



#351

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

RECEIVED JUL 07 2000

TRUDY COXE
Secretary

DAVID B. STRUHS
Commissioner

ARGEO PAUL CELLUCCI
Governor

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION

Property Address: 351 POTWINE LANE, Amherst Name of Owner: DION MANDLE
Address of Owner: 351 Potwine La, Amherst.
Date of Inspection: 7/5/00
Name of Inspector: (Please Print) Alan E. Weiss, R.S.
I am a DEP approved system inspector pursuant to Section 15.340 of Title 5 (310 CMR 15.000)
Company Name: Cold Spring Environmental, Inc.
Mailing Address: 350 Old Enfield Rd., Belchertown, MA 01007
Telephone Number: 413-323-5957

CERTIFICATION STATEMENT

I certify that I have personally inspected the sewage disposal system at this address and that the information reported below is true, accurate and complete as of the time of inspection. The inspection was performed based on my training and experience to ensure proper function and maintenance of on-site sewage disposal systems. The system:

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

Inspector's Signature: Alan Weiss Date: 7/5/00



The System Inspector shall submit a copy of this inspection report to the Approving Authority (Board of Health or DEP) within thirty (30) days of completing this inspection. If the system is a shared system or has a design flow of 10,000 gpd or greater, the inspector and the system owner shall submit the report to the appropriate regional office of the Department of Environmental Protection. The original should be sent to the system owner and copies sent to the buyer, if applicable, and the approving authority.

NOTES AND COMMENTS

- Good condition - No signs of failure.

RECEIVED IN A.M.

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

Property Address: 351 POTWING
Owner: MANDLE
Date of Inspection: 7/5/00

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

A. SYSTEM PASSES:

I have not found any information which indicates that any of the failure conditions described in 310 CMR 15.303 exist. Any failure criteria not evaluated are indicated below.

COMMENTS: _____

B. SYSTEM CONDITIONALLY PASSES:

_____ One or more system components as described in the "Conditional Pass" section need to be replaced or repaired. The system, upon completion of the replacement or repair, as approved by the Board of Health, will pass.

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

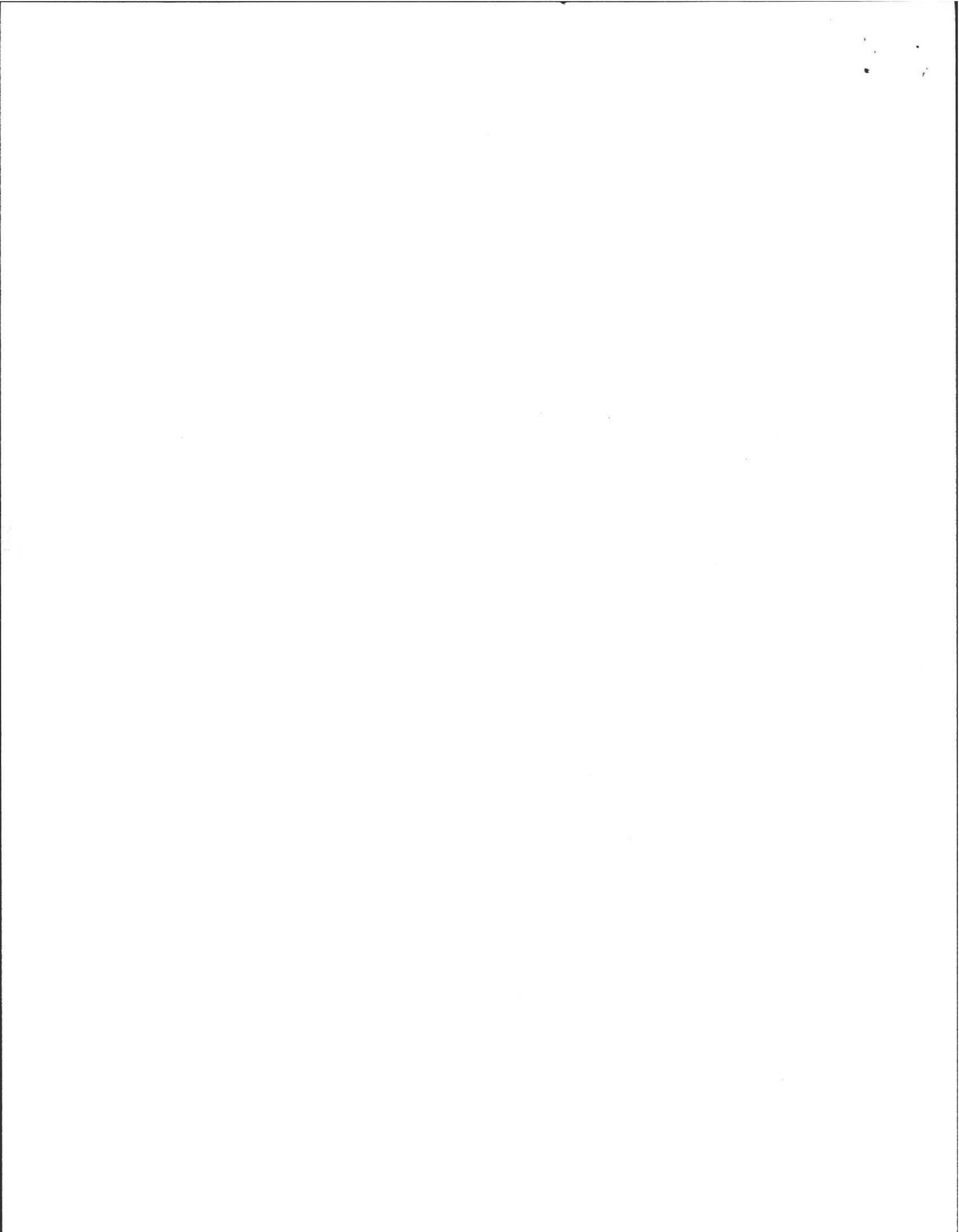
_____ The septic tank is metal, unless the owner or operator has provided the system inspector with a copy of a Certificate of Compliance (attached) indicating that the tank was installed within twenty (20) years prior to the date of the inspection; or the septic tank, whether or not metal, is cracked,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

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

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

_____ The system required pumping more than four times a year due to broken or obstructed pipe(s). The system will pass inspection if (with approval of the Board of Health):

- _____ broken pipe(s) are replaced
- _____ obstruction is removed



SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM

PART A

CERTIFICATION (continued)

Property Address: 351 Rotwine
Owner: Mandic
Date of Inspection: 7/5/00

C. FURTHER EVALUATION IS REQUIRED BY THE BOARD OF HEALTH:

_____ Conditions exist which require further evaluation by the Board of Health in order to determine if the system is failing to protect the public health, safety and the environment.

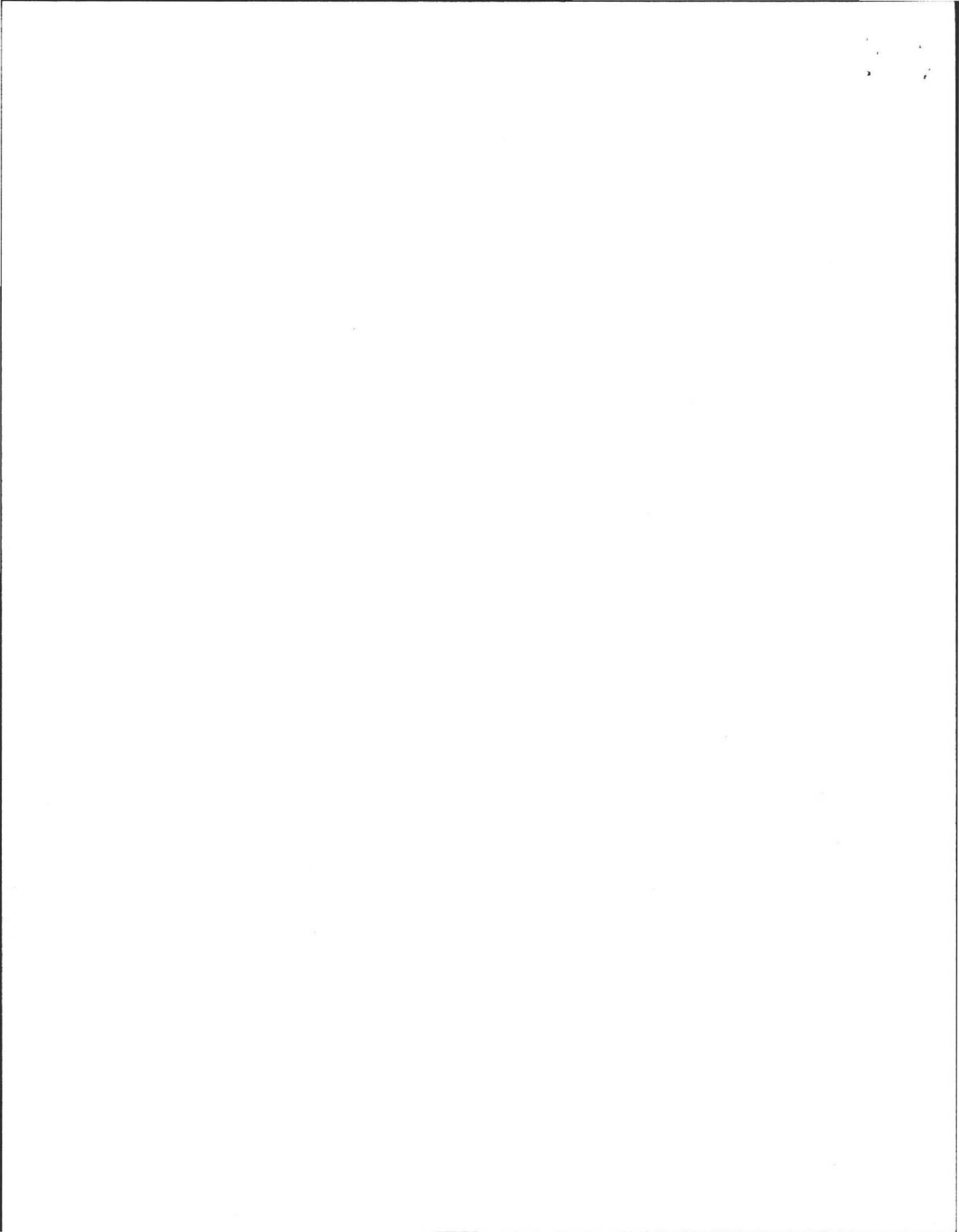
1) **SYSTEM WILL PASS UNLESS BOARD OF HEALTH DETERMINES IN ACCORDANCE WITH 310 CMR 15.303 (1)(b) THAT THE SYSTEM IS NOT FUNCTIONING IN A MANNER WHICH WILL PROTECT THE PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT:**

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

2) **SYSTEM WILL FAIL UNLESS THE BOARD OF HEALTH (AND PUBLIC WATER SUPPLIER, IF ANY) DETERMINES THAT THE SYSTEM IS FUNCTIONING IN A MANNER THAT PROTECTS THE PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT:**

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

3) OTHER



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

Property Address: 351 Potwine
 Owner: Mande
 Date of Inspection: 7/5/00

D. SYSTEM FAILS:

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

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

- | Yes | No | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Backup of sewage into facility or system component due to an overloaded or clogged SAS or cesspool. |
| <input 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 SAS or cesspool. |
| <input 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 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 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 type="checkbox"/> | <input type="checkbox"/> | Any portion of the Soil Absorption System, cesspool or privy is below the high groundwater elevation. |
| <input type="checkbox"/> | <input type="checkbox"/> | Any portion of a cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply. |
| <input type="checkbox"/> | <input type="checkbox"/> | Any portion of a cesspool or privy is within a Zone I of a public well. |
| <input type="checkbox"/> | <input type="checkbox"/> | Any portion of a cesspool or privy is within 50 feet of a private water supply well. |
| <input 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. If the well has been analyzed to be acceptable, attach copy of well water analysis for coliform bacteria, volatile organic compounds, ammonia nitrogen and nitrate nitrogen. |

E. LARGE SYSTEM FAILS:

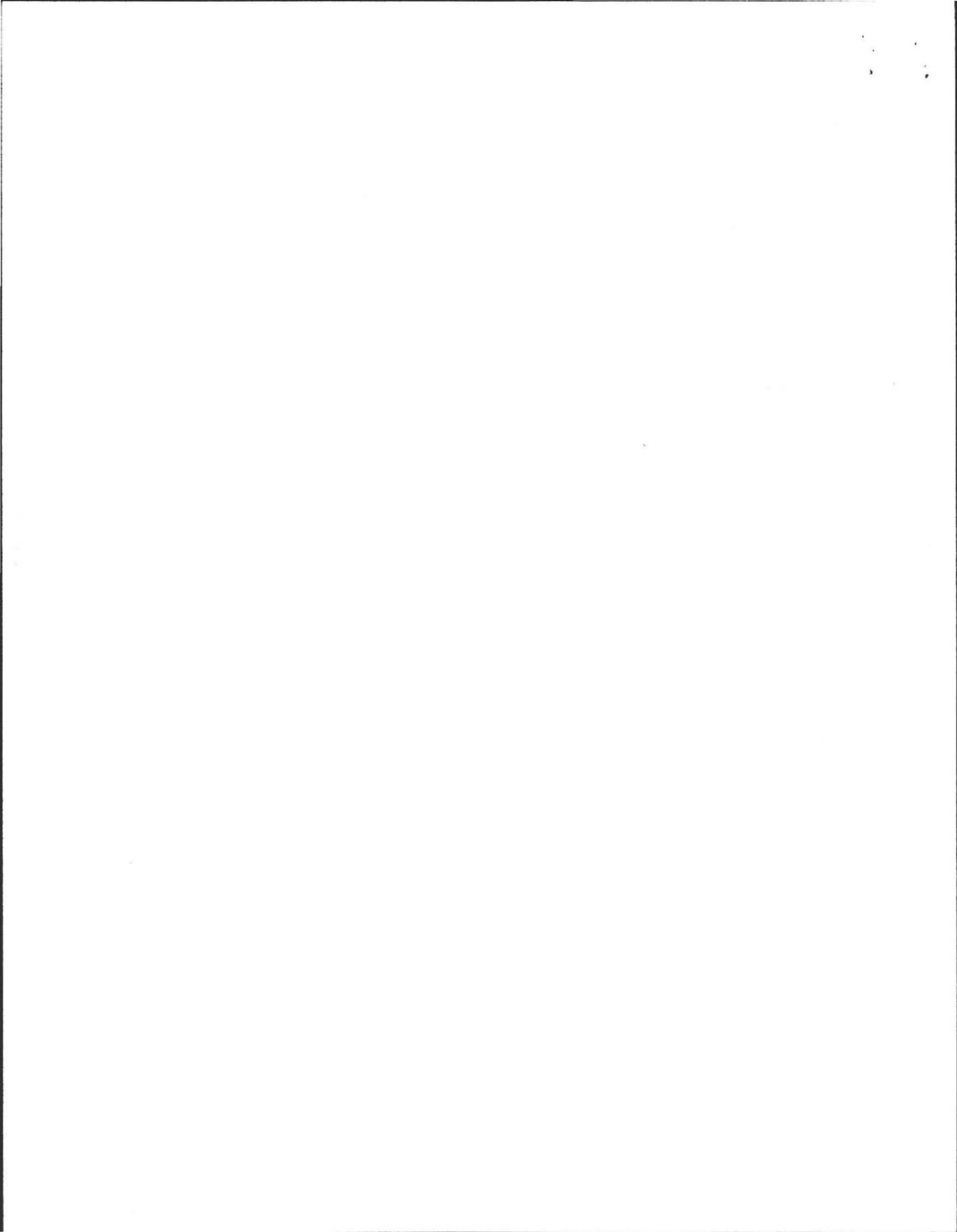
You must indicate either "Yes" or "No" to each of the following:

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

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

- | Yes | No | |
|--------------------------|--------------------------|---|
| <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) |

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

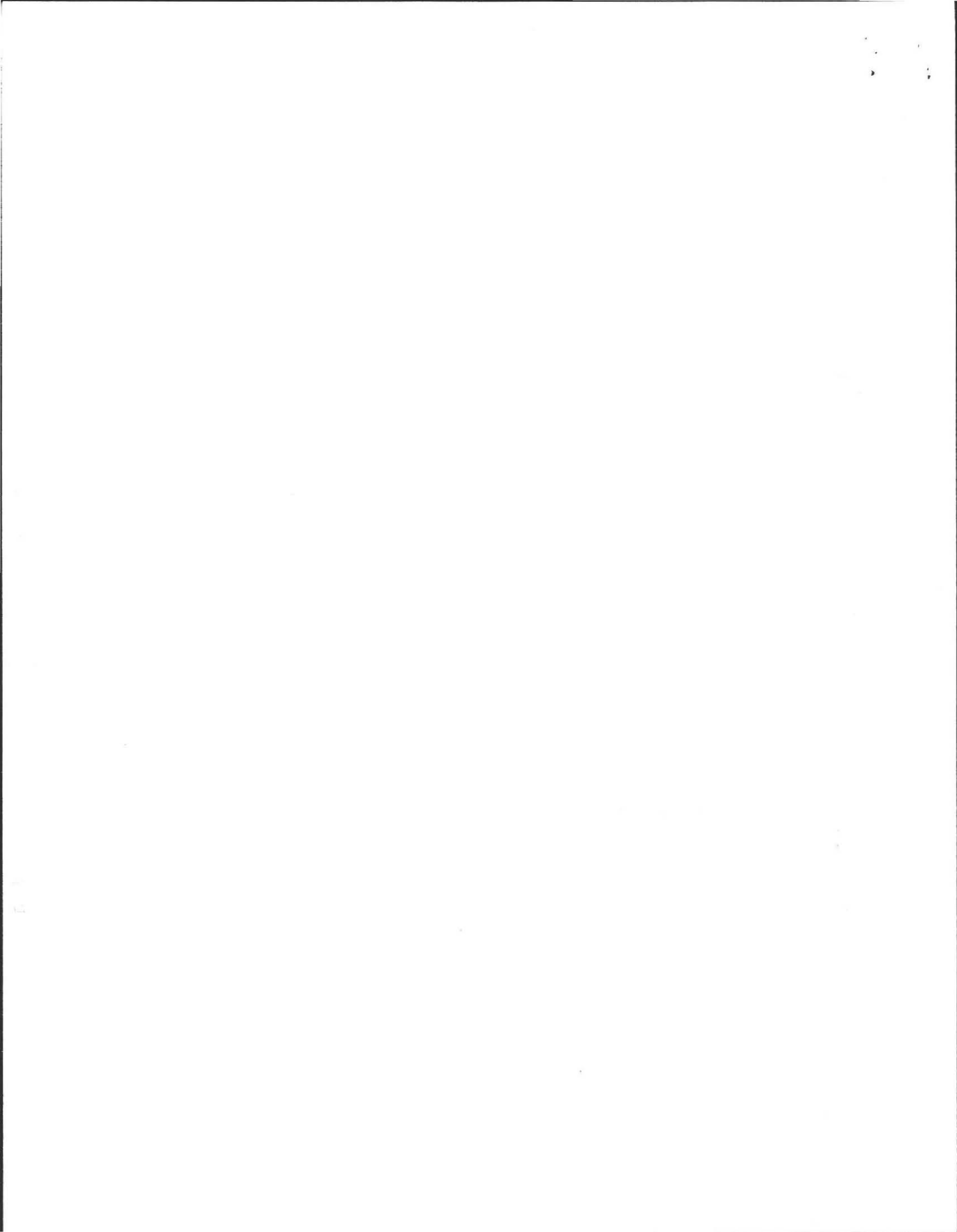


**SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART B
CHECKLIST**

Property Address: 351 PotwinE
 Owner: Mandie
 Date of Inspection: 7/5/00

Check if the following have been done: You must indicate either "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 checked="" type="checkbox"/> | <input type="checkbox"/> | None of the system components have been pumped for at least two weeks and the system has been receiving normal flow rates during that period. Large volumes of water have not been introduced into the system recently or as part of this inspection. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | As built plans have been obtained and examined. Note if they are not available with N/A. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The facility or dwelling was inspected for signs of sewage back-up. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The system does not receive non-sanitary or industrial waste flow. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The site was inspected for signs of breakout. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | All system components, excluding the Soil Absorption System, have been located on the site. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The septic tank manholes were uncovered, opened, and the interior of the septic tank was inspected for condition of baffles or tees, material of construction, dimensions, depth of liquid, depth of sludge, depth of scum.
The size and location of the Soil Absorption System on the site has been determined based on: |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Existing information. For example, Plan at B.O.H. |
| <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) [15.302(3)(b)] |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The facility owner (and occupants, if different from owner) were provided with information on the proper maintenance of SubSurface Disposal Systems. |



SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION

Property Address: 351 Retwine
Owner: Mardik
Date of Inspection: 7/15/00

FLOW CONDITIONS

RESIDENTIAL:

Design flow: 440/550 g.p.d./bedroom.
Number of bedrooms (design): _____ Number of bedrooms (actual): 4
Total DESIGN flow 550
Number of current residents: 4
Garbage grinder (yes or no): N
Laundry (separate system) (yes or no): N; If yes, separate inspection required
Laundry system inspected (yes or no)
Seasonal use (yes or no): N
Water meter readings, if available (last two year's usage (gpd): Nil
Sump Pump (yes or no): N
Last date of occupancy: Current

COMMERCIAL/INDUSTRIAL:

Type of establishment: _____
Design flow: _____ gpd (Based on 15,203)
Basis of design flow _____
Grease trap present: (yes or no) _____
Industrial Waste Holding Tank present: (yes or no) _____
Non-sanitary waste discharged to the Title 5 system: (yes or no) _____
Water meter readings, if available: _____
Last date of occupancy: _____

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

GENERAL INFORMATION

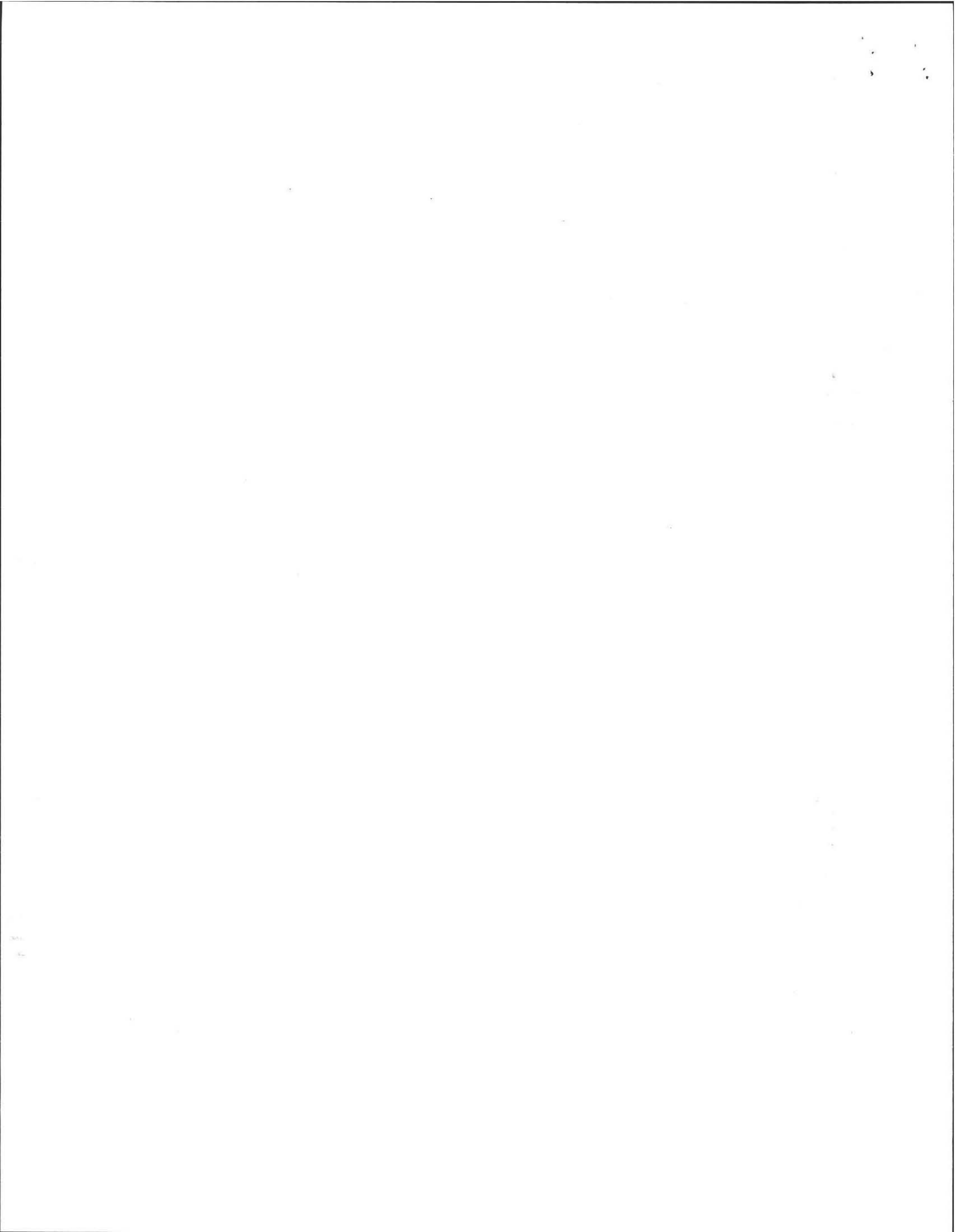
PUMPING RECORDS and source of information:
1991 Pumped 1999, owner, not want pumped.
System pumped as part of inspection: (yes or no) _____
If yes, volume pumped: _____ gallons
Reason for pumping: _____

TYPE OF SYSTEM

Septic tank/distribution box/soil absorption system
 Single cesspool
 Overflow cesspool
 Privy
 Shared system (yes or no) (if yes, attach previous inspection records, if any)
 I/A Technology etc. Attach copy of up to date operation and maintenance contract
 Tight Tank _____ Copy of DEP Approval
Other _____

APPROXIMATE AGE of all components, date installed (if known) and source of information: 5 years.

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



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

Property Address: 351 Detwiler
Owner: Mandele
Date of Inspection: 7/5/00

BUILDING SEWER:
(Locate on site plan)

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

Distance from private water supply well or suction line 10'
Diameter 4"
Comments: (condition of joints, venting, evidence of leakage, etc.)
OK

SEPTIC TANK:
(locate on site plan)

Depth below grade: 4-6" MGA
Material of construction: concrete metal Fiberglass Polyethylene other(explain)

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

Dimensions: 10.5' x 9.5' x 9.5' (1500 gal.)
Sludge depth: 2"
Distance from top of sludge to bottom of outlet tee or baffle: 48"
Scum thickness: 2"
Distance from top of scum to top of outlet tee or baffle: 6"
Distance from bottom of scum to bottom of outlet tee or baffle: 12"
How dimensions were determined: measured

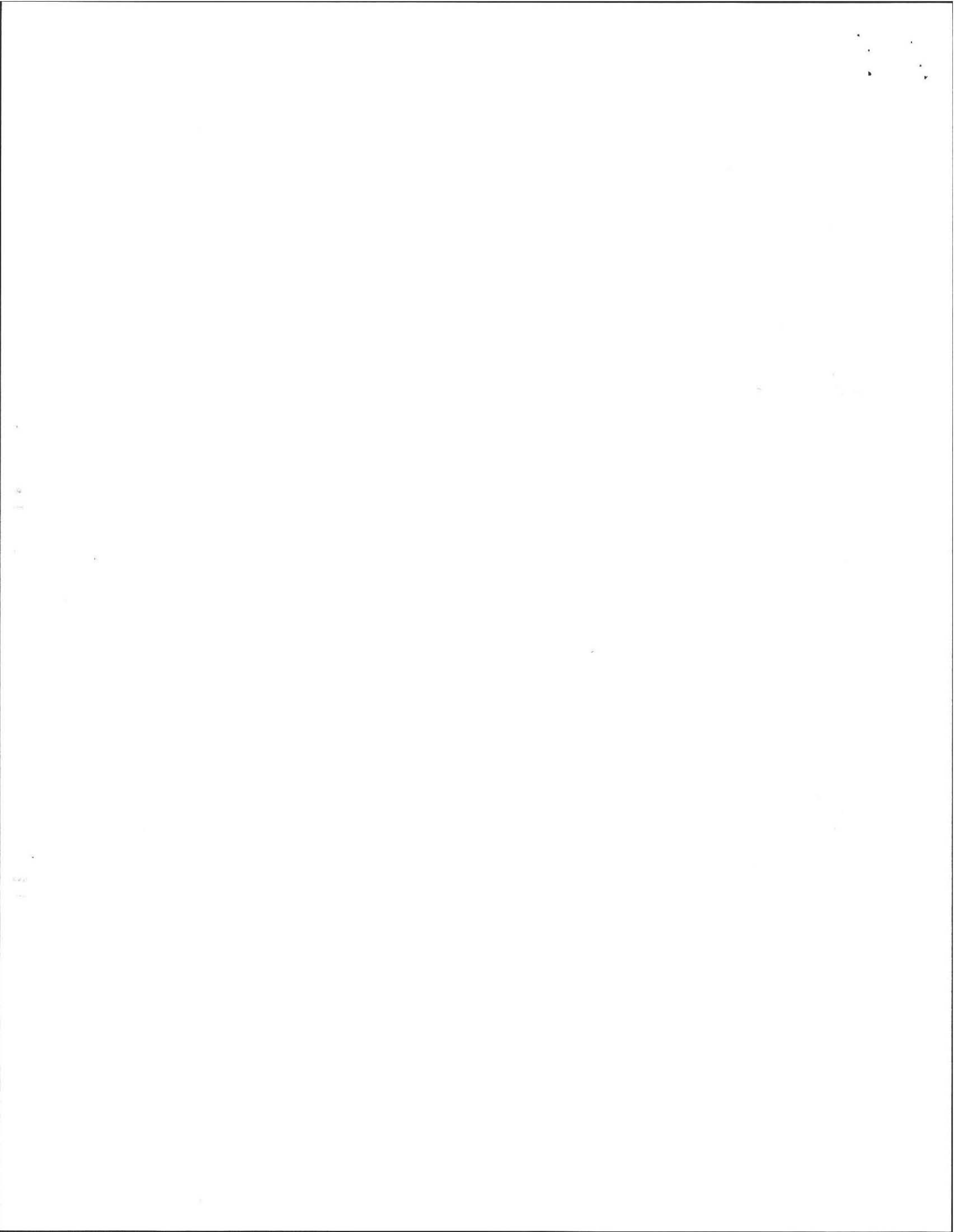
Comments:
(recommendation for pumping, condition of inlet and outlet tees or baffles, depth of liquid level in relation to outlet invert, structural integrity, evidence of leakage, etc.) OK Good Condition

GREASE TRAP: _____
(locate on site plan)

Depth below grade: _____
Material of construction: concrete metal Fiberglass Polyethylene other(explain)

Dimensions: _____
Scum thickness: _____
Distance from top of scum to top of outlet tee or baffle: _____
Distance from bottom of scum to bottom of outlet tee or baffle: _____
Date of last pumping: _____

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



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

Property Address: 351 Potwine
Owner: Mandele
Date of Inspection: 7/5/00

TIGHT OR HOLDING TANK: _____ (Tank must be pumped prior to, or at time of, inspection)
(locate on site plan)

Depth below grade: _____
Material of construction: ___concrete ___metal ___Fiberglass ___Polyethylene ___other(explain)

Dimensions: _____
Capacity: _____ gallons
Design flow: _____ gallons/day
Alarm present _____
Alarm level: _____ Alarm in working order: Yes ___ No ___
Date of previous pumping: _____
Comments:
(condition of inlet tee, condition of alarm and float switches, etc.)

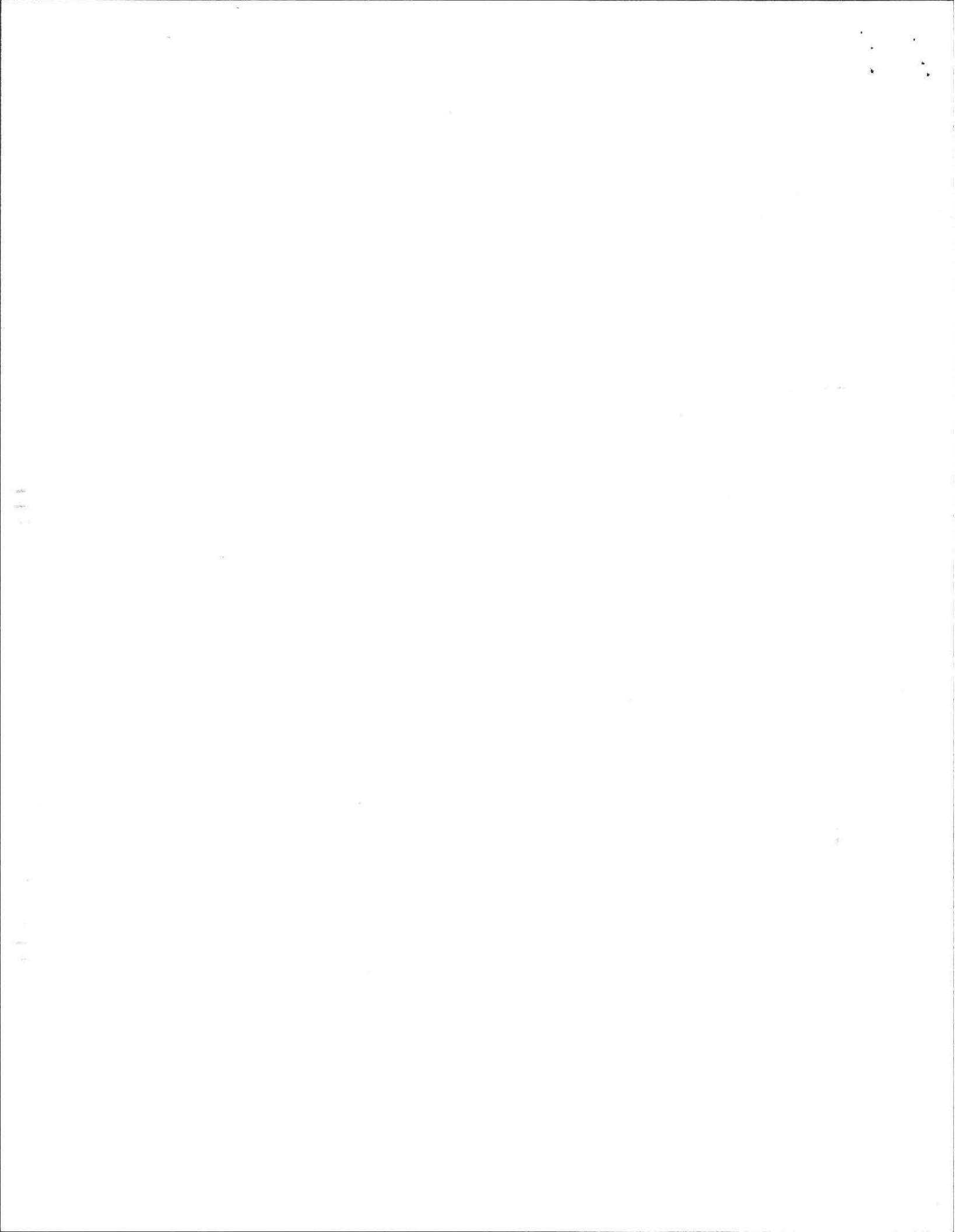
DISTRIBUTION BOX: _____
(locate on site plan)

Depth of liquid level above outlet invert at inlet.

Comments:
(note if level and distribution is equal, evidence of solids carryover, evidence of leakage into or out of box, etc.) _____
ok. No carry over. good Dist. level.

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.) _____



SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM

PART C

SYSTEM INFORMATION (continued)

Property Address: 351 Retuire
Owner: Mandde
Date of Inspection: 7/5/00

SOIL ABSORPTION SYSTEM (SAS):

(locate on site plan, if possible; excavation not required, location may be approximated by non-intrusive methods)

If not located, explain:

Type:

leaching pits, number: _____
leaching chambers, number: _____
leaching galleries, number: _____
leaching trenches, number, length: _____
leaching fields, number, dimensions: (12' x 80')
overflow cesspool, number: _____
Alternative system: _____
Name of Technology: _____

Comments:

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

OK, no sign of failure.

CESSPOOLS: _____

(locate on site plan)

Number and configuration: _____
Depth-top of liquid to inlet invert: _____
Depth of solids layer: _____
Depth of scum layer: _____
Dimensions of cesspool: _____
Materials of construction: _____
Indication of groundwater: _____
inflow (cesspool must be pumped as part of inspection) _____

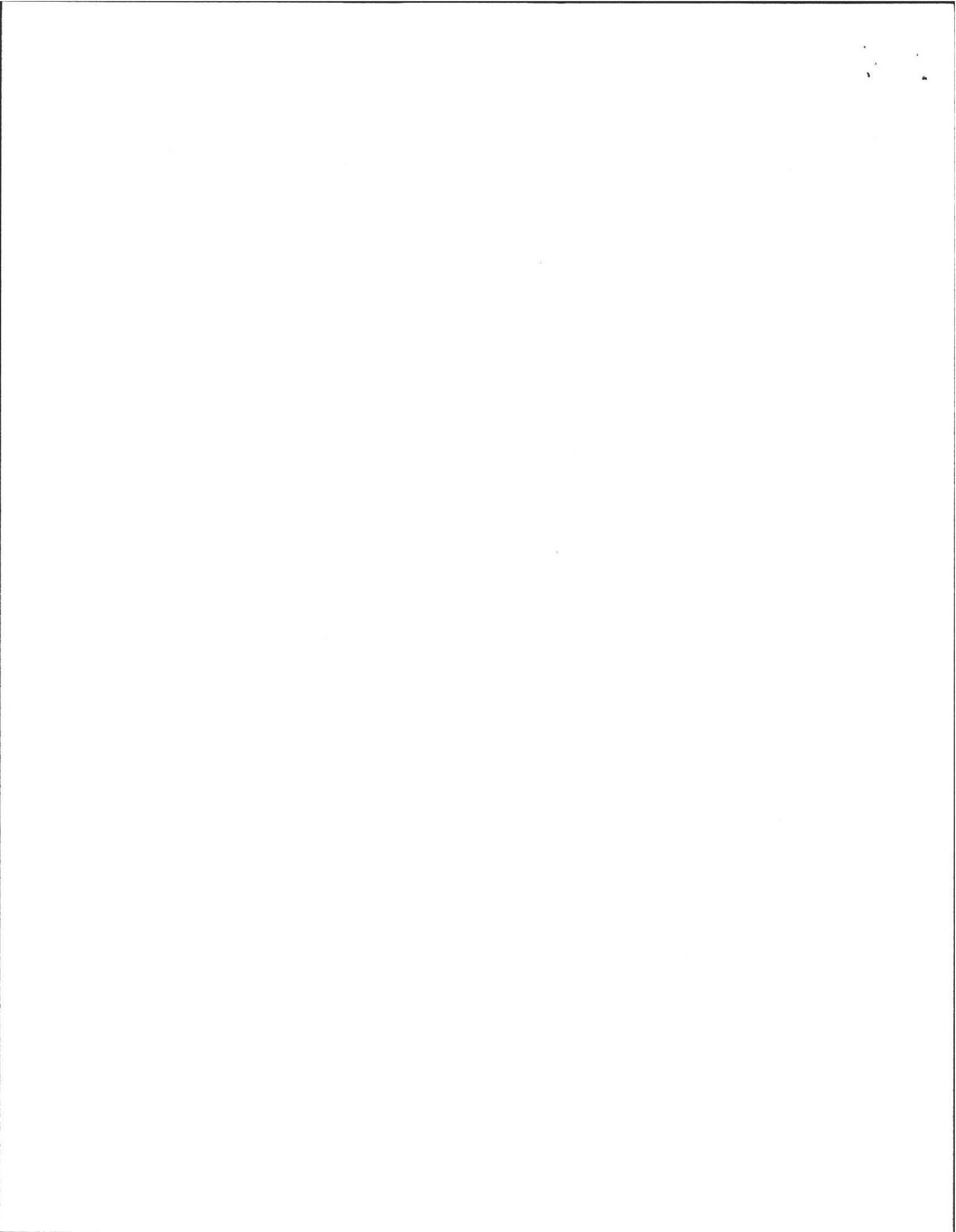
Comments:

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

PRIVY: _____

(locate on site plan)

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



SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM

PART C

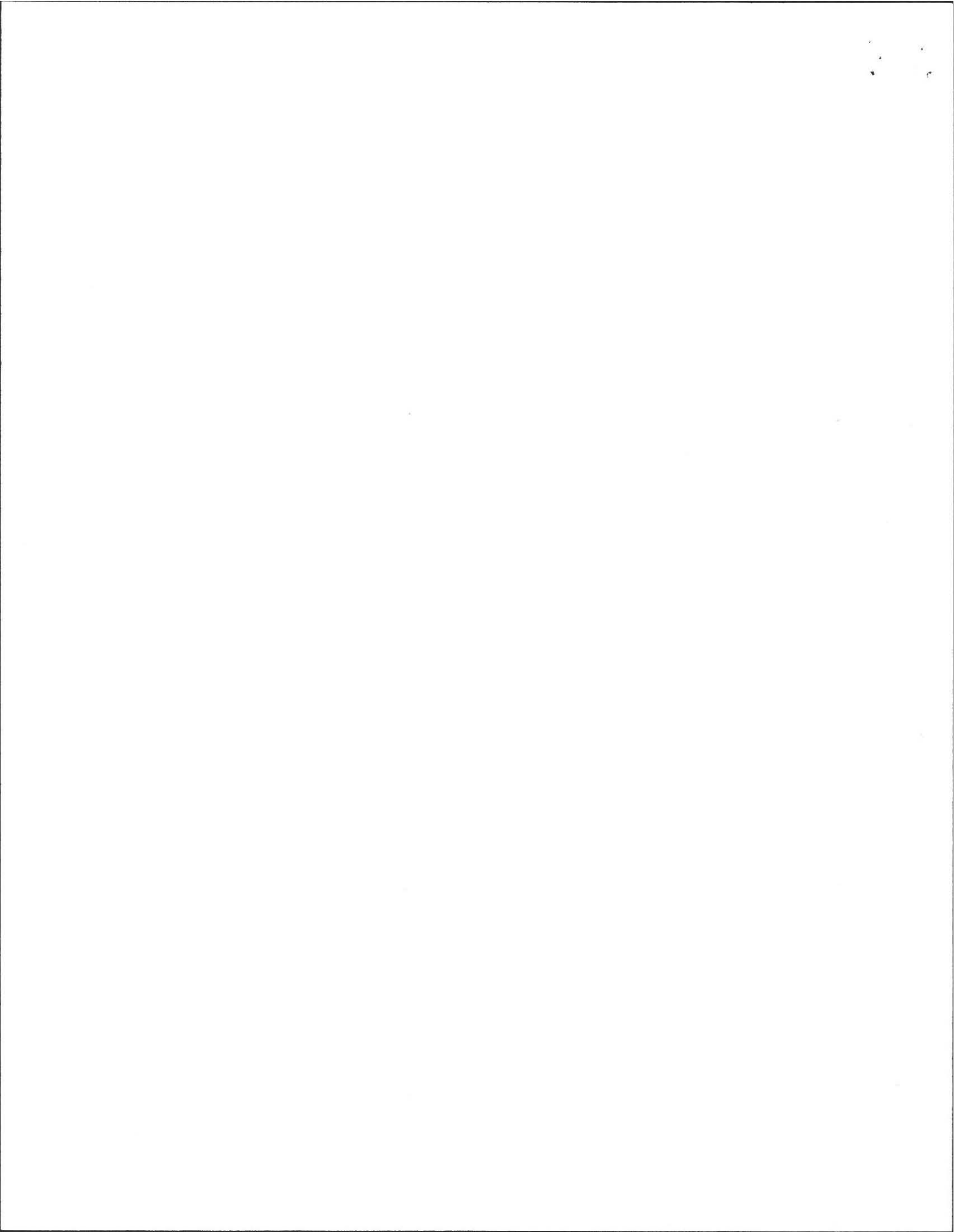
SYSTEM INFORMATION (continued)

Property Address: 351 Potwin
Owner: Mondde
Date of Inspection: 7/5/00

SKETCH OF SEWAGE DISPOSAL SYSTEM:

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

See attached As Built.



SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM

PART C

SYSTEM INFORMATION (continued)

Property Address: 351 Potwine
Owner: Mangle
Date of Inspection: 7/5/00

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

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

SITE EXAM Slope _____
Surface water _____
Check Cellar _____
Shallow wells _____

Estimated Depth to Groundwater 3-4 Feet From Bot. of SAS.

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

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

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

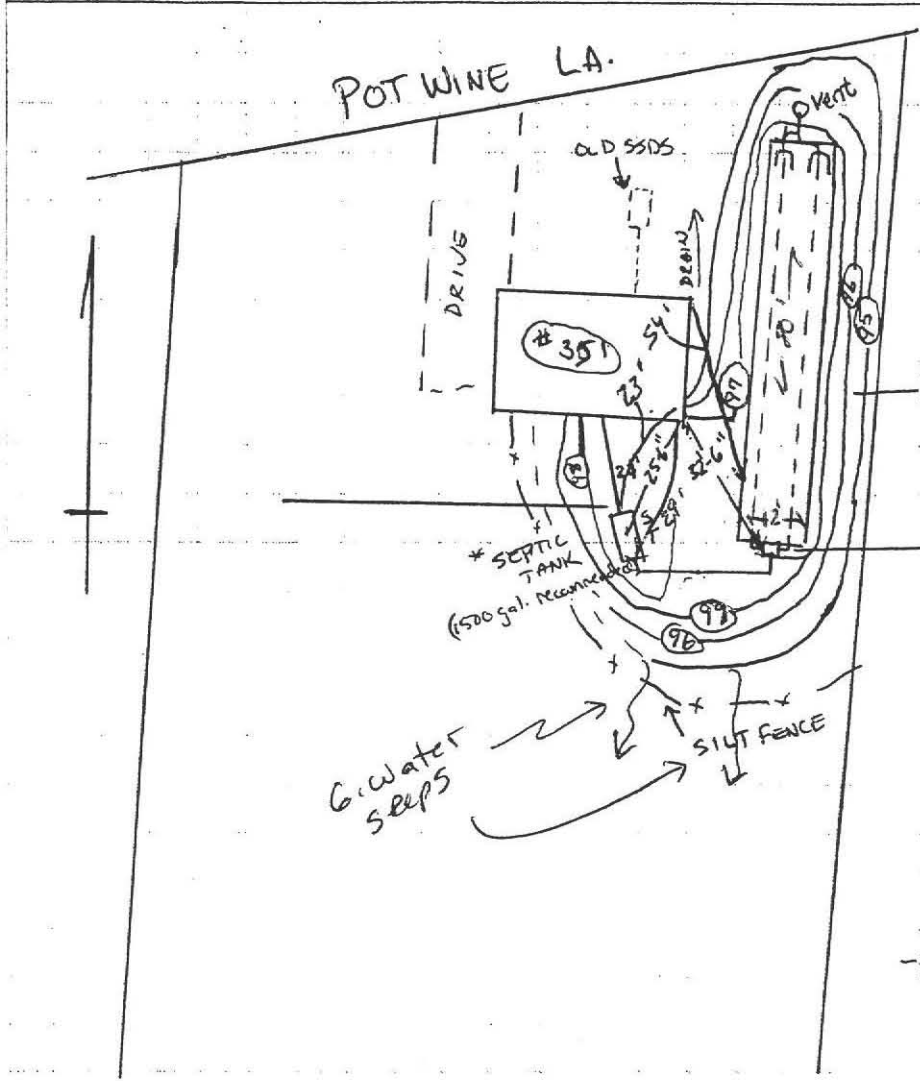
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COLD SPRING ENVIRONMENTAL CONSULTANTS

Belchertown, MA 01007 • (413) 323-5957

JOB MANDLE SEPTIC - ADDENDUM
 SHEET NO. 1 OF 1
 CALCULATED BY A. Weiss DATE 2/14/95
 CHECKED BY (AW) DATE 4/25/95
 SCALE 1" = 40' (Revised 7/5/00)



- INU. AT House 97.60
- INU. SEP. TANK IN 97.15
- INU. " " OUT 96.90
- INU. D.B. IN 96.65
- INU. D.B. OUT 96.45
- INU. Leach IN 96.35
- INU. Leach OUT 95.95
- BOT BED AT 95.45

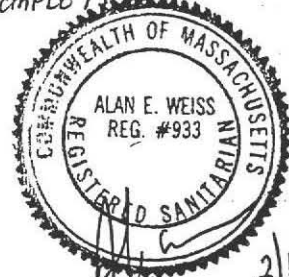
AS BUILT 4/25/95

DEP Transmittal # 58599
 DEP Project # 94-251
 CSEC Project # 94-404

-FINAL INSPECTION 4/25/95

- NOTE! - WITH THIS CHANGE
- PLUMBING COST TO BE LOWER.
 - NO PUMP & CHAMBER NEEDED.
 - MORE FILL REQUIRED IN REAR OF HOUSE
 - MUST ENCLOSE WORK AREA W/ SILT FENCE.
 - BED ELEVATION + LOCATION IS SAME. AS APPROVED.
 - BED PITCH IS TO NORTH.
 - MULCH + SEED AT COMPLETION.

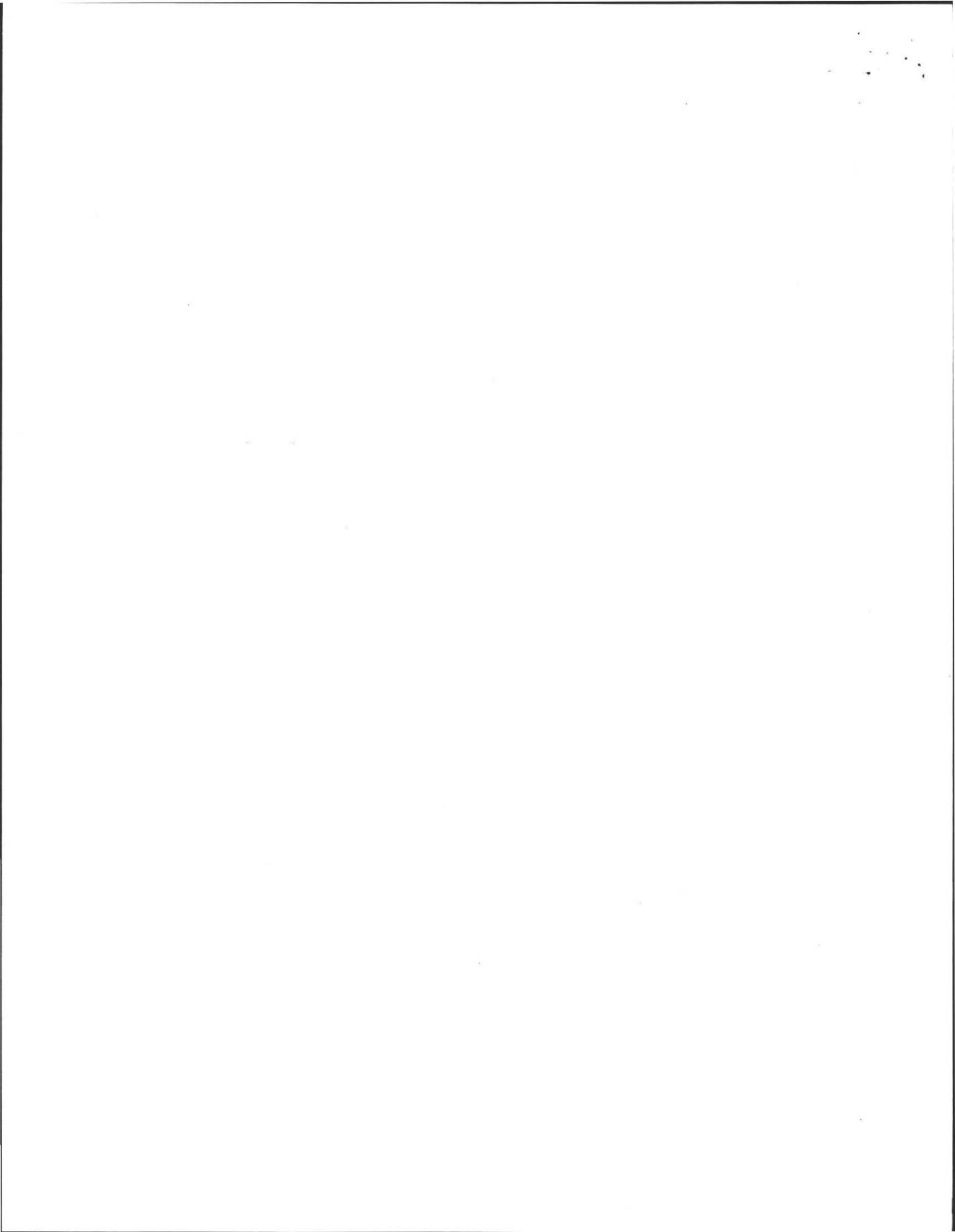
NOTE: PLUMBING AT REAR W/O PUMP COMPLETED
 AT RECOMMENDATION OF INSTALLER IN ORDER
 TO ACHIEVE GRAVITY FLOW AND MINIMIZE BASEMENT
 PLUMBING + CARPENTRY (FINISHED BASEMENT).



4/25/95

2/14/95

(AW)



No. 94-21

#351



THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF AMHERST

Application for Disposal Works Construction Permit

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

351 POTWINE LANE

LOT #2

DIAN MANDLE

351 POTWINE LA

Location - Address

or Lot No.

Owner

Address

Installer

Address

Type of Building

Size Lot 36,048 Sq. feet

Dwelling - No. of Bedrooms 4 Expansion Attic (N) Garbage Grinder (N)

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

Other fixtures

Design Flow 55 1500 gallons per person per day. Total daily flow 440 gallons.

Septic Tank - Liquid capacity 1000 gallons Length 102" Width 58" Diameter Depth 35"

Disposal Trench - No. 1 Width 12' Total Length 30' Total leaching area 760 sq. ft.

Seepage Pit No. Diameter Depth below inlet Total leaching area sq. ft.

Other Distribution box () Dosing tank ()

Percolation Test Results Performed by A. WEISS Date 10/2/94

Test Pit No. 1 4 minutes per inch Depth of Test Pit 11' Depth to ground water 7'

Test Pit No. 2 minutes per inch Depth of Test Pit 10' Depth to ground water (EXIDES 24")

Description of Soil BROWN SAND AND GRAVEL OVER GREY CLAY

Nature of Repairs or Alterations - Answer when applicable NEW L.FIELD, S. TANK, W/ PUMP & CHAMBER, RAISED BED REQ'D, REPIPE BASEMENT TO ACCOMMODATE.

Agreement:

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

Signed Dian Mandle Date 10/25/94

Application Approved By Date

Application Disapproved for the following reasons: Date

Permit No. 94-21 Issued Date

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF Amherst

Certificate of Compliance

THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed () or Repaired (X) by at 351 Potwine Lane Installer Date 4/28/95 has been installed in accordance with the provisions of TITLE 5 of The State Environmental Code as described in the application for Disposal Works Construction Permit No. 94-21 dated

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

DATE Inspector

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF Amherst

TO Be Pd By C.D.B.G. FEE

No. 94-21

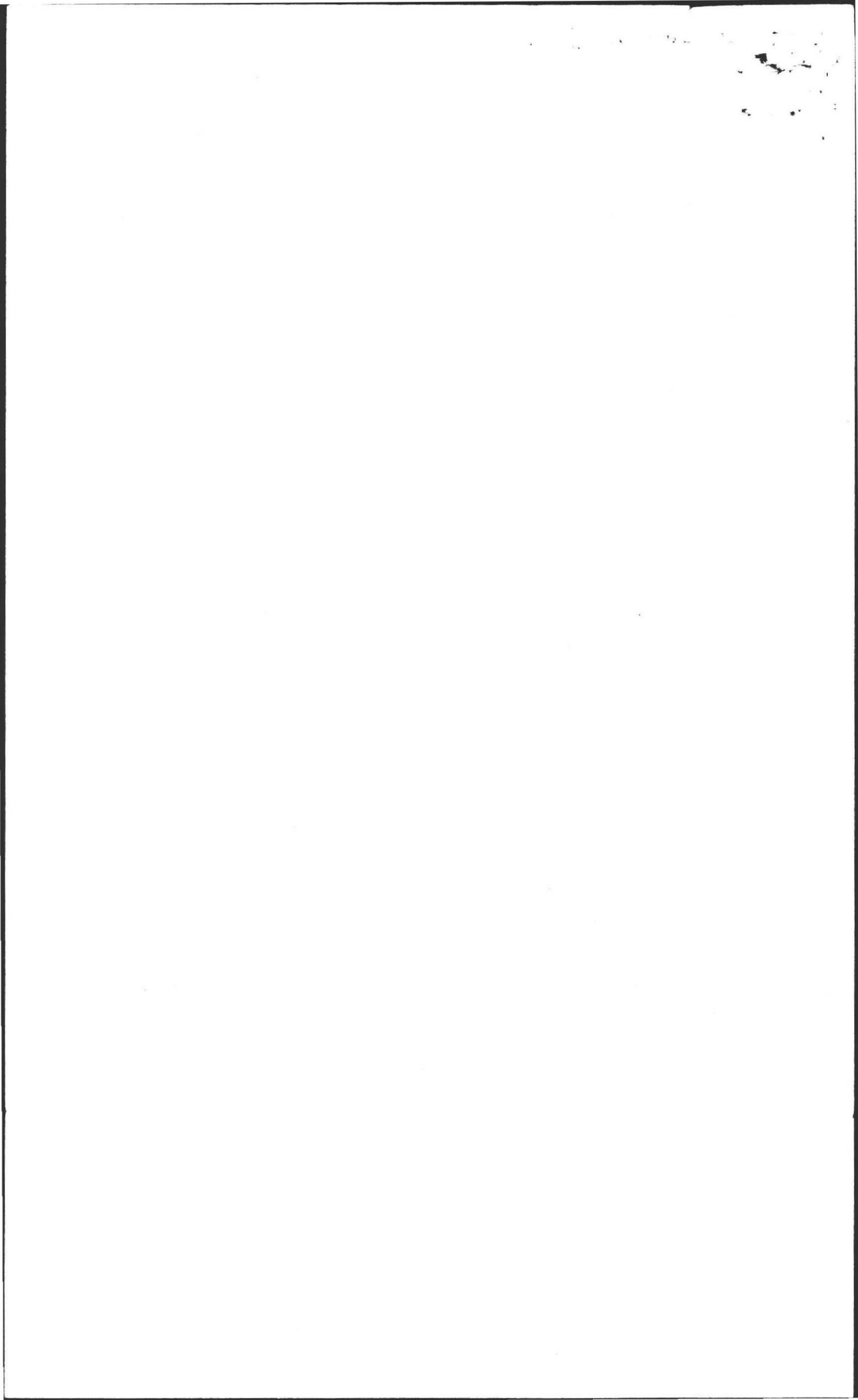
Disposal Works Construction Permit

Permission is hereby granted to Construct () or Repair (X) an Individual Sewage Disposal System at No. 351 Potwine Lane

as shown on the application for Disposal Works Construction Permit No. 94-21 Dated

DATE 4/25/95 Board of Health

CHECK OR FILL IN WHERE APPLICABLE





**COLD SPRING ENVIRONMENTAL
CONSULTANTS, INC.**

- 21E Site Investigations
- Subsurface Investigations
- Pollution Remediation
- LSP on Staff

- Percolation Tests and Septic Designs
- Regulatory Compliance
- Recycling and Solid Waste

October 24, 1994

Mr. Paul Netupsky
Massachusetts Department of Environmental Protection
Bureau of Water Pollution Control, 436 Dwight Street
Springfield, Ma. 01103

Mr. David Zarozinski, Agent
Amherst Health Department
Amherst Ma. 01002

RE: Septic System Repair & Variance Approval
Dian Mandle Residence, 351 Potwine Lane, Amherst, Ma.
Transmittal Form # 58599

Dear Mr. Netupsky & Mr. Zarozinski:

A variance from Title V is requested for the repair of the system at the above mentioned property. The following variances are noted:

- lack of space for 25 fill around the system due to property line and house proximity (310 CMR 15.02(17)).
- lack of 4 feet of percable native material beneath the leaching system (310 CMR 15.03(6)).
- lack of 4 foot groundwater separation from beneath the septic system in order to minimize runoff and grade problems toward house (3 foot is proposed).

Similarly, the Amherst Health Department has been contacted herein on the same variance request and I have noted to them that I have had a previous telephone conversation with you regarding the groundwater separation issue. Because groundwater in the neighborhood of the site is not used for potable purposes and the proposed approach would also mitigate slope and possible breakout concerns, you noted the Department (DEP) would likely consider the request as feasible for approval subject to complete review of the variance request.

Finally, A determination of Applicability will be forwarded to the Amherst Conservation Department and the Mass. DEP-Wetlands Division because of the proposed filling in the buffer zone. Our experience with this situations is that the submittal is routine and the work will be allowed as proposed.

It is my opinion that given all the possible scenarios for a new disposal system, and due to spatial constraints, that this plan best meets the intent on the Sanitary Code 310 CMR 15.00 and the Wetlands Protection Regulations 310 CMR 10.00.

Please see the proposed plan attached (four copies). This approval request has

OCT 24 1994

Page 2:

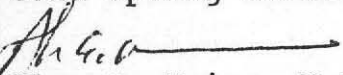
October 24, 1994

also been sent to the Amherst Board of Health who will have approved the variance (see Attachment). The Amherst Conservation Commission and the DEP Wetland Office in Springfield have also been sent appropriate Determination of Applicability Filings. A filing fee of \$ 200.00 has been sent to Boston with the proper administrative forms also attached.

Please feel free to contact me should you have any questions.

Sincerely,

Cold Spring Environmental Consultants, Inc.


Alan E. Weiss, M.S.
President
Principal Hydrogeologist
Registered Sanitarian Lic. #933

cc: Dian Mandle, 351 Potwine La., Amherst



OCT 24 1994

I support the request for these variances because:

- 1) Town water is available.
- 2) The system is designed twenty-five percent (25%) larger than Title V.
- 3) The current system has failed. In my opinion, with the constraints of the layout of the land and developed area, this septic system plan is the best design considering the circumstances.

Town of



AMHERST

Massachusetts

Bettye Anderson Frederic, Director

AMHERST HEALTH DEPARTMENT

70 BOLTWOOD WALK
AMHERST, MA 01002-2128
(413) 256-4077

Date: November 9, 1994
To: Bettye Anderson Frederic
From: David Zarozinski
Re: Variance Request from Title V to repair a septic system
located at 351 Potwine Lane, Amherst, MA

The past history of this area, according to our records on file dating back to 1964, state that:

- 1) The percolation rates vary from 2 minutes per inch to 15 minutes per inch.
- 2) The water table average is 3 to 4 feet.
- 3) Soils vary from sand to sandy clay to clay.

I have reviewed the septic system plans for Ms. Dian Mandle, prepared by Mr. Alan Weiss of Cold Spring Environmental.

The variances from Title V are as follows:

- 1) There will be a variance from the requirement of twenty-five feet (25') of fill around the leach bed. Instead, there will be approximately seventeen feet (17') of fill.
- 2) There will be a variance from the requirement of four feet (4') of native percable material beneath the leaching system [regulation - 15.03 (6)].
- 3) There will be a variance from the requirement of a four foot (4') groundwater separation from beneath the leaching system. In order to minimize runoff and grade problems, a three foot (3') separation is proposed.

15.03 (6)

It's time we made smoking history.

15.02: continued

(6) Required Depth of Pervious Material. Subsurface sewage disposal systems shall be located in an area where there is at least a 4 foot depth of naturally occurring pervious soil below the entire area of the leaching facility. The naturally occurring pervious soil shall have a percolation rate less than or equal to 30 minutes per inch or 20 minutes per inch for systems over 2000 gallons per day and the 4 foot stratum must be free of impervious materials, such as layers of clay, silt, subsoil or loam.

(7) Distances.(1)(2) No disposal facility shall be closer than the distances stated to the components listed in the following table. The distance shall be increased where required by conditions peculiar to a location.

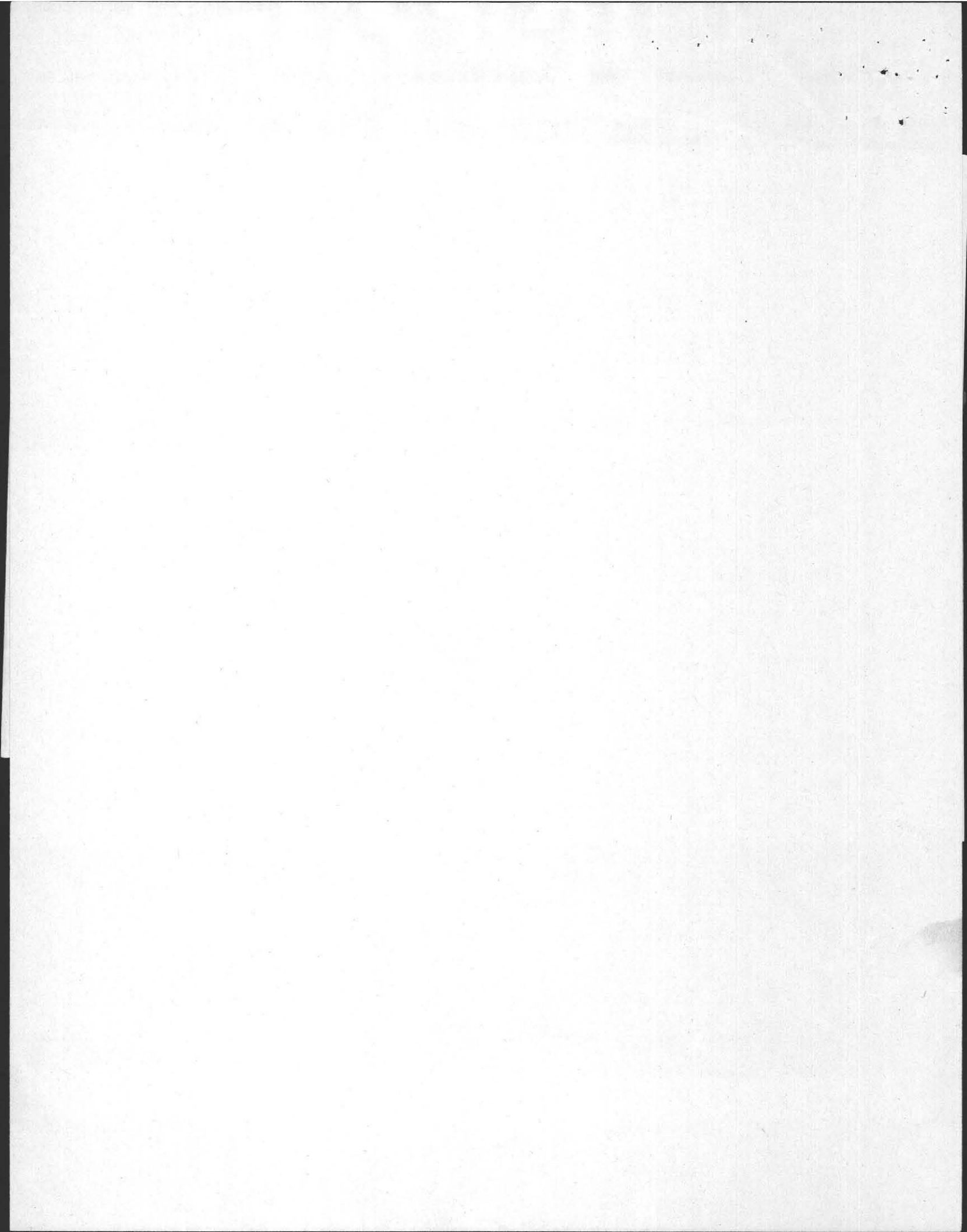
12/31/86

310 CMR - 296

(17) Construction in Fill. Where an individual sewage disposal system is to be constructed wholly or partially in fill, the fill shall be properly placed and compacted to minimize settlement or it shall be allowed to settle for a minimum of 12 months whichever occurs first. The fill material shall be clean coarse washed sand or other clean granular material essentially free from clay, fines, dust, organic matter, large stones, masonry, stumps, frozen clumps of earth, wood, tree branches, and waste construction material, and shall have a percolation rate of less than 2 minutes per inch before and after placement. Before the fill is put in place, all trees, brush, and stumps shall be removed from the area to be filled. Topsoil, peat, and other impervious materials shall be removed from all areas beneath the leaching facility and for a distance of 25 feet in all directions therefrom when the leaching facility is above natural ground elevation; or impervious materials shall be removed for 10 feet in all directions therefrom when the leaching facility is below natural ground elevation. No sewage disposal system shall be constructed in fill placed upon impervious material unless the requirements of 310 CMR 15.03(6) have been met.

12/31/86

310 CMR - 293



Town of



AMHERST

Massachusetts

DEC 14 1994

TOWN HALL
4 BOLTWOOD AVENUE
AMHERST, MA 01002-2351

PLANNING DEPARTMENT
Planning (413) 256-4040
Community Development 256-4042
FAX (413) 256-4041

ml TO: Bettye Anderson Frederic, Health Director

FROM: Marlene Leach, CDBG Administrator

DATE: December 12, 1994

RE: Amherst Board of Health letter to Department of Environmental Protection (D.E.P.) for Mandle Septic System

Please send me a copy of the letter sent to D.E.P. by the Amherst Board of Health regarding the Septic System for Dian Mandle's property at 351 Potwine Lane, Amherst, MA. Thank you.

cc: Connie Kruger, Community Development Planner

Sent - 12 14 94 to Connie

November 19, 1994

Mr. Paul Netupsky
Mass. Dept. of Environ. Protection
Water Pollution Control
436 Dwight Street
Springfield Massachusetts 01103

Transmittal # 58599

Dear Mr. Netupsky:

The Amherst Board of Health at their meeting on November 16, 1994 voted unanimously to support the Title V variance request submitted for Ms. Dian Mandle of 351 Potwine Lane, Amherst Massachusetts as follows:

- o 310 CMR 15.02(17) Construction in Fill - Propose 17 feet
Lack of space for 25 feet fill around system.
- o 310 CMR 15.03(6) Required Depth of Pervious Material -
Propose 3 feet - Lack of 4 feet of percable native
materials.
- o 310 CMR 15.12(2) Ground Water - Propose 3 feet
Lack of 4 foot separation to minimize runoff.

It is the Board's opinion that the applicant has proved that the same degree of environmental protection required under this Title can be achieved without strict application of the particular provision.

Sincerely,

Bettye Anderson Frederic
Health Director

November 19, 1994

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Mass. Dept. of Environ. Protection
Water Pollution Control
436 Dwight Street
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Lack of 4 foot separation to minimize runoff.

It is the Board's opinion that the applicant has proved that the same degree of environmental protection required under this Title can be achieved without strict application of the particular provision.

Sincerely,

Bettye Anderson Frederic
Health Director

November 19, 1994

Ms. Dian Mandle
351 Potwine Lane
Amherst Massachusetts 01002

Dear Ms. Mandle:

The Amherst Board of Health at their meeting on November 16, 1994 voted unanimously to support the Title V variance request submitted for Ms. Dian Mandle of 351 Potwine Lane, Amherst Massachusetts as follows:

- o 310 CMR 15.02(17) Construction in Fill - Propose 17 feet
Lack of space for 25 feet fill around system.
- o 310 CMR 15.03(6) Required Depth of Pervious Material -
Propose 3 feet - Lack of 4 feet of percable native
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Lack of 4 foot separation to minimize runoff.

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Sincerely,

Bettye Anderson Frederic
Health Director

cc: Department of Environmental Protection



COLD SPRING ENVIRONMENTAL
CONSULTANTS, INC.

- 21E Site Investigations
- Subsurface Investigations
- Pollution Remediation
- LSP on Staff

- Percolation Tests and Septic Designs
- Regulatory Compliance
- Recycling and Solid Waste

October 24, 1994

Mr. Paul Netupsky
Massachusetts Department of Environmental Protection
Bureau of Water Pollution Control, 436 Dwight Street
Springfield, Ma. 01103

Mr. David Zarozinski, Agent
Amherst Health Department
Amherst Ma. 01002

RE: Septic System Repair & Variance Approval
Dian Mandle Residence, 351 Potwine Lane, Amherst, Ma.
Transmittal Form # 58599

Dear Mr. Netupsky & Mr. Zarozinski:

A variance from Title V is requested for the repair of the system at the above mentioned property. The following variances are noted:

- lack of space for 25 fill around the system due to property line and house proximity (310 CMR 15.02(17)).
- lack of 4 feet of percable native material beneath the leaching system (310 CMR 15.03(6)).
- lack of 4 foot groundwater separation from beneath the septic system in order to minimize runoff and grade problems toward house (3 foot is proposed).

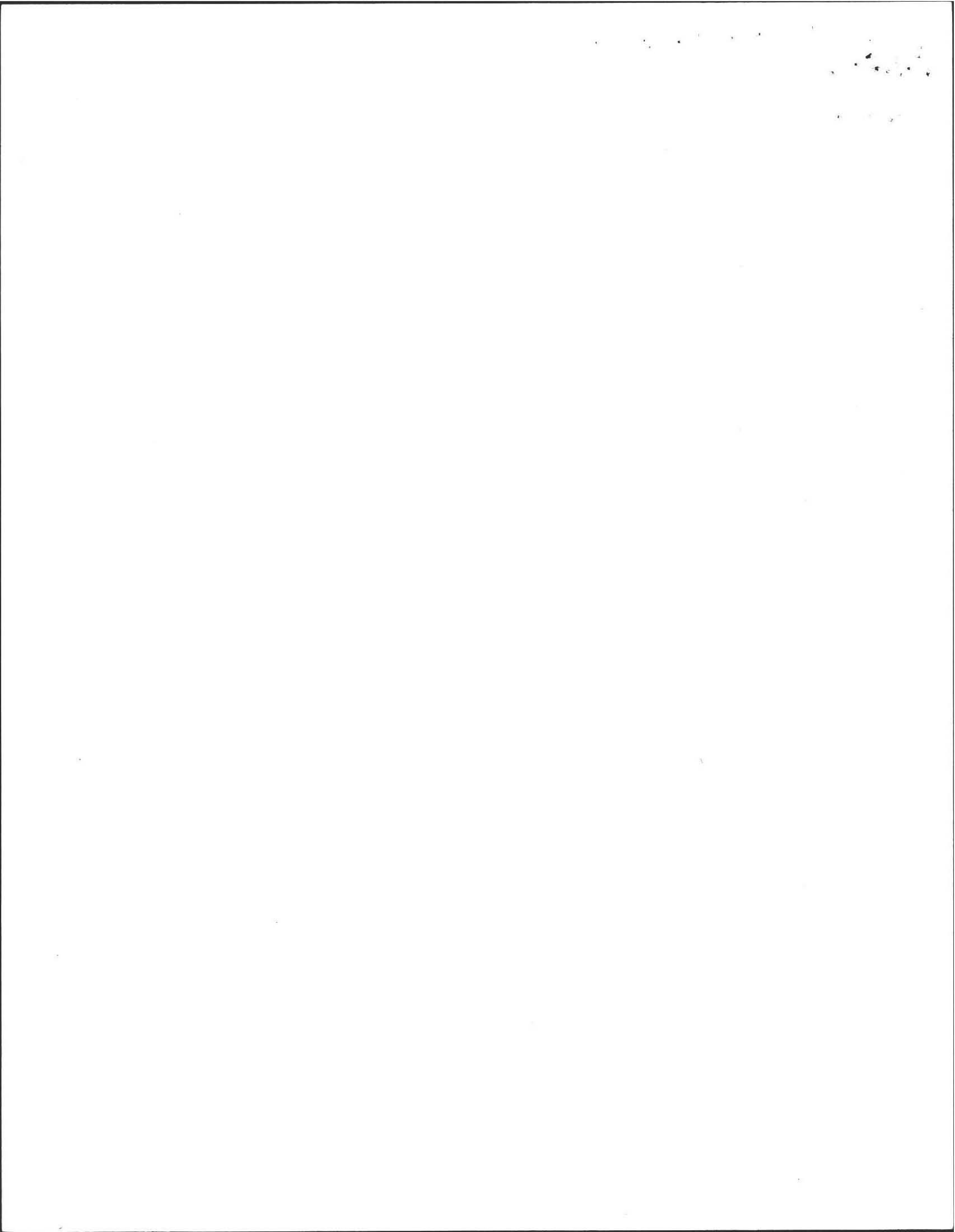
Similarly, the Amherst Health Department has been contacted herein on the same variance request and I have noted to them that I have had a previous telephone conversation with you regarding the groundwater separation issue. Because groundwater in the neighborhood of the site is not used for potable purposes and the proposed approach would also mitigate slope and possible breakout concerns, you noted the Department (DEP) would likely consider the request as feasible for approval subject to complete review of the variance request.

Finally, A determination of Applicability will be forwarded to the Amherst Conservation Department and the Mass. DEP-Wetlands Division because of the proposed filling in the buffer zone. Our experience with this situations is that the submittal is routine and the work will be allowed as proposed.

It is my opinion that given all the possible scenarios for a new disposal system, and due to spatial constraints, that this plan best meets the intent on the Sanitary Code 310 CMR 15.00 and the Wetlands Protection Regulations 310 CMR 10.00.

Please see the proposed plan attached (four copies). This approval request has

OCT 24 1994



Page 2:

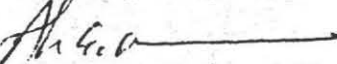
October 24, 1994

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Please feel free to contact me should you have any questions.

Sincerely,

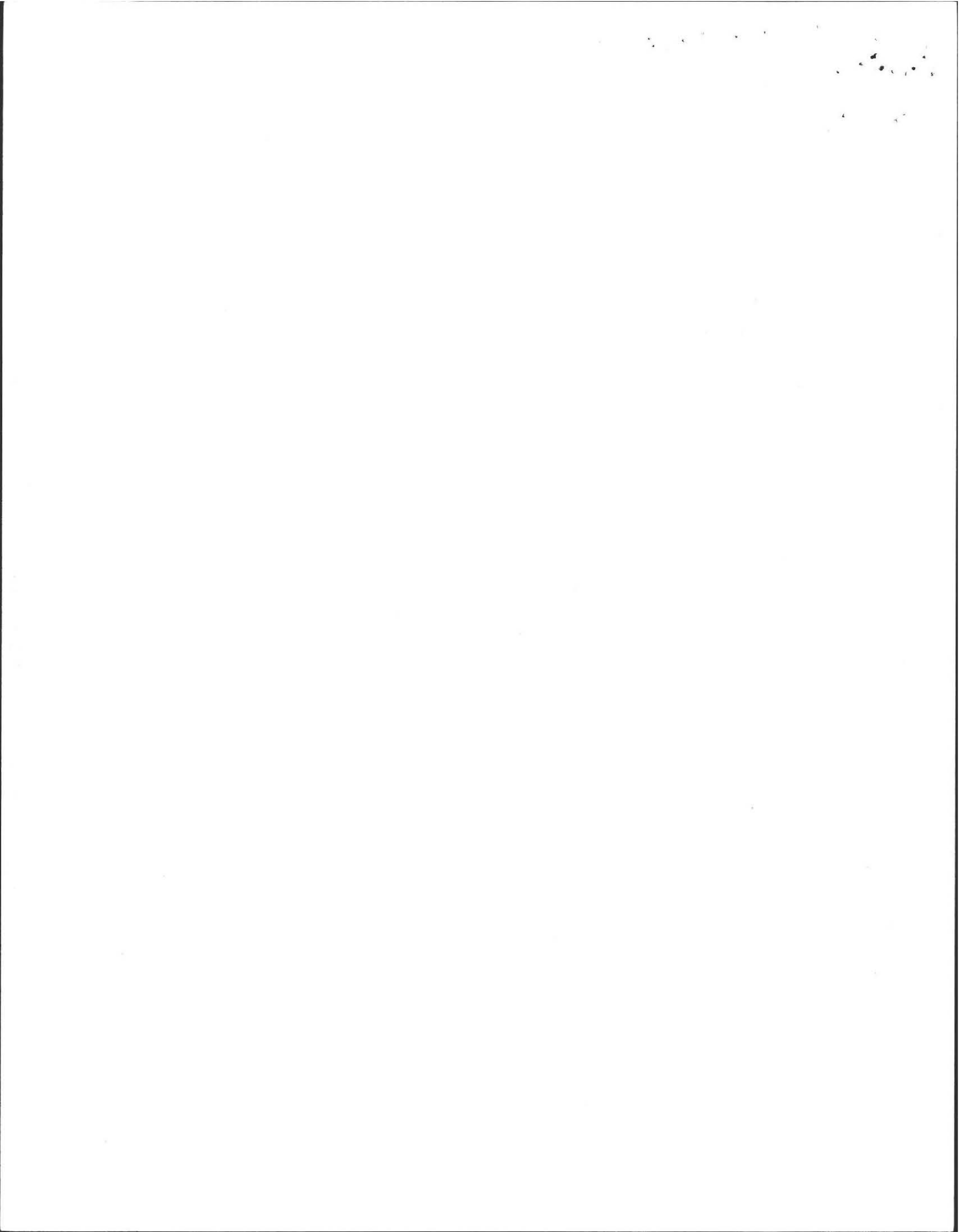
Cold Spring Environmental Consultants, Inc.


Alan E. Weiss, M.S.
President
Principal Hydrogeologist
Registered Sanitarian Lic. #933

cc: Dian Mandle, 351 Potwine La., Amherst



OCT 24 1994



Town of



AMHERST

Massachusetts

Bettye Anderson Frederic, Director

AMHERST HEALTH DEPARTMENT
70 BOLTWOOD WALK
AMHERST, MA 01002-2128
(413) 256-4077

Date: October 27, 1994
To: Bettye Anderson Frederic
From: David Zarozinski *DZ*
Re: Variance Request from Title V to repair a septic system located at 351
Potwine Lane, Amherst, MA

I have reviewed the septic system plans for Ms. Dian Mandle, prepared by
Mr. Alan Weiss of Cold Spring Environmental.

The variances from Title V are as follows:

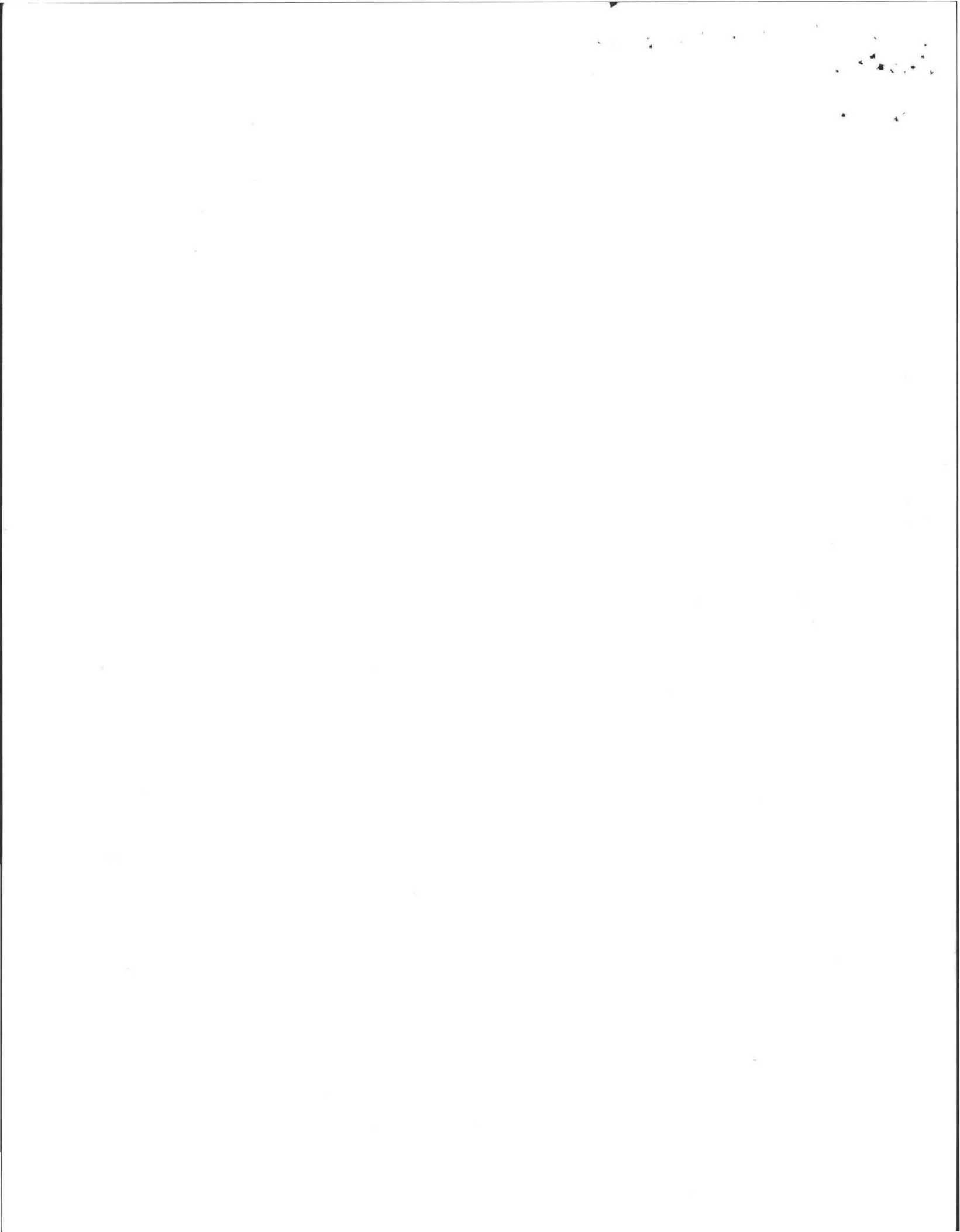
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*310 CMR
15.12 (2)*

I support the request for these variances because:

- 1) Town water is available.
- 2) The system is designed twenty-five percent (25%) larger than Title V.
- 3) The current system has failed. In my opinion, with the constraints of the layout of the land and developed area, this septic system plan is the best design considering the circumstances.

It's time we made smoking history.



No. 94-21

To Be Pd by
C. D. B. G.

THE COMMONWEALTH OF MASSACHUSETTS
BOARD OF HEALTH
TOWN OF AMHERST



Application for Disposal Works Construction Permit

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

351 POTWINE LANE ~~Lot #2~~
Location - Address or Lot No.
DIAN MANDLE 351 POTWINE LA
Owner Address
Installer Address

Type of Building Dwelling — No. of Bedrooms 4 Expansion Attic (N) Garbage Grinder (N)
Other — Type of Building Bas No. of persons Showers () — Cafeteria ()
Other fixtures

Design Flow 55 gallons per person per day. Total daily flow 440 gallons.
Septic Tank — Liquid capacity 1000 gallons Length 102' Width 58" Diameter Depth 55"
Disposal ~~Trench~~ ^{Field} — No. 1 Width 12' Total Length 80' Total leaching area 960 sq. ft.
Seepage Pit No. Diameter Depth below inlet Total leaching area sq. ft.

Other Distribution box () Dosing tank ()
Percolation Test Results Performed by A. WEISS Date 10/2/94
Test Pit No. 1 4 minutes per inch Depth of Test Pit " Depth to ground water 7'
Test Pit No. 2 minutes per inch Depth of Test Pit 10' Depth to ground water OXIDES 24"

Description of Soil BROWN SAND AND GRAVEL OVER GREY CLAY

Nature of Repairs or Alterations — Answer when applicable New L. Field, S. Tank, w/ Pump & Chamber, Raised Bed Req'd, Re-pipe Basement to Accommodate.

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

Signed Dian Mandle Date 10/25/94

Application Approved By _____ Date _____

Application Disapproved for the following reasons: _____ Date _____

Permit No. 94-21 Issued _____ Date _____

THE COMMONWEALTH OF MASSACHUSETTS
BOARD OF HEALTH
TOWN OF AMHERST
Certificate of Compliance

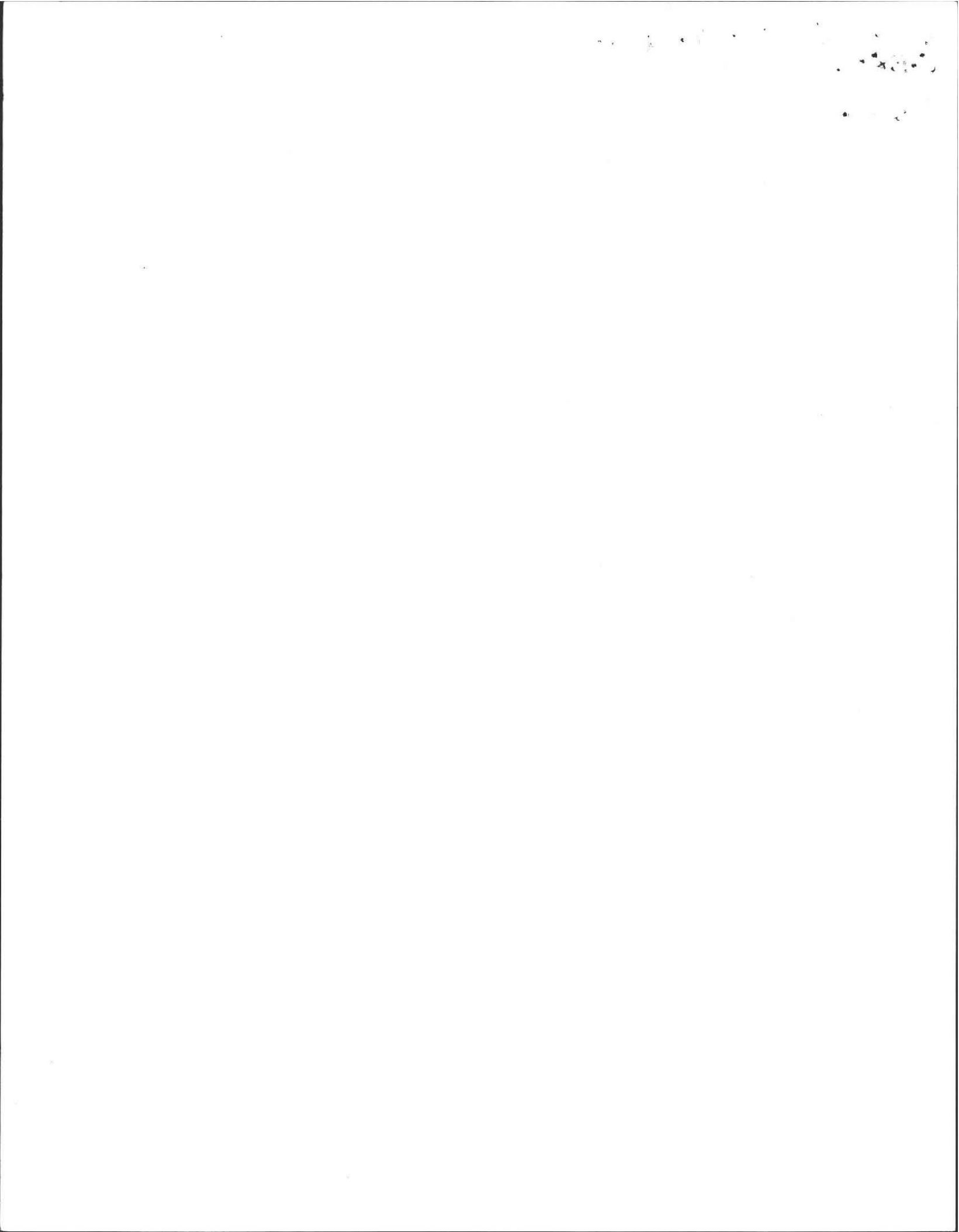
THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed () or Repaired (X) by _____

at 351 Potwine Lane has been installed in accordance with the provisions of TITLE 5 of The State Environmental Code as described in the application for Disposal Works Construction Permit No. 94-21 dated _____

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

DATE _____ Inspector _____

CHECK OR FILL IN WHERE APPLICABLE (b) X



101294 ? Planning Dept
To cover cost
(B&F)

PERC TEST DATA SHEET

DATE 10/7/94 LOCATION 351 POTWINE LANE LOT SIZE _____

OWNER DIAN MANDIE ADDRESS 351 POTWINE LANE TELE # 256-3417

P.E./RS ALAN WEISS FIRM Cold Spring Env. OBSERVED BY DAVID ZANONISKY

BACK HOE OPERATOR Charles Walker TELE 323-4407 BENCH MARK _____

PERC DEPTH 36" PRE SOAK TIME 9:01-9:16 PERC DEPTH _____ PRE SOAK TIME _____

TEST	<u>12"</u>	<u>9:16</u>	<u>8"</u>	<u>9:25</u>	_____	_____
	<u>11"</u>	<u>9:17</u>	<u>7"</u>	<u>9:28</u>	_____	_____
	<u>10"</u>	<u>9:19</u>	<u>6"</u>	<u>9:32</u>	_____	_____
	<u>9"</u>	<u>9:22</u>	<u>3"</u>	<u>in 10 MIN</u>	_____	_____

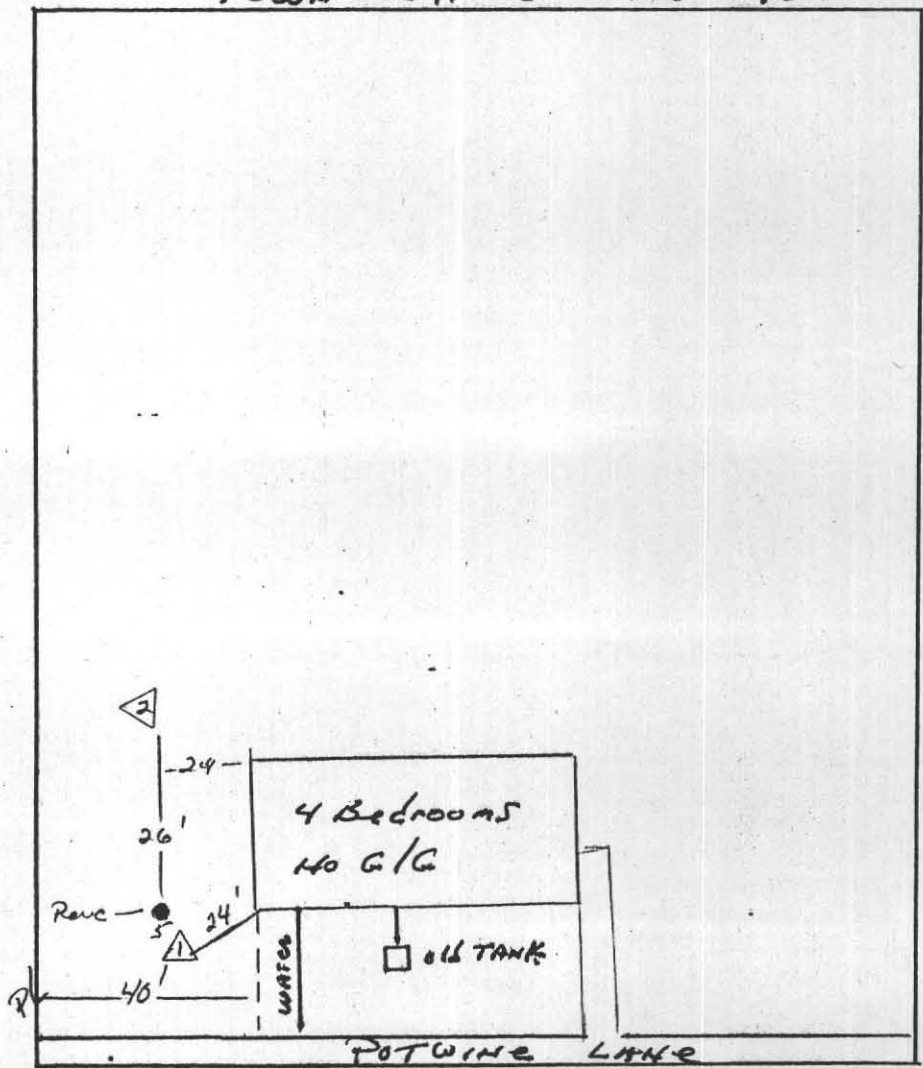
RATE (4) RATE _____

#1	#2
TOP <u>8"</u>	TOP <u>6"</u>
NO SUB	NO SUB
OXIDE <u>2'</u>	OXIDE <u>2'</u>
GRAVEL <u>3'</u>	GRAVEL <u>2'2"</u>
gray clay	gray clay
water <u>11'</u>	water <u>10'</u>

TOP	TOP
SUB	SUB

TOP	TOP
SUB	SUB

TOWN WATER NO G/G

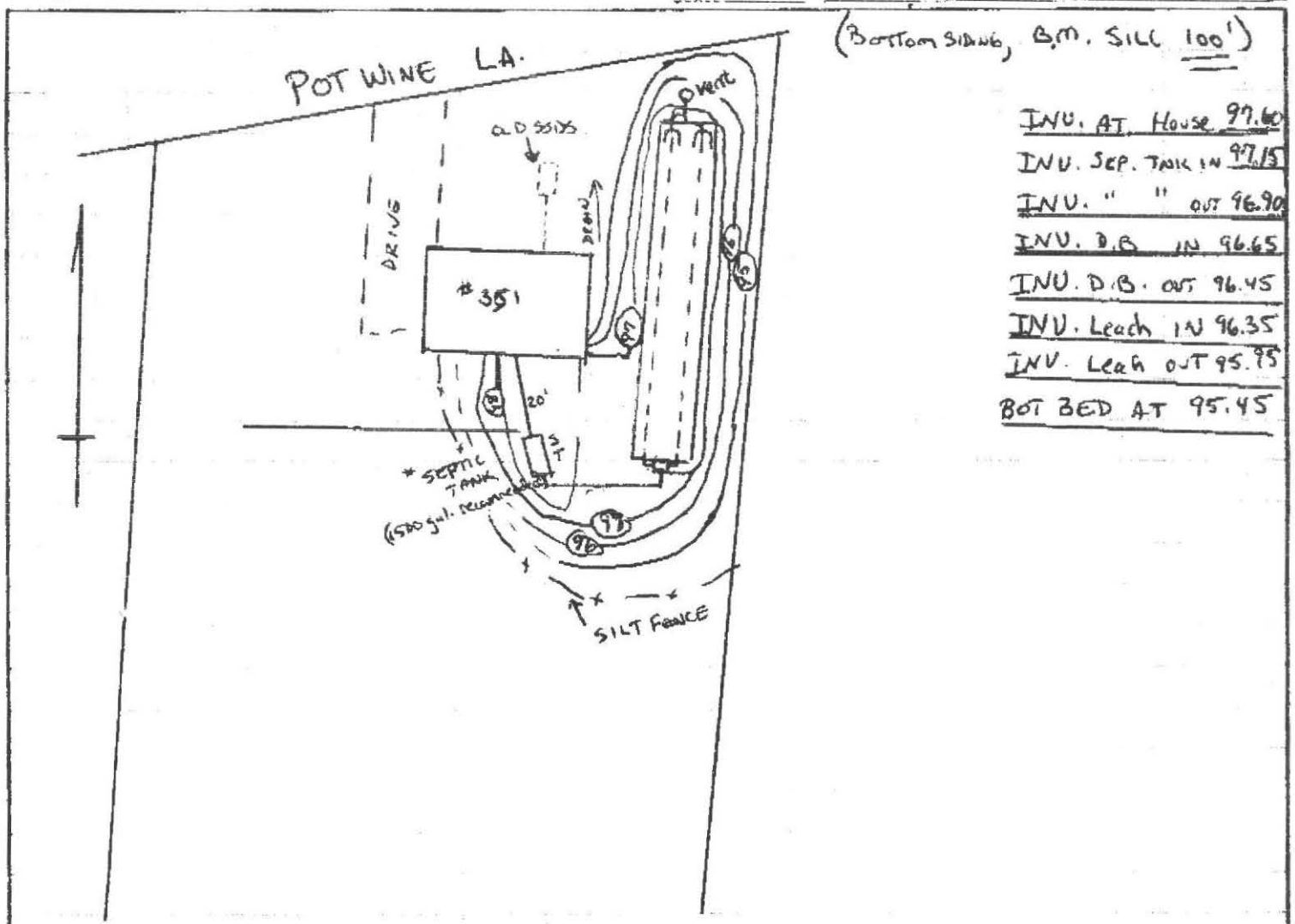




COLD SPRING ENVIRONMENTAL CONSULTANTS

JOB MANUE SEPTIC - ADDENDUM
 SHEET NO. 1 OF 1
 CALCULATED BY A. Weiss DATE 2/14/95
 CHECKED BY (AW) DATE "
 SCALE 1" = 40'

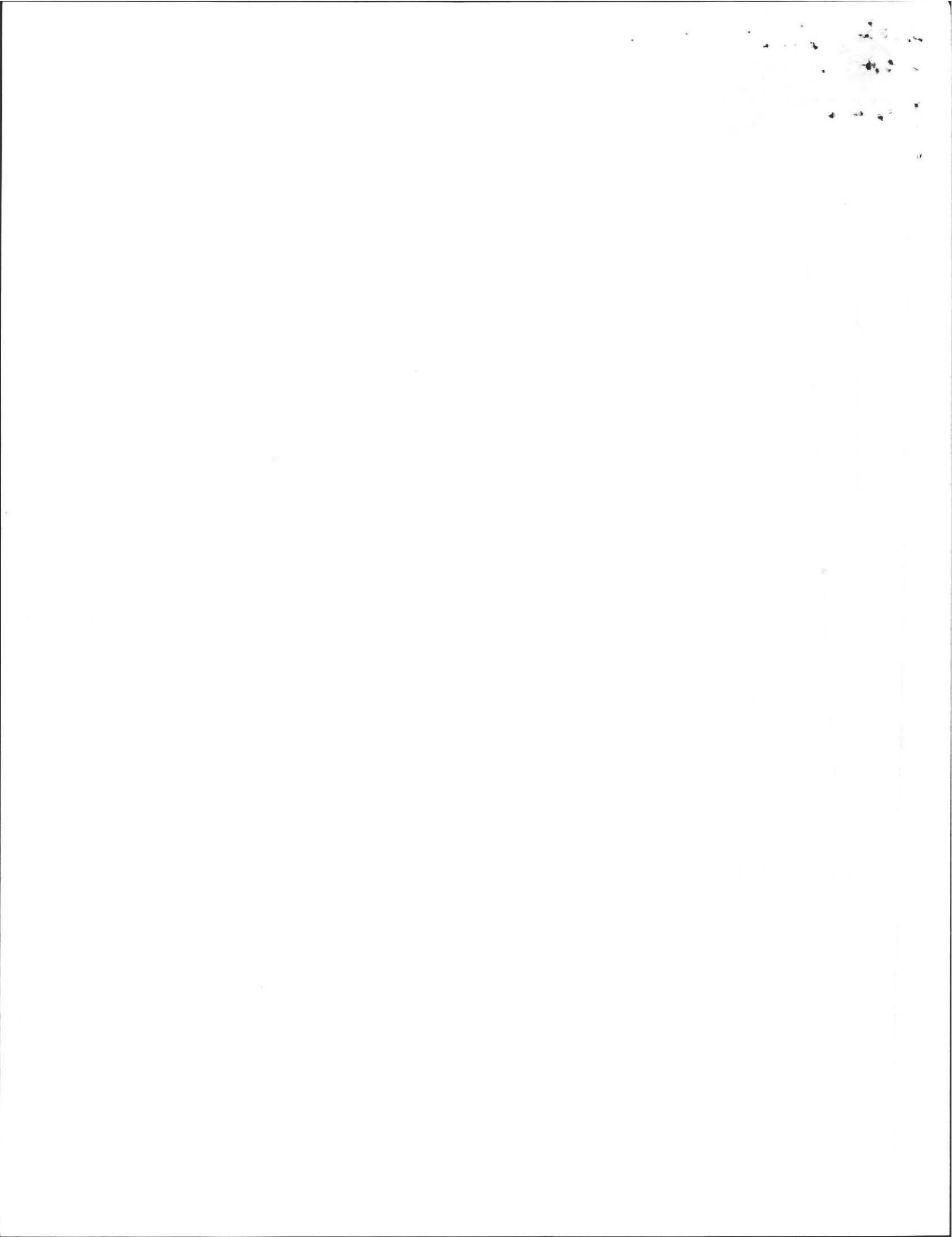
Belchertown, MA 01007 • (413) 323-5957



- NOTE! - WITH THIS CHANGE
- PUMPING COST TO BE LOWER.
 - NO PUMP & CHAMBER NEEDED.
 - MORE FILL REQUIRED IN REAR OF HOUSE
 - MUST ENCLOSE WORK AREA W/ SILT FENCE.
 - BED ELEVATION + LOCATION IS SAME. AS APPROVED.
 - BED PITCH IS TO NORTH.



is built w/out pump or vent
 2/14/95



COLD SPRING ENVIRONMENTAL CONSULTANTS, INC.

350 Old Enfield Road
Belchertown, Ma. 01007
tel (413) 323-5957
fax (413) 323-4916

fax t r a n s m i t t a l

to: Dave Zarozinsky

fax #: 256--4041

from: Alan E. Weiss

date: February 14, 1995

re: Mandle Septic

pages: 2, including this cover sheet

NOTES: Dave,

This septic is proposed to be changed without a pump and pump chamber as noted. The location and elevation of the septic remains the same. With piping exiting the rear of the house the system can gravity flow (a preferred option)

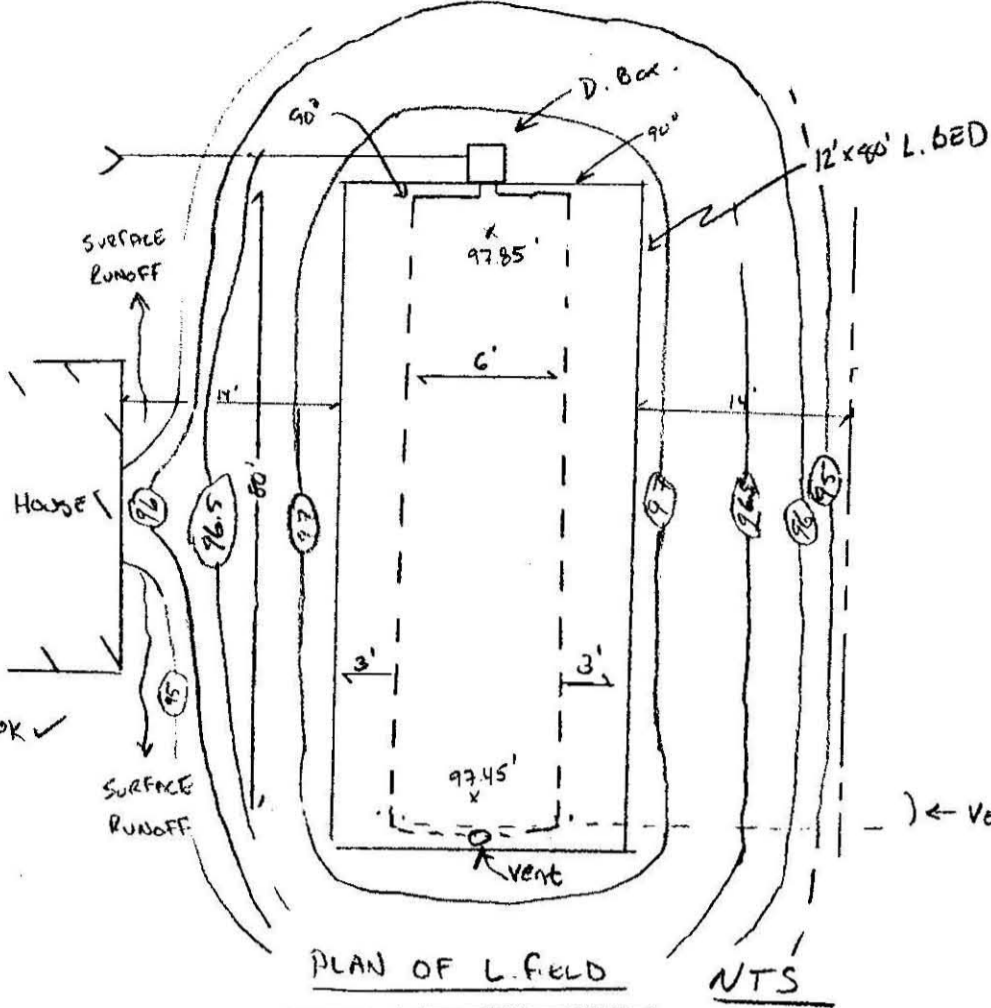
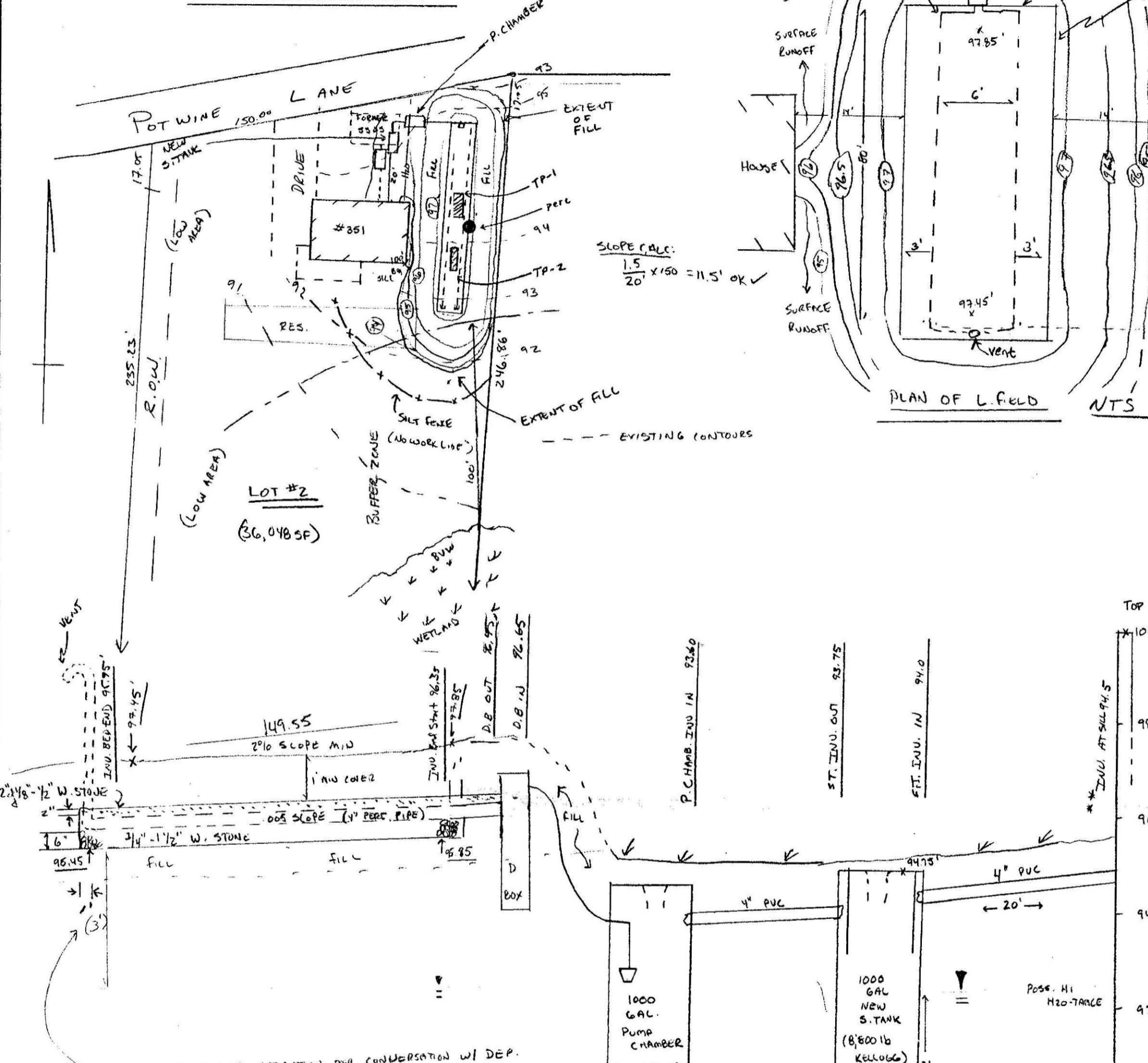
Please call with any questions.

Alan Weiss, R.S.

Handwritten notes or markings in the top right corner, including a date and some illegible text.

201

LOT PLAN (SCALE: 1"=40')



SOIL LOGS		
TP-2	DESCRIPTION	TP-1 (94.45')
0-6"	TOPSOIL + SUBSOIL	0-8"
6"-26"	BROWN SAND + GRAVEL	8"-36"
26'-10'	GRMY VARIED CLAY, LITTLE SILT, TR. F. SAND, -OXIDES AT 24" H ₂ O at 7'	36"-11'

PERC RATE AT 30" = 4 MM/IN ON 10/1/94 BY A. WEISS, ES.

DESIGN NOTES

- DESIGN BASED ON PERC RATE OF 4 MM/IN - DESIGN RATE (8 MM/IN)
- DESIGN CRITERIA: $4BR \times 110 \frac{GAL}{DAY} \Rightarrow 530 \frac{GAL}{DAY} \times 1.25 \Rightarrow 660 \frac{GAL}{DAY}$
- ONE 12' x 80' LEACH BED = $960 SF \times 0.63 \frac{GAL}{SF} \Rightarrow 605 \frac{GAL}{DAY}$
- ASSUME TWO PIPES 78' LONG, W/ 6' SPACING
- NO GARBAGE DISPOSAL ALLOWED
- FILL TO BE PLACED IN ACCORDANCE WITH TITLE II § AMHERST ADVISORY [REMOVE ALL TOPSOIL FIRST]
- SANITARIAN TO INSPECT: SUBGRADE, STONE + FINAL SYSTEM
- OUTLET PIPES FROM P. BOX TO BE LEVEL FOR AT LEAST 2'
- NO WELLS W/IN 100' OF SSDS, TOWN H₂O SUPPLIED.
- USE PUMP + PUMP CHAMBER (COULD UNOSHA 1/2" OR EQUIVALENT) W/ ALARMS AND 1000 GAL CHAMBER. (310 CMR 15.05)

WETLAND REQUIREMENTS

- WORK SUBJECT TO WETLANDS REQS. 310 CMR 10.00 (DETERMINATION OF APPLICABILITY)
- ALL WORK IN BUFFER ZONE AS NOTED
- ESTABLISH NO WORK ZONE WITH SILT FENCE.
- NO WORK WITHIN 50' OF RESOURCE AREA.
- APPROXIMATELY 1200 SF IN BUFFER ZONE

DEP VARIANCES REQUIRED

- VARIANCE FROM REQUIREMENT OF 4' OF NAT'L COVERING MAT'L. (310, 15.03 (6)). [3' DESIGN].
- " " OF 25' OF FILL AROUND L.BED. (310, 15.02 (17)).
- " FROM 4' G.W. SEPARATION REQ'T. (TO 3'). BECAUSE OF RUNOFF CONCNS.

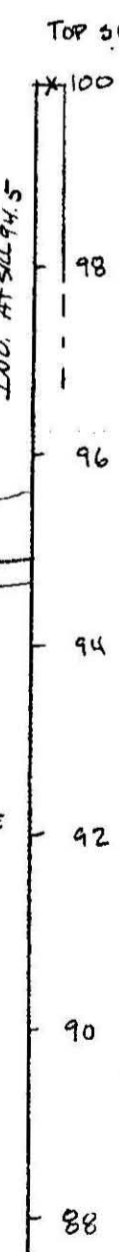
SEPTIC TANK BOUNTY CALCS.

* AT 3' SUBMERGED $3' \times 41 SF \times 2.4 \frac{lb}{CF} = 7,675 lb$ OK
 WEIGHT OF EMPTY TANK (NO SOIL COVER) 8,800 lb
 (Ref. Kellogg Bros.)

** NOTE: BASEMENT MUST BE REPIPED TO ACCOMMODATE SILL DISCHARGE ELEV.



CROSS-SECTION OF SSDS



PROPOSED SEPTIC REPAIR PLAN FOR DIAN MANDLE 351 POTWINE LA, AMHERST, MA.		
SCALE:	APPROVED BY:	DRAWN BY AW
DATE: 10/21/94		
COLD SPRING ENVIRONMENTAL, INC. BELCHERTOWN, MA. 323-5957		
DRAWING NUMBER		94-404-0822