



Rural Zoning Research



James City County Zoning Ordinance Update
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RURAL ZONING RESEARCH

Introduction

On March 8, 2022, the James City County Board of Supervisors approved a resolution to initiate the amendment of the James City Zoning and Subdivision ordinances “in order to establish lot sizes in the Rural Residential District, R-8, and the General Agricultural District, A-1, that are consistent with the stated Rural Lands designation description and development standards as contained within the adopted James City County 2045 Comprehensive Plan.”

EPR, PC was asked to develop an analysis of various aspects of rural large lot zoning ordinances throughout the Commonwealth in order to better understand the range of options and possible standards that could be applied to potential amendments to the County zoning and subdivision standards.

The results of this research are presented below in summary form. While numerous zoning ordinances for different localities were analyzed in detail, this document presents only a summary of the research with key take away points that would be useful for determining proposed amendments to the County standards for the A1 and R8 zoning districts. Detailed standards for various aspects of the localities that were studied are presented in a matrix in the Appendix.

Methodology

This document is intended to build on the research that was conducted by EPR in 2021 as part of the Comprehensive Plan update process, that was summarized in the document titled, Open Space & Rural Character Preservation Analysis. That document presented a summary of research done for several peer communities that were examples of successful rural character preservation approaches through large lot and low-density provisions in their zoning ordinances. This document expands on that research and includes several more localities in Virginia, with a more detailed analysis of their specific requirements for base agricultural zoning and rural cluster development standards.

A number of counties in Virginia have long standing provisions in their zoning ordinance for protecting the scenic, environmental, and economic benefits of their rural landscape. Since the establishment of requirements for cluster zoning provisions in agricultural districts established by the General Assembly, every county with a 10% growth rate was also required to develop residential cluster provisions and standards in their zoning ordinances.¹

The following Virginia counties that incorporate rural preservation zoning standards were studied:

- Albemarle County
- Clarke County
- Caroline County
- Fauquier County
- Frederick County
- Hanover County
- Isle of Wight County
- Loudoun County

This document summarizes key take away points from this research and presents recommendations for consideration in developing revised standards for the A1 and R8 zoning districts in James City County. These recommendations are based on the analysis of peer

¹ § 15.2-2286.1. Provisions for clustering of single-family dwellings so as to preserve open space. The provisions apply to any county or city that had a population growth rate of 10% or more from the next-to-latest to latest decennial census year.

communities as well as our professional assessment of best practices in the profession, relative to our knowledge of the James City County context.

Overview of Research and Recommendations

James City County's Current agricultural zoning standards, for A1 and R8 zoning districts, generally require a minimum lot size of three acres.² The March, 2022 resolution by the Board of Supervisors directs the County to "establish lot sizes in the Rural Residential District, R-8, and the General Agricultural District, A-1, that are consistent with the stated Rural Lands designation description and development standards as contained within the adopted James City County 2045 Comprehensive Plan." In the comprehensive plan, the recommended lot sizes for Rural Lands are a minimum of 20 acres, with consideration for additional cluster provisions. The research of peer localities in Virginia revealed rural large lot zoning standards that ranged from 10 acre to 50 acre minimum lot sizes. While 20 acre lots are certainly not the largest lot sizes found in peer localities, they represent a realistic approach to large lot zoning intended to preserve rural character, as noted in the prior research on open space and rural character preservation. The following findings from the research detail the base density and cluster requirements of the various localities, along with potential recommendations for James City County to consider in revising its zoning ordinance standards.

Base Agricultural Zoning Density

Research Takeaways

Base agricultural zoning density for peer localities is not a simple issue that allows for clear comparisons. This is because several of the counties studied have adopted some form of sliding scale density, where the number of lots allowed is based on the size of the parent parcel. On the other hand, some counties such as Hanover County, Loudoun County and Caroline County had simple large lot zoning without sliding scale provisions. Nevertheless, the effective maximum density in the counties studied, whether under the sliding scale provisions, or under conventional large lot provisions was very low, ranging from a maximum density of 1 lot per 10 acres to 1 lot per 50 acres.

Potential Recommendations

The resolution adopted by the Board of Supervisors calls for an exemption for parcels under 25 acres from the new low density zoning standards. Based on that exemption, it appears less important to adopt some form of sliding scale density approach for James City County. If the County adopts a simple 20 acre minimum lot size with the 25 acre parcel size exemption, it should obviate the need for a sliding scale provision for the County.

Cluster Option – Maximum Density

Research Takeaways

In some cases, a cluster zoning option allows increases in the base density as a form of incentive to encourage cluster development versus conventional development. However, in the peer localities studied, only Loudoun County permitted higher densities for its cluster option. All the other counties had the same maximum density allowed in their cluster provisions as in their conventional large lot provisions.

