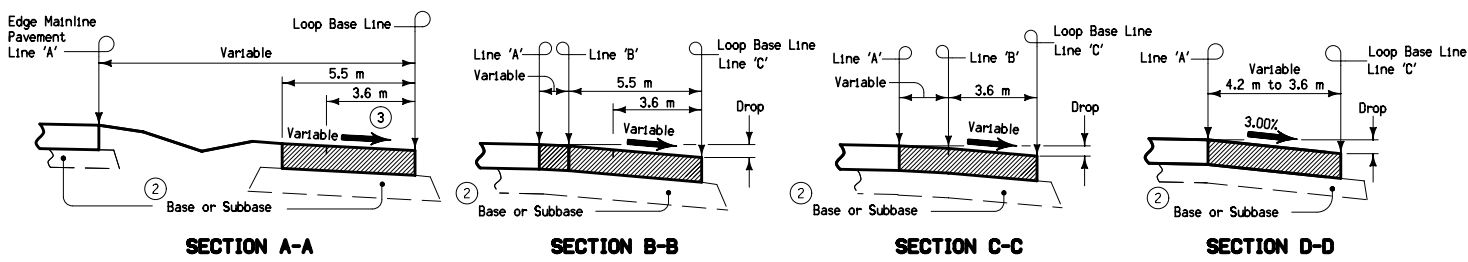


NOTE: The algebraic difference between profile grade for Loop B at (F) and relative profile of Mainline at (H) is 0.38%

PROFILE

| TABLE OF OFFSETS AND DROPS FOR 5.5 m LOOP ENTRANCE | | | | | | | | | | | | | | | | |
|----------------------------------------------------|------------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| Distance From Point (E) Along Line 'A' (m) | 140 | 130 | 120 | 110 | 100 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0 | |
| From Line 'A' To Line 'B' | Offset (m) | 6.257 | 5.130 | 4.088 | 3.129 | 2.255 | 1.464 | 0.757 | | | | | | | | |
| | Slope (%) | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | | | | | | | | |
| | Drop (mm) | 188 | 154 | 123 | 94 | 68 | 44 | 23 | | | | | | | | |
| From Line 'B' To Line 'C' | Offset (m) | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | | | | | | | | |
| | Slope (%) | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 3.64 | | | | | | | | |
| | Drop (mm) | 220 | 220 | 220 | 220 | 220 | 220 | 200 | | | | | | | | |
| From Line 'A' To Line 'C' | Offset (m) | | | | | | | | 5.643 | 5.101 | 4.642 | 4.267 | 3.975 | 3.767 | 3.642 | 3.600 |
| | Slope (%) | | | | | | | | 3.21 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| | Drop (mm) | 408 | 374 | 343 | 314 | 288 | 264 | 223 | 181 | 153 | 139 | 128 | 119 | 113 | 109 | 108 |
| Distance From Point (G) Along Line 'C' (m) | 139.676 | 129.659 | 119.651 | 109.651 | 99.658 | 89.673 | 79.694 | 70.040 | 60.025 | 50.014 | 40.007 | 30.003 | 20.001 | 10.000 | 0 | |

NOTE: From (G) to (P) cross slope between Line A and Line C is a constant 3%.



Loop exit pavement shall be the same thickness as mainline pavement.
 Loop exit pavement shown by shaded area is 1130 square meters.
 Special shaping of area between lines A and B may be required to assure proper drainage.
 For jointing layout, see Standard Road Plan RV-10.
 This design is based on 100 km/h design speed at e max = 6%.

- For header construction details at the beginning of taper, refer to Typical 7101 or Typical 7102.
- Subbase for loop exit pavement shall be the same thickness as mainline subbase.
- The loop pavement cross slope between (J) and (F) is determined by superelevation rotated about line C. Refer to Standard Road Plan RP-3 and plans for superelevation transition requirements.

| TABLE OF SHOULDER TRANSITION LENGTHS | | | |
|--------------------------------------|-------------------------------------------------|-----|------|
| W ₀ | Shoulder Width beyond Edge of Mainline Pavement | | |
| | 2.4m | 3m | 3.6m |
| 3.6m | NA | 60m | 90m |
| 4.2m | 30m | 60m | NA |

NOTE: W₀ is the width of the outside lane to the Edge of Pavement.

All dimensions given in millimeters unless noted.

| | | |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| M METRIC VERSION | | REVISION 5 [04-21-09] |
| | STANDARD ROAD PLAN | RV-9 |
| | REVISIONS: Corrected circle note 2. Removed mainline pavement and shoulder widths. Added table for shoulder transition distance. (Metrics Re-instated.) | SHEET 1 of 1 |
| | <i>Deanna Mihoff</i> APPROVED BY DESIGN METHODS ENGINEER | |
| | ACCELERATION TAPER FOR 5.5 m ENTRANCE LOOP | |