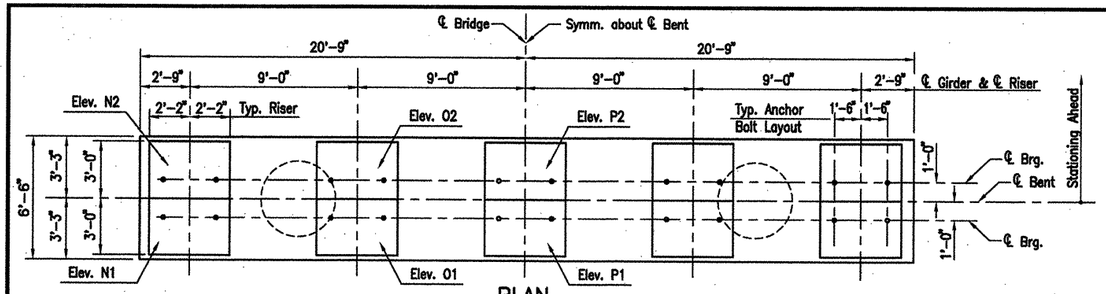
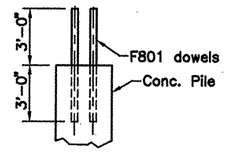
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD/D NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
					ARK.			
				JOB NO.		110395	49	203
				06830		BENTS		47047



PLAN

Scale: 1/4" = 1'-0"

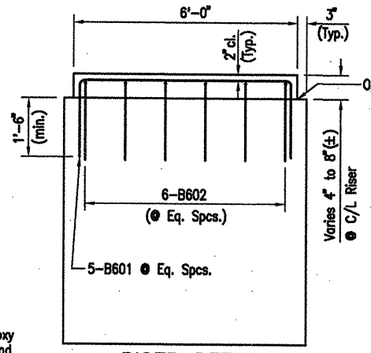
Note:
For details of Elastomeric Bearings, see Dwg. No. 47100 & 47101



SECTION E–E

N.T.S.

Drill and grout F801 dowels 3'-0" into piles using an approved non-shrink grout or an epoxy grout listed on the QPL. Diameter of holes and installation procedure shall be as recommended by the grout manufacturer.



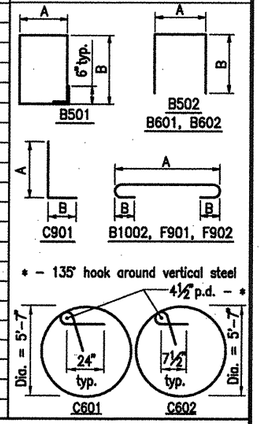
RISER DETAIL

Scale: 1/2" = 1'-0"

BAR LIST–PER BENT

Mark	No. Req'd	Length	'A'	'B'	P.D.
B501	62	22'-4"	4'-9"	6'-2"	2½"
B502	14	18'-3½"	6'-2"	6'-2"	2½"
B503	24	41'-2"			Str.
B601	25	9'-4"	5'-8"	2'-0"	4½"
B602	30	7'-8"	4'-0"	2'-0"	4½"
B1001	12	41'-2"			Str.
B1002	12	44'-0"	41'-2"	11½"	10"
C601	2	G			
C602	4	19'-2½"			
C901	84	C	D	1'-7¼"	9"
F801	96	6'-0"			Str.
F901	52	20'-0"	17'-6"	10"	9"
F902	72	15'-0"	12'-6"	10"	9"
F903	26	17'-6"			Str.
F904	36	12'-6"			Str.

Bending Diagrams
Dimensions are out to out of bars.



