1011 BAY ROAD

1011 Bay Rd

Final insp

Fri 9/19 11.30am

Need As-Built

for Cert of Compl.

11-17-08 335-3395

Called Sherman &

Fredryk

283-6210 Leo Fugler

will find out status

→ will send Handicap

Cannot get Leo's signature

12-15-08

Called Sherman+Fred

283-6210

will ✓ paper work

for sigs

Matt Fernandez Valley Builders

237-9650 467-3979

PO Box 329 Grandby

~~9~~ 97 BAY ROAD 1011
SPT 2008-00012

283-6210 EXT 20
TONY CURD

1011 BAY ROAD

1011 BAY ROAD
SPT 2008-00017

1011 BAY ROAD

No 07-11

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 Leo Fuglar
Installer

at 1011 BAY 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. 07-11 dated 11-11-07

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

DATE 12-11-08 Inspector Ellen Bolin, DC, MPH, RS

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

Date of Test **10/27/2006**

Project #07157
Plan Date **10/09/2007**

orig mailed w/ INV to Mail remainder 9-24-08

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.

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

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

- ☒ 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 _____

Valley Builders, LLC
Facility Owner

1011 Bay Road
Street Address or Lot #

Amherst (City/Town) | MA (State) | 01002 (Zip Code)

Designer Information:

Donald Frydryk, PE, PLS (Name) | Sherman & Frydryk (Name of Company)

Signature | 9/23/08 (Date)

Installer Information:

Leo Fugler (Name) | Leo Fugler (Name of Company)

Signature | Date

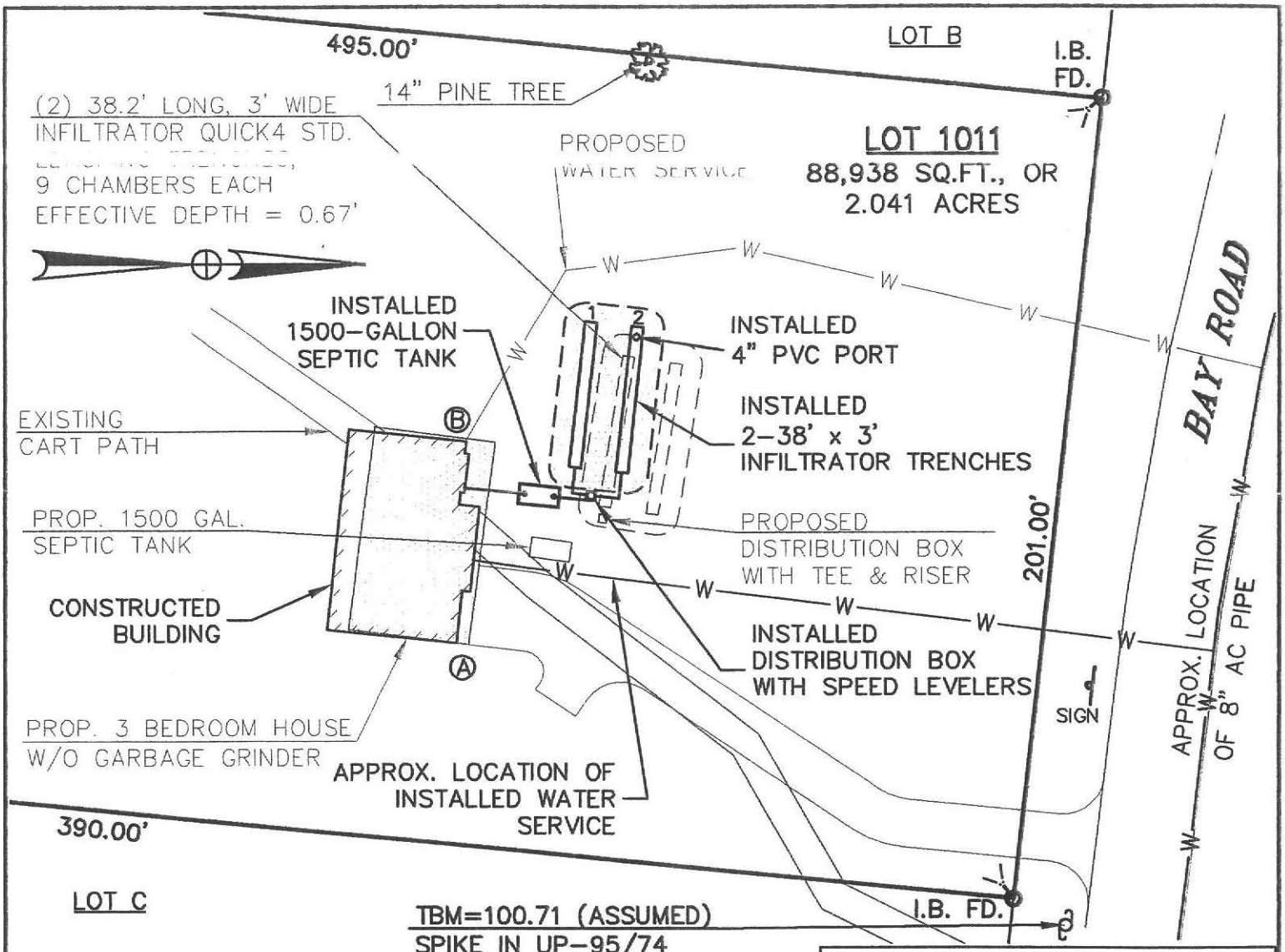
Use of this system is conditioned on compliance with the provisions set forth below:

Certificate is contingent on final fill placement and cover over the system.

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

Approving Authority

Signature | Date



AS-BUILT INVERT ELEVATIONS & COMPONENT TIES

DESC.	A	B	ELEV.
⊕ FOUND.	---	---	112.41
TANK, IN	40.8'	19.5	111.86
TANK, OUT	43.7'	25.8'	111.59
D-BOX, IN	49.6'	33.7'	111.45
D-BOX, OUT 1	---	---	111.28
D-BOX, OUT 2	---	---	111.28
BEG. LINE 1	52.7'	27.7'	111.19
2	59.0'	39.3'	111.13
END LINE 1	86.7'	42.7'	111.20
2	90.7'	51.0'	111.10

SHERMAN & FRYDRYK
Land Surveying and Engineering
3 Converse Street, Suite 203
Palmer, MA 01069

COMMONWEALTH OF MASSACHUSETTS
DONALD J. FRYDRYK
CIVIL
No. 35839
REGISTERED PROFESSIONAL ENGINEER

SEPTIC "AS-BUILT" CONDITIONS

PREPARED FOR

VALLEY BUILDERS, LLC
1011 BAY ROAD
AMHERST, MA

DATE: 09/19/08 PROJECT NO: 07157 DRAFTING: AOC

CHECKED: DJF APPROVED: DJF HORZ: 1"=40'

11-24-08

SHERMAN & FRYDRYK
Land Surveying and Engineering
DEPOT VILLAGE PROFESSIONAL BUILDING
3 CONVERSE STREET, SUITE 203
PALMER, MA 01069

Amherst Health Dept.
70 Boltwood Walk
Bangs Center
Amherst, MA 01002

RECEIVED OCT 12 2007

Valley Builders, LLC 10/09/07
#1011 Bay Road

No. ~~07157~~ 07-11

Fee

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF AMHERST

COMMONWEALTH OF MASSACHUSETTS
DONALD J. FRYDRYK
CIVIL
No. 35839
REGISTERED

Application for Disposal Works Construction Permit

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

#1011 Bay Road 30A-B — Location - Address
Lot 1011 — or Lot No.

David N. and Phyllis H. Smith — Owner
#979 Bay Road, Amherst, MA 01002 — Address

Installer — Address

Type of Building — Size Lot 88,938 Sq. feet
Dwelling — No. of Bedrooms Three (3) Expansion Attic ( ) Garbage Grinder (No)
Other — Type of Building ..... No. of persons..... Showers ( ) — Cafeteria ( )
Other fixtures .....
Design Flow Fifty-five (55) gallons per person per day. Total daily flow 330 gallons.
Septic Tank — Liquid capacity 1,500 gallons Length..... Width..... Diameter..... Depth.....
Disposal Trench — No. Two (2) Width 3' Total Length 38.2' Total leaching area 531 sq. ft.
Seepage Pit No..... Diameter..... Depth below inlet..... Total leaching area..... sq. ft.
Other Distribution box (Yes) Dosing tank (No)
Percolation Test Results Performed by Robert Stover Date 10/27/06
Test Pit No. 1 <2 minutes per inch Depth of Test Pit 120" Depth to ground water 84"
Test Pit No. 2 <2 minutes per inch Depth of Test Pit 120" Depth to ground water 84"
Witnessed by David Zarozinski, Health agent
Description of Soil See attached plans and soil evaluation sheets.

Nature of Repairs or Alterations — Answer when applicable.....

Agreement:

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

Signed 10-11-07

Application Approved By Peter J. McElwain 11/11/07 Date

Application Disapproved *for the following reasons:* .....

Date

Permit No..... Issued..... Date

CHECK OR FILL IN WHERE APPLICABLE

No 07-11

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 Leo Fuglar — Installer
at 1011 BAY 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. 07-11 dated 11-11-07

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

DATE 12-11-08 Inspector ..... DC MPH RS

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

No. 07-11 Town OF Amherst Fee.....

Disposal Works Construction Permit

Permission is hereby granted David & Phyllis Smith
to Construct (X) or Repair ( ) an Individual Sewage Disposal System
at No. 1011 Bay Rd Amherst MA 01002 — Street
as shown on the application for Disposal Works Construction Permit No. 07-11 Dated ~~10/27/06~~ 10/11/07 pmc

Peter J. McElwain, RS, MPH for the — Board of Health

DATE NOV 11 2007

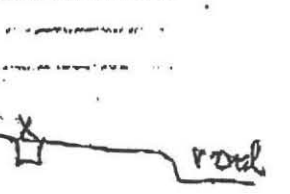
FORM 1255 HOBBS & WARREN, INC., PUBLISHERS

FORM 11 - SOIL EVALUATOR FORM

Location Address or Lot No. Bay Rd., Amherst

On-site Review

Deep Hole Number 1 Date: 10/27/06 Time: 10:00 Weather 50° clear
Location (identify on site plan) see sketch
Land Use woods Slope (%) 1-2 Surface Stones none
Vegetation red oak, sugar maple, white birch
Landform kame
Position on landscape (sketch on the back)
Distances from:
Open Water Body 200 feet+ Drainage way 100 feet
Possible Wet Area 100 feet+ Property Line 25 feet
Drinking Water Well 200 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)
0-10	A	FSL	10YR3/6	none	Friable
10-36	Bw	FSL	10YR5/8	none	slightly friable structureless
36+120	C	fine sand	2.5Y 6/3	@84" bands of 7.5YR5/8	loose to 84" 84"+ friable

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash sand Depth to Bedrock: 120"
Depth to Groundwater: Standing Water in the Hole: none Weeping from Pit Face: none
Estimated Seasonal High Ground Water: 84"

FORM 11 - SOIL EVALUATOR FORM
Page 1 of 3

No. _____ Date: 10/27/06

Commonwealth of Massachusetts
Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: Robert Staver Date: 10/27/06
Witnessed By: David Zarozinski

Location Address: 979 Bay Rd Lot: 30A Lot BF	Owner's Name: David N. + Phyllis H. Smith Address, and Telephone: 979 Bay Rd. Amherst, MA 01002 (413) 256-8953
New Construction ☒ Repair ☐	

Office Review

Published Soil Survey Available: No ☐ Yes ☒
Year Published _____ Publication Scale 1:15840 Soil Map Unit HgC/B
Drainage Class A Soil Limitations poor filter
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) _____

note: most of the stratified sands encountered were fine enough to provide a good filter. No coarse sand or gravel or stones were encountered.

