

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK	140-1 (22)39			
JOB NO.		4528	53	231	

Summary of Bridge Quantities

ITEM NUMBER				801	SP & 802	SP & 802	SP 802-9	SP & 803	** SP & 804	** SP & 804	*SP&805 ALTERNATE NO.1 805 ALTERNATE NO.2	SP & 806	SP & 806	SP & 806	SP	SP 806-9	812	817	SP & 817A	SP & 817A	
BRIDGE NO.	CODE NO.	NAME	PLATE TITLE	ITEM	UNCLASSIFIED EXCAVATION FOR STRUCTURES	CLASS A CONCRETE	CLASS S CONCRETE	BOILED LINSEED OIL	REINFORCING STEEL	STEEL BEARING PILING (10 BP42)	STEEL BEARING PILING (12 BP53)	METAL (ALUMINUM) BRIDGE RAILING (TYPE A) ALTERNATE NO.1 METAL (STEEL) BRIDGE RAILING (TYPE A) ALTERNATE NO.2	STRUCTURAL STEEL IN BEAM SPANS (A-36)	STRUCTURAL STEEL IN BEAM SPANS (A-441)	STRUCTURAL STEEL IN FRAME BRIDGE (A-588)	ELASTOMERIC BEARING PADS	PREFORMED JOINT SEALER	BRIDGE NAME PLATE (TYPE C)	CONCRETE RIPRAP	FILTER BLANKET	DUMPED RIPRAP
					UNIT OF BRIDGE	UNIT	CU.YD.	CU.YD.	CU.YD.	GAL.	LB.	LN. FT.	LN. FT.	LN. FT.	LB.	LB.	LB.	EACH	LN. FT.	PLATE	CU.YD.
5132 A	X 071	BRIDGE OVER DIRTY CREEK		WEST ABUTMENT AND EAST ABUTMENT	167	---	52.38	0.4	3,554	---	442	---	155.6	---	---	---	---	1	93.03	90	271
				PIER NO. 1	154	12.22	41.63	---	11,731	---	---	---	---	---	---	---	---	---	---	---	---
				PIER NO. 2	84	16.50	42.32	---	12,174	---	---	---	---	---	---	---	---	---	---	---	---
				PIER NO. 3	122	12.22	40.93	---	11,559	---	---	---	---	---	---	---	---	---	---	---	---
				ONE 243" CONTINUOUS COMPOSITE I-BEAM UNIT	---	---	268.39	24.4	60,481	---	---	36.62	41,662	152,350	---	---	87	---	---	---	---
				TOTAL FOR BRIDGE 5132A	532	40.94	445.65	24.8	99,499	---	442	486.62	43,220	152,350	---	---	87	1	93.03	90	271
5132 B	X 071	BRIDGE OVER DIRTY CREEK		WEST ABUTMENT AND EAST ABUTMENT	167	---	52.33	0.4	3,554	---	412	---	1,658	---	---	---	---	1	77.37	193	594
				PIER NO. 1	121	11.47	38.85	---	8,809	---	---	---	---	---	---	---	---	---	---	---	---
				PIER NO. 2	60	12.22	38.85	---	8,874	---	---	---	---	---	---	---	---	---	---	---	---
				PIER NO. 3	84	11.47	37.46	---	8,569	---	---	---	---	---	---	---	---	---	---	---	---
				ONE 243" CONTINUOUS COMPOSITE I-BEAM UNIT	---	---	268.39	24.4	60,481	---	---	486.62	41,662	152,350	---	---	87	---	---	---	---
				TOTAL FOR BRIDGE 5132B	432	35.16	435.93	24.8	90,287	---	412	486.62	42,220	152,350	---	---	87	1	77.37	193	594
5133	X 771	HIGHWAY 126 UNDERPASS		NORTH ABUTMENT AND SOUTH ABUTMENT	100	---	35.15	0.3	2,384	255	---	---	---	---	1,097	10	---	1	66.20	---	---
				PEDESTAL NO. 1	152	---	47.19	---	4,640	---	---	---	---	---	---	---	---	---	---	---	---
				PEDESTAL NO. 2	160	---	50.29	---	4,800	---	---	---	---	---	---	---	---	---	---	---	---
				PEDESTAL NO. 3	193	---	56.22	---	5,092	---	---	---	---	---	---	---	---	---	---	---	---
				PEDESTAL NO. 4	230	---	63.21	---	5,405	---	---	---	---	---	---	---	---	---	---	---	---
				ONE 332" CONTINUOUS COMPOSITE STEEL FRAME UNIT	---	---	276.36	25.1	55,987	---	---	664.46	---	---	232,463	---	65	---	---	---	---
	TOTAL FOR BRIDGE 5133	835	---	528.42	25.4	78,314	255	---	664.46	---	---	233,560	10	65	1	66.20	---	---			
TOTAL FOR JOB 4528				1,799	76.10	1,410.00	75.0	268,100	755	854	1,637.70	84,440	304,700	233,560	10	239	---	236.60	268	805	

* See SP 806-10, Aluminum Coated Steel Products.
 ** See SP 806-13, Revision of AWS Bridge Specifications.

BRIDGE NO. 5132A&B, 5133 DRAWING NO. 13784

ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARKANSAS
 INTERSTATE ROUTE 40
 EAST GAR CREEK - JOHNSON COUNTY LINE
 JOB 4528

SUMMARY OF BRIDGE QUANTITIES

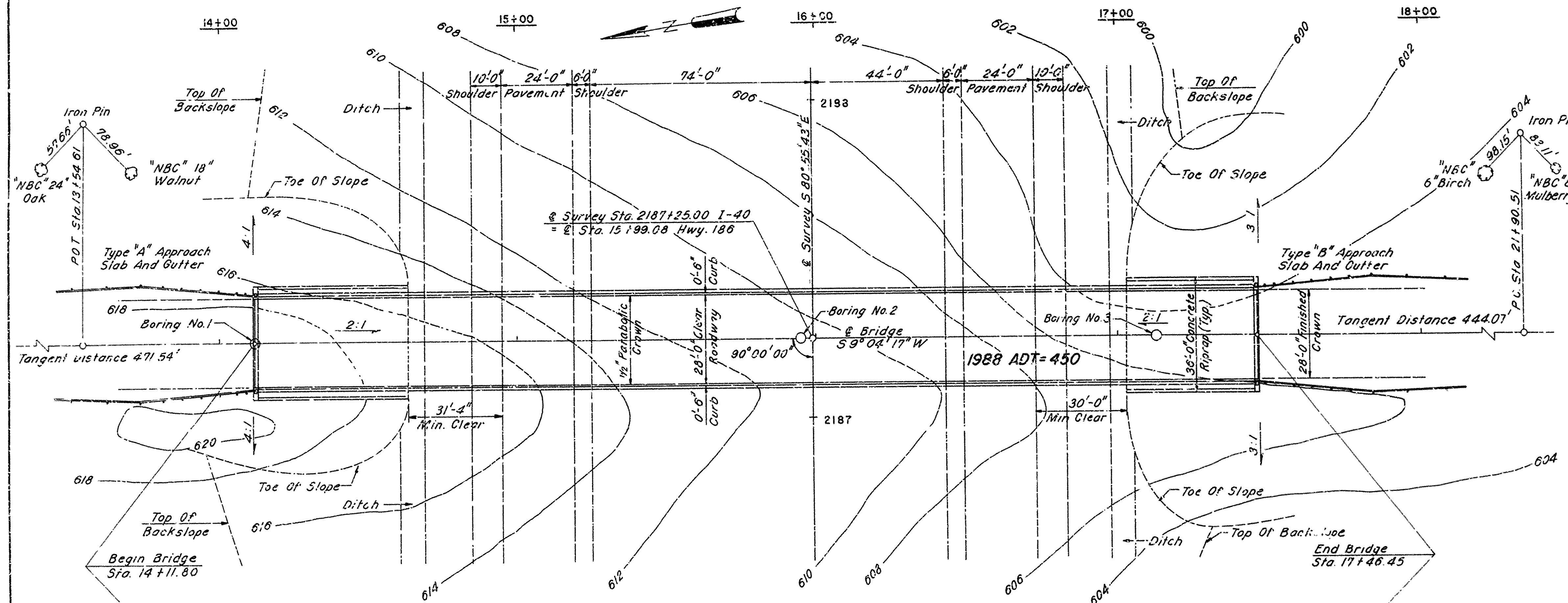
DESIGNED BY: C.S.H.	GARVER & GARVER, INC. ENGINEERS LITTLE ROCK, ARKANSAS	SCALE: NONE
DRAWN BY: D.M.F.		SHEET NO.
CHECKED BY: L.R.G.		53 OF 231
DATE: AUG. 1968		

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISC. YEAR	SHEET NO.	TOT. SHEETS
6	ARK	1-40-1 (22) 39		62	231
JOB NO. 4528					

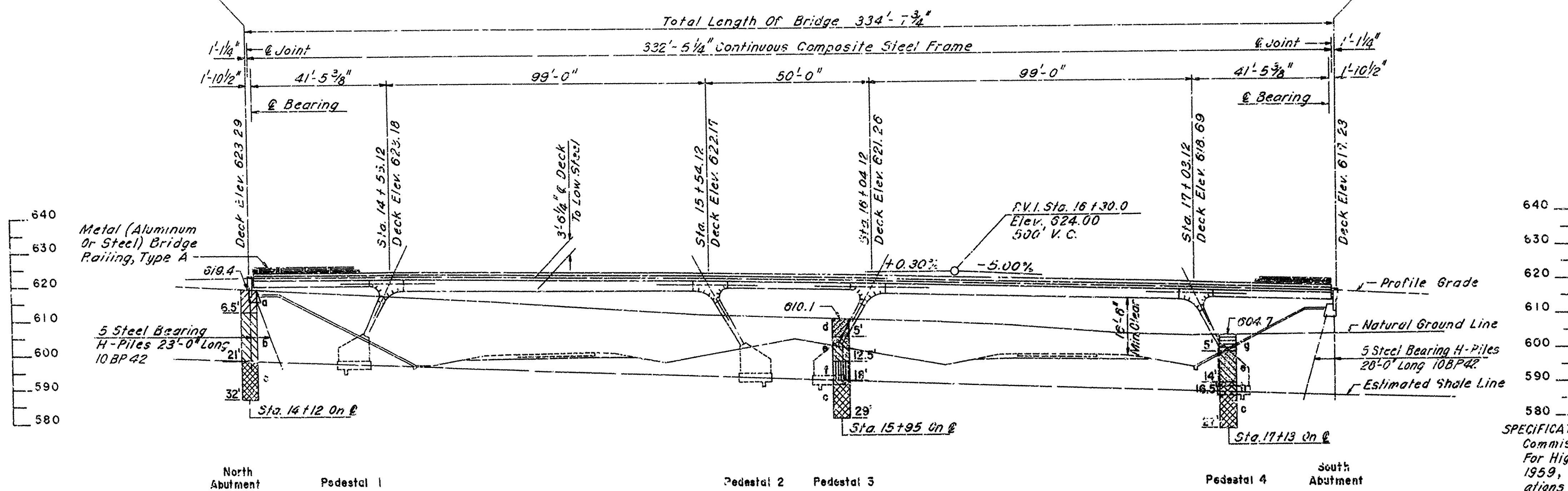
① Hwy 186 Underpass Layout

GENERAL NOTES

- ALL ELEVATIONS ON DRAWINGS REFER TO MEAN SEA LEVEL ELEVATION. FOR ELEVATIONS OF TOP OF CAPS AND BOTTOM OF PEDESTALS, SEE ABUTMENT AND PEDESTAL DETAILS.
- ROADWAYS, CURBS, PARAPETS, ABUTMENTS AND PEDESTALS SHALL BE CONSTRUCTED OF CLASS S CONCRETE. ALL CONCRETE TO BE POURED IN THE DRY. ALL CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED. CHAMFER ON PARAPET TO BE 1/2".
- REINFORCING STEEL SHALL BE DEFORMED BARS OF INTERMEDIATE OR HARD GRADE. ON THE DRAWINGS, BAR SIZES ARE DESIGNATED BY NUMBER, THE FIRST DIGIT INDICATING THE SIZE OF BAR. BARS SHALL BE ACCURATELY LOCATED AND FIRMLY HELD IN PLACE DURING CONSTRUCTION BY STEEL WIRE SUPPORTS. THE WIRE SUPPORTS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM "REINFORCING STEEL".
- ALL STRUCTURAL STEEL SHALL BE A.S.T.M. DESIGNATION A588, UNLESS NOTED OTHERWISE. ALL STRUCTURAL STEEL WILL BE PAID FOR AS "STRUCTURAL STEEL IN FRAME BRIDGE A588".
- ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES, CURRENT EDITION, AND TO JOB SPECIAL PROVISION.
- ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER HIGH STRENGTH BOLTS WITH WEATHERING PROPERTIES, UNLESS NOTED OTHERWISE. THE MINIMUM DISTANCE BETWEEN CENTERS OF 7/8" DIAMETER BOLTS SHALL BE NOT LESS THAN THREE TIMES THE DIAMETER OF THE BOLT, AND PREFERABLY, SHALL BE NOT LESS THAN 3". THE MINIMUM DISTANCE FROM THE CENTER OF A 7/8" DIAMETER BOLT TO A SHEARED EDGE SHALL BE 1 1/2" AND TO A ROLLED OR PLANED EDGE SHALL BE 1 1/4".
- DRAWINGS SHOW GENERAL FEATURES OF DESIGN ONLY. SHOP DRAWINGS SHOWING STRUCTURAL STEEL DETAILS, REINFORCING STEEL SHOP LIST AND BENDING DIAGRAMS AND METAL RAILING DETAILS SHALL BE PREPARED IN ACCORDANCE WITH SPECIFICATIONS SUBMITTED AND APPROVAL SECURED BEFORE FABRICATION IS BEGUN.
- MEMBERS OF DIFFERENT SIZE, BUT AT LEAST EQUAL STRENGTH, MAY BE SUBSTITUTED FOR SIZES SHOWN ON THE PLANS. BASIS OF PAYMENT WILL BE FOR SIZE SHOWN ON THE PLANS OR FOR SUBSTITUTED SIZE, IF LESS.
- THE CONTRACTOR SHALL SUBMIT AN ERECTION PLAN TO THE ENGINEER FOR APPROVAL BEFORE SHOP DRAWINGS ARE SUBMITTED BY THE FABRICATOR. THE ERECTION PLAN SHALL SPECIFY:
 - ORDER OF SPICES
 - METHOD OF ALIGNMENT OR CLAMPING
 - PROGRAM FOR WELDING SEQUENCE AND DISTORTION CONTROL.
- ALL FRAMES SHALL BE BLOCKED IN THEIR TRUE POSITION, WITH WEB PLATES HORIZONTAL, IN THE SHOP, TO FORM EACH COMPLETE FRAME. THE CAMBER, LENGTH OF SECTIONS, DISTANCE BETWEEN BEARINGS AND OPENING OF JOINTS SHALL BE MEASURED WITH THE GUIDES IN THIS POSITION, AND THIS INFORMATION SHALL BECOME A PART OF THE PERMANENT RECORD OF THIS JOB. THE COMPONENT PARTS SHALL BE MATCH MARKED IN THIS ASSEMBLY AND THESE MARKS SHALL BE SHOWN ON THE ERECTION DIAGRAM. ALL FRAME DIMENSIONS ARE BASED ON A TEMPERATURE OF 60°F.
- ALL STRUCTURAL STEEL IS TO REMAIN UNPAINTED.
- LENGTHS OF 108P42 PILES SHOWN SHALL BE ORDERED AND DRIVEN INTO THE MATERIAL DESIGNATED AS SHALE ON THE BORINGS, AND TO A MINIMUM BEARING CAPACITY OF 55 TONS PER PILE. CUTOFF AND/OR BUILDUP SHALL BE ENSURED AND PAID FOR AS PROVIDED IN THE SPECIFICATIONS. PILING SHALL BE DRIVEN AFTER EMBANKMENT IS IN PLACE.
- THE KEY OF ALL PEDESTALS SHALL BE A MINIMUM OF 2'-6" INTO THE MATERIAL DESIGNATED AS SHALE ON THE BORINGS.
- ROCK EXCAVATIONS SHALL BE MADE TO NEAT LINES OF CONCRETE FOOTINGS. CARE SHALL BE EXERCISED TO AVOID SHATTERING OF ROCK FACES. CONCRETE IN FOOTINGS SHALL BE POURED DIRECTLY AGAINST EXCAVATED SURFACES OF ROCK.



PLAN



ELEVATION

BORING LEGEND

- a. Firm Tan Sandy Clay, With Some Rock Fragments, Very Stiff Tan And Red With Many Rock Fragments Below 2'.
b. Hard Tan And Light Gray Shaly Clay, Tan Gray And Dark Gray, Below 10'.
c. Dark Gray Shale.
d. Firm Tan Sandy Clay With Rock Fragments, Very Stiff Tan And Red With Many Rock Fragments Below 1.5'.
e. Very Stiff To Hard Tan Red And Gray Shaly Clay.
f. Dark Gray And Tan Clay-Shale, Thinly Bedded.
g. Firm Tan Sandy Clay With Rock Fragments, Very Stiff With Many Rock Fragments Below 2.5'.
h. Dark Gray Clay Shale.

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications For Highway Construction, Edition Of 1959, The 1966 Supplemental Specifications Thereto, And Designated Special Provisions.

