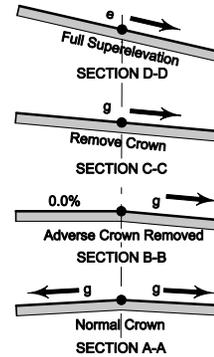


TRANSITION DETAILS WHEN SPIRAL IS USED



g = Normal Cross Slope  
e = Full Superlevation

AXIS OF ROTATION AT CENTER LINE

Refer to specific curve data contained in detail project plans for tangent runoff length (x), runoff length (L) and full superlevation (e).

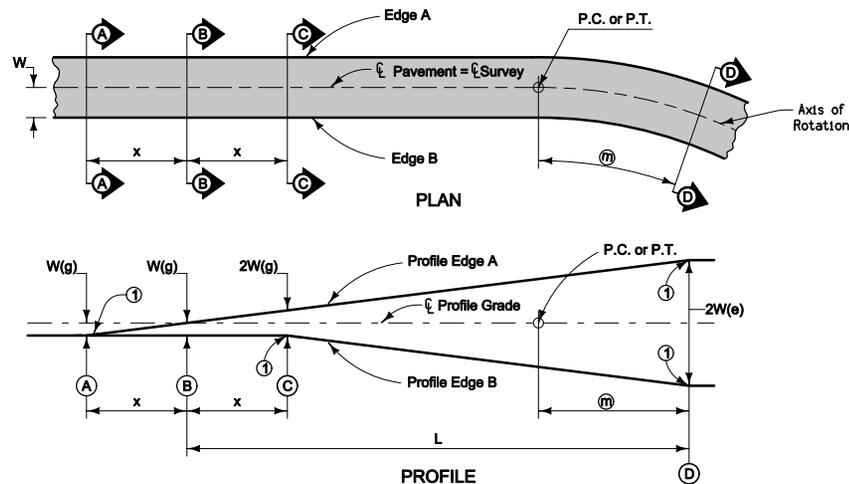
When spiral transitions are not required, place 70% of full superlevation at the P.C. and P.T. Place the other 30% of the runoff length within the curve.

Unless otherwise specified, all lengths are measured along the centerline of the roadway.

Superelevations on this standard are shown for curves to the right. Curves to the left are a mirror image of what is shown.

Ⓜ = 30% of L.

- ① Smooth curve established at time of construction.
- ② Spiral length coincides with runoff length (L).

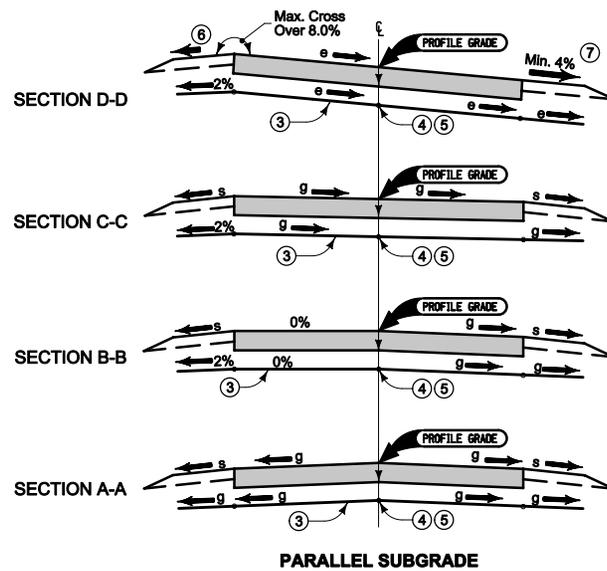


TRANSITION DETAILS WHEN SPIRAL IS NOT USED

|  |               |
|--|---------------|
| <br>Iowa Department<br>of Transportation | REVISION      |
|  | New 04-20-10  |
| <b>STANDARD ROAD PLAN</b>                | <b>PV-301</b> |
| REVISIONS: New. Replaces RP-1.           | SHEET 1 of 2  |

*Deanna Maifeld*  
 APPROVED BY DESIGN METHODS ENGINEER

**SUPERELEVATION DETAILS  
TWO LANE ROADWAYS**



- ③ Subgrade Surface
- ④ 6.0"
- ⑤ Point of Subgrade Rotation
- ⑥ High Side: Maintain normal shoulder slope, *s*, unless this slope produces a grade break with adjacent pavement of more than 8.0%. Then determine the shoulder slope by a 8.0% break with adjacent pavement. If superelevation slope exceeds 7.0%, maintain a 1% slope away from mainline.
- ⑦ Low Side: Maintain the normal shoulder slope, *s*, unless the adjacent pavement slope is steeper. Then slope the shoulder at the same rate as the adjacent pavement.

|  |          |               |
|--|----------|---------------|
|  Iowa Department<br>of Transportation | REVISION |               |
|  | New      | 04-20-10      |
| <b>STANDARD ROAD PLAN</b>  |          | <b>PV-301</b> |
|  |          | SHEET 2 of 2  |
| REVISIONS: New. Replaces RP-1.   |          |               |
| <i>Deanna Maifeld</i><br>APPROVED BY DESIGN METHODS ENGINEER   |          |               |
| <b>SUPERELEVATION DETAILS<br/>TWO LANE ROADWAYS</b>  |          |               |