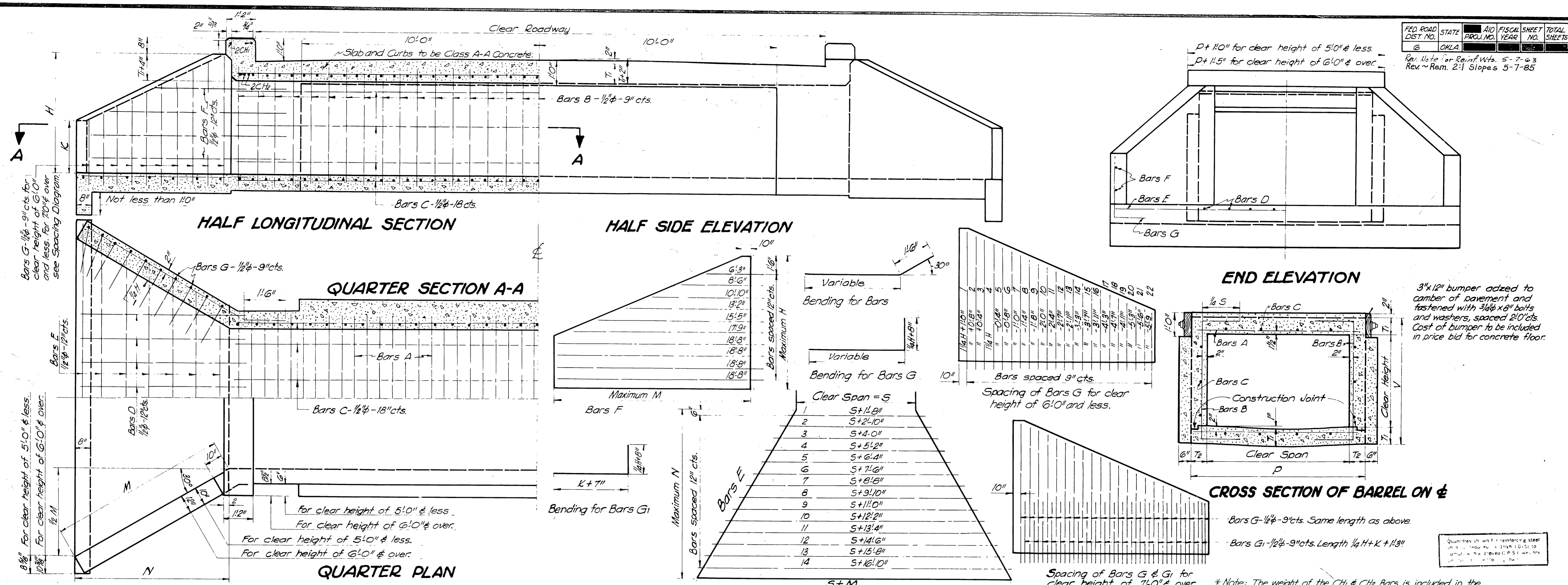


FED. ROAD DIST. NO.	STATE	AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

Rev. Note for Reinf. Wts. 5-7-63  
Rev. Rem. 2:1 Slopes 5-7-85



3"x12" bumper adzed to camber of pavement and fastened with 3/8"x6" bolts and washers, spaced 2'0" cts. Cost of bumper to be included in price bid for concrete floor.

Quantities in this reinforcing steel schedule are based on the design shown on this sheet and are subject to change without notice.

\* Note: The weight of the CH1 & CH2 Bars is included in the weight of the TOTAL QUANTITIES for 30' & 36' Roadway.

DESIGN No.	WATERWAY Clear Span, Ft.	Clear Height, Ft.	Area of Opening	BARREL OF CULVERT										TWO WINGS & ONE APRON										TOTAL QUANTITIES										TWO CURBS			
				DIMENSIONS				REINFORCING STEEL			QUANTITIES			DIMENSIONS				REINFORCING STEEL			QUANTITIES			30' ROADWAY		36' ROADWAY		DESIGN No.	Rein. Steel same size as Bars								
				T1	T2	V	P	Bars A	Bars B	Bars C	Steel Lbs. per Lin. Ft.	Class A Concrete Cu. Yds.	Class AA Concrete Cu. Yds.	H	K	M	N	Bars D	Bars E	Bars F	Bars G	Bars G1	Steel	Class A Concrete	Class AA Concrete	Rein. Steel Lbs.	Class A Concrete Cu. Yds.			Class AA Concrete Cu. Yds.							