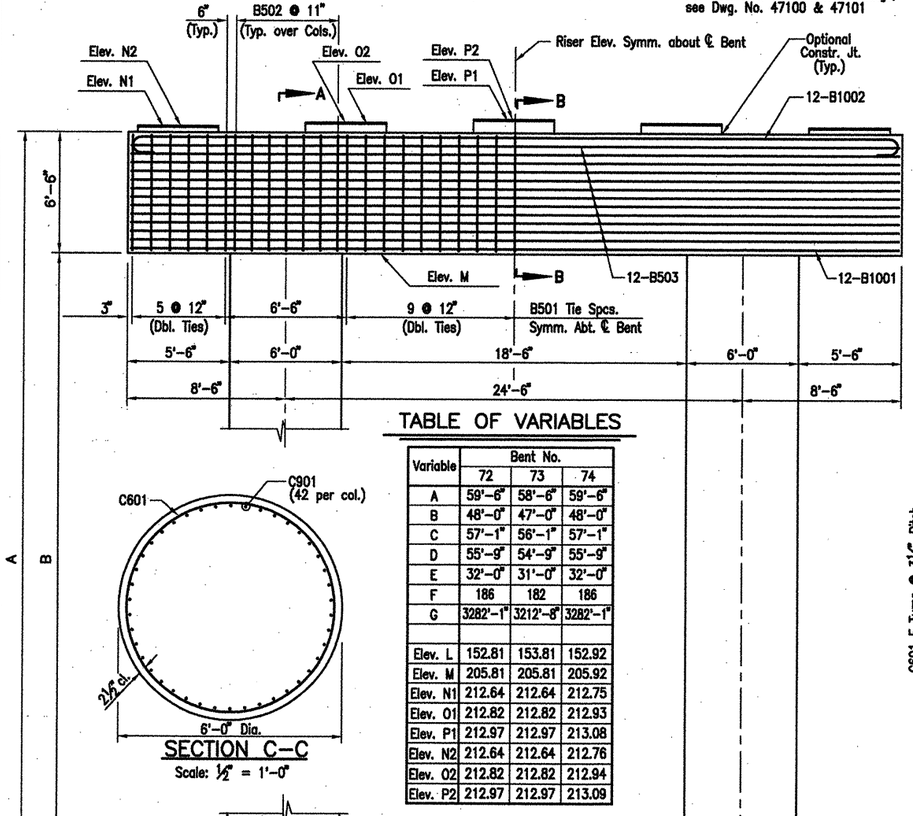
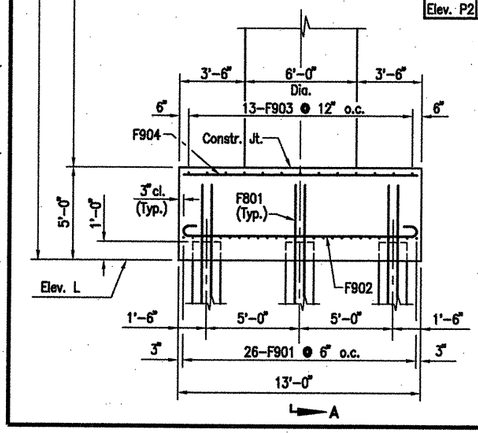


TABLE OF VARIABLES

Variable	Bent No. 72	73	74
A	59'-6"	58'-6"	59'-6"
B	48'-0"	47'-0"	48'-0"
C	57'-1"	56'-1"	57'-1"
D	55'-9"	54'-9"	55'-9"
E	32'-0"	31'-0"	32'-0"
F	186	182	186
G	3282'-1"	3212'-8"	3282'-1"
Elev. L	152.81	153.81	152.92
Elev. M	205.81	205.81	205.92
Elev. N1	212.64	212.64	212.75
Elev. O1	212.82	212.82	212.93
Elev. P1	212.97	212.97	213.08
Elev. N2	212.64	212.64	212.76
Elev. O2	212.82	212.82	212.94
Elev. P2	212.97	212.97	213.09

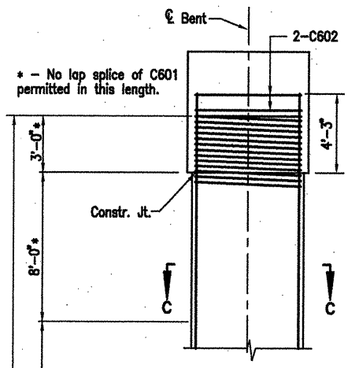
SECTION C–C

Scale: 1/2" = 1'-0"

