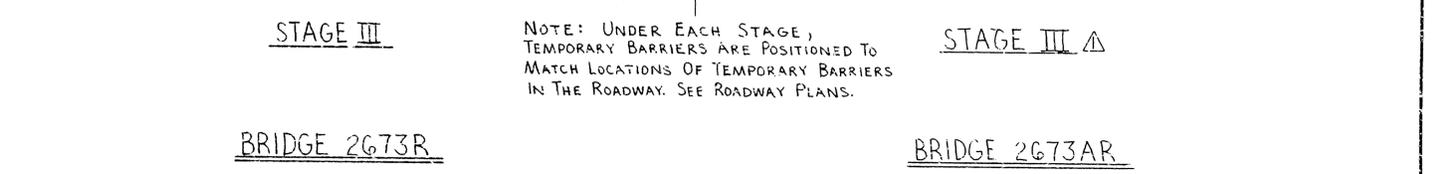
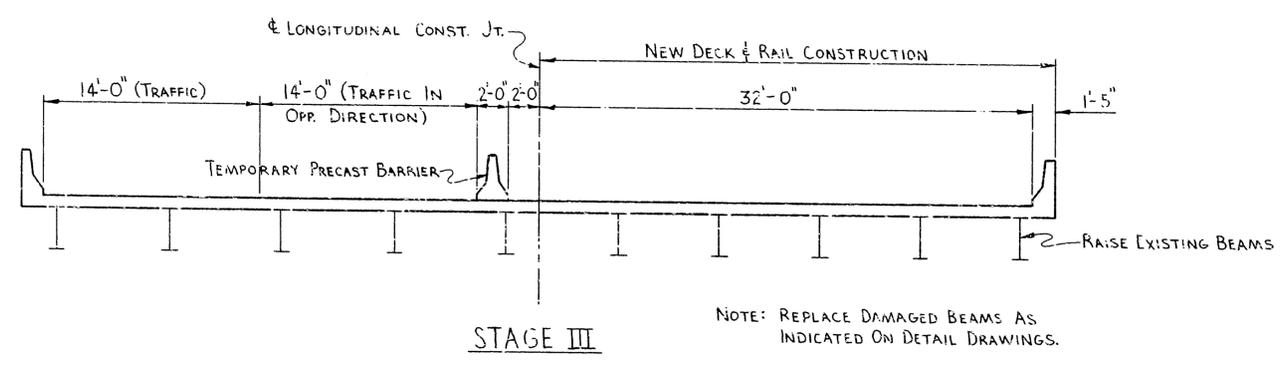
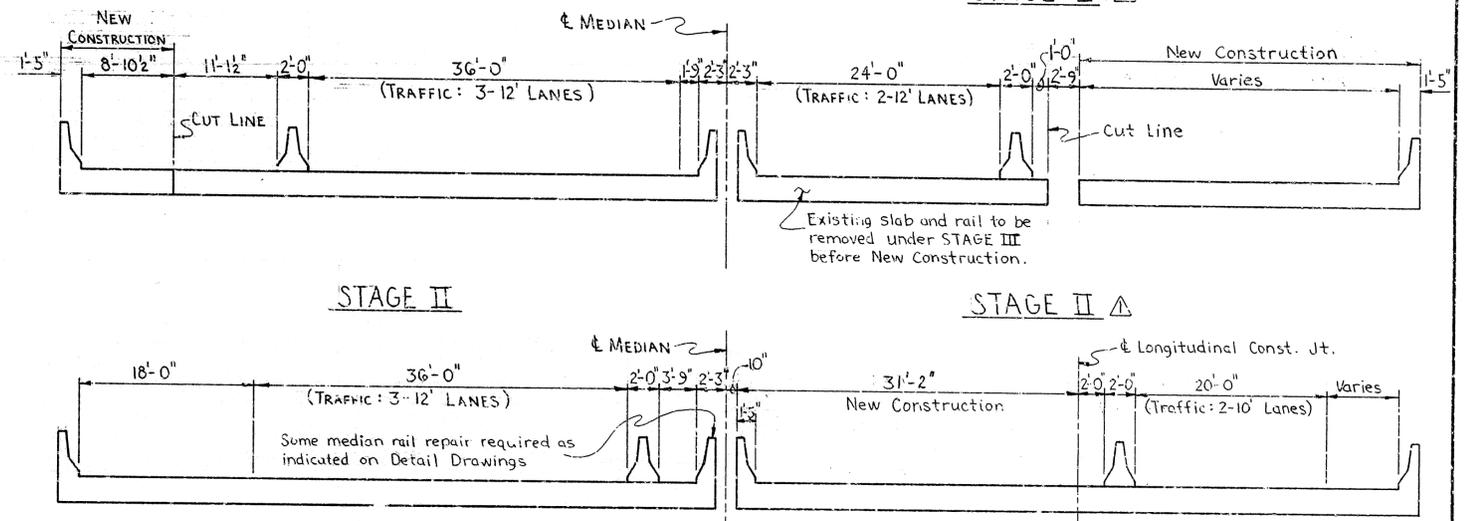
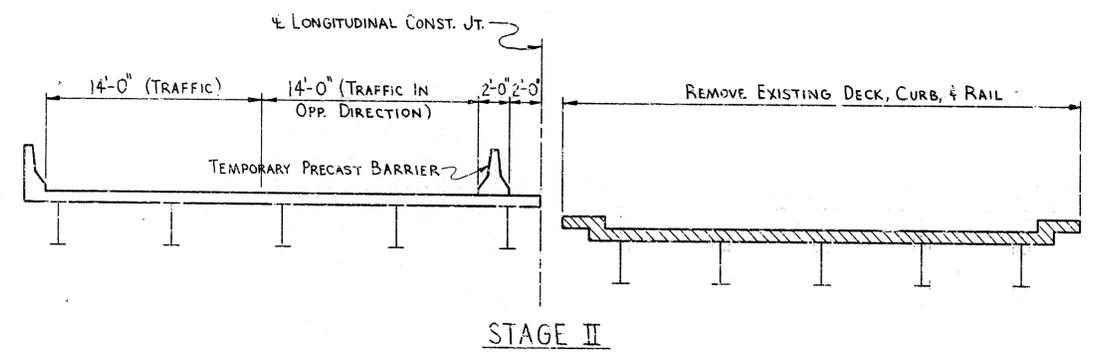
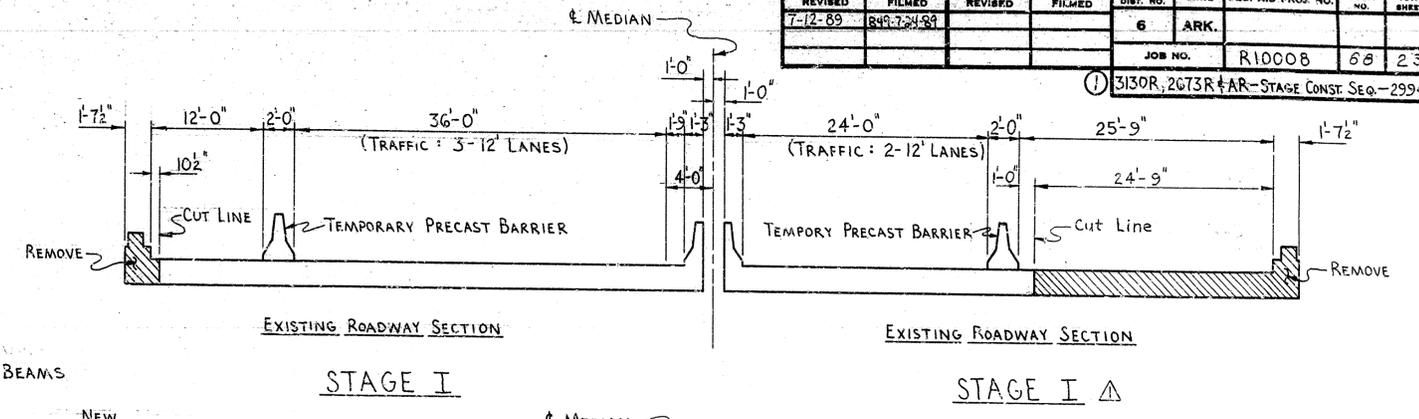
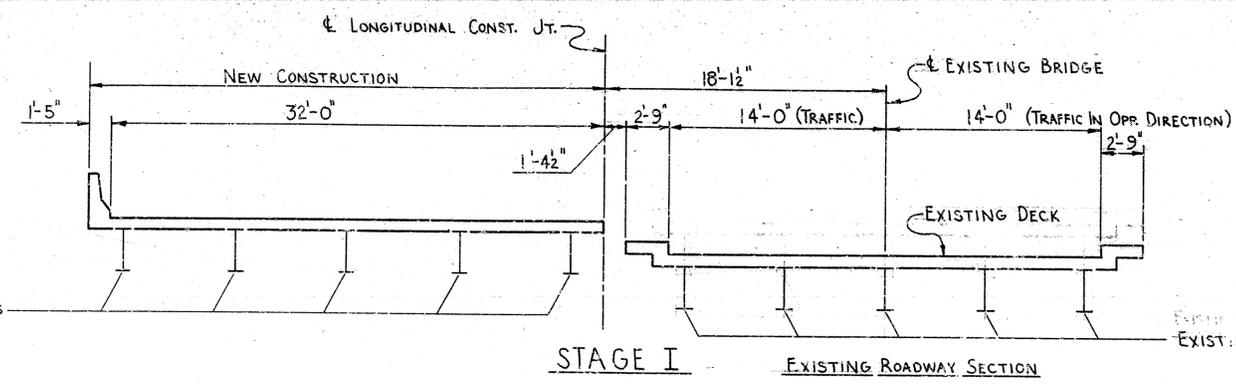


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
7-12-89	8-17-89			6	ARK.			
JOB NO. R10008							68	235
① 3130R, 2673R & AR-STAGE CONST SEQ-29944								



NOTE: UNDER EACH STAGE, TEMPORARY BARRIERS ARE POSITIONED TO MATCH LOCATIONS OF TEMPORARY BARRIERS IN THE ROADWAY. SEE ROADWAY PLANS.

BRIDGE 3130R
LOOKING FORWARD

BRIDGE 2673R

BRIDGE 2673AR

NOTE: REPLACE DAMAGED BEAMS AS INDICATED ON DETAIL DRAWINGS.

REVISIONS:
 Revised Staged Construction for Bridge 2673AR. (DPB, 7-12-89)

NOTE: THE CONTRACTOR MAY CONSTRUCT ANY PART OF THE SUBSTRUCTURE OR SUPERSTRUCTURE AS SOON AS POSSIBLE UNDER ANY STAGE WHEN APPROVED BY THE ENGINEER.

STAGE CONSTRUCTION SEQUENCE
 WEST MEMPHIS INTERCHANGE-1-55
 CRITTENDEN COUNTY

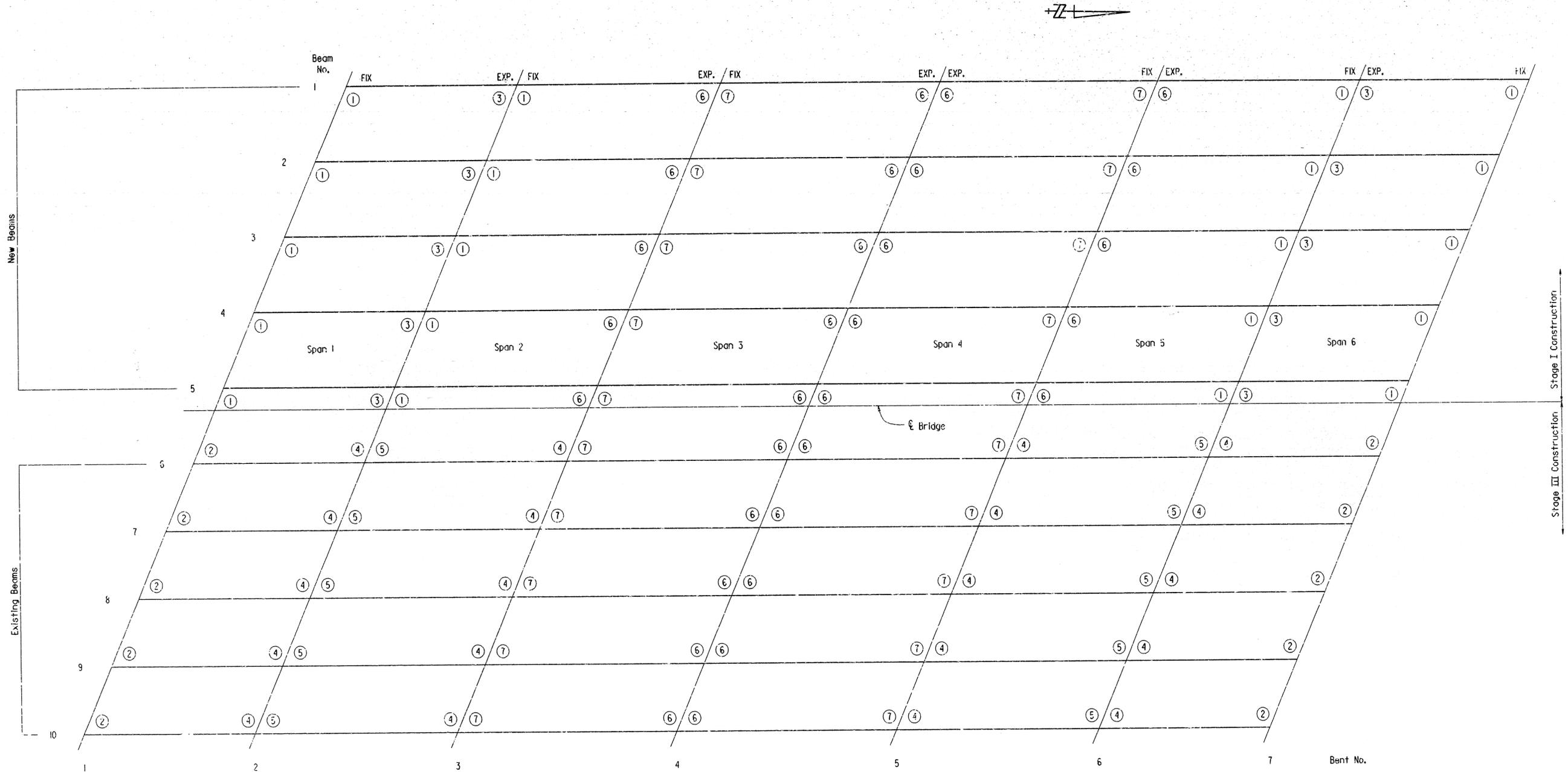
ROUTE SEC.
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 DRAWN BY: DRB DATE: 7-26-88
 CHECKED BY: CJF DATE: 8-15-88
 DESIGNED BY: DRB DATE: 7-26-88
 SCALE: NONE
 BRIDGE NO. 3130R 2673R & AR DRAWING NO. 29944

David P. ...
 BRIDGE ENGINEER

123

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	RIO008		69	235

① 3130R - SUPPLEM. DETLS. - 29945



LOCATION SKETCH FOR NEW & EXISTING SHOES

- ① New Type B-4 Fixed Shoe
- ② Existing Fixed Shoe with New Masonry Plate
- ③ New Type B-4 Expansion Shoe
- ④ Existing Expansion Shoe with New Masonry Plate
- ⑤ Existing Fixed Shoe
- ⑥ New Type D Expansion Shoe
- ⑦ New Type D Fixed Shoe

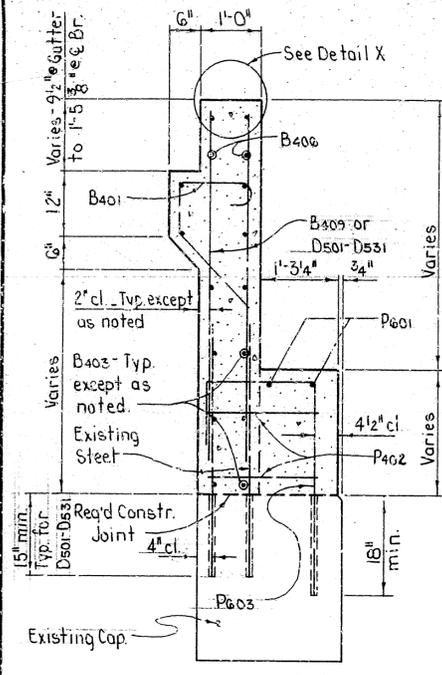
Note: New Anchor Bolts and 1/8" Bearing Pad will be required for all shoes.

SUPPLEMENTARY DETAILS
7TH STREET
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

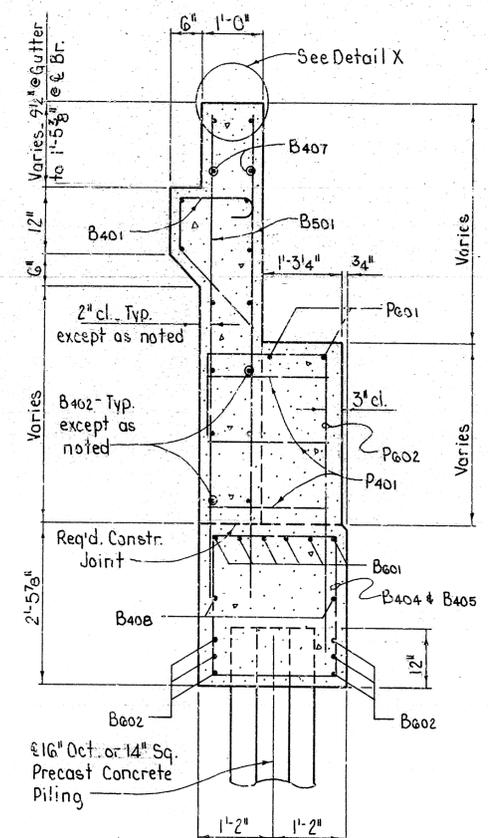
Wesley Pinkerton
BRIDGE ENGINEER

DRAWN BY: KDH DATE: 4 AUG 88
CHECKED BY: C.J.F. DATE: 8-18-88 SCALE: NONE
DESIGNED BY: D.H.P. DATE: 2-16-88
BRIDGE NO. 3130R DRAWING NO. 29945

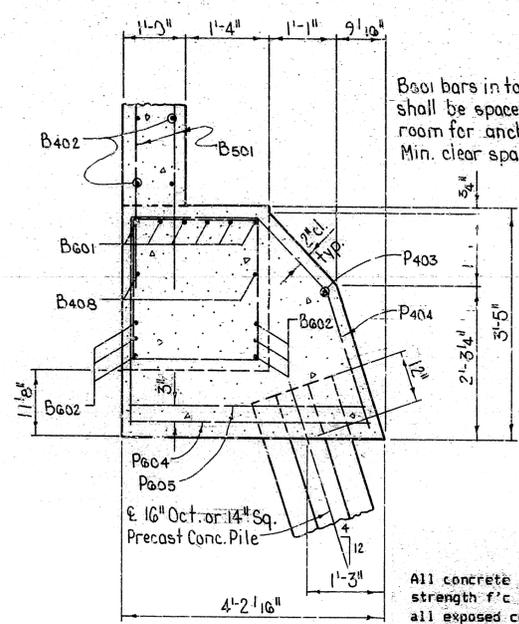
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		71	235
				JOB NO. R10008		3130R - BT. NO. 1 - 29947		



SECTION A-A
Scale: 3/4" = 1'-0"



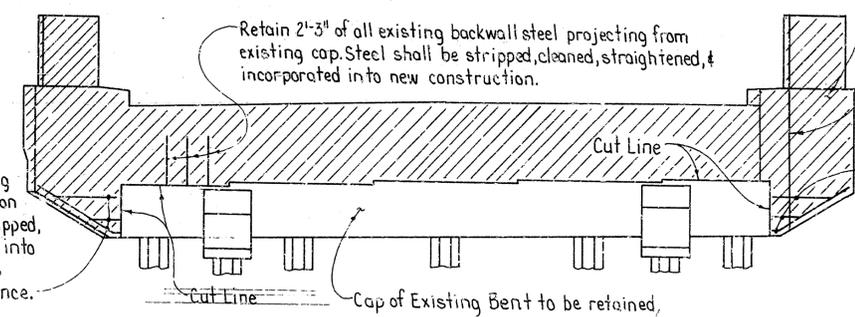
SECTION B-B
Scale: 3/4" = 1'-0"



SECTION C-C
Scale: 3/4" = 1'-0"

NOTE: Care shall be taken to avoid damage to the existing steel to be retained. If two or more adjacent bars, or two bars separated by only one bar, are broken in the concrete removal or bar straightening process, replacement dowel bars shall be drilled and grouted in place at the contractor's expense.

All reinforcing steel projecting from existing cap into existing wing on this side shall be stripped, cleaned, & incorporated into new wing. Cut steel to provide 2" min. clearance.



REMOVAL DETAILS
Looking Back - No Scale

General Notes

All concrete shall be Class "S" with a minimum 28 day compressive strength $f'c = 3,500$ 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.).

The wings & backwall shall not be poured until Span 1 has been poured.

Construction Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, 1988 edition, with applicable supplemental specifications and special provisions.

Design Specifications: AASHTO Standard Specifications for Highway Bridges, 1983 with current interim specifications.

Structural steel in end bents shall be ASTM A36 and shall be paid for as "Structural Steel in Beam Spans (A36)".

For additional notes see layout & Dwg. Nos. 29965 & 29966.

Existing shoes shall have new masonry plates as shown in details. Use Type B-4 shoes for new beams with clips as shown in details. For details of B-4 shoes, see Dwg. No. 29966. All shoes will have 1/8" bearing pad.

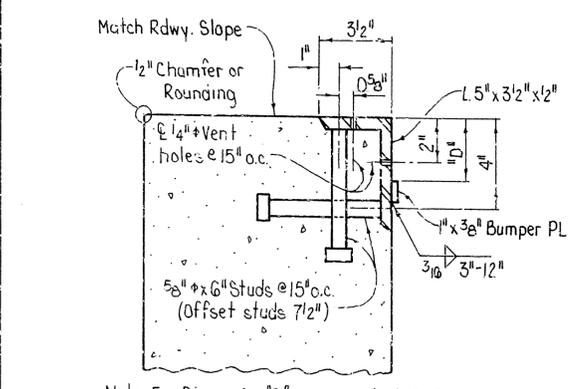
BAR LIST

MARK	NO.	REQ'D.	LENGTH	P.D.	BENDING DIAGRAMS
B401	66	66	3'-11"	2"	
B402	14	14	38'-11"	2"	
B403	14	14	35'-7"	2"	
B404	47	47	8'-8"	2"	
B405	15	15	6'-2"	2"	
B406	2	2	23'-10"	Str.	
B407	2	2	26'-6"	Str.	
B408	2	2	39'-4"	Str.	
B409	60	60	5'-6"	Str.	
P401	14	14	5'-11"	2"	
P402	10	10	5'-8"	2"	
P403	2	2	2'-4"	Str.	
P404	6	6	8'-11"	2"	
S401	3	3	7'-8"	Str.	
S402	4	4	7'-0"	Str.	
D401*	2	2	7'-2"	Str.	
D402*	1	1	6'-8"	Str.	
B501	105	105	7'-6"	Str.	
D501*	2 ea.	2 ea.	Var. 6'-10" to 7'-5"	Str.	
B601	6	6	40'-0"	4 1/2"	
B602	6	6	39'-4"	Str.	
P601	20	20	2'-4"	Str.	
P602	20	20	6'-8"	4 1/2"	
P603*	20	20	5'-8"	4 1/2"	
P604	2	2	13'-0"	4 1/2"	
P605	2	2	12'-10"	4 1/2"	
S601	7	7	6'-11"	4 1/2"	
S602	7	7	8'-5"	4 1/2"	
D601*	4	4	3'-0"	Str.	

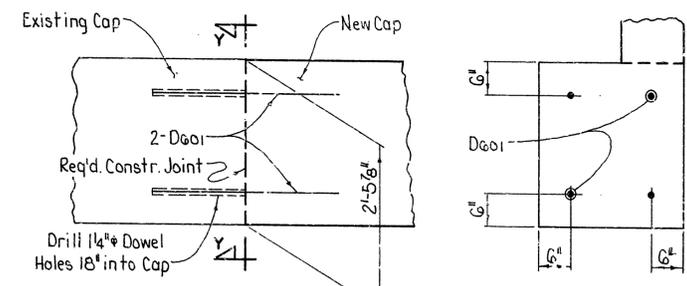
Dimensions are out to out of bars.

NOTE: For Bar Lists & Bending Diagrams for Wings, See Dwg. Nos. 29948 & 29949.

* Payment for furnishing & installing dowel bar will be made under the item "Modification of Existing Bridge Structure (Bridge No. 3130)."

