

No. 98-10

#29

FEE 160
Ad c 4 778
4/29/98

THE COMMONWEALTH OF MASSACHUSETTS

Amherst, MASSACHUSETTS

Application for Disposal System Construction Permit

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

Location Address or Lot No. <u>29 S. Orchard Dr.</u>	Owner's Name, Address and Tel. No. <u>Ned Cramer</u> <u>29 S. Orchard Dr.</u> <u>Amherst, MA</u> <u>256-8177</u>
Installer's Name, Address, and Tel. No. <u>David Desrosiers</u> <u>32 Champion Drive Chicopee</u> <u>01020</u>	Designer's Name, Address and Tel. No. <u>Lewis & Cook Surveyors, Inc</u> <u>323-7124</u> <u>Robert F. Sheehan, PE</u> <u>Belchertown, MA</u>

Type of Building:

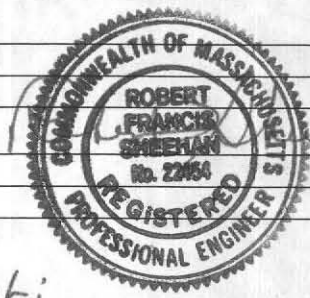
Dwelling No. of Bedrooms 5 Garbage Grinder NO
 Other Type of Building _____ No. per Persons _____ Showers () Cafeteria ()
 Other Fixtures _____

Design Flow 550 gallons per day. Calculated daily flow 588 gallons.

Plan Date May 6, 1998 Number of sheets _____ Revision Date _____
Title _____

Description of Soil See Attached Sheets

Nature of Repairs or Alterations (Answer when applicable) _____



Date last inspected: _____

Agreement:

Insp. Dave Zaroginski

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

Signed [Signature] Date 5/7/98

Application Approved by [Signature] Date 5/7/1998

Application Disapproved for the following reasons _____

Permit No. 98-10 Date Issued 5/2/98

THE COMMONWEALTH OF MASSACHUSETTS

Amherst, MASSACHUSETTS

Certificate of Compliance

[Signature]

THIS IS TO CERTIFY, that the On-site Sewage Disposal System installed () or repaired/replaced (X) on _____ by David Desrosiers for Ned Cramer at 29 S. Orchard Dr. has been constructed in accordance with the provisions of Title 5 and the for Disposal System Construction Permit No. 98-10 dated _____. Use of this system is conditioned on compliance with the provisions set forth below:

The issuance of this certificate shall not be construed as a guarantee that the system will function as designed. This Certificate expires on DATE 5-15-98 Inspector [Signature]

THE COMMONWEALTH OF MASSACHUSETTS

Amherst, MASSACHUSETTS

Disposal System Construction Permit

FEE 160
778

Permission is hereby granted to Ned Cramer to construct () or repair (X) an On-site Sewage System located at 29 S. Orchard Dr. Amherst, Mass

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

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

DATE 5/7/98 Approved by [Signature]

1918
1919

THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF STATE

Application for Naturalization

1. Name of Applicant: John J. O'Brien
 2. Residence: 123 Main Street, Boston, Mass.
 3. Date of Birth: Jan 1, 1880
 4. Place of Birth: Ireland

5. Name of Spouse: None
 6. Name of Children: None
 7. Name of Parents: John J. O'Brien, Mary O'Brien

8. Name of Employer: None
 9. Name of Occupation: None
 10. Name of Character of Occupation: None

11. Name of Character of Business: None
 12. Name of Character of Industry: None
 13. Name of Character of Profession: None

14. Name of Character of Service: None
 15. Name of Character of Vocation: None
 16. Name of Character of Avocation: None

17. Name of Character of Past Occupation: None
 18. Name of Character of Past Business: None
 19. Name of Character of Past Industry: None

20. Name of Character of Past Profession: None
 21. Name of Character of Past Service: None
 22. Name of Character of Past Vocation: None

23. Name of Character of Past Avocation: None
 24. Name of Character of Past Past Occupation: None
 25. Name of Character of Past Past Business: None

26. Name of Character of Past Past Profession: None
 27. Name of Character of Past Past Service: None
 28. Name of Character of Past Past Vocation: None



Town of



AMHERST

Massachusetts

TOWN HALL
4 BOLTWOOD AVENUE
AMHERST, MA. 01002-2351

INSPECTION SERVICES DEPARTMENT
Fax (413) 256-4041
Phone (413) 256-4030

May 8, 1998

To: Amherst Board of Health

From: David Zarozinski, Sanitarian

Re: Local Variance Request to Title V - 29 South Orchard Drive

Mr. & Mrs. Ned Cramer, owners of 29 South Orchard Drive, Amherst, MA. would like to request a variance from Title V Regulations 310 *CMR* 15.405 (1) (I). Their request is to allow a vertical separation distance of three feet (3') between the bottom of the proposed soil absorption system and the high ground water elevation. (copy enclosed)

I would recommend the approval of this variance for the following reasons:

1. The system is designed to allow for both the best feasible upgrade within the borders of the lot, and have the least effect on public health, safety and the environment.
2. Town water is available.
3. Garbage grinder will be removed.

ck # 778
Pg 160^{cc}

No. _____

Date: 4/29/98

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

Performed By: Richard Lewis
Witnessed By: David Zang

Date: 4/29/98

Location Address or Lot # <u>29 South Orchard</u>	Owner's Name, Address, and Telephone # <u>Bob Cramer</u> <u>29 S. Orchard</u> <u>256-8177</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) _____

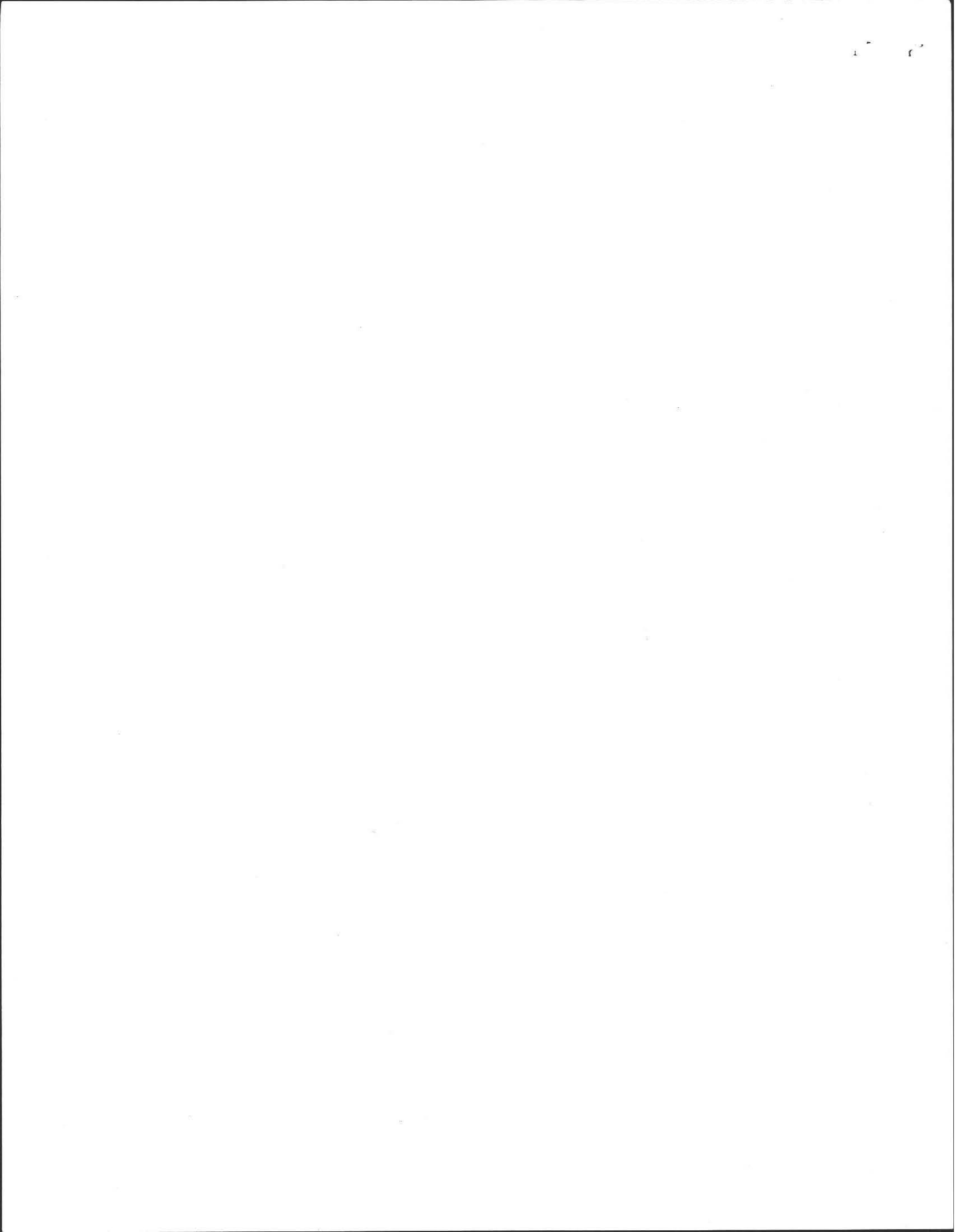
Wetlands Conservancy Program Map (map unit) _____

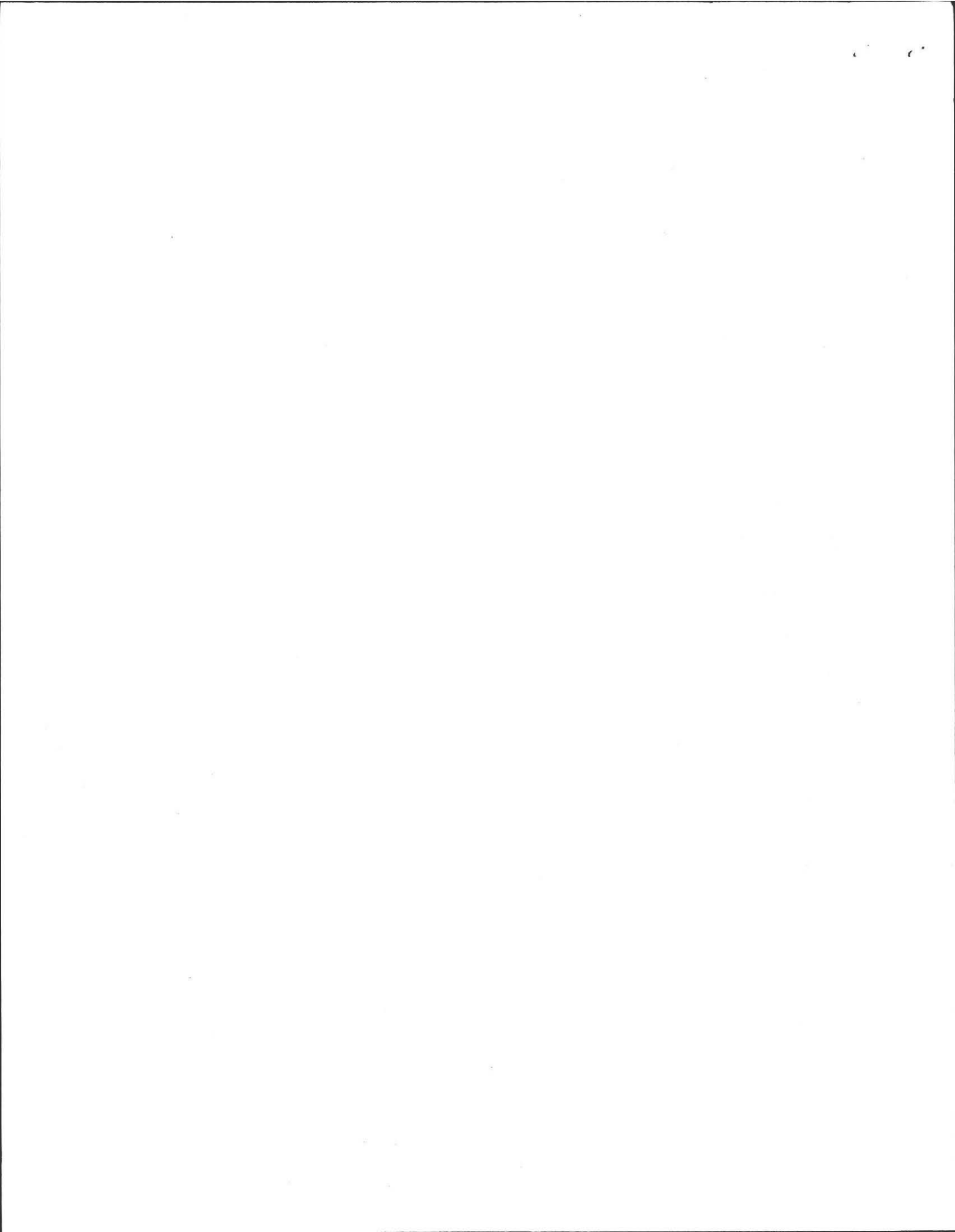
Current Water Resource Conditions (USGS): Month _____

Range :Above Normal Normal Below Normal

Other References Reviewed: _____







Location Address or Lot No. 29 S. Orchard Dr

COMMONWEALTH OF MASSACHUSETTS

, Massachusetts

Percolation Test*		
Date: <u>4/29/98</u>		Time: <u>10:08</u>
Observation Hole #	<u>1</u>	
Depth of Perc	<u>38"</u>	
Start Pre-soak	<u>10:08</u>	
End Pre-soak	<u>10:23</u>	
Time at 12"	<u>10:23</u>	
Time at 9"	<u>10:47</u>	
Time at 6"	<u>11:28</u>	
Time (9"-6")	<u>41</u>	
Rate Min./Inch	<u>13</u>	

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

Site Passed Site Failed

Performed By: Richard Lewis

Witnessed By: David Zarnoff

Comments: _____



Acc. TO DEP.
D. E.P.

29 South Orchard Drive

TO Whom it MAY CONCERN:

- 1) - What % OF TOTAL Leach Lines ARE TURNED UP?
- 2) 6 mo - TO ~~1~~ 1 YR. REINSPECT SYSTEM FOR FINAL APPROVAL.
- 3) I would Recommend The Removal OF The G. Gravel.
- 4) F F PIPES CAN Be TURNED IT MUST Be INSTALLED BY A LICENSED INSTALLER.

10 AM - Monday - April 6, 1998

David Zagor.



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

WILLIAM F WELD
 Governor

TRUDY COXE
 Secretary

ARGEO PAUL CELLUCCI
 Lt Governor

DAVID B STRUHS
 Commissioner

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
 PART A
 CERTIFICATION

Ned Cramer
 Property Address: *29 S. Orchard Dr. Amherst* Address of Owner:
 Date of Inspection: *4/3/88* (if different)
 Name of Inspector: *Pamela Bixell*

I am a DEP approved system inspector pursuant to Section 15.340 of Title 5 (310 CMR 15.000)
 Company Name: *Affordable Home and Septic Inspections Inc.*
 Mailing Address: *129 N. Elm St. Westfield, Ma. 01085*
 Telephone Number: *413 - 568-4289*

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: *Pamela Bixell* Date: *4/3/88*

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)**

*Leach Pipe perforated top; side per repair of 5/87.
 D-Box needs replacing.
 Baffles need replacing in tank.*

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.

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 conforming septic tank as approved by the Board of Health.

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

Property Address: 29 S. Orchard St; Amherst
Owner: Ned Cramer
Date of Inspection: 4/3/98

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). Describe observations:
 - 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 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 to 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 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: 29 S. Orchard Dr, Amherst
 Owner: Red Cramer
 Date of Inspection: 4/3/98

D) SYSTEM FAILS:

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

Yes 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.

- | 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 <u>NOT</u> due to clogged or obstructed pipe(s).
Number of times pumped <u> </u> |
| <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. |

Improperly installed leach field pipes inverted.

E) LARGE SYSTEM FAILS:

You must indicate either "Yes" or "No" as 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 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.

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART B
CHECKLIST

Property Address: *29 S. Orchard St; Amherst*
 Owner: *Red Cramer*
 Date of Inspection: *4/3/98*

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. <i>per system repair 5/87</i> |
| <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. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The size and location of the Soil Absorption System on the site has been determined based on. |
| <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 Sub-Surface Disposal System. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Existing information. Ex. 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)] |

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION

Property Address: 29 S. Orchard Dr; Amherst
Owner: Red Cramer
Date of Inspection: 4/3/98

FLOW CONDITIONS

RESIDENTIAL:

Design flow 50 g.p.d./bedroom for S.A.S
Number of bedrooms 5
Number of current residents 2
Garbage grinder (yes or no): Yes
Laundry connected to system (yes or no): Yes
Seasonal use (yes or no): No
Water meter readings, if available (last two (2) year usage (gpd): Four Water
Sump Pump (yes or no): No

Last date of occupancy: Presently

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

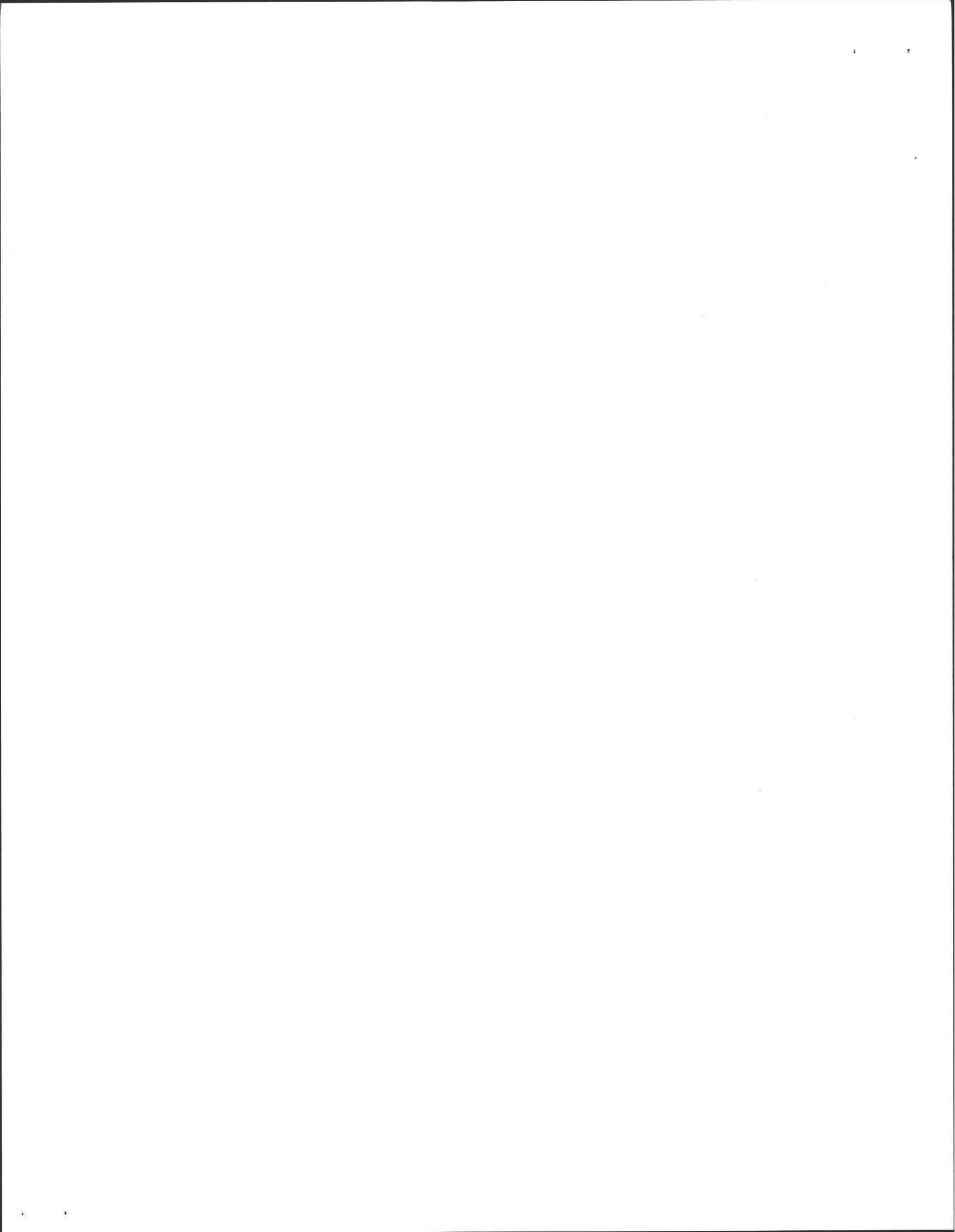
1996 - Claude Katoen
System pumped as part of inspection: (yes or no): No
If yes, volume pumped _____ gallons
Reason for pumping _____

TYPE OF SYSTEM

Septic tank/distribution box/soil absorption system
 Single cesspool
 Overflow cesspool
 Privy
 Shared system (yes or no) (if yes, attach previous inspection records, if any)
 I/A Technology etc. Copy of up to date contract?
Other _____

APPROXIMATE AGE of all components, date installed (if known) and source of information: 1971

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: 29 S. Orchard Dr., Amherst
Owner: Red Camer
Date of Inspection: 4/3/98

BUILDING SEWER:
(Locate on site plan)

Depth below grade: 4'
Material of construction: cast iron 40 PVC other (explain):

Distance from private water supply well or suction line: N/A
Diameter: 6"

Comments (condition of joints, venting, evidence of leakage, etc.):
No signs of leakage present

SEPTIC TANK: Present
(locate on site plan)

Depth below grade: 14"
Material of construction: concrete meta Fiberglass Polyethylene other (explain)

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

Dimensions: 8 x 4 x 5
Sludge depth: 5"
Distance from top of sludge to bottom of outlet tee or baffle:
Scum thickness: 1
Distance from top of scum to top of outlet tee or baffle:
Distance from bottom of scum to bottom of outlet tee or baffle:
How dimensions were determined: Sludge Judge

Baffle eroded

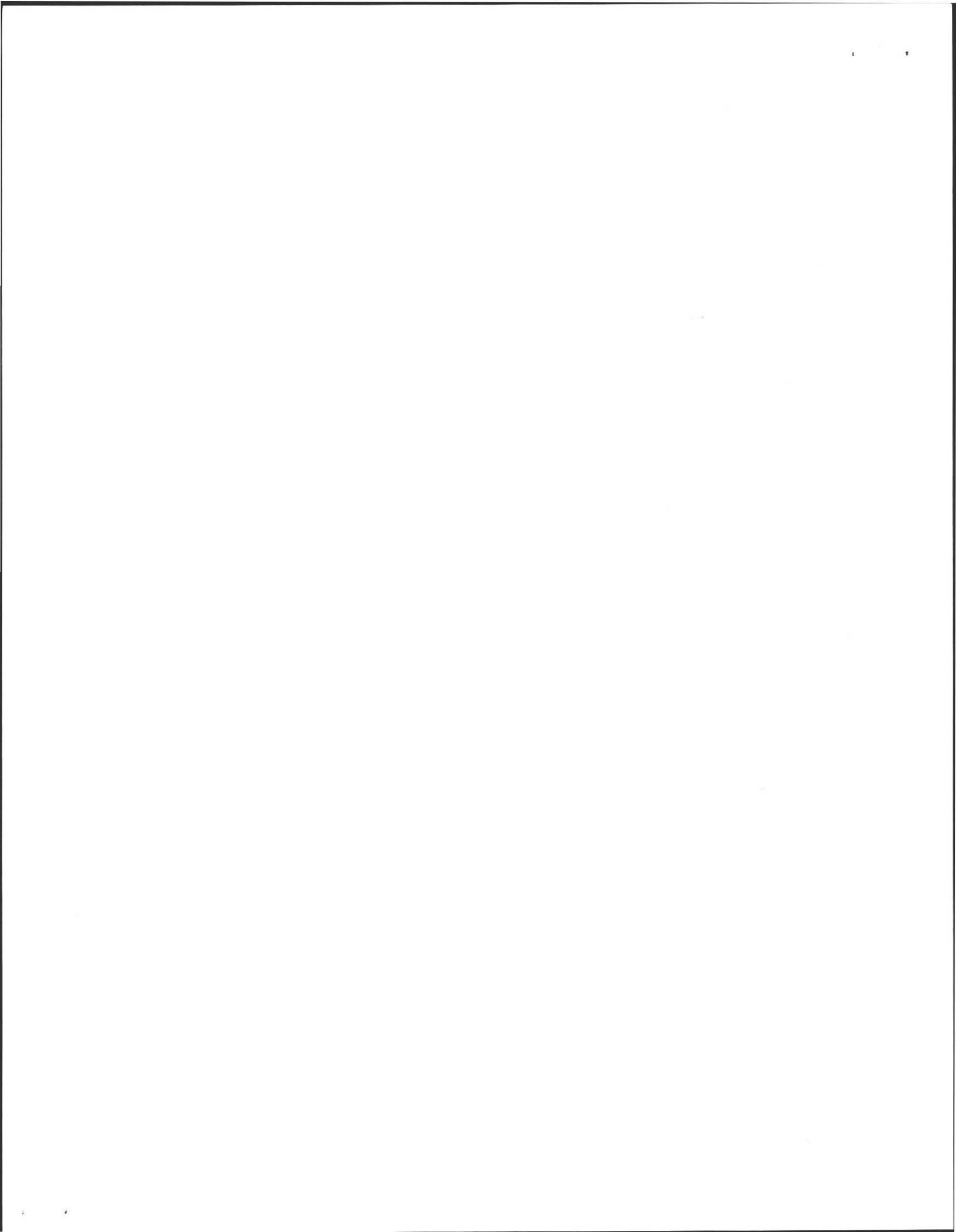
Comments:
(recommendation for pumping, condition of inlet and outlet tees or baffles, depth of liquid level in relation to outlet invert, structural integrity, evidence of leakage, etc.)
Slide in baffles eroded - need replacing
Tank appears sound

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: 29 S. Orchard Dr, Amherst
Owner: Red Cramer
Date of Inspection: 4/3/98

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 level _____ Alarm in working order _____ Yes. _____ No
Date of previous pumping _____
Comments:
(condition of inlet tee, condition of alarm and float switches, etc.)

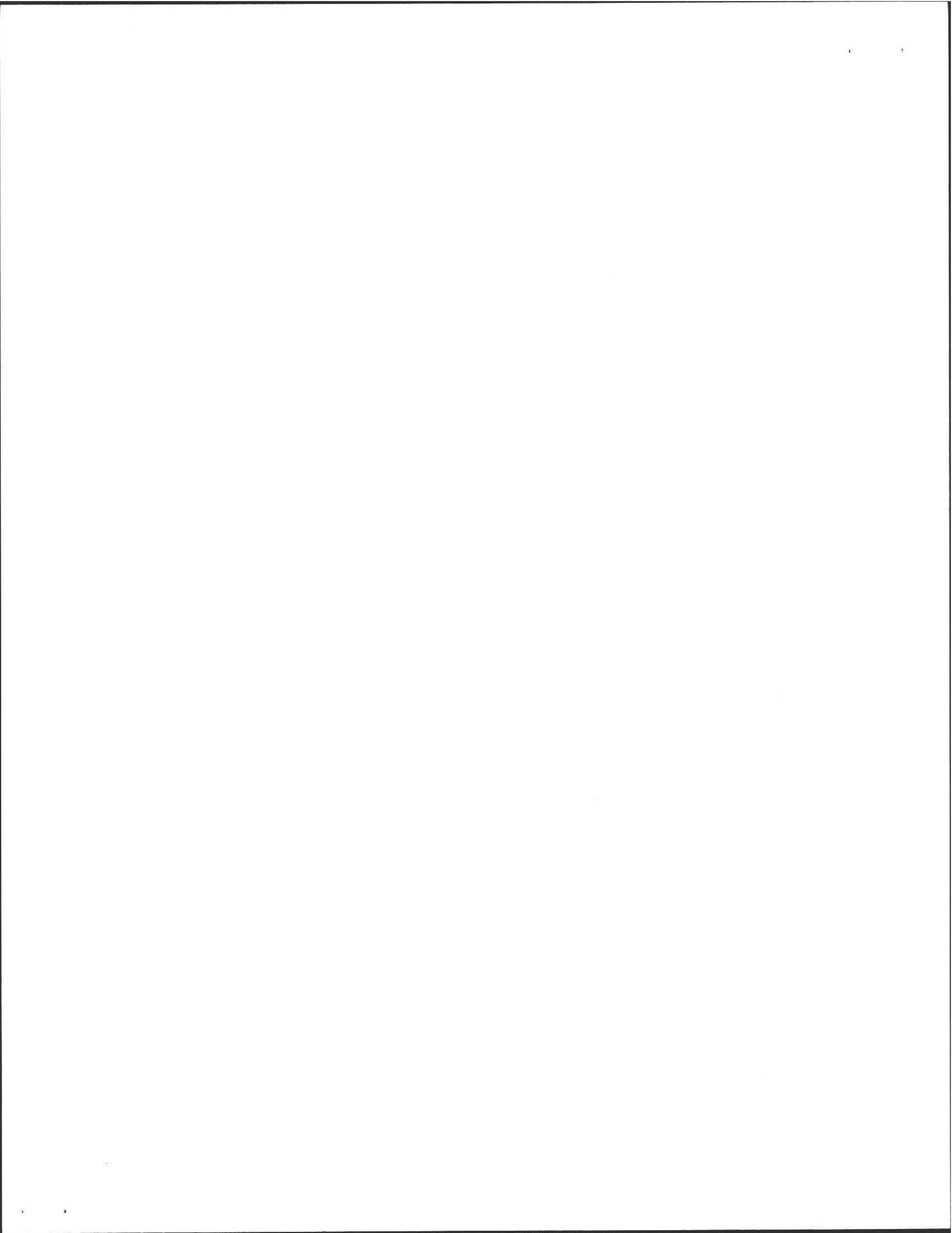
DISTRIBUTION BOX: Present
(locate on site plan)

Depth of liquid level above outlet: invert 2

Comments:
(note if level and distribution is equal, evidence of solids carryover, evidence of leakage into or out of box, etc.)
O-Box cracked; urever needs replacing

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:
Owner:
Date of Inspection:

SOIL ABSORPTION SYSTEM (SAS): Present

(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: (3) Leach lines in trench next to APD drawing
leaching fields, number, dimensions: _____ (perforations face up)
overflow cesspool, number: _____
Alternative system: _____
Name of Technology: _____

Comments:

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

Leach lines repaired in 2/82 with perforated
pipe inserted. no earth blanket found.
No obvious signs of hydraulic failure.
no

CESSPOOLS: _____

(locate on site plan)

Number and configuration: _____
Depth-top of liquid to inlet inven: _____
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.)

11

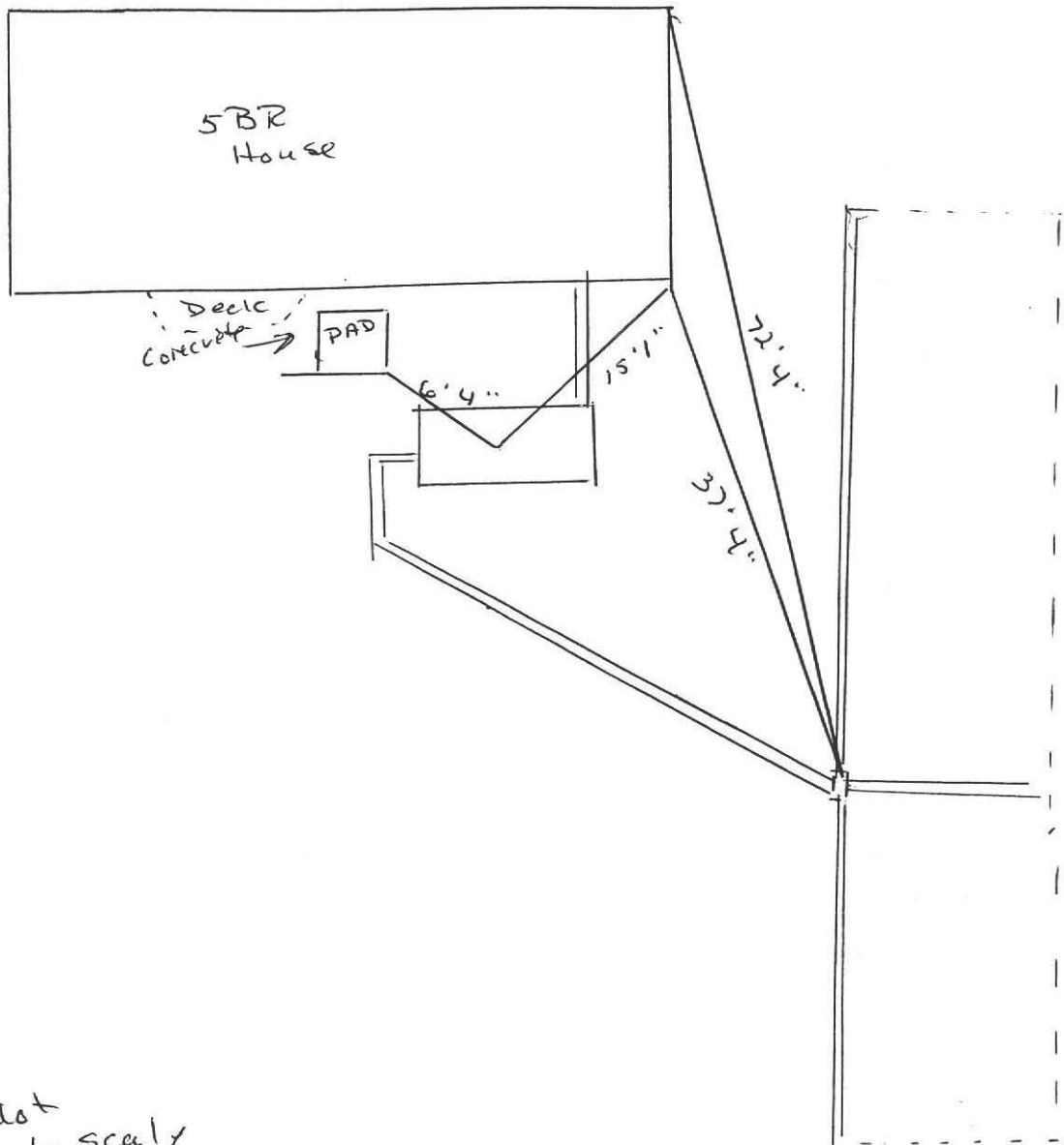
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address:
Owner:
Date of Inspection:

SKETCH OF SEWAGE DISPOSAL SYSTEM:

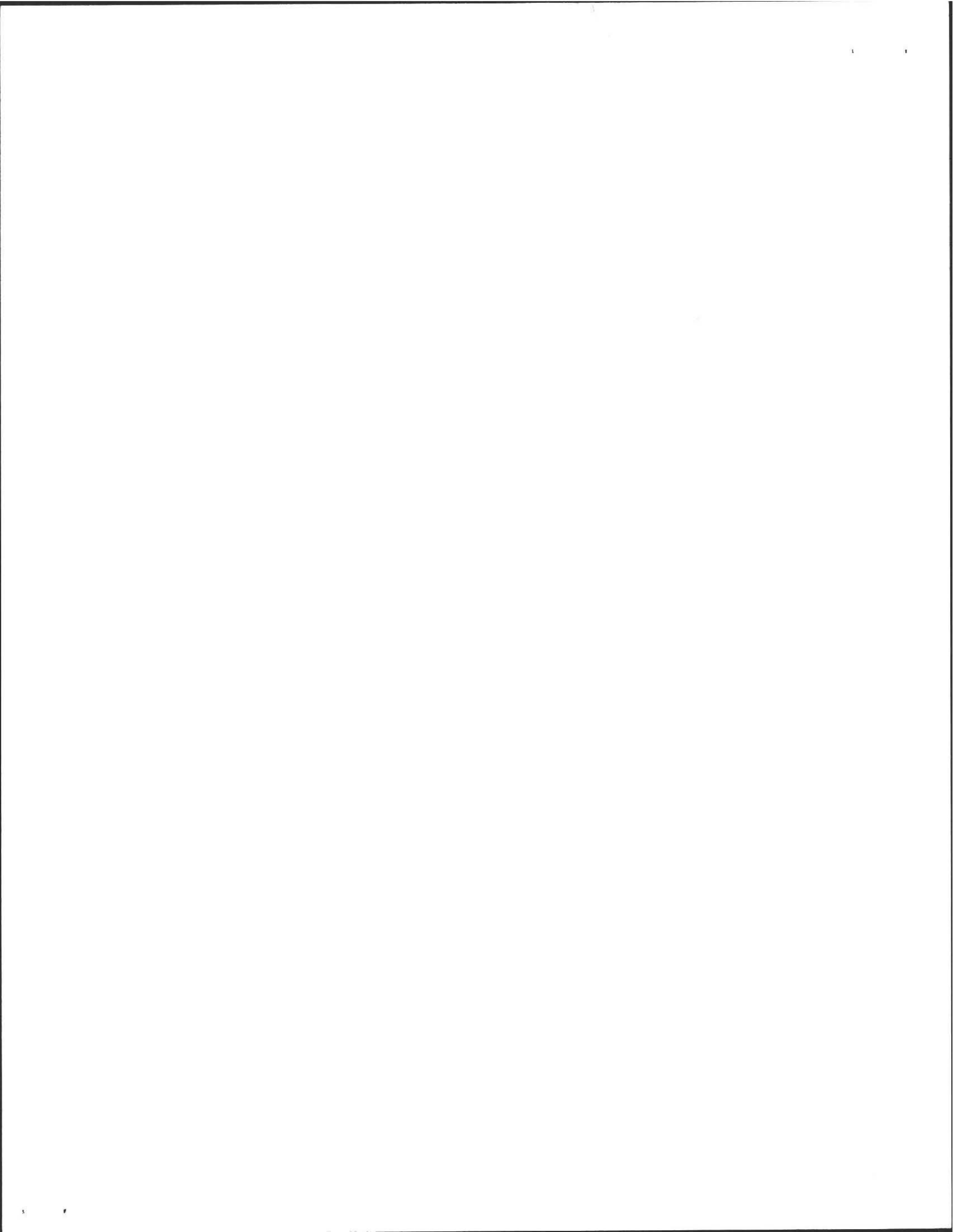
include ties to at least two permanent references landmarks or benchmarks
locate all wells within 100' (Locate where public water supply comes into house)

Front



Not
to scale

Rev



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

Property Address:
Owner:
Date of Inspection:

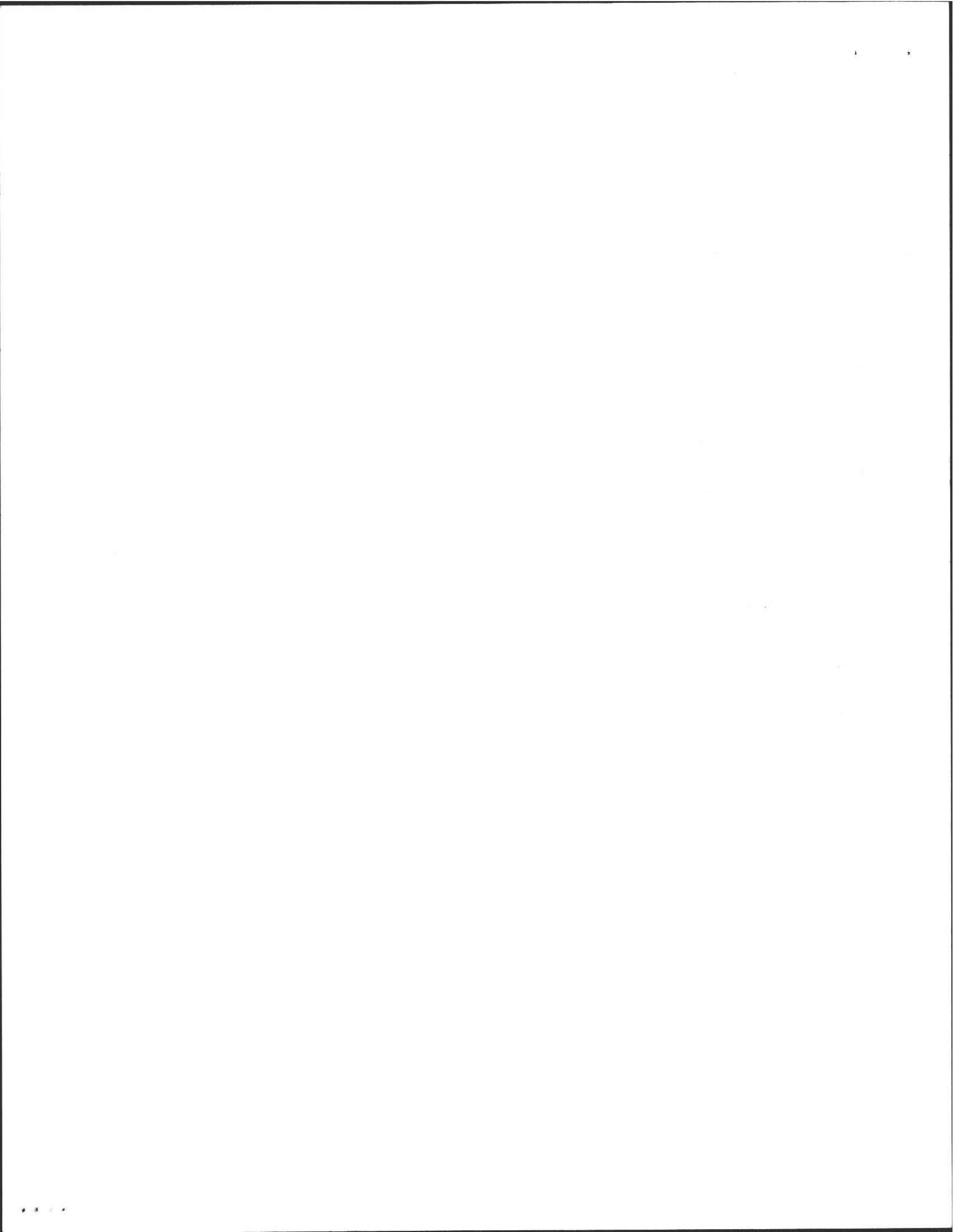
Depth to Groundwater >10' Feet

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

- Obtained from Design Plans on record
- Observation of Site (Abutting property, observation hole, basement sump etc.)
- Determine it from local conditions
- Check with local Board of health
- Check FEMA Maps
- Check pumping records
- Check local excavators, installers
- Use USGS Data

Describe in your own words how you established the High Groundwater Elevation (Must be completed):

Per orig. piez plan 5/71 NO GW @ 10'
Site observation indicates wetlands (Pond)
sanctuary at >10' elevation



4) Type of existing system
 privy cesspool(s) conventional system
 Other (describe) _____

Type of soil absorption system (trenches, chambers, pits, etc.)
Trenches per owner

5) Design flow based on 310 CMR 15.203

a) Design flow of existing system 550 gpd
Approved? yes approval date _____
 no why? _____

b) Design flow of proposed upgraded system 588 gpd
c) Design flow of facility 588 gpd

6) Proposed upgrade of existing system is

a) Voluntary.
 Required by order, letter, etc. (attach copy)
 Required following inspection required by 310 CMR 15.301 (provide date inspection form was submitted to the approving authority) _____ (date)

b) Describe the proposed upgrade to the system

To replace existing system (Failed Title 5 insp.)
with a 30'x35' leaching field, using 3' separation
instead of 4' to reduce mounding effect on a
well maintained lawn

c) Which of the following are applicable to the proposed upgrade?

Reduction of setback(s) (list setbacks to be reduced with proposed setback distances)

Percolation rate of 30-60 minutes per inch (state actual perc rate)



Commonwealth of Massachusetts
Amherst, Massachusetts

Application for Local Upgrade Approval
Title 5, 310 CMR 15.000
DEP Approved form required by 310 CMR 15.403(1)

To be submitted to Local Approving Authority/Board of Health: For the upgrade of a failed or nonconforming system with a design flow of <10,000 gpd, where full compliance, as defined in 310 CMR 15.404(1), is not feasible.

To be submitted to DEP: For the upgrade of a failed or nonconforming system with a design flow of 10,000 up to 15,000 gpd and/or for upgrade of a state or federal facility, where full compliance, as defined in 310 CMR 15.404(1), is not feasible.

NOTE: Local upgrade approval shall not be granted for an upgrade proposal that includes the addition of new design flow to a cesspool or privy or the addition of new design flow above the existing approved capacity of a system constructed in accordance with either the 1978 Code or 310 CMR 15.000.

1) Facility/system owner
Name Ned Cramer
Address 29 S. Orchard Dr.
Phone # 256-8177
Address of facility same

2) Applicant (if different from above)
Name _____
Address _____
Phone # _____

3) Type of facility
 residential ___ commercial ___ school
___ institutional
(Specify) _____



8) Notice to Abutters

No application for upgrade approval in which the setback from property lines or a private water supply well is reduced shall be complete until the applicant has notified all abutters whose property or well is affected by certified mail at least ten days before the Board of Health meeting at which the upgrade approval will be on the agenda. Such notice shall include the date, time and place where the upgrade approval will be discussed.

If the Department is the approving authority, then such notice to abutters must be completed prior to the date of submission of the application to the Department.

The notices to abutters shall include a copy of the completed application form and shall reference the standards set forth in 310 CMR 15.402 through 15.405.

List of affected Abutters:

Abutter Name _____ Address _____	Date notified _____
Abutter Name _____ Address _____	Date notified _____
Abutter Name _____ Address _____	Date notified _____
Abutter Name _____ Address _____	Date notified _____

9) Explain why full compliance, as defined in 310 CMR 15.404(1), is not feasible (each section must be completed):

- a) an upgraded system in full compliance with 310 CMR 15.000 is not feasible:
Hardship, to save on fill and effect on lawn (mounding) in back yard.
- b) an alternative system approved pursuant to 310 CMR 15.283-15.288 is not feasible:

N/A



___ Up to 25% reduction in subsurface disposal area design requirements (state required & proposed size) _____

___ Relocation of water supply well (identify well, describe relocation)

Reduction of required separation between bottom of SAS & high groundwater (specify proposed reduction & perc rate) 4' to 3' 13.33 min/in

___ Other requirements of 310 CMR 15.000 that cannot be met (specify sections of the Code)

System upgrades that cannot be performed in accordance with 310 CMR 15.404 & 15.405, or in full compliance with the requirements of 310 CMR 15.000, require a variance pursuant to 310 CMR 15.410-15.417.

