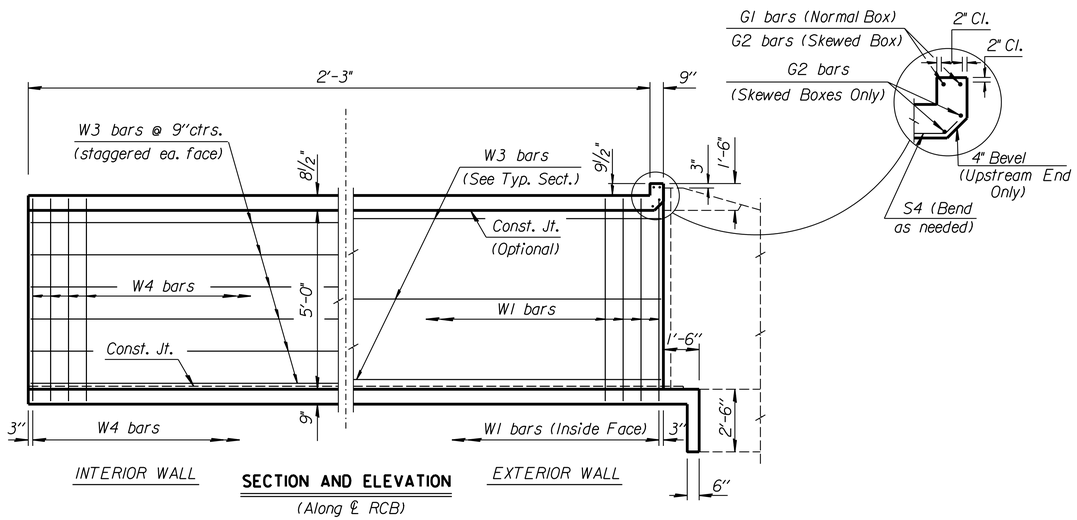
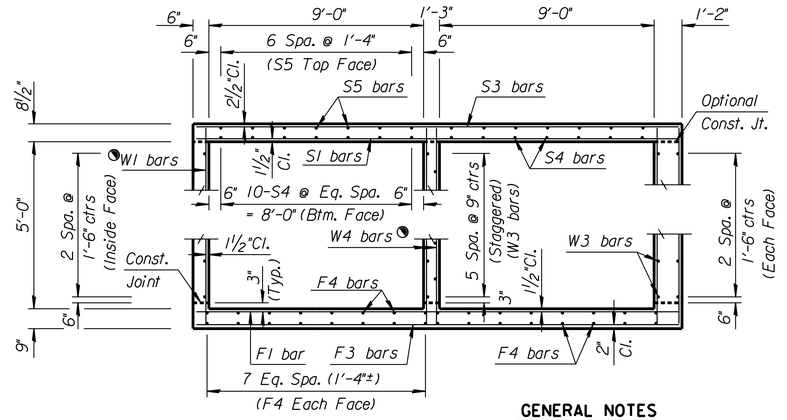
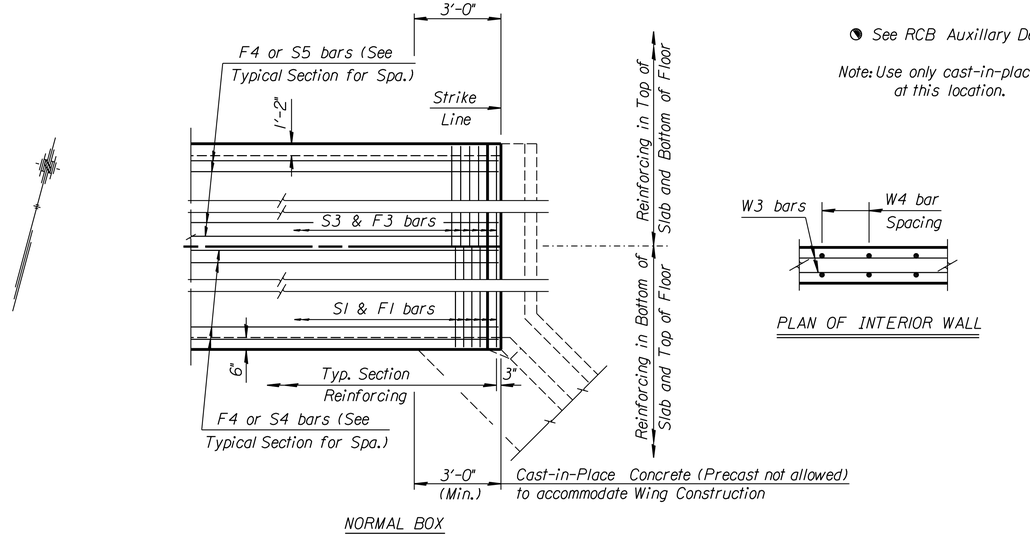
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	468-83775	2004	18	31



SECTION AND ELEVATION
(Along ℄ RCB)



TYPICAL SECTION



NORMAL BOX

PLAN OF INTERIOR WALL

PLAN

See RCB Auxillary Details for Optional Splice.

Note: Use only cast-in-place construction at this location.

GENERAL NOTES

LOADING: HS20-44 AASHTO Specifications, 1983 Edition.
UNIT STRESSES: Class AAA 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: Class AAA Concrete (AE) shall be used throughout. Bevel all exposed edges with a ¾inch triangular moulding.

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 shall not be paid for directly but shall be subsidiary to Class AAA Concrete.
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.
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: "R.C. HEADWALL A" shall be bid as a lump sum which shall include all labor, material, excavation, concrete, reinforcing steel, drilling and grouting, seal course, backfill, flowable fill and all other incidentals necessary to complete the work. Quantities are for information only.

CULVERT SUMMARY

Upstream Flowline Elev.	Downstr. Flowline Elev.	Crown Gr. Elev.	Design Fill Ht.	Skew	Left Wings	Right Wings	Scour Apron	Soil Saver	Granular Backfill	Concrete			Reinf. Steel (Gr. 60)		
										Barrel (Cu.Yds.)	Wings (Cu.Yds.)	Total (Cu.Yds.)	Barrel (Lbs.)	Wings (Lbs.)	Total (Lbs.)
170.60	170.60	N.A.	2	0	NONE	FLARED	NO	NO	NO	5.43	12.32	17.75	1,238	566	1,804

BAR SCHEDULE

F1								F3				F4				S1								S3				S4			S5		
Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	No.	Length		Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	No.	Length	Size	No.	Length
6	6"	9	20'-7"					6	6"	6	20'-7"	4	32	2'-8"		6	6"	9	20'-7"					6	6"	6	20'-7"	5	20	2'-8"	4	14	2'-8"

W1				W2				W3				W4				G1											
Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	No.	Length		Size	Spa.	No.	Length	Size	No.	Length		Size	No.	Length		Size	Spa.	No.	Length
4	9"	15	6'-2"	N/A	N/A	N/A	N/A	4	15	2'-8"		4	9"	10	6'-2"	5	2	20'-7"									

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

BILL OF MATERIALS

Class AAA Concrete	----- C.Y.
Class AAA Concrete (AE)	17.8 C.Y.
Reinforcing Steel (Gr. 60)	1,800 Lbs.
Reinforcing Steel (Epoxy Coated)	----- Lbs.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION
Str. No. 614-33-4506 Sta. 124+79.43
DOUBLE 9 ft x 5 ft RCB
(HEADWALL A)
~~BR 2.9.5 P~~ Sedgwick Co.

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

Plotted By: ras
Plot Location: $UNIT$
File: i:2004/04106/newplans/PF295
Plot Date: 3-11-2004