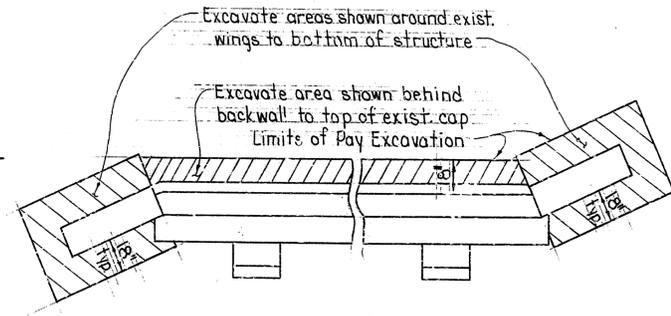


DETAIL X
Scale: 3" = 1'-0"

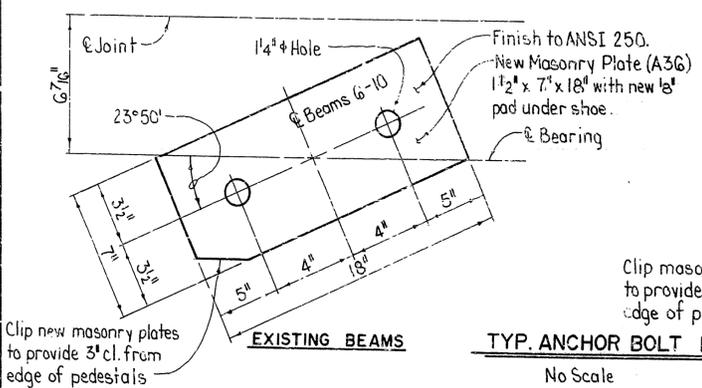


DOWEL DETAIL
Scale: 3/4" = 1'-0"

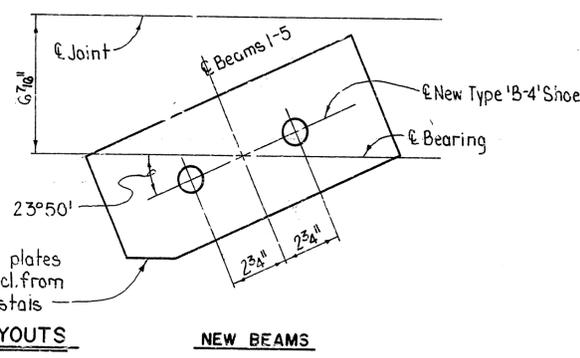
SECTION Y-Y
Scale: 3/4" = 1'-0"



LIMITS OF EXCAVATION FOR EXIST. END BENTS
No Scale



EXISTING BEAMS



NEW BEAMS

TYP. ANCHOR BOLT LAYOUTS
No Scale

SHEET 2 OF 4
DETAILS OF REMODELING BENT 1
7TH STREET

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

DRAWN BY: KDH DATE: 6 JUN 88
CHECKED BY: CJF DATE: 8-15-88 SCALE: AS NOTED
DESIGNED BY: D.H.P. DATE: 2-16-88

Neal Pinkerton
BRIDGE ENGINEER

BRIDGE NO. 3130R DRAWING NO. 29947

126

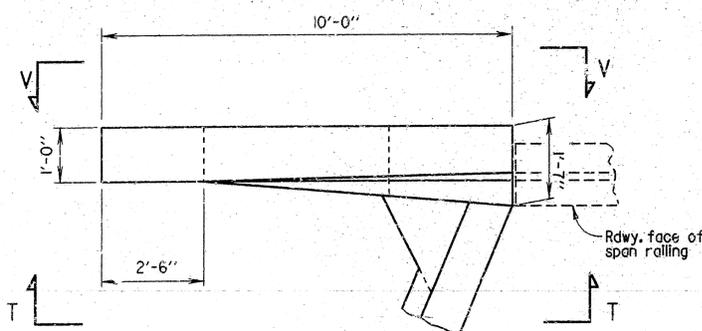
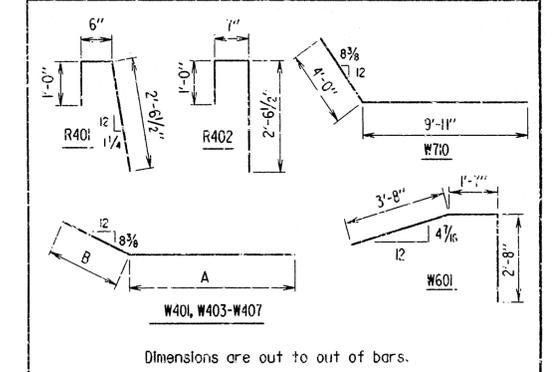
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				6	ARK.			
				JOB NO.	RI0008		72	235

3130R - BENT 1 - 29948

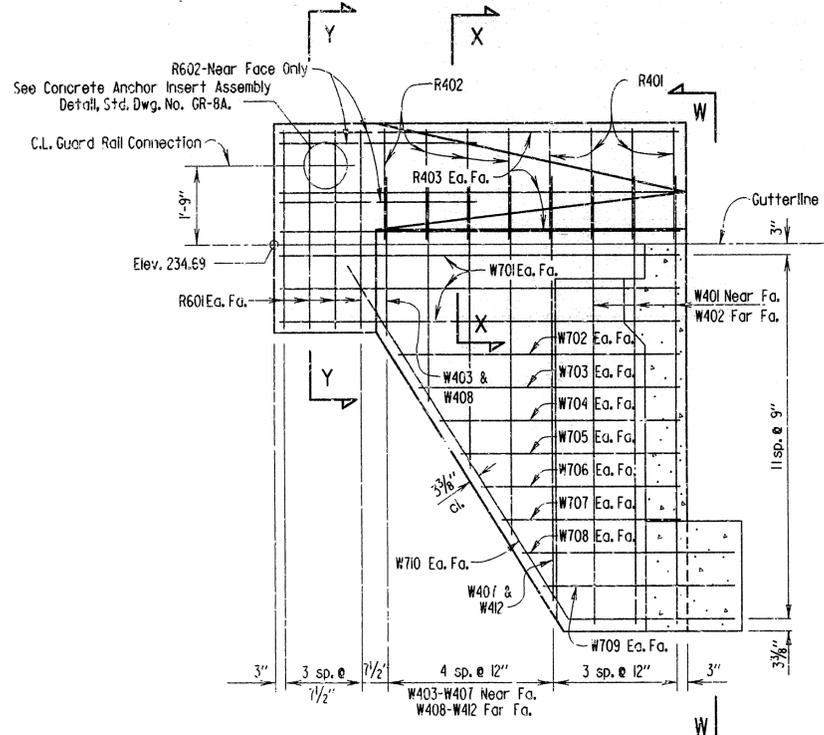
BAR LIST (WING A)

MARK	NO. REQ'D.	LENGTH	A	B	PIN DIA.
R401	4	3'-11"			2"
R402	4	4'-0"			2"
R403	6	9'-8"			Str.
R601	8	4'-5"			Str.
R602	3	5'-0"			Str.
W401	3	10'-1"	8'-11"	1'-2"	2"
W402	3	11'-2"			Str.
W403-W407	1 of each	Var. 3'-5" to 9'-4"	Var. 2'-4" to 8'-2"	1'-2"	2"
W408-W412	1 of each	Var. 4'-8" to 10'-6"			Str.
W601	4	7'-9"			4 1/2"
W701	6	9'-8"			Str.
W702	2	6'-9"			Str.
W703	2	6'-3"			Str.
W704	2	5'-8"			Str.
W705	2	5'-2"			Str.
W706	2	4'-8"			Str.
W707	2	4'-2"			Str.
W708	2	4'-11"			Str.
W709	2	4'-5"			Str.
W710	2	3'-9"			5/4"

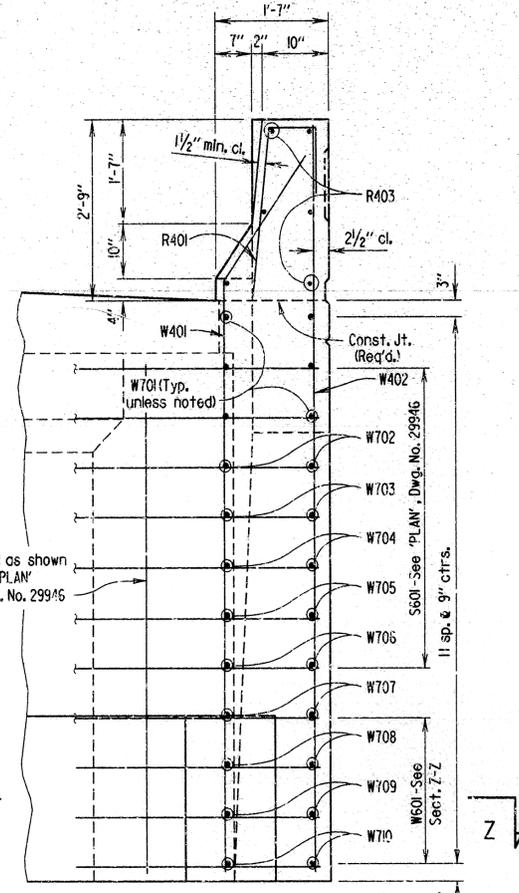
BENDING DIAGRAMS



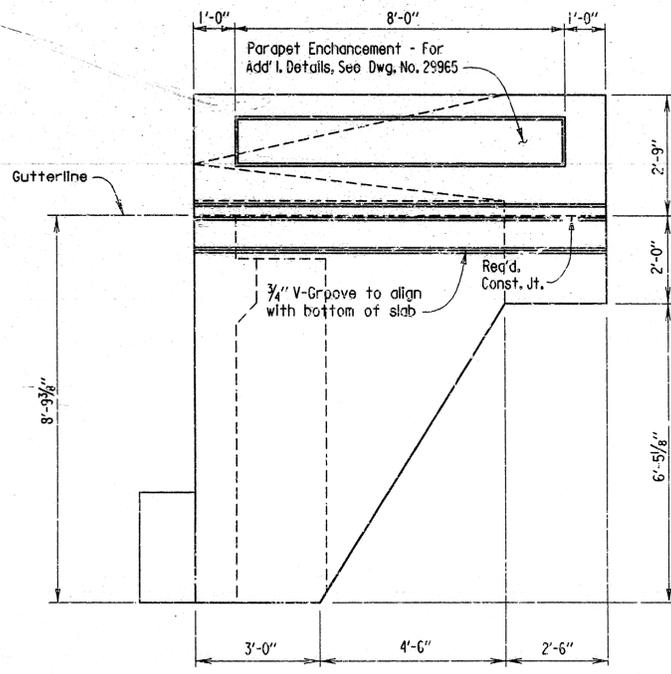
PLAN OF WING A
Scale: 1/2" = 1'-0"



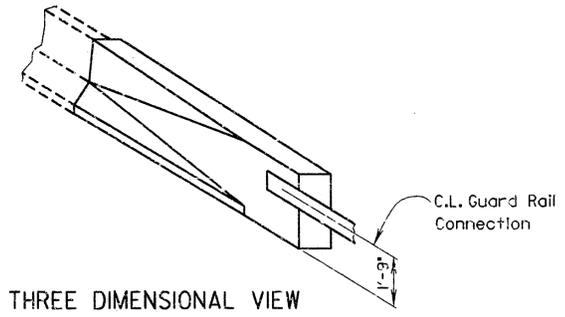
SECTION T-T
1/2" = 1'-0"



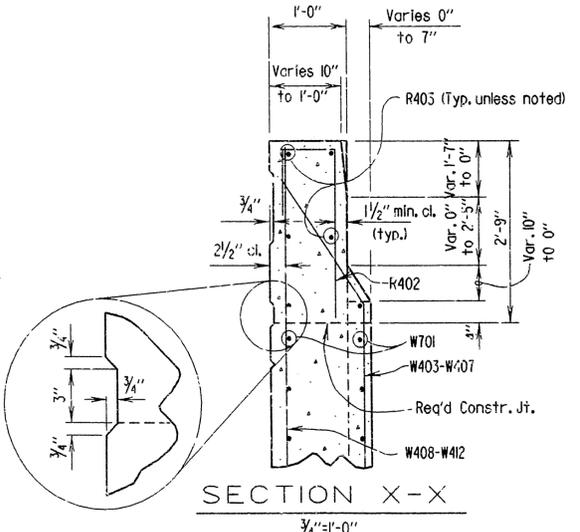
VIEW W-W
3/4" = 1'-0"



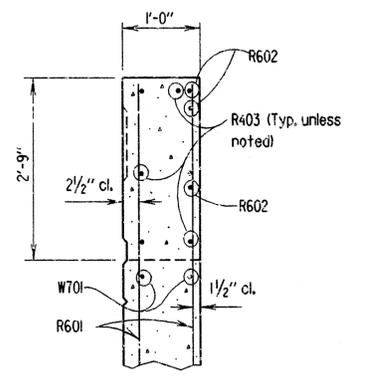
VIEW V-V
1/2" = 1'-0"



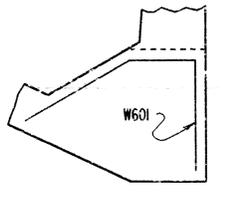
THREE DIMENSIONAL VIEW OF RAIL
No Scale



SECTION X-X
3/4" = 1'-0"



SECTION Y-Y
3/4" = 1'-0"



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

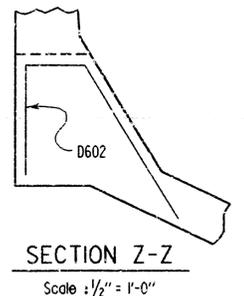
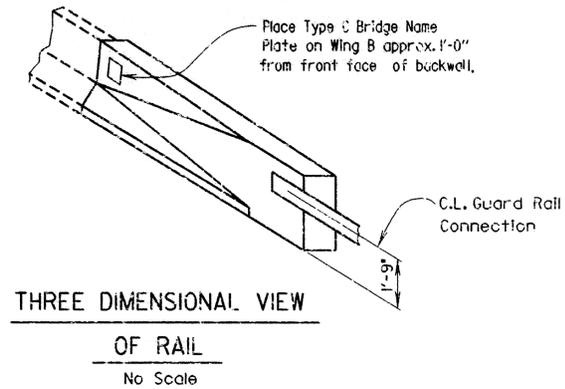
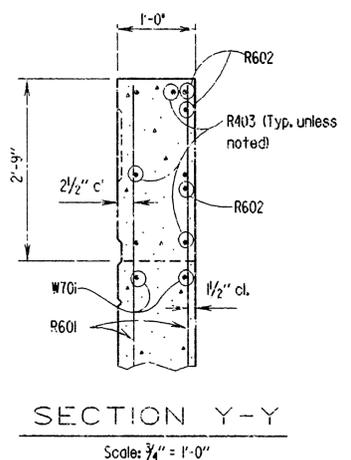
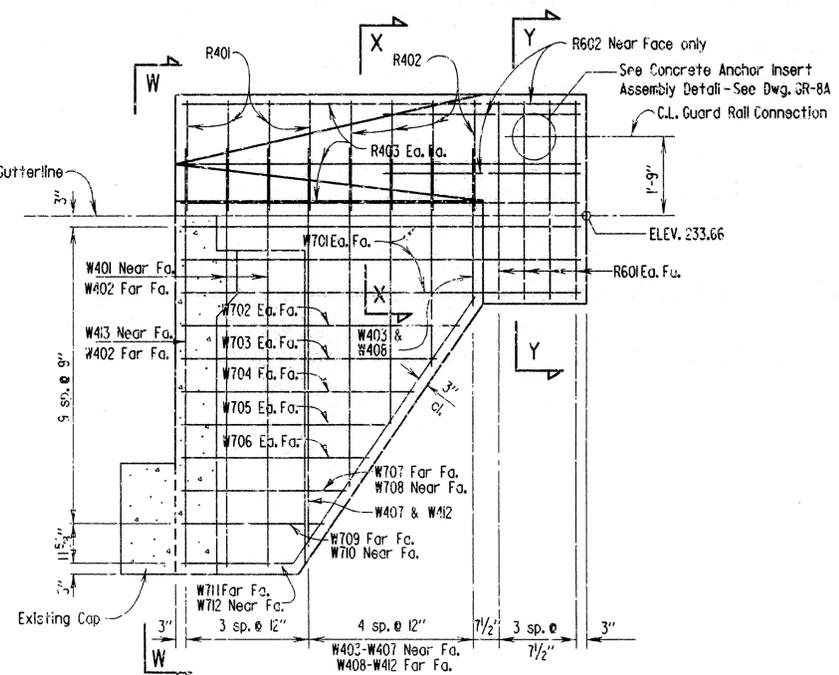
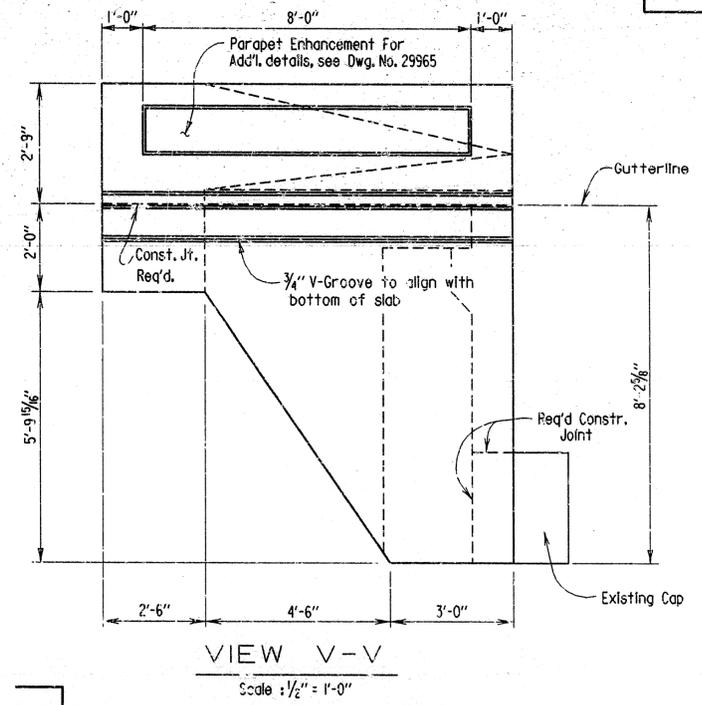
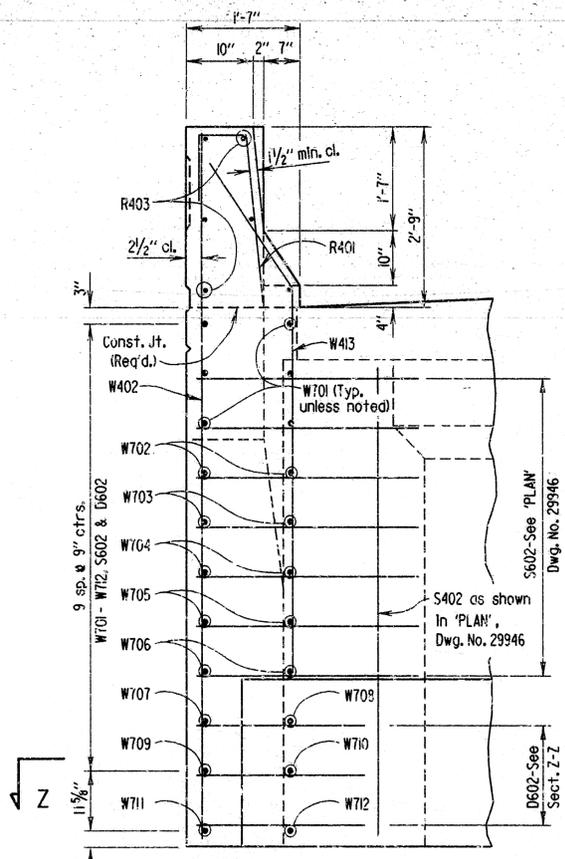
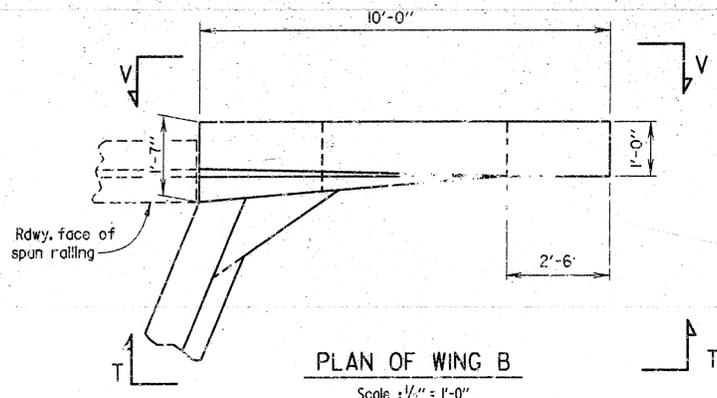
Note: For details of guard rail connections, see Dwg. No. GR-8 & GR-8A.

SHEET 3 OF 4
DETAILS OF REMODELING BENT 1
7TH STREET
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 31 MAY 88
CHECKED BY: C.J.F. DATE: 8-15-88 SCALE: As Shown
DESIGNED BY: DATE:
BRIDGE NO. 3130R DRAWING NO. 29948

Wesley Pinkerton
BRIDGE ENGINEER

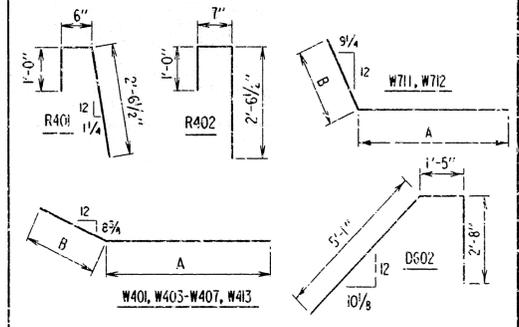
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO.	RI0008	73
						3130R - BENT 1 - 29949		



BAR LIST - WING B

MARK	NO.	REQ'D.	LENGTH	A	B	PIN DIA
R401	4		3'-11"			2"
R402	4		4'-0"			2"
R403	6		9'-8"			Str.
R601	8		4'-5"			Str.
R602	3		5'-0"			Str.
W401	2		9'-5"	8'-3"	1'-2"	2"
W402	3		10'-7"			Str.
W403-W407	1 of each		Var. 3'-6" to 8'-10"	Var. 2'-4" to 7'-8"	1'-2"	2"
W408-W412	1 of each		Var. 4'-8" to 10'-0"			Str.
W413	1		7'-11"	5'-11"	1'-2"	2"
D602	3		8'-10"			4 1/2"
W701	6		9'-8"			Str.
W702	2		6'-8"			Str.
W703	2		6'-2"			Str.
W704	2		5'-7"			Str.
W705	2		5'-0"			Str.
W706	2		4'-5"			Str.
W707	1		3'-10"			Str.
W708	1		2'-10"			Str.
W709	1		3'-3"			Str.
W710	1		2'-3"			Str.
W711	1		11'-11"	9'-5"	2'-8"	5 1/4"
W712	1		10'-11"	9'-5"	1'-8"	5 1/4"

BENDING DIAGRAMS



• Payment for furnishing and installing dowel bars will be made under the item 'Modification of Existing Bridge Structure (Bridge No. 3130)'.

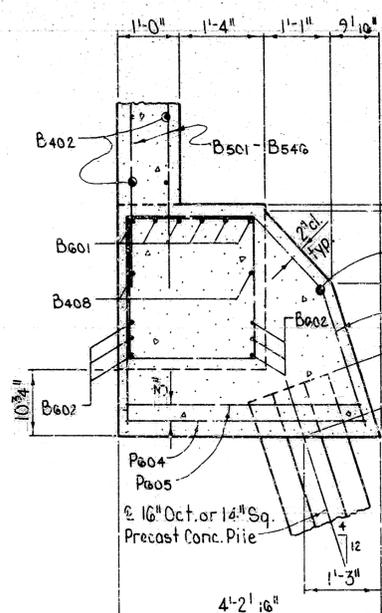
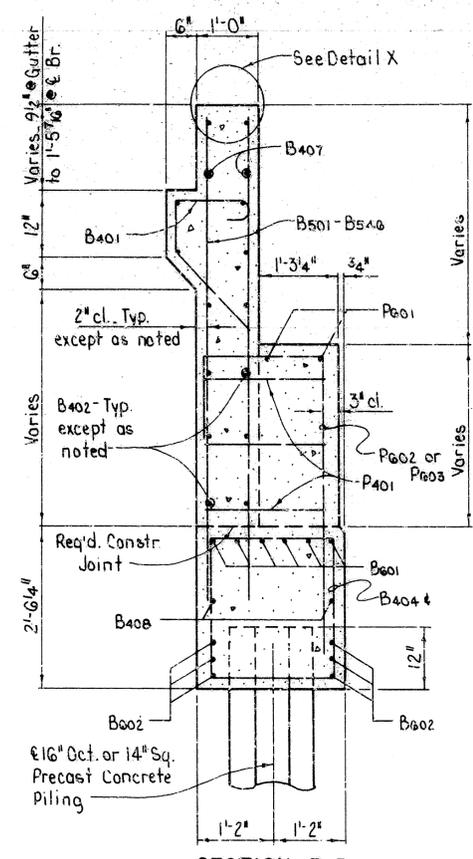
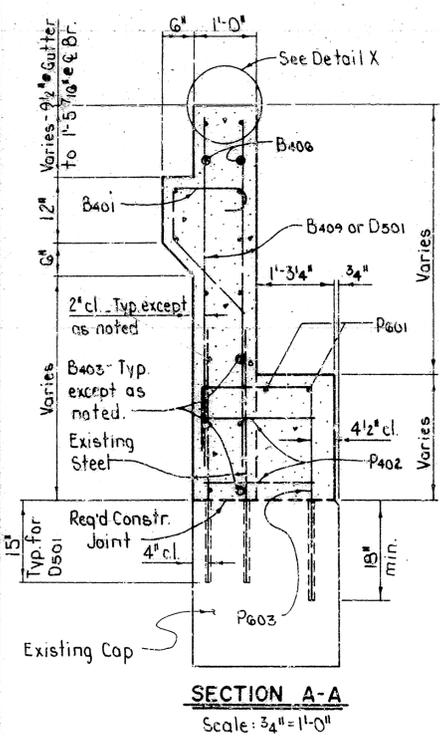
Note: For details of guard rail connections, see Dwg. No. GR-8 & GR-8A.

SHEET 4 OF 4
DETAILS OF REMODELING BENT 1
7TH STREET
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 2 JUN 88
CHECKED BY: C.J.F. DATE: 8-15-88 SCALE: As Shown
DESIGNED BY: DATE:
BRIDGE NO. 3130R DRAWING NO. 29949

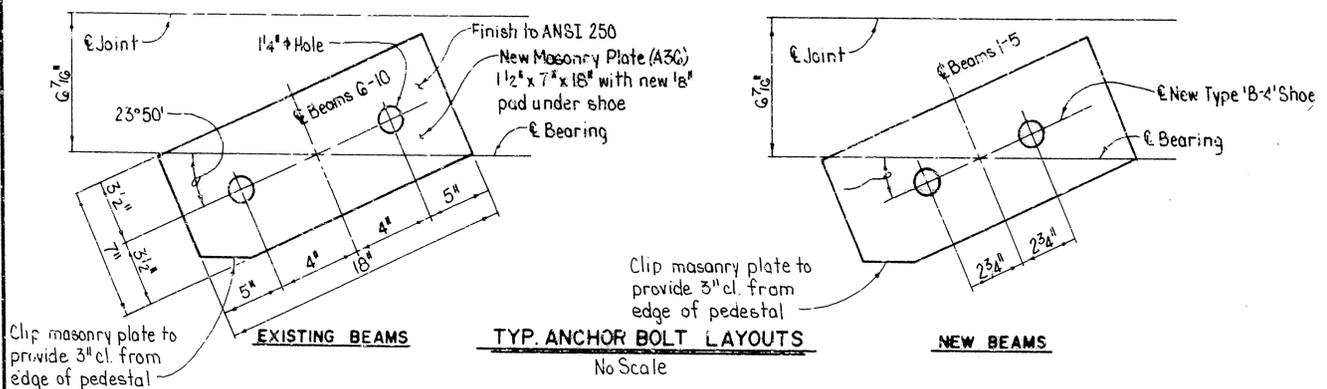
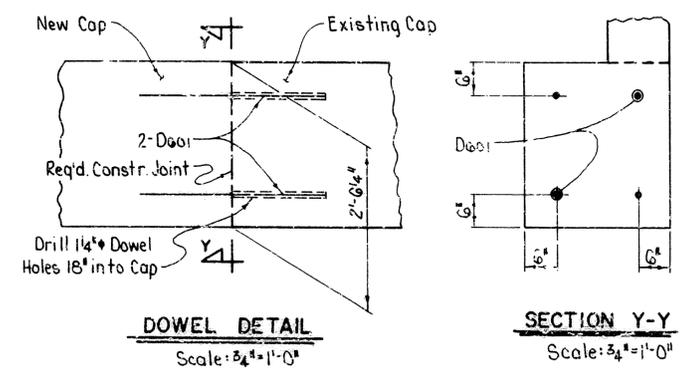
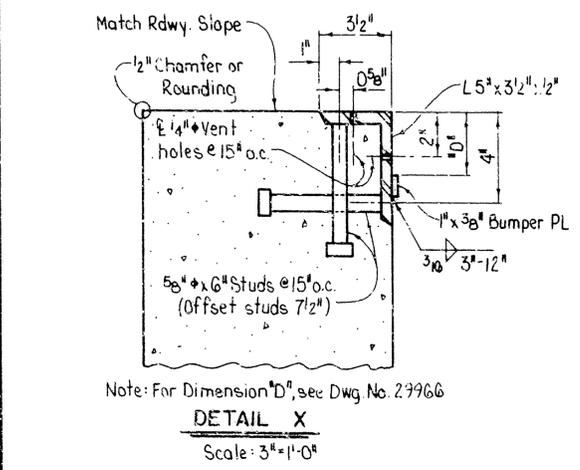
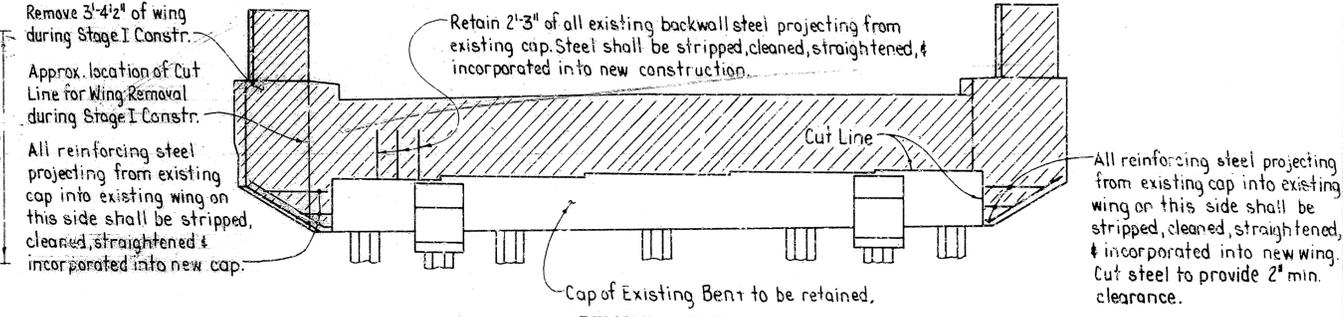
Ward Paulston
BRIDGE ENGINEER

DATE REVISION	DATE FILMED	DATE REVISION	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		RI0008	75	235
				3130R - BT. NO. 7 - 29951				



B601 in top of Cap shall be spaced to allow room for Anchor Bolts. Min. Clear Spacing=2"

NOTE: Care shall be taken to avoid damage to the existing steel to be retained. If two or more adjacent bars, or two bars separated by only one bar, are broken in the concrete removal or bar straightening process, replacement dowel bars shall be drilled and grouted in place at the contractor's expense.



