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Charlotte
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**Cluster Subdivision Overlay District
Proposed Text Amendment (TA-013-006)
Progress Meeting**

Agenda
July 16, 2013

- I. Introduction
- II. Purpose of Meeting
 - A. Text Amendment Extension
 - B. Planning Commission/Public Comments
 - C. Proposed Revisions
- III. Signed Extension Consent Form
- IV. Review Comments
 - A. Minimum Tract Acreage
 - B. Analysis Fire Marshal Comments
 1. Minimum Lot Width (Lots less than 55' in width)
 2. Building Separation
 3. Building Materials
 4. Alley
 - C. Variety of Lot Sizes
 - D. Open Space Requirement
 1. Model Ordinance Calculation
 2. Defining Primary Conservation Areas
 3. Floodplain & Water Bodies
 4. AOS, POS, NOS
 5. Additional comments
 - E. Density
 1. Model Ordinance Calculation
 2. Sample Calculations
 3. Base Zoning District Density
 - F. Other
 1. Infrastructure/Traffic Study – UDO Subsection Reference
 2. Architectural Materials
- V. Proposed Open Space & Density Calculation

Land Planning
+
Landscape Architecture
+
Civil Engineering
+
Urban Design

Total Parcel **622.48** 614.733

Primary Conservation Areas:

Steep Slopes (>20%)	63.64
Jurisdictional Wetlands	91.887
Jurisdictional Stream Channels	3.493
Twelve Mile Creek Surface	7.064
Lake Surface	10.156
Van Wyck Road R/W	2.905
<u>Total PC Areas:</u>	<u>179.145</u>

Other Unbuildable Areas:

Duke Energy Transmission R/W	9.454
Easements/Buffers Outside Floodplain	14.486
10% of TP for Roads	62.248
Subtotal:	86.188
Total Unbuildable:	<u>265.333</u>
Total Buildable:	<u>357.147</u>

Floodplain Areas:

Jurisdictional Wetlands	91.887
Twelve Mile Creek Surface	7.064
Other Floodplain	56.036
<u>Total Floodplain:</u>	<u>154.987</u>

Misc:

Steep Slopes (>25%)	33.22
Jurisdictional Stream Channels (Inside Floodplain)	0.387

Proposed Lancaster County, SC UDO Text Amendment:
Cluster Subdivision Overlay District

1. The Cluster Subdivision Overlay District is hereby established. Cluster subdivisions are residential developments which offer an alternative to traditional subdivision design, with the principle purpose being to encourage more open space in exchange for a variety of lot sizes and increased maximum density. Cluster subdivisions shall be designed using a site planning technique that concentrates buildings and structures to the most buildable areas of a site, in order to preserve the remaining as open space for recreation and preservation of features with environmental, historical, cultural, or other significance. By preserving open space, a cluster subdivision will provide another tool by which the county shall preserve its rural character. The techniques used to concentrate buildings may include, but shall not be limited to, reduction in lot area, minimum setback requirements, and minimum lot width. Cluster subdivisions are permitted in low to moderate density single-family residential districts (R-30, R-30P, R-15, and R-15P) pursuant to the provisions in this ordinance, excluding those allowing Manufactured Housing, and are subject to the following general provisions:
 - a. Minimum acreage: The minimum tract area for a cluster subdivision shall be five (5) gross acres, shall consist of contiguous parcels, and must adjoin or have direct access to at least one collector street.
 - b. Minimum lot area: The minimum lot area (in square feet) per dwelling unit within a cluster subdivision shall be 5,000 square feet.
 - c. Minimum lot width: In a cluster subdivision, where both central water and sewer services are available and adequate, the minimum lot width shall be 55'. However, a minimum lot width of 40' is permissible provided the following conditions are met:
 1. A 10' minimum separation between any structures of adjoining lots is required. No encroachments, as may be otherwise permissible in Section 5.4.3, or elsewhere, of the Lancaster County Unified Development Ordinance (UDO), shall be allowed. *Note: The minimum distance between any two (2) buildings within this type of development shall adhere to the current International Building Code Series;*
 2. Primary and accessory structures shall have a minimum of one (1) or more fire resistant walls or shall be required to have exterior building materials as approved by the Lancaster County Fire Marshal; or
 3. Any lot with a width less than 55 ft. shall require rear access to each dwelling unit via an alley. Any proposed alley shall comply with one of the options outlined in subsection 13.7.10.8 (g) (2) of the Lancaster County UDO. However, the planning commission may vary other alley design standards in response to applications demonstrating an alternative based on creative site planning.
 - d. Variety of lot sizes: Individual lots in a cluster subdivision are encouraged to vary in size and layout. No more than 50% of the lots in a cluster subdivision shall be one width. When a cluster subdivision is permitted to include lots less than 55' in width, such lots shall account for no more than 50% of the total lots in a cluster subdivision.
 - e. Setbacks: The following minimum setbacks are required for individual lots within a cluster subdivision:
 1. Front Yard: The minimum front yard setback shall be 20'. The front yard for a corner lot shall be defined as outlined in Chapter 5 of the Lancaster County UDO;
 2. Side Yard: The minimum side yard setback shall be 5';
 3. Rear Yard: The minimum rear yard setback shall be 30'.

