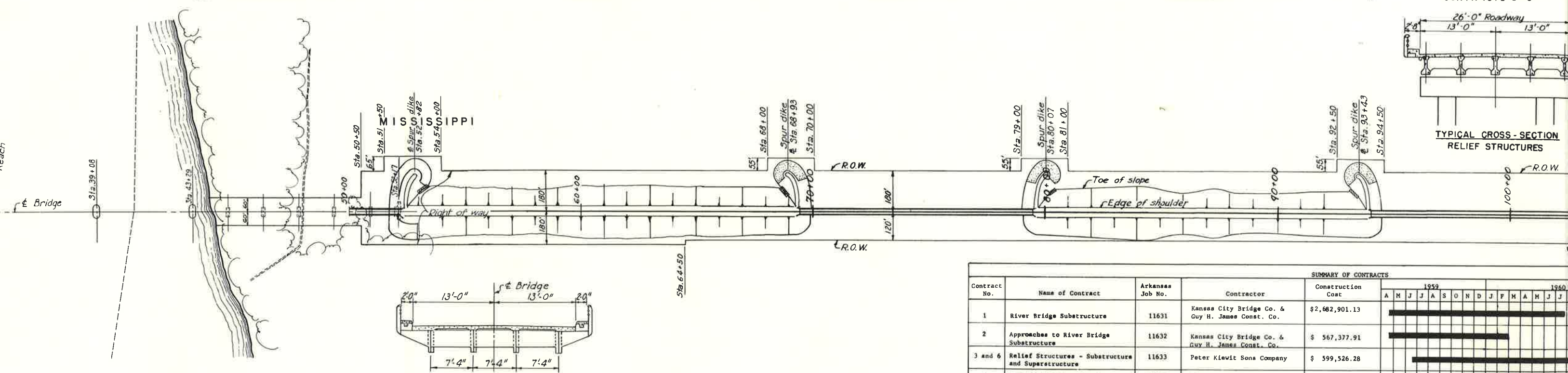
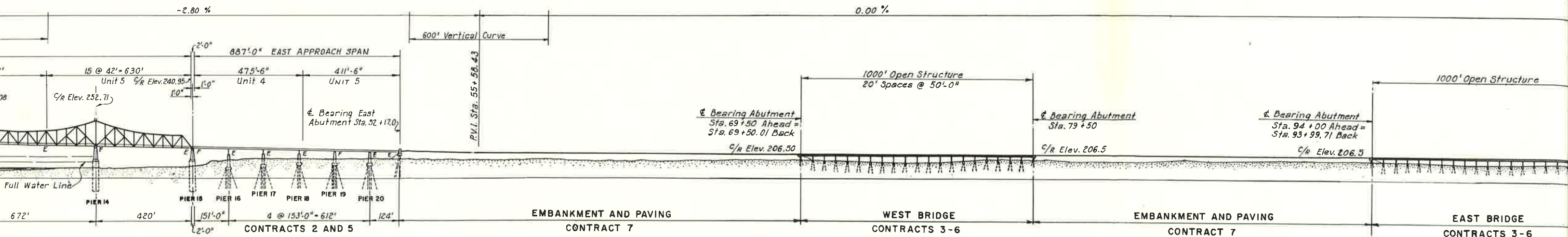
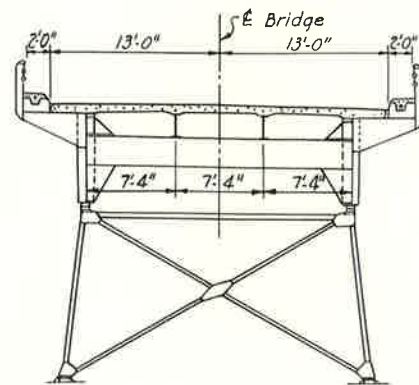


