

## Article 23 DRIVEWAYS, STREETS AND SIDEWALKS

### **23.01 Street Classification**

**23.01.01** Streets shall be classified as provided in Subsection 23.01.02.

- A. The classification shall be based upon the projected volume of traffic to be carried by the street, stated in terms of the number of trips per day.
- B. 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.
- C. Whenever a street continues an existing street that formerly or it is expected that a street will be continued at some future time, the classification of the street will be based upon the street in its entirety.

**23.01.02** The classification of streets shall be as follows:

- A. *Minor*: A street whose sole function is to provide access to abutting properties. It serves or is designed to serve not more than nine (9) dwelling units and is expected to or does handle up to seventy-five (75) trips per day.
- B. *Local*: A street whose sole function is to provide access to abutting properties. It serves or is designed to serve at least ten (10) but no more than twenty five (25) dwelling units and is expected to or does handle between seventy five (75) and two hundred (200) trips per day.
- C. *Subcollector*: A street whose principal function is to provide access to abutting properties but is also designed to be used or is used to connect minor and local streets with collector or arterial streets. Including residences indirectly served through connecting streets, it serves or is designed to serve at least twenty six (26) but not more than one hundred (100) dwelling units and is expected to or does handle between two hundred (200) and eight hundred (800) trips per day.
- D. *Collector*: A street whose principal function is to carry traffic between minor, local, and subcollector streets and arterial streets but that may also provide direct access to abutting properties. It serves or is designed to serve, directly or indirectly, more than one hundred (100) dwelling units and is designed to be used or is used to carry more than eight hundred (800) trips per day.
- E. *Arterial*: A major street in the Town's street system that serves as an avenue for the circulation of traffic into, out, or around the Town and carries high volumes of traffic.

**23.01.03** Private streets will be permitted to serve as access within residential developments, however, the dedication of public streets and other rights-of-way or easements may be required if they are indicated in official plans adopted by the Town Council.

**23.01.04** Public streets and or other rights-of-way or easements of public access over private streets will be required where the North Carolina Department of Transportation, or the Town of Boone Public Works Department determines that such access is necessary for promotion of public health, safety and welfare.

**23.01.05** Private streets shall meet the dimensional standards set forth in Section 23.05.

**23.01.06** Private streets may be utilized under the following conditions:

- A.** The applicant shall record with the Watauga County Register of Deeds an instrument setting forth provisions for the establishment of a property owners association for the purpose of assessing dues for maintenance of the roads by the purchasers of the property which will be served by the roads within the development.
- B.** The applicant shall maintain the road at least until such time that the property owners association assumes maintenance.
- C.** A subdivision disclosure statement is provided as required by G.S. 136-102.6, which fully discloses the status, whether public or private, of the road upon which the lots front.

**23.01.07** The area within the street right-of-way may not be used to satisfy lot area requirements.

**23.02 Access to Lots**

**23.02.01** Every lot shall have access to it that is sufficient to afford 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.

**23.03 Driveways**

**23.03.01** A driveway may provide access to no more than two (2) lots.

- A.** When a single driveway provides access to more than one lot, easement rights in favor of each of the lots that rely upon the driveway for access shall be provided. These rights may be by means of a document recorded in the public records of Watauga County or by means of a notation on the plat of the subdivision that is recorded.

**23.03.02** All driveway entrances and other openings onto streets within the Town’s planning jurisdiction shall be constructed so that:

- A.** Vehicles can enter and exit from the lot in question without posing any substantial danger to themselves, pedestrians, or vehicles traveling in abutting streets, and
- B.** Interference with the free and convenient flow of traffic in abutting or surrounding streets is minimized.

**23.03.03** All driveways shall conform to the Boone Town Code, Chapter 98, or the North Carolina Department of Transportation Manual on Driveway Entrance Requirements, whichever is most restrictive.

**23.03.04** The maximum grade of any driveway used for a fire access roadway shall not exceed ten percent (10%) at any one point on the driveway unless approved by the Chief of the Boone Fire Department.

*(20160028-05192016)*

**23.04 Relationship of Streets to Topography**

**23.04.01** Street grades shall conform as closely as practicable to the original topography.

**23.04.02** The maximum grade of any street used for a fire access roadway shall not exceed ten percent (10%) at any one point unless approved by the Chief of the Boone Fire Department.

