

20 HULST ROAD



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

RECEIVED
\$400
[Signature]

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

Property Address: 20 Hulst Rd.
Amherst, MA
Owner's Name: Terry Omnisky
Owner's Address: same
Date of Inspection: 08/11/2006

Name of Inspector: (please print) Nick Torretti
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:

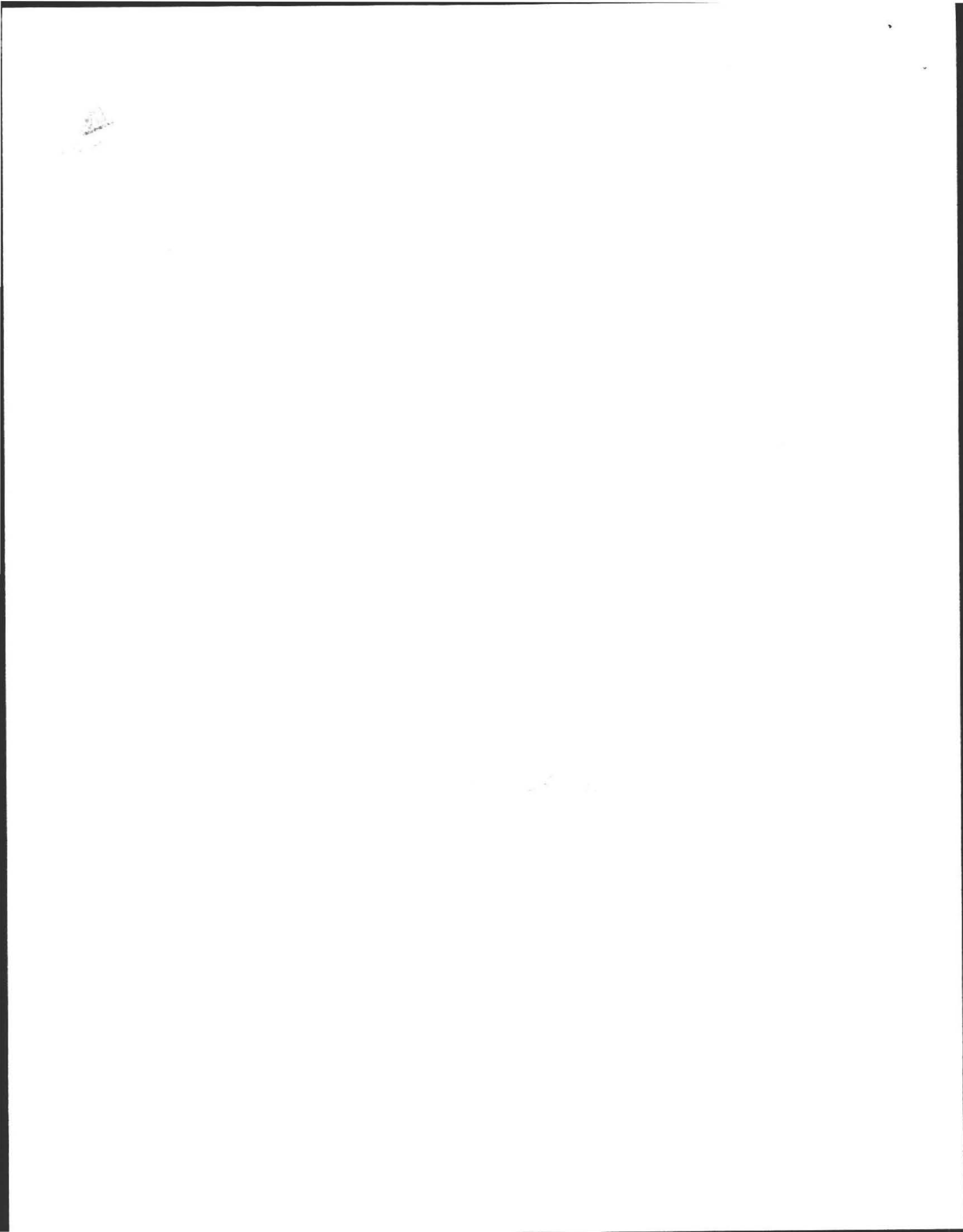
- X Passes
- Conditionally Passes
- Needs Further Evaluation by the Local Approving Authority
- Fails

Inspector's Signature: *Nick Torretti* Date: 08/11/2006

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**

Property Address: 20 Hulst Rd.
Amherst, MA
Owner's Name: Terry Omnisky
Owner's Address: same
Date of Inspection: 08/11/2006

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 Two (2) years. Recommend outlet filter and bacteria/enzymes.

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):

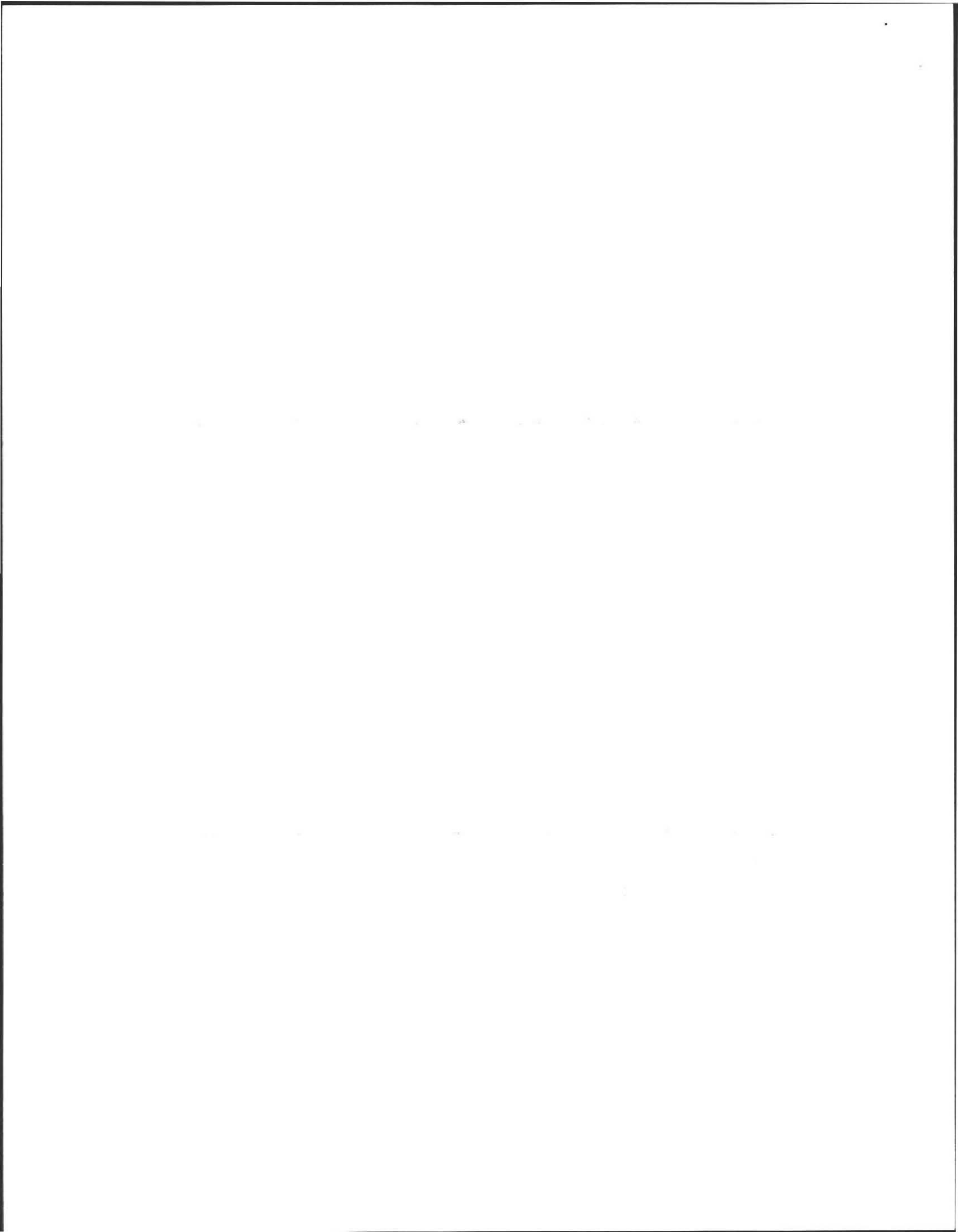
- broken pipe(s) are replaced
- obstruction is removed
- distribution box is leveled or replaced

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: 20 Hulst Rd.
Amherst, MA
Owner's Name: Terry Omnisky
Owner's Address: same
Date of Inspection: 08/11/2006

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:

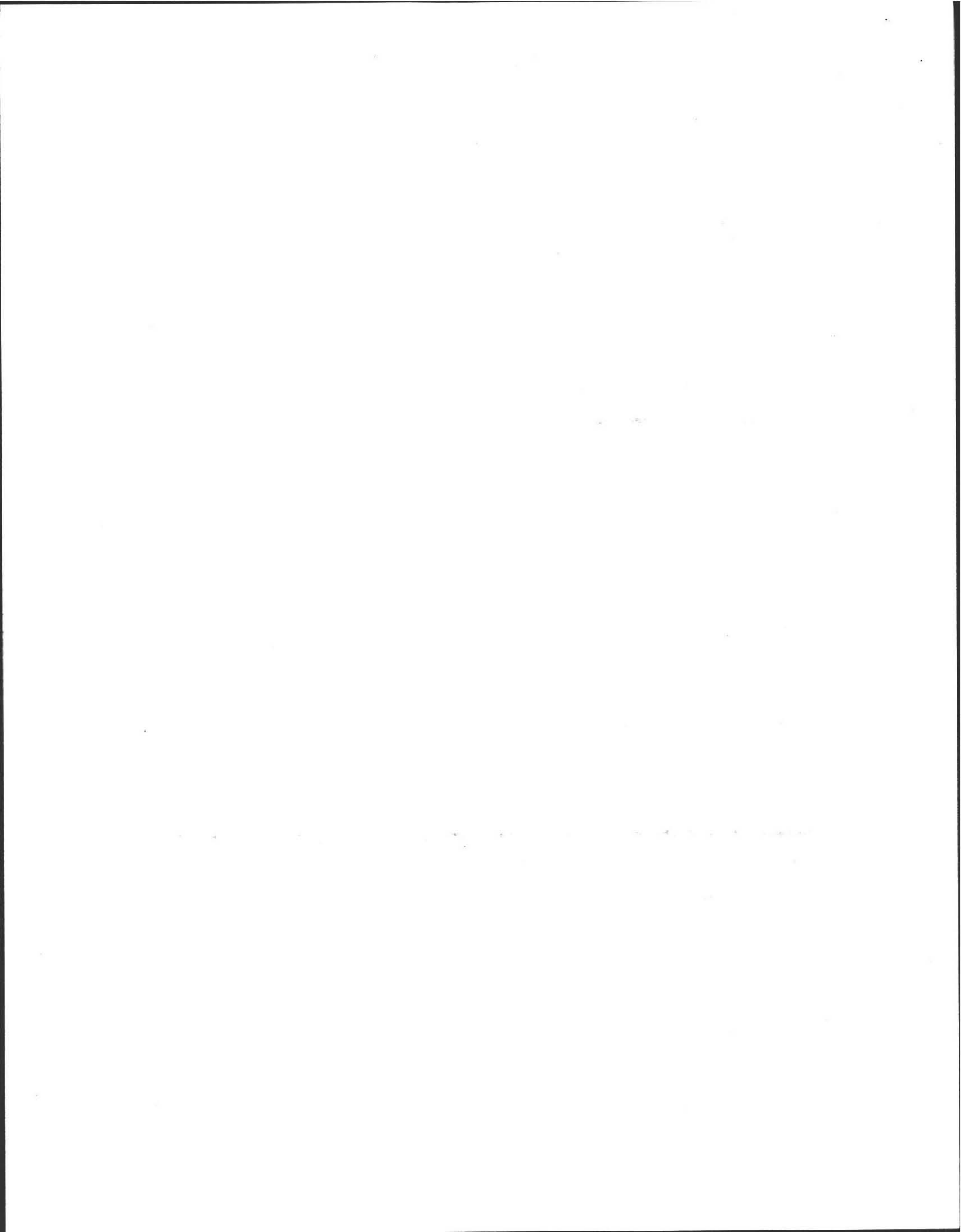
- Cesspool or privy is within 50 feet of a surface water
- Cesspool or privy is within 50 feet of a bordering vegetated wetland or a salt marsh

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: 20 Hulst Rd.
Amherst, MA
Owner's Name: Terry Omnisky
Owner's Address: same
Date of Inspection: 08/11/2006

D. System Failure Criteria applicable to all systems:

You **must** indicate "yes" or "no" to each of the following for **all** inspections:

- | Yes | No | |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Backup of sewage into facility or system component due to overloaded or clogged SAS or cesspool |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS or cesspool |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Liquid depth in cesspool is less than 6" below invert or available volume is less than 1/2 day flow |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Required pumping more than 4 times in the last year NOT due to clogged or obstructed pipe(s). Number of times pumped ____. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Any portion of the SAS, cesspool or privy is below high ground water elevation. ____ |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Any portion of cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Any portion of a cesspool or privy is within a Zone 1 of a public well. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Any portion of a cesspool or privy is within 50 feet of a private water supply well. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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:

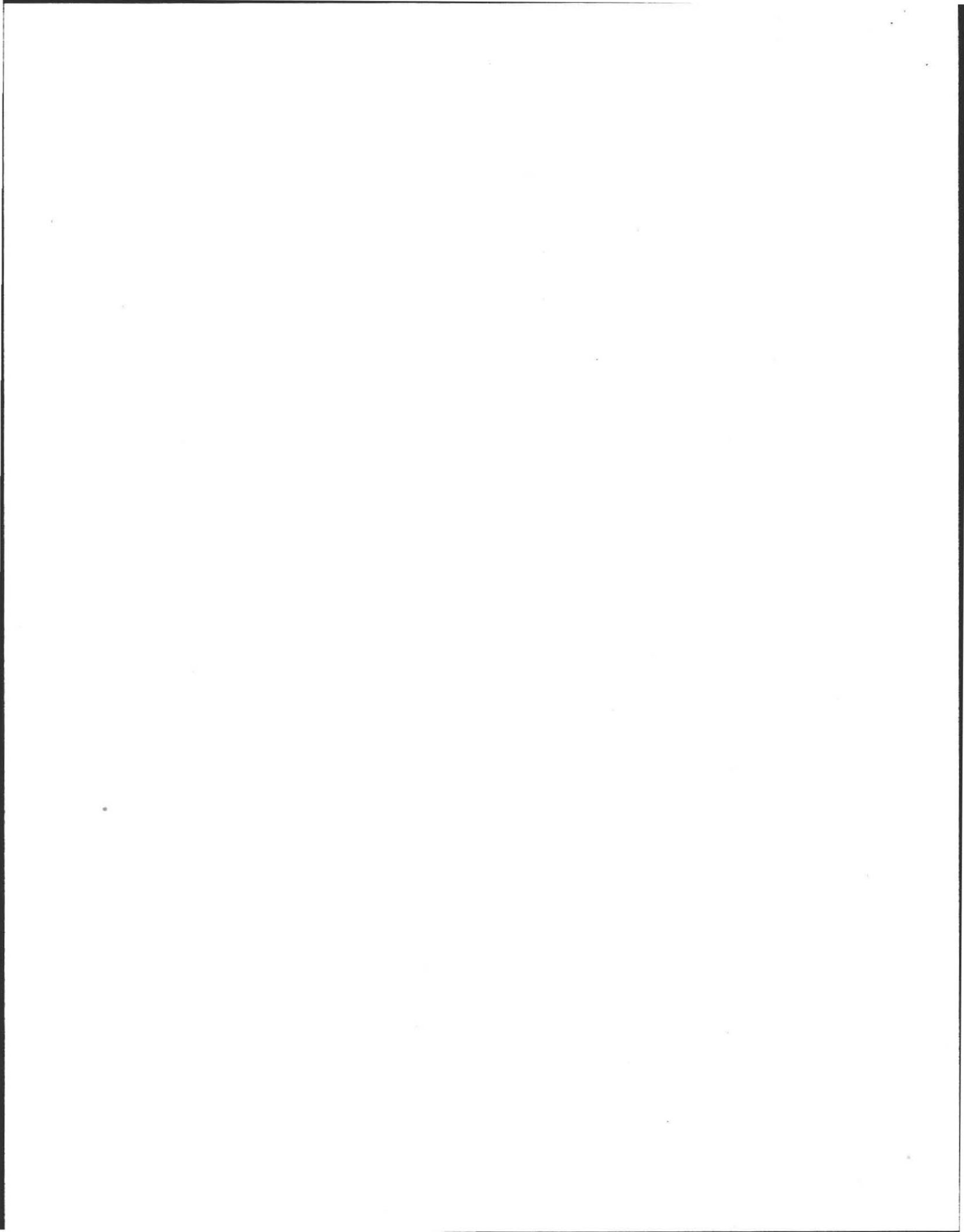
To be considered a large system the system must serve a facility with a design flow of 10,000 gpd to 15,000 gpd.

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 | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | the system is within 400 feet of a surface drinking water supply |
| <input type="checkbox"/> | <input type="checkbox"/> | the system is within 200 feet of a tributary to a surface drinking water supply |
| <input type="checkbox"/> | <input type="checkbox"/> | 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

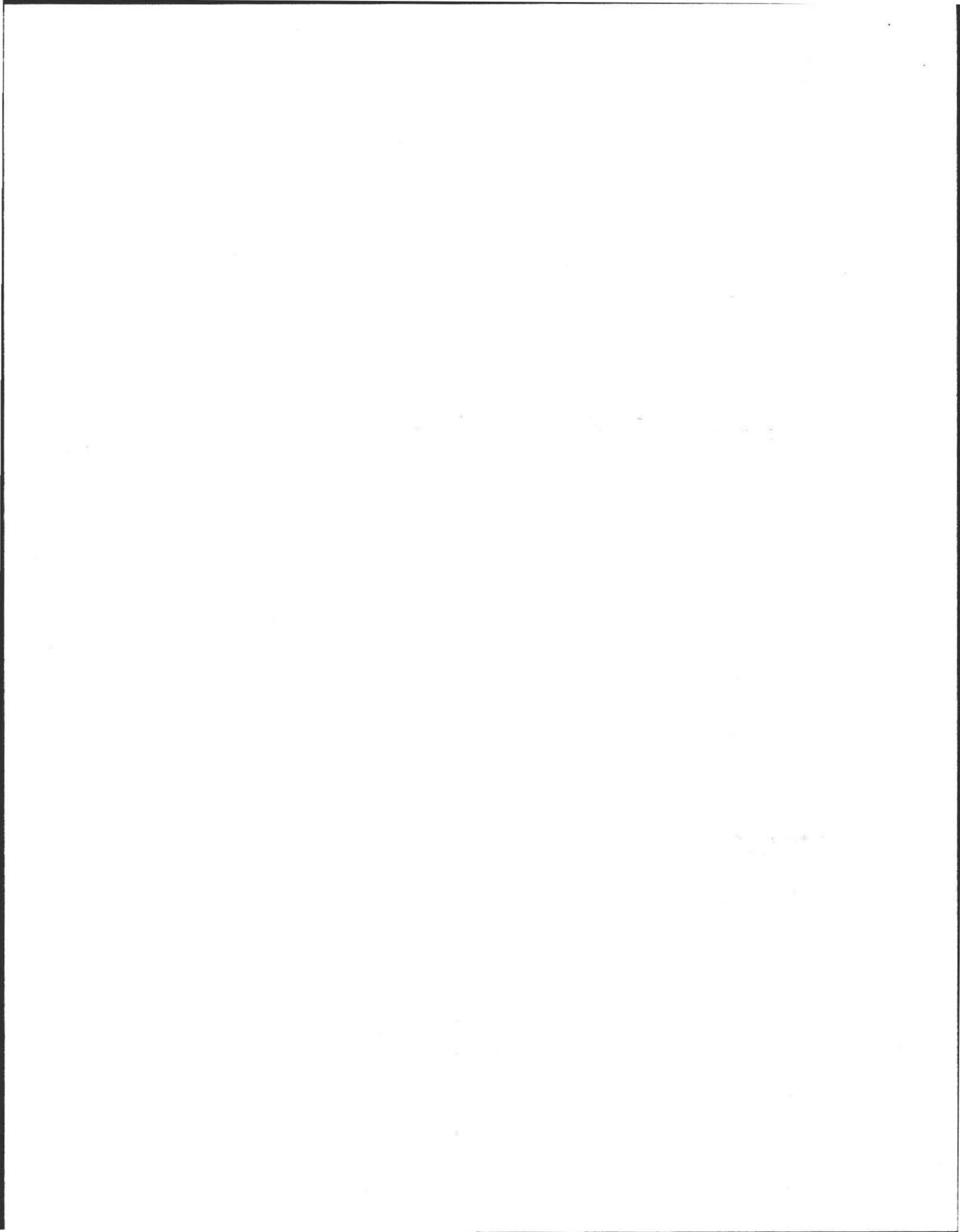
Property Address: 20 Hulst Rd.
Amherst, MA
Owner's Name: Terry Omnisky
Owner's Address: same
Date of Inspection: 08/11/2006

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

- | Yes | No | |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Pumping information was provided by the owner, occupant, or Board of Health |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Were any of the system components pumped out in the previous two weeks ? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Has the system received normal flows in the previous two week period ? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Have large volumes of water been introduced to the system recently or as part of this inspection ? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Were as built plans of the system obtained and examined? (If they were not available note as N/A) |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Was the facility or dwelling inspected for signs of sewage back up ? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Was the site inspected for signs of break out ? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Were all system components, excluding the SAS, located on site ? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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 ? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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 | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Existing information. For example, a plan at the Board of Health. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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: 20 Hulst Rd.
Amherst, MA
Owner's Name: Terry Omnisky
Owner's Address: same
Date of Inspection: 08/11/2006

FLOW CONDITIONS

RESIDENTIAL

Number of bedrooms (design): _ Number of bedrooms (actual): 3
DESIGN flow based on 310 CMR 15.203 (for example: 110 gpd x # of bedrooms): _
Number of current residents: 1
Does residence have a garbage grinder (yes or no): **No**
Is laundry on a separate sewage system (yes or no): **No** [if yes separate inspection required]
Laundry system inspected (yes or no): 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

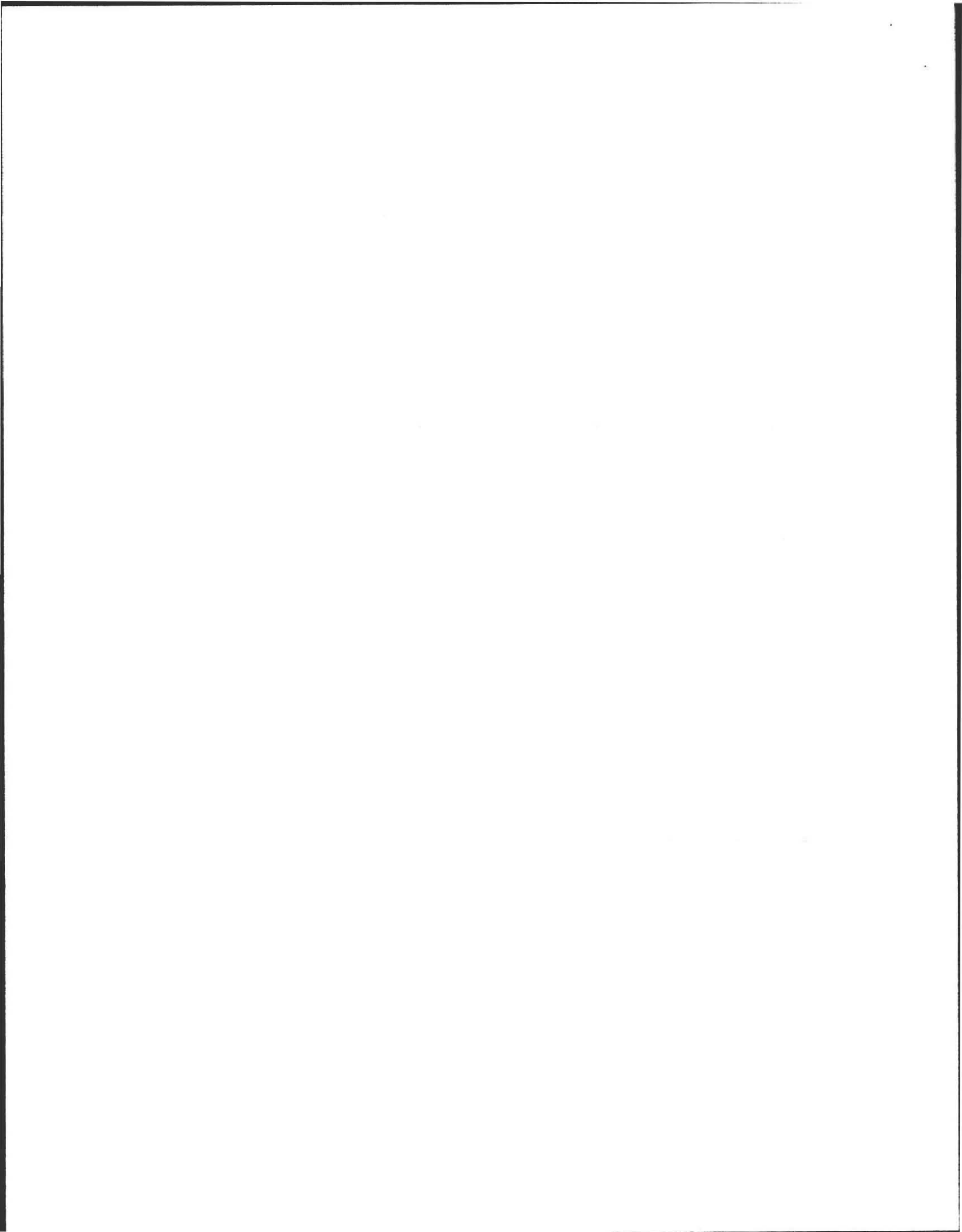
Source of information: **Three(3) years per home owner.**
Was system pumped as part of the inspection (yes or no): **Yes**
If yes, volume pumped: 1500 gallons -- How was quantity pumped determined? **measured**
Reason for pumping: **maintenance**

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:
Approximately 1968 per home owner.



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

Property Address: 20 Hulst Rd.
Amherst, MA
Owner's Name: Terry Omnisky
Owner's Address: same
Date of Inspection: 08/11/2006

BUILDING SEWER (locate on site plan)

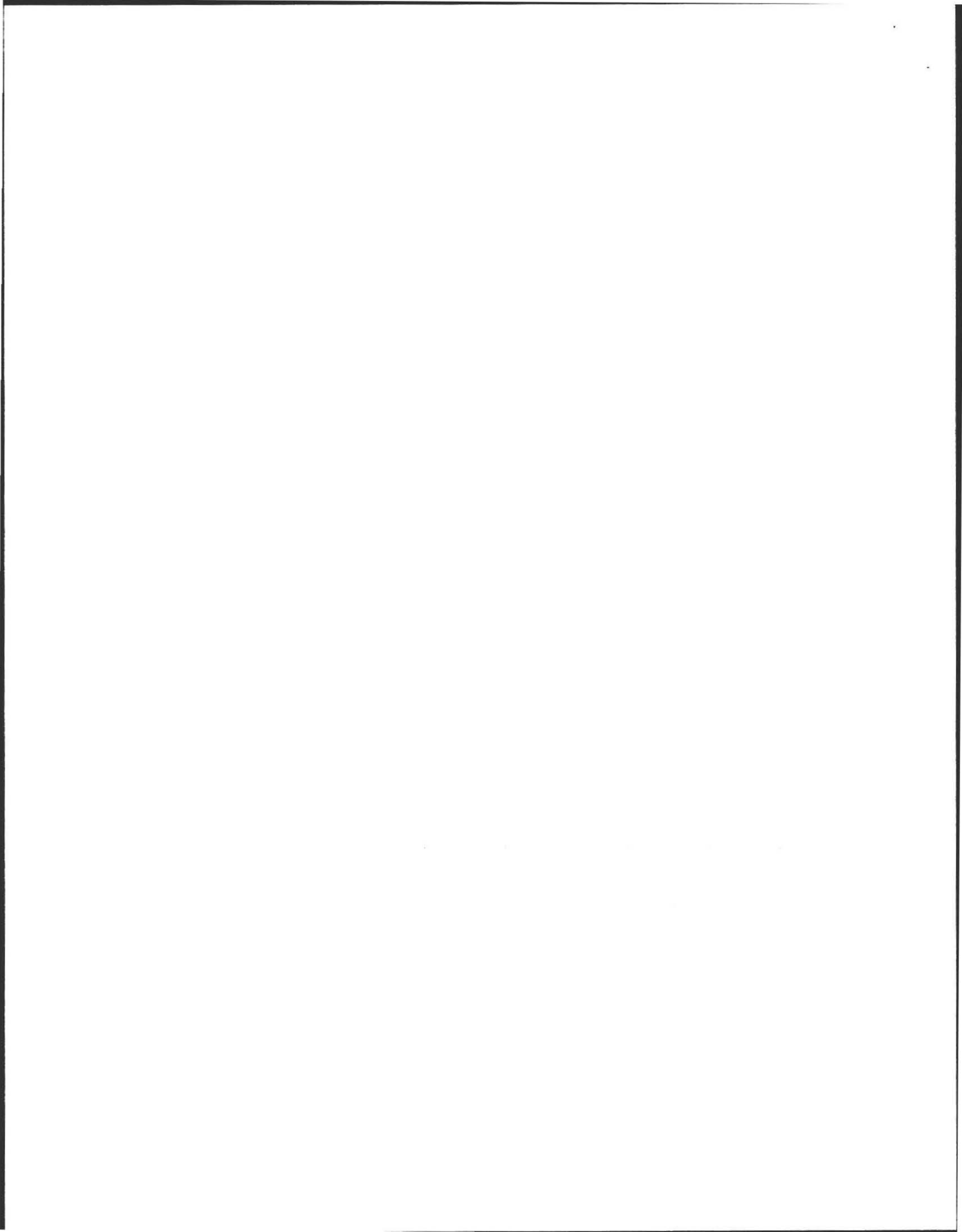
Depth below grade: 5'5"
Materials of construction: cast iron 40 PVC other (explain):
Distance from private water supply well or suction line:
Comments (on condition of joints, venting, evidence of leakage, etc.):
Joints and venting appear okay. No leaks.