CROSS SECTION - UNIT 1



CROSS SECTIONS - UNITS 2, 3, 4 AND 5

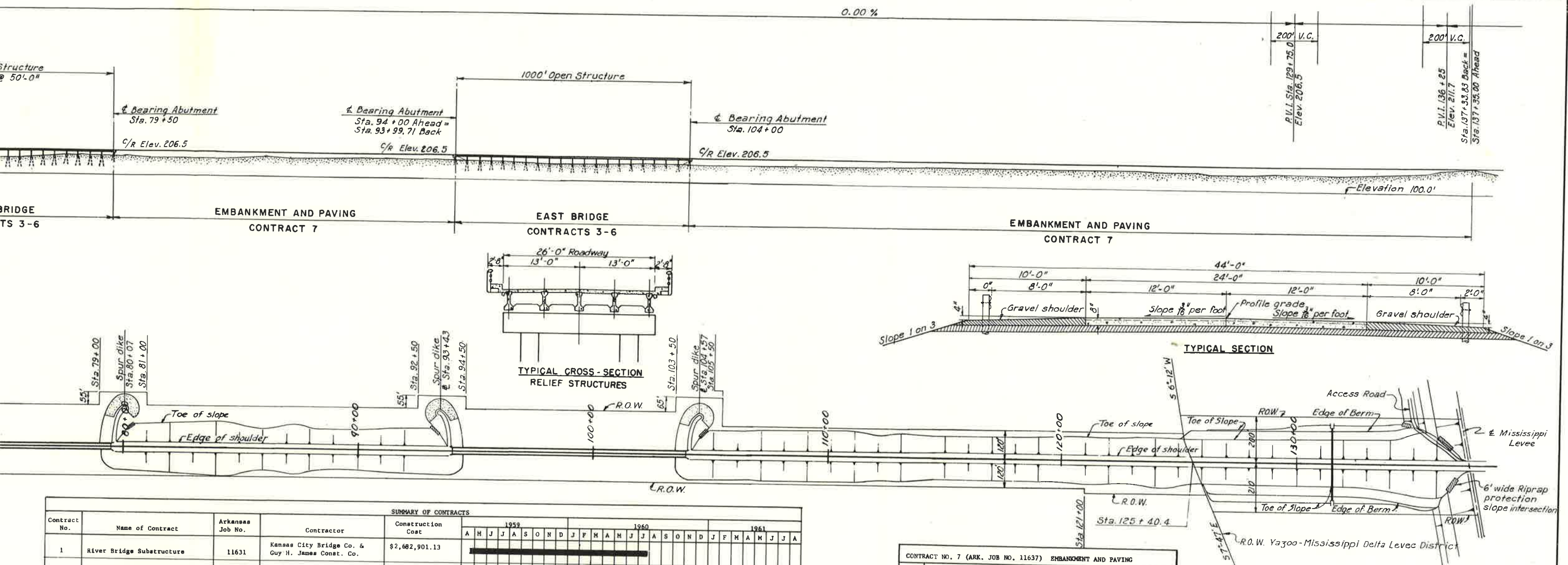
CONTRACT NO. 1 (ARK. JOB NO. 11631) RIVER BRIDGE SUBSTRUCTURE (PIERS 10 THROUGH 15)										
Item	Description	Unit	Unit Price	Total Quantity	Phillips Co. Ark.		Coshoma Co. Miss.			
					Pier 10	Pier 11	Pier 12	Pier 13	Pier 14	Pier 15
1	Plant	Lump Sum	500,000.00	1	-	-	-	-	-	-
2	Excavation for Caisson Piers	Cu.Yds.	6.00	25,868.2	2,604.8	3,888.2	4,736.1	5,138.0	6,321.4	3,139.7
3	Excavation for Caisson Piers below Plan Cutting Edge Elevations	Cu.Yds.	35.00	1,358.5	-	1,358.5	-	-	-	-
4	Concrete Bases of Piers	Cu.Yds.	48.00	25,403.26	2,062.26	5,129.7	5,426.5	4,933.0	4,972.2	2,879.6
5	Concrete Shafts of Piers	Cu.Yds.	60.00	4,467.0	524.5	912.9	929.4	918.6	739.7	421.6
6	Reinforcing Steel	Pounds	0.14	2,586,816	175,315	552,957	501,617	552,074	564,560	240,293
7	Miscellaneous Metalwork	Pounds	0.23	39,084	3,458	8,042	8,042	8,042	8,042	3,458
8	Clearing Right of Way	Lump Sum	1,000.00	1	-	-	-	-	-	-
9	Matresses	Sq.Ft.	0.65	160,000	-	-	80,000	80,000	-	-

