

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
5-18-95	5-25-95			6	ARK.		28	
				JOB NO.		R40039		
				(1) 6479 & 6480 A&B SCH BR QUAN			33983	

SCHEDULE OF BRIDGE QUANTITIES FOR JOB R40039																			
BRIDGE NO. CODE NO.	NAME PLATE TITLE	UNIT OF STRUCTURE	ITEM NO.	SP & 801	SPSS & 802	SPSS & 802	SS & 802	803	SS & 804	SS & 804	805	805	SP & 807	SP & 808	809	812	816	816	SP
			ITEM	UNCLASSIFIED EXCAVATION FOR STRUCTURES - BRIDGE (A)	CLASS B CONCRETE - BRIDGE	CLASS S CONCRETE - BRIDGE	CLASS S(AE) CONCRETE - BRIDGE	BOILED LINSEED OIL	REINFORCING STEEL - BRIDGE (GRADE 60)	EPOXY COATED REINFORCING STEEL (GRADE 60)	PREBORING (D)	STEEL PILING (HP 14x73) (C)	STRUCTURAL STEEL IN PLATE GIRDER SPANS (A588)	ELASTOMERIC BEARINGS	PREFORMED JOINT SEAL	BRIDGE NAME PLATE (TYPE C)	FILTER BLANKET	DUMPED RIPRAP	EXPLORATORY HOLES
				UNIT	CU. YD.	CU. YD.	CU. YD.	CU. YD.	GAL.	LB.	LB.	LIN. FT.	LIN. FT.	LB.	CU. IN.	LIN. FT.	EA.	SQ. YD.	CU. YD.
6479A X271	BLACKBURN CREEK	SOUTH ABUTMENT				52.95	3.19		5,724	624		686	743	3,080	44.2		212	106	
		PIER 1 (B)		2,349	453.70 A	1031.10 A			193,511					15,080					
		PIER 2 (B)		1,654	453.70 A	927.52 A			166,553					33,215					
		PIER 3 (B)		1,969	907.41 A	1481.01 A			303,973					29,848					
		PIER 4 (B)		1,546	907.41 A	7142.90 A			388,693					20,196			346	173	
		PIER 5 (B)		1,432	907.41 A	2098.20 A			383,956					20,196			346	173	
		PIER 6 (B)		1,470	907.41 A	1526.92 A			310,138					29,848					
		PIER 7 (B)		1,791	453.70 A	1256.46 A			218,028					42,495					
		PIER 8 (B)		1,980	453.70 A	1051.08 A			196,530					16,456					
		PIER 9 (B)		1,451	453.70 A	640.04 A			136,878					14,036					
		NORTH ABUTMENT				48.54	1.87		4,724	335	125	285	743	3,080	44.3	1	126	63	
		260'-0" CONT. COMP. PLATE GIRDER UNIT					389.08	28.2		91,893			332,272						
		860'-0" CONT. COMP. PLATE GIRDER UNIT					1,298.08	93.1		311,572			1,325,342						
		390'-0" CONT. COMP. PLATE GIRDER UNIT					581.35	42.1		140,358			524,605						
		TOTALS FOR BRIDGE NO. 6479A		15,642	5,898.14 A	12256.17 A	2,273.57	163.4	2,308,708	544,782	125	971	2,183,705	227,530	88.5	1	1,030	515	1,500
6479B X271	BLACKBURN CREEK	SOUTH ABUTMENT				52.95	2.78		5,708	577		803	743	3,080	44.2	1	212	106	
		NORTH ABUTMENT				48.54	1.63		4,742	316	125	200	743	3,080			82	41	
		260'-0" CONT. COMP. PLATE GIRDER UNIT					385.86	27.9		91,380			332,260						
		860'-0" CONT. COMP. PLATE GIRDER UNIT					1,299.33	93.0		312,590			1,334,666						
		390'-0" CONT. COMP. PLATE GIRDER UNIT					582.87	42.2		141,087			529,473		44.3				
		TOTALS FOR BRIDGE NO. 6479B				101.49	2,272.47	163.1	10,450	545,950	125	1,003	2,197,885	6,160	88.5	1	294	147	
6480A X271	DEADMAN HOLLOW	SOUTH ABUTMENT		270		196.10	1.63		20,639	577			743	2,394	44.2		119	59	
		PIER 1		403	105.90 A	164.26			30,402					15,704					
		PIER 2 (B)		1,888	635.19 A	1089.44 A			224,277					29,520					
		PIER 3 (B)		1,540	907.41 A	2190.30 A			393,575					20,196			346	173	
		PIER 4 (B)		2,325	907.41 A	2041.66 A			377,886					20,196			346	173	
		PIER 5 (B)		2,618	635.19 A	974.08 A			228,455					29,520					
		PIER 6		633	105.90	182.95			32,533					15,704					
		NORTH ABUTMENT		242		195.73	1.63		18,960	539			743	2,394	44.2	1	92	46	
		80'-0" PLATE GIRDER SPAN					128.80	8.5		25,722			80,655						
		870'-0" CONT. PLATE GIRDER UNIT					1,295.04	93.6		313,870			1,285,215						
		80'-0" PLATE GIRDER SPAN					128.80	8.5		25,722			80,655						
		TOTALS FOR BRIDGE NO. 6480A		9,919	3,197.00 A	7,034.52 A	1,555.90	110.6	1,326,727	366,430			1,448,011	135,628	88.4	1	903	451	960
6480B X271	DEADMAN HOLLOW	SOUTH ABUTMENT		364		206.60	1.63		21,462	557			743	2,394	44.2	1	113	57	
		PIER 1		374	105.93	151.84		8.5	28,982					15,704					
		PIER 6		295	105.93	161.15		93.6	30,047					15,704					
		NORTH ABUTMENT		242		195.73	1.63		18,960	538			743	2,394	44.2		176	88	
		80'-0" PLATE GIRDER SPAN					128.80			25,722			80,655						
		870'-0" CONT. PLATE GIRDER UNIT					1,295.04			313,870			1,285,215						
		80'-0" PLATE GIRDER SPAN					128.80			25,722			80,655						
		TOTALS FOR BRIDGE NO. 6480B		1,275	211.86	715.32	1,555.90	110.6	99,451	366,409			1,448,011	36,196	88.4	1	289	145	180
		TOTALS FOR JOB R40039		26,836	9,407.00 A	20,107.50 A	7,657.84	547.7	3,745,336	1,823,571	250	1,974	7,277,612	405,514	353.8	4	2,516	1,258	2,640

NOTES:

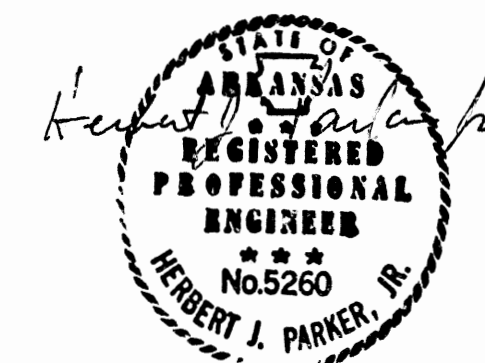
- (A) ESTIMATED QUANTITY OF ROCK EXCAVATION - JOB R40039
BRIDGE 6479 A&B = 6,778 CU. YD.
BRIDGE 6480 A&B = 8,311 CU. YD.

- (B) QUANTITIES SHOWN FOR BRIDGE A PIERS INCLUDE BRIDGE B QUANTITIES.
PIER QUANTITIES FOR BRIDGES A AND B ARE SHOWN FOR BRIDGE A.

- (C) SEE NOTE 6 UNDER ABUTMENT NOTES, DWG. 33984.

- (D) SEE NOTE 7 UNDER ABUTMENT NOTES, DWG. 33984.

△ REVISED: CONCRETE IN COLUMNS CHANGED FROM "CLASS B TO CLASS S
CONCRETE- BRIDGE." ADDED SP JOB NO. R40039 "USE OF TYPE II
CEMENT" W.A.S. 18MAY95



SHEET 1 OF 1
SCHEDULE OF BRIDGE QUANTITIES
BUNYARD RD. - HESS CREEK
(GR. & STRS.)
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: RDF DATE: MARCH, 1993
CHECKED BY: JHR DATE: MARCH, 1993 SCALE: AS NOTED
DESIGNED BY: JDG DATE: MARCH, 1993
BRIDGE NO. 6479 A&B 6480 A&B DRAWING NO. 33983

PBB/RNF 71BCK5 91148015 2--24--94 21

GENERAL NOTES -- JOB R40039

- ALL BEARINGS REFER TO TRUE NORTH.
- LEVEL DATUM IS MEAN SEA LEVEL REFERENCED TO U.S.C.& G.S.
- GRADE LINE DENOTES FINISHED GRADE.
- DRAWINGS SHOW GENERAL FEATURES OF DESIGN ONLY. SHOP DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH THE SPECIFICATIONS, 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.
- THE INFORMATION SHOWN ON BRIDGE LAYOUTS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

CONCRETE:

- ALL CONCRETE IN THE SUPERSTRUCTURE SLABS AND PARAPET SHALL BE CLASS S(AE)--BRIDGE. ALL OTHER CONCRETE SHALL BE CLASS S--BRIDGE, EXCEPT CLASS B--BRIDGE SHALL BE USED IN ALL PIER FOOTINGS OF PIERS 1-9 IN BRIDGE 6479 A&B AND PIERS 2-5 IN BRIDGE 6480 A&B.
- 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.
- CONCRETE IN BRIDGE SUPERSTRUCTURE 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 CONCRETE BRIDGE DECK SHALL BE GIVEN A TINE FINISH AS SPECIFIED FOR FINAL FINISHING IN SUBSECTION 802.20 FOR A CLASS 5 TINED BRIDGE ROADWAY SURFACE FINISH. MOVEMENT OF THE FINISHING MACHINE ACROSS THE NEW CONCRETE SHALL BE ON PLANKS PLACED ON THE SURFACE AND SHALL BE PROHIBITED FOR 72 HOURS AFTER FINISHING THE POUR. SUFFICIENT CONCRETE MUST BE PLACED AHEAD OF THE STRIKE-OFF TO FULLY LOAD THE GIRDER. IF A LONGITUDINAL STRIKE-OFF IS USED, A VERTICAL CAMBER ADJUSTMENT MUST BE MADE IN THE STRIKE-OFF TO ACCOUNT FOR THE FUTURE DEAD LOAD DEFLECTION DUE TO THE RAILING.
- CONCRETE FOR SIMPLE SPANS MAY BE POURED IN INCREMENTS WITH THE CENTER ONE--THIRD TO ONE--HALF LENGTH POURED FIRST. SEVENTY--TWO HOURS SHALL ELAPSE BETWEEN THE END OF THE CENTER POUR AND THE START OF THE END POURS. END POURS MAY BE PLACED SIMULTANEOUSLY. IF NOT PLACED SIMULTANEOUSLY, FORTY--EIGHT HOURS SHALL ELAPSE BETWEEN THE END OF A POUR AND THE START OF A NEW POUR.
- CONTINUOUS BRIDGE SLABS SHALL BE MADE BY PLACING THE SAME NUMBERED POURS SIMULTANEOUSLY OR SEPARATELY -- WITH PARTICULAR EMPHASIS ON THE REQUIREMENT THAT LOWER NUMBERED POURS SHALL BE PLACED PRIOR TO ANY HIGHER NUMBERED POUR. FORTY--EIGHT HOURS SHALL ELAPSE BETWEEN THE END OF A POUR AND THE START OF THE NEXT POUR. SEVENTY--TWO HOURS SHALL ELAPSE BETWEEN THE END OF A POUR AND THE START OF AN ADJACENT POUR. SEVENTY--TWO HOURS SHALL ELAPSE BETWEEN THE POURING OF THE ENTIRE SLAB AND THE POURING OF ANY PORTION OF THE PARAPET RAIL.
- BOILED LINSEED OIL SHALL BE APPLIED TO THE ROADWAY SURFACE OF THE BRIDGE DECK AND THE FRONT AND TOP OF THE CONCRETE PARAPET RAIL.

REINFORCING:

- 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 SLAB AND PARAPET RAIL 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.
- AT THE CONTRACTORS OPTION, THE TRANSVERSE TRUSS BARS SHOWN IN NON-SKEWED SUPERSTRUCTURE SLABS MAY BE REPLACED WITH TWO FULL LENGTH STRAIGHT BARS, OF THE SAME SIZE, IN THE TOP AND BOTTOM MAT OF REINFORCING. BOTH BARS, IN THE TOP AND BOTTOM MAT OF REINFORCING, SHALL BE EPOXY COATED. THE BASIS OF PAYMENT SHALL BE THE TRUSS BARS.

PIERS:

- ALL FOOTINGS SHALL BE SET A MINIMUM OF 3'-0" INTO MATERIAL DESIGNATED AS SHALE OR SANDSTONE ON SOIL BORING LOGS. FOUNDATIONS FOR FOOTINGS SHALL BE PREPARED IN ACCORDANCE WITH SECTION 801.04 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHOULD NOTE THAT THE SHALE NATIVE TO THIS AREA IS HIGHLY WEATHERABLE AND SPECIAL PROTECTION OF BEARING MATERIAL MAY BE REQUIRED. CONCRETE SHOULD BE PLACED IMMEDIATELY FOLLOWING THE FOUNDATION EXCAVATION AND PREPERATION.
- IF ANCHOR BOLTS ARE DRILLED INTO CAP, TOP MAIN REINFORCING BARS SHALL BE PROPERLY PLACED TO AVOID DAMAGE.
- FOR ADDITIONAL NOTES, SEE BRIDGE LAYOUTS.

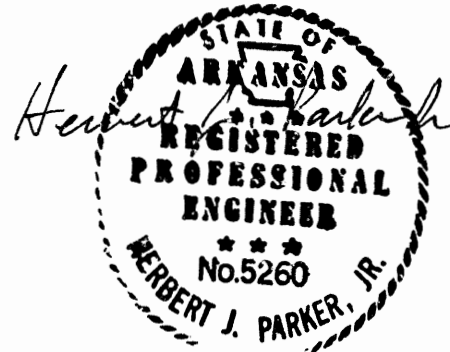
STRUCTURAL STEEL:

- ALL STRUCTURAL STEEL SHALL BE ASTM DESIGNATION A588 UNLESS OTHERWISE NOTED AND SHALL BE PAID FOR AT THE UNIT PRICE PER POUND BID FOR "STRUCTURAL STEEL IN PLATE GIRDER SPANS (A588)". A588 STEEL SHALL NOT BE PAINTED BUT SHALL BE CLEANED IN ACCORDANCE WITH THE JOB R40039 SPECIAL PROVISION "UNPAINTED WEATHERING STRUCTURAL STEEL". STRUCTURAL STEEL COMPLETELY EMBEDDED IN CONCRETE MAY BE ASTM A36.
- STRUCTURAL SHAPES OF EQUAL OR GREATER STRENGTH MAY BE SUBSTITUTED FOR SHAPES SHOWN IF APPROVAL IS OBTAINED FROM THE ENGINEER. PAYMENT WILL BE MADE ON THE BASIS OF SHAPES SHOWN.
- ALL PLATE GIRDER 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. THIS WORK AND MATERIAL WILL NOT BE PAID FOR DIRECTLY BUT CONSIDERED SUBSIDIARY TO THE ITEM "STRUCTURAL STEEL IN PLATE GIRDER SPANS (A588)." THE CHARPY V-NOTCH REQUIREMENTS DO NOT APPLY TO THE SPLICE PLATES.
- STEEL PLATES FOR MAIN LOAD CARRYING MEMBERS (FLANGE AND WEB PLATES) AND FLANGE FIELD SPLICE PLATES SHALL BE CUT AND FABRICATED SO THAT THE PRIMARY DIRECTION OF ROLLING IS PARALLEL TO THE DIRECTION OF THE MAIN TENSILE AND/OR COMPRESSIVE STRESSES.
- GIRDER WEBS MAY BE MADE BY SHOP SP LICING WITH A MINIMUM LENGTH OF 25'-0" FOR SECTIONS. FLANGE PLATES LONGER THAN 50'-0" MAY BE MADE BY SHOP SP LICING WITH A MINIMUM LENGTH OF 25'-0" FOR SECTIONS. NO ADDITIONAL PAYMENT FOR THESE WELDED SPLICES WILL BE MADE.
- ALL WELDS TO BE MADE DURING FABRICATION, BOTH TEMPORARY AND PERMANENT, SHALL BE FULLY DETAILED ON THE SHOP DRAWINGS AND SUBMITTED FOR APPROVAL. 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.
- GROOVE WELDS IN MAIN LOAD CARRYING MEMBERS (FLANGE AND WEB PLATES) SHALL BE QUALITY CONTROL (Q.C.) TESTED BY NONDESTRUCTIVE TESTINGS, AS REQUIRED BY THE GOVERNING SPECIFICATIONS SPECIFIED IN SUBSECTION 807.24 OF THE STANDARD SPECIFICATIONS.
- FILLET WELDS AT FLANGE TO WEB PLATE CONNECTIONS SHALL BE QUALITY CONTROL (Q.C.) TESTED BY THE MAGNETIC PARTICLE METHOD.
- ALL QUALITY CONTROL (Q.C.) TESTING IS AT THE CONTRACTOR'S EXPENSE.
- ALL INTERMEDIATE STIFFENERS SHALL BE FABRICATED NORMAL TO THE TOP FLANGE AND ON THE SIDE OF THE GIRDER WEB AS INDICATED ON THE FRAMING PLANS. NO INTERMEDIATE STIFFENERS ARE TO BE PLACED ON THE OUTSIDE OF THE EXTERIOR GIRDERS. ALL BEARING STIFFENERS SHALL BE FABRICATED VERTICAL.
- ALL GIRDERS SHALL BE BLOCKED IN THEIR TRUE POSITION IN THE SHOP, WITH THE WEBS HORIZONTAL, IN GROUPS OF A MINIMUM OF THREE SECTIONS. SEE SECTION 807.18(b)(2) OF THE STANDARD SPECIFICATIONS. THE CAMBER, LENGTH OF SECTIONS, DISTANCE BETWEEN BEARINGS AND OPENING OF JOINTS SHALL BE MEASURED WITH THE GIRDERS IN THIS POSITION AND THIS INFORMATION SHALL BECOME A PART OF THE PERMANENT RECORDS OF THIS JOB. THE COMPONENT PARTS SHALL BE MATCH MARKED IN THIS ASSEMBLY AND THESE MARKS SHALL BE SHOWN ON THE ERECTION DIAGRAM. ALL GIRDER DIMENSIONS ARE BASED ON A TEMPERATURE OF 60 DEGREES F. A TOLERANCE OF $\pm 1/4"$ IS ALLOWED FOR CAMBER.
- CROSS-FRAMES SHALL BE INSTALLED, WITH A MINIMUM OF 2 BOLTS PER CONNECTION, AS GIRDERS ARE ERECTED. ALL CROSS-FRAMES SHALL BE INSTALLED AND COMPLETELY BOLTED PRIOR TO POURING OF FLOOR SLABS.
- FIELD CONNECTIONS SHALL BE MADE WITH HIGH STRENGTH BOLTS. THE MINIMUM DISTANCE BETWEEN THE CENTERS OF BOLTS SHALL NOT BE LESS THAN 3 TIMES THE DIAMETER OF THE BOLT AND PREFERABLY NOT LESS THAN 2 1/2" FOR 3/4" BOLTS AND 3" FOR 7/8" BOLTS. THE MINIMUM DISTANCE FROM THE CENTER OF A BOLT TO A SHEARED OR FLAME CUT EDGE SHALL BE AS SPECIFIED IN SUBSECTION 807.11 OF THE STANDARD SPECIFICATIONS. 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 GIRDER WEBS, AND BOTTOM OF GIRDER FLANGES.
- 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.
- 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 PLATE GIRDER SPANS (A588)."

ABUTMENTS:

- BACKWALLS SHALL NOT BE POURED BEFORE GIRDERS ARE IN PLACE.
- IF ANCHOR BOLTS ARE DRILLED INTO THE CAP, TOP MAIN REINFORCING BARS SHALL BE PROPERLY PLACED TO AVOID DAMAGE.
- STRUCTURAL STEEL IN ABUTMENTS SHALL CONFORM TO ASTM A588 AND SHALL BE PAID FOR AS "STRUCTURAL STEEL IN PLATE GIRDER SPANS (A588)."
- ALL FOOTINGS SHALL BE SET A MINIMUM OF 2'-0" INTO MATERIAL DESIGNATED AS SHALE OR SANDSTONE ON SOIL BORING LOGS. FOUNDATIONS FOR FOOTINGS SHALL BE PREPARED IN ACCORDANCE WITH SECTION 801.04 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHOULD NOTE THAT THE SHALE NATIVE TO THIS AREA IS HIGHLY WEATHERABLE AND SPECIAL PROTECTION OF BEARING MATERIAL MAY BE REQUIRED. CONCRETE SHOULD BE PLACED IMMEDIATELY FOLLOWING THE FOUNDATION EXCAVATION AND PREPERATION.
- PILES IN ABUTMENTS TO BE DRIVEN AFTER EMBANKMENT, TO BOTTOM OF CAP, IS IN PLACE. EMBANKMENT CONSTRUCTION SHALL PROVIDE FOR MATERIAL AROUND PILING, AT THE ABUTMENTS, THAT WILL PERMIT THE PILING TO BE DRIVEN INTO THE HARD MATERIAL BELOW THE EXISTING GROUND LINE.
- ALL PILING SHALL BE HP14x73 STEEL BEARING PILING AND SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 95 TONS. MANUFACTURED PILE TIPS SHALL BE INSTALLED ON ALL PILES ACCORDING TO MANUFACTURES RECOMMENDATIONS. FOR A QUALIFIED PRODUCTS LIST OF APPROVED POINTS, CONTACT ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT, MATERIALS DIVISION. TO THE ITEM OF "STEEL PILING."
- ALL ABUTMENT PILES SHALL EXTEND A MINIMUM OF 10 FEET INTO NATURAL GROUND. IT IS ANTICIPATED THAT INSTALLATION OF THE PILING AT THE NORTH ABUTMENT OF BR 6479 A&B, WILL REQUIRE PREBORED PILOT HOLES. THE PILOT HOLES SHALL BE DRILLED A MINIMUM OF 10 FEET BELOW EXISTING GROUND IN ACCORDANCE WITH SECTION 805.04 OF THE STANDARD SPECIFICATIONS. ELEVATIONS FROM FIELD SURVEYS HAVE BEEN USED TO ESTIMATE LIMITS OF PREBORED HOLES. PILE LENGTHS ARE ESTIMATED TO EXTEND AT MINIMUM OF 3 FEET BELOW THE LIMITS OF PREBORING.
- 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. LENGTHS SHOWN ARE FOR ESTIMATING QUANTITIES AND FOR USE IN DETERMINING PAYMENT FOR CUT-OFF AND BUILDUP.
- IN LIEU OF USING CRUSHED STONE BACKFILL, A PREFABRICATED DRAINAGE SYSTEM, AS DESCRIBED IN THE SPECIAL PROVISIONS, MAY BE USED. NEITHER DRAINAGE SYSTEM WILL BE PAID FOR DIRECTLY BUT CONSIDERED SUBSIDIARY TO OTHER ITEMS OF WORK.
- FOR ADDITIONAL NOTES, SEE BRIDGE LAYOUTS.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
5-18-95	5-25-95			6	ARK.		42	
				JOB NO.		R40039		
				① 6479&6480 A&B GEN. NOTES				33984



SHEET 1 OF 1
GENERAL NOTES FOR STRUCTURES
BUNYARD RD. -- HESS CREEK
(GR. & STRS.)
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: R.N.F. DATE: FEB., 1993
CHECKED BY: H.J.P. DATE: FEB., 1993
DESIGNED BY: J.H.R. DATE: FEB., 1993
SCALE: NONE
BRIDGE NO. 6479 A & B AND 6480 A & B
DRAWING NO. 33984

BRIDGE ENGINEER

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway And Transportation Department Standard Specifications For Highway Construction, 1993 Edition, With Applicable Supplemental Specifications And Special Provisions.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications For Highway Bridges - 1992 Edition.

Live Loading: HS20

Method Of Design: Load Factor
Fatigue Load Cycle: Case II

Seismic Performance Category A

MATERIALS AND STRENGTHS:

Class S(AE) - Bridge Concrete (Superstructure)
Class S - Bridge Concrete (Abutments, Columns, & Caps Of Piers)
Class B - Bridge Concrete (Footings Of Piers)
Reinforcing Steel (A615 Or A617, GR. 60)
Structural Steel (A588)
Structural Steel (A36)

f'c = 4,000 psi
f'c = 3,500 psi
f'c = 3,000 psi
Fy = 60,000 psi
Fy = 50,000 psi
Fy = 36,000 psi

20'- Riprapped Drainage Swale, See Dwg. No. 34030 For Details.

HYDRAULIC DATA

DRAINAGE AREA = 2,785 Acres

FLOOD DESCRIPTION	FREQ. YEARS	DISCHARGE CFS	NATURAL WATER SURFACE ELEV. *** FEET	WATER SURFACE ELEV. WITH BACKWATER PLANS FEET
DESIGN	50	6,170	1307.2	1307.3
BASE	100	7,400	1308.0	1308.1
EXTREME	500	10,090	1309.6	1309.8

LOW BRIDGE MEMBER ELEVATION = 1441.44 FT.

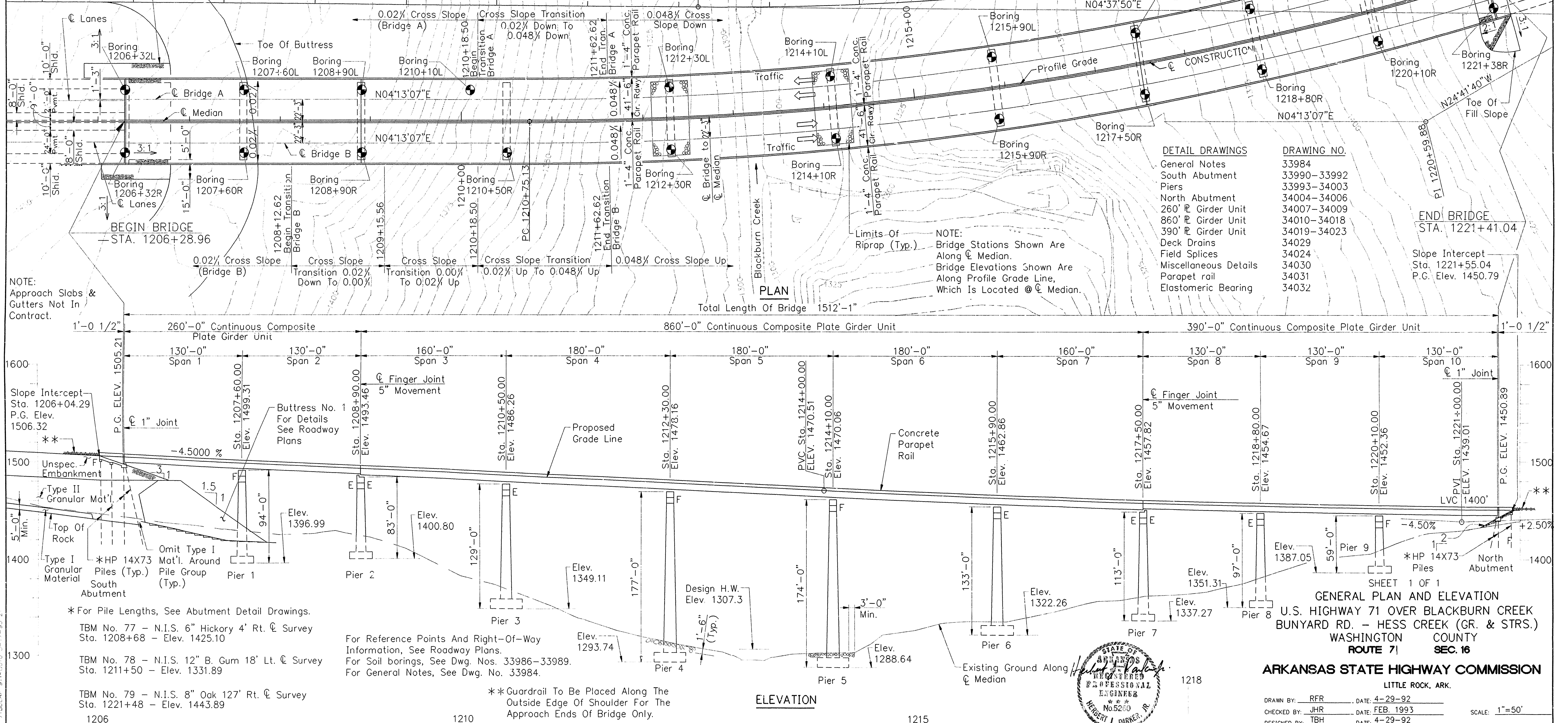
HISTORICAL HIGHWATER = UNKNOWN

*** UNCONSTRICTED WATER SURFACE AT PROPOSED BRIDGE LOCATION.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
5-18-95	5-25-95			6	ARK.		43	
				JOB NO.	R40039		6479 A&B GEN. PLAN & ELEV.	33985

CURVE DATA

€ SURVEY	€ CONSTRUCTION
PI STA. = 1222+20.97 Δ = 29°19'30" LT. D = 1°30'0" T = 991.41' L = 1955.00' PC STA. 1212+21.55 PT STA. 1231+76.55	PI STA. = 1220+59.88 Δ = 28°54'47" LT. D = 1°30'0" T = 984.75' L = 1927.53' PC STA. 1210+75.13 PT STA. 1230+02.66



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED ROAD NO	STATE	FED. AID PROJ NO	SHEET NO.	TOTAL SHEETS
				6	ARK.		44	
				JOB NO		R 40039		
				6479 A & B	SOIL BORINGS			33986

LOG OF BORING NO. 1206+32L													
BLACKBURN CREEK BRIDGE													
TYPE: Air		LOCATION: Construction C.L. Sta. 1206+32, 32 ft Lt											
DEPTH, FT	SYMBOL SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT WT LBS/CF FT	COHESION, TON/SQ FT						% RECOVERY	% RQD	
					<div style="text-align: center;"> </div>								
					PLASTIC LIMIT		WATER CONTENT, %		LIQUID LIMIT				
					0.2	0.4	0.6	0.8	1.0	1.2	1.4		
					10	20	30	40	50	60	70		
		SURF. EL: 1445.9											
		Loose brown sandy silt											
		Firm to stiff reddish tan sandy clay with sandstone fragments, cobbles and boulders	10										
10			15										
		Very soft brown and gray, very severely weathered shale with numerous ferrous partings -seepage at 10.5 and 22 ft	18										
20			25										
		Soft dark gray, fresh shale with calcareous inclusions											
												60	0
30												100	40
		-seepage at 38 ft										100	53
40													

COMPLETION DEPTH: 39 ft
 DATE: 6/9/92

DEPTH TO WATER
 IN BORING: 10.5 ft

DATE: 6/9/92

LOG OF BORING NO. 1206+32 R												
BLACKBURN CREEK BRIDGE												
TYPE: Air		LOCATION: Construction C.L. Sta. 1206+32, 32 ft Rt										
DEPTH, FT	SYMBOL SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT COR. WT LBS/CU FT	COHESION, TON/SQ FT							% RECOVERY
					PLASTIC LIMIT +		WATER CONTENT, % +		LIQUID LIMIT +			
					10	20	30	40	50	60	70	
		SURF. EL: 1441.9										
		Loose brown sandy silt										
		Stiff reddish tan sandy clay with sandstone fragments										
		-rootlets	9									
10		Very soft brown and gray, severely weathered shale with ferrous partings	15									
		-seepage at 10 - 25 ft										
		-gray below 19 ft	16									
20			18									
		Very soft dark gray, slightly weathered shale with ferrous stains	20									
30			25									
			0"									
		Soft dark gray, fresh shale										
40		-seepage at 40 ft										100 47
		-vertical fractures at 42 and 43.5 ft										100 53
45												

COMPLETION DEPTH: 45 ft
 DATE: 6/8/92

DEPTH TO WATER
 IN BORING: 10 ft

DATE: 6/8/92

[illegible]

LOG OF BORING NO. 1207+60R												
BLACKBURN CREEK BRIDGE												
TYPE: Air										LOCATION: Construction C.L. Sta. 1207+60, 32 ft Rt		
DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DW. WT LB/CU FT	COHESION, TON/SQ FT				RECOVERY	% RQD	
						0.2	0.4	0.6	0.8			1.0
						PLASTIC LIMIT	WATER CONTENT, %		LIQUID LIMIT			
						10	20	30	40	50	60	70
			SURF. EL: 1426.0									
			Loose brown sandy silt									
5			Stiff reddish brown sandy clay with sandstone fragments	9								
10			Very soft dark gray, slightly weathered shale with ferrous stains	8								
				21								
20			Soft dark gray, slightly weathered shale	26								
30			Hard gray to light gray, slightly weathered, fine- to medium grained sandstone with ferrous stains 85° shear at 30.5 ft								90	75
			Hard gray, slightly weathered, coarse sandstone, poorly cemented and vuggy									
			Hard gray, fresh, fine-grained sandstone with shale laminations and seams								100	67
40			85° fracture at 39 ft									

COMPLETION DEPTH: 39.5 ft
DATE: 6/1/92

DEPTH TO WATER
IN BORING: 32.5 ft

DATE: 6/1/92

LOG OF BORING NO.1208+90L													
BLACKBURN CREEK BRIDGE													
TYPE: Air		LOCATION: Construction C.L. Sta. 1208+90, 32 ft Lt		COHESION, TON/SQ FT									
DEPTH, FT	SYMBOL SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRP. WT LB/CU FT	Q							% RECOVERY	
					PLASTIC LIMIT			WATER CONTENT, %		LIQUID LIMIT			
					0.2	0.4	0.6	0.8	1.0	1.2	1.4		
		SURF. EL: 1425.6											
		Loose brown sandy silt with sandstone fragments											
		Stiff reddish tan mottled clay with sandstone fragments and cobbles											
10			10										
15		Very soft tan and gray, severely weathered shale with sandstone seams and layers and ferrous stains											
25		Hard tan and light gray, moderately weathered, fine- to medium-grained sandstone with clay seams and layers and ferrous stains											
30		-vuggy below 30.5 ft											
35		Hard gray, fresh shale with interbedded sandstone											
COMPLETION DEPTH: 35 ft			DEPTH TO WATER IN BORING:		DATE:								

LOG OF BORING NO. I208+90R												
BLACKBURN CREEK BRIDGE												
TYPE: Air		LOCATION: Construction C.L. Sta. 1208+90, 32 ft Rt										
DEPTH FT	SYMBOL SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT							% RECOVERY
					0.2 0.4 0.6 0.8 1.0 1.2 1.4 PLASTIC LIMIT WATER CONTENT, % LIQUID LIMIT + • - 10 20 30 40 50 60 7C							
		SURF. EL: 1420.3										
5		Loose brown sandy silt with sandstone fragments - rootlets										
10		Stiff reddish tan mottled sandy clay with sandstone fragments and cobbles										
15		Very soft brown and gray, very severely weathered shale with ferrous stains										
20		Very hard to hard tan and gray, moderately weathered, fine-grained sandstone - porous - vuggy, 23.5 - 25 ft										
30		Very hard light gray, fresh, fine-grained sandstone with shale laminations										

COMPLETION DEPTH: 29 ft DEPTH TO WATER IN BORING: 24.5 ft DATE: 5/31/92



SHEET 1 OF 4
 SOIL BORINGS
 U.S. HIGHWAY 71 OVER BLACKBURN CREEK
 WASHINGTON COUNTY
 ROUTE 71 SEC. 16
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 DRAWN BY: DEH DATE: FEB. 1993
 CHECKED BY: HJP DATE: FEB. 1993
 DESIGNED BY: JHR DATE: FEB. 1993
 SCALE: AS NOTED
 BRIDGE NO. 6479 A&B DRAWING NO. 33986

LOG OF BORING NO. 1210+50L													
BLACKBURN CREEK BRIDGE													
TYPE: Air				LOCATION: Construction C.L. Sta. 1210+10, 32 ft Lt									
DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DR. WT. LB/CF	COHESION, TON/SQ FT							% RECOVERY
						<div>0.2 0.4 0.6 0.8 1.0 1.2 1.4</div> <div>PLASTIC LIMIT WATER CONTENT, % LIQUID LIMIT</div> <div>10 20 30 40 50 60 70</div>							
			SURF. EL: 1370.8										
			Loose brown sandy silt with sandstone fragments - rootlets										
			Stiff reddish tan sandy clay with sandstone fragments -rootlets										
5				8/6									
				0"									
			Very soft brown, severely weathered shale with ferrous stains										
			Hard gray to light gray, slightly weathered, fine-grained sandstone with shale seams and layers										
10			-tan, medium-grained layer at 10 - 10.5 ft									30	11
			Very hard gray, fresh, fine-grained sandstone with thin-bedded shale laminations and seams and shale inclusions										
15												90	40
												100	47
			-medium-grained layer, 21.7 - 22 ft										
			Hard gray, fresh shale with sandstone partings and seams									100	77
25													
												100	85
												80	58
35													

LOG OF BORING NO. 1210+50R												
BLACKBURN CREEK BRIDGE												
TYPE: Air		LOCATION: Construction C.L. Sta. 1210+50, 32 ft R										
DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DR. WT. LB/CF	COHESION, TON/SQ FT						% RECOVERY
						0.2 0.4 0.6 0.8 1.0 1.2 1.4						
			SURF. EL: 1367.5			PLASTIC LIMIT WATER CONTENT, % LIQUID LIMIT						
						10 20 30 40 50 60 70						
			Loose brown fine sandy silt with sandstone fragments - cobbles									
			Stiff to very stiff reddish tan and tan mottled sandy clay with sandstone fragments and cobbles									
5				20								
10				21								
			Very soft brown, severely weathered shale with ferrous stains									
15			Hard tan and light gray, moderately weathered, fine-grained sandstone with ferrous stains									
			Soft dark gray, moderately weathered shale with ferrous stains									
25			Soft dark gray, fresh shale									
			-40° shear at 28 ft									
35												
COMPLETION DEPTH: 34 ft				DEPTH TO WATER								
DATE: 5/27/92				IN BORING: 20 ft				DATE: 5/27/92				

LOG OF BORING NO.1212+30L														
BLACKBURN CREEK BRIDGE														
TYPE: Air			LOCATION: Construction C.L. Sta. 1212+30, 32 ft Lt											
DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DR. WT LBS/CU FT	COHESION, TON/SQ FT							% RECOVERY	
						0.2 0.4 0.6 0.8 1.0 1.2 1.4								
						PLASTIC LIMIT		WATER CONTENT, %			LIQUID LIMIT			
						+		+-----+-----+			+			
			SURF. EL: 1311.9			10	20	30	40	50	60	70		% RQD
			Loose dark brown sandy silt with frequent sandstone cobbles	25										
			Hard dark gray, fresh shale with sandstone partings											
5			Very hard, gray and light gray, fresh, fine-grained sandstone with shale laminations, seams and layers and shale inclusions -wet at 4.5 ft											40
10														47
15														
COMPLETION DEPTH: 13.5 ft				DEPTH TO WATER IN BORING: 5 ft				DATE: 5/27/92						

LOG OF BORING NO. 1212+30R														
BLACKBURN CREEK BRIDGE														
TYPE: Air			LOCATION: Construction C.L. Sta. 1212+30, 32 ft Rt											
DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DR. WT. LB/CF	COHESION, TON/SQ FT							RECOVERY	
						0.2	0.4	0.6	0.8	1.0	1.2	1.4		
						PLASTIC LIMIT	WATER CONTENT, %			LIQUID LIMIT	%			
						10	20	30	40	50		60	70	
5			SURF. EL: 1308.3+ Soft red tan fine sandy clay with sandstone fragments											
10			Very hard gray to light gray, fresh, fine-grained sandstone with shale laminations and seams											
15			-increasing shale below 13.5 ft											

LOG OF BORING NO. 1214+10L												
BLACKBURN CREEK BRIDGE												
TYPE: Air			LOCATION: Construction C.L. Sta 1214+10, 32 ft Lt									
DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DR. WT. LB/CF	COHESION, TON/SQ FT						% RECOVERY
						0		0.2		0.4		
						PLASTIC LIMIT	WATER CONTENT, %	LIQUID LIMIT				
						+	+	+	+	+		
						10	20	30	40	50	60	70
SURF. EL: 1302.4												
Loose brown sandy silt with sandstone cobbles and boulders												
Soft dark gray, severely weathered shale with ferrous stains												
25 0"												
25 0"												
Hard tan and gray, slightly weathered, fine-grained sandstone -with thin-bedded shale laminations below 13.5 ft												
100 55												
85 42												
Soft gray, fresh shale with sandstone seams and layers												
NOTE: Water coming up at this location while drilling 1214+10R.												
COMPLETION DEPTH: 21.5 ft												
DATE: 5/10/92												
DEPTH TO WATER												
DATE: 5/10/92												

LOG OF BORING NO. 1214+10R																
BLACKBURN CREEK BRIDGE																
TYPE: Air				LOCATION: Construction C.L. Sta 1214+10, 32 ft Rt												
DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DR. WT. LB/CF	COHESION, TON/SQ FT										% RECOVERY
						<div>0.2 0.4 0.6 0.8 1.0 1.2 1.4</div> <div>PLASTIC LIMIT WATER CONTENT, % LIQUID LIMIT</div> <div>10 20 30 40 50 60 70</div>										
			SURF. EL: 1303.7													
			Very soft brown and dark gray, severely weathered shale with clay seams												% RCD	
5																
			Hard gray, slightly weathered, fine-grained sandstone with thin-bedded shale laminations and seams												100 80	
10																
			-fractured zone, 12.5 - 13 ft												100 88	
15																
			NOTE: Water coming up at Boring 1214+10L while drilling at this location.													
20																
													</			

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		45	
				JOB NO.		R 40039		
				6479 A & B		SOIL BORINGS	33987	



SHEET 2 OF 4
SOIL BORINGS
U.S. HIGHWAY 71 OVER BLACKBURN CREEK
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY DEH DATE FEB. 1993
CHECKED BY HJP DATE FEB. 1993
DESIGNED BY JHR DATE FEB. 1993
SCALE: AS NOTED
BRIDGE NO. 6479 A & B DRAWING NO. 33987

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		46	
				JOB NO.	R 40039			
				6479 A & B	SOIL BORINGS		33988	

LOG OF BORING NO. 1215+90L BLACKBURN CREEK BRIDGE									
TYPE: Air		LOCATION: Construction C.L. Sta 1215+90, 32 ft Lt							
DEPTH, FT	SYMBOL	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT			WATER CONTENT, %	RECOVERY
					PLASTIC LIMIT	LIQUID LIMIT			% ROD
		SURF. EL: 1337.6							
		Loose brownish tan fine sandy silt with sandstone fragments							
		Stiff brown and reddish tan mottled sandy clay with sandstone fragments							
5		Very stiff reddish brown and tan mottled sandy clay with sandstone fragments and roots	22						
10		Hard tan to gray, moderately weathered, fine- to medium-grained sandstone with ferrous stains and close-bedded shale laminations and seams -with clay seams below 7.25 ft							90 58
15									100 88
20									100 67
COMPLETION DEPTH: 20.5 ft		DEPTH TO WATER IN BORING: Dry		DATE: 5/18/92					

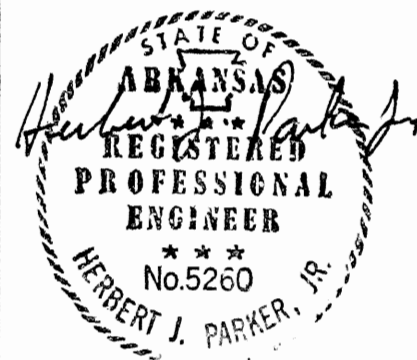
LOG OF BORING NO. 1215+90R BLACKBURN CREEK BRIDGE									
TYPE: Air		LOCATION: Construction C.L. Sta 1215+90, 32 ft Rt							
DEPTH, FT	SYMBOL	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT			WATER CONTENT, %	RECOVERY
					PLASTIC LIMIT	LIQUID LIMIT			% ROD
		SURF. EL: 1337.1							
		Loose brownish tan fine sandy silt							
		Firm to stiff brown and tan mottled sandy clay with sandstone fragments, cobbles and boulders	25 0"						
5									
10		Hard brown, moderately to slightly weathered, medium-grained sandstone							100 47
15									100 62
20									
COMPLETION DEPTH: 20 ft		DEPTH TO WATER IN BORING: Dry		DATE: 5/12/92					

LOG OF BORING NO. 1217+50L BLACKBURN CREEK BRIDGE									
TYPE: Air		LOCATION: Construction C.L. Sta 1217+50, 32 ft Lt							
DEPTH, FT	SYMBOL	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT			WATER CONTENT, %	RECOVERY
					PLASTIC LIMIT	LIQUID LIMIT			% ROD
		SURF. EL: 1363.1							
		Loose tan fine sandy silt							
		Stiff brown and tan mottled sandy clay with sandstone fragments and cobbles	25 0"						
5									
10		Soft tan and gray, moderately weathered, fine-grained sandstone with shale laminations and ferrous stains	25 0"						
15									
20		-hard below 18 ft							
20		-vertical fracture 21 - 21.4 ft							95 55
30									90 52
COMPLETION DEPTH: 29 ft		DEPTH TO WATER IN BORING: Dry		DATE: 5/18/92					

LOG OF BORING NO. 1217+50R BLACKBURN CREEK BRIDGE									
TYPE: Air		LOCATION: Construction C.L. Sta 1217+50, 32 ft Rt							
DEPTH, FT	SYMBOL	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT			WATER CONTENT, %	RECOVERY
					PLASTIC LIMIT	LIQUID LIMIT			% ROD
		SURF. EL: 1361.2							
		Stiff brown and reddish tan mottled clay with sandstone fragments							
5									
10		Soft brown and gray severely weathered shale with ferrous stains	25 0"						
15		Soft gray to light gray, slightly weathered, fine-grained sandstone with ferrous stains and shale laminations							
25									100 80
35									100 52
COMPLETION DEPTH: 34 ft		DEPTH TO WATER IN BORING: Dry		DATE: 5/9/92					

LOG OF BORING NO. 1218+80L BLACKBURN CREEK BRIDGE									
TYPE: Air		LOCATION: Construction C.L. Sta 1218+80, 32 ft Lt							
DEPTH, FT	SYMBOL	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT			WATER CONTENT, %	RECOVERY
					PLASTIC LIMIT	LIQUID LIMIT			% ROD
		SURF. EL: 1384.5							
		Firm reddish tan sandy clay							
		Hard tan, moderately weathered, fine- to medium-grained sandstone with horizontal and vertical fractures, ferrous stains and shale laminations							
5		-tan and gray below 6 ft							100 62
10		Soft dark gray, slightly weathered shale							100 67
15									
COMPLETION DEPTH: 12 ft		DEPTH TO WATER IN BORING: Dry		DATE: 5/13/92					

LOG OF BORING NO. 1218+80R BLACKBURN CREEK BRIDGE									
TYPE: Air		LOCATION: Construction C.L. Sta 1218+80, 32 ft Rt							
DEPTH, FT	SYMBOL	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT			WATER CONTENT, %	RECOVERY
					PLASTIC LIMIT	LIQUID LIMIT			% ROD
		SURF. EL: 1374.6							
		Loose brown sandy silt with numerous sandstone cobbles and boulders							
5		Very soft brown and gray severely weathered shale with numerous ferrous partings, severely fractured	25 0"						
10			25 0"						
15									
20		Soft dark gray, fresh shale							100 57
30		Very hard gray, slightly weathered, fine- to medium-grained sandstone							
		Very hard light gray to gray, fresh, fine-grained sandstone with shale laminations							100 85
		-slightly vuggy, 24 - 25 ft							
COMPLETION DEPTH: 28.5 ft		DEPTH TO WATER IN BORING: Dry		DATE: 5/13/92					



SHEET 3 OF 4
SOIL BORINGS
U.S. HIGHWAY 71 OVER BLACKBURN CREEK
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: DEH DATE: FEB. 1993
CHECKED BY: HJP DATE: FEB. 1993
DESIGNED BY: JHR DATE: FEB. 1993
BRIDGE NO. 6479 A & B DRAWING NO. 33988
SCALE: AS NOTED

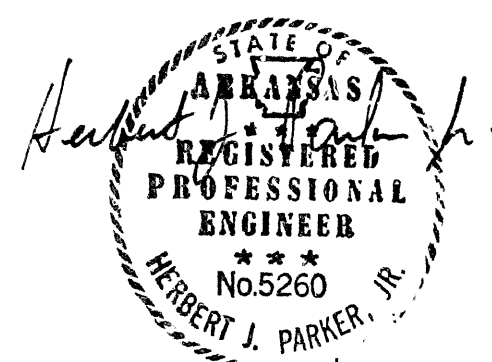
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		47	
				JOB NO.		R 40039		
				6479 A&B		SOIL BORINGS		33989

LOG OF BORING NO. 1220+10L BLACKBURN CREEK BRIDGE									
TYPE: Air		LOCATION: Construction C.L. Sta. 1220+10, 32 ft Lt							
DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CF	COHESION, TON/SQ FT			
						PLASTIC LIMIT	WATER CONTENT, %	LIQUID LIMIT	% RECOVERY
			SURF. EL: 1407.0						
5			Stiff brown and reddish tan mottled clay with sandstone fragments and rootlets	12					
10			Soft brown and gray, severely weathered shale	22					
15			Soft dark gray, slightly weathered shale	25					
			6" bounce						
20			Hard gray, slightly weathered, fine-grained sandstone with shale laminations, seams and layers and ferrous stains						100 37
25			Soft dark gray, fresh shale with poorly-cemented sandstone layers						100 63
30			Hard light gray to gray, slightly weathered, medium-grained sandstone						100 48
35			Very hard gray, slightly weathered, fine-grained sandstone with thin-bedded shale laminations, seams and layers						
COMPLETION DEPTH: 30 ft				DEPTH TO WATER IN BORING: 8 ft		DATE: 5/22/92			

LOG OF BORING NO. 1221+38L BLACKBURN CREEK BRIDGE									
TYPE: Air		LOCATION: Construction C.L. Sta. 1221+38, 32 ft Lt							
DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CF	COHESION, TON/SQ FT			
						PLASTIC LIMIT	WATER CONTENT, %	LIQUID LIMIT	% RECOVERY
			SURF. EL: 1434.1						
5			Loose brown sandy silt						
10			Stiff reddish tan sandy clay with sandstone fragments and cobbles	12					
15			Stiff brown and gray shaley clay with ferrous stains and rootlets	11					
20			Soft brown, severely weathered, coarse-grained sandstone, poorly cemented	19					
25			Soft, gray, slightly weathered shale with ferrous stains						
30									100 30
35			Hard gray, fresh shale						100 40
40									100 0
45			Very hard gray, fresh, medium-grained sandstone with shale seams and layers						100 17
COMPLETION DEPTH: 41 ft				DEPTH TO WATER IN BORING: 25 ft		DATE: 6/9/92			

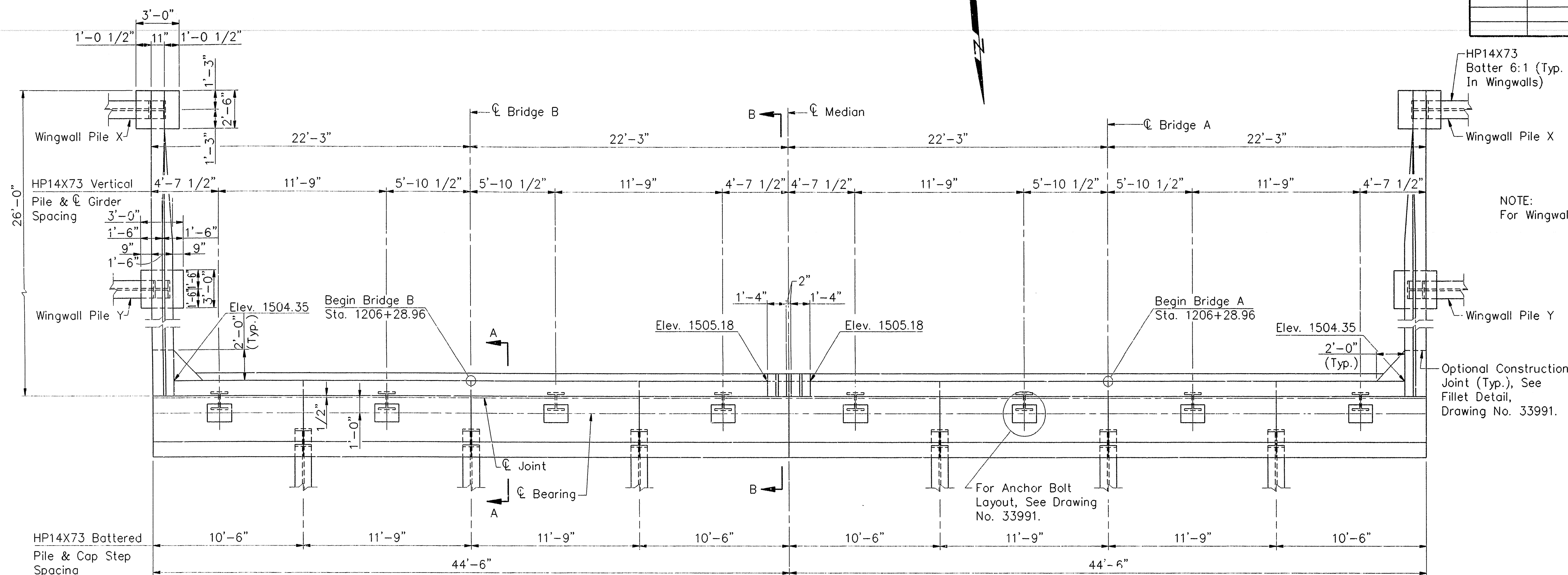
LOG OF BORING NO. 1220+10R BLACKBURN CREEK BRIDGE									
TYPE: Air		LOCATION: Construction C.L. Sta. 1220+10, 32 ft Rt							
DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CF	COHESION, TON/SQ FT			
						PLASTIC LIMIT	WATER CONTENT, %	LIQUID LIMIT	% RECOVERY
			SURF. EL: 1406.5						
5			Loose brown sandy silt						
10			Firm to stiff reddish tan and brown mottled clay with sandstone fragments and cobbles	17					
15				22					
20									
25			Hard gray, moderately weathered, medium-grained sandstone with medium-bedded shale laminations and seams -zone of ferrous staining, 17.5 - 18.5 ft						70 18
30			-increasing shale below 26 ft						100 35
35									100 60
COMPLETION DEPTH: 30 ft				DEPTH TO WATER IN BORING: Dry		DATE: 5/21/92			

LOG OF BORING NO. 1221+38R BLACKBURN CREEK BRIDGE									
TYPE: Auger 6 ft, wash		LOCATION: Construction C.L. Sta. 1221+38, 32 ft Rt							
DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CF	COHESION, TON/SQ FT			
						PLASTIC LIMIT	WATER CONTENT, %	LIQUID LIMIT	% RECOVERY
			SURF. EL: 1438.0						
5			Firm brown sandy silt with frequent sandstone gravel and cobbles						
10			Stiff reddish tan sandy clay	11					
15									
20			Soft brown, severely weathered shale						
25				25					
30									
35			Hard gray and tan, severely to moderately weathered, fine- to medium-grained sandstone with ferrous stains and clay seams						100 0
40			-clay layer 23 - 23.4 ft						98 38
45			Hard gray, fresh, fine-grained sandstone with close-bedded shale laminations and seams -poorly cemented layer, 28.5-29 ft						
COMPLETION DEPTH: 31 ft				DEPTH TO WATER IN BORING: Dry to 6 ft		DATE: 6/11/92			



SHEET 4 OF 4
SOIL BORINGS
U.S. HIGHWAY 71 OVER BLACKBURN CREEK
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: DEH DATE: FEB. 1993
CHECKED BY: HJP DATE: FEB. 1993
DESIGNED BY: JHR DATE: FEB. 1993
SCALE: AS NOTED
BRIDGE NO. 6479 A&B DRAWING NO. 33989

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		48	
				JOB NO.		R40039		
				16479 A&B DTLS. S. ABUTMENT		33990		



NOTE:
For Sections A-A, B-B, And C-C,
See Drawing No. 33991.

PLAN
Scale: 1/4" = 1'-0"

NOTE:
For Wingwall Details, See Drawing No. 33992.

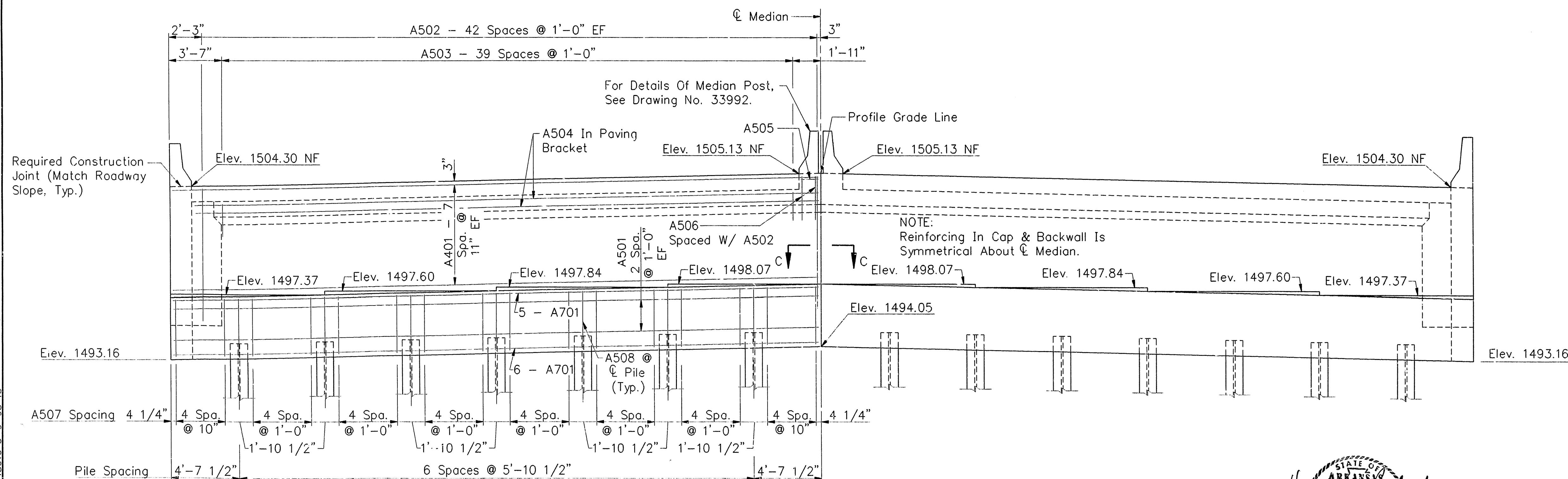
Optional Construction
Joint (Typ.), See
Fillet Detail,
Drawing No. 33991.

TABLE OF PILE LENGTHS			
	Location	Number Req'd.	Length
Bridge A	Abutment Piles	7	75'
	Wingwall Pile X	1	82'
	Wingwall Pile Y	1	79'
Bridge B	Abutment Piles	7	88'
	Wingwall Pile X	1	95'
	Wingwall Pile Y	1	92'

LEGEND

EF = Each Face
NF = Near Face

NOTE:
For General Notes, See Drawing No. 33984.



ELEVATION - LOOKING BACK
Scale: 1/4" = 1'-0"

SHEET 1 OF 3
DETAILS OF SOUTH ABUTMENT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION

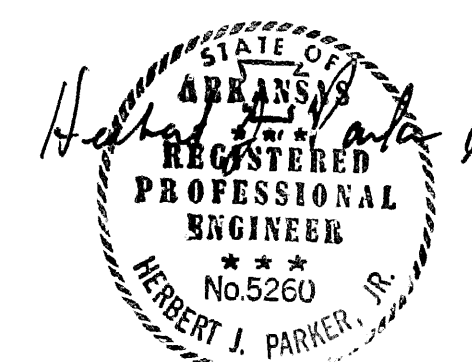
LITTLE ROCK, ARK.

DRAWN BY: JBM DATE: FEB. 1993
CHECKED BY: JDG DATE: FEB. 1993
DESIGNED BY: RLE DATE: FEB. 1993

SCALE: AS NOTED

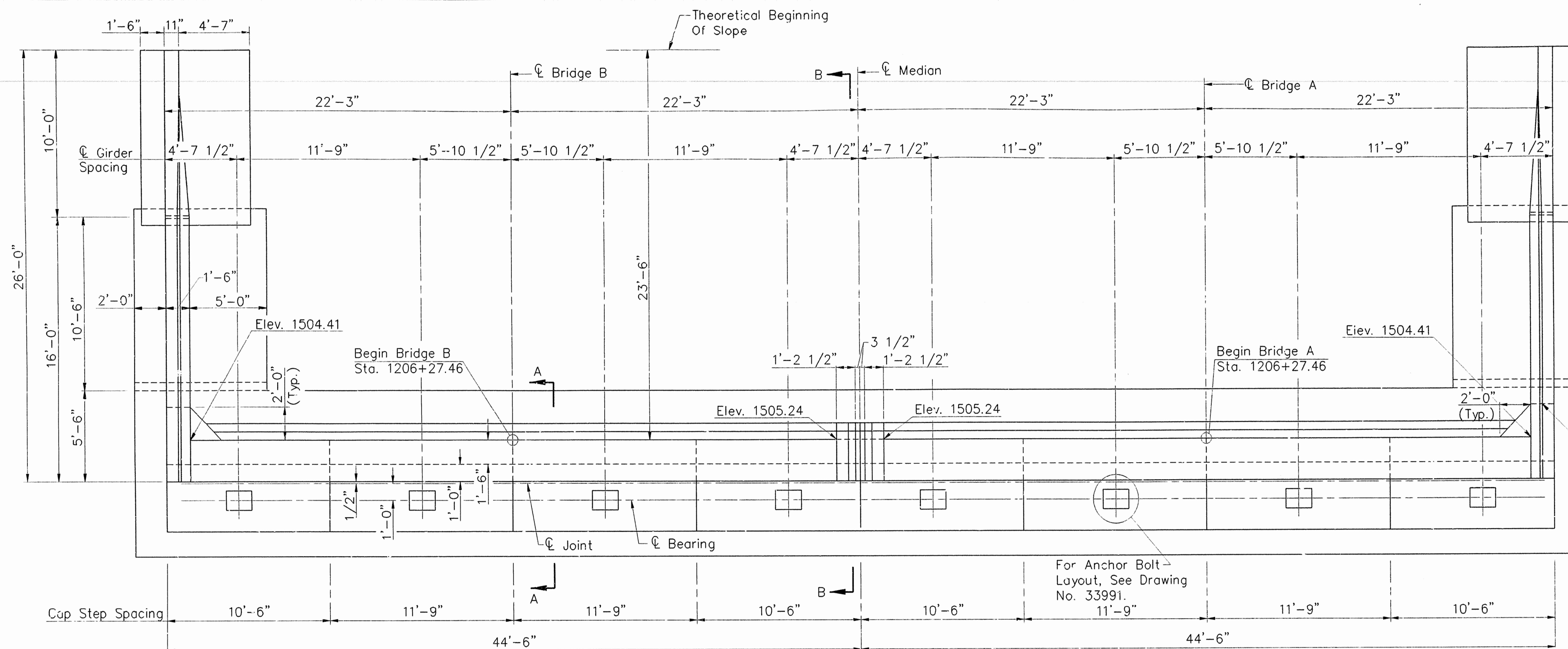
BRIDGE NO. 6479 A&B

DRAWING NO. 33990



BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
5-15-96	5-17-96			6	ARK.		48A	
2-7-97	2-12-97							
				JOB NO.		R40039		
				① 6479 A&B DTLS. S. ABUTMENT			33990	

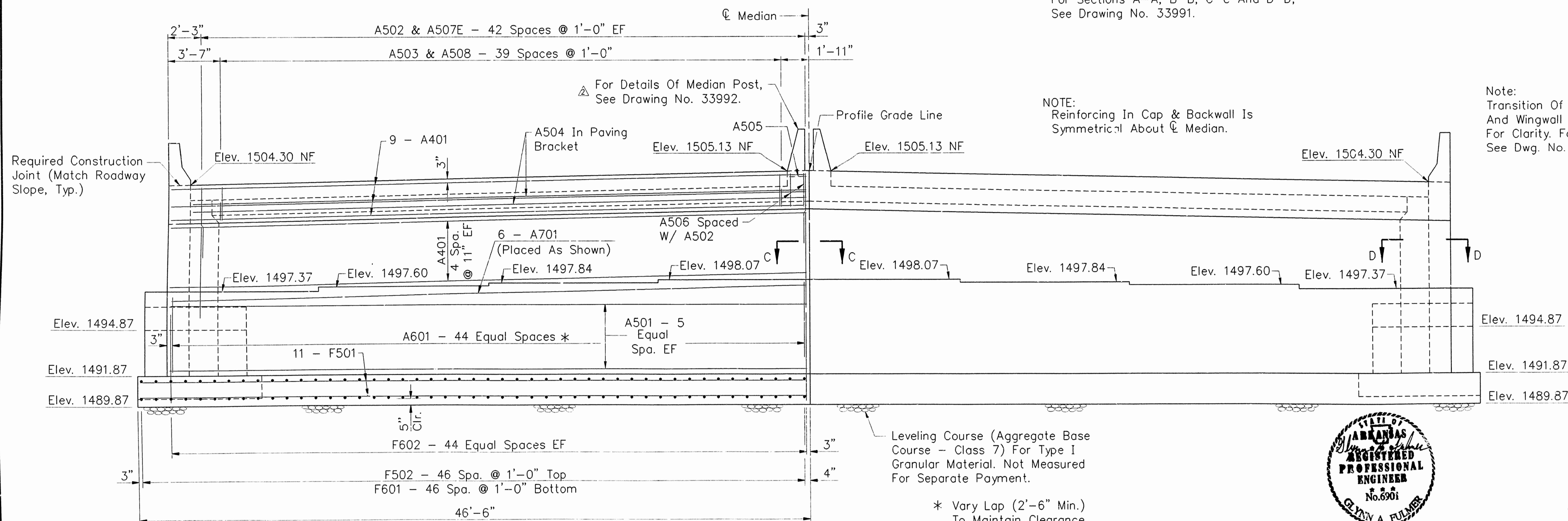


NOTE:
For Wingwall Details, See Drawing No. 33992.

Optional Construction Joint (Typ.), See Section D-D, Drawing No. 33991.

PLAN
Scale: 1/4" = 1'-0"

NOTE:
For Sections A-A, B-B, C-C And D-D, See Drawing No. 33991.



