

BILL OF REINFORCING FOR ONE HEADWALL 45° SKEW CULVERT SPAN X CULVERT HEIGHT

LOCATION		SHAPE	BAR	8' X 10'				8' X 8'				8' X 6'				8' X 5'				8' X 4'				8' X 3'				BAR						
				NO.	LENGTH	WT.	NO.	LENGTH	WT.	NO.	LENGTH	WT.	NO.	LENGTH	WT.	NO.	LENGTH	WT.	NO.	LENGTH	WT.	NO.	LENGTH	WT.	NO.	LENGTH	WT.	NO.	LENGTH	WT.				
FENCE ANCHOR			5f0	2	3'-1"	7	2	3'-1"	7	2	3'-1"	7	2	3'-1"	7	2	3'-1"	7	2	3'-1"	7	2	3'-1"	7	2	3'-1"	7	2	3'-1"	7	5f0			
WINGWALL, B.F.H.		L	4b1	1	63'-1"	43	1	51'-5"	35	1	39'-9"	23	1	33'-11"	23	1	28'-1"	19	1	51'-5"	35	1	39'-9"	27	1	33'-11"	23	1	22'-3"	15	4b1			
WINGWALL, B.F.H.		S	4b2	1	39'-0"	26	1	32'-0"	21	1	25'-0"	17	1	21'-6"	14	1	18'-0"	12	1	32'-0"	21	1	25'-0"	17	1	21'-6"	14	1	18'-0"	12	4b2			
WINGWALL, B.F.H.		L	4b3	8	19'-5"	17	6	17'-5"	15	4	15'-5"	13	3	12'-9"	10	2	12'-9"	10	2	19'-5"	17	5	17'-5"	15	4	15'-5"	13	3	12'-9"	10	4b3			
WINGWALL, B.F.H.		S	4b4	8	19'-5"	17	6	17'-5"	15	4	15'-5"	13	3	12'-9"	10	2	12'-9"	10	2	19'-5"	17	5	17'-5"	15	4	15'-5"	13	3	12'-9"	10	4b4			
WINGWALL, F.F.H.		L	5b5	1	63'-1"	48	1	51'-5"	35	1	39'-9"	23	1	33'-11"	23	1	28'-1"	19	1	33'-11"	23	1	28'-1"	19	1	33'-11"	23	1	22'-3"	15	5b5			
WINGWALL, F.F.H.		S	5b6	1	39'-0"	41	1	32'-0"	33	1	25'-0"	26	1	21'-6"	22	1	18'-0"	29	1	32'-0"	33	1	25'-0"	26	1	21'-6"	22	1	18'-0"	19	5b6			
WINGWALL, F.F.H.		L	5b7	9	13'-6"	35	7	13'-6"	28	5	13'-6"	23	4	13'-6"	20	3	13'-6"	16	7	13'-6"	28	5	13'-6"	23	4	13'-6"	20	3	13'-6"	16	5b7			
WINGWALL, F.F.H.		S	5b8	9	13'-6"	35	7	13'-6"	28	5	13'-6"	23	4	13'-6"	20	3	13'-6"	16	7	13'-6"	28	5	13'-6"	23	4	13'-6"	20	3	13'-6"	16	5b8			
WINGWALL, F.F.V.		L	4c1	60	2'-7"	306	49	2'-7"	107	218	37	2'-7"	140	31	2'-7"	106	25	2'-7"	107	19	49	2'-7"	140	31	2'-7"	106	25	2'-7"	107	19	4c1			
WINGWALL, F.F.V.		S	4c2	36	2'-7"	182	29	2'-7"	107	127	22	2'-7"	82	19	2'-7"	85	15	2'-7"	87	46	29	2'-7"	87	19	2'-7"	82	19	2'-7"	85	15	4c2			
WINGWALL, F.F.V.		L	4c3	2	11'-6"	15	1	9'-6"	6	2	7'-6"	9	2	6'-6"	7	1	5'-6"	6	1	9'-6"	6	2	7'-6"	9	2	6'-6"	7	1	5'-6"	6	4c3			
WINGWALL, F.F.V.		S	4c3	2	11'-6"	15	1	9'-6"	6	2	7'-6"	9	2	6'-6"	7	1	5'-6"	6	1	9'-6"	6	2	7'-6"	9	2	6'-6"	7	1	5'-6"	6	4c3			
WINGWALL, B.F.V.		L	5c4	15	2'-7"	59	15	2'-7"	59	15	2'-7"	59	15	2'-7"	59	15	2'-7"	59	15	2'-7"	59	15	2'-7"	59	15	2'-7"	59	15	2'-7"	59	5c4			
WINGWALL, B.F.V.		S	5c5	4	2'-7"	13	4	2'-7"	13	4	2'-7"	13	4	2'-7"	13	4	2'-7"	13	4	2'-7"	13	4	2'-7"	13	4	2'-7"	13	4	2'-7"	13	5c5			
WINGWALL, B.F.V.		L	5c6	45	9'-2"	606	34	9'-2"	424	22	9'-2"	251	16	9'-2"	174	10	9'-2"	103	34	9'-2"	251	16	9'-2"	174	10	9'-2"	103	4	9'-2"	39	5c6			
WINGWALL, B.F.V.		S	5c7	32	7'-9"	406	25	7'-9"	291	18	7'-9"	191	15	7'-9"	152	10	7'-9"	105	25	7'-9"	291	18	7'-9"	191	15	7'-9"	152	10	7'-9"	105	5c7			
WINGWALL, B.F.V.		L	5c8	31	10'-6"	340	20	10'-6"	219	-	-	-	-	-	-	-	20	10'-6"	219	-	-	-	-	-	-	-	-	-	-	5c8				
WINGWALL, B.F.V.		S	5c8	18	10'-6"	197	11	10'-6"	120	-	-	-	-	-	-	-	11	10'-6"	120	-	-	-	-	-	-	-	-	-	-	5c8				
WINGWALL, B.F.V.		L	5c9	2	15'-5"	32	1	13'-5"	14	11	11'-5"	12	2	10'-5"	22	2	9'-5"	20	14	11'-5"	12	2	10'-5"	22	2	9'-5"	20	2	8'-5"	18	5c9			
WINGWALL, B.F.V.		S	5c9	2	15'-5"	32	1	13'-5"	14	11	11'-5"	12	2	10'-5"	22	2	9'-5"	20	14	11'-5"	12	2	10'-5"	22	2	9'-5"	20	1	8'-5"	9	5c9			
APRON, LONGI., BOTTL.			4d1	5	32'-0"	107	5	26'-4"	88	5	20'-8"	69	5	17'-0"	60	5	15'-0"	50	5	26'-4"	88	5	20'-8"	69	5	17'-0"	60	5	15'-0"	41	4d1			
APRON, LONGI., BOTTL.		L	4d2	3	55'-8"	116	3	44'-2"	92	3	32'-6"	65	3	26'-9"	54	3	21'-0"	42	3	44'-2"	92	3	32'-6"	65	3	26'-9"	54	3	21'-0"	31	4d2			
APRON, LONGI., BOTTL.		S	4d3	3	34'-10"	70	3	27'-11"	56	3	21'-0"	42	3	17'-7"	35	3	14'-2"	28	3	27'-11"	56	3	21'-0"	42	3	17'-7"	35	3	14'-2"	22	4d3			
APRON, LONGI., TOP			6f1	8	32'-0"	385	8	26'-4"	316	8	20'-8"	248	8	17'-0"	214	8	15'-0"	180	6	26'-4"	237	6	20'-8"	186	6	17'-0"	161	6	15'-0"	110	6f1			
APRON, LONGI., TOP		L	6f2	12	6'-7"	319	9	6'-5"	191	6	6'-0"	107	5	6'-0"	76	4	6'-0"	50	9	6'-5"	197	6	6'-0"	107	5	6'-0"	76	4	6'-0"	29	6f2			
APRON, LONGI., TOP		S	6f3	7	6'-8"	188	5	6'-5"	117	4	6'-0"	70	3	6'-11"	47	3	6'-11"	35	5	6'-8"	117	4	6'-0"	70	3	6'-11"	47	3	6'-11"	35	6f3			
APRON, LONGI., TOP		L	6f4	1	63'-1"	98	1	51'-5"	80	1	39'-9"	60	1	33'-11"	51	1	28'-1"	42	1	51'-5"	80	1	39'-9"	60	1	33'-11"	51	1	28'-1"	33	6f4			
APRON, LONGI., TOP		S	6f5	1	39'-0"	59	1	32'-0"	48	1	25'-0"	38	1	21'-6"	32	1	18'-0"	27	1	32'-0"	48	1	25'-0"	38	1	21'-6"	32	1	18'-0"	27	6f5			
PARAPET, VERTICAL			4i1	17	6'-8"	76	17	6'-8"	76	17	6'-8"	76	17	6'-8"	76	17	6'-8"	76	17	6'-8"	76	17	6'-8"	76	17	6'-8"	76	17	6'-8"	76	4i1			
PARAPET, HORIZONTAL			7j1	4	11'-7"	95	4	11'-7"	95	4	11'-7"	95	4	11'-7"	95	4	11'-7"	95	4	11'-7"	95	4	11'-7"	95	4	11'-7"	95	4	11'-7"	95	7j1			
APRON, TRANS., TOP			6m1	7	10'-8"	118	7	10'-8"	118	7	10'-8"	117	7	10'-8"	117	7	10'-8"	117	6	10'-8"	117	7	10'-8"	117	6	10'-8"	117	7	10'-8"	78	6m1			
APRON, TRANS., TOP		L	6m2	29	12'-0"	750	21	11'-11"	496	14	11'-9"	299	10	11'-9"	203	6	11'-9"	115	24	12'-0"	494	16	11'-9"	293	12	11'-9"	207	8	11'-9"	76	6m2			
APRON, TRANS., TOP		S	6m3	7	14'-0"	147	7	12'-5"	151	7	11'-1"	117	7	10'-4"	109	7	9'-7"	101	5	14'-0"	133	5	9'-8"	73	5	8'-8"	65	5	7'-6"	56	6m3			
APRON, TRANS., BOTTL.			6m4	20	29'-2"	451	14	24'-3"	349	12	19'-7"	193	10	14'-6"	146	8	12'-4"	103	16	29'-2"	242	12	19'-7"	193	10	14'-6"	146	8	12'-4"	103	8	6m4		
CURTAIN, HORIZONTAL			6p1	4	11'-6"	69	4	11'-6"	69	4	11'-6"	69	4	11'-6"	69	4	11'-6"	69	4	11'-6"	69	4	11'-6"	69	4	11'-6"	69	4	11'-6"	69	6p1			
CURTAIN, HORIZONTAL		L	6p2	4	36'-0"	216	4	29'-8"	178	4	23'-4"	140	4	20'-2"	121	4	17'-0"	102	4	36'-0"	178	4	29'-8"	178	4	23'-4"	140	4	20'-2"	121	4	6p2		
CURTAIN, HORIZONTAL		S	6p3	4	13'-8"	82	4	11'-7"	70	4	8'-7"	58	4	8'-7"	45	4	8'-7"	45	4	13'-8"	82	4	11'-7"	70	4	8'-7"	58	4	8'-7"	45	4	6p3		
WING SLOPE, BOTH F.		L	6s1	2	8'-4"	25	2	8'-4"	25	2	8'-4"	25	2	8'-4"	25	2	8'-4"	25	2	8'-4"	25	2	8'-4"	25	2	8'-4"	25	2	8'-4"	25	6s1			
WING SLOPE, BOTH F.		S	6s2	2	7'-11"	24	2	7'-11"	24	2	7'-11"	24	2	7'-11"	24	2	7'-11"	24	2	7'-11"	24	2	7'-11"	24	2	7'-11"	24	2	7'-11"	24	6s2			
WING SLOPE, BOTH F.		L	6s3	2	57'-6"	179	2	45'-9"	143	2	33'-10"	102	2	27'-11"	84	2	22'-0"	66	2	57'-6"	179	2	45'-9"	143	2	33'-10"	102	2	27'-11"	84	2	6s3		
WING SLOPE, BOTH F.		S	6s4	2	35'-0"	105	2	27'-9"	83	2	20'-6"	62	2	16'-0"	51	2	13'-2"	40	2	35'-0"	105	2	27'-9"	83	2	20'-6"	62	2	16'-0"	51	2	6s4		
WING SLOPE, BOTH F.		L	6s5	1	62'-8"	97	1	50'-0"	79	1	39'-1"	59	1	33'-2"	50	1	27'-3"	41	1	62'-8"	97	1	50'-0"	79	1	39'-1"	59	1	33'-2"	50	1	27'-3"	41	6s5
WING SLOPE, BOTH F.		S	6s6	1	40'-1"	63	1	32'-0"	49	1	25'-6"	38	1	21'-11"	33	1	18'-3"	27	1	40'-1"	63	1	32'-0"	49	1									