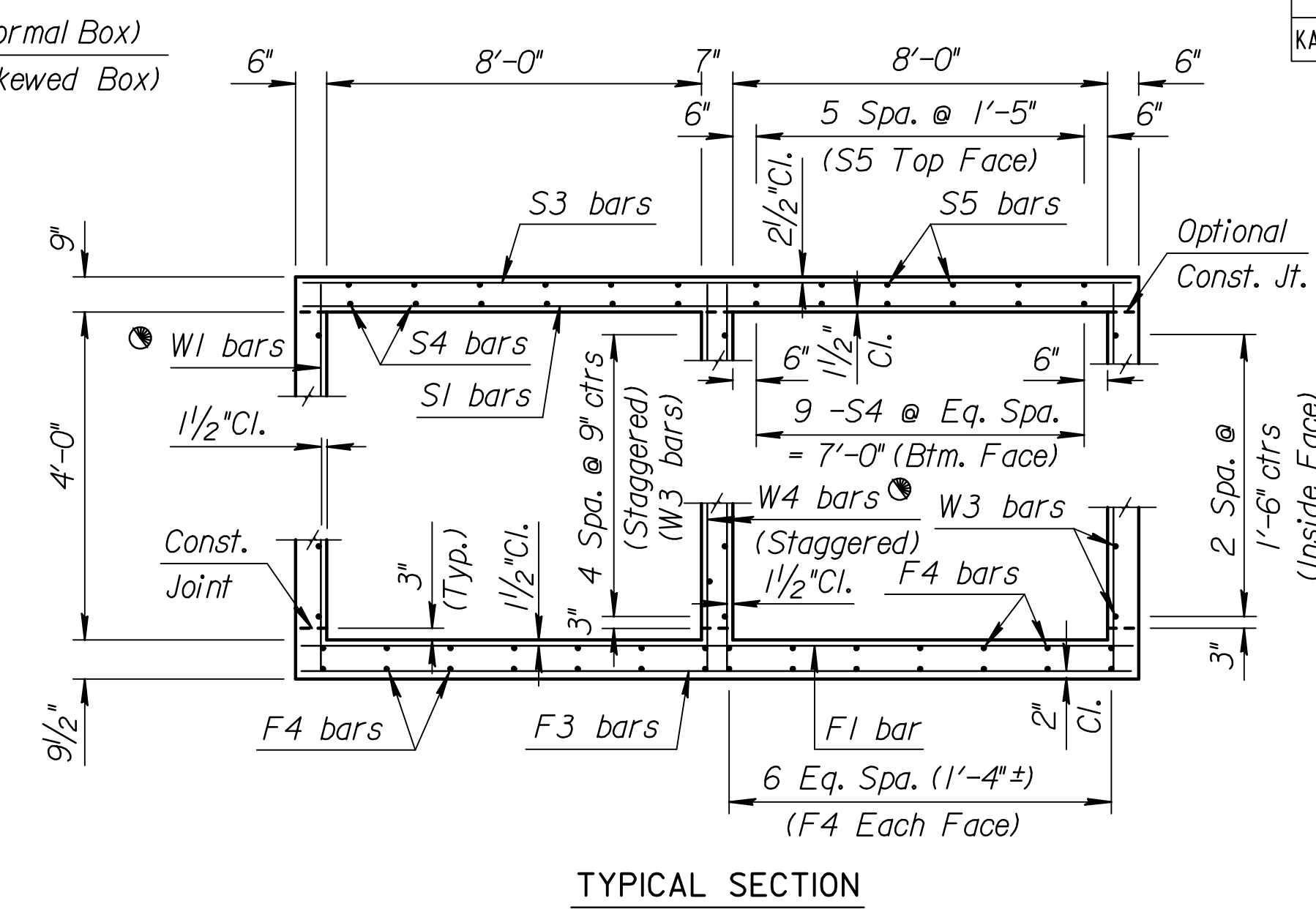
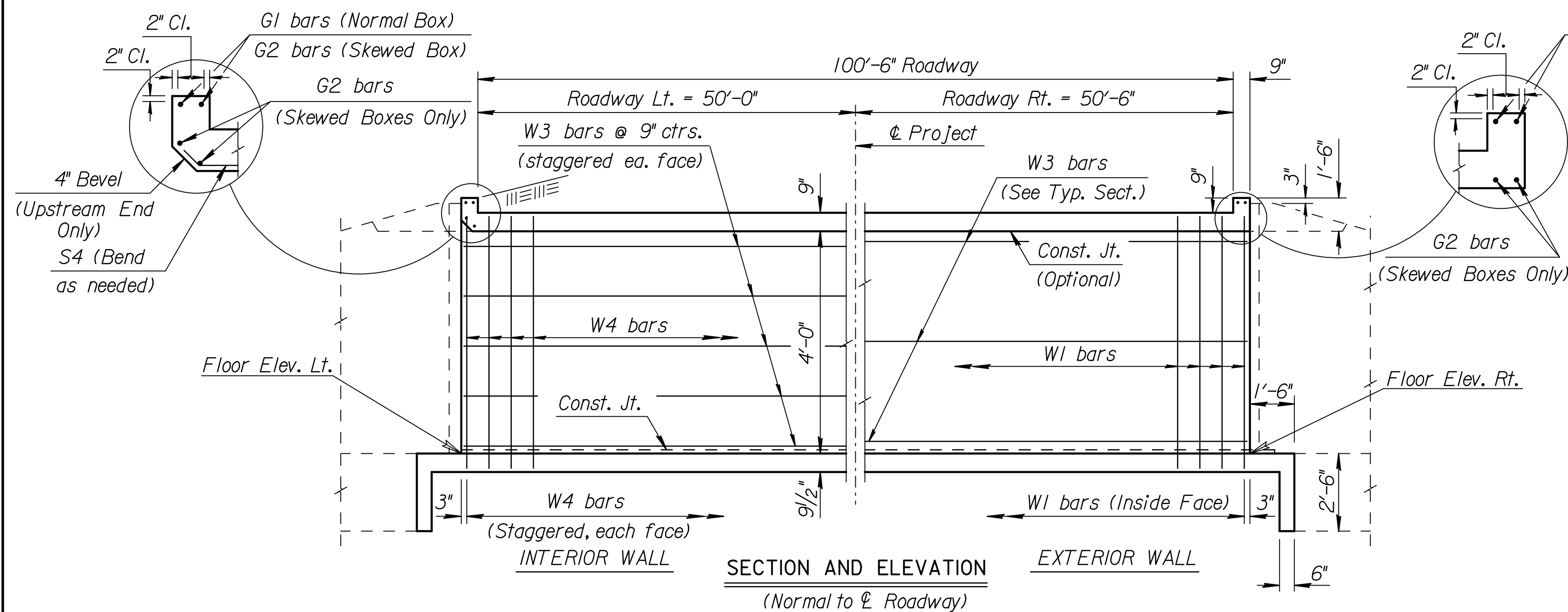


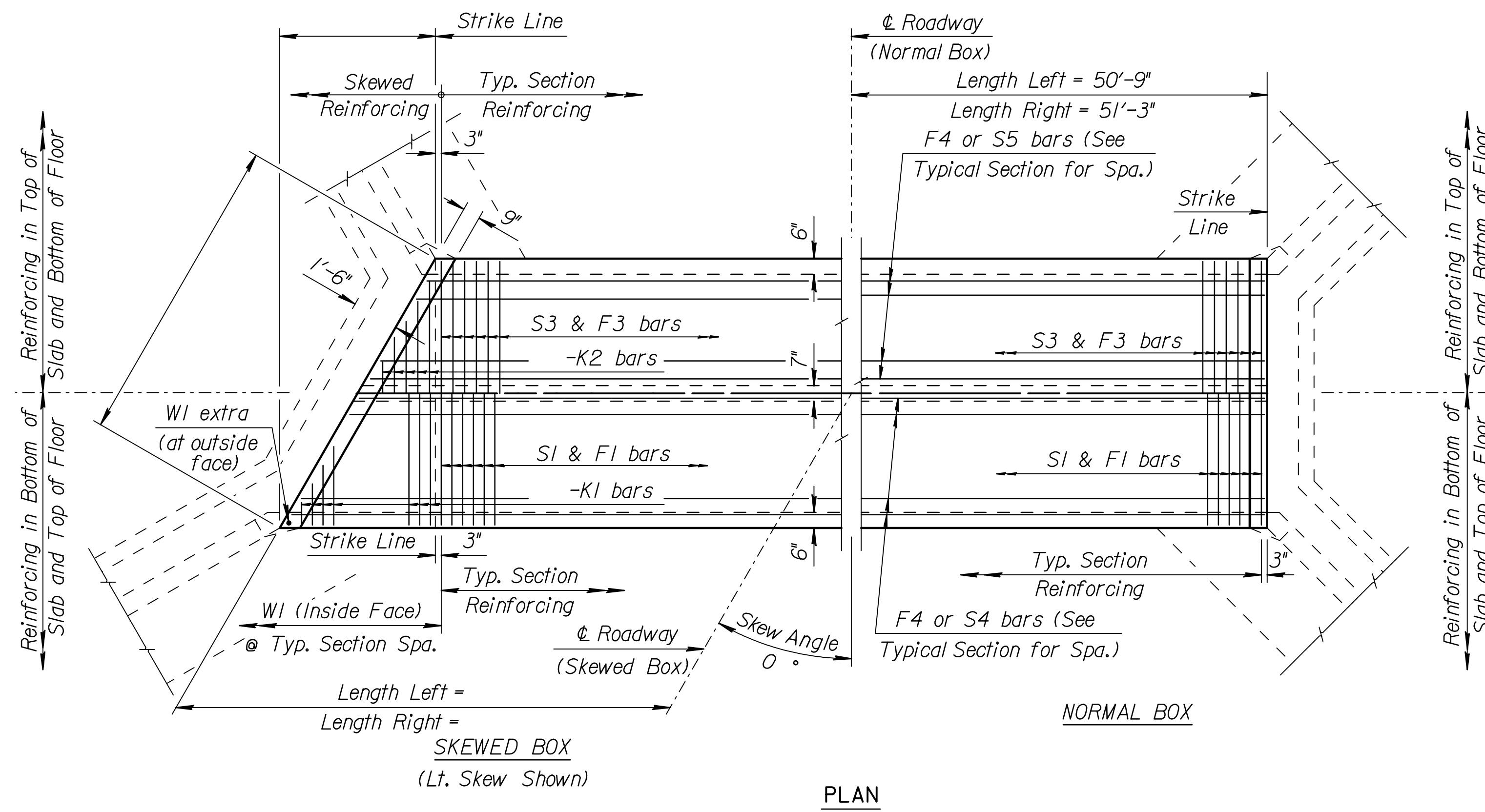
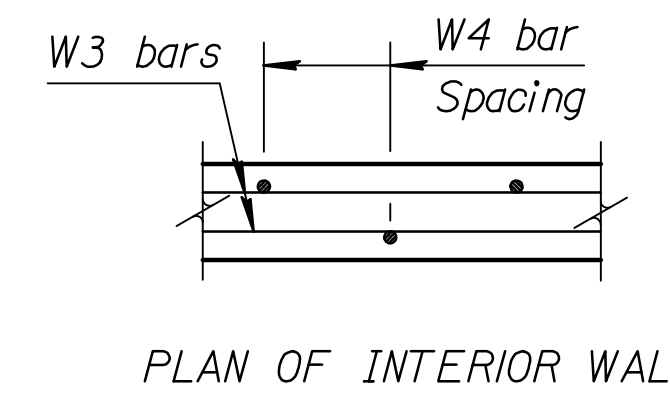
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-84636	2008	95	282



**GENERAL NOTES**

See RCB Auxiliary Details for Optional Splice.  
 Details are shown for complete cast-in-place construction. Only pre-cast barrel sections will be accepted at this location. See BRQ31 for pre-cast and cast-in-place limit requirements. The cast-in-place ends will need to be adjusted to accommodate any increase in center wall widths predicated on the pre-cast construction. See payment note this sheet.

**LOADING:** HS20-44 AASHTO Specifications, 1983 Edition.  
**UNIT STRESSES:** Grade 4.0 Concrete;  $f'c = 4,000$  p.s.i. Reinforcing Steel;  $f_y = 60,000$  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 3/4 inch 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 under-run 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 2-8 ft x 4 ft RCB shall bid per Linear Foot and shall include all labor, material, excavation, concrete, reinforcing steel, seal course, and all other incidentals necessary to complete the work. Quantities shown are for information only.



CULVERT SUMMARY														
Floor Elev. Lt.	Floor Elev. Rt.	Crown Gr. Elev.	Design Fill Ht.	Skew	Concrete		Reinf. Steel (Gr. 60)		Scour Apron	Soil Saver				
					Barrel (Cu.Yds.)	Wings (Cu.Yds.)	Total (Cu.Yds.)	Barrel (Lbs.)			Wings (Lbs.)	Total (Lbs.)		
1345.65	1345.50	1352.67	0	0	FLARED	FLARED	NO	NO	127.03	10.75	137.78	23439	833	24272

BAR SCHEDULE																																	
F1				F3				F4				S1				S3				S4				S5									
Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length						
6	6"	204	17'-3"	N/A	N/A	N/A	N/A	5	7 1/2"	163	17'-3"	4	84	34'-10"	6	6"	204	17'-3"	N/A	N/A	N/A	N/A	5	7 1/2"	163	17'-3"	5	36	51'-8"	4	36	34'-10"	
K1				K2				W1				W2				W3				W4				G1				G2					
Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4	9"	272	5'-3"	N/A	N/A	N/A	N/A	4	33	34'-10"	4	9"	136	5'-3"	5	4	17'-3"	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)	137.8 C.Y.
Concrete (Grade 4.0(AE))	0.0 C.Y.
Reinforcing Steel (Gr. 60)	24270 Lbs.
Reinforcing Steel (Epoxy Coated)	0 Lbs.
Class III Excavation	— C.Y.
Foundation Stabilization	45 C.Y.
Concrete for Seal Course (Set)	1 C.Y.
Granular Backfill (Wingwalls) (Set)	1 C.Y.

NO.	DATE	REVISIONS	BY	APP'D
<b>KANSAS DEPARTMENT OF TRANSPORTATION</b> S+g. 169+96.00 <b>DOUBLE 8 ft x 4 ft RCB</b>				
BR 2.8.4 P		Sedgwick Co.		
DESIGNED	6-5-91	APP'D	KENNETH F. HURST	
DETAIL CK.	DETAIL CK.	QUANTITIES	TRACED	TRACE CK.
DESIGN CK.	DESIGN CK.	QUAN. CK.	TRACE CK.	TRACE CK.

Plotted By: unfiled  
 File: A200101616RCB01616-RCB-Sta 169+96(KDOT V8).dgn  
 Plot Date: 8/29/2008