DESIGN SPECIFICATIONS: AASHTO 1965 Live Loading HS 20-44

UNIT STRESSES: Class S Concrete (n=10) 1,200 psi
Reinforcing Steel 20,000 psi
Structural Steel A588 27,000 psi

BRIDGE NO. 5133 DRAWING NO. 13794

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

INTERSTATE ROUTE 40
EAST GARCREEK - JOHNSON COUNTY LINE
JOB 4528

HWY. 186 UNDERPASS
PLAN AND ELEVATION

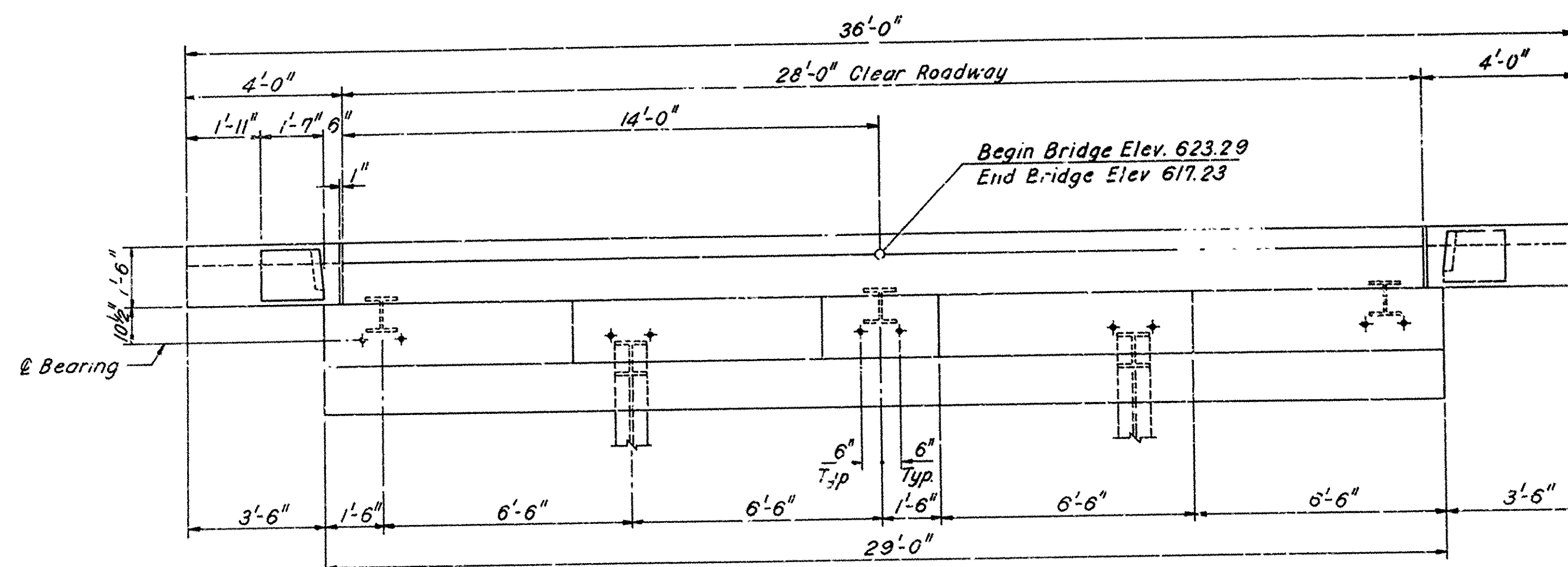
DESIGNED BY: G.F.H.
DRAWN BY: J.B.C.
CHECKED BY: T.B.M.
DATE: AUG. 1968

GARVER & GARVER, Inc.
ENGINEERS
LITTLE ROCK, ARKANSAS

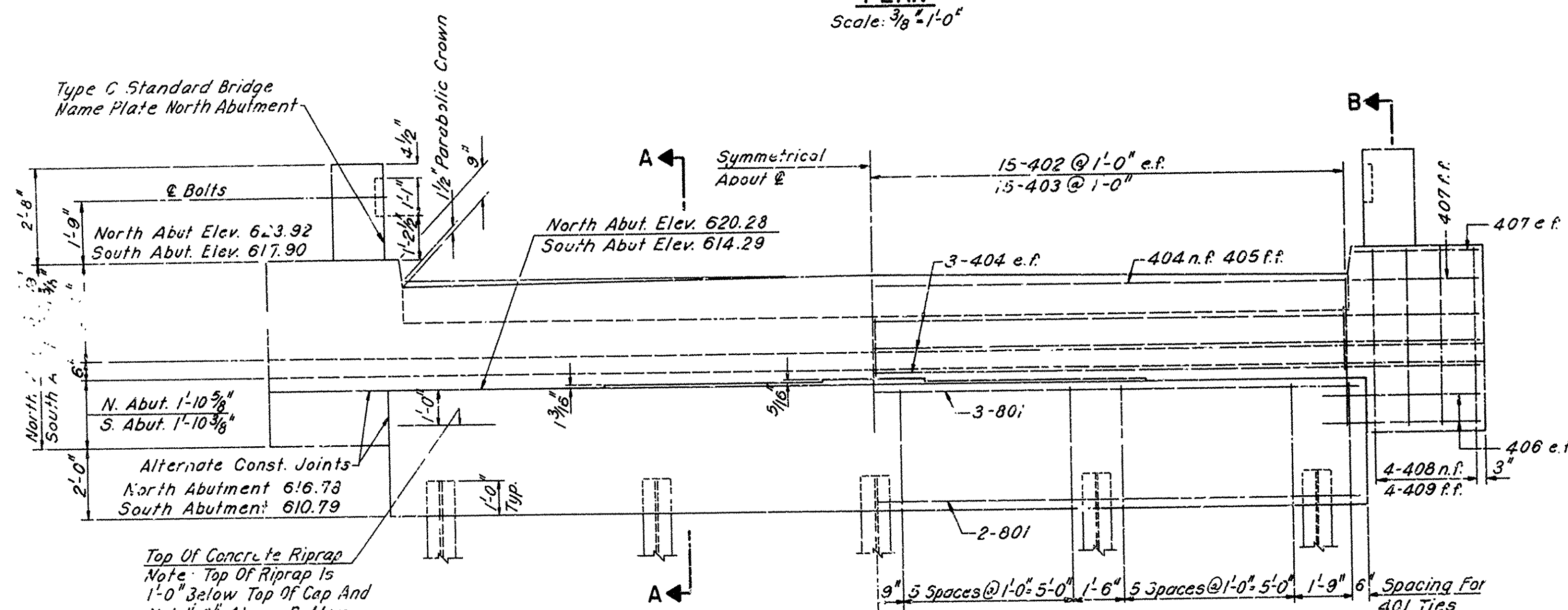
SCALE: 1"=20'-0"
SHEET NO. 62 OF 231

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK	1-40-1 (22:39)		63	231

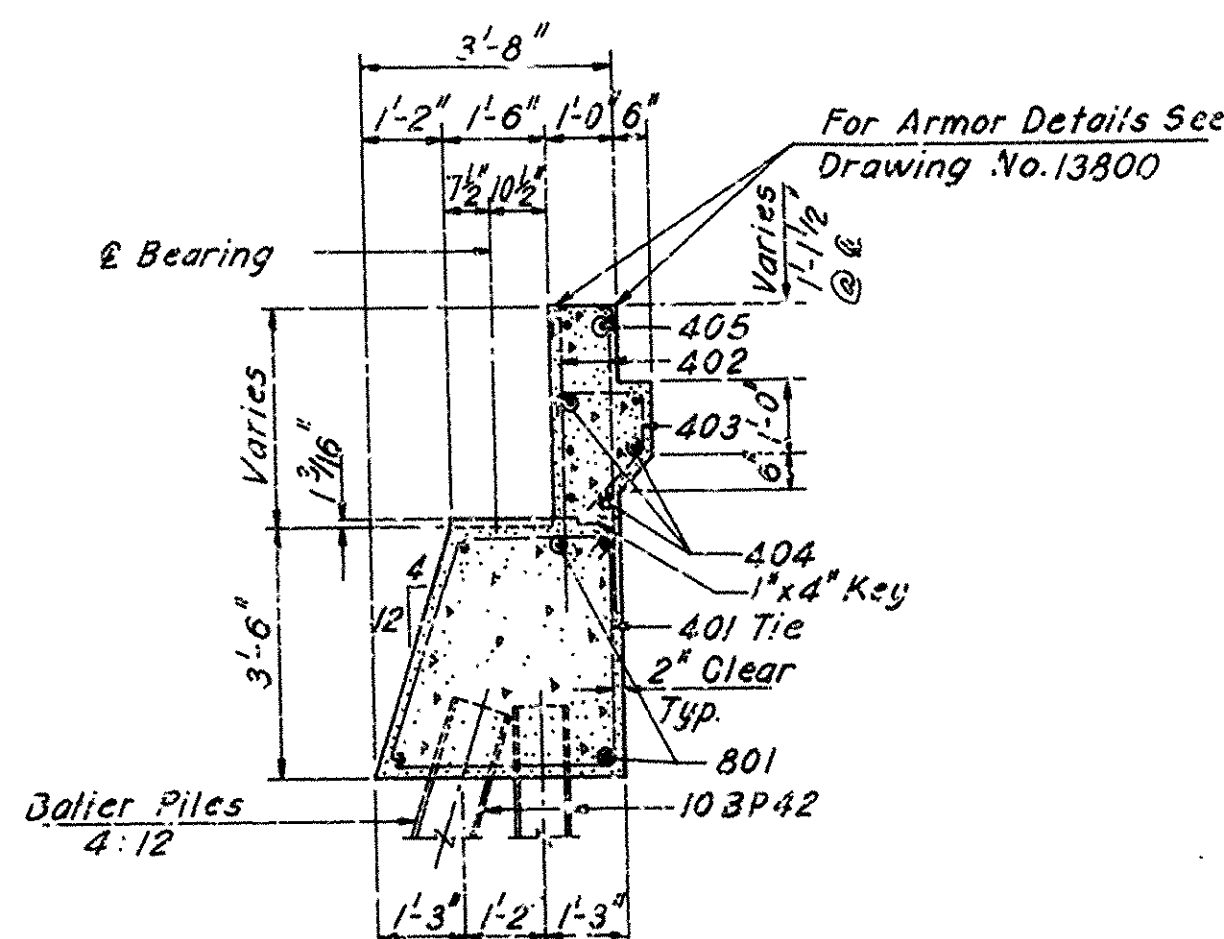
① Hwy 136 Underpass Abutments



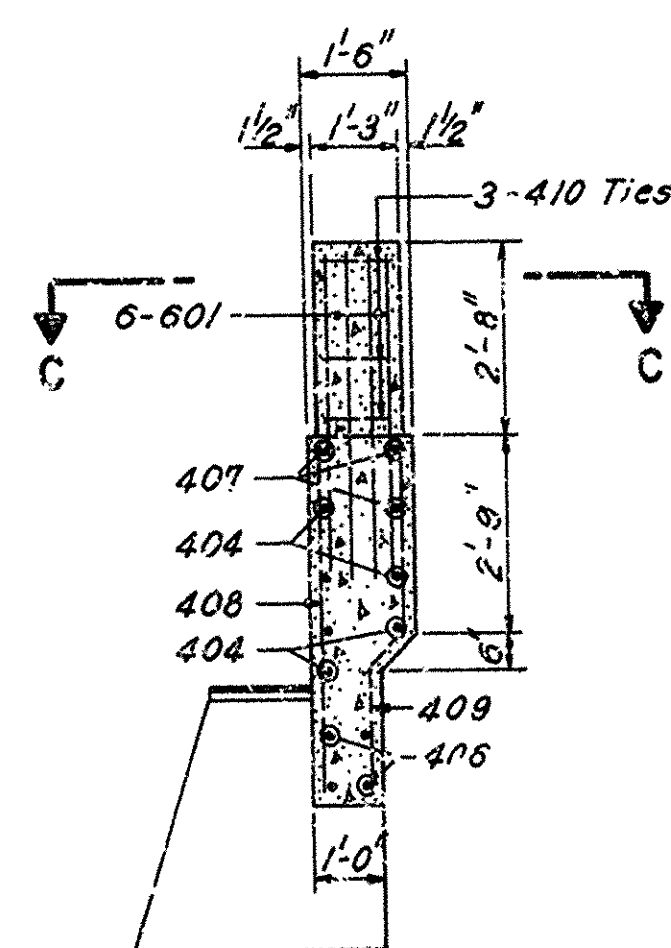
PLAN
Scale: $\frac{3}{8}'' = 1'-0''$



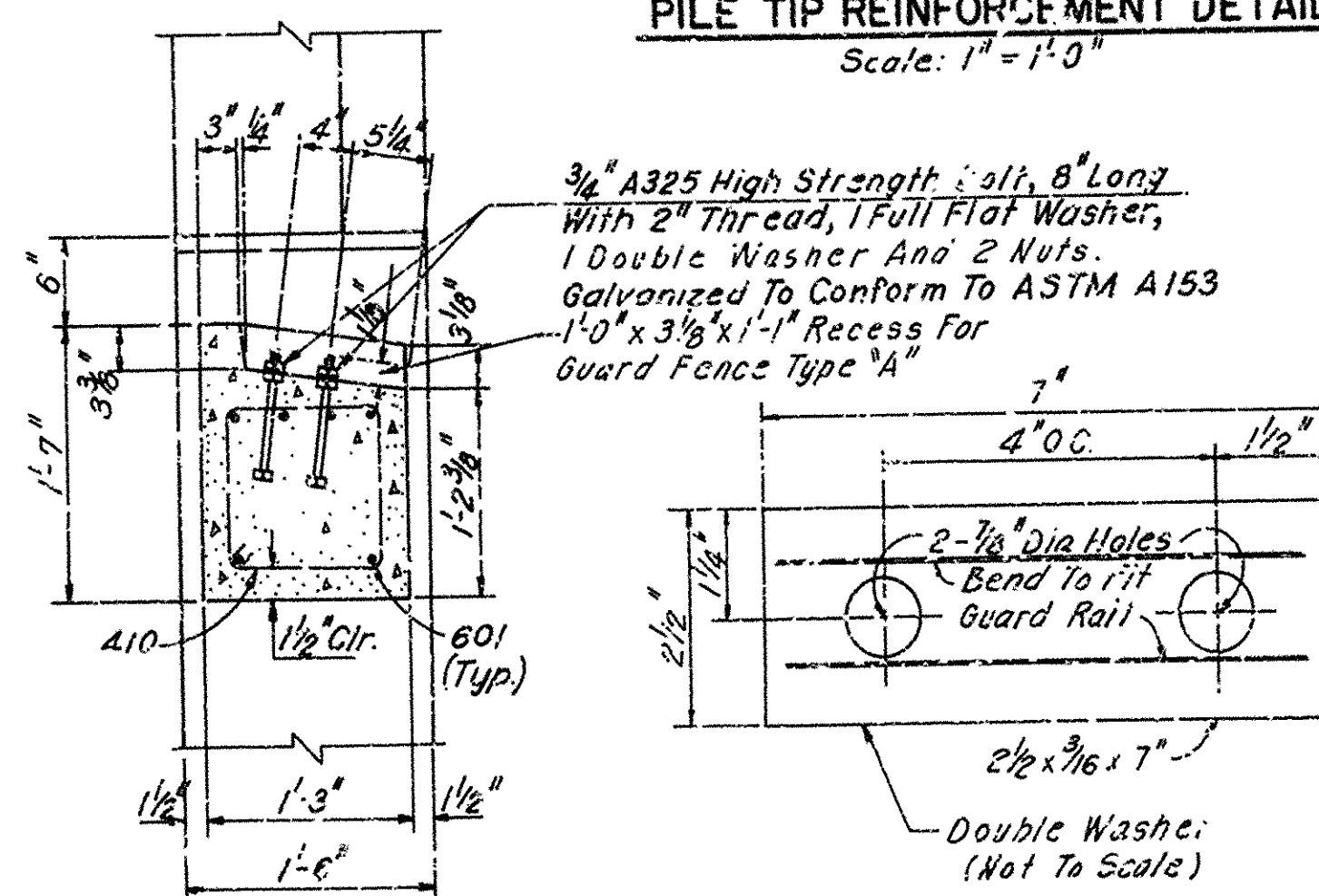
ELEVATION
Scale: $\frac{3}{8}'' = 1'-0''$



SECTION A-A
Scale: $\frac{3}{8}'' = 1'-0''$



SECTION B-B
Scale: $\frac{3}{8}'' = 1'-0''$



SECTION C-C
Scale: $1'' = 1'-0''$

REINFORCEMENT SCHEDULE				BENDING DIAGRAM	
MARK	NO.	LENGTH	PIN DIA.		
401	26	12'-1"	1 1/2"		
402	58	4'-1"	5/8"		
403	29	3'-4"	1 1/2"		
404	7	35'-8"	5/8"		
405	1	30'-8"	5/8"		
406	6	4'-8"	5/8"		
407	6	3'-8"	5/8"		
408	8	4'-9"	5/8"		
409	8	4'-11"	1 1/2"		
410	6	4'-5"	1 1/2"		
601	12	4'-6"	5/8"		
801	5	28'-8"	5/8"		

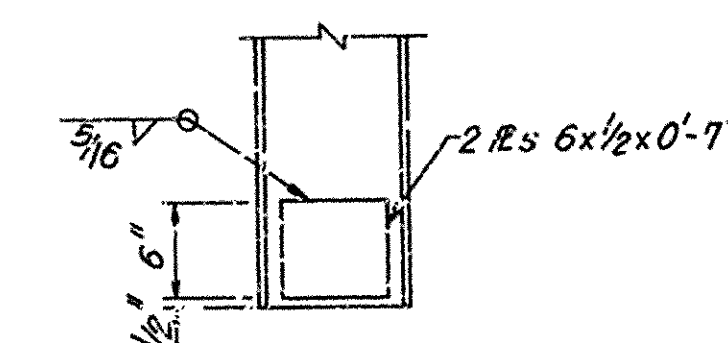
NOTE:
All Dimensions Are Center To Center Of Bars.
Quantities Shown Are For One Abutment Only.

