

# BILL OF REINF. FOR ONE HEADWALL 15° SKEW CULVERT SPAN X CULVERT HEIGHT

LOCATION		SHAPE	SIZE	MARK	1500x1800		1500x1500		1500x1200		1500x900		1200x1200		900x900		MARK			
NO.	LENGTH	MASS	NO.	LENGTH	MASS	NO.	LENGTH	MASS	NO.	LENGTH	MASS	NO.	LENGTH	MASS	NO.	LENGTH	MASS			
FENCE ANCHOR	15 f1	2	930	3	2	930	3	2	930	3	2	930	3	2	930	3	2	f1		
WINGWALL, BFH	L	15 b1	1	7370	12	1	6340	10	1	5310	8	1	4280	7	1	5310	8	1	b1	
WINGWALL, BFH	S	15 b2	1	6550	10	1	5650	9	1	4750	7	1	3850	6	1	4750	7	1	b2	
WINGWALL BFH	L	15 b3	(LENGTH TO VARIATIONS)	33	(LENGTH TO VARIATIONS)	22	(LENGTH TO VARIATIONS)	10	13	1	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	10	13	1	(LENGTH TO VARIATIONS)	6	b3	
WINGWALL BFH	S	15 b4	(LENGTH TO VARIATIONS)	30	(LENGTH TO VARIATIONS)	20	(LENGTH TO VARIATIONS)	12	1	(LENGTH TO VARIATIONS)	5	(LENGTH TO VARIATIONS)	12	1	(LENGTH TO VARIATIONS)	1	(LENGTH TO VARIATIONS)	5	b4	
WINGWALL FFH	L	15 b5	1	7370	12	1	6340	10	1	5310	8	1	4280	7	1	5310	8	1	b5	
WINGWALL FFH	S	15 b6	1	6550	10	1	5650	9	1	4750	7	1	3850	6	1	4750	7	1	b6	
WINGWALL FFH	L	15 b7	(LENGTH TO VARIATIONS)	37	(LENGTH TO VARIATIONS)	27	(LENGTH TO VARIATIONS)	18	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	18	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	18	(LENGTH TO VARIATIONS)	10	b7	
WINGWALL FFH	S	15 b8	(LENGTH TO VARIATIONS)	33	(LENGTH TO VARIATIONS)	24	(LENGTH TO VARIATIONS)	16	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	16	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	16	(LENGTH TO VARIATIONS)	9	b8	
WINGWALL FFV	L	15 c1	(LENGTH TO VARIATIONS)	58	(LENGTH TO VARIATIONS)	43	(LENGTH TO VARIATIONS)	33	(LENGTH TO VARIATIONS)	24	(LENGTH TO VARIATIONS)	33	(LENGTH TO VARIATIONS)	24	(LENGTH TO VARIATIONS)	33	(LENGTH TO VARIATIONS)	24	c1	
WINGWALL FFV	S	15 c2	(LENGTH TO VARIATIONS)	50	(LENGTH TO VARIATIONS)	38	(LENGTH TO VARIATIONS)	28	(LENGTH TO VARIATIONS)	19	(LENGTH TO VARIATIONS)	28	(LENGTH TO VARIATIONS)	19	(LENGTH TO VARIATIONS)	28	(LENGTH TO VARIATIONS)	19	c2	
WINGWALL FFV	L	15 c3	(LENGTH TO VARIATIONS)	8	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	2	c3	
WINGWALL FFV	S	15 c3	(LENGTH TO VARIATIONS)	4	(LENGTH TO VARIATIONS)	3	(LENGTH TO VARIATIONS)	3	(LENGTH TO VARIATIONS)	3	(LENGTH TO VARIATIONS)	3	(LENGTH TO VARIATIONS)	3	(LENGTH TO VARIATIONS)	3	(LENGTH TO VARIATIONS)	3	c3	
WINGWALL BFV	L	15 c4	(LENGTH TO VARIATIONS)	16	(LENGTH TO VARIATIONS)	16	(LENGTH TO VARIATIONS)	16	(LENGTH TO VARIATIONS)	16	(LENGTH TO VARIATIONS)	16	(LENGTH TO VARIATIONS)	16	(LENGTH TO VARIATIONS)	16	(LENGTH TO VARIATIONS)	16	c4	
WINGWALL BFV	S	15 c5	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	10	c5	
WINGWALL BFV	L	15 c6	(LENGTH TO VARIATIONS)	67	(LENGTH TO VARIATIONS)	44	(LENGTH TO VARIATIONS)	28	(LENGTH TO VARIATIONS)	13	(LENGTH TO VARIATIONS)	28	(LENGTH TO VARIATIONS)	13	(LENGTH TO VARIATIONS)	28	(LENGTH TO VARIATIONS)	13	c6	
WINGWALL BFV	S	15 c7	(LENGTH TO VARIATIONS)	65	(LENGTH TO VARIATIONS)	48	(LENGTH TO VARIATIONS)	32	(LENGTH TO VARIATIONS)	17	(LENGTH TO VARIATIONS)	32	(LENGTH TO VARIATIONS)	17	(LENGTH TO VARIATIONS)	32	(LENGTH TO VARIATIONS)	17	c7	
WINGWALL BFV	L	15 c8	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	c8	
WINGWALL BFV	S	15 c8	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	(LENGTH TO VARIATIONS)	0	c8	
WINGWALL BFV	L	15 c9	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	2	c9	
WINGWALL BFV	S	15 c9	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	6	c9	
APRON, LONG BOT	15 d1	3	4810	23	3	4190	20	3	3570	17	3	2950	14	3	3570	17	3	2950	14	d1
APRON, LONG BOT L	15 d2	3	5950	28	3	4950	23	3	3950	19	3	3450	19	3	3450	19	3	3450	19	d2
APRON, LONG BOT S	15 d3	3	5240	25	3	4370	21	3	3500	16	3	3390	11	3	3500	16	3	3390	11	d3
APRON, LONG TOP	20 f1	5	4810	57	5	4190	49	5	3570	42	5	2950	35	4	3570	34	3	2950	21	f1
APRON, LONG TOP L	20 f2	(LENGTH TO VARIATIONS)	24	(LENGTH TO VARIATIONS)	17	(LENGTH TO VARIATIONS)	11	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	11	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	11	(LENGTH TO VARIATIONS)	6	f2
APRON, LONG TOP S	20 f3	(LENGTH TO VARIATIONS)	21	(LENGTH TO VARIATIONS)	15	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	6	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	6	f3
APRON, LONG TOP L	20 f4	(LENGTH TO VARIATIONS)	17	(LENGTH TO VARIATIONS)	15	(LENGTH TO VARIATIONS)	13	(LENGTH TO VARIATIONS)	11	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	11	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	11	(LENGTH TO VARIATIONS)	10	f4
APRON, LONG TOP S	20 f5	(LENGTH TO VARIATIONS)	15	(LENGTH TO VARIATIONS)	12	(LENGTH TO VARIATIONS)	11	(LENGTH TO VARIATIONS)	11	(LENGTH TO VARIATIONS)	11	(LENGTH TO VARIATIONS)	11	(LENGTH TO VARIATIONS)	11	(LENGTH TO VARIATIONS)	11	(LENGTH TO VARIATIONS)	11	f5
PARAPET, VERT	15 j1	11	1880	32	11	1880	32	11	1880	32	11	1880	32	9	1880	27	7	1880	21	j1
PARAPET, HORIZ	25 j1	4	1930	30	4	1930	30	4	1930	30	4	1930	30	4	1620	25	4	1300	20	j1
APRON, TRANS TOP	20 m1	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	7	(LENGTH TO VARIATIONS)	7	(LENGTH TO VARIATIONS)	6	m1
APRON, TRANS TOP	20 m2	(LENGTH TO VARIATIONS)	15	(LENGTH TO VARIATIONS)	12	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	16	(LENGTH TO VARIATIONS)	16	(LENGTH TO VARIATIONS)	16	m2
APRON, TRANS TOP	20 m3	(LENGTH TO VARIATIONS)	12	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	11	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	10	(LENGTH TO VARIATIONS)	2	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	0	m3
APRON, TRANS BOT	20 m4	(LENGTH TO VARIATIONS)	29	(LENGTH TO VARIATIONS)	21	(LENGTH TO VARIATIONS)	15	(LENGTH TO VARIATIONS)	8	(LENGTH TO VARIATIONS)	8	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	9	(LENGTH TO VARIATIONS)	18	m4
CURTAIN, HORIZ	20 p1	4	1530	14	4	1530	14	4	1530	14	4	1530	14	4	1210	11	4	900	8	p1
CURTAIN, HORIZ L	20 p2	4	3840	36	4	3390	32	4	2940	28	4	2490	23	4	2940	28	4	2490	23	p2
CURTAIN, HORIZ S	20 p3	4	3060	29	4	2730	26	4	2390	23	4	2060	19	4	2390	23	4	2060	19	p3
WING SLOPE EF L	20 s1	2	2580	12	2	2580	12	2	2580	12	2	2580	12	2	2580	12	2	2580	12	s1
WING SLOPE EF S	20 s2	2	2430	11	2	2430	11	2	2430	11	2	2430	11	2	2430	11	2	2430	11	s2
WING SLOPE EF L	20 s3	2	2580	12	2	2580	12	2	2580	12	2	2580	12	2	2580	12	2	2580	12	s3
WING SLOPE EF S	20 s4	2	2430	11	2	2430	11	2	2430	11	2	2430	11	2	2430	11	2	2430	11	s4
WING SLOPE FF L	20 s5	1	7640	18	1	6540	15	1	5490	13	1	4420	10	1	5490	13	1	4420	10	s5
WING SLOPE FF S	20 s6	1	6850	16	1	5900	14	1	4900	12	1	3900	9	1	4900	12	1	4000	9	s6
CURTAIN, VERT	15 t1	15	1960	46	12	1960	37	11	1960	34	9	1960	28	10	1960	31	7	1960	22	t1
REINF STEEL			1129 kg			911 kg			780 kg			558 kg			690 kg			493 kg		
ESTIMATED QUANTITIES ONE HEADWALL	CONC	PARAPET FOOTING	0.8	12.4 m³	0.8	10.0 m³	0.8	7.8 m³	0.8	5.9 m³	0.7	7.4 m³	0.7	5.2 m³	0.7	6.9 m³	0.7	5.2 m³		

