

381 Flathills Rd.



Plan: 381 Flat Hills Rd. Designed by: Bob Stover

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)
- 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. & 50' tank
- Well statement if applicable
- Location of any surface waters, rivers, vegetated wetlands
- 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. P
- If dosing is proposed, design and specs of dosing system
- When alternative technology is required, complete plan and specs, including hydraulic profile
- Trenches preferred over beds CMR 15.240 (6) Bed design
- Buoyancy calculations for tanks or components partly below H2O table 15.221(8) p. 56
- 3 to 1, slope outside of mound, toe ending 5 feet from property line
- Local upgrade requests on the plan
- Local upgrade forms attached to application
- Note on plan listing all variances sought in conjunction with the plan

NOTES: plan Review done by Ed Smith &
Javeria Mir on 05/11/11



Commonwealth of Massachusetts
 City/Town of Amherst
**Application for Disposal System
 Construction Permit**
 Form 1A

Number _____
 \$ _____
 Fee

A. Facility Information (continued)

5. Type of Building:

Dwelling

Garbage Grinder (check if present)

Other: Type of Building _____

Number of Persons Served _____

Showers

Number of showers _____

Cafeteria

Other fixtures

Specify other fixtures: _____

6. Design Flow:

550.00

Gallons per Day

Calculated Daily Flow:

560.00

Gallons

7. Plan:

4/22/11

Date of Original

one

Number of Sheets

Revision Date

"Plan of Septic System Repair"

Title of Plan

8. Description of Soil:

attached

9. Nature of Repairs or Alterations (if applicable):

replace distribution box and leach field.

10. Date last inspected:

not apply

Date



Commonwealth of Massachusetts
 City/Town of Amherst
**Application for Disposal System
 Construction Permit**
 Form 1A

1107
 Number
 \$ 150.00
 Fee

DEP has provided this form for use by local Boards of Health if they choose to do so. Before using the form, check with your local Board of Health to make sure that they will accept it.

A. Facility Information

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



Application is hereby made for a permit to: Construct a new on-site sewage disposal system
 Repair or replace an existing on-site sewage disposal system
 Repair or replace an existing system component

1. Location of Facility:

381 Flat Hills Rd.
 Address or Lot #
 Amherst MA 01002
 City/Town State Zip Code

2. Owner Information

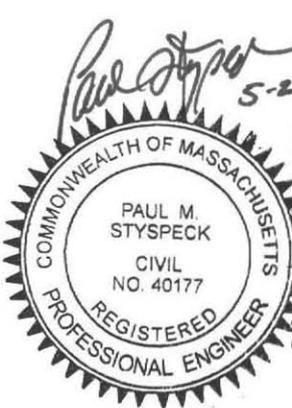
Edward J. and Alexis H. Connolly
 Name
 381 Flat Hills Rd.
 Address (if different from above)
 Amherst MA 01002
 City/Town State Zip Code
 (413) 256-8815
 Telephone Number

3. Installer Information

Bill Clark W. W. Clark Excavating
 Name Name of Company
 22 Pratt Corner Rd.
 Address
 Shutesbury MA 01072
 City/Town State Zip Code
 (413) 259-1411
 Telephone Number

Designer Information

Paul Styspeck, P. E. / Robert Stover Amherst Environmental Services
 Name Name of Company
 P. O. Box 3312
 Address
 Amherst MA 01004-3312
 City/Town State Zip Code
 (413) 256-3400
 Telephone Number





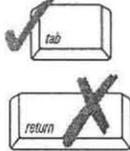
Commonwealth of Massachusetts
 City/Town of Amherst
Disposal System Construction Permit
Form 2A

Number _____

DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

Permission is hereby granted to:

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



Edward J. and Alexis H. Connolly not apply
 Name Name of Company
 381 Flat Hills Rd.
 Address
 Amherst MA 01002
 City/Town State Zip Code

to perform the following work on an on-site sewage disposal system:

- Construction
- Repair or replacement
- Repair or replacement of system components

381 Flat Hills Rd.
 Facility Address
 Amherst MA 01002
 City/Town State Zip Code
 Edwaed and Alexis Connolly 256-8815
 Owner Telephone Number

The work to be performed is further described in the Application for Disposal System Construction Permit. The applicant recognizes his/her duty to comply with Title 5 and the following local provisions or special conditions:

All construction must be completed within three years of the date below.

James M. [Signature]
 Approved by
 Assistant Sanitarian
 Title

05/11/11
 Date



Commonwealth of Massachusetts
 City/Town of Amherst
**Application for Disposal System
 Construction Permit**
 Form 1A

1107
 Number
 \$ 150.00
 Fee

B. Agreement

The undersigned agrees to ensure the construction and maintenance of the aforescribed on-site sewage disposal system in accordance with the provisions of Title 5 of the Environmental Code and not to place the system in operation until a Certificate of Compliance has been issued by this Board of Health.

[Signature]
 Signature _____ Date 4/28/11

Application Approved By:
Jameia M. Edwards
 Name _____ Date 05/11/11

Application **Disapproved** for the following reasons:



Commonwealth of Massachusetts
 City/Town of Amherst
Certificate of Compliance
 Form 3

DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

This is to Certify that the following work on an On-Site Sewage Disposal System

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



- Construction of a new system
- Repair or replacement of an existing system
- Repair or replacement of an existing system component

Has been done in accordance with Title 5 and the Disposal System Construction Permit (DSCP):

DSCP Number _____ DSCP Date _____
 Edward J. and Alexis H. Connolly
 Facility Owner
 381 Flat Hills Rd.
 Street Address or Lot #
 Amherst MA 01002
 City/Town State Zip Code

Designer Information:

Paul Styspeck, P.E. / Robert Stover
 Name
Robert Stover
 Signature
 Amherst Environmental Services
 Name of Company
 6/2/11
 Date

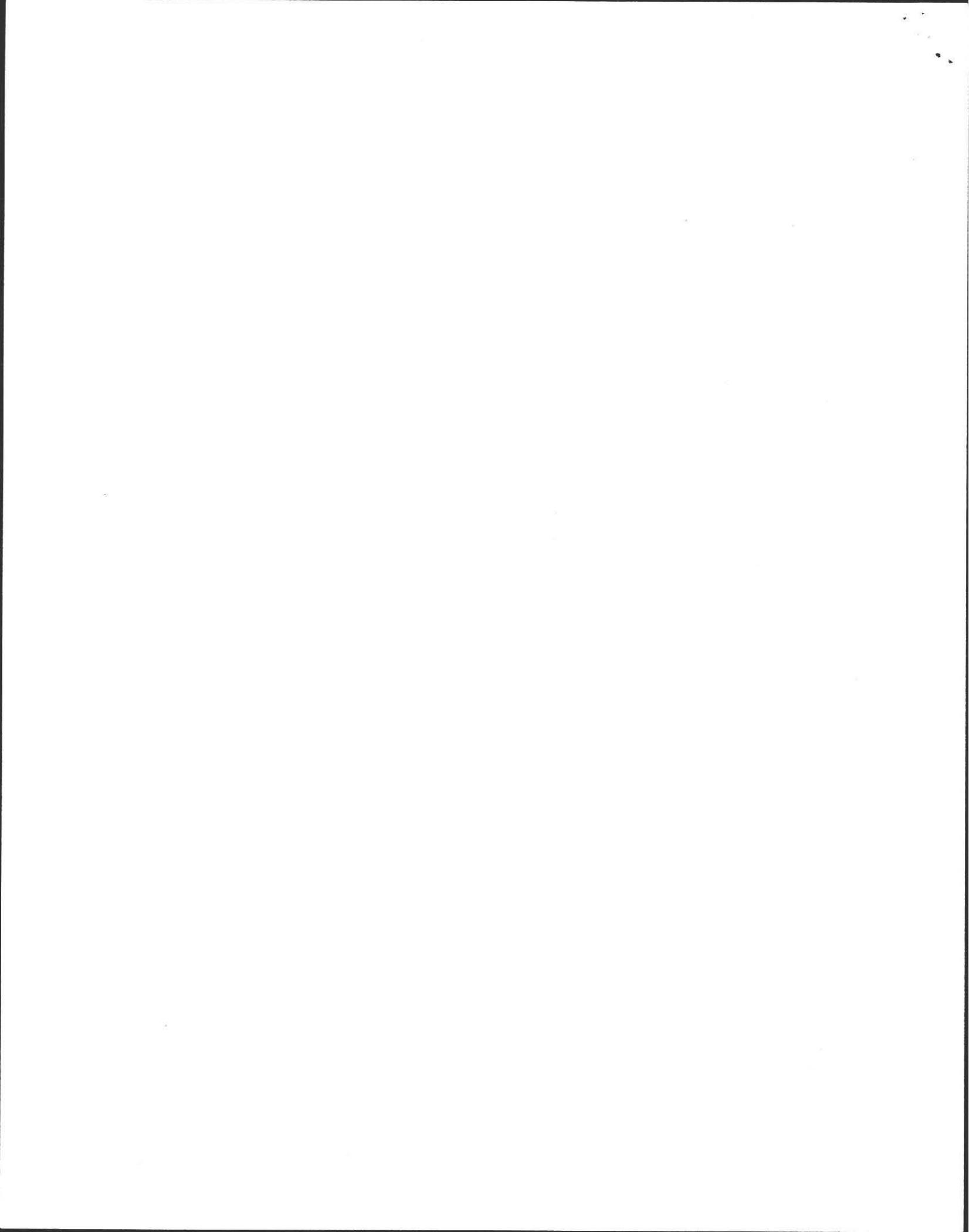
Installer Information:

Tom Backwith
 Name
Tom Backwith
 Signature
 JW Clark Excavating
 Name of Company
 6-2-11
 Date

Use of this system is conditioned on compliance with the provisions set forth below:

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

Jwelia Mir, Amherst Health Dept.
 Approving Authority
Jwelia Mir
 Signature
 06/02/11
 Date



No. _____

Date: 3/29/11

Commonwealth of Massachusetts
Amherst, Massachusetts
Soil Suitability Assessment for On-site Sewage Disposal

Performed By: Robert Stover
Witnessed By: David Zarozinski

Date: 3/29/11

Location Address or Lot # <u>381 Flat Hills Rd.</u>	Owner's Name, Address, and Telephone # <u>Edward Connolly</u> <u>381 Flat Hills Rd</u> <u>Amherst, MA 01002</u> <u>(413) 256-8815</u>
New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/>	

Office Review

Published Soil Survey Available: No Yes

Year Published _____ Publication Scale 1:15,840 Soil Map Unit GfB
Drainage Class A 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 February + March, 2011

Other References Reviewed: _____



Location Address or Lot No. 381 Flat Hills Rd.

On-site Review

Deep Hole Number 2 Date: 3/29/11 Time: 9:40 Weather clear, 38°±

Location (identify on site plan) see sketch

Land Use back yard Slope (%) _____ Surface Stones _____

Vegetation → horse pasture - upland grasses

Landform ground moraine

Position on landscape (sketch on the back)

Distances from:

Open Water Body 200 feet + Drainage way none feet

Possible Wet Area 100 feet Property Line 125 feet ±

Drinking Water Well 150 feet Other _____

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0 - 36	loamy fill	FSL	2.5Y4/4	none	friable
36 - 44	remnant BW	LS	10Y4/4	none	loose
44 - 87	C	LS	2.5Y5/4	none observed above seepage	loose to friable ≥ 5% coarse sub-angular stones + cobbles, occasional small boulder

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) fill (flow) Depth to Bedrock: 87"

Depth to Groundwater: Standing Water in the Hole: 74" Weeping from Pit Face: 72"

Estimated Seasonal High Ground Water: 72"



Location Address or Lot No. 381 Flat Hills Rd.

On-site Review

Deep Hole Number 1 Date: 3/29/11 Time: 10:10 Weather Clear, 38°±

Location (identify on site plan) see sketch

Land Use back yard / horse Slope (%) 3-5 Surface Stones stonewalls

Vegetation pasture upland grasses, white pine, red maple

Landform ground moraine

Position on landscape (sketch on the back)

Distances from:

Open Water Body 200 feet Drainage way none feet

Possible Wet Area 100 feet± Property Line 100 feet±

Drinking Water Well 150 feet Other _____

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-13	Ap	FSL	10YR3/3	none	friable
13-28	Bw	LS	10YR 5/8	none	loose to friable
28-82	C1	LS	2.5Y4/4	none	friable
82-8'	C2	LS	2.5Y4/3	none observed	firm Ground water estimated at 82" due to firm consistency

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) fill (flow) Depth to Bedrock: 8'

Depth to Groundwater: Standing Water in the Hole: none Weeping from Pit Face: none

Estimated Seasonal High Ground Water: 82"



Location Address or Lot No. 381 Flat Hills Rd

Determination for Seasonal High Water Table

Method Used:

- Depth observed standing in observation hole _____ inches
- Depth weeping from side of observation hole 72 inches DEEP HOLE #2
- Depth to soil ^{Consistence} mottles 82 inches DEEP HOLE #1
- 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 6/1993 (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 Robert Stover Date 3/29/11



FORM 12 - PERCOLATION TEST

Location Address or Lot No. 381 Flat Hills Rd.

5 Bdrms
No G/G

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date:	<u>3/29/11</u>	Time: <u>9:17</u>
Observation Hole #	<u>1</u>	
Depth of Perc	<u>40"</u>	
Start Pre-soak	<u>9:17</u>	
End Pre-soak	<u>9:36</u>	
Time at 12"	<u>9:39</u>	
Time at 9"	<u>9:55</u>	
Time at 6"	<u>10:26</u>	
Time (9"-6")	<u>31</u>	
Rate Min./Inch	<u>11</u>	

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

Site Passed Site Failed

Performed By: Robert Stover

Witnessed By: David Zarozinski

Comments: _____



Commonwealth of Massachusetts

Town of _____

Soil Suitability Assessment : On-Site Sewage Disposal

Performed By: Bob Stovon Date: MARCH 29, 2011
 Witnessed By: DAVID ZARZINSKI FOR THE AMHERST B.O.H.

Location Address of: Lot # <u>381 FLAT HILLS RD</u>	Owner's Name: <u>EDWARD + ALEXIS</u> Address of: <u>CONNORLY</u> Telephone: <u>381 FLAT HILLS RD</u> <u>2568815</u>
New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/>	

Office Review

Published Soil Survey Available? No Yes
 Year Published 1981 Publication Scale 15:840 Soil Map Unit MOB
 Drainage Class C Soil Limitations _____

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

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

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

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

Other Reference Reviewed: SEPT./OCT. 2010

Determination: Seasonal High Water Table**Methods Used:**

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

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

Depth of Naturally Occurring Previous Material

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

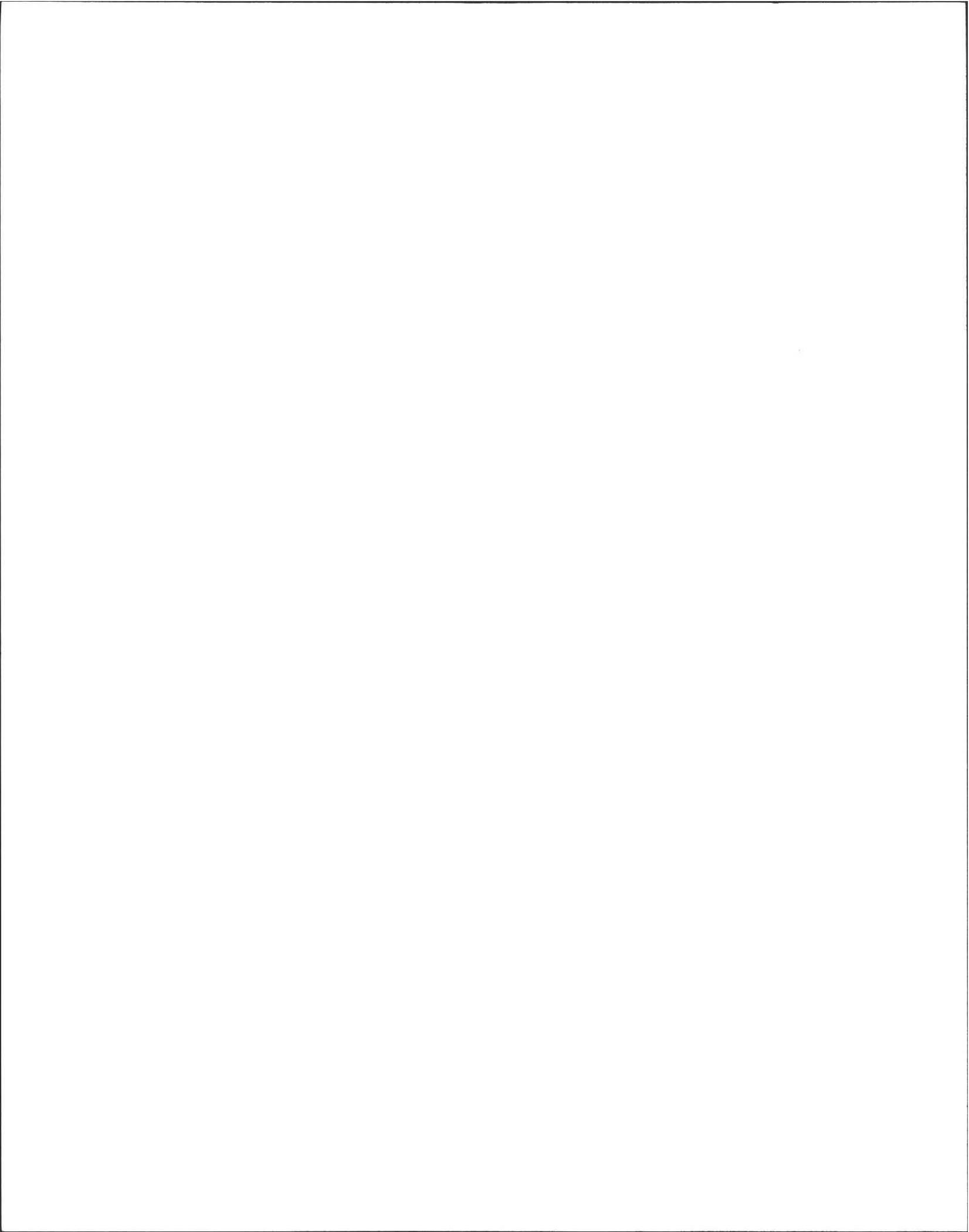
If not, what is the depth of naturally occurring previous material?

