

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	STATE NO.	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	23	80
				JOB NO.	3922	LAYOUT- 32117	
				① 6414			

GENERAL NOTES

BENCH MARK: Nail in side of Power Pole, 153' Rt. of center line Sta. 199+54, Elev. 434.05.

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, 1991 edition, with applicable supplemental specifications and special provisions.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges, 1989 with current inter-im specifications.

LIVE LOADING: HS20

SEISMIC PERFORMANCE CATEGORY: A

MATERIALS AND STRENGTHS:
Class S(AE) Concrete (superstructure) $f'_c = 4,000$ psi
Class S Concrete (substructure) $f'_c = 3,500$ psi
Reinforcing Steel (A615 or A617, GR. 60) $F_y = 60,000$ psi
Structural Steel (A36) $F_y = 36,000$ psi

BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division.

STEEL PILING: Piling in Bents 1 and 4 shall be HP 10x42 and shall be driven with an approved air, steam, or diesel hammer to a minimum safe bearing capacity of 44 tons per pile and to a minimum penetration of 10' below natural ground. Lengths of piling shown are for estimating quantities and for use in determining payment for cut-off and build-up in accordance with the standard specifications. Piles in end bents to be driven after embankment to bottom of cap is in place.

FOOTINGS: Footings shall be set to a maximum elevation of 412.0 and a minimum of 0.5' into very dense Clayey Silt or very hard Calcareous Clay. Foundations for footings shall be prepared in accordance with Section 801.04 of the Standard Specifications.

BRIDGE DECK: The concrete bridge deck shall be given a time finish as specified for final finishing in subsection 802.20 for Class 5 Bridge Roadway Surface Finish.

BOILED LINSEED OIL: Boiled linseed oil treatment shall be applied to the roadway surface and to the face and top of the concrete parapet rail.

DETAIL DRAWINGS:

DRAWING NO.

- End Bents 32118
- Intermediate Bents 32119
- 35' R.C.D.G. spans 32120
- Steel Piling 14395A
- Type C Bridge Name Plate 2388A
- Embankment Construction 1888A
- Dumped Riprap and Filter Blanket 1891F
- Computing Excavation for Structures 1891F
- Approach Slabs and Gutters 2016B & 2017

EXISTING BRIDGE: The existing bridge No. 3134 (log mile 3.84) is 25'-6" wide and 76' long and consists of concrete precast slab spans supported by a concrete substructure. The existing bridge is located approximately 45 feet upstream from the proposed new bridge.

REMOVAL AND SALVAGE: After the new bridge is opened to traffic, the existing bridge (No. 3134) shall be removed in accordance with section 205 of the Standard Specifications. All material from the existing bridge shall become the property of the contractor except precast slabs, spans & bridge railing.

BORING LEGEND

- A. Moist, Loose, Brown and Gray Sand with Clay Seams.
- B. Wet, Medium Dense, Brown and Gray Clayey Sand and Gravel.
- C. Moist, Dense, Brown Clayey Silt.
- D. Moist, Very Dense, Brown to Gray Clayey Silt.
- E. Moist, Very Hard, Gray Calcareous Clay.
- F. Alternating Layers of Hard, Gray Limestone and Moist, Very Hard, Brown and Gray Calcareous Clay.
- G. Wet, Medium Dense, Brown Clayey Sand and Gravel.
- H. Moist, Very Hard, Brown to Gray Calcareous Clay.
- I. Moist, Very Hard, Brown to Gray Calcareous Clay.
- J. Alternating Layers of Moist, Very Hard, Gray Calcareous Clay and Hard, Gray Limestone.
- K. Hard, Gray Limestone.
- L. Moist, Very Hard, Gray and Brown to Brown Calcareous Clay.

LAYOUT OF BRIDGE OVER

LITTLE HOLLY CREEK

DIERKS-CENTER POINT BRS. AND APPRS.

