SUBDIVISION REQUIREMENTS



Key Changes in Article 151.6:

- This article consolidates all the subdivision provisions in the current ordinance into a single article
- There are new purpose and intent and applicability standards pertaining to the subdivision of land
- The article includes additional guidance regarding the dedication, ownership, and maintenance responsibility of public infrastructure (such as streets, water lines, sewer, etc.)
- There are new standards for sidewalks, sight distance triangles, community mailboxes (CBUs), vehicular gates, and other common features
- The article revised the language pertaining to water supply infrastructure for greater clarity
- There are adjustments to the performance guarantee provisions for compliance with changing state law, including the ability of the applicant to choose their desired financial instrument and the removal of maintenance guarantees for public infrastructure (except stormwater management facilities)
- The performance guarantee provisions include requirements for guarantee of private site improvements (off-street parking, landscaping, etc.) to aid in the development process
- The standards include clarification about the process of reduction or release of a performance guarantee
- There are new maintenance provisions for stormwater management facilities and replacement trees
- The article sets out the procedure for establishment of an HOA when a subdivision has common features (open space set-aside, infrastructure, etc.), including a set of minimum documentation requirements to establish an HOA and new provisions controlling the timing of transfer of subdivision responsibility from the subdivider to the HOA
- The standards establish a new reserve fund balance requirement prior to transfer of subdivision responsibility transfer
- There are new conservation subdivision standards that replace the open space subdivision provisions and new districts where conservation subdivision is mandated (WL, RR), allowed (SR, PD), or prohibited (VR, MX)

6.1	Subdivision Standards	6-1
6.1.1	Purpose and Intent	6-1
6.1.2	Applicability	6-1
6.1.3	Subdivision Design	6-1
6.1.4	Lot Configuration	6-1
6.1.5	Access to Lots	6-3
6.1.6	Access to Public Waters	6-4
6.1.7	Easements	6-4
6.1.8	Monuments	6-4
6.1.9	Flood Elevation Markers	6-5
6.1.10	Community Mailboxes	6-5
6.1.11	Cultural and Historic Resources	6-5
6.1.12	Bus Stops for School Children	6-5
6.1.13	Reservation of School Sites	6-6
6.1.14	Dedication of Land for Public Parks	6-6
6.0	Deguired Infractive	
6.2 6.2.1	Required Infrastructure	
6.2.2	Generally	
6.2.3	Streets	
6.2.4	Bridges	
6.2.5	Street Lights	
6.2.6	Sidewalks	
6.2.7	Potable Water Systems	
6.2.8	Sewage Systems	
6.2.9	Fire Protection	
6.2.10	Underground Utilities	
6.2.10	Onderground Officies	0-19
6.3	Performance Guarantees	6-20
6.3.1	Purpose and Intent	6-20
6.3.2	When Required	6-20
6.3.3	Maximum Term of Guarantee	6-20
6.3.4	Form of Guarantee	6-20
6.3.5	Amount of Guarantee	6-21
6.3.6	Release or Reduction of Guarantee	6-21
6.3.7	Improper Release of Financial Guarantees	6-21
6.3.8	Forfeiture of Guarantee	6-21
6.3.9	As-Built Plans Required	6-21
6.3.10	Maintenance Warranties	6-22
6.4	Homogypore' or Proporty Owners' Association	6 24
6.4.1	Homeowners' or Property Owners' Association	
6.4.2	Applicability	
6.4.3	Creation Required	
6.4.4	Responsibilities of Assocation	
6.4.5	Procedure for Association Establishment	
U.T.J	1 1000auto 101 70000lation Establishinghi	∪-∠+

6.4.6	Documentation Requirements	6-24
6.4.7	Membership Requirements	6-25
6.4.8	Transfer of Maintenance Responsibility	6-25
6.4.9	Failure to Maintain is a Violation	6-26
6.5	Conservation Subdivision	6-27
6.5.1	Purpose and Intent	6-27
6.5.2	Applicability	6-27
6.5.3	Procedure	6-27
6.5.4	Conservation Subdivision Standards	6-28
6.5.5	Delineation of Conservation and Development Areas	6-29
6.5.6	Evaluation Criteria for Conservation Subdivision Layout	6-31

6.1 SUBDIVISION STANDARDS¹⁵⁶

6.1.1 PURPOSE AND INTENT

The purpose of this section is to establish standards for the subdivision of land in the County. More specifically, this section is intended to:

- Provide for the orderly growth and development of the County; A.
- В. Coordinate the provision of streets within and contiguous to proposed subdivisions with other existing or planned streets in the general area;
- C. Provide for the adequate provision of public services and infrastructure:
- D. Maintain conditions essential to the public's health, safety, and general welfare; and
- E. Facilitate the further re-subdivision of larger tracts into smaller parcels of land, where appropriate.

6.1.2 APPLICABILITY

A. In General

No subdivision of land in the County, as defined in Section <>, Definitions, shall occur, and no lot or parcel created by such division of land may be sold or developed, unless the division is expressly exempted from this section or has received subdivision approval in accordance with Section <>, Minor Subdivision, Section <>, Transfer Plat, Section <>, Preliminary Plat, Section <>, Final Plat, and the requirements of this section.

В. **Exemptions**

Expedited subdivisions created in accordance with Section <>, Expedited Subdivision, and exempt subdivisions meeting the standards of Section <>, Exempt Subdivision, shall be exempted from these standards.

6.1.3 SUBDIVISION DESIGN¹⁵⁷

Α. Generally

Proposed subdivisions subject to these standards shall:

- Comply with the standards in this article and Article 151.3: Zoning Districts; 1.
- 2. Be in accordance with Section <>, Adopted Policy Guidance; and
- 3. Be designed to promote development that is beneficial to the County.

В. **Development Name**

The name of a proposed development shall not duplicate or be phonetically similar to an existing development name in the County unless the proposed development lies adjacent or in proximity to the existing development.

C. Reasonable Relationship

All required improvements, easements, and rights-of-way (other than required reservations) shall substantially benefit the development or bear a reasonable relationship to the need for public facilities attributable to the new development.

6.1.4 LOT CONFIGURATION¹⁵⁸

The size, shape, and orientation of lots shall be appropriate for the location of the proposed subdivision and for the type of development contemplated. Lots shall to the dimensional standards for the zoning district where located in accordance with Article 151.3: Zoning Districts, and the following standards.

Conformance to Other Regulations A.

- A lot shall have sufficient area, dimensions, and street access to allow a principal building to be erected on 1. it in compliance with the requirements of this Ordinance.
- 2. Lot sizes, shapes, and locations shall be made with due regard to topographic conditions, contemplated use, and the surrounding area.

Camden County

158 These are a blend of new standards, standards from 151.232, Design Standards and Criteria [for major subdivisions] pertaining to lots, and the flag lot standards, which are taken from Section 151.062(D) of the current ordinance.

¹⁵⁶ This is a new section proposed for the County's consideration. It sets out a series of basic purpose and intent statements and general design parameters for all subdivisions.

¹⁵⁷ These are new standards.

6.1 Subdivision Standards155F

6.1.5 Access to Lots159F

B. Side Lot Line Configuration

- 1. Side lines of lots should be at or near right angles or radial to street lines.
- 2. Where side lot lines intersect at the rear of the lot, the angle of intersection shall not be less than 60 degrees.

C. Lot Lines and Drainage

Lot boundaries shall coincide with natural and pre-existing manmade drainageways, to the maximum extent practicable, to avoid disruption of established drainage patterns or lots that can be built upon only by altering such drainageways.

D. Double or Reverse Frontage

- 1. Double frontage or reverse frontage lots shall be avoided, except when used in conjunction with the provisions for marginal access streets in Section <>, Marginal Access Streets.
- 2. Double frontage lots shall require a non-access buffer of 25 feet on one side of the lot bounded by a street, in addition to other dimensional requirements.

E. Special Purpose Lots

Minimum lot dimensional standards shall not apply to lots for family or religious institution cemeteries, sewage lift stations, and similar utility uses. Such lots shall comply with the following:

- 1. A special-purpose lot shall be permitted only after the UDO Administrator has determined that the proposed lot has sufficient dimensions to accommodate the intended use and perimeter buffers required in accordance with Section <>, Perimeter Buffers;
- 2. If the special-purpose lot does not have direct access to a public or private street, an easement for ingress and egress with a minimum width of 20 feet shall be platted.
- 3. The subdivision to create the special purpose lot shall be approved in accordance with this Ordinance and the final plat shall label the lot as a special purpose lot.

F. Flag Lots

New flag lots may be established, subject to the following requirements:

- 1. No more than five percent of the lots within a subdivision (or individual phase of a subdivision) may be configured as flag lots.
- 2. In no instance shall a subdivision have more than 20 flag lots in total.
- 3. New flag lots may be established along an arterial street only in cases where access to the arterial street is shared with an adjacent lot.
- 4. The "pole," arm." or "pan handle" portion of a flag lot shall maintain a minimum width of at least 45 feet.
- 5. Where public water is available, any building on the flag lot shall be within 500 feet of a fire hydrant. The distance shall be measured along the street, then along the flagpole, then in a straight line to the building location:
- 6. Use of a single driveway to serve an adjoining flag lot or to serve a flag lot and an adjoining conventional lot is encouraged. In the case of a driveway shared with a conventional lot, the preferred location for the driveway is on the flagpole portion of the flag lot, with the conventional lot granted an access easement over the flagpole.

G. Wetlands on Lots¹⁵⁹

1. CAMA Wetlands

- a. CAMA wetlands are those lands which are subject to regular or periodic flooding and bear characteristic vegetation or as defined in the State Administrative Code described as any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides provided this shall exclude hurricane or tropical storm tides.
- **b.** Where any lot or site includes an area of CAMA wetlands, as determined by on-site evaluation by the Division of Coastal Management Staff, the wetland area shall not be counted as part of the minimum square footage required of any lot for development.
- c. CAMA wetlands can be credited towards passive open space set-aside requirements in Section <>, Open Space Set-Aside.

2. Designated 404 Wetlands

Where any lot or site includes an area of designated 404 wetlands, as delineated by the U.S. Army Corps of Engineers, the wetland area may be counted as part of the minimum square footage required of any lot for development.

_

¹⁵⁹ This section includes the standards for wetlands from Section 151.232, Design Standards and Criteria [for a major subdivision], in the current ordinance. The current provisions do not allow CAMA wetlands to be credited towards open space requirements, however these proposed open space set-aside standards in article 151.7: Environmental Provisions, do allow CAMA wetlands to be credited towards passive open space set-aside requirements. The standards in this subsection have been revised for consistency with the draft provisions in Article 151.7.

6.1 Subdivision Standards155F

6.1.5 Access to Lots159F

- **b.** CAMA wetlands can be credited towards passive open space set-aside requirements in Section <>, Open Space Set-Aside.
- **c.** Any subdivision that includes designated 404 wetlands shall include a note indicating the presence of such wetlands on the final plat.

6.1.5 ACCESS TO LOTS¹⁶⁰

A. Every Lot Must Maintain Access

1. Generally

Except for lots within bona fide farms, lots created in accordance with Section <>, Transfer Plat, or lots created through an expedited subdivision (see Section <>, Expedited Subdivision), all lots intended to contain a building or structure shall abut a state-maintained road or a private street built and maintained to state road standards.

2. Lots in Bona Fide Farms, Transfer Plats, or Expedited Subdivisions

- Lots established after (insert the effective date of this Ordinance) in a bona fide farm, transfer plat, or expedited subdivision that are intended to contain a building or structure are not required to abut a state-maintained road or private street, but shall maintain some form of access with a minimum width of 45 feet and maintained to afford a reasonable means of ingress and egress for emergency vehicles.
- **b.** In no instance shall an accessway not meeting the requirements for a public or private street serve more than five individual lots.

B. Access on Lots Abutting Major Arterial and Minor Collector Streets

1. The standards in this subsection shall apply to lots abutting the roads listed in Table <>, Major Arterial and Minor Collector Streets.