Note:
Transition Of The Parapet And Wingwall Not Shown For Clarity. For Details See Dwg. No. 33992.

NOTE:
For General Notes, See Drawing No. 33984.

2. Revised Median Side Parapet Configuration

* Vary Lap (2'-6" Min.) To Maintain Clearance At Top Of Cap.

LEGEND
EF = Each Face
NF = Near Face



ELEVATION - LOOKING BACK
Scale: 1/4" = 1'-0"

SHEET 1 OF 3
DETAILS OF SOUTH ABUTMENT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JBM/HEW DATE: FEB. 1993/APR. 1996
CHECKED BY: JDG DATE: FEB. 1993/APR. 1996 SCALE: AS NOTED
DESIGNED BY: RLE/MMM DATE: FEB. 1993/APR. 1996

BRIDGE NO. 6479 A&B DRAWING NO. 33990A

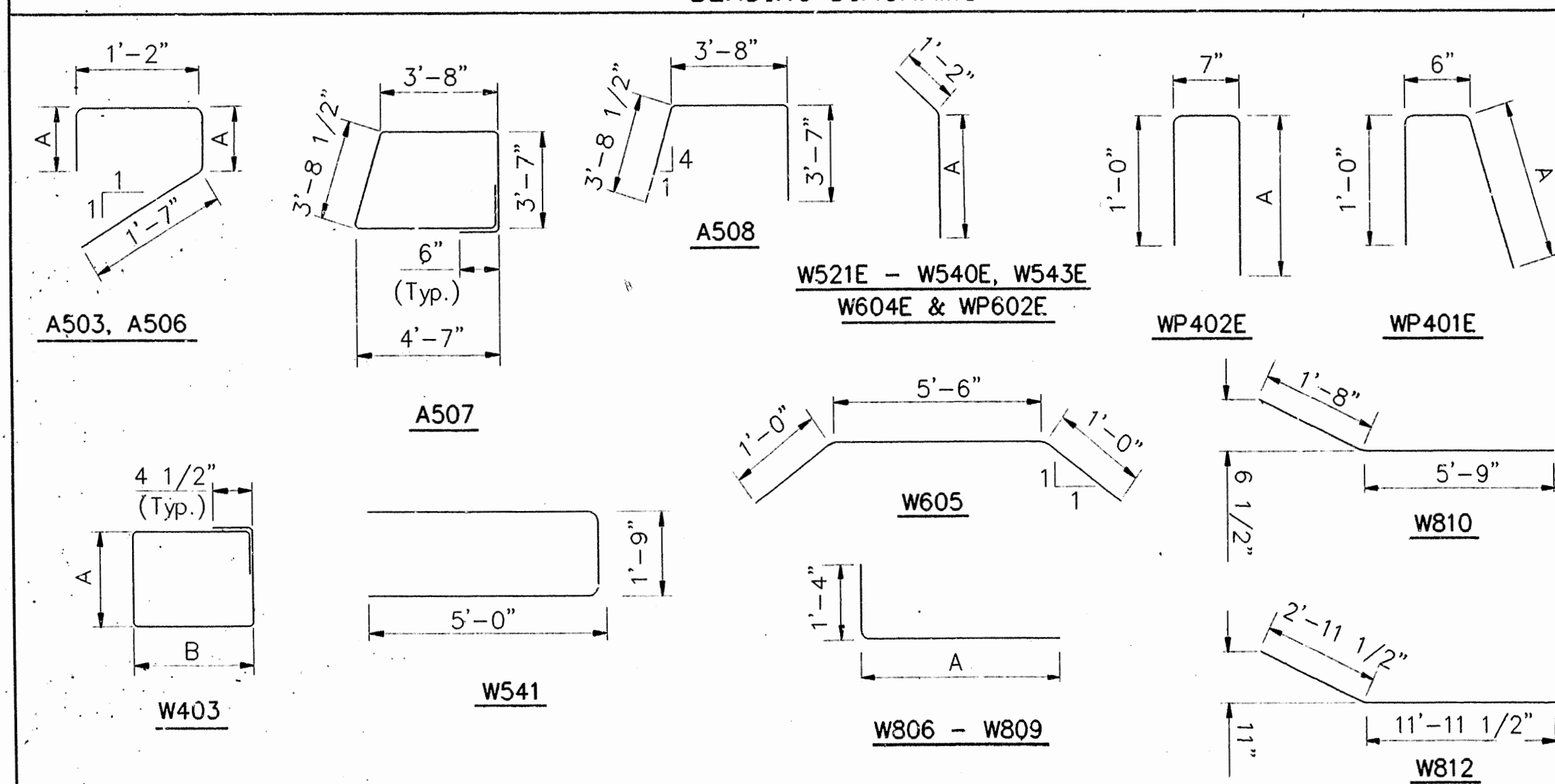
BRIDGE ENGINEER

R/K/JBM WMM 0.91148014 2-7-97

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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					JOB NO.	R40039		
				① 6479	A&B DTLS - S. ABUTMENT			3399

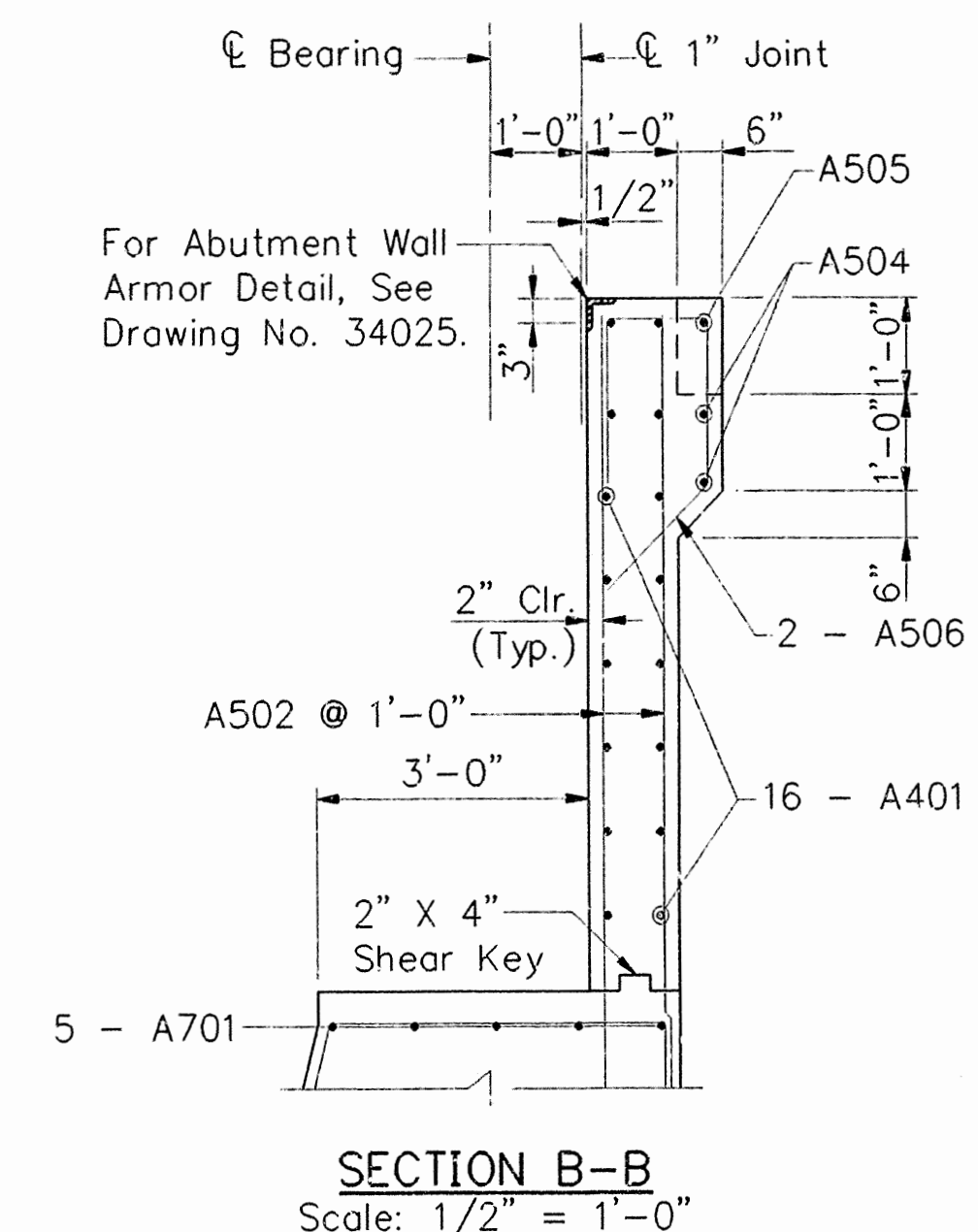
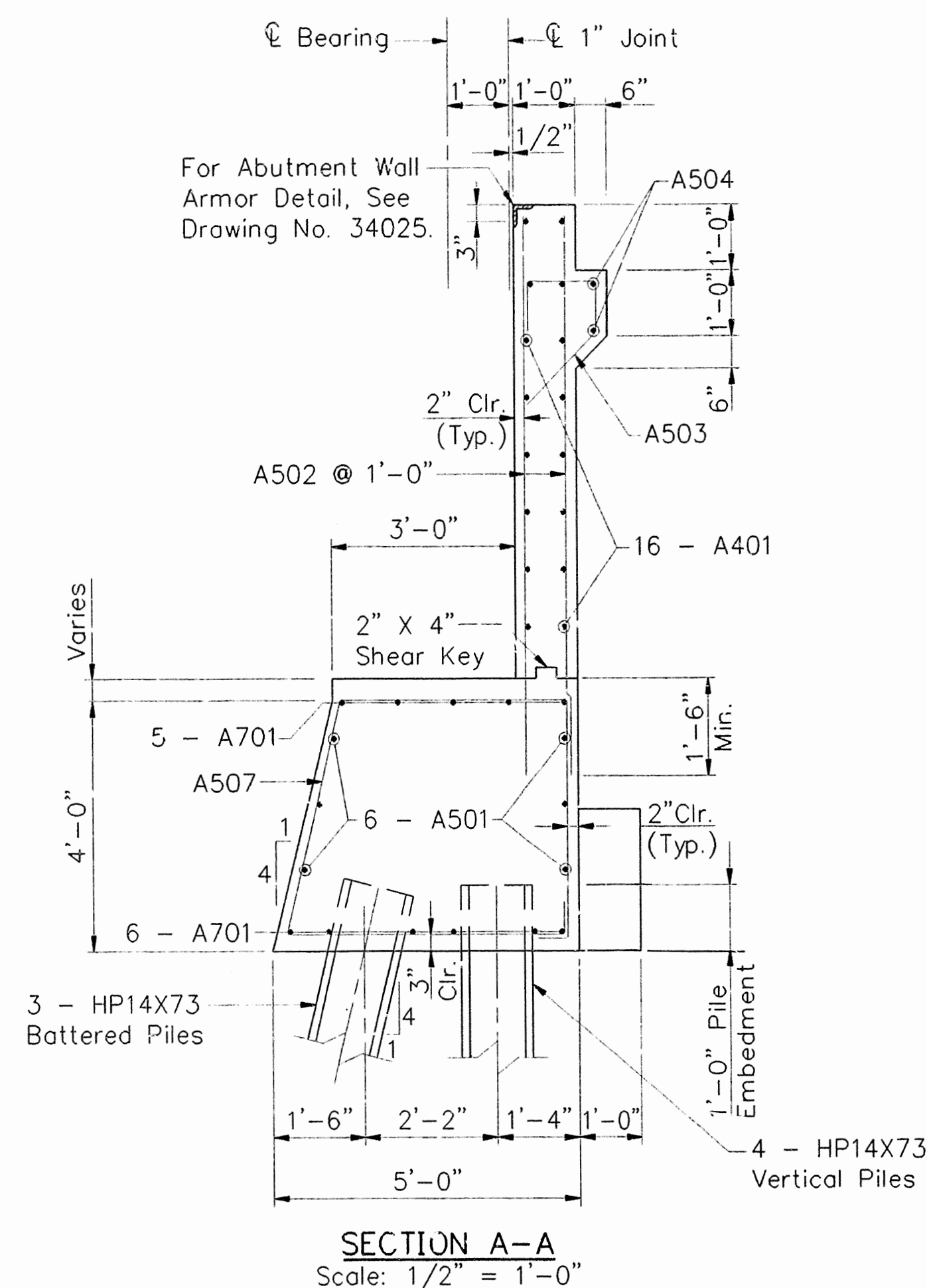
COMMON BARS											
MARK	NO	LENGTH	PIN DIA	A	B	MARK	NO	LENGTH	PIN DIA	A	B
A401	16	44'-2"	STR.			WP404E	1	2'-2"	STR.		
						WP406E	6	1'-2"	STR.		
A501	6	44'-2"	STR.								
A502	86	8'-6"	STR.			WP601E	4	4'-3"	STR.		
A503	40	4'-0 1/2"	2 1/2"	9"		WP602E	2	3'-0	4 1/2"	1'-10"	
A504	2	42'-8"	STR.								
A505	1	1'-2"	STR.								
A506	2	6'-0 1/2"	2 1/2"	1'-9"		W501 TO W510	1 EA.	11'-11" TO 9'-4 1/2"	STR.		
A507	40	16'-0 1/2"	2 1/2"			W511	1	9'-2 1/2"	STR.		
A508	7	10'-9"	2 1/2"			W512	1	8'-11"	STR.		
						W513 TO W520	1 EA.	8'-9 1/2" TO 6'-9 1/2"	STR.		
A701	11	44'-2"	STR.			W542	2	11'-10"	STR.		
W401	3	7'-3"	STR.			W601	6	11'-2 1/2"	STR.		
W402	3	1'-2"	STR.			W602E	4	8'-8 1/2"	STR.		
W403	6	9'-5"	2"	1'-10 1/2"	2'-8"	W603E	4	7'-9"	STR.		
W404	6	7'-10"	2"	1'-7"	2'-2"						
W521E TO W530E	1 EA.	10'-3 1/2" TO 7'-9 1/2"	2 1/2"	9'-1 1/2" TO 6'-7 1/2"		WP401E	24	4'-3"	2"	2'-11"	
W531E	1	7'-7 1/2"	2 1/2"	6'-5 1/2"		WP402E	4	4'-4"	2"	2'-11"	
W532E	1	7'-4"	2 1/2"	6'-2"		WP403E	8	9'-8"	STR.		
W533E TO W540E	1 EA.	7'-2 1/2" TO 5'-2 1/2"	2 1/2"	6'-0 1/2" TO 4'-0 1/2"		WP405E	8	15'-8"	STR.		
W541	3	11'-6 1/2"	2 1/2"								
W543E	2	10'-3"	2 1/2"	9'-1		W501 TO W510	1 EA.	11'-5" TO 8'-10 1/2"	STR.		
						W511	1	8'-8 1/2"	STR.		
W604E	6	9'-7"	4 1/2"	8'-5"		W512	1	8'-5"	STR.		
W605	7	7'-6"	4 1/2"			W513 TO W520	1 EA.	8'-3 1/2" TO 6'-3 1/2"	STR.		
W606	6	2'-8"	STR.			W542	2	11'-4"	STR.		
W801	10	22'-8"	STR.			W601	6	10'-8 1/2"	STR.		
W802	2	18'-7"	STR.			W602E	4	8'-2 1/2"	STR.		
W803	2	16'-1"	STR.			W603E	4	7'-3"	STR.		
W804	2	13'-6 1/2"	STR.								
W805	2	8'-0 1/2"	STR.			WP401E	24	3'-10 1/2"	2"	2'-6 1/2"	
W806	2	9'-7"	6"	8'-5 1/2"		WP402E	4	3'-11 1/2"	2"	2'-6 1/2"	
W807	2	7'-2"	6"	6'-0 1/2"		WP403E	6	9'-8"	STR.		
W808	2	4'-8"	6"	3'-6 1/2"		WP405E	6	15'-8"	STR.		
W809	16	8'-6"	6"	7'-4 1/2"							
W810	3	7'-5"	6"								
W811	3	11'-7"	STR.								
W812	3	14'-11"	6"								
COMMON BARS											
BRIDGE A											
BRIDGE B											

BENDING DIAGRAMS

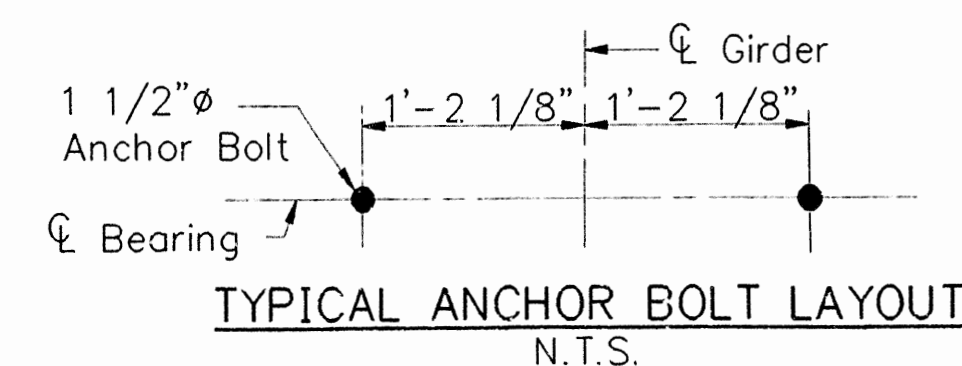
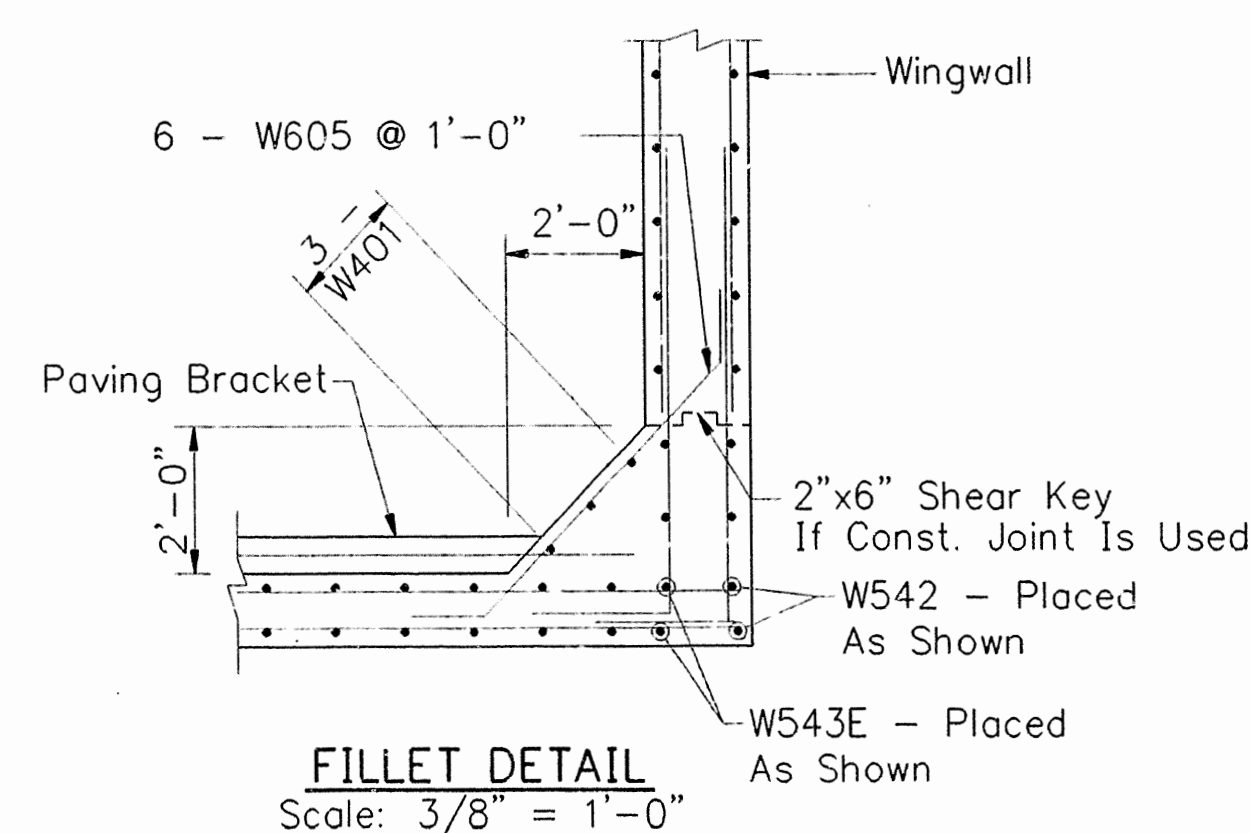
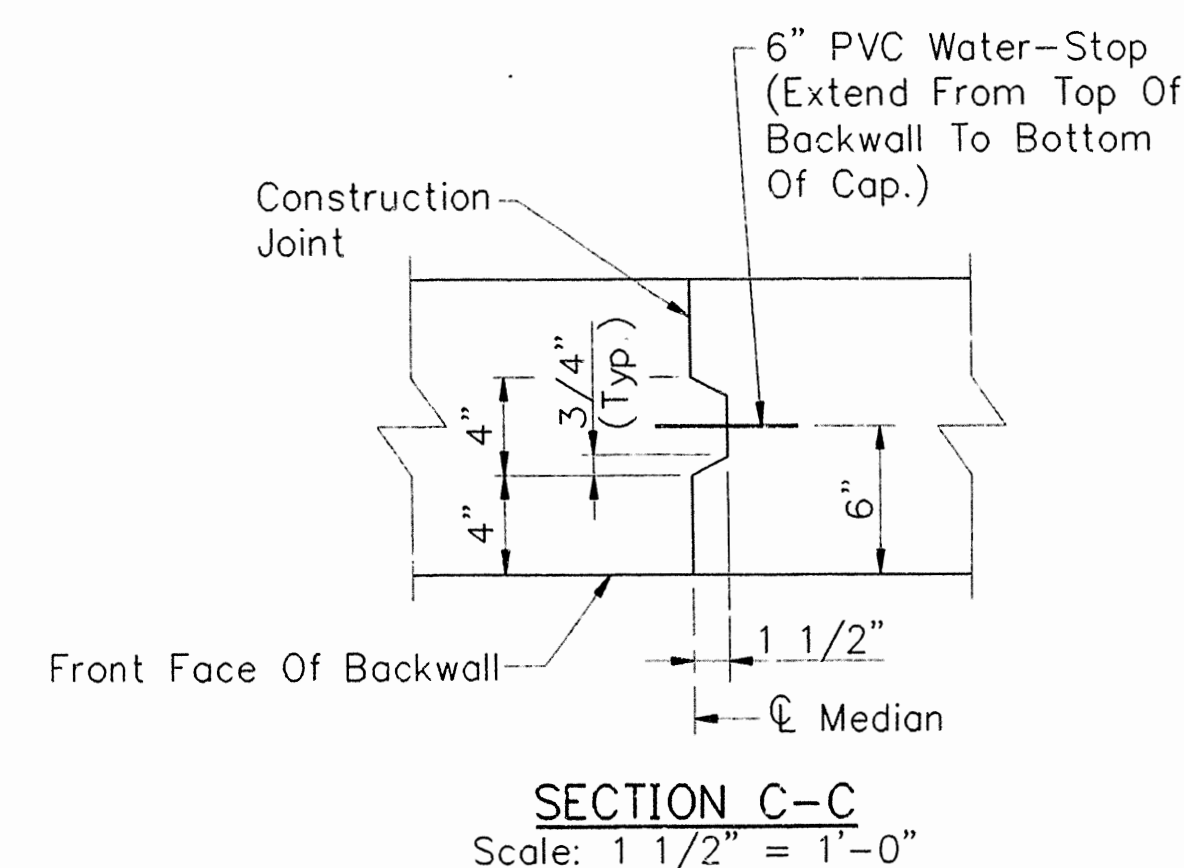


NOTES:

- NOTES:
1. Dimensions Of Bars In Bending Diagram Are Out-To-Out.
 2. Bar Designations Ending With "E" Indicate Epoxy Coated Bars.
 3. Common Bars Shown Are For One Bridge Only.



NOTE:
For Locations Of Sections A-A, B-B,
And C-C, See Drawing No. 33990.



Note:
For Elastomeric Bearing Detail
See Drawing No. 34032.

SHEET 2 OF 3

DETAILS OF SOUTH ABUTMENT

U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: JBM DATE: FEB. 1993
CHECKED BY: JDG DATE: FEB. 1993
DESIGNED BY: RLE DATE: JAN. 1993

SCALE: A.S NOTED

BRIDGE NO. 6479 A&B

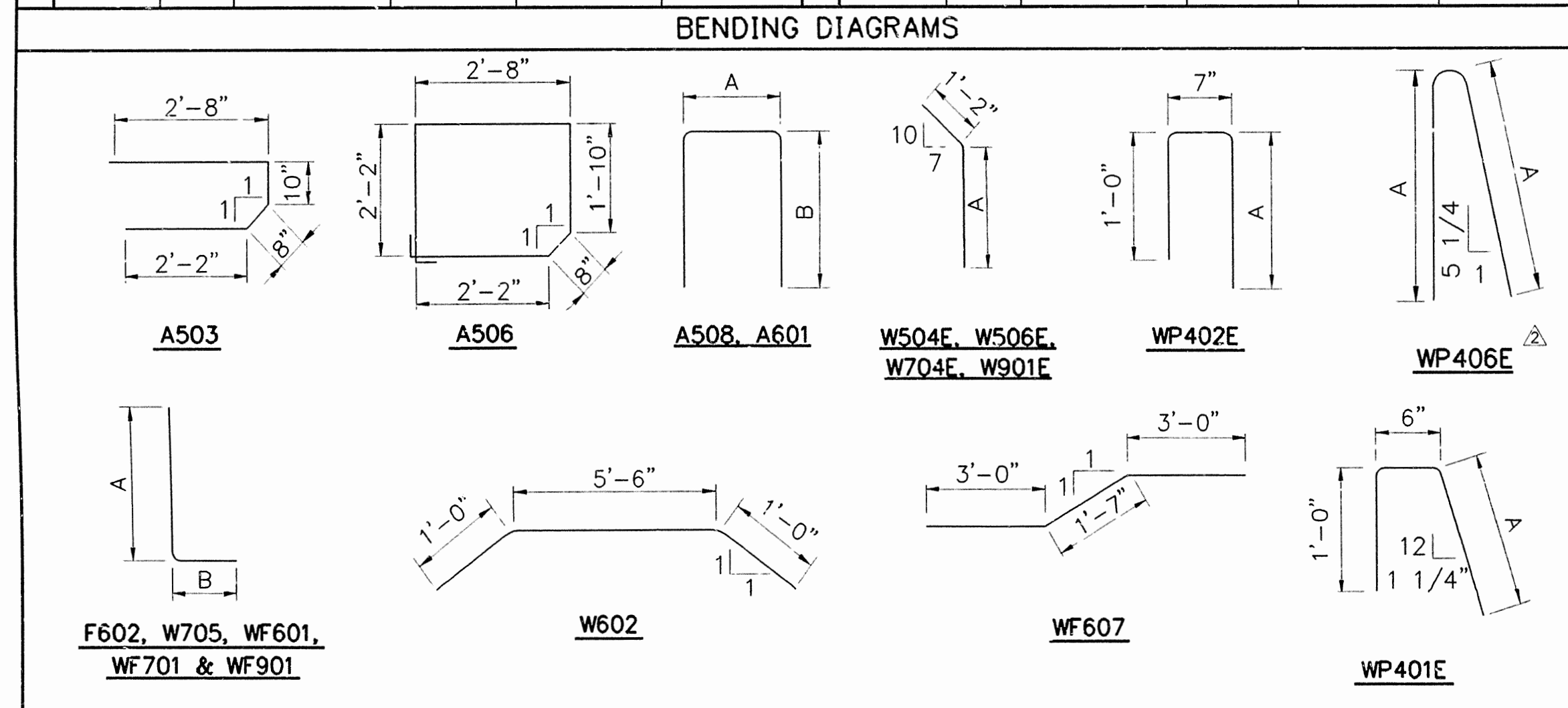
DRAWING NO. 33991

BRIDGE ENGINEER

A circular professional seal for the State of Arkansas. The outer ring contains the text "STATE OF ARKANSAS" at the top and "HERBERT J. PARKER, JR." at the bottom. Inside the ring, the text "REGISTERED PROFESSIONAL ENGINEER" is prominently displayed in the center, with "No. 5260" below it. The seal is signed with "Herbert J. Parker, Jr." in cursive script across the top and sides.

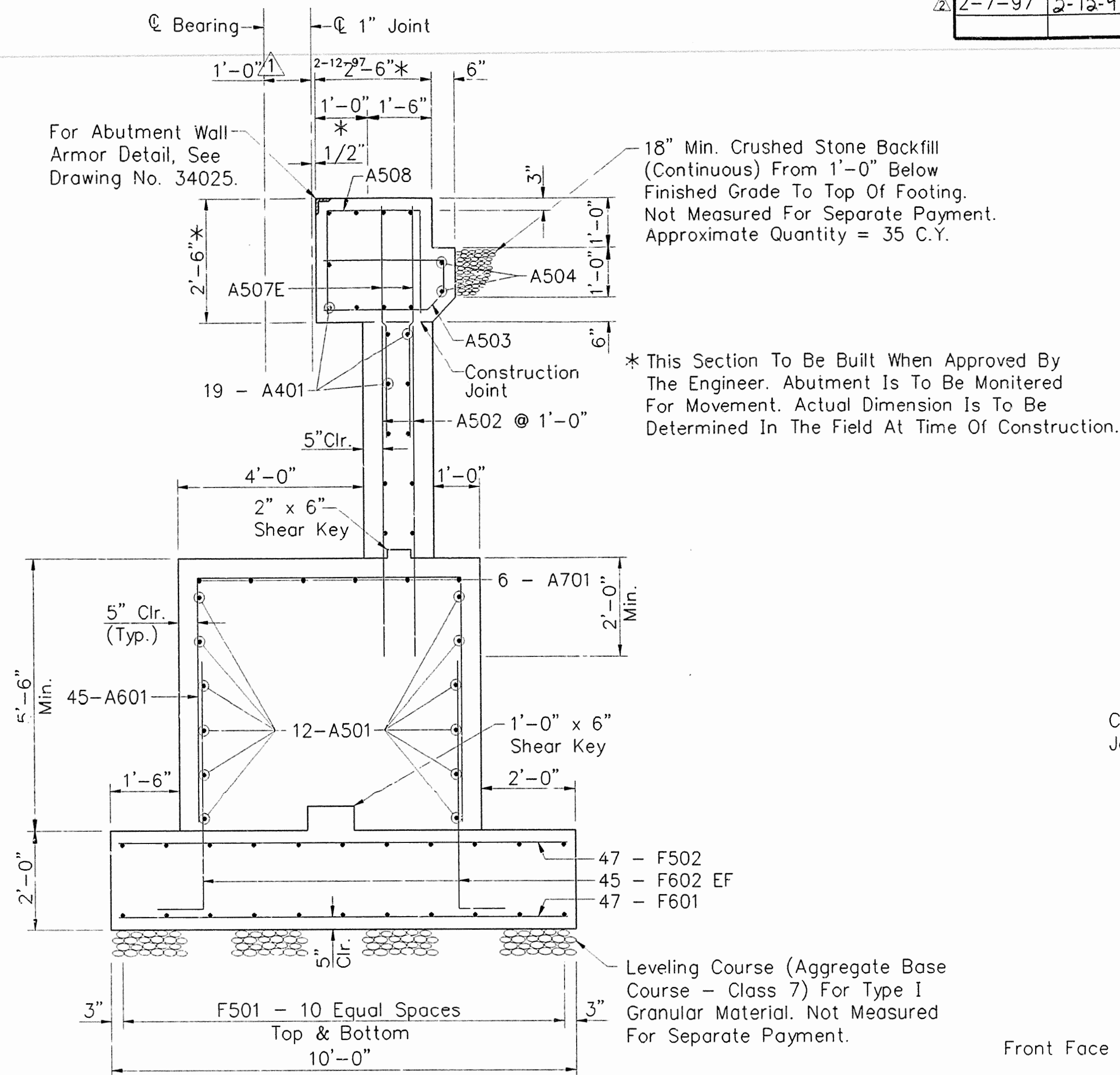
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
5-15-96	5-17-96			6	ARK.		49A	
2-7-97	2-12-97							
				JOB NO.		R40039		
				6479 A&B DTLS. S. ABUTMENT				33991

REINFORCEMENT SCHEDULE											
MARK	NO	LENGTH	PIN DIA	A	B	MARK	NO	LENGTH	PIN DIA	A	B
A401	19	44'-2"	STR.			WF601	4	5'-10"	4 1/2"	3'-11"	2'-1"
A501	12	44'-2"	STR.			WF602	4	3'-11"	STR.		
A502	86	6'-6"	STR.			WF603	11	10'-2"	STR.		
A503	40	6'-2"	2 1/2"			WF604	12	6'-8"	STR.		
A504	2	42'-8"	STR.			WF605	9	13'-6"	STR.		
A505	1	1'-2"	STR.			WF606	3	10'-6"	STR.		
A506	2	10'-0"	2 1/2"			WF607	9	7'-7"	4 1/2"		
A507E	86	4'-8"	STR.								
A508	40	6'-3 1/2"	2 1/2"	2'-2"	2'-2"	WF701	9	6'-9"	5 1/4"	5'-0"	2'-1"
A601	45	15'-8"	4 1/2"	5'-8"	5'-2"	WF801	12	8'-2"	STR.		
A701	6	44'-2"	STR.			WF901	13	10'-11"	9"	8'-0"	3'-2"
F501	22	44'-2"	STR.			WP404E	1	2'-2"	STR.		
F502	47	9'-8"	STR.			WP406E	7	10'-1 3/4"	3"	5'-0"	
F601	47	9'-8"	STR.			WP601E	7	2'-8"	STR.		
F602	45	5'-8"	4 1/2"	5'-0"	1'-0"						
W401	3	11'-2"	STR.			W501	13	15'-7"	STR.		
W504E	2	13'-7"	2 1/2"	12'-5"		W502	9	11'-8"	STR.		
W506E	2	3'-6"	2 1/2"	2'-4"		W503	2	15'-4"	STR.		
W602	12	7'-6"	4 1/2"			W505	2	5'-6"	STR.		
W701	4	23'-2"	STR.			W601E	8	12'-1"	STR.		
W702	14	21'-2"	STR.			WP401E	24	4'-3"	2"	2'-11"	
W703	10	10'-8"	STR.			WP402E	4	4'-4"	2"	2'-11"	
W704E	9	10'-0"	5 1/4"	8'-10"		WP403E	8	9'-8"	STR.		
W705	24	7'-5"	5 1/4"	6'-5"	1'-2"	WP405E	8	15'-8"	STR.		
W901E	13	13'-10"	9"	12'-8"		W501	13	15'-1"	STR.		
WF501	22	4'-0"	STR.			W502	9	11'-2"	STR.		
WF502	16	5'-8"	STR.			W503	2	14'-10"	STR.		
WF503	6	6'-8"	STR.			W505	2	5'-0"	STR.		
						W601E	8	11'-7"	STR.		
						WP401E	24	3'-10 1/2"	2"	2'-6 1/2"	
						WP402E	4	3'-11 1/2"	2"	2'-6 1/2"	
						WP403E	6	9'-8"	STR.		
						WP405E	6	15'-8"	STR.		

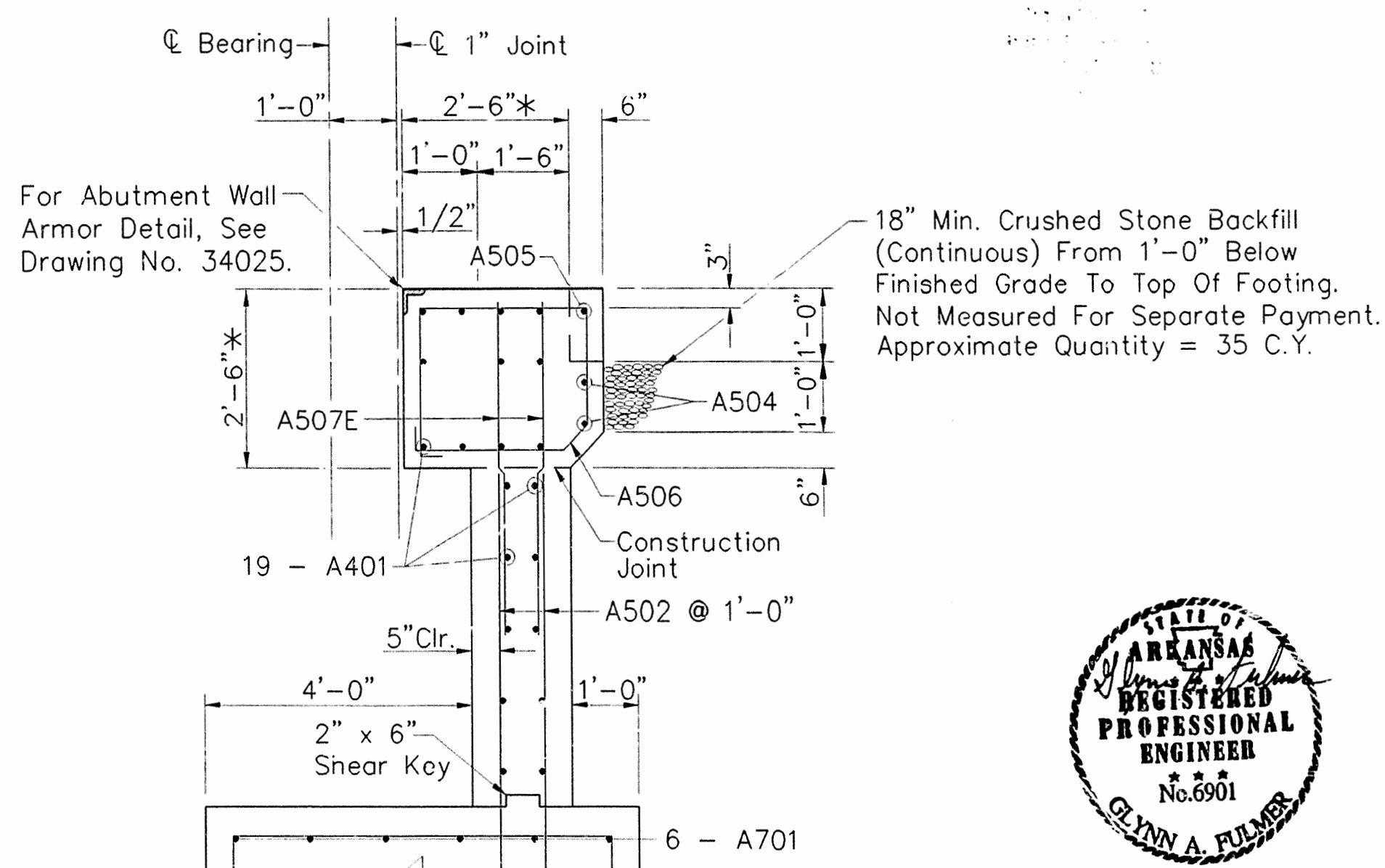


- NOTES:
- Dimensions Of Bars In Bending Diagram Are Out-To-Out.
 - Bar Designations Ending With "E" Indicate Epoxy Coated Bars.
 - Common Bars Shown Are For One Bridge Only.

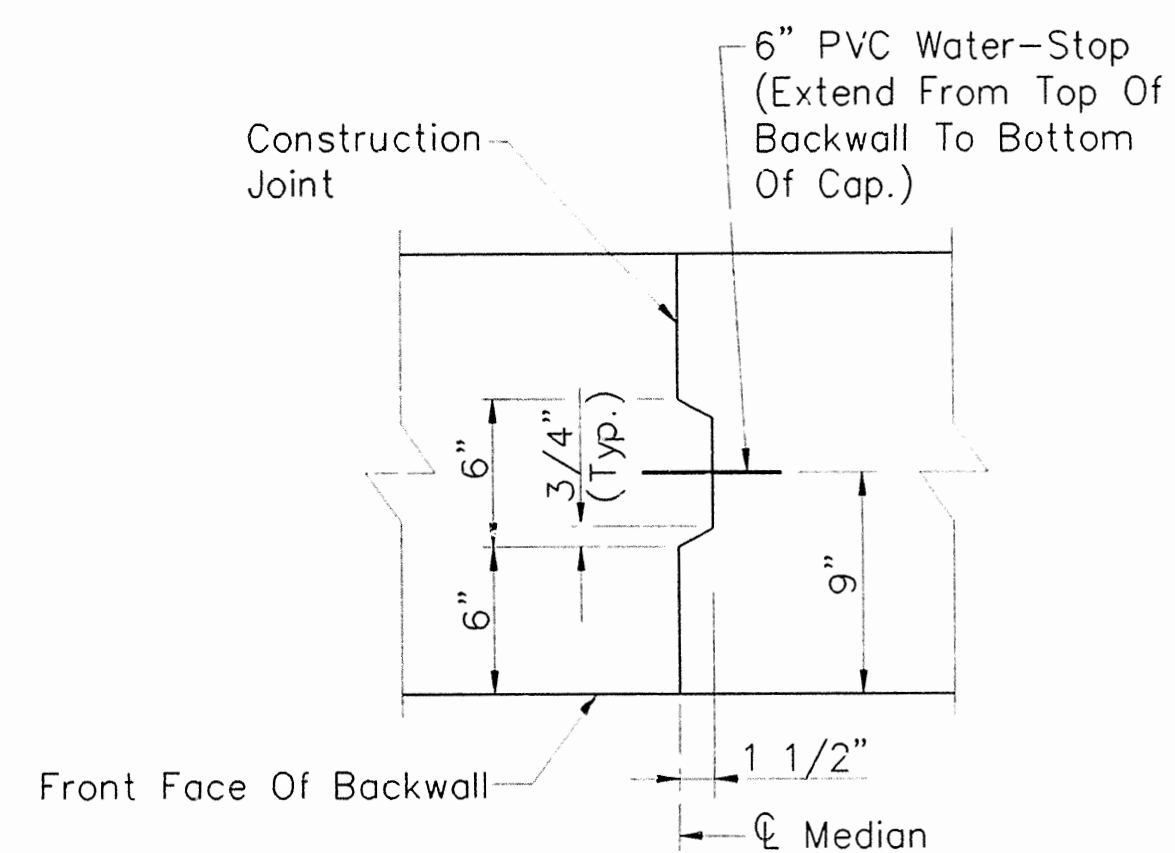
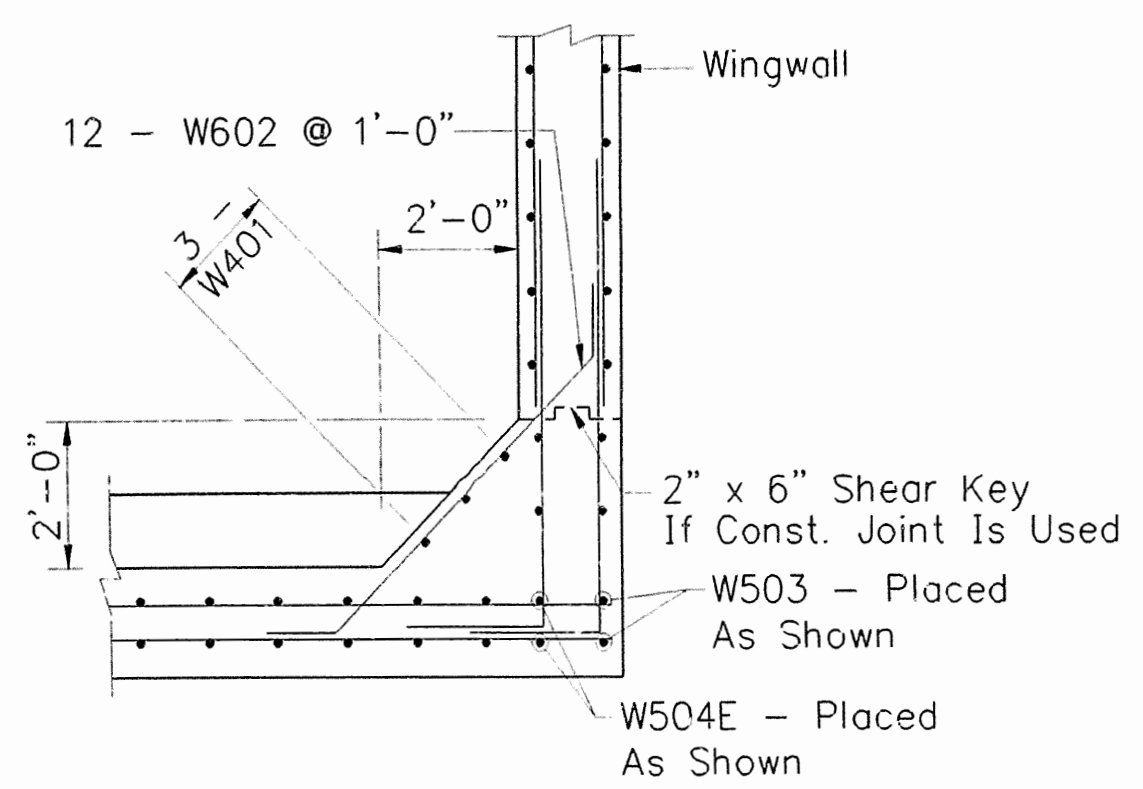
NOTE:
For Locations Of Sections A-A, B-B, C-C And D-D, See Drawing No. 33990.



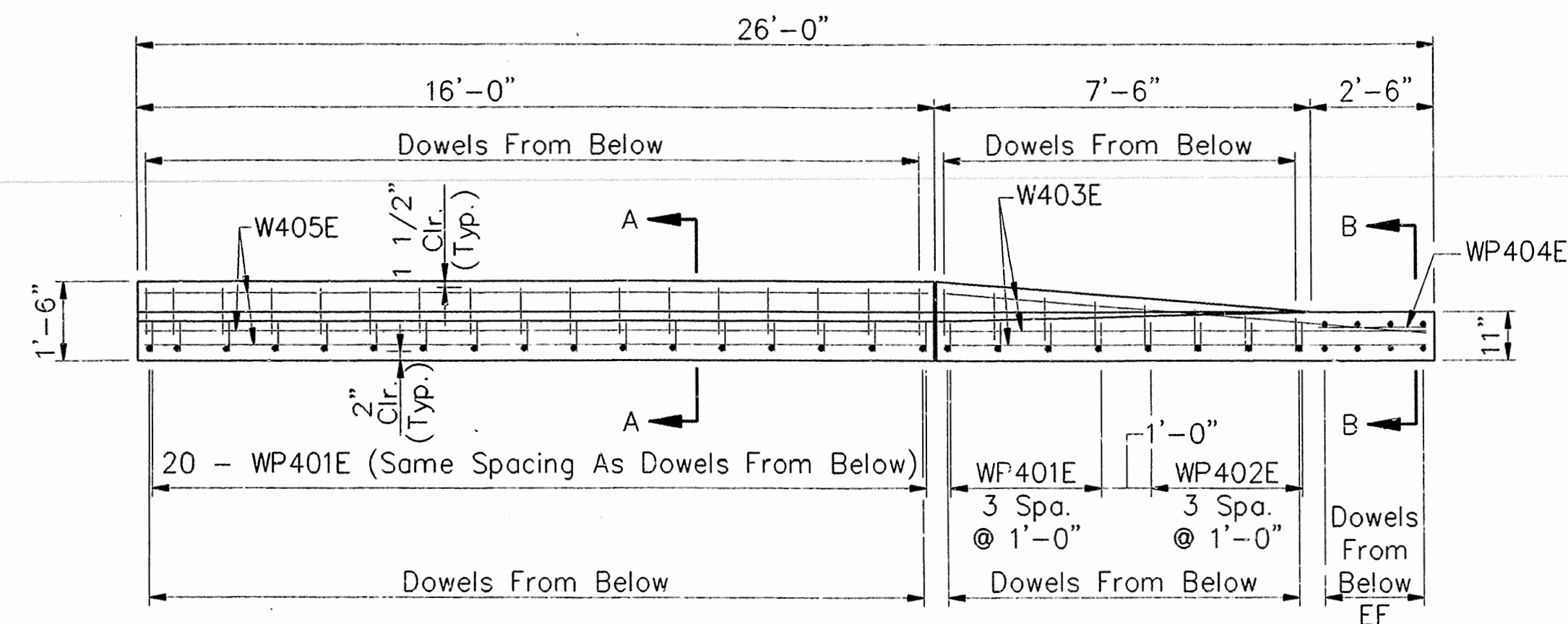
SECTION A-A
Scale: 1/2" = 1'-0"



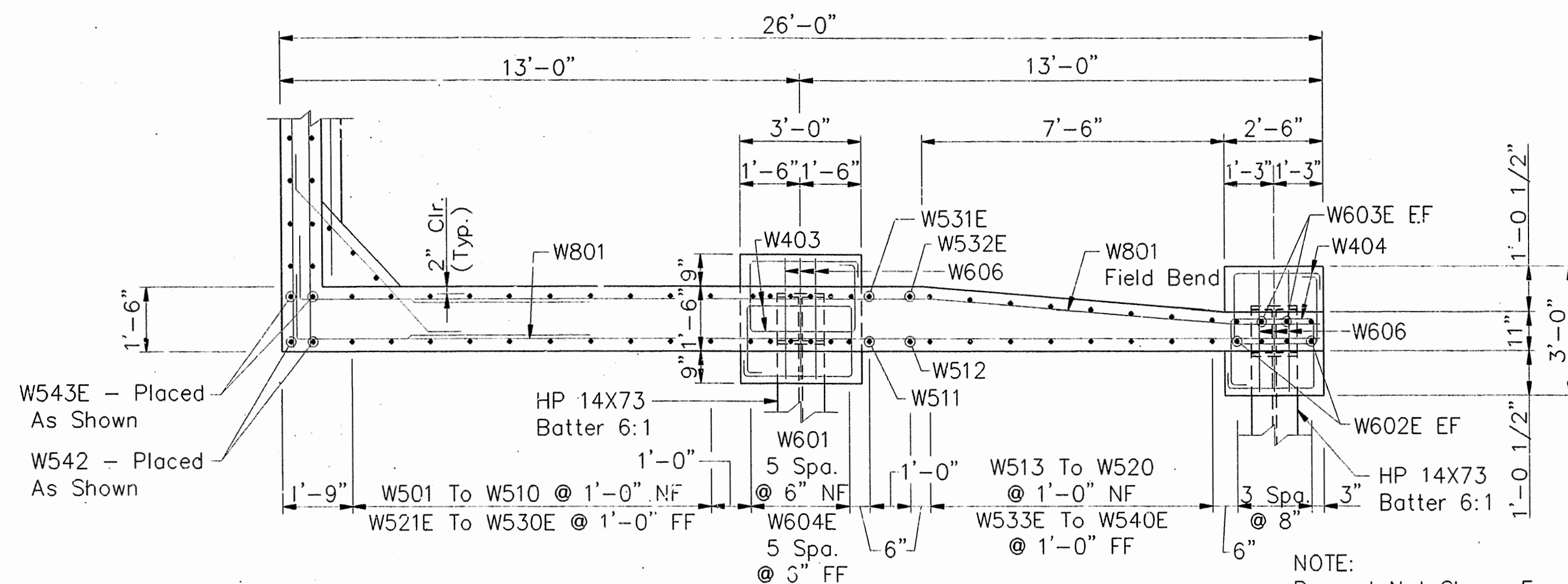
SECTION B-B
Scale: 1/2" = 1'-0"



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		50	
				JOB NO.		R40039		
				① 6479 A&B DTLS. S. ABUTMENT			33992	



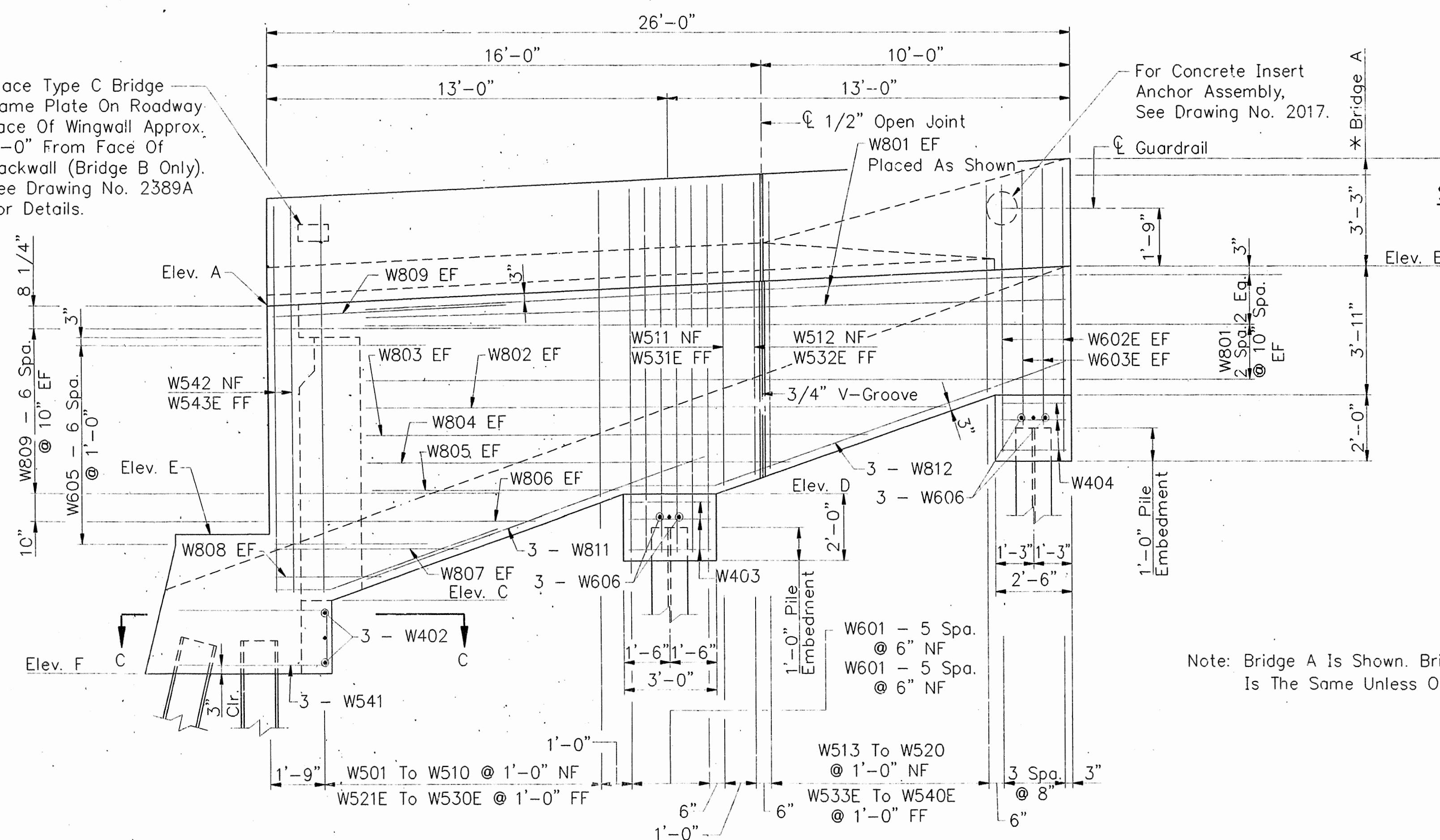
PLAN - PARAPET
Scale: 3/8" = 1'-0"



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

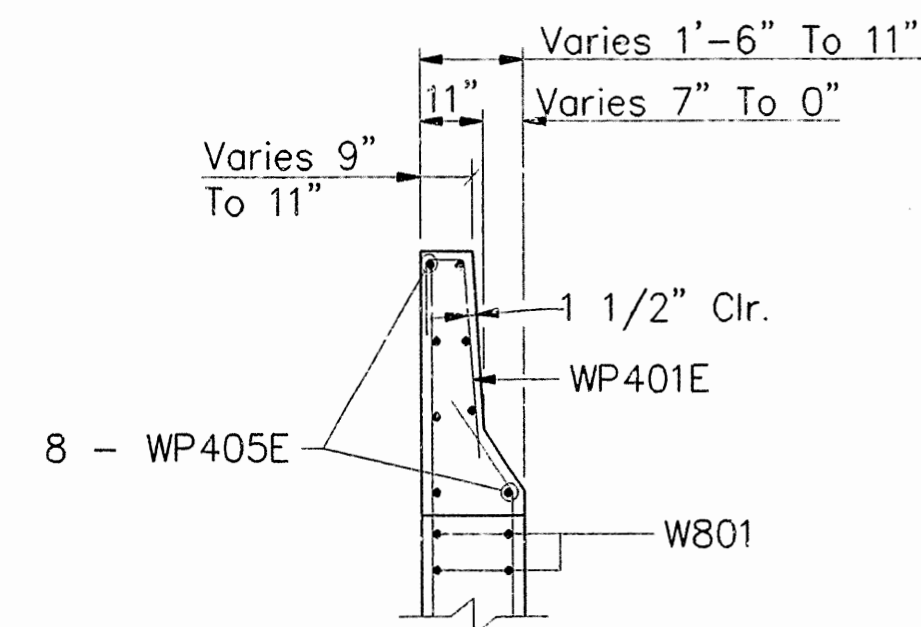
NOTE:
Parapet Not Shown For Clarity,
See Plan Of Parapet Detail.

Place Type C Bridge
Name Plate On Roadway
Face Of Wingwall Approx.
1'-0" From Face Of
Backwall (Bridge B Only).
See Drawing No. 2389A
For Details.

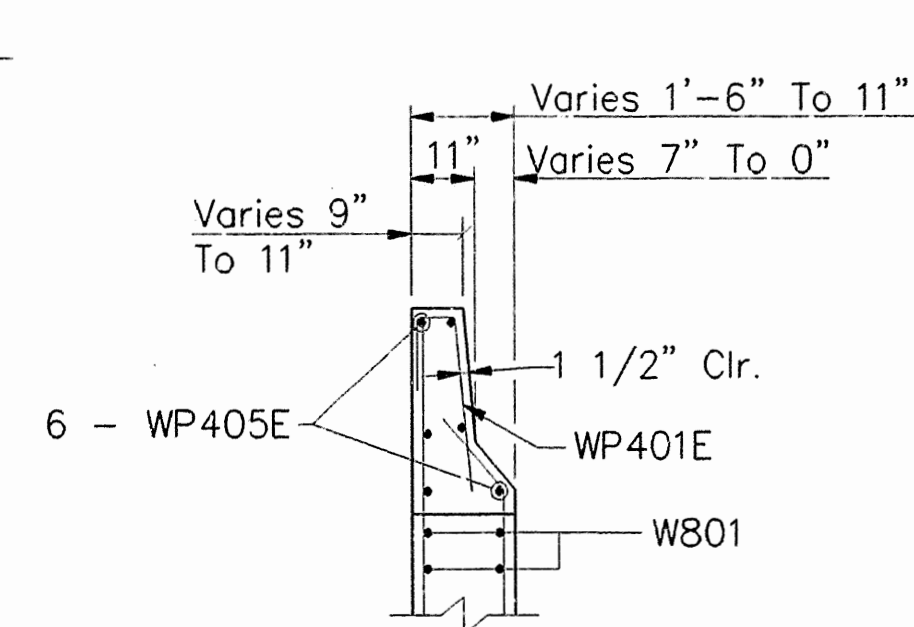


ELEVATION - WINGWALL
Scale: 3/8" = 1'-0"

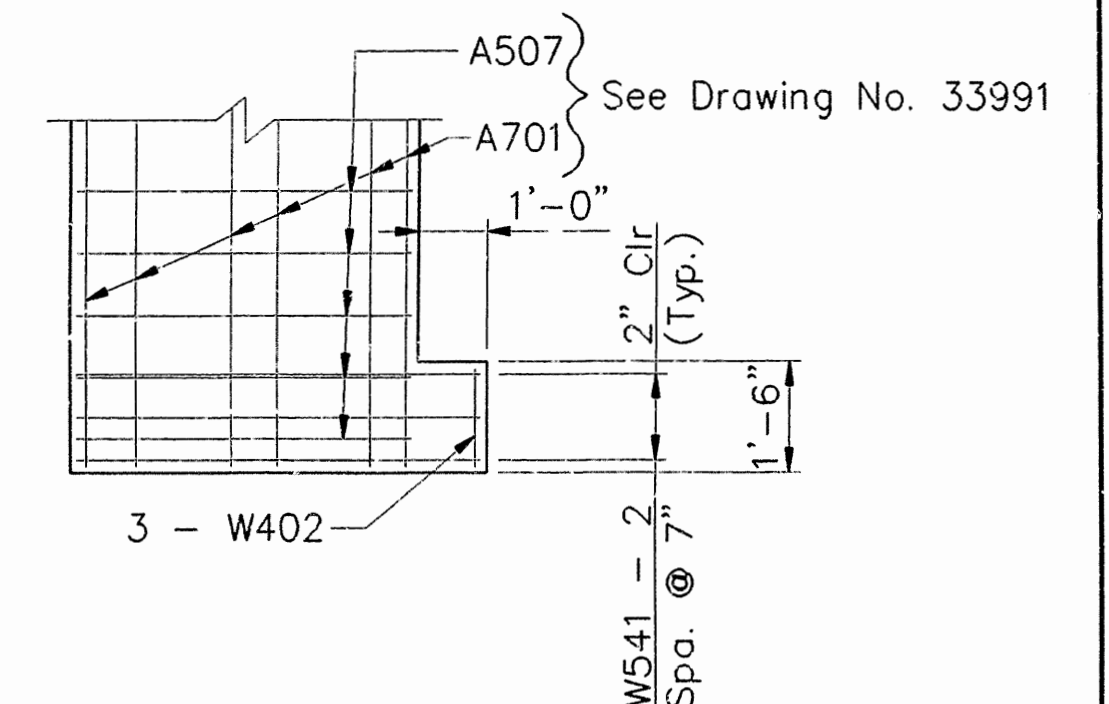
Note: Bridge A Is Shown, Bridge B
Is The Same Unless Otherwise Noted.



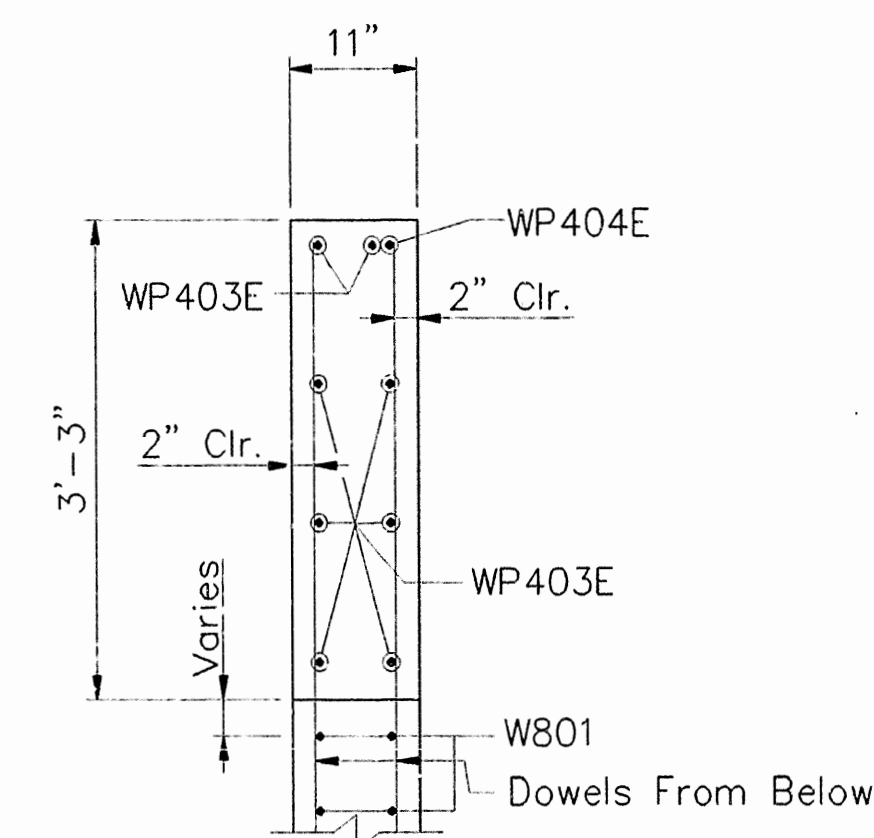
SECTION A-A (BRIDGE A)
Scale: 3/8" = 1'-0"



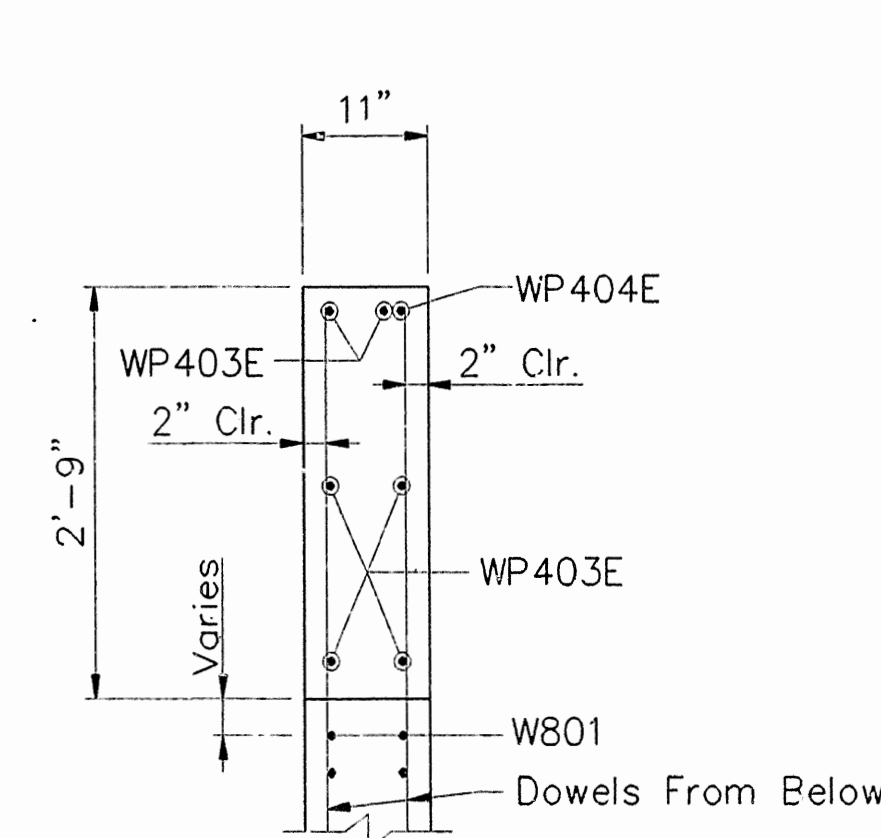
SECTION A-A (BRIDGE B)
Scale: 3/8" = 1'-0"



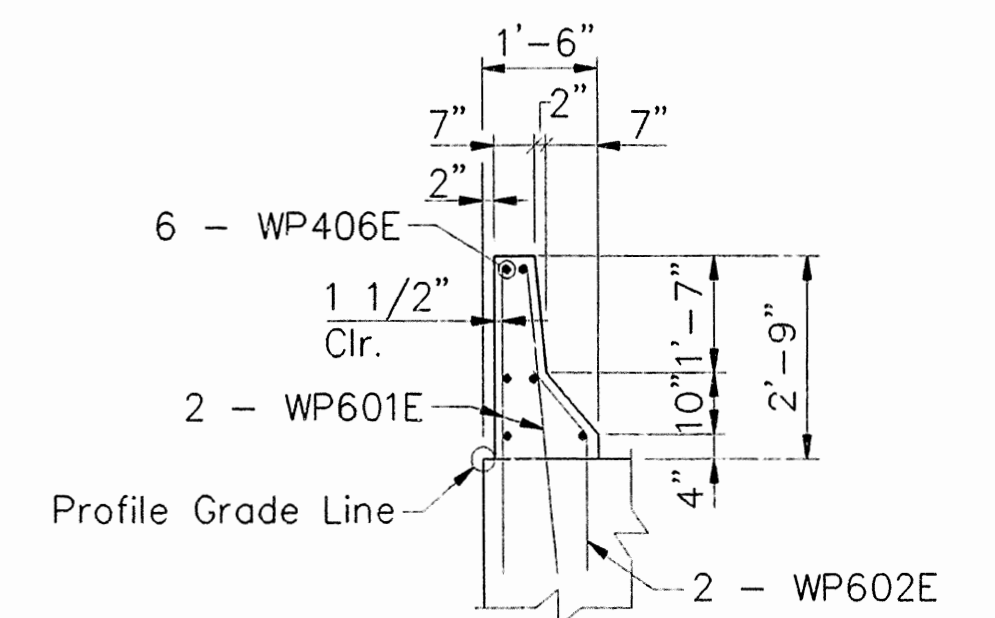
SECTION C-C
Scale: 3/8" = 1'-0"



SECTION B-B (BRIDGE A)
Scale: 3/4" = 1'-0"



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



DETAILS OF MEDIAN POST
Scale: 3/8" = 1'-0"

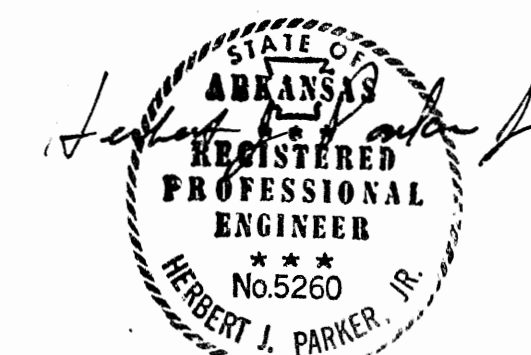
* Bridge B Parapet Height Is 2'-9"
See Section A-A And Section B-B.

TABLE OF ELEVATIONS					
Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Elev. F
1504.27	1505.44	1495.37	1498.54	1497.37	1493.16

Note: Elevations Are The Same
For East And West Wingwalls.

LEGEND

EF = Each Face
NF = Near Face
FF = Far Face



BRIDGE ENGINEER

SHEET 3 OF 3

DETAILS OF SOUTH ABUTMENT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16

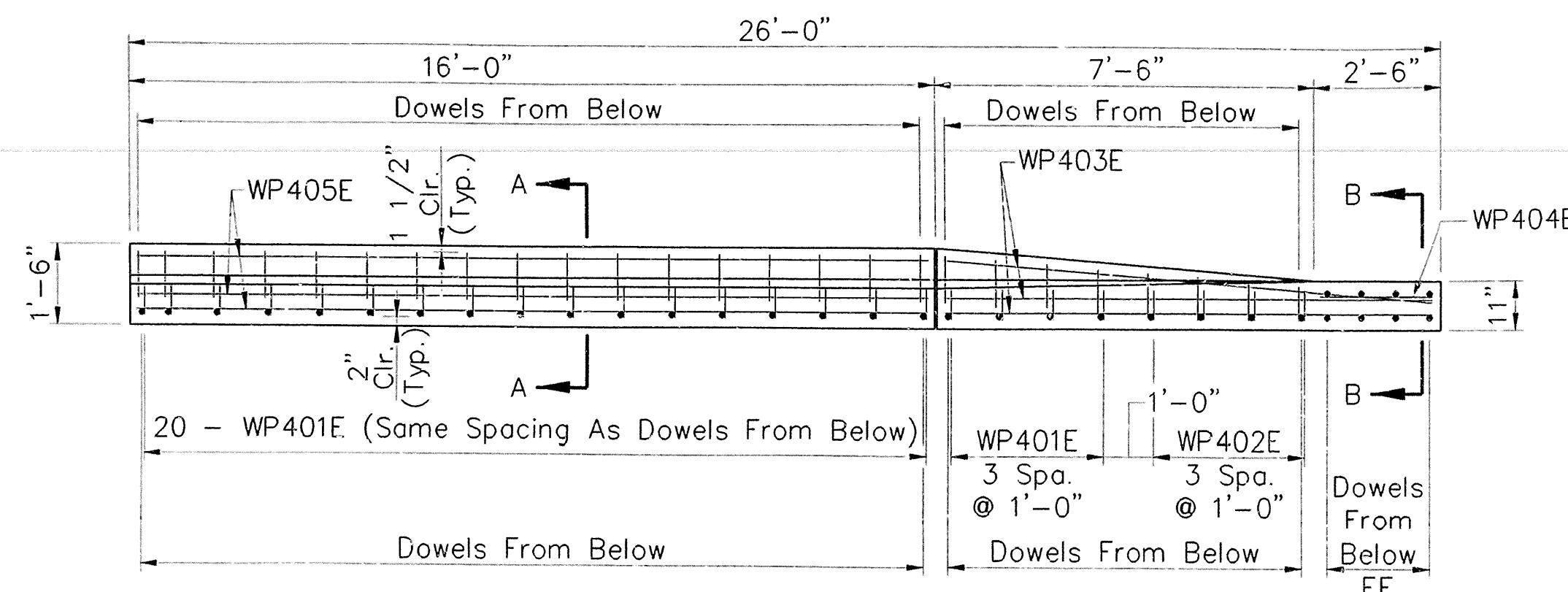
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JBM DATE: FEB. 1993
CHECKED BY: JDG DATE: FEB. 1993
DESIGNED BY: RLE DATE: FEB. 1993

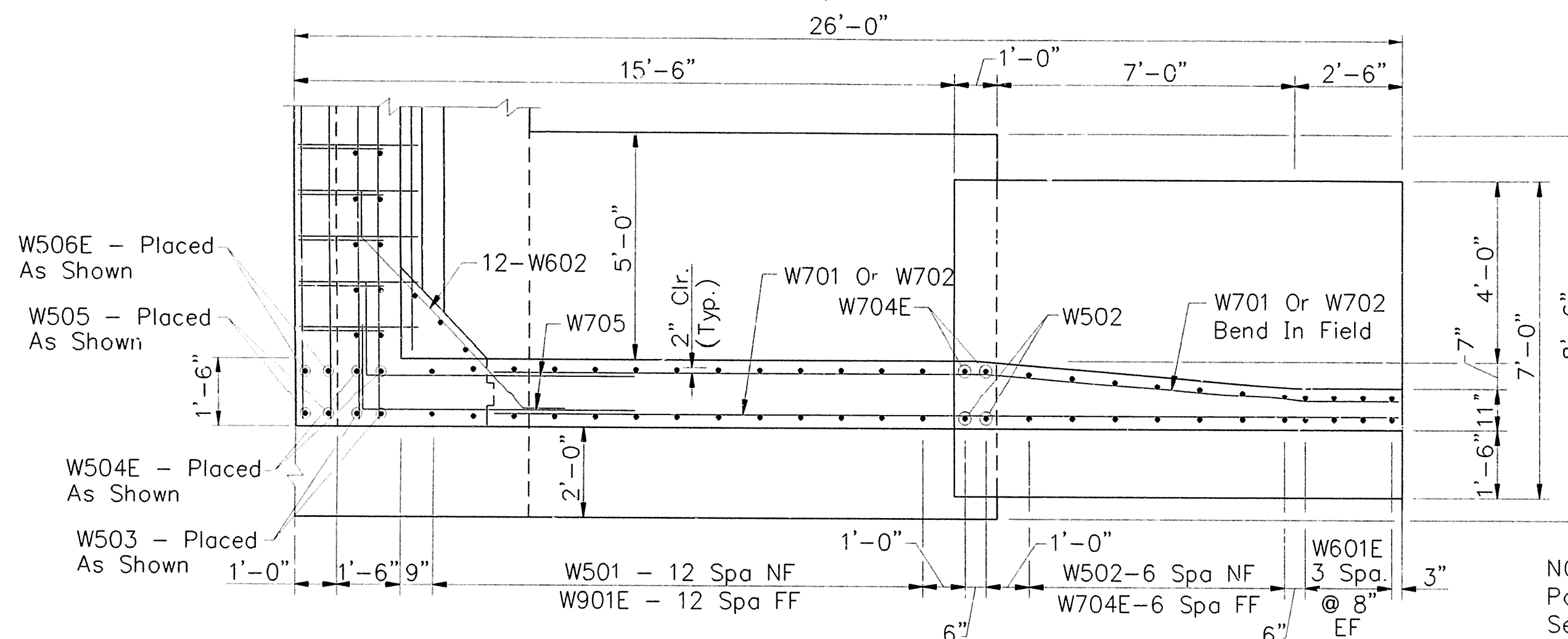
BRIDGE NO. 6479 A&B

DRAWING NO. 33992

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
5-15-96	5-17-96	2-7-97	2-12-97	6	ARK.	R40039	50A	
				JCR NO.	R40039		33992	



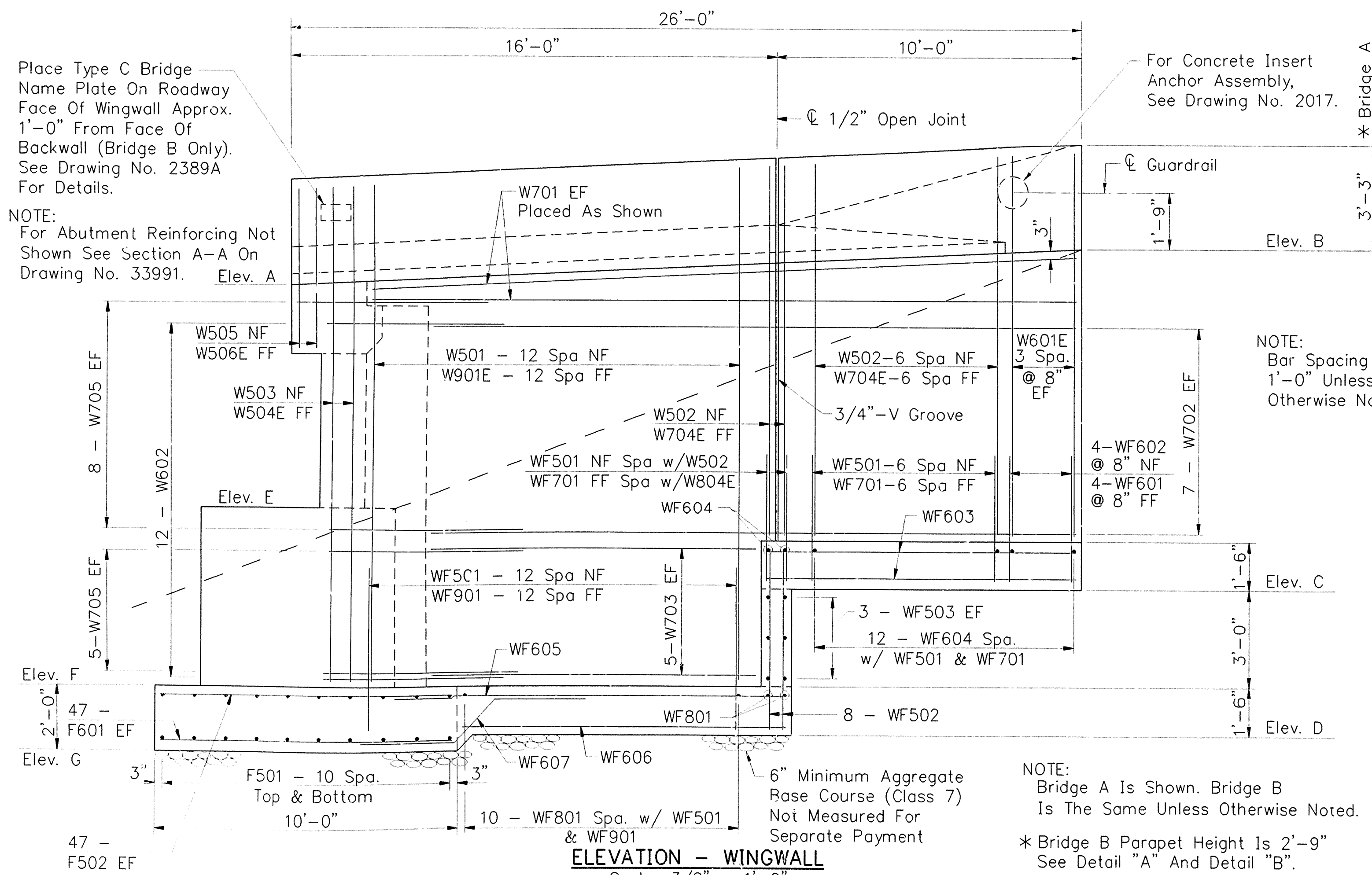
PLAN - PARAPET
Scale: 3/8" = 1'-0"



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

Place Type C Bridge Name Plate On Roadway Face Of Wingwall Approx. 1'-0" From Face Of Backwall (Bridge B Only). See Drawing No. 2389A For Details.

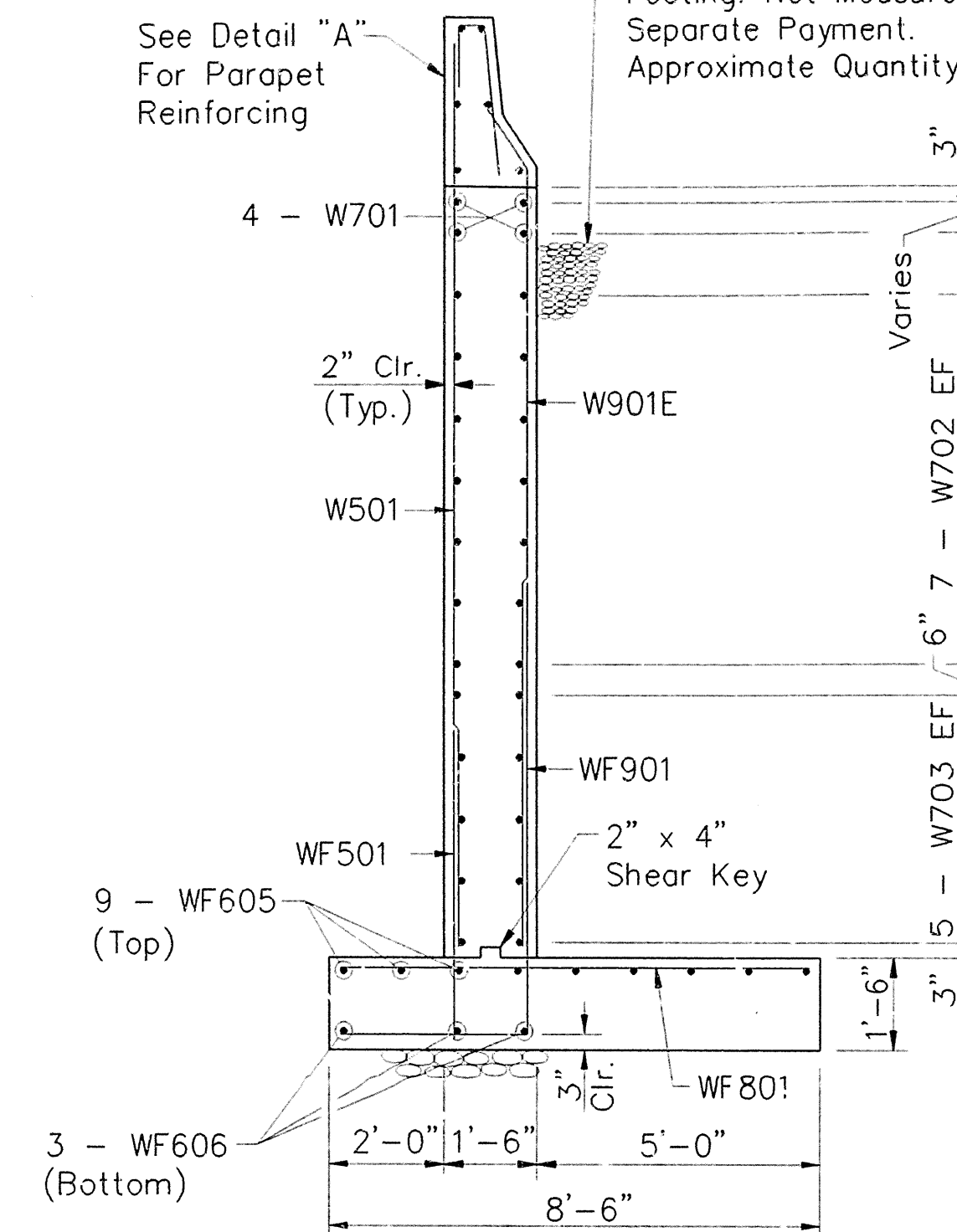
NOTE: For Abutment Reinforcing Not Shown See Section A-A On Drawing No. 33991. Elev. A



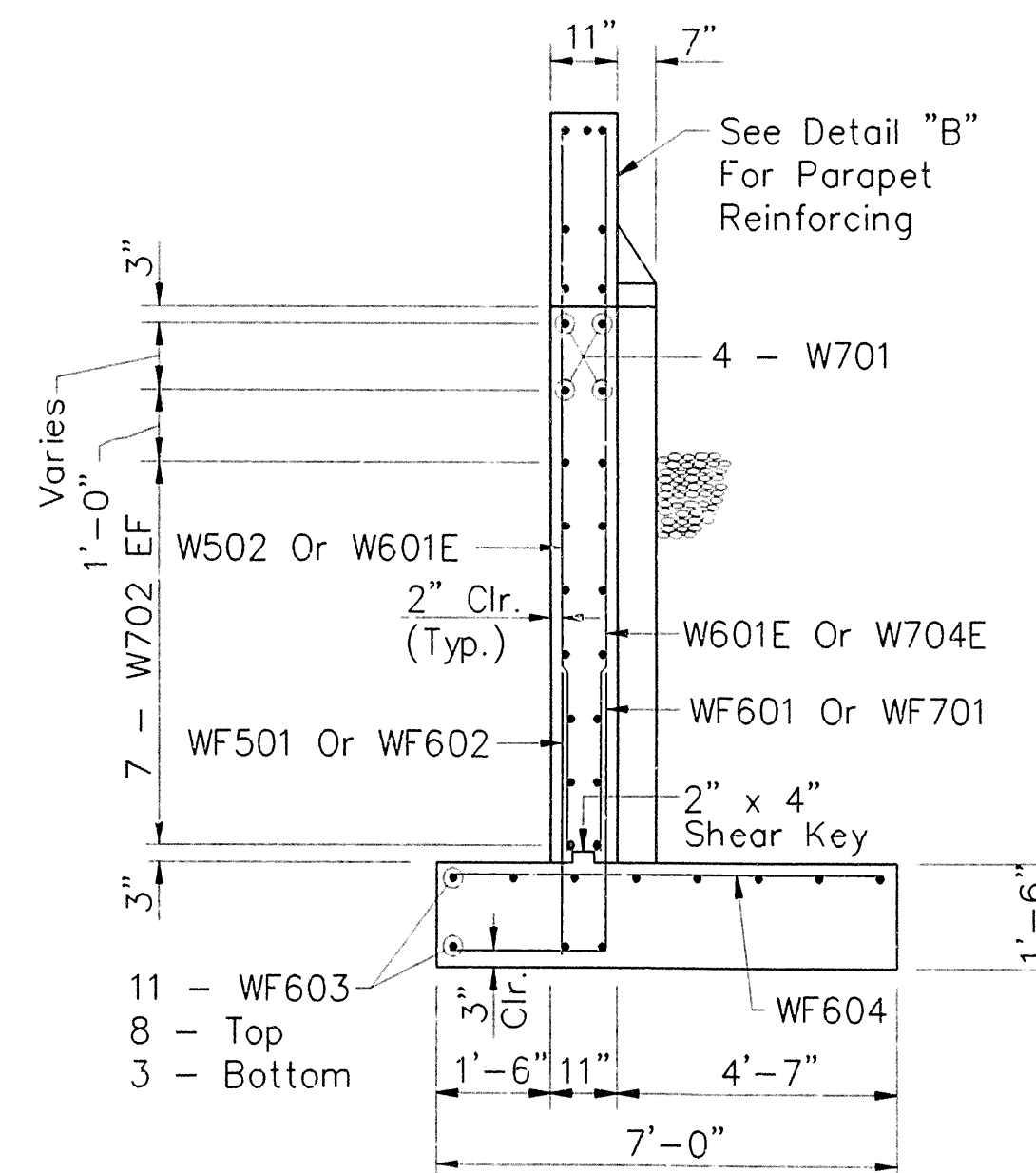
ELEVATION - WINGWALL
Scale: 3/8" = 1'-0"

NOTE: Bridge A Is Shown. Bridge B Is The Same Unless Otherwise Noted.
* Bridge B Parapet Height Is 2'-9" See Detail "A" And Detail "B".

See Detail "A" For Parapet Reinforcing



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



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

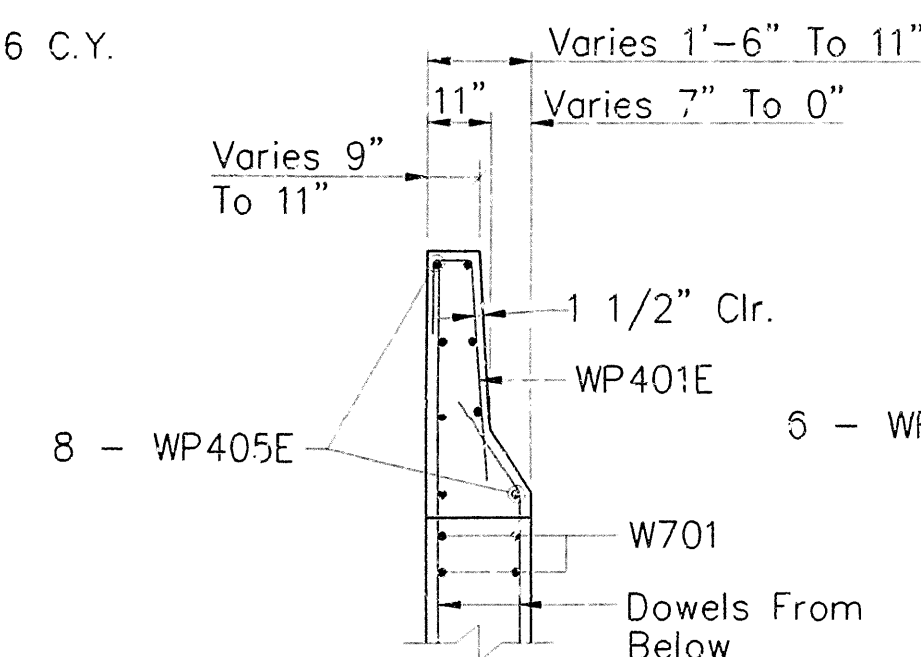
TABLE OF ELEVATIONS						
Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Elev. F	Elev. G
1504.27	1505.44	1494.87	1490.37	1497.37	1491.87	1489.87

NOTES: Elevations Are The Same For East And West Wingwalls. Elevations Shown Are For Outside Face Of Wall.

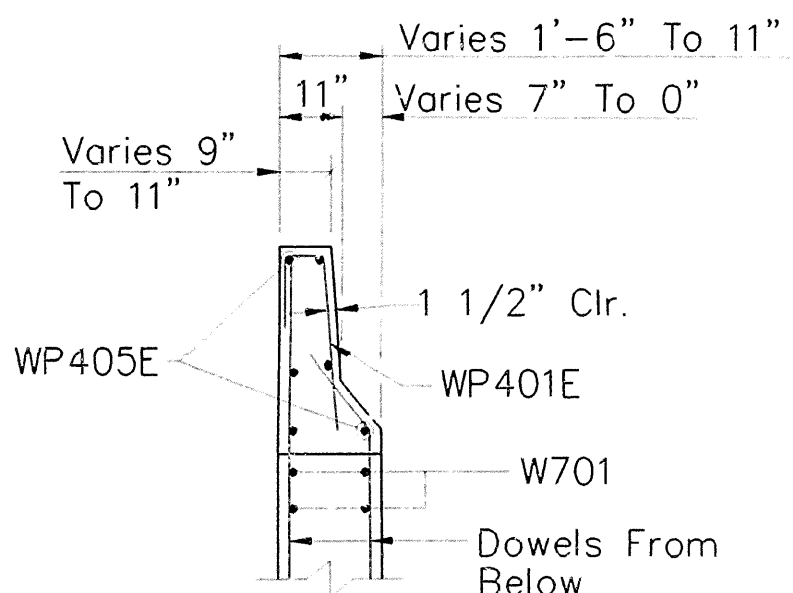
LEGEND

EF = Each Face
NF = Near Face
FF = Far Face

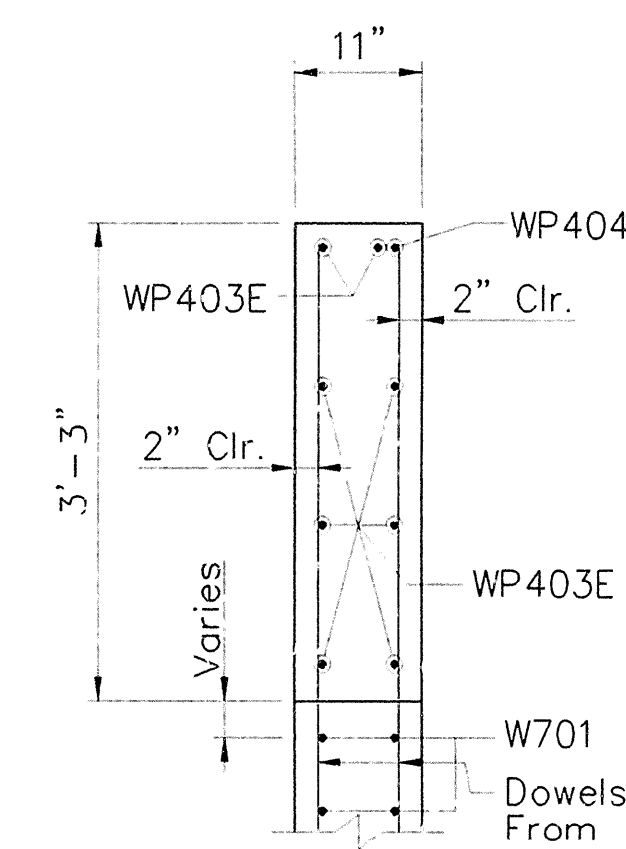
18" Min. Crushed Stone Backfill (Continuous) From 1'-0" Below Finished Grade To Top Of Footing. Not Measured For Separate Payment. Approximate Quantity = 16 C.Y.



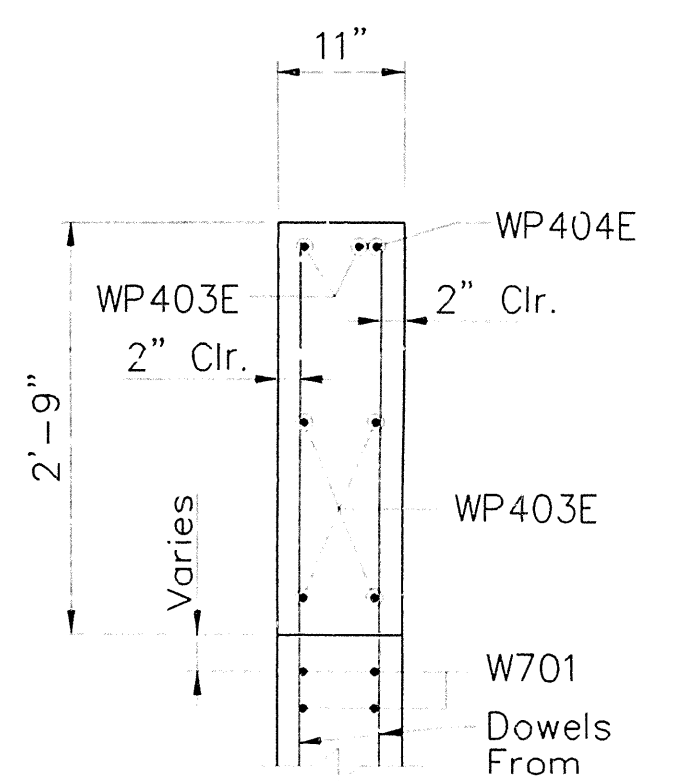
DETAIL "A" (BRIDGE A)
Scale: 3/8" = 1'-0"



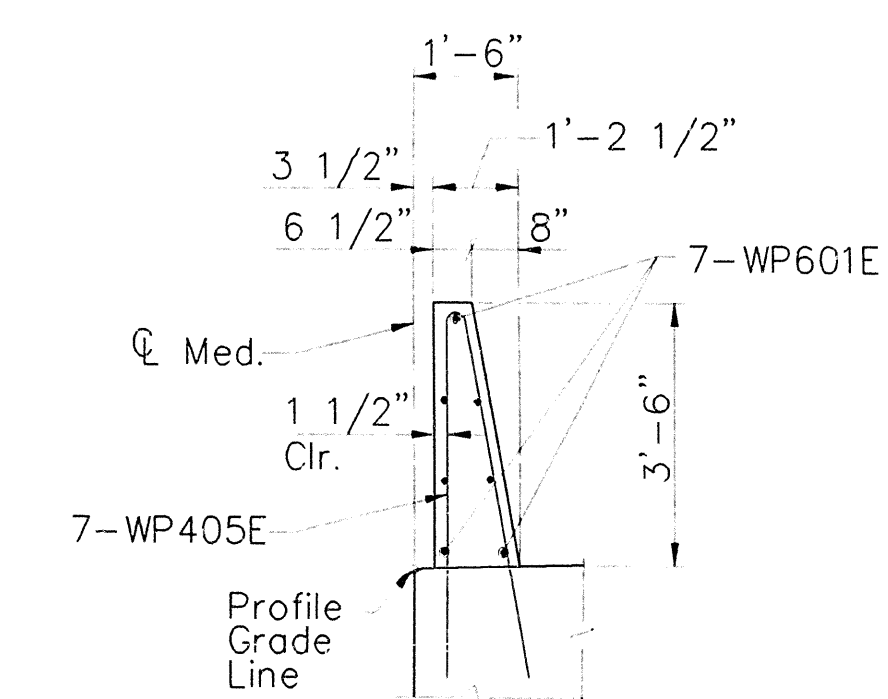
DETAIL "A" (BRIDGE B)
Scale: 3/8" = 1'-0"



DETAIL "B" (BRIDGE A)
Scale: 3/4" = 1'-0"



DETAIL "B" (BRIDGE B)
Scale: 3/4" = 1'-0"



DETAILS OF MEDIAN POST
Scale: 3/8" = 1'-0"

2. Revised Median Side Parapet Configuration

SHEET 3 OF 3
DETAILS OF SOUTH ABUTMENT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 18
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

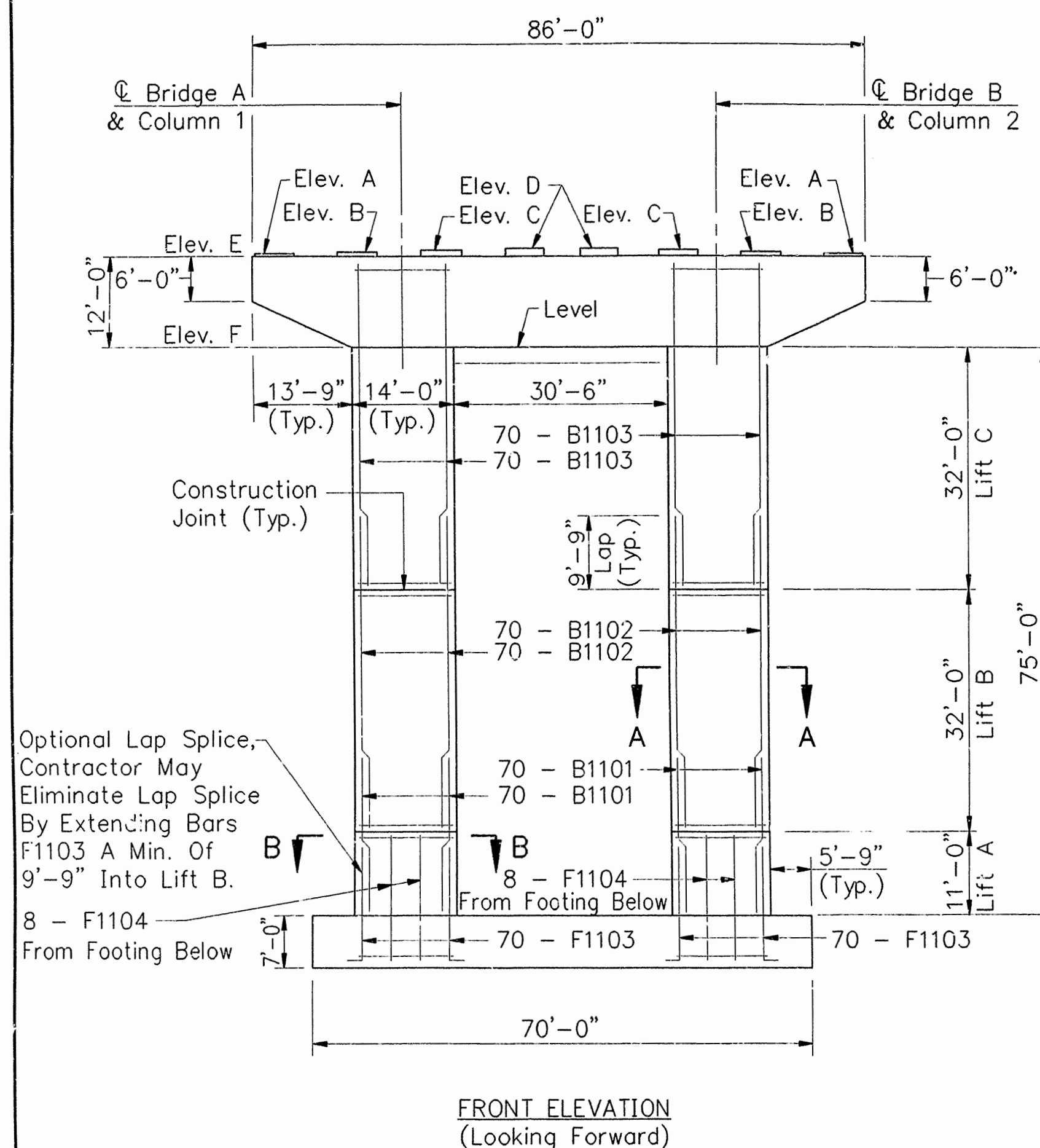
DRAWN BY: JBM/HEW DATE: FEB. 1993, APR. 1996
CHECKED BY: JDG DATE: FEB. 1993, APR. 1996
DESIGNED BY: RLE/WMM DATE: FEB. 1993, APR. 1996

BRIDGE NO. 6479 A&B

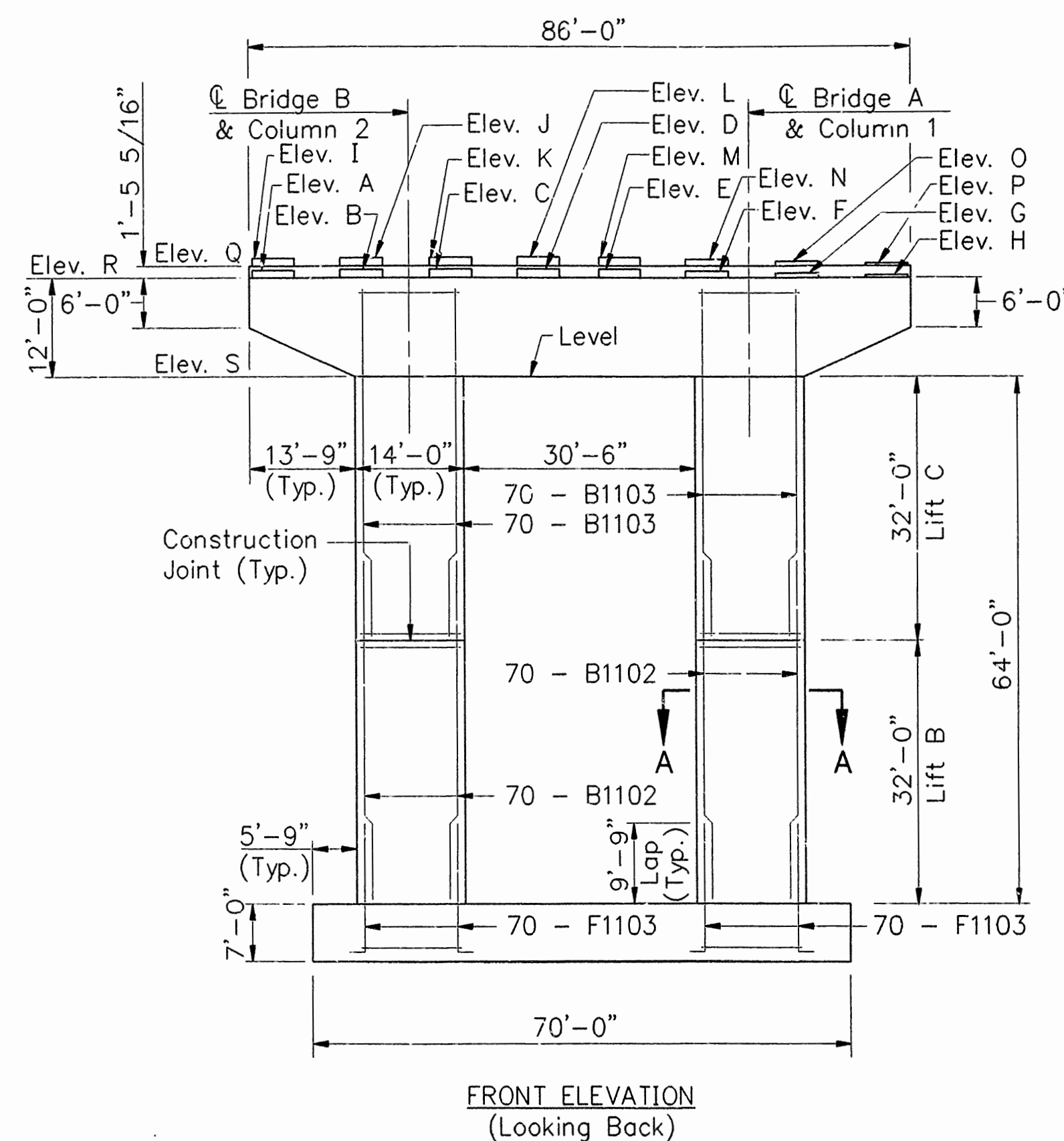
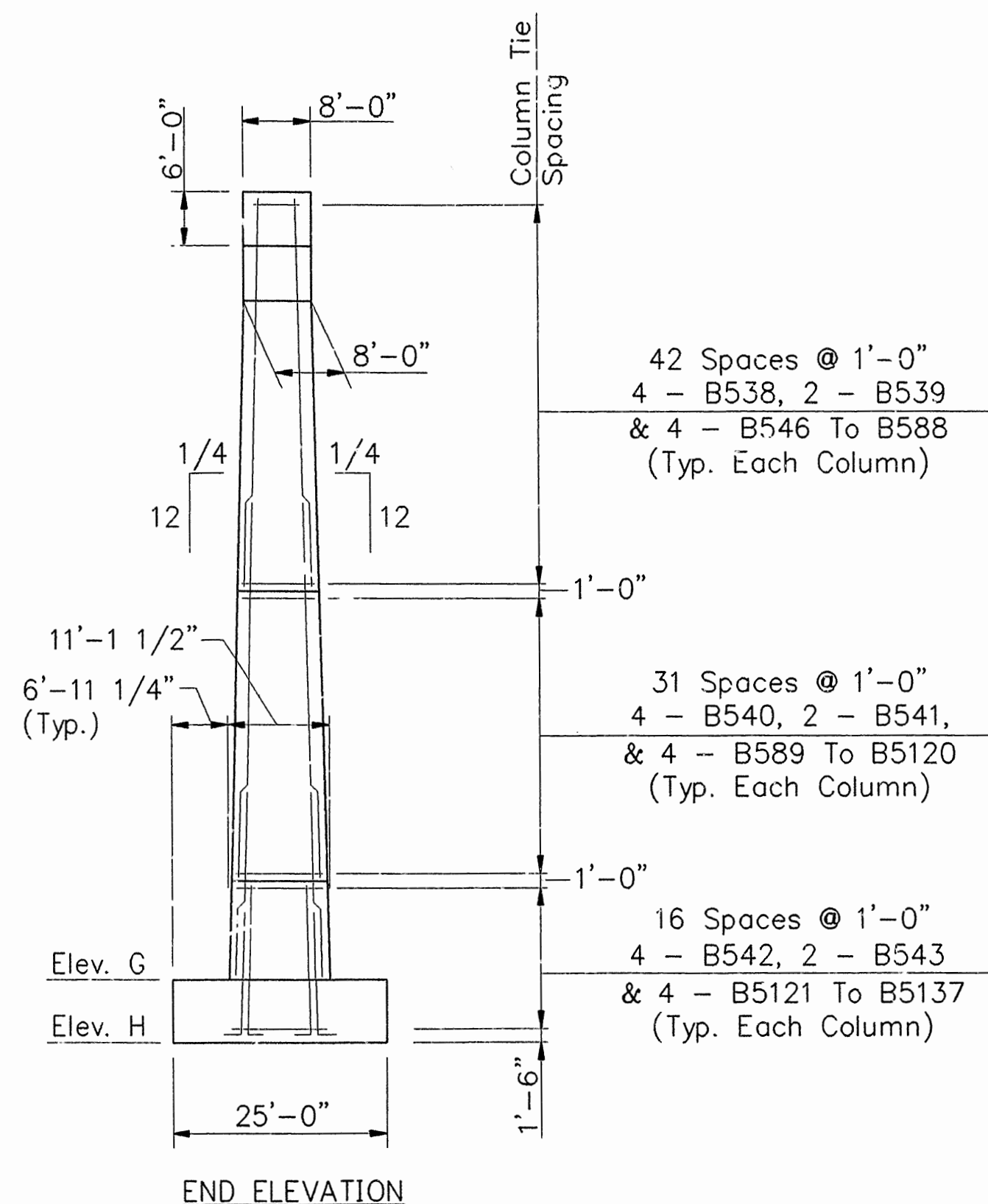
DRAWING NO. 33992A

BRIDGE ENGINEER

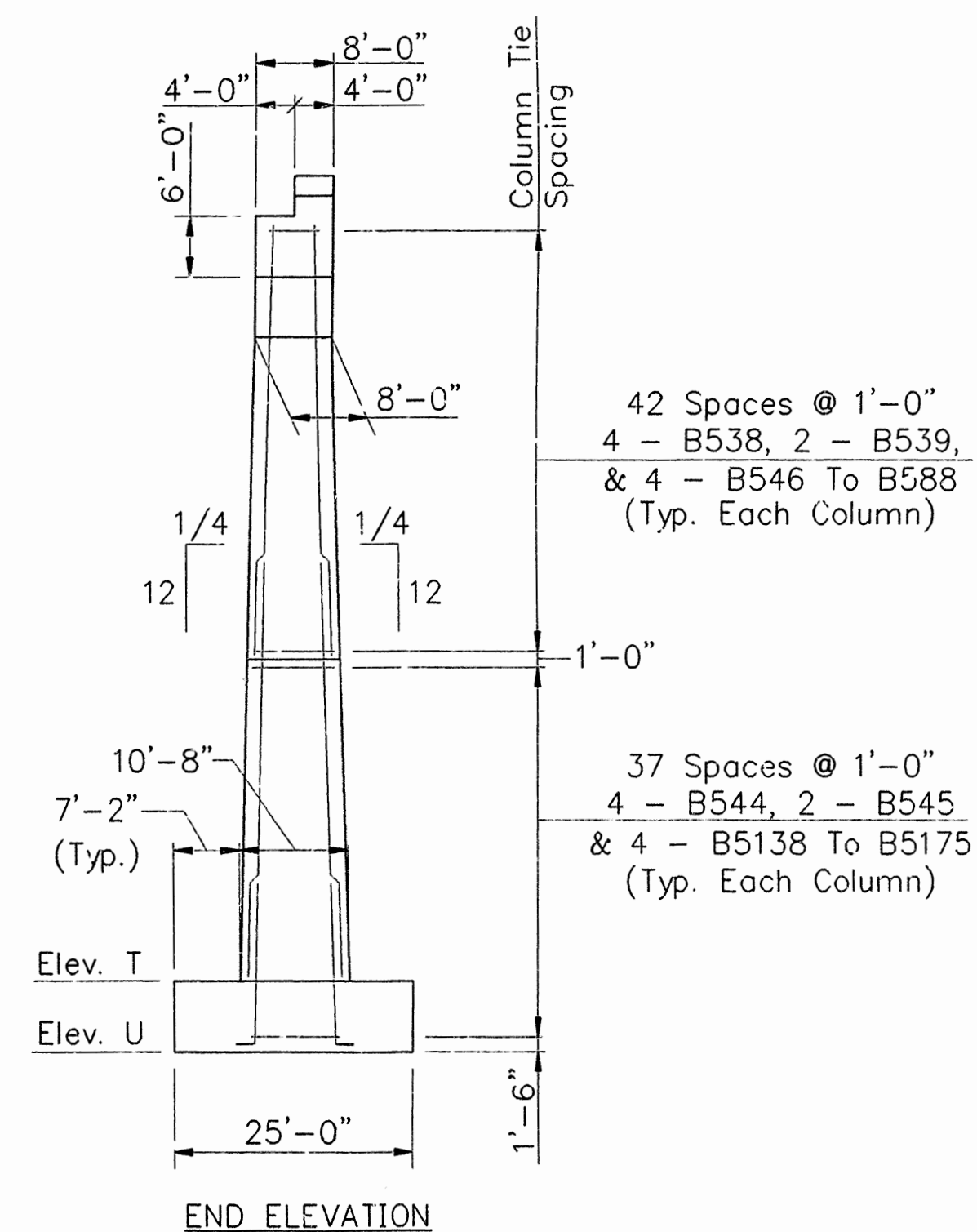
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
5-18-95	5-25-95			6	ARK.		51	
				JOB NO.		R40039		
				① 6479 A & B DTLS PIERS 1, 2, 7-9			33993	



PIER 1
Scale: None



PIER 2
Scale: None



MAXIMUM TOE PRESSURE (kips / sq. ft.)											
	Group I	Group II	Group III	Group IV	Group V	Group VI					
	Max.	Allow.	Max.	Allow.	Max.	Allow.	Max.	Allow.	Max.	Allow.	Max.
Pier 1	5.1	20.0	6.5	25.0	6.2	25.0	6.2	28.0	7.6	28.0	7.2
Pier 2	5.2	20.0	7.1	25.0	6.4	25.0	6.2	28.0	8.1	28.0	7.4

NOTE: All Pressures Are Net Service Load Values.

SERVICE DESIGN LOADS (kips)		
	Pier 1	Pier 2
Dead Load from Superstructure	2752.8	1704.6
Single Lane Live Load	127.4	118.8
Single Lane Impact Load	25.0	22.0

NOTES:
For Cap Details Of Pier 1, See Dwg. No. 33996.
For Cap Details Of Pier 2, See Dwg. No. 33997.
For Column Details & Sections A-A & B-B, See Dwg. No. 33995.
For Footing Details, See Dwg. No. 33998.
For Reinforcement Schedule & Bending Diagrams, See Dwg. No. 33999.
Use Class S Concrete In Cap And Columns. Use Class B Concrete In Footing.

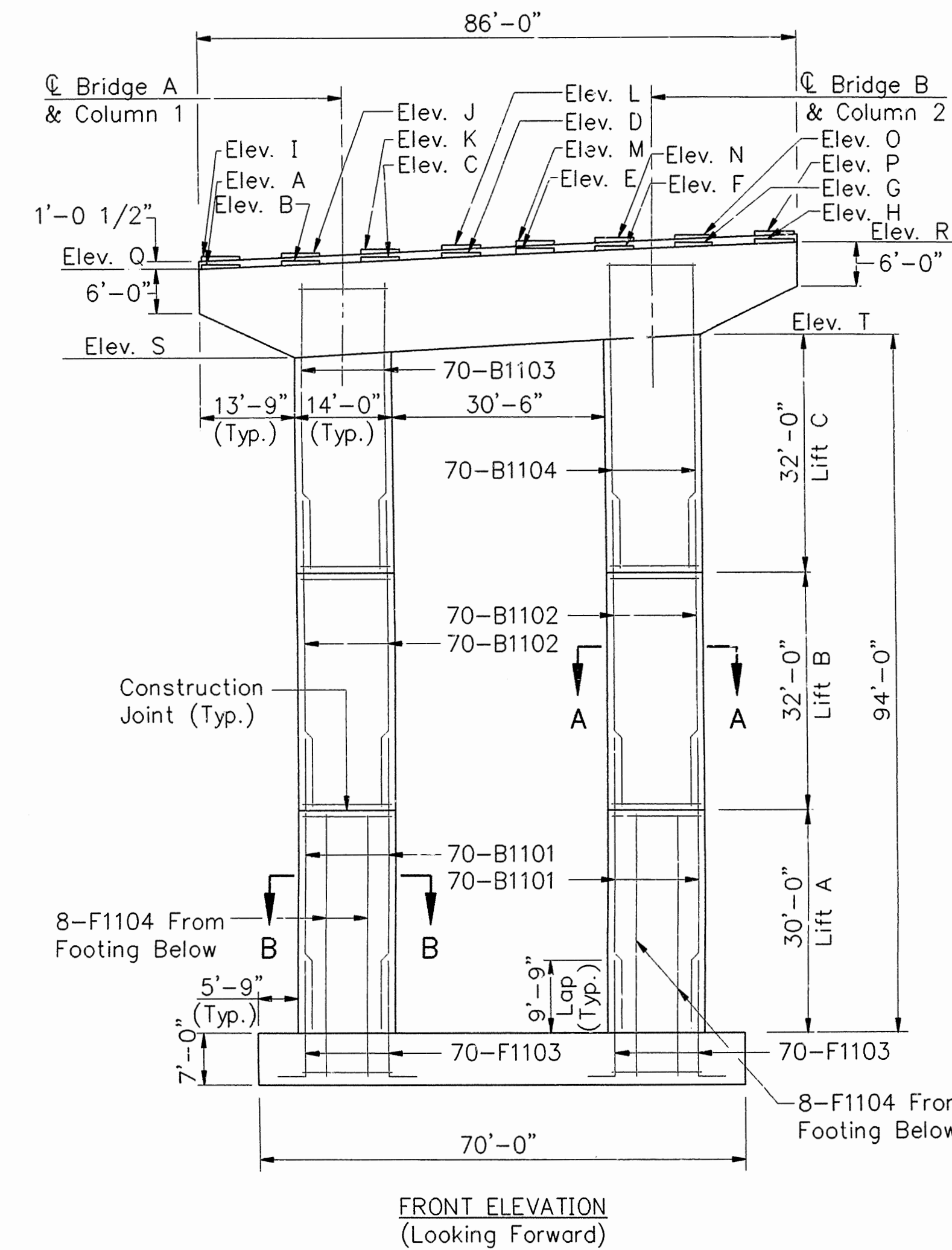
TABLE OF ELEVATIONS																					
	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Elev. F	Elev. G	Elev. H	Elev. I	Elev. J	Elev. K	Elev. L	Elev. M	Elev. N	Elev. O	Elev. P	Elev. Q	Elev. R	Elev. S	Elev. T	Elev. U
Pier 1	1491.32	1491.55	1491.79	1492.02	1490.99	1478.99	1403.99	1396.99													
Pier 2	1484.75	1484.80	1484.86	1484.91	1484.84	1484.61	1484.37	1484.14	1486.16	1486.22	1486.28	1486.34	1486.27	1486.04	1485.80	1485.57	1485.24	1483.80	1471.80	1407.80	1400.80



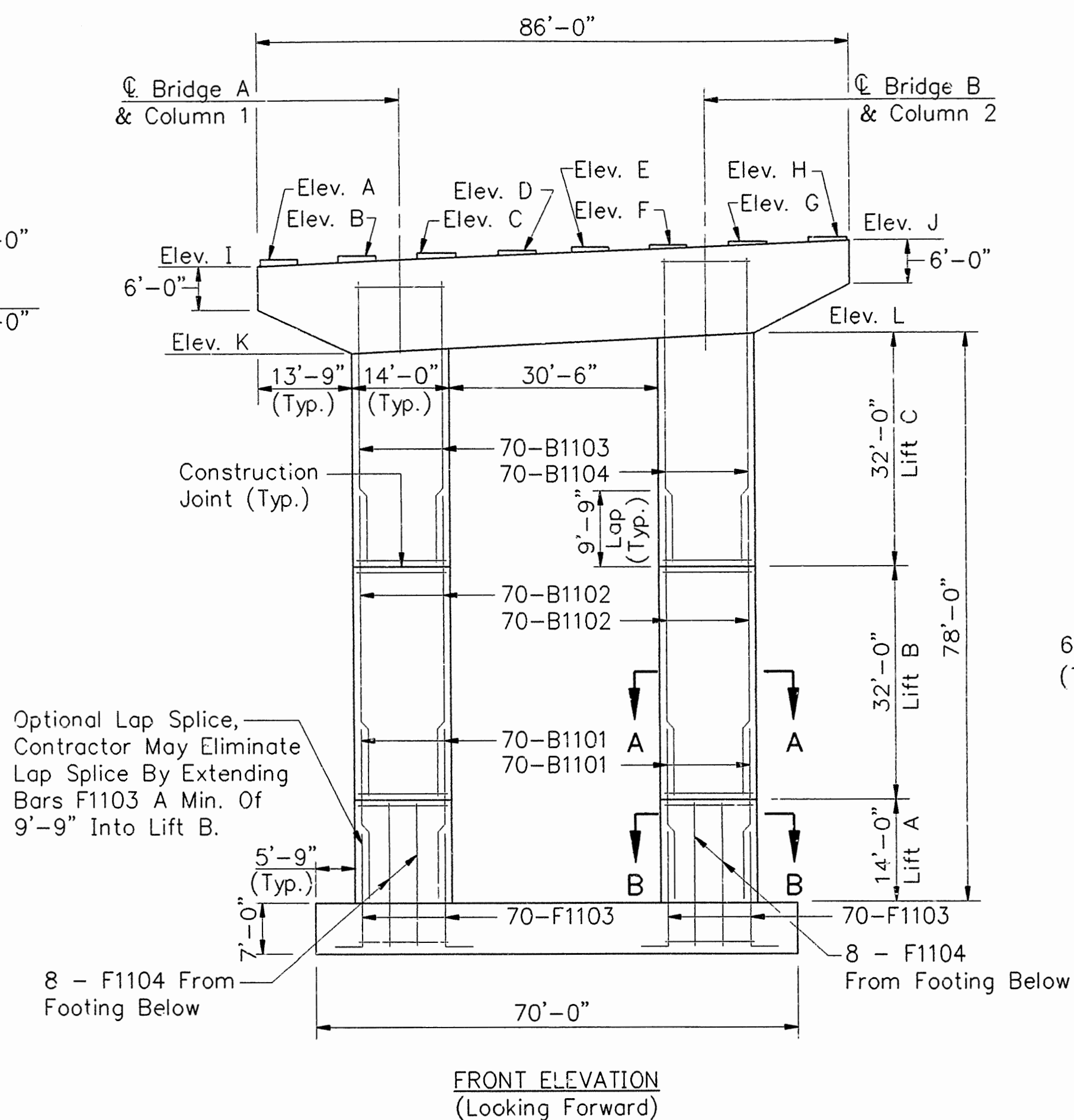
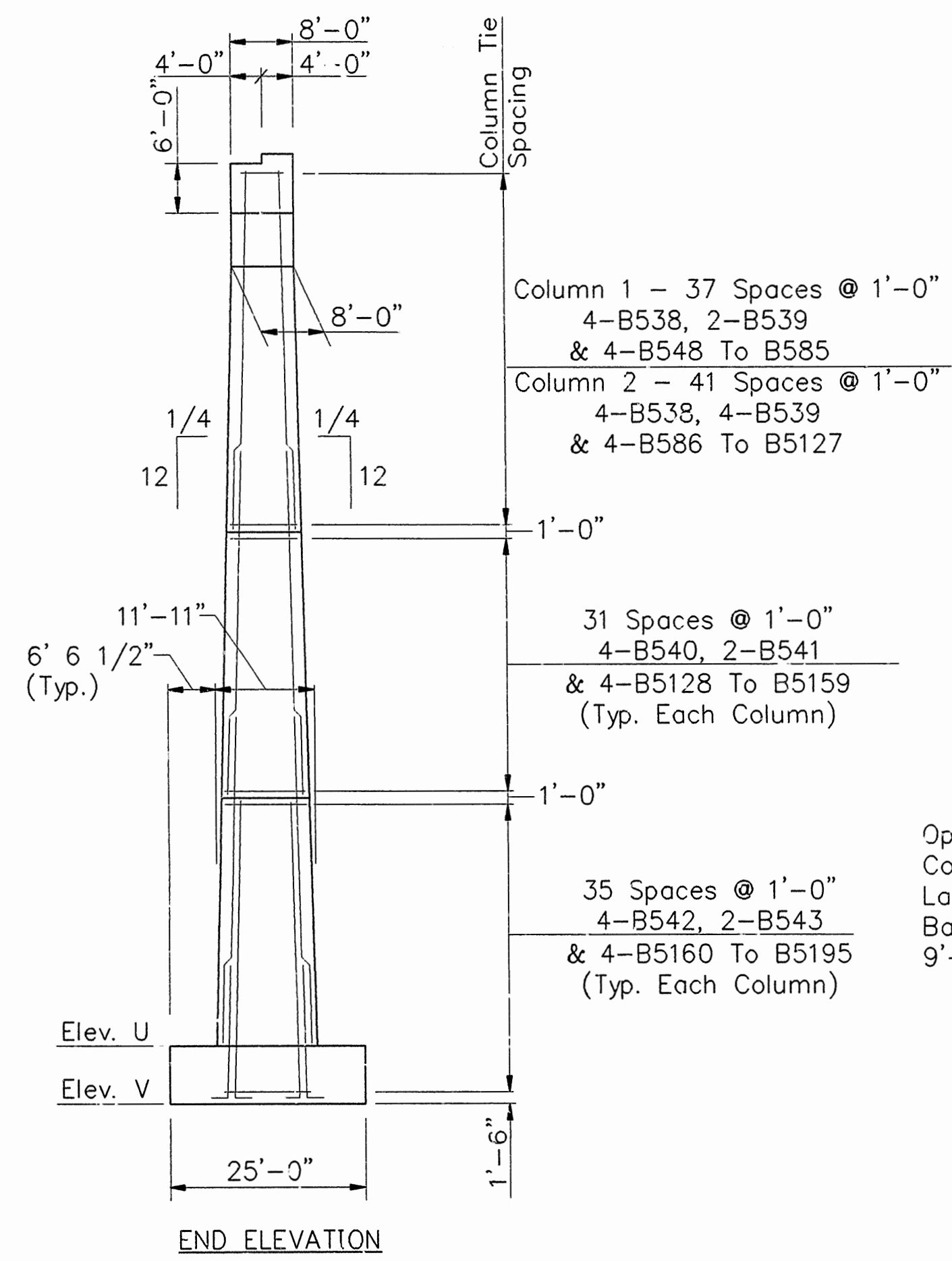
SHEET 1 OF 7
DETAILS OF PIERS 1, 2, 7, 8 & 9
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: HEW DATE: FEB. 1993
CHECKED BY: JHR DATE: FEB. 1993
DESIGNED BY: WMM DATE: FEB. 1993
BRIDGE NO. 6479 A & B DRAWING NO. 33993

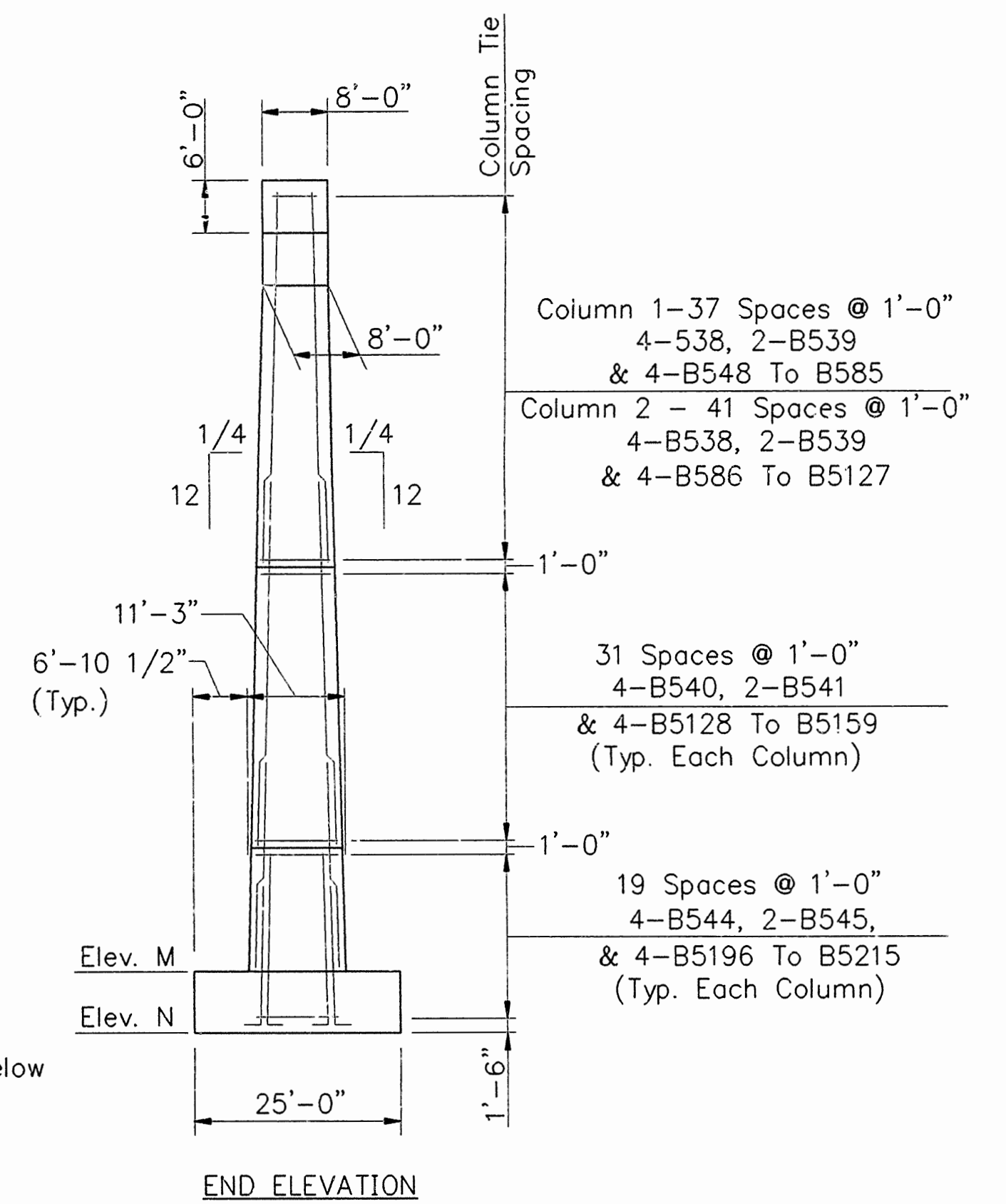
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
5-18-95	5-25-95			6	ARK.		52	
JOB NO.						R40039		
① 6479A&B DTLS PIERS 1,2,7-9 33994								



PIER 7
Scale: None



PIER 8
Scale: None



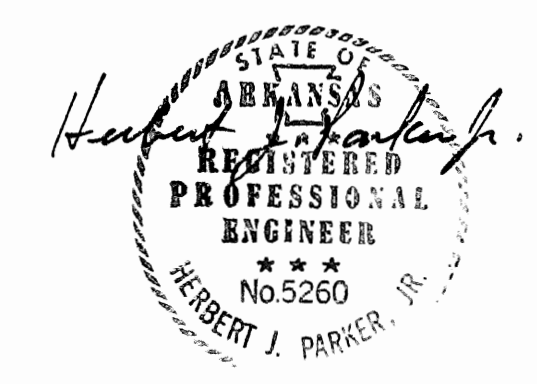
MAXIMUM TOE PRESSURE (kips / sq. ft.)									
	Group I	Group II	Group III	Group IV	Group V	Group VI	Group VII	Group VIII	Group IX
	Max.	Allow.	Max.	Allow.	Max.	Allow.	Max.	Allow.	Max.
Pier 7	5.2	20.0	7.1	25.0	6.4	25.0	6.2	28.0	7.4
Pier 8	5.1	20.0	6.5	25.0	6.2	25.0	6.2	28.0	7.2

NOTE: All Pressures Are Net Service Load Values.

SERVICE DESIGN LOADS (kips)		
	Pier 7	Pier 8
Dead Load from Superstructure	1808.4	2752.8
Single Lane Live Load	118.8	127.4
Single Lane Impact Load	22.0	25.0

NOTE:
For Cap Details Of Pier 7 See Dwg. No. 33997.
For Cap Details Of Pier 8 See Dwg. No. 33996.
For Column Details & Sections A-A & B-B, See Drawing No. 33995.
For Footing Details, See Dwg. No. 33998.
For Reinforcement Schedule & Bending Diagrams, See Dwg. No. 33999.
Use Class S Concrete In Cap And Columns, Use Class B Concrete In Footing.

