780 Boy Rd
plan 1007

Plan: 10-07 Designed by: Alan Wiess.

CHECK LIST FOR SEPTIC PLANS

- [x] Application page attached to plan
- [x] PE or RS stamp, date, signature
- [x] Variances to property line setback distances must have Surveyor Stamp 15.220 (3)
- [x] Legal boundaries noted
- [ ] Easements noted N/A
- [x] Dwellings and buildings existing or proposed noted
- [x] Location of driveway or parking areas, other impervious areas
- [ ] Location and dimensions of reserve area (new) CMR 15.248(1), 15.104(4) Repair
- [x] System design calculations
- [ ] Garbage grinder Y or N (circled: N)
- [x] Benchmark not disturbed during construction, within 75 feet of facility CMR15.220 (4)(q)
- [x] North arrow CMR 15.200 (4) (g)
- [x] Contours
- [x] Deep hole location and data
- [x] Perc hole location and data
- [x] Elevations
- [x] Names of approving authority and soil evaluator CMR 15.211 p. 49
- [x] Location of every water supply, public and private CMR 15.220(k):
  - Within 400 feet of system in case of surface water and gravel packed public water supply
  - Within 250 feet of system in case of tubular public water supply
  - Within 150 feet of private supply wells 100' septic sys. ; 50' tank
- [ ] **Well statement if applicable** N/A
- [ ] Location of any surface waters, rivers, vegetated wetlands
- [x] Location of water lines and other subsurface utilities
- [x] Observed and adjusted ground water elevation in the vicinity of system 15.220 (4)(n)
- [x] Profile of system
- [x] Locus plan to show location of facility, including nearest street
- [x] Materials of construction and specs for system
- [ ] Gas Baffle 15.227.4
- [x] Pipe in center line of tank 310 CMR 15.227, 15.06(8)
- [x] Double washed stone
- [x] Schedule 40 PVC for trafficked areas, house to tank
- [x] Distances noted from house to tank, etc.
- [ ] If dosing is proposed, design and specs of dosing system (NA)
- [ ] When alternative technology is required, complete plan and specs, including hydraulic profile (NA)
- [x] Trenches preferred over beds CMR 15.240 (6)
- [ ] Buoyancy calculations for tanks or components partly below H20 table 15.221(8) p. 56 (NA)
- [ ] 3 to 1 slope outside of mound, toe ending 5 feet from property line
- [ ] Local upgrade requests on the plan (NA)
- [ ] Local upgrade forms attached to application NA
- [ ] Note on plan listing all variances sought in conjunction with the plan NA

NOTES: Plan approved [signature]

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION

RECEIVED 8/23/05

TITLE V
OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM FORM
PART A
CERTIFICATION

Property Address: 780 Bay Road
Amherst MA
Owner's Name: Michaeline Davidson
Owner's Address: same
Date of Inspection: 08/19/2005

Name of Inspector: (please print) NathanToretti
Company Name: CLEAN SEPTICS
Mailing Address: P.O. BOX 394
LUDLOW, MA
Telephone Number: 583-2138

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 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:

X Passes
Conditionally Passes
Needs Further Evaluation by the Local Approving Authority
Fails

Inspector's Signature: Nathan Toretta **Date: 08/19/2005**

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.

Notes and Comments:

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.

OFFICIAL INSPECTION FORM-NOT FOR VOLUNTARY ASSESSEMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION (continued)

Property Address: 780 Bay Road
Amherst MA
Owner's Name: Michaeline Davidson
Owner's Address: same
Date of Inspection: 08/19/2005

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

A. System Passes:

__X_ 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: Pump tank every year. Recommend outlet filter & bacteria/additives. Remove garbage disposal.

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.

Answer yes, no or not determined (Y,N,ND) in the ____ 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.

ND explain:

_____ 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
____ obstruction is removed
____ distribution box is leveled or replaced

ND explain:

_____ 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
____ obstruction is removed

ND explain:

OFFICIAL INSPECTION FORM - NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION (continued)

Property Address: 780 Bay Road
Amherst MA
Owner's Name: Michaeline Davidson
Owner's Address: same
Date of Inspection: 08/19/2005

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

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 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, provided that no other failure criteria are triggered. A copy of the analysis must be attached to this form.

3. **Other:**

_____
_____
_____

OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION (continued)

Property Address: 780 Bay Road
Amherst MA
Owner's Name: Michaeline Davidson
Owner's Address: same
Date of Inspection: 08/19/2005

D. System Failure Criteria applicable to all systems:
You **must** indicate "yes" or "no" to each of the following for **all** inspections:

Yes	No	
__	X	Backup of sewage into facility or system component due to overloaded or clogged SAS or cesspool
__	X	Discharge or ponding of effluent to the surface of the ground or surface waters due to an overloaded or clogged S.A.S. or cesspool.
__	X	Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS or cesspool
__	X	Liquid depth in cesspool is less than 6" below invert or available volume is less than ½ day flow
__	X	Required pumping more than 4 times in the last year **NOT** due to clogged or obstructed pipe(s). Number of times pumped ____.
__	X	Any portion of the SAS, cesspool or privy is below high ground water elevation.
__	X	Any portion of cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply.
__	X	Any portion of a cesspool or privy is within a Zone 1 of a public well.
__	X	Any portion of a cesspool or privy is within 50 feet of a private water supply well.
__	X	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 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, provided that no other failure criteria are triggered. A copy of the analysis must be attached to this form.]**

NO (Yes/No) **The system fails.** 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.
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)

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.

OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART B
CHECKLIST

Property Address: 780 Bay Road
Amherst MA
Owner's Name: Michaeline Davidson
Owner's Address: same
Date of Inspection: 08/19/2005

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

Yes	No	
X		Pumping information was provided by the owner, occupant, or Board of Health
_	X _	Were any of the system components pumped out in the previous two weeks ?
_X_	___	Has the system received normal flows in the previous two week period ?
___	__X_	Have large volumes of water been introduced to the system recently or as part of this inspection ?
	X	Were as built plans of the system obtained and examined? (If they were not available note as N/A)
_X__	___	Was the facility or dwelling inspected for signs of sewage back up ?
_X__	___	Was the site inspected for signs of break out ?
_X__	___	Were all system components, excluding the SAS, located on site ?
_X__	___	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 ?
_X__	___	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:

Yes	No	
	X	Existing information. For example, a plan at the Board of Health.
X		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(3)(b)]

OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION

Property Address: 780 Bay Road
Amherst MA
Owner's Name: Michaeline Davidson
Owner's Address: same
Date of Inspection: 08/19/2005

FLOW CONDITIONS

RESIDENTIAL
Number of bedrooms (design): **_3** Number of bedrooms (actual): **_3**
DESIGN flow based on 310 CMR 15.203 (for example: 110 gpd x # of bedrooms): **_330 GPD**
Number of current residents: **1**
Does residence have a garbage grinder (yes or no): **YES**
Is laundry on a separate sewage system (yes or no): **NO** [if **yes** separate inspection required]
Laundry system inspected (yes or no): _
Seasonal use (yes or no): **NO**
Water meter readings, if available (last 2 years usage (gpd)): **Town water**
Sump pump (yes or no): **NO**
Last date of occupancy: **Present**

COMMERCIAL/INDUSTRIAL
Type of establishment:
Design flow (based on 310 CMR 15.203): _____gpd
Basis of design flow (seats/persons/sqft,etc.): _
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/use: _____

OTHER (describe): _____

GENERAL INFORMATION

Pumping Records
Source of information: **Pumped Sept 2004 per home owner.**
Was system pumped as part of the inspection (yes or no): **NO**
If yes, volume pumped: _____gallons -- How was quantity pumped determined?
Reason for pumping:

TYPE OF SYSTEM
_X 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)
___ Tight tank ___ Attach a copy of the DEP approval

_X Other (describe): **Leach pit**

Approximate age of all components, date installed (if known) and source of information:
N/A
Were sewage odors detected when arriving at the site (yes or no): **NO**

OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 780 Bay Road
Amherst MA
Owner's Name: Michaeline Davidson
Owner's Address: same
Date of Inspection: 08/19/2005

BUILDING SEWER (locate on site plan)
Depth below grade: _
Materials of construction: cast iron **XX** 40 PVC ___other (explain):
Distance from private water supply well or suction line: **N/A**
Comments (on condition of joints, venting, evidence of leakage, etc.):
Joints and venting appear okay. No leaks.

SEPTIC TANK: X (locate on site plan)

Depth below grade: **2'**
Material of construction: _X_concrete ___metal ___fiberglass ___polyethylene _other (explain)_____
If tank is metal list age: __ Is age confirmed by a Certificate of Compliance (yes or no): ___ (attach a copy of certificate)
Dimensions: **L 10'6" x W 5'x D 5'**
Sludge depth: **None**
Distance from top of sludge to bottom of outlet tee or baffle:
Scum thickness: **None**
Distance from top of scum to top of outlet tee or baffle:
Distance from bottom of scum to bottom of outlet tee or baffle:
How were dimensions determined: **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.):
Pump tank every year. Everything appears to be in good working condition. No leaks.