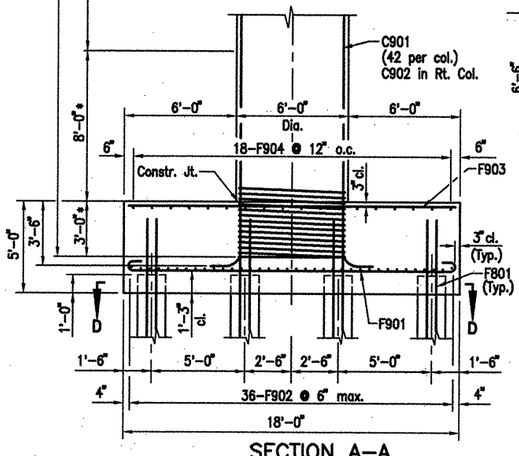


ELEVATION

Scale: 1/4" = 1'-0"
Looking Forward

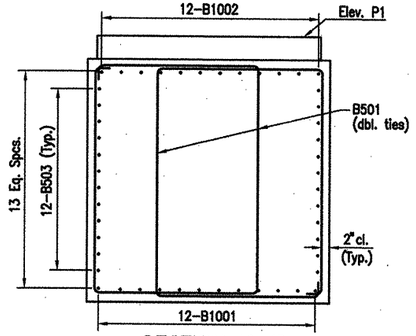


The riser reinforcing steel shall be placed with the bent cap reinforcing steel. The Contractor has the option to drill and grout the riser reinforcing steel at least 1'-6" into the cap using an approved non-shrink grout or an epoxy grout listed in the QPL. Diameter of holes and installation procedure shall be as recommended by the grout manufacturer. Place bent reinforcing properly to avoid damage. This work shall be paid under "Reinforcing Steel – Bridge".



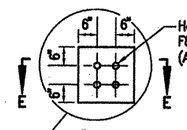
SECTION A–A

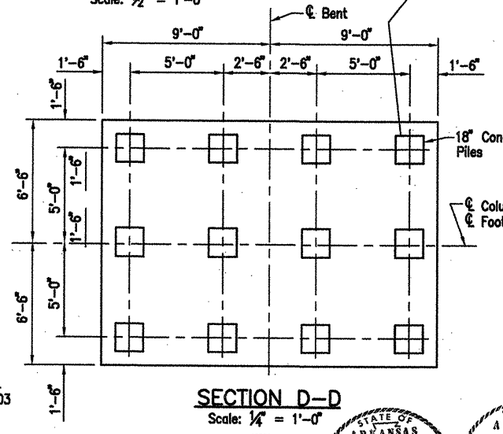
Scale: 1/4" = 1'-0"



SECTION B–B

Scale: 1/2" = 1'-0"





SECTION D–D

Scale: 1/4" = 1'-0"

NOTES:
1. All concrete shall be Class "S". All exposed corners to be chamfered ¾" unless otherwise noted. All concrete shall be poured in the dry.
2. All reinforcing steel shall conform to AASHTO M31 or M53, Gr.60.
3. If anchor bolts are drilled into cap, top reinforcing bars shall be properly placed to avoid damage.
4. For additional information, see Layout.
5. Contractor has the option of placing a 6'-0" lap splice in the vertical leg of C901 bars. The splice shall be in the middle half of the column height. This shall be included in "Reinforcing Steel – Bridge".

NOTES FOR SPIRAL REINFORCING
1. Ends of spirals in footing and cap shall have 1½ turns and terminate with a 135° hook and a 24" tail as shown in Bar List.
2. Spiral reinforcement at splices of bars in the length designated as permissible for lap splices shall be terminated by a 135° hook with a 10" tail hooked around a vertical bar.
3. Spiral reinforcement shall be plain round or deformed steel bars meeting the requirements of AASHTO M31 or M53 (Grade 60) or shall be cold drawn wire meeting the requirements of AASHTO M32 or M225 (Grade 70) with a minimum diameter of 0.75".
4. Spiral reinforcement shall be paid for at the contract unit price bid per pound for "Reinforcing Steel – Bridge (Grade 60)". No additional payment shall be made for spacers, splices or bracing needed for assembly, shipping, handling or erecting.
5. Lapped splices in spirals shall be lapped 80 bar diameters minimum.
6. Adjust spiral pitch as needed to accomodate footing or cap bars.

CERTIFICATE OF AUTHORIZATION — H. JAMES ENGSTROM & ASSOC., INC. — No. 164 — ARKANSAS ENGINEER

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 3125 — H. JAMES ENGSTROM

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 4281 — W. B. CONWAY — 8/31/10

ALTERNATE NO. 1

DETAILS OF BENTS – WHITE RIVER BENTS 72 – 74

WHITE RIVER STR. & APPRS.
(CLARENDON) (PH III) (F)
MONROE COUNTY
ROUTE 79 SEC. 13

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Engstrom & Modjeski and Masters, Inc.

DRAWN BY: CJA/JDB DATE: Sep. 10 FILENAME: b1103951_b16
CHECKED BY: FS DATE: Nov. 01 SCALE: 1/4"=1'-0"
DESIGNED BY: BMH DATE: Nov. 01

BRIDGE ENGINEER

BRIDGE NO. 06830 DRAWING NO. 47047

COMPANY\1999 JOBS\99-044 AHTD\WHITERIVER\JOB 110395\DtlBnt73-75Alt1 ACAD SCALE: 1/4"=1'-0"