



State of Vermont

AGENCY OF NATURAL RESOURCES WASTEWATER SYSTEM AND POTABLE WATER SUPPLY PERMIT

LAWS/REGULATIONS INVOLVED:

10 V.S.A., Chapter 64, Potable Water Supply and Wastewater System and Environmental Protection Rules;
Chapter 1, Wastewater System and Potable Water Supply Rules:
 Subchapter 4, Water Supply and Wastewater Permits
 Subchapter 5, Technical Standards for Wastewater Systems and Potable Water Supplies
Chapter 21, Water Supply

CASE No: **WW-7-1870**

PIN No. SJ06-0101

APPLICANT: Russell W. & Penelope Adams
ADDRESS 1956 Five Mile Square Road
Island Pond, VT 05846

This permit affects property referenced in deeds recorded in Book 57 Page(s) 2-3 of the Brighton, Vermont land records.

This project, consisting of 2 lot subdivision: Lot #1 consists of 31 acres presently developed with an existing 3-bedroom single family residence served by an existing on-site water supply and an existing on-site wastewater disposal system. Lot #2 consists of 7 acres to be developed with a 3-bedroom single family residence to be served by an on-site water supply and a partially off-site at-grade wastewater disposal system. This project is located on Five Mile Square Road, Brighton, Vermont, is hereby approved under the requirements of the regulations named above, subject to the following conditions:

1. GENERAL CONDITIONS

1.1. The project must be completed as described on the plans and/or documents prepared by Glenn A. Harter, listed as follows:

- “Site Plan” dated May 2006
- “Site Plan Detail Lot Two” dated May 2006
- “Site Plan Detail Lot One” dated May 2006
- “Detail Sheet 1” dated May 2006
- “Detail Sheet 2” dated May 2006
- “Detail Sheet 3” dated May 2006

and which have been stamped “APPROVED” by the Wastewater Management Division. No alteration of these plans and/or documents shall be allowed except where written application has been made to the Agency of Natural Resources and approval obtained.

1.2. A copy of the approved plans and the Wastewater System and Potable Water Supply Permit shall remain on the project during all phases of construction and, upon request, shall be made available for inspection by State or Local personnel.

1.3. Each prospective purchaser of any portion of the project shall be shown a copy of the approved plot plan, the licensed designer site report and the Wastewater System and Potable Water Supply Permit prior to conveyance of any portion of the project.

1.4. Lot # 2 has been reviewed and is approved for the construction of one 3-bedroom single-family residence. Construction of other type dwellings, including public buildings, duplexes and condominium units, is not allowed without prior review and approval by the Agency, and such approval will not be granted unless the proposal conforms to the applicable laws and regulations.

WASTEWATER SYSTEM AND POTABLE WATER SUPPLY PERMIT

WW-7-1870, Russell W. & Penelope Adams

Page 2 of 3, Conditions Continued

1.5. Lot #1 has been reviewed and is approved with an existing 3-bedroom single-family residence. Construction of other type dwellings, including public buildings, duplexes and condominium units, is not allowed without prior review and approval by the Agency, and such approval will not be granted unless the proposal conforms to the applicable laws and regulations.

1.6. The conditions of this permit shall run with the land and will be binding upon and enforceable against the permittee and all assigns and successors in interest. The permittee shall be responsible for recording this permit and the "Notice of Permit Recording" in the Brighton Land Records within thirty (30) days of receipt of this permit and prior to the conveyance of any lot subject to the jurisdiction of this permit.

1.7. No alterations to the existing building (Lot #1), which would change or affect the water supply or wastewater disposal, shall be allowed without prior review and approval from the Wastewater Management Division.

1.8. By acceptance of this permit the permittee agrees to allow representatives of the State of Vermont access to the property covered by the permit, at reasonable times, for the purpose of ascertaining compliance with Vermont environmental and health statutes and regulations and with the permit.

1.9. This permit shall in no way relieve you of the obligations of Title 10, Chapter 48, Subchapter 4, for the protection of groundwater.

2. WATER CONDITIONS

2.1. Lot #2 is approved for an on-site water supply from a drilled well provided that the well is located as shown on the approved plans and meets or exceeds the isolation distances required in the Environmental Protection Rules. No permit issued by the Secretary shall be valid for a substantially completed potable water supply until the Secretary receives a certification from a licensed designer, signed and dated, that states:

"I hereby certify that, in the exercise of my reasonable professional judgment, the installation-related information submitted is true and correct and the potable water supply was installed in accordance with the permitted design and all permit conditions, was inspected, was properly tested, and has successfully met those performance tests."

2.2. Lot #1 is approved with an existing on-site water supply system provided that the dug well/spring is located as shown on the plans. This water system shall be operated at all times in a manner that keeps the water supply free from contamination. Should the system fail, the permittee must engage an Agency of Natural Resources licensed designer to evaluate the cause of the failure and to submit information to this office for repair or replacement of the system.

2.3. In the event the lots wastewater disposal replacement area for either lot is utilized the existing dug well/spring serving Lot #1 shall be abandoned and a permit obtained to replace the well. This condition shall be included in the land deeds for these lots.

3. SEWAGE DISPOSAL CONDITIONS

3.1. Lot #1 is approved with an existing on-site subsurface wastewater disposal system. Should this system fail, the permittee must engage an Agency of Natural Resources licensed designer to evaluate the cause of failure and to submit information to this office for the repair/replacement of the failing system. The existing wastewater disposal system is approved for a maximum design flow of 420 gallons of sewage per day.

CONDITIONS CONTINUED...

WASTEWATER SYSTEM AND POTABLE WATER SUPPLY PERMIT

WW-7-1870, Russell W. & Penelope Adams

Page 3 of 3, Conditions Continued

3.2. Lot #2 is approved for the off-site subsurface disposal of wastewater within an at-grade disposal system within the soil test pit and percolation testing area indicated on the approved plans for a maximum of 420 gallons of sewage per day. Should this system fail, the permittee must engage an Agency of Natural Resources licensed designer to evaluate the cause of failure and to submit information to this office for repair/replacement of the failing system. No permit issued by the Secretary shall be valid for a substantially completed wastewater system until the Secretary receives a certification from a licensed designer, signed and dated, that states:

"I hereby certify that, in the exercise of my reasonable professional judgment, the installation-related information submitted is true and correct and the wastewater system was installed in accordance with the permitted design and all permit conditions, was inspected, was properly tested, and has successfully met those performance tests."

3.3. The wastewater disposal system, which is to serve Lot #2 is partially located on Lot #1. The land deed, which establishes and transfers ownership of this project, shall contain a legal easement, which grants the purchaser, and any future owners, the right to enter upon the property for repair, maintenance and other such reasonable purposes as may arise regarding the wastewater disposal system.

Dated at St. Johnsbury, Vermont this 23rd day of June 2006

Jeffrey Wennberg, Commissioner
Department of Environmental Conservation

By Roland G. Grenier, Jr.
Roland G. Grenier, Jr., P.E., Regional Engineer *vs*

C Glenn A. Harter
Brighton Planning Commission



State of Vermont

Department of Environmental Conservation

AGENCY OF NATURAL RESOURCES

AGENCY OF NATURAL RESOURCES

WASTEWATER SYSTEM AND POTABLE WATER SUPPLY PERMIT

LAWS/REGULATIONS INVOLVED:

10 V.S.A., Chapter 64, Potable Water Supply and Wastewater System and Environmental Protection Rules;

Chapter 1, Wastewater System and Potable Water Supply Rules:

Subchapter 4, Water Supply and Wastewater Permits

Subchapter 5, Technical Standards for Wastewater Systems and Potable Water Supplies

Chapter 21, Water Supply

CASE No: **WW-7-1870-1**

PIN No. SJ06-0101

APPLICANT: Russell W. & Penelope Adams

ADDRESS 1956 Five Mile Square Road
Island Pond, VT 05846

This permit affects property referenced in deeds recorded in Book 41 Page(s) 524-525 of the Brighton, Vermont land records.

