

SPECIAL EXCEPTION REQUEST (SE202400034)

TO: Current Planner
Albemarle County Community Development

FROM: Kendra Moon, PE
Line and Grade Civil Engineering

DATE: December 16, 2024

RE: Innisfree Village Wastewater Management System Upgrades
Special Exception Request – Critical Slopes Disturbance

PROJECT DETAILS

Applicant: Kendra Moon | Line and Grade Civil Engineering
Name of Project: Innisfree Village Sanitary
Short Description: Special Exception to Disturb 300 SF Critical Slopes
Proposed Site: 5505 Walnut Level Road
Crozet, VA 22932

PROPERTY DETAILS

Short Parcel ID(s): 14-3, 14-3A, 14-10
Owner: Innisfree Inc. (Contact Rorie Hutter, Executive Director)
Magisterial District: White Hall
Zoning: Rural Areas

EXECUTIVE SUMMARY

A central sewerage system request has been submitted for Innisfree Village to upgrade their existing wastewater disposal systems on site. The current system with separate drainfields for each building is to be reconstructed with an onsite treatment system and centralized drainfield. The best soil for the new drainfield was found downstream of an area of critical slopes, which means the distribution line to the proposed drainfield passes through these critical slopes. Note that the proposed reserve drainfield is shown within County GIS critical slopes area, but per LIDAR topography and field verification by Kendra Moon on February 6, 2024 this area has slopes less than 25%. There is one other minor area of critical slopes disturbance proposed elsewhere on the site (bordering TMP 14-3 and 14-3A) in order to install a new distribution line from the existing buildings to the new wastewater treatment system. The total disturbance area proposed amounts to a maximum of 300 SF total and is not anticipated to cause erosion or a change in stormwater runoff due to the minor nature of the disturbance.

