CULVERT DIMENSIONS

CULVERT HEIGHT	"J"	"LW"	"N1"	"N2"	"R"	"Z"	"Y" Clear Spans 4'	5'	6'	7'	8'	9'	10'	12'	14'	16'	18'	20'	22'	24'
4'	3'-11"	16'-2 5/8"			13/16"	15'-9 9/16"	12'-5 3/16"	13'-5 3/16"	14'-5 3/16"	15'-5 3/16"	16'-5 3/16"	17'-5 3/16"	18'-5 3/16"							
5'	4'-7"	18'-11 3/4"			13/16"	18'-5 9/16"		14'-10 5/16"	15'-10 5/16"	16'-10 5/16"	17'-10 5/16"	18'-10 5/16"	19'-10 5/16"	21'-10 5/16"						
6'	5'-10"	24'-1 3/8"			15/16"	23'-5 13/16"	16'-6 1/2"		18'-6 1/2"		20'-6 1/2"		22'-6 1/2"	24'-6 1/2"	26'-6 1/2"	28'-6 1/2"	30'-6 1/2"	32'-6 1/2"		
8'	7'-5"	30'-8 9/16"			1 1/8"	29'-10 3/16"					23'-1 1/8"		25'-1 1/8"	27'-1 1/8"	29'-1 1/8"	31'-1 1/8"	33'-1 1/8"	35'-1 1/8"		
10'	8'-5"	34'-10 1/4"	2'-11"	6'-6"	1 5/16"	33'-10 9/16"							28'-1 3/16"	30'-1 3/16"	32'-1 3/16"	34'-1 3/16"	36'-1 3/16"	38'-1 3/16"	40'-1 3/16"	
12'	9'-8"	40'-0 3/8"	3'-3"	7'-0"	1 7/16"	38'-10 5/8"								32'-9 7/16"	34'-9 7/16"	36'-9 7/16"	38'-9 7/16"	40'-9 7/16"	42'-9 7/16"	44'-9 7/16"

ESTIMATED QUANTITIES — CULVERT (L=150 FT.)

CLEAR SPANS

CULVERT HEIGHT	4' CONC. CU.YD.	4' REINF. STEEL LB.	5' CONC. CU.YD.	5' REINF. STEEL LB.	6' CONC. CU.YD.	6' REINF. STEEL LB.	7' CONC. CU.YD.	7' REINF. STEEL LB.	8' CONC. CU.YD.	8' REINF. STEEL LB.	9' CONC. CU.YD.	9' REINF. STEEL LB.	10' CONC. CU.YD.	10' REINF. STEEL LB.
4'	65.18	9,058	77.73	11,554	85.46	13,055	99.46	15,520	111.96	18,031	127.94	20,481	142.33	23,373
5'			86.88	12,014	97.62	14,479	109.30	16,178	121.90	17,893	135.44	20,988	152.95	24,761
6'	94.27	11,296			113.05	15,418			141.50	20,177			173.78	26,490
8'									185.54	27,883			215.79	31,316
10'													269.80	35,301
12'														

12' CONC. CU.YD.	12' REINF. STEEL LB.	14' CONC. CU.YD.	14' REINF. STEEL LB.	16' CONC. CU.YD.	16' REINF. STEEL LB.	18' CONC. CU.YD.	18' REINF. STEEL LB.	20' CONC. CU.YD.	20' REINF. STEEL LB.	22' CONC. CU.YD.	22' REINF. STEEL LB.	24' CONC. CU.YD.	24' REINF. STEEL LB.	CULVERT HEIGHT
														4'
181.61	29,473													5'
209.91	32,478	260.90	40,750	305.80	47,282	362.28	58,854	422.93	69,308					6'
254.45	36,347	308.99	43,903	361.19	53,904	417.42	63,731	477.64	74,360					8'
304.62	40,312	343.14	49,473	396.69	59,862	454.29	71,364	521.72	84,189	593.07	99,589			10'
369.40	49,543	401.86	58,070	444.73	63,786	504.64	74,934	568.56	85,271	648.12	99,472	733.73	112,574	12'

HEIGHT = 4 FT.

