

GENERAL NOTES

LOADING: MS18-44 AASHTO Specifications, 1996 Edition.

UNIT STRESSES: Concrete; $f'_c = 28 \text{ MPa}$ Reinforcing Steel (Grade 420); $f_y = 420 \text{ MPa}$

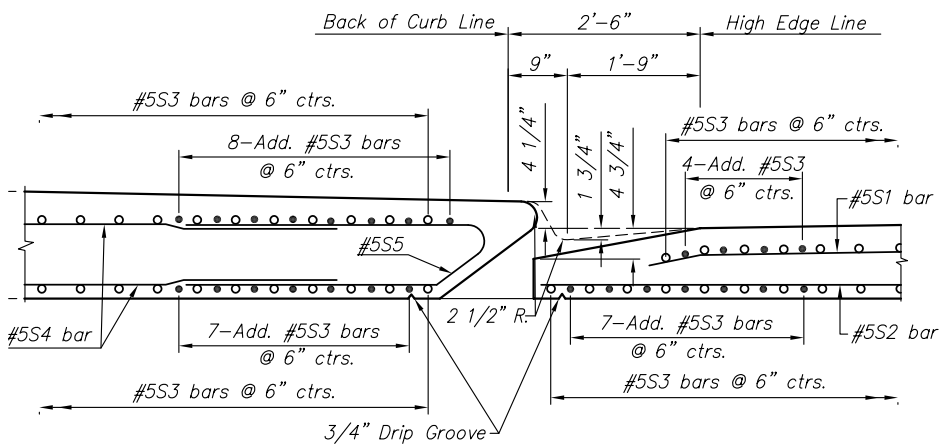
FILL HEIGHT: Unless otherwise noted, the Design Fill Height is measured from the riding surface at the culvert and shall include the surfacing.

CONCRETE: Grade 31 Concrete (AE) shall be used throughout. Bevel all exposed edges with a 3/4" triangular moulding.

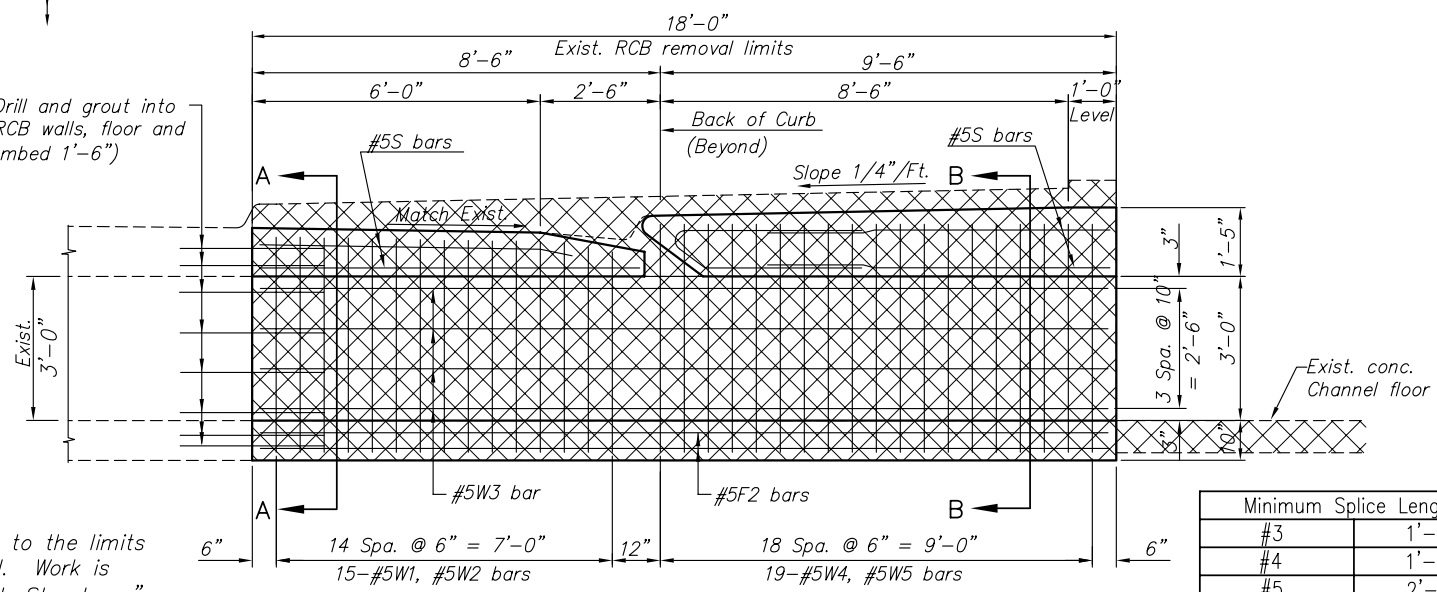
REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60, Epoxy Coated. All dimensions relative to reinforcing steel shall be to centerline of bar unless otherwise noted.

QUANTITIES: The quantities shown in the Culvert Summary include apron, channel walls and channel floor quantities. 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.

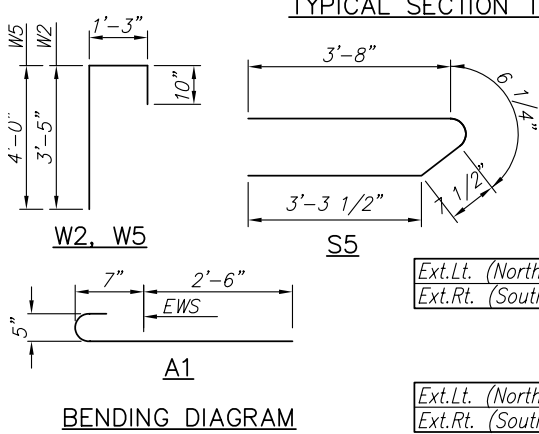
GRANULAR BACKFILL (WINGWALLS): Special backfill procedures may be required at the direction of the Engineer. See Auxiliary Details Sheet.



#5A2 Drill and grout into exist. RCB walls, floor and slab (embed 1'-6")



Bar Size	Minimum Splice Length
#3	1'-2"
#4	1'-6"
#5	2'-0"



Sawcut and remove exist. RCB to the limits shown. Remove exist. handrail. Work is subsidiary to "Removal of Exist. Structures"

		F1		F2		S1		S2		S3		S4		S5														
		Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length											
Ext.Lt. (North)	#5	6"	70	34'-8"	#5	12"	72	17'-8"	#5	12"	35	6'-7"	#5	12"	33	7'-10"	#5	6"	89	33'-2"	#5	12"	68	7'-2"	#5	12"	33	7'-11 1/4"
Ext.Rt. (South)	#5	6"	70	34'-8"	#5	12"	72	17'-8"	#5	12"	35	6'-7"	#5	12"	33	7'-10"	#5	6"	89	33'-2"	#5	12"	68	7'-2"	#5	12"	33	7'-11 1/4"
		W1		W2		W3		W4		W5		A1		A2														
		Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length	Size	Spa.	No.	Length											
Ext.Lt. (North)	#5	6"	60	4'-5"	#5	6"	30	5'-6"	#5	10"	18	17'-8"	#5	6"	76	4'-9"	#5	6"	38	6'-1"	#5	12"	16	3'-8"	#5	10"	148	3'-0"
Ext.Rt. (South)	#5	6"	60	4'-5"	#5	6"	30	5'-6"	#5	10"	18	17'-8"	#5	6"	76	4'-9"	#5	6"	38	6'-1"	#5	12"	16	3'-8"	#5	10"	148	3'-0"

North End	
Grade 31 Concrete (AE)	72.12 C.Y.
Reinforcing Steel (Epoxy Coated)	11,045 LBS.
Foundation Stabilization	23 C.Y.
Granular Backfill	10 C.Y.
South End	
Grade 31 Concrete (AE)	70.72 C.Y.
Reinforcing Steel (Epoxy Coated)	10,975 LBS.
Foundation Stabilization	24.8 C.Y.

KANSAS DEPARTMENT OF TRANSPORTATION				
TRIPLE 10'x3' RC GRADE BOX EXTENSION SOUTH END (7° SKEW)				
PROJ. NO. 87 N-0135-01		SEDGWICK CO.		
MKEC ENGINEERING CONSULTANTS, INC. WICHITA, KANSAS				
DESIGNED BY: KJS	CHECKED BY: KJS			
DRAWN BY: DPG	DATE: DEC 05	SHEET 51 OF 137		