

Well Construction Permit
42 Carriage Lane



Town of



AMHERST

Massachusetts

AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK, AMHERST, MA 01002
(413) 259-3077 (413) 259-2404 - FAX Environmental Health Division (413) 259-3078

APPLICATION FOR A WELL CONTRUCTION PERMIT

I hereby petition the Board of Health of the Town of Amherst for a Well Construction Permit (WCP) to install a private well in the Town of Amherst.


ATTACHED IS A PLAN SHOWING THE PROPOSED LOCATION OF THE WELL (WITH ORIGINAL DATE, STAMP AND SIGNATURE OF AN ENGINEER REGISTERED SANITARIAN, OR REGISTERED LAND SURVEYOR) MEETING ALL THE REQUIREMENTS OF AMHERST RULES AND REGULATIONS FOR PRIVATE WELLS.

1. Address of Property: 42 Carriage Lane
2. Assessor of Parcel Number: 23A-62
3. Name of Owner: John McCarran Telephone Number: 413.256.3474
Address of Owner: 42 Carriage Lane, Amherst, MA
4. Name of Well Driller: Kirk Henshaw - MA Reg # 196
(Must be registered with Massachusetts Water Resources Commission)
5. Purpose of Well: *Drinking () Agricultural Only () Geothermal ()

The undersigned acknowledges that he must, before commencing construction or use of the system which is the matter of this application, secure any and all other permits which may be required by the laws of the Town of Amherst and the Commonwealth of Massachusetts, and agree to abide by all regulations of the Town of Amherst and the Commonwealth of Massachusetts concerning private wells.

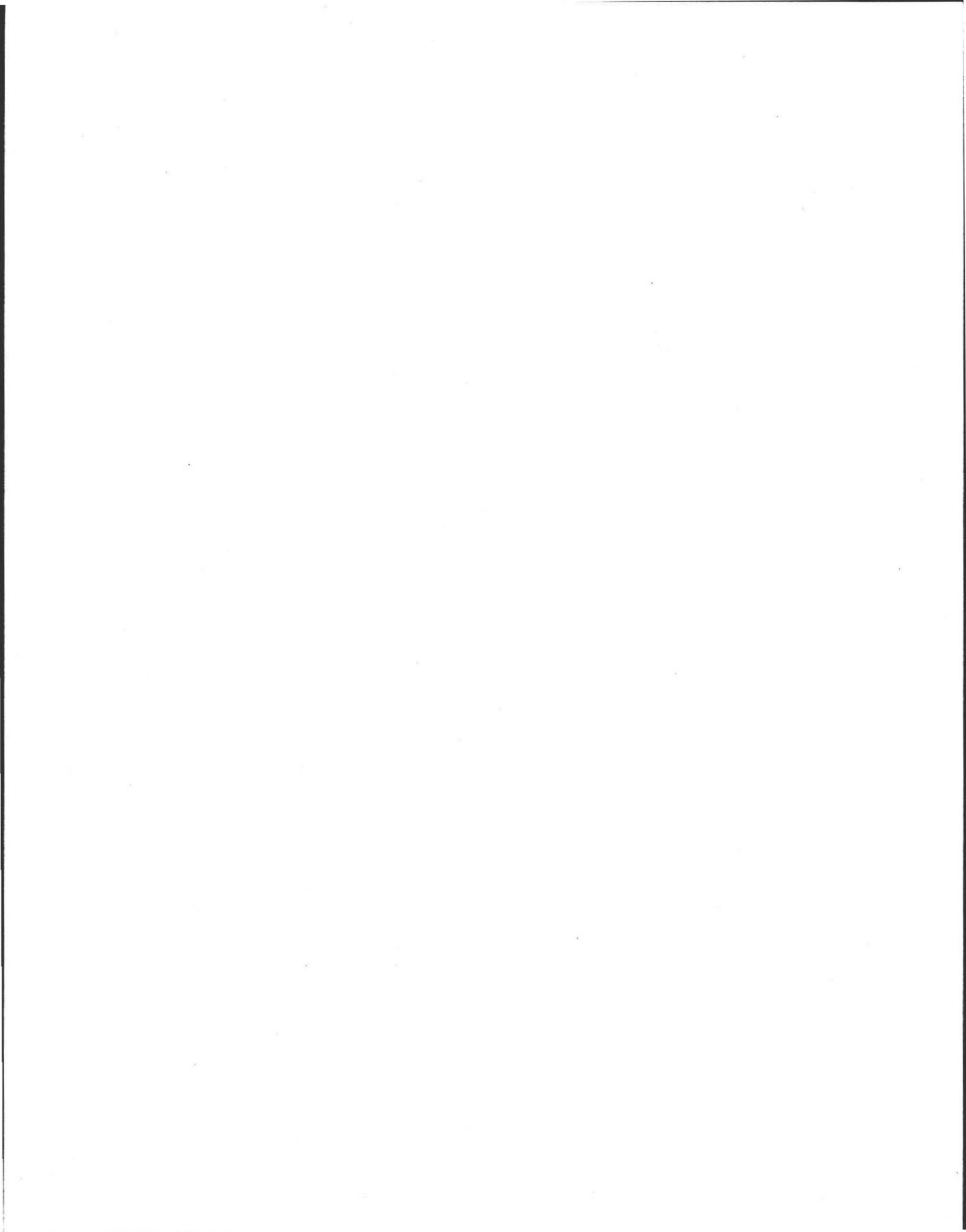
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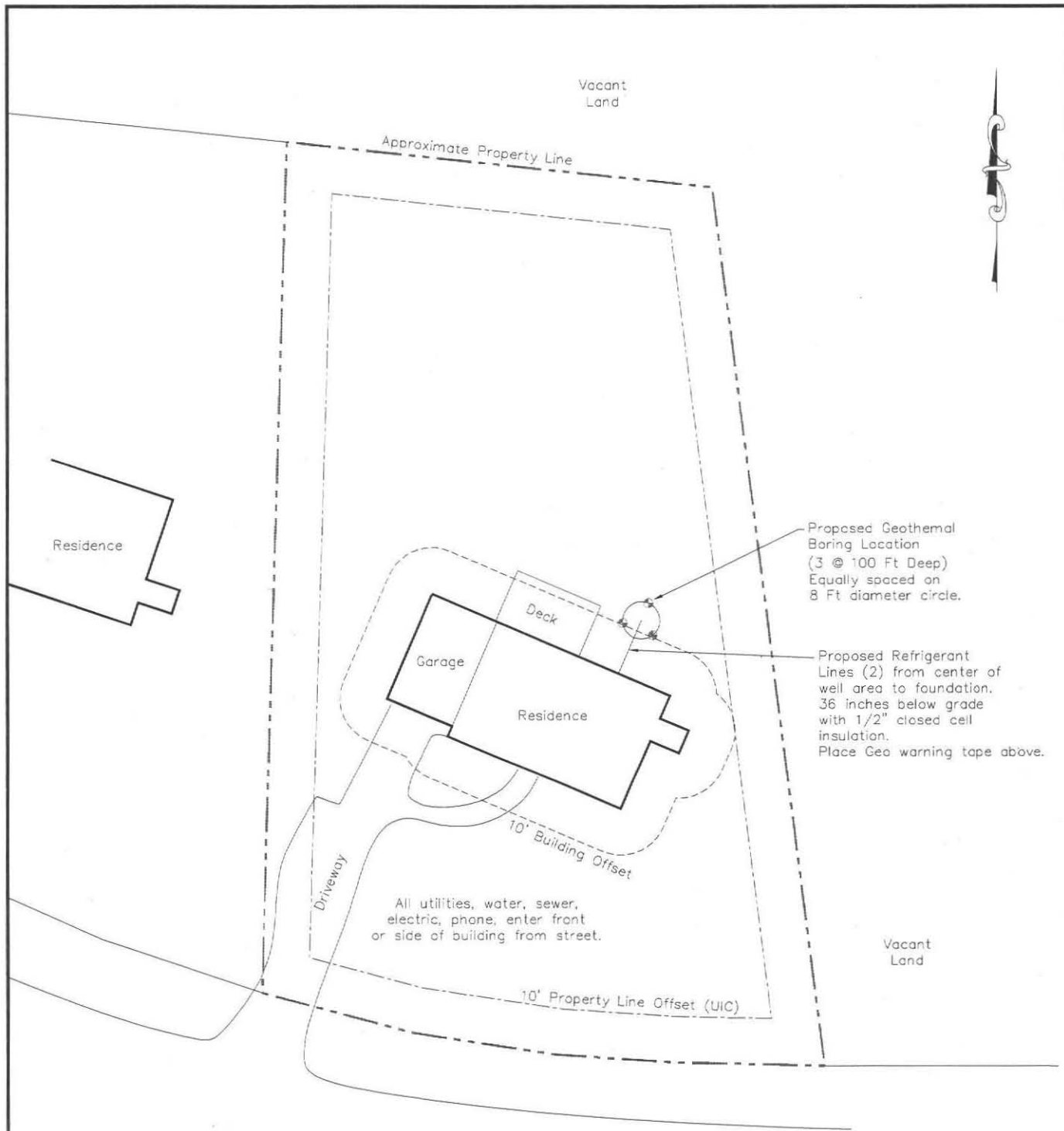
Name of Applicant: Michael Simonelli (for Terraclime Geothermal) Fee: \$100.00

Signature:  Date: 11/23/2010

WELL PERMIT # _____

MAKE SMOKING HISTORY



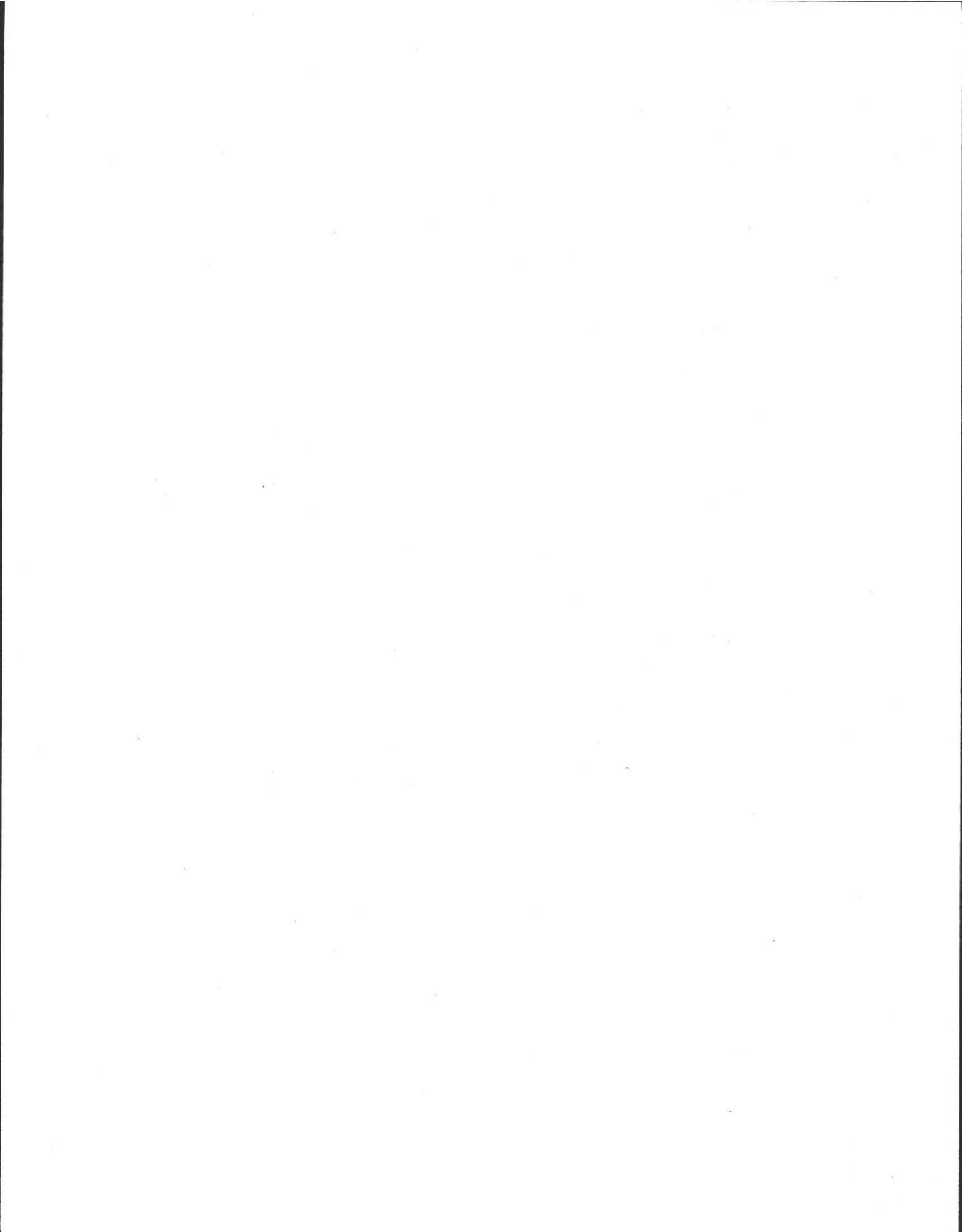


CARRIAGE LANE

NOTES:
 Site plan developed from Amherst GIS Maps and HCRD Pbk75 Pg33, Lot #22.
 All locations are approximate.

Approximate Scale 1" = 30'

<p>Phone: 1-877-372-5236 • Web: www.terraclimegeo.com</p>	PROJECT:	McCarran Residence			COMPUTER CADFILE : 215007e.dwg			
		42 Carriage Lane Amherst, Massachusetts			DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
	TITLE:	Site Sketch			RAS	RAS	MS	
					SCALE:	DATE:	JOB NO.:	FIGURE NO.:
				1" = 30'	12/2/10	215007	1	





Property Map

— Aerial Property Lines

--- Easements

Basemap

--- Trails

Streets

— Local Roads

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— State Routes

MHD Roads

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Planimetric & topographic basemap features compiled
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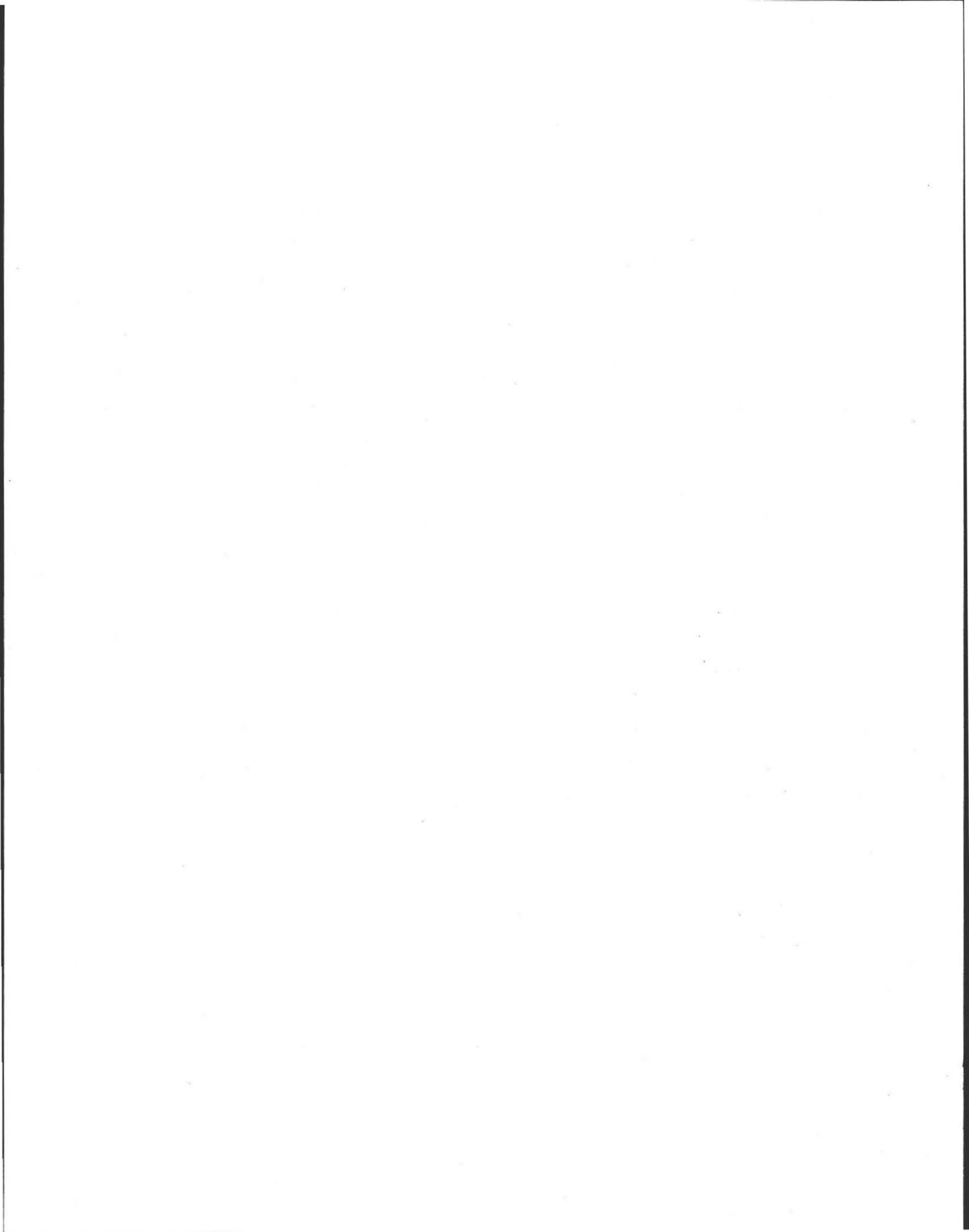
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1" = 46 ft



Amherst GIS Viewer November 17, 2010







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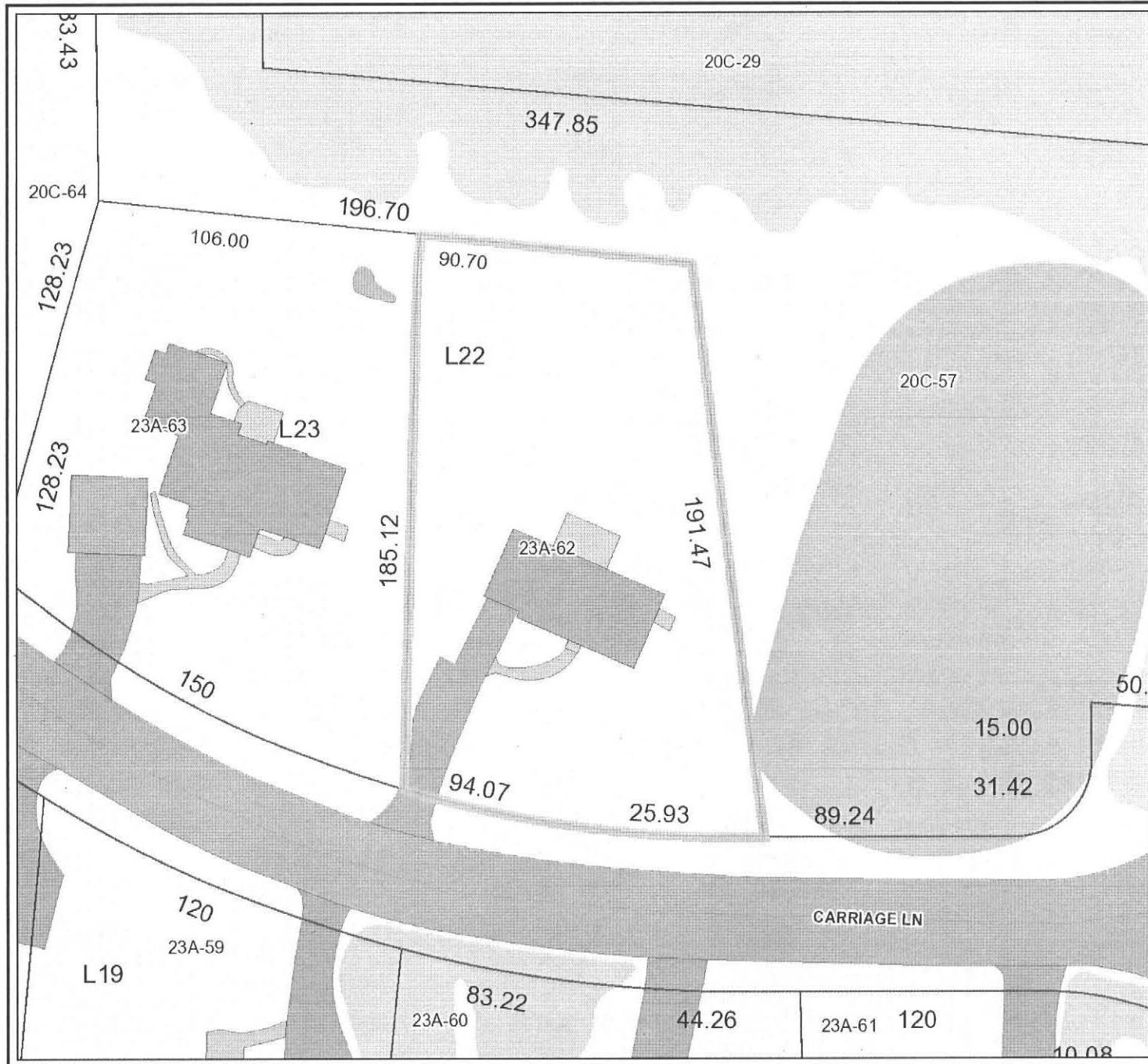
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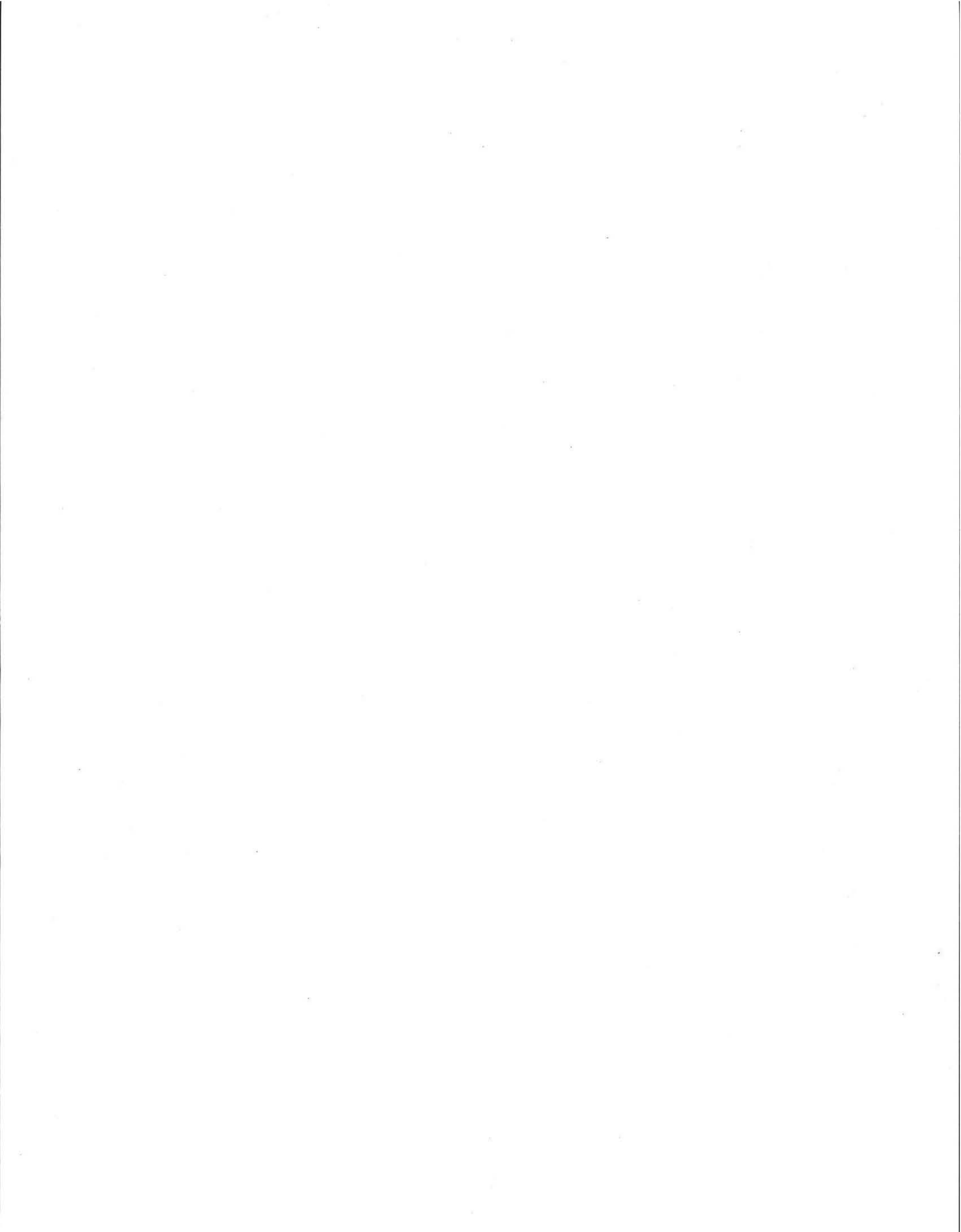
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Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Drinking Water Program

UIC Registration Application for Closed-Loop Ground Source Heat Pump Well

Registration Category

Registration of Underground Discharges to Injection Well(s)
Modification to an Existing UIC Registration

UIC Registration Fee - Exempt

For Modifications to an Existing UIC Registration

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



Check all that apply: Change of owner Change in # of discharge wells (+/-)

Enter UIC Registration Number issued by MassDEP for the initial UIC Registration (required for modifications): MAS11A008203-5CL
UIC Registration #

A. Site Information

Private Residence

Property name (enter "Private Residence" if unnamed)

42 Carriage Lane

Amherst

Property Street Address

City/Town

MA

01102

State

Zip Code

B. Owner Information

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Name of Owner

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Street Address

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Telephone Number

Email (optional)

C. Registered Well Driller

Kirk Henshaw

Well Driller's Name

Reg. No. 196

MassDEP Well Driller Certification Number

Henshaw Well Drilling

Name of Company

413.296.4725

Telephone Number

D. Injection Well Information

3 geothermal bores

Total Number of Wells (existing plus proposed)

Type of Discharge: Direct Exchange Heat Pump Closed Loop Heat Pump

E. Preparer

Michael Simonelli

Printed Name

11/17/2010

Date

413.519.3079

Telephone Number

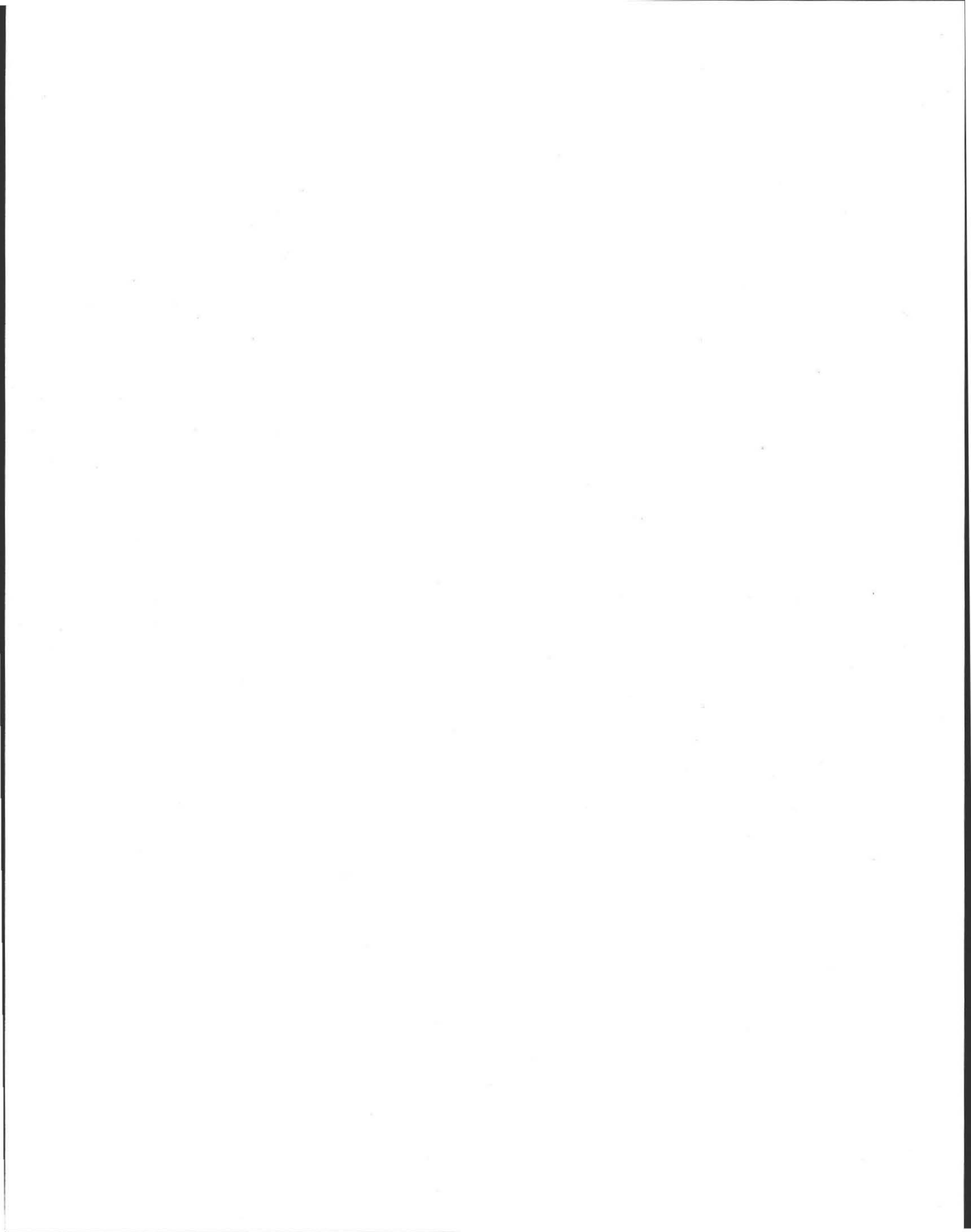
Operations / Project Manager

Position/Title

msimonelli@terraclimegeo.com

Email (optional)

Send a duplicate copy of this form to the local board of health.



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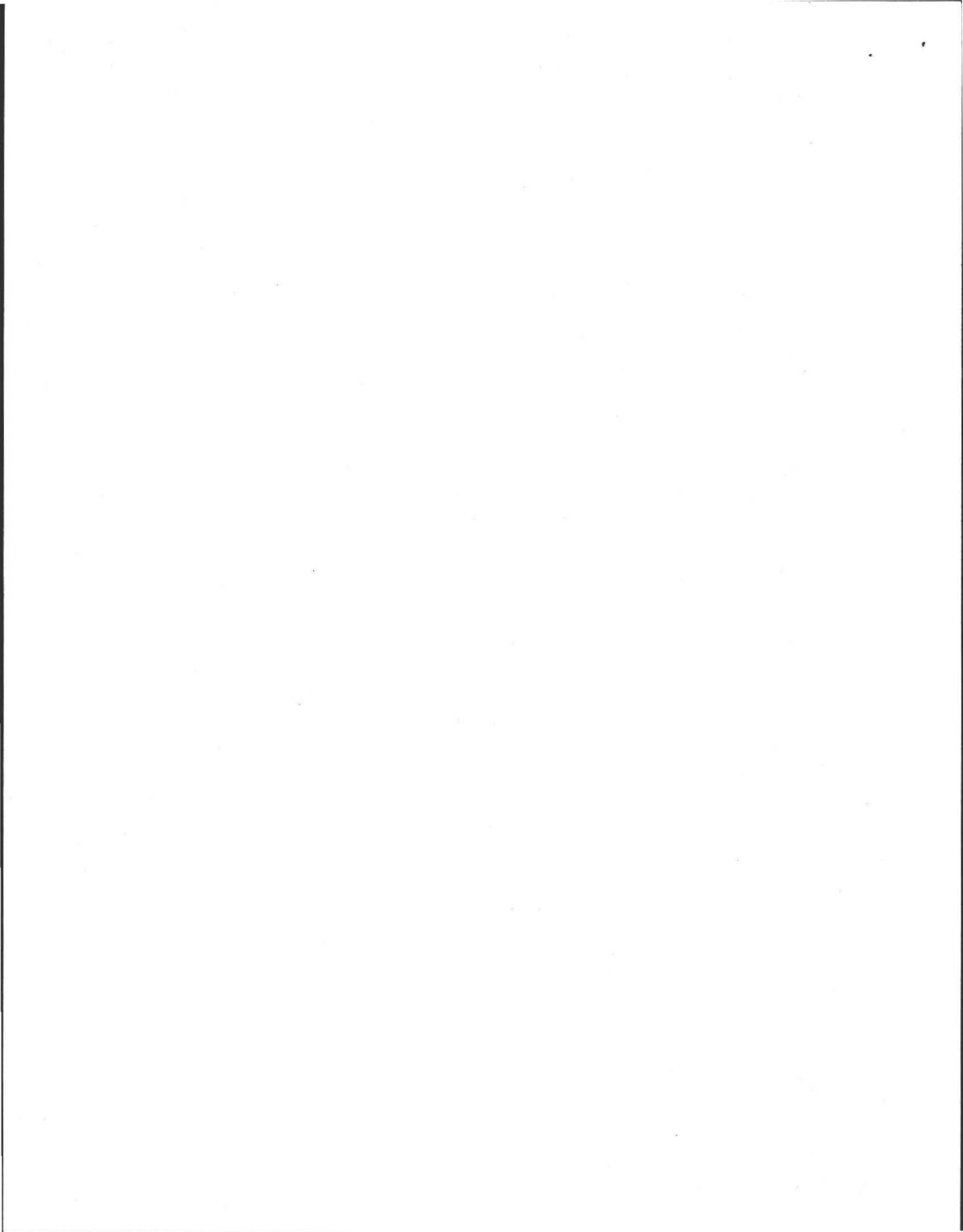
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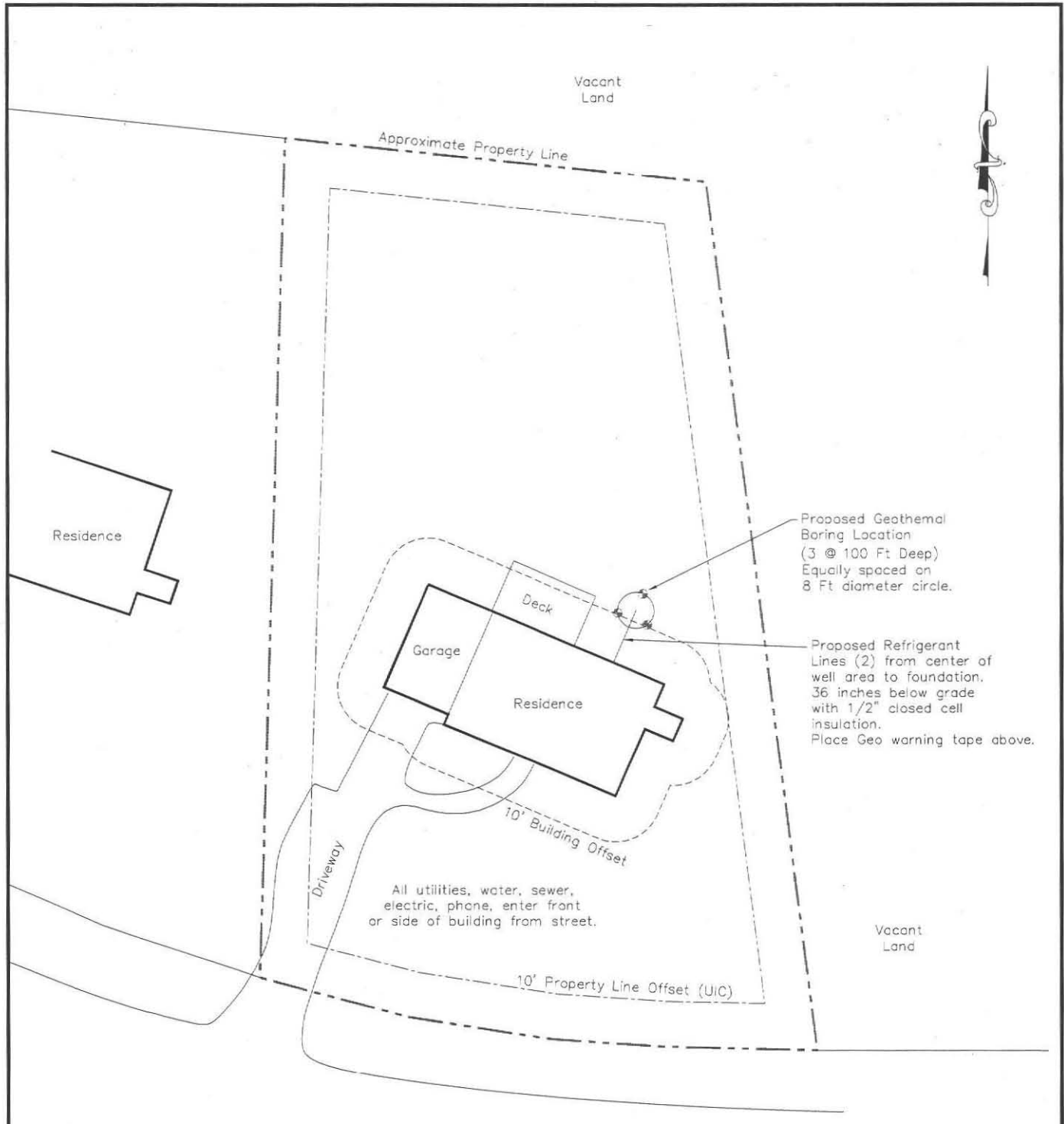
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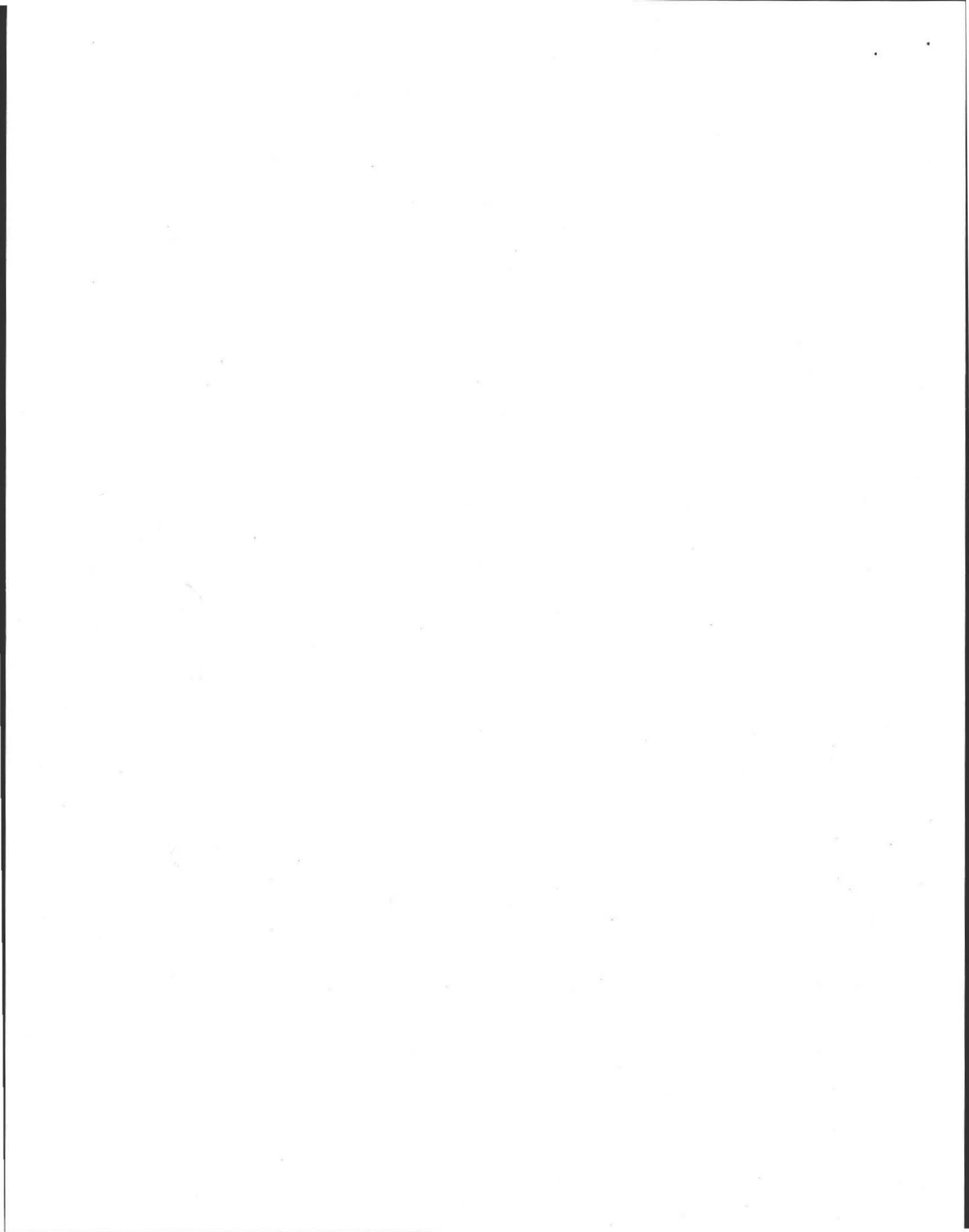
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Terraclime
 GEOTHERMAL

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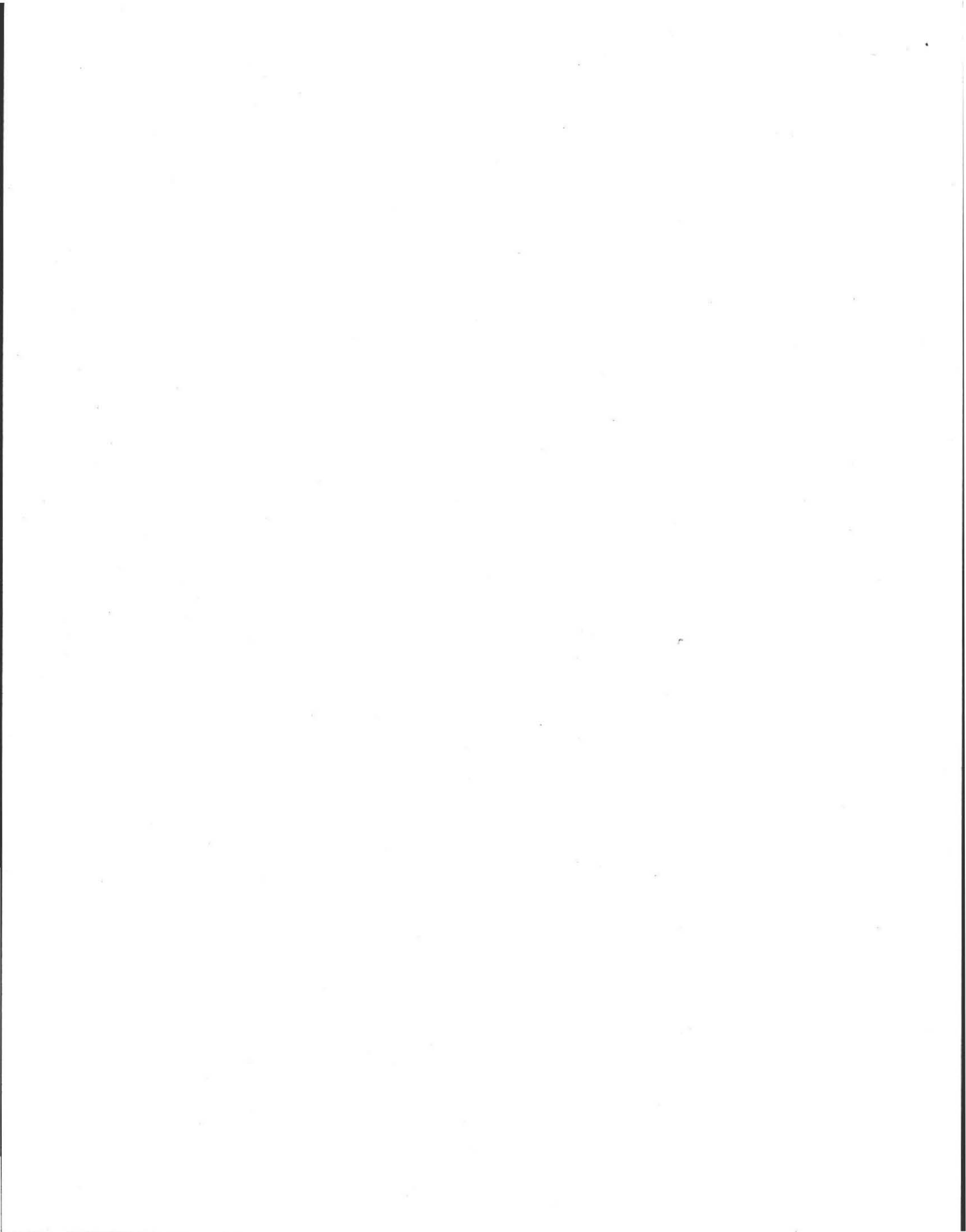
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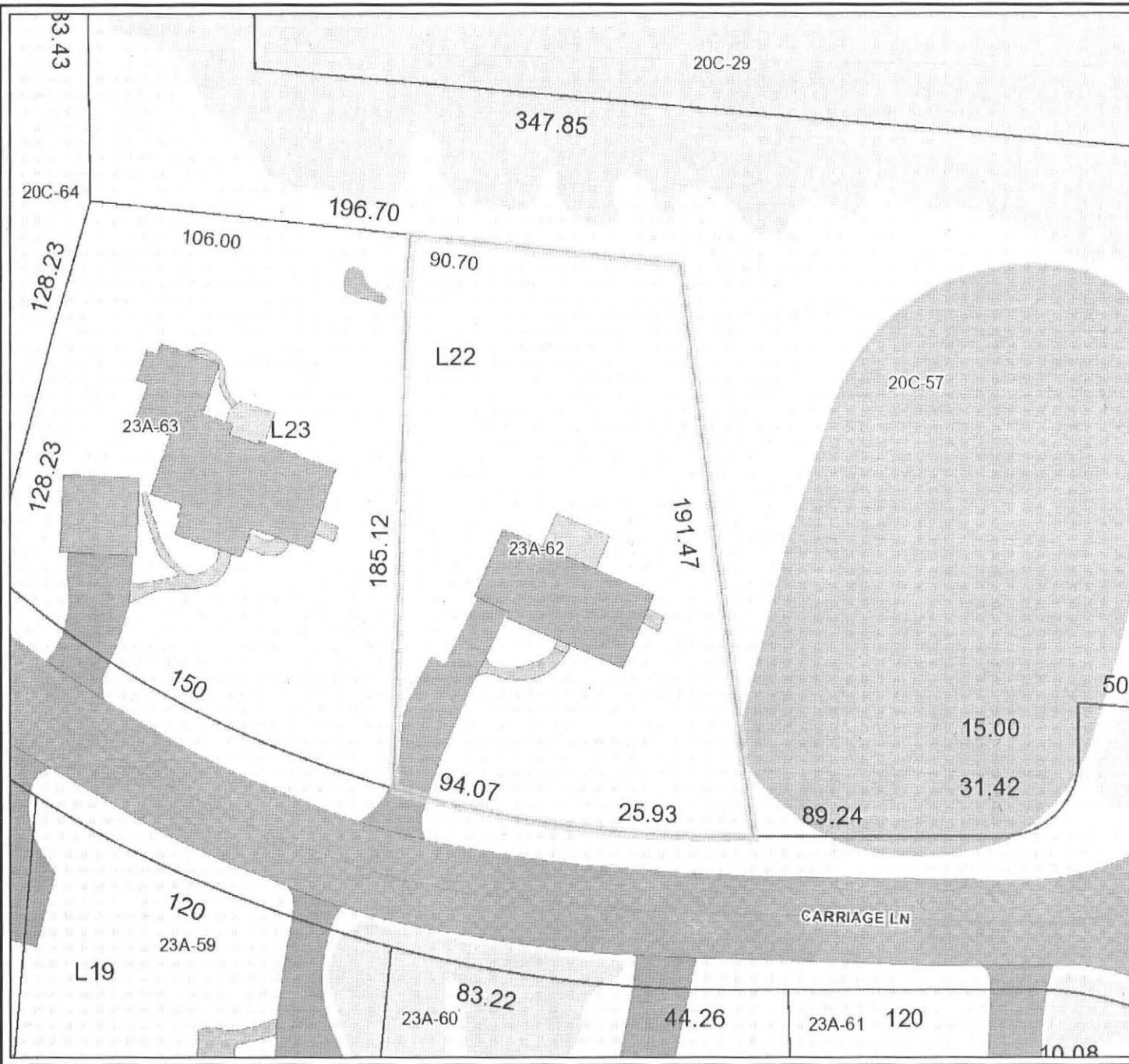
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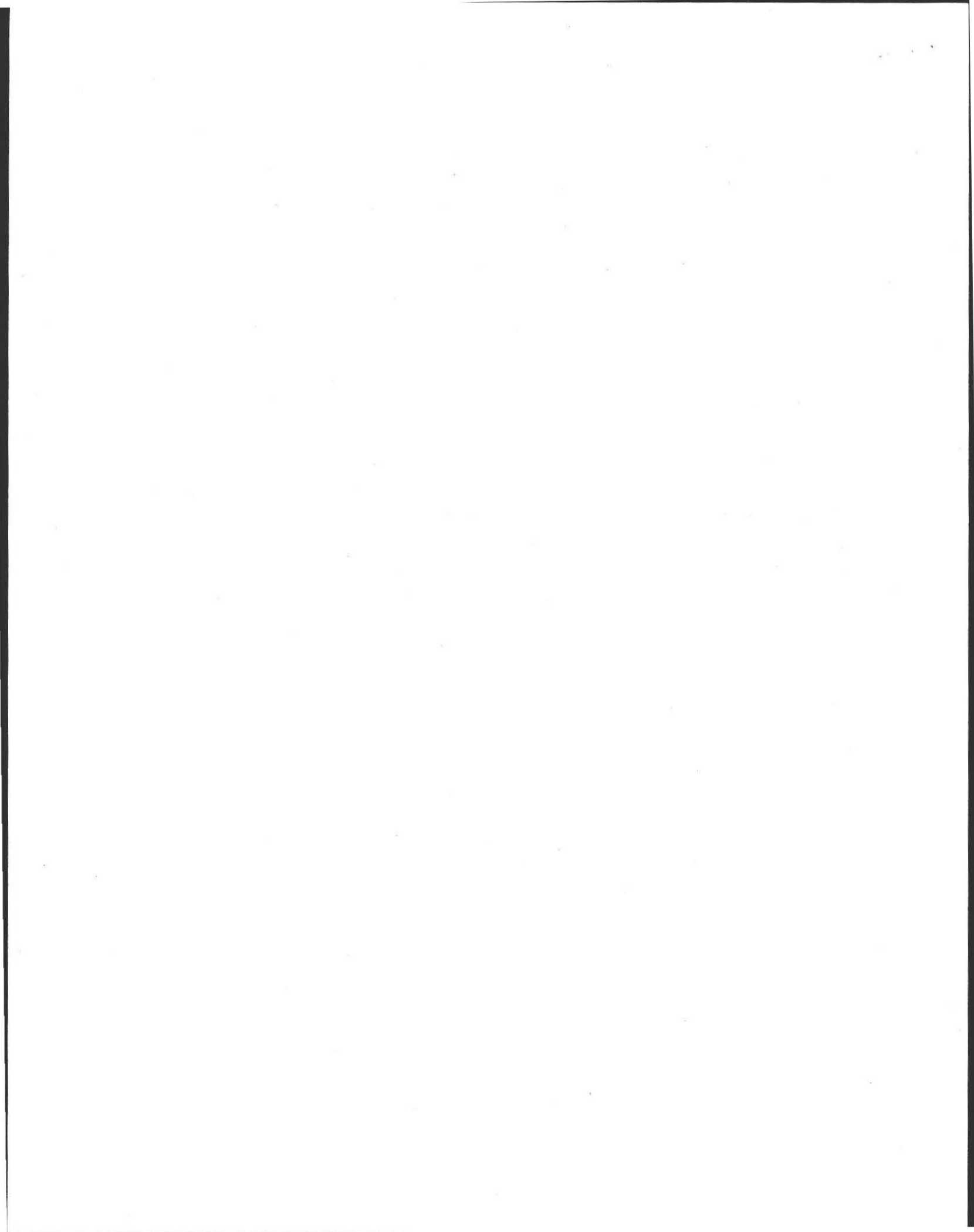
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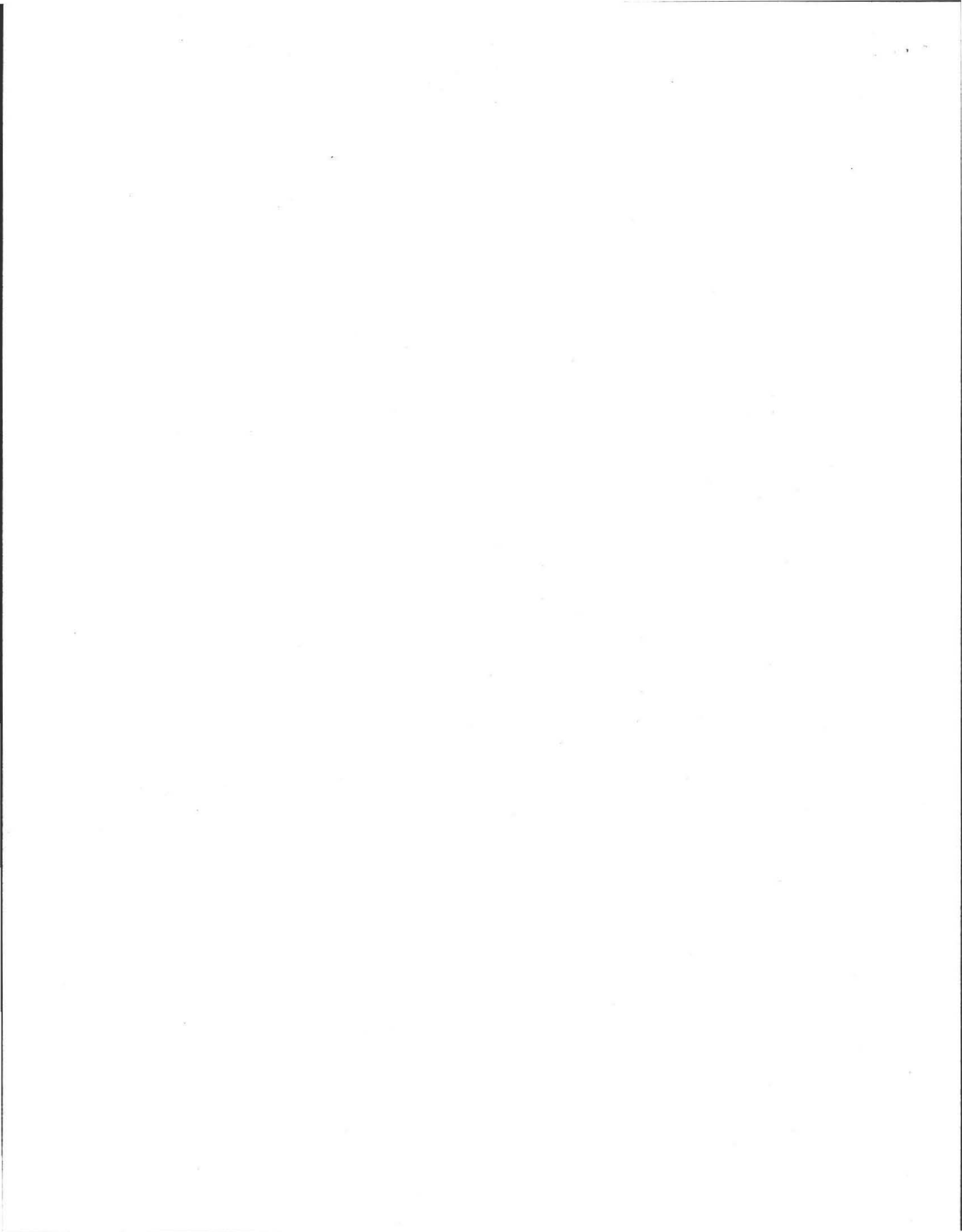
Operations / Project Manager

Position/Title

msimonelli@terraclimegeo.com

Email (optional)

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**AMHERST BOARD OF HEALTH REGULATIONS FOR
PRIVATE WELLS
Adoption Date: October 30, 2008**

I. PURPOSE

These regulations are intended to protect the public health and general welfare by ensuring that private wells are constructed in a manner which will protect the quality of the groundwater derived from private wells.

II. AUTHORITY

These regulations are adopted by the Amherst Board of Health, as authorized by Massachusetts General Laws, Chapter III, section 31. These regulations supersede all previous regulations adopted by the Board of Health pursuant to the construction of private wells. These regulations are derived from the Massachusetts Department of Environmental Protection Model Board of Health Regulations for Private Wells, October 30, 1989, as revised February 1998.

III. DEFINITIONS

Agent: Any person designated and authorized by the Board to enforce these regulations. The agent shall have all the authority of the appointing Board and shall be directly responsible to the Board and under its direction and control.

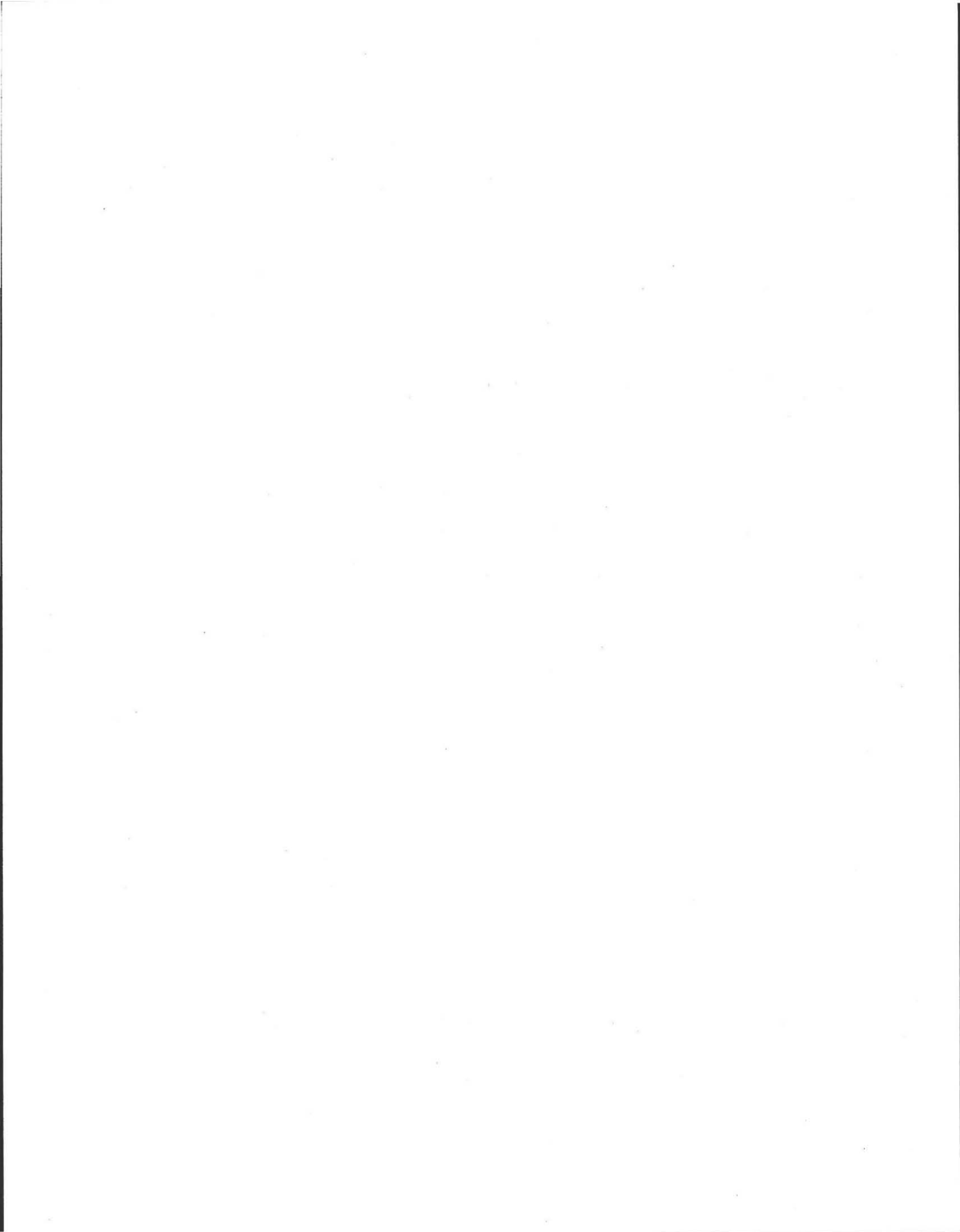
Applicant: Any person who intends to have a private well constructed and is applying for a permit for same.

Board: The Board of Health of Amherst, Massachusetts or its authorized agent.

Casing: Impervious durable pipe placed in a boring to prevent the walls from caving and to serve as a vertical conduit for water in a well.

Certified Laboratory: Any laboratory currently certified by the Massachusetts Department of Environmental Protection for analysis of drinking water. Provisional certification shall also qualify.

Person: An individual, corporation, company, association, trust, or partnership.



Private Well: Any dug, driven, or drilled hole, with a depth greater than its largest surface diameter developed to supply water intended and/or used for human consumption and not subject to regulation by 310 CMR 22.00.

Pumping Test: A procedure used to determine the characteristics of a well and adjacent geologic formation by installing and operating a pump.

Registered Well Driller: Any person registered with the Department of Environmental Management/Office of Water Resources to dig or drill wells in the Commonwealth of Massachusetts.

Static Water Level: The level of water in a well under non-pumping conditions.

Structure: A combination of materials assembled at a fixed location to give-support or shelter, such as a building, framework, retaining wall, fence, or the like.

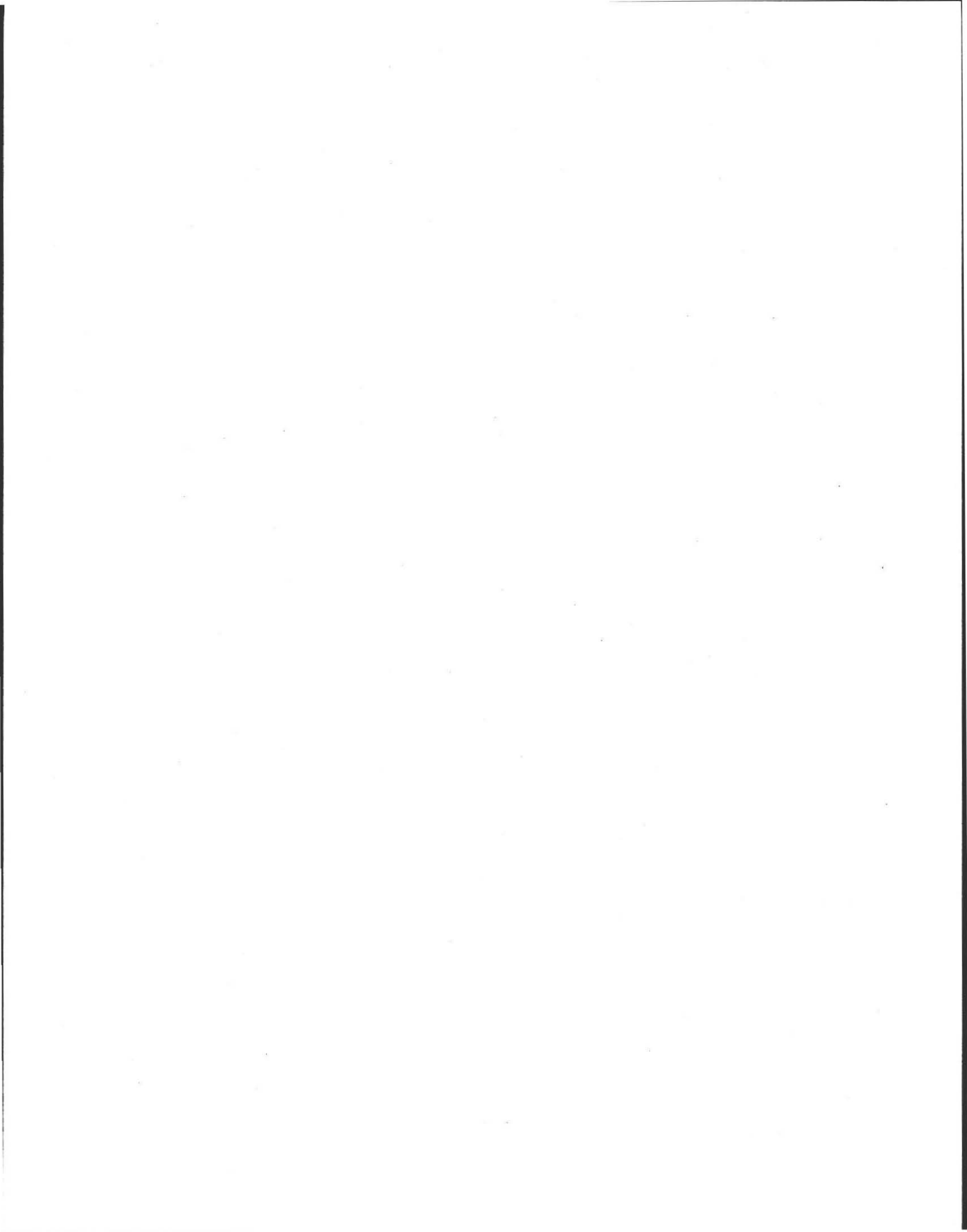
IV. WELL CONSTRUCTION PERMIT

The property owner or his designated representative shall obtain a permit from the Board of Health prior to the commencement of construction of a private well.

Each permit application to construct a well shall include the following:

- 1) the property owner's name and address
- 2) the well driller's name and proof of valid state registration
- 3) a plan with a specified scale showing the location of the proposed well in relation to existing or proposed above or below ground structures on the subject property.
- 4) a written description of visible prior and current land uses within two-hundred (200) feet of the proposed well location, which represent a potential source of contamination, including but not limited to the following:
 - a) existing and proposed structures
 - b) subsurface sewage disposal systems
 - c) subsurface and above ground fuel storage tanks
 - d) public ways
 - e) utility rights-of-way
 - f) any other potential sources of pollution.
- 5) proof that the owner of any property within one hundred and fifty (150) feet of the well and all property abutters have been notified by registered or certified mail, return receipt requested, of the applicant's intention to install a well.
- 6) a permit fee of \$100.00

The permit shall be posted in a visible manner on site at all times that work is taking place. Each permit shall expire one (1) year from the date of issuance unless revoked for cause. Permits may be extended for one additional six (6) months period provided that a



written request has been received by the Board prior to the one year expiration date, and the Board subsequently votes to grant such an extension. No additional fee shall be charged for a permit extension, provided there is no change in the plans for the proposed well.

Well Construction Permits are not transferable.

V. WATER SUPPLY CERTIFICATE

The issuance of a Water Supply Certificate by the Board shall certify that the private well may be used as a drinking water supply. No person shall use a private well, installed after the effective date of these regulations, as a drinking water supply without a Water Supply Certificate issued by the Board of Health.

The following shall be submitted to the Board of Health to obtain a Water Supply Certificate:

- a) well construction permit
- b) copy of the Water Well Completion Report as required by the DEM Office of Water Resources (313 CMR 3.00)
- c) a copy of the Pumping Test Report required pursuant to Section VII of these regulations
- d) a copy of the Water Quality Report required pursuant to Section VIII of these regulations.

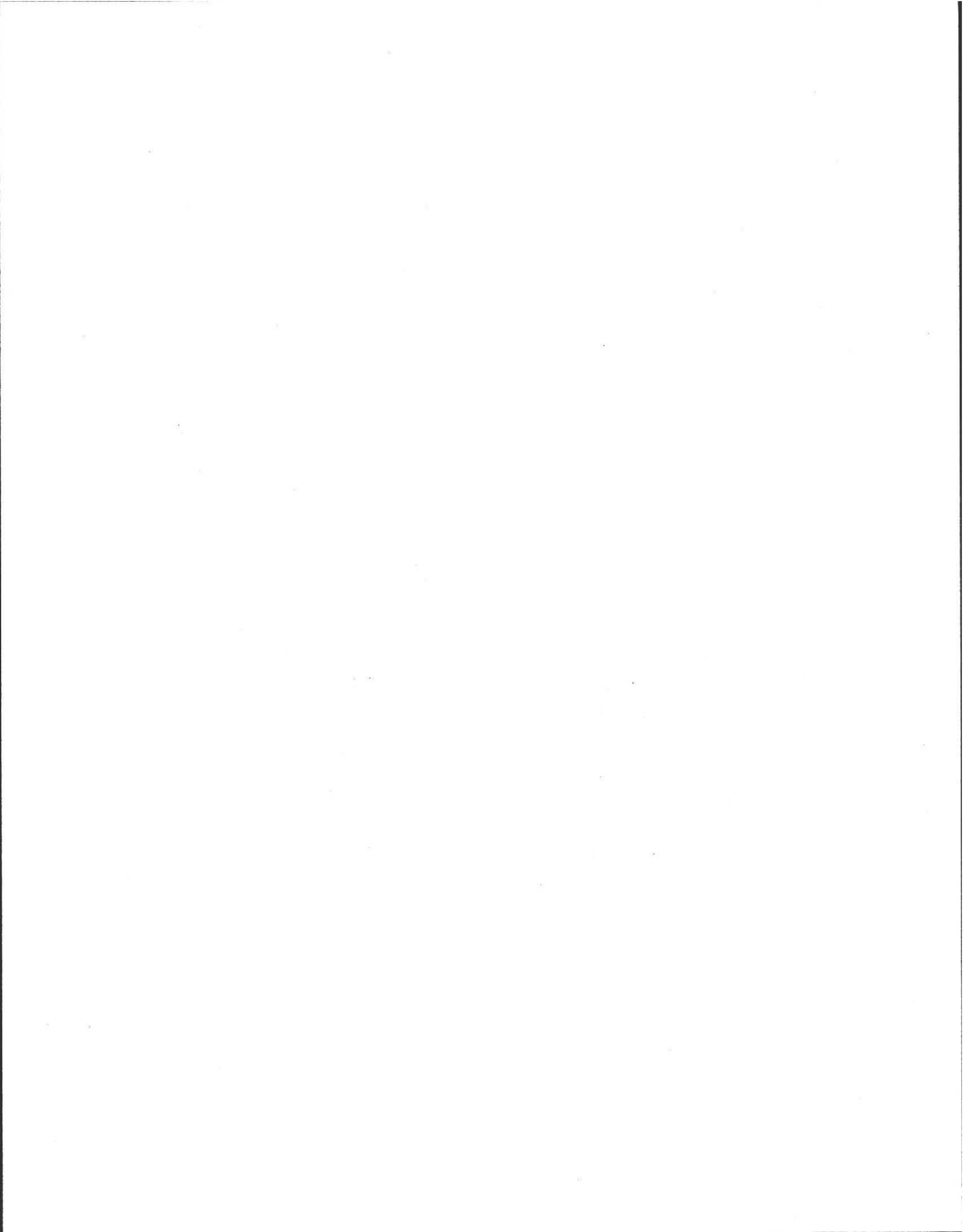
Upon the receipt and review of the above documents, the Board shall make a final decision on the application for a Water Supply Certificate. A final decision shall be in writing and shall comprise one of the following actions:

- a) Issue a Water Supply Certificate
- b) Deny the applicant a Water Supply Certificate and specify the reasons for the denial.
- c) Issue a conditional Water Supply Certificate with those conditions which the Board deems necessary to ensure fitness, purity and quantity of the water derived from that private well. Said conditions may include but not be limited to requiring treatment or additional testing of the water.

It shall be the responsibility of the applicant to transmit a copy of any issued Water Supply Certificate or conditional Water Supply Certificate to the Building Commissioner in association with any request for a certificate of occupancy for any building(s) to be served by a private well.

VI. WELL LOCATION AND USE REQUIREMENTS

In locating a well, the applicant shall identify all potential sources of contamination which exist or are proposed within two hundred (200) feet of the site. When possible, the well shall be located upgradient of all potential sources of contamination and shall be as



far removed from potential sources of contamination as possible, given the layout of the premises.

Each private well shall be accessible for repair, maintenance, testing, and inspection. The well shall be completed in a water bearing formation that will produce the required quantity of water under normal operating conditions.

Each private well shall be located at least ten (10) feet from any property line. The centerline of a well shall, if extended vertically, clear any projection from an adjacent structure by at least five (5) feet.

All private wells shall be located a minimum of 25 feet away from the normal driving surface of any public roadway or a minimum of 15 feet from property boundary of the road right-of-way, whichever is greater.

Each private well shall be located at least 25 feet, laterally, from the normal high water mark of any lake, pond, river, stream, ditch, or slough. When possible, private water systems shall be located in areas above the 100-year floodplain.

A suction line or well shall be located a minimum of 10 feet from a building sewer constructed of durable corrosion resistant material with watertight joints, or 50 feet from a building sewer constructed of any other type of pipe; 50 feet from a septic tank; 100 feet from a leaching field; and 100 feet from a privy.

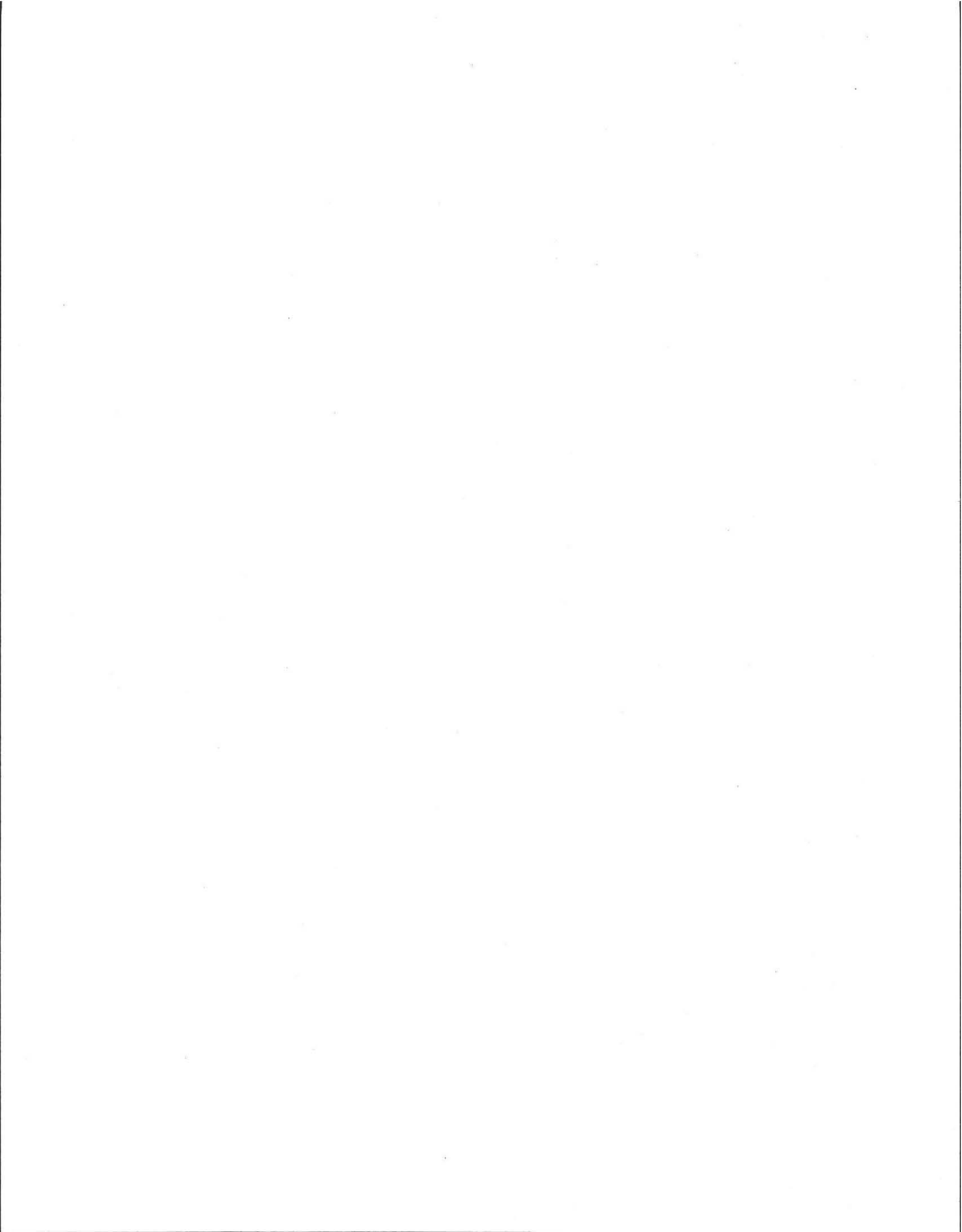
Water supply lines shall be installed at least 10 feet from and 18 inches above any sewer line. Whenever water supply lines must cross sewer lines, both pipes shall be constructed of class 150 pressure pipe and shall be pressure tested to assure a watertight-condition.

The Board reserves the right to impose greater dimensional requirements than those listed, and to impose minimum lateral distance requirements from other potential sources of contamination not listed above. All such special well location requirements shall be listed, in writing, as a condition of the well construction permit.

No private well, or its associated distribution system, shall be connected to either the distribution system of a public water supply system or any type of waste distribution system.

VII. WATER QUANTITY REQUIREMENTS

The applicant shall submit to the Board for review and approval a Pumping Test Report. The Pumping Test Report shall include the name and address of the well owner, description of well location if different from that described in the well construction permit application, date the pumping test was performed, depth at which the pump was set for the test, location for the discharge line, static water level immediately before



pumping commenced, discharge rate and, if applicable, the time the discharge rate changed, pumping water levels and respective times after pumping commenced, maximum drawdown during the test, duration of the test, including both the pumping time and the recovery time during which measurements were taken, recovery water levels and respective times after cessation of pumping, and reference point used for all measurements.

In order to demonstrate the capacity of the well to provide adequate water a Required Volume is pumped during the test. The Required Volume is calculated as follows:

1. The volume of water necessary to support the household's daily need shall be determined using the following equation: (number of bedrooms plus one bedroom) x (110 gallons per bedroom) x (a safety factor of 2) = number of gallons needed daily.
2. The storage capacity of the well shall be determined using the measured static water level and the depth and radius of the drillhole or casing.
3. The Required Volume shall be calculated by adding the volumes of water in (1) and (2) above.

Successful completion of the pumping test requires

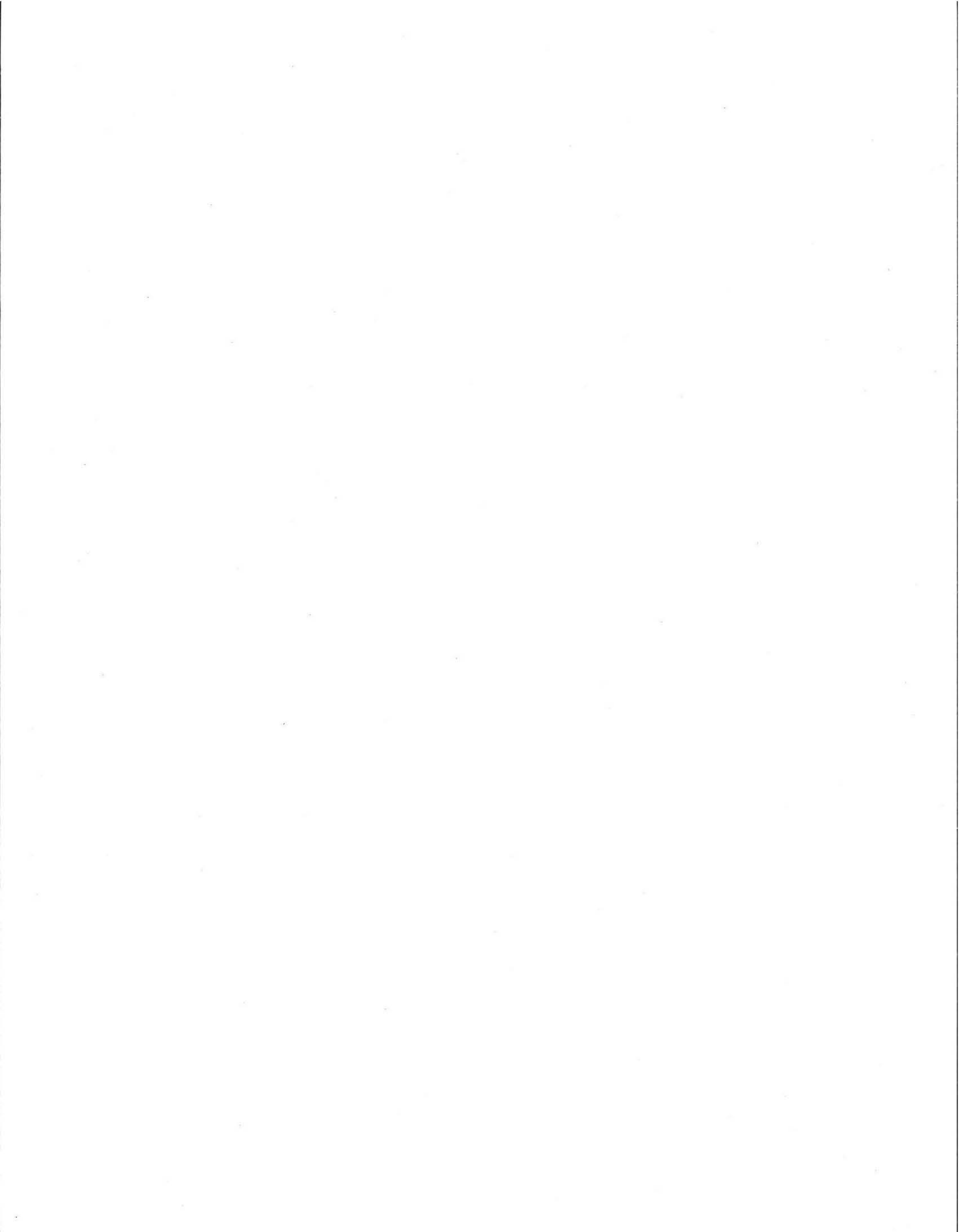
- a) that the well be pumped at a sustained rate of at least 0.5 gallons per minute
- b) that the Required Volume be pumped from the well within a period not to exceed 24-hours.
- c) that, within a twenty-four (24) hour period after the cessation of pumping, the water level in the well recovers to at least eighty-five (85) percent of the prepumped static water level.

If the well fails to sustain a pumping rate of 0.5 gallons per minute, fails to yield the Required Volume within a 24 hour period, or if the water level in the well fails to recover to within 85 percent of the prepumped static water level within a 24 hour period, the well should be redeveloped, hydrofractured, and/ or deepened. After completing the chosen procedure(s), another pumping test should be conducted.

VIII. WATER QUALITY TESTING REQUIREMENTS

After the well has been completed and disinfected, and prior to using it as a drinking water supply, a water quality test shall be conducted.

A water sample shall be collected either after purging three well volumes or following the stabilization of the pH, temperature and specific conductance in the pumped well. The water sample to be tested shall be collected at the pump discharge or from a disinfected tap in the pump discharge line. In no event shall a water treatment device be installed prior to sampling.



The water quality test, utilizing an applicable US EPA approved method for drinking water testing shall be conducted by an EPA or Massachusetts certified laboratory and shall include analysis for the parameters listed in Appendix A. Samples taken from wells completed in crystalline bedrock should also be analyzed for radon, arsenic, and selenium. Additionally, in areas where current or historical land use includes agriculture, the sample should be analyzed for pesticides, herbicides, and arsenic. The results shall be compared to Massachusetts drinking water standards for public water supplies.

Following a receipt of the water quality test results, the applicant shall submit a Water Quality Report to the Board which includes:

- 1) a copy of the certified laboratory's test results
- 2) the name of the individual who performed the sampling
- 3) where in the system the water sample was obtained

Because water quality at a well can change over time the Board recommends that the well be retested at intervals not to exceed ten years. More frequent retesting should be conducted if the well is in an agricultural, commercial, industrial or high density residential area. Retesting should also be considered if any of these conditions occur: an extended drought, an extended wet (high water table) period, significant changes in local hydrologic conditions.

The Board reserves the right to require retesting of the above parameters, or testing for additional parameters when, in the opinion of the Board, it is necessary due to local conditions or for the protection of public health, safety, and welfare. All costs and laboratory arrangements for water testing are the responsibility of the applicant.

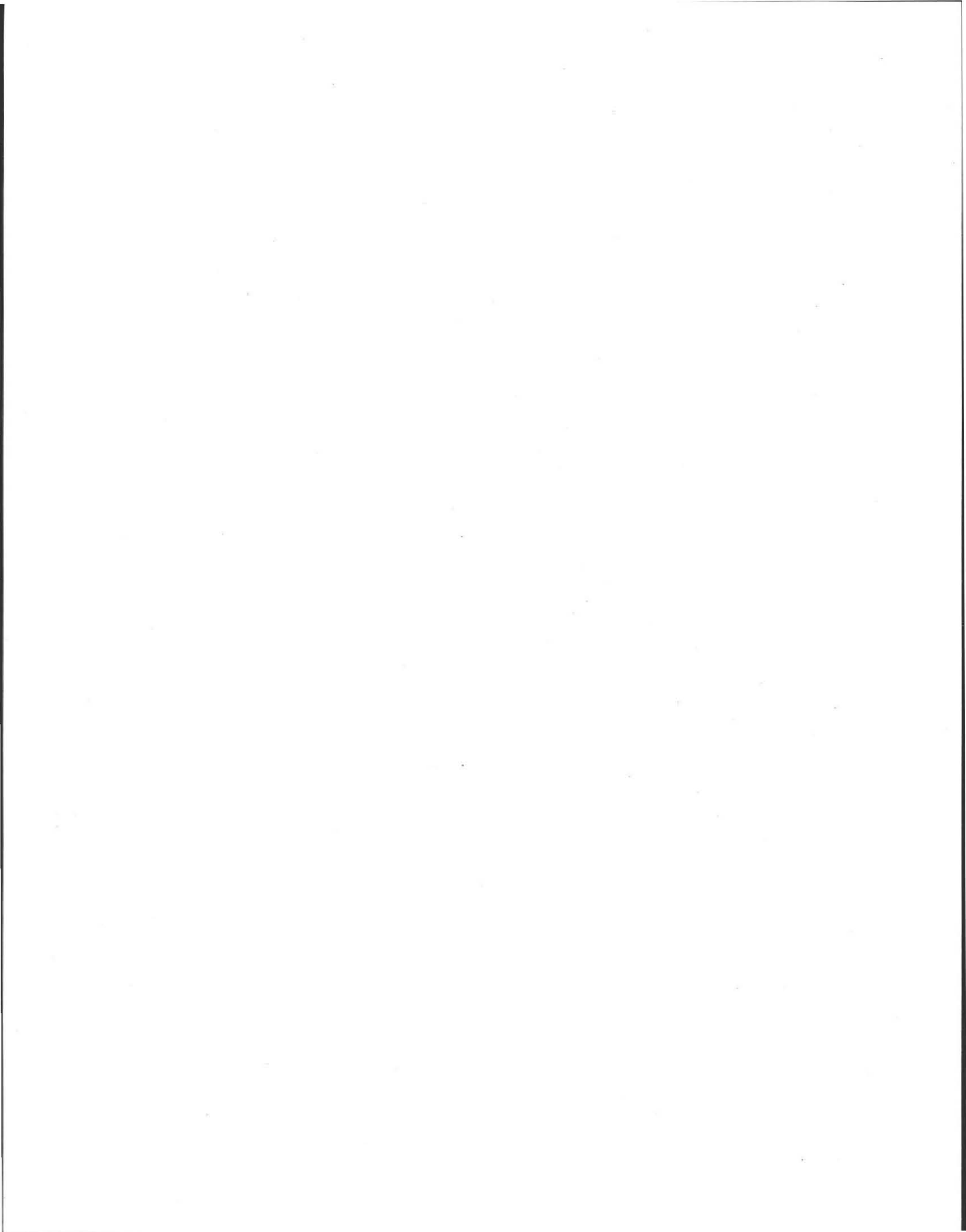
Retesting shall be conducted if the title to the property on which the well is placed is transferred. Exclusions from this requirement follow those described in 310 CMR 15.301 (Title V – for septic systems).

IX. WELL CONSTRUCTION REQUIREMENTS

No person shall construct a private well unless they are a Registered Well Driller as defined in these Regulations.

Any work involving the connection of the private well to the distribution system of the residence must conform to the local plumbing code. All electrical connections between the well and the pump controls and all piping between the well and the storage and/or pressure tank in the house must be made by a pump installer or registered well driller, including the installation of the pump and appurtenance in the well or house.

A physical connection is not permitted between a water supply which satisfies the requirements of these regulations and another water supply that does not meet the requirements of these regulations without prior approval of the Board.



All aspects of construction of a well, including well screen, well casing, wellhead completion, grouting and sealing, pumps, and disinfection shall be in accordance with the Massachusetts Department of Environmental Protection Private Well Guidelines.

In addition, the following requirements must be followed:

All private water supply wells shall be designed such that no unsealed opening will be left around the well that could conduct surface water or contaminated groundwater vertically to the intake portion of the well or transfer water from one formation to another.

Private water supply wells shall be constructed using either steel, thermoplastic or precast concrete pipe well casing. The casing shall be of adequate strength and durability to withstand anticipated formation and hydrostatic pressures, the forces imposed on it during installation, and the corrosive effects of the local hydrogeologic environment.

Private wells drilled in bedrock shall be grouted from the top of the weathered rock interface to fifteen (15) feet into competent bedrock.

All wells completed with the casing extending above grade shall have a surface seal designed to eliminate the possibility of surface water flowing down the annular space between the well casing and the surrounding backfilled materials.

All pumps shall be installed either below the frost line with a pitless adapter or in some other heated and protected sanitary location. Above ground pumps shall be installed in sheltered, dry, accessible locations and shall be protected from freezing.

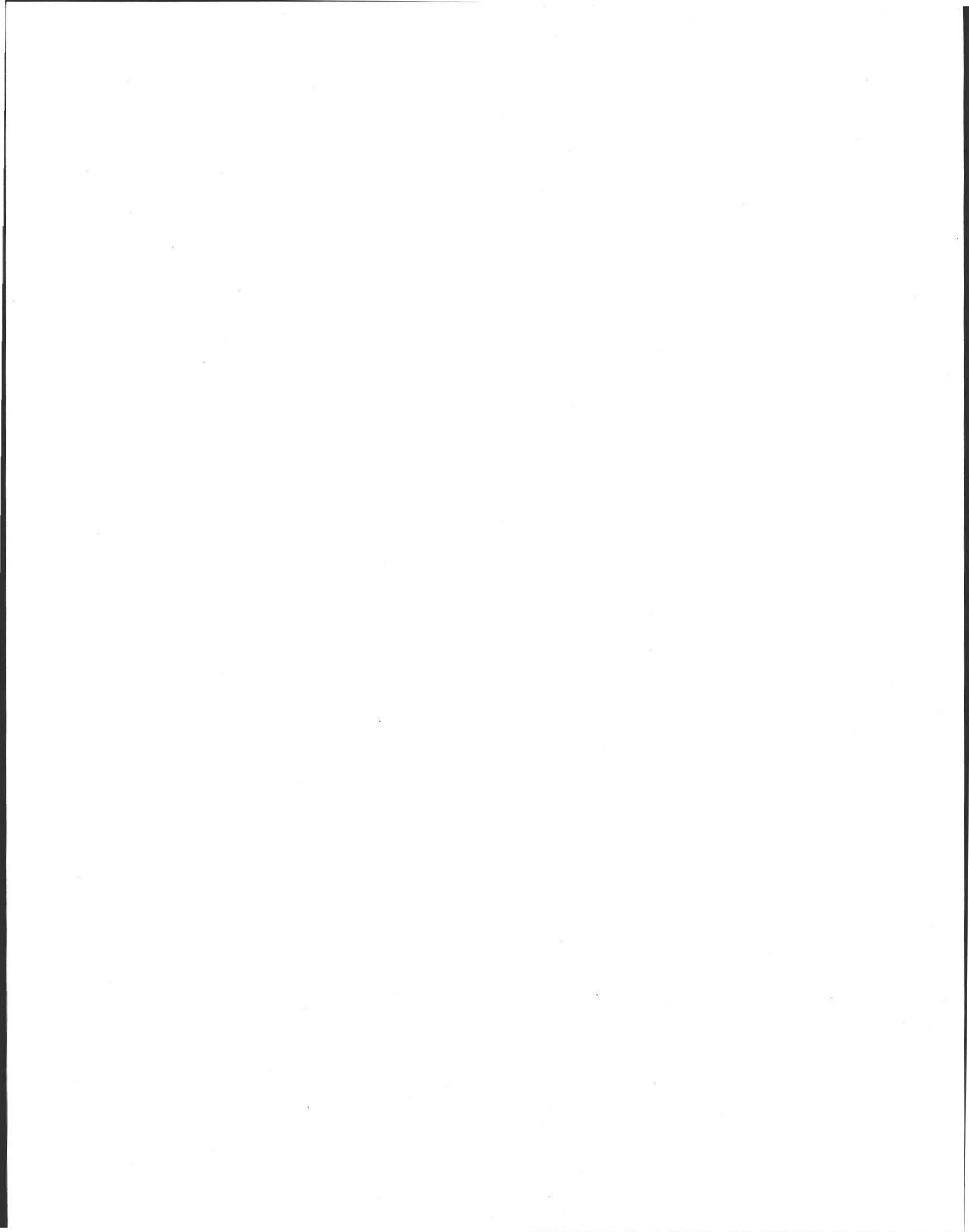
X. DECOMMISSIONING REQUIREMENTS

Abandoned wells, test holes, and borings shall be decommissioned to prevent the well and the annular space outside the casing from serving as a water conduit. The criteria for abandoning a well and the subsequent decommissioning procedures shall be in accordance with the Massachusetts Department of Environmental Protection Private Well Guidelines. Within 30 days of the decommissioning a copy of the Decommissioning Report, containing information described in the DEP Private Well Guidelines, shall be provided to the Board and filed at the Hampshire Registry of Deeds. A copy of a receipt for such filing shall be submitted to the Board.

XI. ENFORCEMENT

1. Permit or Certificate Suspension or Revocation

The Board of Health may suspend or revoke any Well Construction Permit, Water Supply Certificate, or variance issued pursuant to these regulations for any violation of these regulations, or any other applicable General Law, regulation or by-law, or if



the results of a well-test demonstrates that water from the well is no longer suitable for human consumption. Such revocation or suspension may take place after a hearing held by the Board of Health of which the permit holder is given seven (7) days written notice. Such notice shall be deemed given upon mailing same, certified mail, return receipt requested, to the address listed on the permit application.

Nothing in this section shall prevent the Town from taking emergency action to prevent an imminent risk to the health, safety or welfare of the public or the users of a private well.

2. Non-Criminal Disposition

This regulation may be enforced by any Town police officers or agents of the Town's Board of Health.

Whoever violates any provision of this regulation may be penalized by a non-criminal disposition process as provided in G.L. c.40, §21D and the Town's non-criminal disposition by-law. If non-criminal disposition is elected, then any person who violates any provision of this regulation shall be subject to a penalty in the amount of three hundred dollars (\$300.00) per day for each day of violation, commencing ten (10) days following day of receipt of written notice from the Board of Health. Each day or portion thereof shall constitute a separate offense. If more than one, each condition violated shall constitute a separate offense.

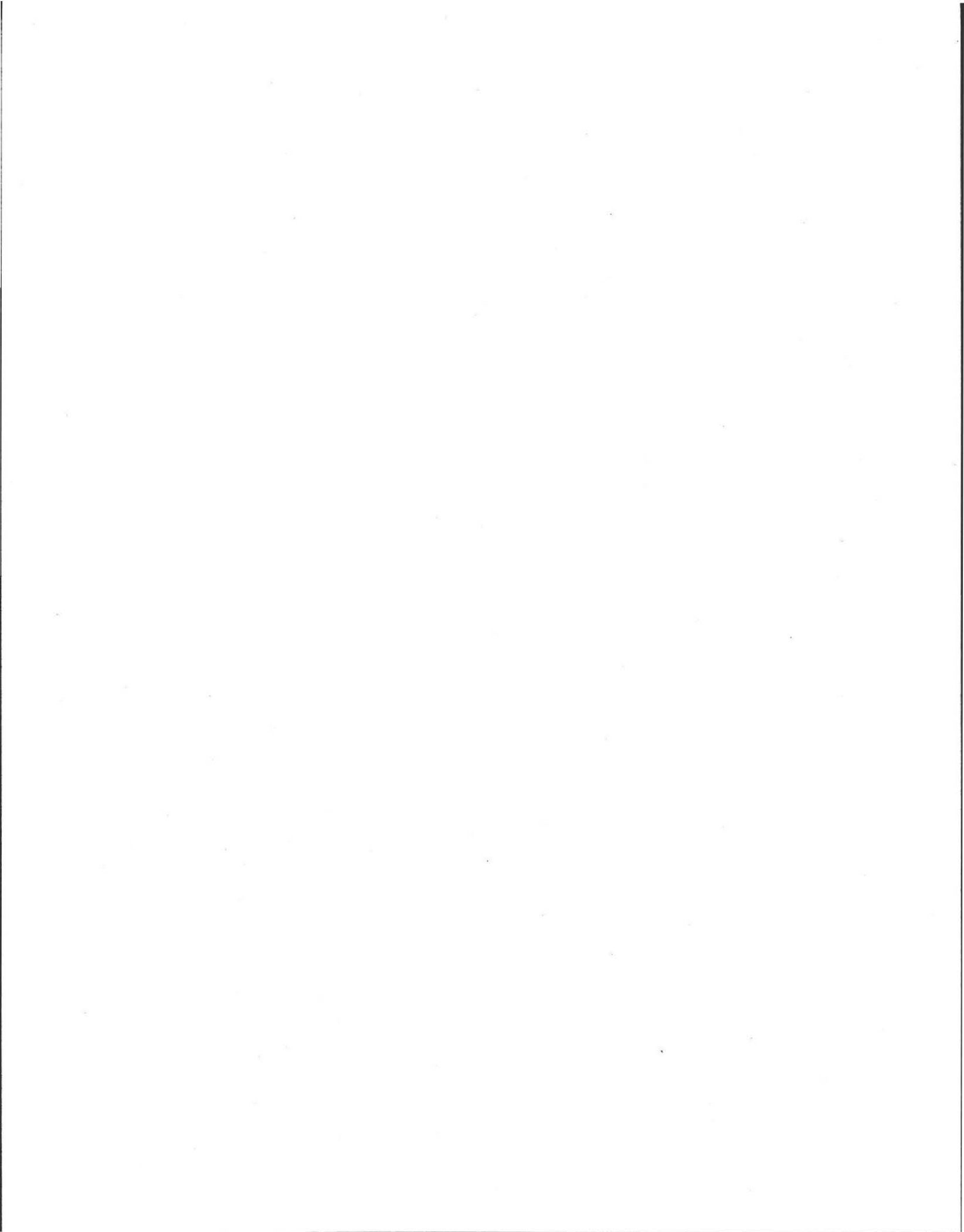
3. Other

Whoever violates any provision of this regulation may be penalized by indictment or on complaint brought in the district court. Except as may be otherwise provided by law and as the district court may see fit to impose, the maximum penalty for each violation or offense shall be one thousand dollars (\$1000.00). Each day or portion thereof shall constitute a separate offense. If more than one, each condition violated shall constitute a separate offense.

The Board of Health may enforce these Regulations or enjoin violations thereof through any lawful process, and the election of one remedy by the Board of Health shall not preclude enforcement through any other lawful means.

XII. VARIANCE

The Board may, after a public hearing, grant a variance to the application of these regulations when, in its opinion, the enforcement thereof would do manifest injustice, and the applicant has demonstrated that the equivalent degree of protection will still be provided to the private water supply without strict application to particular provisions of these regulations.



Every request for a variance shall be made in writing and shall state the specific variance sought and the reasons therefore. The writing shall contain all the information needed to assure the Board that, despite the issuance of a variance, the public health and environment will be protected. Notice of the hearing shall be given by the Board, at the applicant's expense, at least ten (10) days prior thereto, by certified mail to the owner of any property within one hundred and fifty (150) feet of the well to all abutters of the property upon which the private well is located and by publication in a newspaper of general circulation in the town or city in which the private well is located. The notice shall include a statement of the variance sought and the reasons therefore. Any grant or denial of a variance shall be in writing and shall contain a brief statement of the reasons for approving or denying the variance. A copy of each variance shall be conspicuously posted for thirty (30) days following its issuance and shall be available to the public at all reasonable hours in the office of the Town Clerk, Building Commissioner, or Office of the Board of Health. No work shall be done under any variance until thirty (30) days shall have elapsed from its issuance, unless the Board certifies in writing that an emergency exists.

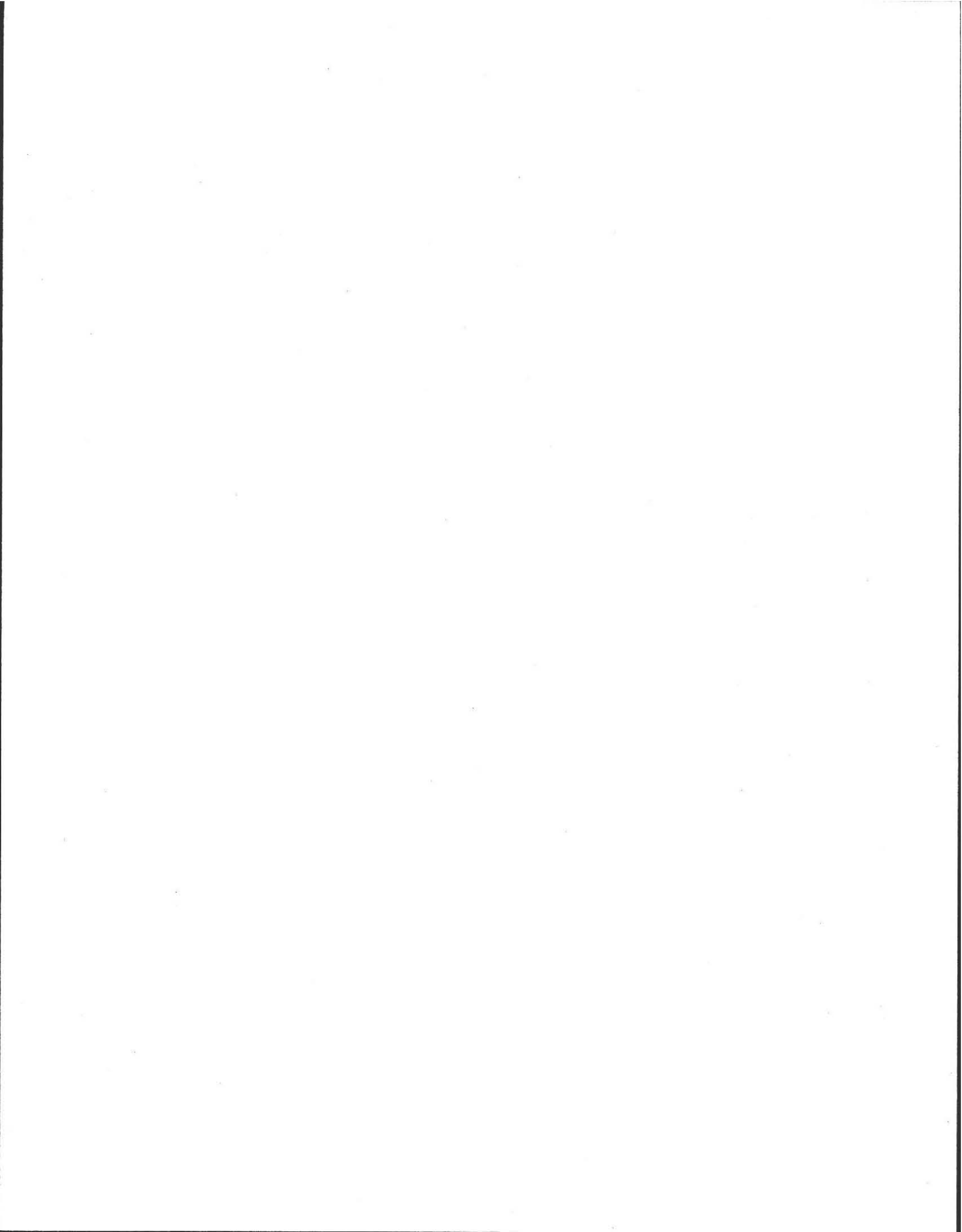
Any variance may be subject to such qualification, revocation, suspension, condition, or expiration as is provided in these regulations or as the Board expresses in its grant of the variance. A variance may otherwise be revoked, modified or suspended, in whole or in part, only after the holder thereof has been notified in writing and has been given an opportunity to be heard, pursuant to Section XI of these regulations.

XIII. SEVERABILITY:

If any provision of these regulations or the application thereof is held to be invalid by a court of competent jurisdiction, the invalidity shall be limited to said provision(s) and the remainder of these regulations shall remain valid and effective. Any part of these regulations subsequently invalidated by a new state law or modification of an existing state law shall automatically be brought into conformity with the new or amended law and shall be deemed to be effective immediately, without recourse to a public hearing and the customary procedures for amendment or repeal of such regulation.

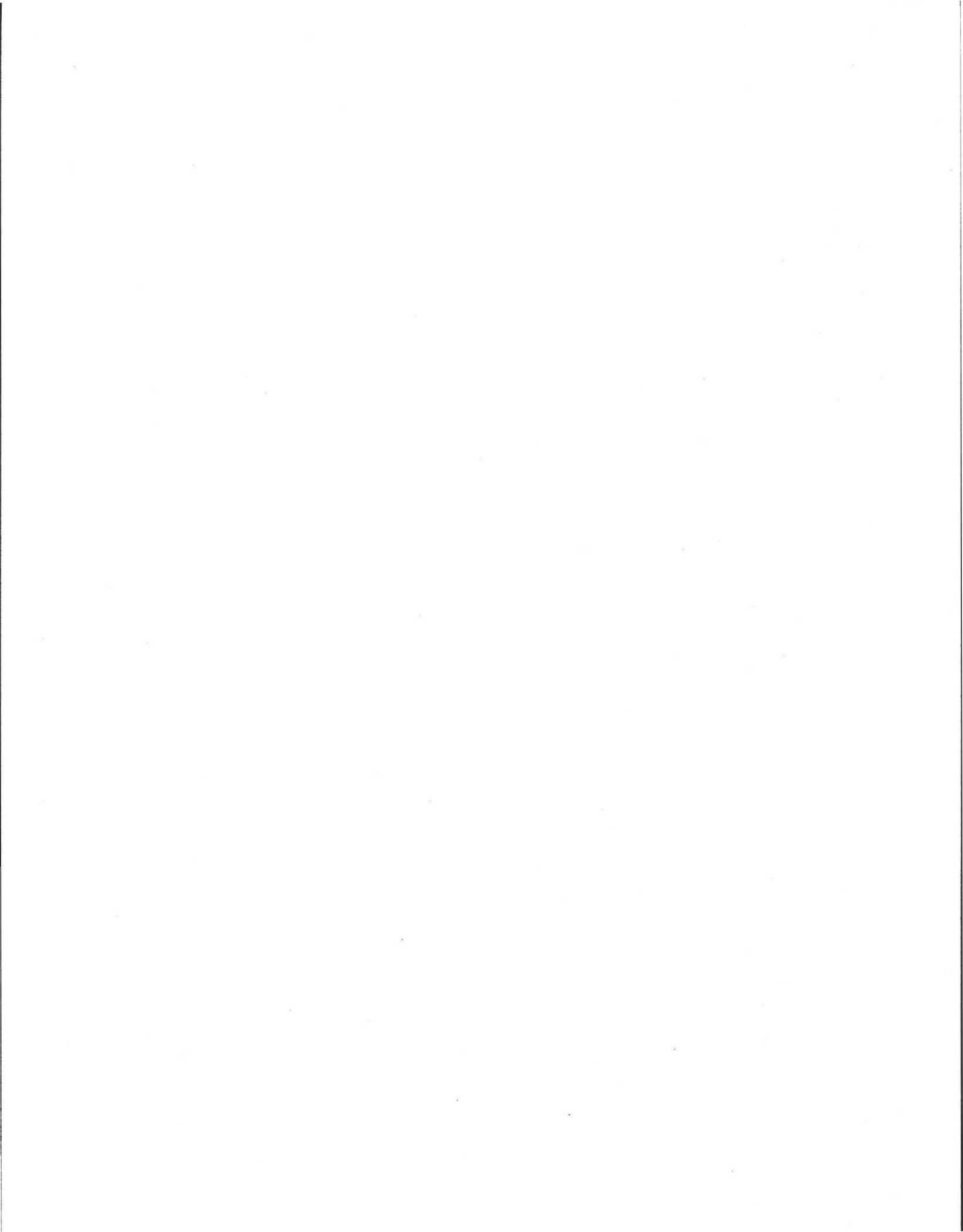
XIV. EFFECTIVE DATE

These regulations were adopted by vote of the Amherst Massachusetts Board of Health, at their regularly scheduled meeting held on October 30, 2008 and are to be in full force and effect on and after December 1, 2008. Before said date, these regulations shall be published and a copy thereof be placed on file in the Board of Health Offices and filed with the Department of Environmental Protection, Division of Wastewater Management (formerly Division of Water Pollution Control) in Boston. These regulations or any portions thereof may be amended, supplemented or repealed from time to time by the Board, with notice as provided by law, on its own motion or by petition.



XV. DISCLAIMER

The issuance of a well permit shall not be construed as a guarantee by the Board or its agents that the water system will function satisfactorily nor that the water supply will be of sufficient quality or quantity for its intended use.

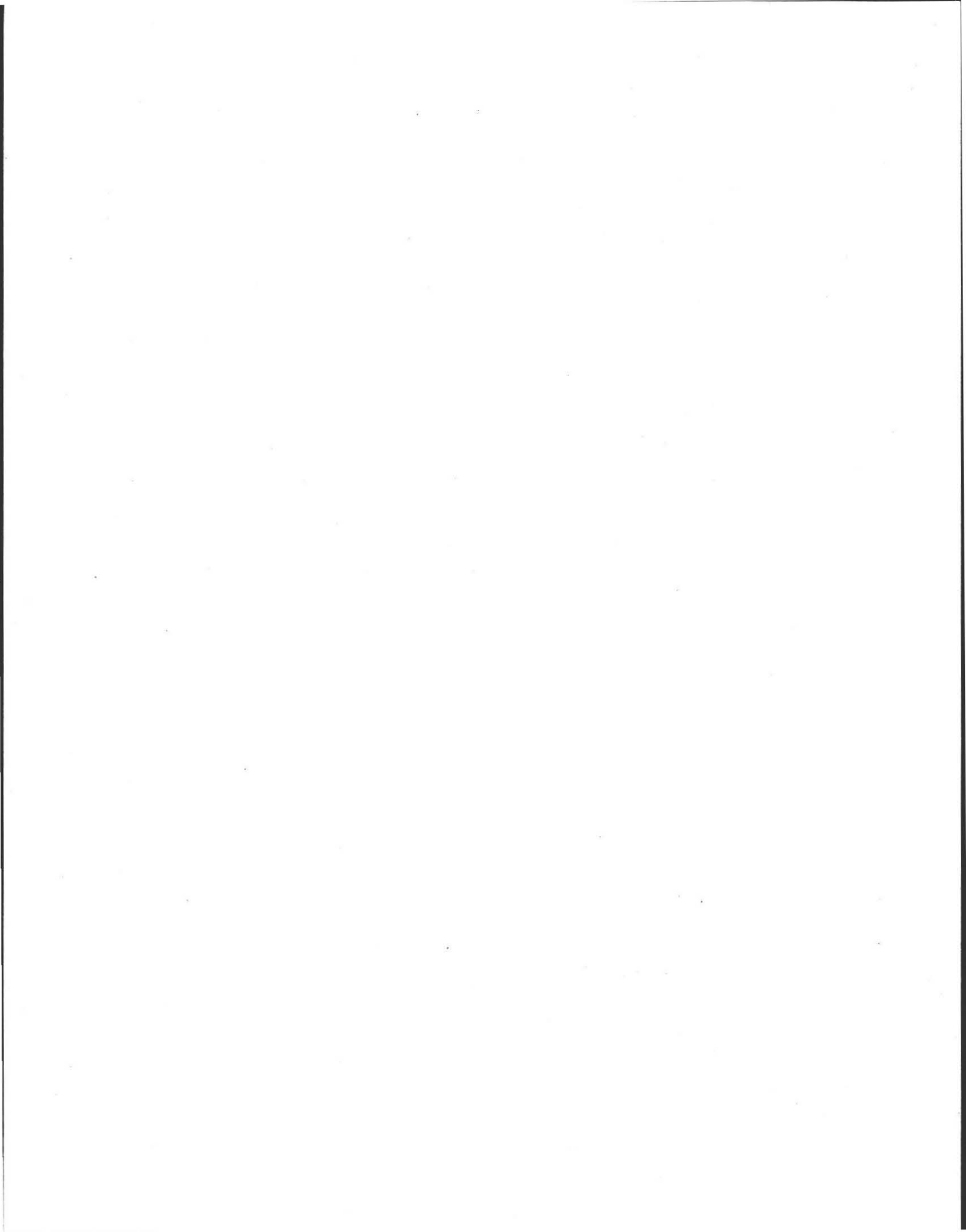


Appendix A: Required Analytes for Testing of Private Well Water Quality

Aluminum
Chloride
Coliform Bacteria
Color
Copper
Fluoride
Foaming Agents
Iron
Manganese
Nitrate
Odor
pH
Silver
Sodium
Sulfate
Total Dissolved Solids
Turbidity
Zinc

Volatile Organic Compounds

Benzene
 Carbon Tetrachloride
 Dichloromethane
 o-Dichlorobenzene
 p-Dichlorobenzene
 1,2-Dichloroethane
 cis-1,2-Dichloroethylene
 trans-1,2-Dichloroethylene
 1,1-Dichloroethylene
 1,2-Dichloropropane
 Ethylbenzene
 Methyl Tertiary Butyl Ether(MTBE)
 Monochlorobenzene
 Styrene
 Tetrachloroethylene (PCE)
 Toluene
 Trichloroethylene (TCE)
 1,1,1-Trichloroethane (1,1, 1-TCA)
 1,2,4-Trichlorobenzene
 1,1,2-Trichloroethane
 Vinyl Chloride (VC)
 Xylenes(total)



Town of



AMHERST

Massachusetts

Scanned
& emailed to
M. Mc Simonelli
12-17-10

mailed
original
12-17-10

AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK, AMHERST, MA 01002
(413) 259-3077 (413) 259-2404 - FAX Environmental Health Division (413) 259-3078

APPLICATION FOR A WELL CONTRUCTION PERMIT

I hereby petition the Board of Health of the Town of Amherst for a Well Construction Permit (WCP) to install a private well in the Town of Amherst.


