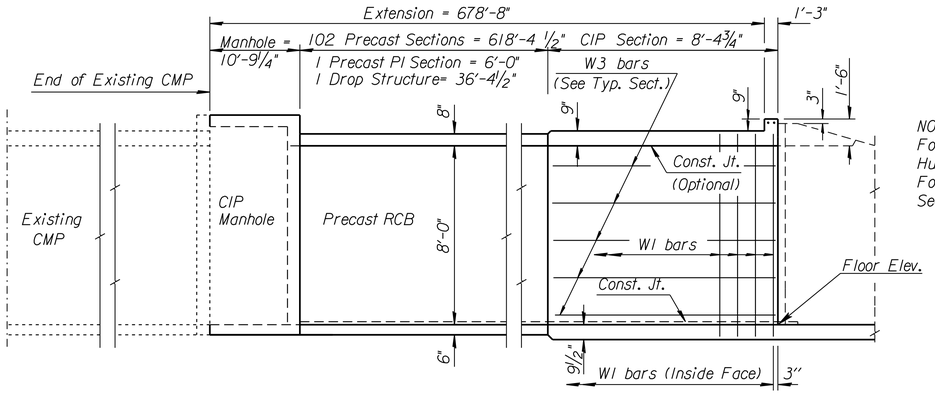
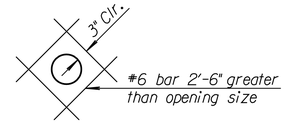


SECTION AND ELEVATION

(Along ℄ RCB)

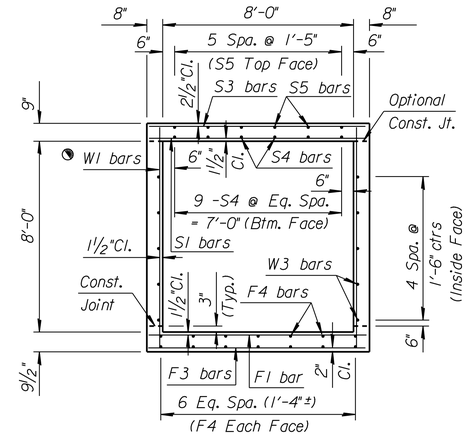
NOTE:
For Wing Wall, Scour Apron and Hubguard Details See Sheet No. 9 & 10.
For Drop Structure Details See Sheet No. 11.



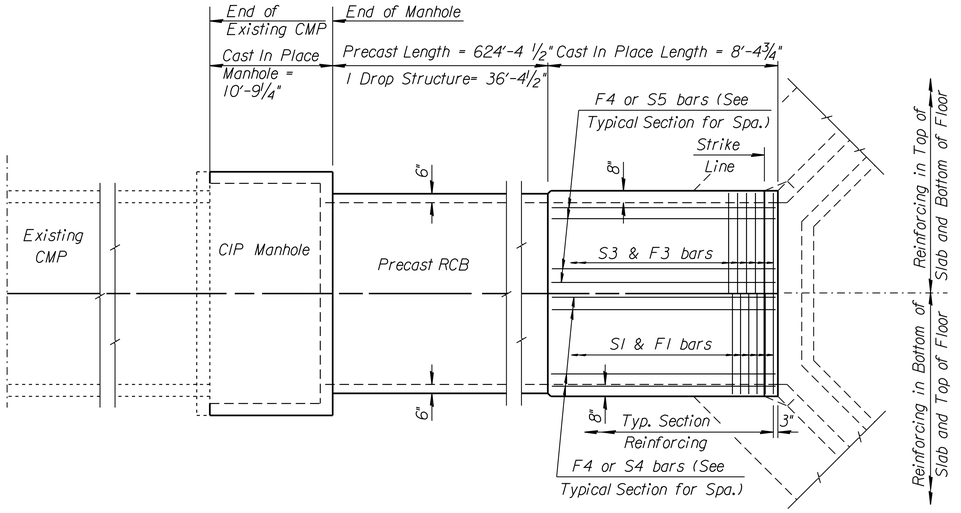
PIPE DETAILS

Note: See Sheet No. 6 for placement details.

◔ See RCB Auxillary Details for Optional Splice.
See Standard No. RD 080 for additional details.



TYPICAL SECTION



PLAN

GENERAL NOTES

LOADING: HS20-44 AASHTO Specifications, 1983 Edition.
UNIT STRESSES: Grade 4.0 Concrete; f'c = 4,000 p.s.i.
Reinforcing Steel; fy = 60,000 p.s.i.
FILL HEIGHT: Unless otherwise noted, the Design Fill Height is measured from the riding surface at the culvert and shall include the surfacing.
CONCRETE: Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a ¾inch triangular moulding. Where Grade 4.0 Concrete (AE) is specified, it shall be placed in the top slab above the Construction Joint.
REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. All dimensions relative to reinforcing steel shall be to centerline of bar unless otherwise noted.
EXCAVATION: Excavation for culverts less than bridge length shall not be paid for directly but shall be subsidiary to Grade 4.0 Concrete. Excavation for RCB Bridges shall be paid for as Class III Excavation.
~~SEAL COURSE: A Seal Course may be required by the Engineer. The Seal Course shall be unreinforced Concrete (Commercial Grade) to a minimum depth of 3 inches or as determined by the Engineer. Concrete for the seal course shall be paid for at the unit price set for Concrete for Seal Course.~~
FOUNDATION STABILIZATION: The Foundation Stabilization quantity has been calculated to the limits shown on the "RCB Auxiliary Details" sheet. The depth may be increased by the Engineer. The Contractor may underrun Foundation Stabilization under the barrel if founded on firm material and with the Engineer's approval. Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.
QUANTITIES: The quantities shown in the Culvert Summary include apron and/or soil saver quantities when their construction is required by the plans. Payment for additional quantities that result from including seal course and/or floating apron, as a change in original plans, shall be made at the Unit Price bid for the various items involved.
GRANULAR BACKFILL (WINGWALLS): Special backfill procedures may be required at the direction of the Engineer. See Auxiliary Details Sheet.
STRIKE LINE: Wingwalls and that portion of the RCB outside the Strike Line shall be constructed level. Footing for wingwalls shall be constructed with the culvert floor. See wingwall detail sheet.
PAYMENT: The Single 8'x8' RCB shall be included in the Lump Sum bid item "Headwall, RC (w/ Energy Dissipators)" which shall include all reinforcing steel, concrete, foundation stabilization and any other incidentals required for construction. Quantities are shown for information only.

ADAPTED FROM KDOT STANDARD BR 1.8.8 P

⧖ For design purposes ONLY. Do NOT use for Construction — CULVERT SUMMARY — ◔ includes any apron welded wire fabric

Floor Elev.	Crown Gr. Elev.	⧖ Design Fill Ht.	Skew	Wings	Scour Apron	Soil Saver	Concrete Barrel (Cu.Yds.)			Concrete Total (Cu.Yds.)	Reinf. Steel (Gr. 60) Barrel (Lbs.)			Reinf. Steel (Gr. 60) Total (Lbs.)	
1301.00	1315.00	0	0	FLARED	YES	NO	7.80			7.80	1,105			1,105	

BAR SCHEDULE

F1 Size	Spa.	No.	Length					F3 Size	Spa.	No.	Length	F4 Size	No.	Length	S1 Size	Spa.	No.	Length		S3 Size	Spa.	No.	Length	S4 Size	No.	Length	S5 Size	No.	Length
6	6"	17	9'-0"	N/A	N/A	N/A	N/A	5	7½"	14	9'-0"	4	14	8'-0"	6	6"	17	9'-0"	N/A	N/A	N/A	N/A	5	7½"	14	9'-0"	5	9	8'-0"	4	6	8'-0"

K1 Size	Spa.	No.	Length	K2 Size	Spa.	No.	Length	W1 Size	Spa.	No.	Length					W3 Size	No.	Length													
N/A	N/A	N/A		N/A	N/A	N/A		4	9"	24	9'-2"	N/A	N/A	N/A	N/A	4	10	8'-0"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				

Minimum Splice Lengths	
#4	1'-4"
#5	1'-8"
#6	2'-0"

✱ SUMMARY OF QUANTITIES

Concrete (Grade 4.0)(AE)	7.8 C.Y.
Reinforcing Steel (Gr. 60)	1,105 Lbs.

✱ - For Information Only

NO.	DATE	REVISIONS	BY	APP'D

HEARTLAND PREPAREDNESS CENTER
SINGLE 8' x 8' REINFORCED CONCRETE BOX

SINGLE 8 ft x 8 ft RCB

JAMES L. ARMOUR, P.E. - CITY ENGINEER
CITY OF WICHITA PROJ. NO. 472-84890

FHWA APPROVAL	6-5-91	APP'D	KENNETH F. HURST
DESIGNED	DETAILED	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK.

Sh. No. 8

Plotted By: r/m | Plot Location: $$KDOTGRP$$
File: i:\2009\09307\09307-000-BX8-RCB_Details.dgn
Plot Date: 6/30/2010