TABLE <>: MAJOR ARTERIAL AND MINOR COLLECTOR STREETS				
Major Arterial Streets	MINOR COLLECTOR STREETS			
US 17	SR 1224, Old Swamp Road			
US 158	SR 1145, Lamb's Road (in its entirety)			
NC 34	3111=33, 33311111311			
NC 343				
	SR 1121, Trotman Road (in its entirety)			
	SR 1111, Wickham Road			
	SR 1000, Texas Road			

- 2. In cases where a tract or site abutting a street listed in Table <>, Major Arterial Streets and Minor Collector Streets, is proposed for subdivision (whether residential or otherwise), then all lots created shall maintain sufficient frontage on a different street, either pre-existing or created as part of the subdivision, so that direct access to lots need not be provided by a street listed in Table <>, Major Arterial Streets and Minor Collector Streets.
- **3.** The final plat creating the subdivision shall indicate a notation that driveway access to a major arterial or minor collector street is limited and shall be provided by a different street.
- 4. In the event a site or tract is unable to comply with the access limitations in this subsection, an applicant may seek a variance in accordance with Section <>, Variance.

C. Marginal Access Streets

1. Where a tract of land to be subdivided adjoins an arterial street, the subdivider may be required to provide a marginal access street parallel to the arterial street or reverse frontage on a minor street for the lots to be developed adjacent to the arterial street.

_

¹⁶⁰ This section consolidates the standards in Sections 151.014, Every Lot Must Abut a Street or Road, Section 151.082 Access to Lots, and Section 151.083, Access to Streets from the current ordinance with no substantive changes except that lots or sites unable to comply with the access limitations to major arterials or collectors streets should undergo a variance instead of the exemption available in the current standards.

6.1 Subdivision Standards155F

6.1.8 Monuments163F

- 2. Where reverse frontage is established, private driveways shall not have direct access to the arterial street, and a 25-foot-wide non-access buffer zone on the side of the lot abutting the arterial street shall be provided.
- **3.** A ten-foot-wide non-access buffer zone may be approved if the vegetation creates a year-round opaque screen or a six-foot-tall opaque fence is provided.
- 4. The non-access buffer zone may be counted toward the open space set-aside requirement or may be counted as a portion of each individual lot.

D. Driveway Consolidation Along Major Arterial and Minor Collector Streets

While a lawfully-established access to an individual lot from a major arterial or minor collector street created prior to (*insert the effective date of this Ordinance*) may remain, it is the intent of this Ordinance to consolidate or eliminate these driveways to help ensure public safety and to preserve the traffic-carrying capacity of the street. In order to incentivize the removal of existing driveways or shared driveways serving two or more lots, the required side setbacks and any perimeter landscaping buffers required by Section <>, Perimeter Buffers, between the lots may be waived, subject to the following requirements:

- 1. NCDOT confirms the shared access can still achieve a satisfactory level of access control;
- 2. A cross access easement between all parties sharing access is approved by the UDO Administrator and recorded with the Camden County Register of Deeds;
- **3.** All fire code regulations are met;
- 4. Adequate utility and drainage easements are provided, if necessary; and
- 5. The maximum number of shared driveways permitted to take advantage of these standards shall be:
 - **a.** One driveway for frontages less than 500 feet;
 - **b.** Two driveways for frontages between 500 feet and 1,000 feet; and
 - **c.** Three driveways for frontages over 1,000 feet.

6.1.6 ACCESS TO PUBLIC WATERS¹⁶¹

- **A.** A subdivider shall not usurp, abolish, or restrict public access to Albemarle Sound, Pasquotank River, North River, or other water body where public access has been historically provided.
- **B.** Subdivisions of 20 or more lots or dwelling units abutting public trust or estuarine waters shall provide an area at least 20,000 square feet in area and at least 100 feet in width with at least 20 linear feet of shoreline that provides visual and physical access to the water for landowners in the subdivision.

6.1.7 EASEMENTS

A. Utility and Drainage Easements 162

- 1. Each lot in a major or minor subdivision shall provide combined utility and drainage easements with a minimum width of ten feet along all side and rear lot lines as well as a combined utility and drainage easement with a minimum width of 15 feet along lot lines bounded by a street.
- 2. Additional easement width may be required by the County due to topography or other physical features.
- **3.** Where a conservation subdivision or other development concept is approved with zero lot lines, alternative easement locations may be considered.

B. Easement Ownership 163

In cases where a developer installs or causes the installation of water, sewer, electrical power, telephone, or cable television facilities and intends that these facilities be owned, operated or maintained by a public utility or any entity other than the developer, the developer shall transfer to the utility or entity the necessary ownership or easement rights to enable the utility or entity to operate and maintain the facilities.

6.1.8 MONUMENTS¹⁶⁴

Monuments shall be included as part of any subdivision, and shall be configured in *accordance The Standards of Practice for Land Surveying in North Carolina*, as adopted by the North Carolina State Board of Registration for Professional Engineers and Land Surveyors, and the following:

¹⁶¹ These standards carry forward the access to water provisions in the subdivision design standards (Section 151.232(D)) of the current ordinance.

¹⁶² This section carries forward the standards for easements in Section 151.232, Design Standards and Criteria [for major subdivisions].

¹⁶³ This section carries forward the standards in Section 151.170, Utility Ownership and Easement Rights, in the current ordinance.

¹⁶⁴ These standards are carried forward from the standards in Section 151.232, Design Standards and Criteria [for major subdivisions], related to lots.

6.1 Subdivision Standards155F

6.1.13 Reservation of School Sites168F

- **A.** Prior to the approval of the final plat, permanent reference points shall have been established in accordance with the standards in this section.
- **B.** At least one corner of the subdivision shall be designated by course and distance (tie) from a readily discernible reference marker.
- **C.** If a corner is within 2,000 feet of a U.S. Geodetic Survey or NC Grid System coordinated monument, then this corner shall be marked with a monument so designated by computed X and Y coordinates which shall appear on the map with a statement identifying this monument to an accuracy of at least one to 10,000.
- D. When a monument is not available, the tie shall be made to some pertinent and readily recognizable landmark or identifiable point, physical object or structure. However, if in the opinion of the Planning Board, a subdivision is of a small size, or if there is an existing tie within a reasonable distance of the subdivision, this shall not be required.
- **E.** Within each subdivision, at least two monuments designed and designated as control corners shall be installed. The surveyor shall employ additional monuments, if required.
- F. All monuments shall be constructed of #4 rebar surrounded by three-inch PVC pipe and filled with concrete.
- **G.** Each monument shall be set 24 inches in the ground unless this requirement is impractical because of unusual conditions.
- **H.** The allowable angular error of closure and the linear error of closure for surveys shall be in accordance with Standards of Practice for Land Surveying published by the State Board of Registration for Land Surveyors.

6.1.9 FLOOD ELEVATION MARKERS¹⁶⁵

Where a subdivision contains more than five lots or more than five acres, it shall include at least one flood elevation marker established by a registered land surveyor.

6.1.10 COMMUNITY MAILBOXES¹⁶⁶

New residential subdivisions shall include cluster mailbox units in accordance with U.S. Postal Service guidelines and the following:

- **A.** Wherever possible, cluster mailboxes shall be located within open space set-aside, served by pedestrian access and served by two or more off-street parking spaces.
- **B.** In cases where the cluster mailboxes must be placed within a public right-of-way, the mailbox unit(s) shall be located and configured in accordance with the latest revision of the NCDOT policy guidance on the placement cluster box units (CBU's) in state maintained subdivision streets.

6.1.11 CULTURAL AND HISTORIC RESOURCES¹⁶⁷

The developer shall not destroy buildings and structures of cultural or historic significance, as determined by County staff in consultation with state preservation officials.

6.1.12 BUS STOPS FOR SCHOOL CHILDREN¹⁶⁸

Except for age-restricted development, the application for a major subdivision or planned development shall show the location(s) of bus stops that shall be used for the pick-up and drop-off of school children on both the preliminary and final plats. Bus stops shall be configured in accordance with the following:

- **A.** Each bus stop shall include a shelter built to the specifications in this section.
- **B.** Each bus stop shall at least six feet long and at least three feet deep with a bench running the length of the bus stop shelter.
- C. The sides of each bus stop shelter shall be made of a clear or semi-clear material and the roof shall be constructed to keep rain off persons standing inside the bus stop shelter.
- **D.** Bus stops shall be located at locations approved by the School Superintendent or his or her designee.
- **E.** The homeowner's association shall be responsible for the maintenance of bus stops.
- **F.** These requirements for a bus stop may be waived by the County upon written approval of the School Superintendent or his or her designee.

¹⁶⁷ This section carries forward the standards for cultural resources in Section 151.232, Design Standards and Criteria [for major subdivisions].

-

¹⁶⁵ This section carries forward the standards for flood elevation markers in Section 151.232, Design Standards and Criteria [for major subdivisions].

¹⁶⁶ These are new standards.

¹⁶⁸ This section carries forward the standards for bus stops from Section 151.232, Design Standards and Criteria [for major subdivisions].

6.1 Subdivision Standards155F

6.1.14 Dedication of Land for Public Parks169F

RESERVATION OF SCHOOL SITES¹⁶⁹ 6.1.13

- Α. If a proposed subdivision of 40 or more lots includes a school site that is designated in the Land Use Plan (in accordance with Section 153A-331 of the North Carolina General Statutes) or some other long range document adopted by the Board of Commissioners, the County shall immediately notify the Camden County Board of Education.
- В. If the Board of Education determines the school site does not need to be reserved, it shall not be required as part of the subdivision
- C. If the Board of Education determines the school site needs to be reserved to accommodate a new school, the subdivision shall not be approved without reservation of the school site. If the school site is reserved, the Board of Education must acquire the site within 18 months after the date the site is reserved, or the subdivider may treat the reservation as null and void as authorized by Section 153A-331 of the North Carolina General Statutes.

DEDICATION OF LAND FOR PUBLIC PARKS¹⁷⁰ 6.1.14

Subdivisions of land for 30 or more single-family residential lots shall be required to dedicate a portion of land, or pay a feein-lieu thereof, for public parkland, in accordance with the standards of this section.

A. **Dedication Amount**

- Single-family residential subdivisions of 30 or more lots shall dedicate 1,452 square feet of land per residential lot to the County for its use in developing public parkland.
- 2. No credit towards required parkland dedication is given for CAMA wetlands, 404 wetlands, or other lands mandated for preservation by federal or state requirements.
- 3. No more than 25 percent of the total dedication requirement may be met through dedication of water areas.

В. **Procedure for Dedication or Payment**

- The developer shall identify land proposed for dedication on the preliminary plat, or propose payment of an in-lieu fee as part of the application for approval of a preliminary plat.
- 2. The Board of Commissioners shall review the proposed application and determine if it complies with the standards in Section <>, Nature of Area to be Dedicated, or Section <>, Payment-in-lieu of Dedication, as appropriate. The decision to accept dedication or payment-in-lieu is up to the sole discretion of the Board of County Commissioners.
- 3. Land shall be dedicated prior to recording the first final plat for the subdivision, or the payment-in-lieu shall be paid prior to recording the first final plat for the subdivision for which the payment-in-lieu is paid.

C. Nature of Area to be Dedicated

All lands proposed for dedication as recreation and park areas shall meet the following standards:

The dedicated land shall be a single parcel of land, whether the subdivision is developed in phases or sections, except where it is determined by the BOC that multiple parcels would better serve County residents.

2. Usability

Public parkland must be flat, well-drained, usable land for a park, as determined by the BOC. In cases where dedication includes an area of water, public access to all portions of a water feature shall be provided and maintained, regardless of water feature's size.

3.

The dedicated land shall be of a shape that supports gathering and recreation activities.

4. Location

- The dedicated parkland shall be located so it can reasonably serve the park needs of the a. residents of the subdivision and immediate area.
- The BOC may require that the land dedicated be located on the periphery of the development in b. order to allow enlargement by combining the recreation and park area with adjacent development or park facilities, existing or planned.

5. Access

¹⁶⁹ NOTE TO STAFF: This section is proposed to replace the standards in Section 151.200, Reservation of School Sites, and the standards for school site reservation in Section 151.232(I) in the current ordinance. These standards propose to delete the community service facility standards in Section 151.232(I)(2) of the design standards and criteria for major subdivisions. It is unclear exactly what a community service facility is, and the statutory authority available to the County to include these requirements.

¹⁷⁰ This section is proposed to replace the standards for public park dedication in Section 151.232, Design Standards and Criteria [for major subdivisions], in the current ordinance.

6.1 Subdivision Standards155F

6.1.14 Dedication of Land for Public Parks169F

- **a.** All dwelling units in the subdivision and residents in the immediate area shall have access to and from the parkland provided by means of streets and public walkways or trails.
- **b.** Rights-of-way for this access shall be shown on the preliminary and final plats.
- **c.** All dedicated lands shall have access by way of a street. Such access can be provided when the dedicated land is adjacent to existing or proposed public parkland with street access.

