

CHAPTER 6 - DESIGN STANDARDS FOR STREETS

6.1 GENERAL REQUIREMENTS

- 6.1.01 A full traffic impact analysis may be required at the City Engineer's discretion. At a minimum, a trip generation report and turn lane analysis shall be required.
- 6.1.02 Development within 3000' of a VDOT maintained street or highway will be required to complete a 527 Traffic Impact Analysis.
- 6.1.03 All streets shall be dedicated to public use and maintenance. Private streets are prohibited excepts as approved by City Council within a Planned Residential Development.

6.2 TECHNICAL DESIGN

6.2.01 System Layout and Design

- A. The overall layout and general design shall conform to the parameters set forth in the approved Engineering Report.
- B. The arrangement of streets shall make provision for the continuation of existing streets in adjoining areas. The street arrangement must be such as to cause no unnecessary hardship to owners of adjoining property when they plat their own land and seek to provide for convenient access to it. Where, in the opinion of the Department, it is desirable to provide for street access to adjoining property, proposed streets shall be extended by dedication to the boundary line of such property.
- C. Where it is reasonable as determined by City staff streets shall be connected. Where dead end streets are permitted the length shall be limited to 400' and they shall a turnaround of 50' radius at the end.
- D. Blocks shall typically be between 400' and 800' in length.
- E. No street grade shall exceed 12 percent in a residential zone or 8 percent in all other zoning classifications.
- F. Horizontal and vertical alignment shall be as generally outlined in VDOT's Subdivision Street Guide.

- G. Intersection of streets shall be at an angle as nearly 90 degrees as possible.
- H. The typical residential street cross section shall be as shown on City Standard Drawing and Details inclusive of curb and gutter and sidewalk. Exceptions to this cross section shall be as determined by the traffic impact analysis study and shall generally conform to VDOT's Subdivision Street Guide.
- I. Pavement design shall be determined by VDOT's Subdivision Street Guide but in no case shall less than 6" of aggregate base and 2" of bituminous concrete surface mix. Streets with grades of 10% or greater shall have 3" of bituminous concrete in addition.

6.3 DRAWINGS

6.3.01 In addition to the requirements in Chapter 1.6 "Drawing Organization and Format" of these standards, drawings shall also show.

- A. Stationing, bearings, and curve data.
- B. Storm Drain layout.
- C. Proposed utilities in the street right-of-way in both plan and profile.
- D. Location of erosion and sediment control devices.
- E. Typical cross section and pavement design.