



Land Surveyors – Boundary Consultants  
Water & Wastewater System Designers  
P.O. Box 388 – 25A West Street  
Bristol, Vermont 05443

Ronald L. LaRose, L.S.

Kevin R. LaRose, L.S.

October 12, 2011

Andrea Grayson  
Mark Keppel  
322 Oak Hill Road  
Charlotte, Vermont 05445

RE State of Vermont Septic Permit

Dear Andrea & Mark:

Please find enclosed the State of Vermont application package concerning the proposed development on your property off of Oak Hill Road in Charlotte.

In the package, you will find three sets of the application. The original is paper-clipped to an envelope that needs to be signed by both of you and sent to the Town of Charlotte along with a check payable to the Town of Charlotte for \$500 based on their fee schedule for a single-family home. One of the remaining two sets is for your records. The other set, as per a State Law passed last summer, is for your neighbor to the south, Mr. & Mrs. Minkler. Once you mail/deliver the package to them, you must sign and send to the State of Vermont the certification letter that is included with this package.

When the time comes that you are ready to construct the system, you or your contractor should contact me so that I can perform the required inspections and certifications. Those will be billed when the system is complete. The inspections and certification generally run around \$500. They include necessary stakeout, inspections, and a certification letter. It should be noted that the above-stated costs assume that the wastewater system and well site will be constructed in their designed location. Any deviation from the designed/permitted location may require an as-built drawing and possibly a permit amendment from the State of Vermont. The permit from the State of Vermont will in no way relieve you from any local permits that may be required. Also, we have indicated on the application to the State of Vermont that there will be no floor drains as part of this project.

You also inquired about remarking your southerly boundary lines. For this work, we would estimate \$1,000 to blaze and paint the south line of the 9.96-acre parcel. This work would require us to find and survey between the easterly and westerly corner, then mark the line between them.

If you have any questions, please do not hesitate to give me a call.

Sincerely,

Kevin R. LaRose, L.S.  
Licensed Class B Designer

Land Surveying ♦ Topographical Surveys ♦ State & Local Permitting ♦ Septic Design ♦ Land Use Planning

p 802 453 3818  
f 802 329 2138

www.larosesurveys.com  
info@larosesurveys.com



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October 12, 2011

Town of Charlotte  
Attn: Mr. Tom Mansfield  
PO Box 119  
Charlotte, Vermont 05445

RE: Wastewater System & Potable Water Supply Permit Application  
Grayson & Keppel Property, Oak Hill Road

Dear Tom:

We are writing on behalf of Andrea Grayson and Mark Keppel in regard to their proposed septic system and water supply for a single-family residence located off the southerly side of Oak Hill Road.

Specifically, Ms Grayson and Mr. Keppel are proposing to construct a septic system and water supply for their "cabin" which is located on a vacant parcel of land, south of Oak Hill Road. We performed test pits on the subject property in the presence of Spencer Harris on May 16, 2011. The proposed septic system is sized for a two-bedroom single-family residence.

For your review, we have included the following:

1. Wastewater System & Potable Water Supply Permit Application;
2. Permit fee of \$500.00;
3. Site Plan (two copies);
4. Overall Plan;
5. Test pit logs;
6. Performance based Calculations;
7. Act 145 Certification.

Ms Grayson and Mr. Keppel are looking forward to your review of their application and subsequent issuance of a permit. If you have any questions, please do not hesitate to give me a call.

Sincerely,

Kevin R. LaRose, L.S.  
Licensed Class B Designer

Cc: Andrea Grayson

Land Surveying ♦ Topographical Surveys ♦ State & Local Permitting ♦ Septic Design ♦ Land Use Planning

802.453.3818  
802.329.2138

www.larosesurveys.com  
info@larosesurveys.com

# 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.

**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 Grayson		2 First Name (and Middle Initial if appropriate) Andrea	
3 Mailing Address Line 1 322 Oak Hill Road		4 Mailing Address Line 2	
5 Town/City Charlotte	6 State/Province Vermont	7 Country United States	8 Zip/Postal Code 05445
9 Email Address			10 Telephone
<input type="button" value="Remove This Applicant"/>			

1 Last Name Keppel		2 First Name (and Middle Initial if appropriate) Mark	
3 Mailing Address Line 1 322 Oak Hill Road		4 Mailing Address Line 2	
5 Town/City Charlotte	6 State/Province Vermont	7 Country United States	8 Zip/Postal Code 05445
9 Email Address			10 Telephone
<input type="button" value="Remove This Applicant"/>			

**Add Another 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			2 Telephone
3 Mailing Address Line 1		4 Mailing Address Line 2	
5 Town/City	6 State/Province	7 Country United States	8 Zip/Postal Code

**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		10 Certifying Official First Name (and MI if appropriate)	
<input type="text"/>		<input type="text"/>	
11 Certifying Official Title			
<input type="text"/>			
12 Certifying Official Email Address			13 Telephone
<input type="text"/>			<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)	
LaRose		Kevin	
3 Designer License#	4 Company Name		
00443	LaRose Surveys, P.C.		
5 Mailing Address Line 1		6 Mailing Address Line 2	
P O Box 388		<input type="text"/>	
7 Town City	8 State/Province	9 Country	10 Zip/Postal Code
Bristol	Vermont	United States	05443
11 Email Address			12 Telephone
kevin@larosesurveys.com			453-3818

13 Designer Role(s)

Water Supply Designer

Wastewater Disposal System Designer

Remove This Designer

Add Another 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	M10B02L21-1	Charlotte	Oak Hill Road

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 (in decimal degrees to five decimal places, ex. 44.38181°) (b) Longitude (in decimal degrees to five decimal places, ex. 72.31392°)

N  ° W (-)  °

**Part IV Project Information**

**Section A - General Project Information & Questions**

1 Project Name (if applicable) 2 Total Acreage of Property

3 Business Name (if applicable)

4 Detailed Project Description

Construction of an on-site septic and water system for a parcel presently occupied by a camp.

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?  Yes  No

6 Does this application include subdividing the property?  Yes  No

7 Has anyone from the Wastewater Management Division's Regional Office been to the property?  Yes  No

If Yes, enter the staff person's name and the date of the visit

(a) Name of Staff Person  (b) Date of Visit

8 Will any construction occur within 50 feet of a wetland boundary, mapped or designated?  Yes  No

If Yes, contact the Wetlands Program of the Water Quality Division at (802) 241-3770

9 Will more than one acre be disturbed during the entire course of construction, including all lots and phases?  Yes  No

If Yes, contact the Stormwater Program of the Water Quality Division at (802) 241-4320

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		

**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	95	491

**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	a site plan showing a portion of lands of Grayson & Keppel	10-01-2011	

**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	9.96	cabin

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	Undeveloped			<input checked="" type="radio"/> Yes <input type="radio"/> No

**Add Another Building**

**Remove This Lot**

**Add Another Lot**

**Section E - Proposed Project Lot/BuildingDetails**

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# <input type="text" value="1"/>	2 Lot Size (acres) <input type="text" value="9.96"/>	3 Proposed Use of the Lot <input type="text" value="two bedroom SFR"/>
4 Is the lot being created as part of a subdivision? <span style="float:right"><input type="radio"/> Yes <input checked="" type="radio"/> No</span>		
5 Are you requesting that the Blood, Marriage, or Civil Union special fee be applied to this lot? <span style="float:right"><input type="radio"/> Yes <input checked="" type="radio"/> No</span>		
6 If the lot is exempt, please indicate the specific exemption from the Wastewater System and Potable Water Supply Rules? <input style="width:100%;" type="text"/>		
7 Provide the following information for each building on the lot.		
<input checked="" type="checkbox"/> X	(a) Building ID <input type="text" value="1"/>	(b) If building is exempt, indicate exemption <input type="text"/>
	(c) Construction or increased flow? <input checked="" type="checkbox"/>	(d) Proposed Use <input type="text" value="two-bedroom SFR"/>
<input type="button" value="Add Another Building"/>		
<input type="button" value="Remove This Lot"/>		
<input type="button" value="Add Another Lot"/>		

Part V Water Supply Information
<b>Section A - Water Supply Screening Questions</b>
1 Are you proposing a new water supply for this project? <span style="float:right"><input checked="" type="radio"/> Yes <input type="radio"/> No</span>
2 Are you proposing changes to an existing water supply for this project? <span style="float:right"><input type="radio"/> Yes <input checked="" type="radio"/> No</span>
3 Is there a connection to an existing water supply for the project? <span style="float:right"><input type="radio"/> Yes <input checked="" type="radio"/> No</span>
<i>If you answered No to all three of the above questions, skip to Part VI. Otherwise, proceed with Part V.</i>
<b>Section B - General Water Supply Questions</b>
1 Does this project involve a failed water supply? <span style="float:right"><input type="radio"/> Yes <input checked="" type="radio"/> No</span>
2 Will any of the proposed water sources serve 25 or more people or have 15 or more service connections? <span style="float:right"><input type="radio"/> Yes <input checked="" type="radio"/> No</span>
<i>If Yes, the applicant must contact the Water Supply Division at (802) 241-3400 for source, construction and operating</i>
3 Are any of the existing or proposed water sources located within a special flood hazard area? <span style="float:right"><input type="radio"/> Yes <input checked="" type="radio"/> No</span>
4 Are any of the existing or proposed water sources located within a floodway? <span style="float:right"><input type="radio"/> Yes <input checked="" type="radio"/> No</span>
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? <span style="float:right"><input type="radio"/> Yes <input checked="" type="radio"/> No</span>
<i>If Yes, please submit additional information on the site. The Waste Management Division can be reached at (802) 241-3888</i>
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? <span style="float:right"><input type="radio"/> Yes <input checked="" type="radio"/> No</span>
<i>If Yes, please submit a copy of the approval letter from the Water Supply Division.</i>
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? <span style="float:right"><input type="radio"/> Yes <input checked="" type="radio"/> No</span>
<i>If Yes, please submit additional information regarding the constituent(s) that exceeds the standards and plans, details, and specifications of the treatment device</i>
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? <span style="float:right"><input type="radio"/> Yes <input checked="" type="radio"/> No</span>
<i>If in areas of known interference issues, please contact the Water Supply Division at (802) 241-3400</i>
<b>Section C - Individual Water Supply Details</b>
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 <input style="width:90%;" type="text" value="Proposed Connection"/>	2 Water Supply Owner (if not Applicant) <input style="width:90%;" type="text"/>																																			
3 Water Source Type <input style="width:90%;" type="text" value="Non-Public Drilled Bedrock Well"/>	4 Type of Change to Supply <input style="width:90%;" type="text" value="New Connection or Increased Flow"/>																																			
5 Lots/Buildings Served by this Water Supply System																																				
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:10%;">(a) Lot#</th> <th style="width:15%;">(b) Building ID</th> <th style="width:35%;">(c) Type of Change to the Building's Supply</th> <th style="width:10%;">(d) Existing</th> <th style="width:10%;">(e) Increase</th> <th style="width:10%;">(f) Total</th> <th style="width:10%;">(g) Rule or Meter Based Flows</th> </tr> </thead> <tbody> <tr> <td style="text-align:center;"><input checked="" type="checkbox"/> 1</td> <td style="text-align:center;">1</td> <td>Connection to New System</td> <td style="text-align:center;"><input type="text"/></td> <td style="text-align:center;">280</td> <td style="text-align:center;">280</td> <td>Rule-based</td> </tr> <tr> <td colspan="7" style="padding: 2px;"><b>Add Another Lot/Building Served by this Supply</b></td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align:center;">6</td> <td style="text-align:center;">7</td> <td style="text-align:center;">8</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align:center;"><input type="text"/></td> <td style="text-align:center;">280</td> <td style="text-align:center;">280</td> <td></td> </tr> </tbody> </table>	(a) Lot#	(b) Building ID	(c) Type of Change to the Building's Supply	(d) Existing	(e) Increase	(f) Total	(g) Rule or Meter Based Flows	<input checked="" type="checkbox"/> 1	1	Connection to New System	<input type="text"/>	280	280	Rule-based	<b>Add Another Lot/Building Served by this Supply</b>										6	7	8					<input type="text"/>	280	280		
(a) Lot#	(b) Building ID	(c) Type of Change to the Building's Supply	(d) Existing	(e) Increase	(f) Total	(g) Rule or Meter Based Flows																														
<input checked="" type="checkbox"/> 1	1	Connection to New System	<input type="text"/>	280	280	Rule-based																														
<b>Add Another Lot/Building Served by this Supply</b>																																				
			6	7	8																															
			<input type="text"/>	280	280																															
9 Is this water supply located off-lot? <span style="float:right;">Yes <input type="radio"/> No <input type="radio"/></span>																																				
10 Is this water supply shared? <span style="float:right;">Yes <input type="radio"/> No <input type="radio"/></span>																																				
<i>If the water supply is located off-lot or shared, submit a copy of the agreement to provide an easement prior to construction</i>																																				
11 Is a variance being requested for this water supply? <span style="float:right;">Yes <input type="radio"/> No <input type="radio"/></span>																																				
<i>If Yes please submit additional details related to the variance request</i>																																				
<input type="button" value="Remove This Water Supply"/>																																				
<input type="button" value="Add Another Water Supply"/>																																				

**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

(a) Water Supply Name/Identifier	(b) Existing	(c) Increase	(d) Total
<input checked="" type="checkbox"/> proposed connection	<input type="text"/>	280	280
<b>Add Another Water Supply</b>			
	2	3	4
	<input type="text"/>	280	280

**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

1a) 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 type="text" value="proposed septic"/>	2 Wastewater Disposal System Owner (if not Applicant) <input type="text"/>
3 Wastewater Disposal System Type <input type="text" value="Mound"/>	4 Type of Change to System <input type="text" value="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	(d) Existing	(e) Increase	(f) Infiltration	(g) Total	(h) Rule or Meter Based Flows
X	1	1	Connection to New System	0	280	0	280	Rule-based
Add Another Lot/Building Served by this System				6	7	8	9	
				0	280	0	280	

10 Is this wastewater disposal system located off-lot? Yes  No

11 Is this wastewater disposal system shared? Yes  No

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

12 Is a variance being requested for this wastewater disposal system? Yes  No

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

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

14 If this wastewater disposal system type is a connection to a municipal system, please select the town

Town

15 If this wastewater disposal system is a soil-based system, please select the design approach used

Design Approach Used

16 For soil-based systems, please check all that apply

- Storage and Dose     Filtrate

17 If this is an Innovative/Alternative soil-based system, please select the system use type

Innovative/Alternative System Use Type

18 If this is an Innovative/Alternative soil-based system, please select the Innovative/Alternative system or product

Innovative/Alternative System or Product

Remove This Wastewater System

Add Another Wastewater System

**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

	(a) Wastewater Disposal System Name/Identifier	(b) Existing	(c) Increase	(d) Infiltration	(e) Total
X	proposed system		280	0	280
		2	3	4	5
			280	0	280

Add Another Wastewater System

**Part VII Application Fees**

1 Fee Amount \$500.00

2 Fee Calculation Details

Town of Charlotte fee schedule for single-family dwelling

**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 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

As the individual who prepared this application, including all documents that are marked as copyrighted, I hereby grant a non-exclusive, limited 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, and for no other purposes. As a condition to this license, the State agrees that it will not make any changes to such documents, nor will the State delete any copyright notices on such documents."

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 Kevin R. LaRose	2 Designer 1 Signature 	3 Signature Date 10/15/11
--------------------------------------	---	------------------------------

**Section B - Certifying Designer 2 Certification & Copyright License**

"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

As the individual who prepared this application, including all documents that are marked as copyrighted, I hereby grant a non-exclusive, limited 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, and for no other purposes. As a condition to this license, the State agrees that it will not make any changes to such documents, nor will the State delete any copyright notices on such documents."

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  	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?

Contact Designer prior to site visit

*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.*

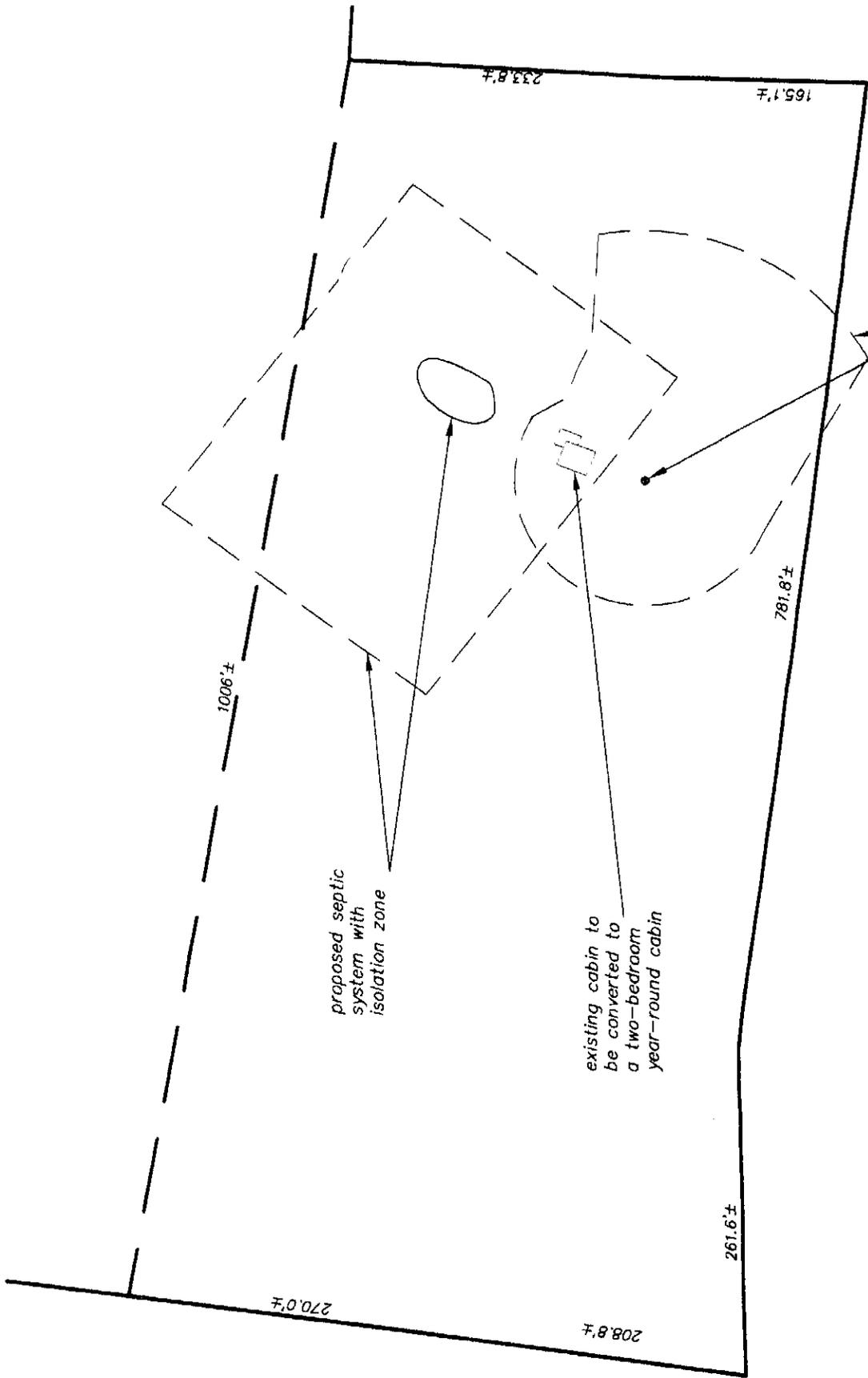
*I also understand that I am not allowed to commence any site work or construction on this project without written approval from the Department of Environmental Conservation.*

*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.*

<input checked="" type="checkbox"/>	2 Print Applicant Name Andrea Grayson	3 Applicant Signature	4 Signature Date
<input checked="" type="checkbox"/>	2 Print Applicant Name Mark Keppel	3 Applicant Signature	4 Signature Date

Add Applicant Signature Block



**Overall Lot Plan**

N.T.S.

LaRose Surveys, P.C.  
**Test Pit Evaluation**

Client: Grayson/Keppel Project #: 11016 Date: May 16, 2011 Site Address: Oak Hill Road, Charlotte

Project Description: vacant lot to be developed with a SFR

Logged By: Kevin LaRose Witnessed By: Spencer Harris

Topographical Description: gently sloping wooded site Slope: 1-5% Vegetation: woods

Weather: rain, 50 Method of Excavation: tracked excavator Excavating Company: Preston

Test Pit #	Horizon	Depth (inches)	Texture	Color	Consistency	Structure	Redoximorphic Features	Comments
101		0-8"	sandy loam	dark brown	friable	granular	none	
		8-15"	fine sandy loam	reddish brown	friable	granular	none	roots
		15-33"	very fine sandy loam	olive gray	friable	subang blocky	depl	
102		0-7"	sandy loam	dark brown	friable	granular	none	
		7-20" 20"	fine sandy loam ledge	reddish brown	friable	granular	none	roots
103		0-5"	sandy loam	dark brown	friable	granular	none	
		5-26"	fine sandy loam	reddish brown	friable	granular	none	roots
		26-33" 33-42"	very fine sandy loam very fine sandy loam	yellow brown olive gray	friable friable	subang blocky subang blocky	conc depl	

LaRose Surveys, P.C.  
**Performance Based Calculations**

Client: Grayson  
 Site Address: Oak Hill Road, Charlotte

Project#: 11016

	<b>SYSTEM</b>
<b>Simplified Desktop Mounding Analysis</b>	south site
Wastewater flow (gpd)	280
Slope (%)	5.0%
Soil texture	fine sandy loam
Linear loading rate factor (f)	18.7
Depth to seasonal high water table (in)	15
Depth to seasonal high water table (ft)	1.3
Max. soil thickness available for groundwater mounding (ft) (SHWT-0.5')	0.8
Linear loading rate (LLR)	14.0
Calculated minimum length of seepage bed (ft)	20.0
Calculated maximum width of seepage bed (ft)	14.0
Is calculated length to width ratio = or > 3:1?	No
Required sand thickness beneath seepage bed (ft)	2.5'
<b>Proposed System Parameters</b>	
Length of seepage bed (ft)	40
Width of seepage bed (ft)	7
Total seepage area (ft <sup>2</sup> )	280
Linear loading rate factor (f)	18.7
Calculated induced groundwater mound thickness (ft)	0.37
Calculated linear loading rate (LLR)	7.00
Calculated depth to seasonal high groundwater & induced mound (ft)	0.88
Minimum sand thickness required beneath seepage bed (ft)	2.12
<b>Confirm Design Parameters Comply with Simplified Mounding Analysis</b>	
Proposed LLR <=/= Simplified LLR	Yes
Proposed seepage bed length >/= Simplified minimum bed length	Yes
Proposed seepage bed width <=/= Simplified maximum bed width	Yes
Calculated length to width ratio =/> 3:1	Yes
Depth to proposed induced groundwater mound >/= 0.5'	Yes
Thickness of "dry" soil from induced groundwater mound & seepage bed >/= 3'	Yes

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 \_\_\_\_\_

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**Affected Landowners**

Lee & Deborah Minkler  
1158 Roscoe Road  
Charlotte, Vermont 05445