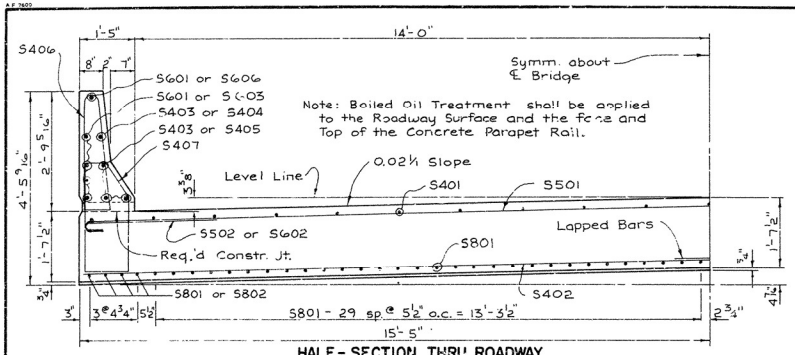
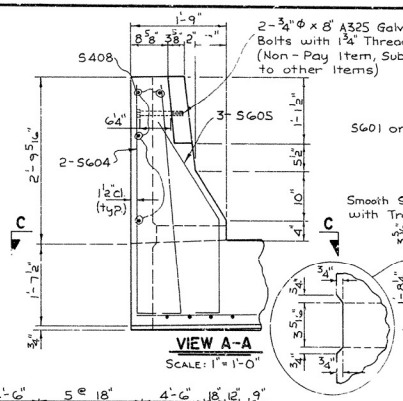
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. R.M.D. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
8-22-80	5-19-8-25-80			6	ARK.			
				JOB NO		60229	19	34

1 5870 SPAN DTL'S 23530



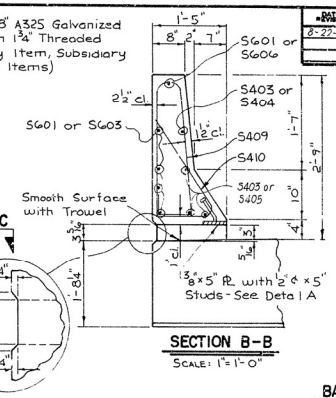
HALF-SECTION THRU ROADWAY

SCALE: ¾" = 1'-0"



VIEW A-A

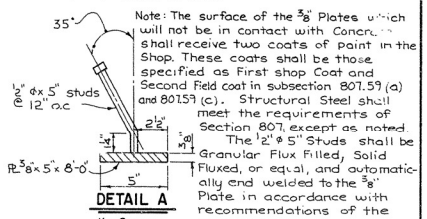
SCALE: 1" = 1'-0"



SECTION B-B

SCALE: 1" = 1'-0"

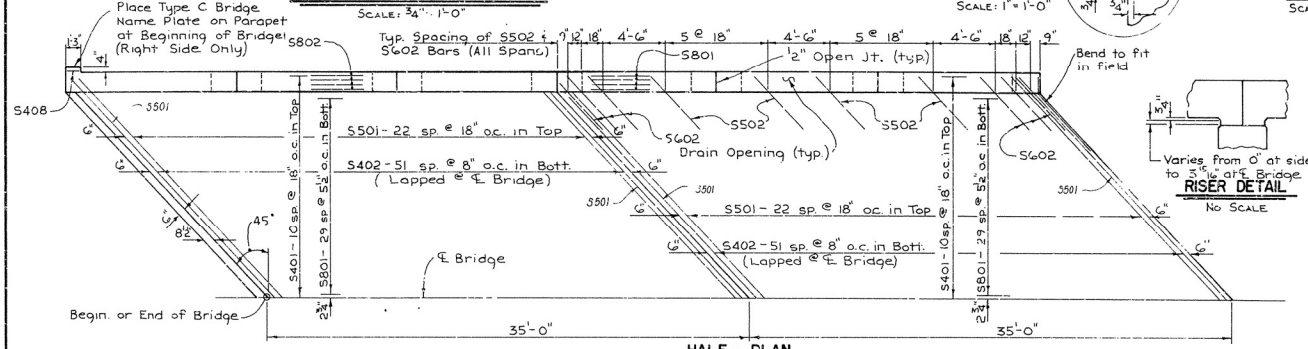
Note: Drain shall taper from 3" x 8'-0" at curb to 3 5/16" x 8'-0" at back face of Concrete Parapet Rail.



