

Entrance Cuts: The maximum vertical curve, crest or sag, shall have a maximum 4-inch vertical offset over a 10-foot chord length. A standard vertical curve is* designed for all commercial entrance profiles that exceed 3.3%.

Entrance Drainage: Drainage shall be considered in the design of entrance grades. Roadways and curb-and-gutter sections that convey storm water runoff within the roadway prism are designed in accordance with department standards. Site runoff into state right-of-way shall be minimized.

Entrance Width: All commercial entrances shall have a width sufficient for the particular land use and anticipated traffic flow with a **minimum** width of 16 feet for a one-way drive and 30 feet for a two-way drive (a two-way commercial entrance on a *local street* shall have a minimum width of 24 feet). The **maximum** width is 20 feet for a one-way drive and 40 feet for a two-way drive. See “Entrance Width” in Definitions Section.

These widths are measured at right angles to the centerline of the entrance at the right-of-way line. Entrances with multiple lanes or median may require additional width. For subdivision streets, radii width and angle are established in the Subdivision Street Design Guide in the Road Design Manual, Appendix B (1), at web link

<http://www.virginiadot.org/business/locdes/rdmanual-index.asp>

Entrance Radius: The entrance radius is designed to accommodate the design vehicle expected to use the commercial entrance on a daily basis and have radii large enough to accommodate the largest design vehicle that will use it without creating undue congestion or hazard on the through highway (See Table 4-3).

Design Vehicle and Turning Radius by Land Use		
Land Use(s) Served by Access	Design Vehicle	Radius
Office with Separate Truck Access	Passenger Car/Pickup	24
Office without Truck Access	Single Unit Truck SU-30	42
Commercial / Retail with Separate Truck Access	Passenger Car/Pickup	24
Commercial / Retail without Separate Truck Access	WB-62 Truck	45
Industrial with Separate Truck Access	Passenger Car/Pickup	24
Industrial without Separate Truck Access	WB-62 Truck	45
Recreational without Watercraft Access or Camping	Passenger Car/Pickup	24
Recreational with Watercraft Access or Camping	Motor Home/Boat	50
Agricultural Field Access	Single Unit Truck	42
Municipal and County Roads	WB-62 Truck	45

TABLE 4-3 DESIGN VEHICLE AND TURNING RADIUS BY LAND USE

Note: “with Separate Truck Access” indicates truck prohibition from primary access.

* Rev.7/14