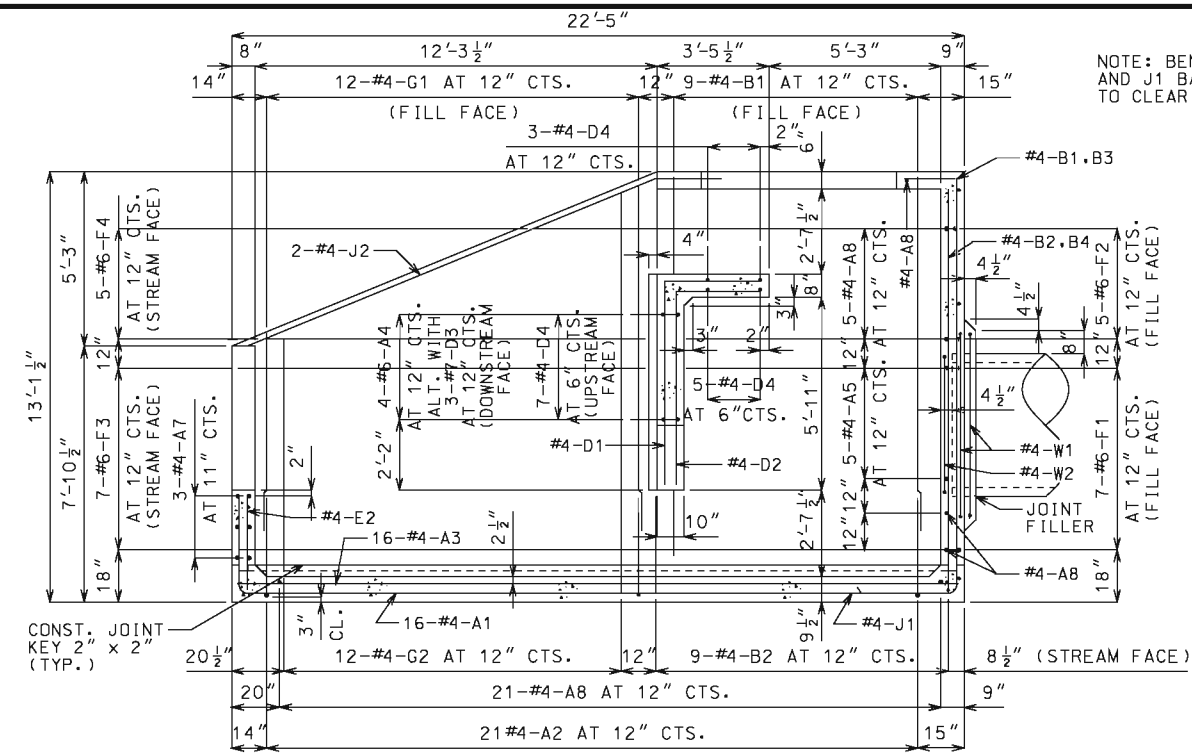
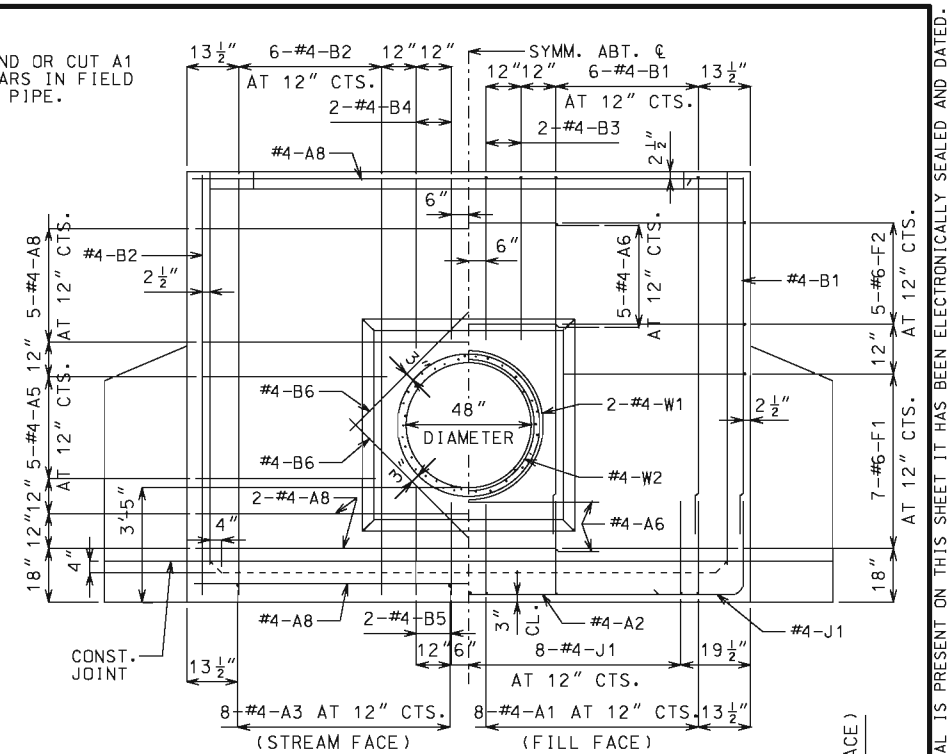