1	11.6'	3.0'	6'	6'	2'6"	3'0"	1/2"φ-6"	2'8"	1/2"φ-9"	3'2"	1/2"φ-18"	8	18.43	111	0.68	2'4"	11.9'	3'5"	2'11/2"	4	3'5"	3	45	87	31	1.69	1.24	6.87	2.46	807	7.54	2.87	1	3'8"	2'8"		
2	2'0"	4.0'	6'	6'	3'0"	3'0"	1/2"φ-6"	2'8"	1/2"φ-9"	3'8"	1/2"φ-18"	8	19.34	130	0.68	2'4"	11.9'	4'2"	3'7/4"	4	3'0"	4	63	118	31	1.88	1.61	7.74	2.46	890	9.29	2.87	2	3'8"	2'8"		
3	2'0"	6.0'	6'	6'	3'0"	4'0"	1/2"φ-6"	3'8"	1/2"φ-9"	3'8"	1/2"φ-18"	8	22.07	130	0.91	2'4"	11.9'	3'5"	2'11/2"	5	3'5"	3	50	95	40	1.94	1.24	8.29	3.26	962	8.47	3.81	3	3'8"	3'8"		
4	2'0"	8.0'	6'	6'	3'0"	4'0"	1/2"φ-6"	3'8"	1/2"φ-9"	3'8"	1/2"φ-18"	8	22.97	138	0.91	2'4"	11.9'	4'2"	3'7/4"	5	2'0"	4	75	128	40	2.12	1.61	9.08	3.26	1046	10.21	3.81	4	3'8"	3'8"		
5	2'6"	7.5'	6'	6'	3'6"	4'0"	1/2"φ-6"	3'8"	1/2"φ-9"	3'8"	1/2"φ-18"	8	23.88	167	0.91	3'0"	11.9'	3'7"	4'3"	5	3'8"	4	87	166	40	2.31	1.98	9.61	3.26	1104	12.11	3.81	5	3'8"	3'8"		
6	3'0"	9.0'	6'	6'	4'0"	4'0"	1/2"φ-6"	3'8"	1/2"φ-9"	3'8"	1/2"φ-18"	10	26.14	185	0.91	3'0"	11.9'	3'7"	4'0"	5	3'3"	5	117	205	40	2.47	2.35	10.93	3.26	1250	13.97	3.81	6	3'8"	3'8"		
7	1'6"	6.0'	7"	7"	2'8"	5'0"	3/4"φ-6"	4'5"	1/2"φ-9"	4'5"	1/2"φ-18"	10	29.50	164	1.29	2'5"	11.9'	3'6"	3'0"	6	5'7"	3	55	107	48	2.21	1.36	10.93	3.26	1275	10.17	5.32	7	5'8"	4'8"		
8	2'0"	8.0'	7"	7"	3'2"	5'0"	1/2"φ-6"	4'5"	1/2"φ-9"	4'5"	1/2"φ-18"	10	30.40	182	1.29	2'5"	11.9'	4'3"	3'8"	6	4'7"	4	81	143	48	2.39	1.73	11.73	3.26	1361	11.99	5.32	8	5'8"	4'8"		
9	2'6"	9.0'	7"	7"	3'8"	5'0"	1/2"φ-6"	4'5"	1/2"φ-9"	4'5"	1/2"φ-18"	10	31.31	200	1.29	3'5"	11.9'	4'3"	3'8"	6	4'9"	4	94	183	48	2.58	1.73	12.94	3.26	1422	13.88	5.32	9	5'8"	4'8"		
10	3'0"	12.0'	7"	7"	4'2"	5'0"	1/2"φ-6"	4'5"	1/2"φ-9"	4'5"	1/2"φ-18"	12	33.58	219	1.29	3'11"	11.9'	5'9"	4'11/4"	6	5'5"	5	126	228	48	2.76	2.47	13.71	3.26	15.72	15.90	5.32	10	5'8"	4'8"		
11	4'0"	16.0'	7"	7"	5'2"	5'0"	1/2"φ-6"	5'0"	1/2"φ-9"	5'0"	1/2"φ-18"	12	36.45	313	1.37	4'4"	11.9'	7'2"	6'2"	6	6'8"	6	179	323	50	3.11	3.21	15.71	3.26	17.90	22.18	5.66	11	6'0"	4'8"		
12	11.6'	7.5'	7"	7"	2'9"	6'0"	3/4"φ-6"	5'8"	1/2"φ-9"	5'8"	1/2"φ-18"	12	36.30	194	1.64	3'5"	11.9'	3'7"	3'11/4"	7	3'6"	3	150	119	56	2.47	1.42	13.34	3.26	15.50	5.75	15.51	11.66	6.73	12	6'8"	5'8"
13	2'0"	10.0'	7"	7"	3'3"	6'0"	1/2"φ-6"	5'8"	1/2"φ-9"	5'8"	1/2"φ-18"	12	37.20	213	1.64	2'11/4"	11.9'	4'4"	3'9"	7	4'2"	4	92	157	56	2.66	1.79	14.26	3.26	16.28	6.73	13	6'8"	5'8"			
14	3'0"	15.0'	7"	7"	4'3"	6'0"	1/2"φ-6"	5'8"	1/2"φ-9"	5'8"	1/2"φ-18"	14	40.38	250	1.64	3'11/4"	11.9'	5'0"	5'0"	7	5'6"	5	138	247	56	3.03	2.53	16.20	3.26	18.08	5.75	16.62	6.73	14	6'8"	5'8"	
15	4'0"	20.0'	7"	7"	5'3"	6'0"	1/2"φ-6"	5'8"	1/2"φ-9"	5'8"	1/2"φ-18"	14	43.32	343	1.73	4'11/4"	11.9'	5'0"	5'0"	7	6'2"	6	182	346	56	3.38	3.27	18.17	3.26	20.77	23.90	7.09	15	7'0"	6'0"		
16	5'0"	25.0'	7"	7"	6'3"	6'0"	1/2"φ-6"	5'8"	1/2"φ-9"	5'8"	1/2"φ-18"	16	47.22	463	1.81	5'11/4"	11.9'	6'9"	7'7"	7	8'0"	8	262	467	61	3.75	4.01	21.06	3.26	23.92	31.69	7.46	16	7'4"	6'4"		
17	7'0"	35.0'	7"	7"	7'11/4"	6'0"	1/2"φ-6"	5'8"	1/2"φ-9"	5'8"	1/2"φ-18"	18	52.60	587	1.81	7'11/4"	11.9'	11'8"	10'11/4"	7	10'6"	10	355	656	64	4.54	5.49	28.33	3.26	31.29	45.83	7.49	17	7'4"	6'4"		
18	2'0"	12.0'	8"	8"	3'5"	7'0"	3/4"φ-6"	6'8"	1/2"φ-9"	6'8"	1/2"φ-18"	12	45.28	257	2.13	3'0"	11.9'	4'5"	3'10"	8	4'3"	4	99	174	64	2.93	1.91	17.08	3.26	18.20	7.38	19.80	15.75	8.66	18	7'8"	6'8"
19	3'0"	18.0'	8"	8"	4'5"	7'0"	1/2"φ-6"	7'0"	1/2"φ-9"	7'0"	1/2"φ-18"	14	49.76	341	2.22	4'0"	11.9'	5'11"	5'10"	8	5'7"	8	149	264	67	3.30	2.65	19.54	3.26	22.53	21.55	9.06	19	8'0"	7'0"		
20	4'0"	24.0'	8"	8"	5'5"	7'0"	1/2"φ-6"	7'0"	1/2"φ-9"	7'0"	1/2"φ-18"	14	51.67	390	2.22	5'0"	11.9'	6'5"	6'5"	8	6'10"	8	205	375	67	3.67	3.40	21.24	3.26	24.34	26.45	9.06	20	8'0"	7'0"		
21	5'0"	30.0'	8"	8"	6'5"	7'0"	1/2"φ-6"	7'0"	1/2"φ-9"	7'0"	1/2"φ-18"	16	56.04	510	2.33	6'0"	11.9'	8'0"	7'9"	8	8'11"	8	283	498	69	4.02	4.14	24.25	3.26	27.62	34.28	9.47	21	8'4"	7'4"		
22	6'0"	36.0'	8"	8"	7'5"	7'0"	1/2"φ-6"	7'0"	1/2"φ-9"	7'0"	1/2"φ-18"	18	59.22	571	2.33	7'0"	11.9'	10'4"	10'11/4"	8	9'5"	9	359	719	72	4.46	4.88	26.81	3.26	30.36	41.85	9.50	22	8'8"	7'4"		
