

BRIDGE NO.	CODE NO.	NAME	SCHEDULE OF BRIDGE QUANTITIES																
			ITEM NO.	801	SP, SS & 802	SP, SS & 802	803	SP, SS & 804	SS & 804	SS & 805	SS & 807	SS & 807	SS & 807	807	809	812	SS & 816	SP	
				UNIT OF BRIDGE	UNCLASSIFIED EXCAVATION FOR STRUCTURES-- BRIDGE*	CLASS S CONCRETE	CLASS S(AE) CONCRETE	BOILED LINSEED OIL	REINFORCING STEEL (GRADE 60)	EPOXY COATED REINFORCING STEEL (GRADE 60)	STEEL PILING (HP 12 x 53)	STRUCTURAL STEEL IN BEAM SPANS (A36)	STRUCTURAL STEEL IN PLATE GIRDER SPANS (A36)	STRUCTURAL STEEL IN PLATE GIRDER SPANS (A572 GRADE 50)	PAINTING STRUCTURAL STEEL	PREFORMED JOINT SEALER	BRIDGE NAME PLATES (TYPE C)	CONCRETE RIPRAP	WALL DRAINAGE SYSTEM
UNIT		CU. YD.	CU. YD.	CU. YD.	GAL.	LB.	LB.	LIN. FT.	LB.	LB.	LB.	TON	LIN. FT.	EA.	CU. YD.	SQ. FT.			
6242 A	X271	COUNTY ROAD 26	SOUTH ABUTMENT		37.3	2.7		4,339		120	664								
			PIER 1	69	55.6			5,785											
			PIER 2	99	55.6			5,785											
			NORTH ABUTMENT		37.3	2.7		4,339		120	664					1	100		
			160'-1 7/8" CONT. COMP. BEAM SPAN			189.1	17	21,930	30,495		158,635				86.0				
			TOTAL BRIDGE 6242A	168	185.8	194.5	17	42178	30,495	240	159,963			80.0	86.0	1	202		
6242 B	X271	COUNTY ROAD 26	SOUTH ABUTMENT		37.3	2.7		4,339		120	664					1	116		
			PIER 1	152	55.4			5,785											
			PIER 2	126	55.4			5,785											
			NORTH ABUTMENT		37.3	2.7		4,339		180	664						114		
			160'-1 7/8" CONT. COMP. BEAM SPAN			189.1	17	21,930	30,495		158,635				86.0				
			TOTAL BRIDGE 6242B	278	185.4	194.5	17	42178	30,495	300	159,963			80.0	86.0	1	230		
6243 A	X271	STATE HWY. 265	SOUTH ABUTMENT		57.9	2.6	1	5,829		150		2,660				1	103		
			PIER 1	327	90.8			11,509											
			PIER 2	378	90.0			11,421											
			NORTH ABUTMENT		57.9	2.6	1	5,829		180		2,660						123	
			239'-9" CONT. COMP. PL GIRDER UNIT			302.9	24	37,293	42,765			152,220	76,875						
			TOTAL BRIDGE 6243A	705	296.6	308.1	26	71,881	42,765	330		157,540	76,875	117		1	226		
6243 B	X271	STATE HWY. 265	SOUTH ABUTMENT		57.9	2.6	1	5,829		180		2,660				1	117		
			PIER 1	289	90.5			11,450											
			PIER 2	339	89.7			11,362											
			NORTH ABUTMENT		57.9	2.6	1	5,829		150		2,660						104	
			239'-9" CONT. COMP. PL GIRDER UNIT			302.9	24	37,293	42,765			152,220	76,875						
			TOTAL BRIDGE 6243B	628	296.0	308.1	26	71,763	42,765	330		157,540	76,875	117		1	221		
6244	X771	U.S. HWY. 71	EAST ABUTMENT	925	294.7	2.6	1	14,334				3,422				1		1,460	
			PIER	150	91.6			13,538											
			WEST ABUTMENT	2,320	618.7	2.6	1	33,900				2,693							2,638
			257'-7 3/8" CONT. COMP. PL GIRDER UNIT			328.7	25	42,577	56,117			211,021	151,924						
			TOTAL BRIDGE 6244	3,395	1,005.0	333.9	27	104,349	56,117			217,136	151,924	185		1		4,098	
			TOTAL JOB R40046	5,174	1,968.8	1,339.1	113	332,349	202,637	1,200	319,926	532,216	305,674	579	172.0	5	879	4,098	

*ESTIMATED QUANTITY OF ROCK EXCAVATION - JOB R40046

BRIDGE 6242 A = 102 Cu.Yd.
BRIDGE 6242 B = 109 Cu.Yd.
BRIDGE 6243 A = 110 Cu.Yd.
BRIDGE 6243 B = 217 Cu.Yd.
BRIDGE 6244 = 2,865 Cu.Yd.

TOTAL FOR JOB 3,403 Cu.Yd.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3-3-89				6	ARK.			
						JOB NO. R40068	38	234
① 6242A&B, 6243A&B, & 6244 NOTES 29017								

GENERAL NOTES - JOB R40046

- ALL BEARINGS REFER TO TRUE NORTH.
- LEVEL DATUM IS MEAN SEA LEVEL REFERENCED TO U.S.C. AND G.S.
- GRADE LINE DENOTES FINISHED GRADE.
- DRAWINGS SHOW GENERAL FEATURES OF DESIGN ONLY. SHOP DRAWINGS SHOWING DETAILS OF STRUCTURAL STEEL AND PERMANENT STEEL FORMS SHALL BE PREPARED, SUBMITTED AND APPROVED BEFORE FABRICATION IS BEGUN.
- ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE RESPECTIVE OWNERS, UNLESS OTHERWISE PROVIDED.
- ALL CONCRETE IN THE SUPERSTRUCTURE SLABS AND PARAPET SHALL BE CLASS S(AE). ALL OTHER CONCRETE SHALL BE CLASS S.
- ALL CONCRETE SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.
- ALL CONCRETE SHALL BE POURED AND SCREEDED OFF PRIOR TO INITIAL SET. THE CONCRETE DECK SHALL BE FINISHED WITH A METAL TINE IN ACCORDANCE WITH SUBSECTION 802.20 OF THE STANDARD SPECIFICATIONS. MOVEMENT OF THE FINISHING MACHINE ACROSS NEW CONCRETE SHALL BE ON PLANKS PLACED ON THE SURFACE AND SHALL BE PROHIBITED FOR 72 HOURS AFTER FINISHING THE POUR. CONCRETE IN BRIDGE SUPERSTRUCTURE SHALL BE PLACED AND CONSOLIDATED FOR THE ENTIRE POUR BEFORE ANY CONCRETE HAS TAKEN IT'S INITIAL SET.
- THE BRIDGE SLAB SHALL BE MADE BY PLACING THE SAME NUMBERED POURS SIMULTANEOUSLY OR SEPARATELY - WITH PARTICULAR EMPHASIS ON THE REQUIREMENT THAT THE LOWER NUMBERED POURS SHALL BE MADE PRIOR TO ANY ADJACENT HIGHER NUMBERED POUR. THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE ENGINEER IF HE ELECTS TO MAKE POURS OTHER THAN SHOWN. FORTY-EIGHT HOURS SHALL ELAPSE BETWEEN POURS WHICH ARE NOT ADJACENT. SEVENTY-TWO HOURS SHALL ELAPSE BETWEEN ADJACENT POURS. ALL PARAPET POURS MADE BEFORE ENTIRE SLAB UNIT HAS BEEN PLACED MUST BE APPROVED BY THE ENGINEER.
- REINFORCING STEEL SHALL BE ASTM A615 OR A617 GRADE 60 DEFORMED BARS. LAP SPLICES SHALL BE A MINIMUM OF 32 BAR DIAMETERS IN LENGTH UNLESS OTHERWISE NOTED. BAR SIZES ARE DESIGNATED BY NUMBER, THE FIRST DIGIT OR DIGITS INDICATING THE SIZE OF THE BAR. BARS SHALL BE ACCURATELY LOCATED IN THE FORMS AND FIRMLY HELD IN PLACE BY STEEL 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 OF "REINFORCING STEEL."
- DIMENSIONS SHOWN IN REINFORCING BAR BENDING DIAGRAMS ARE TO OUTER EDGE OF BARS, UNLESS OTHERWISE NOTED.
- REINFORCING STEEL IN TOP MAT OF SLAB SHALL BE EPOXY COATED. ALL REINFORCING STEEL TO BE EPOXY COATED HAS BEEN MARKED IN THE PLANS WITH AN "E" IMMEDIATELY AT THE END OF THE BAR MARK.
- THE TRANSVERSE TRUSS BARS SHOWN IN THE NON-SKEWED SUPERSTRUCTURE SLABS MAY BE REPLACED WITH FULL LENGTH STRAIGHT BARS OF THE SAME SIZE IN THE TOP AND BOTTOM MAT OF THE SLAB. THE BARS IN THE TOP MAT SHALL BE EPOXY COATED. THE BASIS OF PAYMENT SHALL BE THE TRUSS BARS.
- BOILED LINSEED OIL SHALL BE APPLIED TO THE ROADWAY SURFACE OF ALL BRIDGE DECKS AND THE FRONT FACE AND TOP OF RAIL.
- ANCHOR BOLTS SHALL BE ASTM DESIGNATION A36 AND SHALL BE GALVANIZED TO CONFORM TO ASTM A153. ANCHOR BOLTS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR "STRUCTURAL STEEL IN BEAM SPANS (A36)."
- PILES IN ABUTMENTS TO BE DRIVEN AFTER EMBANKMENT TO BOTTOM OF CAP IS IN PLACE.
- STEEL BEARING PILING SHALL BE DRIVEN WITH AN APPROVED AIR, STEAM, OR DIESEL HAMMER WITH A MINIMUM ENERGY OF 19,000 FOOT POUNDS PER BLOW. ALL PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 70 TONS. PILING SHALL BE HP 12 x 53. FOR PILE TIPS, SEE DWG. 14995 A.
- TOPS OF ALL FOOTINGS SHALL BE A MINIMUM OF 1'- 6" BELOW FINISHED GROUND LINE.
- THE BASE AT ALL SPREAD FOOTINGS SHALL BE EMBEDDED A MINIMUM OF 1'- 0" INTO THE ROCK AND AS DEEP AS REQUIRED TO INSURE THAT THE FOOTING BEARS ON SOUND MATERIAL.

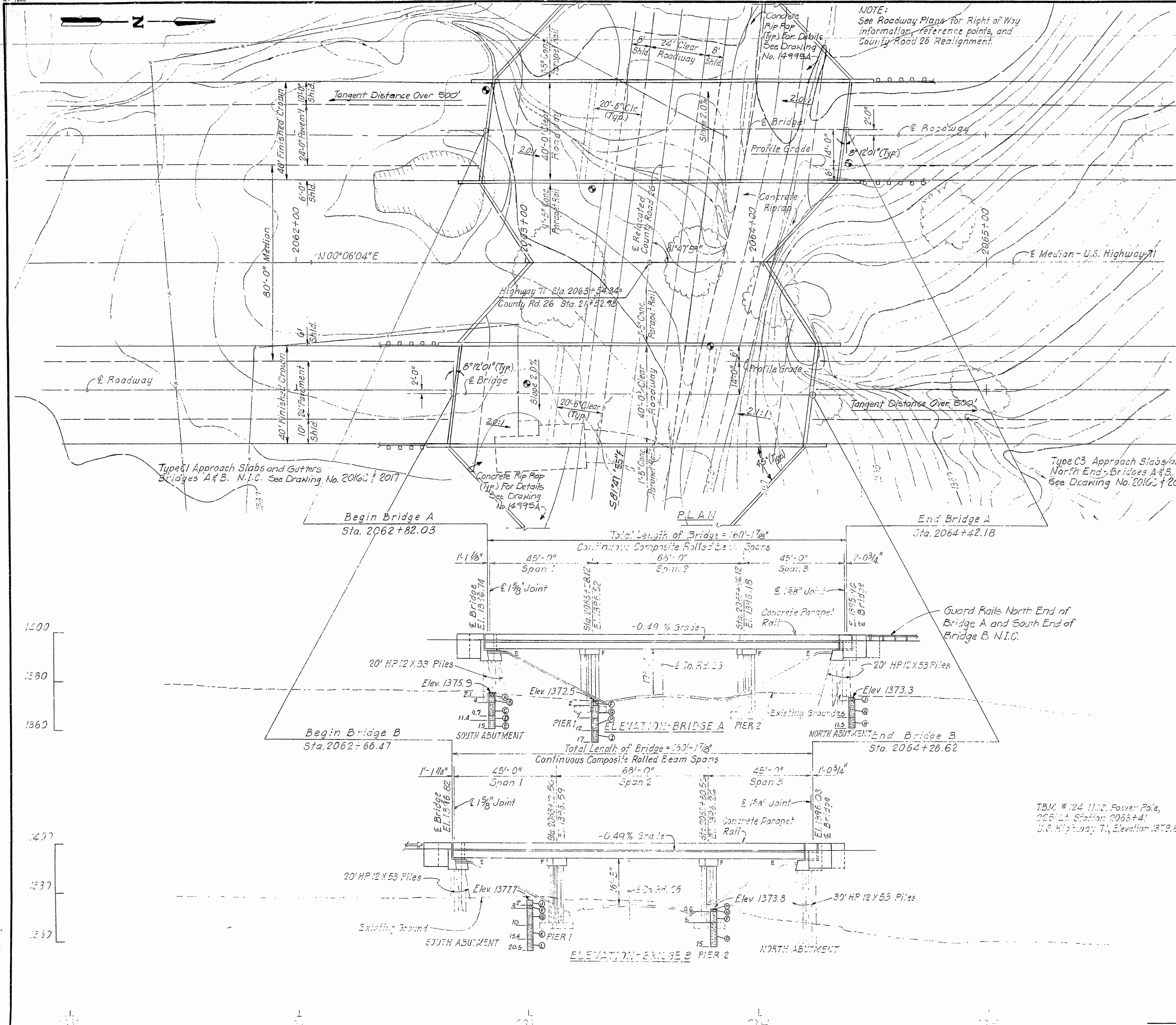
STRUCTURAL STEEL NOTES

- ALL STRUCTURAL STEEL NOT CLASSIFIED AS TO A SPECIFIC GRADE SHALL BE A36.
- ALL WIDE FLANGE BEAMS, ARE CONSIDERED MAIN LOAD CARRYING MEMBERS AND SHALL MEET THE REQUIREMENTS OF THE CHARPY V-NOTCH TEST AS SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.
- ALL FLANGE AND WEB PLATES, ARE CONSIDERED MAIN LOAD CARRYING MEMBERS AND SHALL MEET THE REQUIREMENTS OF THE LONGITUDINAL CHARPY V-NOTCH TEST AS SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS. GROOVE WELDS IN THESE MAIN MEMBERS SHALL BE QUALITY CONTROL (Q.C.) TESTED BY NONDESTRUCTIVE TESTING AS REQUIRED BY THE GOVERNING SPECIFICATIONS SPECIFIED IN SUPPLEMENTAL SPECIFICATION 807-1.
- 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.
- ALL WELDS TO BE MADE DURING FABRICATION, BOTH TEMPORARY AND PERMANENT, SHALL BE FULLY DETAILED ON THE SHOP DRAWINGS. ADDITIONAL WELDS FOR ERECTION PURPOSES, BOTH PERMANENT AND TEMPORARY, SHALL BE FULLY DETAILED AND SUBMITTED TO THE BRIDGE DESIGN DIVISION OF THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT FOR APPROVAL.
- ALL WELDING SHALL CONFORM TO SUBSECTION 807.24 OF THE STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATION 807-1.
- FILLET WELDS AT FLANGE TO WEB PLATE CONNECTIONS SHALL BE Q.C. TESTED BY THE MAGNETIC PARTICLE METHOD.
- ALL QUALITY CONTROL (Q.C.) TESTING IS AT THE CONTRACTOR'S EXPENSE.
- ALL GIRDERS SHALL BE BLOCKED IN THEIR TRUE POSITION, WITH WEBS HORIZONTAL, IN THE SHOP. THE CAMBER, LENGTH OF SECTIONS, DISTANCE BETWEEN BEARINGS AND OPENING OF JOINTS SHALL BE MEASURED WITH THE BEAMS IN THIS POSITION AND THIS INFORMATION SHALL BECOME A PART OF THE PERMANENT RECORDS OF THIS JOB.
- DIAPHRAGMS AND CROSS FRAMES SHALL BE INSTALLED AS BEAMS ARE ERECTED. ALL DIAPHRAGMS OR FRAMES SHALL BE INSTALLED AND COMPLETELY BOLTED PRIOR TO POURING OF FLOOR SLABS.
- OVERSIZED HOLES 3/16" GREATER THAN THE BOLT DIAMETER MAY BE USED AT ALL BOLTED CONNECTIONS OTHER THAN FIELD SPLICES FOR BOLTS 7/8" AND LESS IN DIAMETER. WASHERS UNDER BOTH NUT AND HEAD OF THE BOLT SHALL BE USED WITH OVERSIZED BOLT HOLES.
- FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER BOLTS UNLESS OTHERWISE NOTED. THE MINIMUM DISTANCE BETWEEN THE CENTERS OF 7/8" DIAMETER BOLTS SHALL NOT BE LESS THAN 3 TIMES THE DIAMETER OF THE BOLT AND PREFERABLY NOT LESS THAN 3". THE MINIMUM DISTANCE FROM THE CENTER OF A 7/8" DIAMETER BOLT TO A SHEARED OR FLAME CUT EDGE SHALL BE 1 1/2" AND TO A ROLLED OR PLANED EDGE SHALL BE 1 1/4". BOLT HOLES IN FIELD SPLICES SHALL NOT EXCEED 15/16" IN DIAMETER. BOLT HEADS AT FIELD SPLICES SHALL BE PLACED ON THE EXTERIOR SIDE OF BEAMS, AND BOTTOM OF BEAM FLANGES.
- ALL CONTACT SURFACES BETWEEN PLATES AT FIELD SPLICES SHALL BE FREE OF PAINT, OIL, RUST, OR SCALE BEFORE ASSEMBLY.
- BEARINGS SHALL BE FIRMLY SEATED IN ACCORDANCE WITH SUBSECTION 807.51 OF THE STANDARD SPECIFICATIONS. THIS ITEM OF WORK AND MATERIAL IS TO BE CONSIDERED AS SUBSIDIARY TO THE ITEM OF "STRUCTURAL STEEL IN BEAM SPANS (A36)" AND WILL NOT BE PAID FOR DIRECTLY.
- THE BEARING ASSEMBLES SHALL BE SET IN A VERTICAL POSITION AT 60 DEGREES F.
- ALL METAL BEARINGS AND ROADWAY EXPANSION DEVICES SHALL BE PAID FOR AS "STRUCTURAL STEEL IN ... SPANS (A36)".
- PINS SHALL BE ASTM A668 CLASS C OR ASTM A108 GRADE 1016-1030 INCLUSIVE AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR "STRUCTURAL STEEL IN ... SPANS (A36)".
- ALL STRUCTURAL STEEL, EXCEPT GALVANIZED MEMBERS, CONTACT SURFACES OF BOLTED CONNECTIONS, SURFACES WITHIN 3" OF HOLES AND FIELD WELDS, AND SURFACES IN CONTACT WITH CONCRETE, SHALL BE GIVEN ONE SHOP PRIME COAT AND TWO FIELD COATS OF PAINT AFTER ERECTION AS SPECIFIED IN SUBSECTION 807.59 OF THE STANDARD SPECIFICATIONS. THE SECOND FIELD COAT SHALL BE THE COLOR "ALUMINUM".
- GIRDER WEBS MAY BE MADE BY SHOP SPlicing WITH A MINIMUM LENGTH OF 25'-0" FOR SECTIONS. NO ADDITIONAL PAYMENT FOR WELDS FOR THESE SPLICES WILL BE MADE.
- ALL WEB AND FLANGE PLATES AND FLANGE SPlice PLATES MUST BE PLACED SO THAT THE DIRECTION IN WHICH THE PLATES ARE ROLLED IS ALONG THE LONGITUDINAL AXIS OF THE GIRDER.
- TRANSVERSE INTERMEDIATE STIFFENERS SHALL BE SET NORMAL TO THE TOP FLANGE AND ON THE SIDE OF THE GIRDER WEB AS INDICATED ON THE FRAMING PLANS. NO TRANSVERSE INTERMEDIATE STIFFENERS ARE TO BE PLACED ON THE OUTSIDE OF THE EXTERIOR GIRDERS.

SHEET 1 OF 1
GENERAL NOTES FOR STRUCTURES
GREENLAND - FAYETTEVILLE BYPASS
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: L.D.T. DATE: MAR 1987
CHECKED BY: H.J.P. DATE: MAR. 1987 SCALE: AS NOTED
DESIGNED BY: G.A.F. DATE: MAR. 1987
BRIDGE NO. 6242 A&B, 6243 A&B, AND 6244 DRAWING NO. 29017

BRIDGE ENGINEER

PBB\VW_26\NOTES_8615203\B046 2-28-89



NOTE:
See Roadway Plans for Right of Way
information, reference points, and
County Road 26 Realignment.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3-3-89				6	ARK.			
				JOB NO.		R40068	39	234
① 6242 A&B PLAN & ELEVATION 29018								

- CONSTRUCTION SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1988 AND APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.
- DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1983 EDITION WITH CURRENT INTERIM SPECIFICATIONS.
- LIVE LOADING: HS20
- METHOD OF DESIGN: LOAD FACTOR
- UNIT STRESSES:

CLASS S CONCRETE	F'c	3,500 PSI
CLASS S(AE) CONCRETE	F'c	4,000 PSI
REINFORCING STEEL (GR. 60)	Fy	60,000 PSI
STRUCTURAL STEEL		
ASTM (A36)	Fy	36,000 PSI
ASTM (A572 GRADE 50)	Fy	50,000 PSI
- FATIGUE LOAD CYCLE: CASE II
- CONCRETE SURFACES SHALL BE FINISHED IN ACCORDANCE WITH JOB SP. "SPRAYED CONCRETE FINISH."
- DRAWING REFERENCE NUMBERS:

GENERAL NOTES	29017
ABUTMENTS	29019-29020
PIERS	29021
SUPERSTRUCTURE	29022-29024 29063 & 29064

BORING LEGEND

- (A) Moist, Very Stiff, Brown Silty Clay with Sandstone Cobbles
- (B) Hard, Brown Sandstone
- (C) Hard, Brown and Gray Calcareous Sandstone with Some Clay Seams
- (D) Medium Hard, Gray Weathered Shale
- (E) Hard, Dark Gray Shale
- (F) Moist, Stiff, Brown Silty Clay with Sandstone Cobbles
- (G) Hard, Brown Sandstone with Clay Seams
- (H) Medium Hard, Gray and Brown Highly Weathered Shale
- (I) Medium Hard, Dark Gray Shale with Some Calcareous and Weathered Shale Seams
- (J) Moist, Medium Stiff, Brown Silty Clay
- (K) Medium Hard, Brown and Gray Weathered Shale
- (L) Hard, Dark Gray Shale with Some Calcareous Seams
- (M) Asphalt Pavement
- (N) Moist, Loose, Brown Gravel
- (O) Medium Hard, Gray Highly Weathered Shale

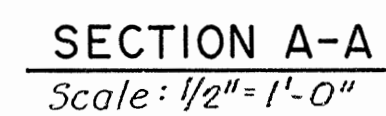
NOTE: Copies of Boring Logs may be obtained from the Programs and Contracts Division of the Arkansas Highway and Transportation Department upon request.

