



THREE RIVERS HEALTH DISTRICT
P.O. BOX 415
SALUDA, Virginia 23149

Sewage Disposal System Operation Permit

Property Owner

Svend & Gale Madsen Trust, Gale Madsen, Trustee
841 Oak Hill Rd.
Lancaster Va. 22503

Health Dept. ID: 151-20-0023
Tax Map# : 26J-1-8
County: Lancaster

Property Location: 841 Oak Hill Rd.

Svend & Gale Madsen Trust is hereby granted permission to operate a **Residential Alternative Onsite Sewage System** at the above referenced location, under the following parameters:

Daily Flow: 450 gallons
Number of Bedrooms: 3

This permit is issued in accordance with the provisions of Title 32.1, Chapter 6 of the Code of Virginia as Amended, and Section 12VAC 5-610-340 of the Sewage Handling and Disposal Regulations of the Virginia Department of Health. The issuance of an operation permit does not denote or imply any guarantee by the department that the sewage disposal system will function for any specified period of time. It shall be the responsibility of the owner or any subsequent owner to maintain, repair, or replace any sewage disposal system that ceases to operate in accordance with the regulations.

The continued validity of this permit is contingent upon compliance with the operation and maintenance requirements contained in the Owner's Operation and Maintenance Manual and Regulations for Alternative Onsite Sewage Systems of the Virginia Department of Health (12VAC5-613-100 et seq.). Owners are advised to be aware of the operation and maintenance instructions for their alternative onsite sewage system and to follow them. Copies of the operation and maintenance instructions can be found by contacting the local health department for the locality where the onsite sewage disposal system is located.

April 6, 2020
Effective Date

George Sanford
Environmental Health Specialist

Signature

Completion Statement

Commonwealth of Virginia
State Department of Health

Health Department
Identification Number: 151-20-0023

Lancaster County Health Department

Class B Contractor:

Master Alternative Installer License No:

Address:

Telephone:

Owner's Name:

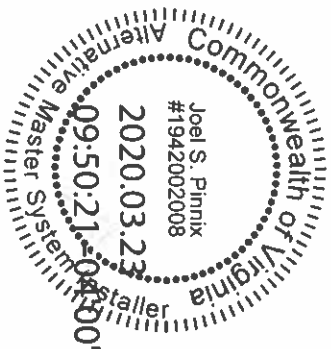
Svend & Gale Madsen Trust
c/o Gale Madsen, Trustee, 841 Oak Hill Road, Lancaster, VA 22503

Location of Installation:

Tax Map ID:

841 Oak Hill Road
26J-1-8

I hereby certify that the onsite sewage disposal system has been installed and completed in substantial accordance with the construction permit issued for the project.





Obsidian Onsite Services, inc.

Completion Statement

Date: March 23, 2020

Project: 841 Oak Hill Road
Tax Map 26J-1-8
Lancaster County, VA

Client: Gale Madsen
841 Oak Hill Road
Lancaster, VA 22503
804-761-1701

Contractor: O2Si

A final inspection of the above on-site treatment works was performed on March 18, 2020. Based on the referenced inspection, it is my opinion that the system was installed in substantial accordance with the construction permit and applicable requirements of the *Regulations*.

If you have any questions or comments, please feel free to contact me.

Respectfully submitted,



Attachment: O&M Manual



THREE RIVERS HEALTH DISTRICT
P.O. BOX 415
SALUDA, VIRGINIA 23149

PE Sewage Disposal System Construction Permit Letter (COV 32.1-163.6)

February 26, 2020

Svend & Gale Madsen Trust, Gale Madsen, Trustee
841 Oak Hill Rd.
Lancaster, Va. 22503

RE: Lancaster County (Voluntary Upgrade)
Tax Map 26J-1-8
HDID: 151-20-0023
System Capacity: Residential, 3 Bedrooms, 450 gallons per day

Dear Mr. & Mrs. Madsen:

This letter and the attached drawings, specifications and calculations dated February 6, 2020 constitute your permit to install a sewage disposal system on the property referenced above. Your application for a permit was submitted pursuant to §32.1-163.6 of the Code of Virginia, which requires the Virginia Department of Health (VDH) to accept designs for onsite sewage systems from individuals licensed as Professional Engineers (PEs). This law allows PEs to design onsite sewage systems that do not fully comply with the Sewage Handling and Disposal Regulations (12 VAC 5-610-10 et seq.) and requires VDH to accept such designs provided they comply with standard engineering practices, performance requirements set by the Board of Health, and certain horizontal setback requirements necessary to protect public health and the environment. VDH hereby recognizes that the design submitted by Joel S. Pinnix, PE, complies with the requirements of the Code of Virginia and the applicable regulations and grants permission to install the system as designed in the area shown on the attached plans and specifications.

If modifications or revisions are necessary between now and when the system is constructed, please contact the PE who designed the system upon which this permit is based. Should revisions be necessary during construction, your contractor should consult with the PE. The PE is authorized to make minor adjustments in the location or design of the system provided that adequate documentation is provided to the Three Rivers Health District.

The PE that submitted the design for this permit is required by the Sewage Handling and Disposal Regulations to conduct a final inspection of this sewage system when it is installed and to submit an inspection report and completion statement to the Three Rivers Health District. The health department is not required to inspect the installation, but may do so at its sole discretion. The sewage system may not be placed into operation until you have obtained an Operation Permit from the Three Rivers Health District. [Include when applicable: Your PE did not submit an Operation and Maintenance Manual for review and approval with the plan package, and will be required to do so prior to issuance of an Operation Permit.]

This Construction Permit is null and void if site and soil conditions are changed from those shown on your application or if conditions are changed from those shown on the attached plans and specifications. VDH may revoke or modify any permit if, at a later date, it finds that the system would threaten public health or the environment.

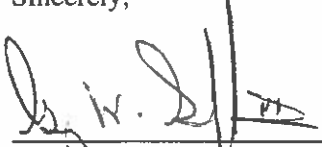
This permit approval has been issued in accordance with applicable regulations based on the information and materials provided at the time of application. There may be other local, state, or federal laws or regulations that apply to the proposed construction of this onsite sewage system. The owner is responsible at all times for complying with all applicable local, state, and federal laws and regulations. This construction permit is transferrable until expired or deemed null and void. A permit transfer form may be found on the VDH website at <http://www.vdh.virginia.gov/environmental-health/gmp-2015-01-forms/>.

The upgrades specified in this permit are voluntary and not required by law.

If you have any questions, please contact me.

This permit expires August 26, 2020.

Sincerely,



Environmental Health Specialist Sr.

CC: P.E.

February 26, 2020

Svend & Gale Madsen Trust, Gale Madsen, Trustee
841 Oak Hill Rd.
Lancaster, Va. 22503

Subject: Alternative Onsite Sewage Disposal System, Owner Responsibilities

Health Department ID Number: 151-20-0023

Tax Map Number: 26J-1-8

Dear Svend & Gale Madsen Trust, Gale Madsen, Trustee:

Records on file at the Three Rivers Health District indicate that you are the owner of an Alternative Onsite Sewage System (AOSS). This letter is to provide you with important information regarding owner responsibilities for the operation and maintenance of your AOSS.

The Regulations for Alternative Onsite Sewage Systems (the "AOSS Regulations," 12 VAC 5-613) became effective on December 7, 2011. These regulations can be found online at <http://www.vdh.virginia.gov/EnvironmentalHealth/Onsite/regulations/index.htm>.