General Notes

All concrete shall be Class "S" with a minimum 28 day compressive strength $f'c = 3,500$ 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).

The wings & backwall shall not be poured until Span 6 has been poured.

Construction Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, 1988 edition, with applicable supplemental specifications and special provisions.

Design Specifications: AASHTO Standard Specifications for Highway Bridges, 1983 with current interim specifications.

Structural steel in end bents shall be ASTM A36 and shall be paid for as "Structural Steel in Beam Spans (A36)".

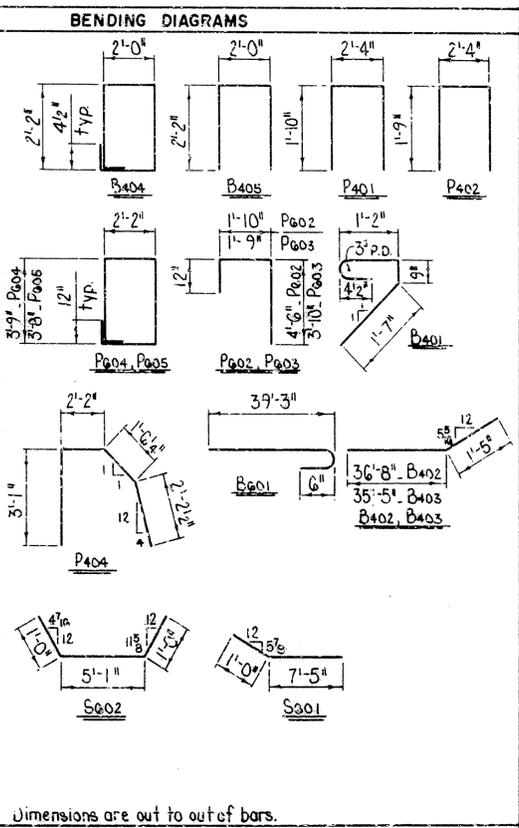
For additional notes see layout & Dwg. Nos. 29965 & 29966.

Existing shoes shall have new masonry plates as shown in details. Use Type 3-4 shoes for new beams with clips as shown in details. For details of B-4 shoes, see Dwg. No. 29966. All shoes will have 1/8" bearing pad.

Note: For Limits of Excavation for Existing End Bents, See Dwg. No. 29947

BAR LIST

MARK	NO.	REQ'D	LENGTH	P.D.
B401	66		3'-11"	2"
B402	14		38'-11"	2"
B403	14		36'-10"	2"
B404	45		8'-8"	2"
B405	15		6'-2"	2"
B406	2		24'-0"	Str.
B407	2		25'-7"	Str.
B408	2		39'-3"	Str.
B409	60		6'-1"	Str.
P401	13		5'-10"	2"
P402	10		5'-8"	2"
P403	2		2'-4"	Str.
P404	6		8'-11"	2"
S401	4		7'-0"	Str.
S402	3		7'-8"	Str.
D401*	2		7'-7"	Str.
B501	3		6'-9"	Str.
B502*	2 ea		Var. 6'-9 1/2" to 7'-9 1/2"	Str.
B546	16		7'-10"	Str.
B601	6		59'-11"	4 1/2"
B602	6		39'-3"	Str.
P601	20		2'-4"	Str.
P602	16		7'-0"	4 1/2"
P603*	28		6'-3"	4 1/2"
P604	2		13'-0"	4 1/2"
P605	2		12'-10"	4 1/2"
S601	7		8'-5"	4 1/2"
S602	7		6'-11"	4 1/2"
D601*	4		3'-0"	Str.
D602*	60		7'-10"	Str.
D603*	1		7'-0"	Str.



Note: For Bar Lists & Bending Diagrams for Wings, See Dwg. Nos. 29952 & 29953.

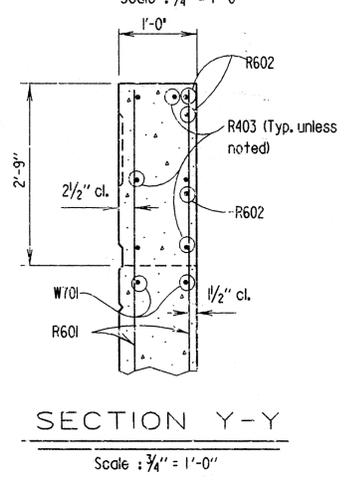
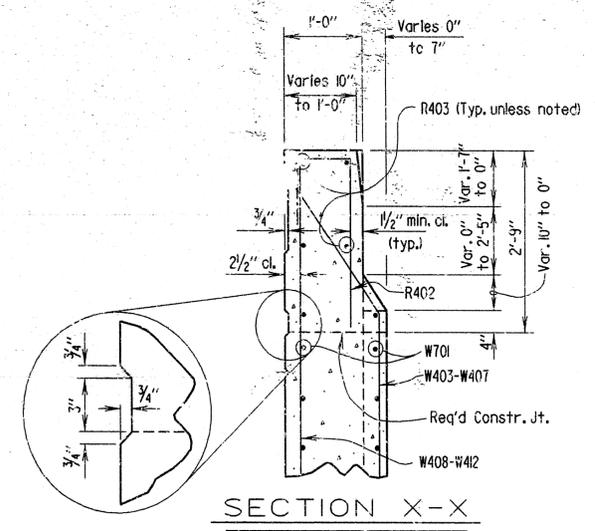
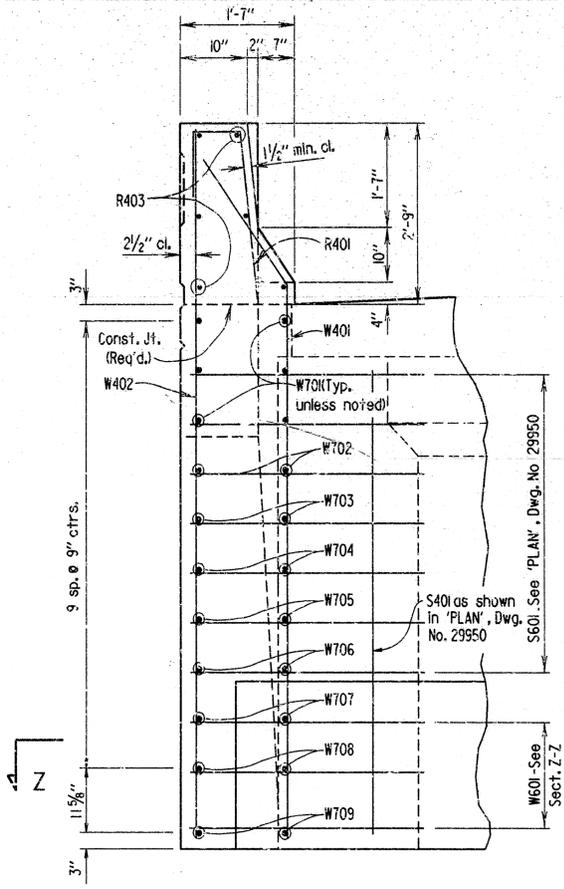
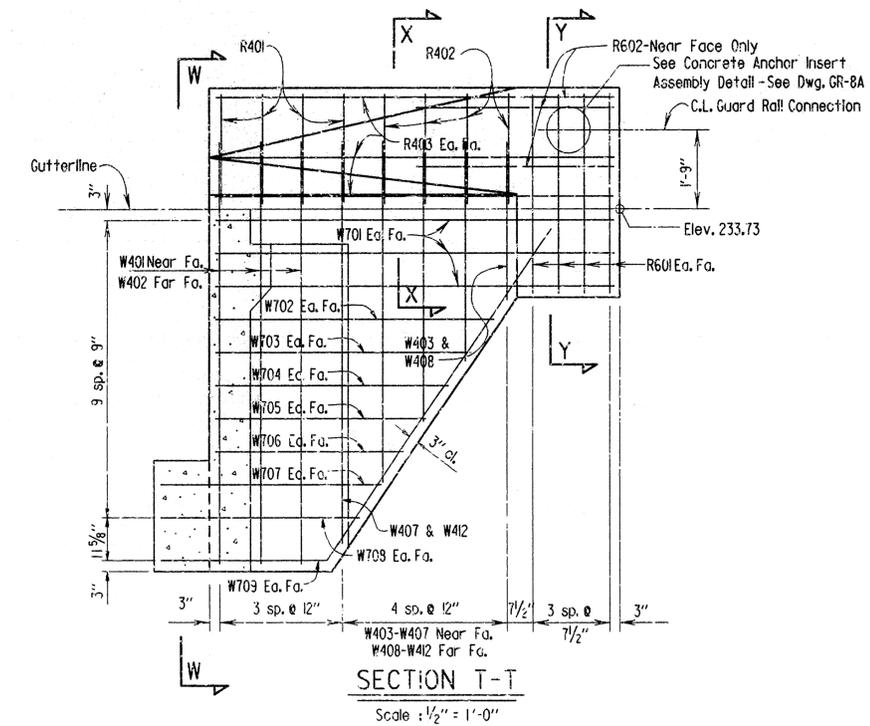
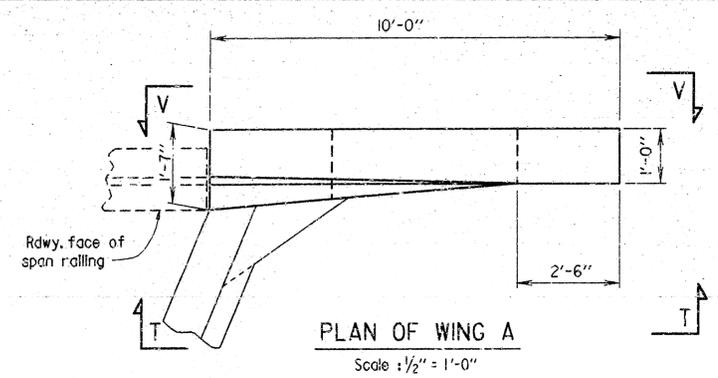
* Payment for furnishing & installing dowel bars will be made under the item "Modification of Existing Bridge Structure (Bridge No. 3130)."

SHEET 2 OF 4
DETAILS OF REMODELING BENT 7
7TH STREET
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 6 JUN 88
CHECKED BY: C.J.F. DATE: 8-15-88
DESIGNED BY: D.H.P. DATE: 2-16-88
BRIDGE NO. 3130R DRAWING NO. 29951

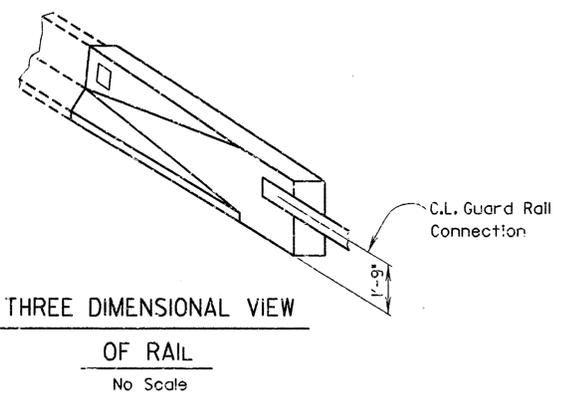
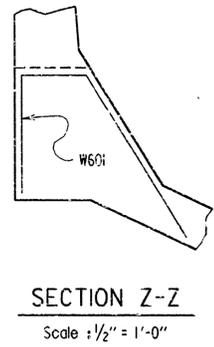
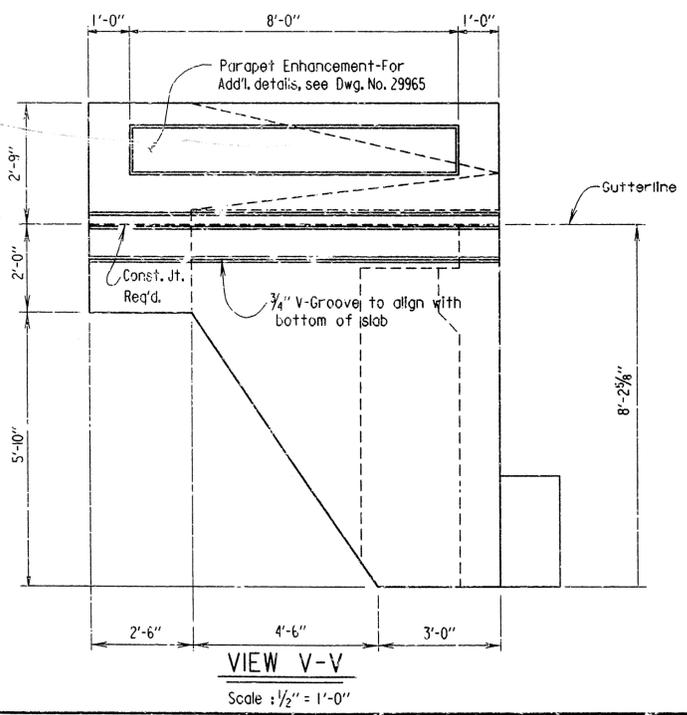
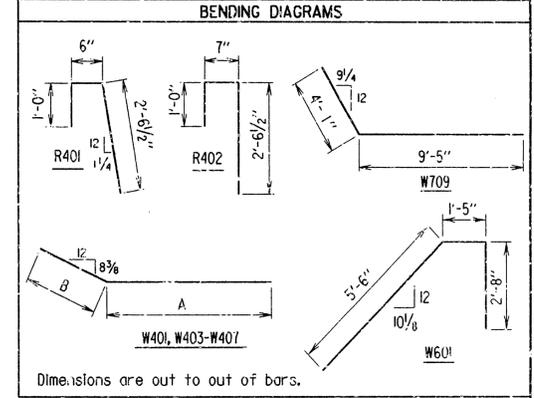
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		RI0008	76	235

3130R - BENT 7 - 29952



BAR LIST - WING A

MARK	NO. REQ'D.	LENGTH	A	B	PIN DIA.
R401	4	3'-11"			2"
R402	4	4'-0"			2"
R403	6	9'-8"			Str.
R601	8	4'-5"			Str.
R602	3	5'-0"			Str.
W401	3	9'-6"	8'-4"	1'-2"	2"
W402	3	10'-7"			Str.
W403-W407	1 of each	Var. 3'-6" to 8'-10"	Var. 2'-4" to 7'-8"	1'-2"	2"
W408-W412	1 of each	Var. 4'-7" to 10'-0"			Str.
W601	3	9'-3"			4 1/2"
W701	6	9'-8"			Str.
W702	2	6'-8"			Str.
W703	2	6'-2"			Str.
W704	2	5'-7"			Str.
W705	2	5'-0"			Str.
W706	2	4'-5"			Str.
W707	2	5'-2"			Str.
W708	2	4'-7"			Str.
W709	2	13'-4"			5 1/4"

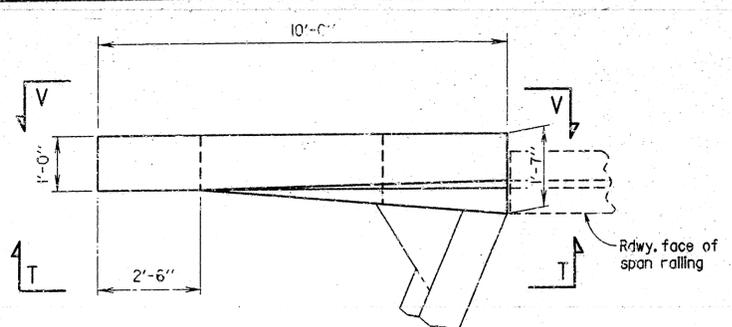


Note: For details of guard rail connections, see Dwg. No. GR-8 & GR-8A.

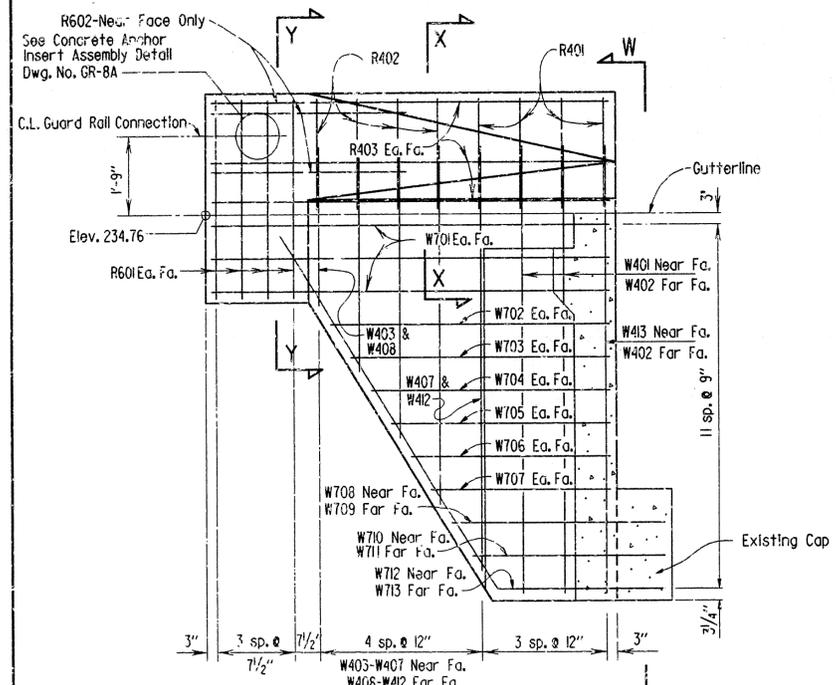
SHEET 3 OF 4
 DETAILS OF REMODELING BENT NO. 7
 7TH STREET
 ROUTE SEC.
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 DRAWN BY: KUH DATE: JUN 88
 CHECKED BY: C J F DATE: 8-15-88 SCALE: AS NOTED
 DESIGNED BY: DATE:
 BRIDGE NO. 3130R DRAWING NO. 29952

Wesley Pinkerton
 BRIDGE ENGINEER

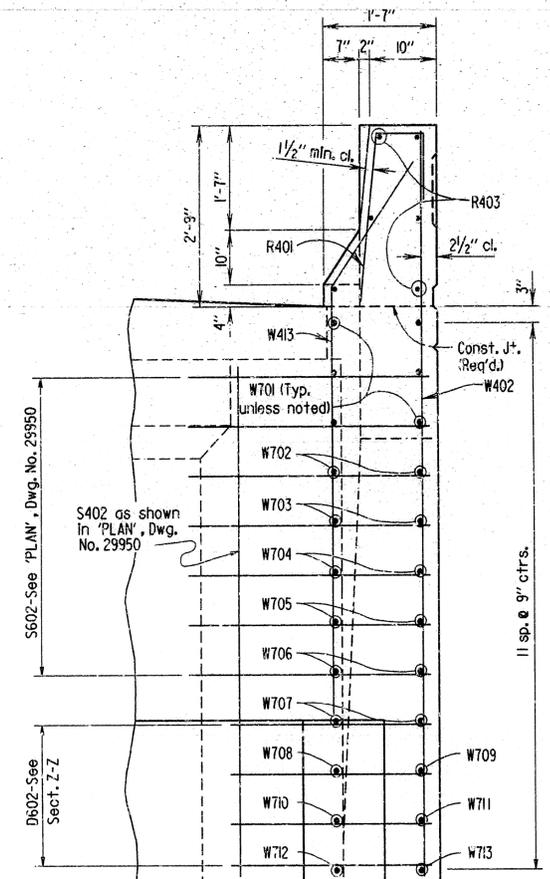
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R10008	77	235
				① 3130R - BENT 7 - 29953				



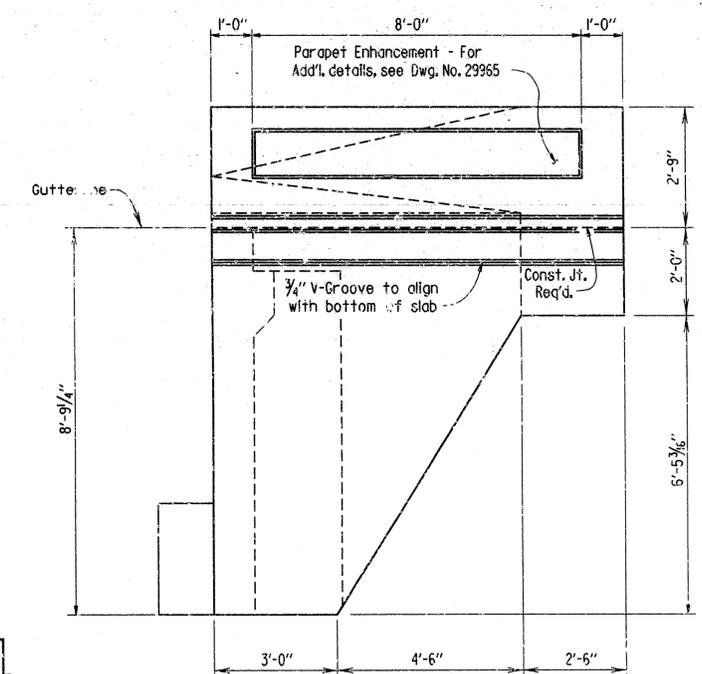
PLAN OF WING B
Scale: 1/2" = 1'-0"



SECTION T-T
Scale: 1/2" = 1'-0"



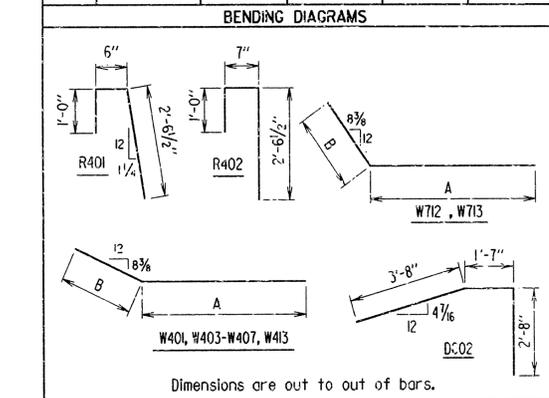
VIEW W-W
Scale: 3/4" = 1'-0"



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

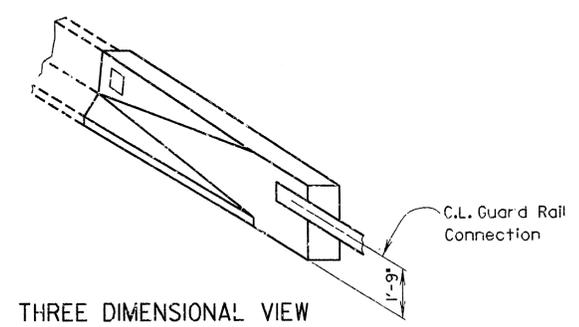
BAR LIST - WING B

MARK	NO.	REQ'D.	LENGTH	A	B	PIN DIA.
R401	4		3'-11"			2"
R402	4		4'-0"			2"
R403	6		9'-8"			Str.
R601	8		4'-5"			Str.
R602	3		5'-0"			Str.
W401	2		10'-1"	8'-11"	1'-2"	2"
W402	3		11'-2"			Str.
W403- W407	1 of each		Var. 3'-6" to 9'-3"	Var. 2'-4" to 8'-3"	1'-2"	2"
W408- W412	1 of each		Var. 4'-7" to 10'-6"			Str.
W413	1		7'-8"	6'-6"	1'-2"	2"
D602	4		7'-9"			4 1/2"
W701	6		9'-8"			Str.
W702	2		6'-9"			Str.
W703	2		6'-3"			Str.
W704	2		5'-9"			Str.
W705	2		5'-2"			Str.
W706	2		4'-8"			Str.
W707	2		4'-2"			Str.
W708	1		3'-11"			Str.
W709	1		4'-11"			Str.
W710	1		3'-5"			Str.
W711	1		4'-5"			Str.
W712	1		12'-11"	9'-11"	3'-2"	5 1/4"
W713	1		13'-9"	9'-11"	4'-0"	5 1/4"

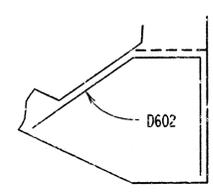


* Payment for furnishing and installing dowel bars will be made under the item 'Modification of Existing Bridge Structure (Bridge No. 3130)'

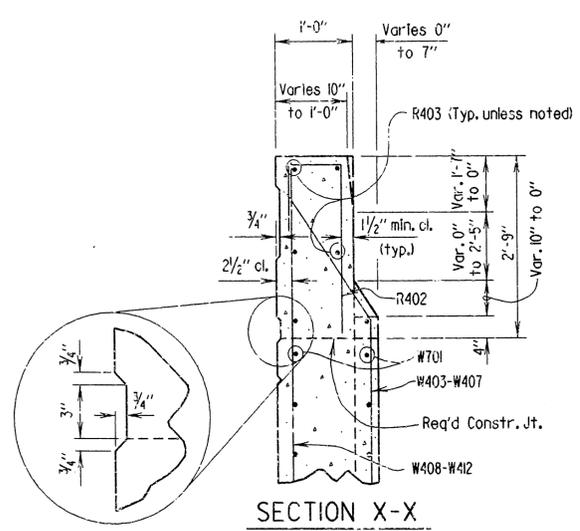
Note: For details of guard rail connections, see Dwg. No. GR-8 & GR-8A.



