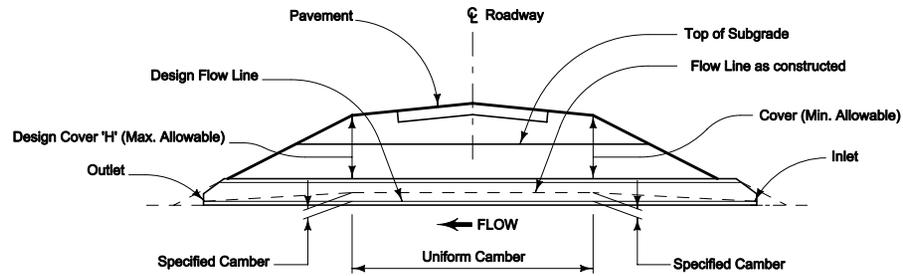


TYPICAL INSTALLATION DUAL ROADWAY



TYPICAL INSTALLATION SINGLE ROADWAY

Refer to RF-14 for pipe joint connection and wrapping.

Refer to RF-30A for culvert bedding and backfill.

COVER

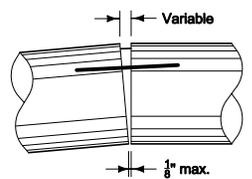
Minimum and maximum allowable cover for pipe culverts as shown on the appropriate Standard Road Plans for the particular kind of culvert, as follows:

- RF-31 Depth of Cover Tables for Concrete Pipe.
- RF-32 Depth of Cover Tables for Corrugated Pipe.

CAMBER

Camber is the dimension line between inlet and outlet elevation. Some settlement of the structure is usually anticipated, resulting in the design flow line between inlet and outlet. Camber is developed uniformly from inlet and outlet to a point beneath the outside shoulder lines of the roadway and is uniform between those points, as indicated. The Normal Camber indicated in the "Allowable Camber Tables" should be used unless specific camber values are indicated elsewhere in the plans.

- ① Camber for concrete pipe is created by placing pipe sections tight at the bottom of the joint with variable opening at top of joint. Camber for corrugated metal pipe to be done as directed by the Engineer.



TYPICAL JOINT IN CAMBERED PIPE ①

Design Cover 'H' (feet)	Normal Camber (feet)
5	0.08
10	0.17
15	0.25
20	0.33
25	0.42
30	0.50
35	0.58

Pipe Size 'D'	Maximum Camber (feet)
24"	1.1
30"	1.2
36"	1.3
42"	1.4
48"	1.5
60"	1.6
84"	1.7

ALLOWABLE CAMBER TABLES

<p>Iowa Department of Transportation</p> <p>STANDARD ROAD PLAN</p> <p>REVISIONS: Changed Standard referenced for Corrugated Pipe.</p> <p style="text-align: right;"><i>Deanna McFalls</i> APPROVED BY DESIGN METHODS ENGINEER</p>	REVISION
	12 10-19-10
	RF-30B
	SHEET 1 of 1
PIPE CULVERT (COVER AND CAMBER)	