The Commonwealth of Virginia State Board of Health Alternative Onsite Sewage Regulation outline the owner's responsibilities for alternative onsite sewage systems. Owners are now required to:

1. Have the **AOSS operated and maintained by a licensed operator**. A list of licensed operators can be obtained by visiting the Department of Professional and Occupational Regulation at www.dpor.virginia.gov. Select "License Lookup" from the menu, type an asterisk (*) in the name field, check the "Operators" box under "Onsite Sewage Systems Professionals" and click "search."
2. Have a **licensed operator** visit the AOSS at the frequency required by the regulations.
3. Have a licensed operator collect any **samples** required by the regulations (specific laboratory sampling requirements depend on the date your application was filed, the size of the treatment system, the approval status of the treatment unit, whether or not disinfection was required, and whether or not there is direct dispersal to groundwater. Laboratory sampling is not required for any small AOSS with an installed soil treatment area that is sized for septic tank effluent and complies with the requirements of 12VAC5-610

for septic tank effluent. Please consult your Operation and Maintenance Manual, the system designer, an Operator, or the Health Department if you have questions.).

4. Keep a copy of the **maintenance log** provided by the operator on the property where the AOSS is located, make the log available to the health department upon request, and transfer the log to any future owner of the property.

5. Keep a copy of the **Operation and Maintenance (O&M) Manual** for the AOSS on the property where the system is located, make the manual available to the health department upon request, and transfer the O&M Manual to any future owner.

6. Comply with the onsite sewage disposal requirements contained in any local ordinance adopted pursuant to the Chesapeake Bay Preservation Act (§10.1-2100 of the Code of Virginia) and the Chesapeake Bay Preservation Area Designation and Management Regulations (9 VAC 10-20) if the AOSS is located within a designated Chesapeake Bay preservation area.

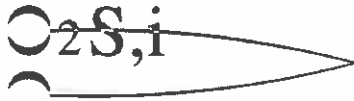
Proper operation and maintenance of an AOSS is required by law and is necessary to ensure continued functioning of the system and may prevent premature failure of the system. Operation and maintenance information for your system may be found by contacting the system designer, the local health department, or by visiting the VDH website at <http://www.vdh.virginia.gov/EnvironmentalHealth/Onsite/newsinterest/index.htm>.

If you have any questions regarding this letter or believe that you received this letter in error, please contact me at (804)-462-9919. Your cooperation and timely response will be appreciated.

Sincerely,

A handwritten signature consisting of the letters 'VDH' in a stylized, cursive font.

Virginia Department of Health



Obsidian Onsite Services, inc.

Professional Engineer Design Report
for an On Site Treatment System VOLUNTARY UPGRADE
Pursuant to § 32.1-164.1:3

**Project/
Property Location:** 841 Oak Hill Road
Tax Map 26J-1-8
Lancaster County, VA

Client: Gale Madsen
841 Oak Hill Road
Lancaster, VA 22503
804-761-1701

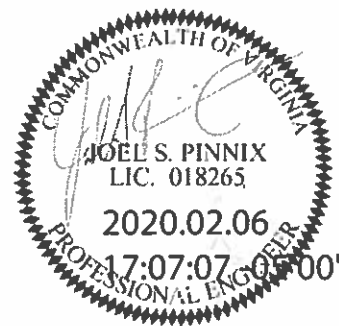
Design by: Joel S. Pinnix, PE, License # 0402018265
Obsidian Onsite Services, Inc.
PO Box 100
Tappahannock, VA 22560
(804) 347-7176
joelpinnix@obsidianengineering.com

Date: February 6, 2020

Attachments

- Existing Site Conditions & Upgrade Layout

I hereby certify that the evaluations and designs contained herein were conducted in accordance with Virginia Code § 32.1-164.1:3 using that degree of skill and care ordinarily exercised under similar conditions by reputable members of a civil engineering profession practicing in the same or similar locality at the time of performance. No other warranty, express or implied, is made or intended and the same are specifically disclaimed.



I recommend an **Voluntary Upgrade Permit** be **APPROVED**.