Critical Slopes Disturbance Areas

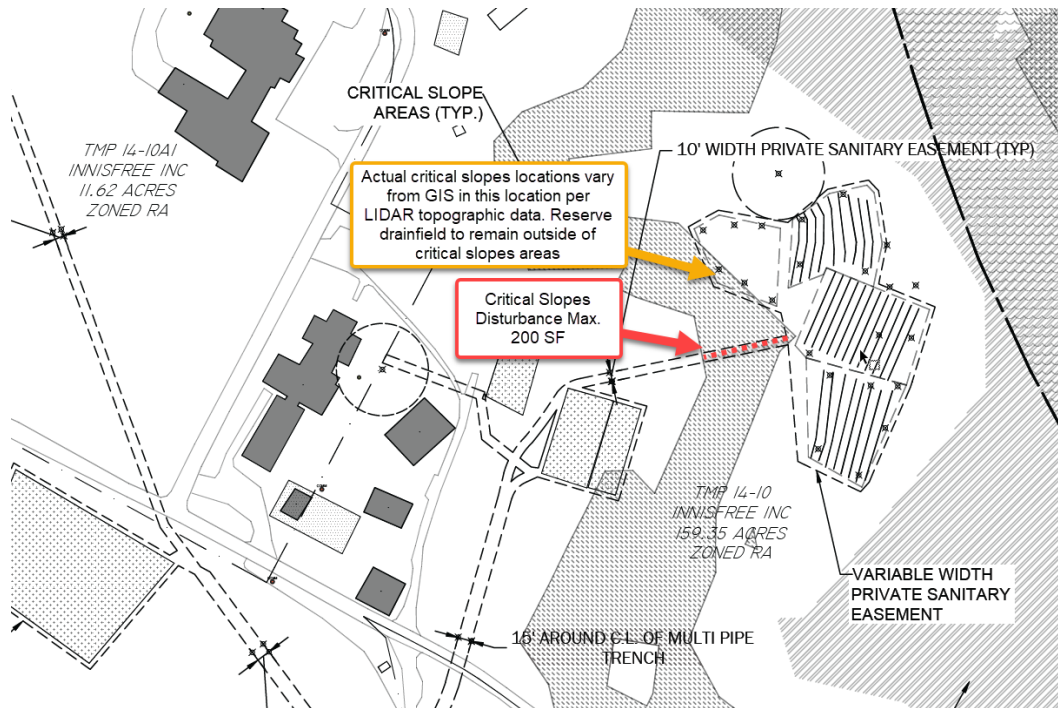


Image 1 – Area A, Critical Slopes Disturbance Maximum 200 SF, TMP 14-10

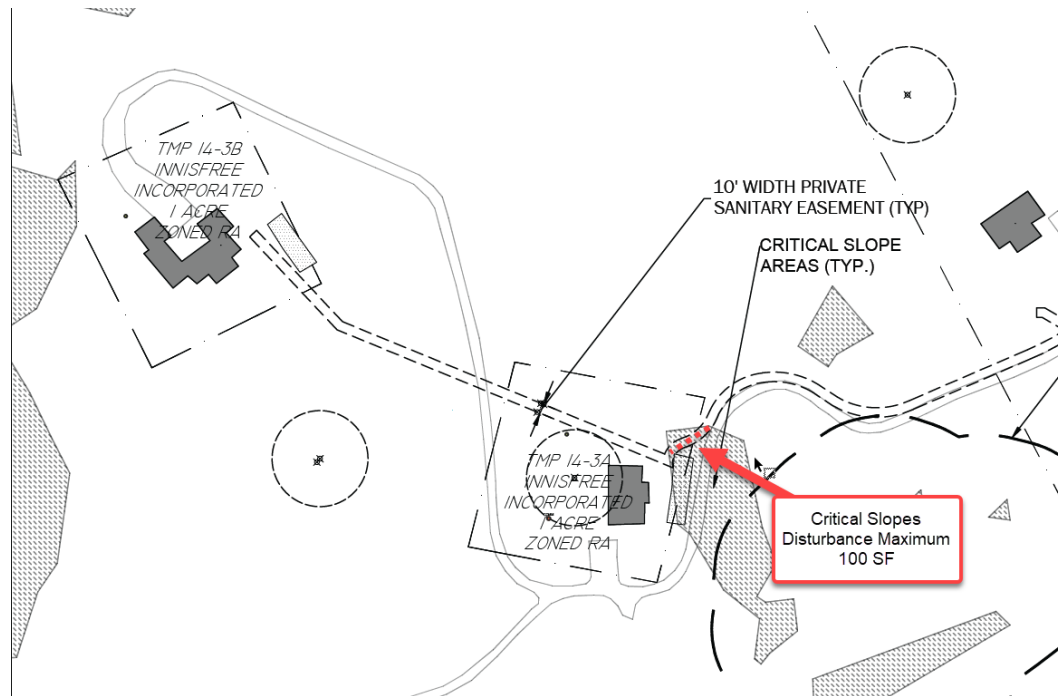


Image 2 – Area B, Critical Slopes Disturbance Maximum 100 SF, TMP 14-3 and 14-3A

REQUEST OF SPECIAL EXCEPTION FOR CRITICAL SLOPES DISTURBANCE

According to Chapter 18, Article II, Section 4.2.5 of the County's Code of Ordinances, any requirement of Section 4.2.3 may be modified or waived by special exception of the Board of Supervisors as provided in section 33.5 and herein:

- a. *Modification or waiver generally.* The Board of Supervisors may modify or waive any requirement as provided in subsection (b), as follows:

1. *Request.* A developer or subdivider requesting a modification or waiver shall file a written request in accordance with section 32.3.5 of this chapter and identify and state how the request would satisfy one or more of the findings set forth in subsection 4.2.5(a)(3). If the request pertains to a modification or waiver of the prohibition of disturbing slopes of 25 percent or greater (hereinafter, "critical slopes"), the request also shall state the reason for the modification or waiver, explaining how the modification or waiver, if granted, would address the rapid and/or large-scale movement of soil and rock, excessive stormwater runoff, siltation of natural and man-made bodies of water, loss of aesthetic resources, and, in the event of septic system failure, a greater travel distance of septic effluent (collectively referred to as the "public health, safety, and welfare factors") that might otherwise result from the disturbance of critical slopes.

