ARTICLE 7 DESIGN STANDARDS

7.1 GENERAL

The regulations set forth in this Article apply to the design standards and contents required for subdivisions, master development plans, ~~preliminary plats, final plats,~~ and major and minor site plans.~~, and minor site plans.~~

LOT DESIGN

7.2.1 Requirements

A. All lots not designated as open space, recreation, street or other reserved area shall meet all area, usable area, size, dimensional, yard and density requirements contained in Article 4, Zoning Districts and Zoning Map.

B. All new lots not designated as open space, recreation, street or other reserved area that front on a public or private street shall meet minimum lot width requirements.

C. ~~No more than three lots may be created that are provided access by a single access easement.~~ All lots or parcels shall meet the minimum access requirements established in this Ordinance.

D. Access easements may not be included to meet any minimum lot area or dimension requirements for a lot or right of way.

7.2.2 Access to Adjacent Properties

Lots shall be arranged to allow for the opening of future streets and logical further subdivision of adjacent properties.

7.2.3 Double Frontage Lots

Lots that have double frontage on streets shall be prohibited except where it is ~~it provides~~ demonstrated that the separation of lots is necessary from a right of way which is restricted for individual driveway access as detailed in Section 7.2.7.A ~~residential development from traffic arteries.~~ A buffer of at least 10 feet in width with no right of access abutting such ~~traffic arteries~~ identified roadways shall be provided on these double frontage lots.

7.2.4 Lot Line Configuration

Sidelines of lots shall be at or near right angles or radial to street lines, unless physical features of the property indicate otherwise.

7.2.5 Lot Lines & Drainage

Lot boundaries shall coincide with natural, existing and new drainage ways to the extent practical to avoid lots that require alteration of drainage ways in order to be built upon.

7.2.6 Lots on Thoroughfares

~~Major or minor~~ Subdivisions shall not be approved that provide for individual ~~residential~~ lots to access Principal ~~Arterial~~ or Minor Arterial ~~or Major Collector~~ roads or streets as shown on the Pender County Collector Street Plan, Pender County Comprehensive Transportation Plan or other approved State Transportation Improvement Plan as amended.

7.2.7 Lots on Collector Streets

~~Major~~ Subdivisions shall not be approved that provide for individual ~~residential~~ lots to access Major or Minor Collector roads or streets as shown on the ~~Coastal~~ Pender Collector Street Plan, Pender County Comprehensive Transportation Plan or other approved State of Federal Transportation Improvement Plan as amended.

A) Collector Streets - Major: Major Collector Streets shall preserve mobility of the transportation network and individual driveway access shall be prohibited, all individual lots shall have access to a public or private street.

B) Collector Streets - Minor: Minor Collector Streets shall balance mobility and access and individual driveway access shall be prohibited. Access to individual lots shall be demonstrated through other public or private streets or Alternative Design Streets as demonstrated in Section 7.5.3.F.

C) Collector Streets - Local: Local Collector Streets shall be designed as to provide increased access to individual lots. Local Collector Streets are intended to feed into the larger transportation network and should be designed as to limit speeds and be circuitous in nature. Individual lot access shall be permitted.

~~**7.2.8 Access**~~

~~All single family dwelling subdivision lots shall have frontage upon a public or private street or access easement. All multi-unit developments shall provide access to a public street directly from each unit or from each unit across a common area owned by the multi-unit development or owned by a Homeowners Association to which the dwelling unit owner is required to be a member.~~

7.2.9 Flag Lots

A. Flag lots as defined in the Ordinance shall be subject to the following requirements:

1) Flag lots will be approved by the Planning Board or Administrator only where the owner or applicant justifies in writing where the property has unusual topographical, soil or other natural features that would make street construction impractical or unusually expensive,
2) The panhandle or access portion of the lot must be at least 45 ft. wide,
3) The panhandle or access portion of the lot must be no longer than 250 ft.,
4) The panhandle portion of the lot shall not count toward the minimum lot area, usable lot area, dimension or set back requirements for the lot,
5) No more than three lot panhandles shall be located on any 750 ft. street segment, including both sides of the street,
6) Only one single family dwelling unit may be located on a flag lot,
7) All flag lot panhandles shall access a public or private street,

