

385 Middle St.



No. 98-7

THE COMMONWEALTH OF MASSACHUSETTS

FEE 160⁰⁰
RS
146756

BOARD OF HEALTH

Town Amherst OF Amherst

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

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

<u>385 Middle Street</u>	<u>Estate of Isabel Straker</u>
<u>Map 23D/ Parcel 105</u>	<u>210 Congate</u> Owner's Name <u>Enterprises, Inc</u>
<u>105</u> Map/Parcel #	<u>71 South Pleasant St., Amherst, MA</u> Address
<u>105</u> Lot #	<u>(413) 256-6022</u> Address <u>01002</u>
<u>Karl's Site Work, Inc</u> Installer's Name	<u>Richard Costa, PE</u> Telephone # <u>Robt Stover</u>
<u>River Dr., Hadley, MA 01035</u> Address	<u>Amherst Civil Engineering</u> Designer's Name
<u>(413) 549-5396</u> Telephone #	<u>P.O. Box 3312, Amherst, MA 01004-3312</u> Address
	<u>(413) 256-3400</u> Telephone #

Type of Building: SFH Lot Size _____ Sq. feet
 Dwelling — No. of Bedrooms 5 Garbage Grinder (no)
 Other — Type of Building _____ No. of persons _____ Showers (), Cafeteria ()
 Other fixtures _____

Design Flow (min. required) 688 gpd Calculated design flow 704 gpd Design flow provided _____ gpd
 Plan: Date 4/6/98 Number of sheets 1 Revision Date _____
 Title Plan of Sewage Disposal System

Description of Soil(s) Attached
 Soil Evaluator Form No. _____ Name of Soil Evaluator Robert Stover Date of Evaluation 9/30/97

DESCRIPTION OF REPAIRS OR ALTERATIONS _____

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

Signed Bonnie J. Bodin Date 4-6-98

Inspections _____

FORM 1 - APPLICATION FOR DSCP DEP APPROVED FORM 5/96

No. 98-7

THE COMMONWEALTH OF MASSACHUSETTS

FEE _____

Amherst BOARD OF HEALTH

CERTIFICATE OF COMPLIANCE

Description of Work: Individual Component(s) Complete System

The undersigned hereby certify that the Sewage Disposal System: Constructed (), Repaired (X), Upgraded (), Abandoned ()
by: _____

at 385 Middle St.
has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans as-built plans relating to application No. _____ dated _____ Approved Design Flow _____ (gpd)

Installer _____
Designer: _____ Inspector _____ Date _____

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

FORM 3 - CERTIFICATE OF COMPLIANCE DEP APPROVED FORM 5/96



7/10/98 4/6/98

No. 98-7

THE COMMONWEALTH OF MASSACHUSETTS

FEE 160⁰⁰
PLC
6756

Amherst BOARD OF HEALTH

DISPOSAL SYSTEM CONSTRUCTION PERMIT

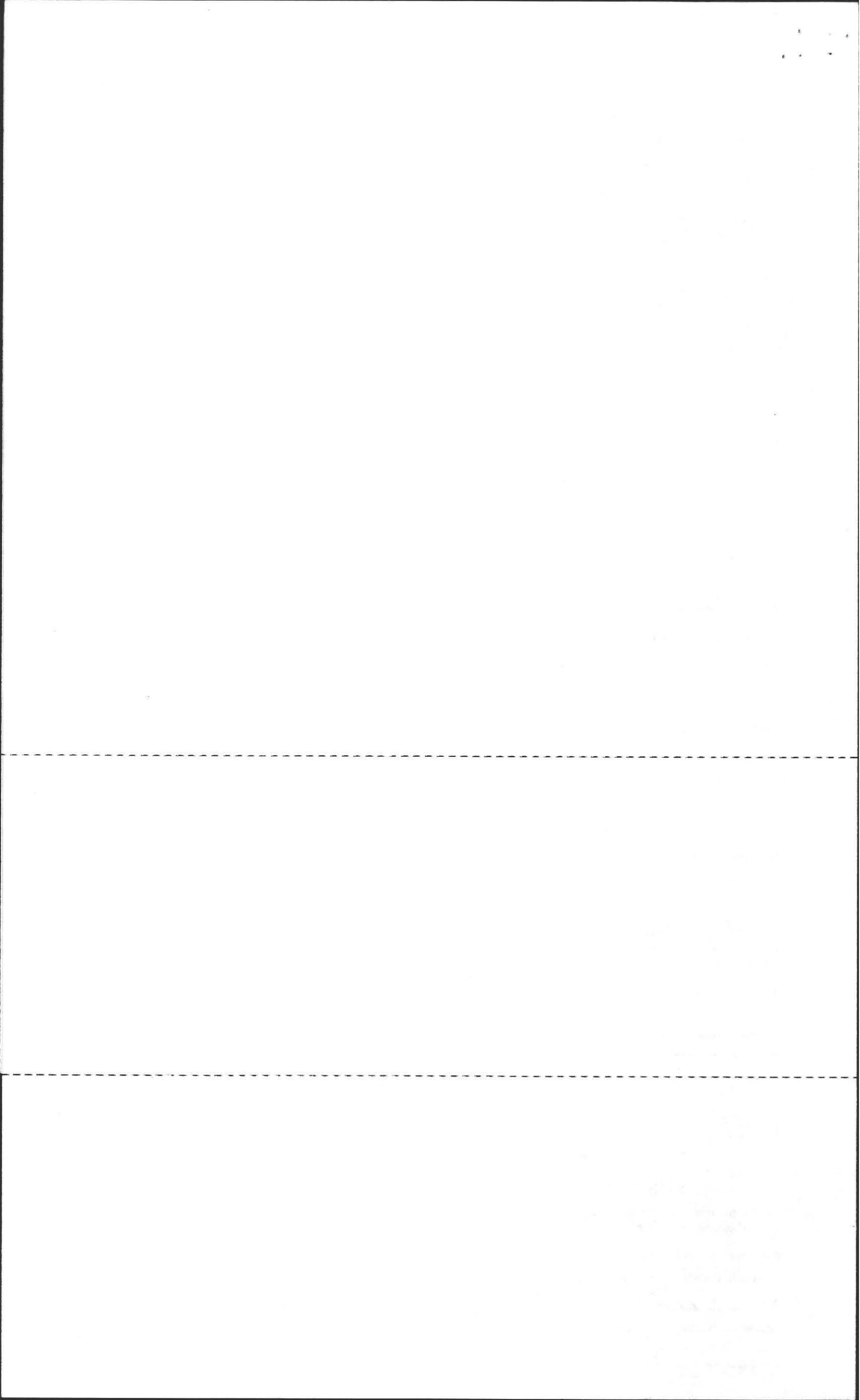
Permission is hereby granted to Construct () Repair (X) Upgrade () Abandon () an individual sewage disposal system at 385 Middle St. as described

in the application for Disposal System Construction Permit No. 98-7 dated 4/6/98

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

Date 4/6/98 Board of Health [Signature]

FORM 2 - DSCP DEP APPROVED FORM 5/96



No. _____

Date: _____

replace tank
Gre

Commonwealth of Massachusetts
Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: Robert Stover

Date: 9/30/97

Witnessed By: David Zarozinski

Location Address or Lot # <u>385 Middle St. Amherst, MA</u>	Owner's Name, Address, and Telephone # <u>Estate of Isabel Straker Stephen Straker Nina Fraiser 410 Congate (Bonnie Bodin 71 South Pleasant St</u>
New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/> <u>5/66 no</u>	

Office Review

Published Soil Survey Available: No Yes

Year Published 12/81 Publication Scale 1:15840 Soil Map Unit MeB/SrB

Drainage Class A/B Soil Limitations poor filter / wetness

Surficial Geologic Report Available: No Yes

Year Published _____ Publication Scale _____

Geologic Material (Map Unit) _____

Landform _____

Flood Insurance Rate Map:

Above 500 year flood boundary No Yes

Within 500 year flood boundary No Yes

Within 100 year flood boundary No Yes

Wetland Area:

National Wetland Inventory Map (map unit) _____

Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS): Month _____

Range :Above Normal Normal Below Normal

Other References Reviewed: _____



Location Address or Lot No. 385 Middle St.
Amherst, MA

On-site Review

Deep Hole Number 2 Date: 9/30/97 Time: 9:45 AM Weather over

Location (identify on site plan)

Land Use field Slope (%) 5% Surface Stones none

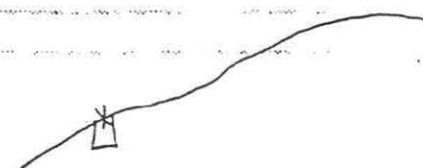
Vegetation grasses

Landform hillside

Position on landscape (sketch on the back)

Distances from:

Open Water Body 200 feet Drainage way 100 feet
Possible Wet Area 100 feet Property Line 40 feet
Drinking Water Well Town feet Other —
Water



DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0 - 11	Ap	same			Friable
11 - 24	Bw	same			Friable / Massive
24 - 36	C1	same			outwash loose
36 - 96	C2	same			ablation till Firm
96 - 123"	C3	FSL	10YR 4/3	5% 7.5YR 5/6	Compact - w/ fine gravel Basal till

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash on till Depth to Bedrock: > 123"

Depth to Groundwater: Standing Water in the Hole: none Weeping from Pit Face: none

Estimated Seasonal High Ground Water: 42"



FORM 12 - PERCOLATION TEST

Location Address or Lot No. 385 Middle St.

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date:	<u>9/30/97</u>	Time: <u>9:22</u>
Observation Hole #	<u>1</u>	
Depth of Perc	<u>57"</u>	
Start Pre-soak	<u>9:22</u>	
End Pre-soak	<u>9:42</u>	
Time at 12"	<u>9:42</u>	
Time at 9"	<u>10:14</u>	
Time at 6"	<u>11:08</u>	
Time (9"-6")	<u>54</u>	
Rate Min./Inch	<u>18</u>	

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

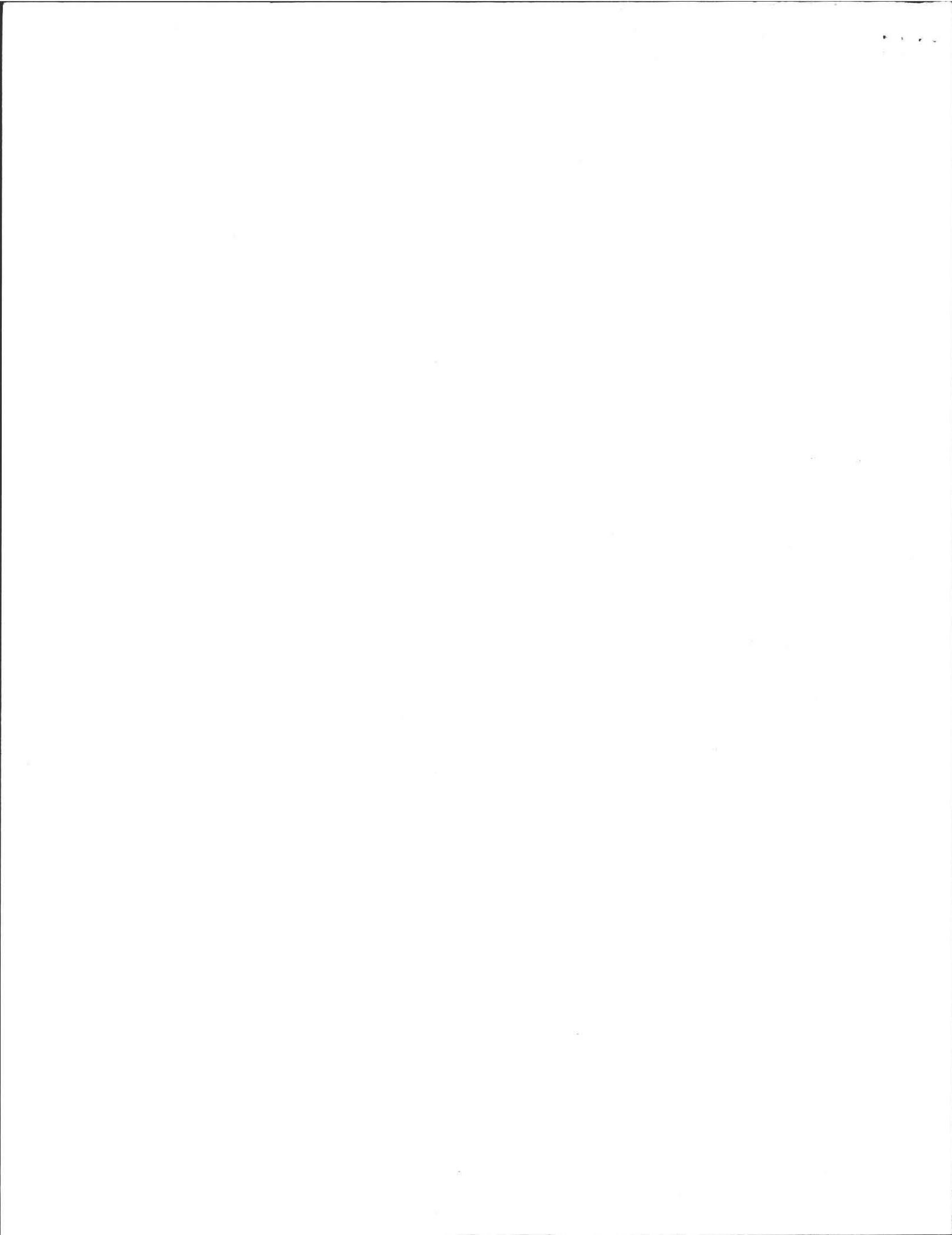
Site Passed Site Failed

Performed By: Robert Stover

Witnessed By: David Zarozinski

Comments: Design for 25% extra





**TOWN OF AMHERST
HEALTH PERMITS/ INSPECTION SERVICES**

No. **0122**

Received of CONGATE ENTERPRISES, INC. of 71 S. PLEASANT STR, AMH MA 01002

For Property Located at: STEPHEN BRAKER @ 385 MIDDLE STR, AMH MA 01002

- | | | | |
|--|-------|---|-----------------|
| HEA009 Bakery
R6510 443508 | _____ | HEA014 Retail Store Permit
R6510 443514 | _____ |
| HEA001 Bed & Breakfast
R6510 443516 | _____ | HEA015 Sanitary Code Booklets
R6510 432305 | _____ |
| HEA025 Burial Permits
R6510 443517 | _____ | HEA016 Septic Tank Permit-Installers
R6510 443511 | <u>\$160.00</u> |
| HEA002 Catering License
R6510 443507 | _____ | HEA017 Septic Tank Permit-Private
R6510 443510 | _____ |
| HEA003 Food Handler
R6510 443515 | _____ | HEA018 Septic Tank Reinspection Fee
R6510 432301 | _____ |
| HEA004 Frozen Desserts
R6510 443501 | _____ | HEA026 Smoking & Tobacco Reg. Violations
R6510 443518 | _____ |
| HEA024 Funeral Director License
R6510 443502 | _____ | HEA019 Sub-Division Review Fee
R6510 432306 | _____ |
| HEA005 Health Dept. Housing Insp.
R6510 432302 | _____ | HEA012 Swimming Pool Permits
R6510 443512 | _____ |
| HEA006 Massage Therapy License
R6510 443504 | _____ | HEA023 TB Clinic
R6510 432303 | _____ |
| HEA007 Milk & Cream License
R6510 443500 | _____ | HEA020 Tanning License
R6510 443509 | _____ |
| HEA008 Motel License
R6510 443506 | _____ | HEA022 Tobacco License
R6510 443505 | _____ |
| HEA010 Removal of Offal
R6510 443513 | _____ | HEA | _____ |
| HEA011 Percolation Test Fees
R6510 432300 | _____ | HEA | _____ |
| HEA013 Recreation Camp License.
R6510 443503 | _____ | | |

TOTAL FEE: \$1160.00

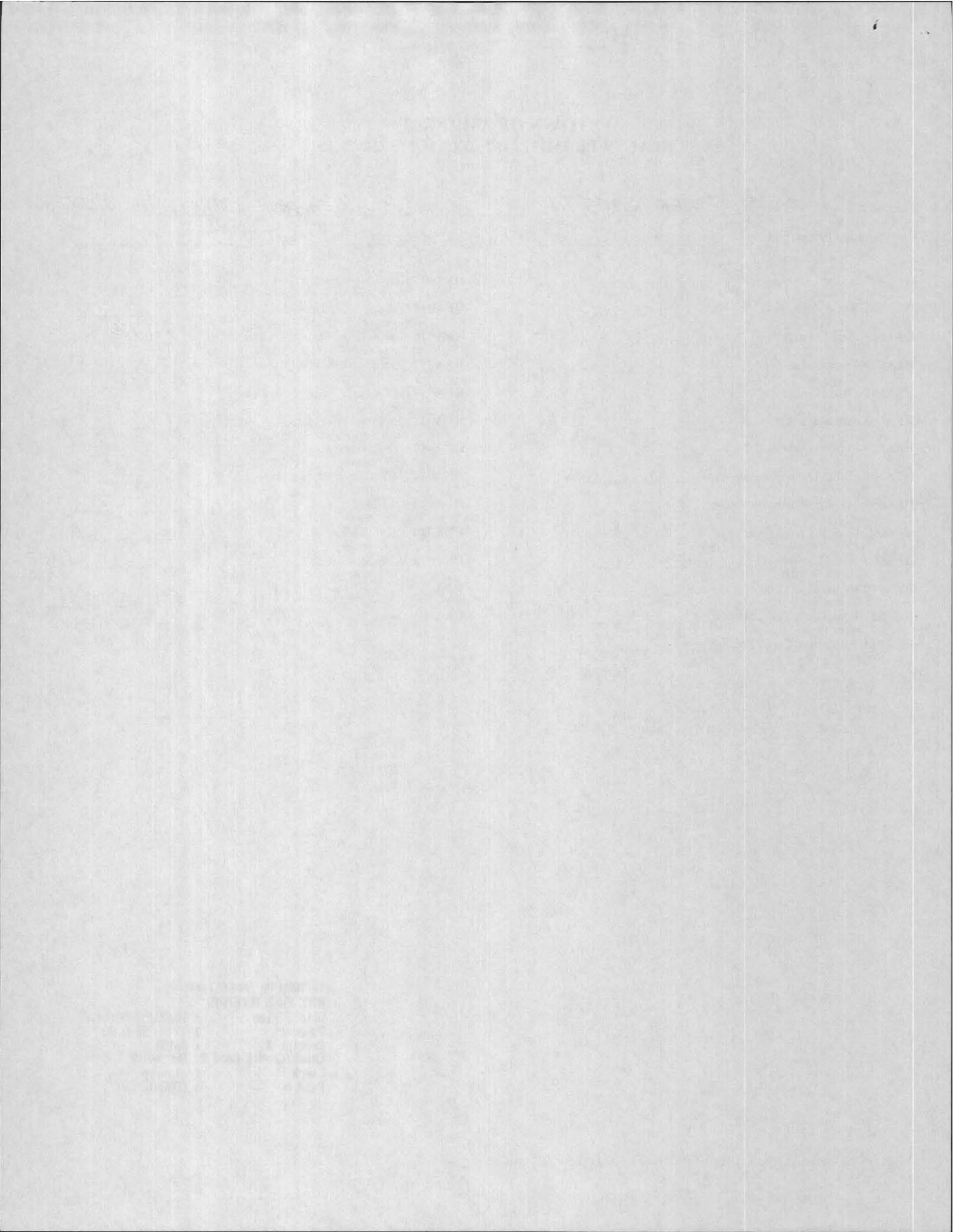
Bruce Davis
Inspection Services/Health Department

10/9/97
Date

11-19-97 CHK # 6756

TOWN OF AMHERST
MISC CASH RECEIPTS
Date / Time : 10/09/97 08:44:22
Payment : \$160.00
Receipt # : 26104
Check/Credit Card #: REC #0122
Clerk : olanyk
Paid by : CONGATE ENT

Must be validated by the Collector's Office to be considered paid.





CONGATE ENTERPRISES, INC.

FULL SERVICE PROPERTY MANAGEMENT

71 S. PLEASANT ST.
AMHERST, MA 01002
PH. 413-253-2326

FLORENCE SAVINGS BANK

FLORENCE MA 01060
53-7168-2118

6756

PAY
TO THE
ORDER OF

THE SUM I 60 DOLS 00 CTS

DATE

AMOUNT

10/06/97

*****\$160.00

TOWN OF AMHERST
Treasurer/Collector
70 Boltwood Walk
Amherst, MA 01002-2351

T.J. Conroy Jr.

⑈006756⑈ ⑆211871688⑆ 05 25 001363⑈

Security features included. Details on back.

CONGATE ENTERPRISES, INC.
FULL SERVICE PROPERTY MANAGEMENT

6756

10/06/97 Pay To: TOWN OF AMHERST

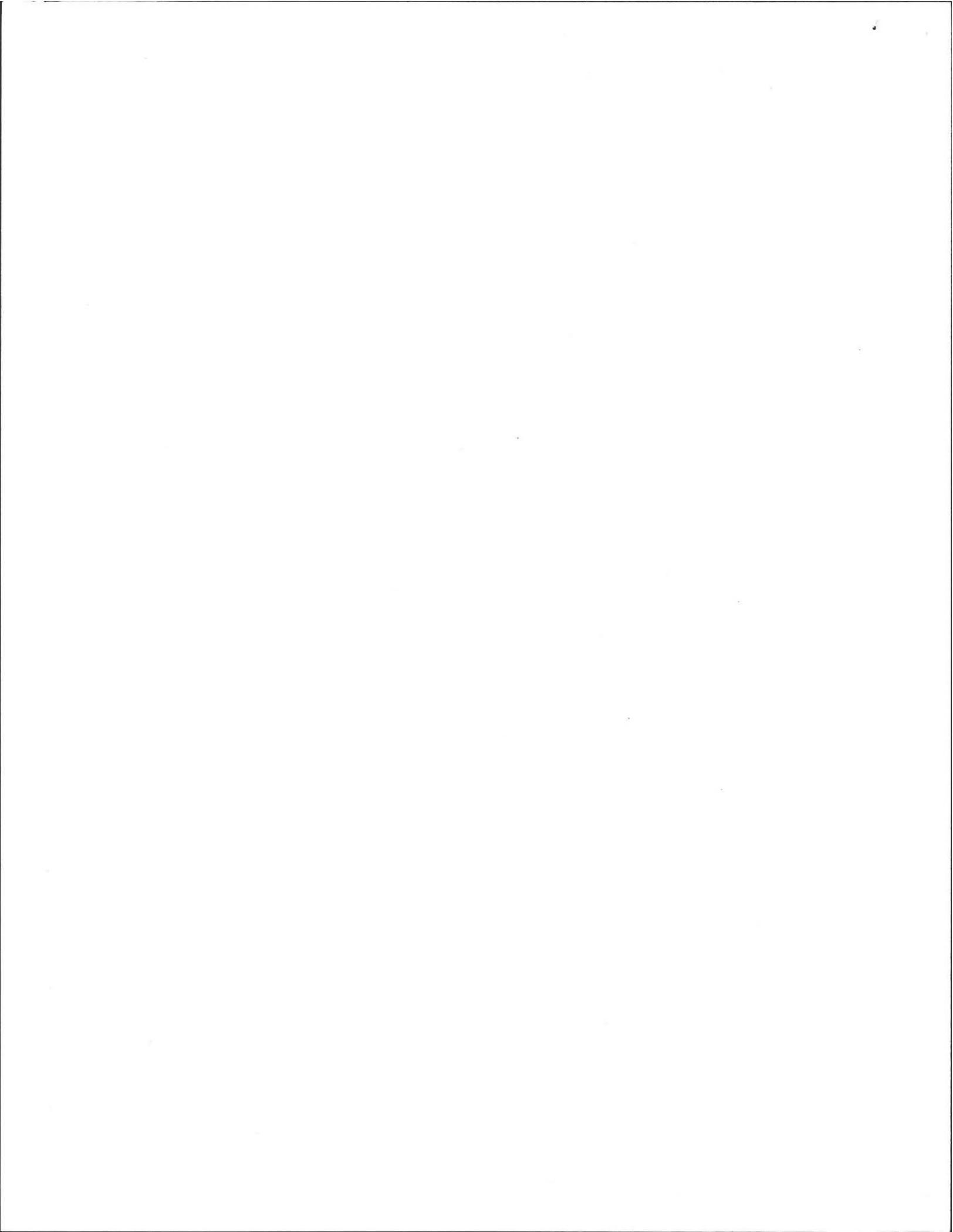
*****\$160.00

10/06/97 Stephen Straker

OE Perc test - 385 Middle St

160.00

RECEIVED OCT 08 1997



**TOWN OF AMHERST
HEALTH PERMITS/ INSPECTION SERVICES**

No. **0122**

Received of CONGATE ENTERPRISES, INC. of 71 S. PLEASANT ST, AMH. MA 01002

For Property Located at: STEPHEN STRAKER @ 385 MIDDLE ST, AMH MA 01002

- | | | | |
|---|-------|--|----------------|
| HEA009 Bakery
R6510 443508 | _____ | HEA014 Retail Store Permit
R6510 443514 | _____ |
| HEA001 Bed & Breakfast
R6510 443516 | _____ | HEA015 Sanitary Code Booklets
R6510 432305 | _____ |
| HEA025 Burial Permits
R6510 443517 | _____ | HEA016 Septic Tank Permit-Installers
R6510 443511 | <u>\$16000</u> |
| HEA002 Catering License
R6510 443507 | _____ | HEA017 Septic Tank Permit-Private
R6510 443510 | _____ |
| HEA003 Food Handler
R6510 443515 | _____ | HEA018 Septic Tank Reinspection Fee
R6510 432301 | _____ |
| HEA004 Frozen Desserts
R6510 443501 | _____ | HEA026 Smoking & Tobacco Reg. Violations
R6510 443518 | _____ |
| HEA024 Funeral Director License
R6510 443502 | _____ | HEA019 Sub-Division Review Fee
R6510 432306 | _____ |
| HEA005 Health Dept. Housing Insp.
R6510 432302 | _____ | HEA012 Swimming Pool Permits
R6510 443512 | _____ |
| HEA006 Massage Therapy License
R6510 443504 | _____ | HEA023 TB Clinic
R6510 432303 | _____ |
| HEA007 Milk & Cream License
R6510 443500 | _____ | HEA020 Tanning License
R6510 443509 | _____ |
| HEA008 Motel License
R6510-443506 | _____ | HEA022 Tobacco License
R6510 443505 | _____ |
| HEA010 Removal of Offal
R6510 443513 | _____ | HEA | _____ |
| HEA011 Percolation Test Fees
R6510 432300 | _____ | HEA | _____ |
| HEA013 Recreation Camp License.
R6510 443503 | _____ | | |

TOTAL FEE: \$110000

Bridget Daniels
Inspection Services/Health Department

10/8/97
Date

10/8/97 CHK# 6756

RECEIVED OCT 08 1997

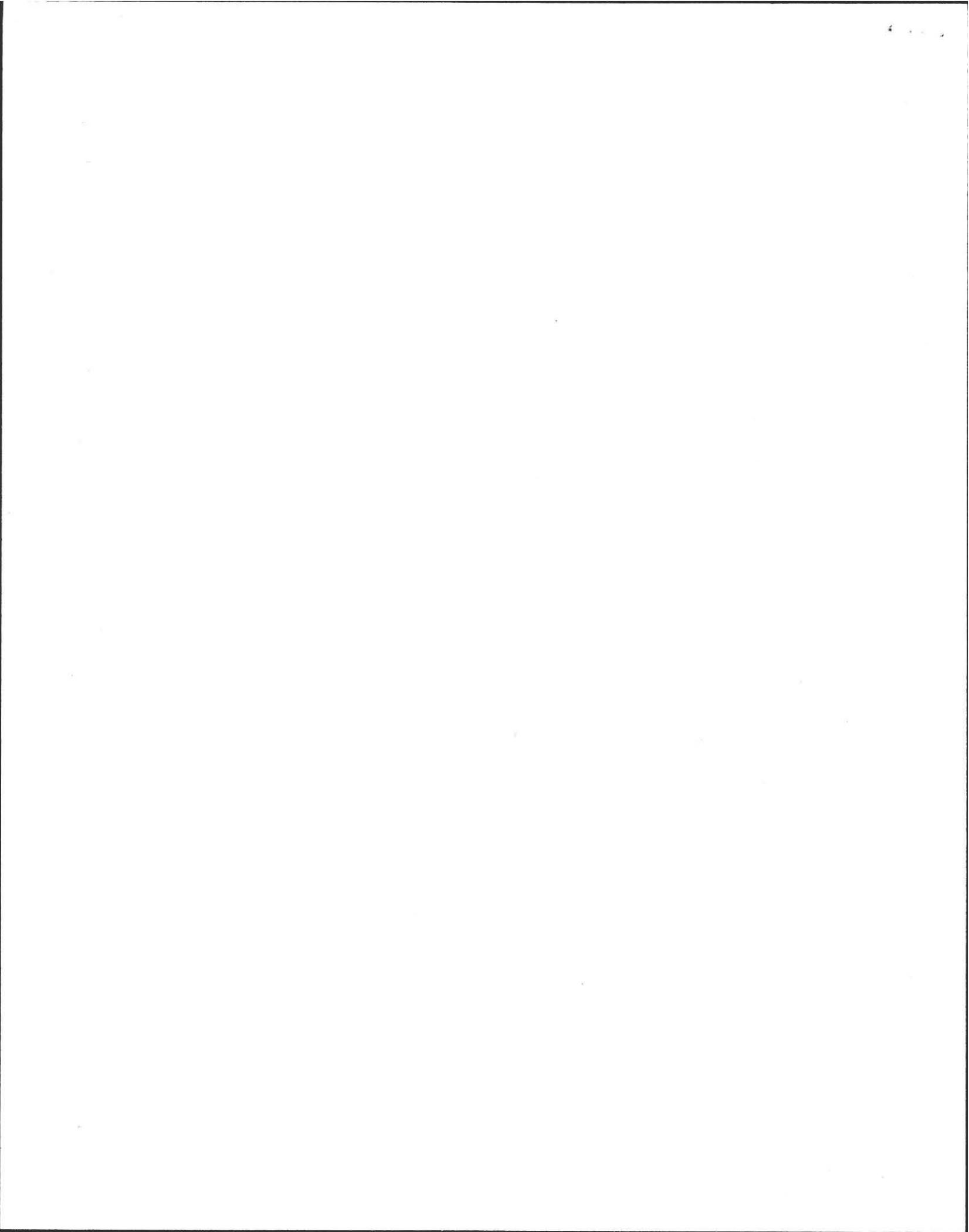
Must be validated by the Collector's Office to be considered paid.

White - Applicant

Yellow - Collector

Pink - Accounting

Gold - Health/Inspections



CONGATE ENTERPRISES, INC.
FULL SERVICE PROPERTY MANAGEMENT

6756

10/06/97 Pay To: TOWN OF AMHERST

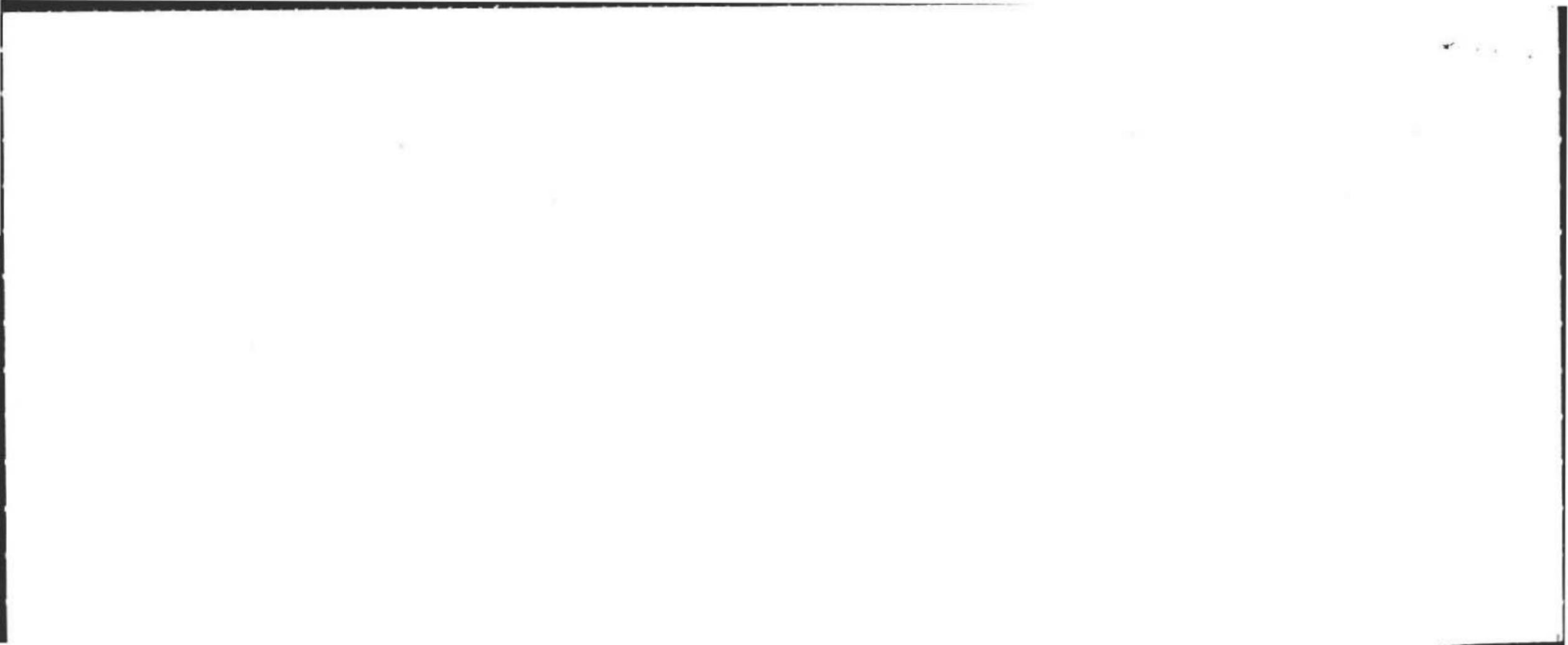
*****\$160.00

10/06/97 Stephen Straker

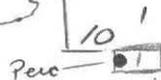
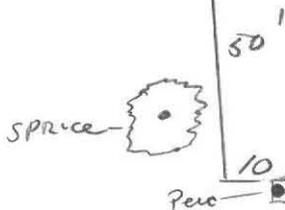
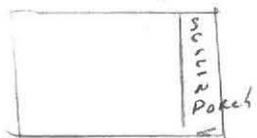
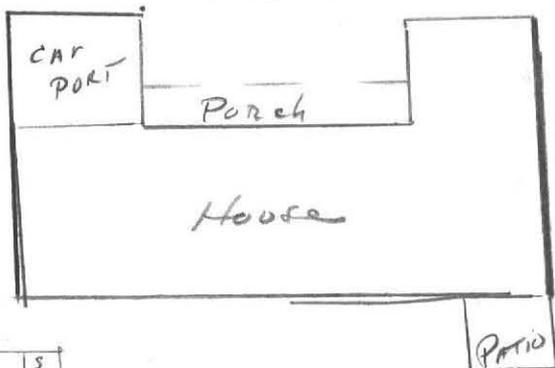
OE Perc test - 385 Middle St

160.00

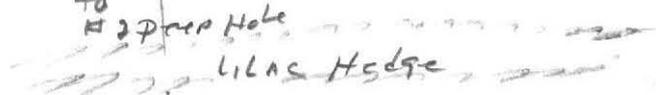
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Middle St



30' TO #2
15' TO Hedge



Open Field

4005 Bedrooms

CHK 6756 Pl 160 00
CONGATE ENTERPRISES

FORM 11 - SOIL EVALUATOR FORM
Page 1 of 3

No. _____

Date: 9/30/97

Commonwealth of Massachusetts
Massachusetts
Soil Suitability Assessment for On-site Sewage Disposal

Performed By: Robert Brown Date: 09/30/97
Witnessed By: David Zarocinski

Location Address or Lot # <u>385 Middle St</u> <u>385</u>	Owner's Name, Address, and Telephone # <u>STEVEN STRAKER - HIND FRAISER</u> <u>385 Middle St</u> <u>385</u> <u>c/o CONGATE BONNIE BODIN</u> <u>71 South Pleasant</u>
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 References Reviewed: _____



FORM 12 - PERCOLATION TEST

Location Address or Lot No. 385 Middle St

COMMONWEALTH OF MASSACHUSETTS

, Massachusetts

Percolation Test*		
Date:	<u>9-30-97</u>	Time: <u>9:22</u>
Observation Hole #	<u>1</u>	
Depth of Perc	<u>57"</u>	
Start Pre-soak	<u>9:22</u>	
End Pre-soak	<u>9:42</u>	
Time at 12"	<u>9:42</u>	
Time at 9"	<u>10:14</u>	
Time at 6"	<u>11:08</u>	
Time (9"-6")	<u>54"</u>	
Rate Min./Inch	<u>18</u>	

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

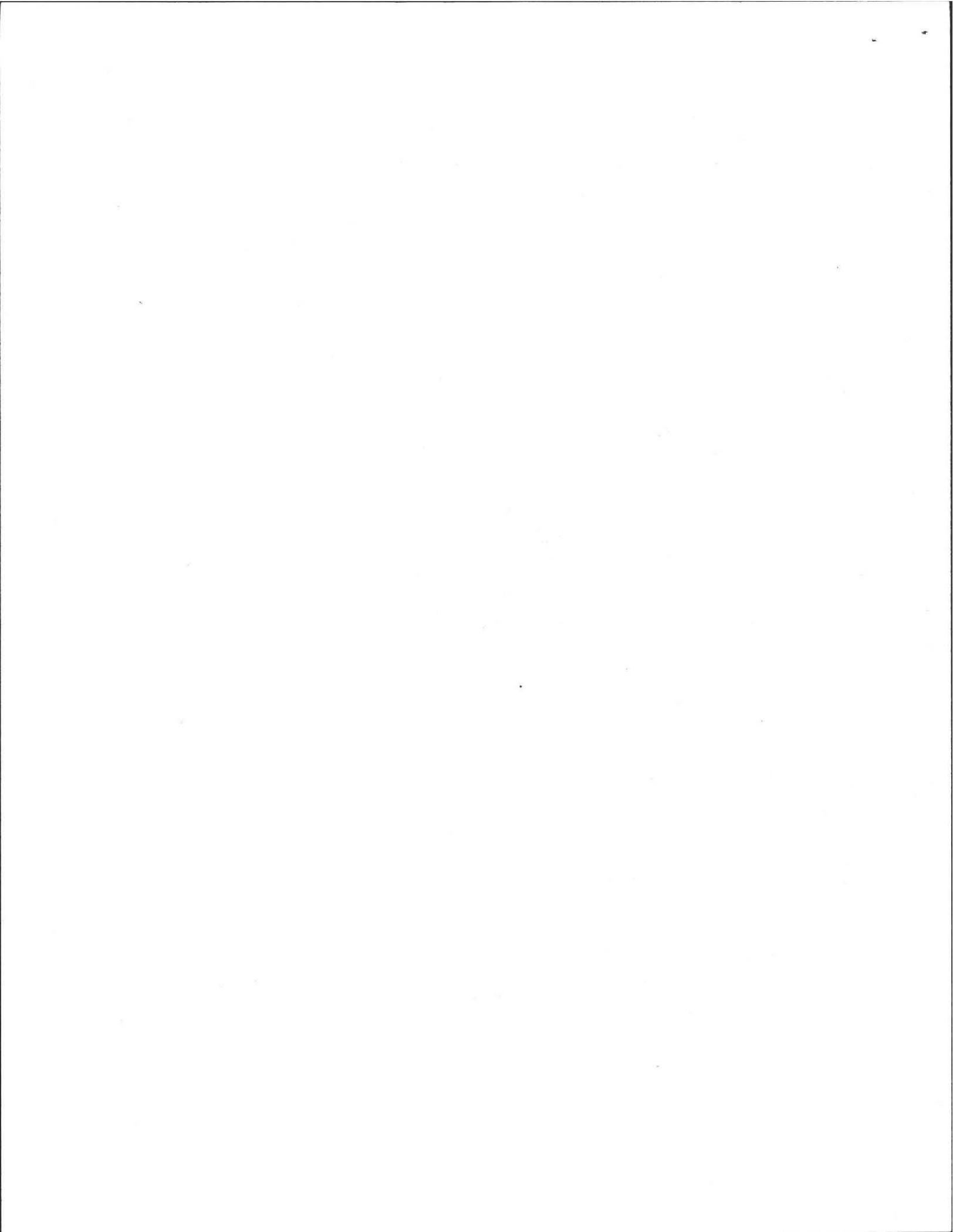
Site Passed Site Failed

Performed By: Robert Stover

Witnessed By: David Ferrinetti

Comments: _____





Location Address or Lot No. 385 Market Hill

On-site Review

Deep Hole Number 1 Date: 9-30-97 Time: 9:00 Weather overcast 70°

Location (identify on site plan) _____

Land Use lawn Slope (%) 5% Surface Stones None

Vegetation grass

Landform hillside

Position on landscape (sketch on the back) _____

Distances from:
 Open Water Body 200 feet Drainage way feet 100'
 Possible Wet Area 100 feet Property Line feet 50'
 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)
0-14	A _p	FSL	10YR 3/3	None	Friable
14-26	B _w	FSL	10YR 4/6	None	Friable Massive
26-40	C ₁	FSL Gravelly	2.5Y 7/1	10YR 4/3 54"	Loose Boulder 15% gravel
40-90	C ₂	FSL	10YR 5/4	5-10% 7.5YR 6/8	Firm - FINE Gravel
90-109	C ₃	FSL	10YR 4/3	5% 7.5YR 6/6	Compact.

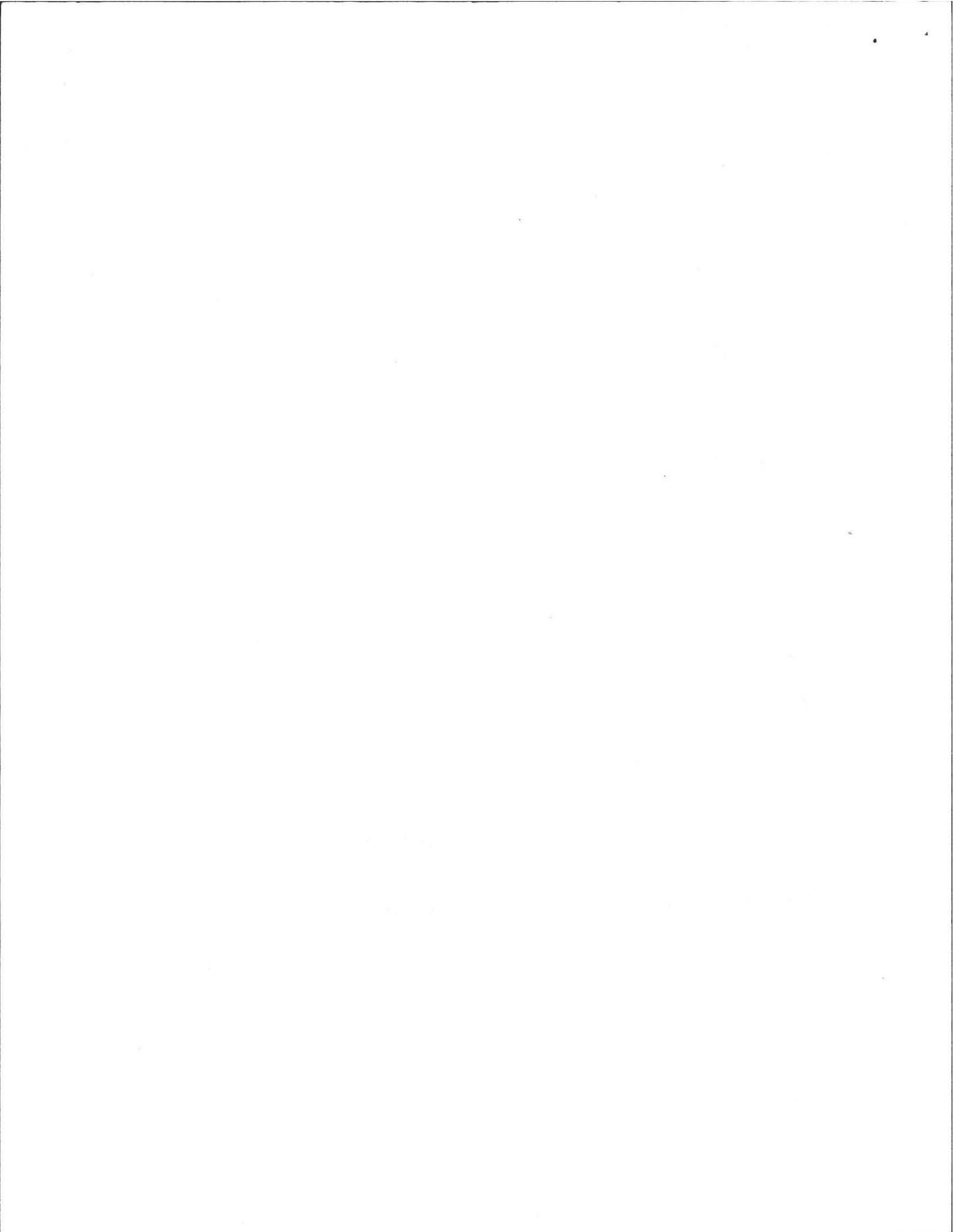
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) OUTCROCK over fill Depth to Bedrock: 7 109"

Depth to Groundwater: _____ Standing Water in the Hole: None Weeping from Pit Face: None

Estimated Seasonal High Ground Water: 54"





Location Address or Lot No. 385 M. Hill St

On-site Review

Deep Hole Number 2 Date: 9-30-97 Time: 9:45 Weather overcast 70°

Location (identify on site plan) _____

Land Use Field Slope (%) 5% Surface Stones None

Vegetation Grass

Landform hillside

Position on landscape (sketch on the back)

Distances from:

Open Water Body 200 feet Drainage way 100 feet
 Possible Wet Area 100 feet Property Line 40 feet
 Drinking Water Well Town W. feet Other _____

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-11"	Ap	Sand			Frangible
11-24"	Bw	Sand			Frangible massive
24-36"	C ₁	Sand			outwash loose
36-96"	C ₂	Sand			obolation Till Firm
96-123"	C ₃	FSL	10YR 4/3	5% 7.5YR 5/6	COMPACT - w fine sand Basal Till

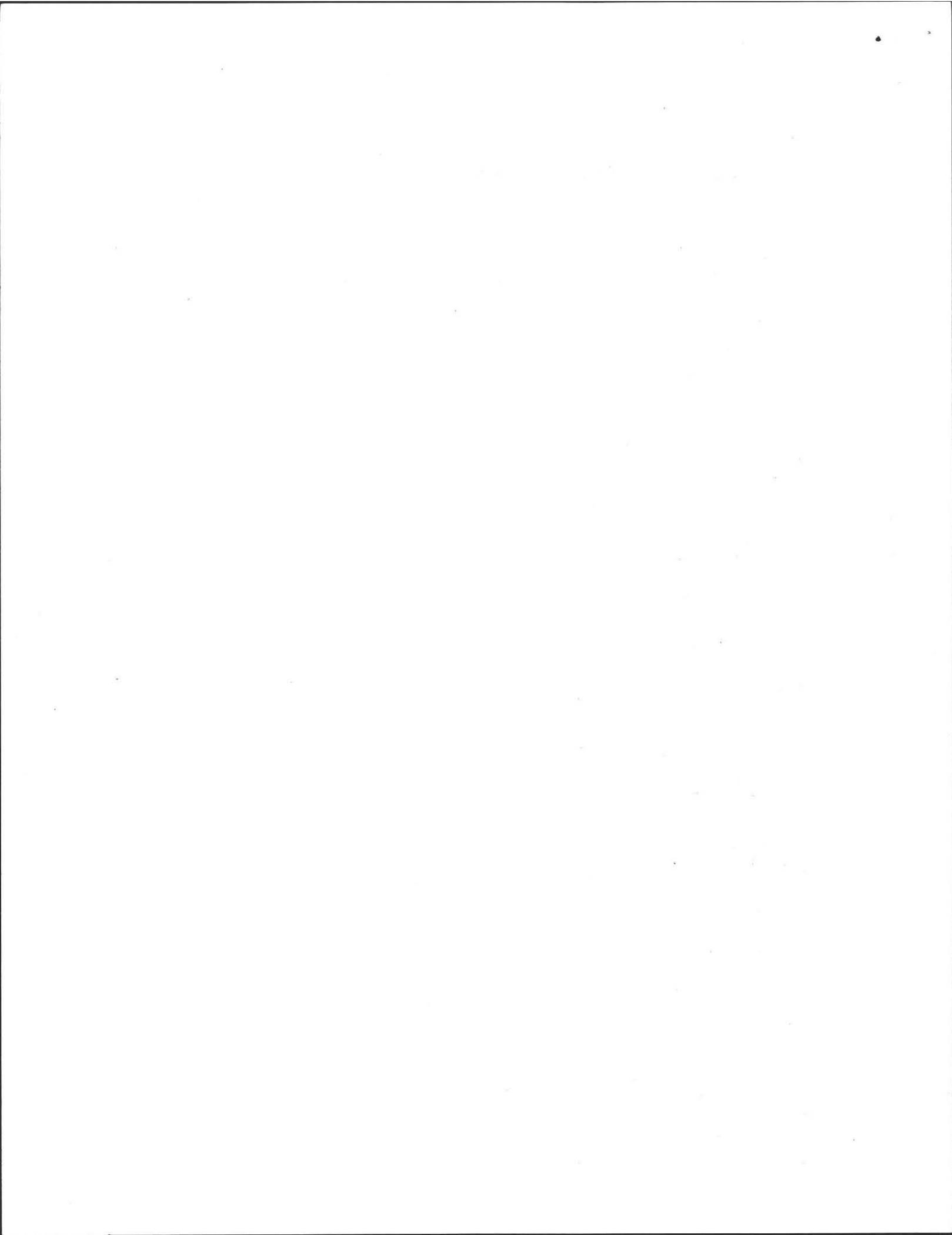
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash Till Depth to Bedrock: 123"

Depth to Groundwater: Standing Water in the Hole: None Weeping from Pit Face: None

Estimated Seasonal High Ground Water: 40"





Town of



AMHERST

Massachusetts

Bettye Anderson Frederic, Director

AMHERST HEALTH DEPARTMENT

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

September 13, 1991

To: Bettye Anderson Frederic

From: David Zarozinski *DZ*

Re: Variances for Failing Septic System at 117 Middle Street,
Amherst

On September 10, 1991, I reviewed the septic system plan that was submitted by Mr. and Mrs. Russ Weigel and prepared by Mr. Walter Schwartz of C.T. Male.

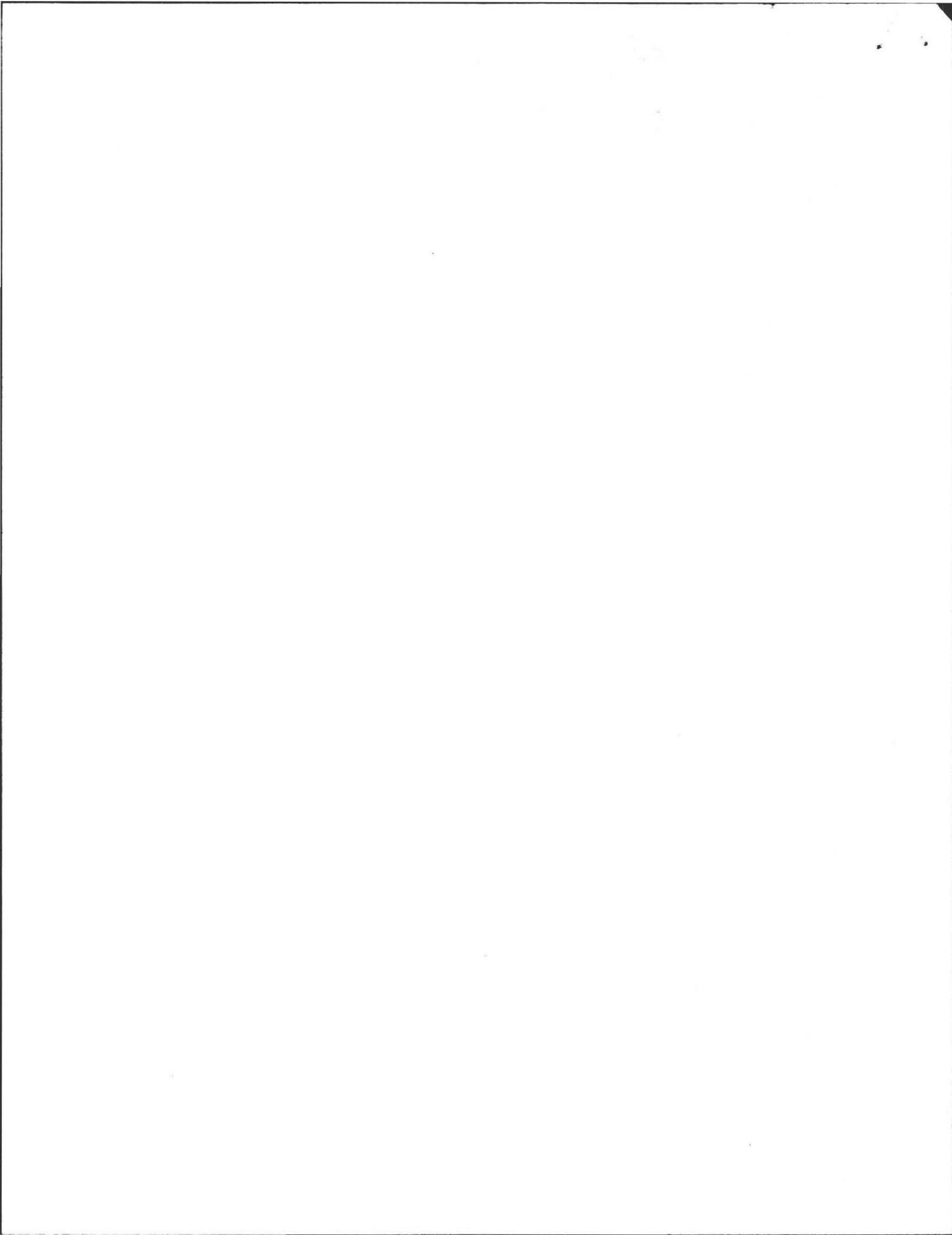
In order to repair this system, the Weigels need variances to the Town of Amherst Amendments to Title V of the State Environmental Code.

Town Requirements:

1. Section 2 - General Requirements - Reference 15.02 (13). Town requires the size of the leaching area: not to be less than 1 1/4 times the minimum area as determined by the state calculations.
2. Distances - Reference 15.03 (7). Private sewage disposal systems shall not be located nearer than 100 feet from any watercourse, stream or pond.

It is my opinion that the size and distance of this system can meet the requirement of the Environmental Code of the Commonwealth of Massachusetts and that no health or environmental harm will be done in allowing these variances.

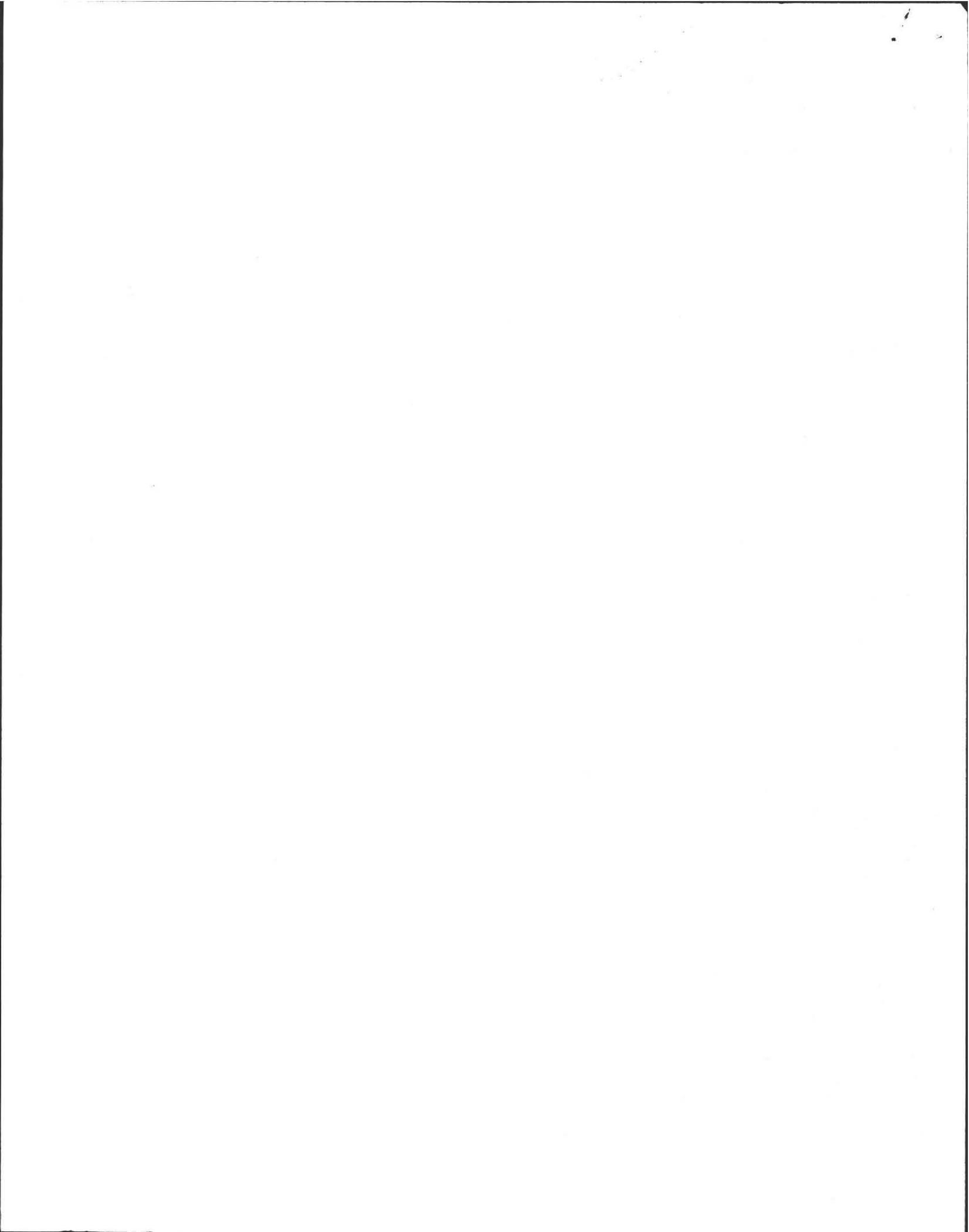
My only concern is that the engineer (Walter Schwartz) made note of oxide stains in the deep holes. In the past, I have used the oxide stain as a means of high water table. If we use the 3 foot oxide stain as a guide, than this septic system plan can not be approved as designed. If we use Professor Veneman's data, the system can be installed and only the Town variances noted would have to be adressed.

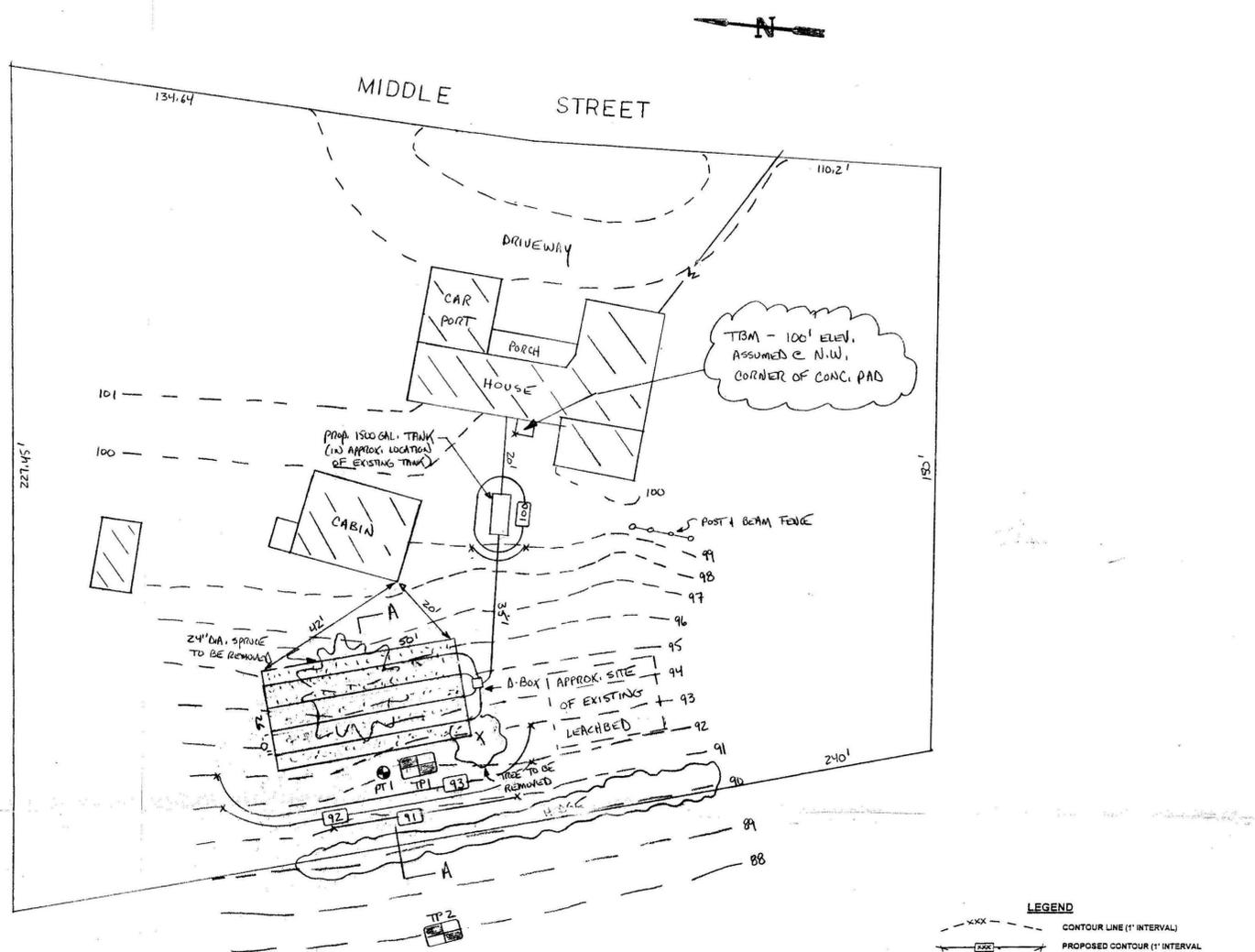


In addition to Professor Veneman's letter, I called Mr. Larry Golonka of D.E.P. to get his input on this matter. He stated Professor Veneman is highly regarded and he would not hesitate to use his information.

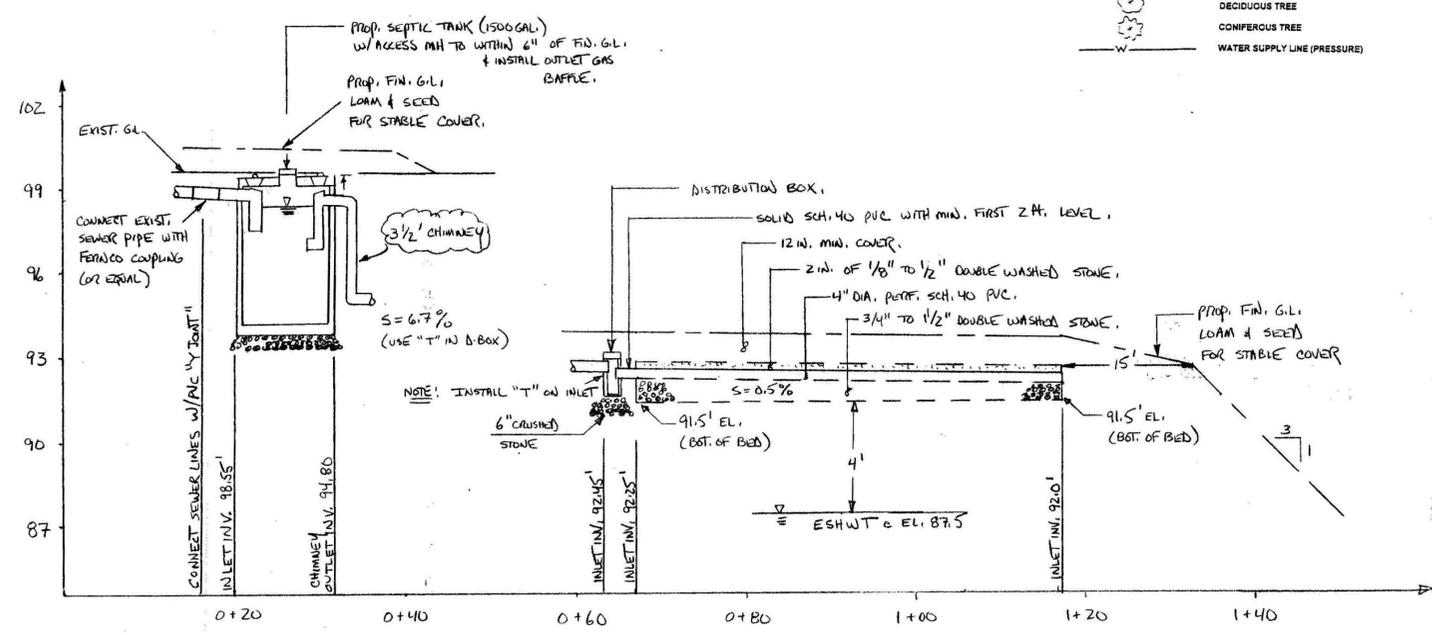
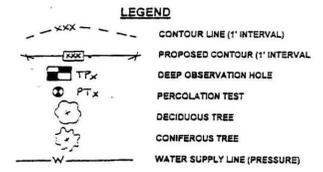
Finally, I have reviewed the Middle Street area and have enclosed some of the soil testing and perc tests that were done.

C:BAF

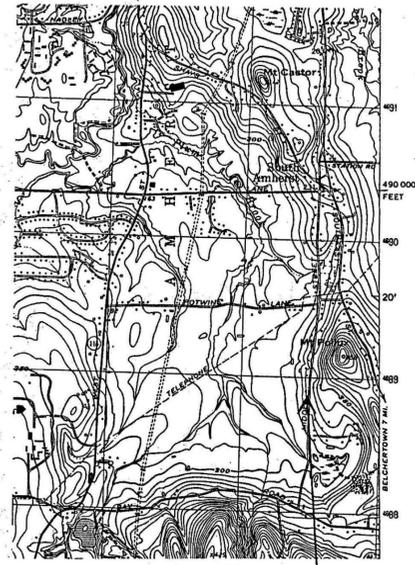




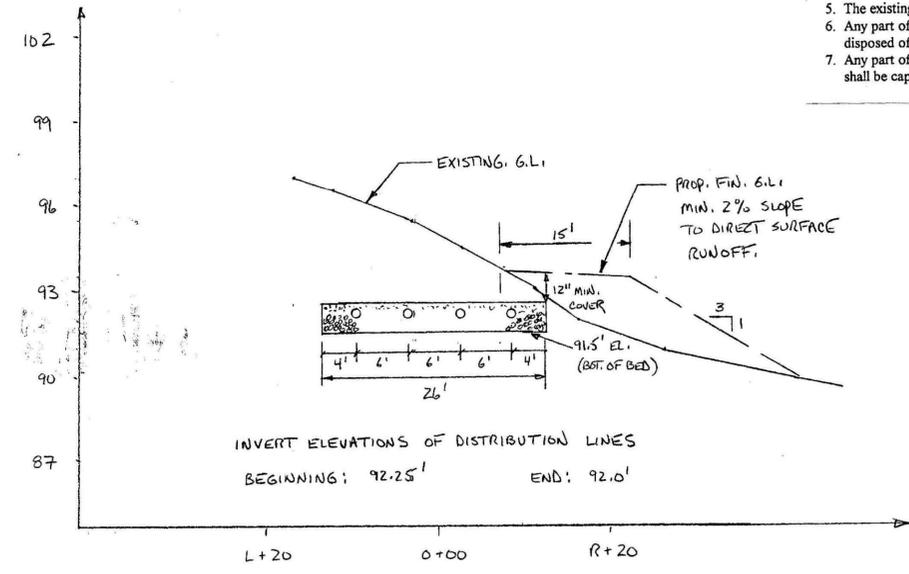
PLAN VIEW
SCALE: 1 inch = 20 feet



SYSTEM PROFILE
SCALE: H: 1" = 10' V: 1" = 3'



PROJECT LOCATION
LOCUS PLAN
USGS MT. HOLYOKE, MA QUAD
SCALE = 1: 25,000



LEACH FIELD
SECTION AT "A - A"
SCALE: H: 1" = 10' V: 1" = 3'

DESIGN CRITERIA

Design flow is for a 5 bedroom house with no garbage grinder.
Proposed septic tank: 1500 gallons.

DESIGN CALCULATION

Design Flow: Title V: 5 bedrooms x 110 gpd/bedroom = 550 gpd
Town of Amherst: 1.25 x 550 = 688 gpd (governs)

Soil Loading Factor: Percolation Rate: 18 min./inch
Class II Soils
Soil Loading Rate: 0.542 gpd/sf

Proposed soil absorption system: 1 leach bed 50 ft. long by 26 ft. wide by 0.50 ft. below invert of distribution lines.

Bottom Area: 50 ft. x 26 ft. = 1300.0 sf
Total Leaching Area: = 1300.0 sf

(1300.0 sf)(0.542 gpd/sf) = 704 gpd
Total Required Capacity = 688 gpd (o'k)

SOIL INVESTIGATION

TEST PIT NO. 1 Elevation = 92.00'
Est. Seasonal High Water Table @ elev. = 87.50'
Bedrock deeper than elev. = 82.92'
Class II soils.

TEST PIT NO. 2 Elevation = 87.92'
Est. Seasonal High Water Table @ elev. = 84.42'
Bedrock deeper than elev. = 77.67'
Class II soils.

Water supply wells within 200 feet and wetland resource areas within 100 feet of the proposed soil absorption system are shown on the planview. Deep observation hole logs and percolation test results are in attached Soil Suitability Report. Soil Investigation and percolation testing by Robert Stover, Certified Soil Evaluator, and witnessed for the Board of Health by David Zarozinski, Certified Soil Evaluator on September 30, 1997.

GENERAL CONDITIONS

- This system repair plan is prepared in accordance with Title V, 310 CMR 15.00. Construction shall conform to these regulations.
- The installer shall notify the designer of any unusual conditions and shall not modify the plan without the written consent of the designer.
- All debris in the site area shall be removed and disposed of by the installer in accordance with the law.
- The installer shall notify the designer and the Amherst Board of Health when the system installation is complete and prior to placement of the cover material for final inspection. Notification shall be 48 hours prior to the time of inspection.
- There is no guarantee expressed or implied to any user of a system installed pursuant to this plan.
- The on-site sewage disposal system shall be pumped and inspected as necessary and at least once every three years.

CONSTRUCTION NOTES

- The pipes exiting the distribution box shall have the same invert elevation and shall be level for at least the first two feet of length.
- Any topsoil, subsoil, stumps, roots and stones shall be removed from the area of the leaching trenches, from five feet around the leaching area and from wherever fill is to be placed. Any fill placed in or adjacent to the leaching area shall be clean granular sand and conform to the specifications of Title V, 310 CMR 15.255(3).
- The finished grade above the soil absorption system shall have a minimum two percent slope to shed surface runoff away from the system.
- Disturbed areas shall be loamed, seeded and mulched until permanent vegetative cover is established.
- The existing septic tank shall be pumped, crushed, and filled with sand.
- Any part of the existing soil absorption system encountered during excavation shall be disposed of in accordance with the requirements of the Amherst Board of Health.
- Any part of the system that shall be located in an area subject to vehicular traffic shall be capable of withstanding H-20 wheel loading.



JRC/RC 4/6/98

ON-SITE SEWAGE DISPOSAL SYSTEM 385 MIDDLE STREET, AMHERST, MA		
ESTATE OF ISABEL STRAKER c/o CONGATE ENTERPRISES, 71 SO. PLEASANT ST., AMHERST, MA 01004		
SCALE: AS SHOWN	APPROVED BY	DRAWN BY REC
DATE: 4/6/98		
AMHERST CIVIL ENGINEERING RICHARD COSTA, P.E. / ROBERT STOVER		
P.O. BOX 3312, AMHERST, MA 01004-3312		DRAWING NUMBER
413-256-3400		

Fred Filios

Middle St. what is issue?

can be rebuilt in place
or other location.

redirect sump pump?

Mon 12/18

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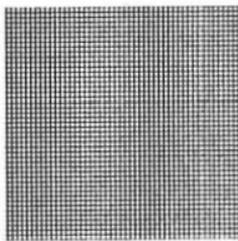
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SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION (continued)

Property Address: *388 Middle St. Amherst MA.*
Owner: *Russel + Ann Koffila*
Date of Inspection: *12/12/95*

B] SYSTEM CONDITIONALLY PASSES (continued)

- 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

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

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

- 1) **SYSTEM WILL PASS UNLESS BOARD OF HEALTH DETERMINES THAT THE SYSTEM IS NOT FUNCTIONING IN A MANNER WHICH WILL PROTECT THE PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT:**
 - Cesspool or privy is within 50 feet of a surface water
 - Cesspool or privy is within 50 feet of a bordering vegetated wetland or a salt marsh.

- 2) **SYSTEM WILL FAIL UNLESS THE BOARD OF HEALTH (AND PUBLIC WATER SUPPLIER, IF APPROPRIATE) DETERMINES THAT THE SYSTEM IS FUNCTIONING IN A MANNER THAT PROTECT THE PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT:**
 - The system has a septic tank and soil absorption system and is within 100 feet to a surface water supply or tributary to a surface water supply.
 - The system has a septic tank and soil absorption system and is within a Zone I of a public water supply well.
 - The system has a septic tank and soil absorption system and is within 50 feet of a private water supply well.
 - The system has a septic tank and soil absorption system and is less than 100 feet but 50 feet or more from a private water supply well, unless a well water analysis for coliform bacteria and volatile organic compounds indicates that the well is free from pollution from that facility and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm.

D] SYSTEM FAILS:

- I have determined that the system violates one or more of the following failure criteria as defined in 310 CMR 15.303. The basis for this determination is identified below. The Board of Health should be contacted to determine what will be necessary to correct the failure.
 - Backup of sewage into facility or system component due to an overloaded or clogged SAS or cesspool.
 - Discharge or ponding of effluent to the surface of the ground or surface waters due to an overloaded or clogged SAS or cesspool.

DEC 15 1995



Commonwealth of Massachusetts
Executive Office of Environmental Affairs
**Department of
Environmental Protection**

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

**SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION**

Property Address: 388 MIDDLE ROAD, Amherst
Date of Inspection: 12/12/95
Name of Inspector: Fred Filios
Company Name, Address and Telephone Number:
69 Pelham Rd
Amherst MA. 01002
Address of Owner: Same
(if different)

CERTIFICATION STATEMENT

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

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

Inspector's Signature:

Luderrick A. Filios

Date:

12/12/96

The System Inspector shall submit a copy of this inspection report to the Approving Authority within thirty (30) days of completing this inspection. If the system is a shared system or has a design flow of 10,000 gpd or greater, the inspector and the system owner shall submit the report to the appropriate regional office of the Department of Environmental Protection.

The original should be sent to the system owner and copies sent to the buyer, if applicable and the approving authority.

INSPECTION SUMMARY:

Check A, B, C, or D

A) SYSTEM PASSES:

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

B) SYSTEM CONDITIONALLY PASSES:

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

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

_____ The septic tank is metal, cracked, structurally unsound, shows substantial infiltration or exfiltration, or tank failure is imminent. The system will pass inspection if the existing septic tank is replaced with a conforming septic tank as approved by the Board of Health.

(revised 8/15/95)

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM

PART A

CERTIFICATION (continued)

Property Address: 388 Middle St Amherst MA.

Owner: Russell & Ann Koffila

Date of Inspection: 12/12/95

D] SYSTEM FAILS (continued):

- Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS or cesspool.
- Liquid depth in cesspool is less than 6" below invert or available volume is less than 1/2 day flow.
- Required pumping more than 4 times in the last year NOI due to clogged or obstructed pipe(s).
Number of times pumped _____
- Any portion of the Soil Absorption System, cesspool or privy is below the high groundwater elevation.
- Any portion of a cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply.
- Any portion of a cesspool or privy is within a Zone I of a public well.
- Any portion of a cesspool or privy is within 50 feet of a private water supply well.
- Any portion of a cesspool or privy is less than 100 feet but greater than 50 feet from a private water supply well with no acceptable water quality analysis. If the well has been analyzed to be acceptable, attach copy of well water analysis for coliform bacteria, volatile organic compounds, ammonia nitrogen and nitrate nitrogen.

E] LARGE SYSTEM FAILS:

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

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

- ___ the system is within 400 feet of a surface drinking water supply
- ___ the system is within 200 feet of a tributary to a surface drinking water supply
- ___ the system is located in a nitrogen sensitive area (Interim Wellhead Protection Area (IWPA) or a mapped Zone II of a public water supply well)

The owner or operator of any such system shall bring the system and facility into full compliance with the groundwater treatment program requirements of 314 CMR 5.00 and 6.00. Please consult the local regional office of the Department for further information.

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

Property Address: 388 Middle St. Amherst MA.
Owner: Russell + Ann Kotfila
Date of Inspection: 12/12/95

Check if the following have been done:

yes Pumping information was requested of the owner, occupant, and Board of Health.

no 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.

yes As built plans have been obtained and examined. Note if they are not available with N/A.

yes The facility or dwelling was inspected for signs of sewage back-up.

no The system does not receive non-sanitary or industrial waste flow

yes The site was inspected for signs of breakout.

yes All system components, excluding the Soil Absorption System, have been located on the site.

yes 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.

yes The size and location of the Soil Absorption System on the site has been determined based on existing information or approximated by non-intrusive methods.

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

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C

SYSTEM INFORMATION (continued)

Property Address: 388 Middle St. Amherst MA. 01002
Owner: Russell + Ann Koffila
Date of Inspection: 12/12/95

SEPTIC TANK:
(locate on site plan)

Depth below grade: 16"
Material of construction: concrete metal FRP other(explain)

Dimensions: 10 x 5 x 4' deep
Sludge depth: 4-6"
Distance from top of sludge to bottom of outlet tee or baffle: 29"
Scum thickness: 4-6"
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: 14"

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.)

Evidence of higher fluid levels at Septic Tank,
Level at time of inspection 1" above outlet invert

GREASE TRAP:
(locate on site plan)

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

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

Comments:

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

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM

PART C

SYSTEM INFORMATION

Property Address: 388 Middle St Amherst MA
Owner: Russell & Ann Kotfila
Date of Inspection: 12/12/95

RESIDENTIAL: 440 Actual Design 300 gal. FLOW CONDITIONS

Design flow: 1500 gallons
Number of bedrooms: 4
Number of current residents: 4
Garbage grinder (yes or no): yes
Laundry connected to system (yes or no): yes
Seasonal use (yes or no): no
Water meter readings, if available: N/A

Last date of occupancy: present

COMMERCIAL/INDUSTRIAL:

Type of establishment: _____
Design flow: _____ gallons/day
Grease trap present: (yes or no) _____
Industrial Waste Holding Tank present: (yes or no) _____
Non-sanitary waste discharged to the Title 5 system: (yes or no) _____
Water meter readings, if available: _____

Last date of occupancy: _____

OTHER: (Describe) _____

Last date of occupancy: _____

GENERAL INFORMATION

PUMPING RECORDS and source of information:

N/A
System pumped as part of inspection: (yes or no) yes
If yes, volume pumped 1500 gallons
Reason for pumping for inspection

TYPE OF SYSTEM

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

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

1976

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

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

Property Address: 388 Middle St. Amherst MA.
Owner: Russell + Ann Kotfila
Date of Inspection: 12/12/95

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

If not determined to be present, explain:

Type:

leaching pits, number: _____
leaching chambers, number: _____
leaching galleries, number: _____
leaching trenches, number, length: _____
leaching fields, number, dimensions: 1 18' x 21' Actual 20' x 50'
overflow cesspool, number: _____

Comments: (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.)
Area of leach ~~field~~ field covers part of reserve area
Outlet pipe from sump pump is over leach facility

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)

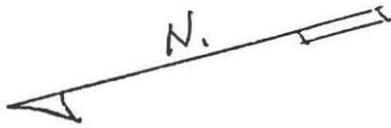
Materials of construction: _____ Dimensions: _____
Depth of solids: _____
Comments: (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.) _____

PLAN SHOWING SEWAGE DISPOSAL

For: N Laurence Miller
91 Hulst Rd.
Amherst Mass

Scale: 1" = 30'

By: Frederick Filios



153.25'

Lot #5

Note. only house (not ~~family room~~ (NO garage)) to be built initially. House without above is 34' long by 26' wide.

Notes:

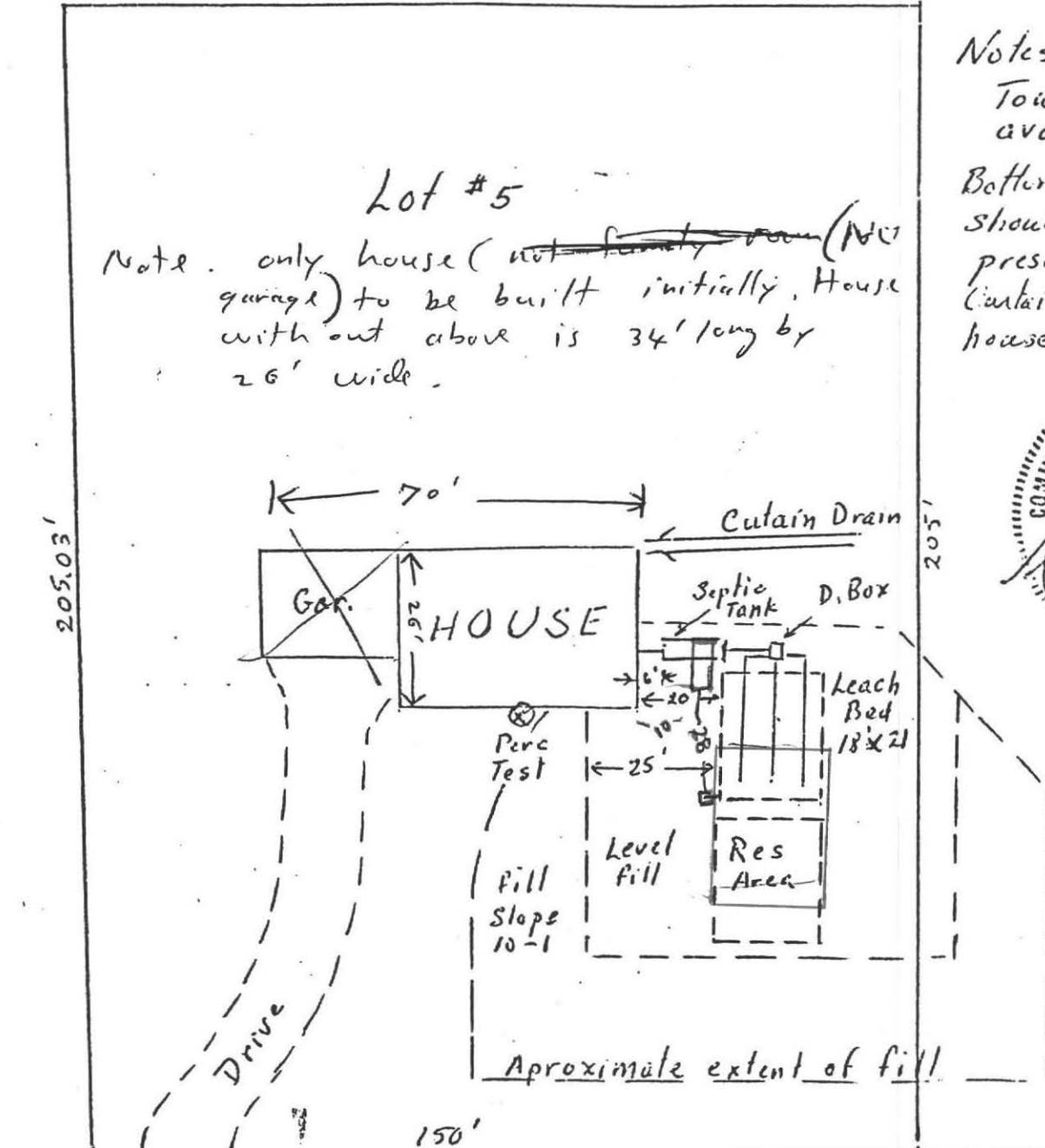
Town water available:

Bottom of Leach Bed should be 1/2' above present ground level. Curtain drain to feed in house foundation drains



Law under purchase agreement / N. Laurence Miller

Lot 5



MIDDLE ST.



DEEP SOIL LOGS

250 - 5008

OWNER L. Robt Mannheim

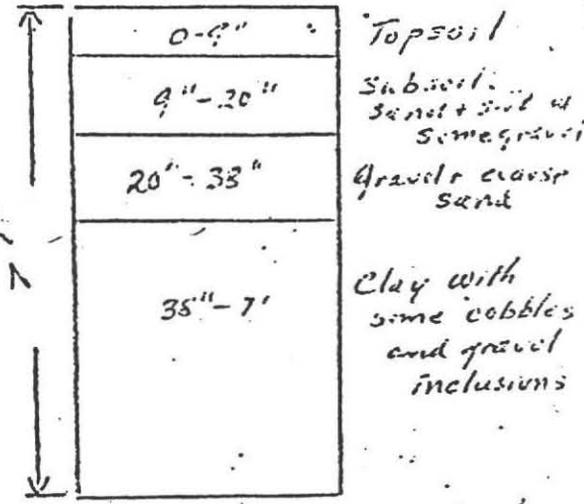
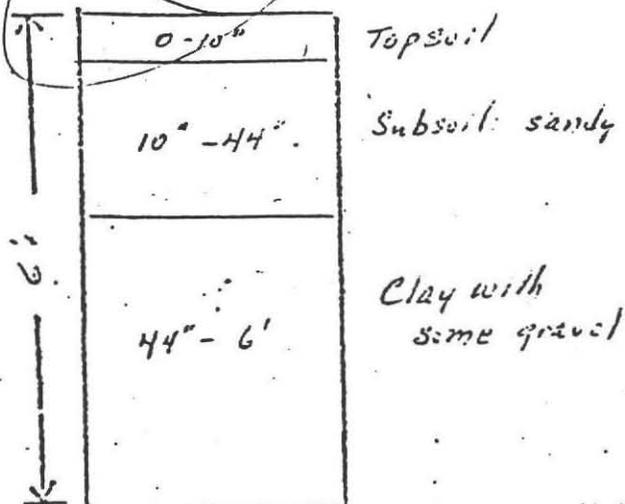
DATE Apr. 8 1976

LOCATION 374 Middle St

OBSERVER F. Atilius

Lot # 5

Lot # 6

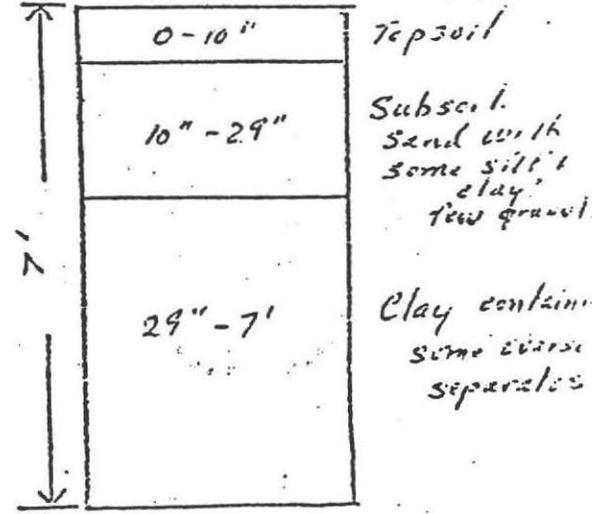
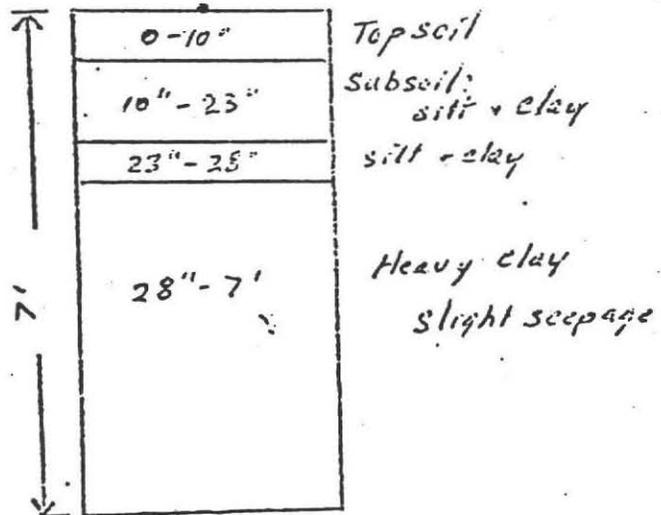


GROUND WATER Rapid seepage at 3 1/2'

GROUND WATER Seepage at 3'

Lot # 9

Lot # 9 Alternate



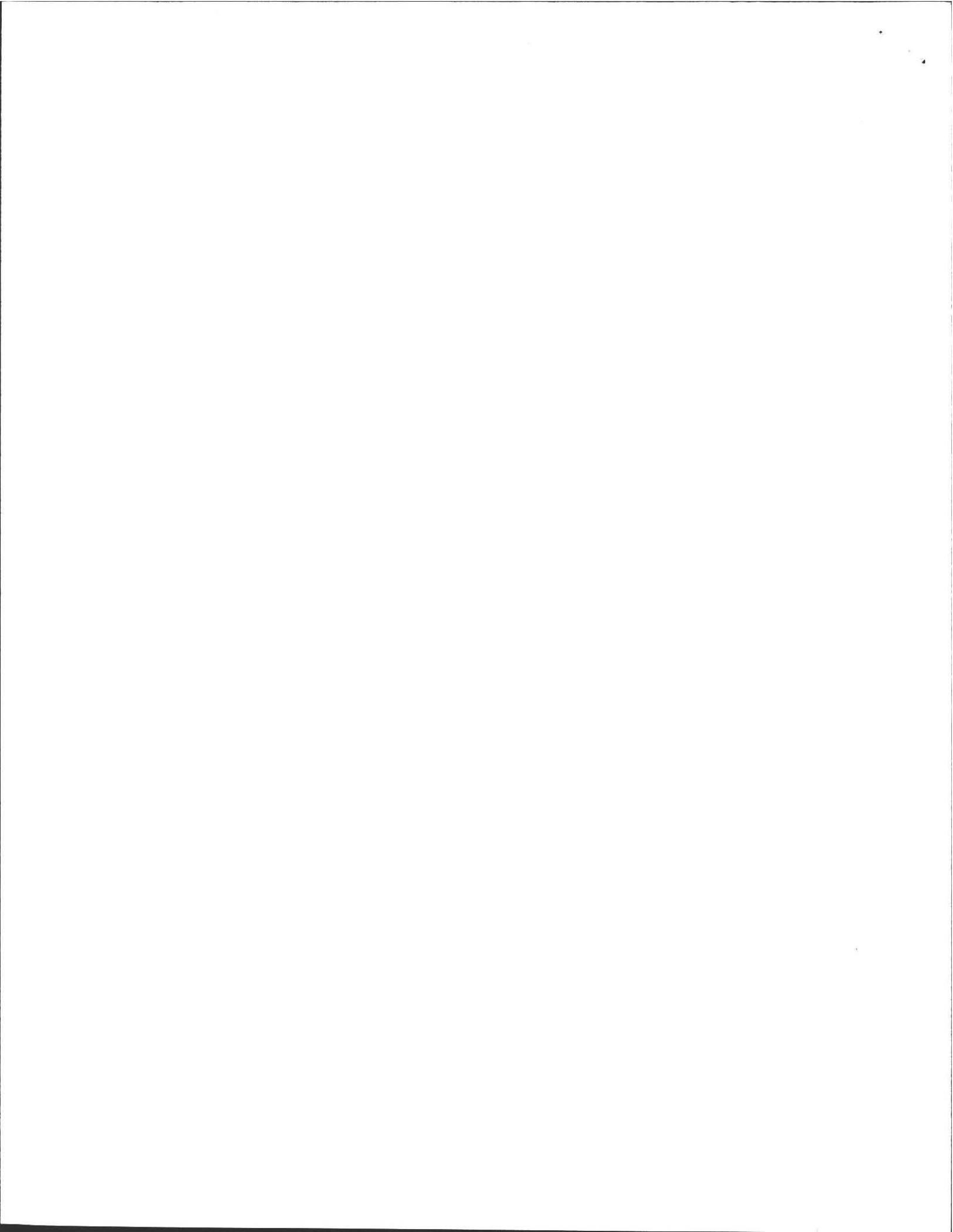
GROUND WATER Slight seepage accumulated in pit at 6'10" in app. 1/2 hr.