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- f. Open space requirement: For cluster subdivisions, the percentage of required open space shall be based on net buildable site acreage, where net buildable excludes areas such as, but not limited to, floodplain, river and stream buffers, etc. However, open space may be located in an area or areas not typically buildable. Open space in a cluster subdivision is also subject to the following:
1. Open space shall be defined as outlined in Section 17.1 of the Lancaster County UDO. This area may include, but is not limited to, active recreation, passive recreation, and natural preservation of important scenic vistas, environmentally sensitive lands, habitat for wildlife, and historically or archaeologically significant areas. Structures are only permitted in the open space when they serve an accessory function, such as a gazebo, fishing dock, swimming pool, or play structure. Open space shall be clearly labeled as such on any preliminary or final plat (including sketch plans) submitted for review;
 2. Open space shall be categorized as:
 - i. Active open space (AOS): Recreation facilities, playgrounds, tennis courts, community swimming pools, etc;
 - ii. Passive open space (POS): Walking trails, bike trails, horse trails, etc.—essentially unimproved land;
 - iii. Natural preservation open space (NOS): Historical sites, endangered species, Archeological sites, wetlands, river buffer, etc;
 3. For a cluster subdivision, no less than twenty (20) percent of the net buildable site acreage shall be set aside in perpetuity as open space. A minimum of five (5) percent of the required open space shall be restricted to AOS and/or POS. However, no more than fifty (50) percent of the required open space shall be categorized solely as AOS (Table 1.1);
 4. Open space shall be contiguous to the extent practicable, when not restricted by natural features such as, but not limited to, topography, existing water body, etc;
 5. Pedestrians should have access to open space;
 6. Where the site contains floodplain, no more than twenty-five (25) percent of that floodplain shall count toward the overall open space requirement. However, where POS is located within floodplain, this area shall also count toward open space with no more than seventy-five (75) percent floodplain to be included in the overall open space requirement. As outlined in subsection (10) of this section, the person or entity identified as having the right of ownership and control over such open space shall be responsible for the continuing upkeep and proper maintenance of the same. It shall not be the responsibility of the county to maintain these areas;
 7. Where the site contains an existing or proposed man-made water body, no more than fifty (50) percent of that water body shall count toward the overall open space requirement;
 8. Proposed open space categorized as AOS may count up to four times toward the overall open space requirement, up to the maximum allowed for AOS in subsection (3) of this section (*Example: If a five thousand (5,000) square foot recreation facility is part of the open space, it may be counted as twenty thousand (20,000) square feet toward the required open space. However, this area in addition to any other proposed AOS shall not exceed fifty (50) percent of the overall required open space as outlined in subsection (3) of this section*);
 9. Open space shall be deed restricted and shall not be developed for use other than open space;