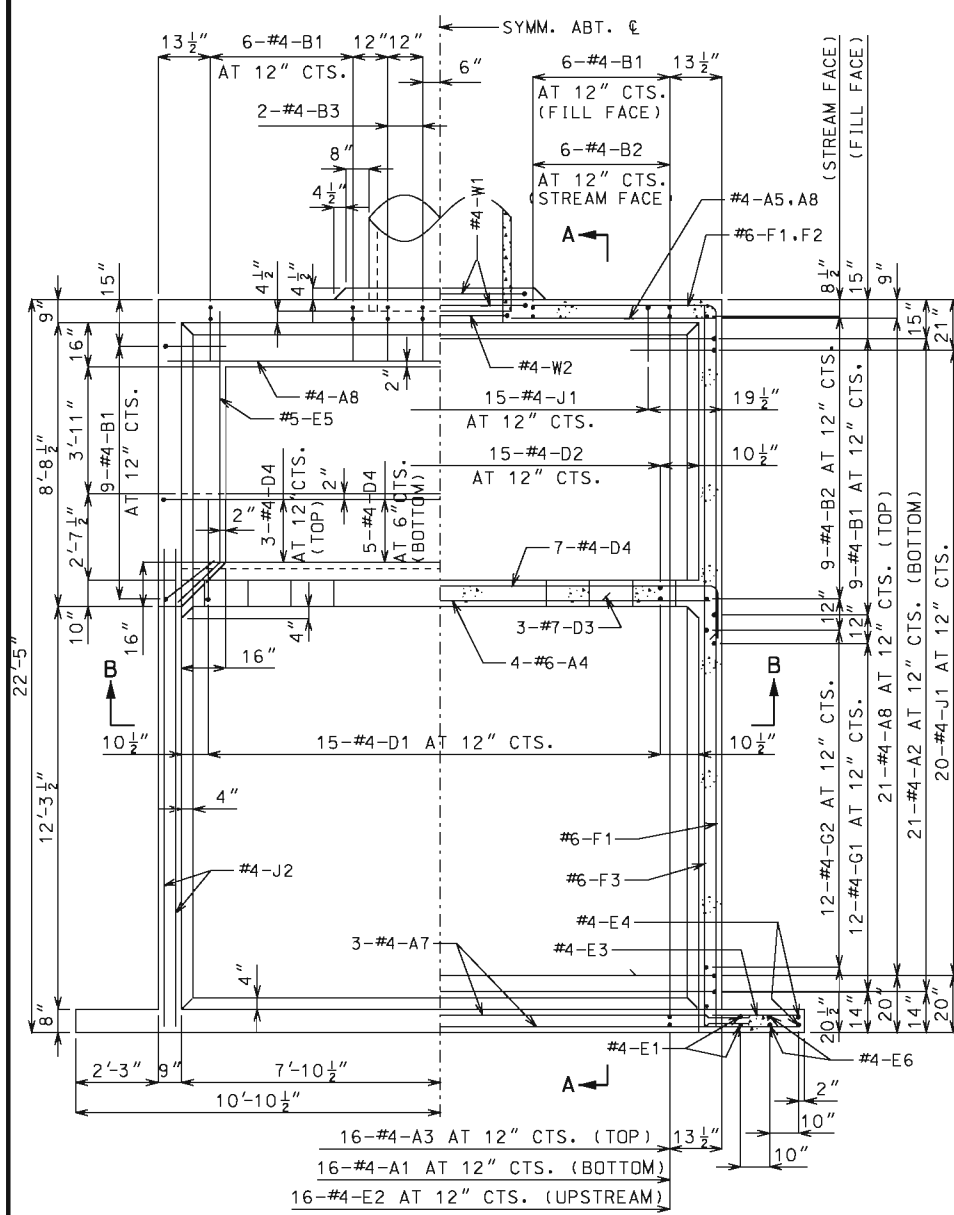
DOWNSTREAM ELEVATION



SECTION A - A

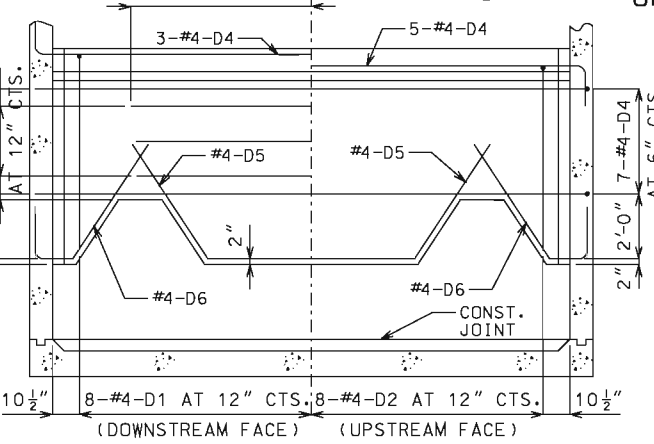


UPSTREAM ELEVATION

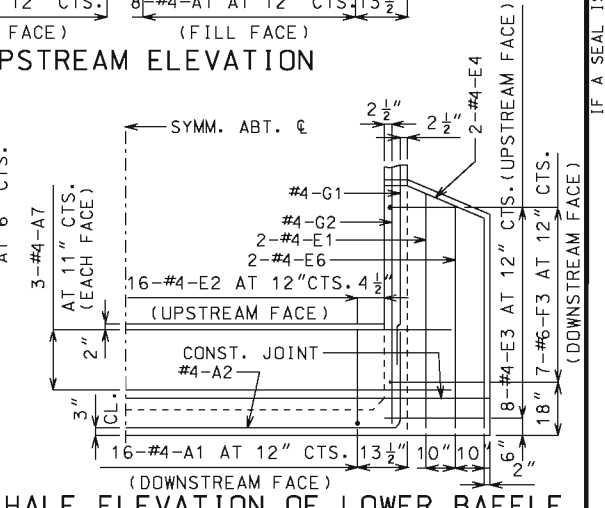


HALF PLAN HALF HORIZONTAL SECTION

NO.	REQ'D	MARK NO.	SHAPE NO.	VARIES (V)	NO. EACH	DIMENSIONS										NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT	
						B	C	D	E	F	H	K	FT. IN.		FT. IN.				
						FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.				FT. IN.
16	4	A1	11					3-0 1/2	22-1	3-0 1/2			28-2	28-0	299				
21	4	A2	11					3-1	16-11	3-1			23-1	22-11	321				
16	4	A3	20					22-2					22-2	22-2	237				
4	6	A4	20					17-0					17-0	17-0	102				
10	4	A5	20					6-0					6-0	6-0	40				
7	4	A6	20					7-1					7-1	7-1	33				
6	4	A7	20					18-0					18-0	18-0	72				
29	4	A8	20					17-0					17-0	17-0	329				
30	4	B1	19					10-8 1/2	0-21 1/2				12-6	12-5	249				
30	4	B2	20					12-10 1/2					12-11	12-11	259				
4	4	B3	19					5-0 1/2	0-21 1/2				6-10	6-9	18				
4	4	B4	20					5-1					5-1	5-1	14				
4	4	B5	20					2-10					2-10	2-10	8				
4	4	B6	20					5-1					5-1	5-1	14				
15	4	D1	19					6-3 1/2	3-2 1/2				9-6	9-5	94				
15	4	D2	19					5-11	2-8				8-7	8-6	85				
3	7	D3	20					12-0					12-0	12-0	74				
15	4	D4	11					0-12	17-0	0-12			19-0	18-10	189				
2	4	D5	15					3-9 1/2	6-4	3-9 1/2	3-1 1/2	2-2	3-1 1/2	2-2	14-0	13-11	19		
4	4	D6	14					0-12	0-15	3-9 1/2			6-1	5-11	16				
4	4	E1	20					7-5					7-5	7-5	20				
16	4	E2	20					3-2					3-2	3-2	34				
16	4	E3	20					2-9					2-9	2-9	29				
4	4	E4	25					6-8	2-2 1/2	0-7 1/2		0-10	2-1	9-6	9-6	25			
2	5	E5	15					2-7 1/2	7-11 1/2			0-22	0-22	10-7	10-6	22			
4	4	E6	20					7-1					7-1	7-1	19				
14	6	F1	19					22-3	6-0				28-3	28-1	591				
10	6	F2	19	V	2			10-8 1/2	6-0				16-9	16-7					
								20-6 1/2	6-0	(INCREMENT = 29 1/2)			26-7	26-5	323				
14	6	F3	19					22-3	2-9				25-0	24-10	522				
10	6	F4	20	V	2			10-8 1/2					10-9	10-7					
								20-6 1/2		(INCREMENT = 29 1/2)			20-7	20-7	233				
24	4	G1	20	V	2			8-1		(INCREMENT = 4 1/2)			8-1	8-1					
								12-6 1/2		(INCREMENT = 4 1/2)			12-7	12-7	166				
24	4	G2	20	V	2			8-4		(INCREMENT = 4 1/2)			8-4	8-4					
								12-9 1/2		(INCREMENT = 4 1/2)			12-10	12-10	170				
