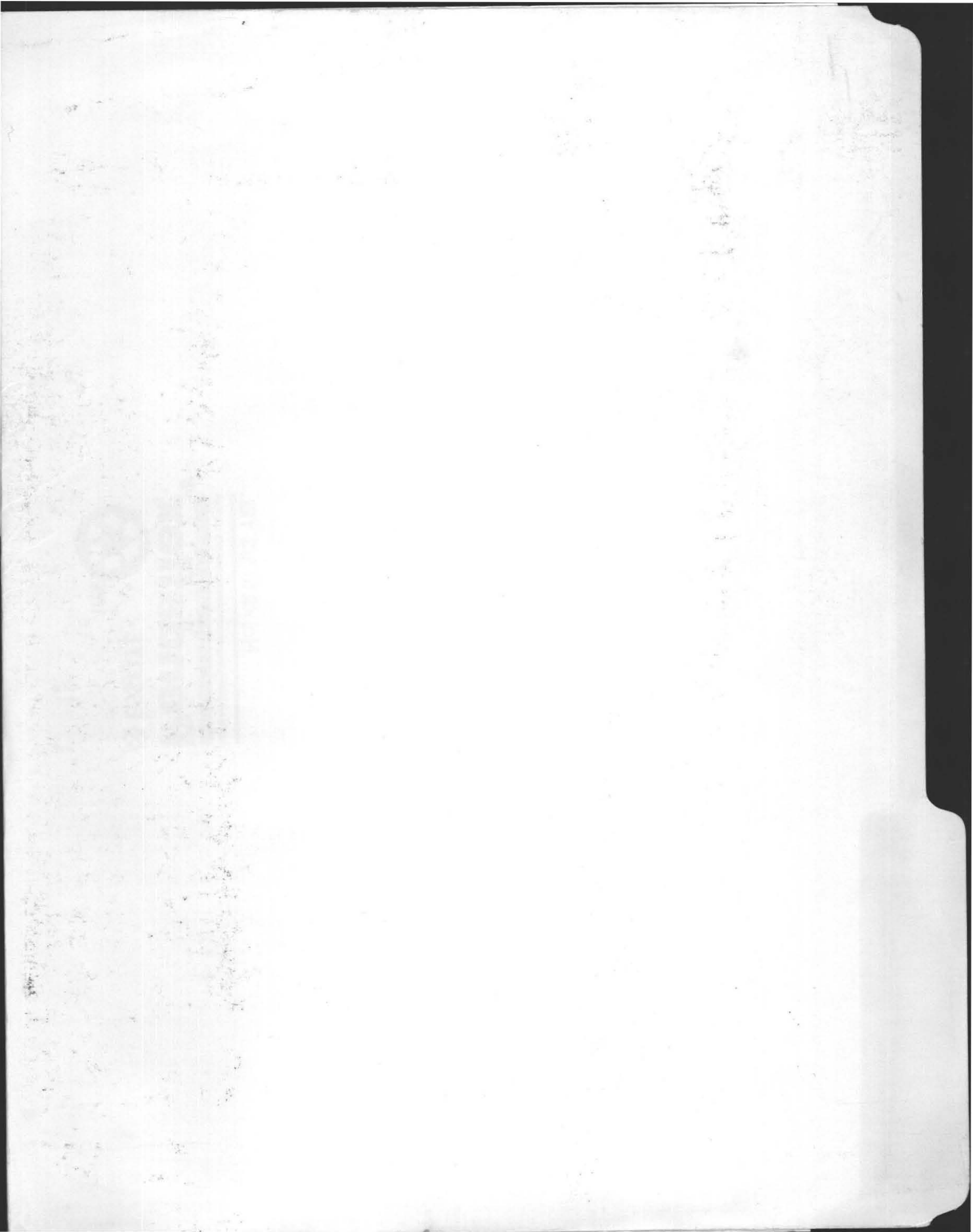


329 Leverett Rd.



ok ✓

**TITLE 5
OFFICIAL INSPECTION FOR - NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM FORM
PART A
CERTIFICATION**

Property Address: 329 Leverett Road Amherst, MA
OWNER Name: Laurie Hanley

Owner's Address: 329 Leverett Road
Amherst MA 01002

Date of Inspection: June 7, 2006

Name of Inspector: Alan E. Weiss, R.S # 933
Company Name: Cold Spring Environmental Inc.
Mailing Address: 350 Old Enfield Road
Belchertown, Massachusetts 01007
Telephone Number: (413) 323-5957 fax: 413-323-4916

COPY

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:

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

Inspector's Signature:  _____ **Date:** June 7, 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

Septic System was in good condition, There is no sign of current or past failing condition. S. Tank (1500 gallon) was in OK shape. Outlet & inlet baffles tees were in place. Septic tank was pumped. D. box was in good shape (w/ three pipes out) Stone was in good condition. All stains & levels were good at s. tank (SAS 3+ years old Approx. Has filter at outlet (cleaned)** Clean annually.)

****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 different conditions of use.

10/10/10

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

Property Address: 329 Leverett Road Amherst, MA

Owner: Hanley

Date of Inspection: June 7, 2006

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

A. System Passes:

XX 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: SAS is 3 yrs. Old & all levels were appropriate tank condition good.

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):

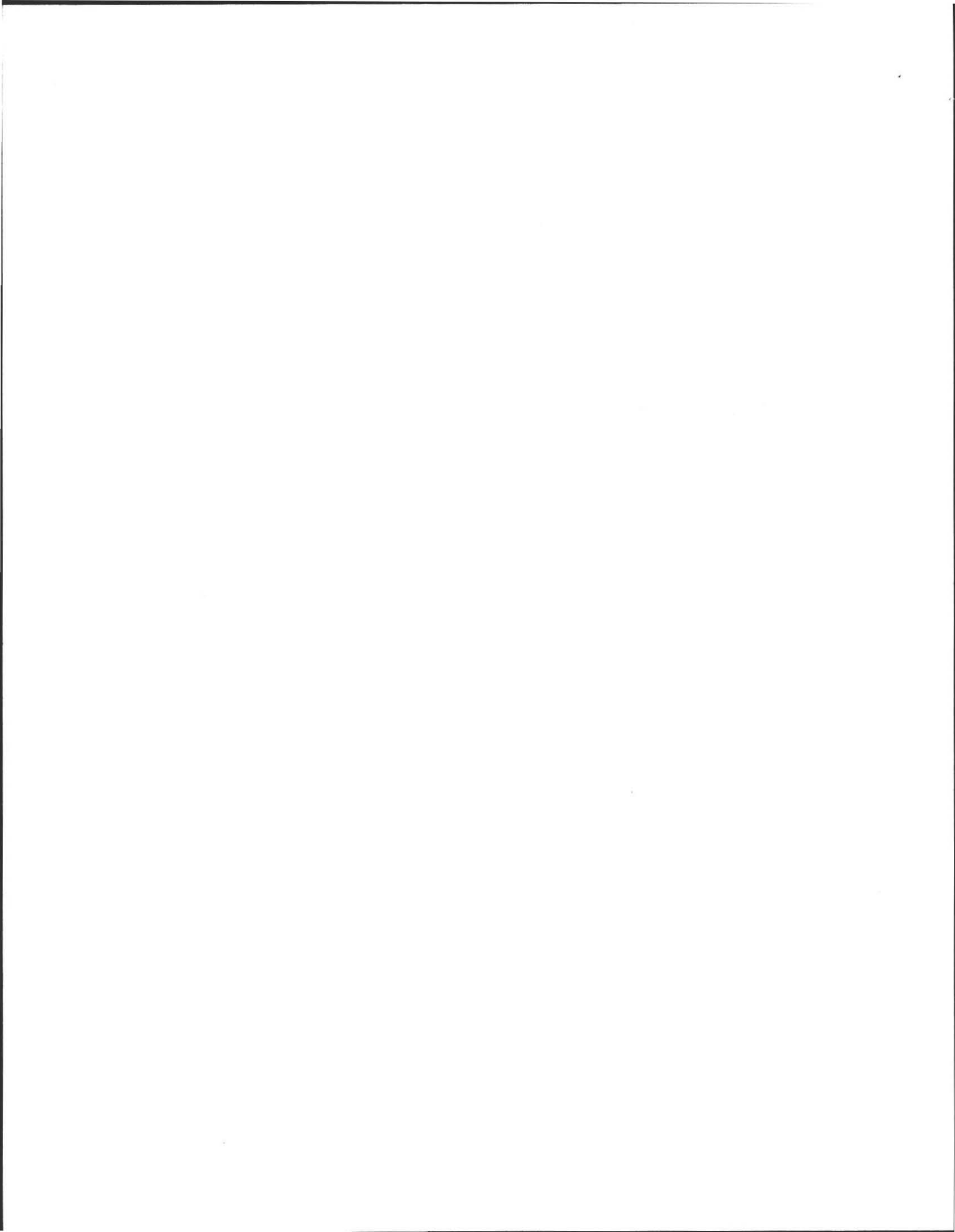
- ___ broken pipe(s) are replaced
- ___ obstruction is removed
- ___ distribution box is leveled or replaced

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: 329 Leverett Road Amherst MA

Owner: Hanley

Date of Inspection: June 7, 2006

C. Further Evaluation is Required by the Board of Health:

NO 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.

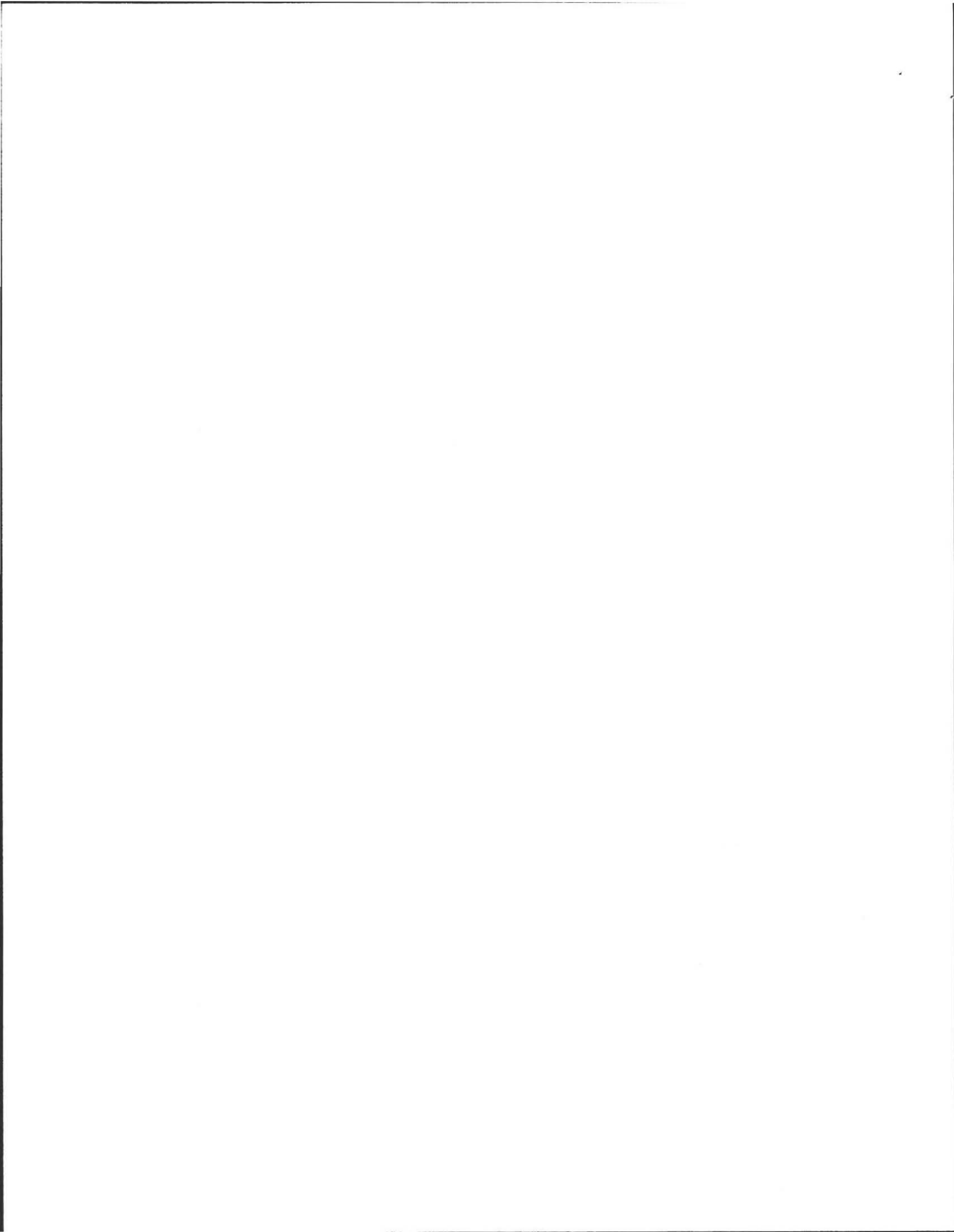
The system has a septic tank and SAS and the SAS is within a Zone 1 of a public water supply.

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: 329 Leverett Road Amherst MA

Owner: Hanley

Date of Inspection: June 7, 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 type="checkbox"/> | <input checked="" type="checkbox"/> | Backup of sewage into facility or system component due to overloaded or clogged SAS or cesspool |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Discharge or ponding of effluent to the surface of the ground or surface waters due to an overloaded or clogged SAS or cesspool |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS or cesspool |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Liquid depth in cesspool is less than 6" below invert or available volume is less than 1/2 day flow |
| <input type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" type="checkbox"/> | Any portion of the SAS, cesspool or privy is below high ground water elevation. |
| <input type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" type="checkbox"/> | Any portion of a cesspool or privy is within a Zone 1 of a public well. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Any portion of a cesspool or privy is within 50 feet of a private water supply well. |
| <input type="checkbox"/> | <input checked="" 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:

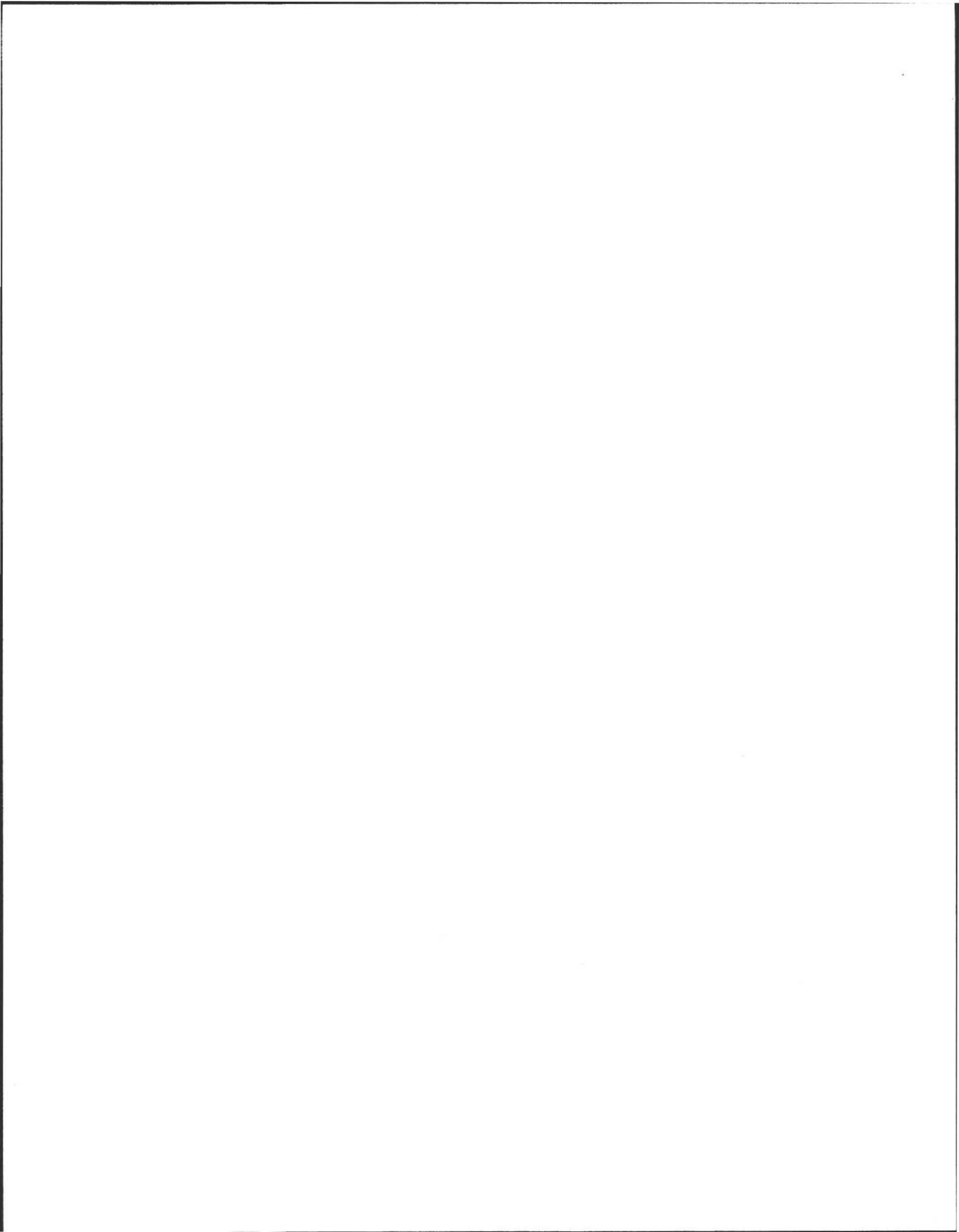
To be considered a large system the system must serve a facility with a design flow of 10,000 gpd to 15,000 gpd.