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10. Open space shall remain under the ownership and control of the developer (or successors) or a homeowners association or similar organization that satisfies the criteria established in Section 17.4 and 17.5 of the Lancaster County UDO. The person or entity identified as having the right of ownership and control over such open space shall be responsible for the continuing upkeep and proper maintenance of the same. It shall not be the responsibility of the county to maintain these areas. If open space location meets a need in the Lancaster County comprehensive plan, the county and developer may consider conveyance of completed open space to the county, upon planning commission and county council approval; and
 11. A cluster subdivision shall include provisions for the protection of trees and other natural amenities within the area or areas designated for open space. The removal of trees and natural vegetation is discouraged, though it is permitted during the development phases for areas designated AOS (and POS for the purpose of trails). AOS shall be clearly labeled as such on any preliminary or final plat submitted for review. It is strongly encouraged that any trees over 24" in diameter (DBH) be preserved and incorporated into AOS where practicable, and upon the request of planning staff such trees existing within areas designated AOS may also need to be shown and labeled. Upon completion of development phases, no person or entity shall remove or destroy any trees or natural vegetation from designated open space without approval from the zoning administrator. However, normal maintenance and removal of dead or fallen trees are permitted and recommended, and shall be the responsibility of the person or entity identified as having the right of ownership as outlined in subsection (10) of this section.
- g. Maximum density: The maximum number of dwelling units per acre for a cluster subdivision shall meet the maximum required for the zoning district in which it is located, as defined in the Lancaster County UDO, except that accessory structures shall not count toward the density limitation. A density bonus incentive shall be granted, allowing a cluster subdivision to have a maximum density of 2.5 dwelling units per acre (2.5 du/acre), and is subject to the following:
1. For sites containing five to fifty (5-50) acres, an increase of required open space to a minimum of twenty-five (25) percent of the net buildable site acreage shall be required. Of this, a minimum of five (5) percent shall be restricted to AOS and/or POS; or
 2. For sites containing more than fifty (50) acres, an increase of required open space to a minimum of thirty (30) percent of the net buildable site acreage shall be required. Of this, a minimum of ten (10) percent shall be restricted to AOS and/or POS (Table 1.1).
- h. Commercial requirement: There shall be no required commercial uses within a cluster subdivision.
- i. Connectivity: The proposed cluster subdivision must have a minimum connectivity index of 1.4 as defined in Chapter 13 of the Lancaster County UDO (Section 13.7.9.1). The following shall also apply:
1. Any cluster subdivision which will result in one hundred fifty (150) or more dwelling units dependent on a single point of access shall require the provision of a second means of ingress/egress and is subject to Section 13.7.8.9 of the Lancaster County UDO;
 2. One (1) stubbed out street shall be required to be provided to any adjacent undeveloped parcel or parcel used for a single-family home that contains a minimum of

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- five (5) acres (Section 13.7.10.3). If this connection would be difficult for topographical reasons, a request for variance may be submitted to the planning commission for review; and
3. Where practicable, the proposed cluster subdivision is required to connect to open space (bike paths, walking/hiking trails, etc) in adjacent developments.
- j. Site planning review standards: A cluster subdivision shall follow the same regulations and provisions outlined in Chapter 13 of the Lancaster County UDO. Furthermore, planning staff shall also include the following in their review:
1. Overall site design shall be harmonious in terms of landscaping, enclosure of principal and accessory uses, sizes of structures, street patterns, and use relationships. Variety in building types, facades, and size of open spaces shall be encouraged;
 2. It is encouraged that the site layout accommodate and preserve any features of historic, cultural, archaeological or sensitive environmental value. Likewise, individual lots, buildings, structures, streets, parking areas, utilities and infrastructure shall be designed and sited to minimize the alteration of natural features, vegetation and topography;
 3. Where practicable, individual lots, building locations, streets, parking areas, utilities and infrastructure should be designed and sited to be compatible with surrounding development patterns;
 4. It is encouraged that open space be located on a site in such a manner so that view sheds from existing public right-of-way are not obstructed, but are enhanced by the open space;
 5. Private streets are permitted in a cluster subdivision, provided such streets meet the construction standards of the Lancaster County Uniform Subdivision Regulations;
 6. Installing sidewalks on both sides of the street in a cluster subdivision is encouraged. As a minimum, a sidewalk will be required on at least one side of every street, with a sidewalk required on both sides of arterial and collector streets. Arterial and collector streets shall be clearly labeled as such on any preliminary or final plat submitted for review;
 7. In general, landscaping requirements for a cluster subdivision shall comply with the requirements of Chapter 12 and Chapter 22 of the Lancaster County UDO. However, the planning commission may vary such requirements in response to applications demonstrating alternative landscaping based on creative site planning. Existing trees and natural vegetation shall be retained wherever possible and shall count towards meeting the landscaping requirements;
 8. In general, buffer requirements for a cluster subdivision shall comply with the requirements of Chapter 12 of the Lancaster County UDO. Existing trees and natural vegetation shall be retained wherever possible and shall count towards meeting the buffer requirements; and
 9. Variety in building materials shall be encouraged within a cluster subdivision. Likewise, it is encouraged that buildings are constructed using quality finish materials (i.e. brick, masonry, stone, concrete siding, or stucco). Vinyl siding is permissible if in combination with other building materials.
- k. Other zoning requirements: Should there be a conflict between this Cluster Subdivision Overlay District and any other requirement of the Lancaster County UDO, the standards of

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this section shall take precedence. Otherwise, other development and zoning requirements not addressed herein shall be designed in accordance with the Lancaster County UDO and /or Code of Ordinances.