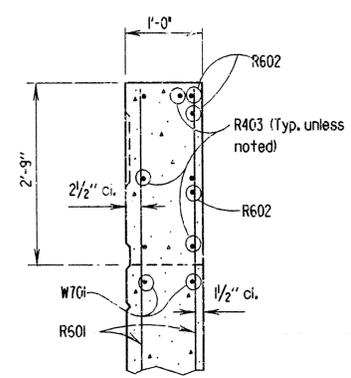
THREE DIMENSIONAL VIEW OF RAIL
No Scale



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



SECTION X-X
Scale: 3/4" = 1'-0"



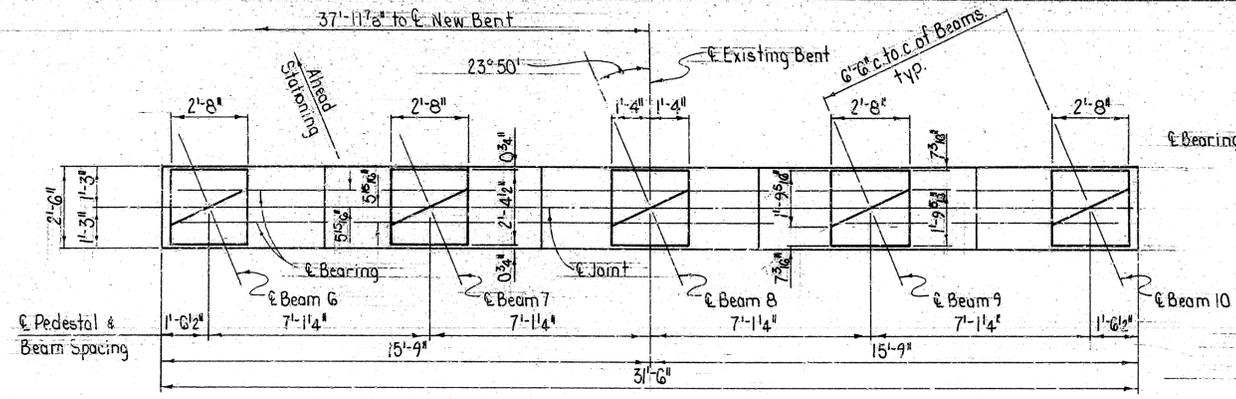
SECTION Y-Y
Scale: 3/4" = 1'-0"

SHEET 4 OF 4
DETAILS OF REMODELING BENT 7
7TH STREET
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

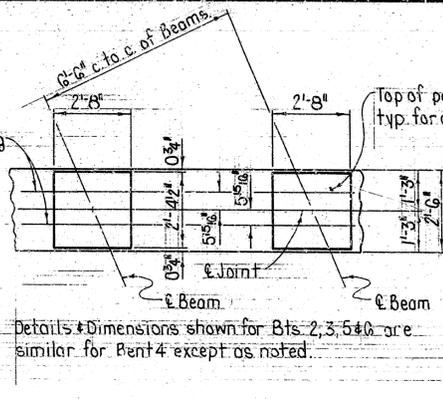
DRAWN BY: KDH DATE: 15 JUN 88
CHECKED BY: C.J.F. DATE: 07 FEB 88 SCALE: AS NOTED
DESIGNED BY: DATE:
BRIDGE NO. 3130R DRAWING NO. 29953

W. Paul Pinkerton
BRIDGE ENGINEER

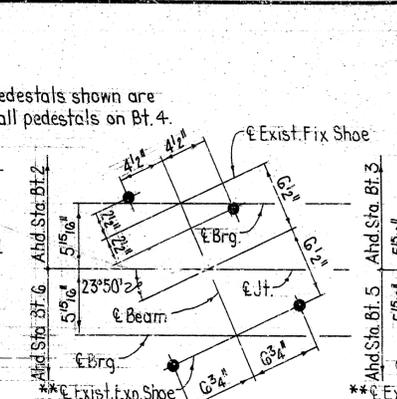
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. R10008						78	235	
3130R- BTS. 2B-6B - 29954								



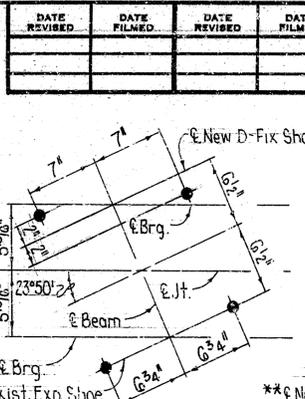
PLAN - BENTS 2B, 3B, 5B & 6B
Scale: 3/8"=1'-0"



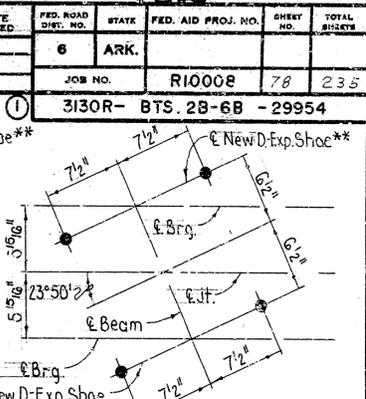
PARTIAL PLAN - BENT 4B
Scale: 3/8"=1'-0"



BENTS 2B & 6B

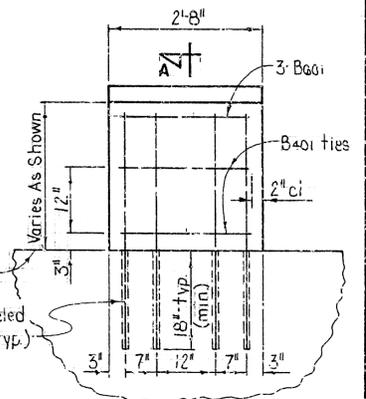


BENTS 3B & 5B

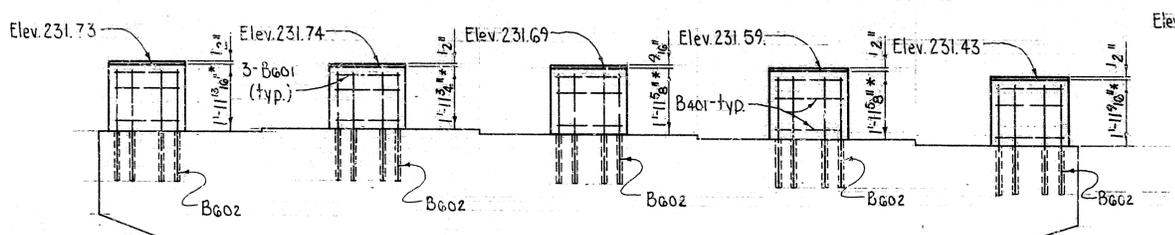
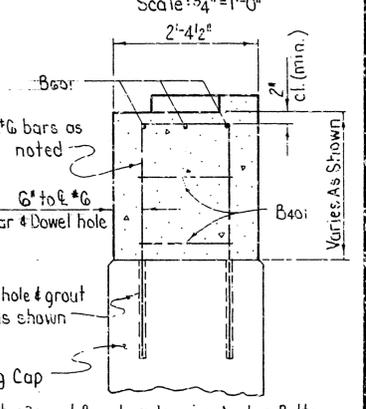


BENT 4B

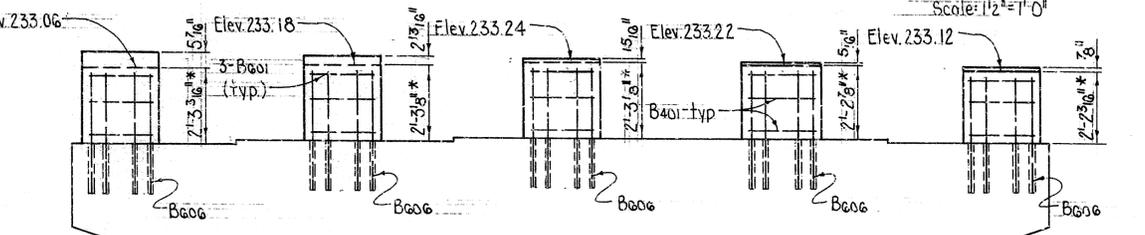
TYP. ANCHOR BOLT LAYOUTS
Scale: 1/2"=1'-0"



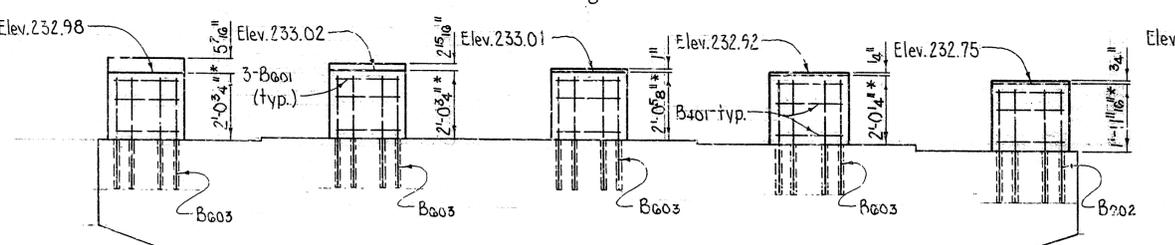
TYP. RISER DETAIL
Scale: 3/4"=1'-0"



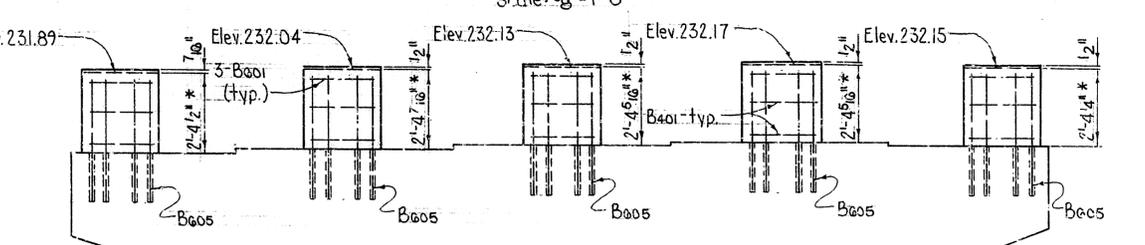
ELEVATION - BENT 2B
Looking Ahead
Scale: 3/8"=1'-0"



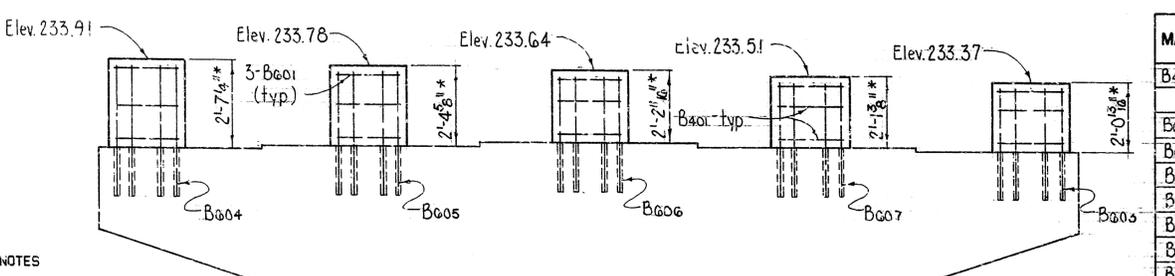
ELEVATION - BENT 5B
Looking Ahead
Scale: 3/8"=1'-0"



ELEVATION - BENT 3B
Looking Ahead
Scale: 3/8"=1'-0"



ELEVATION - BENT 6B
Looking Ahead
Scale: 3/8"=1'-0"



ELEVATION - BENT 4B
Looking Ahead
Scale: 3/8"=1'-0"

BAR LIST - PER BENT

MARK	NUMBER REQUIRED					LENGTH	'A'	P. D.	BENDING DIAGRAMS
	BT. 2B	BT. 3B	BT. 4B	BT. 5B	BT. 6B				
B401	10	10	10	10	10	8'-1"	-	2"	
B601	15	15	15	15	15	2'-4"	-	5/8"	
B602	20	4	-	-	-	7'-9"	3'-4"	4 1/2"	
B603	-	16	4	-	-	7'-11"	3'-5"	4 1/2"	
B604	-	-	4	-	-	9'-1"	4'-0"	4 1/2"	
B605	-	-	4	-	20	8'-7"	3'-9"	4 1/2"	
B606	-	-	4	20	-	8'-3"	3'-7"	4 1/2"	
B607	-	-	4	-	-	8'-1"	3'-6"	4 1/2"	

Dimensions are out to out of bars.

GENERAL NOTES

All concrete shall be Class "S" with a minimum 28 day compressive strength $f'_c = 3,500$ 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.).

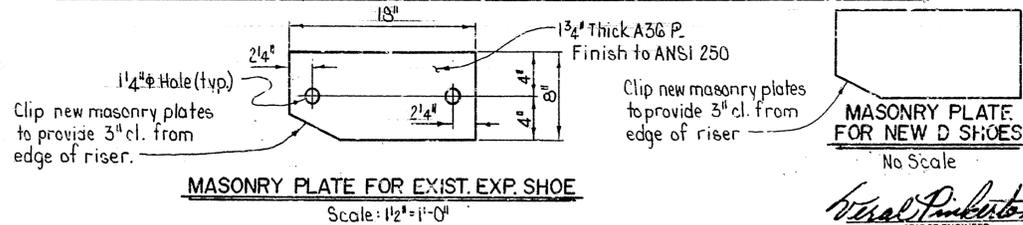
All drilling and grouting for doweled bars to be paid for as part of the item "Modification of Existing Bridge Structure (Bridge No. 3130)."

New anchor bolts to be provided for all shoes. For Typ. Anchor Bolt Details, See Dwg. No. 29966.

For additional notes, see Dwg. Nos. 29965 & 29966.

* These dimensions shall be verified in the field. The Elevations shown are to the low beam seat of riser.

** Existing expansion shoes shall have new masonry plates. See details this drawing. For details of new fixed and expansion "D" shoes, See Dwg. No. 29966. New 1/8" thick bearing pads are to be used for all shoes.

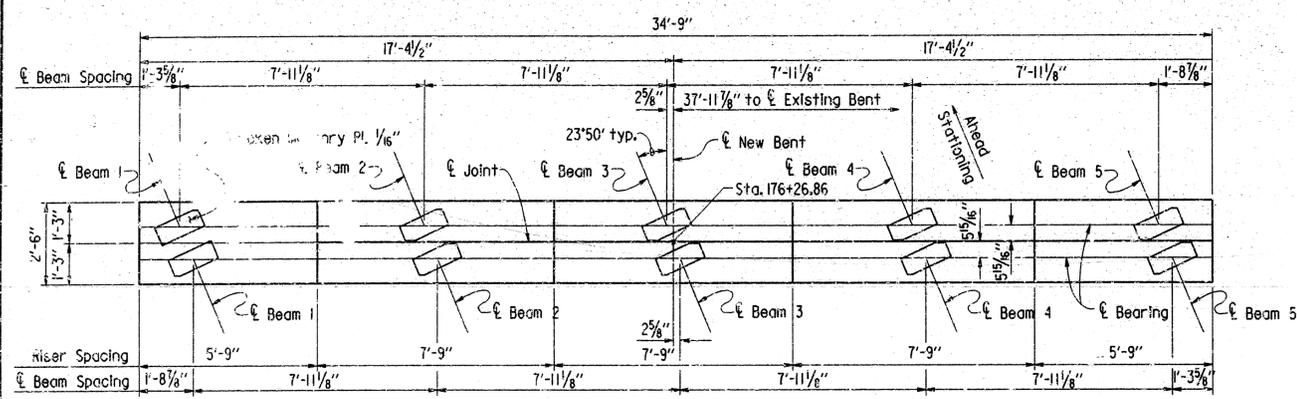


DETAILS OF REMODELING EXISTING BENTS
7TH STREET
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

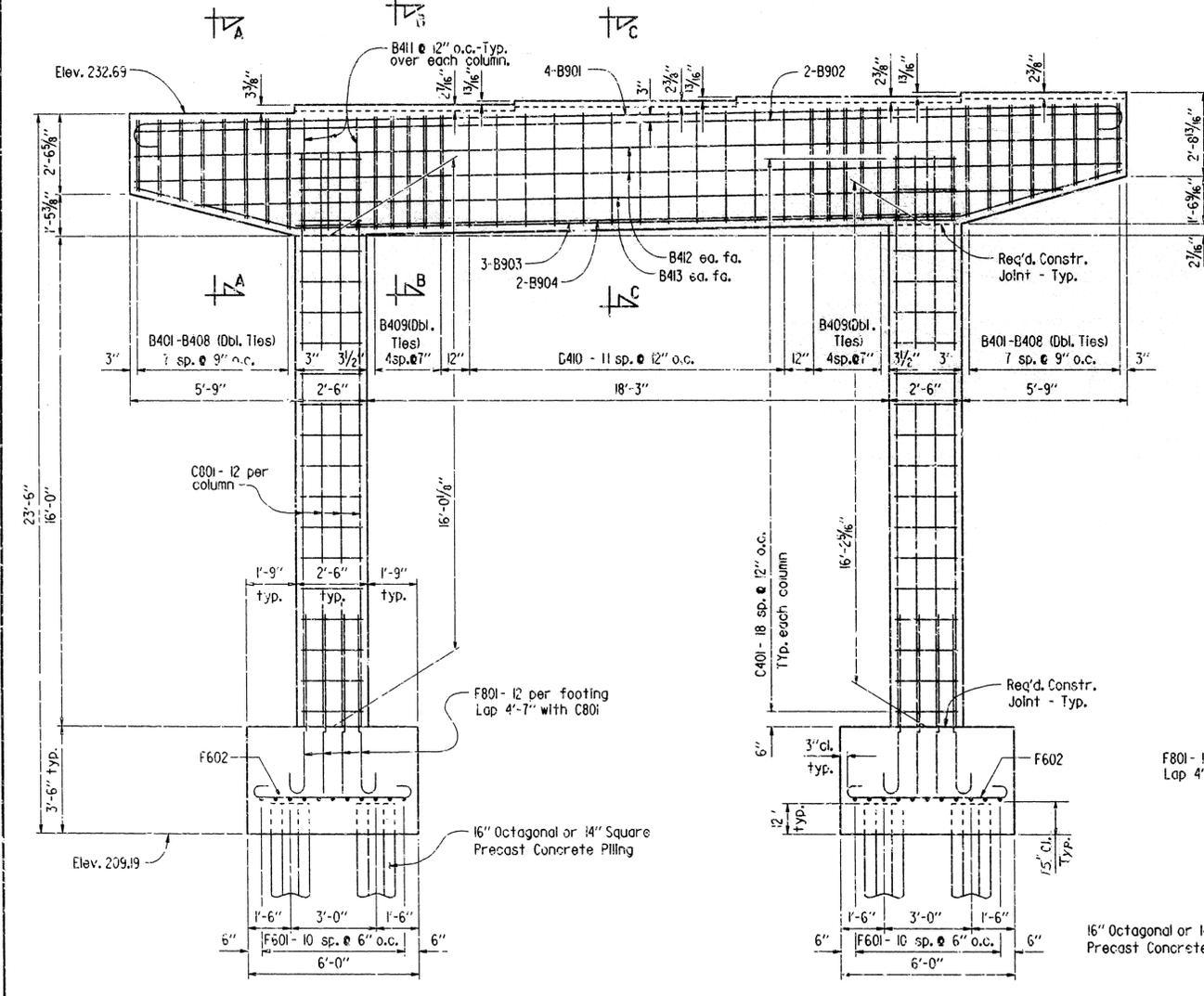
DRAWN BY: KDH DATE: 22 APR 88
CHECKED BY: C.J.F. DATE: 8-15-88
DESIGNED BY: D.H.P. DATE: 2-16-88

BRIDGE NO. 3130R DRAWING NO. 29954

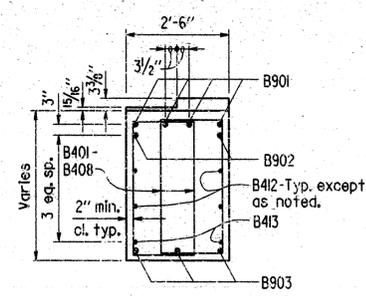
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. R10008		79		235
				① 3130R-BENT 2A (7TH ST.)-29955				



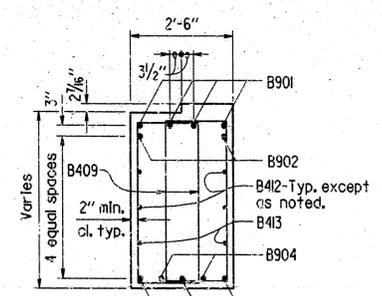
PLAN - BENT 2A
Scale: 1/8" = 1'-0"



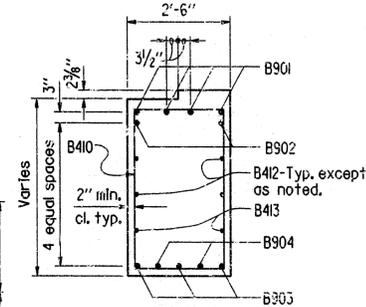
ELEVATION - BENT 2A
(Looking Ahead)
Scale: 1/8" = 1'-0"



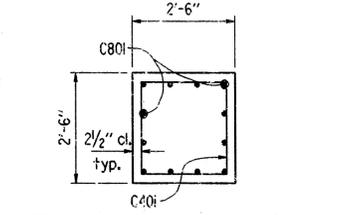
SECTION A-A
Scale: 1/2" = 1'-0"



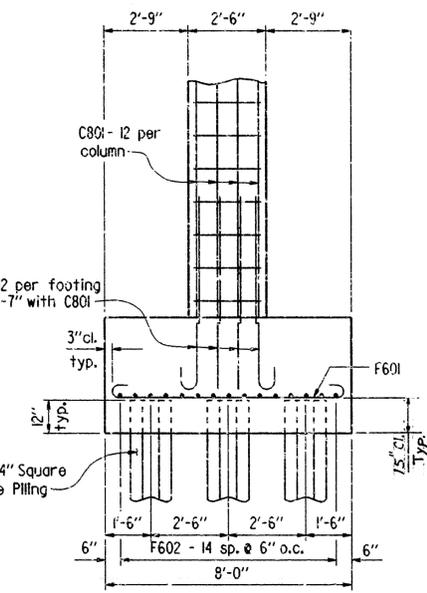
SECTION B-B
Scale: 1/2" = 1'-0"



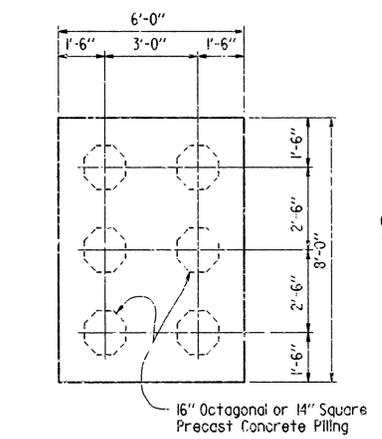
SECTION C-C
Scale: 1/2" = 1'-0"



TYP. SECTION THRU COLUMN
Scale: 1/2" = 1'-0"



PARTIAL END VIEW
Scale: 3/8" = 1'-0"



SEC1. THRU FTG. SHOWING PILES
Scale: 3/8" = 1'-0"

BAR LIST

MARK	NO. REOD.	LENGTH	A	B	P.D.	BENDING DIAGRAMS
B401-B408	4 ea.	Var. 7'-10" to 10'-7"	1'-6"	Var. 2'-2 3/4" to 3'-7 1/4"	2"	A, B
B409	20	10'-8"	1'-6"	3'-8"	2"	A, B
B410	12	12'-0"	2'-2"	3'-8"	2"	A, B
B411	6	9'-4"	2'-2"	3'-8"	2"	A, B
B412	4	34'-5"			Str.	
B413	2	29'-11"			Str.	
C401	38	8'-8"	2'-1"	2'-1"	2"	A, B
F601	22	8'-10"	7'-6"	6"	4 1/2"	F601, F602, B901
F602	30	6'-10"	5'-6"	6"	4 1/2"	F601, F602, B901
C801	24	16'-9"			Str.	
F801	24	7'-11"	7'-0"	8"	6"	
B901	4	36'-11"	34'-5"	10"	9"	
B902	2	34'-5"			Str.	
B903	3	34'-9"			See Diagram	
B904	2	23'-3"			Str.	

Dimensions are out to out of bars.

GENERAL NOTES

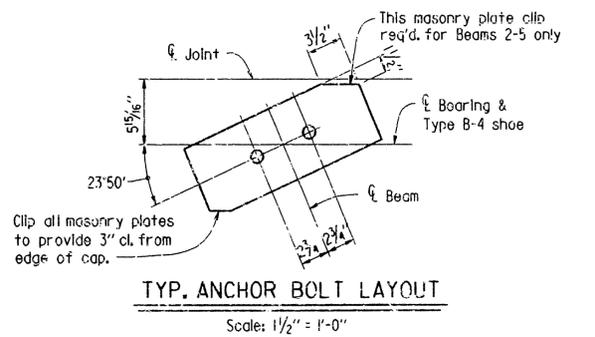
ALL CONCRETE SHALL BE CLASS "S" WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH. f'c = 3500 PSI AND SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4 INCHES UNLESS OTHERWISE NOTED.

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

LIVE LOAD: HS20 METHOD OF DESIGN: LOAD FACTOR

FOR ADDITIONAL NOTES AND FILE NOTES, SEE LAYOUT & DWG. NO. 29965 & 29966.

FOR DETAILS OF TYPE "B-4" SHOES & ANCHOR COLTS, SEE DWG. NO. 25965.



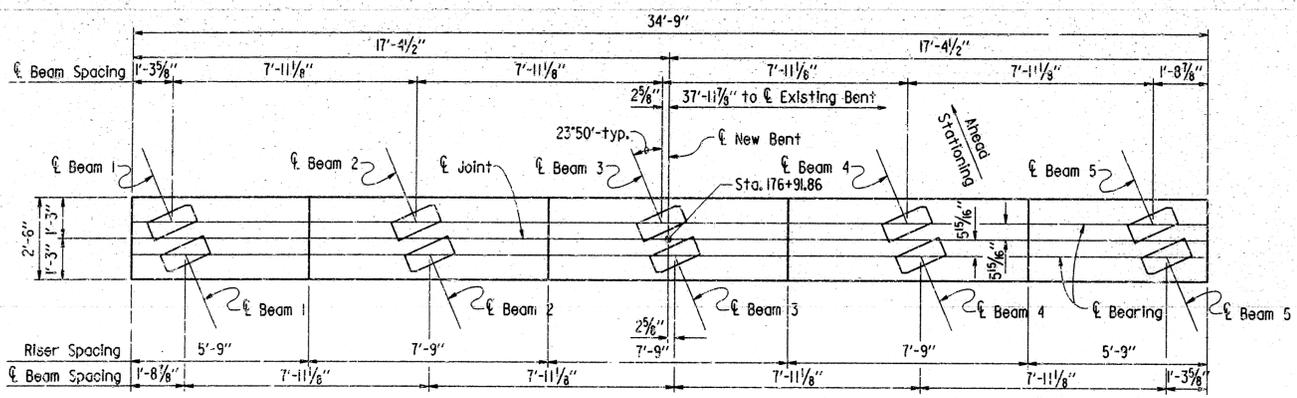
TYP. ANCHOR BOLT LAYOUT
Scale: 1/2" = 1'-0"

DETAILS OF BENT NO. 2A
7TH STREET
ROUTE 79
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

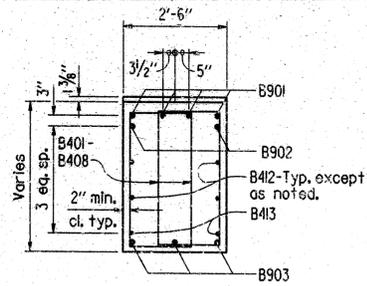
DRAWN BY: KDH DATE: 21 APR 88
CHECKED BY: C.J.F. DATE: 8-18-88 SCALE: AS NOTED
DESIGNED BY: D.H.P. DATE: 2-16-88
BRIDGE NO. 313 DRAWING NO. 29955

Wesley P. ...
BRIDGE ENGINEER

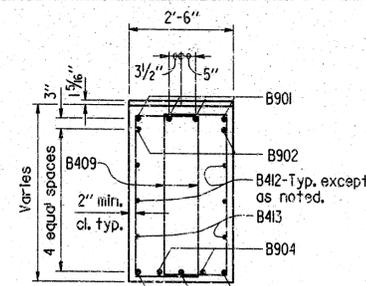
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO.	R10008	B 0 2 3 5
						① 3130R-BENT 3A (7TH ST.)-29956		



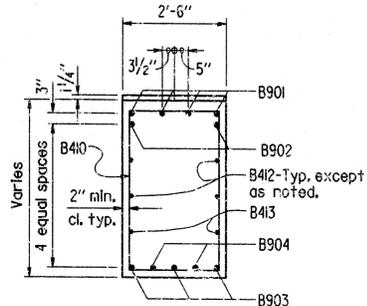
PLAN - BENT 3A
Scale: 3/8" = 1'-0"



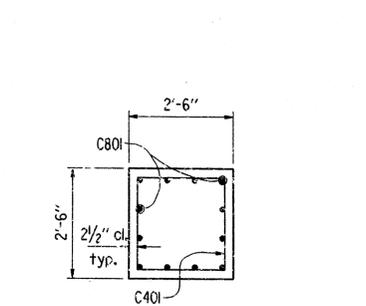
SECTION A-A
Scale: 1/2" = 1'-0"



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



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

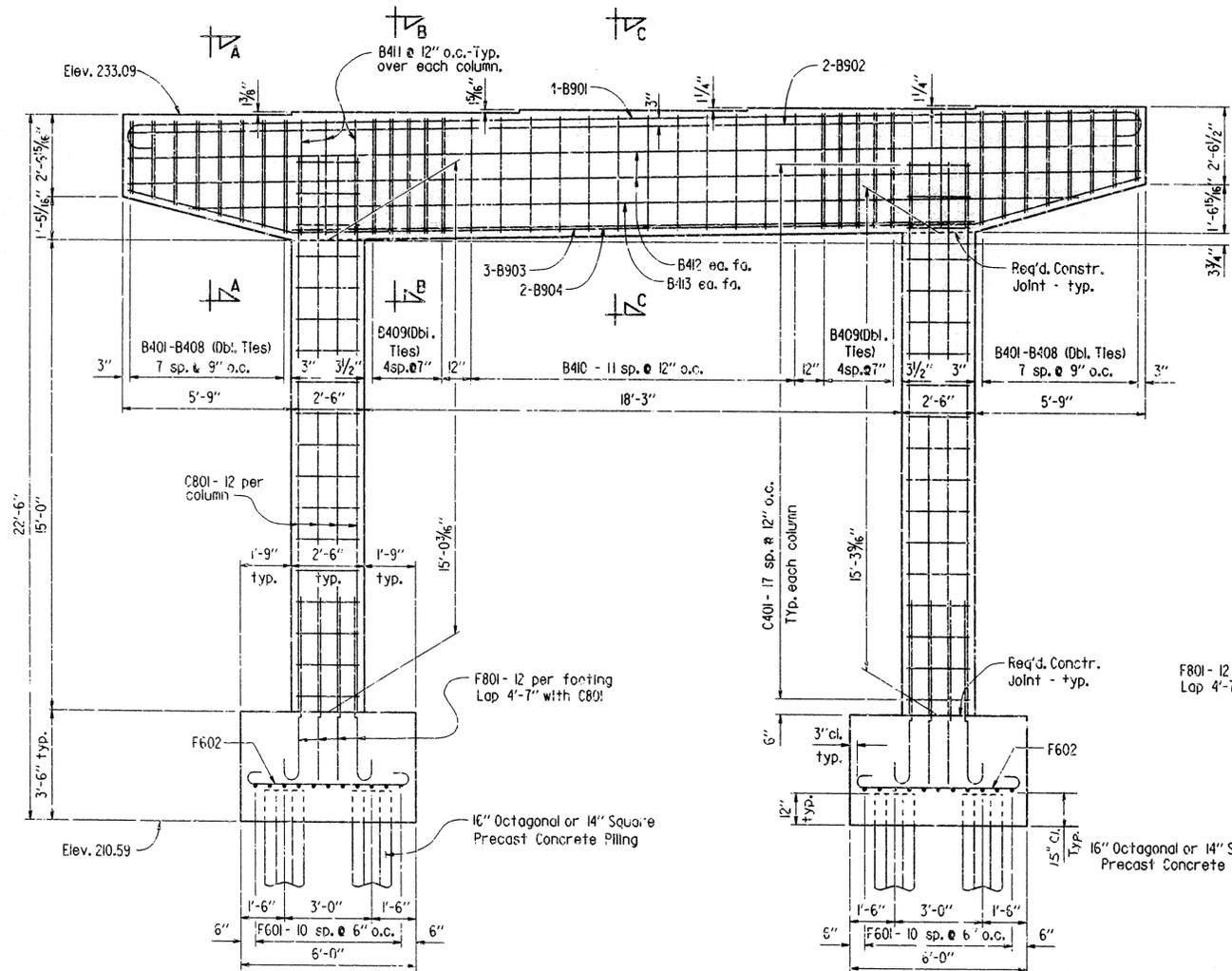


TYP. SECTION THRU COLUMN
Scale: 1/2" = 1'-0"

BAR LIST

MARK	NO. REQD.	LENGTH	A	B	P.D.	BENDING DIAGRAMS
B401 - E408	4 ea.	Var. 8'-0" to 10'-9"	1'-7"	Var. 2'-2 3/4" to 3'-7 1/4"	2"	
B409	20	10'-10"	1'-7"	3'-8"	2"	
B410	12	12'-0"	2'-2"	3'-8"	2"	
B411	6	9'-4"	2'-2"	3'-6"	2"	
B412	4	34'-5"			Str.	
B413	2	29'-11"			Str.	
C401	36	8'-6"	2'-1"	2'-1"	2"	
F601	22	8'-10"	7'-6"	6"	4 1/2"	
F602	30	6'-10"	5'-6"	6"	4 1/2"	
C801	24	17'-9"			Str.	
F801	24	7'-11"	7'-0"	8"	6"	
B901	4	36'-11"	34'-5"	10"	9"	
B902	2	34'-5"			Str.	
B903	3	34'-9"	See Diagram		9"	
B904	2	23'-3"			Str.	