LEGEND

n.f. Near Face
f.f. Far Face
c.f. Each Face

FOUNDATION LOADS

Dead Load 122 Kips
Live Load 100 Kips
Pile Load 67.1 Kips
Allowable Pile Load 104.5 Kips/pile



NOTE:
Structural Steel In Pile Tip
Reinforcement Will Not Be Paid
For Directly But Will Be Considered
Subsidiary To The Item "Steel
Bearing Piling (10 BP42)"

PILE TIP REINFORCEMENT DETAIL

Scale: $1'' = 1'-0''$

Notes:
1. All Concrete Shall Be Class S.
2. For General Notes, See Drawing No. 13794
3. For Anchor Bolt Detail See Drawing No. 13799.

BRIDGE NO. 5133 DRAWING NO. 13795

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

INTERSTATE ROUTE 40
EAST GARCREEK-JOHNSON COUNTY LINE
JOB 4528

HWY. 136 UNDERPASS
ABUTMENTS

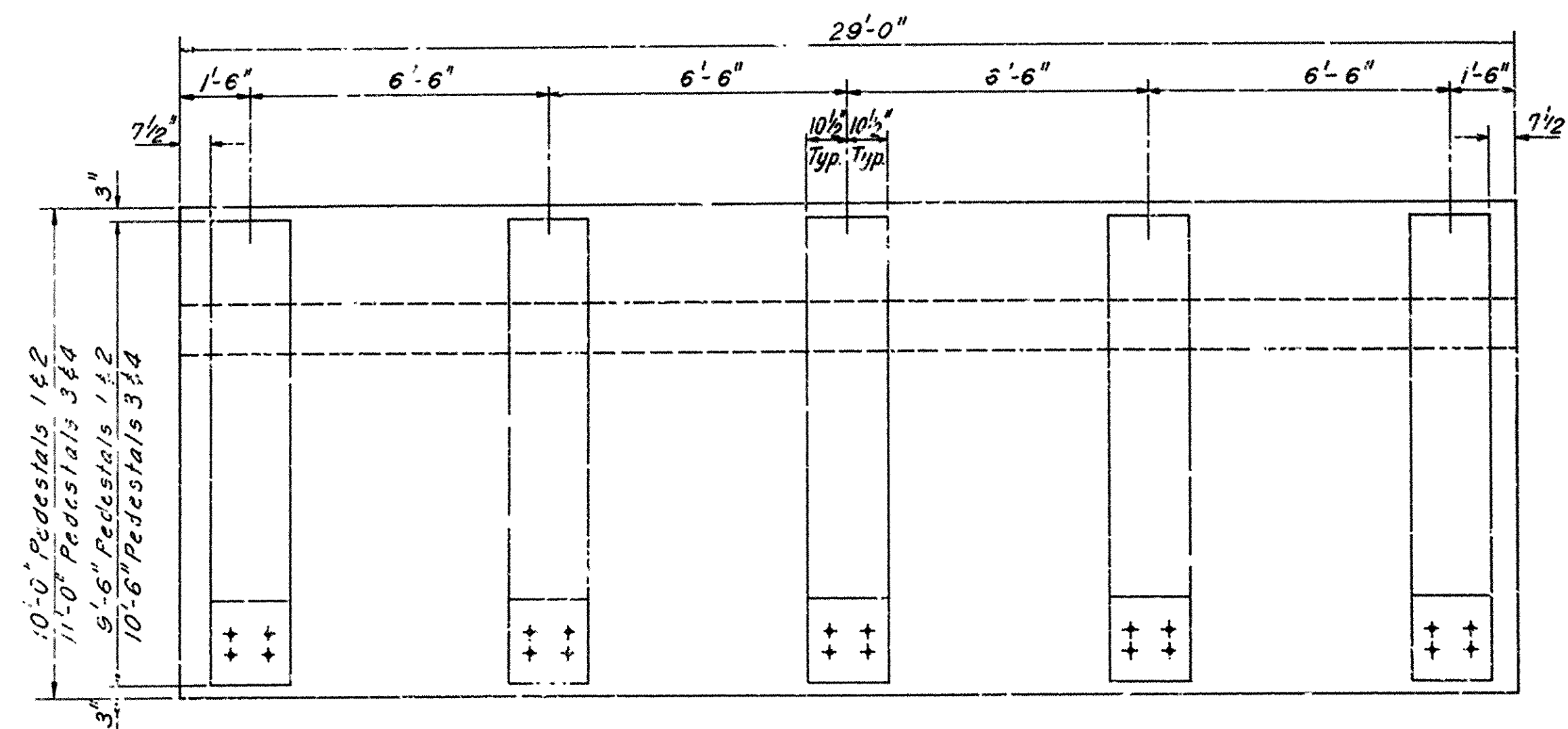
DESIGNED BY J.F.H.
DRAWN BY J.B.C.
CHECKED BY T.B.H.
DATE AUG. 1968

GARVER & GARVER, Inc.
ENGINEERS
LITTLE ROCK, ARKANSAS

SCALE
AS NOTED
SHEET NO.
63 OF 231

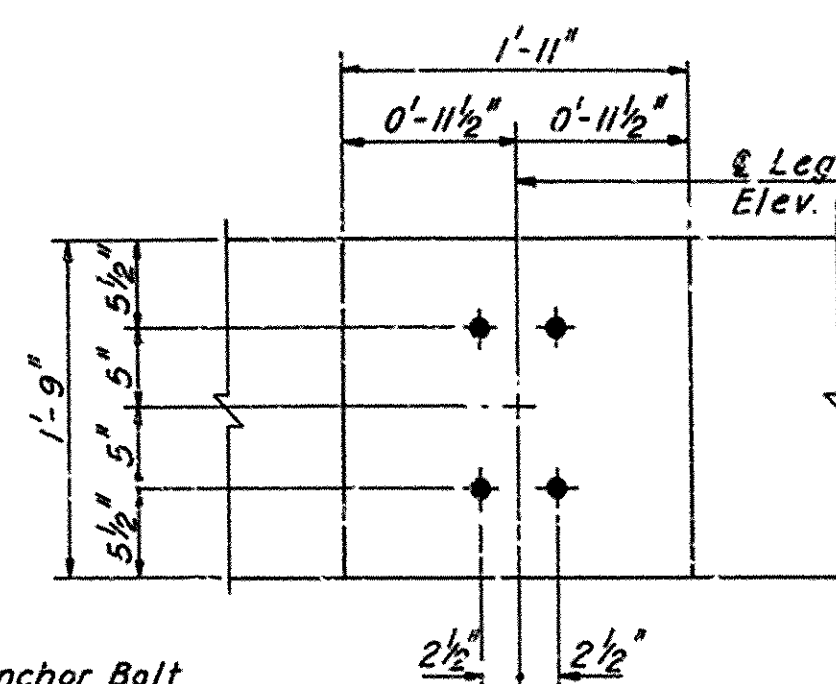
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK	1-40-1 (22)39		64	231
JOB NO.		4528		64	231

① Hwy. 186 Underpass Pedestals

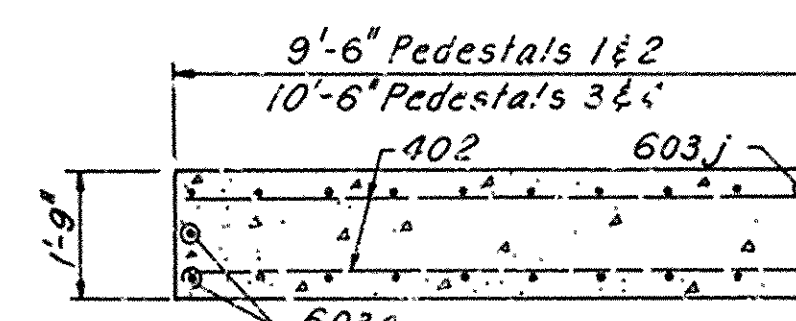


PLAN
Scale: 3/8" = 1'-0"

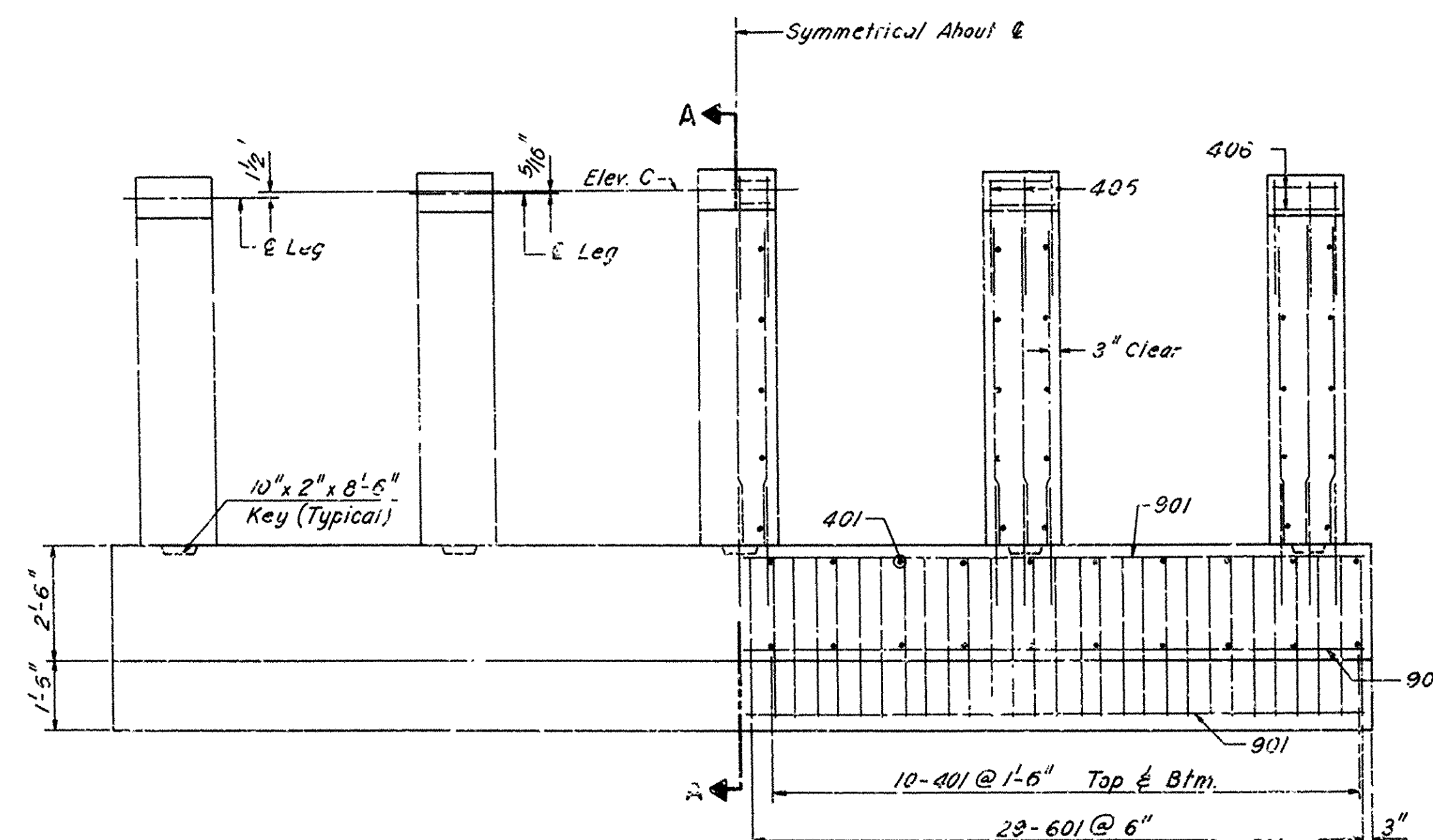
NOTE:
For Anchor Bolt
Detail See Drawing
No. 13799



SECTION C-C
Scale 1" = 1'-0"



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

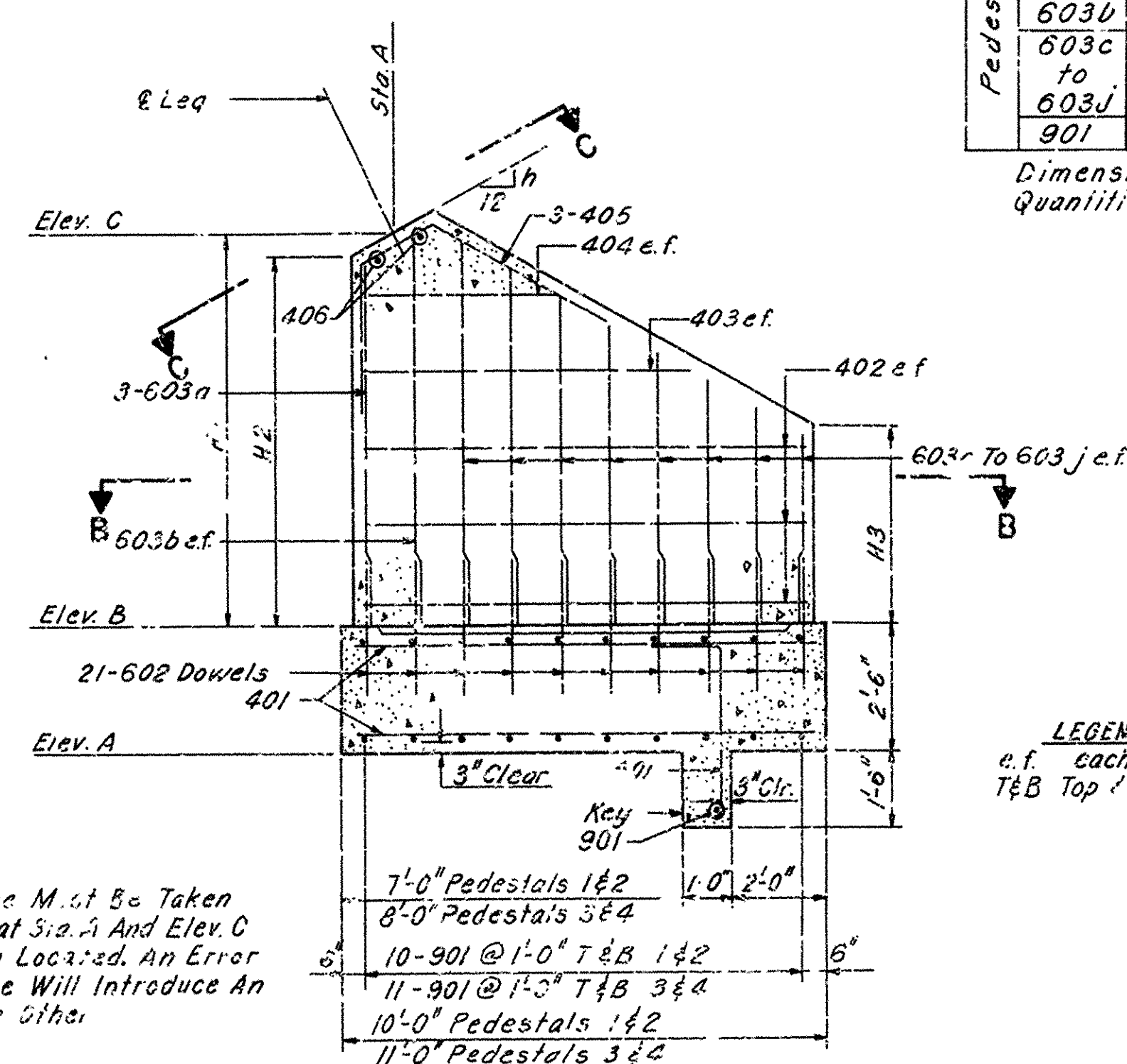


ELEVATION
Scale 3/8" = 1'-0"

REINFORCEMENT SCHEDULE					BENDING DIAGRAM	
MARK	NO.	LENGTH	PIN DIA.			
Pedestal 1	405	15	8'-7"	1 1/2"		405
	406	10	1'-5"	Str.		
	601	58	5'-3"	2 1/2"		
	602	105	4'-0"	Str.		
	401	40	9'-6"	Str.		
	402	30	9'-0"	Str.		
	403	10	6'-2"	Str.		
	404	10	3'-5"	Str.		
	603a	15	7'-7"	Str.		
	603b	10	7'-7"	Str.		
Pedestal 2	603c	10	Varies to 7'-5" to 3'-6"	Str.		601
	901	21	28'-6"	Str.		
	401	40	9'-6"	Str.		
	402	30	9'-0"	Str.		
	403	10	5'-11"	Str.		
	404	10	3'-6"	Str.		
	603a	15	8'-3"	Str.		
	603b	10	8'-10"	Str.		
	603c	10	Varies to 8'-7" to 4'-2"	Str.		
	603j	10	4'-2"	Str.		
Pedestal 3	901	21	28'-6"	Str.		601
	401	40	10'-6"	Str.		
	402	30	10'-0"	Str.		
	403	10	6'-10"	Str.		
	404	10	4'-3"	Str.		
	603a	15	8'-9"	Str.		
	603b	10	9'-5"	Str.		
	603c	10	Varies to 8'-9" to 4'-4"	Str.		
	603j	10	4'-4"	Str.		
	901	23	28'-6"	Str.		
Pedestal 4	401	40	10'-6"	Str.		601
	402	30	10'-0"	Str.		
	403	10	6'-10"	Str.		
	404	10	4'-3"	Str.		
	603a	15	11'-4"	Str.		
	603b	10	11'-11"	Str.		
	603c	10	Varies to 11'-3" to 5'-7"	Str.		
	603j	10	5'-7"	Str.		
	901	23	28'-6"	Str.		
	901	23	28'-6"	Str.		

