

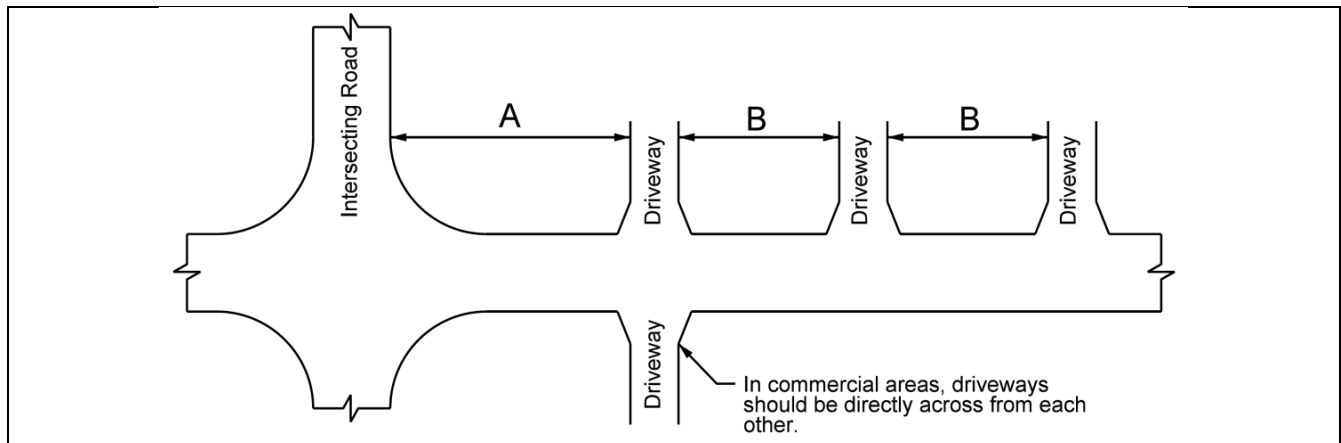
SUDAS Revision Submittal Form

Status Date: As of 5/20/2020 **Topic:** Driveway design for low volume residential streets
Manual: Design **Manual Location:** Section 5L-3 and 5L-4

Requested Revision:

From Section 5L-3 - Access Locations, Spacings, Turn Lanes, and Medians, C (Separate Conflict Areas)

Table 5L-3.05: Minimum Distance between Driveways or from Intersecting Streets



	Minor Arterial			Collector			Local		
	Res. Area	C/I Area	Ag Area	Res. Area ³	C/I Area	Ag Area	Res. Area ³	C/I Area	Ag Area
A. Minimum intersection clearance ¹	145'	170'	300'	100'	100'	300'	75'	75'	150'
B. Minimum driveway spacing ^{1,2}	100'	200'	300'	75'	100'	300'	--- ⁴	--- ⁴	150'

Res = Residential, C/I = Commercial/Industrial

¹ Values are measured from the back of the curb, intersecting road to the adjacent driveway near edge. **Distance may be adjusted due to lot dimension or zoning code.**

² Values are measured between driveway edges.

³ One access drive allowed per lot. Depending on lot size, an additional drive may be allowed upon approval of the Jurisdiction.

⁴ See Jurisdictional Engineer for local requirements.

From Section 5L-4 - Driveway Design Criteria

B. Width Measurement

1. The width of an entrance with a radius return or with a flared taper that connects to a curb and gutter roadway is measured at a point 10 feet back from the roadway curb the back of the sidewalk, or, if no sidewalk exists, at the right-of-way line. Measure the driveway width of an opening with a large radius meeting the widths shown in Table 5L-4.01 at the end of the radius if it extends onto private property. The curb opening may exceed the maximum allowable width of the entrance to accommodate the allowable radius or taper.
2. The width of an entrance that connects to a rural roadway (no curb and gutter) is measured across the top of the entrance at the culvert line or at the location where a culvert would normally be placed.