BAR LIST FOR WINGS & APRONS

BAR	SIZE	NO. REQUIRED SPAN 4'	5'	6'	7'	8'	9'	10'	DIM. X	DIM. X1	LENGTH
T1	#4	4	4	4	4	4	4	4			S+10"
T2	#4	4	4	4	4	4	4	4			S+1'-11"
T3	#4	4	4	4	4	4	4	4			S+3'-0"
T4	#4	4	4	4	4	4	4	4			S+4'-1"
T5	#4	4	4	4	4	4	4	4			S+5'-2"
T6	#4	4	4	4	4	4	4	4			S+6'-3"
T7	#4	4	4	4	4	4	4	4			S+7'-4"
T8	#4	8	8	8	8	8	8	8			S+8'-5"
U	#4	8	8	8	8	8	8	8			15'-10"
V1	#4	12	14	16	18	20	22	24	15'-5"	1'-8"	17'-1"
V2	#4	4	4	4	4	4	4	4	11'-6"	1'-8"	13'-2"
V3	#4	4	4	4	4	4	4	4	7'-6"	1'-8"	9'-2"
V4	#4	4	4	4	4	4	4	4	3'-6"	1'-8"	5'-2"
W1	#4	16	16	16	16	16	16	16	2'-6"	W+3'-8"	W+6'-2"
W2	#4	16	16	16	16	16	16	16	2'-3"	W+2'-9"	W+5'-0"
W3	#4	16	16	16	16	16	16	16	2'-0"	W+1'-10"	W+3'-10"
W4	#4	12	12	12	12	12	12	12	1'-9"	W+1'-1"	W+2'-10"
W5	#4	12	12	12	12	12	12	12	1'-7"	W+4"	W+1'-11"
Y1	#4	4	4	4	4	4	4	4			5'-3"
Y2	#4	4	4	4	4	4	4	4			9'-5"
Y3	#4	4	4	4	4	4	4	4			13'-7"
Y4	#4	4	4	4	4	4	4	4			15'-10"

HEIGHT = 5 FT.

BAR LIST FOR WINGS & APRONS

BAR	SIZE	NO. REQUIRED SPAN 5'	6'	7'	8'	9'	10'	12'	DIM. X	DIM. X1	LENGTH
T1	#4	4	4	4	4	4	4	4			S+10"
T2	#4	4	4	4	4	4	4	4			S+1'-11"
T3	#4	4	4	4	4	4	4	4			S+3'-0"
T4	#4	4	4	4	4	4	4	4			S+4'-1"
T5	#4	4	4	4	4	4	4	4			S+5'-2"
T6	#4	4	4	4	4	4	4	4			S+6'-3"
T7	#4	4	4	4	4	4	4	4			S+7'-4"
T8	#4	4	4	4	4	4	4	4			S+8'-5"
T9	#4	4	4	4	4	4	4	4			S+9'-6"
T10	#4	6	6	6	6	6	6	6			S+10'-7"
U	#4	8	8	8	8	8	8	8			18'-7"
V1	#4	14	16	18	20	22	24	28	18'-1"	1'-8"	19'-9"
V2	#4	4	4	4	4	4	4	4	14'-0"	1'-8	15'-8"
V3	#4	4	4	4	4	4	4	4	10'-6"	1'-8"	12'-2"
V4	#4	4	4	4	4	4	4	4	6'-6"	1'-8	8'-2
V5	#4	4	4	4	4	4	4	4	2'-6"	1'-8"	4'-2"
W1	#4	24	24	24	24	24	24	24	3'-0"	W+4'-2"	W+7'-2"
W2	#4	20	20	20	20	20	20	20	2'-9"	W+3'-6"	W+6'-3"
W3	#4	16	16	16	16	16	16	16	2'-6"	W+2'-6"	W+5'-0"
W4	#4	12	12	12	12	12	12	12	2'-3"	W+1'-9"	W+4'-0"
W5	#4	12	12	12	12	12	12	12	2'-0"	W+1'-1"	W+3'-1"
W6	#4	12	12	12	12	12	12	12	1'-9"	W+4"	W+2'-1"
Y1	#4	4	4	4	4	4	4	4			6'-0"
Y2	#4	4	4	4	4	4	4	4			10'-1"
Y3	#4	4	4	4	4	4	4	4			14'-3"
Y4	#4	8	8	8	8	8	8	8			18'-7"

HEIGHT = 6 FT.