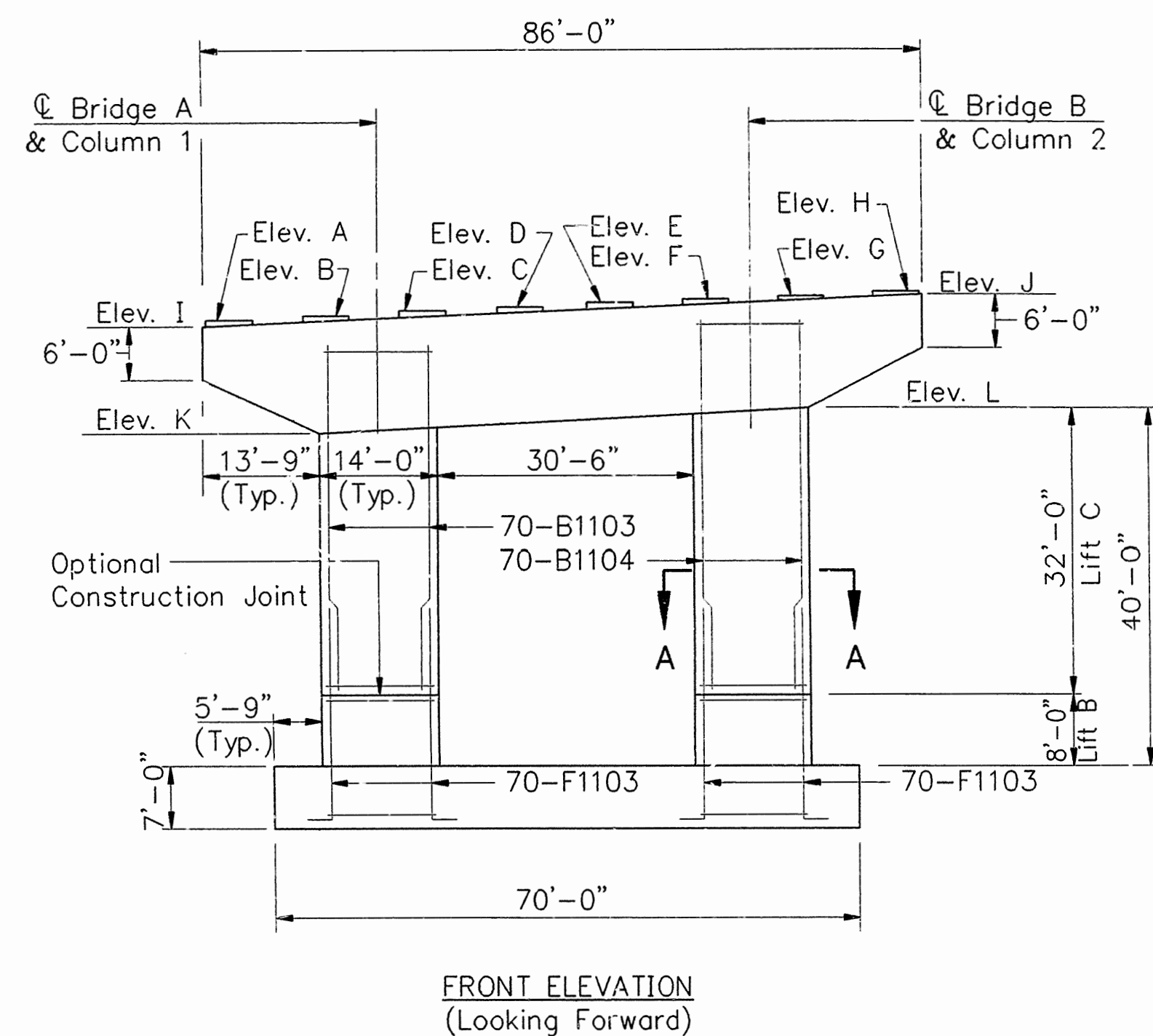
TABLE OF ELEVATIONS																			
	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Elev. F	Elev. G	Elev. H	Elev. I	Elev. J	Elev. K	Elev. L	Elev. M	Elev. N	Elev. O	Elev. P	Elev. Q	Elev. R	Elev. S
Pier 7	1447.49	1448.06	1448.62	1449.18	1449.63	1450.19	1450.76	1451.32	1448.53	1449.10	1449.66	1450.23	1450.67	1451.23	1451.80	1452.36	1446.80	1450.93	1435.46
Pier 8	1445.53	1446.10	1446.66	1447.22	1447.67	1448.23	1448.80	1449.36	1444.84	1448.97	1433.50	1436.31	1358.31	1351.31					



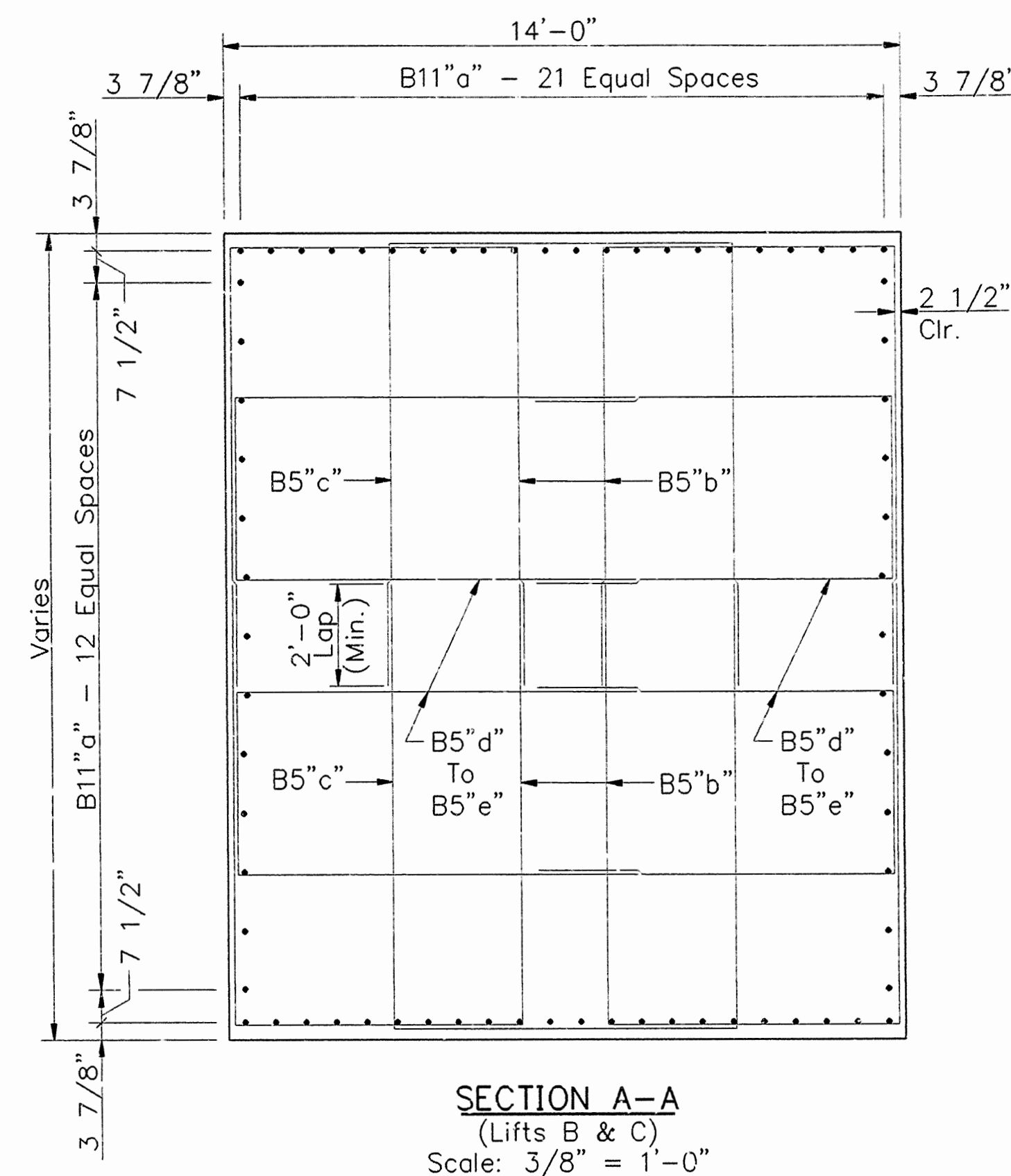
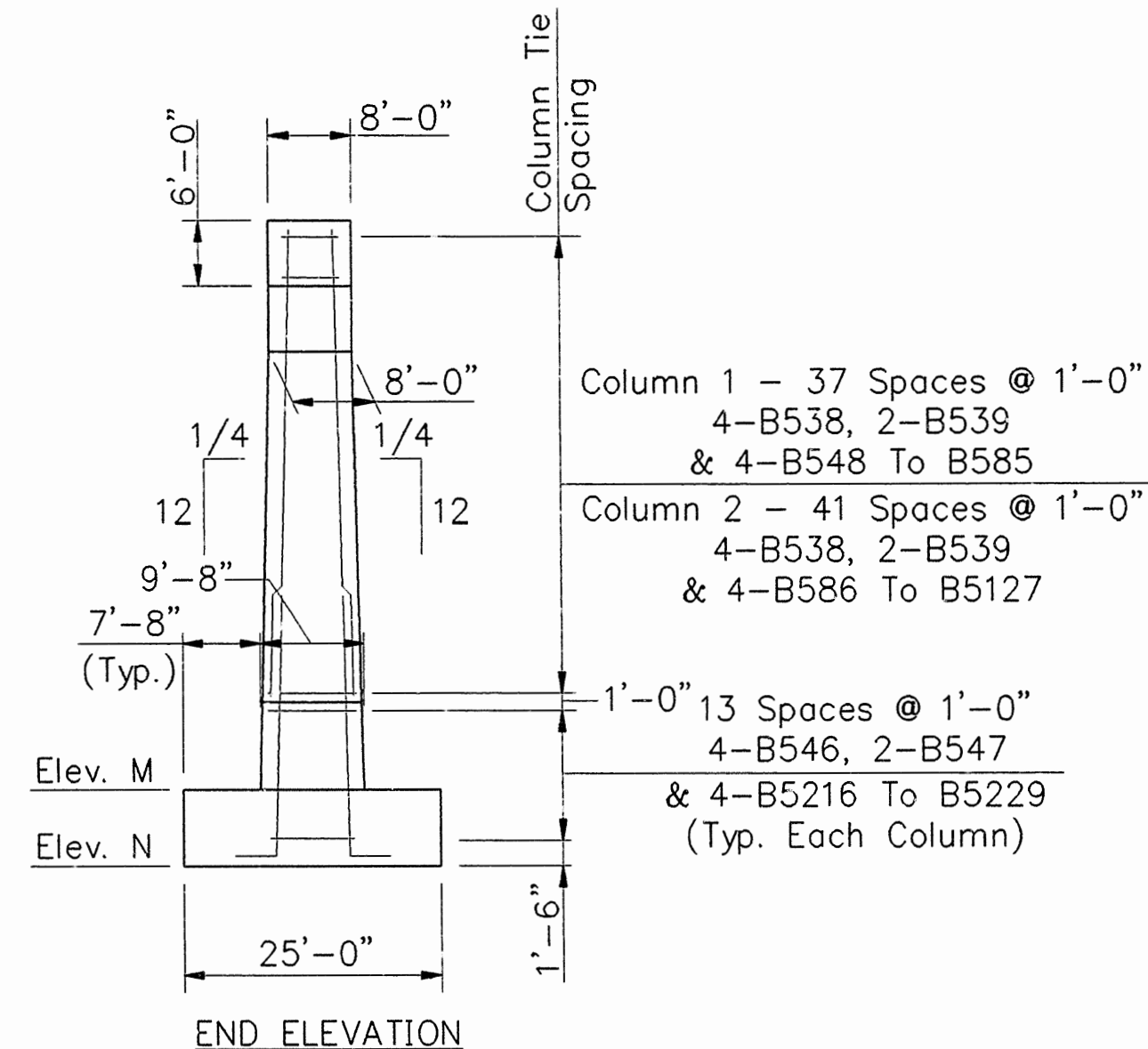
SHEET 2 OF 7
DETAILS OF PIERS 1, 2, 7, 8 & 9
U.S. HIGHWAY 71 OVER BLACKBURN CREEK
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: HEW DATE: FEB. 1993
CHECKED BY: JHR DATE: FEB. 1993
DESIGNED BY: WMM DATE: FEB. 1993
SCALE: AS NOTED
BRIDGE NO. 6479 A & B DRAWING NO. 33994

MSW/JRM/PBB 71B56 31148010 5-5-93 21

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
5-18-95	5-25-95			6	ARK.		53	
				JOB NO.		R40039		
				(1) 6479 A&B DTLS PIERS 1,2,7-9				33995



PIER 9
Scale: None



See Table Of Column Bar Variables
For Bar Mark In Each Lift.

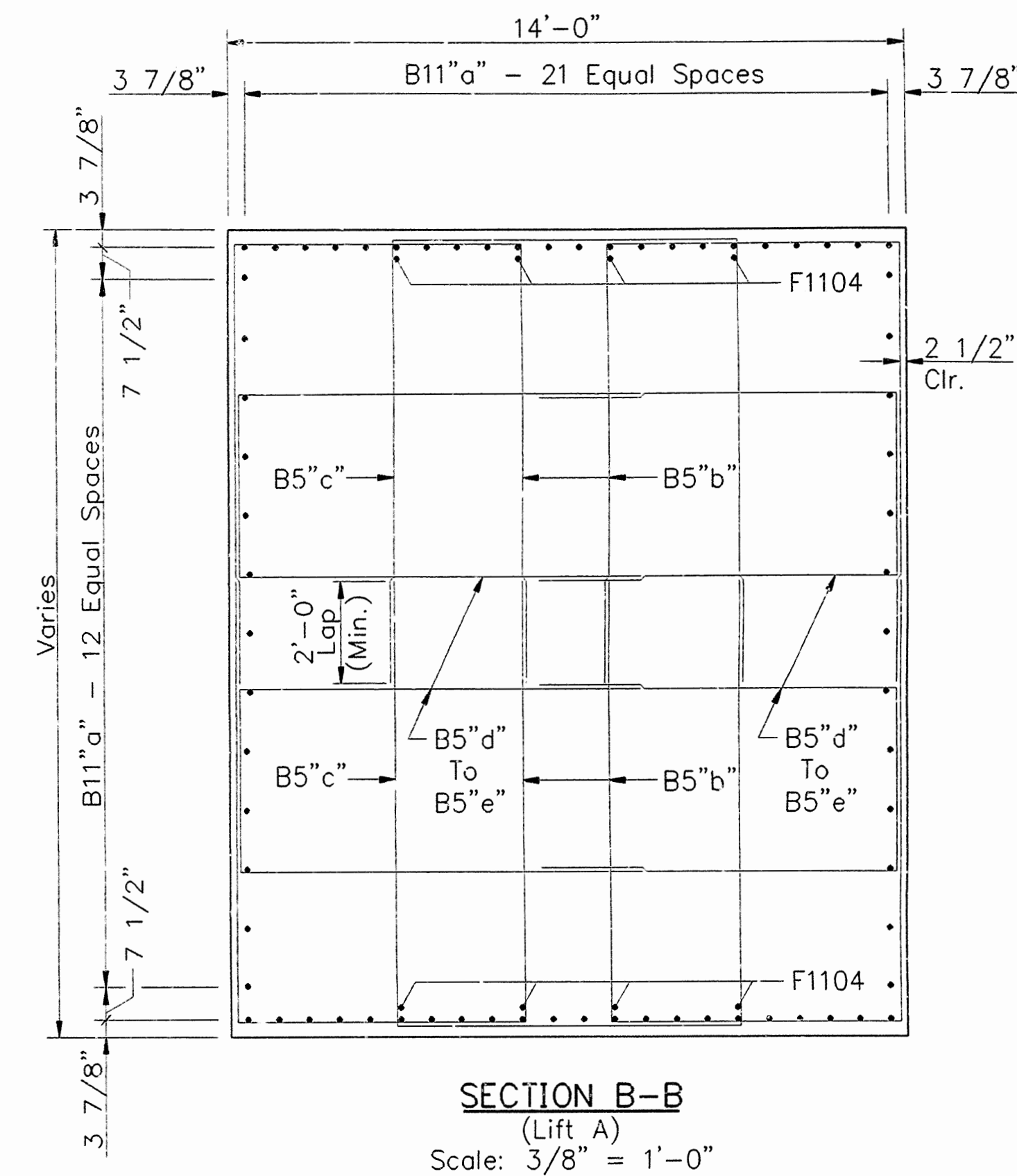


TABLE OF COLUMN BAR VARIABLES - PIERS 1 & 2						
		Vertical Bars		Column Ties		
		No.	"a"	"b"	"c"	"d"
Pier 1	Lift A	70	01	42	43	121
	Lift B	70	02	40	41	89
	Lift C	70	03	38	39	46
Pier 2	Lift A	70	02	44	45	138
	Lift B	70	03	38	39	46

TABLE OF COLUMN BAR VARIABLES - PIERS 7,8&9						
		Vertical Bars		Column Ties		
		No.	"a"	"b"	"c"	"d"
Pier 7	Lift A	70	01	42	43	160
	Lift B	70	02	40	41	128
	Lift C	70	03	38	39	48
Pier 8	Lift A	70	01	44	45	196
	Lift B	70	02	40	41	128
	Lift C	70	03	38	39	48
Pier 9	Lift A	70	04	38	39	86
	Lift B	70	02	40	41	128
	Lift C	70	03	38	39	48

REVISD CLASS S AND CLASS B CONC.
W A S 18 MAY 95

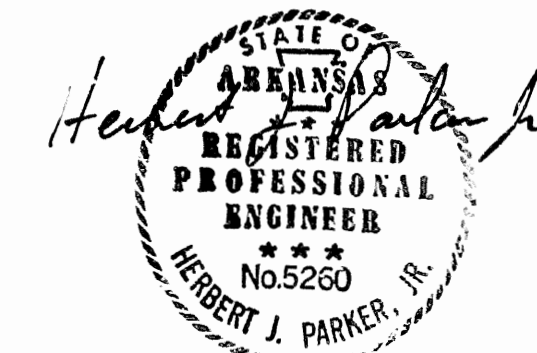
MAXIMUM TOE PRESSURE (kips / sq. ft.)											
	Group I	Group II	Group III	Group IV	Group V	Group VI					
	Max.Allow	Max.Allow	Max.Allow	Max.Allow	Max.Allow	Max.Allow					
Pier 9	5.1	20.0	6.5	25.0	6.2	25.0	6.2	28.0	7.6	28.0	7.2

NOTE: All Pressures Are Net Service Load Values.

SERVICE DESIGN LOADS (kips)	
	Pier 9
Dead Load from Superstructure	2752.8
Single Lane Live Load	127.4
Single Lane Impact Load	25.0

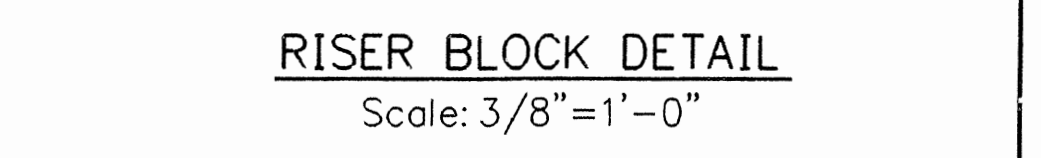
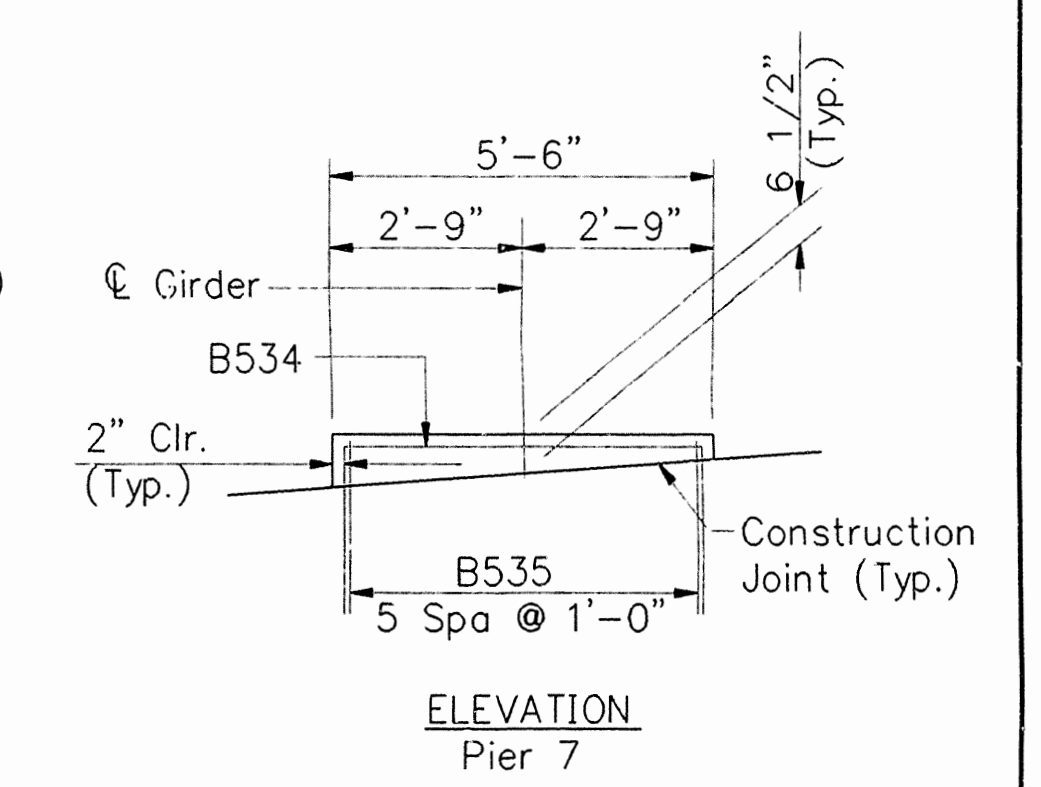
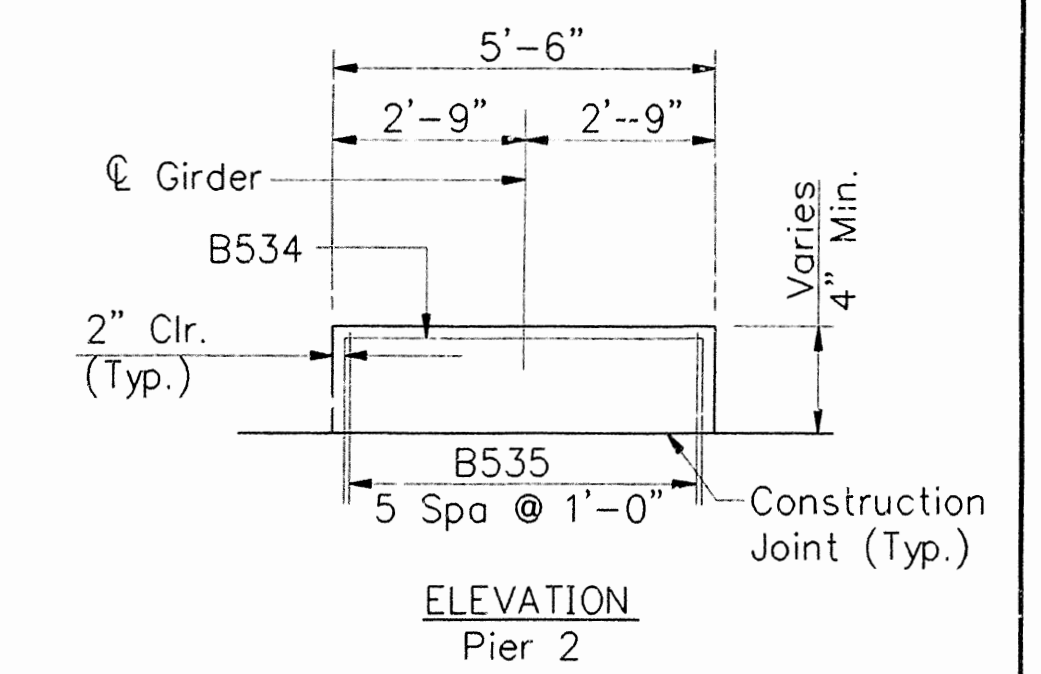
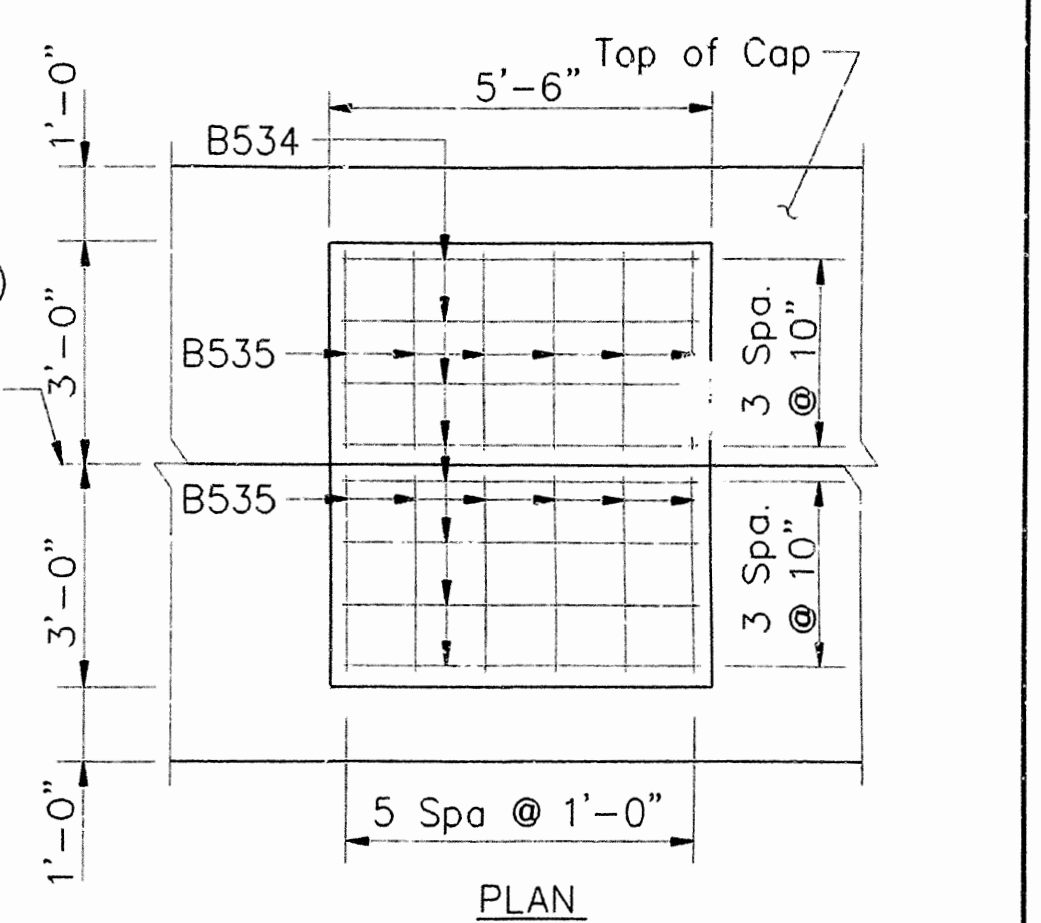
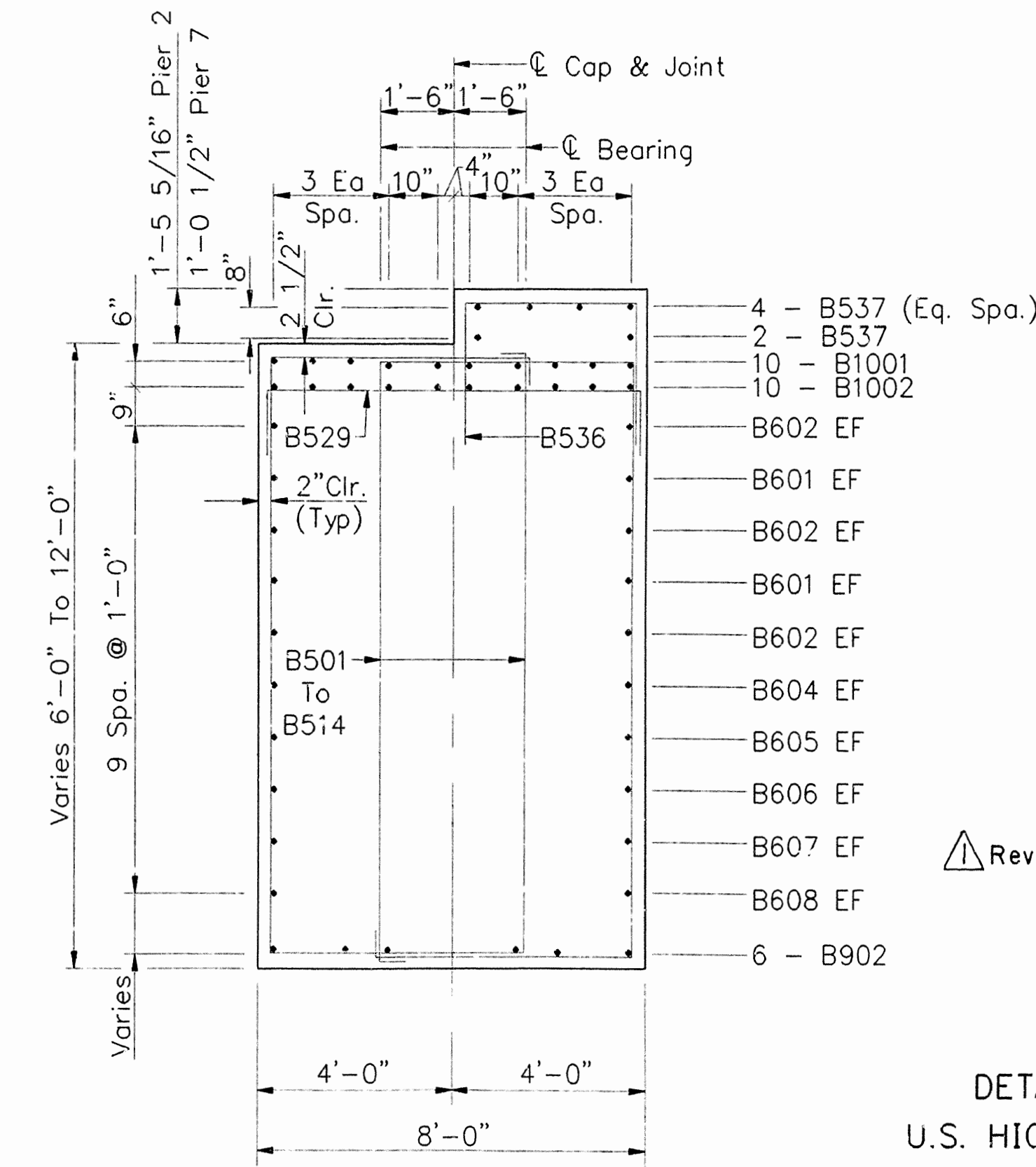
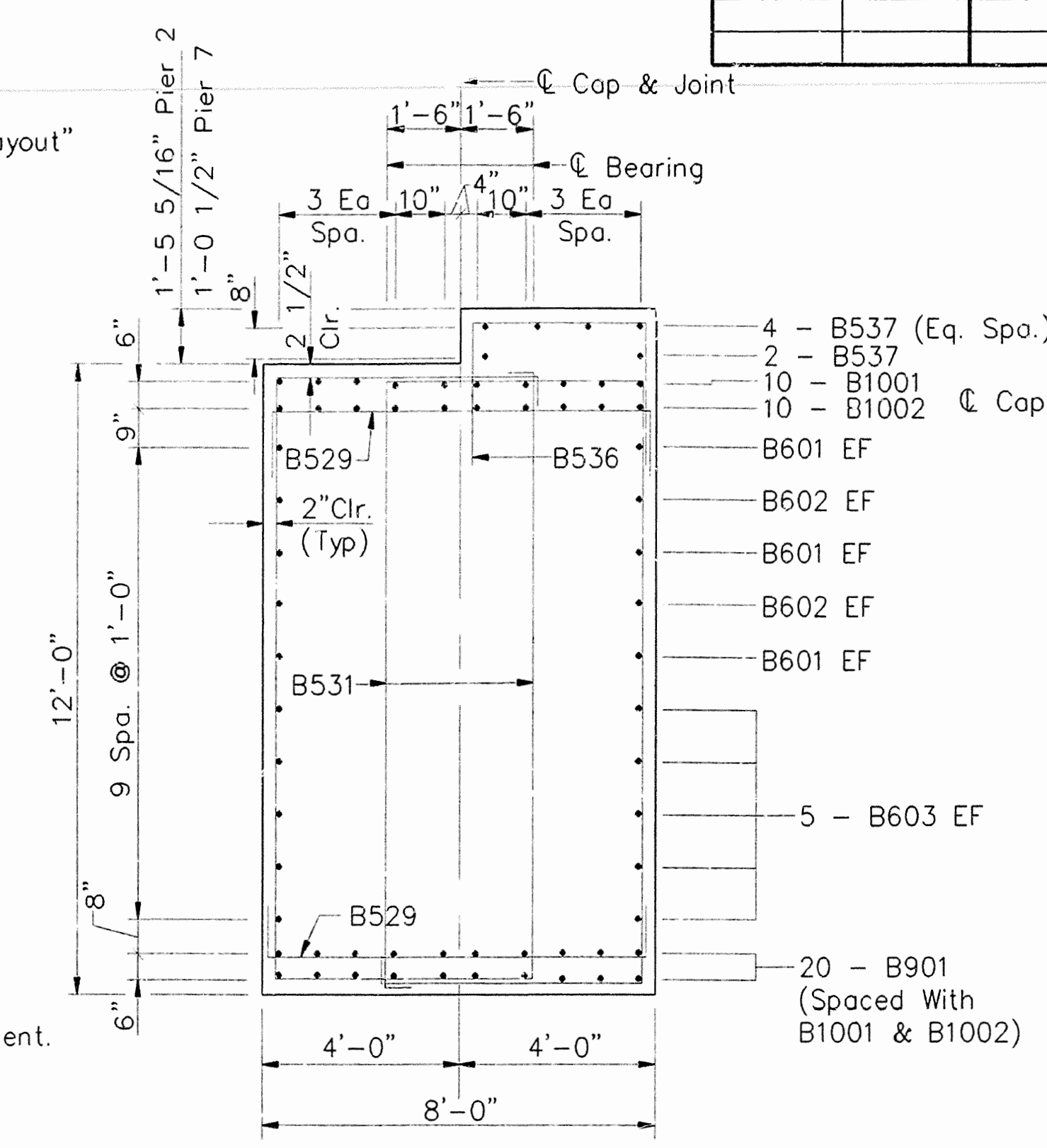
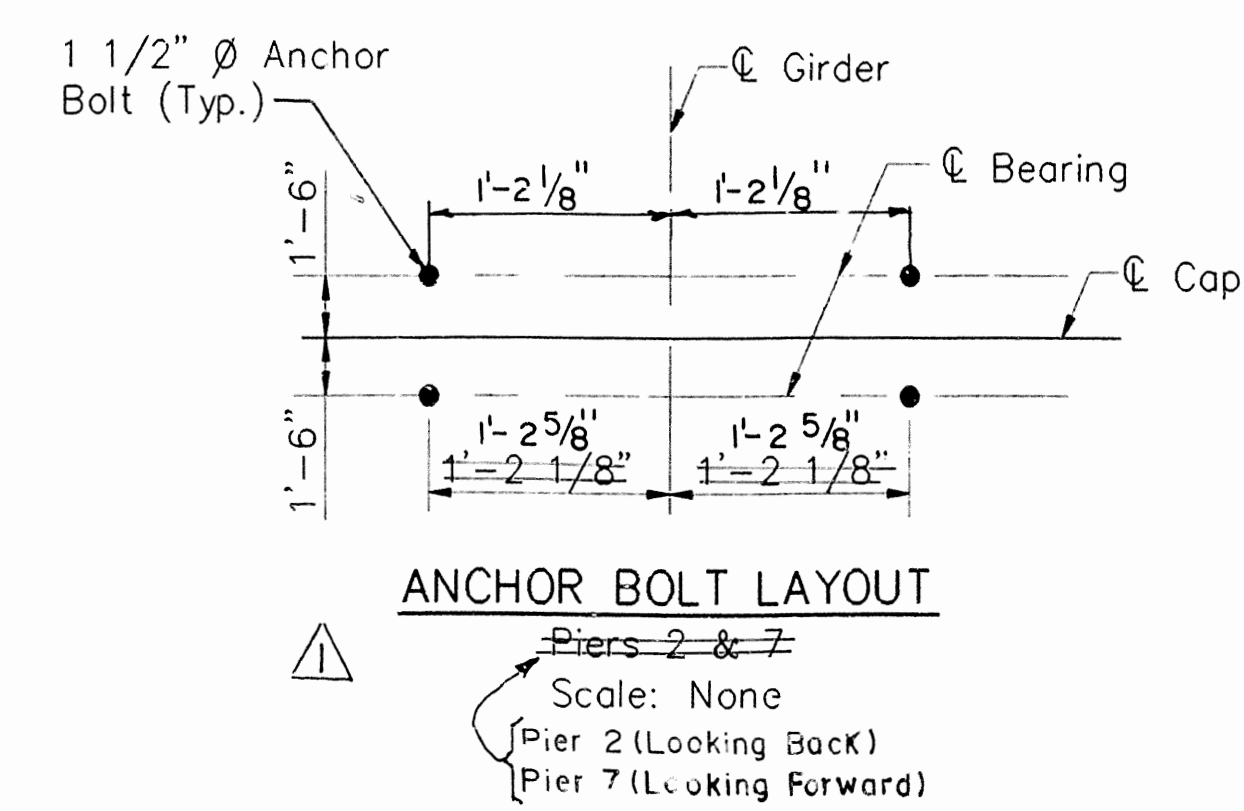
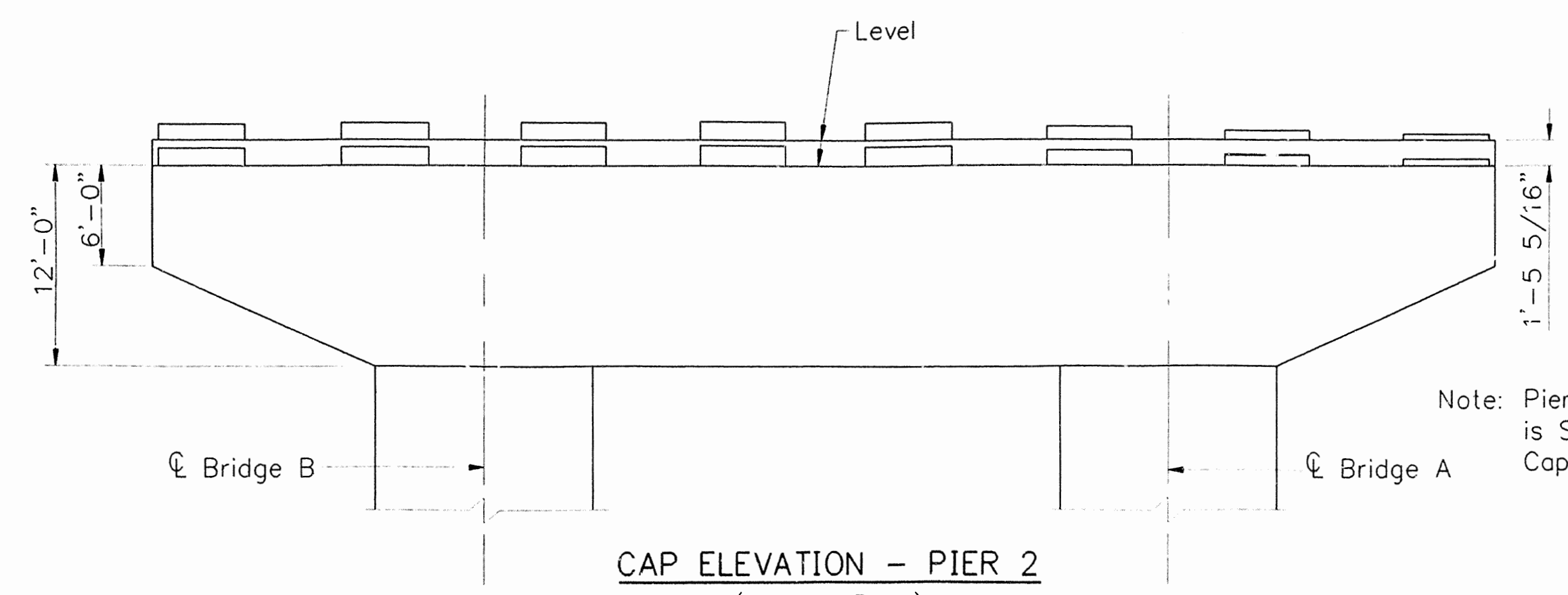
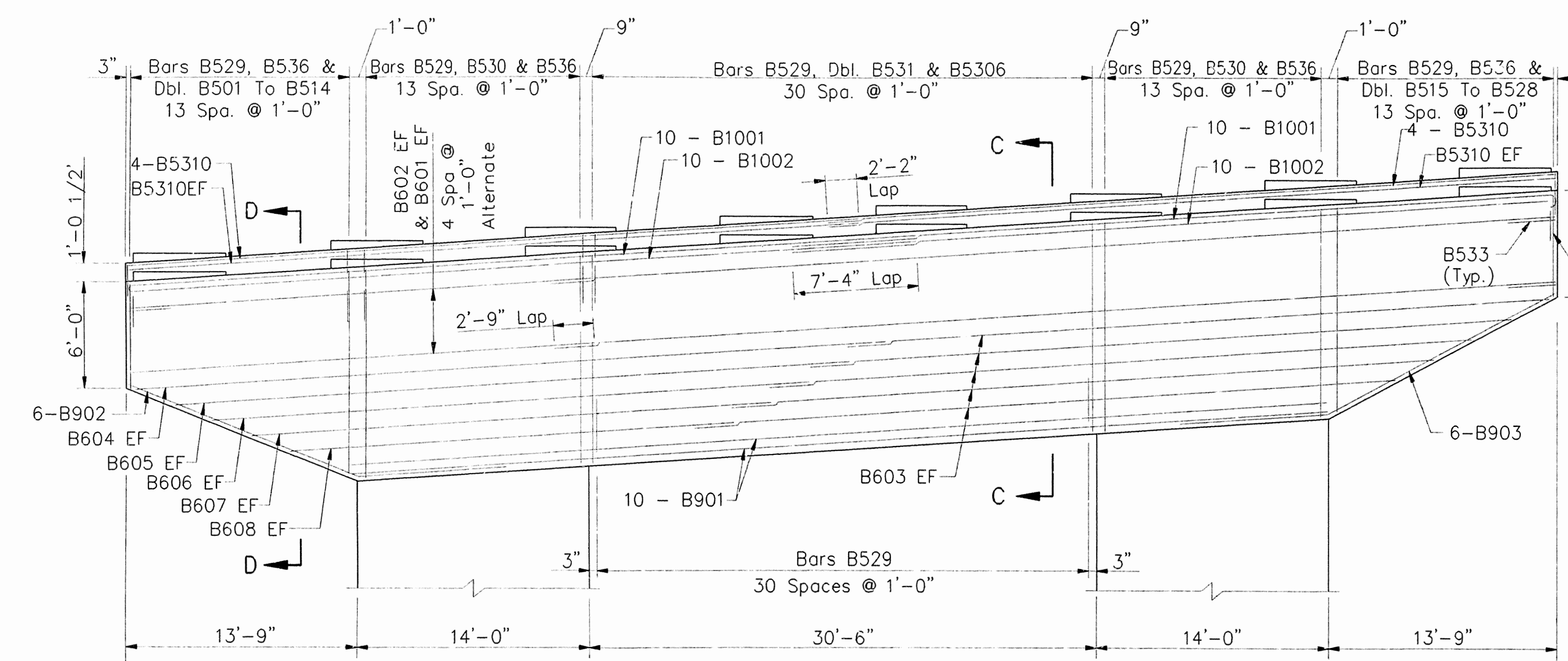
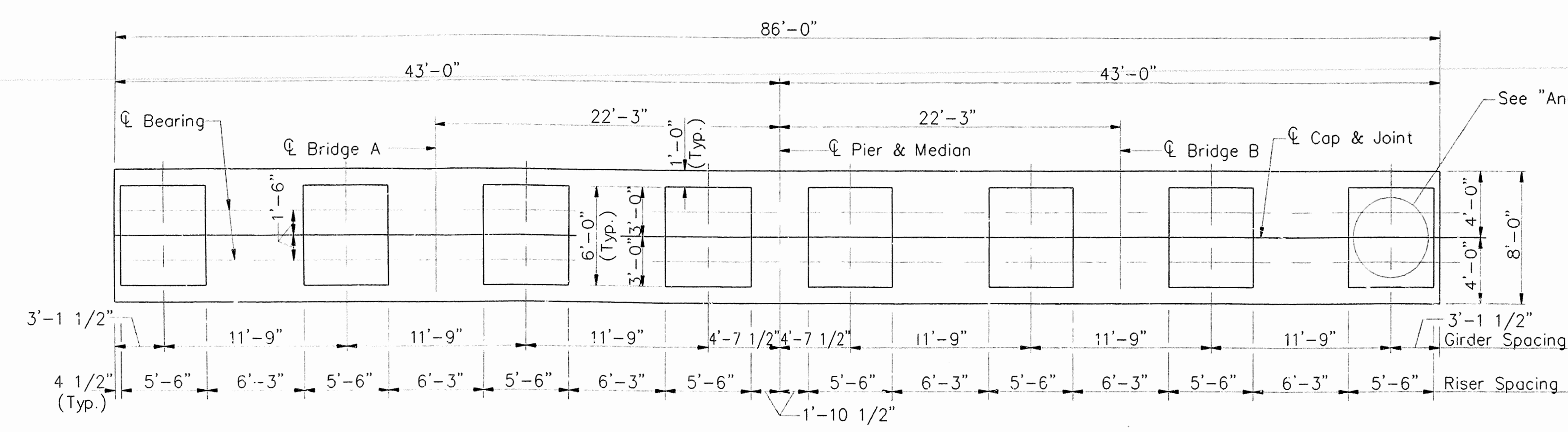
NOTE:
For Cap Details, See Dwg. No. 33996.
For Footing Details, See Dwg. No. 33998.
For Reinforcement Schedule & Bending Diagrams,
See Drawing No. 33999.
Use Class S Concrete In Cap And Columns. Use
Class B Concrete In Footing.

TABLE OF ELEVATIONS												
	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Elev. F	Elev. G	Elev. H	Elev. I	Elev. J	Elev. K	Elev. L
Pier 9	1443.28	1443.84	1444.40	1444.97	1445.41	1445.98	1446.54	1447.10	1442.59	1446.71	1431.25	1434.05



SHEET 3 OF 7
DETAILS OF PIER 1, 2, 7, 8, & 9
U.S. HIGHWAY 71 OVER BLACKBURN CREEK
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARIZONA STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: HEW DATE: FEB. 1993
CHECKED BY: JHR DATE: FEB. 1993
DESIGNED BY: WMM DATE: FEB. 1993
SCALE: AS NOTED
BRIDGE NO. 6479 A & B DRAWING NO. 33995

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-20-95	11-21-95			6	ARK.		55	
				JOB NO.		R40039		
Joint				① 6479	A&B DTLS PIERS 1,2,7-9			33997



Revised Anchor Bolt Layout, 11-20-95 LDF

SHEET 5 OF 7
DETAILS OF PIERS 1, 2, 7, 8, & 9
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 17 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: PBB DATE: FEB. 1993
CHECKED BY: JHR DATE: FEB. 1993
DESIGNED BY: WMM DATE: FEB. 1993
BRIDGE NO. 6479 A & B DRAWING NO. 33997

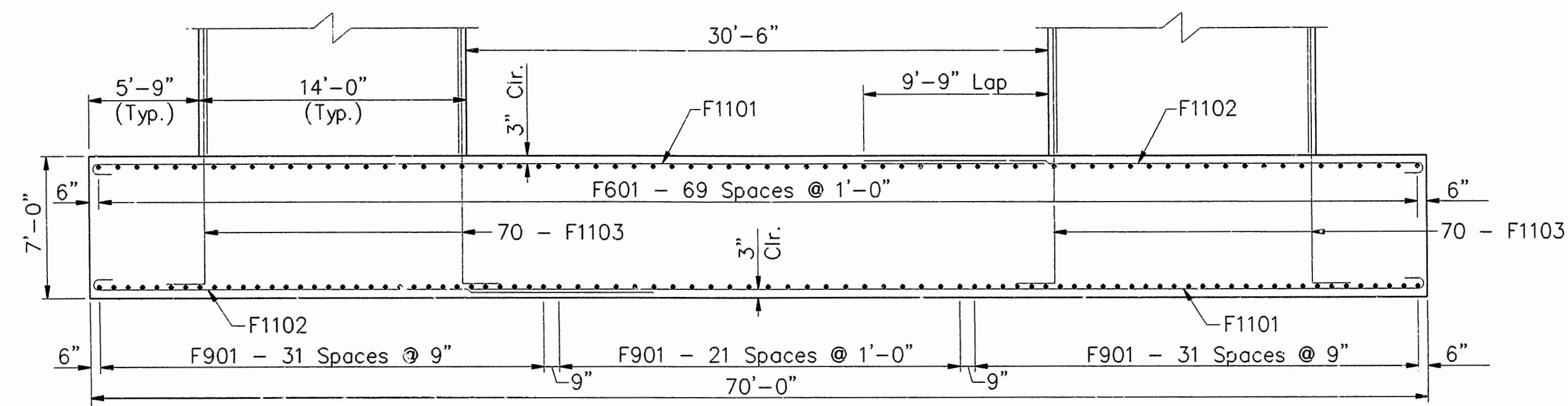
Robert J. Parker, Jr.
REGISTERED PROFESSIONAL ENGINEER
No. 5250
JANUARY 1993

BRIDGE ENGINEER

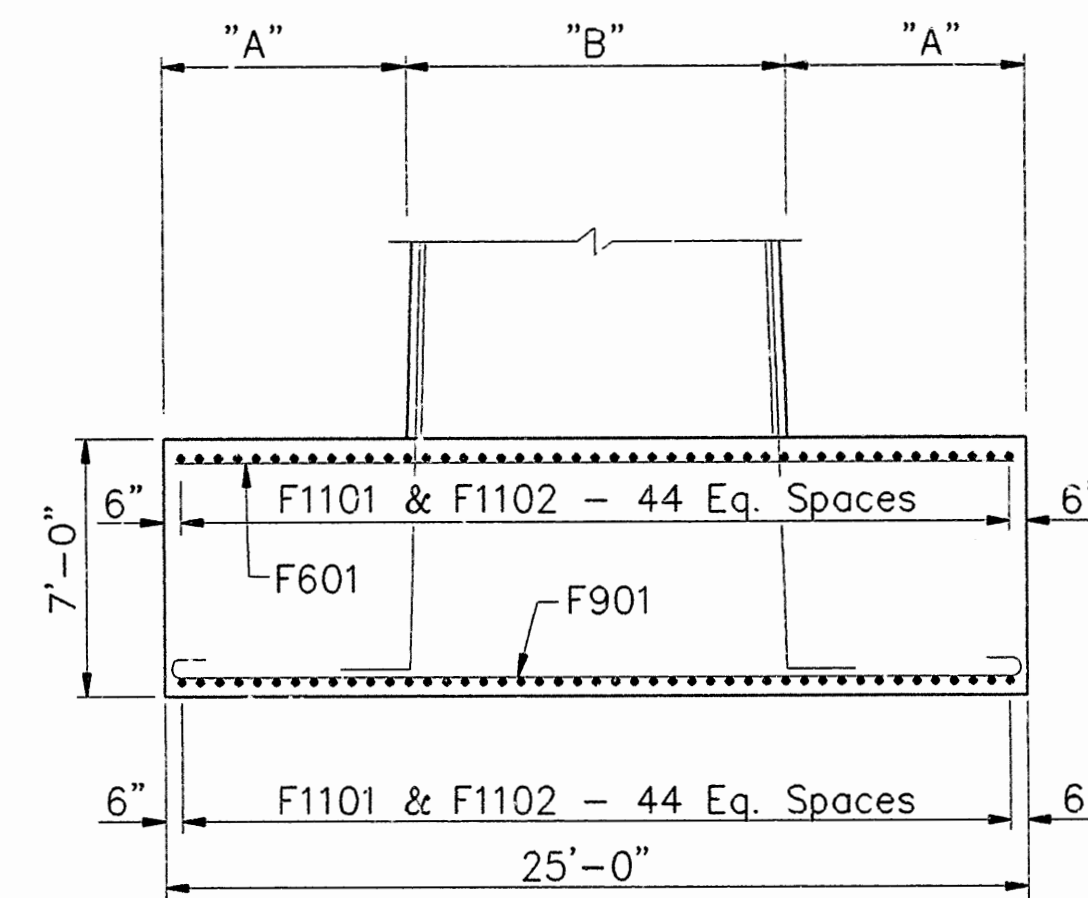
PBB 71B60 91148010 2-24-94

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		56	
				JOB NO.		R40039		
				① 6479 A&B DTLS PIERS 1,2,7-9				33998

Note:
The Lap Splice Location Of Bars
F1101 & F1102 Shall Be Alternated
So That No More Than 50% Of The
Bars Are Spliced At The Same Location.

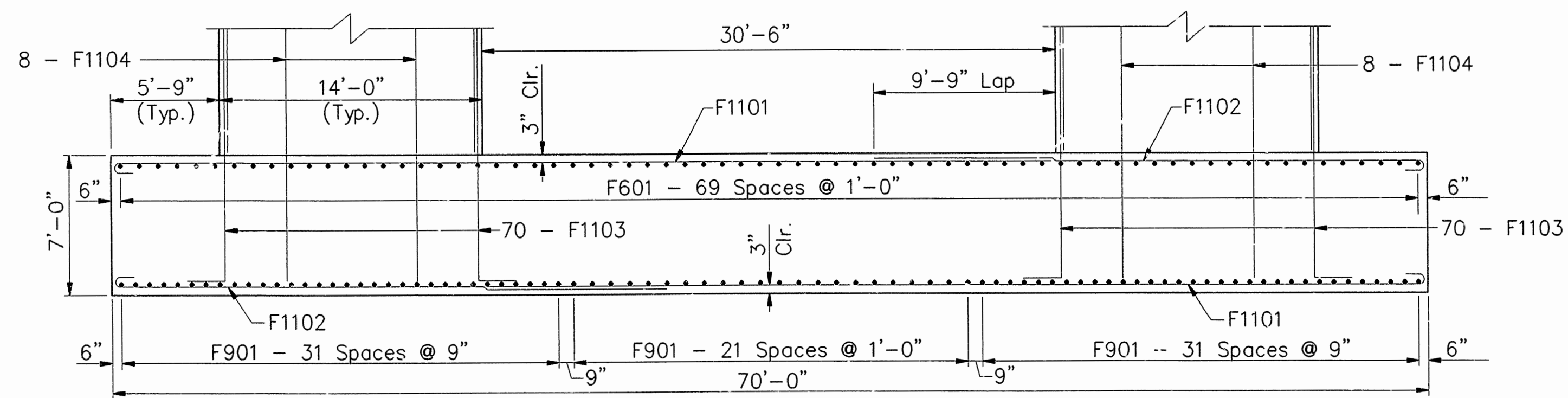


FRONT FOOTING ELEVATION
Piers 2 & 9
Scale: 3/16" = 1'-0"

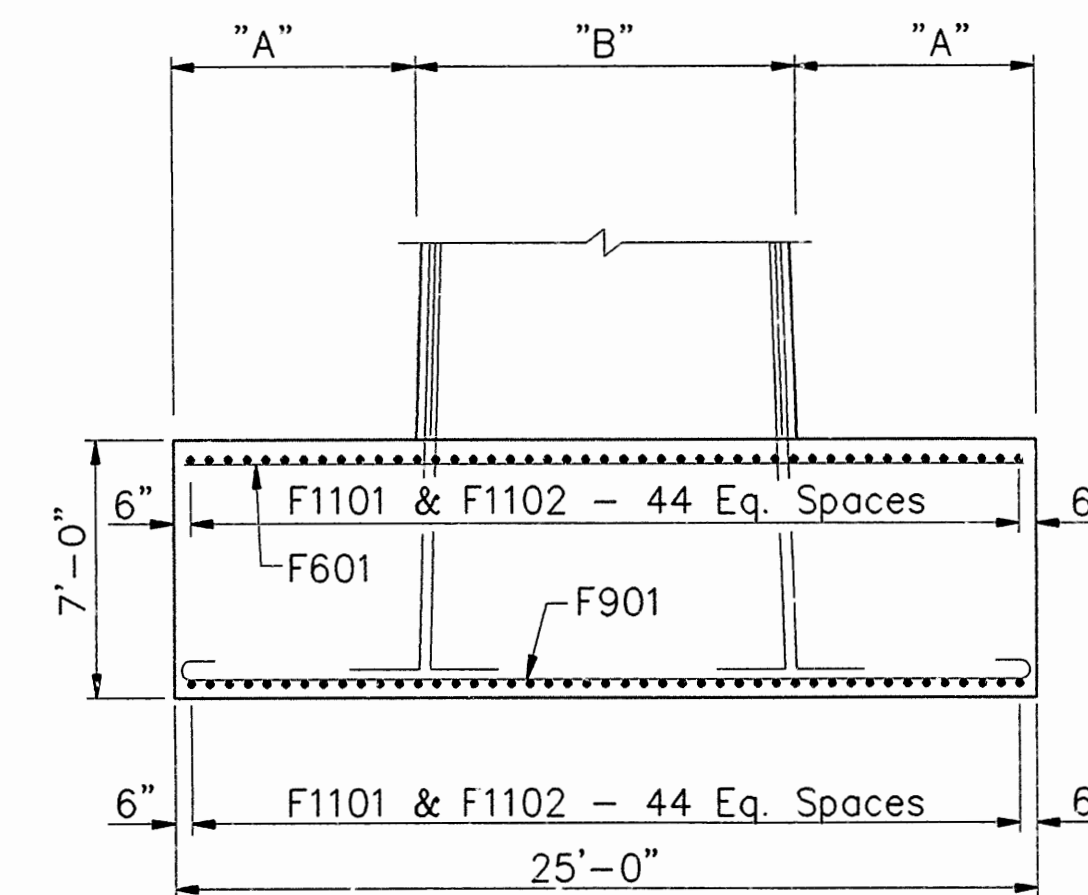


END FOOTING ELEVATION
Piers 2 & 9
Scale: 3/16" = 1'-0"

TABLE OF VARIABLES		
	"A"	"B"
PIER 1	6'-1 1/4"	11'-1 1/2"
PIER 2	7'-2"	10'-8"
PIER 7	6'-6 1/2"	11'-11"
PIER 8	6'-10 1/2"	11'-3"
PIER 9	7'-8"	9'-8"



FRONT FOOTING ELEVATION
Piers 1, 7, & 8
Scale: 3/16" = 1'-0"



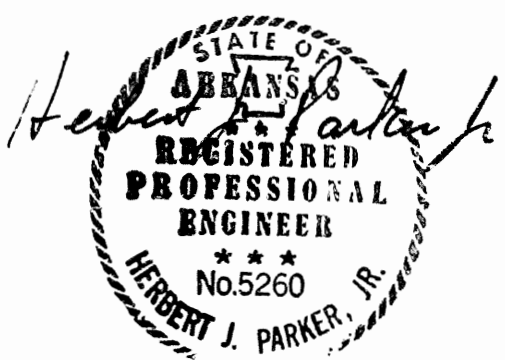
END FOOTING ELEVATION
Piers 1, 7, & 8
Scale: 3/16" = 1'-0"

SHEET 6 OF 7
DETAILS OF PIERS 1, 2, 7, 8, & 9
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: PBB DATE: FEB. 1993
CHECKED BY: JHR DATE: FEB. 1993
DESIGNED BY: WMM DATE: FEB. 1993

BRIDGE NO. 6479 A & B DRAWING NO. 33998



BRIDGE ENGINEER

MSW/JBM/PBB 71861 91148010 5-5-93 21

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		57	
				JOB NO.		R40039		

① 6479 A&B DTLs PIERS 1,2,7-9 33999

REINFORCEMENT SCHEDULE -- PIERS 1 & 2						REINFORCEMENT SCHEDULE -- PIERS 7, 8 & 9												
MARK	NO	LENGTH	PIN DIA	A	B	MARK	NO	LENGTH	PIN DIA	A	B	MARK	NO	LENGTH	PIN DIA	A	B	
COMMON BARS						B529	118	10'-5 1/2"	2 1/2"	7'-8"	1'-6"	PIER 7	B5160	8 EA	17'-10 1/2"	2 1/2"	2'-5"	7'-10"
						B530	28	30'-9 1/2"	2 1/2"	7'-8"	11'-8"		B5195	TO	18'-3"	TO	2'-9 1/2"	
						B531	62	34'-1"	2 1/2"	5'-2"	11'-7 1/2"							
						B532	6	5'-8"	STR.									
						B533	10	10'-4"	2 1/2"	7'-6 1/2"	1'-6"		B1101	140	39'-9"	STR.		
						B538	344	16'-9"	2 1/2"	5'-11 1/2"	5'-6"		B1102	140	41'-9"	STR.		
						B539	172	18'-0 1/2"	2 1/2"	7'-3"	5'-6"							
						B546	8 EA	17'-1 1/2"	2 1/2"	1'-8"	7'-10"		F1103	140	18'-0"	11 1/4"	16'-4"	2'-0"
						B588	TO	17'-6 1/2"		2'-1"			F1104	16	38'-1"	11 1/4"	36'-5"	2'-0"
						B585	TO	17'-6 1/2"		2'-1"								
COMMON BARS						B586	4 EA	17'-1 1/2"	2 1/2"	1'-8"	7'-10"	PIER 8	B501	2 EA	22'-4"	2 1/2"	5'-2"	5'-9"
						B5127	TO	17'-6 1/2"		2'-1"			B514	TO	33'-8"	TO	11'-5"	
						B601	10	60'-0"	STR.				B515	2 EA	33'-8"	TO	11'-5"	
						B602	10	28'-6"	STR.				B528	TO	22'-4"	TO	5'-9"	
						B603	10	40'-0"	STR.				B534	96	9'-5 1/2"	2 1/2"	5'-2"	2'-3"
						B604	2	45'-5"	STR.				B540	256	18'-1"	2 1/2"	5'-11 1/2"	6'-2"
						B605	2	40'-10"	STR.				B541	128	19'-4 1/2"	2 1/2"	7'-3"	6'-2"
						B606	2	36'-3"	STR.				B544	160	19'-6"	2 1/2"	5'-11 1/2"	6'-6 1/2"
						B607	2	31'-8"	STR.				B545	80	20'-9 1/2"	2 1/2"	7'-3"	6'-6 1/2"
						B608	2	27'-1"	STR.				B5128	8 EA	17'-6 1/2"	2 1/2"	2'-1"	7'-10"
COMMON BARS						B901	20	58'-6"	STR.			PIER 9	B5159	8 EA	17'-10 1/2"	2 1/2"	2'-5"	7'-10"
						B902	6	20'-7"	9"	6'-0"	14'-7"		B5196	TO	17'-10 1/2"	TO	2'-5"	
						B903	6	21'-1"	9"	6'-0"	15'-1"		B5215	8 EA	18'-1"	2 1/2"	2'-7 1/2"	
						B1001	10	47'-11"	10"	46'-6"	11 1/2"		B1101	140	23'-9"	STR.		
						B1002	10	46'-4"	STR.				B1102	140	41'-9"	STR.		
						B1103	70	40'-0"	STR.				F1103	140	18'-0"	11 1/4"	16'-4"	2'-0"
						B1104	70	42'-4"	STR.				F1104	16	22'-1"	11 1/4"	20'-5"	2'-0"
						F601	70	24'-6"	STR.									
						F901	86	27'-0"	9"	24'-6"	10"							
						COMMON BARS							F1101	88	51'-6"	11 1/4"	50'-0"	1'-0 1/2"
F1102	88	30'-9"	11 1/4"	29'-3"	1'-0 1/2"							B514	TO	33'-8"	TO	11'-5"		
F1103	140	18'-0"	11 1/4"	16'-4"	2'-0"							B515	2 EA	33'-8"	TO	11'-5"		
B501	2 EA	22'-4"	2 1/2"	5'-2"	5'-9"							B528	TO	22'-4"	TO	5'-9"		
B514	TO	33'-8"		11'-5"	B534							96	9'-5 1/2"	2 1/2"	5'-2"	2'-3"		
B515	2 EA	33'-8"	2 1/2"	5'-2"	11'-5"							B540	256	18'-1"	2 1/2"	5'-11 1/2"	6'-2"	
B528	TO	22'-4"		5'-9"	B541							128	19'-4 1/2"	2 1/2"	7'-3"	6'-2"		
B534	96	9'-5 1/2"	2 1/2"	5'-2"	2'-3"							B542	136	18'-9"	2 1/2"	5'-11 1/2"	6'-6"	
B540	256	18'-1"	2 1/2"	5'-11 1/2"	6'-2"							B543	68	20'-0 1/2"	2 1/2"	7'-3"	6'-6"	
B541	128	19'-4 1/2"	2 1/2"	7'-3"	6'-2"							B589	8 EA	17'-6 1/2"	2 1/2"	2'-1"	7'-10"	
COMMON BARS						B542	136	18'-9"	2 1/2"	5'-11 1/2"	6'-6"	PIER 2	B5120	8 EA	17'-10 1/2"		2'-5"	
						B543	68	20'-0 1/2"	2 1/2"	7'-3"	6'-6"		B5121	TO	17'-10 1/2"		2'-5"	
						B589	8 EA	17'-6 1/2"	2 1/2"	2'-1"	7'-10"		B5137	8 EA	18'-0 1/2"	2 1/2"	2'-7"	7'-10"
						B5120	8 EA	17'-10 1/2"		2'-5"			B1101	140	20'-9"	STR.		
						B5121	TO	17'-10 1/2"		2'-5"			F1104	16	19'-1"	11 1/4"	17'-5"	2'-0"
						B5137	TO	18'-0 1/2"	2 1/2"	2'-7"								
						B1101	140	20'-9"	STR.									
						F1104	16	19'-1"	11 1/4"	17'-5"	2'-0"							
COMMON BARS						B501	2 EA	23'-11"	2 1/2"	5'-11 1/2"	5'-9"	PIER 7	B501	2 EA	23'-11"	2 1/2"	5'-11 1/2"	5'-9"
						B514	TO	35'-3"		11'-5"	B515		2 EA	35'-3"	2 1/2"	5'-11 1/2"	11'-5"	
						B515	2 EA	35'-3"	2 1/2"	5'-11 1/2"	11'-5"		B528	TO	23'-11"	TO	5'-9"	
						B528	TO	23'-11"		5'-9"	B534		64	9'-5 1/2"	2 1/2"	7'-8"	1'-6"	
						B534	64	9'-5 1/2"	2 1/2"	5'-2"	2'-3"		B535	96	6'-11 1/2"	2 1/2"	2'-8"	2'-3"
						B535	96	6'-11 1/2"	2 1/2"	2'-8"	2'-3"		B536	87	8'-9 1/2"	2 1/2"	3'-8"	2'-8"
						B536	87	8'-9 1/2"	2 1/2"	3'-8"	2'-8"		B537	12	43'-11"	STR.		
						B537	12	43'-11"	STR.		B540		256	18'-1"	2 1/2"	5'-11 1/2"	6'-2"	
						B540	256	18'-1"	2 1/2"	5'-11 1/2"	6'-2"		B541	128	19'-4 1/2"	2 1/2"	7'-3"	6'-2"
						B541	128	19'-4 1/2"	2 1/2"	7'-3"	6'-2"		B542	288	19'-6"	2 1/2"	5'-11 1/2"	6'-10 1/2"
COMMON BARS						B542	288	19'-6"	2 1/2"	5'-11 1/2"	6'-10 1/2"	PIER 8	B543	144	20'-9 1/2"	2 1/2"	7'-3"	6'-10 1/2"
						B543	144	20'-9 1/2"	2 1/2"	7'-3"	6'-10 1/2"		B5128	8 EA	17'-6 1/2"	2 1/2"	2'-1"	7'-10"
						B5128	8 EA	17'-6 1/2"	2 1/2"	2'-1"	7'-10"		B5159	TO	17'-10 1/2"		2'-5"	
						B5159	TO	17'-10 1/2"		2'-5"								
COMMON BARS						B501	2 EA	23'-11"	2 1/2"	5'-11 1/2"	5'-9"	PIER 9	B501	2 EA	22'-4"	2 1/2"	5'-2"	5'-9"
						B514	TO	35'-3"		11'-5"	B515		2 EA	35'-3"	2 1/2"	5'-11 1/2"	11'-5"	
						B515	2 EA	35'-3"	2 1/2"	5'-11 1/2"	11'-5"		B528	TO	22'-4"	TO	5'-9"	
						B528	TO	23'-11"		5'-9"	B534		96	9'-5 1/2"	2 1/2"	5'-2"	2'-3"	
						B534	64	9'-5 1/2"	2 1/2"	5'-2"	2'-3"		B546	112	17'-1"	2 1/2"	5'-11 1/2"	5'-8"
						B535	96	6'-11 1/2"	2 1/2"	2'-8"	2'-3"		B547	56	18'-4 1/2"	2 1/2"	7'-3"	5'-8"
						B536	87	8'-9 1/2"	2 1/2"	3'-8"	2'-8"		B5216	8 EA	17'-6 1/2"	2 1/2"	2'-1"	7'-10"
						B537	12	43'-11"	STR.		B5229		TO	17'-8 1/2"	TO	2'-3"		
						B544	304	18'-3"	2 1/2"	5'-11 1/2"	6'-3"		F1103	140	26'-0"	11 1/4"	24'-4"	2'-0"
						B545	152	19'-6 1/2"	2 1/2"	7'-3"	6'-3"							
B5138	8 EA	17'-6 1/2"	2 1/2"	2'-1"	7'-10"													
B5175	TO	17'-11 1/2"		2'-6"														

NOTE: Common Bars Shown Are For One Pier Only.

