474 Station Rd.
Greg Firman

No. _____ Date: 5/21/2013

Commonwealth of Massachusetts
, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: WILLIAM J. SIGNUTA PE 30148 SE024 Date: 5/21/2013
Witnessed By: ED SMITH BOH AGENT

Location Address or Lot # GREGORY FIRMAN AW LOT 474 STATION RD Amherst MA New Construction ☒ Repair ☐	Name/Address, and Telephone # GREGORY FIRMAN 474 STATION ROAD Amherst MASS 1-413-531-3703

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: _____

GREGORY FIRMAN

FORM 11 - SOIL EVALUATOR FORM

NEW LOT 474 STATION ROAD

Location Address or Lot No. AMHERST, MASS

On-site Review

Deep Hole Number TP1-1 Date 5/21/2013 Time 1030 Weather SUNNY COOL

Location (identify on site plan)

Land Use RESIDENTIAL Slope (%) 0 Surface Stones SOME STONES

Vegetation WOODED AREA

Landform OUTWASH TERRACE

Position on landscape (sketch on the back)

Distances from:

Open Water Body DNA feet Drainage way DNA feet

Possible Wet Area DNA feet Property Line ___ feet see sketch

Drinking Water Well ___ feet Other ___

public H2O

DEEP OBSERVATION HOLE LOG*

Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Cobblestones, % Gravel)
0-12	A	S/L	10YR 3-3		
12-24	Bw	L/S	10YR 5-4	NONE NOTED	20% gravel 5% cobbles
24 120	C1	SAND COARSE	10YR 5-3		MASSIVE FRIABLE STRUCTURELESS

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) OUTWASH GRAVEL Depth to Bedrock DNA

Depth to Groundwater Standing Water in the Hole DRY Weeping from Pit Face DRY

Estimated Seasonal High Ground Water EHWT below 120"

DEP APPROVED FORM - 11/07/05

GREGORY FIRMAN
474 STATION RD

Location Address or Lot No. AMHERST MASS

On-site Review

Deep Hole Number TP1-2 Date 5/21/2013 Time 1030 Weather SUNNY COOL

Location (identify on site plan)

Land Use RESIDENTIAL Slope (%) 0 Surface Stones some stones

Vegetation WOODED AREA

Landform OUTWASH TERRACE

Position on landscape (sketch on the back)

Distances from:

Open Water Body DNA feet Drainage way DNA feet

Possible Wet Area DNA feet Property Line ___ feet see sketch

Drinking Water Well ___ feet Other ___

public H2O

DEEP OBSERVATION HOLE LOG*

Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Cobblestones, % Gravel)
0-12	A	S/L	10YR 3-3		
12-20	Bw	L/S	10YR 5-4	NONE NOTED	20% gravel 5% cobbles
20 124	C1	SAND COARSE	10YR 5-3		MASSIVE FRIABLE STRUCTURE

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) OUTWASH GRAVEL Depth to Bedrock DNA

Depth to Groundwater Standing Water in the Hole DRY Weeping from Pit Face DRY

Estimated Seasonal High Ground Water EHWT below 124"

New LOT — GREGORY FIRMAN RD
474 STATION RD
Amherst MASS

FORM H - SOIL EVALUATOR FORM

Location Address or Lot No.

On-site Review

Deep Hole Number TP-3 Date 5/21/2013 Time 1030 Weather Sunny Cool
Location (identify on site plan)
Land Use Residential Slope (%) 0 Surface Stones some rocks
Vegetation WOODED AREA
Landform OUTWASH TERRACE
Position on landscape (sketch on the back)
Distances from:
Open Water Body DNA feet Drainage way DNA feet
Possible Wet Area DNA feet Property Line feet See sketch
Drinking Water Well feet Other
public H2O

DEEP OBSERVATION HOLE LOG

Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Cobblestones, % Gravel)
0-10	A	S/L	10YR 3-3		
10-22	Bw	L/S	10YR 5-4	None	20% gravel 5% cobbles
22 120	C1	SAND coarse	10YR 5-3		MASSIVE FRIABLE

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) OUTWASH GRAVEL Depth to Bedrock DNA
Depth to Groundwater: Standing Water in the Hole: DRY Weeping from Pit Face: DRY
Estimated Seasonal High Ground Water: EHWT below 120"

DEP APPROVED FORM - 12/07/05

New LOT
Gregory FIRMAN
474 STATION ROAD
Amherst MASS

Location Address or Lot No.

On-site Review

Deep Hole Number TP-4 Date 5/21/2013 Time 1030 Weather Sunny Cool
Location (identify on site plan)
Land Use Residential Slope (%) 0 Surface Stones some rocks
Vegetation WOODED AREA
Landform OUTWASH TERRACE
Position on landscape (sketch on the back)
Distances from:
Open Water Body DNA feet Drainage way DNA feet
Possible Wet Area DNA feet Property Line feet See sketch
Drinking Water Well feet Other
public H2O

DEEP OBSERVATION HOLE LOG

Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Cobblestones, % Gravel)
0-10	A	S/L	10YR 3-3		
10-21	Bw	L/S	10YR 5-4	None	20% gravel 5% cobbles
21 126	C1	SAND coarse	10YR 5-3		MASSIVE FRIABLE structure

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) OUTWASH GRAVEL Depth to Bedrock DNA
Depth to Groundwater: Standing Water in the Hole: DRY Weeping from Pit Face: DRY
Estimated Seasonal High Ground Water: EHWT below 126

NEW LOT
GREGORY FIRMAN
474 STATION RD

FORM 12 - PERCOLATION TEST

Location Address or Lot No. Amherst MA

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: 5/21/2013 Time:		
Observation Hole #	TP1-1 TP1-2	TP1-3 TP1-4
Depth of Perc	52	54
Start Pre-soak	10 35 - 10 40	10 45 - 10 50
End Pre-soak	10 40	10 50
Time at 12"	10 40	10 50
Time at 9"	10 42	10 51
Time at 6"	10 44	10 53
Time (9"-6")	2/3 = .66	2/3 .66
Rate Min./Inch Restart	5.0 MIN/INCH	5.0 MIN/INCH

CLASS I SOIL 60" separation per 310CMR 15.212

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

Site Passed ☒ Site Failed ☐

PE 30148
SE 2241

Performed By: WILLIAM J SIERUTA PE

Witnessed By: EDWARD SMITH BOH AGENT

Comments:

DEP APPROVED FORM : 12/07/95

Percolation Test

st No. perc1 @ TP1-4		Test No. perc2 TP1-2 24 gal	
ading	Time	Reading	Time
turation (15 min) 24 gal	1035	Saturation (15 min)	1045 ~ 1050
12	1040 1040	12	1050
11		11	
10 9	1042	10 9	1051
8 7		8 7 2/3 = .66	
6 2/3 = .66	1044	6	1053
:c Rate	5.9 Min/inch	Perc. Rate	Min/inch
ound Elev.		Ground Elev.	
pth of Hole 60" separate		Depth of Hole	

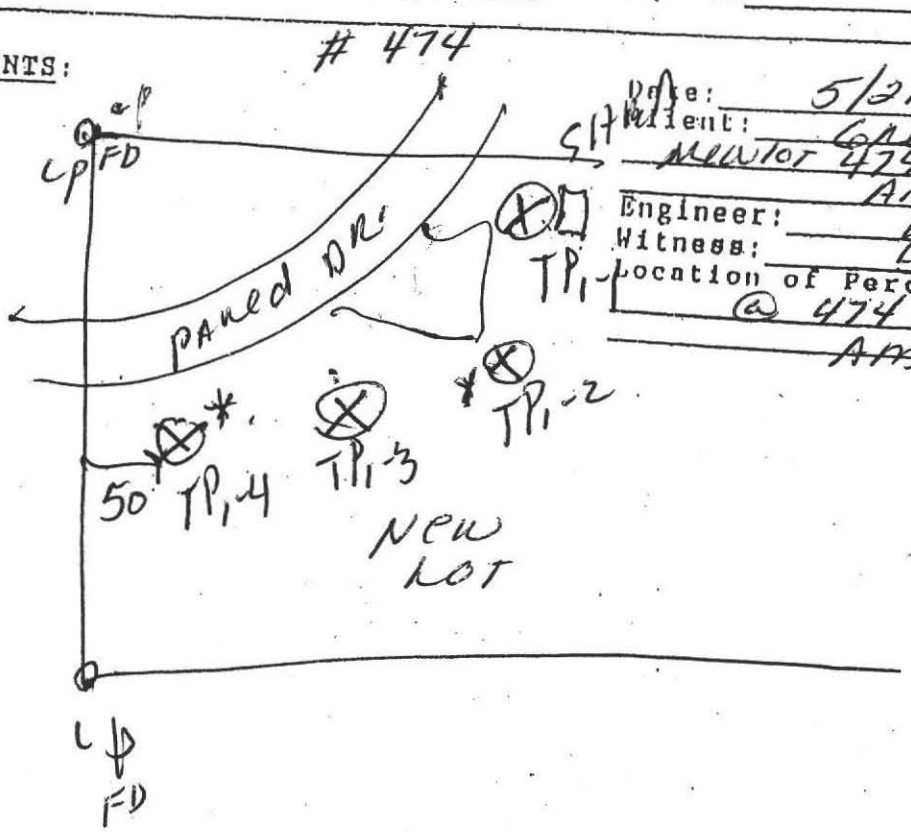
Deep Test Pit/s

:t Pit TP1-1 52"		Test Pit TP1-4	
pth	Soil Description	Depth	Soil Description
0-12	OTS LOAM	0-10	OTS LOAM TOPSOIL
12-24	SILTY GRAVEL SUB	10-21	SILTY GRAVEL SUB
24-120	~~LAYED well~~ GRADED GRAVEL	21-126	well GRADED MED GRAVEL
undwater Depth DRY Elev.		Groundwater Depth DRY Elev.	
rock Depth Elev.		Bedrock Depth Elev.	
und Elev. EHWT below 120"		Ground Elev. EHWT below 126	

.S. Soil Description gravel Seasonal High Water Table? — AS noted

:h Mark: Elev. — Description —

ENTS:



Date: 5/21/2013
Client: GREGORY FIRMAN
NEWLOT 474 STATION RD
AMHERST MA
Engineer: WJ SIERUTA PE
Witness: EA SMITH BOH
Location of Perc: NEW LOT
@ 474 STATION RD
AMHERST MASS

Location Address or Lot No. GREGORY FIRMAN NEW LOT 474 STATION RD AMHERST, MASS

Determination for Seasonal High Water Table

Method Used:

	TP 1	TP 2	TP 3	TP 4
☐ Depth observed standing in observation hole ____ inches	DRY	—	—	—
☐ Depth weeping from side of observation hole ____ inches	DRY	—	—	—
☐ Depth to soil mottles ____ inches ____	below 120	below 124	below 120	below 126
☐ 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 5/95 (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature [signature] Date 5 [illegible] 2013

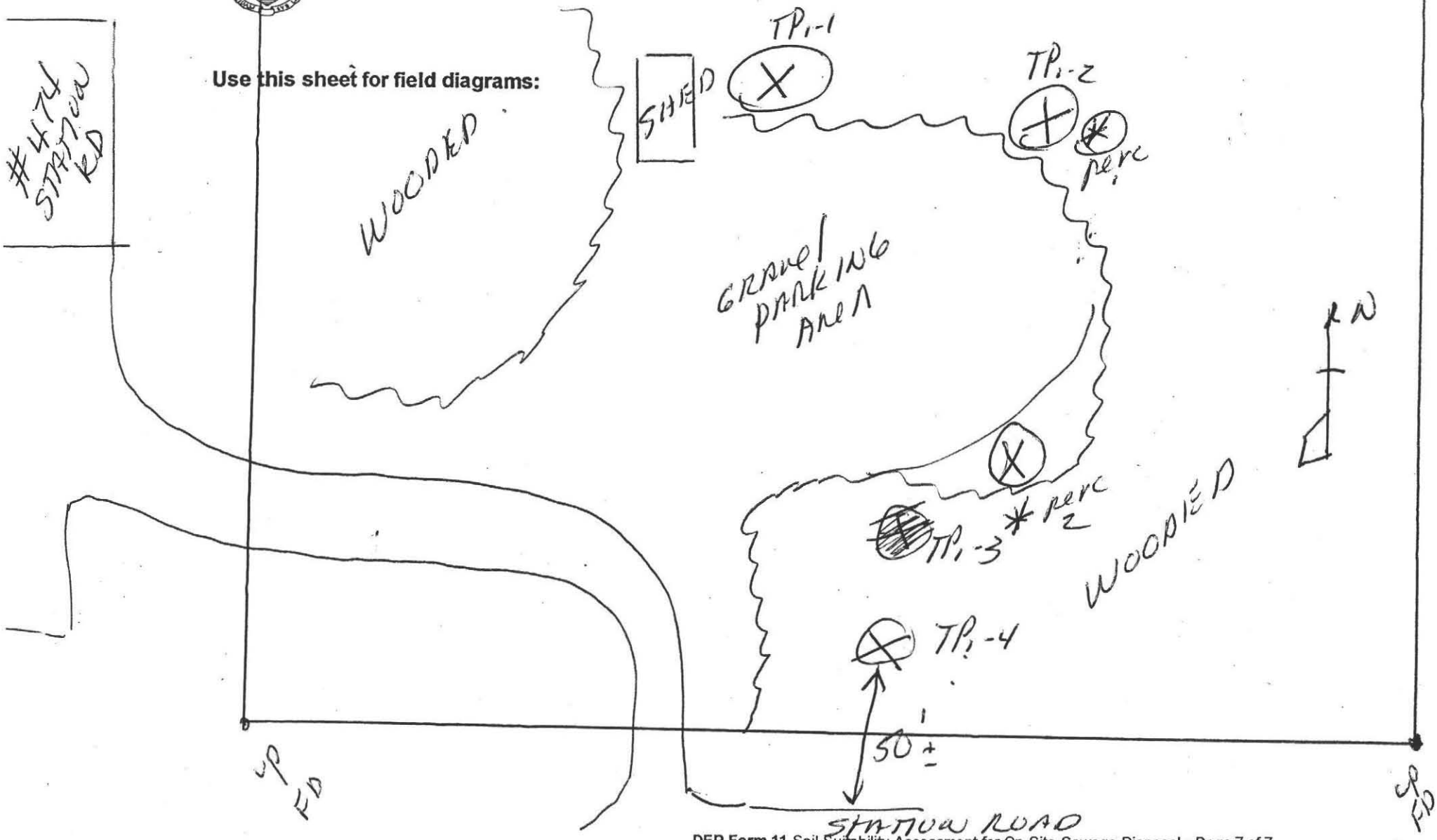
COMMONWEALTH OF MASSACHUSETTS
William John Sieruta
No. 30140
PROFESSIONAL ENGINEER

SE 2241
PE 30140

Commonwealth of Massachusetts
City/Town of

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

Use this sheet for field diagrams:



May 2013
INVOICE

AMHERST PUBLIC HEALTH DEPARTMENT

Bangs Community Center
70 Boltwood Walk
Amherst, MA 01002

DATE: May 24, 2013

perk test

TO Gregory & Lynde Firman
474 Station Road
Amherst, MA, 01002

RE: Invoice for **Soil Evaluation**
474 Station Road (Lot 21D-29)

Services provided by **Edmund Smith**

PAYMENT TERMS: I Paid

QUANTITY	DESCRIPTION	UNIT PRICE	LINE TOTAL
1.00	Soil Evaluation	$ 300.00	$ 300.00
	this fee paid by Wm. Soerita check #8883		
		SUBTOTAL	$ 300.00
		SALES TAX	
		TOTAL	$ 300.00

App — 18390
Batch — 6690

131 PE

CUST NAME
4 BOLTWOOD AVENUE
05/31/13
CITY, ST, ZIP

***TOWN OF A TOWN HAL
AMHERST M REFERENCE
DATE/TIME 13:47

CUST NAME

0
DEPT

DE HEA011 PERCOLATIO 300.

RECPT TOTAL

300.00 AMOUNT
WILLIAM J QUA CHECK 8881

May 2013
INVOICE

AMHERST PUBLIC HEALTH DEPARTMENT

Bangs Community Center
70 Boltwood Walk
Amherst, MA 01002

DATE: May 24, 2013

TO Gregory & Lynde Firman
474 Station Road
Amherst, MA, 01002

RE: Invoice for **Title 5 Inspection Witness**
474 Station Road
Services provided by **Edmund Smith**
PAYMENT TERMS: I Paid

QUANTITY	DESCRIPTION	UNIT PRICE	LINE TOTAL
1.00	Title 5 Inspection Witness (pass)	$ 200.00	$ 200.00
	this fee paid by Wm. Soerita check #8882		
		SUBTOTAL	$ 200.00
		SALES TAX	
		TOTAL	$ 200.00

App - 18389
Batch - 6690

CUST NAME
4 BOLTWOOD AVENUE
05/31/13
CITY, ST, ZIP

***TOWN OF A TOWN HAL
AMHERST M REFERENCE
DATE/TIME 13:44

CUST NAME

0
DEPT

DE HEA058 TITLE V WI 200.

RECPT TOTAL

200.00 AMOUNT
WILLIAM J QUA CHECK 8882

OWNERS: FIRMAN, GREGORY + LYNDE
474 STATION ROAD
AMHERST MA 01002

5/20/2013 474 STATION ROAD
(paid by Wm. Sierota for T5 and Soil Eval.)

10:30 AM

— no water table

#1	0-12	A		
	12-24	Bw	Coarse Sand	30% gravel
	24-120	C_1	Coarse Sand	20% gravel 5% cobbles

#2	0-12	A
	12-20	B_w
	20-124	C_1

#3	0-10
	10-22
	22-120

#4	0-10		
	10-21		
	21-126	C_1	layered coarse gravel

SOIL EVAL - PERC (1)	10:35	began watering hole	24 gallons in
	10:40	12"	
	10:42	9"	
	44	6"	< 2 min / inch (60" separation)
	10:45	START	
	10:50	12	24 gallons in
	10:52	9	< 2 mins / inch
	53	6	

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

474 STATION ROAD, AMHERST MASS
Property Address

GREGORY FIRMAN
Owner's Name

AMHERST | MA | 01002 | 5/9/2013
City/Town | State | Zip Code | Date of Inspection

Owner information is required for every page.

Inspection results must be submitted on this form. Inspection forms may not be altered in any way. Please see completeness checklist at the end of the form.

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

A. General Information

1. Inspector:

WILLIAM J SIERUTA PE
Name of Inspector

SIERUTA ENGINEERING
Company Name

18 DEPOT ROAD
Company Address

LEVERETT | MASS | 01054
City/Town | State | Zip Code

413 549 1817 | SI 1055
Telephone Number | License Number

B. Certification

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

☑ Passes ☐ Conditionally Passes ☐ Fails

☐ Needs Further Evaluation by the Local Approving Authority

COMMONWEALTH OF MASSACHUSETTS
William John Sieruta No. 30148
REGISTERED PROFESSIONAL ENGINEER

Inspector's Signature | Date 5/9/2013

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

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

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

474 STATION ROAD
Property Address

GREGORY FIRMAN
Owner's Name

Owner information is required for every page.

AMHERST | MA | 01002 | 5/9/2013
City/Town | State | Zip Code | Date of Inspection

B. Certification (cont.)

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

A) System Passes:

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

Comments:

SYSTEM IS WORKING well NO PROBLEMS NOTED.

B) System Conditionally Passes:

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

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

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

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

☐ Y ☐ N ☐ ND (Explain below):

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

474 STATION ROAD
Property Address

GREGORY FIRMAN
Owner's Name

AMHERST | MA | 01002 | 5/9/2013.
City/Town | State | Zip Code | Date of Inspection

Owner information is required for every page.