DETAIL A

No Scale

Note: The surface of the ⅜" Plates which will not be in contact with Concrete shall receive two coats of paint in the Shop. These coats shall be those specified as First shop Coat and Second field coat in subsection 807.59 (a) and 807.59 (c). Structural Steel shall meet the requirements of Section 807, except as noted. The 1½" Φ 5" Studs shall be Granular Flux Filled, Solid Fluxed, or equal, and automatically end welded to the ⅜" Plate in accordance with recommendations of the Manufacturer.



HALF - PLAN

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

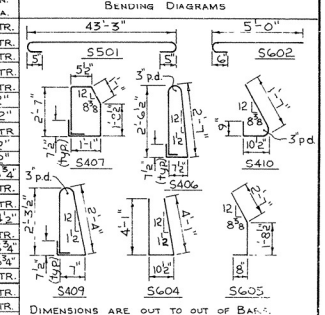
RISER DETAIL

No Scale

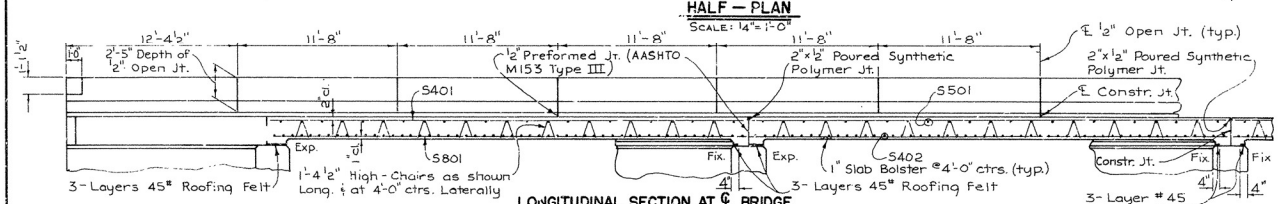
BAR LIST -- EACH SPAN

Mark	No. Req'd. End	No. Req'd. Int.	Length	Pin. Dia.
S401	21	21	34'-8"	Str.
S402	104	104	22'-5"	Str.
S403	16	24	11'-4"	Str.
S404	2		11'-0"	Str.
S405	6		12'-0"	Str.
S406	44	48	6'-10"	2"
S407	44	48	7'-9"	2"
S408	8		1'-0"	Str.
S409	54	54	6'-4"	2"
S410	54	54	3'-2"	2"
S501	25	25	44'-5"	3¾"
S502	24	24	5'-0"	Str.
S601	20	30	11'-4"	Str.
S602	12	12	5'-8"	4½"
S603	8		12'-0"	Str.
S604	4		8'-9"	3¾"
S605	6		4'-9"	3¾"
S606	2		11'-0"	Str.
S801	60	68	34'-8"	Str.
S802	8		35'-2"	Str.

BENDING DIAGRAMS

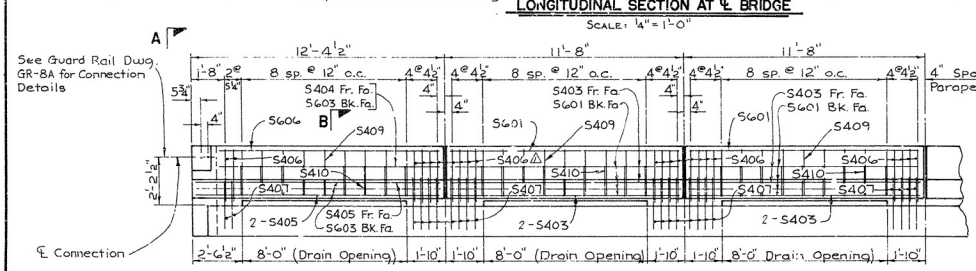


DIMENSIONS ARE OUT TO OUT OF BARS.



LONGITUDINAL SECTION AT ℄ BRIDGE

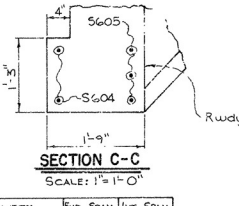
SCALE: 1/4" = 1'-0"



A B

LONGITUDINAL SECTION AT CURB

SCALE: 3/8" = 1'-0"

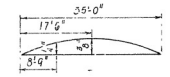


SECTION C-C

SCALE: 1" = 1'-0"

Quantity	End Span	Int. Span
Concrete	72.61 Cu.Yd.	71.66 Cu.Yd.
Reinforcing Steel	11308 Lbs.	11226 Lbs.
Structural Steel*	322 Lbs.	322 Lbs.

* Not Paid For Directly, Subsidiary To The Item "Class S or S(AE) Concrete."



D.L. CAMBER DIAGRAM

GENERAL NOTES

ALL EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

BAR SUPPORTS FOR REINFORCING BARS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM "REINFORCING STEEL."

ROOFING FELT, BITUMINOUS FELT, PREFORMED JOINT, AND SNYTHETIC PLOYMER SHALL BE MEASURED AND PAID FOR AS CLASS S(AE) CONCRETE.

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978, AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1977 AND INTERIMS.

LIVE LOAD: H20
METHOD OF DESIGN: LOAD FACTOR

LOAD DISTRIBUTION TO SLAB: DEAD LOAD: 286 PSF
LIVE LOAD: 0.166 WHEELS/FT. OF WIDTH PLUS 30% IMPACT

CONCRETE: ALL CONCRETE SHALL BE CLASS S(AE) WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH f'c = 3000 PSI.

REINFORCING STEEL: REINFORCING STEEL SHALL CONFORM TO ASTM A615 OR A617, GRADE 60 (YIELD STRENGTH = 60,000 PSI).

⚠ Revised S406 (Longitudinal Section at Curb) 8/22/80. L.M.

DETAILS OF STANDARD 35'-0" R.C. SLAB SPANS 45° RT. FWD. SKEW - 28' CL. RDWY. CONCRETE PARAPET RAIL

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

ALTERED BY: L.M. DATE: 2-4-80
CHECKED BY: GVA DATE: 2-4-80
DESIGNED BY: STA DATE:

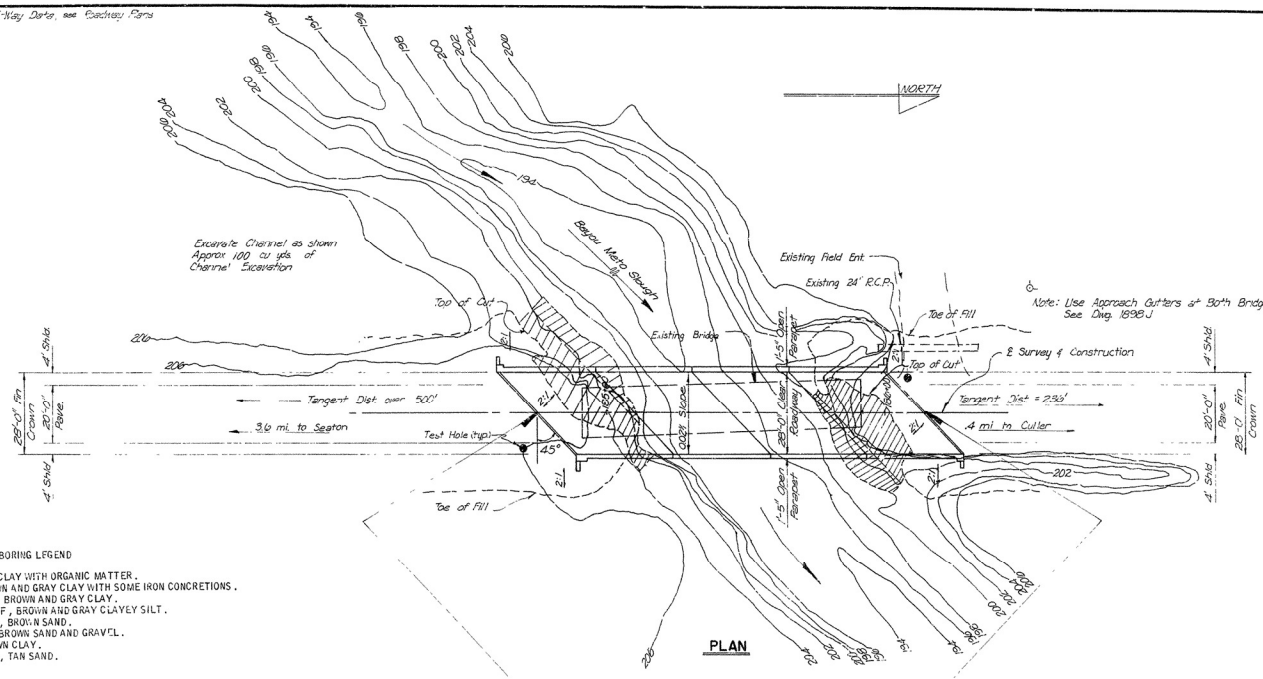
SCALE: As Noted

BRIDGE ENGINEER

BRIDGE NO. 5870 DRAWING NO. 23530

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		60229	17	34
				5870		LAYOUT 23528		

