

# Town of Carrboro Guiding Policies & Regulations

# Relevant Fire Code Provisions

Chapter 5, Section 503 contains the specific requirements for Fire Apparatus Access Roads. A few of the key sections are included below.

### 503.1.2 Additional access.

The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions, or other factors.

### 503.4 Obstruction of fire apparatus access roads.

Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Sections 503.2.1 and 503.2.2 shall be maintained at all times.

### D107.1 One- or two-family dwelling residential developments.

Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads.

Exceptions:

1. Where there are more 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3 of the International Fire Code, access from two directions shall not be required.

Note: Developments may still be required to have additional fire apparatus access roads based on other requirements, such as the requirements in Section 503.1.2.

2. The number of dwelling units on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the fire code official.

# Relevant Land Use Ordinance Provisions

### 15-214(a)

The street system of a subdivision shall be coordinated with existing, proposed and anticipated streets outside the subdivision or outside the portion of a single tract that is being divided into lots (hereinafter, "surrounding streets") as provided in this section.

### 15-214(b)

Collector streets shall intersect with surrounding collector or arterial streets at safe and convenient locations.



### 15-214(c)

Subject to subsection 15-217(a), subcollector, local, and minor residential streets shall connect with all surrounding streets to permit safe, convenient movement of traffic between residential neighborhoods and to facilitate access to neighborhoods by emergency and other service vehicles. The connections shall be created in such a way that they do not encourage the use of such streets by substantial through traffic. (AMENDED 9/16/97; 5/06/03)

### 15-214(d)

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 subdivided property (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. In addition, the permit-issuing authority may require temporary turnarounds to be constructed at the end of such streets pending their extension when such turnarounds appear necessary to facilitate the flow of traffic or accommodate emergency vehicles. Notwithstanding the other provisions of this subsection, no temporary dead-end street in excess of 1,000 feet may be created unless no other practicable alternative is available.

### 15-217(a)

To the extent practicable, all streets shall be interconnected. Cul-de-sacs shall not be used unless the topography of the land does not allow a design that would make an interconnecting street practicable. (AMENDED 9/16/97; 9/28/99)

### 15-217 (b)

All permanent dead-end streets [as opposed to temporary dead-end streets, see subsection 15-214(d)] shall be developed as cul-de-sacs in accordance with the standards set forth in subsection (c), unless construction of such cul-de-sacs is not reasonably possible given such factors as steep slopes or right-of-way limitations. Under such circumstances, the town may approve alternative designs that will provide a safe and convenient means for vehicular traffic to turn around (alternatives are suggested in Appendix C, Standard Drawing No. 19). Except where no other practicable alternative is available, such streets may not extend more than 550 feet (measured to the center of the turn-around). (AMENDED 9/27/94, 9/16/97)

### 15-220(h)

Notwithstanding the other provisions of this section, the town may prohibit the creation of a private road if the creation of such a road would avoid the public street interconnection requirements set forth in Sections 15-214 and 15-217(a). (AMENDED 6/25/02)

#### 15-221(b)

Whenever (i) a lot is proposed to be developed residentially for more than four dwelling units or nonresidentially in such a fashion as to generate more than 40 vehicle trips per day, and (ii) if the lot were to be subdivided, a street would be required running through the lot to provide a connection between existing or planned adjacent streets in accordance with the provisions of Sections 15-214 and 15-217(a), then the developer shall be required to construct and dedicate the same street that would have been required had the property been subdivided. On Town-owned properties, the Town Council may eliminate



or reduce the requirements of this section for reservation and/or connection of right-of-way. (AMENDED 6/25/02; 6/06/17)

# **Relevant Town Code Provisions**

Section 6-12. Play Streets

(a) Whenever, pursuant to subsection (b) of this section, a street or any part thereof has been designated a play street and appropriate traffic control devices have been installed clearly giving notice of this fact, no person may drive a vehicle upon such street or part thereof unless they reside there, or have business there, and all persons shall exercise greatest care at all times when driving upon any play street.

(b) The following streets or portions thereof are hereby designated play streets, and the administrator shall install appropriate traffic control devices that clearly give notice of such designations: None

# Nearby Municipalities' Relevant Policies & Regulations

Durham <u>Unified Development Ordinance – Durham NC</u> <u>Street Connectivity Requirements</u>

### Section 13.6

An interconnected street system is necessary in order to promote orderly and safe <u>development</u> by ensuring that streets function in an interdependent manner, provide adequate access for emergency and service <u>vehicles</u>, enhance access by ensuring connected transportation routes, provide access for <u>people</u> walking and bicycling, and provide continuous and comprehensible traffic routes.

Hillsborough <u>Unified Development Ordinance – Hillsborough, NC</u> (p 6-84)

6.21.3.6 The proposed street layout shall be coordinated with the existing street system of the surrounding area and with the Hillsborough Thoroughfare Plan. Where possible proposed streets shall be the extension of existing streets. Modification of the existing grid pattern may be allowed to accommodate sitetopography

6.21.3.7 To maximize connectivity for public safety and avoid the requirement for additional right of way width improvement and dedication, block lengths will generally not exceed 400 feet and there will be two points of access for any street containing 30 or more dwellings not equipped with individual sprinkler systems.