B. Certification (cont.)

B) System Conditionally Passes (cont.):

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

☐ broken pipe(s) are replaced ☐ Y ☐ N ☐ ND (Explain below):

☐ obstruction is removed ☐ Y ☐ N ☐ ND (Explain below):

☐ distribution box is leveled or replaced ☐ Y ☐ N ☐ ND (Explain below):

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

☐ broken pipe(s) are replaced ☐ Y ☐ N ☐ ND (Explain below):

☐ obstruction is removed ☐ Y ☐ N ☐ ND (Explain below):

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

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

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

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

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

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

474 STATION ROAD
Property Address

GREGORY FIRMAN
Owner's Name

AMHERST MA 01002 5/9/2013
City/Town State Zip Code Date of Inspection

Owner information is required for every page.

B. Certification (cont.)

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

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

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

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

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

Method used to determine distance: _____

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

3. Other:

_____

_____

_____

_____

D) System Failure Criteria Applicable to All Systems:

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

Yes	No	
☐	☒	Backup of sewage into facility or system component due to overloaded or clogged SAS or cesspool
☐	☒	Discharge or ponding of effluent to the surface of the ground or surface waters due to an overloaded or clogged SAS or cesspool
☐	☒	Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS or cesspool
☐	☒ N/A	Liquid depth in cesspool is less than 6" below invert or available volume is less than ½ day flow

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

474 STATION ROAD
Property Address

GREGORY FIRMAN
Owner's Name

AMHERST | MA | 01002 | 5/9/2013
City/Town | State | Zip Code | Date of Inspection

Owner information is required for every page.

B. Certification (cont.)

Yes	No	
☐	☒	Required pumping more than 4 times in the last year ***NOT*** due to clogged or obstructed pipe(s). Number of times pumped: _____.
☐	☒	Any portion of the SAS, cesspool or privy is below high ground water elevation.
☐ DNA		Any portion of cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply.
☐ DNA		Any portion of a cesspool or privy is within a Zone 1 of a public well.
☐ DNA		Any portion of a cesspool or privy is within 50 feet of a private water supply well.
☐ DNA		Any portion of a cesspool or privy is less than 100 feet but greater than 50 feet from a private water supply well with no acceptable water quality analysis. **[This system passes if the well water analysis, performed at a DEP certified laboratory, for fecal coliform bacteria indicates absent and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis and chain of custody must be attached to this form.]**
☐ DNA		The system is a cesspool serving a facility with a design flow of 2000gpd-10,000gpd.
☐	☒	**The system <u>fails</u>.** I have determined that one or more of the above failure criteria exist as described in 310 CMR 15.303, therefore the system fails. The system owner should contact the Board of Health to determine what will be necessary to correct the failure.

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

DNA.

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

Yes	No	
☐	☐	the system is within 400 feet of a surface drinking water supply
☐	☐	the system is within 200 feet of a tributary to a surface drinking water supply
☐	☐	the system is located in a nitrogen sensitive area (Interim Wellhead Protection Area – IWPA) or a mapped Zone II of a public water supply well

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

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

474 STATION ROAD
Property Address

GREGORY FIRMAN
Owner's Name

AMHERST | MA | 01002 | 5/9/2013
City/Town | State | Zip Code | Date of Inspection

Owner information is required for every page.

C. Checklist

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

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

D. System Information

Residential Flow Conditions:

Number of bedrooms (design): 5 Number of bedrooms (actual): 5

DESIGN flow based on 310 CMR 15.203 (for example: 110 gpd x # of bedrooms): 5 x 110 = 550 GALS/DAY

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

474 STATION ROAD
Property Address

GREGORY FIRMAN
Owner's Name

Owner information is required for every page.

AMHERST | MA | 01002 | 5/9/2013
City/Town | State | Zip Code | Date of Inspection

D. System Information

Description: Septic System installed per plan 5/2/2004 554 GALS/DAY

Number of current residents: 3

Does residence have a garbage grinder? ☐ Yes ☒ No

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

Laundry system inspected? ☒ Yes ☐ No

Seasonal use? ☐ Yes ☒ No

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

Detail: —

Sump pump? ☐ Yes ☒ No

Last date of occupancy: — Date

Commercial/Industrial Flow Conditions: DNA

Type of Establishment:

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

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

Grease trap present? ☐ Yes ☐ No

Industrial waste holding tank present? ☐ Yes ☐ No

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

Water meter readings, if available:

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

474 STATION ROAD
Property Address

GREGORY FIRMAN
Owner's Name

AMHERST | MA | 01002 | 5/9/2013
City/Town | State | Zip Code | Date of Inspection

Owner information is required for every page.

D. System Information (cont.)

Last date of occupancy/use: _____ Date

Other (describe below):

_____

_____

_____

General Information

Pumping Records: system pumped every 2yrs per owner LAST PUMPING 11/27/12 see INV.

Source of information:

Was system pumped as part of the inspection? ☐ Yes ☒ No NOT NEEDED

If yes, volume pumped: — gallons

How was quantity pumped determined? —

Reason for pumping: NOT pump, pumped IN 6MO NO SOLIDS etc

Type of System:

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

_____

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Property Address: 474 STATION ROAD

Owner's Name: GREGORY FIRMAN

Owner information is required for every page.

City/Town: AMHERST State: MA Zip Code: 01002 Date of Inspection: 5/9/2013

D. System Information (cont.)

Approximate age of all components, date installed (if known) and source of information:
5-26-2004

Were sewage odors detected when arriving at the site? ☐ Yes ☒ No

Building Sewer (locate on site plan):

Depth below grade: 4.5' feet

Material of construction:

☑ cast iron ☑ 40 PVC ☐ other (explain):

Distance from private water supply well or suction line: PUBLIC H2O feet

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

Septic Tank (locate on site plan):

Depth below grade: feet

Material of construction:

☑ concrete ☐ metal ☐ fiberglass ☐ polyethylene ☐ other (explain)

2004

NEW 1500 GAL TWO COMPARTMENT TANK
10'6 x 5' x 6' 48" FLOW LINE

If tank is metal, list age: years

Is age confirmed by a Certificate of Compliance? (attach a copy of certificate) ☒ Yes ☐ No

Dimensions: 10'6 x 5' x 6'

Sludge depth: 0" pumped 11/27/2012 SEE INV. ATTACHED

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

474 STATION ROAD
Property Address

GREGORY FIRMAN
Owner's Name

Owner information is required for every page.

AMHERST | MA | 01002 | 5/9/2013
City/Town | State | Zip Code | Date of Inspection

D. System Information (cont.)

Septic Tank (cont.)

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

Scum thickness: 1"

Distance from top of scum to top of outlet tee or baffle: 3"

Distance from bottom of scum to bottom of outlet tee or baffle: 11" . . .

How were dimensions determined? measured

Comments (on pumping recommendations, inlet and outlet tee or baffle condition, structural integrity, liquid levels as related to outlet invert, evidence of leakage, etc.):
TANK IN good condition PVC SCH 40 tees
NO problems

Grease Trap (locate on site plan): N A

Depth below grade: _____ feet

Material of construction:

☐ concrete ☐ metal ☐ fiberglass ☐ polyethylene ☐ other (explain):

Dimensions:

Scum thickness

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

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

Date of last pumping: _____ Date

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

474 STATION ROAD
Property Address

GREGORY FIRMAN
Owner's Name

Owner information is required for every page.

AMHERST | MA | 01002 | 5/9/2013
City/Town | State | Zip Code | Date of Inspection

D. System Information (cont.)

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

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

Depth below grade:

Material of construction:

☐ concrete ☐ metal ☐ fiberglass ☐ polyethylene ☐ other (explain):

Dimensions:

Capacity: gallons

Design Flow: gallons per day

Alarm present: ☐ Yes ☐ No

Alarm level: Alarm in working order: ☐ Yes ☐ No

Date of last pumping: Date

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

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

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Property Address: 474 STATION ROAD

Owner's Name: GREGORY FIRMAN

Owner information is required for every page.

City/Town: AMHERST | State: MA | Zip Code: 01002 | Date of Inspection: 5/9/2013

D. System Information (cont.)

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

Depth of liquid level above outlet invert: 0''

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

BOX IN good CONDITION, SELF levelers IN proper adjustment.

Pump Chamber (locate on site plan): ON A

Pumps in working order: ☐ Yes ☐ No

Alarms in working order: ☐ Yes ☐ No

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

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

If SAS not located, explain why: 2 LEACH trenches 49' LONG EFFECTIVE depth 24'' EFFECTIVE WIDTH 3'.5' (41'') see ATTACHED plan.

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Property Address: 474 STATION ROAD

Owner's Name: GREGORY FIRMAN

Owner information is required for every page.

City/Town: AMHERST State: MA Zip Code: 01002 Date of Inspection: 5/9/2013

D. System Information (cont.)

Type:

- ☐ leaching pits — number:
- ☐ leaching chambers — number:
- ☐ leaching galleries — number:
- ☒ leaching trenches — number, length: 2 – 42" x 24" x 49
- ☐ leaching fields — number, dimensions:
- ☐ overflow cesspool — number:
- ☐ innovative/alternative system

Type/name of technology:

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

TOTAL BOTTOM AREA 343 FT²
SIDE WALLS 410 FT²
TOTAL PERMEABILITY
(343 + 410) x .74 = 554 GALS/DAY

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

Number and configuration

Depth – top of liquid to inlet invert

Depth of solids layer

Depth of scum layer

Dimensions of cesspool

Materials of construction

Indication of groundwater inflow ☐ Yes ☐ No

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

474 STATION ROAD
Property Address

GREGORY FIRMAN
Owner's Name

Owner information is required for every page.