*(20160028-05192016)*

**23.05 Street Width and Drainage Requirements**

**23.05.01** Streets shall be constructed to meet the standards set forth in the table below.

Street Type	Minimum Right-of-Way Width (feet)	Minimum Pavement Width (feet)	Shoulder & Swale Allowed	Curb & Gutter Allowed
Minor	45	18	Yes	Yes
Local	45	18	Yes	Yes
Private	30	18	Yes	Yes
Subcollector	50	20	Yes	Yes
Collector	50	20	No	Yes

**23.05.02** Shoulders and drainage swales or curb and gutters may be utilized as allowed in the table above.

- A.** Shoulders and drainage swales shall be a minimum of four feet (4’).
- B.** Standard ninety degree (90°) curb or roll type curb may be permitted along minor and local streets within residential subdivisions.
- C.** Street pavement width:
  - 1. Shall be measured from curb face to curb face where ninety degree (90°) curb is used; and
  - 2. Shall be measured from the center of the curb to the center of the curb where roll type curb is used; and
  - 3. Shall be measured from edge of pavement to edge of pavement where shoulder and swale are used.

**23.06 General Layout of Streets**

**23.06.01** Street systems shall be coordinated with existing, proposed, and anticipated streets as provided in this Section.

- 23.06.02** Collector streets shall intersect with surrounding collector or arterial streets at safe and convenient locations.
- 23.06.03** Subcollector, local, and minor residential streets shall connect with surrounding streets where necessary to permit the convenient movement of traffic between residential neighborhoods or to facilitate access to neighborhoods by emergency service vehicles or for other sufficient reasons.
- A.** Connections shall not be permitted where the effect would be to encourage the use of such streets by substantial cut-through traffic.
- 23.06.04** 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 connections to the anticipated or proposed street is expected.
- A.** The permit issuing authority may require temporary turnarounds to be constructed at the end of such the streets pending their extension when such turnarounds appear necessary to facilitate the flow of traffic or accommodate emergency vehicles.
- 23.06.05** Subcollector, local and minor residential streets shall be curved whenever practicable to the extent necessary to avoid conformity of lot appearance.
- 23.06.06** Cul-de-sacs and loop streets are encouraged so that through traffic on residential streets is minimized.
- 23.06.07** All dead end streets shall be developed as cul-de-sacs in accordance with the standards set forth in this Article. Except where no other practicable alternative is available, such streets may not extend more than 550 feet (measured to the center of the turnaround).
- 23.06.08** The right-of-way of a cul-de-sac shall have a radius of fifty feet (50'). The radius of the paved portion of the turnaround (measured to the outer edge of the pavement) shall be thirty-five feet (35').
- A.** Alternative cul-de-sac designs published in NCDOT's "Subdivision Roads – Minimum Construction Standards" will be considered by the permit issuing authority only in situations where, because of the physical characteristics of the site, the construction of a symmetrical "bulb" end design may not be in the public's best interest.
- 23.06.09** Half streets shall not be permitted except where such 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.
- 23.06.10** Streets shall be laid out so that residential blocks do not exceed 1,800 feet, unless no other practicable alternative is available.

**23.06.11** Streets shall intersect as nearly as possible at right angles, and no two streets may intersect at less than sixty degrees (60°).

**23.06.12** Not more than two streets shall intersect at any one point, unless the Public Works Director certifies to the permit issuing authority that such an intersection can be constructed with no extraordinary danger to public safety.

**23.06.13** Whenever possible, proposed intersections along one side of a street shall coincide with existing or proposed intersections on the opposite side of such street.

A. In any event, where a centerline offset (jog) occurs at an intersection, the distance between centerlines of the intersecting streets shall not be less than 150 feet.

**23.07 Construction Standards and Specifications**

**23.07.01** All streets shall be constructed in accordance with the design construction standards promulgated by the North Carolina Department of Transportation (NCDOT), unless a more restrictive standard is herein, in which case the more restrictive standard shall apply.