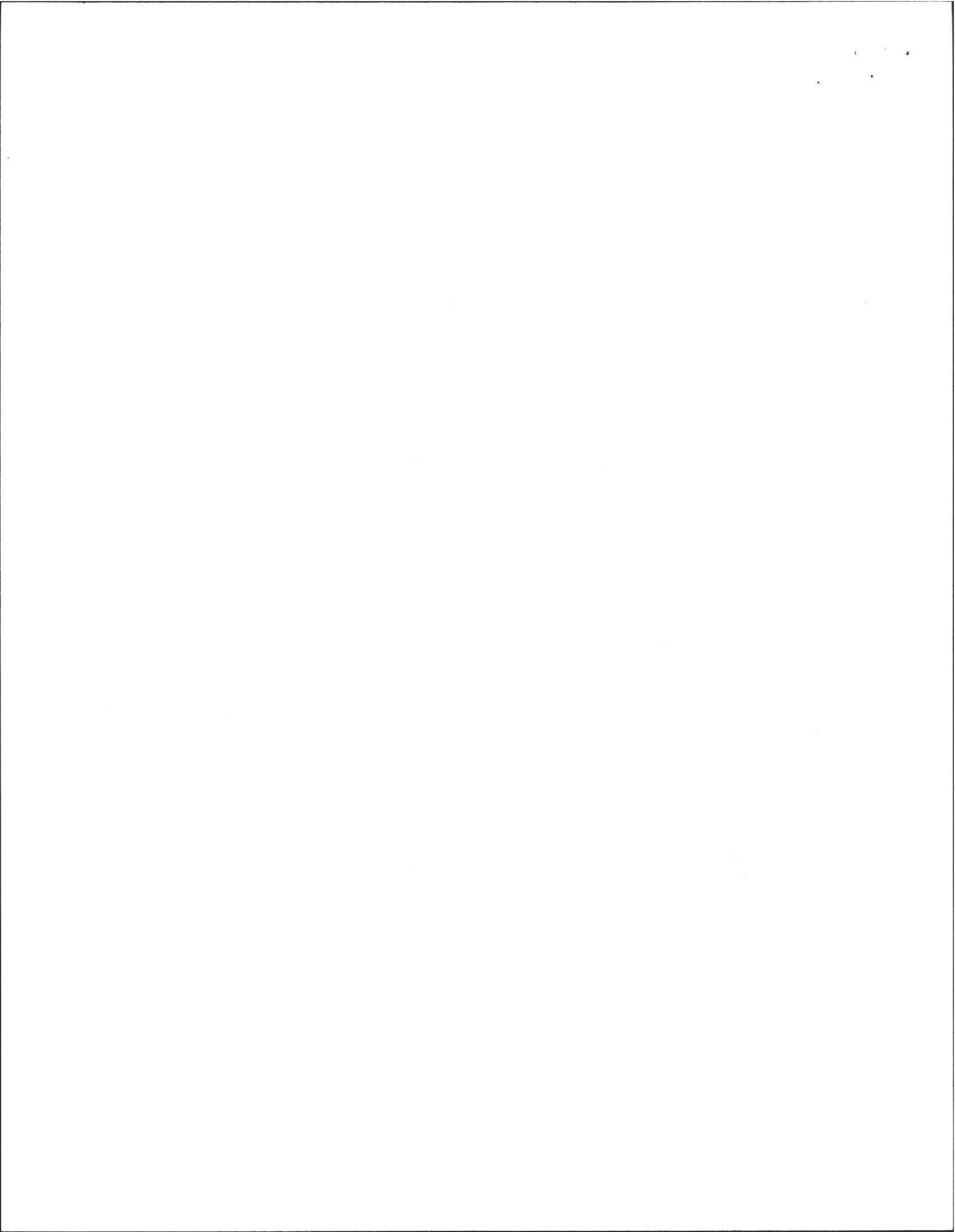
- 7) If the proposed upgrade involves a reduction in the required separation between the bottom of the soil absorption system and the high groundwater elevation, an Approved Soil Evaluator must determine the high ground water elevation pursuant to 310 CMR 15.405(1)(i)(1). The evaluator must be a member or agent of the local approving authority:

Distance from soil absorption system to high groundwater
4 feet

As determined by:

Evaluator's name David Zarozinski
Evaluator's signature [Signature]
Date of evaluation 4/29/88





FORM 11 - SOIL EVALUATOR FORM
Page 2 of 3

Location Address or Lot No. 29 S. Orchard Dr.

On-site Review

Deep Hole Number 1 Date: 4/29/98 Time: 9:30 AM Weather _____

Location (Identify on site plan) _____

Land Use House lot Slope (%) 1 Surface Stones None

Vegetation grass

Landform _____

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body 150 feet ± Drainage way 150 feet ±
Possible Wet Area 150 feet ± Property Line 40 feet ±
Drinking Water Well N/A 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	A	SC	10YR 4/3		Friable
16	Bw	SC	10YR 5/4		Friable
18				7.5YR 5/6	48"
	C	Silty Sand	7.5YR 4/3		Some sand mix, no stones
96					

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Glacial Till Depth to Bedrock: 796

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

Estimated Seasonal High Ground Water: 48"



FORM 11 - SOIL EVALUATOR FORM
Page 2 of 3

Location Address or Lot No. _____

On-site Review

Deep Hole Number Repair 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 Drainage way _____ 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)

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) _____ Depth to Bedrock: _____

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

Estimated Seasonal High Ground Water: _____



No. _____

Date: _____

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

Performed By: Rich Lewis
Witnessed By: Dave Zarojinski

Date: 4/29/98

Location Address or Lot # <u>29 S. Orchard Amherst, MA</u>	Owner's Name, Address, and Telephone # <u>Ned Cramer 29 S. Orchard Dr. Amherst, MA 256-8177</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: _____



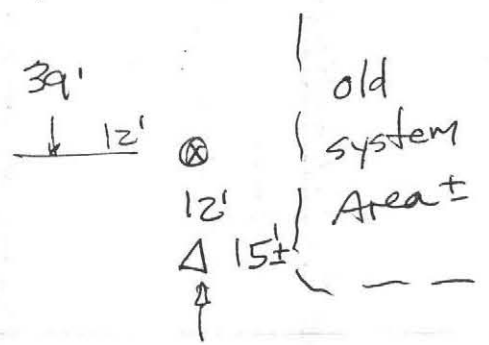
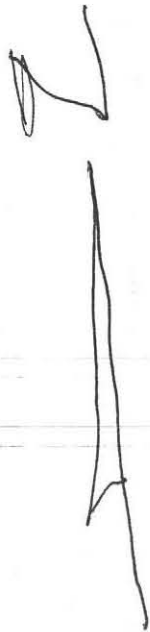
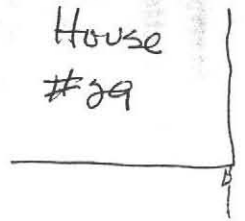
S. orchard Dr.

FORM 12 - PERCOLATION TEST

Location Address or Lot No. 29 S

COMMONWEALTH OF MASSACHUSETTS
Amherst, Massachusetts

Percolation Test*		
Date:	<u>4/29/98</u>	Time: <u>10:00 AM</u>
Observation Hole #	<u>1</u>	
Depth of Perc	<u>38</u>	
Start Pre-soak	<u>10:08 AM</u>	
End Pre-soak	<u>10:23</u>	
Time at 12"	<u>10:23</u>	
Time at 9"	<u>10:47</u>	
Time at 6"	<u>11:28</u>	
Time (9"-6")	<u>41</u>	
Rate Min./Inch	<u>13.33 m/in</u>	



150'+

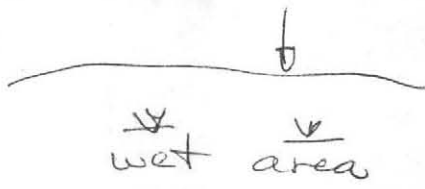
* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

Site Passed Site Failed

Performed By: Rich Lewis

Witnessed By: Dave Zarozinski

Comments: Design for 15 m/in



Location Address or Lot No. 29 S. Orchard Dr.

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 48 inches
- Ground water adjustment feet

Index Well Number Reading Date Index well level

Adjustment factor Adjusted ground water level

Depth of Naturally Occurring Pervious Material

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

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

Certification

I certify that on Nov 1995 (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature Richard A Lewis Date 5/7/98

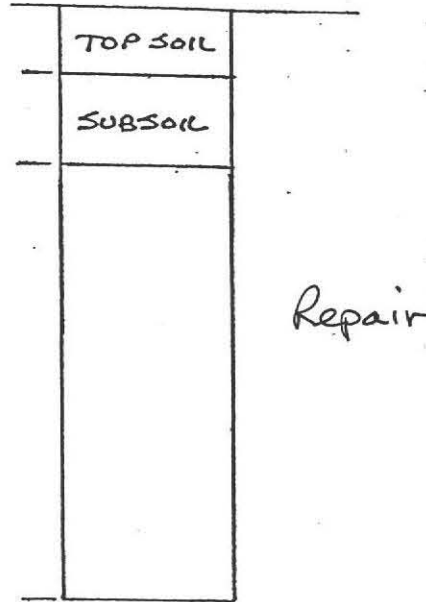
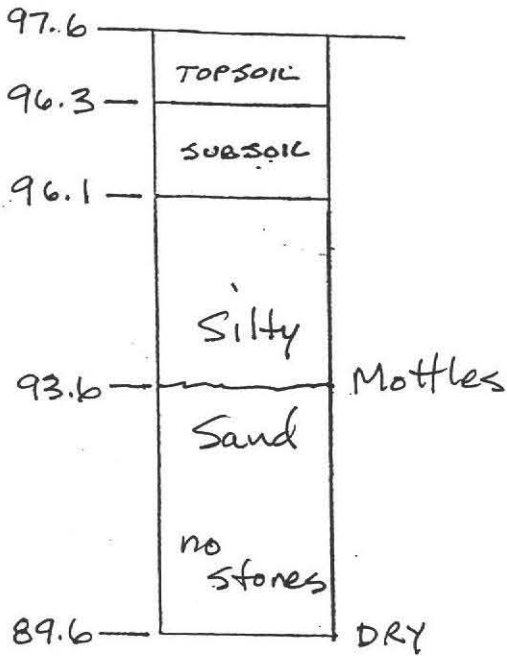


DEEP TEST HOLES

LOT 5 Pg. 3
29 S. Orchard Dr.

#1

#2



CALCULATIONS

SOIL CLASS II

BOTTOM AREA - Bed

$15.0 \text{ min./in} = 0.56 \text{ gal./sq.ft.}$

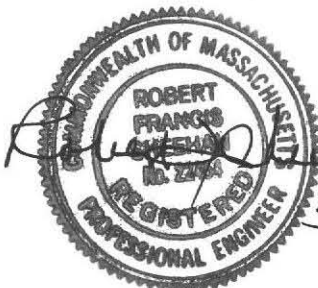
$30' \times 35' = 1050 \text{ sq.ft.}$

SIDEWALL AREA (NOT ALLOWED IN LEACHING FIELDS)

$\text{---} \times \text{---} \times 2 \text{ sides} \times \text{---} \text{ lines} = \text{---} \text{ sq.ft.}$

$1050 \text{ sq.ft.} \times 0.56 \text{ gal./sq.ft.} = 588 \text{ GAL.}$

✓ AVAILABLE

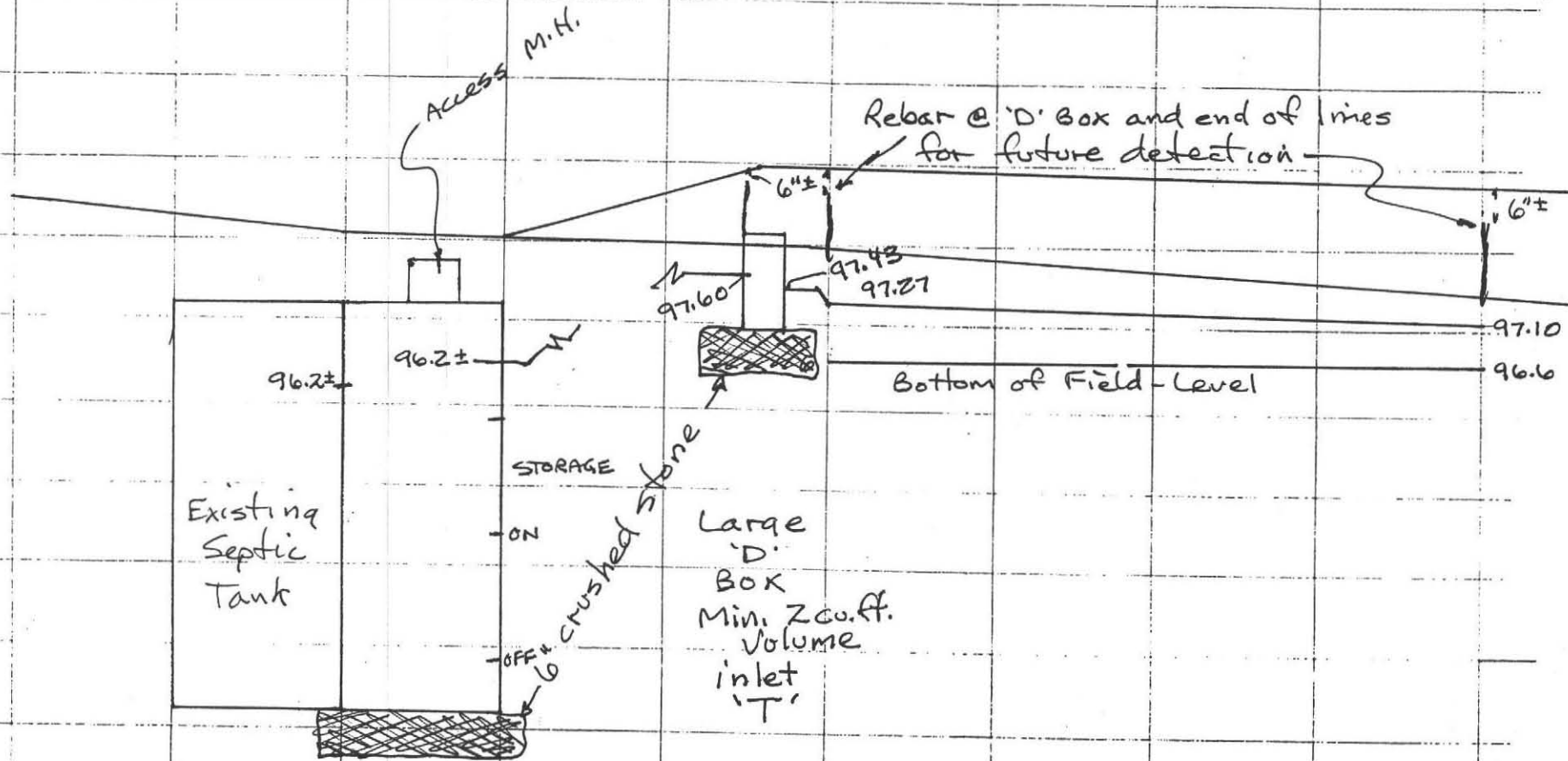


5/7/98

550 GAL. REQUIRED

5 Bedroom House

Title 5, variance from Town Req.



1000 GAL SEPTIC TANK

NOTES: AS PUMP CHAMBER, WATERTIGHT Leaching Field (Bed) 30'x35'

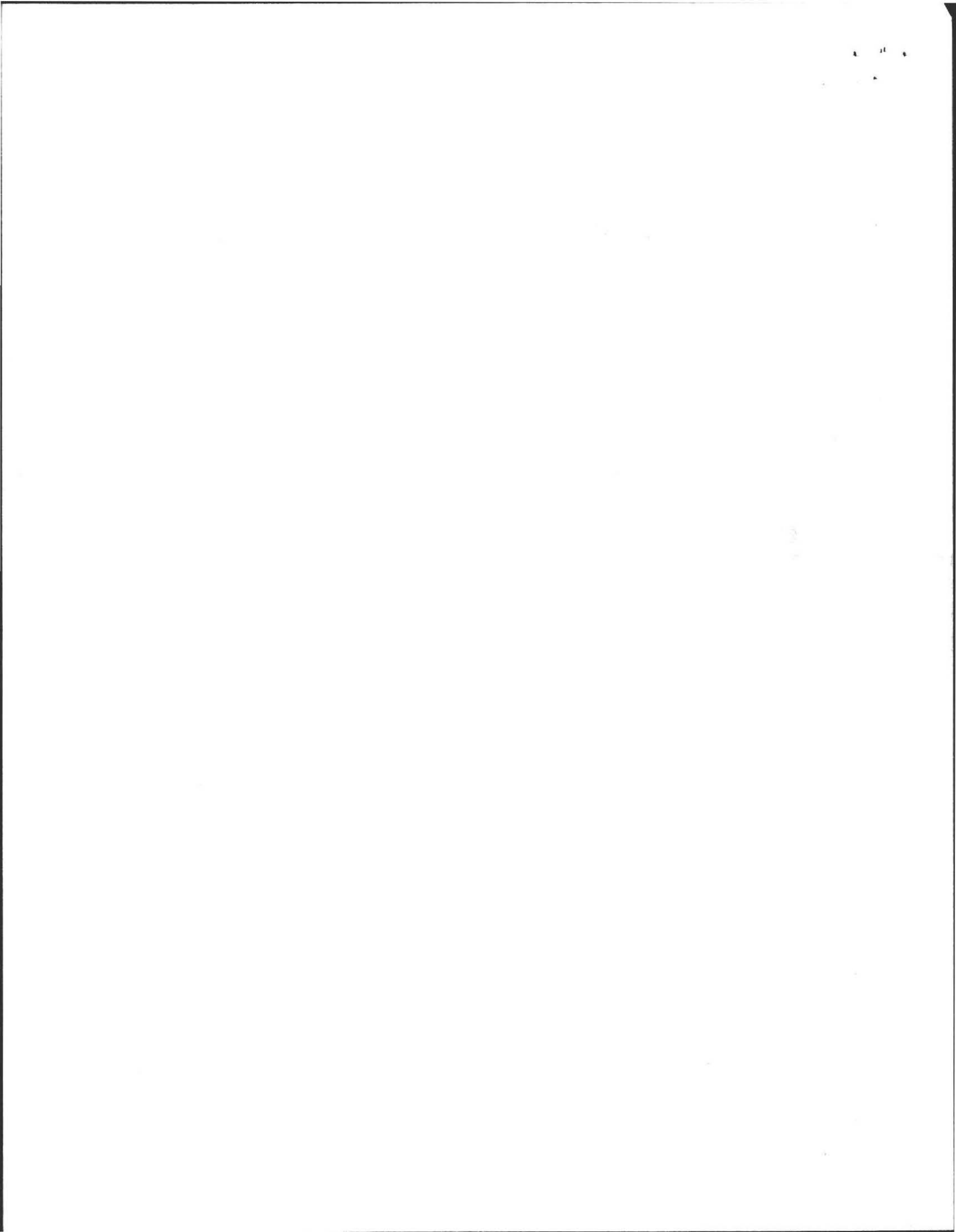
1. SEPTIC TANK SHALL HAVE INLET AND OUTLET TEES.
2. OUTLET TEE SHALL HAVE A GAS BAFFLE
3. D-BOX SHALL HAVE MINIMUM 12" INSIDE WIDTH AND 6" SUMP BELOW OUTLET INVERT.
4. ACCESS M.H.'S TO SEPTIC TANK SHALL BE WITHIN 6" TO FINISHED GRADE
5. D-BOX OUTLET PIPES SHALL BE LEVEL MIN. 2 FT.
6. END CAPS ON PIPES
7. ELEVATIONS ARE TO INVERTS UNLESS NOTED
8. SEPTIC TANKS SHOULD BE INSPECTED ANNUALLY

PROFILE OF SYSTEM SCALE HORZ. 1"=10'
VERT. 1"=2'



5/7/98

LOT 5
Pg. 4
29 S. Orchard Dr.



LOT 5
29 S. Orchard Dr.

PUMP CALCULATIONS

Class II Soil = 1 Dose/Day = 550 GAL./Dose

Pump Chamber to be 1500 GAL. Septic Tank

Pump must move 550 GAL./cycle

* 1500 GAL. Tank holds 32 ± GAL./vertical inch

$\frac{550}{32} = \underline{17.1"} \pm$ or 18" ± Liquid level
to drop in 1500 GAL. Tank

Also 18" ± of storage must be available
above the on switch

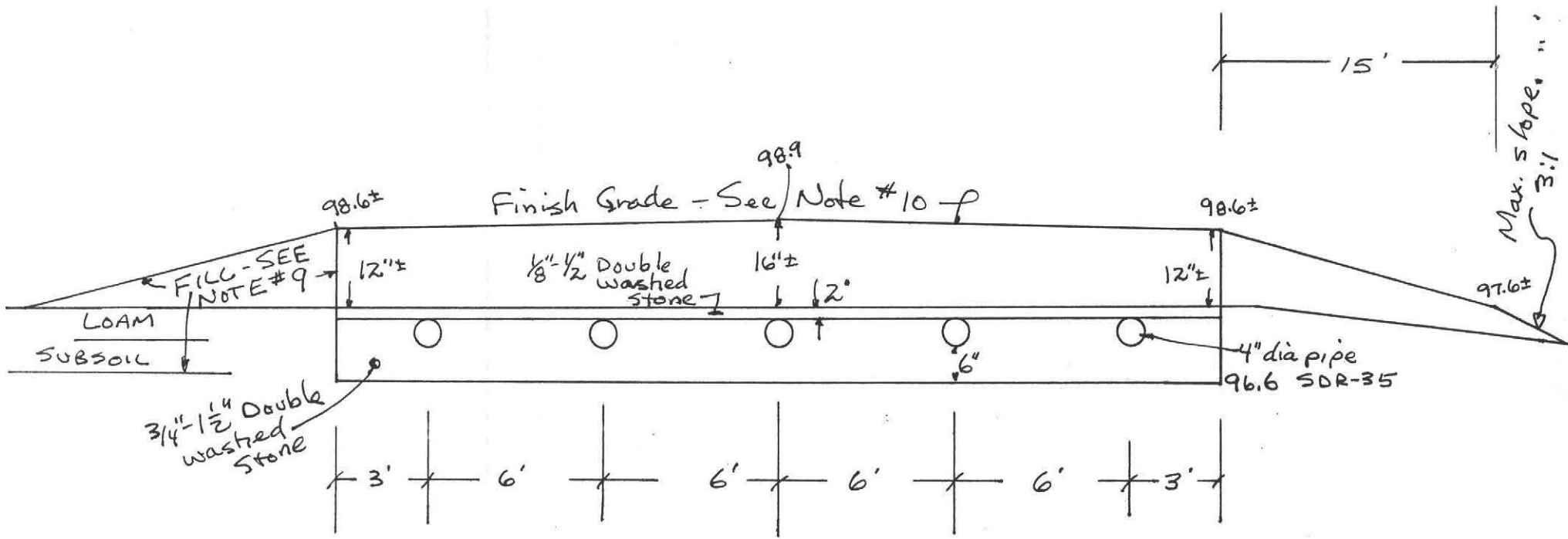
Pump is to be Goulds 3886 or equivalent
2" Pipe from pump chamber to 'D' Box must
be set to drain to prevent freezing

* 1500 GAL. Septic Tank

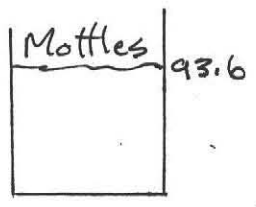
$$\underline{10'} \times \underline{5.16'} \times \frac{\underline{0.083'}}{\text{in}} \times 7.48 \text{ GAL./FT}^3 = \underline{32} \text{ GAL./inch} \pm$$



100



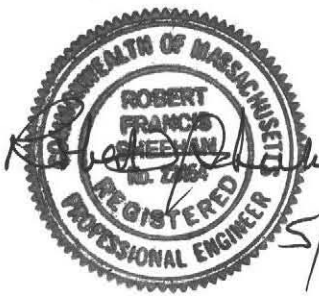
NOTE: After excavation of loam and subsoil, area must be inspected by design Engineer before placement of fill.



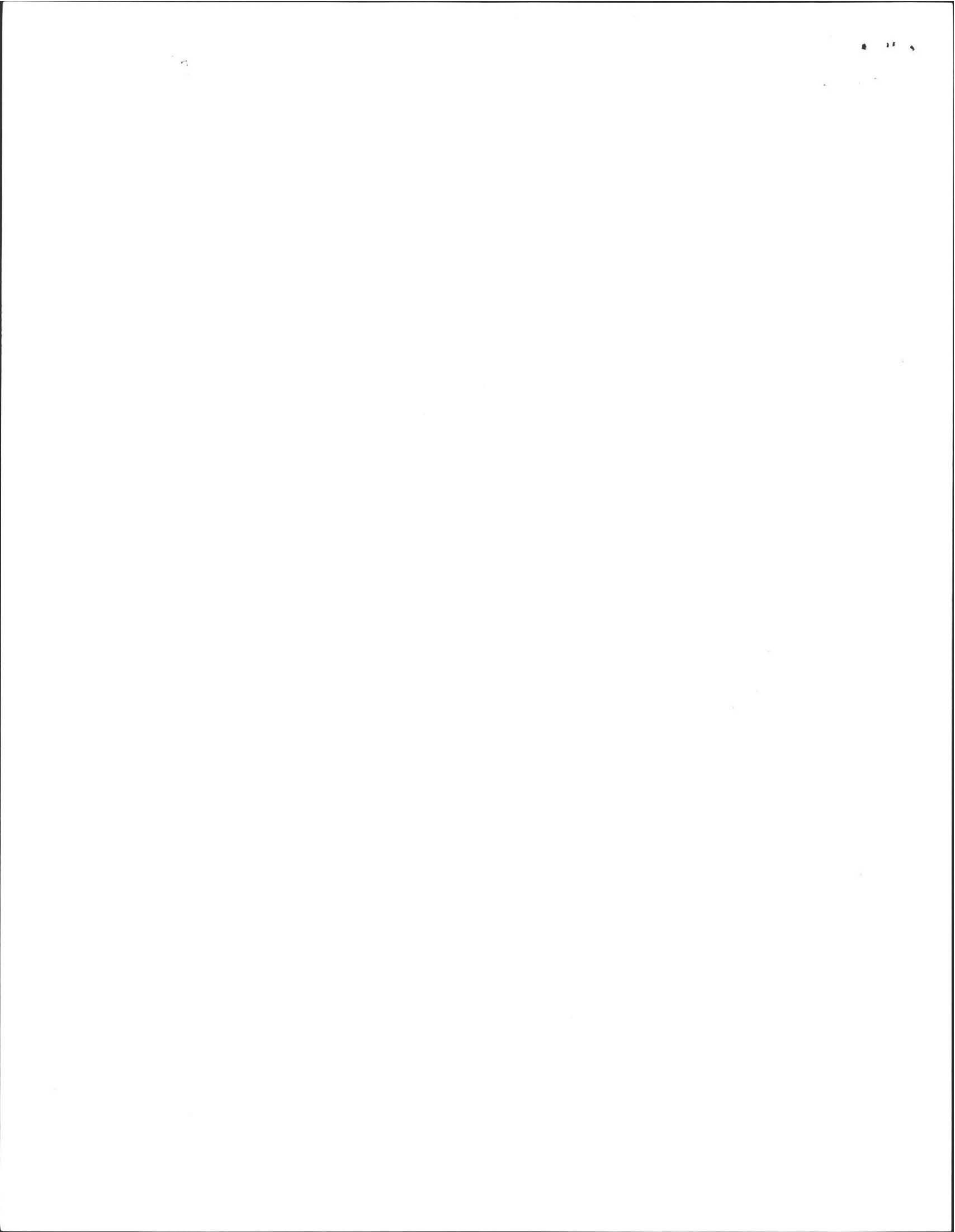
Deep Hole #1

NOTES:

9. ALL LOAM, SUBSOIL AND OTHER IMPERVIOUS MATERIAL SHALL BE REMOVED WITHIN 5 FT. OF LEACHING FACILITY AND FILL WITHIN 5 FT. OF LEACHING FACILITY SHALL MEET SPECIFICATIONS OF TITLE 5 15.255 (3)
 10. FINISH GRADE ABOVE AND ADJACENT TO SYSTEM SHALL SLOPE AT LEAST 2% TO PREVENT ACCUMULATION OF SURFACE WATER
- CROSSSECTION OF SYSTEM
NO SCALE



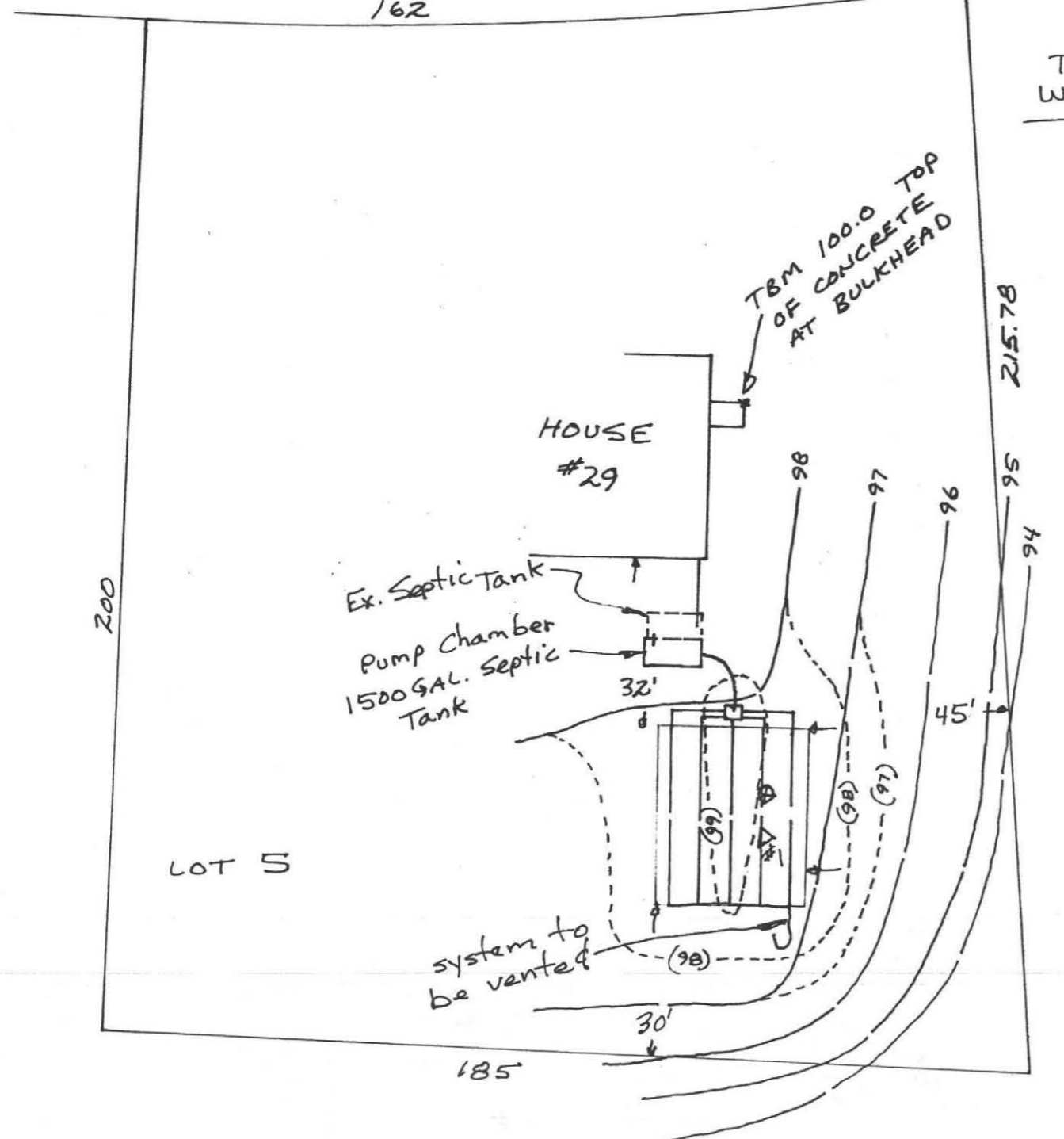
LOT 5 Pg. 5
29 S. Orchard Dr.



SOUTH ORCHARD DRIVE

162

TOWN WATER

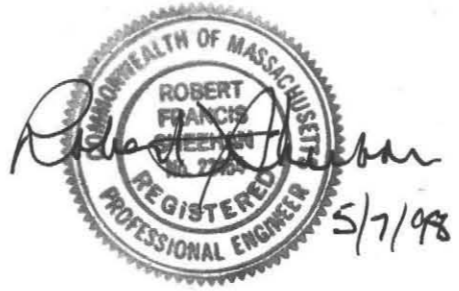


- LEGEND
- △ - Deep Hole
 - ⊗ - Perc Test
 - - 'D' Box
 - ▭ - 1500 GAL. Septic Tank
 - 000 - Existing Contours
 - (000) - Proposed Contours

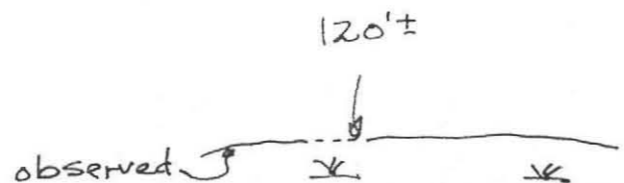
NOTE: 1. ALL LOAM AND SUBSOIL TO BE REMOVED WITHIN 5 FT. OF SEPTIC SYSTEM AND AREA OF FILL.

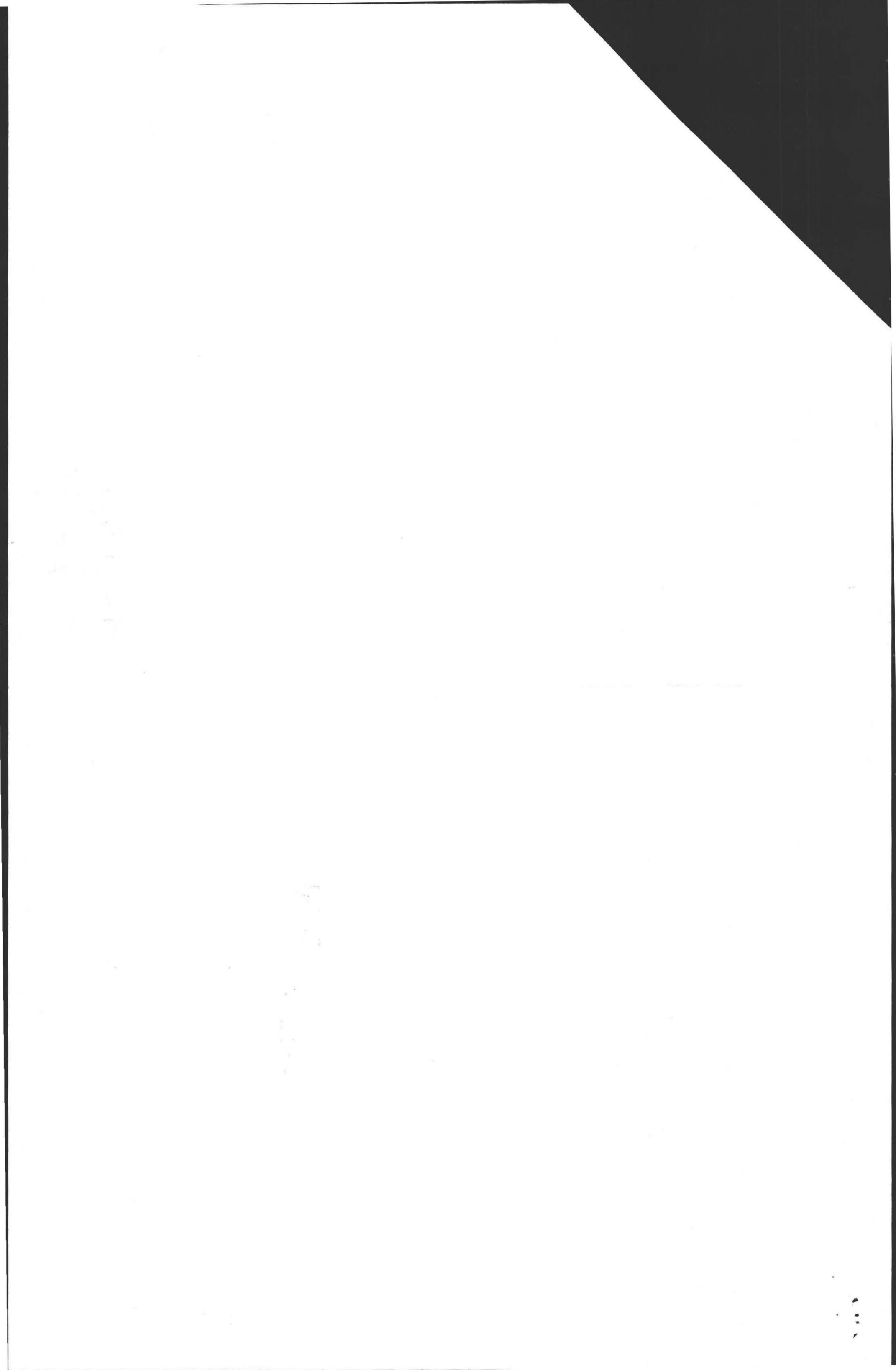
SEPTIC SYSTEM 'REPAIR' PERMIT PLOT PLAN
 IN AMHERST, MA
 PREPARED FOR
 NED CRAMER
 29 SOUTH ORCHARD DR.
 AMHERST, MA

SCALE 1"=30' MAY 6, 1998



LEWIS & COOK SURVEYORS, INC.
 BELCHERTOWN - PALMER, MA





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

No 0324

Received of NED A. CRAMER AND MARY A. CRAMER of 29 S. ORCHARD DR. AMHERST, MA 0100

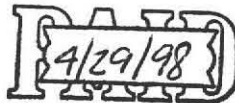
For Property Located at: SAME Name Address
Street Address Owner

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

TOTAL FEE: \$ 1600⁰⁰

Bridget Davis
Inspection Services/Health Department

4/29/98
Date



CHK# 778

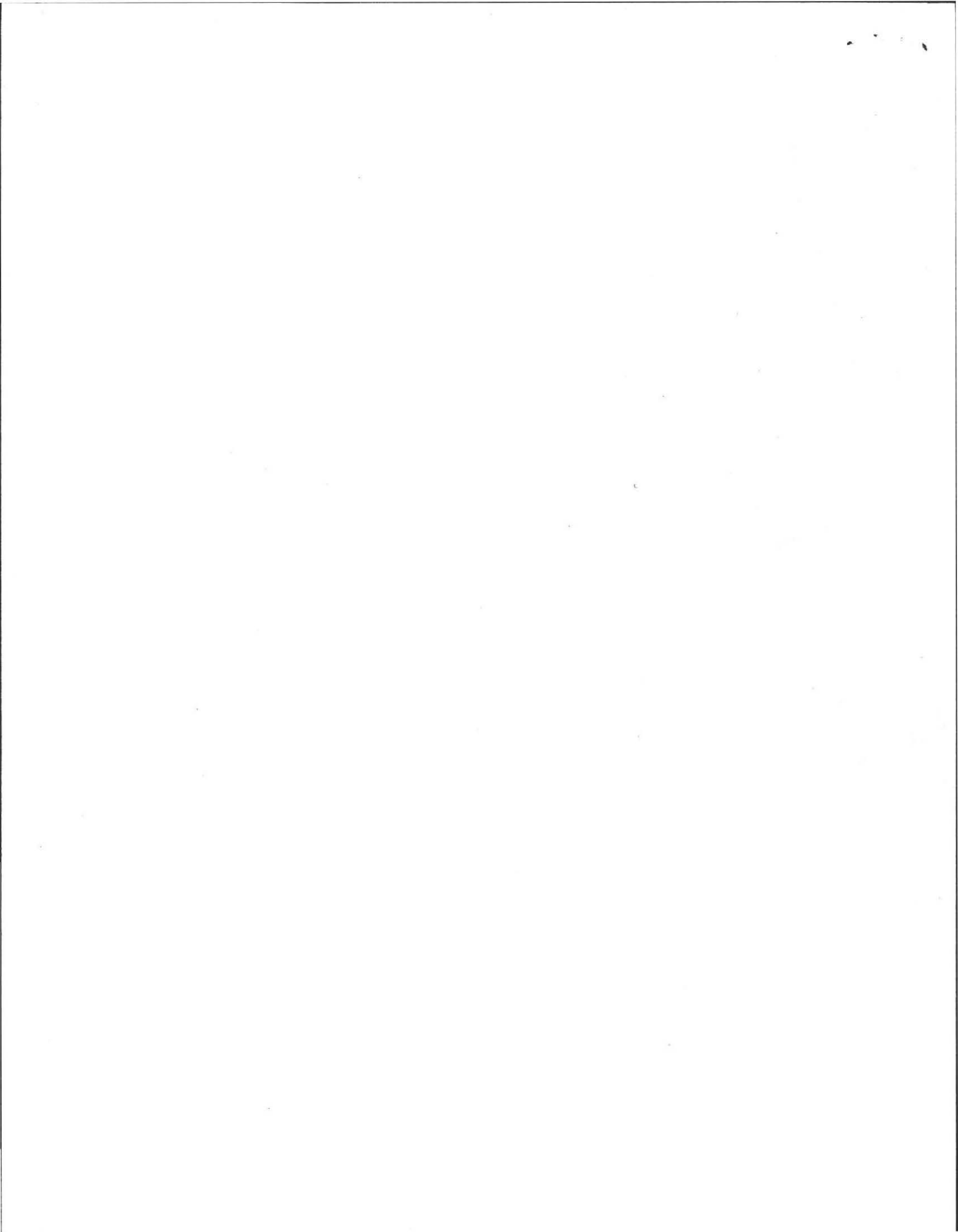
Must be validated by the Collector's Office to be considered paid.

White - Applicant

Yellow - Collector

Pink - Accounting

Gold - Health/Inspections



NED A. CRAMER
MARY A. CRAMER
29 S. ORCHARD DR.
AMHERST, MA 01002-3038

53-7168/2118
0623001708

778

DATE April 29, 1998

PAY TO THE
ORDER OF

Town of Amherst

\$ 160.00

One hundred sixty dollars &

no

100 DOLLARS

Security features
focused
Details on back.



FLORENCE SAVINGS BANK
85 MAIN STREET, FLORENCE, MA 01062

MEMO

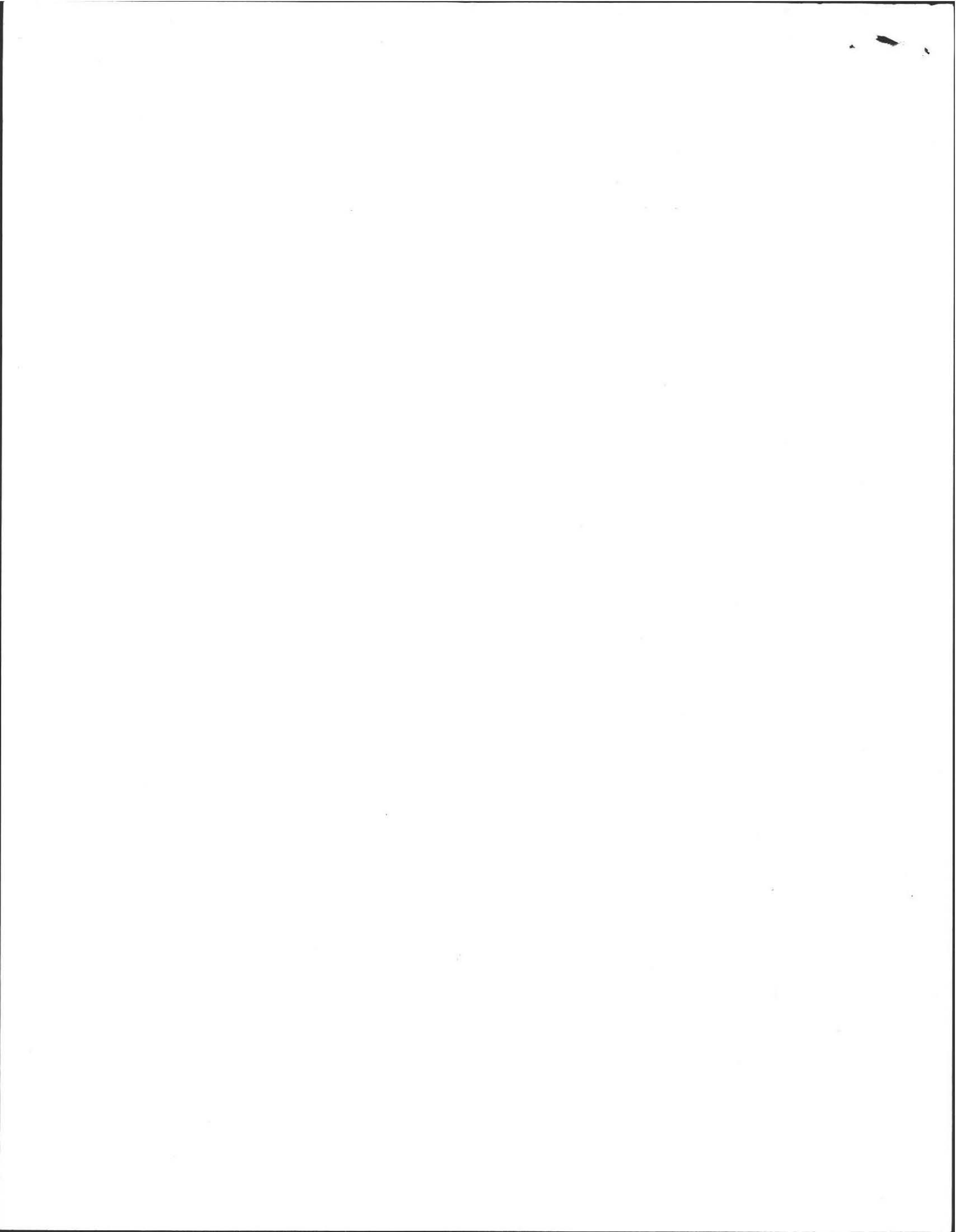
Pac. int. & plans

Mary A. Cramer

MP

⑆ 211871688⑆ 06 23 001708⑆ 0778

FINE LINE



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

NE 0324

Received of NED A. CRAMER AND HARRY A. CRAMER of 29 S. ORCHARD DR. AMHERST, MA 01002

For Property Located at: SAME Street Address Owner

- | | | | |
|--|-------|--|-------|
| 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 | _____ |
| HEA002 Catering License
R6510 443507 | _____ | HEA017 Septic Tank Permit-Private (APR/Jan) <u>100.00</u>
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: \$ 1000.00