CONTRACT NO. 4 (ARK. JOB NO. 11634) RIVER BRIDGE SUPERSTRUCTURE (SPANS 11 THRU 15)										
Item	Description	Unit	Unit Price	Total Quantity	Phillips Co. Ark.		Coshoma Co. Miss.			
					Span 11	Span 12	Span 12	Span 13	Span 14	Span 15
1	Low Alloy Structural Metalwork	Pounds	0.266	4,623,083	629,967	792,023	572,956	1,129,572	953,893	542,664
2	Carbon Structural Metalwork	Pounds	0.252	8,269,582	1,048,214	1,750,345	541,997	2,008,354	1,808,082	1,112,590
3	Concrete Deck and Safety Walks	Cu.Yds.	86.50	1,941.2	264.2	391.8	131.3	470.8	418.8	264.3
4	Reinforcing Steel	Pounds	0.143	455,536	61,625	92,584	30,560	110,787	98,367	61,613
5	Aluminum Tube Handrail	Lin.Ft.	11.00	6,222	841.9	1,263.4	418.8	1,512.2	1,346.6	841.1

SUMMARY OF CONTRACTS																				
Contract No.	Name of Contract	Arkansas Job No.	Contractor	Construction Cost	1959												1960			
					A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J
1	River Bridge Substructure	11631	Kansas City Bridge Co. & Guy H. James Const. Co.	\$2,682,901.13																
2	Approaches to River Bridge Substructure	11632	Kansas City Bridge Co. & Guy H. James Const. Co.	\$ 567,377.91																
3 and 6	Relief Structures - Substructure and Superstructure	11633	Peter Kiewit Sons Company	\$ 599,526.28																
4	River Bridge Superstructure	11634	John F. Beasley Const. Co.	\$3,615,172.18																
5	Approaches to River Bridge Superstructure	11635	John F. Beasley Const. Co.	\$ 833,225.03																
7	Embankment and Paving	11637	R. B. Potashnick	\$ 738,972.43																
8	Toll Collection Facilities, Utilities and Lighting	11638	Peterson, Garbi & Joseph, Inc.	\$ 165,000.00																

CONTRACT NO. 2 (ARK. JOB NO. 11632) APPROACHES TO RIVER BRIDGE - SUBSTRUCTURE																
Item	Description	Unit	Unit Price	Total Quantity	Phillips County, Arkansas											
					W. Abutment	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Pier 6	Pier 7	Pier 8	Pier 9	Pier 16	
1	Clearing Right of Way	Lump Sum	3,000.00	1	-	-	-	-	-	-	-	-	-	-	-	-
2	Structural Excavation	Cu.Yds.	7.00	7,024.1	158.5	147.3	187.7	106.3	214.4	163.1	262.5	246.6	460.8	512.4	1,139.0	-
3	Reinforcing Steel	Pounds	0.18	181,734	6,157	9,701	8,086	8,882	10,804	23,922	9,044	9,350	9,858	10,015	15,271.0	-
4	Concrete Abutments and Piers	Cu.Yds.	50.40	4,674.1	77.2	65.8	75.9	100.3	336.5	457.3	321.2	334.4	342.5	355.6	528.0	-
5	Miscellaneous Metalwork	Pounds	0.50	6,447.8	261.9	708.2	708.1	708.2	371.8	354.1	354.1	354.1	354.1	354.0	354.1	-
6	120P53 Steel Foundation Piles	Lin.Ft.	6.50	23,111.5	808.6	934.7	-	-	-	-	-	-	-	-	4,674.5	-
7	Pile Test Loads	Each	1,500.00	7	-	1	-	-	-	1	-	-	-	1	1	-
8	Cast-in-Place Foundation Piles	Lin.Ft.	7.00	11,833.4	-	-	629.9	685.5	1,449.9	2,336.6	1,533.7	1,740.5	1,725.4	1,751.9	-	-

CONTRACT NO. 5 (ARK. JOB NO. 11635) APPROACHES TO RIVER BRIDGE - SUPERSTRUCTURE																
Item	Description	Unit	Unit Price	Total Quantity	Phillips County, Arkansas											
					Span 1	Span 2	Span 3	Span 4	Span 5	Span 6	Span 7	Span 8	Span 9	Span 10	Span 16	
1	Carbon Structural Metalwork	Pounds	0.211	1,675,880	77,677	85,756	85,756	91,651	84,135	118,635	128,111	130,311	132,710	97,014	122,939	-
2	Low Alloy Structural Metalwork	Pounds	0.219	1,352,246	-	-	176	14,168	91,935	110,385	111,035	112,448	112,448	117,964	117,866	-
3	Concrete Deck and Safety Walks	Cu.Yds.	81.50	1,344.66	44.50	48.42	48.42	56.80	82.50	98.9	97.79	98.72	98.74	97.43	97.33	-
4	Reinforcing Steel	Pounds	0.143	302,734	9,999	11,248	11,248	12,786	18,505	22,209	22,151	22,156	22,156	21,940	21,940	-
5	Aluminum Tube Handrail	Lin.Ft.	11.00	6,180.4	137.2	153.2	153.2	176.2	255.2	306.2	306.2	306.2	306.2	303.2	303.2	-