Current Water Resource Conditions (USGS): Month _____
Range: Above Normal ☐ Normal ☒ Below Normal ☐ September 2006
Other References Reviewed: _____

DEP APPROVED FORM - 12/97/95

FORM 11 - SOIL EVALUATOR FORM

Location Address or Lot No. Bay Rd., Amherst

On-site Review

Deep Hole Number 3 Date: 10/27/06 Time: 10:30 Weather 45°, clear
Location (identify on site plan) see sketch
Land Use woods Slope (%) 2 Surface Stones none
Vegetation red oak, sugar maple, white birch
Landform Kame
Position on landscape (sketch on the back)
Distances from:

Open Water Body 200 feet+ Drainage way 100 feet± ditch
Possible Wet Area 200 feet+ Property Line 60 feet
Drinking Water Well 200 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 - 8	A	FSL	10YR3/6	none	friable
8 - 24	Bw	FSL	10YR5/8	none	slightly friable
24 - 120	C	sand	7.5YR 5/3	@ 84" 7.5YR 5/8	loose

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

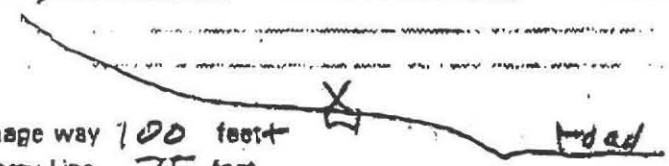
Parent Material (geologic) outwash Depth to Bedrock: 120"+
Depth to Groundwater: Standing Water in the Hole: none Weeping from Pit Face: none
Estimated Seasonal High Ground Water: 84"

FORM 11 - SOIL EVALUATOR FORM

Location Address or Lot No. Bay Rd., Amherst

On-site Review

Deep Hole Number 2 Date: 10/27/06 Time: 10:30 Weather 45° clear
Location (identify on site plan) see sketch
Land Use Woods Slope (%) 1-2 Surface Stones none
Vegetation red oak, sugar maple, white birch
Landform Kame
Position on landscape (sketch on the back)



Distances from:
Open Water Body 200 feet + Drainage way 100 feet+
Possible Wet Area 150 feet + Property Line 75 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)
0-10	A	FSL	10YR 3/4	none	Friable
10-40	BW	FSL	10YR 5/8	none	Friable, no structure
40-120	C	Fine	2.5Y 6/3 7.5YR 5/3	@84" 7.5YR 6/8	slightly friable no coarse

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash Depth to Bedrock: 120+
Depth to Groundwater: Standing Water in the Hole: none Weeping from Pit Face: none
Estimated Seasonal High Ground Water: 84"

File Copy

FORM 11 - SOIL EVALUATOR FORM
Page 3 of 3

Location Address or Lot No. Bay 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 84 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 6/1993 (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 Flower Date 10/27/06

DEP APPROVED FORM - 12/97/95

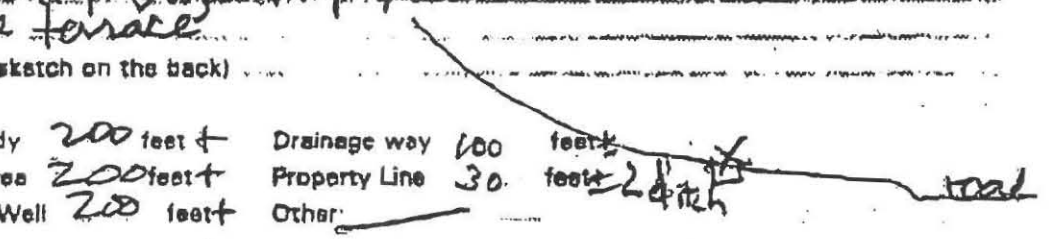
FORM 11 - SOIL EVALUATOR FORM

Location Address or Lot No. Bay Rd., Amherst

On-site Review

Deep Hole Number 4 Date: 10/27/06 Time: 10:40 Weather 45° clear
Location (identify on site plan) see sketch
Land Use Woods Slope (%) 1-2 Surface Stones none
Vegetation red oak, sugar maple, white birch
Landform Kame terrace
Position on landscape (sketch on the back)
Distances from:

Open Water Body	200 feet +	Drainage way	100 feet +
Possible Wet Area	200 feet +	Property Line	30 feet +
Drinking Water Well	200 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 - 8	A	FSL	10YR3/6	none	Friable
8 - 28	Bw	FSL	10YR5/8	none	Friable - no structure
28 - 120	C	Sand	2.5Y 6/3	@84 7.5YR 5/8	loose

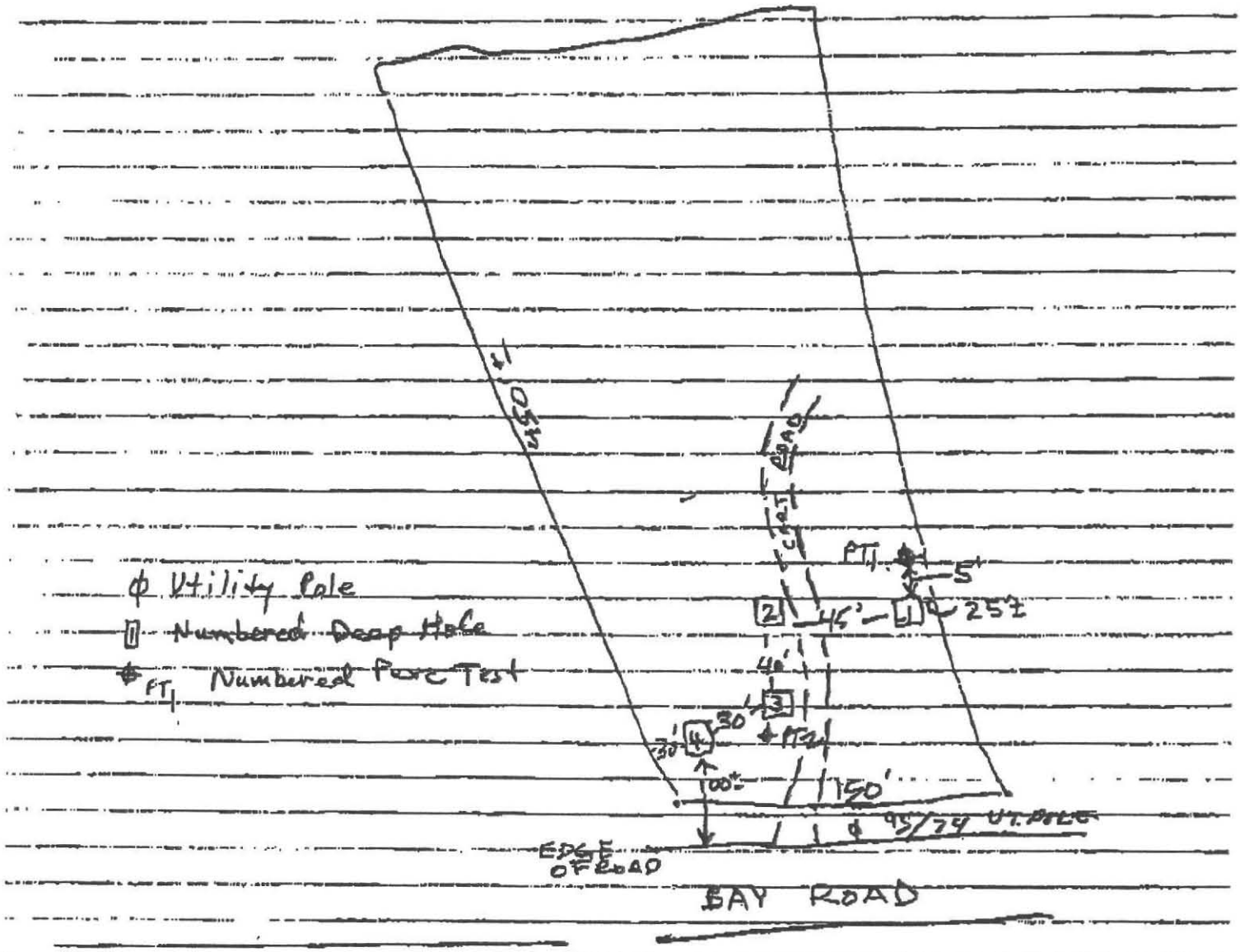
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash Depth to Bedrock: 120
Depth to Groundwater: Standing Water in the Hole: none Weeping from Pit Face: none
Estimated Seasonal High Ground Water: 84

Sketch of Test Pit Locations

Smith Property Bay Rd, Amherst

10/27/06 BY: Robert Stover



ROBERT W. STOVER

AMHERST CIVIL ENGINEERING
P.O. Box 3312
Amherst, MA 01004-3312
(413) 256-3400
rstover@crocker.com

FORM 12 - PERCOLATION TEST

Location Address or Lot No. Bay Rd., Amherst

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: 10/27/06	Time: 9:00	
Observation Hole #	1	2
Depth of Perc	60"	48"
Start Pre-soak	9:25	9:45
End Pre-soak	9:42	9:48
Time at 12"	couldn't maintain a water level	couldn't maitain
Time at 9"		
Time at 6"		
Time (9"-6")		
Rate Min./Inch	<2	<2

* 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: 5' water table separation required

DEP APPROVED FORM - 12/85/01

Form 11 -Soil Suitability Assessment for On-Site Sewage Disposal

Project #:07157 Client: Valley Builders, LLC File: Valley Builders 07157

C. On-Site Review (Lot 1011)

Deep Observation Hole Number: _____ 11/06/2007 (Date) 01:30 (Time) 50s/ms/dry/w>5mph (Weather)

1. Location

   Ground Elevation at Surface of Hole N/A

   Location (Identify on Plan) See attached sketch

2. Land Use: Residential (e.g. woodland, agricultural field, vacant lot, etc.) None observed (Surface Stones) Variable <15% (Slope (%))

   Wooded: pines, maples, oak (Vegetation) N/A (Landform) See attached sketch (Position on landscape (attach sheet))

3. Distances from: Open Water Body >200' feet Drainage Way >100' feet Possible Wet Area >100' feet

   Property Line >20' feet Drinking Water Well >100' feet Other None feet

4. Parent Material: Glacial outwash, excessively drained Unsuitable Materials Present: Yes ☐ No ☒

   If Yes: Disturbed Soil ☐ Fill Material ☐ Impervious Layer(s) ☐
   Weathered/Fractured Rock ☐ Bedrock ☐

Additional Notes
Additional testpit and perc test done to supplement existing data, and bring design into compliance.