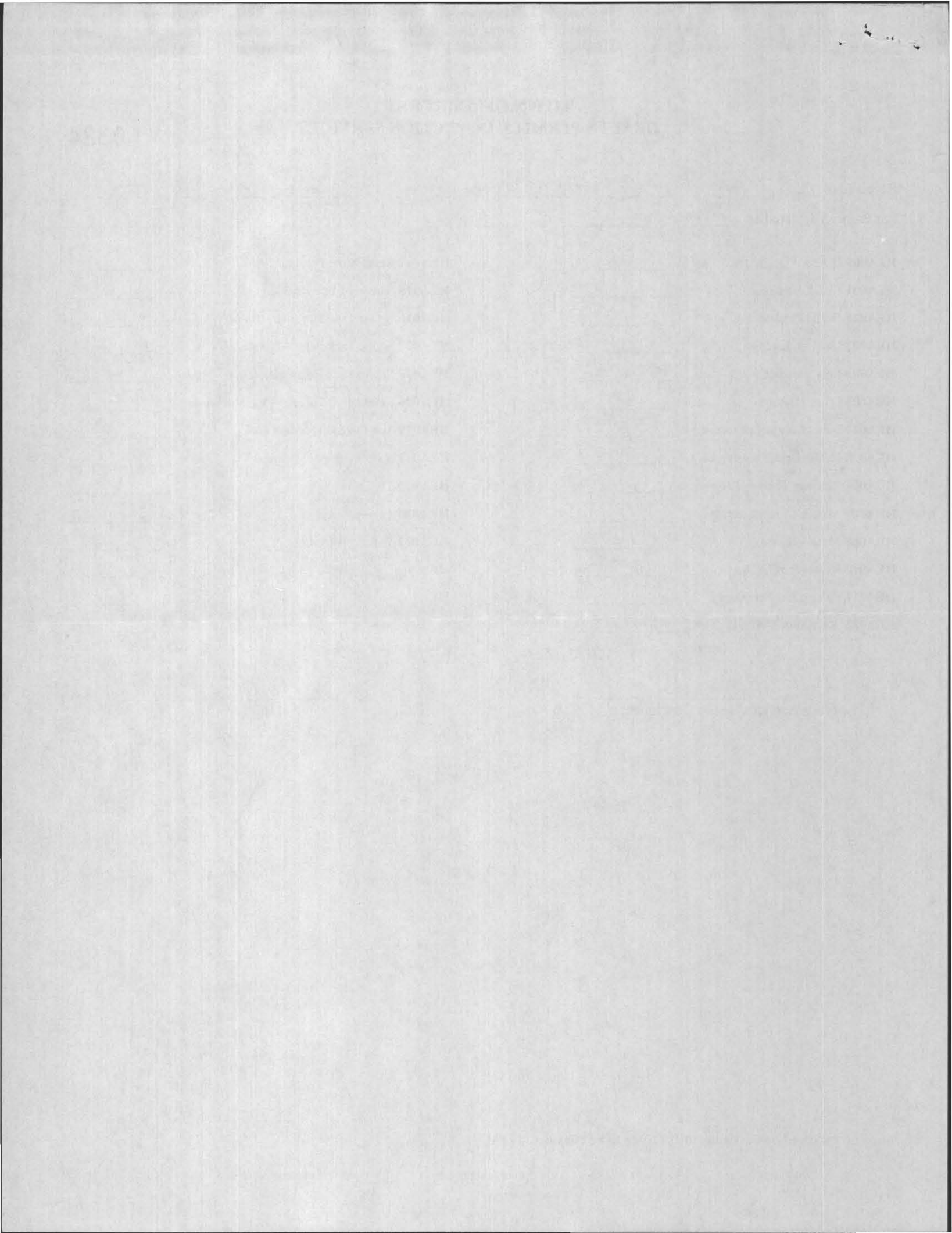
Bruce Davis
Inspection Services/Health Department

4/29/98
Date

4/29/98
CHK# 778

TOWN OF AMHERST 11166
MISC CASH RECEIPTS
Date / Time : 04/29/98 15:37:08
Payment : \$160.00
Receipt # : 63149
Check/Credit Card #: REC 0324
Clerk : olawdp
Paid by : NED CRAMER

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



May 18, 1998

CRAMER's, Ned & Mary
29 S. Orchard Drive
Amherst, MA 01002-3038

Mr Dave Zarozinski
Sanitarian
Amherst Inspection Service
4 Boltwood Avenue
Amherst, MA 01002

Dear Sir:

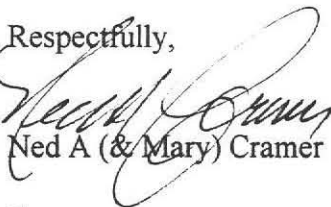
I would like to take this opportunity to express our gratitude for the help extended by your office and you personally.

When my septic system failed, I was left with a total misunderstanding of the situation. Your patience helped explain the system failing and what choices we had. And later, you guided the perk system so that I could understand what was being expected of me.

Your immediate action to provide me with a selection of engineer sources from which to get a remedial plan helped immensely to generate the final solution. Further attention to my plan was greatly appreciated when you expedited the plan through your office so that the contractor could more quickly start the repairs, or, as is in my case - a new system.

I firmly believe that I would have lost the sale of my property, and also the purchase of my new home, had it not been for the timely handling of my specific situation by you. Forever, faithful servants chant the phrase "that is what I am getting paid for". But in this case, you have provided more than the routine service and for that - I sincerely thank you.

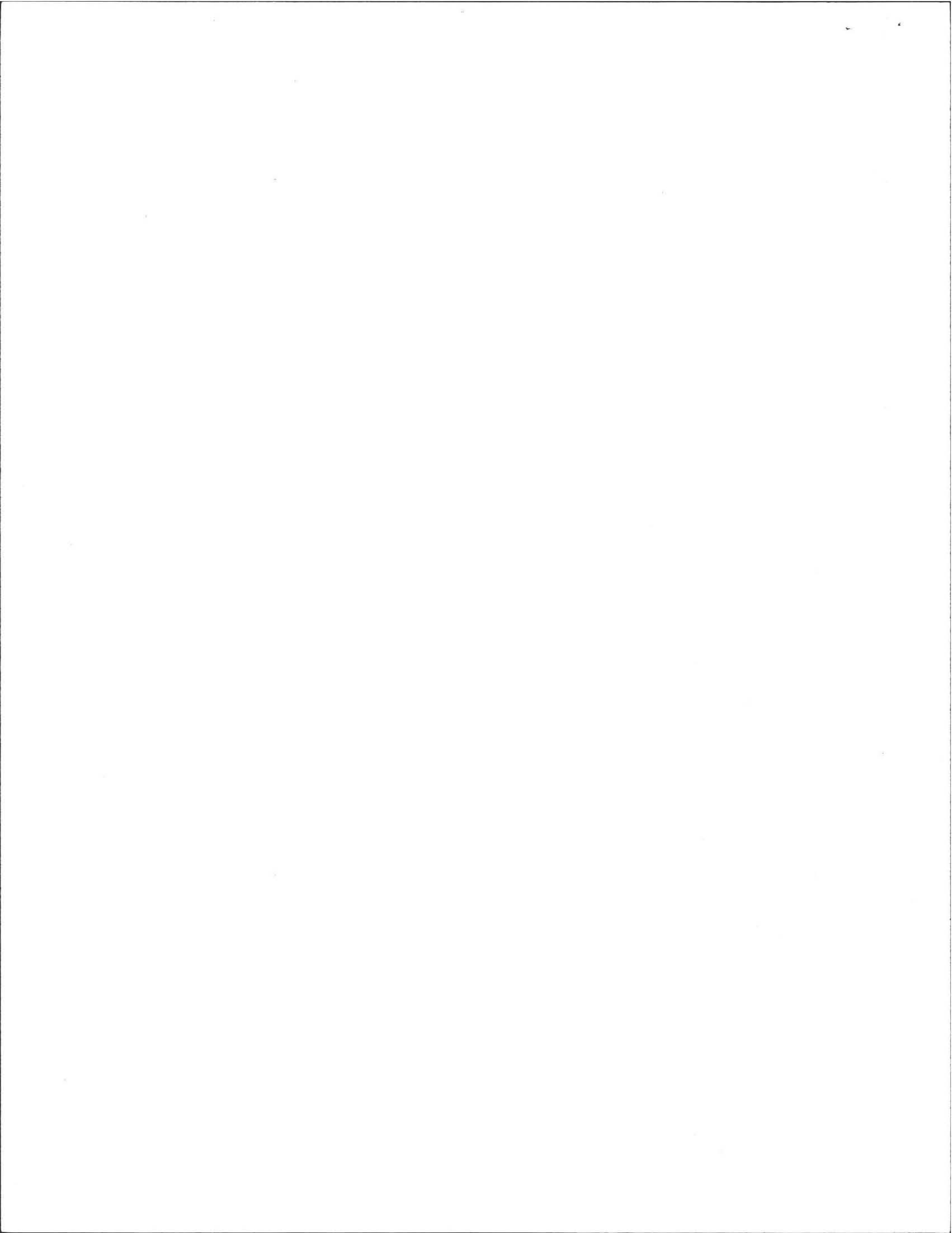
Respectfully,



Ned A (& Mary) Cramer

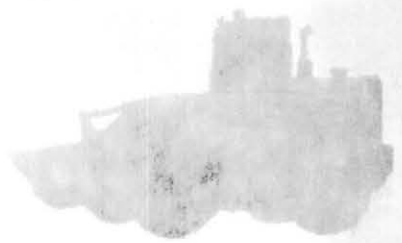
Cc:
Mr Bill Start
Building Commissioner

Mr Barry Del Castillo
Town Manager - Amherst



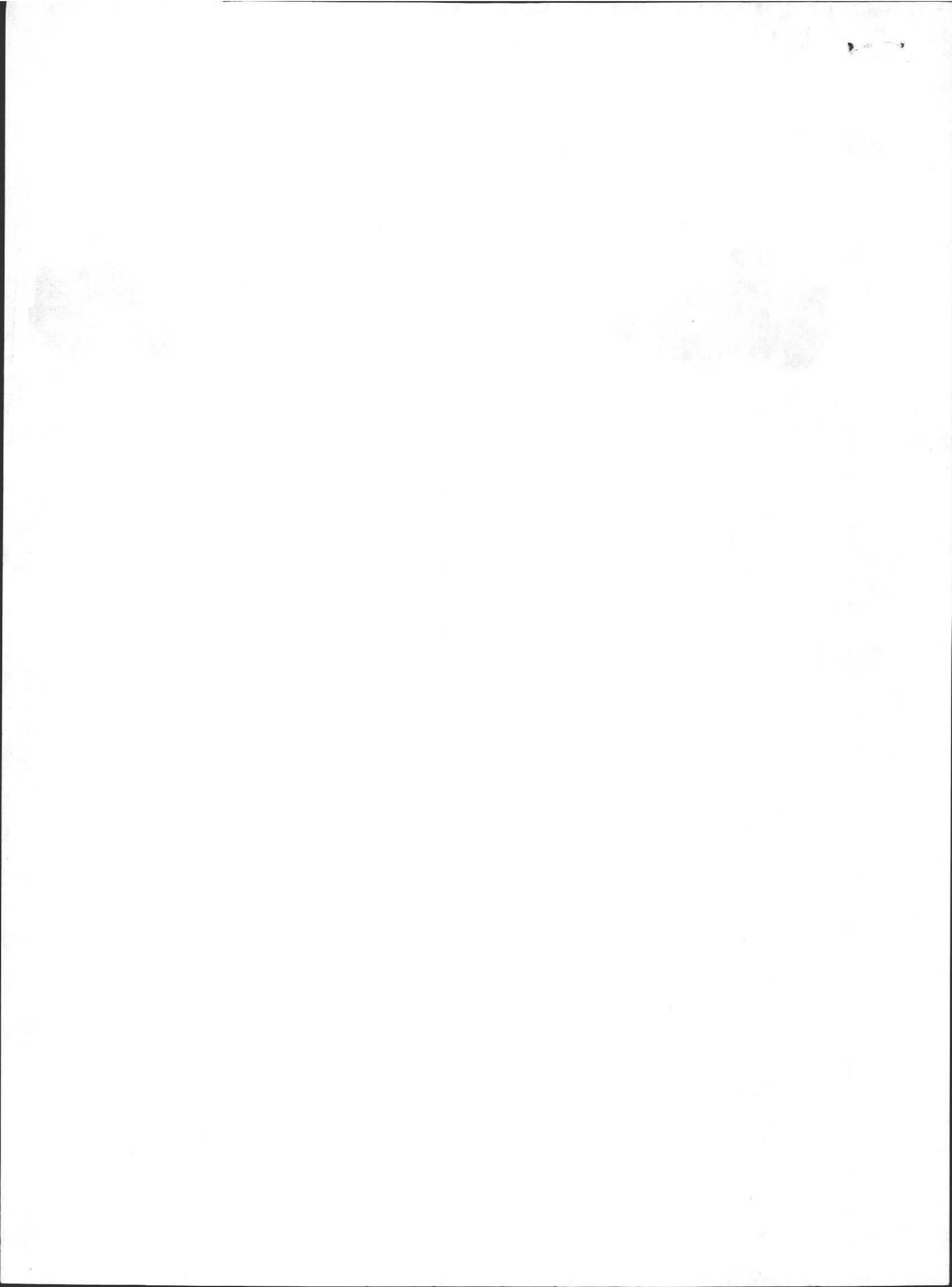
Deere & Son, Inc.

Contractors



SHEET

transmission problems.)





DESROSIERS & SON, Inc.

General Contractors

12 Chantal Dr.
Greenville SC 29615
(813) 871-5555

FACSIMILE
(813) 871-5555

COVER SHEET

Date: 5/15/80

FROM

Dave Desrosiers

David Jacobson

COMPANY:

John Hall - 4341 Long Ave/Whiterd

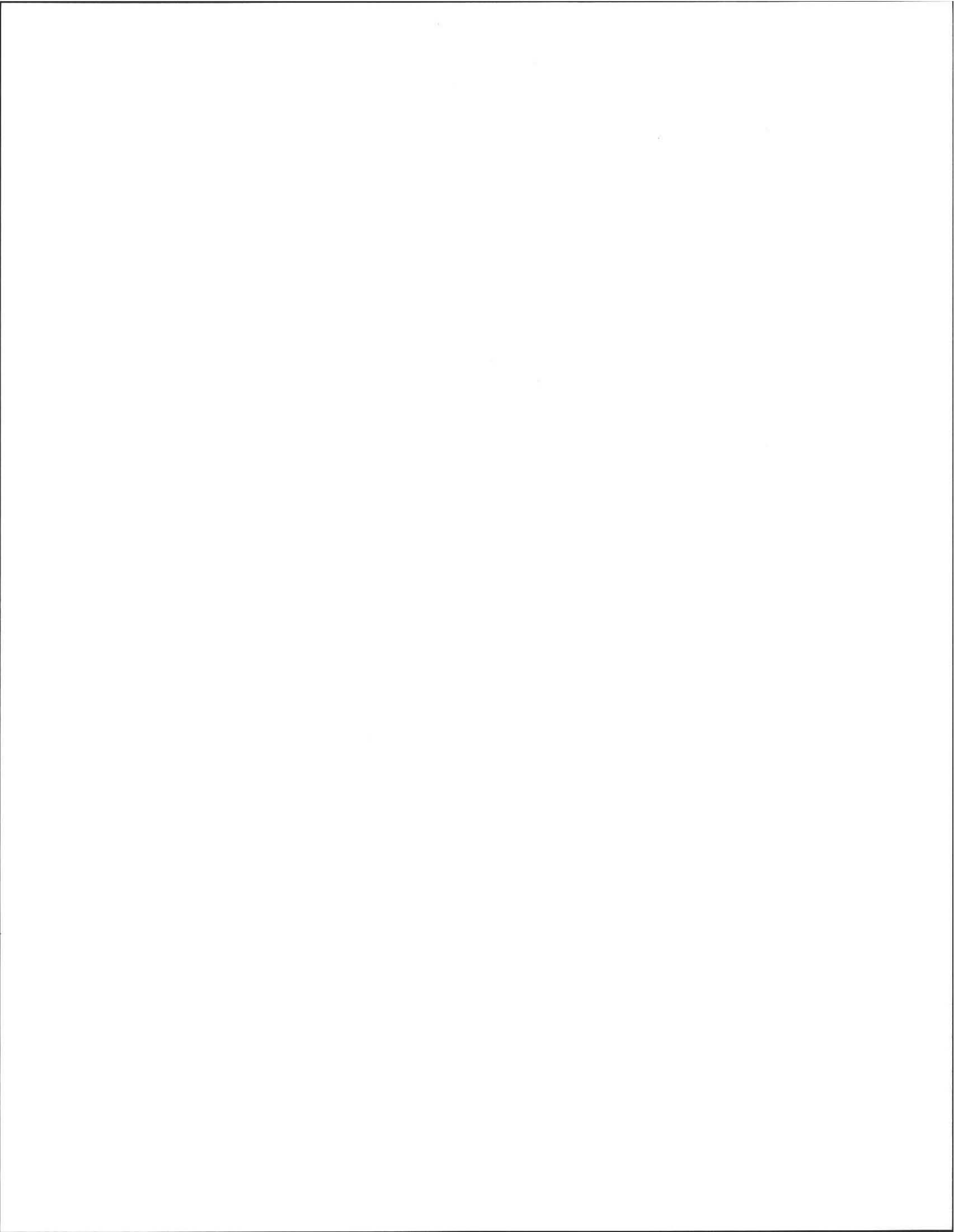
ADDRESS:

Whiterd

(1 of 1 additional sheets included.)

REMARKS

Re: D-Rod Tower on Lot 2 (South Orchard Drive)



3. 3. 1. 0. 2

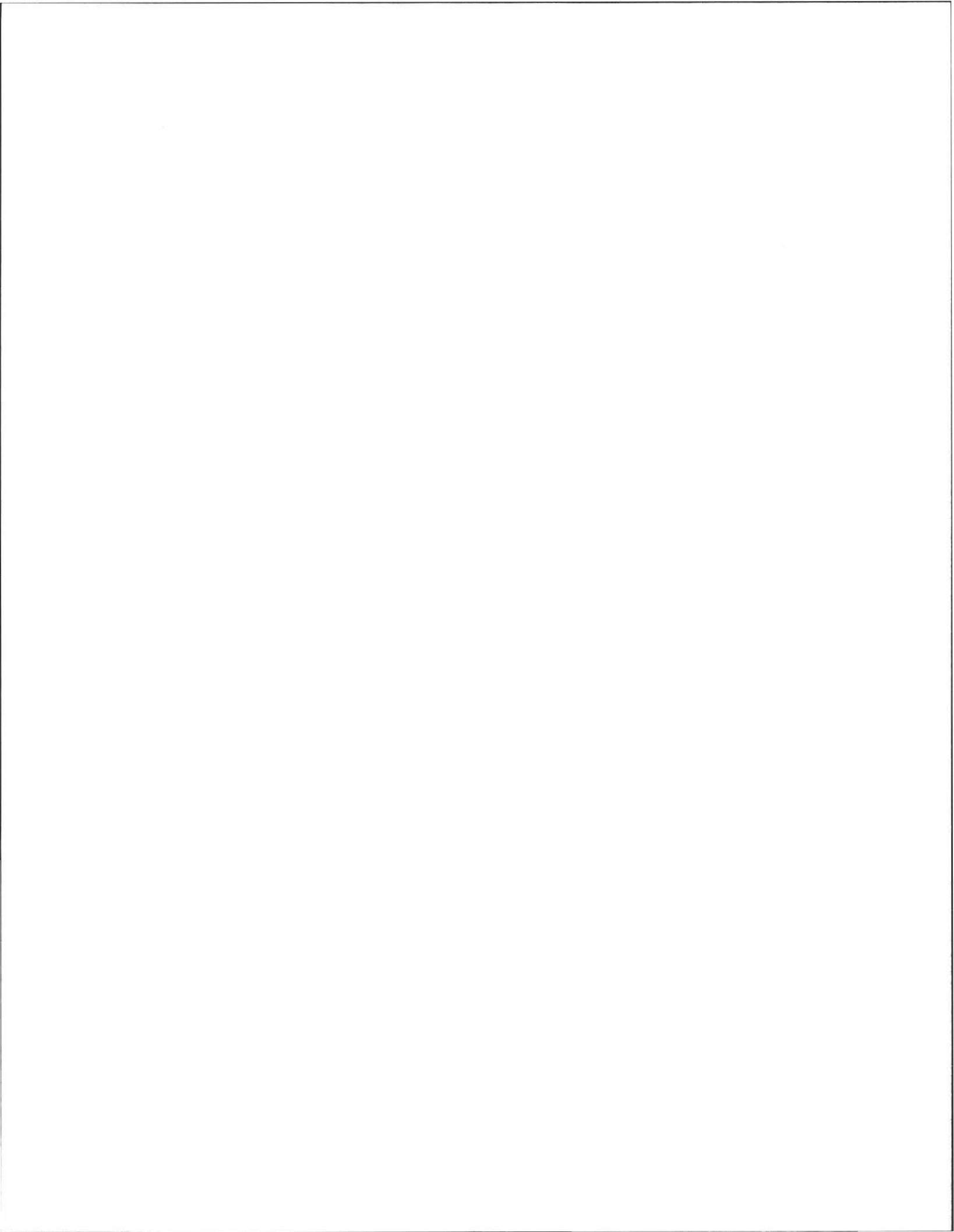


Ball

20 m Corner of House



D-301



#29

BOARD OF HEALTH, AMHERST, MASSACHUSETTS
APPLICATION FOR DISPOSAL WORKS CONSTRUCTION PERMIT

No. 71-5 Date Apr 20 1971 Fee 3.00 Date Rec'd. MAY 6, 1971 By CEL

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

Location—Address SO. ORCHARD DRIVE or Lot No. 5

Owner LEE GOODBAR Address _____

Contractor RUSSELL & ROBERTS Address _____

Type of Building RANCH (RESIDENCE) Dimensions 26 x 64 Size Lot 150 x (32,000 sq ft)

Dwelling—No. of Bedrooms 3 Expansion Attic (N) Garbage Grinder (Y)

Other _____ No. of persons _____ Showers ()

Other fixtures _____ Town Water? YES Type of Well _____

Design Flow 50 gallons per person per day. Total daily flow 300 gallons + 75

Septic Tank—Liquid capacity 1000 gallons Dimensions: L 8 W 4 D 5

Disposal Trench—No. 1 Width _____ Total Length _____ Total leaching area 350 sq. ft.

Disposal Bed—No. 1 Diameter 10 Depth below inlet 35 Total leaching area 310 sq. ft.

Dry Well—No. _____ Diameter _____ Depth below inlet _____ Dimensions: _____ x _____ x _____

Other: Distribution box (Y) No. 1 Dosing tank ()

(Depth of Soil Line Below finished grade at foundation _____)

Percolation Test Results Performed by KENDALL G. LUND Date _____

Test Pit No. 1 8 minutes per inch Depth of Test Pit 3.5'

Test Pit No. 2 _____ minutes per inch Depth of Test Pit _____

Description of Soil Interbedded Silt & sand Depth to Ground Water more than 10.0'

Will disposal area be filled? No Cut down? No

(On reverse side or separate sheet, show plot plan with building. Include dimensions, distances from all boundaries. Show location of wells, streams, ledge, large trees, etc.)

AGREEMENT: The undersigned agrees to construct the afordescribed individual sewage disposal system in accordance with the provisions of Article XI of the Sanitary Code and regulations of the Amherst Board of Health. The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by this board of health.

Application Approved by CEL Russell-Roberts Builder Inc by Barry W Roberts, Pres. date Apr 24 1971

Application Disapproved for the following reasons: none

BOARD OF HEALTH, AMHERST, MASSACHUSETTS
CERTIFICATE OF COMPLIANCE

THIS IS TO CERTIFY, That the individual Sewage Disposal System installed () or repaired () by _____ at _____ has been constructed in accordance with the provisions of

INSTALLER Article XI of the State Sanitary Code as described in the application for Disposal Works Construction Permit No. _____ dated _____

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

DATE _____ Inspector _____

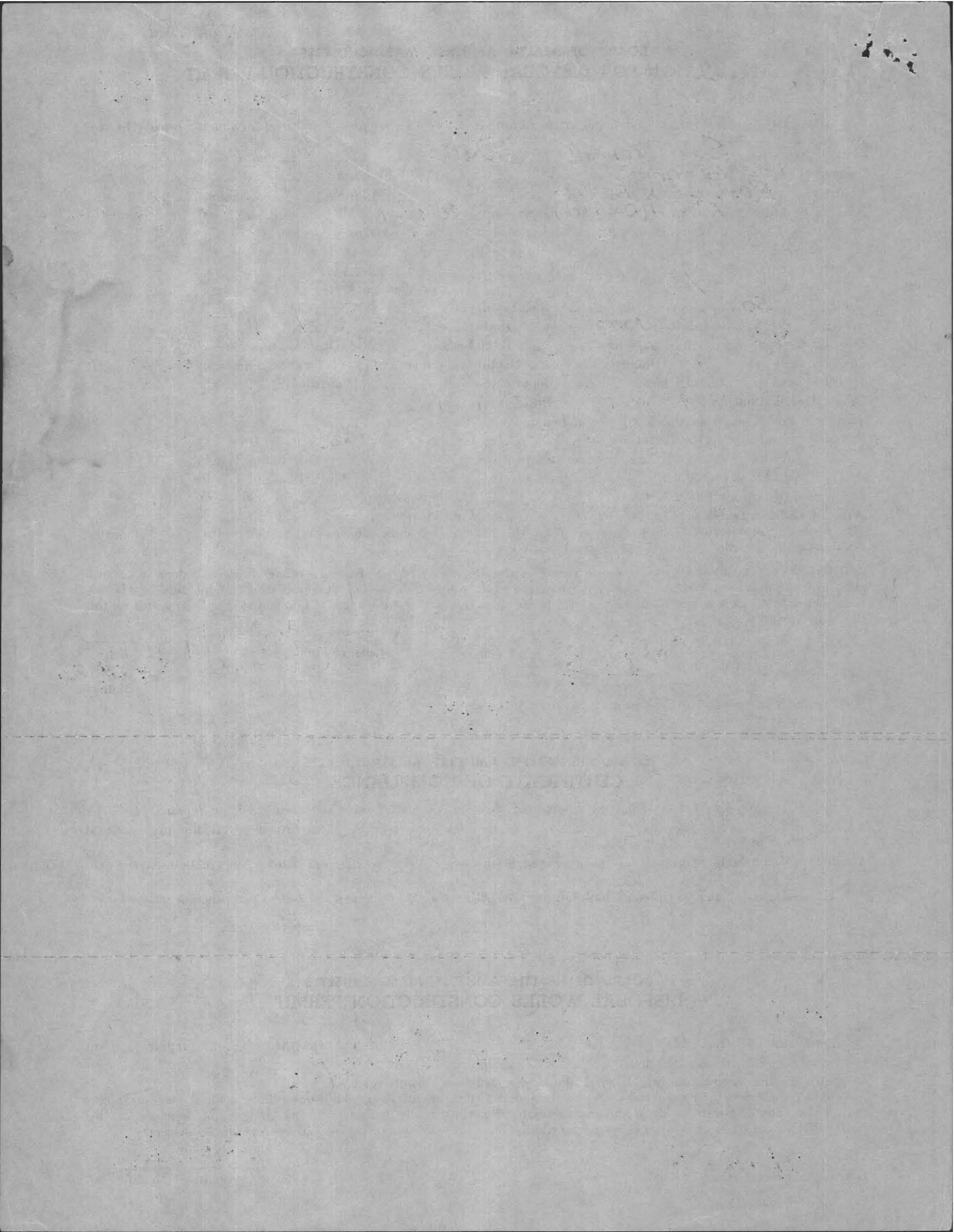
BOARD OF HEALTH, AMHERST, MASSACHUSETTS
DISPOSAL WORKS CONSTRUCTION PERMIT

No. 71-5 Permission is hereby granted RUSSELL + ROBERTS to construct (X) or repair () an Individual Sewage Disposal System at LOT # 5 SO ORCHARD DR.

as shown on the application for Disposal Works Construction Permit No. 71-5

This permit is issued with the understanding that future alterations or additions will be made if necessary. This permit shall not be construed as permission to create or maintain any sewage nuisance and in the issuance of this permit the Board of Health assumes no responsibility for the future operation or maintenance of the system.

DATE 71-5-6 Board of Health CEL



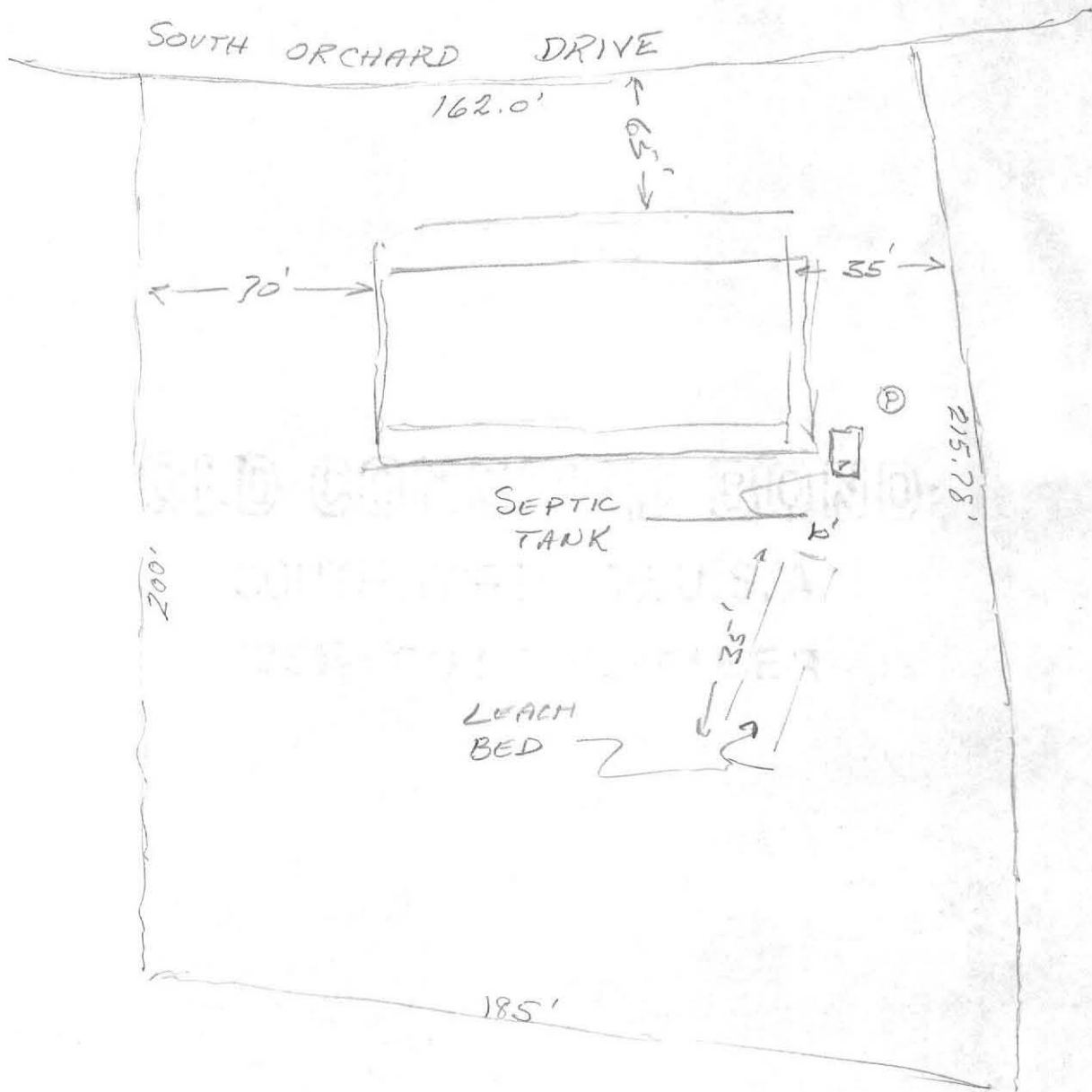
KENDALL G. LUND

Geologist

R.F.D. 1
Amherst, Mass. 01002
413-256-6961

LOT 5

SOUTH ORCHARD ACRES
RUSSEL & ROBERTS



Ⓟ = PERCOLATION TEST LOCATION

OLD ECHEMISTRY BOARD
SOUTH AFRICAN BOARD
SOUTH AFRICAN BOARD