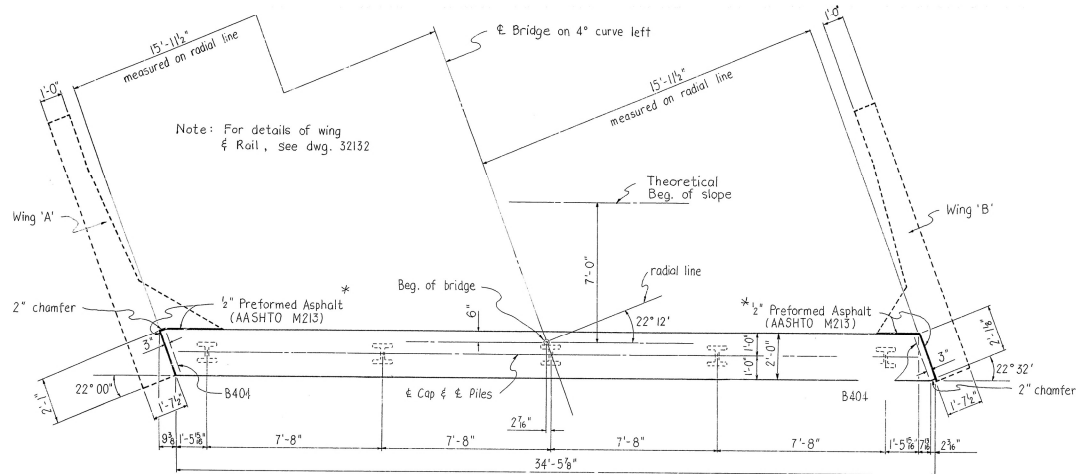
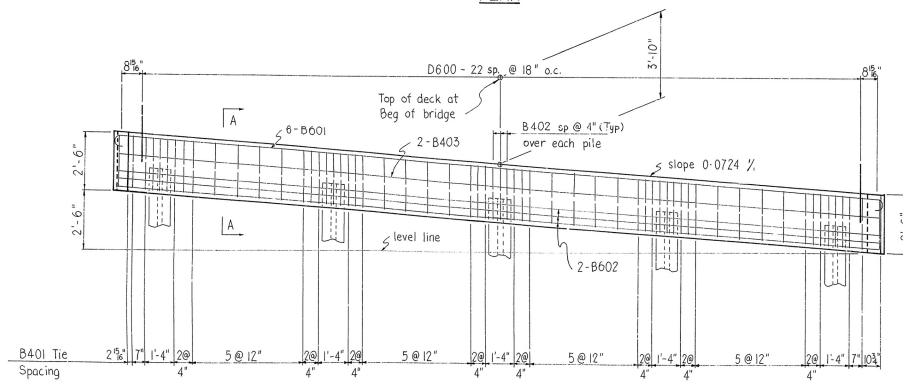




ROUTE	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.	3922	28	80
6415	BENT		32122	



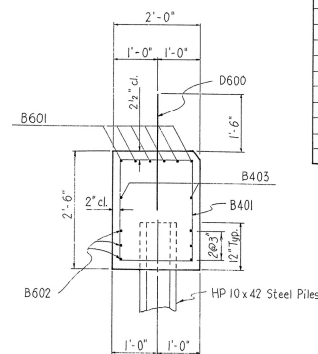
PLAN



ELEVATION

Looking Back.

\* Preformed Asphalt shall be measured and paid for as Class S(AE) Concrete.



SECTION A-A

Scale 3/4\" = 1'-0"



# END BENT 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.).  
For additional information, see layout.

## BAR LIST

MARK	No. Req. End Bent	Length	Pin Dia.	Bending Diagrams
B401	44	7'-11"	2"	
B402	15	5'-9"	2"	
B403	2	34'-2"	Str	
B404	2	8'-2"	2"	
D600	23	3'-0"	Str	
B601	6	35'-6"	4 1/2"	
B602	6	34'-2"	Str	

## DETAILS OF STD. PILE END BENT I

MESSER CREEK  
FOR 35' 0" RCDG SPANS  
32' 0" CL RDWY

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

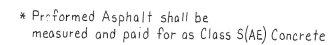
SCALE 3/8" = 1'-0" or as shown

BRIDGE NO. 6415

DRAWING NO. 32122



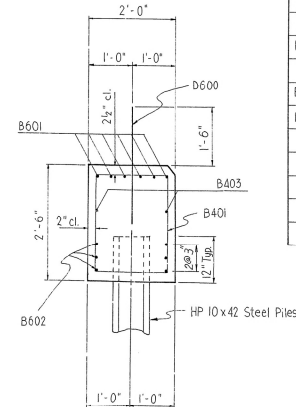
①	6415	BENT	32123
---	------	------	-------



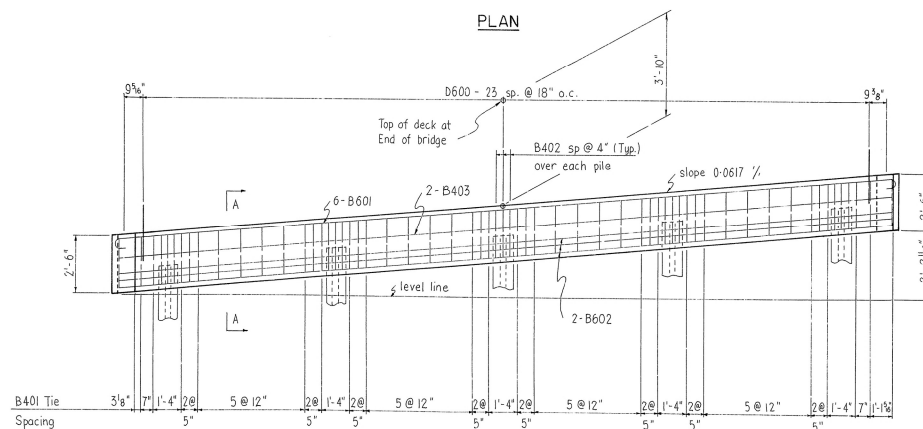
All concrete shall be Class "S" with a minimum 28 day compressive strength  $f'c = 3,500$  psi. Concrete shall be poured in the dry and all exposed corners to be chamfered  $3/4"$  unless otherwise noted.