Commonwealth of Massachusetts
City/Town of: **Amherst**

SHERMAN & FRYDRYK
D.O.T.: **11/06/07**

Form 11 -Soil Suitability Assessment for On-Site Sewage Disposal

Project #:07157 Client: Valley Builders, LLC File: Valley Builders 07157

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

A. Facility Information

1. Facility Information

David N. and Phyllis H. Smith
Owner Name

#1011 Bay Road Map/Lot M30A-P8F
Street Address

Amherst MA 01002
City/Town State Zip Code

B. Site Information

1. (Check one) New Construction ☒ Upgrade ☐ Repair ☐

2. Published Soil Survey available? Yes ☒ No ☐ If yes: 1981 (Year Published) 1:15,840 (Publication Scale) HgC (Soil Map Unit)

Hinckley loamy sand (Soil Name) drainage class (A), slopes (Soil limitations)

3. Surficial Geological Report available? Yes ☐ No ☒ If yes: N/A (Year Published) N/A (Publication Scale) N/A (Map Unit)

N/A (Geologic Material) N/A (Landform)

4. Flood Rate Insurance Map:

Above the 500 year flood boundary?	Yes ☒	No ☐
Within the 100 year flood boundary?	Yes ☐	No ☒
Within the 500 year flood boundary?	Yes ☐	No ☒
Within a Velocity Zone?	Yes ☐	No ☒

5. Wetland Area: National Wetland Inventory Map N/A (Map Unit) N/A (Name)

Wetlands Conservancy Program Map N/A (Map Unit) N/A (Name)

6. Current Water Resource Conditions (USGS)

Range: Above Normal ☐ Normal ☐ Below Normal ☒ October 2007 (Month/Year)

7. Other references reviewed: None

Commonwealth of Massachusetts
City/Town of: **Amherst**

SHERMAN & FRYDRYK
D.O.T.: **11/06/07**

Form 11 -Soil Suitability Assessment for On-Site Sewage Disposal

Project #: 07157 Client: Valley Builders, LLC File: Valley Builders 07157

C. On-Site Review (Lot 1011 Cont.)

Deep Observation Hole Number: _____

Depth (In.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	%		Gravel	Cobbles & Stones			

Groundwater Observed: Yes ☐ No ☐

If Yes: Depth Weeping from Pit _____ Inches Depth Standing Water in Hole _____ inches

Estimated Depth to High Groundwater: _____ inches Elevation: _____ (feet)

Commonwealth of Massachusetts
City/Town of: **Amherst**

SHERMAN & FRYDRYK
D.O.T.: **11/06/07**

Form 11 -Soil Suitability Assessment for On-Site Sewage Disposal

Project #: 07157 Client: Valley Builders, LLC File: Valley Builders 07157

C. On-Site Review (Lot 1011 Cont.)

Deep Observation Hole Number: 5

Depth (In.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	%		Gravel	Cobbles & Stones			
P-5 8"	A	10yr/3/2				fsL					
23"	Bw	10yr/4/6				LS					
140"	C	10yr/5/6	36" distinct	7.5yr 5/8	<10%	S	>10%	<5% Ø 3"/2	med.-coarse grain, granular,	loose, homogenous	

Groundwater Observed: Yes ☑ No ☐

If Yes: Depth Weeping from Pit No inches Depth Standing Water in Hole No inches

Estimated Depth to High Groundwater: 36" inches Bedrock ~~Elevation~~: No (feet)

Commonwealth of Massachusetts
City/Town of Amherst
Percolation Test
Form 12

Proj.#: 07157

D.O.T.: 11/06/2007

Percolation test results must be submitted with the Soil Suitability Assessment for On-site Sewage Disposal. 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.

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

A. Site Information

David N. and Phyllis H. Smith
Owner Name

#1011 Bay Road
Street Address or Lot #

Amherst	MA	01002
City/Town	State	Zip Code

Valley Builders, LLC, Matt Fernandes	413-237-9650
Contact Person (if different from Owner)	Telephone Number

B. Test Results

	11/06/2007 (Date)	01:30 (Time)	Date	Time
Observation Hole #	P-5			
Depth of Perc	75" (18" hole)			
Start Pre-Soak	02:31			
End Pre-Soak	2:31 (10 gallons)			
Time at 12"				
Time at 9"				
Time at 6"	02:32			
Time (9"-6")	Could fill 7", <1 min. to 6"			
Rate (Min./Inch)	<1 mpi			
	Test Passed: ☒ Test Failed: ☐		Test Passed: ☐ Test Failed: ☐	

Anthony Curd
Test Performed By:

Tom Dion
Witnessed By:

Comments:

Excavator was Leo Feugler 413-467-9765

Commonwealth of Massachusetts
City/Town of: Amherst

SHERMAN & FRYDRYK
D.O.T.: 11/06/07

Form 11 -Soil Suitability Assessment for On-Site Sewage Disposal

Project #:07157 Client: Valley Builders, LLC File: Valley Builders 07157

D. Determination of High Groundwater Elevation (Lot 1011)

1. Method used:

		5)	6)	7)	8)
☒	Depth observed standing water in observation hole	None inches	_____ inches	_____ inches	_____ inches
☒	Depth weeping from side of observation hole	None inches	_____ inches	_____ inches	_____ inches
☒	Depth to soil redoximorphic features (mottles)	86" inches	_____ inches	_____ inches	_____ inches
☐	Groundwater adjustment (USGS methodology)	N/A inches	N/A inches	N/A inches	N/A inches

2. Index Well Number N/A Reading Date N/A Index Well Level N/A

Adjustment Factor N/A Adjusted Groundwater Level N/A

E. Depth of Pervious Material

1. Depth of Naturally Occurring Pervious Material

   a. 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 ☒ No ☐

   b. If yes, at what depth was it observed? Upper boundary: 8" (TP-5) inches

   Lower boundary: 140" (TP-5) inches

F. Certification

I certify that 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.

Anthony Curd
Signature of Soil Evaluator

11/07/2007
Date

ANTHONY CURD
Typed or Printed Name of Soil Evaluator

05/1996
Date of Soil Evaluator Exam

TOM DION, BOARD OF HEALTH AGENT
Name of Board of Health Witness

AMHERST
Board of Health

Note: This form must be submitted to the approving authority with Percolation Test Form 12

CK# 4269 — Perc 300.
Perc Test Only Plan 150 ea.

FORM 11: Soil Evaluation Form NO: _____

Commonwealth of Massachusetts
Town of: AMHERST

Soil Suitability Assessment : On-Site Sewage Disposal

Performed By: Bob Stowe Date: 10/20/06
Witnessed By: David Zarozinski

Location Address of:
Lot #

Owner's Name: David A. Smith
Address of: 979 Bay Rd
Telephone:

New Construction ☑ Repair ☐

Office Review

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

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

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

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

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

Other Reference Reviewed:

Determination: Seasonal High Water Table

Methods Used:

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

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

Depth of Naturally Occurring Previous Material

Does at least four feed 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 _____

LOT 7 (979 Bay Rd) + Subdivide

On-Site Review

Deep Hole Number 1+2 Date: 10/27 Time 10 AM
Weather 45° Sunny
Location (identify on site plan) _____
Land Use woods Slope (%) 1-2
Surface Stone _____
Vegetation: Red Oak / maples

Landform: Marine

Position on Landscape (sketch on back) _____
Distances from:
Open Water Body 100 feet
Possible Wet Ares 100 feet
Drinking Water Well 100 feet
Drainageway 100 feet
Property Line _____ feet
Other D-25/2

DEEP OBSERVATION HOLE LOG

	depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
1)	10	A	FSL	10YR 3/6	—	Friable
	36"	Bw	FSL	10YR 5/8	—	Slightly Firm Structureless
	10'	C	Fine Sand	2.5Y 6/3	84" 2.5Y 6/8	Loose to 84" Friable
2)	10"	A	FSL			
	46"	Bw	FSL	Same	84" 7.5Y 5/8	Same
	10'	C	F. Sand			

Parent Material (geologic) Outwash
Depth to Bedrock _____
Depth to Groundwater: —
Standing Water in the Hole —
Weeping from Pit Face —
Estimated Seasonal High Water Hole #1 84" Hole #2

On-Site Review

Deep Hole Number 3/4 Date: 10/27/06 Time 10am
Weather Sunny 45
Location (identify on site plan) _____
Land Use Woods Slope (%) 1-2
Surface Stone _____
Vegetation: Red Oak / maple

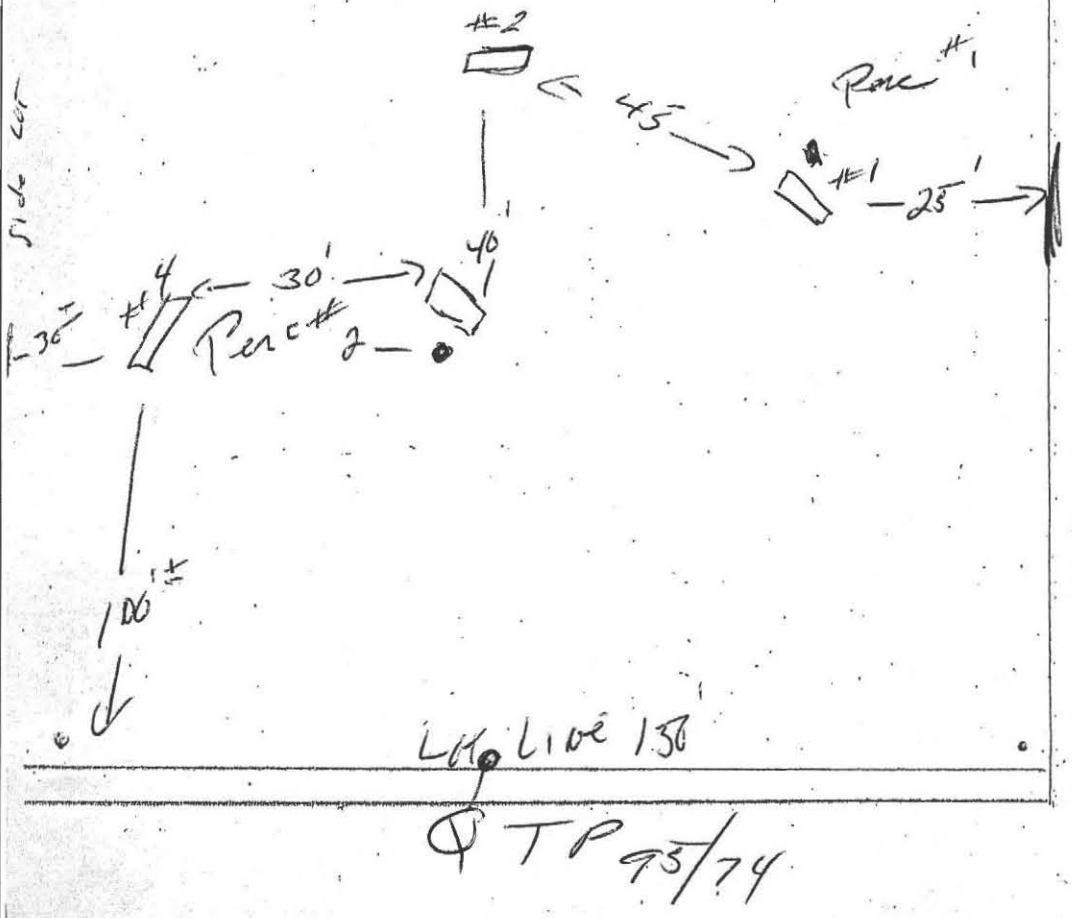
Landform: Marine Terrace

Position on Landscape (sketch on back) _____
Distances from:
Open Water Body _____ feet
Possible Wet Ares _____ feet
Drinking Water Well _____ feet
Drainageway _____ feet
Property Line _____ feet
Other _____

