

Revised Critical Slopes Special Exception Analysis – For April 5, 2023 Board of Supervisors Public Hearing of SE202200035 Woodridge Solar - Critical Slopes Special Exception

Only the Board of Supervisors is required to act on a special exception request. The Planning Commission did not review or provide comments on this special exception request. This amended review of the special exception request replaces the review included in the report provided to the Planning Commission. This analysis reflects information submitted after the preparation of the initial report.

The project proposes to disturb approximately 8.5 acres of critical slopes. The areas of disturbance are scattered across the project and are not a contiguous area. The procedure and criteria for evaluation of the special exception are contained in Sections 4.2.5 and 33.9. The applicant has submitted a request addressing the provisions of the ordinance, Attachment A2. Each of the provisions is addressed below.

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 run-off,*

Prior to any disturbance, the applicant would be required to obtain site plan approval and approval of a grading plan. The approval of these plans would include provisions to minimize stormwater run-off and the movement of soil and rock. The proposed disturbance of critical slopes would result in slopes that are less steep. The reduction in slope would help to minimize stormwater run-off rates and siltation.

siltation of natural and man-made bodies of water,

During construction, erosion control measures are required to minimize siltation. Post construction, the areas would be stabilized, and stormwater management systems would be installed and required to be maintained. Staff notes that these slopes have been disturbed during past timbering operations and would likely be disturbed in future timbering operations if this project were not approved.

loss of aesthetic resources,

The slopes do not currently represent an aesthetic resource.

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.

No drainfields are proposed.

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.

The property is not in a water supply watershed and none of the slopes are associated with flood plain areas. As previously stated, a site plan and grading plan would be required to comply with State and local regulations. The County Engineer has stated that the submittal and approval of these plans will address the provisions of this ordinance section. The slopes do not contain any unusual or unique characteristics that would prevent compliance with the ordinance or that would result in excessive erosion, sedimentation or water pollution.

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:

The site plan review process would verify and require that the proposed grading minimizes soil erosion and stormwater runoff. With the approval of a site plan, sound engineering practices would be satisfied and the public health, safety and welfare would be protected. The areas of slope to be disturbed would not impact any adjacent properties. The special use permit review process would determine if the orderly development of the area were being satisfied.

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;

Staff has reviewed the purposes of this chapter contained in section 1.4. Application of the regulations limiting disturbance of critical slopes does not conflict with the purposes stated in the ordinance. The application does not meet this criterion for granting a modification or waiver.

b. Alternatives proposed by the developer or subdivider would satisfy the intent and purposes of [section 4.2](#) to at least an equivalent degree;

The project would meet all requirements of State and local regulations for the disturbance of soils. These provisions would satisfy the intent and purpose of the ordinance to at least an equivalent degree. The application does meet this criterion for granting a modification or waiver.

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

A strict application of the regulations would not prevent use of the property. Application of the regulations would require redesign of the proposed layout of the project and would likely result in a reduction of the capacity of the facility. The application does not meet this criterion for granting a modification or waiver.

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.

In evaluating this request, staff has considered the provisions of Chapter 18, Section 30.7, Steep Slopes Overlay District. In adopting this district, the County evaluated critical slopes in the development area and distinguished between Managed Slopes (which may be disturbed and Preserved Slopes (which should remain undisturbed). The Board adopted characteristics of these two types of slopes to help in determining which may be disturbed. Staff has used this provision to evaluate the public purpose to be served by approving or denying the request. Under County Code § 18-30.7.3, the characteristics of the two types of slopes are:

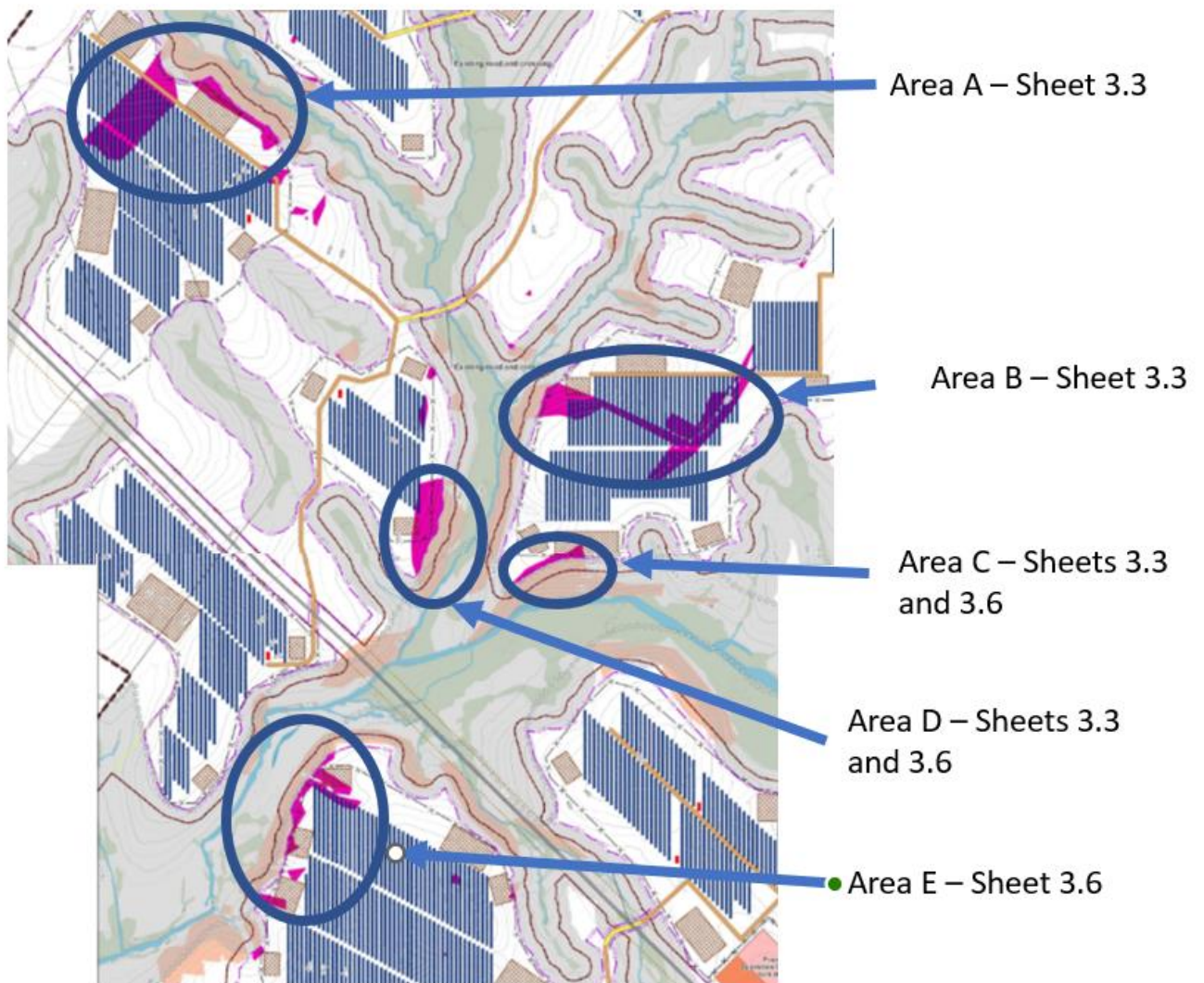
Managed slopes. The characteristics of managed slopes are the following: (i) the contiguous area of steep slopes is limited or fragmented; (ii) the slopes are not associated with or abutting a water feature, including, but not limited to, a river, stream, reservoir or pond; (iii) the slopes are not natural but, instead, are manufactured; (iv) the slopes were significantly disturbed prior to June 1, 2012; (v) the slopes are located within previously approved single-family residential lots; or (vi) the slopes are shown to be disturbed, or allowed to be disturbed, by a prior county action.

Preserved slopes. The characteristics of preserved slopes are the following: (i) the slopes are a contiguous area of 10,000 square feet or more or a close grouping of slopes, any or all of which may be less than 10,000 square feet but whose aggregate area is 10,000 square feet or more; (ii) the slopes are part of a system of slopes associated with or abutting a water feature including, but not limited to, a river, stream, reservoir or pond; (iii) the slopes are part of a hillside system; (iv) the slopes are identified as a resource designated for preservation in the comprehensive plan; (v) the slopes are identified as a resource in the comprehensive plan; (vi) the slopes are of significant value to the entrance corridor overlay district; or (vii) the slopes have been preserved by a prior county action, including, but not limited to, the placement of an easement on the slopes or the acceptance of a proffer or the imposition of a condition, restricting land disturbing activity on the slopes.

Most of the slopes proposed to be disturbed meet the characteristics for Managed Slopes.

In the initial staff report, staff identified five areas that have characteristics of Preserved Slopes. The applicant has submitted detailed topographic information to address these five areas.

Those areas are highlighted below. The areas highlighted in purple are the portions of critical slopes proposed to be disturbed and the beige areas are critical slopes that are not to be disturbed.



The applicant has submitted detailed topography for these five areas.

AREA A

The County's designation of critical slopes in this area appears to be incorrect.

The actual area of critical slopes is far smaller (less than 10,000 square feet) and is fragmented. Most of this area no longer requires a special exception because the slopes are not greater than 25%. Those slopes steeper than 25% are limited in area and are not part of a larger system. Staff supports a special exception for Area A.

AREA B – The topographic information provided by the applicant indicates that the critical slopes in this area are much less than shown on the County's topographic information. Accordingly a large portion of what is shown as critical slopes on County maps is, in fact, not critical slopes and therefore no special exception is required to disturb those areas. The areas that are critical slopes, based on the applicant's topography, are significantly reduced and are fragmented. Staff supports a special exception for Area B.

AREA C – All areas to be disturbed are outside of critical slopes. No special exception is required.

AREA D - All areas to be disturbed are outside of critical slopes. No special exception is required.

AREA E – The detailed topographic information provided by the applicant indicates that County's topographic information is accurate or underrepresents the critical slopes in this area. Staff opinion remains that these areas are a close grouping of slopes that are part of a larger system associated with water features. These characteristics would tend to make the slopes preserved slopes. Staff does not support a special exception for this area.

The installation of solar panels does serve a public purpose by providing renewable energy sources and is consistent with the County's climate action plan. Previous applications for solar energy systems did not involve the disturbance of critical slopes. However, as the size of the projects increases, it is difficult to avoid critical slopes disturbance. Staff opinion is that limited disturbance of critical slopes that meet the criteria of managed slopes is consistent with the intent of the critical slopes regulations and serves a public purpose. Disturbance of areas that meet the criteria for preserved slopes for solar energy systems also serves a public purpose, but conflicts with the public purpose of minimizing impacts to critical slopes that are part of a larger system of critical slopes and are also associated with water features.

Special Exception Summary

In staff opinion, the request to allow disturbance of critical slopes does meet at least one of the criteria for granting a modification or waiver, allowing the Board to grant a modification or waiver. Based on the analysis of the request, staff recommends approval of the request to disturb critical slopes, except for area E, as identified above.