

TABLE OF DIMENSIONS AND QUANTITIES FOR TWO TYPE A HEADWALLS

NO. OF PIPES	DIAM. OF PIPES	TABLE OF DIMENSIONS		REINFORCING STEEL FOR TWO HEADWALLS								TOTAL QUANTITIES									
		G	K	T	E	H	W	BARS A1-A2		BARS E		BARS F1-F2		LBS.	C.Y.						
								No.	Size	No.	Size	No.	Size			No.	Size				
1	12"	12"	9"	1'-9"	2'-6"	7'-0"	6'-8"	10	8	2'-6"	8	6'-8"	28	12	2'-11"	23	12	3'-8"	29	98	1.48
2	"	"	"	"	"	8'-10"	8'-6"	13	"	8'-6"	35	14	"	27	14	"	34	117	1.81		
3	"	"	"	"	"	10'-8"	10'-4"	16	"	10'-4"	43	16	"	31	16	"	39	137	2.15		
4	"	"	"	"	"	12'-6"	12'-2"	18	"	12'-2"	51	18	"	35	18	"	44	156	2.48		
1	15"	12"	9"	1'-9"	2'-9"	8'-3"	7'-11"	12	8	3'-0"	9	7'-11"	33	12	3'-2"	25	12	3'-11"	31	110	1.82
2	"	10"	"	"	"	10'-6"	10'-2"	15	"	10'-2"	42	14	"	30	14	"	37	133	2.24		
3	"	"	"	"	"	12'-9"	12'-5"	19	"	12'-5"	52	16	"	34	16	"	42	156	2.66		
4	"	"	"	"	"	15'-0"	14'-8"	22	"	14'-8"	61	18	"	38	18	"	47	177	3.09		
1	18"	12"	9"	1'-9"	3'-0"	9'-6"	9'-2"	12	8	3'-6"	11	9'-2"	38	12	3'-5"	46	20	4'-2"	56	165	2.19
2	"	12"	"	"	"	12'-2"	11'-10"	18	"	11'-10"	49	22	"	50	22	"	61	189	2.70		
3	"	"	"	"	"	14'-10"	14'-6"	22	"	14'-6"	60	24	"	55	24	"	67	215	3.21		
4	"	"	"	"	"	17'-6"	17'-2"	26	"	17'-2"	72	26	"	59	26	"	72	240	3.73		
1	24"	12"	9"	2'-0"	3'-6"	12'-0"	11'-8"	18	8	4'-6"	14	11'-8"	49	24	4'-11"	63	24	4'-11"	79	223	3.17
2	"	15"	"	"	"	15'-5"	15'-1"	23	"	15'-1"	63	26	"	68	26	"	85	253	3.89		
3	"	"	"	"	"	18'-10"	18'-6"	28	"	18'-6"	76	28	"	73	28	"	92	284	4.62		
4	"	"	"	"	"	22'-3"	21'-11"	33	"	21'-11"	91	30	"	79	30	"	99	316	5.35		
1	30"	12"	9"	2'-3"	4'-0"	14'-6"	14'-2"	21	16	5'-6"	33	14'-2"	59	24	4'-5"	83	28	5'-8"	106	302	4.31
2	"	18"	"	"	"	18'-8"	18'-4"	28	"	18'-4"	76	32	"	94	32	"	121	352	5.28		
3	"	"	"	"	"	22'-10"	22'-6"	34	"	22'-6"	94	36	"	106	36	"	136	403	6.26		
4	"	"	"	"	"	27'-0"	26'-8"	40	"	26'-8"	111	40	"	118	40	"	152	454	7.24		
1	36"	12"	12"	2'-6"	4'-6"	17'-0"	16'-8"	25	16	6'-6"	39	16'-8"	70	32	5'-2"	111	32	6'-8"	143	388	6.40
2	"	18"	"	"	"	21'-11"	21'-7"	32	"	21'-7"	90	36	"	124	36	"	160	445	7.89		
3	"	"	"	"	"	26'-10"	26'-6"	40	"	26'-6"	111	40	"	139	40	"	178	506	9.37		
4	"	"	"	"	"	31'-9"	31'-5"	47	"	31'-5"	131	44	"	152	44	"	196	565	10.85		
1	42"	12"	12"	2'-9"	5'-0"	19'-6"	19'-2"	29	16	7'-6"	45	19'-2"	80	36	5'-8"	136	36	7'-5"	178	468	8.10
2	"	18"	"	"	"	25'-2"	24'-10"	37	"	24'-10"	104	40	"	152	40	"	198	536	9.96		
3	"	"	"	"	"	30'-10"	30'-6"	46	"	30'-6"	127	44	"	167	44	"	218	603	11.80		
4	"	"	"	"	"	36'-6"	36'-2"	54	"	36'-2"	151	48	"	182	48	"	238	670	13.68		
1	48"	15"	12"	3'-0"	5'-9"	23'-0"	22'-8"	34	24	8'-9"	79	22'-8"	95	40	6'-5"	268	40	8'-5"	351	827	10.74
2	"	20"	"	"	"	29'-5"	29'-1"	44	"	29'-1"	121	44	"	295	44	"	386	925	13.08		
3	"	"	"	"	"	35'-10"	35'-6"	53	"	35'-6"	148	48	"	321	48	"	422	1023	15.43		
4	"	"	"	"	"	42'-3"	41'-11"	63	"	41'-11"	175	52	"	348	52	"	457	1122	17.77		
1	54"	15"	12"	3'-3"	6'-3"	25'-6"	25'-2"	38	24	9'-9"	88	25'-2"	105	44	6'-11"	318	44	9'-2"	421	970	12.87
2	"	20"	"	"	"	32'-10"	32'-6"	49	"	32'-6"	136	50	"	361	50	"	478	1112	15.77		
3	"	"	"	"	"	40'-2"	39'-10"	60	"	39'-10"	166	56	"	404	56	"	536	1254	18.66		
4	"	"	"	"	"	47'-6"	47'-2"	71	"	47'-2"	197	62	"	447	62	"	593	1396	21.55		
1	60"	15"	12"	3'-6"	6'-9"	28'-0"	27'-8"	42	24	10'-9"	97	27'-8"	115	48	7'-5"	371	48	9'-11"	497	1122	15.20
2	"	20"	"	"	"	36'-0"	35'-8"	54	"	35'-8"	149	54	"	418	54	"	559	1277	18.55		
3	"	"	"	"	"	44'-0"	43'-8"	66	"	43'-8"	182	60	"	464	60	"	621	1430	21.89		
4	"	"	"	"	"	52'-0"	51'-8"	78	"	51'-8"	216	66	"	511	66	"	683	1585	25.24		
1	66"	15"	12"	3'-9"	7'-3"	30'-6"	30'-2"	45	32	11'-9"	141	30'-2"	126	52	7'-11"	430	52	10'-8"	579	1321	17.72
2	"	20"	"	"	"	39'-1"	38'-9"	58	"	38'-9"	162	58	"	479	58	"	645	1485	21.49		
3	"	"	"	"	"	47'-8"	47'-4"	78	"	47'-4"	198	64	"	529	64	"	712	1651	25.27		
4	"	"	"	"	"	56'-3"	55'-11"	84	"	55'-11"	233	70	"	578	70	"	779	1815	29.05		
1	72"	15"	12"	4'-0"	7'-9"	32'-8"	32'-8"	49	32	12'-9"	153	32'-8"	136	56	8'-5"	492	56	11'-5"	667	1497	20.42
2	"	20"	"	"	"	42'-2"	41'-10"	63	"	41'-10"	175	62	"	544	62	"	738	1673	24.66		
3	"	"	"	"	"	51'-4"	51'-0"	77	"	51'-0"	213	68	"	597	68	"	810	1850	28.89		
4	"	"	"	"	"	60'-6"	60'-2"	90	"	60'-2"	251	74	"	650	74	"	881	2025	33.12		

TABLE OF DIMENSIONS AND QUANTITIES FOR TWO TYPE B HEADWALLS

NO. OF PIPES	DIAM. OF PIPES	TABLE OF DIMENSIONS		REINFORCING STEEL AND QUANTITIES FOR TWO HEADWALLS												TOTAL QUANTITIES																			
		G	K	X	H	Y	W	BARS A1-Ax		BARS B		BARS B1-Bx		BARS C		BARS D1-Dx		BARS E		BARS F		BARS G		BARS S		BARS V1-Vx		BARS W		LBS.	C.Y.				
								No.	Size	No.	Size	No.	Size	No.	Size	No.	Size	No.	Size	No.	Size	No.	Size	No.	Size	No.	Size	No.	Size			No.	Size	No.	Size
1	12"	12"	12"	2'-0"	2'-0"	1'-0"	2'-4"	2	2'-8"	4	6	2'-6"	6	2'-6"	4	5	2'-0"	17	8	2'-2"	12	2'-8"	4	8"	5	4	2'-11"	8	1'-8"	7	68	52			
2	"	"	"	"	"	"	4'-2"	"	"	4'-2"	"	"	"	"	"	"	3'-10"	32	12	"	17	4'-6"	7	"	"	"	"	"	"	95	82				
3	"	"	"	"	"	"	6'-0"	"	"	6'-0"	"	"	"	"	"	"	5'-8"	47	16	"	23	6'-4"	10	"	"	"	"	"	"	122	111				
4	"	"	"	"	"	"	7'-10"	"	"	7'-10"	"	"	"	"	"	"	7'-6"	63	20	"	29	8'-2"	12	"	"	"	"	"	"	151	140				
1	15"	12"	12"	2'-3"	2'-3"	1'-6"	3'-2"	4	3'-0"	8	6	3'-0"	7	4	1'-10"	3	8	11	2'-3"	19	8	2'-5"	13	3'-7"	5	1'-3"	10	8	3'-0"	16	2'-3"	9	101	75	
2	"	10"	"	"	"	"	5'-5"	"	"	5'-5"	"	"	"	"	"	"	4'-6"	38	12	"	19	5'-10"	9	"	"	"	"	"	"	138	116				
3	"	"	"	"	"	"	7'-10"	"	"	7'-10"	"	"	"	"	"	"	6'-9"	56	16	"	26	8'-1"	12	"	"	"	"	"	"	174	157				
4	"	"	"	"	"	"	9'-11"	"	"	9'-11"	"	"	"	"	"	"	9'-0"	75	20	"	32	10'-4"	16	"	"	"	"	"	"	214	198				
1	18"	12"	12"	2'-6"	2'-6"	2'-0"	4'-0"	4	3'-10"	10	6	3'-6"	8	4	1'-10"	3	8	11	4	1'-0"	2	2'-7"	22	8	2'-8"	7	1'-10"	15	12	3'-2"	25	2'-11"	12	129	100
2	"	12"	"	"	"	"	6'-8"	"	"	6'-8"	"	"	"	"	"	"	5'-3"	17	8	"	11	7'-1"	11	"	"	"	"	"	"	172	155				
3	"	"	"	"	"	"	9'-4"	"	"	9'-4"	"	"	"	"	"	"	9'-2"	25	12	"	16	9'-9"	15	"	"	"	"	"	"	219	211				
4	"	"	"	"	"	"	12'-0"	"	"	12'-0"	"	"	"	"	"	"	11'-10"	32	16	"	21	10'-7"	19	"	"	"	"	"	"	264	265				
1	24"	12"	9"	2'-0"	3'-0"	3'-0"	5'-9"	6	5'-0"	20	6	4'-6"	10	4	1'-10"	3	8	11	4	1'-0"	2	3'-2"	26	8	3'-2"	17	6'-2"	9	3'-0"						