DEEP OBSERVATION HOLE LOG

	depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
#3	8	A	FSL	10YR 3/2		Friable
	24	Bw	FSL	10YR 5/6		Slightly Firm
	120	C	Sand	(84" 7.5YR 5/8)	84"	Loose
#4	8	A	FSL	7.5YR 3/3		Friable
	28	Bw	FSL	10YR 3/6	84"	Friable No Structure
	120	C	Sand	10YR 5/8		Loose

Parent Material (geologic) #3 Outwash
Depth to Bedrock 120+/-
Depth to Groundwater: —
Standing Water in the Hole —
Weeping from Pit Face —
Estimated Seasonal High Water 84" / 84



FORM 12: Percolation Test

Location Address or Lot # NEXT TO 979 BAY Rd

Commonwealth of Massachusetts
Town of AMHERST

PERCOLATION TEST * DATE: 10/20/06 TIME: 9AM		
Observation Hole #	1	2
Depth of Perc	60"	48"
Start Pre-soak	9:25	9:45 / 9:48
End Pre-soak	9:42	
Time at 12"	can't	
Time at 9"	Hold	can't
Time at 6"	water	
Time (9"-6")		Hold
Rate Min./Inch		

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

Site Passed ☑ Site failed ☐

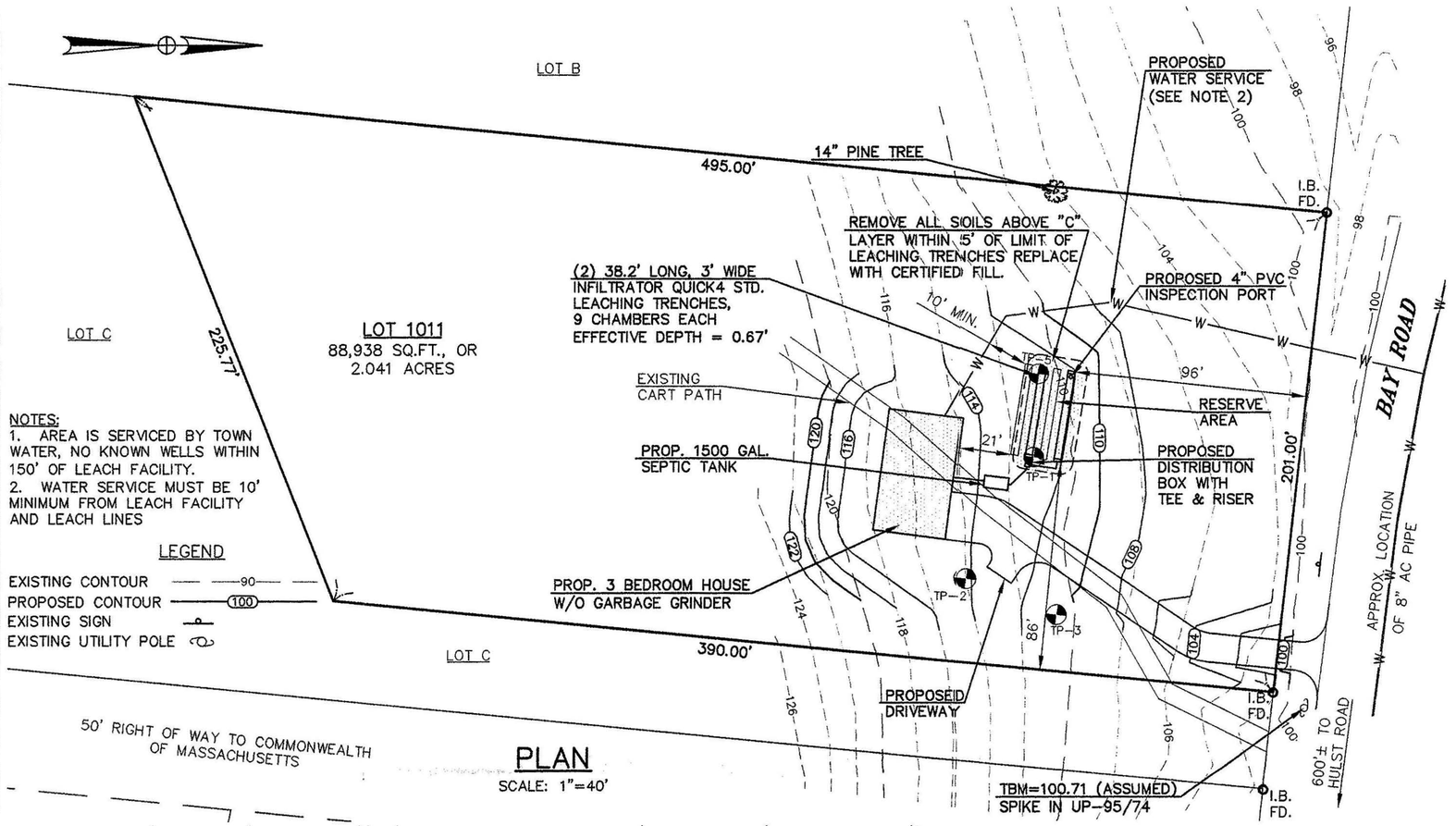
Performed by BOB STOVER

Witnessed by David Zimmerman

Comments:

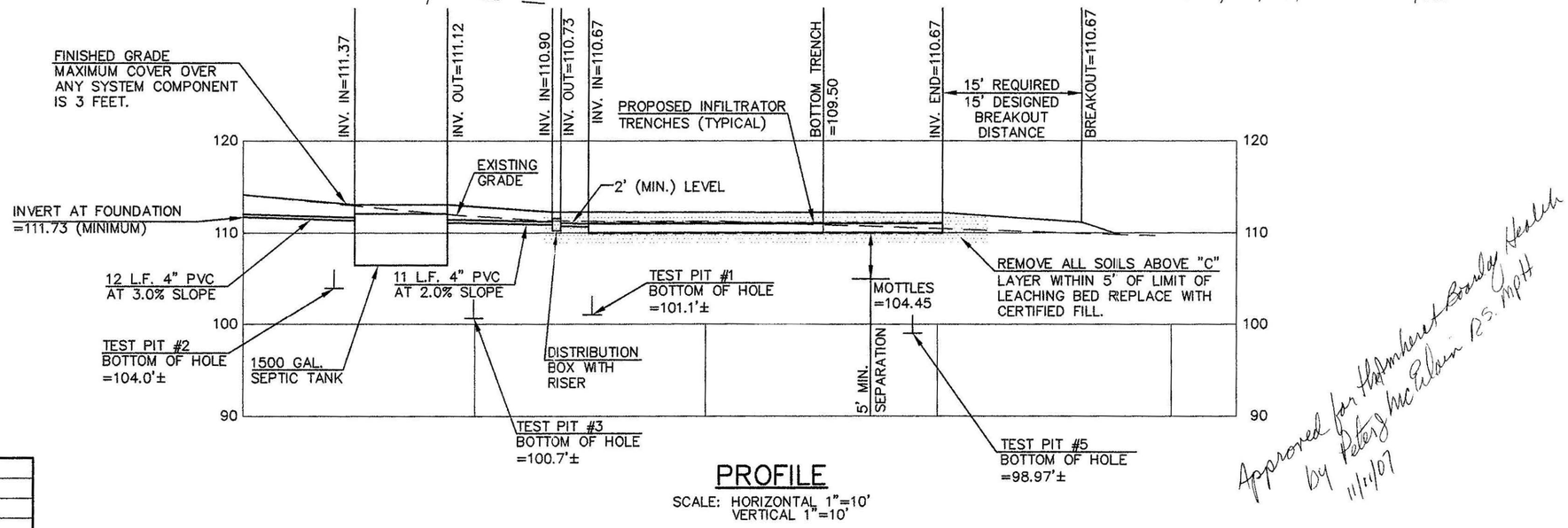
MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR TRENCH SYSTEMS

1. EXCAVATE AND LEVEL 3' WIDE TRENCHES.
2. PREPARE TRENCH BOTTOM AND SIDES IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS. (INFILTRATOR SYSTEMS, INC. RECOMMENDS RAKING SIDEWALL AND BOTTOM INFILTRATIVE SURFACES TO ELIMINATE SMEARING.)
3. SCREW SPLASH PLATE ON BOTTOM OF OPEN END PLATE.
4. SCREW OPEN END PLATE INTO INET END (WITHOUT INTERLOCKS) OF FIRST INFILTRATOR CHAMBER WITH SPLASH PLATE EXTENDING INTO CHAMBER.
5. PLACE FIRST UNIT IN THE INLET END OF TRENCH WITH INTERLOCKS DOWNSTREAM.
6. RUN DISTRIBUTION PIPE THROUGH INLET OPENING IN END PLATE BUT NOT BEYOND SPLASH PLATE. SINGLE SCREW MAY BE USED TO HOLD IN PLACE. PIPE DOES NOT NORMALLY RUN THE LENGTH OF SYSTEM.
7. CONNECT INFILTRATOR CHAMBERS TOGETHER, FULLY ENGAGING INTERLOCKS TO FORM DESIRED TRENCH LENGTH, THE JOINTS MAY BE SCREWED TOGETHER FOR EASE IN CONSTRUCTION. BE SURE TO CHECK TRENCH GRADE WITH A LEVEL OR SURVEYING EQUIPMENT.
8. SCREW CLOSED END PLATE IN DOWNSTREAM END OF LAST CHAMBER. NOTE: FOR SERIAL DISTRIBUTION, OR TO LOOSE THE TRENCHES TOGETHER, USE AN OPEN END PLATE AT THE DOWNSTREAM END OF THE TRENCH, AND RUN A PIPE FROM THE OPENING TO THE NEXT TRENCH.
9. FILL SIDE WALL AREA TO TOP OF SLOTS WITH NATIVE SOIL. "WALK" FILL INTO PLACE TO GIVE PROPER SUPPORT OF SIDES, THIS IS VERY IMPORTANT TO ACHIEVE FULL STRENGTH.
10. BACKFILL TO MINIMUM OF 12" COVER AFTER COMPACTION AND SETTLING FOR H-10 CHAMBERS AND 18" FOR H-20 CHAMBERS. AVOID LARGE ROCKS IN THE BACKFILL MATERIAL. CAUTION--AVOID VEHICULAR TRAFFIC ON SYSTEM DURING CONSTRUCTION SINCE SOIL HAS NOT SETTLED. THIS IS PARTICULARLY IMPORTANT IN SAND, SINCE LOOSE SAND OFFERS VERY LITTLE STRUCTURAL SUPPORT. MOST STATES ADVISE AVOIDING VEHICLE TRAFFIC TO PREVENT COMPACTION OF THE INFILTRATIVE SURFACE. (AFTER PROPER DEPTH OF COVER IS COMPACTED AND SETTLED, INFILTRATOR CHAMBERS WILL THEN SUPPORT VEHICLE WEIGHT NOT TO EXCEED 16,000 LBS. PER AXLE FOR H-10 CHAMBERS AND 32,000 LS. PER AXLED FOR H-20 CHAMBERS.)