SEPTIC TANK: (locate on site plan)

Depth below grade: 4'6"
Material of construction: 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: 8' x 5' x 5' 900 gallon Tetrault Tank
Sludge depth: 1'
Distance from top of sludge to bottom of outlet tee or baffle:
Scum thickness: 3"
Distance from top of scum to top of outlet tee or baffle:
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 Two (2) years. Baffles are intact. Liquid levels are normal. Tank is structurally sound. 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: 20 Hulst Rd.
Amherst, MA
Owner's Name: Terry Omnisky
Owner's Address: same
Date of Inspection: 08/11/2006

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

Depth of liquid level above outlet invert:

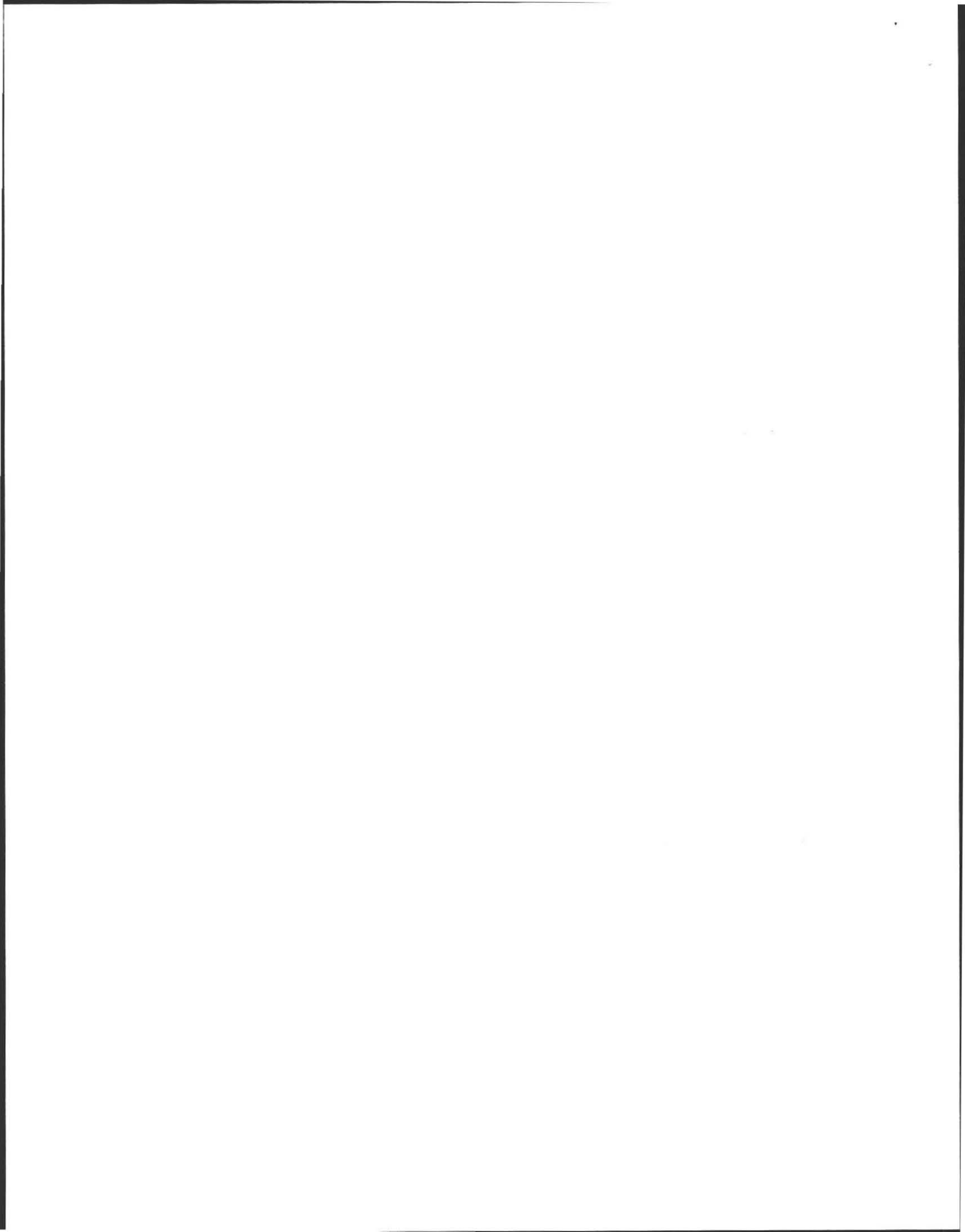
Comments (note if box is level and distribution to outlets equal, any evidence of solids carryover, any evidence of leakage into or out of box, etc.): _____

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: 20 Hulst Rd.
Amherst, MA

Owner's Name: Terry Omnisky

Owner's Address: same

Date of Inspection: 08/11/2006

Date of Inspection: 07/18/2006

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

If SAS not located explain why:

X _ leaching pits, number: **Leach Pit 9'x 5' Leach Pit is a homemade pit built out of cinderblocks**

____ 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 are 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.):

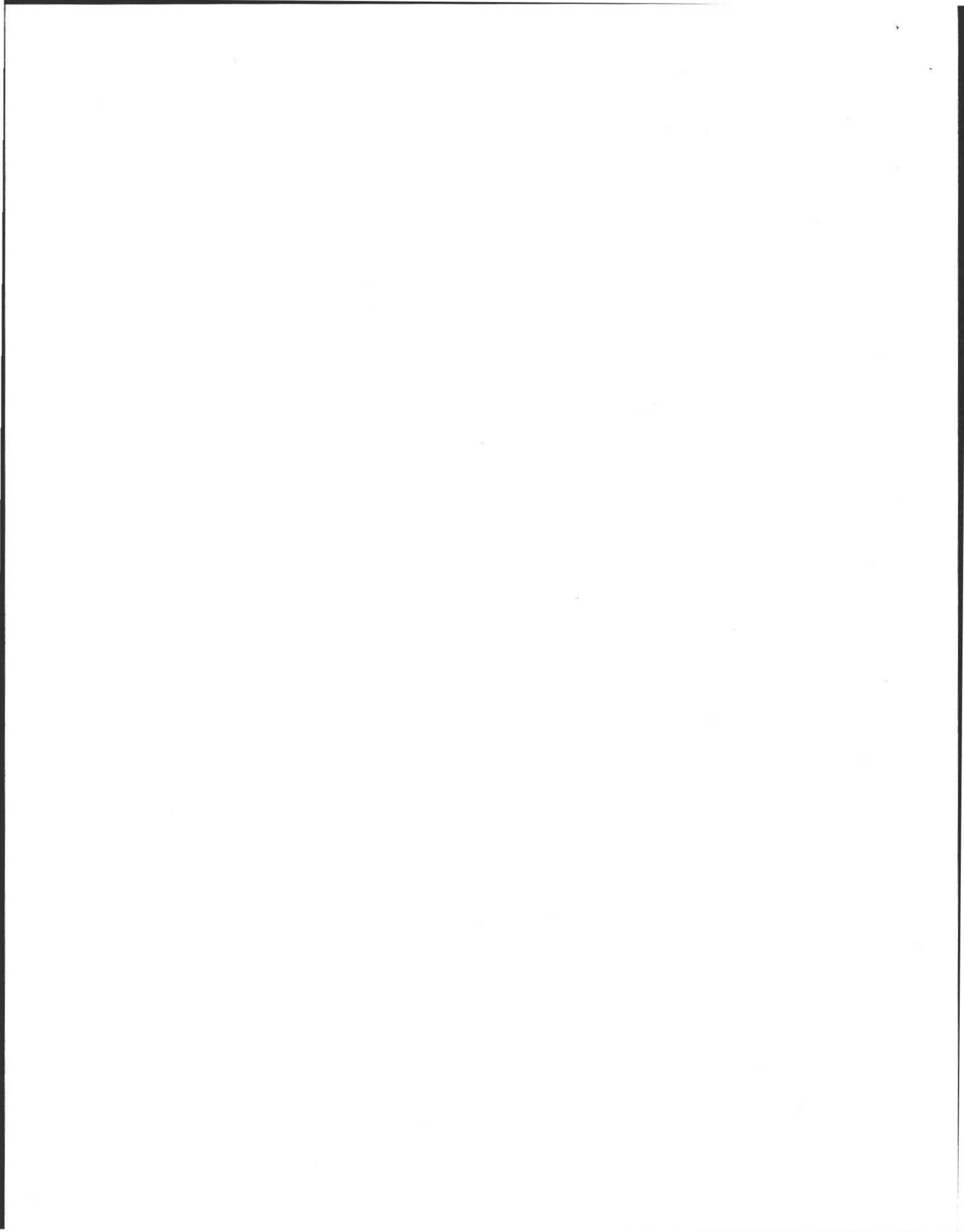
PRIVY: ____ (locate on site plan)

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:

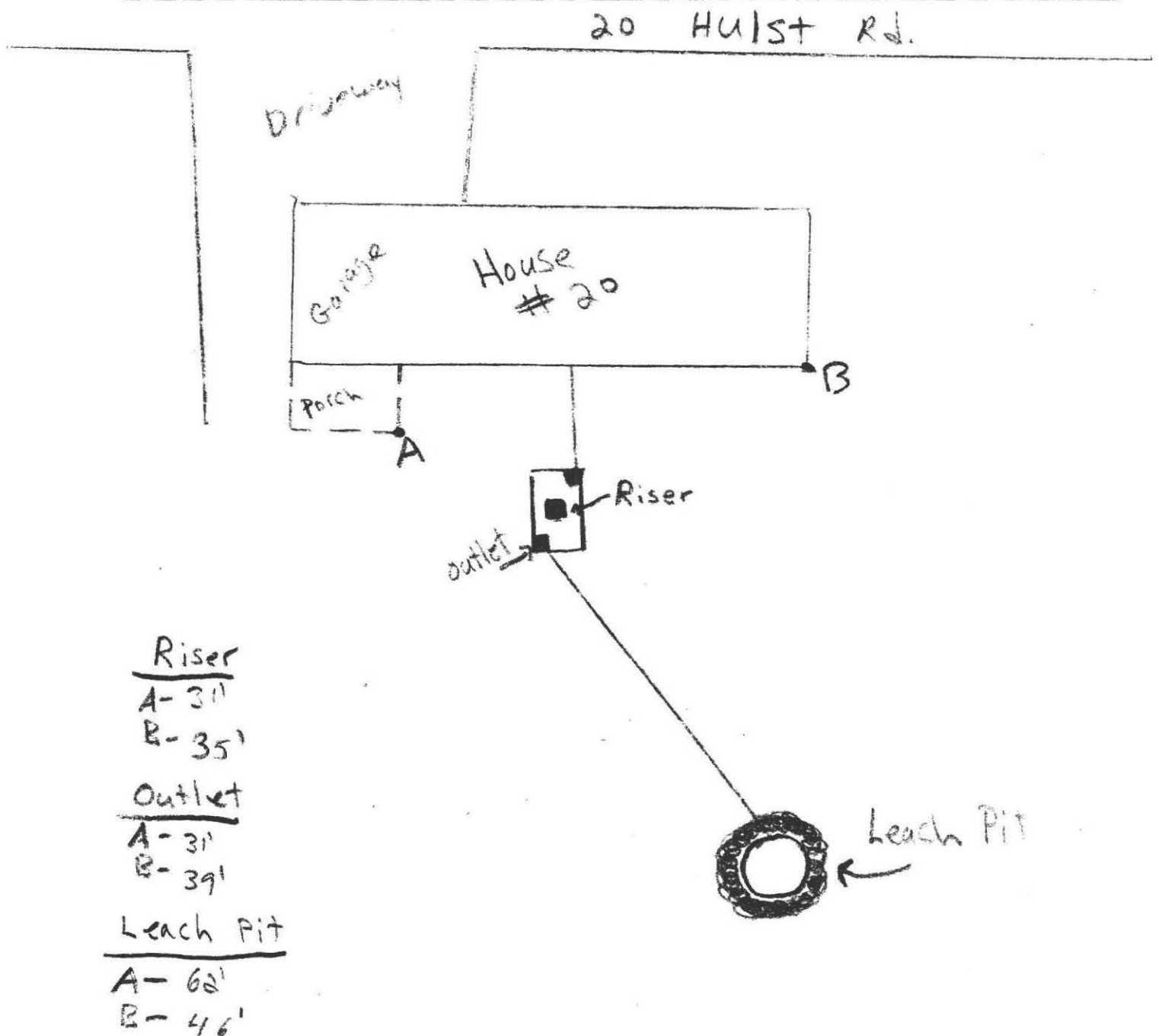
Owner's Name:

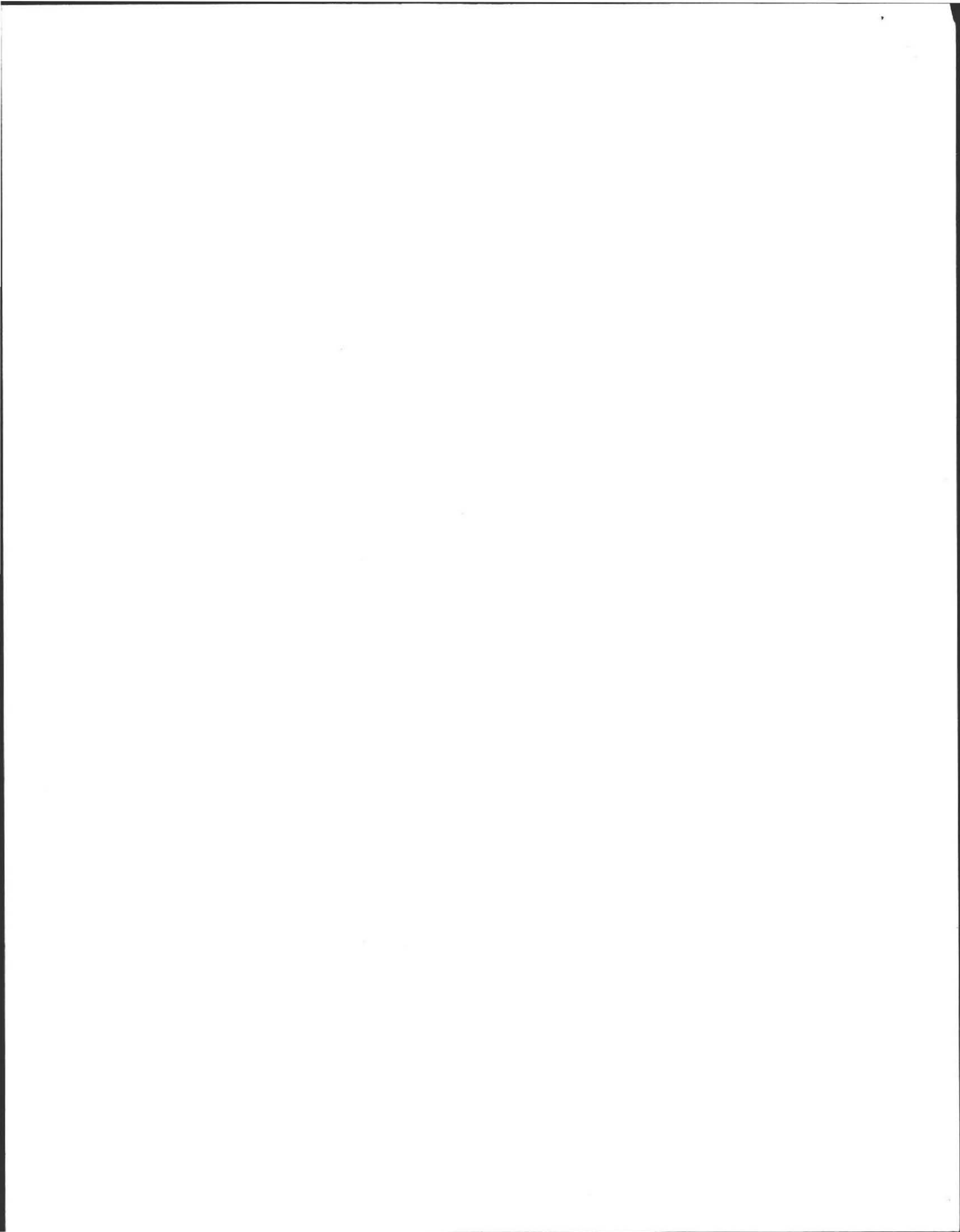
Owner's Address:

Date of Inspection:

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.





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

Property Address: 20 Hulst Rd.
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Owner's Name: Terry Omnisky
Owner's Address: same
Date of Inspection: 08/11/2006

SITE EXAM

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

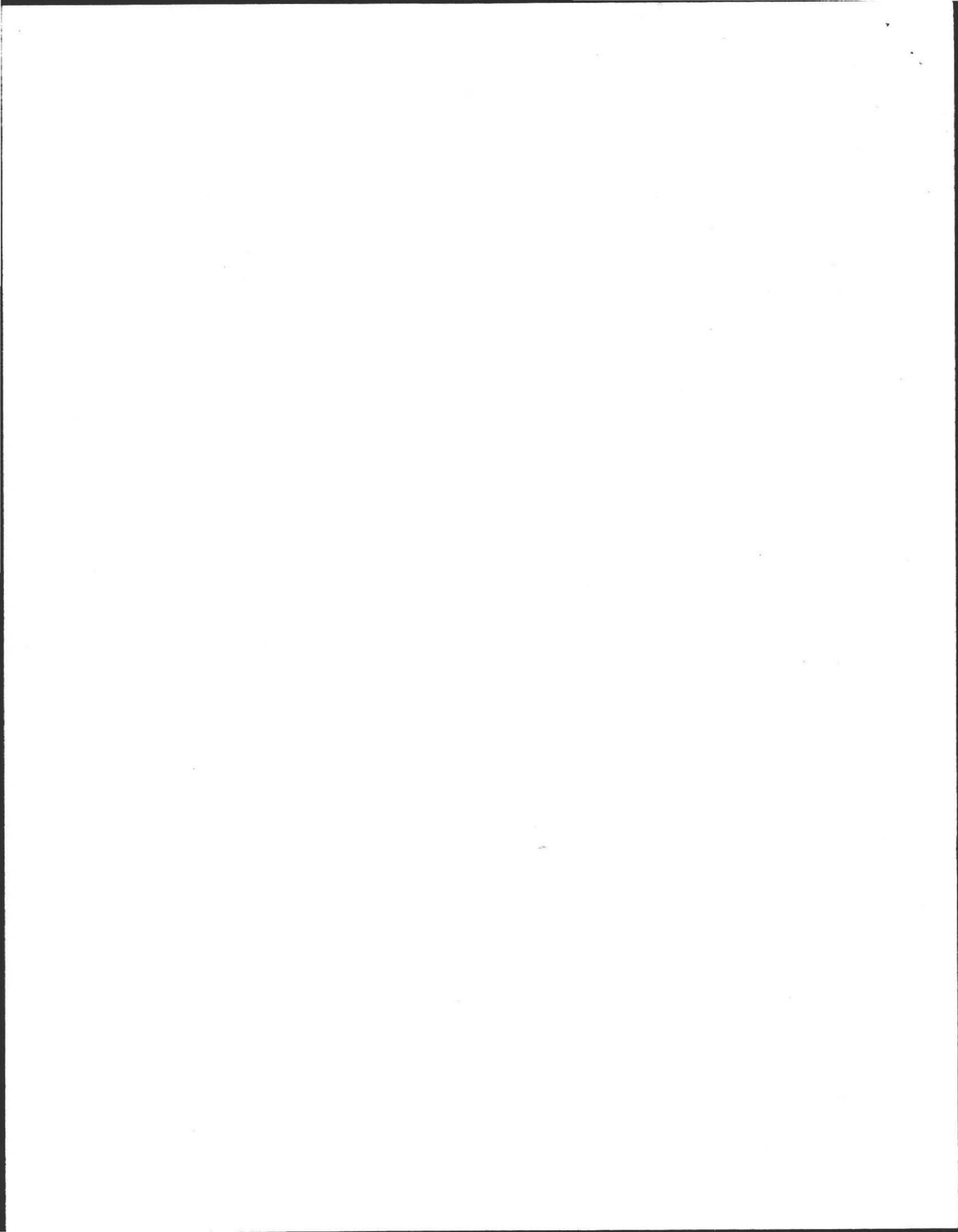
Estimated depth to ground water: **None @ 10'**

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:

Slope in yard and observed abutting properties





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

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

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

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

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

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



DSCP Number Brookfield Farm House DSCP Date _____
 Facility Owner _____
 Street Address or Lot# 20 HWIST RD
Amherst MA _____ Zip Code 01007
 City/Town State

Designer Information:

Alan Weiss, RS, # 933 Cold Spring Environmental, Inc.
 Name Name of Company
 Signature Date 10/18/11

Installer Information:

Rob Adair Jr Adair Construction
 Name Name of Company
 Signature Date 10/18/2011

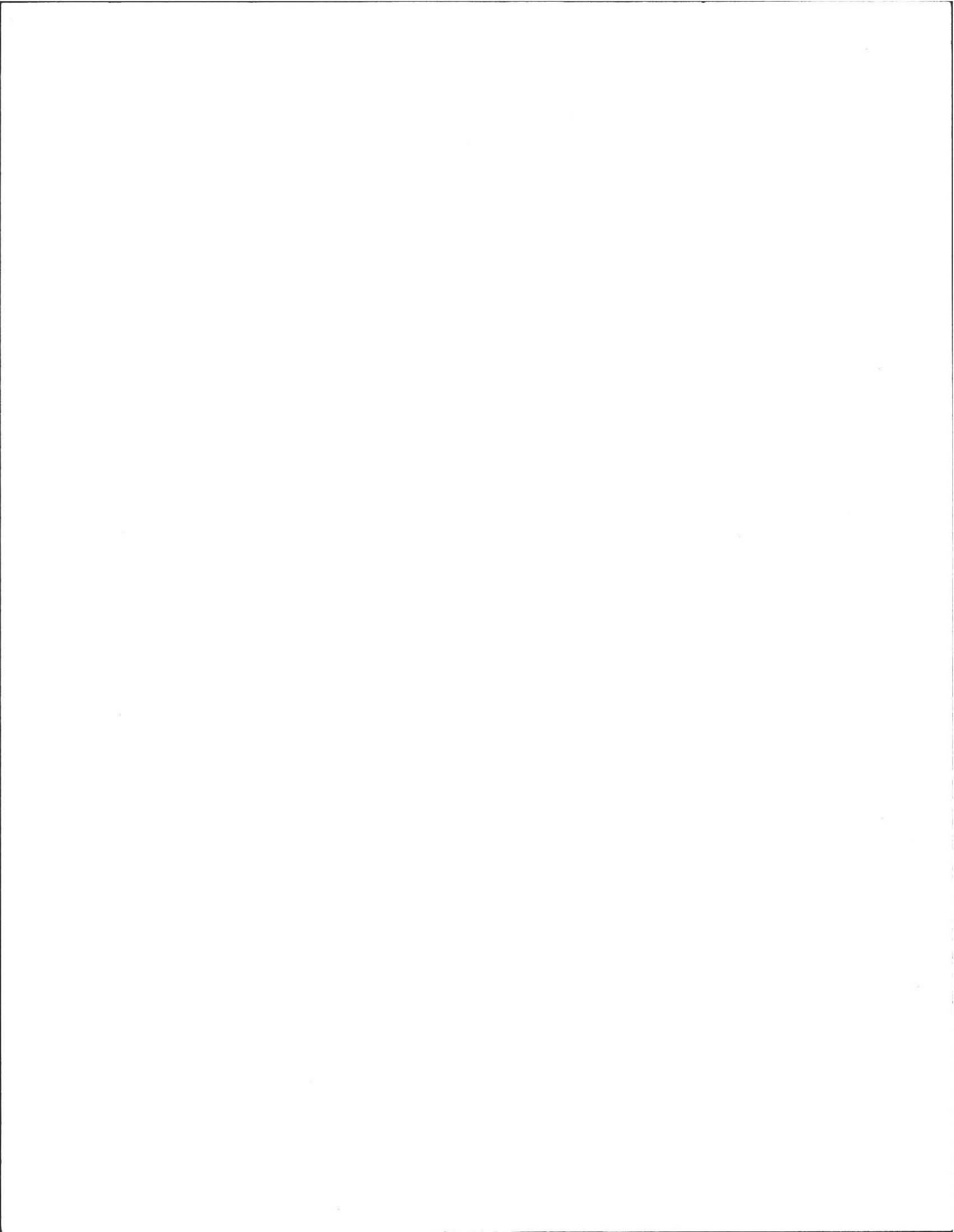
Use of this system is conditioned on compliance with the provisions set forth below:

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

AMHERST HEALTH DEPT.
 Approving Authority _____
 Signature Date 10/18/2011

EMAIL →
 ALAN

FAX FOR ROB ADAIR
 253-1519



AS-BUILT
 REC'D FROM ALAN WEISS
 10/18/2011 at FINAL INSPECTION

N AND

SHERS.
 ED)

CONNECT WITH CLEANOUTS AS NEEDED.

ATTED.

N 89°00'00" E
 157.50'

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

AS BUILT
 10.17.2011
 MAP 30B LOT 48
 SCALE: 1"=30'
 30,086± Sq. Ft.
 0.691± Ac.

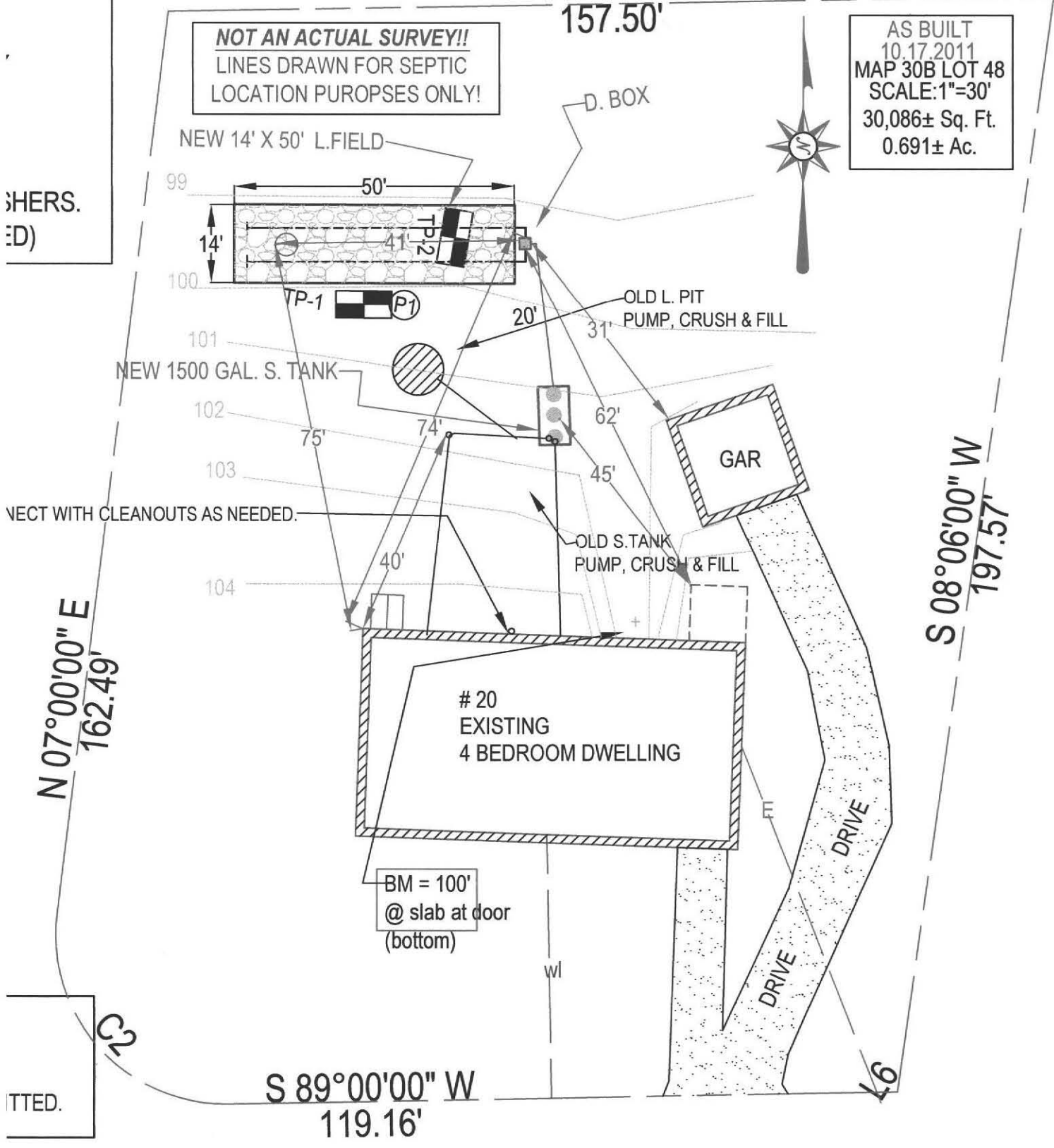
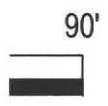


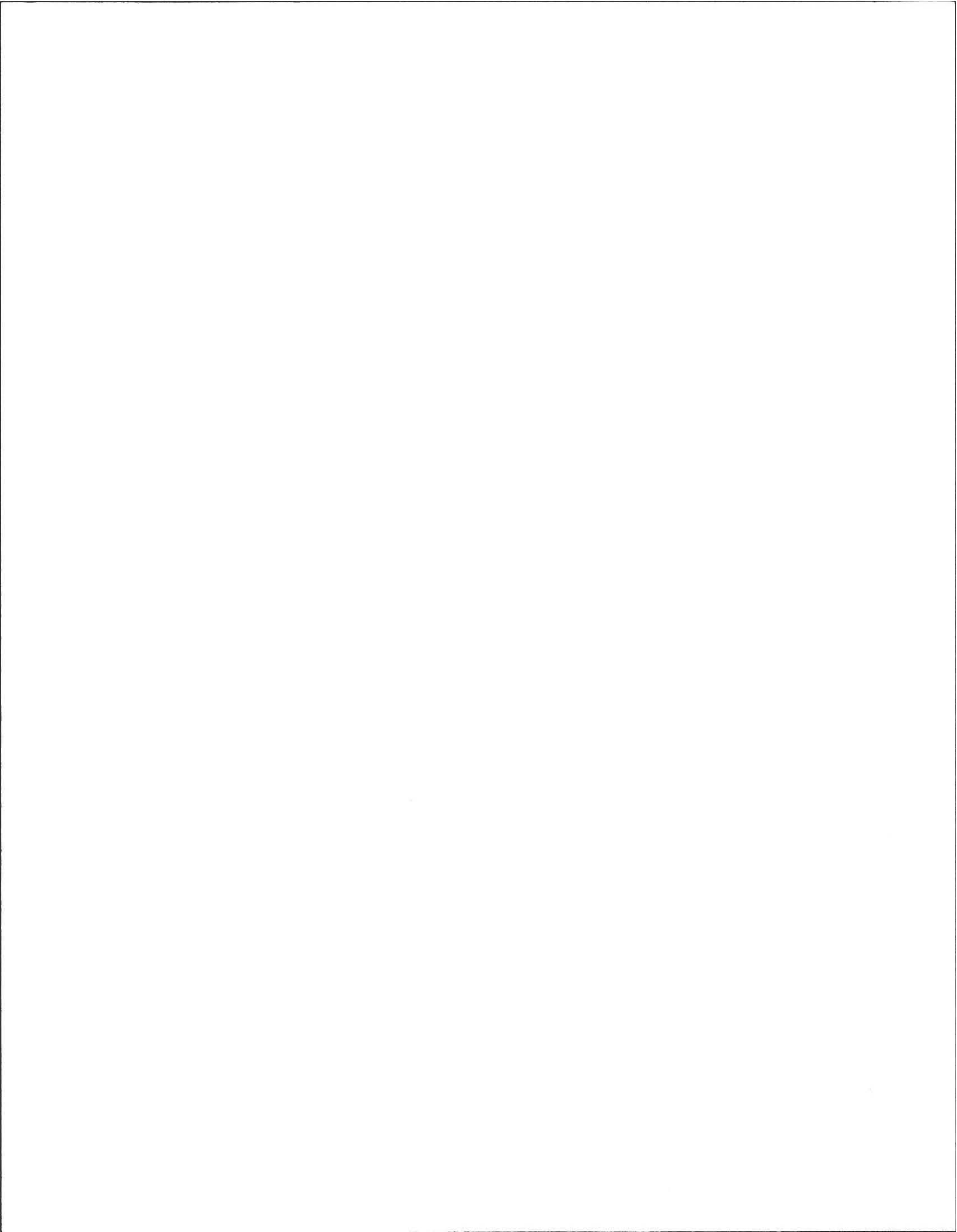
N 07°00'00" E
 162.49'

S 08°06'00" W
 197.57'

S 89°00'00" W
 119.16'

HULST ROAD





FAX

10-18-
2011

Number of pages including cover sheet 2

TO Rob
Adair

Phone

Fax Phone 413.253.1519

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

Phone (413) 259-3153

Fax Phone (413) 259-2404

E-Mail smithe@amherstma.gov

Date

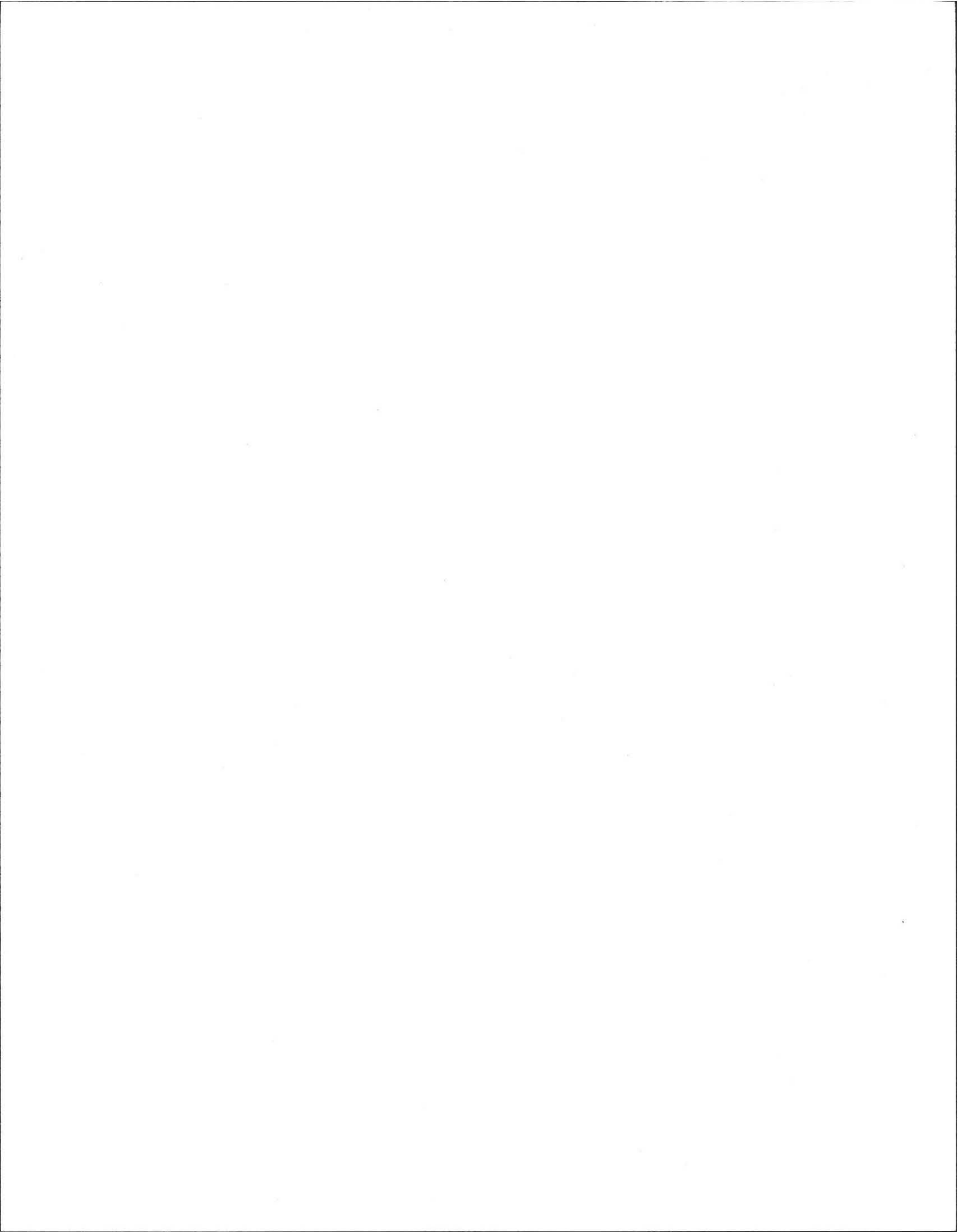
REMARKS: Urgent For your review Reply ASAP Please Comment

Hi Rob –

Here is your copy of the as-built.

Thanks,

Ed



No. _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT



Application for a Permit to Construct() Repair Upgrade() Abandon() Complete System Individual Components

10 Dan Kaplan, Brookfield Farm

Location <u>20 Hulst Rd</u>	Owner's Name <u>Biodynamic Farmland Conserv. Trust</u>
Map/Parcel# <u>30B/48</u>	Address <u>24 Hulst Rd</u>
Lot# <u>48</u>	Telephone# <u>253-7991</u>
Installer's Name <u>Karl's Excavating</u>	Designer's Name <u>Alan Weiss</u>
Address <u>Hadley, MA</u>	Address <u>Balderton, MA</u>
Telephone# <u>519-5396</u>	Telephone# <u>323-5957</u>

Type of Building Residence Lot Size 30,086 sq. ft.
 Dwelling - No. of Bedrooms 4 Bedrooms Garbage grinder
 Other - Type of Building _____ No. of persons _____ Showers (), Cafeteria ()
 Other Fixtures _____
 Design Flow (min. required) 440 gpd Calculated design flow 440 Design flow provided 518 gpd
 Plan: Date 6/12/2011 Number of sheets 1 Revision Date _____
 Title Septic System Repair Plans
 Description of Soil(s) class 1: SAND
 Soil Evaluator Form No. _____ Name of Soil Evaluator A Weiss Date of Evaluation 6/1/2011

DESCRIPTION OF REPAIRS OR ALTERATIONS _____

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 _____

Inspections _____

No. 12-01

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: KARL'S EXCAVATING
at 20 HULST ROAD, AMHERST, MA 01002

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 518 (gpd)

Installer KARL'S EXCAVATING
Designer: ALAN WEISS Inspector: EDMUND SMITH Date: 7/5/2011

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

FEE \$ 350.00 TOTAL

No. 12-01

COMMONWEALTH OF MASSACHUSETTS

Board of Health, _____, MA.