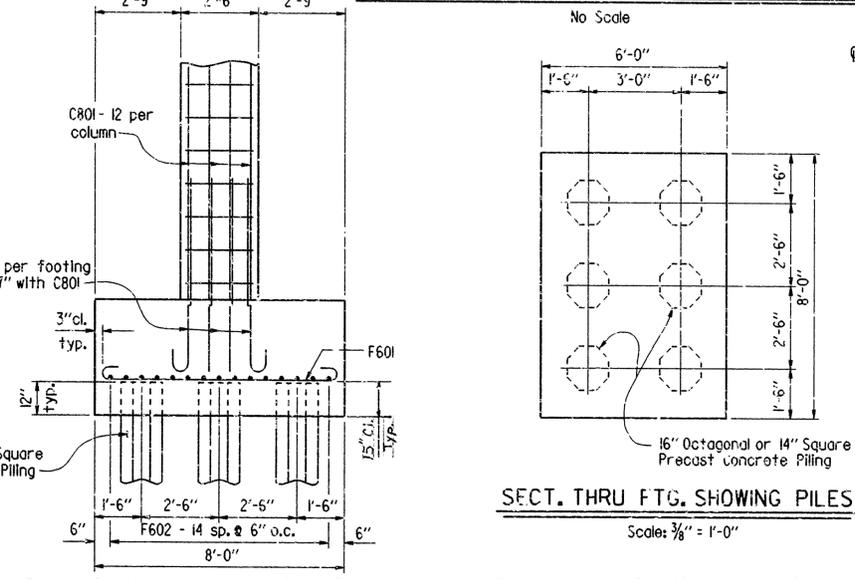
Dimensions are out to out of bars.



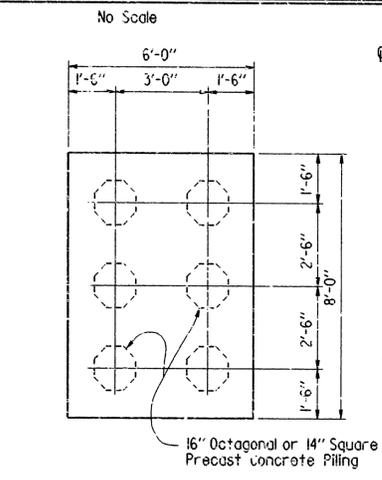
ELEVATION - BENT 3A
(Looking Ahead)
Scale: 3/8" = 1'-0"



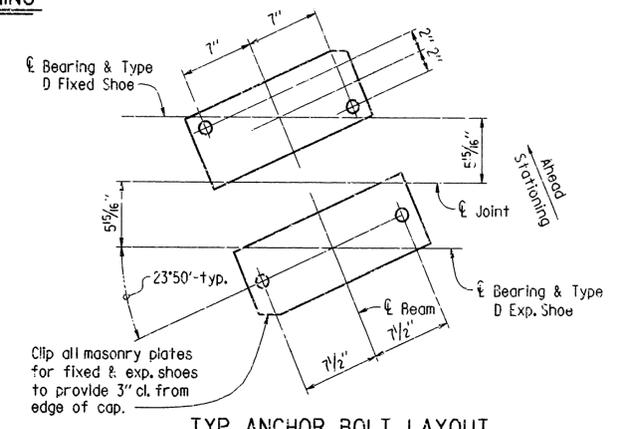
SKETCH SHOWING MASONRY PLATE THICKENING
No Scale



PARTIAL END VIEW
Scale: 3/8" = 1'-0"



SECT. THRU FTG. SHOWING PILES
Scale: 3/8" = 1'-0"



TYP. ANCHOR BOLT LAYOUT
Scale: 1/2" = 1'-0"

GENERAL NOTES

ALL CONCRETE SHALL BE CLASS "S" WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH $f'_c = 3500$ PSI AND SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4 INCHES UNLESS OTHERWISE NOTED.

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

LIVE LOAD: HS20 METHOD OF DESIGN: LOAD FACTOR

FOR ADDITIONAL NOTES AND PILE NOTES, SEE LAYOUT & DWG. NO. 29965 & 29966.

FOR DETAILS OF TYPE D SHOES AND ANCHOR BOLTS, SEE DWG. NO. 29966.

DETAILS OF BENT NO. 3A
7TH STREET
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

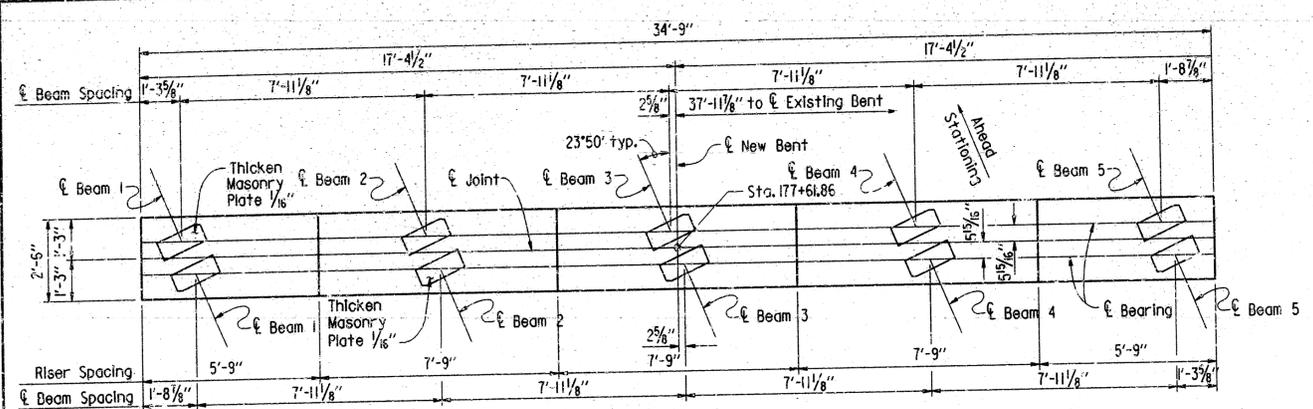
DRAWN BY: KDH DATE: 21 APR 88
CHECKED BY: C.J.F. DATE: 8-18-88
DESIGNED BY: D.H.P. DATE: 2-16-88
BRIDGE NO. 3130R DRAWING NO. 29956

SCALE: AS NOTED

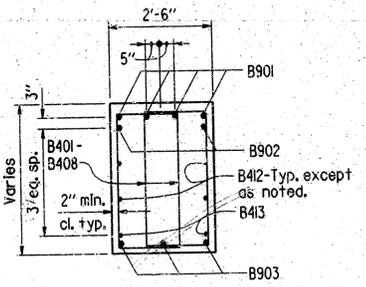
Wesley Pinkerton
BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO. R10008							81	235

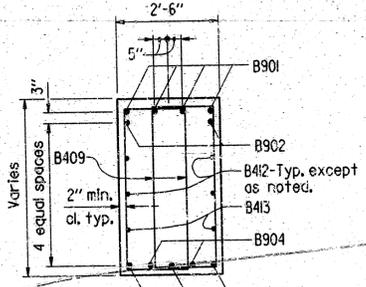
3130R-BENT 4A (7TH ST.)-29957



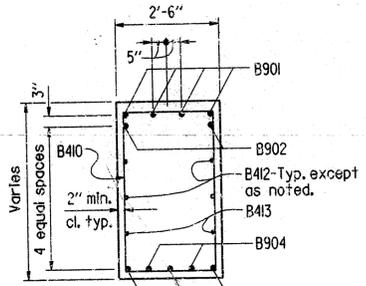
PLAN - BENT 4A
Scale: 3/8" = 1'-0"



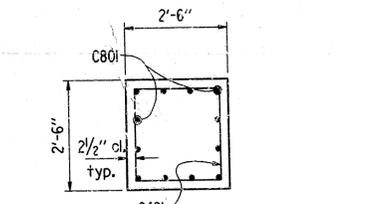
SECTION A-A
Scale: 1/2" = 1'-0"



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



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



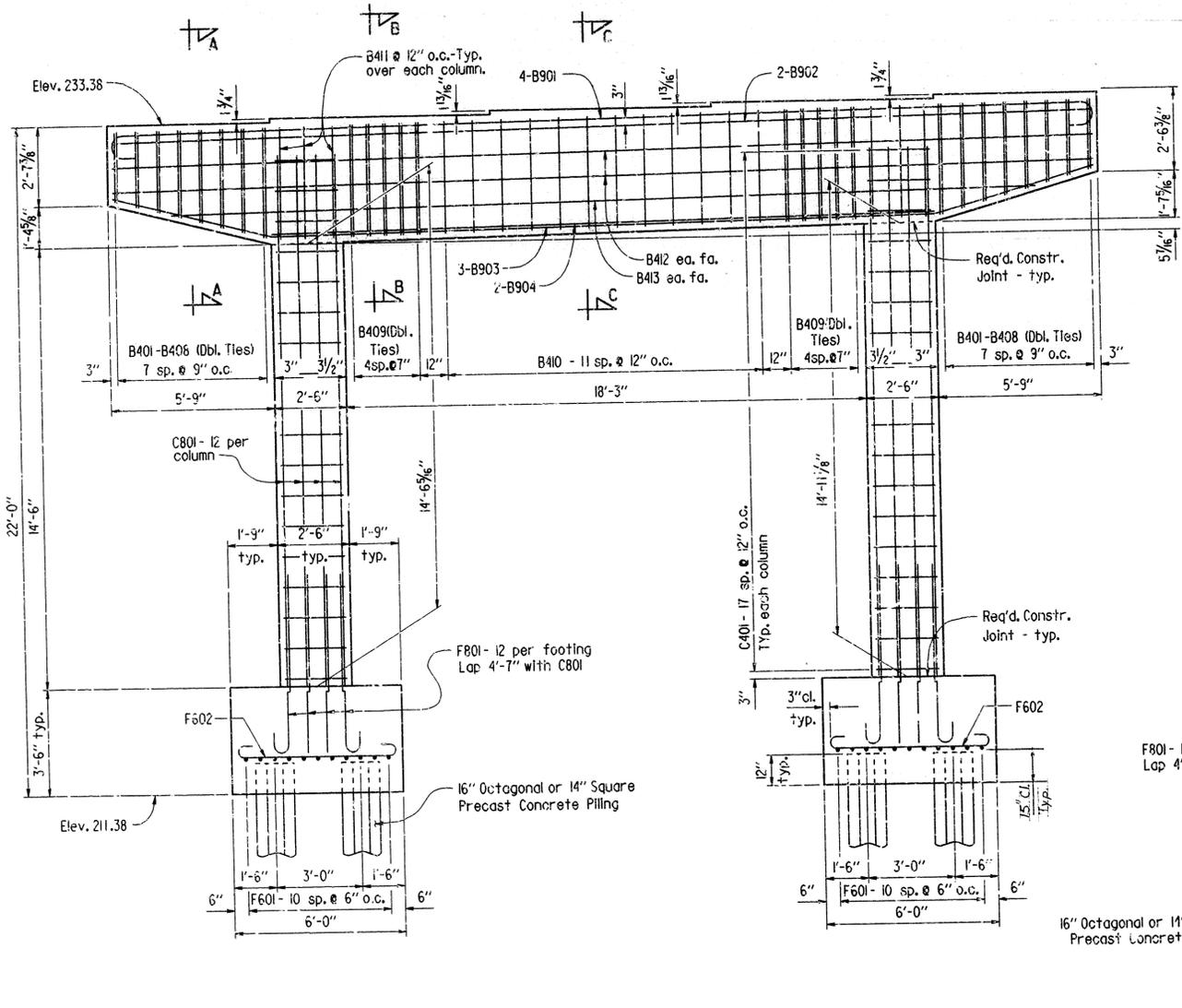
TYP. SECTION THRU COLUMN
Scale: 1/2" = 1'-0"

BAR LIST					BENDING DIAGRAMS	
MARK	NO. REQD.	LENGTH	A	B	P.D.	
B401-B408	4 ea.	Var. 8'-0" to 10'-9"	1'-7"	Var. 2'-2 3/4" to 3'-7 1/4"	2"	
B409	20	10'-10"	1'-7"	3'-8"	2"	
B410	12	12'-0"	2'-2"	3'-8"	2"	
B411	6	9'-4"	2'-2"	3'-8"	2"	
B412	4	34'-5"			Str.	
B413	2	29'-11"			Str.	
C401	36	8'-8"	2'-1"	2'-1"	2"	
F601	22	8'-10"	7'-6"	6"	4 1/2"	
F602	30	6'-10"	5'-6"	6"	4 1/2"	
C801	24	17'-6"			Str.	
F801	2	7'-11"	7'-0"	8"	6"	
B901	4	36'-11"	34'-5"	16"	9"	
B902	2	34'-5"			Str.	
B903	3	34'-9"			Str.	
B904	2	23'-3"			Str.	

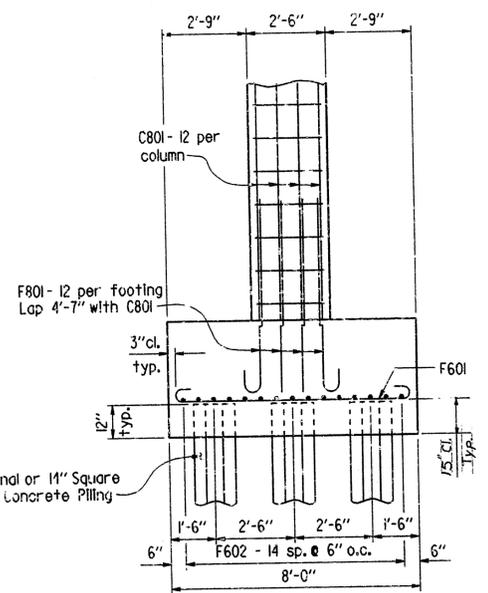
Dimensions are out to out of bars.

GENERAL NOTES

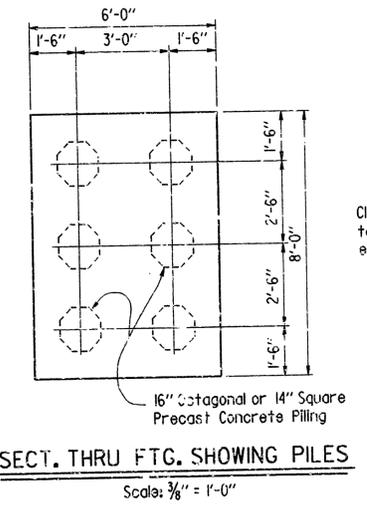
ALL CONCRETE SHALL BE CLASS "S" WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH. $f'_c = 3500$ PSI AND SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4 INCHES UNLESS OTHERWISE NOTED.
 REINFORCING STEEL SHALL CONFORM TO ASTM A615 OR A617, GRADE 60 (YIELD STRENGTH = 60,000 PSI).
 LIVE LOAD: HS20 METHOD OF DESIGN: LOAD FACTOR
 FOR ADDITIONAL NOTES AND PILE NOTES, SEE LAYOUT & DWG. NO. 29965 & 29966.
 FOR DETAILS OF TYPE D SHOES AND ANCHOR BOLTS, SEE DWG. NO. 29966.



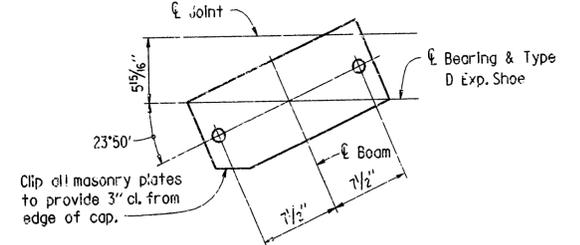
ELEVATION - BENT 4A
(Looking Ahead)
Scale: 3/8" = 1'-0"



PARTIAL END VIEW
Scale: 3/8" = 1'-0"



SECT. THRU FTG. SHOWING PILES
Scale: 3/8" = 1'-0"

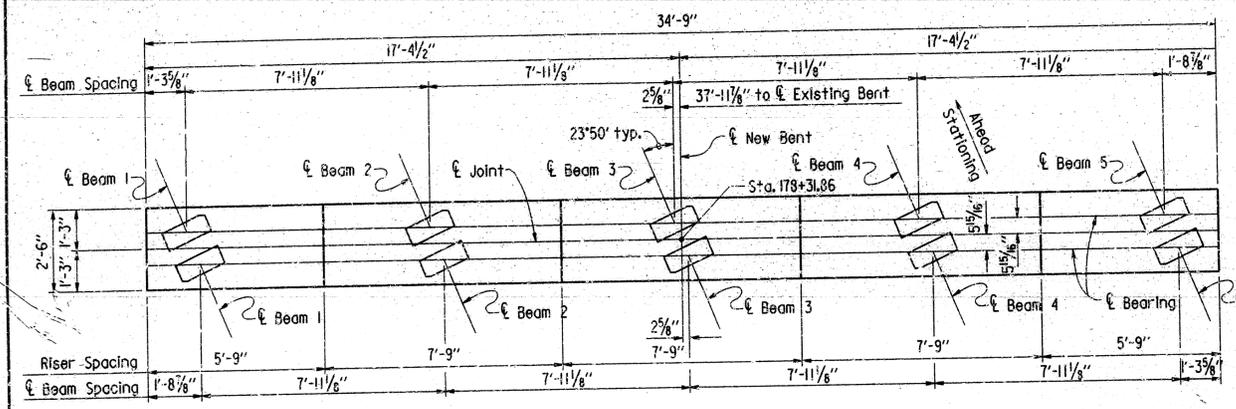


TYP. ANCHOR BOLT LAYOUT
Scale: 1 1/2" = 1'-0"

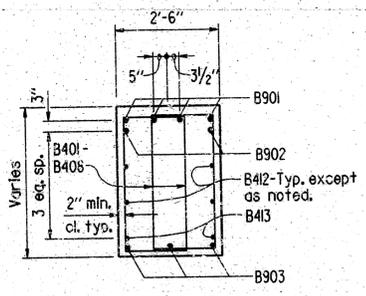
DETAILS OF BENT NO. 4A
7TH STREET
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: KDH DATE: 27 APR 88
CHECKED BY: C.J.F. DATE: 8-18-88 SCALE: AS NOTED
DESIGNED BY: D.H.P. DATE: 2-16-88
BRIDGE NO. 3130R DRAWING NO. 29957

Veral Pinkerton
BRIDGE ENGINEER

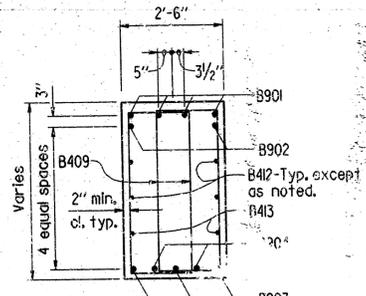
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	RI0008	82	235	
① 3130R-BENT 5A (7TH ST.)-29958								



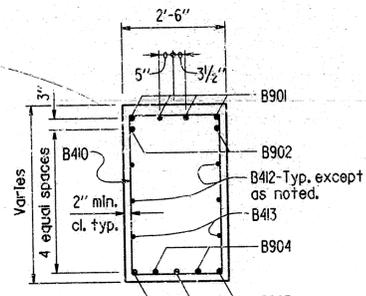
PLAN - BENT 5A
Scale: 3/8" = 1'-0"



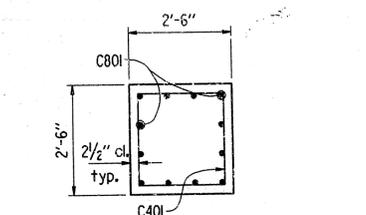
SECTION A-A
Scale: 1/2" = 1'-0"



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



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

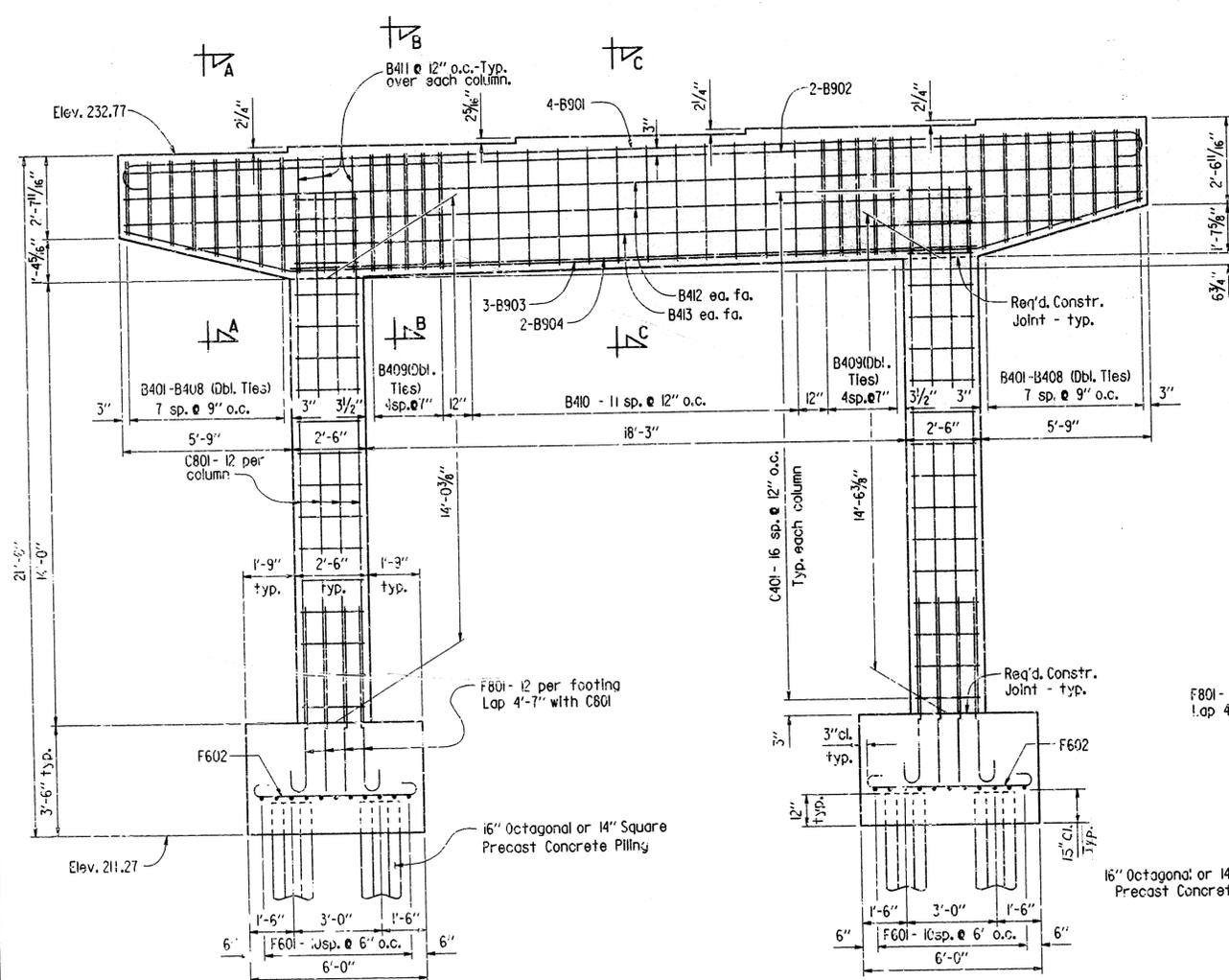


TYP. SECTION THRU COLUMN
Scale: 1/2" = 1'-0"

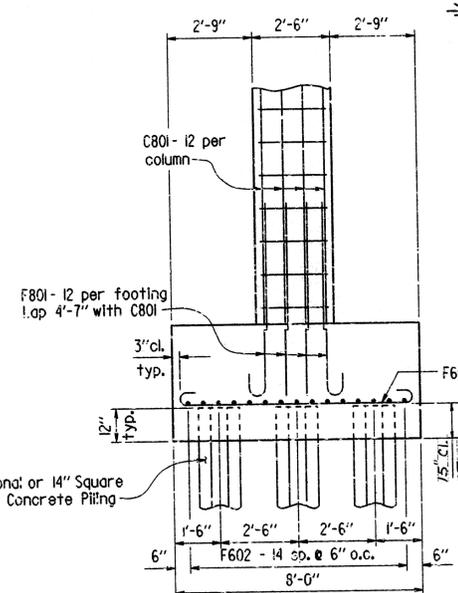
BAR LIST

MARK	NO. REQD.	LENGTH	A	B	P.D.	BENDING DIAGRAMS
B401-B408	4 ea.	Var. 8'-0" to 10'-9"	1'-7"	Var. 2'-2 3/4" to 3'-7 1/4"	2"	A, B
B409	20	10'-10"	1'-7"	3'-8"	2"	A, B
B410	12	12'-0"	2'-2"	3'-8"	2"	A, B
B411	6	9'-4"	2'-2"	3'-8"	2"	A, B
B412	4	34'-5"			Str.	B401-B410, C401
B413	2	29'-11"			Str.	B411
C401	34	8'-8"	2'-1"	2'-1"	2"	F601, F602, B901
F601	22	8'-10"	7'-6"	6"	4 1/2"	A, B
F602	30	6'-10"	5'-6"	6"	4 1/2"	A, B
C801	24	16'-6"			Str.	F801
F801	24	7'-11"	7'-0"	8"	6"	A, B
B901	4	36'-11"	34'-5"	10"	9"	
B902	2	34'-5"			Str.	
B903	3	34'-9"			See Diagram	
B904	2	23'-3"			Str.	

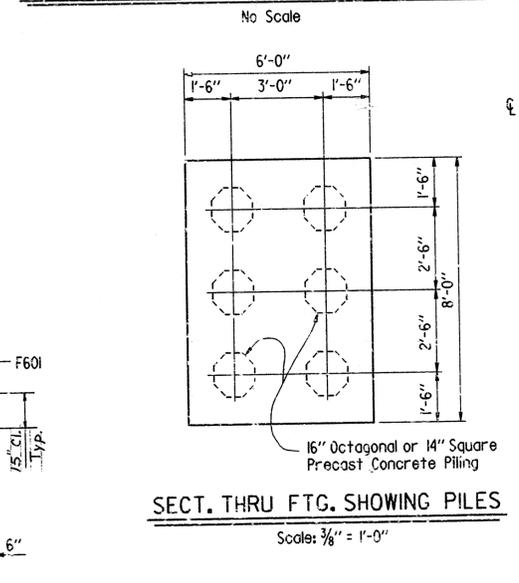
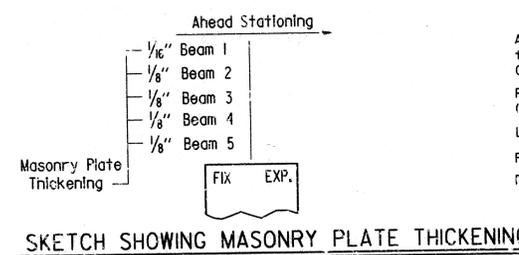
Dimensions are out to out of bars.



ELEVATION - BENT 5A
(Looking Ahead)
Scale: 3/8" = 1'-0"



PARTIAL END VIEW
Scale: 3/8" = 1'-0"



GENERAL NOTES

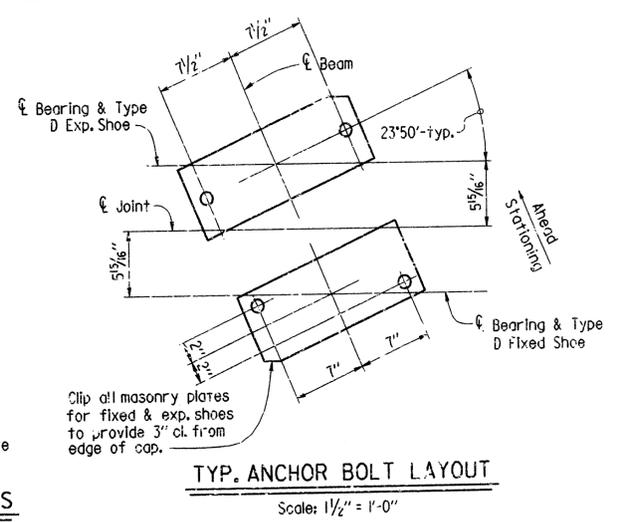
ALL CONCRETE SHALL BE CLASS "S" WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH. f'c = 3500 PSI AND SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS TO BE CHAMFERED 3/8 INCHES UNLESS OTHERWISE NOTED.

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

LIVE LOAD: HS20 METHOD OF DESIGN: LOAD FACTOR

FOR ADDITIONAL NOTES AND FILE NOTES, SEE LAYOUT & DWG. NO. 29965 & 29966.

FOR DETAILS OF TYPE D SHOES AND ANCHOR BOLTS, SEE DWG. NO. 29966.

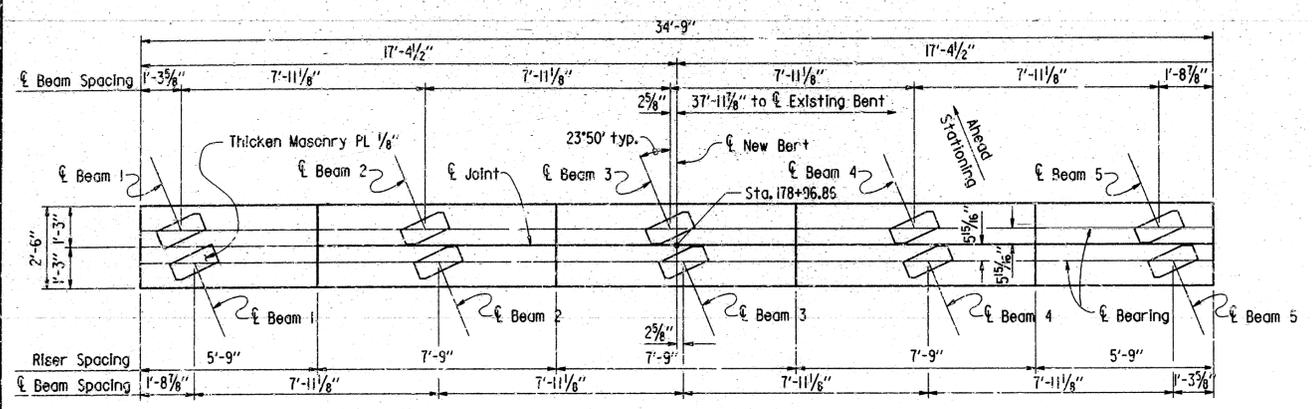


DETAILS OF BENT NO. 5A
7TH STREET
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

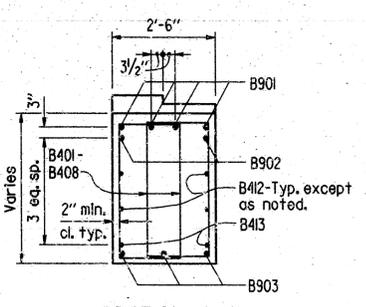
DRAWN BY: KDH DATE: 21 APR 88
CHECKED BY: CJF DATE: 8-18-88 SCALE: AS NOTED
DESIGNED BY: D.L.P. DATE: 2-16-88
BRIDGE NO. 3130R DRAWING NO. 29958

Neal Pinkerton
BRIDGE ENGINEER

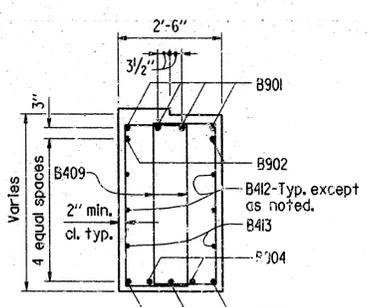
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	R10008	83	235
							JOB NO. R10008 83 235	
							① 3130R-BENT 6A (7TH ST.)-29959	



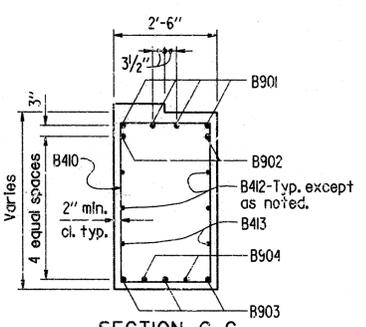
PLAN - BENT 6A
Scale: 3/8" = 1'-0"



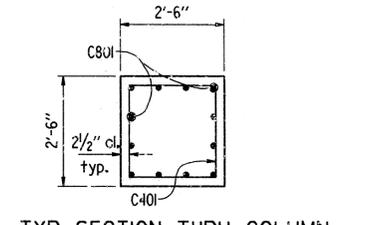
SECTION A-A
Scale: 1/2" = 1'-0"



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

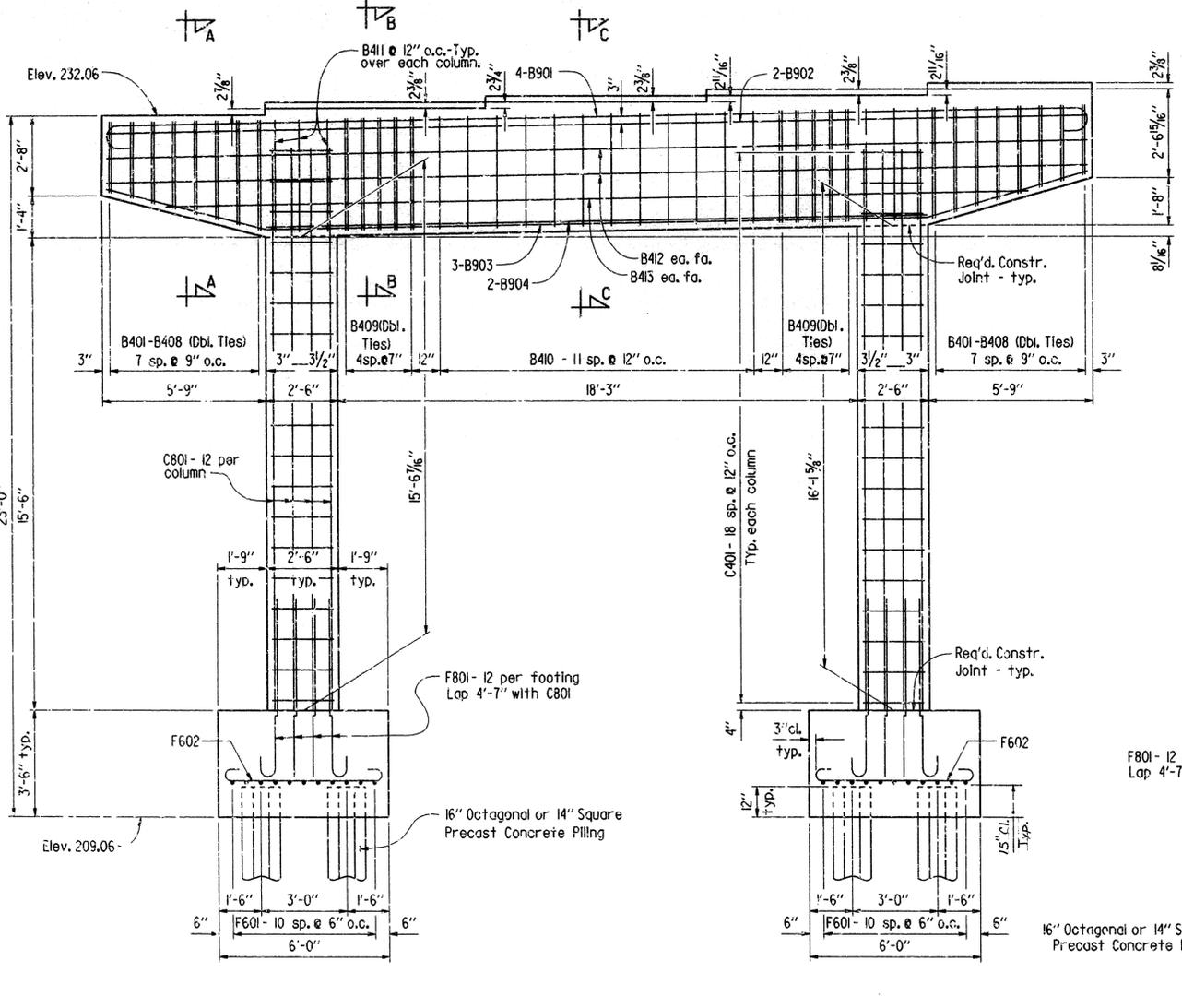


SECTION C-C
Scale: 1/2" = 1'-0"

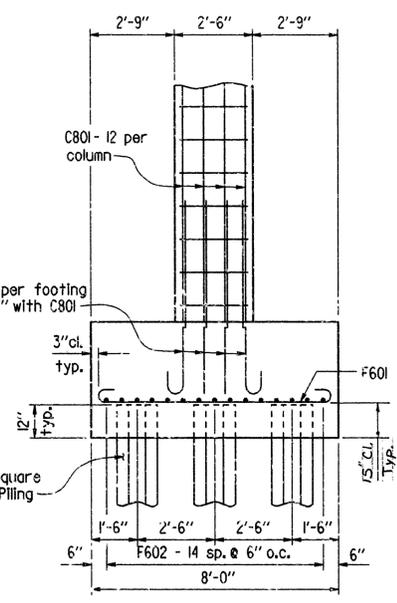


TYP. SECTION THRU COLUMN
Scale: 1/2" = 1'-0"

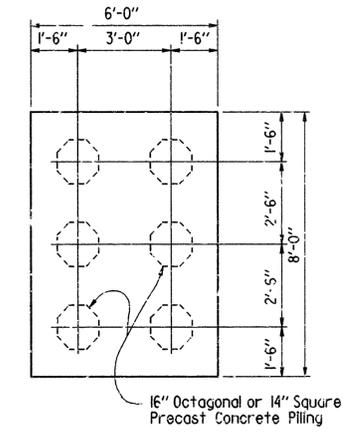
BAR LIST						BENDING DIAGRAMS	
MARK	NO. REQD.	LENGTH	A	B	P.D.		
B401-B408	4 ea.	Var. 7'-10" to 10'-7"	1'-6"	Var. 2'-2 3/4" to 3'-7 1/4"	2"	B401-B410, C401	
B409	20	10'-8"	1'-6"	3'-8"	2"	B411	
B410	12	12'-0"	2'-2"	3'-8"	2"	B411	
B411	6	9'-4"	2'-2"	3'-8"	2"	B411	
B412	4	34'-5"			Str.	B401-B410, C401	
B413	2	29'-11"			Str.	B411	
C401	38	8'-8"	2'-1"	2'-1"	2"	B401-B410, C401	
F601	22	8'-10"	7'-6"	6"	4 1/2"	F601, F602, B901	
F602	30	6'-10"	5'-6"	6"	4 1/2"	F601, F602, B901	
C801	24	18'-6"			Str.	F801	
F801	24	7'-11"	7'-0"	8"	6"	F801	
B901	4	36'-11"	34'-5"	10"	9"	B901	
B902	2	34'-5"			Str.	B901	
B903	3	34'-9"	See Diagram		9"	B901	
B904	2	23'-3"			Str.	B901	



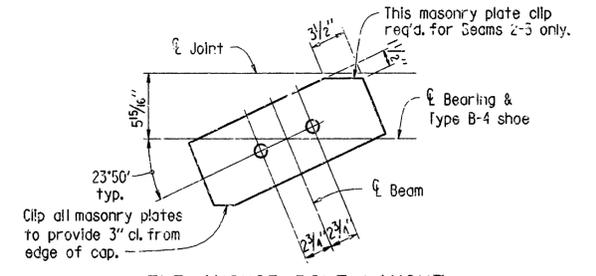
ELEVATION - BENT 6A
(Looking Ahead)
Scale: 3/8" = 1'-0"



PARTIAL END VIEW
Scale: 3/8" = 1'-0"



SECT. THRU FTG. SHOWING PILES
Scale: 3/8" = 1'-0"



TYP. ANCHOR BOLT LAYOUT
Scale: 1/2" = 1'-0"

GENERAL NOTES

ALL CONCRETE SHALL BE CLASS "S" WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH, $f'_c = 3500$ PSI AND SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

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

LIVE LOAD: HS20 METHOD OF DESIGN; LOAD FACTOR

FOR ADDITIONAL NOTES AND PILE NOTES, SEE LAYOUT & DWG. NO. 29965 & 29966.

FOR DETAILS OF TYE B-4 SHOES AND ANCHOR BOLTS, SEE DWG. NO. 29966.

DETAILS OF BENT NO. 6A
7TH STREET
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

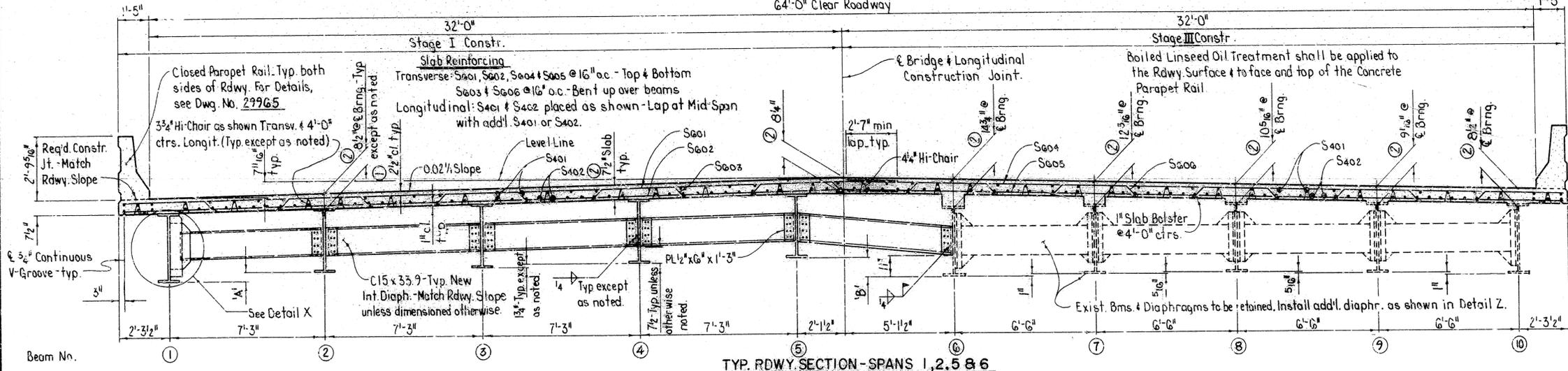
DRAWN BY: KDH DATE: 28 APR 88
CHECKED BY: C.J.F. DATE: 8-18-88 SCALE: AS NOTED
DESIGNED BY: D.J.P. DATE: 2-16-88
BRIDGE NO. 3130R DRAWING NO. 29959

David P. Johnston
BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STAK.	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		84	235
JOB NO. R10008							3130R - SPAN DETAILS-29960	

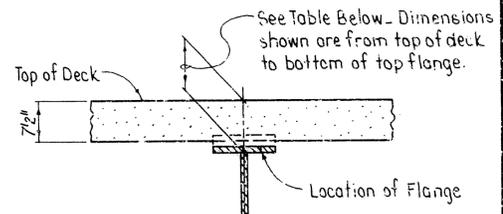
Note: For Additional Details of Stage Construction, See Dwg. No. 29944.

For Sizes of New & Existing Beams, See Framing Plans on Dwg. Nos. 29962 & 29963



- ① Tolerance: Minus = 1/4" Plus: Equal to amount of Slab Thickening used to meet Slab Thickness tolerance - See Detail B on Dwg. No. 29966.
- ② See Detail B on Dwg. No. 29966. Dimensions shown at & Bearings are from top of deck to bottom of top flange.

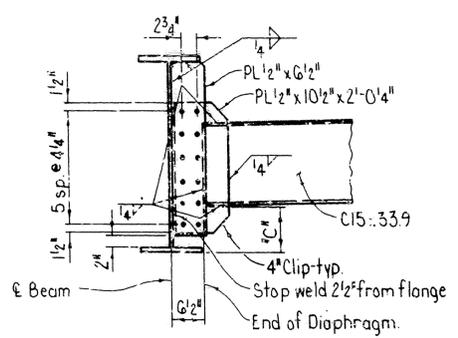
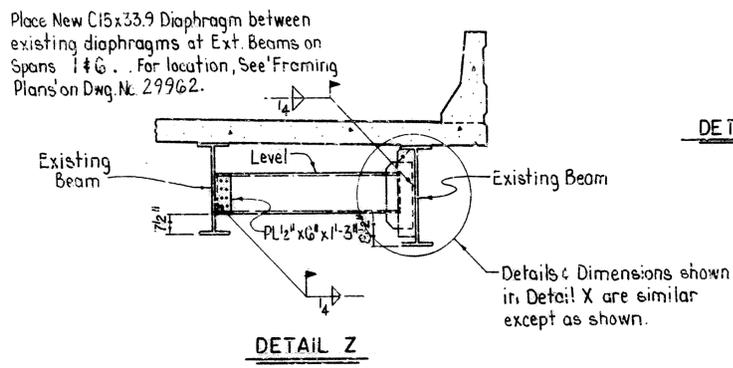
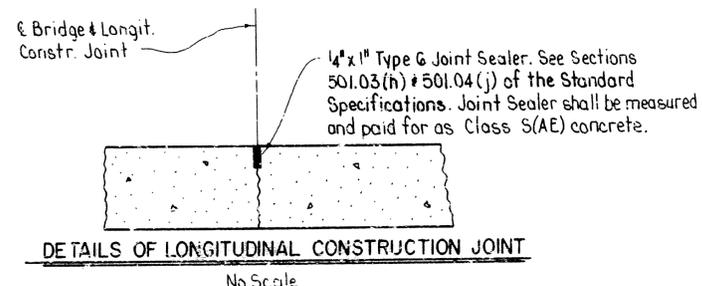
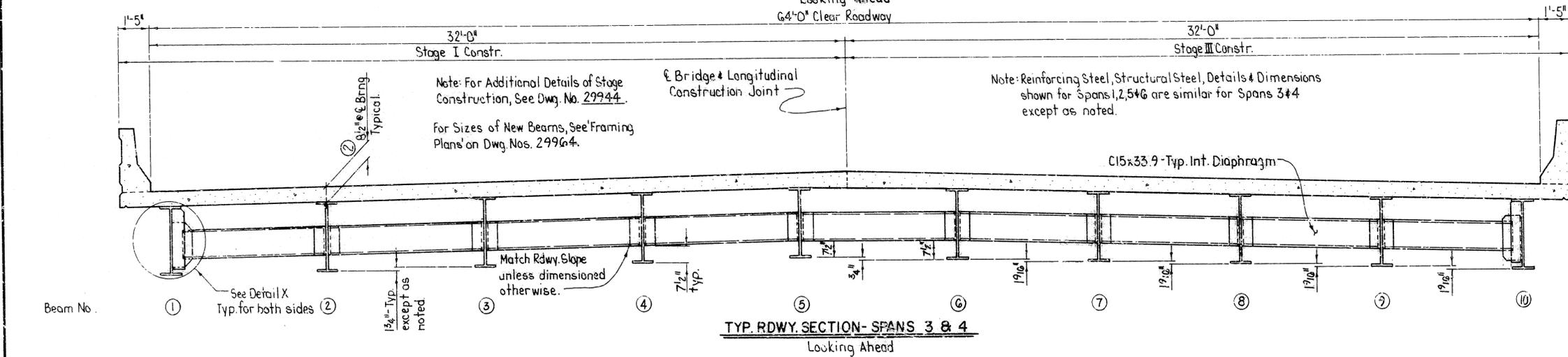
Span No.	'A'	'B'	'C'
1 & 6	4' 3/8"	9' 3/8"	10'
2 & 5	1' 3/4"	7' 8"	7' 5/8"
3 & 4	-	-	7' 5/8"



Spans 1, 2, 5 & 6

Beam No.	Thickness at End Bearing	Acceptable Range of Thickness Away from End Bearing
6	14 3/8"	13 1/8" to 16 3/8"
7	12 3/16"	11 1/8" to 14 3/8"
8	10 5/16"	8 1/8" to 11 3/8"
9	9 1/16"	7 5/8" to 10 3/8"
10	8 1/2"	7 5/8" to 9 3/8"

ACCEPTABLE LOCATION FOR EXISTING BEAM FLANGE BETWEEN BEARINGS
No Scale

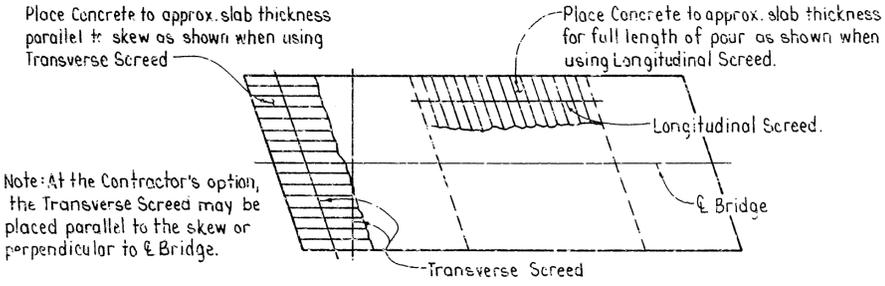
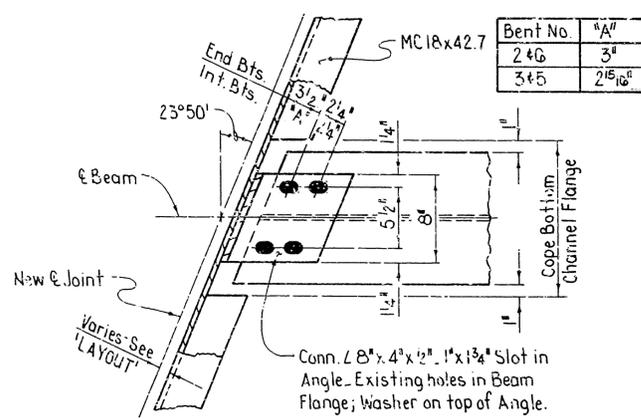
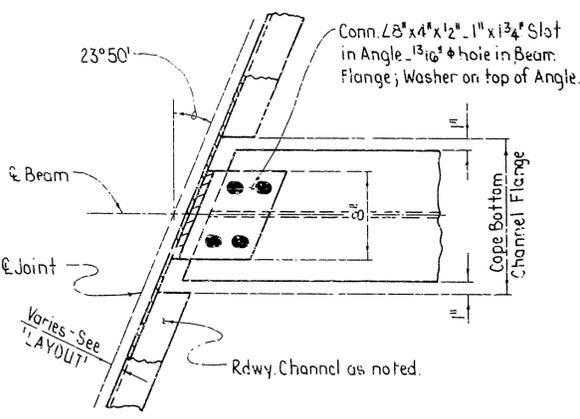
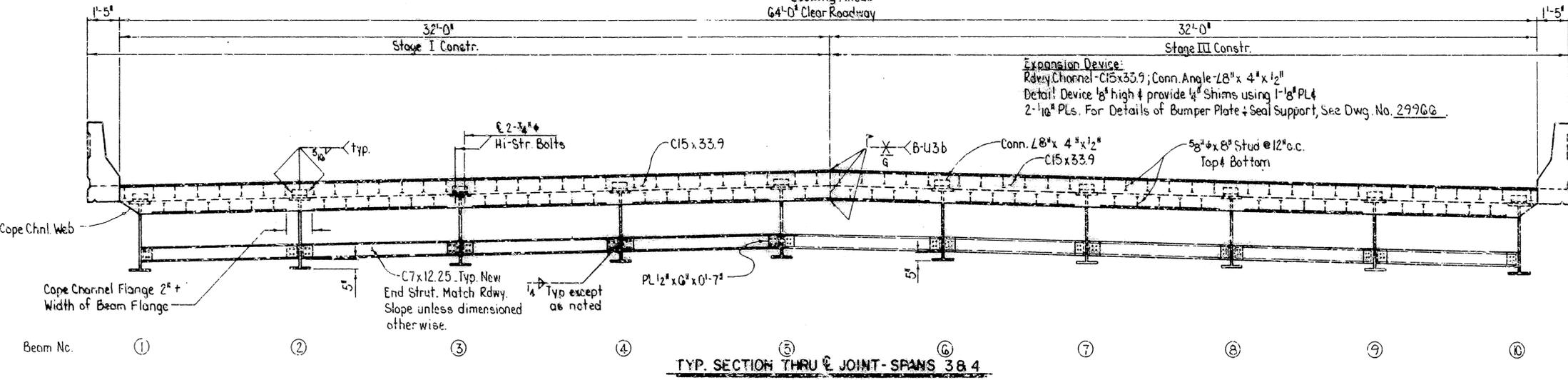
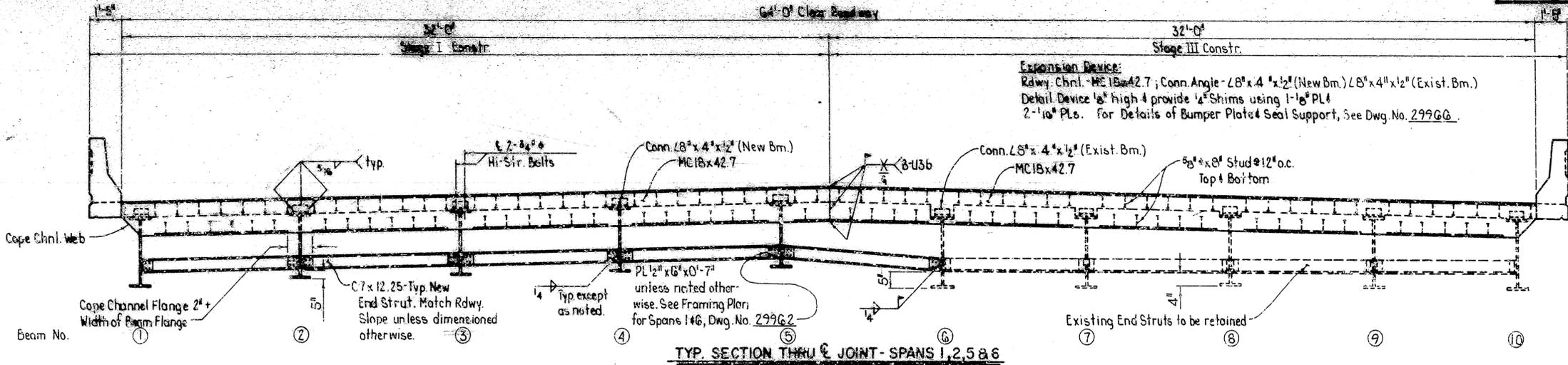


For 'GENERAL NOTES', See Dwg. Nos. 29965 & 29966.