**23.08 Pedestrian Circulation and Sidewalk Requirements**

**23.08.01 When Sidewalks Must Be Constructed:** Sidewalks shall be required for:

- A. All new major subdivisions;
- B. All new multi-family residential development;
- C. All new office, institutional, commercial and industrial development;

**23.08.02** Sidewalks along any public street shall require the dedication of a permanent easement for public use to the Town of Boone.

**23.08.03 Design Requirements.**

A. Sidewalks shall be required along the entire length of any portions of public streets which abut the development parcel.

B. Sidewalks will be constructed in accordance with the Roadway & Sidewalk Program Handbook for the Town of Boone.

1. Any deviation from the requirements must be approved by the Public Works Director.

a. Deviations may only be allowed when strict compliance with the Roadway & Sidewalk Program Handbook is impractical due to topography or because there exists site conditions beyond the applicant's control and not of the applicant's making.

C. Whenever curb and gutter construction is used on public streets, wheelchair ramps shall be provided at intersections and other major points of pedestrian flow. Sidewalks, wheelchair ramps, and depressed curbs shall be constructed in accordance with the published standards of the North Carolina Building Code, Volume I-C, Accessibility.

- D. In all multi-family residential development, sidewalks shall be provided linking dwelling units with other dwelling units, the public street, and on site activity centers such as parking areas, laundry facilities, and recreational facilities.

**23.08.04 Alternative Methods for Pedestrian Circulation:** When an alternative method of public pedestrian circulation has been identified in a duly adopted governmental alternative transportation plan, or where a proposed public greenway will connect to an existing public greenway, the permit issuing authority may allow the installation of a public greenway instead of sidewalks. The following provisions shall apply for the approval of alternative methods for the provision of pedestrian circulation:

- A. The applicant with written authorization from the property owner shall submit a written request for an alternative method for pedestrian circulation to the permit issuing authority.
  - 1. The request shall specify the method proposed as a substitute for sidewalk installation.
  - 2. A site plan depicting the location and dimensions of the alternative method of pedestrian circulation and any other information deemed necessary by the Administrator shall be included with the request.
- B. All alternative methods will be constructed to meet Town of Boone standards and will require the dedication of an assignable permanent easement to the Town of Boone.

**23.08.05 Fee in Lieu**

- A. Except for development along a Primary Sidewalk Priority Route where there is contiguous sidewalk infrastructure in place (as shown on the Sidewalk Priorities Plan duly adopted by the Town), when an applicant is required to construct a sidewalk, the applicant may in lieu of such construction deposit funds into a sidewalk fund maintained by the Town of Boone.
  - 1. Fee-in-lieu is not an option when existing sidewalks are removed during the course of construction; in this case sidewalks must be replaced.
- B. Procedures for Payment of Fee in Lieu
  - 1. The applicant, with written authorization from the property owner, shall submit a written notification to the Administrator of the applicant's intent to pay a fee in lieu of construction.
  - 2. The applicant shall pay the fee prior to the issuance of a Certificate of Occupancy. The fee shall be a fixed amount per linear foot based on the rate calculated and published on a quarterly basis by the Town. The applicable fee shall be determined by the rate in effect on the date the development plan is approved.
  - 3. All funds collected in lieu of construction shall be in addition to all other sidewalk funding and shall be placed in a separate account to be used only for costs

associated with new sidewalk construction as shown on the Sidewalk Priorities Plan duly adopted by the Town.

**23.08.06** Whenever the permit issuing authority finds that a means of pedestrian access is necessary from the subdivision to schools, parks, playgrounds, or other roads or facilities and that such access is not conveniently provided by sidewalks adjacent to the streets, the applicant may be required to reserve an unobstructed easement of at least ten feet (10') in width to provide such access.

**23.09 Street Names and House Numbers**

**23.09.01** Street names shall be assigned by the applicant subject to the approval of the Town.

1. Proposed streets that are obviously in alignment with existing streets shall be given the same name.
2. Newly created streets shall be given names that neither duplicate nor are phonetically similar to existing streets within the Town's planning jurisdiction, regardless of the use of different suffixes.

**23.09.02** Building numbers shall be assigned by the Town.

**23.10 Bridges**

**23.10.01** All bridges shall be constructed in accordance with the standards and specifications of the North Carolina Department of Transportation, except that bridges on roads not intended for public dedication may be approved if designed by a licensed engineer.