D. Payments-In-Lieu of Dedication

1. General

If any of the following conditions apply to the proposed subdivision, a payment-in-lieu shall be provided instead of parkland dedication:

- **a.** The topography or other natural conditions of the site do not provide adequate opportunities for on-site recreation and park areas;
- **b.** The amount of parkland to be dedicated is too small to provide adequate recreation and park opportunities or to be efficiently maintained;
- **c.** The intended location of the parkland is too far from existing recreation and park areas to be efficiently maintained;
- d. Adequate access is not available to the proposed parkland; or
- **e.** The recreation needs of the subdivision can be better met by acquisition or development of park sites outside the subdivision.

2. Amount of Payment

The payment-in-lieu shall be calculated based upon the total acreage of parkland required for dedication. The land's assessed value (as determined by the Camden County Tax Assessor) following subdivision shall be used to arrive at the required payment-in-lieu amount.

3. Use of Funds

Payments-in-lieu received in accordance with this subsection shall be used only for the acquisition or development of recreation and park areas, and open space sites that serve residents living in the immediate area of the development making the payment-in-lieu, in accordance with Section 153A-331 of the North Carolina General Statutes.

6.2 Required Infrastructure170F 6.2.2 Generally

6.2 REQUIRED INFRASTRUCTURE 171

6.2.1 APPLICABILITY¹⁷²

- **A.** The standards in this section shall apply to the construction, installation, and maintenance of public and private utilities located in a public street right-of-way, private street right-of-way, or easement.
- **B.** These standards shall apply to development consisting of a subdivision, site plan, planned development, special use permit, or subject to a building permit.
- **C.** Required infrastructure located in a SFO shall also comply with the applicable standards in Section <>, Special Flood Hazard Area Overlay (SFO).

6.2.2 GENERALLY

A. Consistency with Adjacent Development 173

Whenever it can reasonably be anticipated that utility facilities constructed in one development will be extended to serve other adjacent or nearby developments, the utility facilities (such as, water or sewer lines) shall be located and constructed in accordance with the standards in this section so that extensions can be made conveniently and without undue burden or expense or unnecessary duplication of service.

B. Within Special Flood Hazard Areas

Placement of required infrastructure within the SFO shall only be in accordance with the applicable standards in Section <>, Special Flood Hazard Area Overlay (SFO).

C. As-built Plans Required

- 1. Whenever a developer installs or causes to be installed any utility in any public right-of-way, the developer shall, as soon as practicable after installation is complete, and before acceptance of any utility, furnish the County with an as-built plan that shows the exact location and configuration of the utility. Nothing shall limit the depiction of more than one type of utility on the same as-built plan sheet.
- 2. The as-built plan must be verified as accurate by the utility service provider. Compliance with this requirement shall be a condition of the continued validity of the permit authorizing the development
- **3.** As-built plans shall be prepared and verified prior to issuance of a certificate of occupancy, commencement of operation, approval of a final plat, or release of a performance guarantee, as appropriate.

D. Maintenance Required

- 1. Required infrastructure installed or caused to be installed by a developer and intended for ownership or operation by another entity shall be maintained by the developer until such time as the infrastructure is accepted by the entity who will own or operate it.
- 2. All utility facilities shall be constructed in a manner as to minimize interference with pedestrian or vehicular traffic and to facilitate maintenance without undue damage to improvements or facilities located within the development.

E. Dedication and Acceptance 174

1. Streets and Associated Facilities

- **a.** The subdivider or developer shall install all streets in accordance with the standards in this Ordinance, the procedures manual, and any applicable state or federal requirements.
- **b.** The County shall not accept dedication of rights-of-way or maintenance responsibilities for streets and associated facilities (including curb and gutter, streetlights, street signs, traffic control devices, and stormwater management facilities within a street right-of-way).
- **c.** Streets or roads and their associated infrastructure shall remain under private ownership or be dedicated to the NCDOT, in accordance with NCDOT requirements.

2. Potable Water

¹⁷¹ This section is proposed to consolidate the standards for utilities into one section. There are additional provisions that clarify that these required infrastructure standards apply to subdivisions as well as site plans or development on individual lots.

¹⁷² This section carries forward and builds on the standards in Section 151.096, Utilities, in the current ordinance.

¹⁷³ This section carries forward the standards in Section 151.180, Utilities to be Consistent with Internal and External Development, but the provisions pertaining to maintenance are relocated to the subsection on maintenance.

¹⁷⁴ NOTE TO STAFF: Additional discussion is necessary regarding the County's willingness to accept dedication and maintenance responsibility for these features.

6.2 Required Infrastructure170F

6.2.3 Streets174F

- a. The subdivider or developer shall install all potable water supply lines and meters in accordance with the standards in this Ordinance, the procedures manual, and other state or federal requirements.
- **b.** The County shall not accept dedication of rights-of-way for water lines, which shall be located in with a street right-of-way, or within an easement on land belonging to a landowner.
- c. Potable water supply lines, including water tanks, distribution lines, water mains, and laterals shall be dedicated to the County for maintenance and operation. Supply lines serving individual lots or uses beyond the water meter shall not be the responsibility of the County.

3. Sanitary Sewage System

- a. In cases of development being served by a public or central private sewage systems, the subdivider or developer shall install all sewer lines in accordance with the standards in this Ordinance, the procedures manual, and other state or federal requirements.
- **b.** The County shall not accept dedication of rights-of-way for sewer lines, which shall be located in with a street right-of-way, or within an easement on land belonging to a landowner.
- c. Sanitary sewage lines, including pump stations and treatment facilities shall be dedicated to the County for maintenance and operation. Sewer lines serving individual lots or uses prior to their connection to the central collection system shall not be the responsibility of the County.
- **d.** Centralized private sewage systems shall be offered for dedication to the County, who may choose to accept the system in the sole discretion of the Board of County Commissioners.

4. Stormwater Management Facilities

- The subdivider or developer shall install all stormwater management facilities in accordance with the standards in this Ordinance, the Stormwater Drainage Design Manual, and any applicable state or federal requirements.
- b. The County shall not accept dedication of land occupied by a stormwater management facility or maintenance responsibilities, though the County shall require posting of a performance guarantee for stormwater management facility maintenance in accordance with Section <>, Stormwater Management.

5. Public Open Space

- Land designated as public open space on a final plat shall be considered to be offered for dedication until such offer is accepted by the County. The offer may be accepted through conveyance of fee simple marketable title (unencumbered financially and environmentally) of the land to the County at the time of final plat recordation.
- b. Until such offer of dedication is accepted by the County, land offered for dedication may be used for open space purposes by the landowner or by the owners' association. Land offered for dedication shall not be used for any purpose inconsistent with the proposed public use.

6.2.3 STREETS¹⁷⁵

A. All Streets and Rights-of-Way to Meet State Requirements

All public and private streets and rights-of-way shall be constructed in accordance with the standards established for the particular type of street in question by the NCDOT, unless a higher or more restrictive standard is established by this Ordinance, in which case the street shall meet that higher or more restrictive standard.

B. Construction Standards for Roads Dedicated to the State 176

- 1. All streets intended for dedication to the State shall have rights-of-way and construction meeting the standards contained in the *Subdivision Roads, Minimum Construction Standards* Handbook, as revised, published by the NCDOT. The District Highway Engineer shall approve the plat with respect to road construction, road width, and right-of-way prior to recording. Without the approval, the plat cannot be recorded.
- Once the development meets the minimum housing requirements for state road acceptance, the developer shall petition NCDOT for state road acceptance. After inspection and upon receipt of outcome of the inspection, the developer shall have 12 months to turn over roads to NCDOT.

C. Street Classification 177

6-9

¹⁷⁵ This section carries forward the standards for streets in Section 151.232(A) Design Standards and Criteria [for major subdivisions], Section 151.261(A), Design Standards [for minor subdivisions], and Section 151.276, Design Standards [for private access subdivisions].

¹⁷⁶ NOTE TO STAFF: Additional discussion is necessary regarding how the County wishes to handle Appendix C pertaining to roadway construction standards. This material could be relocated to a procedures manual.

¹⁷⁷ This section carries forward the standards in Section 151.081, Street Classification, in the current ordinance.

6.2 Required Infrastructure170F 6.2.3 Streets174F

Streets that are dedicated to public use shall be classified in accordance with Table <>: Street
Classification.

TABLE <>: STREET CLASSIFICATION					
STREET TYPE [1][2]	DESCRIPTION				
Arterial Street	A street whose principal function is to carry large volumes of traffic at higher speeds through the county or from one part of the county to another. Specifically, the following streets shall be considered arterials: US 17, US 158, NC 34, and NC 343.				
Arterial Access Street	A street that is parallel to and adjacent to an arterial street and that is designed to provide access to abutting properties so that these properties are somewhat sheltered from the effects of the through traffic on the arterial street and so that the flow of traffic on the arterial street is not impeded by direct driveway access from a large number of abutting properties.				
Collector Street	A street whose principle function is to carry traffic between local streets and arterial streets but that may also provide direct access to abutting properties. It generally serves or is designed to serve, directly or indirectly, more than 100 dwelling units and is designed to be used or is used to carry more than 800 trips per day.				
Cul-de-Sac Street	A street that terminates in a vehicular turnaround.				
Local Street	A street whose primary function is to provide access to abutting properties. It generally serves or is designed to serve less than 100 dwelling units and handles less than 800 trips per day.				
Loop Street	A street that has its beginning and end points on the same road.				
Major Arterial	The following arterials that are part of the state's primary road system: US 17, US 158, NC 343, and NC 34.				
Minor Arterial Street	All arterials other than major arterials.				

NOTES:

2. Whenever a street within a new development continues an existing street that formerly terminated outside the development or it is expected that a new street will be continued beyond the development at some future time, the classification of the street will be based upon the street in its entirety, both within and outside of the development.

D. General Layout of Streets 178

- 1. Streets shall be related appropriately to the topography and designed to facilitate the drainage and storm water runoff.
- 2. Street grades shall be governed by DOT requirements and shall conform as closely as practicable to the original topography.
- 3. Half streets (such as streets of less than the full required right-of-way and pavement width) shall not be permitted, except where the streets, when combined with a similar street, developed previously or simultaneously, on property adjacent to the subdivision, creates or comprises a street that meets the right-of-way and pavement requirements of this Ordinance.

E. Compliance with Access and Circulation Standards

New streets and changes to existing streets located within a single lot or tract shall also be subject to the standards in Section <>, Access and Circulation.

F. Street Intersections 179

Street intersections shall be configured in accordance with the following standards:

1. Not more than two streets shall intersect at any one point unless the NCDOT certifies that such an intersection can be constructed with no extraordinary danger to public safety.

^[1] The classification shall be based upon the function of the street and projected volume of traffic to be carried by the street, stated in terms of the number of trips per day.

^[2] The number of dwelling units to be served by the street may be used as a useful indicator of the number of trips but is not conclusive.

¹⁷⁸ This section carries forward the standards in Section 151.088, General layout of Streets, in the current ordinance.

¹⁷⁹ This section carries forward the standards in Section 151.089, Street Intersections, in the current ordinance.

6.2 Required Infrastructure170F

6.2.3 Streets174F

- 2. Streets shall intersect at right angles to the maximum extent practicable, and no two streets shall intersect at less than 60 degrees.
- **3.** Whenever possible, proposed intersections along one side of a street shall coincide with existing or proposed intersections on the opposite side of the street.
- **4.** Where a street center line offset (jog) occurs at an intersection, the distance between centerlines of the intersecting streets shall be not less than 125 feet.
- 5. Except when no other alternative is practicable or legally possible, no two streets may intersect with any other street on the same side at a distance of less than 400 feet measured from centerline to centerline of the intersecting street. When the intersected street is an arterial, the distance between intersecting streets shall be at least 1,000 feet, unless no other alternative is practicable.

G. Turn Lanes Required 180

Turn lanes for either or both left and right turns into a commercial or residential subdivision driveway may be necessary for safety when there are high roadway and/or turning volumes or traffic, when the roadway speeds are moderate or high, or where needed due to limited sight distance. When provided, turn lanes shall be configured in accordance with the following:

- 1. The final determination for the need, location, and design of a turn lane is the responsibility of the NCDOT.
- 2. Left and right turn lanes shall be constructed in accordance with NCDOT standards and specifications.
- 3. Right-turn lanes shall be constructed entirely within the frontage of the property being served, since an adjacent development might subsequently require an entrance that would otherwise encroach into the turn lane.
- **4.** The NCDOT may require a undivided highway to be widened when the median has an inadequate width for a left turn lane.