Potential Recommendations

While cluster development can be a useful mechanism for preserving critical resource areas on a site, it is generally not accompanied by a density incentive in localities that have successfully preserved their rural character through large lot or low density rural zoning. Therefore, it is recommended that the same minimum density of one unit per 20 acres should apply for any cluster provision adopted by the County.

² Note that cluster provisions in A-1 allow an overall gross density of not greater than one unit per two acres, with no lot less than one acre in area to two acres.

Cluster Option- Minimum and Maximum Number of Lots

Research Takeaways

Two counties, Hanover County and Loudoun County, have a minimum parcel size of 20 acres required for any cluster development. Only Albemarle County had a maximum number of cluster lots, set at 20 lots. The other localities generally had no minimum or maximum number of lots required for exercising the cluster development option.

Potential Recommendations

Because of the relatively low densities proposed for James City County, it is not recommended that a minimum or maximum number of lots be required to exercise a cluster development option.

Cluster Option- Permitted Unit Types

Research Takeaways

In general, all the localities researched allowed only single family detached residential uses as a permitted use in their agricultural zoning districts. A few of the localities allowed single family attached or duplex units as special exception or conditional uses. Only Albemarle County allowed duplexes as a permitted use in a cluster if the same base density was maintained.

Potential Recommendations

Based on the comparable locality research, it is not recommended that any use other than a single family detached residential use be permitted by right in the rural zoning districts. However, some type of attached housing or multifamily housing may be considered as a special exception use to allow for the possibility for more affordable unit types in rural contexts.

Cluster Option-Minimum Percent of Open Space Required

Research Takeaways

Most of the localities studied required that a certain proportion of open space be maintained under the cluster option. This minimum range was from 70% to 85%, although the proportion of open space preservation required was not necessarily proportional to the base maximum density of the district. For example, Hanover County required 80% open space with a base density of one unit per 10 acres, whereas Isle of Wight County required 70% open space preservation with a base density of 1 unit per 40 acres.

Potential Recommendations

Given the base density anticipated in James City County of 1 unit per 20 acres, a minimum open space provision within the cluster development option should be considered ranging from 70% to 80%.

Cluster Option-Required Buffers and Screening

Research Takeaways

In general, there were few mandatory requirements for buffers, screening, or setbacks to adjacent development in the localities studied. Fauquier County and Clarke County required minimum setbacks of only 25 feet from adjacent uses in some cases. However, most localities included general design guidelines rather than specifically defined set back requirements within their rural lot development standards.³

Potential Recommendations

James City County may want to consider more detailed design guidelines for screening and buffering development in rural lands, to be included in the provisions of the new zoning amendments. Although few localities had dimensional setbacks attached to those guidelines, the county may want to consider specific setbacks or buffer standards as these could be beneficial to reduce the guesswork and interpretations in applying the guidelines.

³ other than, of course, normal yard setback requirements

Cluster Option-Road Access

Research Takeaways

The majority of the localities studied required all access to be on a new public road for cluster subdivisions, either for subdivisions that exceeded a certain number of lots or for all cluster subdivisions regardless of the number of lots.

Potential Recommendations

James City County's current subdivision standards require that lots front on a new public street constructed for the development for major subdivisions (subdivisions of six or more lots). Minor subdivisions must front on a public road and minor subdivisions of three or more lots are required to use shared driveways to minimize access points. Given that the majority of localities studied required that cluster subdivisions be accessed off a new internal public street, it is recommended that cluster subdivisions in the new standards also include this requirement. An exemption may be allowed for very small clusters of three or fewer lots, however.

Cluster Option – Utilities

Research Takeaways

In general, the localities studied did not allow public water and sewer in their rural areas, and some of them also did not allow private shared systems for utilities.

Potential Recommendations

The resolution adopted by the Board of Supervisors directs staff to include language that eliminates the central well requirement for subdivisions in rural areas. Therefore, it is recommended that language be added to the new ordinance and subdivision standards that public water and sewer are not intended to be located in rural lands. However, the county may want to consider allowing shared systems for either water or wastewater based on any concerns or recommendations from the James City County Virginia Service Authority.

Cluster Option – Minimum and Maximum Lot Size Requirements

Research Takeaways

There was a great deal of variation in minimum and maximum lot size requirements for cluster subdivisions in the localities studied. Minimum lot sizes ranged from 40,000 square feet to 30 acres, and were related to the maximum density requirements in the cluster options. Maximum lot size requirements were similarly related to the minimum densities in each district and ranged from 2 acres to 10 acres.