For additional information, see layout.

MARK	No. Req. End Bent	Length	Pin Dia.	Bending diagram	
B401	44	7'-11"	2"		
B402	15	5'-9"	2"		
B403	2	35'-9"	Str.		
B404	2	8'-5"	2"		
D600	24	3'-0"	Str.		
B601	6	37'-1"	4 1/2"		
B602	6	35'-9"	Str.		



32' 0" CL RDWY



## Looking Forward

Scale  $\frac{3}{4}" = 1' - 0"$

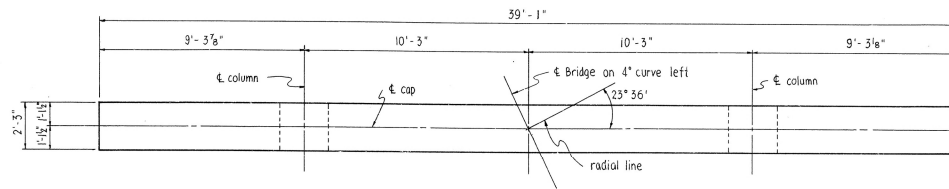


DRAWN BY: CLT DATE: 5-20-91  
CHECKED BY: DHP DATE: 6-20-91 SCALE:  $\frac{3}{8}'' = 1'-0''$  or as shown

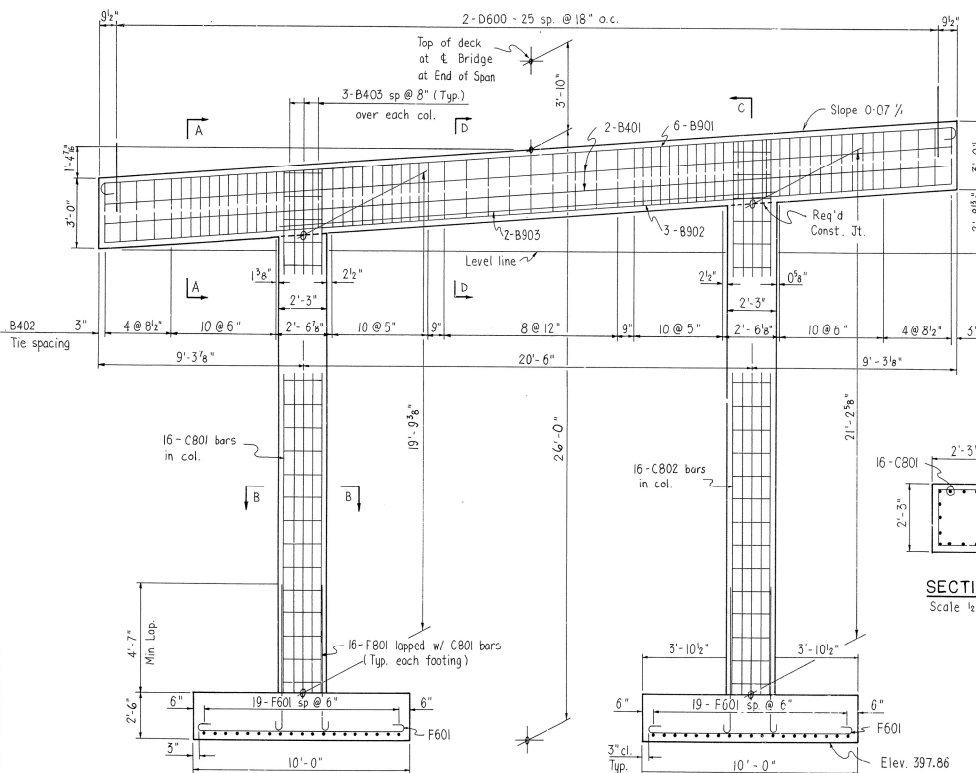
BRIDGE NO. 6415 DRAWING NO. 32123

BRIDGE NO. 6415 DRAWING NO. 32123

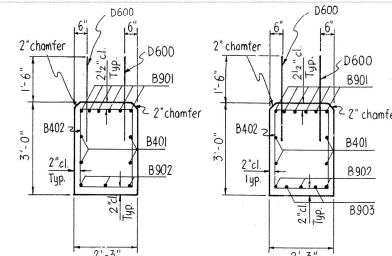
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	3922	35	80
				JOB NO.			6415	BENTS 32124



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



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

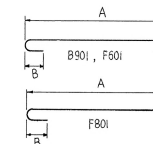


SECTION A-A  
Scale 1/2" = 1'-0"