H. Deceleration Lanes on Major Arterial Streets Required 181

- 1. Any use capable of generating more than 60 trips per peak hour, as estimated by using NCDOT guidelines or the Institute of Traffic Engineers Trip Generation Manual, shall provide at least one deceleration lane per street front in accordance with NCDOT standards when the use is located along a major arterial street.
- Deviations from these requirements may only be authorized when the NCDOT indicates that a particular development design or technique can still achieve a satisfactory level of access control consistent with the objectives of this section.

Coordination and Continuation of Streets 182

1. Internal Street Connectivity

Streets within new developments shall be connected to one another to ensure emergency access and prevent traffic congestion in accordance with the following:

a. Minimum Connectivity Index Score Required

All development shall achieve an internal street connectivity score in accordance with Table <> Minimum Street Connectivity Index:

TABLE <>: MINIMUM STREET CONNECTIVITY SCORE			
ZONING DISTRICT WHERE DEVELOPMENT IS PROPOSED	MINIMUM CONNECTIVITY INDEX SCORE		
WL, RR, HI	<u>1.0</u>		
SR. MC, HC, LI	<u>1.20</u>		
NR, VR, CC	<u>1.40</u>		
VC, MX	<u>1.60</u>		

b. Connectivity Index Score Calculation

- 1. The connectivity index for a development is calculated by dividing its links by its nodes.
- 2. Figure <>, Street Connectivity Index Example, provides an example of how to calculate the connectivity index. Nodes (stars) exist at street intersections and cul-de-sac heads within the development. Links (circles) are stretches of road that connect nodes. Street

¹⁸⁰ This section carries forward the standards in Section 151.085, Turn Lanes Required, in the current ordinance.

¹⁸¹ This section carries forward the standards in Section 151.084, Deceleration Lanes on Major Arterial Streets, in the current ordinance.

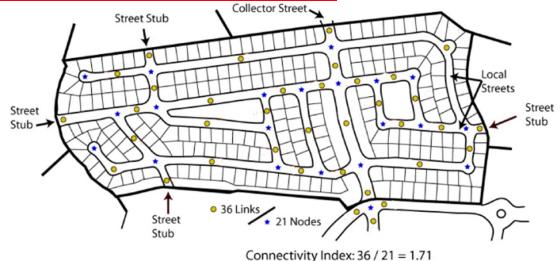
¹⁸² This section carries forward_replaces the standards in section 151.086, Coordination with Surrounding Streets, and Section 151.187, Relationship of Streets to Topography, in the current ordinance with new standards for street connectivity, both inside and outside new development, as well as new minimum ccess requirements to ensure multiple points of entry for emergencies.

6.2 Required Infrastructure170F

6.2.3 Streets174F

stub-outs are considered as links, but temporary dead-end streets internal to a development or alleys are not counted as links. One link beyond every node that exists in the development and provides access to the street system outside the development shall be included in the index calculation. In the diagram, there are 36 links (circles) and 21 nodes (stars); therefore the connectivity index is 1.71 (36/21 = 1.71).

Figure <>: Street Connectivity Index Example



connectivity index. 50 / 21 = 1.7

c. Reduction in Minimum Index Score

The minimum connectivity index score may be reduced if the owner/developer demonstrates it is not possible to achieve due to topographic conditions, natural features, existing road configurations, or adjacent existing development patterns. In these instances, internal street design shall achieve as high a connectivity index score as is reasonably practical.

2. External Street Connectivity

- The arrangement of streets in a development shall provide for the alignment and continuation of existing or proposed streets into adjoining lands in those cases in which the adjoining lands are undeveloped and deemed appropriate for future development or in which the adjoining lands are developed and include opportunities for such connections.
- b. Street rights-of-way shall be extended to or along adjoining property boundaries such that a roadway connection or street stub shall be provided for development where practicable and feasible in each direction (north, south, east, and west) for development which abuts vacant lands. In cases where the property boundary is within a drainage swale, the roadway connection or street stub shall terminate at the edge of the swale, and the developer shall post a performance guarantee with the County to ensure funds are available to complete the street connection.
- c. Arterial and collector streets shall intersect with surrounding collector or arterial streets at safe and convenient locations, as determined by the NCDOT and UDO Administrator.
- d. At all locations where streets terminate with no street connection, but a future connection is planned or accommodated, a sign shall be installed at the location with the words "FUTURE ROAD CONNECTION" to inform property owners.
- The final plat shall identify all stub streets and include a notation that all street stubs are intended for connection with future streets on adjoining undeveloped or underdeveloped lands.
- The street system of a development shall be coordinated with existing, proposed, and anticipated streets
 outside the development or outside the portion of a single tract that is being divided into lots.
- 2.1. Arterial and collector streets shall intersect with surrounding collector or arterial streets at safe and convenient locations, as determined by the NCDOT and UDO Administrator.
- 3. Local streets shall connect with surrounding streets where necessary to permit the convenient movement of traffic or facilitate emergency service vehicle access. Local street connections shall not be permitted where the effect would be to encourage the use of the streets by substantial through traffic.

6.2 Required Infrastructure170F

6.2.3 Streets174F

- Whenever connections to anticipated or proposed surrounding streets are required by this section, the street right-of-way shall be extended and the street developed to the property line of the property being developed, or to the edge of the remaining undeveloped portion of a single tract, at the point where the connection to the anticipated or proposed street is expected.
- The County may require temporary turnarounds to be constructed at the end of the streets pending their extension when the turnarounds appear necessary to facilitate the flow of traffic or accommodate emergency vehicles.
 - 6-f. The use of residential strips of land in order to prevent the extension of proposed or existing streets or access thereto is prohibited.
 - 7. Landlocked parcels shall not be created.
 - 8-g. Where access to a subdivision site is by a street that does not meet State standards, that street shall be improved by the developer in order to meet current State standards.

J. Through Traffic Discouraged

- Through traffic discouraged on local and minor streets.
- Minor streets shall be configured so that their use by through traffic is discouraged.

J. Development Entry Points

Unless exempted in accordance with subsection (4) below, all subdivisions shall provide access from the development to the street system outside the development in accordance with Table <>, Required Subdivision Access:

TABLE <>: REQUIRED SUBDIVISION ACCESS					
TYPE OF DEVELOPMENT	DEVELOPMENT SIZE	MINIMUM NUMBER OF VEHICULAR ACCESS POINTS			
	50 or fewer lots	<u>1</u>			
Residential and Mixed- Use Development	51 to 100 lots	<u>2</u>			
<u>oce poverepment</u>	More than 100 lots	<u>3</u>			
	Less than 5 acres or fewer than 10 lots	<u>1</u>			
Non-residential	5 to 20 acres or 10 to 20 lots	<u>2</u>			
Development	More than 20 acres or more than 20 lots	2 + 1 for every additional 20 acres or lots			

- Nothing in this section shall limit the total number of streets providing access to the street system outside a development, or exempt a development from meeting all applicable external street connectivity standards.
- Street stubs shall be credited as an access point when all ingress or egress to a development is only available from a single major arterial street.
- 4. Development shall be exempted from these standards if it is demonstrated the following conditions apply:
 - a. No other street access points can be located due to existing lot configurations, absence of connecting streets, environmental, or topographic constraints;
 - **b.** NCDOT will not authorize the required number of entrances; or
 - Alternative access can be provided in a manner acceptable to the County that is supported by a transportation impact analysis.

K. Cul-de-Sac Street Design

All dead end streets (excluding temporary dead end streets) shall be designed as cul-de-sacs, in accordance with the following standards:

- 1. No cul-de-sac or dead end street shall exceed 1,000 feet in length nor be less than 100 feet in length, as measured from the closest street intersection centerline.
- 2. Cul-de-sacs shall be designed and constructed to meet state standards and National Fire Protection Association standards.
- 3. The entrance into a cul-de-sac shall be flared by sufficient width to ensure proper turning radius for emergency vehicles upon entering and exiting the cul-de-sac.
- 4. Streets that include roundabouts shall not be considered cul-de-sacs or dead end streets.

L. Private Streets and Roads 183

¹⁸³ This section carries forward the standards in Section 151.091, Private Streets and Roads in Subdivisions, in the current ordinance, except that language pertaining to construction and maintenance has been added.

6.2 Required Infrastructure170F

6.2.6 Sidewalks188F

- 1. Private streets and roads shall be designed, constructed, and maintained in accordance with the standards for public streets.
- Accessways serving lots within a transfer plat or expedited subdivision shall not be considered private streets.
- 3. In no instance shall an accessway serve more than five lots.

M. Vehicular Gates¹⁸⁴

- 1. For the purposes of preserving access to public and private lands by citizens, utility companies, and emergency service providers, vehicular gates, barriers, or other devices intended to obstruct vehicular traffic along a public street right-of-way are prohibited.
- 2. Vehicular gates are allowed on private streets platted after (insert the effective date of this Ordinance), provided the gate is equipped with County-approved devices that allow emergency services to gain access to the street and it meets all requirements set forth in the currently adopted version of the North Carolina Fire Code.

N. Street Names 185

- 1. Street names shall be assigned by the developer, subject to the approval of the Planning Board.
- 2. Proposed streets which are obviously in alignment with existing streets shall be given the same name.
- 3. Street names shall include a suffix such as, circle, court, place, loop, street, road, or other typical suffix.
- 4. In assigning new street names, duplication of existing names shall be avoided and in no case shall the proposed name be phonetically similar to existing names irrespective of the use of a suffix such as street, road, drive, place, court, or similar terms.

O. Street Name Signs 186

- 1. The subdivider shall be required to provide street name signs of a legible and durable construction, and arrange for their maintenance.
- 2. Street name signs shall conform to NCDOT standards.
- **3.** At least two street name signs shall be placed at each four-way street intersection and at least one at each "T" intersection.
- 4. Signs shall be installed free of visual obstruction.

P. Traffic-control Signs and Signals

- I. If deemed necessary by the NCDOT traffic control signs or signals shall be erected and maintained by the developer at each street intersection within the subdivision and at each intersection of a subdivision street and a state-maintained road or access road.
- 2. Signs shall comply with NCDOT regulations with regards to size, shape, color, location and information contained thereon.
- **3.** At least two or more traffic-control signs shall be placed at each four-way street intersection and at least one at each "T" intersection.
- **4.** Signs and signals shall be installed free of visual obstruction.

6.2.4 BRIDGES¹⁸⁷

All bridges shall be constructed in accordance with the standards and specifications of the NCDOT, except that bridges on roads not intended for public dedication may be approved if designed by a professional architect or engineer licensed by the State of North Carolina.

6.2.5 STREET LIGHTS¹⁸⁸

- **A.** Streets and sidewalks shall be illuminated with street lights for security and safety, in accordance with utility company, NCDOT, and County standards.
- **B.** Areas adjacent to the vehicular entrances for non-residential, mixed-use, and multi-family residential developments containing more than four dwelling units shall be adequately lighted to ensure the safety of persons and the security of the buildings.

¹⁸⁴ This is a new section proposed for the County's consideration.

¹⁸⁵ This section carries forward the standards in Section 151.094, Street Names and House Numbers, in the current ordinance.

¹⁸⁶ NOTE TO STAFF: Additional discussion is needed regarding the procurement process for street name and traffic signs. Does the County obtain these, or is a developer free to do this? If the County acquires the sign, how are the costs passed on?

¹⁸⁷ This section carries forward the standards in Section 151.095, Bridges, in the current ordinance.

¹⁸⁸ NOTE TO STAFF: This section consolidates the standards in Sections 151.177, Street Lights, and Section 151.178, Excessive Illumination, in the current code. Additional discussion is required about designating portions of the County (like streets and sidewalks in village centers) as pedestrian areas subject to shorter lighting heights and closer light spacing requirements.

6.2 Required Infrastructure170F

6.2.7 Potable Water Systems189F

- **C.** Exterior lighting located outside of a street right-of-way shall be configured in accordance with the standards in Section <>, Exterior Lighting.
- **D.** Illumination requirements must be met prior to final plat approval or prior to the issuance of an occupancy permit where final plat approval is not required by this Ordinance.

6.2.6 SIDEWALKS¹⁸⁹

Sidewalks shall be configured in accordance with the following standards:

A. Location

1. Both Sides of the Street

Sidewalks shall be required on both sides of the street in the VR, VC, and MX zoning districts, except that sidewalks shall only be required on one side of cul-de-sac streets that are 200 feet in length or shorter.