SUMMARY OF CONTRACTS																																								
Contract No.	Name of Contract	Arkansas Job No.	Contractor	Construction Cost	1959												1960												1961											
					A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A							
1	River Bridge Substructure	11631	Kansas City Bridge Co. & Guy H. James Const. Co.	\$2,682,901.13																																				
2	Approaches to River Bridge Substructure	11632	Kansas City Bridge Co. & Guy H. James Const. Co.	\$ 567,377.91																																				
3 and 6	Relief Structures - Substructure and Superstructure	11633	Peter Klewit Sons Company	\$ 599,526.28																																				
4	River Bridge Superstructure	11634	John F. Beasley Const. Co.	\$3,615,172.18																																				
5	Approaches to River Bridge Superstructure	11635	John F. Beasley Const. Co.	\$ 833,225.03																																				
7	Embankment and Paving	11637	R. B. Porashnick	\$ 738,972.43																																				
8	Toll Collection Facilities, Utilities and Lighting	11638	Peterson, Garbi & Joseph, Inc.	\$ 165,000.00																																				

D. 2 (ARK. JOB NO. 11632) APPROACHES TO RIVER BRIDGE - SUBSTRUCTURE																				
Description	Unit	Unit Price	Total Quantity	Phillips County, Arkansas										Coahoma County, Mississippi						
				W. Abutment	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Pier 6	Pier 7	Pier 8	Pier 9	Pier 16	Pier 17	Pier 18	Pier 19	Pier 20	E. Abutment	
Clearing Right of Way	Lump Sum	3,000.00	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Structural Excavation	Cu.Yds.	7.00	7,024.1	158.5	147.3	187.7	106.3	214.4	163.1	262.5	246.6	460.8	512.4	1,139.0	866.1	569.4	952.4	664.5	172.9	-
Reinforcing Steel	Pounds	0.18	181,734	6,157	9,701	8,086	8,882	10,804	21,922	9,054	9,350	9,858	10,015	15,271.0	12,044	9,507	22,139	9,721	7,233	-
Concrete Abutments and Piers	Cu.Yds.	50.40	4,674.1	77.2	65.8	75.9	100.3	336.5	457.3	321.2	334.4	342.5	355.6	528.0	412.7	319.4	495.3	367.6	84.4	-
Miscellaneous Metalwork	Pounds	0.50	6,447.8	261.9	708.2	708.1	708.2	371.8	354.1	354.1	354.1	354.1	354.0	354.1	354.1	354.1	354.0	371.9	131.1	-
3 Steel Foundation	Lin.Ft.	6.50	23,111.5	808.6	934.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Test Loads	Each	1,500.00	7	-	1	-	-	-	1	-	1	-	-	4,674.5	3,916.1	3,423.6	4,450.9	3,272.3	1,630.8	-
In-Place Foundation	Lin.Ft.	7.00	11,853.4	-	-	629.9	685.5	1,449.9	2,336.6	1,533.7	1,740.5	1,725.4	1,751.9	-	-	-	-	-	-	-

D. 3 (ARK. JOB NO. 11633) APPROACHES TO RIVER BRIDGE - SUPERSTRUCTURE																				
Description	Unit	Unit Price	Total Quantity	Phillips County, Arkansas										Coahoma County, Mississippi						
				Span 1	Span 2	Span 3	Span 4	Span 5	Span 6	Span 7	Span 8	Span 9	Span 10	Span 16	Span 17	Span 18	Span 19	Span 20	Span 21	
Structural Metalwork	Pounds	0.211	1,675,880	77,677	85,756	85,756	91,631	84,135	118,635	128,111	130,311	132,710	97,014	122,939	119,682	117,797	101,087	101,473	81,146	
Concrete Deck and Safety	Cu.Yds.	81.50	1,344.66	44.50	48.42	48.42	54.80	82.50	110,385	111,035	119,448	119,448	117,964	117,866	119,349	119,349	111,217	110,498	89,408	
Reinforcing Steel	Pounds	0.143	302,734	9,999	11,268	11,268	12,786	18,505	22,209	22,151	22,156	22,156	21,940	22,156	22,156	22,056	22,039	22,039	17,989	
Aluminum Tube Handrail	Lin.Ft.	11.00	4,180.4	137.2	153.2	153.2	176.2	255.2	306.2	306.2	306.2	306.2	303.2	303.2	306.2	306.2	306.2	306.2	249.4	