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

# BAR LIST PER BENT

MARK	No Req	Length	A	B	Pin Dia.	Bending Diagram
B401	4	38'-9"			Str.	
B402	61	9'-5"	1'-11"	2'-7 1/2"	2"	
B403	6	7'-0"	1'-11"	2'-7 1/2"	2"	
B901	6	41'-3"	38'-9"	10"	9"	
B902	3	38'-9"			Str.	
B903	2	22'-9"			Str.	
D600	52	3'-0"			Str.	
C401	47	7'-8"	1'-10"	1'-10"	2"	
C801	16	22'-4"			Str.	
C802	16	23'-9"			Str.	
F601	76	10'-10"	9'-6"	6"	4 1/2"	
F801	32	7'-8"	6'-4"	8"	6"	



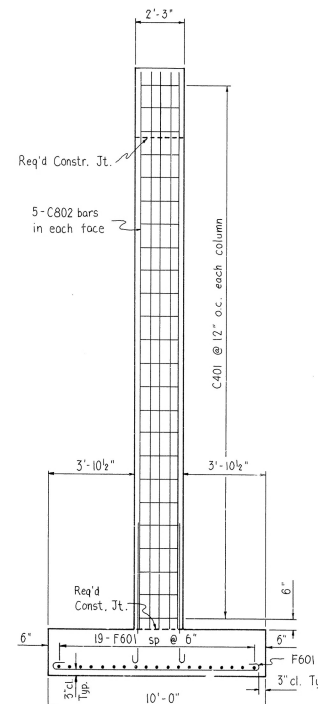
Dimensions are out to out of bars.

## INT. BENT 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.).

For additional information see layout.  
Footing Soil Pressure 6.0 KSF Group I



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

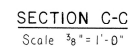
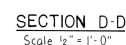
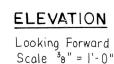
## DETAILS OF BENT 2 MESSER CREEK

ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.  
DATE: 6-2-91  
CHECKED BY: DHP DATE: 6-14-91  
DESIGNED BY: JMT DATE: 6-20-91  
SCALE: As Shown  
BRIDGE NO. 6415 DRAWING NO. 32124



David P. Smith  
BRIDGE ENGINEER



Dimensions are out to out of bars

INT. BENT 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.).

For additional information see layout.  
Footing Soil Pressure 6.0 KSF Gro

### DETAILS OF BENT 3

MESSER CREEK

ROUTE	SEC.
-------	------

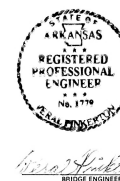
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK

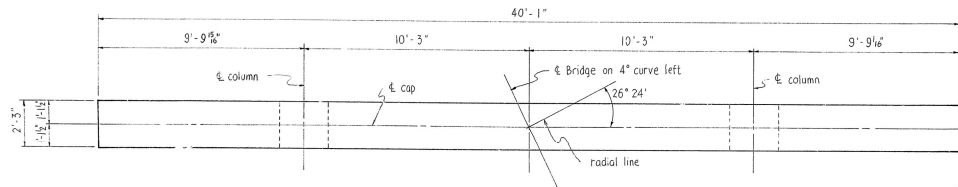
DRAWN BY: CLT DATE: 6-2-91  
CHECKED BY: DHP DATE: 6-14-91 SCALE: As Shown  
DESIGNED BY: JWT DATE: 6-20-91

BRIDGE NO. 6415

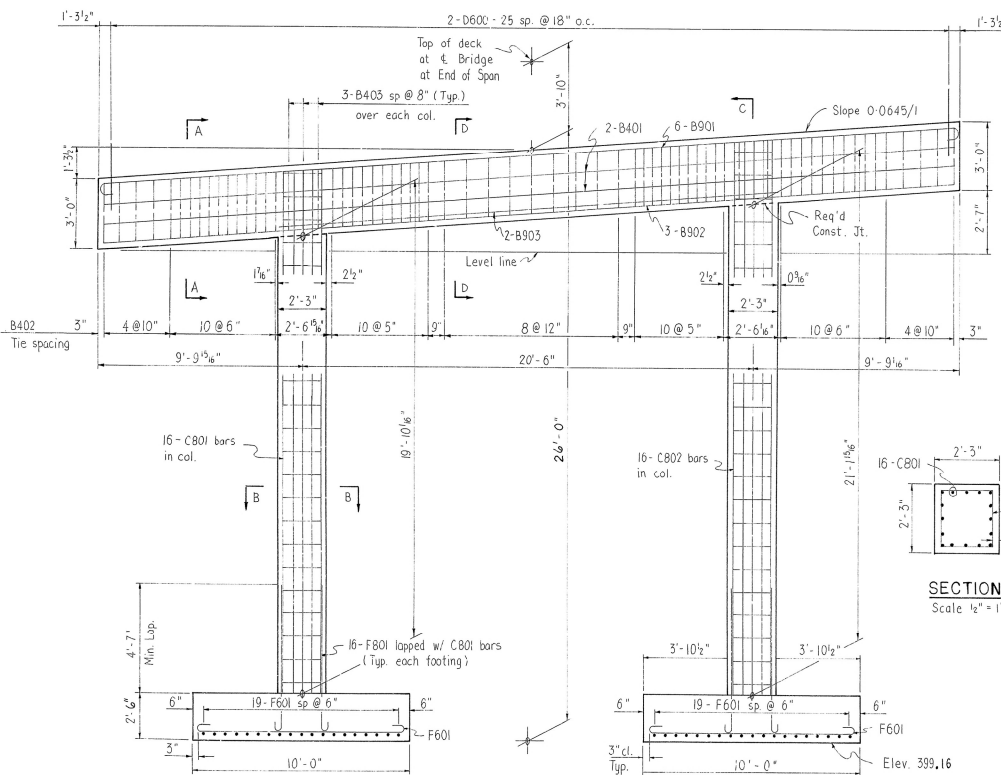
DRAWING NO. 32/25



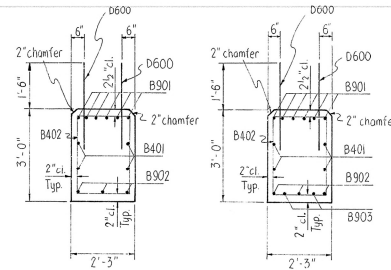
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		3922	32	80
						BENTS	32125	