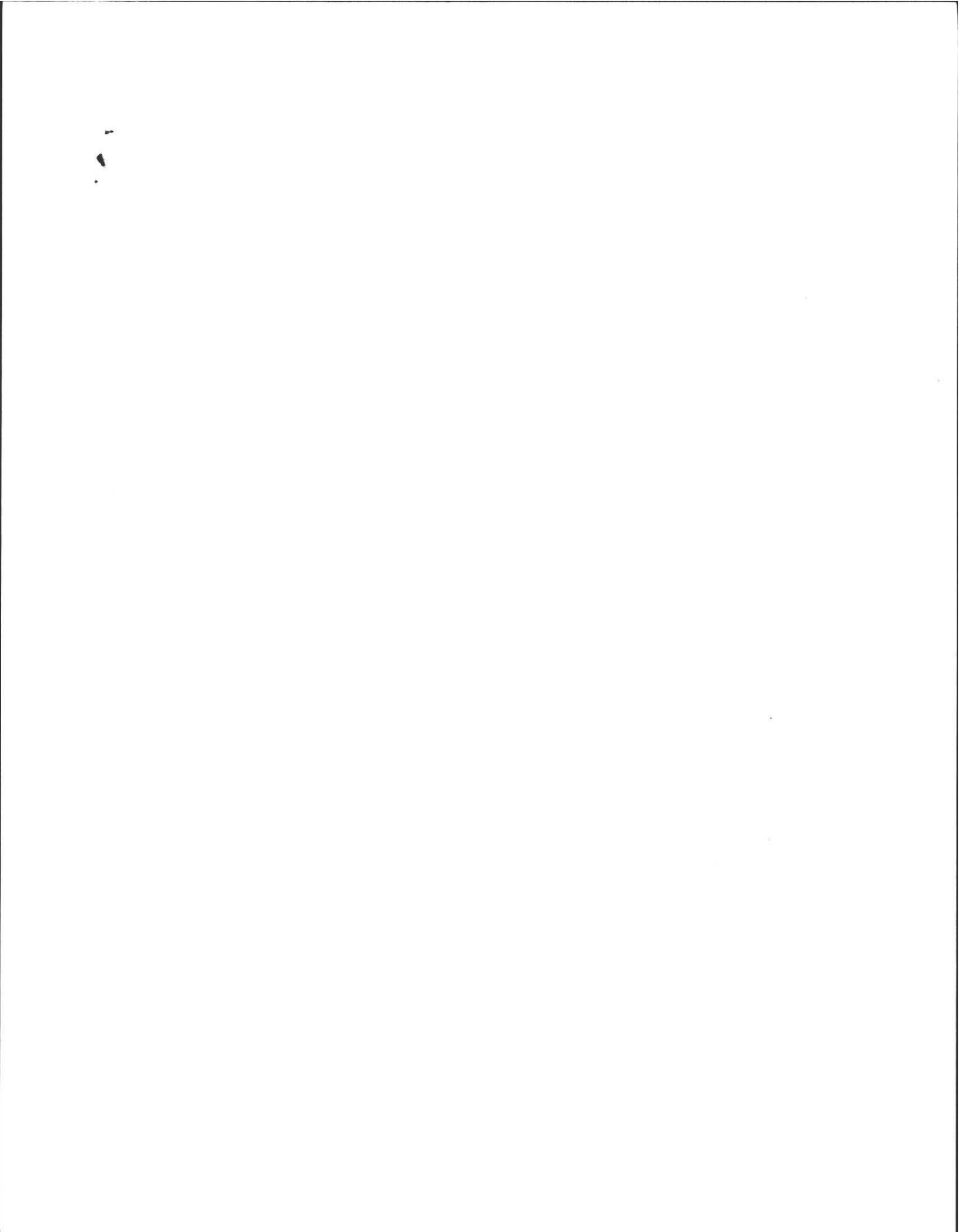
DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct() Repair() Upgrade() Abandon() an individual sewage disposal system at 20 HULST ROAD, AMHERST MA 01002 as described in the application for Disposal System Construction Permit No. 12-01, dated 7/5/2011.

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

Date 7/5/2011 Board of Health Edmund Smith

FEE 350.00 TOTAL





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)
aweiss@charter.net

Date: 6/1/11

Commonwealth of Massachusetts
Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

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

Date: 6/1/11

* Biodynamic Farmland Conservation Trust

Location Address or Lot # <u>20 Hulst Rd</u> <u>Amherst, MA</u> New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/>	Owner's Name: <u>Brookfield farm house</u> Address and Telephone # <u>20 Hulst Rd</u> <u>Amherst, MA</u>
--	---

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)

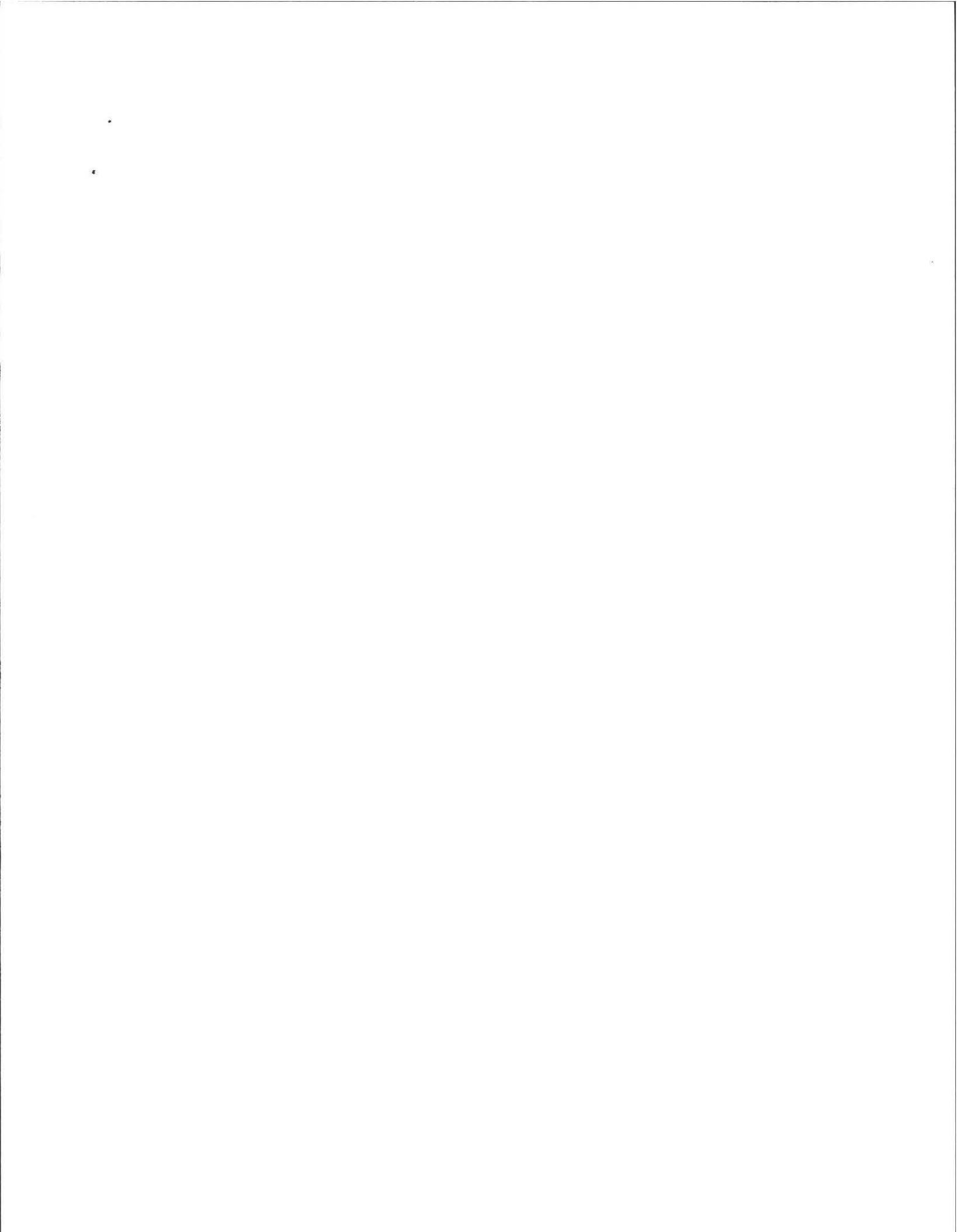
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month

Range : Above Normal Normal Below Normal

Other References Reviewed: _____





Location Address or Lot No. 20 Huist RD

On-site Review

Deep Hole Number 172 Date: 6/1/11 Time: 10:35 Weather SUN 80

Location (identify on site plan) _____

Land Use RES Slope (%) 3 Surface Stones not

Vegetation GRASS

Landform TERRACE

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 30 feet
 Drinking Water Well 100 feet Other _____

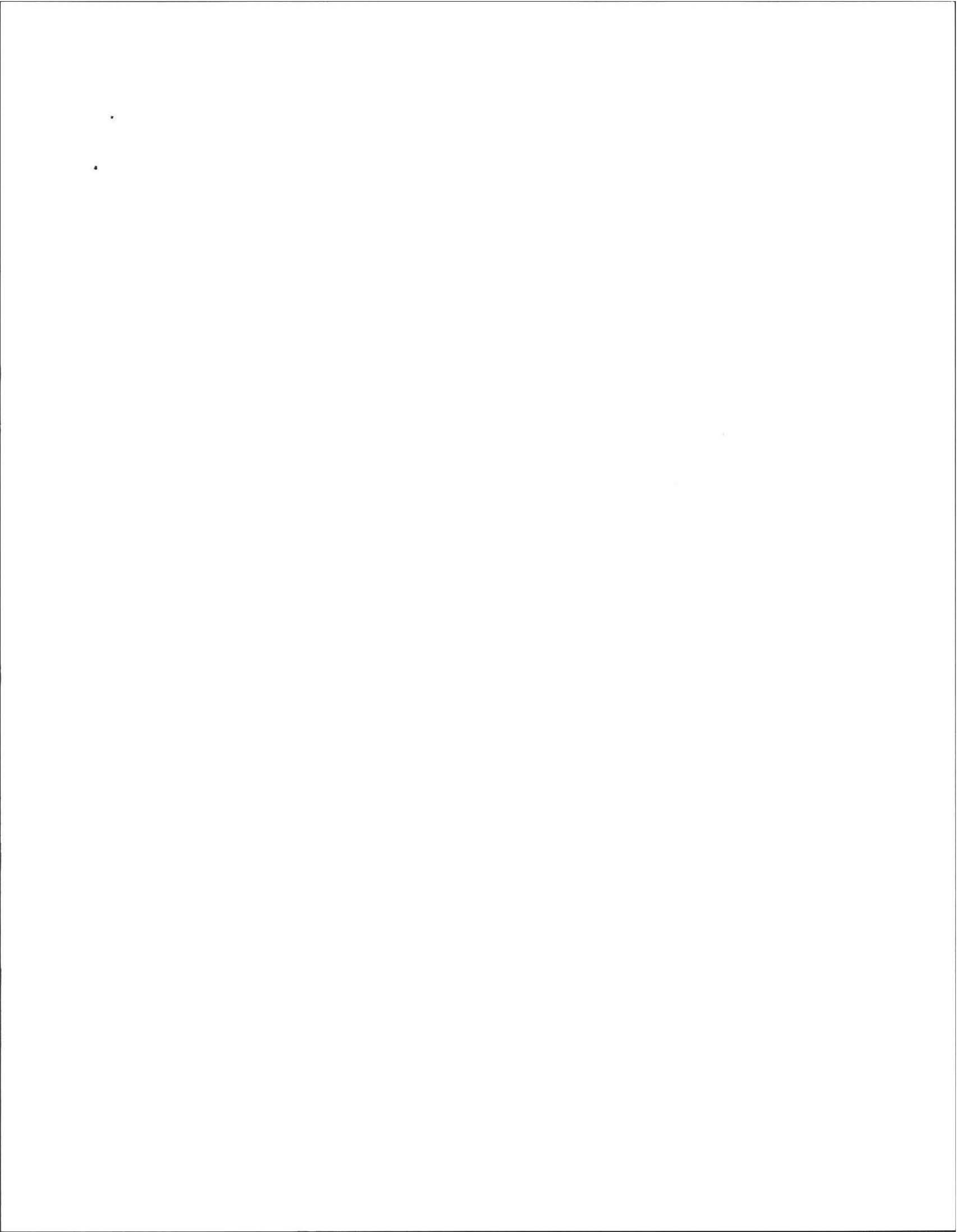
DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
# 0-9" 9"-26" 26"-126"	Ap Bw C ₁	FSL FS LS	10YR 3/3 2.5Y 5/6 2.5Y 4/3	Not obs.	- Frable, Loose. - f. Sandy, granular. - med - coarse sand, granular. Loose, 15% stones
# 0-8" 8"-26" 26"-126"	Ap Bw C ₁	FSL FS LS	10YR 3/3 2.5Y 5/6 2.5Y 4/3	Not obs.	- Frable Loose. - f. Sandy, granular. - med - coarse sand, granular. Loose, 15% stones

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

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





Location Address or Lot No. 20 Hutst Rd

COMMONWEALTH OF MASSACHUSETTS
Amherst, Massachusetts

Percolation Test*		
Date: ...	<u>6/1/11</u>	Time: <u>10:45</u>
Observation Hole #	<u>P.</u>	
Depth of Perc	<u>CANT (40")</u>	
Start Pre-soak	<u>HOLD</u> (<u>12</u>
End Pre-soak		<u>6</u>
Time at 12") <u>Water</u>	<u>P</u>
Time at 9"		<u>a</u>
Time at 6"		<u>i</u>
Time (9"-6")		<u>r</u>
Rate Min./Inch		<u>2</u>

* 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: E. Smith

Comments: _____



•
•
•

Location Address or Lot No. 20 HULST 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 120" inches
- Ground water adjustment feet

Index Well Number Reading Date Index well level

Adjustment factor Adjusted ground water level

Depth of Naturally Occurring Pervious Material

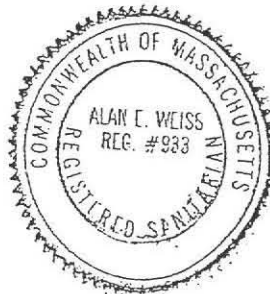
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? yes

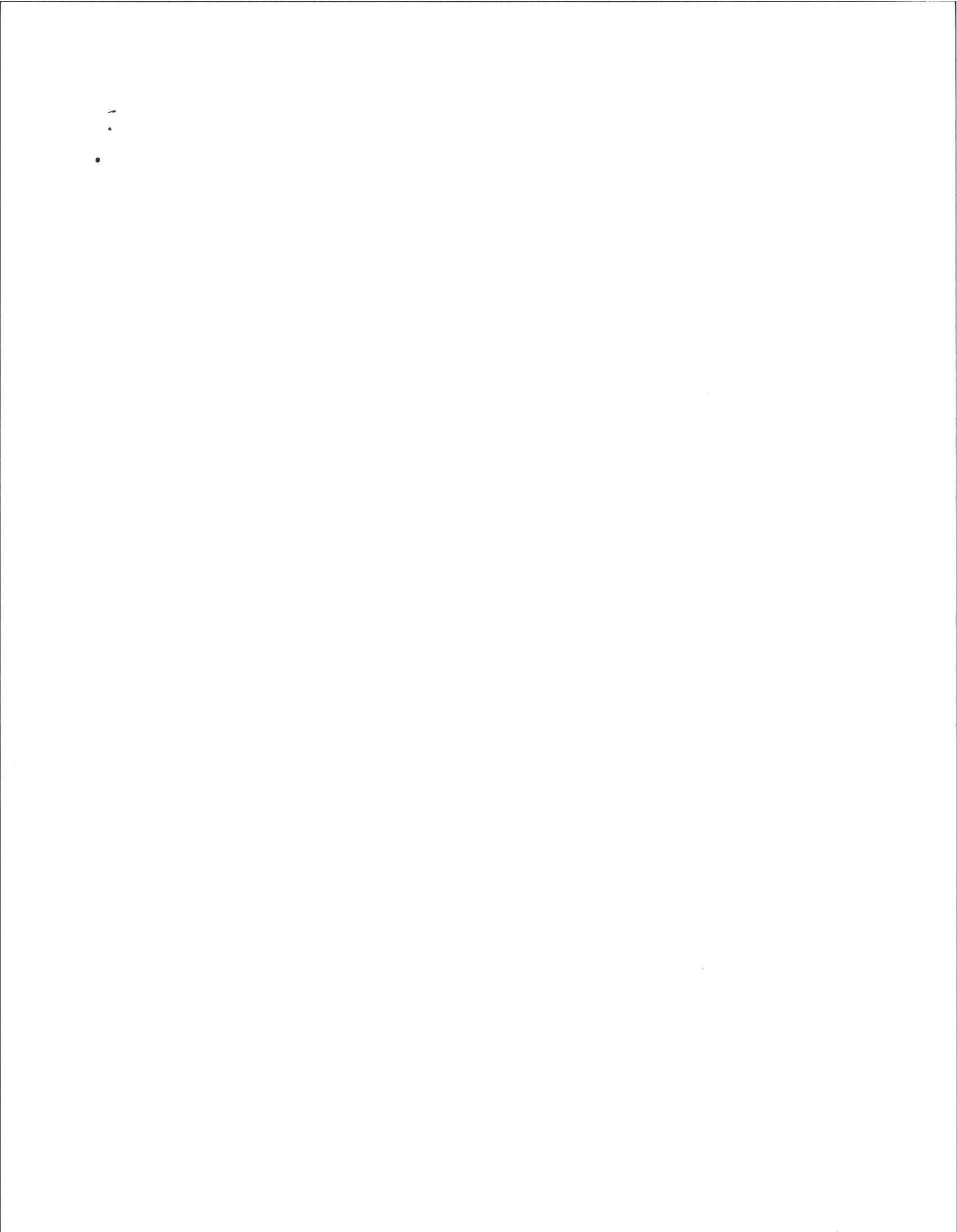
If not, what is the depth of naturally occurring pervious material? _____

Certification

I certify that on June 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.

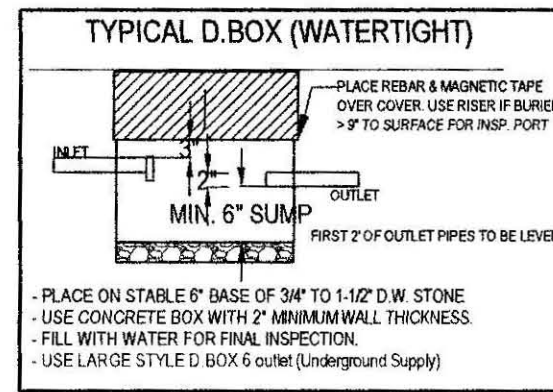
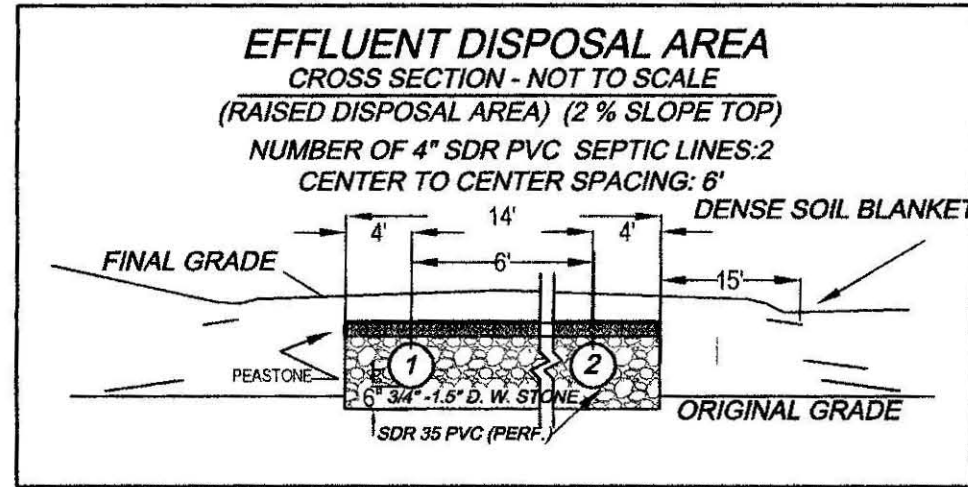
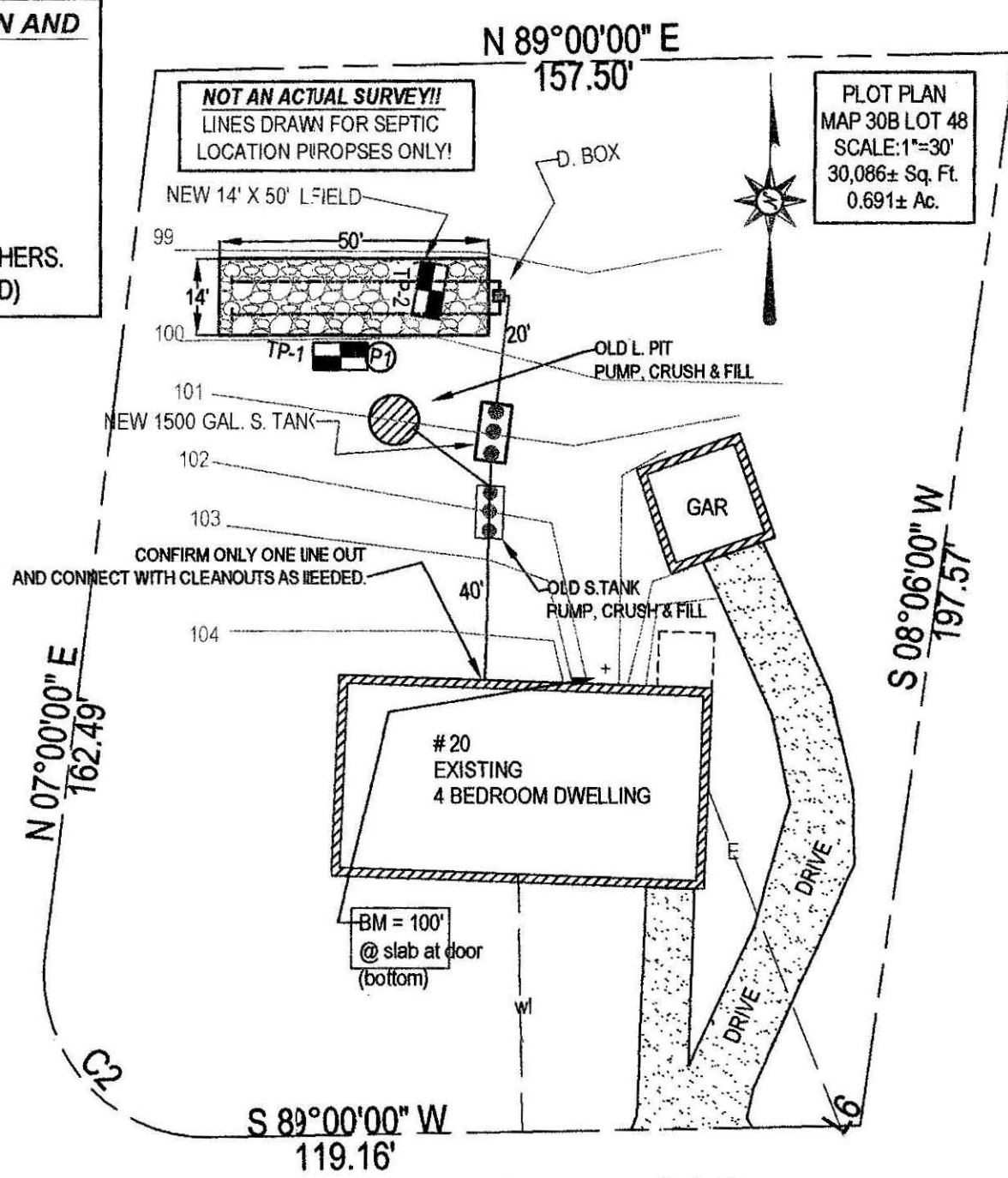
Signature *AE* Date 6/1/11





GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.

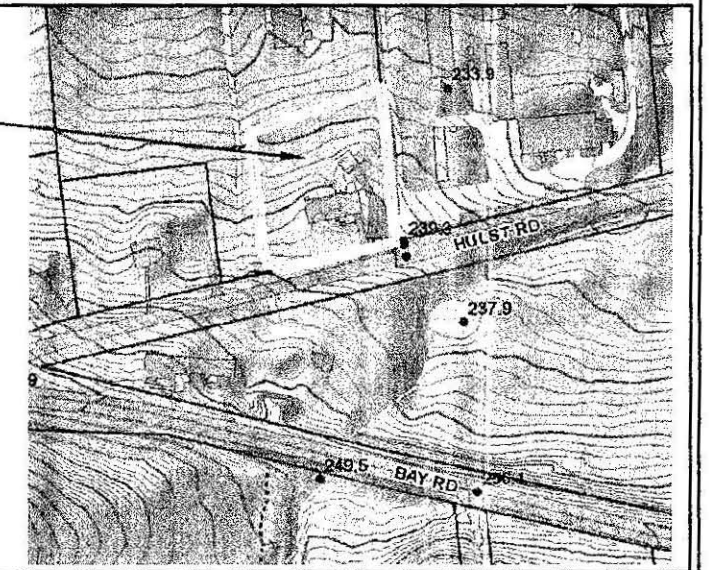
- 1.) HAVE TANK PUMPED EVERY 2 YEARS.
- 2.) MAINTAIN AREA OVER SEPTIC SYSTEM AS GRASSY OR SIMILAR GROUND COVER.
- 3.) DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
- 4.) USE ONLY LIQUID DETERGENTS & LOW FLOW WASHERS.
- 5.) CLEAN TANK OUTLET FILTER ANNUALLY (IF EQUIPED)



NOTE TO HOMEOWNER AND CONTRACTOR:
CONNECTIONS FROM HEATING SYSTEM, AIR CONDITIONERS, SUMP PUMPS, WATER WELL FILTRATION UNITS AND HEAT PUMPS ARE NOT ALLOWED, SANITARY WATER CONNECTIONS ONLY PERMITTED.

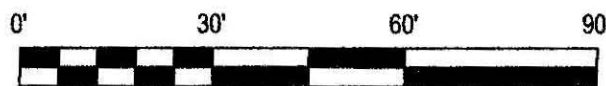
NOTE TO INSTALLER:
TOWN INSPECTOR AND SYSTEM DESIGNER MUST BE CALLED 48 HRS BEFORE START OF SYSTEM INSTALL

SUBJECT SITE LOCATION

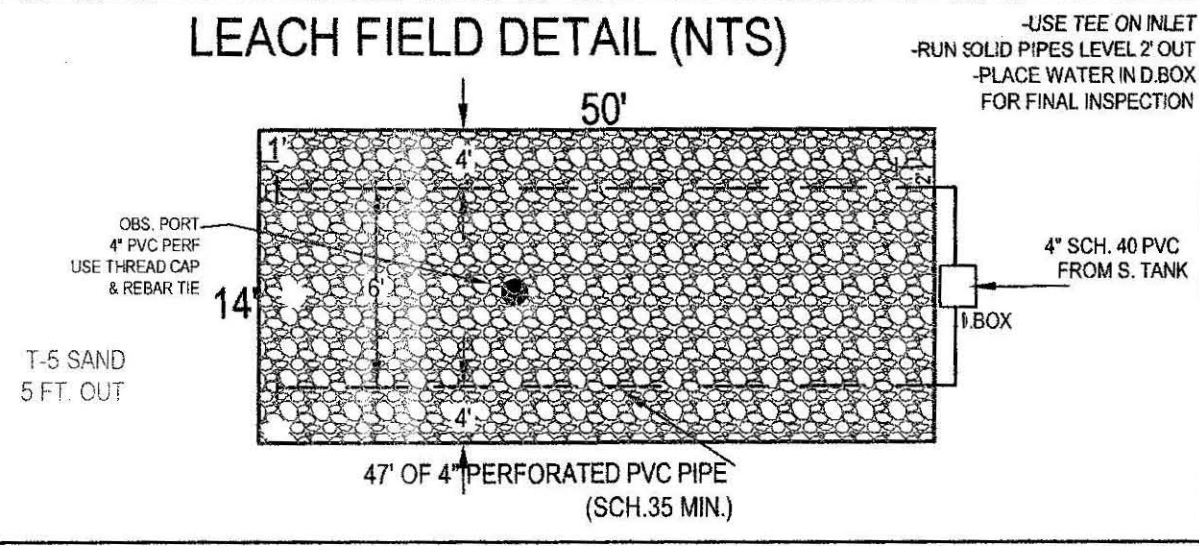


DESIGN NOTES AND CALCULATIONS:

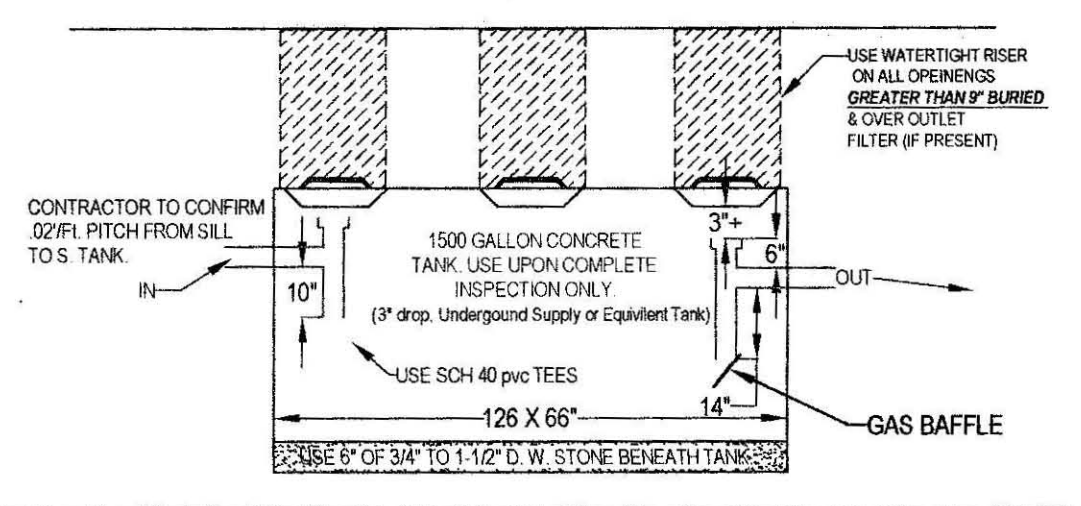
- 1.) 4 (BEDROOM HOME) = 440 GPD MIN. REQUIRED.
- USE LEACHING FIELD 14' WIDE X 50' LONG WITH 6" OF 3/4" TO 1-1/2" DBL WASHED STONE BELOW INVERT.
- BOTTOM AREA: L. FIELD (14' W X 50' L) = 700 SF.
- TOTAL AREA: 700 SF X .74 GAL/SF = 518 GPD PROVIDED.
3. GARBAGE DISPOSAL NOT PERMITTED.
4. NO OTHER PRIVATE WELLS WITHIN 150 FEET OF SAS.
5. NO OTHER WETLANDS WITHIN 50 FEET OF SAS.
6. USE S. TANK AS NOTED & MAINTAIN 0.02 PITCH FROM SILL TO S. TANK
- INSTALL & INSPECT SCH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET).
- NOTE:
- ALL COMPONENTS OF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO 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 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.
- 7B ANY ALL PLASTIC RISERS MUST BE SECURED WITH STAINLESS STEEL SCREWS.
8. - USE (.75"-1 1/2") STONE UNDER TANK & D. BOX FOR 6" FOR STABLE BASE.
- USE ONLY DBL. WASHED APPROVED (.75"-1.5") FOR PLACEMENT IN LEACH AREA.
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 & ESHGW (310 CMR 15.240)
14. USE 2% MIN. SLOPE OVER SAS
- CLEAR TOP AND SUB TO 32" MIN. AS NEEDED (INSPECTION REQUIRED).
- CLEAR PAST BASE OF B (MIN. 32") & SCARIFY UNDER TRENCH PRIOR TO TITLE V SAND/STONE PLACEMENT.
- EXCAVATE EXISTING LOAM, SUB AND ANY EXISTING DEBRIS, DIRTY FILL OR PRIOR SYSTEM IF PRESENT.
15. SOIL EVALUATION BY A. WEISS, RS. (E. Smith), BOH AGENT).
- DEPTH OF PERC. 40"
- PERC RATE = < 2 MIN / IN.
- CLASS 1, S AND SOIL RATING
16. NO TREES WITHIN 10 FT. OF NEW LEACH AREA.
17. ENGINEER TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL
18. BM=100.00 @ (Slab, 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.



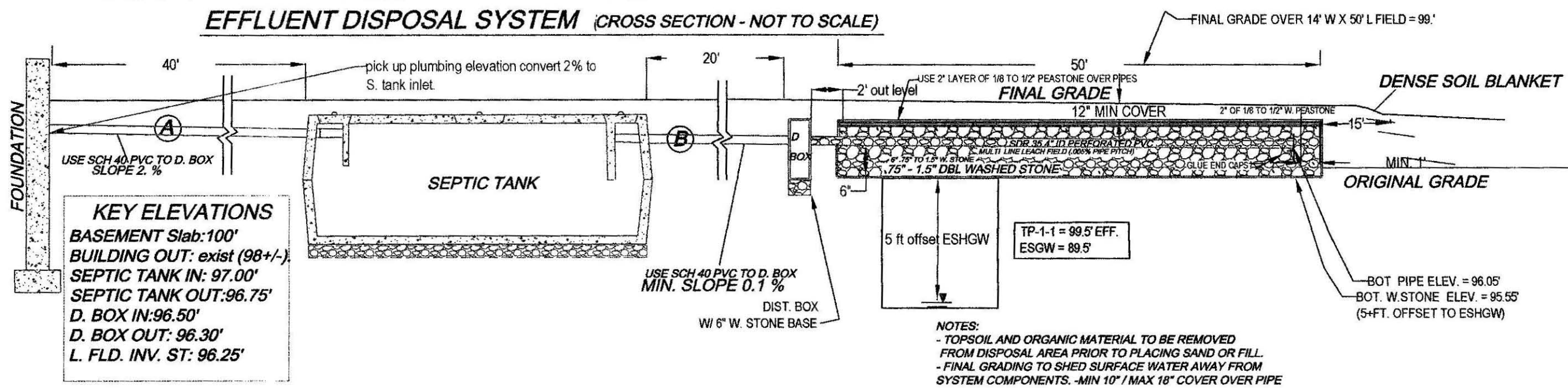
LEACH FIELD DETAIL (NTS)



TYPICAL NEW SEPTIC TANK (WATERTIGHT) OR EQUIVELANT.



EFFLUENT DISPOSAL SYSTEM (CROSS SECTION - NOT TO SCALE)



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.

ATTENTION INSTALLER!!