7.2.10 Special Purpose Lots

A. Special purpose lots that do not meet the minimum lot area, minimum lot dimensions, minimum access requirements or other requirements of this Ordinance may be approved by the Planning Board or Administrator under the following circumstances:

1) The lot has a 20 ft. access easement to a public or private road,
2) The final plat contains the following note for the lot: “This lot must meet any buffer and landscape requirements contained in this Ordinance,”

3) The final plat contains the following note for the lot: Lot shall be used only for the purpose of ___ and any structures (other than fences) located on the lot shall be 10 ft. from any property line,"
4) The final plat contains the following note for the lot: "Buildings for permanent human [or animal (as appropriate)] occupancy not allowed on this lot,"
5) The use approved for the lot is a use allowed in the Zoning District in which the lot is located.

HOMEOWNERS ASSOCIATION REQUIREMENTS

Homeowners Associations shall be required for all developments with dedicated improvements such as privately maintained streets and/or open space dedications and must be recorded along with the first phase of a final plat to encompass the entire development with an outline of amenities/land transferred to the said HOA at or before 25% of all units are constructed.

ACCESS

7.4.1 Requirements

A. All lots shall have direct or indirect access to a public street, private street, or private access easement.

B. Every structure erected or moved in all residential districts shall be on a lot adjacent to or having access to a public right of way, street, or road not less than thirty (30) feet in width. When the lot is not adjacent to the public road, the easement must be a minimum of twenty (20) feet wide.

C. Required access must provide a reasonable means of ingress and egress for emergency vehicles as well as for all those likely to need or desire access to the property in its intended use.

D. Proposed public and private access off of an existing state maintained road shall be required to apply for a NCDOT Driveway Permit.

E. Nonresidential developments applying for access to a collector street shall review internal circulation and access points to determine possible impacts to the surrounding properties and street system.

F. A cross access corridor may be required to provide common access and circulation among adjoining parcels in order to assist in local traffic movement in nonresidential developments.

G. All single family dwelling subdivision lots shall have frontage upon a public or private street or access easement.

H. All multi-unit developments shall provide access to a public street directly from each unit or from each unit across a common area owned by the multi-unit development or owned by a Homeowners Association to which the dwelling unit owner is required to be a member.

7.4.2 Driveway Permits

A. An NCDOT driveway permit shall be required for driveways serving any new use or change of use that access a state maintained road.

B. Driveways shall meet NCDOT driveway standards.

C. Parking in driveways shall not be permitted unless it is determined by the Administrator and Emergency Management that access will not be impaired.

7.4.3 Sight Triangles

A. On any corner lot, a sight triangle shall be established. The sight triangle shall be formed by extending lines from the intersections of two streets to points twenty five (25) feet from the intersecting streets and then connecting the two points.

B. For any driveway, a sight triangle measuring ten (10) feet from the back of the curb and extending seventy (70) feet from the edge of each side of the driveway shall be required.

C. Within the sight triangle, no objects which would impede traffic visibility shall be allowed. Structures, fences, and plant materials that extend into the sight triangle between two and a half feet and eight feet in height, as measured from the grade of the street or drive, shall not be allowed. In certain circumstances, increased site triangle distances may be required to conform to NCDOT requirements.

7.4.4 Cross Access Corridors

A. Definition

1) Cross access corridor are driveways constructed between adjoining properties to provide an alternative passageway to access adjoining developments without entering and exiting the roadway. These cross access corridors are intended to link parking areas on adjoining developments

B. Applicability

1) Cross access corridors shall be required for all nonresidential adjacent properties.
2) Cross access corridors are encouraged for all other developments.
3) The administrator may modify or waive these requirements of this Section if it can be proven that strict compliance would be impractical due to unique site conditions such as environmental concerns, safety concerns, extreme slope, or similar characteristics.