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

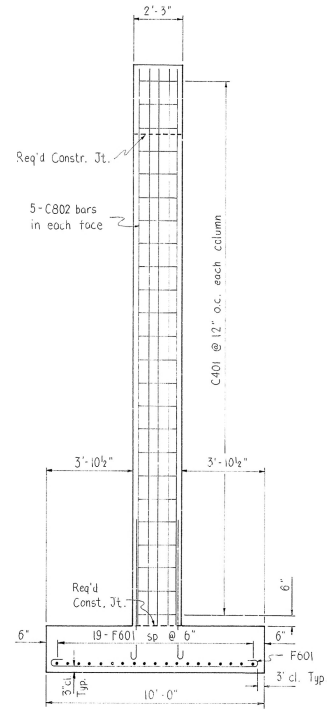


ELEVATION  
Looking Forward  
Scale 3/8" = 1'-0"



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

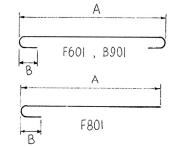
SECTION D-D  
Scale 1/2" = 1'-0"



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

# BAR LIST PER BENT

MARK	No Req	Length	A	B	Pin Dia.	Bending Diagram
B401	4	39'-9"			Str.	
B402	61	9'-5"	1'-11"	2'-7 1/2"	2"	
B403	5	7'-0"	1'-11"	2'-7 1/2"	2"	
B901	6	42'-3"	39'-9"	10"	9"	
B902	5	39'-9"			Str.	
B903	2	22'-9"			Str.	
D600	52	3'-0"			Str.	
C401	47	7'-8"	1'-10"	1'-10"	2"	
C801	16	22'-5"			Str.	
C802	16	25'-9"			Str.	
F601	76	10'-10"	9'-6"	6"	4 1/2"	
F801	32	7'-8"	6'-4"	8"	6"	



Dimensions are out to out of bars.

## INT. BENT 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.).

For additional information see layout.

Footing Soil Pressure 6.0KSF Group I

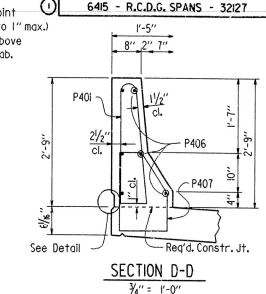
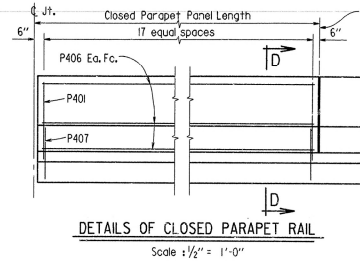
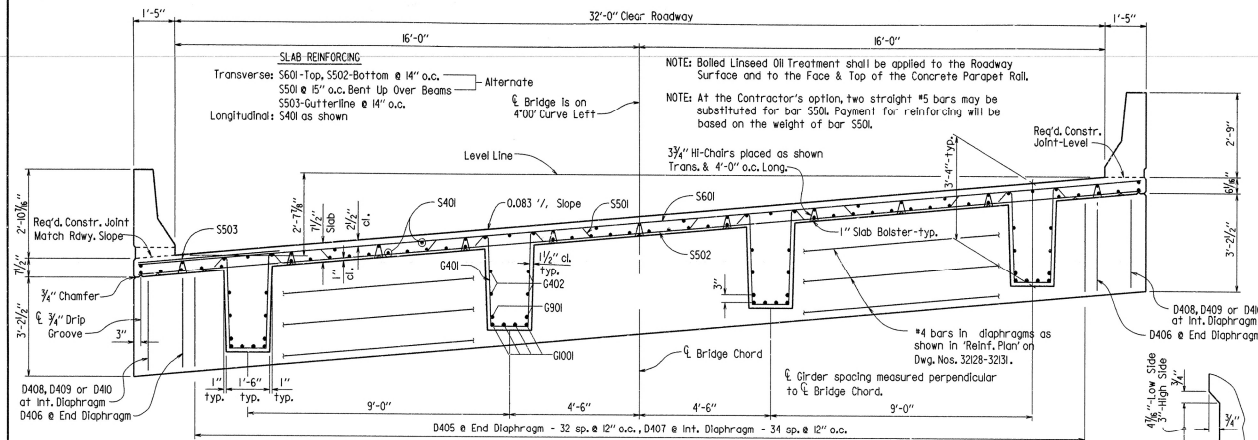
## DETAILS OF BENT 4 MESSER CREEK

ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION



LITTLE ROCK, ARK.  
DRAWN BY: CLT DATE: 6-2-91  
CHECKED BY: DHP DATE: 6-14-91  
DESIGNED BY: JWW DATE: 6-20-91  
BRIDGE NO. 6415 DRAWING NO. 32126

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	3922	33	80
				JOB NO.	6415 - R.C.D.G. SPANS - 32127			



**GENERAL NOTES**

All concrete to be Class (S)AEI. All exposed corners to be chamfered 3/4" unless otherwise noted. The concrete in the girders, end diaphragms, and deck shall be placed in one continuous pour for interior spans. The concrete in the girders, deck, end diaphragms, and wings shall be placed in one continuous pour for end spans.