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

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



TEST PIT LOG:

TP-1 EFF. ELEV: 97.0'					TP-2 EFF. ELEV:				
SOIL EVALUATOR: A. WEISS, RS					DATE OF EVALUATION: 06.01.2011				
DEPTH	HORIZ	TEXTURE	COLOR (MUNSELL)	MATERIAL	DEPTH	HORIZ	TEXTURE	COLOR (MUNSELL)	MATERIAL
0-9"	Ap	FSL	10 YR 3.3	FRIABLE	0-8"	A	SL	10 YR 3.3	FRIABLE
9-26"	Bw	F. SAND	2.5Y 5.6	F. SAND, GRANULAR	8-26"	Bw	F. SAND	2.5Y 5.6	F. SAND, GRANULAR
26-126"	C1	C SAND	2.5Y 4.3	MED-CRSE SAND, GRANULAR	26-120"	C1	C SAND	2.5Y 4.3	MED-CRSE SAND, GRANULAR
				LOOSE, 15% STONES					LOOSE, 15% STONES
OXIDES: NOT OBSERVED					OXIDES: NOT OBSERVED				
EHWT: 120'+					EHWT: --				
STANDING H2O: --					STANDING H2O: --				
WEEPING: --					WEEPING: --				

SEPTIC SYSTEM REPAIR PLAN FOR BIODYNAMIC FARMLAND CONSERVATION TRUST
20 HULST 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: ALWEISS@charter.net

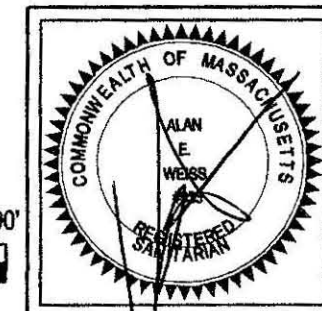
DATE: 06.12.2011

DRAWN BY: ALAN WEISS

REVISED:

SCALE: 1"=30'

DRAWING NUMBER: 110-3590-0601



No. _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT



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

to Dan Kaplan, Brookfield Farm

Location <u>20 Hulst Rd</u>	Owner's Name <u>Biodynamic Fermland Cnsrv. Trust</u>
Map/Parcel# <u>30B/48</u>	Address <u>24 Hulst Rd</u>
Lot# <u>48</u>	Telephone# <u>253-7991</u>
Installer's Name <u>Karl's Excavating</u>	Designer's Name <u>Alan Weiss</u>
Address <u>Hadley, MA</u>	Address <u>Baldwin, MA</u>
Telephone# <u>549-5396</u>	Telephone# <u>323-5957</u>

Type of Building Residence Lot Size 30,086 sq. ft.
 Dwelling - No. of Bedrooms 4 Bedrooms Garbage grinder
 Other - Type of Building _____ No. of persons _____ Showers (), Cafeteria ()
 Other Fixtures _____
 Design Flow (min. required) 440 gpd Calculated design flow 440 Design flow provided 518 gpd
 Plan: Date 6/11/2011 Number of sheets 1 Revision Date _____
 Title Septic System Repair Plans
 Description of Soil(s) class 1: SAND
 Soil Evaluator Form No. _____ Name of Soil Evaluator A Weiss Date of Evaluation 6/1/2011

DESCRIPTION OF REPAIRS OR ALTERATIONS _____

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 _____

Inspections _____

No. 12-01

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: KARL'S EXCAVATING

at 20 HULST ROAD, AMHERST, MA 01002

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 518 (gpd)

Installer KARL'S EXCAVATING

Designer: ALAN WEISS Inspector: EDWARD SMITH Date: 7/5/2011

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

No. _____

FEE _____

COMMONWEALTH OF MASSACHUSETTS

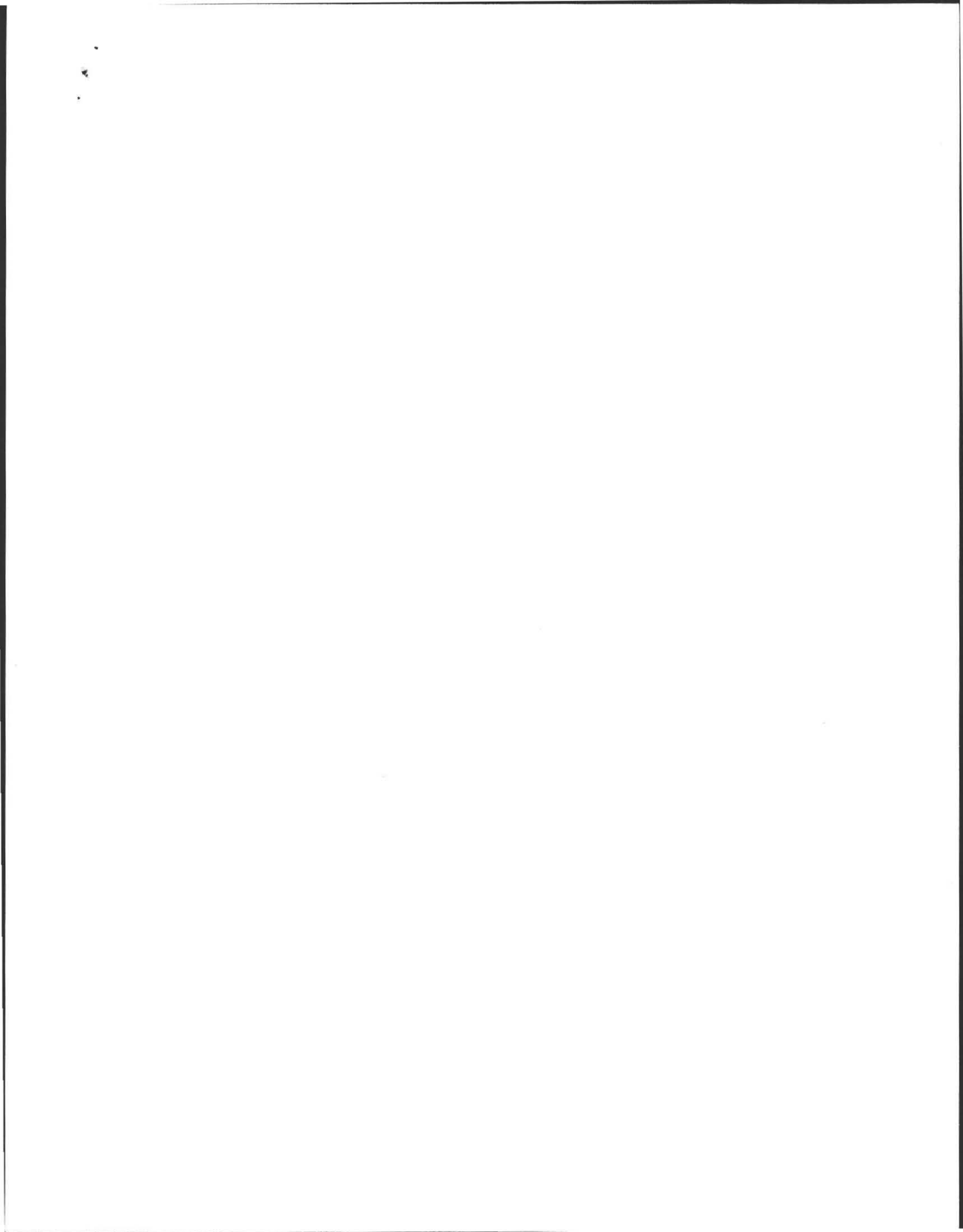
Board of Health, _____, MA.

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.

FEE \$ 350.-





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)
aweiss@charter.net

Date: 6/1/11

Commonwealth of Massachusetts

Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

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

Date: 6/1/11

* Biodynamic Farmland Conservation Trust

Location Address or Lot # <u>20 HULST RD AMHERST, MA</u>	Owner's Name, Address, and Telephone # <u>BROOKFIELD farm house 20 HULST RD AMHERST, MA</u>
New Construction <input checked="" type="checkbox"/> Repair <input type="checkbox"/>	

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)

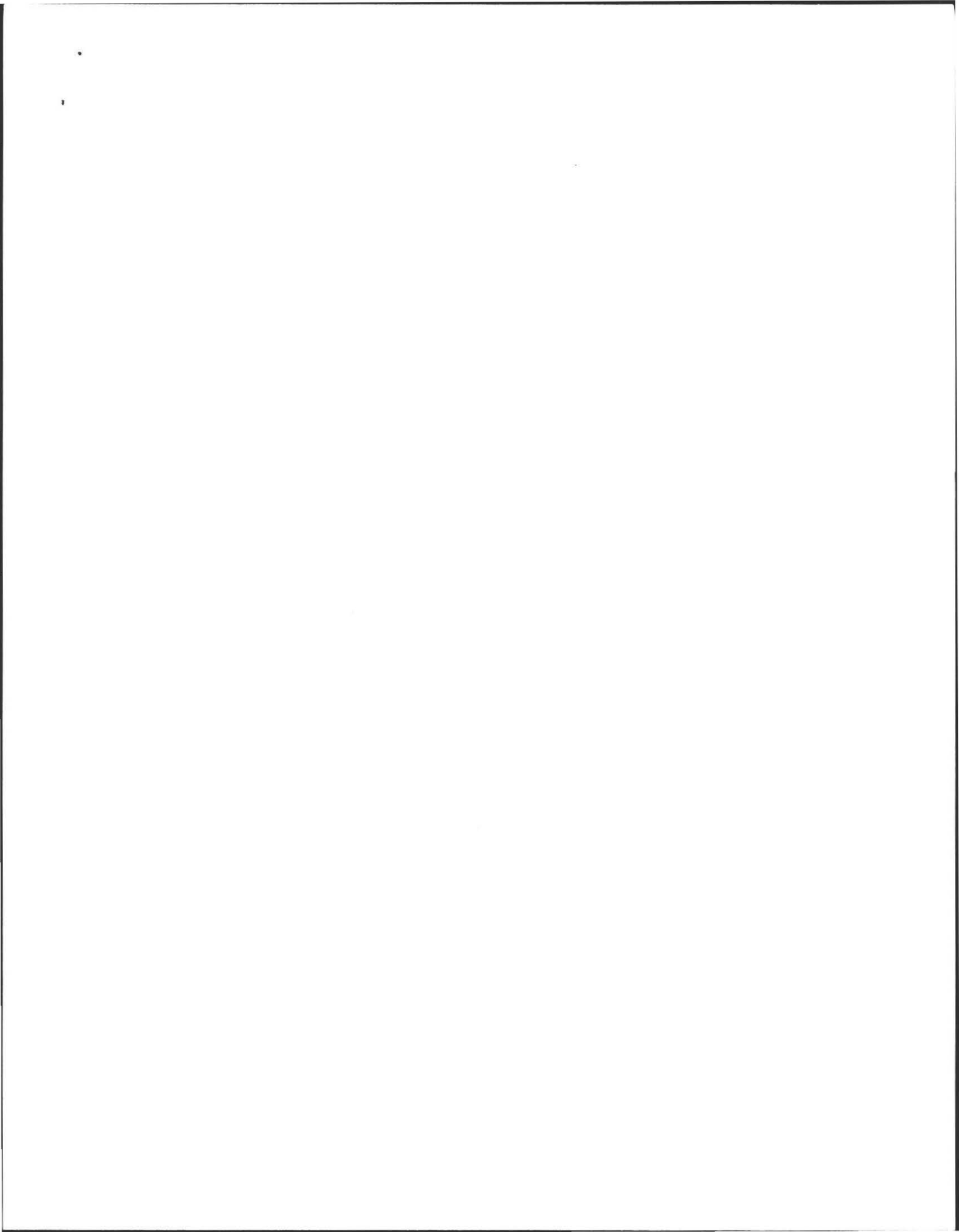
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month

Range :Above Normal Normal Below Normal

Other References Reviewed: _____





Location Address or Lot No. 20 Huist RD

On-site Review

Deep Hole Number 172 Date: 6/1/11 Time: 10:35 Weather SUN 80

Location (identify on site plan) _____

Land Use Res Slope (%) 3 Surface Stones not

Vegetation grass

Landform terrace

Position on landscape (sketch on the back) _____

Distances from:
 Open Water Body 100 feet Drainage way 507 feet
 Possible Wet Area 100+ feet Property Line 307 feet
 Drinking Water Well 1004 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 0-9" 9"-26" 26"-126"	Ap	FSL	10YR 3/3	Not obs.	- Friable, loose. - f. sandy, granular. - med - coarse sand, granular. Loose, 15% stones
	Bw	FS	2.5Y 5/6		
	C ₁	LS	2.5Y 4/3		
#2 0-8" 8"-26" 26"-120"	Ap	FSL	10YR 3/3	not obs.	- Friable loose. - f. sandy, granular. - med - coarse sand, granular Loose, 15% stones
	Bw	FS	2.5Y 5/6		
	C ₁	LS	2.5Y 4/3		

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash Depth to Bedrock: _____
 Depth to Groundwater: Standing Water in the Hole: _____ Weeping from Pit Face: _____
 Estimated Seasonal High Ground Water: 120"





Location Address or Lot No. 20 Hulst Rd.

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: ..	<u>6/1/11</u>	Time: <u>10:45</u>
Observation Hole #	<u>P.</u>	
Depth of Perc	<u>CANT (40")</u>	
Start Pre-soak	<u>HOLD</u>	<u>12</u>
End Pre-soak	<u>Water</u>	<u>0</u>
Time at 12"		<u>P</u>
Time at 9"		<u>a</u>
Time at 6"		<u>i</u>
Time (9"-6")		<u>r</u>
Rate Min./Inch	<u>2</u>	

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

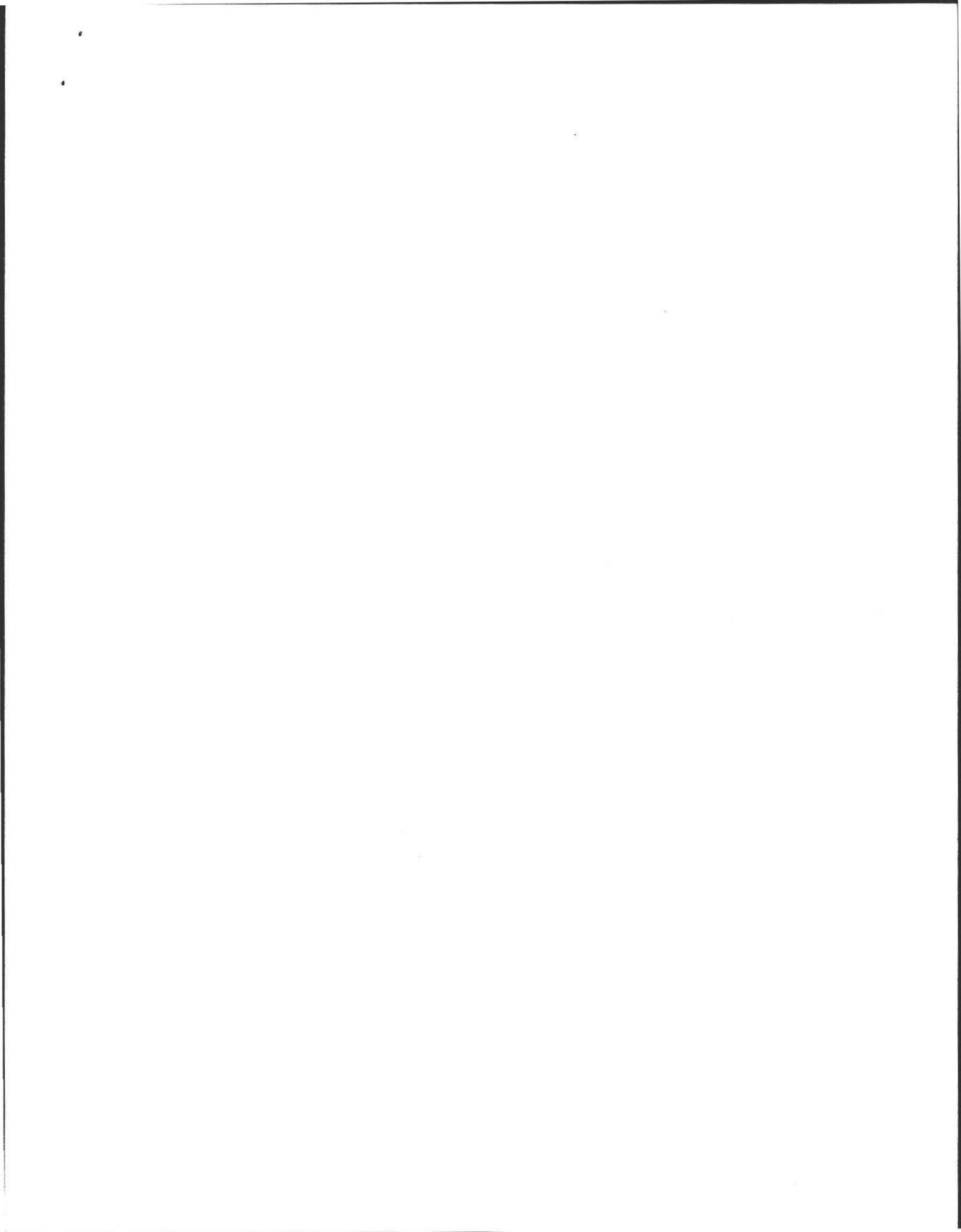
Site Passed Site Failed

Performed By: A Weiss

Witnessed By: E. Smith

Comments: _____





Location Address or Lot No. 20 HULST 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 170" inches
- Ground water adjustment feet

Index Well Number Reading Date Index well level

Adjustment factor Adjusted ground water level

Depth of Naturally Occurring Pervious Material

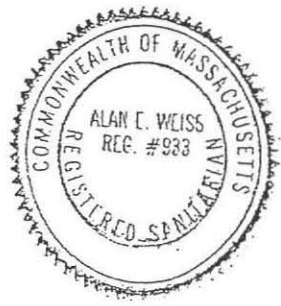
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? yes

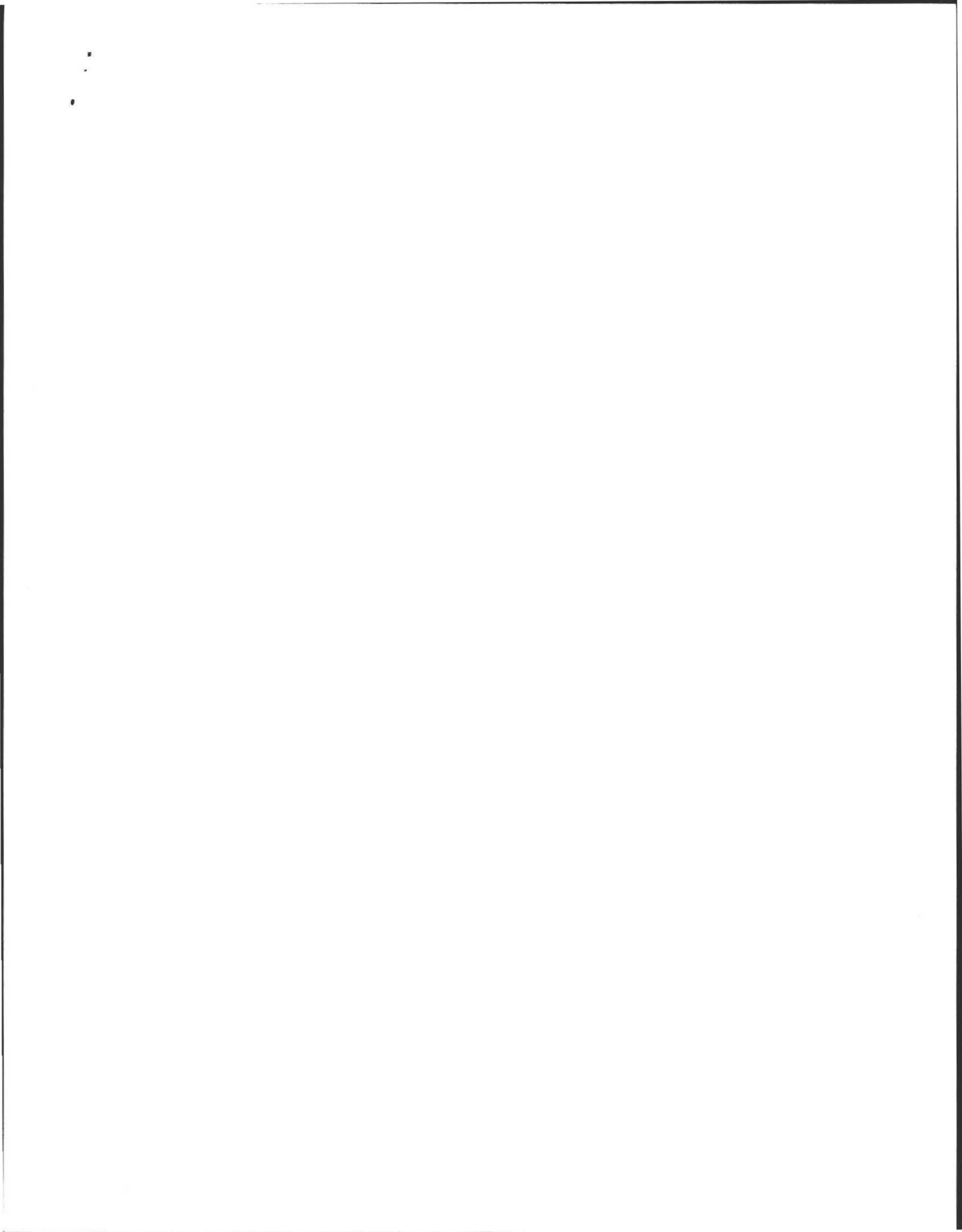
If not, what is the depth of naturally occurring pervious material? _____

Certification

I certify that on June, 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.

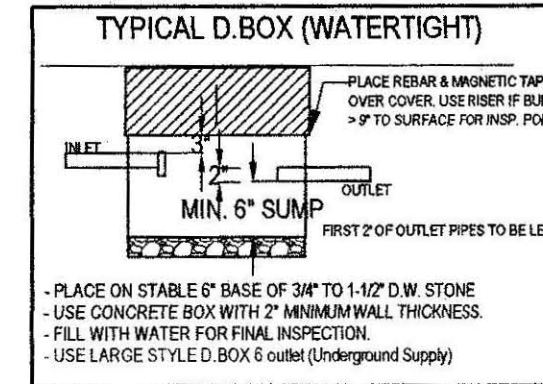
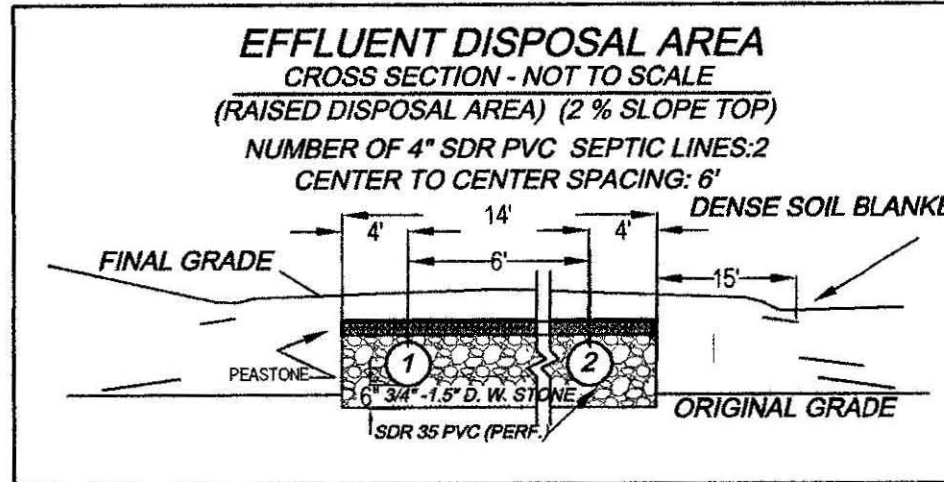
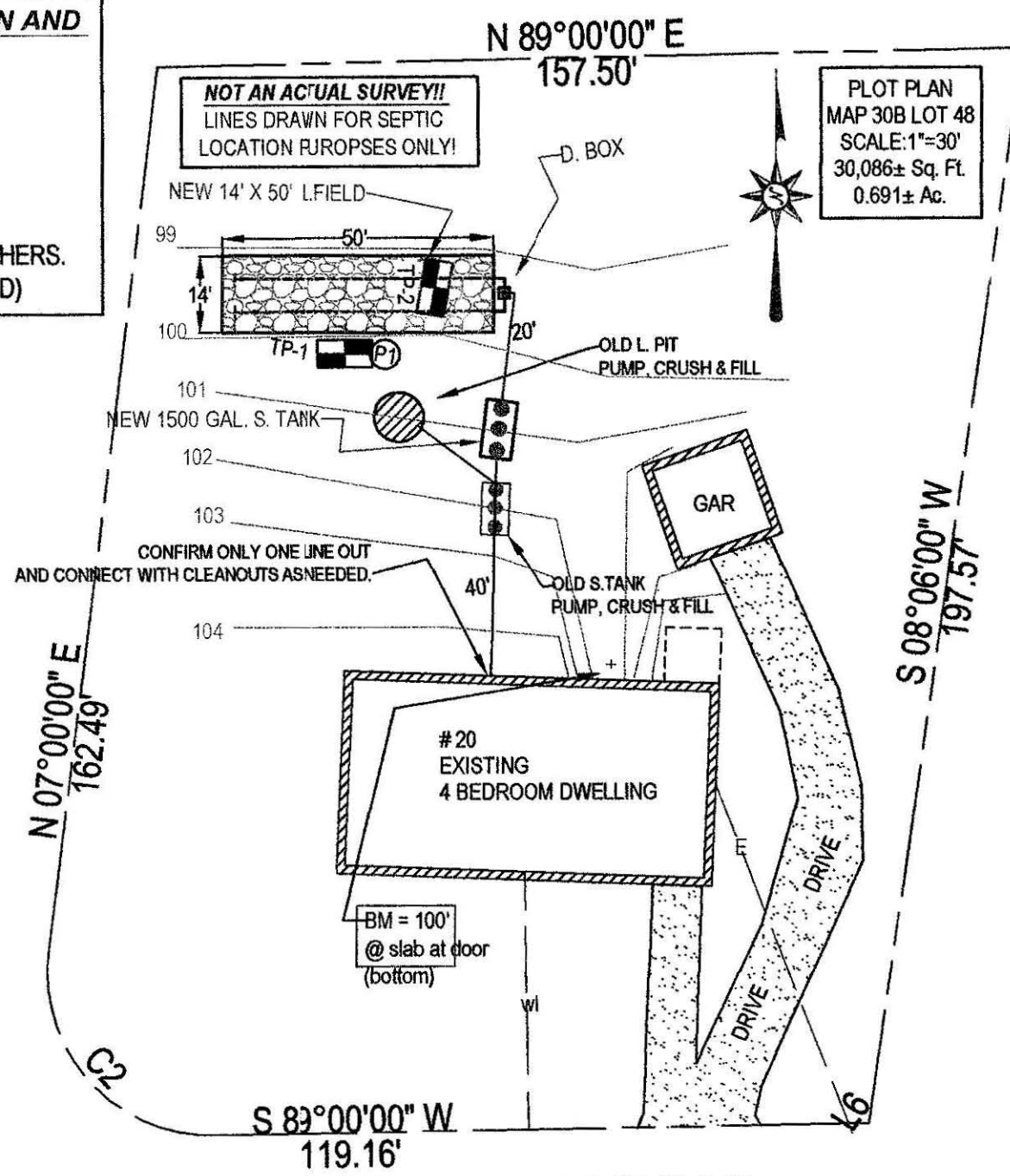
Signature *AE* Date 6/1/11





GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.

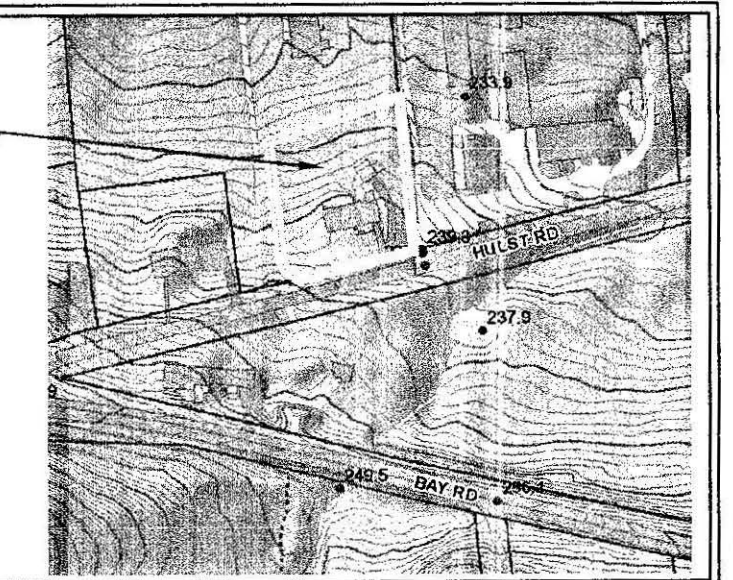
- 1.) HAVE TANK PUMPED EVERY 2 YEARS.
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- 3.) DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
- 4.) USE ONLY LIQUID DETERGENTS & LOW FLOW WASHERS.
- 5.) CLEAN TANK OUTLET FILTER ANNUALLY (IF EQUIPED)



NOTE TO HOMEOWNER AND CONTRACTOR:
CONNECTIONS FROM HEATING SYSTEM, AIRCONDITIONERS, SUMP PUMPS, WATER WELL FILTRATION UNITS AND HEAT PUMPS ARE NOT ALLOWED, SANITARY WATER CONNECTIONS ONLY PERMITTED.

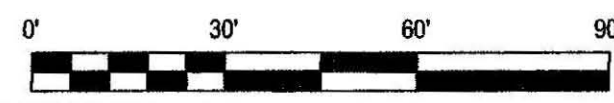
NOTE TO INSTALLER:
TOWN INSPECTOR AND SYSTEM DESIGNER MUST BE CALLED 48 HRS BEFORE START OF SYSTEM INSTALL

SUBJECT SITE LOCATION



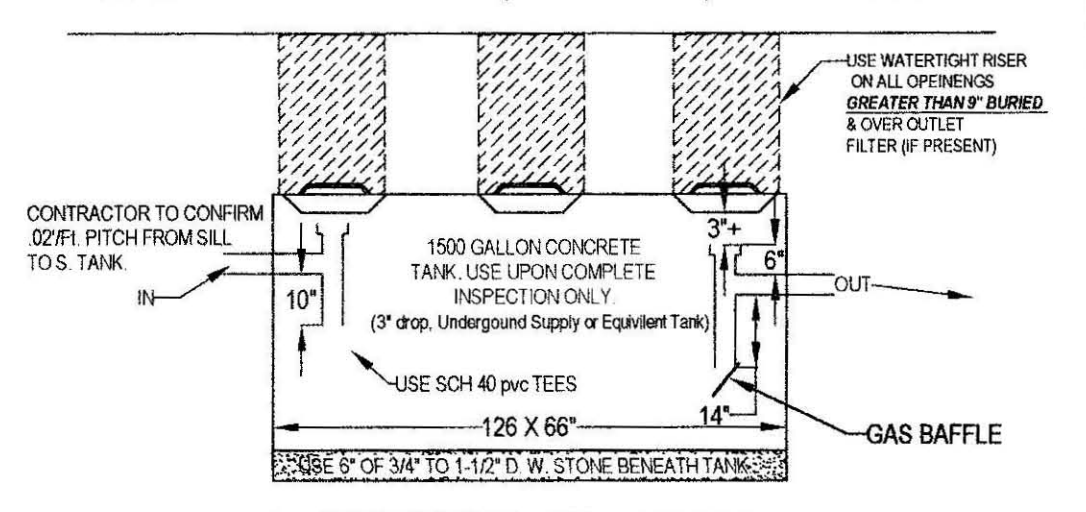
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- 1.) 4 (BEDROOM HOME) = 440 GPD MIN. REQUIRED.
- Use LEACHING FIELD 14' WIDE X 50' LONG WITH 6" OF 3/4" TO 1 1/2" DBL WASHED STONE BELOW INVERT :
- BOTTOM AREA: L. FIELD (14' W X 50' L) = 700 SF.
- TOTAL AREA: 700 SF X .74 GAL/SF = 518 GPD PROVIDED.
3. GARBAGE DISPOSAL NOT PERMITTED.
4. NO OTHER PRIVATE WELLS WITHIN 150 FEET OF SAS.
5. NO OTHER WETLANDS WITHIN 50 FEET OF SAS.
6. USE S. TANK AS NOTED & MAINTAIN 0.02 PITCH FROM SILL TO S. TANK
- INSTALL & INSPECT SCH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET).
- NOTE:**
- ALL COMPONENTS OF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO 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 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.
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8. - USE (.75" - 1 1/2") STONE UNDER TANK & D. BOX FOR 6" FOR STABLE BASE.
- USE ONLY DBL. WASHED APPROVED (.75" - 1.5") FOR PLACEMENT IN LEACH AREA.
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 & ESHGW (310 CMR 15.240)
14. USE 2% MIN. SLOPE OVER SAS
- CLEAR TOP AND SUB TO 32" MIN. AS NEEDED (INSPECTION REQUIRED).
- CLEAR PAST BASE OF B (MIN. 32") & SCARIFY UNDER TRENCH PRIOR TO TITLE V SAND/STONE PLACEMENT.
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15. SOIL EVALUATION BY A. WEISS, RS. (E. Smith), BOH AGENT).
- DEPTH OF PERC. 40"
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- CLASS 1, SAND SOIL RATING
16. NO TREES WITHIN 10 FT. OF NEW LEACH AREA.
17. ENGINEER TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL
18. BM = 100.00 @ (Slab, 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.

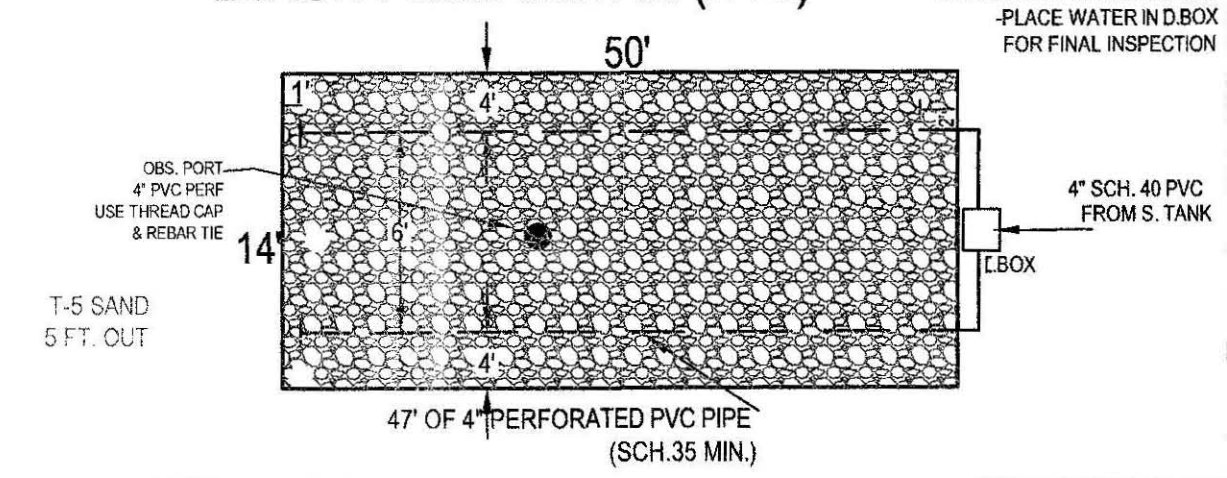


HULST ROAD

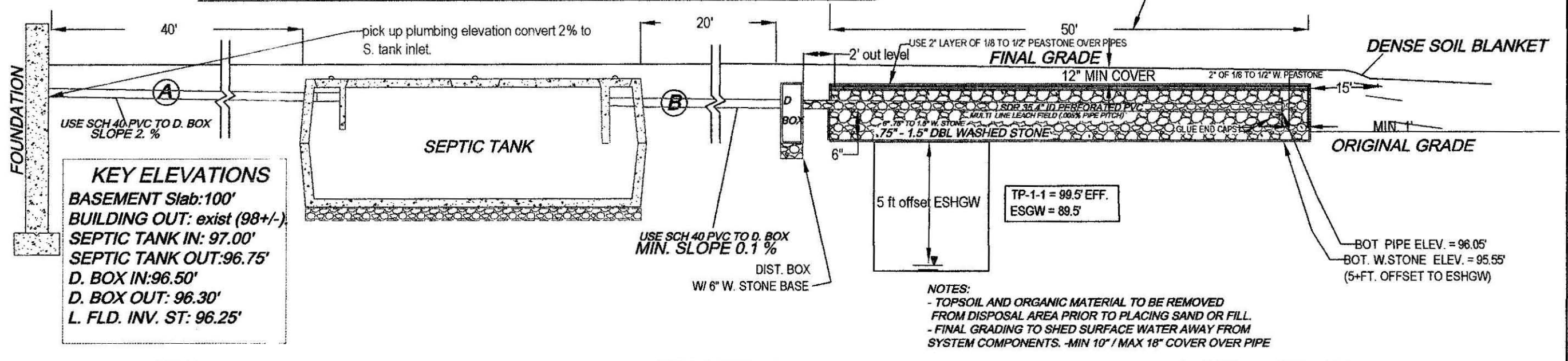
TYPICAL NEW SEPTIC TANK (WATERTIGHT) OR EQUIVALENT.



LEACH FIELD DETAIL (NTS)



EFFLUENT DISPOSAL SYSTEM (CROSS SECTION - NOT TO SCALE)



TEST PIT LOG:

TP-1 EFF. ELEV: 97.0'				SOIL EVALUATOR: A. WEISS, RS				DATE OF EVALUATION: 06.01.2011			
DEPTH	HORIZ	TEXTURE	(MUNSELL)	MATERIAL	DEPTH	HORIZ	TEXTURE	(MUNSELL)	MATERIAL		
0-9"	Ap	FSL	10 YR 3.3	FRIABLE	0-8"	A	SL	10 YR 3.3	FRIABLE		
9-26"	Bw	F. SAND	2.5Y 5.6	F. SAND, GRANULAR	8-26"	Bw	F. SAND	2.5Y 5.6	F. SAND, GRANULAR		
26-126"	C1	C SAND	2.5Y 4.3	MED-CRSE SAND, GRANULAR	26-120"	C1	C SAND	2.5Y 4.3	MED-CRSE SAND, GRANULAR		
				LOOSE, 15% STONES					LOOSE, 15% STONES		
OXIDES: NOT OBSERVED				OXIDES: NOT OBSERVED							
EHWT: 120'+				EHWT: --							
STANDING H2O: -				STANDING H2O: -							
WEEPING: -				WEEPING: -							

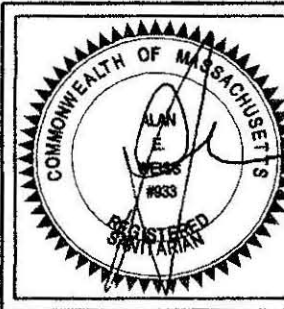
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ATTENTION INSTALLER!!

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

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



SEPTIC SYSTEM REPAIR PLAN FOR BIODYNAMIC FARMLAND CONSERVATION TRUST
20 HULST ROAD
AMHERST, MA

Cold Spring Environmental Consultants Inc.
350 Old Enfield Road
Belchertown, MA 01007

PROJECT: (413) 323-5957	DATE: 06.12.2011	DRAWN BY: ALAN WEISS	REVISED:
SCALE: 1"=30'			DRAWING NUMBER: 110-3590-0601

PERMITS/INSP PAYMENT RECPT#: 12002679
TOWN OF AMHERST
TOWN HALL
4 BOLTWOOD AVENUE
AMHERST MA 01002

DATE: 07/11/11 TIME: 10:37
CLERK: publichea DEPT:

PAID BY: BROOKFIELD FARM DAN
PAYMENT METH: CHECK 1782

REFERENCE: 9819

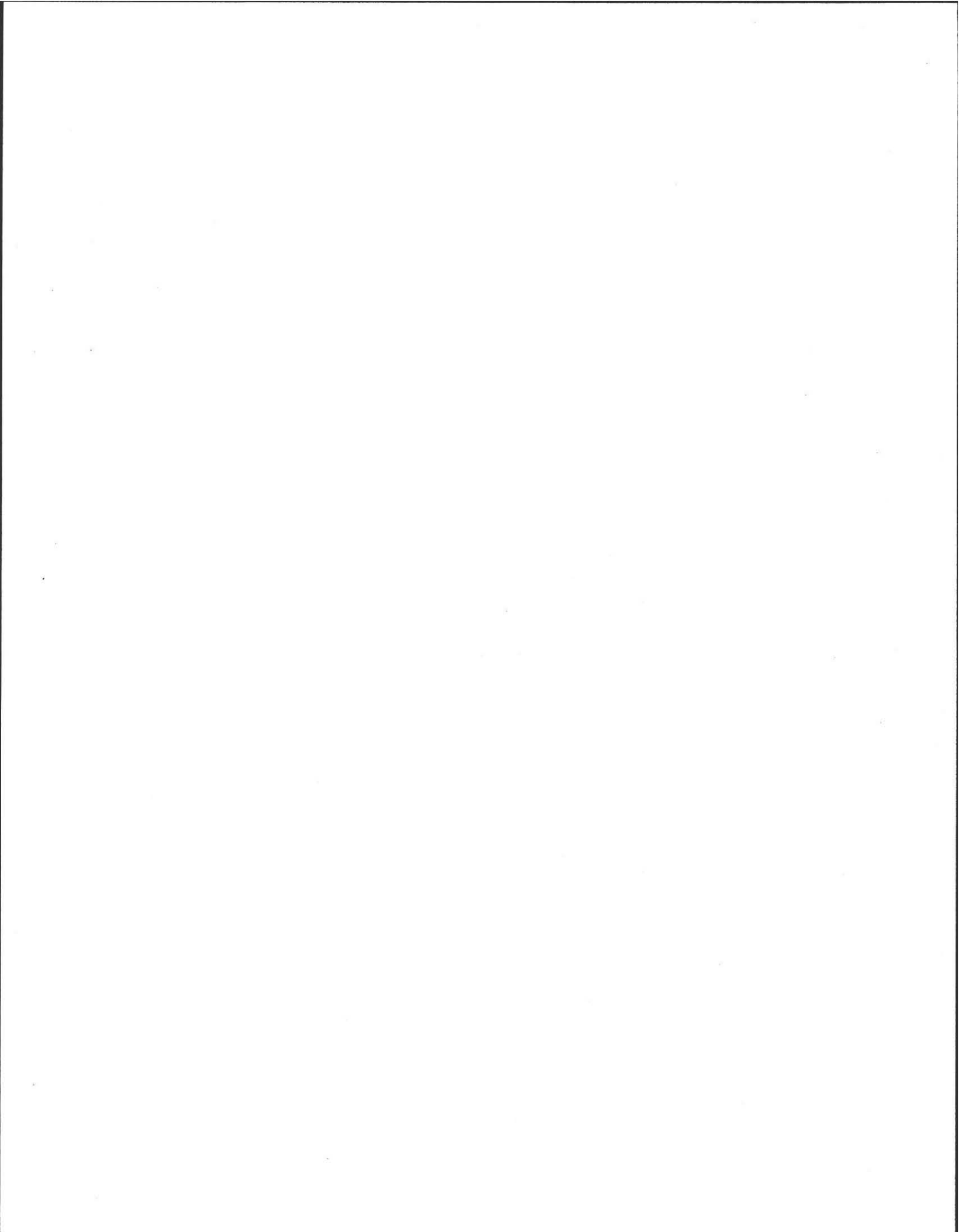
AMT TENDERED: 150.00
AMT APPLIED: 150.00
CHANGE: .00

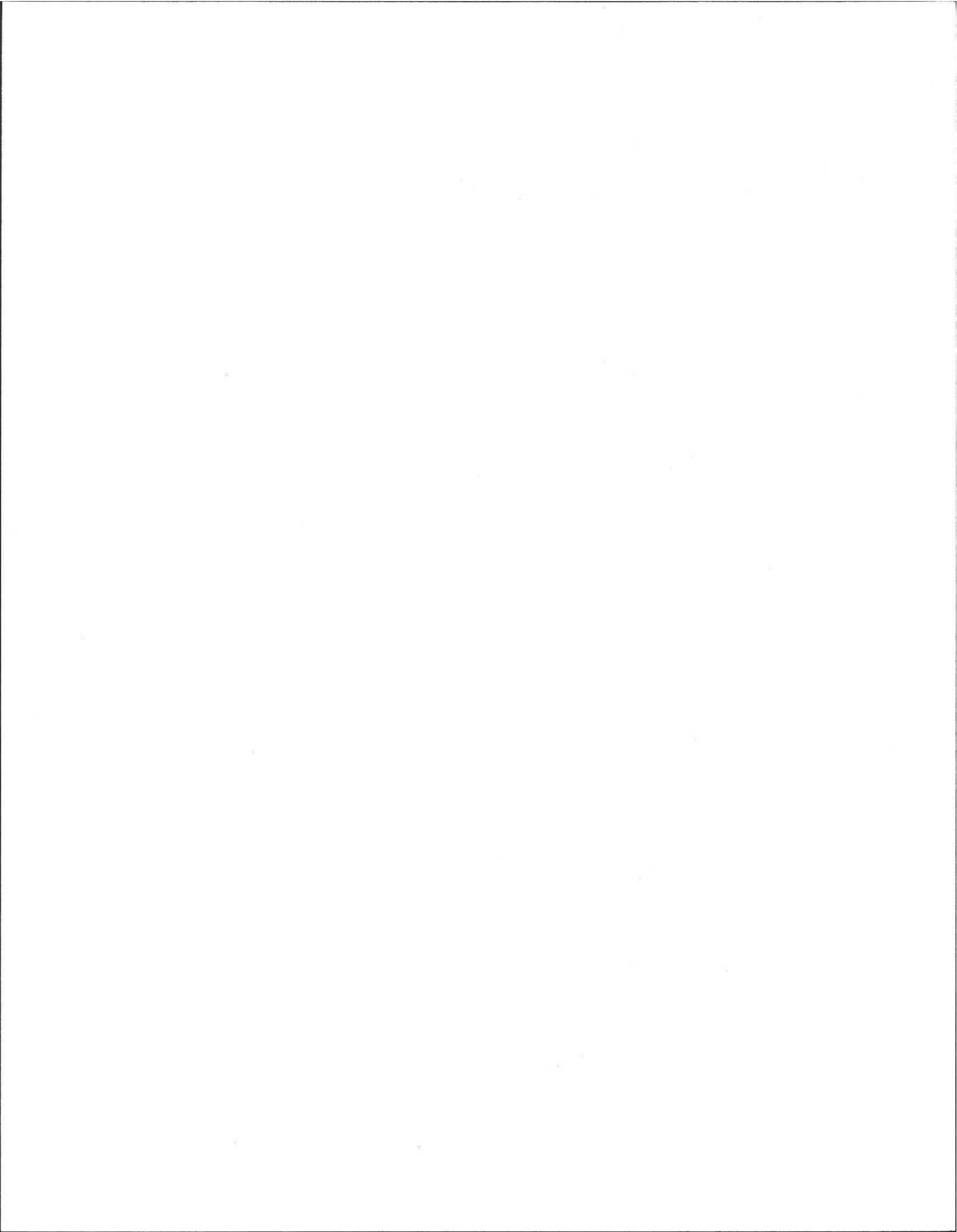
SITE ADDRESS: BROOKFIELD FARM

see 20 Holst Road

FEES:
HEA017 150.00

TOTAL PAID: 150.00





No. _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT



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

Location <u>20 Hulst. RD</u>	Owner's Name <u>Biodynamic Farmland Conserv. Trust</u>
Map/Parcel# <u>30B/48</u>	Address <u>24 Hulst RD</u>
Lot# <u>48</u>	Telephone# <u>253-7991</u>
Installer's Name <u>Kari's Excavating</u>	Designer's Name <u>Alan Weiss</u>
Address <u>Hadley, MA</u>	Address <u>Beldeford, MA</u>
Telephone# <u>519-5396</u>	Telephone# <u>323-5957</u>

Type of Building Residence Lot Size 30,086 sq. ft.
 Dwelling - No. of Bedrooms 4 Bedrooms Garbage grinder
 Other - Type of Building _____ No. of persons _____ Showers (), Cafeteria ()
 Other Fixtures _____
 Design Flow (min. required) 440 gpd Calculated design flow 440 Design flow provided 518 gpd
 Plan: Date 6/12/2011 Number of sheets 1 Revision Date _____
 Title Septic System Repair Plans
 Description of Soil(s) CLASS 1: SAND
 Soil Evaluator Form No. _____ Name of Soil Evaluator A. Weiss Date of Evaluation 6/1/2011

DESCRIPTION OF REPAIRS OR ALTERATIONS _____

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 place the system in operation until a Certificate of Compliance has been issued by the Board of Health.

Signed [Signature] Date 6/30/2011

Inspections _____

No. _____

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. _____

COMMONWEALTH OF MASSACHUSETTS

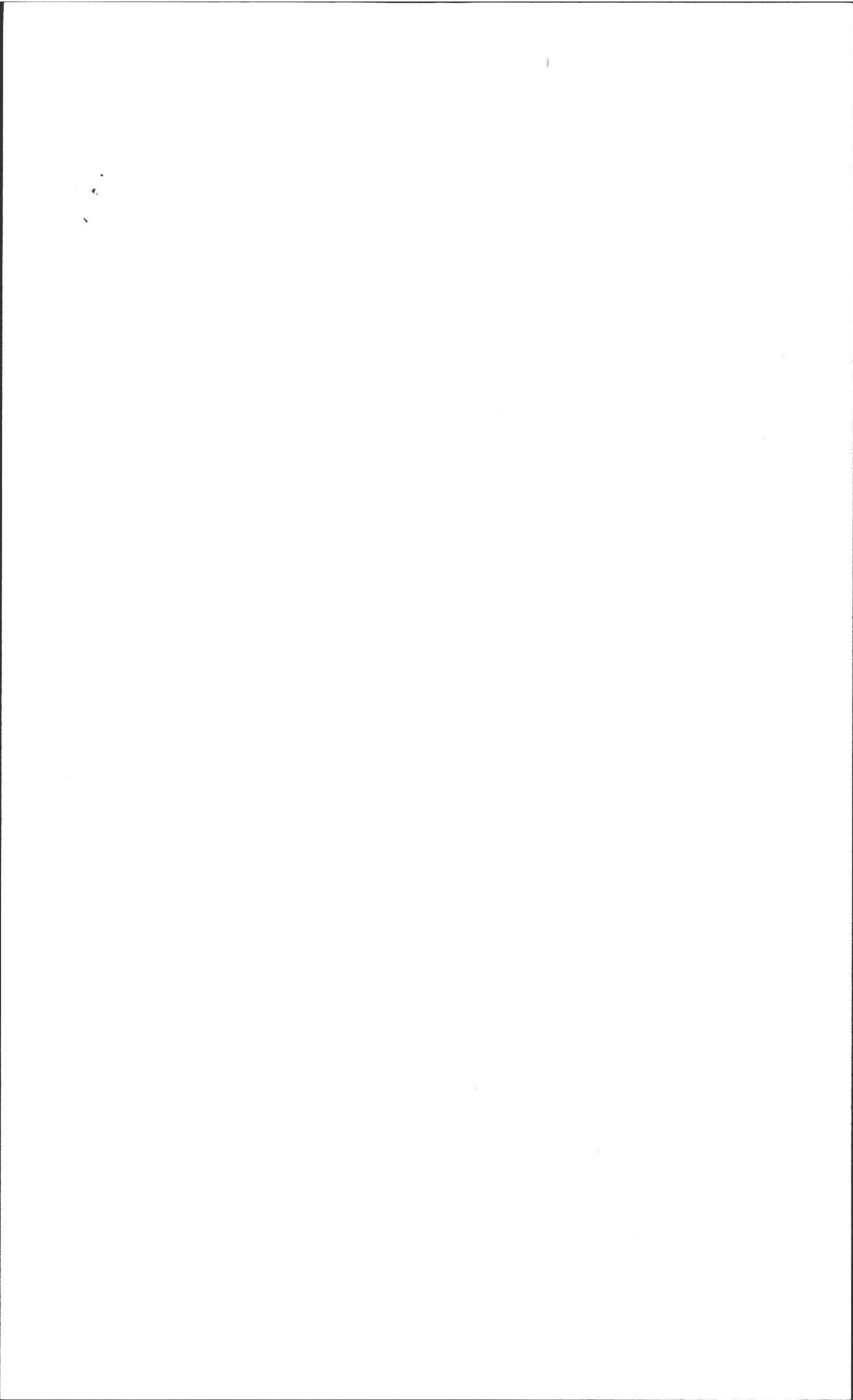
Board of Health, _____, MA.

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.





ALAN E. WEISS, M.S., R.S., L.S.P.

Licensed Site Professional
Registered Sanitarian
Hydrogeologist
President

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

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

aeweiss@charter.net

Date: 6/1/11

Commonwealth of Massachusetts

Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss

Date: 6/1/11

Witnessed By: E. Smith

* Biodynamic Farmland Conservation Trust

Location Address or Lot # <u>20 Hulst Rd Amherst, MA</u>	Owner's Name, Address, and Telephone # <u>Brookfield farm house 20 Hulst Rd Amherst, MA</u>
New Construction <input checked="" type="checkbox"/> Repair <input type="checkbox"/>	

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)

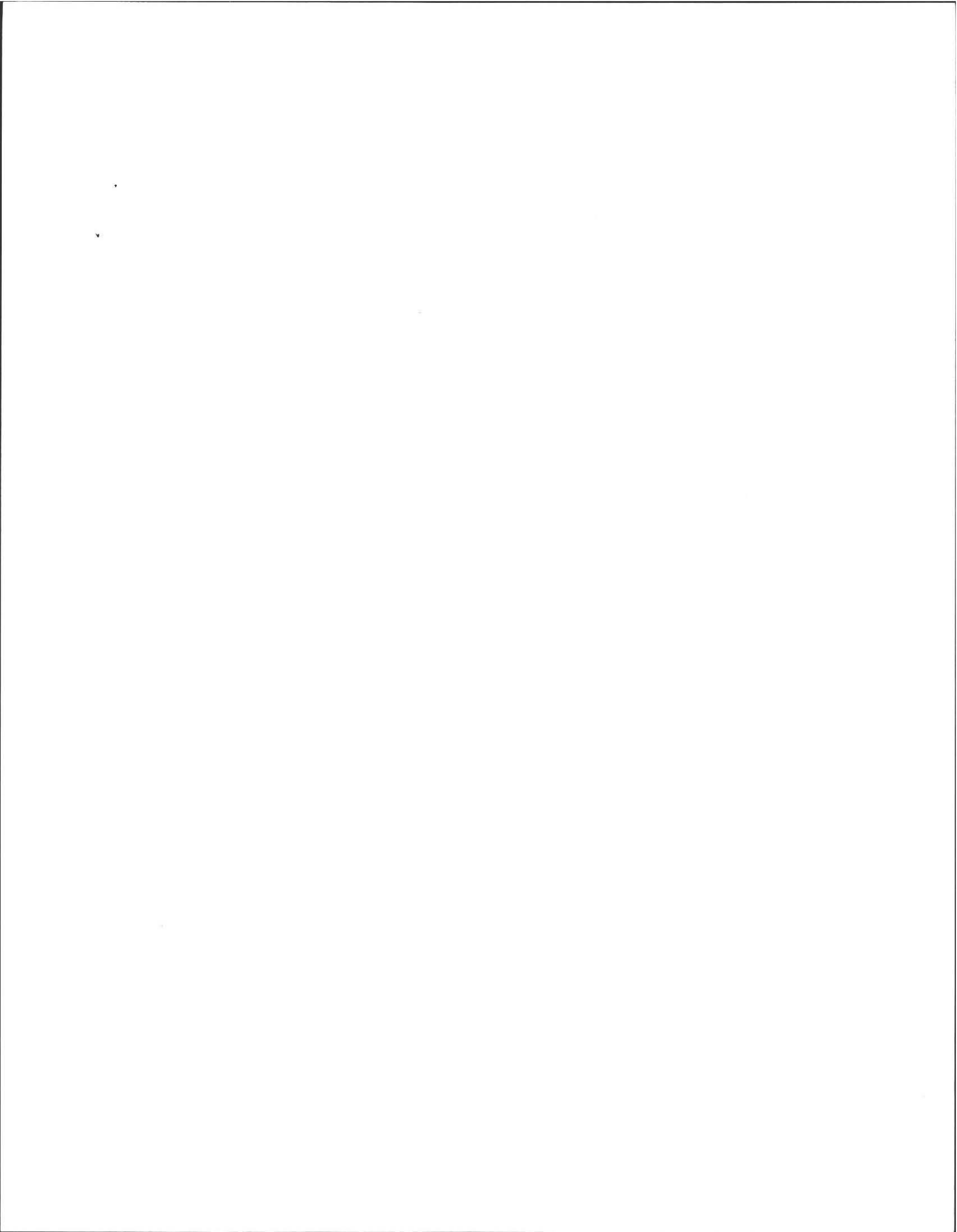
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month

Range : Above Normal Normal Below Normal

Other References Reviewed: _____





Location Address or Lot No. 20 Huist RD

On-site Review

Deep Hole Number 172 Date: 6/1/11 Time: 10:55 Weather SUN 80

Location (identify on site plan) _____

Land Use RES. Slope (%) 3 Surface Stones not

Vegetation GRASS

Landform TERACE

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body 100 feet Drainage way 507 feet

Possible Wet Area 100+ feet Property Line 307 feet

Drinking Water Well 100+ feet Other _____

DEEP OBSERVATION HOLE LOG*

#1

#2

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-9"	Ap	FSL	10YR 3/3		- Frable, loose
9"-26"	Bw	FS	2.5Y 5/6		- f. sandy, granular
26"-126"	C ₁	LS	2.5Y 4/3	Not obs.	- med - coarse sand, granular. Loose, 15% stones
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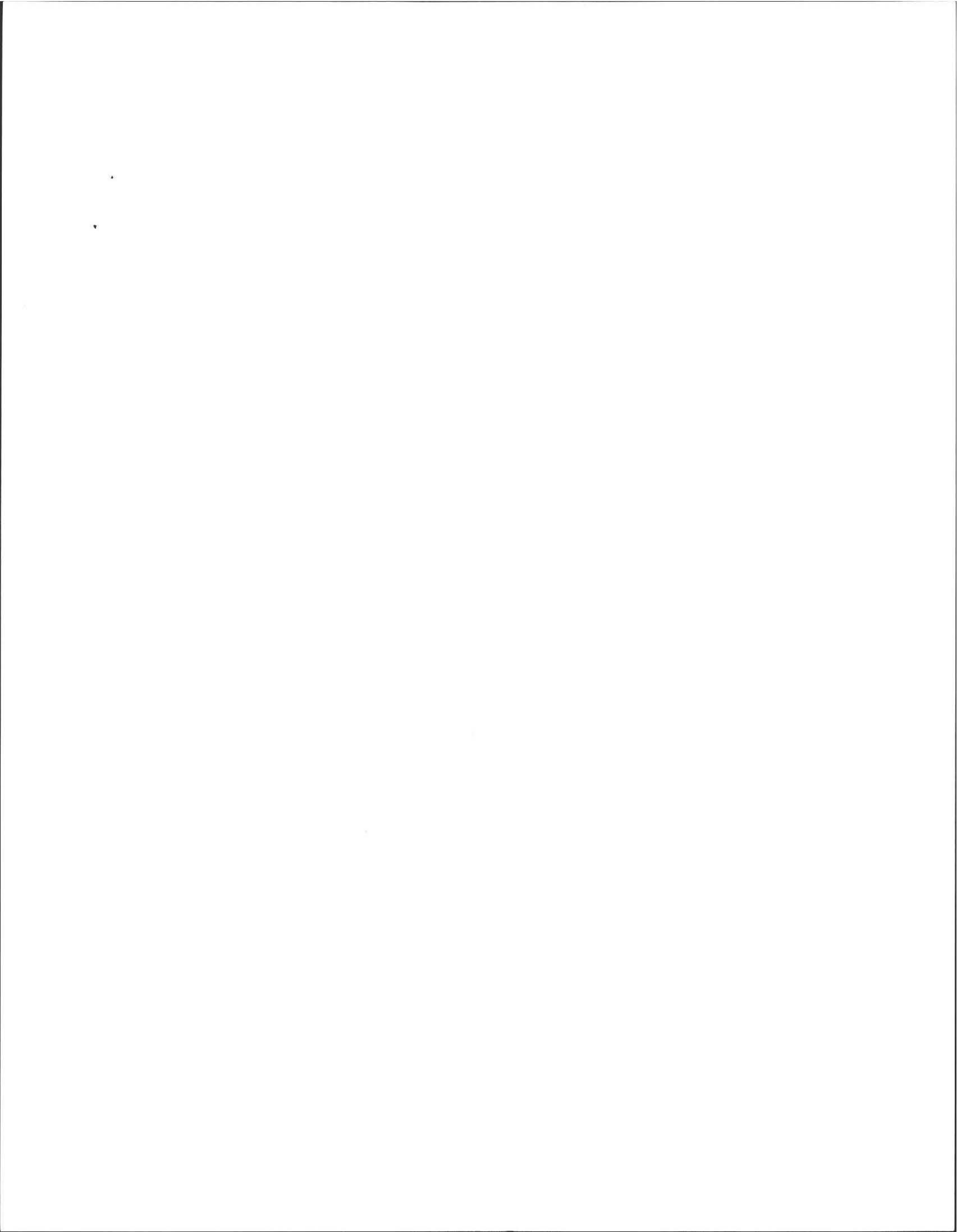
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash Depth to Bedrock: _____

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

Estimated Seasonal High Ground Water: 120"





Location Address or Lot No. 20 Hulst Rd

COMMONWEALTH OF MASSACHUSETTS

Massachusetts

Percolation Test*		
Date: ...	<u>6/1/11</u>	Time: <u>10:45</u>
Observation Hole #		
Depth of Perc	<u>CANT</u>	
Start Pre-soak	<u>Hold</u> (<u>12</u>
End Pre-soak		<u>e</u>
Time at 12") <u>Water</u>	<u>p</u>
Time at 9"		<u>a</u>
Time at 6"		<u>r</u>
Time (9"-6")		<u>r</u>
Rate Min./Inch		<u>2</u>

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

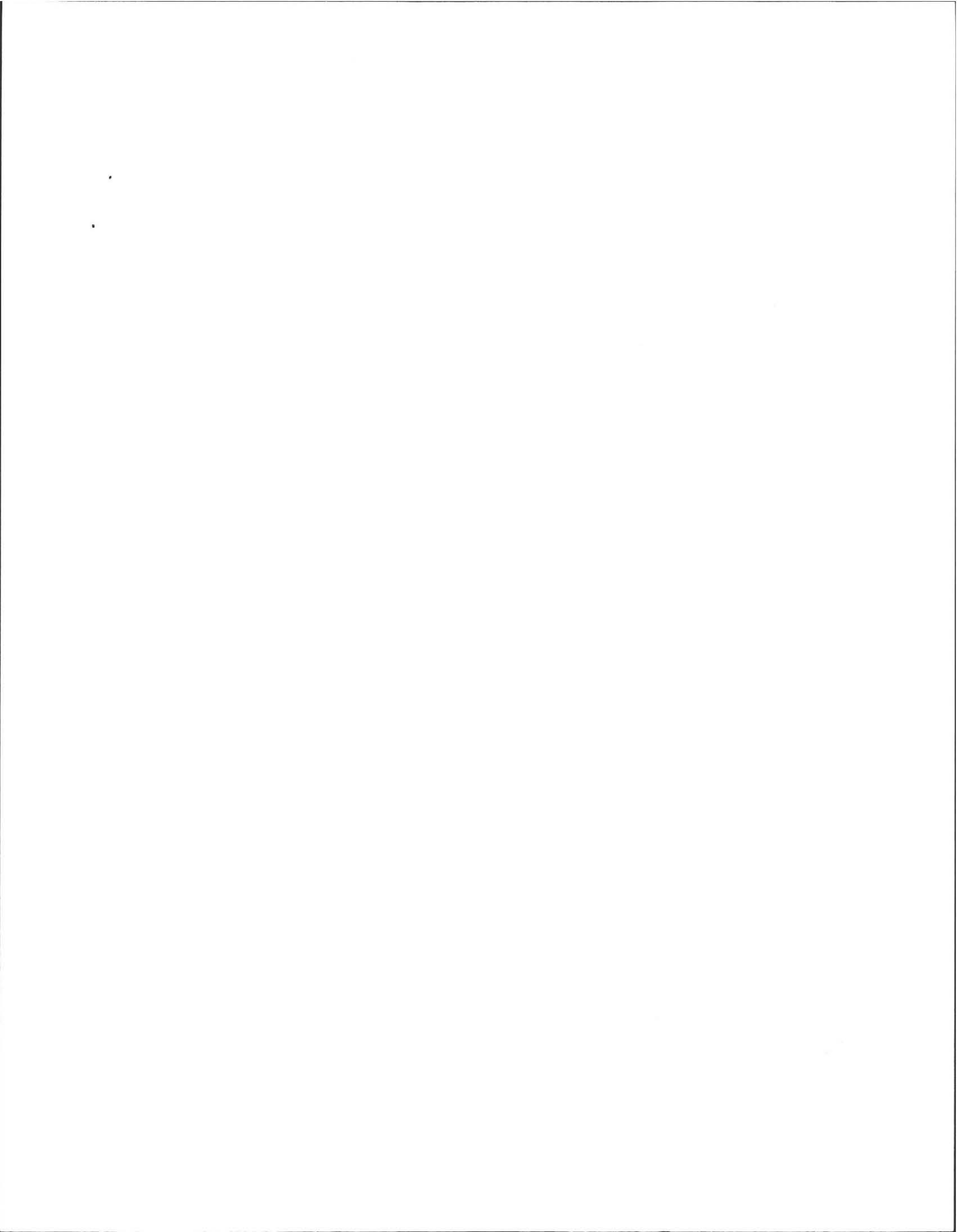
Site Passed Site Failed

Performed By: A Weiss

Witnessed By: E. Smith

Comments: _____





Location Address or Lot No. 20 HUIST 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 120" inches
- Ground water adjustment feet

Index Well Number Reading Date Index well level

Adjustment factor Adjusted ground water level

Depth of Naturally Occurring Pervious Material

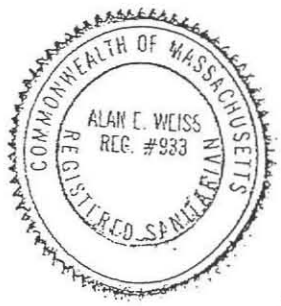
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? yes

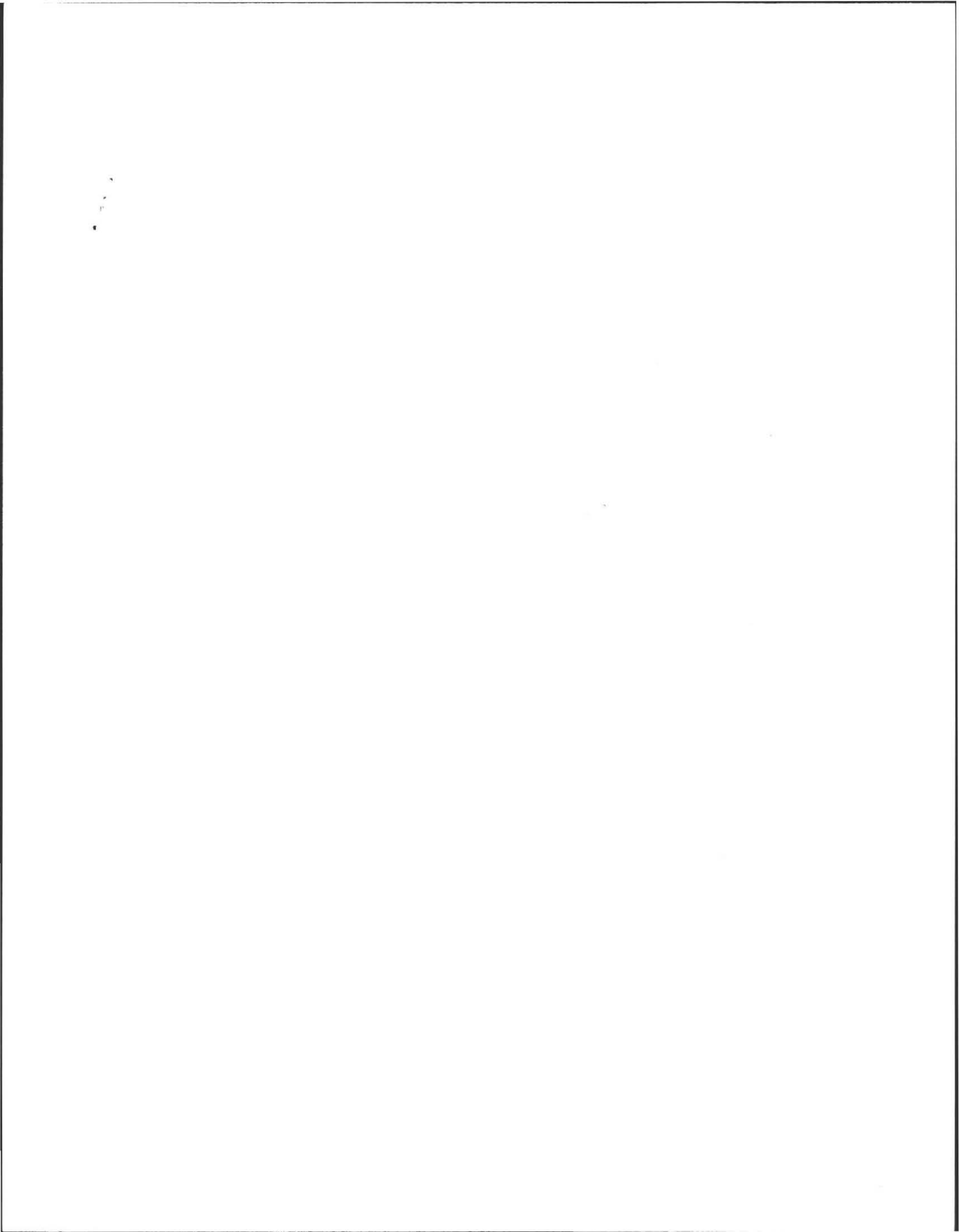
If not, what is the depth of naturally occurring pervious material? _____

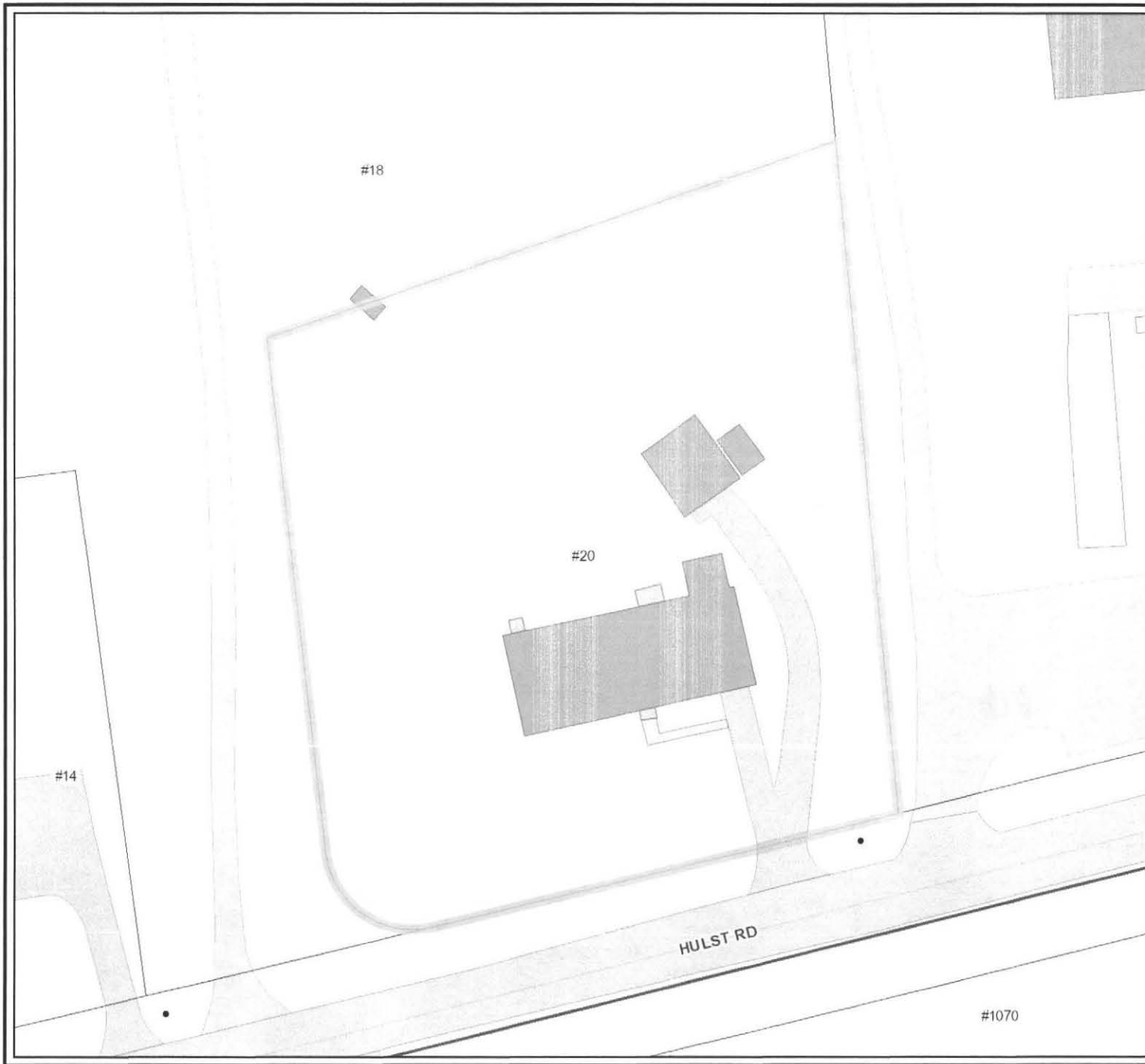
Certification

I certify that on June, 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 *AP* Date 6/1/11







- Utility Poles
- Control Points
- Documents
- Scanned Documents
 - Gate Card
 - Line Plan
 - Fiche Plan
 - Easement Plan
 - Subdivision Plan
 - Record Plan
 - As-Built Plan
 - Site Plan
 - Deed
 - Sewer Svc Cards
 - Drain Svc Cards
- Drainage System
 - Catch Basins
 - Drain Manholes
 - Stormwater Outfalls
 - Culverts
 - Drain Lines
 - Active
 - Missing
 - Abandoned
- Sanitary Sewer System
 - Sewer Manholes
 - Private
 - Town of Amherst
 - Sewer Lines
 - Active
 - Missing
 - Abandoned
 - Sewer Force Mains
- Pump Stations
 - Pump Station
 - Residential Pump
 - Commercial Pump
- Water Distribution System
 - Water Valve
 - Main Line Gate
 - Unknown Gate
 - Blowoff
 - Meter Pit
 - Fire Hydrants
 - Water Line
 - TOA Water Line
 - Missing TOA Water L
 - UM/AC/HC Water Ln
 - Hydrant Line
 - TOA Raw Water Ln
 - TOA Service Line
 - Private or Other Lines
- Property Map
 - Property Lines
 - Easements
- Basemap
 - Trails
 - Rail Lines
- Structures
 - Building
 - Foundation or in const
 - Outbuilding or Miscell
 - Deck, Porch, Stairs or
 - Mobile home, Trailer
 - Swimming Pool
 - Building Ruins
 - Water storage tank
 - Sidewalks

Horizontal Datum: MA Stateplane Coordinate System, Zone 4151, Datum NAD83, Feet
 Vertical Datum: NAVD88, Feet

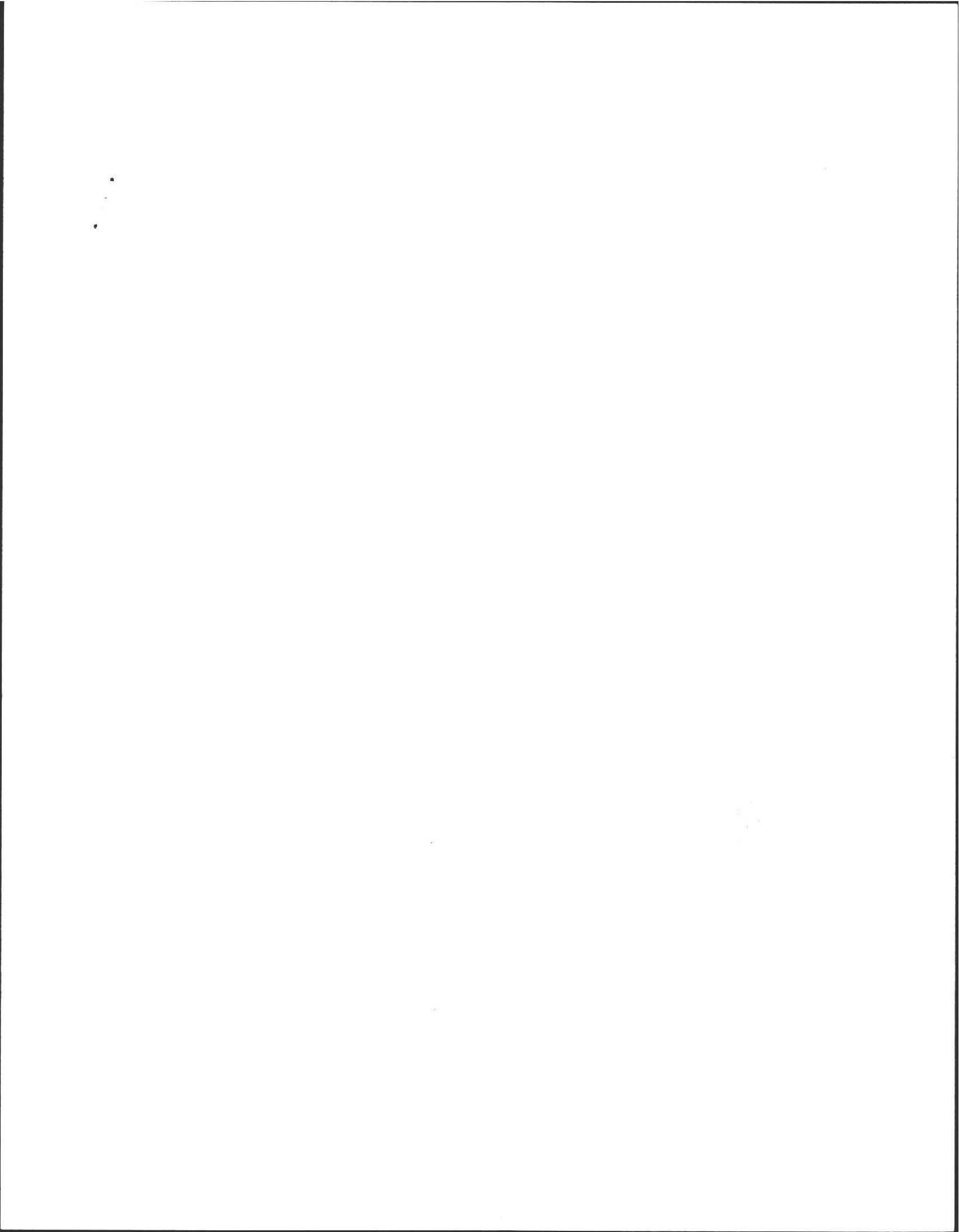
Planimetric & topographic basemap features compiled at 1"=40' scale from April, 2009 Aerial Photography. Parcels compiled to match the basemap; revisions are ongoing.

The information depicted on this map is for planning purposes only. It may not be adequate for legal boundary definition, regulatory interpretation, or property conveyance purposes. Utility structures and underground utility locations are approximate and require field verification.

THE TOWN OF AMHERST MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THE ACCURACY, COMPLETENESS, RELIABILITY, OR SUITABILITY OF THESE DATA. THE TOWN OF AMHERST DOES NOT ASSUME ANY LIABILITY ASSOCIATED WITH THE USE OR MISUSE OF THIS INFORMATION.

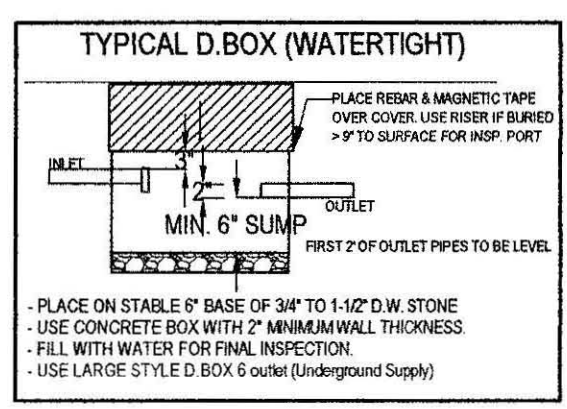
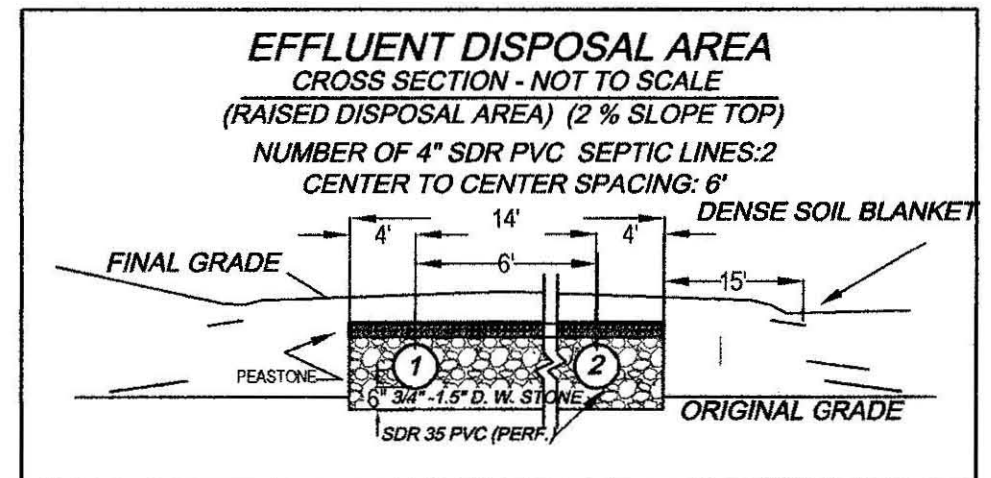
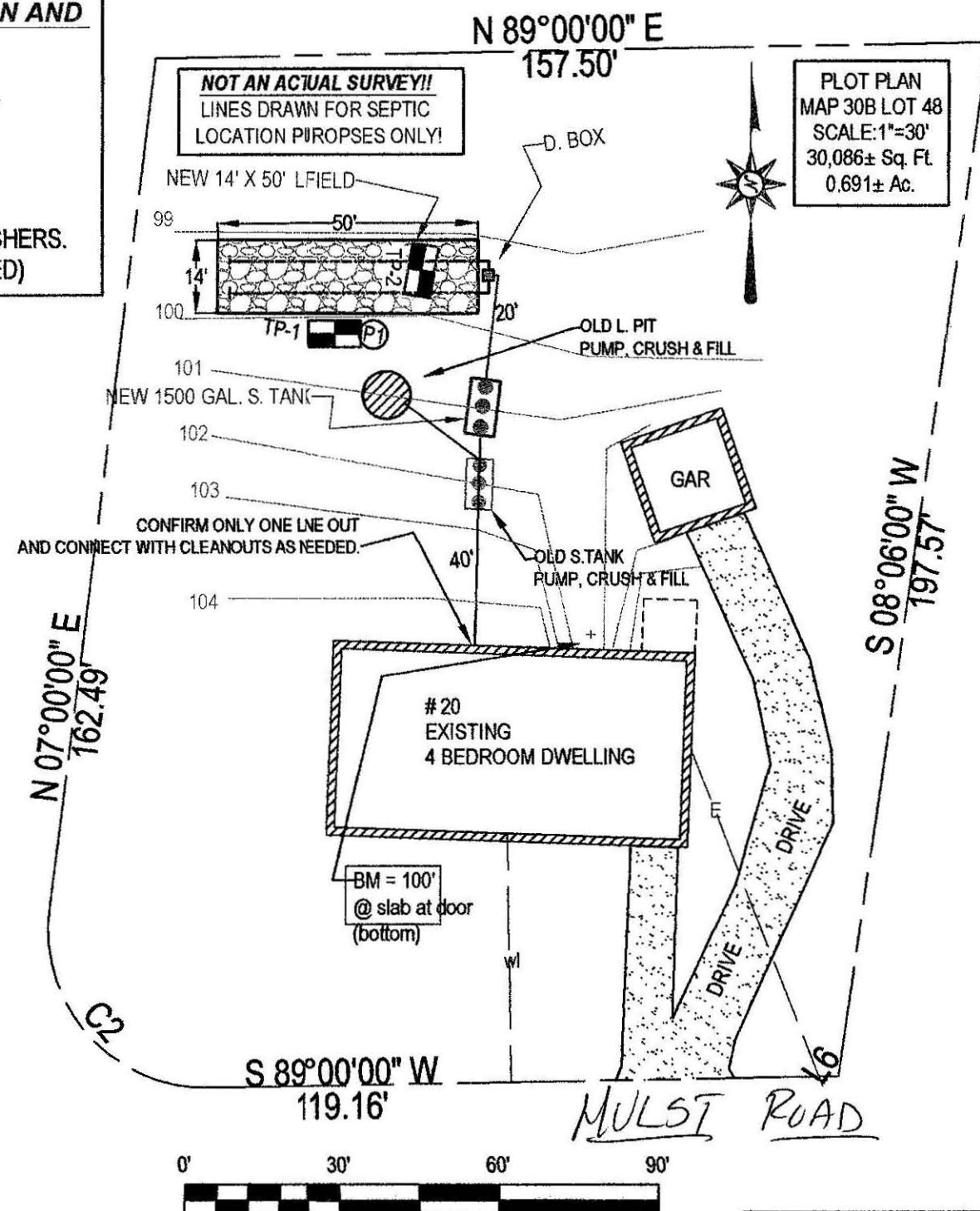
1" = 40 ft





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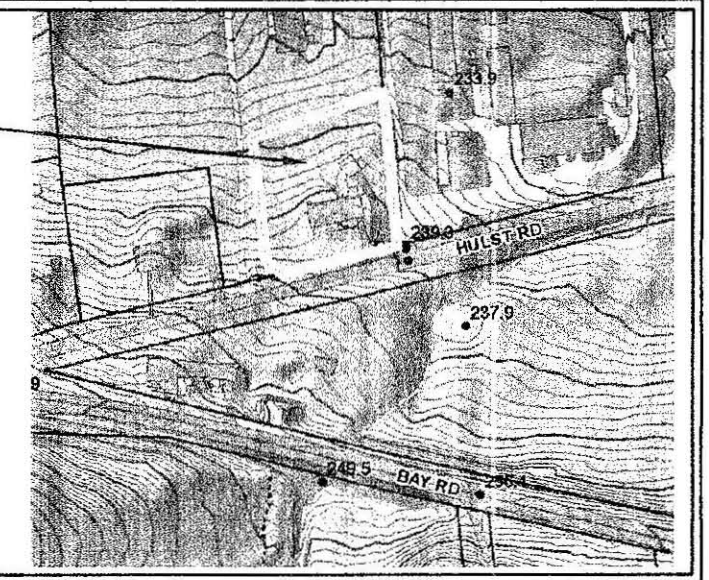
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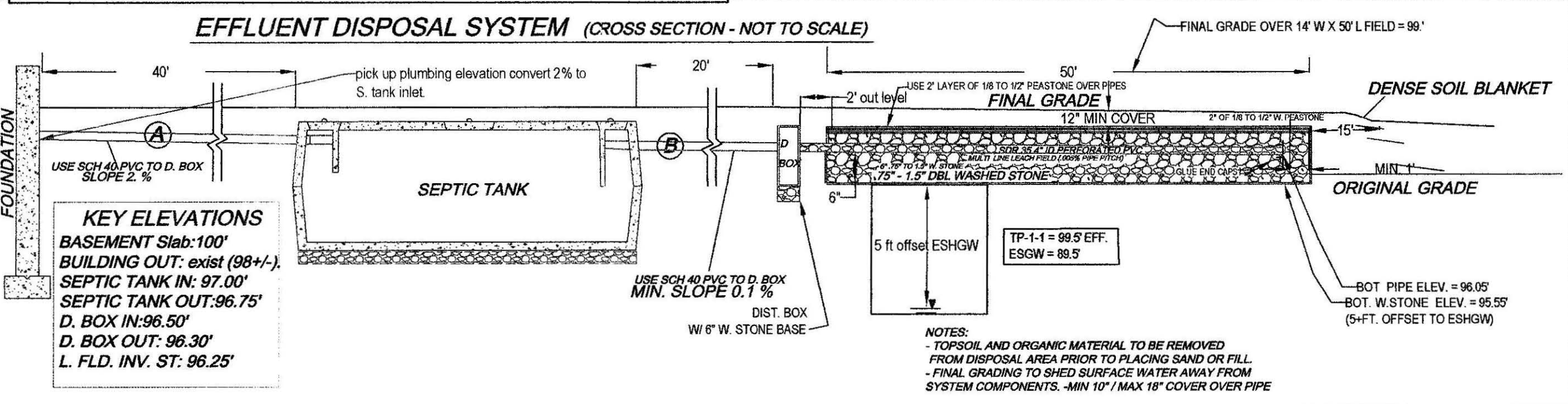
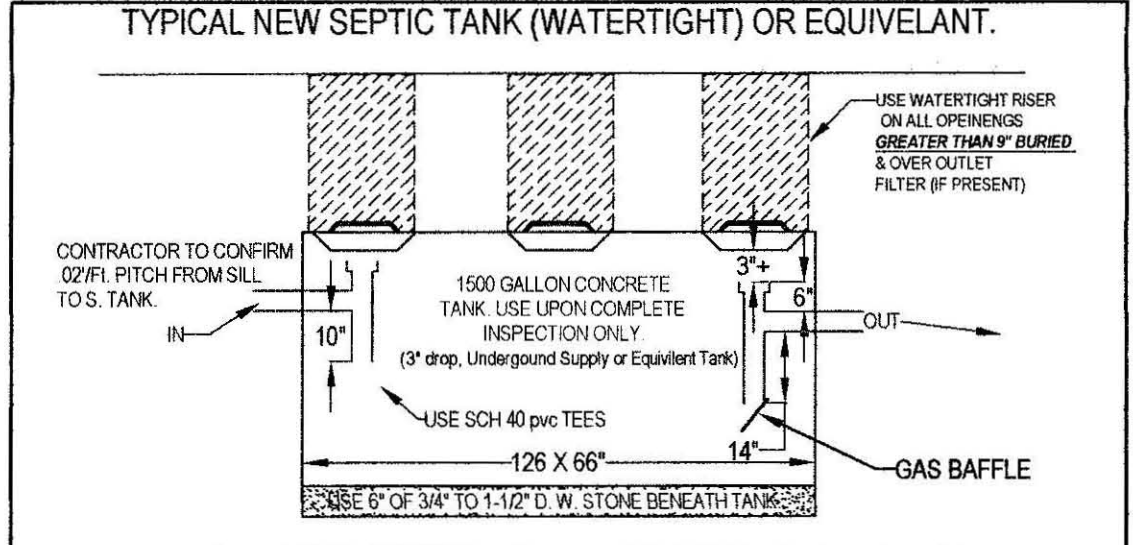
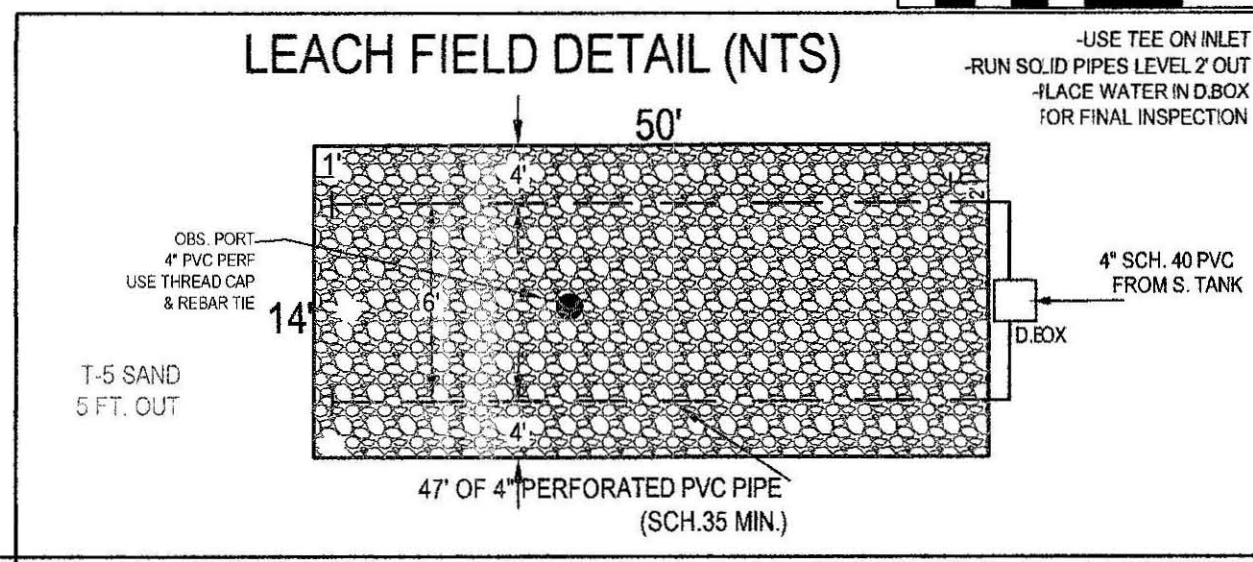
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- INSTALLATION IN LOW GROUNDWATER SEASON RECOMMENDED.
- USE OBSERVATION PORT NEAR CENTER OF STONE BED HAVE 4" PERFORATED, PVC INSPECTION PORTALS TO BOTTOM OF STONE BED, WITH RISER TO 3" OF SURFACE & THREADED CAP & MARK WITH RE-BAR.



GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.

- HAVE TANK PUMPED EVERY 2 YEARS.
- MAINTAIN AREA OVER SEPTIC SYSTEM AS GRASSY OR SIMILAR GROUND COVER.
- DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
- USE ONLY LIQUID DETERGENTS & LOW FLOW WASHERS.

ATTENTION INSTALLER!!
CALL DIG SAFE BEFORE YOU DIG!! MASSACHUSETTS STATE LAW CHAPTER 82 SECTIONS 4 - 40E REQUIRE THAT PREMARKING OF GAS, ELECTRIC, WATER, TELEPHONE AND CABLE T.V. UTILITY LINES BE MADE A MINIMUM OF 72 HOURS PRIOR TO GROUND BREAK FOR ANY EXCAVATION.

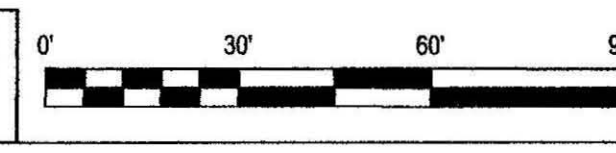
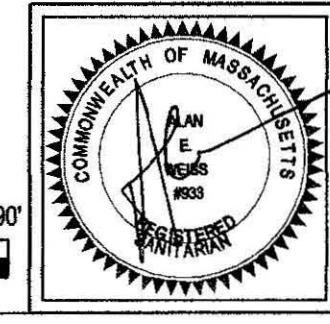
NOTE: INSTALLER MUST CONTACT ENGINEER/BD OF HEALTH 48 HOURS PRIOR TO SUBGRADE INSPECTION. INSTALLER MUST HAVE ALL BREAK OUT FILL ON SITE AND IN PLACE PRIOR TO SIGN OFF BY ENGINEER AT TIME OF FINAL INSPECTION OR APPROVAL WILL NOT BE GIVEN TO BACKFILL.

TEST PIT LOG:					SOIL EVALUATOR: A. WEISS, RS					DATE OF EVALUATION: 06.01.2011	
TP-1 EFF. ELEV: 97.0'					TP-2 EFF. ELEV:						
DEPTH:	HORIZ:	TEXTURE:	MOISTURE:	MATERIAL:	DEPTH:	HORIZ:	TEXTURE:	COLOR:	MOISTURE:	MATERIAL:	
0-9"	Ap	FSL	10 YR 3.3	FRIABLE	0-8"	A	SL	10 YR 3.3	FRIABLE		
9-26"	Bw	F. SAND	2:5Y 5.6	F. SAND, GRANULAR	8-26"	Bw	F. SAND	2.5Y 5.6	F. SAND, GRANULAR		
26-126"	C1	C SAND	2:5Y 4.3	MED-CRSE SAND, GRANULAR	26-120"	C1	C SAND	2.5Y 4.3	MED-CRSE SAND, GRANULAR		
				LOOSE, 15% STONES					LOOSE, 15% STONES		
OXIDES: INOT OBSERVED					OXIDES: NOT OBSERVED						
EHW: 120" +					EHW: -						
STANDING H2O: -					STANDING H2O: -						
WEEPING: -					WEEPING: -						

SEPTIC SYSTEM REPAIR PLAN FOR BIODYNAMIC FARMLAND CONSERVATION TRUST
20 HULST ROAD
AMHERST, MA

Cold Spring Environmental Consultants Inc.
350 Old Enfield Road
Belchertown, MA 01007

PHONE: (413) 323-5957
FAX: (413) 323-4916
DATE: 06.12.2011
SCALE: 1"=30'
DRAWN BY: ALAN WEISS
REVISED:
DRAWING NUMBER: 110-3590-0601



No. _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT



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

Location <u>20 Hulst Rd</u>	Owner's Name <u>Biodynamic Farmland Conserv. Trust</u>
Map/Parcel# <u>30B/48</u>	Address <u>24 Hulst Rd</u>
Lot# <u>48</u>	Telephone# <u>253-7991</u>
Installer's Name <u>Karl's Excavating</u>	Designer's Name <u>Alan Weiss</u>
Address <u>North, MA</u>	Address <u>Baldertown, MA</u>
Telephone# <u>519-5396</u>	Telephone# <u>323-5957</u>

Type of Building Residence Lot Size 30,086 sq. ft.
 Dwelling - No. of Bedrooms 4 Bedrooms Garbage grinder
 Other - Type of Building _____ No. of persons _____ Showers (), Cafeteria ()
 Other Fixtures _____
 Design Flow (min. required) 440 gpd Calculated design flow 440 Design flow provided 518 gpd
 Plan: Date 6/12/2011 Number of sheets 1 Revision Date _____
 Title Septic System Repair Plans
 Description of Soil(s) class 1 SAND
 Soil Evaluator Form No. _____ Name of Soil Evaluator A. Weiss Date of Evaluation 6/1/2011

DESCRIPTION OF REPAIRS OR ALTERATIONS _____

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

Signed Daniel [Signature] Date June 30, 2011

Inspections _____

No. 7/1/2011
12-01

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: KARL'S EXCAVATING
at 20 HULST ROAD

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 6/30/2011. Approved Design Flow 518 (gpd)

Installer KARL'S EXCAVATING
Designer: ALAN WEISS Inspector: Edmund Smith Date: 7/1/2011

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

No. _____

COMMONWEALTH OF M

Board of Health, _____

DISPOSAL SYSTEM CONST

Permission is hereby granted to; Construct () Repair () Upgrade
at _____

Disposal System Construction Permit No. _____, dated _____

Provided: Construction shall be completed within three years of the

Dan
Sign these +
return to Bd of
Health w/ paper
see.
Alan

system
on for
met.





ALAN E. WEISS, M.S., R.S., L.S.P.

Licensed Site Professional
Registered Sanitarian
Hydrogeologist
President

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

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

aeweiss@charter.net

Date: 6/1/11

Commonwealth of Massachusetts

Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss

Date: 6/1/11

Witnessed By: E. Smith

* Biodynamic Farmland Conservation Trust

Location Address or Lot # <u>20 Hulst Rd Amherst, MA</u>	Owner's Name, Address, and Telephone # <u>Brookfield farm house 20 Hulst Rd Amherst, MA</u>
New Construction <input checked="" type="checkbox"/> Repair <input type="checkbox"/>	

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)

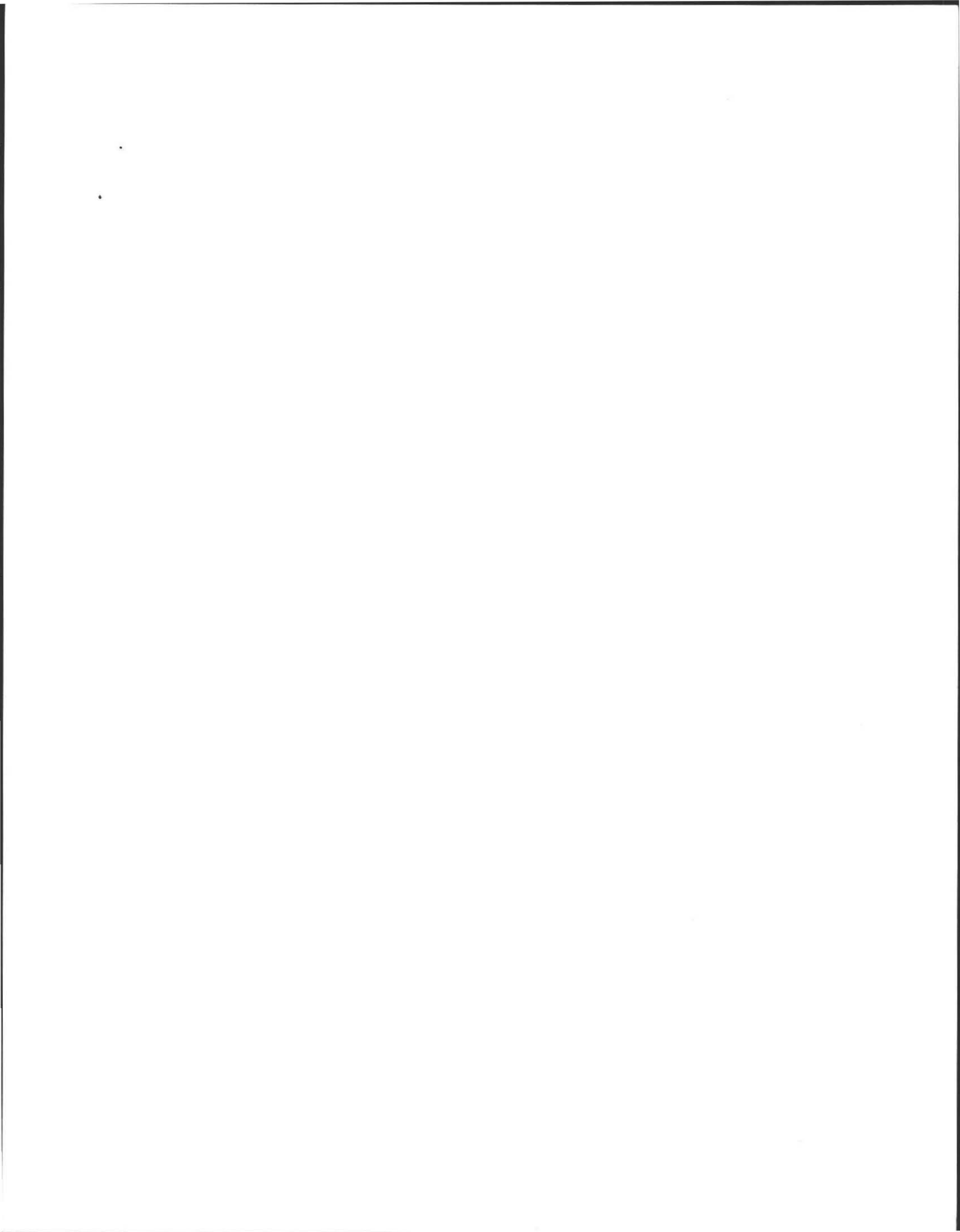
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month

Range: Above Normal Normal Below Normal

Other References Reviewed: _____





Location Address or Lot No. 20 Huist RD

On-site Review

Deep Hole Number 142 Date: 6/1/11 Time: 10:35 Weather SUN 80

Location (identify on site plan) _____

Land Use RES. Slope (%) 3 Surface Stones not

Vegetation grass

Landform terrace

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body 100 feet Drainage way 507 feet
 Possible Wet Area 100+ feet Property Line 307 feet
 Drinking Water Well 100+ feet Other _____

DEEP OBSERVATION HOLE LOG*

#1

#2

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-9"	Ap	FSL	10YR 3/3		- Friable, Loose.
9"-26"	Bw	FS	2.5Y 5/6		- f. Sandy, granular.
26"-126"	C ₁	LS	2.5Y 4/3	Not obs.	- med - coarse sand, granular. Loose, 15% stones
0-8"	Ap	FSL	10YR 3/3		- Friable Loose.
8"-26"	Bw	FS	2.5Y 5/6	Not obs.	- f. Sandy, granular.
26" → 126"	C ₁	LS	2.5Y 4/3	Not obs.	- med - coarse sand, granular. Loose, 15% stones

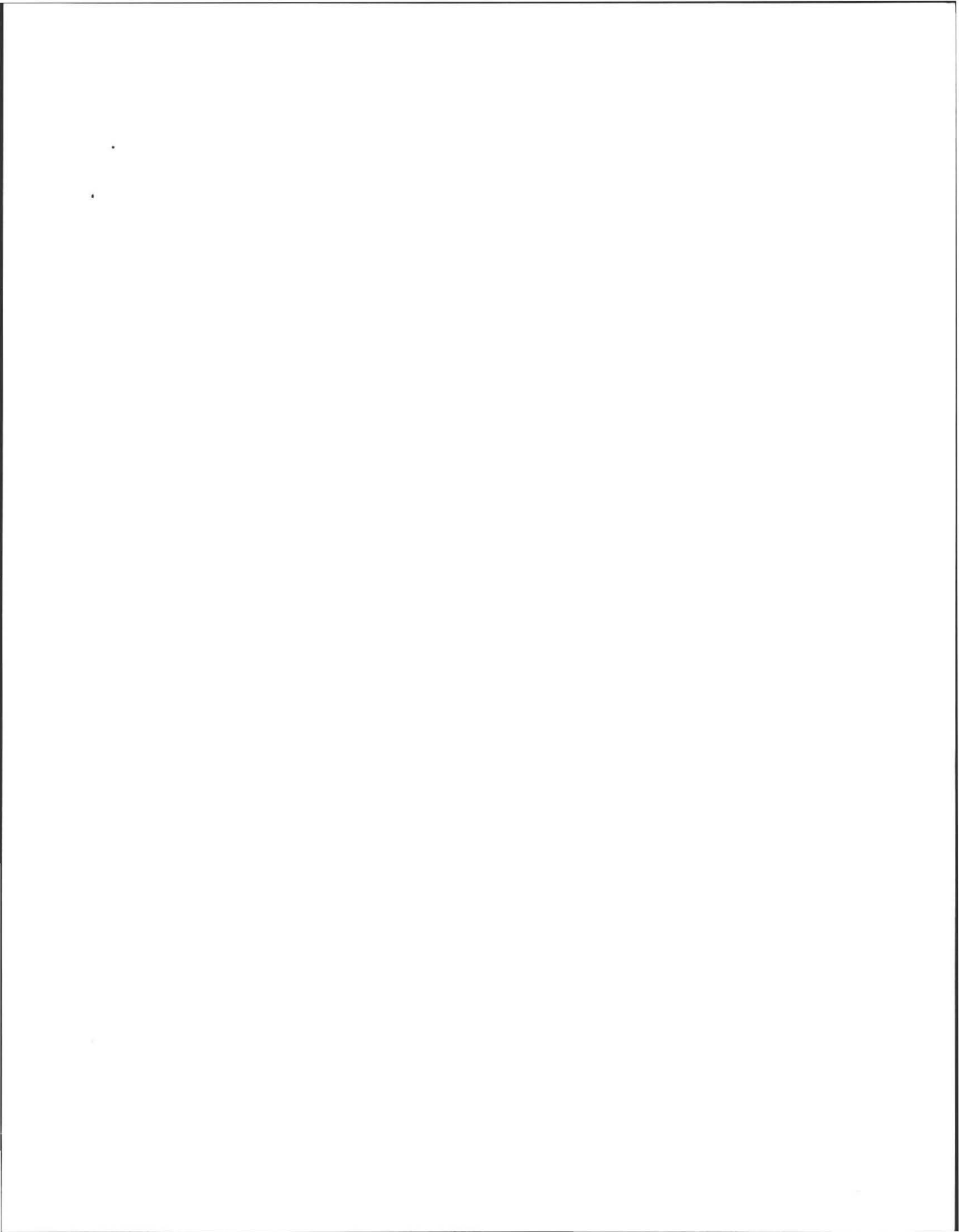
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash. Depth to Bedrock: _____

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

Estimated Seasonal High Ground Water: 120"





Location Address or Lot No. 20 Hulst Rd

COMMONWEALTH OF MASSACHUSETTS

Massachusetts

Percolation Test*		
Date: ..	<u>6/1/11</u>	Time: <u>10:45</u>
Observation Hole #:		
Depth of Perc	<u>CANT</u>	
Start Pre-soak	<u>Hold</u>	<u>12</u>
End Pre-soak	<u>Water</u>	<u>6</u>
Time at 12"		<u>P</u>
Time at 9"		<u>a</u>
Time at 6"		<u>r</u>
Time (9"-6")		<u>r</u>
Rate Min./Inch	<u>2</u>	<u>↓</u>

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

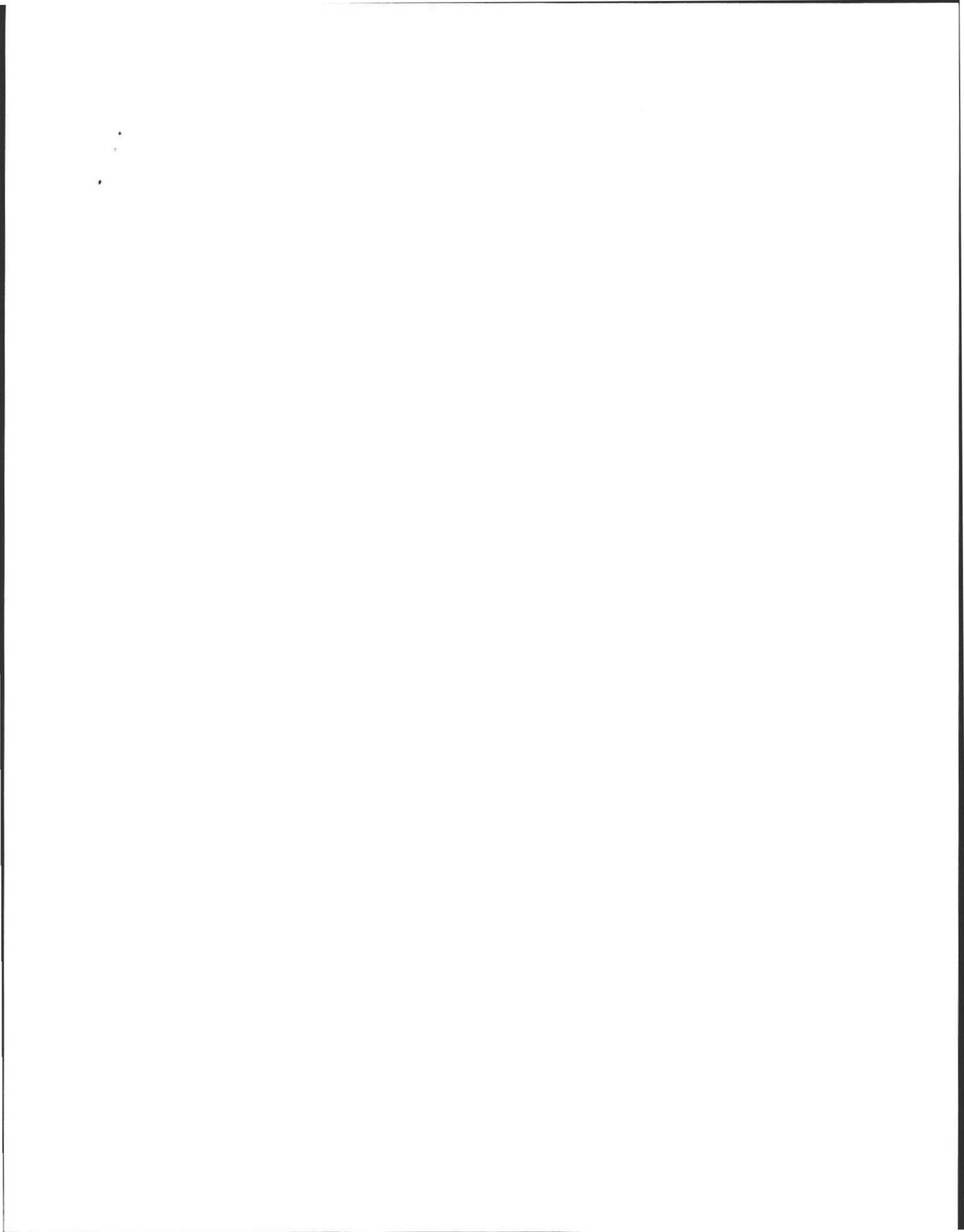
Site Passed Site Failed

Performed By: A Weiss

Witnessed By: E. Smith

Comments: _____





Location Address or Lot No. 20 HUIST 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 120" inches
- Ground water adjustment feet

Index Well Number Reading Date Index well level

Adjustment factor Adjusted ground water level

Depth of Naturally Occurring Pervious Material

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

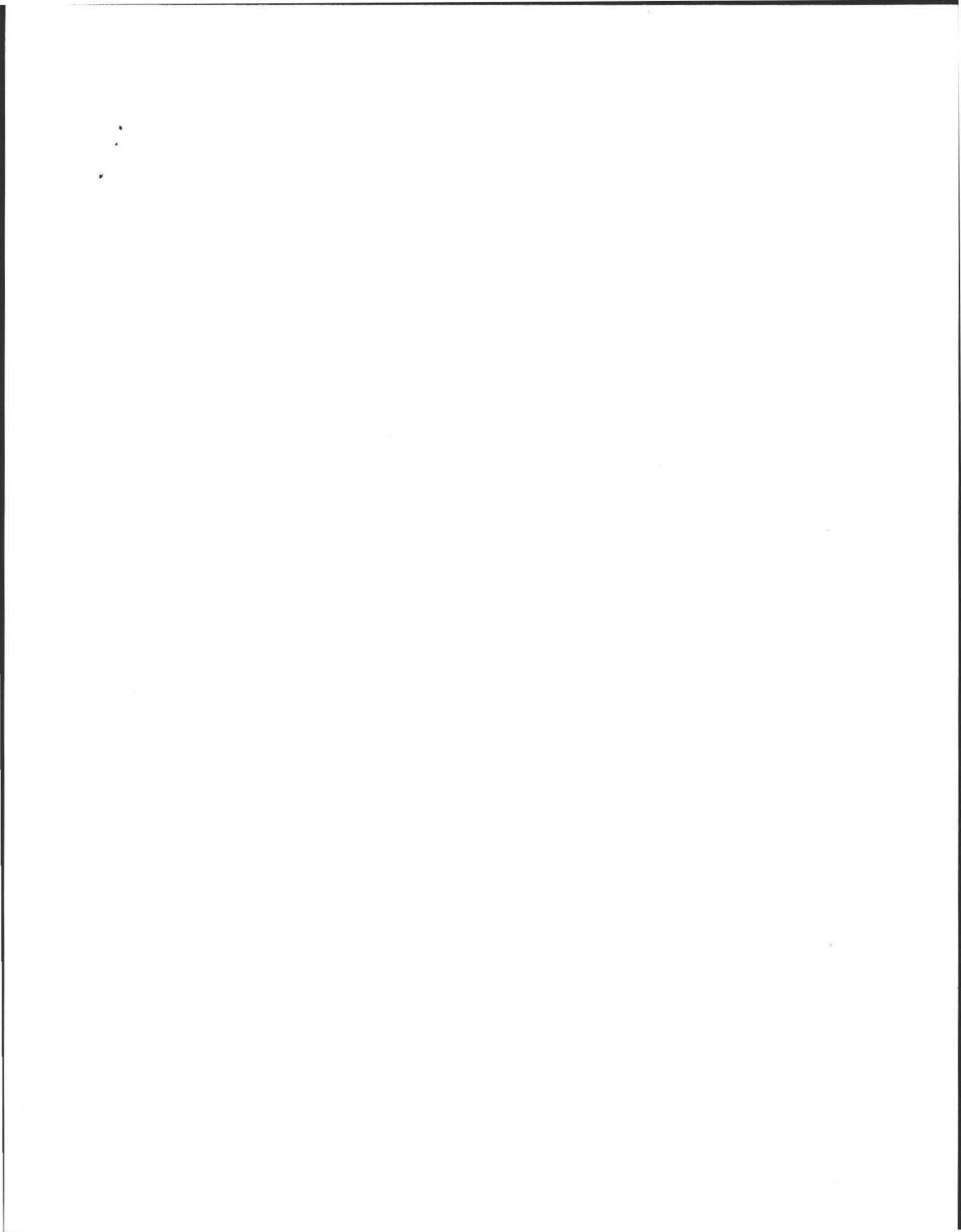
If not, what is the depth of naturally occurring pervious material? _____

Certification

I certify that on June 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.

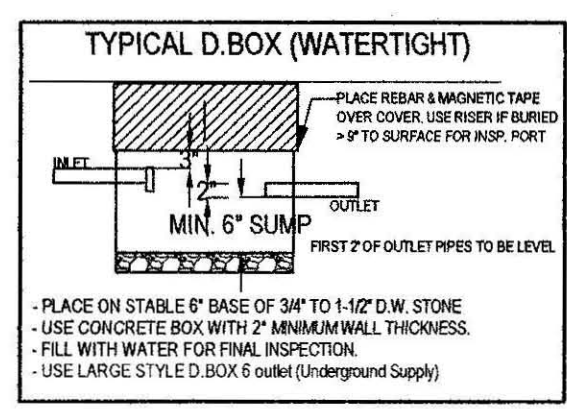
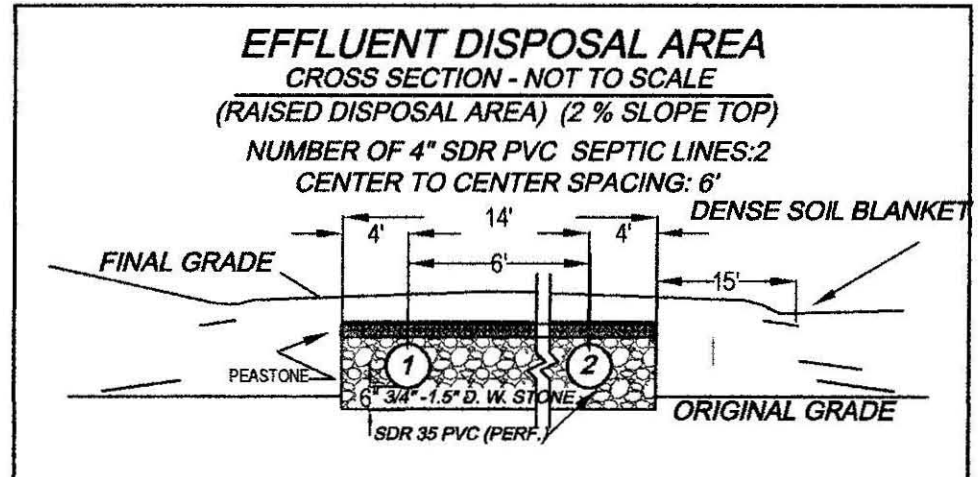
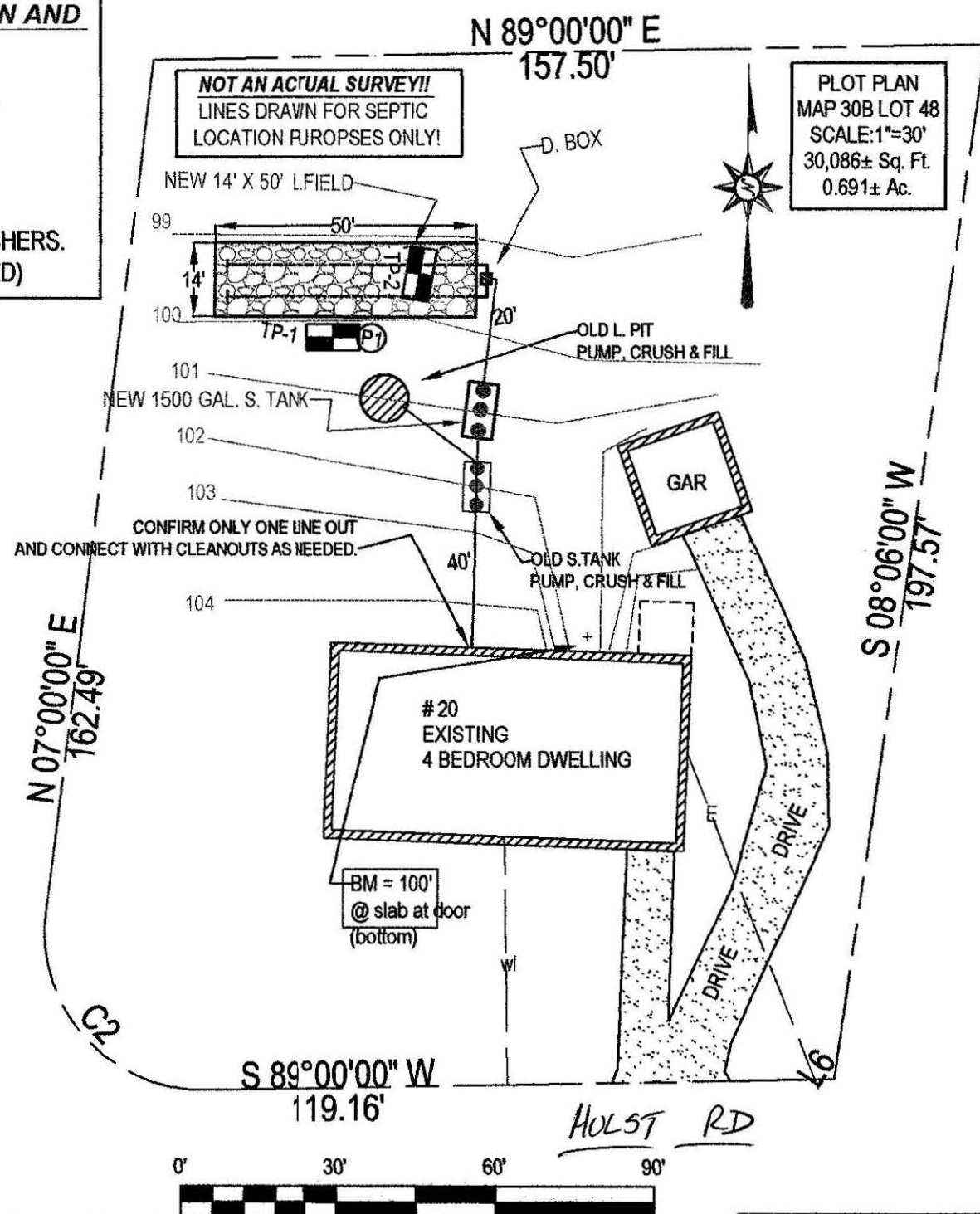
Signature *AP* Date 6/1/11





GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.

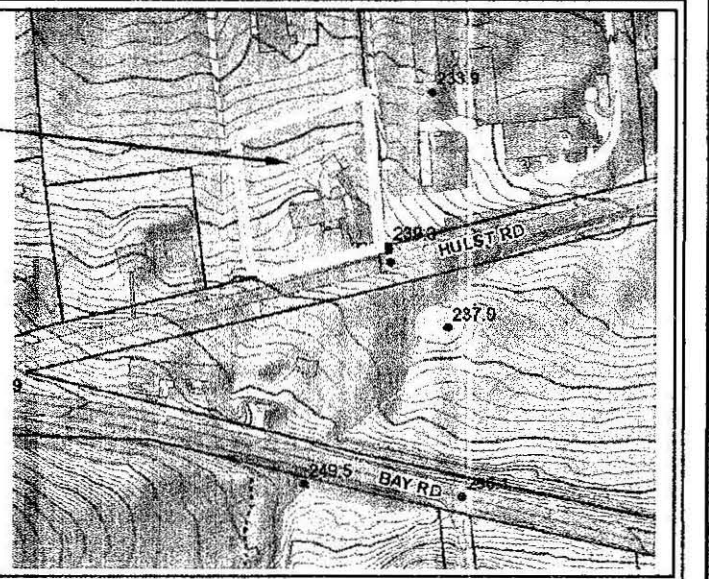
- 1.) HAVE TANK PUMPED EVERY 2 YEARS.
- 2.) MAINTAIN AREA OVER SEPTIC SYSTEM AS GRASSY OR SIMILAR GROUND COVER.
- 3.) DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
- 4.) USE ONLY LIQUID DETERGENTS & LOW FLOW WASHERS.
- 5.) CLEAN TANK OUTLET FILTER ANNUALLY (IF EQUIPED)



NOTE TO HOMEOWNER AND CONTRACTOR:
CONNECTIONS FROM HEATING SYSTEM, AIRCONDITIONERS, SUMP PUMPS, WATER WELL FILTRATION UNITS AND HEAT PUMPS ARE NOT ALLOWED, SANITARY WATER CONNECTIONS ONLY PERMITTED.

NOTE TO INSTALLER:
TOWN INSPECTOR AND SYSTEM DESIGNER MUST BE CALLED 48 HRS BEFORE START OF SYSTEM INSTALL

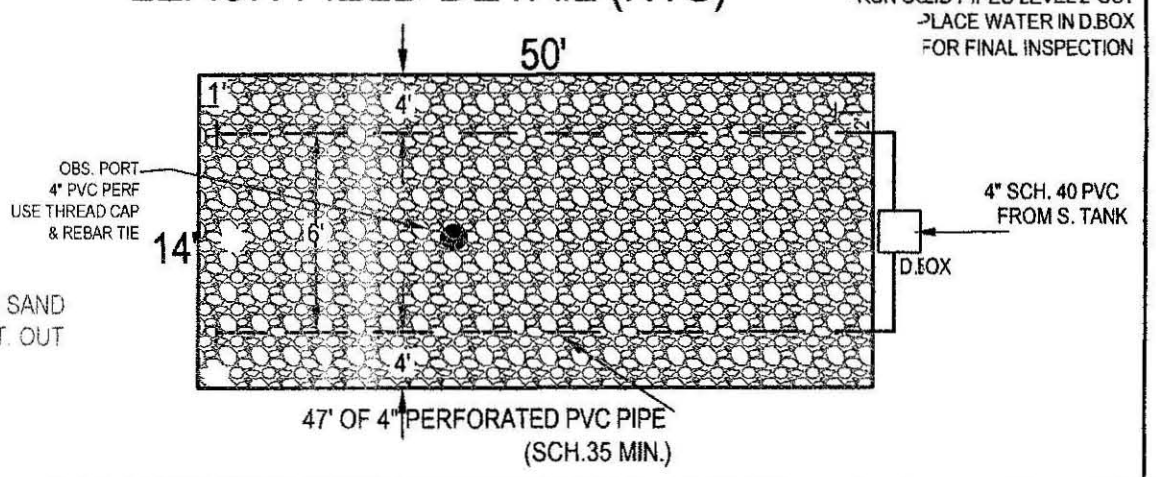
SUBJECT SITE LOCATION



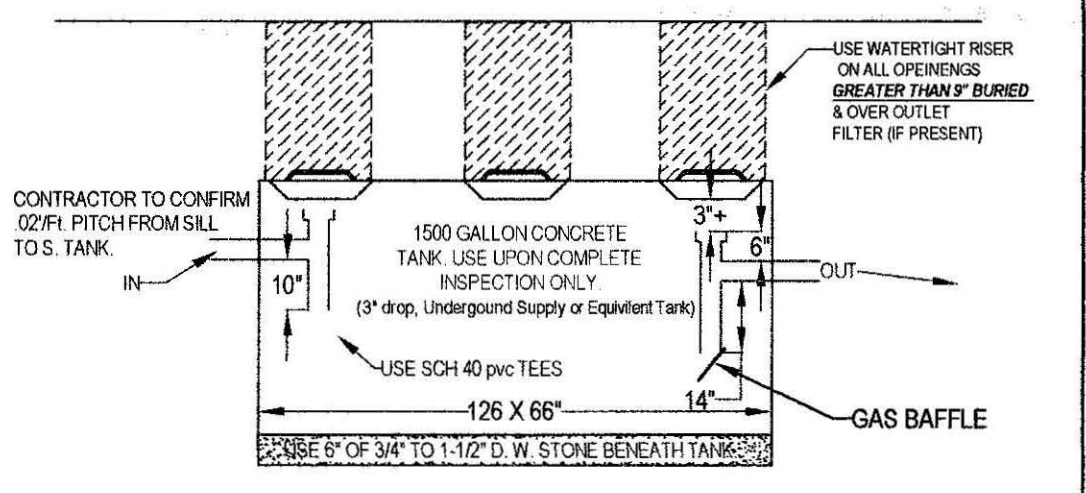
DESIGN NOTES AND CALCULATIONS:

- 1.) 4 (BEDROOM HOME) = 440 GPD MIN. REQUIRED,
 - Use LEACHING FIELD 14' WIDE X 50' LONG WITH 6" OF 3/4" TO 1 1/2" DBL WASHED STONE BELOW INVERT :
 - BOTTOM AREA: L. FIELD (14' W X 50' L) = 700 SF.
 - TOTAL AREA: 700 SF X .74 GAL/SF = 518 GPD PROVIDED.
3. GARBAGE DISPOSAL NOT PERMITTED.
4. NO OTHER PRIVATE WELLS WITHIN 150 FEET OF SAS.
5. NO OTHER WETLANDS WITHIN 50 FEET OF SAS.
6. USE S. TANK ASS NOTED & MAINTAIN 0.02 PITCH FROM SILL TO S. TANK
 - INSTALL & INSPECT SCH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET),
- NOTE:
 - ALL COMPONENTS OF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO 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 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.
- 7B. ANY /ALL PLASTIC RISERS MUST BE SECURED WITH STAINLESS STEEL SCREWS.
8. -USE (.75"-1 1/2") STONE UNDER TANK & D. BOX FOR 6" FOR STABLE BASE.
 - USE ONLY DBL. WASHED APPROVED (.75"-1.5") FOR PLACEMENT IN LEACH AREA.
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 & ESHGW (310 CMR 15.240)
14. USE 2% MIN. SLOPE OVER SAS
 - CLEAR TOP AND SUB TO 32" MIN. AS NEEDED (INSPECTION REQUIRED).
 - CLEAR PAST I/BASE OF B (MIN. 32") & SCARIFY UNDER TRENCH PRIOR TO TITL V SANDSTONE PLACEMENT.
 - EXCAVATE EXISTING LOAM, SUB AND ANY EXISTING DEBRIS, DIRTY FILL OR PRIOR SYSTEM IF PRESENT.
15. SOIL EVALUATION BY A. WEISS, RS. (E. Smith, BOH AGENT).
 - DEPTH OF PERC. 40"
 - PERC RATE = < 2 MIN / IN.
 - CLASS 1, SAND SOIL RATING
16. NO TREES WITHIN 10 FT. OF NEW LEACH AREA.
17. ENGINEER TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL.
18. BM=100.00 @ (Slab, 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.

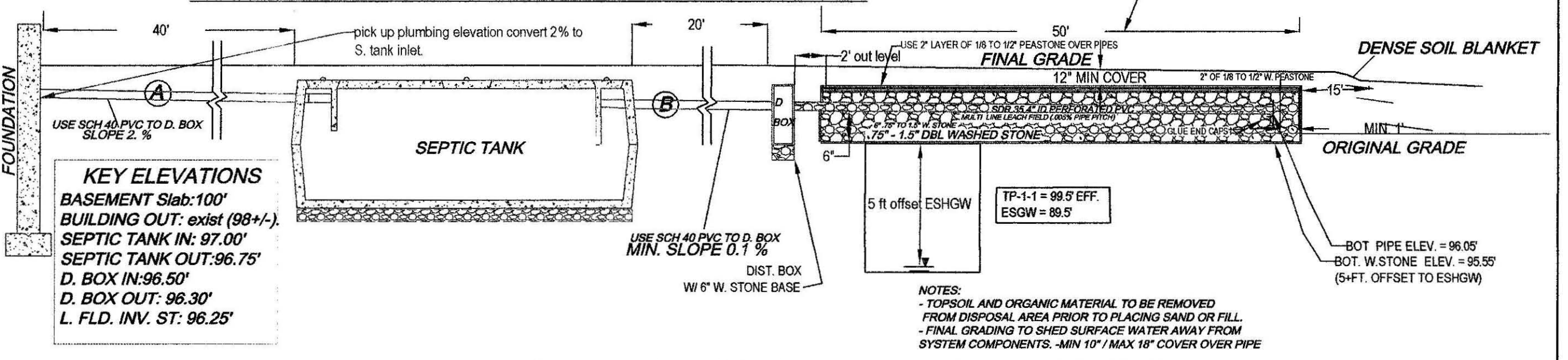
LEACH FIELD DETAIL (NTS)



TYPICAL NEW SEPTIC TANK (WATERTIGHT) OR EQUIVELANT.



EFFLUENT DISPOSAL SYSTEM (CROSS SECTION - NOT TO SCALE)



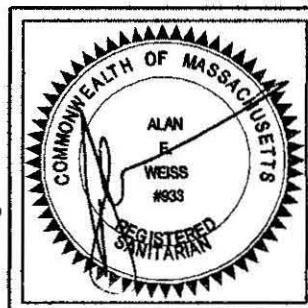
TEST PIT LOG:

TP-1 EFF. ELEV: 97.0'				SOIL EVALUATOR: A. WEISS, RS				DATE OF EVALUATION: 06.01.2011			
DEPTH:	HORIZ:	TEXTURE:	MOISTURE:	MATERIAL:	DEPTH:	HORIZ:	TEXTURE:	MOISTURE:	MATERIAL:		
0-9"	Ap	FSL	10 YR 3.3	FRIABLE	0-8"	A	SL	10 YR 3.3	FRIABLE		
9-26"	Bw	F. SAND	2.5Y 5.6	F. SAND, GRANULAR	8-26"	Bw	F. SAND	2.5Y 5.6	F. SAND, GRANULAR		
26-126"	C1	C SAND	2.5Y 4.3	MED-CRSE SAND, GRANULAR	26-120"	C1	C SAND	2.5Y 4.3	MED-CRSE SAND, GRANULAR		
				LOOSE, 15% STONES					LOOSE, 15% STONES		
OXIDES: INOT OBSERVED				OXIDES: NOT OBSERVED							
EHWT: 120" +				EHWT: -							
STANDING H2O: -				STANDING H2O: -							
WEEPING: -				WEEPING: -							

SEPTIC SYSTEM REPAIR PLAN FOR BIODYNAMIC FARMLAND CONSERVATION TRUST
20 HULST ROAD
AMHERST, MA

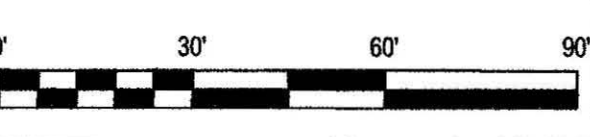
Cold Spring Environmental Consultants Inc.
350 Old Enfield Road
Belchertown, MA 01007

PROJECT: (413) 323-5957
DRAWN BY: ALAN WEISS
DATE: 06.12.2011
SCALE: 1"=30'
REVISED:
DRAWING NUMBER: 110-3590-0601



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

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



No. _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

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

Location	<u>20 Hill St. RD</u>	Owner's Name	<u>Biodynamic Farmland Conserv. Trust</u>
Map/Parcel#	<u>30B/48</u>	Address	<u>24 Hill St RD</u>
Lot#	<u>48</u>	Telephone#	<u>253-7991</u>
Installer's Name	<u>Kari's Excavating</u>	Designer's Name	<u>Alan Weiss</u>
Address	<u>Hartley, MA</u>	Address	<u>Balderton, MA</u>
Telephone#	<u>519-5396</u>	Telephone#	<u>323-5957</u>

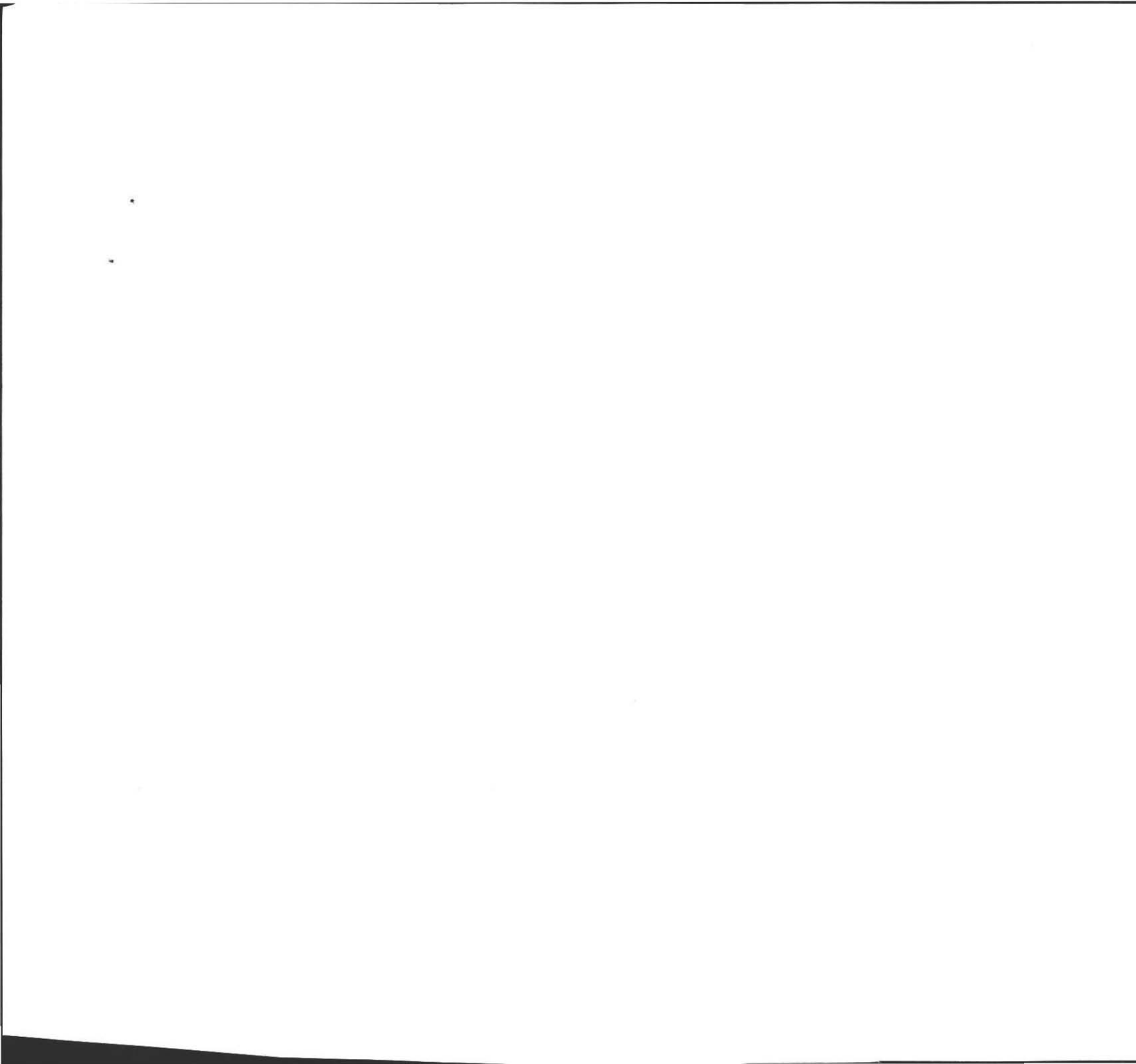
Type of Building Residence Lot Size 30,086 sq. ft.
 Dwelling - No. of Bedrooms 4 Bedrooms Garbage grinder
 Other - Type of Building _____ No. of persons _____ Showers (), Cafeteria ()
 Other Fixtures _____
 Design Flow (min. required) 440 gpd Calculated design flow 440 Design flow provided 518 gpd
 Plan: Date 6/13/2011 Number of sheets 1 Revision Date _____
 Title Septic System Repair Plans
 Description of Soil(s) class 1: SAND
 Soil Evaluator Form No. _____ Name of Soil Evaluator A. Weiss Date of Evaluation 6/1/2011

DESCRIPTION OF REPAIRS OR ALTERATIONS _____

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 Dennis J. [Signature] Date 6/30/2011

Inspections _____





ALAN E. WEISS, M.S., R.S., L.S.P.