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: 329 Leverett Road Amherst MA

Owner: Hanley

Date of Inspection: June 7, 2006

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

Yes No

Pumping information was provided by the owner, occupant, or Board of Health

Were any of the system components pumped out in the previous two weeks ?

Has the system received normal flows in the previous two week period ?

Have large volumes of water been introduced to the system recently or as part of this inspection ?

Were as built plans of the system obtained and examined? (If they were not available note as N/A)

Was the facility or dwelling inspected for signs of sewage back up ?

Was the site inspected for signs of break out ?

Were all system components, excluding the SAS, located on site ?

Were the septic tank manholes uncovered, opened, and the interior of the tank inspected for the condition of the baffles or tees, material of construction, dimensions, depth of liquid, depth of sludge and depth of scum ?

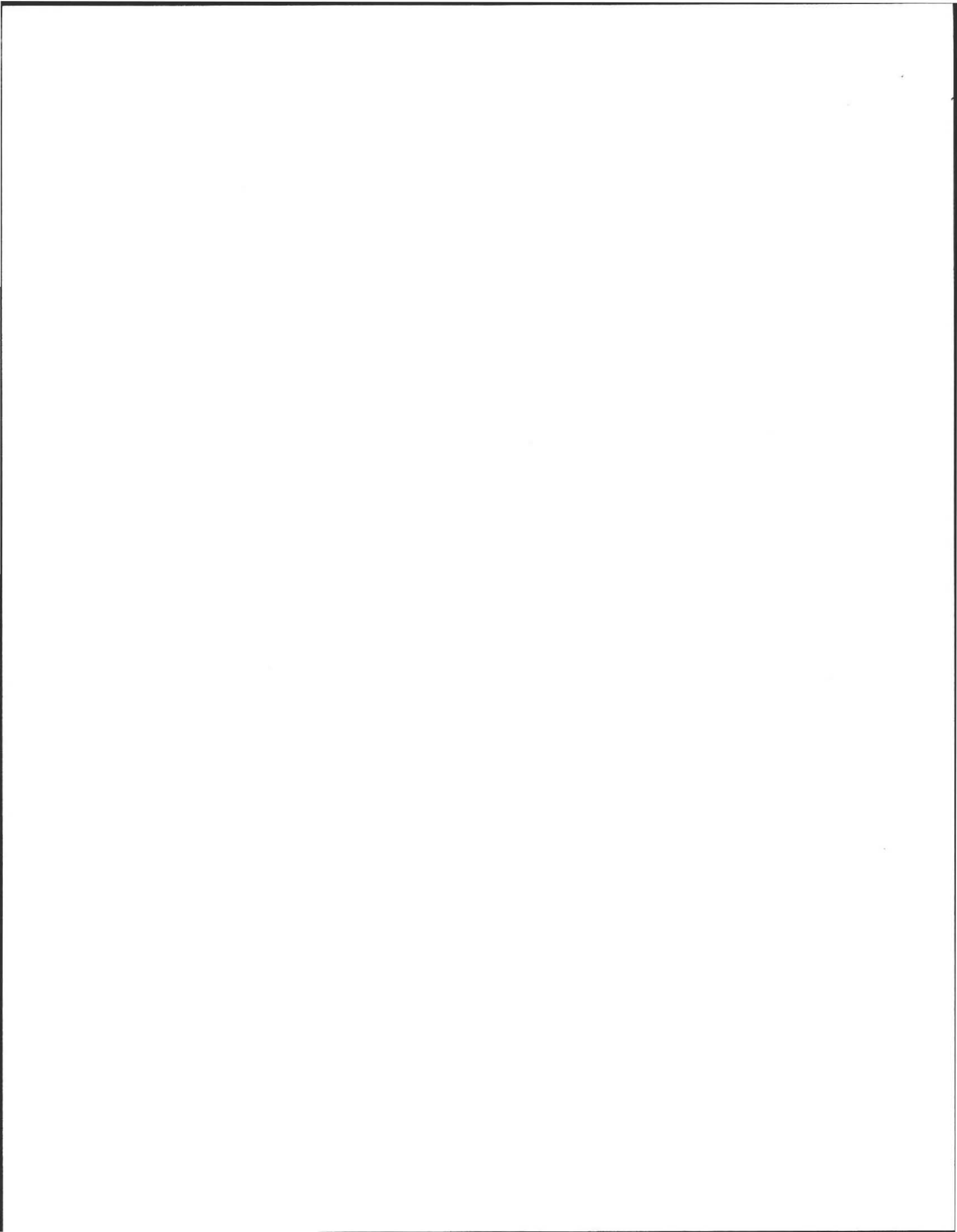
Was the facility owner (and occupants if different from owner) provided with information on the proper maintenance of subsurface sewage disposal systems ?

The **size and location of the Soil Absorption System (SAS)** on the site has been determined based on:

Yes no

Existing information. For example, a plan at the Board of Health.

Determined in the field (if any of the failure criteria related to Part C is at issue approximation of distance is unacceptable) [310 CMR 15.302(3)(b)]



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

Property Address: 329 Leverett Road Amherst MA

Owner: Hanley

Date of Inspection: June 7, 2006

FLOW CONDITIONS

RESIDENTIAL

Number of bedrooms (design): 4 Number of bedrooms (actual): 4

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

Number of current residents: 3

Does residence have a garbage grinder (yes or no): NO.GRINDERS ARE NOT RECOMMENDED**

Is laundry on a separate sewage system (yes or no): NO [if yes separate inspection required]

Laundry system inspected (yes or no): no (Owner has no laundry connected).

Seasonal use: (yes or no): no

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

Sump pump (yes or no): NO *

Last date of occupancy: 2 mos.

COMMERCIAL/INDUSTRIAL

Type of establishment: N/A

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: Owner & records (2 yrs.)

Was system pumped as part of the inspection (**YES** or no): Yes

If yes, volume pumped: 1000 gallons -- How was quantity pumped determined? Measured

Reason for pumping: REQUEST

TYPE OF SYSTEM

Septic tank, distribution box, soil absorption system

Single cesspool

Overflow cesspool

Privy

Shared system (yes or no) (if yes, attach previous inspection records, if any)

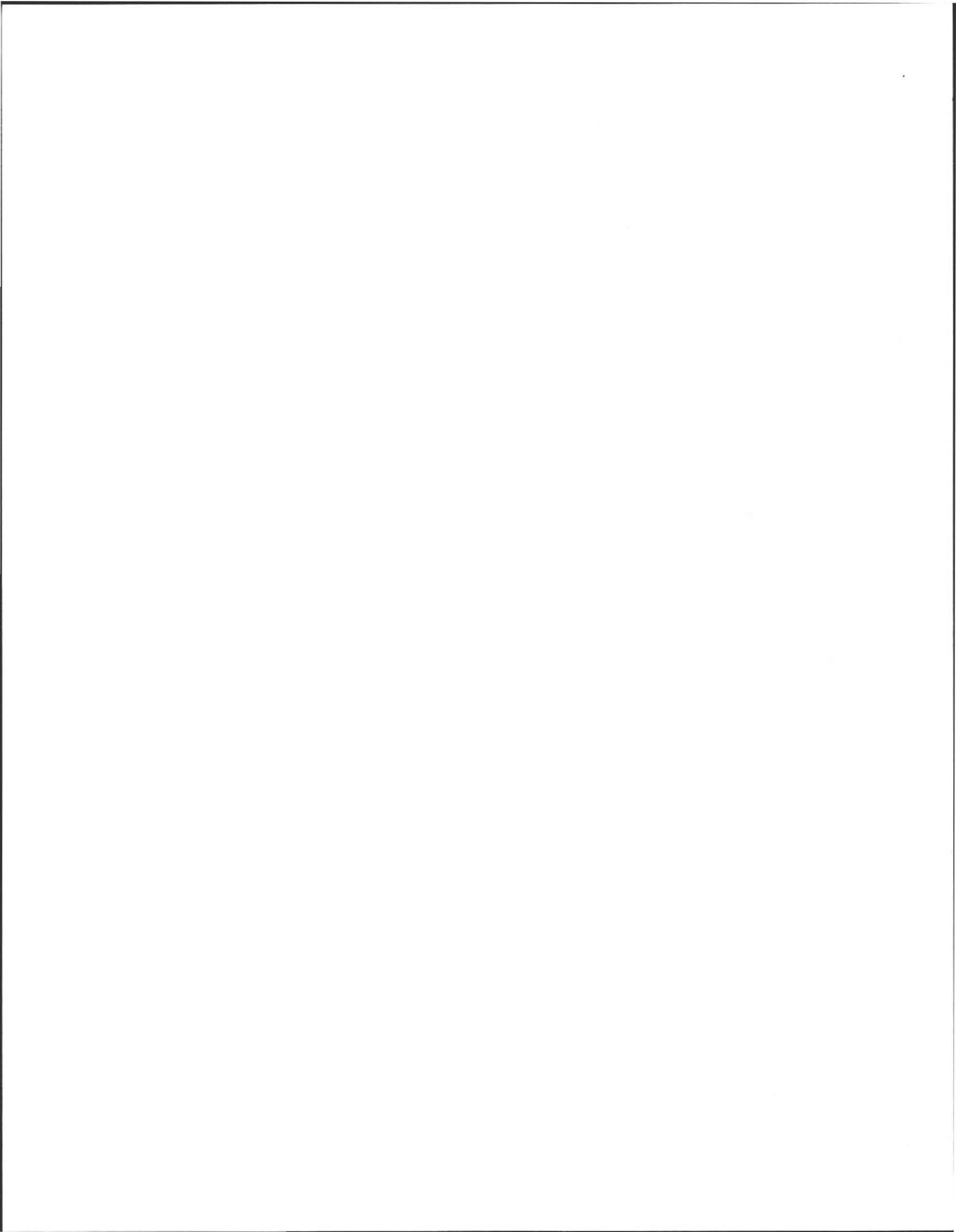
Innovative/Alternative technology. Attach a copy of the current operation and maintenance contract (to be obtained from system owner)

Tight tank Attach a copy of the DEP approval

Other (describe):

Approximate age of all components, date installed (if known) and source of information: 16 +/- years old

Were sewage odors detected when arriving at the site (yes or no): NO



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

Property Address: 329 Leverett Road Amherst MA

Owner: Hanley

Date of Inspection: June 7, 2006

BUILDING SEWER (locate on site plan)

Depth below grade: -16+"

Materials of construction: ___ cast iron 40 PVC ___ other (explain): _____

Distance from private water supply well or suction line: 10'+

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

SEPTIC TANK: Yes (locate on site plan)

Depth below grade: 12"

Material of construction: concrete ___ metal ___ fiberglass ___ polyethylene
___ other(explain) _____

If tank is metal list age: ___ Is age confirmed by a Certificate of Compliance (yes or no): ___ (attach a copy of certificate)

Dimensions: 4.5'w x 10.5 l x 5.5'd

Sludge depth: 2"

Distance from top of sludge to bottom of outlet tee or baffle: 42"

Scum thickness: 2"

Distance from top of scum to top of outlet tee or baffle: 5"

Distance from bottom of scum to bottom of outlet tee or baffle: 14"

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.): TANK CONDITION OK

S. tank had baffles, TANK SHOULD BE PUMPED EVERY OTHER YEAR. Clean outlet filter annually

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

Depth below grade: ___

Material of construction: ___ concrete ___ metal ___ fiberglass ___ polyethylene ___ other (explain): _____

Dimensions: _____

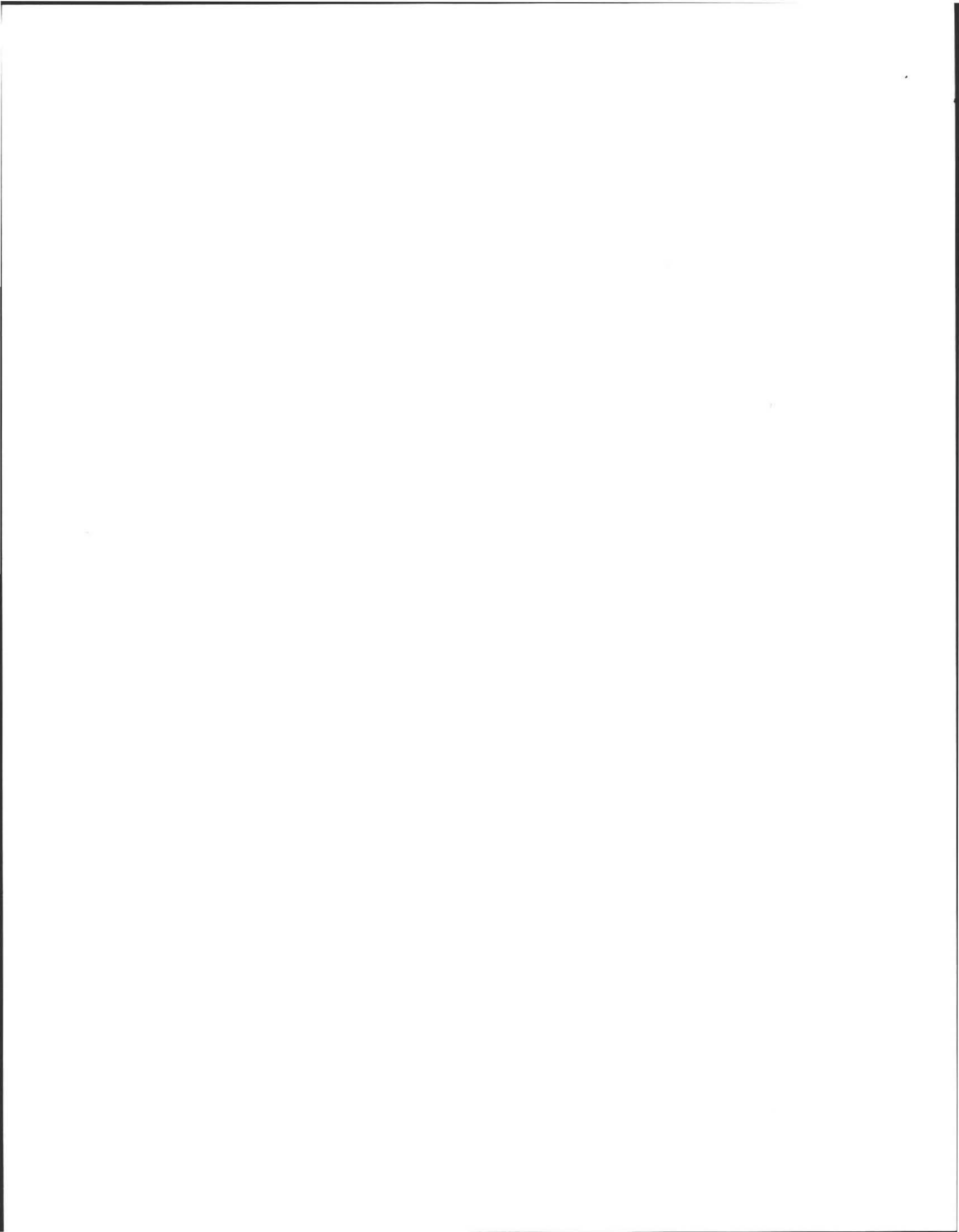
Scum thickness: _____

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

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

Date of last pumping: _____

Comments (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: 329 Leverett Road Amherst MA

Owner: Hanley

Date of Inspection: June 7, 2006

TIGHT or HOLDING TANK: NO (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: YES (if present must be opened)(locate on site plan)

Depth of liquid level above outlet invert: @ inv.