AMHERST | MA | 01002 | 5/9/2013
City/Town | State | Zip Code | Date of Inspection

D. System Information (cont.)

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

Privy (locate on site plan): DNA

Materials of construction:

Dimensions

Depth of solids

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

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Property Address: 474 STATION ROAD

Owner's Name: GREGORY FIRMAN

City/Town: AMHERST State: MA Zip Code: 01002 Date of Inspection: 5/9/2013

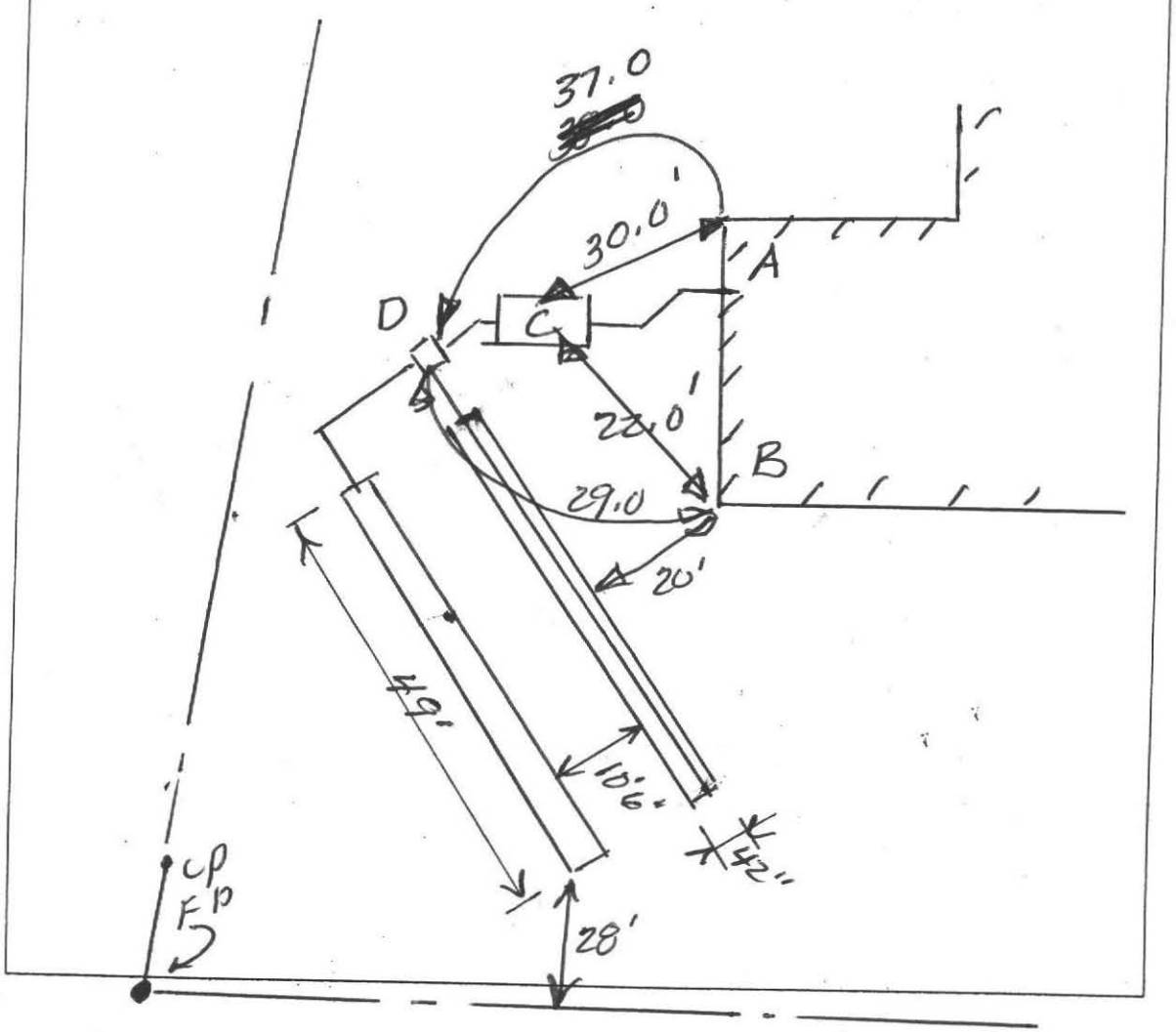
Owner information is required for every page.

D. System Information (cont.)

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

☒ hand-sketch in the area below
☒ drawing attached separately

SEE ATTACHED DESIGN 5/2/2013



Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Property Address: 474 STATION ROAD

Owner's Name: GREGORY FIRMAN

Owner information is required for every page.

City/Town: AMHERST | State: MA | Zip Code: 01002 | Date of Inspection: 5/9/2013

D. System Information (cont.)

Site Exam:

- [x] Check Slope
- [ ] Surface water
- [x] Check cellar
- [ ] Shallow wells

Estimated depth to high ground water: 8 FT SEE DESIGN PLAN feet

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

- [x] Obtained from system design plans on record — PERCOLATION test 1-6-04 A WEIS
  - If checked, date of design plan reviewed: 5/2/2004 Date
- [ ] Observed site (abutting property/observation hole within 150 feet of SAS)
- [x] Checked with local Board of Health - explain:
- [x] Checked with local excavators, installers - (attach documentation)
- [ ] Accessed USGS database - explain:

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

SEE ORIGINAL PERCOLATION TEST 1-6-04

SEE SEPTIC SYSTEM PLAN 5-2-2004 WJS

Before filing this Inspection Report, please see Report Completeness Checklist on next page.

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Property Address: 474 STATION ROAD

Owner's Name: GREGORY FIRMAN

City/Town: AMHERST State: MA Zip Code: 01002 Date of Inspection: 5/9/2013

Owner information is required for every page.

E. Report Completeness Checklist

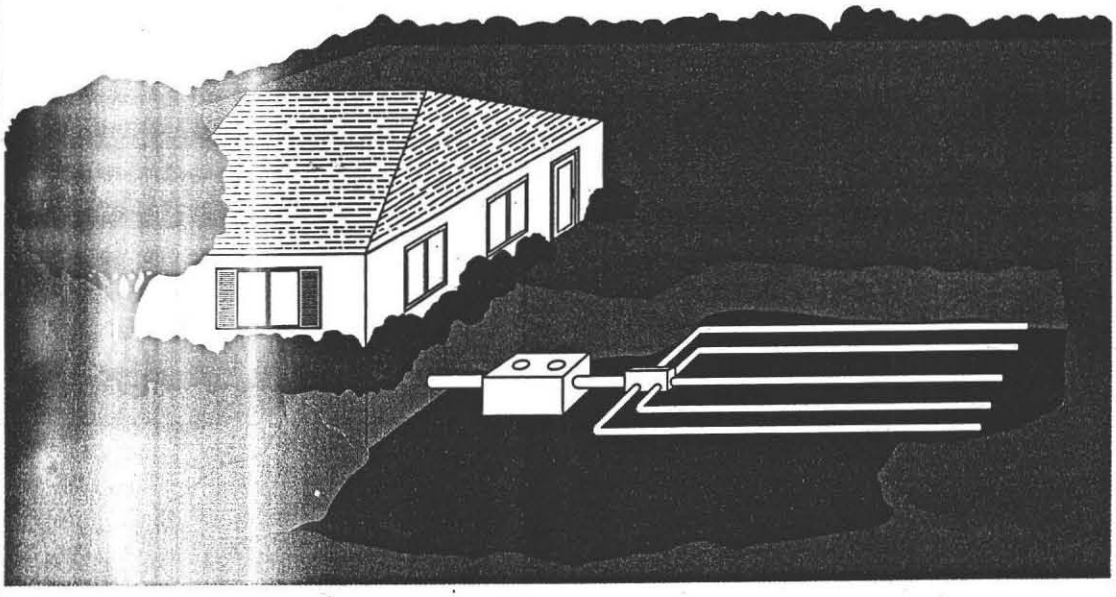
- [x] Inspection Summary: A, B, C, D, or E checked
- [x] Inspection Summary D (System Failure Criteria Applicable to All Systems) completed
- [x] System Information – Estimated depth to high groundwater
- [x] Sketch of Sewage Disposal System either drawn on page 15 or attached in separate file

Septic Systems Explained

Septic systems are individual wastewater treatment systems that use the soil to treat small wastewater flows, usually from individual homes. They are typically used in rural or large lot settings where centralized wastewater treatment is impractical.

There are many types of septic systems in use today. While all septic systems are individually designed for each site, most septic systems are based on the same principles.

A Conventional Septic System



*A septic system consists of a **septic tank**, a distribution box and a **drainfield**, all connected by pipes, called **conveyance lines**.*

Your septic system treats your household wastewater by temporarily holding it in the septic tank where heavy solids and lighter scum are allowed to separate from the wastewater. This separation process is known as primary treatment. The solids stored in the tank are decomposed by bacteria and later removed, along with the lighter scum, by a professional septic tank pumper.

*After the partially treated wastewater leaves the tank, it flows into a **distribution box**, which separates this flow evenly into a network of **drainfield trenches**. Drainage holes at the bottom of each line allow the wastewater to drain into gravel trenches for temporary storage. This **effluent** then slowly seeps into the subsurface soil where it is further treated and purified (**secondary treatment**).*