55	4	J1	19					3-3	3-3				6-6	6-5	236				
4	4	J2	20					14-10					14-10	14-10	40				
2	4	W1	16					5-2 1/2					17-3	17-3	23				
1	4	W2	16					4-4 1/2					14-7	14-7	10				

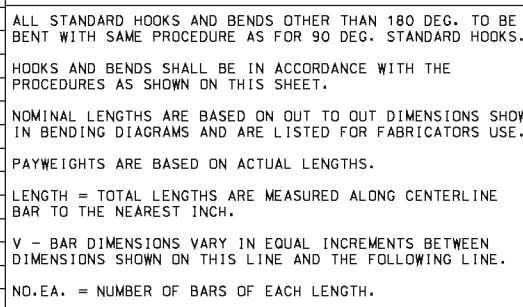


SECTION B - B



HALF ELEVATION OF LOWER BAFFLE AND WING

ESTIMATED QUANTITIES		
ITEM	TOTAL	
CLASS B CONCRETE	CU. YD.	36.7
REINFORCING STEEL (GRADE 60)	LBS.	4,940



GENERAL NOTES:

DESIGN UNIT STRESSES
 CLASS B CONCRETE f'c = 3,000 psi
 REINFORCING STEEL (GRADE 60) fy = 60,000 psi

REINFORCING STEEL
 MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1 1/2" UNLESS SHOWN OTHERWISE.

DIMENSIONS
 DRAWINGS ARE NOT TO SCALE. FOLLOW DIMENSIONS.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 105 WEST CAPITOL JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

STATE OF MISSOURI
 DENNIS W. HECKMAN
 NUMBER PE-27141
 PROFESSIONAL ENGINEER

PIPE CULVERT HEADWALL ENERGY DISSIPATOR (IMPACT TYPE) FOR 48" CONCRETE PIPE

DATE EFFECTIVE:	07/01/2001	604.15E	SHEET NO.
DATE PREPARED:	9/3/2009		1 OF 1

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.