Reinforcing steel to be ASTM A615 or A617, Grade 60. Bar supports of reinforcing bars will not be paid for directly, but will be considered subsidiary to the item "Reinforcing Steel".

Neoprene Pad, Type 2 Joint Filler and Type 6 Poured Joint. Material shall be measured and paid for as Class (S)AEI Concrete. Neoprene material shall meet the requirements of Section 806.02 of the Standard Specifications and shall be in one piece for the full width and length of the bearing and may be 50, 60, or 70 durometer elastomer.

Construction Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, 1960 Edition with applicable supplemental specifications and special provisions.

Design Specifications: AASHTO Standard Specifications for Highway Bridges, 1969 Edition with current interim specifications.

Live Loading: HS20 Method of Design: Load Factor

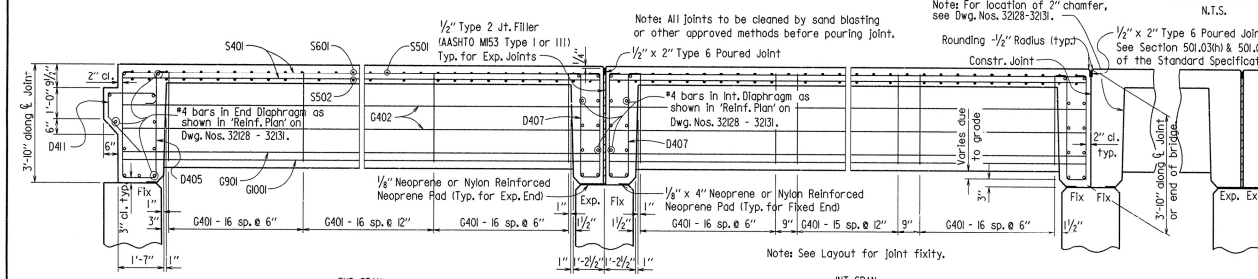
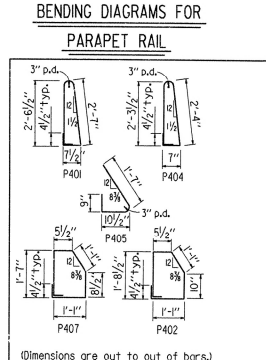
Dead Load: Int. Girder 1882 PLF Ex. Girder 1827 pif

\*Includes Future Wearing Surface: 200 PLF

Live Load: 1,500 wheels + impact

Unit Stresses: 28 day compressive strength of Class (S)AEI Concrete = 4000 psi

Yield Strength of Reinforcing Steel = 60,000 psi.

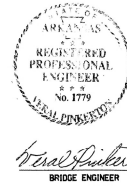
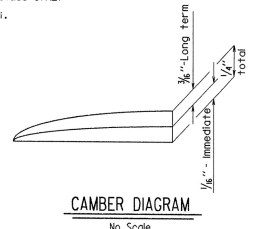
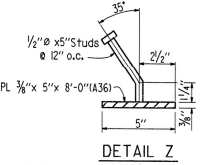
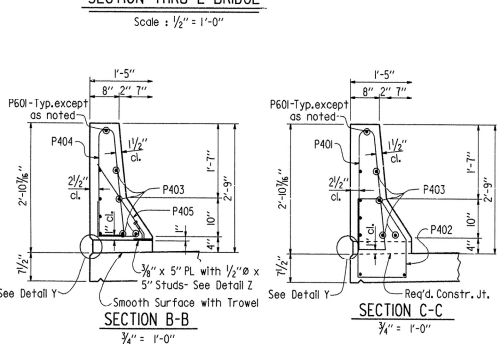
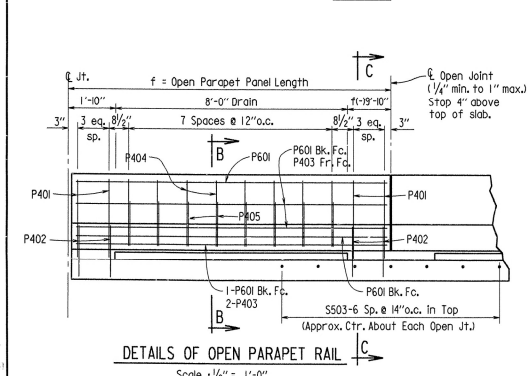


**DETAIL Y**  
N.T.S.

Notes for location of 2" chamfer, see Dwg. Nos. 32128-32131.

Rounding 1/2" Radius (typ.)

1/2" x 2" Type 6 Poured Joint - See Section 501.03(h) & 501.04(d) of the Standard Specifications.



