

## SECTION 4 – ENTRANCE DESIGN

### Entrance Design Principles

Entrances are, in effect, at-grade intersections and should be designed consistent with the intended use. The number of crashes is disproportionately higher at entrances than at other intersections; thus their design and location merit special considerations. Entrances should not be situated within the functional area of an intersection or in the influence area of an adjacent entrance. The functional area extends both upstream and downstream from the physical intersection area and includes the longitudinal limits of auxiliary lanes.

**Entrance Angle:** The entrance centerline should be perpendicular to the state highway centerline and extend tangentially for a minimum distance of 40 feet beyond the near-side edge line. An acute angle between 60 degrees and 90 degrees may be permitted if significant physical constraints exist. Acute angles less than 60 degrees shall require special approval of the Department.

**Entrance Radius:** The entrance radius should be designed to accommodate the design vehicle expected to use the entrance on a daily basis.

<b>Design Vehicle and Turning Radius by Land Use</b>		
<b>Land Use(s) Served by Access</b>	<b>Design Vehicle</b>	<b>Radius</b>
Office with Separate Truck Access	Passenger Car/Pickup	24
Office without Truck Access	Single Unit Truck	42
Commercial / Retail with Separate Truck Access	Passenger Car/Pickup	24
Commercial / Retail without Separate Truck Access	WB-50 Truck	45
Industrial with Separate Truck Access	Passenger Car/Pickup	24
Industrial without Separate Truck Access	WB-50 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-50 Truck	45

**TABLE 4-1 DESIGN VEHICLE AND TURNING RADIUS BY LAND USE**

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

Entrances into mixed use developments will be designed to accommodate the largest design vehicle expected to use that entrance.