This project, consisting of amendment to WW-7-1870 to correct the book and page of a previously approved 2 lot subdivision. This project is located on Five Mile Square Road, Brighton, Vermont, is hereby approved under the requirements of the regulations named above, subject to the following conditions:

1. GENERAL CONDITIONS

1.1. The project must be completed as described on the plans and/or documents prepared by Glenn A. Harter, listed as follows:

“Site Plan” dated May 2006

“Site Plan Detail Lot Two” dated May 2006

“Site Plan Detail Lot One” dated May 2006

“Detail Sheet 1” dated May 2006

“Detail Sheet 2” dated May 2006

“Detail Sheet 3” dated May 2006

and which have been stamped “APPROVED” by the Wastewater Management Division. No alteration of these plans and/or documents shall be allowed except where written application has been made to the Agency of Natural Resources and approval obtained.

1.2. A copy of the approved plans and the Wastewater System and Potable Water Supply Permit shall remain on the project during all phases of construction and, upon request, shall be made available for inspection by State or Local personnel.

1.3. Each prospective purchaser of any portion of the project shall be shown a copy of the approved plot plan, the licensed designer site report and the Wastewater System and Potable Water Supply Permit prior to conveyance of any portion of the project.

1.4. The conditions of this permit shall run with the land and will be binding upon and enforceable against the permittee and all assigns and successors in interest. The permittee shall be responsible for recording this permit and the “Notice of Permit Recording” in the Brighton Land Records within thirty (30) days of receipt of this permit and prior to the conveyance of any lot subject to the jurisdiction of this permit.

CONDITIONS CONTINUED...



WASTEWATER SYSTEM AND POTABLE WATER SUPPLY PERMIT

WW-7-1870-1, Russell W. & Penelope Adams;

Page 2 of 2, Conditions Continued

1.7. No alterations to the existing building (Lot #1), which would change or affect the water supply or wastewater disposal, shall be allowed without prior review and approval from the Wastewater Management Division.

1.8. By acceptance of this permit the permittee agrees to allow representatives of the State of Vermont access to the property covered by the permit, at reasonable times, for the purpose of ascertaining compliance with Vermont environmental and health statutes and regulations and with the permit.

1.9. This permit shall in no way relieve you of the obligations of Title 10, Chapter 48, Subchapter 4, for the protection of groundwater.

1.10. All general conditions set forth in Permit number WW-7-1870, dated June 23, 2006, shall remain in effect except as amended or modified herein.

2. WATER CONDITIONS

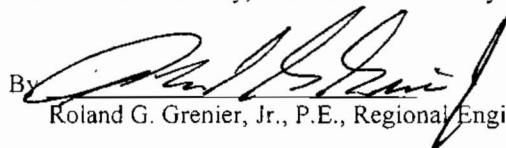
2.1. All water conditions set forth in Permit number WW-7-1870, dated June 23, 2006, shall remain in effect except as amended or modified herein.

3. SEWAGE DISPOSAL CONDITIONS

3.1. All sewage conditions set forth in Permit number WW-7-1870, dated June 23, 2006, shall remain in effect except as amended or modified herein.

Laura Q. Pelosi, Commissioner
Department of Environmental Conservation

Dated at St. Johnsbury, Vermont this 23rd day of October 2008

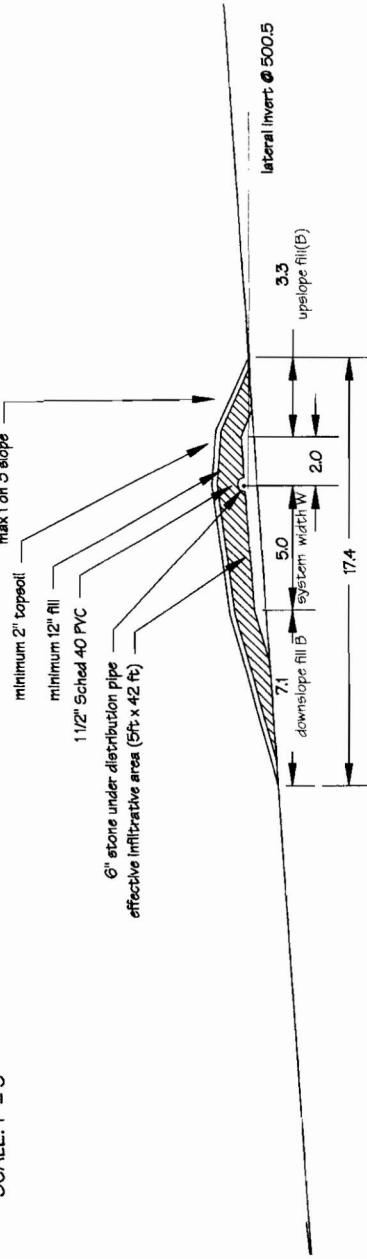
By 
Roland G. Grenier, Jr., P.E., Regional Engineer

C Dan Keenan
Brighton Planning Commission

APPEALS

Any person aggrieved by this permit may appeal to the Environmental Court within 30 days of the date of issuance of this permit in accordance with 10 V.S.A. Chapter 220 and the Vermont Rules of Environmental Court Proceedings.

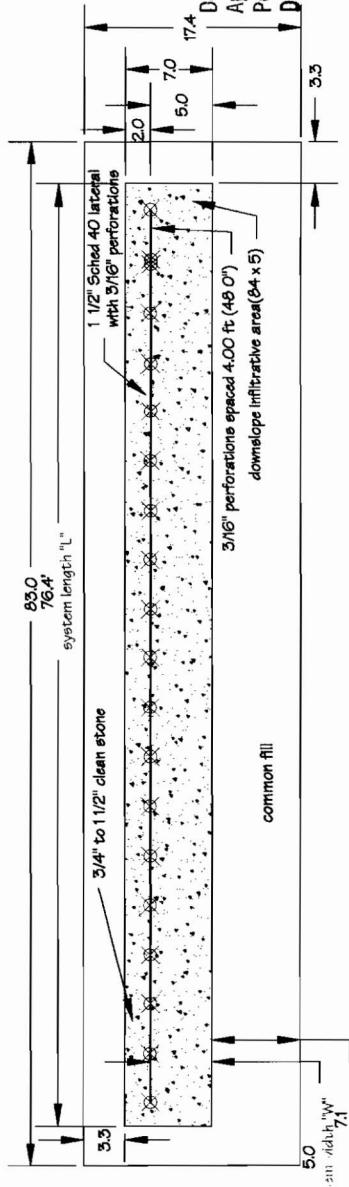
SECTION VIEW PROPOSED AT GRADE WASTEWATER DISPOSAL SYSTEM USING SEPTIC EFFLUENT
SCALE: 1" = 5'



SYSTEM CALCULATIONS

system application rate = 420 gal/day
design percolation rate = 4.8 mil/in
wastewater application rate for at-grade system with septic
effluent = $(0.8 \times (5/4.8)) = 1.1 \text{ gal/eq.ft.}$
sizing requirement = $420/1.1 = 381.6 \text{ sq.ft.}$
effective infiltration area = $5 \times (76.4) = 382 \text{ sq.ft.}$
pressure distribution line = 1.5" Sch 40 PVC

PLAN VIEW PROPOSED AT GRADE WASTEWATER DISPOSAL SYSTEM USING SEPTIC EFFLUENT
SCALE: 1" = 10'



AT-GRADE CONSTRUCTION NOTES:

- 1) The surface water infiltration area (mandatory for sites with slopes of more than 5 percent) shall be installed prior to constructing the at-grade system to keep surface water runoff away from the system while it is under construction.
- 2) Construction of the at-grade system and/or filling shall not take place when the water table is at or near the surface of a site, the soil moisture content is too high for construction to begin.
- 3) To prevent contamination, construction equipment shall not be moved across and down-slope of the grade or soil surface or after filling.
- 4) Vegetation shall be cut close to the ground and removed from the area to be filled. Tree stumps shall be cut flush with the ground and the roots left in place. On leveled sites, the forest litter shall be raked off if more than an inch thick. The at-grade system area shall be leveled off if more than an inch thick.
- 5) The foreman may be installed before filling or after filling when the foreman installs the system at the up-slope side of the system. When the foreman installs the system at the down-slope side, the foreman should be installed before filling, if practical, foremen should connect to the distribution pipe from the ends of the distribution pipe and the infiltration pipe.
- 6) Upon completion of the filling and before placing the stone aggregate, a designer shall inspect the site preparations.
- 7) Construction shall begin immediately after the filling of the infiltration area. The pressure distribution pipe shall be laid level on top of the stone and capped at the ends of the pipe and that the distribution requirements in sec 3-50 (of the VT ANR Environmental Protection Rules Chapter 1 Wastewater System and Portable Water Supply Rules, 17105) are met. After connecting the distribution pipe to the foreman, the distribution pipe shall be covered with 12 inches of clean stone aggregate. The stone aggregate shall be covered compacted with litter fabric.
- 8) The litter fabric shall be covered with a minimum of 12 inches of soil but no more than 18 inches, with the upper 2 to 4 inches of soil being topsoil and the remainder of the fill being a fine sandy loam to a medium sand texture. The soil cover shall be maintained over the system.
- 9) A registered cover tree of large brush and trees shall be maintained over the system.

17105-18100

DETAIL SHEET 1

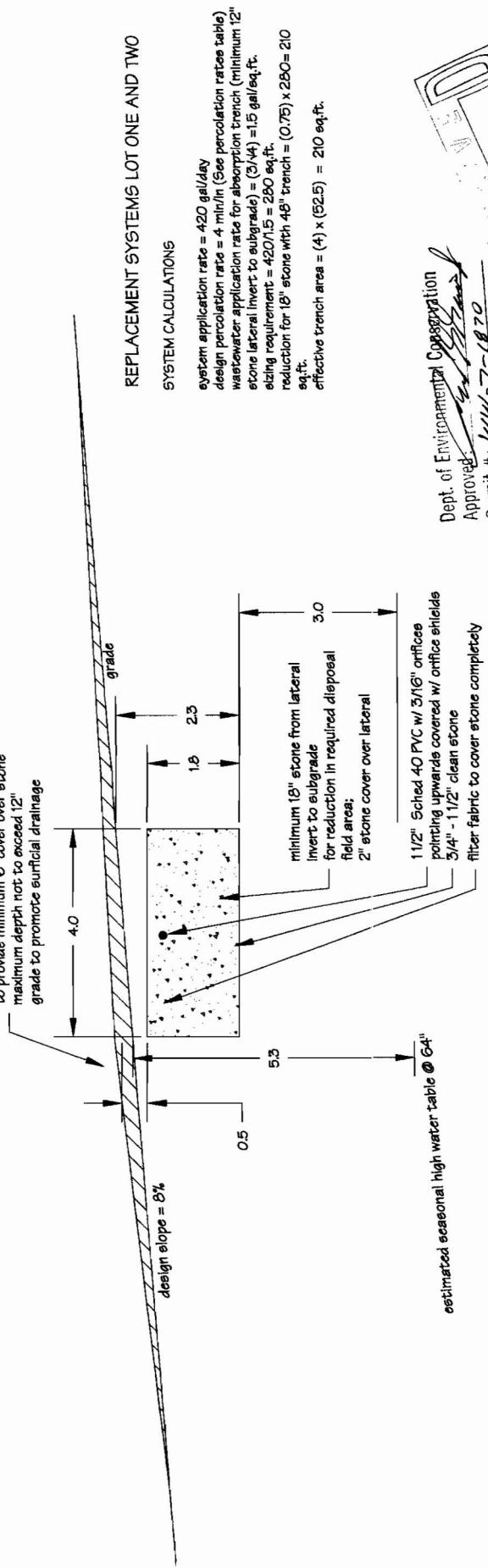
P. & R. Adams	for	Brighton, VT
Glenn A. Hartner	by	179 Peene Hill Rd.
Site Tech A&B		Barton, VT
Drawn:		Design:
Surveyed:		Date:
SHEET 4 of 6		
MAP NUMBER 05-53		

5 by 6

SECTION VIEW PROPOSED ABSORPTION TRENCH

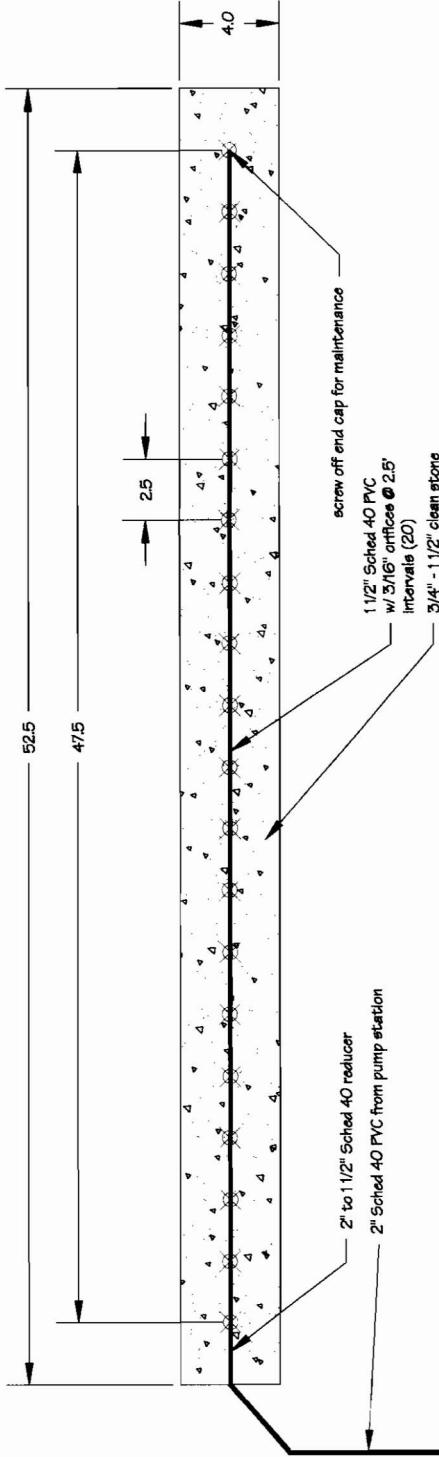
SCALE: 1" = 2'

variable depth fill w/2" topsoil
to provide minimum 6" cover over stone
maximum depth not to exceed 12"
grade to promote surficial drainage



PLAN VIEW PROPOSED ABSORPTION TRENCH
SCALE: 1" = 5'

INTERVIEW



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

DETAIL SHEET 2	
P. & R Adams	for
Glenn A. Harter	by
Site Tech A&B	179 Pine Hill Rd.
Drawn:	Barton, VT
Surveyed: G.H. G.B.	Design: GH
SHEET 5 of 6	
MAP NUMBER 05-55	

०५३३

PROPOSED SINGLE COMPARTMENT SEPTIC TANK / PUMP STATION AS MANUFACTURED BY S.T. GRISWOLD

PRESSURE TEST
After the pipes have been laid, all newly laid pipe or any valved section thereof shall be subjected to a hydraulic pressure of at least 1.5x the highest working pressure in the sections. Test pressures shall:

- 1) Not be less than 50 psi at the highest point
- 2) Not exceed pipe design pressures
- 3) Be of at least 2 hr. duration
- 4) Not vary by more than +/- 5 psi
- 5) Not exceed twice the rated pressure of the valve

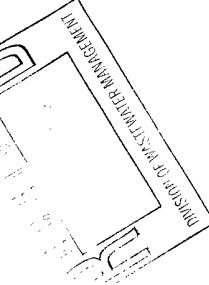
Procedure: Each valved section of pipe shall be filled with water slowly and the specified test pressure shall be applied by means of a pump connected to pipe. Air removal: air shall be completely expelled from the pipe and valves before applying test pressure. Examination: During tests, all joints, fittings, valves, joints shall be carefully examined. Damaged or defective pipe fitting or valves found during the pressure test shall be repaired or replaced and the test shall be conducted again.