PLAN

SCALE: 1"=40'



PROFILE

SCALE: HORIZONTAL 1"=10'
VERTICAL 1"=10'

Approved for Amherst Board of Health
by Peter J. McElwain P.E. MPH
11/14/07

NO,	DATE	BY	REVISIONS
1	11/07/07	AOC	ADD.'L PERC DATA; B-LAYER NOTE

SHERMAN & FRYDRYK
Land Surveying and Engineering
3 Converse Street, Suite 203
Palmer, MA 01069
283-6210

DESIGN: A.O.C.
DRAFTING: A.O.C.
CHECKED: K.T.T.
APPROVED: D.J.F.

COMMONWEALTH OF MASSACHUSETTS
DONALD J. FRYDRYK
CIVIL
No. 35639
REGISTERED PROFESSIONAL ENGINEER

SCALE:
HORZ: AS SHOWN
VERT: AS SHOWN
DATE: 10/09/07

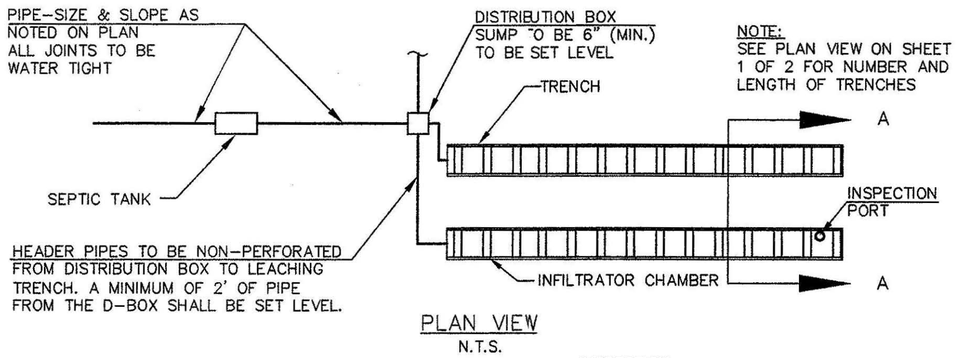
REVISED

PLAN OF PROPOSED SEWAGE DISPOSAL SYSTEM
PREPARED FOR
VALLEY BUILDERS, LLC
#1011 BAY ROAD
AMHERST, MA

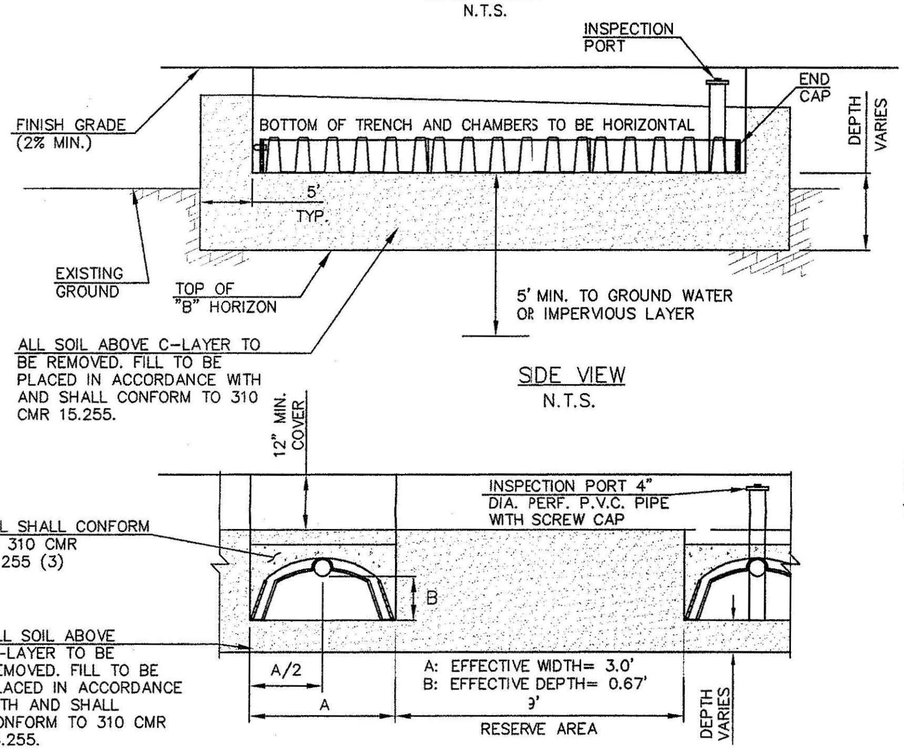
PROJECT NUMBER
07157

SHEET NUMBER
1 OF 2

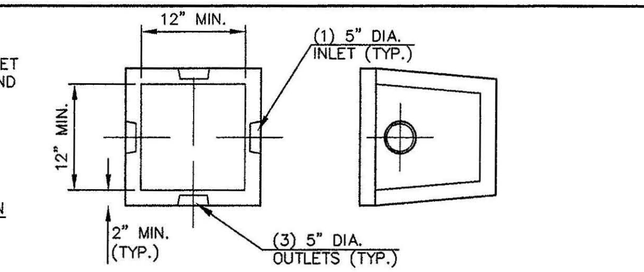
07157-S.DWG

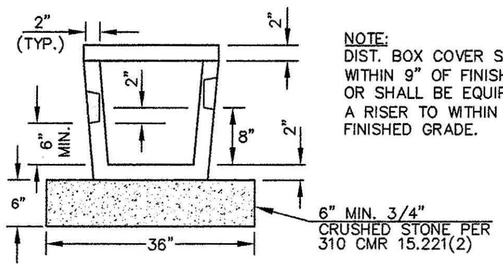


PLAN VIEW
N.T.S.



SIDE VIEW
N.T.S.

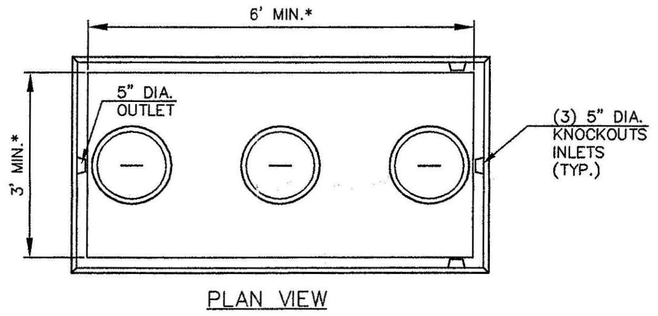




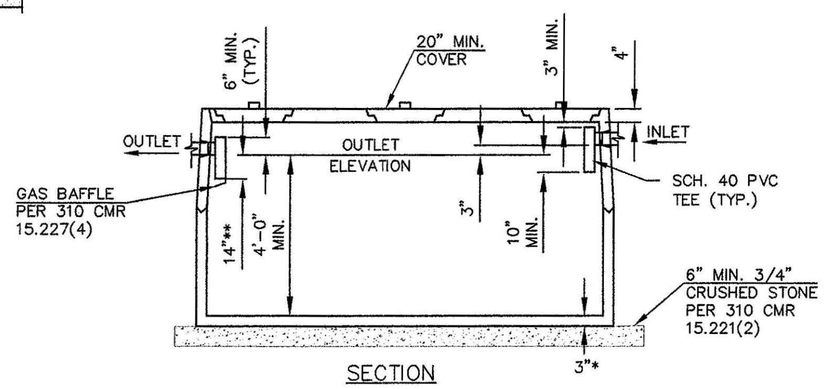
NOTE:
DIST. BOX COVER SHALL BE WITHIN 9" OF FINISHED GRADE OR SHALL BE EQUIPPED WITH A RISER TO WITHIN 6" OF THE FINISHED GRADE.

STEEL REINFORCEMENT – A–615–75, GRADE 60, 1" COVER (MIN.)
CONCRETE STRENGTH – 4,000 PSI AT 28 DAYS (MIN.)

PRECAST DISTRIBUTION BOX
N.T.S.



PLAN VIEW



SECTION

NOTE: SEPTIC TANK MUST BE PLACED 50' MINIMUM FROM ANY DOMESTIC WELL.
*MINIMUM WALL THICKNESS TO BE 3" IF REINFORCED. 4" WITHOUT REINFORCEMENT
**FOR TANKS WITH DIFFERENT LIQUID DEPTHS, SCH. 40 PVC OUTLET TEES SHALL BE CONSTRUCTED TO THE DEPTH BELOW THE OUTLET INVERT IN ACCORDANCE WITH 310 CMR 15.227 (6).

1,500 GALLON SEPTIC TANK
N.T.S.

DESIGN CALCULATIONS

3 BEDROOMS X 2 PERSONS PER BEDROOM = 6 PERSONS

6 PERSONS X 55 GALLONS OF WASTEWATER PER PERSON PER DAY = 330 GALLONS OF WASTEWATER PER DAY.

PERCOLATION RATE = <2 MIN PER INCH.

LEACHING AREA REQUIREMENTS: CLASS I SOIL 310 CMR 15.242
USE 5 MIN. PER INCH EFFLUENT LOADING RATE = 0.74 GPD/SF

INFILTRATOR TRENCH DESIGN

SIDEWALL: 1' OF LENGTH X 2 SIDES X 0.67' EFFECTIVE DEPTH X 1.67 = 2.23 SF/LF OF TRENCH.
BOTTOM: 1' OF LENGTH X 2.83' WIDE X 1.67= 4.73 SF/LF OF TRENCH.
TOTAL: 2.23 + 4.73= 6.96 SF/LF OF TRENCH (PER DEP APPROVAL)
X .74 GAL/SF LOADING RATE= 5.15 GAL./LF OF TRENCH

REQUIRED LENGTH OF TRENCH (CALCULATED):
330 GAL./5.15 GAL PER LINEAR FOOT = 64 LINEAR FEET OF TRENCH.
REQUIRED LENGTH OF TRENCH (PER DEP APPROVAL):
400 S.F. (MIN.)/ 6.96' SF/LF = 57.5 LINEAR FEET OF TRENCH.