23	3'0"	24.0'	10"	10"	4'8"	9'0"	3/4"φ-6"	9'0"	1/2"φ-9"	9'0"	1/2"φ-18"	18	74.24	436	3.26	4'2"	11.9'	6'11"	5'3/4"	10	5'8"	5	166	306	83	3.83	2.64	28.24	3.26	32.68	33.68	13.16	23	10'0"	9'0"		
24	4'0"	32.0'	10"	10"	5'8"	9'0"	1/2"φ-6"	9'0"	1/2"φ-9"	9'0"	1/2"φ-18"	18	76.06	485	3.26	5'2"	11.9'	7'11"	6'3/4"	10	7'0"	7	239	426	83	4.20	3.58	30.28	3.26	34.46	31.37	13.16	24	10'0"	9'0"		
25	5'0"	40.0'	10"	10"	6'8"	9'0"	1/2"φ-6"	9'0"	1/2"φ-9"	9'0"	1/2"φ-18"	20	80.96	607	3.38	6'2"	11.9'	9'0"	7'9"	10	8'3"	8	309	556	85	4.55	4.32	33.23	3.26	35.77	31.42	13.62	25	10'4"	9'4"		
26	6'0"	48.0'	10"	10"	7'8"	9'0"	1/2"φ-6"	9'0"	1/2"φ-9"	9'0"	1/2"φ-18"	22	84.14	669	3.38	7'2"	11.9'	10'6"	9'11"	10	9'6"	8	389	790	88	4.99	5.02	35.92	3.26	40.97	47.28	13.62	26	10'4"	9'4"		
27	7'0"	56.0'	10"	10"	8'8"	9'0"	1/2"φ-6"	9'0"	1/2"φ-9"	9'0"	1/2"φ-18"	22	85.95	730	3.38	8'2"	11.9'	12'0"	10'5"	10	10'10"	10	607	985	88	5.36	5.80	40.86	3.26	44.93	51.62	13.62	27	10'8"	9'4"		
28	8'0"	64.0'	10"	10"	9'8"	9'0"	1/2"φ-6"	9'0"	1/2"φ-9"	9'0"	1/2"φ-18"	24	89.99	847	3.43	9'2"	11.9'	13'5"	11'11/4"	10	11'2"	10	571	1092	89	5.71	6.54	45.03	3.26	50.44	63.71	13.62	28	10'11"	9'6"		
29	3'0"	30.0'	11"	11"	4'10"	11'4"	3/4"φ-6"	11'0"	1/2"φ-9"	11'0"	1/2"φ-18"	20	97.70	533	4.31	4'3"	11.9'	6'3"	5'5"	12	5'10"	5	183	343	99	4.37	2.96	36.32	3.26	41.70	41.93	17.29	29	12'0"	11'0"		
30	4'0"	40.0'	11"	11"	5'10"	11'4"	1/2"φ-6"	11'0"	1/2"φ-9"	11'0"	1/2"φ-18"	20	99.52	583	4.31	5'3"	11.9'	7'8"	6'3/4"	12	7'1"	7	260	471	99	4.72	3.70	38.45	3.26	44.12	36.72	17.29	30	12'0"	11'0"		
31	5'0"	50.0'	11"	11"	6'10"	11'4"	1/2"φ-6"	11'0"	1/2"φ-9"	11'0"	1/2"φ-18"	22	104.71	705	4.44	6'3"	11.9'	9'2"	7'11/4"	12	8'4"	8	333	617	102	5.09	4.44	41.61	3.26	47.89	44.59	17.29	31	12'4"	11'4"		
32	6'0"	60.0'	11"	11"	7'10"	11'4"	1/2"φ-6"	11'0"	1/2"φ-9"	11'0"	1/2"φ-18"	24	107.89	767	4.44	7'3"	11.9'	10'7"	9'5"	12	9'7"	9	417	852	105	5.51	4.42	47.87	3.26	50.80	52.48	17.82	32	12'8"	11'4"		
33	7'0"																																				