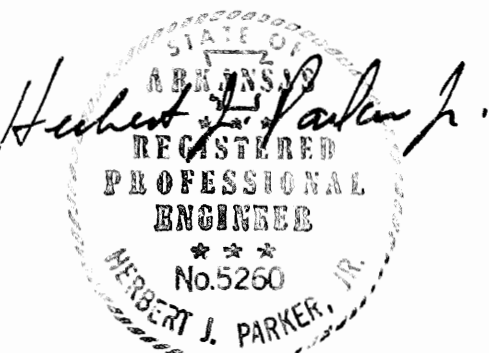
SHEET 7 OF 7
DETAILS OF PIERS 1, 2, 7, 8, & 9
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

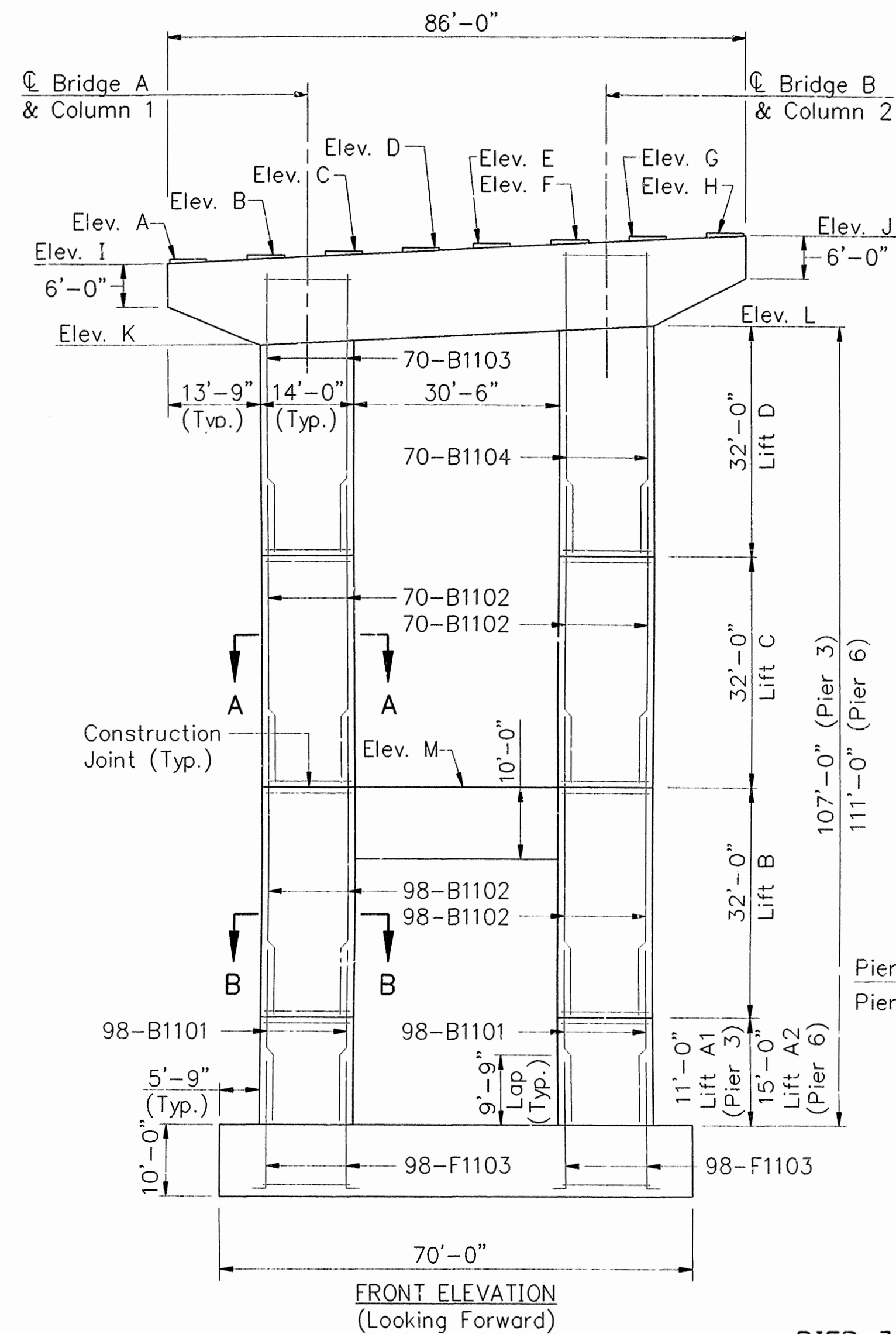
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: P.B.B. DATE: FEB. 1993
CHECKED BY: J.H.R. DATE: FEB. 1993
DESIGNED BY: W.M.M. DATE: FEB. 1993

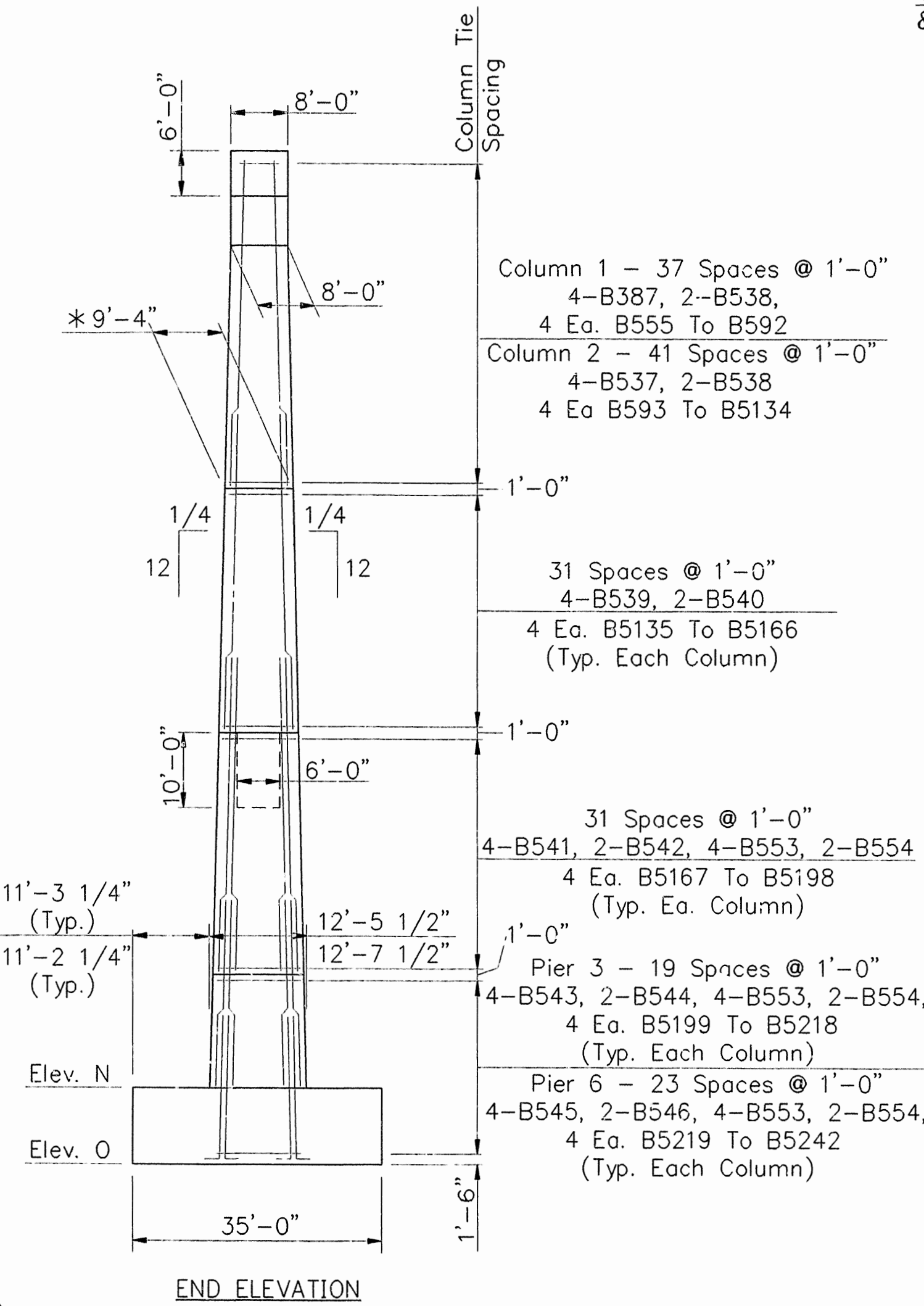
BRIDGE NO. 6479 A & B DRAWING NO. 33999

BRIDGE ENGINEER

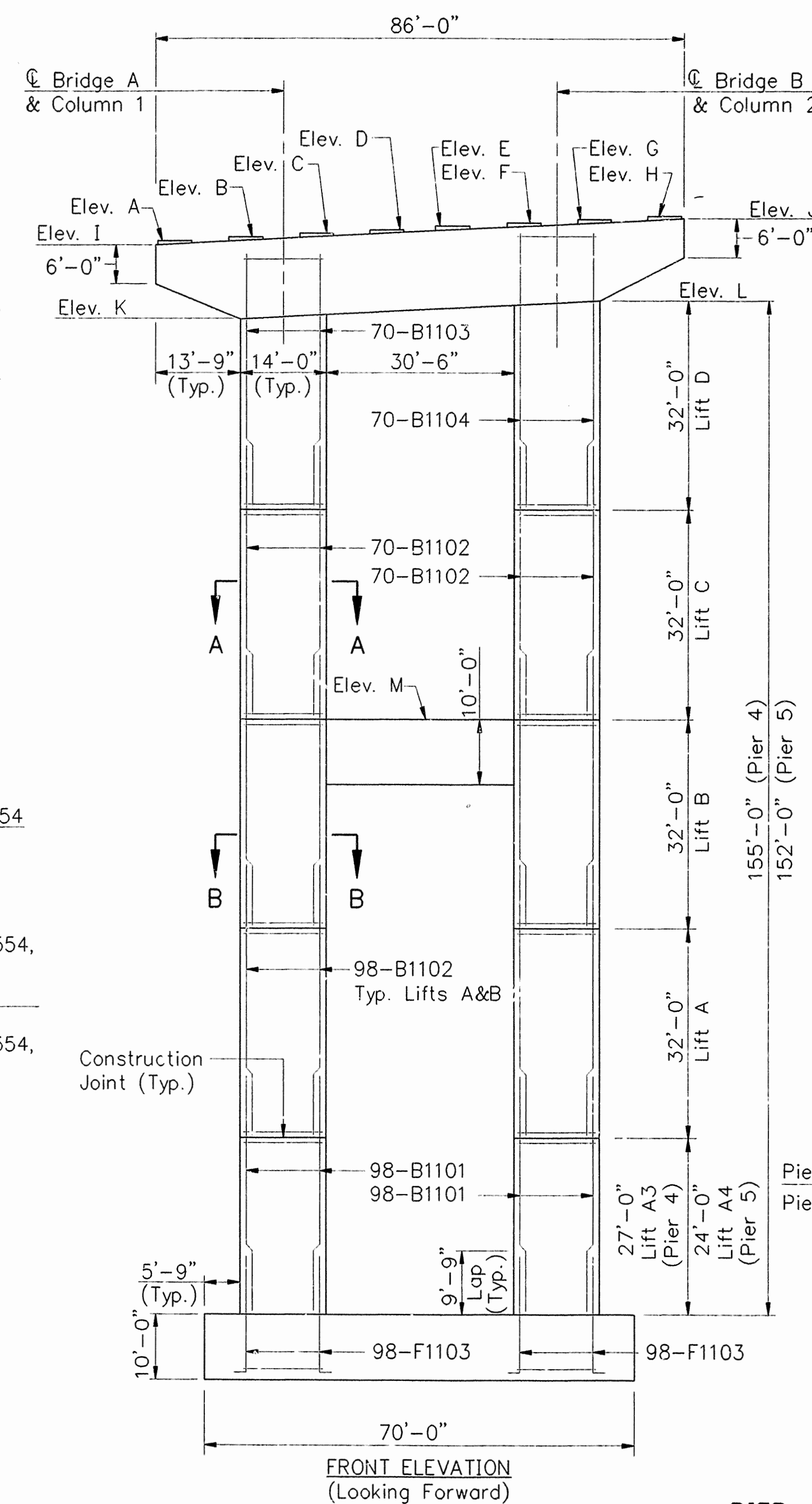




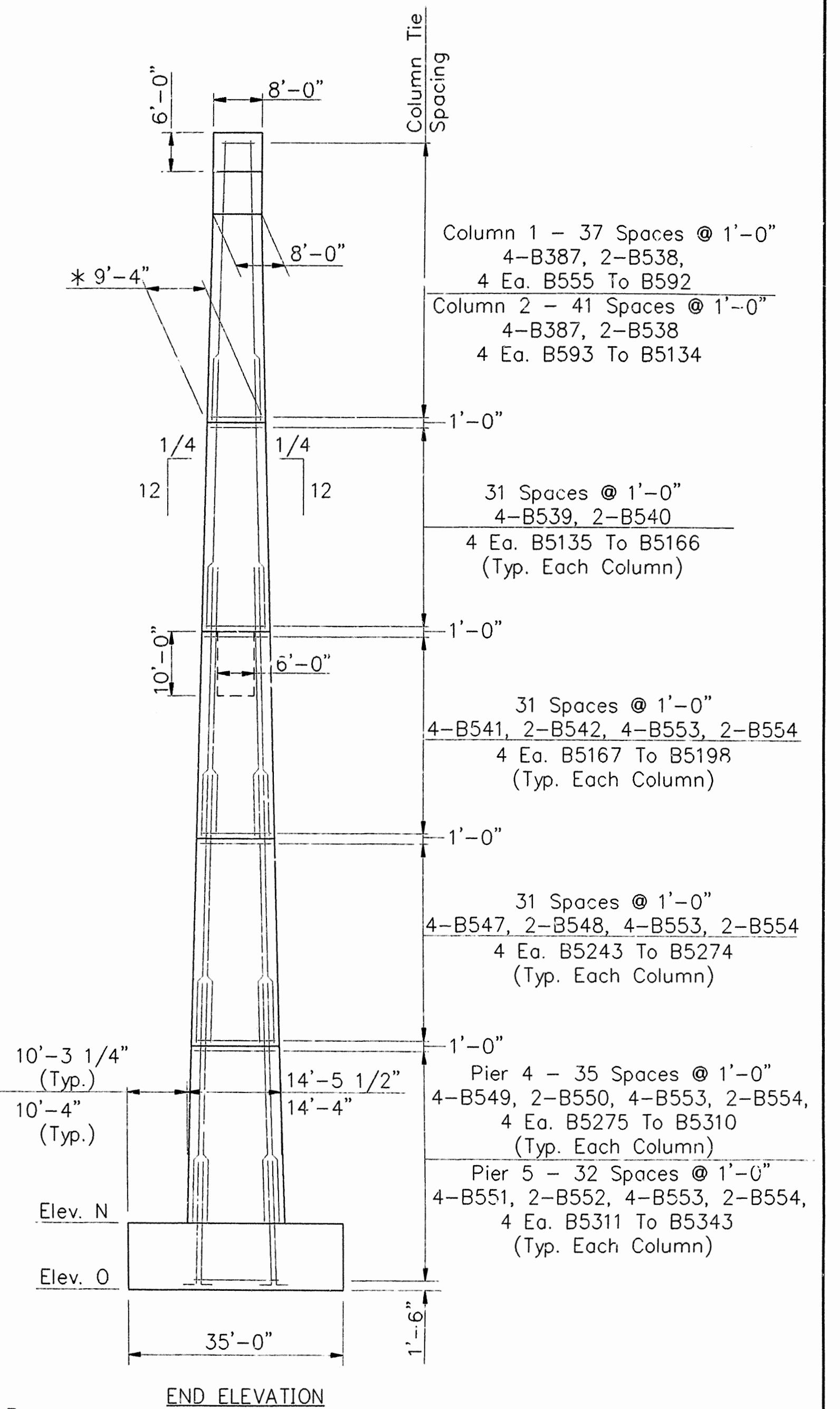
PIER 3 & 6
Scale: None



END ELEVATION



PIER 4 & 5
Scale: None



END ELEVATION

* Vary Batter On Column To Match 8'-0"
Dimension At Bottom Of Cap.

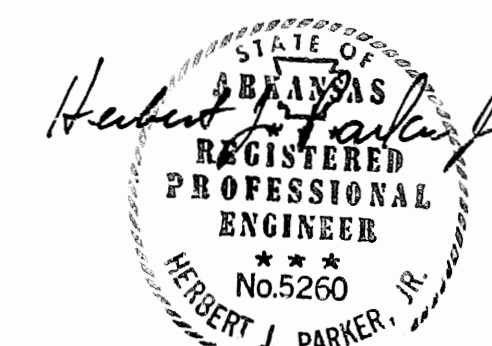
NOTE:
For Cap Details, See Drawing No. 34001.
For Footing & Column Details, Sections
A-A & B-B See Drawing No. 34002.
For Reinforcing Schedule & Bending
Diagrams, See Drawing No. 34003.
Use Class S Concrete In Cap And Columns.
Use Class B Concrete In Footing.

MAXIMUM TOE PRESSURE (kips / sq. ft.)											
	Group I	Group II	Group III	Group IV	Group V	Group VI					
	Max.	Allow	Max.	Allow	Max.	Allow	Max.	Allow	Max.	Allow	Max.
Piers 3-6	6.0	20.0	8.2	25.0	7.2	25.0	6.6	25.0	8.8	28.0	7.9
	28.0										

NOTE: All Pressures Are Net Service Load Values.

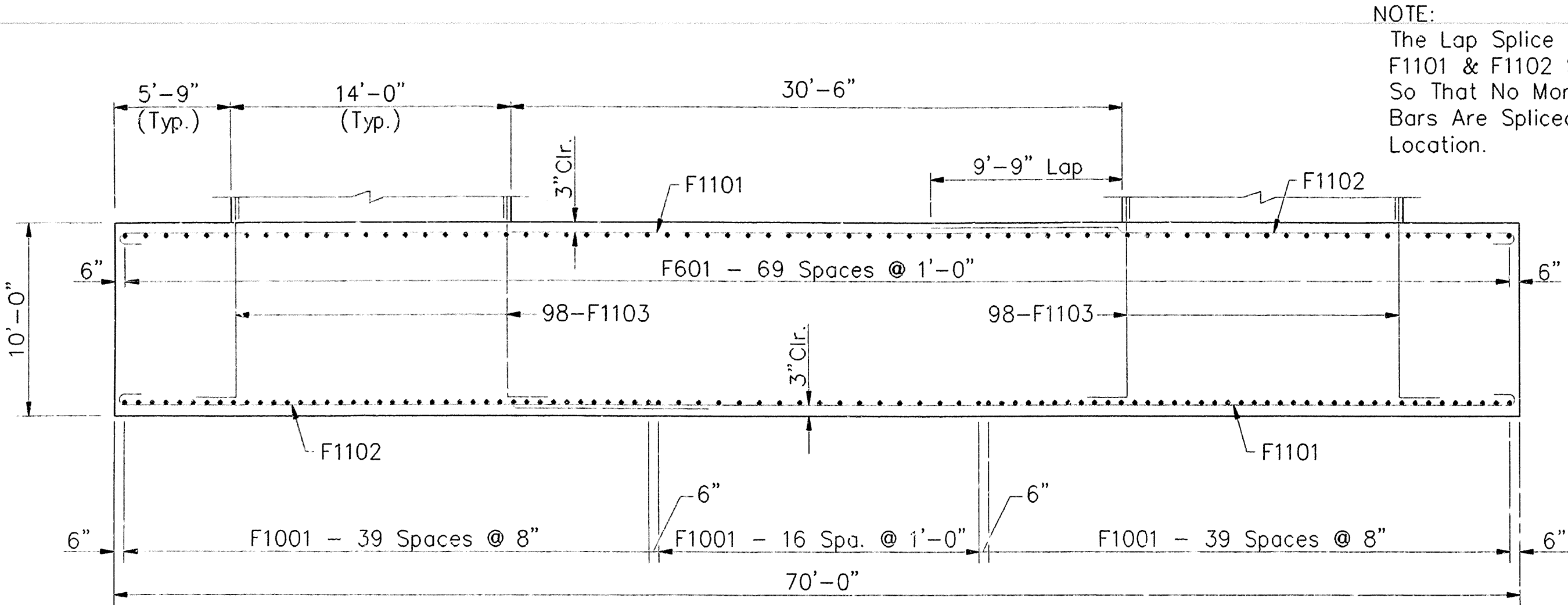
SERVICE DESIGN LOADS (kips)											
Dead Load from Superstructure											3298.4
Single Lane Live Load											158.2
Single Lane Impact Load											26.8

TABLE OF ELEVATIONS															
	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Elev. F	Elev. G	Elev. H	Elev. I	Elev. J	Elev. K	Elev. L	Elev. M	Elev. N	Elev. O
Pier 3	1476.85	1477.16	1477.46	1477.77	1478.01	1478.32	1478.62	1478.93	1479.23	1479.47	1479.78	1480.01	1480.21	1480.41	1480.61
Pier 4	1467.96	1468.52	1469.09	1469.65	1470.10	1470.66	1471.22	1471.79	1472.35	1472.91	1473.47	1474.03	1474.59	1475.15	1475.71
Pier 5	1459.86	1460.42	1460.99	1461.55	1462.00	1462.56	1463.12	1463.69	1464.25	1464.81	1465.37	1465.93	1466.49	1467.05	1467.61
Pier 6	1452.58	1453.14	1453.71	1454.27	1454.71	1455.28	1455.84	1456.41	1456.97	1457.53	1458.09	1458.65	1459.21	1459.77	1460.33

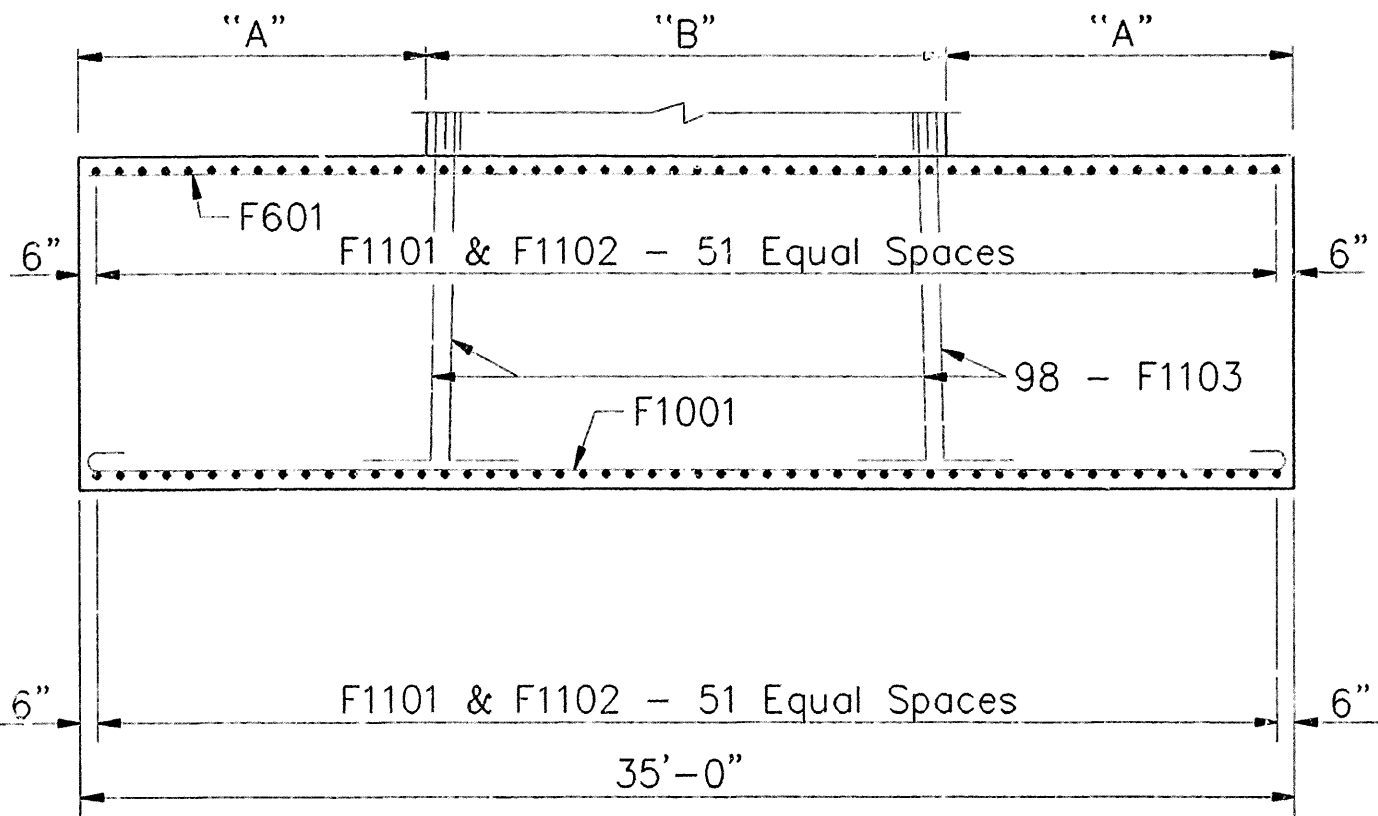


SHEET 1 OF 4
DETAILS OF PIERS 3 - 6
U.S. HIGHWAY 71 OVER BLACKBURN CREEK
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: HEW DATE: FEB. 1993
CHECKED BY: NDT DATE: FEB. 1993
DESIGNED BY: WMM DATE: FEB. 1993
SCALE: AS NOTED
BRIDGE NO. 6479 A & B DRAWING NO. 34000

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
5-18-95	5-25-95			6	ARK.		60	
				JOB NO.		R40039		
				① 6479 A & B DTLS PIERS 3 - 6			34002	



FRONT FOOTING ELEVATION
Scale: 3/16" = 1'-0"

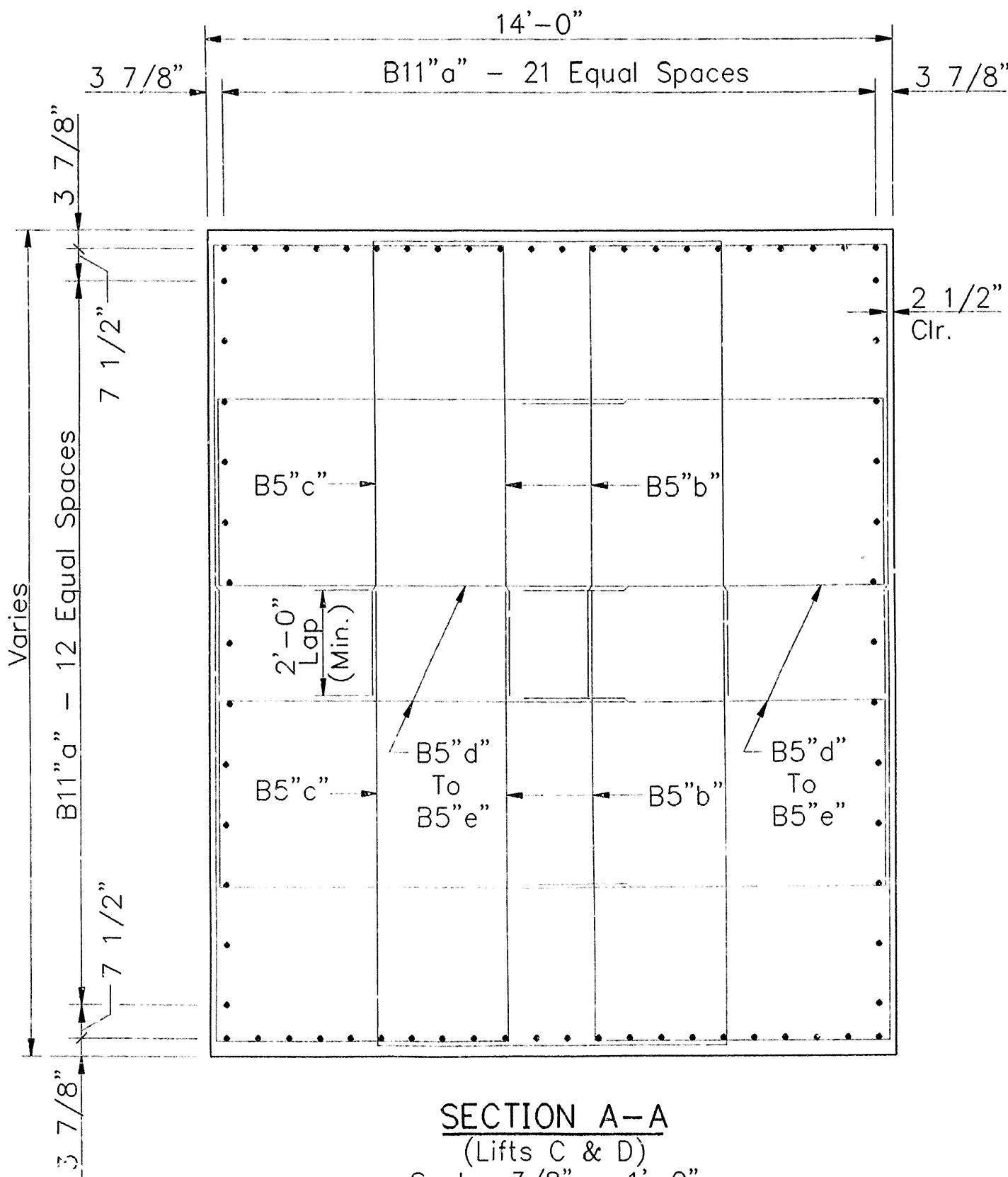


END FOOTING ELEVATION
Scale: 3/16" = 1'-0"

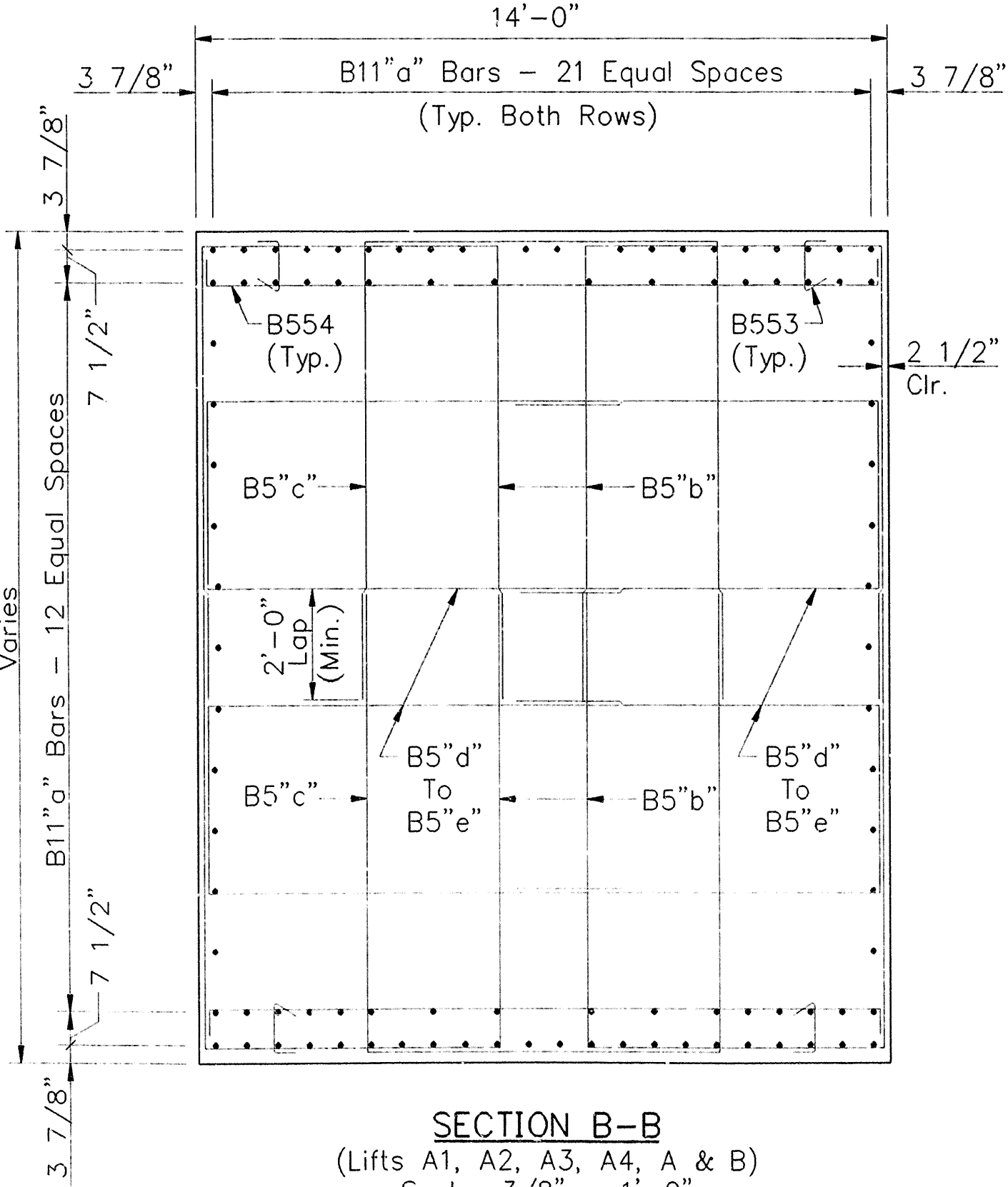
TABLE OF COLUMN BAR VARIABLES – PIERS 3-6							
		Vertical Bars		Column Ties			
		No.	"a"	"b"	"c"	"d"	"e"
Common Lifts For Col. 1 & 2	Lift A1	98	01	43	44	199	218
	Lift A2	98	01	45	46	219	242
	Lift A3	98	01	49	50	275	310
	Lift A4	98	01	51	52	311	343
	Lift A	98	02	47	48	243	274
	Lift B	98	02	41	42	167	198
	Lift C	70	02	39	40	135	166
Col. 1	Lift D	70	03	37	38	55	92
Col. 2	Lift D	70	04	37	38	93	134

TABLE OF VARIABLES		
	"A"	"B"
Pier 3	11'-3 1/4"	12'-5 1/2"
Pier 4	10'-3 1/4"	14'-5 1/2"
Pier 5	10'-4"	14'-4"
Pier 6	11'-2 1/4"	12'-7 1/2"

NOTE:
See TABLE OF COLUMN BAR VARIABLES
For Bar Mark In Each Lift.

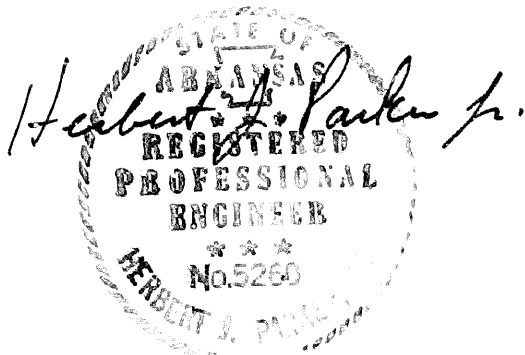


SECTION A-A
(Lifts C & D)
Scale: 3/8" = 1'-0"



SECTION B-B
(Lifts A1, A2, A3, A4, A & B)
Scale: 3/8" = 1'-0"

NOTE:
For Cap Details, See Drawing No. 34001.
For Reinforcing Schedule And Bending
Diagrams, & Strut Details, See Drawing
No. 34003.
Use Class S Concrete In Cap And Columns. Use Class
B Concrete In FOOTING.



SHEET 3 OF 4
DETAILS OF PIERS 3 - 6
U.S. HIGHWAY 71 OVER BLACKBURN CREEK
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: HEW DATE: FEB. 1993
CHECKED BY: NDT DATE: FEB. 1993 SCALE: AS NOTED
DESIGNED BY: WMM DATE: FEB. 1993
BRIDGE NO. 6479 A & B DRAWING NO. 34002

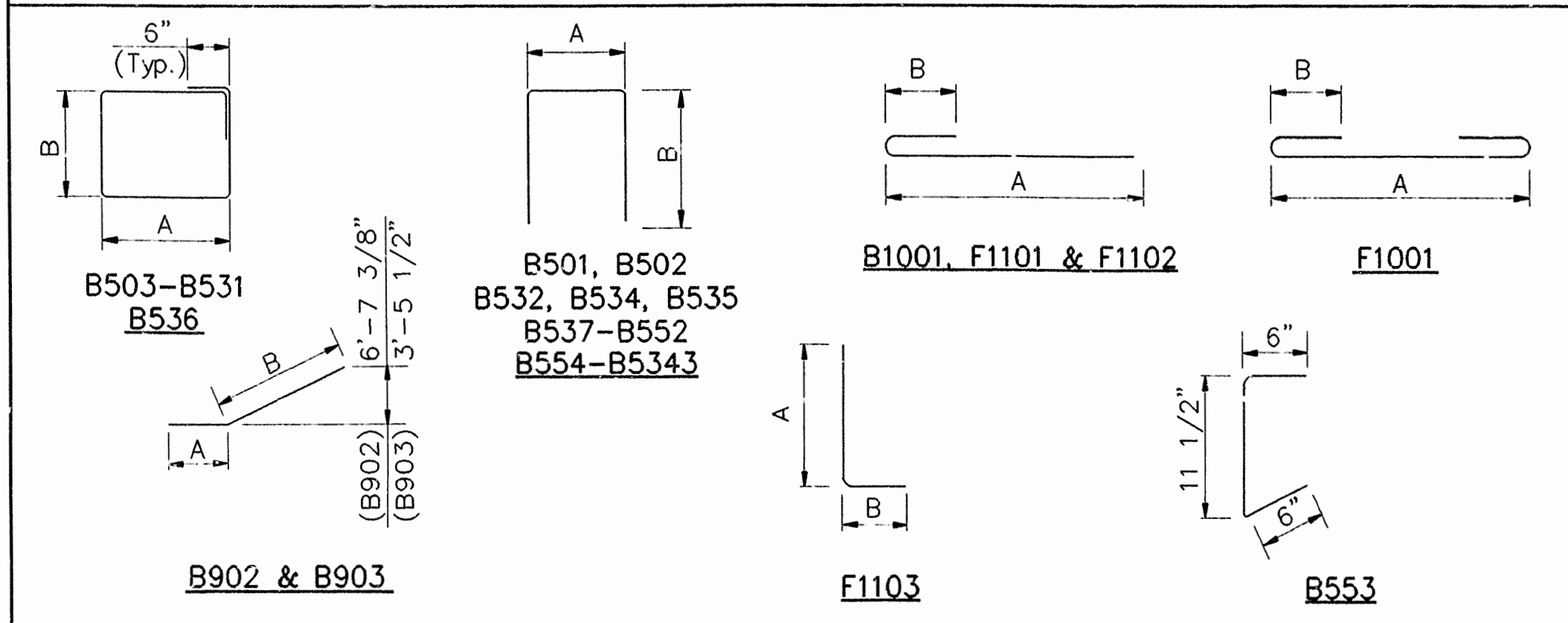
IBM/HEW ZIB30 91148010 3-12-93 21

COMMON BARS

REINFORCEMENT SCHEDULE

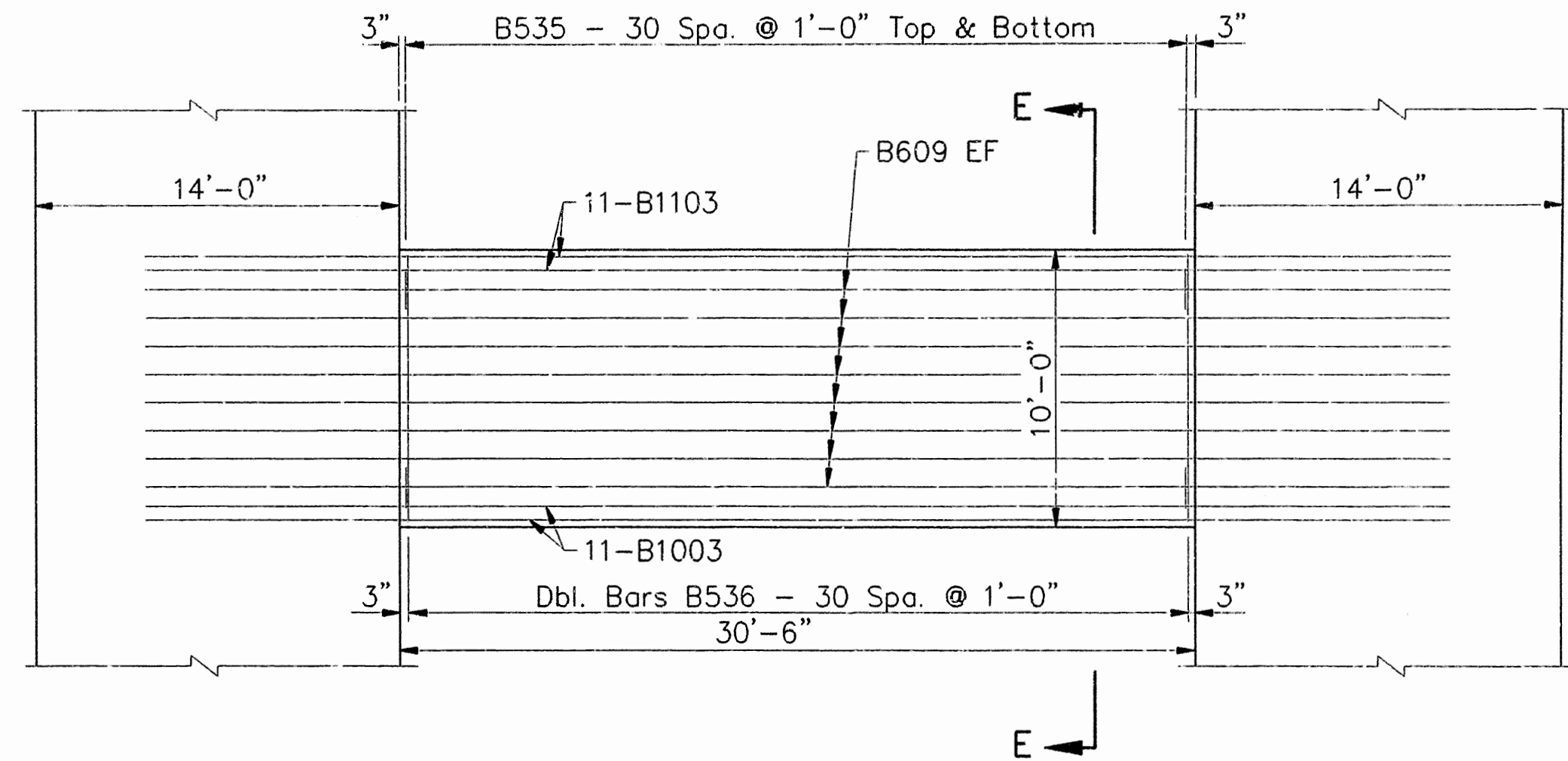
MARK	NO	LENGTH	PIN DIA	A	B	MARK	NO	LENGTH	PIN DIA	A	B
B501	28	30'-9 1/2"	2 1/2"	7'-8"	11'-8"	B543	160	20'-3"	2 1/2"	5'-11 1/2"	7'-3"
B502	142	10'-5 1/2"	2 1/2"	7'-8"	1'-6"	B544	80	21'-6 1/2"	2 1/2"	7'-3"	7'-3"
B503	2 Ea.	23'-4"	2 1/2"	5'-8"	5'-9"	B553	416	1'-9"	2 1/2"		
To B516		34'-7"			To 11'-4 1/2"	B554	208	14'-4 1/2"	2 1/2"	13'-7"	6"
B517	2 Ea.	34'-7"	2 1/2"	5'-8"	11'-4 1/2"	B5199	8 Ea.	18'-2 1/2"	2 1/2"	2'-9"	7'-10"
To B530		23'-4"			To 5'-9"	To B5218		To 18'-5"		To 2'-11 1/2"	
B531	86	35'-1"	2 1/2"	5'-8"	11'-7 1/2"	B1101	196	20'-9"	STR		
B532	10	10'-4 1/2"	2 1/2"	7'-6 1/2"	1'-6"	B1102	336	41'-9"	STR		
B533	6	5'-8"	STR								
B534	96	9'-5 1/2"	2 1/2"	5'-2"	2'-3"	B547	256	20'-9"	2 1/2"	5'-11 1/2"	7'-6"
B535	62	6'-5 1/2"	2 1/2"	5'-8"	1'-6"	B548	128	22'-0 1/2"	2 1/2"	7'-3"	7'-6"
B536	62	26'-9"	2 1/2"	3'-6"	9'-7 1/2"	B549	288	22'-3"	2 1/2"	5'-11 1/2"	8'-3"
B537	320	16'-9"	2 1/2"	5'-11 1/2"	5'-6"	B550	144	23'-6 1/2"	2 1/2"	7'-3"	8'-3"
B538	160	18'-0 1/2"	2 1/2"	7'-3"	5'-6"	B553	800	1'-9"	2 1/2"		
B539	256	18'-1"	2 1/2"	5'-11 1/2"	6'-2"	B554	400	14'-4 1/2"	2 1/2"	13'-7"	6"
B540	128	19'-4 1/2"	2 1/2"	7'-3"	6'-2"	B5243	8 Ea.	18'-2 1/2"	2 1/2"	2'-9"	7'-10"
B541	256	19'-5"	2 1/2"	5'-11 1/2"	6'-10"	To B5274		To 18'-6 1/2"		To 3'-1"	
B542	128	20'-8 1/2"	2 1/2"	7'-3"	6'-10"	B5275	8 Ea.	18'-6 1/2"	2 1/2"	3'-1"	7'-10"
To B555	4 Ea.	17'-1 1/2"	2 1/2"	1'-8"	To 7'-10"	To B5310		To 18'-11"		To 3'-5 1/2"	
To B592		17'-6 1/2"		2'-1"	To 7'-10"	B1101	196	36'-9"	STR		
B593	4 Ea.	17'-1 1/2"	2 1/2"	1'-8"	To 7'-10"	B1102	532	41'-9"	STR		
To B5134		17'-6 1/2"		2'-1"	To 7'-10"						
B5135	8 Ea.	17'-6 1/2"	2 1/2"	2'-1"	To 7'-10"	B547	256	20'-9"	2 1/2"	5'-11 1/2"	7'-6"
To B5166		17'-10 1/2"		2'-5"	To 7'-10"	B548	128	22'-0 1/2"	2 1/2"	7'-3"	7'-6"
B5167	8 Ea.	17'-10 1/2"	2 1/2"	2'-5"	To 7'-10"	B551	264	22'-1"	2 1/2"	5'-11 1/2"	8'-2"
To B5198		18'-2 1/2"		2'-9"	To 7'-10"	B552	132	23'-4 1/2"	2 1/2"	7'-3"	8'-2"
B601	10	60'-0"	STR			B553	776	1'-9"	2 1/2"		
B602	10	28'-6"	STR			B554	388	14'-4 1/2"	2 1/2"	13'-7"	6"
B603	10	40'-0"	STR			B5243	8 Ea.	18'-2 1/2"	2 1/2"	2'-9"	7'-10"
B604	2	45'-5"	STR			To B5274		To 18'-6 1/2"		To 3'-1"	
B605	2	40'-10"	STR			B5311	8 Ea.	18'-6 1/2"	2 1/2"	3'-1"	7'-10"
B606	2	36'-3"	STR			To B5343		To 18'-11"		To 3'-5 1/2"	
B607	2	31'-8"	STR			B1101	196	33'-9"	STR		
B608	2	27'-1"	STR			B1102	532	41'-9"	STR		
B609	16	50'-0"	STR								
B901	24	58'-6"	STR			B545	192	20'-5"	2 1/2"	5'-11 1/2"	7'-4"
B902	6	23'-2"	9"	8'-0"	15'-2"	B546	96	21'-8 1/2"	2 1/2"	7'-3"	7'-4"
B903	6	22'-7"	9"	8'-0"	14'-7"	B553	448	1'-9"	2 1/2"		
B1001	24	47'-11"	10"	46'-6"	11 1/2"	B554	224	14'-4 1/2"	2 1/2"	13'-7"	6"
B1002	24	46'-4"	STR			B5219	8 Ea.	18'-2 1/2"	2 1/2"	2'-9"	7'-10"
B1003	44	50'-0"	STR			To B5242		To 18'-5 1/2"		To 3'-0"	
B1103	70	40'-0"	STR			B1101	196	24'-9"	STR		
B1104	70	42'-4"	STR			B1102	336	41'-9"	STR		
F601	70	34'-6"	STR								
F1001	97	37'-4"	10"	34'-6"	11 1/2"						
F1101	104	51'-6"	11 1/4"	50'-0"	1'-0 1/2"						
F1102	104	30'-9"	11 1/4"	29'-3"	1'-0 1/2"						
F1103	196	21'-2"	11 1/4"	19'-6"	2'-0"						

BENDING DIAGRAM



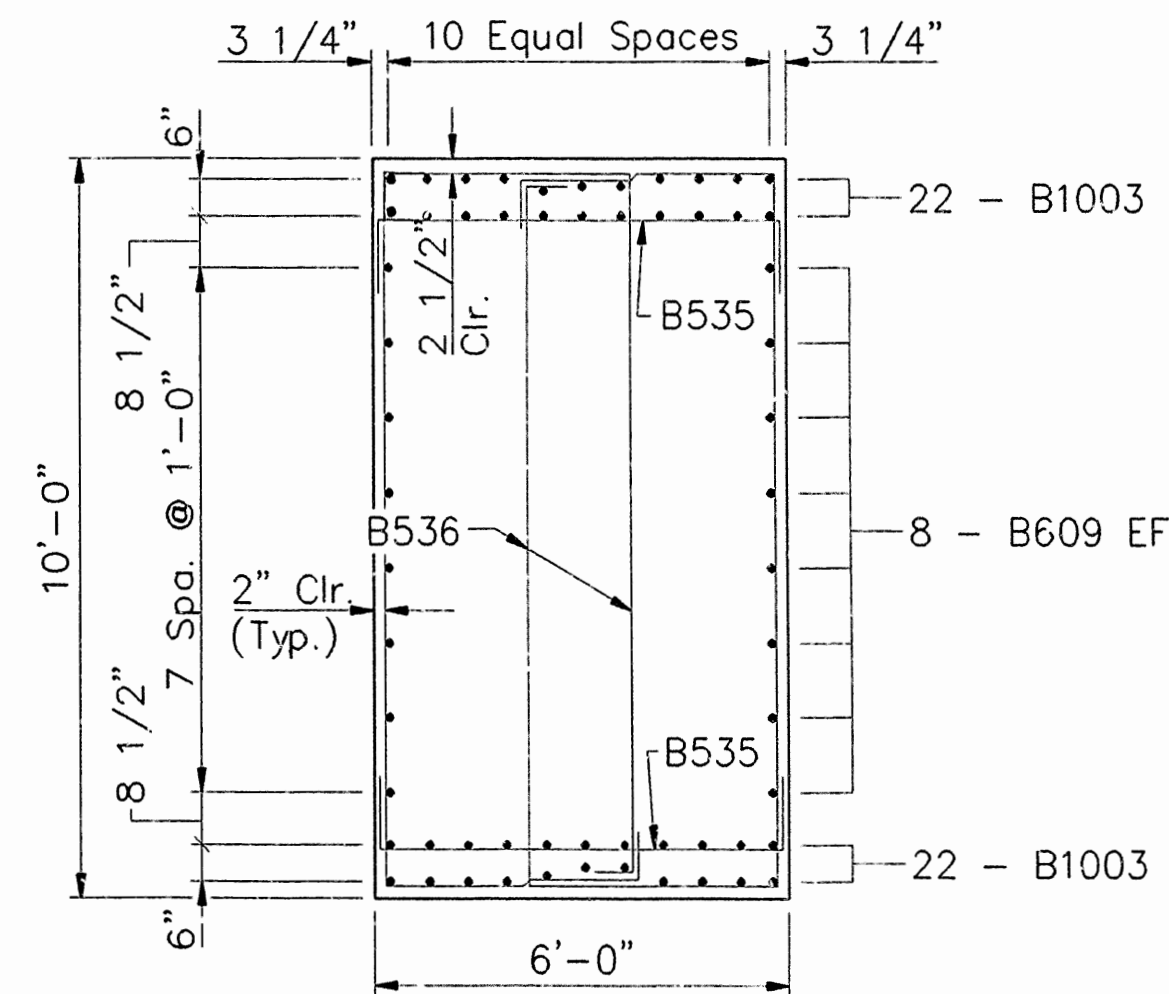
NOTE: Common Bars Shown
Are For One Pier Only.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		61	
				JOB NO.	R40039			
				6479 A & B	DTLS PIERS 3-6			34003



STRUT ELEVATION

Scale: 3/16"=1'-0"



SECTION E-E

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

SHEET 4 OF 4
DETAILS OF PIERS 3 - 6
U.S. HWY. 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16

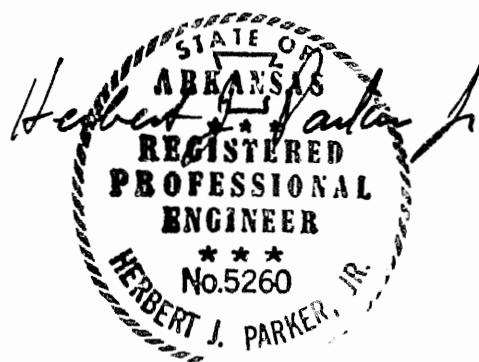
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: JAN. 1993
CHECKED BY: NDT DATE: JAN. 1993
DESIGNED BY: WMM DATE: JAN. 1993

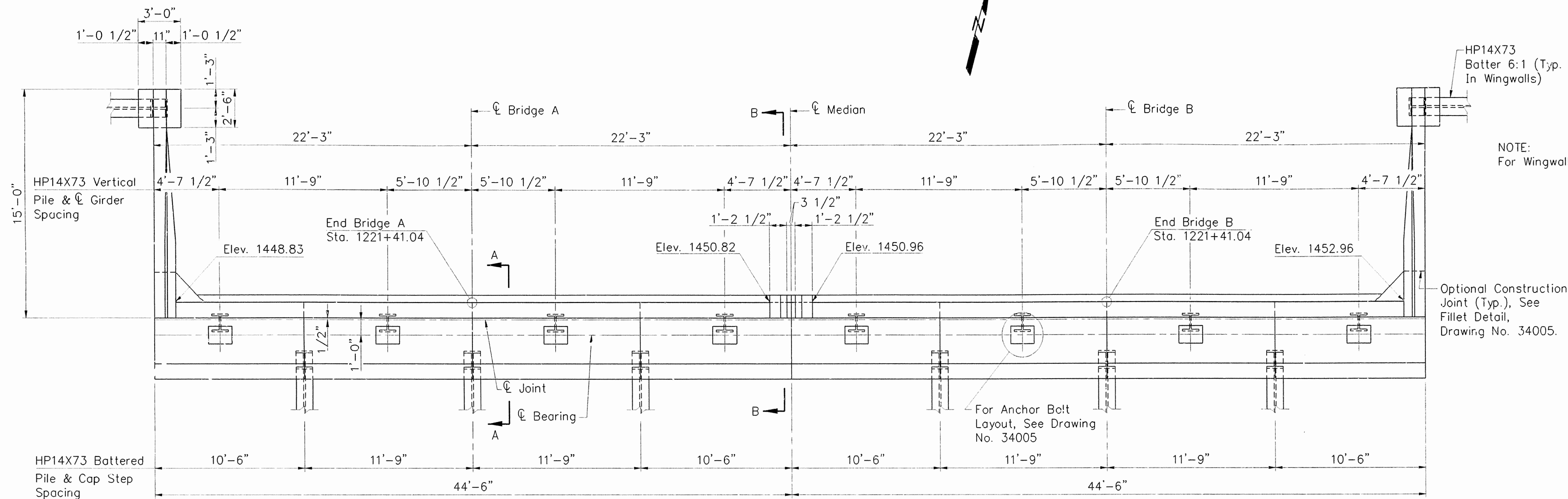
BRIDGE NO. 6479 A & B

DRAWING NO. 34003



BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
2-7-97	2-12-97			6	ARK.		62	
				JOB NO.		R40039		
				① 6479 A&B DTLS N ABUTMENT		34004		



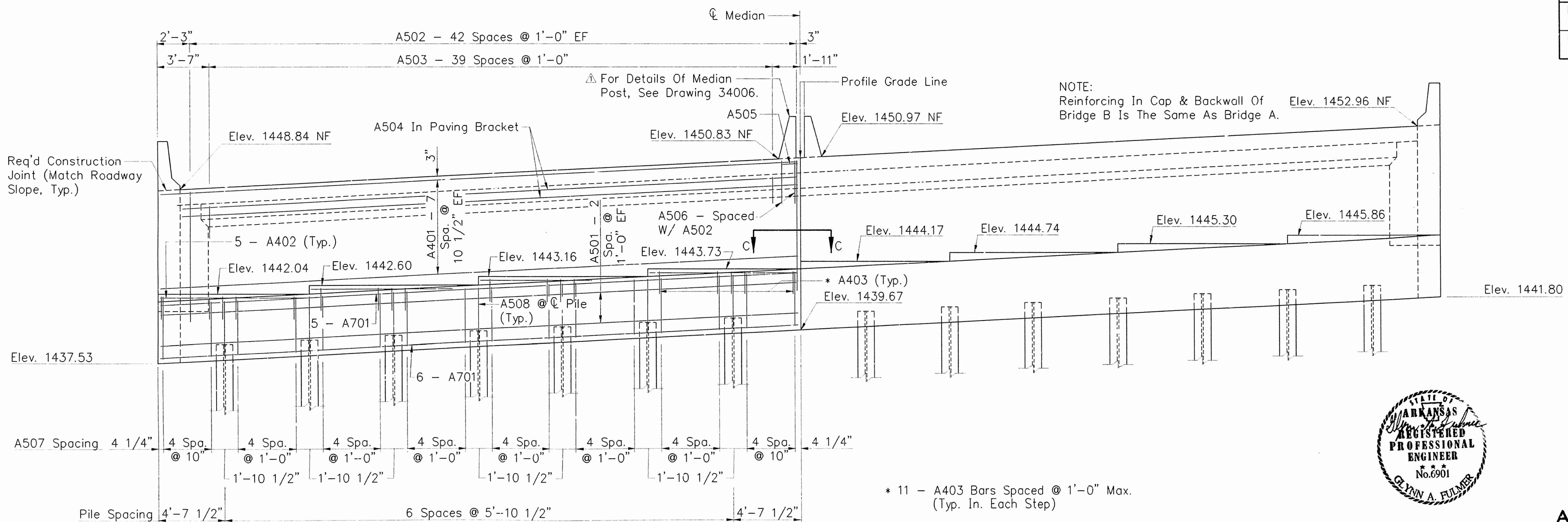
NOTE:
For Sections A-A, B-B, And C-C,
See Drawing No. 34005.

PLAN
Scale: 1/4" = 1'-0"

TABLE OF PILE LENGTHS			
	Location	Number Req'd	Length
Bridge A	Abutment Piles	7	35
	Wingwall Piles	1	40
Bridge B	Abutment Piles	7	25
	Wingwall Piles	1	25

LEGEND

EF = Each Face
NF = Near Face



NOTE:
For General Notes, See Drawing No. 33984.

