



April 17, 2012

Ms. Nancy Preston Sabin
2346 North Greenbush Road
Charlotte, Vermont 05445

RE: Proposed Two-Unit Apartment Building
2348 North Greenbush Road, Charlotte, VT

Dear Ms. Sabin:

Enclosed, you will find the completed wastewater disposal and water supply system plans and the Town of Charlotte wastewater permit application for your review. Please sign and date the permit application and Act 145 certification statement where indicated, attach a check for \$500.00 made payable to the Town of Charlotte, and then forward the application package to the Town Office in the enclosed envelope. The additional two copies are for your records and for your contractors use (Wes Patnaude).

If you have any questions, or if we can provide further assistance, please contact me directly at (800) 477-4384.

Respectfully,
Lincoln Applied Geology, Inc.

Elias J. Erwin
Licensed Class B Designer #503

EE/SR/ih

Enclosures

F:\CLIENTS\2008\08086.1\State Permit\Client Cover Ltr.doc



April 17, 2012

Mr. Thomas Mansfield, Zoning Administrator
Mr. Spencer Harris, Septic Consultant
Town of Charlotte
P.O. Box 119
Charlotte, VT 05445

RE: Sabin Property - Developed +/- 2.54 Acre Parcel
Proposed Two-Unit Apartment Building
2346 North Greenbush Road, Charlotte, Vermont

Dear Mr. Mansfield and Mr. Harris:

Accompanying this letter is a signed Act 145 Certification Statement, a Wastewater Permit Application with a permit fee of \$500.00, a signed Act 145 certification statement, two full scale copies of the Plan Sheets 1 and 2, a reduced (11" x 17") copy of Plan Sheet 1 and 2, a system design letter and the attachments, and a CD of the complete package.

If you have any questions regarding the content of this letter or if we can provide additional information regarding this permit application, please contact me at (800) 477-4384.

Respectfully,
Lincoln Applied Geology, Inc.

Elias Erwin
Licensed Class B Designer #503

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April 17, 2012

Mr. Thomas Mansfield, Zoning Administrator
Mr. Spencer Harris, Septic Consultant
Town of Charlotte
P.O. Box 119
Charlotte, VT 05445

RE: Sabin Property – Developed +/- 2.54 Acre Parcel
Proposed Two-Unit Apartment Building
2346 North Greenbush Road, Charlotte, Vermont

Dear Mr. Mansfield and Mr. Harris:

Nancy Preston Sabin owns a year-round six (6) bedroom single family residence (SFR) with a one bedroom apartment on a +/- 2.54 acre parcel located at 2346 and 2350 North Greenbush Road in Charlotte, VT. An additional building is located on the lot which was used as a store formerly known as “Needle Works”. This building is located at 2348 North Greenbush Road and it is currently unoccupied and uninhabited. The six bedroom single family residence (SFR) with a one bedroom apartment is served by an existing on-site drilled bedrock water supply well (Tag# 8422). An additional drilled bedrock water supply well is located on the property and it is believed to serve the former store. Currently, individual on-site wastewater disposal systems serve each structure. Each existing wastewater disposal system consists of a 1,000 gallon precast concrete septic tank and either a drywell and/or an in-ground leachfield. Ms. Sabin would like to convert the former store into a two-unit apartment building that will contain a total of three bedrooms. In order to do so, Lincoln Applied Geology, Inc. (LAG) proposes the installation of an updated and fully complying shared in-ground absorption trench-type wastewater disposal system and utilize the existing drilled bedrock water supply wells. The existing site and soil conditions along with the proposed shared wastewater disposal system and the new water supply system for the two-unit apartment are described below in greater detail.

On December 2, 2008, I performed a site and soil evaluation on the property’s south lawn. In general, this area has a gentle uniform slope (+/-4%) toward the south and a pond located at the southwest corner of the parcel. This area was targeted for soil evaluation due to the lateral separation from the existing water supply well and favorable site conditions. A total of four test pits were installed and each test pit location is shown on Plan Sheet 1. The soil profile in each test pit was evaluated and a detailed description of the soil observed in each test pit is included as Attachment A. Review of the soil logs indicates that dark brown sandy loam and brown fine sandy loam overlies brown gravelly sand. No evidence of seasonal high ground water and/or ledge was encountered to a minimum depth of 78” below grade (bg). In general, the entire soil

profile is considered well drained. Furthermore, two percolation tests were performed adjacent to Test Pit #1 (TP-1) and TP-3. The results of the percolation testing are also included in Attachment A. Review of the testing data indicates that a percolation rate of 5.3 minutes per inch (min/in) and 6.0 min/in were recorded at Percolation Test #1 (P-1) and P-2, respectively. Therefore, based on the second slowest percolation rate (6.0 min/in), an application rate of 1.2 gallon per day per square foot (gpd/ft²) was calculated and used as the basis of design for the proposed shared primary and replacement in-ground absorption trench type disposal system. Based on the favorable results of the evaluation, it was determined that a fully complying in-ground absorption trench-type wastewater disposal system will meet existing site and soil conditions.

The wastewater flows associated with the proposed disposal system were determined by the total number of proposed bedrooms. Therefore, a six-bedroom SFR [630 gallons per day (gpd)] plus a one bedroom apartment (140 gpd) equals 770 gpd. The proposed two-unit apartment includes three bedrooms which equals an additional 420 gpd. In total, the proposed shared wastewater disposal system will accommodate a design flow rate of 1,190 gpd.

Wastewater from each structure will gravity discharge to individual septic tanks. The existing SFR, with the single bedroom apartment, will require a new 1,500 gallon precast concrete septic tank fit with an effluent filter and water tight access risers set to grade. The proposed two-unit apartment will utilize the existing 1,000 gallon precast septic tank that served the former store. This tank will be retrofit with an effluent filter and watertight access risers set to grade. From the septic tanks, effluent will gravity drain to a proposed five-hole gravity distribution box. Effluent will then be evenly distributed to four 4' by 62' in-ground absorption trenches. Using the calculated loading rate of 1.2 gpd/ft², the proposed in-ground disposal system meets the required application area by providing 992 ft² ($1,190 \text{ gpd} / 1.2 \text{ gpd/ft}^2 = 992 \text{ ft}^2$). All proposed wastewater disposal system components and specifications are shown on Plan Sheets 1 and 2.

The drilled bedrock well (Tag# 844) and the water supply system currently serving the existing SFR with a single bedroom apartment are preexisting and will remain unchanged. The new water system serving the two-unit apartment will consist of the existing drilled bedrock well, a submersible pump set in the drilled well, a minimum of 160 psi 1" diameter polyethylene pipe from the pump to the pitless adapter in the well casing, and from the pitless adapter to a hydropneumatic pressure tank located in the proposed apartment. In the apartment, the water system will consist of a 1" brass check valve, hose bib, a hydropneumatic pressure tank with a pressure switch (40 psi cut-in and 60 psi cut-out), pressure gauge, pressure relief valve, brass ball valve, and copper pipe to distribute water. The electrical wiring will extend from the pump to the pressure switch and electric service panel in the building. We acknowledge that an amendment will be required at the point that the water system is installed to prove maximum daily

demand (0.58 gpm), instantaneous peak demand (10 gpm), and water quality are sufficient for the proposed two-unit apartment. The existing drilled bedrock water supply wells are shown on Plan Sheet 1 along with the required well isolation shields for each. The water system details are included on Plan Sheet 3.

Accompanying this letter are the attachments, a signed Act 145 Certification Statement, a signed Wastewater Permit Application with a permit fee of \$500.00, two full scale copies of the Plan Sheets 1 and 2, one reduced (11" x 17") copy of Plan Sheets 1 and 2, and one CD of the complete application package. We look forward to your favorable review as Ms. Sabin would like to proceed with the installation of the wastewater disposal system and the proposed apartment as soon as possible.

If you have any questions or if we can provide additional information regarding the content of this permit application, please contact me directly at (800) 477-4384.

Respectfully,
Lincoln Applied Geology, Inc.



A handwritten signature in black ink, appearing to read "E. J. Erwin".

Elias J. Erwin
Licensed Class B Designer #503

EE/SR:ih
Enclosures

Attachment A

Soil Evaluation and Percolation Test Results

**Sabin Property
2346 North Greenbush Road
Charlotte, Vermont
Soil Evaluation performed by Elias J. Erwin, Licensed Class B Designer #503
December 2, 2008**

All test pits are located on the southern portion of the property.

Test Pit #1 (TP-1)

- 0-12" Dark brown sandy loam, loose, crumb structure, many fine to medium roots, well drained.
- 12-33" Brown fine sandy loam, loose to friable, fine blocky structure, few fine roots many medium roots, well drained.
- 33-78" Brown gravelly sand, very loose, granular well drained, no mottles, ledge or ground water to depth.

Test Pit #2 (TP-2)

- 0-17" Dark brown sandy loam, loose, crumb structure, many fine to medium roots, well drained.
- 12-42" Brown fine sandy loam, loose to friable, fine blocky structure, few fine roots many medium roots, well drained.
- 42-80" Brown gravelly sand, very loose, granular, well drained, no mottles, ledge or ground water to depth.

Test Pit #3 (TP-3)

- 0-14" Dark brown sandy loam, loose, crumb structure, many fine to medium roots, well drained.
- 14-37" Brown fine sandy loam, loose to friable, fine blocky structure few fine roots many medium roots, well drained.
- 27-78" Brown gravelly sand, very loose, well drained, no mottles ledge or ground water to depth.

Test Pit #4 (TP-4)

- 0-18" Dark brown sandy loam, loose, crumb structure, many fine to medium roots, well drained.
- 18-38" Brown fine sandy loam, loose to friable, fine blocky structure few fine roots many medium roots, well drained.
- 38-78" Brown gravelly sand, very loose, well drained, no mottles ledge or ground water to depth.

**Sabin Property
North Greenbush Road
Charlotte, Vermont
Percolation Test Results**

All tests were performed on December 2, 2008 at a depth of 24"

PT-1	Drop Time (min)	Total Drop Time (min)	Total Drop (inches)	Drop Rate (min/inch)
	3.0	3.0	1	3.0
	3.6	6.6	2	3.3
	3.8	10.4	3	3.5
	3.9	14.3	4	3.6
	4.0	18.3	5	3.7
	4.1	22.4	6	3.7
	4.2	26.6	7	3.8
	---	1440.0	---	5.3

PT-2	Drop Time (min)	Total Drop Time (min)	Total Drop (inches)	Drop Rate (min/inch)
	3.2	3.2	1	3.2
	3.9	7.1	2	3.6
	4.2	11.3	3	3.8
	4.3	15.6	4	3.9
	4.5	20.1	5	4.0
	4.6	24.7	6	4.1
	4.7	29.4	7	4.2
	---	1440.0	---	6.0

***NOTE:**

Drop time includes fill time for each of the seven runs.

