

**Department of Community Development  
Staff Report**

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**PROPERTY OWNERS:** Wayne and Linda Heflin  
**APPLICANT(S):** Wayne and Linda Heflin  
**LOCATION:** 7550 Frytown Road, Warrenton  
**DISTRICT:** Center District  
**PIN(S):** 6994-37-9397-000  
**ACREAGE:** 1.0007 acre  
**ZONING:** Residential (R-1)  
**LAND USE:** Rural  
**MEETING DATE:** November 17, 2016

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**REQUEST:** SPEX-15-006017: The Applicants are seeking approval of a Category 20 Special Exception for a private individual sewage treatment system that discharges into a drainageway, in accord with Section 3-320.7 of the Zoning Ordinance.

**OUTSTANDING ISSUES:** There are no outstanding issues identified.

**RECOMMENDATION:** Staff recommends approval of the application subject to the following conditions should the Planning Commission wish to recommend approval to the Board of Supervisors. With the proposed conditions of development, staff believes the Applicants satisfy Zoning Ordinance sections 5-006 and 5-2000.

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**STAFF RECOMMENDED CONDITIONS:**

1. The Special Exception is granted only for the land indicated in this application as PIN 6994-37-9397, and is not transferable to other land.

2. This approval shall be granted for one private individual discharge sewage treatment system, for the remediation of the failed system, to serve an existing single family dwelling.
3. The Applicant shall submit evidence that all applicable permits, such as but not limited to Virginia Department of Health (VDH) and Department of Environmental Quality (DEQ), have been granted for the discharge sewage treatment system prior to any land disturbing activities associated with the Special Exception.
4. The on-site facilities and operation of the individual discharge sewage treatment system shall be in accordance with all applicable federal, state and local regulations at all times.
5. The individual discharge system shall be in accordance with the plat titled "*Physical Topographical Survey, Property of Wayne & Linda Heflin*" as drafted by Holmes Smith and dated September 7, 2016, unless alteration is required by DEQ or VDH.
6. Should the type of individual discharge system installed differ from the Advantex system described in application for SPEX-006017, it shall be a system of equivalent performance approved by DEQ and VDH and shall include telemetry to the operator.
7. The individual discharge system shall be designed to discharge a flow equal to or less than 600 gallons or less per day on monthly average.
8. Performance and maintenance of the discharge system shall comply with *Alternative Discharging Sewage Treatment Regulations for Individual Single Family Dwellings*, 12VAC5-640, as required by the Virginia Department of Health.
9. The Applicant shall install a water meter or an effluent meter to track water usage and submit reports to the Virginia Department of Health to ensure compliance with this Special Exception and submit reports to DEQ per VPDES permit conditions. Reports shall be submitted annually, unless otherwise directed by the Virginia Department of Health or Virginia Department of Environmental Quality.
10. Monitoring shall meet Virginia Health Department and Virginia Department of Environmental Quality standards.
11. A maintenance and monitoring contract with a licensed professional shall be retained at all times. The Applicant shall provide the Zoning Administrator with a copy of the contract annually.
12. A Site Plan shall be required for the use.

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**Topic Description:**

The Applicants, Wayne and Linda Heflin, are requesting approval of a Category 20 Special Exception for a private individual sewage treatment system that discharges into an open ditch. This request is to serve an existing single family residence that the Applicants currently occupy. The proposed system is an Advantex discharge system that will eventually discharge into Cedar Run. The Applicants' Statement of Justification is attached.

The property and the newly constructed residence were purchased by the Applicants on March 31, 2016. Soon afterward, the Applicants noted standing water over the drainfield area of their property. According to the Applicants, repeated attempts to address the issue by contacting the residential building company were not successful. The Applicants then contacted the design engineer of the septic alternative system. Upon consultation, the engineer claimed that the system was functioning properly. However, given the continued problem of standing water, the Applicants then contacted an independent licensed Onsite Soil Evaluator (OSE), Phil Helm, to examine the property. Mr. Helm determined that the drainfield soils were saturated and that the system was in a state of failure. Subsequent testing by Mr. Helm revealed that the soils on site are not adequate for any type of sub-surface septic or septic alternative system. The Virginia Department of Health (VDH) confirmed the findings, as detailed in a Repair Permit Denial Letter dated September 28, 2016. The County Soil Scientist, Jim Sawyer, also found that the soils on the Heflin property were inadequate for an in-ground system.