① Revised Median Side Parapet Configuration



SHEET 1 OF 3
DETAILS OF NORTH ABUTMENT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JBM DATE: FEB. 1993
CHECKED BY: JGD DATE: FEB. 1993
DESIGNED BY: RLE DATE: JAN. 1993
SCALE: AS NOTED

BRIDGE NO. 6479 A&B DRAWING NO. 34004

BRIDGE ENGINEER

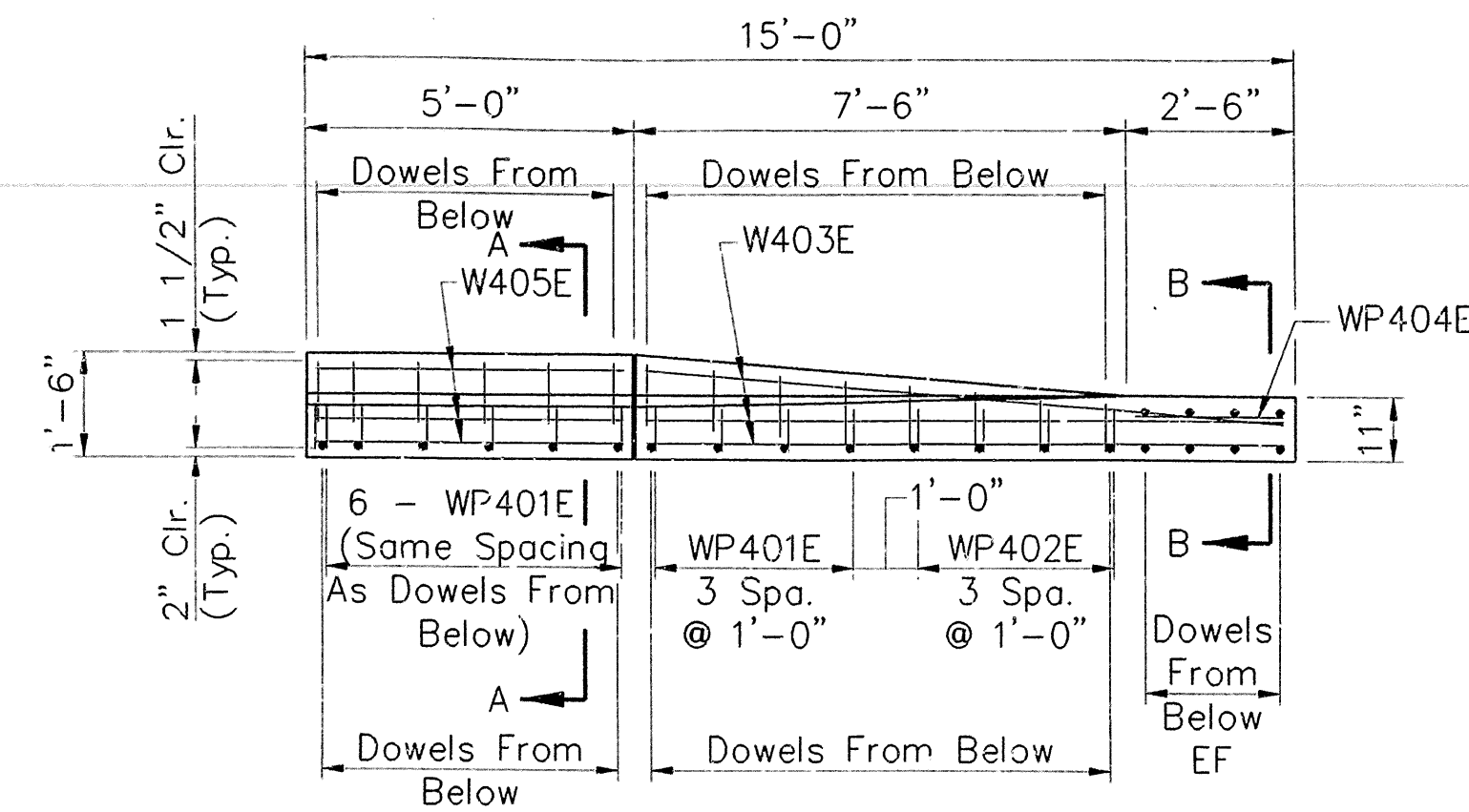
ELEVATION - LOOKING FORWARD
Scale: 1/4" = 1'-0"

* 11 - A403 Bars Spaced @ 1'-0" Max.
(Typ. In. Each Step)

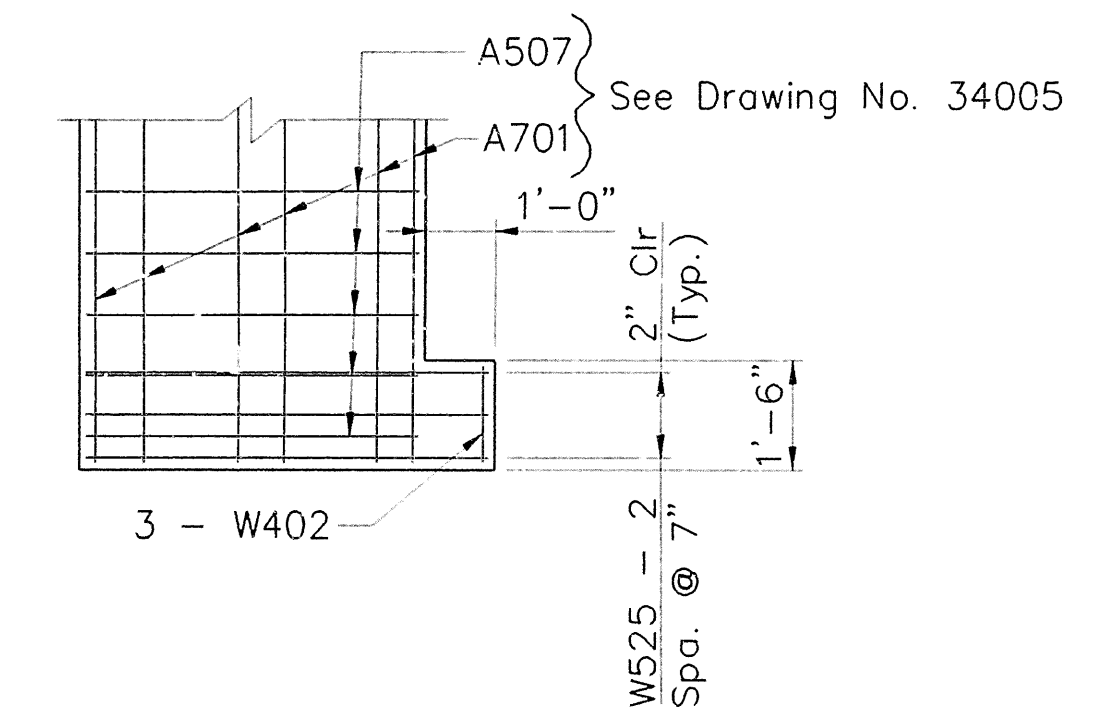
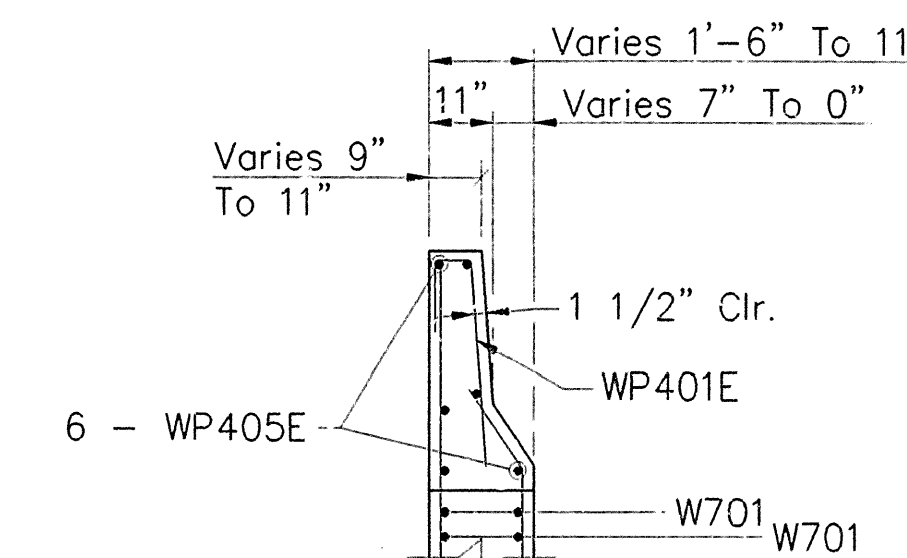
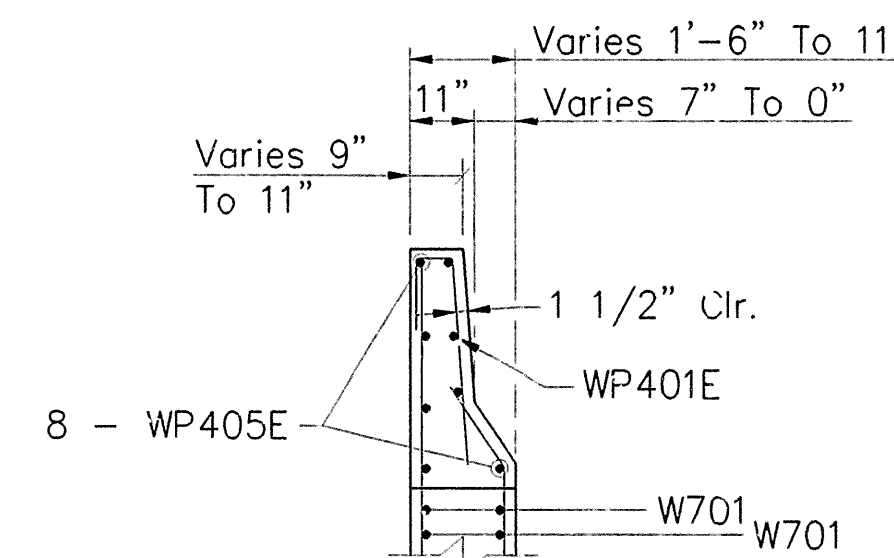
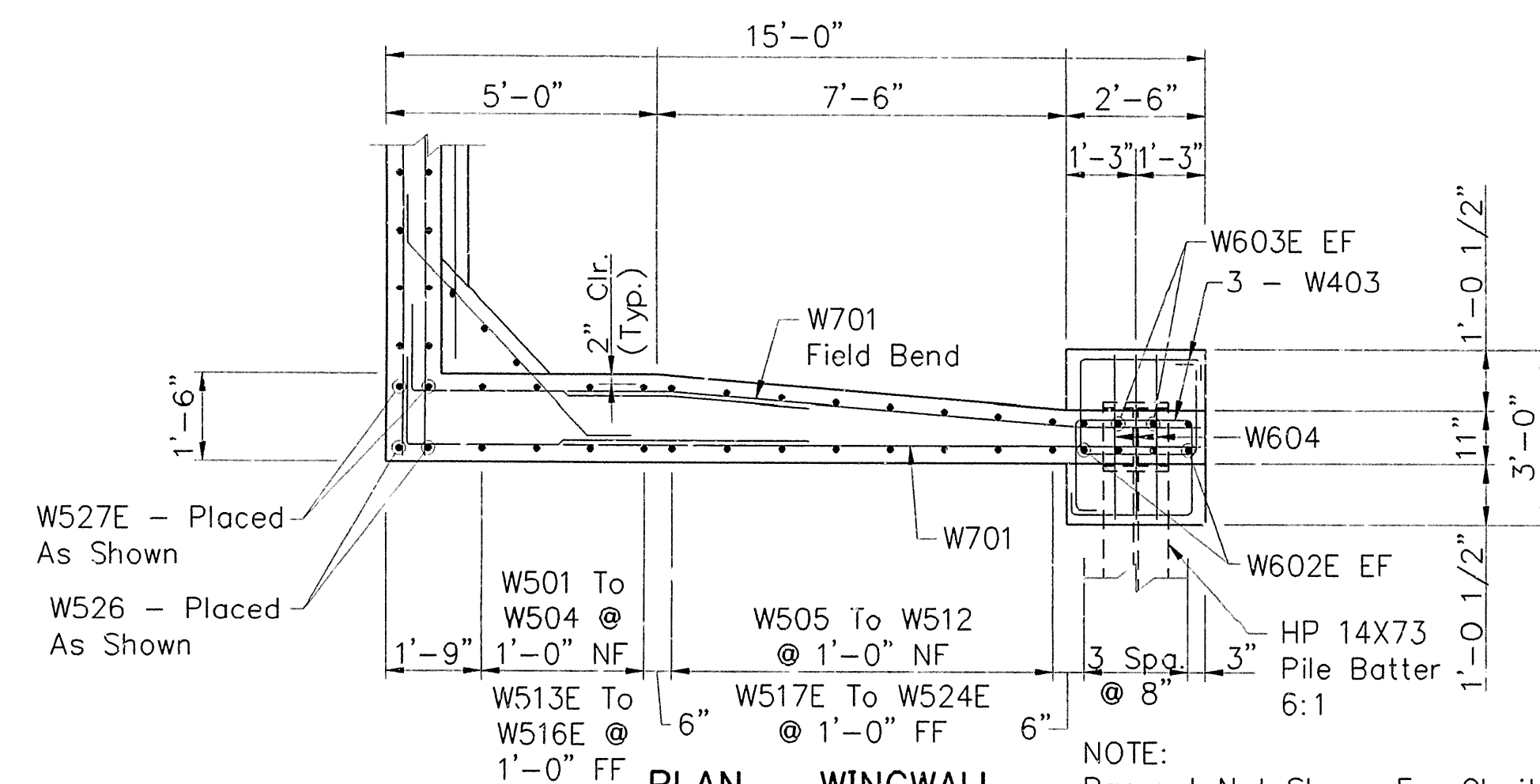
REINFORCEMENT SCHEDULE											
COMMON BARS						COMMON BARS					
MARK	NO	LENGTH	PIN DIA	A	B	MARK	NO	LENGTH	PIN DIA	A	B
A401	16	44'-2 1/2"	STR.			W708	12	7'-4"	5 1/4"	6'-4"	
A402	20	10'-2"	STR.			W709	3	6'-8 1/2"	5 1/4"		
A403	44	6'-6"	2"			W710	3	13'-0"	STR.		
A501	6	44'-2 1/2"	STR.			WP404E	1	2'-2"	STR.		
A502	86	8'-6"	STR.			WP406E	4	10'-1 3/4"	3"	5'-0"	
A503	40	4'-0 1/2"	2 1/2"	9"		WP601E	7	1'-2"	STR.		
A504	2	42'-8 1/2"	STR.								
A505	1	1'-2"	STR.								
A506	2	6'-0 1/2"	2 1/2"	1'-9"							
A507	40	16'-0 1/2"	2 1/2"								
A508	7	10'-9"	2 1/2"								
A701	11	44'-2 1/2"	STR.								
W401	3	6'-0"	STR.			W501	1 EA.	10'-9"	STR.		
W402	3	1'-2"	STR.			W504	1 EA.	9'-4"	STR.		
W403	6	7'-10"	2"			W505	1 EA.	9'-1"	STR.		
W513E	1 EA.	9'-2"	2 1/2"	8'-0"		W512	1 EA.	5'-6 1/2"	STR.		
W516E	1 EA.	7'-9"	2 1/2"	6'-7"		W526	2	10'-9"	STR.		
W517E	1 EA.	7'-6"	2 1/2"	6'-4"		W602E	4	7'-5"	STR.		
W524E	1 EA.	3'-11 1/2"	2 1/2"	2'-9 1/2"		W603E	4	6'-5"	STR.		
W525	3	12'-2 1/2"	2 1/2"			WP401E	10	4'-3"	2"	2'-11"	
W527E	2	9'-2"	2 1/2"	8'-0"		WP402E	4	4'-4"	2"	2'-11"	
W601	5	7'-6"	4 1/2"			WP403E	8	9'-8"	STR.		
W604	3	2'-6"	STR.			WP405E	8	4'-8"	STR.		
W701	8	11'-8"	STR.			W501	1 EA.	10'-3"	STR.		
W702	2	7'-11 1/2"	STR.			W504	1 EA.	8'-10"	STR.		
W703	2	6'-3 1/2"	STR.			W505	1 EA.	8'-7"	STR.		
W704	2	8'-7 1/2"	5 1/4"	7'-7 1/2"		W512	1 EA.	5'-0 1/2"	STR.		
W705	2	6'-11 1/2"	5 1/4"	5'-11 1/2"		W526	2	10'-3"	STR.		
W706	2	5'-3 1/2"	5 1/4"	4'-3 1/2"		W602E	4	6'-11"	STR.		
W707	2	3'-7 1/2"	5 1/4"	2'-7 1/2"		W603E	4	5'-11"	STR.		
						WP401E	10	3'-10 1/2"	2"	2'-6 1/2"	
						WP402E	4	3'-11 1/2"	2"	2'-6 1/2"	
						WP403E	6	9'-8"	STR.		
						WP405E	6	4'-8"	STR.		

BENDING DIAGRAMS											

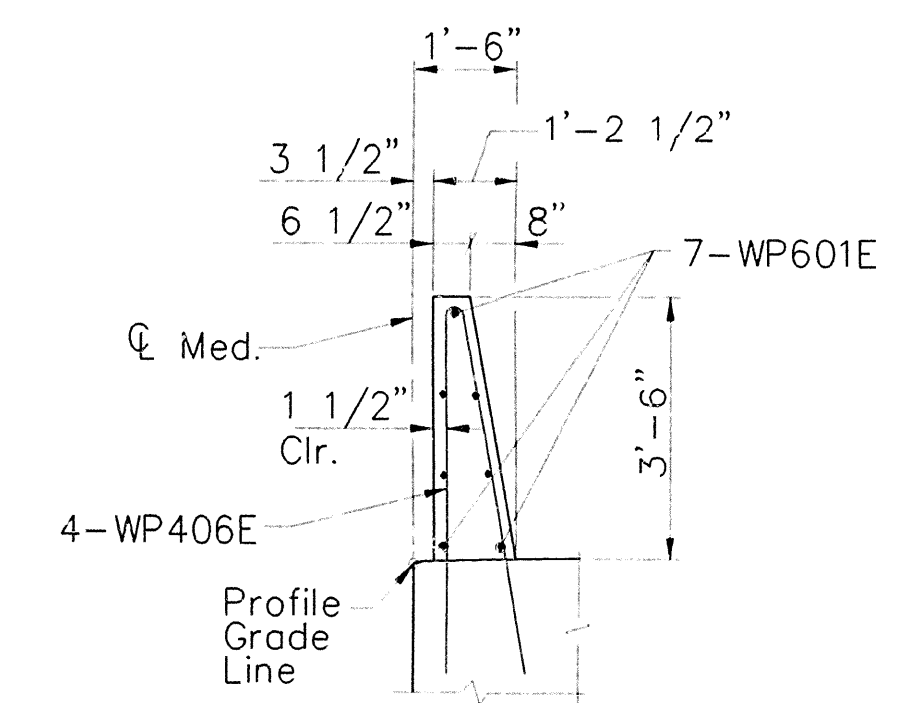
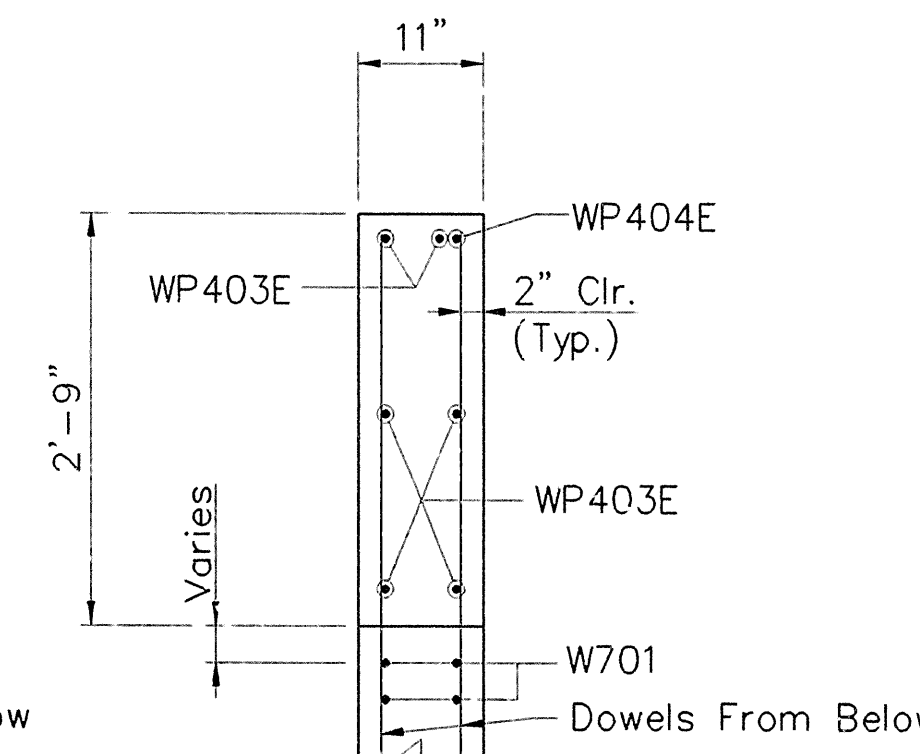
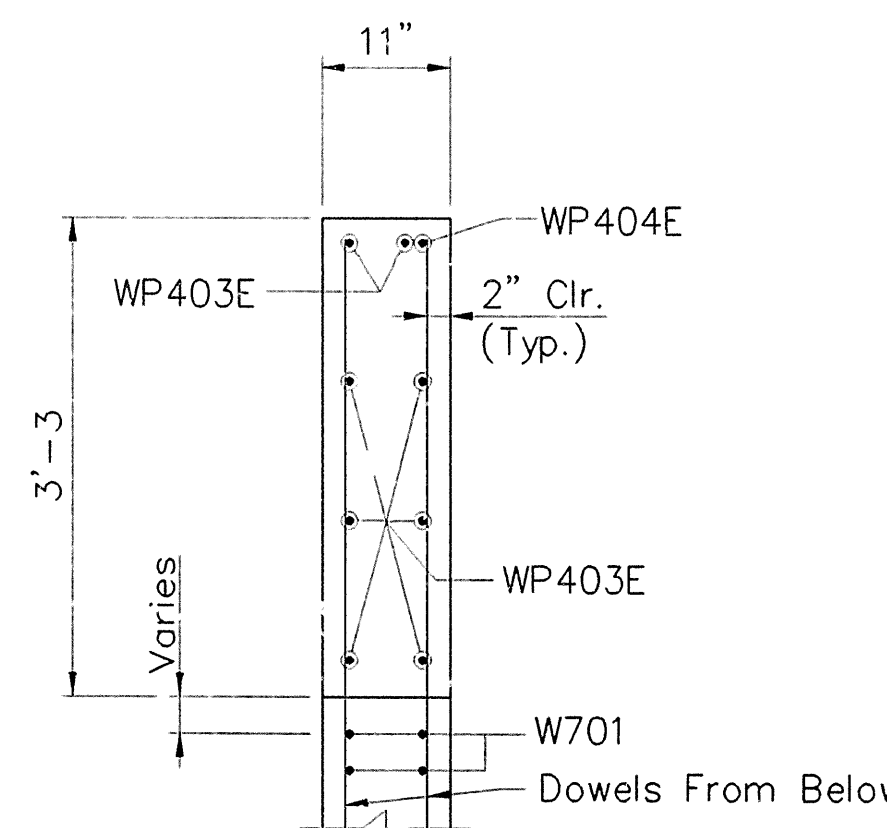
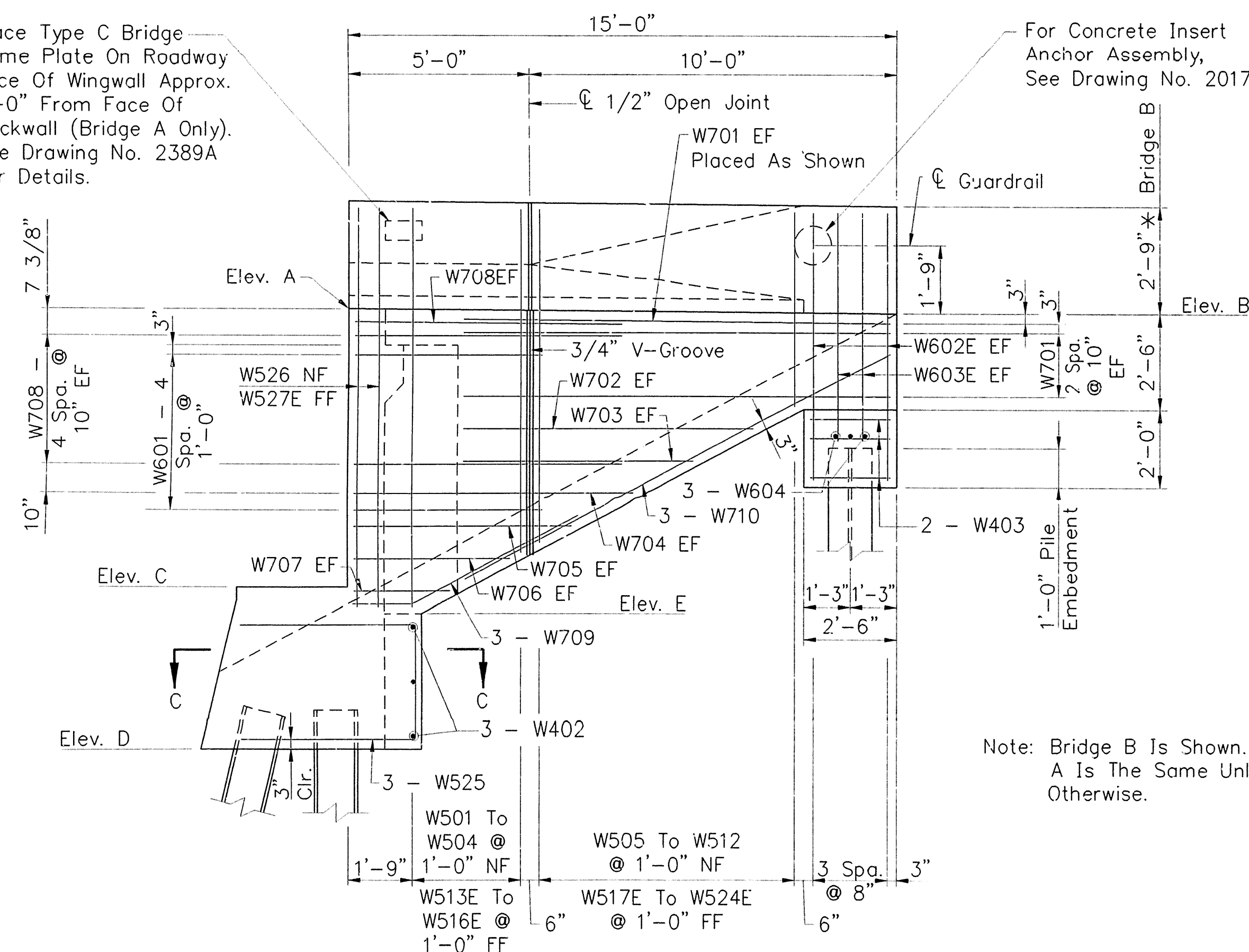
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
2-7-97	2-12-97			6	ARK.		64	
				JOB NO.		R40039		
				6479 A&B DTLS. N. ABUTMENT			34006	



	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E
East Wingwall	1453.04	1452.92	1445.86	1441.80	1445.17
West Wingwall	1448.76	1448.65	1442.04	1437.53	1440.90



Place Type C Bridge Name Plate On Roadway Face Of Wingwall Approx. 1'-0" From Face Of Backwall (Bridge A Only). See Drawing No. 2389A For Details.



* Bridge A Parapet Height Is 3'-3", See Section A-A And Section B-B.

LEGEND

EF = Each Face
NF = Near Face
FF = Far Face

Note: Bridge B Is Shown. Bridge A Is The Same Unless Noted Otherwise.



BRIDGE ENGINEER

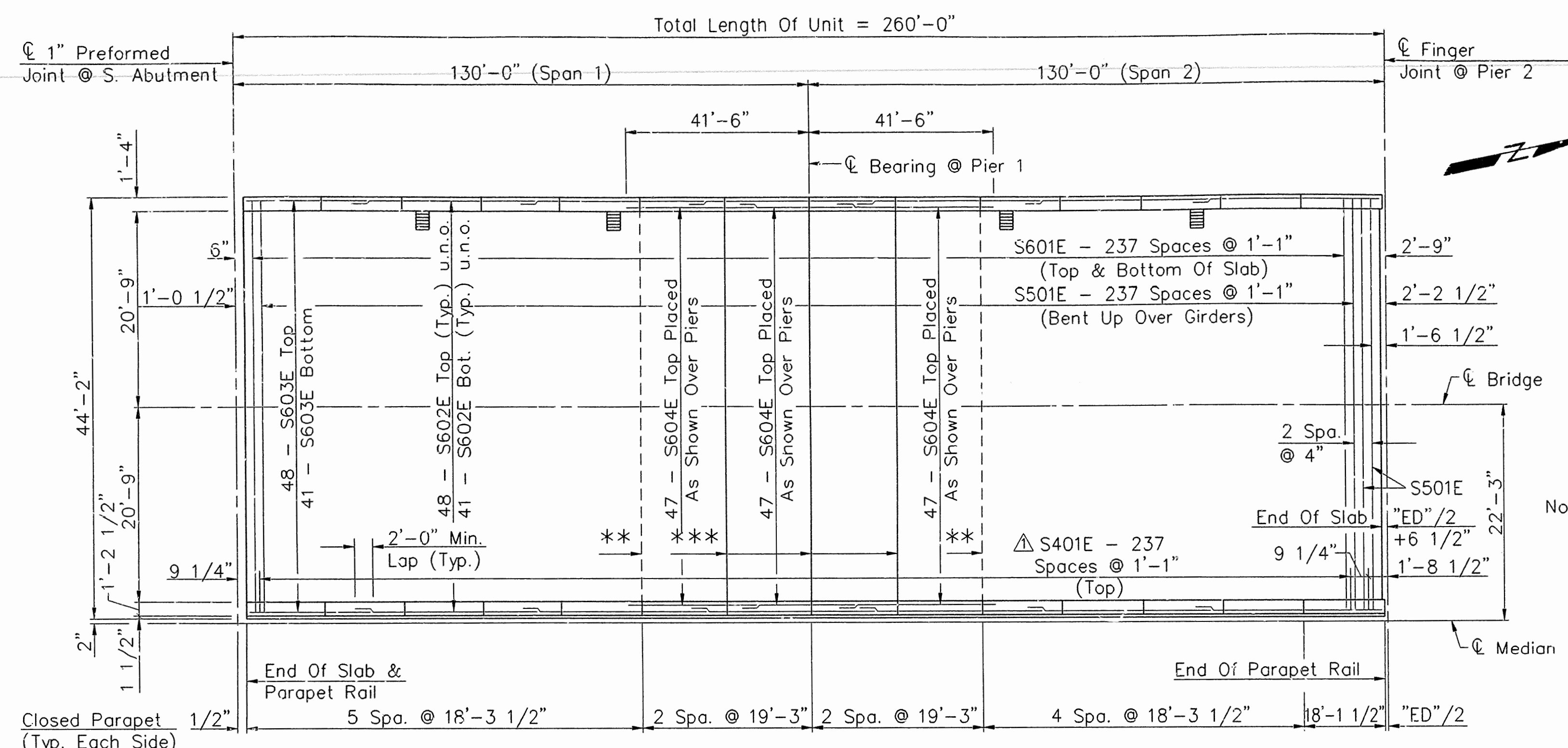
Revised Median Side Parapet Configuration

SHEET 3 OF 3
DETAILS OF NORTH ABUTMENT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JBM DATE: FEB. 1993
CHECKED BY: JDG DATE: FEB. 1993
DESIGNED BY: RLE DATE: FEB. 1993

BRIDGE NO. 6479 A&B DRAWING NO. 34006

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
2-7-97	2-13-97			6	ARK.		65	
				JOB NO. R40039				
				1 6479 A&B DTL'S CONT PL GIRD		34007		



SLAB PLAN (BRIDGE A)
Scale: None

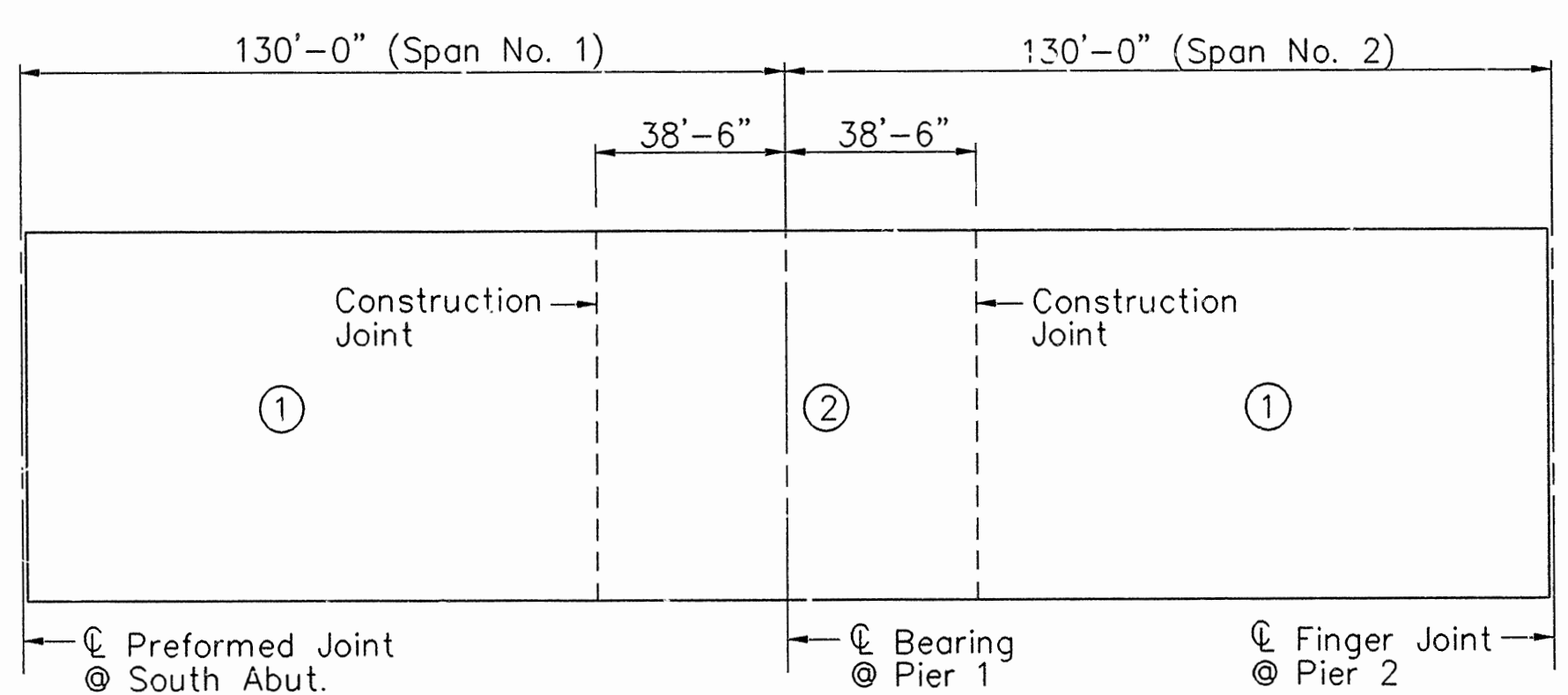
** : Slab Joint @ Construction Joint
*** : Required Slab Joint - Match Parapet Joint

LEGEND

u.n.o. = Unless Noted Otherwise

- Note:
- Bridge "A" Shown. Bridge "B" Is Symmetrical About Median.
 - For Longitudinal Reinforcing Placement, See Typical Section, Drawing No. 34009.

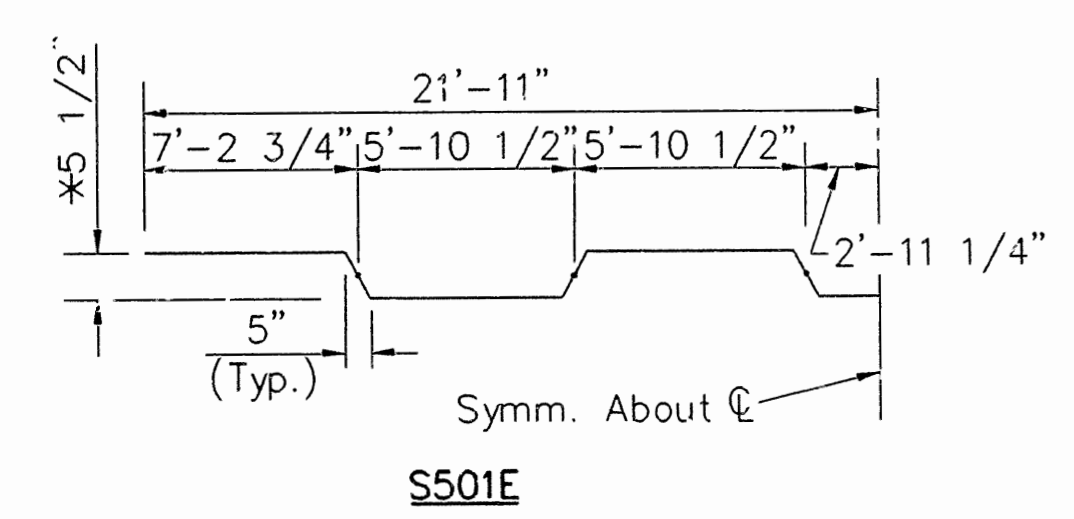
NOTE:
Pours With The Same Numbers May Be Placed Simultaneously Or Separately. All Pours ① Must Be Placed Before Pours ② Can Be Placed. Forty-Eight Hours Shall Elapse Between The End Of A Pour And The Start Of A New Pour. Seventy-Two Hours Shall Elapse Between The End Of A Pour And The Start Of An Adjacent Pour. Seventy-Two Hours Shall Elapse Between The Pouring Of The Entire Slab And The Pouring Of Any Portion Of The Parapet Rail.



SLAB POURING SEQUENCE (BRIDGE A & B)
N.T.S.

REINFORCEMENT SCHEDULE							
BRIDGE A				BRIDGE B			
MARK	NO.	LENGTH	PIN DIA.	MARK	NO.	LENGTH	PIN DIA.
S401E	239	3'-0"	Str.	S401E	239	3'-0"	Str.
S501E	240	44'-8 1/2"	3"	S501E	240	44'-8 1/2"	3"
S601E	476	43'-10"	Str.	S601E	476	43'-10"	Str.
S602E	534	40'-0"	Str.	S602E	534	40'-0"	Str.
S603E	89	31'-3"	Str.	S603E	89	31'-3"	Str.
S604E	141	29'-8"	Str.	S604E	141	29'-8"	Str.
P401E	270	5'-7"	2"	P401E	270	5'-7"	2"
P403E	270	7'-2 1/2"	3"	P402E	270	6'-3"	3"
P404E	8	17'-9"	Str.	P404E	6	17'-9"	Str.
P405E	72	17'-11"	Str.	P405E	54	17'-11"	Str.
P406E	32	18'-10"	Str.	P406E	24	18'-10"	Str.
P411E	526	9'-7"	3"	P411E	526	9'-7"	3"
P601E	7	17'-9"	Str.	P601E	7	17'-9"	Str.
P602E	63	17'-11"	Str.	P602E	63	17'-11"	Str.
P603E	28	18'-10"	Str.	P603E	28	18'-10"	Str.

BENDING DIAGRAM



* 1/2" Overtolerance, No Undertolerance.

- NOTE:
- Dimensions Of Bars Are Out-To-Out.
 - Bar Designations Ending With "E" Indicates Epoxy Coated Bars.

VARIABLES FOR EXTERIOR PARAPET RAILING			
"f"	CLOSED PARAPET		
"k"	"n"	"t"	
18'-1 1/2"	3"	18	04
18'-3 1/2"	3"	18	05
19'-3"	3"	19	06

VARIABLES FOR MEDIAN PARAPET RAILING			
"f"	CLOSED PARAPET		
"k"	"n"	"t"	
18'-1 1/2"	3"	36	01
18'-3 1/2"	3"	36	02
19'-3"	3"	38	03

Revised Median Side Parapet Configuration

- NOTE:
- For General Notes See Drawing No. 33984.
 - For Slab Joint And Screed Rail Support Details, See Drawing No. 34030.
 - For Parapet Reinforcing And Bending Diagrams, See Drawing No. 34031.
 - For Deck Drain Locations & Details, See Drawing No. 34029.
 - For Finger Joint Details, See Drawing No.'s 34026 & 34027.
 - For Finger Joint Drain Details, See Drawing No. 34028.
 - For 1" Preformed Expansion Joint Details, See Drawing No. 34025.
 - For Haunch Details, See Drawing No. 34009.



SHEET 1 OF 3
DETAILS OF 260' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: HEW DATE: FEB. 1993
CHECKED BY: NDT DATE: FEB. 1993
DESIGNED BY: JDG DATE: FEB. 1993
SCALE: AS NOTED
BRIDGE NO. 6479 A&B DRAWING NO. 34007

ANCHOR DETAILS AT PREFORMED EXPANSION DEVICE
N.T.S.

ANCHOR DETAILS AT FINGER EXPANSION DEVICE
N.T.S.

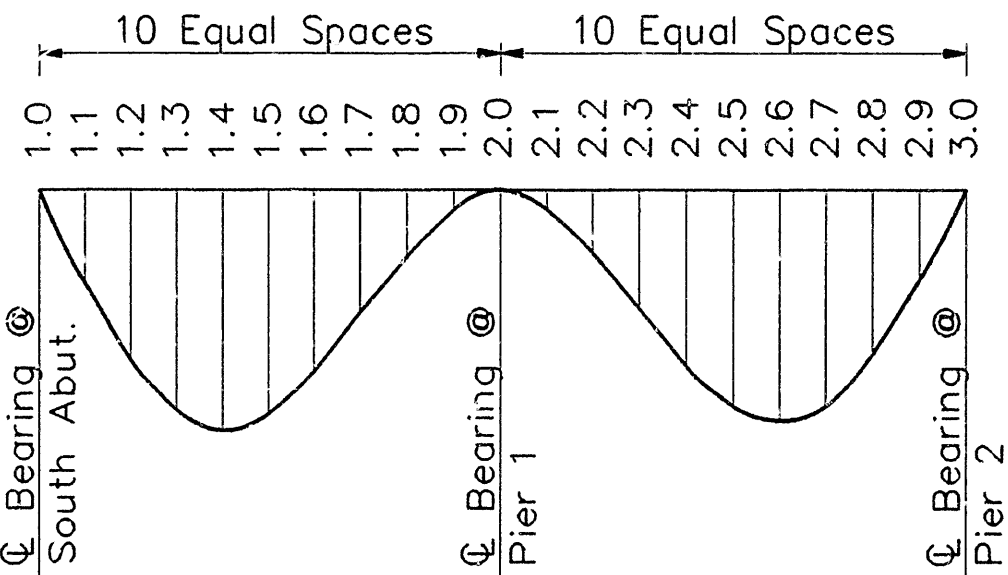
BRIDGE ENGINEER

BWB/HEW 71B8C23 0: 91148014 2-7-97 21

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		66	
				JOB NO.		R40039		
				① 6479 A&B DTLS CONT PL GIRD			34008	

- NOTES:
- Bridge "A" Shown. Bridge "B" Is Symmetrical About \bar{C} Median.
 - Intermediate Stiffeners, Where Required, Are Spaced Equally Between Cross Frames Unless Noted Otherwise.

TABLE OF DEFLECTIONS (IN INCHES)				
Span	Point Of Deflection	Structural Steel	Structural Steel + Slab	Structural Steel + Slab + Parapet
Span No. 1	1.0	0.00	0.00	0.00
	1.1	0.15	0.88	0.95
	1.2	0.28	1.61	1.73
	1.3	0.37	2.08	2.24
	1.4	0.40	2.25	2.43
	1.5	0.37	2.10	2.27
	1.6	0.31	1.71	1.85
	1.7	0.21	1.16	1.26
	1.8	0.11	0.61	0.67
	1.9	0.03	0.18	0.20
Span No. 2	2.0	0.00	0.00	0.00
	2.1	0.03	0.17	0.19
	2.2	0.11	0.59	0.64
	2.3	0.20	1.11	1.21
	2.4	0.30	1.65	1.79
	2.5	0.36	2.03	2.19
	2.6	0.38	2.17	2.34
	2.7	0.36	2.03	2.19
	2.8	0.27	1.56	1.68
	2.9	0.15	0.86	0.92
	3.0	0.00	0.00	0.00



DEAD LOAD DEFLECTION DIAGRAM (BRIDGE A&B)

Scale: None

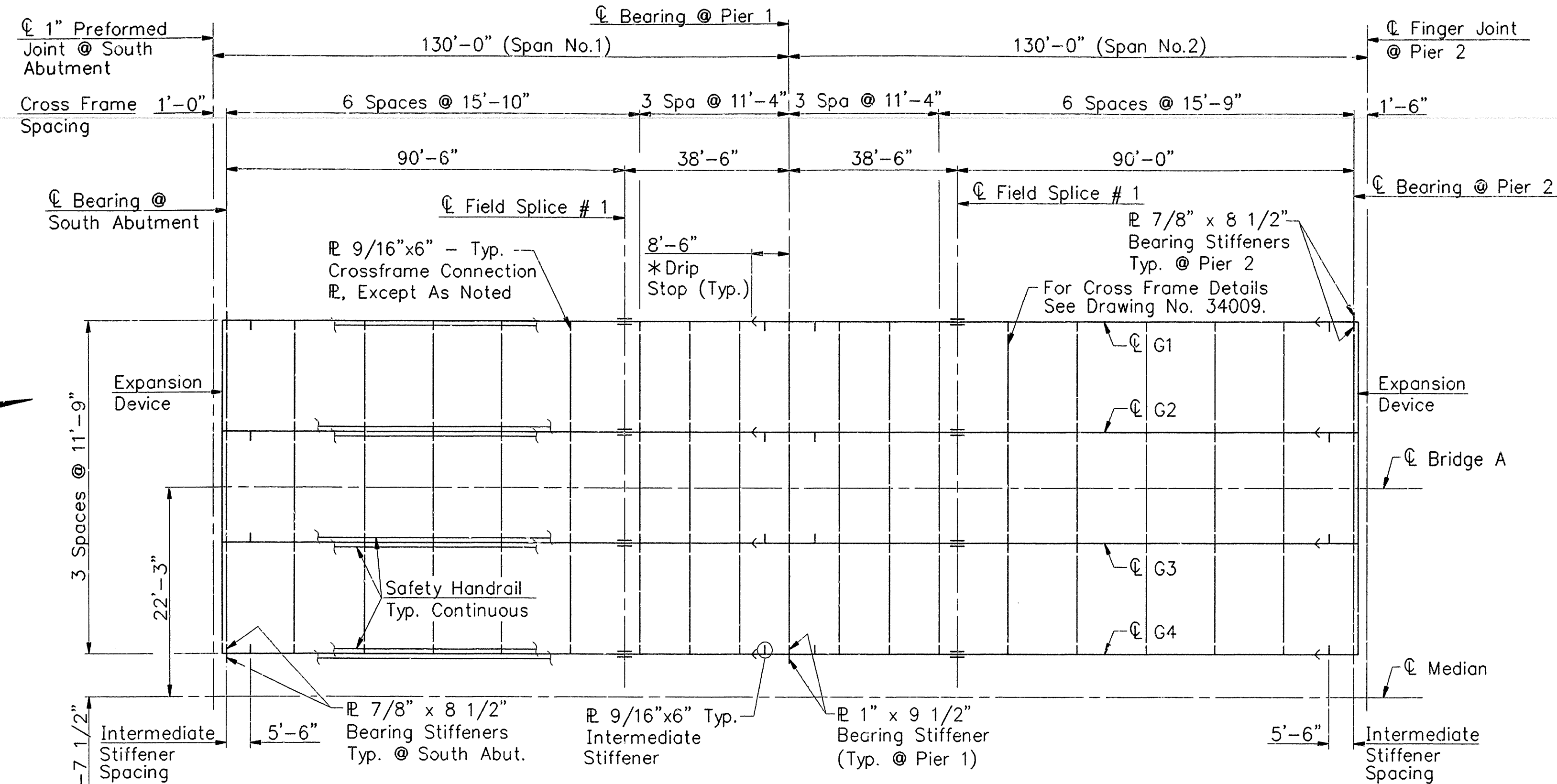
NOTE:
Camber For Dead Load Plus Vertical Curve $\pm 1/4"$ Tolerance. Deflections Shown Are From A Chord From Centerline Bearing To Centerline Bearing. Vertical Curve Corrections Not Included. Negative Sign (-) Indicates Point Above Chord.

- NOTES:
- For General Notes, See Drawing No. 33984.
 - All Structural Steel Including Girders, Splice R's, Bearing And Intermediate Stiffeners, Cross Frames & Connection R's, And Drip Stop R's Shall Be A588 Steel.
 - For Flange And Web Splice Details, See Drawing No. 34030.
 - For Elastomeric Bearing Details, See Drawing No. 34032.
 - For Screed Rail Support, Shear Connector And Stiffener Connection Details, See Drawing No. 34030.
 - For Field Splice Details, See Drawing No. 34024.
 - For Safety Handrail Details, See Drawing No. 34016.

DETAIL "A"

Scale: $3/4" = 1'-0"$

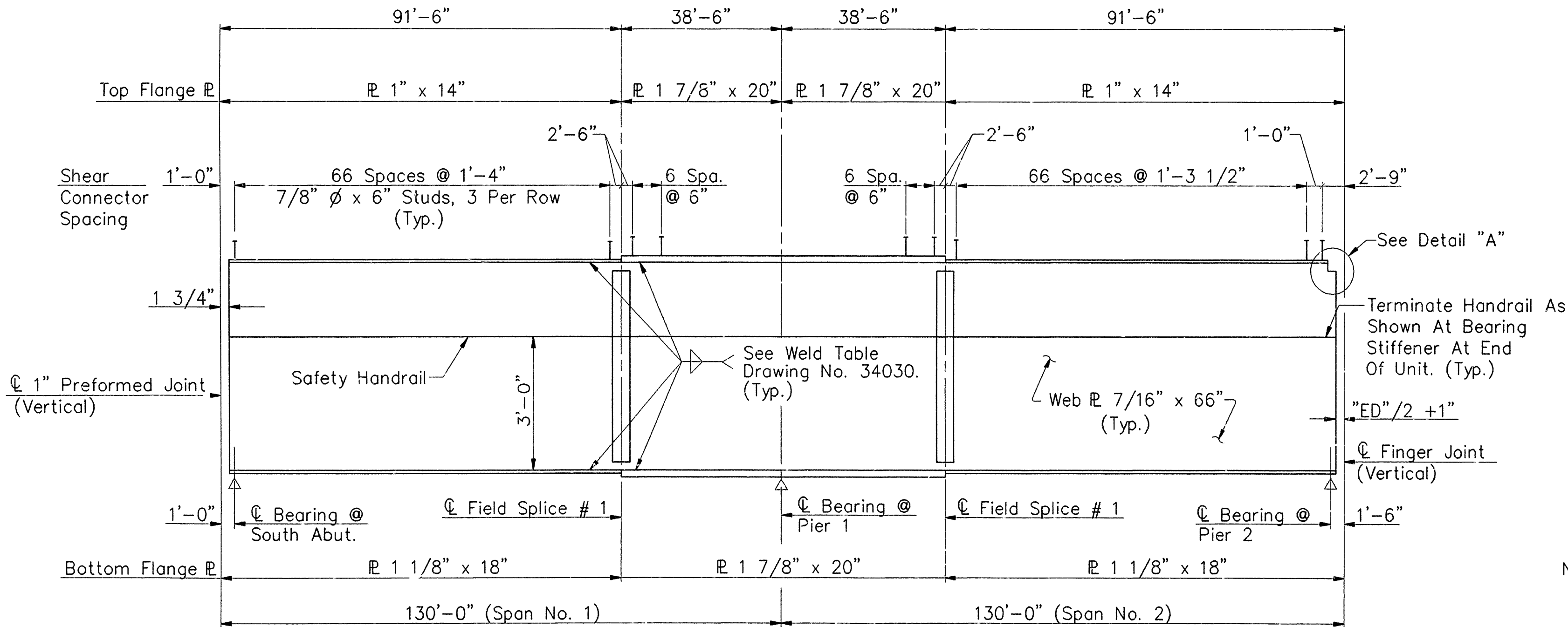
Note:
For Dimension "ED", See Table On Drawing No. 34027.



FRAMING PLAN (BRIDGE A)

Scale: None

* Drip Stop R To Be Placed 8'-6" Up-Slope From \bar{C} Bearing At Piers 1 And 2. See Drawing No. 34030 For Details.

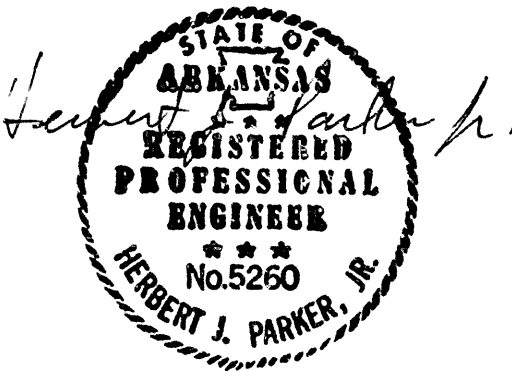


GIRDER ELEVATION (BRIDGE A & B)

Scale: None

SERVICE LOAD DISTRIBUTION TABLE		
	Interior Girder	Exterior Girder
Dead Load Non Composite	1322 PLF + Girder	1232 PLF + Girder
Dead Load To Composite Girder **	413 PLF	359 PLF
Live Load To Composite Girder	2.14 Wheels + Impact	1.93 Wheels + Impact

** Includes 20 psf For Future Wearing Surface.



SHEET 2 OF 3
DETAILS OF 260' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

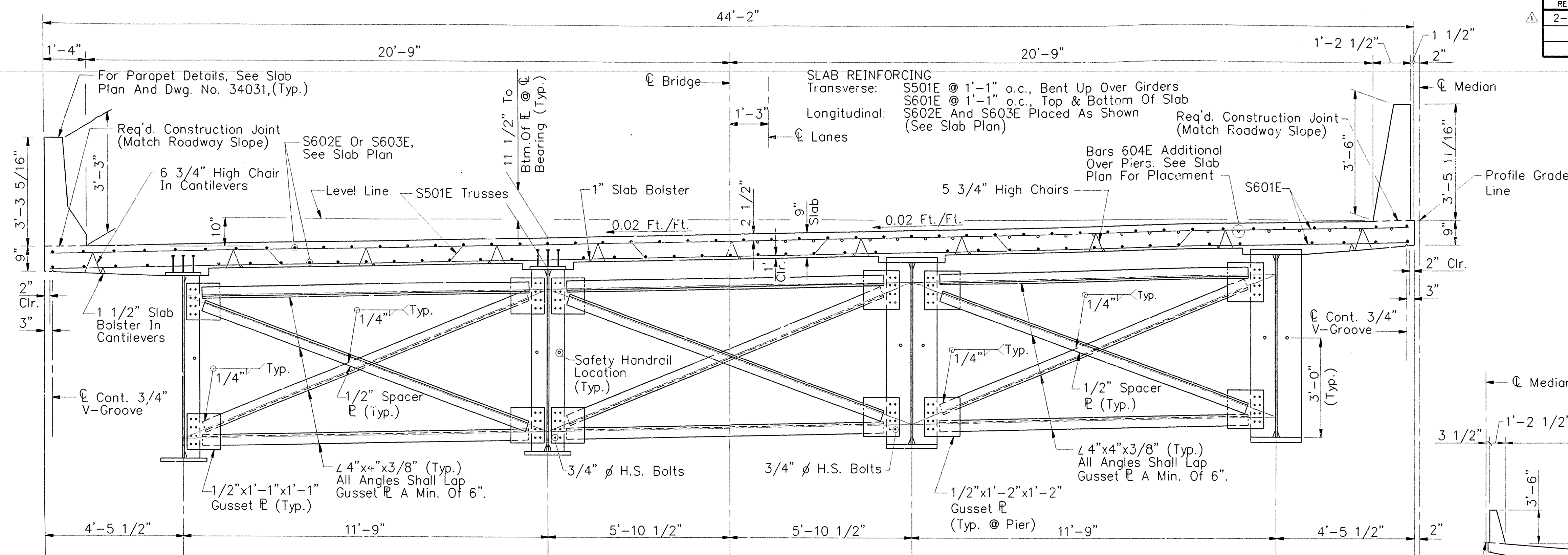
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 1993
CHECKED BY: JDG DATE: FEB. 1993
DESIGNED BY: JHR DATE: FEB. 1993

BRIDGE NO. 6479 A&B DRAWING NO. 34008

BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
2-7-97	2-12-97			6	ARK.		67	
				JOB NO.	R40039			
				6479 A&B	DTLS. CONT. PL. GIRD		34009	



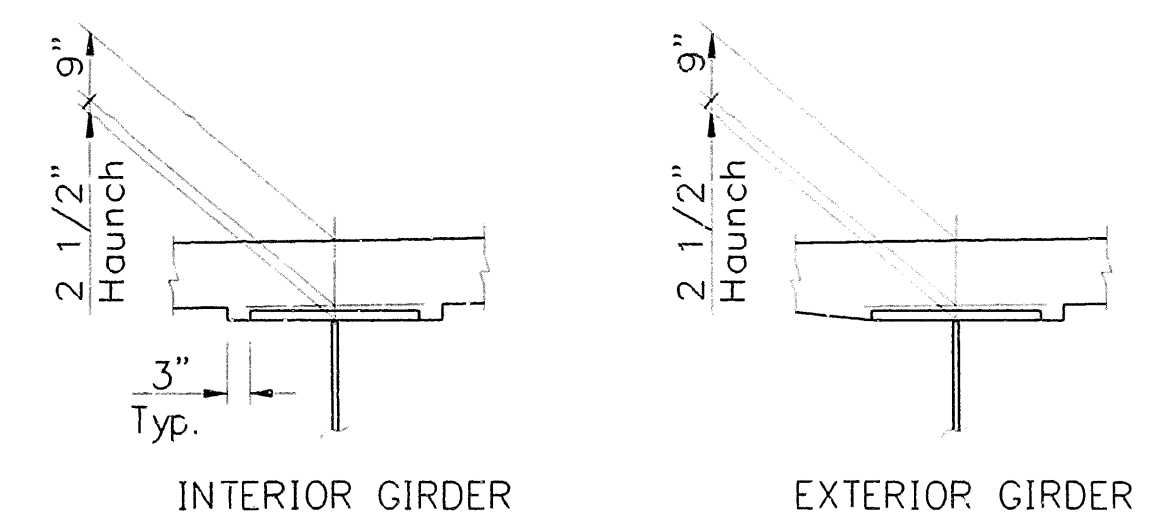
HALF SECTION NEAR MIDSPAN (BRIDGE A)

(Looking Ahead)
Scale: 1/2" = 1'-0"

Note: High Chairs And Slab Bolsters Are Spaced As Shown And At 4'-0" o.c. Longitudinally.

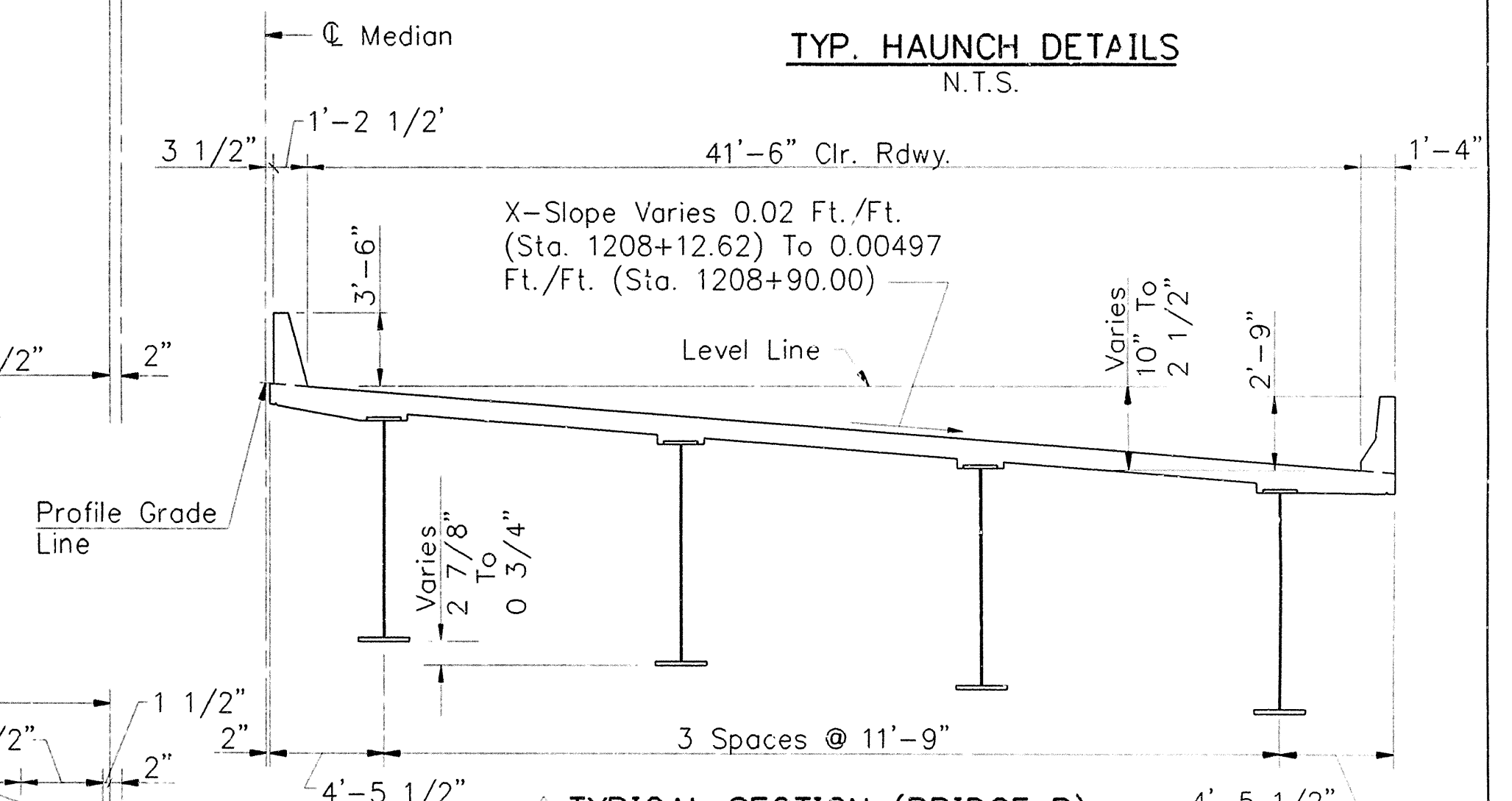
HALF SECTION AT PIER (BRIDGE A)

(Looking Ahead)
Scale: 1/2" = 1'-0"



NOTE:
Tolerance For Slab Thickness Is Minus 1/4" And Plus 1". Interior And Exterior Girder Haunches May Be Increased To 1" Greater Than The Dimension Shown. No Adjustment For Increase In Quantities Will Be Made For Thickening Slab Or Deepening Haunch.

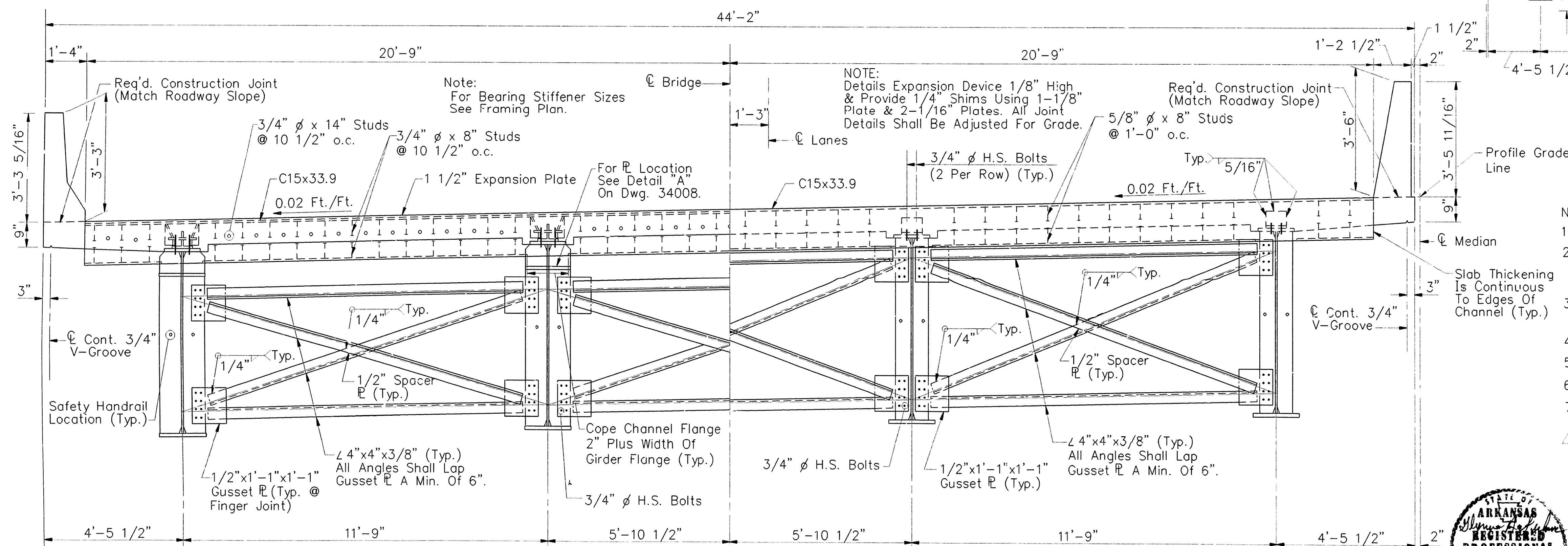
TYP. HAUNCH DETAILS
N.T.S.



TYPICAL SECTION (BRIDGE B)

(Looking Ahead)
Scale: N.T.S.

NOTE:
Details Shown For Bridge A Are Typical For Bridge B Except As Shown Above.



TYPICAL HALF SECTION NEAR FINGER EXPANSION DEVICE (BRIDGE A)

(Looking Ahead)
Scale: 1/2" = 1'-0"

TYPICAL HALF SECTION AT PREFORMED EXPANSION DEVICE (BRIDGE A)

(Looking Ahead)
Scale: 1/2" = 1'-0"

- NOTES:
- 1.) For General Notes, See Dwg. No. 33984.
 - 2.) The Concrete Bridge Deck Shall Be Given A Fine Finish As Specified For Final Finish In Subsection 802.20 For Class 5 Roadway Surface Finish To Within 18" Of Parapet.
 - 3.) Boiled Linseed Oil Treatment Shall Be Applied To The Roadway Surface And The Top And Front Face Of The Rail.
 - 4.) For Finger Joint Drain Details, See Dwg. No. 34028.
 - 5.) For Finger Joint Details, See Dwg. No.'s 34026 & 34027.
 - 6.) For Details Of 1" Preformed Joint, See Dwg. No. 34025.
 - 7.) For Safety Handrail Details, See Dwg. No. 34016.

Revised Median Side Parapet Configuration

SHEET 3 OF 3

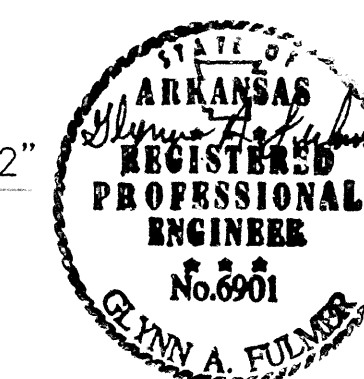
DETAILS OF 260' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: RNF DATE: FEB., 1993
CHECKED BY: NDT DATE: FEB., 1993
DESIGNED BY: JHR DATE: FEB., 1993

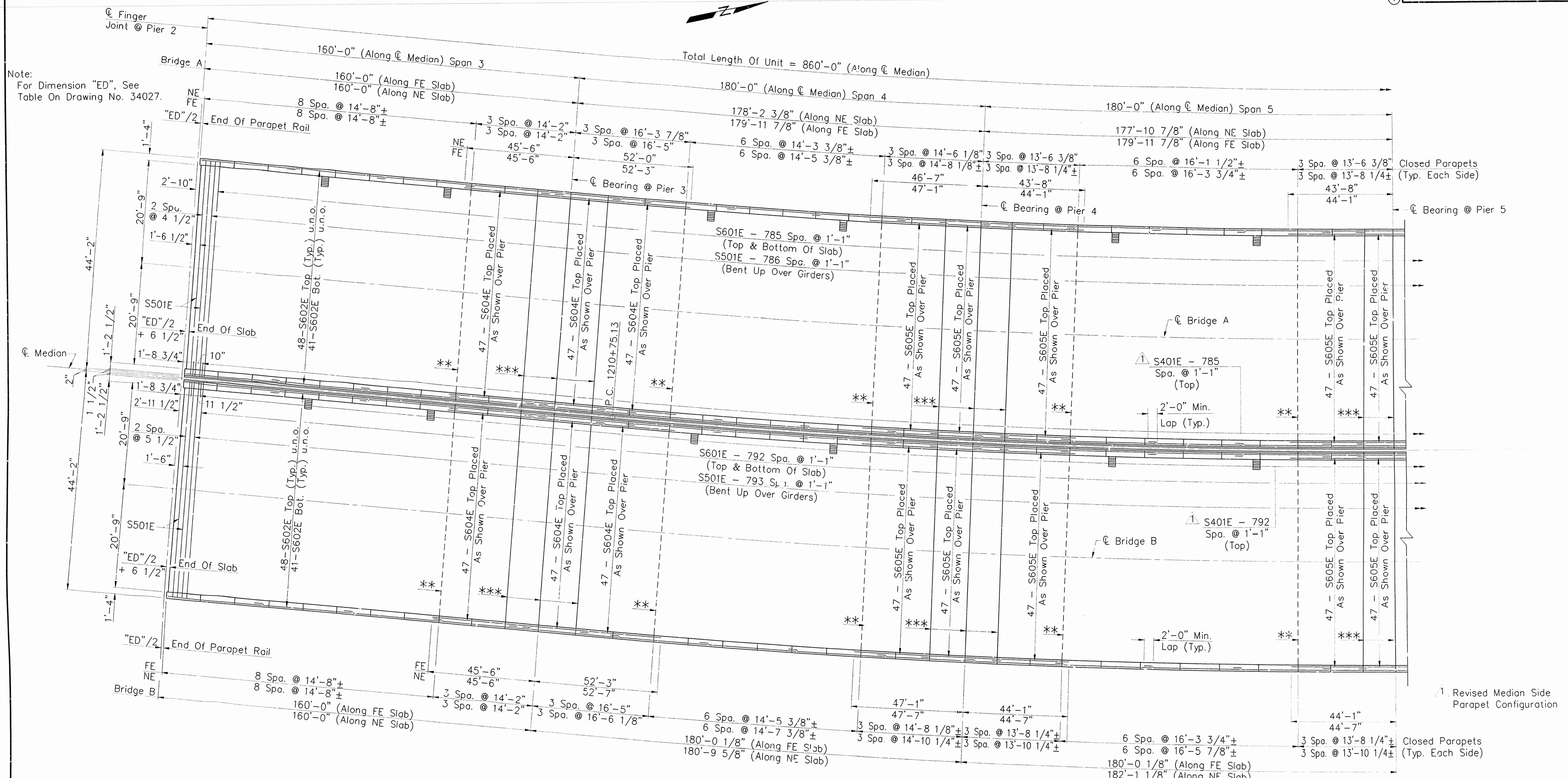
BRIDGE NO. 6479 A&B DRAWING NO. 34009



BRIDGE ENGINEER

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
2-7-97	2-12-97			6	ARK.		68	
				JOB NO.	R40039			
				6479 A&B	DTLS CONT PL GIRD		34010	



Note:
For Dimension "ED", See
Table On Drawing No. 34027.