C. Requirements

1) Cross access corridors shall be designed to provide unified circulation and access between sites
2) The minimum width for a cross access corridor is 20 feet to accommodate two way travel.
3) Cross access corridors must be set at least 20 feet from any paved public roadway.
4) If a site is developed adjoining to an undeveloped parcel, it shall be designed so that its parking, access, and circulation are easily tied together to create a unified system at a later date. If the building site abuts an existing developed property, it shall tie into the abutting parking, access, and circulation to create a unified system when possible. This shall be accomplished by requiring the applicant to:
   a) Construct a cross access future connection to the property line to allow for future connection or dedicate an easement of sufficient width to accommodate a future cross access corridor.

D. Maintenance and Operation

1) Where a cross access is developed, the owners/developers of the affected properties shall provide for mutually coordinated parking, access, and circulation systems, and shall provide design features as necessary to make it visually obvious that abutting properties shall be tied together for create a unified system.
2) In order to maintain a clear passage for emergency and non-emergency travel, no parking shall be allowed in a cross access corridor.

7.5 STREET DESIGN

7.5.1 Public and Private Street Design

A. Layout of streets as to arrangement, width, grade, character, and location shall conform to the following:

1) Pender County Collector Street Plan, Pender County Transportation Plan or other approved State of Federal Transportation Improvement Plan.

a.) In any instance that a site plan or development plan layout does not conform to the specific layout of roadways as proposed in an adopted County plan as referred above, then the applicant must demonstrate the conformance with the spacing standards and move the roadway as detailed below;

Zoning District	Intensity	Approximate Street Spacing
Environmental Conservation	Little to no development	N/A
Rural Agricultural	Less than 2 dwelling units per acre	3,000 to 6,000 feet apart
General Business, General Industrial, Industrial Transition, Manufactured Housing Community, Residential Performance	2-4 dwelling units per acre	1,500 to 3,000 feet apart
Residential Mixed, Office & Institutional, Planned Development	More than 4 dwelling units per acre/activity nodes	750 to 1,500 feet apart

b.) Any deviation from the required spacing standards, width, grade, or character of the streets may be granted based on the approval of the Administrator. Maximization of the number of lots or parcels in a land division is not a reason to allow a waiver or modification. Criteria for approval may include;

1. 401 or 404 Wetlands as depicted by USACE wetland verification or as presented in written or map form by a wetlands consultant or professional wetlands scientist that identifies wetlands present within the project area and alternative locations of collector streets cannot be achieved. Evidence shall be presented that the written or map form verification has been submitted to USACE for wetland concurrence at the time of permitting;

a. Wetlands impacted in excess of 0.5 acres on site that are directly caused by the required collector road shall warrant administrative review for an exception when no other alignment can be made on site without equal or greater wetland impacts.

b. Off-site wetland impacts in excess of 1 acre based on a desktop review/assessment (by wetland consultant or professional wetlands scientist) that are directly caused by the County's required collector road corridor shall warrant

administrative review for an exception when no other alignment can be made on site without equal or greater wetland impacts.

2. Identified Areas of Environmental Concern (AEC) that lie within the identified path of the collector street;
3. An adjacent property connection cannot be made due to existing conditions that would create a street slope greater than a 4:1 ratio.
4. Existing railroad crossings, structures, conservation easements or buildings that are not part of the development plan located on the subject property or adjacent property that create a barrier in the identified path of the Collector Street and no other arrangement can be made. Evidence shall be presented from the appropriate agency showing that the crossing(s) cannot be made;
5. Significant Trees, as defined (Section 8.1.3.A.2), are located on the subject property and alternative location for collector street construction cannot be made. A significant tree survey shall be submitted demonstrating the general location, species and size.
6. The identified Collector Street will lineally connect into an existing roadway network that is, an existing private street, was not constructed to NCDOT standards, or would create conditions inconsistent with the collector street classification. Alternative roadway design shall be submitted to make connections with the existing or planned roadway network to the Administrator for review and approval.

2) Adjoining street systems,
3) Existing, planned and proposed streets, topographic, drainage and other natural features of the property,
4) To provide for continuity in existing streets and proposed streets,
5) Provide adequate right-of-way for collector streets,
6) Reasonable access will be provided to adjacent properties for development.