Potential Recommendations

Minimum and maximum lot sizes need to be calibrated to the base density in the cluster option. They also depend on whether or not offsite septic or well provisions are allowed. Allowing off-site shared septic systems can allow minimum lot sizes as small as an acre or less. However, if well and septic must be accommodated on each lot, it is recommended that the minimum lot size be at least two acres to allow flexibility in locating perc sites and well sites on each lot. Given the recommended 20 acre maximum density anticipated by the County, it is recommended that a minimum lot size of two acres and a maximum lot size of 4 acres be required. This should work well with the above recommendation of a minimum of 80% open space required for cluster developments.

Cluster Option – Setbacks from Roadways

Research Takeaways

There was considerable variation in requirements for building setbacks from roadways in the locality study. They ranged from as little as 35 feet to as much as 200 feet of required setbacks from roads. Most of the setbacks were fairly limited though, except for Caroline

county's 200 foot required set back from the right of way. Landscaping and buffering standards in rural areas were not found in the localities studied.

Potential Recommendations

Given the County's long legacy of scenic corridor protection and concerns about maintaining rural viewsheds from roadways, any new setback requirements from roadways should be sufficient to maintain the rural character that is found on many of James City County's rural roadways. Current County standards require landscape buffers along Community Character Corridors of 150 feet and 75 feet along non-Community Character Corridors. The consultants prepared a separate analysis of the visual impact of different potential setback standards on Forge Rd in another document. Based on this separate analysis, it is recommended that new standards be established requiring setbacks in the range of 300 ft. to 400 ft. and that these setbacks be measured from the edge of rights of way. Changes to the existing landscape buffers along Community Character Corridors may also be considered.

Additional Notes and Conclusions

One other important feature of the James City County rural zoning standards that was also found in some of the zoning ordinances studied was the inclusion of design guidelines for rural cluster subdivisions. the county's A1 zoning district currently has design standards that state that subdivision design should minimize grading and destruction of natural vegetation and shall provide protection of conservation areas. Based on research from other localities, these design standards could be expanded into a more robust set of lot siting, buffering and conservation standards and practices that would help preserve the visual and environmental integrity of the county's rural lands.

In general, the research has shown that James City County's proposal to lower the permitted density in its Rural Lands and incorporate large lot zoning provisions, along with a flexible cluster option is in accordance with the best practices of other Virginia localities that have instituted these kinds of provisions to protect their valued rural landscapes. The recommendations for specific standards for James City County's cluster provisions suggested in this document should not be taken as the only possible option for these standards. They are only starting points for consideration and discussion and are based on finding a middle ground in the range of standards that were encountered in other localities that were studied. The most important consideration is that new James City County standards should be sensitive to the County's particular rural context and legacy of valuing its rural areas for their important scenic and environmental benefits.

Appendix – Summary of Research of Virginia Agricultural Zoning Regulations for Selected Localities