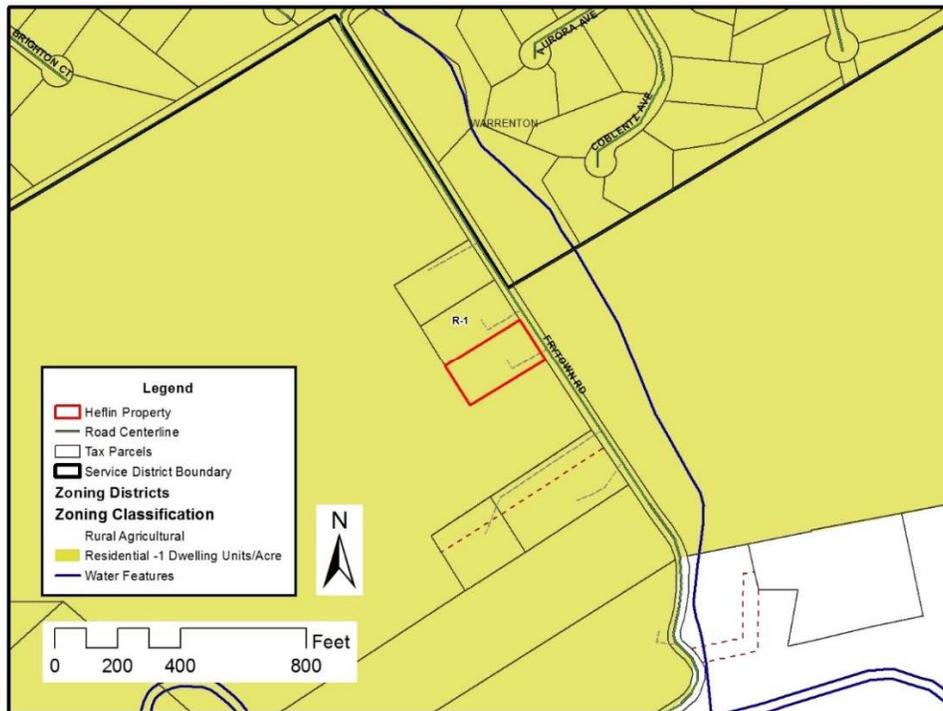
Given the lack of viable alternatives, it has been determined that the only remaining course of action is to discharge treated effluent into an adjacent drainageway. The Applicants are proposing to replace their existing system with an *Advantex AX20* pretreatment unit by *Orenco*. An additional *BioMicrobics* aeration unit will further treat waste in addition to an ultraviolet light. The treated waste will run through a shallow, gravel lined trench for a length of 250 feet within the subject property. The trench will terminate in an existing drainage swale. The aforementioned system meets VDH guidelines for the highest level of treatment (designated TL-3). The proposed treatment system and the discharged effluent will require ongoing maintenance and evaluation reports that will be sent to VDH and the Virginia Department of Environmental Quality (DEQ) for monitoring.

The installation of this system requires approval of a VPDES Permit from the Virginia Department of Environmental Quality (DEQ), as well as a Virginia Department of Health (VDH) permit for the approval of the sewage treatment portion of the system. The Applicant has already received their VPDES permit, VAG406594, and are in the process of pursuing other required permits concurrent with the Special Exception approval process.

**Location, Zoning and Current Land Use:**

The property is located along Frytown Road (Route 674) and just east of Warrenton. The property is zoned Residential (R-1) and is just over one (1) acre in size. The Applicants' residence is located near the center of the parcel.