BAR LIST FOR WINGS & APRONS

BAR	SIZE	NO. REQUIRED SPAN 4'	6'	8'	10'	12'	14'	16'	18'	20'	DIM. X	DIM. X1	LENGTH
T1	#4	4	4	4	4	4	4	4	4	4			S+1'-0"
T2	#4	4	4	4	4	4	4	4	4	4			S+2'-1"
T3	#4	4	4	4	4	4	4	4	4	4			S+3'-2"
T4	#4	4	4	4	4	4	4	4	4	4			S+4'-3"
T5	#4	4	4	4	4	4	4	4	4	4			S+5'-4"
T6	#4	4	4	4	4	4	4	4	4	4			S+6'-5"
T7	#4	4	4	4	4	4	4	4	4	4			S+7'-6"
T8	#4	4	4	4	4	4	4	4	4	4			S+8'-7"
T9	#4	4	4	4	4	4	4	4	4	4			S+9'-8"
T10	#4	4	4	4	4	4	4	4	4	4			S+10'-9"
T11	#4	4	4	4	4	4	4	4	4	4			S+11'-10"
T12	#4	8	8	8	8	8	8	8	8	8			S+12'-11"
U	#4	12	12	12	12	12	12	12	12	12			23'-9"
V1	#4	12	16	20	24	28	32	36	40	44	23'-1"	1'-8"	24'-9"
V2	#4	4	4	4	4	4	4	4	4	4	19'-6"	1'-8"	21'-2"
V3	#4	4	4	4	4	4	4	4	4	4	15'-6"	1'-8"	17'-2"
V4	#4	4	4	4	4	4	4	4	4	4	12'-0"	1'-8"	13'-8"
V5	#4	4	4	4	4	4	4	4	4	4	8'-6"	1'-8"	10'-2"
V6	#4	4	4	4	4	4	4	4	4	4	4'-6"	1'-8"	6'-2"
W1	#4	28	28	28	28	28	28	28	28	28	4'-0"	W+5'-4"	W+9'-4"
W2	#4	16	16	16	16	16	16	16	16	16	3'-8"	W+4'-8"	W+8'-4"
W3	#4	16	16	16	16	16	16	16	16	16	3'-5"	W+4'-0"	W+7'-5"
W4	#4	16	16	16	16	16	16	16	16	16	3'-2"	W+3'-3"	W+6'-5"
W5	#4	16	16	16	16	16	16	16	16	16	2'-10"	W+2'-4"	W+5'-2"
W6	#4	16	16	16	16	16	16	16	16	16	2'-6"	W+1'-4"	W+3'-10"
W7	#4	16	16	16	16	16	16	16	16	16	2'-0"	W+5"	W+2'-5"
Y1	#4	4	4	4	4	4	4	4	4	4			6'-8"
Y2	#4	4	4	4	4	4	4	4	4	4			10'-9"
Y3	#4	4	4	4	4	4	4	4	4	4			14'-11"
Y4	#4	4	4	4	4	4	4	4	4	4			19'-1"
Y5	#4	4	4	4	4	4	4	4	4	4			23'-3"
Y6	#4	4	4	4	4	4	4	4	4	4			24'-9"

HEIGHT = 8 FT.