GREASE TRAP: __(locate on site plan)

Depth below grade:
Material of construction: ___concrete ___metal ___fiberglass ___polyethylene ___other (explain):_____
Dimensions: _ gal required tank capacity_____
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 (on pumping recommendations, inlet and outlet tee or baffle condition, structural integrity, liquid levels as related to outlet invert, evidence of leakage, etc.): _
_____
_____

OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 780 Bay Road
Amherst MA
Owner's Name: Michaeline Davidson
Owner's Address: same
Date of Inspection: 08/19/2005

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/day
Alarm present (yes or no): _____
Alarm level: _____ Alarm in working order (yes or no): ____
Date of last pumping: _____
Comments (condition of alarm and float switches, etc.):
_____
_____

DISTRIBUTION BOX: None (if present must be opened)(locate on site plan)
Depth of liquid level above outlet invert:
Comments (note if box is level and distribution to outlets equal, any evidence of solids carryover, any evidence of leakage into or out of box, etc.):

PUMP CHAMBER : ___ (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.):

OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 780 Bay Road
Amherst MA
Owner's Name: Michaeline Davidson
Owner's Address: same
Date of Inspection: 08/19/2005

SOIL ABSORPTION SYSTEM (SAS): ____ (locate on site plan, excavation not required)

If SAS not located explain why:
_ **X** leaching pits, number: **1 leach pit approximately 2'4" deep**
____ 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.):
No signs of hydraulic failure. Soil and vegetation appear okay.

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 or no): __
Comments (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.):
_____
_____

PRIVY: ____ (locate on site plan)

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

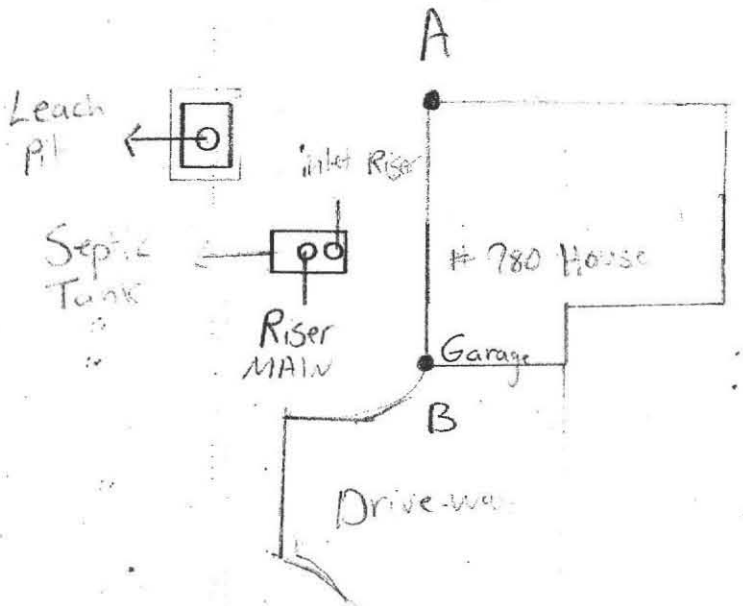
OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 780 Bay Road
Amherst MA
Owner's Name: Michaeline Davidson
Owner's Address: same
Date of Inspection: 08/19/2005

SKETCH OF SEWAGE DISPOSAL SYSTEM
Provide a sketch 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.
Drawing not to scale.

Septic Tank MAIN Riser
A 34'
B 26'6"

Leach Pit
A 28'
B 48'6"



OFFICIAL INSPECTION FORM – NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 780 Bay Road
Amherst MA
Owner's Name: Michaeline Davidson
Owner's Address: same
Date of Inspection: 08/19/2005

SITE EXAM
Slope
Surface water
Check cellar **XXX**
Shallow wells

Estimated depth to ground water: **None @ 6'.**

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

_____Obtained from system design plans on record - If checked, date of design plan reviewed:
_____Observed site (abutting property/observation hole within 150 feet of SAS)
____ Checked with local Board of Health-explain: ____
__ Checked with local excavators, installers- (attach documentation)
____ Accessed USGS database-explain: _____

You must describe how you established the high ground water elevation:
Checked cellar.

DAVID
FYI eyes

#780

RECEIVED JUN 23 1997

ENVIRONMENTAL FIELD SERVICES, INC.
P.O. BOX 518
LEEDS, MA 01053
1-413-586-7200

June 17, 1997

Gorden Bostock
780 Bay Road
Amherst, MA 01002

re: Septic System Inspection at 780 Bay Road, Amherst, MA

Dear Gorden:

Enclosed please find a copy of my report for the referenced inspection. I have forwarded a copy of the report to the Amherst Board of Health per the requirements of 310 CMR 15.300, and to Betsy Eagen per your request.

Based on the results of my inspection in accordance with 310 CMR 15.300, I have concluded that the system does not fail to protect the environment and/or the public health.

Please call if you have any questions, and thank you for this opportunity to be of service.

Sincerely yours,

Michael J. Lavigne
Environmental Engineer
Certified System Inspector

Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Department of Environmental Protection
Western Regional Office

William F. Weld
Governor
Trudy Coxe
Secretary, EOEA
David B. Struhs
Commissioner

ENVIRONMENTAL FIELD SERVICES, INC.
P.O. BOX 518 LEEDS, MA 01053
1-413-586-7200

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION

Property Address: 780 Bay Rd. Amherst
Date of Inspection: 5-29-97
Name of Inspector: Mike LAVigne
Company Name, Address and Telephone Number: (above)

Address of Owner: (If different) Gorden Bostock
780 Bay Rd.
Amherst, MA 01002

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

Inspector's Signature: [signature] , **Date:** 5/29/97

The System Inspector shall submit a copy of this inspection report to the Approving Authority 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.

INSPECTION SUMMARY:

Check A, B, C, or D:

A) SYSTEM PASSES:

✓ I have not found any information which indicates that the system violates any of the failure criteria as defined in 310 CMR 15.303. Any failure criteria not evaluated are indicated below.

B) SYSTEM CONDITIONALLY PASSES:

____ One or more system components need to be replaced or repaired. The system, upon completion of the replacement or repair, passes inspection.

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, 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 conforming 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

436 Dwight Street • Springfield, Massachusetts 01103 • FAX • Telephone

ENVIRONMENTAL FIELD SERVICES, INC.
P.O. BOX 518 LEEDS, MA 01053
1-413-586-7200

SEPTIC SYSTEM INSPECTION

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

Property Address:
Owner:
Date of Inspection:

B] SYSTEM CONDITIONALLY PASSES (continued)

___ 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

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 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 a 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 APPROPRIATE) DETERMINES THAT THE SYSTEM IS FUNCTIONING IN A MANNER THAT PROTECT THE PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT:

___ The system has a septic tank and soil absorption system and is within 100 feet to a surface water supply or tributary to a surface water supply.
___ The system has a septic tank and soil absorption system and is within a Zone I of a public water supply well.
___ The system has a septic tank and soil absorption system and is within 50 feet of a private water supply well.
___ The system has a septic tank and soil absorption system and 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.

D] SYSTEM FAILS:

_____ I have determined that the system violates one or more of the following failure criteria as defined 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.

___ 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.

ENVIRONMENTAL FIELD SERVICES, INC.
P.O. BOX 518 LEEDS, MA 01053
1-413-586-7200

SEPTIC SYSTEM INSPECTION

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

Property Address:
Owner:
Date of Inspection:

D) SYSTEM FAILS (continued):

____ 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:

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

_____ The design flow of system is 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:

____ 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 bring the system and facility into full compliance with the groundwater treatment program requirements of 314 CMR 5.00 and 6.00. Please consult the local regional office of the Department for further information.

PART B
CHECKLIST

Check if the following have been done:

✓ Pumping information was requested of the owner, occupant, and 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 or approximated by non-intrusive methods.

✓ The facility owner (and occupants, if different from owner) were provided with information on the proper maintenance of Sub-Surface Disposal System.

ENVIRONMENTAL FIELD SERVICES, INC.
P.O. BOX 518 LEEDS, MA 01053
1-413-586-7200

SEPTIC SYSTEM INSPECTION

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION

Property Address:
Owner:
Date of Inspection:

FLOW CONDITIONS

RESIDENTIAL:
Design flow: 660 gallons
Number of bedrooms: 3.
Number of current residents: 1
Garbage grinder (yes or no): yes
Laundry connected to system (yes or no): yes
Seasonal use (yes or no): no
Water meter readings, if available: _____

Last date of occupancy: current

COMMERCIAL/INDUSTRIAL:
Type of establishment: _____
Design flow: _____ gallons/day
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: Last fall, every few years previously, per owner.

System pumped as part of inspection: (yes or no) no
If yes, volume pumped: _____ gallons
Reason for pumping: _____

TYPE OF SYSTEM

✓ Septic tank/~~distribution box~~/soil absorption system
_____ Single cesspool
_____ Overflow cesspool
_____ Privy
_____ Shared system (yes or no) (if yes, attach previous inspection records, if any)
_____ Other (explain) _____

APPROXIMATE AGE of all components, date installed (if known) and source of information: 1984, per original design and owner.

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

ENVIRONMENTAL FIELD SERVICES, INC.
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1-413-586-7200

SEPTIC SYSTEM INSPECTION

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

Property Address:
Owner:
Date of Inspection:

SEPTIC TANK: ✓
(locate on site plan)

Depth below grade: 18"
Material of construction: ✓ concrete ___ metal ___ FRP ___ other(explain)

Dimensions: 126" x 68" x 64", 1500 gal.
Sludge depth: None
Distance from top of sludge to bottom of outlet tee or baffle: N/A
Scum thickness: None
Distance from top of scum to top of outlet tee or baffle: N/A
Distance from bottom of scum to bottom of outlet tee or baffle: N/A

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.)

Appears to be in good condition, no problems noted.

GREASE TRAP: N/A
(locate on site plan)

Depth below grade: ___
Material of construction: ___ concrete ___ metal ___ FRP ___ 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: ___

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.)

ENVIRONMENTAL FIELD SERVICES, INC.
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1-413-586-7200

SEPTIC SYSTEM INSPECTION

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

Property Address:
Owner:
Date of Inspection:

TIGHT OR HOLDING TANK: N/A
(locate on site plan)

Depth below grade:_____
Material of construction: ____concrete ____metal ____FRP ____other(explain)
_____
_____

Dimensions:_____
Capacity:_____gallons
Design flow:_____gallons/day
Alarm level:_____

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

DISTRIBUTION BOX: N/A
(locate on site plan)

Depth of liquid level above outlet invert:_____

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

PUMP CHAMBER: N/A
(locate on site plan)

Pumps in working order:(yes or no)_____

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

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1-413-586-7200

SEPTIC SYSTEM INSPECTION

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

Property Address:
Owner:
Date of Inspection:

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

If not determined to be present, explain: Uncovered, measured and inspected.

Type:
leaching pits, number: 1, 1000 gal. 5' deep
leaching chambers, number:
leaching galleries, number:
leaching trenches, number, length:
leaching fields, number, dimensions:
overflow cesspool, number:

Comments: (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.) Appears to be working well, no problems noted. Tank 5' deep, only 12" of liquid in bottom.

CESSPOOLS: N/A
(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/A
(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.)

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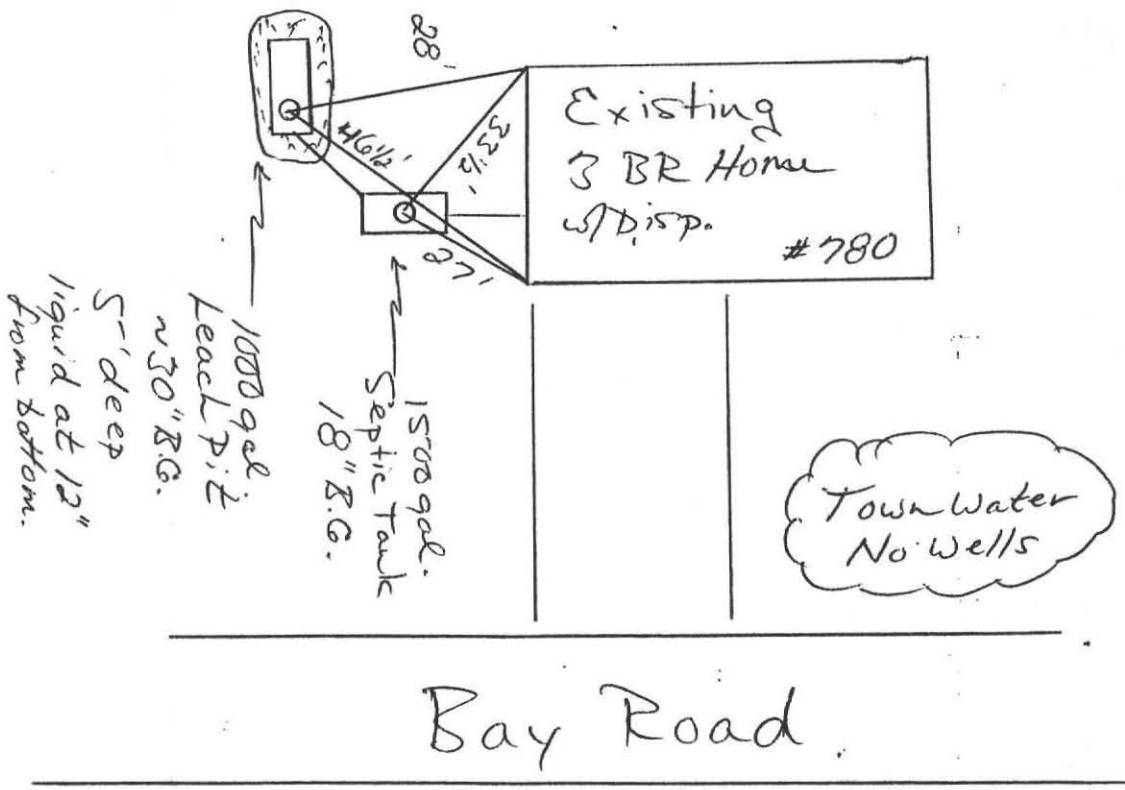
SEPTIC SYSTEM INSPECTION

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

Property Address:
Owner:
Date of Inspection:

SKETCH OF SEWAGE DISPOSAL SYSTEM:
Include ties to at least two permanent references landmarks or benchmarks
locate all wells within 100'



DEPTH TO GROUNDWATER

Depth to groundwater: ≥10' feet
method of determination or approximation: Per original design. Almer Huntley & Assoc. Perc and deep holes, April 16th 1995 10' deep hole, groundwater = none.

(revised 8/15/95)

ENVIRONMENTAL FIELD SERVICES, INC.
P.O. BOX 518
LEEDS, MA 01053
1-413-586-7200

June 17, 1997

Gorden Bostock
780 Bay Road
Amherst, MA 01002

re: Septic System Inspection at 780 Bay Road, Amherst, MA

Dear Gorden:

Enclosed please find a copy of my report for the referenced inspection. I have forwarded a copy of the report to the Amherst Board of Health per the requirements of 310 CMR 15.300, and to Betsy Eagen per your request.

Based on the results of my inspection in accordance with 310 CMR 15.300, I have concluded that the system does not meet any of the failure criteria specified at 310 CMR 15.303.

Please call if you have any questions, and thank you for this opportunity to be of service.

Sincerely yours,

Michael J. Lavigne
Environmental Engineer
Certified System Inspector

No. 1007 FEE _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, *MA.*

CERTIFICATE OF COMPLIANCE

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

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

by: KARI'S

at KARI'S Ex.

has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to application No. 1007, dated 5. Approved Design Flow 445 (gpd)

Installer X

Designer: X Inspector: Lloyd Countermanche Date: 6/29/2010

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

No. 1007 FEE 150

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, *MA.*

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct( ) Repair(✓) Upgrade( ) Abandon( ) an individual sewage disposal system at 780 Bay Rd as described in the application for Disposal System Construction Permit No. 1007, dated 5/5/10.

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

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

Date 5/5/10 Board of Health Lloyd Countermanche
signing for the Amherst Board of Health

No. 1007

FEE _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, *MA.*

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

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

Location 780 Bay Road	Owner's Name Mickeline Davidson
Map/Parcel# 260/150	Address 780 Bay Road
Lot# 150	Telephone# 413.374.5161
* Installer's Name	Designer's Name Alan Weiss RS.
Address	Address Belchertown
Telephone#	Telephone# 413.323.5957

Type of Building Residence Lot Size 40,039± sq. ft.

Dwelling - No. of Bedrooms 3 B Garbage grinder (N)

Other - Type of Building _____ No. of persons _____ Showers ( ), Cafeteria ( )

Other Fixtures _____

Design Flow (min. required) 110 gpd Calculated design flow 330 Design flow provided 445 gpd

Plan: Date 4/22/10 Number of sheets _____ Revision Date _____

Title Septic System Repair Plan

Description of Soil(s) Class I

Soil Evaluator Form No. _____ Name of Soil Evaluator A. Weiss Date of Evaluation 4/15/10

DESCRIPTION OF REPAIRS OR ALTERATIONS Install New SAS

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

* Signed Mickeline Davidson Date 5/5/10

Sign Here

Inspections _____

No. 1007

FEE _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, *MA.*

CERTIFICATE OF COMPLIANCE

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

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

by: KARI'S

at KARI'S Ex.

has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to application No. 1007, dated 5. Approved Design Flow 445 (gpd)

Installer X

Designer: X Inspector: Stephen Canterbury Date: 6/29/2010

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

No. 1007

FEE 150

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, *MA.*

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct( ) Repair(✓) Upgrade( ) Abandon( ) an individual sewage disposal system at 780 BAY RD as described in the application for Disposal System Construction Permit No. 1007, dated 5/5/10.

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

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

Date 5/5/10 Board of Health Stephen Canterbury
signing for the Amherst Board of Health

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: 4/15/10

Commonwealth of Massachusetts
Amherst, , Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss
Witnessed By: G. Centurelle

Date: 4/15/2010

Location Address or Lot #	Owner's Name, Address, and Telephone #
780 BAY RD New Construction ☐ Repair ☐	Michelle Davidson 780 BAY RD Amherst. 374-5161

Office Review

Published Soil Survey Available: No ☐ Yes ☑

Year Published Publication Scale Soil Map Unit

Drainage Class Soil Limitations

Surficial Geologic Report Available: No ☑ Yes ☐

Year Published Publication Scale

Geologic Material (Map Unit)

Landform

Flood Insurance Rate Map:

Above 500 year flood boundary No ☐ Yes ☑

Within 500 year flood boundary No ☑ Yes ☐

Within 100 year flood boundary No ☑ Yes ☐

Wetland Area:

National Wetland Inventory Map (map unit)

Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month

Range: Above Normal ☐ Normal ☑ Below Normal ☐

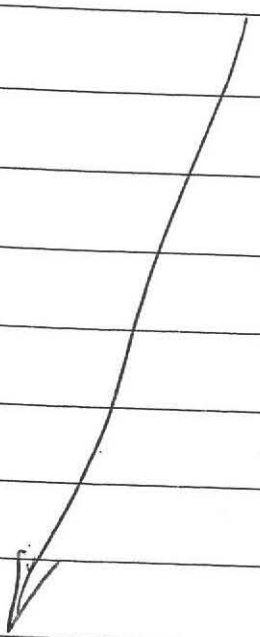
Other References Reviewed: _____

Location Address or Lot No. 780 Bay Rd

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: 4/15/2010	Time: 11:00	
Observation Hole #	P1	
Depth of Perc	38"	
Start Pre-soak	11:22	
End Pre-soak	11:37	
Time at 12"	11:37	
Time at 9"	11:48	
Time at 6"	12:03	
Time (9"-6")	15	
Rate Min./Inch	5 MIN / IN.	



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

Site Passed ☑ Site Failed ☐

Performed By: A. Weiss

Witnessed By: G. Courtmanche.

Comments:

DEP

DEP APPROVED FORM - 12/07/95

Location Address or Lot No. 780 BAY RD

On-site Review

Deep Hole Number 1 + 2 Date: 4/15/2010 Time: 11:30 Weather Sun 70°

Location (identify on site plan)

Land Use grass Slope (%) 2 Surface Stones NOT

Vegetation grassed

Landform Terraced.

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 Town 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	0-6"	A	FSL	10YR 3/2		
	6-22"	B	LS	10YR 4/6		- Friable
	22" → 90"	C1	S	10YR 5/6	90"	- Friable
	90"-126"	C2	VFS	2.5Y 5/2	2.5Y 4/1 10YR 6/8	F. M. Sand granular, outwash
						V. F. Sand, Varved.
#2	0-6"	A	FSL	10YR 3/2		
	6"-24"	B	LS	10YR 4/6		Friable
	24" → 96"	C1	S	10YR 5/6	90"	Friable.
	96'-126"	C2	VFS	2.5Y 5/2		F- M. Sandy granular
						V.F Sand, Varved.

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Glacio Lacustrine   Depth to Bedrock: 126"+

Depth to Groundwater: Standing Water in the Hole: NOT   Weeping from Pit Face: NOT

Estimated Seasonal High Ground Water: 90"

* Use 1 Ft T-5 Under Bed.

DEP

Location Address or Lot No. 780 Bay Rd

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 90" inches
- ☐ Ground water adjustment ..... feet

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

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

Depth of Naturally Occurring Pervious Material

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

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

Certification

I certify that on 6/95 (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.

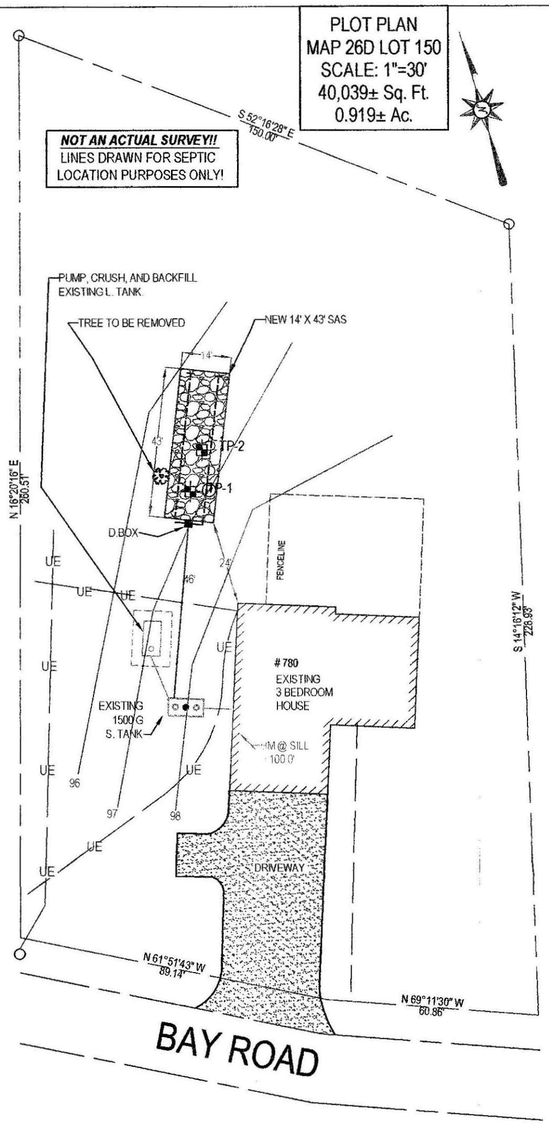
Signature _____ Date 4/15/2010

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

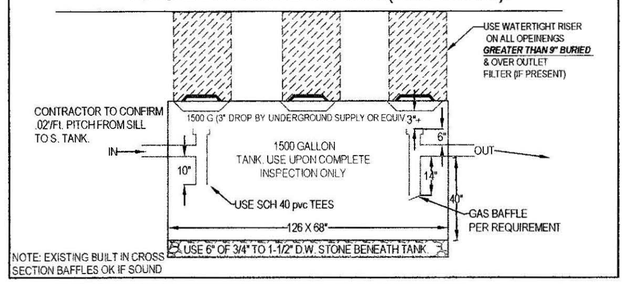
DEP APPROVED FORM - 12/07/95

(Over)

PLOT PLAN
MAP 26D LOT 150
SCALE: 1"=30'
40,039± Sq. Ft.
0.919± Ac.



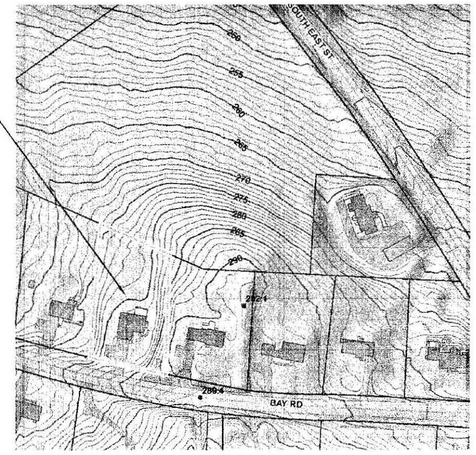
TYPICAL EXISTING SEPTIC TANK (WATERTIGHT).



USING EXISTING SEPTIC TANKS:
AN EXISTING 1,000 or 1,500 GALLON SEPTIC TANK CAN BE USED IF UPON INSPECTION BY THE IIISTALLING 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.

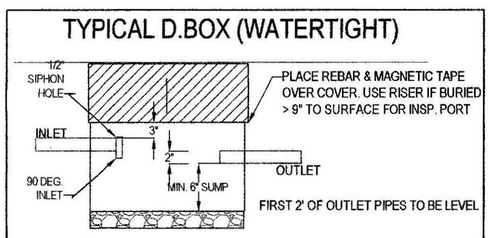
SUBJECT SITE LOCATION

(AMHERST GIS)



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

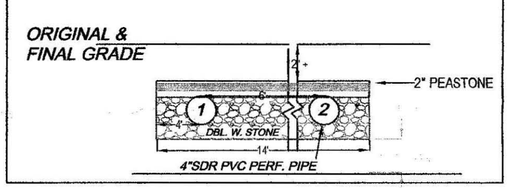
TYPICAL D.BOX (WATERTIGHT)



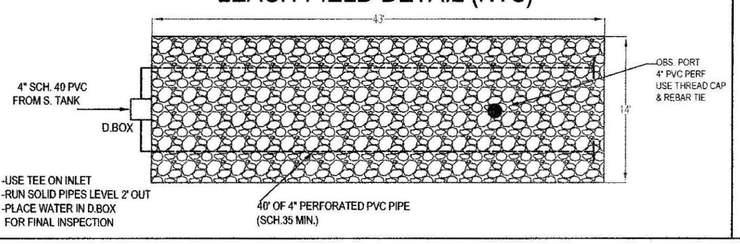
- PLACE ON STABLE 6" BASE OF 3/4" TO 1-1/2" D.W. STONE
- USE CONCRETE BOX WITH 2" MINIMUM WALL THICKNESS.
- FILL WITH WATER FOR FINAL INSPECTION.
- USE LARGE STYLE D.BOX 6 outlet (Underground Supply)

EFFLUENT DISPOSAL AREA
CROSS SECTION - NOT TO SCALE
(LEVEL DISPOSAL AREA)

NUMBER OF SEPTIC LINES:2
CENTER TO CENTER SPACING: 6'

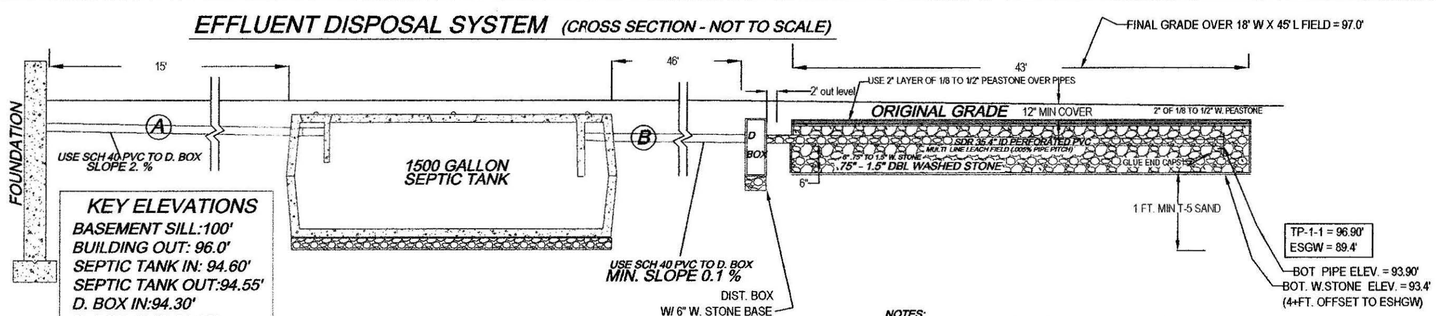


LEACH FIELD DETAIL (NTS)



NOTE TO INSTALLER: A PLUMBER MUST INSPECT INSIDE PLUMBING AND FIX ANY LEAKING FAUCETS OR TOILETS IF FOUND TO BE LEAKING OR FLOWING IMPROPERLY INTO SEPTIC SYSTEM PRIOR TO FINAL INSPECTION.

EFFLUENT DISPOSAL SYSTEM (CROSS SECTION - NOT TO SCALE)



KEY ELEVATIONS
BASEMENT SILL:100'
BUILDING OUT: 96.0'
SEPTIC TANK IN: 94.60'
SEPTIC TANK OUT:94.55'
D. BOX IN:94.30'
D. BOX OUT: 94.13'
L. FLD. INV. ST: 94.10'

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

DESIGN NOTES AND CALCULATIONS:

1.) 3 BEDROOM HOME: X 110 GPD /BR = 330 GPD. REQUIRED,

-Use ONE FIELD: 14' WIDE X 43' LONG WITH 6" OF $\frac{3}{4}$" TO $1\frac{1}{2}$" DBL WASHED STONE BELOW INVEIRT
- BOTTOM AREA: 14\' W X 43' L =602 SF.
- SIDE AREA: 0 SF.
- TOTAL AREA: 602 SF X 0.74 GAL/SF = 445 GPD

3. GARBAGE DISPOSAL NIOT ALLOWED, ...
4. NO OTHER PRIVATE WELLS WITHIN 150 FEET OF SAS (TOWN WATER).
5. NO OTHER WETLANDS WITHIN 100 FEET OF SAS
6. USE EXISTING 1,500 GAIL S. TANK UPON COMPLETE INSPECTION ONLY
   - INSTALL & INSPECT SCH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET) IF NEEDED.
   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 (6 OIUTLET) D.BOX ONLY.
7A. ALL D. BOX OUTLET PIIPES LEVEL FOR FIRST 2'. BOXES MUST HAVE 2"+ CONC. WALLS.
   NOTE:
   - D. BOXES WITH MORE THAN 9" OF COVER SOIL MUST HAVE RISERS TO 6" OF SURFACE.
8. USE APPROVED (.75"-1 11/2") DBL. WASHED STONE UNDER TANK & D. BOX FOR 6".
   -CONFIRM STONE PROIPERLY DOUBLE WASHED PRIOR TO PLACEMENT.
9. USE PROPER SCH. 40 PWC TEES AS SHOWN.
10. PRE & POST CONTOURS NOTED AS NECESSARY. RESERVE AS NOTED *(not required for repairs)*.
11. SLOPE CALCS (SEE CO3NTOURS). SUBGRADE INSP. REQ'D.
13. USE FIELD DUE TO TOPOGRAPHY AND SPACE OF LOT WITH RESPECT TO LOCATION AND ELEVATION OF RESIDE:NCE. (310 CMR 15.240)
14. USE 2% MIN. SLOPE OWER SAS
   - CLEAR TOP AND SUB. TO 24" MIN. AS NEEDED (INSPECTION REQUIRED).
   - CLEAR PAST BASE OF B (MIN. 24") & SCARIFY UNDER BED 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. ON 4/15/10 (G. COURTMANCHE, BOH AGENT)
   - DEPTH OF PERC. 38"
   - PERC RATE = 5 MIN // IN.
   - CLASS I SOIL RATING
16. NO TREES WITHIN 10 FT. OF NEW LEACH FIELD.
17. ENGINEER & TOWN (IF IREQUIRED) TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL.
18. BM=100.00 @ (as noted)), CONFIRM PROPER PIPE SLOPES
   - USE/INSPECT SCH. 40) PIPE FOR PIPE FROM HOUSE TO NEW OR EXISTING TANK
19. GRADE MULCH AND SE!ED OVER SAS AS NOTED.
20. INSTALLATION IN LOW GROUNDWATER SEASON RECOMMENDED.
21. USE OBSERVATION POINT 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.

TEST PIT LOG:

SOIL EVALUATOR: A. WEISS, RS
DATE OF EVALUATION: 4/15/10

TP-1 EFF. ELEV: 96.90'					TP-2 EFF. ELEV: 96.9'				
DEPTH:	HORIZ	TEXTURE	COLOR (MUNSELL):	MATERIAL:	DEPTH:	HORIZ	TEXTURE	COLOR (MUNSELL)	MATERIAL:
0-6	A	FSL	10 YR 3/2	FRIABLE	0-6	A	FSL	10 YR 3/2	FRIABLE
6-22	Bw	LS	10 YR 4/6	FRIABLE	6-24	Bw	LS	10 YR 4/6	FRIABLE
22-90	C1	S	10 YR 5/6	F-M SAND, GRANULAR, OUTWASH	24-96	C1	S	10 YR 5/6	F-M SAND, GRANULAR, OUTWASH
90-126	C2	VFS	2.5 Y 5/2	VF SAND, VARVED	96-126	C2	VFS	2.5 Y 5/2	VF SAND, VARVED
OXIDES:		10 YR 4/1	2.5 Y 4/1	OBSERVED @ 90"	OXIDES:		10 YR 4/1	2.5 Y 4/1	OBSERVED @ 90"
EHWT:			90"		EHWT:			90"	
STANDING H2O:			NOT OBSERVED		STANDING H2O:			NOT OBSERVED	
WEEPING:			NOT OBSERVED		WEEPING:			NOT OBSERVED	
BEDROCK:			126"+		BEDROCK:			126"+	

ATTENTION INSTALLER!!
CALL DIG SAFE BEFORE YOU DIG!! MASSACHUSETTS STATE LAW CHAPTER 82 SECTIONS 40 - 40E REQIIRE 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 — WEISS #963 — REGISTERED SANITARIAN

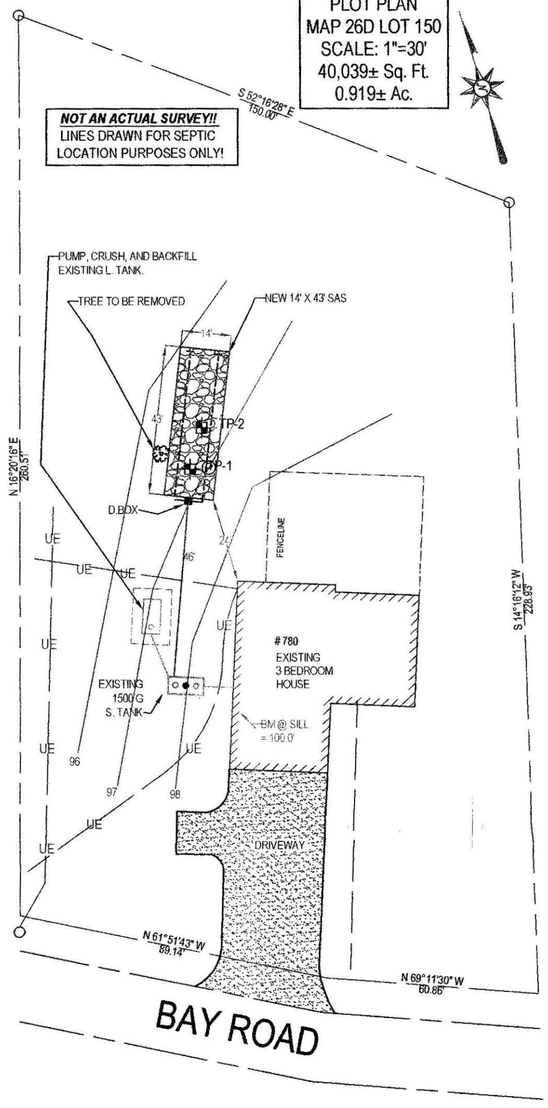
SEPTIC SYSTEM REPAIR PLAN FOR MICHELINE DAVIDSON
780 BAY ROAD
AMHERST, MA.

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

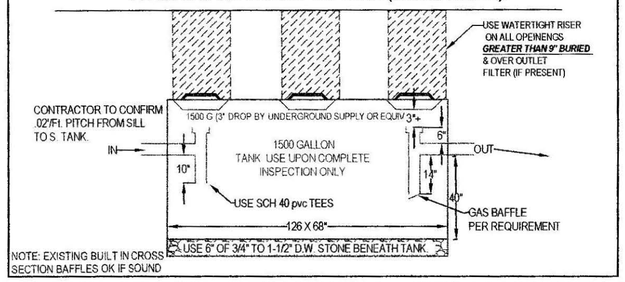
DATE:	DRAWN BY:	REVISED:
4/22/10	ARS	
SCALE: 1"=30'	CHECKED BY: AEW	DRAWING NUMBER: 110-3342-0415

PLOT PLAN
MAP 26D LOT 150
SCALE: 1"=30'
40,039± Sq. Ft.
0.919± Ac.

NOT AN ACTUAL SURVEY!!
LINES DRAWN FOR SEPTIC LOCATION PURPOSES ONLY!



TYPICAL EXISTING SEPTIC TANK (WATERTIGHT).



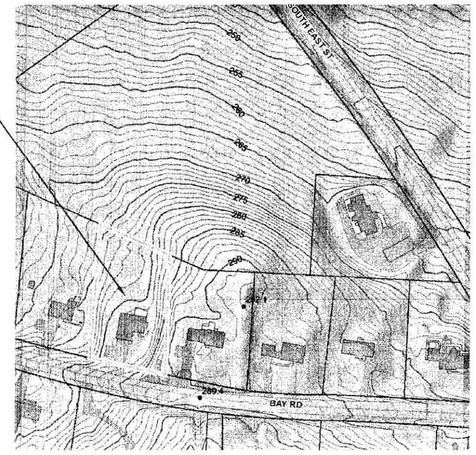
NOTE: EXISTING BUILT IN CROSS SECTION BAFFLES OK IF SOUND

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.

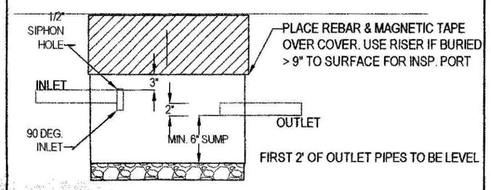
GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.
1.) HAVE TANK PUMPED EVERY 2 YEARS.
2.) MAINTAIN AREA OVER SEPTIC SYSTEM AS GRASSY OR SIMILAR GROUND COVER.
3.) DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
4.) USE ONLY LIQUID DETERGENTS & LOW FLOW 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

SUBJECT SITE LOCATION

(AMHERST GIS))

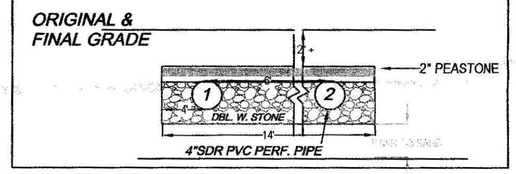


TYPICAL D.BOX (WATERTIGHT)

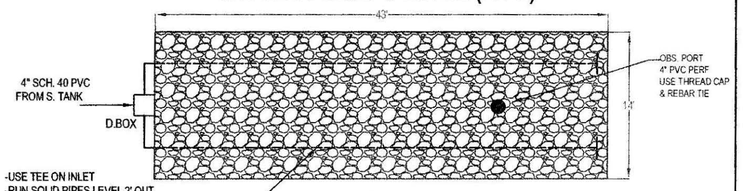


- PLACE ON STABLE 6" BASE OF 3/4" TO 1-1/2" D.W. STONE
- USE CONCRETE BOX WITH 2" MINIMUM WALL THICKNESS.
- FILL WITH WATER FOR FINAL INSPECTION.
- USE LARGE STYLE D.BOX 6 outlet (Underground Supply)

EFFLUENT DISPOSAL AREA
CROSS SECTION - NOT TO SCALE
(LEVEL DISPOSAL AREA)
NUMBER OF SEPTIC LINES:2
CENTER TO CENTER SPACING: 6'

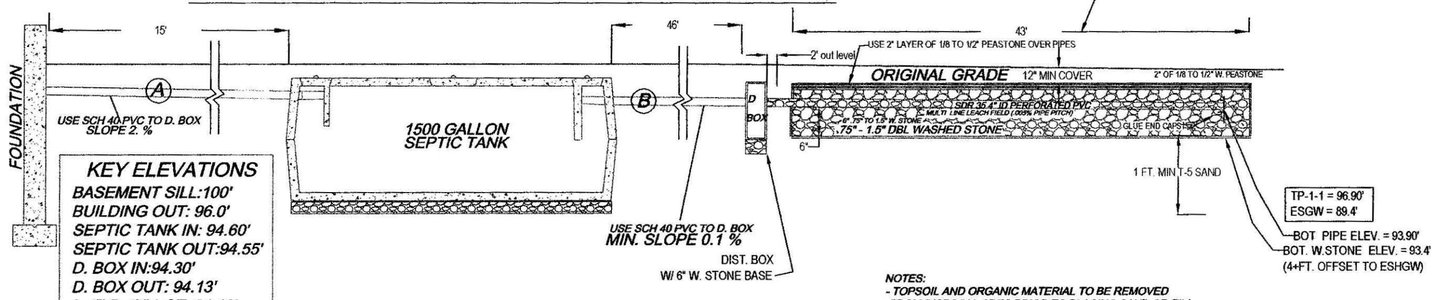


LEACH FIELD DETAIL (NTS)



NOTE TO INSTALLER: A PLUMBER MUST INSPECT INSIDE PLUMBING AND FIX ANY LEAKING FAUCETS OR TOILETS IF FOUND TO BE LEAKING OR FLOWING IMPROPERLY INTO SEPTIC SYSTEM PRIOR TO FINAL INSPECTION

EFFLUENT DISPOSAL SYSTEM (CROSS SECTION - NOT TO SCALE)



KEY ELEVATIONS
BASEMENT SILL:100'
BUILDING OUT: 96.0'
SEPTIC TANK IN: 94.60'
SEPTIC TANK OUT:94.55'
D. BOX IN:94.30'
D. BOX OUT: 94.13'
L. FLD. INV. ST: 94.10'

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

DESIGN NOTES: AND CALCULATIONS:

1.) 3 BEDROOM HOME X 110 GPD /BR = 330 GPD. REQUIRED,

-Use ONE FIELD:: 14' WIDE X 43' LONG WITH 6" OF 3/4" TO 1 1/2" DBL WASHED STONE BELOW INVERT
- BOTTOM AREA: 1'-4" W X 43' L =602 SF.
- SIDE AREA: 0 SF..
- TOTAL AREA: 602 SF X 0.74 GAL/SF = 445 GPD

3. GARBAGE DISPOSAL INOT ALLOWED, ...
4. NO OTHER PRIVATE WELLS WITHIN 100 FEET OF SAS (TOWN WATER).
5. NO OTHER WETLANDS WITHIN 100 FEET OF SAS
6. USE EXISTING 1,500 G/AL S. TANK UPON COMPLETE INSPECTION ONLY
   - INSTALL & INSPECT SCH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET) IF NEEDED.
   NOTE:
   - ALL COMPONENTS OIF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO MAINTAIN 3I' CLEARANCE FROM TOP OF TEES TO BOTTOM OF TANK COVERS & BOXES.
7. USE LARGE STYLE (6 OUTLET) D.BOX ONLY.
7A. ALL D. BOX OUTLET PIPES LEVEL FOR FIRST 2'. BOXES MUST HAVE 2"+ CONC. WALLS
   NOTE:
   - D. BOXES WITH MORE THAN 9" OF COVER SOIL MUST HAVE RISERS TO 6" OF SURFACE.
8. USE APPROVED (.75"-1I 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 CONTOURS NOTED AS NECESSARY, RESERVE AS NOTED *(not required for repairs)*
11. SLOPE CALCS (SEE CONTOURS), SUBGRADE INSP. REQ'D.
13. USE FIELD DUE TO TOPOGRAPHY AND SPACE OF LOT WITH RESPECT TO LOCATION AND ELEVATION OF RESIDENCE (310 CMR 15.240)
14. USE 2% MIN. SLOPE COVER SAS
   - CLEAR TOP AND SUB TO 24" MIN. AS NEEDED (INSPECTION REQUIRED).
   - CLEAR PAST BASE (OF B (MIN. 24") & SCARIFY UNDER BED 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. ON 4/15/10 (G. COURTMANCHE, BOH AGENT).
   - DEPTH OF PERC. 38I"
   - PERC RATE = 5 MIIN / IN,
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16. NO TREES WITHIN 100 FT. OF NEW LEACH FIELD.
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18. BM=100.00 @ (as noted), CONFIRM PROPER PIPE SLOPES
   - USE/INSPECT SCH. 40 PIPE FOR PIPE FROM HOUSE TO NEW OR EXISTING TANK
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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 STONE BED, WITH RISER TO 3" OF SURFACE & THREADED CAP & MARK WITH RE-BAR..

TEST PIT LOG:

SOIL EVALUATOR: A. WEISS, RS
DATE OF EVALUATION: 4/15/10

TP-1 EFF. ELEV: 96.90'					TP-2 EFF. ELEV: 96.9'				
DEPTH:	HORIZ:	TEXTURE:	COLOR (MUNSELL):	MATERIAL:	DEPTH:	HORIZ:	TEXTURE:	COLOR (MUNSELL):	MATERIAL:
0-6	A	FSL	10 YR 3/2	FRIABLE	0-6	A	FSL	10 YR 3/2	FRIABLE
6-22	Bw	LS	10 YR 4/6	FRIABLE	6-24	Bw	LS	10 YR 4/6	FRIABLE
22-90	C1	S	10 YR 5/6	F-M SAND, GRANULAR, OUTWASH	24-96	C1	S	10 YR 5/6	F-M SAND, GRANULAR, OUTWASH
90-126	C2	VFS	2.5 Y 5/2	VF SAND, VARVED	96-126	C2	VFS	2.5 Y 5/2	VF SAND, VARVED
OXIDES:		10 YR 4/1	2.5 Y 4/1	OBSERVED @ 90"	OXIDES:		10 YR 4/1	2.5 Y 4/1	OBSERVED @ 90"
EHWT:			90"		EHWT:			90"	
STANDING H2O:			NOT OBSERVED		STANDING H2O:			NOT OBSERVED	
WEEPING:			NOT OBSERVED		WEEPING:			NOT OBSERVED	
BEDROCK:			126"+		BEDROCK:			126"+	

SEPTIC SYSTEM REPAIR PLAN FOR MICHELINE DAVIDSON
780 BAY ROAD
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:
4/22/10	ARS	
SCALE: 1"=30"	CHECKED BY: AEW	DRAWING NUMBER: 110-3342-0415

COMMONWEALTH OF MASSACHUSETTS
ALAN E WEISS #403
REGISTERED SANITARIAN

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 MAIE 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'

No. 1007

FEE _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, *MA.*

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

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

Location 780 Bay Road	Owner's Name Micheline Davidson
Map/Parcel# 26D/150	Address 780 Bay Road
Lot# 150	Telephone# 413.374.5161
Installer's Name	Designer's Name Alan Weiss RS.
Address	Address Belchertown
Telephone#	Telephone# 413.323.5957

Type of Building Residence Lot Size 40,089± sq. ft.

Dwelling - No. of Bedrooms 3 B Garbage grinder (N)

Other - Type of Building _____ No. of persons _____ Showers ( ), Cafeteria ( )

Other Fixtures _____

Design Flow (min. required) 110 gpd Calculated design flow 330 Design flow provided 445 gpd

Plan: Date 4/22/10 Number of sheets _____ Revision Date _____

Title Septic System Repair Plan

Description of Soil(s) Class I

Soil Evaluator Form No. _____ Name of Soil Evaluator A. Weiss Date of Evaluation 4/15/10

DESCRIPTION OF REPAIRS OR ALTERATIONS Install New SAS

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

Signed _____ Date _____ Sign Here

Inspections _____

No. _____

FEE _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, _____, *MA.*

CERTIFICATE OF COMPLIANCE

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

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

by: _____

at _____

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

Installer _____

Designer: _____ Inspector: _____ Date: _____

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

No. _____

FEE _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, _____, *MA.*

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct( ) Repair( ) Upgrade( ) Abandon( ) an individual sewage disposal system at _____ as described in the application for Disposal System Construction Permit No. _____, dated _____.

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

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

Date _____ Board of Health _____

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: 4/15/10

Commonwealth of Massachusetts
Amherst, , Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss
Witnessed By: G. Centuncle

Date: 4/15/2010

Location Address or Lot #	Owner's Name, Address, and Telephone #
780 BAY RD	Michelle Davidson 780 BAY RD Amherst. 374-5161
New Construction ☐ Repair ☐	

Office Review

Published Soil Survey Available: No ☐ Yes ☑

Year Published Publication Scale Soil Map Unit

Drainage Class Soil Limitations

Surficial Geologic Report Available: No ☑ Yes ☐

Year Published Publication Scale

Geologic Material (Map Unit)

Landform

Flood Insurance Rate Map:

Above 500 year flood boundary No ☐ Yes ☑

Within 500 year flood boundary No ☑ Yes ☐

Within 100 year flood boundary No ☑ Yes ☐

Wetland Area:

National Wetland Inventory Map (map unit)

Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month

Range: Above Normal ☐ Normal ☑ Below Normal ☐

Other References Reviewed: _____

FORM 12 - PERCOLATION TEST

Location Address or Lot No. 780 Bay Rd

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*

Date: 4/15/2010 Time: 11:00

Observation Hole #	P1	
Depth of Perc	38"	
Start Pre-soak	11:22	
End Pre-soak	11:37	
Time at 12"	11:37	
Time at 9"	11:48	
Time at 6"	12:03	
Time (9"-6")	15	
Rate Min./Inch	5 MIN/IN.	

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

Site Passed ☑ Site Failed ☐

Performed By: A. Weiss

Witnessed By: G. Courtmanche.

Comments:

DEP APPROVED FORM - 12/07/95

Location Address or Lot No. 780 BAY RD

On-site Review

Deep Hole Number 1 & 2 Date: 4/15/2010 Time: 11:30 Weather Sun 70°
Location (identify on site plan)
Land Use grass Slope (%) 2 Surface Stones NOT
Vegetation grassed
Landform Terraced.
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 Town 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					
0-6"	A	FSL	10YR 3/2		Friable
6-22"	B	LS	10YR 4/6		Friable
22"→90"	C_1	S	10YR 5/6	90" 2.5Y 4/1 10YR 6/8	F-M. Sand, granular, Oxidized
90"-126"	C_2	VFS	2.5Y 5/2		V.F. Sand, Varved.
# 2					
0-6"	A	FSL	10YR 3/2		Friable
6"-24"	B	LS	10YR 4/6		Friable.
24"→96"	C_1	S	10YR 5/6	90"	F-M. Sand, granular
96'-126"	C_2	VFS	2.5Y 5/2		V.F Sand, Varved.

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Glacio Lacustrine Depth to Bedrock: 126"+
Depth to Groundwater: Standing Water in the Hole: NOT Weeping from Pit Face: NOT
Estimated Seasonal High Ground Water: 90"

* Use 1 Ft T-5 under Bed.

DEP APPROVED FORM - 12/07/95

Location Address or Lot No. 780 BAY RD

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 90" inches
- ☐ Ground water adjustment ..... feet

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

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

Depth of Naturally Occurring Pervious Material

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

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

Certification

I certify that on 6/95 (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 4/15/2010

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

DEP APPROVED FORM - 12/07/95

(Over)

COLD SPRING ENVIRONMENTAL CONSULTANTS, INC.

ALAN E. WEISS, M.S., R.S., L.S.P.
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350 Old Enfield Rd.
Belchertown, MA 01007
(413) 323-5957 & 323-4916 (FAX)
aeweiss@charter.net

Date: 4/15/10

Commonwealth of Massachusetts
Amherst, , Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss
Witnessed By: G. Centuncle

Date: 4/15/2010

Location Address or Lot #	Owner's Name, Address, and Telephone #
780 BAY RD New Construction ☐ Repair ☐	Michelle Davidson 780 BAY RD Amherst. 374-5161

Office Review

Published Soil Survey Available: No ☐ Yes ☑

Year Published Publication Scale Soil Map Unit

Drainage Class Soil Limitations

Surficial Geologic Report Available: No ☑ Yes ☐

Year Published Publication Scale

Geologic Material (Map Unit)

Landform

Flood Insurance Rate Map:

Above 500 year flood boundary No ☐ Yes ☑

Within 500 year flood boundary No ☑ Yes ☐

Within 100 year flood boundary No ☑ Yes ☐

Wetland Area:

National Wetland Inventory Map (map unit)

Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month

Range: Above Normal ☐ Normal ☑ Below Normal ☐

Other References Reviewed: _____

Location Address or Lot No. 780 Bay Rd

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*

Date: 4/15/2010 Time: 11:00

Observation Hole #	P1	
Depth of Perc	38"	
Start Pre-soak	11:22	
End Pre-soak	11:37	
Time at 12"	11:37	
Time at 9"	11:48	
Time at 6"	12:03	
Time (9"-6")	15	
Rate Min./Inch	5 MIN / IN.	

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

Site Passed ☑ Site Failed ☐

Performed By: A. Weiss

Witnessed By: G. Courtmanche.

Comments:

Location Address or Lot No. 780 BAY RD

On-site Review

Deep Hole Number 1 & 2 Date: 4/15/2010 Time: 11:30° Weather SUN 70°
Location (identify on site plan)
Land Use grass Slope (%) 2 Surface Stones NOT
Vegetation grassed
Landform Terraced.
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 TOWN 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					
0-6"	A	FSL	10YR 3/2		Friable
6-22"	B	LS	10YR 4/6		Friable
22"→90"	C_1	S	10YR 5/6	90" 2.5Y 4/1 10YR 6/8	F-M. Sandy granular, Distinct
90"-126"	C_2	VFS	2.5Y 5/2		V.F. Sad, Varved.
# 2					
0-6"	A	FSL	10YR 3/2		Friable
6"-24"	B	LS	10YR 4/6		Friable.
24"→96"	C_1	S	10YR 5/6	90"	F-M. Sandy granular
96'-126"	C_2	VFS	2.5Y 5/2		V.f Sad, Varved.

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Glacio Lacustrine Depth to Bedrock: 126"+
Depth to Groundwater: Standing Water in the Hole: NOT Weeping from Pit Face: NOT
Estimated Seasonal High Ground Water: 90"

* Use 1 Ft T-5 Under Bed.

Location Address or Lot No. 780 Bay Rd

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 90" inches
- ☐ Ground water adjustment ..... feet

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

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

Depth of Naturally Occurring Pervious Material

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

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

Certification

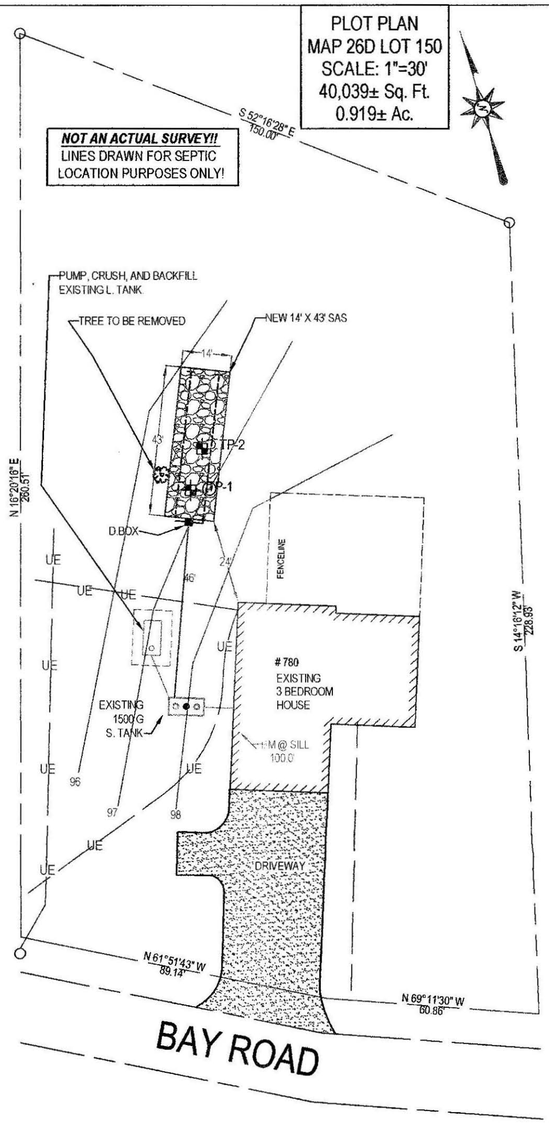
I certify that on 6/95 (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

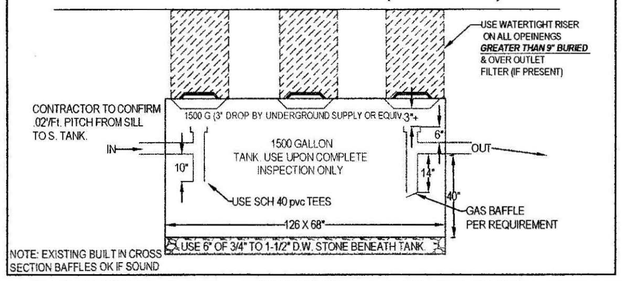
Signature _____ Date 4/15/2010

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

DEP APPROVED FORM - 12/07/95

(Over)





PLOT PLAN
MAP 26D LOT 150
SCALE: 1"=30'
40,039± Sq. Ft.
0.919± Ac.

NOT AN ACTUAL SURVEY!!
LINES DRAWN FOR SEPTIC LOCATION PURPOSES ONLY!

NOTE TO INSTALLER: A PLUMBER MUST INSPECT INSIDE PLUMBING AND FIX ANY LEAKING FAUCETS OR TOILETS IF FOUND TO BE LEAKING OR FLOWING IMPROPERLY INTO SEPTIC SYSTEM PRIOR TO FINAL INSPECTION.

TYPICAL EXISTING SEPTIC TANK (WATERTIGHT).

NOTE: EXISTING BUILT IN CROSS SECTION BAFFLES OK IF SOUND

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.

SUBJECT SITE LOCATION
(AMHERST GIS)

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)

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

EFFLUENT DISPOSAL AREA
CROSS SECTION - NOT TO SCALE
(LEVEL DISPOSAL AREA)

NUMBER OF SEPTIC LINES:2
CENTER TO CENTER SPACING: 6'

LEACH FIELD DETAIL (NTS)

-USE TEE ON INLET
-RUN SOLID PIPES LEVEL 2' OUT
-PLACE WATER IN D.BOX FOR FINAL INSPECTION

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

KEY ELEVATIONS
BASEMENT SILL:100'
BUILDING OUT: 96.0'
SEPTIC TANK IN: 94.60'
SEPTIC TANK OUT:94.55'
D. BOX IN:94.30'
D. BOX OUT: 94.13'
L. FLD. INV. ST: 94.10'

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

DESIGN NOTES ,AND CALCULATIONS:
1.) 3 BEDROOM HOME X 110 GPD /BR = 330 GPD. REQUIRED,

-Use ONE FIELD: 14' WIDE X 43' LONG WITH 6" OF $\frac{3}{4}$" TO $1\frac{1}{2}$" DBL WASHED STONE BELOW INVERRT
- BOTTOM AREA: 14'' W X 43' L =602 SF.
- SIDE AREA: 0 SF.
- TOTAL AREA: 602 SSF X 0.74 GAL/SF = 445 GPD

3. GARBAGE DISPOSAL NOT ALLOWED, ...
4. NO OTHER PRIVATE WEILLS WITHIN 150 FEET OF SAS (TOWN WATER).
5. NO OTHER WETLANDS WITHIN 100 FEET OF SAS
6. USE EXISTING 1,500 GAL. S. TANK UPON COMPLETE INSPECTION ONLY
   - INSTALL & INSPECT SCH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET) IF NEEDED,
   NOTE:
   - ALL COMPONENTS OF INEW 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 (6 OUTLET) D.BOX ONLY.
7A ALL D. BOX OUTLET PIPPES LEVEL FOR FIRST 2'. BOXES MUST HAVE 2"+ CONC. WALLS
   NOTE:
   - D. BOXES WITH MORE THAN 9" OF COVER SOIL MUST HAVE RISERS TO 6" OF SURFACE.
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 CONTOURSS NOTED AS NECESSARY, RESERVE AS NOTED ***(not required for repairs)***.
11. SLOPE CALCS (SEE CONTOURS). SUBGRADE INSP. REQ'D.
13. USE FIELD DUE TO TOPOGRAPHY AND SPACE OF LOT WITH RESPECT TO LOCATION AND ELEVATION OF RESIDENCE (310 CMR 15.240)
14. USE 2% MIN. SLOPE OVER SAS
   - CLEAR TOP AND SUB TO 24" MIN. AS NEEDED (INSPECTION REQUIRED).
   - CLEAR PAST BASE OF B (MIN. 24") & SCARIFY UNDER BED 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. ON 4/15/10 (G. COURTMANCHE, BOH AGENT).
   - DEPTH OF PERC. 38"
   - PERC RATE = 5 MIN / IN,
   - CLASS I SOIL RATING
16. NO TREES WITHIN 10 FT. OF NEW LEACH FIELD.
17. ENGINEER & TOWN (IF REQUIRED) TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL.
18. BM=100.00 @ (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 STONE BED, WITH RISER TO 3" OF SURFACE & THREADED CAP & MARK WITH RE-BAR..

TEST PIT LOG:

SOIL EVALUATOR: A. WEISS, RS
DATE OF EVALUATION: 4/15/10

TP-1 EFF. ELEV: 96.90'					TP-2 EFF. ELEV: 96.9'				
DEPTH:	HORIZ:	TEXTURE:	COLOR (MUNSELL):	MATERIAL:	DEPTH:	HORIZ:	TEXTURE:	COLOR (MUNSELL):	MATERIAL:
0-6	A	FSL	10 YR 3/2	FRIABLE	0-6	A	FSL	10 YR 3/2	FRIABLE
6-22	Bw	LS	10 YR 4/6	FRIABLE	6-24	Bw	LS	10 YR 4/6	FRIABLE
22-90	C1	S	10 YR 5/6	F-M SAND, GRANULAR, OUTWASH	24-96	C1	S	10 YR 5/6	F-M SAND, GRANULAR, OUTWASH
90-126	C2	VFS	2.5 Y 5/2	VF SAND, VARVED	96-126	C2	VFS	2.5 Y 5/2	VF SAND, VARVED
OXIDES:	10 YR 4/1		2.5 Y 4/1	OBSERVED @ 90"	OXIDES:	10 YR 4/1		2.5 Y 4/1	OBSERVED @ 90"
EHWT:			90"		EHWT:			90"	
STANDING H2O:			NOT OBSERVED		STANDING H2O:			NOT OBSERVED	
WEEPING:			NOT OBSERVED		WEEPING:			NOT OBSERVED	
BEDROCK:			126"+		BEDROCK:			126"+	

ATTENTION INSTALLER!!
CALL DIG SAFE BEFORE YOU DIG!! MASSACHUSETTS STATE LAW CHAPTER 82 SECTIONS 40 - 40E REQURE 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'

ALAN E. WEISS #933 REGISTERED SANITARIAN

SEPTIIC SYSTEM REPAIR PLAN FOR MICHELINE DAVIDSON
780 BAY ROAD
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: 4/22/10	DRAWN BY: ARS	REVISED:
SCALE: 1"=30'	CHECKED BY: AEW	DRAWING NUMBER: 110-3342-0415