CAPACITY OF SYSTEM AS DESIGNED

2 X (36'+2.2')= 76.4 LF OF TRENCH X 6.96 SF/LF = 531 SF (EFF. LEACH AREA)
531 SF X .74 GAL/SF=393 GAL. OF WASTEWATER PER DAY. (18 CHAMBERS)
(WITHOUT GARBAGE GRINDER)

SEPTIC TANK

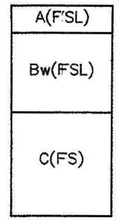
WITHOUT GARBAGE DISPOSAL:
330 GALLONS OF WASTEWATER PER DAY X 200% = 660 GALLONS REQUIRED EFFECTIVE LIQUID CAPACITY OF SEPTIC TANK.

USE 1500 GAL SEPTIC TANK MIN.

CONSTRUCTION NOTES

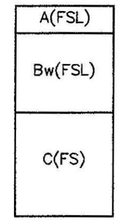
1. INSTALLERS MUST BE CERTIFIED BY INFILTRATOR SYSTEMS, INC. IN ORDER TO BE AUTHORIZED TO INSTALL THIS SYSTEM.
2. A MINIMUM OF 48 HOURS NOTICE TO THE ENGINEER IS REQUIRED FOR INSPECTION OF THE SYSTEM. FINAL COVER OF THE SYSTEM COMPONENTS SHALL NOT BE COMPLETED UNTIL AFTER THE INSPECTION.
3. ALL EXISTING SOILS ABOVE THE "B" HORIZON SHALL BE REMOVED WITHIN THE AREA SHOWN ON THE PLAN. FILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH AND SHALL MEET THE SPECIFICATIONS OF 310 CMR 15.255. A CERTIFIED SIEVE ANALYSIS FOR THE FILL MATERIAL SHALL BE FURNISHED BY THE CONTRACTOR TO THE OWNER.
4. ALL STRUCTURES, INCLUDING BUT NOT LIMITED TO THE SEPTIC TANK AND THE D–BOX, SHALL BE WITHIN 9" OF FINISHED GRADE, OR EQUIPPED WITH RISERS TO WITHIN 6" OF FINISHED GRADE.
5. ALL STRUCTURES SHALL BE MARKED FOR FUTURE LOCATION USING MAGNETIC TAPE OR OTHER COMPARABLE METHOD, IN ACCORDANCE WITH 310 CMR 15.221(12).

OBSERVATION PIT #TP–1



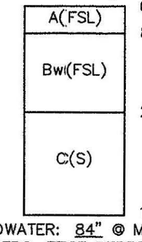
GROUNDWATER: 84" @ MOTTLING
PERC. TEST AT 60"=<2 MIN./INCH

OBSERVATION PIT #TP–2



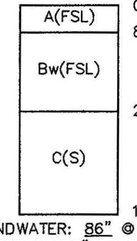
GROUNDWATER: 84" @ MOTTLING
PERC. TEST AT 48"=<2 MIN./INCH

OBSERVATION PIT #TP–3



GROUNDWATER: 84" @ MOTTLING
NO PERC. TEST PERFORMED

OBSERVATION PIT #TP–5



GROUNDWATER: 86" @ MOTTLING
PERC. TEST AT 75"=<1 MIN./INCH

SOIL EVALUATION BY ROBERT STOVER, 10/27/06
WITNESSED BY DAVID ZAROZINSKI, HEALTH AGENT
SOIL EVALUATION BY ANTHONY CURD, 11/06/07 (TP–5)
WITNESSED BY TOM DION, HEALTH AGENT, 11/06/07 (TP–5)

GENERAL NOTES

1. NO WETLANDS WITHIN 50' OF PROPOSED SEPTIC SYSTEM.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH 310 CMR 15.00, THE STATE ENVIRONMENTAL CODE, TITLE 5.
3. SEPTIC TANK SHALL BE MAINTAINED IN ACCORDANCE WITH 310 CMR 15.351.
4. ALL PIPING FROM HOUSE TO DISTRIBUTION BOX SHALL BE SCH–40, RING–TITE. DISTRIBUTION LINES SHALL BE SCH 40 OR SDR 35 PER 310 CMR 15.252(2)(h).
5. PROPERTY LINES SHOWN ARE FOR ENGINEERING DESIGN PURPOSES ONLY.
6. AREA SERVED BY TOWN WATER, NO KNOWN WELLS IN AREA.
7. BACKWASH OF WATER PURIFICATION OR FILTRATION DEVICES MUST DISCHARGE TO A DRYWELL, NOT TO PROPOSED LEACH FACILITY.

NO,	DATE	BY	REVISIONS
1	11/07/07	AOC	ADD.'L PERC DATA; B–LAYER NOTE

SHERMAN & FRYDRYK
Land Surveying and Engineering
3 Converse Street, Suite 203
Palmer, MA 01069

DESIGN: A.O.C.
DRAFTING: A.O.C.
CHECKED: K.T.T.
APPROVED: D.J.F.

COMMONWEALTH OF MASSACHUSETTS
DONALD J. FRYDRYK
CIVIL
No. 35839
REGISTERED PROFESSIONAL ENGINEER

SCALE:
HORZ: N.T.S.
VERT: N.T.S.
DATE: 10/09/07

DETAILS

REVISED

PLAN OF PROPOSED SEWAGE DISPOSAL SYSTEM
PREPARED FOR
VALLEY BUILDERS, LLC
#1011 BAY ROAD
AMHERST, MA

PROJECT NUMBER
07157

SHEET NUMBER
2 OF 2

07157–D.DWG

Town of

AMHERST

Epi Bodhi
Health Dept

TOWN HALL
4 Boltwood Avenue
Amherst, MA 01002-2351

Conservation Department
(413) 259-3045
(413) 259-2410 [Fax]
conservation@amherstma.gov

CONSERVATION COMMISSION MEETING AGENDA
WEDNESDAY, JANUARY 9, 2008
7:00 PM – TOWN ROOM, TOWN HALL

Review of minutes from 12/12/07 meeting
Comments from the Chair (Nicki)
Director's Report (Dave)
Wetland Administrator's Report (Stephanie)

1. **7:05 PM** – Veridian Village Conservation Restriction Discussion

2. **7:30 PM** – Request for an Amended Order of Conditions (Cont'd from 12/12/07) – Berkshire Design Group for the National Yiddish Book Center for incorporating Fire Department requests for emergency access drive and emergency egress route from building exits and minor re-grading as required by the proposed changes on 1021 West Street (Map 25B, Parcel 63).

3. **7:45 PM** – Notice of Intent (Cont'd from 12/12/07) – Cold Spring Environmental Consultants Inc. for Sheila Stevens for construction of a single-family home with proposed crossing of an intermittent stream/drainage swale and Bordering Vegetated Wetland on 49 Overlook Drive (Map 6B, Parcel 49).

4. **8:00 PM** – Chapter 61: Bay Road – Smith dk

5. **8:10 PM** – Chapter 61: Henry Street – Cowls

6. **8:20 PM** – Chapter 61A: 539 Market Hill Road – Riley/Thornton

7. Miscellaneous

Posted 1/4/08

TOWN OF AMHERST
HEALTH PERMITS/INSPECTION SERVICES No. 3240

Received of VALLEY BUILDERS LLC. of P.O. Box 329 GRANBY MA.
Name Address

For Property Located at: 1011 BAY ROAD VALLEY BUILDERS LLC.
Street Address Owner

HEA009	Bakery R6510 443508		HEA015	Sanitary Code Booklets R6510 432305	
HEA001	Bed & Breakfast R6510 443516		HEA016	Septic Tank Permit-Installers R6510 443511	
HEA002	Catering License R6510 443507		HEA017	Septic Tank Permit-Private R6510 443510	#275.00
HEA003	Food Handler R6510 443515		HEA018	Septic Tank Reinspection Fee R6510 432301	
HEA004	Frozen Deserts R6510 443501		HEA019	Sub-Division Review Fee R6510 432306	
HEA005	Health Dept. Housing Isp. R6510 432302		HEA012	Swimming Pool Permits R6510 443512	
HEA006	Massage Therapy License R6510 443504		HEA020	Tanning License R6510 443509	
HEA007	Milk & Cream License R6510 443500		HEA024	Funeral Director License R6510 443502	
HEA008	Motel License R6510 443506		HEA034	Immunization Clinic R6510 432307	
HEA010	Removal of Offal R6510 443513		HEA030	Car Seats 8407 258004	
HEA021	Removal of Rubbish R6510 443520		HEA026	Smoking & Tobacco Reg. Violations R6510 443518	
HEA011	Percolation Test Fees R6510 432300	#100.00	HEA023	TB Clinic R6510 432303	
HEA013	Recreation Camp License R6510 443503		HEA022	Tobacco License R6510 443505	
HEA014	Retail Store Permit R6510 443514		HEA		
			HEA		

TOTAL FEE: #375.00

Thomas Shea
Inspeciton Services/Health Department

11/6/07
Date

PLAN REVIEW $150 -
Subsequent Plans $125
#275 CK #4589 #275.00
CK 4590 #100.00
#375.00

82708705
TOWN OF AMHERST
MISC CASH RECEIPTS
Date / Time : 11/09/07 08:49
Payment : $275.00
Receipt # : 49465
Check/Credit Card #: 4590,4589

Must be Validated by the Collector's Office to be considered paid

White - Applicant *Yellow - Collector* *Pink - Accounting* *Gold - Health/Inspections*

TOWN OF AMHERST 71145
MISC CASH RECEIPTS
Date / Time : 11/09/07 08:27
Payment : $100.00
Receipt # : 49464
Check/Credit Card #:
Paid By:

Peter J. McErlain, R.S., MPH
Title Five Consulting
16 Coed Drive
Easthampton, MA 01027
Phone 413-527-8204

INVOICE

INVOICE # 022

DATE: Nov. 11, 2007

Bill To:
Epi Bodhi, Director
Amherst Board of Health
70 Boltwood Walk
Amherst, MA 01002-2341

For: Septic System Plan Review

DESCRIPTION	AMOUNT
Septic System Plan Review — **1.0 hours @ $30.00/Hr.**	$30.00
Date: Nov. 11, 2007 **Plan for:** 1011 Bay Rd., Amherst **By:** Donald Frydryk **Results:** Plan was approved	
GAVE TO KATHRYN ON 11/15/07	
Please make check payable to Peter McErlain and remit to 16 Coed Dr., Easthampton, MA 01027	
TOTAL	**$30.00**

If you have any questions concerning this invoice, contact Peter McErlain, 413-527-8204

THANK YOU

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

No. 07-11 Town OF Amherst Fee

Disposal Works Construction Permit

Permission is hereby granted David & Phyllis Smith

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

at No. 104 Bay Rd Amherst MA 01002 10/11/07 phc

Street

as shown on the application for Disposal Works Construction Permit No. 07-11 Dated ~~10/27/06~~

Peter J. McElaney RS. MPH

for HA Board of Health

DATE NOV 11 2007

FORM 1255 HOBBS & WARREN, INC., PUBLISHERS

Peter J. McErlain, R.S., MPH
16 Coed Drive
Easthampton, MA 01027
Tel: (413) 527-8204

MEMO

TO: ***Amherst Board of Health***

DATE: ***November 11, 2007***

RE: ***Review of a Plan for New Soil Absorption System at 1011 Bay Rd., Amherst, MA***

Property Owner: David & Phyllis Smith
979 Bay Rd.
Amherst, MA 01059

System Designer: Donald Frydryk, P.E..