GROUND WATER Seepage continues to 6'10"



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SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C

SYSTEM INFORMATION (continued)

Property Address: *388 Middle St. Amherst MA.*
Owner: *Russell + Ann Kotfila*
Date of Inspection: *12/12/95*

SKETCH OF SEWAGE DISPOSAL SYSTEM:

include ties to at least two permanent references landmarks or benchmarks
locate all wells within 100'

See existing plans (original)

DEPTH TO GROUNDWATER

Depth to groundwater: _____ feet

method of determination or approximation: _____

To be determined by ensuring perc
Test and deep holes for S&S replacement
3 1/2' according to original application

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
5400 S. UNIVERSITY AVENUE
CHICAGO, ILLINOIS 60637

RECEIVED
JAN 15 1964

W. R. BOYD, JR.

No. _____

Date Nov
PD
NS OK
12/8/95

Commonwealth of Massachusetts
, Massachusetts

Site Suitability Assessment for On-site Sewage Disposal

Performed By: _____ Certification Number: _____

Witnessed By: _____

Location Address or Lot No. <u>278 Middle St</u>	Owner's Name, Address and Tel. # <u>Mary Hohten</u>
---	--

New Construction Repair

Office Review

Published Soil Survey Available: No Yes
Year Published _____ Publication Scale _____ Soil Map Unit _____
Drainage Class _____ Soil Limitations _____

Surficial Geologic Report Available: No Yes
Year Published _____ Publication Scale _____
Geologic Material (Map Unit) _____
Landform _____

Flood Insurance Rate Map:

Above 500 year flood boundary No Yes
Within 500 year flood boundary No Yes
Within 100 year flood boundary No Yes

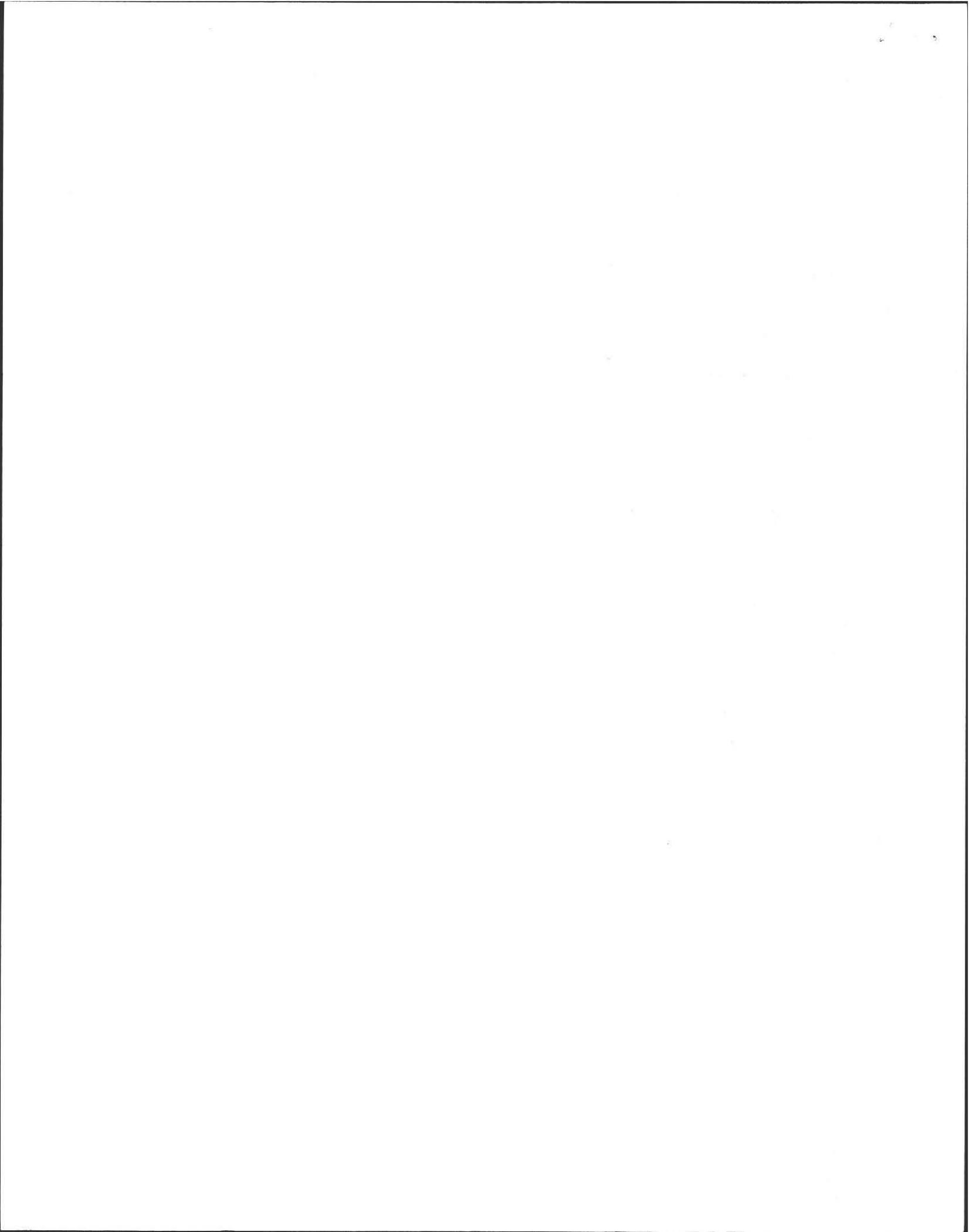
Wetland Area:

National Wetland Inventory Map (map unit) _____
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS):

Month _____
Range: Above Normal Normal Below Normal

Other References Reviewed: _____



Determination for Seasonal High Water Table

Method Used:

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

Index Well Number Reading Date Index well level

Adjustment factor Adjusted ground water level

Percolation Test		
Date: <u>12/1/95</u>		Time: <u>1:00</u>
Observation Hole #		
Depth of Perc		
Start Pre-soak		
End Pre-soak		
Time at 12"		
Time at 9"	43" 2:12	44" 2:16
Time at 6"	46" 2:26	45" 2:21
Time (9"-6")	14 min	
Rate Min./Inch	5 min	

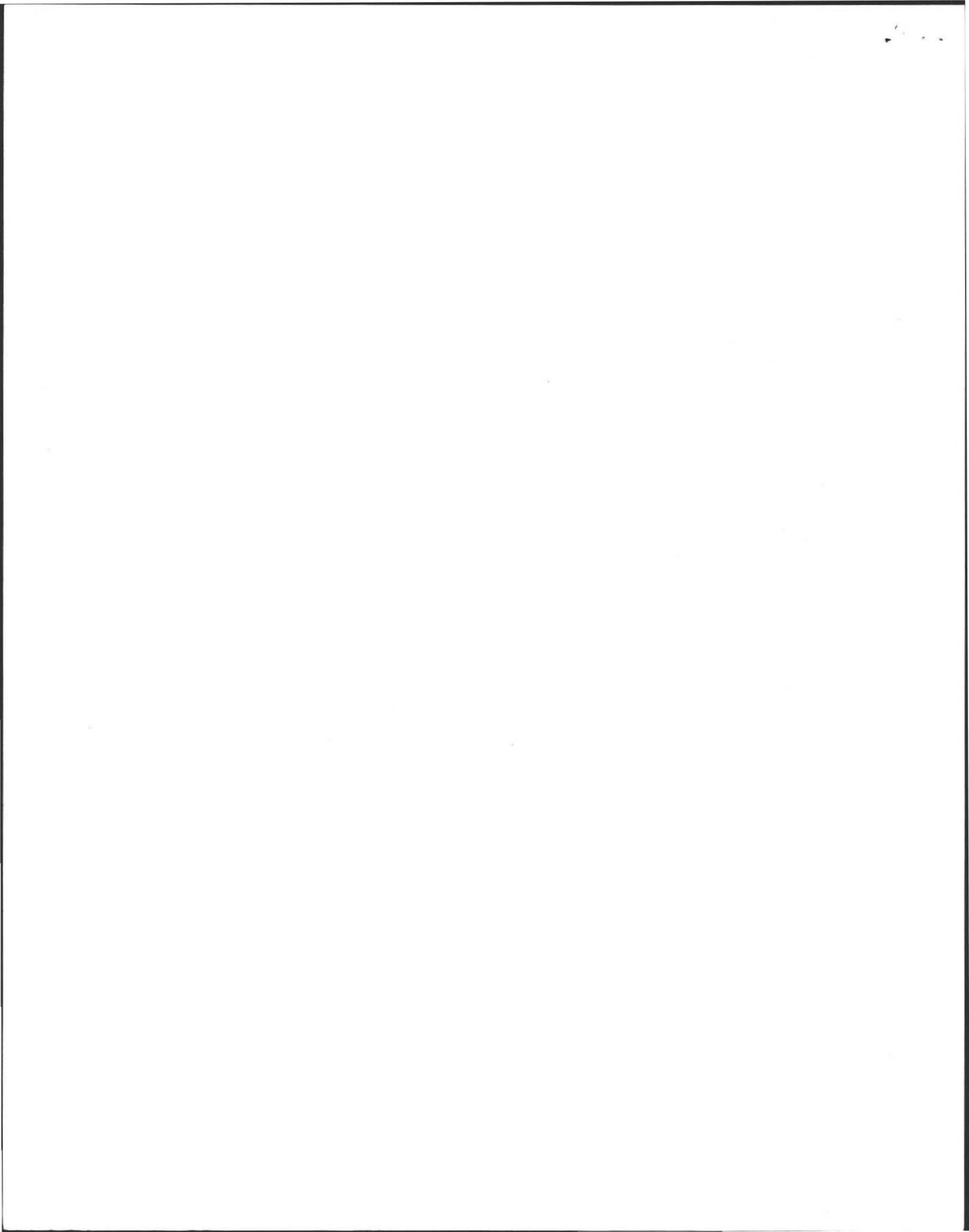
Site Suitability Assessment: Site Passed Site Failed

Additional Testing Needed: _____

Performed By: _____ Certification Number: _____

Witnessed By: _____

Comments: _____



On-site Review

On-site Review

Deep Hole Number Date: 12/1/95 Time: 1:00 Weather

Location (identify on site plan)

Land Use Slope (%) Surface Stones

Vegetation

Landform

Position on landscape (sketch on the back)

Distances from:

Open Water Body feet Drainageway feet

Possible Wet Area feet Property Line feet

Drinking Water Well feet Other

Deep Hole Number Date: Time: Weather

Location (identify on site plan)

Land Use Slope (%) Surface Stones

Vegetation

Landform

Position on landscape (sketch on the 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)
0-4"	A				
NO B					
Med to coarse Sand Tanned Sand	C1	10YR 6/6		54"	
Fine Sand Little Silts LS Lamy Sand	C2	10YR 5/8 7.5YR 5/6		8" 10'	

DEEP OBSERVATION HOLE LOG

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
Unpaved (No Room to dig)					

Parent Material (geologic) NO WATER Depth to Bedrock:

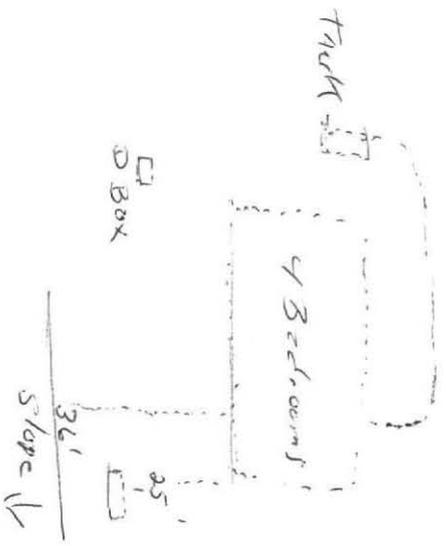
Depth to Groundwater: Standing Water in the Hole: Weeping from Pit Face:

Estimated Seasonal High Ground Water:

Parent Material (geologic) Depth to Bedrock:

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

Estimated Seasonal High Ground Water:



Road