Dimensions Are Center To Center Of Bars.
Quantities Shown Are For One Pedestal Only.

- NOTES:
- All Concrete Shall Be Class S.
 - For Leg Anchorage Details See Drawing No. 13799.



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

NOTE:
Extreme Care Must Be Taken
To Insure That Sta. A And Elev. C
Are Properly Located. An Error
In Either One Will Introduce An
Error In The Other.

FOUNDATION LOADS					
LOCATION	ALLOW	VERTICAL		HORIZONTAL	
		MAX.	MIN.	MAX.	MIN.
Pedestal 1	10.0 KSF	7.5 KSF	0	9.1 KSF	6.9 KSF
Pedestal 2	10.0 KSF	9.5 KSF	0	9.1 KSF	6.9 KSF
Pedestal 3	10.0 KSF	7.6 KSF	0	9.1 KSF	6.9 KSF
Pedestal 4	10.0 KSF	10.0 KSF	0	9.1 KSF	6.9 KSF

TABLE OF DIMENSIONS & ELEVATIONS								
LOCATION	H1	H2	H3	h	STA. A	ELEV. A	ELEV. B	ELEV. C
Pedestal 1	7'-7"	7'-1 1/8"	3'-7"	6 1/16	14 + 47.16	538.00	538.50	606.08
Pedestal 2	8'-10"	8'-5"	4'-3"	5 3/4	15 + 62.52	592.00	594.50	603.34
Pedestal 3	9'-2 1/8"	8'-9 3/8"	4'-5"	6 7/16	15 + 95.10	591.00	593.50	602.75
Pedestal 4	11'-5 3/4"	11'-4 1/8"	5'-9"	5 3/16	17 + 10.31	587.00	589.50	601.31

LEGEND
e.f. each face
T & B Top & Bottom

BRIDGE NO. 5133 DRAWING NO. 13796

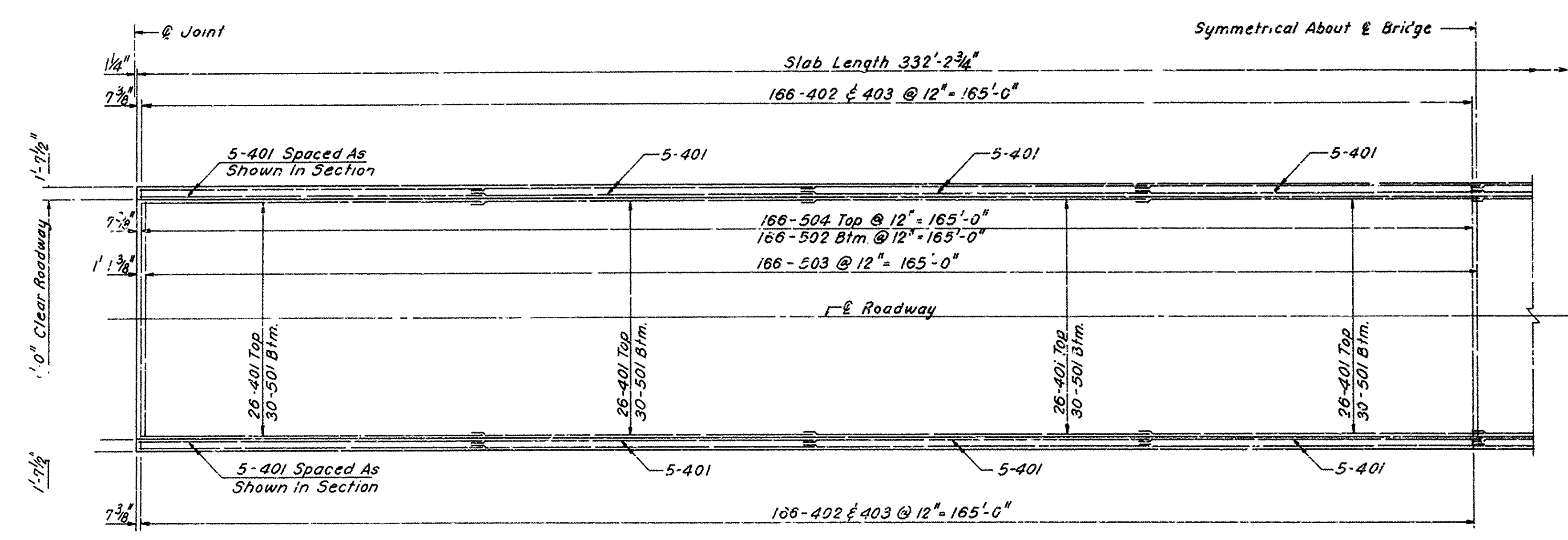
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

INTERSTATE ROUTE 40
EAST GARCREEK - JOHNSON COUNTY LINE
JOB 4528
HWY. 186 UNDERPASS
PEDESTALS

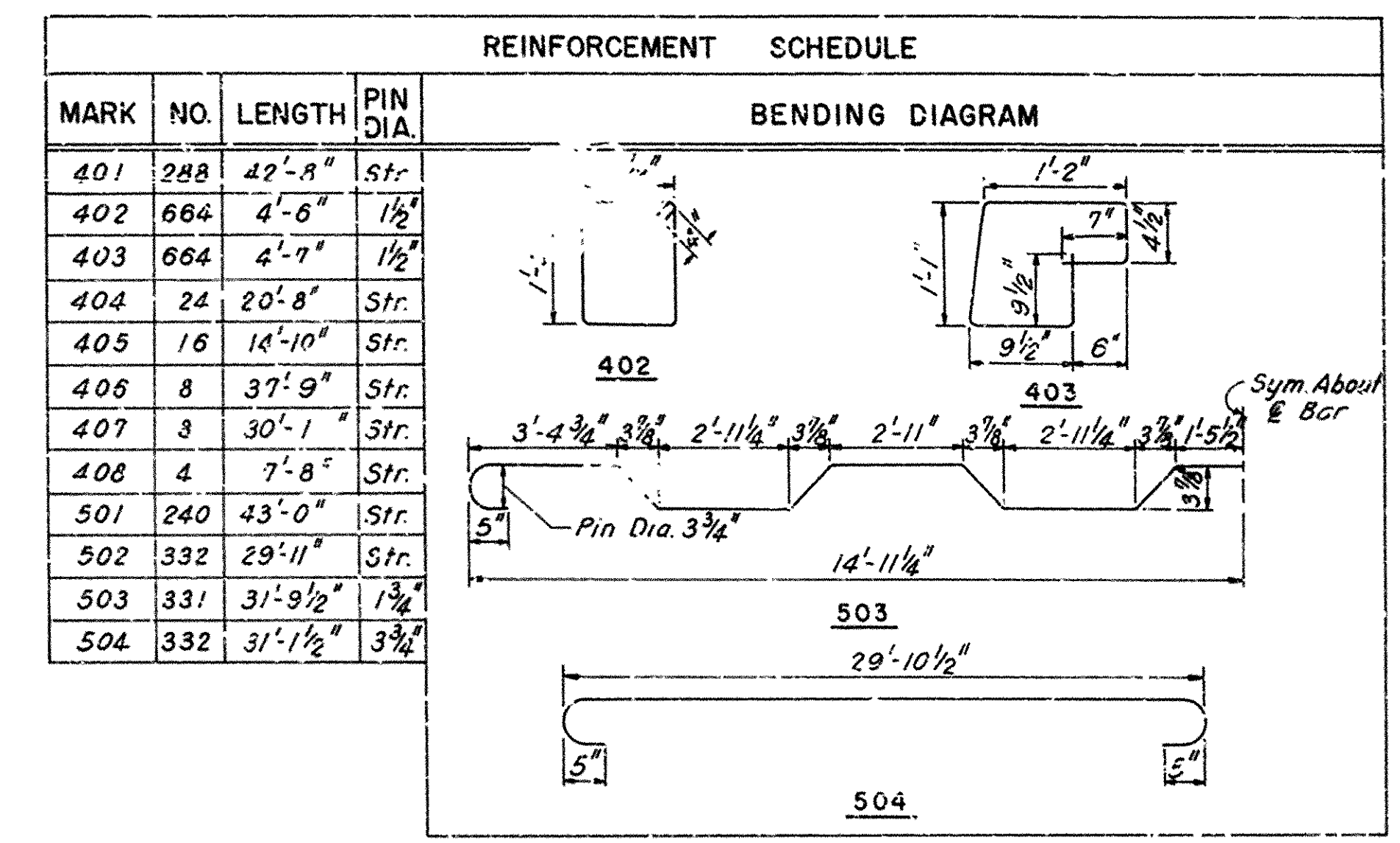
DESIGNED BY: G.F.H.	GARVER & GARVER, Inc.	AS NOTED
DRAWN BY: J.B.C.	ENGINEERS	SHEET NO.
CHECKED BY: T.B.H.	LITTLE ROCK, ARKANSAS	64 OF 231
DATE: AUG. 1968		

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK	1-40-1 (22) 39		65	231
JOB NO. 4528					

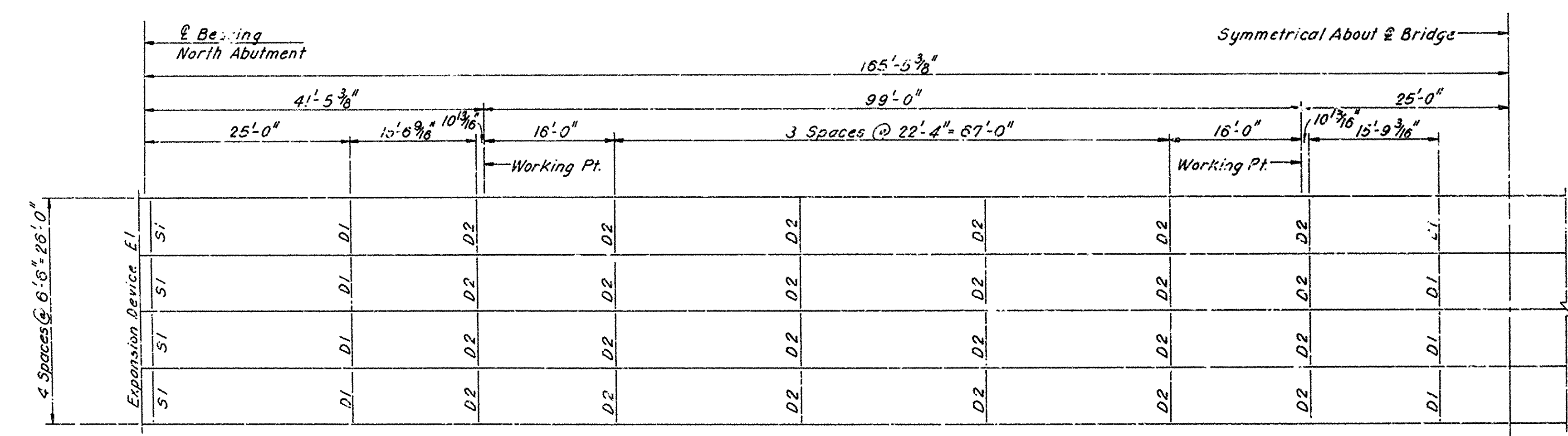
① Hwy 186 Br Slab - Framing Plan



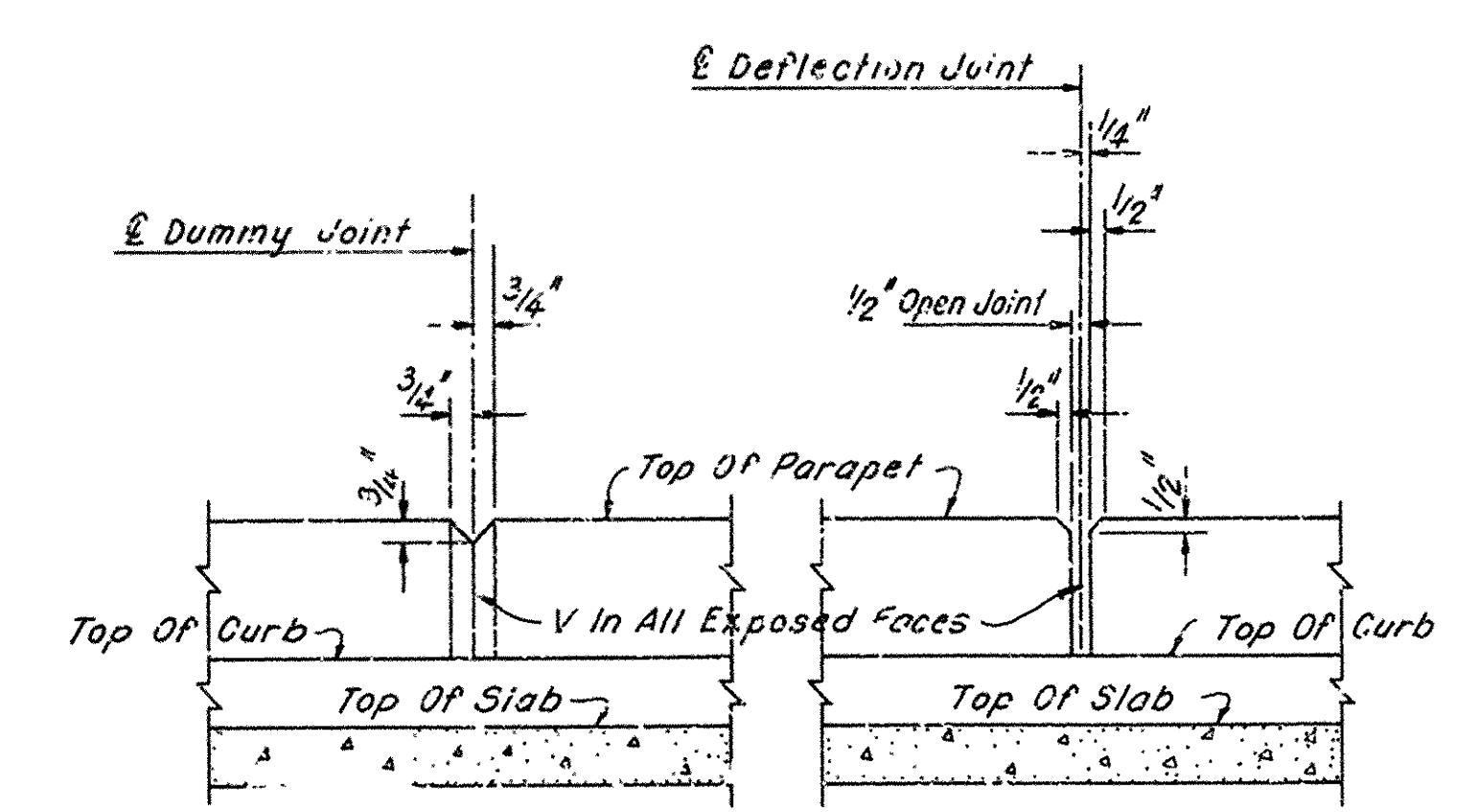
SLAB PLAN
Scale 1"=10'-0"



Dimensions Are Center To Center Of Bars.

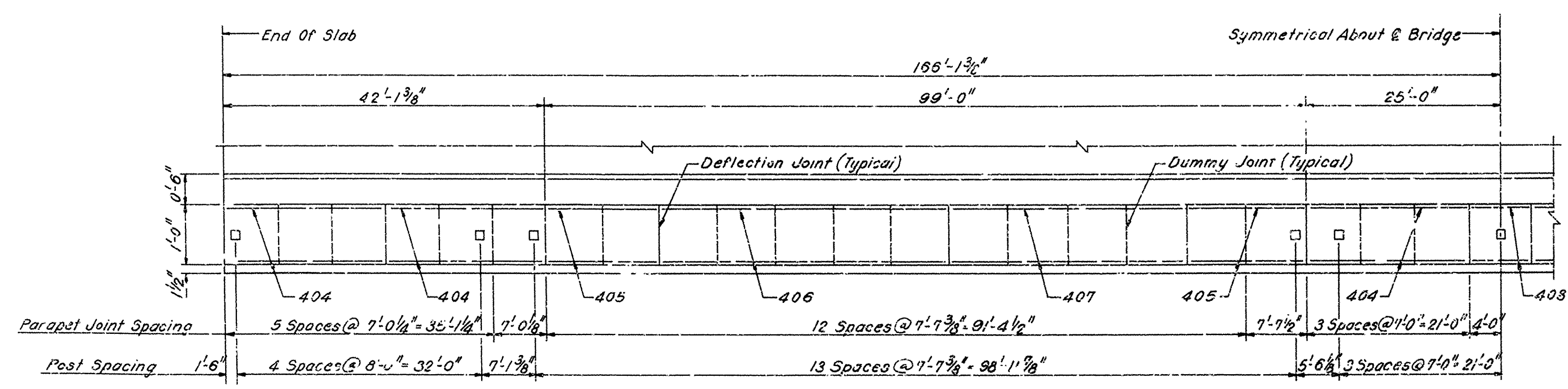


FRAMING PLAN
Scale 1"=10'-0"



DUMMY JOINT THRU PARAPET
Scale: None

DEFLECTION JOINT THRU PARAPET
Scale: None



PLAN SHOWING POST AND PARAPET JOINT SPACING
Scale: None

- NOTES:
- For Deck Cross-Section, Diaphragms D1 & D2, Strut S1, Expansion Device EI, Pour Sequence, And Dead Load Deflection Diagram See Drawing No. 13800.
 - For Frame Elevation See Drawing No. 13198.