**Zoning Map**



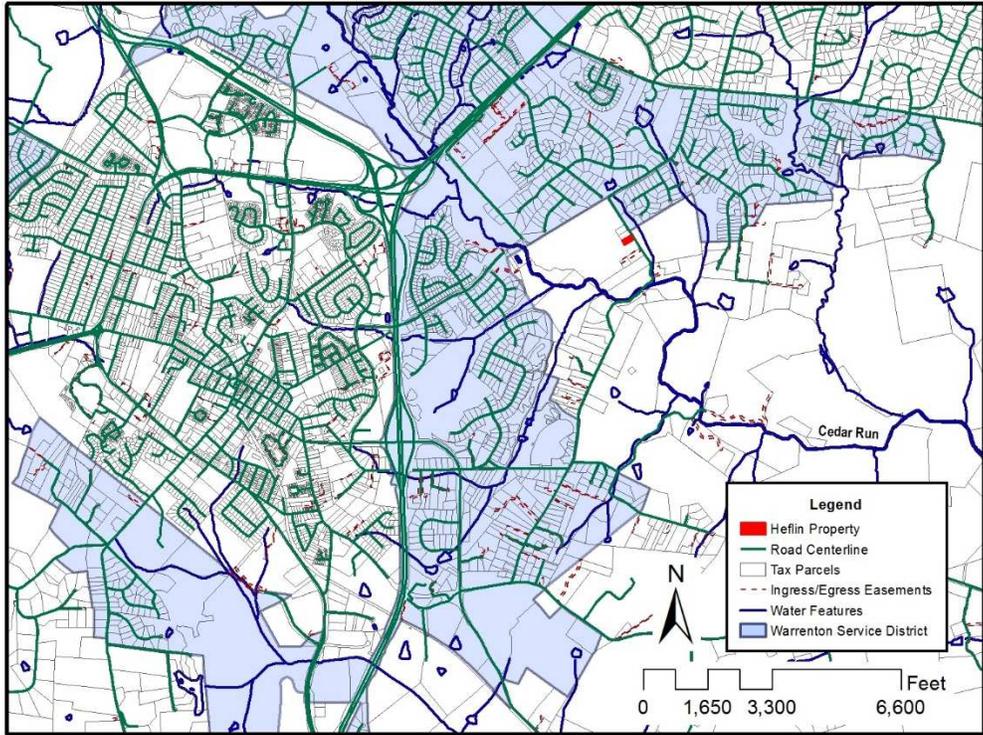
**Neighboring Zoning and Current Land Use:**

Adjacent properties are also zoned Residential (R-1), including two (2) parcels to the north of similar size that are also used for residential purposes. Abutting to the west and east are larger, predominately forested parcels. The parcel immediately to the west is the site of the previously approved but not yet constructed Cedar Mill Subdivision.