**DETAILS COMMON TO 35'-0" R.C.D.G. SPANS**  
**MESSER CREEK**

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

DRAWN BY: KDH  
CHECKED BY: UH  
DESIGNED BY: JUT  
BRIDGE NO. 6415

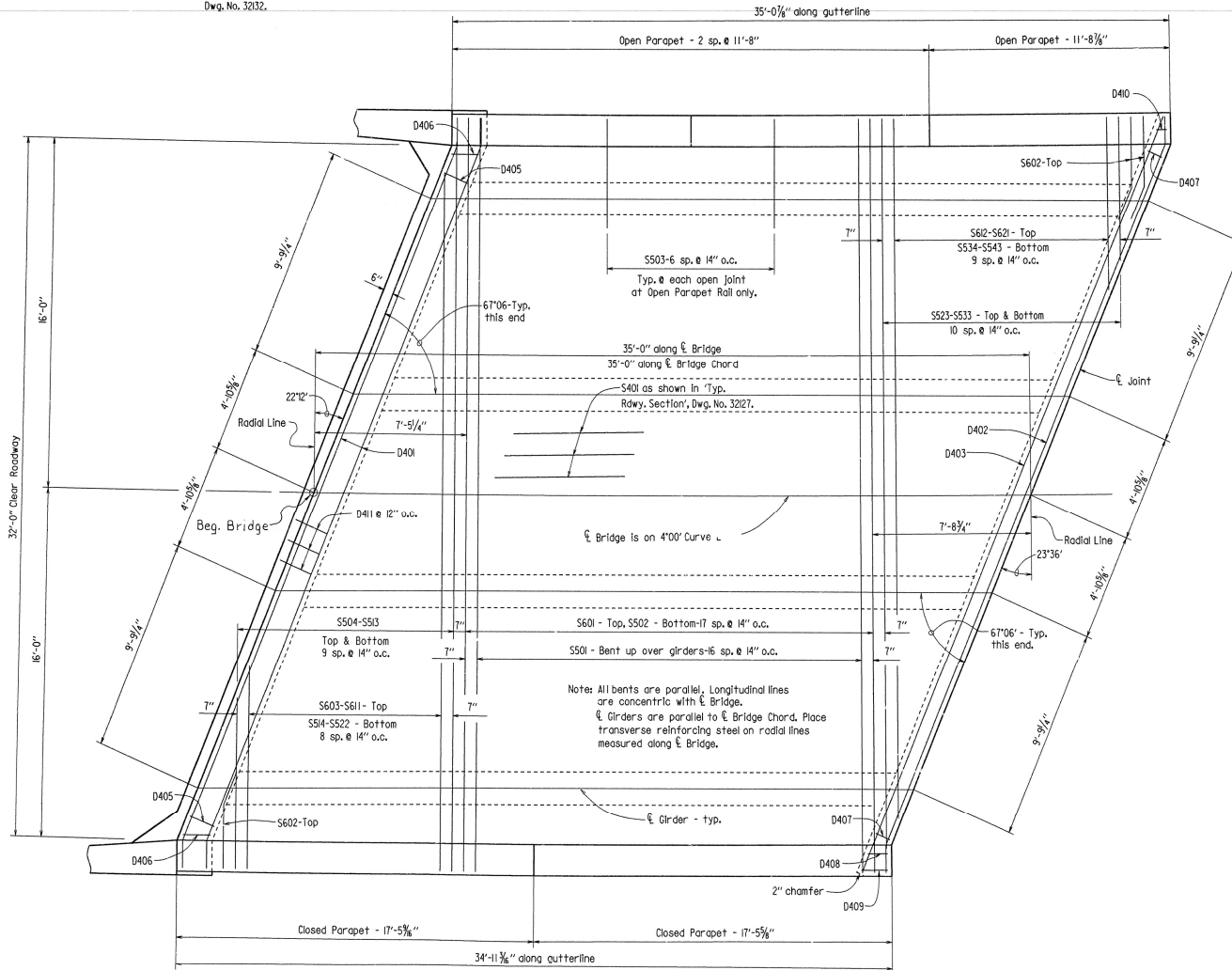
DATE: 23 MAY 91  
DATE: 6-20-91  
DATE: 6-20-91