- NOTE:
- 1.) For Longitudinal Reinforcing Placement See Typical Sections, Drawing No.'s 34017 & 34018.
 - 2.) Transverse Slab Reinforcing Is Placed On Radial Lines And Spaced Along ϕ Bridge.
 - 3.) Longitudinal Slab Reinforcing Is Placed With Same Degree Of Curvature As Slab.
 - 4.) Edges Of Slabs Are Concentric To 1'30"00" Curve ϕ Median, Past The P.C.
 - 5.) All Transverse Lines Are Radial To ϕ Median.

** : Slab Joint @ Construction Joint
*** : Required Slab Joint - Match Parapet Joint

LEGEND

NE = Near Edge
FE = Far Edge
u.n.o. = Unless Noted Otherwise

- NOTE:
- 1.) For General Notes See Drawing No. 33984.
 - 2.) For Slab Joint And Screed Rail Support Details, See Drawing No. 34030.
 - 3.) For Parapet Reinforcing And Bending Diagrams, See Drawing No. 34031.
 - 4.) For Deck Drain Locations & Details, See Drawing No. 34029.
 - 5.) For Finger Joint Details, See Drawing No.'s 34026 & 34027.
 - 6.) For Finger Joint Drain Details, See Drawing No. 34028.
 - 7.) For Haunch Details, See Drawing No. 34018.
 - 8.) For Slab Pouring Sequence & Reinforcement Schedule, See Drawing No. 34012.



SHEET 1 OF 9

DETAILS OF 860' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16

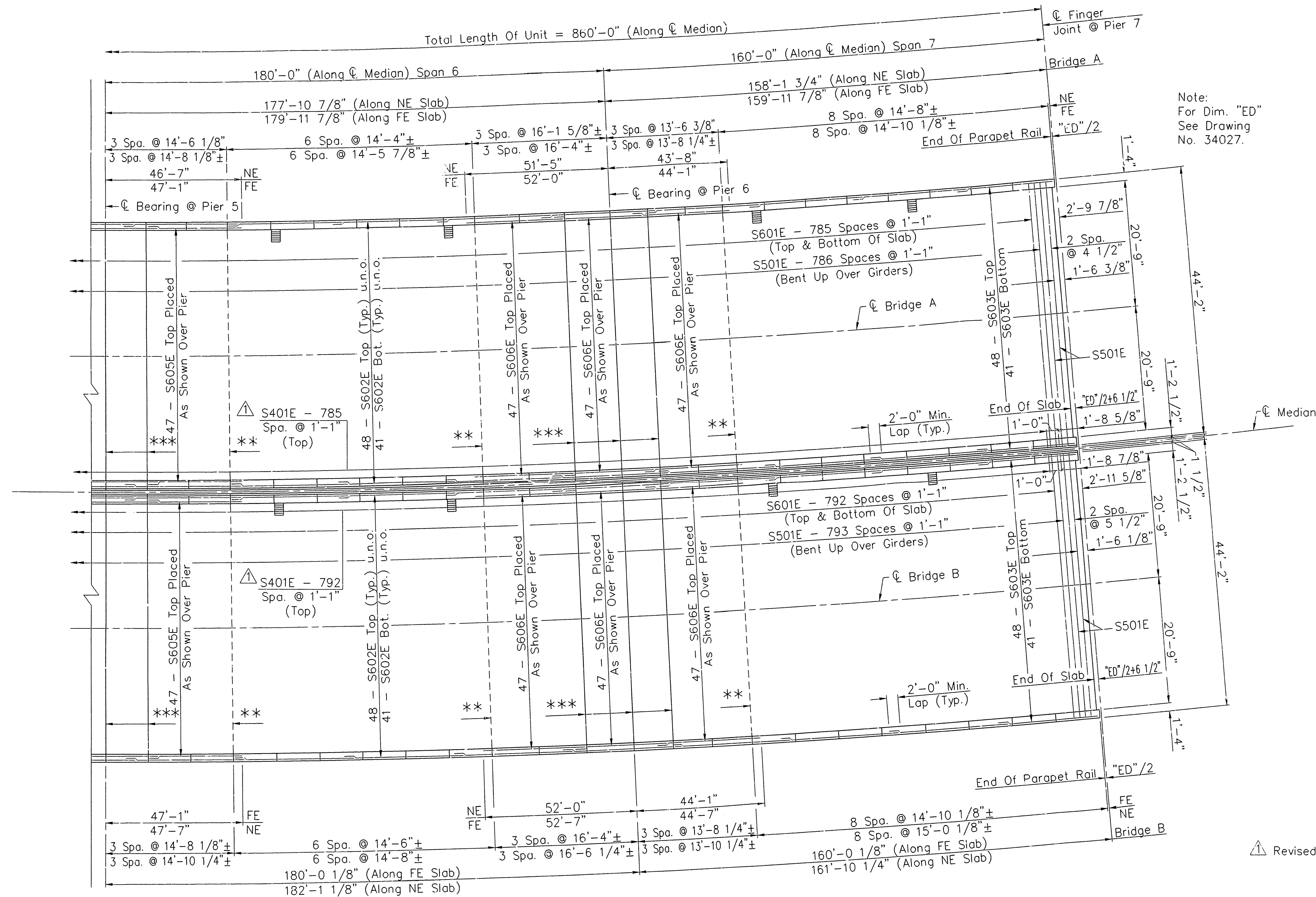
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

BRIDGE NO. 6479 A&B DRAWING NO. 34010

DESIGNED BY: JDC DATE: FEB. 1993
CHECKED BY: NDT DATE: FEB. 1993
SCALE: AS NOTED

RLK/HEW 71BB226 0-91148014 2-8-97

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
2-7-97	2-10-97			6	ARK.		69	
				JOB NO.		R40039		
				1 6479 A&B DTL'S CONT. PL. GIRD			34011	



NOTE:

- For Longitudinal Reinforcing Placement See Typical Sections, Drawing No.'s 34017 & 34018.
- Transverse Slab Reinforcing Is Placed On Radial Lines And Spaced Along \bar{C} Bridge.
- Longitudinal Slab Reinforcing Is Placed With Same Degree Of Curvature As Slab.
- Edges Of Slabs Are Concentric To 1'30"00" Curve @ \bar{C} Median, Past The P.C.
- All Transverse Lines Are Radial To \bar{C} Median.

PARTIAL SLAB PLAN (BRIDGE A & B)

Scale: None

- ** : Slab Joint @ Construction Joint
 *** : Required Slab Joint - Match Parapet Joint

LEGEND

NE = Near Edge
 FE = Far Edge
 u.n.o. = Unless Noted Otherwise

NOTE:

- For General Notes See Drawing No. 33984.
- For Slab Joint And Screed Rail Support Details, See Drawing No. 34030.
- For Parapet Reinforcing And Bending Diagrams, See Drawing No. 34031.
- For Deck Drain Locations & Details, See Drawing No. 34029.
- For Finger Joint Details, See Drawing No.'s 34026 & 34027.
- For Finger Joint Drain Details, See Drawing No. 34028.
- For Haunch Details, See Drawing No. 34018.
- For Slab Pouring, Sequence & Reinforcement Schedule, See Drawing No. 34012.



SHEET 2 OF 9
 DETAILS OF 860' CONT. COMP. PLATE GIRDER UNIT
 U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
 ROUTE 71 SEC. 16

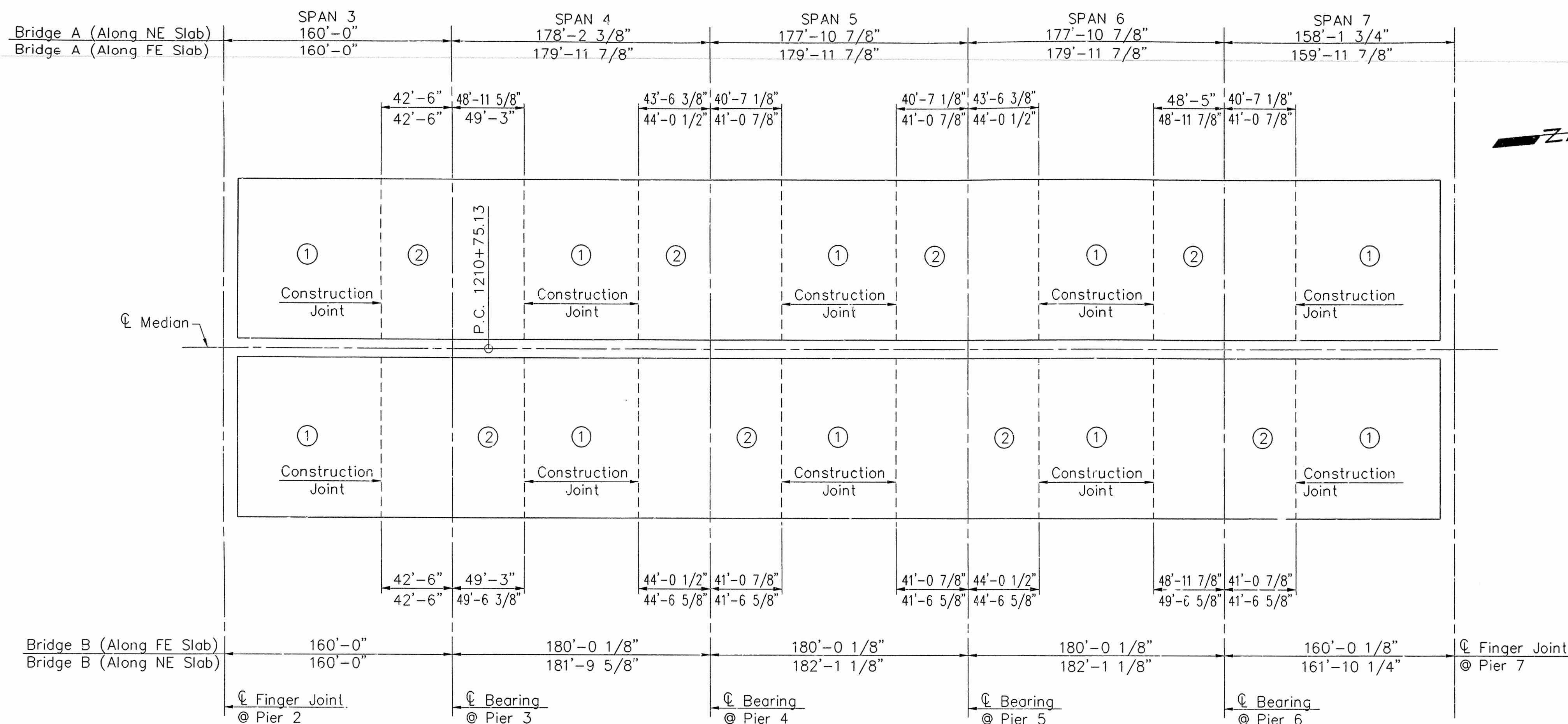
ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 1993
 CHECKED BY: NDT DATE: FEB. 1993
 DESIGNED BY: JDG DATE: FEB. 1993

BRIDGE NO. 6479 A&B

DRAWING NO. 34011

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
2-7-97	2-12-97			6	ARK.		70	
				JOB NO.		R40039		
				6479 A&B DTLs CONT PL GIRD				34012



NOTE:
 Pours With The Same Numbers May Be Placed Simultaneously Or Separately. All Pours ① Must Be Placed Before Pours ② Can Be Placed. 48 Hours Shall Elapse Between The End Of A Pour And The Start Of A New Pour Except 72 Hours Shall Elapse Between The End Of A Pour And The Start Of An Adjacent Pour. 72 Hours Shall Elapse Between The Pouring Of The Entire Slab And The Pouring Of Any Portion Of The Parapet Rail.

SLAB POURING SEQUENCE (BRIDGE A & B)
N.T.S.

NOTE:
Edges Of Slabs Are Concentric To 1'30"00"
Curve @ $\frac{1}{4}$ Median Past The P.C.

LEGEND

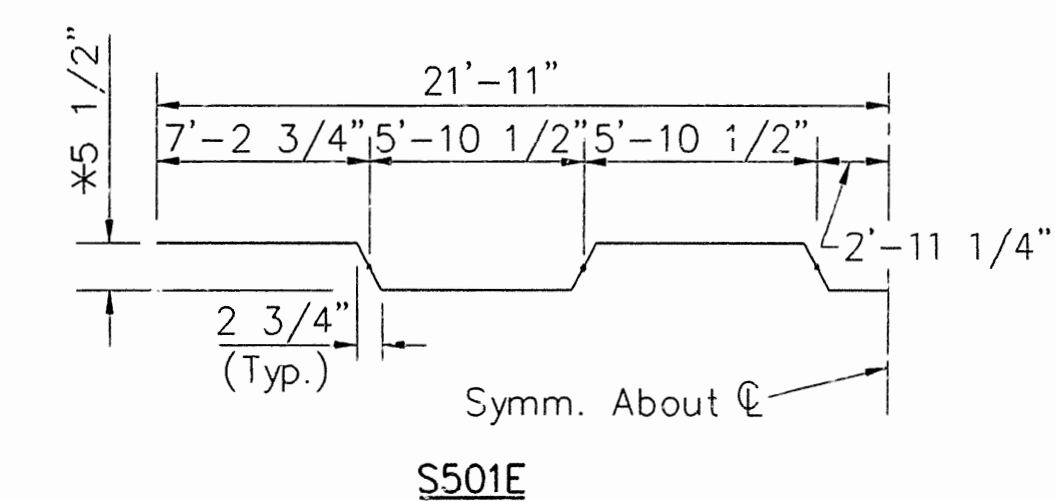
NE = Near Edge
FE = Far Edge

VARIABLES FOR EXTERIOR PARAPET RAILING			
"f"	CLOSED PARAPET		
	"k"	"n"	"t"
13'-6 3/8" To 13'-10 1/4"	3 1/2" To 5 1/2"	13	04
14'-2" To 14'-6 1/8"	2 1/2" To 3 1/2"	14	05
14'-7 3/8" To 14'-10 1/4"	4" To 5 1/2"	14	06
15'-0 1/8"	4"	15	07
16'-1 1/2" To 16'-4"	2 1/2"	16	08
16'-5" To 16'-6 1/4"	3" To 3 1/2"	16	09

VARIABLES FOR MEDIAN PARAPET RAILING			
"f"	CLOSED PARAPET		
	"k"	"n"	"t"
13'-6 3/8" To 13'-10 1/4"	3 1/2" To 5 1/2"	26	01
14'-2" To 14'-6 1/8"	2 1/2" To 3 1/2"	28	02
14'-7 3/8" To 14'-10 1/4"	4" To 5 1/2"	28	03
16'-1 1/2" To 16'-4"	2 1/2"	32	04
16'-5" To 16'-6 1/8"	3" To 3 1/2"	32	05

REINFORCEMENT SCHEDULE							
BRIDGE A				BRIDGE B			
MARK	NO.	LENGTH	PIN DIA.	MARK	NO.	LENGTH	PIN DIA.
S401E Δ	789	3'-0"	Str.	S401E Δ	796	3'-0"	Str.
S501E	791	44'-8 1/2"	3"	S501E	798	44'-8 1/2"	3"
S601E	1572	43'-10"	Str.	S601E	1586	43'-10"	Str.
S602E	1958	40'-0"	Str.	S602E	1958	40'-0"	Str.
S603E	89	22'-4"	Str.	S603E	89	30'-3"	Str.
S604E	141	34'-7"	Str.	S604E	141	34'-9"	Str.
S605E	282	32'-5"	Str.	S605E	282	32'-9"	Str.
S606E	141	34'-1"	Str.	S606E	141	34'-5"	Str.
P401E Δ	885	5'-7"	2"	P401E Δ	893	5'-7"	2"
				P402E Δ	893	6'-3"	3"
P403E Δ	885	7'-2 1/2"	3"	P404E Δ	54	13'-4"	Str.
P404E Δ	72	13'-2"	Str.	P405E Δ	18	13'-10"	Str.
P405E Δ	168	13'-10"	Str.	P406E Δ	156	14'-3"	Str.
P406E Δ	128	14'-3"	Str.	P407E	48	14'-7"	Str.
P408E Δ	96	15'-9"	Str.	P409E Δ	72	16'-0"	Str.
P411E Δ	1712	9'-7"	3"	P411E Δ	1712	9'-7"	3"
P601E Δ	63	13'-2"	Str.	P601E Δ	63	13'-4"	Str.
P602E Δ	105	13'-10"	Str.	P602E Δ	105	13'-10"	Str.
P603E Δ	154	14'-3"	Str.	P603E Δ	154	14'-3"	Str.
P604E Δ	63	15'-9"	Str.	P604E Δ	63	14'-7"	Str.
P605E Δ	21	16'-0"	Str.	P605E Δ	21	16'-0"	Str.

BENDING DIAGRAM



* 1/2" Overtolerance, No Undertolerance.

NOTE:

- 1.) Dimensions Of Bars Are Out-To-Out.
- 2.) Bar Designations Ending With "E"
Indicates Epoxy Coated Bars.
- 3.) For Bar Bending Diagrams Of Parapet Reinforcing,
See Drawing No. 34031.

1 Revised Median Side Parapet Configuration

SHEET 3 OF 9
DETAILS OF 860' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 1993

CHECKED BY: NDT DATE: FEB. 1993

DESIGNED BY: JDG DATE: FEB. 1993

BRIDGE NO. 6479 A&B DRAWING NO. 1000

BRIDGE NO. 0479 A&D DRA

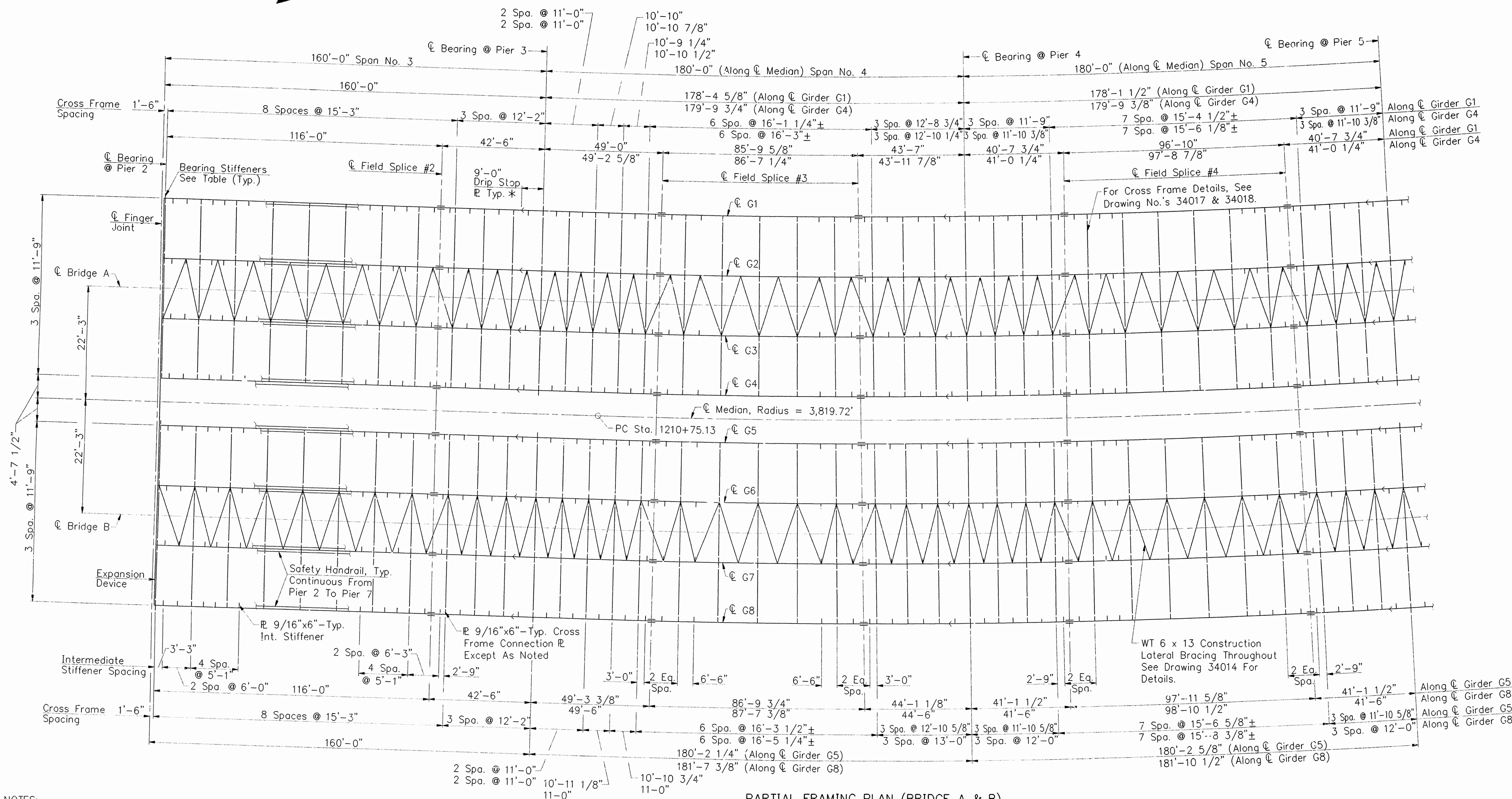
DRAWING NO. 34012

DRAWING NO. J4012

STATE OF
ARKANSAS
Glynn A. Fulmer
REGISTERED
PROFESSIONAL
ENGINEER
No. 6901
GLYNN A. FULMER

BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		71	
				JOB NO.		R40039		
				6479 A&B		DTLS CONT. PL. GIRD	34013	



PARTIAL FRAMING PLAN (BRIDGE A & B)

Scale: None

NOTES:

- For General Notes, See Drawing No. 33984.
- All Structural Steel Including Girders, Splice Pl's, Bearing And Intermediate Stiffeners, Cross Frames & Connection Pl's, Lateral Bracing & Connection Pl's, And Drip Stop Pl's Shall Be A588 Steel.
- For Flange And Web Splice Details, See Drawing No. 34030.
- For Elastomeric Bearing Details, See Drawing No. 34032.
- For Scribed Rail Support, Shear Connector And Stiffener Connection Details, See Drawing No. 34030.
- For Field Splice Details, See Drawing No. 34024.
- For Dead Load Deflection Diagrams, See Drawing No. 34016.
- For Safety Handrail Details, See Drawing No. 34016.

* For Drip Stop Details, See Drawing No. 34030.

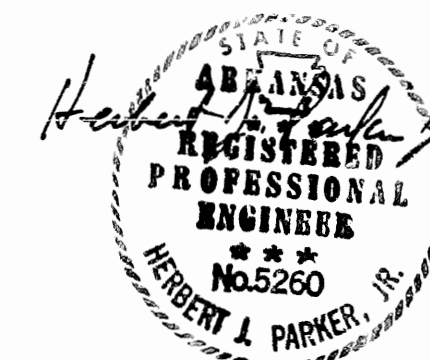
SERVICE LOAD DISTRIBUTION TABLE		
	Interior Girder	Exterior Girder
Dead Load Non Composite	1322 PLF + Girder	1246 PLF + Girder
Dead Load To Composite Girder **	413 PLF	359 PLF
Live Load To Composite Girder	2.14 Wheels + Impact	1.93 Wheels + Impact

** Includes 20 psf For Future Wearing Surface.

TABLE OF BEARING STIFFENERS	
Pier	Typical Plate Size
2	1" x 9 1/2"
3-5	1 1/4" x 11 1/2"

NOTES:

- Intermediate Stiffeners, Where Required, Are Spaced Equally Between Cross Frames Unless Noted Otherwise.
- Minimum Clearance Between Web Splice Plates And Lateral Bracing Connection Plates = 1'-0"
- Girders Are Concentric To 1'30'00" Curve @ Median, Past The P.C.
- All Transverse Lines Are Radial To Median.



SHEET 4 OF 9

DETAILS OF 860' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK
WASHINGTON COUNTY
ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 1993
CHECKED BY: JDC DATE: FEB. 1993
DESIGNED BY: JHR DATE: FEB. 1993

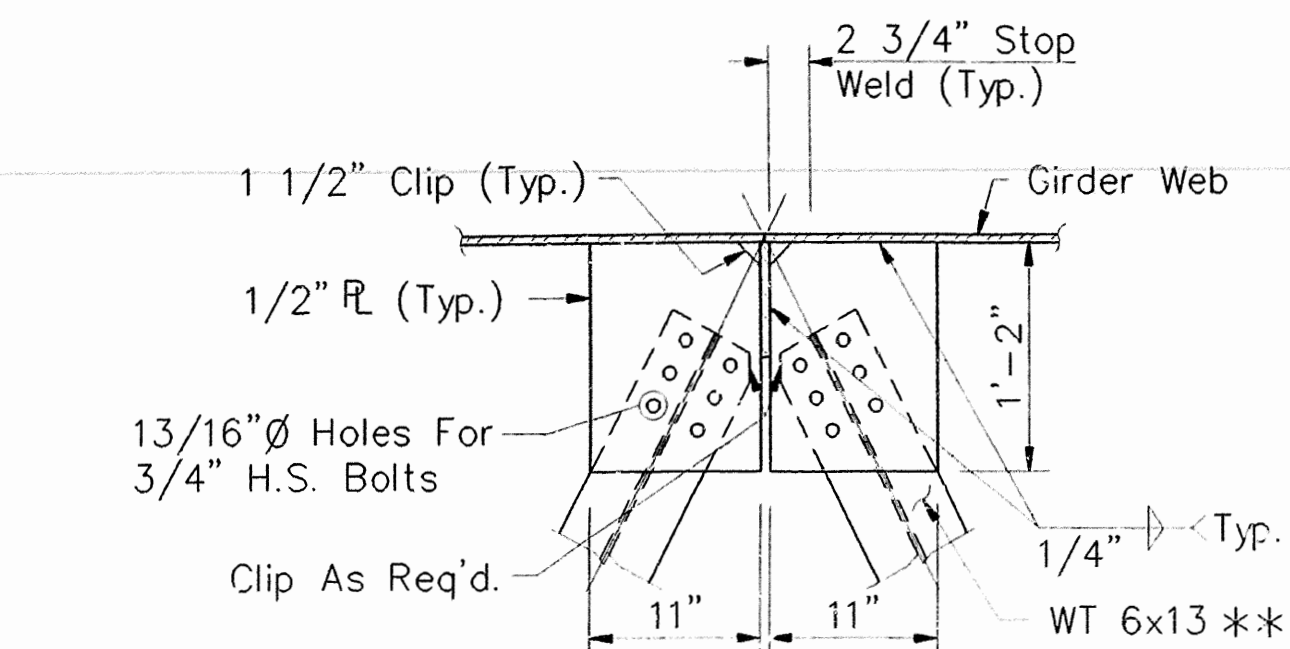
SCALE: AS NOTED

BRIDGE NO. 6479 A&B

DRAWING NO. 34013

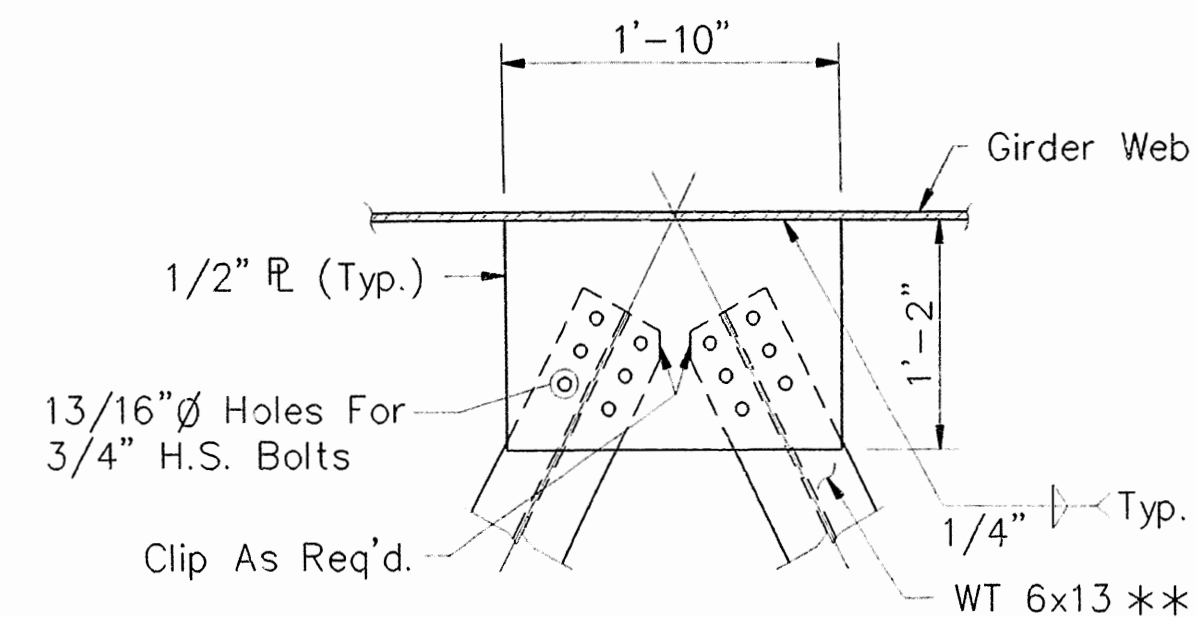
BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		72	
				JOB NO.		R40039		
				1 6479 A&B	DTLS CONT PL GIRD		34014	



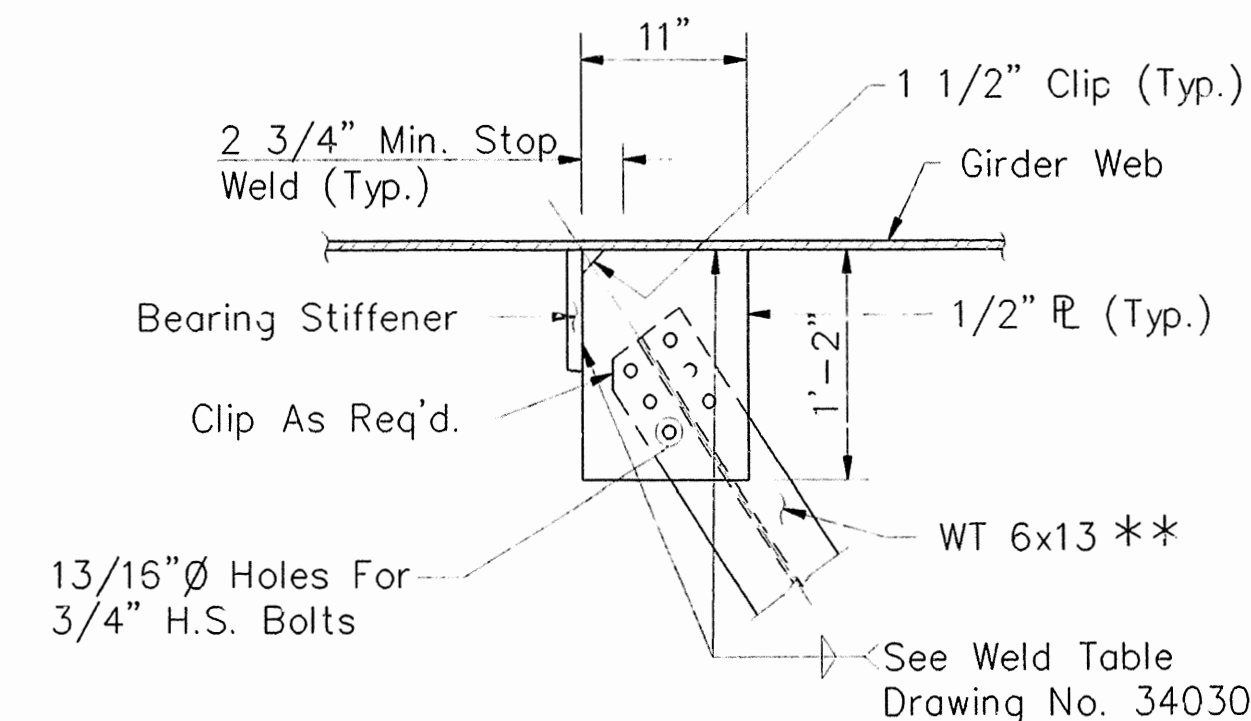
TYP. LATERAL BRACE CONN. AT INTER. STIFF. OR CONN. PL's
Scale: None

** See Framing Plan For Location Of Lateral Bracing.



TYP. LATERAL BRACE CONN. AT GIRDER WEB
Scale: None

** See Framing Plan For Location Of Lateral Bracing.



TYP. LATERAL BRACE CONN. AT BEARING STIFFENERS
Scale: None

** See Framing Plan For Location Of Lateral Bracing.

NOTES:

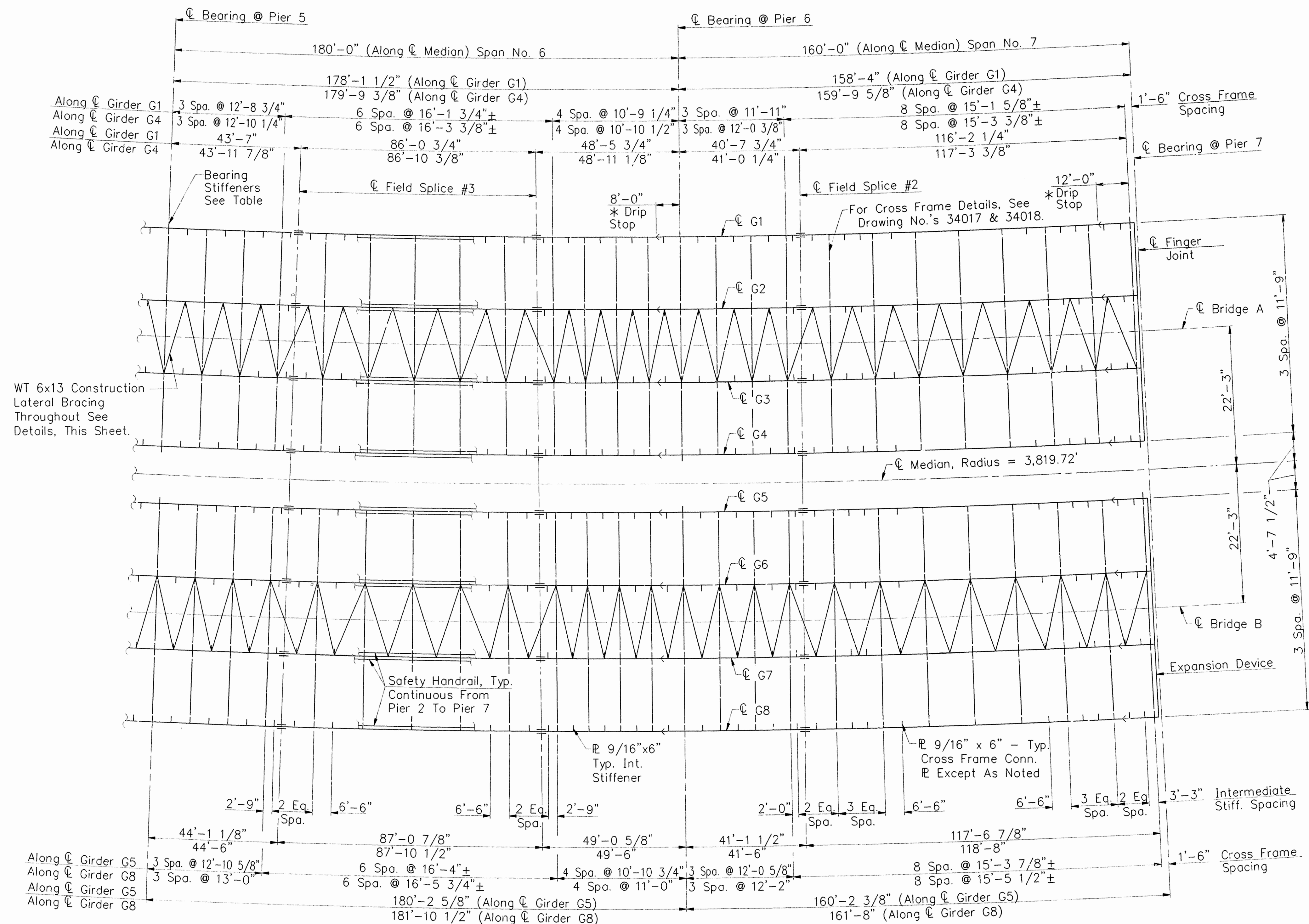
- For General Notes, See Drawing No. 33984.
- All Structural Steel Including Girders, Splice PL's, Bearing And Intermediate Stiffeners, Cross Frames & Connection PL's, Lateral Bracing & Connection PL's, And Drip Stop PL's Shall Be A588 Steel.
- For Flange And Web Splice Details, See Drawing No. 34030.
- For Elastomeric Bearing Details, See Drawing No. 34032.
- For Scribed Rail Support, Shear Connector And Stiffener Connection Details, See Drawing No. 34030.
- For Field Splice Details, See Drawing No. 34024.
- For Dead Load Deflection Diagrams, See Drawing No. 34016.
- For Safety Handrail Details, See Drawing No. 34016.

* For Drip Stop Details,
See Drawing No. 34030.

TABLE OF BEARING STIFFENERS	
Pier	Typical Plate Size
7	1" x 9 1/2"
5 & 6	1 1/4" x 11 1/2"

NOTES:

- Intermediate Stiffeners, Where Required, Are Spaced Equally Between Cross Frames Unless Noted Otherwise.
- Minimum Clearance Between Web Splice Plates And Lateral Bracing Connection Plates = 1'-0".
- Girders Are Concentric To 1'30'00" Curve @ Median, Past The P.C.
- All Transverse Lines Are Radial To Median.



PARTIAL FRAMING PLAN (BRIDGE A & B)

Scale: None

SHEET 5 OF 9

DETAILS OF 860' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY

ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 1993

CHECKED BY: JDG DATE: FEB. 1993

DESIGNED BY: JHR DATE: FEB. 1993

SCALE: AS NOTED

BRIDGE NO. 6479 A&B

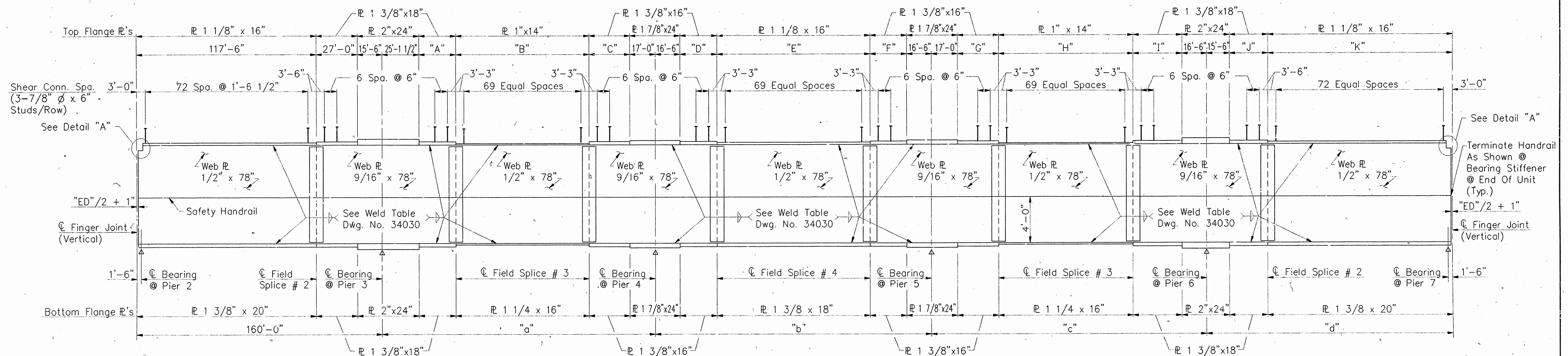
DRAWING NO. 34014

BRIDGE ENGINEER



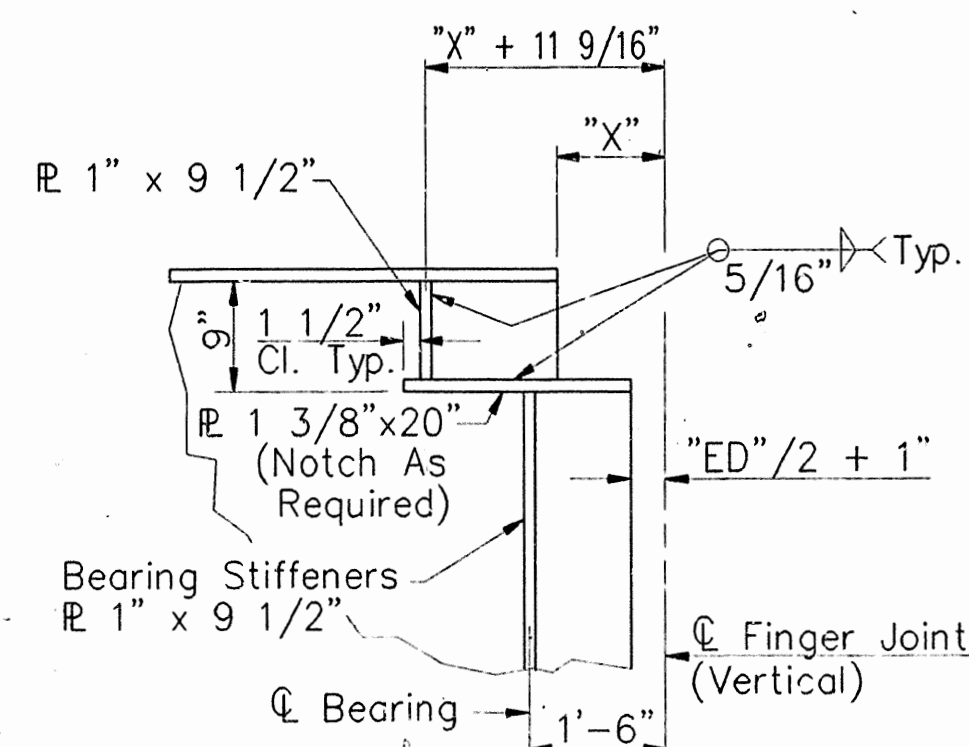
(1) 6481 A&B DTLS CONT PL GIRD 34015

GIRDER ELEVATION – TABLE OF VARIABLES															
GIRDER	A	B	C	D	E	F	G	H	I	J	K	"a"	"b"	"c"	"d"
G1	23'-10 3/8"	85'-9 5/8"	26'-7"	24'-1 3/4"	96'-10"	24'-1 3/4"	26'-7"	86'-0 3/4"	31'-11 3/4"	25'-1 3/4"	117'-8 1/4"	178'-4 5/8"	178'-1 1/2"	178'-1 1/2"	158'-4"
G2	23'-11 1/4"	86'-0 7/8"	26'-8 5/8"	24'-3 1/4"	97'-1 5/8"	24'-3 1/4"	26'-8 5/8"	86'-4"	32'-1 1/2"	25'-3 1/4"	118'-0 5/8"	178'-10 3/8"	178'-8 1/8"	178'-8 1/8"	158'-9 7/8"
G3	24'-0 1/8"	86'-4 1/8"	26'-10 1/4"	24'-4 3/4"	97'-5 1/4"	24'-4 3/4"	26'-10 1/4"	86'-7 1/8"	32'-3 3/8"	25'-4 3/4"	118'-5"	179'-4"	179'-2 3/4"	179'-2 3/4"	159'-3 3/4"
G4	24'-1 1/8"	86'-7 1/4"	26'-11 7/8"	24'-6 1/4"	97'-8 7/8"	24'-6 1/4"	26'-11 7/8"	86'-10 3/8"	32'-5 1/8"	25'-6 1/4"	118'-9 3/8"	179'-9 3/4"	179'-9 3/8"	179'-9 3/8"	159'-9 5/8"
G5	24'-1 3/4"	86'-9 3/4"	27'-1 1/8"	24'-7 1/2"	97'-11 3/4"	24'-7 1/2"	27'-1 1/8"	87'-0 7/8"	32'-6 5/8"	25'-7 1/2"	119'-0 7/8"	180'-2 1/4"	180'-2 5/8"	180'-2 5/8"	160'-2 3/8"
G6	24'-2 5/8"	87'-1"	27'-2 3/4"	24'-9"	98'-3 3/8"	24'-9"	27'-2 3/4"	87'-4 1/8"	32'-8 3/8"	25'-9"	119'-5 1/4"	180'-8"	180'-9 1/4"	180'-9 1/4"	160'-8 1/4"
G7	24'-3 1/2"	87'-4 1/4"	27'-4 3/8"	24'-10 1/2"	98'-6 7/8"	24'-10 1/2"	27'-4 3/8"	87'-7 3/8"	32'-10 1/4"	25'-10 1/2"	119'-9 5/8"	181'-1 5/8"	181'-3 7/8"	181'-3 7/8"	161'-2 1/8"
G8	24'-4 1/2"	87'-7 3/8"	27'-6"	25'-0"	98'-10 1/2"	25'-0"	27'-6"	87'-10 1/2"	33'-0"	26'-0"	120'-2"	181'-7 3/8"	181'-10 1/2"	181'-10 1/2"	161'-8"



GIRDER ELEVATION (BRIDGE A & B)

SCALE: H: 1"=30'-0"
V: N.T.S.



DETAIL "A"

Scale: $3/4" = 1'-0"$

Notes:
For Variable "X", See
Drawing No. 34026.

Note:
For Dimension "ED", See Table
On Drawing No. 34027.

NOTES:

1. For General Notes, See Drawing No. 33984.
2. All Structural Steel Including Girders, Splice R's, Bearing & Intermediate Stiffeners, Cross Frames & Connection R's, Lateral Bracing & Connection R's, And Drip Stop R's Shall Be A588 Steel.
3. For Flange And Web Splice Details, See Drawing No. 34030.
4. For Elastomeric Bearing Details, See Drawing No. 34032.
5. For Scribed Rail Support, Shear Connector And Stiffener Connection Details See Drawing No. 34030.
6. For Field Splice Details, See Drawing No. 34024.
7. For Dead Load Deflection Diagrams, See Drawing No. 34016.
8. For Safety Handrail Details, See Drawing No. 34016.

SHEET 6 of 9

DETAILS OF 860' CONT. COMP. PLATE GIRDER UNIT

U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY

ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 1993

CHECKED BY: NDT DATE: FEB. 1993

DESIGNED BY: JHR . DATE: FEB. 1993

SCALE: AS NOTED

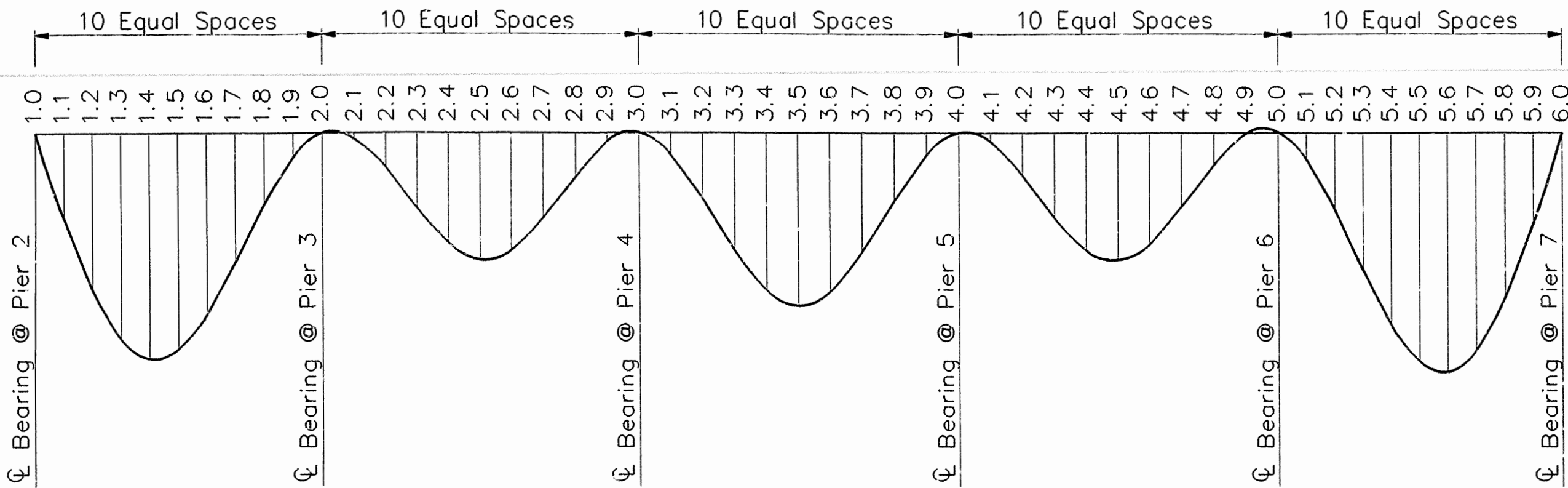
BRIDGE NO. 6479 A & B

DRAWING NO. 34015

A circular professional engineer seal for the State of Arkansas. The outer ring contains the text "STATE OF ARKANSAS" at the top and "HERBERT J. PARKER, JR." at the bottom. Inside the ring, the text "REGISTERED PROFESSIONAL ENGINEER" is written in a bold, sans-serif font. Below this, the number "No. 5260" is printed. Three stars are positioned above the number. A handwritten signature, "Herbert J. Parker, Jr.", is written across the seal in dark ink.

BRIDGE ENGINEER

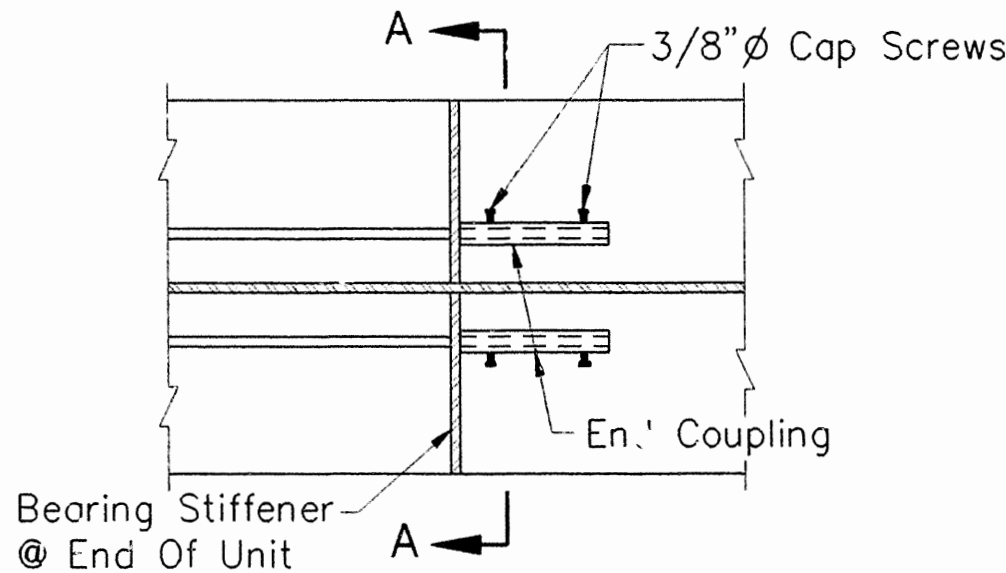
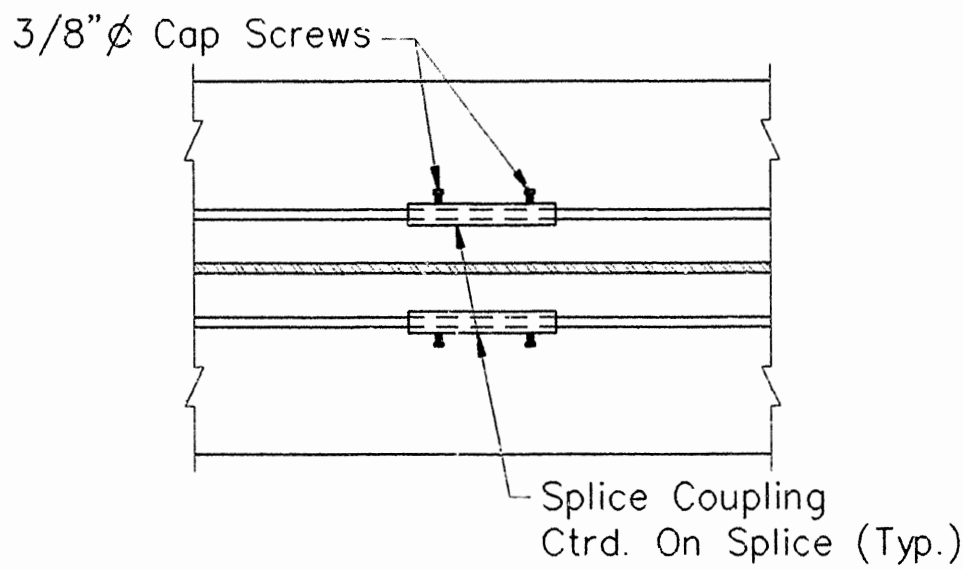
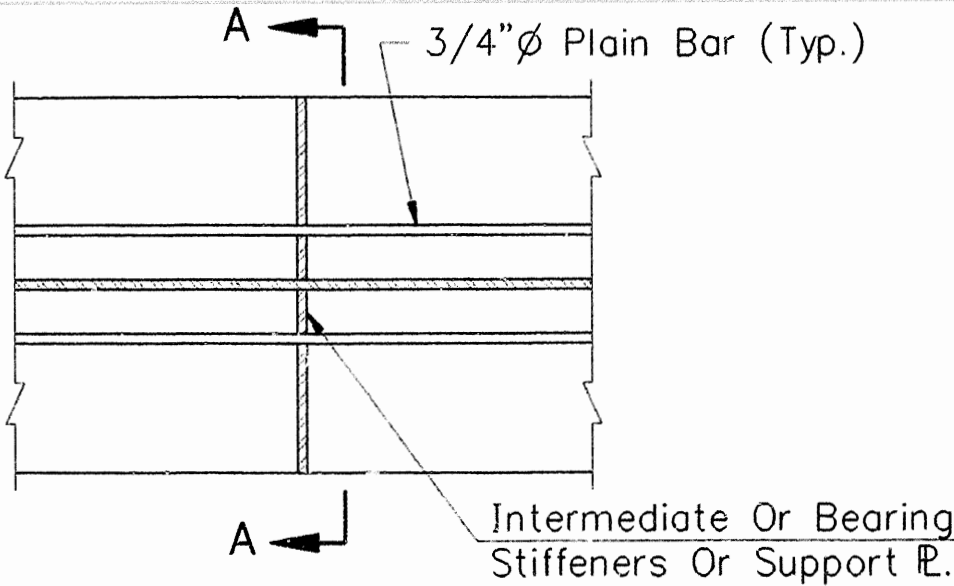
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		74	
				JOB NO.		R40039		
				① 6479 A&B DTLs CONT PL GIRD		34016		



DEAD LOAD DEFLECTION DIAGRAM (BRIDGE A & B)
SCALE: N.T.S.

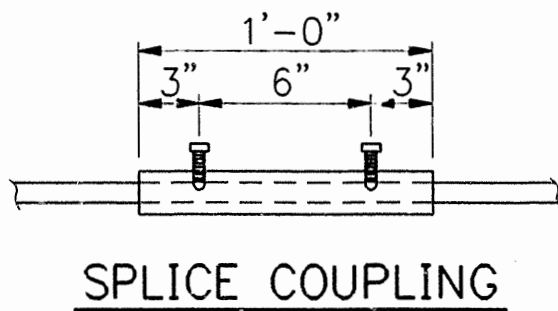
TABLE OF DEFLECTIONS (IN INCHES)							
	Point Of Deflection	BRIDGE A			BRIDGE B		
		Structural Steel	Structural Steel + Slab	Structural Steel + Slab + Parapet	Structural Steel	Structural Steel + Slab	Structural Steel + Slab + Parapet
No. 3	1.0	0.00	0.00	0.00	0.00	0.00	0.00
	1.1	0.30	1.33	1.43	0.29	1.32	1.41
	1.2	0.55	2.44	2.62	0.54	2.42	2.59
	1.3	0.72	3.20	3.44	0.71	3.16	3.39
	1.4	0.79	3.51	3.78	0.78	3.47	3.72
	1.5	0.76	3.37	3.63	0.76	3.32	3.56
	1.6	0.65	2.82	3.04	0.64	2.78	2.99
	1.7	0.47	2.01	2.17	0.46	1.97	2.12
	1.8	0.27	1.12	1.21	0.26	1.09	1.17
	1.9	0.10	0.39	0.42	0.10	0.37	0.40
No. 4	2.0	0.00	0.00	0.00	0.00	0.00	0.00
	2.1	-0.01	0.04	0.06	-0.01	0.07	0.09
	2.2	0.05	0.42	0.49	0.07	0.49	0.56
	2.3	0.16	1.01	1.14	0.17	1.11	1.24
	2.4	0.25	1.54	1.71	0.27	1.66	1.84
	2.5	0.29	1.77	1.97	0.31	1.90	2.10
	2.6	0.27	1.64	1.83	0.29	1.76	1.94
	2.7	0.19	1.19	1.33	0.20	1.27	1.40
	2.8	0.08	0.59	0.66	0.09	0.63	0.71
	2.9	0.00	0.11	0.13	0.00	0.12	0.14
No. 5	3.0	0.00	0.00	0.00	0.00	0.00	0.00
	3.1	0.09	0.33	0.36	0.09	0.33	0.36
	3.2	0.25	0.99	1.08	0.26	1.03	1.11
	3.3	0.41	1.74	1.89	0.43	1.82	1.96
	3.4	0.54	2.31	2.50	0.56	2.41	2.61
	3.5	0.58	2.52	2.73	0.61	2.64	2.85
	3.6	0.54	2.31	2.51	0.56	2.41	2.61
	3.7	0.41	1.74	1.89	0.43	1.82	1.96
	3.8	0.25	0.98	1.07	0.26	1.03	1.11
	3.9	0.09	0.32	0.35	0.09	0.33	0.35
No. 6	4.0	0.00	0.00	0.00	0.00	0.00	0.00
	4.1	0.00	0.12	0.14	0.00	0.13	0.15
	4.2	0.08	0.60	0.68	0.08	0.63	0.71
	4.3	0.19	1.22	1.36	0.20	1.28	1.42
	4.4	0.27	1.68	1.86	0.28	1.77	1.95
	4.5	0.29	1.81	2.01	0.30	1.90	2.09
	4.6	0.24	1.56	1.74	0.26	1.65	1.83
	4.7	0.15	1.03	1.16	0.15	1.08	1.21
	4.8	0.04	0.41	0.47	0.04	0.43	0.50
	4.9	-0.03	-0.01	0.00	-0.03	-0.01	0.00
No. 7	5.0	0.00	0.00	0.00	0.00	0.00	0.00
	5.1	0.11	0.42	0.45	0.12	0.43	0.46
	5.2	0.29	1.15	1.24	0.30	1.21	1.30
	5.3	0.48	2.04	2.20	0.51	2.14	2.30
	5.4	0.66	2.84	3.06	0.69	2.98	3.19
	5.5	0.77	3.36	3.62	0.81	3.53	3.78
	5.6	0.80	3.50	3.76	0.84	3.67	3.93
	5.7	0.72	3.17	3.41	0.76	3.34	3.57
	5.8	0.55	2.43	2.61	0.57	2.54	2.72
	5.9	0.30	1.32	1.42	0.31	1.38	1.48
	6.0	0.00	0.00	0.00	0.00	0.00	0.00

NOTE:
Camber For Dead Load Plus Vertical Curve $\pm 1/4"$ Tolerance. Deflections Shown Are From A Chord From Centerline Bearing To Centerline Bearing. Vertical Curve Corrections Not Included. Negative Sign (-) Indicates Point Above Chord.

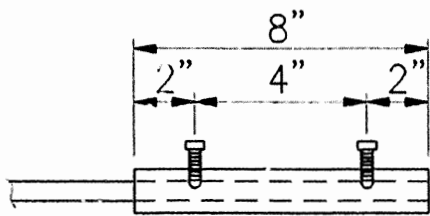


Couplings Shall Be Made Of Round Mechanical Tubing (Carbon Steel), 1 1/4" o.d., 7/32" Wall Thick. All Tubing Shall Be ASTM A519 (CW).

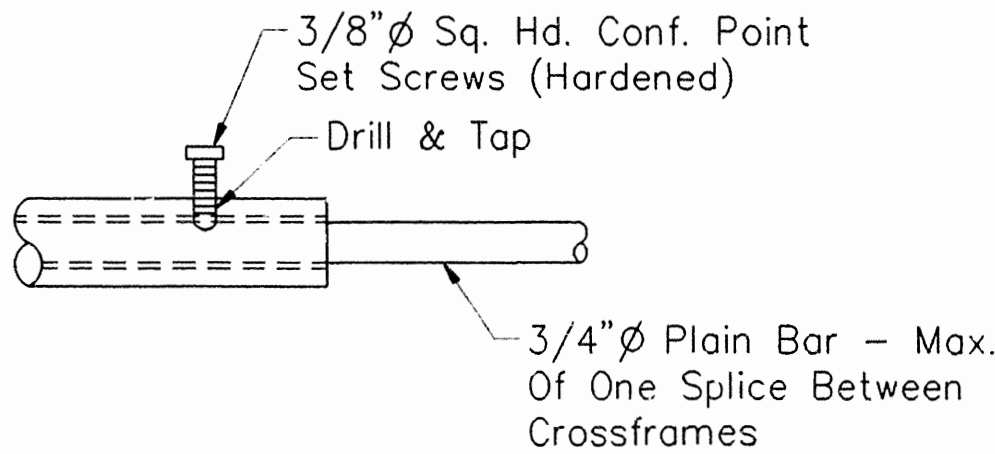
DETAILS OF FIELD ERECTED SAFETY HANDRAILS
N.T.S.



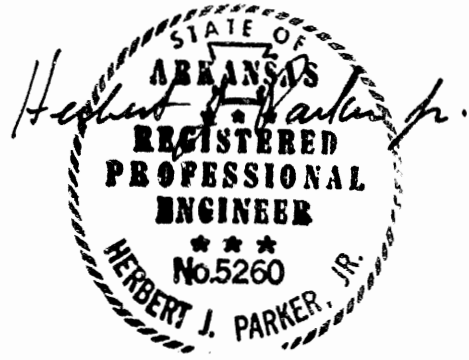
SPLICE COUPLING



END COUPLING

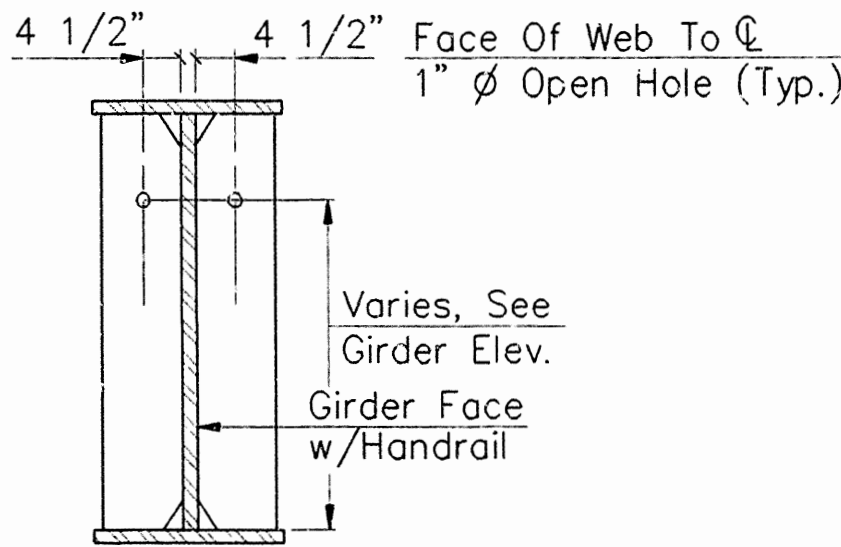


DETAIL OF CAP SCREW

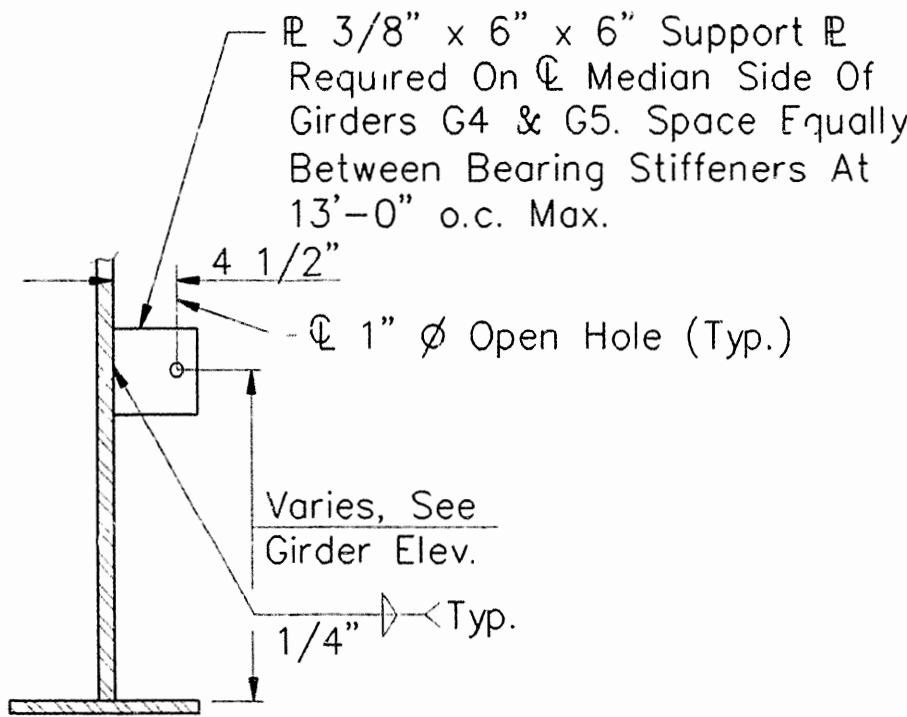


Unless Otherwise Noted, All Structural Steel In Safety Handrails Shall Conform To The Requirements Of ASTM Designation A36 And Section 807 Of The Standard Specifications. All Structural Steel In Safety Handrails Shall Be Paid For As "Structural Steel In Plate Girder Spans (A588)."