SHEET 1 OF 1
GENERAL PLAN AND ELEVATION
GREENLAND INTERCHANGE

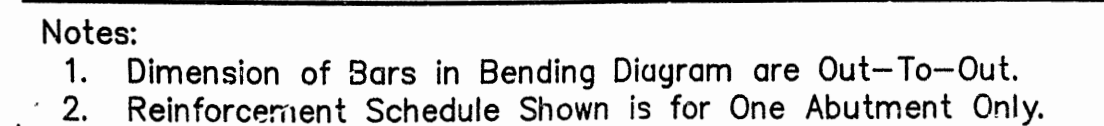
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: G.B.S. DATE: MAR 1987
CHECKED BY: T.B.H. DATE: MAR 1987
DESIGNED BY: H.O.P. DATE: MAR 1987
SCALE: 1"=20'
BRIDGE ENGINEER
BRIDGE NO. 3242 A & B DRAWING NO. 29018

① 6242 A+B DTLS.OF ABUTMENTS 29019



BENDING DIAGRAMS

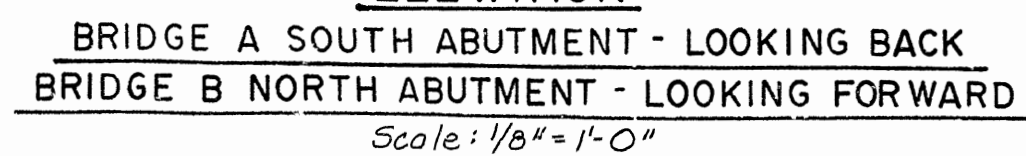
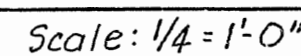


DRAWN BY: C.H.K. DATE: MAR. 1987
CHECKED BY: G.A.F. DATE: MAR. 1987 SCALE: AS NOTED
DESIGNED BY: V.I.R.W. DATE: MAR. 1987

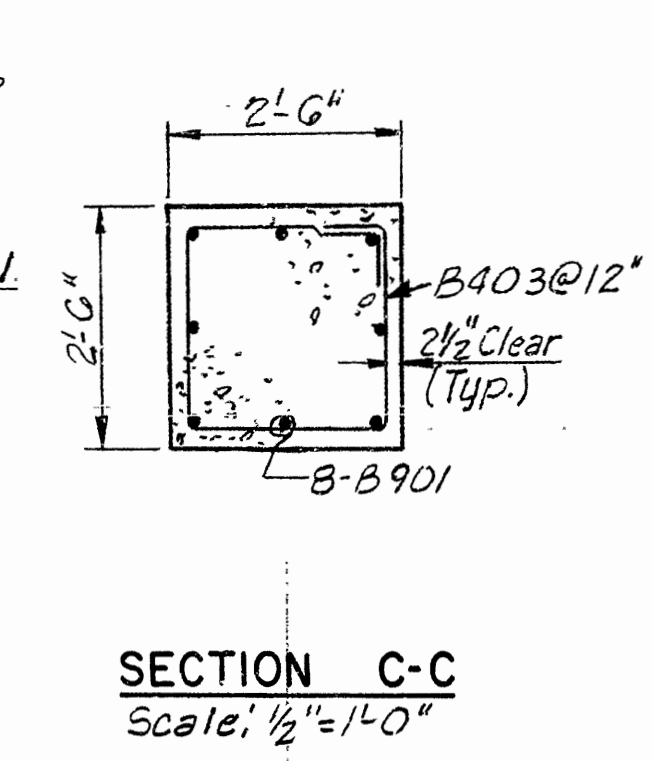
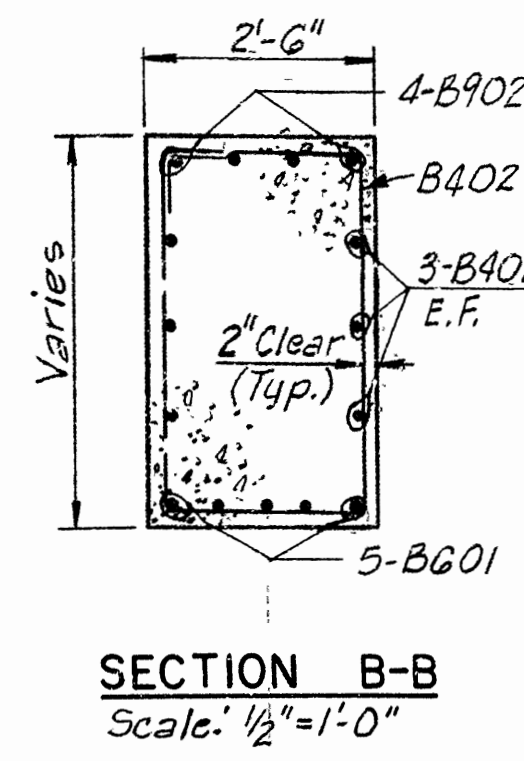
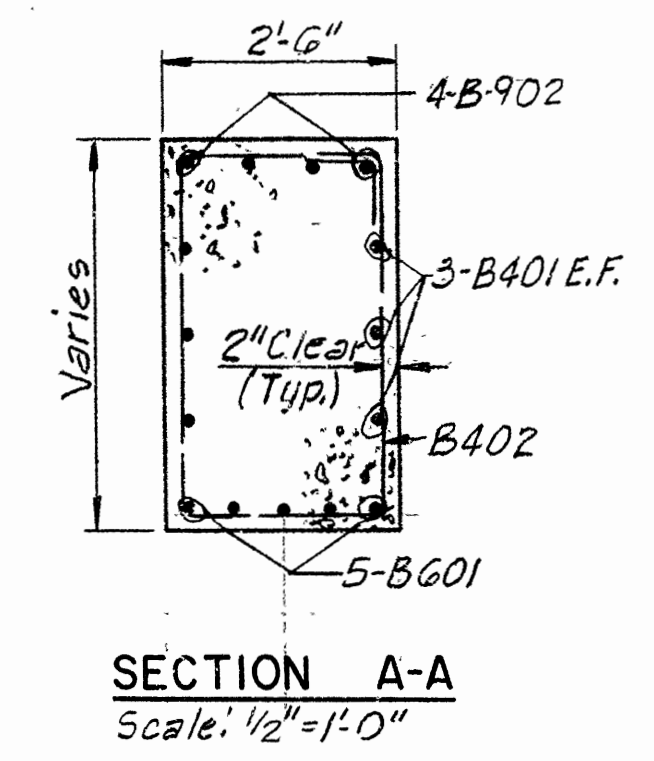
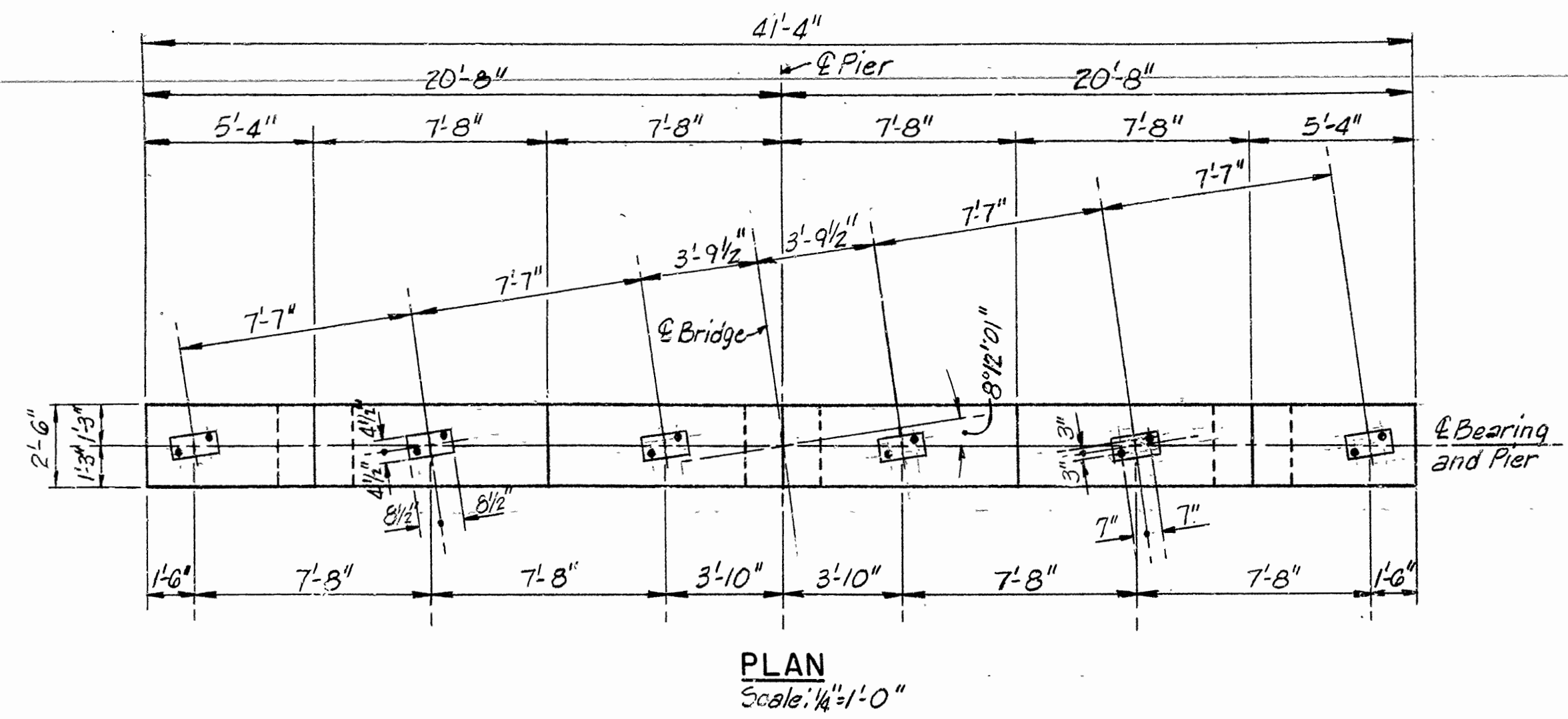
BRIDGE NO. 6242 A & B DRAWING NO. 29019



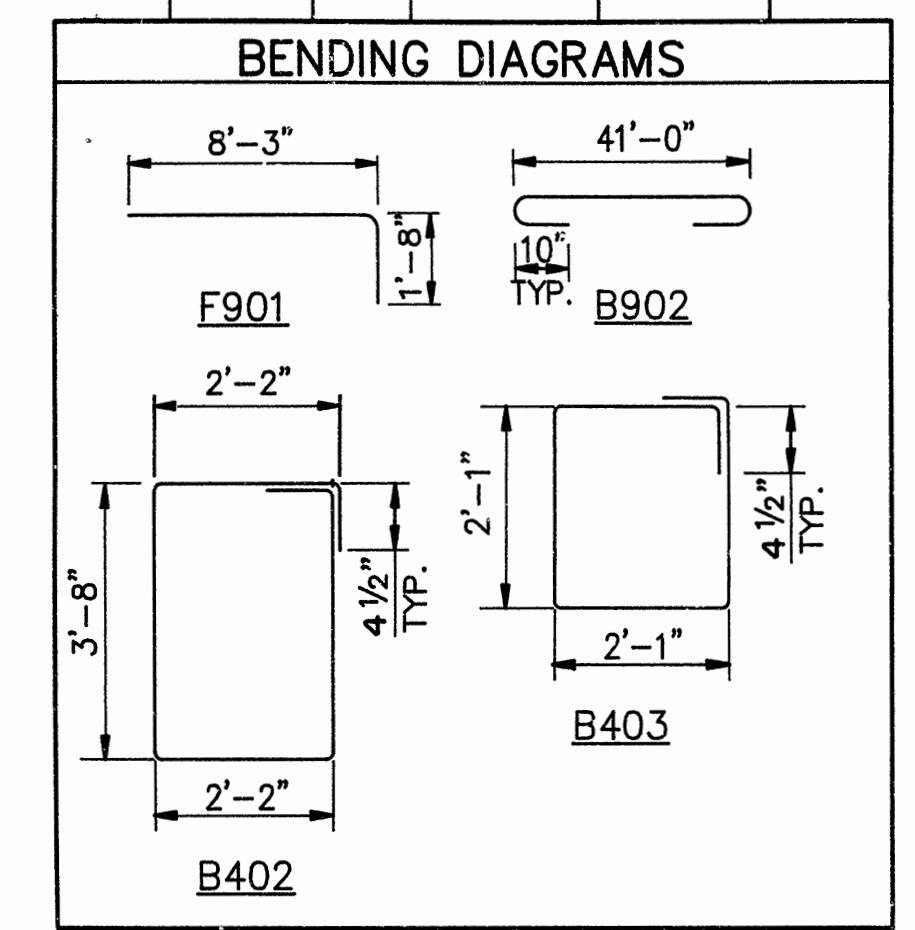
12-20-89 Added Dimensions F & G, Elevations
H & I to ELEVATIONS, Revise 4'-0" Cap depth location.



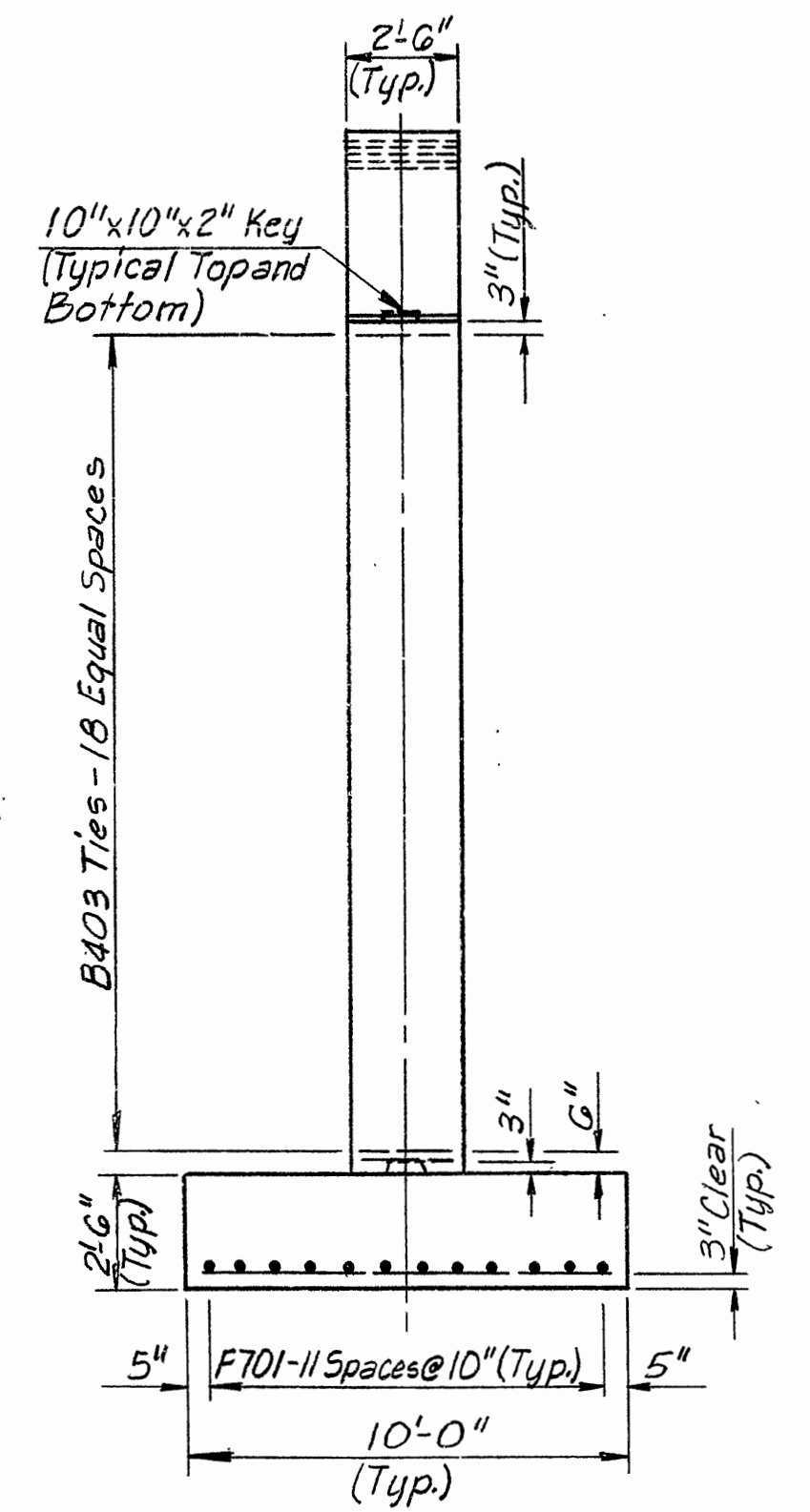
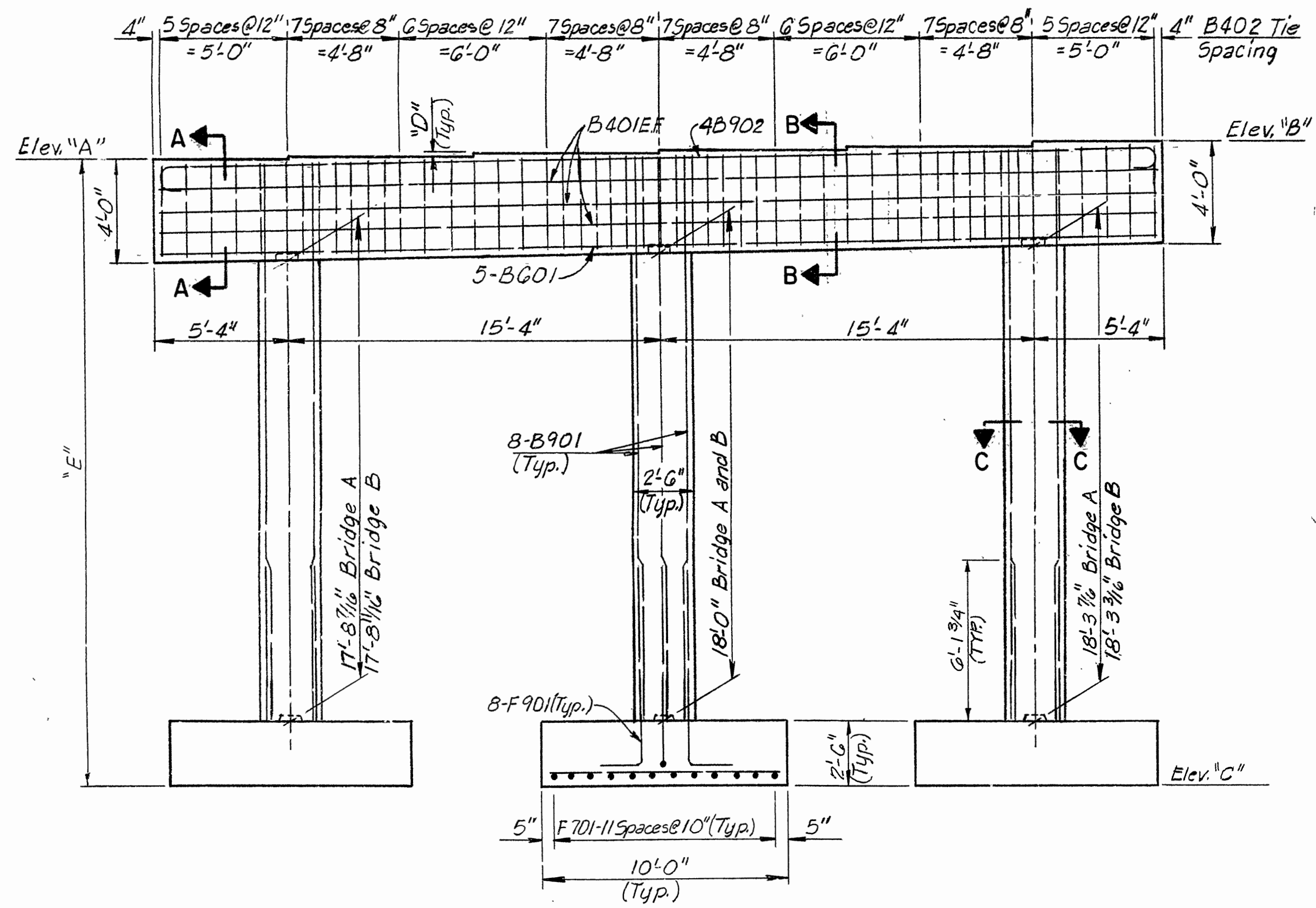
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3-3-89				6	ARK.			
				JOB NO.	R40068			42
				6264 A&B DETAILS OF PIERS 29021				



MARK	NO	LENGTH	PIN DIA
B401	6	41'-0"	STR
B402	51	12'-0"	2"
B403	60	8'-8"	2"
B601	5	41'-0"	STR
B901	24	21'-4"	STR
B902	4	43'-6"	9"
F701	72	9'-6"	STR
F901	24	9'-8"	9"



- Notes:
- Reinforcement Schedule shown is for One Pier Only.
 - Dimension of Bars in Bending Diagram are Out-To-Out.



BRIDGE	PIER	ELEV. A	ELEV. B	ELEV. C	D	E
A	1	1391.65	1392.44	1367.55	178"	24'-1 3/16"
	2	1391.31	1392.10	1367.21	178"	24'-1 3/16"
B	1	1391.75	1392.48	1367.62	178"	24'-1 3/16"
	2	1391.42	1392.15	1367.29	178"	24'-1 3/16"

SHEET 1 OF 1
DETAILS OF PIERS
GREENLAND INTERCHANGE

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

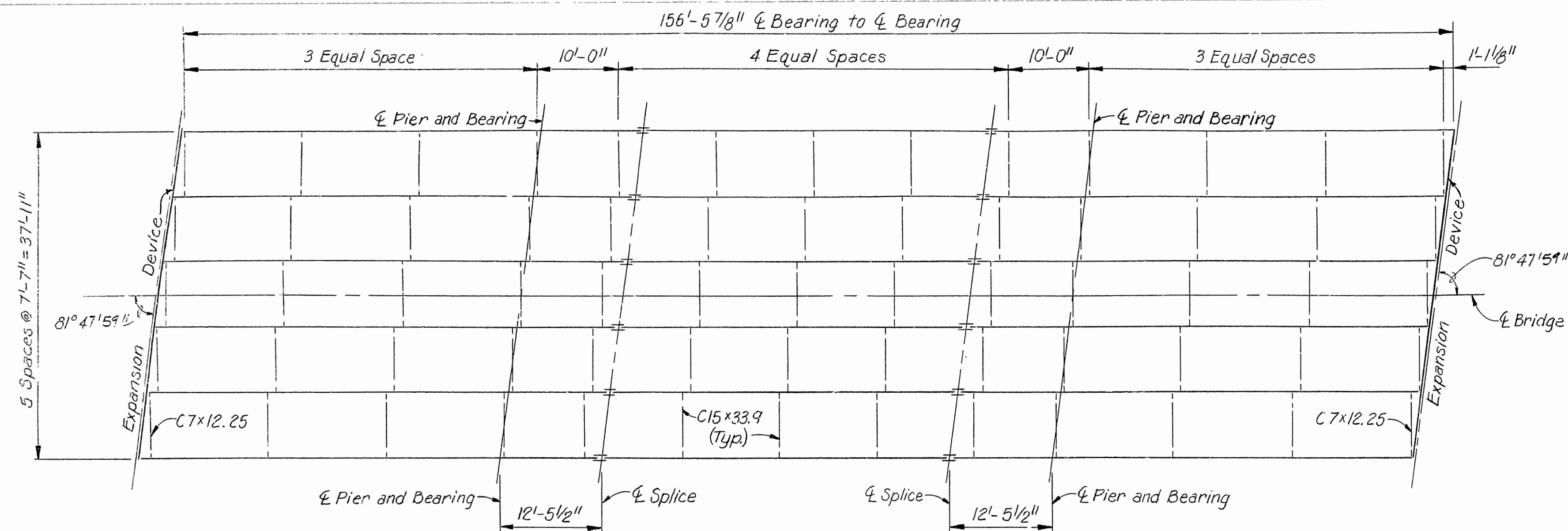
DRAWN BY: D.M.F. DATE: MAR. 1987
CHECKED BY: G.A.F. DATE: MAR. 1987
DESIGNED BY: W.F.W. DATE: MAR. 1987
SCALE: AS NOTED

BRIDGE NO. 6242 A & B DRAWING NO. 29021

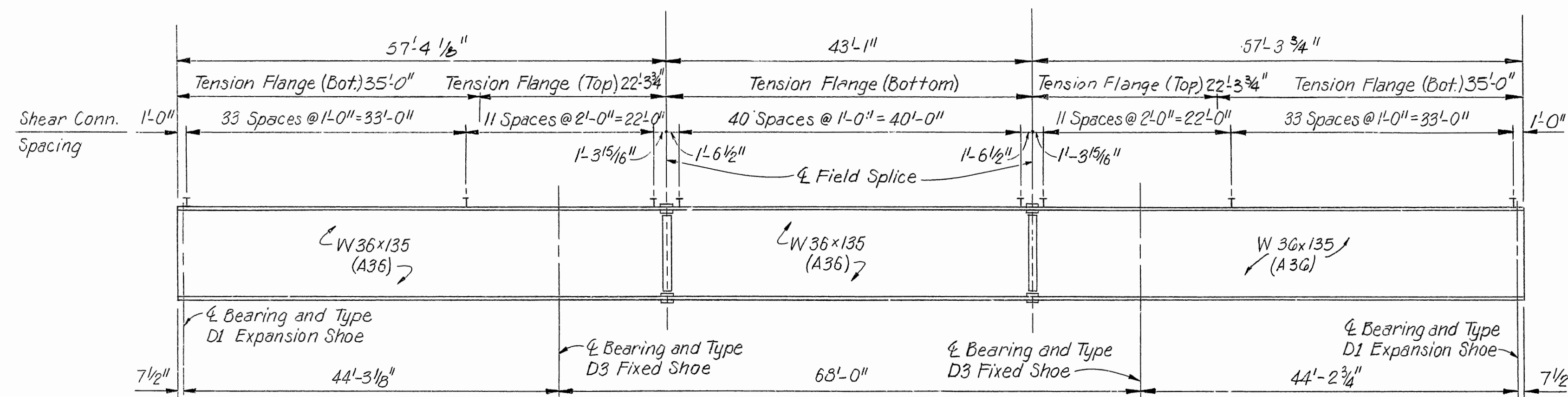


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3-3-89				6	ARK.			

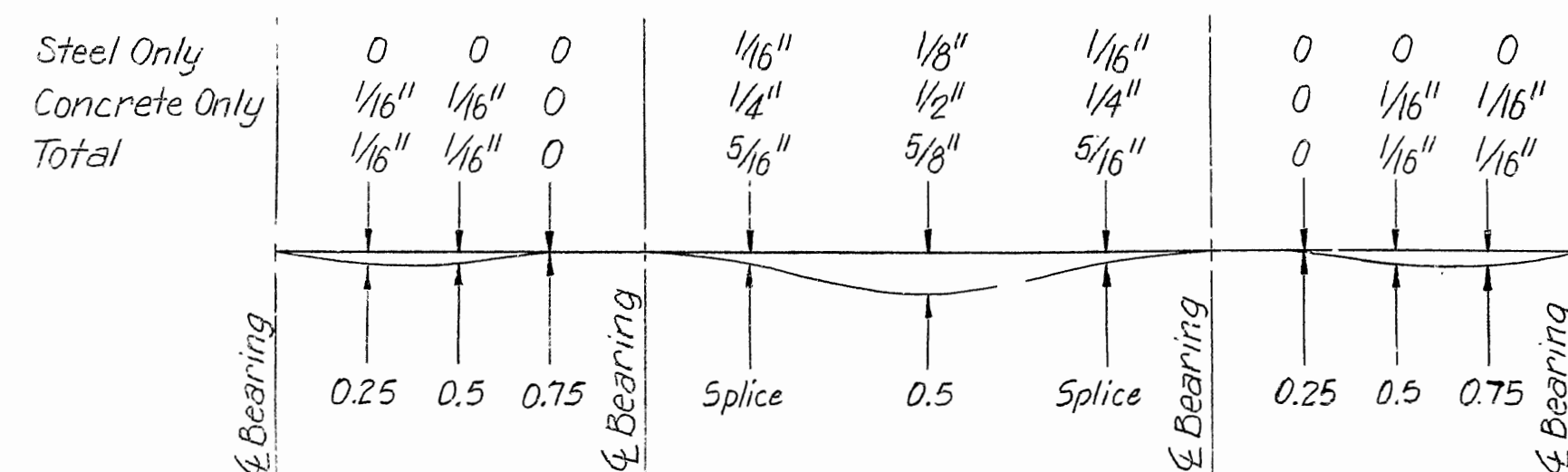
① 6242 A&B DTL5 W-BEAM SPANS 29022



FRAMING PLAN
BRIDGE A&B - LOOKING WEST
Scale: 1"=10'-0"

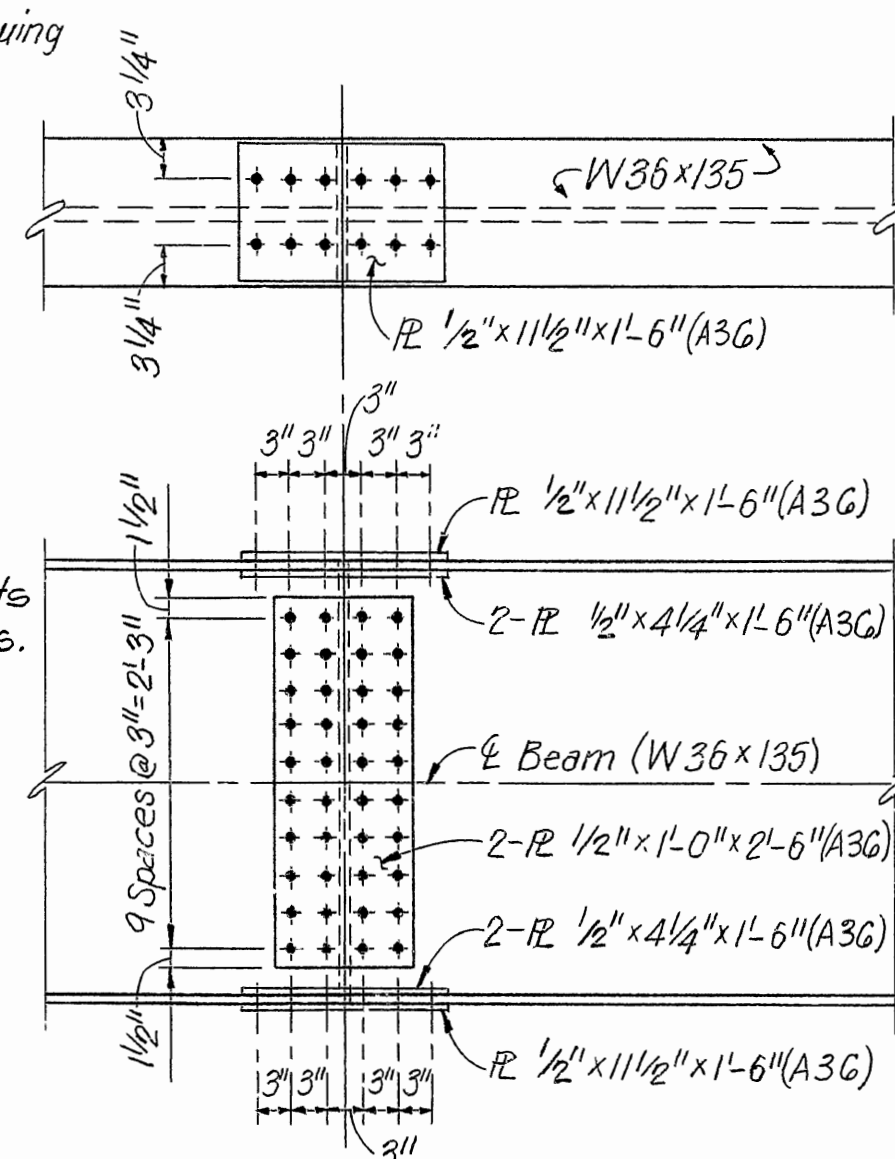


TYPICAL BEAM ELEVATION
Scale: None



DEAD LOAD DEFLECTION DIAGRAM
Scale: None

NOTE:
Charpy "V" Notch requirements
do not apply to Splice Plates.



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

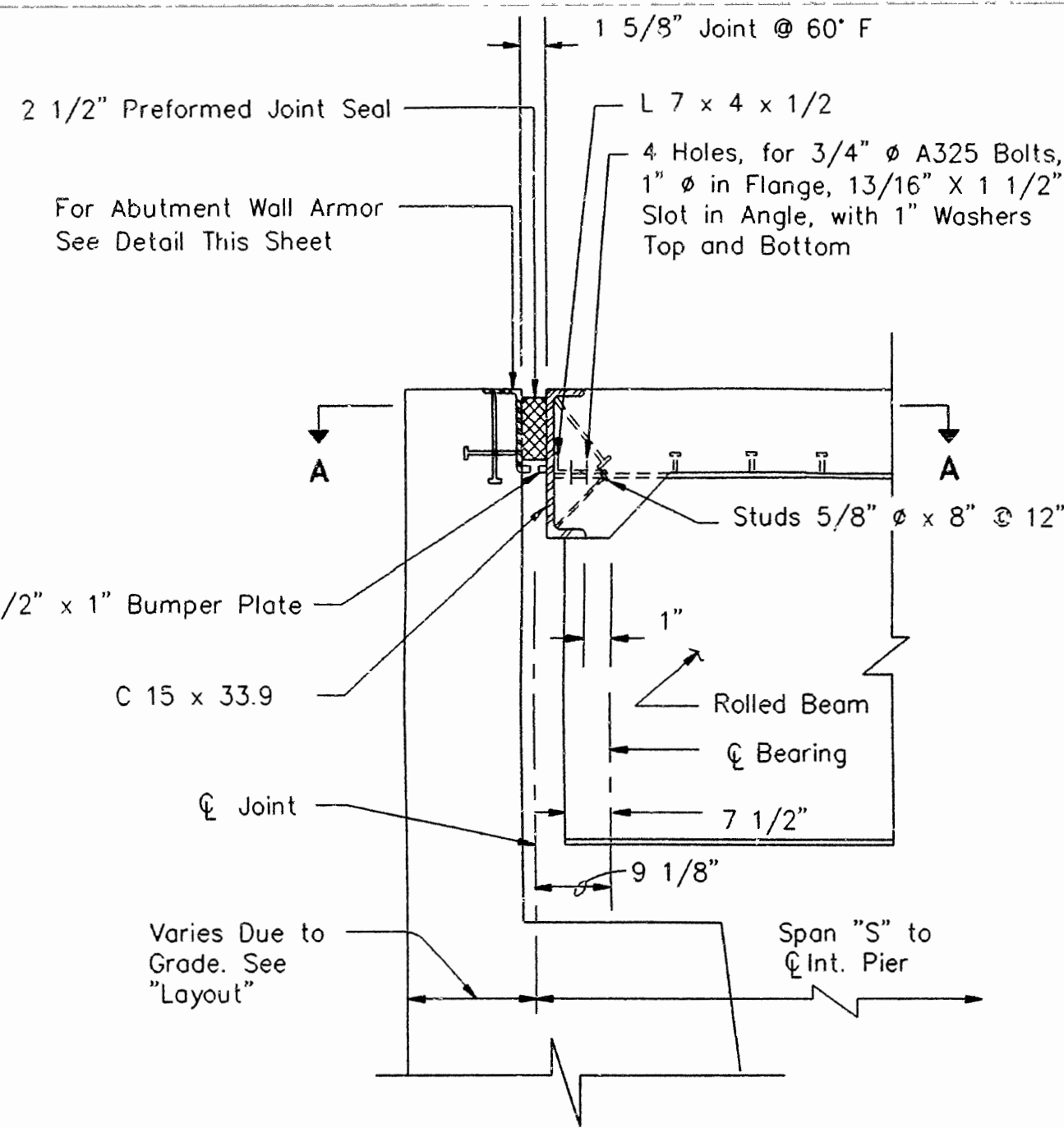
SHEET 1 OF 3
DETAILS OF W-BEAM SPANS
GREENLAND INTERCHANGE

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

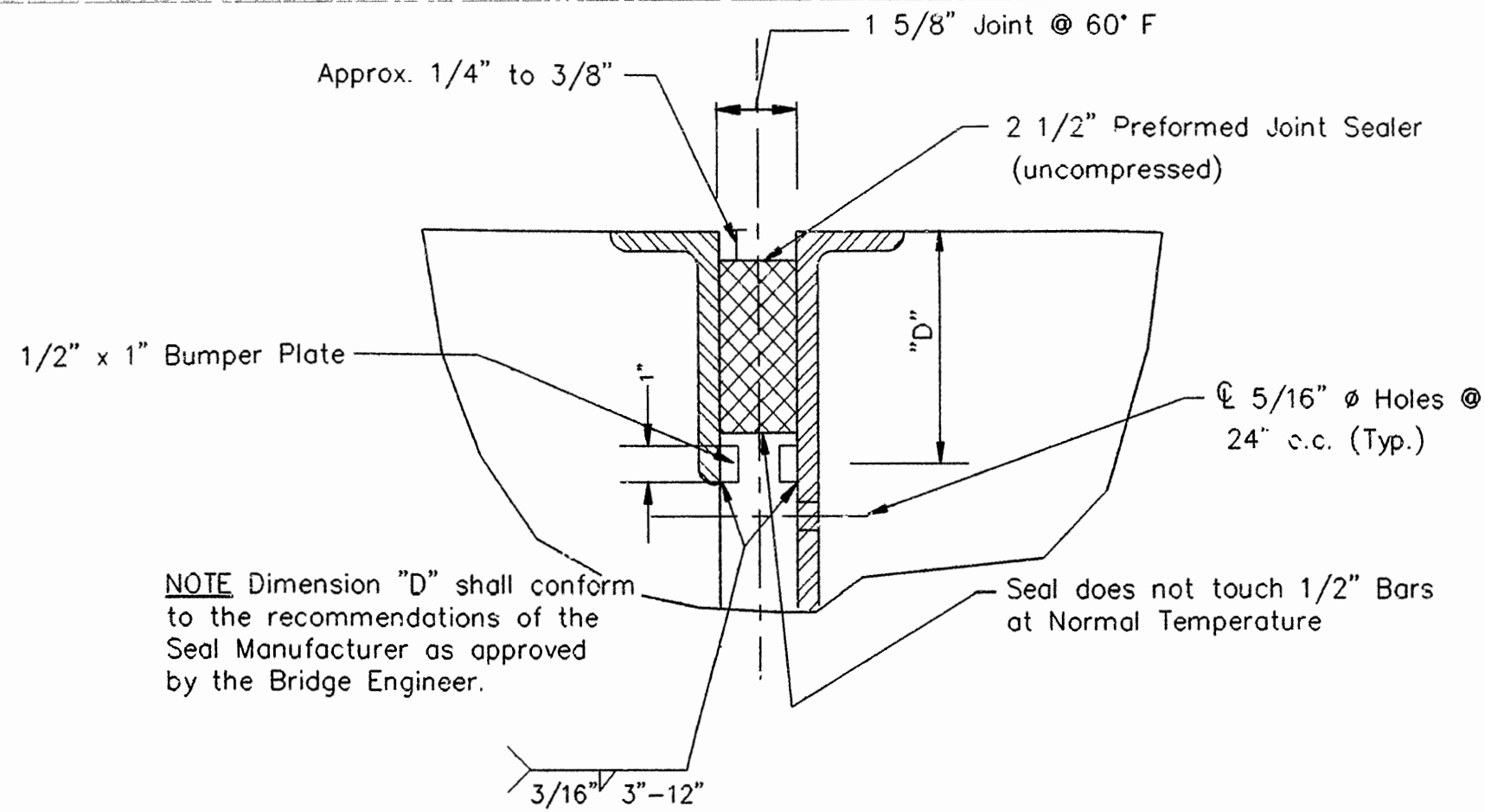
DRAWN BY: V.W. DATE: MAR. 1987
CHECKED BY: H.J.P. DATE: MAR. 1987
DESIGNED BY: G.A.F. DATE: MAR. 1987

BRIDGE NO. 6242 A&B DRAWING NO. 29022

BRIDGE ENGINEER

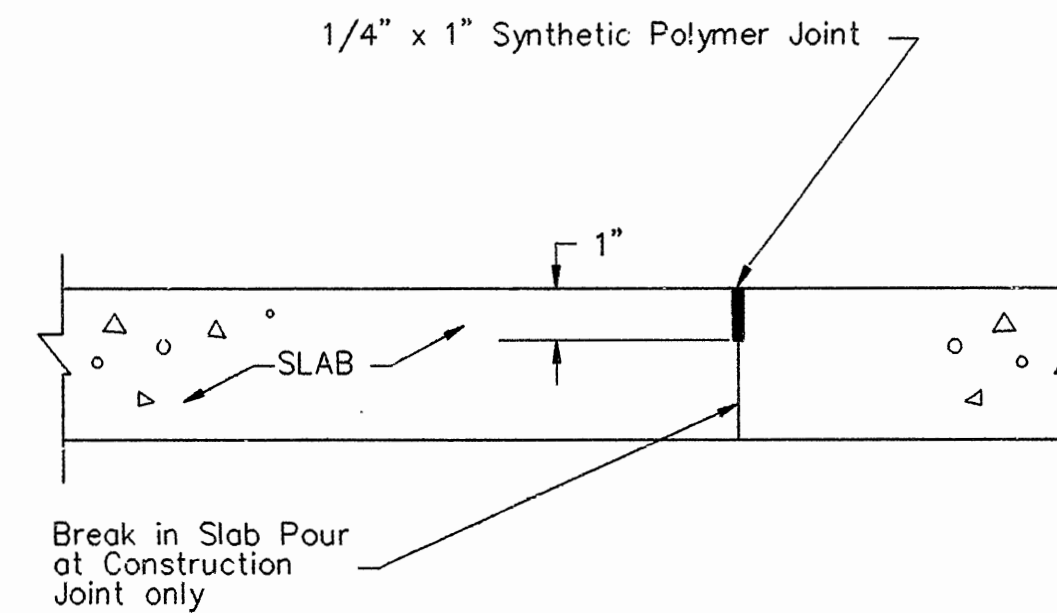


SECTION OF EXPANSION DEVICE AT ABUTMENT
Scale: None

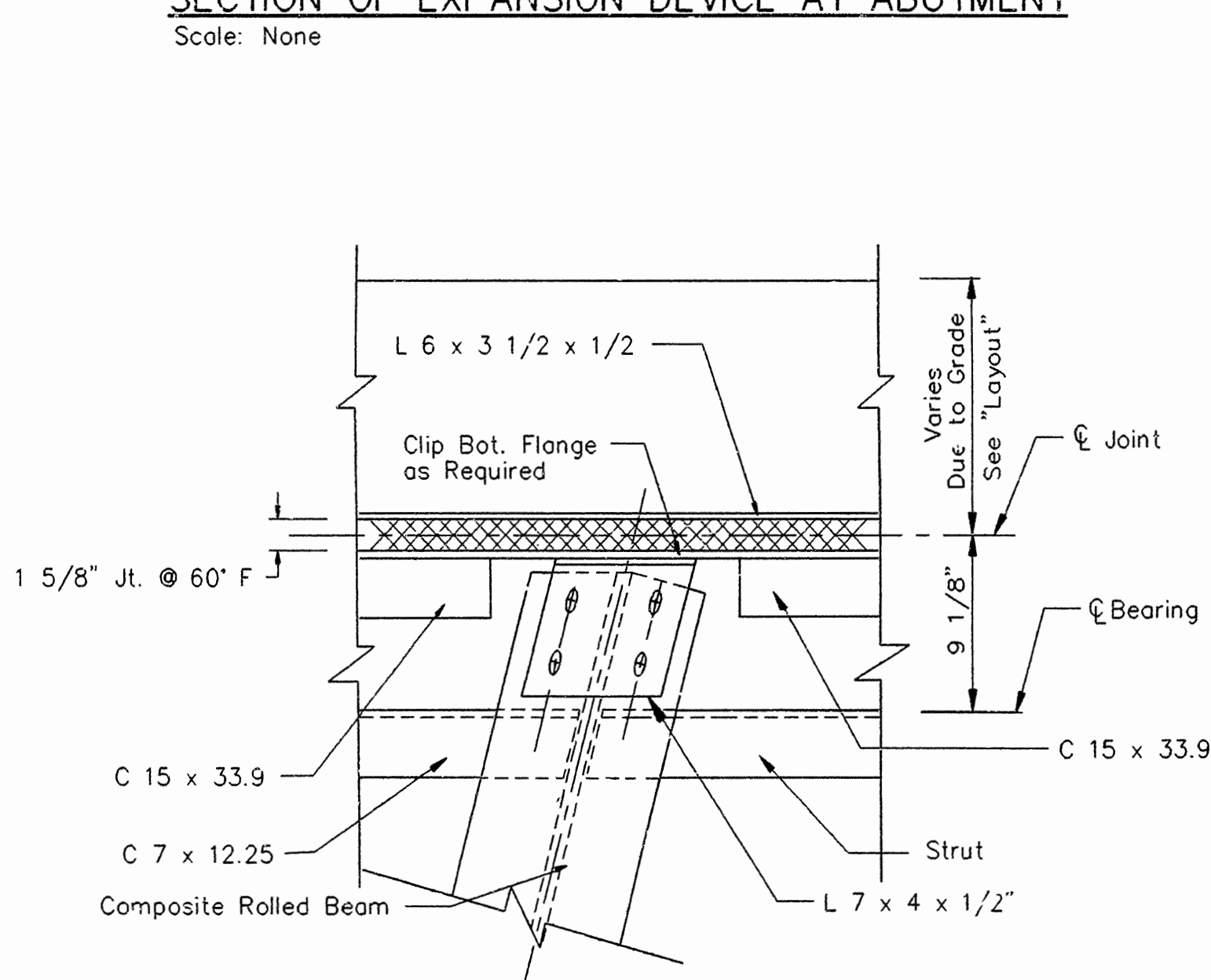


JOINT SEAL AND PLACEMENT DETAIL
Scale: None

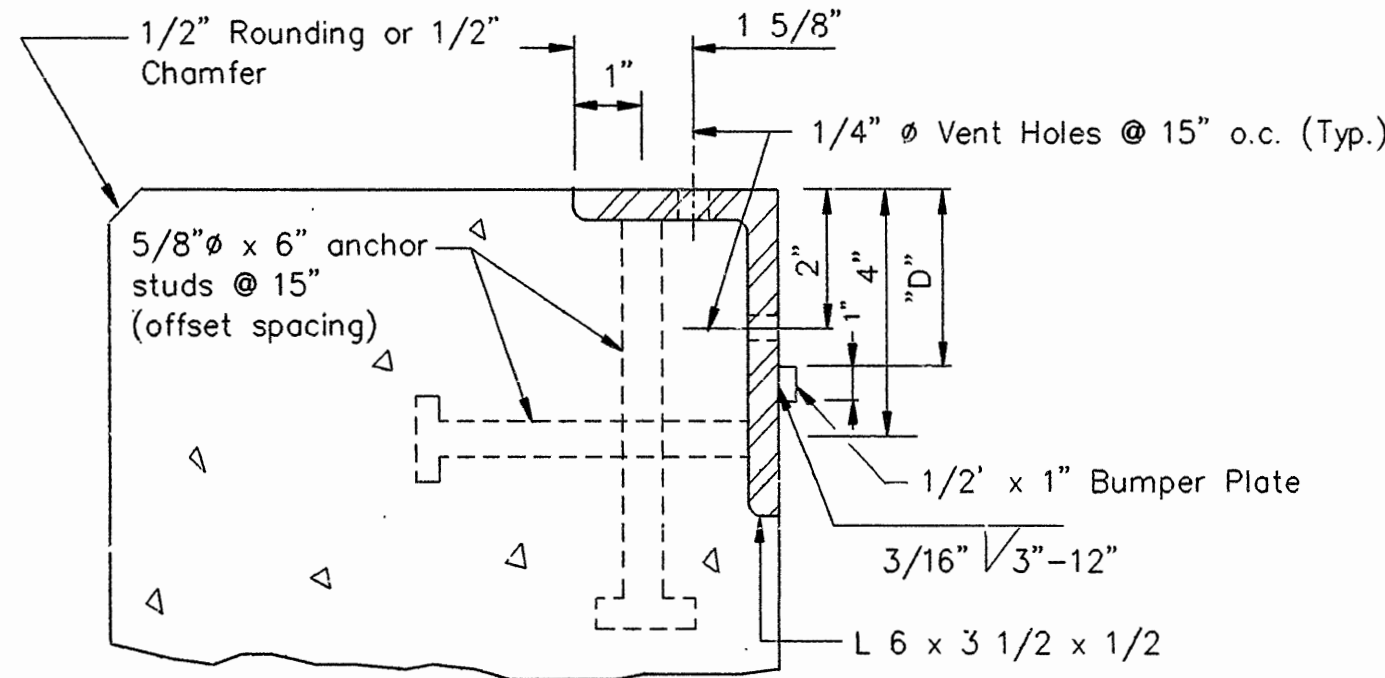
LOAD DISTRIBUTION TABLE		
	INTERIOR BEAM	EXTERIOR BEAM
DEAD LOAD NON COMPOSITE	950 PLF + BEAM	828 PLF + BEAM
DEAD LOAD TO COMP. BEAM INCLUDES 24 PSF FOR FUTURE WEARING SURFACE	364 PLF	404 PLF
LIVE LOAD TO COMPOSITE BEAM	1.50 WHEEL + IMPACT	1.40 WHEEL + IMPACT



SLAB JOINT DETAIL
Scale: None

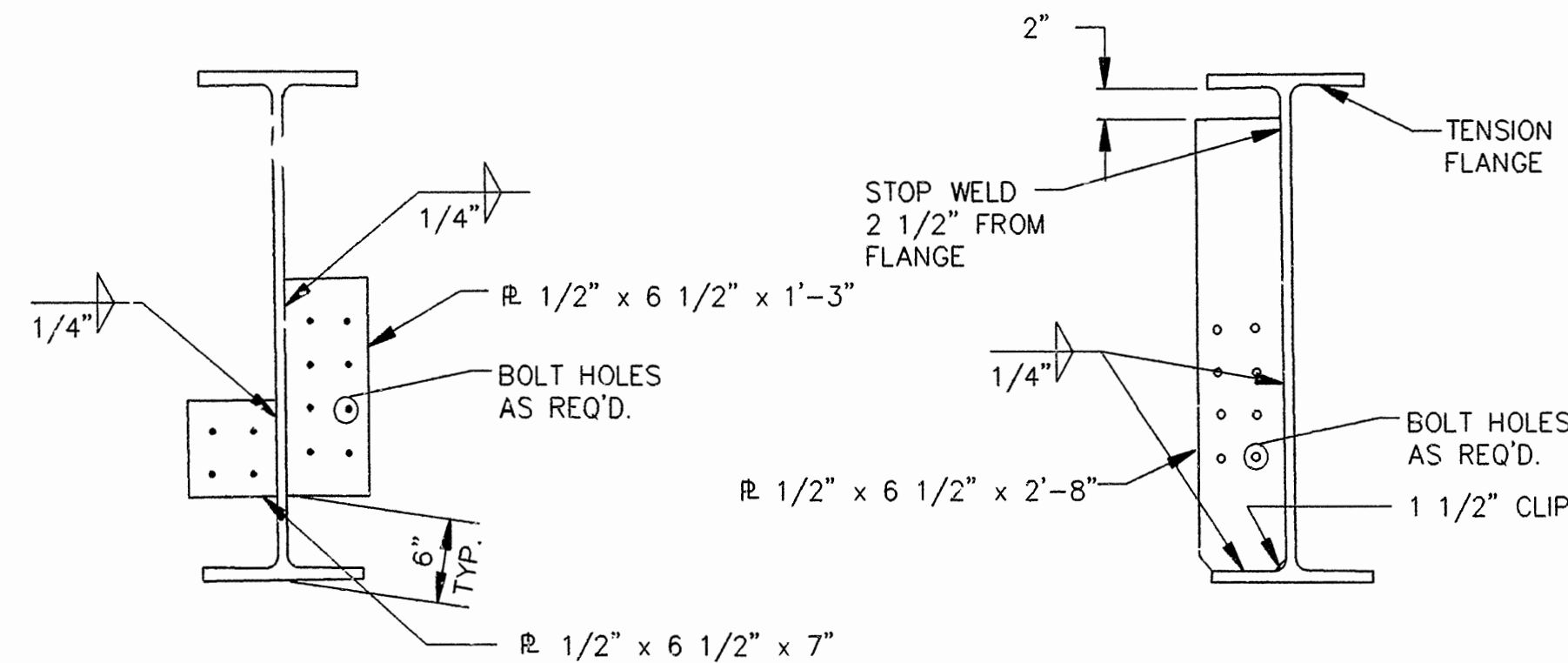


SECTION A-A FLANGE CLIP DETAIL
Scale: 1 1/2 inch = 1'-0"

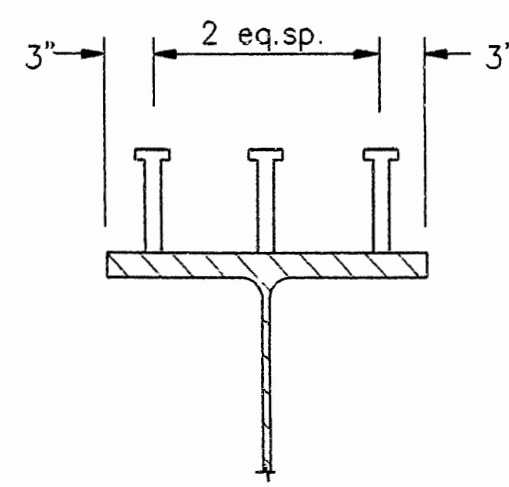


NOTE: "D" shall conform to recommendations of Seal Manufacturer

ARMOR DETAIL
Scale: None

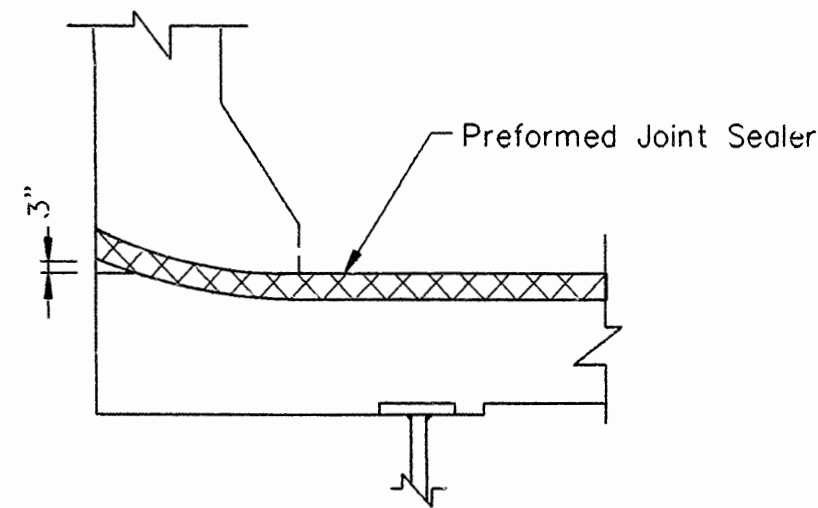


GUSSET PLATE DETAILS
Scale: 1 inch = 1'-0"

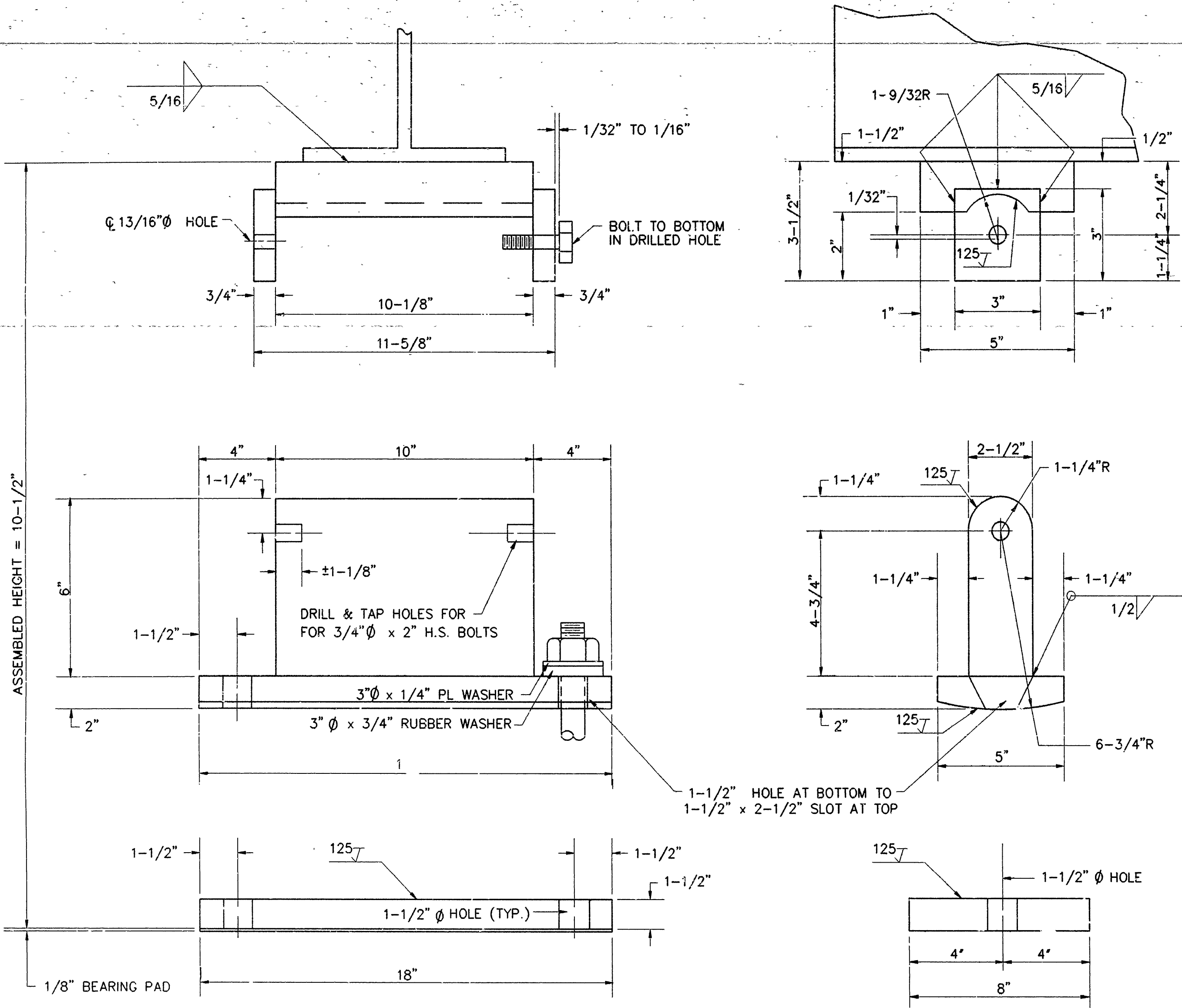


SHEAR CONNECTOR DETAIL
Scale: None

Stud Shear Connectors shown shall be 7/8 inch x 4 inch long Granular Flux Filled, Solid Fluxed or equal and Automatically end Welded to Flanges in Accordance with the Recommendations of the Manufacturer. 3/4 inch Diameter Studs may be Substituted for the 7/8 inch Diameter Studs at the Ratio of 1.37-3/4 Studs in place of 1-7/8 Stud. The 7/8 inch Stud shall be used as the Basis of Payment of 81.0 lbs. per one hundred Studs.

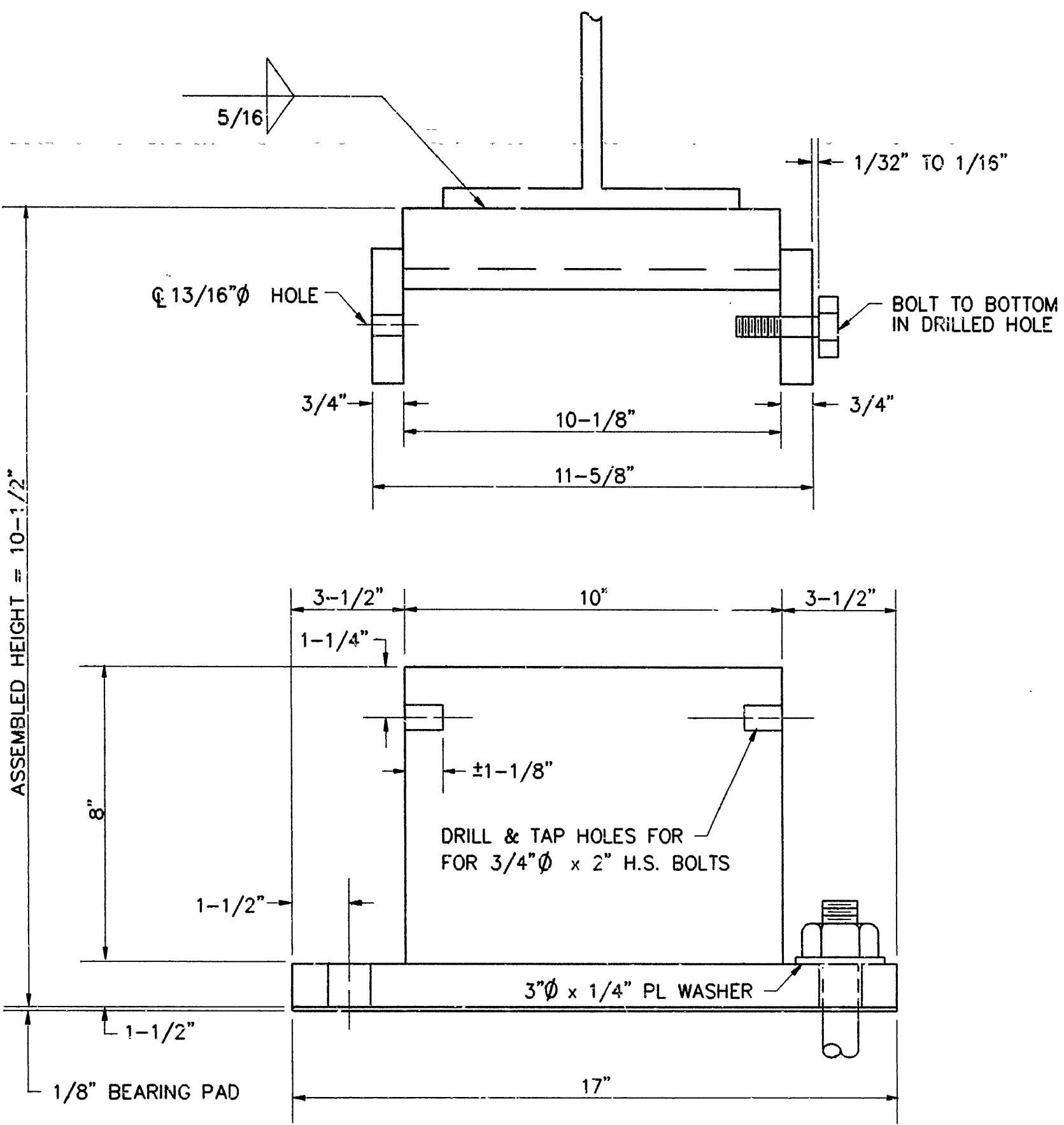


SEAL PLACEMENT
Scale: None

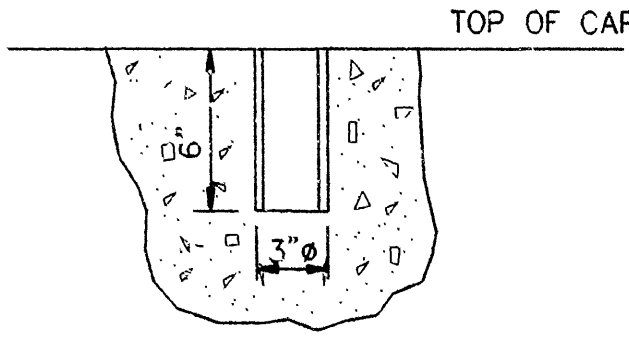
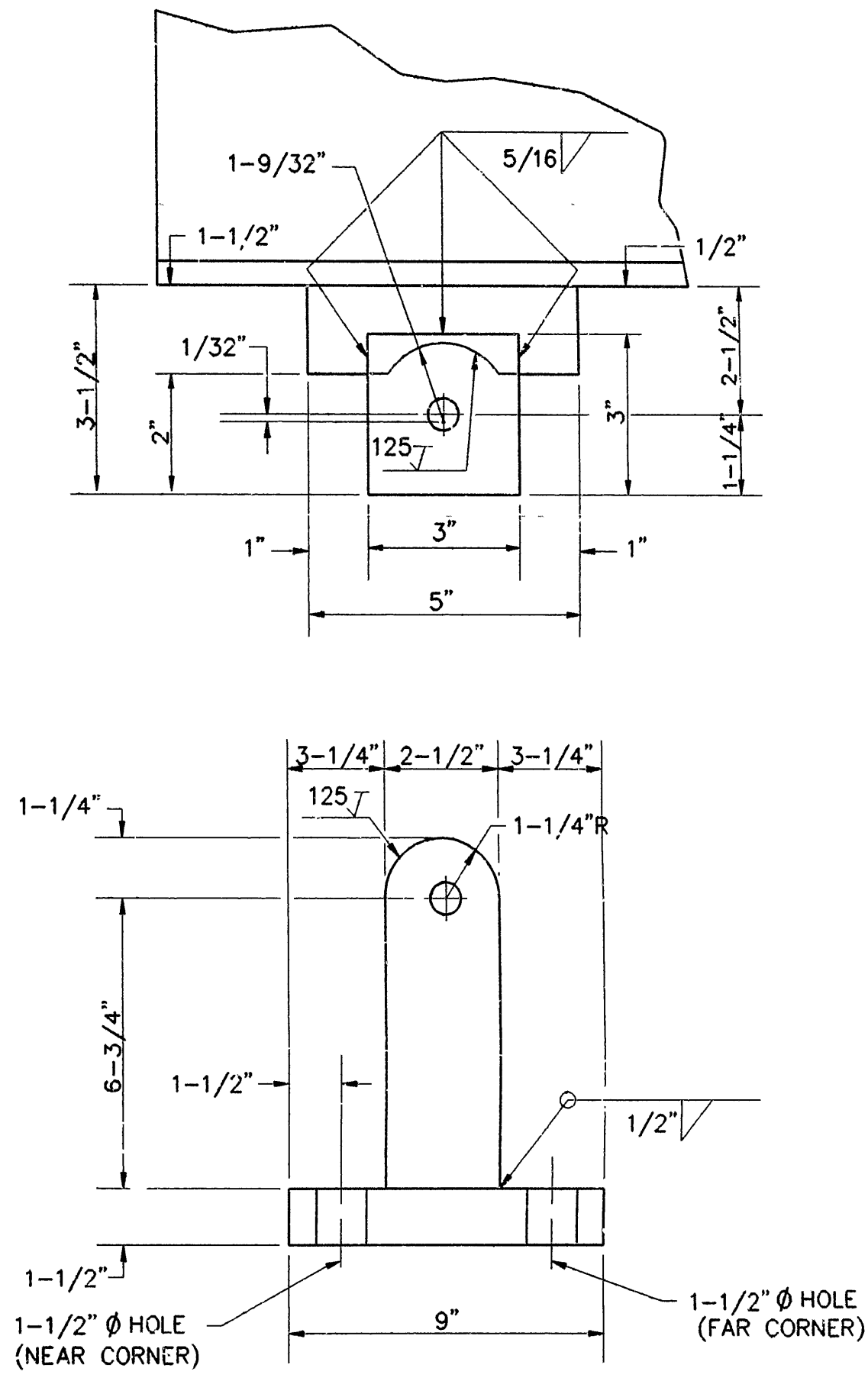


NOTE: RUBBER WASHER SHALL BE A CLOSED CELL EXPANDED RUBBER MEETING REQUIREMENTS OF ASTM D1056-78 FOR RE42-B2E2 MATERIAL.

D1 EXPANSION SHOE
SCALE: NONE

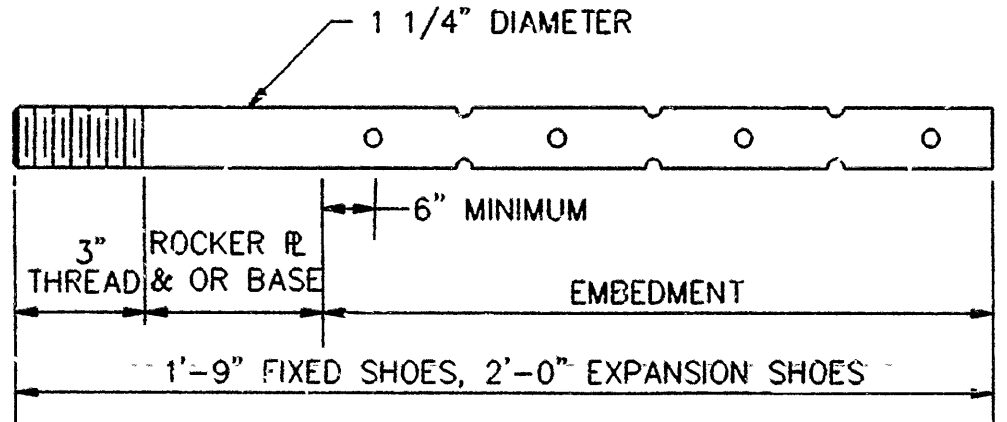


D3 FIXED SHOE
SCALE: NONE



ANCHOR BOLT SLEEVE DETAIL
SCALE: NONE

NOTE: AS AN ALTERNATE TO POURING CAPS WITH ANCHOR BOLTS IN PLACE, THE CONTRACTOR MAY DRILL AND GROUT ANCHOR BOLTS AFTER PIER CONSTRUCTION IS COMPLETE. IF THIS ALTERNATE IS CHOSEN, GALVANIZED SHEET METAL SLEEVES SHALL BE SET AT ALL ANCHOR BOLT LOCATIONS WITH TEMPLATES SECURELY FASTENED TO THE CAP FORMS. ADJUST SPACING OF TOP REINFORCEMENT IN CAP FOR PLACEMENT OF ANCHOR BOLTS OR SLEEVES. MAINTAIN A MINIMUM SPACING OF 3" CENTER TO CENTER OF BARS. THE SLEEVES SHALL BE DRY PACKED WITH STYROFOAM OR URETHANE FOAM OR APPROVED EQUAL PRIOR TO POURING CONCRETE AND HAVE THE MINIMUM DIMENSIONS SHOWN. IF ANCHOR BOLTS ARE TO BE CAST IN PLACE, THE SLEEVE WILL NOT BE REQUIRED. THE SHEET METAL SLEEVE WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO "STRUCTURAL STEEL IN BEAM SPANS (A36)."

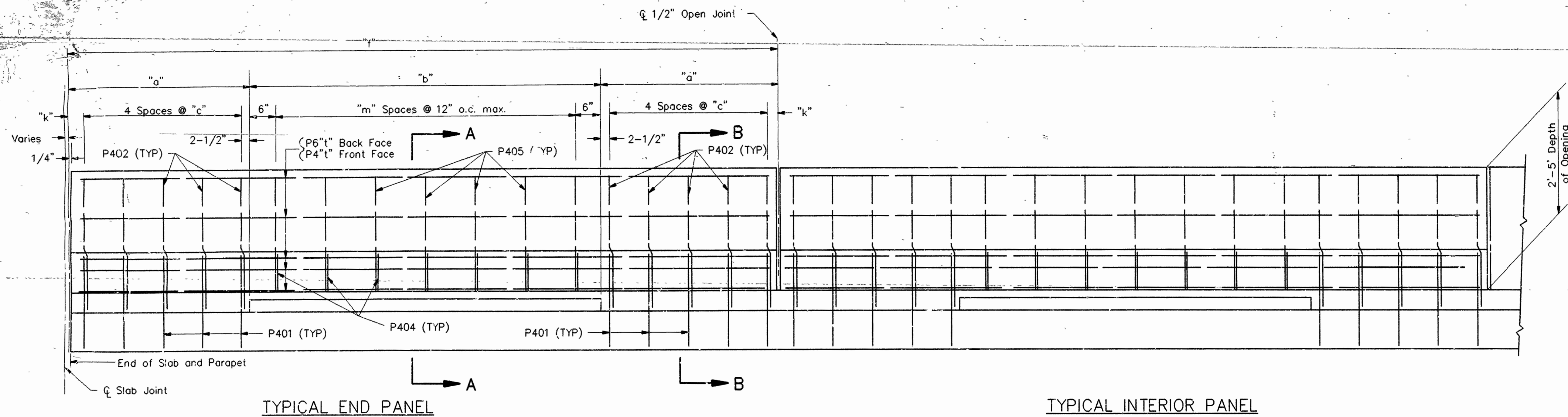


DETAILS OF SWEDGED ANCHOR BOLT
SCALE: NONE

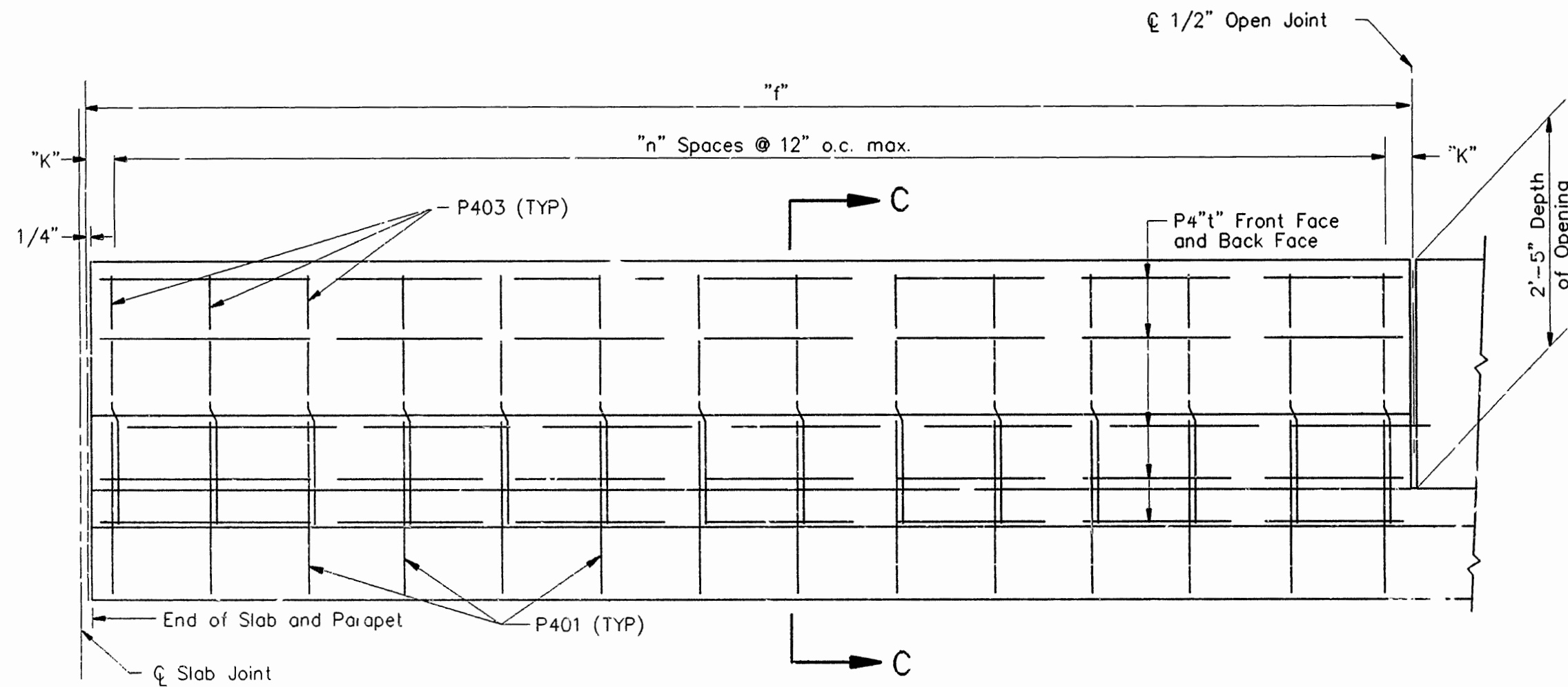
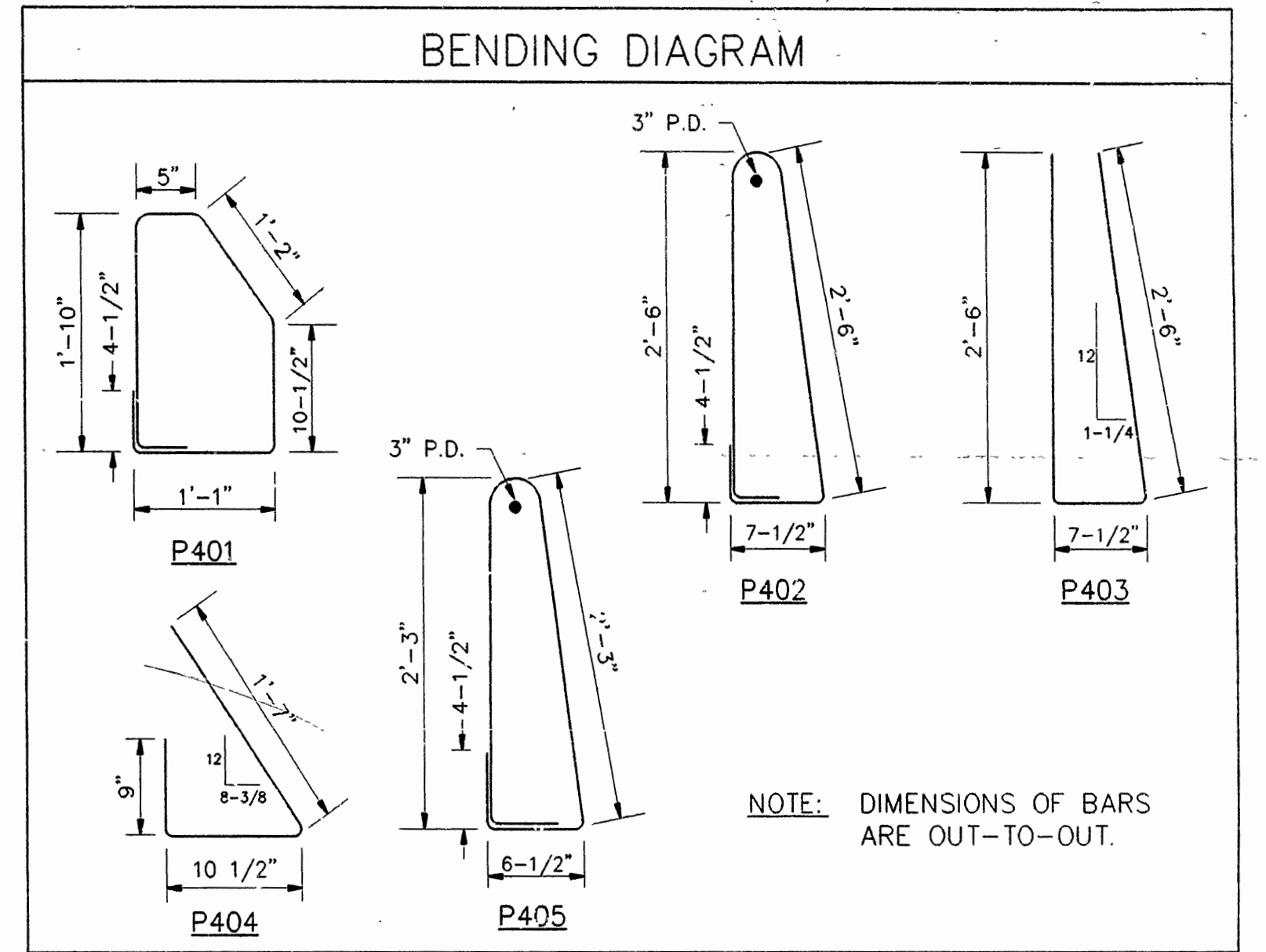
- NOTES:
- ALL SHOES SHALL BE BUILT OF ASTM A36 WELDED PLATES.
 - ALL SHOES SHALL BE MEASURED AND PAID FOR AS "STRUCTURAL STEEL IN BEAM SPANS (A36)."
 - BEARINGS SHALL BE FINALLY SEATED IN ACCORDANCE WITH SECTION 807.51 OF THE STANDARD SPECIFICATIONS.
 - THE SIZE OF FILLET WELDS SHALL BE AS SHOWN IN THE TABLE FOR MINIMUM FILLET WELD SIZE.
 - TOP PLATE TO BE BEVELED TO GRADE WHERE GRADE IS 1% OR GREATER.

TABLE FOR MINIMUM FILLET WELD SIZE	
MATERIAL THICKNESS OF THICKER PART JOINED (INCHES)	MINIMUM SIZE OF FILLET WELD (INCHES)
To 2 1/4" Inclusive	3/8"
Over 2 1/4" to 6"	1/2"

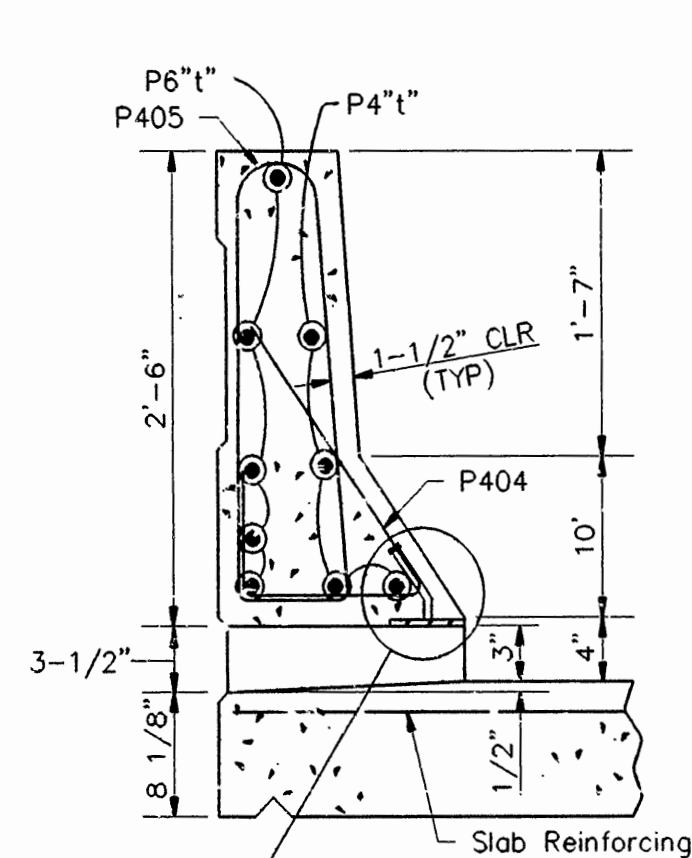
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	R40046		47	
① 6242 A&B DETAIL OF PARAPET 29026								



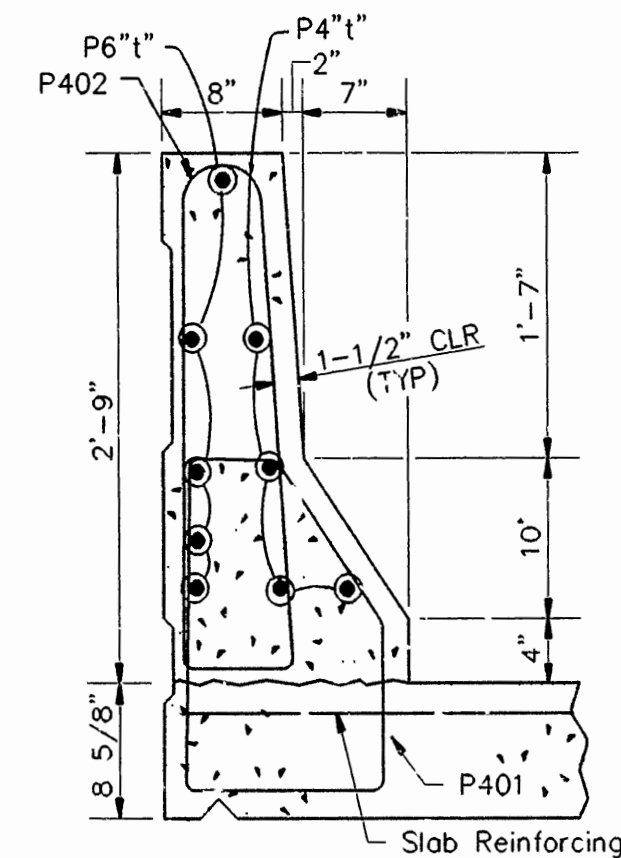
LONGITUDINAL SECTION AT CURB FOR OPEN PARAPET RAIL
SCALE: NONE



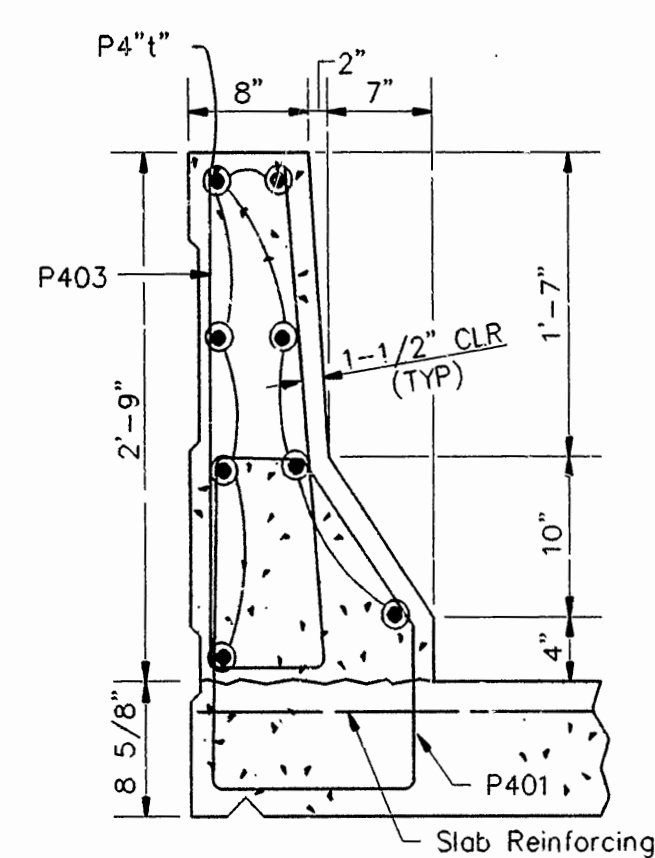
LONGITUDINAL SECTION AT CURB FOR CLOSED PARAPET RAIL
SCALE: NONE



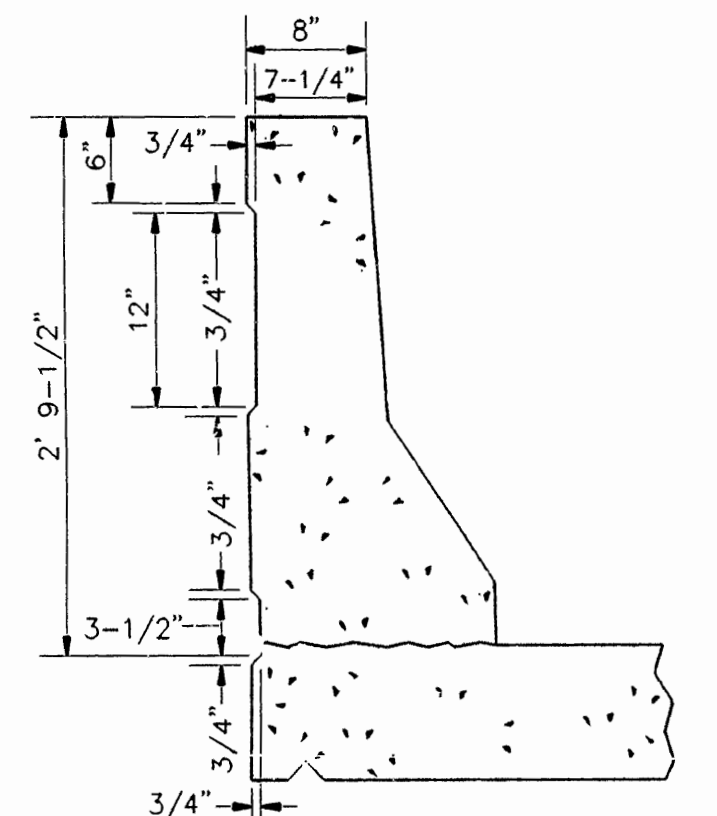
SECTION A-A
SCALE: 1" = 1'-0"



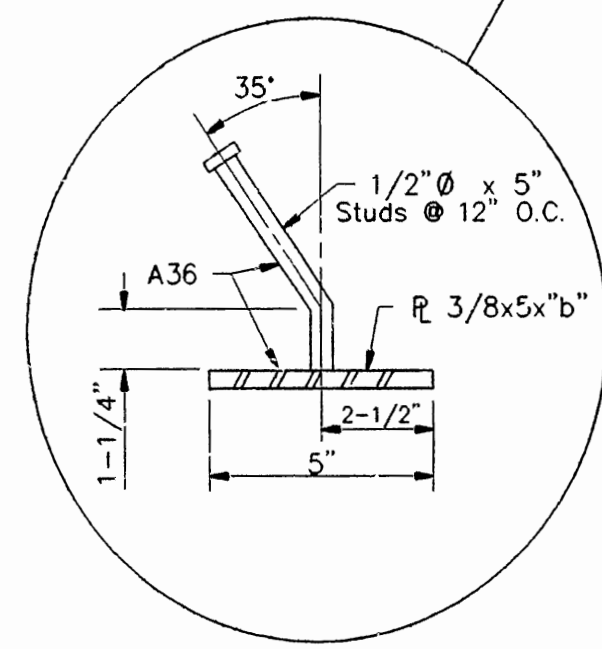
SECTION B-B
SCALE: 1" = 1'-0"



SECTION C-C
SCALE: 1" = 1'-0"

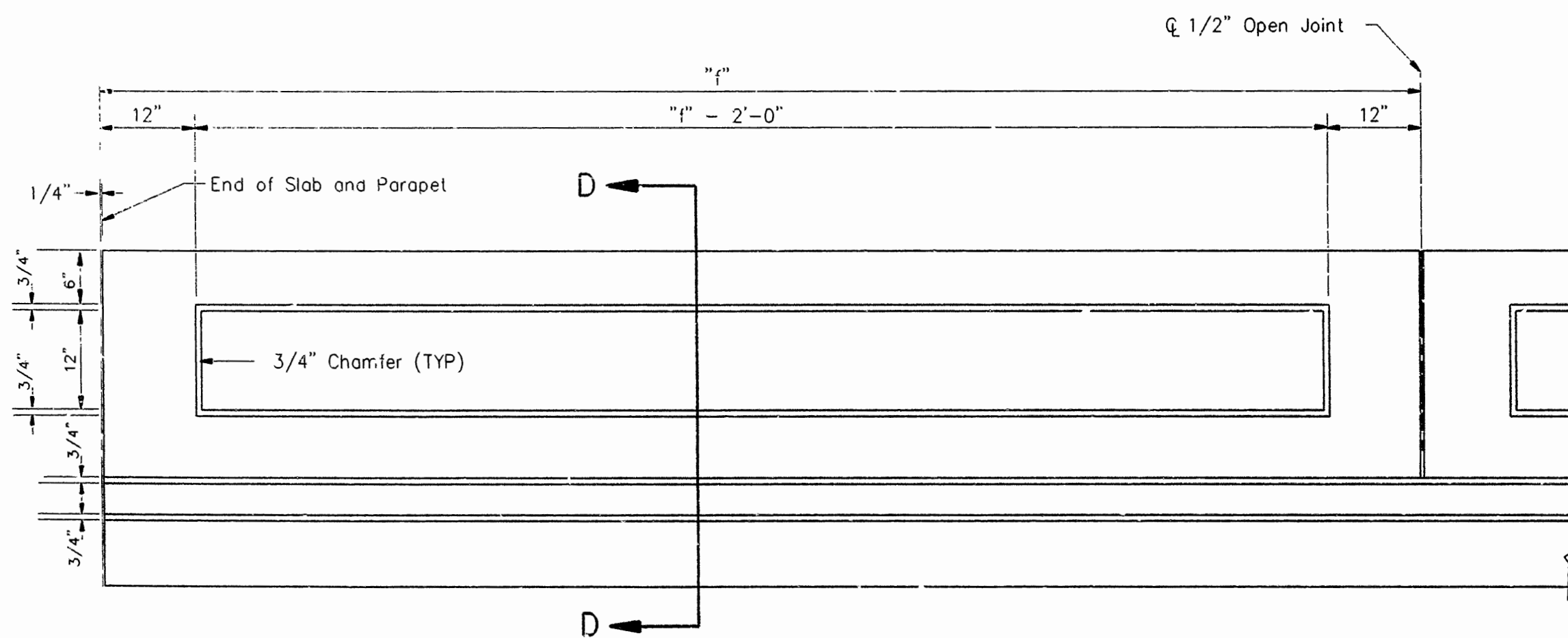


SECTION D-D
SCALE: 1" = 1'-0"



NOTES:

1. Studs Shall Be 5" Long, Granular Flux Filled, Solid Fluxed or Equal and Automatically Welded to Plate. Studs and Plate to be Measured and Paid for as "Structural Steel in ... Spans (A36)."
2. The Surfaces of the 3/8" Plate Which Will Not Be In Contact With Concrete Shall Receive Two Coats of Paint in the Shop. These Coats Shall Be Those Specified as Shop Prime Coat and Finish Coat In Subsection 807.59 of the Standard Specifications.



