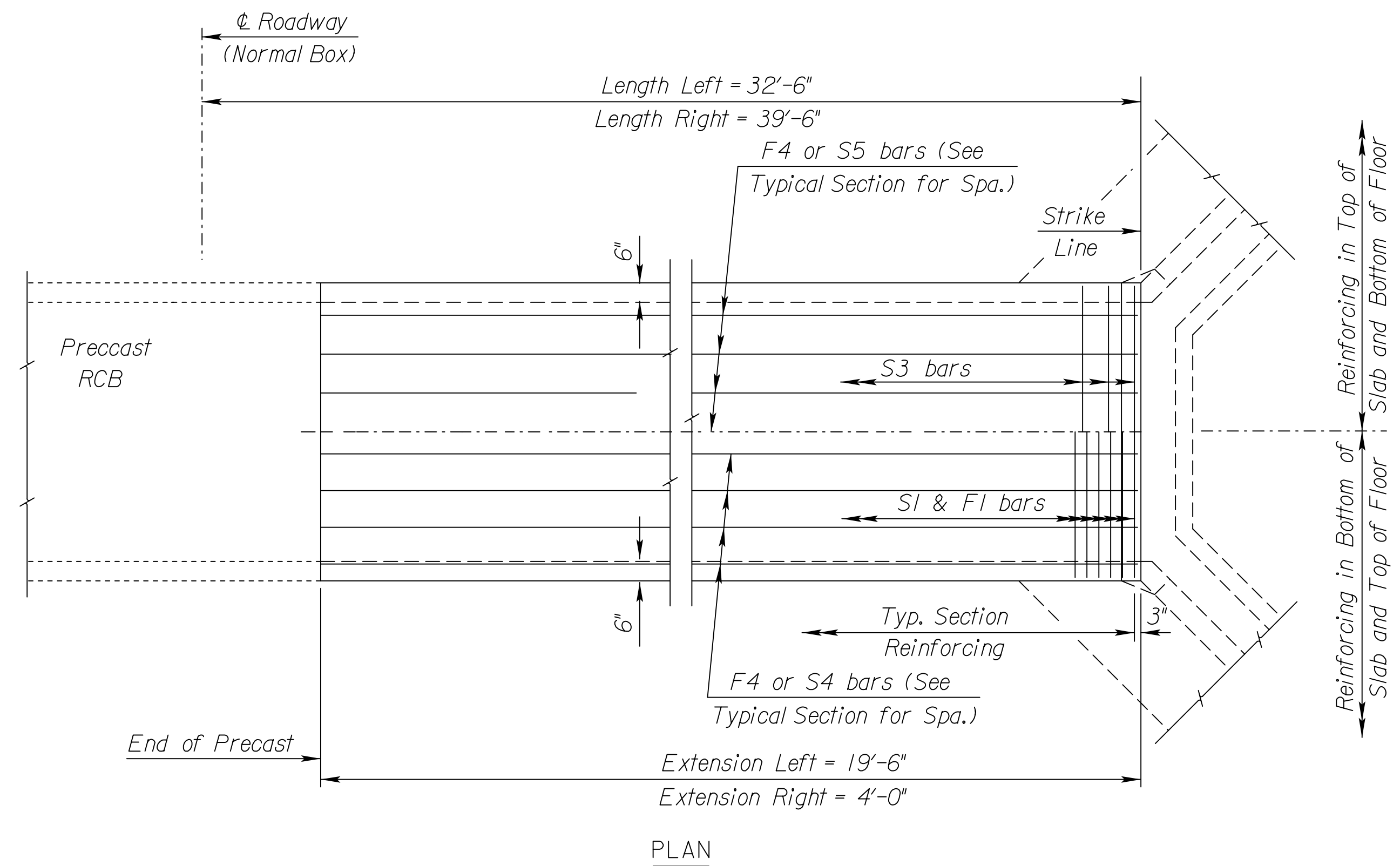
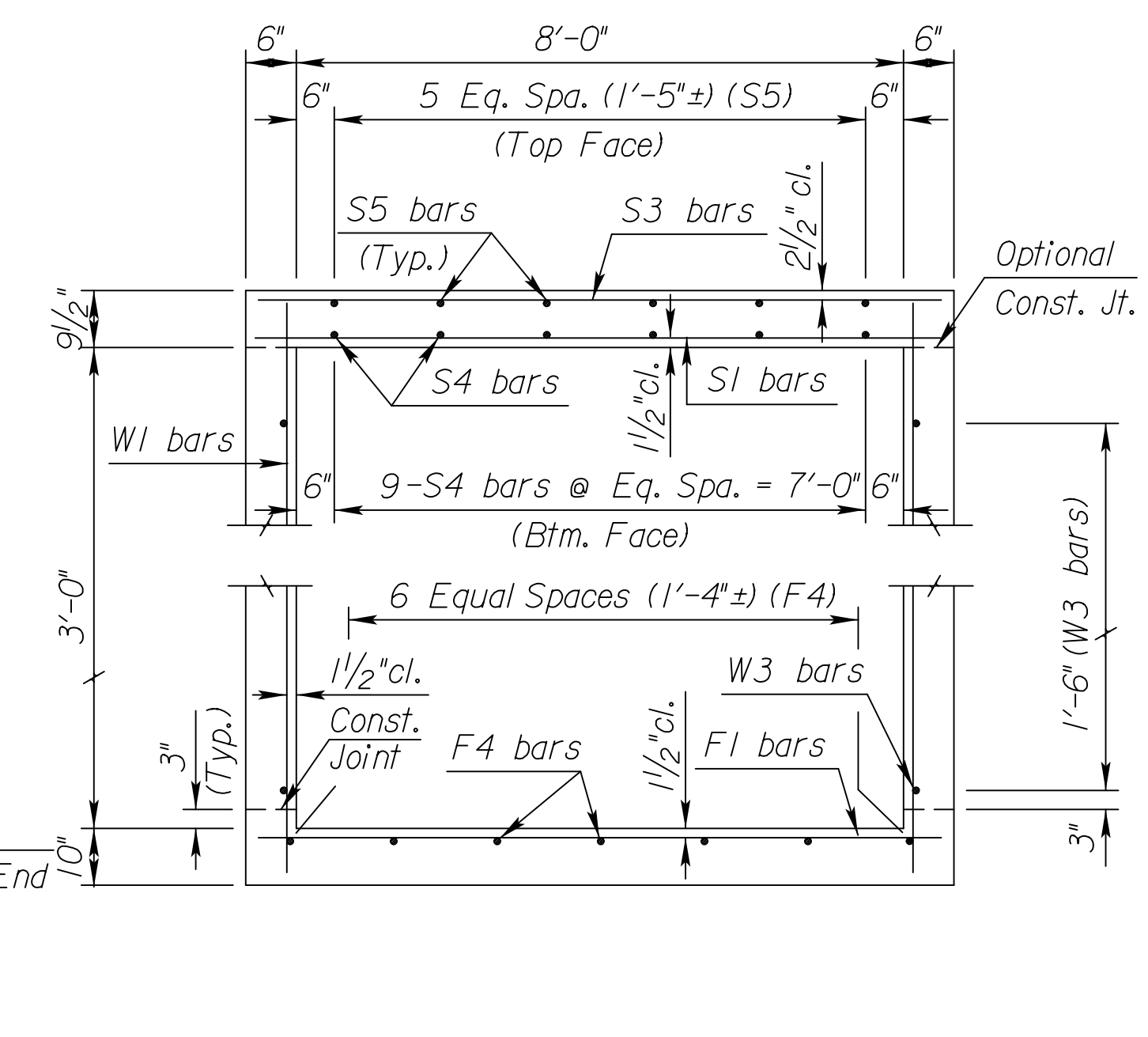
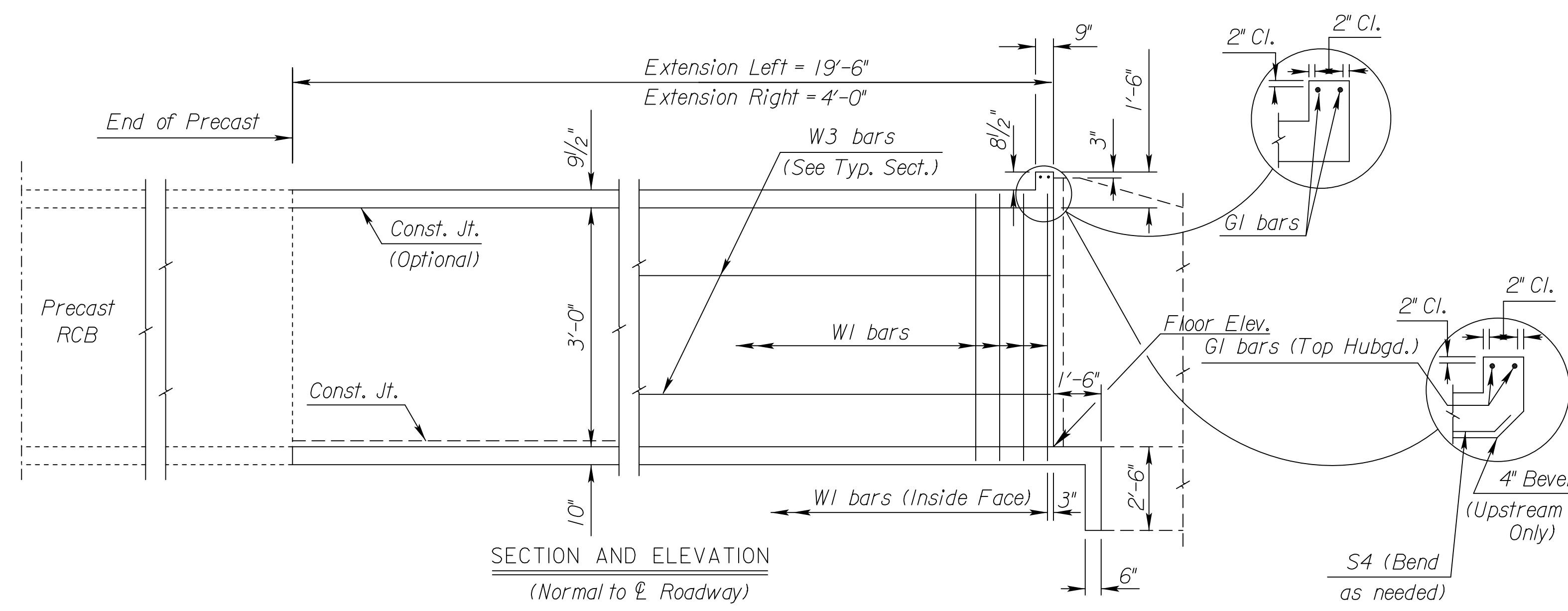


STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-84692	2013	86	193



GENERAL NOTES

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. All steel shall be epoxy coated, with exception to the precast sections and welded wire fabric. All steel shall be epoxy coated, with exception to the precast sections and welded wire fabric.
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 shall be constructed below the R.C.B. as shown in the Plans. The Seal Course below Precast Sections shall consist of 6" of crushed rock conforming to ASTM C-33, Gradation No. 67, and shall meet the requirements for Portland Cement Concrete Pavement Coarse Aggregate, Section P-501. Cast-in-Place Sections will also require the same seal course as the precast sections.
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.
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.

TYPICAL SECTION

⊗ For design purposes ONLY. Do NOT use for Construction. CULVERT SUMMARY ⊕ includes any welded wire fabric

Floor Elev.	Crown Gr. Elev.	Design Fill Ht.	Skew	Wings	Scour Apron	Soil Saver	Concrete			Reinf. Steel (Gr. 60)		
							Barrel (Cu.Yds.)	Wings (Cu.Yds.)	Total (Cu.Yds.)	Barrel (Lbs.)	Wings (Lbs.)	Total (Lbs.)
Ext.Lt. 1317.22	1322.90	0	0	FLARED	YES	NO	12.89	5.09	17.98	1634	314	1948
Ext.Rt. 1316.99				FLARED	YES		2.77	5.09	7.86	343	314	657

BAR SCHEDULE

F1		F4			S1			S3			S4			S5							
Size	Spa.	No.	Length	Size	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	No.	Length				
Ext.Lt.	6	6 1/2"	36	8'-8"	4	7	19'-2"	6	6 1/2"	36	8'-8"	4	1'-6"	14	8'-8"	6	9	19'-2"	5	6	19'-2"
Ext.Rt.	6	6 1/2"	8	8'-8"	4	7	3'-8"	6	6 1/2"	8	8'-8"	4	1'-6"	4	8'-8"	5	9	3'-8"	4	6	3'-8"

W1		W3			G1					
Size	Spa.	No.	Length	Size	No.	Length	Size	No.	Length	
Ext.Lt.	4	9"	27	4'-4"	4	4	19'-2"	5	2	8'-8"
Ext.Rt.	4	9"	6	4'-4"	4	4	3'-8"	5	2	8'-8"

**For Information Only

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

SUMMARY OF QUANTITIES **

Concrete (Grade 4.0)	25.8	C.Y.
Reinforcing Steel (Gr. 60)	2605	Lbs.
Foundation Stabilization	0	C.Y.

NO.	DATE	REVISIONS	BY	APP'D
KANSAS DEPARTMENT OF TRANSPORTATION				
Sta. 128+45				
SINGLE 8 ft x 3 ft RCB				
EXT. LT. AND RT.				
BR 1.8.3-P			Sedgwick Co.	
DESIGNED	DETAILER	QUANTITIES	CADD	
DESIGN CK.	DETAIL CK.	QUAN. CK.	CADD CK.	

Plotted By: srb
 File: I:\2008\08207\Bridges\Ina\08207 - 8x3 RCB (Box).dgn
 Plot Date: 8/19/2013