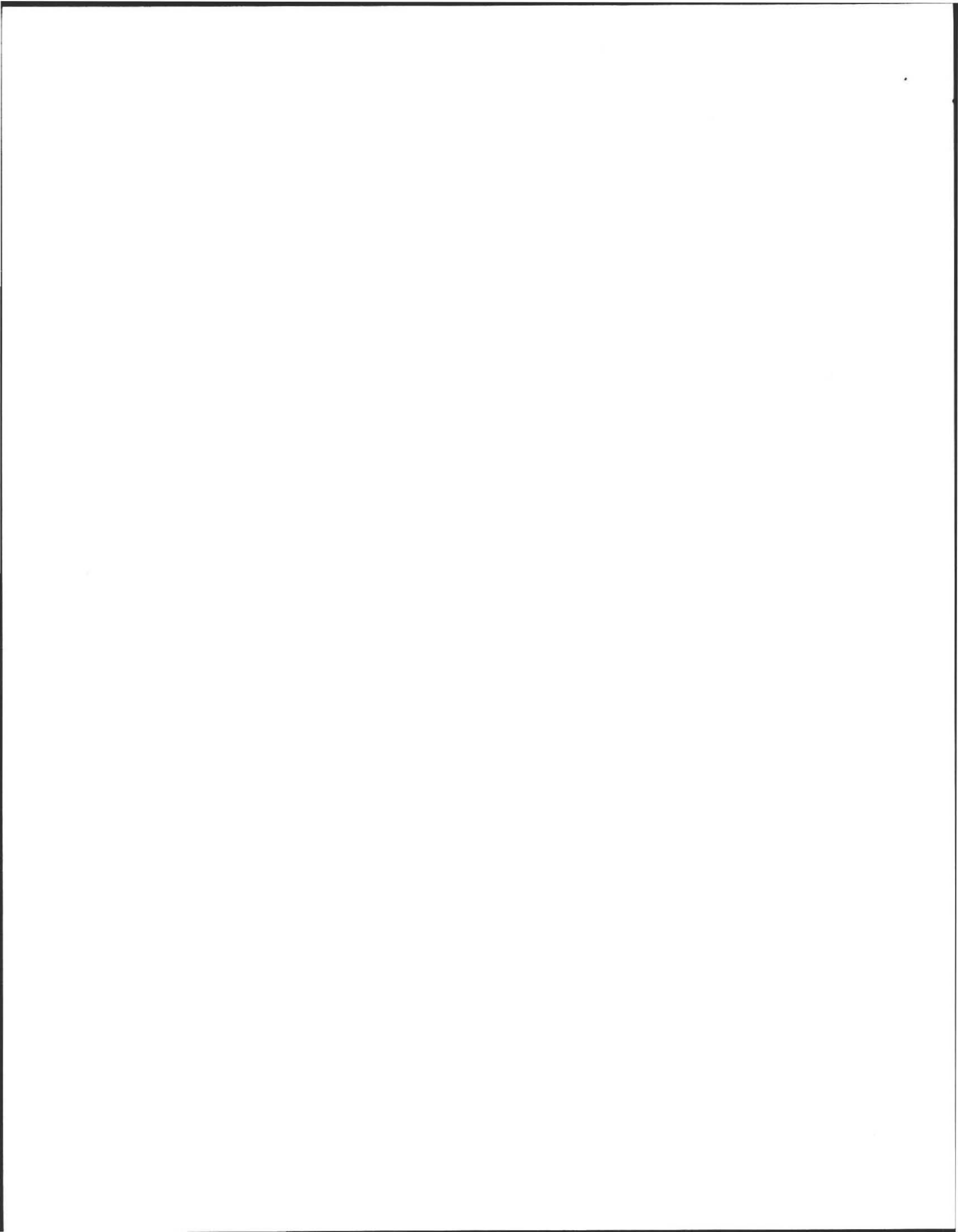
Comments (note if box is level and distribution to outlets equal, any evidence of solids carryover, any evidence of leakage into or out of box, etc.): 3 outlet lines level& equal flow noted.

PUMP CHAMBER: No (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: 329 Leverett Road Amherst MA

Owner: Hanley

Date of Inspection: June 7, 2006

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

If SAS not located explain why:

Type

___ leaching pits, number:

___ leaching chambers, number:

___ leaching galleries, number:

___ leaching trenches, number, length: +/-

 leaching fields, number, dimensions: 16' w x 50' l +/-

___ 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 failure, stone ok, and no Groundwater noted, Top of stone @ 1'

CESSPOOLS: N/A (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.):

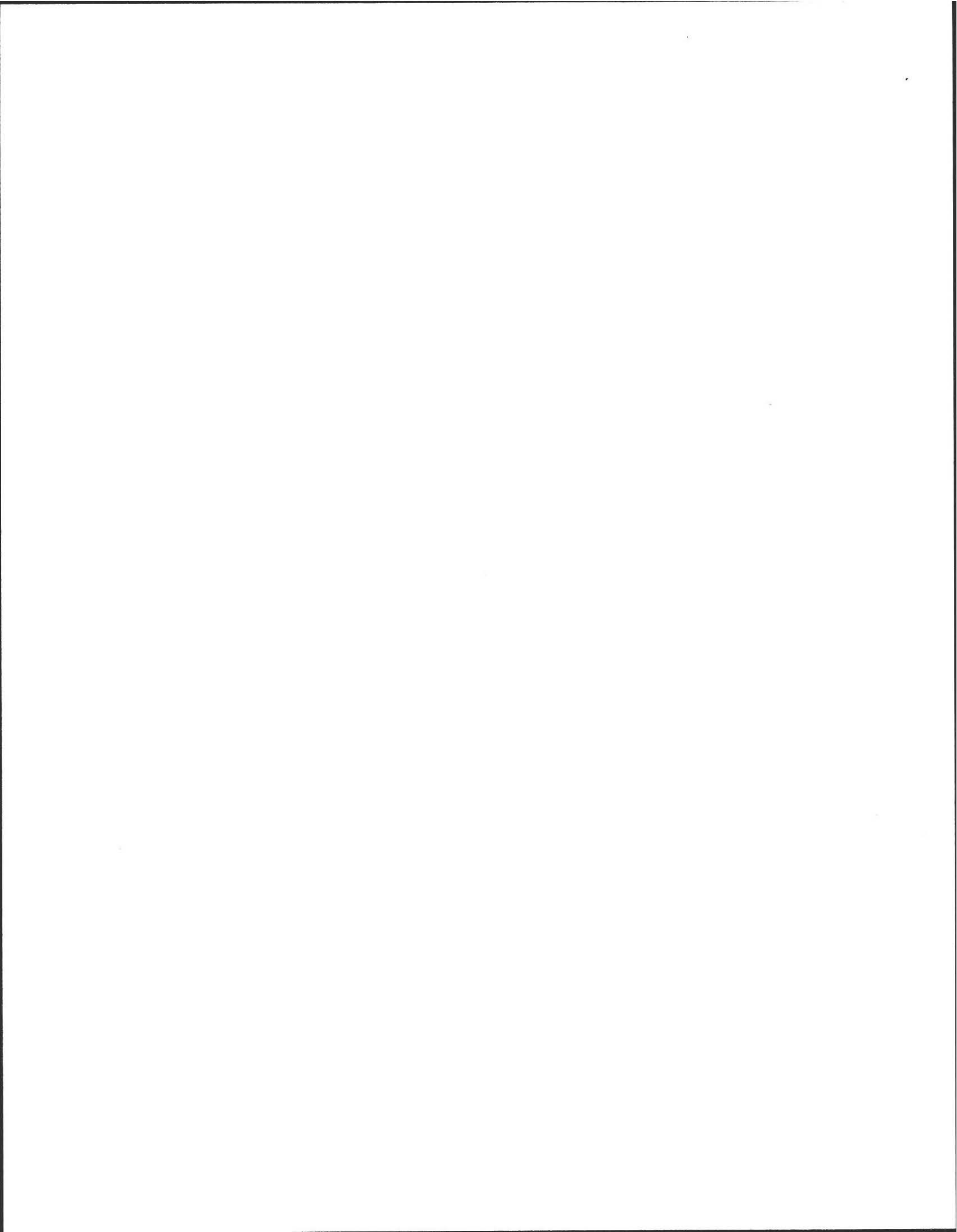
PRIVY: N/A (locate on site plan)

Materials of construction:

Dimensions:

Depth of solids:

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



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

Property Address: 329 Leverett Road Amherst MA

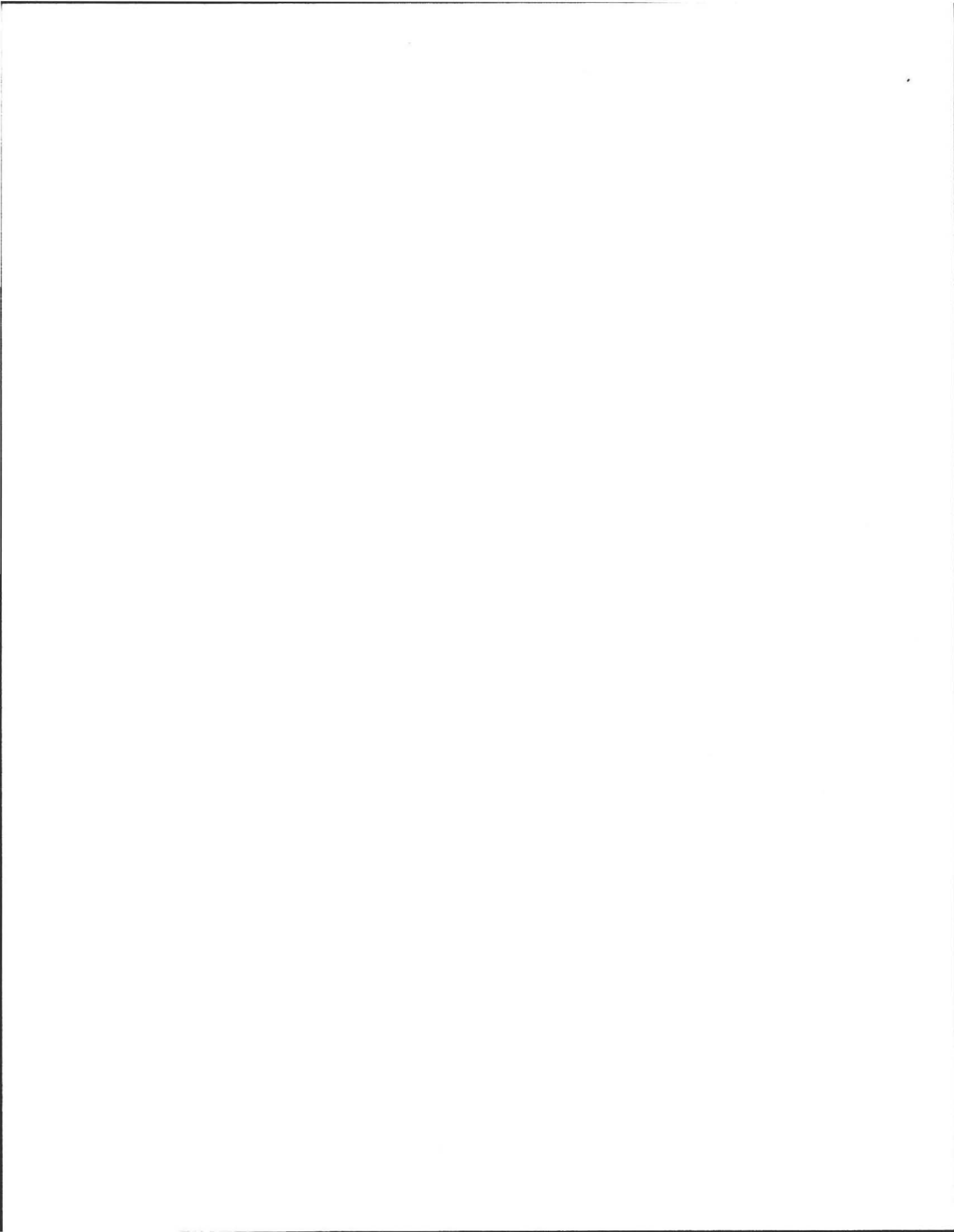
Owner: Hanley

Date of Inspection: June 7, 2006

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.

Also See attached



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

Property Address: 329 Leverett Road Amherst MA

Owner: Hanley

Date of Inspection: June 7, 2006

SITE EXAM

Slope YES

Surface water

Check cellar

Shallow wells _____

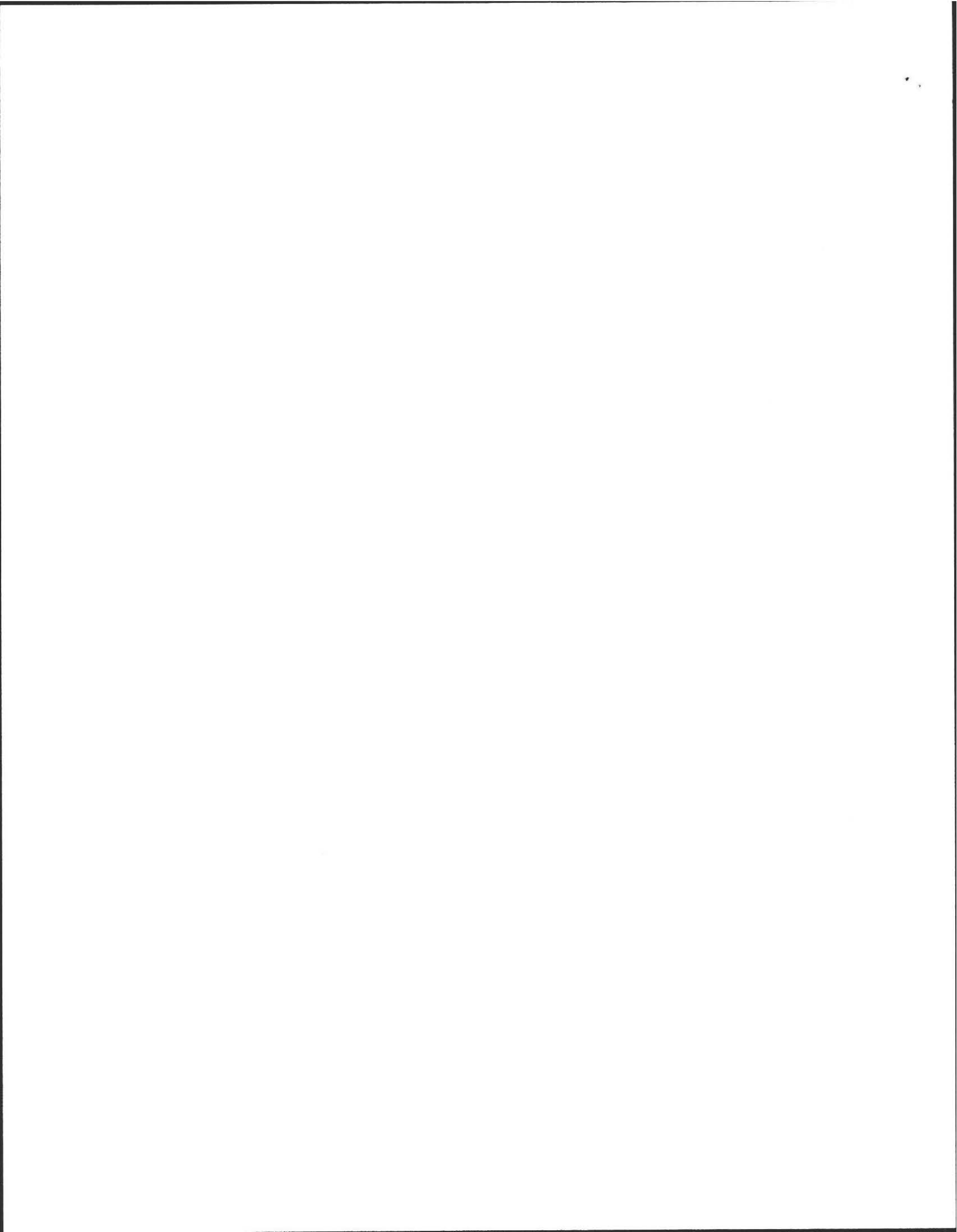
Estimated depth to ground water 5'+/-feet

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

- YES 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:

Water level based on on-site data from topography, and records plan 2002 installation record .



