(3.10.2) Entrances, Curb Cuts and Intersections

(3.10.2.1) The need for right lane tapers, turn lanes, left turn lanes, etc. shall be determined based on VDOT Entrance Standards. Calculations shall be provided if requested during plan review. Extension of acceleration and deceleration lanes beyond the limit of the development property will be required where determined by City staff. The developer shall be responsible for coordination with adjoining landowner(s) to secure additional right-of-way and easements necessary for construction.

(3.10.2.2) Entrances and curb cuts shall comply with the requirements of the Virginia Department of Transportation "Minimum Standards of Entrances to State Highways," and this manual. Throat widths shall be measured at point of tangency of curb radii. Entrance must extend to this point before any turnouts are allowed.

(3.10.2.3) Minimum distances, at street intersections, measured from end of curb radius at street intersection along face of curb to beginning of curb radius for proposed entrance shall be as follows:

Arterial Streets 100 feet

Collector Streets 50 feet (100 feet where traffic signal exists or is planned) Local Streets 50 feet

Minimum distance shall be 125 feet if cross street is classified as an Arterial Street.

(3.10.2.4) Width of entrance, measured perpendicularly to parallel sides shall be as follows:

(3.10.2.4.1) Commercial and Multi-family Residential – Minimum 30 feet for two-way traffic, 14 feet for one-way traffic. Maximum 50 feet/20 feet respectively. Appropriate signage shall be shown for all one-way entries and exits. Minimum width of a curb median dividing a two-way entrance into one-way entry and exit lanes shall be 4 feet.

(3.10.2.4.2) Single Family Residential –12 feet minimum, 24 feet maximum.

(3.10.2.5) Minimum curb radii for entrances shall be:

(3.10.2.5.1) Industrial – 25 feet (50 feet when high volume of tractor-trailer trucks is anticipated).

(3.10.2.5.2) Commercial and Multi-family Residential is 12.5 feet

(3.10.2.5.3) Single Family Residential 2 feet

(3.10.2.5.4) Curb returns shall not extend along street beyond side property line extended.

(3.10.2.6) Curb cuts shall comply with the requirements of the following VDOT Standard Drawings:

(3.10.2.6.1) Street Intersections – CG-11

(3.10.2.6.2) Industrial Entrances – CG-10A (must be designed to contain ten-year storm in street) or CG-11 (must be designed to intersection standards)

(3.10.2.6.3) Commercial and Multi-Family Residential Entrances – CG-9D; CG-10A or CG-11 may be considered if designed with uphill grade from the street such that a sixinch rise in the pavement is provided from the center of the valley gutter and the entrance curbing extends to that rise. For CG-11 entrance, plans must detail curb spillout and flow line locations and elevations. Additionally, use of CG-11 requires a street grade of 2% minimum to allow for curb spillout and drainage across the entrance, unless drainage design provides for street water to enter site. Existing elevations at edge of pavement, flow line, and top of curb for both sides of the proposed entrance tie-in shall be provided on the plans to confirm suitability for CG-11.

(3.10.2.6.4) Single Family Residential – CG-9B modified per the following:

1. 5 ft. distance from flow line to end/grade break is reduced to 4 feet for curb & gutter only installations.

2. Extend full depth entrance to back of sidewalk where sidewalk exists or is proposed.

(3.10.2.7) All entrances shall be designed and constructed to contain gutter drainage within street for a minimum 10-year storm flow.

(3.10.2.8) No driveway shall intersect a public street at an angle less than 80 degrees.

(3.10.2.9) Adequate sight distance must be available at all entrances in accordance with the standard entrance sight distance detail. Sight distance profiles shall be required when requested by the City Engineer. Sight distance easements are required when the line of sight encroaches into private property behind the entrance radius curbing. Such easement shall be recorded prior to the start of construction.

(3.10.2.10) Upon development, any existing entrances not being used shall be removed and replaced with standard curb and gutter.

(3.10.2.11) Entrance locations and interior areas shall be selected and designed such that public streets or alleys are not depended upon for vehicles maneuvering in and out of loading areas.