ATTACHED IS A PLAN SHOWING THE PROPOSED LOCATION OF THE WELL (WITH ORIGINAL DATE, STAMP AND SIGNATURE OF AN ENGINEER REGISTERED SANITARIAN, OR REGISTERED LAND SURVEYOR) MEETING ALL THE REQUIREMENTS OF AMHERST RULES AND REGULATIONS FOR PRIVATE WELLS.

1. Address of Property: 42 Carriage Lane
2. Assessor of Parcel Number: 23A-62
3. Name of Owner: John McCarran Telephone Number: 413.256.3474
Address of Owner: 42 Carriage Lane, Amherst, MA
4. Name of Well Driller: Kirk Henshaw - MA Reg # 196
(Must be registered with Massachusetts Water Resources Commission)
5. Purpose of Well: *Drinking () Agricultural Only () Geothermal (X)

The undersigned acknowledges that he must, before commencing construction or use of the system which is the matter of this application, secure any and all other permits which may be required by the laws of the Town of Amherst and the Commonwealth of Massachusetts, and agree to abide by all regulations of the Town of Amherst and the Commonwealth of Massachusetts concerning private wells.

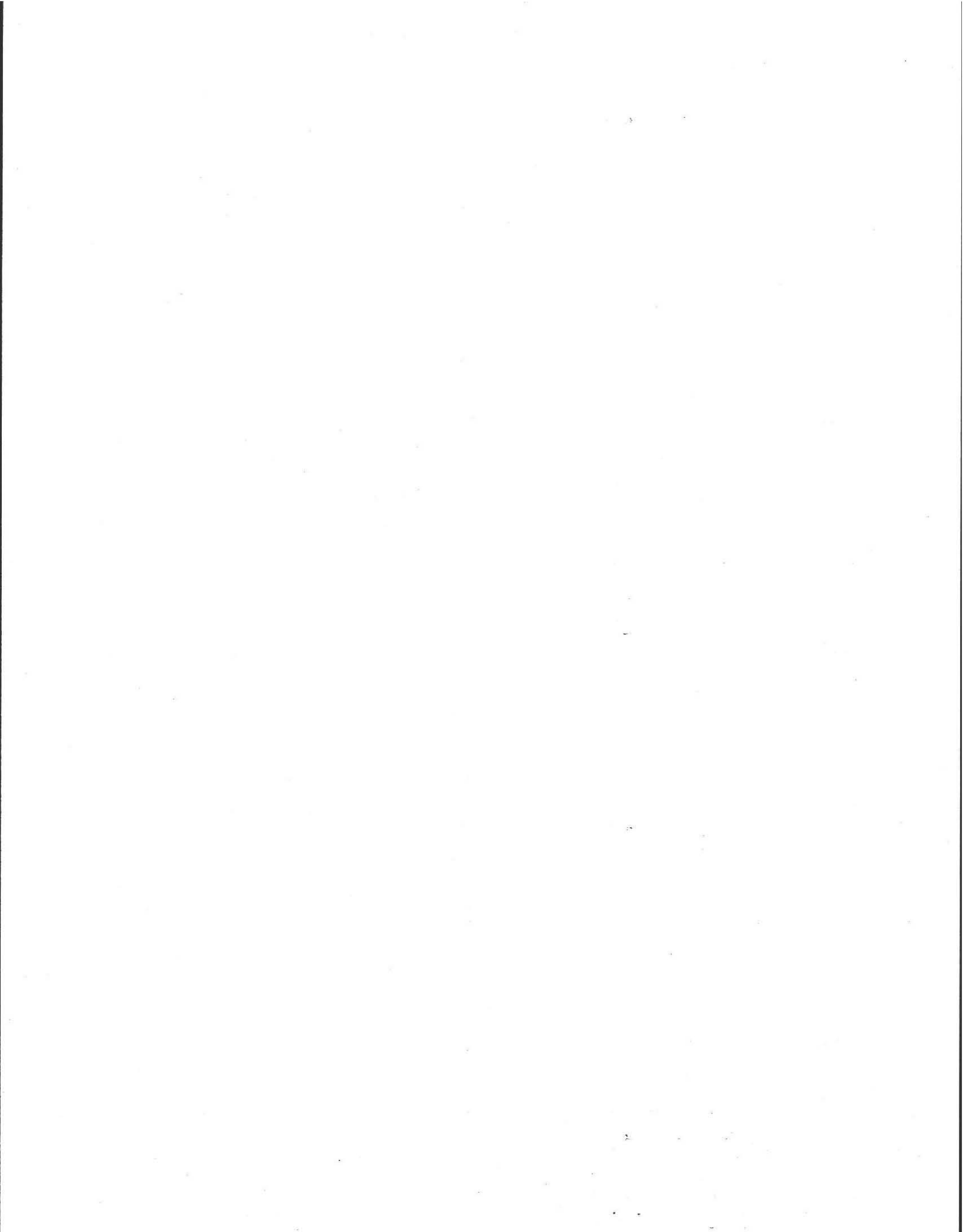
- The undersigned also understands that if a private well is to be used for drinking purposes, a **BUILDING PERMIT** affecting the structure the well is to serves **WILL NOT BE ISSUED UNTIL A Water Supply Certificate** has been granted by the Amherst Board of Health.

Name of Applicant: Michael Simonelli (for Terraclime Geothermal) Fee: \$100.00

Signature:  Date: 11/23/2010

WELL PERMIT # GEO 11-01

Application Approved: 12-16-2010



Sadler, Pam Field

From: Mike Simonelli [msimonelli@terraclimegeo.com]
Sent: Friday, December 17, 2010 7:21 AM
To: Mir, Javeria
Cc: Suzanne Streeter; Gary Prior; Health Department
Subject: Fwd: USPS certified tracking notes - 18-215007.00
Attachments: Description of land uses 121410.docx

Javeria,

The BoH meeting went well last night and they approved the permit. They did not ask for any of the information you and Gary had asked for the day of the walk through so I wanted to forward it to you first thing this morning. You will find the written visual inspection attached to this e-mail and the tracking numbers for the certified letters to the neighboring properties below. With this information, all requests have been satisfied and we are ready to proceed.

Would you please see that the permit is finalized and, if possible, scan and e-mail a copy to me for our records and mail the original to me at the address below. Thank you again for the assistance with this process.

Thanks - Mike

--

Michael Simonelli
Terraclime Geothermal
o. 413.233.9389
c. 413.519.3079
f. 413.789.2776

www.terraclimegeo.com

----- Forwarded message -----

From: Suzanne Streeter <ssstreeter@ecsconsult.com>
Date: Wed, Dec 15, 2010 at 10:18 AM
Subject: Fwd: USPS certified tracking notes - 18-215007.00
To: Mike Simonelli <msimonelli@ecsconsult.com>

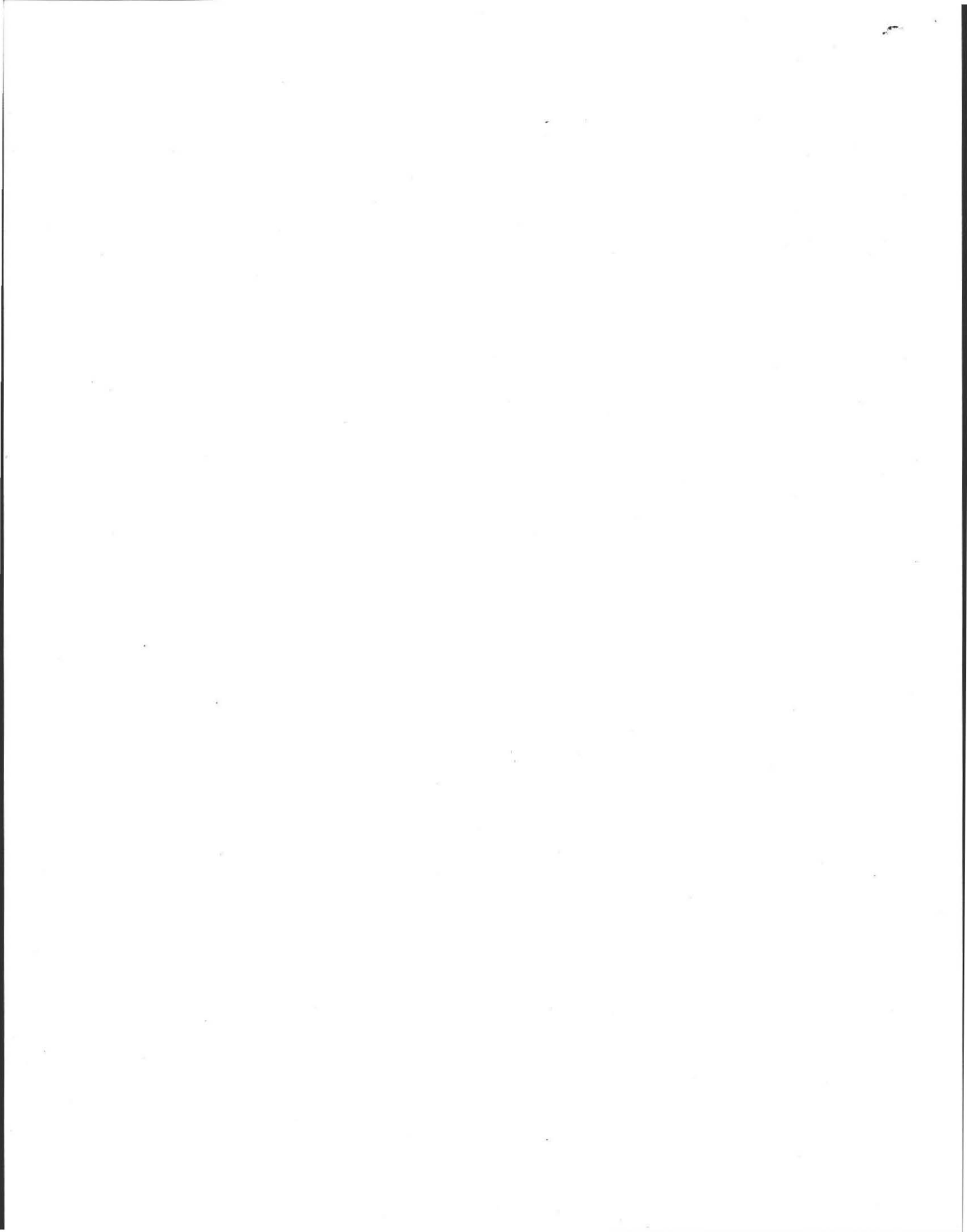
Mike,

This is the tracking info for the certified letters to Carriage Lane. Do you need more info for your meeting tomorrow?

----- Forwarded message -----

From: Cynthia Lemire <clemire@ecsconsult.com>
Date: Tue, Dec 14, 2010 at 6:03 PM
Subject: USPS certified tracking notes - 18-215007.00
To: Suzanne Streeter <ssstreeter@ecsconsult.com>

William Wehrli & Monica Moran – 41 Carriage Lane – 7009 2820 0004 0109 6220



William Wehrli & Monica Moran – 37 Carriage Lane – 7009 2820 0004 0109 6190

May Lee Chen – 9 Rachel Drive, E. Brunswick, NJ – 7009 2820 0004 0109 6213

Patricia Gorman – 47 Carriage Lane – 7009 2820 0004 0109 6206

John & Elizabeth Finn – 34 Carriage Lane – 7009 2820 0004 0109 6183

Posted today – in mail box for morning pick up.

--

Sue Streeter

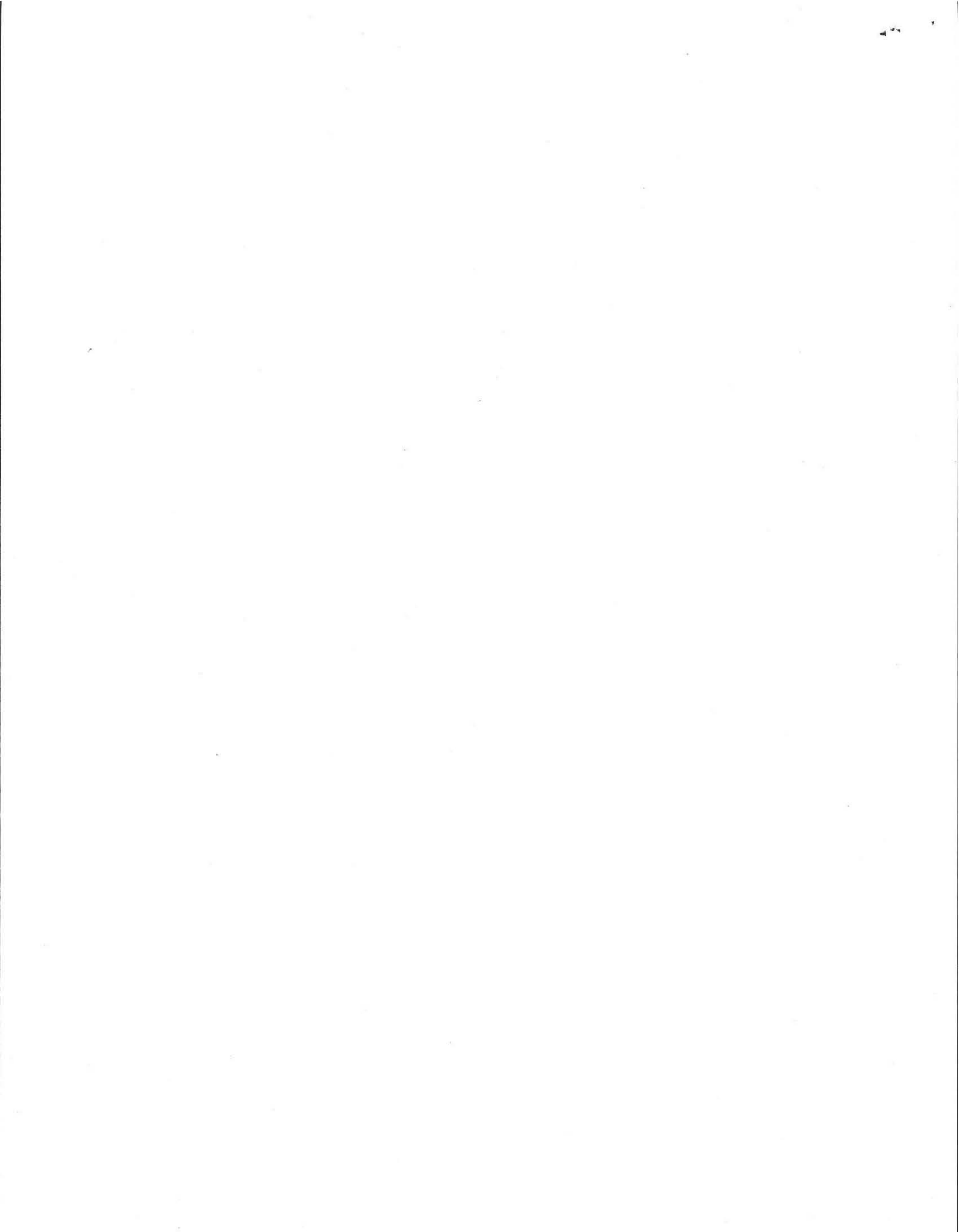
Accounting Administrator

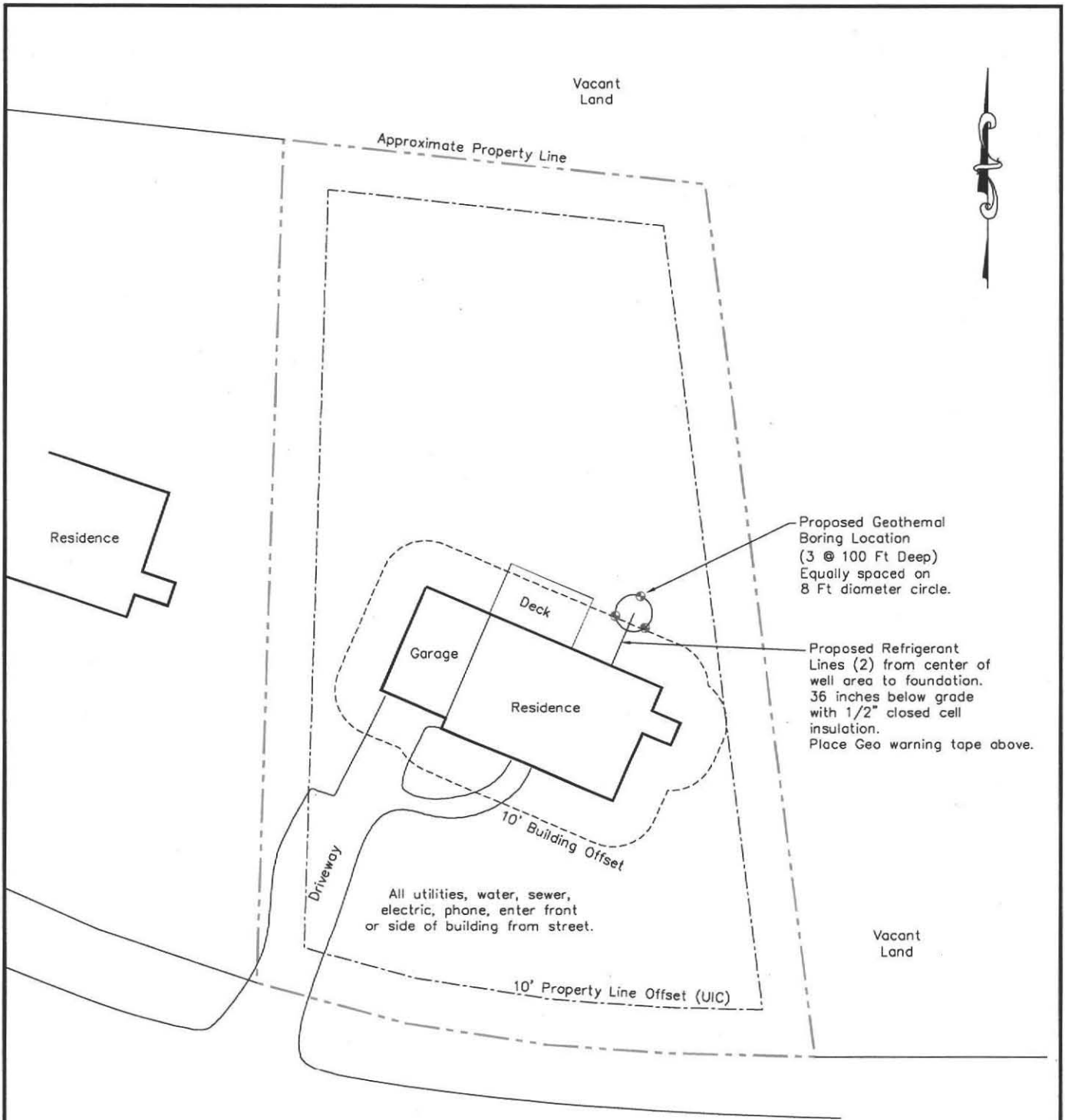
Environmental Compliance Services, Inc./Terraclime Geothermal

sstreeter@ecsconsult.com

(413) 233-9423

This electronic message and any attachment contains information from Environmental Compliance Services, Inc., which may be proprietary, confidential, privileged or subject to the work product doctrine and thus protected from disclosure. It is intended for the addressees only. If you are not an addressee, any disclosure or copying of the contents of the E-mail or any action taken (or not taken) in reliance on it is unauthorized and may be unlawful. If you are not an addressee, please inform the sender immediately.





CARRIAGE LANE

NOTES:
 Site plan developed from Amherst GIS Maps and HCRD Pbk75 Pg33, Lot #22.
 All locations are approximate.

Approximate Scale 1" = 30'

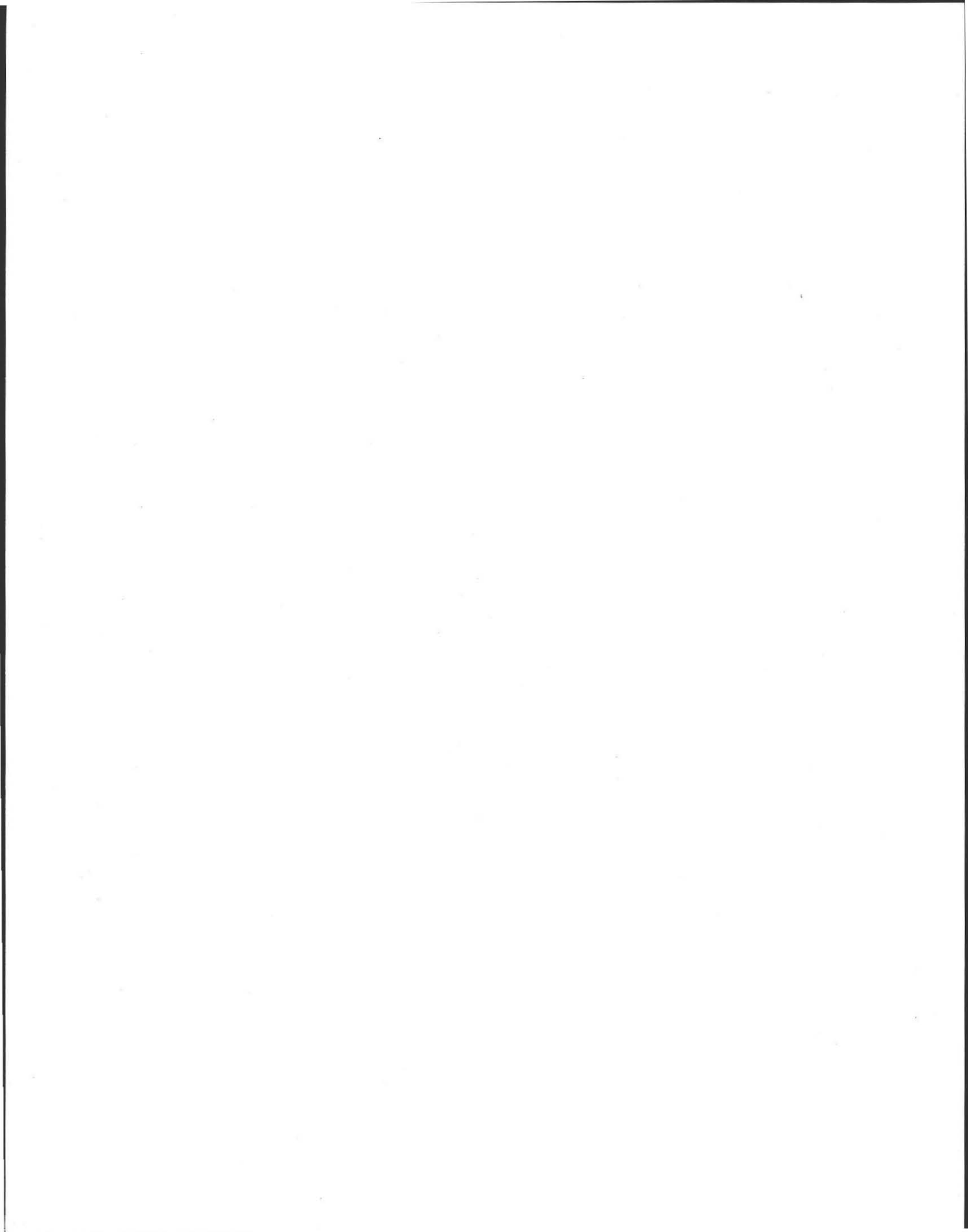
Terraclime
 GEOTHERMAL

Phone: 1-877-372-5236 • Web: www.terraclimegeo.com

PROJECT:
McCarran Residence
 42 Carriage Lane
 Amherst, Massachusetts

TITLE:
Site Sketch

COMPUTER CADFILE : 215007e.dwg			
DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
RAS	RAS	MS	
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
1" = 30'	12/2/10	215007	1





- Property Map
- Aerial Property Lines
 - Easements
- Basemap
- Trails
- Streets
- Local Roads
 - Major Roads
 - State Routes
- MHD Roads
- Limited Access High
 - Multi-lane Hwy, not I
 - Other Numbered High
 - Major Road, Collector
 - Minor Road, Arterial

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

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

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

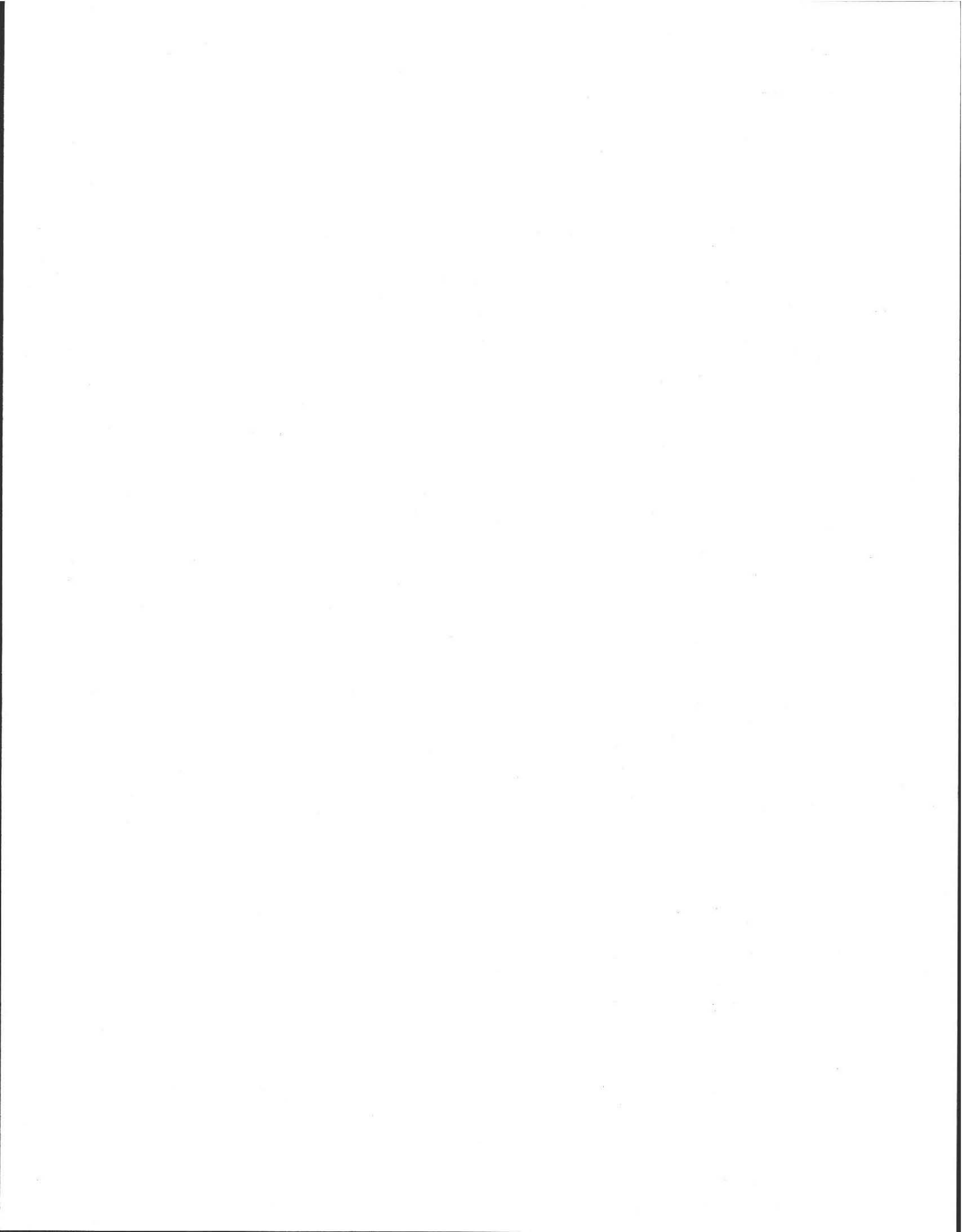
THE TOWN OF AMHERST MAKES NO WARRANTIES,
EXPRESSED OR IMPLIED, CONCERNING THE
ACCURACY,
COMPLETENESS, RELIABILITY, OR SUITABILITY OF
THESE DATA. THE TOWN OF AMHERST DOES NOT
ASSUME ANY LIABILITY ASSOCIATED WITH THE
USE OR MISUSE OF THIS INFORMATION.

1" = 46 ft



Amherst GIS Viewer November 17, 2010







- Property Map**
- Property Lines
 - Property Line
 - Hydrographic Property
 - Right of Way Line
 - Town Boundary
 - Other Property Lines
 - Former Property Line
 - Subdivision Lot Line
 - Easements
 - Sidewalks
 - Transportation
 - Paved street polygons
 - Unpaved street polyg
 - Bridges
 - Bridge decking and str
 - Foot Bridge
 - Rail Bridge
- Basemap**
- Trails
 - Rail Lines
- Structures**
- Building
 - Foundation or in const
 - Outbuilding or Miscell
 - Deck, Porch, Stairs or
 - Mobile home, Trailer
 - Swimming Pool
 - Building Ruins
 - Water storage tank
- Rivers and Streams**
- Streams
 - Major Culverts
 - Hydro Connector
 - Headwalls, Floodwalls
- Landcover**
- Brush and scrub vege
 - Tree and forest vege
 - Cultivated field
 - Gravel pile
 - Quarry
 - Misc Impervious Surfa
- Parking**
- Parking Paved
 - Parking Unpaved
- Driveways**
- Driveway Paved
 - Driveway Unpaved

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

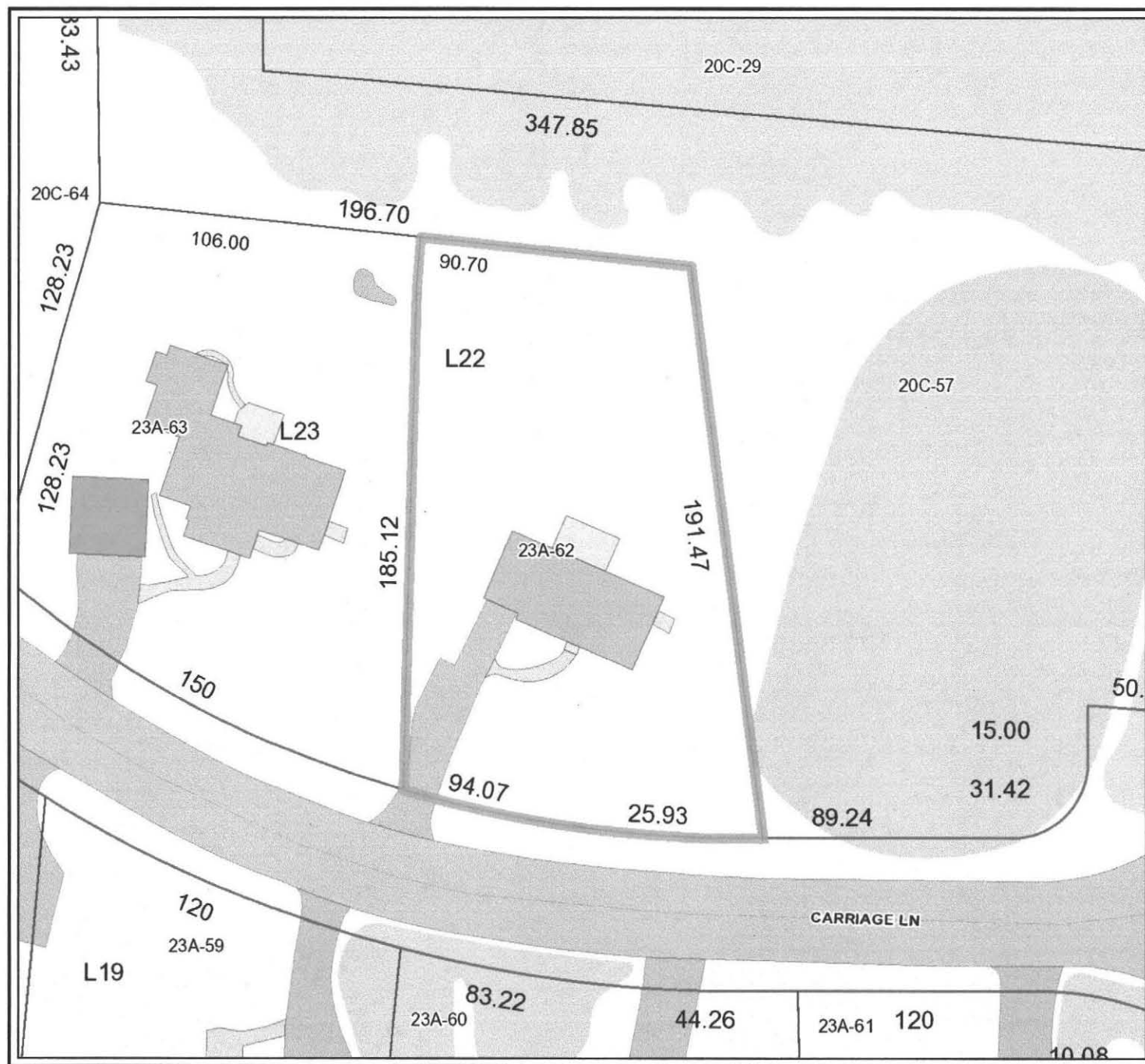
Planimetric & topographic basemap features compiled at 1"=40' scale from April, 2009 Aerial Photography. Parcels compiled to match the basemap; revisions are ongoing.

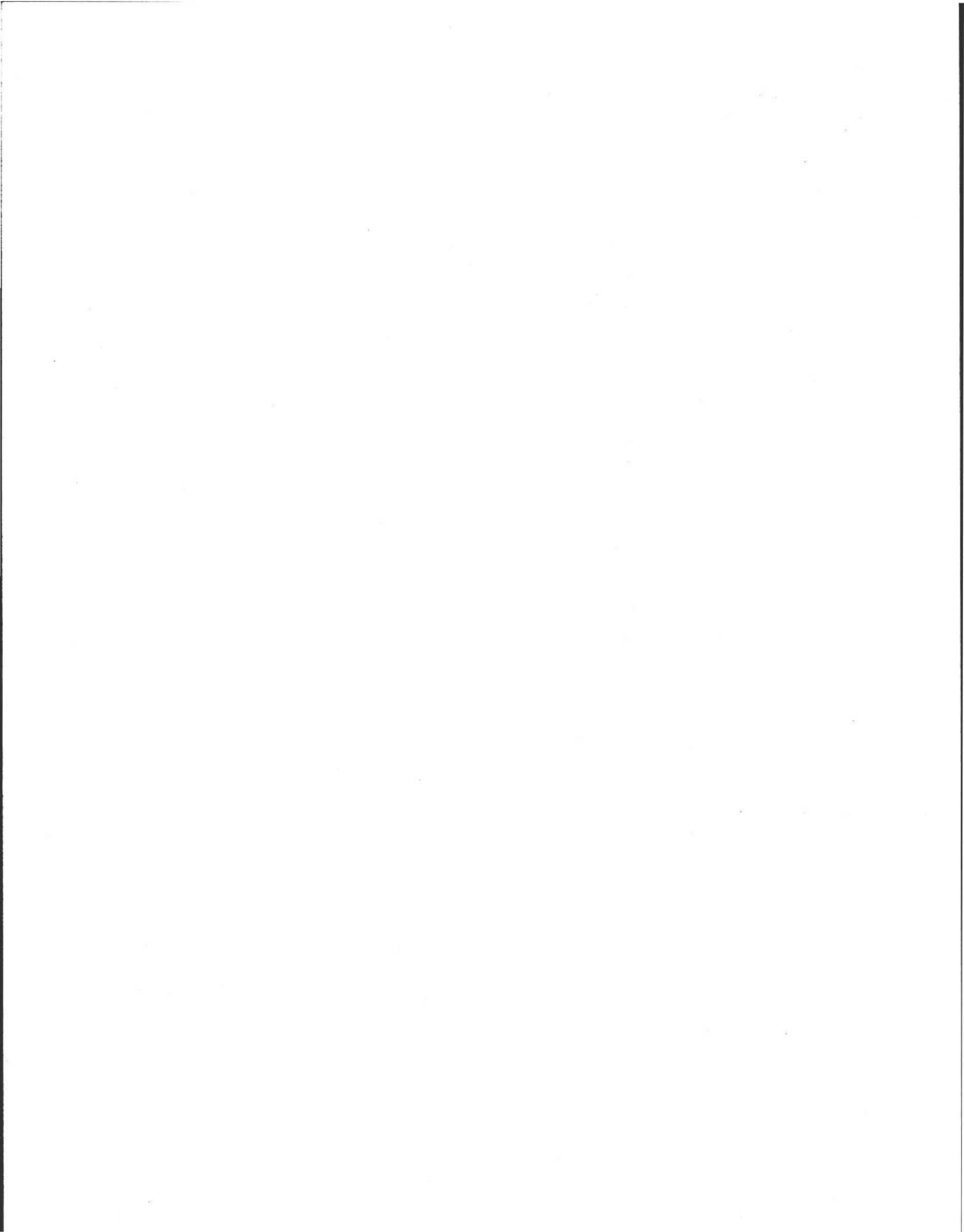
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1" = 46 ft

Amherst GIS Viewer November 17, 2010







Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Drinking Water Program

UIC Registration Application for Closed-Loop Ground Source Heat Pump Well

Registration Category

Registration of Underground Discharges to Injection Well(s)
Modification to an Existing UIC Registration

UIC Registration Fee - Exempt

For Modifications to an Existing UIC Registration

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



Check all that apply: Change of owner Change in # of discharge wells (+/-)

Enter UIC Registration Number issued by MassDEP for the initial UIC Registration (required for modifications): MAS11A008203-5CL
UIC Registration #

A. Site Information

Private Residence

Property name (enter "Private Residence" if unnamed)

42 Carriage Lane

Property Street Address

Amherst

City/Town

MA

State

01102

Zip Code

B. Owner Information

John McCarran

Name of Owner

42 Carriage Lane

Street Address

Amherst

City/Town

MA

State

01102

Zip Code

413.256.3474

Telephone Number

Email (optional)

C. Registered Well Driller

Kirk Henshaw

Well Driller's Name

Reg. No. 196

MassDEP Well Driller Certification Number

Henshaw Well Drilling

Name of Company

413.296.4725

Telephone Number

D. Injection Well Information

3 geothermal bores

Total Number of Wells (existing plus proposed)

Type of Discharge: Direct Exchange Heat Pump Closed Loop Heat Pump

E. Preparer

Michael Simonelli

Printed Name

11/17/2010

Date

413.519.3079

Telephone Number

Operations / Project Manager

Position/Title

msimonelli@terraclimegeo.com

Email (optional)

Send a duplicate copy of this form to the local board of health.