System Description: The proposed Soil Absorption System (SAS) is a Septic tank / Infiltrator Leach Trench SAS, w/ a 1500 Gal. septic tank and Two 38.2'X 3' Infiltrator trenches w/ a 5' separation to ground water. The system design is based on a perc rate of 5 min./in. and an estimated seasonal high groundwater at 14"

Conclusion: As a result of a review of the system design plans I have concluded that the design for the proposed SAS complies with all requirements of Title 5, 310 CMR 15.000 and I hereby recommend approval subject to the following condition:

- **The Septic System Installer must be certified by Infiltrator Systems, Inc. as an authorized Infiltrator System installer.**

Please feel free to contact me with any questions concerning this review.

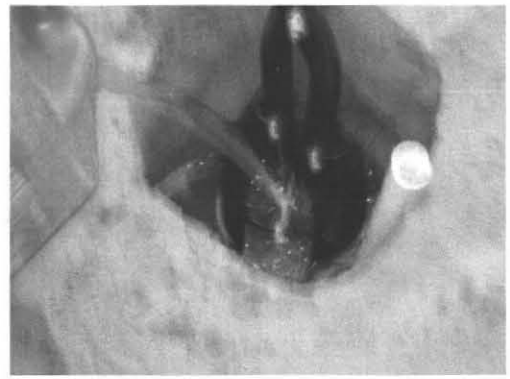
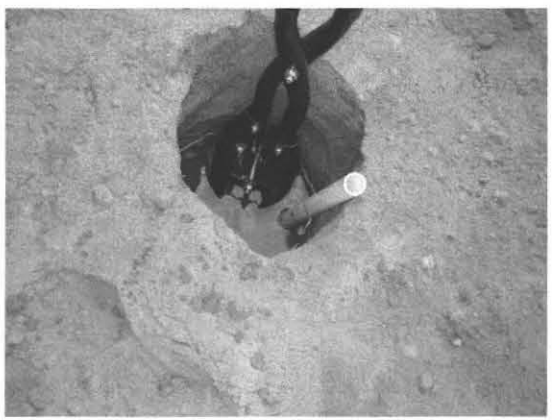
Thank you.

Peter J. McErlain

Date 11-11-07





Deep hole and perc test for TP 5
1011 Bay Road
Engineer: Anthony Curd
11/6/07

I believe the lot # 1011 you are referring to on Bay Road is really Map 30 A /parcel 21. The owner was in looking for a street number and I believe the number assigned was 1011 Bay Road – please check with the owner.

Bonnie

10/19/2007

received
10-23-07

Peter J. McErlain, R.S., MPH
16 Coed Drive
Easthampton, MA 01027
Tel: (413) 527-8204

COPY

MEMO

TO: Tom Dion, Amherst Board of Health

DATE: October 21, 2007

RE: Review of Septic Plan for 1011 Bay Rd., Amherst

A review of the septic design plan for property at 1011 Bay Rd., Amherst revealed the following deficiencies:

- **The plan showed only one deep hole/test pit at the site of the proposed sewage disposal system, when a minimum of two are required by code.**
- **The Construction notes on the plan called for the excavation of all soils above the "B" horizon, and called for the construction of the disposal system in "Title 5 sand" placed on top of the "B" horizon. The "B" horizon was not perc tested but was listed as being a Fine Sandy Loam which has a smaller sewage application rate that the "C" horizon which was perc tested.**

I have spoken with the plan designer (Donald Frydryk) and suggested the following actions:

- **Have another test pit excavated at the site of the proposed disposal system.**
- **Revise the plan to call for the excavation of the "B" horizon or the leaching system design size must be revised and based on the slower application rate that is listed in the code for Fine Sandy Loam.**

Mr. Frydryk agreed to inform the property owner that another deep hole/test pit was required and to revise the plan to call for the removal of the "B" horizon.

I'll hold on to the original plans and supporting information. Please forward the revised plans to me for review. I'll incorporate the original supporting information into those revised plans.

Please feel free to contact me with any questions concerning this memo.

Thank you.

Peter J. McErlain

Peter J. McErlain **Date** 10-21-07

Town of Amherst Board of Health
Permit Plan Percolation Assessment Sheet

1. Septic System (Please circle):

A.) Alternative

B.) Cesspool with overflow

C.) Conventional gravity w/d box

D.) Large (10,000 GPD)

E.) Modified Tight Tank

F.) Shared System

G.) Single Cesspool

H.) Pit System

I.) Conventional w/Pump chamber

J.) Pressure dosing system

K.) Other:_____

2. Soil Absorption System (Please Circle):

A.) Alternative Bed

B.) Leach Field

C.) Trenches

D.) Pit/Galley

E.) Other: _____

3. Compartment Tank (Please Circle): Yes or No

4. Tank Gallon: 1#_____ #2_____

5. Design Flow (GPD): _____

6. Tank Construction (Please Circle):

A.) Concrete

B.) Fiberglas

C.) Steel

D.) Other: _____

7. Elevated (Please Circle): Yes or No

8. Groundwater Separation: _____

9. Title V (Please Circle):

A.) C-Conditional Pass

B.) F-Fail

C.) P- Pass

D.) V- Further Evaluation

10. Date of Title V Inspection: _____

TOWN OF AMHERST
HEALTH PERMITS/INSPECTION SERVICES

No. 2373

Received of PHYLLIS H. SMITH (Name) of 979 BAY ROAD (Address)

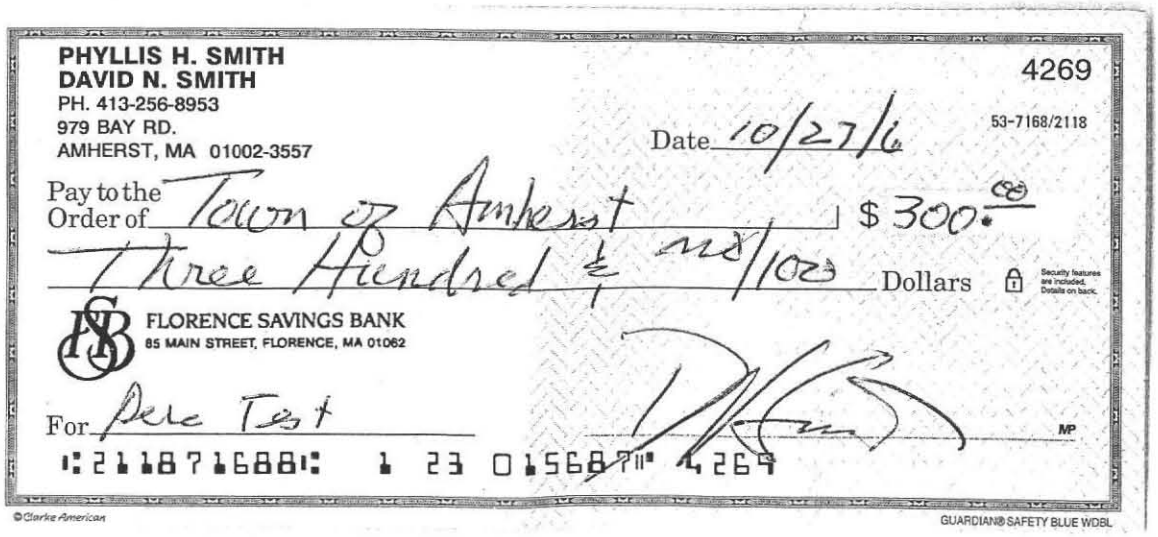
For Property Located at: 979 BAY ROAD (Street Address) PHYLLIS AND DAVID SMITH (Owner)

HEA009	Bakery R6510 443508		HEA015	Sanitary Code Booklets R6510 432305	
HEA001	Bed & Breakfast R6510 443516		HEA016	Septic Tank Permit-Installers R6510 443511	
HEA002	Catering License R6510 443507		HEA017	Septic Tank Permit-Private R6510 443510	
HEA003	Food Handler R6510 443515		HEA018	Septic Tank Reinspection Fee R6510 432301	
HEA004	Frozen Deserts R6510 443501		HEA019	Sub-Division Review Fee R6510 432306	
HEA005	Health Dept. Housing Isp. R6510 432302		HEA012	Swimming Pool Permits R6510 443512	
HEA006	Massage Therapy License R6510 443504		HEA020	Tanning License R6510 443509	
HEA007	Milk & Cream License R6510 443500		HEA024	Funeral Director License R6510 443502	
HEA008	Motel License R6510 443506		HEA034	Immunization Clinic R6510 432307	
HEA010	Removal of Offal R6510 443513		HEA030	Car Seats 8407 258004	
HEA021	Removal of Rubbish R6510 443520		HEA026	Smoking & Tobacco Reg. Violations R6510 443518	
HEA011	Percolation Test Fees R6510 432300	#300 00	HEA023	TB Clinic R6510 432303	
HEA013	Recreation Camp License R6510 443503		HEA022	Tobacco License R6510 443505	
HEA014	Retail Store Permit R6510 443514		HEA		
			HEA		

TOTAL FEE: 300 00

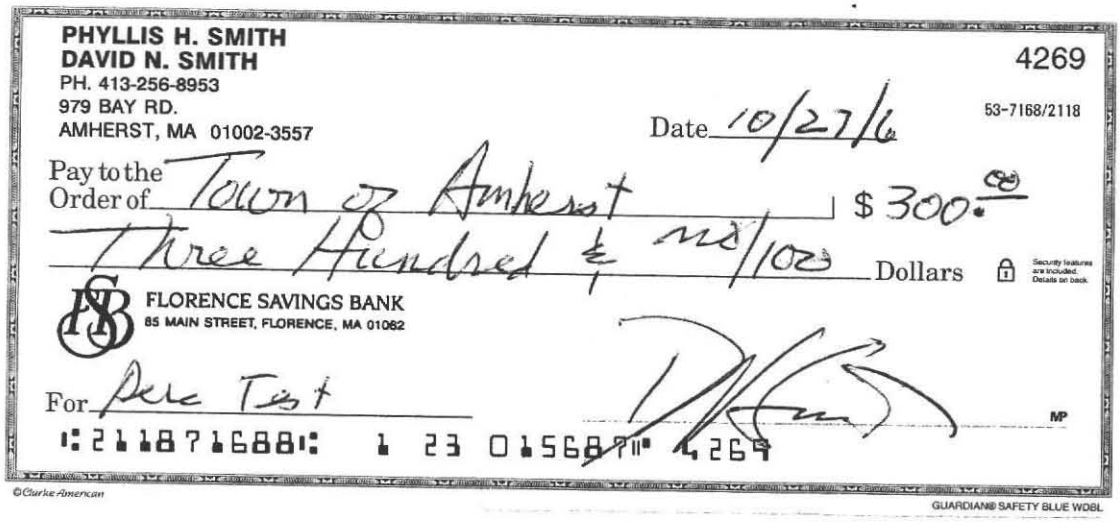
Thomas Dion
Inspeciton Services/Health Department

10/31/06
Date



Must be Validated by the Collector's Office to be considered paid

White - Applicant *Yellow - Collector* *Pink - Accounting* *Gold - Health/Inspections*



PHYLLIS H. SMITH
DAVID N. SMITH
PH. 413-256-8953
979 BAY RD.
AMHERST, MA 01002-3557

4269

53-7168/2118

Date 10/27/6

Pay to the Order of Town of Amherst $ 300.00

Three Hundred & no/100 Dollars

Security features are included. Details on back.

