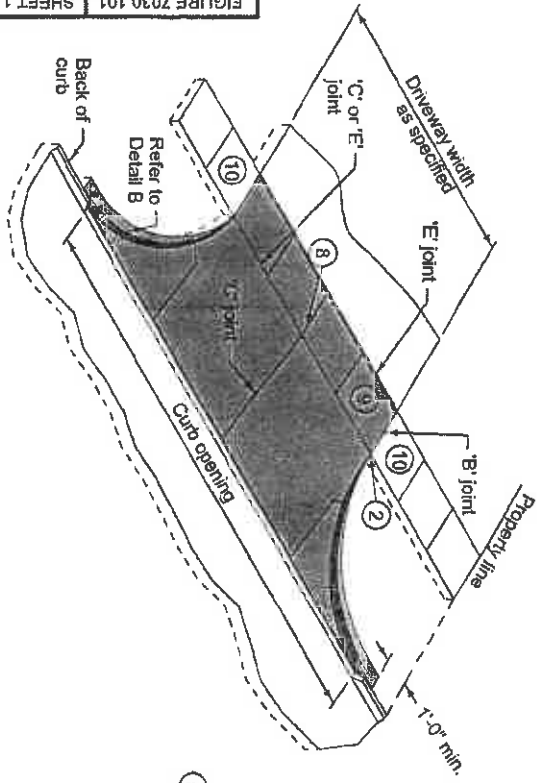
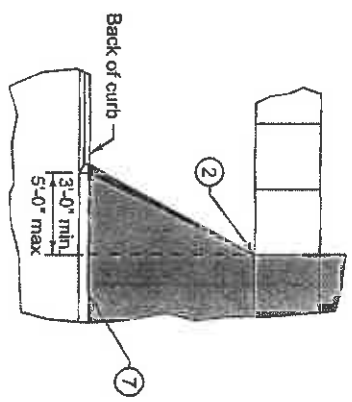


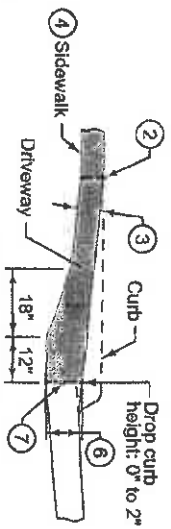
TYPE A WITH FLARES



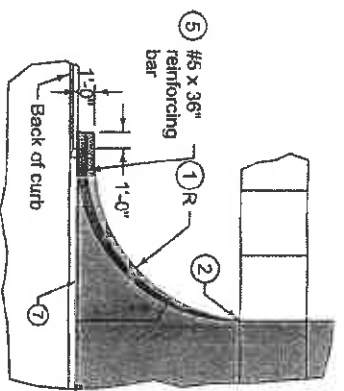
TYPE A WITH RADII



DETAIL A



TYPICAL SECTION



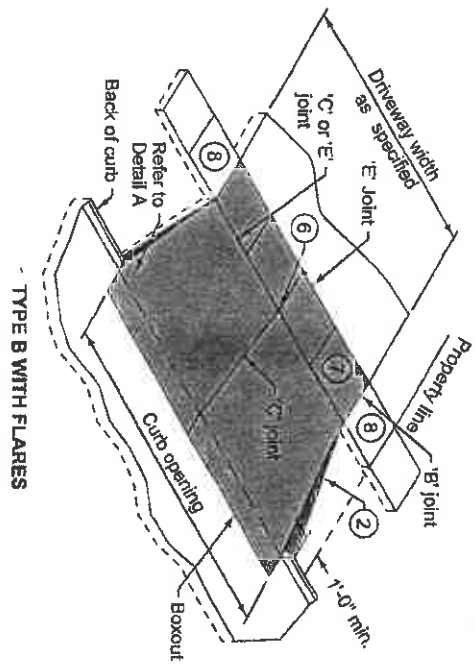
DETAIL B

- 1 Driveway radius (R). Residential: 10 foot minimum, 15 foot maximum. Commercial and Industrial: As specified in the contract documents.
- 2 Transition the curb height to 0 inches at end of lap/radius or at the front edge of sidewalk. Do not extend raised curb across sidewalk.
- 3 Pavement thickness. Residential: 6 inches minimum. Commercial and Industrial: 7 inches minimum.
- 4 Sidewalk thickness through driveway to match thickness of driveway.
- 5 Center reinforcing bar vertically in the pavement.
- 6 Match thickness of adjacent roadway, 8 inches minimum.
- 7 Provide 'E' joint at back of curb unless 'B' joint is specified.
- 8 For alleys, invert the pavement crown 2% toward center of alley.
- 9 Target cross slope of 1.5% with a maximum cross slope of 2.0%. If specified in the contract documents, construct the sidewalk through the driveway 5 feet wide to serve as a passing space.
- 10 If cross slope of adjacent sidewalk panel exceeds 2.0%, remove and replace to transition from existing sidewalk to sidewalk through driveway. If elevation change requires a curb ramp, comply with Figure 7030.205, verify need for detectable warning panel with Engineer.

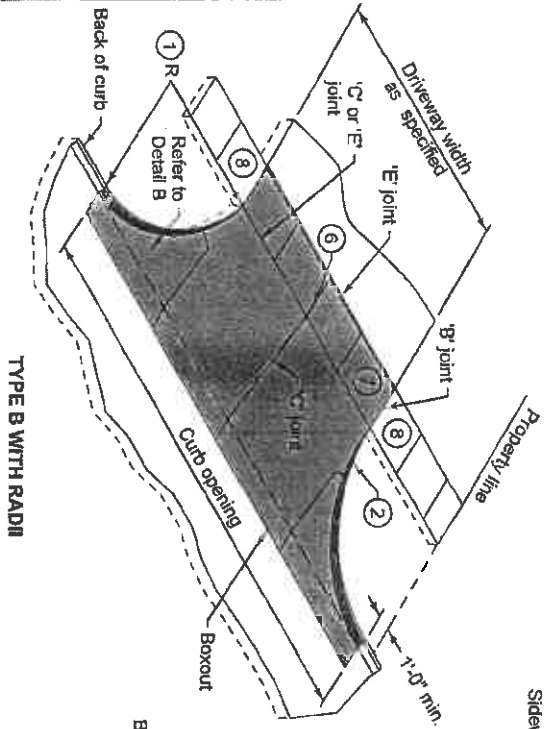
	REVISION	
	Number	Date
	7030.101	10-15-13
SHEET 1 of 1		

SUDAS Standard Specifications

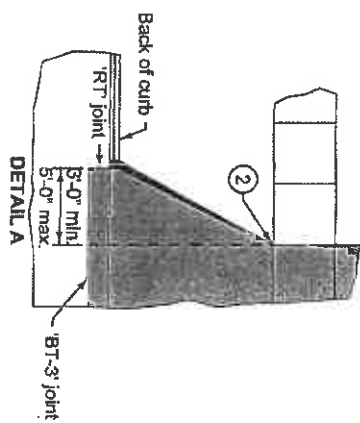
CONCRETE DRIVEWAY, TYPE A



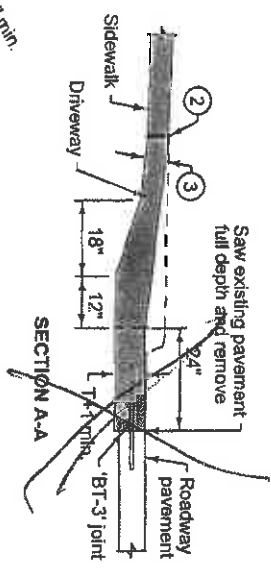
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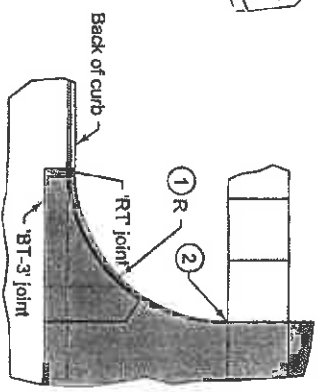
TYPE B WITH RADI



DETAIL A



SECTION A-A



DETAIL B

- ① Driveway radius (R). Residential: 10 foot minimum, 15 foot maximum. Commercial and Industrial: As specified in the contract documents.
- ② Transition the curb height to 0 inches at end of taper/radius or at the front edge of sidewalk. Do not extend raised curb cross sidewalk.
- ③ Pavement thickness. Residential: 6 inches minimum. Commercial and Industrial: 7 inches minimum.
- ④ Sidewalk thickness through driveway to match thickness of driveway.
- ⑤ If longitudinal joint is located 48 inches or less from the back of curb, extend boxout to joint line. Full depth saw cut is still required.
- ⑥ For alleys, invert the pavement crown 2% toward the center of the alley.
- ⑦ Target cross slope of 1.5% with a maximum cross slope of 2.0%. If specified in the contract documents, construct the sidewalk through the driveway 5 feet wide to serve as a passing space.
- ⑧ If cross slope of adjacent sidewalk panel exceeds 2.0%, remove and replace to transition from existing sidewalk to sidewalk through driveway. If the elevation change requires a curb ramp, comply with Figure 7030.205; verify need for detectable warning panel with Engineer.

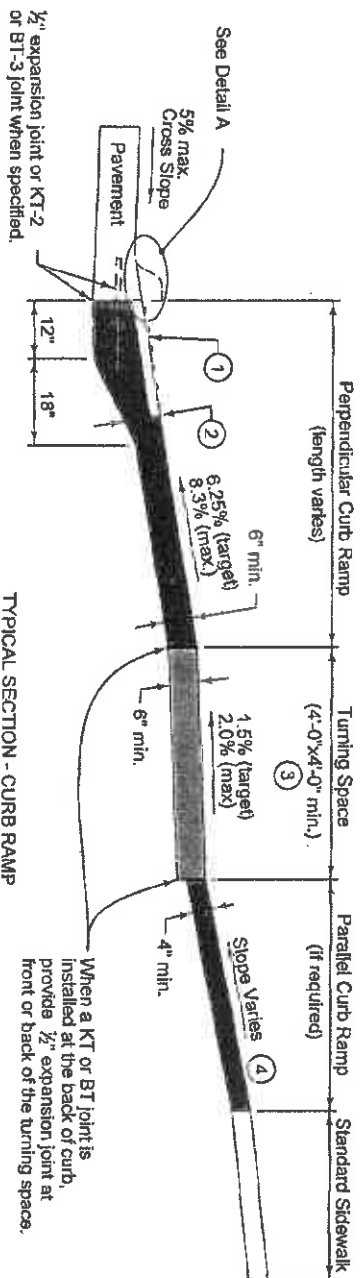


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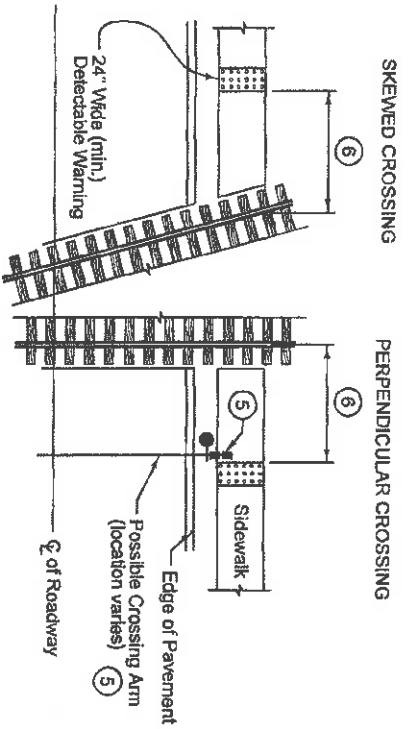
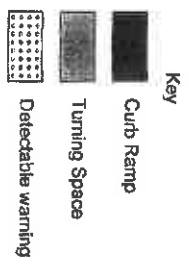
REVISION
New 10-15-13
SHEET 1 of 1

SUDAS Standard Specifications

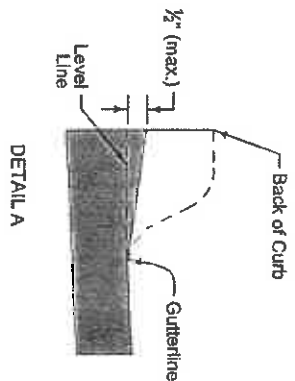
CONCRETE DRIVEWAY, TYPE B



TYPICAL SECTION - CURB RAMP

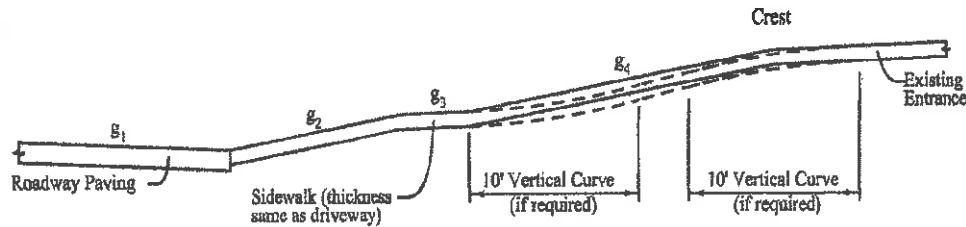


DETECTABLE WARNING LOCATION AT RAILROAD CROSSING



- ① Provide a minimum 2 foot width of detectable warning surfaces in the direction of pedestrian travel across the full width of the curb ramp or turning space, exclusive of curbs or flares.
- ② Provide a minimum of 6 inches of concrete below the detectable warning panel.
- ③ Target slope of 1.5% with maximum slope perpendicular to the travel directions of 2.0%. Minimum 4 feet by 4 feet.
- ④ If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference between the landing and the standard sidewalk.

The length of the parallel ramp is not required to exceed 15 feet, regardless of the resulting slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.
- ⑤ If crossing gate conflicts with location of detectable warning or if pedestrian crossing gate is provided, place detectable warning panel in advance of the crossing gate.
- ⑥ Locate front edge of detectable warning panel 12 to 15 feet from centerline of nearest rail. Orient truncated domes parallel to the direction of pedestrian travel.

Figure 5I-4.02A: Typical Section - Commercial/Industrial and Residential Entrance

1. Algebraic Difference Between g_1 and g_2 :
 - a. Commercial/Industrial: Not to exceed 9%
 - b. Residential: Not to exceed 12%
2. Algebraic Difference Between g_2 and g_3 :
 - a. Commercial/Industrial: Not to exceed 6%
 - b. Residential: Not to exceed 8%
3. Maximum Slope of g_3 = 2% (ADA compliance)
4. Algebraic Difference g_3 to g_4 :
 - a. Commercial/Industrial: Not to exceed 5%
 - b. Residential: Not to exceed 8%
 - c. 10 foot vertical curve required for change in grade exceeding 5%
5. Maximum Slope of g_4 :
 - a. Commercial/Industrial: 7%
 - b. Residential: 10%
6. 10 foot vertical curve required for change in grade from g_4 to existing exceeding 5%
7. If the above grade restrictions require a depressed sidewalk through the driveway, a transition section should be provided between the normal sidewalk grade and the depressed section. As a general rule, use the following transition lengths:

Elevation Difference from Normal Sidewalk Grade (inches)	Transition Distance (feet)
1 to 2	8
2 to 4	12
4 to 6	16
Greater than 6	Desirable max. slope is 16:1 Absolute max. slope is 12:1