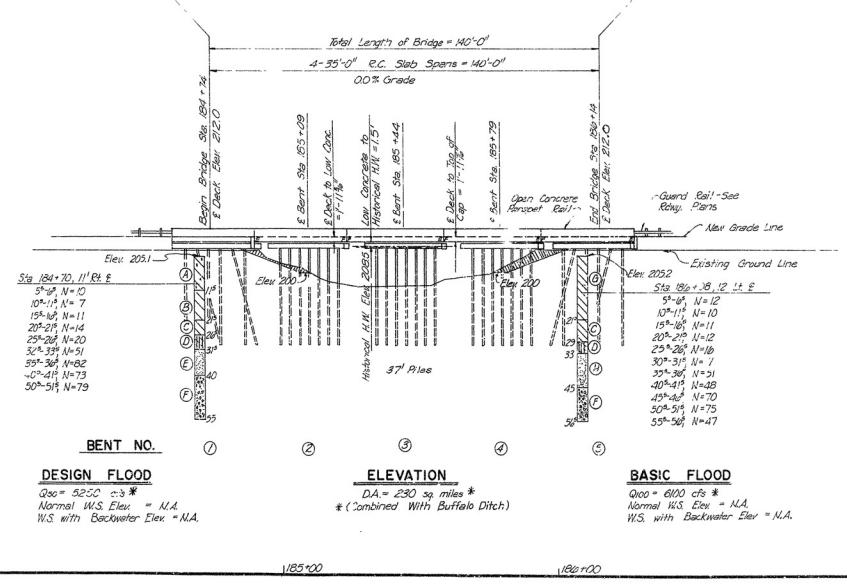
For Right-of-Way Data, see Roadway Plans



PLAN

BORING LEGEND

A. MOIST, STIFF, TAN CLAY WITH ORGANIC MATTER.
B. MOIST, STIFF, BROWN AND GRAY CLAY WITH SOME IRON CONCRETIONS.
C. MOIST, VERY STIFF, BROWN AND GRAY CLAY.
D. MOIST, MEDIUM STIFF, BROWN AND GRAY CLAYEY SILT.
E. MOIST, VERY DENSE, BROWN SAND.
F. WET, VERY DENSE, BROWN SAND AND GRAVEL.
G. MOIST, STIFF, BROWN CLAY.
H. MOIST, VERY DENSE, TAN SAND.



GENERAL NOTES

BENCH MARK: SPIKE IN SIDE OF P.P. 30' LT. OF CENTERLINE AT STA. 183+25. ELEV. 207.40.

ALL CONCRETE SHALL BE POURED IN THE DRY.

ALL PILING SHALL BE 16" OCTAGONAL OR 16" SQUARE PRECAST CONCRETE DRIVEN WITH AN APPROVED AIR, STEAM, OR DIESEL HAMMER TO A BEARING CAPACITY OF 44 TONS AND TO A MINIMUM PENETRATION OF 20' BELOW NATURAL GROUND. PILE SHAPES SHALL NOT BE MIXED ON ANY BRIDGE.

LENGTHS OF PILING SHOWN ARE ASSUMED FOR ESTIMATING QUANTITIES ONLY. ACTUAL LENGTHS TO BE DETERMINED IN THE FIELD. DRIVE ONE 42FT. TEST PILE IN BENTS 2 & 4. PILES IN END BENTS TO BE DRIVEN AFTER EMBANKMENT TO BOTTOM OF CAP IS IN PLACE.

FOR DETAILS OF END BENTS, SEE DWG. NO. 23529
FOR DETAILS OF INTERMEDIATE BENTS, SEE DWG. NO. 23529
FOR DETAILS OF PRECAST CONCRETE PILING, SEE DWG. NO. 2383
FOR DETAILS OF R.C. SLAB SPANS, SEE DWG. NO. 23530

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978, AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1977 EDITION AND INTERIM SPECIFICATIONS.

LIVE LOADING: H20

METHOD OF DESIGN: LOAD FACTOR

REMOVE THE EXISTING 100 FT. BRIDGE AT STA. 184+91. THE BRIDGE CONSISTS OF A TIMBER DECK ON TIMBER STRINGERS SUPPORTED BY TIMBER CAPS AND PILING. SEE SECTION 205 OF THE STANDARD SPECIFICATIONS. ALL MATERIAL FROM THE EXISTING BRIDGE SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ~~CONSTRUCT A 100 FT. TEMPORARY BRIDGE APPROXIMATELY 40 FT. LT. OF STA. 184+70 WITH MINIMUM DECK ELEVATION OF 207.5. THE TEMPORARY BRIDGE SHALL HAVE A MINIMUM ROADWAY OF 20 FT. AND A MINIMUM LIVE LOAD DESIGN CAPACITY OF HS 10 DWR. SEE SECTION 603 OF THE STANDARD SPECIFICATIONS~~.

LAYOUT OF
BRIDGE OVER BAYOU METO SLOUGH
SEATON-CULLER
LONOKE COUNTY

ROUTE 381 SEC. 1

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

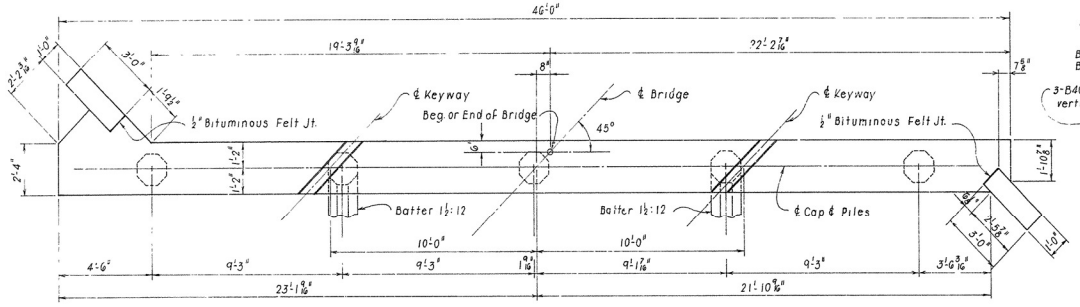
DRAWN BY: E.R.W. DATE: 11-27-79
CHECKED BY: R.V.A. DATE: 2-4-80
DESIGNED BY: J.F. DATE: 11-27-79
SCALE: 1" = 20'-0"

BRIDGE ENGINEER

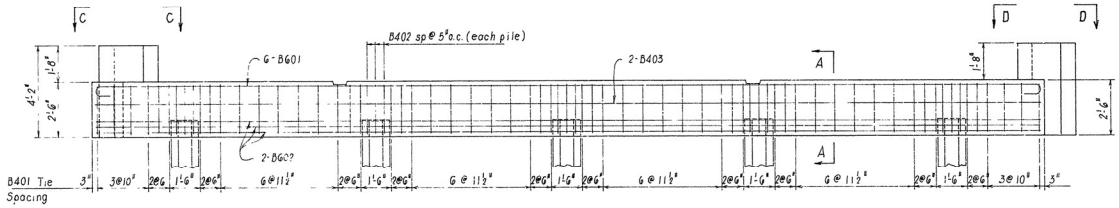
BRIDGE NO. 5870 DRAWING NO. 23528

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
8-22-80	5-13-8-25-80			6	ARK.			
				JOB NO.		60229	18	34

