#45

RECEIVED AUG 0 4 1999

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONE WINTER STREET, BOSTON MA 02108 (617) 292-5500

ARGEO PAUL CELLUCCI
Governor

TRUDY COXE
Secretary

DAVID B. STRUHS
Commissioner

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION

Property Address: 45 Elf Hill Rd, Amherst
Name of Owner BLAKE WEIRICH
Address of Owner: 45 ELF HILL RD AMHERST, MA 01002
Date of Inspection: 8/3/99
Name of Inspector: (Please Print) Alan E. Weiss, R.S.
I am a DEP approved system inspector pursuant to Section 15.340 of Title 5 (310 CMR 15.000)
Company Name: Cold Spring Environmental, Inc.
Mailing Address: 350 Old Enfield Rd., Belchertown, MA 01007
Telephone Number: 413-323-5957

CERTIFICATION STATEMENT

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 inspection. The inspection was performed based on my training and experience in the proper function and maintenance of on-site sewage disposal systems. The system:

- ✓ Passes
- ___ Conditionally Passes
- ___ Needs Further Evaluation By the Local Approving Authority
- ___ Fails

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

Inspector's Signature: Ale **Date:** 8/3/99

The System Inspector shall submit a copy of this inspection report to the Approving Authority (Board of Health or DEP) within thirty (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 Department of Environmental Protection. The original should be sent to the system owner and copies sent to the buyer, if applicable, and the approving authority.

NOTES AND COMMENTS

Good Condition, No Signs of Failure.

revised 9/2/98

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION (continued)

Property Address: 45 EIGHTH RD.
Owner: WEIRICH
Date of Inspection: 8/3/99

INSPECTION SUMMARY: Check *A, B, C, or D*:

A. SYSTEM PASSES:

✓ I have not found any information which indicates that any of the failure conditions described in 310 CMR 15.303 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.

Indicate yes, no, or not determined (**Y**, **N**, or **ND**). Describe basis of determination in all instances. If "not determined", explain why not.

__ The septic tank is metal, unless the owner or operator has provided the system inspector with a copy of a Certificate of Compliance (attached) indicating that the tank was installed within twenty (20) years prior to the date of the inspection; or the septic tank, whether or not metal, is cracked, structurally unsound, shows substantial infiltration or exfiltration, or tank failure is imminent. The system will pass inspection if the existing septic tank is replaced with a complying septic tank as approved by the Board of Health.

__ Sewage backup or breakout or high static water level observed in the distribution box is due to broken or obstructed pipe(s) or due to a broken, settled or uneven distribution box. The system will pass inspection if (with approval of the Board of Health).

- _____ broken pipe(s) are replaced
- _____ obstruction is removed
- _____ distribution box is levelled or replaced

__ The system required pumping more than four 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
- _____ obstruction is removed

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION (continued)

Property Address: 45 Elf Hill
Owner: Weirich
Date of Inspection: 8/3/99

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 the public health, safety and 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 THE PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT:**

__ Cesspool or privy is within 50 feet of surface water
__ Cesspool or privy is within 50 feet of a bordering vegetated wetland or a salt marsh.

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 AND SAFETY AND THE 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 soil absorption system and the SAS is within a Zone I of a public water supply well.
__ The system has a septic tank and soil absorption system and the SAS is within 50 feet of a private water supply well.
__ The system has a septic tank and soil absorption system and the SAS is less than 100 feet but 50 feet or more from a private water supply well, unless a well water analysis for coliform bacteria and volatile organic compounds indicates that the well is free from pollution from that facility and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm. Method used to determine distance _____ **(approximation not valid).**

3) OTHER

__ _____
_____
_____

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION (continued)

Property Address: 45 Elf Hill Rd
Owner: Weirich
Date of Inspection: 8/3/99

D. SYSTEM FAILS:

You must indicate either "Yes" or "No" to each of the following:

_____ I have determined that one or more of the following failure conditions exist as described in 310 CMR 15.303. The basis for this determination is identified below. The Board of Health should be contacted to determine what will be necessary to correct the failure.

Yes	No	
___	___	Backup of sewage into facility or system component due to an 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 1/2 day flow.
___	___	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 Soil Absorption System, cesspool or privy is below the high groundwater elevation.
___	___	Any portion of a 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 I 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. If the well has been analyzed to be acceptable, attach copy of well water analysis for coliform bacteria, volatile organic compounds, ammonia nitrogen and nitrate nitrogen.

E. LARGE SYSTEM FAILS:

You must indicate either "Yes" or "No" to each of the following:

The following criteria apply to large systems in addition to the criteria above:

_____ The system serves a facility with a design flow of 10,000 gpd or greater (Large System) and the system is a significant threat to public health and safety and the environment because one or more of the following conditions exist:

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)

The owner or operator of any such system shall upgrade the system in accordance with 310 CMR 15.304(2). Please consult the local regional office of the Department for further information.

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART B
CHECKLIST

Property Address: 45 Elf Hill
Owner: Weirich
Date of Inspection: 8/3/99

Check if the following have been done: You must indicate either "Yes" or "No" as to each of the following:

Yes	No	
✓		Pumping information was provided by the owner, occupant, or Board of Health.
✓		None of the system components ~~have been~~ pumped for at least two weeks and the system has ~~been receiving normal~~ flow rates during that period. Large volumes of water have not been introduced into the system recently or as part of this inspection.
✓		As built plans have been obtained and examined. Note if they are not available with N/A.
✓		The facility or dwelling was inspected for signs of sewage back-up.
✓		The system does not receive non-sanitary or industrial waste flow.
✓		The site was inspected for signs of breakout.
✓		All system components, excluding the Soil Absorption System, have been located on the site.
✓		The septic tank manholes were uncovered, opened, and the interior of the septic tank was inspected for condition of baffles or tees, material of construction, dimensions, depth of liquid, depth of sludge, depth of scum.
		The size and location of the Soil Absorption System on the site has been determined based on:
✓		Existing information. For example, Plan at B.O.H.
✓		Determined in the field (if any of the failure criteria related to Part C is at issue, approximation of distance is unacceptable) [15.302(3)(b)]
✓		The facility owner (and ~~occupants, if different from owner~~) were provided with information on ~~the proper maintenance of~~ SubSurface Disposal Systems.

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION

Property Address: 45 Elf Hill
Owner: Weirich
Date of Inspection: 8/31/99

FLOW CONDITIONS

RESIDENTIAL:
Design flow: 330 g.p.d./bedroom.
Number of bedrooms (design): 3 Number of bedrooms (actual):___
Total DESIGN flow 330
Number of current residents: 2
Garbage grinder (yes or no): N
Laundry (separate system) (yes or no): Y; If yes, separate inspection required
Laundry system inspected (yes or no)
Seasonal use (yes or no): N
Water meter readings, if available (last two year's usage (gpd): N/A
Sump Pump (yes or no): N
Last date of occupancy: Current

COMMERCIAL/INDUSTRIAL:
Type of establishment: N/A
Design flow: _____ gpd (Based on 15.203)
Basis of design flow _____
Grease trap present: (yes or no)___
Industrial Waste Holding Tank present: (yes or no)___
Non-sanitary waste discharged to the Title 5 system: (yes or no)___
Water meter readings, if available: _____
Last date of occupancy: _____

OTHER: (Describe) _____
Last date of occupancy: _____

GENERAL INFORMATION

PUMPING RECORDS and source of information: 4yrs. ago
System pumped as part of inspection: (yes or no)___
If yes, volume pumped: 1000 gallons
Reason for pumping: Time, owner request

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)
_____ I/A Technology etc. Attach copy of up to date operation and maintenance contract
_____ Tight Tank _____Copy of DEP Approval

Other _____

APPROXIMATE AGE of all components, date installed (if known) and source of information: 8 yrs

Sewage odors detected when arriving at the site: (yes or no) N

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 45 Elf Hill Rd
Owner: Weirich
Date of Inspection: 8/3/99

BUILDING SEWER:
(Locate on site plan)

Depth below grade: 12"
Material of construction: __ cast iron ✓ 40 PVC __ other (explain)

Distance from private water supply well or suction line _____
Diameter _____
Comments: (condition of joints, venting, evidence of ~~leakage,~~ etc.)

SEPTIC TANK: ✓
(locate on site plan)

Depth below grade: 12" ✓
Material of construction: __concrete __metal __Fiberglass __Polyethylene __other(explain)

If tank is metal, list age ___ Is age confirmed by Certificate of Compliance ___ (Yes/No)

Dimensions: 8.5 x 4.5 x 4.5
Sludge depth: 4"
Distance from top of sludge to bottom of outlet tee or baffle: 46"
Scum thickness: 1"
Distance from top of scum to top of outlet tee or baffle: 6"
Distance from bottom of scum to bottom of outlet tee or baffle: 10"
How dimensions were determined: Measured

Comments:
(recommendation for pumping, condition of inlet and outlet tees or baffles, depth of liquid level in relation to outlet invert, structural integrity, evidence of leakage, etc.) Good Shape

GREASE TRAP: N
(locate on site plan)

Depth below grade:____
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: _____

Comments:
(recommendation for pumping, condition of inlet and outlet tees or baffles, depth of liquid level in relation to outlet invert, structural integrity, evidence of leakage, etc.) _____

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 45 ELF HILL
Owner: WEINER
Date of Inspection: 8/3/99

TIGHT OR HOLDING TANK: N/A (Tank must be pumped prior to, or 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/day
Alarm present_____
Alarm level:_____ Alarm in working order: Yes __ No__
Date of previous pumping: _____
Comments:
(condition of inlet tee, condition of alarm and float switches, etc.)

DISTRIBUTION BOX: Y
(locate on site plan)

Depth of liquid level above outlet invert: ± at INV.

Comments:
(note if level and distribution is equal, evidence of solids carryover, evidence of leakage into or out of box, etc.)
Good Flow, Good condition

PUMP CHAMBER: N
(locate on site plan)

Pumps in working order: (Yes or No)_____
Alarms in working order (Yes or No)_____
Comments:
(note condition of pump chamber, condition of pumps and appurtenances, etc.) _____

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 45 Elf Hill
Owner: Weinch
Date of Inspection: 8/3/99

SOIL ABSORPTION SYSTEM (SAS): ✓
(locate on site plan, if possible; excavation not required, location may be approximated by non-intrusive methods)

If not located, explain:
— 10'x48' L. Field (1991)

Type:
leaching pits, number:___
leaching chambers, number:___
leaching galleries, number:___
leaching trenches, number, length:___
leaching fields, number, dimensions: (1) (10'x48')
overflow cesspool, number:___
Alternative system: ___
Name of Technology: ___

Comments:
(note condition of soil, signs of hydraulic failure, level of ponding, damp soil, condition of vegetation, etc.)
No signs of Failure.

CESSPOOLS: N
(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 (cesspool must be pumped as part of inspection)___

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

PRIVY: N
(locate on site plan)

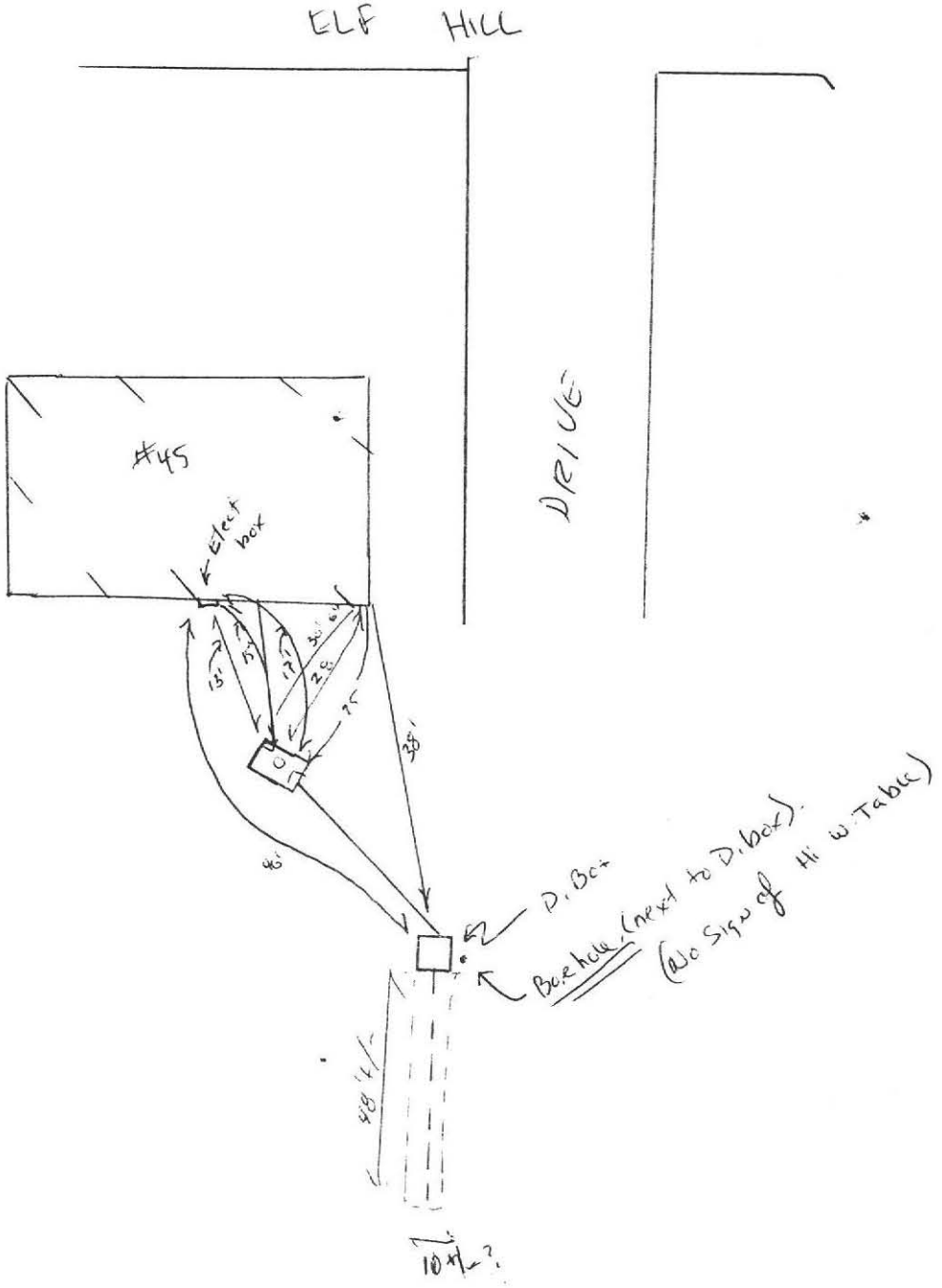
Materials of construction:___ Dimensions:___
Depth of solids:___
Comments:
(note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.)

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 45 Elf Hill
Owner: Weirich
Date of Inspection: 8/3/99

SKETCH OF SEWAGE DISPOSAL SYSTEM:

include ties to at least two permanent reference landmarks or benchmarks
locate all wells within 100' (Locate where public water supply comes into house)



SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 45 Elf Hill
Owner: Weinch
Date of Inspection: 8/3/99

NRCS Report name _____
Soil Type _____
Typical depth to groundwater _____

USGS Date website visited
Observation Wells checked
Groundwater depth: Shallow _____ Moderate _____ Deep _____

SITE EXAM
- ✓ Slope
- Surface water
- ✓ Check Cellar
- Shallow wells

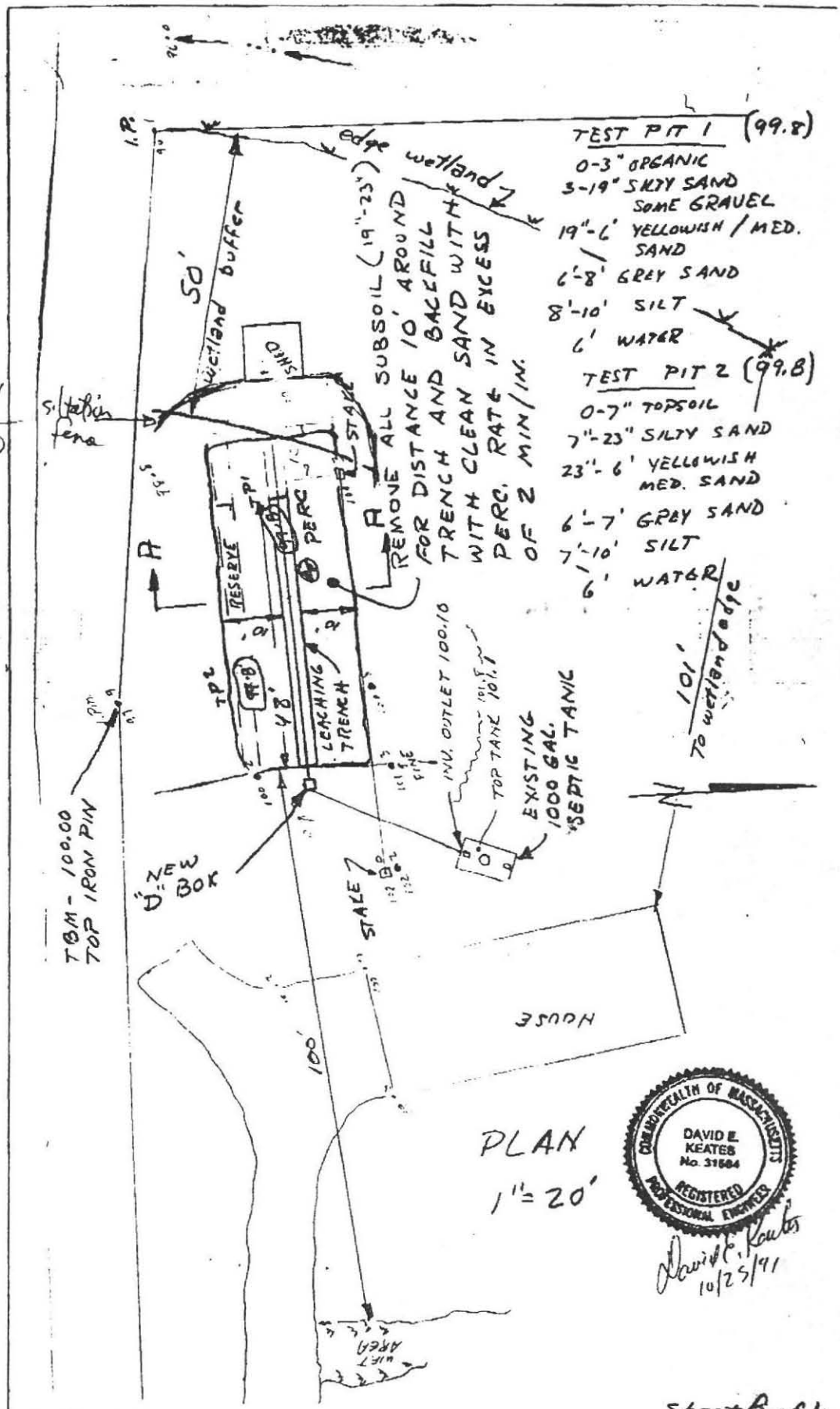
Estimated Depth to Groundwater 4-5' Feet

Please indicate all the methods used to determine High Groundwater Elevation:

- ✓ Obtained from Design Plans on record (1991 per + plan)
- ____ Observed Site (Abutting property, observation hole, basement sump etc.)
- ✓ Determined from local conditions
- ✓ Checked with local Board of health
- ____ Checked FEMA Maps
- ____ Checked pumping records
- ____ Checked local excavators, installers
- ____ Used USGS Data

Describe how you established the High Groundwater Elevation. (**Must** be completed)

TOPO + Veg. + Plans / records from 1991.



Sheet 8 of 11

PROJECT Sewage Disposal System
RUSS JANIS
45 ELF HILL ROAD
AMHERST, MA.

DAVID E. KEATES, P.E.
CONSULTING CIVIL ENGINEER
102 RUSSELL STREET
SUNDERLAND, MASSACHUSETTS 01375
Tel. 413-665-7670