LEAKAGE TEST

A leakage test shall be conducted concurrently with the pressure test. Definition: leakage is the quantity of water that must be supplied into the newly laid pipe, or any valved section, to maintain pressure within 5% of the specified test pressure after the air in the pipeline has been removed and the pipe filled with water. Allowable leakage: Leakage must not be greater than that determined by the formula:

$L = (NDP)^{1/4} / 1400$

where L is the allowable leakage in gallons/hour; N is the number of joints in the length of the pipeline tested; D is the nominal diameter of the pipe in inches; and P is the average test pressure during the leakage test in pounds/sq. in. gauge.



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

Glenn A. Harter
Site Tech A&B
Drawn: GH
Surveyed: GH, G.B.
Date: May 06

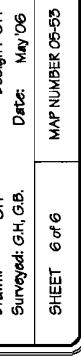
John A. Walter
5/24/06

DETAIL SHEET 3

P.R. Adams for
Brighton, VT
by
Glenn A. Harter
Site Tech A&B
Drawn: GH
Surveyed: GH, G.B.
Date: May 06

MAP NUMBER 05-53

SHEET 6 of 6



Det. of Enviro. & Comm. Conf. Appl'd
Permit #: W.U. - 7-070
Date: 6/22/06

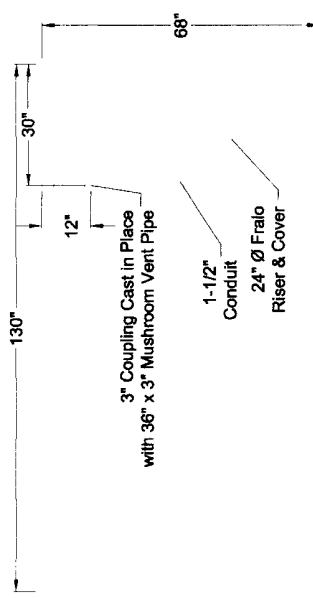
Note 2:
Zoeller 1 1/4" Discharge Hose
Assembly from pipe to 1 1/4"
Stub Outside Riser (includes
Flexible PVC Pipe, Union, Ball
Valve, and Pipe Seal.)

PLAN
Vent 24" Above
Finish Grade
Water Tight
Junction Box
Top of Float Tree
33" Typical Inlet
Level
12"

SECTION
128"
4"
3"
56"
68"
55 3/4"
5"

LATERAL INVERTS
496.5 House
496.2 S.T.E.P. Inlet
493.7 S.T.E.P. outlet
496.0 Pump on
495.7 Pump off
500.5 Lateral invert at grade system

PUMP SIZING
Friction losses
Delivery losses = .9
Force main length = 25
Network losses = 3.5ft
Total friction losses = 4.2
Static head = 4.5
ft.
Total pumping head = 9.0
ft.
500.5 495.7
Minimum network discharge rate = 14.8
gpm
Use Orenco PA 200511 pump



PROJECT DOCKET SHEET

ID # WW-7-1870

PIN # SJOL-0101

DATE

REVIEW ACTION

5/26/06

INFO RECEIVED

5/26/06

See Glenn

6/20/06

~~REVIEW~~ Site visit OT

Review - Called Glenn to discuss replacement of Lot #1 shallow well in the event the replacement well design area is used. He advised owner will abandon the shallow well in that event. I advised I will condition P.

Draft P

AGENCY OF NATURAL RESOURCES (ANR) AND NATURAL RESOURCES BOARD

<http://www.anr.state.vt.us/dec/ead/pa/index.htm> / <http://www.state.vt.us/envboard/>**COPY****PROJECT REVIEW SHEET****THIS IS NOT A PERMIT**

TOTAL # OF DEC PERMITS:

RESPONSE DATE:

DISTRICT: 7

TOWN: Brighton

PRE-APPLICATION REVIEW:

PENDING APPLICATION #: **WW-7-1870**PIN **SJ06 - 0101**

OWNER OF PROJECT SITE:	APPLICANT OR REPRESENTATIVE:
Russell and Penelope Adams 1956 Five Mile Square Road Island Pond, VT 05846 Telephone: (802) 723-4790	Glenn A Harter 179 Peene Hill Barton, VT 05822 Telephone: (802) 525-3873
Project Name:	

Based on a written or oral request or information provided by Glenn A. Harter received on May 26, 2006, a project was reviewed on a tract/tracts of land of 38 acres, located on Five Mile Square Road. The project is generally described as:

Division of 38 acres into 2 lots: Lot #1 being 31 acres with an existing single family residence and Lot #2 being 7 acres for construction of a single family residence.

Prior permits from this office: _____

**PERMITS NEEDED FROM THE DISTRICT ENVIRONMENTAL OFFICE
PRIOR TO COMMENCEMENT OF CONSTRUCTION**

I hereby request a jurisdictional opinion from the District Coordinator or Assistant District Coordinator regarding the jurisdiction of 10 V.S.A. Chapter 151 (Act 250) over the project described above. John Miller

 Landowner/Agent Permit Specialist Other Person

1. ACT 250: THIS IS A JURISDICTIONAL OPINION BASED UPON AVAILABLE INFORMATION, AND A WRITTEN REQUEST FROM THE ANR PERMIT SPECIALIST, THE LANDOWNER/AGENT, OR OTHER PERSON. ANY NOTIFIED PARTY OR INTERESTED PERSON AFFECTED BY THE OUTCOME MAY APPEAL TO THE ENVIRONMENTAL COURT WITHIN 30 DAYS OF THE ISSUANCE OF THIS OPINION (10 V.S.A. Chapter 220). (#47) **

Project: Commercial Residential Municipal

Has the landowner subdivided before? Yes No When/where: _____ # of lots: _____

AN ACT 250 PERMIT IS REQUIRED: Yes No Copies sent to Statutory Parties: Yes No

BASIS FOR DECISION:

*Creation of fewer than 6 lots in Brighton, and
10 lots in District, in 5 years.*

SIGNATURE: John Miller DATE: 5/30/06 ADDRESS: District # 7 Environmental Commission
(Assistant) District Coordinator Telephone: 802 751-0120 1229 Portland Street, St. Johnsbury, VT 05819

2. WASTEWATER MANAGEMENT DIVISION REGIONAL OFFICE: PERMIT/APPROVAL REQUIRED? Yes No
 Wastewater System and Potable Water Supply Permit (#1 & #2)** Notice of Permit Requirements (deferral language) (#2)
 Floor Drains (#1.2) Campgrounds (#3) Extension of sewer lines (#5)

REGIONAL ENGINEER ASSIGNED: Guy Grenier 802 751-0128

Steve Rebillard 802 751-0458

SIGNATURE: John Miller DATE: 5/30/06 ADDRESS: Agency of Natural Resources
 Environmental Assistance Division, Permit Specialist Telephone: 802 751-0127 (TUES) Dept. of Environmental Conservation
 Wastewater Management Division, Telephone: 802 751-0130 1229 Portland Street, St. Johnsbury, VT 05819

Project ID: W05-7-1870

AFTER FINAL ACTION SHEET

SAR NEEDED TREATMENT PLANT

TOWN APPROVAL DATE _____

Lots Approved 2

Number of Water Systems 2

Number of Wastewater Systems 2

Wastewater Volume 840

Water Volume

Grade	Primary Waste Water Systems Number	REPLACEMENT Waste Water Systems Total GPD	Water System Type	Permitted Number	Total GPD	Waste Water Systems	
						Permitted Bottled Water	Public Community
Continuous Area							
Indirect Discharge							
In Ground	<u>1</u>	<u>420</u>	<u>840</u>			Transient (Non-Community (TNC))	
Innovative							
Mound							
Municipal							
No Change							
None							
Private System At Grade							
Private System In Ground							
Filtrate System Mound							
Holding Tank							
Variance							
Alternative Toilet							
Enhanced Prescriptive							
Performance Based							
						Water System Type	

**Agency of Natural Resources
Department of Environmental Conservation
Wastewater Management Division**

**WASTEWATER SYSTEM & POTABLE WATER SUPPLY
PERMIT APPLICATION**

(Under the authority of 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)

Please print or type.

