

CKS Engineers, Inc.

MEMO:

To: Robert Zienkowski, Township Manager
Michael Crotty, Esquire

From: Cindy VanHise, P.E., CKS Engineers, Inc.

Date: August 21, 2023

Re: Bechtel Farm at Stony Run
Agricultural Soils Bonus Density Analysis

As requested, we have reviewed the following documents submitted from Artisan Construction Group, LLC in support of the Bonus Density for Open Space Resource Conservation calculation for the Bechtel Farm at Stony Run development:

- Restricted Open Space Breakdown Plan, prepared by Stuart and Associates, LLC, dated January 3, 2022, last revised July 21, 2023.
- Open Space Plan, prepared by Stuart and Associates, LLC, dated January 3, 2022, last revised June 23, 2023.
- 11x17 "Q&A" Cover sheet, dated July 21, 2023.

The applicant's correspondence notes that these plans and calculations are being provided as a supplement to the Open Space Plan (previously submitted) and until such time that a Zoning Determination regarding the Historic Resource is issued by the Township, the applicant is proposing an alternative to utilize Prime Farmland Agricultural Soils for the bonus density proposed for the development.

Our review of the above submitted materials has generated the following comments:

Artisan represents that 56.89% "open space" will be provided at the site. In prior submissions the sheets used to demonstrate bonus density qualifying criteria and areas were satisfied included Sheets 12 of 62 (D-3) and 62 of 62 (RS-1.00). In those prior plan presentations, Restricted Open Spaces were established as six unique areas, labeled 'A' through 'F', amounting to 18.328 acres or 26.99%, within the overall 38.634 acres of open space. No single sheet was ever provided to combine data of the two referenced sheets to illustrate that a sufficient quantity of prime agricultural soils was being preserved in support of the proposed bonus density.

Previously, Artisan contended that two eligible categories for bonus density were present at the tract, a historic resource and agricultural soils. The revised Restricted Open Space Breakdown Plan removes the historic resource and intends to have density bonus considered by using open space area which is solely comprised of prime agricultural lands. The soils mapping as represented on their exhibit is consistent with United States Department of Agriculture's Natural Resource Conservation Service soil mapping boundaries, however soil type tags are absent from the plan view itself and should be added. In total there are six soil types on the tract, five of which are considered prime agricultural soils per Section 27-401.A. The non-qualifying soil, shown in a copper red color, is Croton Silt Loam (CyA).

As you know, the minimum requirement in the LR District is that 50% restricted open space be provided per 27-904.1.A.1 when OSDO is used. Per 27-2404.1B.1.d this percentage may be reduced as low as 25% where a density bonus is utilized as prescribed in 27-904.3.

This submission takes a more global approach to delineating the open space for the site as two components, rather than labeling in smaller pieces. First, the OSDO minimum 25% restricted open space is achieved using undeveloped portions of the Croton Silt Loam and Rowland Silt Loam, yielding 16.978 acres primarily in the southern portion of the tract. The additional 31.89% of restricted open space, consisting of various soils types, all of which are prime agricultural soils, are then considered for bonus density. While not individually labeled, these areas are dispersed throughout the tract.

The calculation breakdown on the plan for open space incorrectly lists a subpercentage of Croton Silt Loam as being 20.05% of the site; the applicant shall verify this percentage, as the tallying percentages seem incorrect. Nonetheless, the previously established area of CyA soils on-site was noted to be 16.87 acres per Sheet 62. A portion of that mapped soil will contain Vernon Circle, Lots 1, 80, 85 and 86. The acreage of the CyA soils within Vernon Circle, Lots 1, 80, 85 and 86 must be verified by the applicant. As stated above, the remainder of the mapped CyA soil, presently noted to be 14.972 acres, will be contained in the minimum required 25% restricted open space. There is no limitation on lands contained in the (non- bonus density) open space other than a percentage restriction on wetlands, steep slopes and flood hazard. The applicant must clearly demonstrate that within the open space, an area of no more than 15% of the gross tract area, is comprised of wetlands, steep slopes or flood hazard area. There are known flood hazard and wetland areas on the site, however, those specific acreages are not documented on this latest plan, as required. Additionally, a revision should be made to illustrate how the claim that 30% of the open space excludes said areas as tabulated.

Following this clarification to be provided by the applicant, the 25% minimum restricted open space and additional open space consisting of prime agricultural lands may yield an adequate area to achieve density at or close to the desired unit count. But, until the requested supporting documentation is provided, we cannot support the proposed density.

Furthermore, it is very possible that open space areas contributing to bonus density will be reduced with pending plan revisions, such as, but not limited to:

- The inclusion of six parking spaces at Vernon Circle near Lot 86, as was requested by the Planning Commission, as these parking spaces have not been depicted on the current plan.
- The disposition of the sewage pumping station near Basin 3 and Unit 70.
- The Board of Supervisors' acceptance of three stormwater facilities within open space areas.
- The Board of Supervisors' acceptance of the sizes and locations of restricted open space areas, particularly the 50-foot-wide strips of land along the side tract boundaries.

Conclusion:

The applicant should provide additional supporting information for our review of the proposed Prime Agricultural Soils as the bonus density for the development, all on one plan sheet, along with addressing other required plan revisions that may impact the acreage of the open space areas. Until such information is provided, a comprehensive analysis cannot be finalized.