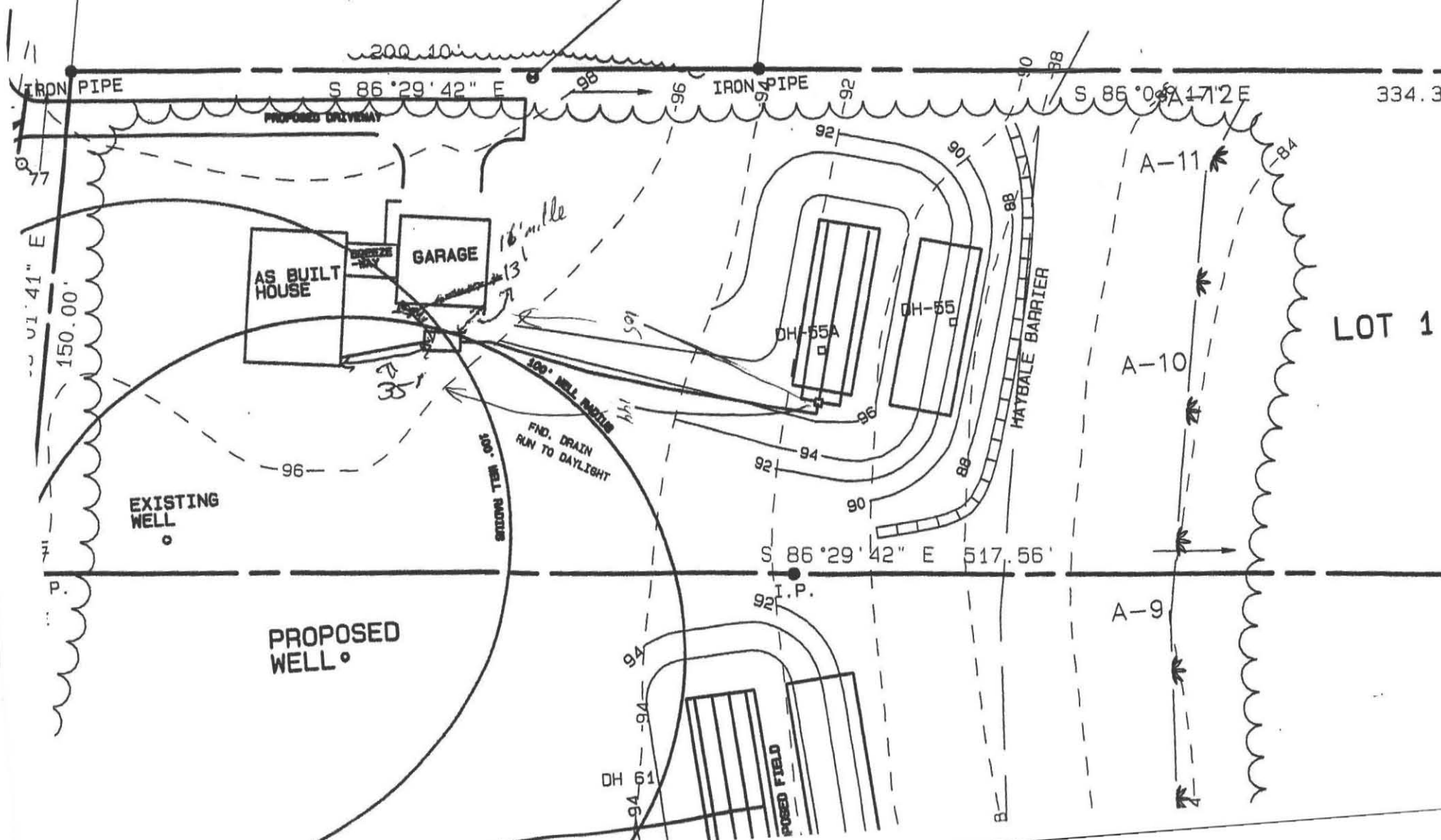
Gr Regd Septic - 665-3989

HANLEY
329 Leverett Rd.
Amh.

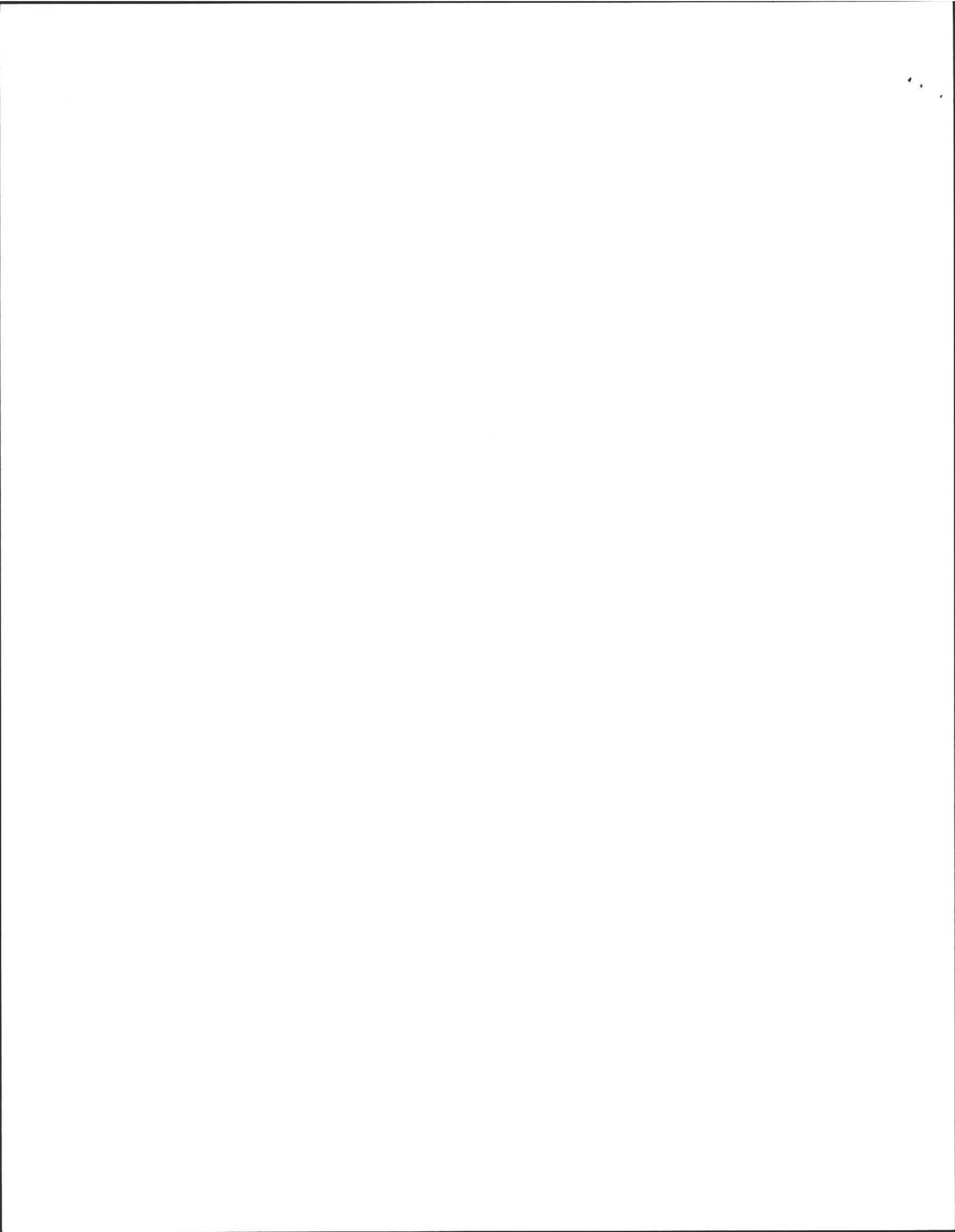
Pink - 35' from Rt. Rear House Corner
JOHN F. GARBER
BOOK 2436, PAGE 24
SEE: PLAN BOOK 15B, PAGE 40
PLAN BOOK 95, PAGE 9

BENCHMARK:
SPIKE IN 20" MAPLE
ELEVATION = 98.85 FEET.
ASSUMED DATUM.

LEIGH F. AND EUGENIE E. ANDREWS
PORTION OF BOOK 1817, PAGE 245
SEE: PLAN BOOK 158, PAGE 40
PLAN BOOK 97, PAGE 90
PLAN BOOK 95, PAGE 9



LOT 1



FORM 1-APPLICATION FOR DSCP

rec.# 2076

No 02-23

Fee 100⁰⁰ pl
 ck# 9562
12/6/02

Commonwealth of Massachusetts
AMHERST, Massachusetts

Application for Disposal System Construction Permit

Application is hereby made for a Permit to Construct (X) or Repair () an On-site Sewage Disposal system at:

| | |
|---|--|
| Location Address or Lot No. <u>1</u> | Owner's Name, Address and Tel. # |
| <u>329 LEVERETT ROAD</u> | <u>NORTHAMPTON ASSOCIATES</u> <u>25 MAIN STREET</u> <u>NORTHAMPTON, MA 01060</u> <u>413-586-5340</u> |
| Installer's Name, Address, and Tel. # | Designer's Name, Address and Tel. # |
| <u>LML CONSTRUCTION</u> <u>608 LONG PLAIN ROAD</u> <u>LEVERETT, MA 01054</u> <u>413-665-3788</u> | <u>MacLeay Associates, Inc.</u> <u>102 Bridge Street</u> <u>Shelburne Falls, MA 01370</u> <u>(413) 625-9774</u> |

Type of Building:

Dwelling No. of Bedrooms 4 Garbage Grinder NO
 Other Type of Building _____ No. of Persons _____ Showers _____ Cafeteria _____
 Other Fixtures _____

Design Flow 440 gallons per day. Calculated daily flow 477 gallons
 Plan Date 11/22/02 Number of Sheets ONE Revision Date NONE
 Title SUBSURFACE SEWAGE DISPOSAL PLAN IN AMHERST, MASS FOR
NORTHAMPTON ASSOCIATES, LEVERETT ROAD.

Description of Soil FINE SANDY LOAM SEE PLAN FOR DETAILED TEST PIT DESCRIPTIONS.
SEASONAL HIGH GROUNDWATER AT 24" PERC RATE 10 MIN./INCH. . WITNESSED BY
DAVID ZAROZINSKI

Nature of Repairs or Alterations (Answer when applicable) INSTALL SEPTIC TANK, D-BOX AND
LEACH FIELD

Date last inspected: _____

-*Agreement:

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

Signed [Signature] Date 12/6/02

Application Approved by [Signature] Date 12/6/02

Application Disapproved for the following reasons _____

Permit No. 02-23

Date Issued 12/6/02



FORM 2-DISPOSAL SYSTEM CONSTRUCTION PERMIT

Commonwealth of Massachusetts

AMHERST, Massachusetts

Disposal System Construction Permit

No. 02-23

Permission is hereby granted to NORTHAMPTON ASSOCIATES to construct
(X) or repair () an On-site Sewage System located at
LOT 1 LEVERETT ROAD (329)

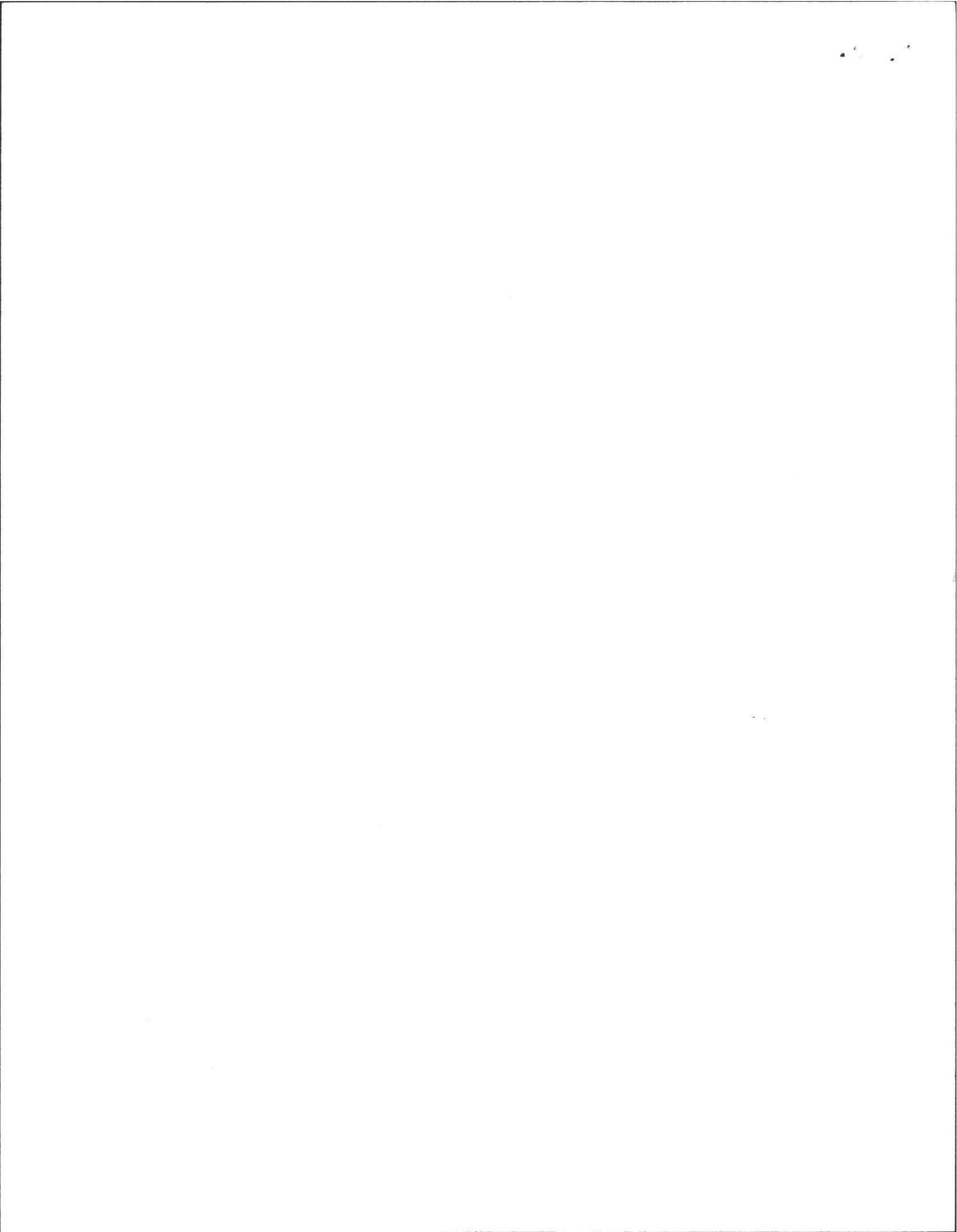
and as described in the above Application for Disposal System Construction Permit. The applicant recognizes his/her duty to comply with Title 5 and the following local provisions or special conditions.

All construction must be completed within two years of the date below.

Date 12/6/02

Approved by

David Pasquini for Amherst Health Dept.