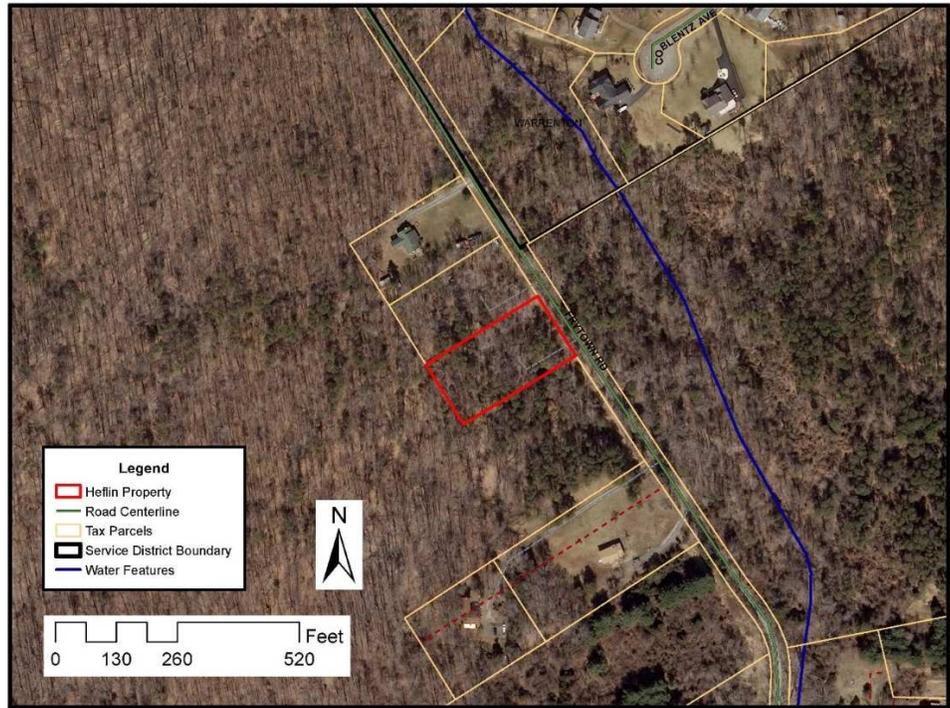
**Comprehensive Plan:**

The site is located just outside the Service District Boundary of Warrenton in an area designated for Rural Land Use by the Comprehensive Plan. Chapter 8 – Rural Land Use Plan, of the Comprehensive Plan establishes the goals of preserving farmland, open space and the rural character of the county. These preservation goals include protection of environmental and cultural resources as well as aesthetic integrity. Staff believes the application to be in conformance with the Comprehensive Plan’s goals for rural areas.

**Warrenton Service District Area Map**



**Aerial Map**



**Special Exception Analysis:**

The Special Exception must comply with General Standards for Special Permits and Special Exception Uses, found in Section 5-006; and Section 5-2000. Staff's analysis of the standards are provided below in italics.

### **5-006 General Standards for Special Permits and Special Exception Uses**

In addition to the special standards set forth hereinafter for specific uses, all Special Permit and Special Exception uses shall also satisfy the following general standards.

1. The proposed use shall be such that it will not adversely affect the use or development of neighboring properties. It shall be in accordance with the applicable zoning district regulations and the applicable provisions of the adopted Comprehensive Plan. The location, size and height of buildings, structures, walls and fences, and the nature and extent of screening, buffering and landscaping shall be such that the use will not hinder or discourage the appropriate development and/or use of adjacent or nearby land and/or buildings or impair the value thereof.

*The use should not adversely affect the use or development of neighboring properties. The proposed treatment system meets Virginia Department of Health (VDH) guidelines for the highest level of treatment for effluent. All landowners located within one mile downstream of the proposed discharge system have been notified of the pending application.*

2. The proposed use shall be such that pedestrian and vehicular traffic generated will not be hazardous or conflict with the existing and anticipated traffic in the neighborhood and on the streets serving the site.

*The proposed use will not generate additional pedestrian or vehicle traffic.*

3. In addition to the standards which may be set forth in this Article for a particular category or use, the BZA and Board may require landscaping, screening, yard requirements or other limitations found to be necessary and appropriate to the proposed use and location.

*Additional landscaping, screening or fencing may be conditioned by the Board of Supervisors if it is deemed necessary for the proposed discharge system. Due to the fact that the proposed treatment system will be located below-ground and because the discharge ditch will be located in the rear yard, staff has not proposed any additional landscaping or screening requirements.*

4. Open space shall be provided in an amount at least equal to that specified for the zoning district in which the proposed use is located.

*Open space is not required with this application.*

5. Adequate utility, drainage, parking, loading, and other necessary facilities to serve the proposed use shall be provided. Low impact development techniques are encouraged by the County and shall be incorporated into the site and facility design when deemed

appropriate by the applicant after consultation with appropriate county officials. Parking and loading requirements shall be in accordance with the provisions of Article 7.

*The treatment system requires Department of Environmental Quality (DEQ) approval and will be required to meet all state regulations regarding system design and will be subject to regular testing for system performance.*

6. Signs shall be regulated by the provisions of Article 8, except as may be qualified in the Parts that follow for a particular category or use. However, the BZA and the Board, under the authority presented in Section 007 below, may impose more strict standards for a given use than those set forth in this Ordinance.

