FLAT HILLS - 290 is for sale + occupied

491 - 463 is building

to NJ of

165 MECHANIC STREET

~~166 GLENDALE ROAD~~

Application - 17568
Batch - 5809

April 5, 2013
INVOICE

AMHERST PUBLIC HEALTH DEPARTMENT

Bangs Community Center
70 Boltwood Walk
Amherst, MA 01002

DATE: April 5, 2013

TO Dave Perry for Elizabeth Perry
165 Mechanic Street
Amherst, MA, 01002

RE: Invoice for **Title 5 Witness Fee**
165 Mechanic Street
Services provided by **Edmund Smith**
PAYMENT TERMS: I Paid

QUANTITY	DESCRIPTION	UNIT PRICE	LINE TOTAL
1.00	Title 5 Witness Fee	$ 200.00	$ 200.00
		SUBTOTAL	$ 200.00
		SALES TAX	
		TOTAL	$ 200.00

130 PE

CUST NAME
4 BOLTWOOD AVENUE
04/09/13
CITY, ST, ZIP

***TOWN OF A TOWN HAL
AMHERST M REFERENCE
DATE/TIME 08:25

CUST NAME

0
DEPT

DE HEA058 TITLE V WI 200.

RECPT TOTAL

AMOUNT

200.00
DAVE PERRY QUA CHECK 2981

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

165 Mechanic st.
Property Address

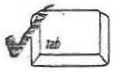
Elizabeth Perry
Owner's Name

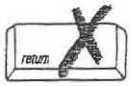
Owner information is required for every page.

Amherst | MA | 01002 | 4/2/13
City/Town | State | Zip Code | Date of Inspection

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:

Dave Perry
Name of Inspector

Dave Perry const
Company Name

153 center st
Company Address

Ashburnham | MASS | 01430
City/Town | State | Zip Code

978 827 6259 | S1587
Telephone Number | License Number

B. Certification

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

☑ Passes ☐ Conditionally Passes ☐ Fails

☐ Needs Further Evaluation by the Local Approving Authority

Inspector's Signature | Date: 4/2/13

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

165 Mechanic St
Property Address

Liz Peery
Owner's Name

Owner information is required for every page.

Amherst	MA	01002	4/2/13
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 in good working order

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

165 Mechanic St

Property Address

Liz Perry

Owner's Name

Owner information is required for every page.

Amherst	MA	01002	4/2/13
City/Town	State	Zip Code	Date of Inspection

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

165 Mechanic St
Property Address

Liz Peasty
Owner's Name

Owner information is required for every page.

City/Town	State	Zip Code	Date of Inspection
Amherst	MA	01002	4/2/13

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

165 Mechanic ST
Property Address

Liz Perry
Owner's Name

Owner information is required for every page.

Amherst	MA	01002	4/2/13
City/Town	State	Zip Code	Date of Inspection

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.
☐	☑	Any portion of cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply.
☐	☑	Any portion of a cesspool or privy is within a Zone 1 of a public well.
☐	☑	Any portion of a cesspool or privy is within 50 feet of a private water supply well.
☐	☑	Any portion of a cesspool or privy is less than 100 feet but greater than 50 feet from a private water supply well with no acceptable water quality analysis. **[This system passes if the well water analysis, performed at a DEP certified laboratory, for fecal coliform bacteria indicates absent and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis and chain of custody must be attached to this form.]**
☐	☑ N/A	The system is a cesspool serving a facility with a design flow of 2000gpd-10,000gpd.
☐	☑ PASSES	**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.

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

165 Mechanic St
Property Address

Liz Perry
Owner's Name

Owner information is required for every page.

Amherst | MA | 01002 | 4/2/13
City/Town | State | Zip Code | Date of Inspection

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: See Attached
☑	☐	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): 3 Number of bedrooms (actual): 2

DESIGN flow based on 310 CMR 15.203 (for example: 110 gpd x # of bedrooms): 330 GPD

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

165 MECHANIC ST
Property Address

Liz Perry
Owner's Name

Owner information is required for every page.

AMHERST | MA | 01002 | 4/2/13
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D. System Information

Description:
System works good

Number of current residents: 0

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? NA ☐ Yes ☐ No

Seasonal use? ☐ Yes ☑ No

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

Detail: H_2O shut off town water house has been vacant for more than 4 years. when house was occupied only by 1 person

Sump pump? ☐ Yes ☑ No

Last date of occupancy: 2/2/11 ± (Date)

Commercial/Industrial Flow Conditions:

Type of Establishment:

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

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

Grease trap present? ☐ Yes ☐ No

Industrial waste holding tank present? ☐ Yes ☐ No

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

Water meter readings, if available:

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

165 Mechanic St
Property Address

Liz Perry
Owner's Name

Owner information is required for every page.

Amherst | MASS | 01002 | 4/2/13
City/Town | State | Zip Code | Date of Inspection

D. System Information (cont.)

Last date of occupancy/use: _____ Date

Other (describe below):

General Information

Pumping Records:

Source of information: Home owner + Pumper

Was system pumped as part of the inspection? ☑ Yes ☐ No

If yes, volume pumped: 1500 gallons

How was quantity pumped determined? gauge on truck

Reason for pumping: _____

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

165 Mechanic St
Property Address

Liz Perry
Owner's Name

Owner information is required for every page.

Amherst	MA	01002	4/2/13
City/Town	State	Zip Code	Date of Inspection

D. System Information (cont.)

Approximate age of all components, date installed (if known) and source of information:
installed in 1999 system 14 years old

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

Building Sewer (locate on site plan):

Depth below grade: 1' ± feet

Material of construction:

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

Distance from private water supply well or suction line: miles feet

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

Septic Tank (locate on site plan):

Depth below grade: 9" ± feet

Material of construction:

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

If tank is metal, list age: _____ years

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

Dimensions: _____

Sludge depth: _____

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

145 Mechanic St
Property Address

Liz Peretty
Owner's Name

Owner information is required for every page.

Amherst	MA	01002	4/2/13
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: sludge 5"

Scum thickness: scum 0"

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

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

How were dimensions determined? _____

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

All good Pump out every 2-3 years

Grease Trap (locate on site plan):

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

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

165 Mechanic St
Property Address

Liz Perry
Owner's Name

Owner information is required for every page.

Amherst | MA | 01002 | 4/2/13
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):

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

105 Mechanic ST
Property Address

Liz Perry
Owner's Name

Owner information is required for every page.

Amherst | MA | 01002 | 4/2/13
City/Town | State | Zip Code | Date of Inspection

D. System Information (cont.)

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

Depth of liquid level above outlet invert: &

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.):

All OK

Pump Chamber (locate on site plan):

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:

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

145 Mechanic St

Property Address

Liz Peotty

Owner's Name

Owner information is required for every page.

Amherst | MA | 01002 | 4/2/13

City/Town | State | Zip Code | Date of Inspection

D. System Information (cont.)

Type:

☐	leaching pits	number:	
☐	leaching chambers	number:	
☐	leaching galleries	number:	
☑	leaching trenches	number, length:	2 @ 35'
☐	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.):

no failure all good

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

Number and configuration _____

Depth – top of liquid to inlet invert _____

Depth of solids layer _____

Depth of scum layer _____

Dimensions of cesspool _____

Materials of construction _____

Indication of groundwater inflow ☐ Yes ☐ No

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

165 Mechanic St
Property Address

Liz Perry
Owner's Name

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Amherst | MASS | 01002 | 4/2/13
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):

Materials of construction:

Dimensions

Depth of solids

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

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

165 Mechanic St
Property Address

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Owner's Name

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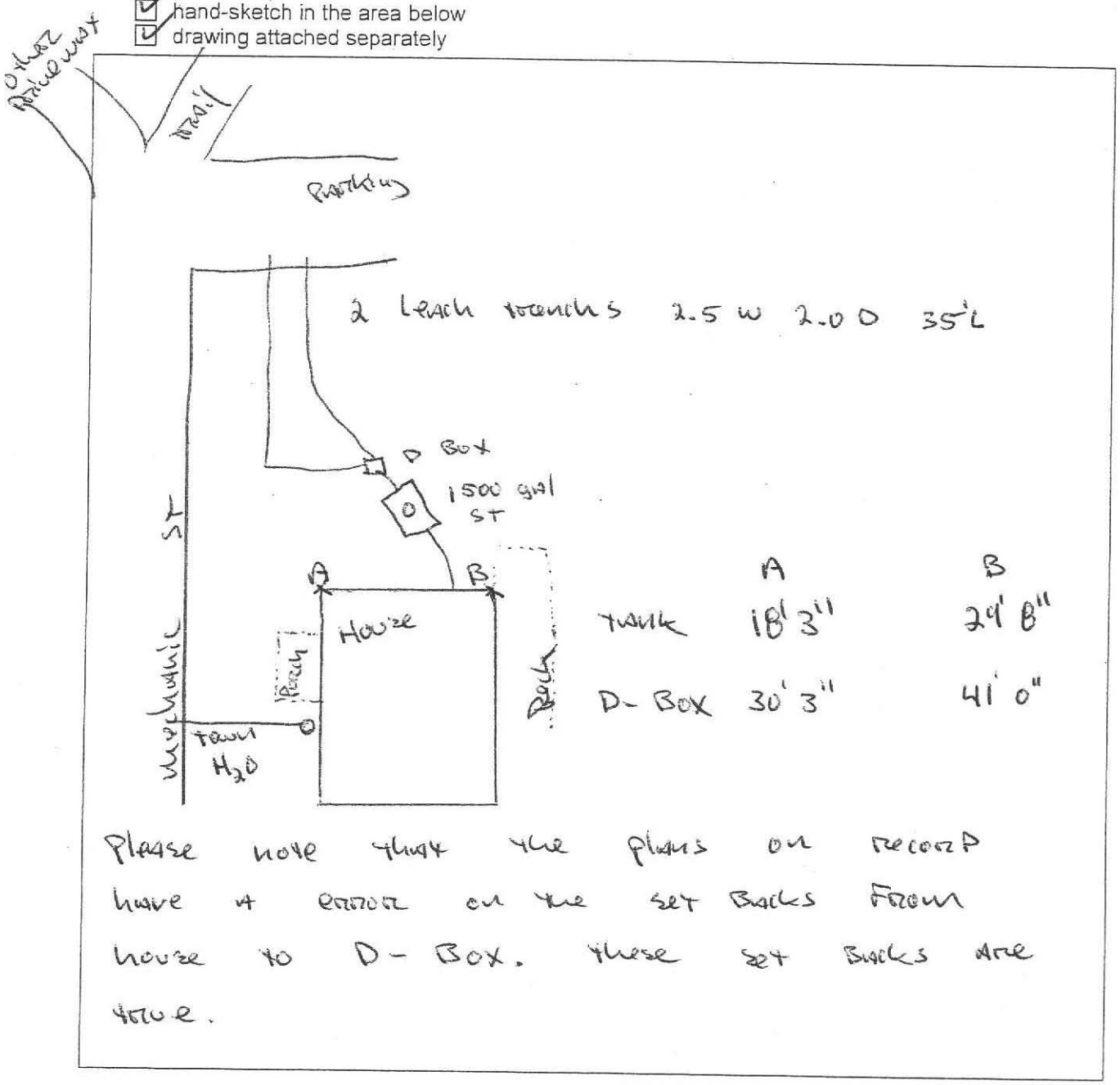
Amherst | MA | 01002 | 4/2/13
City/Town | State | Zip Code | Date of Inspection

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



Please note that the plans on record have an error on the set backs from house to D-Box. These set backs are here.

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

165 Mechanic St
Property Address

Liz Perry
Owner's Name

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Amherst	MA	01002	4/2/13
City/Town	State	Zip Code	Date of Inspection

D. System Information (cont.)

Site Exam:

- [x] Check Slope
- [x] Surface water
- [x] Check cellar
- [ ] Shallow wells N/A

Estimated depth to high ground water: 6.5' feet

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

- [x] Obtained from system design plans on record
  - If checked, date of design plan reviewed: 4/2/13 Date
- [x] Observed site (abutting property/observation hole within 150 feet of SAS)
- [x] Checked with local Board of Health - explain: BOH on site During Inspection
- [x] Checked with local excavators, installers - (attach documentation) See pumping records
- [ ] Accessed USGS database - explain:

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

See attached Plans + soil Logs + testing

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

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

145 Merrimac St
Property Address

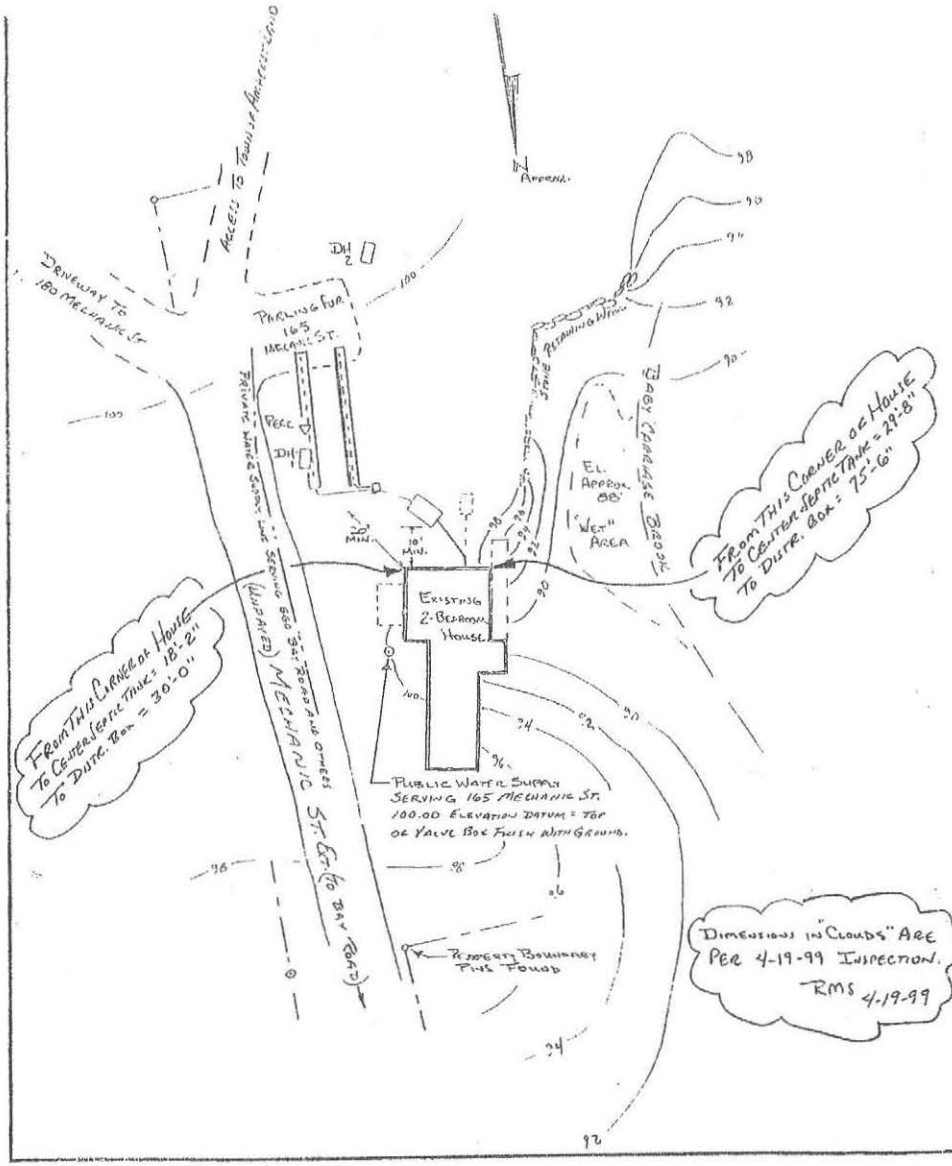
Liz Perry
Owner's Name

Owner information is required for every page.

Amherst | MA | 01002 | 4/2/13
City/Town | State | Zip Code | Date of Inspection

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



CONSTRUCTION NOTES

THIS DESIGN HAS BEEN COMPLETED AND CONSTRUCTION IS TO BE CARRIED OUT IN ACCORDANCE WITH 310CMR-15.00 (TITLE 5) 12-27-96 REVISION.

EXISTING SEPTIC TANK IS TO BE IS TO BE PUMPED, CRUSHED, FILLED WITH SAND AND BURIED IN PLACE. EXISTING SYSTEM DOWNSTREAM FROM SEPTIC TANKIS TO BE INVESTIGATED. IF AN EXISTING LEACH PIT IS FOUND, IT TOO MUST BE PUMPED, CRUSHED, FILLED WITH SAND AND BURIED IN PLACE. NEW LEACH TRENCHES ARE TO BE PLACED TO AVOID THE LOCATION OF THE DISCONTINUED LEACH FACILITY.

THE OFFSET DISTANCES ARE VERY CRITICAL TO SUCCESSFUL INSTALLATION OF THIS DESIGN. MAINTAIN ALL TITLE 5 MINIMUM OFFSETS. PAY PARTICULAR ATTENTION TO:

- MINIMUM 10 FEET CELLAR WALL TO SEPTIC TANK.
- MINIMUM 20 FEET CELLAR WALL TO LEACH TRENCHES.
- MINIMUM 10 FEET PRIVATE WATER SUPPLY LINE TO LEACH TRENCHES.
- MINIMUM 50 FEET WET AREA (AT LOW AREA BEHIND HOUSE) TO LEACH TRENCHES.

(PRIVATE WATER SUPPLY LINE WAS MARKED APPROXIMATELY MARCH 5, 1999.)

ALL TOP & SUBSOIL IS TO BE REMOVED FROM THE AREA OF THE NEW LEACH TRENCHES + 5 FEET ON ALL SIDES. MACHINE-COMPACT SAND MEETING 15.255 REQUIREMNENTS TO ESTABLISH CONSISTENT BASE ELEVATIONS AS SHOWN ON SHEET 1 OF 2 FOR TWO TRENCHES WITH SAME BASE ELEVATION.

FINISH CONTOURS ARE TO APPROXIMATE EXISTING.

THE OFFSET OF THE PROPOSED LEACH TRENCHES ABOVE GROUNDWATER IS 6.2 FEET, EXCEEDING THE 5 FOOT MINIMUM REQUIRED BY TITLE 5. THIS IS A REPAIR, SO THE 1.25 AMHERST SIZING FACTOR IS NOT INCLUDED. THE SYSTEM IS SIZED FOR 3-BEDROOM CAPACITY.

THIS DESIGN DOES NOT INCLUDE CAPACITY FOR A GARBAGE GRINDER. FUTURE INSTALLATION OF A GARBAGE GRINDER IS NOT ALLOWED.

PER AMHERST REGULATION, IN-PROCESS INSPECTIONS FOR BOTTOM-OF-TRENCH ELEVATIONS AND FINAL AS-BUILT INSPECTIONS ARE REQUIRED. FOR INSPECTIONS CONTACT:

DESIGNER: (413) 256-0647
HEALTH AGENT: (413) 256-4030

COMMONWEALTH OF MASSACHUSETTS
RICHARD M SCOTT
CIVIL
No 31188
REGISTERED PROFESSIONAL ENGINEER
3-17-99

SHEET 2 OF 2

SEPTIC SYSTEM DESIGN
AT 165 MECHANIC STREET AMHERST

SCALE: 1" = 30'	APPROVED BY:	DRAWN BY RMS
DATE: 3-10 99		REVISED 3-19-99 TO ADD AS-BUILT DATA

FOR ELIZABETH PERRY
BY RICHARD SCOTT, P.E.

DRAWING NUMBER

OFF SETS FROM HOUSE TO D-BOX INCORRECT

System Design Calculations

2 Bedroom x 110 gal. per BR per day = 220 gal. per day design flow. Design for 330 gpd

Minimum effective septic tank volume = 2.0 x 330 = 660 gal

Specified tank volume for this installation = 1500 gal.

Percolation rate = <2 minutes per inch

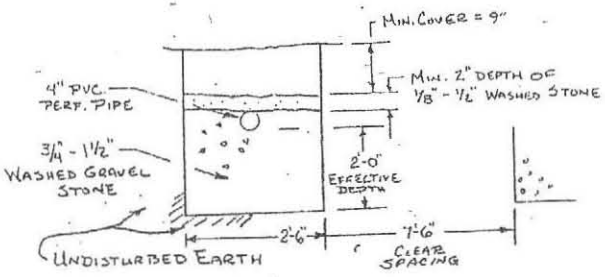
Design loading = 0.74 gpd per sq. ft. of effective sidewall & 0.74 gpd per sq. ft of bottom area.

Specified leach trenches are 2.5 ft. wide x 2.0 ft. effective depth. Allowable loading per ft. of trench = 1.0 x 2.5 x 0.74 + 2 x 1.0 x 2.0 x 0.74 = 4.81 gpd/ft.

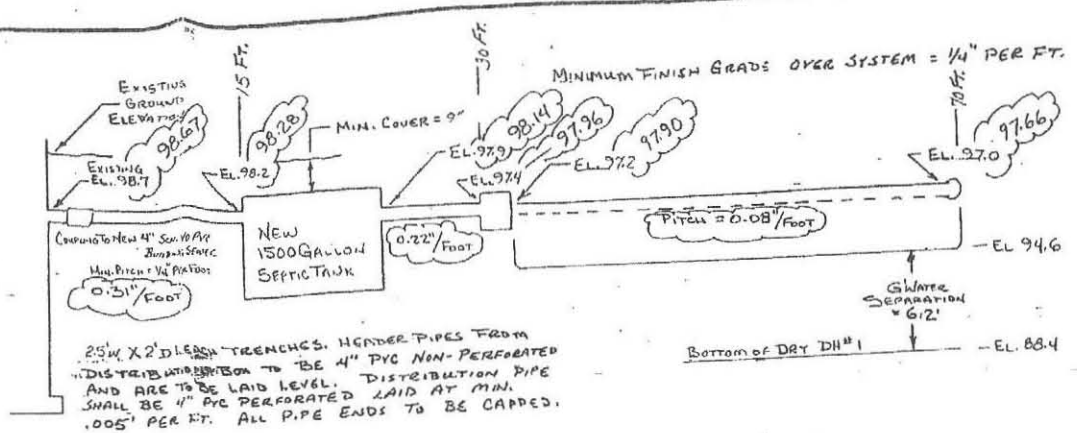
Required trench length = 330 ÷ 4.81 = 69 feet
(Without consideration of trench ends)

Specified trenches = 2 @ 35 Ft. Long

Allowable volume = 70 x 4.81 = 337 gpd
(Without consideration of trench ends)



Leach Trench Section
(Not To Scale)



System Profile – Section Parallel to Flow
(Not To Scale)

Construction Notes

Septic tak and distribution box are to be set on a six-inch level base of 1-1/4" stone.

Gas baffle is to be installed on septic tank outlet.

Leach trench stone is to be double-washed to meet DEP and town of Amherst guidelines.

Outlet pipes from D-box to be level out two feet then 1/16" per foot pitch.

Elevations in "Clouds" are per 4-19-99 Inspection RMS 4-19-99

Commonwealth of Massachusetts — Richard M Scott — Civil — No 31109 — Registered Professional Engineer — 3-17-99

Sheet 1 of 2

Septic System Design
At 165 Mechanic Street Amherst

Scale: As Shown	Approved by:	Drawn by RMS
Date: 3-9-99		Revised 4-19-99 To Add As-Built Data

For Elizabeth Perry
By Richard Scott, P.E.

Drawing Number

Richard Scott, P.E.
31 Shutesbury Road
Pelham, MA 01002
(413) 256-0647

May 3, 1999

Dave Zarozinski, Health Agent
Inspection Services
4 Boltwood Avenue
Amherst, MA 01002-2351

Subject: Septic System Repair at 165 Mechanic Street (Property of Elizabeth Perry)
Documentation of As-Built Inspection

Dear Dave:

On April 19, 1999 I completed the in-process inspection for this septic system repair installation at the subject property. Per Amherst regulations, this first inspection was to check the removal of unsuitable soils from beneath the soil absorption system and check those "subgrade" elevations.

I confirmed that the unsuitable soils were removed and the subgrade elevations were consistent with what we learned at the soil testing last November. I authorized the installer, Karl's Excavating to continue with the construction of the leach trenches. No additional sand fill was required to meet the required elevations. I discussed with the installer the desire to keep the system as high as possible while still maintaining the minimum pipe pitches for gravity flow.

On April 22, 1999 I completed the final as-built inspection with you. The as-built dimensions triangulated from the house and the as-built elevations are documented on the enclosed plan copies. These are in accordance with the approved plan and permit. All dimensional offsets and pipe pitches are per Title 5 requirements. The installer was able to gain a few inches in elevation and still maintain the pipe pitches. This has helped keep the leach trenches from being too deep in the ground.

The installation work has been well done. I recommend that the Certificate of Compliance be issued to allow use of the repaired system.

Thanks, Dave for your help in getting this project completed. Please call me if there is anything else I need to do.

Sincerely,

Richard Scott

Richard Scott, P.E.

cc: Ms. Elizabeth Perry, Owner
Steve Konieczny, Karl's Excavating

5/5/99

Richard Scott, P.E.
31 Shutesbury Road
Pelham, MA 01002
(413) 256-0647

Dave Zarozinski
Health Department
Town Hall - Main Street
Amherst, MA 01002

March 13, 1999

Subject: Title 5 Septic System Repair Design for 165 Mechanic Street
(Property of Elizabeth Perry)

Dear Dave:

Enclosed are two copies of the application materials for the septic system repair, which is proposed for the subject property. If you have any questions on the design, you can reach me briefly by phone at (978) 544-2511. When you have completed your review, you can call me or you can call ~~Mrs.~~ Ms. Perry directly so she can stop by at the Health Department office to sign the permit application and pay the fee if she has not already done that. ~~Mrs~~ Ms. Perry's phone is 253-3310.

As you'll note on the plan, the private water line is as close to the proposed trench location as allowed by Title 5. This is to maximize the separation to the wet area at Baby Carriage Brook. Although the separation to the wet area at the brook is only the minimum 50 feet, the wet area is clearly bounded by the steep slope. If you think this needs Conservation Department review, let me know.

Thanks, Dave for your prompt review. I know ~~Mrs.~~ Ms. Perry is anxious to complete this repair and will proceed with installation by Karl's Excavating as soon as she has the permit and the weather will allow.

Sincerely,

Richard Scott

Richard Scott, P.E.

cc: Elizabeth Perry
Steve Konieczny

COMMONWEALTH OF MASSACHUSETTS
RICHARD M. SCOTT
CIVIL
No. 31129
REGISTERED
PROFESSIONAL ENGINEER

3-18-99

FORM 1A - APPLICATION FOR DSCP

No. 99-4

Fee 160 00

CK # 2086 Pd 3-29-99

COMMONWEALTH OF MASSACHUSETTS

Board of Health, TOWN OF AMHERST, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

Application for a Permit to: Construct ( ) Repair (✓) Upgrade ( ) Abandon ( )

☑ Complete System ☐ Individual Components

Location 165 MECHANIC STREET	Owner's Name ELIZABETH PERRY
Map/Parcel#	Address 165 MECHANIC STREET, AMHERST
Lot#	Telephone# 413-253-3310
Installer's Name KARL'S EXCAVATING	Designer's Name RICHARD SCOTT, P.E.
Address 327 RIVER DRIVE HADLEY, MA 01035	Address 31 SHUTESBURY RD. PELHAM, MA 01002
Telephone# 413 549-5396	Telephone# 413-256-0647

Type of Building: RESIDENTIAL
Dwelling - No. of Bedrooms 2
Other - Type of Building _____
No. of persons _____ Showers ( ), Cafeteria ( )
Other Fixtures _____

Lot Size _____ sq.ft. AREA AVAILABLE FOR S.A.S. = APPROX. 15' x 50'
Garbage grinder (W)

Design Flow (min. required) 220 gpd Calculated design flow 330 gpd
Design flow provided 351 gpd

Plan: Date 3-9-99 Number of sheets 2 Revision Date _____
Title SEPTIC SYSTEM DESIGN AT 165 MECHANIC STREET

Description of Soil(s) SAND - MERRIMAC
Soil Evaluator Form No. 11 Name of Soil Evaluator RICHARD SCOTT
Date of Soil Evaluation 11-17-98

DESCRIPTION OF REPAIRS OR ALTERATIONS INSTALL NEW BUILDING SEWER, SEPTIC TANK AND SOIL ABSORPTION SYSTEM.

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

Signed Elizabeth J. Perry Date 3/24/99

Inspections _____

DEP APPROVED FORM 5/96

FORM 2A - DSCP

No. 99-4 Fee 160.00

COMMONWEALTH OF MASSACHUSETTS

Board of Health, TOWN OF AMHERST, MA.

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to: Construct( ) Repair( ) Upgrade( ) Abandon( ) an individual sewage disposal system at 165 MECHANIC STREET as described in the application for Disposal System Construction Permit No. 99-4, dated 3/24/99.

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

Date 3-24-99 Board of Health Carol Jaczynski

DEP APPROVED FORM 5/96

FORM 3A - CERTIFICATE OF COMPLIANCE

No. 99-4 Fee 60.00

COMMONWEALTH OF MASSACHUSETTS

Board of Health, TOWN OF 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: Hoyt's

at: 165 MECHANIC STREET

has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to application No. _____

dated 4-22-99. Approved Design Flow _____ (gpd)

Installer Hoyt's — Daniel P. Hoyt

Designer: RICHARD SCOTT Richard Scott 4-22-99 Inspector Dan Zaynick

Date 4-22-99

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

DEP APPROVED FORM 5/96

RICHARD SCOTT, P.E.
REGISTERED CIVIL ENGINEER

SITE ENGINEERING
PERC TESTS SEPTIC SYSTEM DESIGN

31 SHUTESBURY ROAD
PELHAM, MA 01002

(413) 256-0647

FORM 11 - SOIL EVALUATOR FORM
Page 1

No. 99-4

Date 11-17-98

TOWN OF AMHERST, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: RICHARD SCOTT, P.E.

Witnessed By: DAVID ZAROZINSKI, HEALTH AGENT

Location Address or Lot: 165 MECHANIC STREET MAP PARCEL#	Owner's Name, Address, and Telephone #: ELIZABETH PERRY 165 MECHANIC ST. AMHERST, MA 01002 413-253-3310

New Construction ☐ Repair ☑

Office Review

Published Soil Survey Available: No ☐ Yes ☑

Year Published 1981 Publication Scale 1:15,840 Soil Map Unit CENTRAL HAMPSHIRE SHEET #20 - SOIL MeB - MEERIMAC

Drainage Class F 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) ____

Current Water Resource Conditions (USGS): Month ____

Range : Above Normal ☐ Normal ☐ Below Normal ☐

Other References Reviewed: USGS MAP, OTHER MECHANIC STREET SOIL TESTS

RICHARD SCOTT, P.E.
REGISTERED CIVIL ENGINEER

SITE ENGINEERING
PERC TESTS SEPTIC SYSTEM DESIGN

31 SHUTESBURY ROAD
PELHAM, MA 01002 (413) 256-0647

SOIL EVALUATOR FORM

On-site Review

Deep Hole Number 1 & 2 Date: 11-17-98 Time: 8:30 A.M. Weather 40° OVERCAST

Location (identify on site plan) .....

Land Use RESIDENTIAL Slope (%) 0-8% Surface Stones FEW

Vegetation HARD & SOFTWOOD TREES, LAWN

Landform GLACIAL OUTWASH TERRACE

Position on landscape (sketch on the back) .....

Distances from:

BABY CARRIAGE BROOK: Open Water Body 80 feet Drainage way ..... feet

Possible Wet Area 60 feet Property Line 40 feet

Drinking Water Well ..... 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)
Deep Hole #1 (Ground Surface El. = 98.4; G'Water El. = 88.4)					
0-8	A	SANDY LOAM	10YR 4/2	NONE	
8-30	B/C	COARSE SAND	7.5YR 6/6	NONE	W/ 40% GRAVEL & COBBLES
30-120	C	FINE SAND	10YR 7/2	NONE	W/ NO COARSE FRAGMENTS
Deep Hole #2 (Ground Surface El. = 100.8; G'Water El. = 90.8)					
0-9	A	SANDY LOAM	10YR 4/2	NONE	
9-24	B	LOAMY SAND	7.5YR 6/4	NONE	
24-48	C_1	COARSE SAND	7.5YR 6/6	NONE	W/ 50% GRAVEL & COBBLES
48-120	C_2	FINE SAND	10YR 7/2		0% COARSE FRAGMENTS

Parent Material (geologic) GLACIAL OUTWASH TILL Depth to Bedrock: >120"

Depth to Groundwater: Standing Water in the Hole: >120" Weeping from Pit Face: >120"

Estimated Seasonal High Ground Water: 120"

RICHARD SCOTT, P.E.
REGISTERED CIVIL ENGINEER

SITE ENGINEERING
PERC TESTS SEPTIC SYSTEM DESIGN

31 SHUTESBURY ROAD
PELHAM, MA 01002

(413) 256-0647

Determination for Seasonal High Water Table

Location 165 MECHANIC STREET
Method Used: Town AMHERST

- ☐ Depth observed standing in observation hole ..... inches
- ☐ Depth weeping from side of observation hole ..... inches
- ☑ Depth to soil mottles 120 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 June 16, 1995 (date) I have passed the 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 Richard Scott Date 11-17-98

RICHARD SCOTT, P.E.
REGISTERED CIVIL ENGINEER

SITE ENGINEERING
PERC TESTS SEPTIC SYSTEM DESIGN

31 SHUTESBURY ROAD
PELHAM, MA. 01002 (413) 256-0847

FORM 12 - PERCOLATION TEST

COMMONWEALTH OF MASSACHUSETTS

TOWN OF AMHERST, Massachusetts

Percolation Test				
Date: 11-17-98		Time: 8:30 A.M.		
Observation Hole #	P1			
Depth of Perc Bottom	57"			
Start Pre-soak	8:41			
End Pre-soak	8:56			
Time at 12"	8:56			
Time at 9"	9:00			
Time at 6"	9:06			
Time (9"-6")	2			
Rate Min./Inch	0.7 MIN./IN.			

Site Passed ☑ Site Failed ☐

Performed By: RICHARD SCOTT, P.E.

Witnessed By: DAVID ZAROZINIKI, HEALTH AGENT

Comments: REQUIRES 5' SEPARATION ABOVE GROUNDWATER

RECEIVED MAR 2 9 1999

Elizabeth J. Perry
165 Mechanic St
Amherst, MA 01002

2086

53-8027/2118

3/29 1999

PAY TO THE ORDER OF Town of Amherst $ 160.00

One Hundred Sixty 00/100 DOLLARS

UMASS/FIVE COLLEGE FEDERAL CREDIT UNION
New Market Center
6 University Drive
Amherst, Mass. 01002

FOR Perk Test + Plans MEMBER Elizabeth J Perry MP

⑆211880271⑆ 020287198⑈ 2086

11-17-98
Mass Pd

FORM 11 - SOIL EVALUATOR FORM

No. _____ Date: 11-17-98

Commonwealth of Massachusetts
, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: Rick Scott Date: 11-17-98
Witnessed By: David Tomasetti

Location Address or Lot #	Owner's Name, Address, and Telephone #
New Construction ☐ Repair ☑	Elizabeth Perry 165 Mechanic 253-3310

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: _____

FORM 12 - PERCOLATION TEST

Location Address or Lot No. 165 Mechanic St.

COMMONWEALTH OF MASSACHUSETTS

, Massachusetts

Percolation Test*		
Date: 11-17-98	Time: 8:41	
Observation Hole #		
Depth of Perc	57"	
Start Pre-soak	8:41	
End Pre-soak	8:56	
Time at 12"	8:56	
Time at 9"	9:00	
Time at 6"	9:06	
Time (9"-6")	6 min	
Rate Min./Inch	(2)	

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

Site Passed ☑ Site Failed ☐

Performed By: R. H Scott

Witnessed By: David Zuniga II

Comments:

DEP APPROVED FORM - 12/07/95

Location Address or Lot No. 165 Mechanic St.

On-site Review

Deep Hole Number ____ Date: 11-17-98 Time: ____ Weather ____
Location (identify on site plan) ____
Land Use ____ Slope (%) ____ Surface Stones ____
Vegetation ____
Landform ____
Position on landscape (sketch on the back)
Distances from:

Open Water Body	feet	Drainage way	feet
Possible Wet Area	feet	Property Line	feet
Drinking Water Well	feet	Other	

H 1

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
8	A	Sandy Loam	10yr 4/2	Moist	
30	B/C	Coarse Sand	7.5yr 6/6		40% Gravel Cobbles
120	C	F. vc Sand	10yr 7/2		Lt no O%

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) ____ Depth to Bedrock: ____
Depth to Groundwater: Standing Water in the Hole: ____ Weeping from Pit Face: ____
Estimated Seasonal High Ground Water: ____

Location Address or Lot No. _____

On-site Review

Deep Hole Number ..... Date: ..... Time: ..... Weather .....
Location (identify on site plan) .....
Land Use ..... Slope (%) ..... Surface Stones .....
Vegetation .....
Landform .....
Position on landscape (sketch on the back)
Distances from:

Open Water Body	feet	Drainage way	feet
Possible Wet Area	feet	Property Line	feet
Drinking Water Well	feet	Other	#1

DEEP OBSERVATION HOLE LOG*

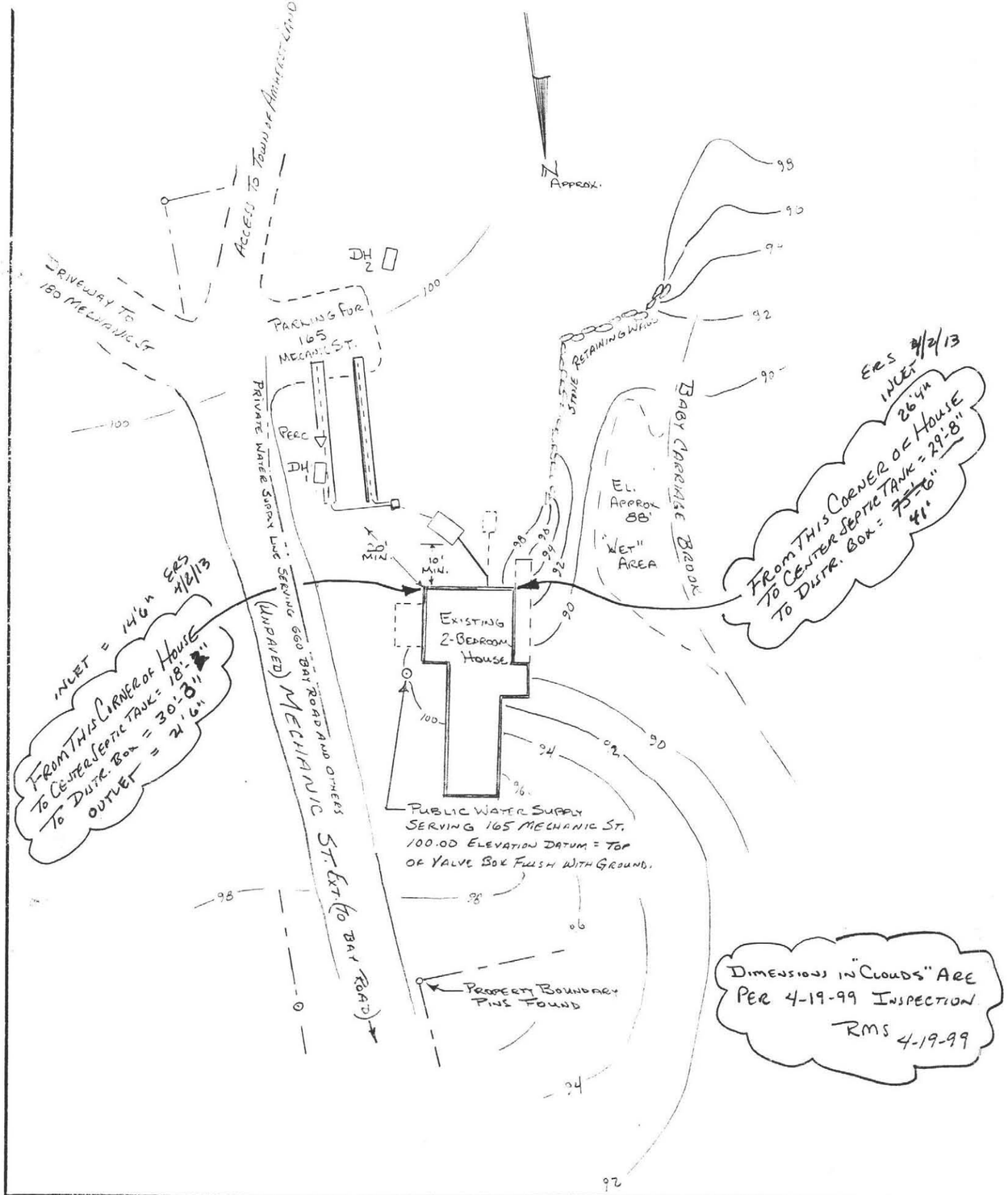
Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
9	A	Sandy Loam	10yr 4/2	Many	
24	B	Loamy Sand	7 yr 6/4		
	C1	Coarse Sand			
	C2	Fine Sand	7.5yr 6/6		50 Percent Stones
120"			10yr 7/2		0/0 Coarse Sand

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) _____ Depth to Bedrock: _____

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

Estimated Seasonal High Ground Water: _____



DIMENSIONS IN "CLOUDS" ARE PER 4-19-99 INSPECTION RMS 4-19-99

CONSTRUCTION NOTES

THIS DESIGN HAS BEEN COMPLETED AND CONSTRUCTION IS TO BE CARRIED OUT IN ACCORDANCE WITH 310CMR-15.00 (TITLE 5) 12-27-96 REVISION.

EXISTING SEPTIC TANK IS TO BE IS TO BE PUMPED, CRUSHED, FILLED WITH SAND AND BURIED IN PLACE. EXISTING SYSTEM DOWNSTREAM FROM SEPTIC TANKIS TO BE INVESTIGATED. IF AN EXISTING LEACH PIT IS FOUND, IT TOO MUST BE PUMPED, CRUSHED, FILLED WITH SAND AND BURIED IN PLACE. NEW LEACH TRENCHES ARE TO BE PLACED TO AVOID THE LOCATION OF THE DISCONTINUED LEACH FACILITY.

THE OFFSET DISTANCES ARE VERY CRITICAL TO SUCCESSFUL INSTALLATION OF THIS DESIGN. MAINTAIN ALL TITLE 5 MINIMUM OFFSETS. PAY PARTICULAR ATTENTION TO:

- MINIMUM 10 FEET CELLAR WALL TO SEPTIC TANK.
- MINIMUM 20 FEET CELLAR WALL TO LEACH TRENCHES.
- MINIMUM 10 FEET PRIVATE WATER SUPPLY LINE TO LEACH TRENCHES.
- MINIMUM 50 FEET WET AREA (AT LOW AREA BEHIND HOUSE) TO LEACH TRENCHES.

(PRIVATE WATER SUPPLY LINE WAS MARKED APPROXIMATELY MARCH 5, 1999.)

ALL TOP & SUBSOIL IS TO BE REMOVED FROM THE AREA OF THE NEW LEACH TRENCHES + 5 FEET ON ALL SIDES. MACHINE-COMPACT SAND MEETING 15.255 REQUIREMNENTS TO ESTABLISH CONSISTENT BASE ELEVATIONS AS SHOWN ON SHEET 1 OF 2 FOR TWO TRENCHES WITH SAME BASE ELEVATION.

FINISH CONTOURS ARE TO APPROXIMATE EXISTING.

THE OFFSET OF THE PROPOSED LEACH TRENCHES ABOVE GROUNDWATER IS 6.2 FEET, EXCEEDING THE 5 FOOT MINIMUM REQUIRED BY TITLE 5. THIS IS A REPAIR, SO THE 1.25 AMHERST SIZING FACTOR IS NOT INCLUDED. THE SYSTEM IS SIZED FOR 3-BEDROOM CAPACITY.

THIS DESIGN DOES NOT INCLUDE CAPACITY FOR A GARBAGE GRINDER. FUTURE INSTALLATION OF A GARBAGE GRINDER IS NOT ALLOWED.

PER AMHERST REGULATION, IN-PROCESS INSPECTIONS FOR BOTTOM-OF-TRENCH ELEVATIONS AND FINAL AS-BUILT INSPECTIONS ARE REQUIRED. FOR INSPECTIONS CONTACT:

DESIGNER: (413) 256-0647
HEALTH AGENT: (413) 256-4030

COMMONWEALTH OF MASSACHUSETTS
RICHARD M SCOTT
CIVIL
No 31199
REGISTERED PROFESSIONAL ENGINEER
3-17-99

SEPTIC SYSTEM DESIGN
AT 165 MECHANIC STREET AMHERST

SCALE: 1" = 30'	APPROVED BY:	DRAWN BY RMS
DATE: 3-10-99		REVISED 4-19-99 TO ADD AS-BUILT DATA

FOR ELIZABETH PERRY
BY RICHARD SCOTT, P.E.

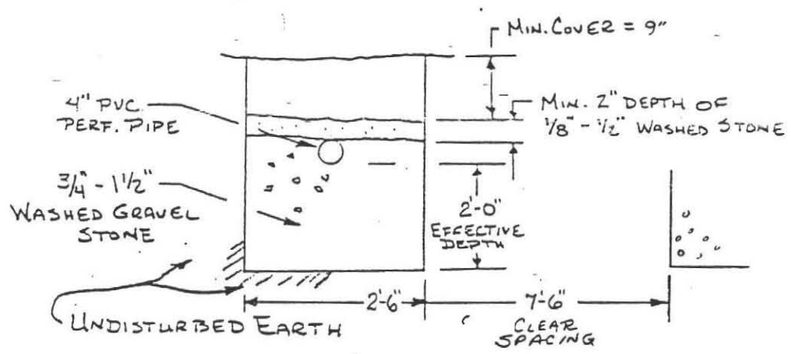
DRAWING NUMBER

System Design Calculations

2 Bedroom x 110 gal. per BR per day = .220 gal. per day Design Flow. Design for 330 GPD
Minimum Effective Septic Tank Volume = 2.0 x 330 = 660 GAL
Specified Tank Volume for this Installation = 1500 GAL.
Percolation Rate = <2 minutes per inch →
Design Loading = 0.74 GPD per sq. ft. of effective sidewall & 0.74 GPD per sq. ft of bottom area.

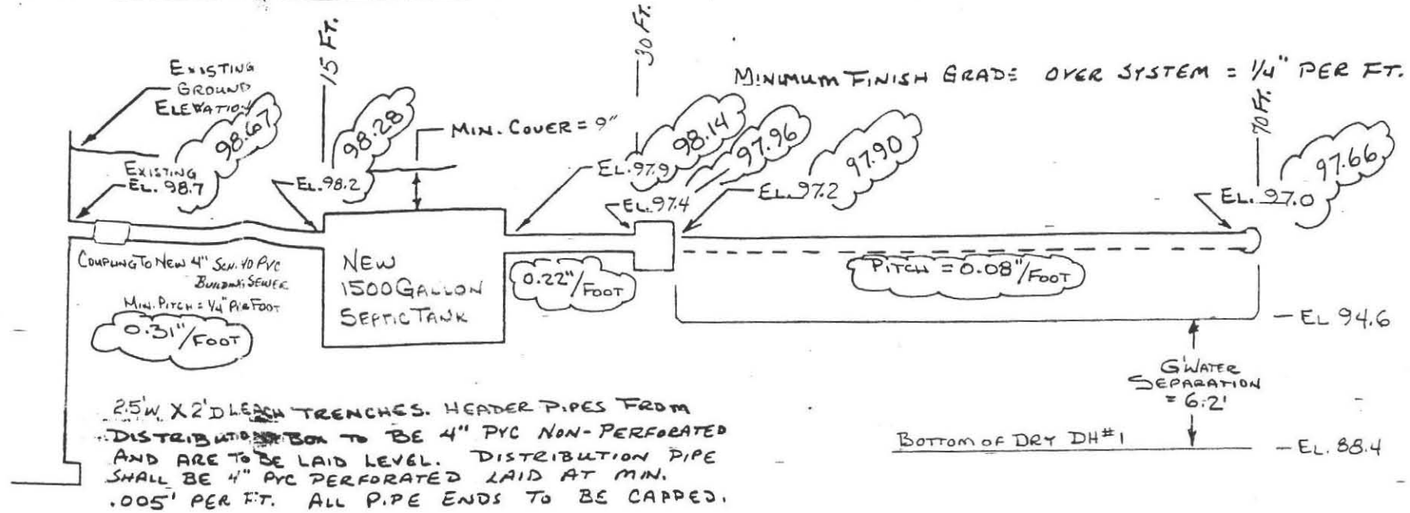
Specified leach trenches are 2.5 ft. wide x 2.0 ft. effective depth. Allowable loading per ft. of trench = 1.0 x 2.5 x 0.74 + 2 x 1.0 x 2.0 x 0.74 = 4.81 GPD/FT.
Required Trench Length = 330 ÷ 4.81 = 69 feet
(Without Consideration of Trench Ends)

Specified Trenches = 2 @ 35 Ft. Long
Allowable Volume = 70 x 4.81 = 337 GPD
(Without Consideration of Trench Ends)



Leach Trench Section
(Not To Scale)

Elevations in "Clouds" are per 4-19-99 Inspection RMS 4-19-99



System Profile ~ Section Parallel To Flow
(Not To Scale)

CONSTRUCTION NOTES

SEPTIC TAK AND DISTRIBUTION BOX ARE TO BE SET ON A SIX-INCH LEVEL BASE OF 1-1/4" STONE.

GAS BAFFLE IS TO BE INSTALLED ON SEPTIC TANK OUTLET.

LEACH TRENCH STONE IS TO BE DOUBLE-WASHED TO MEET DEP AND TOWN OF AMHERSTGUIDELINES.

OUTLET PIPES FROM D-BOX TO BE LEVEL OUT TWO FEET THEN 1/16" PER FOOT PITCH.

COMMONWEALTH OF MASSACHUSETTS
RICHARD M SCOTT
CIVIL
No 31199
REGISTERED PROFESSIONAL ENGINEER
Richard Scott 3-17-99

Septic System Design
At 165 Mechanic Street Amherst

Scale: As Shown	Approved By:	Drawn By RMS
Date: 3-9-99		Revised 4-19-99 To Add As-Built Data

For Elizabeth Perry
By Richard Scott, P.E.

Drawing Number

Richard Scott, P.E.
31 Shutesbury Road
Pelham, MA 01002
(413) 256-0647

May 3, 1999

Dave Zarozinski, Health Agent
Inspection Services
4 Boltwood Avenue
Amherst, MA 01002-2351

Subject: Septic System Repair at 165 Mechanic Street (Property of Elizabeth Perry)
Documentation of As-Built Inspection

Dear Dave:

On April 19, 1999 I completed the in-process inspection for this septic system repair installation at the subject property. Per Amherst regulations, this first inspection was to check the removal of unsuitable soils from beneath the soil absorption system and check those "subgrade" elevations.

I confirmed that the unsuitable soils were removed and the subgrade elevations were consistent with what we learned at the soil testing last November. I authorized the installer, Karl's Excavating to continue with the construction of the leach trenches. No additional sand fill was required to meet the required elevations. I discussed with the installer the desire to keep the system as high as possible while still maintaining the minimum pipe pitches for gravity flow.

On April 22, 1999 I completed the final as-built inspection with you. The as-built dimensions triangulated from the house and the as-built elevations are documented on the enclosed plan copies. These are in accordance with the approved plan and permit. All dimensional offsets and pipe pitches are per Title 5 requirements. The installer was able to gain a few inches in elevation and still maintain the pipe pitches. This has helped keep the leach trenches from being too deep in the ground.

The installation work has been well done. I recommend that the Certificate of Compliance be issued to allow use of the repaired system.

Thanks, Dave for your help in getting this project completed. Please call me if there is anything else I need to do.

Sincerely,

Richard Scott

Richard Scott, P.E.

cc: Ms. Elizabeth Perry, Owner
Steve Konieczny, Karl's Excavating

5/5/99

Richard Scott, P.E.
31 Shutesbury Road
Pelham, MA 01002
(413) 256-0647

Dave Zarozinski
Health Department
Town Hall - Main Street
Amherst, MA 01002

March 13, 1999

Subject: Title 5 Septic System Repair Design for 165 Mechanic Street
(Property of Elizabeth Perry)

Dear Dave:

Enclosed are two copies of the application materials for the septic system repair, which is proposed for the subject property. If you have any questions on the design, you can reach me briefly by phone at (978) 544-2511. When you have completed your review, you can call me or you can call ~~Mrs.~~ Ms. Perry directly so she can stop by at the Health Department office to sign the permit application and pay the fee if she has not already done that. ~~Mrs~~ Ms. Perry's phone is 253-3310.

As you'll note on the plan, the private water line is as close to the proposed trench location as allowed by Title 5. This is to maximize the separation to the wet area at Baby Carriage Brook. Although the separation to the wet area at the brook is only the minimum 50 feet, the wet area is clearly bounded by the steep slope. If you think this needs Conservation Department review, let me know.

Thanks, Dave for your prompt review. I know ~~Mrs.~~ Ms. Perry is anxious to complete this repair and will proceed with installation by Karl's Excavating as soon as she has the permit and the weather will allow.

Sincerely,

Richard Scott

Richard Scott, P.E.

cc: Elizabeth Perry
Steve Konieczny

3-18-99

FORM 1A - APPLICATION FOR DSCP

No. 99-4

Fee 160 00

CU # 2086 Pd 3-29-99

COMMONWEALTH OF MASSACHUSETTS

Board of Health, TOWN OF AMHERST, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

Application for a Permit to: Construct ( ) Repair (✓) Upgrade ( ) Abandon ( )

☑ Complete System ☐ Individual Components

Location 165 MECHANIC STREET	Owner's Name ELIZABETH PERRY
Map/Parcel#	Address 165 MECHANIC STREET, AMHERST
Lot#	Telephone# 413-253-3310
Installer's Name KARL'S EXCAVATING	Designer's Name RICHARD SCOTT, P.E.
Address 327 RIVER DRIVE HADLEY, MA 01035	Address 31 SHUTESBURY RD. PELHAM, MA 01002
Telephone# 413 549-5396	Telephone# 413-256-0647

Type of Building: RESIDENTIAL
Dwelling - No. of Bedrooms 2
Other - Type of Building _____
No. of persons _____ Showers ( ), Cafeteria ( )
Other Fixtures _____

Lot Size _____ sq.ft. AREA AVAILABLE FOR S.A.S. = APPROX. 15' x 50'
Garbage grinder WD

Design Flow (min. required) 220 gpd Calculated design flow 330 gpd
Design flow provided 351 gpd

Plan: Date 3-9-99 Number of sheets 2 Revision Date _____
Title SEPTIC SYSTEM DESIGN AT 165 MECHANIC STREET

Description of Soil(s) SAND - MERRIMAC
Soil Evaluator Form No. 11 Name of Soil Evaluator RICHARD SCOTT
Date of Soil Evaluation 11-17-98

DESCRIPTION OF REPAIRS OR
ALTERATIONS INSTALL NEW BUILDING SEWER, SEPTIC TANK AND SOIL ABSORPTION SYSTEM.

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

Signed Elizabeth J. Perry Date 3/24/99

Inspections _____

DEP APPROVED FORM 5/96

FORM 2A - DSCP

No. 99-4 Fee 160.00

COMMONWEALTH OF MASSACHUSETTS

Board of Health, TOWN OF AMHERST, MA.

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to: Construct( ) Repair( ) Upgrade( ) Abandon( ) an individual sewage disposal system at 165 MECHANIC STREET

as described in the application for Disposal System Construction Permit No. 99-4, dated 3/24/99.

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

Date 3-24-99 Board of Health Carol Jaczynski

DEP APPROVED FORM 5/96

FORM 3A - CERTIFICATE OF COMPLIANCE

No. 99-4 Fee 60

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Town of 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: Hoyt's

at: 165 Mechanic Street

has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to application No. _____

dated 4-22-99. Approved Design Flow _____ (gpd)

Installer Hoyt's — David Ryan

Designer: Richard Scott Richard Scott 4-22-99 Inspector Dan Bayard

Date 4-22-99

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

DEP APPROVED FORM 5/96

RICHARD SCOTT, P.E.
REGISTERED CIVIL ENGINEER

SITE ENGINEERING
PERC TESTS SEPTIC SYSTEM DESIGN

31 SHUTESBURY ROAD
PELHAM, MA 01002
(413) 256-0647

FORM 11 - SOIL EVALUATOR FORM

No. 99-4

Date 11-17-98

TOWN OF AMHERST, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: RICHARD SCOTT, P.E.

Witnessed By: DAVID ZAROBINSKI, HEALTH AGENT

Location Address or Lot # 165 MECHANIC STREET MAP PARCEL#	Owner's Name, Address, and Telephone # ELIZABETH PERRY 165 MECHANIC ST. AMHERST, MA 01002 413-253-3310

New Construction ☐ Repair ☑

Office Review

Published Soil Survey Available: No ☐ Yes ☑

Year Published 1981 Publication Scale 1:15,840 Soil Map Unit CENTRAL HAMPSHIRE SHEET #20 - SOIL MeB - MERRIMAC

Drainage Class F 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) ____

Current Water Resource Conditions (USGS): Month ____

Range : Above Normal ☐ Normal ☐ Below Normal ☐

Other References Reviewed: USGS MAP, OTHER MECHANIC STREET SOIL TESTS

RICHARD SCOTT, P.E.
REGISTERED CIVIL ENGINEER

SITE ENGINEERING
PERC TESTS SEPTIC SYSTEM DESIGN

31 SHUTESBURY ROAD
PELHAM, MA 01002 (413) 256-0647

SOIL EVALUATOR FORM

On-site Review

Deep Hole Number 1 & 2 Date: 11-17-98 Time: 8:30 A.M. Weather 40° OVERCAST
Location (identify on site plan)
Land Use RESIDENTIAL Slope (%) 0-8% Surface Stones FEW
Vegetation HARD & SOFTWOOD TREES, LAWN
Landform GLACIAL OUTWASH TERRACE
Position on landscape (sketch on the back)
Distances from:

BABY CARRIAGE BROOK	Open Water Body	80	feet	Drainage way	feet
	Possible Wet Area	60	feet	Property Line	40 feet
	Drinking Water Well		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)
Deep Hole #1 (Ground Surface El. = 98.4; G'Water El. = 88.4)					
0-8	A	SANDY LOAM	10YR 4/2	NONE	
8-30	B/C	COARSE SAND	7.5YR 6/6	NONE	w/ 40% GRAVEL & COBBLES
30-120	C	FINE SAND	10YR 7/2	NONE	w/ NO COARSE FRAGMENTS
Deep Hole #2 (Ground Surface El. = 100.8; G'Water El. = 90.8)					
0-9	A	SANDY LOAM	10YR 4/2	NONE	
9-24	B	LOAMY SAND	7.5YR 6/4	NONE	
24-48	C_1	COARSE SAND	7.5YR 6/6	NONE	w/ 50% GRAVEL & COBBLES
48-120	C_2	FINE SAND	10YR 7/2		0% COARSE FRAGMENTS

Parent Material (geologic) GLACIAL OUTWASH TILL Depth to Bedrock: >120"

Depth to Groundwater: Standing Water in the Hole: >120" Weeping from Pit Face: >120"

Estimated Seasonal High Ground Water: 120"

RICHARD SCOTT, P.E.
REGISTERED CIVIL ENGINEER

SITE ENGINEERING
PERC TESTS SEPTIC SYSTEM DESIGN

31 SHUTESBURY ROAD
PELHAM, MA 01002

(413) 256-0647

Determination for Seasonal High Water Table

Location 165 MECHANIC STREET

Method Used: Town AMHERST

- ☐ Depth observed standing in observation hole ..... inches
- ☐ Depth weeping from side of observation hole ..... inches
- ☑ Depth to soil mottles 120 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 JUNE 16, 1995 (date) I have passed the 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 Richard Scott Date 11-17-98

RICHARD SCOTT, P.E.
REGISTERED CIVIL ENGINEER

SITE ENGINEERING
PERC TESTS SEPTIC SYSTEM DESIGN

31 SHUTESBURY ROAD
PELHAM, MA. 01002 (413) 256-0847

FORM 12 - PERCOLATION TEST

COMMONWEALTH OF MASSACHUSETTS

TOWN OF AMHERST, Massachusetts

Percolation Test

Date: 11-17-98 Time: 8:30 A.M.

Observation Hole #	P_1			
Depth of Perc Bottom	57"			
Start Pre-soak	8:41			
End Pre-soak	8:56			
Time at 12"	8:56			
Time at 9"	9:00			
Time at 6"	9:06			
Time (9"-6")	6			
Rate Min./Inch	0.7 MIN./IN.			

Site Passed ☑ Site Failed ☐

Performed By: RICHARD SCOTT, P.E.

Witnessed By: DAVID ZAROZINSKI, HEALTH AGENT

Comments: REQUIRES 5' SEPARATION ABOVE GROUNDWATER

RECEIVED MAR 2 9 1999

Elizabeth J. Perry
165 Mechanic St
Amherst, MA 01002

2086
53-8027/2118

3/29 1999

PAY TO THE ORDER OF Town of Amherst $ 160.00

One Hundred Sixty 00/100 DOLLARS

Security features included Details on back

UMASS/FIVE COLLEGE FEDERAL CREDIT UNION
New Market Center
6 University Drive
Amherst, Mass. 01002

FOR Park Test + Plans MEMBER Elizabeth J Perry MP

⑆211880271⑆ 020287198⑈ 2086

HARLAND

11-17-98
Not Dec

No. _____ Date: 11-17-98

Commonwealth of Massachusetts
, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: Rick Scott Date: 11-17-98
Witnessed By: David Thomas

Location Address or Lot #	Owner's Name, Address, and Telephone #
New Construction ☐ Repair ☑	Elizabeth Perry 165 Mechanic 253-3310

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: _____

FORM 12 - PERCOLATION TEST

Location Address or Lot No. 165 Mechanic St.

COMMONWEALTH OF MASSACHUSETTS

, Massachusetts

Percolation Test*		
Date: 11-17-98	Time: 8:41	
Observation Hole #		
Depth of Perc	57"	
Start Pre-soak	8:41	
End Pre-soak	8:56	
Time at 12"	8:56	
Time at 9"	9:00	
Time at 6"	9:06	
Time (9"-6")	6 min	
Rate Min./Inch	(2)	

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

Site Passed ☑ Site Failed ☐

Performed By: Rick Scott

Witnessed By: David Zaragoza

Comments:

DEP

DEP APPROVED FORM - 12/07/95

Location Address or Lot No. 165 Mechanic St.

On-site Review

Deep Hole Number ... Date: 11-17-98 Time: Weather

Location (identify on site plan)

Land Use ... Slope (%) Surface Stones

Vegetation

Landform

Position on landscape (sketch on the back)

Distances from:

Open Water Body	feet	Drainage way	feet
Possible Wet Area	feet	Property Line	feet
Drinking Water Well	feet	Other	

#1

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
8	A	Sandy Loam	10yr 4/2	None	
30	B/C	Coarse Sand	7.5yr 6/6		40% Gravel Cobbles
120	C	F. vc Sand	10yr 7/2		w/ no O%

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Depth to Bedrock:

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

Estimated Seasonal High Ground Water:

Location Address or Lot No. _____

On-site Review

Deep Hole Number ... Date: ... Time: ... Weather

Location (identify on site plan) ...

Land Use ... Slope (%) ... Surface Stones ...

Vegetation ...

Landform ...

Position on landscape (sketch on the back)

Distances from:

Open Water Body	feet	Drainage way	feet
Possible Wet Area	feet	Property Line	feet
Drinking Water Well	feet	Other	#1

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
9	A	Sandy Loam	10yr 4/2	Many	
24	B	Loamy Sand	7 yr 6/4		
	C_1	Coarse Sand			
	C_2	Fine Sand	7.5yr 6/6		5% Boulders + Stones
120"			10 yr 7/2		0% Coarse Sand

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) _____ Depth to Bedrock: _____

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

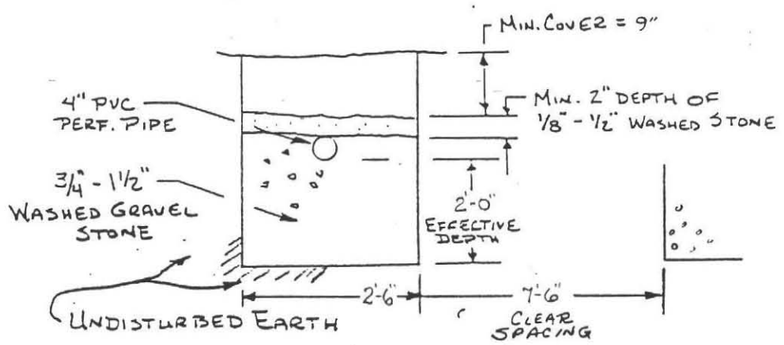
Estimated Seasonal High Ground Water: _____

System Design Calculations

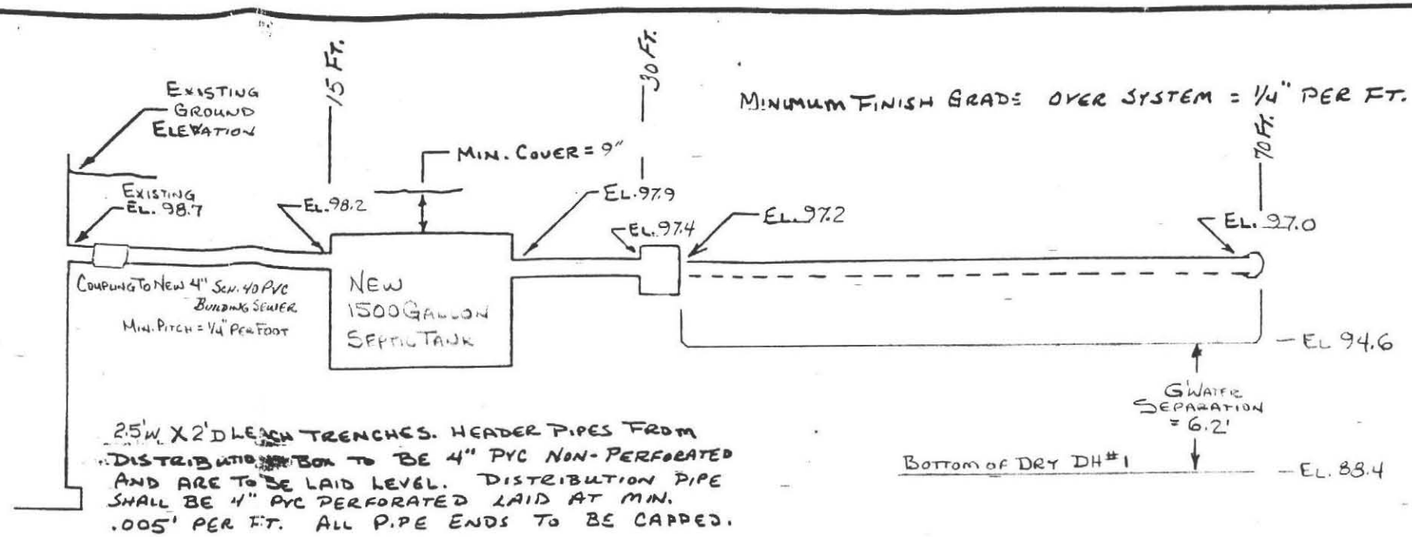
2 Bedroom x 110 gal. per BR per day =
220 gal. per day design flow. Design for 330 GPD
Minimum effective septic tank volume = 2.0 x 330 = 660 gal
Specified tank volume for this installation = 1500 gal.
Percolation rate = <2 minutes per inch →
Design loading = 0.74 GPD per sq. ft. of effective sidewall & 0.74 GPD per sq. ft of bottom area.

Specified leach trenches are 2.5 ft. wide x 2.0 ft. effective depth. Allowable loading per ft. of trench = 1.0 x 2.5 x 0.74 + 2 x 1.0 x 2.0 x 0.74 = 4.81 GPD/ft.
Required trench length = 330 ÷ 4.81 = 69 feet
(Without consideration of trench ends)

Specified trenches = 2 @ 35 Ft. Long
Allowable volume = 70 x 4.81 = 337 GPD
(Without consideration of trench ends)



Leach Trench Section
(Not To Scale)



System Profile ~ Section Parallel to Flow
(Not to Scale)

CONSTRUCTION NOTES

SEPTIC TAK AND DISTRIBUTION BOX ARE TO BE SET ON A SIX-INCH LEVEL BASE OF 1-1/4" STONE.

GAS BAFFLE IS TO BE INSTALLED ON SEPTIC TANK OUTLET.

LEACH TRENCH STONE IS TO BE DOUBLE-WASHED TO MEET DEP AND TOWN OF AMHERSTGUIDELINES.

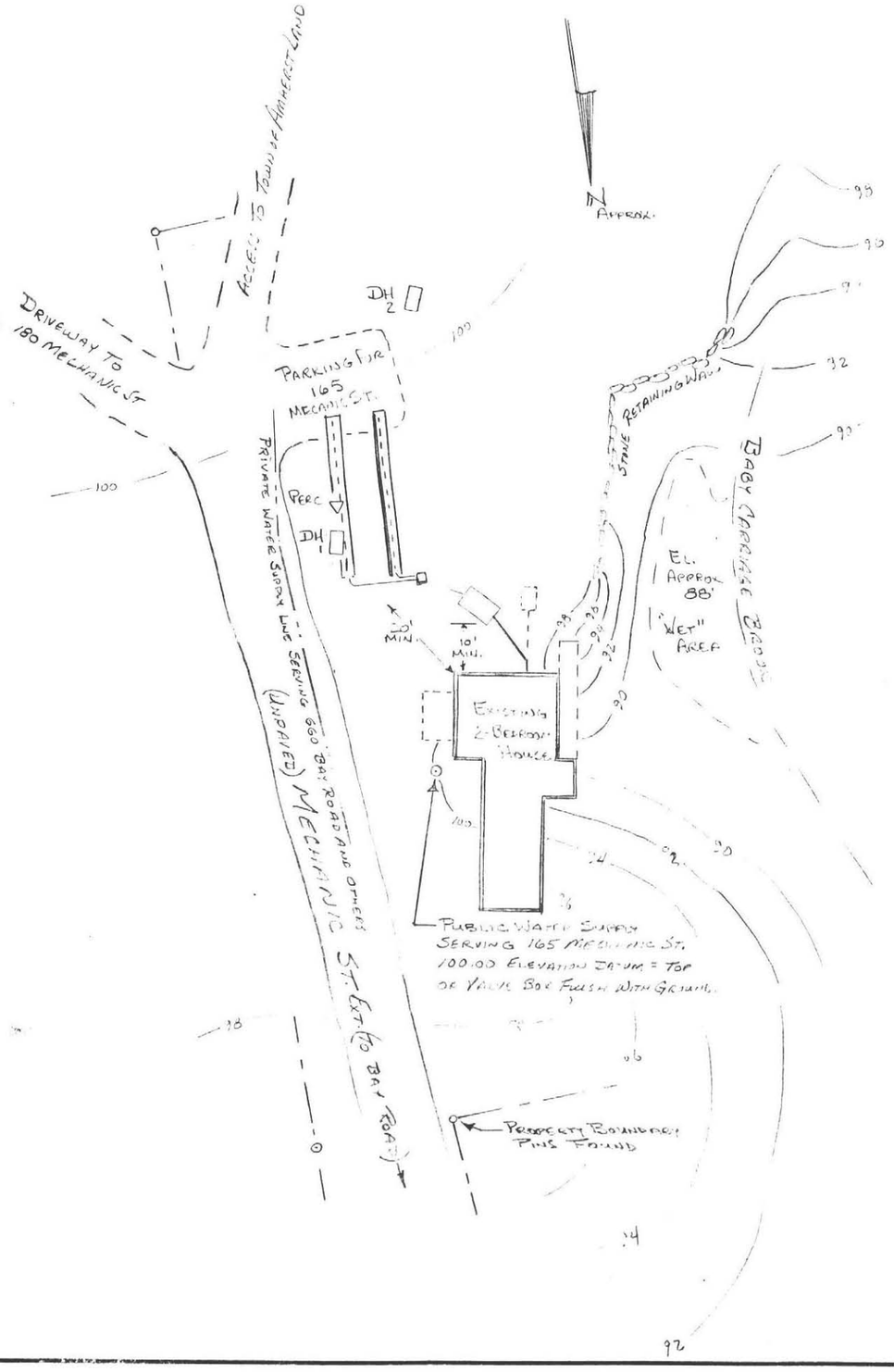
OUTLET PIPES FROM D-BOX TO BE LEVEL OUT TWO FEET THEN 1/16" PER FOOT PITCH.

COMMONWEALTH OF MASSACHUSETTS
RICHARD M SCOTT
CIVIL
No 31199
REGISTERED PROFESSIONAL ENGINEER
Richard Scott 3-17-99

Sheet 1 of 2

Septic System Design At 165 Mechanic Street Amherst		
SCALE: As Shown	APPROVED BY:	DRAWN BY RMS
DATE: 3-9-99		REVISED
For Elizabeth Perry By Richard Scott, P.E.		
		DRAWING NUMBER

11 X 17 PRINTED ON NO. 1000H CLEARPRINT ●



CONSTRUCTION NOTES

THIS DESIGN HAS BEEN COMPLETED AND CONSTRUCTION IS TO BE CARRIED OUT IN ACCORDANCE WITH 310CMR-15.00 (TITLE 5) 12-27-96 REVISION.

EXISTING SEPTIC TANK IS TO BE IS TO BE PUMPED, CRUSHED, FILLED WITH SAND AND BURIED IN PLACE. EXISTING SYSTEM DOWNSTREAM FROM SEPTIC TANKIS TO BE INVESTIGATED. IF AN EXISTING LEACH PIT IS FOUND, IT TOO MUST BE PUMPED, CRUSHED, FILLED WITH SAND AND BURIED IN PLACE. NEW LEACH TRENCHES ARE TO BE PLACED TO AVOID THE LOCATION OF THE DISCONTINUED LEACH FACILITY.

THE OFFSET DISTANCES ARE VERY CRITICAL TO SUCCESSFUL INSTALLATION OF THIS DESIGN. MAINTAIN ALL TITLE 5 MINIMUM OFFSETS. PAY PARTICULAR ATTENTION TO:

- MINIMUM 10 FEET CELLAR WALL TO SEPTIC TANK.
- MINIMUM 20 FEET CELLAR WALL TO LEACH TRENCHES.
- MINIMUM 10 FEET PRIVATE WATER SUPPLY LINE TO LEACH TRENCHES.
- MINIMUM 50 FEET WET AREA (AT LOW AREA BEHIND HOUSE) TO LEACH TRENCHES.

(PRIVATE WATER SUPPLY LINE WAS MARKED APPROXIMATELY MARCH 5, 1999.)

ALL TOP & SUBSOIL IS TO BE REMOVED FROM THE AREA OF THE NEW LEACH TRENCHES + 5 FEET ON ALL SIDES. MACHINE-COMPACT SAND MEETING 15.255 REQUIREMNENTS TO ESTABLISH CONSISTENT BASE ELEVATIONS AS SHOWN ON SHEET 1 OF 2 FOR TWO TRENCHES WITH SAME BASE ELEVATION.

FINISH CONTOURS ARE TO APPROXIMATE EXISTING.

THE OFFSET OF THE PROPOSED LEACH TRENCHES ABOVE GROUNDWATER IS 6.2 FEET, EXCEEDING THE 5 FOOT MINIMUM REQUIRED BY TITLE 5. THIS IS A REPAIR, SO THE 1.25 AMHERST SIZING FACTOR IS NOT INCLUDED. THE SYSTEM IS SIZED FOR 3-BEDROOM CAPACITY.

THIS DESIGN DOES NOT INCLUDE CAPACITY FOR A GARBAGE GRINDER. FUTURE INSTALLATION OF A GARBAGE GRINDER IS NOT ALLOWED.

PER AMHERST REGULATION, IN-PROCESS INSPECTIONS FOR BOTTOM-OF-TRENCH ELEVATIONS AND FINAL AS-BUILT INSPECTIONS ARE REQUIRED. FOR INSPECTIONS CONTACT:

DESIGNER: (413) 256-0647
HEALTH AGENT: (413) 256-4030

COMMONWEALTH OF MASSACHUSETTS
RICHARD M SCOTT
CIVIL
No 31199
REGISTERED PROFESSIONAL ENGINEER
3-17-99

SHEET 2 OF 2

SEPTIC SYSTEM DESIGN
AT 165 MECHANIC STREET - AMHERST

SCALE: 1"=30'	APPROVED BY:	DRAWN BY RMS
DATE: 3-10-99		REVISED

FOR ELIZABETH PERRY
BY RICHARD SCOTT, P.E.

DRAWING NUMBER