Table 1

Sabin Property
North Greenbush Road
Charlotte, Vermont
Percolation Test Results
All tests were performed on December 2, 2008 at a depth of 24"

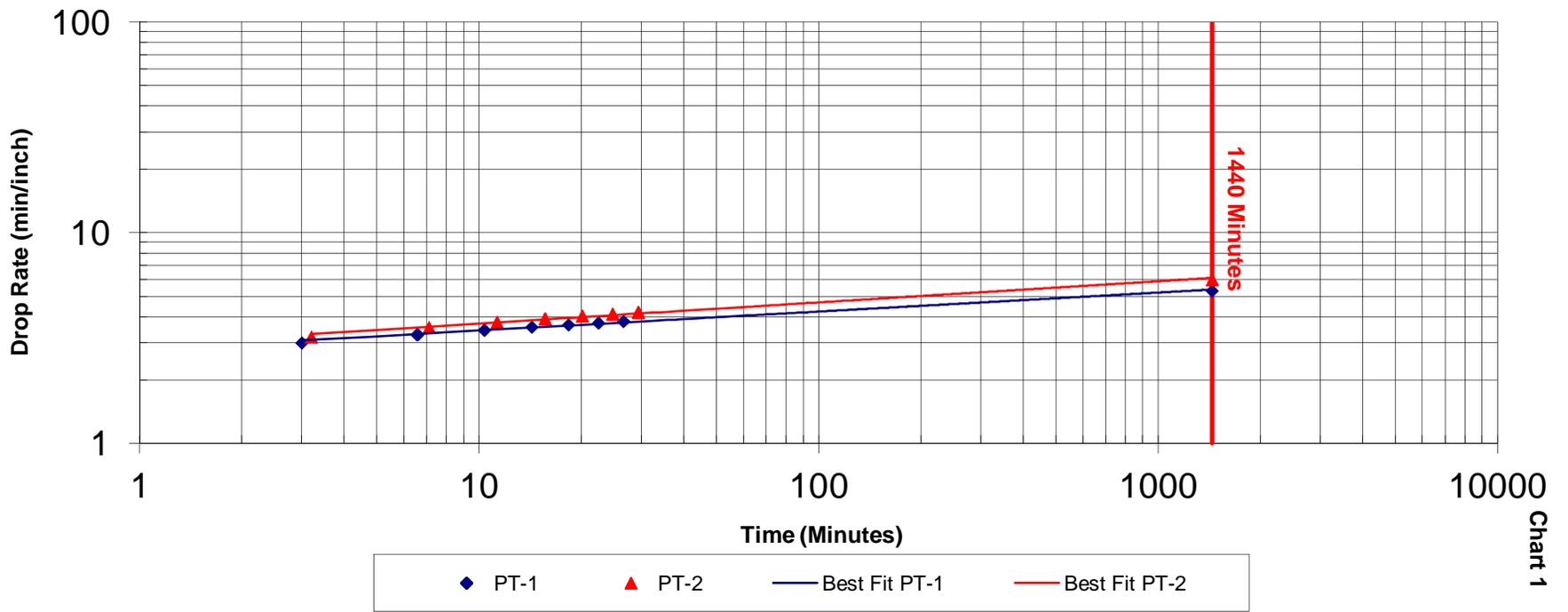


Chart 1

First Revision Issued 6-18-2010

Certification Statement for use in compliance with Act 145 of the 2010 Legislative Session

One of the two following certification statements shall be included with any application for a Wastewater System and Potable Water Supply Permit that is filed on or after June 2, 2010

Note: When the property subject to the permit application is owned by more than one person, only one of the landowners must sign the certification statement even though all landowners must sign the permit application itself.

When there are affected property owners, the applicant shall use this statement:

I hereby certify that the attached list of names and addresses includes all those whose property may be affected by the proposed water and wastewater systems, and their associated isolation distances and zones, and that all those listed have been sent a copy of the application and any associated plans.

Signature _____

Name (Printed) _____

Date of this certification _____

Note: It will be helpful for future property transfer work if the physical address of the property or property tax ID number is included with the certification.

When there are no affected landowners, the applicant shall use this statement:

I hereby certify that notification is not required either because there is an exemption or there are no landowners who may be affected by the proposed water and wastewater systems.

Signature _____

Name (Printed) _____

Date of this certification _____

List of Affected Land Owners:

1. George M. and Patricia R. Lavalette
2289 Greenbush Road
Charlotte, VT 05445
(802) 425-3012
2. Kenneth W. Spencer
Eliza J. Pillard
2338 Greenbush Road
Charlotte, VT 05445
(802) 425-5422
3. Delancey and Henrietta Ober
2296 Greenbush Road
Charlotte, VT 05445
(802) 425-3837



April 17, 2012

George and Patricia Lavalette
2289 Greenbush Road
Charlotte, VT 05445

RE: Sabin Property – 2346 Greenbush Road, Charlotte, VT
Act 145 Notification

Dear Mr. and Mrs. Lavalette:

I am currently preparing an application for a Town of Charlotte Wastewater System and Potable Water Supply Permit on behalf of your neighbor, Ms. Nancy P. Sabin. The permit application requests approval to renovate the former store, "Needle Works", into a two-unit apartment on the +/- 2.54 acre property adjacent to yours. The proposed apartment will utilize a new drilled bedrock water supply wells and a shared wastewater disposal system. The proposed location of the water supply well and wastewater disposal system is located near your property.

Recent changes to State statute (Act 145) require me to notify you that isolation distances related to the proposed well and/or disposal system extends onto your property. These isolation distances might limit your ability to place a well or disposal system in these areas of your property in the future. The statute change does not create any right other than notification.

I have enclosed a copy of the permit application, the associated plans and any associated documents. The plans show the isolation zones around the proposed well and wastewater disposal system and the "overshadowing" onto your property. If you have any questions, please contact me directly at 1(800)-477-4384.

Respectfully,
Lincoln Applied Geology, Inc.

Elias J. Erwin, LCBD #503

EE/JR:ih
Enclosure

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April 17, 2012

Kenneth W. Spencer
Eliza J. Pillard
2338 Greenbush Road
Charlotte, VT 05445

RE: Sabin Property – 2346 Greenbush Road, Charlotte, VT
Act 145 Notification

Dear Mr. Spencer and Ms. Pillard:

I am currently preparing an application for a Town of Charlotte Wastewater System and Potable Water Supply Permit on behalf of your neighbor, Ms. Nancy P. Sabin. The permit application requests approval to renovate the former store, “Needle Works”, into a two-unit apartment on the +/- 2.54 acre property adjacent to yours. The proposed apartment will utilize a new drilled bedrock water supply wells and a shared wastewater disposal system. The proposed location of the water supply well and wastewater disposal system is located near your property.

Recent changes to State statute (Act 145) require me to notify you that isolation distances related to the proposed well and/or disposal system extends onto your property. These isolation distances might limit your ability to place a well or disposal system in these areas of your property in the future. The statute change does not create any right other than notification.

I have enclosed a copy of the permit application, the associated plans and any associated documents. The plans show the isolation zones around the proposed well and wastewater disposal system and the “overshadowing” onto your property. If you have any questions, please contact me directly at 1(800)-477-4384.

Respectfully,
Lincoln Applied Geology, Inc.


Elias J. Erwin, LCBD #503

EE/JR:ih
Enclosure

F:\CLIENTS\2008\08086.1\State Permit\ACT 145 Letter.docx



April 17, 2012

Delancey and Henrietta Ober
2296 Greenbush Road
Charlotte, VT 05445

RE: Sabin Property – 2346 Greenbush Road, Charlotte, VT
Act 145 Notification

Dear Mr. and Mrs. Ober:

I am currently preparing an application for a Town of Charlotte Wastewater System and Potable Water Supply Permit on behalf of your neighbor, Ms. Nancy P. Sabin. The permit application requests approval to renovate the former store, "Needle Works", into a two-unit apartment on the +/- 2.54 acre property adjacent to yours. The proposed apartment will utilize a new drilled bedrock water supply wells and a shared wastewater disposal system. The proposed location of the water supply well and wastewater disposal system is located near your property.

Recent changes to State statute (Act 145) require me to notify you that isolation distances related to the proposed well extends onto your property. These isolation distances might limit your ability to place a disposal system in this area of your property in the future. The statute change does not create any right other than notification.

I have enclosed a copy of the permit application, the associated plans and any associated documents. The plans show the isolation zones around the proposed well and wastewater disposal system and the "overshadowing" onto your property. If you have any questions, please contact me directly at 1(800)-477-4384.

Respectfully,
Lincoln Applied Geology, Inc.

Elias J. Erwin, LCBD #503

EE/JR:ih
Enclosure

F:\CLIENTS\2008\08086.1\State Permit\ACT 145 Letter.docx

Wastewater Management Division - Permit Application Wastewater System & Potable Water Supply



For Office Use Only:

Application#	PIN#	Date Complete Application Received
<input type="text"/>	<input type="text"/>	<input type="text"/>

Authority:

10 V.S.A. Chapter 64, the Environmental Protection Rules, Chapter 1, Wastewater System & Potable Water Supply Rules, and Chapter 21, Water Supply Rules, Appendix A. Part 11 - Small Scale Water Systems.

General Information:

The organization and/or content of this form may not be altered, however, the form is designed to expand to allow additional information to be entered. Changes in the organization and/or content of the form may result in an invalid application or permit.

In most cases a licensed designer will be required for your project and to help complete this application form. There are also line-by-line instructions available to assist with completing this form.

NOTE: We strongly suggest referring to the application instructions while completing this application form.

Part I Applicant (Landowner) & Project Contact Information

Section A - Applicant Details (if Landowner is an Individual or Individuals)

1 Last Name <input type="text" value="Sabin"/>		2 First Name (and Middle Initial if appropriate) <input type="text" value="Nancy P."/>	
3 Mailing Address Line 1 <input type="text" value="2346 North Greenbush Road"/>		4 Mailing Address Line 2 <input type="text"/>	
5 Town/City <input type="text" value="Charlotte"/>	6 State/Province <input type="text" value="VT"/>	7 Country <input type="text" value="United States"/>	8 Zip/Postal Code <input type="text" value="05445"/>
9 Email Address <input type="text" value="N/A"/>		10 Telephone <input type="text" value="(802) 425-2886"/>	
<input type="button" value="Remove This Applicant"/>			

Section B - Applicant Details (if Landowner is other than an Individual or Individuals, e.g. Corporations, Homeowner's Associations, etc.)

1 Registered Legal Entity or Organization Name <input type="text"/>		2 Telephone <input type="text"/>	
3 Mailing Address Line 1 <input type="text"/>		4 Mailing Address Line 2 <input type="text"/>	
5 Town/City <input type="text"/>	6 State/Province <input type="text"/>	7 Country <input type="text" value="United States"/>	8 Zip/Postal Code <input type="text"/>

Certifying Official

The Certifying Official must be a person who has signatory authority for the legal entity or organization that is the Applicant. A copy of the document authorizing this person to act as a signatory authority must be attached to this application.

9 Certifying Official Last Name <input type="text"/>		10 Certifying Official First Name (and MI if appropriate) <input type="text"/>	
11 Certifying Official Title <input type="text"/>			
12 Certifying Official Email Address <input type="text"/>		13 Telephone <input type="text"/>	
<input type="button" value="Remove This Applicant"/>			

Section C - Primary Contact Information (if other than Applicant)			
1 Last Name		2 First Name (and Middle Initial if appropriate)	
<input type="text"/>		<input type="text"/>	
3 Mailing Address Line 1		4 Mailing Address Line 2	
<input type="text"/>		<input type="text"/>	
5 Town/City	6 State/Province	7 Country	8 Zip/Postal Code
<input type="text"/>	<input type="text"/>	United States	<input type="text"/>
9 Email Address			10 Telephone
<input type="text"/>			<input type="text"/>

Section D - Building/Business Owner Information			
1 Last Name		2 First Name (and Middle Initial if appropriate)	
<input type="text"/>		<input type="text"/>	
3 Mailing Address Line 1		4 Mailing Address Line 2	
<input type="text"/>		<input type="text"/>	
5 Town/City	6 State/Province	7 Country	8 Zip/Postal Code
<input type="text"/>	<input type="text"/>	United States	<input type="text"/>
9 Email Address			10 Telephone
<input type="text"/>			<input type="text"/>

Part II Certifying Designer(s) Information

1 Designer Last Name		2 Designer First Name (and Middle Initial if appropriate)	
Erwin		Elias	
3 Designer License#	4 Company Name		
00503	Lincoln Applied Geology, Inc.		
5 Mailing Address Line 1		6 Mailing Address Line 2	
163 Revell Drive		<input type="text"/>	
7 Town/City	8 State/Province	9 Country	10 Zip/Postal Code
Lincoln	VT	United States	05443
11 Email Address			12 Telephone
eerwin@lagvt.com			(802) 453-4384
13 Designer Role(s) (check all that apply)			
<input type="checkbox"/> Water Supply Designer <input checked="" type="checkbox"/> Wastewater Disposal System Designer			
Remove This Designer			

1 Designer Last Name		2 Designer First Name (and Middle Initial if appropriate)	
Revell		Sephen	
3 Designer License#	4 Company Name		
00178	Lincoln Applied Geology, Inc.		
5 Mailing Address Line 1		6 Mailing Address Line 2	
163 Revell Drive		<input type="text"/>	
7 Town/City	8 State/Province	9 Country	10 Zip/Postal Code
Lincoln	VT	United States	05443

11 Email Address <input style="width:95%;" type="text" value="srevell@lagvt.com"/>	12 Telephone <input style="width:95%;" type="text" value="(802) 453-4384"/>
13 Designer Role(s) (check all that apply)	
<input checked="" type="checkbox"/> Water Supply Designer	
<input checked="" type="checkbox"/> Wastewater Disposal System Designer	
<input type="button" value="Remove This Designer"/>	

Part III Property Location Information

Section A - Property Parcel ID#(s) and Location(s)

1 Please provide the property location information including Town or City Parcel ID#, Town/City, and Street or Road location in the table below:

	(a) Town/City Parcel ID#	(b) Town or City	(c) Street or Road Location
X	<input style="width:95%;" type="text" value="00004-2346"/>	<input style="width:95%;" type="text" value="Charlotte"/>	<input style="width:95%;" type="text" value="2346 North Green Bush Road"/>
<input type="button" value="Add Another Property"/>			

Section B - Center of Property GPS Coordinates

1 Enter the approximate center of property coordinates using GPS set for NAD83 or as derived from a map (map must be based on NAD83).

(a) Latitude <i>(in decimal degrees to five decimal places, ex. 44.38181°)</i> N <input style="width:80%;" type="text" value="44.31689"/> °	(b) Longitude <i>(in decimal degrees to five decimal places, ex. -72.31392 °)</i> W (-) <input style="width:80%;" type="text" value="73.25471"/> °
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Part IV Project Information

Section A - General Project Information & Questions

1 Project Name (if applicable) <input style="width:95%;" type="text" value="Sabin Property"/>	2 Total Acreage of Property <input style="width:95%;" type="text" value="2.54"/>
3 Business Name (if applicable) <input style="width:95%;" type="text"/>	
4 Detailed Project Description Ms. Sabin currently owns a developed +/-2.54 acre parcel in Charlotte, VT. The property contains a six bedroom single family residence (SFR) with a one bedroom apartment and a detached structure formerly used as a store. Both structures are served by separate drilled bedrock water supply wells and separate in-ground septic systems. Ms. Sabin proposes to convert the store building into two additional apartments (3 BR total). Therefore, a fully complying shared wastewater disposal system is proposed.	
5 Were all buildings or structures, campgrounds, and their associated potable water supplies and wastewater systems substantially completed before January 1, 2007 and all improved and unimproved lots in existence before January 1, 2007? <input checked="" type="radio"/> Yes <input type="radio"/> No	
6 Does this application include subdividing the property? <input type="radio"/> Yes <input checked="" type="radio"/> No	
7 Has anyone from the Wastewater Management Division's Regional Office been to the property?..... <input type="radio"/> Yes <input checked="" type="radio"/> No	
If Yes, enter the staff person's name and the date of the visit.	
(a) Name of Staff Person <input style="width:80%;" type="text"/>	(b) Date of Visit <input style="width:80%;" type="text"/>
8 Will any construction occur within 50 feet of a wetland boundary, mapped or designated? <input type="radio"/> Yes <input checked="" type="radio"/> No	
<i>If Yes, contact the Wetlands Program of the Water Quality Division at (802) 241-3770.</i>	
9 Will more than one acre be disturbed during the entire course of construction, including all lots and phases? <input type="radio"/> Yes <input checked="" type="radio"/> No	
<i>If Yes, contact the Stormwater Program of the Water Quality Division at (802) 241-4320.</i>	

10 Will there be any stream crossings by roads, utilities, or other construction? Yes No

If Yes, contact the River Corridor Mgmt. Program of the Water Quality Division at:

Central & Northwest Vermont (802) 879-5631
 Southern Vermont (802) 786-5906
 Northeastern Vermont (802) 751-0129

11 Is the project located in a special flood hazard area as designated on the flood insurance maps prepared for a municipality by the Federal Emergency Management Agency? Yes No

If Yes, show the special flood hazard area limits on the site plan.

12 Act 250: Has the Applicant (Landowner) subdivided any other lots of any size within a five mile radius of this subdivision, or within the environmental district within the last five years? Yes No

If Yes, enter the town(s) and the associated number of lots in the table below:

	(a) Town	(b) Number of Lots
X		
<input type="button" value="Add Another Town/Lot"/>		

13 Is there any prior Act 250 jurisdiction on the tract of land?..... Yes No

If Yes, enter the Act 250 permit number:

(a) Act 250 Permit Number

Section B - Project Deed Reference

1 Please provide the Town, Book, and Page reference for the current landowner's deed(s) to this property in the table below:

	(a) Town	(b) Book	(c) Page(s)
X	Charlotte	56	300
<input type="button" value="Add Another Deed Reference"/>			

Section C - Project Plan Reference

1 Please provide the following information for all water supply and wastewater disposal system plans being submitted.

	(a) Sheet#	(b) Title	(c) Plan Date	(d) Plan Revision Date
X	1	Sabin Property - Site Plan with Location of Water and Wastewater Systems	04-16-2012	
X	2	Sabin Property - Wastewater System Design Details	04-16-2012	
<input type="button" value="Add Another Plan Reference"/>				

Section D - Existing Project Lot/BuildingDetails

Please provide the existing project details. This section is used to describe what is existing for the project. For example, if you are subdividing an undeveloped 21-acre parcel, you would list the existing parcel. If you are revising the boundary lines of two commercial lots in an industrial park, and constructing an addition to an existing building you would list the existing lot numbers, existing acres, existing buildings, existing uses, construction date(s), prior permits, and answer the compliance questions.

1 Lot#	2 Lot Size (acres)	3 Existing Use of the Lot
1	2.54	Multi-Family Residential

4 Provide the following information for each building on the lot:

	(a) Building ID	(b) Existing Use	(c) Date Construction of Building Substantially Complete	(d) Prior Permits	(e) In compliance with existing permits?
X	1	Residential	01-01-1920		<input type="radio"/> Yes <input type="radio"/> No
X	2	Commercial	01-01-1980		<input type="radio"/> Yes <input type="radio"/> No

Add Another Building

Remove This Lot

Add Another Lot

Section E - Proposed Project Lot/Building Details

This section is used to describe what you are proposing to do in this project. For example, if you were going to create 4 lots for construction of single family residences, you would list each lot, proposed acreage, proposed buildings, and proposed use.

1 Lot#	2 Lot Size (acres)	3 Proposed Use of the Lot
1	2.54	Multi-Family Residential

4 Is the lot being created as part of a subdivision? Yes No

5 Are you requesting that the Blood, Marriage, or Civil Union special fee be applied to this lot? Yes No

6 If the lot is exempt, please indicate the specific exemption from the Wastewater System and Potable Water Supply Rules?

7 Provide the following information for each building on the lot:

	(a) Building ID	(b) If building is exempt, indicate exemption	(c) Construction or increased flow?	(d) Proposed Use
X	1		<input type="checkbox"/>	Existing 6 BR SFR w/ 1 BR Apartment
X	2		<input type="checkbox"/>	Proposed Two Unit Apartment- 3 Bedrooms Total

Add Another Building

Remove This Lot

Add Another Lot

Part V Water Supply Information

Section A - Water Supply Screening Questions

1 Are you proposing a new water supply for this project? Yes No

2 Are you proposing changes to an existing water supply for this project? Yes No

3 Is there a connection to an existing water supply for the project? Yes No

If you answered No to all three of the above questions, skip to Part VI. Otherwise, proceed with Part V.

Section B - General Water Supply Questions

1 Does this project involve a failed water supply? Yes No

2 Will any of the proposed water sources serve 25 or more people or have 15 or more service connections? Yes No

If Yes, the applicant must contact the Water Supply Division at (802) 241-3400 for source, construction and operating

3 Are any of the existing or proposed water sources located within a special flood hazard area? Yes No

4 Are any of the existing or proposed water sources located within a floodway? Yes No

5 Are any of the proposed water sources located within 1 mile of a hazardous waste site as designated by the Waste Management Division and identified on the Agency mapping website? Yes No

If Yes, please submit additional information on the site. The Waste Management Division can be reached at (802) 241-3888.

6 Does this project require an approval letter from the Water Supply Division for the construction of a public water system, municipal water line extension over 500 feet, or hydrants or sprinkler systems? Yes No

If Yes, please submit a copy of the approval letter from the Water Supply Division.

7 Does the proposed or existing water supply(ies) use a water treatment device to obtain compliance with the quality requirements in the Water Supply Rule? Yes No

If Yes, please submit additional information regarding the constituent(s) that exceeds the standards and plans, details, and specifications of the treatment device.

8 Is any portion of the proposed water supply located in or near a Water Source Protection Area as designated by the Water Supply Division? Yes No

If in areas of known interference issues, please contact the Water Supply Division at (802) 241-3400.

Section C - Individual Water Supply Details

Please provide the following information for each of the existing and proposed water supply(ies) serving a building or structure, or campground on the property.

1 Water Supply Name/Identifier Lot 1/Building 1 - Existing Well	2 Water Supply Owner (if not Applicant)
3 Water Source Type Non-Public Drilled Bedrock Well	4 Type of Change to Supply No Change

5 Lots/Buildings Served by this Water Supply System

	(a) Lot#	(b) Building ID	(c) Type of Change to the Building's Supply	Design Flows (Gallons Per Day)			(g) Rule or Meter Based Flows
				(d) Existing	(e) Increase	(f) Total	
X	1	1	No Change	770	0	770	Rule-based
Water Supply System Design Flows Total (GPD) →				770	0	770	

Add Another Lot/Building Served by this Supply

Remove This Water Supply

1 Water Supply Name/Identifier Lot 1/Building 2 - Existing Well	2 Water Supply Owner (if not Applicant)
3 Water Source Type Non-Public Drilled Bedrock Well	4 Type of Change to Supply New Connection or Increased Flow

5 Lots/Buildings Served by this Water Supply System

	(a) Lot#	(b) Building ID	(c) Type of Change to the Building's Supply	Design Flows (Gallons Per Day)			(g) Rule or Meter Based Flows
				(d) Existing	(e) Increase	(f) Total	
X	1	2	Increased Flow (no construction)	0	420	420	Rule-based
Water Supply System Design Flows Total (GPD) →				0	420	420	

Add Another Lot/Building Served by this Supply

Remove This Water Supply

Add Another Water Supply

9 Is this water supply located off-lot? Yes No

10 Is this water supply shared? Yes No

If the water supply is located off-lot or shared, submit a copy of the agreement to provide an easement prior to construction.

11 Is a variance being requested for this water supply? Yes No

If Yes, please submit additional details related to the variance request.

Section D - Water Supply Design Flows Summary Table

1 If the project includes more than one water supply, please list each water supply system and provide the total water supply design flows for the project. **IMPORTANT:** Please don't include systems that were identified in this Part on Section C, Line 4 as a "Replacement Area Designation" in this summary table.

		Design Flows (Gallons Per Day)		
(a) Water Supply Name/Identifier		(b) Existing	(c) Increase	(d) Total
X	Lot 1/ Bldg 1 - Existing Well	770	0	770
X	Lot 1/ Bldg 2 - Drilled Well	0	420	420
Project Water Supply Design Flows Total (GPD) →		770	420	1,190
<div style="border: 1px solid green; padding: 2px; display: inline-block; color: green;">Add Another Water Supply</div>				

Part VI Wastewater Disposal System Information

Section A - Wastewater Disposal System Screening Questions

- 1 Are you proposing a new wastewater disposal system or replacement area for this project? Yes No
 - 2 Are you proposing changes to an existing wastewater disposal system for this project? Yes No
 - 3 Is there a connection to an existing wastewater disposal system for the project? Yes No
- If you answered No to all three of the above questions, skip to Part VII. Otherwise, proceed with Part VI.*

Section B - General Wastewater Disposal System Questions

- 1 Does this project involve a failed wastewater disposal system? Yes No
- 2 Do any of the systems require a curtain or dewatering drain as part of the design? Yes No
- 3 Is a hydrogeologic study required for this project? Yes No
- 4 If the project has a soil-based wastewater disposal system with design flows that exceed 1,000 GPD, is this project located in a Class A Watershed?..... Yes No NA
 If Yes, indicate the Class A Watershed in which the system(s) is located:
 (a) Class A Watershed Name
- 5 Are there any existing or proposed floor drains as part of this project?..... Yes No
 If Yes, indicate where the floor drains will discharge:
 (a) Floor Drain Discharge Point
- 6 If the project utilizes an Innovative/Alternative System or Product, has the applicant received a copy of the Wastewater Management Division's approval letter? Yes No NA
- 7 Is any portion of the proposed wastewater disposal system located in or near a Water Source Protection Area as designated by the Water Supply Division? Yes No
If Yes, contact the Water Supply Division at (802) 241-3400.

Section C - Individual Wastewater Disposal System Details

Please provide the following information for each of the existing and proposed wastewater disposal systems serving a building or structure, or campground on the property.

1 Wastewater Disposal System Name/Identifier <input style="width: 95%; height: 20px;" type="text" value="Lot 1/Building 1 - Existing In-ground"/>	2 Wastewater Disposal System Owner (if not Applicant) <input style="width: 95%; height: 20px;" type="text"/>
3 Wastewater Disposal System Type <input style="width: 95%; height: 20px;" type="text" value="In-ground"/>	4 Type of Change to System <input style="width: 95%; height: 20px;" type="text" value="No Change"/>
5 Lots/Buildings Served by this Wastewater Disposal System	

	(a) Lot#	(b) Building ID	(c) Type of Change to the Building's System	Design Flows (Gallons Per Day)			(h) Rule or Meter Based Flows	
				(d) Existing	(e) Increase	(f) Infiltration		(g) Total
X	1	1	No Change	770	0	0	770	Rule-based
Wastewater Disposal System Design Flows Total (GPD) →				770	0	0	770	

Add Another Lot/Building Served by this System

Remove This Wastewater System

1 Wastewater Disposal System Name/Identifier Lot 1/Building 2 - Existing In-ground	2 Wastewater Disposal System Owner (if not Applicant)
3 Wastewater Disposal System Type In-ground	4 Type of Change to System No Change

5 Lots/Buildings Served by this Wastewater Disposal System

	(a) Lot#	(b) Building ID	(c) Type of Change to the Building's System	Design Flows (Gallons Per Day)			(h) Rule or Meter Based Flows	
				(d) Existing	(e) Increase	(f) Infiltration		(g) Total
X	1	2	No Change		420	0	420	Rule-based
Wastewater Disposal System Design Flows Total (GPD) →					420	0	420	

Add Another Lot/Building Served by this System

Remove This Wastewater System

1 Wastewater Disposal System Name/Identifier Lot 1/ Bldg 1+2 Proposed Shared Primary	2 Wastewater Disposal System Owner (if not Applicant)
3 Wastewater Disposal System Type In-ground	4 Type of Change to System New System

5 Lots/Buildings Served by this Wastewater Disposal System

	(a) Lot#	(b) Building ID	(c) Type of Change to the Building's System	Design Flows (Gallons Per Day)			(h) Rule or Meter Based Flows	
				(d) Existing	(e) Increase	(f) Infiltration		(g) Total
X	1	1	Connection to New System	770	0	0	770	Rule-based
X	1	2	Connection to New System	0	420	0	420	Rule-based
Wastewater Disposal System Design Flows Total (GPD) →				770	420	0	1,190	

Add Another Lot/Building Served by this System

Remove This Wastewater System

1 Wastewater Disposal System Name/Identifier Lot 1,Bldg 1+2 Proposed Shared Replacemt	2 Wastewater Disposal System Owner (if not Applicant)
3 Wastewater Disposal System Type In-ground	4 Type of Change to System New System

5 Lots/Buildings Served by this Wastewater Disposal System

	(a) Lot#	(b) Building ID	(c) Type of Change to the Building's System	Design Flows (Gallons Per Day)			(h) Rule or Meter Based Flows	
				(d) Existing	(e) Increase	(f) Infiltration		(g) Total
X	1	1	Select	770	0	0	770	Rule-based
X	1	2	Select		420	0	420	Rule-based

Wastewater Disposal System Design Flows Total (GPD) →	770	420	0	1,190
Add Another Lot/Building Served by this System				
Remove This Wastewater System				

10 Is this wastewater disposal system located off-lot? <input type="radio"/> Yes <input checked="" type="radio"/> No
11 Is this wastewater disposal system shared? <input checked="" type="radio"/> Yes <input type="radio"/> No <i>If the wastewater disposal system is located off-lot or shared, submit a copy of the agreement to provide an easement prior to initiation of construction.</i>
12 Is a variance being requested for this wastewater disposal system? <input type="radio"/> Yes <input checked="" type="radio"/> No <i>If Yes, please submit additional details related to the variance request.</i>
13 If this wastewater disposal system type is a connection to an Indirect Discharge System, please provide the Indirect Discharge System ID number. Indirect Discharge System ID Number <input style="width: 100%;" type="text"/>
14 If this wastewater disposal system type is a connection to a municipal system, please select the town. Town <input style="width: 100%;" type="text"/>
15 If this wastewater disposal system is a soil-based system, please select the design approach used. Design Approach Used <input style="width: 100%; border: 1px solid black;" type="text" value="Prescriptive"/>
16 For soil-based systems, please check all that apply. <input type="checkbox"/> Storage and Dose <input type="checkbox"/> Filtrate
17 If this is an Innovative/Alternative soil-based system, please select the system use type. Innovative/Alternative System Use Type <input style="width: 100%;" type="text"/>
18 If this is an Innovative/Alternative soil-based system, please select the Innovative/Alternative system or product. Innovative/Alternative System or Product <input style="width: 100%; height: 20px;" type="text"/>

Section D - Wastewater Disposal Systems Design Flows Summary Table

1 If the project includes more than one wastewater disposal system, please list each system on this page and provide the total wastewater disposal design flows for the project. **IMPORTANT:** Please don't include systems that were identified in this Part on Section C, Line 4 as a "Replacement Area Designation" in this summary table.

					Design Flows (Gallons Per Day)					
(a) Wastewater Disposal System Name/Identifier	(b) Existing	(c) Increase	(d) Infiltration	(e) Total						
X Proposed Shared Primary	770	420	0	1,190						
Project Wastewater Disposal Design Flows Total (GPD) →					770	420	0	1,190		

Add Another Wastewater System

Part VII Application Fees	
1 Fee Amount	<input style="width: 80%;" type="text" value="\$500.00"/>

2 Fee Calculation Details

\$500 per the Town of Charlotte

Part VIII Designer Certification & Copyright License

Section A - Certifying Designer 1 Certification & Copyright License

"I hereby certify that in the exercise of my reasonable professional judgement, the design-related information submitted with this application is true and correct, and that the design included in this application for a permit complies with the Vermont Wastewater System and Potable Water Supply Rules and the Vermont Water Supply Rules.

As the individual who prepared this application, including all documents that are marked as copyrighted, I hereby grant a license to the State to allow the documents to be made available for public review and copying in order to properly implement and operate the permitting programs for Wastewater Systems and Potable Water Supplies."

1 Check the design(s) you are certifying. This should be the same as the Designer Role(s) you selected in Part II, Section A, Line 13.

- Water Supply Designer
- Wastewater Disposal System Designer

1 Designer 1 Name Elias J. Erwin, LCBD #503	2 Designer 1 Signature _____	3 Signature Date _____
--	---------------------------------	---------------------------

Section B - Certifying Designer 2 Certification & Copyright License

"I hereby certify that in the exercise of my reasonable professional judgement, the design-related information submitted with this application is true and correct, and that the design included in this application for a permit complies with the Vermont Wastewater System and Potable Water Supply Rules and the Vermont Water Supply Rules.

As the individual who prepared this application, including all documents that are marked as copyrighted, I hereby grant a license to the State to allow the documents to be made available for public review and copying in order to properly implement and operate the permitting programs for Wastewater Systems and Potable Water Supplies."

1 Check the design(s) you are certifying. This should be the same as the Designer Role(s) you selected in Part II, Section B, Line 13.

- Water Supply Designer
- Wastewater Disposal System Designer

1 Designer 2 Name Stephen Revell, CPG, LCBD #178	2 Designer 2 Signature _____	3 Signature Date _____
---	---------------------------------	---------------------------

Part IX Applicant(s) Signature & Acknowledgements

In order to insure compliance with the requirements of the regulations administered by the Department of Environmental Conservation, Wastewater Management Division, it may be necessary to visit the property. As this would involve a Department employee entering private property, we request your approval to do so.

1 If we do visit your property, do you have any special instructions?

Prior to a Site visit, please call Elias Erwin, Licensed Class B Designer #503.

"As landowner of the property for which I am requesting a permit from the Department of Environmental Conservation, I understand that by signing this application I am granting permission for the Department employees to enter the property, during normal working hours, to insure compliance of the property with the applicable rules of the Department.

I also understand that I am not allowed to commence any site work or construction on this project without written approval from the Department of Environmental Conservation.

If my project utilizes an Innovative/Alternative System or Product, I have received a copy of the Wastewater Management Division's approval letter and agree to abide by the conditions of the approval.

I also certify that to the best of my knowledge and belief the information submitted above is true, accurate and complete."

X	2 Print Applicant Name Nancy Preston Sabin	3 Applicant Signature	4 Signature Date
----------	---	-----------------------	------------------

Add Applicant Signature Block

CONSTRUCTION SPECIFICATIONS - TRENCH

NOTE: PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY DIGSAFE (1-888-DIGSAFE) AND ALL MATERIALS, INCLUDING STONE SHALL BE APPROVED BY THE ENGINEER.

- THE OUTLET PIPE FROM THE SEPTIC TANK TO THE DISTRIBUTION BOX SHALL BE 4 INCHES SDR 35 PVC, AT A MINIMUM SLOPE OF 1/8 INCH/FT. THE PIPE SHALL BE LAID ON UNDISTURBED GROUND OR PROPERLY BEDDED.
- A DISTRIBUTION BOX SHALL BE INSTALLED BETWEEN THE SEPTIC TANK OR PUMP STATION, IF APPLICABLE AND THE ABSORPTION TRENCHES. THE DISTRIBUTION BOX SHALL BE SET LEVEL, ON UNDISTURBED GROUND TO EVENLY DISTRIBUTE THE EFFLUENT TO EACH DISTRIBUTION LINE. ADEQUATE PROVISIONS SHALL BE TAKEN TO ASSURE THE STABILITY AND ACCESSIBILITY OF THE DISTRIBUTION BOX FOR INSPECTIONS. LEVELNESS OF THE DISTRIBUTION BOX SHALL BE WITNESSED BY THE ENGINEER AND AN AUTHORIZED TOWN REPRESENTATIVE.
- EACH DISTRIBUTION LINE SHALL CONNECT INDIVIDUALLY TO THE DISTRIBUTION BOX AND EXIT AT THE SAME SLOPE FOR THE FIRST 5 FEET TO 10 FEET. THE PIPE CONNECTING THE DISTRIBUTION BOX TO THE DISTRIBUTION LINES SHALL BE WATERTIGHT AND LAID ON UNDISTURBED GROUND OR PROPERLY BEDDED.
- WHEN THE TRENCHES HAVE BEEN EXCAVATED, THE SIDES AND BOTTOM SHALL BE RAKED TO LOOSEN ANY SMEARED SOIL SURFACES.
- CONSTRUCTION EQUIPMENT SHALL BE KEPT OFF THE AREA TO BE USED FOR SEWAGE DISPOSAL AS MUCH AS POSSIBLE TO PREVENT COMPACTION OF THE SOILS.
- PLACEMENT OF CRUSHED STONE IN THE TRENCHES SHALL BE INITIATED IMMEDIATELY AFTER TRENCH EXCAVATION IS COMPLETED. THIS WILL REQUIRE THAT THE ENGINEER AND AUTHORIZED TOWN REPRESENTATIVE BE PRESENT AT THE TIME OF COMPLETION OF TRENCH EXCAVATION (SEE INSPECTION SPECIFICATIONS).
- 12 INCHES OF CLEAN CRUSHED STONE (3/4 TO 1-1/2 INCHES) SHALL BE PLACED IN THE BOTTOM OF THE TRENCHES IN ACCORDANCE WITH THE PLANS. THE DISTRIBUTION LINE SHALL BE CAREFULLY PLACED LEVEL ON THE BEDDING AND COVERED WITH AT LEAST 2 INCHES OF STONE. THE ENDS OF THE DISTRIBUTION LINES SHALL BE CAPPED.
- THE GRADING SHALL DIRECT RUN-OFF AWAY FROM THE SEPTIC SYSTEM AREAS AND BE SMOOTH AND FREE OF POCKETS WITH SUFFICIENT SLOPE TO ENSURE DRAINAGE.

INSPECTION REQUIREMENTS

- THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND AUTHORIZED TOWN REPRESENTATIVE A MINIMUM OF 24 HOURS IN ADVANCE FOR INSPECTION OF THE BOTTOM OF THE TRENCHES PRIOR TO PLACEMENT OF STONE AND PIPING.
- THE CONTRACTORS SHALL NOTIFY THE ENGINEER AND AUTHORIZED TOWN REPRESENTATIVE A MINIMUM OF 24 HOURS IN ADVANCE FOR INSPECTION OF THE SYSTEM PRIOR TO BACKFILLING, INCLUDING THE DISTRIBUTION BOX (LEVELNESS CHECK) AND SEPTIC TANK.
- LOTS REQUIRING PUMP STATIONS: WITNESSING OF PUMP ON, OFF AND ALARM OPERATION, CHECK OF PUMPING RATE AND EMERGENCY STORAGE VOLUME.
- THIS DESIGN MUST BE INSPECTED BY LINCOLN APPLIED GEOLOGY, INC., LINCOLN, VERMONT TO ENSURE COMPLIANCE WITH THESE PLANS. LINCOLN APPLIED GEOLOGY, INC. WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT ARISE FROM FAILURE TO FOLLOW SPECIFICATIONS, AND THE DESIGN INTENT THAT THE PLANS CONVEY, AND FROM FAILURE TO HAVE BEEN NOTIFIED BY THE CONTRACTOR FOR INSPECTIONS.

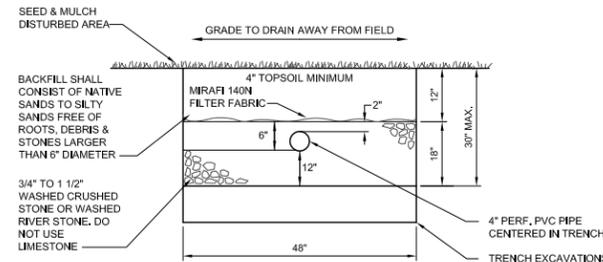
SEWAGE DESIGN INFORMATION

- THE SEWAGE DISPOSAL SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE TOWN REGULATIONS AND THE VERMONT ENVIRONMENTAL PROTECTION RULES.
- THE FOLLOWING MINIMUM ISOLATION DISTANCES SHALL BE MAINTAINED FROM THE DISPOSAL AREA TO:

PROPERTY LINE	25 FEET
BUILDING (WITH FOOTING DRAIN) UPSLOPE OR SIDESLOPE	35 FEET
BUILDING (WITH FOOTING DRAIN) DOWNSLOPE	75 FEET
DRIVEWAYS & PARKING LOTS	10 FEET
TREES	10 FEET
- BASIS OF DESIGN:

NO. OF BEDROOMS	4
DESIGN FLOW	490
PERCOLATION RATE	< 60 MIN/INCH
LOADING RATE, Q (TRENCHES)	1.0 GAL/SF/DAY (6" STONE)
- SEPTIC TANK
 - A 1,000 GALLON PRECAST CONCRETE SEPTIC TANK, CAMP PRECAST OR APPROVED EQUAL SHALL BE USED, WITH THREE ACCESS COVERS; 4,000 PSI CONCRETE; WATERPROOF JOINTS AND SET ON THOROUGHLY COMPACTED SUBBASE. THE OUTLET BAFFLE SHALL HAVE AN EFFLUENT FILTER & A TWO (2) FOOT DIAMETER RISER TO GRADE WITH STEEL COVER.
 - THE USE OF GARBAGE DISPOSALS IS NOT RECOMMENDED.
- MISC.:
 - IF A WATER TREATMENT SYSTEM IS GOING TO BE USED, THE BACKWASH WATER MAY NOT BE DISCHARGED INTO THE DISPOSAL SYSTEM.

BASIS OF DESIGN INFORMATION		
EXISTING	X	Y
6-BDRM RESIDENCE with	140GPD/BDRM X (3) + 70GPD/BDRM X (3)	630
(1) 1-BDRM APARTMENT	140 GPD/BDRM x 1	140
PROPOSED		
(1) 2-BDRM APARTMENT	140GPD/BDRM X (2)	280
(1) 1-BDRM APARTMENT	140GPD/BDRM X (1)	140
TOTAL =		1190

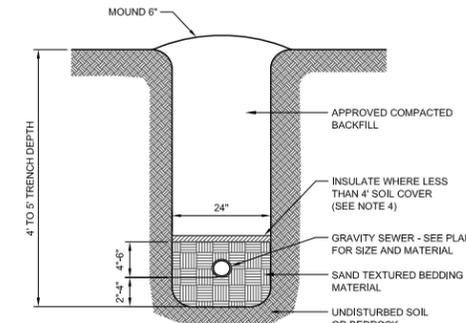


ABSORPTION TRENCH

NOT TO SCALE

ABSORPTION TRENCH NOTES:

- DO NOT ALLOW CONSTRUCTION TRAFFIC, DRIVING OR PARKING ON TOP OF THE SYSTEM.
- THE TRENCH SIDEWALLS AND BOTTOM SHALL BE UNDISTURBED, PRIOR TO BACKFILLING CALL FOR INSPECTION, RAKE ANY SMEARED SOILS.



GRAVITY SEWER TRENCH NOTES:

- BACKFILL AND BEDDING SHALL BE PROPERLY COMPACTED.
- BEDDING MATERIAL SHALL NORMALLY CONSIST OF WELL-GRADED SANDS AND GRAVELS WITH A MAXIMUM SIZE OF 3/4".
- BACKFILL SHALL NOT CONTAIN:
 - ANY STONES MORE THAN 1/2" (1 1/2" MAXIMUM DIAMETER WITHIN 2' OF THE OUTSIDE OF THE PIPE) IN THE LARGEST DIMENSION.
 - BE GREATER THAN 50 POUNDS.
 - CONTAIN ANY FROZEN, WET OR ORGANIC MATERIAL.
- USE RIGID INSULATION AT THE RATE OF 1" FOR EVERY FOOT LESS THAN 4'.
- FORCEMAIN MUST BE TESTED FOR LEAKAGE.
- AT ANY CROSSING UNDER A ROAD OR DRIVE, GRAVITY SEWER IS TO BE ENCASED IN 4" PVC SLEEVE, SAID SLEEVE IS TO EXTEND 8' IN EITHER DIRECTION FROM EDGE OF TRAVELED WAY.
- THE SIDES OF THE TRENCHES 4' OR MORE IN DEPTH ENTERED BY PERSONNEL SHALL BE SHEETED OR SLOPED TO THE ANGLE OF REPOSE AS DEFINED BY O.S.H.A. STANDARDS.

GRAVITY SEWER TRENCH DETAIL

NOT TO SCALE

STATE OF VERMONT MOUND SAND SPECIFICATIONS

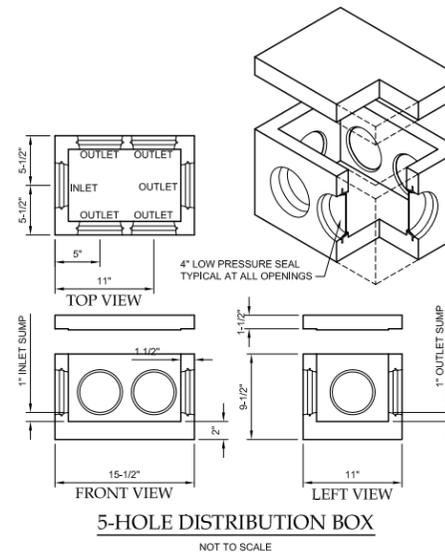
Fill Material: The fill material from the natural soil plowed surface to the top of the trench or bed shall be sand texture with one of the following sieve analyses:

1. Sieve Number	Opening (mm)	Percent Passing, by Weight
3/8	9.500	85 - 100
40	0.425	25 - 75
60	0.240	0 - 30
100	0.149	0 - 10
200	0.074	0 - 5

2. Sieve Number	Opening (mm)	Percent Passing, by Weight
4	4.750	95 - 100
8	2.380	80 - 100
16	1.190	50 - 85
30	0.590	25 - 60
50	0.297	10 - 30
100	0.149	2 - 10

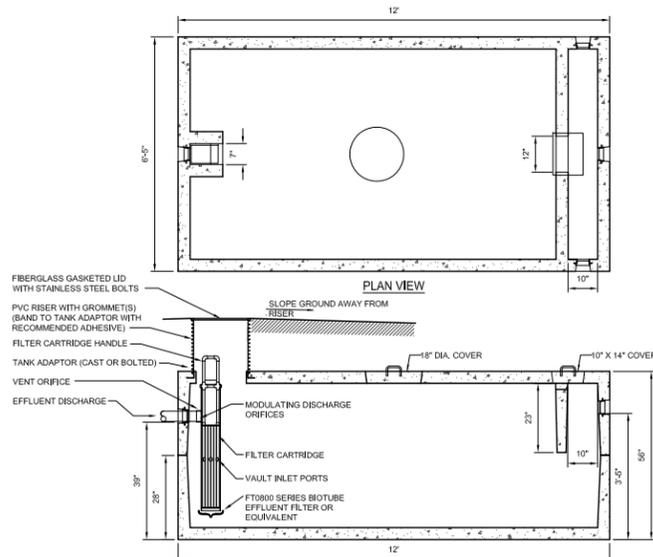
3. Sieve Number	Opening (mm)	Percent Passing, by Weight
3/8	9.500	85 - 100
40	0.420	30 - 50
200	0.074	0 - 10

The material must meet specifications 1, 2, or 3. Interpolation of analyses is not permitted. Fill material 2 is ASTM Specification C-33 and is intended for manufactured material.



5-HOLE DISTRIBUTION BOX

NOT TO SCALE

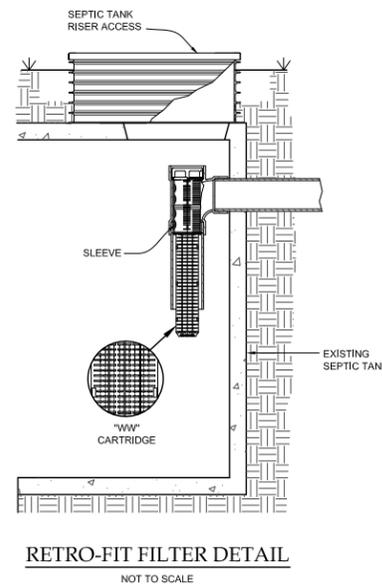


1500 GALLON PRECAST SEPTIC TANK

NOT TO SCALE

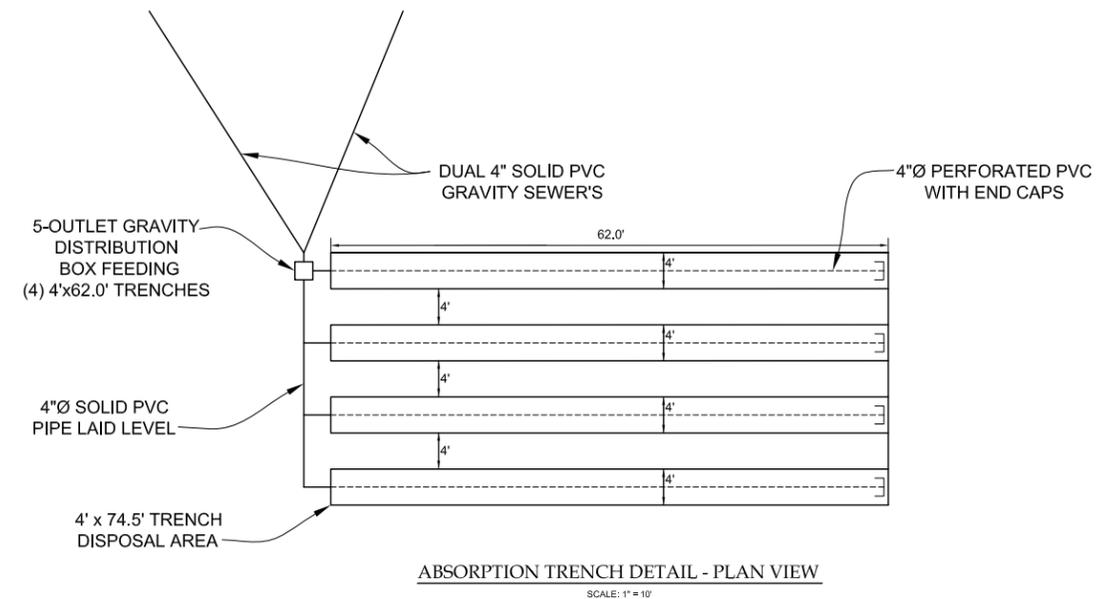
SEPTIC TANK OPERATION & MAINTENANCE RECOMMENDATIONS

- THE SEPTIC TANK'S PURPOSE IS TO SETTLE OUT SOLIDS, CONTAIN THE SCUM AND PASS TREATED EFFLUENT. BACTERIA WITHIN THE SEPTIC TANK HELPS DECOMPOSE THE SOLIDS. SHOULD ANY SOLIDS PASS THROUGH THE SEPTIC TANK INTO THE SYSTEM, PREMATURE CLOGGING OF THE PIPING, STONE OR NATIVE SOIL BENEATH THE SYSTEM IS LIKELY TO OCCUR. ONLY HUMAN WASTES SHOULD ENTER THE SEWAGE SYSTEM, WATER USE SHOULD BE CONSERVATIVE AND CLEANING AGENTS CANNOT ENTER THE SYSTEM, AS THEY KILL BACTERIA.
- THE STATE FLOW FIGURES OF 140 GAL/DAY/BEDROOM ARE BASED ON SHORT TERM PEAK USE PERIODS (I.E., DAILY EVENTS). ACTUAL FLOWS SHOULD AVERAGE 75-100 GALLONS PER DAY, PER BEDROOMS.
- ONCE PER YEAR, THE DEPTH OF SCUM AND SLUDGE IN THE SEPTIC TANK SHOULD BE MEASURED AND THE TANK SHALL BE PUMPED IF:
 - THE SLUDGE LEVEL IS WITHIN 12 INCHES OF THE BOTTOM OF THE OUTLET.
 - THE SCUM LAYER IS WITHIN 3 INCHES OF THE TOP OF THE OUTLET.
 - IF A OR B IS ANTICIPATED TO OCCUR PRIOR TO THE NEXT INSPECTION.
 - IN ANY CASE, THE TANK SHALL BE PUMPED AT A MAXIMUM 5 YEAR INTERVAL.
- ONCE A YEAR, THE DISTRIBUTION BOX AND/OR PUMP STATION SHOULD BE INSPECTED AND ANY SETTLED SOLIDS REMOVED.
- THE EFFLUENT FILTER SHOULD BE INSPECTED AND CLEANED ANNUALLY.
- ABOVE ITEMS 1-5 ARE INTENDED TO PROLONG THE LIFE OF THE SYSTEM, NOT GUARANTEE IT.



RETRO-FIT FILTER DETAIL

NOT TO SCALE



ABSORPTION TRENCH DETAIL - PLAN VIEW

SCALE: 1" = 10'

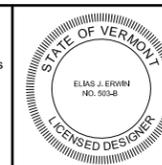
NOT TO SCALE

THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.

"I hereby certify that in the exercise of my reasonable professional judgment the design-related information submitted with this application is true and correct, and that the design included in this application for a permit complies with the Vermont Wastewater System and Potable Water Supply Rules and the Vermont Water Supply Rules."

Elias J. Erwin
Licensed Class B Designer #503

Date



Sabin Property
2346 North Greenbush Road
Charlotte, Vermont

Proposed Wastewater System Design Details

LAG PROJECT # 08086.1
DATE: April 13, 2012
SURVEYORS: EE/TAM
DRAWN BY: TAM
FIGURE #: 2

CONSTRUCTION SPECIFICATIONS - TRENCH

NOTE: PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY DIGSAFE (1-888-DIGSAFE) AND ALL MATERIALS, INCLUDING STONE SHALL BE APPROVED BY THE ENGINEER.

- THE OUTLET PIPE FROM THE SEPTIC TANK TO THE DISTRIBUTION BOX SHALL BE 4 INCHES SDR 35 PVC, AT A MINIMUM SLOPE OF 1/8 INCH/FT. THE PIPE SHALL BE LAID ON UNDISTURBED GROUND OR PROPERLY BEDDED.
- A DISTRIBUTION BOX SHALL BE INSTALLED BETWEEN THE SEPTIC TANK OR PUMP STATION, IF APPLICABLE AND THE ABSORPTION TRENCHES. THE DISTRIBUTION BOX SHALL BE SET LEVEL, ON UNDISTURBED GROUND TO EVENLY DISTRIBUTE THE EFFLUENT TO EACH DISTRIBUTION LINE. ADEQUATE PROVISIONS SHALL BE TAKEN TO ASSURE THE STABILITY AND ACCESSIBILITY OF THE DISTRIBUTION BOX FOR INSPECTIONS. LEVELNESS OF THE DISTRIBUTION BOX SHALL BE WITNESSED BY THE ENGINEER AND AN AUTHORIZED TOWN REPRESENTATIVE.
- EACH DISTRIBUTION LINE SHALL CONNECT INDIVIDUALLY TO THE DISTRIBUTION BOX AND EXIT AT THE SAME SLOPE FOR THE FIRST 5 FEET TO 10 FEET. THE PIPE CONNECTING THE DISTRIBUTION BOX TO THE DISTRIBUTION LINES SHALL BE WATERTIGHT AND LAID ON UNDISTURBED GROUND OR PROPERLY BEDDED.
- WHEN THE TRENCHES HAVE BEEN EXCAVATED, THE SIDES AND BOTTOM SHALL BE RAKED TO LOOSEN ANY SMEARED SOIL SURFACES.
- CONSTRUCTION EQUIPMENT SHALL BE KEPT OFF THE AREA TO BE USED FOR SEWAGE DISPOSAL AS MUCH AS POSSIBLE TO PREVENT COMPACTION OF THE SOILS.
- PLACEMENT OF CRUSHED STONE IN THE TRENCHES SHALL BE INITIATED IMMEDIATELY AFTER TRENCH EXCAVATION IS COMPLETED. THIS WILL REQUIRE THAT THE ENGINEER AND AUTHORIZED TOWN REPRESENTATIVE BE PRESENT AT THE TIME OF COMPLETION OF TRENCH EXCAVATION (SEE INSPECTION SPECIFICATIONS).
- 12 INCHES OF CLEAN CRUSHED STONE (3/4 TO 1-1/2 INCHES) SHALL BE PLACED IN THE BOTTOM OF THE TRENCHES IN ACCORDANCE WITH THE PLANS. THE DISTRIBUTION LINE SHALL BE CAREFULLY PLACED LEVEL ON THE BEDDING AND COVERED WITH AT LEAST 2 INCHES OF STONE. THE ENDS OF THE DISTRIBUTION LINES SHALL BE CAPPED.
- THE GRADING SHALL DIRECT RUN-OFF AWAY FROM THE SEPTIC SYSTEM AREAS AND BE SMOOTH AND FREE OF POCKETS WITH SUFFICIENT SLOPE TO ENSURE DRAINAGE.

INSPECTION REQUIREMENTS

- THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND AUTHORIZED TOWN REPRESENTATIVE A MINIMUM OF 24 HOURS IN ADVANCE FOR INSPECTION OF THE BOTTOM OF THE TRENCHES PRIOR TO PLACEMENT OF STONE AND PIPING.
- THE CONTRACTORS SHALL NOTIFY THE ENGINEER AND AUTHORIZED TOWN REPRESENTATIVE A MINIMUM OF 24 HOURS IN ADVANCE FOR INSPECTION OF THE SYSTEM PRIOR TO BACKFILLING, INCLUDING THE DISTRIBUTION BOX (LEVELNESS CHECK) AND SEPTIC TANK.
- LOTS REQUIRING PUMP STATIONS; WITNESSING OF PUMP ON, OFF AND ALARM OPERATION, CHECK OF PUMPING RATE AND EMERGENCY STORAGE VOLUME.
- THIS DESIGN MUST BE INSPECTED BY LINCOLN APPLIED GEOLOGY, INC., LINCOLN, VERMONT TO ENSURE COMPLIANCE WITH THESE PLANS. LINCOLN APPLIED GEOLOGY, INC. WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT ARISE FROM FAILURE TO FOLLOW SPECIFICATIONS, AND THE DESIGN INTENT THAT THE PLANS CONVEY, AND FROM FAILURE TO HAVE BEEN NOTIFIED BY THE CONTRACTOR FOR INSPECTIONS.

SEWAGE DESIGN INFORMATION

- THE SEWAGE DISPOSAL SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE TOWN REGULATIONS AND THE VERMONT ENVIRONMENTAL PROTECTION RULES.
- THE FOLLOWING MINIMUM ISOLATION DISTANCES SHALL BE MAINTAINED FROM THE DISPOSAL AREA TO:

PROPERTY LINE	25 FEET
BUILDING (WITH FOOTING DRAIN) UPSLOPE OR SIDESLOPE	35 FEET
BUILDING (WITH FOOTING DRAIN) DOWNSLOPE	75 FEET
DRIVEWAYS & PARKING LOTS	10 FEET
TREES	10 FEET

3. BASIS OF DESIGN:	
NO. OF BEDROOMS	4
DESIGN FLOW	490
PERCOLATION RATE	< 60 MIN/INCH
LOADING RATE, Q (TRENCHES)	1.0 GAL/SF/DAY (6" STONE)

4. SEPTIC TANK

- A 1,000 GALLON PRECAST CONCRETE SEPTIC TANK, CAMP PRECAST OR APPROVED EQUAL SHALL BE USED, WITH THREE ACCESS COVERS; 4,000 PSI CONCRETE; WATERPROOF JOINTS AND SET ON THOROUGHLY COMPACTED SUBBASE. THE OUTLET BAFFLE SHALL HAVE AN EFFLUENT FILTER & A TWO (2) FOOT DIAMETER RISER TO GRADE WITH STEEL COVER.

- THE USE OF GARBAGE DISPOSALS IS NOT RECOMMENDED.

5. MISC.:

- IF A WATER TREATMENT SYSTEM IS GOING TO BE USED, THE BACKWASH WATER MAY NOT BE DISCHARGED INTO THE DISPOSAL SYSTEM.

BASIS OF DESIGN INFORMATION			
EXISTING	X	Y	
6-BDRM RESIDENCE WITH	140GPD/BDRM X (3) + 70GPD/BDRM X (3)=	630	
(1) 1-BDRM APARTMENT	140 GPD/BDRM x 1 =	140	
PROPOSED			
(1) 2-BDRM APARTMENT	140GPD/BDRM X (2)	280	
(1) 1-BDRM APARTMENT	140GPD/BDRM X (1)	140	
TOTAL =			1190

STATE OF VERMONT MOUND SAND SPECIFICATIONS

Fill Material: The fill material from the natural soil plowed surface to the top of the trench or bed shall be sand texture with one of the following sieve analyses:

Sieve Number	Opening (mm)	Percent Passing, by Weight
3/8	9,500	85 - 100
40	0,420	25 - 75
60	0,240	0 - 30
100	0,149	0 - 10
200	0,074	0 - 5

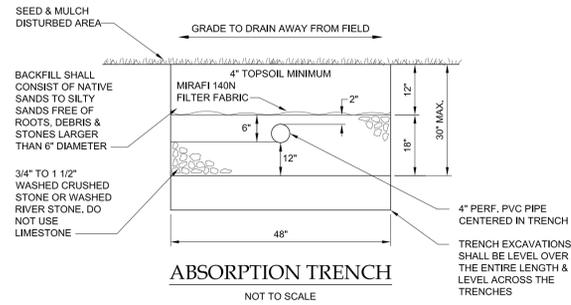
Sieve Number	Opening (mm)	Percent Passing, by Weight
4	4,750	95 - 100
8	2,380	80 - 100
16	1,190	50 - 85
30	0,590	25 - 60
50	0,297	10 - 30
100	0,149	2 - 10

Sieve Number	Opening (mm)	Percent Passing, by Weight
3/8	9,500	85 - 100
40	0,420	30 - 50
200	0,074	0 - 10

The material must meet specifications 1, 2, or 3. Interpolation of analysis is not permitted. Fill material 2 is ASTM Specification C-33 and is intended for manufactured material.

SEPTIC TANK OPERATION & MAINTENANCE RECOMMENDATIONS

- THE SEPTIC TANK'S PURPOSE IS TO SETTLE OUT SOLIDS, CONTAIN THE SCUM AND PASS TREATED EFFLUENT. BACTERIA WITHIN THE SEPTIC TANK HELPS DECOMPOSE THE SOLIDS. SHOULD ANY SOLIDS PASS THROUGH THE SEPTIC TANK INTO THE SYSTEM, PREMATURE CLOGGING OF THE PIPING, STONE OR NATIVE SOIL BENEATH THE SYSTEM IS LIKELY TO OCCUR. ONLY HUMAN WASTES SHOULD ENTER THE SEWAGE SYSTEM. WATER USE SHOULD BE CONSERVATIVE AND CLEANING AGENTS CANNOT ENTER THE SYSTEM, AS THEY KILL BACTERIA.
- THE STATE FLOW FIGURES OF 140 GAL/DAY/BEDROOM ARE BASED ON SHORT TERM PEAK USE PERIODS (I.E., DAILY EVENTS). ACTUAL FLOWS SHOULD AVERAGE 75-100 GALLONS PER DAY, PER BEDROOMS.
- ONCE PER YEAR, THE DEPTH OF SCUM AND SLUDGE IN THE SEPTIC TANK SHOULD BE MEASURED AND THE TANK SHALL BE PUMPED IF:
 - THE SLUDGE LEVEL IS WITHIN 12 INCHES OF THE BOTTOM OF THE OUTLET.
 - THE SCUM LAYER IS WITHIN 3 INCHES OF THE TOP OF THE OUTLET.
 - IF A OR B IS ANTICIPATED TO OCCUR PRIOR TO THE NEXT INSPECTION.
 - IN ANY CASE, THE TANK SHALL BE PUMPED AT A MAXIMUM 5 YEAR INTERVAL.
- ONCE A YEAR, THE DISTRIBUTION BOX AND/OR PUMP STATION SHOULD BE INSPECTED AND ANY SETTLED SOLIDS REMOVED.
- THE EFFLUENT FILTER SHOULD BE INSPECTED AND CLEANED ANNUALLY.
- ABOVE ITEMS 1-5 ARE INTENDED TO PROLONG THE LIFE OF THE SYSTEM, NOT GUARANTEE IT.

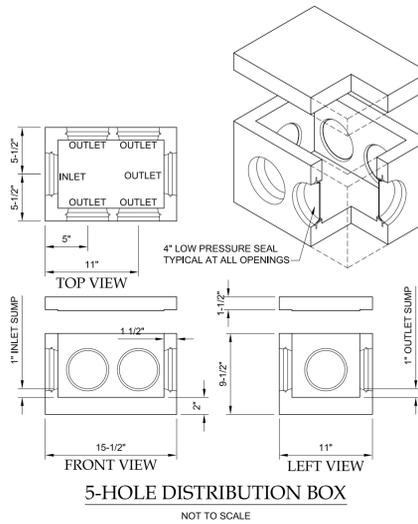


ABSORPTION TRENCH

NOT TO SCALE

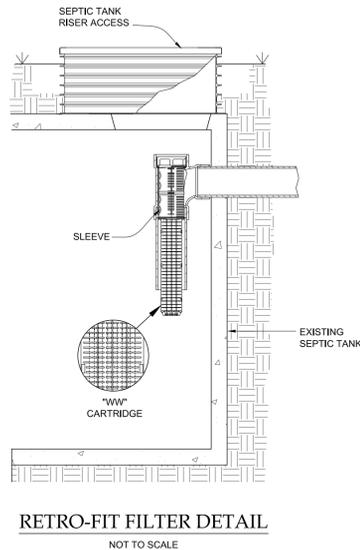
ABSORPTION TRENCH NOTES:

- DO NOT ALLOW CONSTRUCTION TRAFFIC, DRIVING OR PARKING ON TOP OF THE SYSTEM.
- THE TRENCH SIDEWALLS AND BOTTOM SHALL BE UNDISTURBED. PRIOR TO BACKFILLING CALL FOR INSPECTION, RAKE ANY SMEARED SOILS.



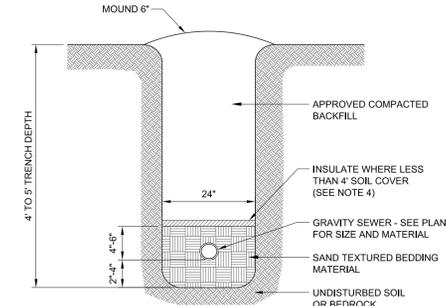
5-HOLE DISTRIBUTION BOX

NOT TO SCALE



RETRO-FIT FILTER DETAIL

NOT TO SCALE



GRAVITY SEWER TRENCH NOTES:

- BACKFILL AND BEDDING SHALL BE PROPERLY COMPACTED.
- BEDDING MATERIAL SHALL NORMALLY CONSIST OF WELL-GRADED SANDS AND GRAVELS WITH A MAXIMUM SIZE OF 3/4".
- BACKFILL SHALL NOT CONTAIN:
 - ANY STONES MORE THAN 12" (1 1/2" MAXIMUM DIAMETER WITHIN 2" OF THE OUTSIDE OF THE PIPE) IN THE LARGEST DIMENSION.
 - BE GREATER THAN 50 POUNDS.
 - CONTAIN ANY FROZEN, WET OR ORGANIC MATERIAL.
- USE RIGID INSULATION AT THE RATE OF 1" FOR EVERY FOOT LESS THAN 4".
- FORCEMAIN MUST BE TESTED FOR LEAKAGE.
- AT ANY CROSSING UNDER A ROAD OR DRIVE, GRAVITY SEWER IS TO BE ENCASED IN A 4" PVC SLEEVE. SAID SLEEVE IS TO EXTEND 6" IN EITHER DIRECTION FROM EDGE OF TRAVELED WAY.
- THE SIDES OF THE TRENCHES 4' OR MORE IN DEPTH ENTERED BY PERSONNEL SHALL BE SHEETED OR SLOPED TO THE ANGLE OF REPOSE AS DEFINED BY O.S.H.A. STANDARDS.

GRAVITY SEWER TRENCH DETAIL

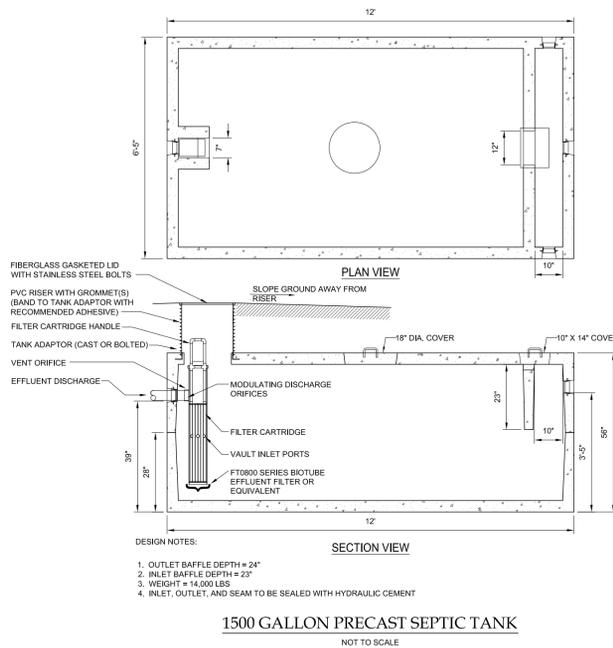
NOT TO SCALE

ITEM	LEACHFIELD	SEPTIC TANK	SEWER
DRILLED WELL	(b)	50	50
GRAVEL PACK WELL, SHALLOW WELL OR SPRING	(b)	75	75
LAKES, PONDS AND IMPOUNDMENTS	50	25	25
RIVER, STREAM	50	25	10
DRAINAGE SWALES, ROADWAY DITCHES	25	--	--
MAIN OR MUNICIPAL WATER LINES	50	50	(d)
SEWER SERVICE LINES	25	25	(d)
ROADWAYS, DRIVEWAYS, PARKING LOTS	10	5	(c)
TOP OF EMBANKMENT, OR SLOPE > 30%	25	10	--
PROPERTY LINE	25 ¹	10	10
TREES	10	10	10
OTHER DISPOSAL FIELD OR REPLACEMENT AREA	10 ²	--	--
FOUNDATION, FOOTING DRAINS, CURTAIN DRAINS	35 ³	10	--
PUBLIC COMMUNITY WATER SUPPLY (e)	(f)	(f)	(f)
SUCTION WATER LINE	100	50	50

THESE DISTANCES MAY BE REDUCED WHEN EVIDENT THAT THE DISTANCE IS UNNECESSARY TO PROTECT AN ITEM OR INCREASED IF NECESSARY TO PROVIDE ADEQUATE PROTECTION.

- ISOLATION DISTANCES APPLY REGARDLESS OF PROPERTY LINE AND OWNERSHIP.
- SEPARATION BETWEEN POTABLE WATER SUPPLIES AND LEACHFIELD'S SHALL BE DETERMINED BY METHODS IN THE VERMONT WATER AND SUPPLY RULE, APPENDIX 21-A, PART 11, 11.4.
- SEWERS UNDER ROADS, DRIVEWAYS OR PARKING LOTS MAY REQUIRE PROTECTIVE CONDUITS OR SLEEVES.
- SEPARATION OF PRESSURE WATER LINES CONSIDERED AS "SERVICE CONNECTIONS" AND SEWER LINES SHALL ADHERE TO THE VERMONT PLUMBING RULES. SEPARATION OF PRESSURE WATER LINES (CONSIDERED TO BE PART OF A PUBLIC WATER SYSTEM AS DEFINED BY THE VERMONT WATER SUPPLY RULE) AND SEWER LINES SHALL ADHERE TO THE REQUIREMENTS OF THE VERMONT WATER SUPPLY RULE.
- THIS REFERS TO PUBLIC COMMUNITY WATER SYSTEMS, AS DEFINED IN THE VERMONT WATER SUPPLY RULE.
- CONTACT DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S WATER SUPPLY DIVISION, 103 SOUTH MAIN STREET, WATERBURY, VERMONT FOR ISOLATION DISTANCES RELATIVE TO PUBLIC COMMUNITY WATER SUPPLY.

WASTEWATER SYSTEM ISOLATION DISTANCES



1500 GALLON PRECAST SEPTIC TANK

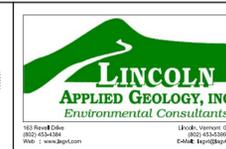
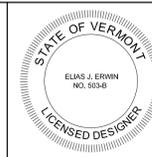
NOT TO SCALE

NOT TO SCALE

THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.

"I hereby certify that in the exercise of my reasonable professional judgment the design-related information submitted with this application is true and correct, and that the design included in this application for a permit complies with the Vermont Wastewater System and Potable Water Supply Rules and the Vermont Water Supply Rules."

