

June 4, 2015

Ms. Jeannine McCrumb, Sewage Officer
Town of Charlotte
P.O. Box 119
Charlotte, VT 05445

RE: Couture, Anderson and Smith Redefined 5 – Lot Subdivision, Vineyard View Drive, Charlotte – Submittal of Water/Wastewater Application

Dear Jeannine:

The 5 – lot subdivision owned by Jonathan Couture, Kimberly Anderson and Thomas & Nancy Smith is going through the process of redefining the 5 lot subdivision as it is shown on the Figure 1 Site Redevelopment Plan. In redefining the subdivision, a number of changes are being proposed to existing and proposed water and wastewater systems that are reflected in this WW-138-1011 permit amendment application. These include: Lot 1 will continue to use the primary disposal system (and replacement area) that was permitted by the Town in 1982 through Bill Zabiloski of the On-Site Sewage Program; Lot 1 and 3 will continue to jointly use the drilled well now located on Lot 3; Lot 2 will utilize an on-site mound disposal system (instead of the community mound) and an on-site well; and newly re-configured Lot 4 and 5 will continue to be connected to the community mound and each will have their own well.

Lot 1 will continue to use the 1982 approved in-ground disposal system shown on Figure 1. The primary and replacement disposal areas are located on Lot 3 by easement. The inspection/evaluation report and design prepared by Bill Zabiloski on behalf of the applicant for the Town of Charlotte is attached. Lot 1 will continue to share the pre-existing well that is now located on Lot 3. This well has always been connected to the Lot 1 residence and the barn complex (that has recently been converted to the Lot 3 residence.)

Lot 2 will utilize a 4 bedroom on-site performance based mound and an on-site well. The mound and all related test pits and percolation tests and the on-site well are shown on Figure 1. The soil profile descriptions (which were reviewed with Spencer Harris on 9-14-2009); percolation data; the site specific mounding analysis; the pressure distribution and mound dimension details; and an effluent pump specifications for a pump capable of meeting the required head/capacity demands are attached. Figure 2 shows the wastewater system details for Lot 2.

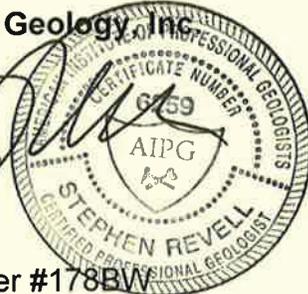
Lot 3 has been connected to the community mound and has shared a drilled well with Lot 1 for the past several years.

Lot 5 has been split into Lot 4 and 5. Both lots will be connected to the community mound disposal system via existing stubbed out connections to the community pump station. Each lot will use a 1500 gallon STEP tank and a 1.5' force main (shown on Figure 3) that connects it to the community pump station shown on Figure 1. Lot 4 and 5 will each use individual on-site wells shown on Figure 1. The well and water system details are shown on Figure 3. You will note that the isolation zones for the Lot 2, 4 and 5 wells and the Lot 2 mound do not overshadow any adjacent property, so Act 145 notification is not required. An ANR Form 5 has been attached indicating that fact.

I believe the Couture, Anderson and Smith WW-138-1101 permit amendment application is complete with a signed application and ANR Form 5, a \$1250.00 application fee payable to the Town of Charlotte, 2 signed copies of Figures 1, 2 and 3, and 1 copy of this letter and the attachments. The applicants look forward to your satisfactory review and issuance of the requested permit.

If you have any questions, please give me a call.

Very truly yours,
Lincoln Applied Geology, Inc.



Stephen Revell
Licensed Designer #178BW
Senior Hydrogeologist

SR/ih

Enclosure

CC: Jonathan Couture
Kimberly Anderson
Thomas & Nancy Smith

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Drinking Water & Groundwater Protection 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 Courture		2 First Name (and Middle Initial if appropriate) Jonathan	
3 Mailing Address Line 1 240 Vineyard View Drive		4 Mailing Address Line 2	
5 Town/City Charlotte	6 State/Province VT	7 Country United States	8 Zip/Postal Code 05445
9 Email Address			10 Telephone

Remove This Applicant

1 Last Name Anderson		2 First Name (and Middle Initial if appropriate) Kimberly	
3 Mailing Address Line 1 240 Vineyard View Drive		4 Mailing Address Line 2	
5 Town/City Charlotte	6 State/Province VT	7 Country United States	8 Zip/Postal Code 05445
9 Email Address			10 Telephone

Remove This Applicant

1 Last Name Smith		2 First Name (and Middle Initial if appropriate) Thomas J. & Nancy S.	
3 Mailing Address Line 1 264 Vineyard View Drive		4 Mailing Address Line 2	
5 Town/City Charlotte	6 State/Province VT	7 Country United States	8 Zip/Postal Code 05445
9 Email Address			10 Telephone

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	8 Zip/Postal Code	
					United States		
Certifying Official The Certifying Official must be a person who has signatory authority for the legal entity or organization that is the Applicant.							
9 Certifying Official Last Name					10 Certifying Official First Name (and MI if appropriate)		
11 Certifying Official Title							
12 Certifying Official Email Address						13 Telephone	
Remove This Applicant							

Add Another Applicant

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

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

Part II Certifying Designer(s) Information							
1 Designer Last Name					2 Designer First Name (and Middle Initial if appropriate)		
Revell					Stephen		
3 Designer License#		4 Company Name					
178		Lincoln Applied Geology, Inc.					

5 Mailing Address Line 1 163 Revell Drive		6 Mailing Address Line 2	
7 Town/City Lincoln	8 State/Province VT	9 Country United States	10 Zip/Postal Code 05443
11 Email Address srevell@lagvt.com			12 Telephone 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 <div style="background-color: yellow; padding: 2px; display: inline-block;">Remove This Designer</div>			

Add Another Designer

Part III Property Location Information

Section A - Property Location

1 Please provide the property Town and the property address or a brief description of the location.

(a) Town or City Charlotte	(b) Street or Road Location 173 State Park Road
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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>	(b) Longitude <i>(in decimal degrees to five decimal places, ex. -72.31392°)</i>
N <input type="text" value="44.27896"/> °	W (-) <input type="text" value="73.23153"/> °

Part IV Project Information

Section A - General Project Information & Questions

1 Project Name (if applicable) Couture, Anderson and Smith Subdivision	2 Total Acreage of Property 27.88
3 Business Name (if applicable)	
4 Detailed Project Description The applicants are recreating a 5-lot subdivision served by a community disposal system (Lot 3, 4 and 5) and 2 on-site disposal systems (Lot 1 and 2) and individual on-site wells. The community disposal area is designed to accommodate 6 units, so 3 units will be held in reserve.	
5 (a) Were all existing buildings or structures, campgrounds, and their associated potable water supplies and wastewater systems substantially completed before January 1, 2007? <input checked="" type="radio"/> Yes <input type="radio"/> No	
(b) Were all existing 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 checked="" type="radio"/> Yes <input type="radio"/> No	
7 Has anyone from the Drinking Water & Groundwater Protection Division's Regional Office been to the property?..... <input checked="" type="radio"/> Yes <input type="radio"/> No	
If Yes, enter the staff person's name and the date of the visit.	
(a) Name of Staff Person <input type="text" value="Spencer Harris"/>	(b) Date of Visit (m/d/yyyy) <input type="text" value="9/14/2009"/>
8 Will any construction occur within 50 feet of a wetland boundary, mapped or designated? <input type="radio"/> Yes <input checked="" type="radio"/> No	
If Yes, contact the Wetlands Program of the Watershed Management Division at (802) 338-4835.	

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 Watershed Management 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 Watershed Management 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 Select	

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
 4C1240

Section B - Project Deed Reference

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

(a) Town	(b) Parcel ID	(c) Book	(d) Page(s)
X Charlotte	0012-0264	194	208-213
X Charlotte	0012-0264	215	113-118
X Charlotte	0012-0240	171	306-310

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 Figure 1	Re development Plan of 5 Lot Subdivision	6/5/2015	
X Figure 2	Lot 2, 4 and 5 Wastewater System Details	6/5/2015	
X Figure 3	Lot 2, 4 and 5 Water System Details	6/5/2015	

Add Another Plan Reference

Section D - Existing Project Lot/Building Details

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	1.78	Residential

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

X	(a) Building ID 1	(b) Existing Use Residential	(c) Date Construction of Building Substantially Complete Pre 1980	(d) Prior Permits WW-138-1011	(e) In compliance with existing permits? <input checked="" type="radio"/> Yes <input type="radio"/> No
Add Another Building					
Remove This Lot					
1 Lot#	2 Lot Size (acres)	3 Existing Use of the Lot			
2	5.01	Undeveloped			
4 Provide the following information for each building on the lot:					
X	(a) Building ID	(b) Existing Use	(c) Date Construction of Building Substantially Complete	(d) Prior Permits	(e) In compliance with existing permits?
				WW-138-1011	<input checked="" type="radio"/> Yes <input type="radio"/> No
Add Another Building					
Remove This Lot					
1 Lot#	2 Lot Size (acres)	3 Existing Use of the Lot			
3	9.05	Residential			
4 Provide the following information for each building on the lot:					
X	(a) Building ID	(b) Existing Use	(c) Date Construction of Building Substantially Complete	(d) Prior Permits	(e) In compliance with existing permits?
				WW-1381011	<input checked="" type="radio"/> Yes <input type="radio"/> No
Add Another Building					
Remove This Lot					
1 Lot#	2 Lot Size (acres)	3 Existing Use of the Lot			
4	7.87	Undeveloped			
4 Provide the following information for each building on the lot:					
X	(a) Building ID	(b) Existing Use	(c) Date Construction of Building Substantially Complete	(d) Prior Permits	(e) In compliance with existing permits?
				WW-138-1011	<input checked="" type="radio"/> Yes <input type="radio"/> No
Add Another Building					
Remove This Lot					
1 Lot#	2 Lot Size (acres)	3 Existing Use of the Lot			
5	4.17	Undeveloped			
4 Provide the following information for each building on the lot:					
X	(a) Building ID	(b) Existing Use	(c) Date Construction of Building Substantially Complete	(d) Prior Permits	(e) In compliance with existing permits?
				WW-138-1011	<input checked="" 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	4.08	Single 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	§1-304(a)(1)	<input type="checkbox"/>	No change

Add Another Building

Remove This Lot

1 Lot#	2 Lot Size (acres)	3 Proposed Use of the Lot
2	5.01	Single Family Residence

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 checked="" type="checkbox"/>	Single Family Residence

Add Another Building

Remove This Lot

1 Lot#	2 Lot Size (acres)	3 Proposed Use of the Lot
3	14.94	Single Family Residence

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 checked="" type="checkbox"/>	Single Family Residence

Add Another Building

Remove This Lot

1 Lot#	2 Lot Size (acres)	3 Proposed Use of the Lot
4	1.52	Single Family Residence

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 checked="" type="checkbox"/>	Single Family Residential

Add Another Building

Remove This Lot

1 Lot#	2 Lot Size (acres)	3 Proposed Use of the Lot
5	2.35	Single Family Residence

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 checked="" type="checkbox"/>	Single Family Residence

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 or water service line or changes to a permitted but not constructed water supply or water service line for this project? Yes No

2 Are you proposing changes to an existing water supply or water service for this project (including changes to location, design flows, or operational change)? Yes No

3 Is there an existing connection to a water supply or water service line for this project? Yes No

Complete Part V if you answered Yes to any of the above questions. A project with no existing or proposed water supply may skip to Part VI.

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 Drinking Water & Groundwater Protection Division at (802) 241-3400 for source, construction and an operating permit.

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 Drinking Water & Groundwater Protection 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 Drinking Water & Groundwater Protection 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 Drinking Water & Groundwater Protection Division? Yes No
If in areas of known interference issues, contact the Drinking Water & Groundwater Protection 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 & Lot 3 Well	2 Water Supply Owner (if not Applicant) Lot 3
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) Change	(f) Total	
X 1	1	No Change	490	0	490	Rule-based
Add Another Lot/Building Served by this Supply			6	7	8	
			490	0	490	

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.

Remove This Water Supply

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

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) Change	(f) Total	
X 2	1	Connection to New System	0	490	490	Rule-based

Add Another Lot/Building Served by this Supply

6	7	8
0	490	490

- 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.

Remove This Water Supply

1 Water Supply Name/Identifier Lot 3 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) Change	(f) Total	
X	3	1	No Change	0	490	490	Rule-based

Add Another Lot/Building Served by this Supply

6	7	8
0	490	490

- 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.

Remove This Water Supply

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

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) Change	(f) Total	
X	4	1	Connection to New System	0	490	490	Rule-based

Add Another Lot/Building Served by this Supply

6	7	8
0	490	490

- 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.

Remove This Water Supply

1 Water Supply Name/Identifier Lot 5 Well	2 Water Supply Owner (if not Applicant)
3 Water Source Type Non-Public Drilled Bedrock Well	4 Type of Change to Supply New System

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) Change	(f) Total	
X	5	1	Connection to New System	0	490	490	Rule-based
				6	7	8	
				0	490	490	

Add Another Lot/Building Served by this 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.

Remove This Water Supply

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	Design Flows (Gallons Per Day)		
		(b) Existing	(c) Change	(d) Total
X	Lot 1 Well	490	0	490
X	Lot 2 Well	0	490	490
X	Lot 3 Well	490	0	490
X	Lot 4 Well	0	490	490
X	Lot 5 Well	0	490	490
		2	3	4
		980	1,470	2,450

Add Another Water Supply

Part VI Wastewater Disposal System Information

Section A - Wastewater Disposal System Screening Questions

1 Are you proposing a new or replacement wastewater disposal system, a new wastewater service line, or changes to a permitted but not constructed wastewater disposal system or wastewater service line for this project? Yes No
 2 Are you proposing changes to an existing wastewater disposal system, replacement wastewater disposal system, replacement area, or wastewater service line for this project (including changes to location, design flows, or operational change)? Yes No

3 Is there an existing connection to a wastewater disposal system or wastewater service line for this project? Yes No

Complete Part VI if you answered Yes to any of the above questions.
A project with no existing or proposed wastewater disposal systems may skip to Part VII.

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 For projects using soil-based wastewater systems having a total design flow that exceeds 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 Drinking Water & Groundwater Protection 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 Drinking Water & Groundwater Protection Division? Yes No

If Yes, contact the Drinking Water & Groundwater Protection 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 Lot 1 Primary	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) Change	(f) Infiltration	(g) Total	
X 1	1	No Change	490	0	0	490	Rule-based
Add Another Lot/Building Served by this System			6 490	7 0	8 0	9 490	

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 (Note: Store and dose does not apply to standard pump/pump chamber systems).
 Storage and Dose Filtrate Constructed Wetlands

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

1 Wastewater Disposal System Name/Identifier <input type="text" value="Lot 1 Replacement"/>	2 Wastewater Disposal System Owner (if not Applicant) <input type="text"/>
3 Wastewater Disposal System Type <input type="text" value="In-ground"/>	4 Type of Change to System <input type="text" value="Replacement Area Designation"/>

5 Lots/Buildings Served by this Wastewater Disposal System

	Design Flows (Gallons Per Day)							(h) Rule or Meter Based Flows
	(a) Lot#	(b) Building ID	(c) Type of Change to the Building's System	(d) Existing	(e) Change	(f) Infiltration	(g) Total	
X	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="No Change"/>	<input type="text" value="490"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="490"/>	<input type="text" value="Rule-based"/>
Add Another Lot/Building Served by this System				<input type="text" value="490"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="490"/>	

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 (Note: Store and dose does not apply to standard pump/pump chamber systems).
 Storage and Dose Filtrate Constructed Wetlands

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

1 Wastewater Disposal System Name/Identifier <input type="text" value="Lot 2 Primary"/>	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	Design Flows (Gallons Per Day)				(h) Rule or Meter Based Flows
			(d) Existing	(e) Change	(f) Infiltration	(g) Total	
X 2	1		490	0	0	490	Rule-based
Add Another Lot/Building Served by this System			6	7	8	9	
			490	0	0	490	

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 (Note: Store and dose does not apply to standard pump/pump chamber systems).
 Storage and Dose Filtrate Constructed Wetlands

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

1 Wastewater Disposal System Name/Identifier Lot 3 Primary	2 Wastewater Disposal System Owner (if not Applicant) <input type="text"/>
3 Wastewater Disposal System Type Mound	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) Change	(f) Infiltration	(g) Total	
X 3	1	No Change	305	0	0	305	Rule-based
Add Another Lot/Building Served by this System			6	7	8	9	
			305	0	0	305	

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 (Note: Store and dose does not apply to standard pump/pump chamber systems).
 Storage and Dose Filtrate Constructed Wetlands

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

1 Wastewater Disposal System Name/Identifier

Lot 4 Primary

2 Wastewater Disposal System Owner (if not Applicant)

3 Wastewater Disposal System Type

Mound

4 Type of Change to System

New Connection or Increased Flow

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)			(g) Total	(h) Rule or Meter Based Flows
				(d) Existing	(e) Change	(f) Infiltration		
X	4	1	Connection to Existing System	305	0	0	305	Rule-based
Add Another Lot/Building Served by this System				6	7	8	9	
				305	0	0	305	

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

Performance Based

16 For soil-based systems, please check all that apply (Note: Store and dose does not apply to standard pump/pump chamber systems).

Storage and Dose Filtrate Constructed Wetlands

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

1 Wastewater Disposal System Name/Identifier <input type="text" value="Lot 5 Primary"/>	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 Connection or Increased Flow"/>																																							
5 Lots/Buildings Served by this Wastewater Disposal System																																								
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="width:5%;">(a) Lot#</th> <th rowspan="2" style="width:10%;">(b) Building ID</th> <th rowspan="2" style="width:20%;">(c) Type of Change to the Building's System</th> <th colspan="4" style="width:30%;">Design Flows (Gallons Per Day)</th> <th rowspan="2" style="width:10%;">(h) Rule or Meter Based Flows</th> </tr> <tr> <th style="width:10%;">(d) Existing</th> <th style="width:10%;">(e) Change</th> <th style="width:10%;">(f) Infiltration</th> <th style="width:10%;">(g) Total</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">5</td> <td style="text-align: center;">1</td> <td style="text-align: center;">Connection to Existing System</td> <td style="text-align: center;">305</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">305</td> <td style="text-align: center;">Rule-based</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: center;">Add Another Lot/Building Served by this System</td> <td style="text-align: center;">6</td> <td style="text-align: center;">7</td> <td style="text-align: center;">8</td> <td style="text-align: center;">9</td> <td colspan="2"></td> </tr> <tr> <td colspan="2"></td> <td></td> <td style="text-align: center;"><input type="text" value="305"/></td> <td style="text-align: center;"><input type="text" value="0"/></td> <td style="text-align: center;"><input type="text" value="0"/></td> <td style="text-align: center;"><input type="text" value="305"/></td> <td colspan="2"></td> </tr> </tbody> </table>		(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) Change	(f) Infiltration	(g) Total	X	5	1	Connection to Existing System	305	0	0	305	Rule-based			Add Another Lot/Building Served by this System	6	7	8	9						<input type="text" value="305"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="305"/>		
(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) Change	(f) Infiltration		(g) Total																																		
X	5	1	Connection to Existing System	305	0	0	305	Rule-based																																
		Add Another Lot/Building Served by this System	6	7	8	9																																		
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16 For soil-based systems, please check all that apply (Note: Store and dose does not apply to standard pump/pump chamber systems). <input type="checkbox"/> Storage and Dose <input type="checkbox"/> Filtrate <input type="checkbox"/> Constructed Wetlands																																								
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Remove This Wastewater System																																								
1 Wastewater Disposal System Name/Identifier <input type="text" value="In Reserve Unit 4, 5 & 6"/>	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	Design Flows (Gallons Per Day)			(h) Rule or Meter Based Flows	
				(d) Existing	(e) Change	(f) Infiltration		(g) Total
X	In	Reserve		915	0	0	915	Rule-based
Add Another Lot/Building Served by this System				6	7	8	9	
				915	0	0	915	
10 Is this wastewater disposal system located off-lot?							<input checked="" type="radio"/> Yes <input 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	
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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 type="text"/>								
14 If this wastewater disposal system type is a connection to a municipal system, please select the town.								
Town								
<input type="text"/>								
15 If this wastewater disposal system is a soil-based system, please select the design approach used.								
Design Approach Used								
<input type="text" value="Performance Based"/>								
16 For soil-based systems, please check all that apply (Note: Store and dose does not apply to standard pump/pump chamber systems).								
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<input 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 type="text"/>								

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	Design Flows (Gallons Per Day)			(e) Total
		(b) Existing	(c) Change	(d) Infiltration	
X	Lot 1 Primary	490	0	0	490
X	Lot 2 Primary	490	0	0	490
X	Lot 3 Primary	305		0	305
X	Lot 4 Primary	305	0	0	305

X	Lot 5 Primary	305	0	0	305
X	Reserve Unit 4, 5 and 6	915	0	0	915
Add Another Wastewater System		2	3	4	5
		2,810	0	0	2,810

Part VII Application Fees

1 Fee Amount

2 Fee Calculation Details

Fees \$250.00 per residential unit x 5 units = \$1,250.00

Part VIII Designer Certification & Copyright License

Section A - Certifying Designer 1 Certification & Copyright License

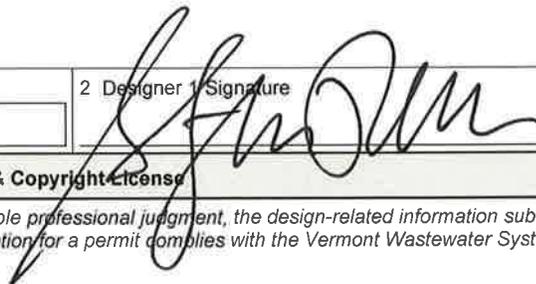
"I hereby certify that in the exercise of my reasonable professional judgment, the design-related information submitted with this application is true and correct, and that the design included in this application for a permit complies with the Vermont Wastewater System and Potable Water Supply Rules and 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	2 Designer 1 Signature	3 Signature Date
Stephen Revell		6/5/15

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
<input type="text"/>	<input type="text"/>	<input type="text"/>

Part IX Applicant(s) Signature & Acknowledgements

In order to insure compliance with the requirements of the regulations administered by the Department of Environmental Conservation, Drinking Water & Groundwater Protection 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?

"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 Drinking Water & Groundwater Protection 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 Jonathan Couture	3 Applicant Signature	4 Signature Date
X	2 Print Applicant Name Kimberly Anderson	3 Applicant Signature	4 Signature Date
X	2 Print Applicant Name Thomas J. Smith	3 Applicant Signature	4 Signature Date
X	2 Print Applicant Name Nancy S. Smith	3 Applicant Signature	4 Signature Date

Add Applicant Signature Block

Conservation District On-Site Sewage Program

own of Charlotte

Application No. 6-12-02

INITIAL INSPECTION REPORT

State Park Rd Lot 1

Specialist B. M. Zabulski Date 12/2/02

Owner(s) Jim Rozendal - Gary Darling



SPECIFIC SITE CHARACTERISTICS

1. Soil Profile

A. How determined? test pits hand auger borings

B. Soil descriptions: (depth, color, texture, density, etc.) 0-9" dk brown, silty loam, compact
9-24" dk brown, silty loam, compact, 24-29" dk brown, sandy loam, silty, 29-34" dk brown, sandy loam, silty, mottled in the silty loam

C. Soil series: name Keokuk - Richwood no. VA B - Sx C map no. 64

D. Depth to: bedrock or ledge _____ compact layer (fragipan) 0-24"
seasonal high ground water table (how determined?) 24" water

4. Percolation Test: Est. 30 min/in Actual _____ 5. Slope 7-10%

6. Major Limitations (if any) clay layer, seasonal high water table

- 7. Can isolation distances be obtained yes no
- 8. Is there room for a replacement area? yes no
- 9. Failed system? no yes why? _____

SPECIFIC DESIGN DETAILS

0. Septic Tank 1000 gal concrete Disposal Field 1375 sq. ft.

1. Subsurface Drainage yes no Surface Drainage? yes no

2. Disposal Field Flagged? yes no Design Sketch? yes no

3. Distances to: Lot Lines 25' Water Supplies 100' drilled well Water Lines 25'

Surface Waters _____ Roads 10' Trees _____ Embankments _____

THIS SYSTEM DESIGN WILL ACCOMMODATE A MAXIMUM OF 10 OCCUPANTS.

RECOMMENDATION

- I recommend this site for on-site sewage disposal.
- I do not recommend this site for on-site sewage disposal (see attached letter).

It is understood that the Conservation District is inspecting the applicant's property for the sole purpose of ensuring compliance with applicable health ordinances and regulations. The Conservation District does not undertake any responsibility for the effectiveness of any design it may submit to the applicant. All designs submitted by the Conservation District to the applicant are without any warranty of any nature whatsoever and no action shall lie against the Conservation District whether arising out of theory of contract or theory of tort.

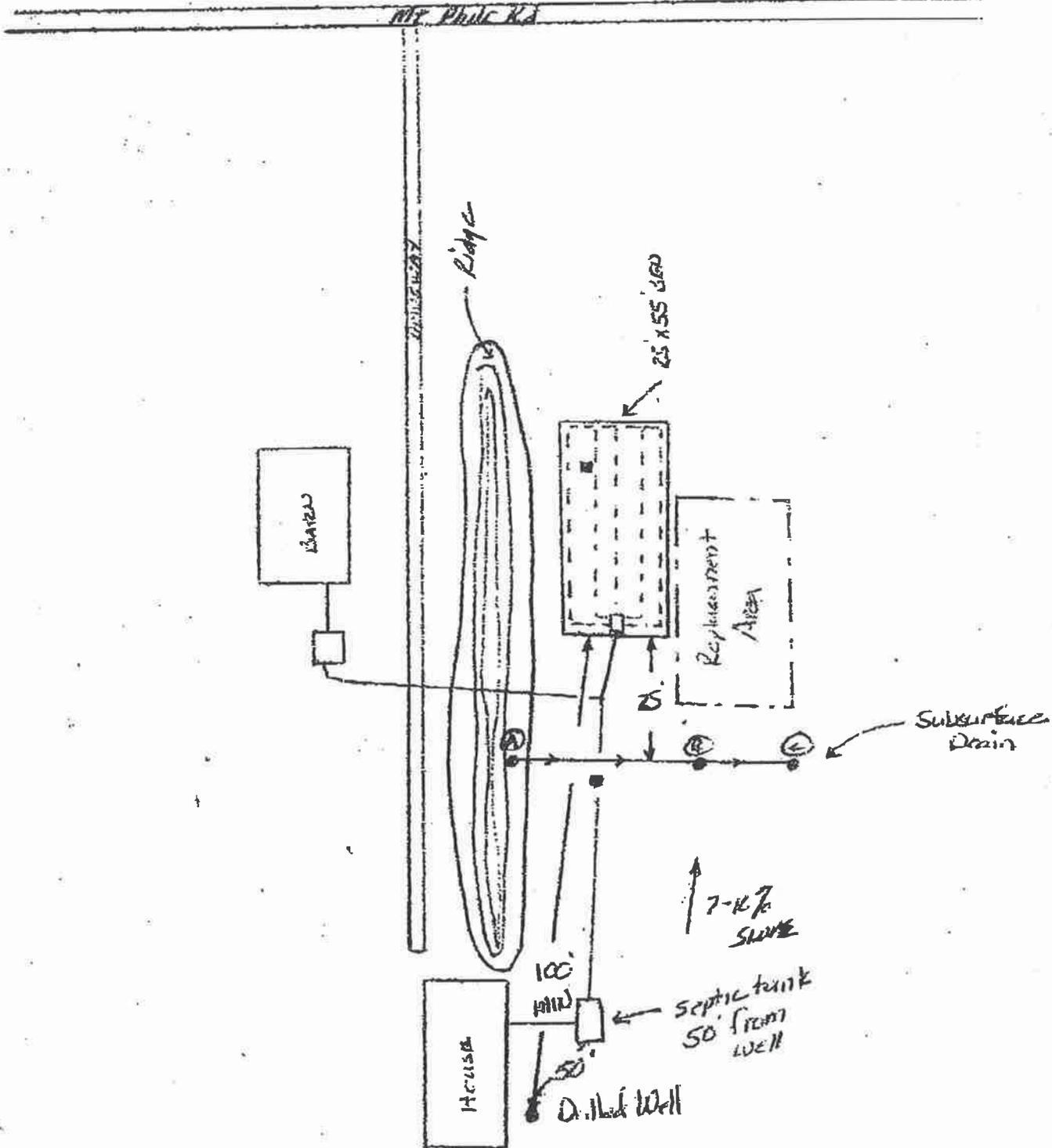
Miskell

Conservation District On-Site Sewage Program

NET TO SCALE

90 ACRES
■ = TEST PIT

To R7

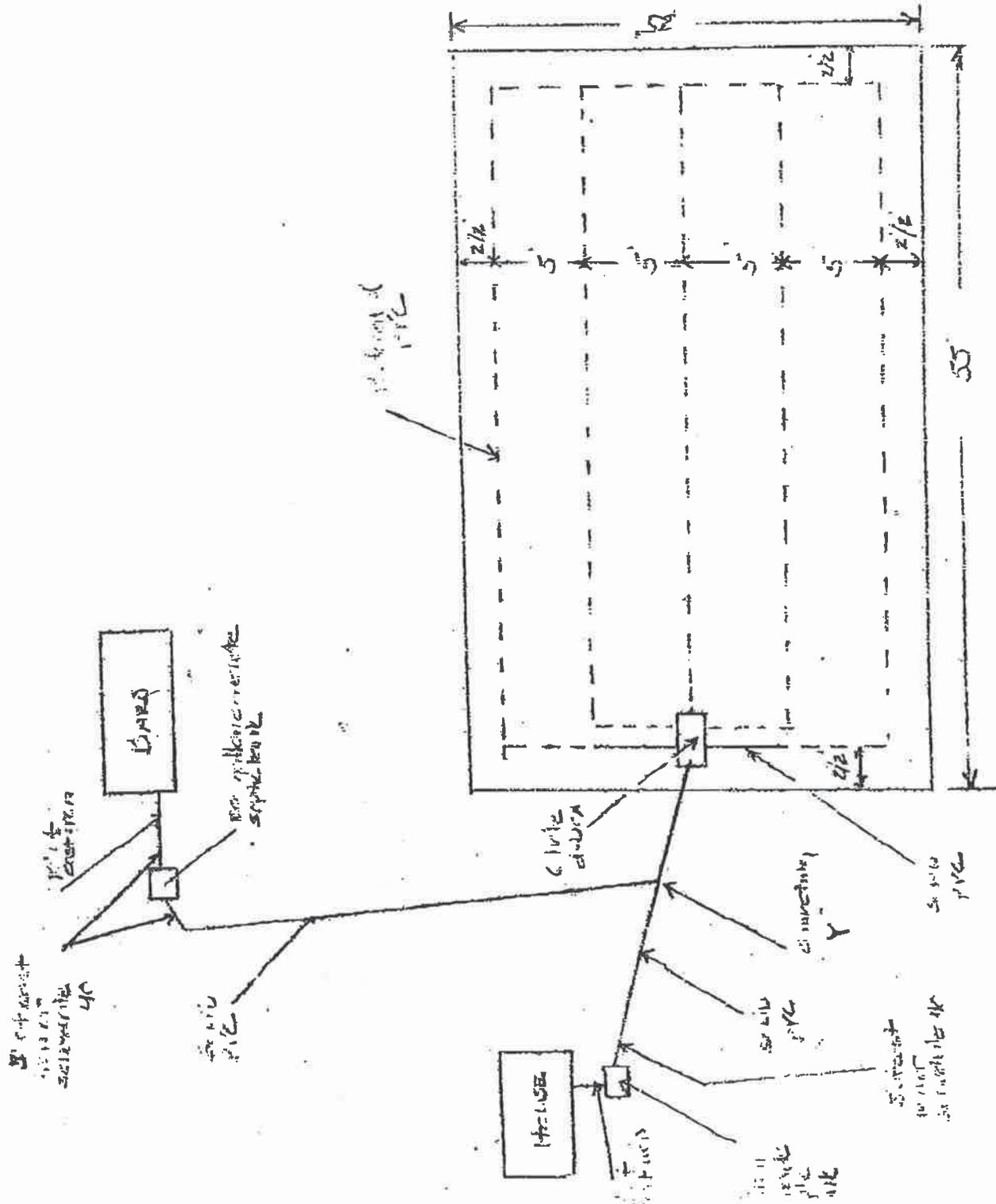


Misc

Conservation District On-Site Sewage Program

NOT TO SCALE

ASE 25 X 55 600

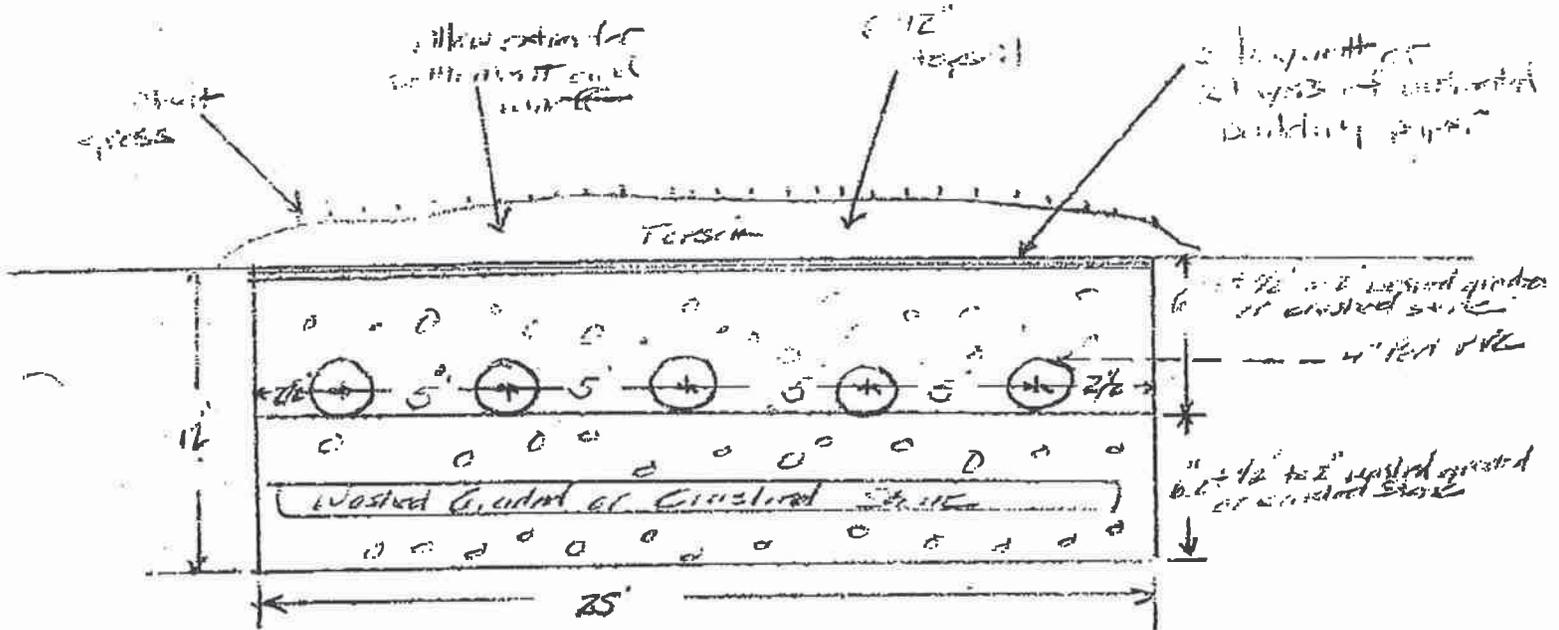


Mick

Conservation District On-Site Sewage Program

not to scale

NEW CROSS SECTION



Construction Note

⊗
 When digging bed remove all clay present at surface
 (approx. 20-40") then dig bed

Clark Hinsdale III Property
State Park Road, Charlotte
Soil Profile Descriptions
September 24, 2008
September 14, 2009
By Stephen Revell, CPG, LCBD #178

6 - Lot Community Disposal Area

Test Pit 8-01

- 0 - 8" Brown fine sandy loam, loose, strong granular-fine blocky, well drained.
- 8 - 27" Tan to yellow-brown stony fine to medium sandy loam, loose, strong blocky structure, well-drained.
- 27 - 48" Brown stony fine sandy loam; friable; moderate blocky; few, faint mottles 27 - 37"; distinct, common mottles 37 - 48"; no ledge or water to depth.

Test Pit 8-02

- 0 - 10" Brown fine sandy loam, loose, strong granular-fine blocky, well drained.
- 10 - 24" Brown to ashy stony fine to very fine sandy loam; strong fine blocky structure, friable, mottling at 18".
- 24 - 48" Brown-gray very fine sandy loam, friable to firm, blocky, mottled, no water or ledge to depth.

Test Pit 8-03

- 0 - 8" Brown fine sandy loam, loose, strong granular-fine blocky, well drained.
- 8 - 24" Brown to ashy stony fine to very fine sandy loam; strong fine blocky structure, friable, mottling at 18".
- 24 - 36' Brown-gray very fine sandy loam, friable to firm, blocky, mottled, no water or ledge to depth.

Test Pit 8-04

- 0 – 12" Brown stony sandy loam, loose, strong granular, well drained.
- 12 – 26" Red-brown stony loamy sand, 30% coarse fraction, loose, strong granular, well drained.
- 26 – 42" Brown stony loamy medium sand to gravelly medium sand, strong granular, loose, well drained.
- 42 – 54" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled, no water or ledge to depth.

Test Pits 8-05

- 0 – 12" Brown stony sandy loam, loose, strong granular, well drained.
- 12 – 30" Red-brown stony loamy sand, 30% coarse fraction, loose, strong granular, well drained.
- 30 – 42" Brown stony loamy medium sand to gravelly medium sand, strong granular, loose, well drained.
- 42 – 48" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled, no water or ledge to depth.

Test Pits 8-06

- 0 – 12" Brown stony sandy loam, loose, strong granular, well drained.
- 12 – 26" Red-brown stony loamy sand, 30% coarse fraction, loose, strong granular, well drained.
- 26 – 48" Brown stony loamy medium sand to gravelly medium sand, strong granular, loose, well drained.
- 48 – 54" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled, no water or ledge to depth.

Test Pits 8-07

- 0 – 12" Brown stony sandy loam, loose, strong granular, well drained.
- 12 – 48" Red-brown stony loamy sand, 30% coarse fraction, loose, strong granular, well drained.
- 48 – 60" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled, no water or ledge to depth.

Test Pits 8-08

- 0 – 12" Brown stony sandy loam, loose, strong granular, well drained.
- 12 – 36" Red-brown stony loamy sand, 40% coarse fraction, loose, strong granular, well drained.
- 36 – 60" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled at 42", no water or ledge to depth.

Test Pits 8-09

- 0 – 11" Brown stony sandy loam, loose, strong granular, well drained.
- 11 – 40" Red-brown stony loamy sand, 30% coarse fraction, loose, strong granular, well drained.
- 40 – 54" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled at 42", no water or ledge to depth.

Test Pits 8-10

- 0 – 12" Brown stony sandy loam, loose, strong granular, well drained.
- 12 – 42" Red-brown stony loamy sand, 25% coarse fraction, loose, strong granular, well drained.
- 42 – 48" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled at 44", no water or ledge to depth.

Test Pits 8-11

- 0 – 10" Brown stony sandy loam, loose, strong granular, well drained.
- 10 – 36" Red-brown stony loamy sand, 40% coarse fraction, loose, strong granular, well drained.
- 36 – 50" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled at 40", no water or ledge to depth.

Test Pits 8-12

- 0 – 12" Brown stony sandy loam, loose, strong granular, well drained.
- 12 – 30" Red-brown stony loamy sand, 40% coarse fraction, loose, strong granular, well drained.
- 30 – 42" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled at 36", no water or ledge to depth.

Test Pits 8-13

- 0 – 12" Brown stony sandy loam, loose, strong granular, well drained.
- 12 – 27" Red-brown stony loamy sand, 30% coarse fraction, loose, strong granular, well drained.
- 27 – 40" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled at 34", no water or ledge to depth.

Test Pits 8-14

- 0 – 8" Brown stony sandy loam, loose, strong granular, well drained.
- 8 – 24" Red-brown stony loamy sand, 40% coarse fraction, loose, strong granular, well drained.
- 24 – 50" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled at 36", no water or ledge to depth.

Test Pits 9-01

- 0 – 12" Brown stony sandy loam, loose, strong granular, well drained.
- 12 – 25" Red-brown stony loamy sand, 30% coarse fraction, loose, strong granular, well drained.
- 25 – 36" Brown stony loamy medium sand to gravelly medium sand, strong granular, loose, mottled at 30".
- 36 – 50" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled, no water or ledge to depth.

Test Pits 9-02

- 0 – 10" Brown stony sandy loam, loose, strong granular, well drained.
- 10 – 48" Red-brown stony loamy sand, 30% coarse fraction, loose, strong granular, well drained.
- 48 – 72" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled, no water or ledge to depth.

Test Pits 9-03

- 0 – 12" Brown stony sandy loam, loose, strong granular, well drained.
- 12 – 50" Red-brown stony loamy sand, 30% coarse fraction, loose, strong granular, mottled at 32".
- 50 – 72" Brown-gray stony very fine sandy loam to loamy fine sand, friable, weak blocky, mottled, no water or ledge to depth.

Lot 2 Disposal Area Evaluation

Test Pit 8-15

- 0 – 10" Brown stony sandy loam, loose, moderate granular, well drained.
- 10 – 30" Red-brown stony sandy loam to loamy medium sand, loose to friable, moderate granular, mottled at 24".
- 30 – 48" Tan stony fine sandy loam, friable, weak blocky, mottled, no water or ledge to depth.

Test Pit 8-16

- 0 – 12" Brown slightly stony fine sandy loam, loose to friable, moderate fine blocky, well drained.
- 12 – 24" Tan to faint red-brown fine sandy loam, friable, moderate fine blocky, mottled at 15".
- 24 – 40" Tan stony fine sandy loam, friable to firm, mottled, no water or ledge to depth.

Test Pit 8-17

- 0 – 8" Brown slightly stony fine sandy loam, loose to friable, moderate fine blocky, well drained.
- 8 – 27" Tan to faint red-brown fine sandy loam, friable, moderate fine blocky, mottled at 18".
- 27 – 48" Tan stony fine sandy loam, friable to firm, mottled, no water or ledge to depth.

Test Pit 8-18

- 0 – 8" Brown slightly stony fine sandy loam, loose to friable, moderate fine blocky, well drained.
- 8 – 20" Tan to faint red-brown fine sandy loam, friable, moderate fine blocky, mottled at 18".
- 20 – 36" Tan stony fine sandy loam, weak blocky, friable to firm, mottled, no water or ledge to depth.

Test Pit 8-19

- 0 – 6" Brown slightly stony fine sandy loam, loose to friable, moderate fine blocky, well drained.
- 6 – 27" Tan to faint red-brown fine sandy loam, friable, moderate fine blocky, mottled at 15".
- 27 – 42" Tan stony fine sandy loam, weak blocky, friable to firm, mottled, no water or ledge to depth.

Test Pit 8-20

- 0 – 8" Brown slightly stony fine sandy loam, loose to friable, moderate fine blocky, well drained.
- 8 – 24" Tan to faint red-brown fine sandy loam, friable, moderate fine blocky, well drained.
- 24 – 36" Tan stony fine sandy loam, weak blocky, friable to firm, mottled, no water or ledge to depth.

Test Pit 8-21

- 0 – 8" Brown slightly stony fine sandy loam, loose to friable, moderate fine blocky, well drained.
- 8 – 30" Tan to faint red-brown fine sandy loam, friable, moderate fine blocky, mottled at 24".
- 30 – 36" Tan stony fine sandy loam, weak blocky, friable to firm, mottled, no water or ledge to depth.

Test Pit 8-22

- 0 – 8" Brown slightly stony fine sandy loam, loose to friable, moderate fine blocky, well drained.
- 8 – 36" Tan to faint red-brown fine sandy loam, friable, moderate fine blocky, mottled at 24".
- 36 – 42" Tan stony fine sandy loam, weak blocky, friable to firm, mottled, no water or ledge to depth.

Test Pit 8-23

- 0 – 8" Brown slightly stony fine sandy loam, loose to friable, moderate fine blocky, well drained.
- 8 – 27" Tan to faint red-brown fine sandy loam, friable, moderate fine blocky, mottled at 27".
- 27 – 48" Tan stony fine sandy loam, weak blocky, friable to firm, mottled, no water or ledge to depth.

Test Pit 8-24

- 0 – 10" Brown slightly stony fine sandy loam, loose to friable, moderate fine blocky, well drained.
- 10 – 32" Tan to faint red-brown fine sandy loam, friable, weak fine blocky, mottled at 30".
- 32 – 48" Tan stony fine sandy loam, weak blocky, friable to firm, mottled, no water or ledge to depth.

Test Pit 8-25

- 0 – 6" Brown slightly stony fine sandy loam, loose to friable, moderate fine blocky, well drained.
- 6 – 18" Tan to faint red-brown fine sandy loam, friable, weak fine blocky, well drained.
- 18 – 42" Tan stony fine sandy loam, weak blocky, friable to firm, mottled at 24", no water or ledge to depth.

Test Pit 8-26

- 0 – 8" Brown slightly stony fine sandy loam, loose to friable, moderate fine blocky, well drained.
- 8 – 24" Tan to faint red-brown fine sandy loam, friable, weak fine blocky, mottled at 20".
- 24 – 40" Tan stony fine sandy loam, weak blocky, friable to firm, mottled, no water or ledge to depth.

Test Pit 8-27

- 0 – 8" Brown slightly stony fine sandy loam, loose to friable, moderate fine blocky, well drained.
- 8 – 22" Tan to faint red-brown fine sandy loam, friable, weak fine blocky, mottled at 18".
- 22 – 36" Tan stony fine sandy loam, weak blocky, friable to firm, mottled, no water or ledge to depth.

Test Pit 8-28

- 0 – 8" Brown slightly stony fine sandy loam, loose to friable, moderate fine blocky, well drained.
- 8 – 24" Tan to faint red-brown fine sandy loam, friable, weak fine blocky, mottled at 15".
- 24 – 42" Tan stony fine sandy loam, weak blocky, friable to firm, mottled, no water or ledge to depth.

Test Pit 8-29

- 0 – 12" Brown slightly stony very fine sandy loam to loam, friable, strong fine blocky, well drained.
- 12 – 24" Brown silt loam, friable, moderate blocky, mottled.
- 24 – 48" Brown to red-brown stony fine sandy loam, friable, weak blocky, faint mottling, no water or ledge to depth.

Test Pit 8-30

- 0 – 18" Brown loam, friable, blocky, mottled at 12".
- 18 – 36" Brown-gray silt loam to silty clay, mottled, firm, platy, no water or ledge to depth.

Test Pit 8-31

- 0 – 12" Brown loam, friable, blocky, mottled at 12".
- 12 – 24" Brown-gray silt loam to silty clay, mottled, blocky firm, platy, no water or ledge to depth.
- 24 – 42" Brown to red-brown fine sandy loam, friable, blocky, faint mottling, no water or ledge to depth.

Test Pit 8-32

- 0 – 12" Brown loam, friable, blocky, mottled at 12".
- 12 – 24" Brown-gray silt loam to silty clay, mottled, firm, platy, no water or ledge to depth.
- 24 – 48" Brown to red-brown fine sandy loam, friable, blocky, faint mottling, no water or ledge to depth.

Test Pit 8-33

- 0 – 12" Brown loam, friable, blocky, mottled at 12".
- 12 – 27" Brown-gray silt loam to silty clay, mottled, firm, platy, no water or ledge to depth.
- 27 – 42" Brown to red-brown fine sandy loam, friable, blocky, faint mottling, no water or ledge to depth..

Test Pit 8-34

- 0 – 12" Brown loam, friable, blocky, mottled at 12".
- 12 – 30" Brown-gray silt loam to silty clay, mottled, firm, platy, no water or ledge to depth.
- 30 – 42" Brown to red-brown fine sandy loam, friable, blocky, faint mottling, no water or ledge to depth.

Hinsdale Property
 State Park Road
 Charlotte, Vermont

Percolation Test Results

All tests were performed on September 25, 2008 at a depth of 18" - 24"

PT-1	Drop Time (min)	Total Drop Time (min)	Total Drop (inches)	Drop Rate (min/inch)
	2.5	2.5	1	2.5
	3.9	6.4	2	3.2
	5.4	11.8	3	3.9
	6.5	18.3	4	4.6
	7.8	26.1	5	5.2
	8.2	34.3	6	5.7
	9.1	43.4	7	6.2
	---	1440.0	---	12.5

PT-3	Drop Time (min)	Total Drop Time (min)	Total Drop (inches)	Drop Rate (min/inch)
	6.1	6.1	1	6.1
	10.8	16.9	2	8.5
	15.6	32.5	3	10.8
	19.3	51.8	4	13.0
	20.5	72.3	5	14.5
	24.7	97.0	6	16.2
	27.4	124.4	7	17.8
	---	1440.0	---	32.2

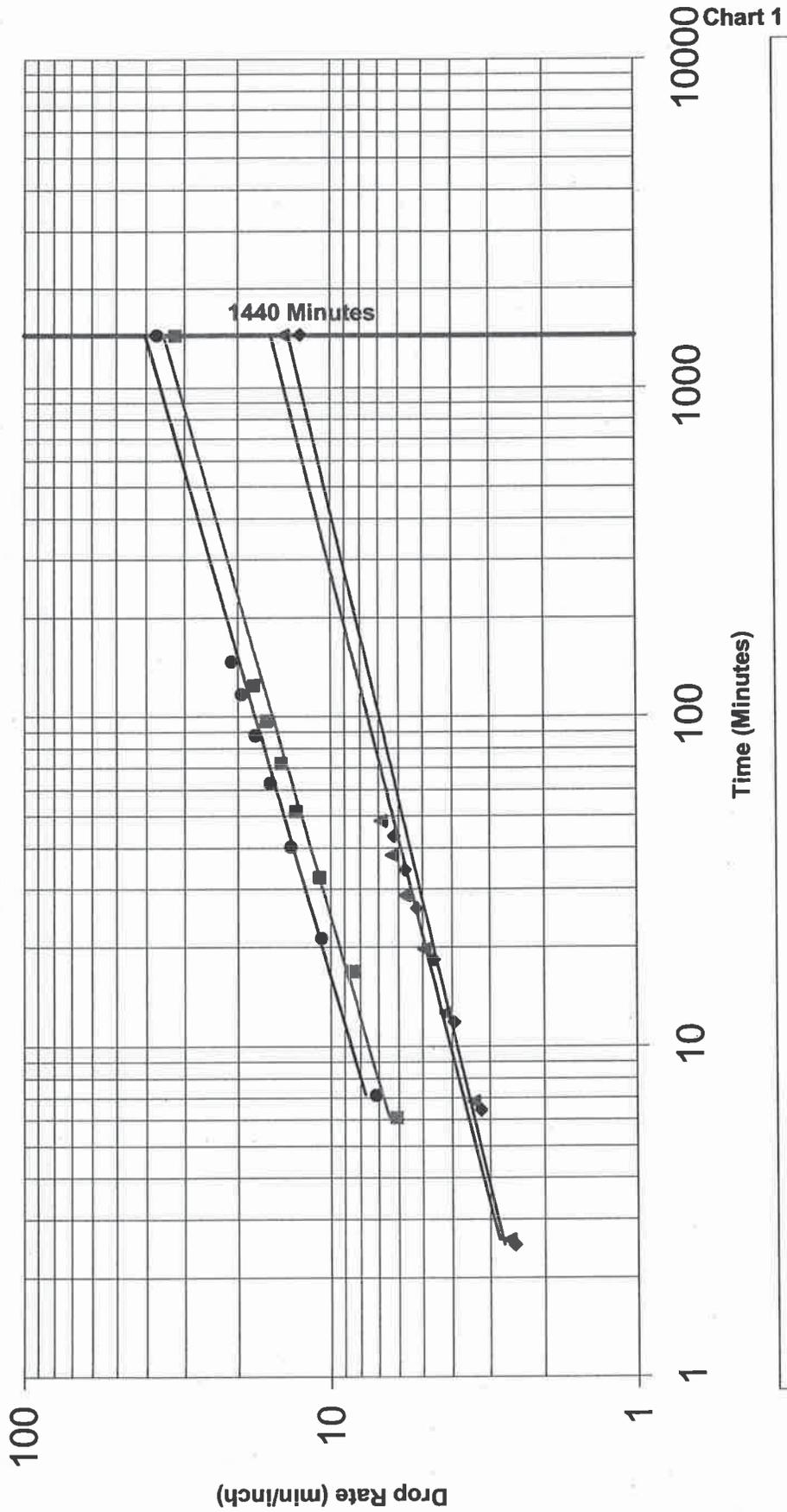
PT-2	Drop Time (min)	Total Drop Time (min)	Total Drop (inches)	Drop Rate (min/inch)
	2.6	2.6	1	2.6
	4.2	6.8	2	3.4
	5.8	12.6	3	4.2
	7.1	19.7	4	4.9
	8.9	28.6	5	5.7
	9.4	38.0	6	6.3
	10.2	48.2	7	6.9
	---	1440.0	---	14.2

PT-4	Drop Time (min)	Total Drop Time (min)	Total Drop (inches)	Drop Rate (min/inch)
	7.1	7.1	1	7.1
	14.2	21.3	2	10.7
	18.9	40.2	3	13.4
	22.5	62.7	4	15.7
	24.8	87.5	5	17.5
	29.0	116.5	6	19.4
	30.4	146.8	7	21.0
	---	1440.0	---	36.8

*NOTE:
 Drop time includes fill time for
 each of the seven runs.

Hinsdale Property
State Park Road
Charlotte, Vermont
Percolation Test Results

All tests were performed on September 25, 2008 at a depth of 18" - 24"



Site Specific Effluent Mounding Analysis
Lot 2 State Park Rd Subdivision
State Park Rd, Charlotte, VT.

In order to support the proposed performance based mound-type disposal system design and show that the soils can accommodate the design flow rate associated with a year-round four-bedroom residence, a site specific hydrogeologic analysis using Darcy's Law was conducted. The following formula was used to determine the ability of the soil to accept the proposed amount of wastewater and determine its impact on the shallow seasonal ground water system.

Using the equation:

$$Q = k \cdot i \cdot h \cdot l$$

Where: Q= Volume= 490 gallons/ day = 65.5 ft³/ day;
k= Hydraulic Conductivity = 20 ft./ day (approved k value for very fine to fine sandy loam with weak blocky structure);
i= Gradient = 7% = 0.07 ft./ ft.;
h= effluent mound height in feet;
l= 80' mound length.

When solving this equation for h, an effluent mound of 0.50' was calculated. Since evidence of a seasonal high ground water system was identified at 18" or 1.50' with an induced mound of 0.50', 1.00' feet of unsaturated soil will remain. To maintain the required 3' separation to the induced mound, 3' - 1.00' or 2.00' of state approved mound sand is required beneath the application area.

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PRESSURE DISTRIBUTION & MOUND DIMENSION DETAILS

CLIENT'S NAME: State Park Rd Lot 2 Mound
 DATE: 6/4/2015 PERFORMED BY: S. Revell LAG Project #: 08091

Design Flow Rate	490	GPD
Width of Distribution Stone Bed/Trench	5.11	FEET
Length of Distribution Stone Bed/Trench	96	FEET
Thickness of Sand Beneath Distribution Stone Bed/Trench	2	FEET
Thickness of Stone Beneath Laterals	6	INCHES
Soil Cover Thickness at Edge of Level Area	12	INCHES
Front Slope of Finished Mound	33	PERCENT
Side and Rear Slope of Finished Mound	33	PERCENT
Percolation Rate	60	MPI
Natural Ground Slope	7	PERCENT
Thickness of Sand on Upper Side of Level Area	2.68	FEET
Thickness of Sand on Lower Side of Level Area	3.18	FEET
Width of Level Area	7.11	FEET
Length of Level Area	98	FEET
Area of Distribution Stone Bed/Trench	491	SQUARE FT
Volume of Stone Required	11	CUBIC YARDS
Proposed Basal Area	1952	SQUARE FEET
Volume of Mound Sand Required	292.9	CUBIC YARDS
Number of Laterals	2	
Length of Each Lateral	46	FEET
Number of Orifices in the Manifold	0	
Number of Orifices in Each Lateral	12	
Distance Between Manifold and First Orifice	2	FEET
Distance Between Orifices (on center)	4	FEET
Distribution Area per Orifice	20.44	SQ. FT.
Design Pressure Head	3	FEET
Diameter of Orifices (enter as fraction)	0.188	INCHES
Elevation From Pump Intake to Laterals (0 if siphon)	10	FEET
Diameter of Force Main	1.5	INCHES
Length of Force Main	85	FEET
Length of Manifold to Lateral	2.5	FEET
Diameter of Manifold Pipe	1.5	INCH
Diameter of Lateral Pipe	1.5	INCH
Friction Loss in Force Main	2.17	FEET
Friction Loss in Manifold	0.02	FEET
Friction Loss in Section 1	0.01	FEET
Friction Loss in Entire Lateral	0.10	FEET
Discharge Rate at First Orifice	0.72	GPM
Discharge Rate at Last Orifice	0.71	GPM
Percent Difference in Flow Rate First to Last Orifice	1.51	PERCENT
Total Dynamic Head Loss	15.390	FEET
Total Distribution System Flow	16.50	GPM
Volume of Distribution System	8.45	GALLONS
Pump Capacity	16.50 GPM vs	15.390 FEET OF HEAD
Volume per Dose		122.5 GALLONS
On/Off Float Swing (1,000 gal. Tank)		4.1 INCHES

PRESSURE DISTRIBUTION & MOUND DIMENSION DETAILS

CLIENT'S NAME: State Park Rd Lot 2 Mound
 DATE: 6/4/2015 PERFORMED BY: S. Revell LAG Project #: 08091

DIMENSIONS OF MOUND SYSTEM

Dimensions of Mound Sand

6.7 feet from level area to uphill sand toe	9.5 ft corner of level area to upper toe corner
7.11 ft wide level area	8.1 ft to side toe from upper edge of level area
5.11 ft wide stone bed/trench 96 ft long stone bed/trench	9.6 ft to side toe from lower edge of level area
98 ft long level area	17.3 ft corner of level area to lower toe corner
12.2 feet from level area to downhill sand toe	

Dimensions of Final Cover

9.2 feet from level area to uphill toe	13.0 ft corner of level area to upper fill toe
	11.2 ft to side toe from upper edge of level area
7.11 ft wide level area	
98 ft long level area	12.7 ft to side toe from lower edge of level area
	22.7 ft corner of level area to lower fill toe
16.1 feet from level area to downhill toe	

PLOW AREA LAYOUT MEASUREMENTS

Center of Bed/Trench to Downslope Toe	68.0 feet
End of Level Area @ Midpoint to Downslope Toe	25.4 feet
Center of Bed/Trench to Upslope Toe	59.6 feet
End of Level Area @ Midpoint to Upslope Toe	15.7 feet

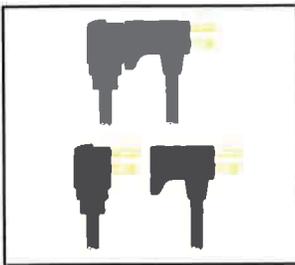
HYDROMATIC®

SHEF30

Submersible Effluent Pump

- Effluent Septic Tank

Automatic operation features easily adjustable, wide-angle float switch with a piggyback plug-in arrangement that allows for simple conversion to manual operation. Special inlet design allows pump to handle 3/4" solids. Cast iron body and an oil-filled motor provide superior cooling characteristics for longer pump life. Motor windings contain automatic thermal overload protection. Energy efficient .3 HP motor pumps up to 35 GPM at 10' total dynamic head. Discharge is 1-1/2" N.P.T.



May be operated manually or automatically with a piggyback switch.



HYDROMATIC®
Pentair Pump Group

SHEF30 - Submersible Effluent Pump

Details

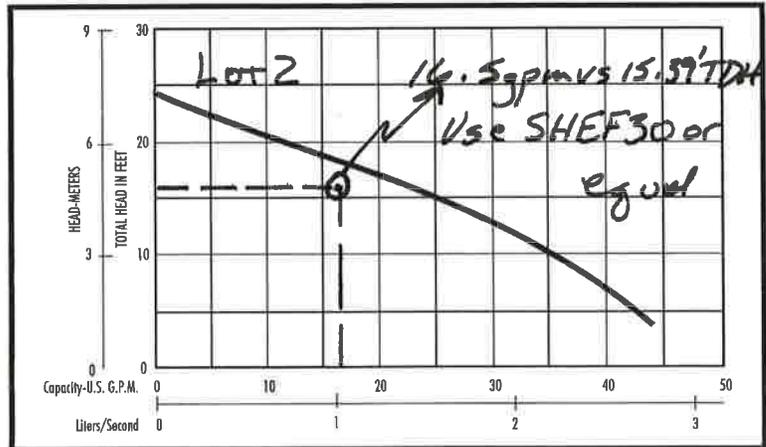
Pump Characteristics

Pump/Motor Unit	Submersible
Automatic Model	SHEF30A1
Horsepower	.30
Full Load Amps	8.0
Motor Type	Shaded Pole (4 pole)
R.P.M.	1550
Phase Ø	1
Voltage	115
Hertz	60
Temperature	120°F Ambient
NEMA Design	A
Insulation	Class A
Discharge Size	1-1/2" NPT (38mm)
Solids Handling	3/4" (19mm)
Unit Weight	30 lbs.
Power Cord	18/3, SJTW, 20' std.

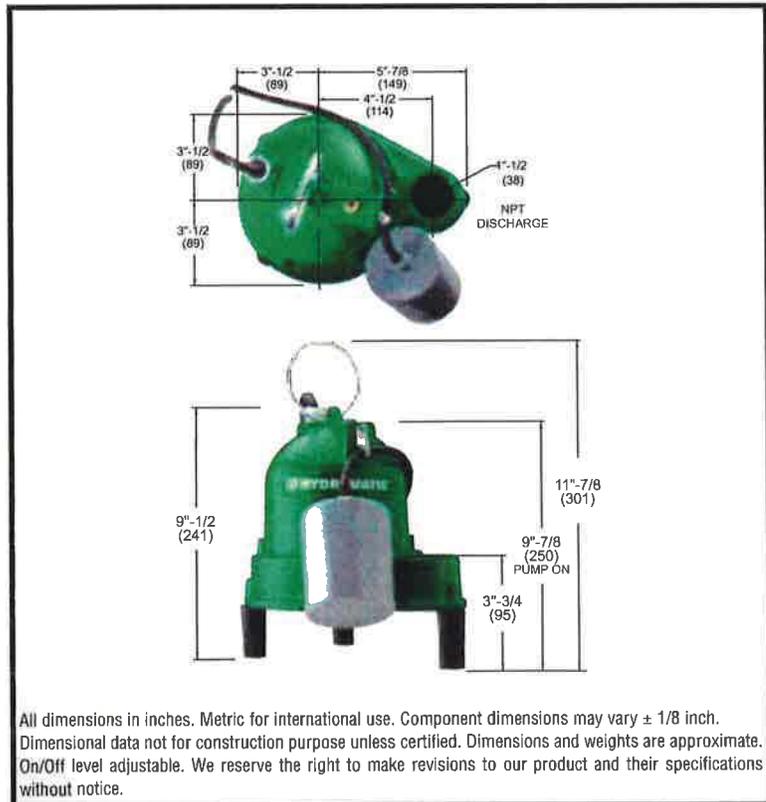
Materials of Construction

Handle	Stainless Steel
Lubricating Oil	Dielectric Oil
Motor Housing	Cast Iron
Pump Volute	Cast Iron
Shaft	Steel
Mechanical Shaft Seal	Seal Faces: Carbon/Ceramic Seal Body: Anodized Steel Spring: Stainless Steel Bellows: Buna-N
Impeller	Engineered Thermoplastic
Upper Bearing	Cast Iron Sleeve
Lower Bearing	Single Row Ball Bearing
Legs	Engineered Thermoplastic
Fastener	Stainless Steel

Performance Data



Dimensional Data



All dimensions in inches. Metric for international use. Component dimensions may vary $\pm 1/8$ inch. Dimensional data not for construction purpose unless certified. Dimensions and weights are approximate. On/Off level adjustable. We reserve the right to make revisions to our product and their specifications without notice.



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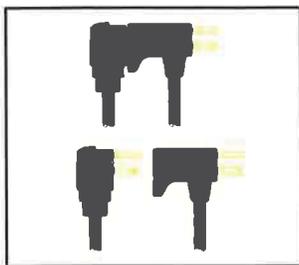
HYDROMATIC®

SHEF30

Submersible Effluent Pump

- Effluent Septic Tank

Automatic operation features easily adjustable, wide-angle float switch with a piggyback plug-in arrangement that allows for simple conversion to manual operation. Special inlet design allows pump to handle 3/4" solids. Cast iron body and an oil-filled motor provide superior cooling characteristics for longer pump life. Motor windings contain automatic thermal overload protection. Energy efficient .3 HP motor pumps up to 35 GPM at 10' total dynamic head. Discharge is 1-1/2" N.P.T.



May be operated manually or automatically with a piggyback switch.



SHEF30 - Submersible Effluent Pump

Details

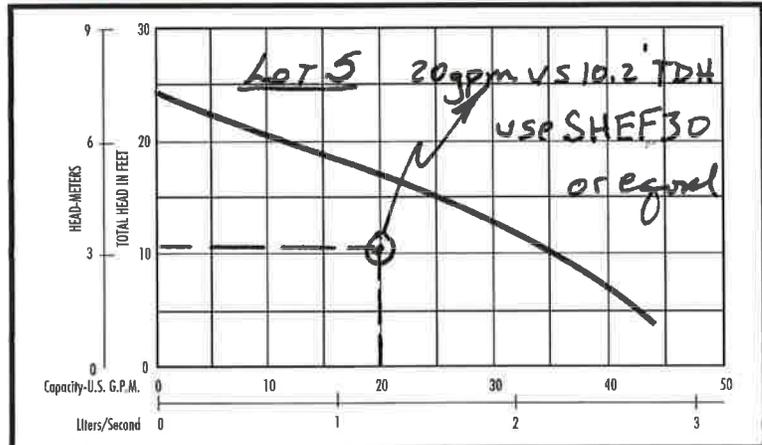
Pump Characteristics

Pump/Motor Unit	Submersible
Automatic Model	SHEF30A1
Horsepower	.30
Full Load Amps	8.0
Motor Type	Shaded Pole (4 pole)
R.P.M.	1550
Phase Ø	1
Voltage	115
Hertz	60
Temperature	120°F Ambient
NEMA Design	A
Insulation	Class A
Discharge Size	1-1/2" NPT (38mm)
Solids Handling	3/4" (19mm)
Unit Weight	30 lbs.
Power Cord	18/3, SJTW, 20' std.

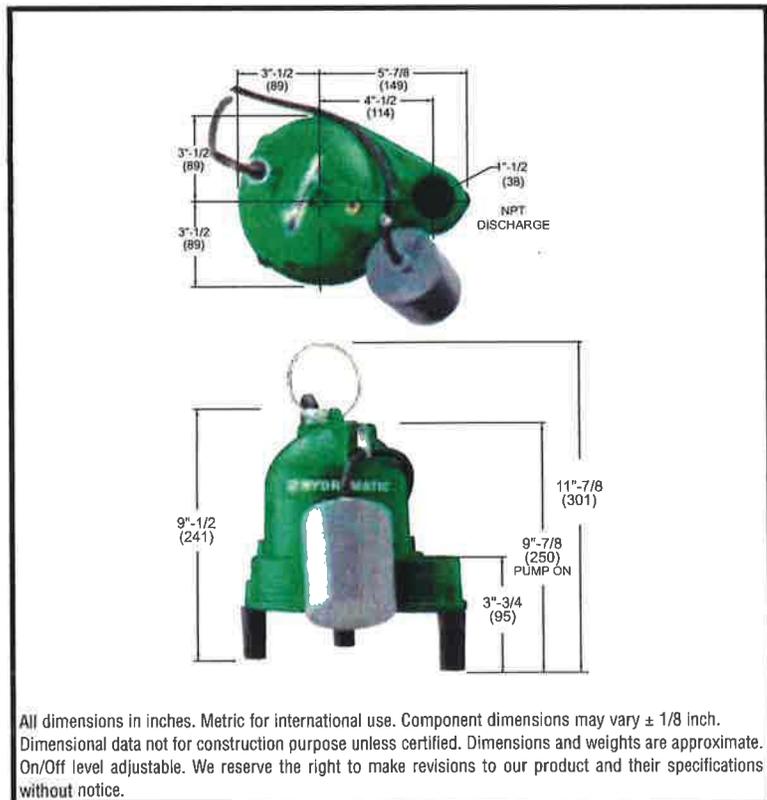
Materials of Construction

Handle	Stainless Steel
Lubricating Oil	Dielectric Oil
Motor Housing	Cast Iron
Pump Volute	Cast Iron
Shaft	Steel
Mechanical Shaft Seal	Seal Faces: Carbon/Ceramic Seal Body: Anodized Steel Spring: Stainless Steel Bellows: Buna-N
Impeller	Engineered Thermoplastic
Upper Bearing	Cast Iron Sleeve
Lower Bearing	Single Row Ball Bearing
Legs	Engineered Thermoplastic
Fastener	Stainless Steel

Performance Data



Dimensional Data



All dimensions in inches. Metric for international use. Component dimensions may vary $\pm 1/8$ inch. Dimensional data not for construction purpose unless certified. Dimensions and weights are approximate. On/Off level adjustable. We reserve the right to make revisions to our product and their specifications without notice.



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HYDROMATIC®

SHEF40

Submersible High Head Effluent Pump

Applications

- Septic Tank Effluent
- High Head Sump
- Dewatering



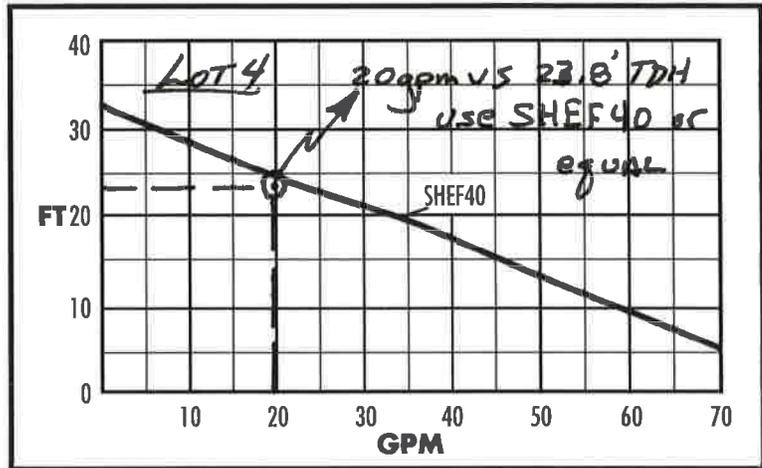
SHEF40 - Submersible Effluent Pump

DETAILS

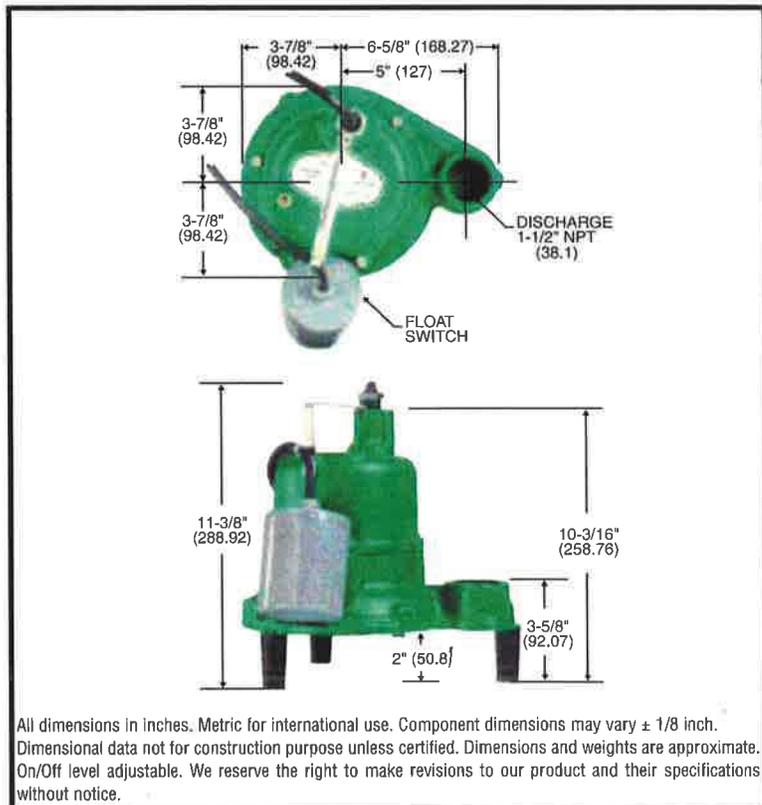
Pump Characteristics

Pump/Motor Unit	Submersible	
Manual Models	SHEF40M1	SHEF40M2
Automatic Models	SHEF40A1	SHEF40A2
Horsepower	4/10	
Full Load Amps	12	6.5
Motor Type	Shaded Pole (4 Pole)	
R.P.M.	1550	
Phase	1Ø	
Voltage	115	230
Hertz	60	
Temperature	120° F Max. Fluid Temp.	
NEMA Design	A	
Insulation	Class A	
Discharge Size	1 1/2" NPT	
Solids Handling	3/4"	
Weight	28 lbs.	
Power Cord	18/3, SJTW, 20' std. (30' optional)	

Performance Data



Dimensional Data



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Materials of Construction

Handle	Stainless Steel
Lubricating Oil	Dielectric Oil
Motor Housing	Cast Iron
Pump Casing	Cast Iron
Shaft	Steel
Mechanical Shaft Seal	Seal Faces: Carbon/Ceramic Seal Body: Anodized Steel Spring: Stainless Steel Bellows: Buna-N
Impeller	Engineered Thermoplastic
Upper Bearing	Bronze Sleeve Bearing
Lower Bearing	Single Row Ball Bearing
Bottom Plate	Polyester Coated Steel
Fasteners	Stainless Steel
Legs	Engineered Thermoplastic

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