HOWARD COUNTY

ROUTE 4

SEC. 3

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: J.W.T. DATE: 8-7-90

CHECKED BY: DEL DATE: 8-7-90

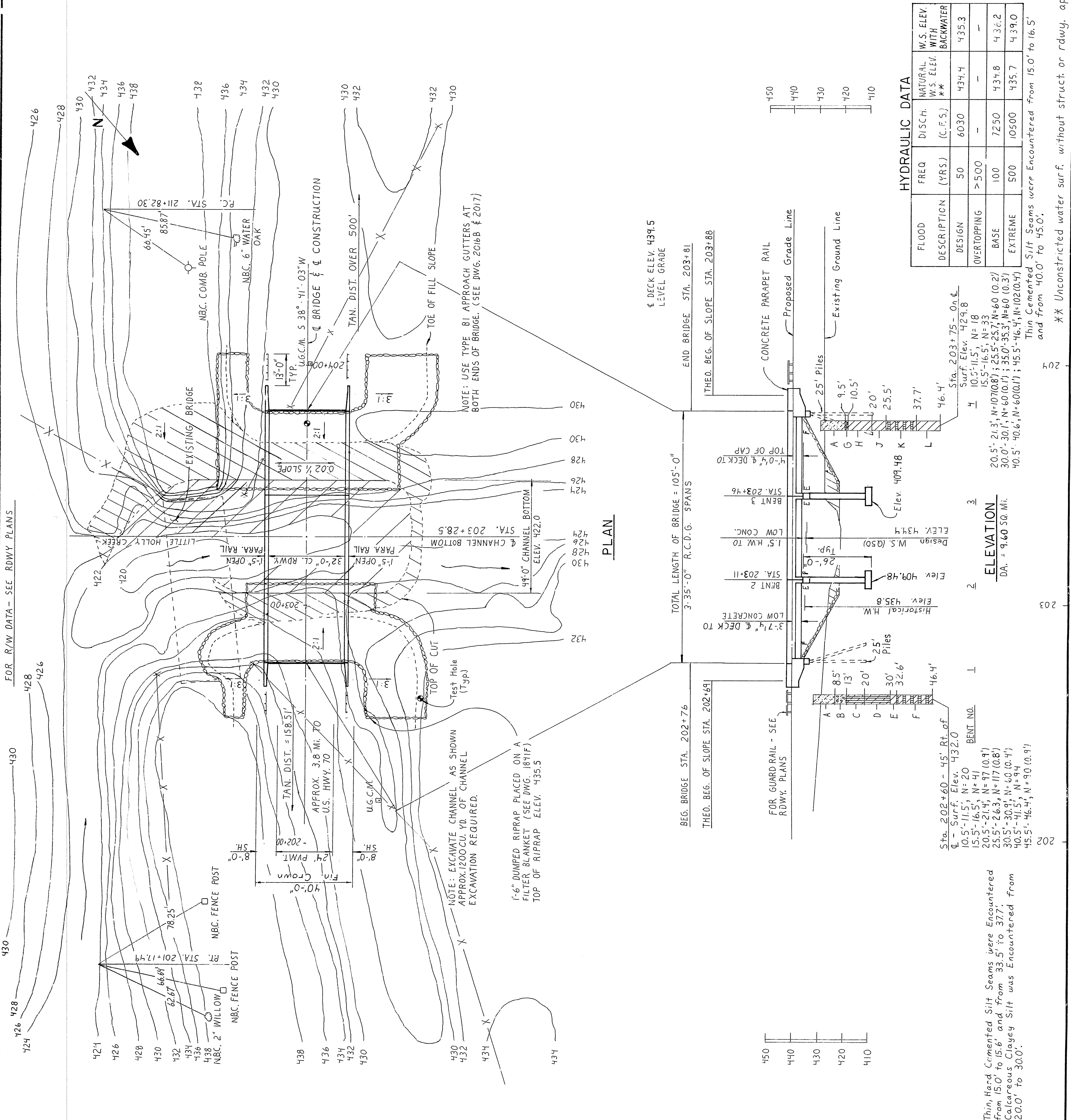
SCALE: 1" = 20'

BRIDGE NO. 6414

DRAWING NO. 32117



BRIDGE ENGINEER



** Unconstricted water surf. without struct. or rdwy. apprs.

DATE REVISED 8-19-91	DATE FILMED 8-19-91	DATE REVISED	DATE FILMED	SHEET NO.	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	3922	9	80

6413,6414,6415 - QUANTITIES - 32111

SCHEDULE OF BRIDGE QUANTITIES FOR JOB NO. 3922

BRIDGE NO.	CODE NO.	NAME PLATE	UNIT OF STRUCTURE	ITEM NO.	205 REMOVAL OF EXISTING BRIDGE STRUCTURE (SITE NO.)	603 TEMPORARY BRIDGE STRUCTURE (20' ROADWAY WIDTH)	801 UNCLASSIFIED EXCAVATION FOR STRUCTURES- BRIDGE	802 CLASS S CONCRETE	SP&802	803 BOILED LINSEED OIL	804 REINFORCING STEEL (GRADE 60)	804 EPOXY COATED REINFORCING STEEL (GRADE 60)	805 STEEL PILING (HP 10X42)	812 BRIDGE NAME PLATE (TYPE C)	816	816	DUMPED RI PRAP
				UNIT		LIN. FT.	CU. YD.	CU. YD.	CU. YD.	GAL.	LB.	LB.	LIN. FT.	EACH	SQ. YD.	CU. YD.	
6413	X021	LITTLE HOLLY CREEK	BENT NOS. 1 & 5				10	14.76			2291		200		960	480	
			BENT NOS. 2 - 4			394	86.54		13879								
			FOUR 35'-0" R.C.D.G. SPANS						330.80	15.0	24480						
			SITE NO. 1 - BRIDGE NO. 3132	1													
TOTAL FOR BRIDGE NO. 6413				1	105	404	101.3	330.80	15.0	55220	24480	200	1	960	480		
6414	X021	LITTLE HOLLY CREEK	BENT NOS. 1 & 4														
			BENT NOS. 2 & 3			112	11.82		1832								
			THREE 35'-0" R.C.D.G. SPANS				46.88		10374								
			SITE NO. 3 - BRIDGE NO. 3134	1				209.0	9.5	39734							
TOTAL FOR BRIDGE NO. 6414				1		112	58.7	209.0	9.5	51940		200	1	770	385		
6415	X021	MESSER CREEK	BENT NO. 1														
			BENT NOS. 2 - 4			505	108.17		1079				100		270	135	
			BENT NO. 5				6.66		18782								
			FOUR 35'-0" R.C.D.G. SPANS	1				283.20	12.6	52865				100	1	250	125
SITE NO. 4 - BRIDGE NO. 1870																	
TOTAL FOR BRIDGE NO. 6415				1		505	121.2	283.20	12.6	73840		200	1	520	260		
TOTALS FOR JOB NO. 3922				3	105	* 1021	281.2	823.0	37.1	181000	24480	600	3	2250	1125		

* Includes approx. 15 cu. yds. of Rock Excavation

DALE LOE
DESIGN SECTION SUPERVISOR



SCHEDULE OF BRIDGE QUANTITIES
DIERKS-CENTER POINT BRS. & APPRS.
HOWARD COUNTY
ROUTE 4 SEC. 3
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