BAR LIST FOR WINGS & APRONS

BAR	SIZE	NO. REQUIRED SPAN 8'	10'	12'	14'	16'	18'	20'	DIM. X	DIM. X1	LENGTH
T1	#4	4	4	4	4	4	4	4			S+1'-3"
T2	#4	4	4	4	4	4	4	4			S+2'-4"
T3	#4	4	4	4	4	4	4	4			S+3'-5"
T4	#4	4	4	4	4	4	4	4			S+4'-6"
T5	#4	4	4	4	4	4	4	4			S+5'-7"
T6	#4	4	4	4	4	4	4	4			S+6'-8"
T7	#4	4	4	4	4	4	4	4			S+7'-9"
T8	#4	4	4	4	4	4	4	4			S+8'-10"
T9	#4	4	4	4	4	4	4	4			S+9'-11"
T10	#4	4	4	4	4	4	4	4			S+11'-0"
T11	#4	4	4	4	4	4	4	4			S+12'-1"
T12	#4	4	4	4	4	4	4	4			S+13'-2"
T13	#4	4	4	4	4	4	4	4			S+14'-3"
T14	#4	4	4	4	4	4	4	4			S+15'-4"
T15	#4	8	8	8	8	8	8	8			S+16'-5"
U	#4	12	12	12	12	12	12	12			30'-4"
V1	#4	20	24	28	32	36	40	44	29'-6"	1'-8"	31'-2"
V2	#4	4	4	4	4	4	4	4	25'-6"	1'-8"	27'-2"
V3	#4	4	4	4	4	4	4	4	22'-0"	1'-8"	23'-8"
V4	#4	4	4	4	4	4	4	4	18'-6"	1'-8"	20'-2"
V5	#4	4	4	4	4	4	4	4	14'-6"	1'-8"	16'-2"
V6	#4	4	4	4	4	4	4	4	11'-0"	1'-8"	12'-8"
V7	#4	4	4	4	4	4	4	4	7'-0"	1'-8"	8'-8"
W1	#5	28	28	28	28	28	28	28	4'-6"	W+6'-11"	W+11'-5"
W2	#5	24	24	24	24	24	24	24	4'-2"	W+5'-10"	W+10'-0"
W3	#5	16	16	16	16	16	16	16	3'-9	W+5'-1"	W+8'-10"
W4	#4	16	16	16	16	16	16	16	3'-5"	W+4'-1"	W+7'-6"
W5	#4	16	16	16	16	16	16	16	3'-1"	W+3'-2"	W+6'-3"
W6	#4	16	16	16	16	16	16	16	2'-9"	W+2'-2"	W+4'-11"
W7	#4	16	16	16	16	16	16	16	2'-5"	W+1'-2"	W+3'-7"
W8	#4	12	12	12	12	12	12	12	2'-0"	W+6"	W+2'-6"
Y1	#4	8	8	8	8	8	8	8			6'-8"
Y2	#4	8	8	8	8	8	8	8			10'-10"
Y3	#4	8	8	8	8	8	8	8			14'-11"
Y4	#4	8	8	8	8	8	8	8			19'-1"
Y5	#4	8	8	8	8	8	8	8			23'-2"
Y6	#4	8	8	8	8	8	8	8			27'-4"
Y7	#4	16	16	16	16	16	16	16			30'-4"

HEIGHT = 10 FT.

