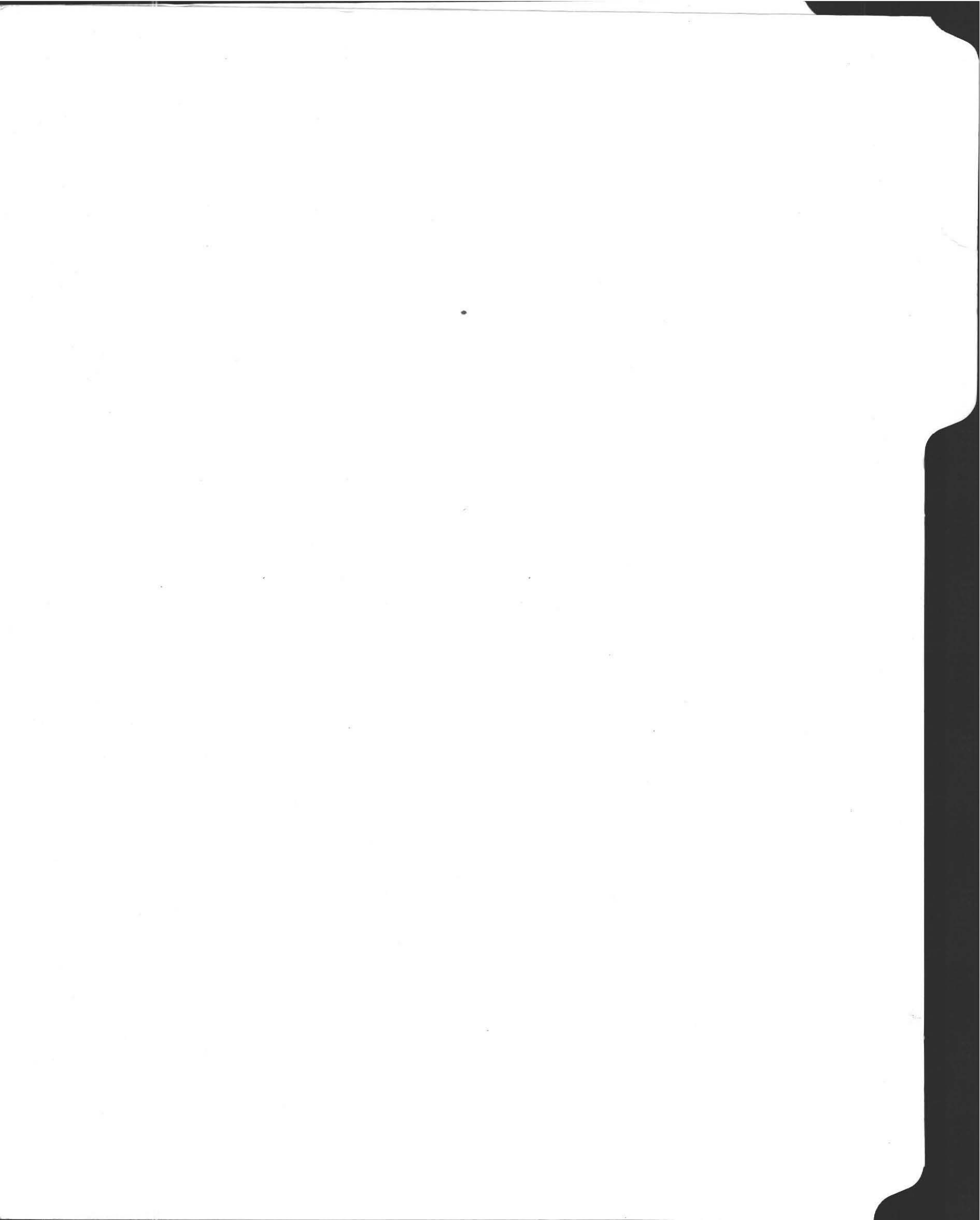


1111 BAY ROAD





Commonwealth of Massachusetts
 City/Town of Amherst
Certificate of Compliance
 Form 3

DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

This is to Certify that the following work on an On-Site Sewage Disposal System

- Construction of a new system
- Repair or replacement of an existing system
- Repair or replacement of an existing system component

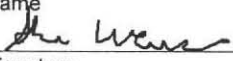
Has been done in accordance with Title 5 and the Disposal System Construction Permit (DSCP):

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




DSCP Number _____ DSCP Date _____
 Fred Errington _____
 Facility Owner
 1111 Bay Road _____
 Street Address or Lot #
 Amherst, MA _____ MA _____ 01002
 City/Town State Zip Code

Designer Information:

Alan Weiss, RS, # 933 _____ Cold Spring Environmental, Inc. _____
 Name Name of Company
 _____ 03.30.2012
 Signature Date

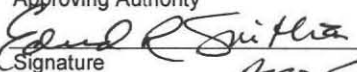
Installer Information:

Karls _____ Karls Excavating _____
 Name Name of Company
 _____ 03.29.2012
 Signature Date

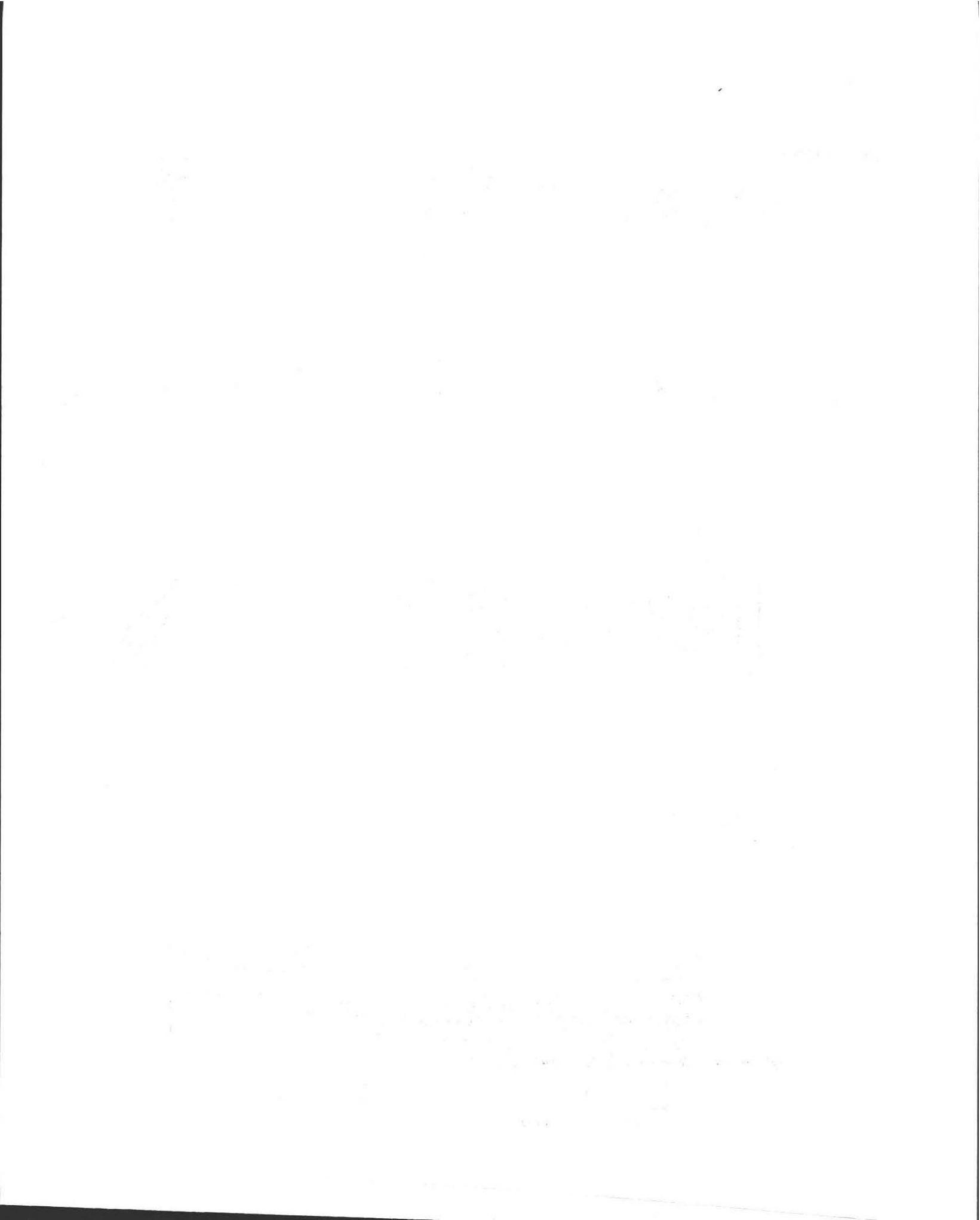
Use of this system is conditioned on compliance with the provisions set forth below:

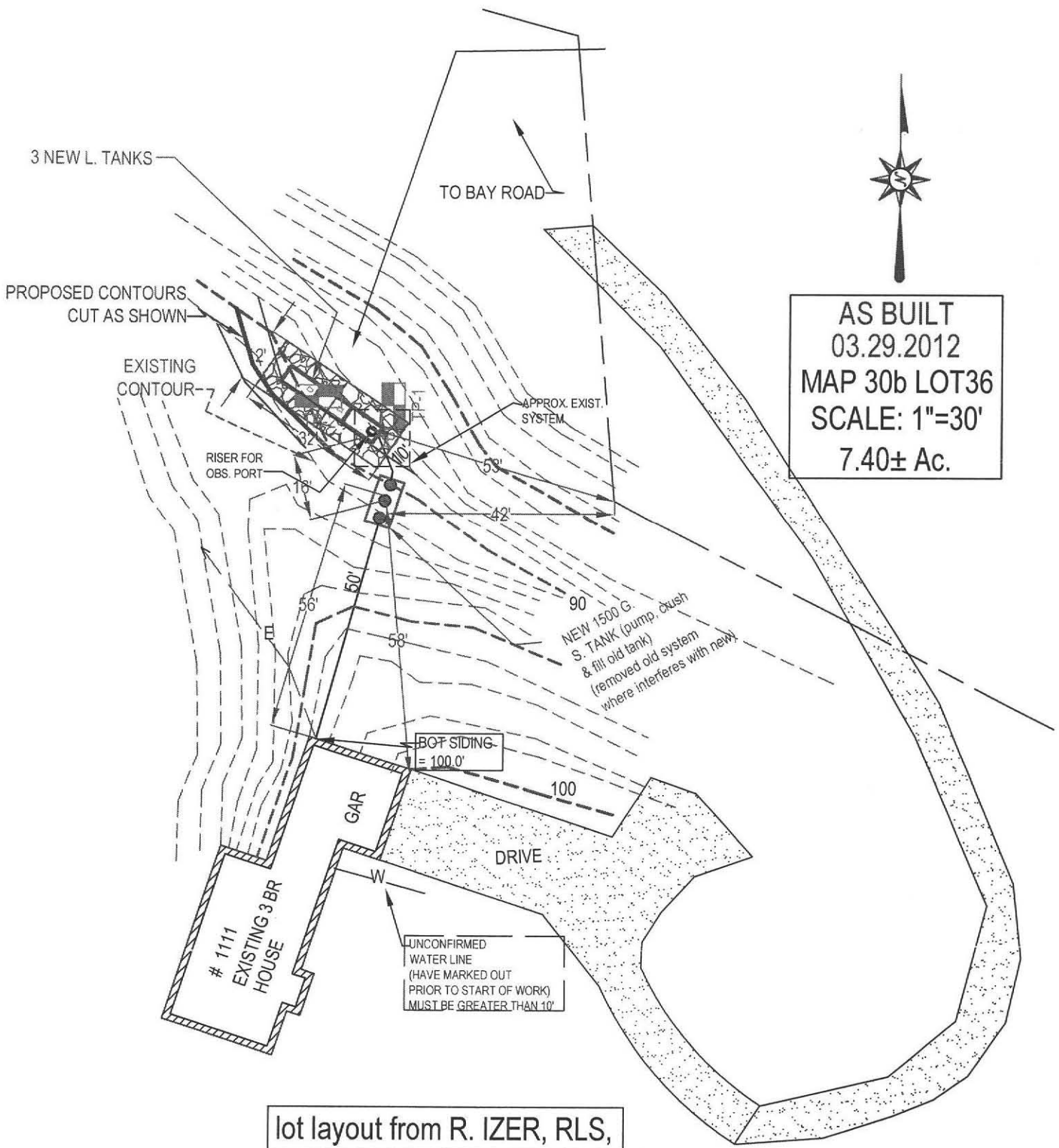
Pump s. tank every two years.

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

AMHERST HEALTH DEPARTMENT
 Approving Authority

 Signature *Asst. Sanitarian*

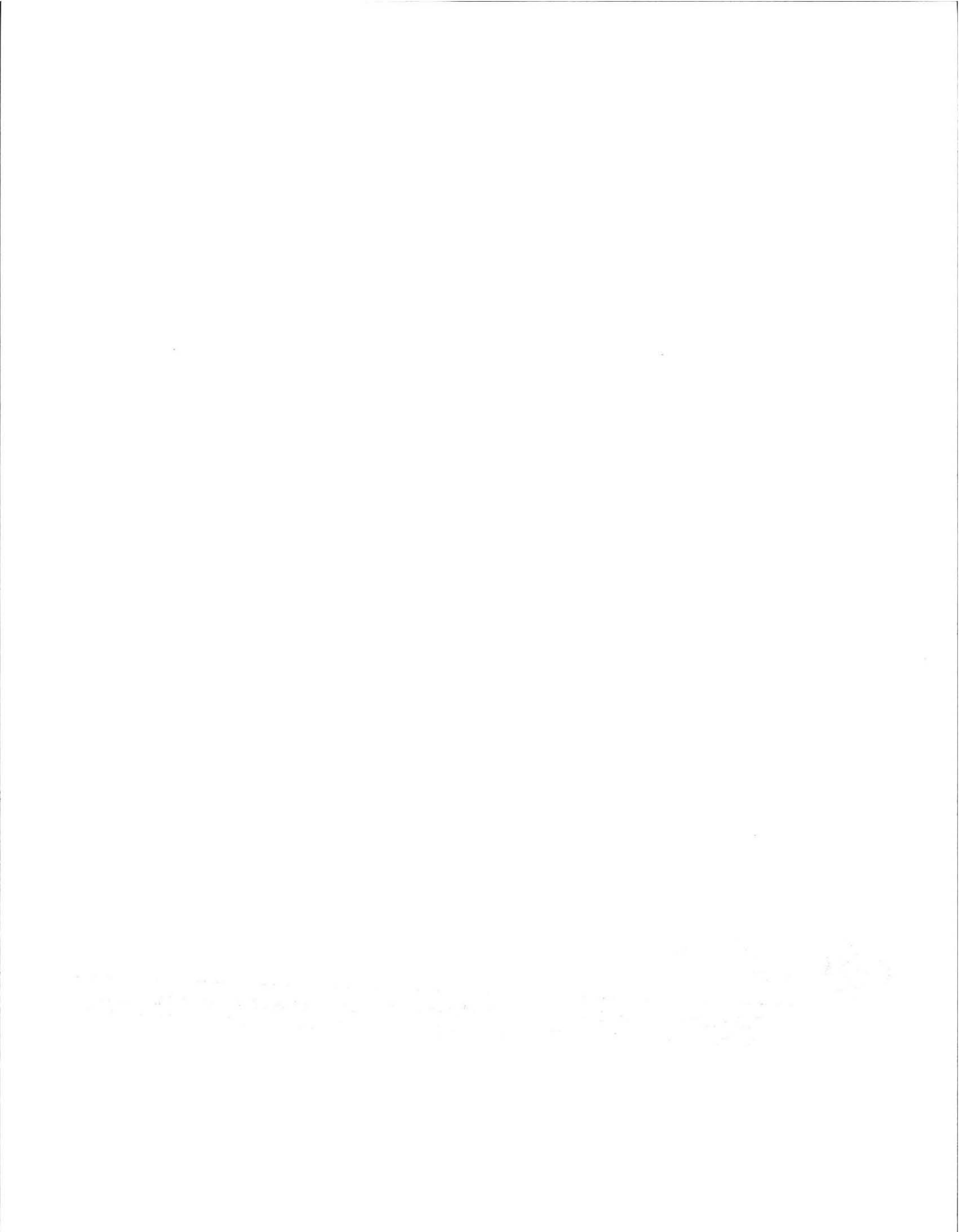
3/30/2012
 Date





lot layout from R. IZER, RLS,

- GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.**
- 1.) HAVE TANK PUMPED EVERY 2 YEARS.
 - 2.) MAINTAIN AREA OVER SEPTIC SYSTEM AS GRASSY OR SIMILAR GROUND COVER.
 - 3.) DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
 - 4.) USE ONLY LIQUID DETERGENTS & LOW FLOW WASHERS.
 - 5.) WIPE ALL OIL AND GREASE FROM COOKWARE AND DISPOSE IN TRASH NOT SEPTIC.
 - 6) *All Toilets and Faucets must be confirmed to not be leaking, because one leaking*



No. 12-10

FEE \$450 TOTAL

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

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

Location <u>1111 Bay Rd.</u>	Owner's Name <u>Fred Errington + Deborah Gwartz</u>
Map/Parcel# <u>302/36</u>	Address <u>1111 Bay Rd. Amherst, MA</u>
Lot# <u>#36</u>	Telephone# <u>253-9617</u>
Installer's Name <u>Karl's Excavating</u>	Designer's Name <u>Alan Weiss, RS</u>
Address <u>Hadley, MA</u>	Address <u>Belchertown, MA</u>
Telephone# <u>413-519-5396</u>	Telephone# <u>413-373-5957</u>

Type of Building Residence Lot Size 740 Ac 41 sq. ft.
 Dwelling - No. of Bedrooms 3 Bedroom Garbage grinder
 Other - Type of Building _____ No. of persons _____ Showers (), Cafeteria ()
 Other Fixtures _____
 Design Flow (min. required) 110 gpd Calculated design flow 330 Design flow provided 414 gpd
 Plan: Date 3/3/2012 Number of sheets _____ Revision Date _____
 Title Septic System Repair Plan for Deborah Gwartz + Fred Errington
 Description of Soil(s) _____
 Soil Evaluator Form No. _____ Name of Soil Evaluator ALWEISS, RS Date of Evaluation 2/14/2012
E. Smith, POH

DESCRIPTION OF REPAIRS OR ALTERATIONS Complete New septic system.

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

Signed Fred Errington Date March 7, 2012

Inspections _____

No. 12-10

FEE \$450 total

COMMONWEALTH OF MASSACHUSETTS

Board of Health, AMHERST, MA.

CERTIFICATE OF COMPLIANCE

Description of Work: Individual Component(s) Complete System

The undersigned hereby certify that the Sewage Disposal System; Constructed (), Repaired , Upgraded (), Abandoned ()

by: 1111 BAY ROAD
at KARL'S EXCAVATING

has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to application No. 12-10, dated 3/3/2012. Approved Design Flow 414 (gpd)

Installer _____

Designer: _____ Inspector: Alan Weiss Date: 3/27/2012

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

No. 12-10

FEE \$450 TOTAL

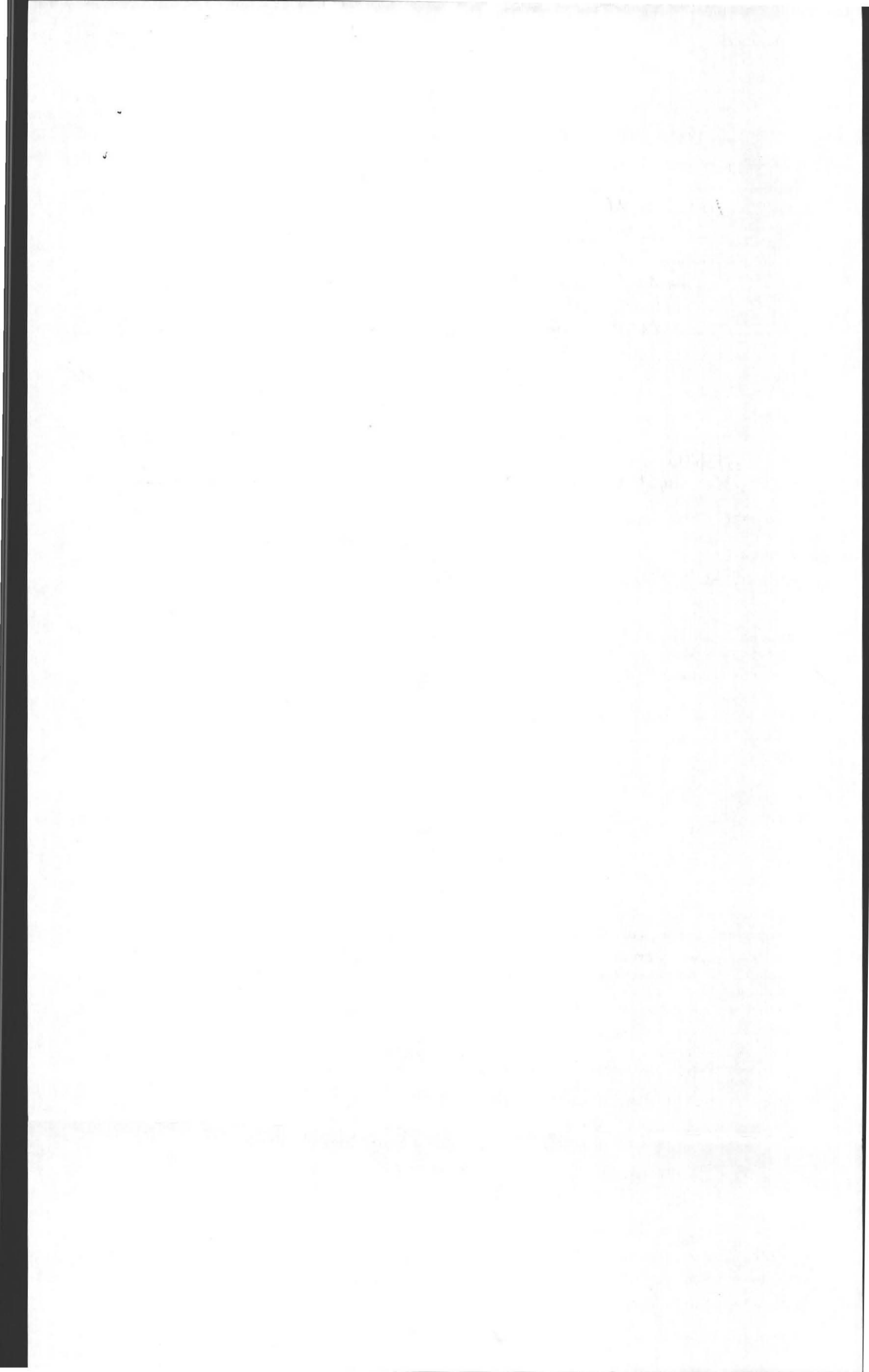
COMMONWEALTH OF MASSACHUSETTS

Board of Health, AMHERST, MA.

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct () Repair Upgrade () Abandon () an individual sewage disposal system at 1111 BAY ROAD as described in the application for Disposal System Construction Permit No. 12-10, dated 3/9/2012

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





ALAN E. WEISS, M.S., R.S., L.S.P.

Licensed Site Professional
Registered Sanitarian
Hydrogeologist
President

- Wetland Consults
- Soil and Water Testing
- 21E Site Investigations
- Percolation Tests and
- Septic Designs
- Title 5 Inspections

350 Old Enfield Rd.
Belchertown, MA 01007
(413) 323-5957 & 323-4916 (FAX)

aeweiss@charter.net

Date: 2/24/2012

Commonwealth of Massachusetts
Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss
Witnessed By: E. Smith

Date: 2/24/2012

Location Address or Lot # <u>Map 30B. LOT 36</u> <u>1111 Bay Rd</u>	Owner's Name, Address, and Telephone # <u>Deborah Gewertz</u> <u>Fred Errington</u> <u>1111 Bay Rd.</u> <u>Amherst, MA</u>
New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/>	

413-253-9619

Office Review

Published Soil Survey Available: No Yes

Year Published Publication Scale

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)

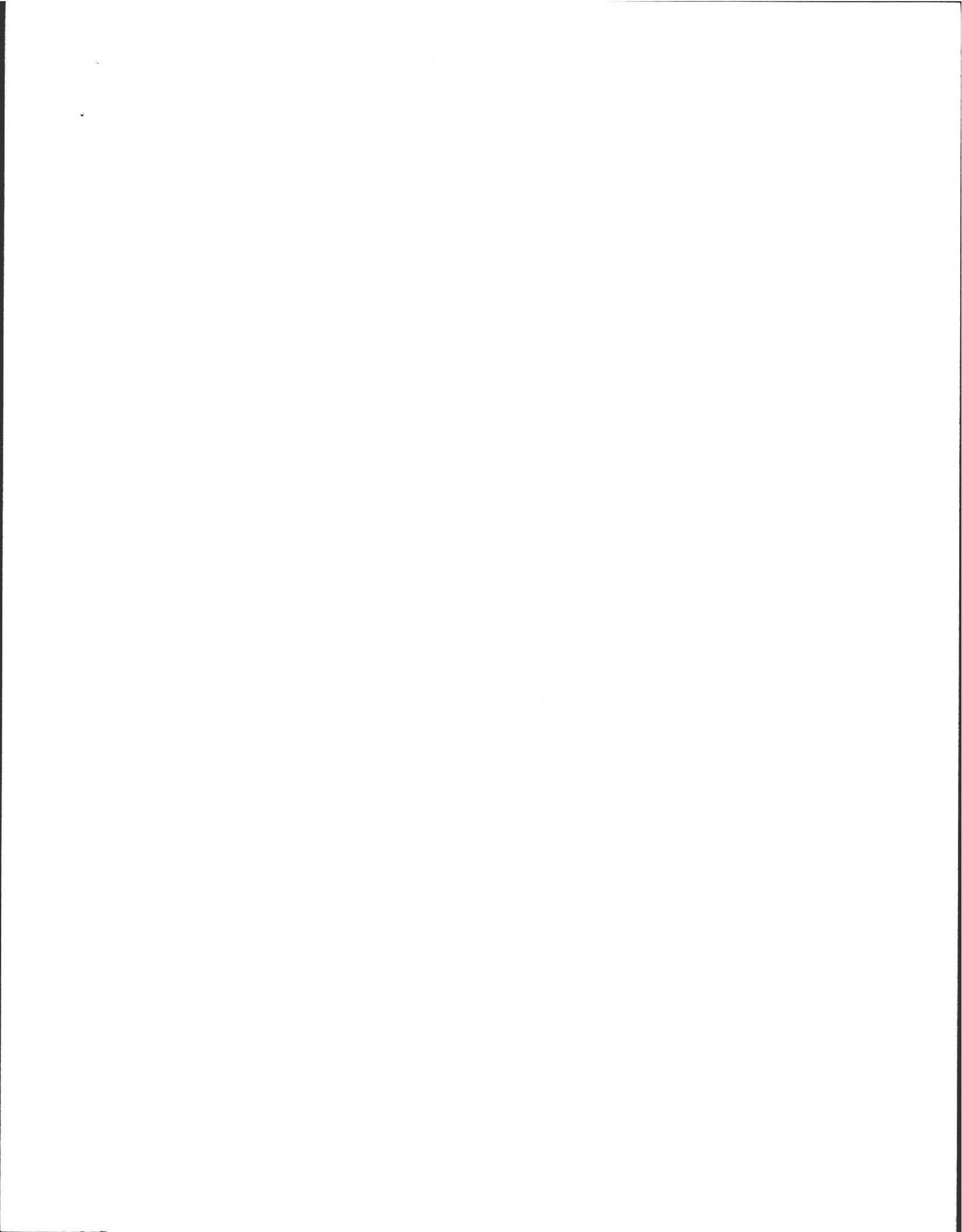
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month

Range :Above Normal Normal Below Normal

Other References Reviewed: _____





Location Address or Lot No. 1111 Bay Rd.

On-site Review

Deep Hole Number 1+2 Date: 2/24/2012 Time: showers Weather 40° rain

Location (identify on site plan) _____

Land Use Res. Rural Slope (%) 3% Surface Stones Not

Vegetation Wood

Landform Terraced as noted

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body 100' feet Drainage way 100' feet

Possible Wet Area 100' feet Property Line 50' feet

Drinking Water Well (TOW) feet Other _____
Town Water

DEEP OBSERVATION HOLE LOG*

#1

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Moisture	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-8"	A	FSC	10YR 3/2		- Friable
8"-24"	Bw	LS	10YR 4/6	Not obs	- f. sandy, loose.
24"-144"	C	MS	10YR 4/6	Not obs	MS + CS

#2
in 01

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Moisture	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-8"	A	FSC			- Friable.
8-24"	Bw	LS		Not obs	
24"-78"	C	MS	10YR 5/4		- old pipe Enclosure? MS-CS. Well Sorted.

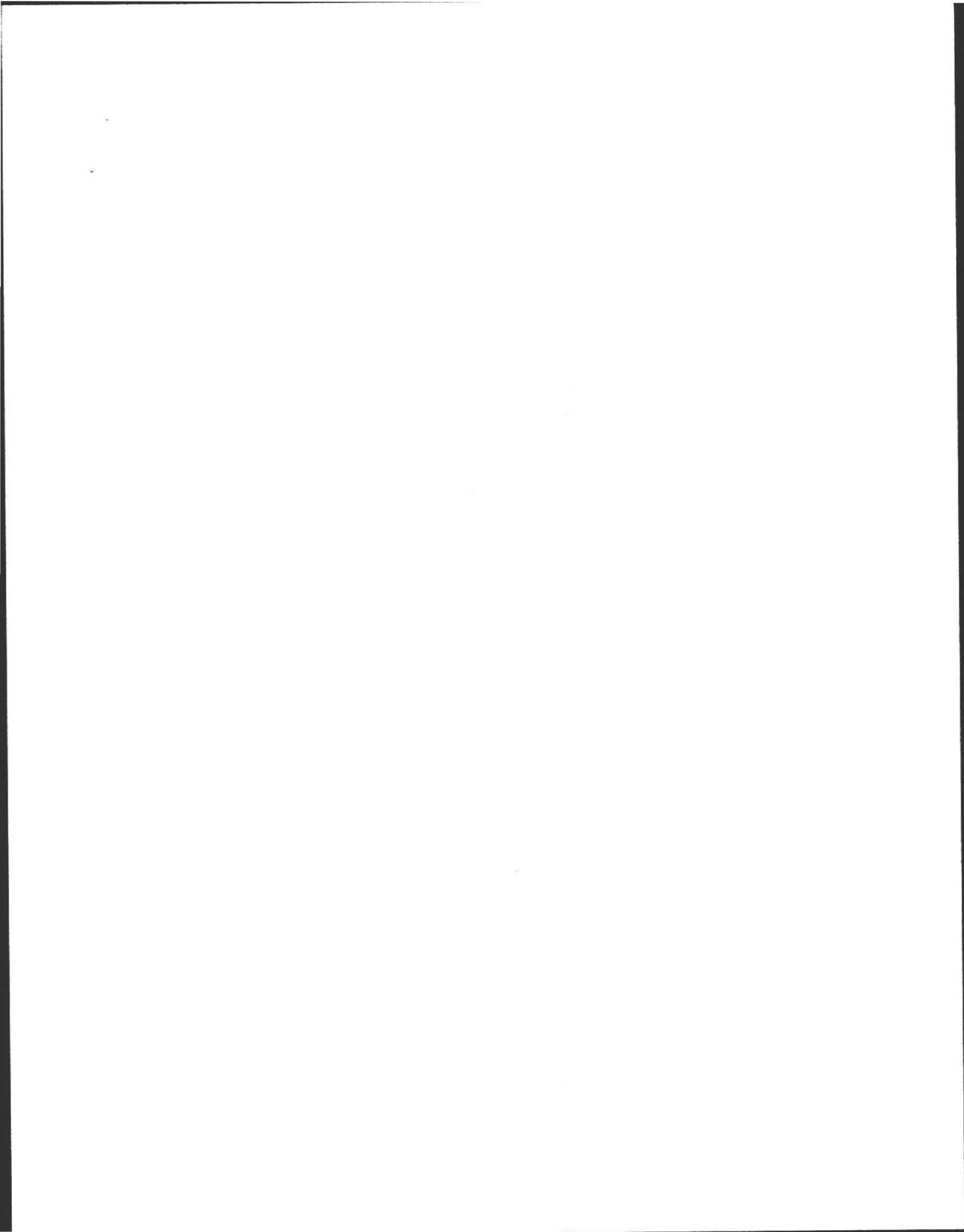
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) OUTCROPS Depth to Bedrock: Not

Depth to Groundwater: Standing Water in the Hole: Not Weeping from Pit Face: Not

Estimated Seasonal High Ground Water: 144" + eff.





Location Address or Lot No. 1111 Bay Rd

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date:	<u>2/24/2012</u>	Time: <u>1:30</u>
Observation Hole #	<u>P1</u>	
Depth of Perc	<u>58"</u>	
Start Pre-soak	<u>1:35</u>	
End Pre-soak	<u>1:38</u>	
Time at 12"		
Time at 9"	<u>could</u>	
Time at 6"	<u>NOT</u>	
Time (9"-6")	<u>HOLD</u>	
Rate Min./Inch	<u>SOAK</u>	
	<u>2.2</u> ^{min} _{hr}	

Repair

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

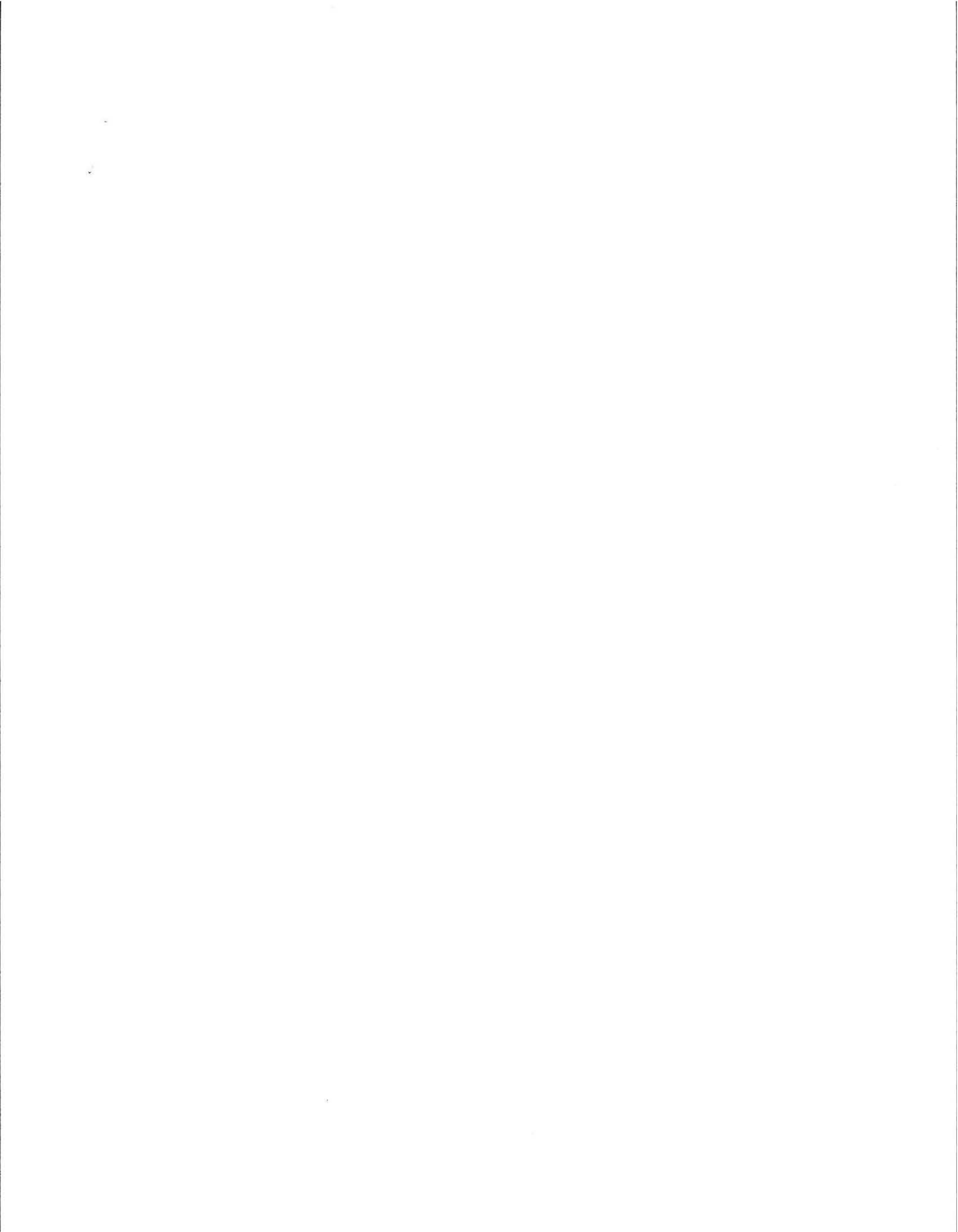
Site Passed Site Failed

Performed By: A. Weiss

Witnessed By: E. Smith

Comments: 5' offset to ESHCW





Location Address or Lot No. 1111 Bay RD, Amherst.

Determination for Seasonal High Water Table

Method Used:

- Depth observed standing in observation hole 144" inches
- Depth weeping from side of observation hole inches
- Depth to soil mottles 144" inches Not obs
- Ground water adjustment feet

Index Well Number Reading Date Index well level
Adjustment factor Adjusted ground water level

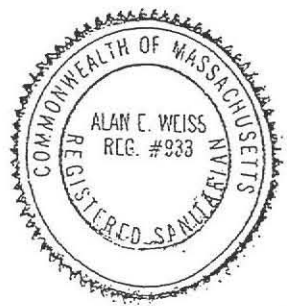
Depth of Naturally Occurring Pervious Material

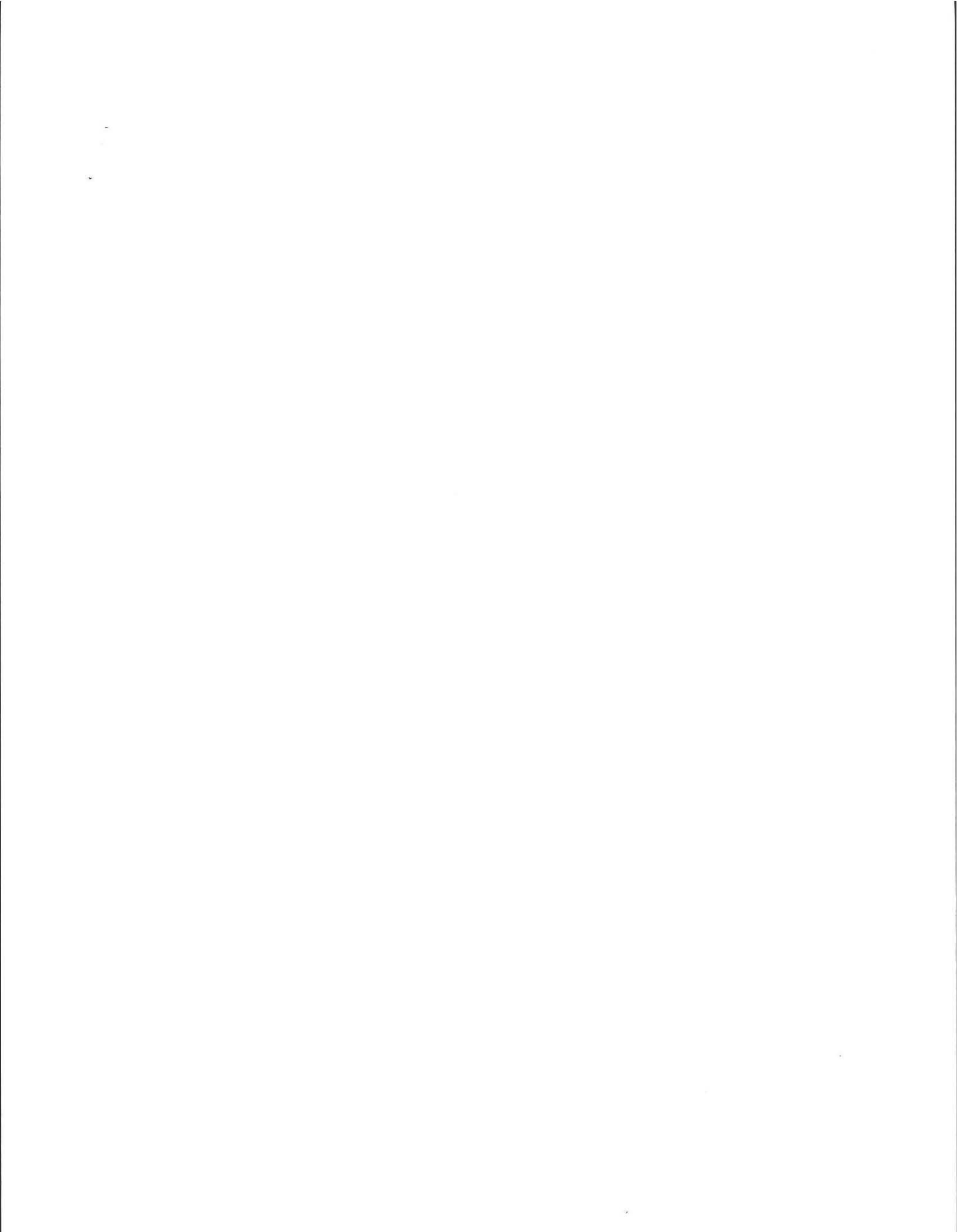
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? YES
If not, what is the depth of naturally occurring pervious material? _____

Certification

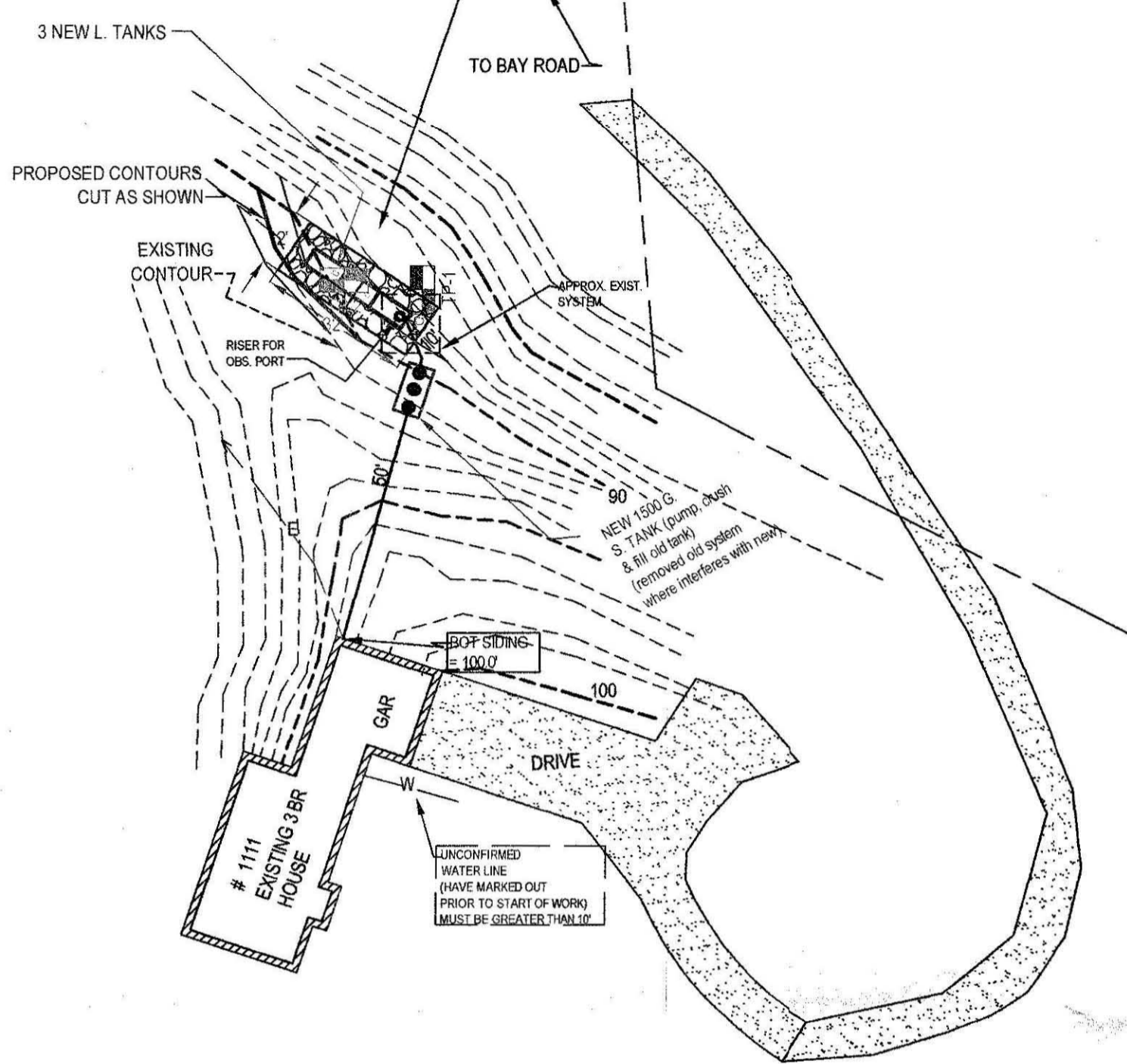
I certify that on 6/95 (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature [Signature] Date 2/24/2012

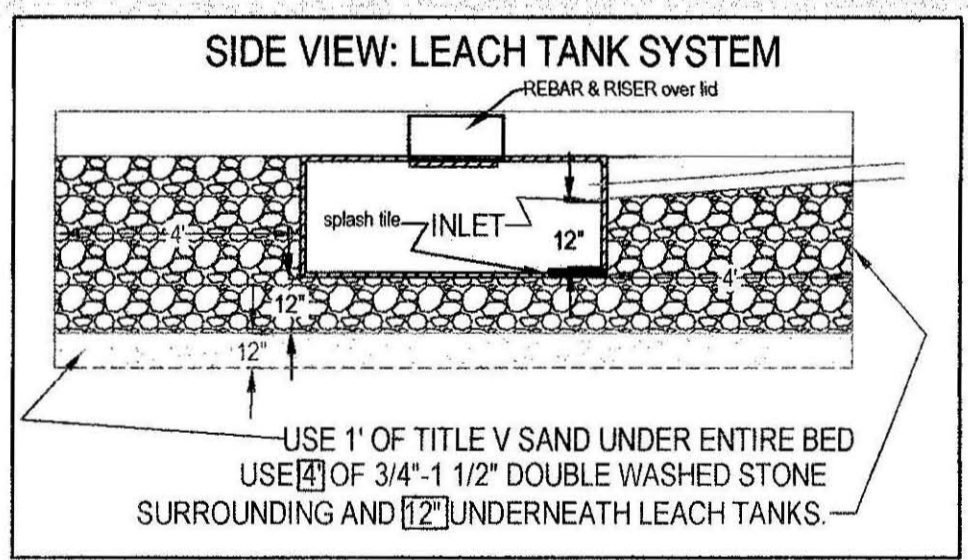
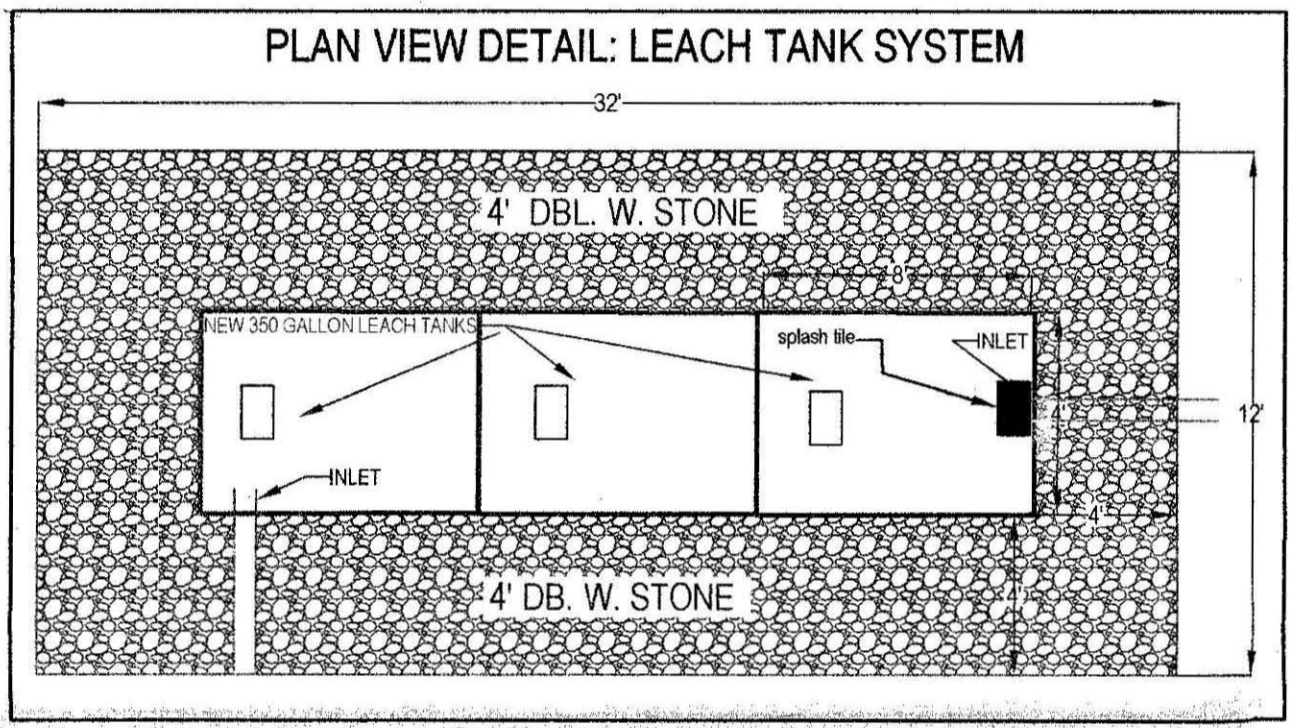
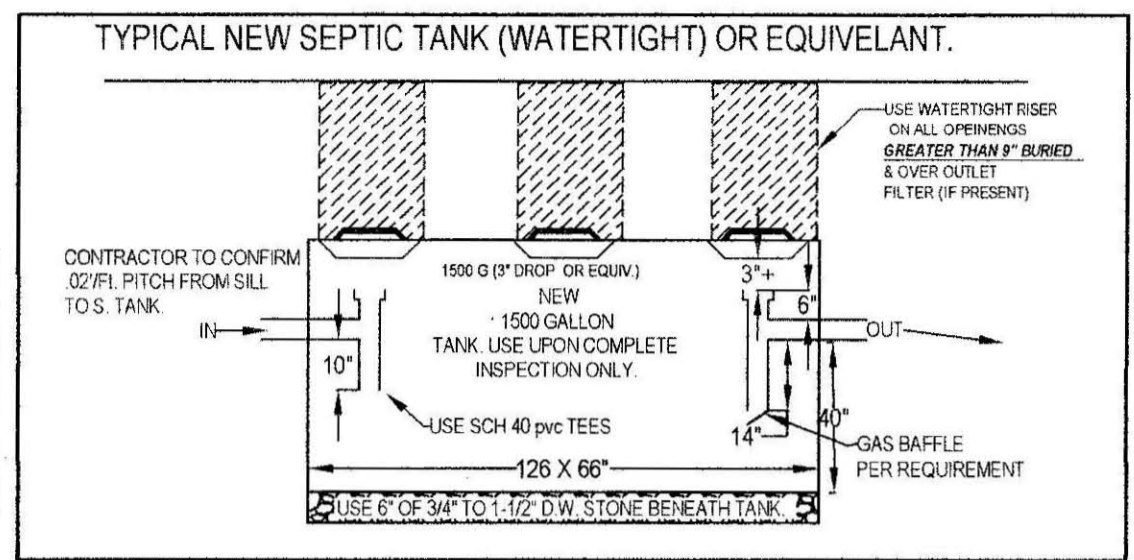




SLOPING WORK AREA CONDITIONS:
 Work Area adjacent slope may require review for erosion control and drainage patterns during and after construction. Erosion control during the construction period is recommended with double staked haybales (or equiv.) HEAVILY MULCH ALL OPEN AREAS AFTER COMPLETION FOR STABILITY DURING RE-GROWTH OF COVER VEGETATION.

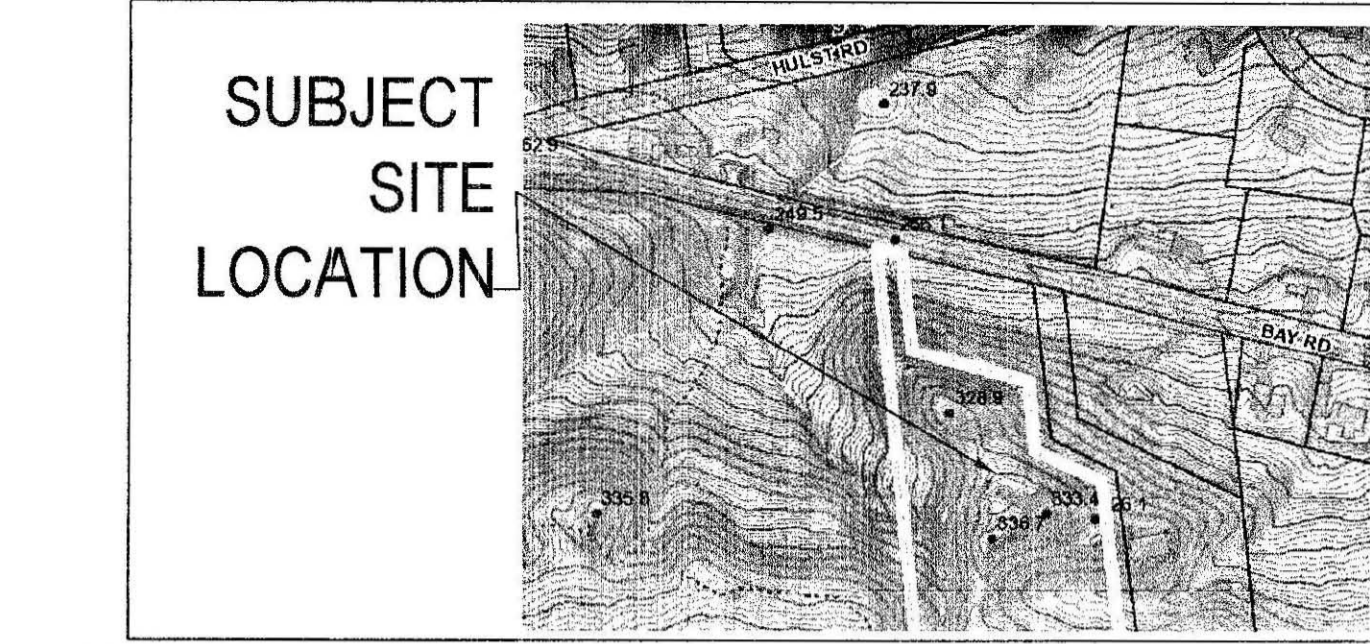


PLOT PLAN
MAP 30b LOT36
SCALE: 1"=30'
7.40± Ac.

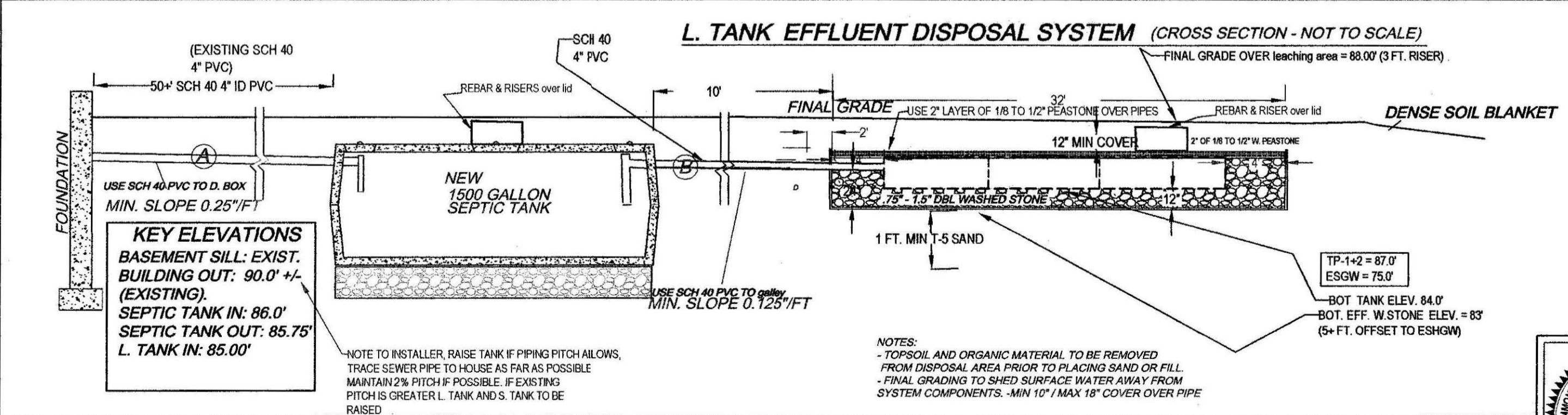


lot layout from R. IZER, RLS,

GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.
 1.) HAVE TANK PUMPED EVERY 2 YEARS.
 2.) MAINTAIN AREA OVER SEPTIC SYSTEM AS GRASSY OR SIMILAR GROUND COVER.
 3.) DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
 4.) USE ONLY LIQUID DETERGENTS & LOW FLOW WASHERS.
 5.) WIPE ALL OIL AND GREASE FROM COOKWARE AND DISPOSE IN TRASH NOT SEPTIC.
 6) All Toilets and Faucets must be confirmed to not be leaking, because one leaking fixture can fail a septic system in ONE DAY



DESIGN NOTES AND CALCULATIONS:
 1.) 3 (BEDROOM HOME) = 330 GPD. REQUIRED,
 - Use Three 300 gal. 4' X 8' chamber GALLERY: 12' WIDE X 32' LONG WITH 24" OF 3/4" TO 1 1/2" DBL WASHED STONE BELOW INVERT
 - BOTTOM AREA: 3 galleys X (12' W X 32' L) = 384 SF.
 - SIDE AREA: 3 GALLEYS X (2' HT X 32' L) X 2 SIDES = 128 SF
 - END AREA: 2 ENDS X (2.0' HT X 12' W) X 2 ENDS = 48 SF.
 - TOTAL AREA: 560 SF X .74 GAL/SF = 414 GPD
 3. GARBAGE DISPOSAL NOT ALLOWED. ... MUST BE REMOVED****
 4. NO OTHER PRIVATE WELLS WITHIN 150 FEET OF SAS. (Town water)
 5. NO OTHER WETLANDS WITHIN 100 FEET OF SAS,
 6. USE New 1,500 GAL S. TANK AS NOTED & MAINTAIN 0.02 PITCH FROM SILL TO S. TANK
 - INSTALL & INSPECT SCH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET),
NOTE:
 - ALL COMPONENTS OF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO MAINTAIN 3" CLEARANCE FROM TOP OF TEES TO BOTTOM OF TANK COVERS & BOXES.
 7. ALL PLASTIC RISERS MUST BE SECURED WITH STAINLESS STEEL SCREWS.
 8. USE APPROVED (.75"-1 1/2") DBL. WASHED STONE UNDER TANK FOR 6".
 - CONFIRM STONE PROPERLY WASHED & STABLE PRIOR TO PLACEMENT.
 9. USE PROPER SCH. 40 PVC TEES AS SHOWN.
 10. PRE & POST CONTOURS NOTED AS NECESSARY, RESERVE AS NOTED (not required for repairs).
 11. SLOPE CALCS (SEE CONTOURS). SUBGRADE INSP. REQ'D.
 13. USE GALLEYS DUE TO TOPOGRAPHY AND SPACE OF LOT WITH RESPECT TO LOCATION AND ELEVATION OF RESIDENCE & PIPING UNDER SLAB (310 CMR 15.240)
 14. USE 2% MIN. SLOPE OVER SAS
 - CLEAR TOP AND SUB: TO 28" MIN. AS NEEDED (INSPECTION REQUIRED).
 - CLEAR PAST BASE OF B (MIN. 28") & SCARIFY UNDER TRENCH PRIOR TO TITLE V SAND /STONE PLACEMENT.
 - EXCAVATE EXISTING LOAM, SUB AND ANY EXISTING DEBRIS, DIRTY FILL OR PRIOR SYSTEM IF PRESENT.
 15. SOIL EVALUATION BY A. WEISS, RS. (E. Smith, BOH AGENT).
 - DEPTH OF PERC. 58"
 - PERC RATE = <2 MIN / IN,
 - CLASS 1, M. SAND SOIL RATING
 16. NO TREES WITHIN 10 FT. OF NEW LEACH AREA.
 17. ENGINEER & TOWN TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL.
 18. BM=100.00 @ (BOT. GAR. SIDING, as noted), CONFIRM PROPER PIPE SLOPES
 - USE/INSPECT SCH. 40 PIPE FOR PIPE FROM HOUSE TO NEW OR EXISTING TANK
 19. GRADE MULCH AND SEED OVER SAS AS NOTED.
 20. INSTALLATION IN LOW GROUNDWATER SEASON RECOMMENDED.
 21. USE OBSERVATION PORT NEAR CENTER OF STONE BED HAVE 4" PERFORATED, PVC INSPECTION PORTALS TO BOTTOM OF STONIE BED, WITH RISER TO 3" OF SURFACE & THREADED CAP & MARK WITH RE-BAR.



TEST PIT LOG:

TP-1					TP-2				
DEPTH	HORIZ.	TEXTURE	COLOR (MUNSELL)	MATERIAL	DEPTH	HORIZ.	TEXTURE	COLOR (MUNSELL)	MATERIAL
0-8"	Ap	FSL	10 YR 3.2	FRIABLE	0-22"	Ap	FSL	10 YR 3.2	FRIABLE
8-24"	Bw	LS	10 YR 4.6	FRIABLE, F. SANDY	22-30"	Bw	LS	10 YR 4.6	FRIABLE, F. SANDY
24-144"	C1	MS	10 YR 4.4	MS AND CS, LOOSE	30-128"	C1	MS	10 YR 4.4	MS & CS.
				well sorted, granular					well sorted, granular (OLD SYSTEM)
OXIDES: NOT OBSERVED					OXIDES: NOT OBSERVED				
EHWT: 144"+					EHWT: -				
STANDING H2O: NOT OBSERVED					STANDING H2O: NOT OBSERVED				
WEEPING: NOT OBSERVED					WEEPING: NOT OBSERVED				
BEDROCK: 144"+					BEDROCK: -				

SEPTIC SYSTEM REPAIR PLAN FOR DEBORAH GWERTZ AND FRED ERRINGTON
 1111 BAY ROAD
 AMHERST, MA
Cold Spring Environmental Consultants Inc.
 350 Old Enfield Road
 Belchertown, MA. 01007
 P/F/O. NO: (413) 323-5957
 F.A.X: (413) 323-4916
 e-Mail: AWEISS@charter.net

ATTENTION INSTALLER!!
 CALL DIG SAFE BEFORE YOU DIG!! MASSACHUSETTS STATE LAW CHAPTER 82 SECTIONS 41 - 40E REQUIRE THAT PREMARKING OF GAS, ELECTRIC, WATER, TELEPHONE AND CABLE T.V. UTILITY LINES BE MADE A MINIMUM OF 72 HOURS PRIOR TO GROUND BREAK FOR ANY EXCAVATION.

NOTE: INSTALLER MUST CONTACT ENGINEER/BD OF HEALTH 48 HOURS PRIOR TO SUBGRADE INSPECTION. INSTALLER MUST HAVE ALL BREAK OUT FILL ON SITE AND IN PLACE PRIOR TO SIGN OFF BY ENGINEER AT TIME OF FINAL INSPECTION OR APPROVAL WILL NOT BE GIVEN TO BACKFILL.



DATE: 03.03.2012
 SCALE: 1"=30'
 DRAWN BY: ALAN WEISS
 REVISION:
 DRAWING NUMBER: 112.3824.0224

1111 BAY ROAD - FRED ERRINGTON & DEBORAH GEWERTZ

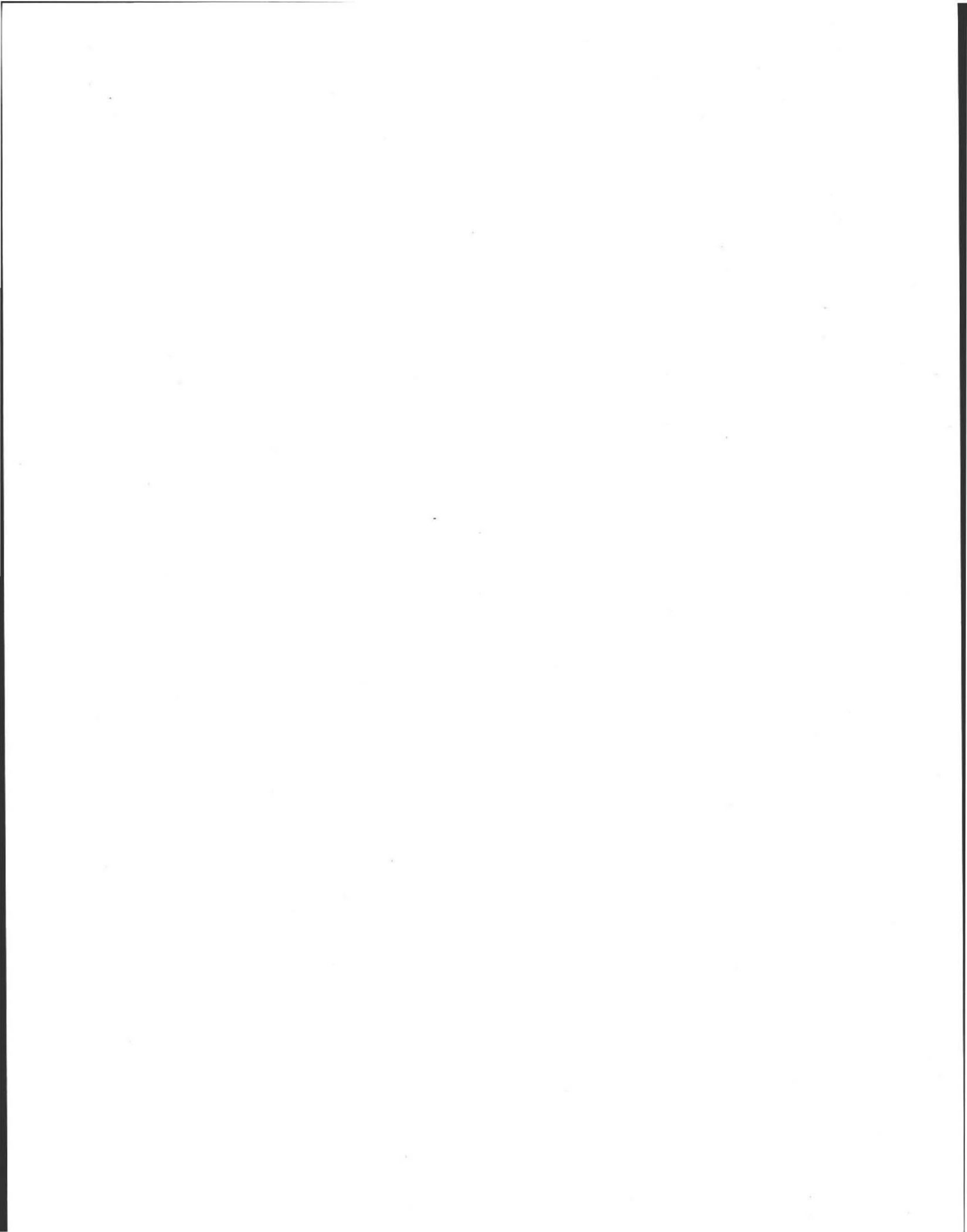
Plan: 12-10

Designed by: ALAN WEISS

CHECK LIST FOR SEPTIC PLANS

- Application page attached to plan
- PE or RS stamp, date, signature
- NA Variances to property line setback distances must have Surveyor Stamp. 15270 (3)
- Legal boundaries noted
- NA Basements noted
- Dwellings and buildings existing or proposed noted
- Location of driveway or parking areas, other impervious areas
- NA Location and dimensions of reserve area (new) CMR 15.248(1), 15.104(4)
- System design calculations
- Garbage grinder Y or N **MUST BE REMOVED**
- Benchmark not disturbed during construction, within 75 feet of facility CMR 15.220 (4)(g)
- North arrow CMR 15.200 (4) (g)
- Contours
- Deep hole location and data
- Perc hole location and data
- Elevations
- Names of approving authority and soil evaluator CMR 15.211 p. 49
- Location of every water supply, public and private. CMR 15.220(k):
 - Within 400 feet of system in case of surface water and gravel packed public water supply
 - Within 250 feet of system in case of tubular public water supply
 - Within 150 feet of private supply wells - 100' septic sys. 5' tank
- NA Well statement if applicable
- Location of any surface waters, rivers, vegetated wetlands
- Location of water lines and other subsurface utilities
- Observed and adjusted ground water elevation in the vicinity of system 15.220 (4)(n)
- Profile of system
- Locus plan to show location of facility, including nearest street
- Materials of construction and specs for system
- Gas Baffle 1527.4
- Pipe in center line of tank 310 CMR 15.227, 15.05(8)
- Double washed stone
- Schedule 40 PVC for trafficked areas, house to tank
- Distances noted from house to tank, etc.
- NA If dosing is proposed, design and specs of dosing system
- NA When alternative technology is required, complete plan and specs, including hydraulic profile
- NA Trenches preferred over beds CMR 15.240 (6)
- NA Buoyancy calculations for tanks or components partly below H2O table 15.221(8) p. 56
- NA 3 to 1 slope outside of mound, toe ending 5 feet from property line
- NA Local upgrade requests on the plan
- NA Local upgrade forms attached to application
- NA Note on plan listing all variances sought in conjunction with the plan

NOTES: NOTE GARBAGE GRINDER; COLLECTOR OF 3 LEACH TANKS



No. _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

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



Location <u>1111 Bay Rd.</u>	Owner's Name <u>Fred Errington + Deborah Gwertz</u>
Map/Parcel# <u>30B/36</u>	Address <u>1111 Bay Rd. Amherst, MA.</u>
Lot# <u>#36</u>	Telephone# <u>253-9617</u>
Installer's Name <u>KARL'S Excavating</u>	Designer's Name <u>Alan Weiss, RS</u>
Address <u>Hadley, MA.</u>	Address <u>Belchertown, MA.</u>
Telephone# <u>413-549-5396</u>	Telephone# <u>413-323-5957</u>

Type of Building Residence Lot Size 7.40 Ac +/- sq. ft.
 Dwelling - No. of Bedrooms 3 Bedroom Garbage grinder
 Other - Type of Building _____ No. of persons _____ Showers (), Cafeteria ()
 Other Fixtures _____

Design Flow (min. required) 110 gpd Calculated design flow 330 Design flow provided 414 gpd

Plan: Date 3/3/2012 Number of sheets _____ Revision Date _____

Title Septic System Repair - Plan for Deborah Gwertz + Fred Errington

Description of Soil(s) _____

Soil Evaluator Form No. _____ Name of Soil Evaluator A. Weiss, RS Date of Evaluation 2/14/2012

E. Smith, POH

DESCRIPTION OF REPAIRS OR ALTERATIONS

Complete New septic system.

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

Signed Fred Errington Date March 7, 2012

Inspections _____

No. _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, _____, MA.

CERTIFICATE OF COMPLIANCE

Description of Work: Individual Component(s) Complete System

The undersigned hereby certify that the Sewage Disposal System; Constructed (), Repaired (), Upgraded (), Abandoned ()

by: _____
 at _____

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

Installer _____

Designer: _____ Inspector: _____ Date: _____

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

No. _____

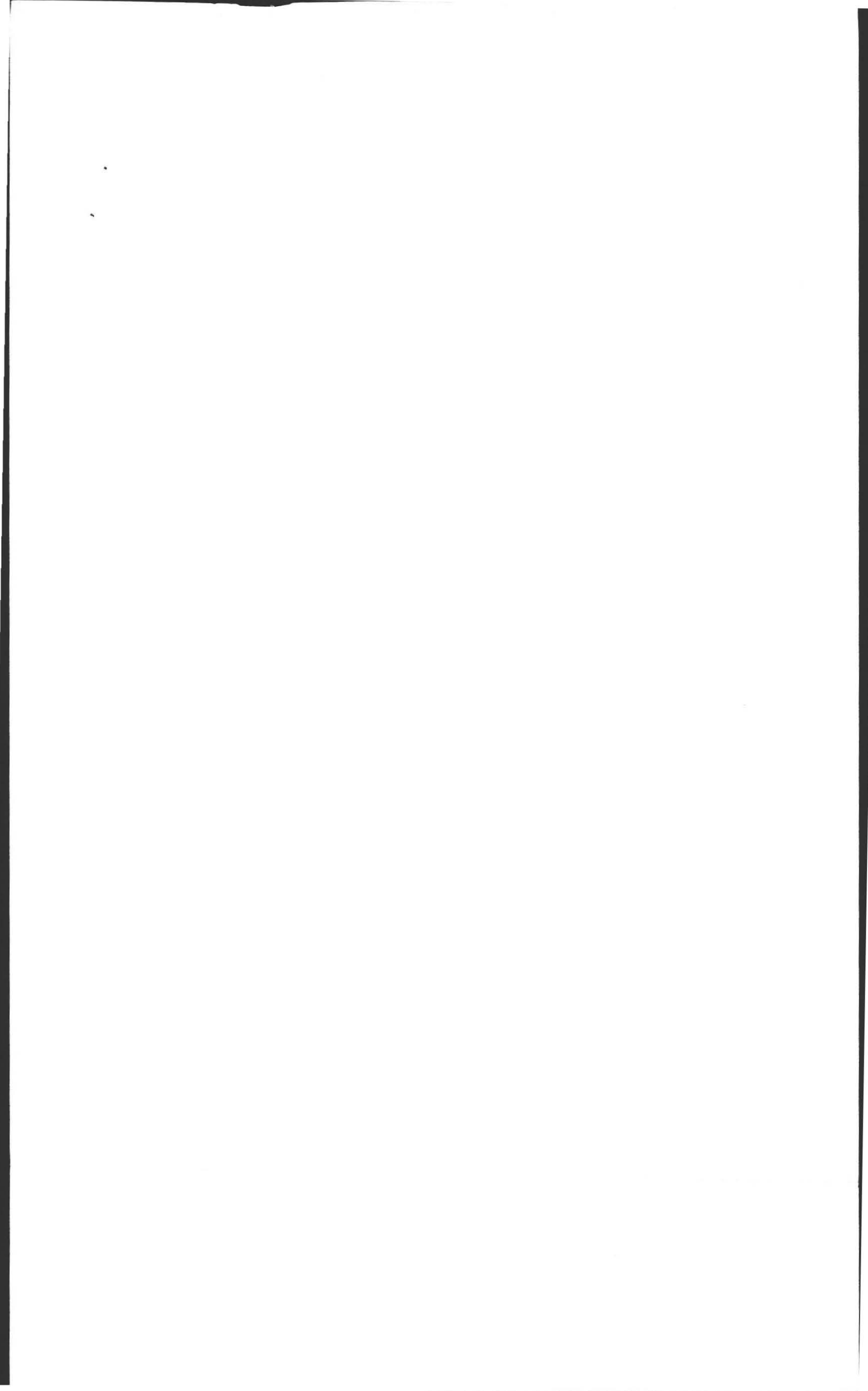
COMMONWEALTH OF MASSACHUSETTS

Board of Health, _____, MA.

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct () Repair () Upgrade () Abandon () an individual sewage disposal system at _____ as described in the application for Disposal System Construction Permit No. _____, dated _____.

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





ALAN E. WEISS, M.S., R.S., L.S.P.

Licensed Site Professional
Registered Sanitarian
Hydrogeologist
President

- Wetland Consults
- Soil and Water Testing
- 21E Site Investigations
- Percolation Tests and
- Septic Designs
- Title 5 Inspections

350 Old Enfield Rd.
Belchertown, MA 01007
(413) 323-5957 & 323-4916 (FAX)

aeweiss@charter.net

Date: 2/24/2012

Commonwealth of Massachusetts

Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss
Witnessed By: E. Smith

Date: 2/24/2012

Location Address or Lot # <u>Map 30B, LOT 36</u> <u>1111 Bay Rd</u>	Owner's Name, Address, and Telephone # <u>Deborah Gewertz</u> <u>Fred Errington</u> <u>1111 Bay Rd.</u> <u>Amherst, MA</u>
New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/>	

Office Review

413-253-9619

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. 1111 Bay Rd.

On-site Review

Deep Hole Number 1+2 Date: 2/24/2012 Time: showers Weather 40° rain

Location (identify on site plan) _____

Land Use Res. Rural Slope (%) 3% Surface Stones Not

Vegetation Wood

Landform Terrace as noted

Position on landscape (sketch on the back) _____

Distances from:
 Open Water Body 100+ feet Drainage way 100+ feet
 Possible Wet Area 100+ feet Property Line 50+ feet
 Drinking Water Well (TOW) feet Other _____
Town Water

DEEP OBSERVATION HOLE LOG*

#1

Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-8"	A	FSC	10YR 3/2		- Friable
8"-24"	Bw	LS	10YR 4/6	Not obs	- F-Smly, Loose.
24"-144"	C	MS	10YR 4/4	Not obs	MS + CS

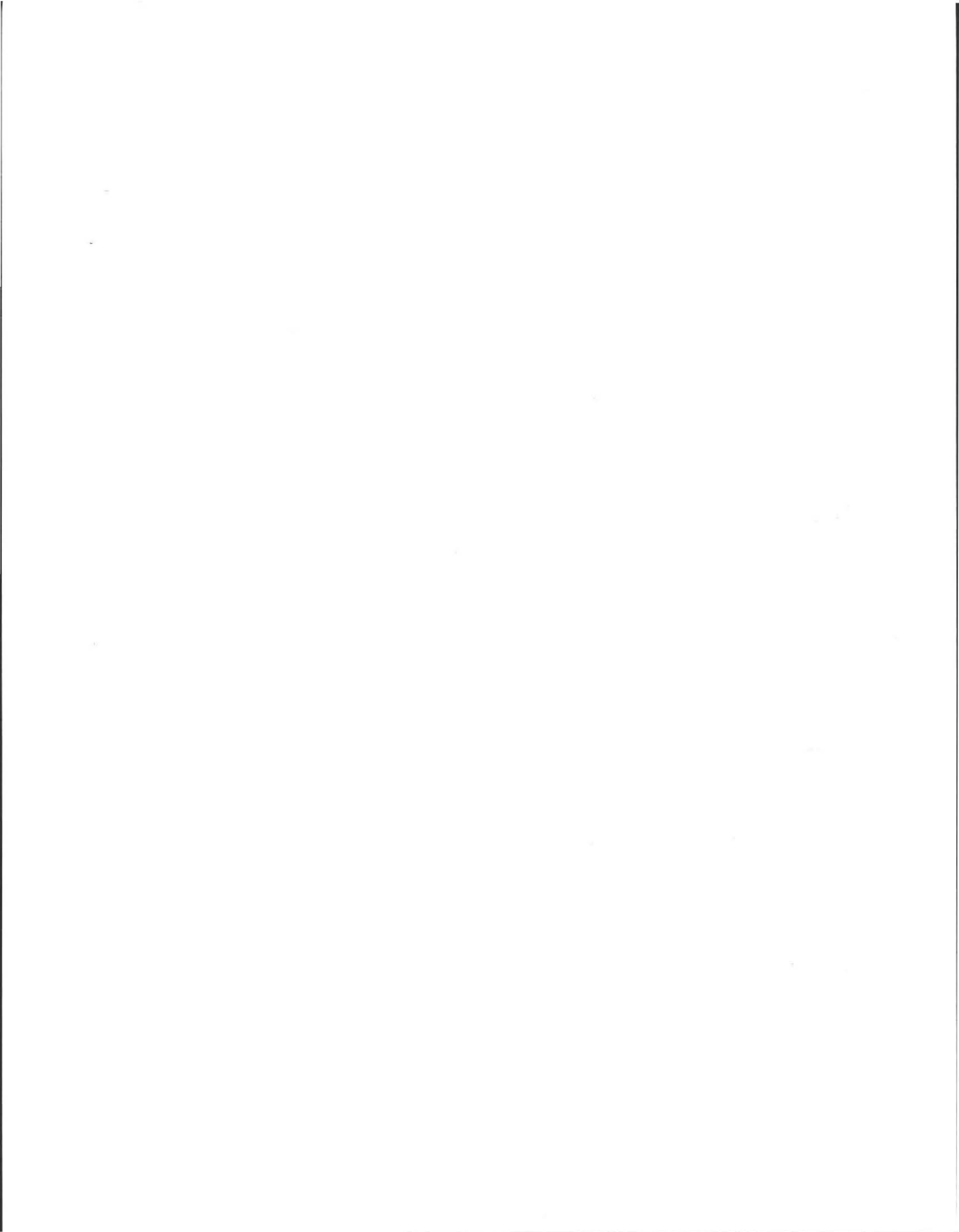
#2
in 01

Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-8"	A	FSC			- Friable
8-24"	Bw	LS		Not obs	
24"-78"+	C	MS	10YR 5/4		- old system Enclosure? MS-CS. Well Sorted.

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) OUTCROPS Depth to Bedrock: Not
 Depth to Groundwater: Standing Water in the Hole: Not Weeping from Pit Face: Not
 Estimated Seasonal High Ground Water: 144" + EOP.





Location Address or Lot No. 1111 Bay Rd

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: <u>2/24/2012</u>		Time: <u>1:30</u>
Observation Hole #	<u>P₁</u>	<div style="writing-mode: vertical-rl; transform: rotate(180deg);">Repair</div>
Depth of Perc	<u>58"</u>	
Start Pre-soak	<u>1:35</u>	
End Pre-soak	<u>1:38</u>	
Time at 12"	<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> COULD NOT HOLD SOAK </div>	
Time at 9"		
Time at 6"		
Time (9"-6")		
Rate Min./Inch		
	<u>(2)</u> ^{min} <u>FA.</u>	

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

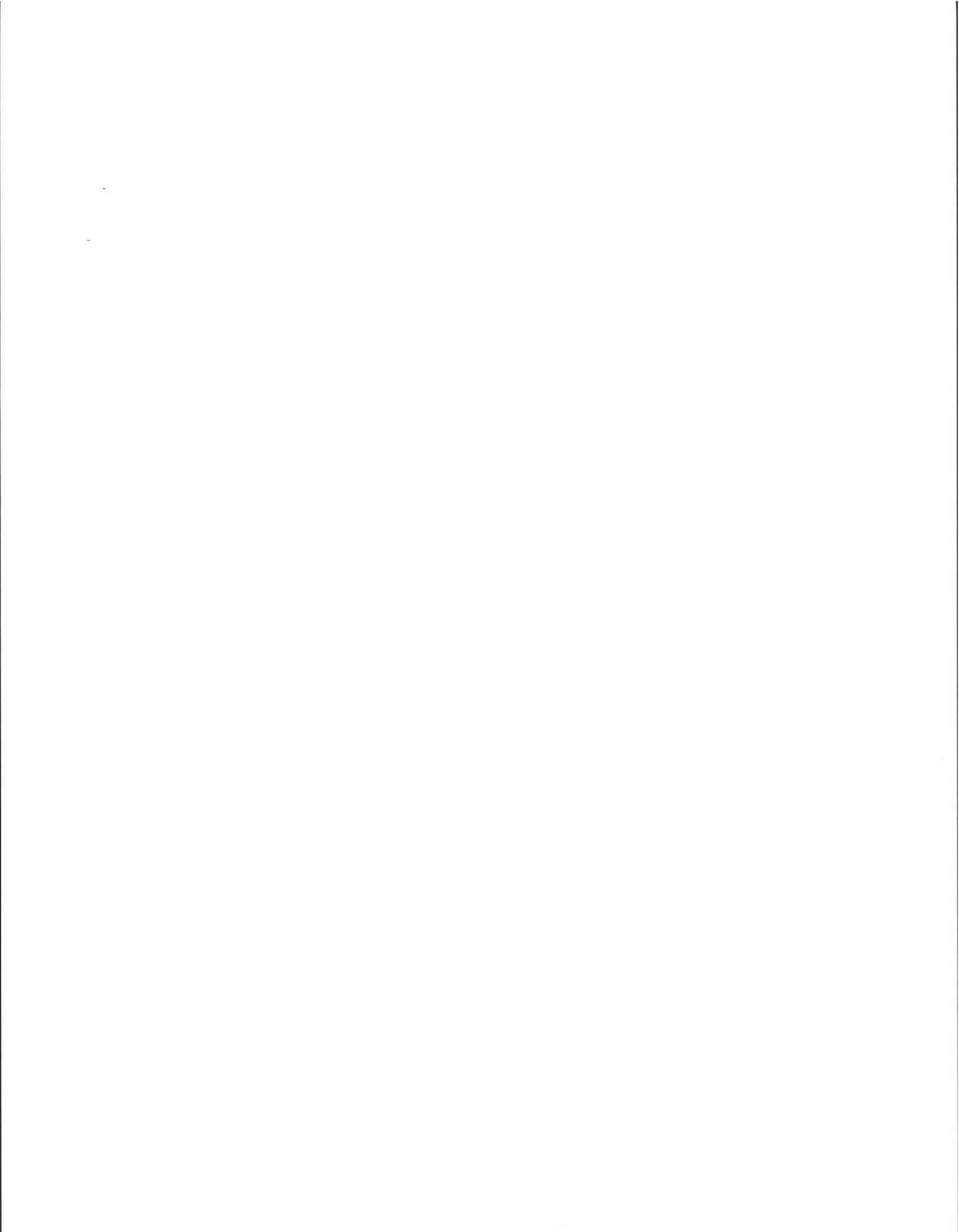
Site Passed Site Failed

Performed By: A. Weiss

Witnessed By: E. Smith

Comments: 5' offset to ESTHOW





Location Address or Lot No. 1111 Bay RD, Amherst.

Determination for Seasonal High Water Table

Method Used:

- Depth observed standing in observation hole 144" inches
- Depth weeping from side of observation hole inches
- Depth to soil mottles 144" inches Not obs
- Ground water adjustment feet

Index Well Number Reading Date Index well level
Adjustment factor Adjusted ground water level

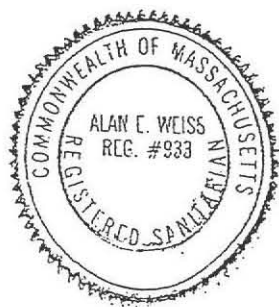
Depth of Naturally Occurring Pervious Material

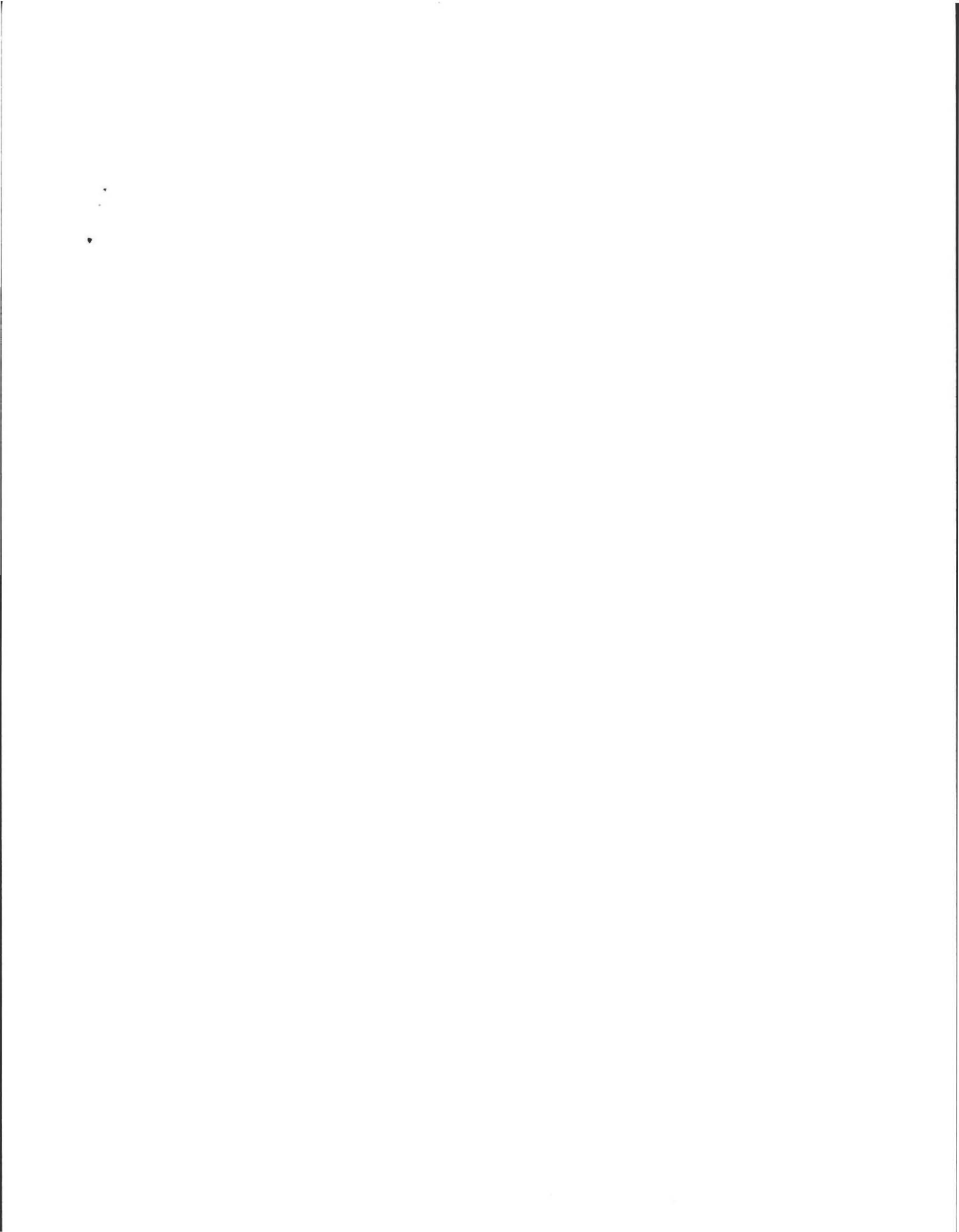
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? YES
If not, what is the depth of naturally occurring pervious material? _____

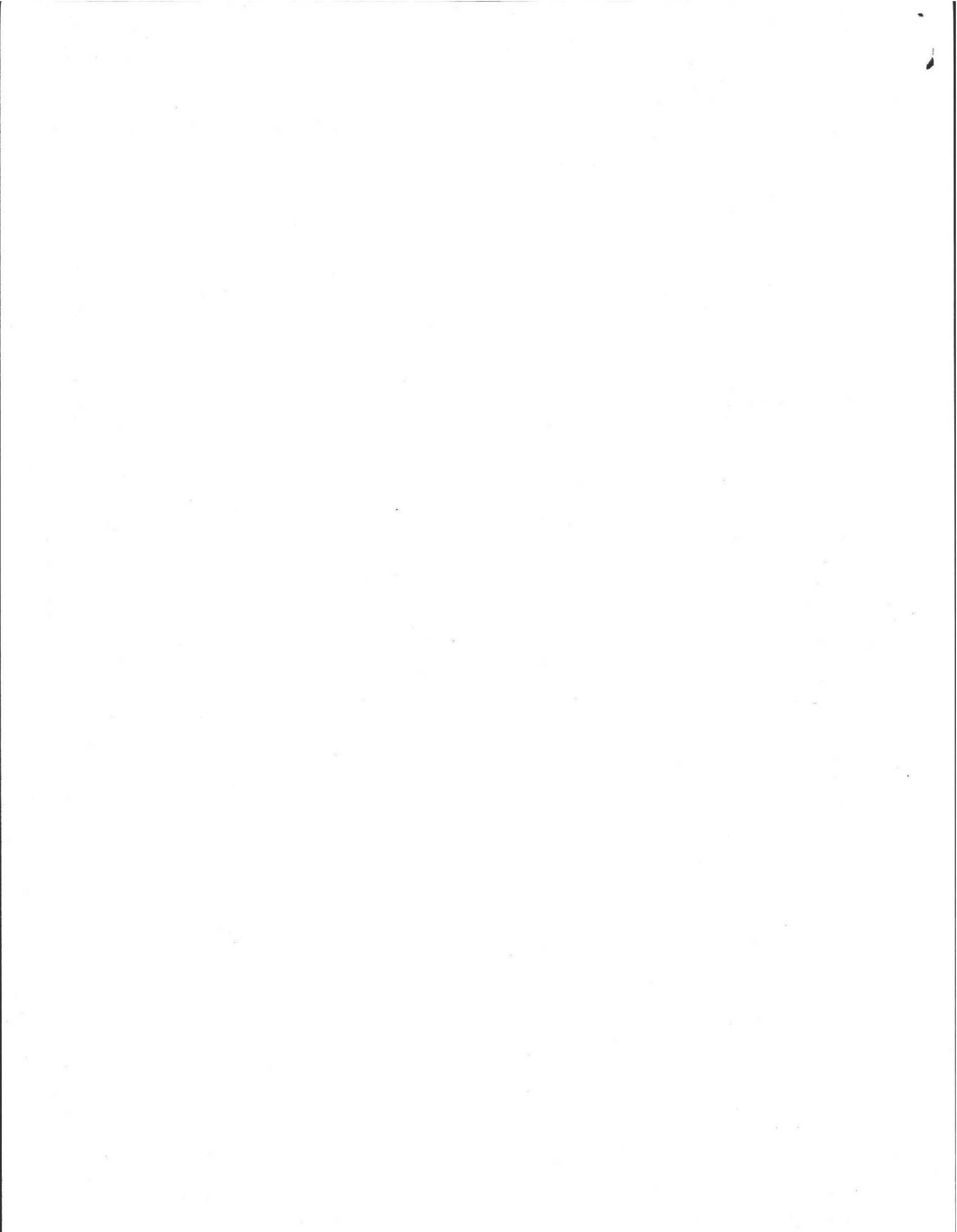
Certification

I certify that on 6/95 (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 [Signature] Date 2/24/2012







PERMITS/INSP PAYMENT RECPT#: 12072829
TOWN OF AMHERST
TOWN HALL
4 BOLTWOOD AVENUE
AMHERST MA 01002

DATE: 02/27/12 TIME: 09:43
CLERK: publichea DEPT:

PAID BY: FREDERICK K ERRINGTO
PAYMENT METH: CHECK 955

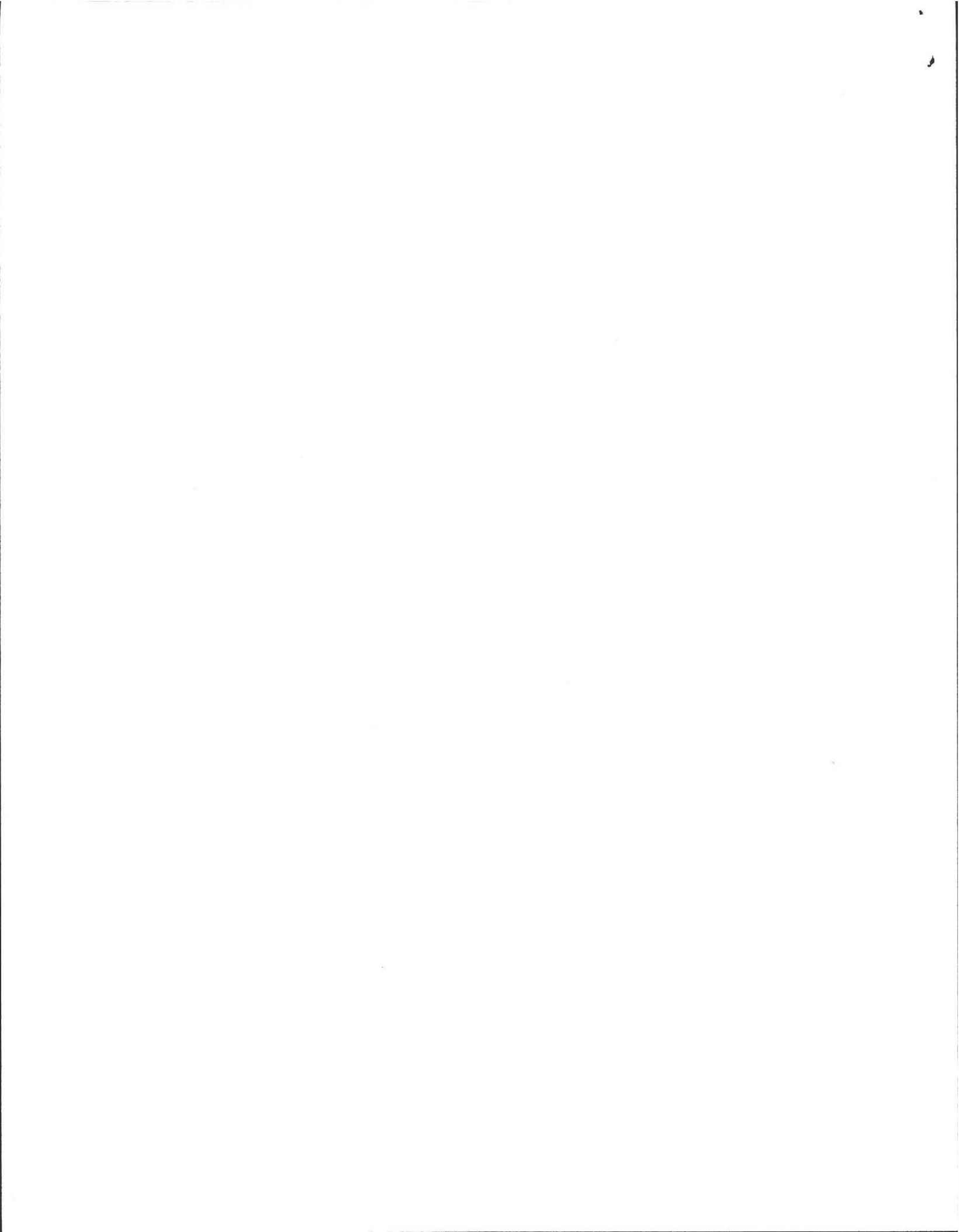
REFERENCE: 12524

AMT TENDERED: 300.00
AMT APPLIED: 300.00
CHANGE: .00

SITE ADDRESS: PERC TEST

FEES:
HEA011 300.00

TOTAL PAID: 300.00



PERMITS/INSP PAYMENT RECPT#: 12072830
TOWN OF AMHERST
TOWN HALL
4 BOLTWOOD AVENUE
AMHERST MA 01002

DATE: 02/27/12 TIME: 09:46
CLERK: publichea DEPT:

PAID BY: FREDERICK K ERRINGTO
PAYMENT METH: CHECK 955

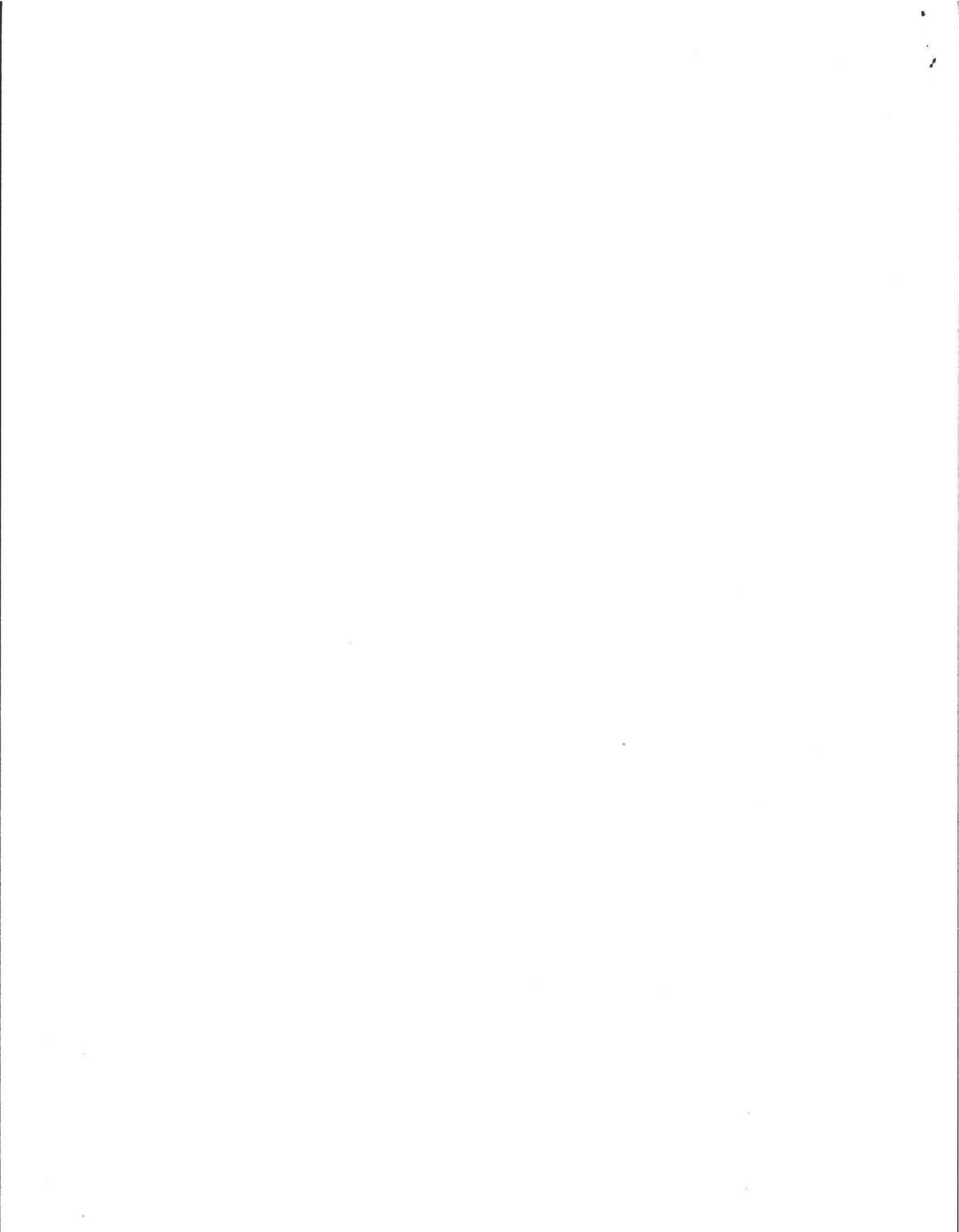
REFERENCE: 12526

AMT TENDERED: 150.00
AMT APPLIED: 150.00
CHANGE: .00

SITE ADDRESS: SEPTIC PLAN REVIEW

FEES:
HEA017 150.00

TOTAL PAID: 150.00





Commonwealth of Massachusetts

City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

paid
2/24/2015
\$450
\$300 - per
\$150 - Plan
Reviewed
~~200~~ FREE

A. Facility Information

Owner Name: FRED ERRINGTON 253-9619

Street Address: 1111 BAY ROAD frederick.errington@trincoll.edu Map/Lot # _____

City: AMHERST State: MA Zip Code: 01002

B. Site Information

1. (Check one) New Construction Upgrade Repair

2. Published Soil Survey Available? Yes No If yes: Year Published _____ Publication Scale _____ Soil Map Unit _____

Soil Name _____ Soil Limitations _____

3. Surficial Geological Report Available? Yes No If yes: Year Published _____ Publication Scale _____ Map Unit _____

Geologic Material _____ Landform _____

4. Flood Rate Insurance Map

Above the 500-year flood boundary? Yes No Within the 100-year flood boundary? Yes No

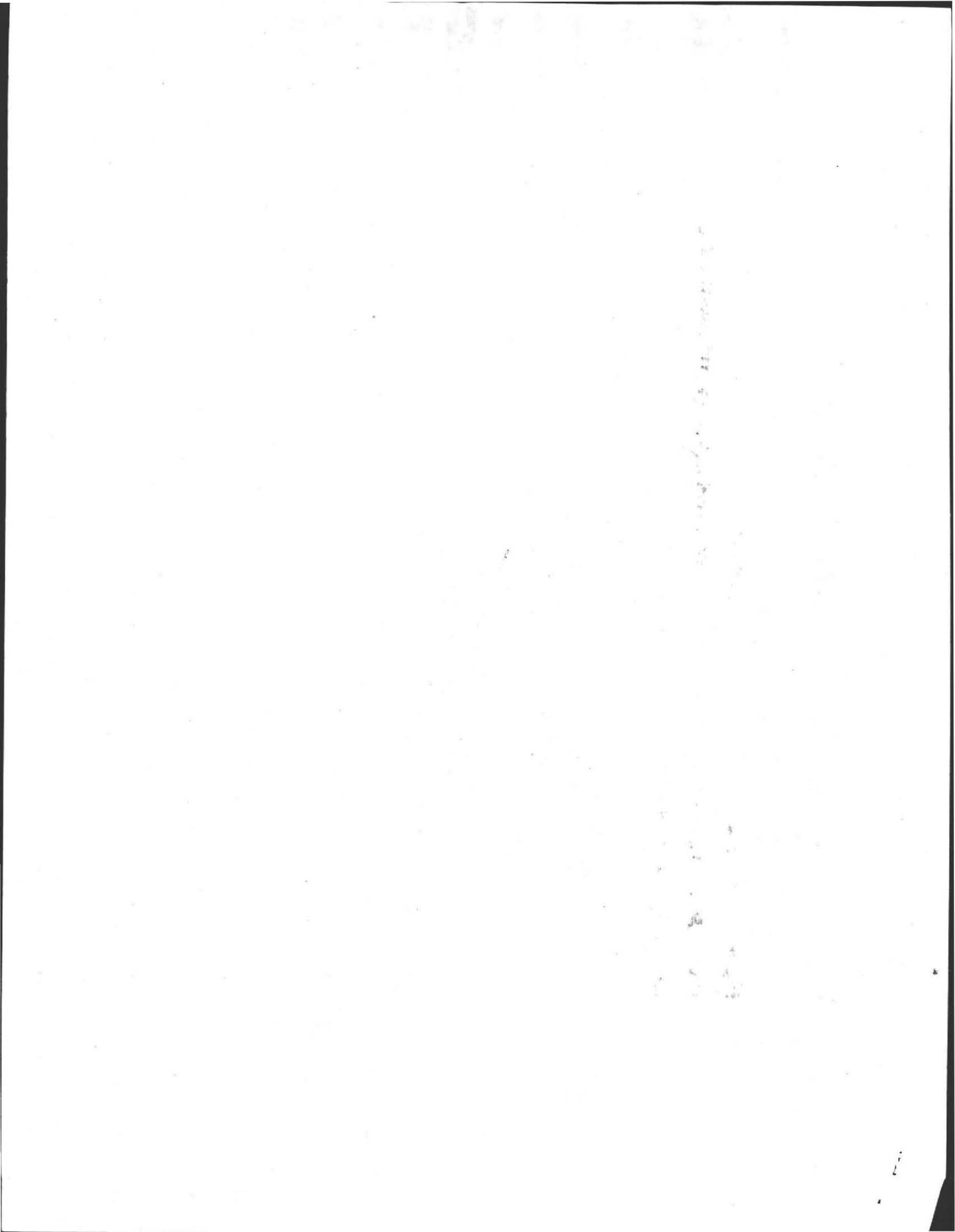
Within the 500-year flood boundary? Yes No Within a velocity zone? Yes No

5. Wetland Area: National Wetland Inventory Map Map Unit _____ Name _____

Wetlands Conservancy Program Map Map Unit _____ Name _____

6. Current Water Resource Conditions (USGS): _____ Month/Year _____ Range: Above Normal Normal Below Normal

7. Other references reviewed: _____





Commonwealth of Massachusetts

City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserved disposal area)

Deep Observation Hole Number: 1 Date: 2/24/2012 Time: 1:15 Weather: light rain / overcast

1. Location

Ground Elevation at Surface of Hole: Location (identify on plan):

2. Land Use: Woodland (e.g., woodland, agricultural field, vacant lot, etc.) Surface Stones: none Slope (%): varied 25% Vegetation: 2nd growth Landform: Position on Landscape (attach sheet):

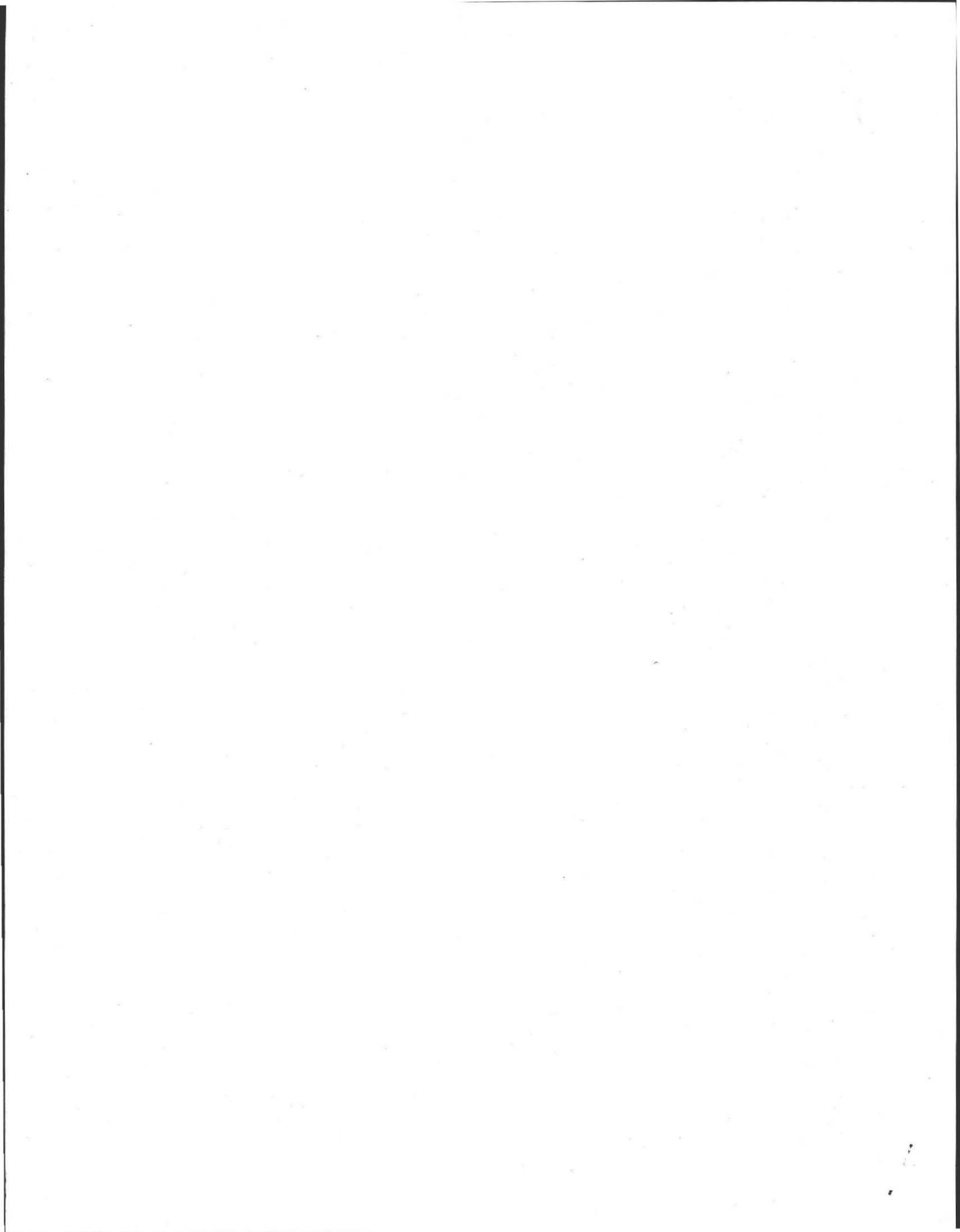
3. Distances from: Open Water Body (feet), Drainage Way (feet), Possible Wet Area (feet), Property Line (feet), Drinking Water Well (feet), Other (feet)

4. Parent Material: Same terrace - same ester Unsuitable Materials Present: [] Yes [X] No

If Yes: [] Disturbed Soil [] Fill Material [] Impervious Layer(s) [] Weathered/Fractured Rock [] Bedrock

5. Groundwater Observed: [] Yes [X] No If yes: Depth Weeping from Pit Depth Standing Water in Hole

Estimated Depth to High Groundwater: inches elevation





Commonwealth of Massachusetts
 City/Town of
Septic System Installation Checklist

DEP has provided this form for use by local Boards of Health if they wish to do so.

A. Applicant Information

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



Name _____

Address _____

City _____ State _____ Zip Code _____

Disposal System Construction Permit # _____ Map _____ Lot _____

Installer _____

Designer _____

Board of Health Representative _____

Inspection Dates:

Tank: _____ Date _____ Leach Area: _____ Date _____

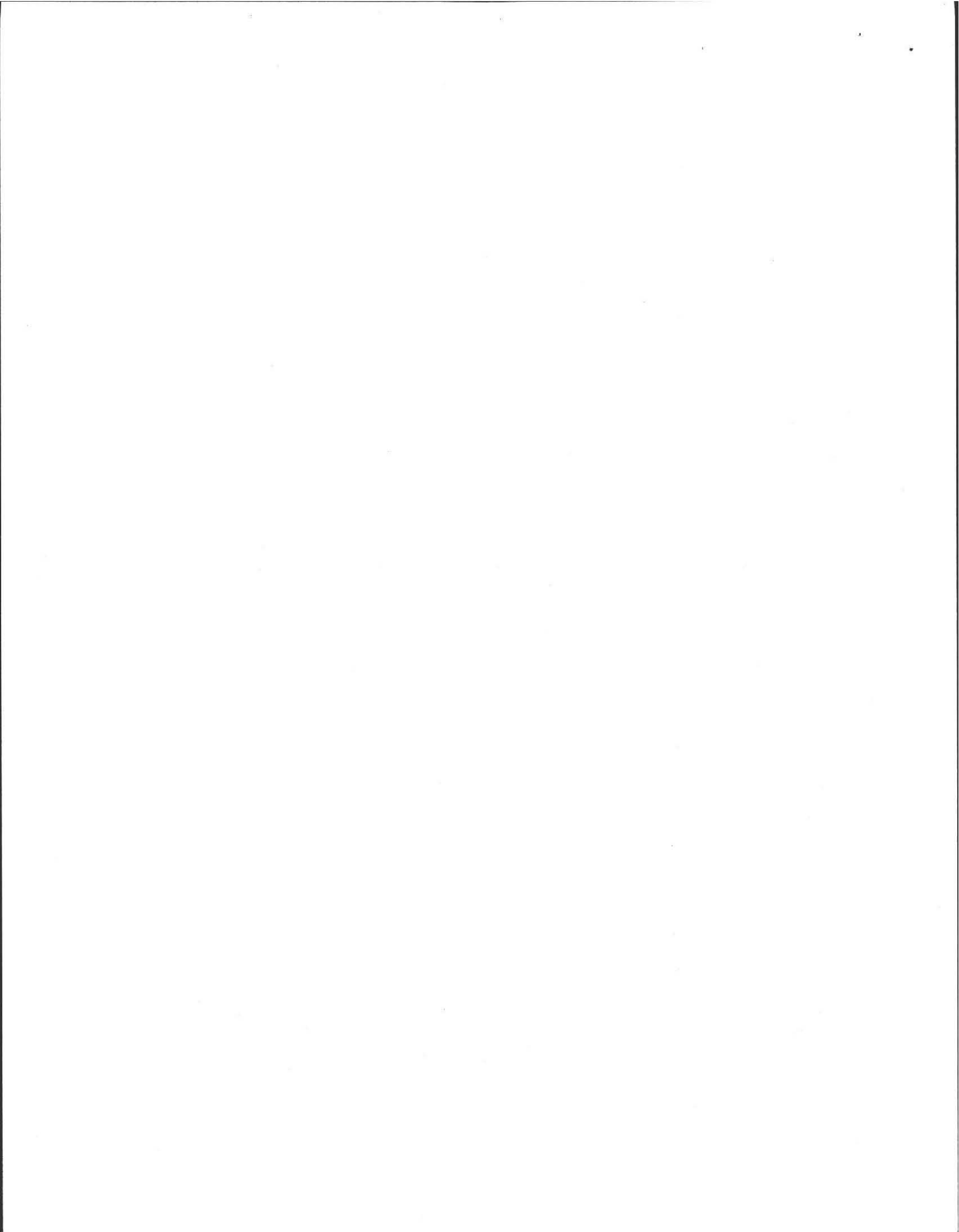
Final: _____ Date _____ Other: _____ Date _____

B. Application Checklist

1. Pre-Construction Conference	Approved	N/A	Problem
Sieve analysis supplied for sand	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Current approved plans (3 copies)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
System staked prior to construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
On-site check for tank water-tightness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Abandonment of existing system (repairs)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan revision(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Conditions/Approvals	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
O/M Plan on file	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DEP approval on file	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*UNDERGROUND SUPPLY →
 REMOVED MOSTLY
 SOME CRUSHED + BURIED*

*SUPPLIED ARROW (CT)
 GALLERY OF LEECH TRENCHES*





Commonwealth of Massachusetts

City/Town of

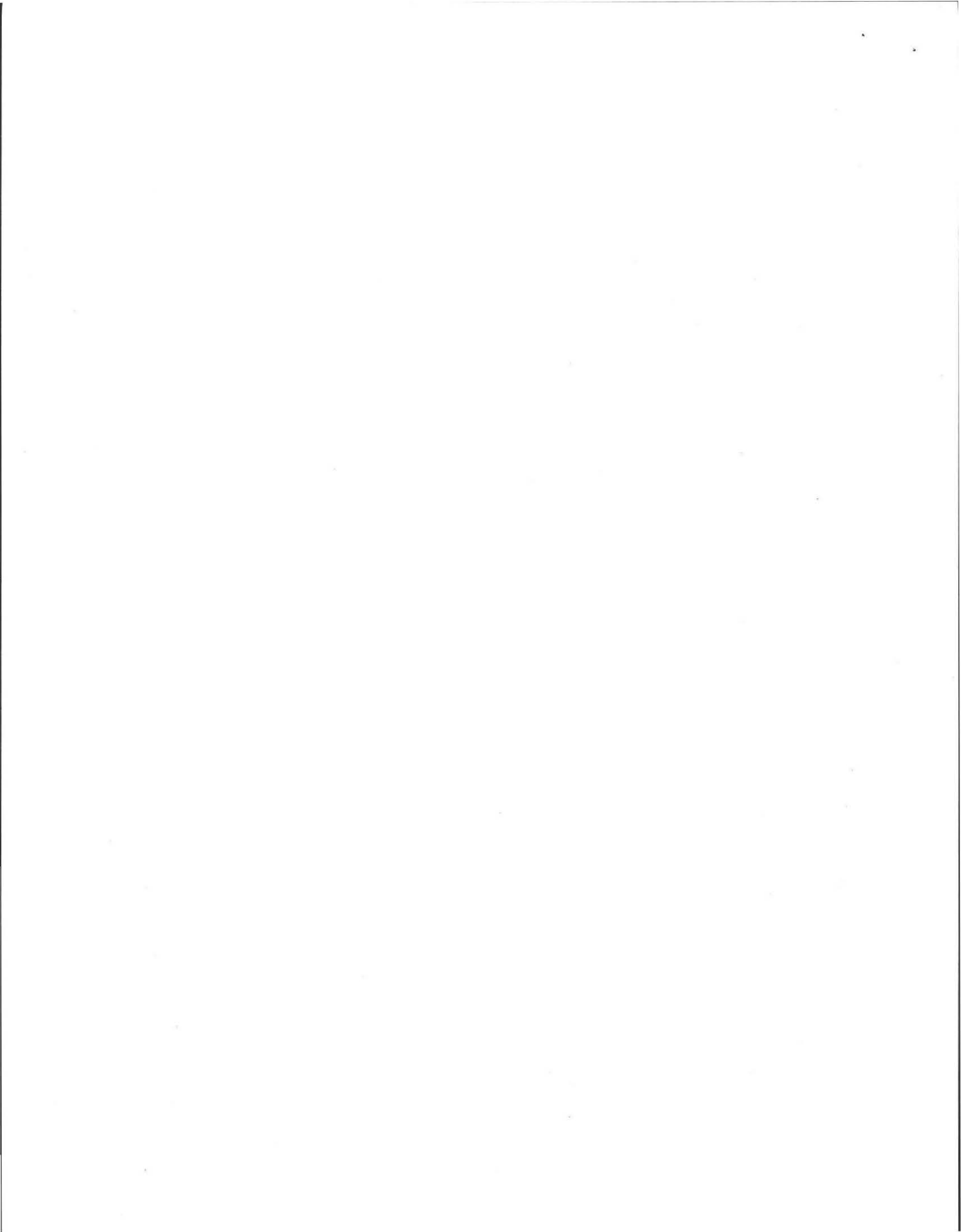
Septic System Installation Checklist

B. Application Checklist (cont.)

2. Construction Inspection

		Approved	N/A	Problem
a) Building Sewer (310 CMR 15.222)				
All waste pipes tied into building sewer	Basement check	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schedule 40 PVC 4" or cast iron	Verify by reading pipe	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minimum slope of 0.01-0.02	Visual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pipe laid in continuous straight line	Visual	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pipe laid on compact, firm base	Visual	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cleanouts precede all changes in alignment/grade	Verify by visual/tape	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cleanout provided every 100 ft.	Verify by visual/tape	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Backfill material clean	Visual	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Septic Tank (310 CMR 15.223)				
Tank is set level with 6" stone under (15.228)	Check with level	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tank is required size/loading per plan	Verify with plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inlet and outlet are at proper location (15.227)	Verify with plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tank is water tight (15.226)	Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outlet tees extend 6" above flow line	Verify by visual/tape	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Approved filter device placed at outlet	DEP list	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gas baffle installed at outlet tee	Visual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inlet and outlet tees on center line	Visual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tank is backfilled with acceptable material	Visual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes:



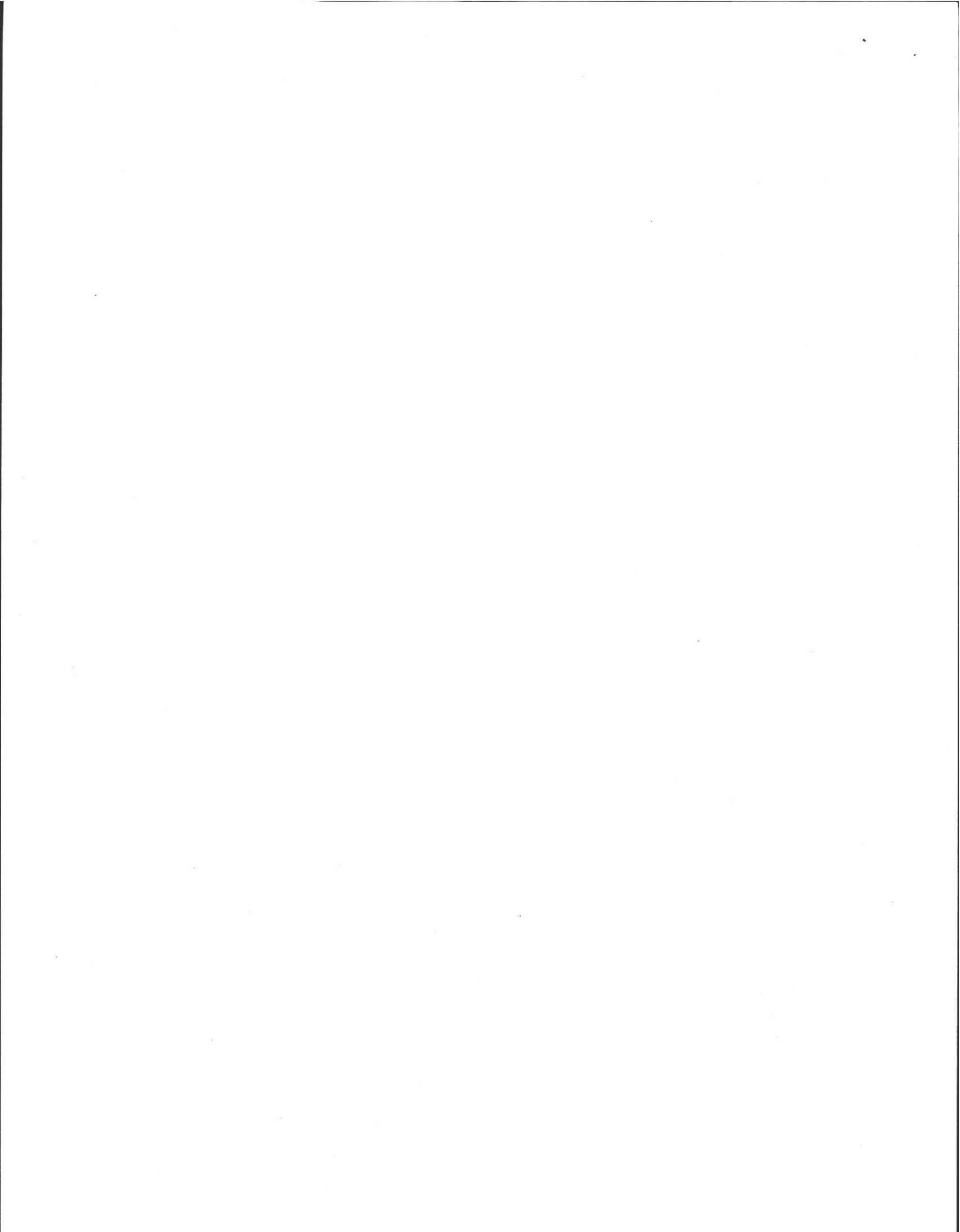


Commonwealth of Massachusetts
 City/Town of
Septic System Installation Checklist

B. Application Checklist (cont.)

		Approved	N/A	Problem
c) Distribution Box (310 CMR 15.232)				
All outlet pipes at same elevation	Check by adding water	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Number of outlets _____ per plan	Number of laterals _____ per plan			
Inlet tee min. 1" over outlet	Visual and w/tape	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D box set on level base	Visual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Top of D box 36" max depth	Visual and w/tape	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D box is water-tight	Add water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D box has a minimum of 2" thick wall and 12" inside dimension		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Pump Chamber (310 CMR 15.231)				
Tank is set level	Visual and w/level	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proper volume is provided	Check plan and tank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Float elevations set per plan	Measure w/tape	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Min. 2" delivery line to D box	Visual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number of pumps: _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specified pump provided or designers approval for equal pump		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct pump sequence		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Covers set to grade		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electrical permit provided		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6" of stone beneath chamber	Visual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chamber is water-tight	Test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Min. 9" cover provided	Visual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct loading provided per plan	Visual on tank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes:

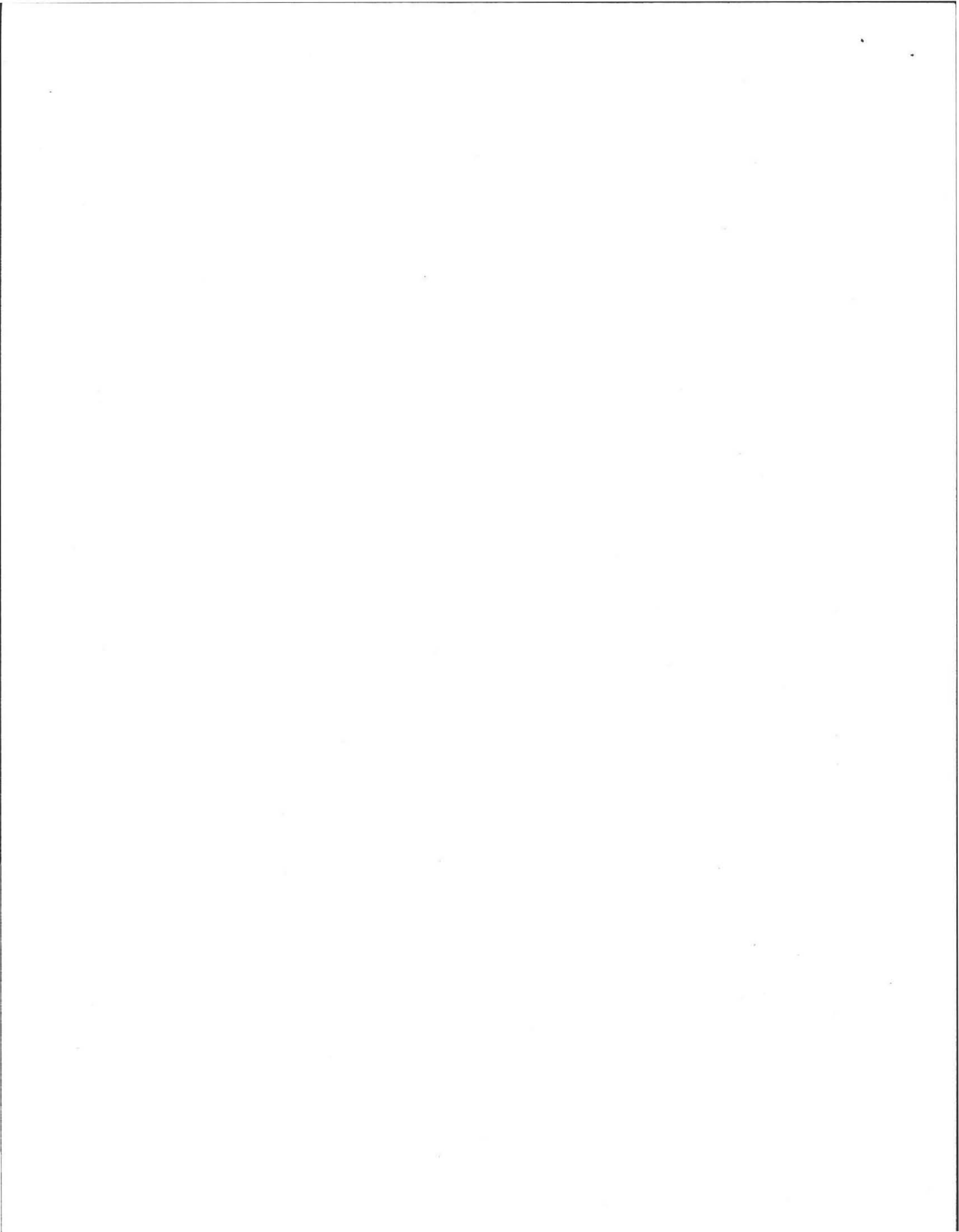




Commonwealth of Massachusetts
 City/Town of
Septic System Installation Checklist

B. Application Checklist (cont.)

		Approved	N/A	Problem
e) Leaching Facility (310 CMR 15.240)				
No frozen material used including back fill	Visual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No clay, tailings or stones larger than 6" for cover material		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soil at bottom/sides of excavation matches info on deep holes		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All impervious layers removed	Visual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No remaining A/B horizons	Visual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Groundwater conditions match plan and deep holes	Visual/check plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vented if under impervious cover per plan (15.241)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vent is protected from precipitation and animal entry		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cover of a minimum of 9" over leach area		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pipe slope equal to 0.005	Check w/transit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leach area per design (15.241)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Excavation is level and at required depth	Visual/check plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Removal of 5 ft material and replacement (if in fill)	Visual/check plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Back fill material is acceptable	Visual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Final contours correct per plan	Check with plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface/subsurface drainage away from leach area		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Final grade and side slopes are stable		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Distribution lines are capped, vented, or connected together		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Impermeable barrier (15.255[2])		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retaining wall inspected by PE		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retaining wall is water-proofed		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retaining wall/barrier is at correct depth/height		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





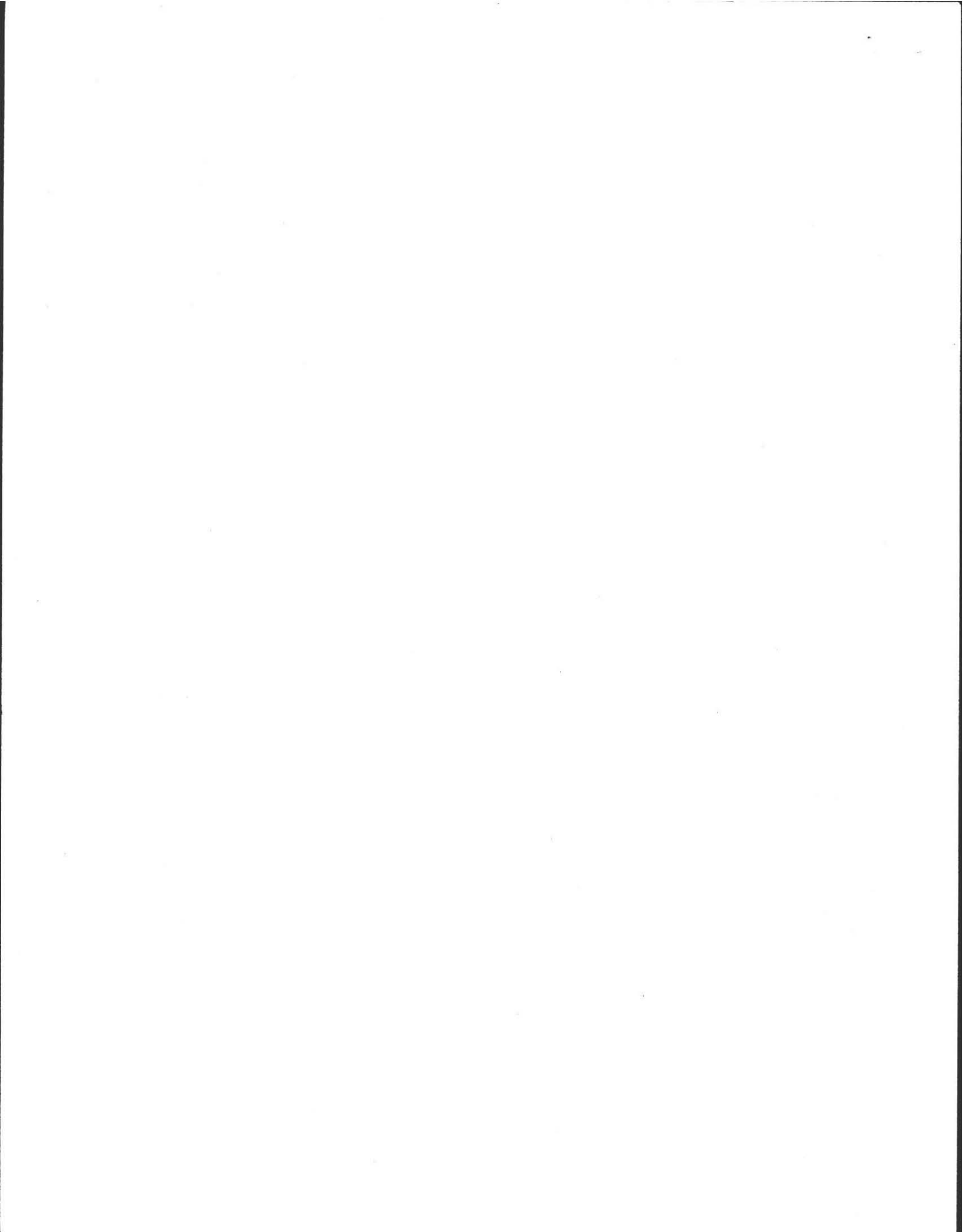
Commonwealth of Massachusetts

City/Town of

Septic System Installation Checklist

B. Application Checklist (cont.)

		Approved	N/A	Problem
f) Leaching trenches (310 CMR 15.251)				
Number of trenches:	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Depth of trenches:	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Width of trenches:	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trench spacing per plan		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stone is double-washed [3/4" to 1 1/2"] (15.247)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Leaching fields (310 CMR 15.242)				
Length of field:	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Width of field:	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Min. of 2 distribution lines		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Separation distance conforms to plan		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stone is double-washed [3/4" to 1 1/2"] (15.247)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Leaching Pits (310 CMR 15.253)				
Number of pits:	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Depth of pits:	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stone is double-washed [3/4" to 1 1/2"] (15.247)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Each pit has min. 1 20" access cover		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Piping network and configuration of pits/chambers per plan		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Tight Tank (310 CMR 15.260)				
Tank is set level with 6" stone under	Visual and with level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tank is proper size per plan	Visual with plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pumping contract has been provided		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Covers to grade	Visual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A/V alarm set at 3/5 tank capacity	Check floats by raising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A/V alarm test on separate circuit	Set off alarm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





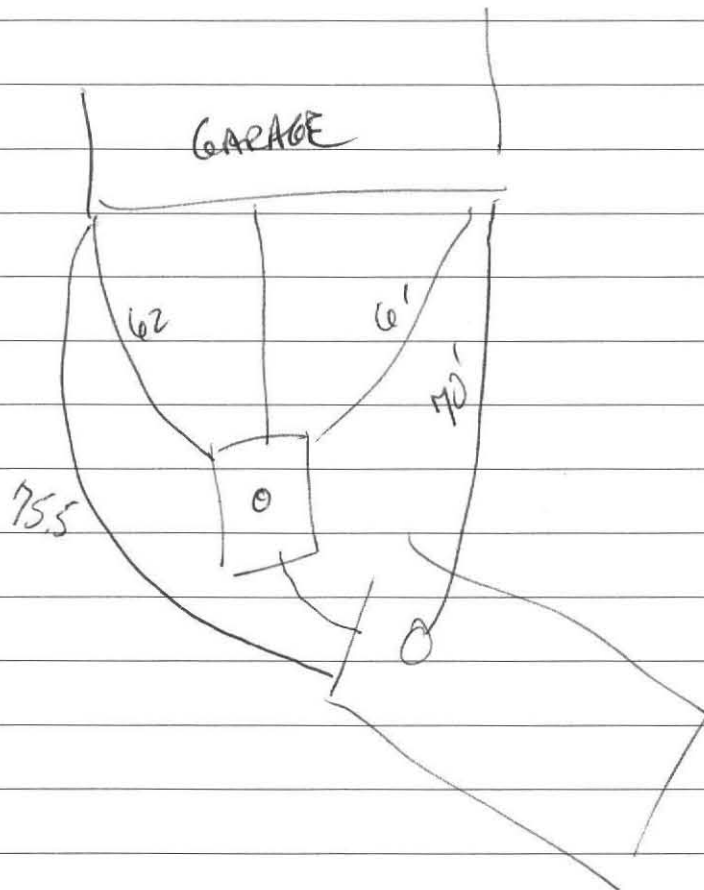
Commonwealth of Massachusetts
City/Town of
Septic System Installation Checklist

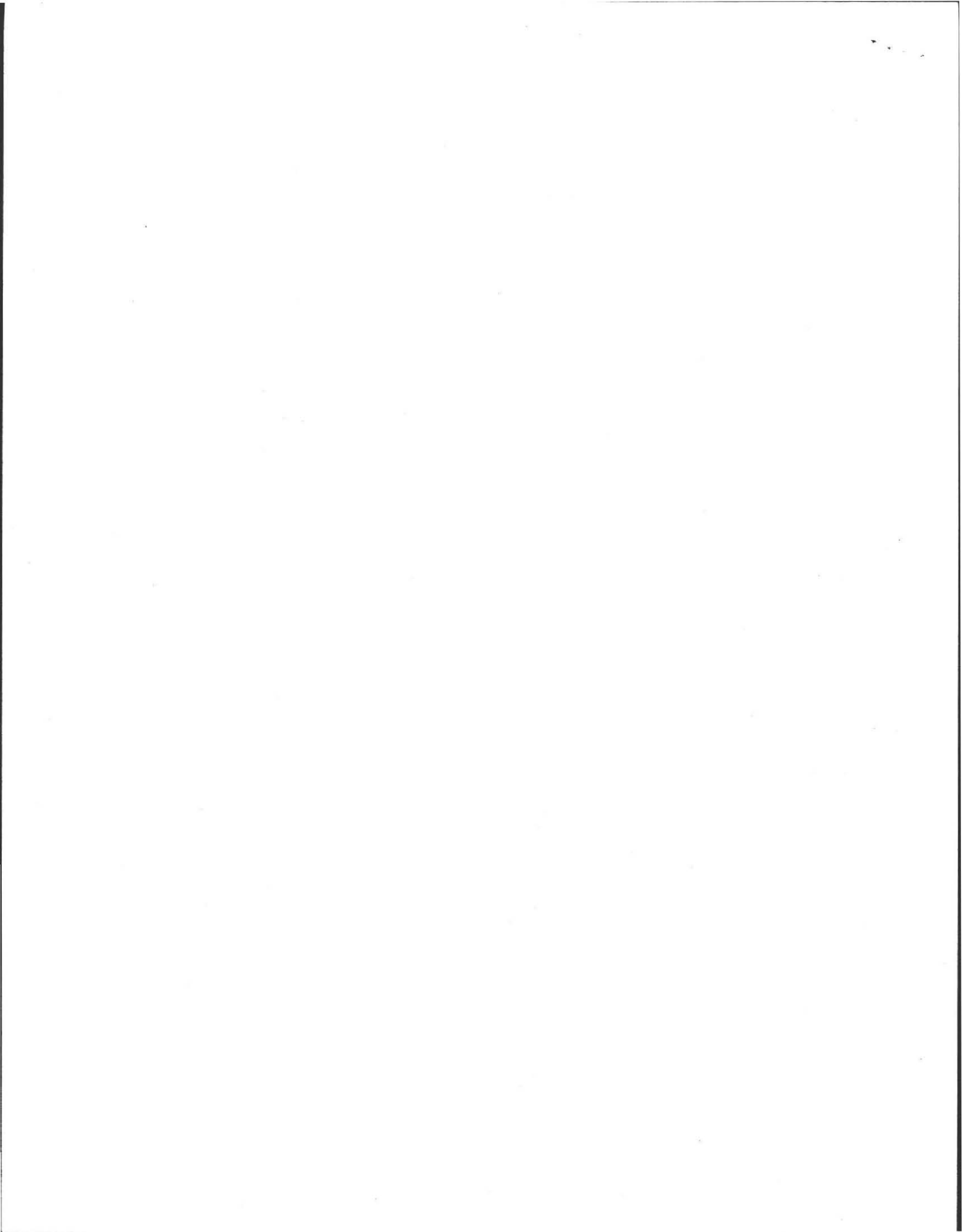
B. Application Checklist (cont.)

j) Certificate of Compliance (310 CMR 15.021)

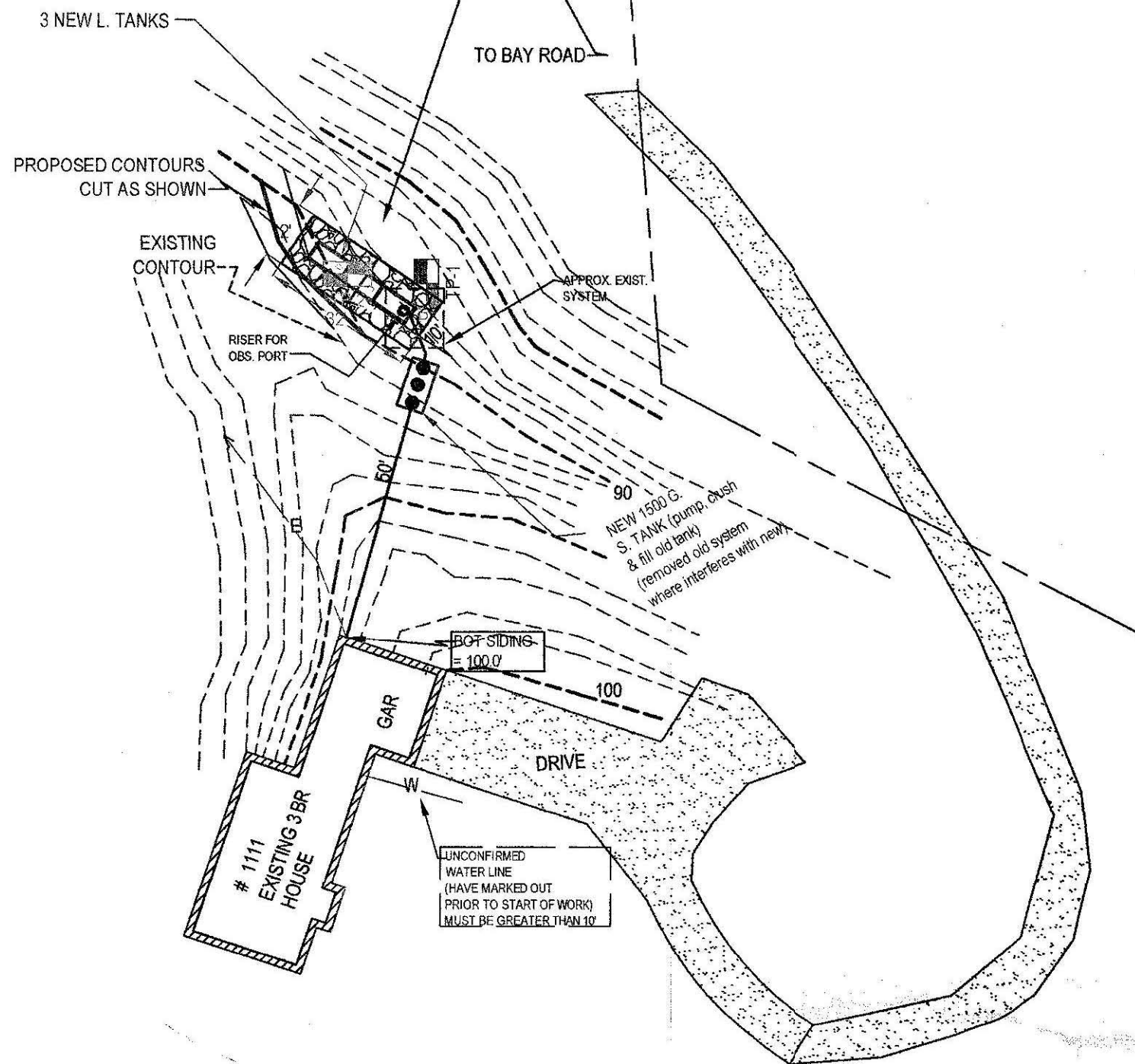
As Built Plan Submitted	_____
	Date
Signed by Installer	_____
	Date
Signed by Designer	_____
	Date
Certificate of Compliance Issued	_____
	Date

Notes:

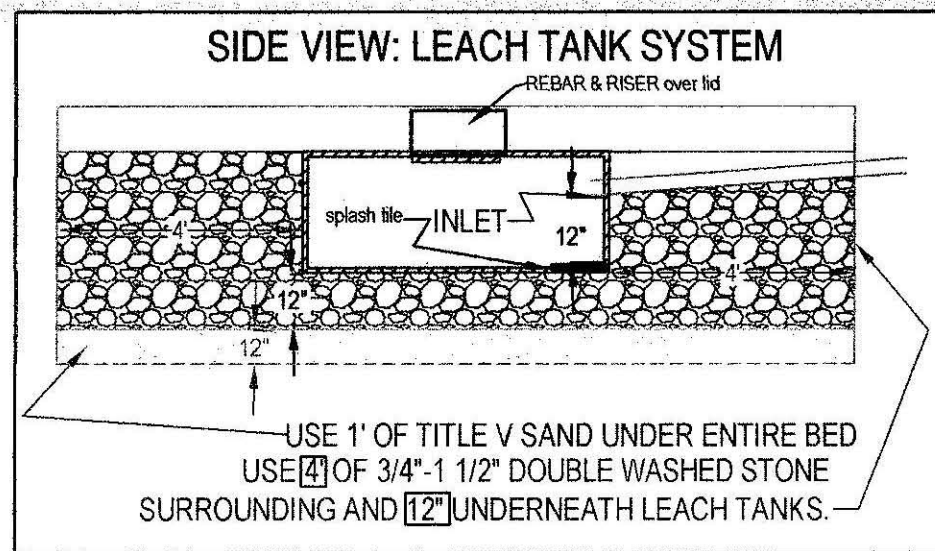
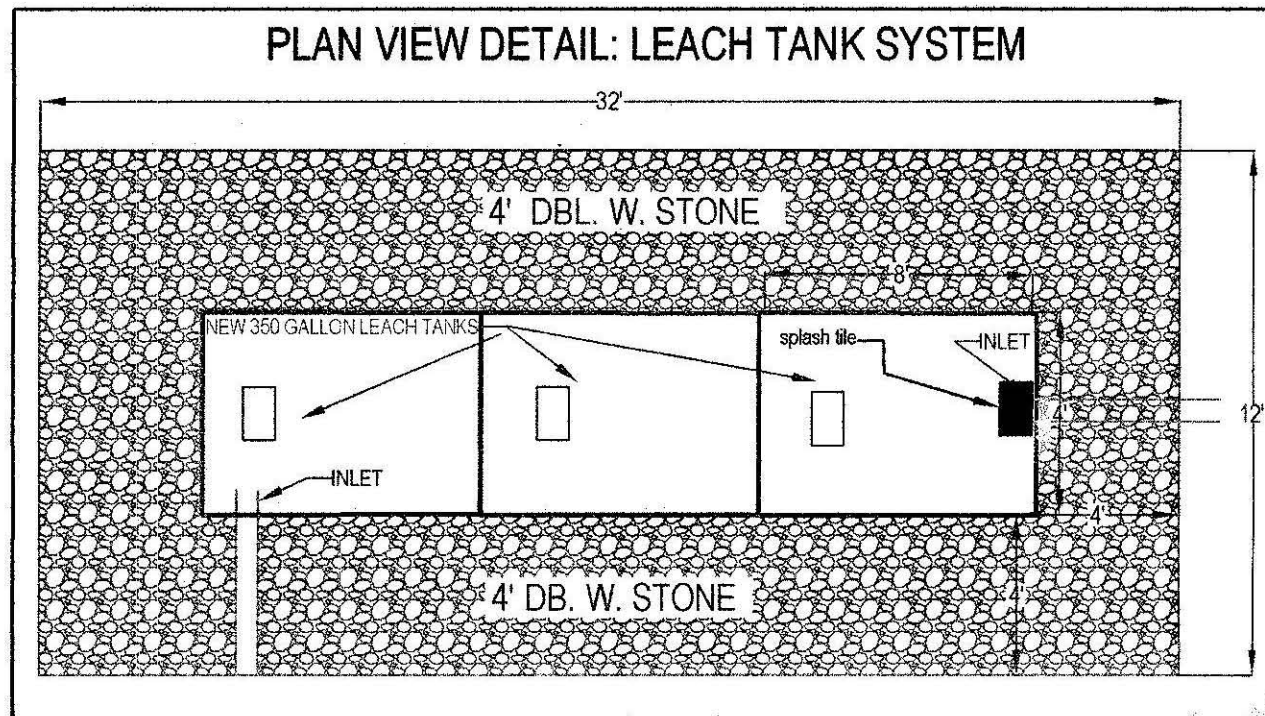
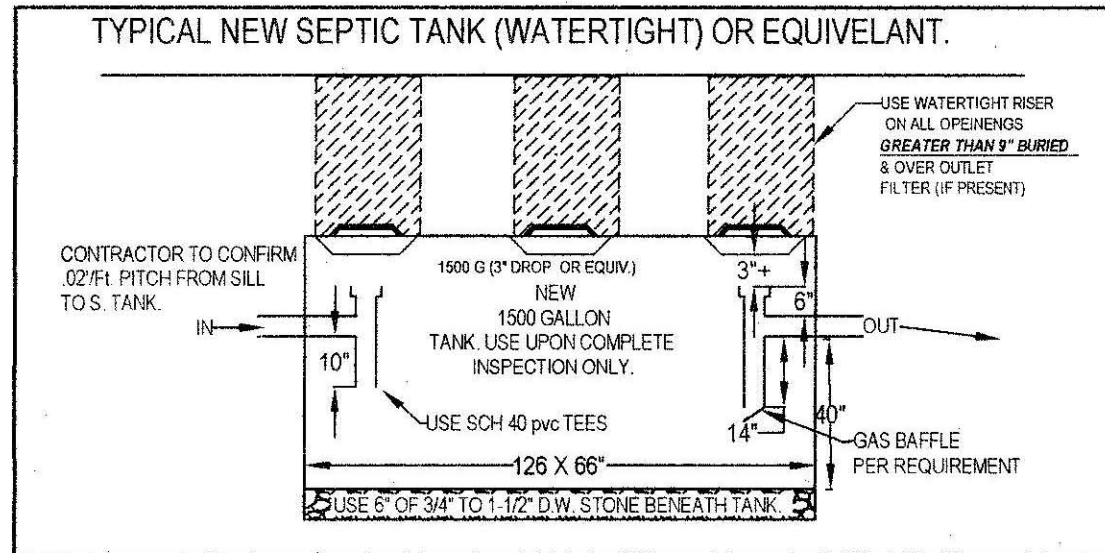




SLOPING WORK AREA CONDITIONS:
 Work Area adjacent slope may require review for erosion control and drainage patterns during and after construction. Erosion control during the construction period is recommended with double staked haybales (or equiv.)
HEAVILY MULCH ALL OPEN AREAS AFTER COMPLETION FOR STABILITY DURING RE-GROWTH OF COVER VEGETATION.



PLOT PLAN
MAP 30b LOT36
SCALE: 1"=30'
7.40± Ac.

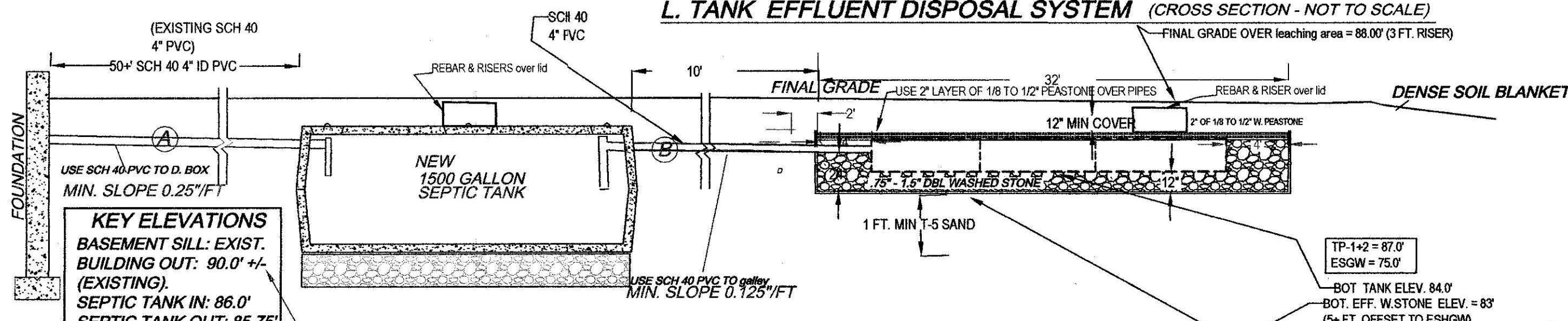


lot layout from R. IZER, RLS,

GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER.

- HAVE TANK PUMPED EVERY 2 YEARS.
- MAINTAIN AREA OVER SEPTIC SYSTEM AS GRASSY OR SIMILAR GROUND COVER.
- DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF SYSTEM.
- USE ONLY LIQUID DETERGENTS & LOW FLOW WASHERS.
- WIPE ALL OIL AND GREASE FROM COOKWARE AND DISPOSE IN TRASH NOT SEPTIC.
- All Toilets and Faucets must be confirmed to not be leaking, because one leaking fixture can fail a septic system in ONE DAY.**

L. TANK EFFLUENT DISPOSAL SYSTEM (CROSS SECTION - NOT TO SCALE)



KEY ELEVATIONS
 BASEMENT SILL: EXIST.
 BUILDING OUT: 90.0' +/- (EXISTING).
 SEPTIC TANK IN: 86.0'
 SEPTIC TANK OUT: 85.75'
 L. TANK IN: 85.00'

NOTE TO INSTALLER, RAISE TANK IF PIPING PITCH ALLOWS, TRACE SEWER PIPE TO HOUSE AS FAR AS POSSIBLE MAINTAIN 2% PITCH IF POSSIBLE. IF EXISTING PITCH IS GREATER L. TANK AND S. TANK TO BE RAISED

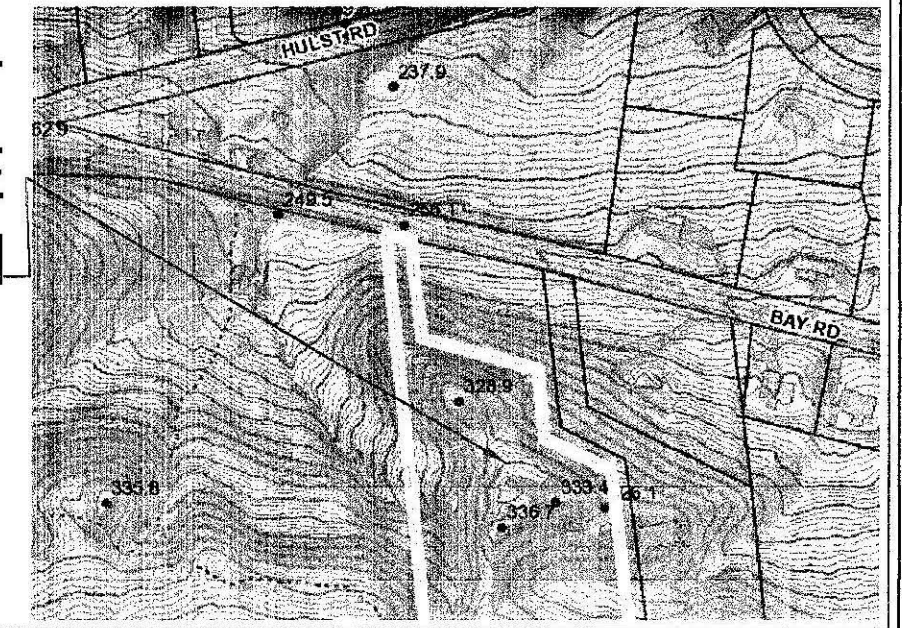
NOTES:
 - TOPSOIL AND ORGANIC MATERIAL TO BE REMOVED FROM DISPOSAL AREA PRIOR TO PLACING SAND OR FILL.
 - FINAL GRADING TO SHED SURFACE WATER AWAY FROM SYSTEM COMPONENTS. -MIN 10' / MAX 18" COVER OVER PIPE

ATTENTION INSTALLER!!
 CALL DIG SAFE BEFORE YOU DIG! MASSACHUSETTS STATE LAW CHAPTER 82 SECTIONS 4 - 40E REQUIRE THAT PREMARKING OF GAS, ELECTRIC, WATER, TELEPHONE AND CABLE T.V. UTILITY LINES BE MADE A MINIMUM OF 72 HOURS PRIOR TO GROUND BREAK FOR ANY EXCAVATION.

NOTE: INSTALLER MUST CONTACT ENGINEER/BD OF HEALTH 48 HOURS PRIOR TO SUBGRADE INSPECTION. INSTALLER MUST HAVE ALL BREAK OUT FILL ON SITE AND IN PLACE PRIOR TO SIGN OFF BY ENGINEER AT TIME OF FINAL INSPECTION OR APPROVAL WILL NOT BE GIVEN TO BACKFILL.



SUBJECT SITE LOCATION



DESIGN NOTES AND CALCULATIONS:

- 3 (BEDROOM HOME) = 330 GPD. REQUIRED.
 - Use Three 300 gal. 4' X 8' chamber GALLERY: 12' WIDE X 32' LONG WITH 24" OF 3/4" TO 1 1/2" DBL WASHED STONE BELOW INVERT
 - BOTTOM AREA: 3 galleys X (12' W X 32' L) = 384 SF.
 - SIDE AREA: 3 GALLEYS X (2' HT X 32' L) X 2 SIDES = 128 SF
 - END AREA: 2 ENDS X (2.0' HT X 12' W) X 2 ENDS = 48 SF.
 - TOTAL AREA: 560 SF X .74 GAL/SF = 414 GPD
- GARBAGE DISPOSAL NOT ALLOWED, ... MUST BE REMOVED****
- NO OTHER PRIVATE WELLS WITHIN 150 FEET OF SAS. (Town water)
- NO OTHER WETLANDS WITHIN 100 FEET OF SAS,
- USE NEW 1,500 GAL S. TANK AS NOTED & MAINTAIN 0.02 PITCH FROM SILL TO S. TANK
 - INSTALL & INSPECT SICH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET),
 NOTE:
 - ALL COMPONENTS OF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO MAINTAIN 3" CLEARANCE FROM TOP OF TEES TO BOTTOM OF TANK COVERS & BOXES.
- ALL PLASTIC RISERS MUST BE SECURED WITH STAINLESS STEEL SCREWS.
- USE APPROVED (.75"-1 1/2") DBL. WASHED STONE UNDER TANK FOR 6".
 - CONFIRM STONE PROPERLY WASHED & STABLE PRIOR TO PLACEMENT.
- USE PROPER SCH. 40 PVC TEES AS SHOWN.
- PRE & POST CONTOURS NOTED AS NECESSARY, RESERVE AS NOTED (not required for repairs).
- SLOPE CALCS (SEE CONTOURS), SUBGRADE INSP. REQ'D.
- GALLEYS DUE TO TOPOGRAPHY AND SPACE OF LOT WITH RESPECT TO LOCATION AND ELEVATION OF RESIDENCE & PIPING UNDER SLAB (310 CMR 15.240)
- USE 2% MIN. SLOPE OVER SAS
 - CLEAR TOP AND SUBJ TO 28" MIN. AS NEEDED (INSPECTION REQUIRED).
 - CLEAR PAST BASE OF B (MIN. 28") & SCARIFY UNDER TRENCH PRIOR TO TITLE V SAND /STONE PLACEMENT.
 - EXCAVATE EXISTING LOAM, SUB AND ANY EXISTING DEBRIS, DIRTY FILL OR PRIOR SYSTEM IF PRESENT.
- SOIL EVALUATION BY A. WEISS, RS. (E. Smith, BOH AGENT).
 - DEPTH OF PERC. 58"
 - PERC RATE = <2 MIN / IN,
 - CLASS 1, M. SAND SOIL RATING
- NO TREES WITHIN 10 FT. OF NEW LEACH AREA.
- ENGINEER & TOWN TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL
- BM=100.00 @ (BOT. GAR. SIDING, as noted), CONFIRM PROPER PIPE SLOPES
 - USE/INSPECT SCH. 40 PIPE FOR PIPE FROM HOUSE TO NEW OR EXISTING TANK
- GRADE MULCH AND SEED OVER SAS AS NOTED.
- INSTALLATION IN LOW GROUND/WATER SEASON RECOMMENDED.
- USE OBSERVATION PORT NEAR CENTER OF STONE BED HAVE 4" PERFORATED, PVC INSPECTION PORTALS TO BOTTOM OF STONIE BED, WITH RISER TO 3" OF SURFACE & THREADED CAP & MARK WITH RE-BAR.

TEST PIT LOG:

TP-1				TP-2					
DEPTH	HORIZ.	TEXTURE	COLOR (MUNSELL)	MATERIAL	DEPTH	HORIZ.	TEXTURE	COLOR (MUNSELL)	MATERIAL
0-8"	Ap	FSL	10 YR 3.2	FRIABLE	0-22"	Ap	FSL	10 YR 3.2	FRIABLE
8-24"	Bw	LS	10 YR 4.6	FRIABLE, F. SANDY	22-30"	Bw	LS	10 YR 4.6	FRIABLE, F. SANDY
24-144"	C1	MS	10 YR 4.4	MS AND CS, LOOSE well sorted, granular	30-128"	C1	MS	10 YR 4.4	MS & CS. well sorted, granular (OLD SYSTEM)
OXIDES: NOT OBSERVED				OXIDES: NOT OBSERVED					
EHW: 144"+				EHW: -					
STANDING H2O: NOT OBSERVED				STANDING H2O: NOT OBSERVED					
WEEPING: NOT OBSERVED				WEEPING: NOT OBSERVED					
BEDROCK: 144"+				BEDROCK: -					

SEPTIC SYSTEM REPAIR PLAN FOR DEBORAH GWERTZ AND FRED ERRINGTON
 1111 BAY ROAD
 AMHERST, MA

Cold Spring Environmental Consultants Inc.
 350 Old Enfield Road
 Belchertown, MA. 01007

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DATE: 03.03.2012
 SCALE: 1"=30'
 DRAWN BY: ALAN WEISS
 REVISIONS:
 DRAWING NUMBER: 112.3824.0224