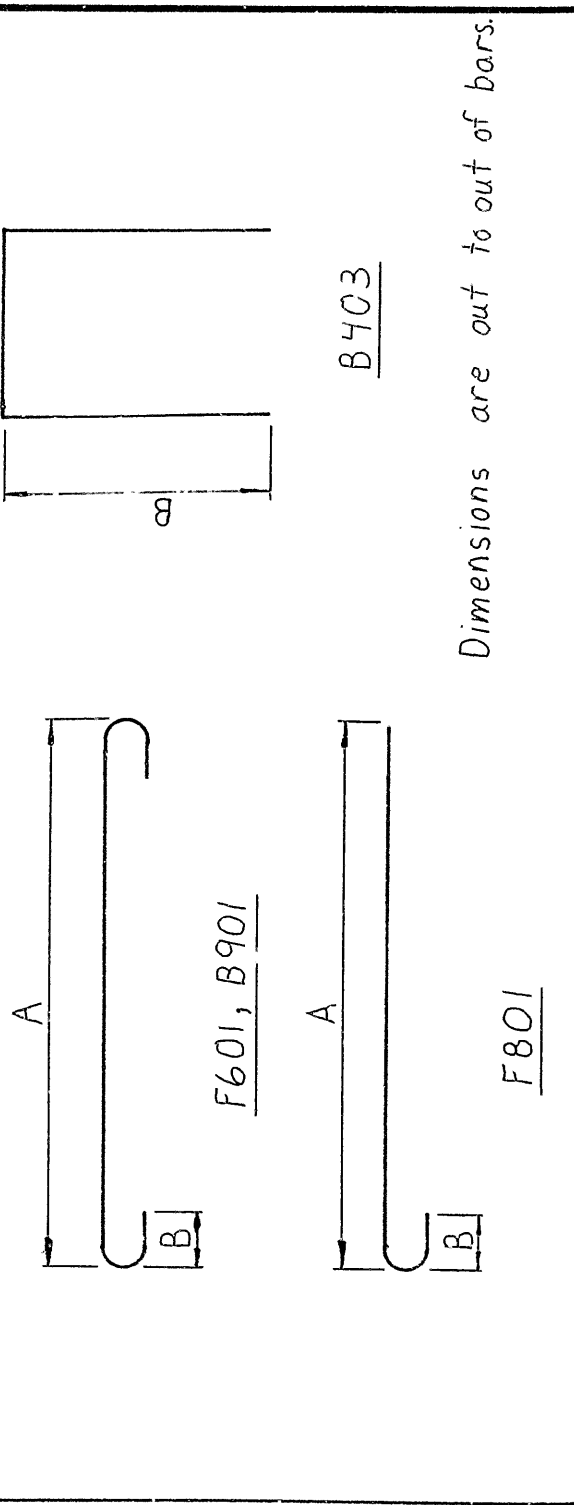
DRAWN BY: KDH DATE: 19 JUN 91
CHECKED BY: DHP DATE: 6-21-91 SCALE: NONE
DESIGNED BY: DATE:
BRIDGE NO. 6413, 6414, 6415 DRAWING NO. 32111

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK			
						3922	25	80
						JOB NO.		

① 6414 BENTS 32119

BAR LIST PER BENT

MARK	No. Req'd.	Length	A	B	P. D.	Bending Diagrams
B401	4	34'-8"			Str.	
B402	52	8'-11"	1'-8"	2'-7 1/2"	2"	
B403	6	6'-9"	1'-8"	2'-7 1/2"	2"	
B901	4	37'-2"	34'-8"	10"	9"	
B902	5	34'-8"			Str.	
D401	**	2'-6"			Str.	
C401	48	6'-8"	1'-7"	1'-7"	2"	
C801	32	23'-8"			Str.	
F601	60	8'-10"	7'-6"	6"	4 1/2"	
F801	32	7'-2"	6'-3"	8"	6"	



INT. BENT NOTES

All concrete shall be Class "G" with a minimum 28 day compressive strength $f'_c \geq 3,500$ psi. Concrete shall be poured in the dry and all exposed corners to be chamfered 3/4" unless otherwise noted.

All reinforcing steel shall conform to ASTM A615 or A617, Grade 60 (yield strength = 60,000 psi.).

For additional information see layout.

Soil Pressure 7.5 Group III
** - 23 For Fix-Exp.
- 0 For Exp-Exp.