The disturbance of 300 sf critical slopes is proposed in order to allow for a new wastewater disposal system on site to treat sanitary wastewater from twenty-one (21) buildings. The existing drainfields are located in relatively poor soil conditions and were permitted long ago without reserves, meaning that if they were to fail there is currently no approved location on site to dispose of the wastewater. This centralized system allows Innisfree to more affordably and responsibly improve their wastewater system by upgrading it with a centralized treatment system and disposing of it in an area with better soils. However, the location of the adequate soil on site is downhill of an area of critical slopes. This means that the distribution line to the drainfield will necessarily disturb a portion of the slopes. Disturbance will be minimally invasive as the proposed trench will be 1 foot wide or less, and just a few feet deep as the trench only needs to be big enough for a 2" force main and underground electrical lines. The disturbed area is currently mown turf, so there will be no loss of aesthetic resources or change in stormwater runoff due to this disturbance. This area is shown in Image 1 above, labeled as area A, and is likely to disturb only 100 SF to 200 SF, the latter of which has been shown to be conservative. Note that there is one other small area of similar disturbance for the distribution line to the treatment system from the buildings, shown in Image 2 as Area B with a maximum 100 SF disturbance. This area is similar in that the disturbance will be within mown turf and will be only 1 foot wide trench or less to allow for a small, relatively shallow pipe.

2. *Consideration of recommendation; determination by county engineer.* In reviewing a request for a modification or waiver, the Board of Supervisors shall consider the recommendation of the agent as to whether any of the findings set forth in subsection 4.2.5(a)(3) can be made by the commission. If the request pertains to a modification or waiver of the prohibition of disturbing critical slopes, the Board of Supervisors shall consider the determination by the county engineer as to whether the developer or subdivider will address each of the public health, safety and welfare factors so that the disturbance of the critical slopes will not pose a threat to the public drinking water supplies and flood plain areas, and that soil erosion, sedimentation, water pollution and septic disposal issues will be mitigated to the satisfaction of the county engineer. The county engineer shall evaluate the potential for soil erosion, sedimentation and water pollution that might result from the disturbance of slopes of 25 percent or greater in accordance with the current provisions of the Virginia Department of Transportation Drainage Manual, the Commonwealth of Virginia Erosion and Sediment Control Handbook and Virginia State Water Control Board best management practices, and where applicable, Chapter 17, Water Protection, of the Code.

One area of proposed critical slope disturbance is upstream of a floodplain and water protection ordinance buffer. However, disturbance will be minimal, less than a foot in width, and will be within an area of mown turf which will be immediately strawed and seeded. Silt fence will be in place along the border of the floodplain within the disturbance area to keep any soils from migrating into the floodplain area during construction.

With regard to "septic disposal issues," no septic effluent will be disposed of as part of this project. Existing septic disposal will be eliminated; collected septic effluent will be treated to

a very high quality and disposed of in a low pressure dosed drainfield with a low hydraulic loading rate. Thus drainfield soils provide further treatment to the effluent, insuring minimum water quality impacts.

3. Findings. The Board of Supervisors may grant a modification or waiver under this subsection (a) if it finds that the modification or waiver would not be detrimental to the public health, safety or welfare, to the orderly development of the area, or to adjacent properties; would not be contrary to sound engineering practices; and at least one of the following:
 - a. Strict application of the requirements of section 4.2 would not forward the purposes of this chapter or otherwise serve the public health, safety or welfare;
 - b. Alternatives proposed by the developer or subdivider would satisfy the intent and purposes of section 4.2 to at least an equivalent degree;
 - c. Due to the property's unusual size, topography, shape, location or other unusual conditions, excluding the proprietary interest of the developer or subdivider, prohibiting the disturbance of critical slopes would effectively prohibit or unreasonably restrict the use of the property or would result in significant degradation of the property or adjacent properties; or
 - d. Granting the modification or waiver would serve a public purpose of greater import than would be served by strict application of the regulations sought to be modified or waived.

This request is not associated with any construction other than to improve the existing sanitary system on site. Granting the waiver would allow for Innisfree Village to continue their services without posing a greater threat to the environment and the people living on site should the existing sanitary systems fail. The proposed improvements are not seen as a threat to public health, safety, or welfare.