BRIDGE NO. 5133 DRAWING NO. 13797

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

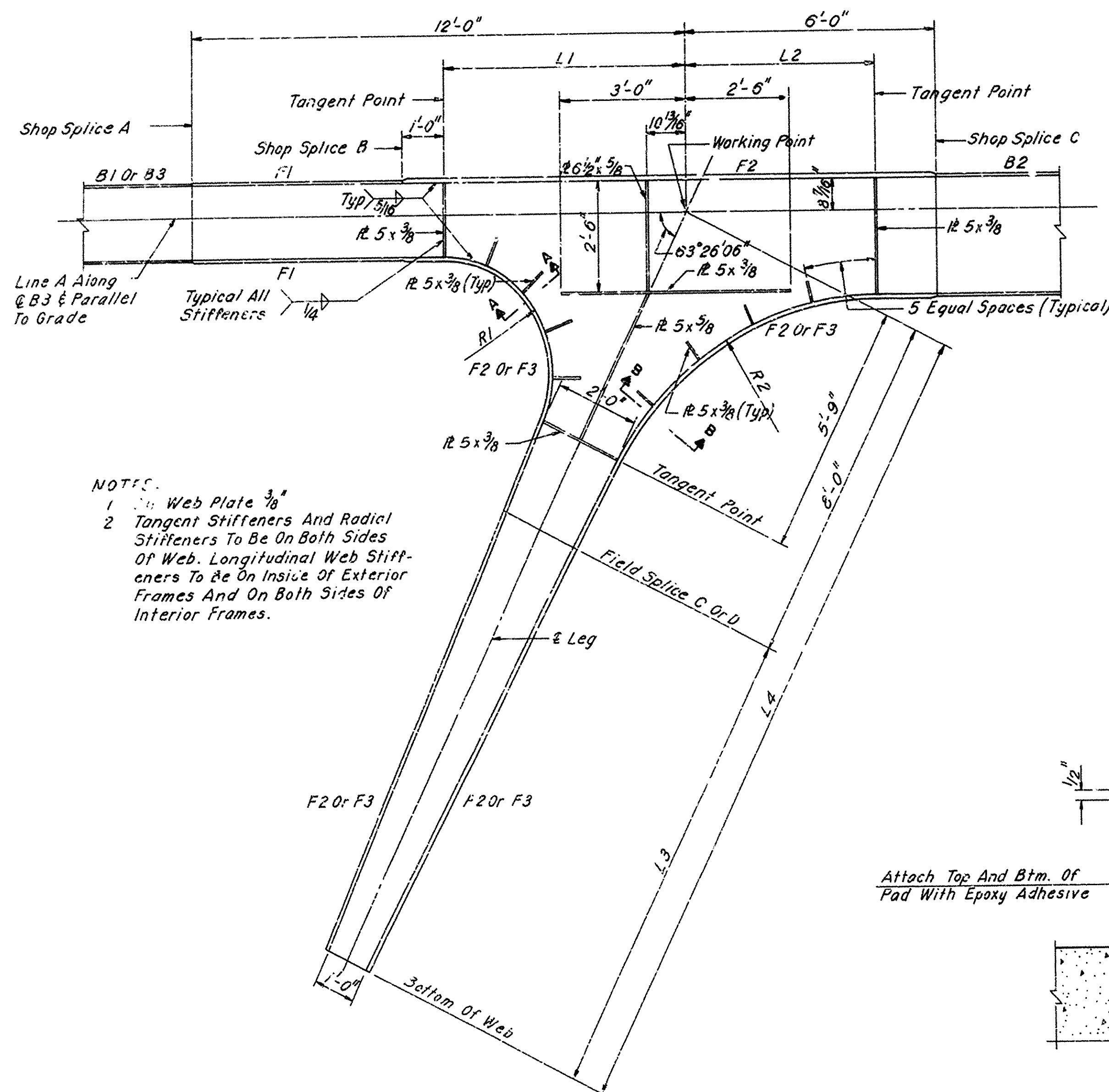
INTERSTATE ROUTE 40
EAST GARCREEK - JOHNSON COUNTY LINE
JOB 4528

HWY. 186 UNDERPASS
SLAB AND FRAMING PLAN

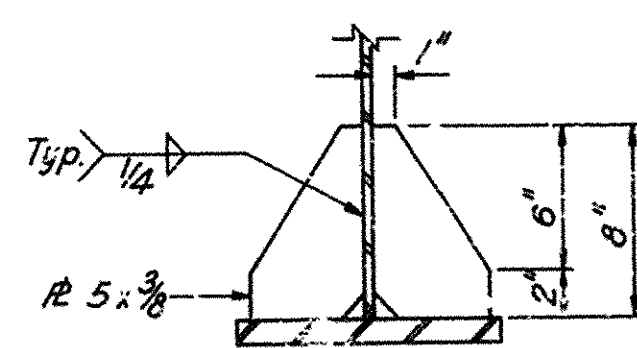
DESIGNED BY: G.F.H.	GARVER & GARVER, Inc. ENGINEERS LITTLE ROCK, ARKANSAS	SCALE: AS NOTED
DRAWN BY: J.B.C.		65-231
CHECKED BY: T.B.H.		
DATE: AUG. 1968		

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK	1-40-1 (22)39		67	231
JOB NO.		4528		67	231

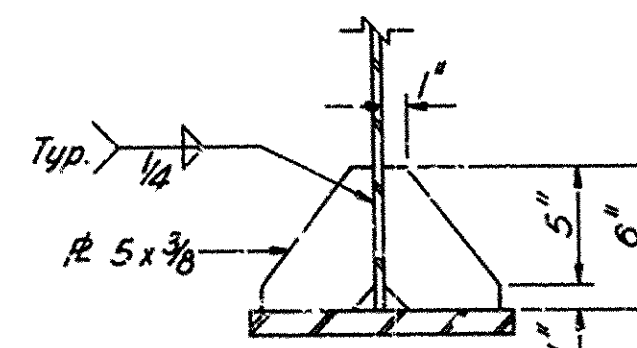
① Hk 186 Br Leg-Anchorage Dngs.



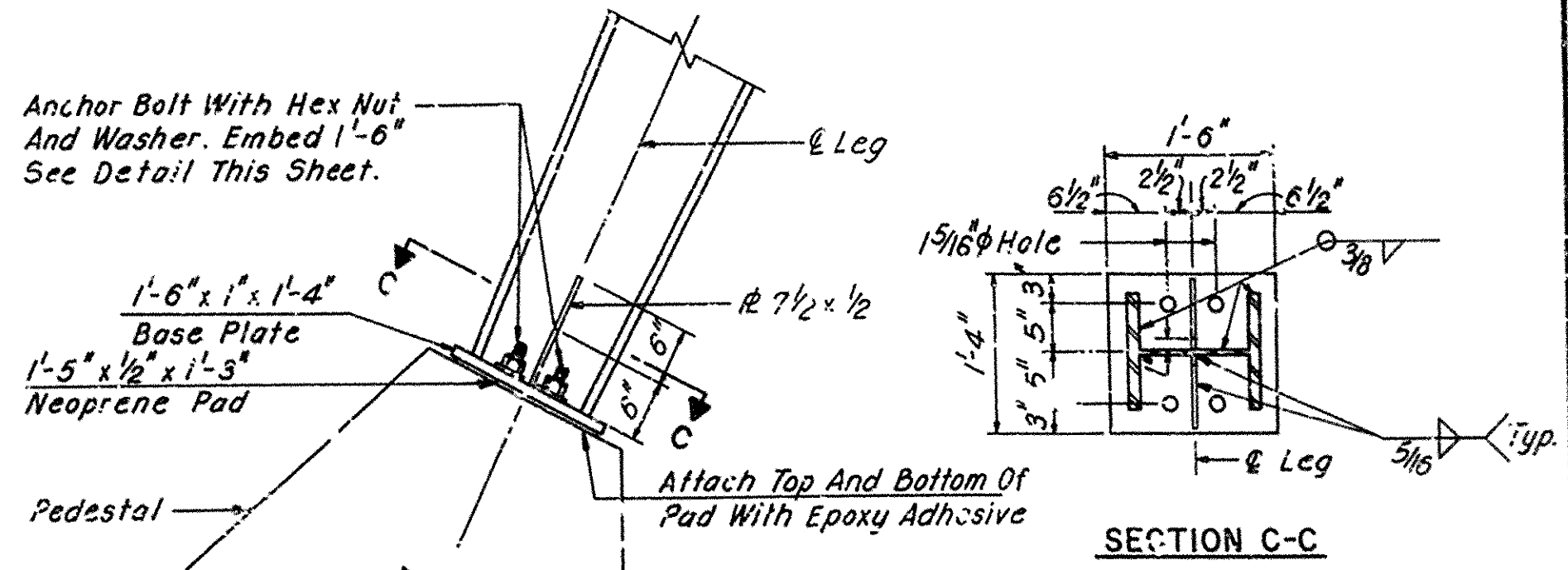
ELEVATION OF LEG
Scale: $\frac{1}{2}$ " = 1'-0"



SECTION A-A
Scale: $\frac{1}{2}$ " = 1'-0"



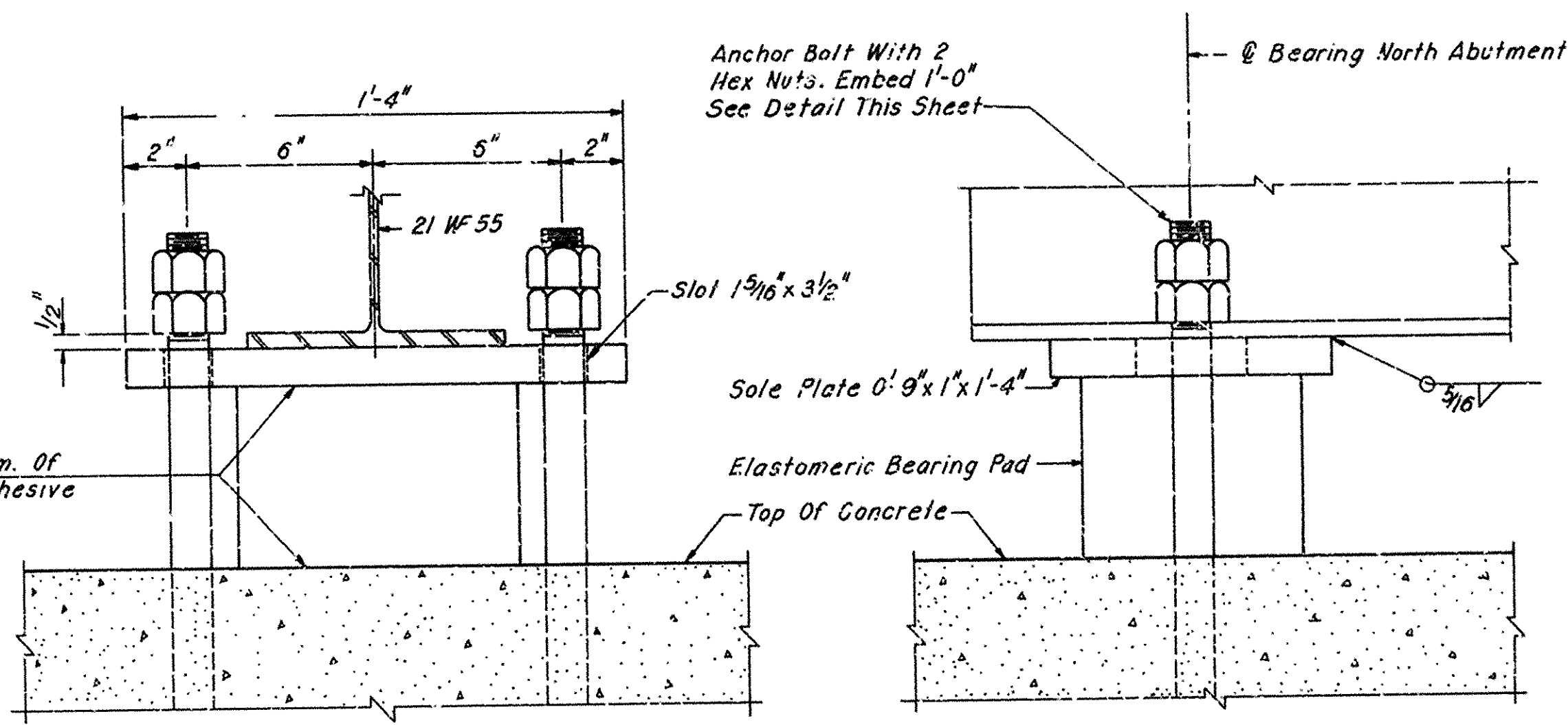
SECTION B-B
Scale: $\frac{1}{2}$ " = 1'-0"



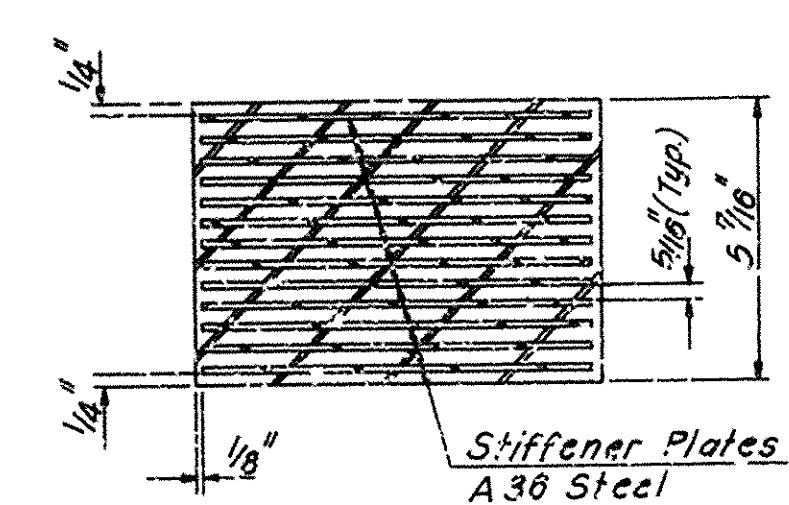
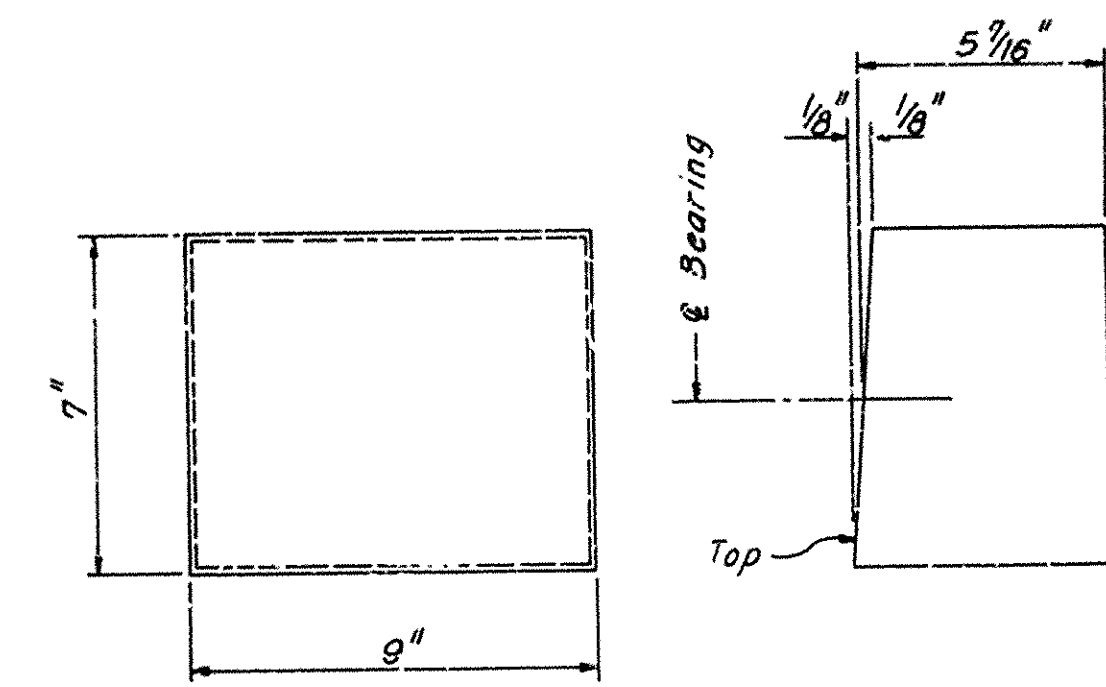
ELEVATION

NOTE:
These Neoprene Pads Will Not Be Paid For Directly But Will Be Considered Subsidiary To The Item "Structural Steel In Frame Bridge A 588".