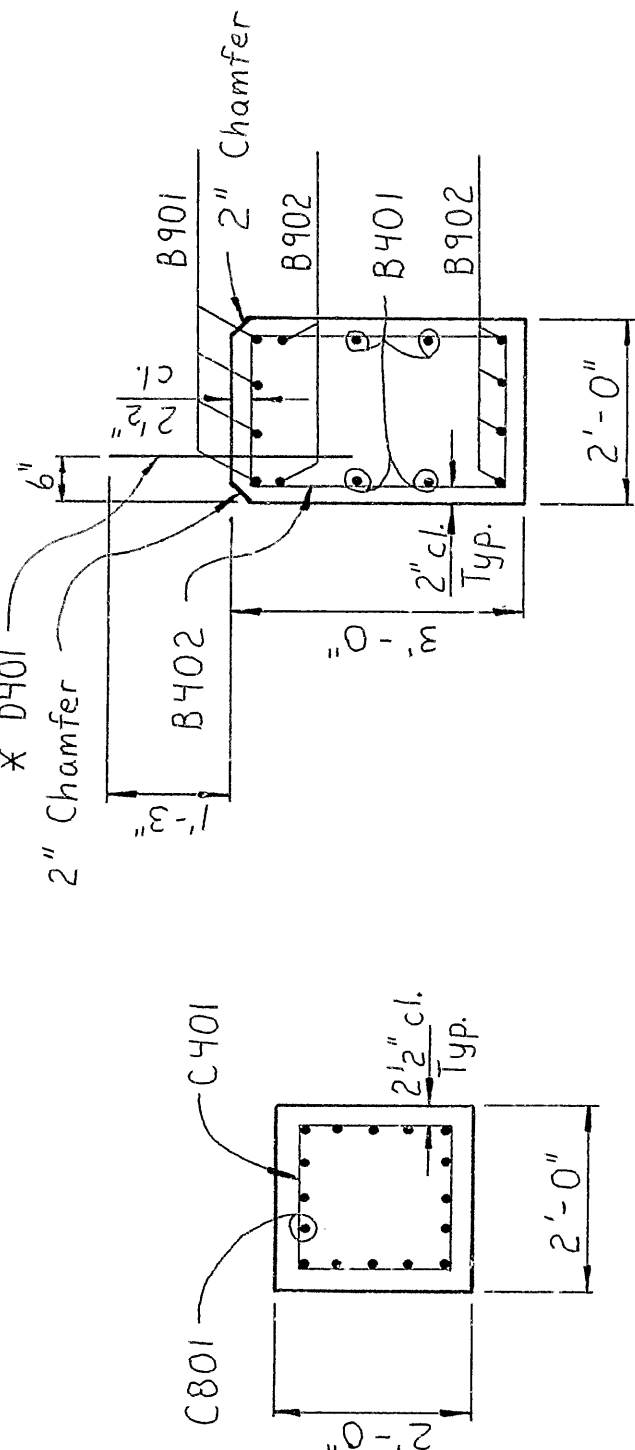
DETAILS OF BENTS 2&3
LITTLE HOLLY CREEK

ROUTE 1779
SEC. 1779
ARKANSAS STATE HIGHWAY COMMISSION

DRAWN BY: JMT DATE: 5-8-91
CHECKED BY: DHP DATE: 6-7-91
DESIGNED BY: JMT DATE: 6-20-91

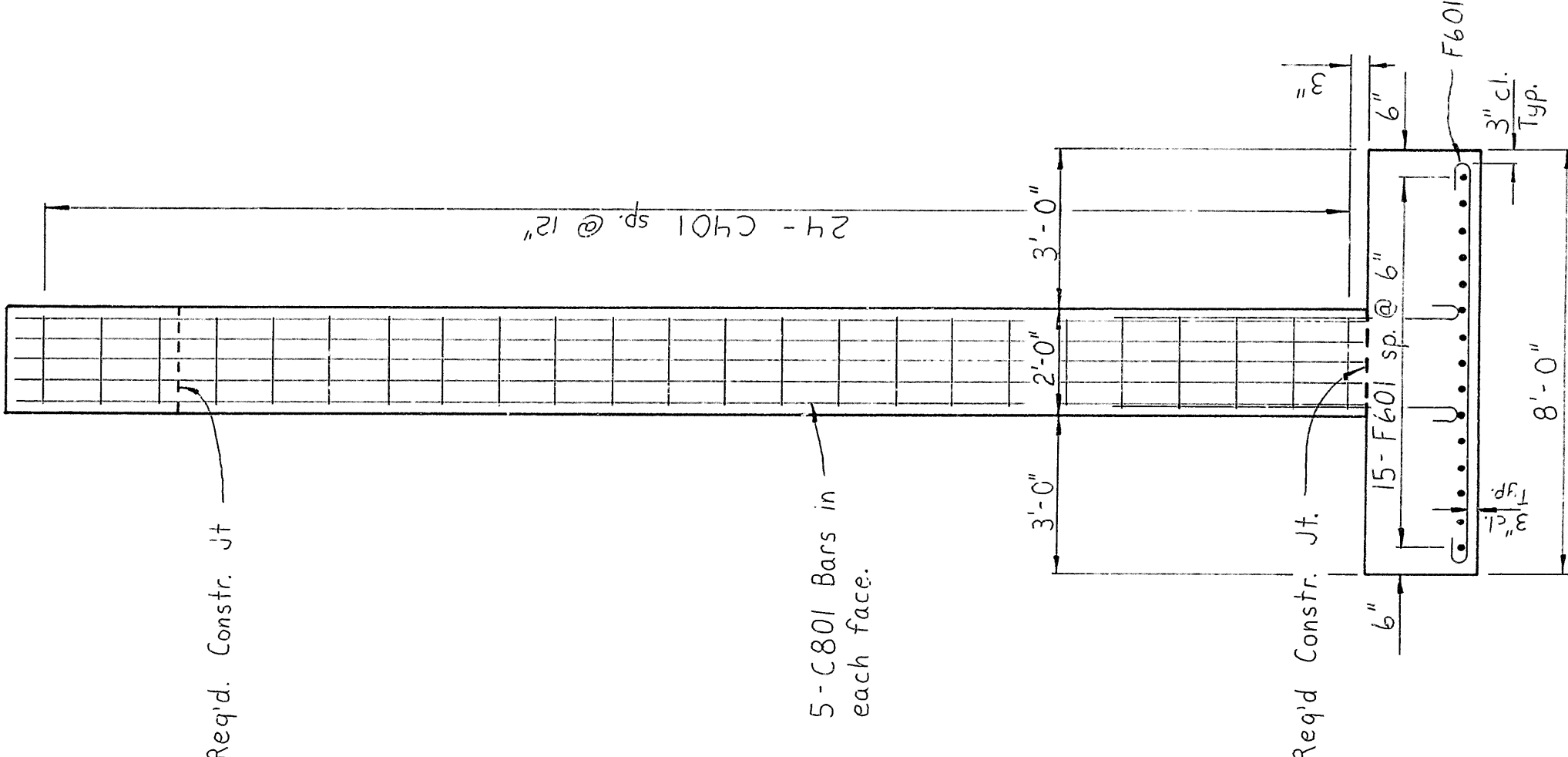
BRIDGE NO. 6414
DRAWING NO. 32119

* Use only for Exp.-Fix Bents. See Layout.
For Fix side only.