SCALE: AS NOTED

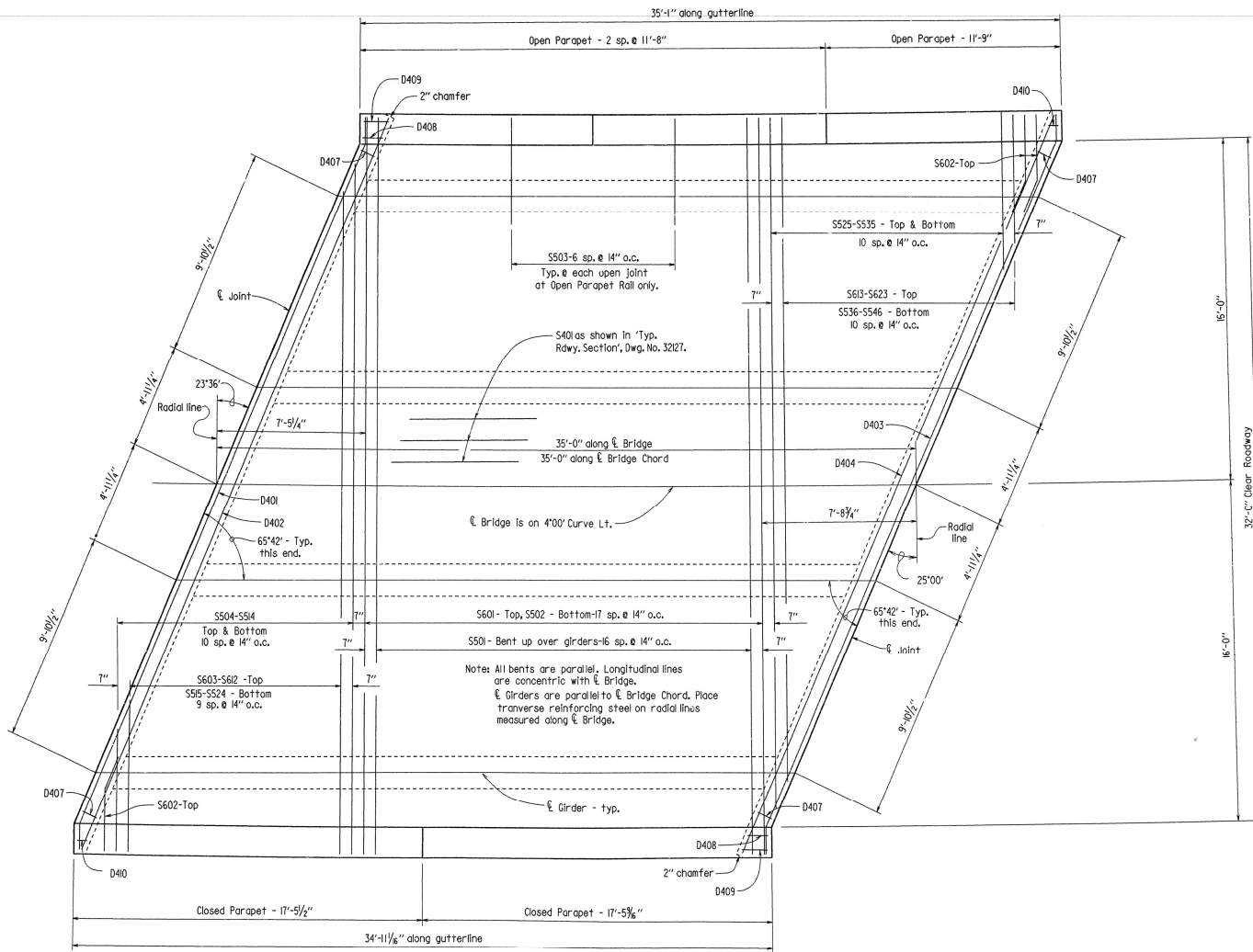
DRAWING NO. 32127

Note: Rail & wing are included in span construction and quantities. For details of rail & wing, see Dwg. No. 3232.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. PROJ. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		34	80
				JOB NO.	3922		34	80
					6415 - SPAN 1 - 32128			



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	3922	35	80
				JOB NO.	6415 - SPAN 2 - 32129			



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

# BAR LIST

MARK	NO.	REQ'D.	LENGTH	P.D.	BENDING DIAGRAMS
S401	71	34'-8"	Str.		
D401	5	37'-5"	2"		
D402	5	37'-7"	2"		
D403	5	37'-9"	2"		
D404	5	38'-0"	2"		
D407	70	7'-10"	2"		
D408	2	8'-0"	2"		
D409	2	8'-5"	2"		
D410	2	7'-6"	2"		
G401	196	7'-10"	2"		
G402	16	34'-6"	Str.		
P401	60	6'-4"	2"		
P402	24	5'-6"	2"		
P403	12	11'-2"	Str.		
P404	24	5'-10"	2"		
P405	24	3'-2"	2"		
P406	12	15'-11"	Str.		
P407	36	5'-3"	2"		
S501	17	35'-2"	3"		
S502	18	34'-6"	Str.		
S503	14	5'-0"	Str.		
S504-S504	2 ea.	Var. 5'-8" to 32'-4"	Str.		
S505-S505	1 ea.	Var. 7'-0" to 31'-0"	Str.		
S506-S506	2 ea.	Var. 7'-4" to 32'-4"	Str.		
S507-S507	1 ea.	Var. 6'-0" to 31'-1"	Str.		
S508-S508	18	34'-6"	Str.		
S509-S509	3	5'-1"	4 1/2"		
S510-S510	1 ea.	Var. 7'-0" to 31'-0"	Str.		
S511-S511	1 ea.	Var. 6'-0" to 31'-1"	Str.		
S512-S512	15	11'-2"	Str.		
G501	8	34'-6"	Str.		
G502	16	34'-6"	Str.		

## DETAILS OF SPAN 2 MESSER CREEK

ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
DRAWN BY: KDH DATE: 31 MAY 91  
CHECKED BY: DHP DATE: 6-20-91  
DESIGNED BY: JPT DATE: 6-20-91  
BRIDGE NO. 6415 DRAWING NO. 32129