BAR LIST FOR WINGS & APRONS

BAR	SIZE	NO. REQUIRED SPAN 10'	12'	14'	16'	18'	20'	22'	DIM. X	DIM. X1	LENGTH
T1	#4	4	4	4	4	4	4	4			S+1'-6"
T2	#4	4	4	4	4	4	4	4			S+2'-7"
T3	#4	4	4	4	4	4	4	4			S+3'-8"
T4	#4	4	4	4	4	4	4	4			S+4'-9"
T5	#4	4	4	4	4	4	4	4			S+5'-10"
T6	#4	4	4	4	4	4	4	4			S+6'-11"
T7	#4	4	4	4	4	4	4	4			S+8'-0"
T8	#4	4	4	4	4	4	4	4			S+9'-1"
T9	#4	4	4	4	4	4	4	4			S+10'-2"
T10	#4	4	4	4	4	4	4	4			S+11'-3"
T11	#4	4	4	4	4	4	4	4			S+12'-4"
T12	#4	4	4	4	4	4	4	4			S+13'-5"
T13	#4	4	4	4	4	4	4	4			S+14'-6"
T14	#4	4	4	4	4	4	4	4			S+15'-7"
T15	#4	4	4	4	4	4	4	4			S+16'-8"
T16	#4	4	4	4	4	4	4	4			S+17'-9"
T17	#4	8	8	8	8	8	8	8			S+18'-10"
U	#4	12	12	12	12	12	12	12			34'-6"
V1	#4	24	28	32	36	40	44	48	33'-6"	1'-8"	35'-2"
V2	#4	4	4	4	4	4	4	4	30'-0"	1'-8"	31'-8"
V3	#4	4	4	4	4	4	4	4	26'-6"	1'-8"	28'-2"
V4	#4	4	4	4	4	4	4	4	22'-6"	1'-8"	24'-2"
V5	#4	4	4	4	4	4	4	4	18'-6"	1'-8"	20'-2"
V6	#4	4	4	4	4	4	4	4	15'-0"	1'-8"	16'-8"
V7	#4	4	4	4	4	4	4	4	11'-6"	1'-8"	13'-2"
V8	#4	4	4	4	4	4	4	4	7'-6"	1'-8"	9'-2"
V9	#4	4	4	4	4	4	4	4	4'-0"	1'-8"	5'-8"
W1	#6	24	24	24	24	24	24	24	6'-0"	W+8'-3"	W+14'-3"
W2	#6	24	24	24	24	24	24	24	5'-7"	W+7'-5"	W+13'-0"
W3	#5	24	24	24	24	24	24	24	5'-2"	W+6'-6"	W+11'-8"
W4	#5	16	16	16	16	16	16	16	4'-9"	W+5'-10"	W+10'-7"
W5	#5	16	16	16	16	16	16	16	4'-5'	W+5'-1"	W+9'-6"
W6	#4	16	16	16	16	16	16	16	4'-2"	W+4'-5"	W+8'-7"
W7	#4	16	16	16	16	16	16	16	3'-10"	W+3'-8"	W+7'-6"
W8	#4	16	16	16	16	16	16	16	3'-6"	W+2'-10"	W+6'-4"
W9	#4	16	16	16	16	16	16	16	3'-2"	W+1'-10"	W+5'-0"
W10	#4	12	12	12	12	12	12	12	2'-10"	W+1'-1"	W+3'-11"
W11	#4	8	8	8	8	8	8	8	2'-7"	W+8"	W+3'-3"
Y1	#4	8	8	8	8	8	8	8			7'-4"
Y2	#4	8	8	8	8	8	8	8			12'-6"
Y3	#4	8	8	8	8	8	8	8			17'-7"
Y4	#4	8	8	8	8	8	8	8			22'-10"
Y5	#4	8	8	8	8	8	8	8			28'-0"
Y6	#4	8	8	8	8	8	8	8			33'-2"
Y7	#4	16	16	16	16	16	16	16			34'-6"

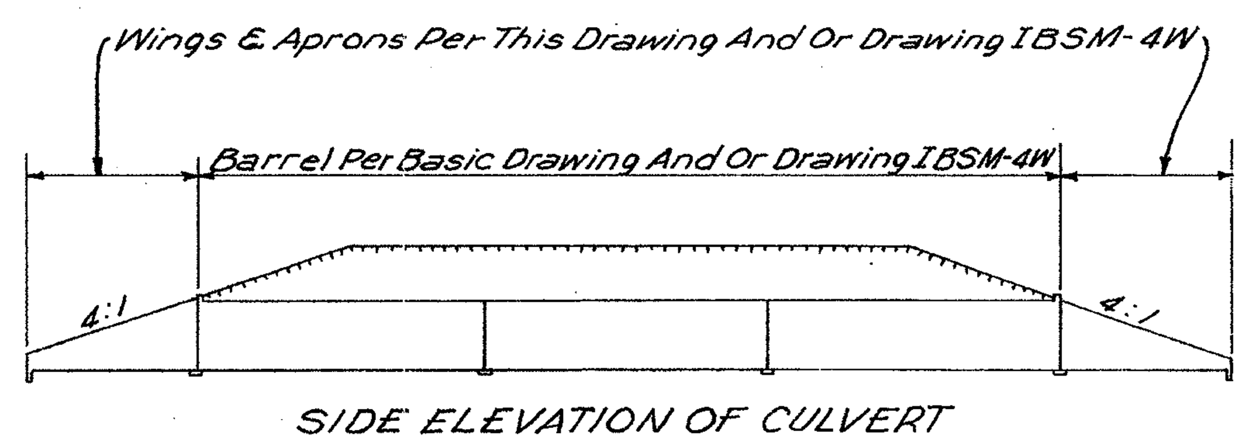
HEIGHT = 12 FT.

BAR LIST FOR WINGS & APRONS

BAR	SIZE	NO. REQUIRED SPAN 12'	14'	16'	18'	20'	22'	24'	DIM. X	DIM. X1	LENGTH
T1	#4	4	4	4	4	4	4	4			S+1'-8"
T2	#4	4	4	4	4	4	4	4			S+2'-9"
T3	#4	4	4	4	4	4	4	4			S+3'-10"
T4	#4	4	4	4	4	4	4	4			S+4'-11"
T5	#4	4	4	4	4	4	4	4			S+6'-0"
T6	#4	4	4	4	4	4	4	4			S+7'-1"
T7	#4	4	4	4	4	4	4	4			S+8'-2"
T8	#4	4	4	4	4	4	4	4			S+9'-3"
T9	#4	4	4	4	4	4	4	4			S+10'-4"
T10	#4	4	4	4	4	4	4	4			S+11'-5"
T11	#4	4	4	4	4	4	4	4			S+12'-6"
T12	#4	4	4	4	4	4	4	4			S+13'-7"
T13	#4	4	4	4	4	4	4	4			S+14'-8"
T14	#4	4	4	4	4	4	4	4			S+15'-9"
T15	#4	4	4	4	4	4	4	4			S+16'-10"
T16	#4	4	4	4	4	4	4	4			S+17'-11"
T17	#4	4	4	4	4	4	4	4			S+19'-0"
T18	#4	4	4	4	4	4	4	4			S+20'-1"
T19	#4	4	4	4	4	4	4	4			S+21'-2"
T20	#4	6	6	6	6	6	6	6			S+22'-3"
U	#4	12	12	12	12	12	12	12			39'-8"
V1	#4	28	32	36	40	44	48	52	38'-6"	1'-8"	40'-2"
V2	#4	4	4	4	4	4	4	4	35'-0"	1'-8"	36'-8"
V3	#4	4	4	4	4	4	4	4	31'-0"	1'-8"	32'-8"
V4	#4	4	4	4	4	4	4	4	27'-6"	1'-8"	29'-2"
V5	#4	4	4	4	4	4	4	4	24'-0"	1'-8"	25'-8"
V6	#4	4	4	4	4	4	4	4	20'-0"	1'-8"	21'-8"
V7	#4	4	4	4	4	4	4	4	16'-6"	1'-8"	18'-2"
V8	#4	4	4	4	4	4	4	4	12'-6"	1'-8"	14'-2"
V9	#4	4	4	4	4	4	4	4	9'-0"	1'-8"	10'-8"
V10	#4	4	4	4	4	4	4	4	5'-6"	1'-8"	7'-2"
W1	#7	24	24	24	24	24	24	24	6'-6"	W+9'-7"	W+16'-1"
W2	#7	20	20	20	20	20	20	20	6'-2"	W+8'-11"	W+15'-1"
W3	#7	16	16	16	16	16	16	16	5'-10"	W+8'-2"	W+14'-0"
W4	#7	16	16	16	16	16	16	16	5'-6"	W+7'-3"	W+12'-9"
W5	#6	16	16	16	16	16	16	16	5'-2"	W+6'-6"	W+11'-8"
W6	#6	16	16	16	16	16	16	16	4'-10"	W+5'-7"	W+10'-5"
W7	#5	16	16	16	16	16	16	16	4'-5"	W+4'-7"	W+9'-0"
W8	#5	16	16	16	16	16	16	16	4'-0"	W+3'-7"	W+7'-7"
W9	#4	16	16	16	16	16	16	16	3'-8"	W+2'-8"	W+6'-4"
W10	#4	12	12	12	12	12	12	12	3'-3"	W+1'-11"	W+5'-2"
W11	#4	12	12	12	12	12	12	12	2'-11"	W+1'-2"	W+4'-1"
W12	#4	8	8	8	8	8	8	8	2'-8"	W+9"	W+3'-5"
Y1	#4	8	8	8	8	8	8	8			7'-8"
Y2	#4	8	8	8	8	8	8	8			12'-10"
Y3	#4	8	8	8	8	8	8	8			18'-0"
Y4	#4	8	8	8	8	8	8	8			23'-2"
Y5	#4	8	8	8	8	8	8	8			28'-5"
Y6	#4	8	8	8	8	8	8	8			33'-7"
Y7	#4	8	8	8	8	8	8	8			38'-9"
Y8	#4	24	24	24	24	24	24	24			39'-8"