Obsidian Onsite Services, Inc.
PO Box 100, Tappahannock, VA 22560
804.347.7176 fax 208.978.1458

841 Oak Hill Road
Tax Map 26J-1-8
Lancaster County, VA
February 6, 2020

Existing Conditions:

The existing onsite treatment works consists of a septic and pump tank discharging to an existing Puraflo peat filter treatment system.

Voluntary Upgrade:

The proposed upgraded treatment works includes the addition of a Clearstream NC600 aerobic treatment to bring the effluent quality to the “drainfield standard” of TL-2 or better prior to dosing the peat modules – all for the purpose of improved treatment.

Design Criteria

Water Supply	Existing IIIA Well
Bedrooms	3
Hydraulic Loading	450 gpd

See Design Worksheets for further design calculations.

On Site Treatment System Components:

Septic Tank

1. **Existing** 1000 gallon septic tank – disconnect the existing septic tank from the existing pump tank and plug the pipe penetrations.

Pump Tank

2. **Existing** 1,000 gallon, pump tank with pump and controls.

ATU

3. Add a Clearstream NC600 ATU between the septic tank and pump tank as shown.
4. Install compressor and alarm panel for ATU as required.

General Notes

- Contractor shall comply with Virginia Sewage Handling and Disposal Regulations for elements not specified herein.
- Contractor shall verify lines and grades and shown on the plans. Engineer shall be notified of any discrepancy.
- Contractor shall install all manufactured components in accordance with manufacturer’s guidelines.
- Electrical systems shall be installed in accordance with local building code requirements.
- Contractor shall adjust depths of on-site treatment components to accommodate the required slope of all gravity piping.
- Contractor shall level buried tanks.
- All backfill shall be compacted to mitigate subsidence. Care shall be taken when backfilling around risers and man-ways so as not to damage system components.
- Disturbed areas shall be graded to drain away from the treatment works, and seeded.

Client: Gale Madsen
 841 Oak Hill Road
 Lancaster, VA 22503
 804-761-1701

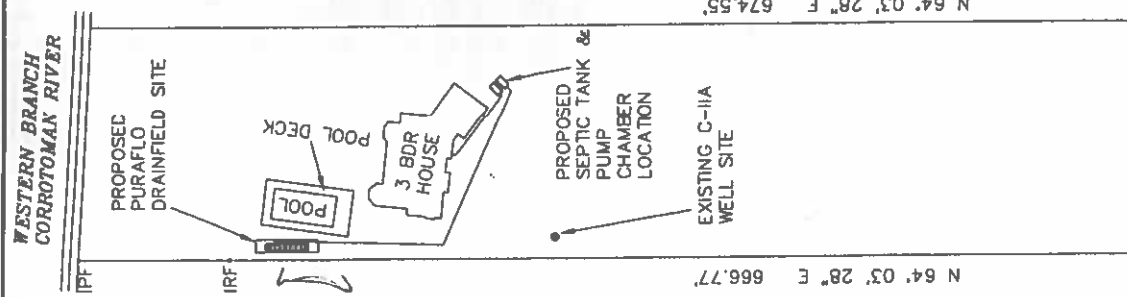
Project: 841 Oak Hill Road
 TM 26J-1-8
 Lancaster County, VA