C. Dimensions

Figure 5L-4.01: Entrance Dimensions

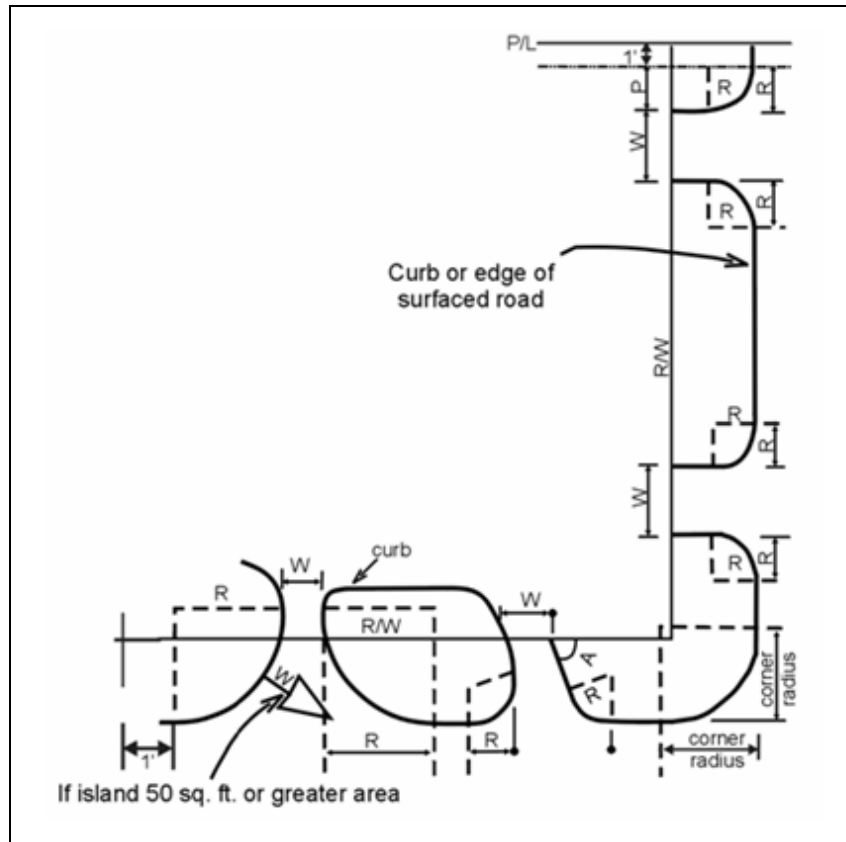


Table 5L-4.01: Driveway Dimensions¹
(all dimensions are in feet)

Dimension Reference (See Figure 5L-4.01)		Major Arterial Street				Minor Arterial Street				Collector (Major and Minor)				Local Street			
		Residential	Commercial	Industrial	Agricultural	Residential	Commercial	Industrial	Agricultural	Residential	Commercial	Industrial	Agricultural	Residential	Commercial	Industrial	Agricultural
Width																	
Minimum	W	15	24	24	20	15	24	24	20	10	24	24	20	10	24	24	20
Maximum		30	45	45	30	30	45	45	30	24	40	45	30	24 **	32	40	30
Right-turn Radius ²																	
Minimum	R	10	10	25	25	10	10	25	25	10	10	25	25	10	10	10	20
Maximum		25	35	50	35	25	35	50	35	25	35	50	35	15	20	30	35
Min. Acute Angle ³		60°	70°	70°	70°	60°	70°	70°	70°	60°	70°	70°	70°	60°	70°	70°	70°
Pref. Acute Angle	A	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°
Min. Pavement Thickness (inches)	T	6/8	7/9	*	6	6	7	*	6	6	7	*	6	6	7	*	6

¹ Major entrances require special design.

² 3 to 5 foot flares (F) may be used for residential and agricultural entrances.

³ Any variation from 90° will be evaluated on a case by case basis. The minimum acute angle (measured from the edge of the pavement) is 60°.

* Requires special design.

** Maximum width of 12 feet per garage stall up to a total maximum of 36 feet except where located on a cul-de-sac bulb where the maximum width is 24 feet. See jurisdiction policy for specific requirements.

1. The width (W) shown applies to rural routes and city streets including neighborhood business, residential, and industrial streets. ~~For joint entrances centered on property lines, the entrance width may increase 5 feet rounded to the nearest 5 foot interval but should not exceed 45 feet.~~ For residential drives on local streets, joint entrances centered on property lines or structures built with a shared garage wall, the maximum driveway width for each property will be 24 feet measured at the right-of-way line. For joint entrances, any landscaping between the drives will count toward the 24 foot maximum width. The landscaping width will be equally shared between the two properties. In rural areas (open ditch roadways) widths for paved entrances should include an additional 4 feet for shoulders (minimum 2 feet shoulders each side).
2. The radius (R) for agricultural uses will vary according to the following intersecting acute angles:

Table 5L-4.02: Agricultural Acute Angle and Radius

Acute Angle	Acute Radius Decrease (feet)	Obtuse Radius Increase (feet)
85° to 90°	0	0
75° to 85°	5 feet	5 feet
65° to 75°	5 feet	10 feet
60° to 65°	10 feet	15 feet

Where the entrance radius specified is greater than the distance between the back of curb and the front edge of the sidewalk the radius may be reduced to meet the available space but should be no less than 10 feet. An option to the radius under this condition is the use of flared entrances. When a flare is used, it should be 3 to 5 feet wide and should be constructed from the back of curb to the sidewalk. If no sidewalk exists, flares should be 10 feet long.

3. For individual properties, the number of entrances should be as follows:
 - a. **Single Family (SF) Residential:** Each SF residential property is limited to one access point. However, where houses are located on corner lots, have extra wide frontage, or on heavy traveled roadway more than one access point may be allowed to eliminate backing out on a heavily traveled roadway. See jurisdiction policy for specific requirements.

Reason for Revision: Updated point of width measurement, established width based on number of garage stalls, clarified joint driveway width, and updated distance from intersections.

Comments: None.

District: 1 2 3 4 5 6 **2/27/2020 Webinar**

Comments: One person questioned if you could measure from the front of the sidewalk. Another person suggested measuring widths at the end of the driveway curb radius when adjacent to a commercial area.

District:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Comments:	None.					
Action:	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved	
District:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Comments:	Approved everything except having a larger driveway if you have a 3-car garage.					
Action:	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved	
District:	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Comments:	None.					
Action:	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved	
District:	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Comments:	None.					
Action:	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved	
District:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input checked="" type="checkbox"/> 5	<input type="checkbox"/> 6
Comments:	None.					
Action:	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved	
District:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input checked="" type="checkbox"/> 6
Comments:	None.					
Action:	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved	

Final District Action Summary: All 6 districts approved; see comments above.

Board of Directors Action: Approved.