Note: There are line by line instructions available to help you complete this application form. In many cases a licensed designer will be required for your project, who will be able to help complete this application form.

Electronic versions of the form are available on the Wastewater Management Division website at <http://www.anr.state.vt.us/dec/ww/EngServ.htm>

The organization and/or content of this form may not be altered, however the form may be expanded 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.

For office use only
Application #
WW-1-1870

PIN ST06-0101

Complete application
Received on

Month _____ Day _____ Year _____

Fee \$ _____

Check # _____

Fee Code _____

Program Code _____

1. Landowner(s) name (as shown on property deed) If there are multiple landowners, please provide a separate sheet listing each landowner, their mailing address, signature, and date.
Russell W. Adams and Penelope Adams

2. Mailing address for landowner(s).

Street: 1956 Five Mile Square Road

3. Telephone number(s).

(802) 723-4790

Town, State, Zip Code: Island Pond, VT 05846

4. Co-applicant name.

5. Mailing address for co-applicant.

6. Telephone number.

7. Name of licensed designer.

Glenn A. Harter

8. Mailing address for licensed designer.

179 Peene Hill Barton, VT 05822

9. Telephone number.

802-525-3873

10. Does this project involve a failed water supply or wastewater disposal system?

Yes No

11. Project location. Please include a location map.

Street or Road. (911 Street or Road Address if available)
see project locus

12. City or Town.

Brighton

13. Project name (if applicable)

**14. If an existing lot, what date
was the lot created?**
1950

15. Total acreage of property

38 +

16. Number of lots created. If subdividing property. Include any lots subject to deferral restrictions 2	17. List each lot number and the acreage of the lot. If any lot is developed with a structure, describe the use and when it was constructed. All of the property must be described, including any remaining or retained land and any undeveloped land which will be subject to Notice of Permit Requirements /deferral restrictions.															
18. Deed reference Book (s) 57 Pages (s) 2-3	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Lot #</th> <th style="text-align: left;">Acres</th> <th style="text-align: left;">Bedrooms / Use</th> <th style="text-align: left;">When constructed</th> <th style="text-align: left;">Undeveloped</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">31 +/-</td> <td style="text-align: center;">SFR</td> <td style="text-align: center;">1950</td> <td></td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">7 +/-</td> <td style="text-align: center;">SFR</td> <td></td> <td style="text-align: center;">x</td> </tr> </tbody> </table>	Lot #	Acres	Bedrooms / Use	When constructed	Undeveloped	1	31 +/-	SFR	1950		2	7 +/-	SFR		x
Lot #	Acres	Bedrooms / Use	When constructed	Undeveloped												
1	31 +/-	SFR	1950													
2	7 +/-	SFR		x												

19. Prior permits or exemptions issued by the Agency of Natural Resources for subdivision of land or construction of public buildings. The permits or exemptions would have prefixes of EC, PB, WW, DE, HE, HB, LUP, MH, TT, or CC followed by the number of the project.
Any Act 250 Permits (LUP) on this tract of land? <input type="checkbox"/> Yes # <input checked="" type="checkbox"/> No

20. Detailed project description. Proposed subdivision of existing 38 + acre lot off Five Mile Square Road in Brighton, VT; Lot One, 31 +/- acres to be retained with existing single family residence, wastewater disposal system and potable shallow well water supply; Lot Two, 7 +/- acres with proposed single family residence, at grade wastewater disposal system and drilled well water supply. Both Lots are impacted by wetlands and transitional wetlands bordering the Clyde River. A 50' buffer zone is shown for Lot Two. No construction or disturbance will take place within this zone. In addition, both Lots One and Two require replacement areas within the Lot One water supply well shield.

21. Type of wastewater system design. 1) Prescriptive: <input checked="" type="checkbox"/> 2) Enhanced prescriptive: <input type="checkbox"/> 3) Performance-based: <input type="checkbox"/> 4) Municipal connection: <input type="checkbox"/> 5) Private off-site <input type="checkbox"/> Name of landowner:

22. Is the wastewater disposal system located in a municipality that <u>does not</u> have both a confirmed planning process and valid zoning bylaws? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

23. Water Supply. (Also see #28 and #29 below.) GPD = gallons per day of design flow																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Lot #1</th> <th style="text-align: left;">Lot #2</th> <th style="text-align: left;">Other lots or uses</th> <th style="text-align: left;">Basis for design flow</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">420</td> <td style="text-align: center;">0</td> <td></td> <td style="text-align: center;">SFR</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">420</td> <td></td> <td style="text-align: center;">SFR</td> </tr> <tr> <td style="text-align: center;">420</td> <td style="text-align: center;">420</td> <td></td> <td></td> </tr> </tbody> </table>	Lot #1	Lot #2	Other lots or uses	Basis for design flow	420	0		SFR	0	420		SFR	420	420		
Lot #1	Lot #2	Other lots or uses	Basis for design flow													
420	0		SFR													
0	420		SFR													
420	420															

Type: Individual well: Shared well: TNC: * NTNC: * Community: *
 (*Systems serving 24+ people more than 60 days / year)

Owner of system if not applicant
(Include letter from the system owner authorizing any increase in design flow)

Is the water source located within a 100 year floodplain? Yes No

24. Wastewater Disposal System. (Also see #21 & #22 above and #29 & #30 below.)

	Lot #1	Lot #2	Other lots or uses	Basis for design flow
Existing flows	420	0		SFR
Increase	0	420		SFR
Total	420	420		

If using a municipal wastewater treatment system, owner of system
(Include letter from the system owner authorizing any increase in design flow)

If using an Indirect Discharge System, ID# and owner

Are floor drains proposed? No Yes If "Yes," where will they discharge?

GPM of infiltration for sewers over 500' GPM

25. Global Positioning System (GPS) Coordinates. (WGS 84 or NAD 83 Criteria) with accuracy of +/- 50' for water systems and wastewater systems serving the project.

Existing Water Sources (GPS Coordinates) N 44° 48' 16" W 71° 54' 46" Accuracy in Ft 20

Proposed Water Sources (GPS Coordinates) N 44° 48' 20" W 71° 54' 44" Accuracy in Ft 19
 Proposed replacement area N 44 48' 17" W 71 54' 46" Acc in ft 20

Existing Wastewater Systems (GPS Coordinates) N 44° 48' 16" W 71° 54' 48" Accuracy in Ft 20

Proposed Wastewater Systems (GPS Coordinates) N 44° 48' 19" W 71° 54' 44" Accuracy in Ft 19
 Proposed replacement area N 44 48' 15" W 71 54' 45" Acc in ft 20

WGS 84 NAD 83

26. List any easements required and enclose a copy of the signed easement agreements.
 see attached for Proposed Easement Language

Water Quality Division WEB SITE: <http://www.anr.state.vt.us/dec/waterq/wqdhomed.htm>

27(A). Will there be any construction or land disturbance on the property in or near a wetland, a wetland buffer, or in or near a wet area on the property?

Yes No Wetlands Section - Telephone (802) 241-3770.

27(B). Will more than one acre be disturbed during the entire course of construction, including all lots and phases?