Licensed Site Professional
Registered Sanitarian
Hydrogeologist
President

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

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

aeweiss@charter.net

Date: 6/1/11

Commonwealth of Massachusetts

Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss

Date: 6/1/11

Witnessed By: E. Smith

* Biodynamic Farmland Conservation Trust

Location Address or Lot # <u>20 Hulst Rd</u> <u>Amherst, MA</u> New Construction <input checked="" type="checkbox"/> Repair <input type="checkbox"/>	Owner's Name, Address, and Telephone # <u>Brookfield farm house</u> <u>20 Hulst Rd</u> <u>Amherst, MA</u>
---	--

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) _____

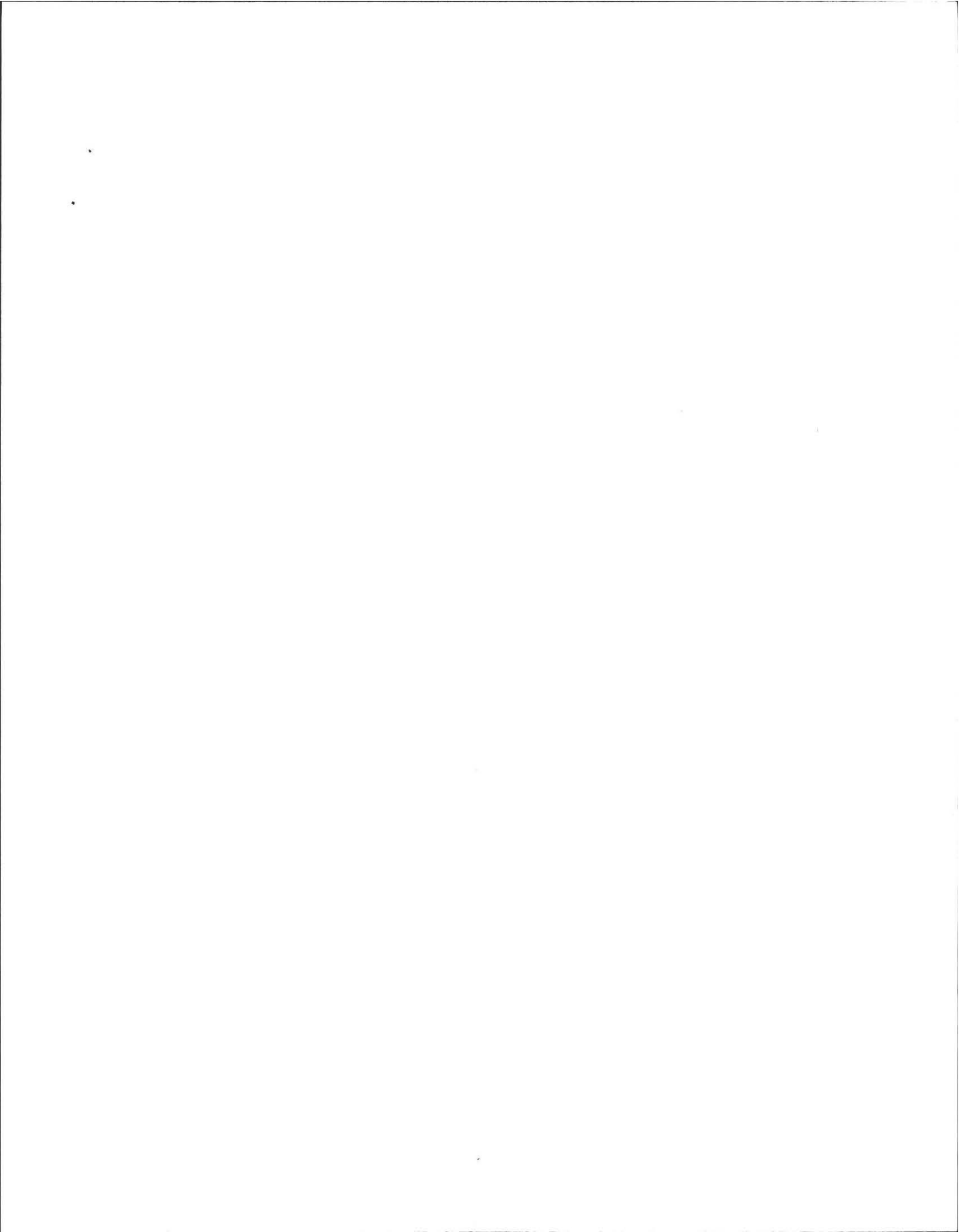
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS): Month _____

Range : Above Normal Normal Below Normal

Other References Reviewed: _____





Location Address or Lot No. 20 Huist RD

On-site Review

Deep Hole Number 172 Date: 6/1/11 Time: 10:35 Weather SUN 80

Location (identify on site plan) _____

Land Use RES Slope (%) 3 Surface Stones not

Vegetation grass

Landform terrace

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body 100 feet Drainage way 507 feet

Possible Wet Area 100+ feet Property Line 307 feet

Drinking Water Well 1004 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 0-9" 9"-26" 26"-126"	Ap	FSL	10YR 3/3	Not obs.	- Friable, Loose. - f. Sandy, granular. - med - coarse sand, granular. Loose, 15% stones
	Bw	FS	2.5Y 5/6		
	C ₁	LS	2.5Y 4/3		
#2 0-8" 8"-26" 26"→126"	Ap	FSL	10YR 3/3	Not obs.	- Friable Loose. - f. Sandy, granular. - med - coarse sand, granular Loose, 15% stones
	Bw	FS	2.5Y 5/6		
	C ₁	LS	2.5Y 4/3		

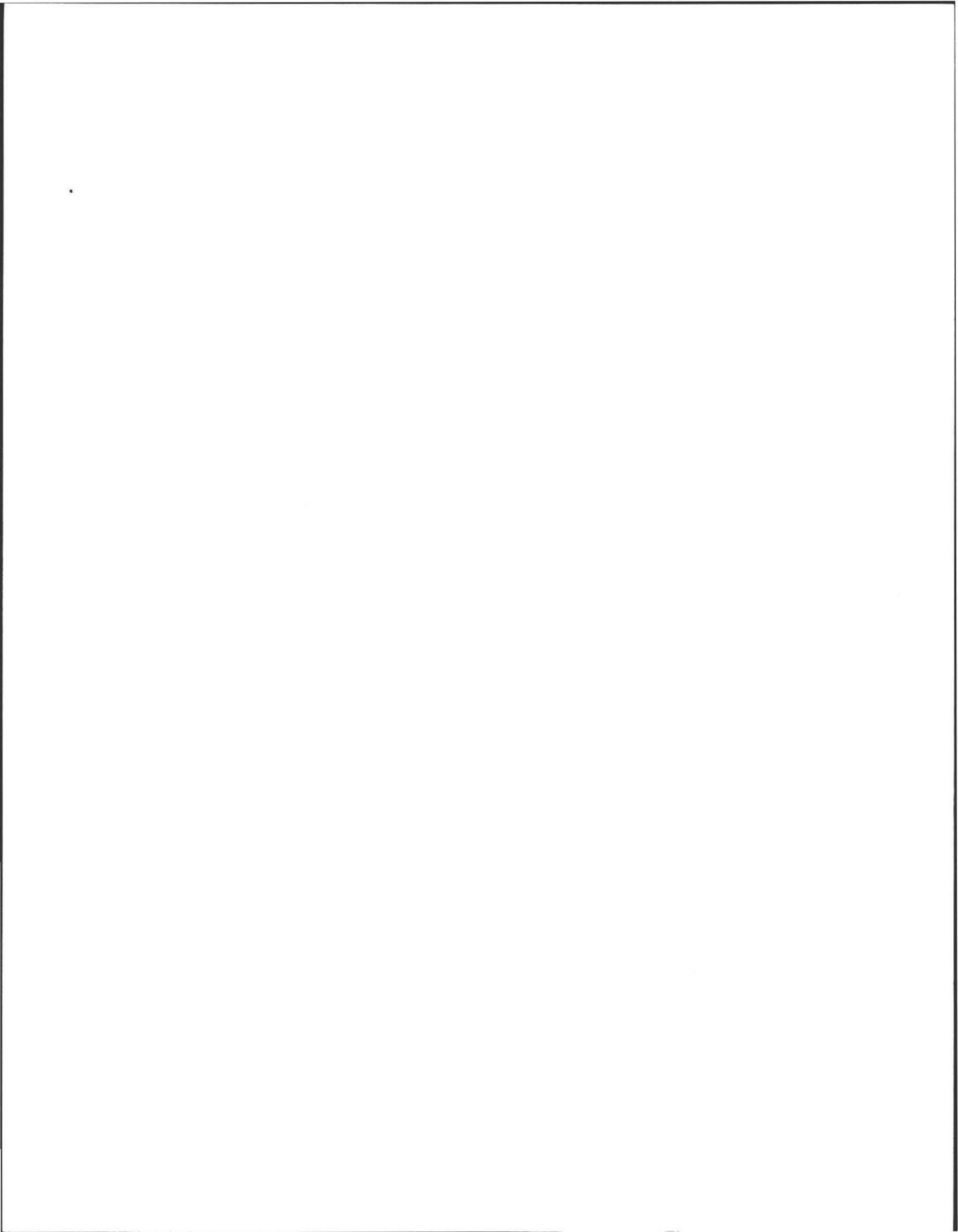
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash Depth to Bedrock: _____

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

Estimated Seasonal High Ground Water: 120"





Location Address or Lot No. 20 Hulst Rd

COMMONWEALTH OF MASSACHUSETTS

Massachusetts

Percolation Test*		
Date: ...	<u>6/1/11</u>	Time: <u>10:45</u>
Observation Hole #		
Depth of Perc	<u>CANT</u>	
Start Pre-soak	<u>Hold</u>	<u>R</u>
End Pre-soak	<u>Water</u>	<u>e</u>
Time at 12"		<u>p</u>
Time at 9"		<u>a</u>
Time at 6"		<u>i</u>
Time (9"-6")		<u>r</u>
Rate Min./Inch	<u>2</u>	<u>↓</u>

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

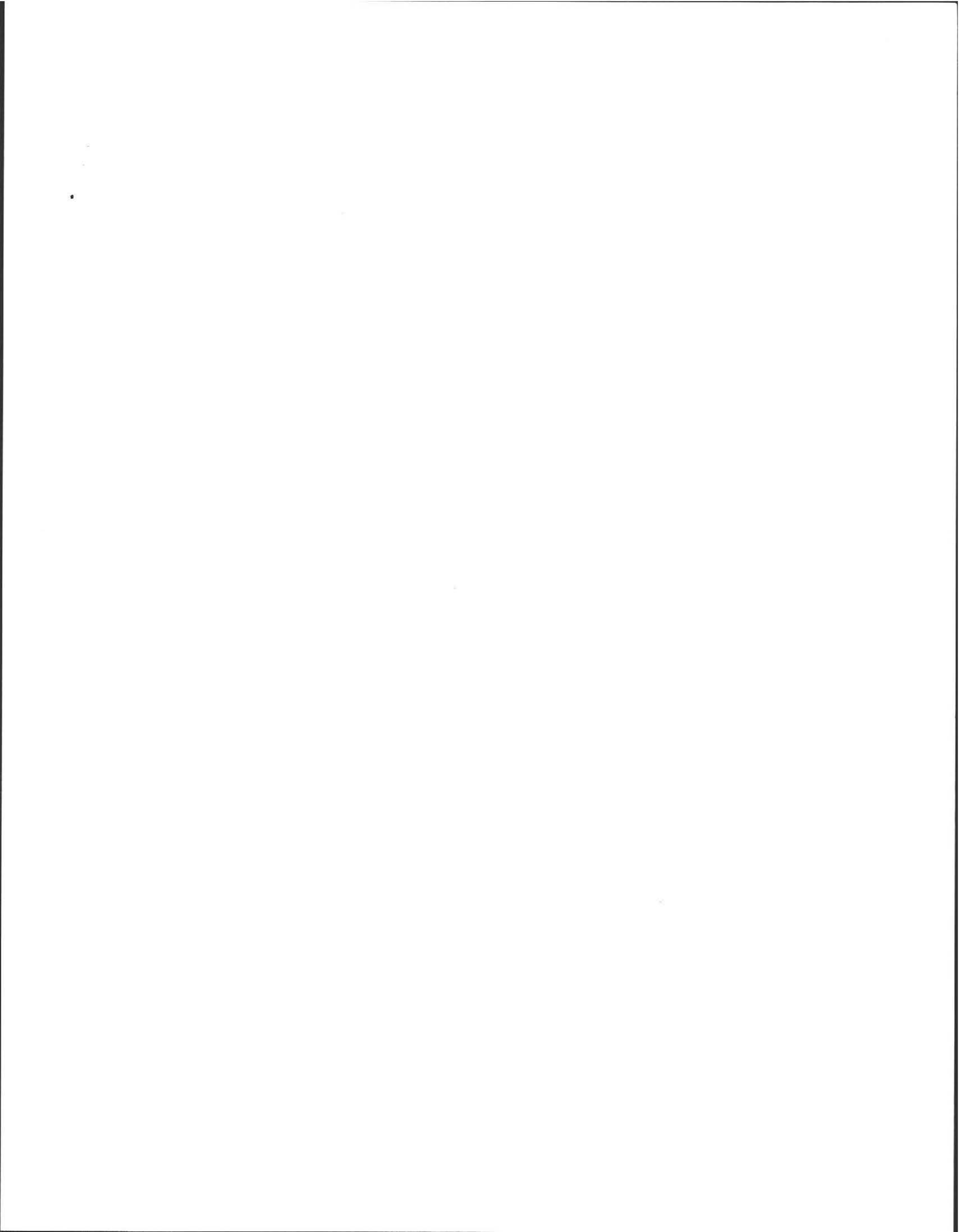
Site Passed Site Failed

Performed By: A Weiss

Witnessed By: E. Smith

Comments: _____





Location Address or Lot No. 20 HULST 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 120" inches
- Ground water adjustment..... feet

Index Well Number Reading Date Index well level

Adjustment factor Adjusted ground water level

Depth of Naturally Occurring Pervious Material

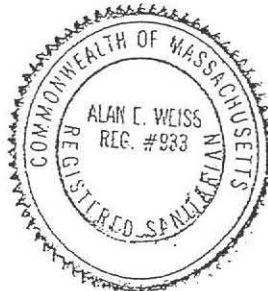
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? yes

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

Certification

I certify that on June 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.

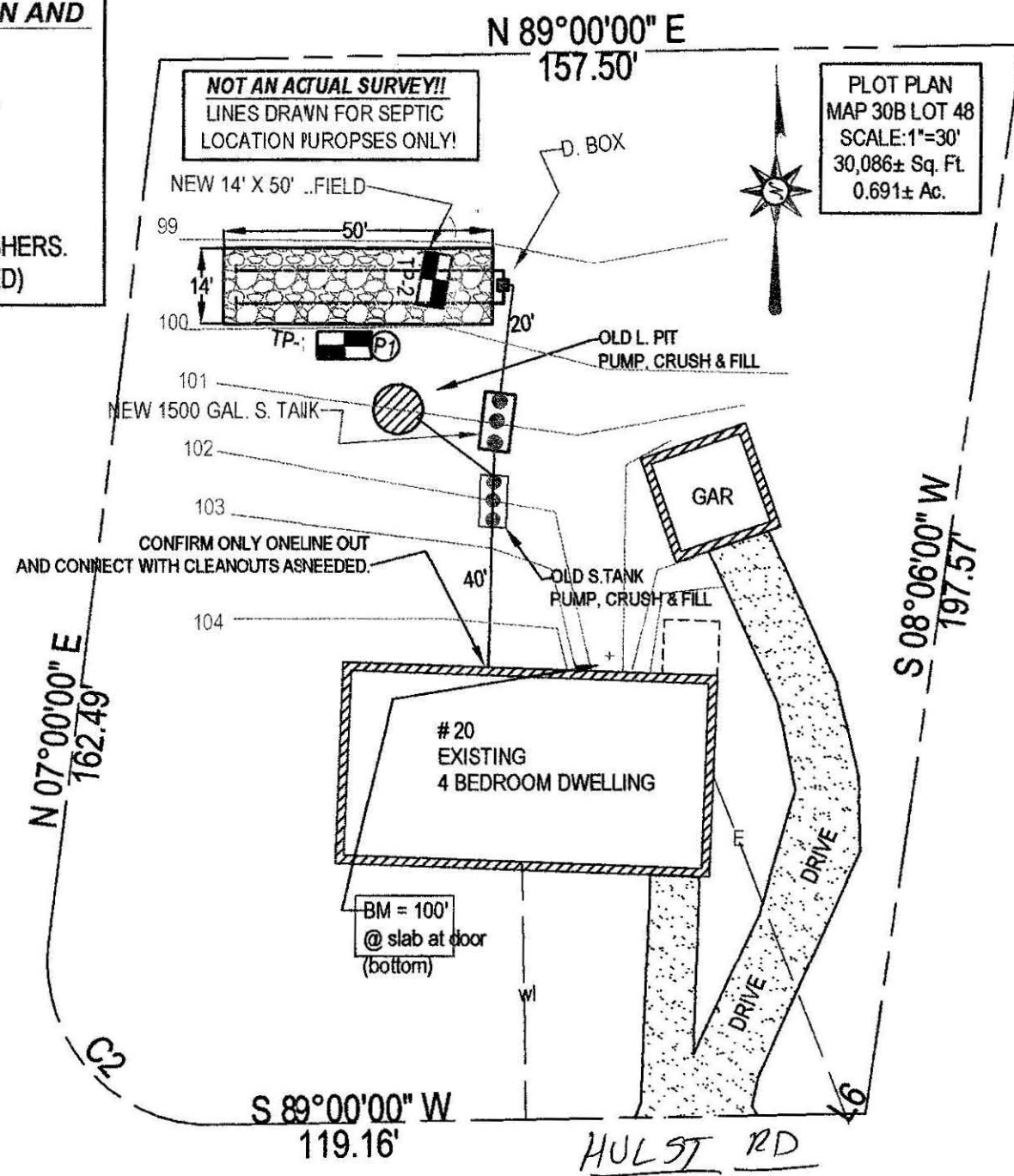
Signature *AE* Date 6/1/11



1
2
3

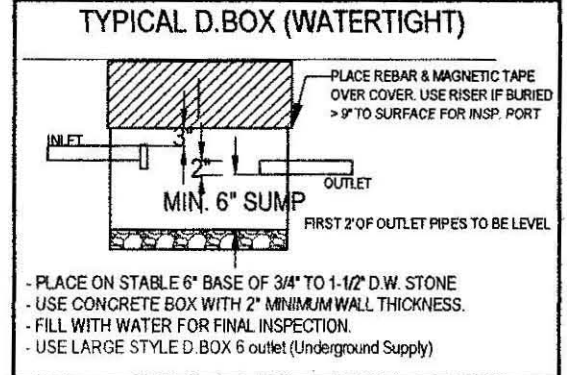
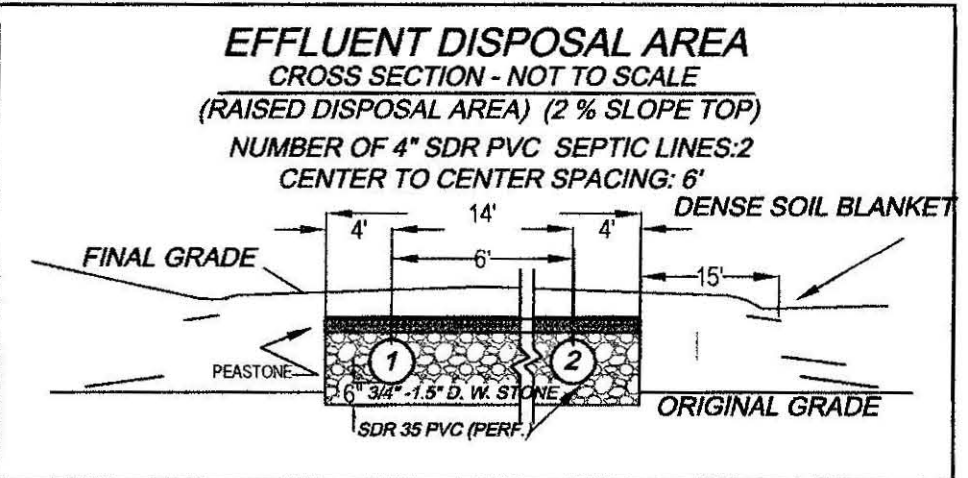
GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.

- HAVE TANK PUMPED EVERY 2 YEARS.
- MAINTAIN AREA OVER SEPTIC SYSTEM AS GRASSY OR SIMILAR GROUND COVER.
- DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
- USE ONLY LIQUID DETERGENTS & LOW FLOW WASHERS.
- CLEAN TANK OUTLET FILTER ANNUALLY (IF EQUIPED)



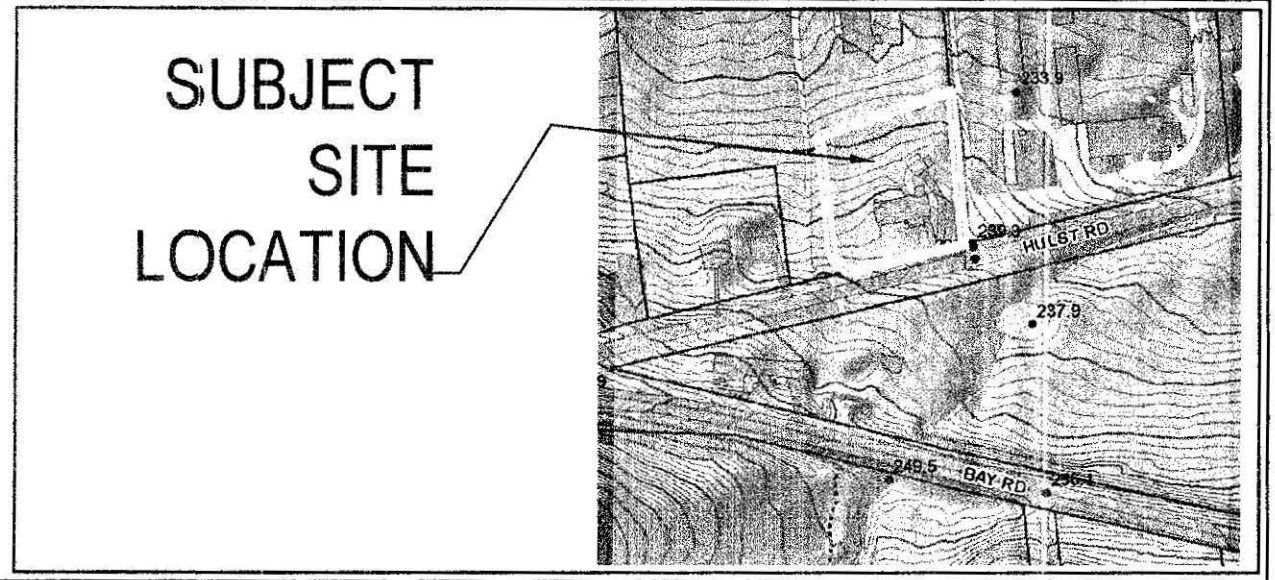
NOT AN ACTUAL SURVEY!
LINES DRAWN FOR SEPTIC LOCATION PURPOSES ONLY!

PLOT PLAN
MAP 30B LOT 48
SCALE: 1"=30'
30,086± Sq. Ft.
0.691± Ac.



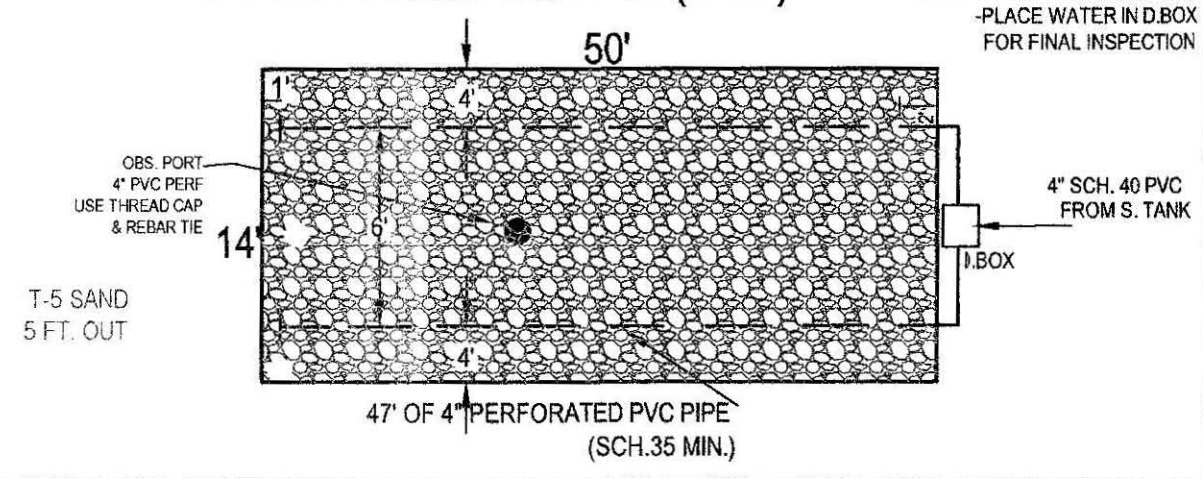
NOTE TO HOMEOWNER AND CONTRACTOR:
CONNECTIONS FROM HEATING SYSTEM, AIR CONDITIONERS, SUMP PUMPS, WATER WELL FILTRATION UNITS AND HEAT PUMPS ARE NOT ALLOWED, SANITARY WATER CONNECTIONS ONLY PERMITTED.

NOTE TO INSTALLER:
TOWN INSPECTOR AND SYSTEM DESIGNER MUST BE CALLED 48 HRS BEFORE START OF SYSTEM INSTALL

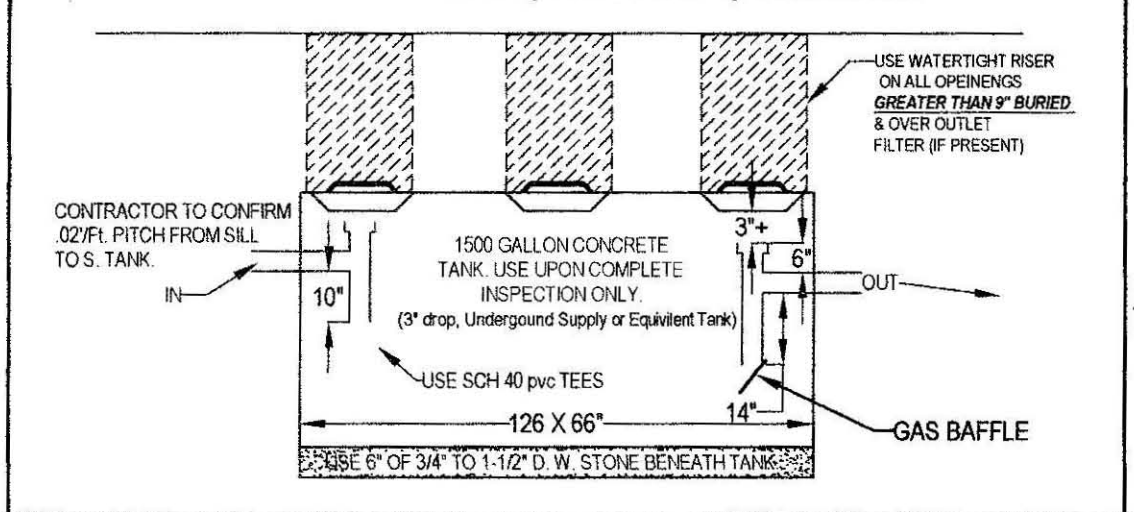


- DESIGN NOTES AND CALCULATIONS:**
- 4 (BEDROOM HOME) = 440 GPD MIN. REQUIRED.
 - USE LEACHING FIELD 14' WIDE X 50' LONG WITH 6" OF 3/4" TO 1 1/2" DBL WASHED STONE BELOW INVERT
 - BOTTOM AREA: L. FIELD (14' W X 50' L) = 700 SF.
 - TOTAL AREA: 700 SF X .74 GAL/SF = 518 GPD PROVIDED.
 - GARBAGE DISPOSAL NOT PERMITTED.
 - NO OTHER PRIVATE WELLS WITHIN 150 FEET OF SAS.
 - NO OTHER WETLANDS WITHIN 50 FEET OF SAS.
 - USE S. TANK AS NOTED & MAINTAIN 0.02 PITCH FROM SILL TO S. TANK
 - INSTALL & INSPECT SCH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET),
 - NOTE:
 - ALL COMPONENTS OF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO MAINTAIN 3" CLEARANCE FROM TOP OF TEES TO BOTTOM OF TANK COVERS & BOXES.
 - USE LARGE STYLE (6 OUTLET) D.BOX ONLY.
 - 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.
 - ANY ALL PLASTIC RISERS MUST BE SECURED WITH STAINLESS STEEL SCREWS.
 - USE (75'-1 1/2") STONE UNDER TANK & D. BOX FOR STABLE BASE
 - USE ONLY DBL. WASHED APPROVED (75'-1.5") FOR PLACEMENT IN LEACH AREA.
 - USE PROPER SCH. 40 PVC TEES AS SHOWN.
 - PRE & POST CONTOURS NOTED AS NECESSARY, RESERVE AS NOTED (not required for repairs).
 - SLOPE CALCS (SEE CONTOURS). SUBGRADE INSP. REQ'D.
 - USE FIELD DUE TO TOPOGRAPHY AND SPACE OF LOT WITH RESPECT TO LOCATION AND ELEVATION OF RESIDENCE & ESHGW (310 CMR 15.240)
 - USE 2% MIN. SLOPE OVER SAS
 - CLEAR TOP AND SUB TO 32" MIN. AS NEEDED (INSPECTION REQUIRED).
 - CLEAR PAST BASE OF B (MIN. 32") & SCARIFY UNDER TRENCH PRIOR TO TITLE V SAND/STONE PLACEMENT.
 - EXCAVATE EXISTING LOAM, SUB AND ANY EXISTING DEBRIS, DIRTY FILL OR PRIOR SYSTEM IF PRESENT.
 - SOIL EVALUATION BY A. WEISS, RS. (E. Smith), BOH AGENT).
 - DEPTH OF PERC. 40"
 - PERC RATE: = < 2 MIN / IN.
 - CLASS 1, SAND SOIL RATING
 - NO TREES WITHIN 10 FT. OF NEW LEACH AREA.
 - ENGINEER TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL
 - BM=100.00 @ (Slab, as noted), CONFIRM PROPER PIPE SLOPES
 - USE/INSPECT SCH. 40 PIPE FOR PIPE FROM HOUSE TO NEW OR EXISTING TANK
 - GRADE MULCH AND SEED OVER SAS AS NOTED.
 - INSTALLATION IN LOW GROUNDWATER SEASON RECOMMENDED.
 - 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.

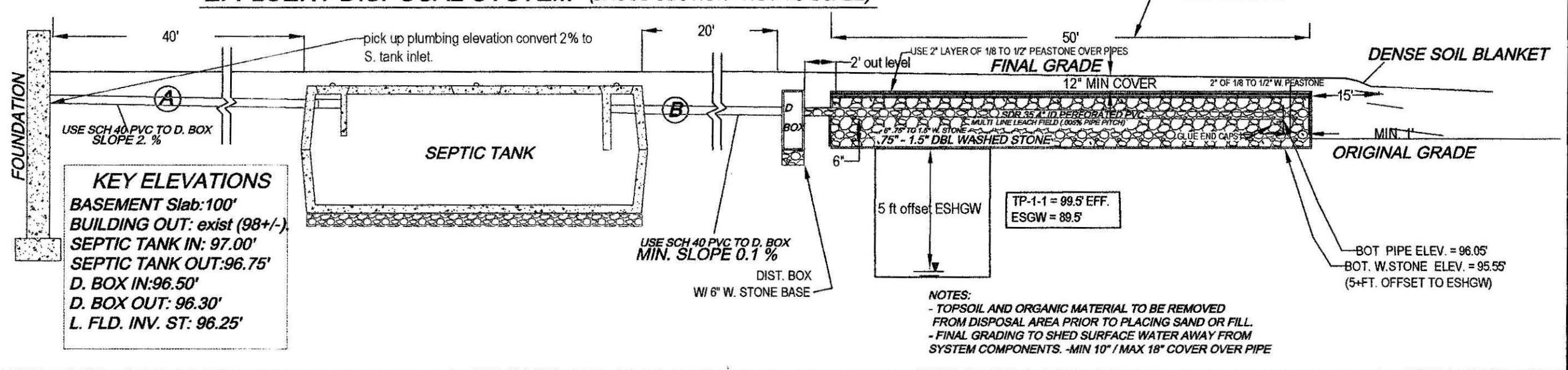
LEACH FIELD DETAIL (NTS)



TYPICAL NEW SEPTIC TANK (WATERTIGHT) OR EQUIVELANT.



EFFLUENT DISPOSAL SYSTEM (CROSS SECTION - NOT TO SCALE)



KEY ELEVATIONS
BASEMENT Slab: 100'
BUILDING OUT: exist (98+/-)
SEPTIC TANK IN: 97.00'
SEPTIC TANK OUT: 96.75'
D. BOX IN: 96.50'
D. BOX OUT: 96.30'
L. FLD. INV. ST: 96.25'

TEST PIT LOG:					SOIL EVALUATOR: A. WEISS, RS		DATE OF EVALUATION: 06.01.2011		
TP-1 EFF. ELEV: 97.0'				TP-2 EFF. ELEV:					
DEPTH:	HORIZ:	TEXTURE:	PERC (MUNSELL)	MATERIAL:	DEPTH:	HORIZ:	TEXTURE:	PERC (MUNSELL)	MATERIAL:
0-9"	Ap	FSL	10 YR 3.3	FRIABLE	0-8"	A	SL	10 YR 3.3	FRIABLE
9-26"	Bw	F SAND	2.5Y 5.6	F. SAND, GRANULAR	8-26"	Bw	F SAND	2.5Y 5.6	F. SAND, GRANULAR
26-126"	C1	C SAND	2.5Y 4.3	MED-CRSE SAND, GRANULAR	26-120"	C1	C SAND	2.5Y 4.3	MED-CRSE SAND, GRANULAR
									LOOSE, 15% STONES
OXIDES:	NOT OBSERVED			OXIDES:	NOT OBSERVED				
EHWT:	120'+			EHWT:	--				
STANDING H2O:	--			STANDING H2O:	--				
WEEPING:	--			WEEPING:	--				

SEPTIC SYSTEM REPAIR PLAN FOR BIODYNAMIC FARMLAND CONSERVATION TRUST
20 HULST ROAD
AMHERST, MA

Cold Spring Environmental Consultants Inc.
350 Old Enfield Road
Belchertown, MA 01007

PROJECT: (413) 323-5957
SCALE: (413) 323-4916
DATE: 06.12.2011
DRAWN BY: ALAN WEISS
REVISED:
SCALE: 1"=30'
DRAWING NUMBER: 110-3590-0601



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

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