ELEVATION SHOWING TREATMENT FOR OUTSIDE PARAPET RAILING
SCALE: NONE

SHEET 1 OF 1
DETAILS OF PARAPET
GREENLAND INTERCHANGE

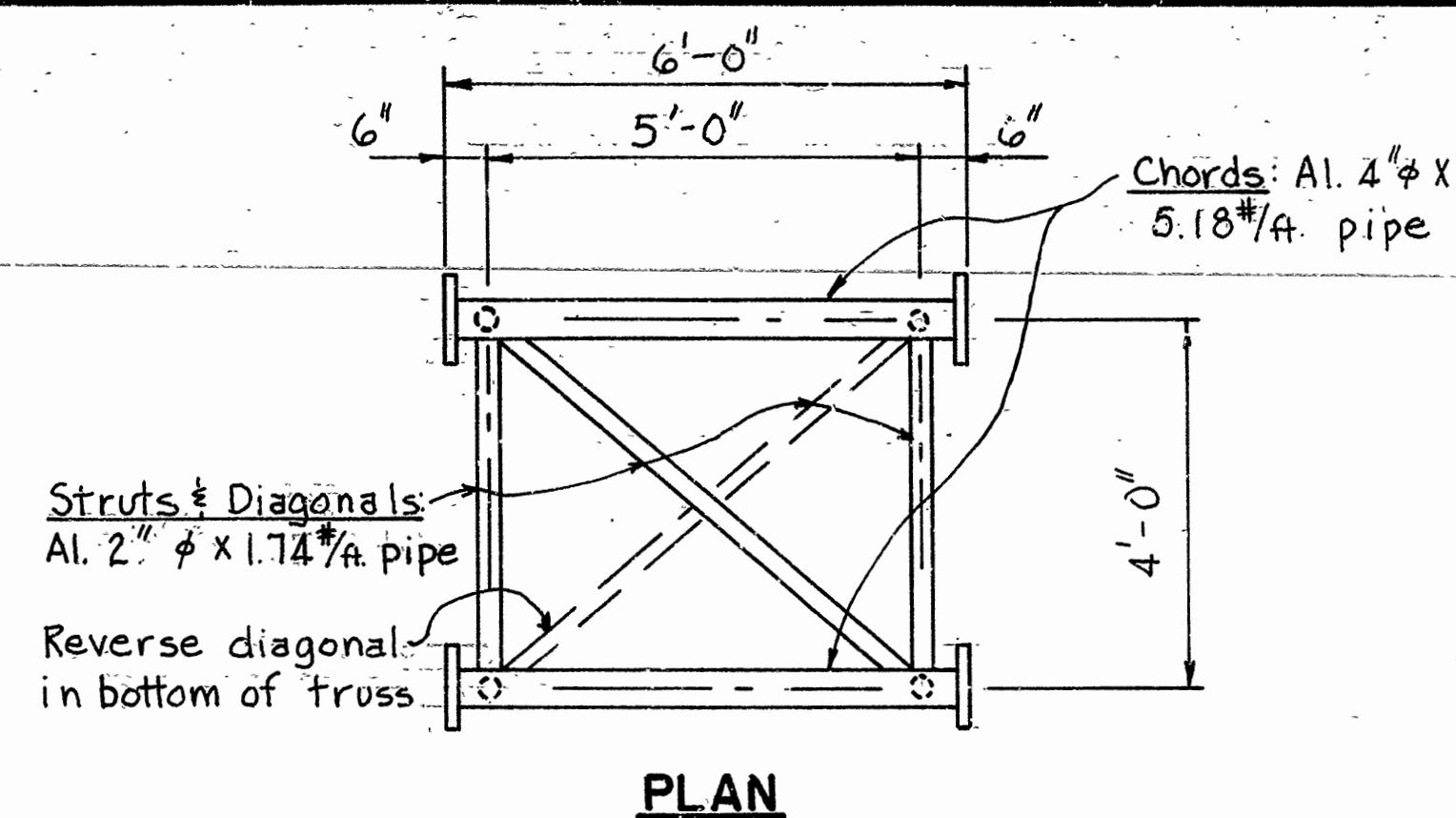
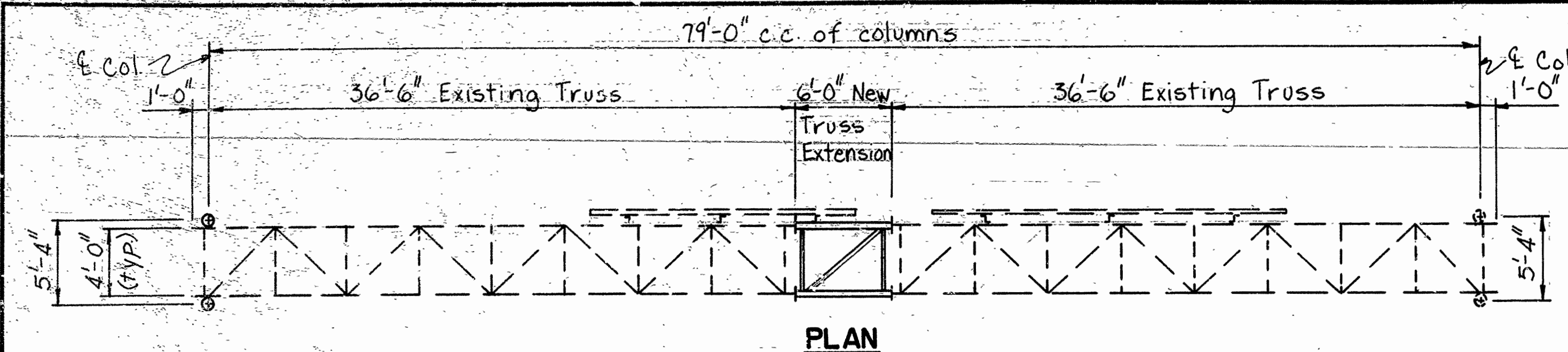
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: L.D.T. DATE: MAR., 1987
CHECKED BY: H.J.P. DATE: MAR., 1987
DESIGNED BY: G.A.F. DATE: MAR., 1987
DRAWN BY: AS NOTED

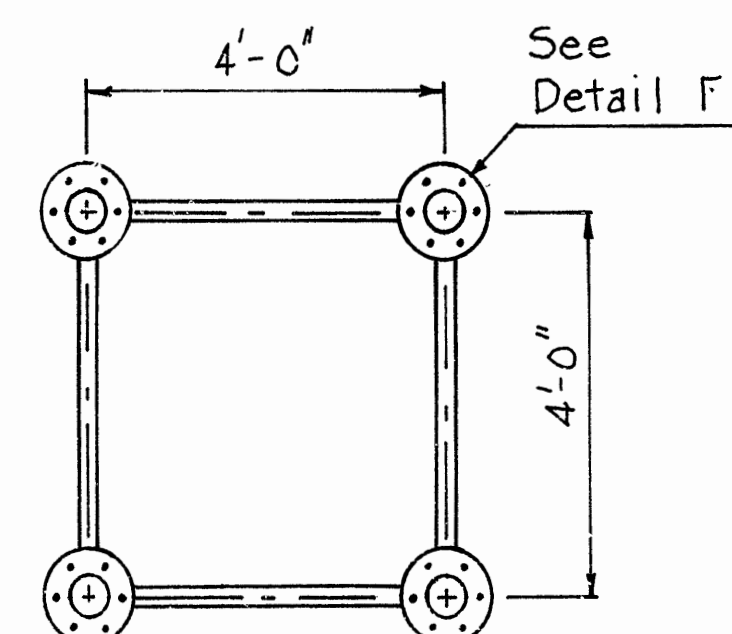
BRIDGE NO. 6242 A & B DRAWING NO. 29026

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
12-21-88	01-12-88			6	ARK.			
				JOB NO.		R60010		

① OH40-6-17-Sign Dtls.-29029

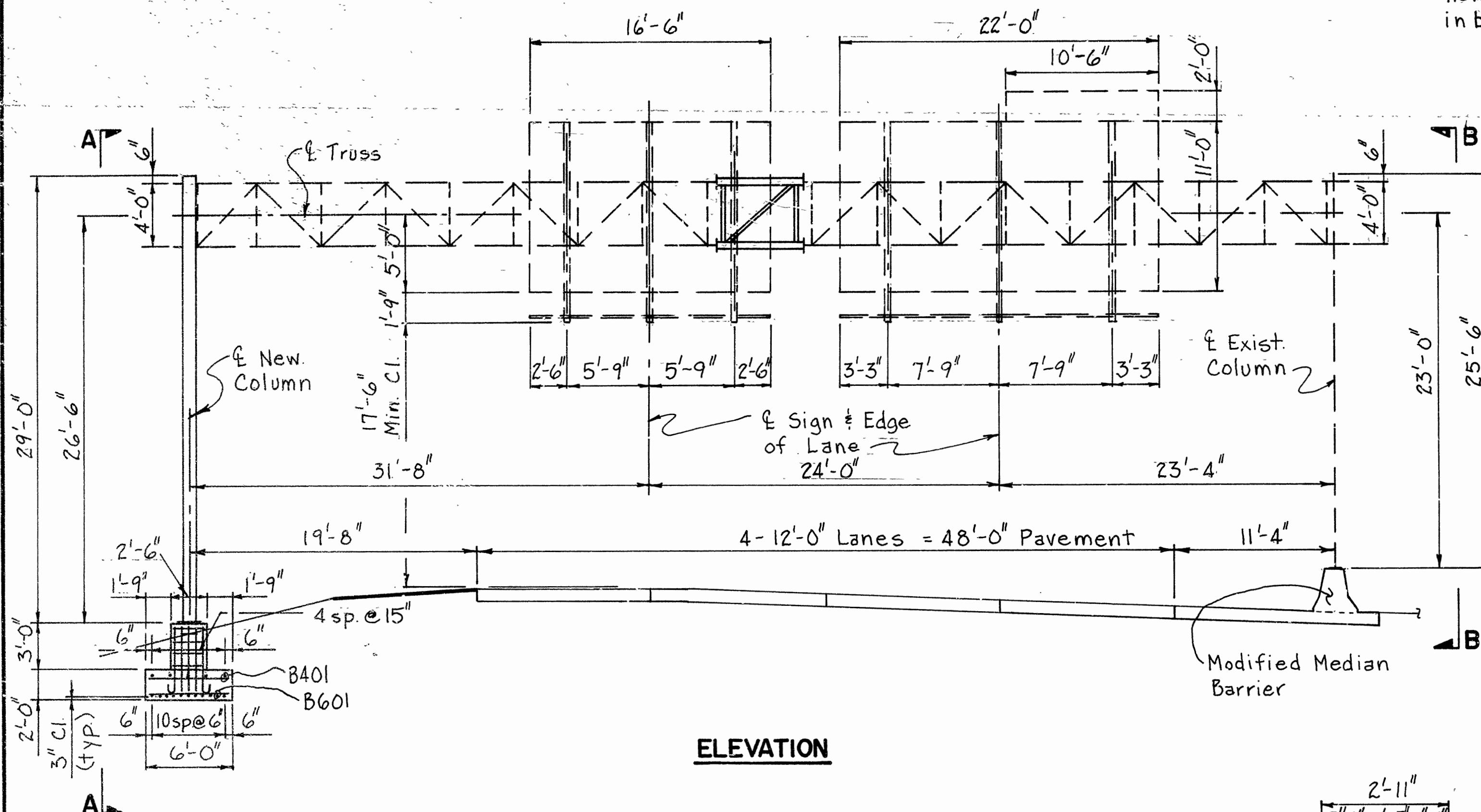


<u>BAR LIST</u>					<u>BENDING DIAGRAMS</u>	
MARK	NO. REQ'D.	LENGTH	PIN DIA.			
B401	5	13'-6"	str.			
B402	20	5'-6"	str.			
B403	4	19'-4"	2"			
B404	4	14'-6"	str.			
B405	30	3'-2"	2"			
B406	30	2'-8"	2"			
B601	11	13'-6"	str.			
B602	14	5'-1"	4 1/2"			
B701	3	14'-6"	str.			

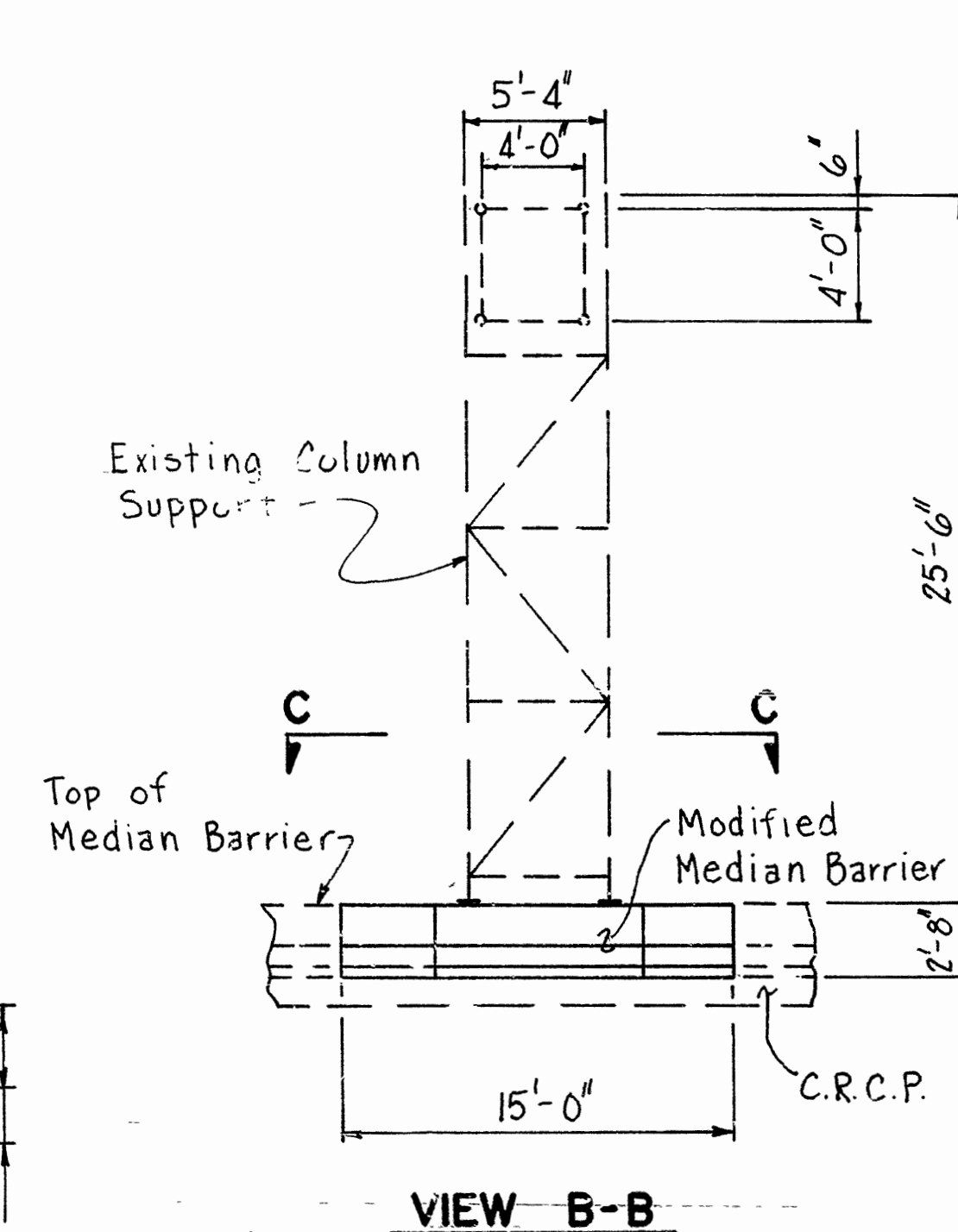
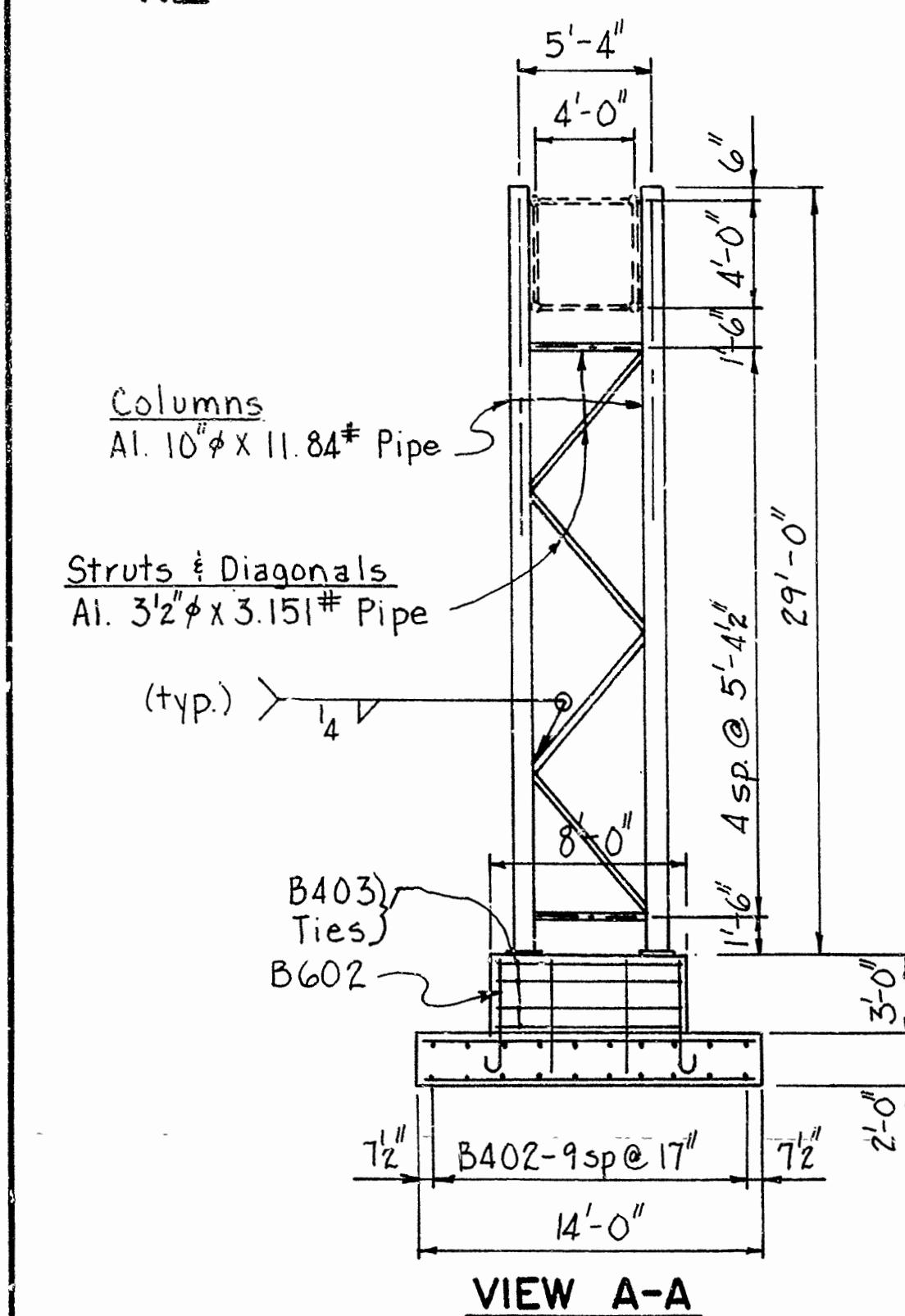


VIEW E-E
Scale: $\frac{1}{2}'' = 1'-0''$

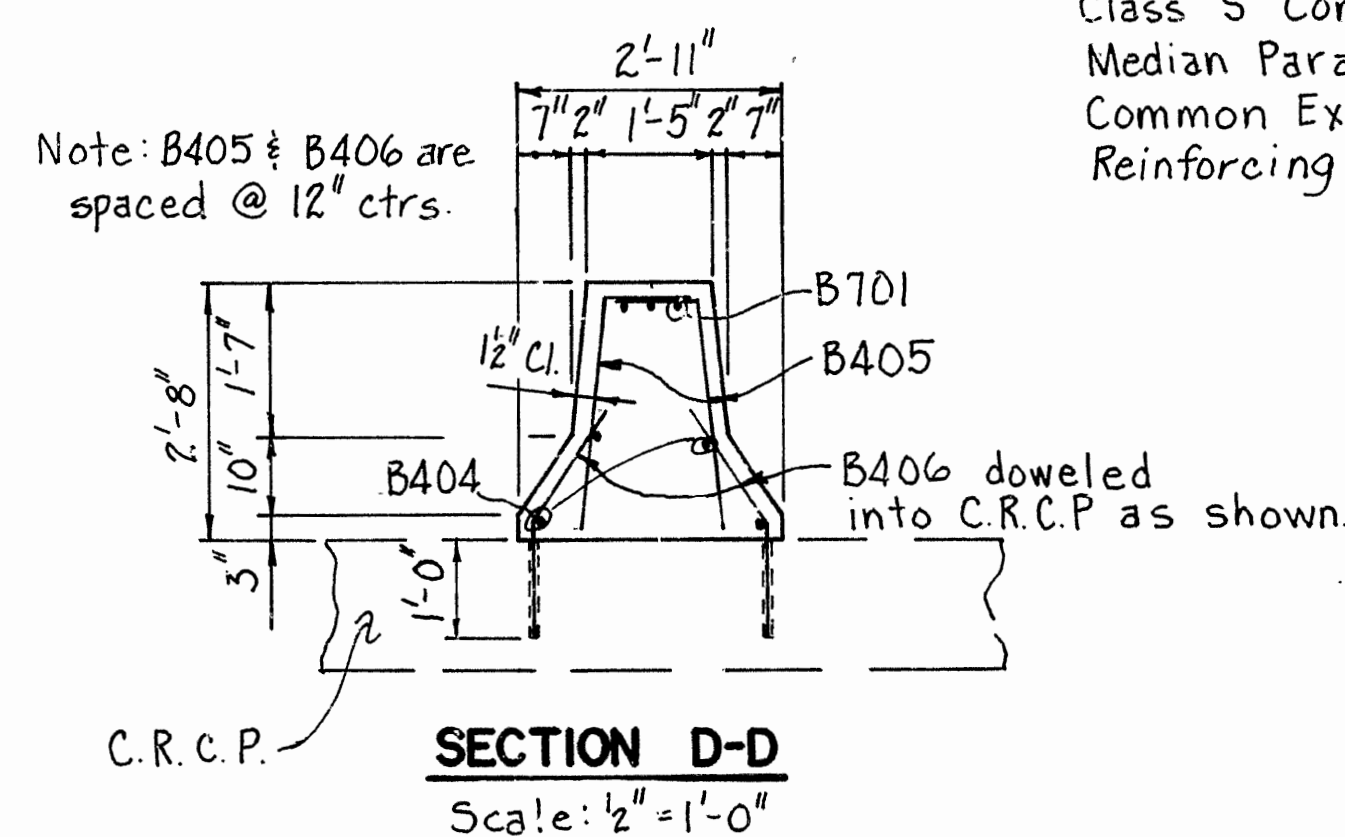
£ 3/4" Hi. Str. Hex Hd. bolt
with Hex Nut, Lockwasher
& Flatwashers (Galv.)



ELEVATION

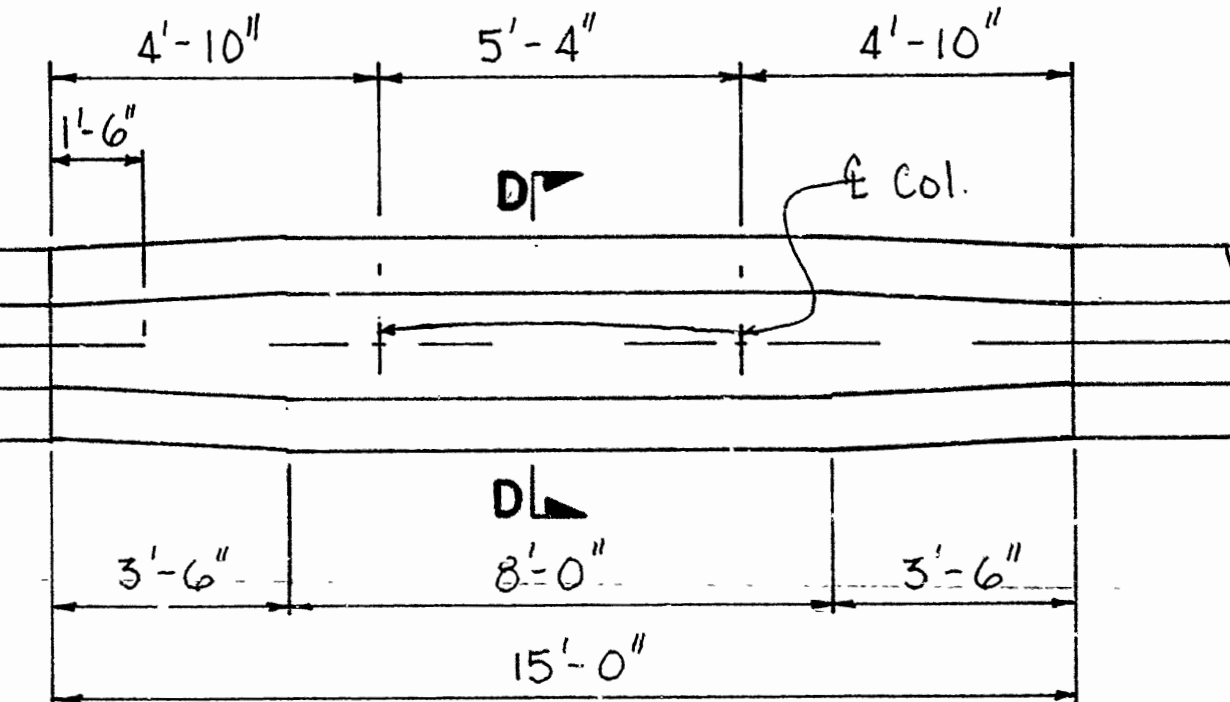


VIEW B-B



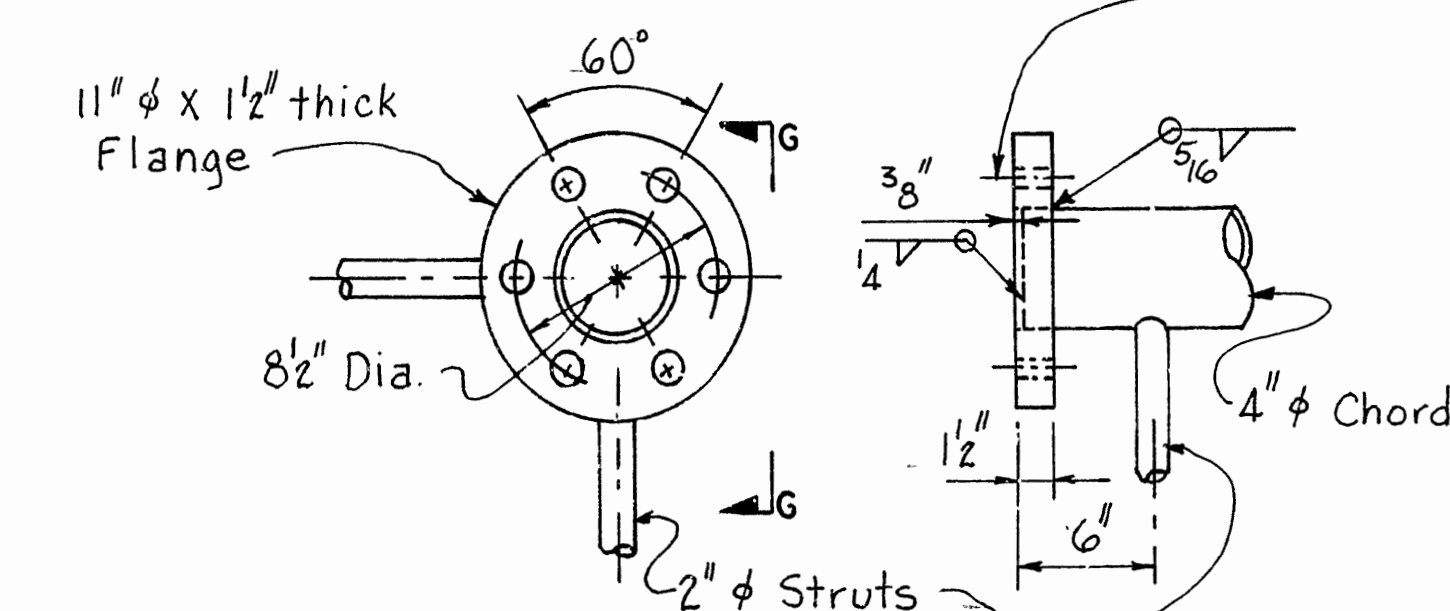
SECTION D-D
Scale: 1/2" = 1'-0"

Extend 2-#4
continuous bars
as shown (typ
each side) —



VIEW C-C.
Scale: $3/8" = 1'-0"$

FOUNDATION QUANTITIES
(For information only)
Class 5 Concrete (Including Modified
Median Parapet): 11.9 yds.³
Common Excavation: 24.1 yds.³
Reinforcing Steel (Gr. 60): 745 lbs.



DETAIL F
Scale: $1\frac{1}{2}'' = 1'-0''$

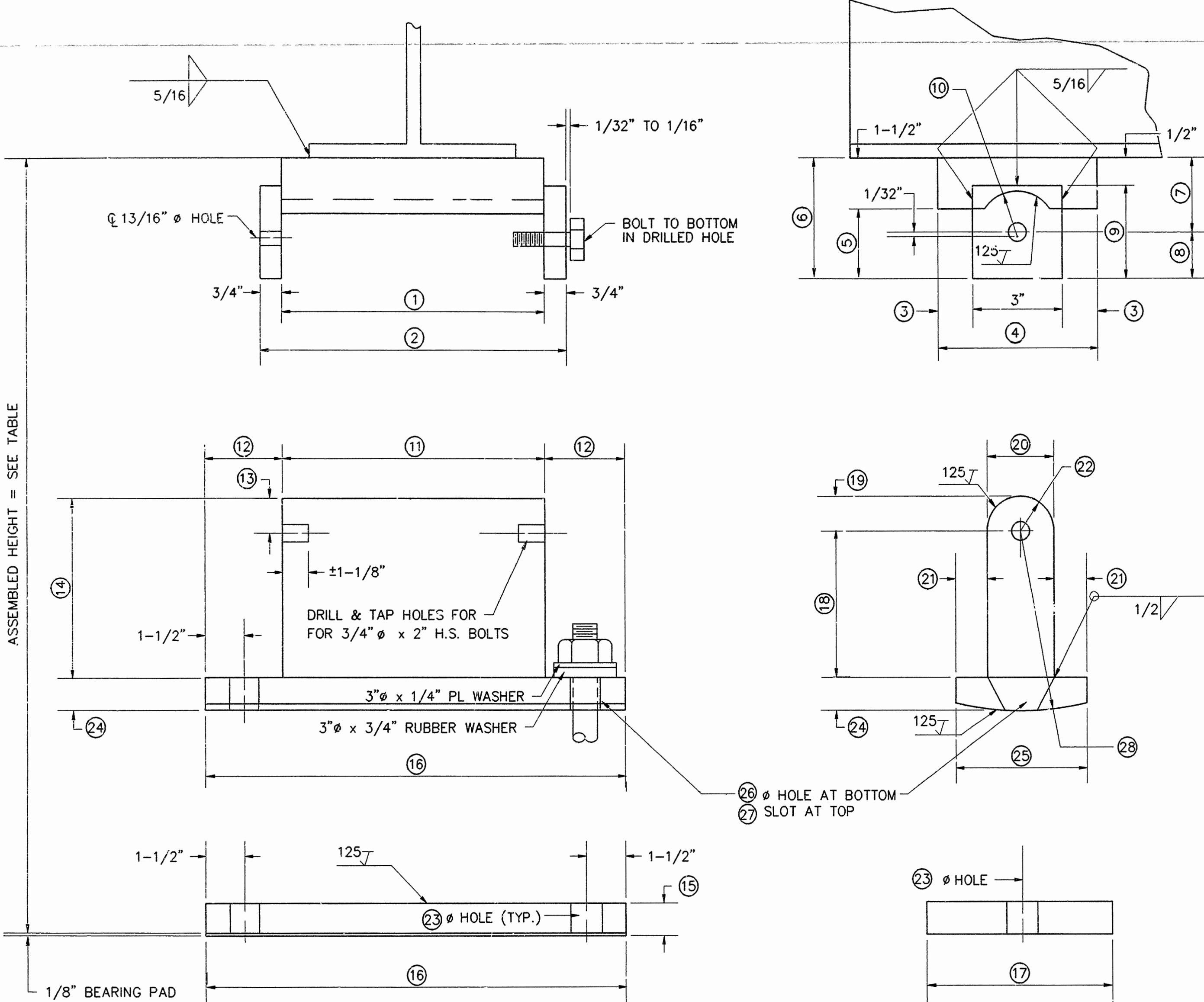
VIEW G-G
Scale: $1\frac{1}{2}'' = 1'-0''$

SHEET 1 OF 2
STA 42+00 RAMP B
OVERHEAD SIGN
I-30 - HWY. 67/167
PULASKI COUNTY
ROUTE 1-40 SEC. 33
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DDG DATE: 3-27-87
CHECKED BY: _____ DATE: _____
DESIGNED BY: DDG DATE: 3-87
SCALE: 1" = 6' or
as noted
SIGN NO. OH 40-6-17 **DRAWING NO. 29029**

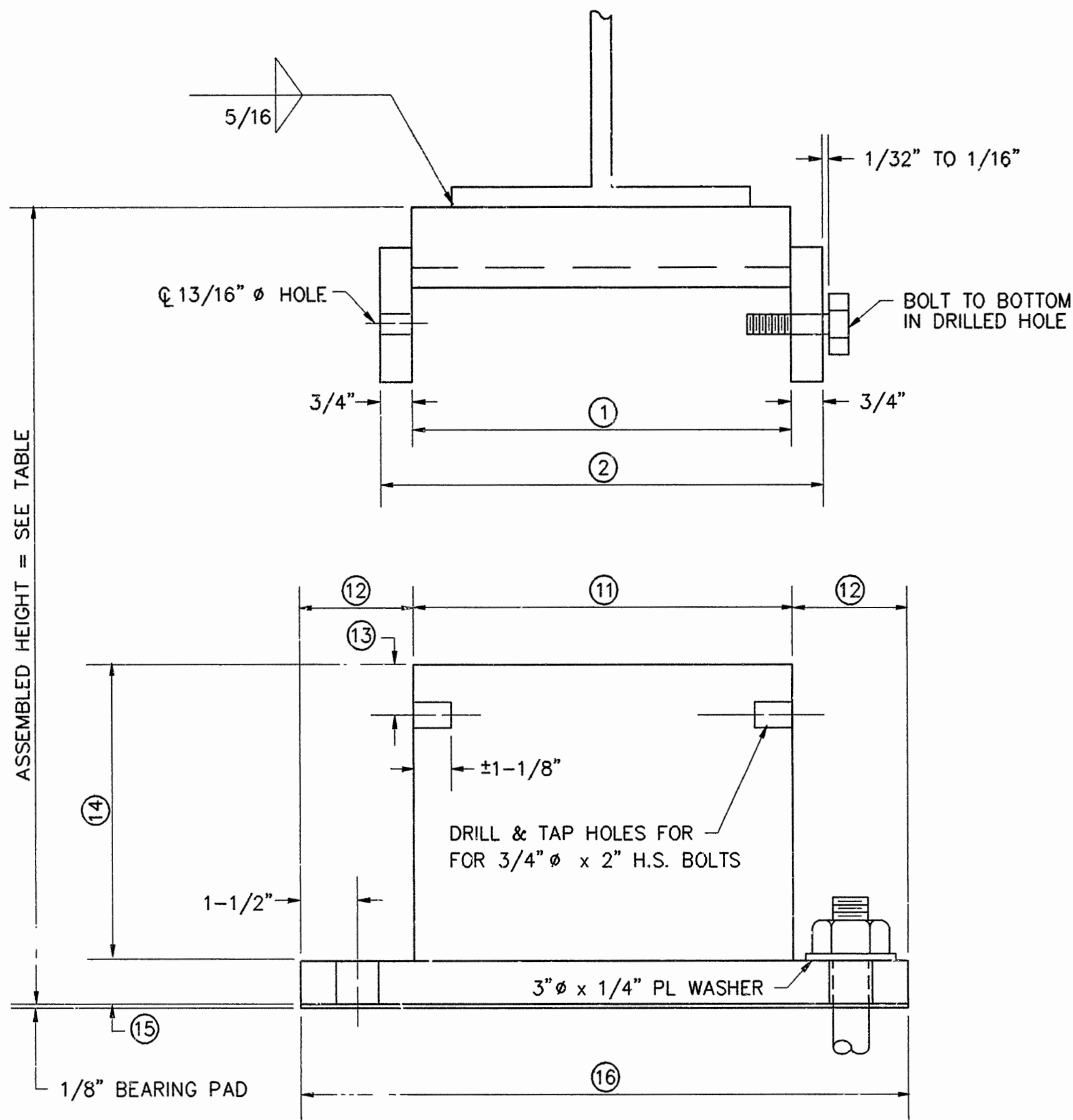
Paul Pinkerton
BRIDGE ENGINEER

TABLE FOR MINIMUM FILLET WELD SIZE	
MATERIAL THICKNESS OF THICKER PART JOINED (INCHES)	MINIMUM SIZE OF FILLET WELD (INCHES)
To 2 1/4" Inclusive	3/8"
Over 2 1/4" to 6"	1/2"



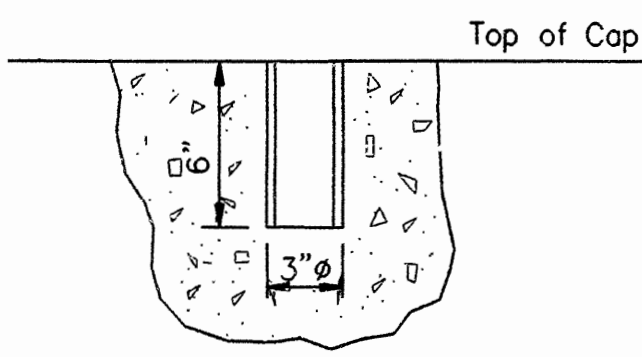
NOTE:
Rubber Washer Shall Be a Closed Cell Expanded Rubber Meeting Requirements of ASTM D1056-78 for RE452-B2E2 Material.

EXPANSION SHOE
Scale: None



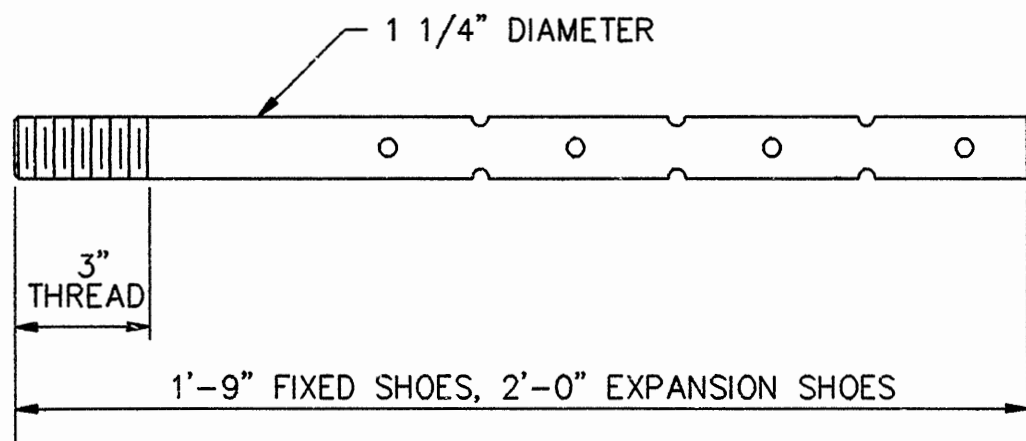
FIXED SHOE
Scale: None

SPECIFICATIONS AND VARIABLE DIMENSIONS FOR WELDED PLATE STEEL EXPANSION AND FIXED SHOES																												TOTAL BRIDGE NO. 6242 A & B	TOTAL BRIDGE NO. 6243 A & B	TOTAL BRIDGE NO. 6244					
SHOE TYPE	ASSEMBLED HEIGHT	MAX. LOAD	MAXIMUM MOVEMENT	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰	⑱	⑲	⑳	㉑	㉒	㉓	㉔	㉕	㉖	㉗	㉘				
EXPANSION BEARING	D1	10 1/2"	100K	1 3/4" (± 7/8" or 140")	10 1/8"	11 5/8"	1"	5"	2"	3 1/2"	2 1/4"	1 1/4"	3"	1 9/32" R	10"	4"	1 1/4"	6"	1 1/2"	18"	8"	4 3/4"	1 1/4"	2 1/2"	1 1/4"	1 1/4"R	1 1/2"	2"	5"	1 1/2"	1 1/2" x 2 1/2"	6 3/4" R	24	20	8
	D4	13"	200K	2 1/2" (± 1 1/4" or 200")	13 1/8"	14 1/8"	1 1/2"	6"	2 1/2"	4"	2 1/2"	1 1/2"	3 1/2"	1 17/32" R	13"	4"	1 1/2"	7"	2 1/2"	21"	14 1/2"	5 1/2"	1 1/2"	3"	1 1/2"	1 1/2"R	1 1/2"	2 1/2"	6"	1 1/2"	1 1/2" x 3"	8" R			
FIXED BEARING	D3	10 1/2"			10 1/8"	11 5/8"	1"	5"	2"	3 1/2"	2 1/2"	1 1/4"	3"	1 9/32" R	10"	3 1/2"	1 1/4"	8"	1 1/2"	17"	9"	6 3/4"	1 1/4"	2 1/2"	3 1/4"	1 1/4"R	1 1/2"						24		
	E4	12"	250K		13 1/8"	14 5/8"	1 1/2"	6"	2 1/2"	4"	2 1/2"	1 1/2"	3 1/2"	1 19/32" R	13"	4"	1 1/2"	9"	2"	21"	12 1/2"	7 1/2"	1 1/2"	3"	4 3/4"	1 1/2"R	1 1/2"						20		
	E5	13"			13 1/8"	14 5/8"	1 1/2"	6"	2 1/2"	4"	2 1/2"	1 1/2"	3 1/2"	1 19/32" R	13"	4"	1 1/2"	9"	3"	21"	14"	7 1/2"	1 1/2"	3"	5 1/2"	1 1/2"R	1 1/2"							4	



ANCHOR BOLT SLEEVE DETAIL
Scale: None

NOTE:
As an Alternate to Pouring Caps with Anchor Bolts in Place, the Contractor may Drill and Grout Anchor Bolts After Pier Construction is Complete. If this Alternate is Chosen, Galvanized Sheet Metal Sleeves Shall Be Set at All Anchor Bolt Locations with Templates Securely Fastened to the Cap Forms. Adjust Spacing of Top Reinforcement in Cap for Placement of Anchor Bolts or Sleeves. Maintain a Minimum Spacing of 3" Center to Center of Bars. The Sleeves Shall Be Dry Packed with Styrofoam or Urethane Foam or Approved Equal Prior to Pouring Concrete and have the Minimum Dimensions Shown. If Anchor Bolts are to be Cast in Place, the Sleeve Will Not Be Required. The Sheet Metal Sleeve Will Not Be Paid for Directly, but will be considered Subsidiary to "Structural Steel in ... Spans (A36)."



DETAILS OF SWEDGED ANCHOR BOLT
Scale: None

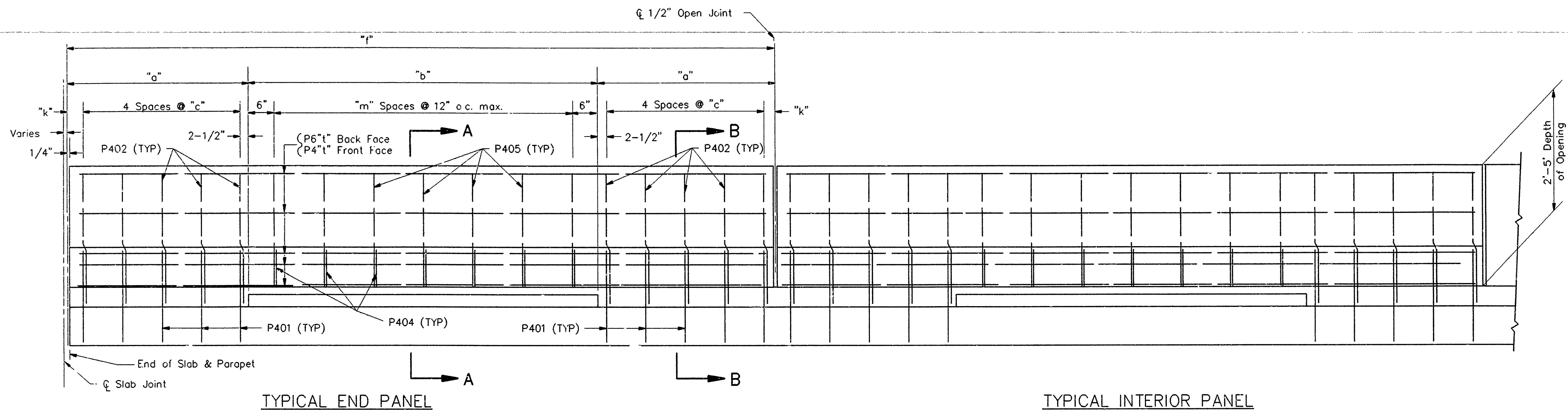
- NOTES:
- All Shoes Shall Be Built of ASTM A36 Welded Plates
 - All Shoes Shall Be Measured and Paid for as "Structural Steel in ... Spans (A36)."
 - Bearings Shall Be Finally Seated in Accordance with Section 807.51 of the Standard Specifications.
 - The Size of Fillet Welds Shall Be as shown in the Table for Minimum Fillet Weld size.
 - Top Plate to be Beveled to Grade where Grade is over 1%.

SHEET 1 OF 1
DETAILS OF SHOES
GREENLAND - FAYETTEVILLE BYPASS

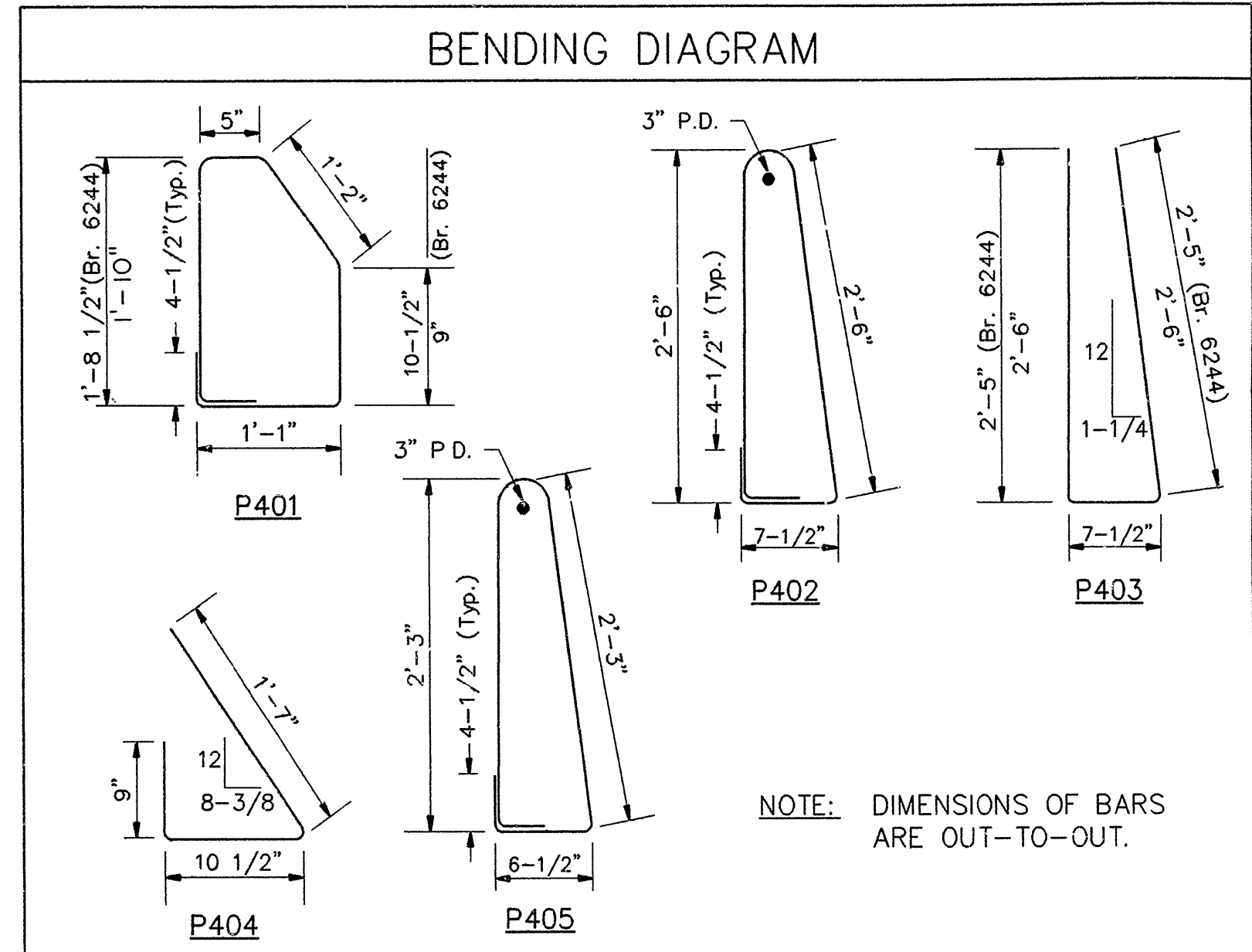
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: L.D.T. DATE: JAN., 1988
CHECKED BY: H.J.P. DATE: JAN., 1988
DESIGNED BY: G.A.F. DATE: JAN., 1988
SCALE: NONE
BRIDGE NO. 6242 A&B, 6243 A&B, AND 6244 DRAWING NO. 29603

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3-3-89				6	ARK.			
				JOB NO.	R40068	67	234	

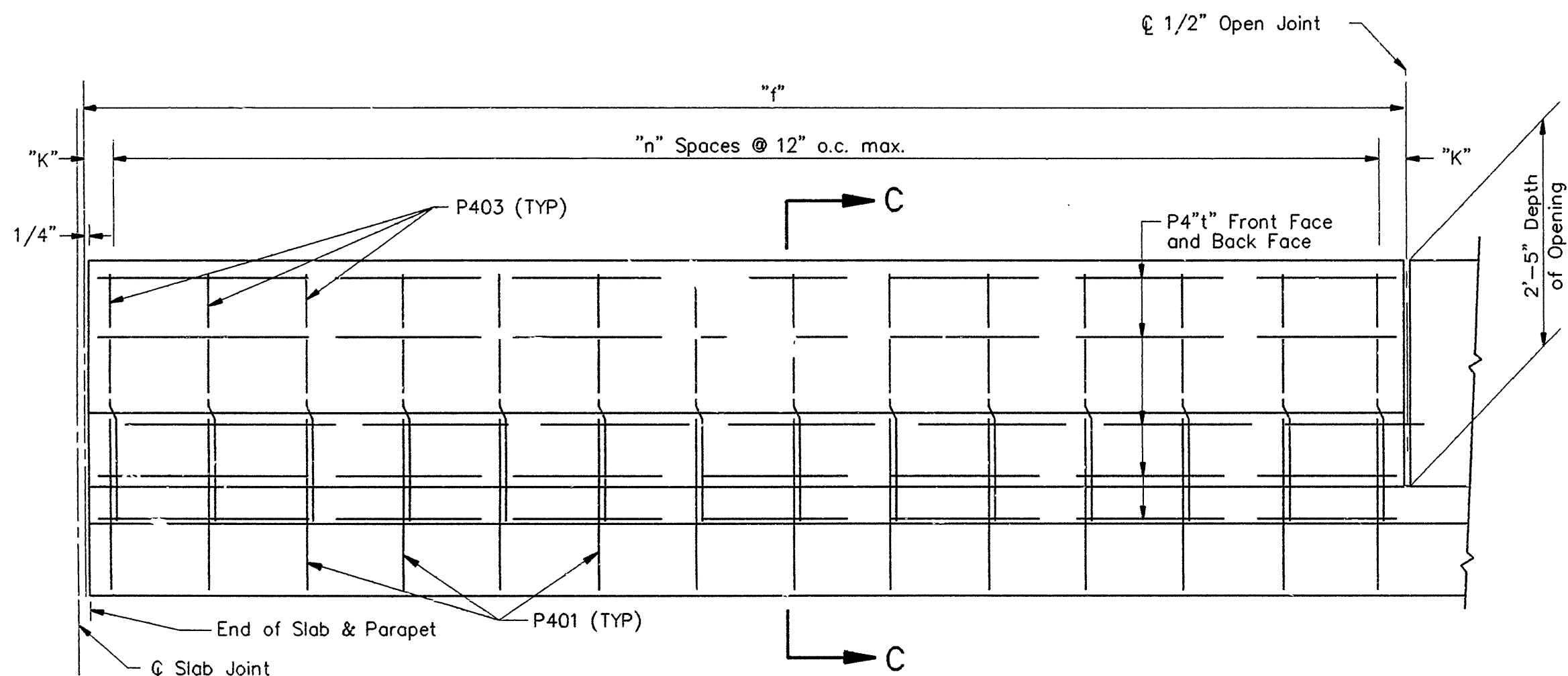
6242 A&B, 6243 A&B, & 6244 RAIL 29604



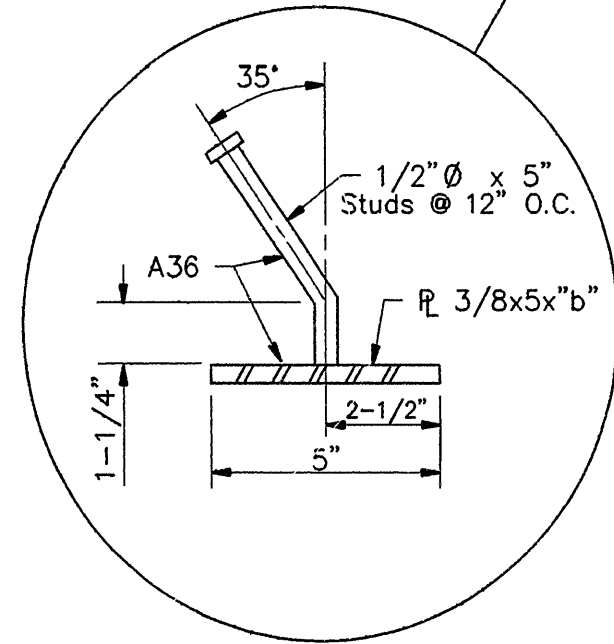
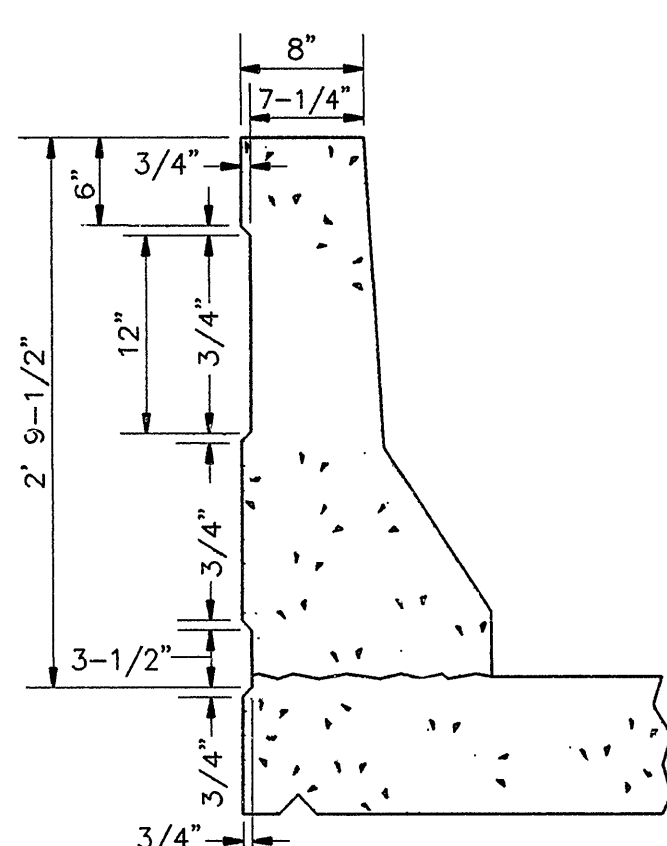
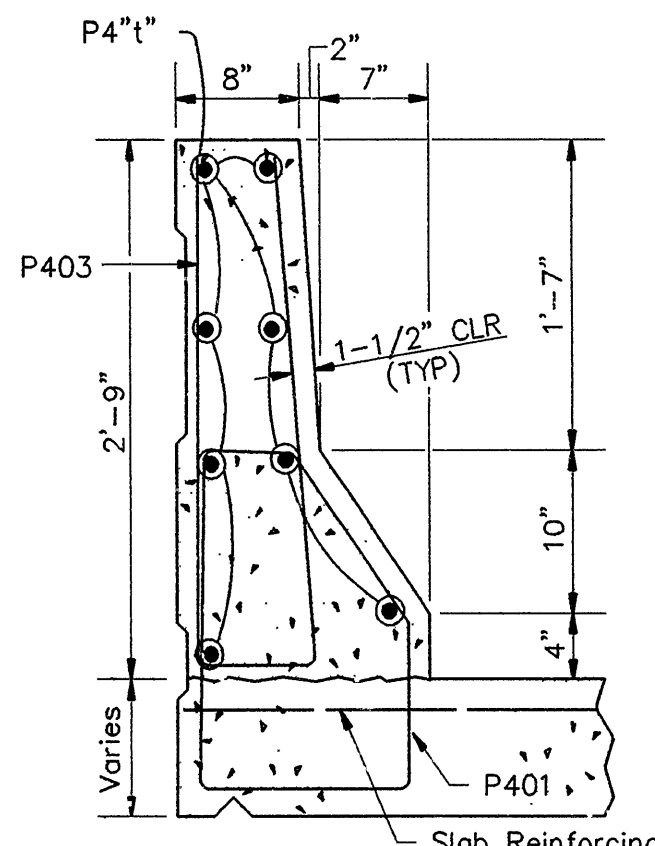
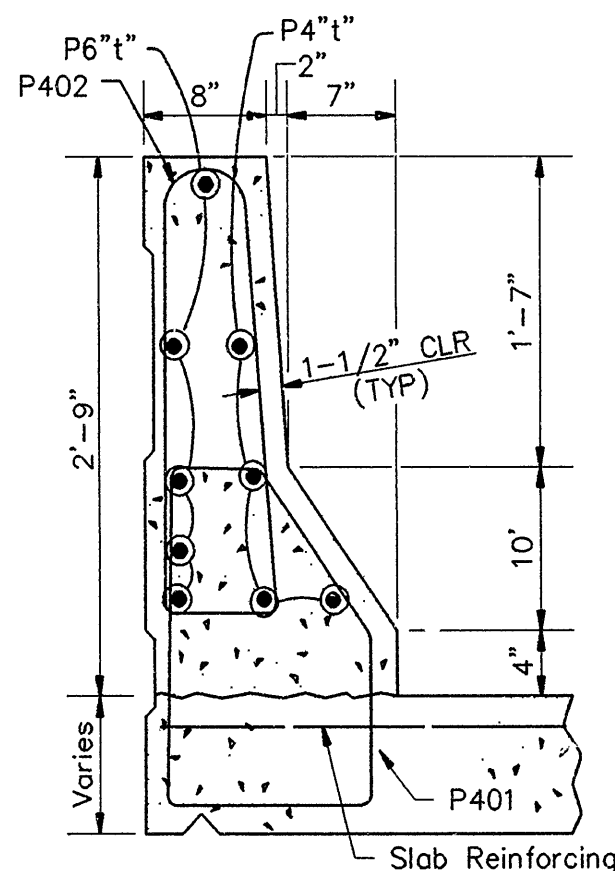
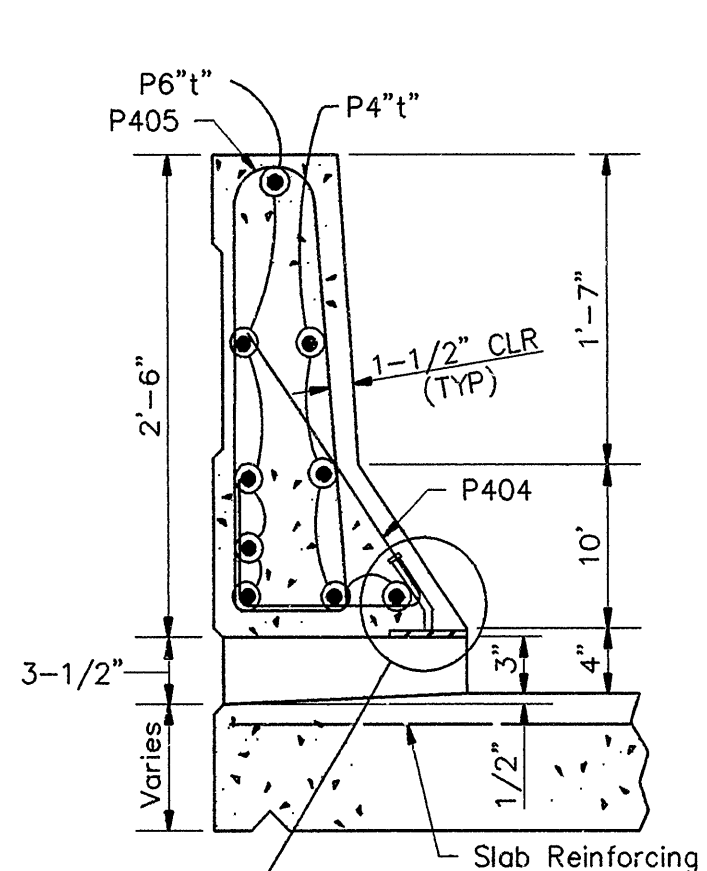
LONGITUDINAL SECTION AT CURB FOR OPEN PARAPET RAIL
SCALE: NONE



NOTE: DIMENSIONS OF BARS ARE OUT-TO-OUT.

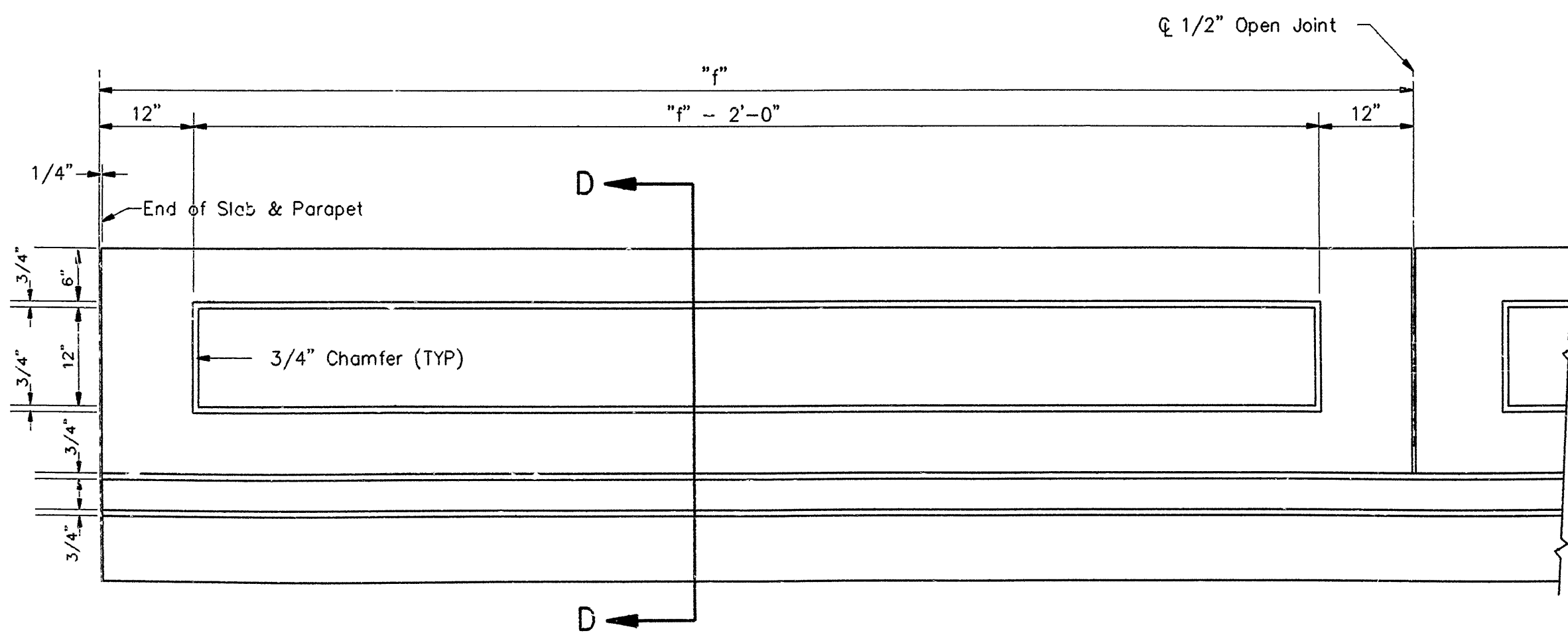


LONGITUDINAL SECTION AT CURB FOR CLOSED PARAPET RAIL
SCALE: NONE



NOTES:

1. Studs Shall Be 5" Long, Granular Flux Filled, Solid Fluxed or Equal and Automatically Welded to Plate. Studs and Plate to be Measured and Paid for as "Structural Steel in ... Spans (A36).
2. The Surfaces of the 3/8" Plate Which Will Not Be In Contact With Concrete Shall Receive Two Coats of Paint in the Shop. These Coats Shall Be Those Specified as Shop Prime Coat and Finish Coat In Subsection 807.59(1) and 807.59(3) of the Standard Specifications.



ELEVATION SHOWING TREATMENT FOR OUTSIDE PARAPET RAILING
SCALE: NONE

SHEET 1 OF 1
DETAILS OF PARAPET
GREENLAND - FAYETTEVILLE BYPASS

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

DRAWN BY: L.D.T. DATE: JAN., 1988
CHECKED BY: H.J.P. DATE: JAN., 1988
DESIGNED BY: G.A.F. DATE: JAN., 1988
DRAWN BY: AS NOTED

BRIDGE NO. 6242 A&B, 6243 A&B, DRAWING NO. 29604 AND 6244

BRIDGE ENGINEER