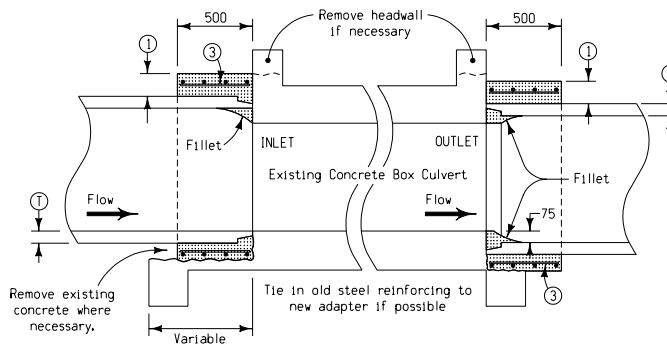
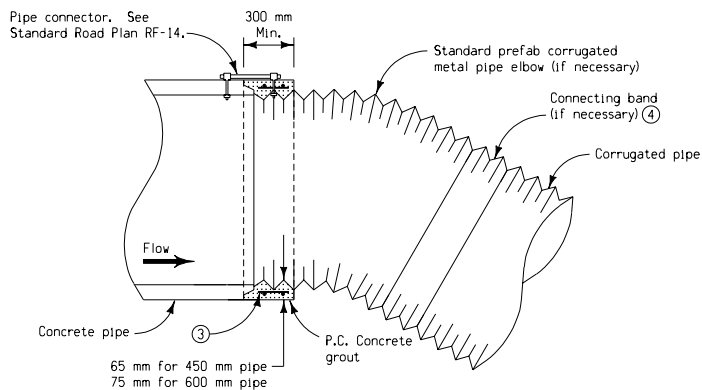


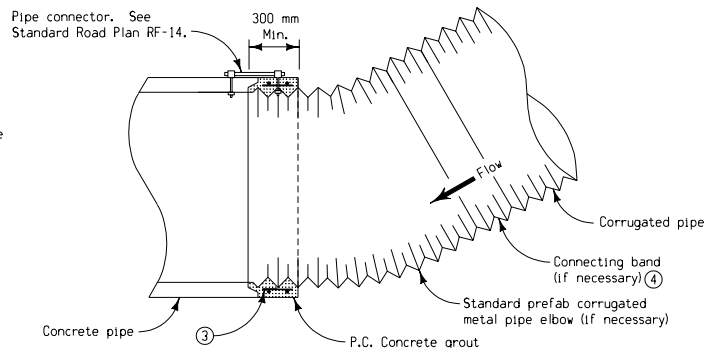
CONCRETE PIPE TO CONCRETE PIPE  
TYPE "C-1"



CONCRETE PIPE TO CONCRETE BOX CULVERT  
TYPE "C-2"



CONCRETE PIPE TO CORRUGATED PIPE  
TYPE "C-3"



CORRUGATED PIPE TO CONCRETE PIPE  
TYPE "C-4"

#### GENERAL NOTES:

When the use of suitable adaptors for making connections in various drainage structures are required, the details shall be similar to those indicated hereon for the respective types.

Materials and methods of construction shall be in accordance with current Standard and Supplemental Specifications.

No payment will be made for individual adaptors.

The cost of furnishing all materials and constructing adaptor as indicated will be considered incidental to the pipe culvert.

The cost of removing and disposing, as directed, of any necessary headwall, wingwall or other concrete, shall be bid as "Removal of Existing Structures".

Type "C-1" and "C-2" adaptors are to be formed and constructed on the job site by methods approved by the Engineer.

Type "C-3" and "C-4" adaptors may be shop fabricated by a method approved by the Engineer for attaching a concrete collar (either tongue or groove end) to a standard section of corrugated metal pipe. Holes may be field drilled in corrugated metal pipe to match alignment with concrete pipe.

① Thickness same as pipe thickness (T) but not less than 100 millimeters (except for corrugated pipe where 'T' may vary).

② Opening between pipes shall be carefully grouted.

③ Minimum reinforcing shall be steel wire mesh WWF 150 x 150 - W2. Lap ends 150 millimeters.

④ Positive type joint coupling required.

T Thickness of wall of concrete pipe. See Standard Road Plan RF-1.

ESTIMATED ENCASEMENT QUANTITIES PER METER FOR "C-1" AND "C-2" ADAPTORS			
Diameter, D mm	Concrete m <sup>3</sup>	Wire Mesh kg	Concrete for Fillet m <sup>3</sup>
375	0.3	3.0	--
450	0.3	3.4	--
525	0.3	3.9	--
600	0.3	4.2	--
750	0.5	5.1	0.3
900	0.5	6.0	0.3
1050	0.5	6.7	0.3
1200	0.8	7.6	0.3
1350	0.8	8.5	0.3
1500	1.0	9.2	0.3
1650	1.3	10.3	0.3
1800	1.5	11.2	0.3
1950	1.5	12.1	0.3
2100	1.8	12.9	0.3

( 100 D and 150 D Pipe )

All dimensions given in millimeters unless noted.

METRIC VERSION	Iowa Department of Transportation Project Development Division	
	<b>STANDARD ROAD PLAN</b>	<b>RF-2</b>
	REVISION: Metric conversion of Standard Road Plan RF-2 no. 5 (dated 2-23-93).	REVISION NO. 5
	APPROVED BY: <i>David P. Smith</i> 03-10-95 DESIGN METHODS ENGINEER	REVISION DATE 06-06-95
	CONSTRUCTION OF TYPE 'C' CONCRETE ADAPTORS FOR PIPE CULVERT CONNECTIONS	