B. Spite strips along development boundaries preventing access to streets from adjacent properties are prohibited.

C. Street Alignment – local residential street intersections should be directly aligned if possible.

D. When such intersections cannot be aligned, they shall be offset centerline to centerline by not less than 125 ft. Intersections of Collector streets as defined herein or shown on the Pender County Collector Street Plan, Pender County Transportation Plan or other approved State Transportation Improvement Plan.

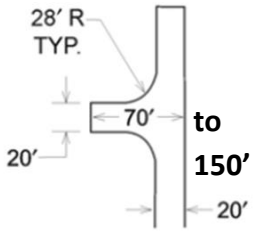
E. Streets should intersect as nearly as possible at right angles.

F. Permanent dead end streets (cul-de-sacs) or temporary dead end (stub) streets shall be no longer than 1,000 ft. unless it is demonstrated by the developer that the configuration of the property prevents its development without longer streets to provide access to the lots and common area to be subdivided.

G. Temporary dead end or stub streets between 150 and 1,000 feet in length shall provide turn around capabilities to meet one of the following requirements:

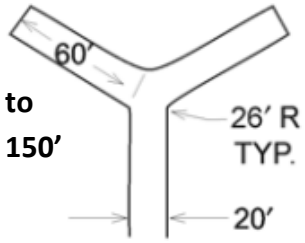
1) A cul de sac with at least 90-feet of right of way including 80-feet of pavement
2) A T/hammerhead intersection (Figure G1)
3) A Y intersection (Figure G2)
4) A T intersection (Figure G3)

Figure G1:



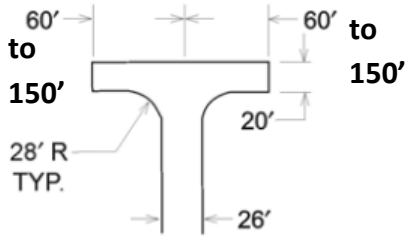
ACCEPTABLE ALTERNATIVE TO 120-FOOT HAMMERHEAD

Figure G2:



60-FOOT "Y"

Figure G3:



120-FOOT HAMMERHEAD

H. For new subdivisions exceeding 30 lots, more than one method of ingress and egress must be provided. The turning radius must be 28-feet. This requirement may be met by providing a connection to future development as outlined in Section 7.5.1.A.

I. Applicants for subdivision approval shall obtain approval for street names from the Pender County Addressing Coordinator. A copy of the approved preliminary plat with approved street names must be submitted to the Administrator within 30 days of approval of the preliminary plat and prior to final plat submission.

J. Sight triangles as required in the NCDOT Secondary Roads Standards shall be provided at all street intersections.

7.5.2 Public Streets

All designated public streets shall be designed and constructed in compliance with the current NCDOT Subdivision Roads Minimum Construction Standards.

7.5.3 Private Streets

A. All designated private streets shall be designed and constructed in compliance with the current NCDOT Subdivision Roads Minimum Construction Standards.

1) However, variations to right-of-way widths and geometric design may be permitted upon Planning Board review and approval where certain features such as topography, environmental features, low impact development design or unique needs of a development exist at the Master Development Plan or conditional rezoning approval.

2) Alternative Design Streets: Alternative Design Streets are intended to provide individual lot access to structures in order preserve the mobility of the transportation system. The alternative designs presented are not intended to limit the design of shared access and consultation with the Administrator should be had prior to development submittal.

a. All alternative designed streets shall adhere to design requirements as outlined with the current NCDOT Subdivision Roads Minimum Construction Standards with the exception of the following;

i) Length of roadway shall not exceed five-hundred (500) feet

ii) Width of easement or right of way shall be at least twenty (20) feet with a twelve (12) foot minimum pavement width

b) Where Alternative Design Streets do not connect to two public or private streets, turnaround capabilities shall be provided in accordance with Section 7.5.1.F & 7.5.1.G

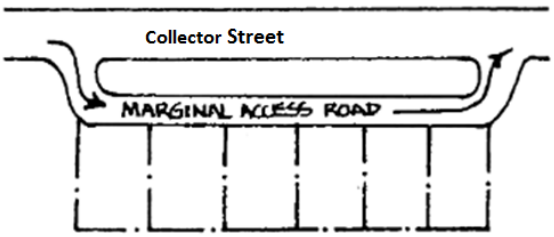
c) Sharp changes in alignment and grade shall be avoided

d) Distance Separation ADD

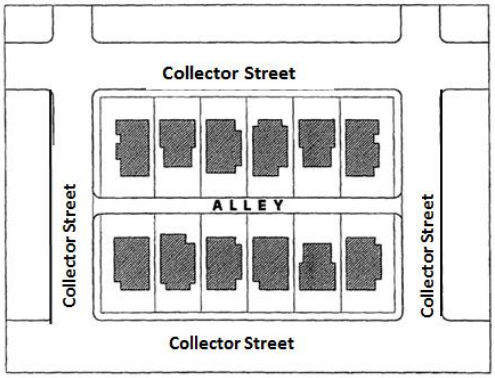
(didn't move improvements over because that's covered in D & E)

e) Alternative Design Street Examples

i) Marginal Access Road: a street parallel and adjacent to public or private streets (while physically separated from it) which provides both access to abutting properties and controlled access to the public or private street



ii) Alley: A strip of land owned publicly or privately, set aside primarily for vehicular service access to the rear or side of property otherwise fronting on a street of a higher classification. Alleys shall be used to serve lots as part of an interconnected street system, alleys provide access to property but are not intended to accommodate through traffic.



iii) Additional alternative design streets may be approved by the Administrator if the alternative design presented promotes shared access to collector streets rather than individual lot access. The Administrator may approve other designs based on: safety, topography, environmental conditions, or other appropriate criteria.

B. Developments with private streets shall make provisions for immediate access for Pender County Emergency Service (Law Enforcement, Fire & Rescue) vehicles and employees to the development and shall provide for an easement for such services and an easement shall be provided to Pender County and its employees for administration of Pender County Ordinances.

C. Subdivisions with private streets will be subject to requirements to construct public collector streets under any of the following conditions:

1) When the subdivision contains streets that have any dimension of more than 5280 ft.,
2) When any street in the subdivision has the potential to serve more than 200 residential or commercial units,
3) When access to any lot or unit in the subdivision is more than 5280 ft. by a private street to a public street,
4) When existing public streets have been dedicated or constructed to the property line of the subdivision,
5) When access to adjacent properties will be hindered as a result of private streets being allowed in the subdivision.

D. All subdivisions that have any private streets must meet the minimum qualifying requirements contained in the Required Improvements section of this Ordinance.

E. All subdivisions proposing new construction of streets must provide a Certificate of Disclosure: Private Roads found in Appendix D

7.5.4 Access Easements

A. Access easements must provide access to a public street

B. Lots created have either direct access to a public street, private street or private access easement as defined by this Ordinance.

C. A minimum passable travel way 20 feet wide shall be provided within a forty five (45') foot easement at time of zoning approval.

D. The plat contains the following note: "All new access easements shown or designated on this plat, include the transfer of an easement to public entities and public utilities for the purpose of installation and maintenance of water, sewer, electric and communication lines."

E. The plat must contain the following note: "All new access easements shown or designated on this plat include the transfer of an easement to Pender County, its employees and administration of all Pender County Ordinances"

F. No more than four parcels may be approved to utilize one access easement.

Definitions

ALLEY: A strip of land owned publicly or privately, set aside primarily for vehicular service access to the rear or side of property otherwise fronting on a street of a higher classification.

ALTERNATIVE DESIGN STREET: Alternative Design Streets are intended to provide individual lot access to structures in order preserve the mobility of the transportation system. Alleys and marginal access roads are examples of alternative design streets.

MARGINAL ACCESS ROAD: a street parallel and adjacent to public or private streets (while physically separated from it) which provides both access to abutting properties and controlled access to the public or private street