*No signage is proposed for the use.*

7. The future impact of a proposed use will be considered and addressed in establishing a time limit on the permit, if deemed appropriate. Existing and recent development, current zoning and the Comprehensive Plan shall be among the factors used in assessing the future impact of the proposed use and whether reconsideration of the permit after a stated period of time would be necessary and appropriate for the protection of properties in the vicinity and to ensure implementation of the Comprehensive Plan.

*Because DEQ is the ultimate permitting authority, staff is not recommending a time limit.*

8. The proposed use shall be such that air quality, surface and groundwater quality and quantity, are not degraded or depleted to an extent that would hinder or discourage the appropriate development and/or use of adjacent or nearby land and/or buildings or impair the value thereof.

*The proposed use should not affect air quality. Conditions of development have been proposed to address surface and groundwater quality. Per DEQ regulations, the discharge system cannot discharge a flow of more than 1,000 gallons per day. The proposed treatment system is designed to handle a maximum average flow of 600 gallons per day and will include a remote monitoring system to ensure proper functioning. A condition has been included to limit an average daily flow to 600 gallons or less per day. The Applicants will be required to submit ongoing reports to DEQ and VDH monitoring discharge quantity and water quality.*

9. Except as provided in this Article, all uses shall comply with the lot size, bulk regulations, and performance standards of the zoning district in which located.

*The Applicant will be required to comply with applicable zoning district regulations.*

#### **5-2001 Additional Submission Requirements**

1. In addition to the submission requirements set forth in Section 011 above, all applications for Category 20 uses shall be accompanied by the following:

- A. Four (4) copies of a map showing the utility system of which the proposed use will be an integral part, together with a written statement outlining the functional relationship of the proposed use to the utility system.
- B. Four (4) copies of a statement, prepared by a certified engineer, giving the basic reasons for selecting the particular site as the location for the proposed facility and certifying that the proposed use will meet the performance standards of the district in which located.

*The above standards do not apply to this Application.*

- 2. A special exception application for a private individual sewage treatment system which discharges into an open ditch or water shall also include the following:
  - A. Proof of notification of all landowners within 1 mile downstream.
  - B. Proof that no inground system is possible.
  - C. Location of all existing and/or proposed buildings on the property shall be shown on the plat.
  - D. Location of all existing and/or proposed wells shall be shown on the plat.
  - E. Location of all recorded easements on the property shall be shown on the plat.
  - F. Proposed location of discharge point shall be shown on the plat.
  - G. Proposed location of the treatment unit shall be shown on the plat.
  - H. Proposed easement locations (if needed) shall be shown on the plat.
  - I. Setbacks of proposed treatment units and discharge points to wells, property lines and other discharge points (if applicable) shall be shown on the plat.
  - J. Location of any public or private water intakes within 1 mile downstream of discharge point shall be shown on the plat.
  - K. Location of any public swimming areas within 1 mile downstream of the discharge point shall be shown on the plat.
  - L. Location of any springs 100 feet upstream and 1,500 feet downstream of discharge point shall be shown on the plat, with labels identifying any that are used as a water supply source.
  - M. Describe proposed treatment unit(s), including manufacturer and function of the components of the treatment unit(s) in the statement of justification.
  - N. Identify anticipated Maintenance and Monitoring service provider in the statement of justification.
  - O. Indicate type of discharge point (all-weather stream, intermittent stream or dry ditch) in the statement of justification.

*All items listed above have been addressed with the Special Exception submission.*

### **5-2002 Standards for All Category 20 Uses**

In addition to the general standards set forth in Section 006 above, all Category 20 special permit and special exception uses shall satisfy the following standards:

*(Note: Only the applicable standards are listed below.)*

1. Category 20 special permit and special exception uses shall not be required to comply with the lot size requirements or the bulk regulations set forth for the zoning district in which located in Part 4 of Article 3. However, such requirements may be established in the conditions under which such a special permit or special exception is granted.