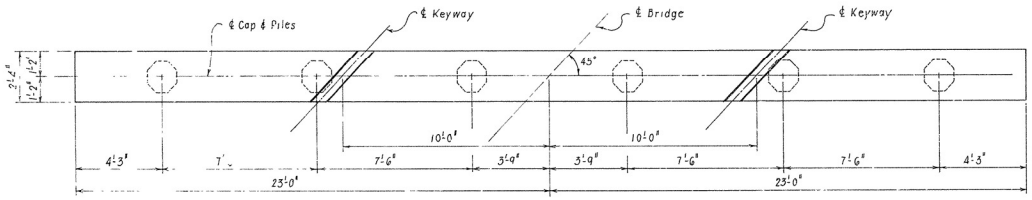
① 5870 BENT 23529



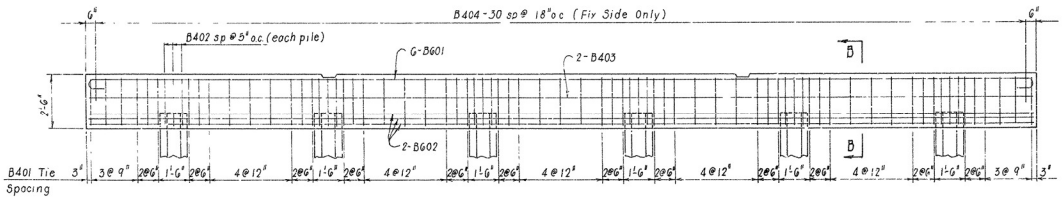
PLAN OF END BENT



ELEVATION OF END BENT

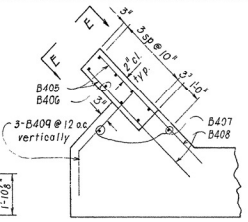


PLAN OF INT. BENT

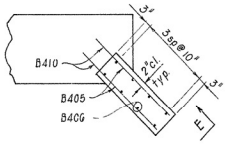


ELEVATION OF INT. BENT

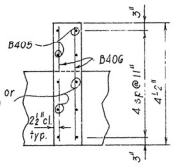
△ Revised Bending Diagram. 8/22/80 L.M.



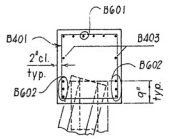
VIEW C-C
½" = 1'-0"



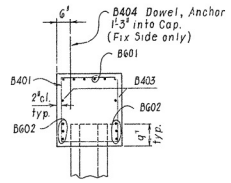
VIEW D-D
½" = 1'-0"



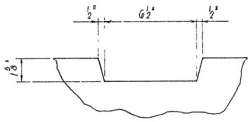
VIEW E-E
½" = 1'-0"



SECTION A-A
½" = 1'-0"



SECTION B-B
½" = 1'-0"



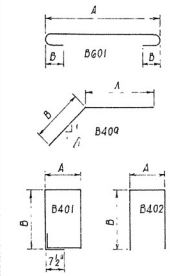
KEYWAY DETAIL
3" = 1'-0"

BAR LIST - ONE BENT

Mark	No Req'd End	No Req'd Int.	Length	A	B	Pin Dia.
B601	6	6	47'-0"	45'-8"	6"	4½"
B602	6	6	45'-8"			Str.
B401	56	57	9'-2"	2'-0"	2'-2"	2"
B402	15	18	6'-2"	2'-0"	2'-2"	2"
B403	4	4	23'-8"			Str
B404		*	2'-6"			Str
B405	8		2'-8"			Str.
B406	16		3'-10"			Str.
B407	2		2'-2"			Str
B408	6		5'-2"			Str.
B409	3		4'-3"	2'-9"	1'-6"	2"
B410	6		3'-10"			Str

* [31 (Fix-Exp Bent) / 62 (Fix-Fix Bent)]

Bending Diagram



Dimens. are out to out of bars

GENERAL NOTES

ALL CONCRETE SHALL BE CLASS "S" AND SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

REINFORCING STEEL SHALL BE ASTM A615 OR A617, GRADE 60. (YIELD STRENGTH = 60,000 PSI).

CONCRETE IN CAPS SHALL BE CLASS "S" WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH f'c = 3500 PSI.

ALL PILING SHALL BE 16" OCTAGONAL OR 16" SQUARE PRECAST CONCRETE AND SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 44 TONS PER PILE.

LIVE LOAD: H20 METHOD OF DESIGN: LOAD FACTOR

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1977 WITH INTERIMS.

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. EDITION OF 1978, AND APPLICABLE SPECIAL PROVISIONS.

QUANTITIES - ONE BENT

Bent Type	Class S Concrete	Reinforcing Steel
End Bent	10.91 yd³	1406
Int. Bent (Fix-Exp.)	9.69 yd³	1373
Int. Bent (Fix-Fix)	9.69 yd³	1425.07

DETAILS OF STD. PILE BENTS
35'-0" R.C. SLAB SPANS
28'-0" CL. RDWY. 45° RT. FWD. SKEW
CONCRETE PARAPET RAIL

ROUTE 381 SEC. 1

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: L.M. DATE: 1-22-80
CHECKED BY: D.P. DATE: 2-5-80
DESIGNED BY: DATE:
SCALE: 3/8" = 1'-0" or as shown

Frank Pinkerton
BRIDGE ENGINEER

BRIDGE NO. 5870 DRAWING NO. 23529