Yes No Construction Stormwater Permits – Telephone (802) 241-4320.

27(C). Will there be any stream crossings by roads, utilities, or other construction?

Yes No River Corridor Management Section – Central & NW VT (802) 879-5631; SO.VT. (802) 786-5906; NE VT (802) 751-0129.

28. Is the proposed well located within 1 mile of a hazardous waste site as designated by the Waste Management Division?

Yes No Telephone (802) 241-3888.

29. 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 Telephone (802) 241-3400.

Is any portion of the proposed water supply located in or near a water Source Protection Area as designated by the Water Supply Division?

Yes No Telephone (802) 241-3400.

30. Is the lot or project located in a flood prone area? Yes No**31. 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: # of lots in town/sIs there any prior Act 250 jurisdiction on the tract of land? Yes; Permit # No**32. Application Fee**

\$420.00

Please refer to attached fee schedule for calculations or contact your regional office for assistance.

33. Has anyone from the regional office been to the site? Yes No*If so, please provide the name of the staff member and the date of the visit.***34. Signatures and 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. 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.

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

Russell W. Adams**Penelope Adams**

Landowner(s) name. (printed)



5-24-06

Landowner(s) signature.

Date



5-24-06

If there are several landowners, and there is not room to fit the information on this form, please attach an additional sheet with the names, mailing addresses, signatures, and dates.

If an attorney signs for the landowner, please submit a copy of the authorization document that grants the power of attorney specific to land transactions.

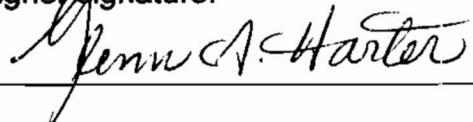
35. Designer statement.

"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 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."

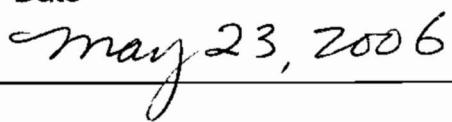
Designer name. (printed)

Glenn A. Harter

Designer signature.



Date



Form Revised July, 2004

e-form



State of Vermont

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation

Department of Fish and Wildlife
Department of Forests, Parks, and Recreation
Department of Environmental Conservation
State Geologist
RELAY SERVICES FOR THE HEARING IMPAIRED
1-800-253-0191 TDD>Voice
1-800-253-0195 Voice>TDD

June 23, 2006

Russell W. & Penelope Adams
1956 Five Mile Square Road
Island Pond, VT 05846

RE: WW-7-1870
Town of Brighton

Enclosed are two copies of the above referenced permit. You must file this permit with your town clerk within 30 days of issuance.

Please take the permit stamped "DOCUMENTS FOR RECORDING", the notification postcard and the correct fee (\$7.00 per page) to your town clerk. Please ask the town clerk to return the notification card to this office to verify recording.

Thank you for your cooperation. If you have any questions, please contact me at the above address.

Sincerely,

A handwritten signature in black ink that appears to read "Sue Cross".

Sue Cross, Administrative Assistant A

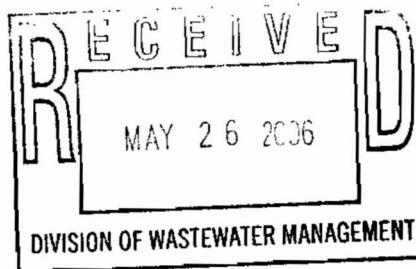
ENCLOSURES



Glenn A. Harter

Vermont Certified Site Technician #293

Roland Grenier
Regional Engineer
Wastewater Management Division
1229 Portland Street, Suite 201
St. Johnsbury, VT 05819-2099



179 Peene Hill
Barton, VT 05822
phone (802) 525-3873
fax (802) 525-3045
email: vtsitetech@gmail.com

May 24, 2006

Re: Proposed subdivision of 38 + acre lot off Five Mile Square Road in Brighton, VT.

Dear Guy,

Project description:

Proposed subdivision of existing 38 + acre lot off Five Mile Square Road in Brighton, VT; Lot One, 31 +/- acres to be retained with existing single family residence, wastewater disposal system and potable shallow well water supply; Lot Two, 7 +/- acres with proposed single family residence, at grade wastewater disposal system and drilled well water supply. Both Lots are impacted by wetlands and transitional wetlands bordering the Clyde River. A 50' buffer zone is shown for Lot Two. No construction or disturbance will take place within this zone. In addition, both Lots One and Two require replacement areas within the Lot One water supply well shield.

Please find enclosed the following:

1. Wastewater System and Potable Water Supply Permit Application and check for \$420.00
2. Project Locus
3. Orthophoto Plot Plan
4. Site Plan
(Sheet 1 of 6) Scale: 1" = 100'
Project description, GPS coordinates existing and proposed wastewater disposal systems and water supplies; proposed house site; existing house site.
5. Site Plan Detail 1
(Sheet 2 of 6) Scale 1" = 30'
Lot Two proposed locations at grade wastewater disposal system, house site, drilled well, 50' buffer zone, and Lot Two construction and maintenance easement.
6. Site Plan Detail 2
(Sheet 3 of 6) Scale 1" = 30'
Lot One location existing house site, wastewater system and shallow well; proposed location absorption trench replacement systems, proposed easement language.
7. Detail Sheet 1
(Sheet 4 of 6)
Plan and section views proposed at grade wastewater disposal system using septic effluent, system calculations, construction notes.
8. Detail Sheet 2
(Sheet 5 of 6)
Plan and section views proposed in ground absorption trench replacement area, sizing calculations.
9. Detail Sheet 3
(Sheet 6 of 6)
Plan and section views proposed 1500 gallon concrete seamless step septic tank, pressure and leakage tests, pump sizing, inverts.

10. Water Supply
11. Soil Data
12. Pump Specifications (2 pages)

Sincerely,


Glenn A. Harter



State of Vermont

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation

Department of Fish and Wildlife
Department of Forests, Parks, and Recreation
Department of Environmental Conservation
State Geologist
RELAY SERVICES FOR THE HEARING IMPAIRED
1-800-253-0191 TDD>Voice
1-800-253-0195 Voice>TDD

May 26, 2006

Russell W. & Penelope Adams
1956 Five Mile Square Road
Island Pond, VT 05846

RE: WW-7-1870, Subdivision of 38 +/- acres into 2 lots: Lot #1 consists of 31 +/- acres to be retained with existing single family residence with wastewater disposal system and potable shallow well water supply. Lot #2 consist of 7 +/- acres with proposed single family residence, at grade wastewater disposal system and drilled well water supply, off Five Mile Square Road, in Brighton, VT.

Dear Applicant:

We received your completed application for the above referenced project on May 26, 2006, including a fee of \$420.00 paid by check #3238. Under the performance standards for this program, we have a maximum of 45 days of "in-house" time to review your application. If we require further information from you to make a decision, the time until we receive it is not included in the in-house performance standards.