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Table 1.1 – Example Cluster Subdivision Areas

	<i>(5-50 Gross Acres)</i>	<i>(+ 50 Gross Acres)</i>
Gross Tract Area:	50 acres	500 acres
Unbuildable Land:	5 acres	125 acres
Net Buildable Land:	45 acres	375 acres
Maximum Density:	1.5 du/acre	1.5 du/acre
Required Open Space:	20% of 45 (9 acres)	20% of 375 (75 acres)
Minimum AOS/POS:	5% of 9 (0.45 acre)	5% of 75 (3.75 acres)
Maximum AOS:	50% of 9 (4.50 acres)	50% of 75 (37.50 acres)
Bonus - Maximum Density:	2.5 du/acre	2.5 du/acre
Required Open Space:	25% of 45 (11.25 acres)	30% of 375 (112.50 acres)
Minimum AOS/POS:	5% of 11.25 (0.56 acre)	10% of 112.50 (11.25 acres)
Maximum AOS:	50% of 11.25 (5.63 acres)	50% of 112.50 (56.25 acres)

Appendix 1

Example of Applying Formulas That Determine Number of Allowable Lots and Amount of Open Space To Set Aside

The following formula would be used to determine the number of allowable lots:

Total Dwelling Units Allowed = Total Parcel minus Unbuildable Area divided by Minimum Lot Size

$$TU = (TP - UA) / MLS$$

TU	=	Total Units Allowed	(dwelling units)
TP	=	Total Parcel	(acres)
UA	=	Unbuildable Area	(acres)
MLS	=	Minimum Lot Size	(acres)

Note: If minimum lot size is in square feet round to nearest fraction of an acre e.g. a 20,000 square foot minimum lot size would be rounded up to half an acre.

TU = Total Units or Lots Allowed
TP = 622.48 acres, Total Parcel
UA = 312.145 acres, Unbuildable Area (OR Total Open Space Set Aside Below?)
MLS = 0.125 acres, Minimum Lot Size (5,000 SF based on Cluster Subdivision text)

TU = (622.48 – 312.145)/ 0.125
TU = 310.335/ 0.125
TU = 2,482.68 Total Lots or Dwelling Units Allowed

Alternate 01: Using Base Zoning District Square Footage of 29,040 SF for R-30P. The model open space ordinance appears to use the base zoning district requirement for this calculation, but allows for “Flexible Lot Dimensions”. This allows reductions below the minimum otherwise required for open space subdivisions.

TU = (622.48 – 312.145)/ 0.66 (Based on base area of 29,040 SF for R-30P)
TU = 310.335/ 0.66
TU = 470.20 Total Lots or Dwelling Units Allowed

Alternate 02: Using 2.5 DU/Acre as a suggested base for all Cluster Subdivisions, regardless of base zoning district.

TU = (622.48 – 312.145) x 2.5 DU/Acre
TU = 310.335 x 2.5
TU = 775.8375 Total Lots or Dwelling Units Allowed

The following formula would be used to determine the amount of open space to set aside:

Total Open Space Set Aside = Total Parcel minus Primary Conservation Areas multiplied by Open Space Percentage then added to Primary Conservation Areas

$$TO = ((TP - PC) OSP) + PC$$

TO = Total Open Space Set Aside (acres)
TP = Total Parcel (acres)
PC = Primary Conservation Areas (acres)
OSP = Open Space Percentage (% of Buildable Area)

TO = Total Open Space Set Aside
TP = 622.48 acres, Total Parcel
PC = 179.145 acres, Primary Conservation Areas
OSP = 30% (or .30), Open Space Percentage

TO = ((622.48 - 179.145) .30) + 179.145
TO = (443.335) .30 + 179.145
TO = (133) + 179.145
TO = **312.145 acres of Total Open Space Set Aside**

So a maximum of 2,482.68 lots could be developed on 310.335 acres (622.48 - 312.145 = 310.335).

Alternate 03: Leaving Steep Slopes out of Primary Conservation Area gives a PC of 155.505 acres.

TO = ((622.48 - 115.505) .30) + 115.505 ~~622.48 - 115.505 = 506.975~~
TO = (506.975) .30 + 115.505
TO = (152.0925) + 115.505
TO = **267.60 acres of Total Open Space Set Aside**

*TU = 887.20 Total Lots or Dwelling Units Allowed when calculated with Alternate 02 above.

*TU= **933.72 lots or dwelling units when calculated as conventional subdivision, 622.48 acres x 1.5 DU/Acre (R-30P).**