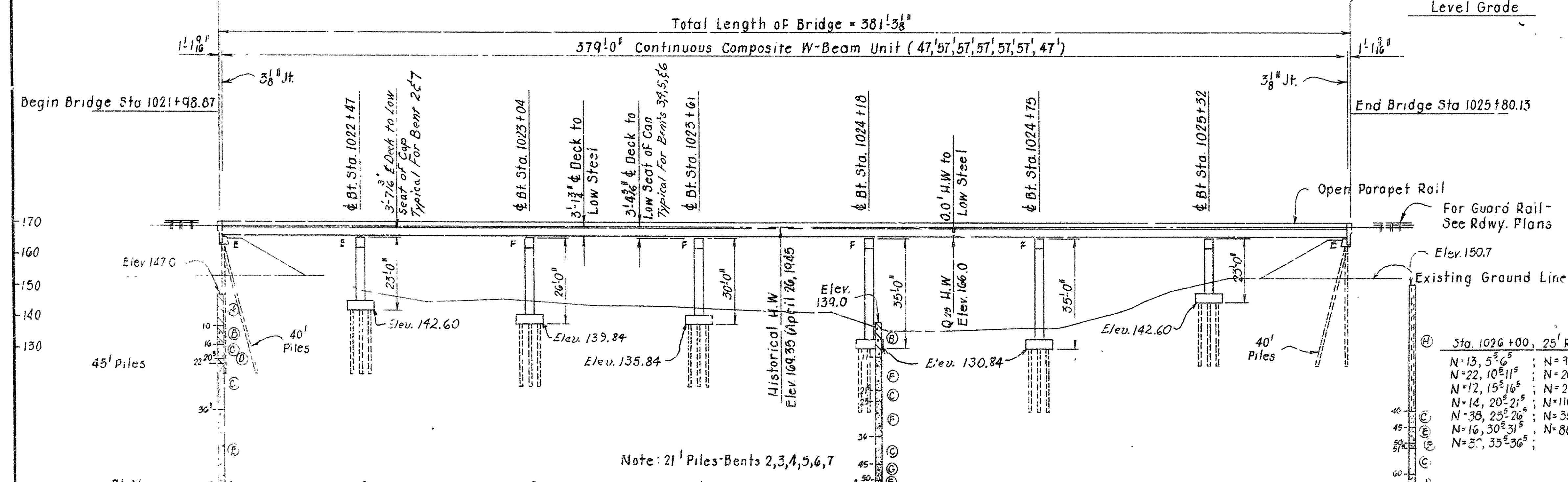


REV.	DATE	BY	CHKD.	APP.	FILE	PLATE	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.	GR-031-1(23)									
		JOB NO.	11974	33	93						
			5856	LAYOUT						23352	

Use Concrete Spillways
at both bridge ends
See Sheet No. 4

GENERAL NOTES

- BENCH MARK: CHISELED "Q" ON INDIAN BAYOU 10' LT.
STA. 1022+34.8, ELEV. 155.00.
- ALL CONCRETE SHALL BE POURED IN THE DRY.
- ALL PILING SHALL BE 14" SQUARE OR 16" OCTAGONAL PRECAST CONCRETE AND SHALL BE DRIVEN WITH AN APPROVED AIR, STEAM, OR DIESEL HAMMER TO A MINIMUM BEARING CAPACITY OF 44 TONS PER PILE. PILE SHAPES SHALL NOT BE MIXED ON ANY BRIDGE. PILES IN END BENTS SHALL BE DRIVEN A MINIMUM OF 10 FT. BELOW THE NATURAL GROUND LINE. PILES IN INTERMEDIATE BENTS SHALL HAVE A MINIMUM PENETRATION OF 20 FT. BELOW THE BOTTOM OF FOOTING.
- LENGTHS OF PILING SHOWN ARE ASSUMED FOR ESTIMATING QUANTITIES ONLY. ACTUAL LENGTHS TO BE DETERMINED IN THE FIELD. DRIVE ONE 45 FT. TEST PILE IN BENT NO. 1, AND ONE 26 FT. TEST PILE IN BENT NO. 3, 5 & 7.
- PILES IN END BENTS TO BE DRIVEN AFTER EMBANKMENT TO BOTTOM OF CAP IS IN PLACE.
- FOR DETAILS OF END BENTS, SEE DWG. NO. 23344
FOR DETAILS OF INTERMEDIATE BENTS, SEE DWG. NO. 23353 & 23354
FOR DETAILS OF CONTINUOUS UNIT, SEE DWG. NO. 23355, 23356 & 23349 THRU 23351
FOR DETAILS OF PRECAST CONCRETE PILING, SEE DWG. NO. 2383
- SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978 AND APPLICABLE SPECIAL PROVISIONS.
- DESIGN SPECIFICATIONS: 1977 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, WITH 1978 AND 1979 INTERIMS.
- LIVE LOADING: HS20
- METHOD OF DESIGN: LOAD FACTOR
- REMOVE THE EXISTING 304 FT. BRIDGE AT STA. 1022+34.8, WHICH CONSISTS OF A CONCRETE DECK SUPPORTED BY CONCRETE CAPS AND TIMBER PILING. SEE SECTION 205 OF THE STANDARD SPECIFICATIONS. ALL MATERIAL FROM THE EXISTING SUPERSTRUCTURE SHALL BE SALVAGED AND REMAIN THE PROPERTY OF THE STATE. ALL REMAINING MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
- * Conc. Deck consists of Precast Concrete Slabs.
CONSTRUCT A 230 FT. TEMPORARY BRIDGE 125 FT. RT. OF CENTERLINE. CONSTRUCTION BEGINNING AT STA. 1023+20 AND ENDING AT STA. 1025+50. THE TEMPORARY BRIDGE SHALL HAVE A MINIMUM ROADWAY WIDTH OF 20 FEET, A MINIMUM LIVE LOAD DESIGN CAPACITY OF H15 AND A MINIMUM DECK ELEVATION OF 160.0. SEE SECTION 603 OF THE STANDARD SPECIFICATIONS AND SP JOB 11974: "CONSTRUCTION IN THE VICINITY OF ARKANSAS POWER AND LIGHT COMPANY'S POWER TRANSMISSION LINE."
- BORING LOG
- (A) Moist, Medium Stiff, Gray Clay.
 - (B) Wet, Medium Stiff, Gray Clay with Organic Matter (Driftwood)
 - (C) Wet, Dense, Gray or Brown Sand.
 - (D) Wet, Soft, Gray Clay.
 - (E) Wet, Medium Dense, Brown or Gray Sand with some Gravel.
 - (F) Wet, Medium Dense, Brown or Gray Sand with some Organic Matter.
 - (G) Wet, Medium Dense, Gray Sand and Gravel with Organic Matter
 - (H) Moist to Wet, Medium Dense to Dense, Brown Silty Sand.
 - (I) Wet, Dense to Very Dense, Gray Gravelly Sand.



DESIGN FLOOD

Sta 1022+00, 40' Rt. &	
N=6, 5° 5' 6"	N=20, 30° 31'
N=10, 10° 11'	N=19, 35° 32'
N=14, 15° 16'	N=15, 40° 41'
N=3, 20° 21'	N=14, 50° 51'
N=38, 25° 26'	N=25, 60° 61'

* Q₂₅ = 243,000 cfs
Q₂₅ thru Bridge = 22,000 cfs
Normal W.S. Elev. 166.0
W.S. with Backwater = Elev. 166.3

ELEVATION

Sta 1024+21, 40' Rt. &	
N=7, 5° 5' 6"	N=41, 30° 31'
N=8, 10° 11'	N=32, 35° 32'
N=14, 15° 16'	N=11, 40° 41'
N=19, 20° 21'	N=27, 45° 46'
N=44, 25° 26'	N=45, 50° 51'

* Includes other relief openings & Main River Bridge.
* D.A. = 25,132 Sq. Mi.

BASIC FLOOD

Q ₁₀₀ = NA	
Normal W.S. Elev. NA	
W.S. with Backwater = Elev. NA	

- Open Parapet Rail
For Guard Rail - See Rdwy. Plans
- Elev. 150.7
Existing Ground Line
- 40' Piles

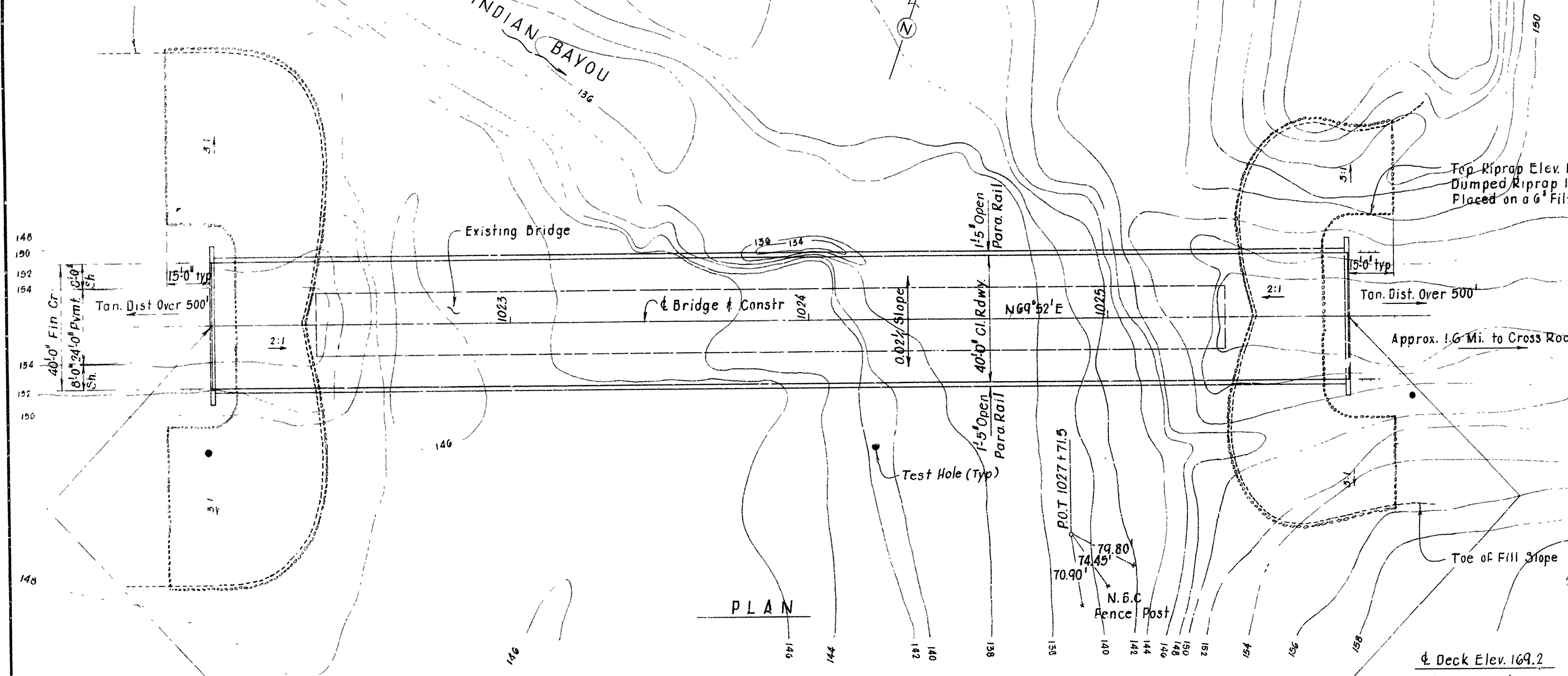
Sta. 1026+00, 25' Rt. &

N=13, 5° 5' 6"	N=34, 40° 41'
N=22, 10° 11'	N=20, 45° 46'
N=12, 15° 16'	N=23, 50° 51'
N=14, 20° 21'	N=10, 55° 56'
N=38, 25° 26'	N=35, 60° 61'
N=16, 30° 31'	N=86, 65° 66'
N=5, 35° 36'	

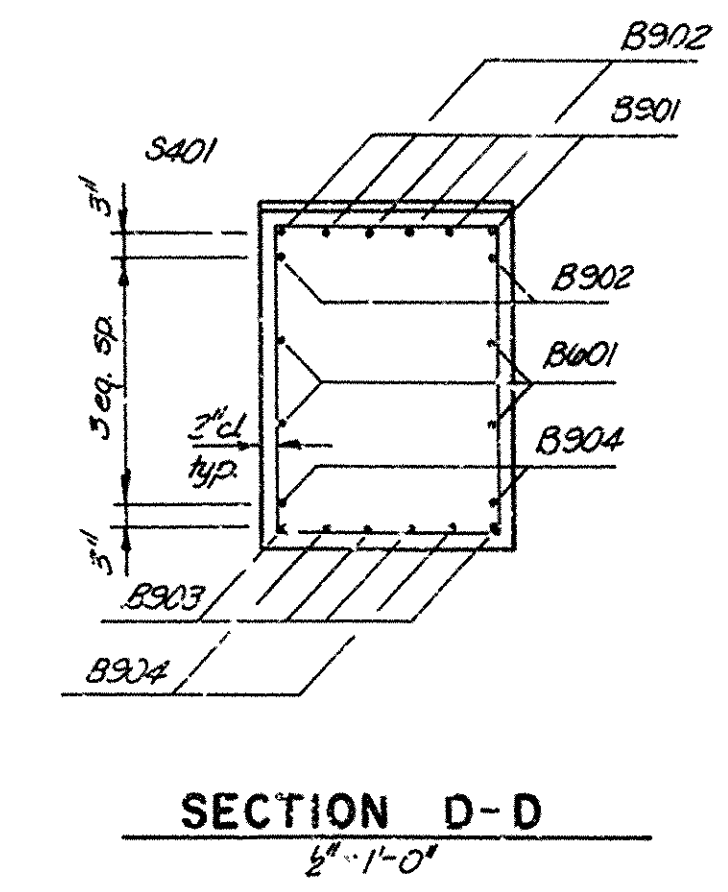
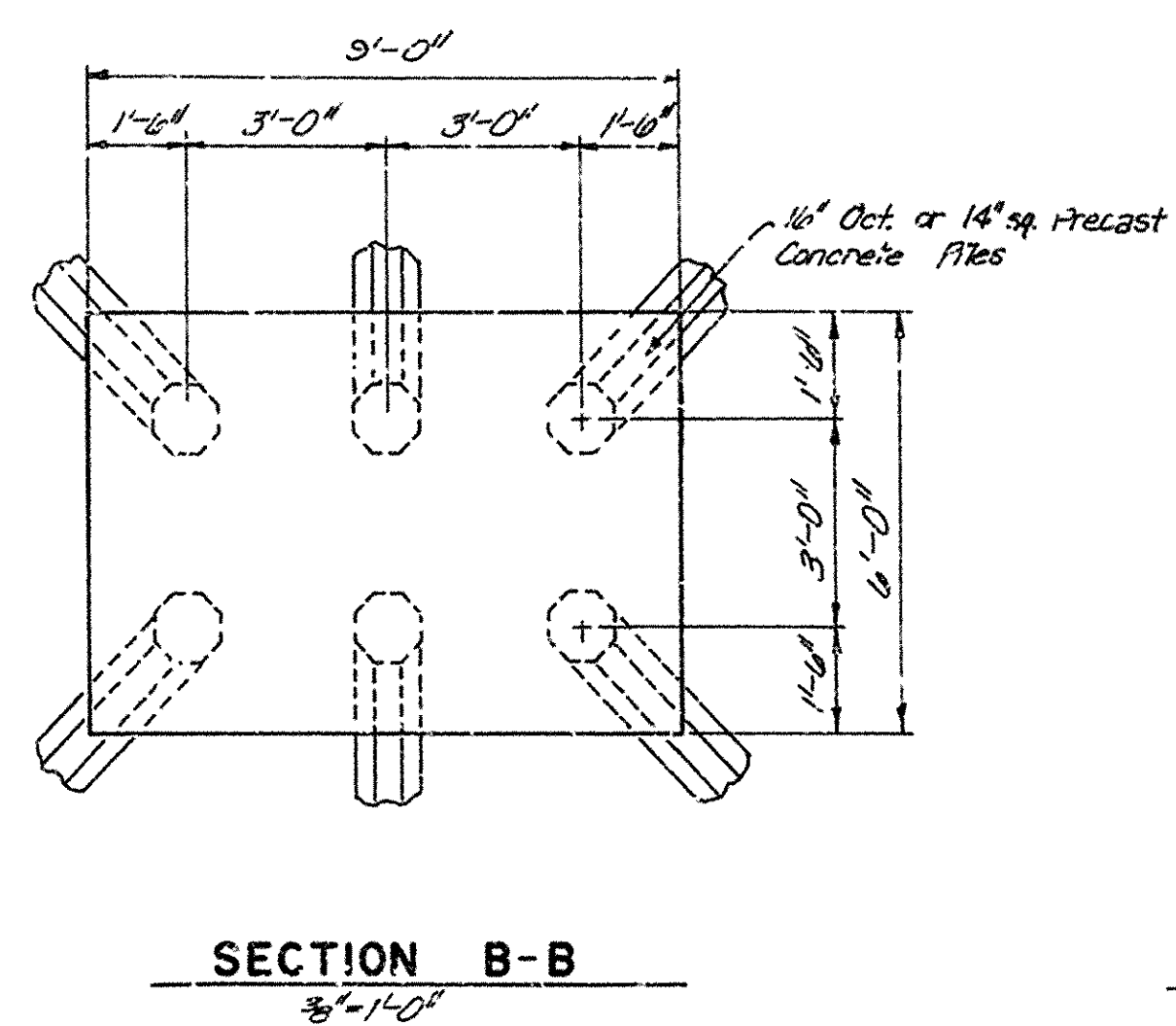
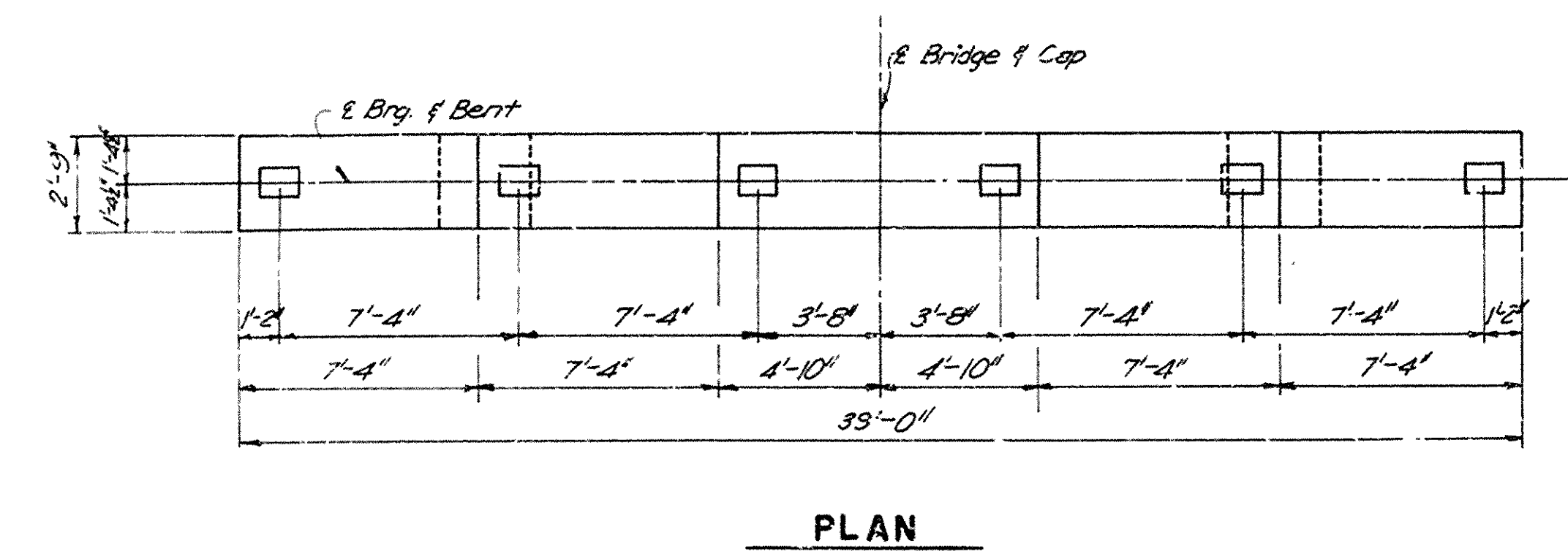
LAYOUT OF BRIDGE OVER
INDIAN BAYOU
ST. CHARLES BRIDGE - CROSS ROADS
MONROE CO.
ROUTE 1 SEC. 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: L.M. DATE: 8-11-78
CHECKED BY: GVA DATE: 11-15-79
DESIGNED BY: GVA DATE: 8-12-78
BRIDGE NO. 5856 DRAWING NO. 23352

For R/W Data See Rdwy Plans

Toe of Fill Slope

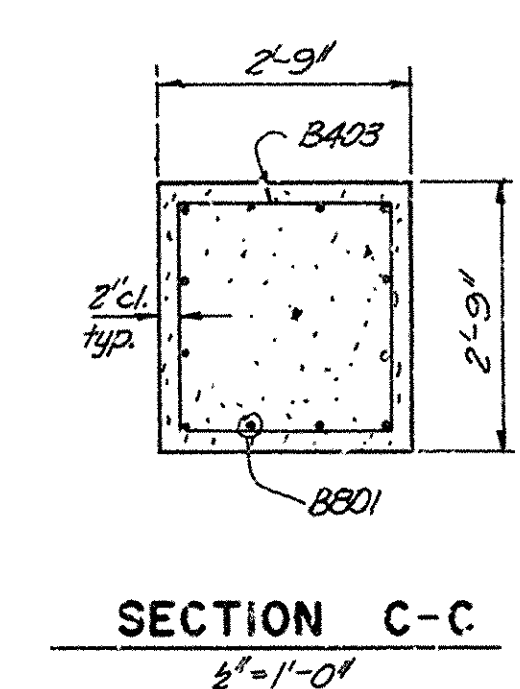
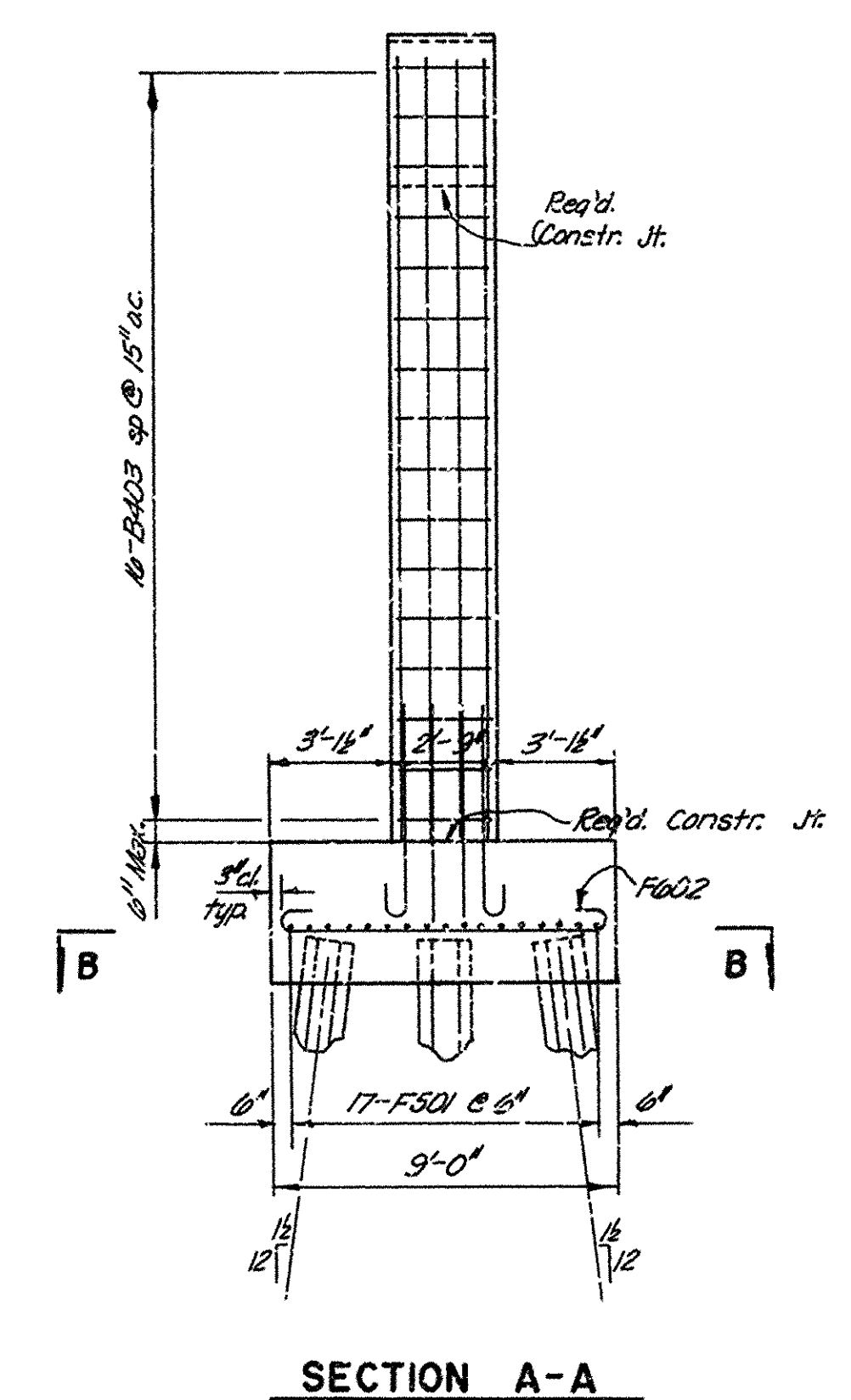
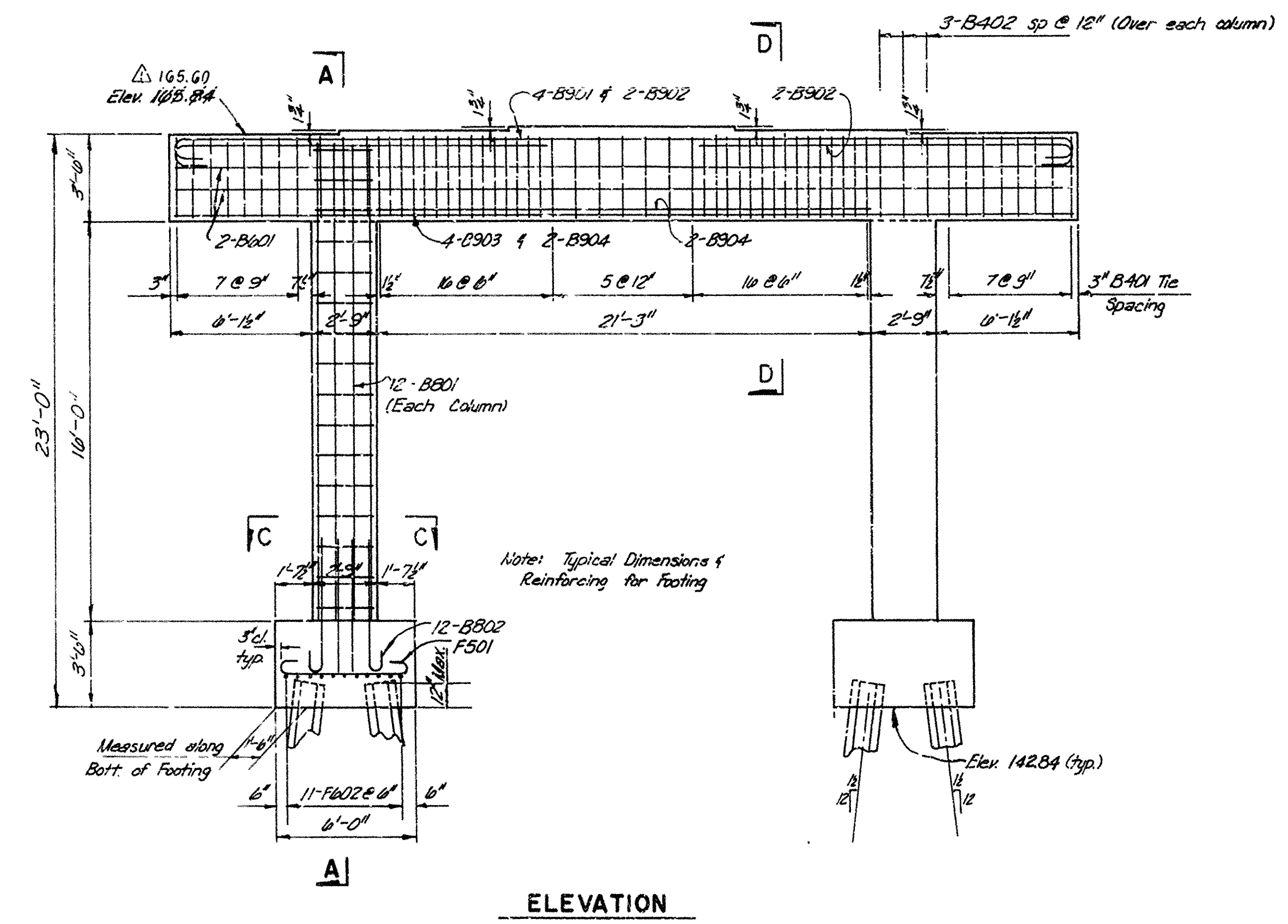


DATE REVISION	DATE	DATE REVISION	DATE	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4-8-82	2-4-80			6	ARK.	GR-031-1(25)	17	54
				JOB NO.	110016		17	54
				5856	BENT		23353	



BAR LIST (ONE BENT)

Mark	No. Reqd.	Length	A	B	Pin Dia.	Bending Diagram
B901	4	41'-2"	33'-8"	10"	9"	
B902	8	17'-3"	16'-0"	10"	9"	
B903	4	38'-8"			Str.	
B904	4	21'-3"			Str.	
B801	24	18'-10"			Str.	
B802	24	7'-2"	6'-3"	8"	6"	
B401	4	38'-8"			Str.	
F402	22	9'-10"	8'-6"	6"	4 1/2"	
F501	34	6'-8"	5'-10"	5"	3 3/4"	
B401	54	12'-0"	2'-5"	3'-2"	2"	
B402	6	8'-7"	2'-5"	3'-2"	2"	
B403	32	10'-6"	2'-5"	2'-5"	2"	



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.

f'_c = COMPRESSIVE STRENGTH OF CLASS S CONCRETE 3500 PSI.

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

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

LIVE LOAD: HS20

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

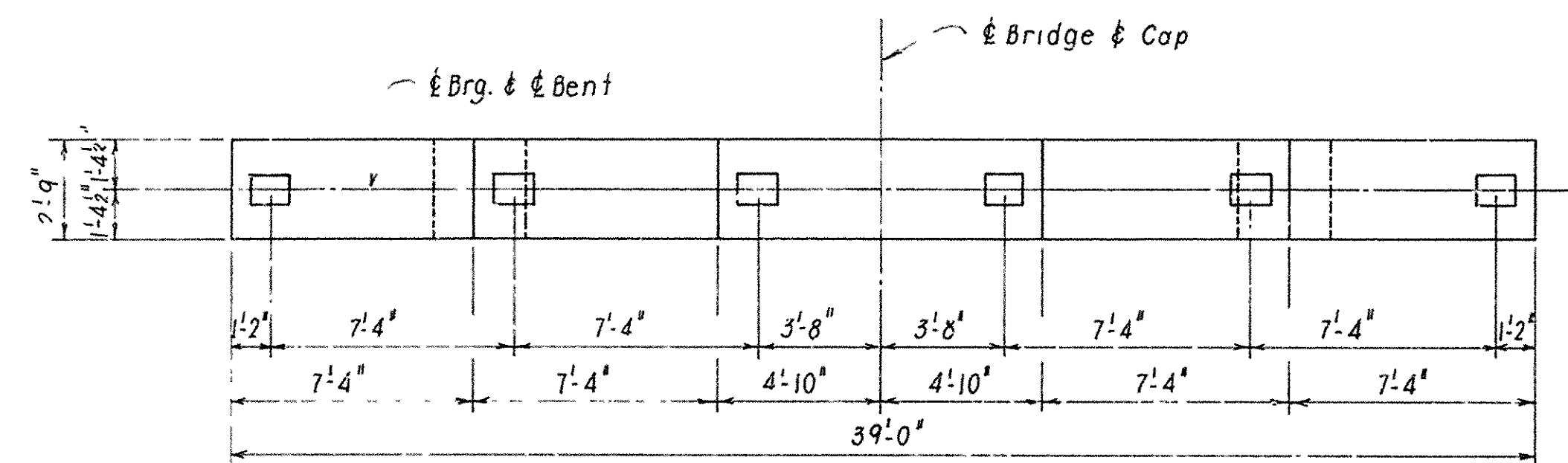
METHOD OF DESIGN: LOAD FACTOR

DETAILS OF INT. BENTS 2 & 7
INDIAN BAYOU
CROSS ROADS-SOUTH
MONROE CO.
ROUTE 1 SEC. 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: E.R.W. DATE: 11-6-79
CHECKED BY: M.E.W. DATE: 11-20-79
DESIGNED BY: G.A. DATE: 10-10-79
SCALE: 1/4" = 1'-0" or as shown
BRIDGE NO. 5856 DRAWING NO. 23353

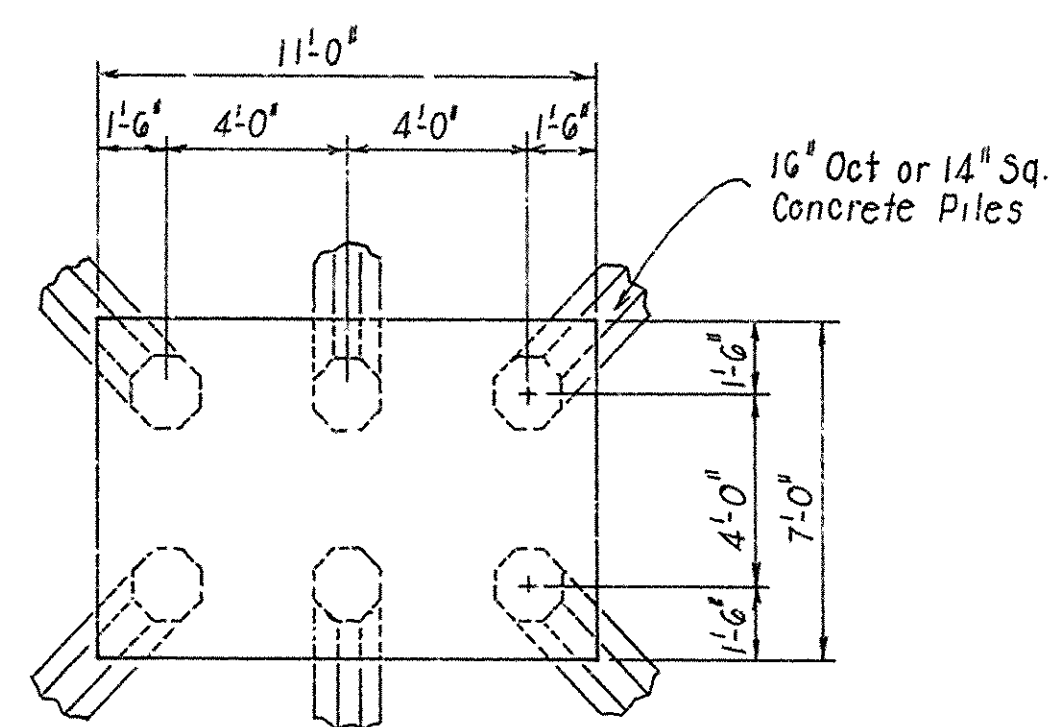
Revised: 4-8-82, L.M.

Neal Pinkerton
BRIDGE ENGINEER

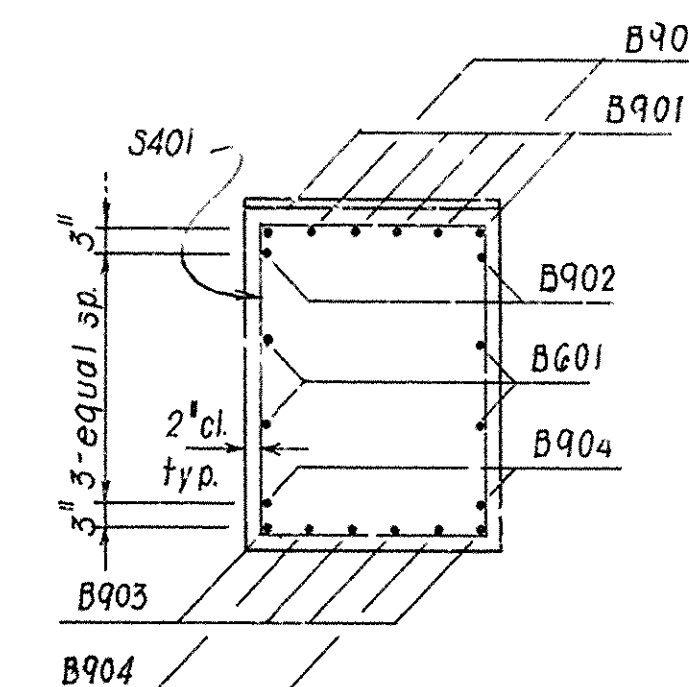
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				G	ARK.	GR-031-1(23)	35	93
						JOB NO.	5856	BENT
								23354



PLAN



SECTION B-B



SECTION D-D

BAR LIST (ONE BENT)

Mark	No. Req'd	Length	A	D	Pin Dia.	Bending Diagram (Dimens are out to out of bars)
B901	4	41'-2"	38'-8"	10"	9"	
B902	8	17'-3"	16'-0"	10"	9"	
B903	4	38'-8"			Str.	
B904	4	21'-3"			Str.	
B905	24	*			Str.	
B906	24	7'-11"	6'-8"	10"	9"	
F701	26	12'-2"	10'-6"	7"	5 1/2"	
B601	4	38'-8"			Str.	
F602	42	7'-10"	6'-6"	6"	4 1/2"	
B401	54	12'-0"	2'-5"	3'-2"	2"	
B402	6	8'-7"	2'-5"	3'-2"	2"	
B403	**	10'-6"	2'-5"	2'-5"	2"	

* For Length, see Table of Variables.
 ** For No. Req'd, see Table of Variables.

GENERAL NOTES

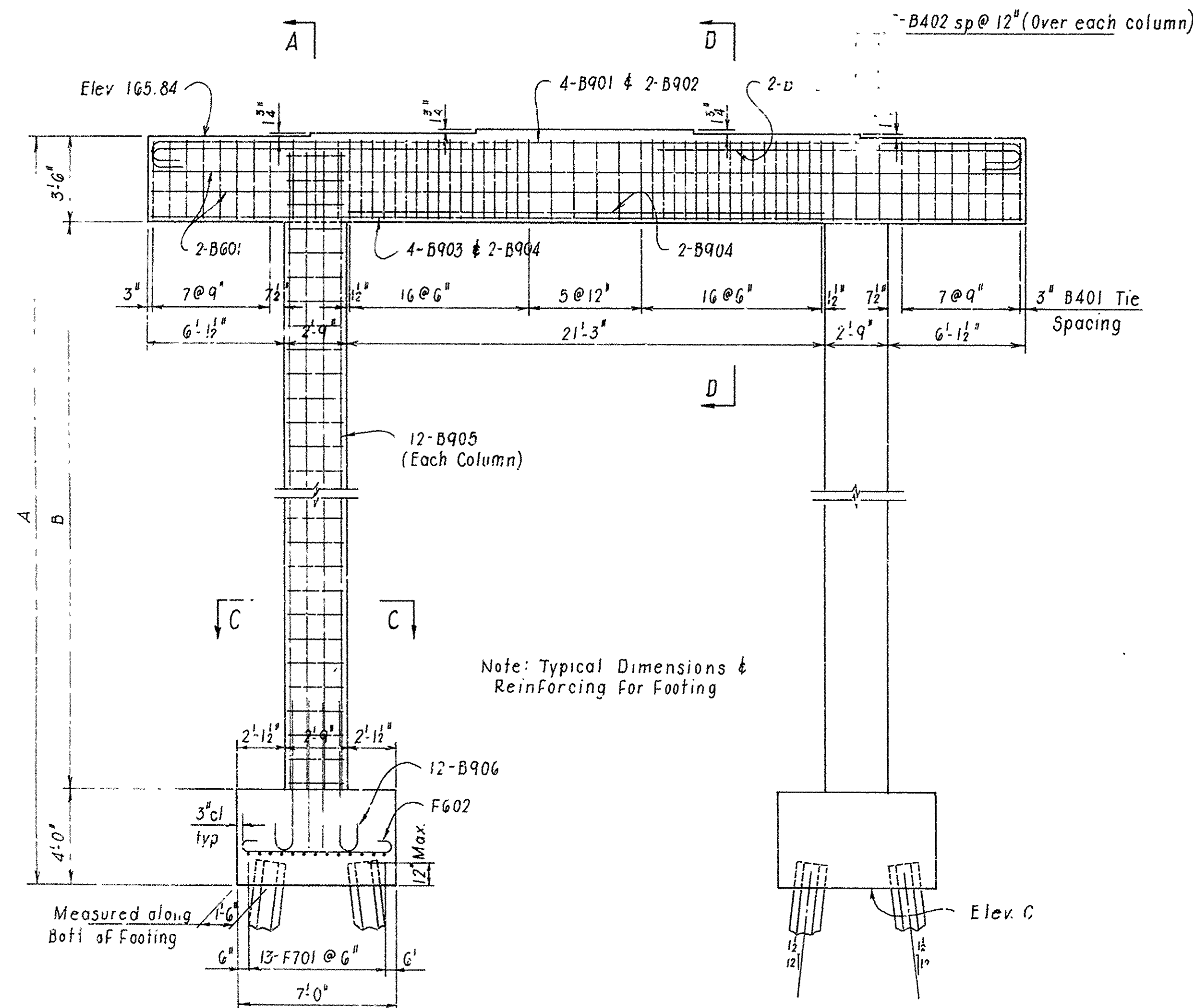
ALL CONCRETE SHALL BE CLASS S AND SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.
 f'_c = COMPRESSIVE STRENGTH OF CLASS S CONCRETE = 3500 PSI.
 REINFORCING STEEL SHALL BE ASTM A615, OR A617, GRADE 60. YIELD STRENGTH (f_y) = 60,000 PSI.

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

LIVE LOAD: HS20

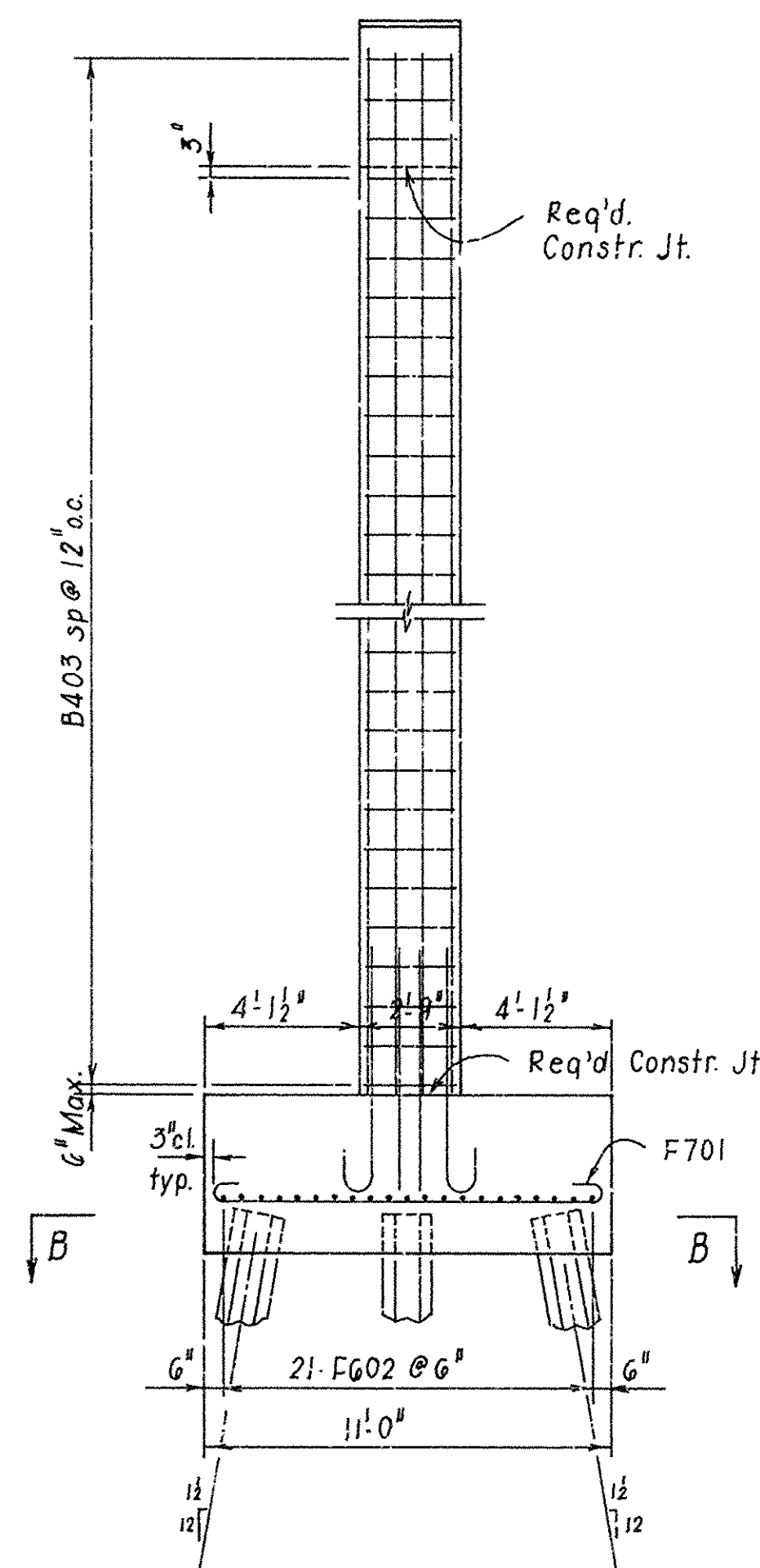
DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1977 EDITION WITH INTERIMS.

METHOD OF DESIGN: LOAD FACTOR



Note: Typical Dimensions & Reinforcing for Footing

ELEVATION



SECTION A-A

TABLE OF VARIABLES

Bent No	A	B	Elev. C	B905	B403
3	26'-0"	16'-6"	139.84	21'-3"	44
4	30'-0"	22'-6"	135.84	25'-3"	52
5	35'-0"	27'-6"	130.84	30'-3"	62
6	35'-0"	27'-6"	130.84	30'-3"	62

DETAILS OF INT. BENTS 3, 4, 5, & 6
 INDIAN BAYOU
 ST. CHARLES BRIDGE - CROSS ROADS
 MONROE CO.

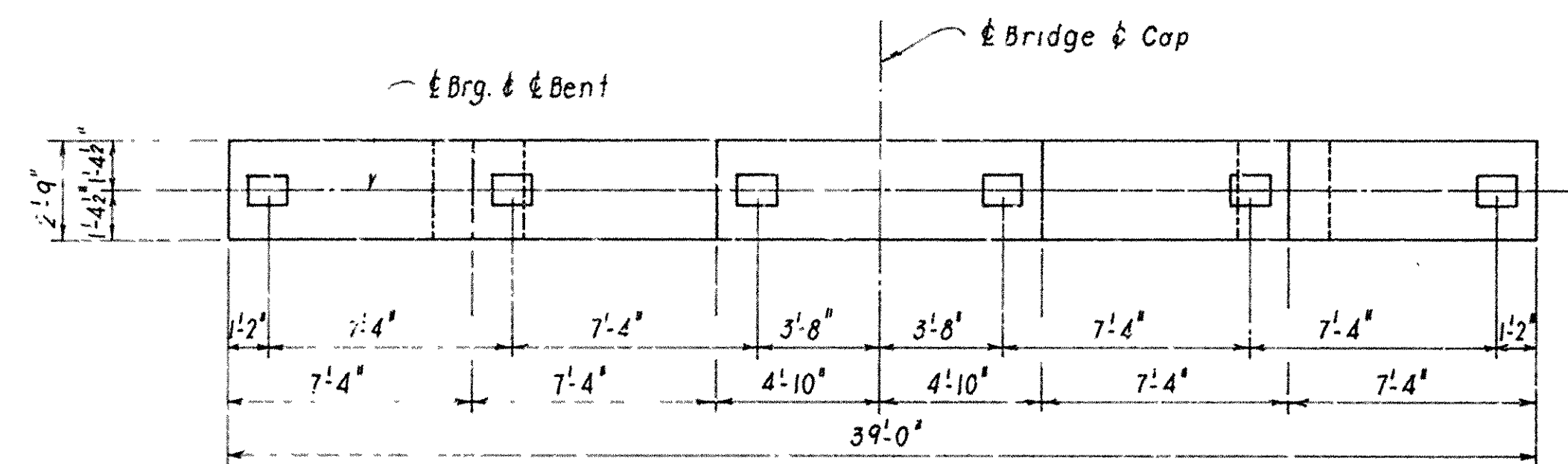
ROUTE 1 SEC. 6
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

DRAWN BY: L.M. DATE: 11-6-79
 CHECKED BY: M.E.W. DATE: 11-20-79
 DESIGNED BY: G.V.A. DATE: 10-10-79

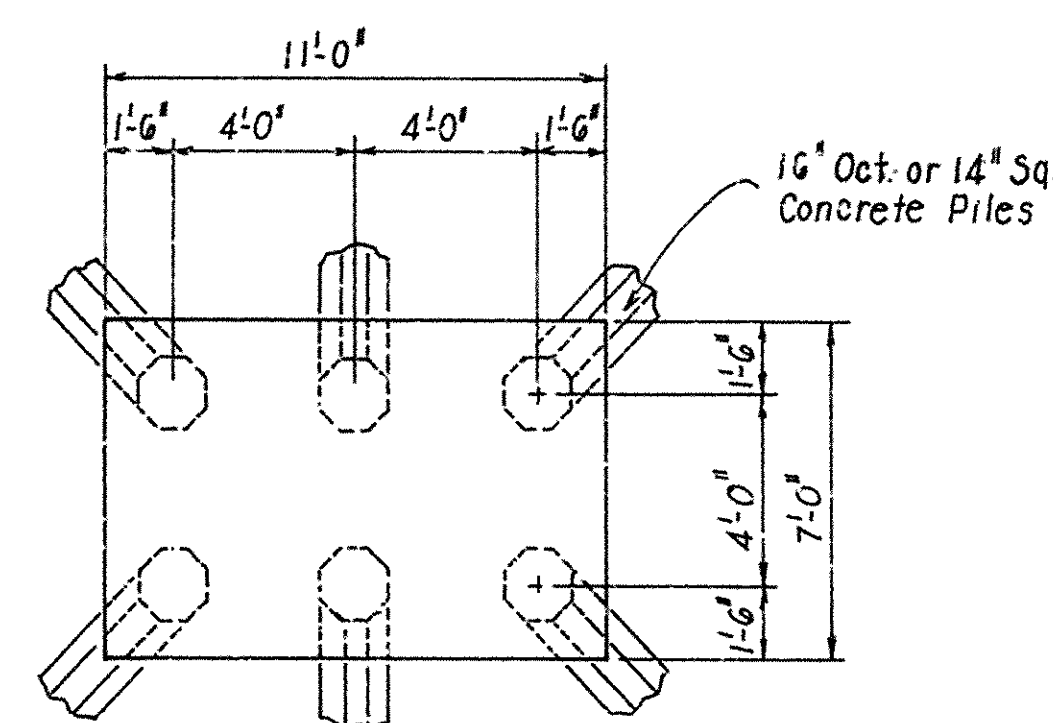
BRIDGE NO. 5856 DRAWING NO. 23354

BRIDGE ENGINEER

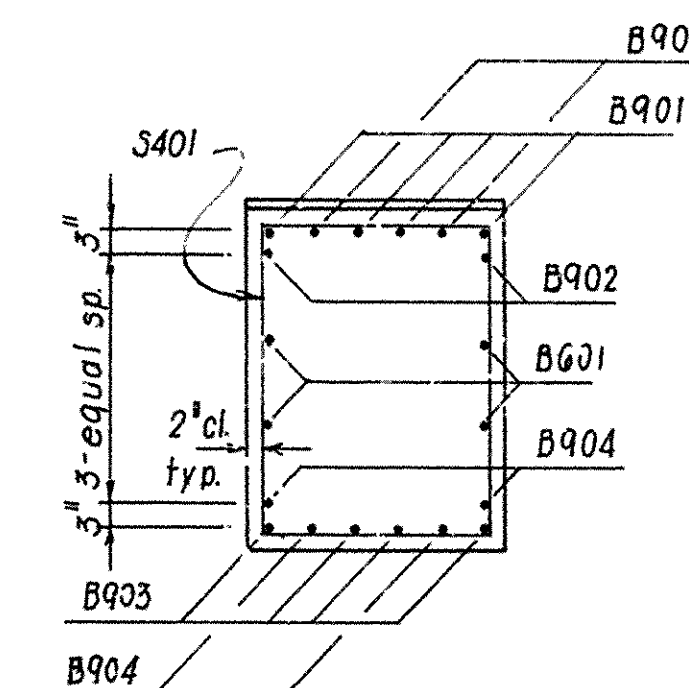
DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	PROJ. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	GR-031-1(25)	18	54
				5856		BENT		23354



PLAN



SECTION B-B

SECTION D-D
1/2" = 1'-0"

BAR LIST(ONE BENT)

Mark	No. Req'd	Length	A	B	P in Dia	Bending Diagram (Dimens are out to out of bars)
B901	4	41'-2"	38'-8"	10"	q"	
B902	8	17'-3"	16'-0"	10"	q"	
B903	4	38'-8"			Str.	
B904	4	21'-3"			Str.	
B905	24	*			Str.	
B906	24	7'-11"	6'-8"	10"	q"	
F701	26	12'-2"	10'-6"	7"	5/8"	
B601	4	38'-8"			Str.	
F602	42	7'-10"	6'-6"	6"	4/8"	
B401	54	12'-0"	2'-5"	3'-2"	2"	
B402	6	8'-7"	2'-5"	3'-2"	2"	
B403	**	10'-6"	2'-5"	2'-5"	2"	

* For Length, see Table of Variables.
 ** For No. Req'd, see Table of Variables

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.

f'_c = COMPRESSIVE STRENGTH OF CLASS S CONCRETE = 3500 PSI.

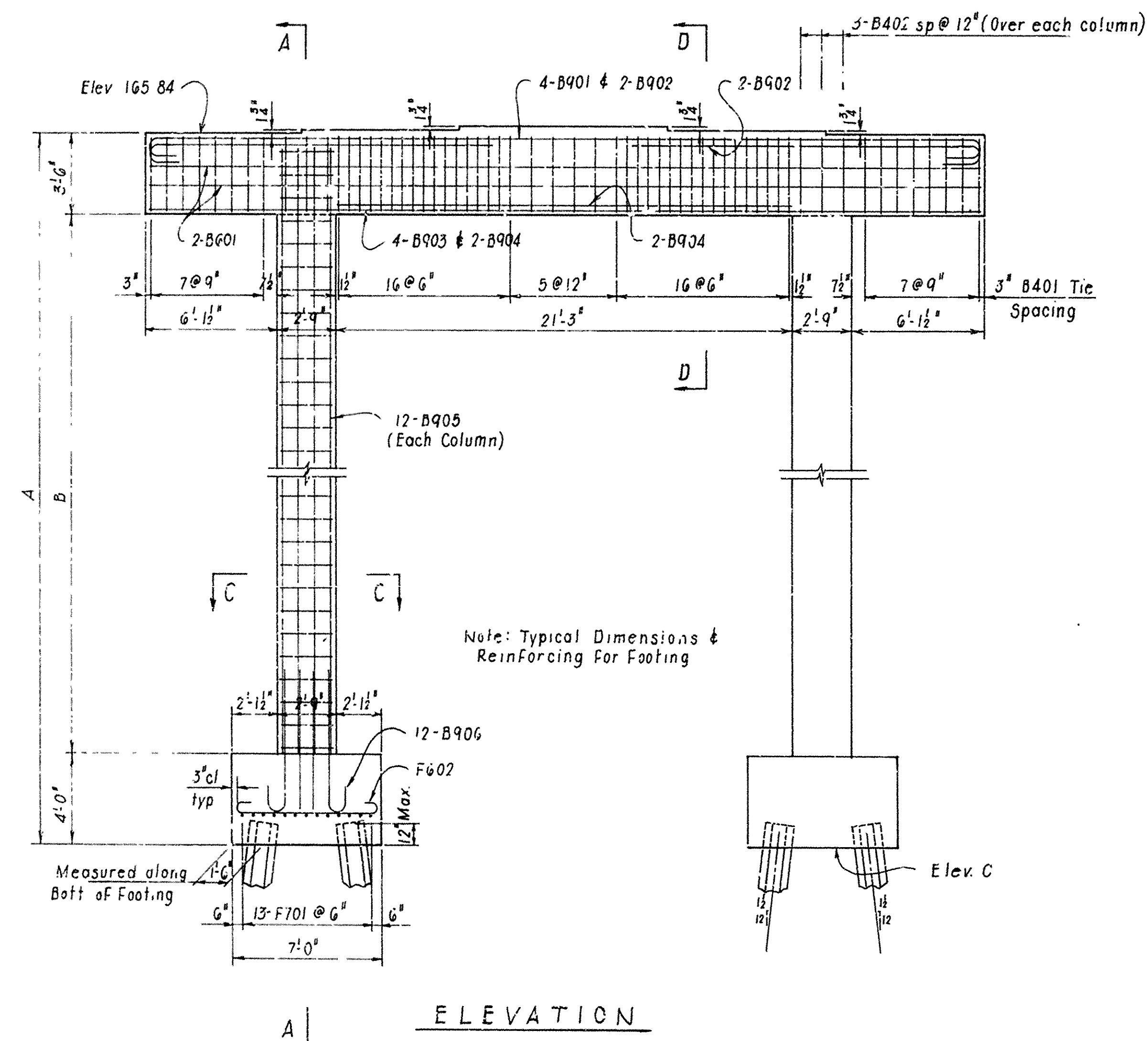
REINFORCING STEEL SHALL BE ASTM A615, OR A617, GRADE 60. YIELD STRENGTH (f_y) = 60,000 PSI.

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

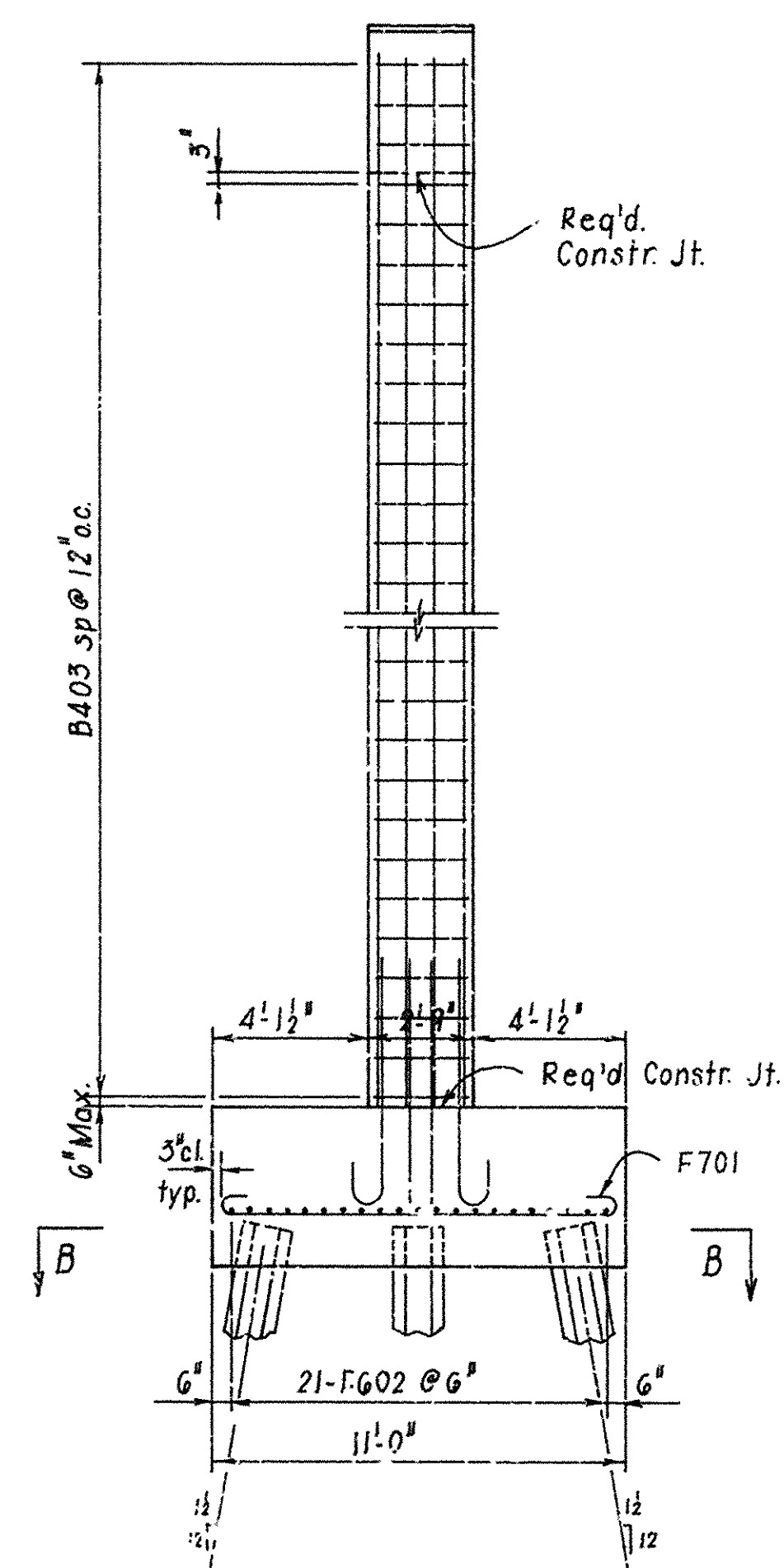
LIVE LOAD: HS20

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

METHOD OF DESIGN: LOAD FACTOR



ELEVATION



SECTION A-A

TABLE OF VARIABLES

Bent No	A	B	Elev C	B905	B403
3	26'-0"	18'-6"	139.84	21'-3"	44
4	30'-0"	22'-6"	135.84	25'-3"	52
5	35'-0"	27'-6"	130.84	30'-3"	62
6	35'-0"	27'-6"	130.84	30'-3"	62

DETAILS OF INT. BENTS 3,4,5, & 6
 INDIAN BAYOU
 CROSS ROADS - SOUTH
 MONROE CO.

ROUTE 1 SEC. 6
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

DRAWN BY: L.M. DATE: 11-6-79
 CHECKED BY: MEW DATE: 11-20-79
 DESIGNED BY: SVA DATE: 10-10-79

BRIDGE NO. 5856

DRAWING NO. 23354

Paul Pinkerton
 BRIDGE ENGINEER

DATE	FILED	DATE	FILED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	MC	TOTAL SHEETS
				6	ARK.	GR-031-1 (25)		
				JOB NO.		110016	19	54
				5856		CONT. UNIT		23355

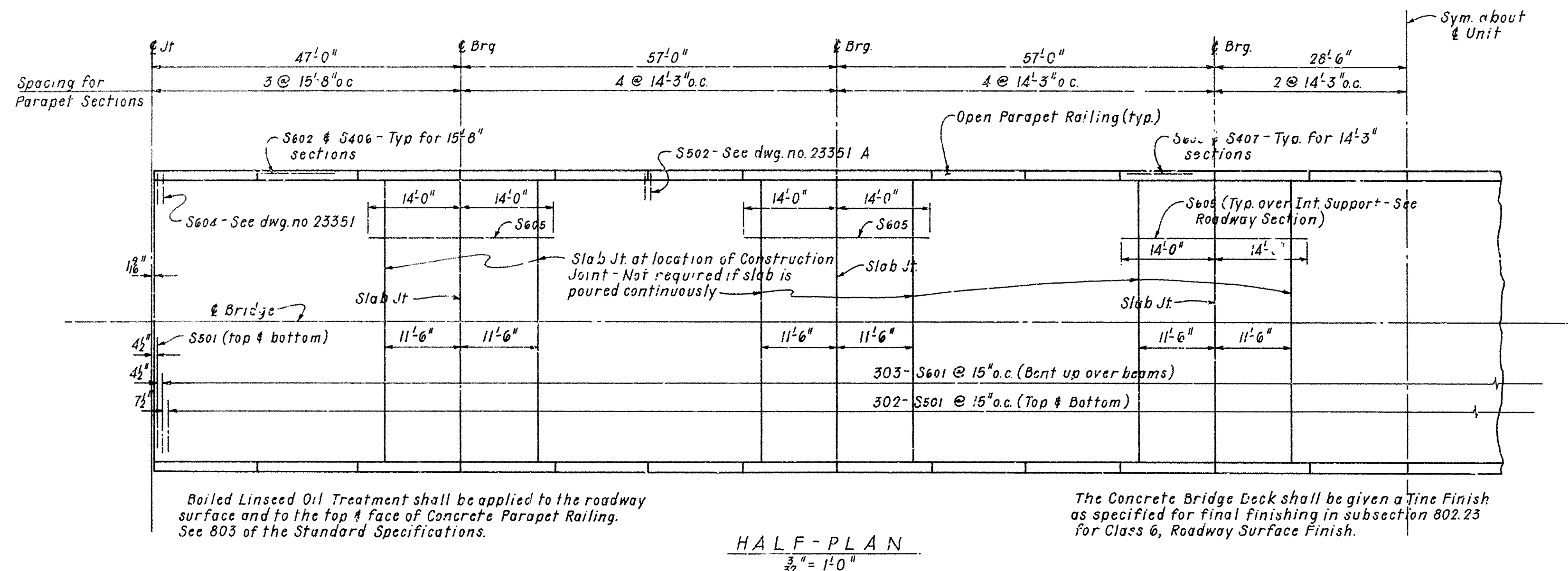
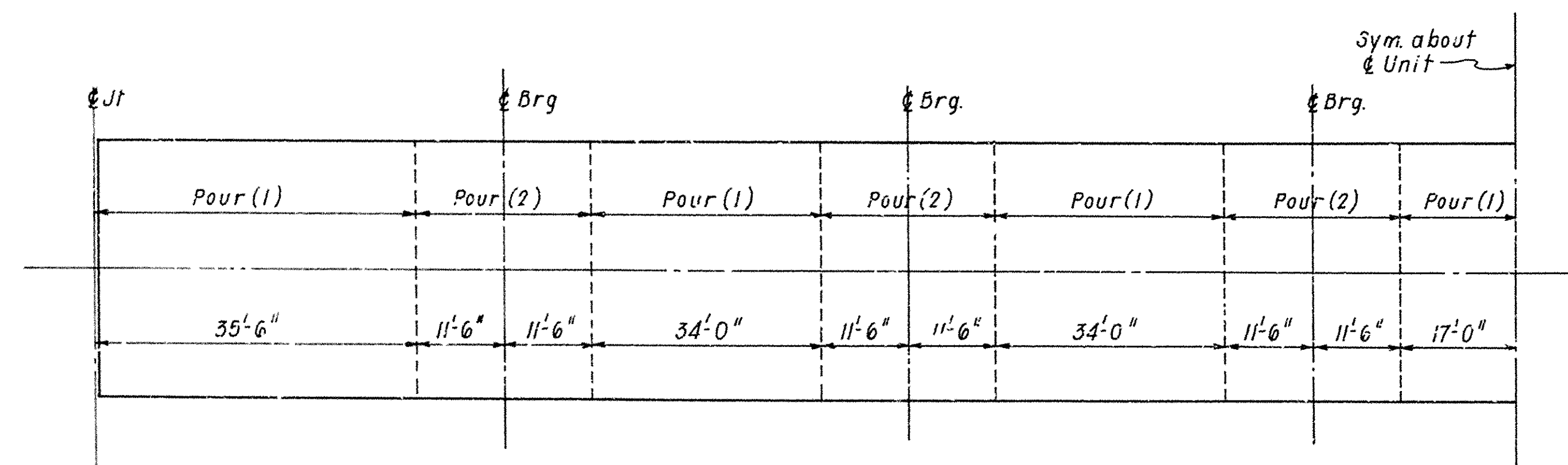
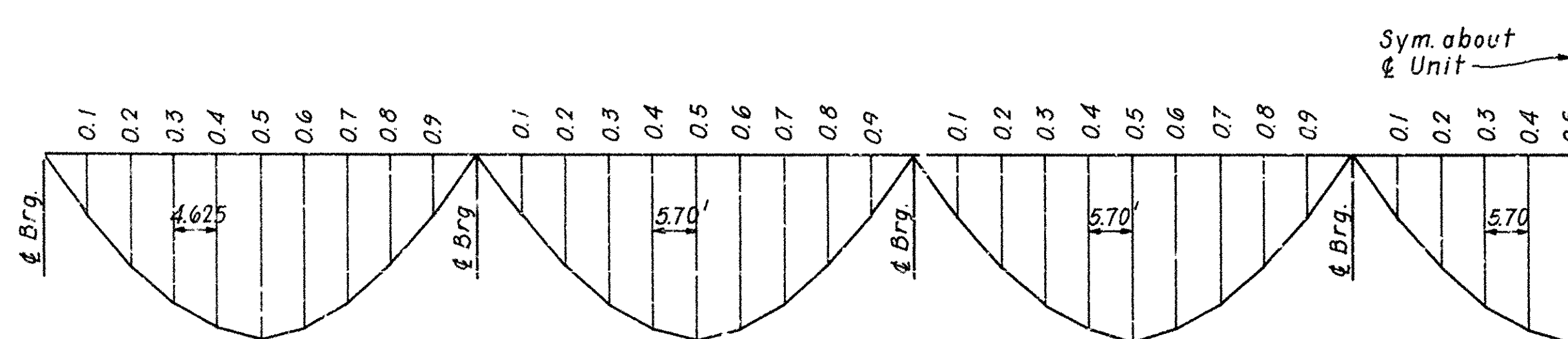


TABLE OF DEFLECTIONS (IN.)

Point of Deflection	Weight of Structural Steel		Weight of Structural Steel & Slab		Weight of Struc. Steel, Slab & Conc. Para. Rail	
	Int.	Ext.	Int.	Ext.	Int.	Ext.
0	0	0	0	0	0	0
0.1	0.016	0.016	0.146	0.135	0.155	0.153
0.2	0.030	0.030	0.270	0.249	0.286	0.282
0.3	0.040	0.040	0.354	0.326	0.376	0.370
0.4	0.044	0.044	0.390	0.359	0.414	0.407
0.5	0.042	0.042	0.375	0.346	0.399	0.393
0.6	0.035	0.035	0.316	0.292	0.336	0.332
0.7	0.025	0.025	0.226	0.208	0.240	0.237
0.8	0.014	0.014	0.123	0.114	0.131	0.130
0.9	0.004	0.004	0.037	0.034	0.039	0.038
0	0	0	0	0	0	0
0.1	0.007	0.007	0.059	0.054	0.063	0.064
0.2	0.020	0.020	0.182	0.168	0.196	0.196
0.3	0.035	0.035	0.313	0.288	0.333	0.333
0.4	0.045	0.045	0.407	0.375	0.436	0.433
0.5	0.049	0.049	0.441	0.407	0.472	0.468
0.6	0.045	0.045	0.406	0.375	0.435	0.432
0.7	0.035	0.035	0.311	0.287	0.333	0.331
0.8	0.020	0.020	0.181	0.167	0.194	0.193
0.9	0.006	0.006	0.057	0.053	0.062	0.062
0	0	0	0	0	0	0
0.1	0.006	0.006	0.056	0.052	0.060	0.060
0.2	0.020	0.020	0.178	0.164	0.191	0.190
0.3	0.034	0.034	0.307	0.283	0.329	0.326
0.4	0.045	0.045	0.402	0.370	0.429	0.425
0.5	0.049	0.049	0.436	0.402	0.466	0.461
0.6	0.045	0.045	0.402	0.371	0.430	0.426
0.7	0.034	0.034	0.308	0.284	0.329	0.326
0.8	0.020	0.020	0.179	0.165	0.191	0.190
0.9	0.006	0.006	0.056	0.052	0.061	0.060
0	0	0	0	0	0	0
0.1	0.006	0.006	0.057	0.052	0.061	0.061
0.2	0.020	0.020	0.179	0.165	0.192	0.191
0.3	0.035	0.035	0.309	0.285	0.331	0.328
0.4	0.045	0.045	0.403	0.372	0.431	0.428
0.5	0.049	0.049	0.438	0.404	0.468	0.464

BAR LIST (FOR UNIT)

MK	No. Req'd	Length	Pin Dia.	Bending Diagram
S601	303	43'-7"	3 3/4"	<p>Sym. abt. S</p>
S602	60	15'-3"	Str.	
S603	200	13'-11"	Str.	
S604	24	5'-5"	Str.	
S605	288	28'-0"	Str.	
S501	608	42'-6"	Str.	<p>* No Undertolerance; 1/2" Overtolerance</p>
S502	350	5'-0"	Str.	
S401	1045	35'-11"	Str.	<p>For Bending Diagrams not shown, see dwg. no. 23351 A.</p> <p>Dimens are out to out of bars.</p>
S402	416	6'-10"	2"	
S403	416	6'-0"	2"	
S404	544	3'-2"	2"	
S405	544	6'-4"	2"	
S406	48	15'-3"	Str.	
S407	160	13'-11"	Str.	



Note: Pours with same number may be placed simultaneously or separately. All pours (1) must be placed before pours (2) can be placed. 48 hours shall elapse between pours and 77 hours shall elapse between adjacent pours.

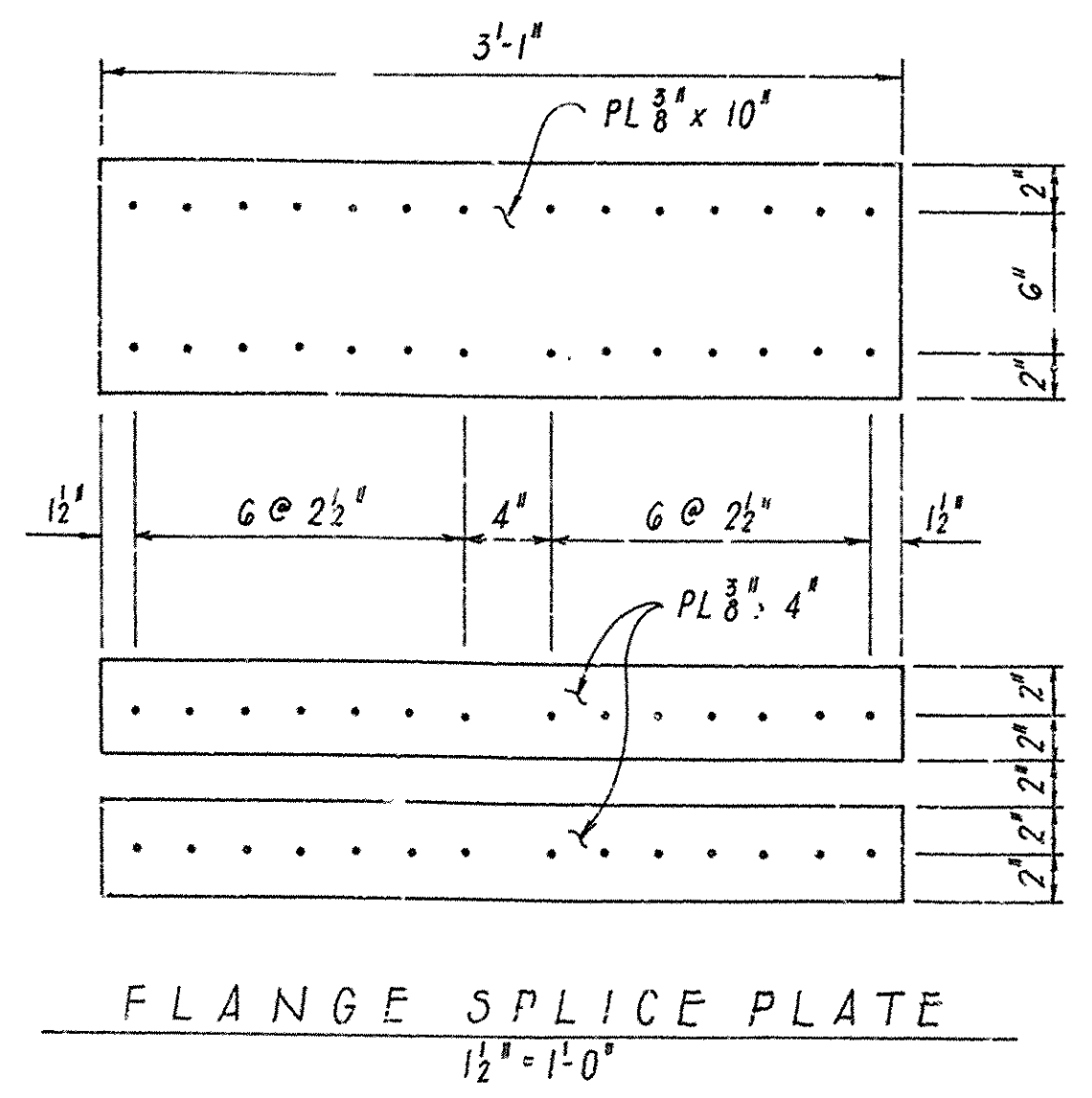
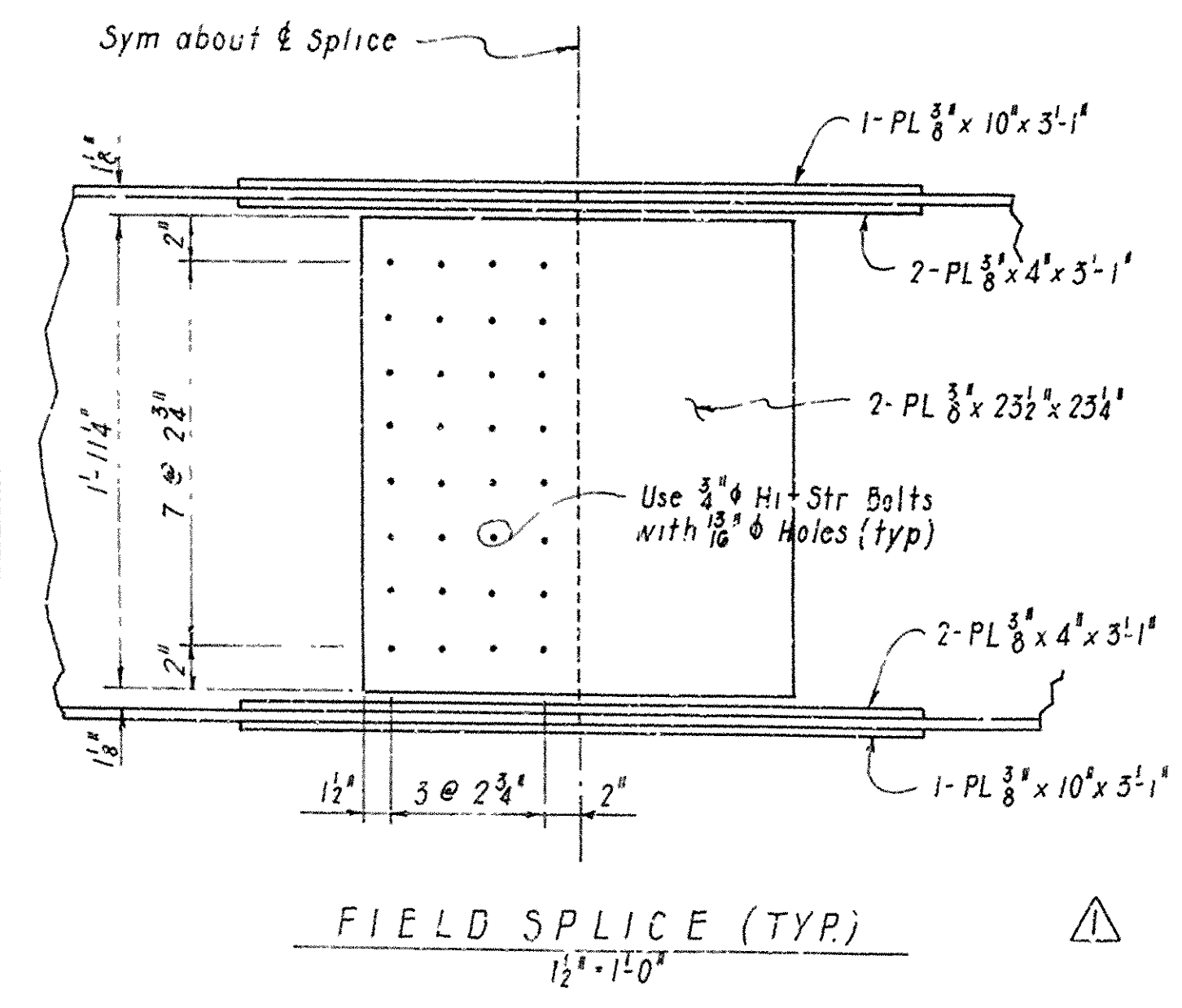
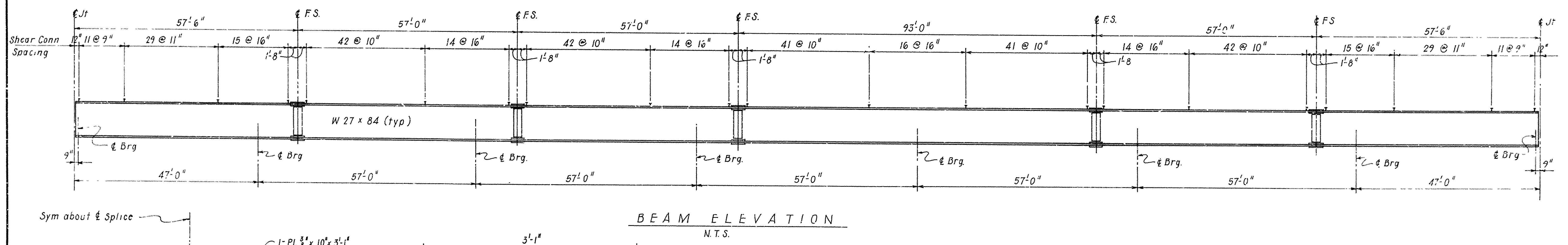
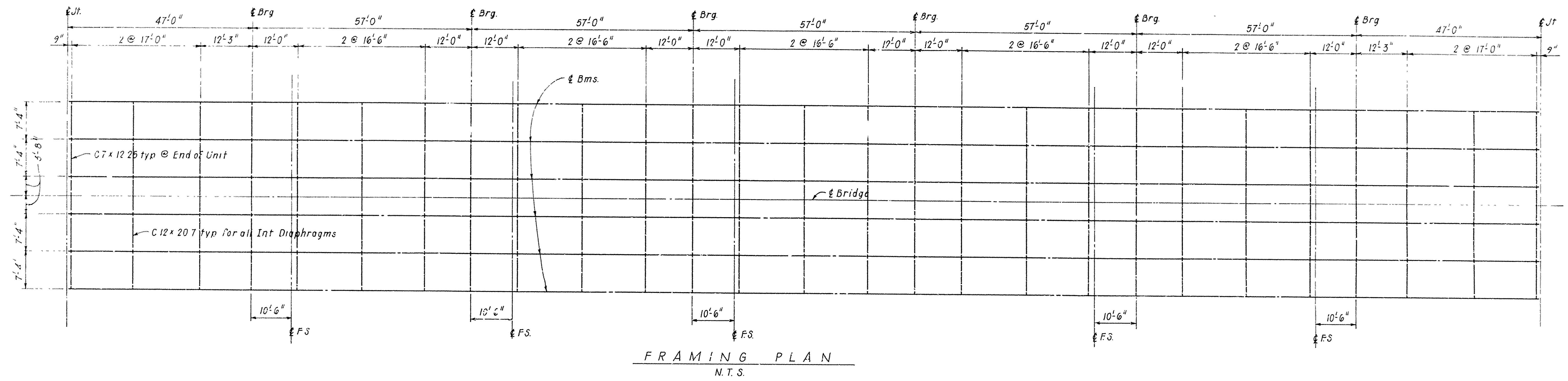
For General Notes & Supplementary Details not shown see dwg. no. 23349 A.
For Elastomeric Bearings see dwg. no. 23350 A.
For Details of Concrete Parapet Rail see dwg. no. 23351 A.

(SHEET 1 OF 2)
DETAILS OF 379'-0" CONT. W-BEAM UNIT
CROSS ROADS-SOUTH
MONROE COUNTY
ROUTE 1 SEC. 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: H. May DATE: 11-2-79
CHECKED BY: GVA DATE: 11-16-79
DESIGNED BY: GVA DATE: 10-15-79
SCALE: As Shown

BRIDGE NO. 5856 DRAWING NO. 23355

DATE	REVISION	DATE	REVISION	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-9-81	5856-11-12-81			6	ARK.	GR. 031-1(25)	20	54
				JOB NO.	110016	20	54	
				5856	CONT UNIT	23356		



(SHEET 2 OF 2)
DETAILS OF 379'-0" CONT. W-BEAM UNIT
CROSS ROADS - SOUTH
MONROE COUNTY
ROUTE 1 SEC. 6
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: H. H. H. DATE: 11-6-79
CHECKED BY: G. V. A. DATE: 11-16-79
DESIGNED BY: G. V. A. DATE: 10-15-79
SCALE: As Shown
BRIDGE NO. 5856 DRAWING NO. 23356

Revised: Added Field Splice & Details, 11-9-81. L.M.

David Pinkerton
BRIDGE ENGINEER