CONTRACT NO. 7 (ARK. JOB NO. 11637) EMBANKMENT AND PAVING					Item	Description	Unit	Unit Price	Quantity
1	Clearing Right of Way	Lump Sum	25,000.00	1	2	Embankment in Place	Cu.Yds.	0.40	873,389
3	Excavation of Unsuitable Material	Cu.Yds.	1.00	2,490	4	Granular Embankment	Cu.Yds.	0.65	75,003
5	6 Inch Granular Base	Sq.Yds.	1.00	34,898	6	8" Portland Cement Concrete Pavement	Sq.Yds.	6.50	17,135.7
7	Reinforced Concrete Approach Slabs	Sq.Yds.	15.00	277.8	8	Fertilizing	Acres	113.00	29
9	Mulch Sodding	Sq.Yds.	0.15	140,269.2	10	Steel Plate Guard Rail	Lin.Ft.	2.75	12,760.3
11	Sacked Concrete Riprap	Sq.Yds.	10.00	7,697.9	12	Gravel Surfacing	Cu.Yds.	6.00	2,969.7
13	Concrete Right of Way Markers	Each	10.00	47.0	14	Miscellaneous Roadway and Ditch Excavation	Cu.Yds.	1.00	0
SP	Structural Excavation	Cu.Yds.	2.20	420	SP	P.C. Reinforced Concrete	Cu.Yds.	66.00	15
SP	Reinforcing Steel	Lbs.	0.1925	4,348	SP	36" Extra strength R.C. Culvert Pipe	Lin.Ft.	19.80	296

CONTRACT NO. 3-6 (ARK. JOB NO. 11633) RELIEF STRUCTURES						
Item	Description	Unit	Unit Price	Total Quantity	West Bridge	East Bridge
1	Clearing Right of Way	Lump Sum	5,479.00	1		
2	Structural Excavation	Cu.Yds.	9.00	3,643.3	1,866.7	1,776.6
3	Concrete Abutments and Piers	Cu.Yds.	45.00	2,087.2	1,052.1	1,035.1
4	Concrete Deck and Safety Walks	Cu.Yds.	65.00	1,504.9	752.5	752.4
5	Miscellaneous Metalwork	Pounds	0.30	92,714	46,357	46,357
6	Reinforcing Steel	Pounds	0.12	527,314	271,252	256,062
7	Cast-in-Place Foundation Piles	Lin.Ft.	6.00	15,832.1	7,922.4	7,909.7
8	Pile Test Loads	Each	1,500.00	4	2	2
9	Prestressed Concrete Beams	Lin.Ft.	13.00	9,956.2	4,978.1	4,978.1
10	Aluminum Tube Handrail	Lin.Ft.	12.00	4,000.0	2,000.0	2,000.0

- Design specifications: A.A.S.H.O. 1953 with tentative revisions of 1954 and 1955. Live load to be H20-S16-44. Dead load includes a provision for 15 lb. per sq. ft. future wearing surface.
- Unless otherwise shown, all dimensions are measured at 60° F.
- All steel not otherwise shown shall be carbon structural steel ASTM A7-55T, or A-373 the latter being members that are made up by welding two or more parts together. Manganese steel is modified A-242.
- Unless otherwise noted all rivets shall be 7/8" diameter.
- All welding shall conform to the American Welding Society specifications for Welded Highway and Railroad Bridges.
- Concrete shall have a minimum strength of 3,000 p.s.i. at 28 days.
- Reinforcing steel shall be spliced as shown or as approved by the Engineer. Lap all bars 30 diameters at splices. Bends shall conform to A.C.I. Standards. Reinforcing steel to be billet steel (intermediate or hard grade) or rail steel, with a design tensile stress of 20,000 p.s.i.

FEDERAL AID PROJECT U-F-016-5 (2)
HOUSING AND HOME FINANCE AGENCY PROJECT PFL-V-3-91

ARKANSAS STATE HIGHWAY COMMISSION
MISSISSIPPI STATE HIGHWAY DEPARTMENT
MISSISSIPPI RIVER BRIDGE
NEAR HELENA, ARKANSAS

GENERAL PLAN AND ELEVATION
PROJECT SUMMARY

PLAN SCALE 1" = 400'
HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY, MISSOURI
NEW YORK, NEW YORK