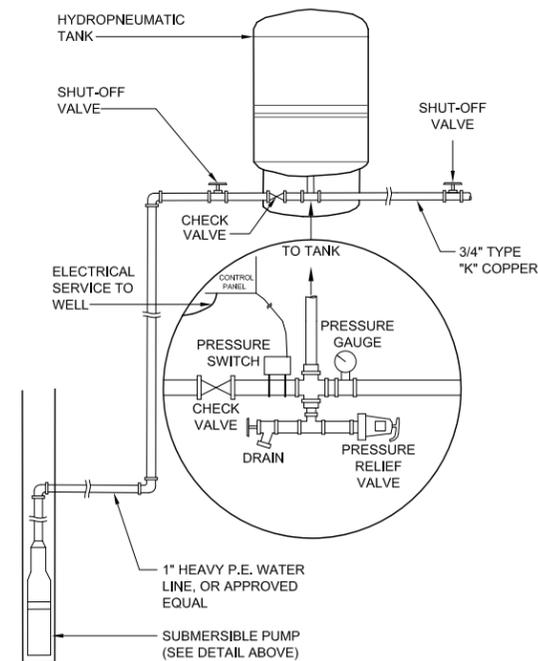
Elias J. Erwin
Licensed Class B Designer #503



Sabin Property
2346 North Greenbush Road
Charlotte, Vermont

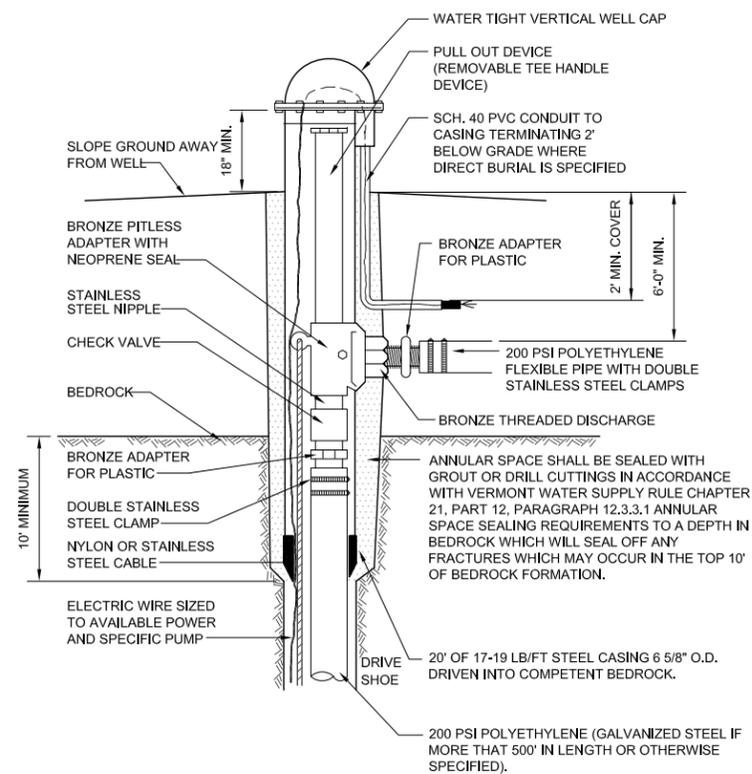
Proposed Wastewater System Design Details

LAG PROJECT # 08086.1
DATE: April 13, 2012
SURVEYOR: EET/AM
DRAWN BY: TAM
FIGURE #: 2



TYPICAL INDIVIDUAL WATER SYSTEM

NOT TO SCALE

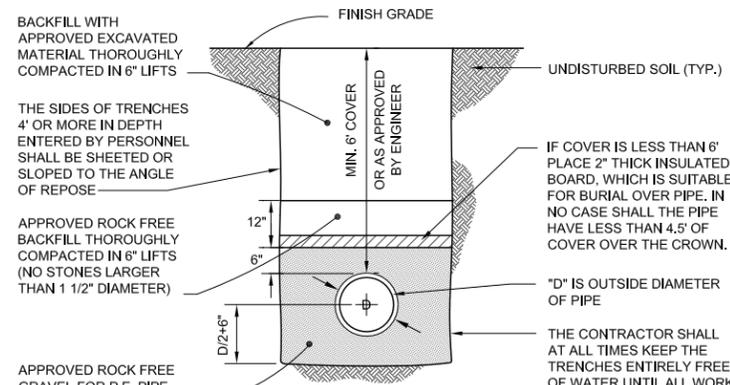


TYPICAL RESIDENTIAL DRILLED WELL

NOT TO SCALE

INDIVIDUAL DRILLED WELL NOTE:

1. THE SUBMERSIBLE PUMP MODEL AND DEPTH OF SETTING TO BE SPECIFIED BY THE ENGINEER AFTER THE WELL IS DRILLED AND YIELD TESTED (PIPE AND ADAPTOR SIZE TO SUIT ALSO).



TYPICAL WATER TRENCH

NOT TO SCALE

INDIVIDUAL DRILLED WELL DESIGN DATA

1. THE DRILLED WELL(S) CONSTRUCTION, LOCATION, DISINFECTION, AND TESTING SHALL BE IN ACCORDANCE WITH THE STATE OF VERMONT - WATER SUPPLY RULES.
2. THE BASIS OF DESIGN FOR EACH DRILLED WELL IS:
 - A. AVERAGE DAY DEMAND: 140 GPD X 3 BEDROOMS = 420 GPD.
 - B. MAXIMUM DAILY DEMAND: (140 GPD X 3 BEDROOMS)/720 MIN/DAY = 0.58 GPM (3 BEDROOM)
 - C. OPERATING PRESSURE RANGE: 40-60 PSI AT PRESSURE SWITCH
 - D. INSTANTANEOUS PEAK DEMAND = 5 GPM.

POTENTIAL SOURCE OF CONTAMINATION AND OTHER SITING LIMITATIONS	SEPARATION DISTANCE
Roadway, Parking Lot (outer edge of shoulder)	25 Feet
Driveway (Fewer than 3 residences)	15 Feet
Sewage System Disposal Fields	(See a.)
Subsurface Wastewater Piping and Related Tanks	50 Feet
Property Line	10 Feet (See b.)
Limit of Herbicide Application on utility R.O.W.	100 Feet (See c.)
Surface Water	10 Feet (See d.)
Buildings	10 Feet
Concentrated Livestock Holding Areas and Manure Storage Systems	200 Feet
Hazardous or Solid Waste Disposal Site	(See f.)
Non-sewage Wastewater Disposal Fields	(See f.)

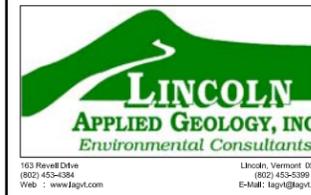
DRILLED WELL ISOLATION DISTANCES

- a. See Table a11-2.
- b. Increased to 50' when adjacent to agricultural cropland.
- c. Applies to rights-of-way (ROW) where herbicides have been applied in the past 12 months or may be applied in the future. This distance may be increased to 200' depending on the active ingredient in the herbicide according to Vermont Regulations for Control of Pesticides.
- d. For Public water sources, see appendix A, Part 3, Subpart 3.4.
- e. Water sources shall not be located in a flood way.
- f. If a water source is potentially downgradient of a source of contamination, then the Secretary shall apply criteria in Appendix A Subpart 11.4.2.2.

NOT TO SCALE

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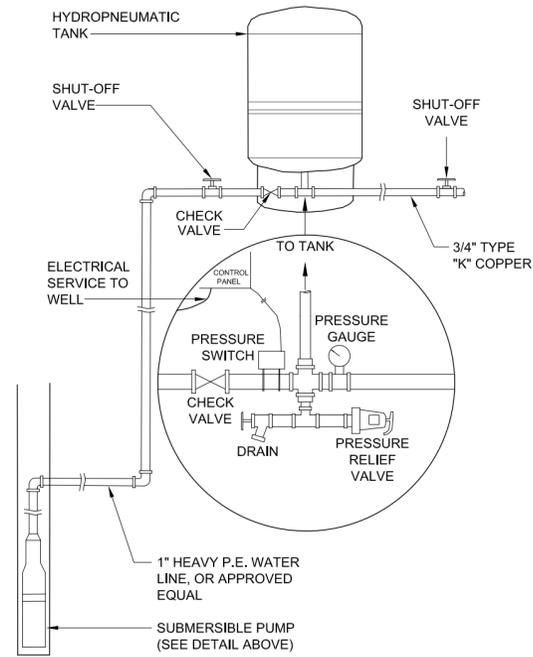
Elías J. Erwin
Licensed Class B Designer #503



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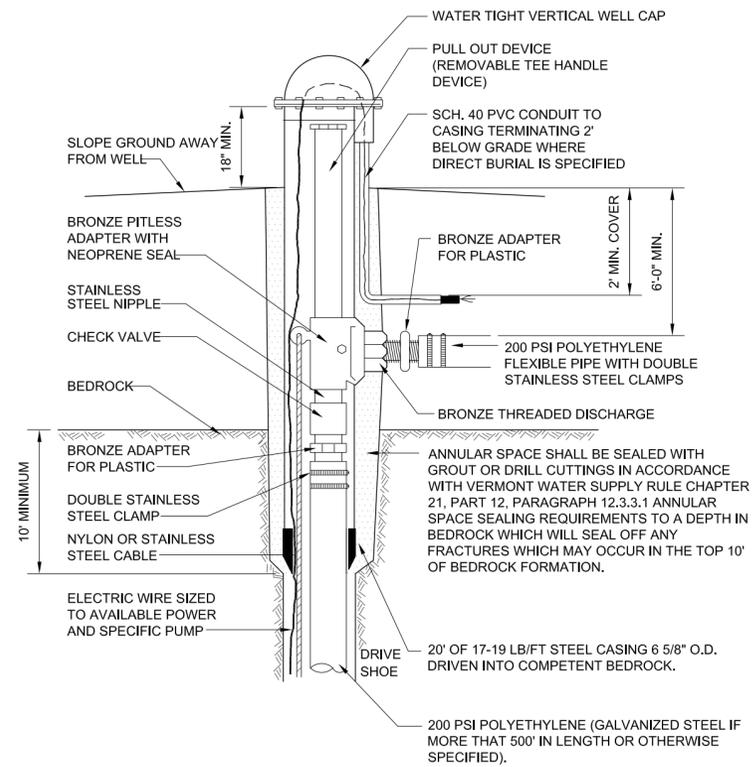
Proposed Water System Design Details

LAG PROJECT #
08086.1
DATE:
April 13, 2012
SURVEYORS:
EE/TAM
DRAWN BY:
TAM
FIGURE #:



TYPICAL INDIVIDUAL WATER SYSTEM

NOT TO SCALE

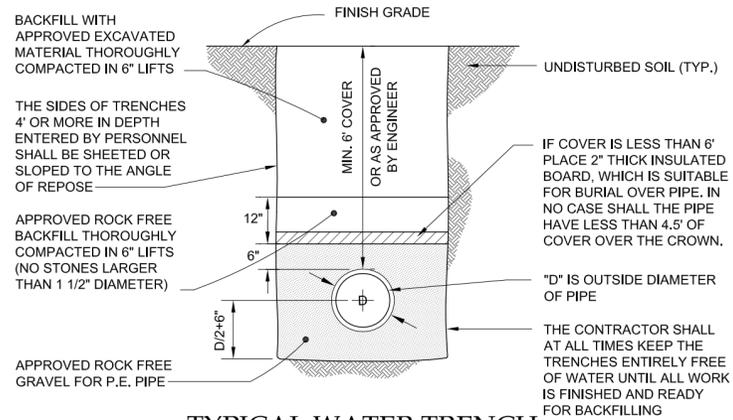


TYPICAL RESIDENTIAL DRILLED WELL

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DRILLED WELL ISOLATION DISTANCES

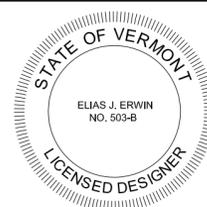
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Elias J. Erwin
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Date



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Sabin Property
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Charlotte, Vermont

Proposed Water System Design Details

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TAM
FIGURE #:

3