Certification

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

Signature _____
 Date _____

8703
 381 Flat Hills
 Rd.
 Batch 5022



BOB STOVER

On-Site Review

Deep Hole Number ① Date: MARCH 29 Time _____
 Weather SUNNY 38
 Location (identify on site plan) _____
 Land Use BACKYARD HORSE PASTURE Slope (%) 3-5
 Surface Stone NONE
 Vegetation: _____

GRASS

Landform:

ROUND MORAIN E

Position on Landscape (sketch on back) _____

Distances from:

Open Water Body 200 feetDrainageway ✓ feetPossible Wet Area 100 feetProperty Line 100+ feetDrinking Water Well 150+ feet

Other _____

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsell)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
13	A _p	FSL	10YR 3/3	—	FRIABLE
28	B _w	LS	10YR 5/8	—	LOOSE TO FRIABLE
80"	C ₁	LS	2.5Y 4/4	—	FIRM w/ DEPTH
96"	C ₂	LS	2.5Y 4/3	—	

Parent Material (geologic) Till (Flow)Depth to Bedrock 8

Depth to Groundwater:

Standing Water in the Hole _____

Weeping from Pit Face _____

Estimated Seasonal High Water 82"381 Flat Hills
Road, Amherst
256-8815

On-Site Review

Deep Hole Number ② Date: MARCH 29 Time _____
 Weather SUNNY 38
 Location (identify on site plan) _____
 Land Use BACK YARD/HORSE PASTURE Slope (%) 3-5
 Surface Stone NONE
 Vegetation: _____

GRASS

Landform:

ROUND MORAIN E

Position on Landscape (sketch on back) _____

Distances from:

Open Water Body 200 feetDrainageway ✓ feetPossible Wet Area 100 feetProperty Line 100+ feetDrinking Water Well 150 feet

Other _____

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsell)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
36	LOAMY Fill	FSL	2.5Y 4/4	—	FRIABLE
44"	VERMONT B _w	LS	10YR 4/4	—	LOOSE
87"	C	LS	2.5Y 5/4	NONE	LOOSE TO FRIABLE
				OBSERVED ABOVE SERPENTINE	± 570 CORONA SUB-ANGULAR

Parent Material (geologic) Till (Flow)Depth to Bedrock 87

Depth to Groundwater:

Standing Water in the Hole 74"Weeping from Pit Face 72"Estimated Seasonal High Water 72"

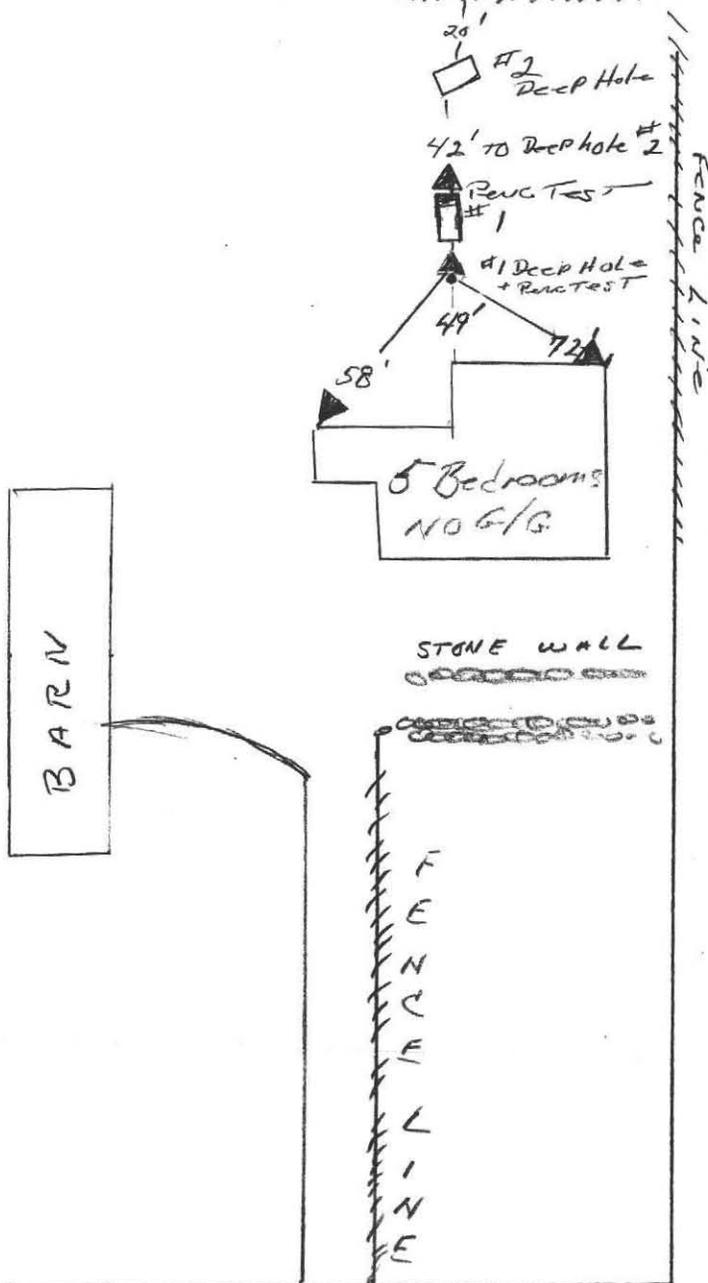
STONES - COBBLES

OCCASIONAL

SMALL BOULDER



FENCE POST LINE
NOT PROPERTY LINE



381 FLAT Hills Road

FORM 12: Percolation Test

Location Address or Lot # 381 FLAT Hills Rd

Commonwealth of Massachusetts
Town of AMHERST

PERCOLATION TEST *		
DATE: <u>3/29/11</u>		TIME:
Observation Hole #	<u>①</u>	
Depth of Perc	<u>40"</u>	
Start Pre-soak	<u>9:17</u>	
End Pre-soak	<u>9:36</u>	
Time at 12"	<u>9:36</u>	
Time at 9"	<u>9:55</u>	
Time at 6"	<u>10:26</u>	
Time (9"-6")	<u>31 min</u>	
Rate Min./Inch	<u>10 + (15)</u>	

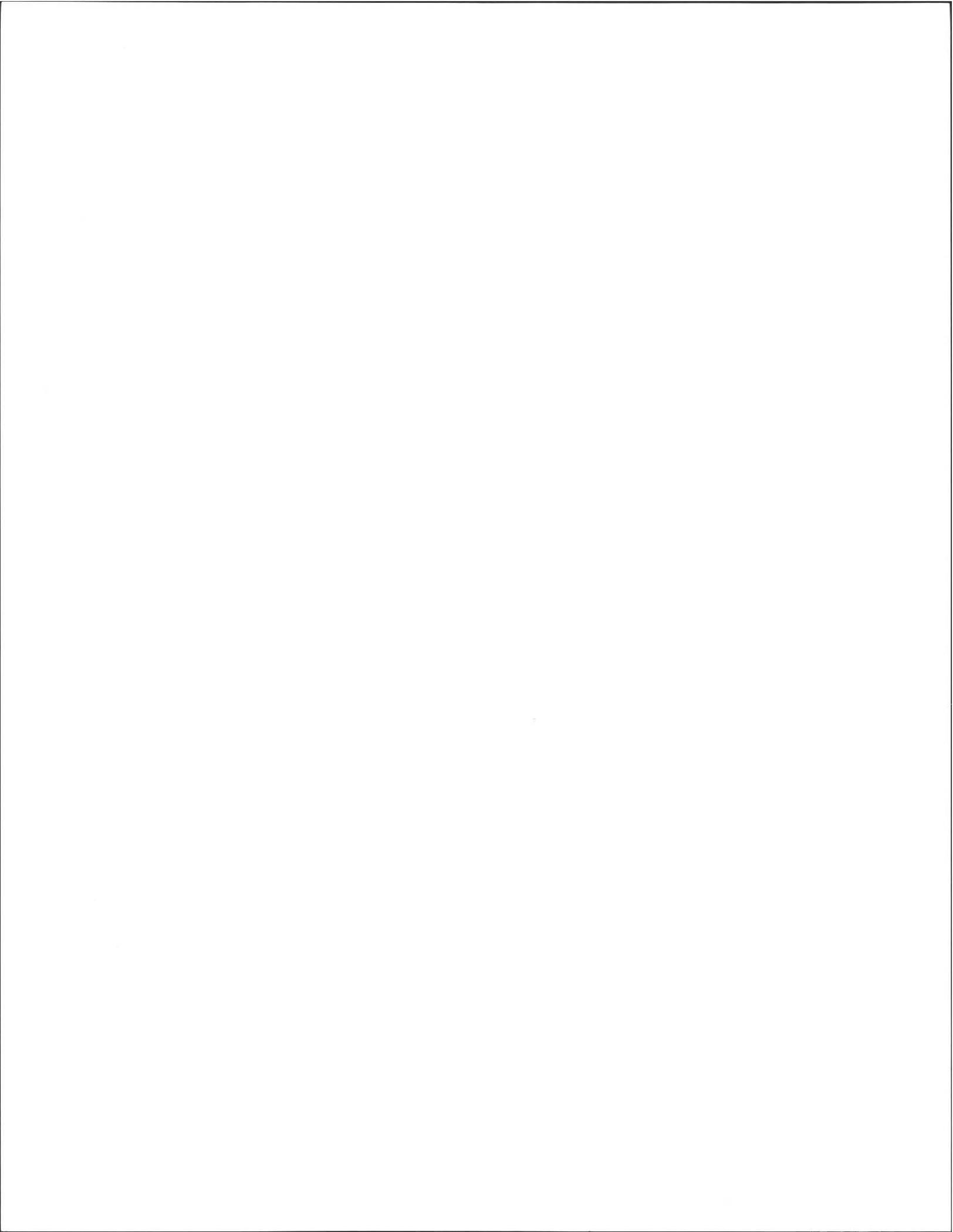
*Minimum of one percolation test must be performed in both the primary area and reserve area.

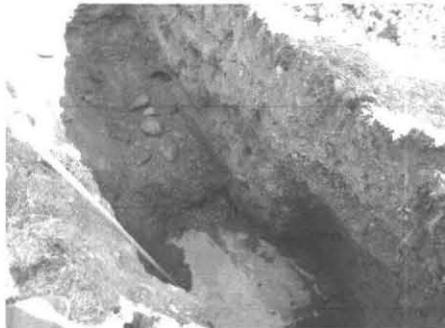
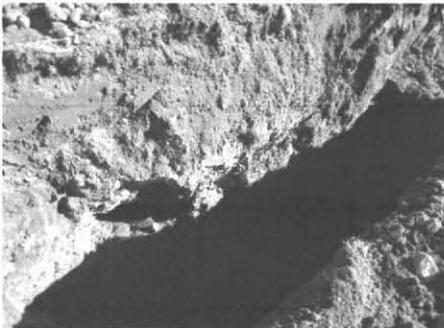
Site Passed Site failed

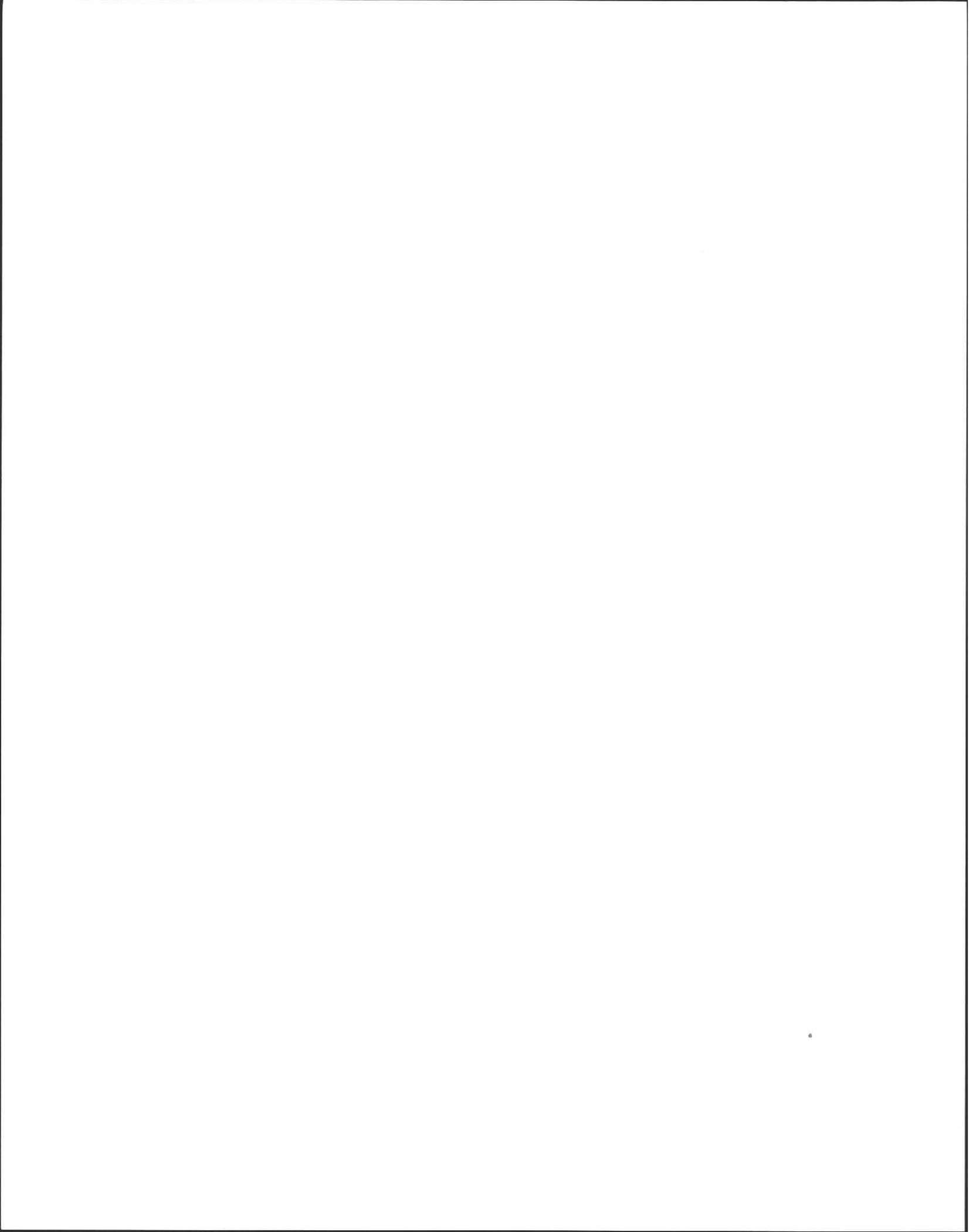
Performed by Bob Stouder

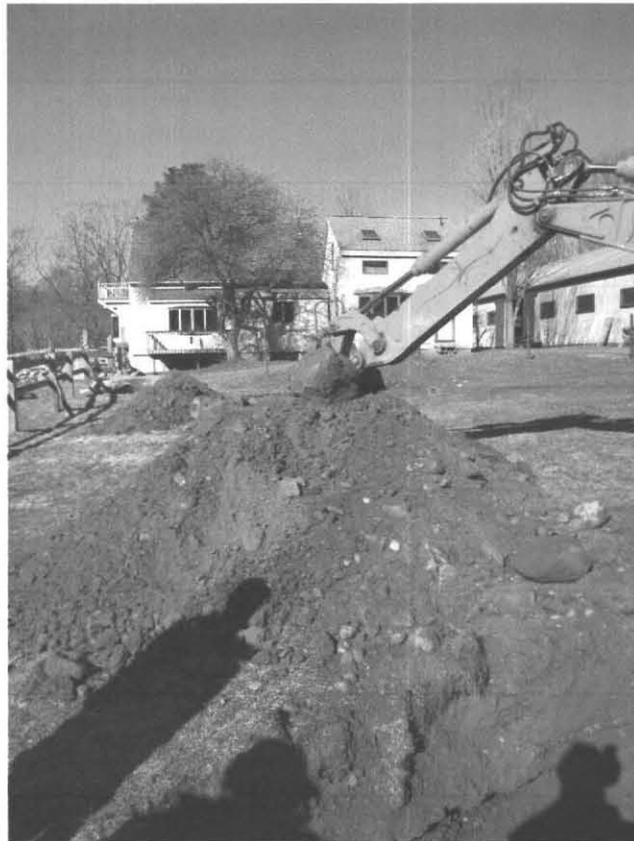
Witnessed by David Zarozinski

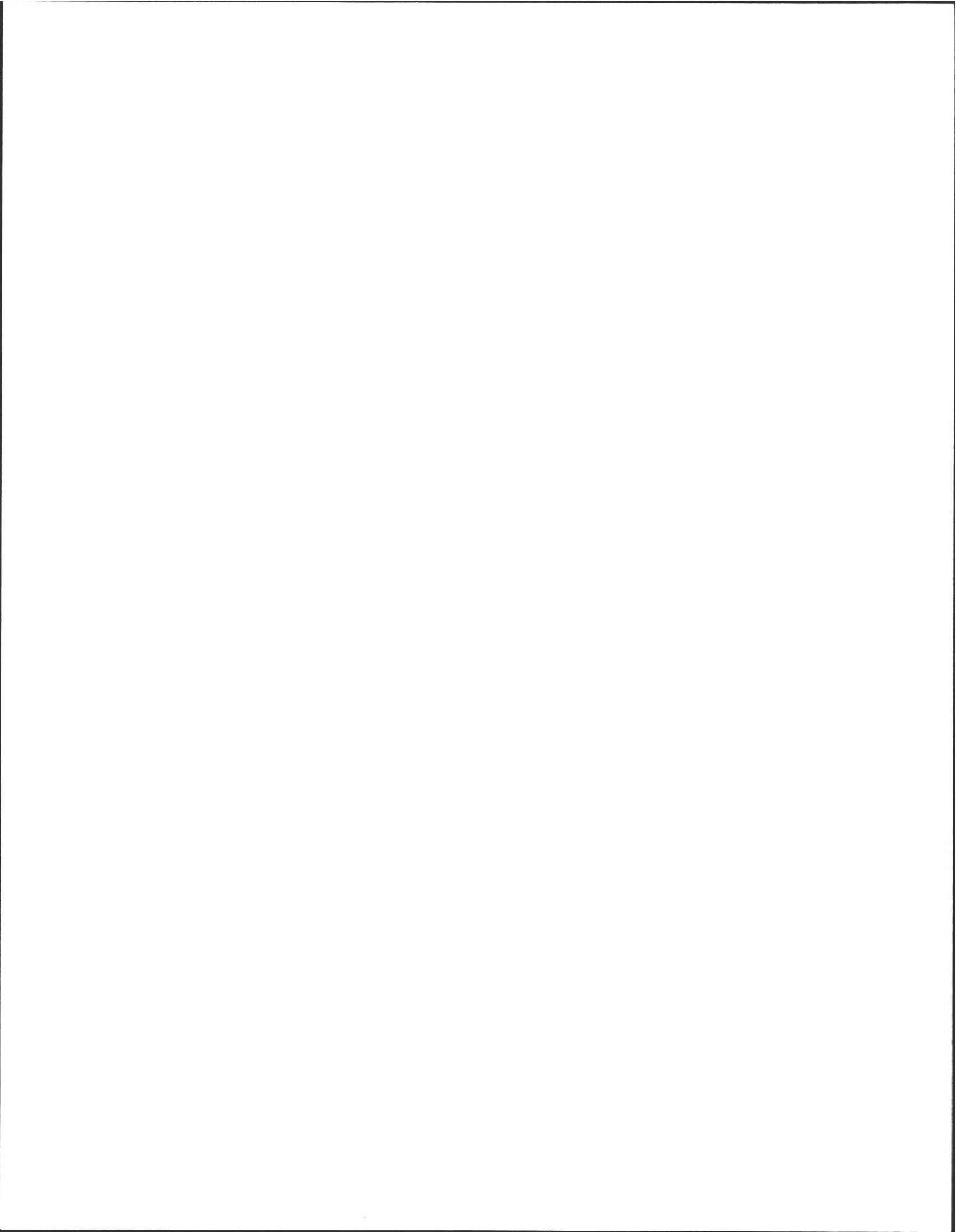
Comments:











PERMITS/INSP PAYMENT RECPT#: 11106938
TOWN OF AMHERST
TOWN HALL
4 BOLTWOOD AVENUE
AMHERST MA 01002

DATE: 05/03/11 TIME: 13:45
CLERK: mirj DEPT:

PAID BY:
PAYMENT METH: CHECK 1451

REFERENCE:

AMT TENDERED: 150.00
AMT APPLIED: 150.00
CHANGE: .00

SITE ADDRESS: 381 FLAT HILLS RD

FEE:
HEA017 SEPTIC TANK PER 150.00

TOTAL PAID: 150.00



SOIL EVALUATION

Soil Evaluator: Robert Stover
 BOH Representative: David Zarozinski
 Date of Evaluation: 3/29/2011

Ground elevation at soil evaluation test pit #1: 98.67'
 Est. Seasonal High Ground Water Elev. 91.83'
 Bedrock Elevation deeper than: 90.67'

Depth	Soil Horizon	Soil Texture	Soil Color	Mottling	Other
0 - 13"	Ap	FSL	10YR3/3	None	Friable
13 - 28"	Bw	LS	10YR5/6	None	Loose to friable
28 - 82"	C1	SL	2.5Y4/4	None	Friable
82 - 95"	C2	FSL	2.5Y5/4	None	Observed Firm Ground water estimated on firm consistency.

Parent Material (Geologic): till
 Standing Water in the Hole: none Weeping from Pit Face: none
 Estimated Seasonal High Ground Water: 82'

Ground elevation at soil evaluation test pit #2: 96.00'
 Est. Seasonal High Ground Water Elev. 91.25'
 Bedrock Elevation deeper than: 87.83'

Depth	Soil Horizon	Soil Texture	Soil Color	Mottling	Other
0 - 36"	Loamy Fill	FSL	2.5Y4/4	None	Friable
36 - 44"	remnant Bw	SL	10YR4/4	None	Loose
44 - 87"	C	SL	2.5Y5/4	None	observed above seepage Loose to friable 5% coarse Sub-angular Stones & cobbles Some small Boulders

Parent Material (Geologic): till
 Standing Water in the Hole: 74" Weeping from Pit Face: 72"
 Estimated Seasonal High Ground Water: 72'

DESIGN CRITERIA

Design flow is for a 5-bedroom house without a garbage grinder

DESIGN CALCULATION

Design flow: 5-bedrooms, no garbage grinder: = 550 gpd.
 Retain existing septic tank: 1500 gallons.
 Effluent Loading Rate: Percolation Rate = 15 minutes per inch Class II soils.
 Effluent loading rate = 0.56 gpd/sf.
 Soil Absorption System: one leach bed, 50' long X 20' wide aggregate & distribution line bed

Bottom Area: 50' X 20' = 1,000 SF.
 Sidewall: NOT ALLOWED = 1,000 SF.
 Total Leaching Area: = 1,000 SF.
 Calculated Design Flow: 1,000 SF X 0.56 GPD/SF = 560 gpd.
 Total Required Design Flow = 550 gpd (OK)

GENERAL CONDITIONS

- This septic system repair plan is prepared in accordance with Title 5, 310 CMR 15.00. Construction shall conform to these regulations.
- The installer shall inform the designer of any unusual conditions and shall not modify the plan without the written consent of the designer.
- All debris in the site area shall be removed and disposed of in accordance with the law.
- There is no guarantee expressed or implied to any user of a system installed pursuant to this plan.
- The installer shall notify the designer and the Board of Health Representative when the system excavation is ready for inspection and again when the system installation is complete. Notification shall be 72 hours prior to the time of inspection.
- The septic tank shall be pumped and inspected as necessary and at least once every three years.

CONSTRUCTION NOTES

- Any topsoil, subsoil, old fill, or other impervious materials encountered during excavation shall be removed from the area of the soil absorption system, from five feet around the soil absorption system shall be a clean, granular sand and conform to the specifications of Title 5, 310 CMR 15.25(3).
- Pipes exiting the distribution box shall have the same invert elevation and be laid level for a minimum first two feet.
- The finished grade above the soil absorption system shall have a minimum two percent slope to shed surface runoff away from the system.
- Disturbed areas shall be loamed, seeded and mulched until stable vegetation is established.



Paul M. Styspeck
 5-2-11

PLAN OF SEPTIC SYSTEM REPAIR
 381 FLAT HILLS ROAD, AMHERST, MA 01002
 ASSESSORS MAP 6B, LOT 22

EDWARD J. AND ALEXIS H. CONNOLLY
 381 FLAT HILLS RD., AMHERST, MA 01002

SCALE: AS SHOWN	APPROVED BY:	DRAWN BY: RLWS
DATE: 4/26/11		REVISED:

AMHERST ENVIRONMENTAL SERVICES
 PAUL STYSPECK, P.E. / ROBERT STOVER

P. O. BOX 3312, AMHERST, MA 01004-3312
 (413) 255-3400

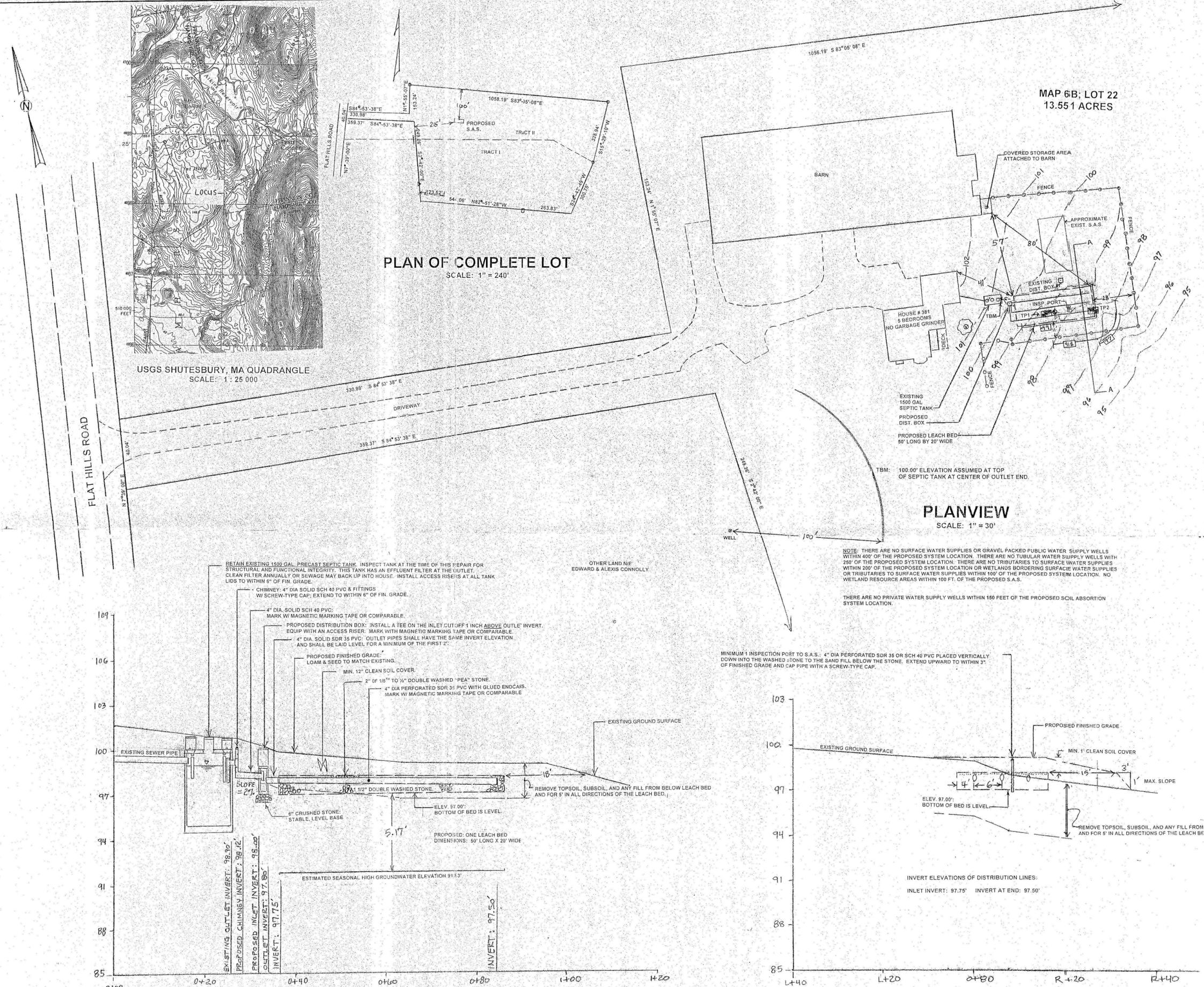
MAP 6B: LOT 22
13.551 ACRES

PLAN OF COMPLETE LOT
 SCALE: 1" = 240'

PLANVIEW
 SCALE: 1" = 30'

PROFILE OF SYSTEM
 SCALE: H: 1" = 10' V: 1" = 3'

SECTION OF LEACH BED
 SCALE: H: 1" = 10' V: 1" = 3'



NOTE: THERE ARE NO SURFACE WATER SUPPLIES OR GRAVEL PACKED PUBLIC WATER SUPPLY WELLS WITHIN 400' OF THE PROPOSED SYSTEM LOCATION. THERE ARE NO TUBULAR WATER SUPPLY WELLS WITHIN 250' OF THE PROPOSED SYSTEM LOCATION. THERE ARE NO TRIBUTARIES TO SURFACE WATER SUPPLIES WITHIN 200' OF THE PROPOSED SYSTEM LOCATION OR WETLANDS BORDERING SURFACE WATER SUPPLIES OR TRIBUTARIES TO SURFACE WATER SUPPLIES WITHIN 100' OF THE PROPOSED SYSTEM LOCATION. NO WETLAND RESOURCE AREAS WITHIN 100 FT. OF THE PROPOSED S.A.S.

THERE ARE NO PRIVATE WATER SUPPLY WELLS WITHIN 150 FEET OF THE PROPOSED SOIL ABSORPTION SYSTEM LOCATION.

MINIMUM 1 INSPECTION PORT TO S.A.S.: 4" DIA PERFORATED SDR 35 OR SCH 40 PVC PLACED VERTICALLY DOWN INTO THE WASHED STONE TO THE SAND FILL BELOW THE STONE. EXTEND UPWARD TO WITHIN 3" OF FINISHED GRADE AND CAP PIPE WITH A SCREW-TYPE CAP.

INVERT ELEVATIONS OF DISTRIBUTION LINES:
 INLET INVERT: 97.75' INVERT AT END: 97.50'

RETAIN EXISTING 1500 GAL. PRECAST SEPTIC TANK. INSPECT TANK AT THE TIME OF THIS REPAIR FOR STRUCTURAL AND FUNCTIONAL INTEGRITY. THIS TANK HAS AN EFFLUENT FILTER AT THE OUTLET. CLEAN FILTER ANNUALLY OR SEWAGE MAY BACK UP INTO HOUSE. INSTALL ACCESS RISERS AT ALL TANK LIDS TO WITHIN 6" OF FIN. GRADE.

CHIMNEY: 4" DIA SOLID SCH 40 PVC & FITTINGS W/ SCREW-TYPE CAP. EXTEND TO WITHIN 6" OF FIN. GRADE.

4" DIA. SOLID SCH 40 PVC. MARK W/ MAGNETIC MARKING TAPE OR COMPARABLE.

PROPOSED DISTRIBUTION BOX: INSTALL A TEE ON THE INLET CUT OFF 1 INCH ABOVE OUTLET INVERT. EQUIP WITH AN ACCESS RISER. MARK WITH MAGNETIC MARKING TAPE OR COMPARABLE.

4" DIA. SOLID SDR 35 PVC. OUTLET PIPES SHALL HAVE THE SAME INVERT ELEVATION AND SHALL BE LAID LEVEL FOR A MINIMUM OF THE FIRST 2'.

PROPOSED FINISHED GRADE. LOAM & SEED TO MATCH EXISTING.

MIN. 12" CLEAN SOIL COVER.

2" OF 1/8" TO 1/2" DOUBLE WASHED "PEA" STONE.

4" DIA PERFORATED SDR 35 PVC WITH GLUED ENOCAFS. MARK W/ MAGNETIC MARKING TAPE OR COMPARABLE.

REMOVE TOPSOIL, SUBSOIL, AND ANY FILL FROM BELOW LEACH BED AND FOR 5' IN ALL DIRECTIONS OF THE LEACH BED.

6" CRUSHED STONE. STABLE LEVEL BASE.

ELEV. 97.00'. BOTTOM OF BED IS LEVEL.

PROPOSED: ONE LEACH BED DIMENSIONS: 50' LONG X 20' WIDE.

ESTIMATED SEASONAL HIGH GROUNDWATER ELEVATION 91.83'

EXISTING SEWER PIPE

EXISTING GROUND SURFACE

EXISTING OUTLET INVERT: 98.10'
 PRECAST CHIMNEY INVERT: 78.12'
 PROPOSED INLET INVERT: 95.00'
 OUTLET INVERT: 97.00'
 INVERT: 97.75'

INVERT: 97.50'

CHECK OR FILL IN WHERE APPLICABLE

No. 90-6
Revised

Inspected 6/26/90
Need to Re-inspect
JUN 22 1990

38 Flat Hills CK # 712
Revised Plan
FEE 30.00 PL
6/22/90

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town of AMHERST

Application for Disposal Works Construction Permit

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

Location - Address: REAR OF 371 FLAT HILL RD
Address: EDWARD CONNOLLY
Owner: L + F CONST
Installer: L + F CONST
Address: 371 FLAT HILL RD
Address: 256 - 8P15

Type of Building: _____
Size Lot: 4 AC + Sq. feet
Dwelling - No. of Bedrooms: 3 Expansion Attic () Garbage Grinder (u)
Other - Type of Building: _____ No. of persons: _____ Showers () - Cafeteria ()
Other fixtures: _____

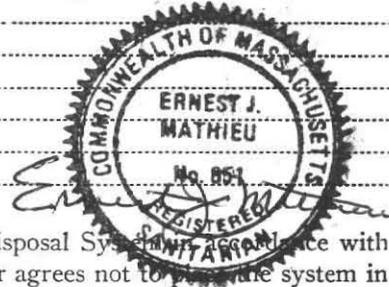
Design Flow: 55 gallons per person per day. Total daily flow: 330 x 1.25 = 412.5 gallons.
Septic Tank - Liquid capacity: 1500 gallons Length: _____ Width: _____ Diameter: _____ Depth: _____
Disposal Trench - No. 2 Width: 36" Total Length: 140 Total leaching area: 840 sq. ft.
Seepage Pit No. _____ Diameter: _____ Depth below inlet: _____ Total leaching area: _____ sq. ft.

Other Distribution box (X) Dosing tank (-)
Percolation Test Results Performed by: ERNEST MATHIEU Date: 5/5/90
Test Pit No. 1: 15 minutes per inch Depth of Test Pit: 12.8 Depth to ground water: 11.7
Test Pit No. 2: _____ minutes per inch Depth of Test Pit: 11.1 Depth to ground water: DRY

Description of Soil: BROWN SANDY TILL

Nature of Repairs or Alterations - Answer when applicable: _____

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



Signed: [Signature] Date: 6/22/90
Application Approved By: [Signature] Date: 6/26/90
Application Disapproved for the following reasons: _____

Permit No. 90-6 Revised Issued _____ Date _____

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town of AMHERST

Certificate of Compliance

THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed (X) or Repaired () by L + F CONST at REAR 371 FLAT HILL RD has been installed in accordance with the provisions of TITLE 5 of The State Sanitary Code as described in the application for Disposal Works Construction Permit No. 90-6 Revised dated _____

THE ISSUANCE OF THIS CERTIFICATE SHALL NOT BE CONSTRUED AS A GUARANTEE THAT THE SYSTEM WILL FUNCTION SATISFACTORY.

DATE _____ Inspector _____

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town of AMHERST

No. 90-6
Revised

Disposal Works Construction Permit

CK # 712
FEE 30.00 PL
6/22/90

Permission is hereby granted to Construct (X) or Repair () an Individual Sewage Disposal System at No. REAR 371 FLAT HILL RD as shown on the application for Disposal Works Construction Permit No. 90-6 Revised Dated 6/26/90

DATE 6/26/90
[Signature] Board of Health

1953

Application for (Name) (Address)

Dear Sirs,
I am writing to you regarding the application for (Name) (Address) which I submitted to you on (Date). I am pleased to hear that you have received my application and am sure that you will find it to be a most interesting and valuable one.



Yours faithfully,
(Signature)

(Name)
(Address)
(City, State, Zip)

(Date)

THE BOARD OF DIRECTORS
SYSTEM OF (Name)
DATE

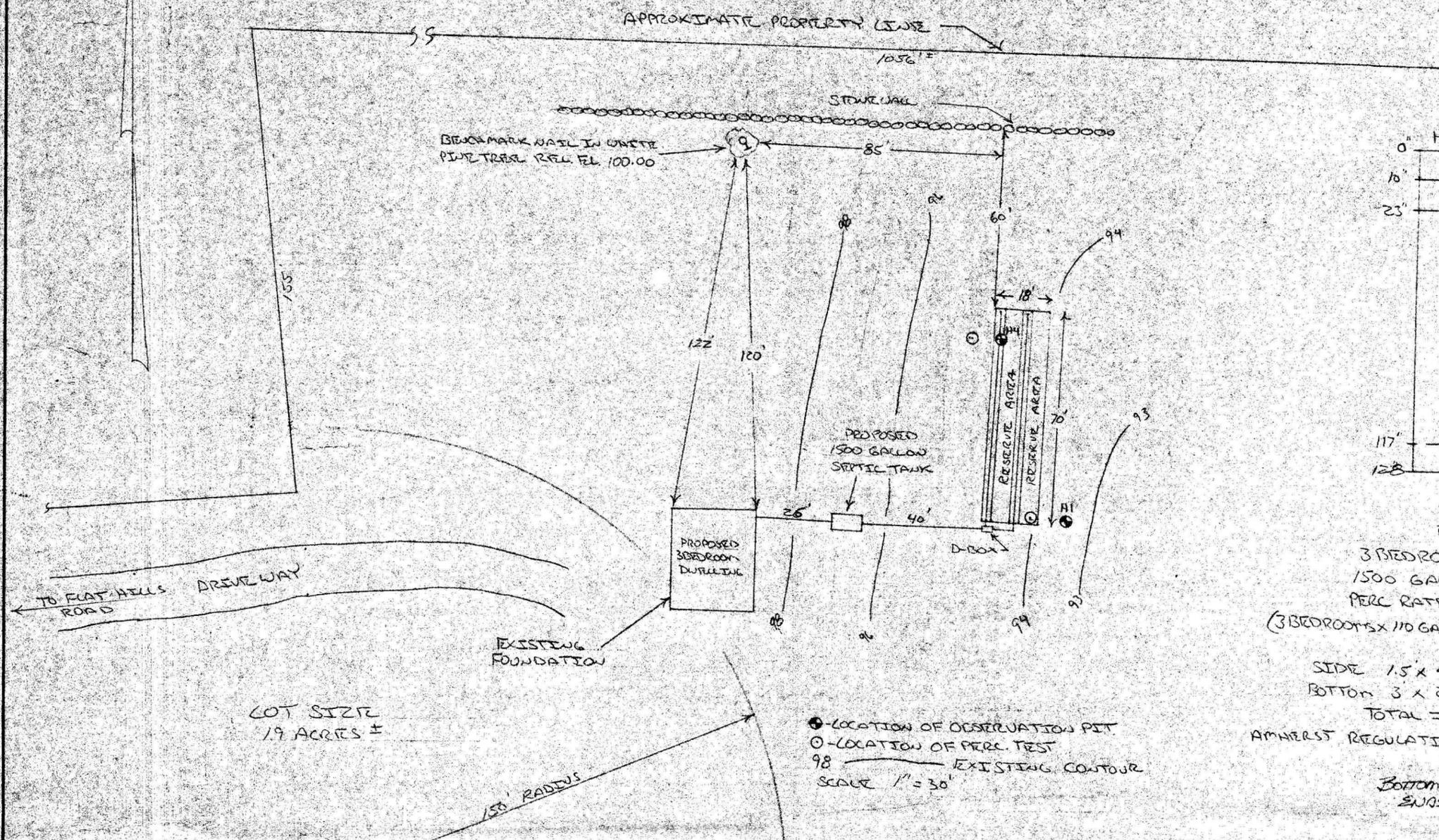
(Signature)
(Name)
(Address)
(City, State, Zip)

OFFICE OF THE DIRECTOR

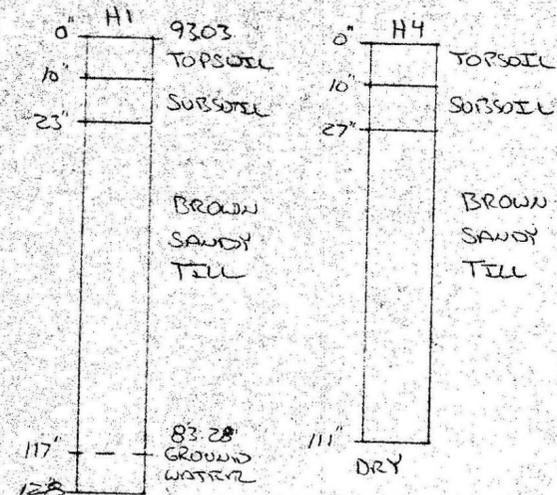
NO OTHER WELLS OBSERVED WITHIN
200' OF PROPOSED LEACHING FACILITY

NOTE: PROPERTY OWNER IS RESPONSIBLE FOR COMPLIANCE
WITH ALL LOCAL ZONING REGULATIONS AND
REQUIREMENTS AND FOR OBTAINING ALL PERMITS
NECESSARY TO BUILD.

JUN 22 1990



SOIL LOG



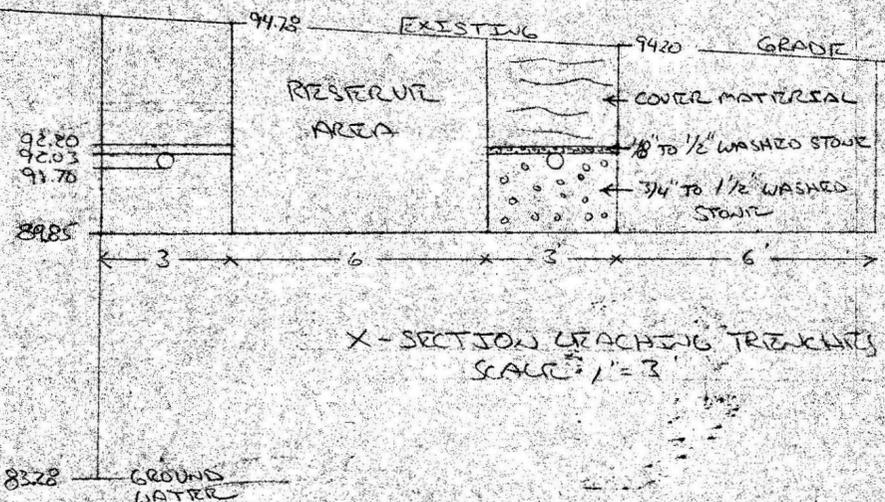
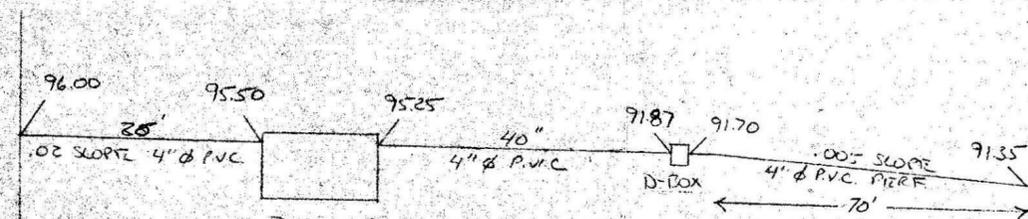
DESIGN CALCULATIONS
3 BEDROOMS, NO GARBAGE GRINDER
1500 GALLON SEPTIC TANK, D.O.P. H1=62', H4=48"
PERC RATE H1 + H4 = 15 MIN/INCH
(3 BEDROOMS x 110 GALLONS) x 1.25 = 412.5 GALLONS DAILY FLOW

SIDE 1.5' x 4' x 70' x .66 GAL/FT² = 277.2 GALLONS
BOTTOM 3' x 2' x 70' x .43 GAL/FT² = 180.6 GALLONS
TOTAL = 840 FT², TOTAL = 457.8 GALLONS
AMHERST REGULATIONS USED FOR CALCULATIONS

BOTTOM OF TRENCHES TO BE LAID FLAT
ENDS OF PIPES MUST BE CARRED

● LOCATION OF OBSERVATION PIT
○ LOCATION OF PERC TEST
98 ——— EXISTING CONTOUR
SCALE 1" = 30'

LOT SIZE
1.9 ACRES ±



PLAN OF SUBSURFACE SEWAGE DISPOSAL SYSTEM
371 FLAT HILLS ROAD AMHERST, MASS.

SCALE: _____ APPROVED BY: _____ DRAWN BY: _____
DATE: _____ SUBMITTED TO: BOARD OF HEALTH MAY 29 1990 REVISED: _____

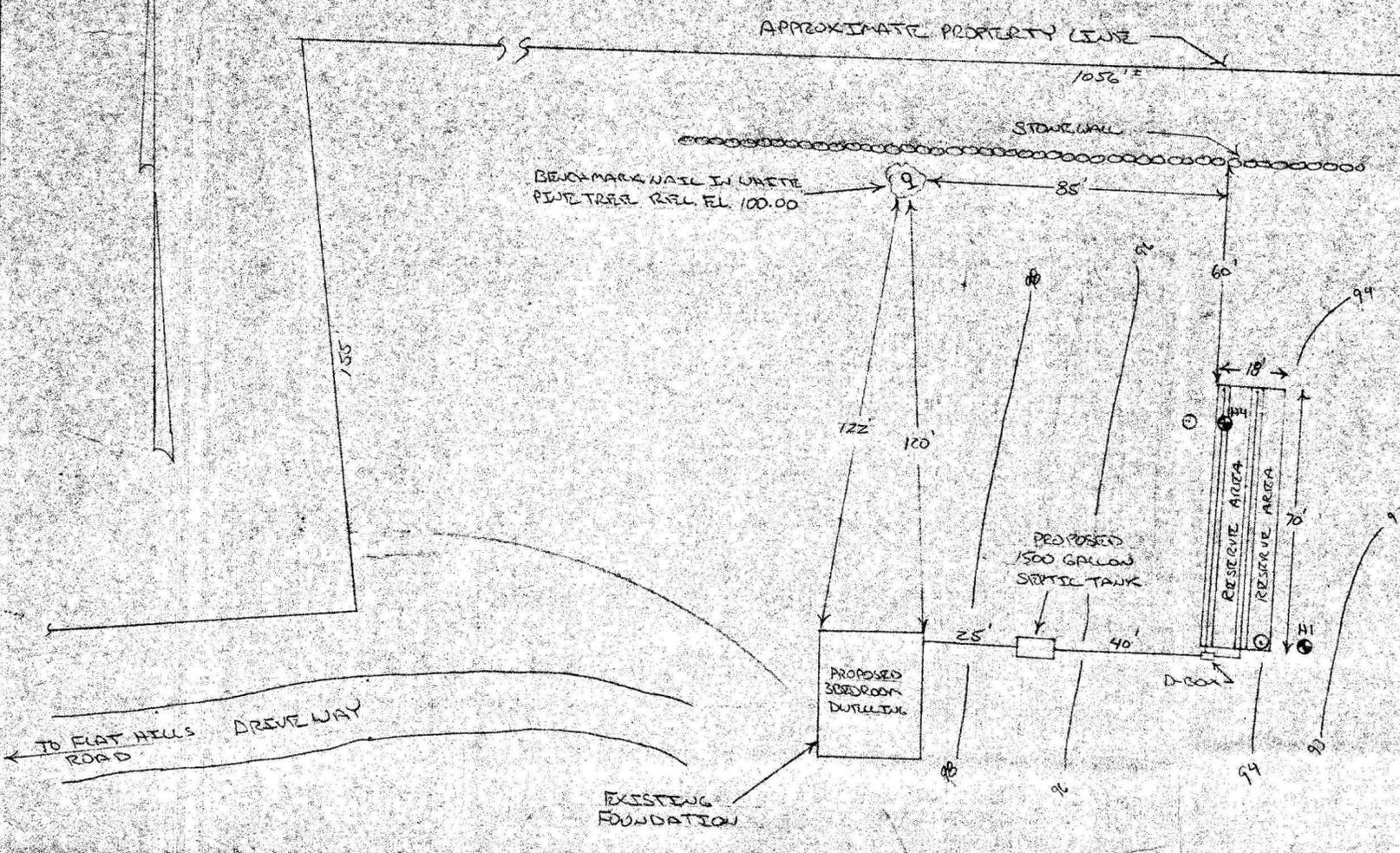
SEPTIC DESIGN FOR MR./MRS EDWARD CONNOLLY, REAR
OF 371 FLAT HILLS RD AMHERST MASS

DRAWING NUMBER
90136 PDN

REVISED LOCATION

NO OTHER WELLS OBSERVED WITHIN 200' OF PROPOSED LEACHING FACILITY

NOTE: PROPERTY OWNER IS RESPONSIBLE FOR COMPLIANCE WITH ALL LOCAL ZONING REGULATIONS AND REQUIREMENTS AND FOR OBTAINING ALL PERMITS NECESSARY TO BUILD.



SOIL LOG

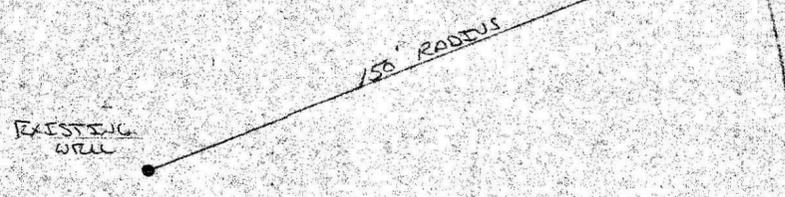
DEPTH	H1	H4
0'	9303	TOPSOIL
10'		TOPSOIL
25'		SUBSOIL
		BROWN SANDY TILL
117"	83.28	GROUND WATER
128"		DRY

DESIGN CALCULATIONS
 3 BEDROOMS, NO GARBAGE GRINDER
 1500 GALLON SEPTIC TANK, D.O.P. H1 = 62", H4 = 48"
 PERC RATE H1 + H4 = 25' MIN / INCH
 (3 BEDROOMS x 110 GALLONS) x 1.25 = 412.5 GALLONS DAILY FLOW

SIDE 1.5' x 4' x 70' x .66 GAL/FT² = 277.2 GALLONS
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 TOTAL = 840 FT², TOTAL = 457.8 GALLONS
 AMHERST REGULATIONS USED FOR CALCULATIONS.

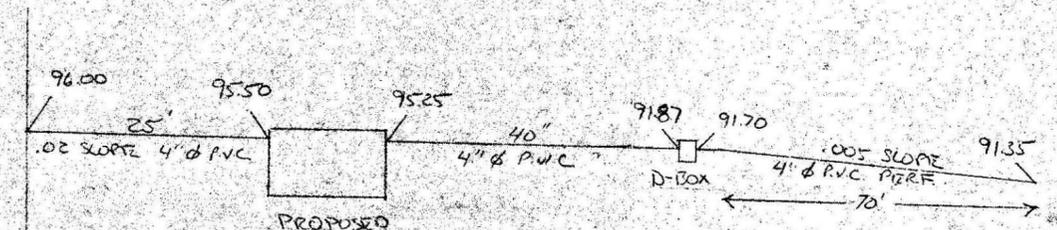
BOTTOM OF TRENCHES TO BE LAID FLAT
 ENDS OF PIPES MUST BE CARVED

LOT SIZE 1.9 ACRES ±



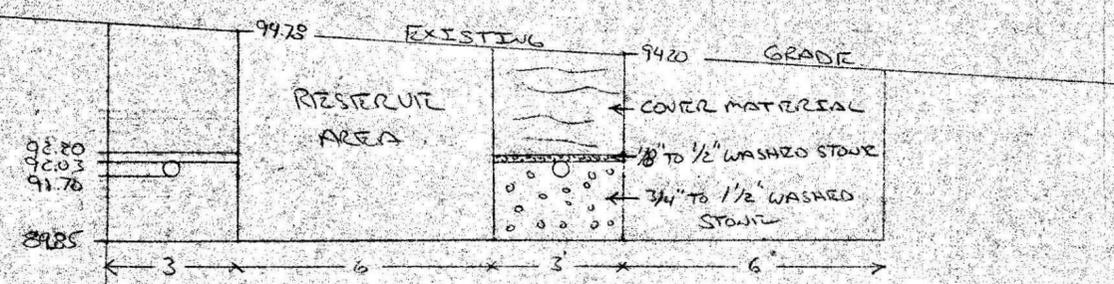
● LOCATION OF OBSERVATION PIT
 ○ LOCATION OF PERC TEST
 98 EXISTING CONTOUR
 SCALE 1" = 30'

PROPOSED 3 BEDROOM DWELLING



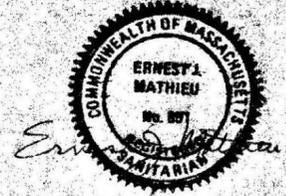
INVERT ELEVATIONS NO SCALE

REVISED LOCATION



X-SECTION LEACHING TRENCHES
 SCALE 1" = 3'

83.28 GROUND WATER



PLAN OF SURFACE SEWAGE DISPOSAL SYSTEM
 371 FLAT HILLS ROAD AMHERST, MASS.

SCALE:	APPROVED BY: SUBMITTED TO BOARD OF HEALTH MAY 29 1990	DRAWN BY:
DATE:	REVISOR:	
SEPTIC DESIGN FOR MR/MRS EDWARD CONNOLLY, REAR OF 371 FLAT HILLS RD AMHERST MASS		
DRAWING NUMBER		90136 PDN

REVISED LOCATION