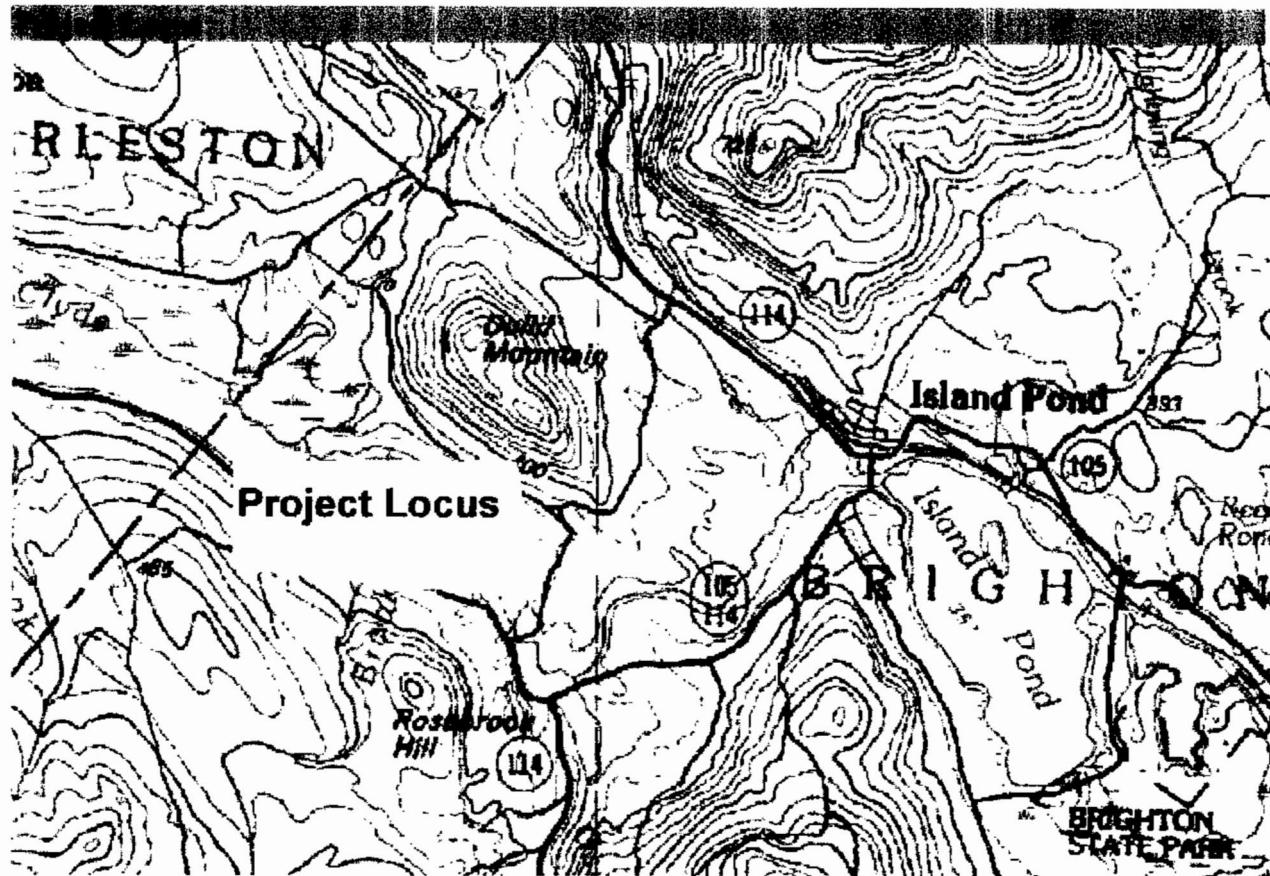
If you have any questions about the review process, or if you have not received a decision on your application within the 45 in-house days, please contact this office.

We have forwarded the information contained in your application to the Information Specialist for this region. A Project Review Sheet will be sent to you indicating other state agencies and departments you should contact regarding additional permits or approvals you may need under their programs. If you have not already done so, you should also check with town officials about any necessary town permits.

For the Division of Wastewater Management

Sue Cross
Sue Cross
Administrative Assistant

cc: Brighton Planning Commission
Glenn A. Harter



Water Supply Design Lot Two

The water supply design is based on proposed individual drilled bedrock well for a single family residence (3 bedroom); as follows:

Average Day Demand

ADD = 420 gallons/day

Maximum Day Demand

MDD = 420gpd/720 min = 0.6gpm

Instantaneous Peak Demand

IPD = 5 gpm per VT Water Supply Rule 11.3.2(b)

Source Capacity

Long term yield to be determined by well driller per VT Water Supply Rule 11.6.0.1

Pump Capacities

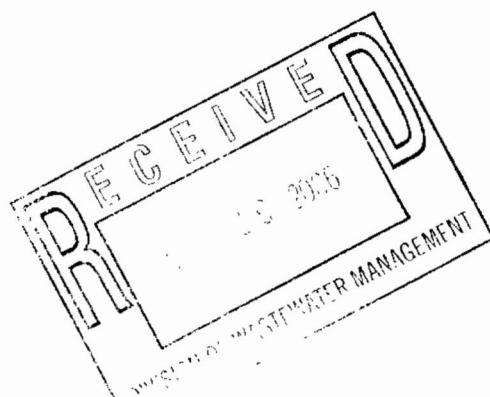
The pumping unit shall meet VT Water Supply Rule 11.8.1.3

Operating Pressure Ranges

Operating pressure shall meet minimum parameters of VT Water Supply 11.8.3.2.1

Flood Plain

Proposed individual water supply is not in a flood plain.



Soil Analysis

Soils on this site were generally loamy sands to medium sands deposited along the former banks of the Clyde River. TP2 and TP4 located in former logging landing evidenced some soil disturbance. Organic layer in these two pits was not logged.

Soil Data

Test pit #1	Elevation = 503.2	Seasonal high water table @ 24"
0-10"	Dark brown very fine loamy sand, friable, granular, many fine roots	
10-24"	Dark reddish brown fine loamy sand, friable	
24-51"	Olive brown loamy sand, 2" dark FeO2 layer @ 24-26"	
Test pit #2	Elevation = 496.4	Seasonal high water table @ 9"
0-9"	Dark brown very fine sandy loam, friable, granular, many fine roots	
9-24"	Olive brown fine sandy loam, firm, FeO2 mottles distinct @ 9"	
24-34"	Olive gray loamy sand, firm,	
Test pit #3	Elevation = 499.2	Seasonal high water table @ 52"
0-12"	Dark brown very fine sandy loam, friable, granular, many fine roots	
12-36"	Dark yellow brown fine loamy sand, friable	
36-52"	Olive brown loamy sand, loose, few random white spots, medium, leached sand	
52-80"	Olive brown loamy sand, firm, some FeO2 stains	
Test pit #4	Elevation = 496.5	Seasonal high water table @ 16"
0-8"	Dark brown very fine sandy loam, friable, granular, many fine roots	
8-16"	Dark reddish brown loamy sand, friable; granular, some small stone	
16-48"	Olive brown loamy gravelly sand, friable, distinct FeO2 stains, cobbles	
Test pit #5	Elevation = 498.1	Seasonal high water table @ 39"
0-10"	Dark brown very fine sandy loam, friable, granular, many fine roots	
10-38"	Dark yellowish brown fine loamy sand, friable	
38-65"	Olive brown loamy sand, firm, some FeO2 stains @ 39-44"	
Test pit #6	Elevation = 510.8	Seasonal high water table @ none observed"
0-10"	Dark brown very fine sandy loam, friable, granular, many fine roots	
10-36"	Yellowish brown loamy sand, friable	
36-85"	Olive brown fine to medium sand, loose	
Test pit #7	Elevation = 509.9	Seasonal high water table @ 64"
0-10"	Dark brown very fine sandy loam, friable, granular, many fine roots	
10-36"	Dark yellowish brown loamy sand, friable	
36-64"	Olive brown loamy sand, loose	
64-80"	Olive brown fine sandy loam, firm, FeO2 mottles faint	

Percolation test results

	Test depth (from grade)	min/in	Bore hole depth
B1	32"	4.0	40"
B2	18	4.8	25
B3	18	5.3	26