Caring for Your Septic System

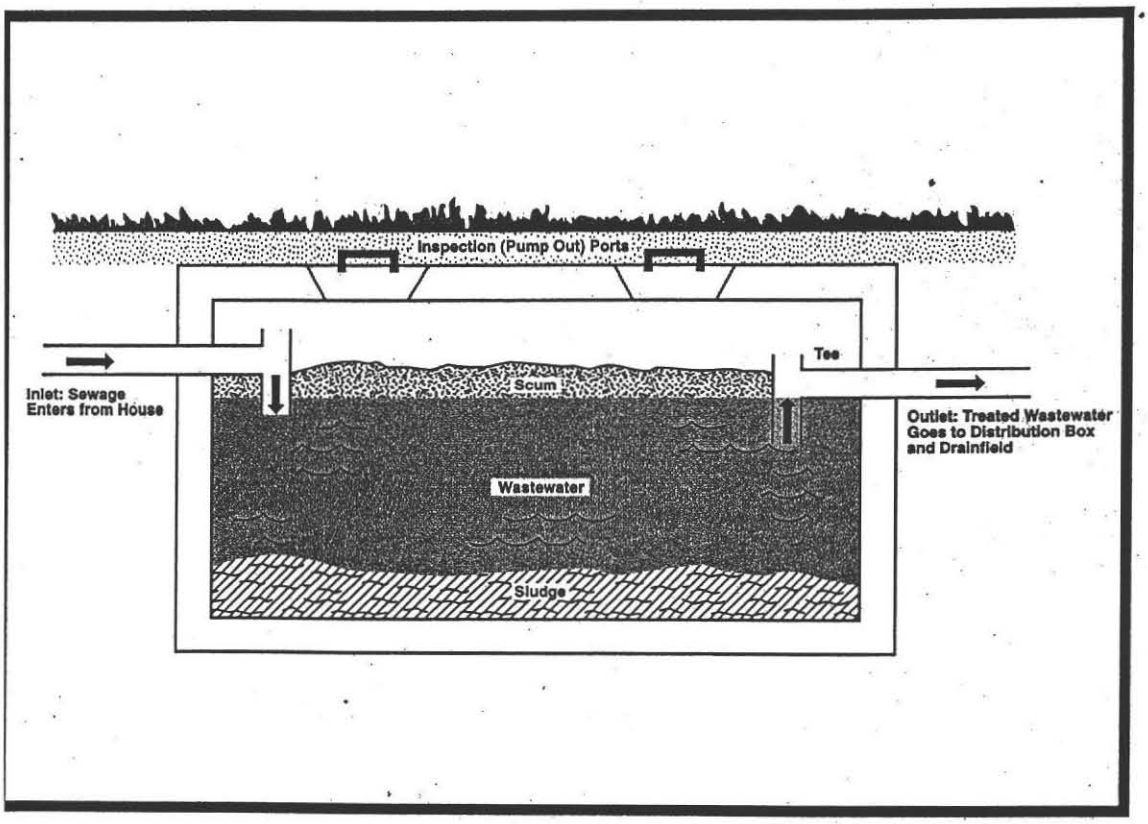
The accumulated solids in the bottom of the septic tank should be pumped out **every three to five years** to prolong the life of your system. Septic systems must be maintained regularly to continue working.

Neglect or abuse of your septic system can cause it to fail. Failing septic systems can

- cause a serious health threat to your family and neighbors,
- degrade the environment, especially lakes, streams and groundwater,
- reduce the value of your property,
- be very expensive to repair, and
- put thousands of water supply users at risk if you live in a public water supply watershed and fail to maintain your system.

Be alert to these warning signs of a failing system:

- sewage surfacing over the drainfield (especially after storms),
- sewage back-ups in the house,
- lush, green growth over the drainfield,
- slow draining toilets or drains,
- sewage odors.



TEST PIT TPT-1

TEST PIT TPT-2

AS BUILT TIES TO SEPTIC

SEPTIC TANK CENTER COVER
AC 30.0
BC 22.6 FROM 30" PIPE 25.6'

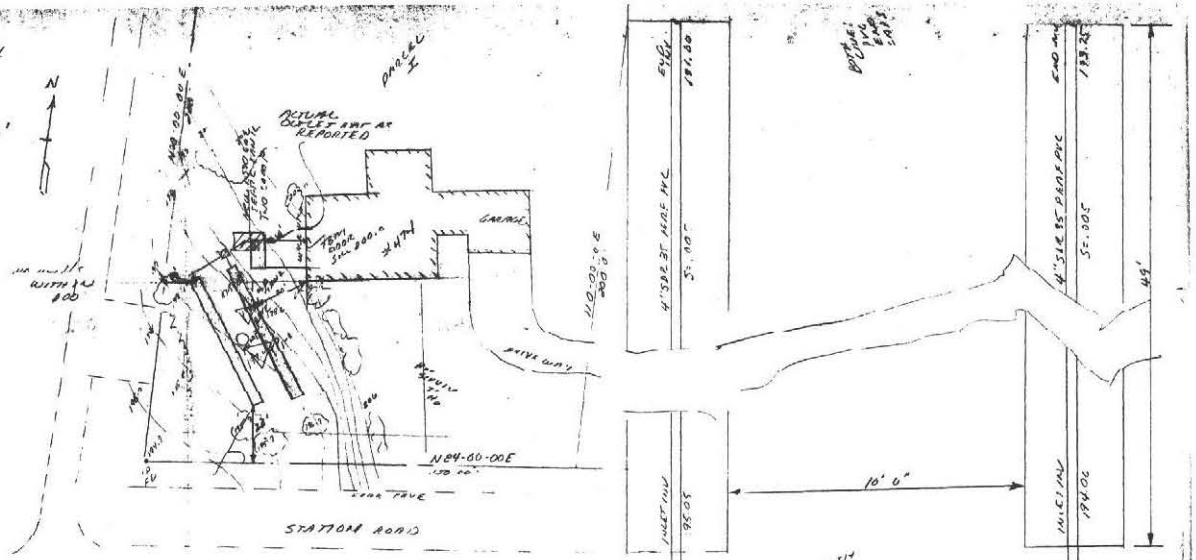
DIST BOX
AD 38.0
BD 29.0 FROM 30" PIPE 19'

2 TRENCHES

NO H2O
NO MOTTLING
NO MOTTLING

PERC 2 WAIVED BY BOH

DATE: 1-6-04
EVAL: A. WEISS, RS
WITNESS: D. ZAROZINSKI BOH
PERMEABILITY TEST
PERC. @ TPT-1
DEPTH 60"
ACTUAL RATE 1.33 MIN/INCH
DESIGN RATE 3.0 MIN/INCH
CLASS I SOIL
60" SEPARATION REQD PER 310CMR 15.212



INSTALLATION NOTES
1. OLD TANK TO BE PUMPED CLEANED AND DEMOLISHED
2. ALL STONE TO BE DOUBLE WASHED STONE FREE OF ALL SILT & FINES
3. ALL PIPE JOINTS WITH TANK AND DIST BOX TO BE ASSURED PROPERLY SEALED
4. SEPTIC TANK TO BE A TWO (2) COMPARTMENT TANK WITH AN 1ST AND SECOND SIDE INACCOMPANCE WITH 310 CMR 15 227 SECT
5. SEPTIC TANK AND DIST BOX TO BE SET ON 6" DEEP COMPACTED STONE FOUNDATION PAD
6. NO TREES WITHIN 10'OF LEACHING SYSTEM

PLANVIEW SCALE 1"=20'

SEPTIC SYSTEM PROFILE
SCALE 1"=1'

LEACH TRENCH DETAIL
SCALE 1"=2' HORZ
1"=2' VERT

DESIGN INFORMATION

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH 310 CMR 15.0 TITLE 5 AND ALL LOCAL BOARD OF HEALTH REGULATIONS

ALL DISTURBED AREAS TO BE LOAMED AND SEEDED

DESIGN CRITERIA

USE: EXISTING SINGLE FAMILY RESIDENTIAL HOME
5 BEDROOMS
WITH INTEGRAL UNIT
INC. GARBAGE DISP

DESIGN FLOW: 310 CMR 15.203
REQD. 110 GALS/BED x 5 = 550 GALS
WITHOUT DISPOSAL UNIT
DISPOSAL TO BE REMOVED

SEPTIC TANK: 310 CMR 15.223
USE TWO COMPARTMENT TANK PRECAST CONC
STONE 8'6" x 5'
REQD. 250 GALS/DAY x 200% = 1100 GAL
MINIMUM TANK SIZE PERMITTED 1500 GALS

LEACHING SYSTEM: DUE TO SOIL CONDITIONS A LEACH TRENCH DESIGN IS TO BE USED PER 310 CMR 15.242

EFFECTIVE DEPTH 24" BAT
CLEARANCE WIDTH 42" BETWEEN TRENCHES
EFFECTIVE LENGTH
(2 TRENCHES) TRENCHES 47' LONG WITH 10'6" BETWEEN TRENCHES
TOTAL AREA
6' x 2.5' x 47' = 943 ft²
EFFECTIVE AREA DISCOUNTING WALLS
(2' x 2' x 47' = (2' x 2' x 35') = 410 ft²
TOTAL PERMEABILITY
(943.0 + 410.0) .74 = 554 GALS/DAY
MEETS FLOW REQD

PERMEABILITY
310 CMR 15.242
LOCAL BOARD OF HEALTH
ACTUAL RATE 1.33 GALS/FT²
DESIGN RATE 3.0 MIN/INCH
CLASS I SOIL
BOTTOM & SIDEWALL AREA

STONE CONFORMS TO 310 CMR 15.240 PROD FOR SCARIFICATION
1.5 OR LESS IS FT AVAILABLE TO BANK OUT
ELEV 174.50
30FT MEETS CODE REQD OFFSET

STRUCT	INVERT INV	END INV	BOTTOM ELEV	TOP STONE	SEPARATION TO INVERT
1	195.05	194.80	192.80	195.60	7.80
2	199.00	199.75	191.75	191.50	6.80'

SEPTIC SYSTEM DESIGN
FOR
GREGORY FIRMANE & RUSHEE FIRMANE
4144 STATION ROAD
AMHERST, MASS.
ENGINEER: STEWART PC
DATE: MAY 2, 2004

Invoice

Adair Constructi
89 Potwine Lane
Amherst, MA 01002
413-253-9925

Bill To:
Gregory Firman 474 Station Rd. Amherst, MA 10002

Date	Invoice No.	P.O. Number	Terms	Project
12/09/12	6039	253-1484	Due on receipt	

Item	Description	Quantity	Rate	Amount
	11/27/2012 Tuesday			
11002	Septic tank pumping, waste water removal for 1500 gallon tank	1	150.00	150.00
11005	Waste Water Disposal 1530 gallons @ Hadley Waste Water slip #791137	1,530	0.13	198.90
1.5% Interest after 30 days			Total	$348.90

Pd online 12/19/12 G.

No. 04-01 Revised B-8 Semite

FEE 75.00 PE B.11 Semite

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, *MA.*

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

Application for Permit to Construct(X) Repair(X) Upgrade(X) Abandon( ) - ☒ **Complete System** ☐ **Individual Components**

Location G. FIRMAN	Owner's Name G. FIRMAN & L RUSHER FIRMAN
Map/Parcel# 474 STATION ROAD	Address 474 STATION ROAD AMHERST MASS
Lot# AMHERST, MASS LOT 210 25	Telephone# 253-1484
Installer's Name	Designer's Name WILLIAM SIERUTA PE
Address	Address 46 upland RD Holyoke MASS
Telephone#	Telephone# 532 8525

Type of Building RESIDENTIAL HOME Lot Size 1.37 ACRES sq. ft.

Dwelling - No. of Bedrooms 5+BEDROOM Garbage grinder (NO

Other - Type of Building SINGLE FAMILY No. of persons 10 Showers (3), Cafeteria (-)

Other Fixtures WALK OUT BMT

Design Flow (min. required) 110 x 5 gpd Calculated design flow 550 Design flow provided 554 gpd

Plan: Date MAY 2 2004 Number of sheets 1 Revision Date

Title SEPTIC SYSTEM DESIGN FOR G. FIRMAN 474 STATION RD

Description of Soil(s) SEE ATTACHED

Soil Evaluator Form No. 11 Name of Soil Evaluator A WEISS Date of Evaluation 11/6/04

DESCRIPTION OF REPAIRS OR ALTERATIONS complete septic System upgrade to 310 CMR 15.0

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

Signed X Lynne Rusher Firman Date 5-5-04

Inspections

No. 04-01 (Revised) FEE 75.00

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, *MA.*

CERTIFICATE OF COMPLIANCE

Description of Work: ☐ **Individual Component(s)** ☑ **Complete System**

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

by: William Sieruta

at 474 Station Rd

has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to application No. 04-01 (R), dated _____. Approved Design Flow _____(gpd)

Installer

Designer: Inspector: Date: 5/11/04

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

No. 04-01 Revised FEE 75.00

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, *MA.*

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct( ) Repair(✓) Upgrade( ) Abandon( ) an individual sewage disposal system

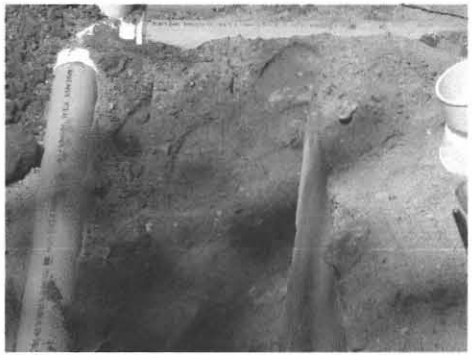
at 474 STATION RD as described in the application for

Disposal System Construction Permit No. 04-01 (R), dated MAY 2, 2004

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

Form 1255 Rev. 5/96 A.M. Sulkin Co. Boston, MA

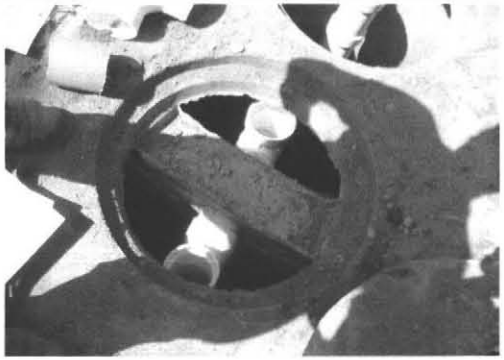
Date May 6, 2006 Board of Health













474 Station Road 5/11/04
Installer: W. Sieruta
Engineer: W. Sieruta

AMHERST HEALTH DEPT.
TOWN OF AMHERST
HEALTH PERMITS

0350

Received of Gregory + Lynne Rustler Forman (Name) of 471 Station Rd. (Address)

For Property Located at: same (Street Address) same (Owner)

HEA009	Bakery R6510 443509		HEA016	Septic Tank Permit-Installers R6510 443511	
HEA001	Bed & Breakfast R6510 443516		HEA017	Septic Tank Permit-Private R6510 443510	(1) 100.00
HEA002	Catering License R6510 443507		HEA018	Septic Tank Reinspection Fee R6510 432301	
HEA003	Food Handler R6510 443515		HEA019	Sub-Division Review Fee R6510 432306	
HEA004	Frozen Deserts R6510 443501		HEA012	Swimming Pool Permits R6510 443512	
HEA005	Health Dept. Housing Isp. R6510 432302		HEA020	Tanning License R6510 443509	
HEA006	Massage Therapy License R6510 443504		HEA034	Immunization Clinic R6510 432307	
HEA008	Motel License R6510 443506		HEA026	Smoking & Tobacco Reg. Violations R6510 443518	
HEA010	Removal of Offal R6510 443513		HEA022	Tobacco License R6510 443505	
HEA021	Removal of Rubbish R6510 443520		HEA042	Body Arts / Tatoo R6510 443521	
HEA011	Percolation Test Fees R6510 432300	(1) 175.00	HEA043	Food Service Plan Review R6510 432308	
HEA013	Recreation Camp License R6510 443503		HEA044	Porta Potties R6510 432309	
HEA014	Retail Store Permit R6510 443514		HEA045	Ice Rinks R6510 443522	
HEA015	Sanitary Code Booklets R6510 432305		HEA046	Rental Registration R6510 432310	
			HEA047	Fines R6510 48200	
			HEA		
			HEA		

TOTAL FEE: $275.00

&%VO&%V5
TOWN OF AMHERST
MISC CASH RECEIPTS
Date / Time : 01/28/04 11:48
Payment : $100.00
Receipt # : 52785
Check/Credit Card #:
Paid by : GREGORY & LYNNDE RU
S

Amherst Health Department

1/27/04
Date

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

OFFICE USE ONLY

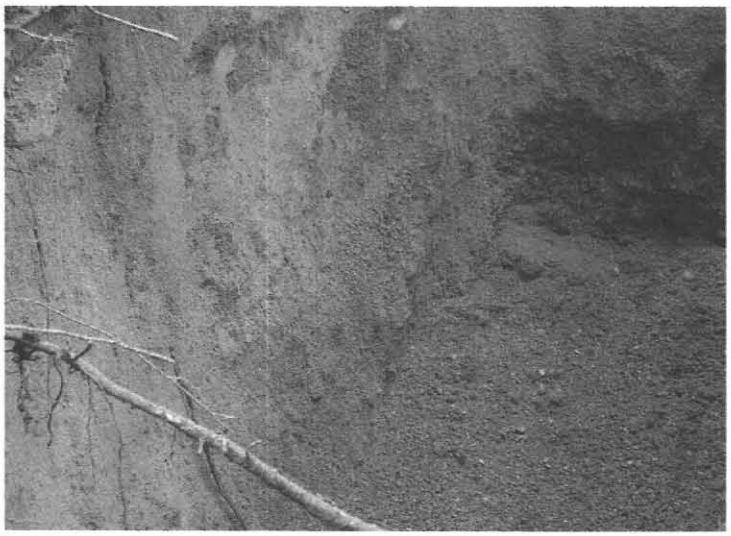
CHECK #	CASH
3292	

MISC CASH RECEIPTS
Date / Time : 01/28/04 11:48
Payment : $175.00
Receipt # : 52785
Check/Credit Card #:
Paid by :

WHITE – Applicant YELLOW – Collector PINK – Accounting GOLD – Health / Inspections

474 STATION RD OWNER: GREG FIRMAN






474 STATION RD – 2 OWNER: GREG FIRMAN

William J. Sieruta, P.E.
46 Upland Road
Holyoke, MA. 01040

Board of Health
Town Hall
Boltwood Avenue
Amherst, MA. 01002

May 26, 2004

Subject: As Built Inspection
474 Station Road
Amherst, MA.

An "as built" inspection was completed for the subject septic system. The system is in compliance with 310 CMR 15.0 and local board of health regulations. Septic tank was reorientated due to the actual sewer outlet pipe. See "as built plan." If you have any questions or need any further information, please do not hesitate to contact me.

Very truly yours,

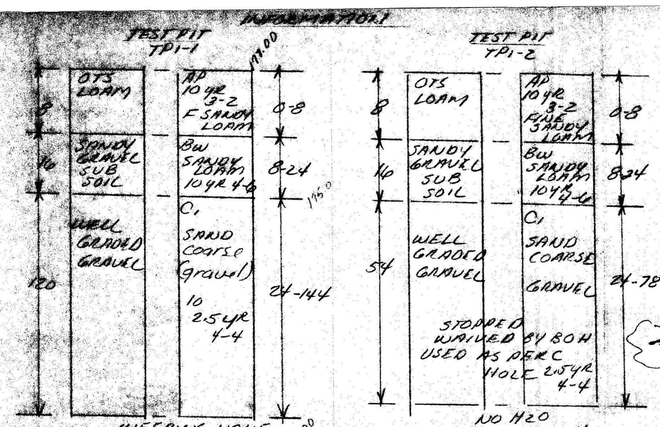
William J. Sieruta P.E.

William J. Sieruta, P.E.

(mbs)

2CC : G. Firman

WJS:mbs

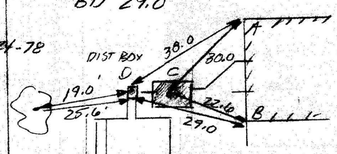


DATE: 1-6-04
EVALT: A. WEISS RS
WITNESS: D. ZAROZINSKI BOH
PERMEABILITY TEST
PERC. @ TP1-1
DEPTH 40"
ACTUAL RATE 1.33 MIN/INCH
DESIGN RATE 5.0 MIN/INCH
CLASS I SOIL
60" SEPARATION REQD PER 310 CMR 15.212

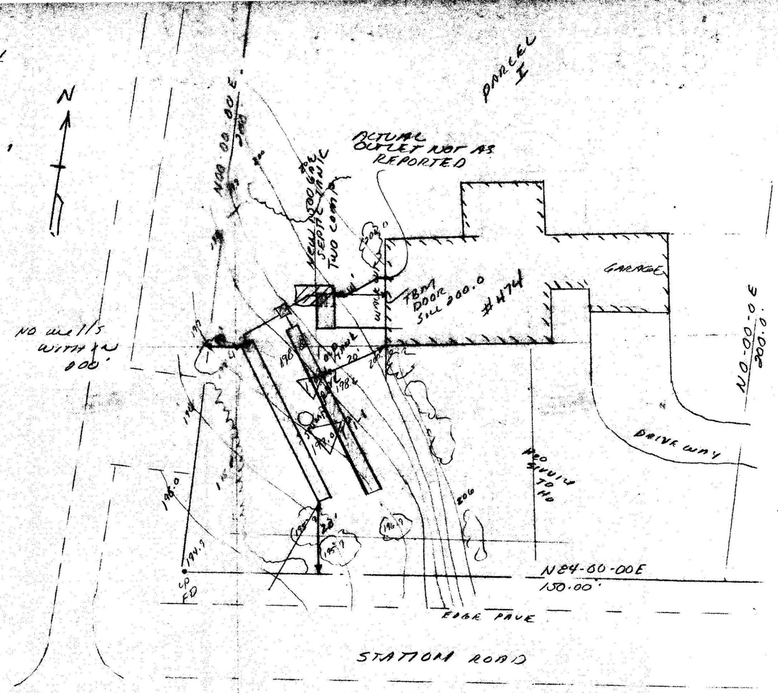
AS BUILT TIES TO SEPTIC

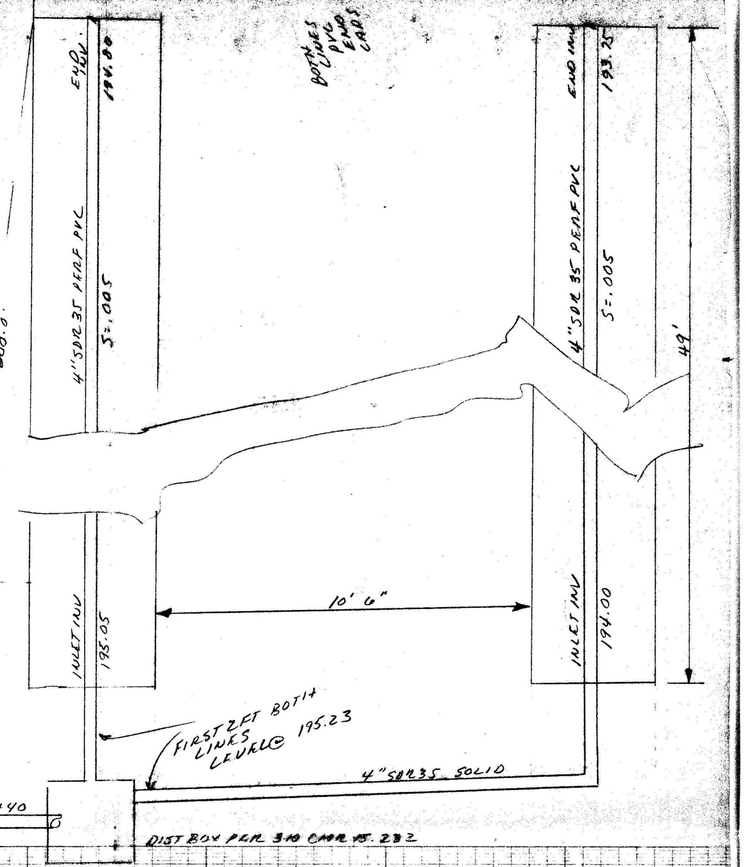
SEPTIC TANK
CENTER COVER
AC 30.0
BC 22.6 FROM 30" PINE 25.6'

DIST BOX
AD 38.0 FROM 30" PINE 19'
BD 29.0



2 TRENCHES





PLANVIEW SCALE 1"=20'

INSTALLATION NOTES
1. OLD TANK TO BE PUMPED CLEANED AND REMOVED
2. ALL STONE TO BE DOUBLE WASHED STONE FREE OF ALL SILT & FINES
3. ALL PIPE JOINTS WITH TANK AND DIST BOX TO BE ASPHALT ROAF SEALED
4. SEPTIC TANK TO BE A TWO (2) COMPARTMENT TANK WITH IN LET AND OUTLET TEES IN ACCORDANCE WITH 310 CMR 15.227 SECT 5
5. SEPTIC TANK AND DIST BOX TO BE SET ON 6" DEEP WASHED STONE FOUNDATION PAD
6. NO TREES WITHIN 10' OF LEACHING SYSTEM

DESIGN INFORMATION
ALL CONSTRUCTION TO BE IN ACCORDANCE WITH 310 CMR 15.0 TITLE 5 AND ALL LOCAL BOARD OF HEALTH REGULATIONS

FINISH GRADING TO BE AS SHOWN ON PLANVIEW. ALL DISTURBED AREAS TO BE LOAMED AND SEEDED

DESIGN CRITERIA
USE: EXISTING SINGLE FAMILY RESIDENTIAL HOME
5 BEDROOMS
WITH DISPOSAL UNIT
FULL WALKOUT BMT

DESIGN FLOW: 310 CMR 15.203
REQD 110 GALS/BED x 5 = 550 GALS
WITHOUT DISPOSAL UNIT
DISPOSAL TO BE REMOVED

SEPTIC TANK: 310 CMR 15.223
USE TWO COMPARTMENT TANK PRECAST CONC.
TANK 10'6 x 5' x 5'
REQD 550 GALS/DAY x 200% = 1100 GAL
MINIMUM TANK SIZE PERMITTED 1500 GALS

LEACHING SYSTEM: DUE TO SOIL CONDITIONS A LEACH TRENCH DESIGN IS TO BE USED PER 310 CMR 15.251

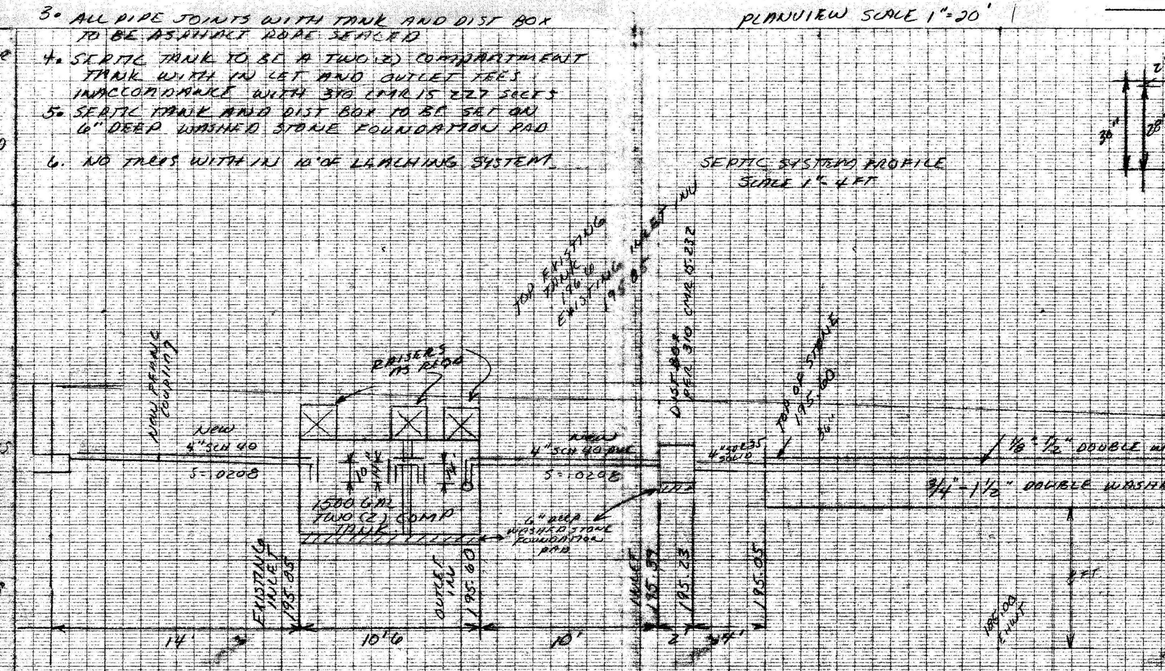
EFFECTIVE DEPTH 24" BMT
EFFECTIVE WIDTH 42" 3.5FT
EFFECTIVE LENGTH

USE TWO (2) TRENCHES 49' LONG WITH 10'6" BETWEEN TRENCHES

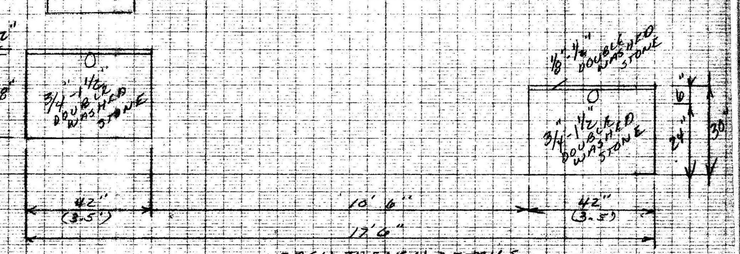
BOTTOM AREA
2 x 3.5 x 49 = 343 FT²
SIDEWALL AREA PLUS END WALLS
(2' x 2 x 2 x 49) + (2 x 2 x 3.5) = 410 FT²

PERMEABILITY
310 CMR 15.242
PERCOLATION RATES
ACTUAL RATE
1.33 GALS/FT²
DESIGN RATE
5.0 MIN/INCH
CLASS I SOIL
BOTTOM & SIDEWALL AREAS
.74 GALS/FT²

TOTAL PERMEABILITY
(343.0 + 406) .74 = 554 GALS/DAY
MEETS FLOW REQD



SEPTIC SYSTEM PROFILE
SCALE 1" = 4 FT

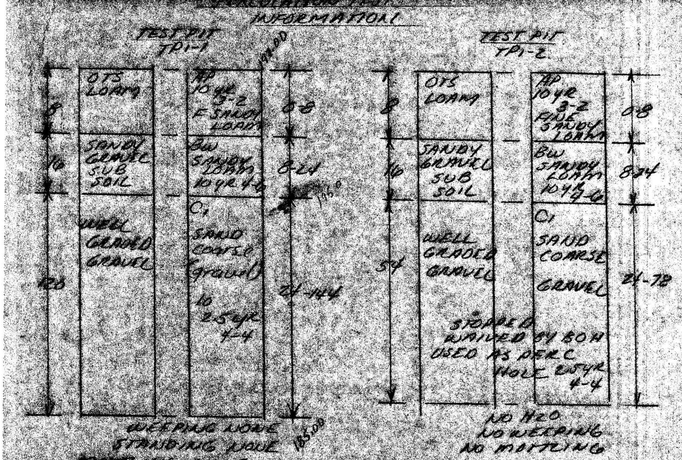


LEACH TRENCH DETAILS
SCALE 1" = 2' VERT
1" = 2' HORZ

SLOPE OFFSET CODE
310 CMR 15.210
REQD FOR SLOPES OF
1:3 OR LESS 15 FT
AVAILABLE TO BREAKOUT
ELEV 194.50
20 FT MEETS CODE REQD
OFFSET

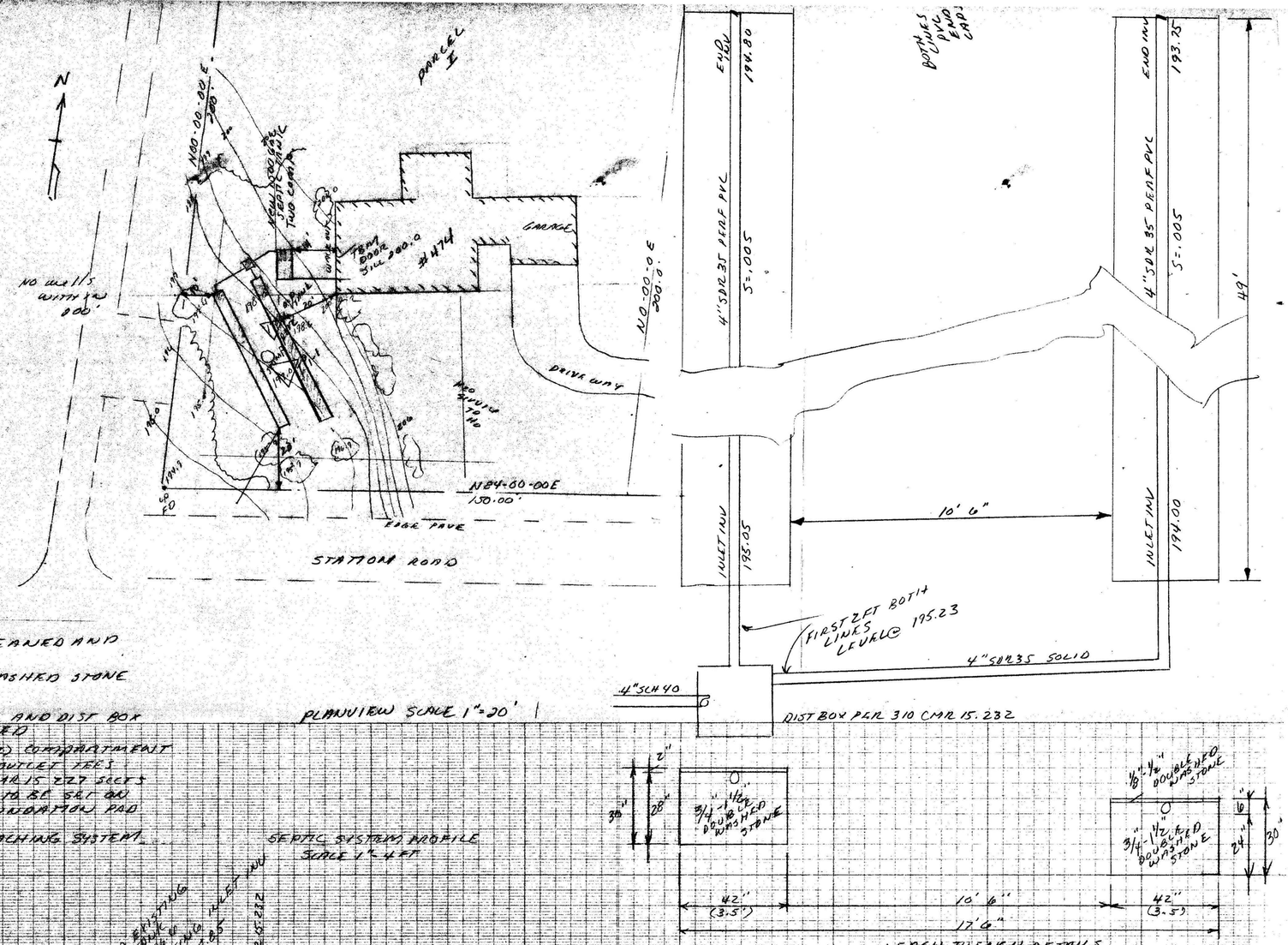
TRENCH	INLET INV	END INV	BOTTOM ELEV	TOP STONE	SEPARATION TO EHWT
1	195.05	194.80	192.80	195.60	7.80'
2	194.00	193.75	191.75	194.50	6.80'

SEPTIC SYSTEM DESIGN
FOR
GREGORY FIRMANE & LINDA RUSHER FIRMANE
474 STATION ROAD
AMHERST, MASS
ENGR: W.J SIERUTA PE
DATE: MAY 2, 2004



DATE: 7-6-04
EVAL: A. WEISS BS
WITNESS: D. ZAROUSKE BOH

PERMEABILITY TEST
PERC. @ TP1-1
DEPTH 40"
ACTUAL RATE 1.33 MIN/INCH
DESIGN RATE 5.0 MIN/INCH
CLASS I SOIL
66" SEPARATION REQD PER 310CMR 15.212



INSTALLATION NOTES

1. OLD TANK TO BE PUMPED CLEANED AND REMOVED
2. ALL STONE TO BE DOUBLE WASHED STONE FREE OF ALL SILT & FINES
3. ALL PIPE JOINTS WITH TANK AND DIST BOX TO BE ASPHALT ROPE SEALED
4. SEPTIC TANK TO BE A TWO (2) COMPARTMENT TANK WITH IN LET AND OUTLET TEES IN ACCOMODANCE WITH 310 CMR 15 227 SECT 5
5. SEPTIC TANK AND DIST BOX TO BE SET ON 6" DEEP WASHED STONE FOUNDATION PAD
6. NO TREES WITHIN 10' OF LEACHING SYSTEM

DESIGN INFORMATION

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH 310 CMR 15.0 ATRES AND ALL LOCAL BOARD OF HEALTH REGULATIONS

FINISH GRADING TO BE AS SHOWN ON PLANVIEW
ALL DISTURBED AREAS TO BE LOAMED AND SEEDED

DESIGN CRITERIA

USE: EXISTING SINGLE FAMILY RESIDENTIAL HOME
5 BEDROOMS
WITH DISPOSAL UNIT
FULL WALKOUT BMT

DESIGN FLOW: 310CMR 15.203
REQD 110 GALS/BED x 5 = 550 GALS
WITHOUT DISPOSAL UNIT
DISPOSAL TO BE REMOVED.

SEPTIC TANK: 310CMR 15.225
USE 1500 COMPARTMENT TANK PRECAST CONC.
TANK 10'6" x 5' x 5'
REQD 550 GALS/DAY x 200% = 1100 GAL
MINIMUM TANK SIZE PERMITTED 1500 GALS

LEACHING SYSTEM: DUE TO SOIL CONDITIONS A LEACH TRENCH DESIGN IS TO BE USED PER 310CMR 15.251

EFF TIVE DEPTH 24" 2FT
EFFECTIVE WIDTH 42" 3.5FT
EFFECTIVE LENGTH

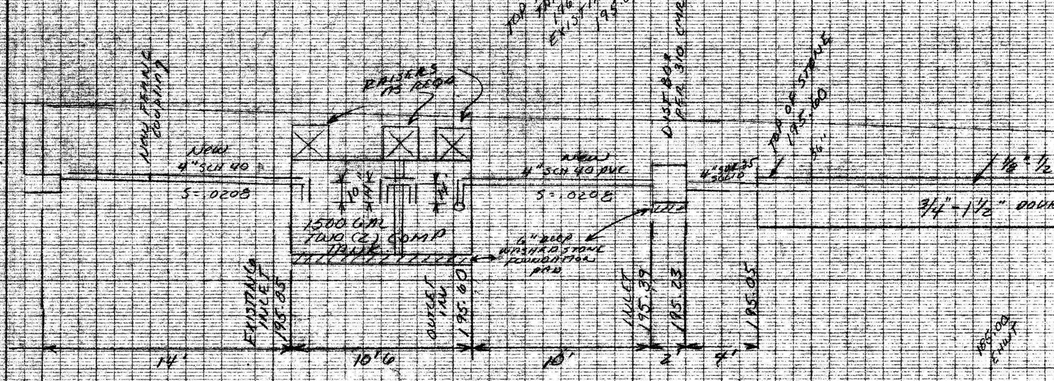
USE TWO (2) TRENCHES
49' LONG WITH 10'6" BETWEEN TRENCHES

BOTTOM AREA
2 x 3.5 x 49 = 343 ft²

SIDEWALL AREA PLUS END WALLS
(2' x 2 x 2 x 49) + (2 x 2 x 3.5) = 418 ft² 406

TOTAL PERMEABILITY
(343.0 + 406) .74 = 554 GALS/DAY
MEETS FLOW REQD

PERMEABILITY
310CMR 15.242
PERCOLATION RATES
ACTUAL RATE
1.33 GALS/FT²
DESIGN RATE
5.0 MIN/INCH
CLASS I SOIL
BOTTOM & SIDEWALL AREAS
.74 GALS/FT²



SCODE OFFSET CALC
310 CMR 15.210
REQD FOR SLOPES OF
1:3 OR LESS 15FT
AVAILABLE TO BRAKOUT
ELEV 194.50
20FT MEETS CODE REQD
OFFSET

TRENCH	INLET INV	END INV	BOTTOM ELEV	TOP STONE	SEPARATION TO EHWT
1	195.05	194.80	192.80	195.60	7.80'
2	194.00	193.75	191.75	194.50	6.80'

SEPTIC SYSTEM DESIGN
FOR
GREGORY FIRMAN & JUNE RUSHER FIRMAN
474 STATION ROAD
AMHERST, MASS
ENGR: W.J SIERUTA PE
DATE: MAY 2, 2004