FLORENCE SAVINGS BANK
85 MAIN STREET, FLORENCE, MA 01062

For Perc Test

MP

⑆211871688⑆ 1 23 01568711 4269

©Clarke American

GUARDIAN® SAFETY BLUE WDBL

Amherst

Perc Test
Bay Rd
for Mr+Mrs Smith
10/27/06

Given ✓ to
Julie 10/30/06

No. SPT 2008-00012 Date: 11/6/07

Commonwealth of Massachusetts
, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: SHERMAN + FRYDRYK TONY CURD Date: 11/6/07
Witnessed By: TOM DION

Location Address or Lot #	Owner's Name, Address, and Telephone #
1011 BAY ROAD New Construction ☑ Repair ☐	DAVID N. AND PHYLLIS H. SMITH 979 BAY ROAD

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. 1011 BAY ROAD

On-site Review

50's

Deep Hole Number TP 5 Date: 11/6/07 Time: 2:00 PM Weather MOSTLY SUNNY

Location (identify on site plan)

Land Use ~~RES/AGRICULTURE~~ WOODS Slope (%) 15% Surface Stones NONE

Vegetation MAPLE + PINE

Landform

Position on landscape (sketch on the back)

Distances from:

Open Water Body 200'+ feet Drainage way 100'+ feet

Possible Wet Area 100'+ feet Property Line 20'+ feet

Drinking Water Well 100'+ 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)
0-8"	A	FSL	10YR 3/2		
8"-23"	Bw	LS	10YR 4/6		
23"-140"	C	S	7.5YR 5/8	86" MOTTLES DISTINCT	>5% COBBLES + STONES MED COARSE GRAIN, LOOSE, GRANULAR, HOMOGENOUS

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Depth to Bedrock: NONE

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

Estimated Seasonal High Ground Water: HOLE #5 86"

Location Address or Lot No. 1011 BAY ROAD

Determination for Seasonal High Water Table

Method Used:

- ☐ Depth observed standing in observation hole NONE inches
- ☐ Depth weeping from side of observation hole NONE inches
- ☐ Depth to soil mottles 86 inches
- ☐ Ground water adjustment NONE 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 5/96 (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 Anthony Cimo Date 11/6/07

FORM 12 - PERCOLATION TEST

Location Address or Lot No. _____

COMMONWEALTH OF MASSACHUSETTS

, Massachusetts

Percolation Test*		
Date: 11/6/07	Time: 2:31 PM	
Observation Hole #	P5	
Depth of Perc ~~75"~~	75" (18")	
Start Pre-soak	2:31	
End Pre-soak	2:31	
Time at 12"	—	
Time at 9"	—	
Time at 6"	7" AT 2:31 6" AT 2:32	
Time (9"-6")	< 1 MIN.	
Rate Min./Inch	< 2 MIN./INCH	

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

Site Passed ☑ Site Failed ☐

Performed By: ANTHONY GRD

Witnessed By: TOM DION

Comments: _____

DEP APPROVED FORM - 12/07/95

SPT 2008-00018

CK# 4269 — Perc 300.00
Perc Test Only Am 150.00

FORM 11: Soil Evaluation Form NO: _____

Commonwealth of Massachusetts
Town of AMHERST

Soil Suitability Assessment : On-Site Sewage Disposal

Performed By: Bob Stone Date: 10/20/06
Witnessed By: David Zaroziecki

Location Address of:	Owner's Name: David A. Smith
Lot #	Address of: 979 Bay Rd
	Telephone:

New Construction ☑ Repair ☐

Office Review

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

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

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

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

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

Other Reference Reviewed:

Determination: Seasonal High Water Table

Methods Used:

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

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

Depth of Naturally Occurring Previous Material

Does at least four feed 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 _____

LOT 7 (979 Bay Rd) Subdivided

On-Site Review

Deep Hole Number 1+2 Date: 10/27 Time 10 AM
Weather 45° Sunny
Location (identify on site plan) _____
Land Use woods Slope (%) 1-2
Surface Stone _____
Vegetation: Red Oak / maples

Landform: None

Position on Landscape (sketch on back) _____
Distances from:
Open Water Body 100 feet Drainageway 100 feet
Possible Wet Ares 100 feet Property Line 1/2 feet
Drinking Water Well 100 feet Other D-25/2

DEEP OBSERVATION HOLE LOG

	depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
1)	10	A	FSL	10YR 3/6	—	FRIABLE
	36"	Bw	FSL	10YR 5/6	—	SLIGHTLY FRIABLE STRUCTURELESS
	10'	C	FINE SAND	7.5Y 4/3	84" 7.5Y 5/8	LOOSE TO 84" FRIABLE
2)	10"	A	FSL	Same	84" 7.5Y 5/8	Same
	46"	Bw	FSL			
	10'	C	L. SAND			

Parent Material (geologic) OUTWASH
Depth to Bedrock _____
Depth to Groundwater: —
Standing Water in the Hole —
Weeping from Pit Face —
Estimated Seasonal High Water Hole #1 84" oxidic
Hole #2

On-Site Review

Deep Hole Number 3/4 Date: 10/27/06 Time 10am
Weather Sunny 45°
Location (identify on site plan) _____
Land Use Woods Slope (%) 1-2
Surface Stone _____
Vegetation: Red Oak / maple

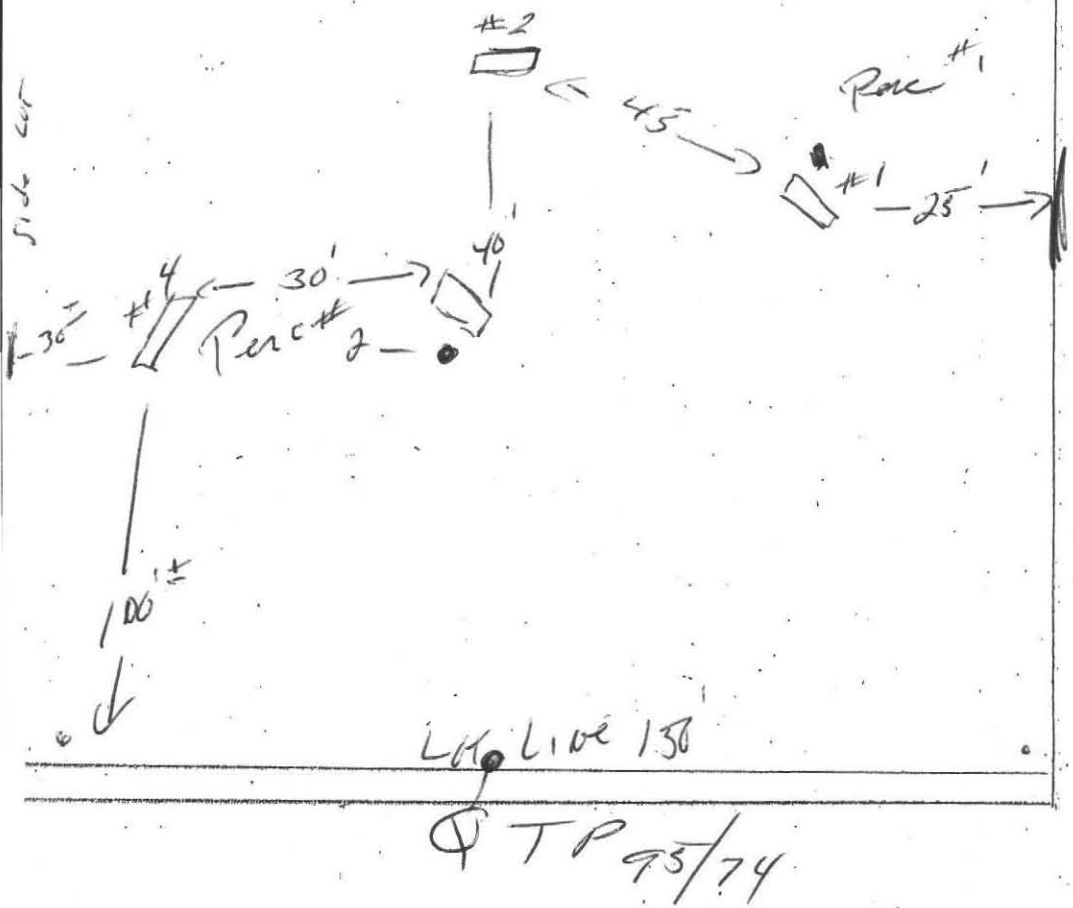
Landform: None Terrace

Position on Landscape (sketch on back) _____
Distances from:
Open Water Body _____ feet Drainageway _____ feet
Possible Wet Ares _____ feet Property Line _____ feet
Drinking Water Well _____ feet Other _____

DEEP OBSERVATION HOLE LOG

	depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
#3	8	A	FSL	10YR 3/6		FRIABLE
	24	Bw	FSL	10YR 5/8		Slightly Friable
	120	C	Sand	(84" 7.5YR 5/8)	84"	Loose
#4	8	A	FSL	7.5Y 5/3		FRIABLE
	28	Bw	FSL	10YR 3/6	84"	FRIABLE NO STRUCTURE
	120	C	Sand	10YR 5/8		Loose

Parent Material (geologic) #3 OUTWASH
Depth to Bedrock 120"
Depth to Groundwater: —
Standing Water in the Hole —
Weeping from Pit Face —
Estimated Seasonal High Water 84" / 84"



FORM 12: Percolation Test
Location Address or Lot # NEXT TO 979 Bay Rd

Commonwealth of Massachusetts
Town of AMHERST

PERCOLATION TEST * DATE: 10/20/06 TIME: 9AM		
Observation Hole #	1	2
Depth of Perc	60"	48
Start Pre-soak	9:25	9:45 / 9:48
End Pre-soak	9:42	
Time at 12"		
Time at 9"	10 min	
Time at 6"	Hold	10 min
Time (9"-6")	water	
Rate Min./Inch		Hold

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

Site Passed ☑ Site failed ☐

Performed by BOB STOVER

Witnessed by David Zinnamon

Comments: