6/6/2013 - Tank flooded (above top of inlet).
6/4/2013 - returned w/ backhoe to check outlet and load tank

11 INDIAN PIPE

42 HARRIS

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

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

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

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

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

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

DSCP Number	DSCP Date
13-15	7/9/2013

Facility Owner: DONALD DAVID

Street Address or Lot #: 11 INDIAN PIPE LANE

City/Town	State	Zip Code
AMHERST	MA	01002

Designer Information:

Name	Name of Company
ALAN WEISS, RS	COLD SPRING ENVIRONMENTAL
Signature	Date

Installer Information:

Name	Name of Company
ADAIR EXCAVATION	
Signature	Date
	8/27/2013

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

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

Approving Authority	
AMHERST HEALTH DEPT.	
Signature	Date
	8.30.2013

11057

SCHNEIDER PLUMBING & HEATING, INC.

DATE 19

JOB NAME: Donald Duval

JOB NUMBER:

ADDRESS: 11 Indian Pipe Lane Oxford

PHONE:

DESCRIPTION OF WORK: Removal Disposal and Replace Section of Sink waste

☑ DAY WORK
☐ CONTACT
☐ EXTRA

QTY.	MATERIAL	PRICE	AMOUNT

QTY.	MATERIAL	PRICE	AMOUNT
	Disposal is Removed		

TIME AND LABOR RECORD

WORKER	DATE	IN	OUT	IN	OUT	HOURS	RATE	AMOUNT
CS	8/31/13							

SIGNATURE

TOTAL

MISCELLANEOUS JOB EXPENSES

DESCRIPTION	AMOUNT

TOTAL

TOTAL MATERIAL	
TOTAL LABOR	
MISC. EXPENSES	
TOTAL	

LS-326 LEEDSTAMPS

FAX

Number of pages including cover sheet:
2

TO ROB ADAIR

Phone

Fax Phone 253-1519

Date 8.27.2013

FROM *Edmund Smith*
Amherst Health Department
Bangs Community Center
70 Boltwood Walk
Amherst, MA 01002

Phone *(413) 259-3153*

Fax Phone *(413) 259-2404*

E-Mail *smithe@amherstma.gov*

REMARKS: ☐ *Urgent* ☐ *For your review* ☒ *Reply ASAP* ☐ *Please Comment*

Please sign under Installer Information, and fax (or scan & email) it back to me
Thanks!

Edmund Smith
Health Inspector
Amherst Health Department

faxed 8/27/13 at noon

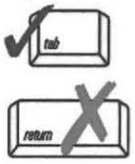
Commonwealth of Massachusetts
City/Town of

Certificate of Compliance

Form 3

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

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



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

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

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

13-15
DSCP Number

7/9/2013
DSCP Date

DONALD DAVID
Facility Owner

11 INDIAN PIPE LANE
Street Address or Lot #

AMHERST
City/Town

MA
State

01002
Zip Code

Designer Information:

ALAN WEISS, RS
Name

COLD SPRING ENVIRONMENTAL
Name of Company

Signature

Date

Installer Information:

ADAIR EXCAVATION
Name

Name of Company

Signature

Date

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

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

Approving Authority

Signature

Date

djdavid@comcast.net

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

11 INDIAN PIPE LANE
Property Address

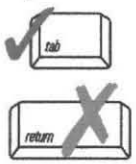
DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 2013
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:

NICK TORRETTI
Name of Inspector

CLEAN SEPTICS
Company Name

P O BOX 394 252 WEST ST
Company Address

LUDLOW	MASS	01056
City/Town	State	Zip Code

413 583 2138	S I 4496
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

Nick Torretti
Inspector's Signature

JUNE 8, 2013
Date

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

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 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:

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):

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 2013
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

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 2013
City/Town	State	Zip Code	Date of Inspection

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
☐	☒	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

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 2013
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.]**
☐	☒	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.

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

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 2013
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:
☒	☐	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): 4 Number of bedrooms (actual): 4

DESIGN flow based on 310 CMR 15.203 (for example: 110 gpd x # of bedrooms): 440 GPD

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 2013
City/Town	State	Zip Code	Date of Inspection

D. System Information

Description:

Number of current residents: 2

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)): WELL AT 100' +

Detail:
RECOMMEND REMOVING THE GARBAGE DISPOSAL

Sump pump? ☐ Yes ☒ No

Last date of occupancy: PRESENT
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

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 2013
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: PUMPED OCTOBER 1, 2012 BY CLEAN SEPTICS

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

If yes, volume pumped: 1500 gallons

How was quantity pumped determined? MEASURED

Reason for pumping: MAINTENANCE /PREP FOR INSPECTION

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):

  LEACH PIT

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 2013
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:

APPROXIMATELY TWENTY NINE YEARS OLD, 1984

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

Building Sewer (locate on site plan):

Depth below grade: _____ feet

Material of construction:

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

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

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

JOINTS AND VENTING OK, NO LEAKAGE

Septic Tank (locate on site plan):

Depth below grade: APPROX. 4' feet

Material of construction:

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

CLEAN SEPTICS PUMPED THE SEPTIC TANK JUNE 8, 2013. RECOMMEND REPLACING THE SEPTIC TANK.

8.27.2013 - NOTE: CLEAN SEPTICS AGREED TO STRIKE SEPTIC TANK REPLACEMENT RECOMENDATION - TANK PASSES. Edward R Smith AMHERST BOH

If tank is metal, list age: _____ years

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

Dimensions: L 10' 6" X W 5' X H 5'

Sludge depth: 6"

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 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: 3"

Distance from top of scum to top of outlet tee or baffle: TANK WAS BACKING UP TO THE TOP OF THE SEPTIC TANK

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

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.):

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

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 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):

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

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 2013
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: NO D BOX

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.):
NONE FOUND

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:

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 2013
City/Town	State	Zip Code	Date of Inspection

D. System Information (cont.)

Type:

☒	leaching pits	number:	ONE LEACH PIT
☐	leaching chambers	number:	
☐	leaching galleries	number:	
☐	leaching trenches	number, length:	
☐	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.):
YES SIGNS OF HYDRAULIC FAILURE, SEPTIC TANK AND LEACH PIT FLOODED WITH EFFLUENT

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

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 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.):
S. A. S. IS IN HYDRAULIC FAILURE

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.):

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 2013
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

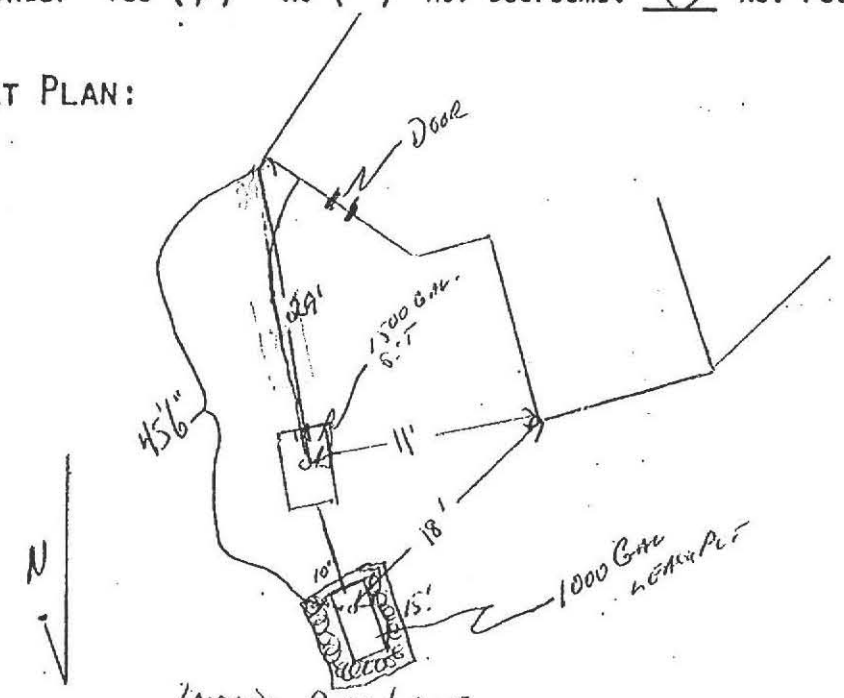
Date Installation Inspected and Approved Sep. 1984

Description of System: Tank Capacity: 1500 Septic Tank 150 @ Bottom

Leach Field ( ) Bed ( ) Seepage Pit (X) Square Feet: 250 @ Sides

Garbage Grinder Yes (X) No ( ) No. Bedrooms: 3 No. People 6

AS - BUILT PLAN:



PROPER MAINTENANCE OF YOUR PRIVATE SEWAGE DISPOSAL SYSTEM

1. This system must be inspected periodically and the tank pumped out at an interval not to exceed 3 years.
2. For your protection sanitary pumpers are licensed by the Amherst Board of Health.
3. Regular pumping is crucial to avoid early failure and costly repairs of the system.
4. DO NOT dispose into the system such items as rags, string, sanitary napkins, coffee grounds as they can cause it to clog and fail.
5. Further information can be obtained by contacting your Health Department at 253-7077.

Commonwealth of Massachusetts

Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 2013
City/Town	State	Zip Code	Date of Inspection

D. System Information (cont.)

Site Exam:

☒ Check Slope

☐ Surface water

☒ Check cellar

☐ Shallow wells

Estimated depth to high ground water: _____ feet

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

☒ Obtained from system design plans on record

If checked, date of design plan reviewed: _____ Date

☒ Observed site (abutting property/observation hole within 150 feet of SAS)

☒ Checked with local Board of Health - explain:

BOARD OF HEALTH AGENT ED SMITH WITNESSED INSPECTION AND RE -TURN VISIT TO THE PROPERTY.

☐ Checked with local excavators, installers - (attach documentation)

☐ Accessed USGS database - explain:

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

TO BE DETERMINED AT TIME OF PERCOLATION TEST.

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

11 INDIAN PIPE LANE
Property Address

DAVID
Owner's Name

Owner information is required for every page.

AMHERST	MASS	01002	JUNE 8, 2013
City/Town	State	Zip Code	Date of Inspection

E. Report Completeness Checklist

☒ Inspection Summary: A, B, C, D, or E checked

☒ Inspection Summary D (System Failure Criteria Applicable to All Systems) completed

☒ System Information – Estimated depth to high groundwater

☒ Sketch of Sewage Disposal System either drawn on page 15 or attached in separate file

July 2013
INVOICE

AMHERST PUBLIC HEALTH DEPARTMENT

Bangs Community Center
70 Boltwood Walk
Amherst, MA 01002

DATE: July 9, 2013

TO Donald & Honore David
11 Indian Pipe Drive
Amherst, MA, 01002

RE: Invoice for **Soil Evaluation & Plan Review**
11 Indian Drive
Services provided by **Edmund Smith**
PAYMENT TERMS: I PAID

QUANTITY	DESCRIPTION	UNIT PRICE	LINE TOTAL
1.00	Soil Evaluation Board of Health Witness	$ 300.00	$ 300.00
1.00	Plan Review	$ 150.00	$ 150.00
	Paid - thank you, Ed Smith		
		SUBTOTAL	$ 450.00
		SALES TAX	
		TOTAL	$ 450.00

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

13-15
Number

$-- 450
Fee

B. Agreement

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

X Donald David — Signature
7/9/13 — Date

Application Approved By:

Edward Gaffney — Name
7/11/13 — Date

Application **Disapproved** for the following reasons:

Town copies

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

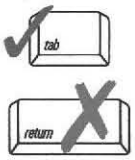
Number 13-15

$ 460
Fee

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

A. Facility Information

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



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

1. Location of Facility:

11 Indian Pipe, Lane
Address or Lot #

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

2. Owner Information

Donald David
Name

11 Indian Pipe Lane
Address (if different from above)

~~Hadley~~ Amherst | MA | ~~01035~~ 01002
City/Town | State | Zip Code

Telephone Number

3. Installer Information

Adair Excav. | Name of Company
Name

Address

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

531-7921
Telephone Number

4. Designer Information

Alan Weiss, RS | Cold Spring Environmental Consultants Inc.
Name | Name of Company

350 Old Enfield Road
Address

Belchertown | MA | 01007
City/Town | State | Zip Code

413-531-4015
Telephone Number

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

13-15
Number

$-- 450
Fee

A. Facility Information (continued)

5. Type of Building:

☒ Dwelling ☐ Garbage Grinder (check if present)

Other: Type of Building _____ - Number of Persons Served

☐ Showers _____ Number of showers ☐ Cafeteria ☐ Other fixtures

Specify other fixtures: _____

6. Design Flow: 4Bedroom= 440 GPD 462 GPD, provided)
Gallons per Day

Calculated Daily Flow: 462
Gallons

7. Plan: 07.05.2013
Date of Original

1
Number of Sheets

_____
Revision Date

Septic System Plan
Title of Plan

8. Description of Soil:

fs

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

New Leach area (reuse existing tank only if sound)

10. Date last inspected: 6.7.2013
Date

COLD SPRING ENVIRONMENTAL CONSULTANTS, INC.

ALAN E. WEISS, M.S., R.S., L.S.P.
Licensed Site Professional
Registered Sanitarian
Hydrogeologist
President

•Wetland Consults
•Soil and Water Testing
•21E Site Investigations
•Percolation Tests and
•Septic Designs
•Title 5 Inspections

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

Date: 6-25-13

Commonwealth of Massachusetts
Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss
Witnessed By: E. Smith.

Date: 6/25/13

Location Address or Lot #	Owner's Name, Address, and Telephone #
11 Indian Pipe Ln.	D. David, 11 Indian Pipe Ln. Amherst, MA 01002

New Construction ☐ Repair ☑

4 BR. Residence.

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) SAND.

Landform Kame Deta-

Flood Insurance Rate Map:

Above 500 year flood boundary No ☐ Yes ☑

Within 500 year flood boundary No ☑ Yes ☐

Within 100 year flood boundary No ☑ Yes ☐

Wetland Area:

National Wetland Inventory Map (map unit)

Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month

Range: Above Normal ☑ Normal ☑ Below Normal ☐

Other References Reviewed: _____

Location Address or Lot No. 11 Indian Pipe Ln.

On-site Review

Deep Hole Number 1+2 Date: 6/25/13 Time: 1pm Weather Sun 80s.
Location (identify on site plan) _____
Land Use Residential Slope (%) _____ Surface Stones _____
Vegetation Woodal.
Landform Deciduous
Position on landscape (sketch on the back) _____
Distances from:

Open Water Body	100'+ feet	Drainage way	50'+ feet
Possible Wet Area	100'+ feet	Property Line	25'+ feet
Drinking Water Well	100'+ feet	Other	

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
#1					
0-12"	Ap	FSL	10yr3/3		-Friable.
12"-35"	Bw	fs	10yr5/6		-fSandy Loose.
35-138"	C.		10yr4/4	NOT obs	-C. Sand + gravel. Loose, granular.
#2 @ perc					
0-12"	Ap	FS	↓	Not obs	↓ Same as #1
12"-35"	Bw	FS			
35"-120"	C.	CS			

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Outwash. Depth to Bedrock: 138"+
Depth to Groundwater: Standing Water in the Hole: Not Weeping from Pit Face: Not
Estimated Seasonal High Ground Water: 138"+

Location Address or Lot No. 11 Indian Pipe Ln.

Determination for Seasonal High Water Table

Method Used:

- ☐ Depth observed standing in observation hole ..... inches
- ☐ Depth weeping from side of observation hole ..... inches
- ☑ Depth to soil mottles 136" ± inches (Assumed)
- ☐ Ground water adjustment ..... feet

Index Well Number ..... Reading Date ..... Index well level

Adjustment factor ..... Adjusted ground water level .....

Depth of Naturally Occurring Pervious Material

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

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

Certification

I certify that on 6/95 (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature _____ Date 6/25/13

COMMONWEALTH OF MASSACHUSETTS
ALAN C. WEISS
REG. #933
REGISTERED SANITARIAN

Location Address or Lot No. 11 Indian Pipe Ln.

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*

Date: 6/25/13 Time: 1:00PM

Observation Hole #	P1	
Depth of Perc	50"	Repair
Start Pre-soak	1:20.	
End Pre-soak	1:35	
Time at 12"	1:35	
Time at 9"	1:36	
Time at 6"	1:37	
Time (9"-6")	<2	
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: Alan Weiss RS

Witnessed By: Ed. Smith BoH.

Comments: 5+ ft offset to ESHGW

DEP

DEP APPROVED FORM - 12/07/95

PROJECT NO.: 13-15

CITY/TOWN: AMHERST

APPLICANT: DONALD DAVID

ADDRESS: 11 INDIAN PIPE

DESIGN FLOW: 440 (462 PROVIDED) gpd

REVIEWED BY: ED SMITH DATE:

APPROVED
9/11/2013
Edward R Smith

	N/A	OK	NO	
GENERAL				
Legal boundaries denoted [310 CMR 15.220(4)(a)]		✓		
Street, Lot, tax parcel number and lot number noted on plan [310 CMR 15.220(4)(u)]		✓		
Locus Provided [310 CMR 15.2204(t)]		✓		
Plan proper scale? (1"=40' for plot plans, 1"= 20' or fewer for components) [310 CMR 15.220(4)]		✓		
Easements shown [310 CMR 15.220(4)(b)]		✓		
System located totally on lot served [310 CMR 15.405(1)(a) for upgrades]- if not, a variance is required [310 CMR 15.412 (4)]		✓		
Location of impervious surfaces (driveways, parking areas etc.) [310 CMR 15.220(4)(d)]		✓		
Location all buildings existing and proposed 310 CMR 15.220 (4)(c)]		✓		
Location and dimensions of system components and reserve areas. [310 CMR 15.220(4)(e)]		✓		
System Calculations [310 CMR 15.220(4)(f)]		✓		
daily flow		✓		
septic tank capacity (required and provided)		✓		
soil absorption system (required and provided)		✓		
whether system designed for garbage grinder		✓		NOT ALLOWED
North arrow [310 CMR 15.220(4)(g)]		✓		
Existing and proposed contours [310 CMR 15.220(4)(g)]		✓		
Location and log of deep observation holes (existing grade el. on each test) [310 CMR 15.220(4)(h)]		✓		
Names of soil evaluator and BOH representative [310 CMR 15.220(4)(h) and (i)]		✓		
Location and date of percolation tests (performed at proper elevation?) [310 CMR 15.220(4)(i)]		✓		
Percolation test results match loading rate? [310 CMR 15.242]		✓		
Certification statement by Soil Evaluator [310 CMR 15.220(4)(j)]		✓		
Observed and Adjusted groundwater (method for adjustment given or indicated) [310 CMR 15.103(3) and 310 CMR 15.220(4)(n)]		✓		

GENERAL cont.	N/A	OK	NO
Location of every water supply, public and private, [310 CMR 15.220(4)(k)]		✓	
within 400 feet of the proposed system location in the case of surface water supplies and gravel packed public water supply wells		✓	
within 250 feet of the proposed system location in the case of tubular public water supply wells		✓	
within 150 feet of the proposed system location in the case of private water supply wells		✓	
Location of all surface waters and wetlands located up to 100 ft. beyond setbacks listed in 310 CMR 15.211 and any catch basins located within 50 ft. [310 CMR 15.220(4)(l)]		✓	
Water lines and other subsurface utilities located [310 CMR 15.220(4)(m)] (if water line cross see 310 CMR 15.211(1)[1])		✓	
Profile of system showing invert elevations of all system components and the bottom of the SAS [310 CMR15.220(4)(o)]		✓	
Stamp of designer [310 CMR 15.220(1) and 310 CMR 15.220(2)]		✓	
Stamp of Registered Land Surveyor (required if construction activities within 5 ft. of lot line) [310 CMR 15.220(3)]	✓		
Test Holes adequate (two in each of the primary and reserve unless trenches as permitted in 310 CMR 15.102(2) or as approved for an upgrade under LUA at 310 CMR 15.405(1)(k)]		✓	
Test hole adequate to demonstrate four feet of suitable material? [310 CMR 15.103(4)]		✓	
Test Holes adequate to confirm adequate groundwater separation? [310 CMR 15.103(3)]		✓	
Benchmark within 50-75' of system [310 CMR 15.220(4)(q)]		✓	
Materials specifications noted? [various sections of 310 CMR 15.000]		✓	
System components not > 36" deep (unless Local Upgrade Approval or LUA requested) [310 CMR 15.405(1(b)]		✓	
All system components marked with magnetic tape 15.221 (12)		✓	

REPAIR

SEPTIC TANK	N/A	OK	No
Size OK? [310 CMR 15.223(1)]		✓	
Inlet tee located ten inches below flow line [310 CMR 15.227 (6)]		✓	
Outlet tee 14" or 14" + 5" per foot for increase ft depth [310 CMR 15.227(6)]		✓	
Outlet tee with gas baffle or approved filter [310 CMR 15.227 (4)]		✓	
Note regarding installation on stable compacted base [310 CMR 15.228(1)]		✓	

Separation between inlet and outlet tees (no less than liquid depth) [310 CMR 15.227(2)]		✓		
Inlet/Outlet elevations at least 12" above high groundwater (except as described 310 CMR 15.227(5)) or permitted for upgrades under LUA [310 CMR 15.405(1)(k)]		✓		
Minimum cover 9" (Tanks buried more than 9" must have risers on all openings and on the d-box) [310 CMR 15.2228(1) and 310 CMR 15.232(3)(f)]		✓		
Three access covers (inlet and outlet must be 20" or greater) - middle access at least 8" (by 7/07) [310 CMR 15.228(2)]		✓		
Access to within 6 " of grade - one port for systems<1000gpd, two for systems >1000 gpd [310 CMR 15.228(2)]		✓		
All at-grade covers secured to unauthorized access? [310 CMR 15.228(2)]		✓		
> 10 ft from building foundation [310 CMR 15.211(1)]		✓		
Buoyancy calculation Required/Done [310 CMR 15.221(8)]	✓			
H-20 Where appropriate? [310 CMR 15.226(3)]	✓			
Setbacks from resources [310 CMR 15.211]		✓		
Multi-Compartment Tanks				
Required when other than single-family dwelling or flow>1000 gpd [310 CMR 15.223(1)(b)]	✓			
First compartment 200% daily flow; Second compartment 100% daily flow [310 CMR 15.224(2) and (3)]	✓			
"U" pipe through or over baffle, outlet of each compartment with gas baffle or approved filter [310 CMR 15.224(4)]	✓			
BUILDING SEWER AND OTHER PIPING	N/A	OK	No	
Located at least ten feet from any water line? [310 CMR 15.222(2)]		✓		SLEEVED WHERE NECESSARY
Disposal piping at least 18" below water line (when water and sewer cross, see 310 CMR 15.211(1)[1])		✓→		CHECK ONSITE
Cleanouts required/provided ? [310 CMR 15.222(8)]	✓			
Thrust blocks specified in force mains? 310 CMR 15.221(6)(c)]	✓			
Slope of sewer line not less than 0.01 (1/8"/ft) 0.02 preferable [310 CMR 15.222(6)]	•	✓		
Proper pitch on all runs? (.005 within gravity-distributed trenches and beds) [310 CMR 15.251(9) and 310 CMR 15.252(2)(c)]		✓		
Siphon problem/ (leachfield below pump chamber)	✓			
Endcaps or vent manifold specified?	✓	•		
Size and orientation of discharge holes specified? (not smaller than 3/8" not larger than 5/8") [310 CMR 15.251(8) and 310 CMR 15.252(2)(h)]		✓		
Materials specified (310 CMR 15.251(5) specifies various pipe types allowed)		✓		
DISTRIBUTION BOX				

Stable compacted base [310 CMR 15.221(2) and 310 CMR 15.232(2)(a)]		✓		
Splash plate or baffle tee required on inlet/ provided? (when pressure sewer to d-box or steep pitch of gravity sewer) [310 CMR 15.323(3)(a)]	✓			
Riser if deeper than 9" [310 CMR 15.232(3)(f)]		✓		
Inside minimum dimension 12" [310 CMR 15.232(2)(b)]		✓		
Minimum sump 6" [310 CMR15.232(3)(e)]		✓		
Watertight cover if <2000gpd); waterproof manhole if >2000gpd [310 CMR 15.232(3)(d)]	✓			
PUMP CHAMBERS				
Capacity (emergency storage above working=design flow)? [310 CMR 231(2)]	✓			
Proper setbacks [310 CMR 15.211 (same as septic tanks)]				
Watertight 20-in minium access manhole at least 20" MUST BE TO GRADE [310 CMR 15.231(5)]				
Service components accessible (not too deep with piping, disconnects accessible)				
Alarm floats - alarm on circuit separate from pumps specified?				
Exceeds two units must have two pumps operating in lead-lag mode. [310 CMR 15.231(6) and (8)]				
Stable Compacted Base [310 CMR 15.221(2)]				
Buoyancy calculations needed ? Provided? [310 CMR 15.221 (8)]				
Dosing chamber capacity (required and provided), pump curves and specifications, number of dosing cycles and depth per cycle? [310 CMR 15.220(4)(r)]				
Effluent tee filter provided? [310 CMR 15.231(10)]				
SOIL ABSORPTION SYSTEMS (SAS) GENERAL	N/A	OK	No	
Calculations correct?		✓		
4 feet of naturally occurring material demonstrated? [310 CMR 15.240(1)]		✓		
Required separation to groundwater? [310 CMR 15.212)]		✓		
Aggregate specified as double washed [310 CMR 15.247(2)]		✓		
System Venting required/provided? (system under driveway or >36" deep) [310 CMR 15.241]	✓			
Inspection ports specified and within 3"final grade? [310 CMR 15.240(13)]		✓		RISERS SPECIFIED
Breakout requirements met? (No violation of breakout elevation within 15 ft of SAS unless barrier) [310 CMR 15.211(1)[4] and Guidance Document]		✓		
GALLERIES,PITS,CHAMBERS 310 CMR 15.253				
Chambers and Gal. in trench configuration supplied with inlet every 20 ft. [310 CMR 15.253(6)]		✓		
Each structure with one inspection manhole (if >2000 gpd must be to grade) [310 CMR 15.253(2)]		✓		

Aggregate 1' minimum- 4' maximum. [310 CMR 15.253(1)(b)]		✓	
2' sidewall credit maximum [310 CMR 15.253(1)(a)]		✓	
In bed configuration, inlet every 40 sq. ft. [310 CMR 15.253(6)]		✓	
TRENCHES 310 CMR 15.251			
Width 2' minimum 3' maximum [310 CMR 15.251(1)(b)]	✓		
100 feet - maximum length [310 CMR 15.251(1)(a)]			
Minimum separation 2x effective depth or width whichever greater (3x if reserve between trenches) [310 CMR 251(1)(d)]			
Situated along contours [310 CMR 15.251(2)]			
Breakout OK? [310 CMR 15.211(1)[4] and Guidance Document]			
BED SAS (Maximum size of bed or field 5000 gpd)			
minimum 2 distribution lines [310 CMR 15.252(2)(a)]	✓		
Maximum separation between lines 6' [310 CM R15.252(2)(d)]			
Maximum separation between lines and outside of bed 4' [310 CMR 15.252(2)(e)]			
Aggregate depth below discharge pipes 6" minimum, 12" maximum. [310 CMR 15.252(2)(g)]			
Separation between beds 10' minimum. [310 CMR 15.252(2)(f)]			
Bottom area used in calculations only [310 CMR 15.252(2)(i)]			
DID THE PLAN INVOLVE	**N/A**	**OK**	**No**
Pressure Dosed System ? Provided pump and piping calculations as required [310 CMR 15.220(4)(r)]	✓		
Groundwater Separation Per 310 CMR 15.240(12) does the groundwater separation take into account mounding.	✓		
Pressure dosing required on all systems >2000gpd or alternative systems under remedial approval [310 CMR 15.254(2) and I/A Remedial Use Approvals]	✓		
If used in gravelless system - make sure jet is directed as not to scour soil interface [Guidance Document]	✓		
Inspections once per year (systems< 2000 gpd) or quarterly (>2000gpd) good to note on plan [310 CMR 15.254(2)(d)]	✓		
Construction in fill - Did the plan specify that the fill shall meet the specification of 310 CMR 15.255(3)?	✓		
Impervious barrier and/or retaining wall ? [Guidance Document]	✓		
Impervious barrier installation must be supervised by designer [310 CMR 15.255(2)(b)]	✓		
Retaining wall must be designed by Registered Professional Engineer [310 CMR 15.255(2)(a)]	✓		
Side slope not exceed 3:1 ? [310 CMR 15.255(2)]		✓	
Breakout requirements met? [310 CMR 15.252(2) and Guidance Document]		✓	
At least 5 ft. from impervious barrier to edge of SAS (10 ft. recommended) [310 CMR 15.255 (2)(e)]	✓		

Gravelless System [I/A Approval Letters]			
Check DEP Approval letters for credits and design conditions	✓		
If used with pressure dosing do not allow pressure discharge to scour soil interface	✓		
Alternative Septic System [I/A Approval Letters]			
Was DEP Approval Letter provided and/or have you reviewed the letter for conditions?	✓		
Is the technology being properly applied and does it meet all DEP Approval Conditions?			
Is there a note on the plan regarding the requirement for perpetual maintenance agreement?			
Any alarms involved on separate circuits			
Did the applicant submit an operation and maintenance manual?			
Has applicant submitted a copy of a maintenance agreement?			
Variances			
Are the variances listed on the plan ? [310 CMR 15.220 (4) (p)]	✓		
RLS Stamp necessary on plan if a component is within five feet of property line [310 CMR 15.412(4)]	✓		
New construction or increased flow proposed - [Refer to 310 CMR 15.414]	✓		
Nitrogen Sensitive Areas	N/A	OK	No
Is the system in a Designated Nitrogen Sensitive Area (Zone II for a public supply well)? [310 CMR 15.214, 310 CMR 15.215 and 310 CMR 15.216 - also refer to Policy regarding upgrades of such existing systems]	✓		
Is the system proposed on the same lot as served by private well ? [310 CMR 15.214(2)]	✓		
Are the nitrogen loads proposed in compliance? [310 CMR 15.216(1)]	✓		
Miscellaneous			
Pumping to septic tank ? [310 CMR 15.229]	✓		
Shared System [310 CMR 15.290]	✓		

Commonwealth of Massachusetts
City/Town of Amherst,
Application for Disposal System Construction Permit

Form 1A

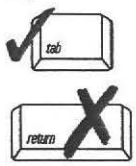
Number

$--
Fee

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

A. Facility Information

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



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

1. Location of Facility:

11 Indian Pipe, Lane
Address or Lot #

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

2. Owner Information

Donald David
Name

11 Indian Pipe Lane
Address (if different from above)

~~Hadley~~ Amherst | MA | ~~01035~~ 01002
City/Town | State | Zip Code

Telephone Number

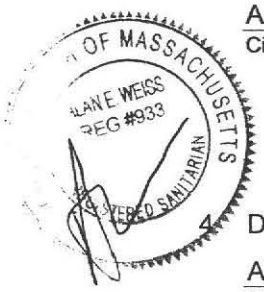
3. Installer Information

Adair Excav. | Name of Company
Name

Address

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

531-7921
Telephone Number



4. Designer Information

Alan Weiss, RS | Cold Spring Environmental Consultants Inc.
Name | Name of Company

350 Old Enfield Road
Address

Belchertown | MA | 01007
City/Town | State | Zip Code

413-531-4015
Telephone Number

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

Number

$--
Fee

A. Facility Information (continued)

5. Type of Building:

☒ Dwelling ☐ Garbage Grinder (check if present)

Other: Type of Building _____ - Number of Persons Served

☐ Showers _____ Number of showers ☐ Cafeteria ☐ Other fixtures

Specify other fixtures: _____

6. Design Flow: 4Bedroom= 440 GPD 462 GPD, provided)
Gallons per Day

Calculated Daily Flow: 462
Gallons

7. Plan: 07.05.2013
Date of Original

1
Number of Sheets

Revision Date

Septic System Plan
Title of Plan

8. Description of Soil:

fs

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

New Leach area (reuse existing tank only if sound)

10. Date last inspected: 6.7.2013
Date

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

Number

$--
Fee

B. Agreement

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

Signature

7/9/13
Date

Application Approved By:

Name

Date

Application **Disapproved** for the following reasons:

June 2013
INVOICE

AMHERST PUBLIC HEALTH DEPARTMENT

Bangs Community Center
70 Boltwood Walk
Amherst, MA 01002

DATE: June 7, 2013

TO Donald & Honore David
11 Indian Pipe Lane
Amherst, MA, 01002

Turned over!

RE: Invoice for **Title 5**

Services provided by **Edmund Smith**

PAYMENT TERMS: I Paid

QUANTITY	DESCRIPTION	UNIT PRICE	LINE TOTAL
1.00	Title 5 Inspection Witness (failure of leach tank)	$ 200.00	$ 200.00
	paid today check 294 - thank you		$ (200.00)
		SUBTOTAL	$ -
		SALES TAX	
		TOTAL	$ -

No..... FEE $90 -

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF Amherst

Application for Disposal Works Construction Permit

CHECK OR FILL IN WHERE APPLICABLE

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

Amherst Woods Phase II — Location - Address
Lot #28 — or Lot No.
Donald & Honore' David — Owner
2 Woodside Drive, Wilbraham, Ma. 01095 — Address
Stoney's Excavating Co. — Installer
West St., Montague Ctr. Mass. — Address

Type of Building — Size Lot.....Sq. feet
Dwelling — No. of Bedrooms 3 Expansion Attic ( ) Garbage Grinder (/)
Other — Type of Building Single Family Hse No. of persons 2 Showers (3) — Cafeteria ( )
Other fixtures .....
Design Flow.....gallons per person per day. Total daily flow.....gallons.
Septic Tank — Liquid capacity.....gallons Length..... Width..... Diameter..... Depth.....
Disposal Trench — No. ..... Width..... Total Length..... Total leaching area.....sq. ft.
Seepage Pit No..... Diameter..... Depth below inlet..... Total leaching area.....sq. ft.
Other Distribution box ( ) Dosing tank ( )
Percolation Test Results Performed by..... Date.....
Test Pit No. 1.....minutes per inch Depth of Test Pit..... Depth to ground water.....
Test Pit No. 2.....minutes per inch Depth of Test Pit..... Depth to ground water.....
Description of Soil GRAVEL
Nature of Repairs or Alterations — Answer when applicable.....

Agreement:

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

Signed X Donald J David — April 1984 (Date)

Application Approved By..... — Date

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

Date

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

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

.....OF.....

Certificate of Compliance

THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed ( ) or Repaired ( )
by..... Installer
at.....
has been installed in accordance with the provisions of TITLE 5 of The State Sanitary Code as described in the application for Disposal Works Construction Permit No..... dated.....

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

DATE..... Inspector.....

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

.....OF.....

No..... FEE.....

Disposal Works Construction Permit

Permission is hereby granted.....
to Construct ( ) or Repair ( ) an Individual Sewage Disposal System
at No..... Street
as shown on the application for Disposal Works Construction Permit No..... Dated.....

..... Board of Health

DATE.....

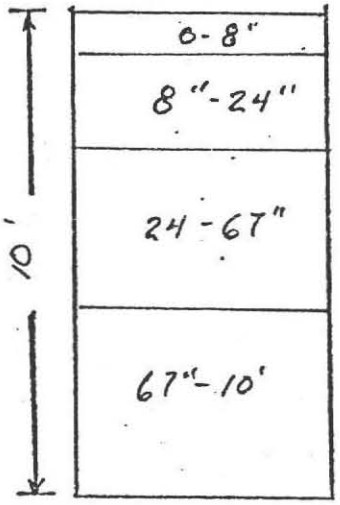
FORM 1255 HOBBS & WARREN, INC., PUBLISHERS

DEEP SOIL LOGS

OWNER Amherst Woods Phase II Date Mar. 21, 1984

LOCATION Amherst Woods Lot #28 OBSERVER F.A. Filios

Soil



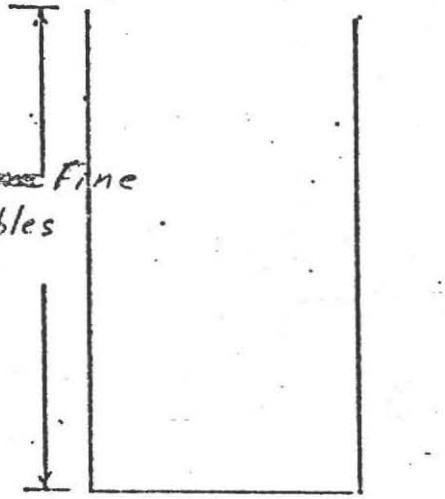
Topsoil

Subsoil

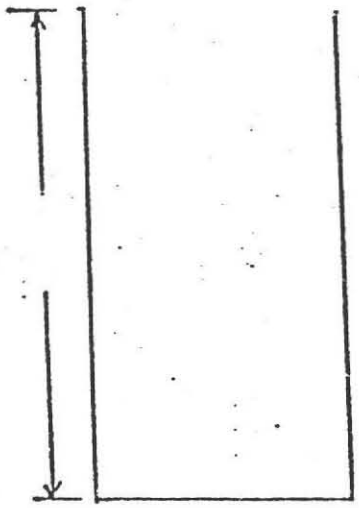
Coarse sand with ~~some~~ Fine gravel + some cobbles

Coarse sand

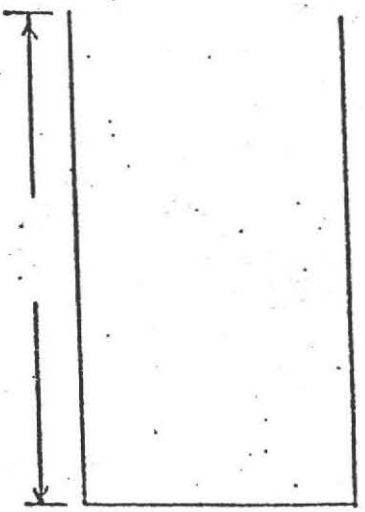
Ground Water none



Ground Water ____



Ground Water ____



Ground Water ____

Percolation Rate at 42"

< 2 minutes/inch

COMMONWEALTH OF MASSACHUSETTS
FRANCIS A. FILIOS, R.S.
633

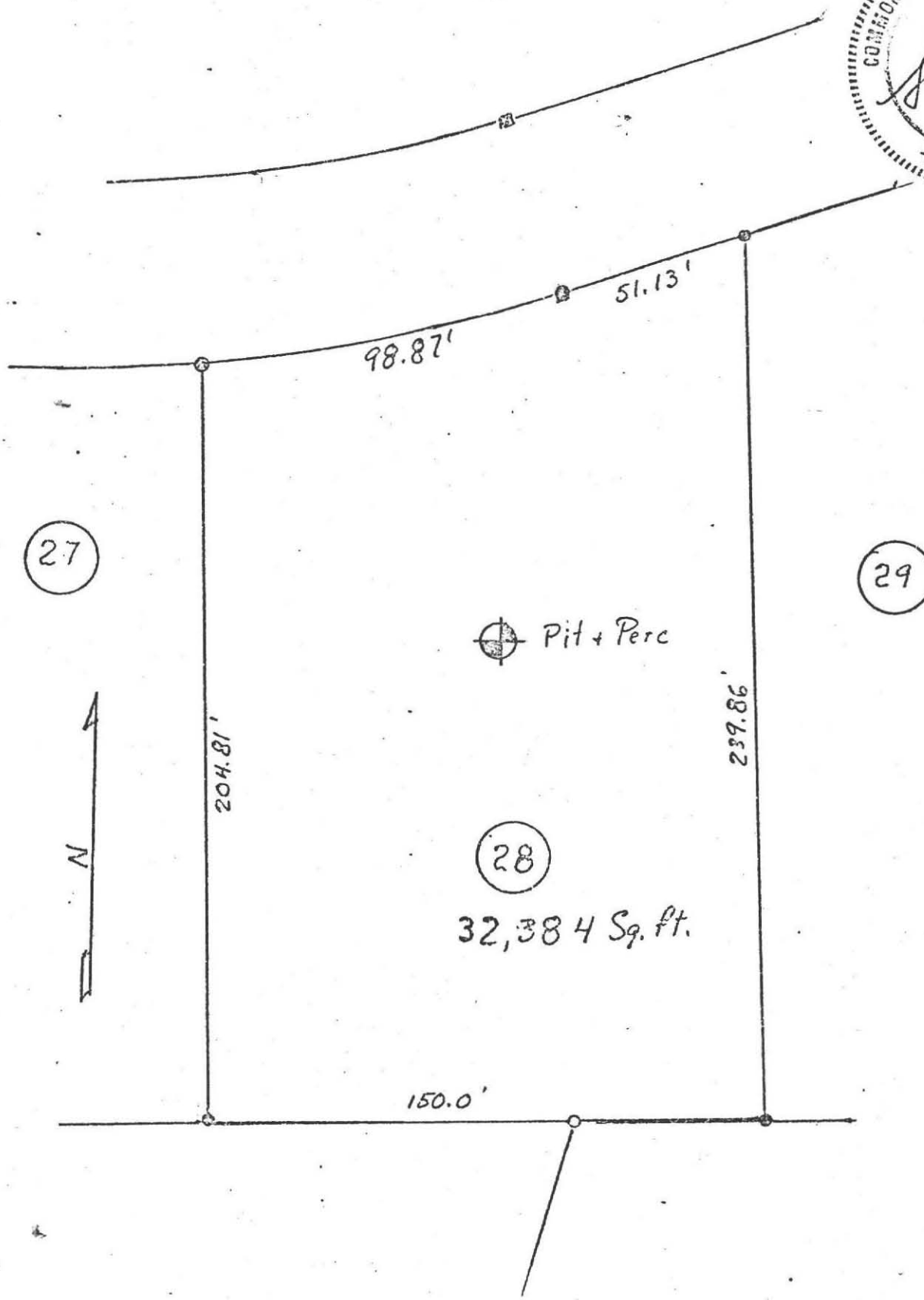
PERCOLATION TEST LOCATION

For: Amherst Woods

Mar, 1984

Scale: 1" = 40'

By: Frederick Filios



11 Indian Pipe

No. 84-11

Fee $90

SPT 1984-00001

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town of Amherst

Indian Pipe

Application for Disposal Works Construction Permit

COMMONWEALTH OF MASSACHUSETTS — FREDERICK FILIOS, R.S. 688

Application is hereby made for a Permit to Construct (✓) or Repair ( ) an Individual Sewage Disposal System at: 11 Indian Pipe

Amherst Woods Phase II — Location - Address — 28 or Lot No.

Donald LaVerdiere — Owner — 300 Station Rd. Amherst — Address

Zo Stone — Installer — Montague MA. — Address

Type of Building — Size Lot 32,384 Sq. feet

Dwelling — No. of Bedrooms 3 Expansion Attic ( ) Garbage Grinder (✓)

Other — Type of Building ..... No. of persons ..... Showers ( ) — Cafeteria ( )

Other fixtures .....

Design Flow 55 gallons per person per day. Total daily flow 330 gallons.

Septic Tank — Liquid capacity 1500 gallons Length ..... Width ..... Diameter ..... Depth .....

Disposal Trench — No. ..... Width ..... Total Length ..... Total leaching area ..... sq. ft.

Seepage Pit No. 1 ~~Diameter~~ 10½ x 7' Depth below inlet 5' Total leaching area 175 sq. ft. Sides 70 Bottom

Other Distribution box ( ) Dosing tank ( )

Percolation Test Results Performed by Frederick Filios Date Mar 21, 1984

Test Pit No. 1 <2 minutes per inch Depth of Test Pit 10' Depth to ground water none

Test Pit No. 2 ..... minutes per inch Depth of Test Pit ..... Depth to ground water .....

Description of Soil enclosed

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

Agreement:

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

Signed * Donald David Site on A.I.T. 4-[illegible]-84 Date

Application Approved By C. Drake Jr. 4/24/84 Date

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

Date

Permit No. 84-11 Issued 4/24/84 Date

CHECK OR FILL IN WHERE APPLICABLE

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

OF .....

Certificate of Compliance

THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed ( ) or Repaired ( )

by ..... Installer

at .....

has been installed in accordance with the provisions of TITLE 5 of The State Sanitary Code as described in the application for Disposal Works Construction Permit No. ..... dated .....

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

DATE ..... Inspector .....

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

No. 84-11 Town of Amherst Fee $90

Disposal Works Construction Permit

Permission is hereby granted Don LaVerdiere - 2D Stone

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

at No. Lot 28 Amherst Woods - Lear Place Lane
Street

as shown on the application for Disposal Works Construction Permit No. 84-11 Dated 4/24/84

Charles E Dodge
Board of Health

DATE April 24, 1984

FORM 1255 HOBBS & WARREN, INC., PUBLISHERS

PLAN SHOWING SEWAGE DISPOSAL

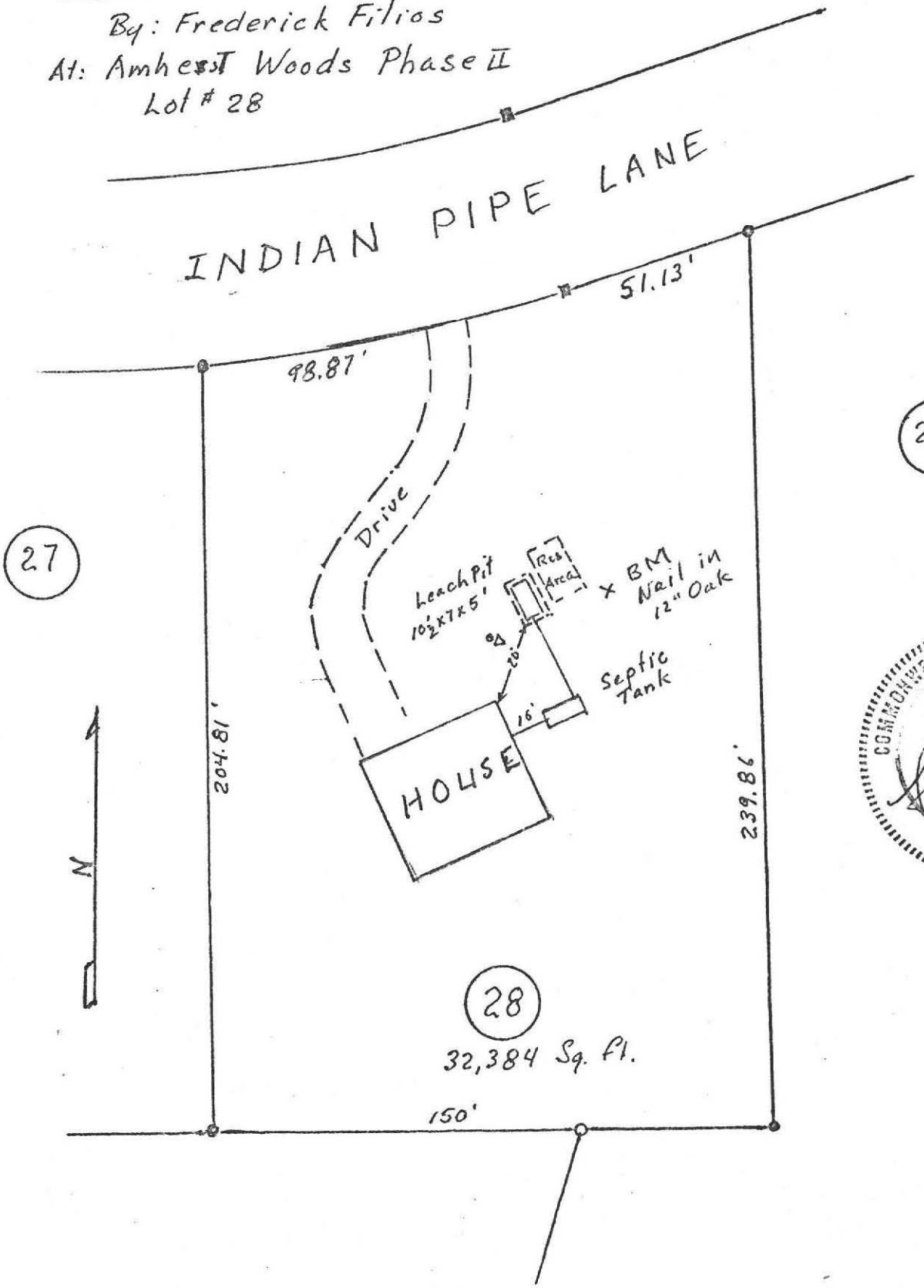
For: Donald La Verdiere
500 Station Road
Amherst Mass.

Apr 1984

Scale: 1" = 40'

By: Frederick Filios

At: Amherst Woods Phase II
Lot # 28



COMMONWEALTH OF MASSACHUSETTS
FREDERICK D. FILIOS, R.S.
688

BOARD OF HEALTH

TOWN OF AMHERST, MASSACHUSETTS

LOT 28 INDIAN PIPE LANE

Important Information Regarding Your Private Sewage Disposal System

DISPLAY THIS DOCUMENT IN A PROMINENT PLACE

Owner DONALD DAVIS Address 11 INDIAN PIPE LA.

Installer ED STONE Address MONTAGUE RD.

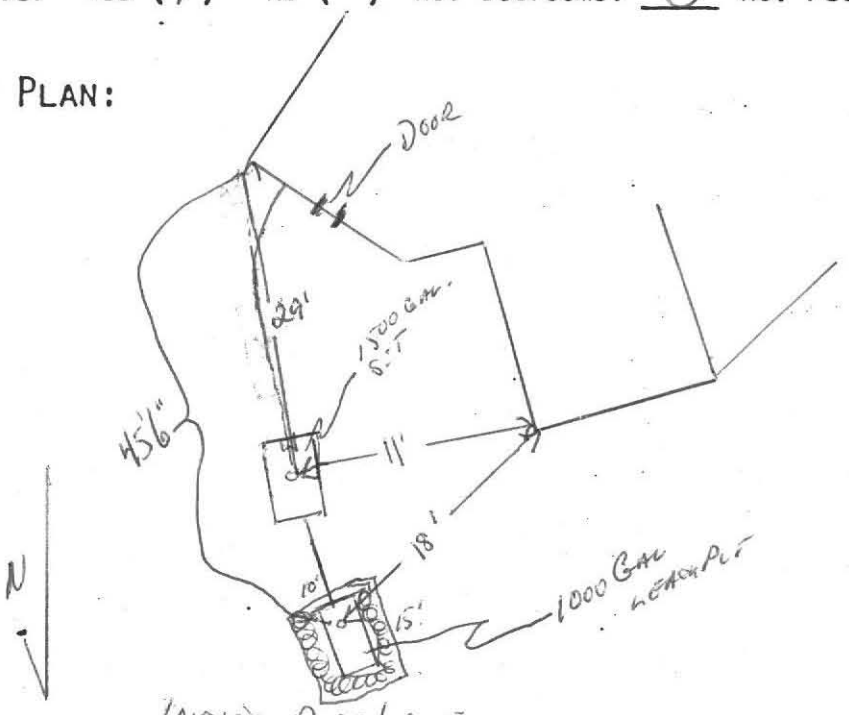
Date Installation Inspected and Approved SEP. 1984

Description of System: Tank Capacity: 1500 SEPTIC TANK 150 @ BOTTOM

Leach Field ( ) Bed ( ) Seepage Pit (X) Square Feet: 250 @ SIDES

Garbage Grinder Yes (YT) No ( ) No. Bedrooms: 3 No. People 6

AS - BUILT PLAN:



PROPER MAINTENANCE OF YOUR PRIVATE SEWAGE DISPOSAL SYSTEM

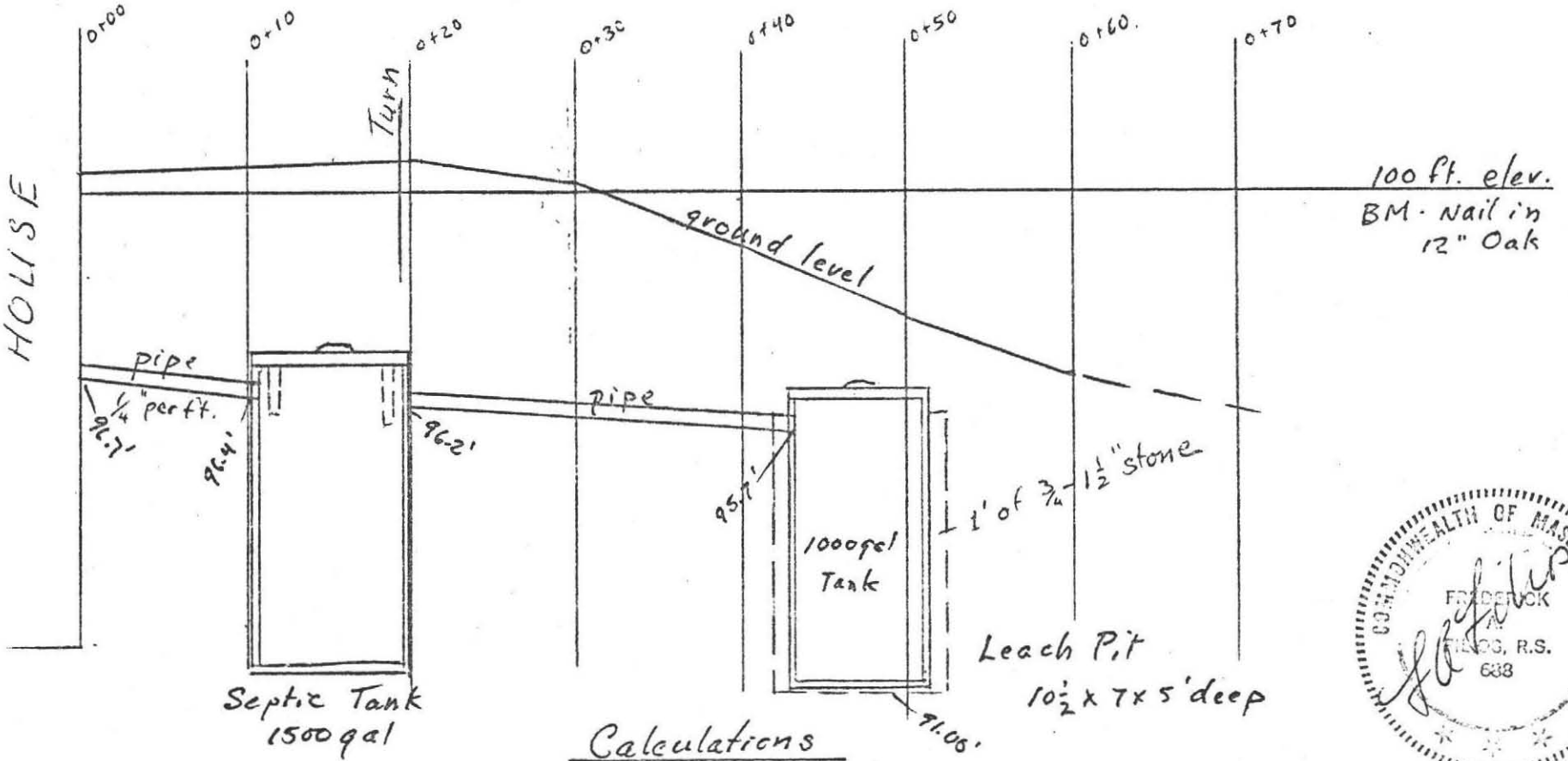
1. This system must be inspected periodically and the tank pumped out at an interval not to exceed 3 years.
2. For your protection sanitary pumpers are licensed by the Amherst Board of Health.
3. Regular pumping is crucial to avoid early failure and costly repairs of the system.
4. DO NOT dispose into the system such items as rags, string, sanitary napkins, coffee grounds as they can cause it to clog and fail.
5. Further information can be obtained by contacting your Health Department at 253-7077.

PROFILE OF SEPTIC SYSTEM

Apr. 1984

For: Donald La Verdiere
500 Station Rd.
Amherst Mass
At: Amherst Woods Lot 28

Scale: Horizontal;
Vertical;
By: Frederick Filios



COMMONWEALTH OF MASSACHUSETTS
FREDERICK
FILIOS, R.S.
688

Calculations

3 Bdm x 110 = 330 gallons
At: 2 minutes per inch
Sides: 2.5 gal. per sq. ft.
Bottom: 1 gal. per sq. ft.

Sides $10\frac{1}{2} \times 5 \times 2 = 105$ Sq. ft
$7 \times 5 \times 2 = 70$ Sq. ft
$175 \times 2.5 = 437.5$ gallons

Bottom $10\frac{1}{2} \times 7 = 73.5 \times 1 = 73.5$ gallons

Total 511.0 gallons proposed

PERCOLATION TEST LOCATION

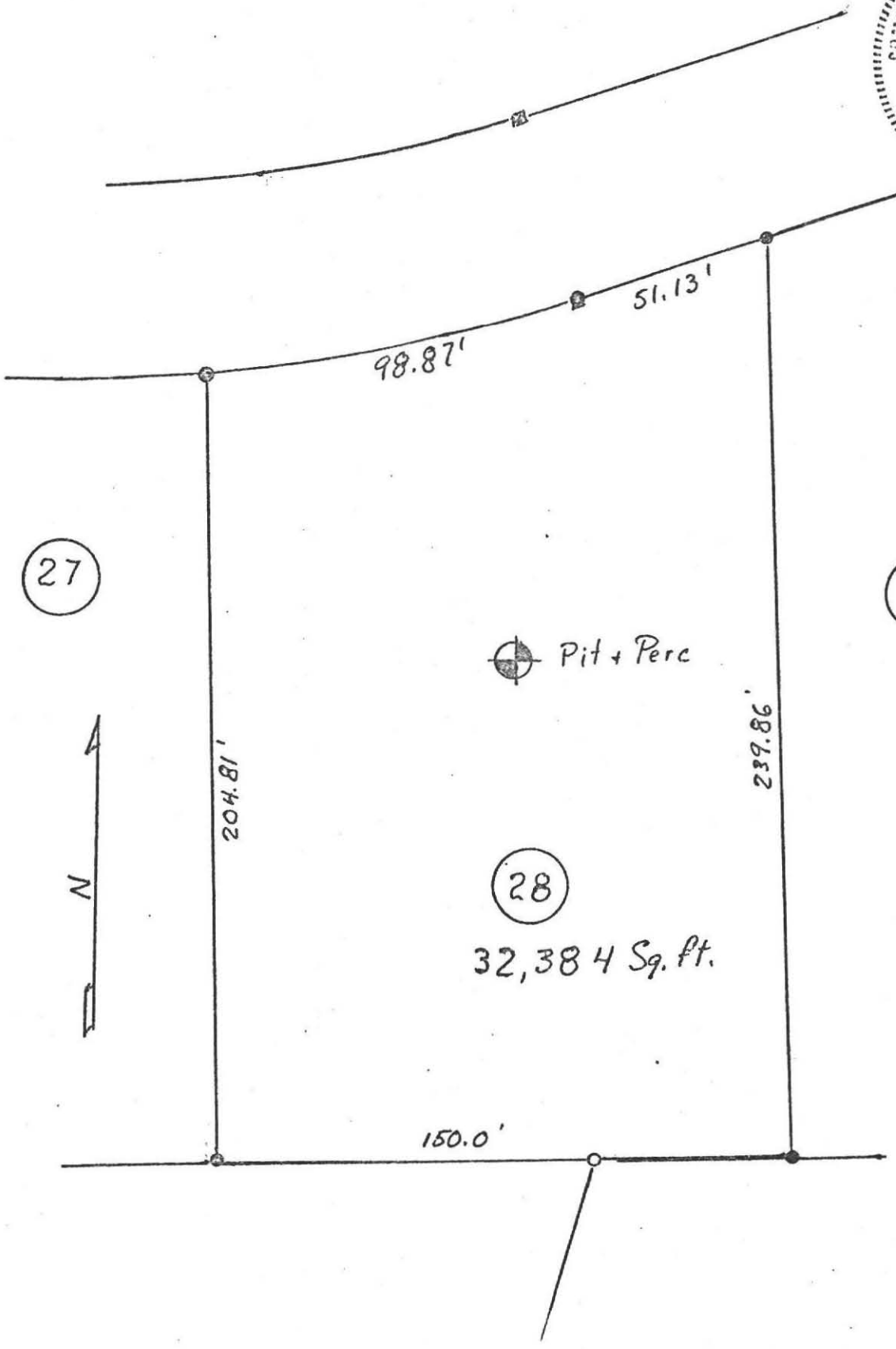
For: Amherst Woods

Mar, 1984

Scale: 1" = 40'

By: Frederick Filios

COMMONWEALTH OF MASSACHUSETTS
FREDERICK FILIOS, R.S.
688

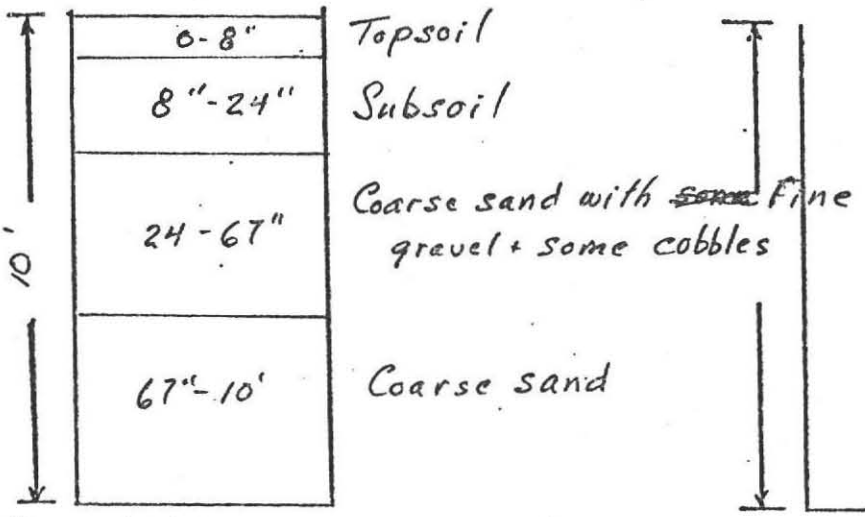


DEEP SOIL LOGS

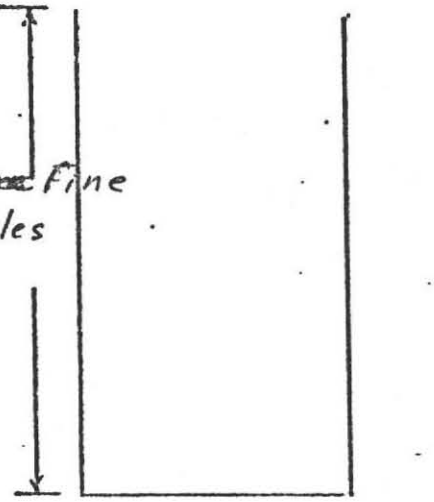
OWNER Amherst Woods Phase II Date Mar. 21, 1984

LOCATION Amherst Woods Lot #28 OBSERVER F.A. Filios

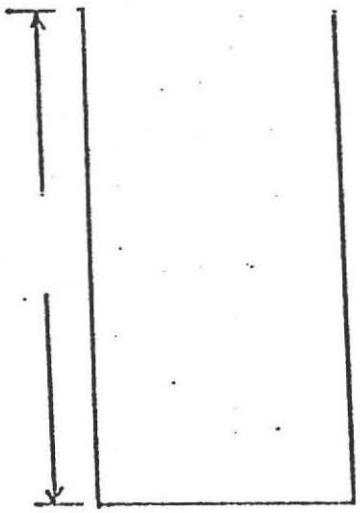
Soil



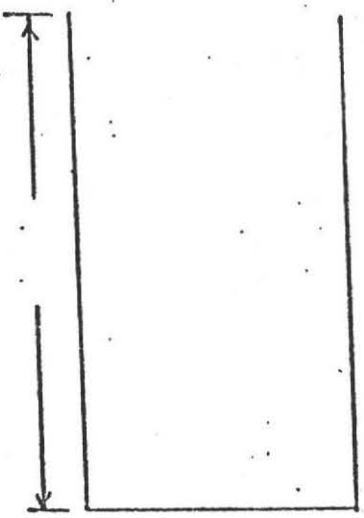
Ground Water none



Ground Water ____



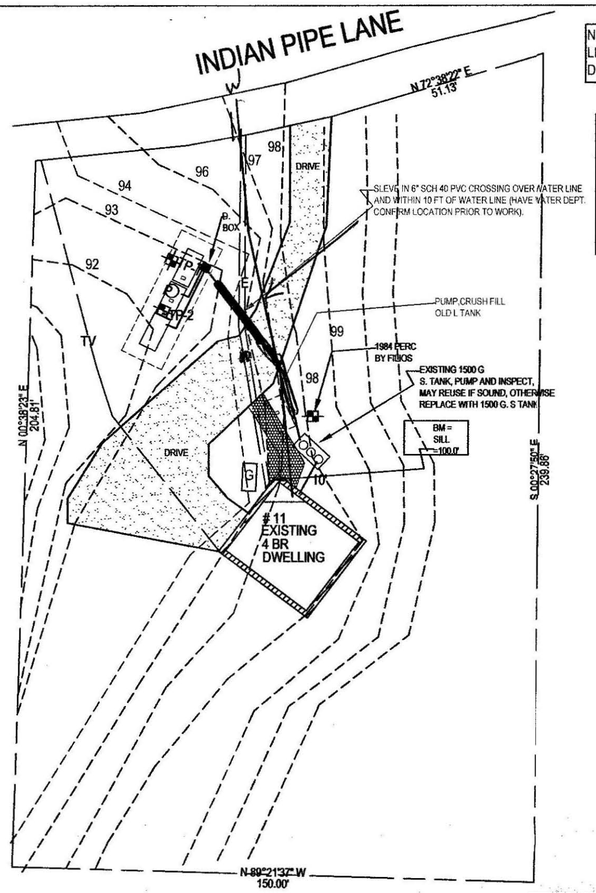
Ground Water ____



Ground Water ____

Percolation Rate at 42"

< 2 minutes/inch

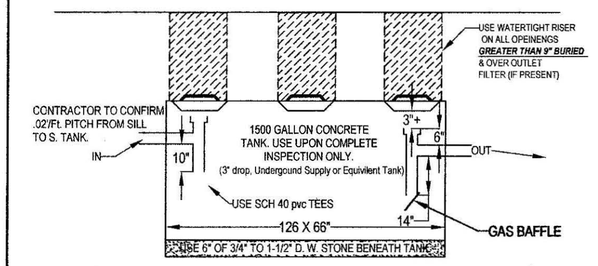


NOT AN ACTUAL SURVEY!
LINES DRAWN FOR SEPTIC LOCATION & DESIGN ONLY.

PLOT PLAN
MAP 21D LOT 32
SCALE: 1"=30'
32,384 Sq. Feet
0.74 Acres

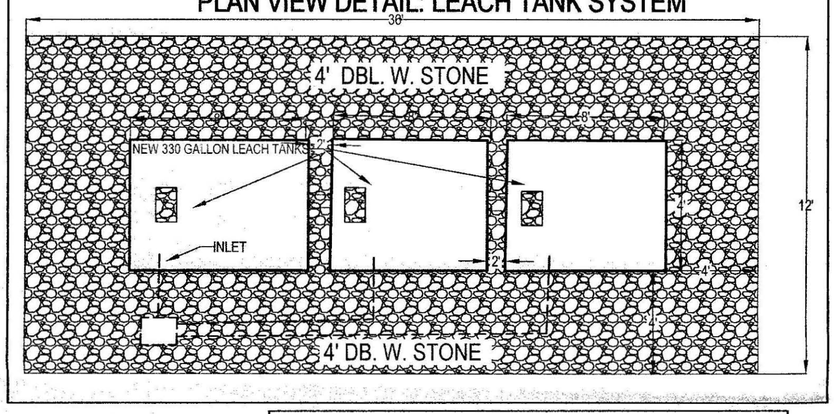
NOTE TO INSTALLER:
ALL UTILITY LOCATIONS ARE APPROXIMATE, HAVE WATER AND OTHER LINES RE-MARKED PRIOR TO START OF WORK

TYPICAL SEPTIC TANK (WATERTIGHT) OR EQUIVELANT.

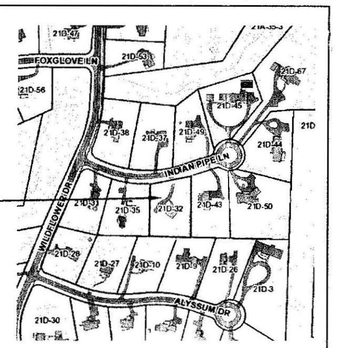


USING EXISTING SEPTIC TANKS:
AN EXISTING 1,000 or 1,500 GALLON SEPTIC TANK CAN BE USED IF UPON INSPECTION BY THE INSTALLING CONTRACTOR, IF THE TANK IS INSPECTED AND PUMPED AND FOUND TO BE STRUCTURALLY SOUND AT THE TIME OF THE SUBGRADE INSPECTION.
IF BAFFLES ARE NOT BUILT IN, THAN SCH 40 PVC TEES MUST BE ADDED.
IF TANK IS NOT SOUND THAN, NOTIFY ENGINEER IMMEDIATELY IN ORDER TO ACCOMODATE A NEW 1,500 GALLON (MIN.) SEPTIC TANK.

PLAN VIEW DETAIL: LEACH TANK SYSTEM



SUBJECT SITE LOCATION



DESIGN NOTES AND CALCULATIONS:

1.) 4 (BEDROOM HOME) = 440 GPD. REQUIRED,

-Use Three 330 gal. 4' X 8' chamber GALLERY:12' WIDE X 36' LONG WITH 30" OF 3/4" TO 1 1/2" DBL WASHED STOINE BELOW INVERT

- BOTTOM AREA:: 3 galleys X (12' W X 36' L) =432 SF.
- SIDE AREA: 3 GiALLEYS X (2' HT X36' L)X 2 SIDES =144 SF
- END AREA: 2 ENDS X (2.0' HT X 12' W) X 2 ENDS = 48 SF.
- TOTAL AREA: 6i24 SF X .74 GAL/SF = 462 GPD

3. GARBAGE DISPOSAIL NOT ALLOWED, ***TO BE REMOVED***..
4. NO WELLS WITHIN 1i50 FEET OF SAS. (Town water)
5. NO WETLANDS WITHIIN 100 FEET OF SAS,
6. USE S. TANK AS NOTIED & MAINTAIN 0.02 PITCH FROM SILL TO S. TANK
   - INSTALL & INSPECT SCH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET),
   NOTE:
   - ALL COMPONENTS (OF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO MAINTAINI 3" CLEARANCE FROM TOP OF TEES TO BOTTOM OF TANK COVERS & BOXES.
7. USE LARGE STYLE (6i OUTLET) D.BOX ONLY.

7A ALL D. BOX OUTLETT PIPES LEVEL FOR FIRST 2'. BOXES MUST HAVE 2"+ CONC. WALLS
NOTE:
- D. BOXES WITH MOIRE THAN 9" OF COVER SOIL MUST HAVE RISERS TO 6" OF SURFACE.

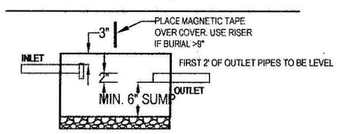
7B ALL PLASTIC RISERS MUST BE SECURED WITH *STAINLESS STEEL* SCREWS.

8. USE APPROVED (.75"--1 1/2") DBL. WASHED STONE UNDER TANK & D. BOX FOR 6".
   -CONFIRM STONE PROPERLY DOUBLE WASHED PRIOR TO PLACEMENT.
9. USE PROPER SCH. 40) PVC TEES AS SHOWN.
10. PRE & POST CONTOIURS NOTED AS NECESSARY, RESERVE AS NOTED *(not required for repairs)*.
11. SLOPE CALCS (SEE (CONTOURS). SUBGRADE INSP. REQ'D.
13. USE GALLEYS DUE TO TOPOGRAPHY AND SPACE OF LOT WITH RESPECT TO LOCATION AND ELEVATION OF RESIIDENCE & PIPING UNDER SLAB (310 CMR 15.240)
14. USE 2% MIN. SLOPE I OVER SAS
    - CLEAR TOP AND SUB TO 36" MIN. AS NEEDED (INSPECTION REQUIRED).
    - CLEAR PAST BASE: OF B (MIN. 36") & SCARIFY UNDER TRENCH PRIOR TO TITLE V SAND /STONE PLACEMENT.
    - EXCAVATE EXISTING LOAM, SUB AND ANY EXISTING DEBRIS, DIRTY FILL OR PRIOR SYSTEM IF PRESENT.
15. SOIL EVALUATION B'Y A. WEISS, RS. (E. SMITH, BOH AGENT).
    - DEPTH OF PERC. 5i0"
    - PERC RATE = <2 MIIN / IN,
    - CLASS 1 C. Sand, SiOIL RATING
16. NO TREES WITHIN 1i0 FT. OF NEW LEACH AREA.
17. ENGINEER & TOWN TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL.
18. BM=100.00 @ (PATIO) SLAB, BOT. SIDING as noted), CONFIRM PROPER PIPE SLOPES
    - USE/INSPECT SCH.. 40 PIPE FOR PIPE FROM HOUSE TO NEW OR EXISTING TANK
19. GRADE MULCH AND SEED OVER SAS AS NOTED.
20. INSTALLATION IN LOW GROUNDWATER SEASON RECOMMENDED.
21. USE OBSERVATION IPORT NEAR CENTER OF STONE BED HAVE 4" PERFORATED, PVC INSPECTION PORTALS TO BOTTOM OF STONE BED, WITH RISER TO 3" OF SURFACE & THREADED CAP & MARK WITH RE-BAR..

GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.

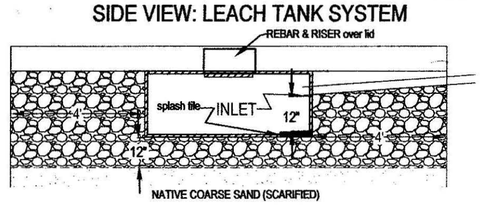
1.) HAVE TANK PUMPED EVERY 2 YEARS.
2.) MAINTAIN AREA OVER SEPTIC SYSTEM AS GRASSY OR SIMILAR GROUND COVER.
3.) DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
4.) USE ONLY LIQUID DETERGENTS & LOW FLOW WASHERS.
5.) WIPE ALL OIL AND GREASE FROM COOKWARE AND DISPOSE IN TRASH NOT SEPTIC.
6) All Toilets and Faucets must be confirmed to not be leaking, because one leaking fixture can fail a septic system in ONE DAY

TYPICAL D.BOX (WATERTIGHT) - OPTIONAL

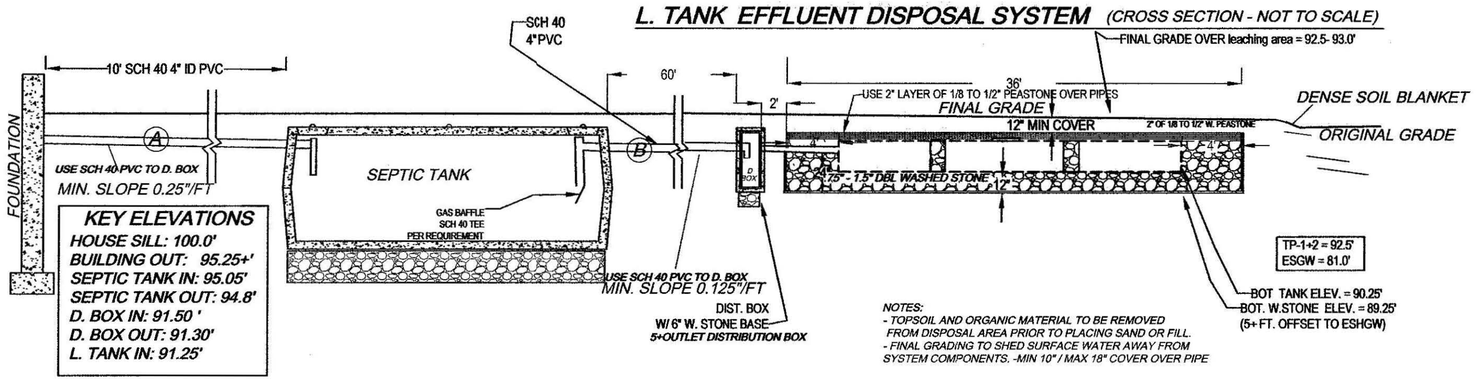


- PLACE ON STABLE 6" BASE OF 3/4" TO 1-1/2" CRUSHED STONE
- USE CONCRETE BOX WITH 2" MINIMUM WALL THICKNESS.
- FILL WITH WATER FOR FINAL INSPECTION.
- USE LARGE STYLE D.BOX (5 OUTLET MINIMUM)

SIDE VIEW: LEACH TANK SYSTEM



L. TANK EFFLUENT DISPOSAL SYSTEM (CROSS SECTION - NOT TO SCALE)



KEY ELEVATIONS
HOUSE SILL: 100.0'
BUILDING OUT: 95.25+'
SEPTIC TANK IN: 95.05'
SEPTIC TANK OUT: 94.8'
D. BOX IN: 91.50 '
D. BOX OUT: 91.30'
L. TANK IN: 91.25'

NOTES:
- TOPSOIL AND ORGANIC MATERIAL TO BE REMOVED FROM DISPOSAL AREA PRIOR TO PLACING SAND OR FILL.
- FINAL GRADING TO SHED SURFACE WATER AWAY FROM SYSTEM COMPONENTS. -MIN 10" / MAX 18" COVER OVER PIPE

TEST PIT LOG:

SOIL EVALUATOR: A. WEISS
DATE OF EVALUATION: 06.11.2013 AND 1988

TP 1					TP 1-88 ELEV:				
DEPTH:	HORIZ:	TEXTURE:	COLOR (MUNSELL):	MATERIAL:	DEPTH:	HORIZ:	TEXTURE:	COLOR (MUNSELL):	MATERIAL:
0-12"	A	FSL	10 YR 3.3	FRIABLE	0-8"	A	FSL		TOPSOIL
12-35"	Bw	LS	10 YR 5.6	FRIABLE	8-24"	Bw	LS		SUBSOIL
35-138"+	C1	CS	10 YR 4.4	COARSE SAND & GRAV.	24-120"	C1	S & G		COARSE SAND & GRAV.
				10% BOULDERS AND COBBLES					
OXIDES:			138"+	not obs. (assumed).	OXIDES:			not	
EHWT:			138"+		EHWT:			120"+	
STANDING H2O:			not		STANDING H2O:			not	
WEEPING:			not		WEEPING:			not	
BEDROCK:			138"+		BEDROCK:			120"+	

ATTENTION INSTALLER!!
CALL DIG SAFE BEFORE YOU DIG!! MASSACHUSETTS STATE LAW CHAPTER 82 SECTIONS 40 - 40E REQUIRE THAT PREMARKING OF GAS, ELECTRIC, WATER, TELEPHONE AND CABLE T.V. UTILITY LINES BE MADE A *MINIMUM* OF 72 HOURS PRIOR TO GROUND BREAK FOR ANY EXCAVATIOI.

NOTE: *INSTALLER MUST CONTACT ENGINEER/BD OF HEALTH 48 HOURS PRIOR TO SUBGRADE INSPECTION. INSTALLER MUST HAVE ALL BREAK OUT FILL ON SITE AND IN PLACE PRIOR TO SIGN OFF BY ENGINEER AT TIME OF FINAL INSPECTION OR APPROVAL WILL NOT BE GIVEN TO BACKFILL.*

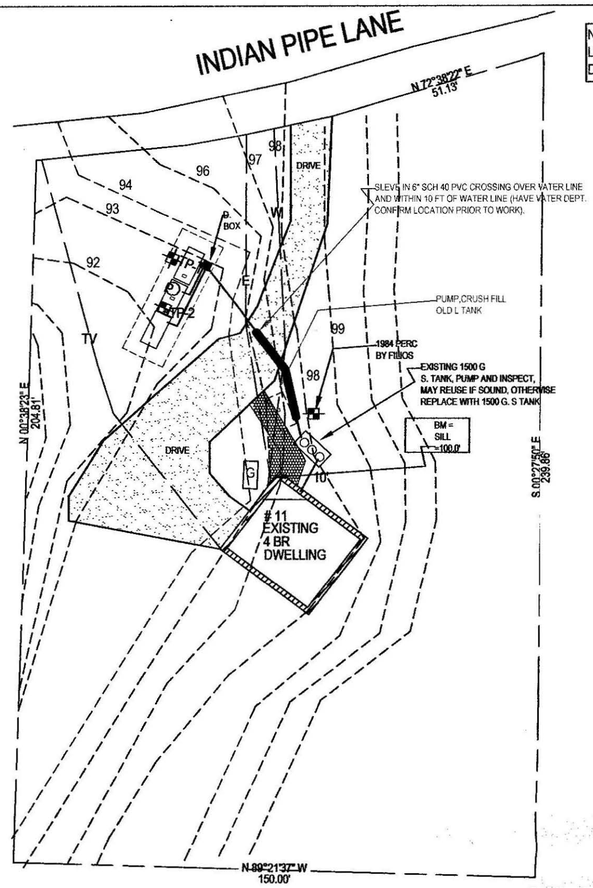
0' 30' 60' 90'

COMMONWEALTH OF MASSACHUSETTS
ALAN E. WEISS #933
REGISTERED SANITARIAN

SEPTIC SYSTEM DESIGN PLAN FOR MR DONALD DAVID
11 INDIAN PIPE LANE
AMHERST, MA

Cold Spring Environmental Consultants Inc.
350 Old Enfield Road
Belchertown, MA. 01007
PHONE: (413) 323-5957
FAX: (413) 323-4916
e-Mail: AEWEISS@charter.net

DATE:	DRAWN BY:	REVISED:
07.05.2013	ALAN WEISS	
SCALE: 1"=30'		DRAWING NUMBER: 113-4121-0611

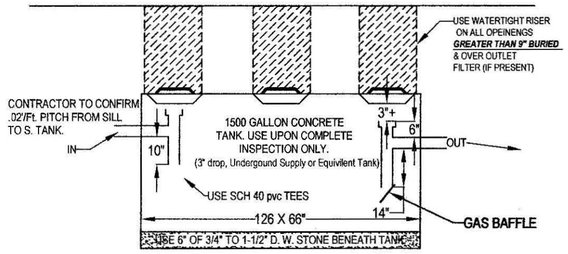


NOT AN ACTUAL SURVEY!
LINES DRAWN FOR SEPTIC LOCATION & DESIGN ONLY.

PLOT PLAN
MAP 21D LOT 32
SCALE: 1"=30'
32,384 Sq. Feet
0.74 Acres

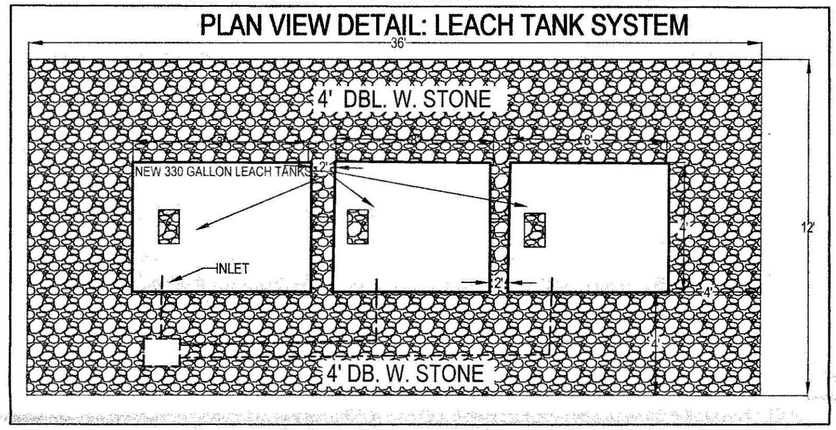
NOTE TO INSTALLER:
ALL UTILITY LOCATIONS ARE APPROXIMATE, HAVE WATER AND OTHER LINES RE-MARKED PRIOR TO START OF WORK

TYPICAL SEPTIC TANK (WATERTIGHT) OR EQUIVELANT.

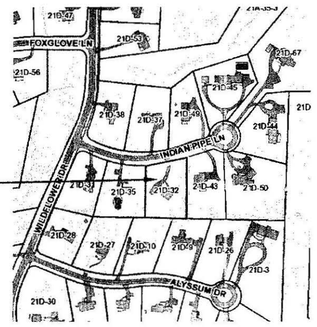


USING EXISTING SEPTIC TANKS:
AN EXISTING 1,000 or 1,500 GALLON SEPTIC TANK CAN BE USED IF UPON INSPECTION BY THE INSTALLING CONTRACTOR, IF THE TANK IS INSPECTED AND PUMPED AND FOUND TO BE STRUCTURALLY SOUND AT THE TIME OF THE SUBGRADE INSPECTION.
IF BAFFLES ARE NOT BUILT IN, THAN SCH 40 PVC TEES MUST BE ADDED.
IF TANK IS NOT SOUND THAN, NOTIFY ENGINEER IMMEDIATELY IN ORDER TO ACCOMODATE A NEW 1,500 GALLON (MIN.) SEPTIC TANK.

PLAN VIEW DETAIL: LEACH TANK SYSTEM



SUBJECT SITE LOCATION



DESIGN NOTES AND CALCULATIONS:

1.) 4 (BEDROOM HOME) = 440 GPD. REQUIRED,

-Use Three 330l gal. 4' X 8' chamber GALLERY:12' WIDE X 36' LONG WITH 30" OF ¾" TO 1½" DBL WASHED STONE BELOW INVERT

- BOTTOM AREA: 3 galleys X (12' W X 36' L) =432 SF.
- SIDE AREA: 3 GALLEYS X (2' HT X36' L)X 2 SIDES =144 SF
- END AREA: 2 ENDS X (2.0' HT X 12' W) X 2 ENDS = 48 SF.
- TOTAL AREA: 6l24 SF X .74 GAL/SF = 462 GPD

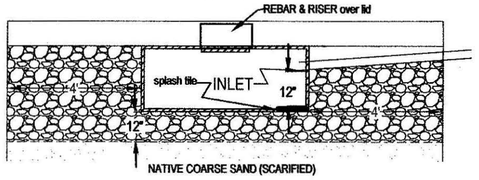
3. GARBAGE DISPOSAL NOT ALLOWED, ***TO BE REMOVED***..
4. NO WELLS WITHIN 150 FEET OF SAS. (Town water)
5. NO WETLANDS WITHIIN 100 FEET OF SAS,
6. USE S. TANK AS NOTED & MAINTAIN 0.02 PITCH FROM SILL TO S. TANK
   - INSTALL & INSPECT ISCH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET),
   NOTE:
   - ALL COMPONENTS (OF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO MAINTAIN :3" CLEARANCE FROM TOP OF TEES TO BOTTOM OF TANK COVERS & BOXES.
7. USE LARGE STYLE (6i OUTLET) D.BOX ONLY.

7A ALL D. BOX OUTLET PIPES LEVEL FOR FIRST 2'. BOXES MUST HAVE 2'+ CONC. WALLS
NOTE:
- D. BOXES WITH MORRE THAN 9" OF COVER SOIL MUST HAVE RISERS TO 6" OF SURFACE.

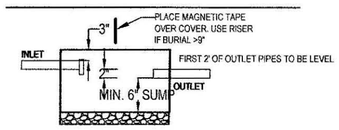
7B ALL PLASTIC RISERS MUST BE SECURED WITH *STAINLESS STEEL* SCREWS.

8. USE APPROVED (.75"-1 1/2") DBL. WASHED STONE UNDER TANK & D. BOX FOR 6".
   -CONFIRM STONE PROPERLY DOUBLE WASHED PRIOR TO PLACEMENT.
9. USE PROPER SCH. 40 I PVC TEES AS SHOWN.
10. PRE & POST CONTOURS NOTED AS NECESSARY, RESERVE AS NOTED *(not required for repairs)*.
11. SLOPE CALCS (SEE CONTOURS). SUBGRADE INSP. REQ'D.
13. USE GALLEYS DUE TO TOPOGRAPHY AND SPACE OF LOT WITH RESPECT TO LOCATION AND ELEVATION OF RESIDENCE & PIPING UNDER SLAB (310 CMR 15.240)
14. USE 2% MIN. SLOPE (OVER SAS
    - CLEAR TOP AND SUJB TO 36" MIN. AS NEEDED (INSPECTION REQUIRED).
    - CLEAR PAST BASE (OF B (MIN. 36") & SCARIFY UNDER TRENCH PRIOR TO TITLE V SAND /STONE PLACEMENT.
    - EXCAVATE EXISTING LOAM, SUB AND ANY EXISTING DEBRIS, DIRTY FILL OR PRIOR SYSTEM IF PRESENT.
15. SOIL EVALUATION BY A. WEISS, RS. (E. SMITH, BOH AGENT).
    - DEPTH OF PERC. 50"
    - PERC RATE = <2 MIIN / IN,
    - CLASS 1 C. Sand, SCOIL RATING
16. NO TREES WITHIN 10) FT. OF NEW LEACH AREA.
17. ENGINEER & TOWN TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL.
18. BM=100.00 @ (PATIO SLAB, BOT. SIDING as noted), CONFIRM PROPER PIPE SLOPES
    - USE/INSPECT SCH. 40 PIPE FOR PIPE FROM HOUSE TO NEW OR EXISTING TANK
19. GRADE MULCH AND SEED OVER SAS AS NOTED.
20. INSTALLATION IN LOW GROUNDWATER SEASON RECOMMENDED.
21. USE OBSERVATION PORT NEAR CENTER OF STONE BED HAVE 4" PERFORATED, PVC INSPECTION PORTALS TO BOTTOM OF STOINE BED, WITH RISER TO 3" OF SURFACE & THREADED CAP & MARK WITH RE-BAR..

SIDE VIEW: LEACH TANK SYSTEM



TYPICAL D.BOX (WATERTIGHT) - OPTIONAL

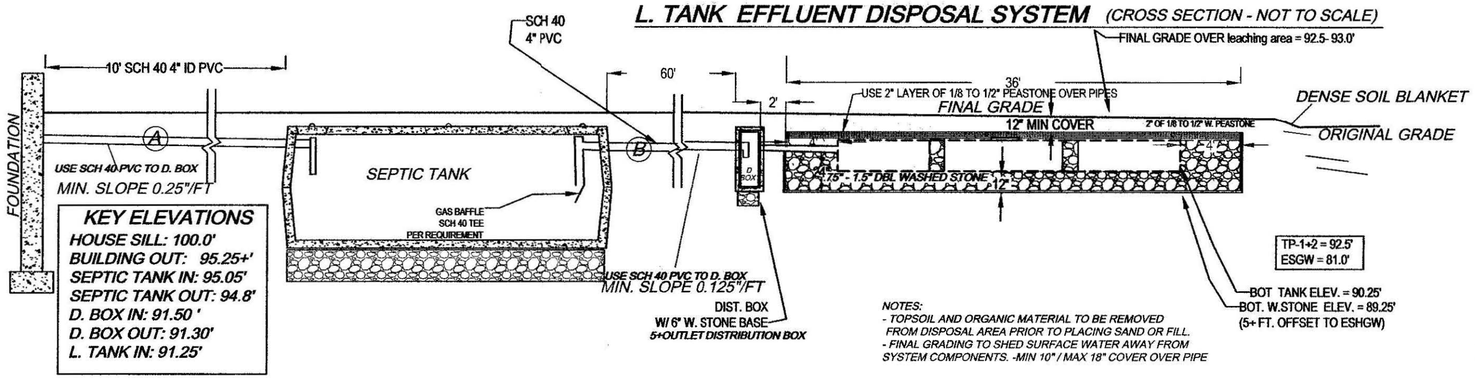


- PLACE ON STABLE 6" BASE OF 3/4" TO 1-1/2" CRUSHED STONE
- USE CONCRETE BOX WITH 2" MINIMUM WALL THICKNESS.
- FILL WITH WATER FOR FINAL INSPECTION.
- USE LARGE STYLE D.BOX (5 OUTLET MINIMUM)

GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.

1.) HAVE TANK PUMPED EVERY 2 YEARS.
2.) MAINTAIN AREA OVER SEPTIC SYSTEM AS GRASSY OR SIMILAR GROUND COVER.
3.) DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
4.) USE ONLY LIQUID DETERGENTS & LOW FLOW WASHERS.
5.) WIPE ALL OIL AND GREASE FROM COOKWARE AND DISPOSE IN TRASH NOT SEPTIC.
6) All Toilets and Faucets must be confirmed to not be leaking, because one leaking fixture can fail a septic system in ONE DAY

L. TANK EFFLUENT DISPOSAL SYSTEM *(CROSS SECTION - NOT TO SCALE)*



KEY ELEVATIONS
HOUSE SILL: 100.0'
BUILDING OUT: 95.25+'
SEPTIC TANK IN: 95.05'
SEPTIC TANK OUT: 94.8'
D. BOX IN: 91.50 '
D. BOX OUT: 91.30'
L. TANK IN: 91.25'

NOTES:
- *TOPSOIL AND ORGANIC MATERIAL TO BE REMOVED FROM DISPOSAL AREA PRIOR TO PLACING SAND OR FILL.*
- *FINAL GRADING TO SHED SURFACE WATER AWAY FROM SYSTEM COMPONENTS. -MIN 10" / MAX 18" COVER OVER PIPE*

TEST PIT LOG:

SOIL EVALUATOR: A. WEISS					DATE OF EVALUATION: 06.11.2013 AND 1988				
TP 1					TP 1-88 ELEV:				
DEPTH:	HORIZ:	TEXTURE:	COLOR (MUNSELL):	MATERIAL:	DEPTH:	HORIZ:	TEXTURE:	COLOR (MUNSELL):	MATERIAL:
0-12"	A	FSL	10 YR 3.3	FRIABLE	0-8"	A	FSL		TOPSOIL
12-35"	Bw	LS	10 YR 5.6	FRIABLE	8-24"	Bw	LS		SUBSOIL
35-138"+	C1	CS	10 YR 4.4	COARSE SAND & GRAV.	24-120"	C1	S & G		COARSE SAND & GRAV.
				10% BOULDERS AND COBBLES					
OXIDES:			138"+	not obs. (assumed).	OXIDES:			not	
EHWT:			138"+		EHWT:			120"+	
STANDING H2O:			not		STANDING H2O:			not	
WEEPING:			not		WEEPING:			not	
BEDROCK:			138"+		BEDROCK:			120"+	

ATTENTION INSTALLER!!
CALL DIG SAFE BEFORE YOU DIG!! MASSACHUSETTS STATE LAW CHAPTER 82 SECTIONS 40 - 40E REQUIRE THAT PREMARKING OF GAS, ELECTRIC, WATER, TELEPHONE AND CABLE T.V. UTILITY LINES BE MADE A *MINIMUM* OF 72 HOURS PRIOR TO GROUND BREAK FOR ANY EXCAVATION

NOTE: *INSTALLER MUST CONTACT ENGINEER/BD OF HEALTH 48 HOURS PRIOR TO SUBGRADE INSPECTION. INSTALLER MUST HAVE ALL BREAK OUT FILL ON SITE AND IN PLACE PRIOR TO SIGN OFF BY ENGINEER AT TIME OF FINAL INSPECTION OR APPROVAL WILL NOT BE GIVEN TO BACKFILL.*

0' 30' 60' 90'

COMMONWEALTH OF MASSACHUSETTS — ALAN E. WEISS — REG. SANITARIAN — REGISTERED SANITARIAN

SEPTIC SYSTEM DESIGN PLAN FOR MR DONALD DAVID
11 INDIAN PIPE LANE
AMHERST, MA

Cold Spring Environmental Consultants Inc.
350 Old Enfield Road
Belchertown, MA. 01007
PHONE: (413) 323-5957
FAX: (413) 323-4916
e-Mail: AEWEISS@charter.net

DATE:	DRAWN BY:	REVISED:
07.05.2013	ALAN WEISS	
SCALE: 1"=30'		DRAWING NUMBER: 113-4121-0611