KDH/SA 1, 550, 3001, 3922 83922.52

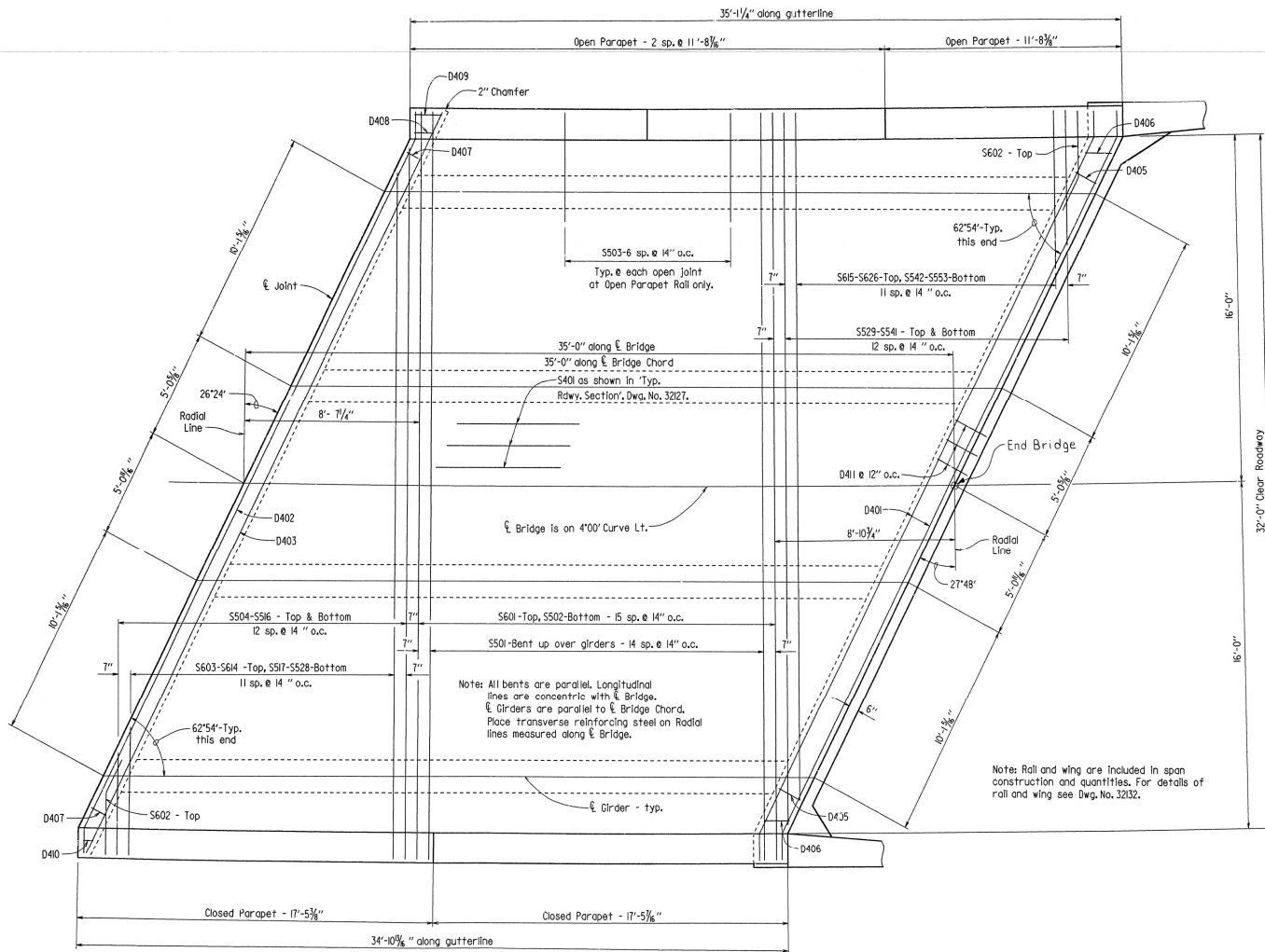
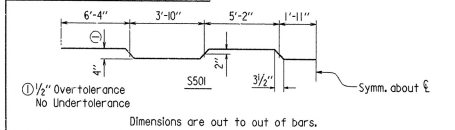




DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	3922	37	80
				JOB NO.	6415 - SPAN 4 - 32131			

# BAR LIST

MARK	NO.	REQ'D.	LENGTH	P.D.	BENDING DIAGRAMS
S401	71	34'-8"	Str.		
D401	11	38'-2"	2"		
D402	5	38'-2"	2"		
D403	5	38'-6"	Str.		
D405	33	8'-3"	2"		
D406	2	8'-5"	2"		
D407	35	7'-10"	2"		
D408	1	8'-0"	2"		
D409	1	8'-5"	2"		
D410	1	7'-6"	2"		
D411	33	4'-5"	2"		
D401	196	7'-10"	2"		
D402	16	34'-6"	Str.		
P401	60	6'-4"	2"		
P402	24	5'-6"	2"		
P403	12	11'-2"	Str.		
P404	24	5'-10"	2"		
P405	24	3'-2"	2"		
P406	12	16'-11"	Str.		
P407	36	5'-3"	2"		
S501	15	35'-2"	3"		
S502	16	34'-6"	Str.		
S503	14	5'-0"	Str.		
S504-S516	2 ea.	Var. 4'-8" to 32'-10"	Str.		
S517-S528	1 ea.	Var. 5'-11" to 31'-8"	Str.		
S529-S541	2 ea.	Var. 6'-2" to 32'-10"	Str.		
S542-S553	1 ea.	Var. 7'-3" to 31'-8"	Str.		
S601	16	34'-6"	Str.		
S602	2	5'-1"	4 1/2"		
S603-S614	1 ea.	Var. 5'-11" to 31'-8"	Str.		
S615-S626	1 ea.	Var. 7'-3" to 31'-8"	Str.		
P601	15	11'-2"	Str.		
G901	8	34'-6"	Str.		
G1001	16	34'-6"	Str.		



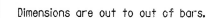
BRIDGE ENGINEER

DETAILS OF SPAN 4  
MESSER CREEK  
ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
DRAWN BY: KDH DATE: 10 JUN 91  
CHECKED BY: JHP DATE: 6-20-91  
DESIGNED BY: JMT DATE: 6-20-91  
BRIDGE NO. 6415 DRAWING NO. 32131 -

KDH:SH 1, 550, 3001, 3922 B3922.54



### BENDING DIAGRAMS

TABLE OF VARIABLESTabular Data By: KDH Date: 11-11-91

Checked By: *JWT*      Date: *6-19-91*

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

STANDARD DETAILS  
FOR WING AND RAIL  
MESSER CREEK  
ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

ALTERED BY: LM DATE: 11-4-87  
 CHECKED BY: C.J.F. DATE: 11-25-87 SCALE: As Shown  
 DESIGNED BY: STD. DATE: \_\_\_\_\_  
 BRIDGE NO. 6415 DRAWING NO. 32132

KDHFS14 R3922XXX3.WI 1.550.3001.3922