2. One Side of the Street

- a. Sidewalks shall be required on one side of the street in the SR, NR, and HC districts, except that no sidewalks shall be required when the majority of lots in a subdivision exceed two acres in area and there are no existing sidewalks connections within 500 linear feet of the subdivision.
- **b.** When sidewalks are required on one side of the street, they shall generally be located on the side of the street to best continue existing sidewalk networks, if present.
- Where there is no clear preferable street side for the placement of a sidewalk, the sidewalk shall be placed on the street side where it is least likely to have a negative impact on stormwater management, in the opinion of the UDO Administrator.

3. In Accordance with Existing Conditions

Sidewalks shall be located in accordance with County policy or with existing conditions, as determined by the UDO Administrator, in the MC, LI, HI, and CC districts.

a. When County policy requires sidewalks to be installed, but there is no clear preferable street side for the placement of a sidewalk, the sidewalk shall be placed on the street side where it is least likely to have a negative impact on stormwater management, in the opinion of the UDO Administrator.

4. No Sidewalks Required

No sidewalks shall be required in the following locations:

- a. In the CP, WL, and RR districts:
- **b.** Along alleys and accessways to individual lots not served by a street;
- **c.** Where an existing or proposed all-weather surface trail or pedestrian pathway can provide an equivalent level of pedestrian circulation; and
- **d.** In cases where environmental or topographic conditions make such provision prohibitive and no practicable alternative design is available.

B. Configuration

- 1. Sidewalks shall be at least four feet wide, and may be required to match the width of a connecting sidewalk that exceeds four feet in width.
- 2. Sidewalks shall be constructed of asphalt, concrete, or other hard-surface materials, consistent with an approved site plan, or with the established sidewalk patterns in the general area of the development.
- **3.** Pedestrian street crossings shall be raised above the adjacent street level, be a different material, or be striped as a traffic-calming measure.
- 4. Sidewalks and pedestrian pathways shall connect with existing or planned sidewalks at property boundaries.
- 5. New nonresidential, mixed-use, and multi-family development shall provide at least one on-site improved connection between the development and the adjacent public sidewalk system (planned or existing).
- 6. Whenever curb and gutter construction is used on public streets, wheelchair ramps for the disabled, configured in accordance with NCDOT standards, shall be provided at intersections and other major points of pedestrian flow in accordance with Section 136-44.14 of the North Carolina General Statutes.
- 7. In unsubdivided developments, sidewalk construction for the disabled shall conform to the requirements of the State Building Code.

C. Credit for Trails

Hard-surfaced, ADA-accessible trails within open space set-asides shall be credited towards these sidewalk requirements when trails connect developments or connect open space set-asides to schools, shopping areas, or other recreation areas.

¹⁸⁹ These are new standards for the County's consideration, and incorporate the standards in Section 151.093, Attention to Handicapped in Street and Sidewalk Construction, in the current ordinance.

6.2 Required Infrastructure170F

6.2.7 Potable Water Systems189F

6.2.7 POTABLE WATER SYSTEMS¹⁹⁰

A. Water Supply System Required

- 1. Except where exempted due to distance or different ownership, every lot within a subdivision shall be served by a means of a water supply that is adequate to accommodate the reasonable needs of the use or subdivision lot(s) and that complies with all applicable health regulations.
- The developer shall provide all the necessary pipes and accessories for installation of the required potable water lines.
- **3.** All materials and pipes shall meet or exceed the requirements established under state law and by the County for the potable water system.
- 4. The County may, before issuing any permit under this Ordinance, make the investigation and require the developer to submit the information as appears reasonably necessary to ensure that the developer or his or her successor will be able to comply with the water supply system requirements of this Ordinance.
- 5. Individual lots within a subdivision subject to a still-valid and unexpired preliminary plat approved prior to November 4, 1996, shall not be required to connect to the County potable water system.

B. Connection to Current County Water Supply System Required

- 1. Unless exempted, the subdivider shall construct a water system as part of the subdivision that complies with the standards and specifications of the public water system with jurisdiction where the subdivision is located and then connect it to the public water supply system serving the area in which the subdivision is located. Construction of the water system shall comply with the following:
 - a. Construction plans for the proposed system shall be prepared by a professional engineer;
 - **b.** Materials and construction shall be in accordance with the specifications for the public water system, as specified by the water system's engineer that serves the area where the subdivision is located;
 - **c.** The cost of the construction, connection, and approval of the subdivision water system shall be paid by the subdivider;
 - **d.** All water mains, laterals, meter boxes, and easements shall be dedicated to the public water system;
 - e. Water lines shall be installed within street rights-of-way, where possible; and
 - f. All water systems installed having 15 or more connections shall meet the standards of the State Commission for Health Services, Division of Environmental Management.
- 2. All water system connection fees shall be paid by the developer for each lot required to be connected to the County water system, prior to the submission of final plat approval.

C. Connection to Planned County Water Supply System Required

- 1. If a public water supply system is to be provided to the area proximate to a subdivision within a five-year period, as indicated in the County's long range water extension plan, official map, or other official document, the County may require installation of a capped system or dry lines (mains only), within the road right-of-way; or
- 2. The County may require a payment in lieu of the improvement.

D. Oversizing of Water Supply System-Related Improvements

- The water supply system where the subdivision is being developed may require installation of certain oversized facilities, such as water mains in excess of eight inches in diameter, when it is in the interest of future development.
- 2. When oversizing is required, the public water system operating where the subdivision is located shall pay for that portion of the improvement that exceeds the standards set forth in this Ordinance.

E. Exemption from County Water Supply System Connection due to Distance

Subdivisions of More than Five Lots

A subdivider establishing a subdivision of more than five lots shall be exempted from the requirement to install water lines only in cases when the development falls outside the maximum distance from the existing water supply system. The maximum distance shall be determined in accordance with the following:

a. Residential Development

1. In cases where all lots in a residential subdivisions are located farther than the maximum separation distance from an existing or planned public potable water supply system, the subdivision may be developed without connecting to the public water system.

_

¹⁹⁰ This section consolidates the standards in Section 151.174, Water Supply System Required, Section 151. 171, Major Subdivisions to Install Water Lines, Section 151.172, Sewage Disposal Facilities Required, and Section 151.176, Water/Sewer Districts Required, in the current ordinance. The language in this section has been revised for greater clarity.

6.2 Required Infrastructure170F

6.2.8 Sewage Systems191F

2. The maximum separation distance shall be a distance greater than the distance determined using the following equation: 100 feet for the first 10 units and 20 feet per each additional residential units beyond 10.

Example: All lots within a 40-unit residential subdivision shall be more than 1,600 feet away from a potable water supply line before the subdivision may be exempted from the requirements to connect to the public system. $(10 \times 100) + (30 \times 20) = 1,600$ feet. If any lot in the proposed subdivision is less than 1,600 feet from a potable water supply line, then the developer shall be responsible for installing water supply lines throughout the subdivision in accordance with this section.

b. Nonresidential Development 191

- 1. In cases where the subdivision is proposed for non-residential development, the maximum separation distance shall be determined by transposing the projected daily water demand of the proposed non-residential use into the water demand created by an equivalent number average residential units and then using the distance formula for residential development (in subsection (a) above.
- 2. The projected water demand for an average residential unit is 250 gallons per day.

Example: A proposed non-residential development is projected to use a total of 5,000 gallons of potable water per day, which is equivalent to 20 residential units (5,000/250 = 20). If the lot containing the non-residential use is within 1,300 feet of a centralized public potable water supply line, the developer shall connect to the potable water supply system. If the lot containing the nonresidential use is more than 1,300 feet from the centralized public potable water supply, then no connection to the water public water line is required.

c. Supplemental Calculation Information

- The number of residential units in a development shall be determined by calculating the maximum number of units (or equivalent units) allowable for each proposed lot.
- In determining the number of residential units (or equivalent units) in a development as part of calculating the maximum separation distance, the number of residential units used in the equation shall be the total for the development rather than one or more phases.

2. Subdivisions of Five or Fewer Lots

A subdivider establishing a subdivision of five or fewer lots shall be exempted from the requirement to install water lines to all lots when no portion of the land being subdivided is within 1,000 feet on an existing public water supply system and the applicant provides a written statement signed by an official of each public water supply system in the County that the public water supply system does not plan to provide water service to the land in the subdivision within five years of the date of the application.

F. Exemption from County Water Supply System Connection due to Different Ownership

Connection to an existing County water supply line closer than the maximum separation distance shall not be required if it necessary for the subdivider to extend the water line across land owned by a different landowner, after diligent effort, the easement necessary to run the connecting line cannot reasonably be obtained.

6.2.8 SEWAGE SYSTEMS¹⁹²

A. Sewage System Required

Every lot within a subdivision intended to be developed shall be served by a sewage disposal system that is adequate to accommodate the reasonable needs of the use or subdivision lot and that complies with all applicable Albemarle Regional Health Services regulations.

B. Connection to Public Sewer

1. Residential Subdivisions

Residential subdivisions may connect to existing public sewer lines, but nothing shall require connection to public sewer unless the development cannot be adequately served by an on-site wastewater system, as determined by Albemarle Regional Health Services (ARHS).

2. Nonresidential and Mixed-Use Subdivisions

Camden County
Unified Development Ordinance

¹⁹¹ NOTE TO STAFF: This section has been supplemented with a equivalency figure of water demand of 250 gallons per day.

¹⁹² NOTE TO STAFF: This section consolidates the standards in Sections 151.172, Sewage Disposal Facilities, Required, and Section 151.173, Determining Compliance, from the current ordinance. Nothing in the current provisions requires the set aside af a reserve area for lots using on-site sewage treatment systems. Is this a requirement the County wants to include?

6.2 Required Infrastructure170F

6.2.9 Fire Protection 192F

Nonresidential and mixed-use subdivisions shall connect to and extend public sewer through the development.

C. On-Site Sewage Disposal System

- 1. No preliminary plat for a subdivision proposing to use septic tanks or other ground absorption systems shall be approved until ARHS has certified that each lot shown on the preliminary plat has been inspected and found suitable for a septic tank or other ground absorption system capable of serving at least a three-bedroom house.
- 2. No final plat or other approval for a subdivision proposing to use septic tanks or other ground absorption systems shall be approved until Albemarle Regional Health Services has certified that each lot in the subdivision has been inspected and found suitable for a septic tank or other ground absorption system capable of serving the intended or likely use of the lot. Subdivisions already subject to preliminary plat approval including certification by ARHS shall be exempted from this requirement provided the ultimate use is consistent with the use anticipated during certification at preliminary plat stage.

D. Centralized Sewage Systems

- I. In cases where a proposed subdivision seeks to address sewage through a centralized system, like a "package plant", the centralized system shall be built to designed, constructed, operated, and maintained in accordance with minimum County standards.
- 2. Whenever a private sewer treatment system is utilized to service a development, a sewer district shall be established in accordance with state law encompassing the boundaries of the development.
- 3. The district shall be established prior to the first final plat approval and shall be structured in a manner that will ensure the long term viability of the water and/or sewer treatment system.

E. Additional Standards for Sewage Systems

- 1. No sewage treatment system that discharges into surface waters shall be allowed.
- 2. Sewage systems constructed in a special flood hazard area overlay shall comply with the applicable standards in Section <>, Special Flood Hazard Area Overlay (SFO).

6.2.9 FIRE PROTECTION¹⁹³

A. Fire Hydrants

- 1. Every subdivision that is served by a County-owned water system or a private/public central water system with at least six-inch lines shall include a system of fire hydrants sufficient to provide adequate fire protection for the buildings located or intended to be located within the development.
- 2. Fire hydrants must be located so that not more than 500 linear feet, measured along the centerline of the street right-of-way, separates a property within the development and a fire hydrant. However, the County may require a deviation from the standards in this section if a different configuration is warranted.
- The County, after consultation with local fire officials, shall determine the precise location of all fire hydrants.
- **4.** Fire hydrants shall be placed six feet behind the curb line of publicly dedicated streets that have curb and gutter and must be placed within ten feet of a public or private road or street.
- 5. The permit issuing authority shall, after consultation with local fire officials, determine the design standards of all hydrants based on fire flow needs. Unless otherwise specified, all hydrants shall have two 22-inch hose connections and one 42-inch hose connection. The 22-inch hose connections shall be located at least 212 inches from the ground level. All hydrant threads shall be national standard threads.
- **6.** Water lines that serve hydrants shall be at least six-inch lines and, unless no other practicable alternative is available, no lines shall be dead-end lines and they shall be looped where practical.
- 7. When served by a County-owned or a private/public central water system, all conversions of existing structures to non-residential uses and all new construction projects, excluding single-family and two-family dwellings, that are less than 1,000 feet from an existing fire hydrant shall be required to extend the line and install a new fire hydrant within 500 feet of their parcel.
- **8.** Subdivisions of five lots or less shall be exempt from these requirements, provided all five lots are within one parcel/tract of land. Additional lots subdivided from the one parcel/tract of land shall comply with the fire hydrant requirement.

B. Fire Protection in Developments Not Served by the Public Water Supply System

Every residential development containing 20 or more lots and every non-residential subdivision containing ten or more lots shall provide a supply of water that is sufficient to provide adequate fire fighting capability with respect to every building that is reasonably expected to be constructed within the development, in accordance with the following:

¹⁹³ This section consolidates the standards in Section 151.182, Fire Hydrants, and Section 151.183, Water Supply for Fire Protection in Developments not Served by the Public Water Supply System, in the current ordinance.

6.2 Required Infrastructure170F

6.2.10 Underground Utilities 193F

- 1. The UDO Administrator shall determine the types, sizes, dimensions, and spatial relationships of buildings anticipated within the development by using the best information available, including, without limitation, market experience, the developer's plans, and the range of permissible uses in the district where located.
- 2. The developer may provide the required water supply through ponds, wells, cisterns, above ground storage tanks, water lines, where a community water supply system is installed, or a combination of these, provided they comply with the requirements of this section.
- 3. The water supply facilities may be located on or off the site of the development. However, off-site facilities shall be acceptable only if the developer has a sufficient legal interest in the facilities to ensure that the facilities will be available to serve the development as long as they are needed.
- 4. The water supply facilities shall be of a size and so located that within 2,500 feet of every anticipated building in the development a sufficient volume of water is available at all times of the year to supply the water flow needed to suppress a fire on each building.
- 5. In determining needed water flow for anticipated buildings, the UDO Administrator shall be guided by the standards promulgated by the Insurance Service Office, which standards shall be available in the office of the UDO Administrator. However, the UDO Administrator may modify these standards warranted upon the advice of the Fire Chief of the applicable Volunteer Fire Department to the end that the basic objective of this section set forth above might most reasonably be satisfied.
- **6.** Water supply sources shall be so located so that fire-fighting vehicles will have ready access to the sources at all times. A hard surfaced roadway shall be provided to the water source as well as a hard surfaced, turnaround area of sufficient dimensions to facilitate access by fire-fighting vehicles to and from the water source.
- 7. Water supply sources shall be provided with the necessary equipment and connections (such as, dry hydrants in ponds) to ensure that fire-fighting equipment can draw water from the sources in the most efficient manner reasonably possible.
- **8.** The developer or his or her successor shall be responsible for ensuring that all water supply sources, access roadways and other facilities or equipment required under this section are maintained.

6.2.10 UNDERGROUND UTILITIES¹⁹⁴

- A. All electric power lines, not to include transformers or enclosures containing electrical equipment including, but not limited to switches, meters or capacitors which may be pad mounted, telephone, gas distribution and cable television lines in subdivisions constructed after (*insert the effective date of this Ordinance*) shall be placed underground in accordance with the specifications and policies of the respective utility service providers and located in accordance with applicable NCDOT requirements.
- **B.** No electric power, telephone, cable television or other utility lines may be installed over the waters of the Pasquotank or North Rivers, areas of environmental concern or wetlands and no utility poles may be erected within the waters of the Pasquotank or North Rivers, areas of environmental concern or wetlands without proper permits from the Army Corps of Engineers and/or CAMA.
- **C.** The provisions of this section shall not apply to the underground installation of any lateral service line in excess of 200 feet to serve a single-family residence.

_

¹⁹⁴ This section carries forward the standards in Section 151.179, Underground Utilities, from the current ordinance with no substantive changes.

6.3 Performance Guarantees194F6.3.5 Amount of Guarantee

6.3 PERFORMANCE GUARANTEES 195

6.3.1 PURPOSE AND INTENT

These standards create the additional flexibility necessary for development to be occupied or for lots in a subdivision to be conveyed prior to completion of all required infrastructure or site improvements, provided funds have been reserved for completion of these features. These provisions ensure that funds are available for the County's use to complete required pubic infrastructure or private site features in the event an applicant or developer is unable to do so.

6.3.2 WHEN REQUIRED

A performance guarantee, prepared in accordance with the standards in this section, shall be required in the following circumstances:

- A. To ensure the completion of public infrastructure improvements, including but not limited to: streets, potable water, sanitary sewer, stormwater management facilities within rights-of-way, electricity, and street lights, that are required as part of an approved preliminary plat, site plan, or special use permit, but are not approved as complete before approval of a final plat or certificate of occupancy, as appropriate; and
- **B.** To ensure completion of required private site improvements including, but not limited to: off-street parking, screening, landscaping, tree protection, fencing, or stormwater management facilities on individual lots, that are required as part of a preliminary plat, site plan, or special use permit, but are not installed before approval of a certificate of occupancy.

6.3.3 MAXIMUM TERM OF GUARANTEE

The maximum term of the performance guarantee shall reflect any time limit for completing installation of required improvements that is included in the preliminary or final plat, site plan, or special use permit, as appropriate. In no instance shall the term of a performance guarantee exceed two years. The Board of Commissioners, for good cause shown, may grant up to one extension for a time period not exceeding one year.

6.3.4 FORM OF GUARANTEE

A. The applicant shall propose the form(s) of the performance guarantee, which shall be provided in one or more of the following forms:

1. Cash or Irrevocable (Evergreen) Letter of Credit

- **a.** The developer shall deposit cash, or other instrument readily convertible into cash at face value, such as an irrevocable (or "evergreen") letter of credit, either with the County or in escrow with a North Carolina financial institution.
- **b.** If cash or other instrument is deposited in escrow with a financial institution, an agreement between the financial institution and the developer shall be filed with the County guaranteeing the following:
 - That the escrow account shall be held in trust until released by the County and may not be used or pledged by the developer for any other matter during the term of the escrow; and
 - 2. That in case of a failure on the part of the developer to complete or repair the improvements, the financial institution shall, upon notification by the County, immediately pay the funds deemed necessary by the County to complete or repair the improvements up to the full balance of the escrow account, or deliver to the County any other instruments fully endorsed or otherwise made payable in full to the County.
- **c.** The financial institution holding the cash or other instrument shall indicate to the County its notification requirements for release or payment of funds.

2. Surety Bond

- **a.** The developer shall obtain a surety bond from a surety bonding company authorized to issue surety bonds in North Carolina.
- **b.** The bond shall be payable to the County and shall be in an amount as required by this subsection.

¹⁹⁵ These standards are proposed to replace the standards for improvement guarantees in Sections 151.242, Protection Against Defects through Section 151.245, Acceptable Bond Terms and Methods, in the current ordinance. The standards have been revised to reflect several statutory changes, including the ability for the applicant to specify the form of performance guarantee they prefer and removal of the ability of the County to require sureties for the warranty of streets (though warranty bonds may still be required for stormwater management facilities and replacement trees).

6.3 Performance Guarantees 194F

6.3.9 As-Built Plans Required

- **B.** The performance guarantee shall distinguish between the portion of the guarantee provided for public infrastructure improvements as well as the portion of the guarantee provided for private site improvements, if applicable.
- **C.** The performance guarantee shall be conditioned on the performance of all work necessary to complete the installation of the required improvements within the term of the guarantee.

6.3.5 AMOUNT OF GUARANTEE

A. Generally

Performance guarantees shall be in an amount equal to 125 percent of the estimated cost of completing the installation of the required improvements, including the costs of materials, labor, and project management.

B. Estimated Costs

- 1. Estimated costs of completing installation of required public improvements shall be itemized by improvement type and certified by the developer's licensed professional engineer, and is subject to approval by the UDO Administrator.
- 2. Estimated costs for completing private site improvements shall be itemized and certified by the developer's contractor, and is subject to approval by the UDO Administrator.

C. Renewal

If a performance guarantee is renewed, the UDO Administrator may require the amount of the performance guarantee be updated to reflect changes in cost over time.

6.3.6 RELEASE OR REDUCTION OF GUARANTEE 196

A. Release Requested

The UDO Administrator shall release or reduce a performance guarantee only after:

- 1. The owner or developer has submitted to the County a written request for a release or reduction of the performance guarantee that includes certification by the owner's or developer's engineer or contractor, whichever is appropriate, that installation of the guaranteed improvements has been completed in accordance with approved plans and specifications, and as-builts (if applicable);
- 2. County staff has performed an inspection of the improvements and certified in writing that installation of the guaranteed improvements is completed in accordance with approved plans and specifications; and
- 3. No release or reduction in performance guarantee amounts will be considered until more than 25 percent of the work is in place and approved.

B. Acceptance Shall be Documented

The UDO Administrator shall provide written notice of the County's final acceptance of the improvements subject to performance guarantees.

6.3.7 IMPROPER RELEASE OF FINANCIAL GUARANTEES

If the County releases a performance guarantee through error, the error shall not release the developer from responsibility for the completion of all improvements in accordance with this Ordinance.

6.3.8 FORFEITURE OF GUARANTEE¹⁹⁷

A. Notice of Failure to Install or Complete Improvements

If the owner or developer fails to complete installation of the guaranteed improvements within the term of the performance guarantee (as may be extended), the UDO Administrator shall give the owner or developer 30 day's written notice of the scope and degree of the default, by certified mail.

B. County Completion of Improvements

After the 30-day notice period expires, the County may draw on the guarantee and use the funds to perform the work necessary to complete installation of the guaranteed improvements. After completing such work, the County shall provide a complete accounting of the expenditures to the owner or developer. In the event of a default triggering the use of the performance guarantee, the County shall return any of the unused deposited cash funds or other security.

6.3.9 AS-BUILT PLANS REQUIRED

Camden County
Unified Development Ordinance

¹⁹⁶ This is a new section providing greater clarity about how release of performance guarantees takes place.

¹⁹⁷ This is a new section that describes the process followed when the County must access a performance guarantee.

6.3 Performance Guarantees 194F

6.3.10 Maintenance Warranties197F

A. Public Improvements

Upon completion of a public infrastructure project, the developer shall certify to the UDO Administrator that the completed project has been constructed in accordance with the approved plans and shall submit actual "as built" plans for all public improvements after final construction is completed.

B. Stormwater Management Facilities

Upon completion of a private stormwater management facility, the developer shall certify to the UDO Administrator that the completed project is in accordance with the approved plans and shall submit actual "as built" plans after final construction is completed. The plans shall show the final design specifications for all improvements and the field location, size, depth, and related measures, controls and devices, as installed. The designer shall certify, under seal, that the as-built design, measures, controls, and devices are in compliance with the approved plans and with the requirements of this Ordinance.

C. Inspection Required

A final inspection and approval by the UDO Administrator shall occur before the release of the financial guarantee.

6.3.10 MAINTENANCE WARRANTIES¹⁹⁸

A. When Required

- 1. A maintenance warranty, prepared in accordance with the standards in this section, is required to ensure against defects in workmanship or materials in providing stormwater management facilities required as part of an approved preliminary plat, site plan, or special use permit, as appropriate.
- 2. A maintenance warranty may also be required by the County to ensure that any replacement trees required by this Ordinance survive for a period of up to three years following planting.

B. Term of Maintenance Warranty

- 1. The term of a maintenance warranty for a stormwater management facility shall be 18 months from the date of completion.
- 2. The term for a maintenance warranty for replacement trees shall be set by the UDO Administrator at the time the requirement for the provision of replacement trees is applied. In no instance shall the term exceed a maximum of three years form the date a replacement tree is planted, but nothing shall limit the County from applying successive maintenance warranty periods to any subsequent plantings necessary following death of a replacement tree within three years of its planting.

C. Form of Maintenance Warranty

The applicant shall propose the form(s) of the maintenance warranty, which shall be provided in one or more of the forms in Section <>, Form of Guarantee.

D. Function of Maintenance Warranty

The maintenance warranty shall:

- 1. Be conditioned on the performance of all work necessary to cure defects in materials and workmanship and maintain the required stormwater management facilities or replacement trees during the term of the maintenance warranty.
- 2. Provide that in case of the owner's or developer's failure to maintain and repair or replace the stormwater management facilities or replacement trees, the County shall be able to obtain the funds necessary to make necessary repairs or replacements in accordance with the warranty provisions for timeframe and forfeiture.

E. Amount of Maintenance Warranty

- 1. Maintenance warranty for stormwater management facilities shall be in an amount up to 30 percent of the full actual cost, including the costs of materials and labor, of installing the required stormwater management facilities.
- 2. Maintenance warranty for replacement trees shall be in an amount up to 100 percent of the full actual cost, including the costs of materials and labor, of installing the required replacement trees.

F. Release of Maintenance Warranty

The UDO Administrator shall release a maintenance warranty at the end of the term only after an inspection is conducted of the stormwater management facilities or replacement trees, and it is certified in writing that the guaranteed stormwater management facilities or replacement trees have been maintained in accordance with approved plans and specifications.

_

¹⁹⁸ This section replaces Section 151.242, Protection Against Defects, from the current ordinance, but the standards have been revised to clarify that maintenance warranties may only be applied to stormwater management facilities and replacement trees. Warranty requirements may no longer be applied to roads/ It is possible to apply maintenance requirement to public water and public sanitary sewer infrastructure in cases when these aspects are provided as enterprises, but zoning and subdivision regulations re no longer authorized to require warranties for these features.

6.3 Performance Guarantees 194F

6.3.10 Maintenance Warranties197F

G. Default and Forfeiture of Maintenance Warranty

1. Notice of Failure to Maintain Improvements

If the owner or developer fails to maintain the stormwater management facilities or allows the replacement trees to die during the term of the maintenance warranty, the UDO Administrator shall give the owner or developer 30 days written notice of the scope and degree of the default by certified mail.

2. County Correction of Defects

After the 30-day notice period expires, the County shall present a plan to cure any defects within 30 days, and following such presentation, draw on the security and use the funds to perform work necessary to ensure the guaranteed stormwater management facilities or replacement trees comply with approved plans and specifications. After completing the work, the County shall provide a complete accounting of the expenditures to the owner or developer and, as applicable, refund all unused funds, without interest.

6.4 Homeowners' or Property Owners' Association198F6.4.6 Documentation Requirements

6.4 HOMEOWNERS' OR PROPERTY OWNERS' ASSOCIATION 199

6.4.1 PURPOSE

The purpose of this section is to set out the requirements for establishment of a homeowners' or property owners' association (hereinafter "association") that shall be responsible for the long-term maintenance of common areas, common features, and private infrastructure in a subdivision. This section also sets out the requirements associated with transfer of subdivision control and maintenance responsibility from the subdivider to the association.

6.4.2 APPLICABILITY

The standards in this section shall apply to subdivisions with open space set-aside(s), lands held under common ownership, or shared responsibility for common infrastructure including, but not limited to: streets or stormwater management facilities.

6.4.3 CREATION REQUIRED

- A. A homeowners' or property owners' association shall be established in areas that have private common open space or shared private infrastructure. Associations are required to accept ownership and maintenance responsibility of all open space set-aside(s), shared infrastructure, or common areas within a development.
- **B.** Associations are also required in order to fulfill the requirements of Chapter 47C (the "Condominium Act") of the North Carolina General Statutes, or the requirements of Chapter 47F (the "Planned Community Act") of the North Carolina General Statutes.
- C. The association shall be in legal existence prior to the conveyance, lease-option, or other long-term transfer of control of any unit or lot in the development, though maintenance responsibility shall only transfer from the developer to the association in accordance with Section <>, Transfer of Maintenance Responsibility.

6.4.4 RESPONSIBILITIES OF ASSOCATION

Upon transfer of maintenance responsibility, the association shall be responsible for:

- A. Liability insurance and payment of premiums for liability insurance and local taxes;
- **B.** Maintenance of all common elements including, but not limited to, stormwater management facilities, private utilities, private streets and drives, private sidewalks and trails, private streetlights, and private common recreation facilities shown on the preliminary and final plats:
- C. Maintenance of public streets until such time as NCDOT agrees to accept the responsibility for street maintenance;
- D. Maintenance of an escrow account intended for the maintenance and repair of community facilities; and
- **E.** Payment of assessments for public and private improvements made to or for the benefit of the common elements.

6.4.5 PROCEDURE FOR ASSOCIATION ESTABLISHMENT

- A. Documents for the creation of the association shall be submitted to the County for review and approval prior to approval of the final plat (see Section <>, Final Plat). Documentation shall include, but not be limited to the information in Section <>, Documentation Requirements.
- B. The association shall be established by the subdivider prior to the sale of the first lot in the subdivision.
- C. The association documents shall establish that the subdivider shall maintain the common area, common facilities, and infrastructure until 75 percent of the lots are sold, unless 75 percent of the lots is insufficient to meet the NCDOT's minimum threshold for the number of homes served by a street, in which case; and
- **D.** Responsibility for maintaining the subdivision's common areas, common facilities, and private infrastructure shall be transferred in accordance with the standards in Section <>, Transfer of Maintenance Responsibility.

6.4.6 DOCUMENTATION REQUIREMENTS

- **A.** The association documents submitted to the County for review and approval shall include, but not be limited to, the following:
 - **1.** A declaration of all restrictive covenants;
 - 2. A declaration of all deed restrictions;
 - 3. A declaration that the association is responsible for liability insurance and all applicable taxes;

¹⁹⁹ This is a new section proposed to replace the standards in Section 151.198, Homeowners Associations, in the current ordinance with the revisions described on Pages 48 and 49 in the Evaluation Report. Specifically, these new standards enhance the formation documentation requirements, require establishment of a reserve fund for operating funds, and provide greater clarity about the timing of transfer of maintenance responsibility from the developer to the HOA. In particular, these standards delay transfer of responsibility of roadway maintenance responsibility until the street(s) meet NCDOT's threshold standards for the minimum number of dwelling units.

6.4 Homeowners' or Property Owners' Association198F

6.4.9 Failure to Maintain is a Violation

- 4. A declaration of common ownership and maintenance responsibilities of all on-site improvements not dedicated to a local or state agency, including but not limited to streets, drainage systems, wastewater systems, open space set-aside areas, recreational facilities, and private infrastructure;
- **5.** A description of the structural organization and operating procedures of the association;
- **6.** Association by-laws;
- 7. A legal description of all open space set-asides and other lands owned in common;
- **8.** Provisions establishing the legal authority of the association to maintain control over all common areas, common features, and private infrastructure in the subdivision, following transfer of control by the subdivider:
- **9.** Provisions authorizing the association to compel contributions from owners in the development to cover their proportionate share of maintenance costs associated with common areas, common features, and private infrastructure:
- **10.** Provisions authorizing the association to increase the amount of mandatory fees or assessments, when necessary, for the continued maintenance of common areas, common features, or private infrastructure;
- 11. Provisions authorizing the association to convert any member's unpaid assessments into a lien on the real property; and
- **12.** Evidence related to the establishment of a reserve fund to support the continued maintenance and upkeep of common areas, common features, and private infrastructure.
- **B.** Following approval of the required documentation by the County, the subdivider shall record all required documentation with the Camden County Register of Deeds.

6.4.7 MEMBERSHIP REQUIREMENTS

- **A.** Following establishment of the association by the subdivider, membership in the association shall be automatic and mandatory for all purchasers of land within the subdivision and their successors in title.
- **B.** All members of an association shall be responsible for contributions to the association's reserve fund to cover their proportionate share of maintenance costs associated with common areas, common features, and private infrastructure.

6.4.8 TRANSFER OF MAINTENANCE RESPONSIBILITY 200

- A. The subdivider shall be responsible for maintenance of all common areas, common features, and private infrastructure until maintenance responsibility is transferred to the association in accordance with the standards in this subsection.
- **B.** Maintenance responsibility shall not be transferred from the subdivider to the association until all of the following occur:
 - 1. At least 75 percent of the total number of lots in the subdivision are sold; and
 - 2. The subdivider commissions a report prepared by a professional engineer licensed in North Carolina indicating that all common areas, common features, and infrastructure elements comply with the minimum standards in this Ordinance and the County Code of Ordinances. The report shall also include verification of the reserve fund balance in accordance with the standards in this section; and
 - 3. County staff reviews and approves the report prepared by the professional engineer; and
 - 4. A reserve fund dedicated to the continued maintenance and upkeep of common areas, common features, and private infrastructure is established with a banking institution acceptable to the County in the name of the association that contains a minimum balance that includes the following:
 - **a.** Ten percent of the road construction costs for streets not maintained by NCDOT at the time of transfer (gravel base and asphalt only);
 - **b.** Except for sidewalks and street trees, ten percent of the construction costs of common features and private infrastructure;
 - c. Liability insurance and taxes for two years; and
 - **d.** Facilities, stormwater, and landscaping maintenance costs for two years.
 - 5. In the event the association has not collected sufficient assessment funds from the lot owners in the subdivision to meet the minimum balance requirements of the reserve fund, the subdivider shall be responsible for the difference needed to meet the minimum balance requirements.
- C. The subdivider shall retain maintenance responsibility of all streets intended for dedication to NCDOT until either 75 percent of the lots are sold, or until the street has the minimum number of homes required to meet NCDOT requirements for acceptance.

-

²⁰⁰ NOTE TO STAFF: This is a new set of provisions for the County's consideration. The standards specify the timing of transfer from a developer to an HOA and require establishment of a reserve fund for maintenance expenditures prior to transfer. The standards also specify a minimum fund balance for the reserve fund. These figures are open to further revision, as appropriate.

6.4 Homeowners' or Property Owners' Association198F

6.4.9 Failure to Maintain is a Violation

D. Applications to cede maintenance responsibility to the association for common areas, common features, or private infrastructure prior to conveyance of 75 percent of the lots in the subdivision may be reviewed by the Board of Commissioners. The Board of Commissioners, at the request of the subdivider, shall waive the timing and reserve fund requirements upon a finding that the association has sufficient financial capacity to assume maintenance responsibility for common areas, common facilities, and private infrastructure.

6.4.9 FAILURE TO MAINTAIN IS A VIOLATION

Failure to maintain common areas, common features, or infrastructure is a violation of this Ordinance and is subject to the penalties and remedies in Article 151.9: Enforcement.

6.5 Conservation Subdivision200F

6.5.3 Procedure

6.5 CONSERVATION SUBDIVISION 201

6.5.1 PURPOSE AND INTENT

The purpose and intent of this section is to provide landowners in the rural and suburban portions of the County a development option that provides additional development flexibility to build on smaller lots when additional open space set-asides are provided, and the development is designed and located in a way that protects rural character, agricultural activities, or natural and historic features on the site. This is done in order to:

- A. Conserve open land, including those areas containing productive agricultural soils, unique and sensitive natural features such as floodplains, wetlands, river and stream corridors, areas with mature hardwood trees, and watersheds:
- **B.** Promote existing rural character particularly in areas visible from major roadways in the County;
- **C.** Retain and protect existing environmental, natural, and cultural resources;
- D. Create a linked network of open lands; and
- **E.** Provide reasonable economic use of the land.

6.5.2 APPLICABILITY²⁰²

A. Type of Development

This conservation subdivision option shall be limited to development of single-family detached residential dwellings on individual lots in subdivisions of more than five lots. The conservation subdivision option shall not be available for any other form of development or use type.

B. Where Required

Single-family detached residential subdivisions of more than five lots in the WL and RR districts shall be configured as conservation subdivisions, in accordance with the standards in this section.

C. Where Allowed

Single-family detached residential subdivisions of more than five lots in the SR and PD districts may be developed as a conservation subdivision, in accordance with the standards in this section.

D. Where Prohibited

The conservation subdivision option is not available for use in the NR, VR, or MX districts.

6.5.3 PROCEDURE

Development utilizing the conservation subdivision option shall be approved as a preliminary plat in accordance with the procedures and standards in Section <>, Preliminary Plat, after approval of a conservation and development plan in accordance with this section.

A. Conservation and Development Plan

Prior to review of an application for preliminary plat for a conservation subdivision, an applicant shall have a conservation and development plan for the land reviewed and approved, or approved with conditions by the UDO Administrator in accordance with this section and the standards of Section <>, Conservation Subdivision Standards, and Section <>, Delineation of Conservation Areas and Development Areas.

B. Conservation and Development Plan Requirements

1. Step 1—Site Analysis Map

The applicant shall prepare a site analysis map that provides information about existing site conditions and context, and that analyzes existing conditions both on the land proposed for the development site and on land within 500 feet of the site, and submit the site analysis map to the UDO Administrator. It is the intent of this section that the information required to be presented in the site analysis map be produced primarily from existing sources, maps, in order to ensure the process is economical for the applicant.

2. Step 2—Site Inspection

²⁰¹ This section is proposed to replace the provisions in Section 151.290 through Section 151.297 of the current ordinance pertaining to common open space subdivisions. Page 57 of the Evaluation Report describes several of the recommended revisions, including a different name – "conservation subdivisions," new mandates for configuration of residential subdivisions of more than 5 lots to be configured as conservation subdivisions in the WL and RR districts, reductions in individual lot size (for the sake of conservation and creating more open space), and requirements to set aside at least 50 percent of the subdivision land area as passive open space (with the allowance for farming to take place in the set-aside).

²⁰² This is a new section that specifies where a conservation subdivision can or cannot be located. The current ordinance does not have mandatory or prohibited locations. The mandatory locations are included to ensure rural areas stay rural and the prohibited areas are included to ensure that more urban areas remain urban in character.

6.5 Conservation Subdivision200F

6.5.4 Conservation Subdivision Standards202F

After receipt of the site analysis map, the UDO Administrator shall schedule a site inspection of the land with the applicant. The applicant or the applicant's representative shall attend the site inspection with a County staff member. The purpose of this site visit is to:

- a. Familiarize the staff with the existing site conditions and natural and historic features of the site;
- **b.** Identify potential site development issues, including the best location for the development to ensure its visibility from surrounding areas and major roadways is minimized; and
- c. Provide an opportunity to discuss site development concepts, including the general layout of conservation areas and potential locations for proposed structures, utilities, streets, and other development features. Comments made by the staff during the site inspection shall be interpreted as being only suggestive. No official decision on the conservation and development plan shall be made during the site inspection.

3. Step 3—Conservation and Development Areas Map

Based on the site analysis map and the information obtained during the site inspection, the applicant shall prepare a conservation and development areas map that depicts proposed primary conservation areas, secondary conservation areas, and development areas, in accordance with Section <>, Delineation of Conservation Areas and Development Areas.

4. Step 4—Conservation and Development Plan

Based on the site analysis map, the information obtained during the site inspection, and the conservation and development areas map, the applicant shall prepare and submit to the UDO Administrator a conservation and development plan. The conservation and development plan shall include the following:

- A site analysis map;
- **b.** A conservation and development areas map; and
- **c.** A preliminary site improvements plan, showing proposed site development, including utilities, streets, other development features, buffers (if applicable), and lot lines located in the proposed development area(s).

C. Review of Conservation and Development Plan

The UDO Administrator shall review the conservation and development plan in accordance with the procedures and requirements of Section <>, Conservation Subdivision Standards, and Section <>, Delineation of Conservation Areas and Development Areas.

D. Review and Approval of Conservation Subdivision

Following review and approval or approval with conditions of the conservation and development plan by the UDO Administrator for a preliminary plat of the conservation subdivision shall be submitted and reviewed in accordance with Section <>, Preliminary Plat.

6.5.4 CONSERVATION SUBDIVISION STANDARDS²⁰³

A conservation subdivision shall comply with the following standards:

A. Location

Conservation subdivisions shall be configured to minimize their visibility from adjacent lands and major roadways.

B. Minimum Project Size

Conservations subdivisions shall be at least 10 acres in area.

C. Required Conservation Area

- 1. The required conservation area shall occupy at least 50 percent of the total acreage of the conservation subdivision site, but nothing shall limit it from occupying more than 50 percent of a conservation subdivision site.
- 2. The conservation area shall be considered open space set-aside subject to the applicable standards in Section <>, Open Space Set-Aside.

D. Maximum Residential Density

²⁰³ This section replaces the standards in Section 151.291, Applicability and Lot Sizes, in the current ordinance with the standards for the zoning districts where the developments are proposed. The density bonus provisions in Section 151.293, Density Bonus and Incentives for Developing a Common Open Space Subdivision, in the current ordinance Is not carried forward because the maximum allowable densities are already increased for conservation subdivisions in the zoning district material in Article 151.3: Zoning Districts. Several of the requirements in Section 151.294, Ownership and Minimum Percentage of Open Space, in the current ordinance are not carried forward. For example, the current standards exclude CAMA and 404 wetlands from the open space set-aside. This is not carried forward since recent state changes allow these areas to be included in calculating development yield. The active recreation requirements in the current ordinance are not carried forward because the open space set-aside standards in Article 151.7: Environmental Provisions, do not credit active recreations towards open space requirements in the WL, RR, and SR districts.

6.5 Conservation Subdivision200F

6.5.5 Delineation of Conservation and Development Areas203F

A conservation subdivision shall be limited to the maximum density for a conservation subdivision in the zoning district in which it is located. Nothing shall prevent a conservation subdivision from increasing the maximum allowable residential density in accordance with Section <>>, Sustainable Development Incentives.

E. Dimensional Requirements

Conservation subdivision lots in the WL, RR, and SR zoning districts shall comply with the dimensional standards for the zoning district where located. Conservation subdivisions in a PD district shall comply with the dimensional requirements specified in the PD Master Plan.

F. Setbacks

- 1. Conservation subdivision lots in the WL, RR, and SR zoning districts shall comply with the setback requirements for the zoning district where located.
- 2. Conservation subdivision lots in the PD district shall comply with the setback requirements specified in the PD Master Plan.
- **3.** Lots in a conservation subdivision shall comply with required setbacks from streets, wetlands/surface waters, or other protected natural areas.

G. Maximum Lot Coverage

- 1. Conservation subdivision lots in the WL, RR, and SR zoning districts shall comply with the maximum lot coverage requirements for the zoning district where located.
- 2. Conservation subdivision lots in the PD district shall comply with the maximum lot coverage requirements specified in the PD Master Plan.

H. On-Site Wastewater

With approval from the ARHS, individual septic systems and drain lines may be located within the conservation area, provided:

- 1. Easements shall be recorded showing the location of systems within conservation area;
- 2. Restrictive covenants shall provide for access, maintenance, and upkeep of systems located in the conservation area; and
- 3. All septic systems shall be operated in compliance with state and local regulations.

6.5.5 DELINEATION OF CONSERVATION AND DEVELOPMENT AREAS²⁰⁴

The conservation area and development area on the conservation and development areas map shall comply with the following standards:

A. Primary Conservation Areas

1. Features to be Preserved

The following features shall be located and delineated on the conservation and development areas map, and shall be preserved in the following priority order as primary conservation areas:

- **a.** Areas with existing mature trees around the perimeter of the site;
- **b.** CAMA wetlands:
- c. U.S. Army Corps of Engineers designated 404 wetlands;
- **d.** Riparian buffers and other lands within 50 feet of estuarine or other surface waters;
- e. Areas with impermeable soils; and
- f. Habitat utilized by endangered or threatened species or designated Natural Heritage Areas.

2. Amount to be Preserved

All areas occupied by features comprising a primary conservation area shall be set aside and reserved for conservation purposes in accordance with the following standards:

a. Primary Conservation Area is Less than Minimum Required

In cases where the geographic area occupied by all features comprising the primary conservation area is less than the minimum required conservation area, then all lands comprising the primary conservation area shall be set aside.

b. Primary Conservation Area Exceeds the Minimum Required

1. In the event the geographic area of all features identified and prioritized as the primary conservation area results in a primary conservation area exceeding the conservation area requirement, priority for retention shall be given to the highest quality portion of the features to be conserved. (For example, conservation of the first type of prioritized features constitute 47 percent of a site, and the next prioritized feature consists of five percent and the minimum required conservation area is 50 percent of the site area, the

_

²⁰⁴ This section replaces the provisions in Section 151.295, Location of Open Space, and Section 151.297, Site Planning Procedures, with a basic system for identifying primary and secondary conservation areas as well as building areas. This process takes place prior to review of the conservation subdivision through the preliminary plat process.

6.5 Conservation Subdivision200F

6.5.5 Delineation of Conservation and Development Areas203F

applicant may identify which portions of the features exceeding the 50 percent conservation area requirement will be designated for conversion to development area).

2. Development on lands made available for conversion to development area shall be in accordance with the standards in this Ordinance.

3. Allowable Uses

Uses located within a primary conservation area shall be limited to:

- a. Unpaved pedestrian trails, walkways, and boardwalks;
- **b.** Above ground and below ground public utilities and associated easements, provided no feasible alternative exists:
- Street or driveway crossings, provided such crossings do not violate this Ordinance, or other state or federal laws;
- **d.** Stormwater management systems, where no practicable alternative exist; and
- e. Docks and other water-dependent features, as allowed in this Ordinance.

B. Secondary Conservation Areas

1. Features to be Preserved

In addition to primary conservation areas, the conservation and development areas map shall also identify secondary conservation areas, which shall be preserved in the following priority order:

- **a.** Historic, archeological, and cultural resources;
- **b.** Prime agricultural lands, including existing pastures (whether in use or otherwise);
- **c.** Existing and mature woodland forests, natural fields, and meadows (especially those greater than five acres);
- **d.** Scenic corridors and views; and
- e. Areas that could serve to extend existing greenways, trails, parks, or recreation areas.

2. Amount to be Preserved

All areas occupied by features comprising a secondary conservation area shall be set aside and reserved as a part of the conservation area in accordance with the following standards:

a. Primary Conservation Area Occupies More than that Required

In the event that the geographic area set aside as the primary conservation area is more of the required conservation area, no additional lands occupied by secondary conservation features shall be required to be included in the conservation area.

b. Primary Conservation Area Occupies Less than that Required

In the event the geographic area set aside as the primary conservation area is less than the required conservation area, then lands containing secondary conservation features shall also be set aside as part of the conservation area in priority order.

3. Allowable Uses

Uses located within a secondary conservation area shall be limited to:

- **a.** All uses allowed in a primary conservation area;
- **b.** Uses allowed in the Agricultural Use classification in Table <>, Principal Use Table;
- **c.** Individual or community water supply and septic systems;
- **d.** Stormwater management facilities;
- **e.** Required drainage or other utility easements;
- f. Mitigation of development activities, including restoration of disturbed or degraded areas to enhance habitat and scenic value.

C. Ownership of Conservation Areas

1. Landowner or Association

A conservation area shall be owned jointly or in common by the owners of the development or through a recognized homeowners or property owners association, which shall be established in accordance with Section <>, Homeowners' or Property Owners' Association.

2. Nonprofit Organization

The landowners may decide to convey a conservation area to a nonprofit organization such as a land trust or land conservancy for management and maintenance if the County is provided adequate assurance the area will be properly managed and maintained.

3. Dedicated to County or Other Public Agency

In some cases, certain lands designated as conservation areas, such as greenways, may be dedicated to the County, a nonprofit organization, or other public agency during the development review process, at the landowner's discretion. If offered by the landowner, the Board of Commissioners shall determine whether that land is appropriate for dedication to the County or other public agency.

D. Development Areas

6.5 Conservation Subdivision200F

6.5.6 Evaluation Criteria for Conservation Subdivision Layout204F

After identifying the primary and secondary conservation areas, the development area shall be identified. It is the area within which development may occur, and shall include the area within the site where:

- 1. Any clearing or grading activities will take place;
- 2. Ingress and egress will be located;
- 3. Individual or community wells and septic systems may be located (if not located within the secondary conservation area);
- 4. Streets, utilities, and other similar structures will be located; and
- 5. All allowable uses may be located.

6.5.6 EVALUATION CRITERIA FOR CONSERVATION SUBDIVISION LAYOUT 205

Conservation subdivisions shall be configured to:

- **A.** Protect and preserve all floodways and wetlands;
- **B.** Preserve and maintain mature woodlands, existing fields, pastures, meadows and orchards and creates sufficient buffer areas to minimize conflicts between residential and agricultural uses;
- **C.** Locate development outside of prime agricultural soils, to the maximum extent practicable;
- **D.** Ensure the appearance of development is minimized, to the maximum possible extent;
- E. Design around existing hedgerows and tree lines between fields or meadows;
- F. Leave scenic views and vistas unblocked or uninterrupted, particularly as seen from public roadways;
- G. Avoid siting new construction on prominent rises or highly visible areas by taking advantage of lower topographic features;
- H. Protect wildlife habitat areas of species listed as endangered, threatened or of special concern by NCDEQ;
- I. Preserve sites of historic, archaeological, or cultural value (including spring houses, barn foundations, cellar holes, earthworks, burial grounds and similar features);
- J. Include a pedestrian circulation system designed to assure that pedestrians can walk safely and easily on the site, between properties and activities or special features within the neighborhood open space system; and
- K. Consolidate open space into areas that are contiguous, to the maximum extent practicable.

_

²⁰⁵ This section carries forward the standards in Section 151.296, Evaluation Criteria, from the current ordinance.