ADDITIONAL BAR LIST FOR WINGS & APRONS

BAR	SIZE	H=4 Ft. NO.	H=4 Ft. LENGTH	H=5 Ft. NO.	H=5 Ft. LENGTH	H=6 Ft. NO.	H=6 Ft. LENGTH	H=8 Ft. NO.	H=8 Ft. LENGTH	H=10 Ft. NO.	H=10 Ft. LENGTH	H=12 Ft. NO.	H=12 Ft. LENGTH
F	#4	8	16'-2"	8	19'-0"	8	24'-4"	8	31'-1"	8	35'-4"	8	40'-8"
Q	#5	20	3'-0"	24	3'-0"	28	3'-0"	72	3'-0"	72	3'-0"	88	3'-0"
QS	#4	4	3'-7"	4	4'-7"	4	5'-7"	4	7'-7"	4	9'-7"	4	11'-7"
R1	#4							12	W+6'-0"	12	W+7'-0"	12	W+8'-3"
R2	#4							12	W+4'-11"	12	W+5'-11"	12	W+7'-2"
R3	#4							12	W+3'-10"	12	W+4'-10"	12	W+6'-1"
R4	#4							12	W+2'-9"	12	W+3'-9"	12	W+5'-0"
R5	#4							12	W+1'-8"	12	W+2'-8"	12	W+3'-11"
R6	#4							12	W+7"	12	W+1'-7"	12	W+2'-10"
R7	#4									16	W+1 1/2"	16	W+1'-4 1/2"
R8	#4											16	W-1"



SIDE ELEVATION OF CULVERT

See Drawing IBJL-1 For Joint Locations.

NOTE:
Auxiliary Slabs "W" And Vertical Construction Joints At The Wings Are Required Only Where Called For By The Basic Drawing And Auxiliary Slabs "W" Are Not To Be Used For Culvert Heights Of Less Than 8 Feet.

GENERAL NOTES:

This Drawing Shows The General Details Necessary To Modify A Single Cell Culvert For Wings With 4:1 Slope.

All Governing Dimensions, Reinforcement Details And General Requirements Of Basic Culvert Drawing Shall Apply Except As Specifically Modified By This Drawing And Or Drawing IBSM-4W.

Barrel Details On Basic Culvert Drawing Shall Be Used With Cover From 2'-6" To The Maximum Shown On Basic Culvert Drawing. With Cover Less Than 2'-6" And More Than Maximum Shown On Basic Culvert Drawing Use Drawing IBSM-4W For Barrel Details.

Quantities Shown On This Sheet Are For Culverts With Basic Culvert Barrels And Wings With 4:1 Slope Per This Drawing. Quantities Shown On Drawing IBSM-4W Are For Culverts With Barrels Per Drawing IBSM-4W And Wings With 4:1 Slope Per This Drawing And Drawing IBSM-4W. Quantities Not Shown On This Sheet And Or Drawing IBSM-4W Are Same As Shown On Basic Culvert Drawing.

Quantities Shown On This Sheet Are For Complete Culvert Of The Length Noted And Include Barrel, Parapets, Wings, Aprons, Cut-off Walls, Auxiliary Slabs "W" Where Required And Two Auxiliary Slabs "J."

Quantities Shown On This Sheet Will Be Used As A Basis For Final Payment For Culverts Constructed In Accordance With This Drawing And Basic Culvert Drawing.

BY

REVISION

DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WINGS WITH 4:1 SLOPE FOR BASIC CULVERT DRAWING SINGLE CELL

HEIGHTS 4–12 FT.
SPANS 4–24 FT.

WORKING NUMBER
SD-IWS-4A

SHEET NUMBER

FILENAME:
DESIGN TEAM ______ CHECKED ______ DATE ______

COUNTY:
PROJECT NO.:
DESIGN TEAM:
FILENAME: