



GENERAL NOTES

LOADING: HS20-44 AASHTO Specifications, 1983 Edition.

UNIT STRESSES: Class AAA 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 31 Concrete (AE) shall be used throughout. Bevel all exposed edges with a 3/4 inch triangular moulding.

REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60, Epoxy Coated. 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 Class AAA 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: Foundation Stabilization may be required as directed by the Engineer. The depth of Foundation Stabilization shall be determined by the Engineer. Foundation Stabilization shall be subsidiary to Grade 31 Concrete (AE). See Auxillary Details.

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 Auxillary 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.

CULVERT SUMMARY															
Flow Line Elev.	Flow Line Elev. Rt.	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.)
171.36	171.09	180.02	2	0	STRAIGHT	STRAIGHT	YES	NO	NO	317.78	31.08	348.86	67594	2060	69654

BAR SCHEDULE																																									
Concrete															Epoxy Coated Bars																										
F1					F2					F3					F4					ΔS1		S2		ΔS3		ΔS4		ΔS5													
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"	200	42'-6"	N/A	N/A	N/A	N/A	6	6"	200	42'-6"	4	192	34'-2"	6	6"	200	42'-6"	N/A	N/A	N/A	N/A	6	6"	200	42'-6"	5	96	50'-8"	4	84	34'-2"									
K1					K2					W1					W2					W3		W4		ΔG1		ΔG2		ΔG3													
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4	9"	268	6'-4"	N/A	N/A	N/A	N/A	4	72	34'-2"	4	9"	402	6'-4"	5	8	42'-6"	5	18"	28	4'-1"	5	18"	28	4'-4"

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

SUMMARY OF QUANTITIES	
Grade 31 Concrete (AE)	348.8 C.Y.
Reinforcing Steel (Epoxy Coated)	69030 Lbs.
Class III Excavation	C.Y.
Foundation Stabilization	112.5 C.Y.
Granular Backfill (Wingwalls)	33.0 C.Y.

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KANSAS DEPARTMENT OF TRANSPORTATION
Sta. 47+55.05

4 - 10 Ft. x 5 Ft. RCB

Proj. No. 87 N-0135-01 Sedgwick Co.

M K E C ENGINEERING CONSULTANTS, INC.
WICHITA, KANSAS

DESIGNED BY: JRA	CHECKED BY:
DRAWN BY: DPG	DATE: 12/05/03

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