



Aqua Nova Engineering, PLC

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18 December 2024

Mr. Frank Pohl
County Engineer
Department of Community Development
County of Albemarle
401 McIntire Road, North Wing
Charlottesville, VA 22902

RE: UPDATED -Innisfree Village Central Sewerage System Request

Dear Frank,

We have corrected the number of sewer connections from the previous version of this letter. On behalf of Innisfree Inc., please consider this notice to establish a central sewerage system at Innisfree Village (Innisfree), located on TMP 14-10 in northwestern Albemarle County. Innisfree is a residential community with adults with intellectual disabilities, founded in 1971. Please note that the installation of this central sewerage system is a standalone project and not associated with any additional construction at this time.

The proposed system will replace multiple conventional onsite sewage systems (COSS) with a centralized wastewater treatment and disposal system permitted with the Virginia Department of Health (VDH) as an alternative onsite sewage system (AOSS). The new centralized system will greatly improve the existing disposal systems by providing a higher level of treatment and a new disposal site with suitable soils.

Number of Connections

There are **21** connections to be made to this AOSS, including the following:

- 15 existing residences
- 2 workshops
- 1 office building
- 1 farm building
- 1 community center
- 1 future residence

Buildings are located on multiple parcels owned by Innisfree, including TMP 14-02, 14-03, 14-03B, 14-10, 14-10A, 14-10A1, 14-10A2, 14-10A4, 14-10C, and 14-10F.

Type of Central Sewerage System and its Necessity

The proposed AOSS consists of three parts, collection, treatment, and disposal. Septic tank effluent will be collected from each building via either a septic tank effluent pump (STEP) or septic tank effluent gravity (STEG) system. Some existing gravity laterals will be utilized, but mostly the collection system will be newly installed. Following collection, the wastewater will be treated to a treatment level 3 (TL-3) in a centralized treatment system composed of a multi-step biological treatment process. Note that treatment will exceed state requirements in order to target a reduction in trace organic compounds (TOrcs) which include pharmaceuticals found in wastewater. Following treatment, the effluent is pumped approximately 1,200 ft to a disposal system consisting of low pressure dosed trenches.

This central sewerage system is necessary as the site is well outside of any access to public sewer, and the majority of the existing COSS infrastructure is inadequate or failing.

Sincerely,



David Maciolek, P.E.
Principal Engineer
Aqua Nova Engineering, PLC