LEG ANCHORAGE DETAIL
Scale: $\frac{3}{4}$ " = 1'-0"



END ANCHORAGE DETAIL
Scale: $\frac{3}{4}$ " = 1'-0"



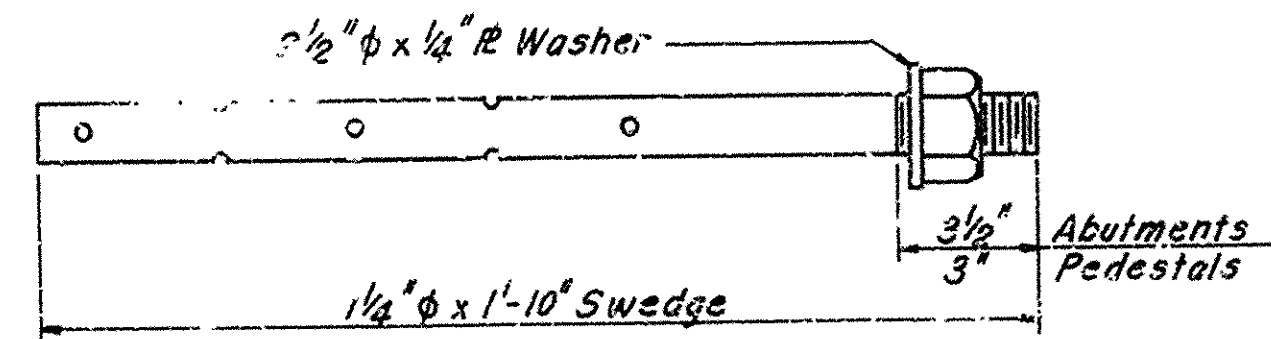
NOTE:
Only Those Pads At The South Abutment To Be Tapered.

ELASTOMERIC BEARING PADS
Scale: None

TABLE OF DIMENSIONS						
LOCATION	L1	L2	L3	L4	R1	R2
EXTERIOR AND	Legs 164	5'-10 3/4"	4'-0 13/16"	9'-6"	17'-6"	2'-7 15/16"
INTERIOR FRAME	Legs 243	5'-0 7/16"	4'-6 5/16"	11'-3"	13'-3"	2'-9 7/16"

FRAME SCHEDULE						
	B1	B2	B3	COV. #	F1	F2
EXTERIOR FRAME	21 WF 55	33 WF 110	18 WF 45	8 x 5/8"	11 1/2 x 3/4"	11 1/2 x 1"
INTERIOR FRAME	21 WF 55	33 WF 110	18 WF 45	8 x 1/2"	11 1/2 x 1/8"	11 1/2 x 1/8"

NOTE: Two Nut. Only At Abutments, One Nut And Washer At Pedestals.



ANCHOR BOLT DETAILS
Scale: $\frac{3}{4}$ " = 1'-0"

- NOTES:**
- For Abutment Details See Drawing No. 13795
 - For Pedestal Details See Drawing No. 13796
 - For Framing Plan See Drawing No. 13797
 - For Frame Elevation And Splice Details See Drawing No. 13798
 - For Cross Section And Dead Load Deflection Diagram See Drawing No. 13800
 - Anchor Bolts Shall Conform To ASTM Designation A307, Grade A. Galvanized To Conform To ASTM Specification A153.

BRIDGE NO. 5133 DRAWING NO. 13799

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

INTERSTATE ROUTE 40
EAST GARCREEK - JOHNSON COUNTY LINE
JOB 4528

HWY. 186 UNDERPASS
LEG ELEVATION AND ANCHORAGE DETAILS

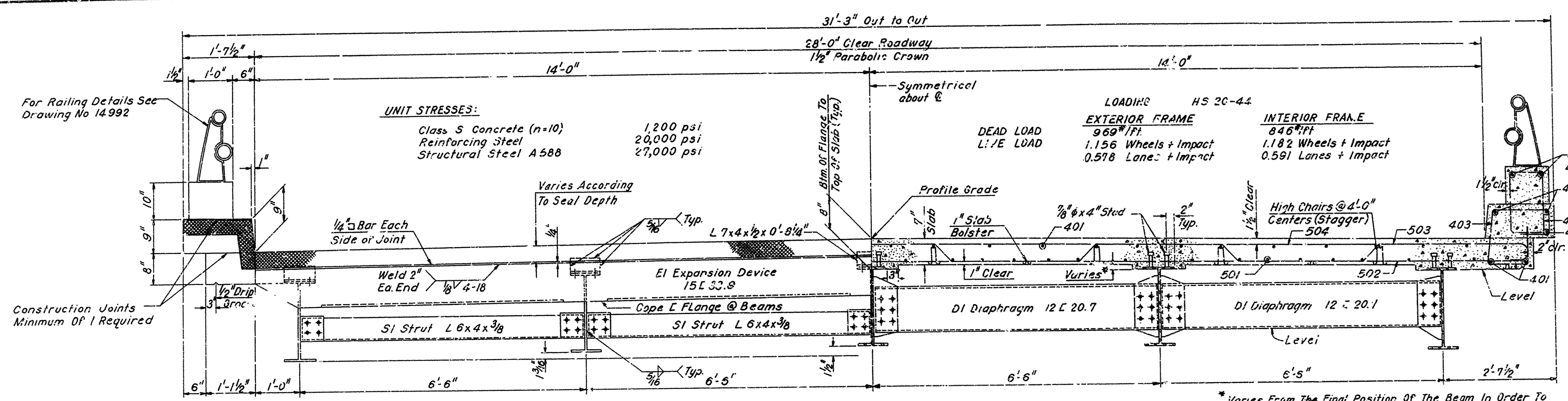
DESIGNED BY: G.F.H.
DRAWN BY: J.B.C.
CHECKED BY: T.J.H.
DATE: AUG. 1968

GARYER & GARYER, Inc.
ENGINEERS
LITTLE ROCK, ARKANSAS

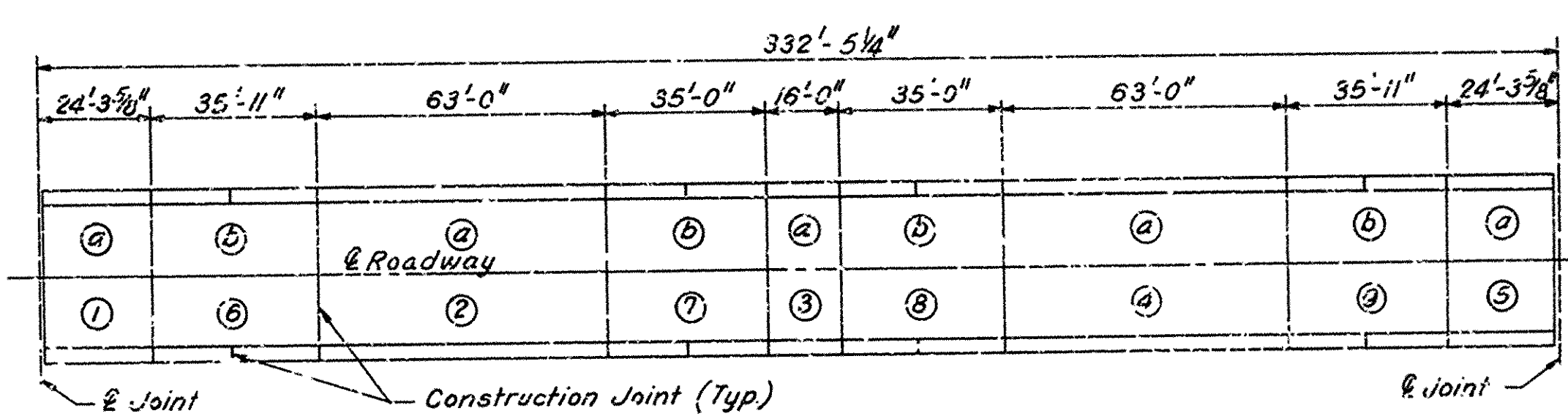
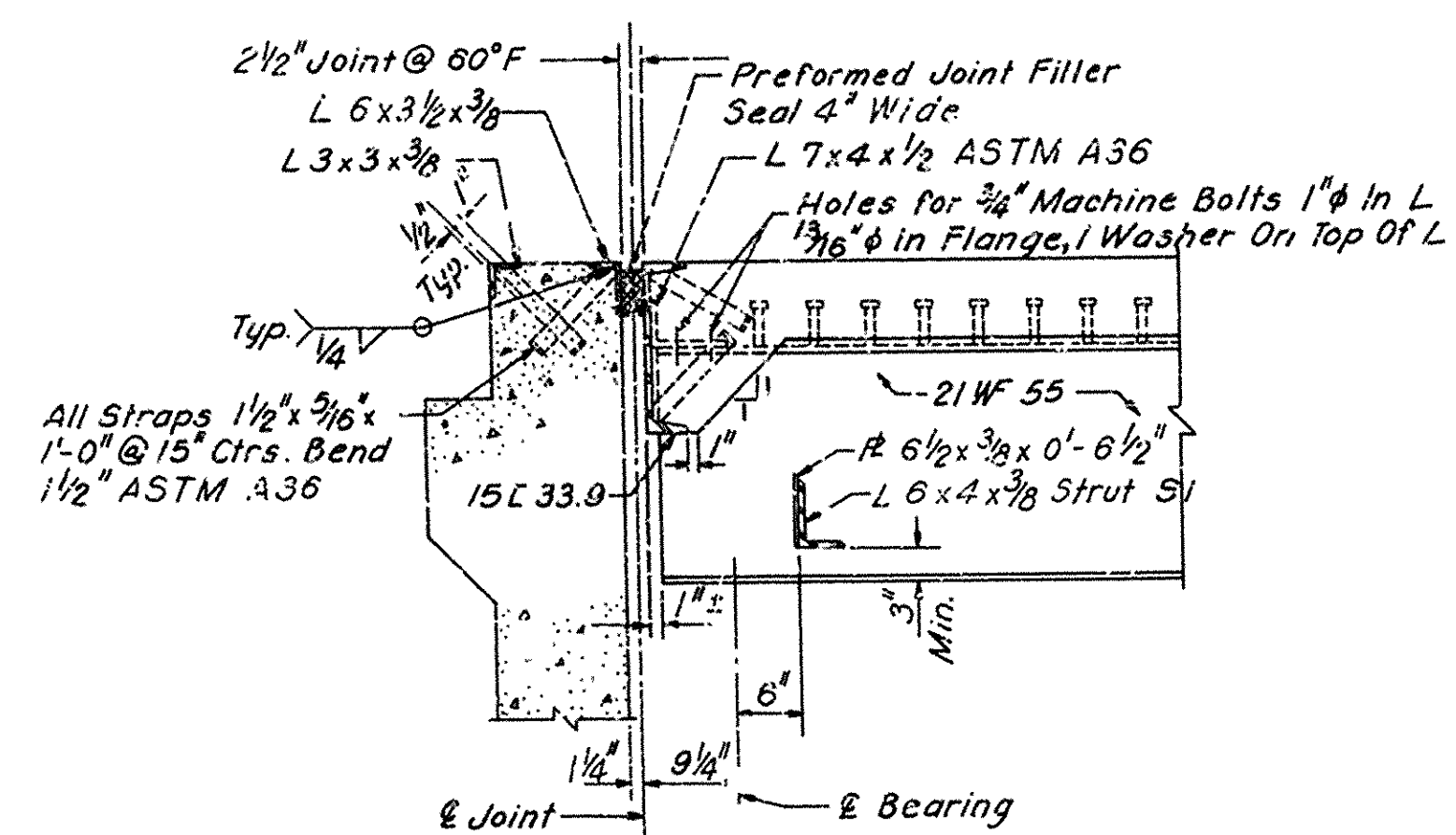
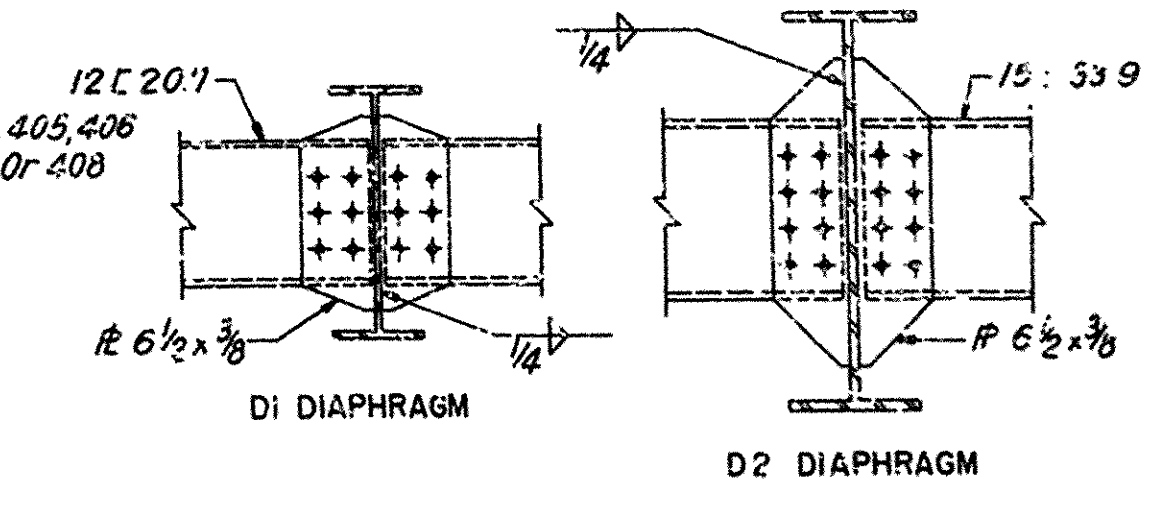
SCALE: AS NOTED
SHEET NO. 67 OF 231

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK	1-40-1 (22)39		68	231
JOB NO. 4528					

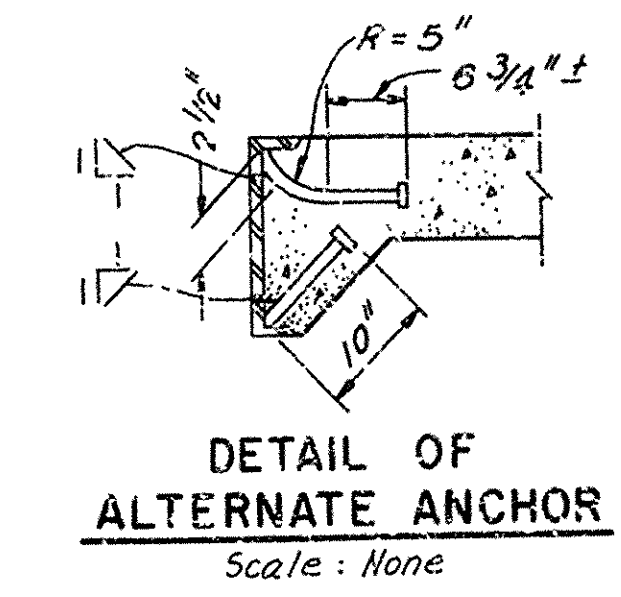
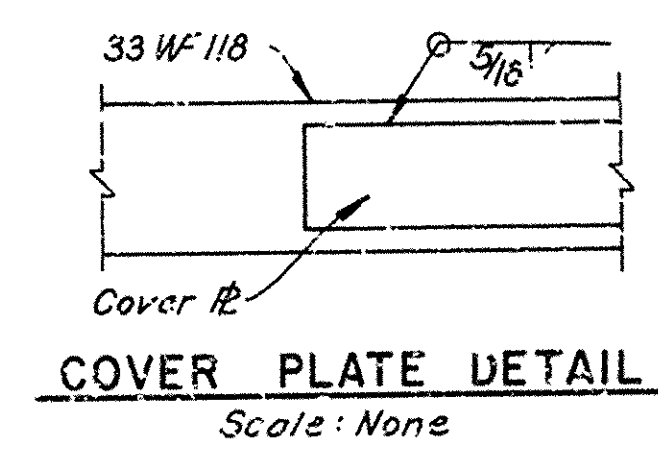
Hwy 186 Br. X-Sect-Exp. Device



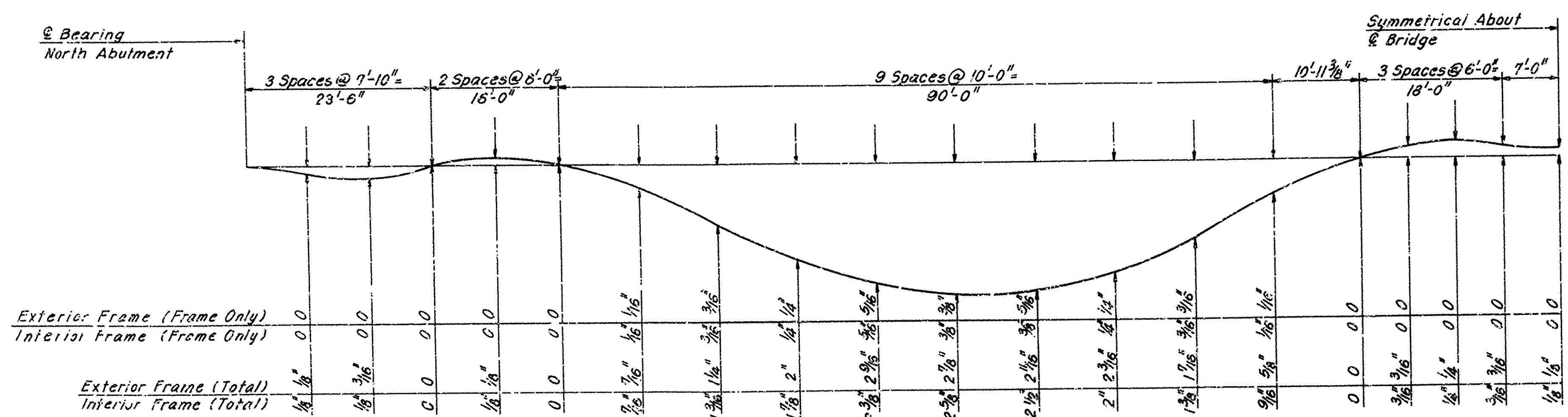
NOTE: Detail Expansion Device 1/8" High And Provide 1/4" OF Shim (2-1/8" & 1-1/8")



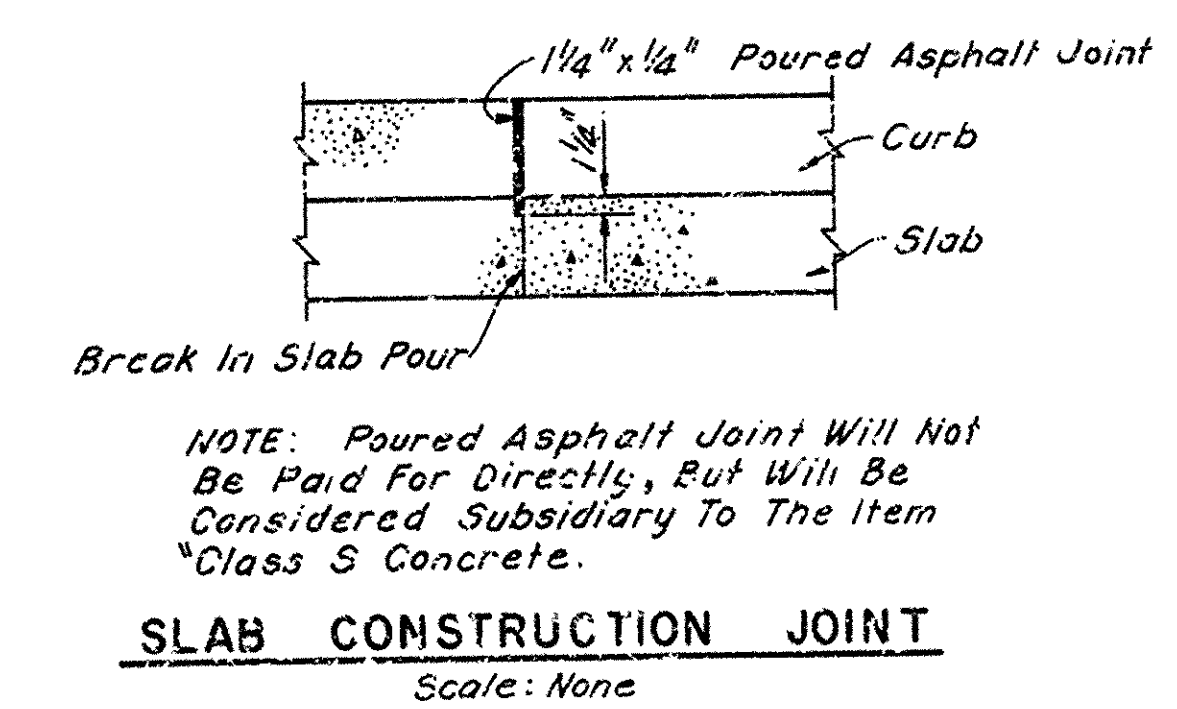
- NOTES:
1. Joints Shown Are Required. Location Of Other Construction Joints Are Optional.
 2. A Minimum Of 72 Hours To Elope Before Making Adjacent Pours.
 3. Permissible Simultaneous Pours Are Noted By Same Letters.
 4. For Continuous Pour Option, See Job 'Special Provision'.
 5. Over Each Working Point Provide Construction Joint In Curb.



NOTE: As An Alternate For Straps, 3/4" x 10" Automatically Welded Stud Anchors, Granular Flux Filled, Solid Fixed Or Equal, May Be Used. Straps Shall Be Used As Basis Of Measurement And Payment. Stud Anchors Shall Conform To The Requirements Of Section 806 Of The 1966 Supplemental Specifications.



NOTE: Camber Beam As Required For Dead Load Deflection And Vertical Curve Correction. Acceptable Tolerance Is ± 1/8". Vary Slab Haunch To Allow For Difference Between Computed And Actual Camber.



BRIDGE NO. 5133 DRAWING NO. 13800

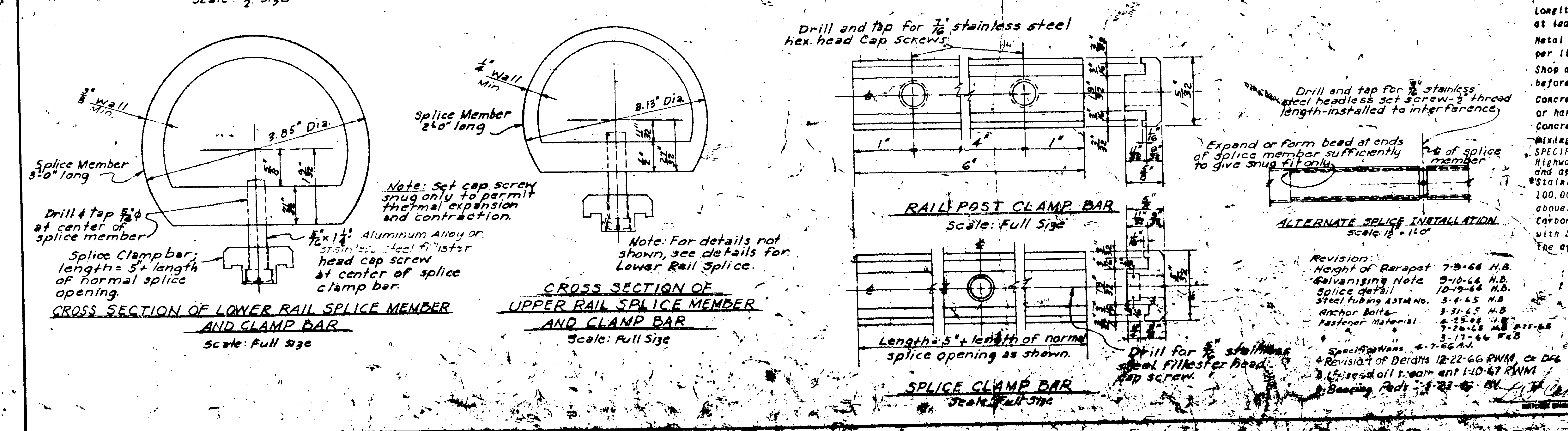
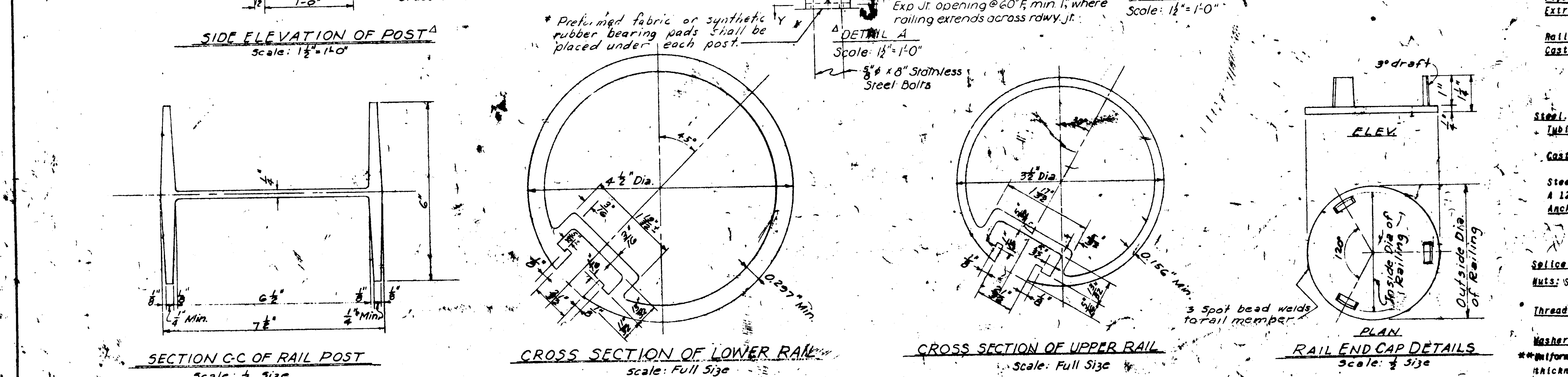
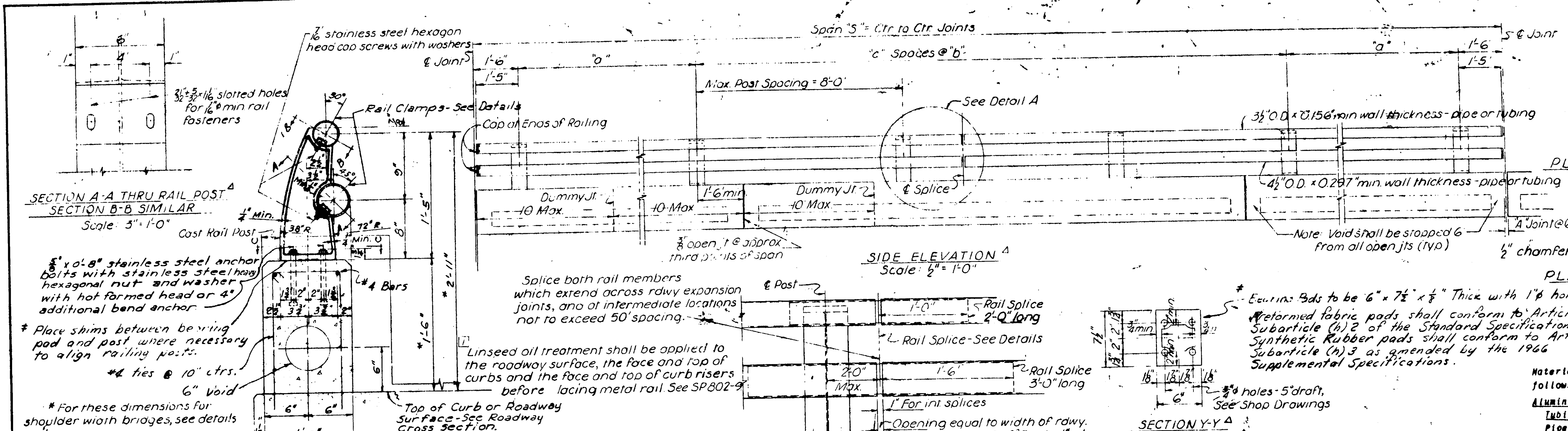
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS

INTERSTATE ROUTE 40
EAST GARCREEK - JOHNSON COUNTY LINE
JOB 4528

HWY. 186 UNDERPASS
CROSS SECTION & EXPANSION DEVICE

DESIGNED BY: G.F.H.	GARVER & GARVER, Inc. ENGINEERS LITTLE ROCK, ARKANSAS	SCALE: AS NOTED
DRAWN BY: J.B.C.		SHEET NO.
CHECKED BY: T.B.H.		68 OF 231
DATE: AUG. 1968		

FED. ROAD DIST. NO.	STATE	FED. AID PROJECT YEAR	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	1975	1975	34	35
JOB NO.		10755			



PLAN C - OPEN JOINT

PLAN OF DUMMY JOINT

GENERAL NOTES

Material for metal railing shall be galvanized steel or aluminum alloy as follows:

ALUMINUM ALLOY:

Extrusions: 6061-T6 or 6062-T6; ASTM Specification B 221.

Castings: 356F; ASTM Specification B 221.

Permanent Mold Castings: 356-T6; minimum tensile strength 20,000 psi; elongation in 2", 20% minimum. Outside surfaces of flange shall be given a No. 220 grit blast finish, of which all exposed surfaces shall receive one coat of clear lacquer.

STEEL:

Extrusions: 6061-T6 or 6062-T6; ASTM Specification B 221.

Castings: 356F; ASTM Specification B 221.

Permanent Mold Castings: 356-T6; minimum tensile strength 20,000 psi; elongation in 2", 20% minimum. Outside surfaces of flange shall be given a No. 220 grit blast finish, of which all exposed surfaces shall receive one coat of clear lacquer.

STEEL RAIL MEMBERS: Carbon steel castings conforming to ASTM Specification A 27, Grade 88-35.

ANCHOR BOLTS AND RAIL CLAMP SCREWS: Anchor bolts and rail clamp screws shall be stainless steel conforming to ASTM Specification A 193, Grade B-8, with a minimum yield strength of 80,000 psi.

SPLICE CAP SCREWS: Aluminum Alloy 6061-T6 or 6062-T6; ASTM Specification B 221.

NUTS: Stainless Steel, ASTM Specification A 194, Grade 8.

THREADS: Threads on bolts, screws and nuts shall conform to American Standard Coarse Series, Class 2 Fit; ASA Specification B1.1.

WASHERS: Aluminum Alloy, A194-2024; ASTM Specification B 221.

SPlicing: Uniform section steel or aluminum tubing or pipe of equivalent strength and wall thickness with approved fasteners may be substituted for the design shown. Longitudinal rail members shall be of sufficient length to provide attachment at least three posts.

Metal railing including posts and fastenings shall be paid for at the unit price per linear foot bid for Metal (Aluminum or Steel) Bridge Railing.

Shop drawings showing details of railing shall be submitted and approved before fabrication is begun.

Concrete for parapet shall be Class S. Reinforcing Steel shall be intermediate or hard grade. This work and material shall be measured and paid for as Class S Concrete and Reinforcing Steel respectively.

Mixing of aluminum and galvanized steel parts in railing assembly is not permitted.

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1959, the 1966 Supplemental Specifications thereon and applicable Special Provisions.

Stainless steel, ASTM A276, Type 304 with a minimum ultimate strength of 100,000psi may be used in lieu of the rail fastener material shown in the notes above.

Carbon steel fastener material as specified above, aluminum coated in accordance with Special Provision 806-10, may be used with aluminum rail members in lieu of the applicable material specified.

DETAILS OF METAL BRIDGE RAILING

TYPE A

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

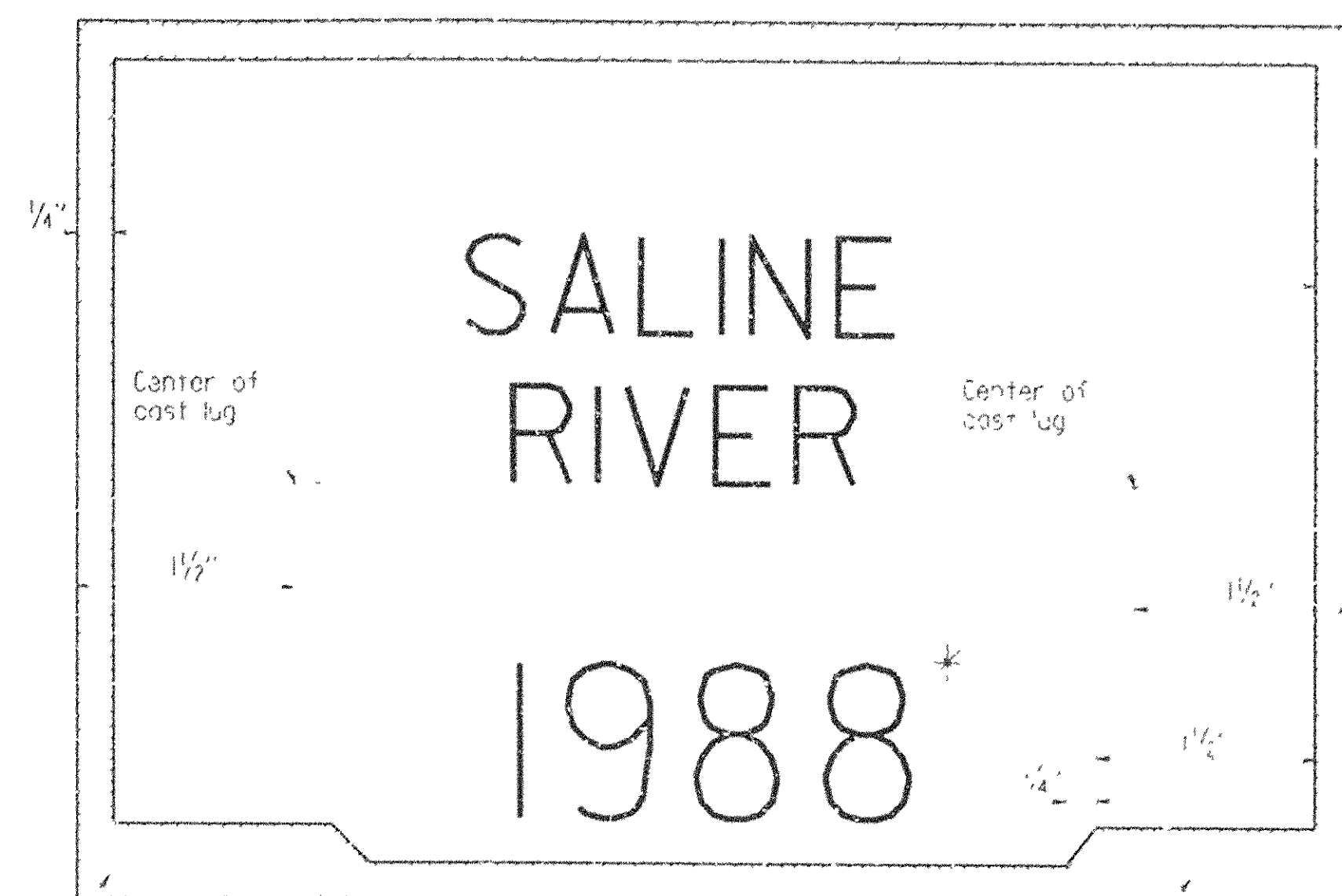
BRIDGE NO. 14392

DRAWING NO. 14392

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-89	11-16-91			6	ARK.			
				JOB NO.				