SHEET 1 OF 7
 DETAILS OF W-BEAM SPANS
 7TH STREET
 ROUTE SEC.
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 DRAWN BY: KDH DATE: 11 FEB 88
 CHECKED BY: C.J.F. DATE: 8-1-88
 DESIGNED BY: D.H.P. DATE: 8-16-88
 SCALE: 3/8" = 1'-0" or as noted.
 BRIDGE NO. 3130R DRAWING NO. 29960

Wesley Pinkerton
 BRIDGE ENGINEER

NO.	DATE	BY	REVISION
1			
2			
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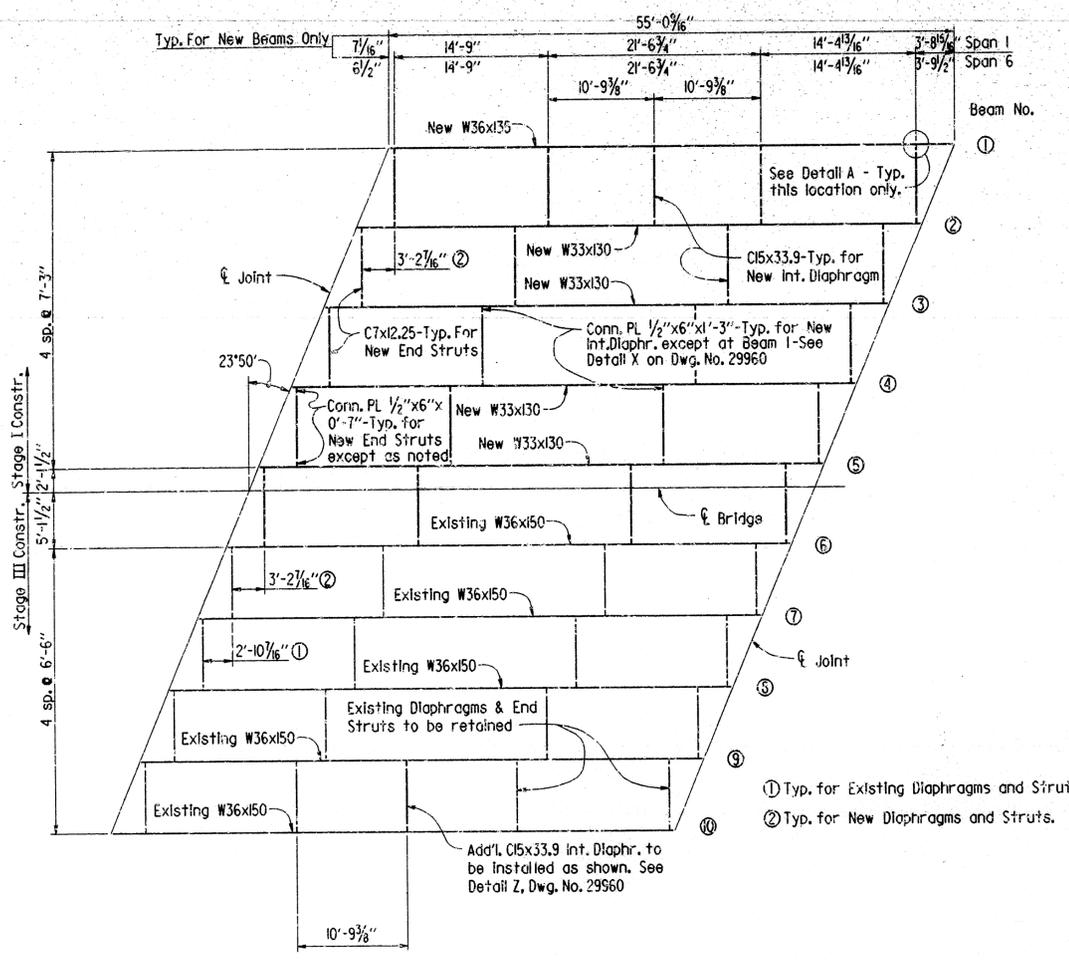


For 'GENERAL NOTES', See Dwg. Nos. 299G5 & 299G6

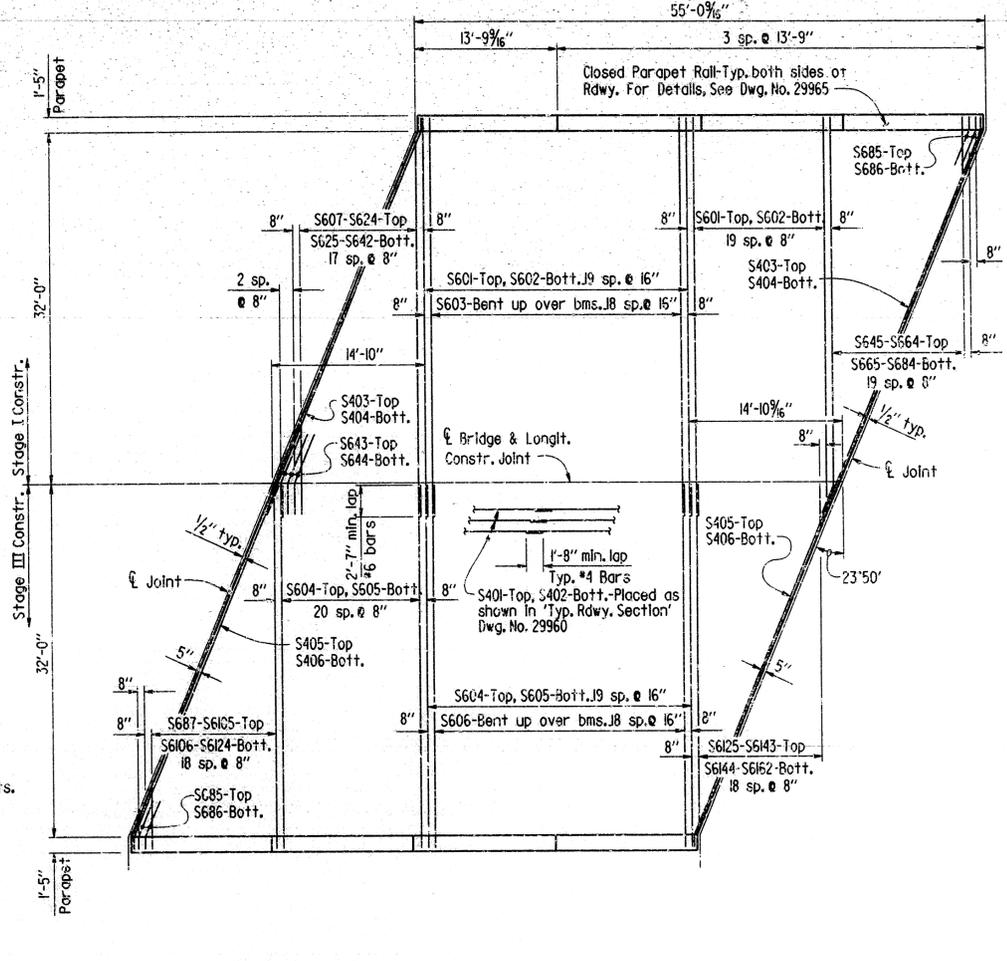
SHEET 2 OF 7
 DETAILS OF W-BEAM SPANS
 7TH STREET
 ROUTE SEC.
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 DRAWN BY: KDH DATE: 29 FEB 88
 CHECKED BY: C.J.F. DATE: 8-1-88
 DESIGNED BY: D.H.P. DATE: 2-16-88
 SCALE: 3/8" = 1'-0" or as noted
 BRIDGE NO. 3130R DRAWING NO. 29961

Veral P. ...
 BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	RI0008	86	235	
				3130R - SPAN DETAILS - 29962				



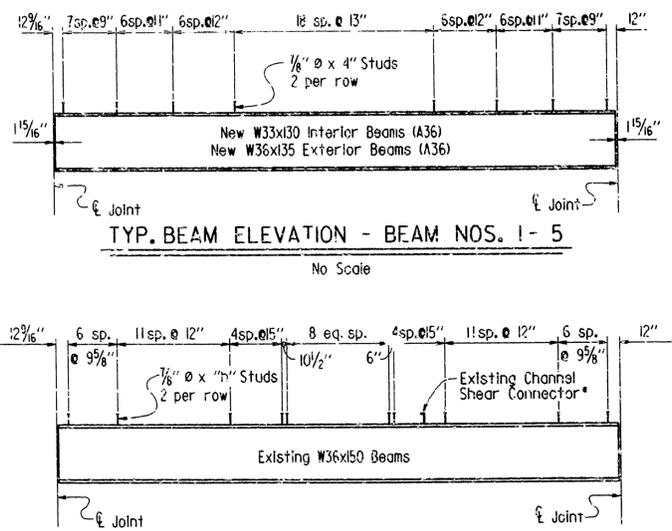
FRAMING PLAN - SPANS 1 & 6
Scale: 1/8" = 1'-0"



REINFORCING PLAN - SPANS 1 & 6
Scale: 1/8" = 1'-0"

BAR LIST - PER SPAN

MARK	NO.	REOD.	LENGTH	P.D.	BENDING DIAGRAMS
S401*	112		28'-2"	Str.	
S402	192		28'-2"	Str.	
P401	112		5'-6"	2***	
P402	112		5'-6"	2***	
P403	48		13'-4"	Str.	
S601*	40		36'-0"	Str.	
S602	40		36'-0"	Str.	
S603*	19		36'-11"	4 1/2***	
S604*	41		33'-1"	Str.	
S605	41		33'-1"	Str.	
S606*	19		34'-2"	4 1/2***	
S607-S624*	1 ea.		Var. 8'-8" to 34'-4"	Str.	<p>Dimensions are cut off out of bars.</p> <p>*These bars are to be Epoxy Coated.</p> <p>**For these Bending Diagrams, see Dwg. No. 29965</p> <p>Note: At the Contractor's option, two straight #6 bars may be substituted for bars S603 & S606 with the top bar epoxy coated. Payment for reinforcing will be based on the weight of bars S603 & S606.</p>
S625-S642	1 ea.		Var. 7'-9" to 33'-5"	Str.	
S643*	3		7'-8"	4 1/2"	
S644	3		7'-8"	4 1/2"	
S645-S664*	1 ea.		Var. 6'-0" to 34'-8"	Str.	
S665-S684	1 ea.		Var. 6'-0" to 34'-8"	Str.	
S685*	4		4'-9"	4 1/2"	
S686	4		4'-9"	4 1/2"	
S687-S6105*	1 ea.		Var. 5'-11" to 32'-8"	Str.	
S6106-S6124	1 ea.		Var. 5'-11" to 32'-8"	Str.	
S6125-S6143*	1 ea.		Var. 4'-4" to 31'-3"	Str.	
S6144-S6162	1 ea.		Var. 4'-4" to 31'-3"	Str.	
S403*	2		38'-0"	3"	
S404	2		38'-0"	3"	
S405*	2		36'-2"	3"	
S406	2		36'-2"	3"	



TYP. BEAM ELEVATION - BEAM NOS. 1-5
No Scale

TYP. BEAM ELEVATION - BEAM NOS. 6-9
No Scale

Note: No new shear connectors required for Existing Beam No. 10.
*The New 1/8" Ø Studs shall be placed to miss the existing channel shear connectors.

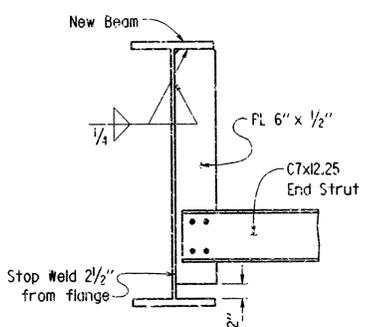
SHEAR CONNECTOR TABLE

Beam Number	Shear Connector Height - "H"
6	10"
7	8"
8	5"
9	4"

For Details of Shear Connectors and Shear Connector notes, See Dwg. No. 29965

DEAD LOAD DEFLECTIONS

Beam Number	Structural Steel		Structural Steel + Slab		Structural Steel + Slab + Parapet Roll	
	1/4 Pt.	1/2 Pt.	1/4 Pt.	1/2 Pt.	1/4 Pt.	1/2 Pt.
New-No. 1	1/16"	1/8"	3/16"	1/2"	3/8"	1/2"
New-No. 2	1/8"	1/8"	3/16"	13/16"	5/8"	7/8"
New-No. 3	1/8"	1/8"	3/16"	13/16"	5/8"	7/8"
New-No. 4	1/8"	1/8"	3/16"	13/16"	5/8"	7/8"
New-No. 5	1/8"	1/8"	1/2"	11/16"	9/16"	13/16"
Existing-No. 6	1/16"	1/8"	1/8"	5/8"	1/2"	11/16"
Existing-No. 7	1/16"	1/8"	7/16"	5/8"	7/16"	5/8"
Existing-No. 8	1/16"	1/8"	3/8"	3/8"	7/16"	5/8"
Existing-No. 9	1/16"	1/8"	3/8"	3/8"	7/16"	5/8"
Existing-No. 10	1/16"	1/8"	3/8"	1/2"	3/8"	1/2"



DETAIL A
Scale: 1" = 1'-0"

For GENERAL NOTES, See Dwg. Nos. 29965 & 29966.

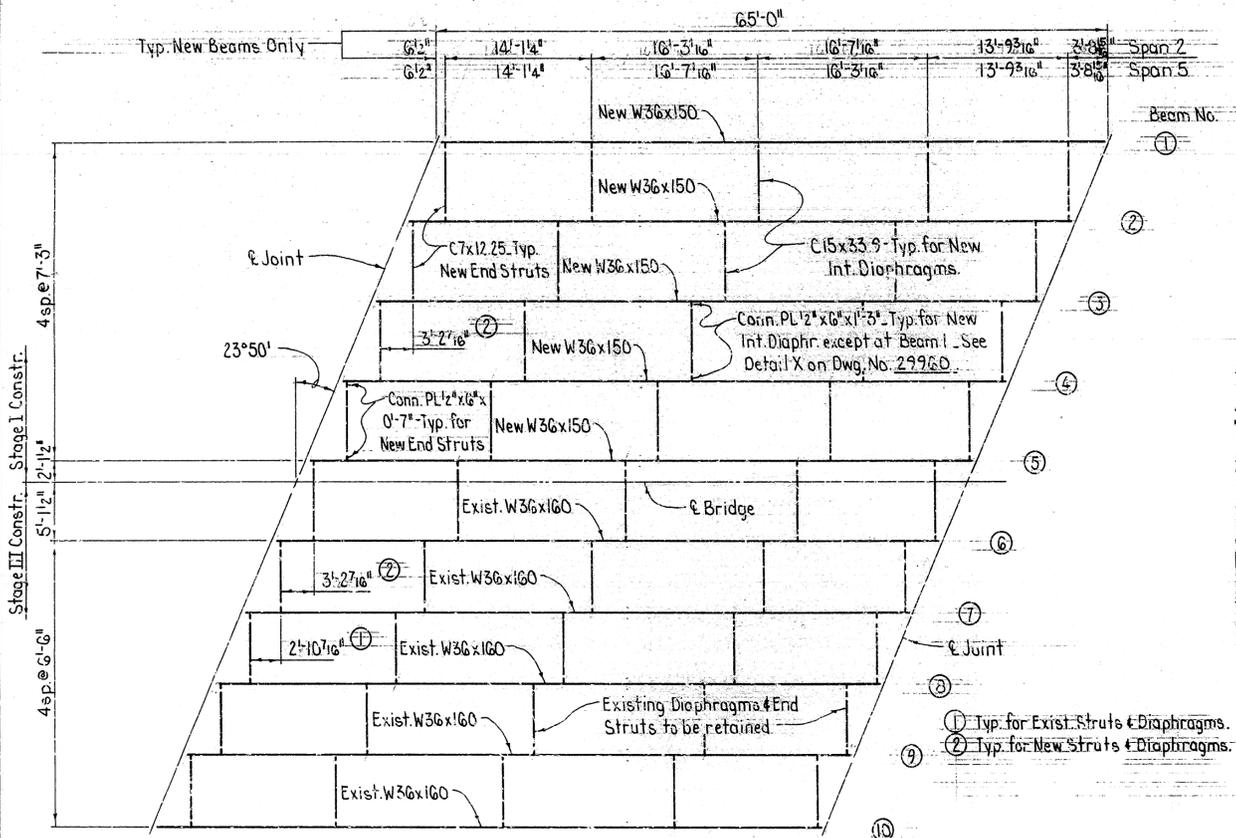
SHEET 3 OF 7
 DETAILS OF W-BEAM SPANS
 7TH STREET
 ROUTE SEC.
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 15 MAR 88
 CHECKED BY: C.J.F. DATE: 8-18-88
 DESIGNED BY: D.H.P. DATE: 2-16-88
 BRIDGE NO. 3130R DRAWING NO. 29962

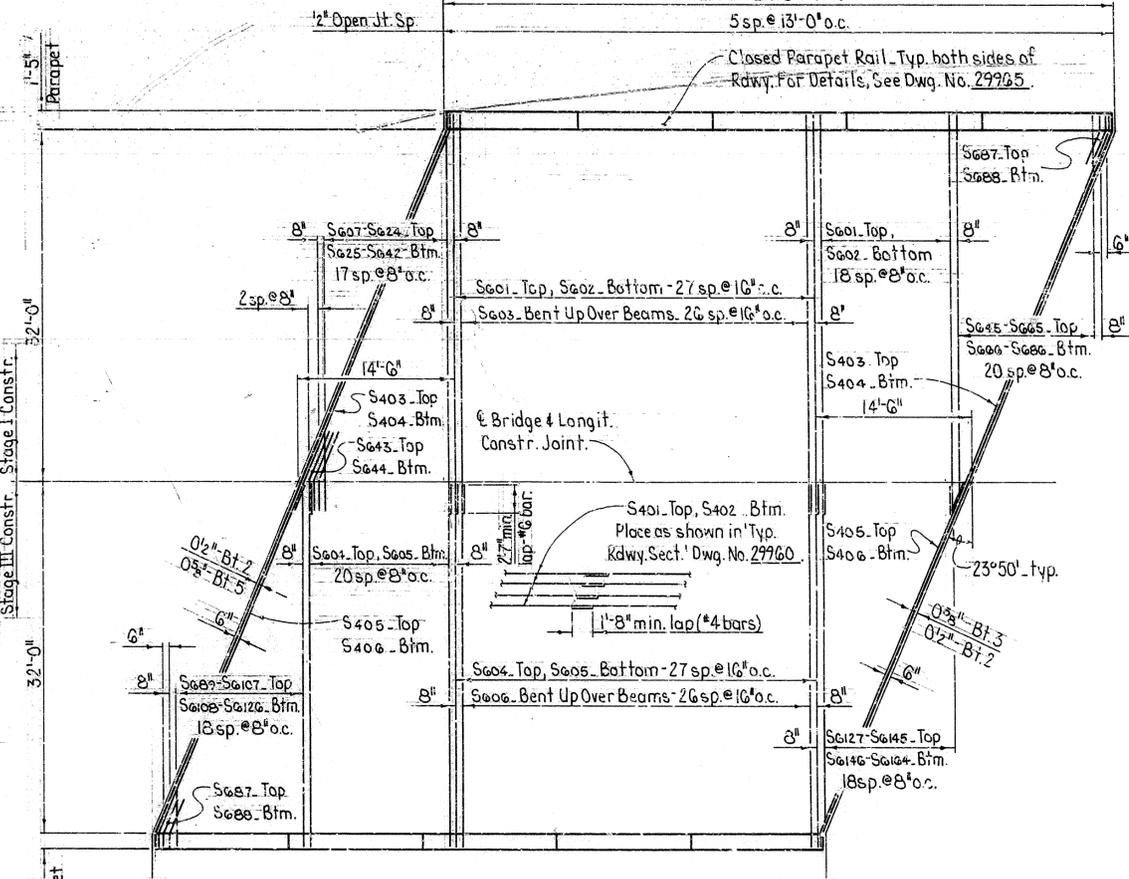
BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	R10008	87	235	

3130R - SPAN DETAILS - 29963



FRAMING PLAN - SPANS 2 & 5
Scale: 1/8"=1'-0"



REINFORCING PLAN - SPANS 2 & 5
Scale: 1/8"=1'-0"

BAR LIST - PER SPAN

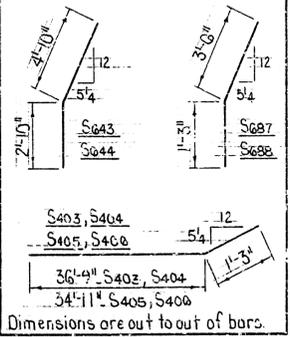
MARK	NO.	REQD.	LENGTH	P.D.
S401*	112		33'-2"	3'
S402	192		33'-2"	3'
P401	150		5'-6"	21**
P402	130		5'-6"	21**
P403	60		12'-8"	3'
S601*	47		36'-0"	3'
S602	47		36'-0"	3'
S603*	27		36'-11"	4 1/2**
S604*	49		33'-11"	3'
S605	49		33'-11"	3'
S606*	27		34'-2"	4 1/2**
S607	1ea.		Var. 7'-11" to 33'-7"	3'
S624*	1ea.		Var. 7'-11" to 33'-7"	3'
S625	1ea.		Var. 7'-11" to 33'-7"	3'
S643*	3		7'-8"	4 1/2'
S644	3		7'-8"	4 1/2'
S645	1ea.		Var. 5'-2" to 35'-4"	3'
S665*	1ea.		Var. 5'-2" to 35'-4"	3'
S666	1ea.		Var. 5'-2" to 35'-4"	3'
S687*	4		4'-9"	4 1/2'
S688	4		4'-9"	4 1/2'
S689	1ea.		Var. 5'-2" to 32'-4"	3'
S610*	1ea.		Var. 5'-2" to 32'-4"	3'
S6126	1ea.		Var. 5'-2" to 32'-4"	3'
S6127	1ea.		Var. 3'-5" to 30'-7"	3'
S6145*	1ea.		Var. 3'-5" to 30'-7"	3'
S6146	1ea.		Var. 3'-5" to 30'-7"	3'
S403*	2		38'-0"	3'
S404	2		38'-0"	3'
S405*	2		36'-2"	3'
S406	2		36'-2"	3'

* These bars are to be Epoxy Coated

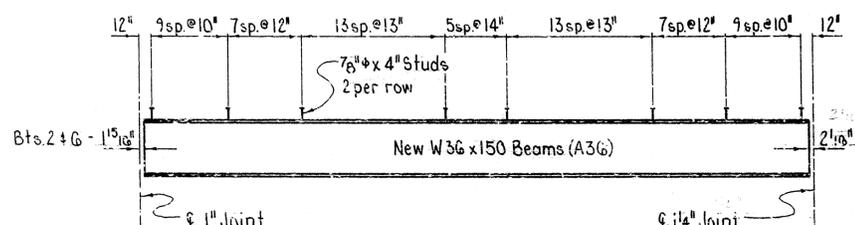
** For these Pending Diagrams, See Dwg. No. 29965.

Note: At the Contractor's option, two straight #6 bars may be substituted for bars S603 & S606 with the top bar epoxy coated. Payment for reinforcing will be based on the weight of bars S603 & S606.

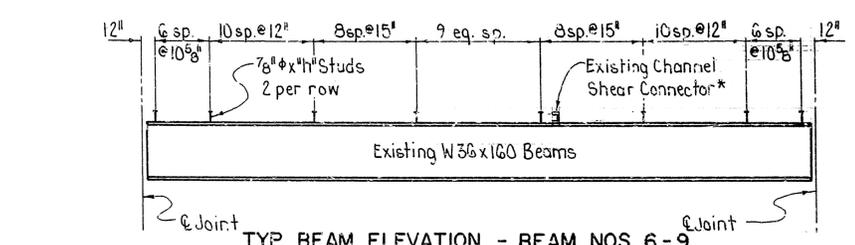
BENDING DIAGRAMS



Dimensions are out to out of bars.



TYP. BEAM ELEVATION - BEAM NOS. 1 - 5
No Scale



TYP. BEAM ELEVATION - BEAM NOS. 6 - 9
No Scale

Note: No new shear connectors required for Existing Beam No. 10.

* The New 7/8" x 4" Studs shall be placed to miss the existing channel shear connectors.

SHEAR CONNECTOR TABLE

Beam Number	Shear Connector Height - "h"
6	10"
7	8"
8	5"
9	4"

For Details of Shear Connectors and Shear Connector Notes, See Dwg. No. 29965.

DEAD LOAD DEFLECTIONS

Beam Number	Structural Steel		Structural Steel + Slab		Structural Steel + Slab + Parapet Rail	
	1/4 Pt.	1/2 Pt.	1/4 Pt.	1/2 Pt.	1/4 Pt.	1/2 Pt.
New-No. 1	1/8"	3/16"	9/16"	13/16"	5/8"	7/8"
New-No. 2	3/16"	1/4"	7/8"	13/16"	15/16"	1 1/4"
New-No. 3	3/16"	1/4"	7/8"	13/16"	15/16"	1 1/4"
New-No. 4	3/16"	1/4"	7/8"	13/16"	15/16"	1 1/4"
New-No. 5	3/16"	1/4"	3/4"	1 1/8"	7/8"	1 3/16"
Existing-No. 6	3/16"	1/4"	3/4"	1 1/8"	13/16"	1 1/8"
Existing-No. 7	3/16"	1/4"	3/4"	1 1/8"	3/4"	1 1/16"
Existing-No. 8	3/16"	1/4"	3/4"	1 1/8"	3/4"	1 1/16"
Existing-No. 9	3/16"	1/4"	1 1/8"	1 1/8"	3/4"	1 1/16"
Existing-No. 10	1/8"	3/16"	5/8"	13/16"	5/8"	7/8"

FOR GENERAL NOTES, See Dwg. Nos. 29965 & 29966.

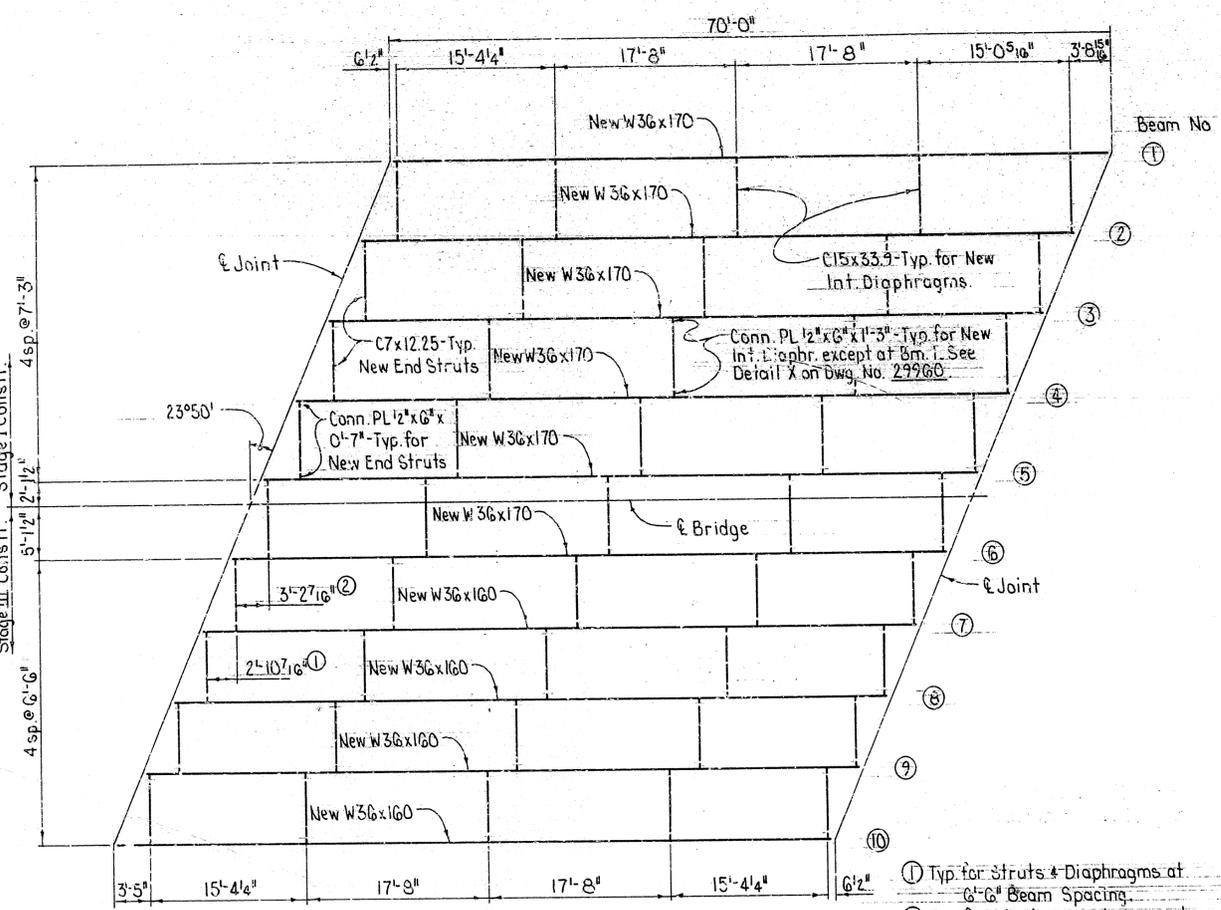
SHEET 4 OF 7
DETAILS OF W-BEAM SPANS
7TH STREET
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 17 MAR 88
CHECKED BY: CJF DATE: 3-1-88
DESIGNED BY: D.H.F. DATE: 2-16-88
BRIDGE NO. 3130R DRAWING NO. 29963

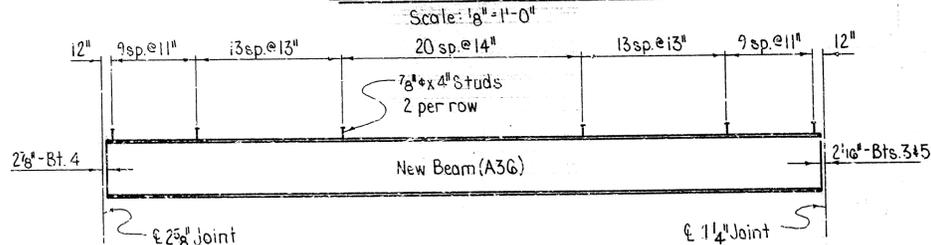


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	R10008	88	235	

① 3130R - SPAN DETAILS - 29964



FRAMING PLAN - SPANS 3 & 4



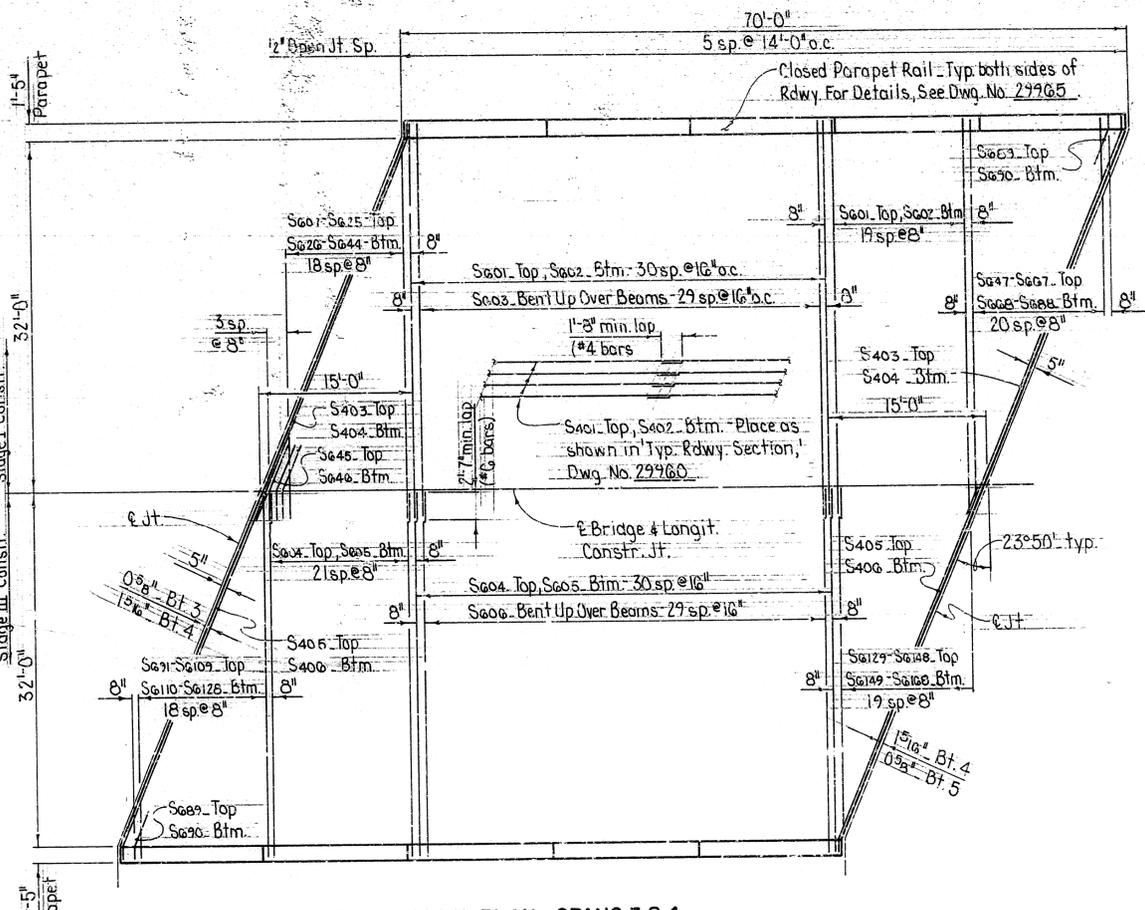
TYP. BEAM ELEVATION

No Scale

For Details of Shear Connectors and Shear Connector Notes, See Dwg. No. 29965

DEAD LOAD DEFLECTIONS

Beam Number	Structural Steel		Structural Steel + Slab		Structural Steel + Slab + Parapet Rail	
	1/4 Pt.	1/2 Pt.	1/4 Pt.	1/2 Pt.	1/4 Pt.	1/2 Pt.
1	3 1/16"	1 1/4"	1 1/16"	1"	3 3/4"	1 1/16"
2-4, 7-9	1 1/4"	5 1/16"	1"	1 7/16"	1 1/16"	1 1/2"
5	1 1/4"	5 1/16"	7/8"	1 3/16"	1"	1 7/16"
6	1 1/4"	5 1/16"	1"	1 3/8"	1 1/16"	1 7/16"
10	3 1/16"	5 1/16"	7/8"	1 1/4"	1 5/16"	1 5/16"



REINFORCING PLAN - SPANS 3 & 4

Scale: 1/8" = 1'-0"

*These bars are to be Epoxy Coated.

** For these Bending Diagrams, See Dwg. No. 29965.

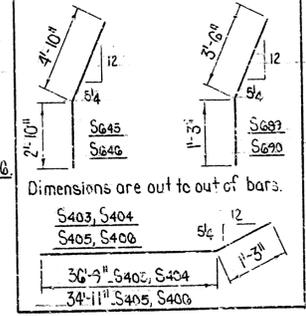
Note: At the Contractor's option, two straight #6 bars may be substituted for bars S603 & S606, with the top bar epoxy coated. Payment for reinforcing will be based on the weight of bars S603 & S606.

For 'GENERAL NOTES', See Dwg. Nos. 29965 & 29966.

BAR LIST - PER SPAN

MARK	NO.	REQ'D	LENGTH	P.D.
S401*	112		35'-7"	Str.
S402	192		35'-7"	Str.
P401	140		5'-6"	2**
P402	140		5'-6"	2**
P405	60		13'-6"	Str.
S601*	51		36'-0"	Str.
S602	51		36'-0"	Str.
S603*	30		36'-1 1/2"	1 1/2**
S604*	53		33'-1"	Str.
S605	53		33'-1"	Str.
S606*	30		34'-2"	4 1/2**
S607	1 ea.		Var. 7'-5" to 34'-7"	Str.
S625*	1 ea.		Var. 7'-5" to 34'-7"	Str.
S626	1 ea.		Var. 7'-5" to 34'-7"	Str.
S644	3		7'-8"	4 1/2"
S645*	3		7'-8"	4 1/2"
S646	3		7'-8"	4 1/2"
S647	1 ea.		Var. 4'-8" to 34'-10"	Str.
S667*	1 ea.		Var. 4'-8" to 34'-10"	Str.
S668	1 ea.		Var. 4'-8" to 34'-10"	Str.
S669*	2		4'-9"	4 1/2"
S690	2		4'-9"	4 1/2"
S691	1 ea.		Var. 4'-8" to 31'-10"	Str.
S6109*	1 ea.		Var. 4'-8" to 31'-10"	Str.
S6110	1 ea.		Var. 4'-8" to 31'-10"	Str.
S6128	1 ea.		Var. 2'-11" to 31'-7"	Str.
S6129	1 ea.		Var. 2'-11" to 31'-7"	Str.
S6148*	1 ea.		Var. 2'-11" to 31'-7"	Str.
S6149	1 ea.		Var. 2'-11" to 31'-7"	Str.
S6168	2		38'-0"	3"
S403*	2		38'-0"	3"
S404	2		38'-0"	3"
S405*	2		36'-2"	3"
S406	2		36'-2"	3"

BENDING DIAGRAMS



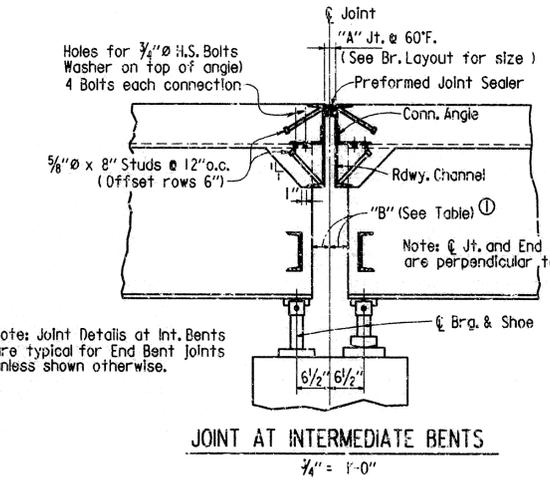
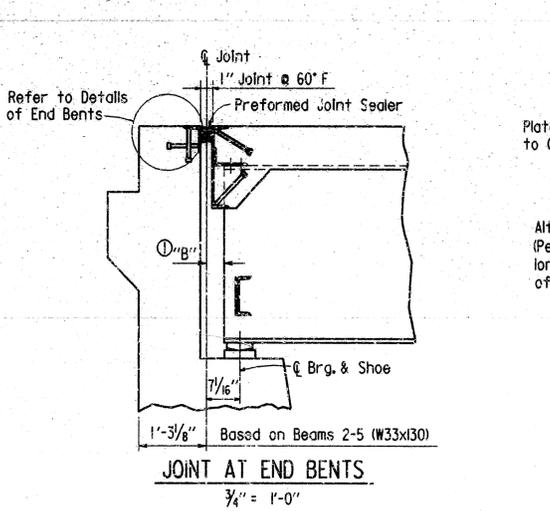
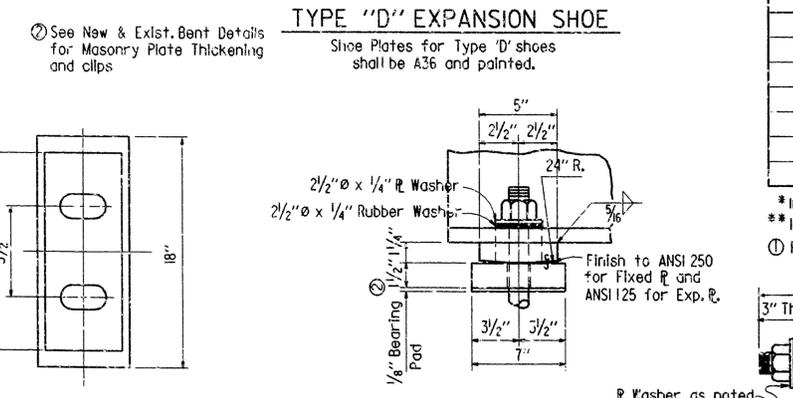
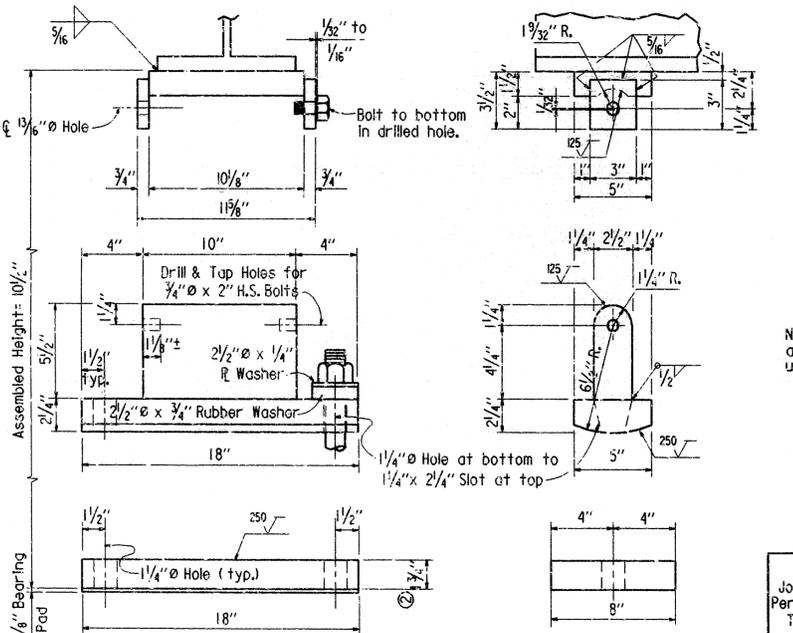
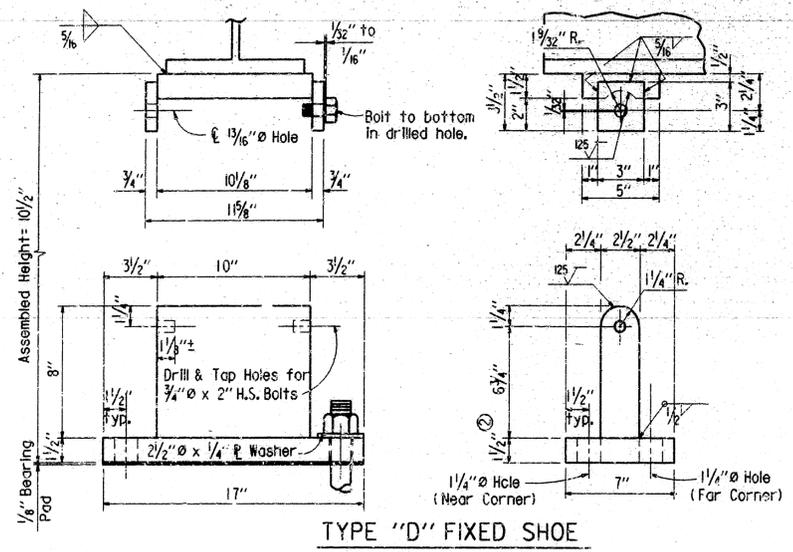
SHEET 5 OF 7
 DETAILS OF W-BEAM SPANS
 7TH STREET
 ROUTE SEC.
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, A.R.K.

DRAWN BY: KDH DATE: 28 MAR 88
 CHECKED BY: C.J.F. DATE: 8-1-88
 DESIGNED BY: D.H.P. DATE: 2-16-88
 SCALE: AS NOTED

David Pinkerton
 BRIDGE ENGINEER

BRIDGE NO. 3130R DRAWING NO. 29964

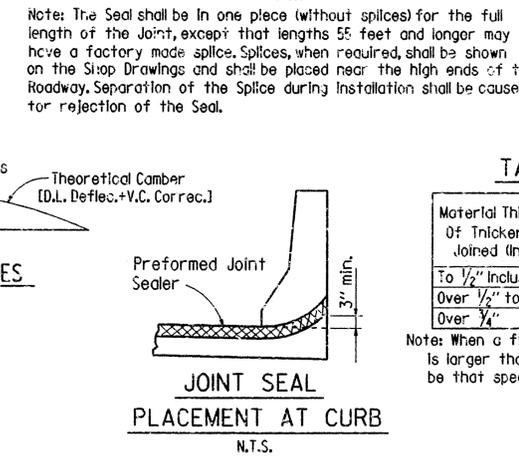
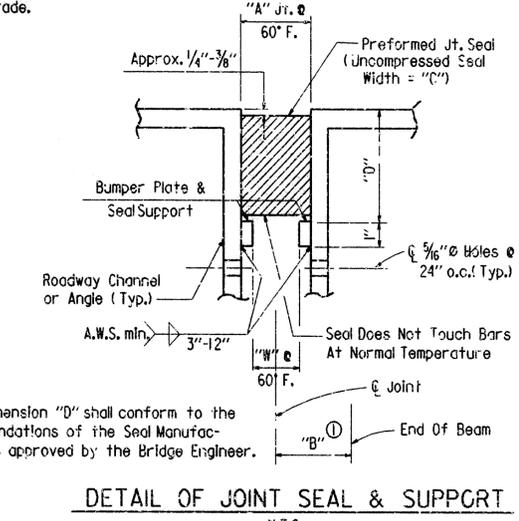
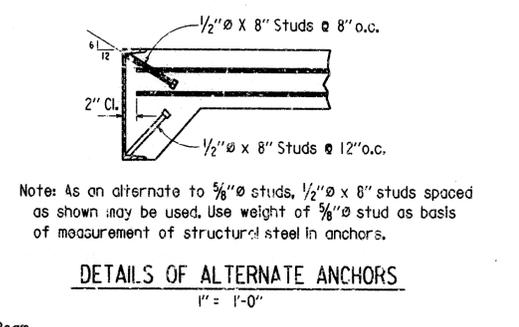
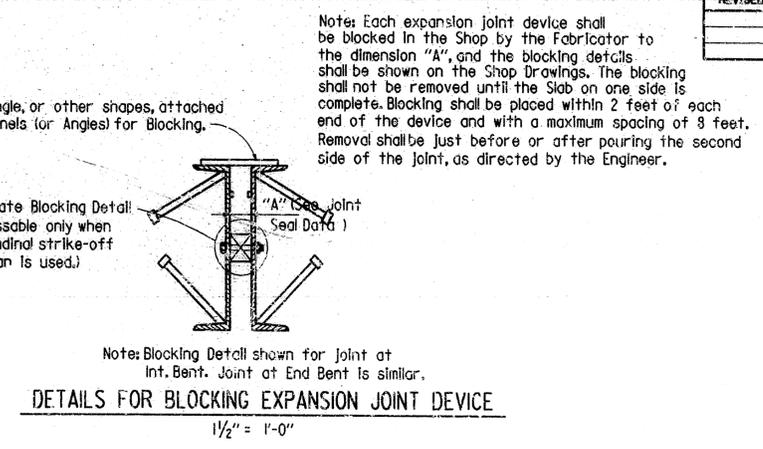
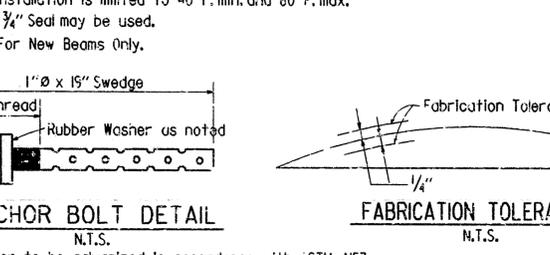
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO.	R10008	90 2,3,5
						① 3130R - SPAN DETAILS - 29966		



JOINT SEAL DATA

"A" Joint Width Perpendicular To Joint @ 60°F*	"B" Perpendicular To Joint	"C" Uncompressed Seal Width	"W" Width Between Plates	Bumper Plate Size
1"	1 3/4" ±	1 5/8"	1/4"	1" x 3/8"
1 1/8"	1 7/8" ±	1 3/4"	3/8"	1" x 3/8"
1 1/4"	1 7/8" ±	2"	1/2"	1" x 3/8"
1 5/8"	2 1/8" ±	2 1/2"	5/8"	1" x 1/2"
1 7/8"	2 1/4" ±	3"	3/4"	1" x 3/8"
2 1/4"	2 3/8" ±	3 1/2"	3/4"	1" x 3/4"
2 3/8"	2 3/8" ±	4"	7/8"	1" x 7/8"

* Installation is limited to 40°F. min. and 80°F. max.
** 1 3/4" Seal may be used.
① For New Beams Only.



Notes: Each expansion joint device shall be blocked in the Shop by the Fabricator to the dimension "A", and the blocking details shall be shown on the Shop Drawings. The blocking shall not be removed until the Slab on one side is complete. Blocking shall be placed within 2 feet of each end of the device and with a maximum spacing of 8 feet. Removal shall be just before or after pouring the second side of the Joint, as directed by the Engineer.

Plate, Angle, or other shapes, attached to Channels (or Angles) for Blocking.

Alternate Blocking Detail (Permissible only when longitudinal strike-off of span is used.)

Note: Blocking Detail shown for joint at Int. Bent. Joint at End Bent is similar.

ADJUSTMENT FOR SLAB THICKNESS TOLERANCE
N.T.S.

Thickness as detailed on Span Drawings. Tolerance is minus 1/4" and plus 1".
Note: No Increase in concrete and structural steel quantities will be made to meet slab tolerances.

GENERAL NOTES

GOVERNING SPECIFICATIONS ARE THE ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1988 WITH APPLICABLE SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS.

ALL CONCRETE SHALL BE CLASS (S1A) AND SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED. CONCRETE FOR SPANS CAN BE POURED IN ONE CONTINUOUS OPERATION WITH A STRIKE OFF EXTENDING OVER THE WHOLE SPAN LENGTH. SPANS MAY BE POURED IN INCREMENTS WITH THE CENTER ONE-THIRD TO ONE-HALF SPAN LENGTH POURED FIRST, AFTER WHICH, NOT LESS THAN 72 HOURS SHALL ELAPSE BEFORE POURING THE END SECTIONS. END SECTIONS MAY BE POURED SIMULTANEOUSLY. IF NOT POURED SIMULTANEOUSLY, 48 HOURS SHALL ELAPSE BETWEEN END SECTIONS POURS. A MINIMUM OF 72 HOURS SHALL ELAPSE BETWEEN COMPLETION OF THE SLAB AND THE POURING OF THE PARAPET RAILING OR CURB. CONCRETE SHALL BE PLACED AND CONSOLIDATED FOR THE ENTIRE POUR BEFORE ANY CONCRETE HAS TAKEN ITS INITIAL SET. THIS MAY REQUIRE THE USE OF A RETARDING AGENT.

THE BRIDGE DECK SHALL BE GIVEN A TIME FINISH AS SPECIFIED FOR FINAL FINISHING IN SUBSECTION 802.20 FOR A CLASS 5 ROADWAY SURFACE FINISH.

REINFORCING STEEL SHALL CONFORM TO ASTM A615 OR A617, GRADE 60. THE REINFORCING STEEL IS TO BE ACCURATELY LOCATED IN THE FORMS AND FIRMLY HELD IN PLACE BY STEEL WIRE SUPPORTS, SUFFICIENT IN NUMBER AND SIZE TO PREVENT DISPLACEMENT DURING THE COURSE OF CONSTRUCTION. THE WIRE SUPPORTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM "REINFORCING STEEL". SHOP LISTS AND BENDING DIAGRAMS OF REINFORCING STEEL, INCLUDING WIRE SUPPORTS, MAY BE SUBMITTED FOR APPROVAL BEFORE FABRICATION IS BEGUN.

ALL WELDING SHALL CONFORM TO SS 807-1. WELDED CONNECTIONS SHALL BE 3/16" FILLET SHOP WELDS UNLESS OTHERWISE NOTED. ALL WELDING THAT IS TO BE DONE DURING FABRICATION OF STRUCTURAL STEEL, INCLUDING TEMPORARY WELDS SHALL BE DETAILED ON THE SHOP DRAWINGS AND SUBMITTED FOR APPROVAL. IF THE CONTRACTOR OR ERECTOR SHOULD WANT TO MAKE ADDITIONAL WELDS, WHETHER TEMPORARY OR PERMANENT, HE SHALL SUBMIT DETAILED DRAWINGS WITH FORMAL REQUEST TO THE BRIDGE ENGINEER OF THE ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT FOR APPROVAL.

ALL STUD SHEAR CONNECTORS SHALL BE GRANULAR FLUX FILLED, SOLID FLUXED, OR EQUAL, AND SHALL BE AUTOMATICALLY END WELDED IN ACCORDANCE WITH RECOMMENDATIONS OF THE MANUFACTURER.

FIELD CONNECTIONS SHALL BE BOLTED WITH 3/4" HIGH STRENGTH BOLTS. DO NOT REINSTALL EXISTING BOLTS. USE NEW HIGH STRENGTH BOLTS IN ALL FIELD CONNECTIONS. UNLESS OTHERWISE NOTED, BOLT HOLES SHALL BE 1/16" EXCEPT THAT 15/16" HOLES MAY BE USED FOR CONNECTION OF EXPANSION DEVICES, DIAPHRAGMS, AND END STRUTS IF A WASHER IS USED UNDER BOTH THE NUT AND HEAD OF BOLT.

DIAPHRAGMS SHALL BE INSTALLED AS BEAMS ARE ERECTED AND SHALL BE COMPLETELY BOLTED PRIOR TO POURING OF CONCRETE DECK.

BEARINGS SHALL BE SEATED IN ACCORDANCE WITH SECTION 807.51 OF THE STANDARD SPECIFICATIONS. THIS WORK AND MATERIAL ARE TO BE CONSIDERED AS SUBSIDIARY TO THE ITEM "STRUCTURAL STEEL IN BEAM SPANS" AND WILL NOT BE PAID FOR DIRECTLY.

DRAWINGS SHOW GENERAL FEATURES OF DESIGN ONLY. SHOP DRAWINGS SHALL BE MADE IN ACCORDANCE WITH THE SPECIFICATIONS, SUBMITTED AND APPROVAL SECURED BEFORE FABRICATION IS BEGUN. STRUCTURAL SHAPES OF EQUAL OR GREATER STRENGTH MAY BE SUBSTITUTED FOR SHAPES SHOWN IF APPROVAL IS OBTAINED FROM THE BRIDGE ENGINEER. PAYMENT WILL BE MADE ON THE BASIS OF SHAPES SHOWN.

FOR ADDITIONAL NOTES, SEE DWG. NO. 29966

TABLE FOR WELD

Material Thickness Of Thicker Part (Inches)	Minimum Size Of Fillet Weld (Inches)	Single Pass Weld Must Be Used
To 1/2" Inclusive	3/8"	Used
Over 1/2" to 3/4"	1/2"	Used
Over 3/4"	5/8"	Used

Note: When a fillet weld size, as shown on the Plans, is larger than the minimum, the First Pass shall be that specified for minimum size of fillet weld.

SHEET 7 OF 7
DETAILS OF W-BEAM SPANS
7TH STREET
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DATE: 15 JUL 88
DRAWN BY: KDH
CHECKED BY: C J F
DESIGNED BY: D. H. P.
BRIDGE NO. 3130R
DRAWING NO. 29966