*The proposed treatment system will be almost entirely located below ground and the discharge ditch will be entirely contained within the subject property. Staff has not proposed any additional requirements regarding lot size requirements or bulk regulations.*

2. No land or building in any district other than the Industrial Districts shall be used for the storage of materials or equipment, or for the repair or servicing of vehicles or equipment or for the parking of vehicles, except those needed by employees connected with the operation of the immediate facility.

*No additional storage will be required for the proposed use.*

3. In all zoning districts, other than the I-2 District, all equipment, machinery and facilities not located within an enclosed building shall be effectively screened.

*The proposed treatment system will be almost entirely located below ground. Therefore, staff has not proposed any additional screening requirements.*

4. If the proposed location of a Category 20 use is in a Residential District there shall be a finding that there is no more suitable site available for such use in a Commercial or Industrial District, except that in the case of electric transformer stations and telephone and telegraph exchanges or dial centers, there shall be a finding that there is no alternative site available in a Commercial or Industrial District within distance of one mile, unless there is a substantial showing that it is impractical for satisfactory service to be rendered from an available location in such Commercial or Industrial District.

*There are no Commercial or Industrial zoned sites nearby that offer an alternative location for the proposed use.*

5. A special exception for a private individual sewage treatment system which discharges into an open ditch or water, shall be allowed only to replace an existing sewage system which is presently serving an existing use. That existing sewage system must have failed and have been certified by the Virginia Department of Health to pose a real or potential health threat and a discharging sewage treatment system is the only alternative for the repair. In approving such a system the Board may establish conditions including but not limited to use, maintenance, and testing.

*The Virginia Department of Health (VDH) has confirmed that the existing treatment system is not viable for waste treatment on the Heflin property. As such, VDH issued a Repair Permit denial letter (attached) citing insufficient percolation due to the soils on the Heflin property. VDH has*

*also confirmed support of the proposed use (see VDH comments attached) as the only viable solution for waste treatment on the property. Staff has included a condition requiring the Applicants to meet VDH and DEQ standards for ongoing maintenance and testing for the proposed treatment system.*

### **Staff and Agency Review Comments**

Staff and applicable referral agencies have reviewed the application for conformance with the county's Comprehensive Plan, the Zoning Ordinance and other relevant regulations, including those of VDH and DEQ. Comments are summarized below with staff notes following in italics noting how comments have been addressed.

#### Planning Analysis

Planning analysis is provided within the report.

#### Zoning Analysis

Comments not received.

#### Soil Scientist

1. Applicant shall show location of treatment unit(s) (Zoning Ordinance 5-2001.2.F.).

*Location of the proposed Advantex treatment system is shown on the plat.*

2. Applicant shall show correct location of discharge point and show the 250 feet of ditch to demonstrate that no off-site easement is required (ZO 5-2001.2.H).

*The plat indicates both the discharge point and the approximate location of the 250 foot ditch. These features are located entirely within the subject property and will not require any off-site easement.*

3. Applicant shall show setbacks of treatment unit(s), discharge point and treatment path from wells and property lines (ZO 5-2001.2.I). Location on scaled drawing is sufficient.

*The plat drawing and associated scale indicate that all components of the proposed treatment system meet required setbacks.*

4. Describe proposed treatment unit(s) (ZO 5-2001.2.M)

*The proposed Advantex treatment system is described within the Applicants' Statement of Justification as well as supplemental documentation providing further description and drawings of the system.*

5. Applicant shall label discharge point as "dry ditch" (ZO 5-2001.2.O).

*The discharge point and the discharge ditch are both noted on the plat. The Applicant has confirmed that the gravel lined ditch will be a dry ditch.*

Health Department

The Health Department is in support of this Special Exception application. There is no suitable onsite repair area available. Upon approval of the Special Exception, the Applicant may make an application to the health department for a repair permit to construct the discharging system. A minor modification permit to relocate the existing treatment tanks may be made under separate application and is forthcoming.

*Health Department comments confirm the need for the Special Exception application. These comments have been shared with the Applicant.*

Virginia Department of Transportation (VDOT)

Comments not received.