6.21.3.9 Cul-de-sacs shall not be used to avoid connection with an existing street or to avoid the extension of an important street



### Chapel Hill

#### Road Connectivity Plan - June 2023

Chapel Hill has been studying their road connectivity policy and the above document was adopted in June 2023. It has yet to show up in the ordinances.

# **Town of Holly Springs**

<u>Unified Development Ordinance -Holly Springs</u> (p134)

7.3 Connectivity

A. Purpose.

In order to provide for the convenient movement of traffic, effective fire protection, efficient provision of utilities or where such connection is in accordance with the Comprehensive Plan, streets shall be arranged so as to: provide for the continuation of collector streets and thoroughfare streets between adjacent subdivisions and development; maximize interconnectivity between and within subdivisions or development; and, minimize the use of cul-de-sac streets.

#### C. Streets to be Interconnected.

All streets shall be designed to form part of an interconnected street pattern. Streets must connect with adjacent street networks to the extent possible. Street designs will be evaluated as to meeting this interconnectivity standard on their ability to: permit multiple routes between origin/ destination point; diffuse traffic; and, shorten walking distance.

E. Interconnectivity with Adjacent Projects.

1. Connection to Street Stubs Required. New developments shall connect to any existing street stubs from adjacent properties. Traffic calming measures as allowed in the Engineering Design & Construction Standards shall be included when street stubs between neighborhoods are connected.

## Town of Apex

Unified Development Ordinance – Apex

Article 7 Subdivision Section 7.2 Design Standards

# 7.2.1 Streets

### (A) Interconnectivity

1.) In areas where no thoroughfares or collector streets are represented thereon, streets shall be designed and located in proper relation to existing and proposed streets, to the topography of the area, and to natural features such as streams, hills, and stands of trees. Residential streets should further be laid out in such manner as to encourage the flow of through-traffic at slow speeds, except upon major and minor thoroughfares. All proposed street designs shall provide for the appropriate projection of principal streets in surrounding areas to permit reasonable access for surrounding properties, both for current use and future subdivision.



#### 7.5.4 E Public Access Requirements

A residential development or any portion thereof shall (either by itself or in combination with another existing development through which it accesses the public street system) propose no more than 50 single-family units, 100 multifamily units, or 50 units of single-family and multi-family combined unless it is served by at least two (2) points of access to the public street system. When more than one (1) point is required, one (1) of those two (2) points must be a full movement intersection and both points of access must be constructed to Town of Apex Standards

## Town of Cary, NC

Land Development Ordinance – Cary – Chapter 7 Development and Design Standards

7.10 Connectivity

7.10.3 Standards for Streets/On-Site Vehicular Circulation (p LDO 7-136)

The following standards shall be met for all development plans and for redevelopment of sites.

(A) Street Connectivity

(1) Any residential development shall be required to achieve a connectivity index of 1.2 or greater. In the event that this requirement is modified pursuant to Section 7.10.3(D)(2), a six (6)-foot pedestrian trail shall be provided to link any cul-de-sacs within a residential development in which the required connectivity index has been modified. A connectivity index is a ratio of the number of street links (road sections between intersections and cul-de-sacs) divided by the number of street nodes (intersections and cul-de-sac heads). The following illustration provides an example of how to calculate the index. Street links on existing adjacent streets that are not part of the proposed subdivision are not included in the connectivity index calculation.

(2) For non-residential, multi-family, or mixed used developments of greater than five (5) acres, an organized and complete street network must be provided with an emphasis on connectivity throughout the development and for future adjacent development. Sites, five (5) acres or less, must provide street connections with adjacent properties (i.e., taking into account the future development/redevelopment of these properties).

(a) All access points from public thoroughfares and collectors shown on the Comprehensive Transportation Plan shall be connected with each other through a continuous network of public or private streets. (Non-residential private streets are not required to meet public street standards.) Connections between thoroughfares and collectors shall be direct while maintaining a functional and organized street network. Limited parking in front of buildings along these streets may be provided.



#### (B) Street Arrangement

(1) The proposed public or private street system shall be designed to provide vehicular and pedestrian interconnections to facilitate internal and external traffic movements in the area. In addition to the specific connectivity requirements described above, roadway interconnections shall be provided during the initial phase of any development plan between the development site and its adjacent properties with one (1) roadway interconnection every 1250-1500 linear feet f or each direction in which the subject property abuts.....

(2) Any development of more than one hundred (100) residential units or additions to existing developments such that the total number of units exceeds one hundred (100) shall be required to provide for vehicular and pedestrian access to at least two (2) public streets unless such provision is modified pursuant to Section 3.19.1.

(4) In general, permanent cul-de-sacs are discouraged in the design of street systems, and should only be used when topography, the presence of natural features, and/or vehicular safety factors make a vehicular connection impractical.