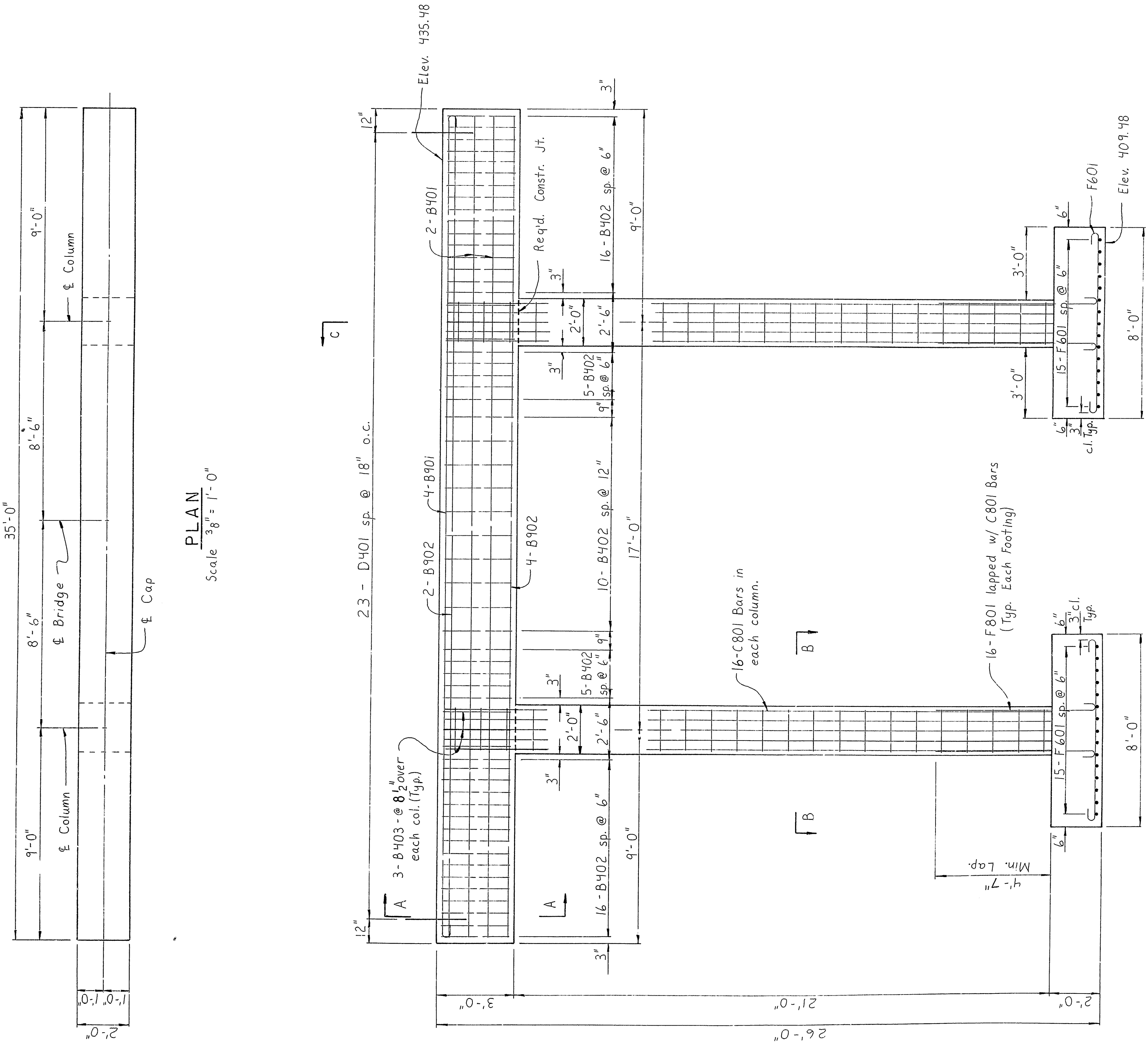


SECTION A-A
Scale 1/2" = 1'-0"

SECTION B-B
Scale 1/2" = 1'-0"



SECTION C-C
Scale 3/8" = 1'-0"



PLAN
Scale 3/8" = 1'-0"

ELEVATION
Scale 3/8" = 1'-0"
Looking Forward