Commonwealth of Massachusetts

Town of _____

Soil Suitability Assessment : On-Site Sewage Disposal

Performed By: Christina Burrell Date: 12/3/01
Witnessed By: David Zorostich

| | |
|--|------------------------------|
| Location Address of: <u>Leventt Rd</u> <u>Deer Hole 55/55A</u> | Owner's Name: <u>Stowell</u> |
| Address of: _____ | Telephone: _____ |
| New Construction <input type="checkbox"/> Repair <input checked="" 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 Reference Reviewed:

Holes 55/55A

Determination: Seasonal High Water Table

Methods Used:

- Depth observed standing in observation hole _____ inches
- Depth weeping from side of observation hole _____ inches
- Depth to soil mottles _____ inches
- Ground water adjustment _____ feet

Index Well No. _____ Reading Date _____ Index Well Level _____
Adjustment factor _____ Adjusted ground water level _____

Depth of Naturally Occurring Previous Material

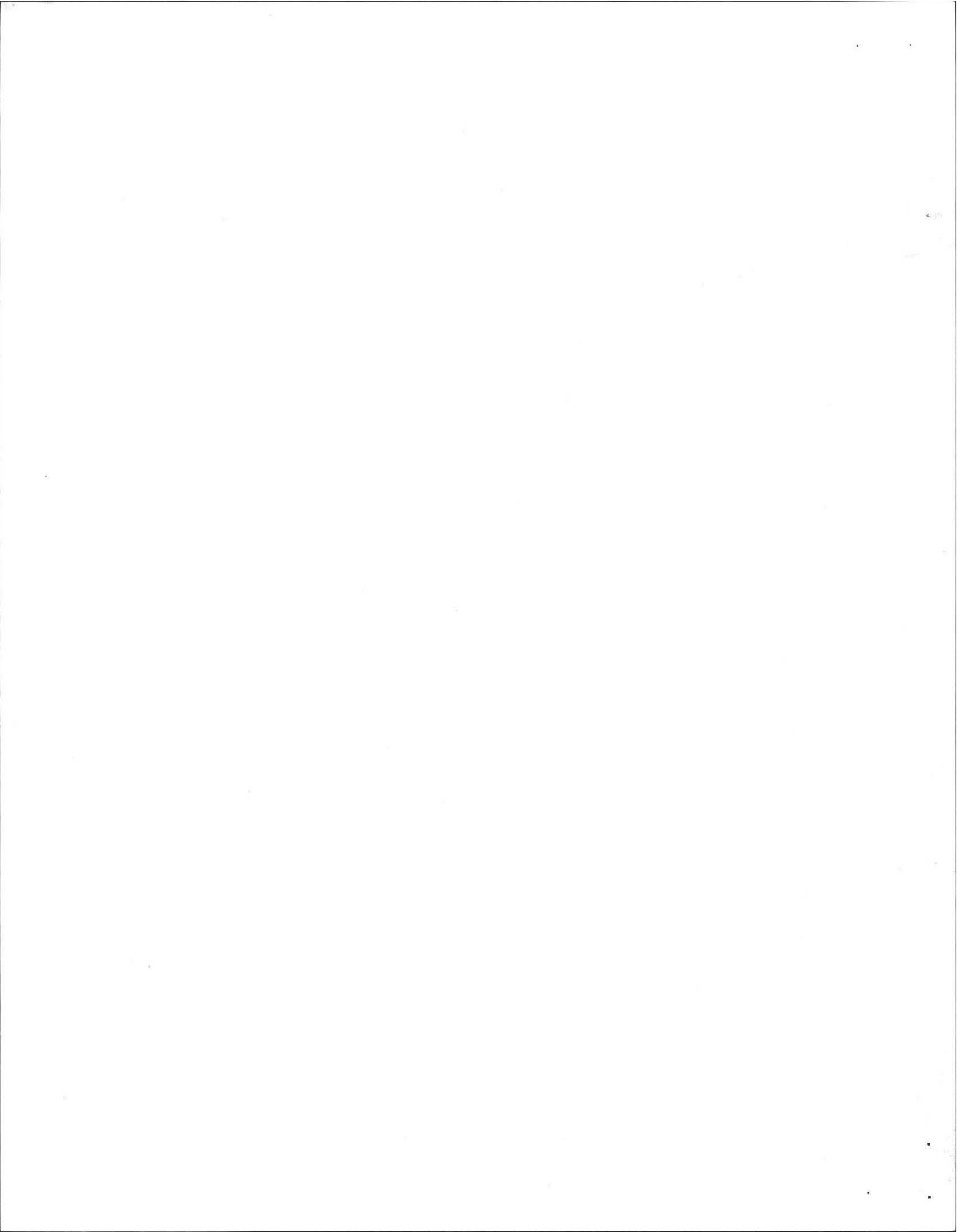
Does at least four feet of naturally occurring previous materials exist in all areas observed throughout the area proposed for this soil absorption system? _____

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

Certification

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

Signature _____
Date _____



Stowell Prop

On-Site Review

Deep Hole Number 55 Date: 12/5/01 Time _____
 Weather Sunny 60
 Location (identify on site plan) _____
 Land Use Field Slope (%) 5
 Surface Stone Small rocks
 Vegetation: grass

Landform: Till Terrace

Position on Landscape (sketch on back) _____

Distances from:
 Open Water Body 100+ feet Drainageway — feet
 Possible Wet Area 100+ feet Property Line 70' feet
 Drinking Water Well 100+ feet Other side
to be dividing

| DEEP OBSERVATION HOLE LOG | | | | | |
|-----------------------------|----------------|---------------------|----------------------|----------------------------|---|
| depth from surface (inches) | soil horizon | soil texture (USDA) | soil color (Munsell) | soil mottling | other (structure, stones, boulders) Consistency, % gravel |
| 8 | Ap | FSL | 10YR 3/2 | — | loose congl 5% gravel |
| 17 | Bw | FSL | 10YR 5/6 | — | MASSIVE EX FINE 20% gravel |
| 31 | C ₁ | FSL | 10YR 4/6 | 7.5YR 4/6 | MASSIVE FINE grain 15% gravel |
| 103 | C ₂ | FSL | 10YR 4/3 | 5Y 10YR 4/4 5Y 2.5Y 1/6 | MASSIVE, FINE grain |

Parent Material (geologic) OUTWASH/ABLATION 20' to 14" DIA
 Depth to Bedrock 103
 Depth to Groundwater:
 Standing Water in the Hole 80
 Weeping from Pit Face 80
 Estimated Seasonal High Water 31

On-Site Review

Deep Hole Number 55A Date: _____ Time _____
 Weather _____
 Location (identify on site plan) _____
 Land Use _____ Slope (%) _____
 Surface Stone _____
 Vegetation: SAME

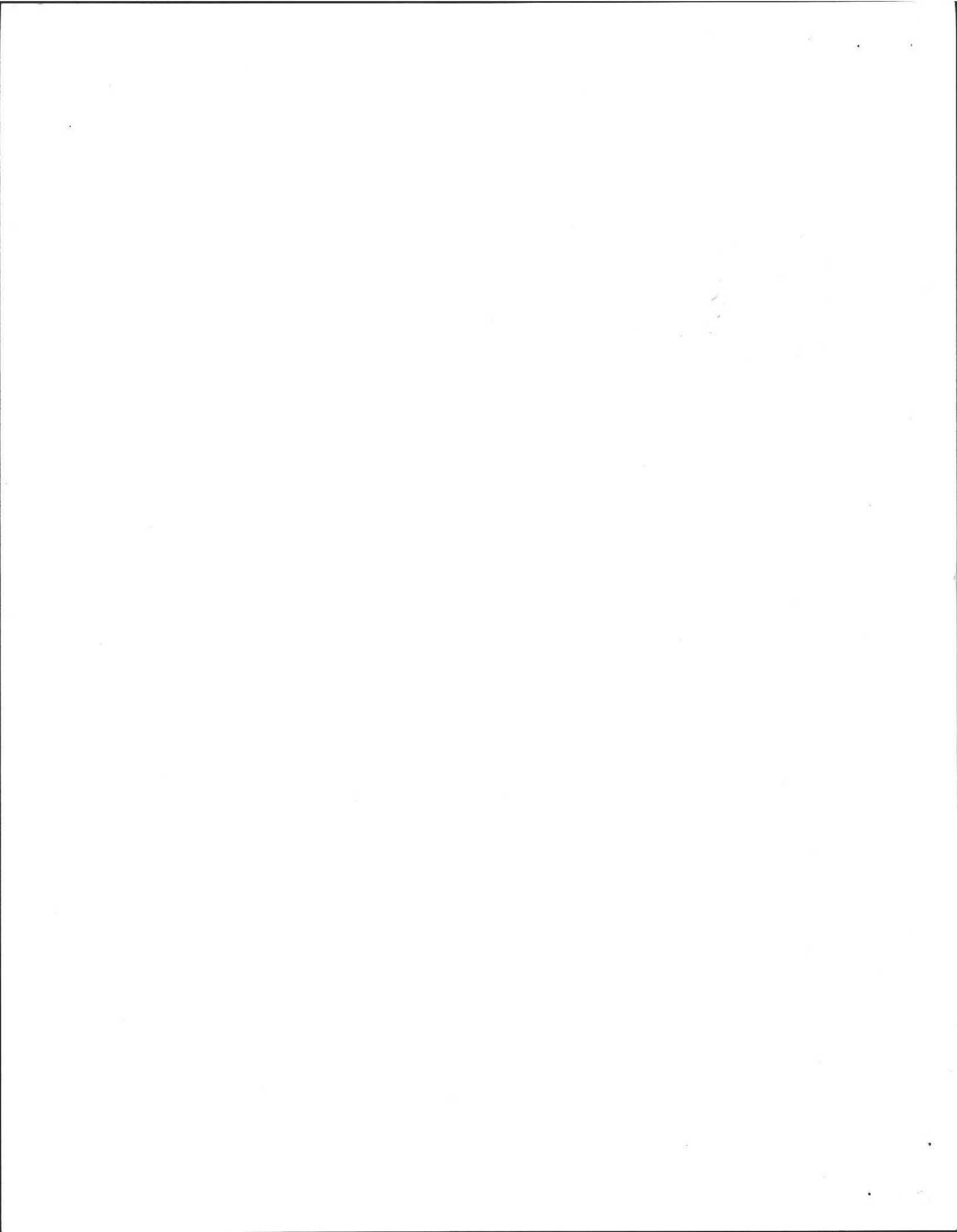
Landform: _____

Position on Landscape (sketch on back) _____

Distances from:
 Open Water Body _____ feet Drainageway _____ feet
 Possible Wet Area _____ feet Property Line _____ feet
 Drinking Water Well _____ feet Other _____

| DEEP OBSERVATION HOLE LOG | | | | | |
|-----------------------------|----------------|---------------------|----------------------|-------------------------|---|
| depth from surface (inches) | soil horizon | soil texture (USDA) | soil color (Munsell) | soil mottling | other (structure, stones, boulders) Consistency, % gravel |
| 8 | Ap | FSL | 10YR 3/2 | — | |
| 24 | Bw | FSL | 10YR 4/6 | 24" 5/6 7.5YR 4/6 | SHAN #5 55 |
| 117 | C ₁ | FSL | 10YR 4/3 | | |

Parent Material (geologic) same
 Depth to Bedrock 117
 Depth to Groundwater:
 Standing Water in the Hole —
 Weeping from Pit Face 93
 Estimated Seasonal High Water 117



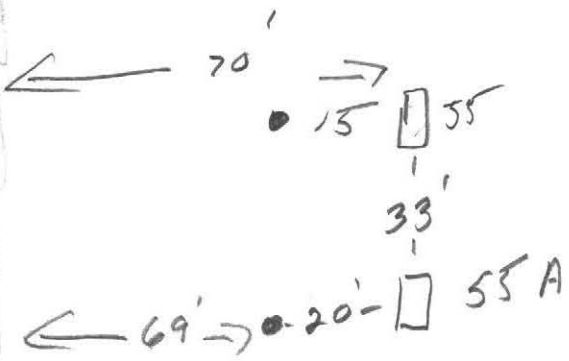
Stuwell Prop

FORM 12: Percolation Test

Location Address or Lot # Leavett Rd

Commonwealth of Massachusetts

Town of Amherst



PERCOLATION TEST *

DATE: 12/5/01 TIME:

| | | |
|--------------------|--------------|--------------|
| Observation Hole # | <u>55</u> | <u>55 A</u> |
| Depth of Perc | <u>48"</u> | <u>38"</u> |
| Start Pre-soak | <u>9:27</u> | <u>10:30</u> |
| End Pre-soak | <u>9:42</u> | <u>10:45</u> |
| Time at 12" | <u>9:42</u> | <u>10:45</u> |
| Time at 9" | <u>9:49</u> | <u>10:56</u> |
| Time at 6" | <u>10:13</u> | <u>11:25</u> |
| Time (9"-6") | <u>25</u> | <u>29</u> |
| Rate Min./Inch | <u>(9)</u> | <u>(10)</u> |

*Minimum of one percolation test must be performed in both the primary area and reserve area.

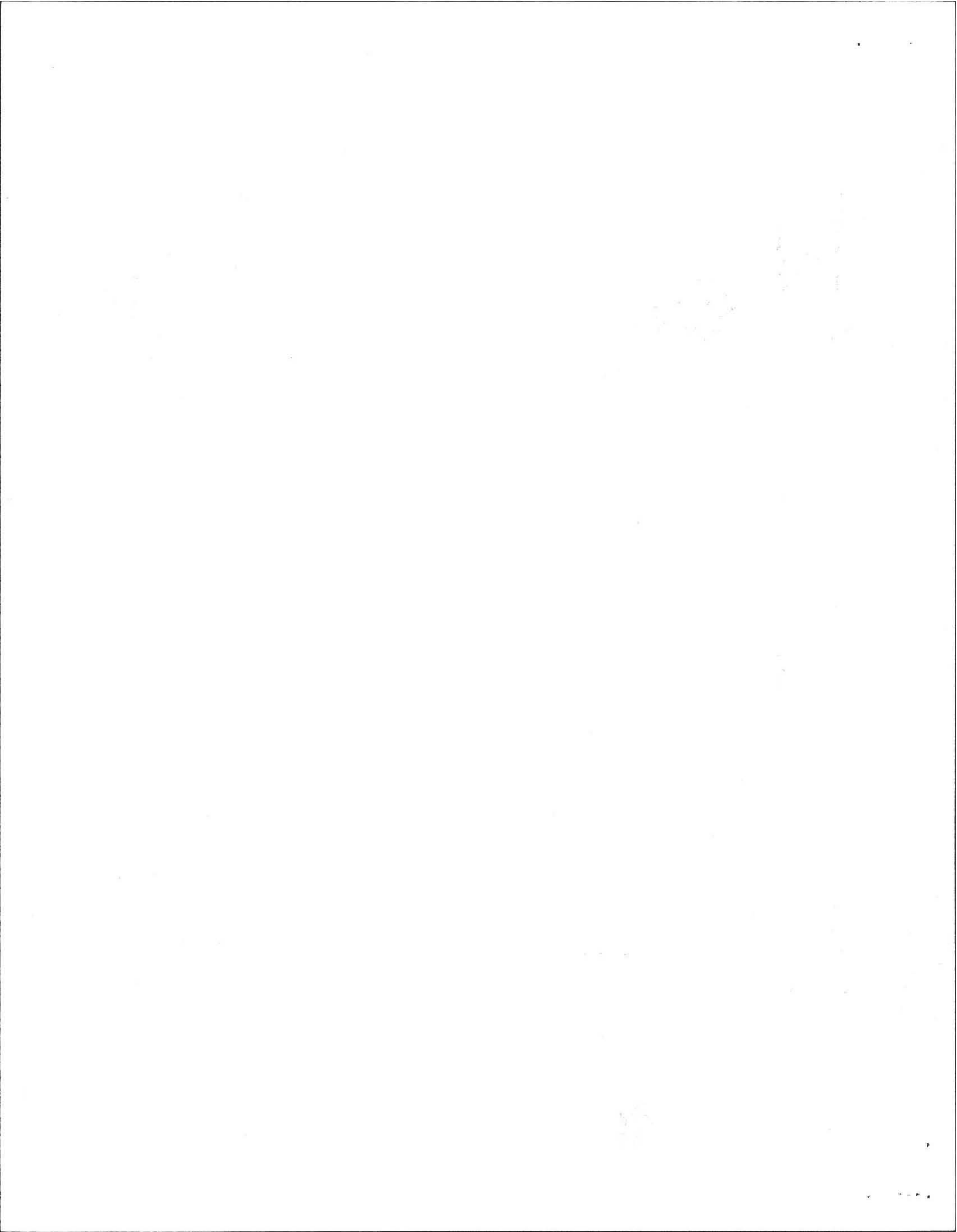
Site Passed Site failed

Performed by CHRISTIAN BOIAN

Witnessed by DAVID ZARWELL

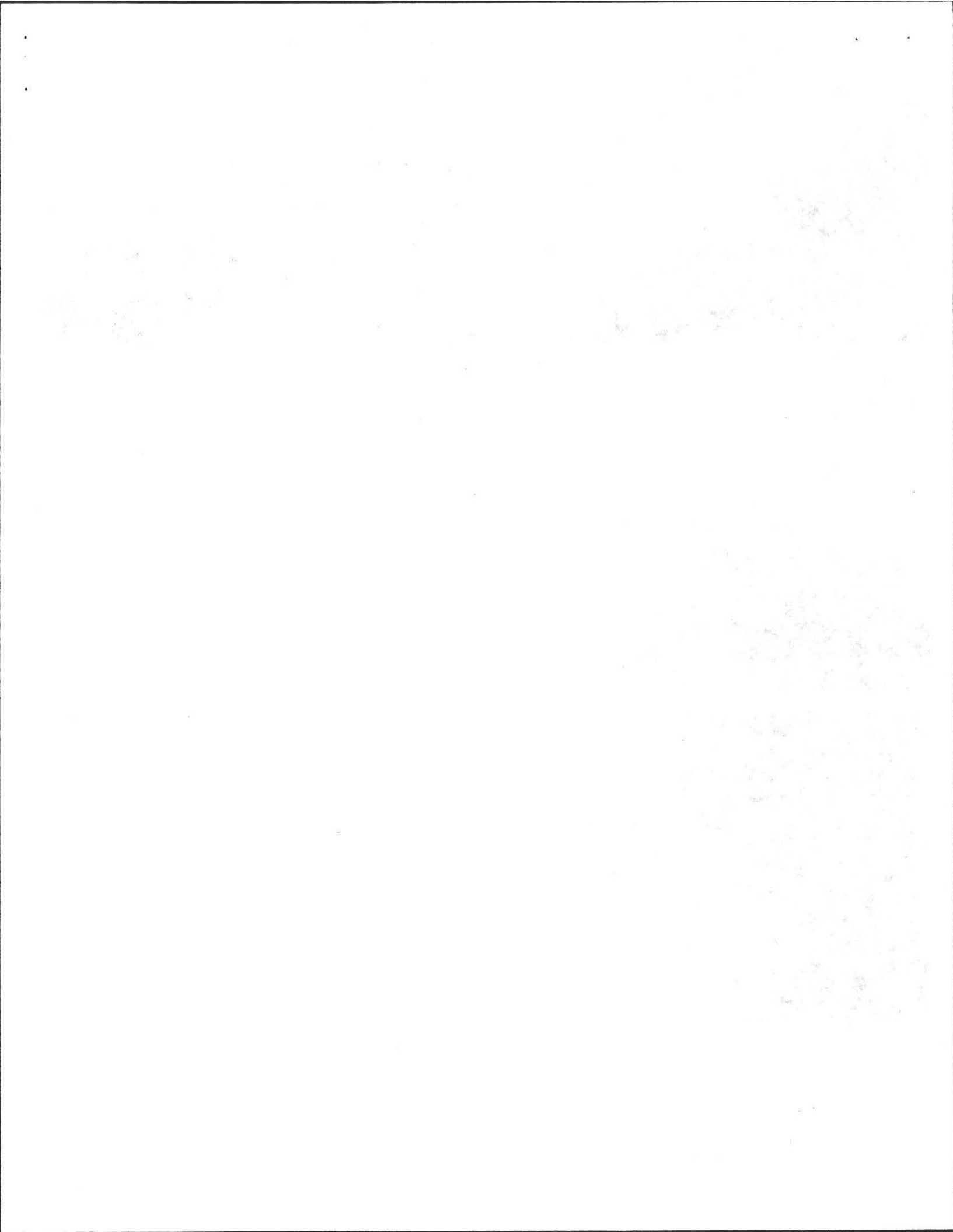
Comments:

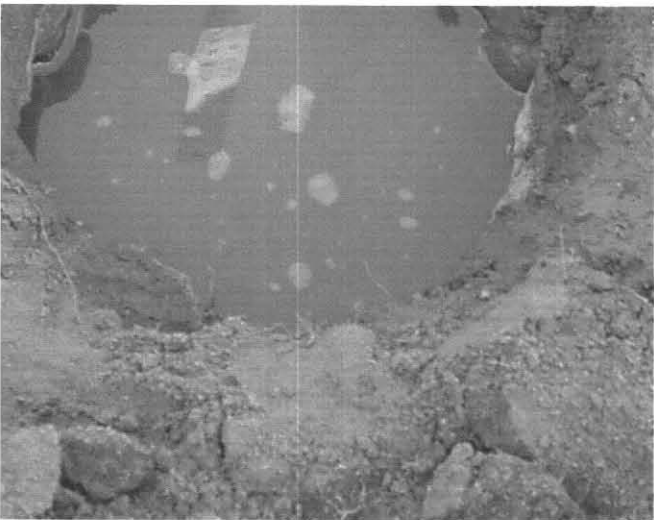
Leavett Rd



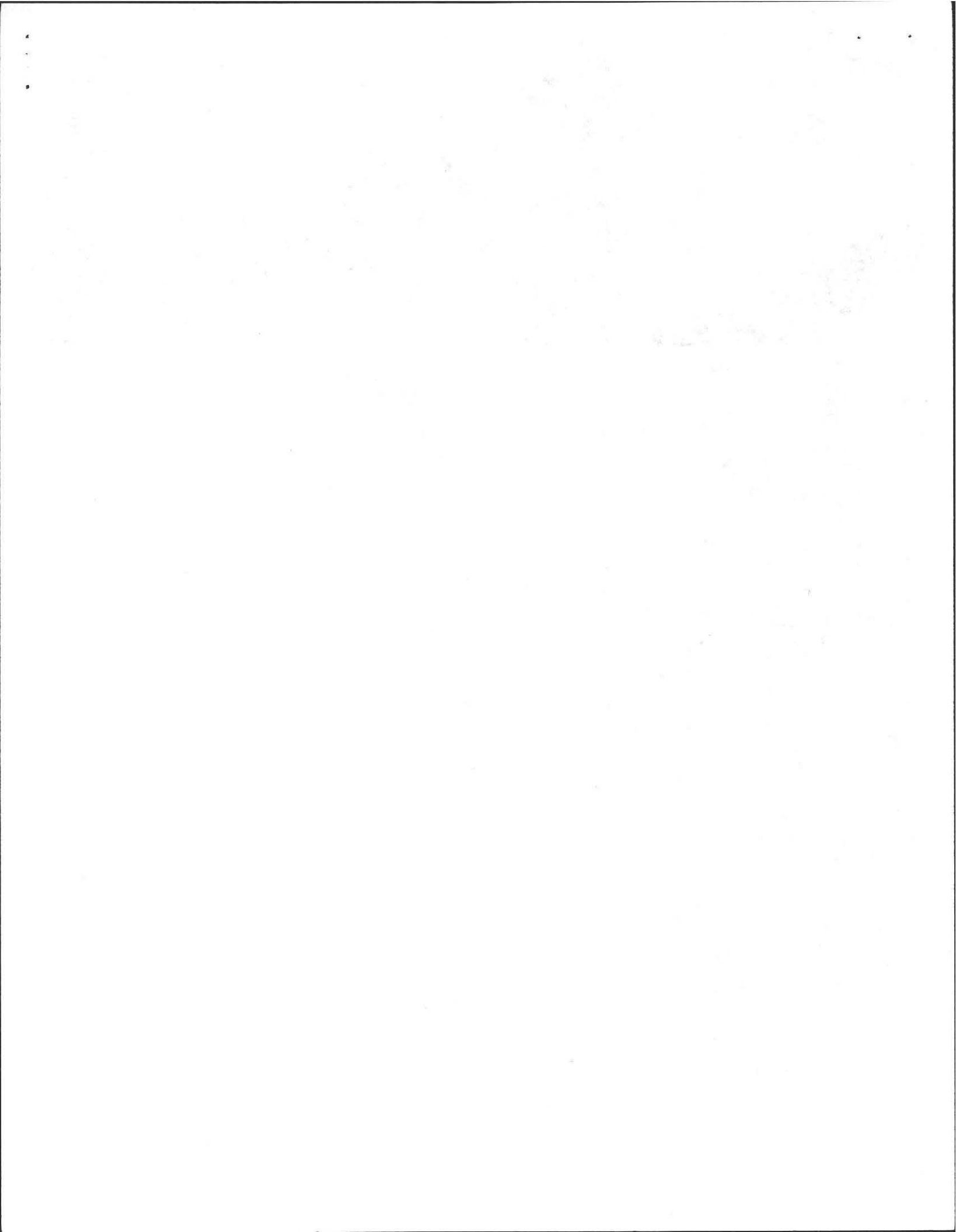


Stowall Property on Leverett Road Hole 55.
Engineer: Christian Boysen





Stowall Property on Leverett Road Hole #55A
Engineer: Christian Boysen



TYPE OR PRINT ONLY

Well Completion Report

1. WELL LOCATION ADDRESS: North Leverett Road PROPERTY OWNER: Eco Structures
 SUBDIVISION NAME: _____ MAILING ADDRESS: 25 Main Street, Suite 445
 CITY/TOWN: Amherst MA CITY/TOWN: Northampton, MA 01060
 ASSESSORS MAP 03A ASSESSORS LOT #: 1 NOTE: Assessors Map and Lot # mandatory if no street address available
 BOARD OF HEALTH PERMIT OBTAINED: Yes Not Required PERMIT NUMBER _____ DATE ISSUED _____

2. WORK PERFORMED New Well Abandon Domestic Irrigation Cable Auger
 Deepen Recondition Monitoring Municipal Air Hammer Direct Push
 Replace Other _____ Industrial Other _____ Mud Rotary Other _____

3. WELL LOG (Use permit when applicable, mark with distance)

| WATER | | Unconsolidated | | | | | | | Consolidated | Sketch (Use permit when applicable, mark with distance) |
|--------------|---------|----------------|------|------|--------|---------|----------|---------|--------------|---|
| Permeability | | Clay | Silt | Sand | Gravel | Cobbles | Boulders | Other | Rock Type | |
| High | Low | | | | | | | | | |
| From (ft) | To (ft) | | | | | | | | | |
| 0 | 35 | | | X | X | | | | | |
| 35 | 425 | | | | | | | Bedrock | quartz/shale | |

4. WELL CONSTRUCTION

| Total Depth Drilled | From (ft) | To (ft) | Casing Type and Material | Size O.D. (in) | Well Seal Type |
|------------------------|-------------------|---------|--------------------------|----------------|----------------|
| 425' | | 60' | 17 lb Steel | 6" | Drive Shoe |
| Date Drilling Complete | November 20, 2002 | | | | |

5. SCREEN

| From (ft) | To (ft) | Slot Size | Screen Type and Material | Screen Diameter |
|-----------|---------|-----------|--------------------------|-----------------|
| | | NONE | | |

6. FILTER PACK / GROUT / SAND / OTHER

| From (ft) | To (ft) | Material Description | Purpose |
|-----------|---------|----------------------|---------|
| | | | |

7. ADDITIONAL WELL INFORMATION

Developed? Yes No
 Fracture Enhancement? Yes No
 Method _____
 Disinfected? Yes No

8. WELL TEST DATA / PRODUCTION

| Date | Method | Yield (GPM) | Time Pumped (hrs & min) | Drawdown to (Ft. BGS) | Time Recovery to (hrs & min) | Recovery to (Ft. BGS) | Date Measured | Depth Below Ground Surface (FT) |
|----------|--------|-------------|-------------------------|-----------------------|------------------------------|-----------------------|---------------|---------------------------------|
| 11/21/02 | bucket | 2 | 4h 0m | 210' | 2h 35m | 35' | 11/21/02 | 35' |

9. PERMANENT PUMP INFORMATION

Pump Description _____ Horsepower _____
 Pump Intake Depth _____ (ft) Nominal Pump Capacity _____ (gpm)
 MOUNTAIN SPRINGS PUMPS
 Pelham, MA

10. WELL DRILLER'S STATEMENT

This well was drilled and/or abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge.

Driller: Kenneth C. Lynde Supervising Driller Signature: [Signature] Registration #: 4 8 0
 Firm: Lynde Well Drilling, Inc. Date: 11/27/02 Rig Permit #: 1 1 4

NOTE: Well Completion Reports must be filed by the registered well driller within 30 days of well completion.

10



Quabbin Analytical Laboratory

Box 1192 Stadler Street, Belchertown, MA 01007

(413)-323-7134

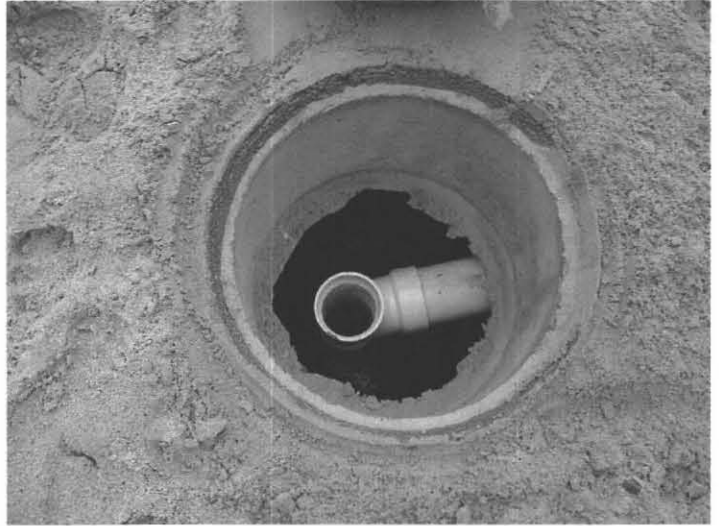
| | | | |
|------------------|---------------------------|---------------|-----------------------------|
| Name: | WVO, LLC | Sample Date: | 11-22-02 |
| Address: | 25 Main Street, Suite 445 | Report Date: | 11-27-02 |
| | Northampton, MA 01060 | Collected By: | Mt. Springs Pumps & Service |
| Sample Location: | | Type Supply: | Well |
| | Leverett Road | Sample No.: | QAL 7813 with SP 2454 |
| | Amherst, MA 01002 | Lab ID#: | M-02454 & M-MA 138 |
| | | | |

| TESTED FOR | RESULTS | MAX. RECOMMENDED LEVELS |
|-------------------------|---------|-------------------------|
| Total Coliform Bacteria | Absent | Present or Absent |
| Nitrite | 0 | 1.0 mg/l |
| Nitrate | 0.2 | 10.0 mg/l |
| Ammonia | .03 | No Limit |
| pH | 8.00 | 6.5-8.5 |
| Iron | .16 | .30 mg/l |
| Sodium | 9.25 | No Limit |
| Hardness | 60.0 | No Limit |
| Turbidity | 4.4 | 5 NTU |
| Chloride | 14.2 | 250 mg/l |
| Chlorine | 0 | No Limit |
| Lead | 0 | 0.015 mg/l |
| Arsenic | 0.0127 | 0.05 mg/l |
| | | |
| | | |
| | | |
| | | |

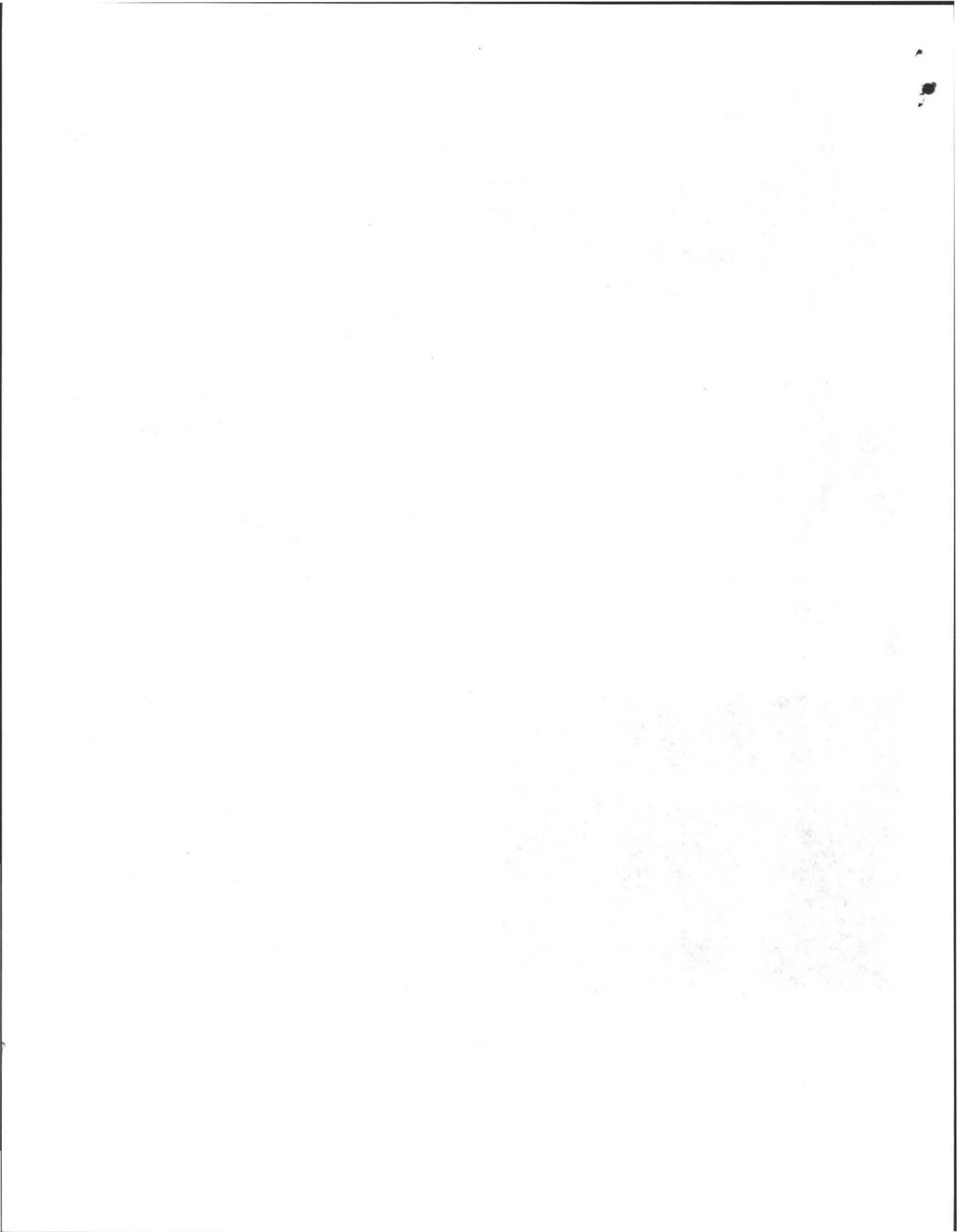
Results are only for those items listed above and on the above collected date. Except for the following _____, the sample was found to be within acceptable levels for D.E.P. Drinking Water Standards. If there are any questions on this report, please do not hesitate to call this office.

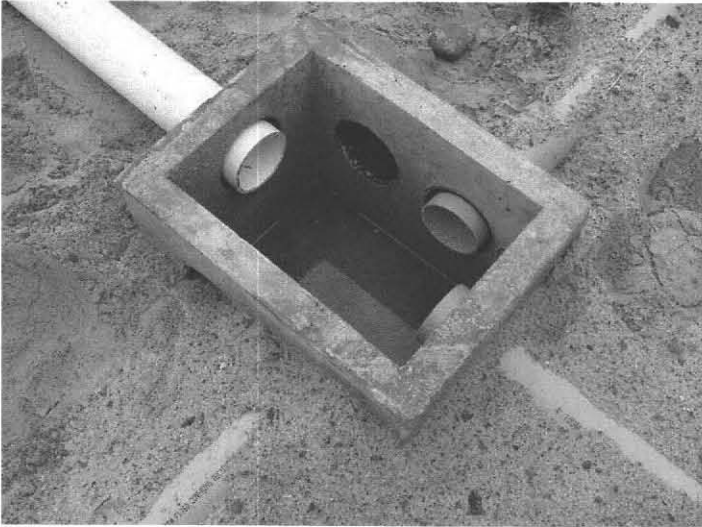
David Fredenburgh, Director



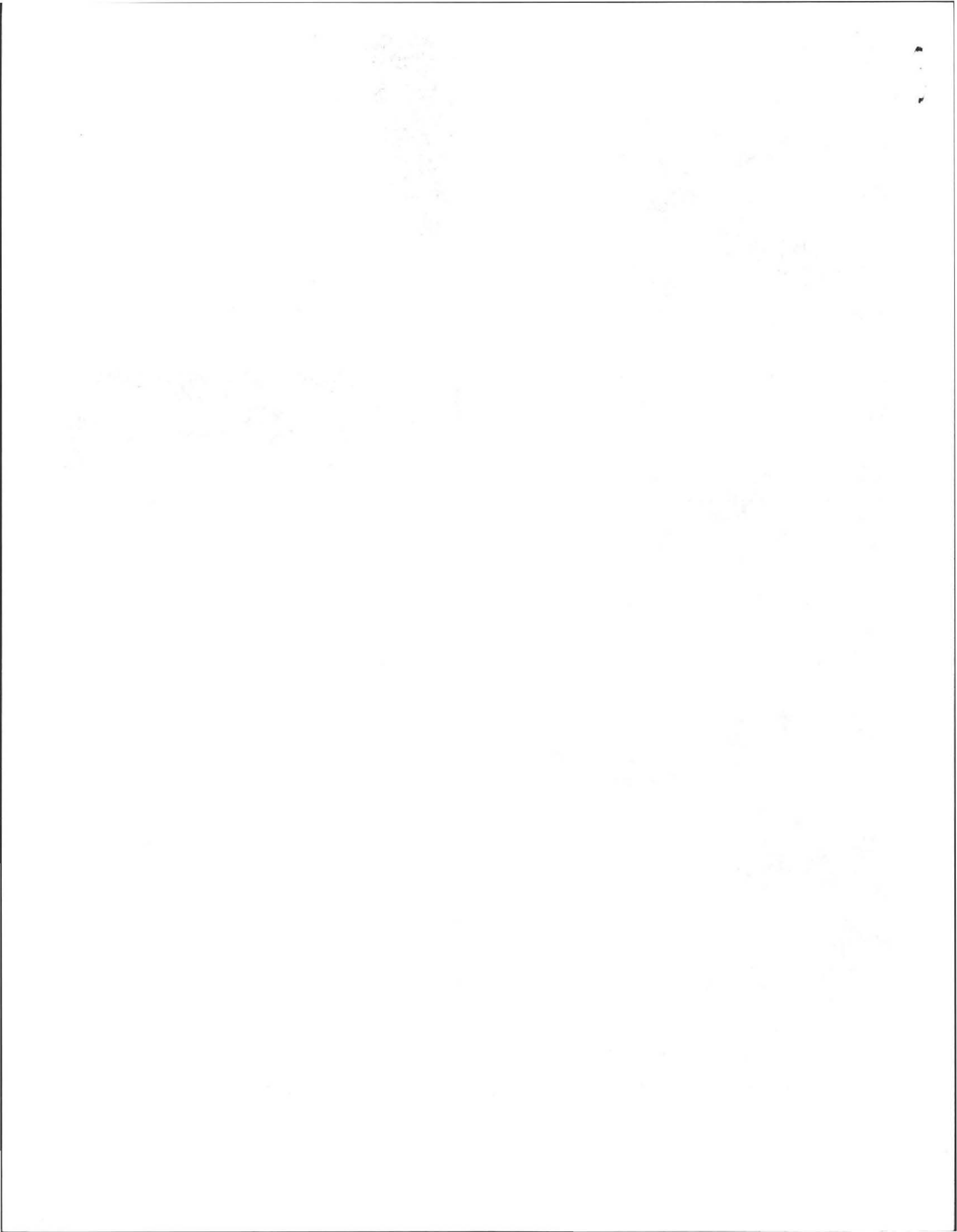


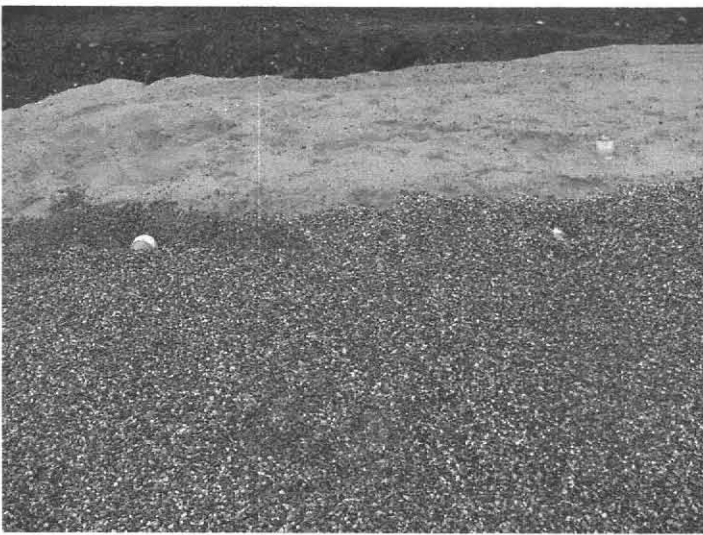
329 Leverett Rd Northampton Assoc
Installer: LML Cons. Designer: MacLeay Assoc.



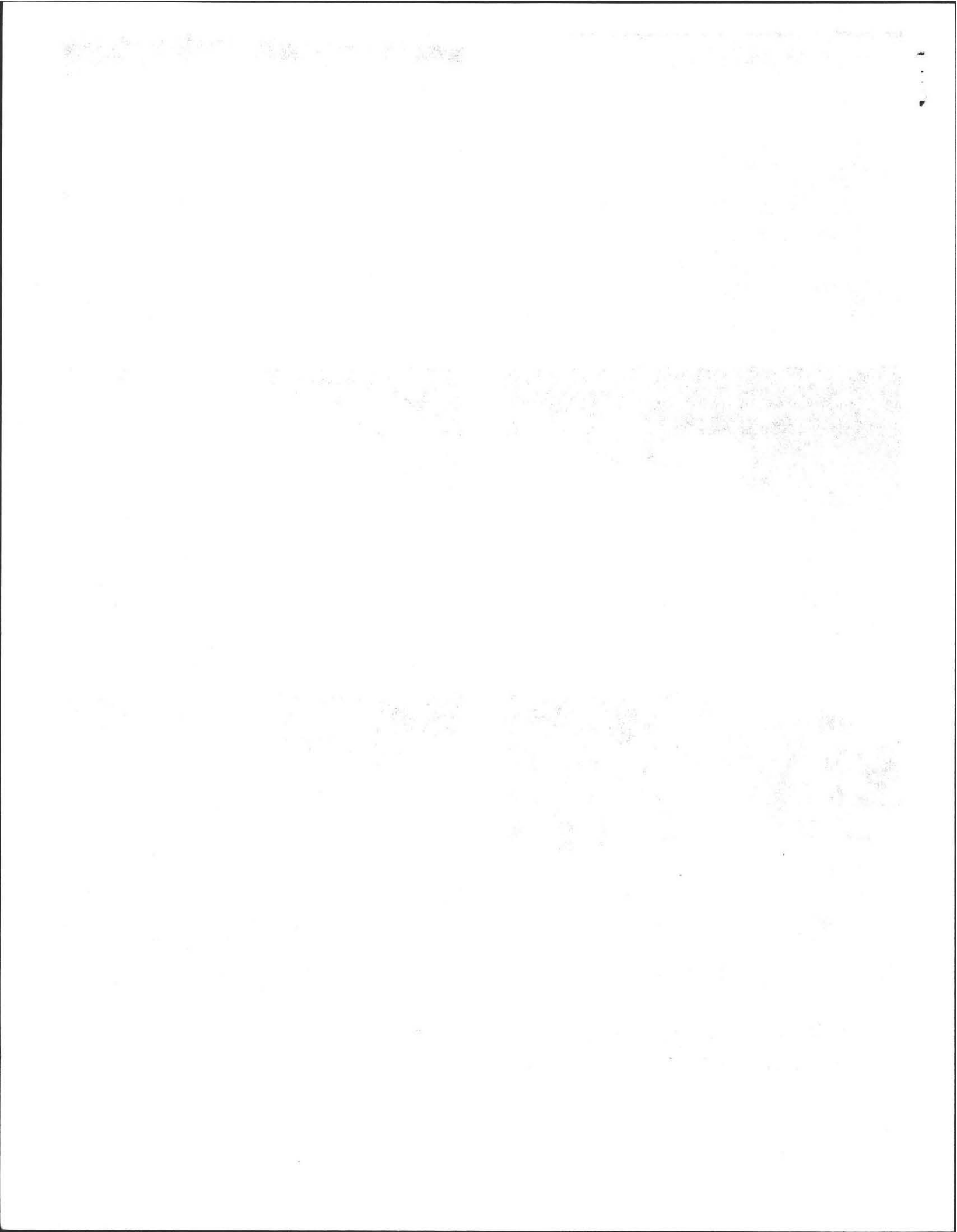


329 Leverette Rd Noho Assoc 25 Main St, Noho
Installer: LML Cons. Designer: MacLeay Assoc

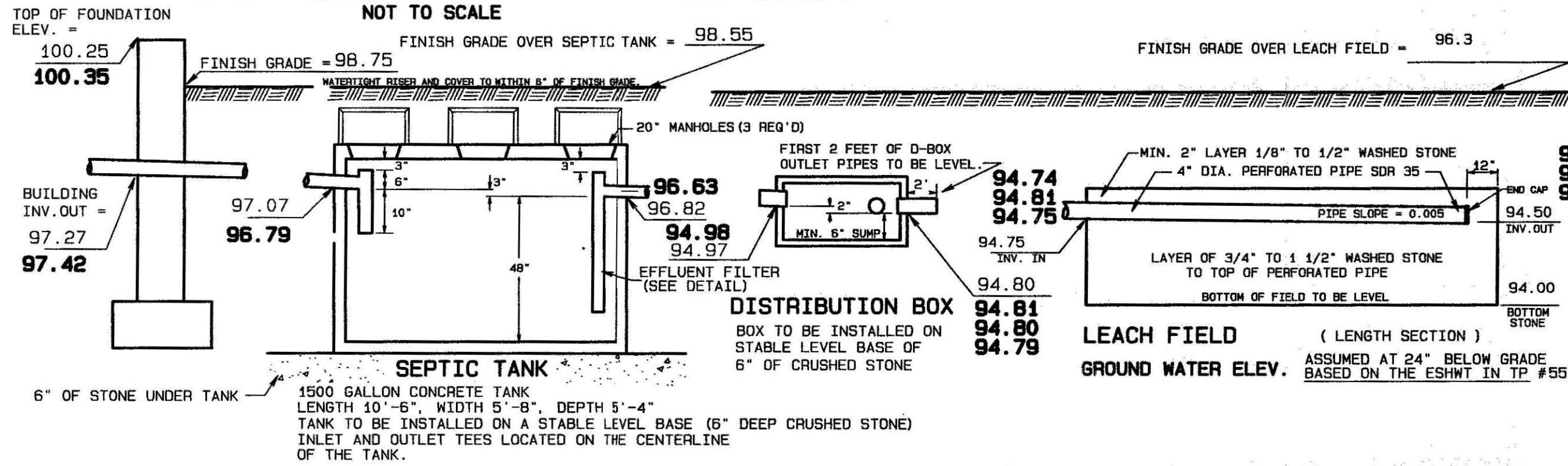




329 Leverett Rd Northampton Assoc
Installer: LML Cons Designer: Macleay Assoc



SANITARY SYSTEM PROFILE



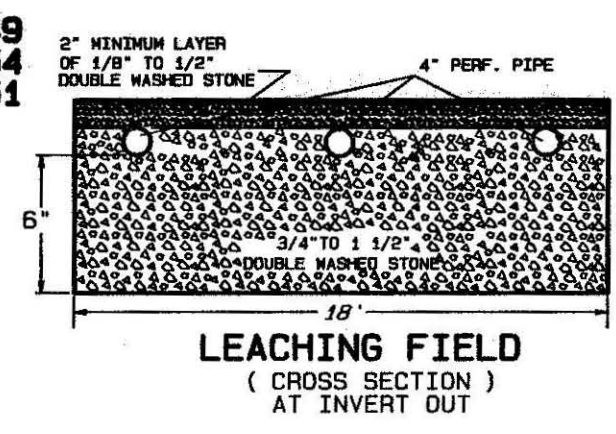
TEST PIT DATA

BOARD OF HEALTH WITNESS: DAVE ZAROZINSKI
 DATE: DECEMBER 5, 2001
 SOIL EVALUATOR: DOUGLAS J. MacLEAY, P.E.

| PERC TEST ID | PERC RATE (MIN/IN) | PERC DEPTH (IN) |
|--------------|--------------------|-----------------|
| 55 | 10 | 38 |
| 55A | 9 | 48 |

TEST PIT # 55
 ELEV. TOP = 88.57
 ESHWT = 85.99
 OBS. H2O = 81.90
 BOTTOM = 79.99

TEST PIT # 55A
 ELEV. TOP = 91.26
 ESHWT = 89.26
 OBS. H2O = 83.51
 BOTTOM = 81.51

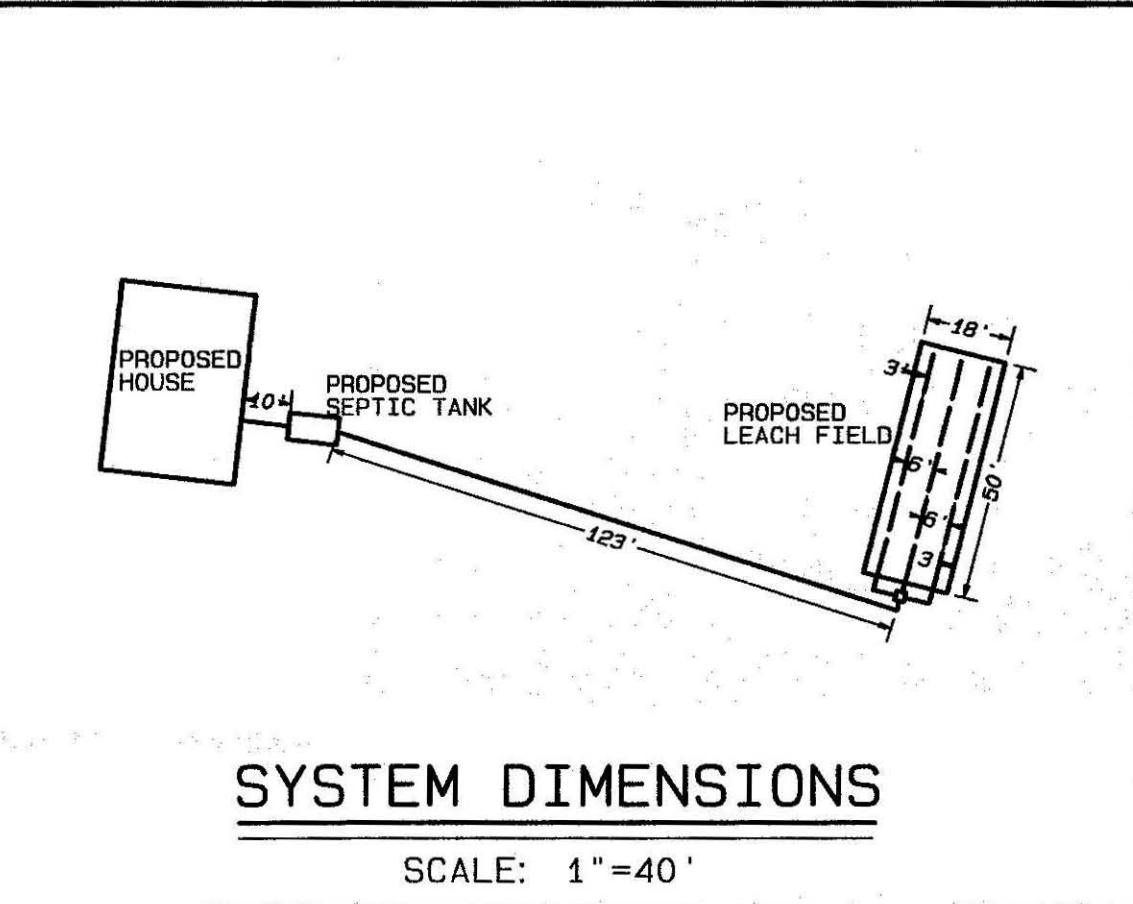
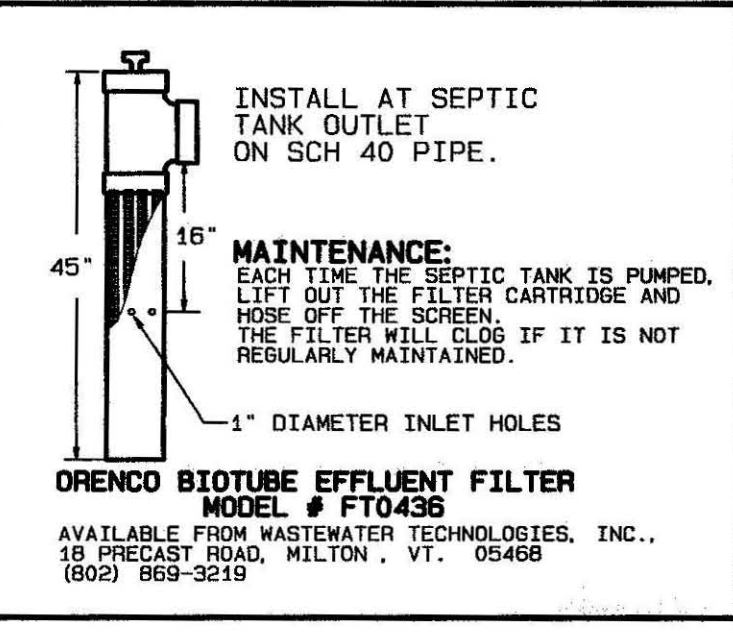


| HORIZON | Soil Description | Depth |
|-------------|--------------------------|-------|
| HORIZON Aa | FINE SANDY LOAM 10YR 3/2 | 8" |
| HORIZON A | FINE SANDY LOAM 10YR 5/6 | 17" |
| HORIZON C | FINE SANDY LOAM 10YR 4/6 | 31" |
| HORIZON Cc2 | FINE SANDY LOAM 10YR 4/3 | 80" |

NOTES:

- THIS PLAN IS FOR A NEW SEPTIC SYSTEM.
- REMOVE TOPSOIL & SUBSOIL BENEATH THE LEACHING FIELD AND TO 5' ON ALL SIDES OF THE FIELD. REPLACE WITH FILL MATERIAL MEETING THE SPECIFICATIONS OF 310 CMR 15.255(3) (TITLE 5, 310 CMR 15.255(5)).
- TITLE 5 REQUIRES OBSERVATION OF THE INSTALLED SYSTEM BY THE DESIGN ENGINEER AND A BOARD OF HEALTH MEMBER OR AGENT FOR THE BOARD OF HEALTH. THE SYSTEM MUST NOT BE BACKFILLED PRIOR TO OUR OBSERVATION. CONTACT OUR OFFICE AND THE BOARD OF HEALTH TWO BUSINESS DAYS BEFORE REQUESTED DATE FOR OBSERVATION.
- ALL DISTURBED AREAS SHOULD BE LOAMED, RAKED, FERTILIZED, SEEDED AND MULCHED AT THE COMPLETION OF CONSTRUCTION.

PROPERTY LINE REFERENCE:
 PROPERTY LINES AS SHOWN ARE BASED ON A PLAN OF LAND IN AMHERST, MASSACHUSETTS, PREPARED FOR NORTHAMPTON ASSOCIATES, INC. PREPARED BY H.L. EATON ASSOC. DATED OCTOBER 21, 2002.



DESIGN DATA

DESIGN BASED ON SINGLE FAMILY RESIDENCE
 DESIGN FLOW 110 GALLON PER DAY PER BEDROOM (4)
 TOTAL DESIGN FLOW 440 GALLON PER DAY.

SEPTIC TANK
 440 GALLONS X 200% = 880 GALLONS DESIGN CAPACITY.
 USE 1500 GALLON SEPTIC TANK.

LEACHING FIELD
 BOTTOM:
 50' LENGTH X 18' WIDTH = 900 SQUARE FEET.
 900 SQ. FT. X .53 GAL. PER SQ. FT. = 477 GAL. LEACHING.
 TOTAL LEACHING CAPACITY = 477 GALLONS PER DAY.

NOTE: PER TITLE 5, 310 CMR 15.240(6): A FIELD IS DESIGNED FOR THIS SITE DUE TO THE AREA LIMITATIONS CAUSED BY THE HOUSE LOCATION AND PROPERTY LINES.

AS BUILT LOCATIONS AND ELEVATIONS ARE BASED ON A FIELD SURVEY PERFORMED BY MACLEAY ASSOCIATES, DATED MAY 27, 2003

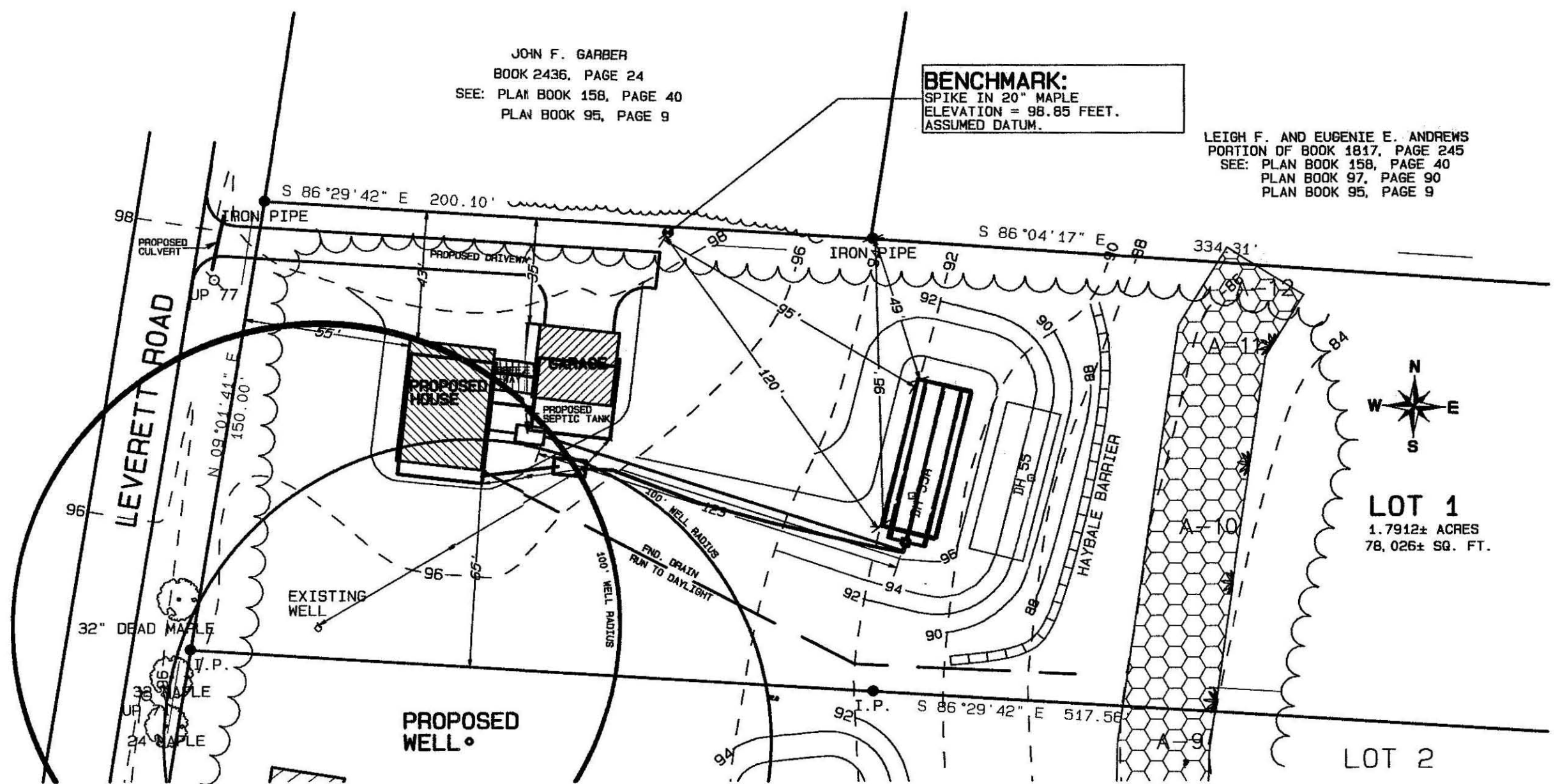
SYSTEM INSTALLED BY:
 L & F CONSTRUCTION
 503 LONG PLAIN ROAD
 LEVERETT, MA 01054
 (413) 665-3788

GENERAL NOTES

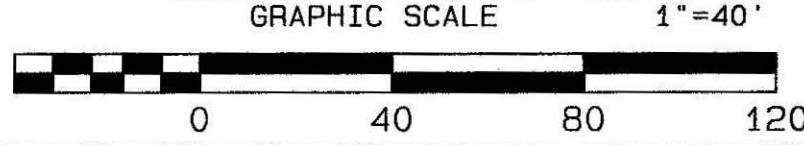
- 4" PIPE WITH TIGHT JOINTS TO BE USED IN DISPOSAL SYSTEM EXCEPT WHERE OTHERWISE NOTED.
- 4" SDR 35 PERFORATED PIPE TO BE USED IN LEACHING AREA.
- 1500 GALLON REINFORCED CONCRETE SEPTIC TANK.
- AMHERST BOARD OF HEALTH MUST BE NOTIFIED WHEN SYSTEM IS NEARLY COMPLETE AND PRIOR TO BACKFILLING.
- ELEVATIONS BASED ON ASSUMED DATUM
- UNLESS OTHERWISE NOTED, ALL SYSTEM COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH TITLE 5 OF THE STATE SANITARY CODE AND ANY APPLICABLE LOCAL RULES.
- ANY CHANGE TO THIS PLAN MUST BE APPROVED BY THE BOARD OF HEALTH AND THE DESIGN ENGINEER.
- THIS SYSTEM IS NOT DESIGNED FOR A GARBAGE GRINDER.

LEGEND

- 100 --- EXISTING CONTOURS
- 100 --- PROPOSED CONTOURS
- 4" SDR 35 PERFORATED PIPE
- 4" SDR 35 SOLID PIPE
- WATER LINE
- HAYBALE BARRIER
- EDGE OF WETLAND
- CENTERLINE STREAM
- PROPERTY LINE
- o o o o o o o o o o STONEWALL



SITE PLAN



| | | | | |
|-------------------|--|---|----------|-------------|
| SHEET NO. 1 OF 1. | | 1. 5/28 J.H. | AS-BUILT | D.M. |
| SCALE | APPROVED: | REV. DATE | BY | DESCRIPTION |
| AS SHOWN | DOUGLAS J. MACLEAY No. 21203 0717 REGISTERED PROFESSIONAL ENGINEER | TITLE: SUBSURFACE SEWAGE DISPOSAL PLAN IN AMHERST, MASS | | |
| DRN. BY | | FOR: NORTHAMPTON ASSOCIATES 281 LEVERETT ROAD | | |
| CHECKED | | DATE: | JOB NO. | |
| D.M. | | NOVEMBER 22, 2002 | 2002-072 | |

MacLEAY ASSOCIATES, INC.
 102 BRIDGE STREET, SHELBURNE FALLS, MA 01370
 TELEPHONE: (413) 625-9774 FAX: (413) 625-9704