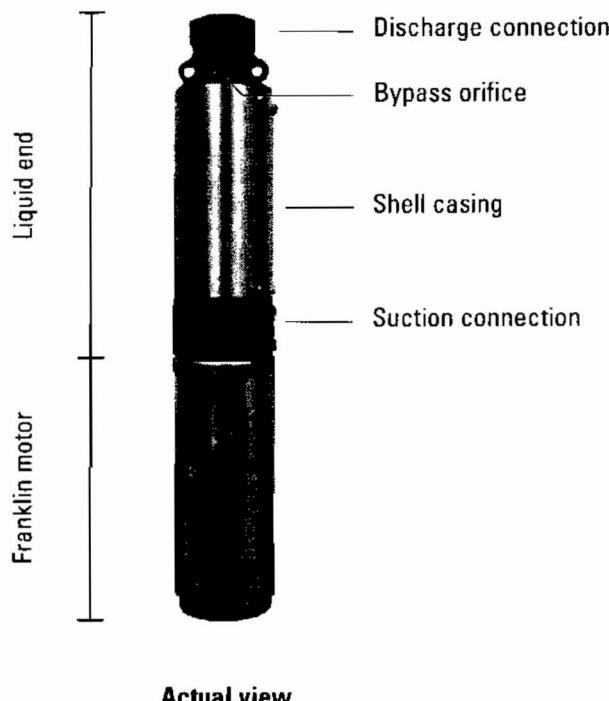
PA Series High-Head Effluent Pumps

Technical
Data Sheet

Applications

Our submersible High-Head Effluent Pumps are designed to transport screened effluent (with low TSS counts) from septic tanks or separate dosing tanks to collection and treatment systems. All our pumps are constructed of lightweight, corrosion-resistant stainless steel and engineered plastics; all are field-serviceable and repairable with common tools; and all PA Series models are UL and CSA listed for use with effluent.

Orenco High-Head Effluent Pumps are used in a variety of applications, including: drainfields, packed bed filters, mounds, aerobic units, effluent irrigation, effluent sewers, wetlands, lagoons, and more.



Features/Unique Specifications

To specify this pump for your installation, require the following:

- minimum 24-hour run-dry capability without water lubricant
- 1/8-inch bypass orifice to ensure flow recirculation for motor cooling and to prevent air bind;
- floating stack design to protect against upthrust and increase pump life;
- repairable (nondisposable) liquid end for better long-term ownership;
- corrosion-resistant construction;
- Franklin motor rated for continuous use and frequent cycling;
- type SOOW motor cable (suitable for Class I, Division 1 and 2 applications).

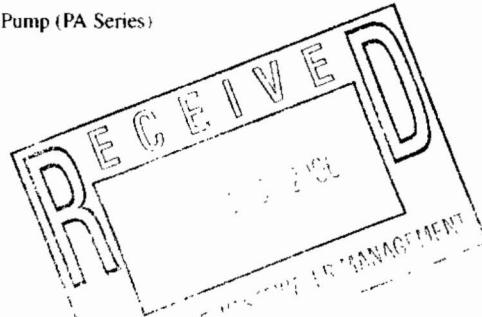
Standard Models

See specifications (on back) for complete list.

Nomenclature

PA	20	05	1	1
				Voltage: 1 = 115
				Phase: 1 = single-phase
				Horsepower: 05 = 1/2 hp
				Nominal flow (gpm). 10 20 30 50

Pump (PA Series)



Orenco Systems®
Incorporated

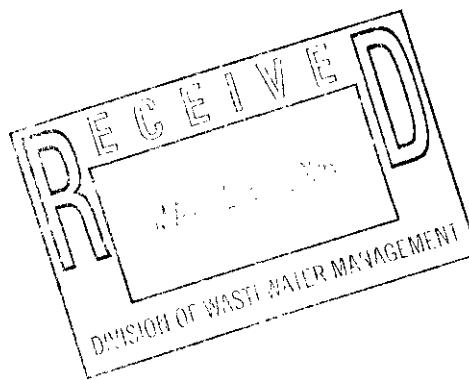
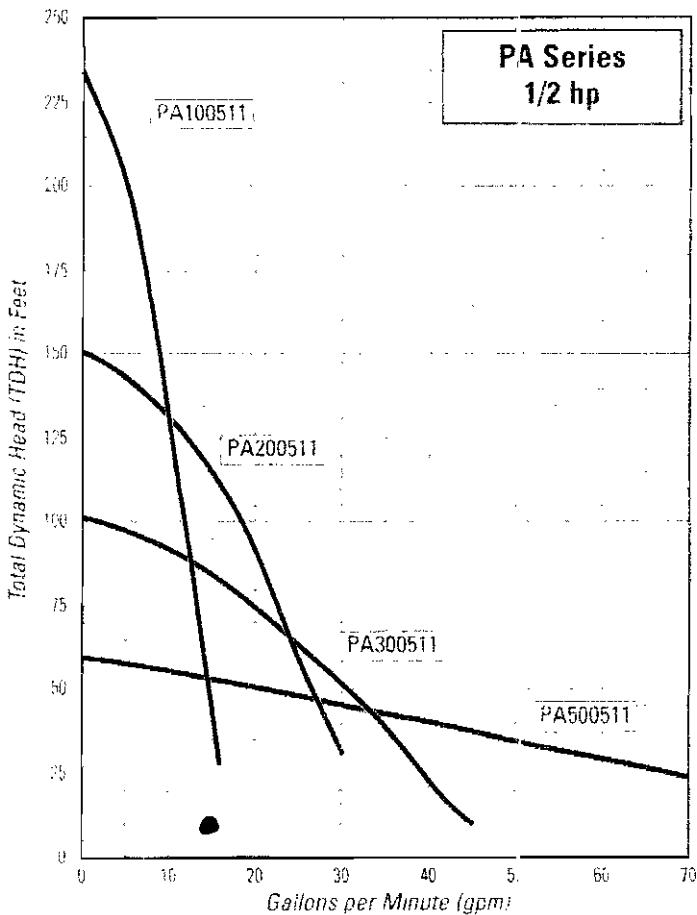
1-800-348-9843

NTD-PU
Rev. 1.3, ©
Page

PA Series Pump Curves

Using a Pump Curve

A *pump curve* helps you determine the best pump for your system. Pump curves show the relationship between flow (gpm) and pressure (TDH), providing a graphical representation of a pump's optimal performance range. Pumps perform best at their *nominal flow rate*—the value, measured in gpm, expressed by the first two numerals in an Orenco pump nomenclature.

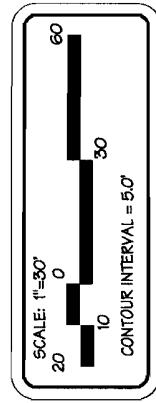


Orenco Systems[®]
Incorporated

1-800-348-9843

NTD-PU-PA-1
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Page 3 of 3





All bearings refer to magnetic north
Method of survey: Total station and prism
Elevations and contours by trigonometric interpolation

PROPOSED EASEMENT LANGUAGE:

(to be included in Lot Two deed)

Also conveyed is the exclusive right to construct, use, operate and maintain a septic system (replacement) surrounded by a 10' maintenance buffer and a delivery pipe (force main) thereto. The delivery pipeline shall be considered the centerline of a 10' wide right of way running southwesterly from Lot 2 to the above-mentioned septic system. In particular, this easement can be more fully described as beginning at unmarked point (A) along the common boundary of proposed Lot One and Two which point is 48 ft. more or less from the southerly corner of a parcel (Lot Two) and running 5 25 W 61 to an unmarked point (B), thence turning 5 22 E 22' to an unmarked point (C), thence turning 5 22 E 34' to an unmarked point (D), thence turning 5 39 W 10' to an unmarked point (E), thence turning N 81 W 23' to an unmarked point (F), thence turning 5 09 W 49' to an unmarked point (G), thence turning 5 22 E 46' to an unmarked point (H), thence turning N 82 E 34' to an unmarked point (I), thence turning N 05 W 69' to an unmarked point (J), thence turning N 39 E 11' to an unmarked point (K), thence turning N 18 E 24' to an unmarked point (L), thence turning 5 22 E 6' to an unmarked point (M), thence turning N 28 E 62' to an unmarked point (N), thence turning northerly along westerly boundary of said parcel a distance of 3' from the above easement beginning.

Approved: *[Signature]* Permit #: 444-7-1872
Date: 6/22/26

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

[Signature] 6/24/26