① NAME PLATES 2389A

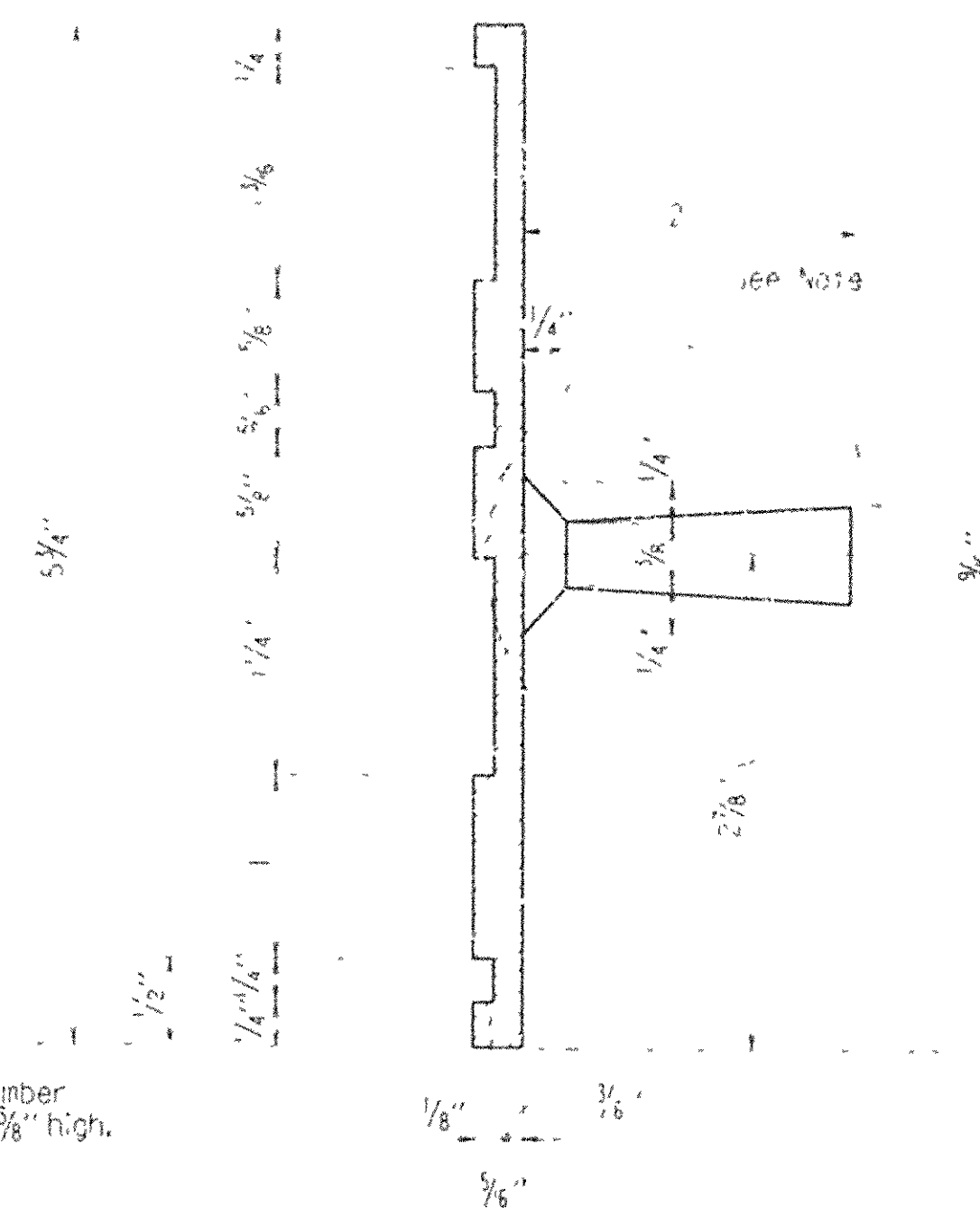
7" Minimum to 9" Maximum
(Length to be determined by the lettering required)



Stamp the design loading here with letters and numerals 3/8" high. Example: HS 20

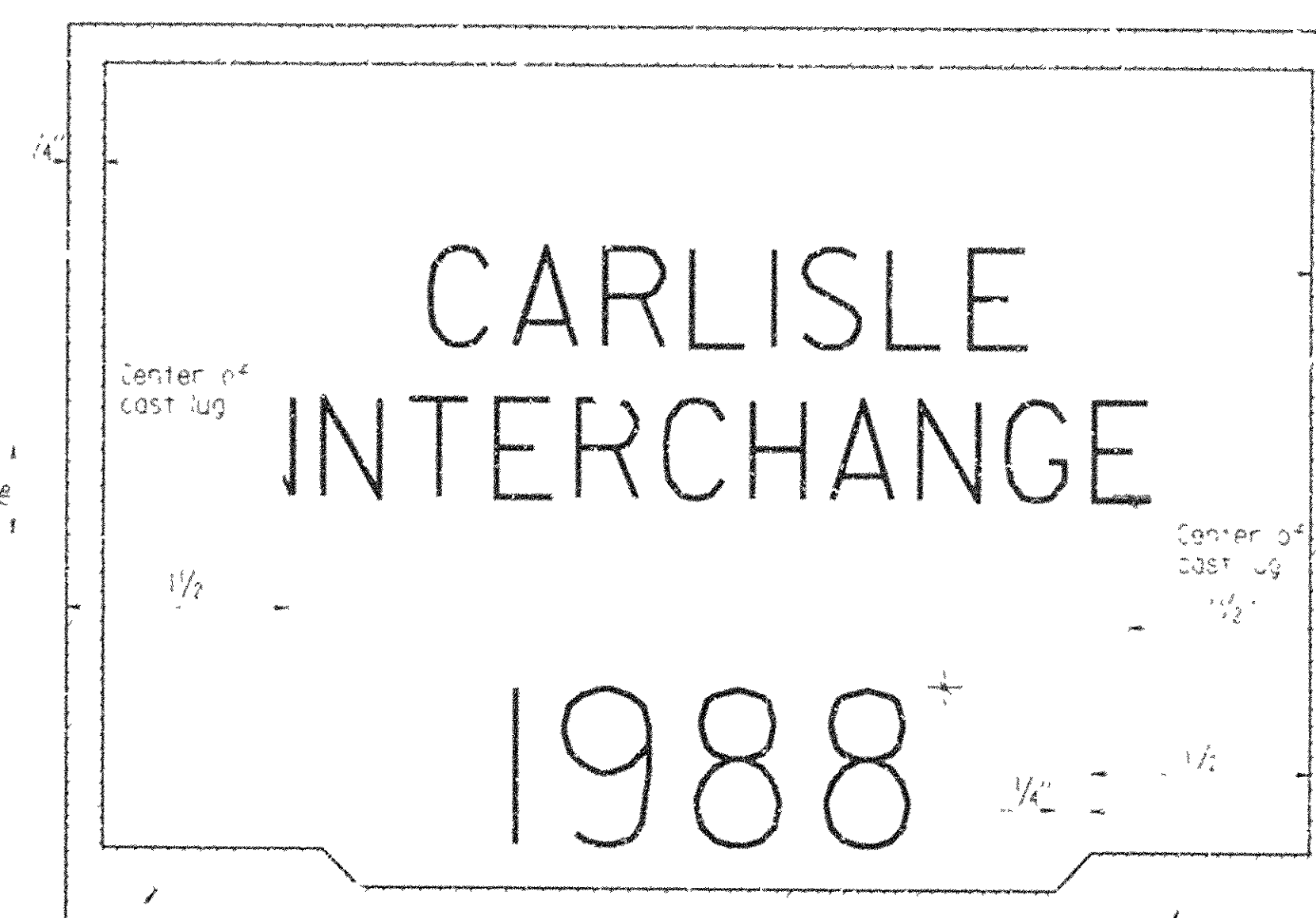
Stamp the bridge number here with numerals 3/8" high. Example: 6275

TYPICAL BRIDGE NAME PLATE-STYLE 1-FULL SIZE
STREAM CROSSINGS



Note: Alternate attachments may be used provided such attachments are submitted and approved secured before fabrication is begun.

7" Minimum to 9" Maximum
(Length to be determined by the lettering required)



Stamp the design loading here with letters and numerals 3/8" high. Example: HS 20

Stamp the bridge number here with numerals 3/8" high. Example: 6275

TYPICAL BRIDGE NAME PLATE-STYLE 3-FULL SIZE
GRADE SEPARATION STRUCTURES

GENERAL NOTES

1. Name plates are to be either cast aluminum or bronze and shall meet the material requirements as specified in section 6.1 of the standard specifications.

2. Body of plate shall be 3/8" thick and shall include two tapering slots 3/8" to 1/2" wide. The border and all lettering shall be raised 1/4" above the face of plate and shall be polished.

3. All lettering shall be polished, square cut and not tapered.

4. The number of plates required and the location and name on the route for each bridge shall be as designated on the plans.

5. Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, Current Edition, with applicable Supplemental Specifications and Special Provisions.

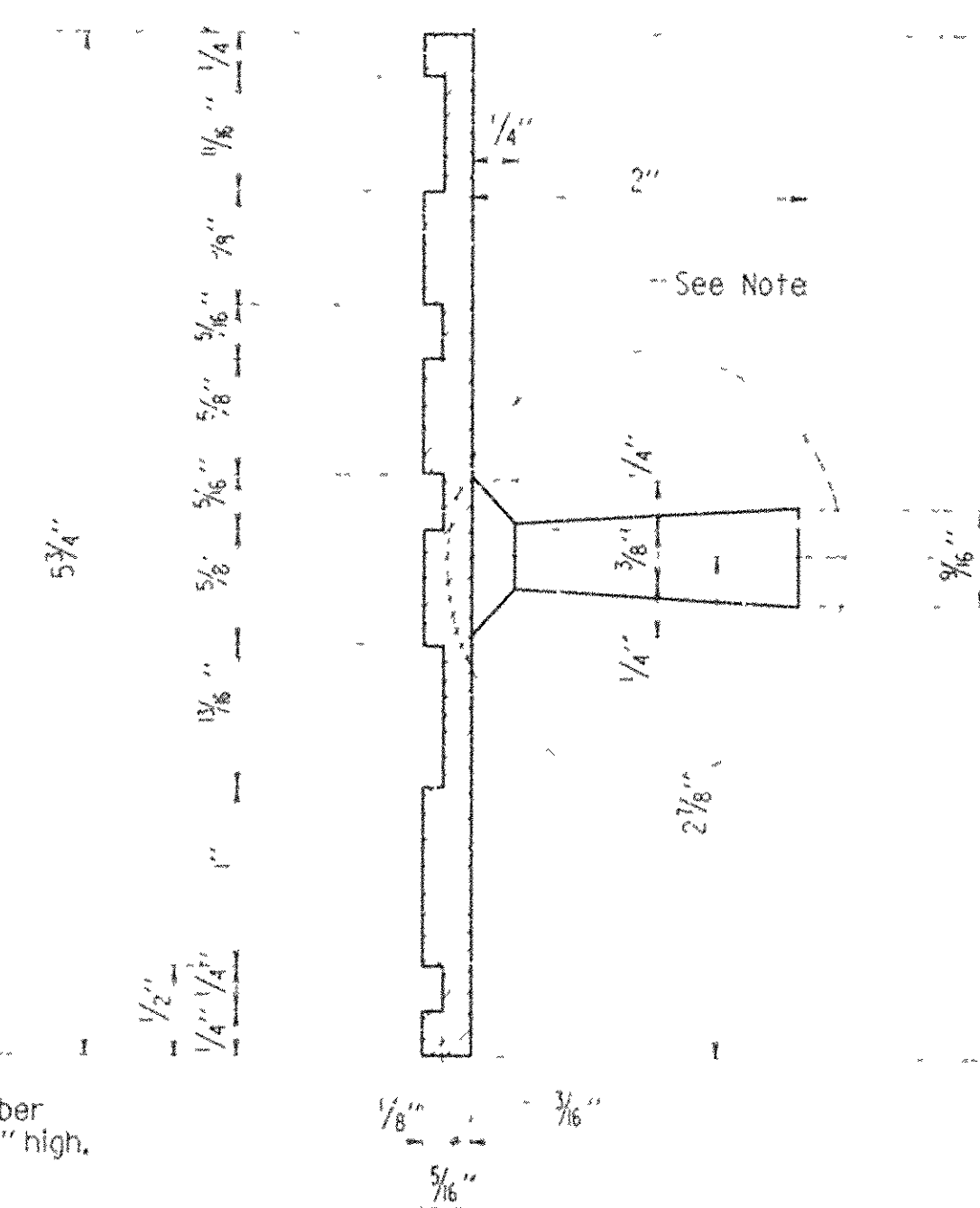
7" Minimum to 9" Maximum
(Length to be determined by the lettering required)



Stamp the design loading here with letters and numerals 3/8" high. Example: HS 20

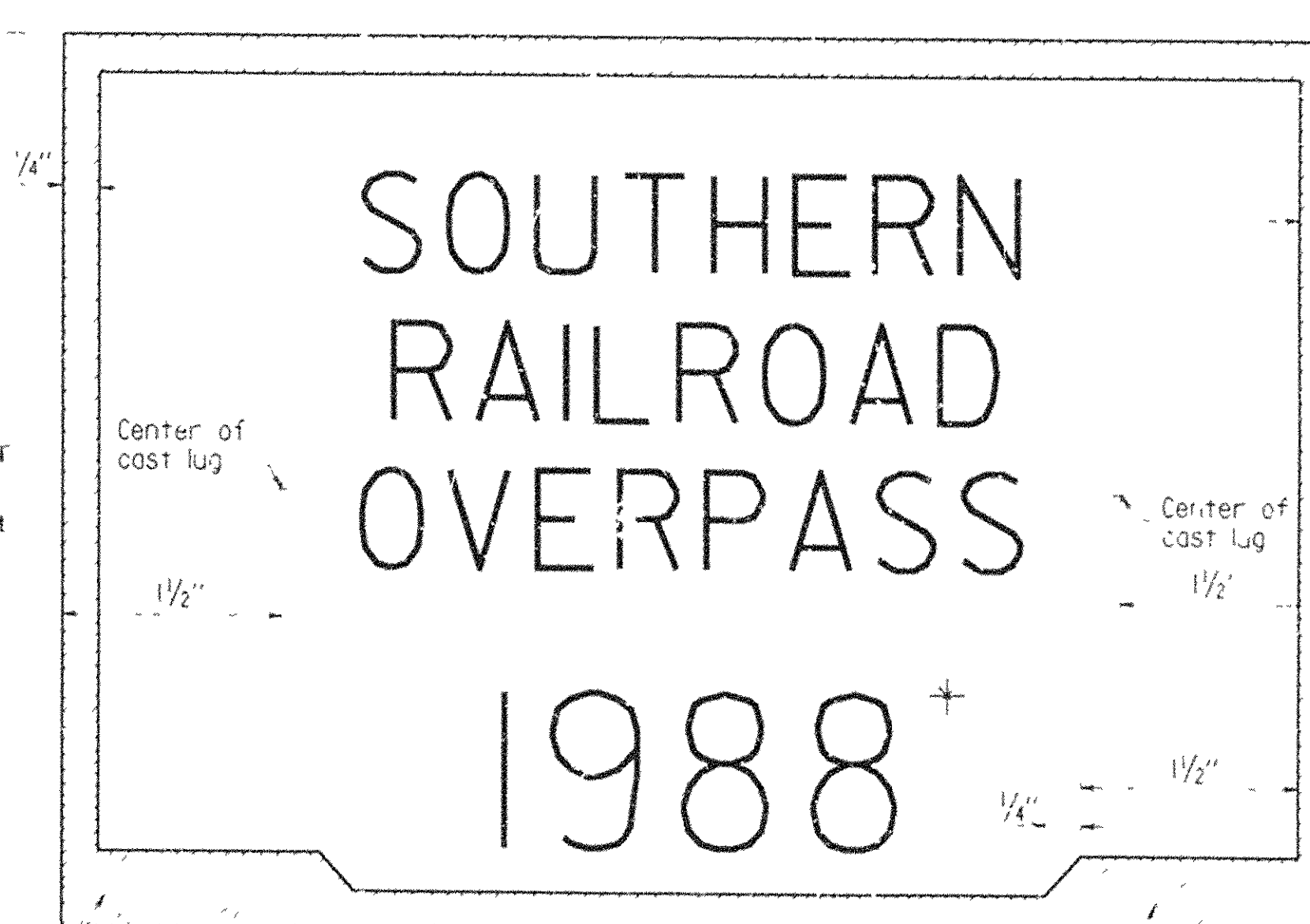
Stamp the bridge number here with numerals 3/8" high. Example: 6275

TYPICAL BRIDGE NAME PLATE-STYLE 2-FULL SIZE
STREAM CROSSINGS



See Note

7" Minimum to 9" Maximum
(Length to be determined by the lettering required)



Stamp the design loading here with letters and numerals 3/8" high. Example: HS 20

Stamp the bridge number here with numerals 3/8" high. Example: 6275

TYPICAL BRIDGE NAME PLATE-STYLE 4-FULL SIZE
GRADE SEPARATION STRUCTURES

* Year in which contract is awarded.

Revised notes, 11-16-89, LM
Rev. General Notes, 11-2-90, W.M.G.
Rev. General Notes 11-11-92, CR/Hart

DETAILS OF STANDARD
TYPE C BRIDGE NAME PLATES

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

DRAWN BY: LDF DATE: 6-16-88
CHECKED BY: CPB DATE: 6-16-88
DESIGNED BY: DATE:
BRIDGE NO. SCALE: FULL SIZE
DRAWING NO. 2389A