Drawn By: JSP
 Date: 01-21-19
 As Shown

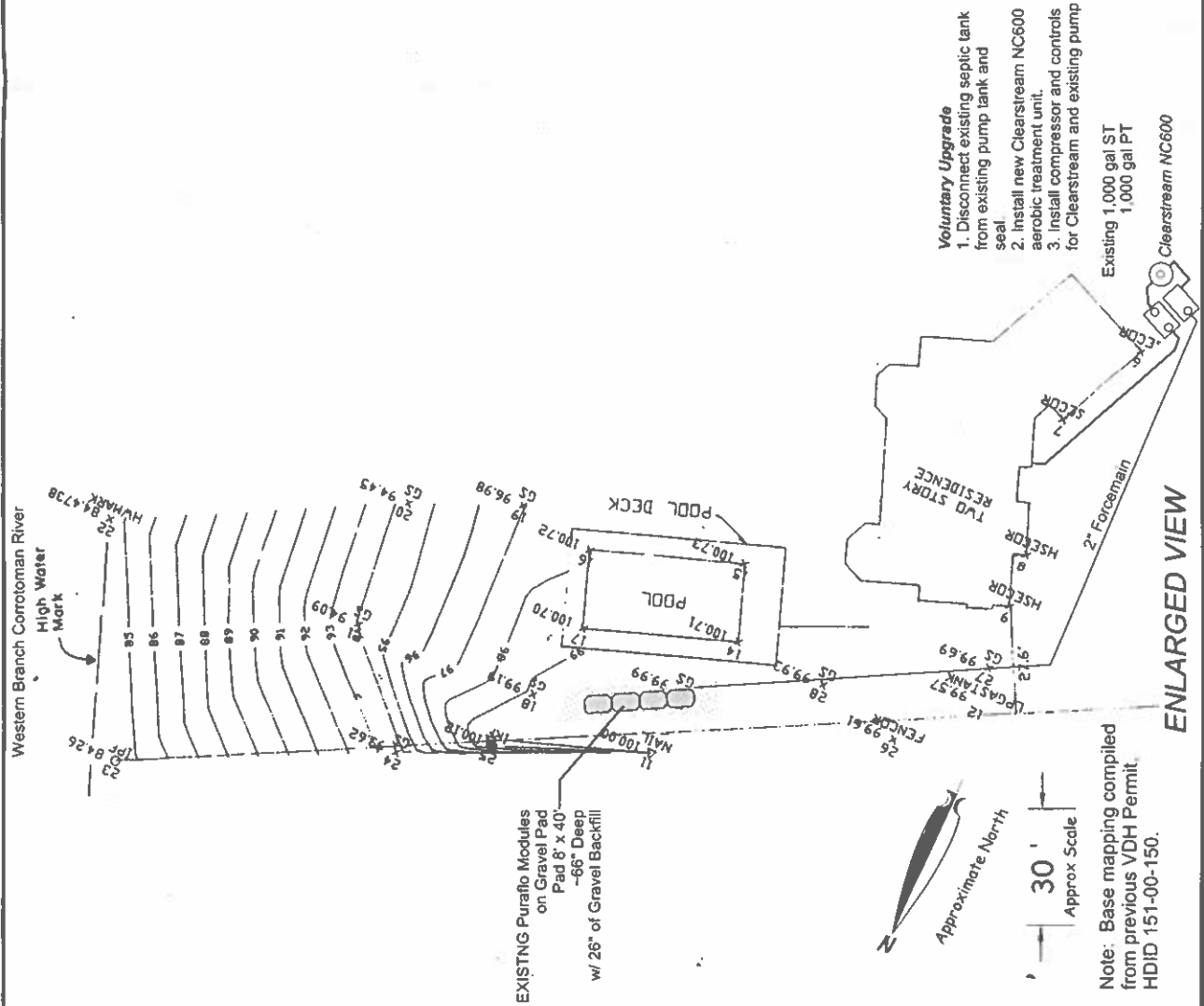
Existing Site Conditions and Upgrade Layout



O2Si
 Obsidian Onsite Services, inc.
 P.O. Box 100
 Tappahannock, VA 22560
 (804) 347-7176



EXISTING CONDITIONS



- Voluntary Upgrade**
1. Disconnect existing septic tank from existing pump tank and seal.
 2. Install new Clearstream NC600 aerobic treatment unit.
 3. Install compressor and controls for Clearstream and existing pump.

Existing 1,000 gal ST
 1,000 gal PT
 Clearstream NC600

ENLARGED VIEW

Note: Base mapping compiled from previous VDH Permit, HDID 151-00-150.