Virginia Agricultural Zoning Regulations for Selected Localities												
LOCALITY	Large Lot Option		Cluster Option									
	Base Density in Ag. Zone	Sliding Scale Features	Max. Density for Cluster Development	Min./Max. Number of Lots	Permitted Unit Types	Percent Open Space Req.	Buffers/Setbacks	Road Access	Utilities	Lot Size Req.	Setback From Roads	NOTES
Albemarle	1:21 ac.	Up to 5 lots of at least 2 ac. allowed for each parent parcel ⁽¹⁾	Same as Sliding Scale base zoning	Max. 20 lots	Single family detached or duplex if required density is maintained	Rural conservation parcel of at least 40 ac. is required	Design guidelines to preserve scenic and historic features	All lots shall have access restricted to an internal street	Rural areas expected to have lower service level than Development areas.	Min. 2 ac. / No Maximum	75 ft from public roads / 25 ft from internal roads	The Cluster development option is called the Rural Preservation Option and has a number of design standards to ensure conservation of critical environmental features
Clarke	NA	Based on parcel size - ranges from 1:15 to 1: 69 ⁽⁶⁾	Same as Sliding Scale base zoning ⁽⁸⁾	NA	Single family residence	None	25 ft. along property lines for lots 20 ac. or larger	None ⁽⁷⁾	Shared utility systems not permitted in rural areas	Min. 2 ac. / Max. 4 ac.	100-150 ft. from CL depending on type of road	
Caroline	25 ac.	NA	NA	NA	Single family residence	NA	NA	NA	NA	NA	200 ft.	There does not appear to be any cluster provision in the ordiannce despite the state code requirement for cluster provisions in agricultural zoning districts
Fauquier	NA	1 - 10 lots for parcels up to 205 ac. +1 lot for each additional 50 acres ⁽²⁾	Same as Sliding Scale base zoning	Any parcel 35 ac. or greater must cluster with 85% preserved	Single family detached (or attached with Special Exception)	85%	25 ft. to residential districts (50 ft. if not cluster)	Public streets required for subdivisions of 3 or more lots	No public W&S or private shared systems in rural areas ⁽³⁾	30 ac. Min.	75-150 depending on road classification	
Frederick	1:50	3 divisions permitted for the first 25 ac. Then 1 lot per 50 ac. Above 25 ac.	Same as Sliding Scale base zoning	NA	Single family residence	NA	NA	Clusters of 6 or more lots shall be served by an internal public street	No public W&S or private shared systems in rural areas	2 ac. Max - 1.5 ac. Max. average of lots, Min. lot size subject to Health Dept. reg's.	NA	Planning Commission shall make final determination as to whether cluster development can be achieved in keeping with the purposes of the ordinance
Hanover	1:10	NA	1:10 ac. In A-1 District / 1: 6.25 ac. In RC District	Min. parcel size for cluster is 20 ac.	Single family residence	70%	None except for general design guidelines to preserve features	All cluster lots must have internal street access	Utility extensions to rural areas permitted at private expense	No min. lot req. in RC District. 2 ac. Min. in A-1 Dist. (no maximum)	60-125 ft depending on roadway width	Extensive design guidelines in the RC district direct cluster development to preserve scenic views and natural and historic features
Isle of Wight	1:40 ac.	2 lots for 1st 20 ac. + 1 lot per additional 40 ac.	Mandatory Cluster - all new lots must be max. 10 ac.	Same as Sliding Scale base zoning	Single family detached (or attached or multifamily as Conditional Use)	70%	100 ft. from road ROW; must be buffered with landscaping	All subdivisions shall be served by one point of road access	No private shared systems in rural areas	10 ac. Maximum / 40,000 s.f. Minimum	100 ft. from road ROW	Bike/Ped facilities required to connect to existing facilities and recreational areas. Common open space must incorporate sensitive environmental features. Residences to be set back 100 ft. from active farm operations
Loudoun	1:20 ac. Or 1:40 ac. ⁽⁴⁾	10 ac. Lots allowed for initial subdivision	1:5 ac. Or 1:15 ac. ⁽⁵⁾	Min. parcel size for cluster is 20 ac.	Single family residence	70% ⁽⁹⁾	NA	Lot access may be by private access easement	No public W&S in rural areas except for failing septic systems	None to 40,000 s.f. ⁽¹⁰⁾	35-100ft. Depending on roadway type	Homeowners associations required for any subdivision with common elements
<p>(1) Development rights are required to create a lot of less than 21 acres in size in the rural area zoning district. The maximum number of development rights for any parcel, of any size is five. The total of all lots created on a parcel through development rights may not exceed 31 acres. Large parcels may use their development rights and create as many 21 acre lots as the parcel size may allow. Lots in the rural area may be as small as 2 acres, without clustering, if the lot is created by using a development right.</p> <p>(2) Allowable densities range from 1 lot per parcel on lots less than acre in size, to up to 10 lots for parcels 205 acres and above in size (plus one additional lot for each additional 50 acres).</p> <p>(3) Subdivisions in rural areas containing seven or more lots are required to develop shared water systems, and to conduct hydro-geologic studies</p> <p>(4) AR-1, with a base density of 1 unit per 20 acres and AR-2 with a base density of 1 unit per 40 acres - Cluster requirements listed are for AR-1 (20 ac. Min. zoning)</p> <p>(5) AR-1 district permits up to 1 unit per 5 acres ; AR-2 district permits up to 1 unit per 15 acres</p> <p>(6) Parcels of 14.99 ac. or below have one development right, gradually decreasing up to parcels of 1,003 ac. and above having 15 development rights</p> <p>(7) The Subdivision Ordinance includes a number of design guidelines for lots in rural areas, e.g. lots should not be lined up along roads and should use shared driveways</p> <p>(8) Note that Clarke County has no cluster option per se but has a maximum lot size of 4 acres within its base agricultural district (AOC District)</p> <p>(9) A minimum of 70% of the gross land area of the development shall be comprised of a Rural Economy Lot(s) or a combination of Rural Economy Lot(s) and Common Open Space.</p> <p>(10) (i) On-site Water and Wastewater. 40,000 sq. ft.; Off-site Wastewater, On-site Water. 20,000 sq. ft.; Off-site Water and Off-Site Wastewater, No minimum lot size.</p>												