All Structural Steel In Safety Handrails Shall Be Painted According To Section 638 Of The Standard Specifications. In Lieu Of Painting, Structural Steel May Be Galvanized According To ASTM Designation A153. All Painting Or Galvanizing, Required Or Optional, Will Not Be Paid For Directly, But Shall Be Considered Subsidiary To The Item "Structural Steel In Plate Girder Spans (A588)."



SECTION A-A



HANDRAIL SUPPORT PLATE DETAIL

NOTE:
Additional Handrail Support Plates Shall Be Used In Locations Where The Spacing Of The Cross Frame Connection Pl's Exceeds 13'-0".

NOTE:
All Safety Handrails Shall Be 3/4" plain Bars Made Continuous By Using Splice Couplings - See Details.

SHEET 7 OF 9
DETAILS OF 860' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

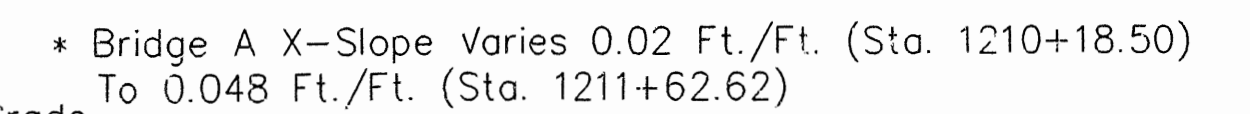
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 1993
CHECKED BY: JDG DATE: FEB. 1993
DESIGNED BY: JHR DATE: FEB. 1993

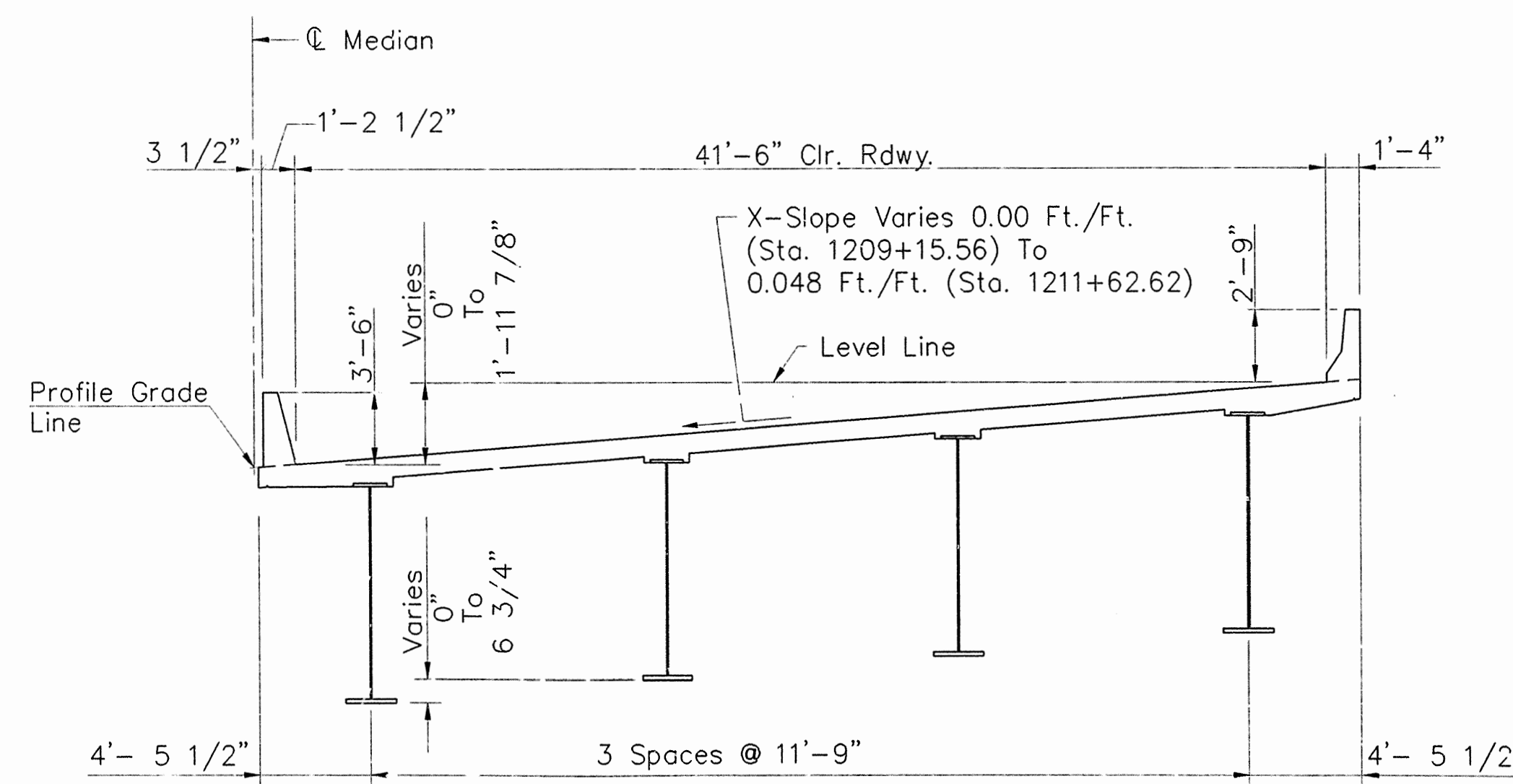
BRIDGE NO. 6479 A&B DRAWING NO. 34016

BRIDGE ENGINEER

2-7-97	2-19-97			6	ARK.		75	
				JOB NO.		R40039		



⚠ TYPICAL SECTION NEAR MIDSPAN (BRIDGE A)
(Looking Ahead)
Scale: 1/2" = 1'-0"



TYPICAL SECTION FROM STA. 1209+15.56 TO STA. 1211+62.62 (BRIDGE B)
(Looking Ahead)
Scale: N.T.S.

NOTES:

- 1.) For General Notes, See Dwg. No. 33984
- 2.) The Concrete Bridge Deck Shall Be Given A Fine Finish As Specified For Final Finish In Subsection 802.20 For Class 5 Roadway Surface Finish To Within 18" Of Parapet.
- 3.) Boiled Linseed Oil Treatment Shall Be Applied To The Roadway Surface And The Top And Front Face Of The Rail.
- 4.) For Deck Drain Locations & Details, See Slab Plan & Dwg. No. 34029.
- 5.) For Finger Joint Details, See Dwg. No.'s 34026 & 34027.
- 6.) For Finger joint Drain Details, See Dwg. No. 34028.
- 7.) For Safety Handrail Details, See Dwg. No. 34016.
- 8.) For Haunch Details, See Dwg. No. 34018.

1 Revised Median Side Parapet Configuration

SHEET 8 OF 9

DETAILS OF 860' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY

ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION

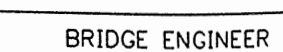
LITTLE ROCK, ARK.

DRAWN BY: RNF DATE: FEB., 1993
CHECKED BY: NDT DATE: FEB., 1993
DESIGNED BY: JHR DATE: FEB., 1993

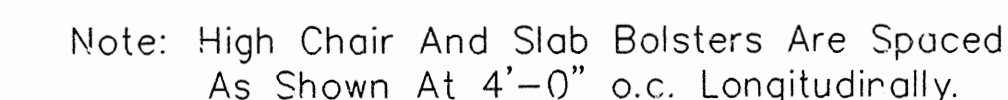
SCALE: AS NOTED

BRIDGE NO. 6479 A & B

DRAWING NO. 34017

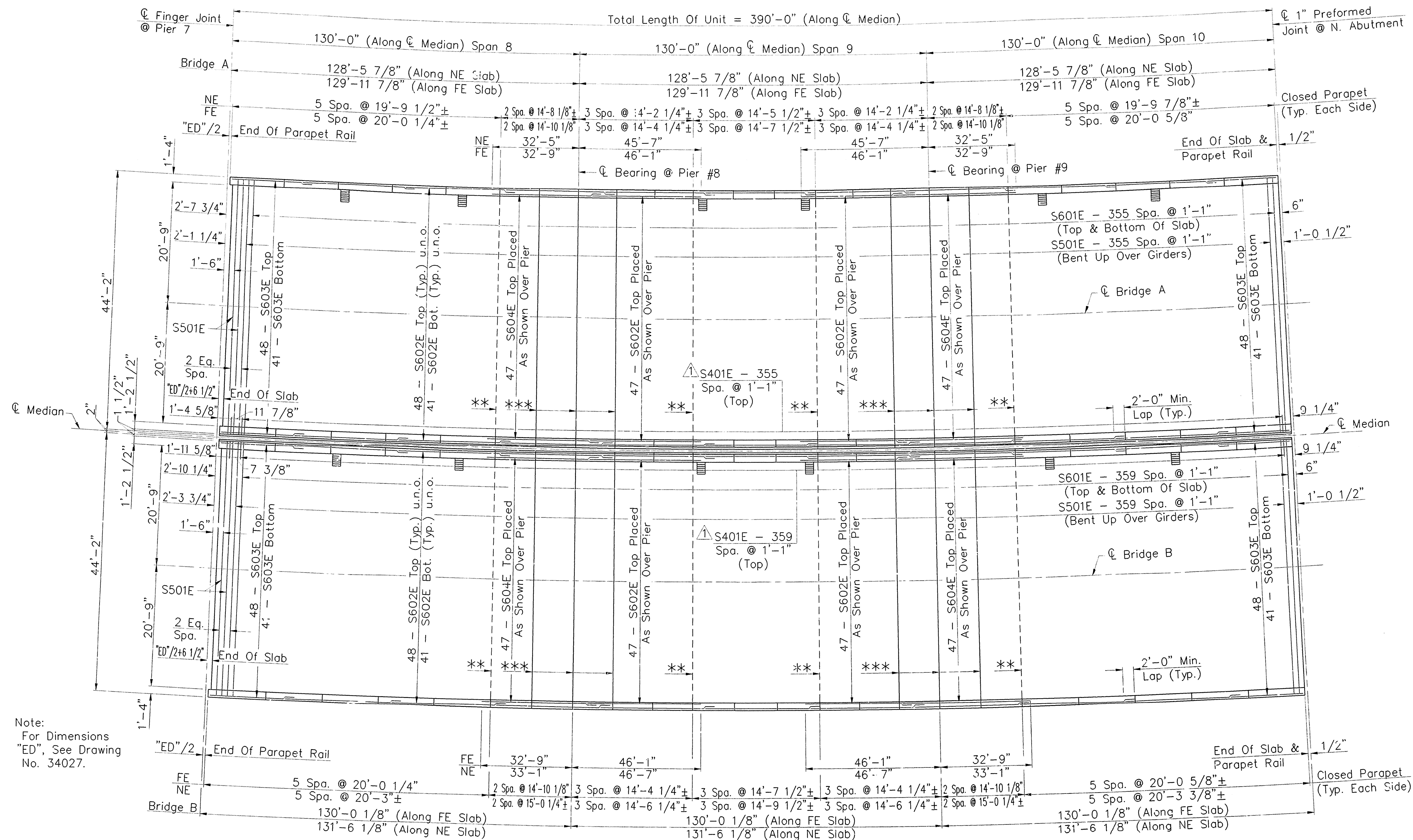


①	6479	A&B	DTLS	CONT	PI	GRID	34018
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STATE OF
ARKANSAS
Glenn A. Fulmer
REGISTERED
PROFESSIONAL
ENGINEER
No. 6901
GLENN A. FULMER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
2-7-97	2-19-97			6	ARK.		77	
				JOB NO.		R40039		
				6479 A&B DTLS CONT PL GIRD				34019



PARTIAL SLAB PLAN (BRIDGE A & B)

Scale: None

- NOTE:
- For Longitudinal Reinforcing Placement See Typical Sections, Drawing No. 34023
 - Transverse Slab Reinforcing Is Placed On Radial Lines And Spaced Along ϕ Bridge.
 - Longitudinal Slab Reinforcing Is Placed With Same Degree Of Curvature As Slab.
 - Edges Of Slabs Are Concentric To 1'30'00" Curve @ ϕ Median, Past The P.C.
 - All Transverse Lines Are Radial To ϕ Median.

**: Slab Joint @ Construction Joint
***: Required Slab Joint - Match Parapet Joint

LEGEND

NE = Near Edge
FE = Far Edge
u.n.o. = Unless Noted Otherwise

NOTE:

- For General Notes See Drawing No. 33984.
- For Slab Joint And Screed Rail Support Details, See Drawing No. 34030.
- For Parapet Reinforcing And Bending Diagrams, See Drawing No. 34031.
- For Deck Drain Locations & Details, See Drawing No. 34029.
- For Finger Joint Details, See Drawing No.'s 34026 & 34027.
- For Finger Joint Drain Details, See Drawing No. 34028.
- For Haunch Details, See Drawing No. 34023.
- For Slab Pouring Sequence & Reinforcement Schedule, See Drawing No. 34020.



SHEET 1 OF 5
DETAILS OF 390' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

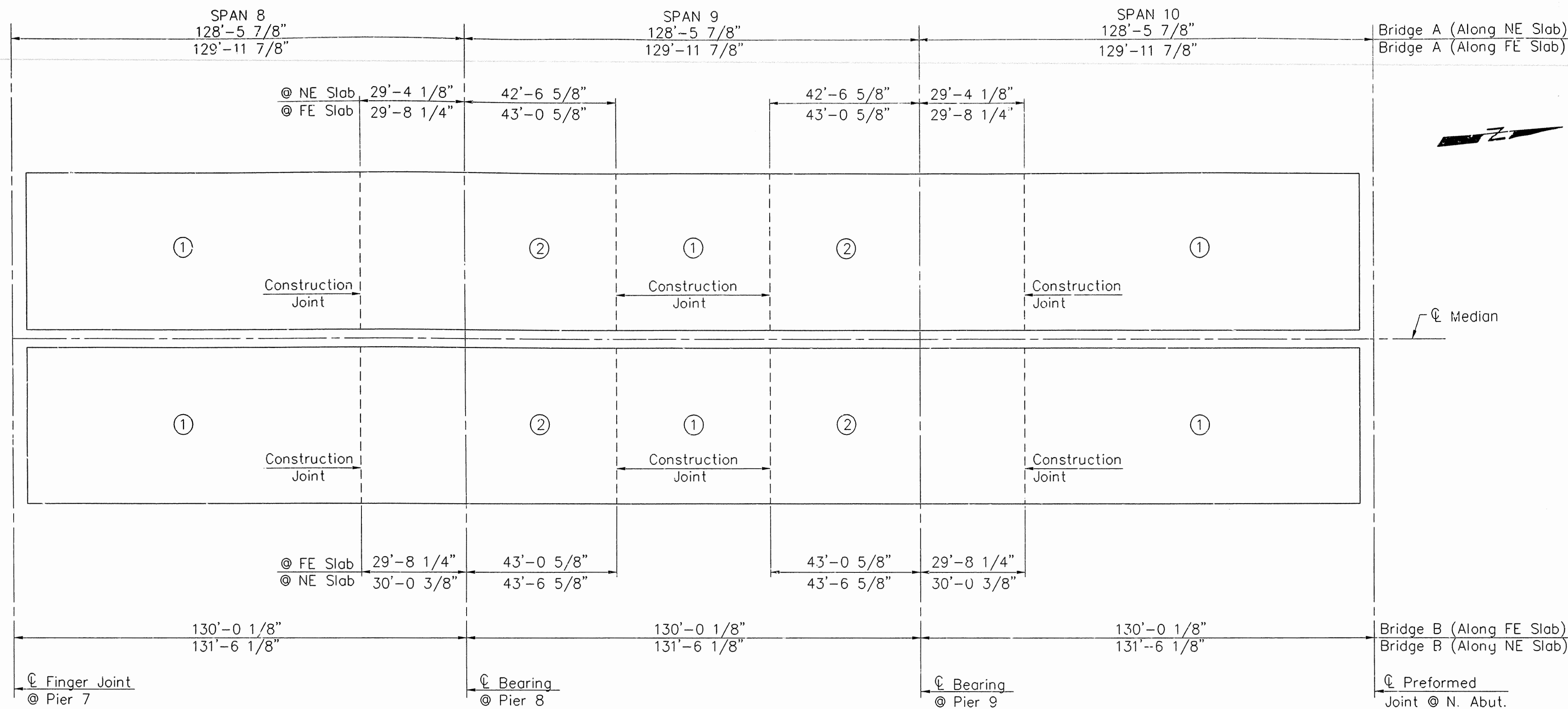
DRAWN BY: HEW DATE: FEB. 1993
CHECKED BY: NDT DATE: FEB. 1993
DESIGNED BY: JDG DATE: FEB. 1993



















BRIDGE NO. 6479 A&B

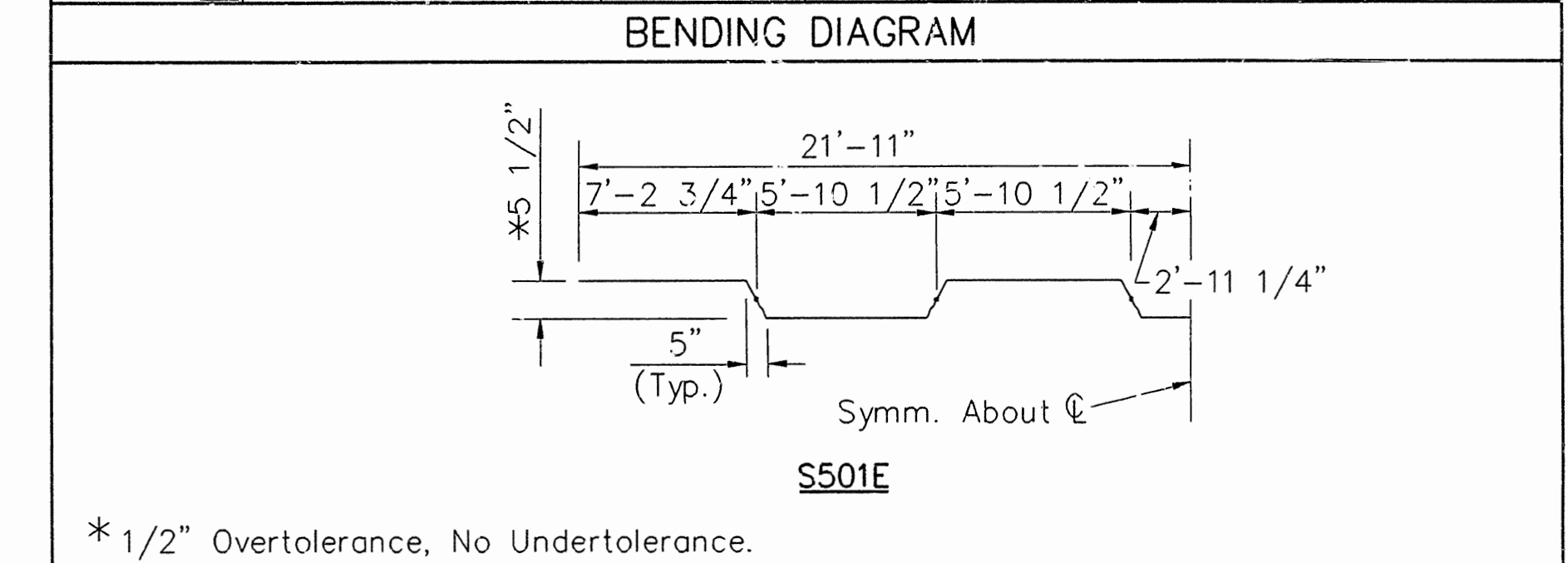
DRAWING NO. 34019

BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
2-7-96	2-19-97			6	ARK.		78	
				JOB NO.		R40039		
				① 6479 A&B	DTLS CONT PL GIRD			34020



REINFORCEMENT SCHEDULE							
BRIDGE A				BRIDGE B			
MARK	NO.	LENGTH	PIN DIA.	MARK	NO.	LENGTH	PIN DIA.
S401E 	357	3'-0"	Str.	S401E 	361	3'-0"	Str.
S501E	358	44'-8 1/2"	3"	S501E	362	44'-8 1/2"	3"
S601E	712	43'-10"	Str.	S601E	720	43'-10"	Str.
S602E	895	40'-0"	Str.	S602E	895	40'-0"	Str.
S603E	178	24'-6"	Str.	S603E	178	26'-9"	Str.
S604E	94	41'-10"	Str.	S604E	94	42'-8"	Str.
				P401E 	432	5'-7"	2"
P401E 	428	5'-7"	2"	P402E 	432	6'-3"	3"
P403E 	428	7'-2 1/2"	3"	P405E 	36	14'-0"	Str.
P404E	48	13'-10"	Str.	P406E 	18	14'-5"	Str.
P405E 	56	14'-0"	Str.	P407E	24	14'-8"	Str.
P408E 	80	19'-5"	Str.	P409E	60	19'-11"	Str.
P411E 	833	9'-7"	3"	P411E 	836	9'-7"	3"
P601E 	63	14'-0"	Str.	P601E 	63	14'-0"	Str.
P602E 	28	14'-5"	Str.	P602E 	28	14'-5"	Str.
P603E 	70	19'-8"	Str.	P603E 	70	19'-5"	Str.



NOTE:
 Pours With The Same Numbers May Be Placed
 Simultaneously Or Separately. All Pours ①
 Must Be Placed Before Pours ② Can Be
 Placed. 48 Hours Shall Elapse Between The
 End Of A Pour And The Start Of A New Pour
 Except 72 Hours Shall Elapse Between The
 End Of A Pour And The Start Of An Adjacent
 Pour. 72 Hours Shall Elapse Between The
 Pouring Of The Entire Slab And The Pouring
 Of Any Portion Of The Parapet Rail.

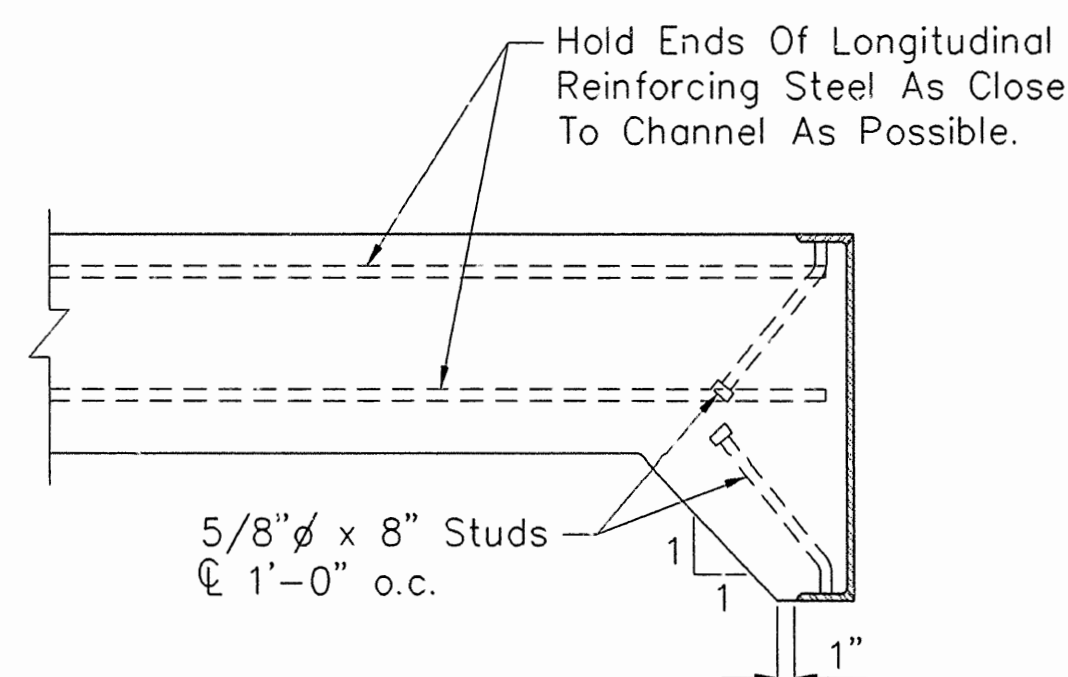
SLAB POURING SEQUENCE (BRIDGE A & B)
N.T.S.

NOTE:
Edges Of Slabs Are Concentric To 1'30'00"
Curve @ $\frac{1}{4}$ Median.

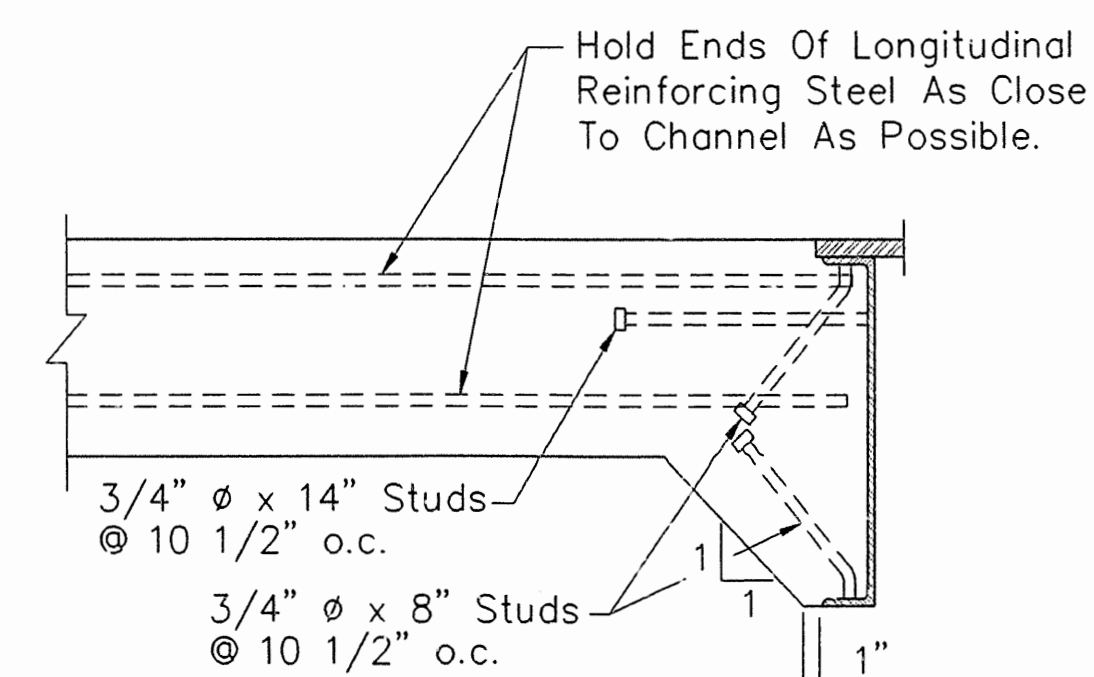
LEGEND

NE = Near Edge
FE = Far Edge

VARIABLES FOR EXTERIOR PARAPET RAILING			
"t"	CLOSED PARAPET		
	"k"	"n"	"t"
14'-2 1/4"	3"	15	04
14'-4 1/4" To 14'-8 1/8"	4" To 5 1/2"	15	05
14'-9 1/2" To 14'-10 1/8"	6" To 7"	15	06
15'-0 1/4"	2 1/2"	16	07
19'-9 1/2" To 20'-0 1/4"	3 1/2" To 5"	21	08
20'-3"	6 1/2"	21	09



ANCHOR DETAILS AT PREFORMED EXPANSION DEVICE
N.T.S.



ANCHOR DETAILS AT FINGER EXPANSION DEVICE
N.T.S.

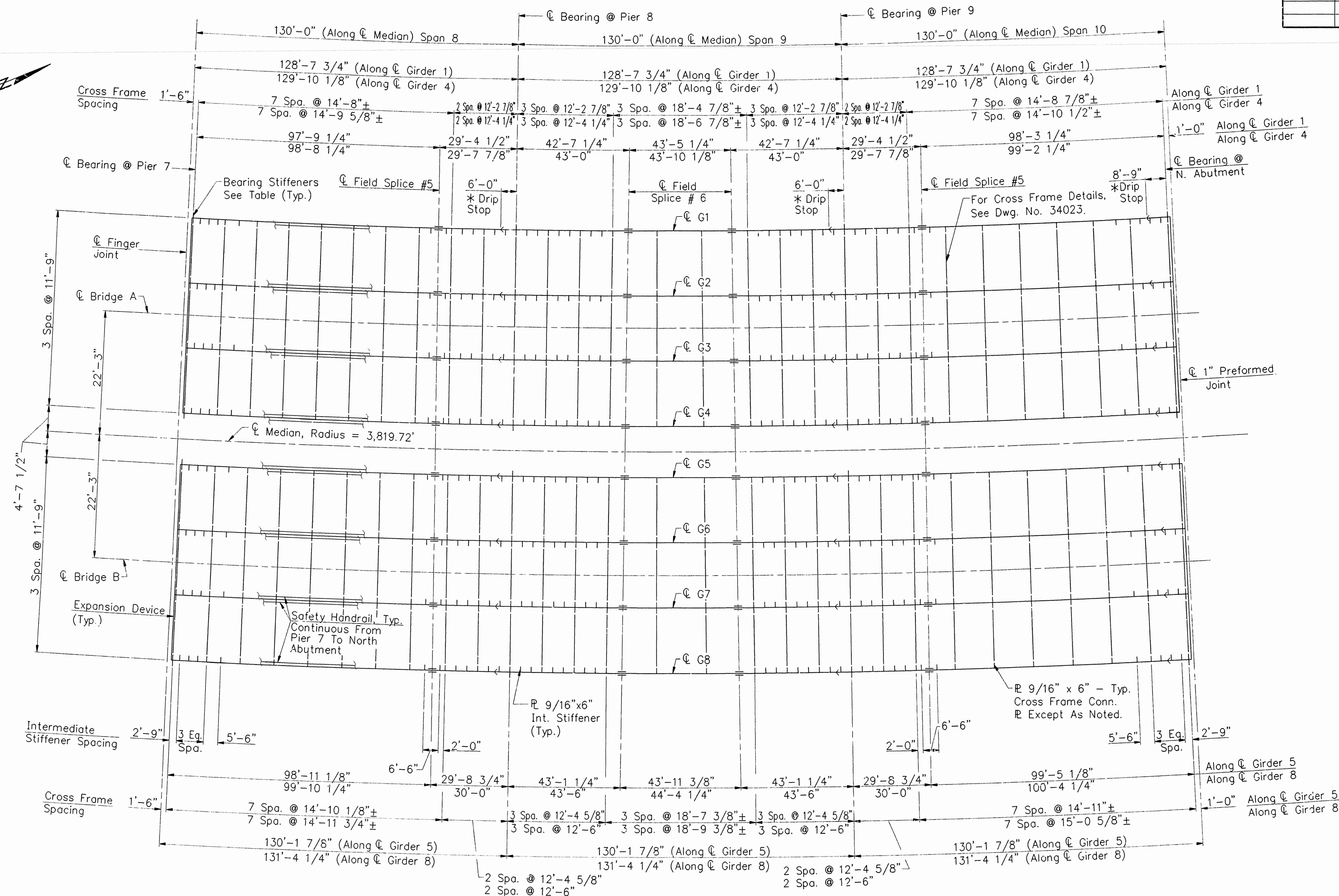
VARIABLES FOR MEDIAN PARAPET RAILING			
"f"	CLOSED PARAPET		
	"k"	"n"	"t"
14'-4 1/4" To 14'-8 1/8"	4" TO 5 1/2"	30	01
14'-9 1/2" To 14'-10 1/8"	6" TO 7"	30	02
19'-9 1/2" To 20'-0 5/8"	3 1/2" TO 5"	42	03



SHEET 2 OF 5
DETAILS OF 390' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: HEW DATE: FEB. 1993
CHECKED BY: NDT DATE: FEB. 1993
DESIGN'D BY: JDG DATE: FEB. 1993
SCALE: AS NOTED
BRIDGE NO. 6479 A&B DRAWING NO. 34020

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		79	
				JOB NO.	R40039			
				6479 A&B	DTLS CONT PL GIRD		34021	



PARTIAL FRAMING PLAN (BRIDGE A & B)
Scale: None

- NOTES:
- For General Notes, See Drawing No. 33984.
 - All Structural Steel Including Girders, Splice R's, Bearing And Intermediate Stiffeners, Cross Frames & Connection R's, And Drip Stop R's Shall Be A588 Steel.
 - For Flange And Web Splice Details, See Drawing No. 34030.
 - For Elastomeric Bearing Details, See Drawing No. 34032.
 - For Scribed Rail Support, Shear Connector And Stiffener Connection Details, See Drawing No. 34030.
 - For Field Splice Details, See Drawing No. 34024.
 - For Dead Load Deflection Diagrams, See Drawing No. 34022.
 - For Safety Handrail Details, See Drawing No. 34016.

* For Drip Stop Details,
See Drawing No. 34030.

SERVICE LOAD DISTRIBUTION TABLE		
	Interior Girder	Exterior Girder
Dead Load Non Composite	1322 PLF + Girder	1232 PLF + Girder
Dead Load To Composite Girder **	413 PLF	359 PLF
Live Load To Composite Girder	2.14 Wheels + Impact	1.93 Wheels + Impact

** Includes 20 psf For Future Wearing Surface.

TABLE OF BEARING STIFFENERS	
Pier	Typical Plate Size
7	7/8" x 8 1/2"
8 & 9	1" x 9 1/2"
N. Abut.	7/8" x 8 1/2"

- NOTES:
- Intermediate Stiffeners, Where Required, Are Spaced Equally Between Cross Frames Unless Noted Otherwise.
 - Minimum Clearance Between Web Splice Plates And Lateral Bracing Connection Plates = 1'-0".
 - Girders Are Concentric To 1:30'00" Curve @ Median.
 - All Transverse Lines Are Radial To Median.



SHEET 3 OF 5
DETAILS OF 390' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: FEB. 1993
CHECKED BY: JDG DATE: FEB. 1993
DESIGNED BY: JHR DATE: FEB. 1993

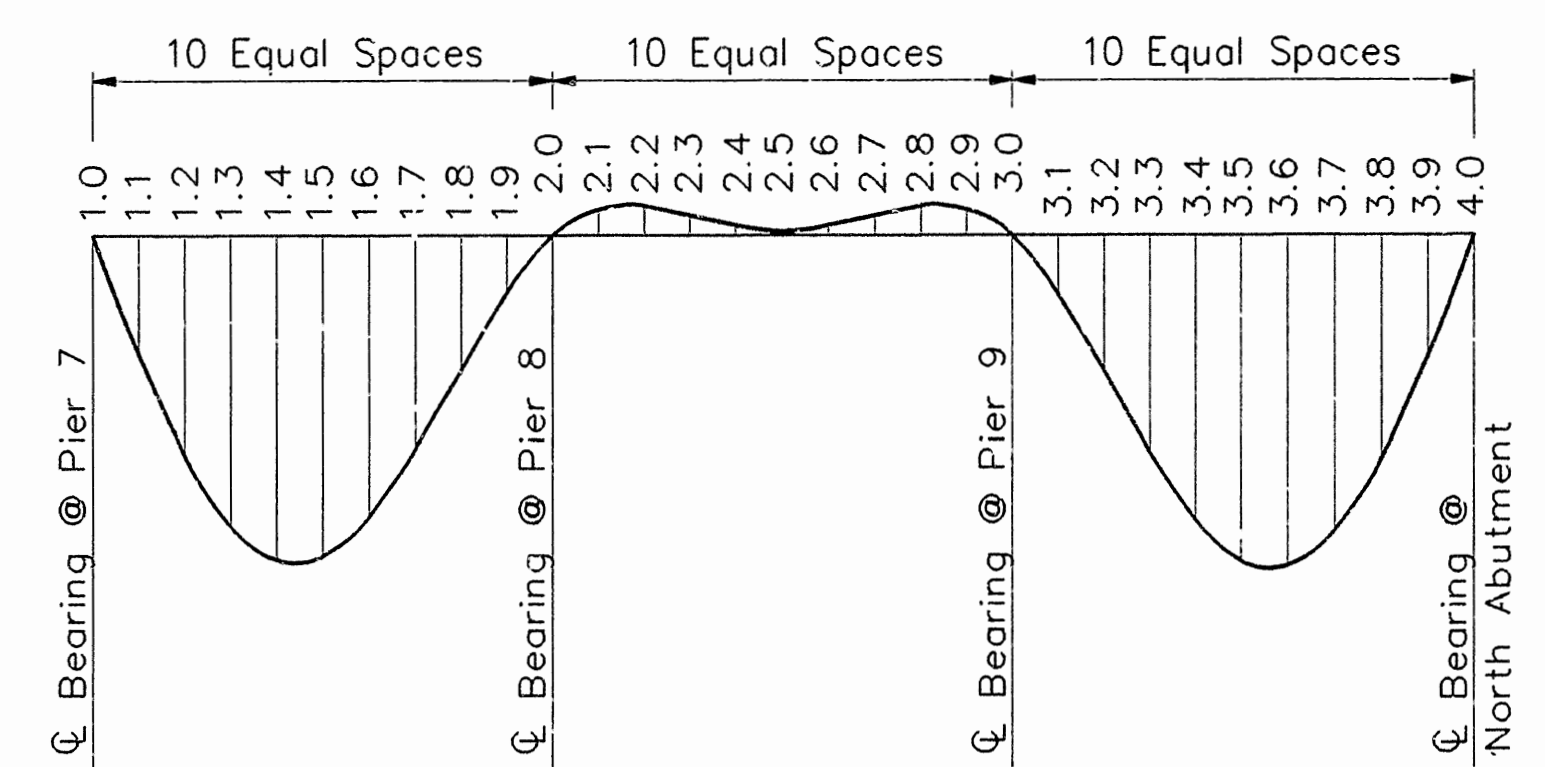
BRIDGE NO. 6479 A&B DRAWING NO. 34021

BRIDGE ENGINEER

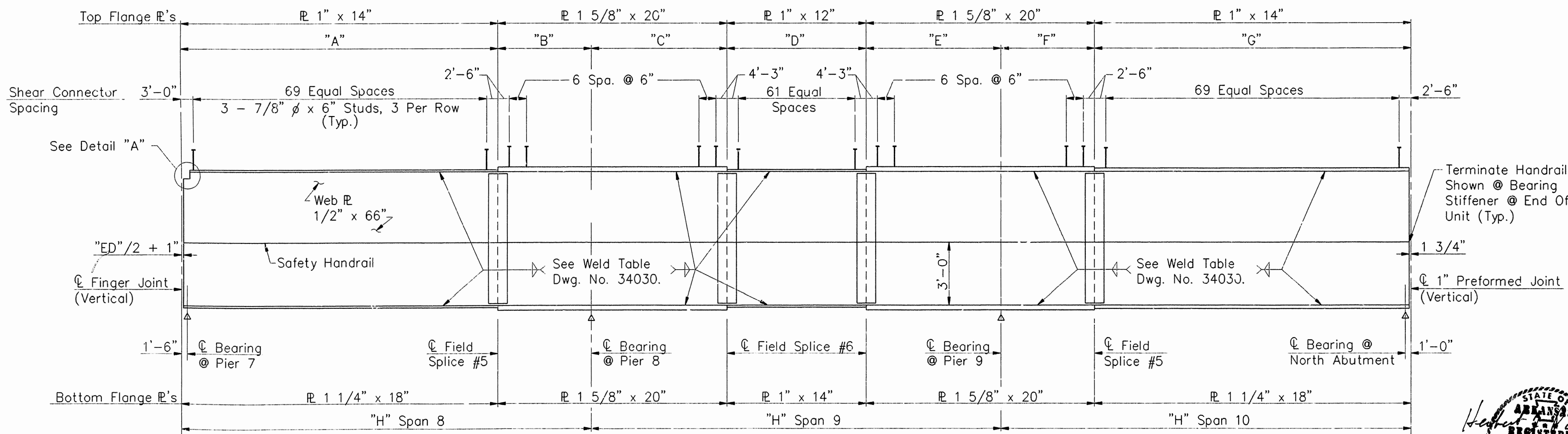
TABLE OF DEFLECTIONS (IN INCHES)							
Span	Point Of Deflection	BRIDGE A			BRIDGE B		
		Structural Steel	Structural Steel + Slab	Structural Steel + Slab + Parapet	Structural Steel	Structural Steel + Slab	Structural Steel + Slab + Parapet
No. 8	1.0	0.00	0.00	0.00	0.00	0.00	0.00
	1.1	0.19	1.07	1.14	0.20	1.12	1.19
	1.2	0.36	1.98	2.12	0.37	2.07	2.21
	1.3	0.47	2.62	2.81	0.49	2.74	2.93
	1.4	0.52	2.92	3.14	0.55	3.07	3.28
	1.5	0.51	2.88	3.09	0.54	3.02	3.23
	1.6	0.45	2.52	2.71	0.47	2.64	2.83
	1.7	0.34	1.92	2.06	0.36	2.01	2.15
	1.8	0.22	1.21	1.30	0.23	1.26	1.35
	1.9	0.09	0.52	0.56	0.10	0.54	0.58
No. 9	2.0	0.00	0.00	0.00	0.00	0.00	0.00
	2.1	-0.04	-0.24	-0.25	-0.04	-0.25	-0.26
	2.2	-0.04	-0.27	-0.27	-0.04	-0.29	-0.29
	2.3	-0.02	-0.20	-0.18	-0.02	-0.21	-0.19
	2.4	0.00	-0.12	-0.09	0.00	-0.12	-0.09
	2.5	0.01	-0.08	-0.04	0.01	-0.08	-0.04
	2.6	0.00	-0.12	-0.09	0.00	-0.12	-0.09
	2.7	-0.02	-0.21	-0.19	-0.02	-0.22	-0.20
	2.8	-0.04	-0.27	-0.27	-0.04	-0.29	-0.29
	2.9	-0.04	-0.24	-0.25	-0.04	-0.25	-0.26
No. 10	3.0	0.00	0.00	0.00	0.00	0.00	0.00
	3.1	0.09	0.52	0.56	0.10	0.55	0.59
	3.2	0.22	1.22	1.31	0.23	1.28	1.37
	3.3	0.35	1.95	2.09	0.37	2.05	2.19
	3.4	0.46	2.56	2.75	0.48	2.68	2.87
	3.5	0.52	2.93	3.14	0.55	3.07	3.29
	3.6	0.53	2.97	3.18	0.56	3.12	3.33
	3.7	0.48	2.66	2.85	0.50	2.79	2.98
	3.8	0.36	2.01	2.16	0.38	2.10	2.25
	3.9	0.20	1.08	1.16	0.21	1.14	1.22
	4.0	0.00	0.00	0.00	0.00	0.00	0.00

NOTE:
Camber For Dead Load Plus Vertical Curve $\pm 1/4"$
Tolerance. Deflections Shown Are From A Chord
From Centerline Bearing To Centerline Bearing.
Vertical Curve Corrections Not Included. Negative
Sign (-) Indicates Point Above Chord.

GIRDER ELEVATION - TABLE OF VARIABLES								
GIRDER	A	B	C	D	E	F	G	H
G1	99'-3 1/4"	29'-4 1/2"	42'-7 1/4"	43'-5 1/4"	42'-7 1/4"	29'-4 1/2"	99'-3 1/4"	128'-7 3/4"
G2	99'-6 7/8"	29'-5 5/8"	42'-8 3/4"	43'-7"	42'-8 3/4"	29'-5 5/8"	99'-6 7/8"	129'-0 1/2"
G3	99'-10 5/8"	29'-6 3/4"	42'-10 3/8"	43'-8 5/8"	42'-10 3/8"	29'-6 3/4"	99'-10 5/8"	129'-5 3/8"
G4	100'-2 1/4"	29'-7 7/8"	43'-0"	43'-10 1/8"	43'-0"	29'-7 7/8"	100'-2 1/4"	129'-10 1/8"
G5	100'-5 1/8"	29'-8 3/4"	43'-1 1/4"	43'-11 3/8"	43'-1 1/4"	29'-8 3/4"	100'-5 1/8"	130'-1 7/8"
G6	100'-9"	29'-9 3/4"	43'-2 7/8"	44'-1"	43'-2 7/8"	29'-9 3/4"	100'-9"	130'-6 3/4"
G7	101'-0 5/8"	29'-10 7/8"	43'-4 3/8"	44'-2 3/4"	43'-4 3/8"	29'-10 7/8"	101'-0 5/8"	130'-11 1/2"
G8	101'-4 1/4"	30'-0"	43'-6"	44'-4 1/4"	43'-6"	30'-0"	101'-4 1/4"	131'-4 1/4"

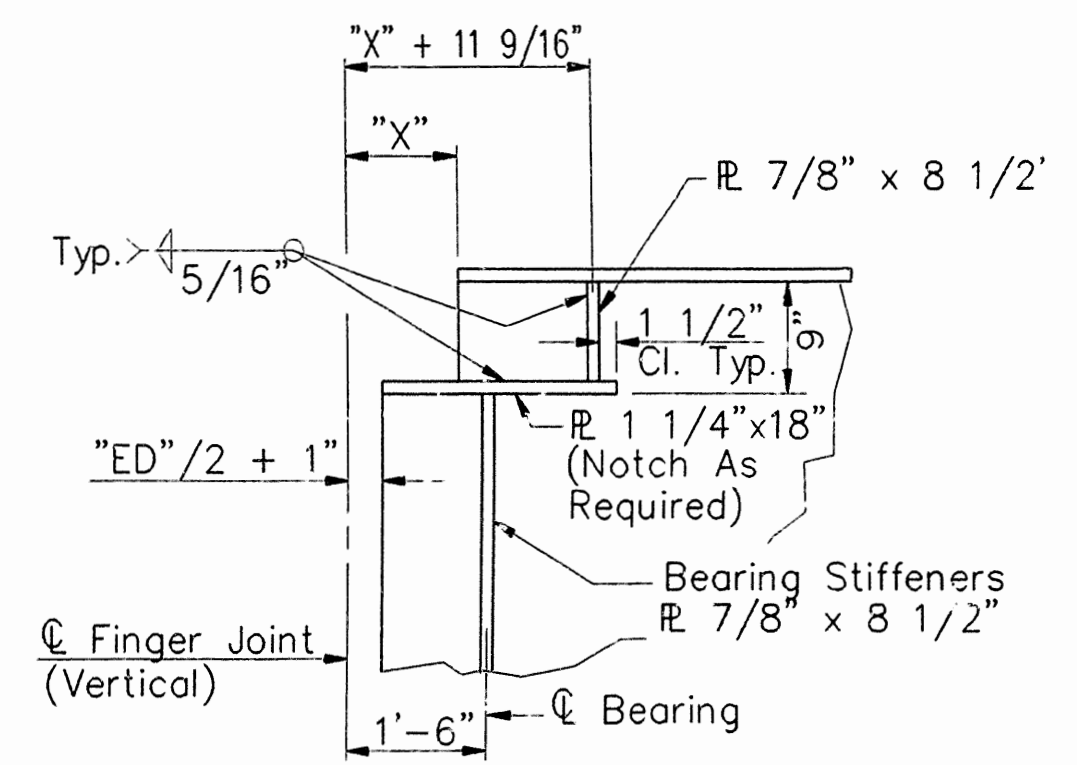


DEAD LOAD DEFLECTION (BRIDGE A & B)
SCALE: None



Note:
For Dimension "ED", See Table
On Drawing No. 34027.

GIRDER ELEVATION (BRIDGE A & B)
SCALE: H: 1"=20'-0"
V: N.T.S.



Notes:
For Variable "X", See
Drawing No. 34026.

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

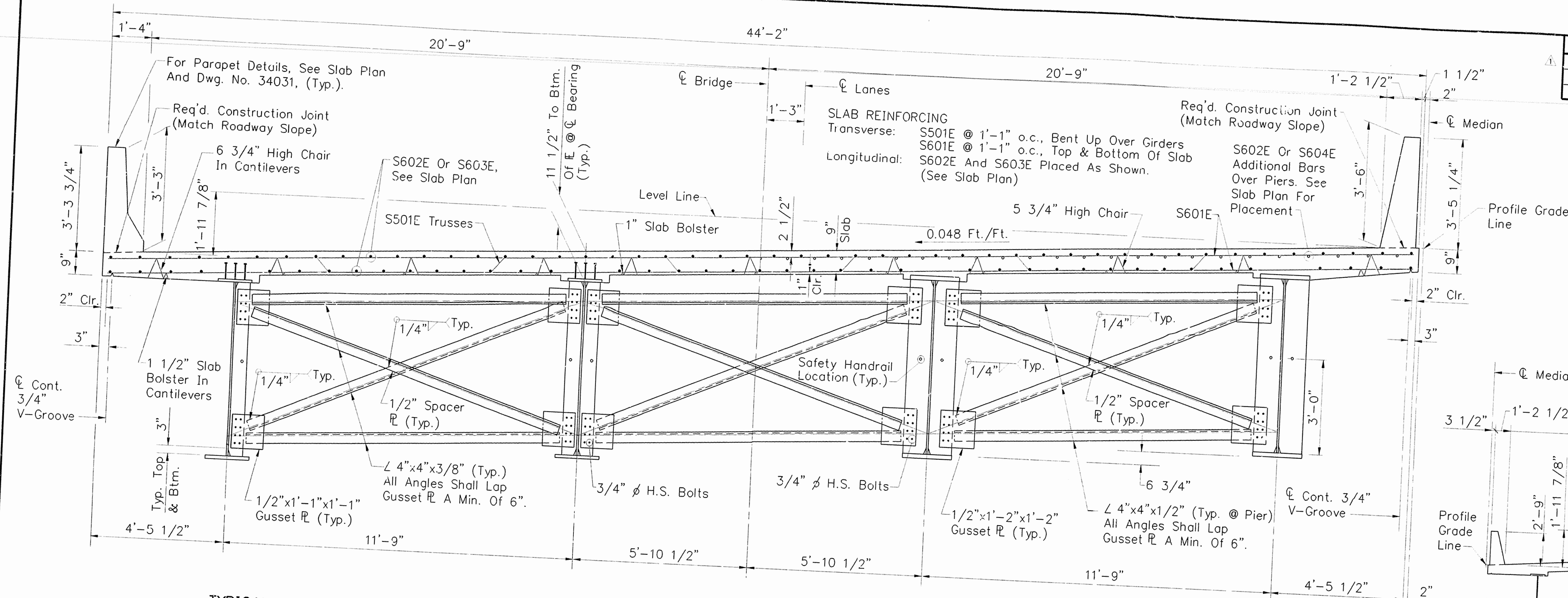
SHEET 4 of 5
DETAILS OF 390' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: HEW DATE: FEB. 1993
CHECKED BY: NDT DATE: FEB. 1993
DESIGNED BY: JHR DATE: FEB. 1993
BRIDGE NO. 6479 A & B DRAWING NO. 34022



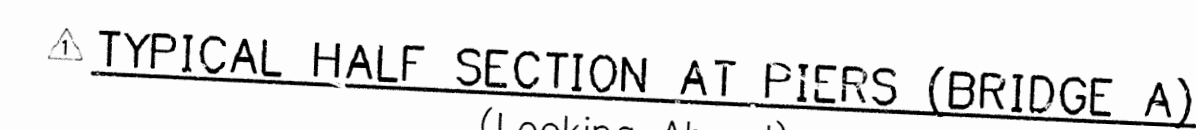
BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
2-7-97	2-19-97			6	ARK.		81	
				JOB NO.		R40039		
				① 6479 A	DTLS CONT PL GIRD			34023



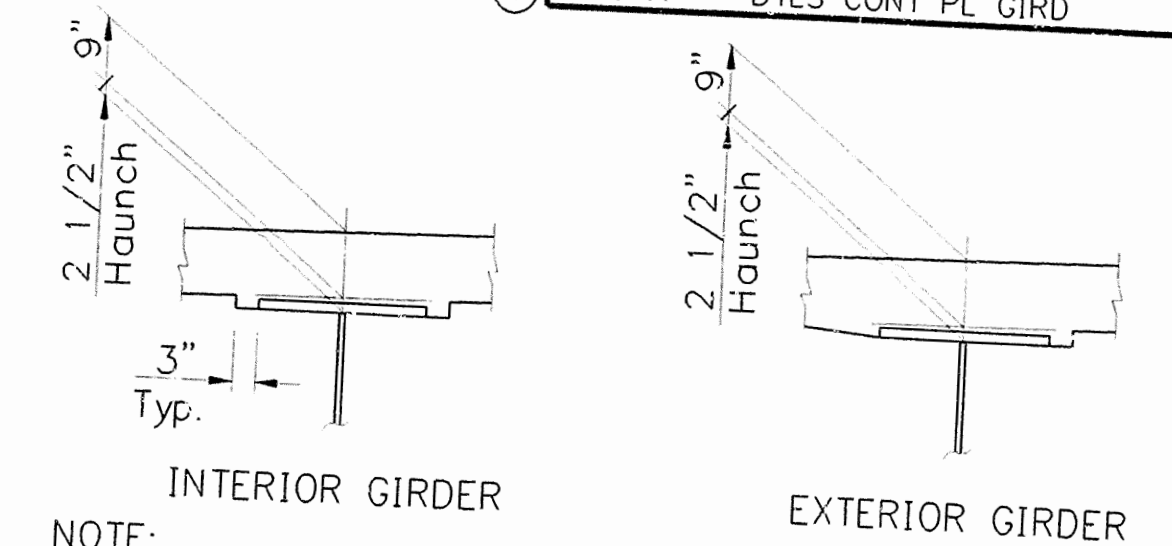
TYPICAL HALF SECTION NEAR MIDSPAN (BRIDGE A)
(Looking Ahead)

(Looking Ahead)
Scale: $1/2" = 1'-0"$



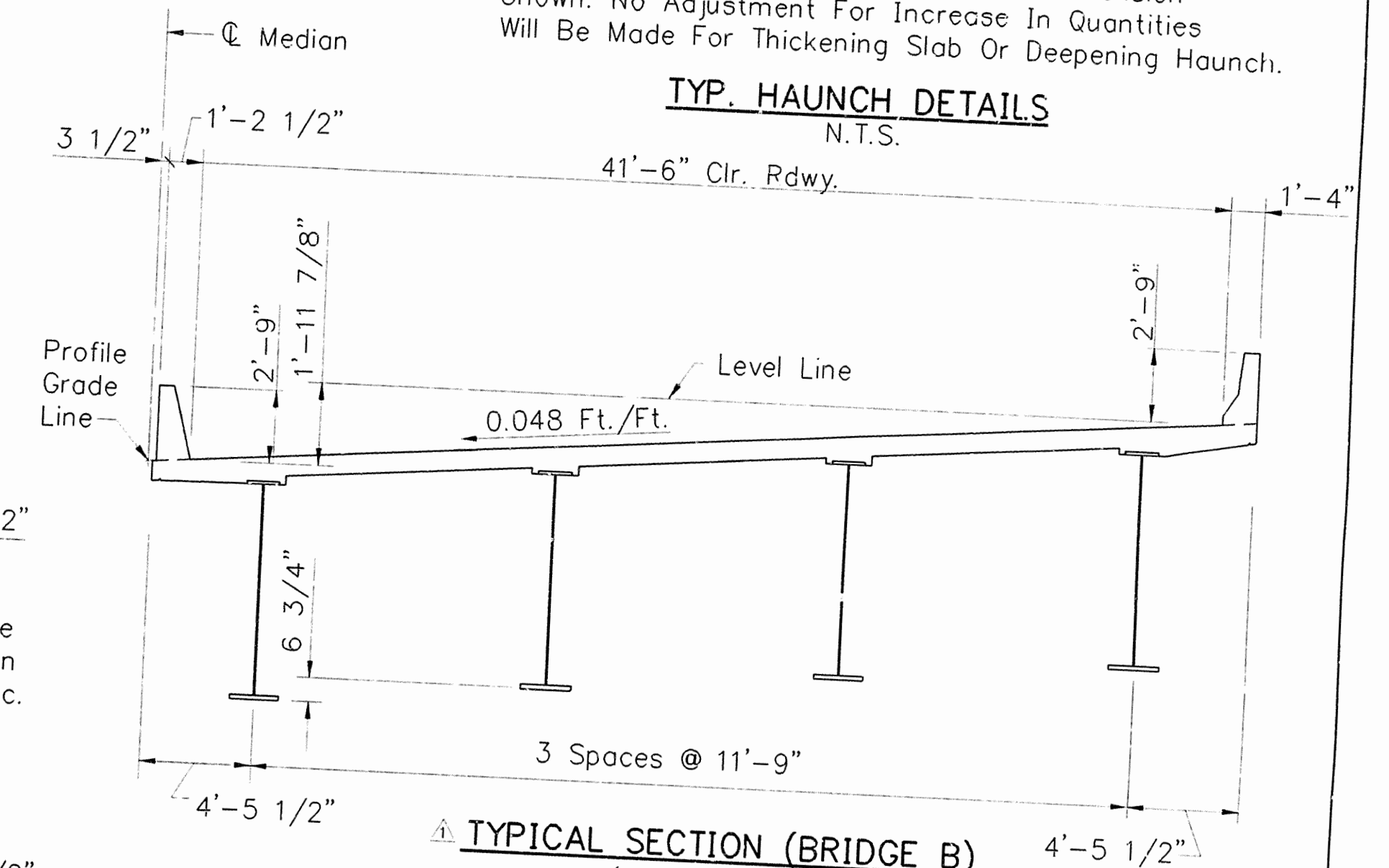
(Looking Ahead)
Scale: $1/2" = 1'-0"$

Note: High Chairs And
Slab Bolsters Are
Spaced As Shown
And At 4'-0" o.c.
Longitudinally.



NOTE: Tolerance For Slab Thickness Is Minus 1/4" And Plus 1". Interior And Exterior Girder Haunches May Be Increased To 1" Greater Than The Dimension Shown. No Adjustment For Increase In Quantities Will Be Made For Thickening Slab Or Deepening Haunch.

TYP. HAUNCH DETAILS
N.T.S.



① TYPICAL SECTION (BRIDGE B)

(Looking Ahead)
Scale: N.T.S.

NOTE:
Details Shown For Bridge A Are Typical
For Bridge B Except As Shown.

NOTES:

- 1.) For General Notes, See Dwg. No. 33984.
- 2.) The Concrete Bridge Deck Shall Be Given A Fine Finish As Specified For Final Finish In Subsection 802.20 For Class 5 Roadway Surface Finish To Within 18" Of Parapet.
- 3.) Boiled Linseed Oil Treatment Shall Be Applied To The Roadway Surface And The Top And Front Face Of The Rail.
- 4.) For Finger Joint Drain Details, See Dwg. No. 34028.
- 5.) For Finger Joint Details, See Dwg. No.'s 34026 & 34027.
- 6.) For Details Of 1" Preformed Joint, See Dwg. No. 34025.
- 7.) For Safety Handrail Details, See Dwg. No. 34016.
- ① Revised Median Side Parapet Configuration

SHEET 5 OF 5

DETAILS OF 390' CONT. COMP. PLATE GIRDER UNIT
U.S. HIGHWAY 71 OVER BLACKBURN CREEK

WASHINGTON COUNTY
ROUTE 71 SEC. 18

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

LITTLE ROCK, AR

DRAWN BY: RNF DATE: FEB., 1993

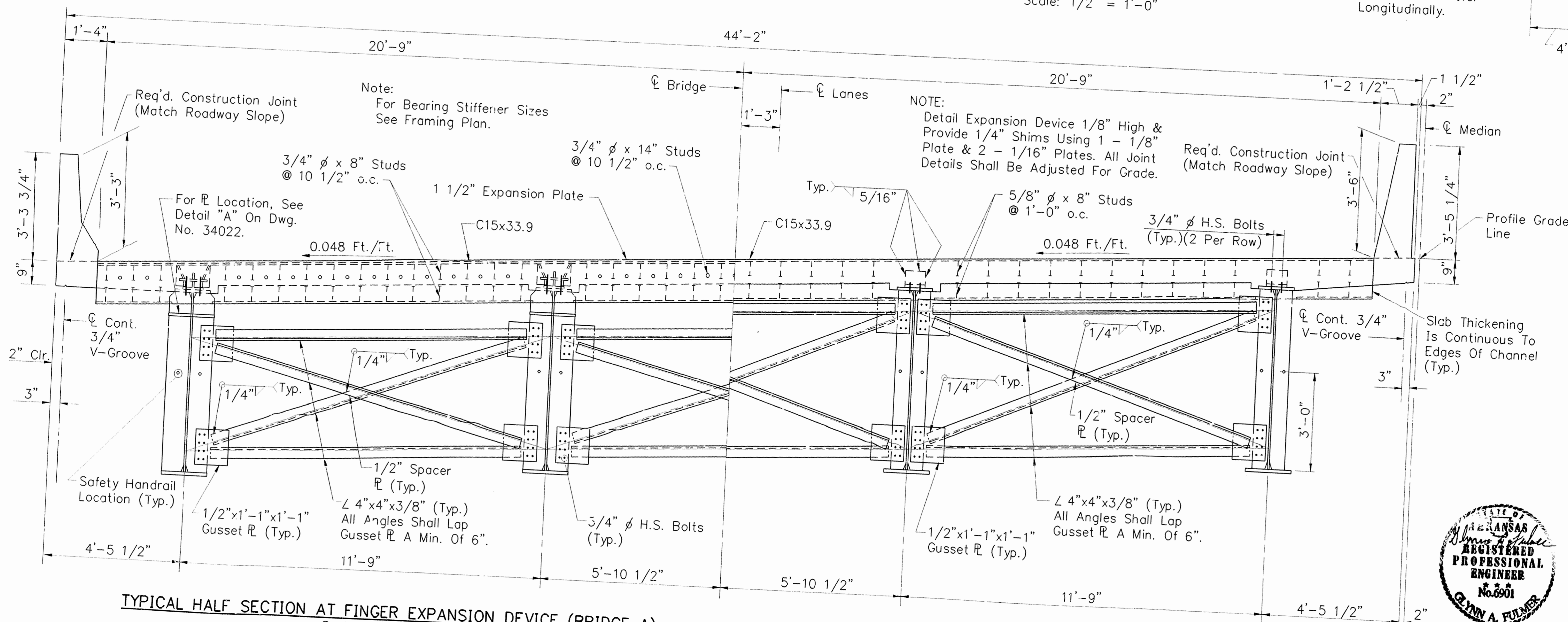
CHECKED BY: NDT DATE: FEB., 1993

DESIGNED BY: JHR DATE: FEB., 1993

SCALE: AS NOTED

BRIDGE NO. 6479 A&B

DRAWING NO. 34023



TYPICAL HALF SECTION AT FINGER EXPANSION DEVICE (BRIDGE A)
Scale: $1/2" = 1'-0"$

Scale: $1/2" = 1'-0"$

TYPICAL HALF SECTION NEAR PREFORMED EXPANSION DEVICE (BRIDGE A)
Scale: $1/2" = 1'-0"$

Scale: $1/2" = 1'-0"$



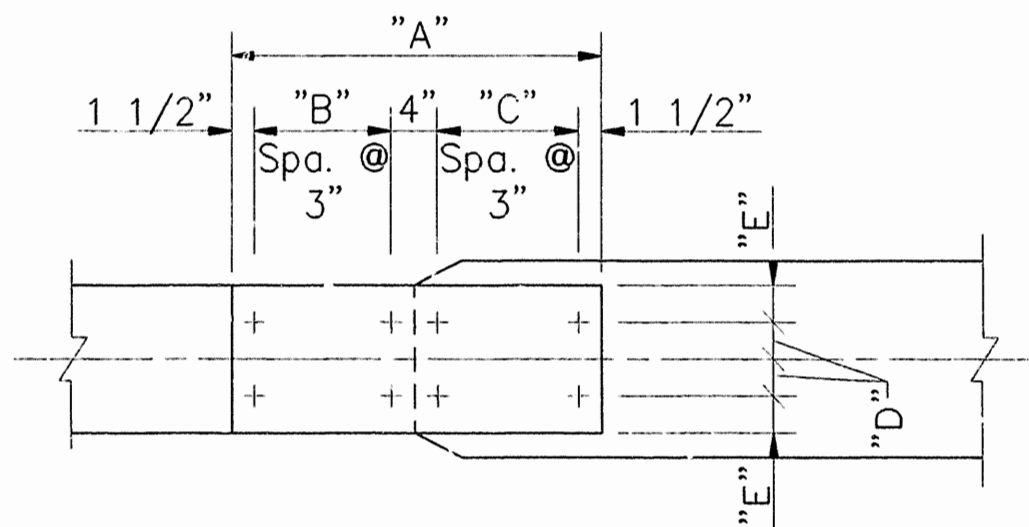
BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		82	
				JOB NO.		R40039		

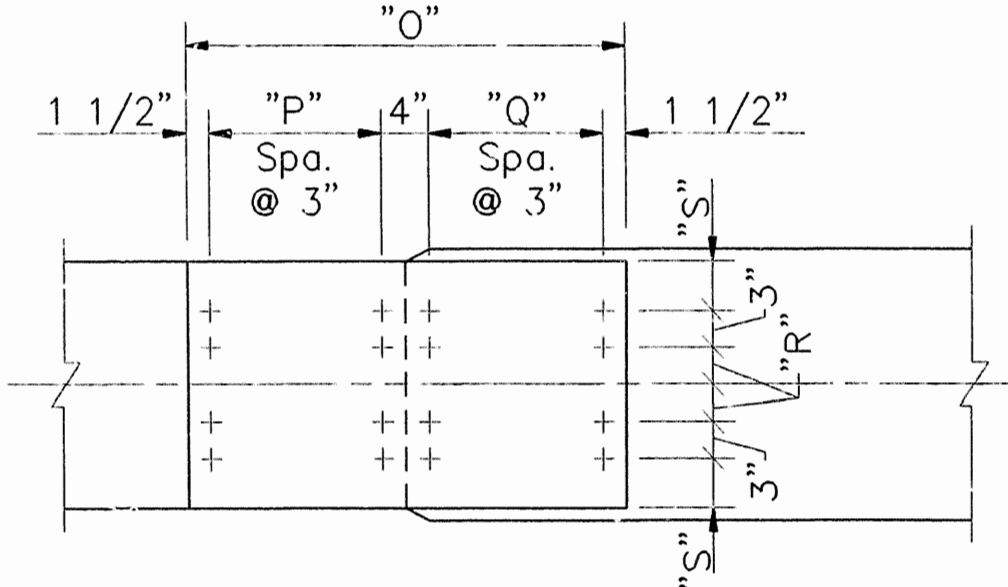
① 6479&6480 A&B DTLS SPLICES 34024

FIELD SPLICE - TABLE OF VARIABLES

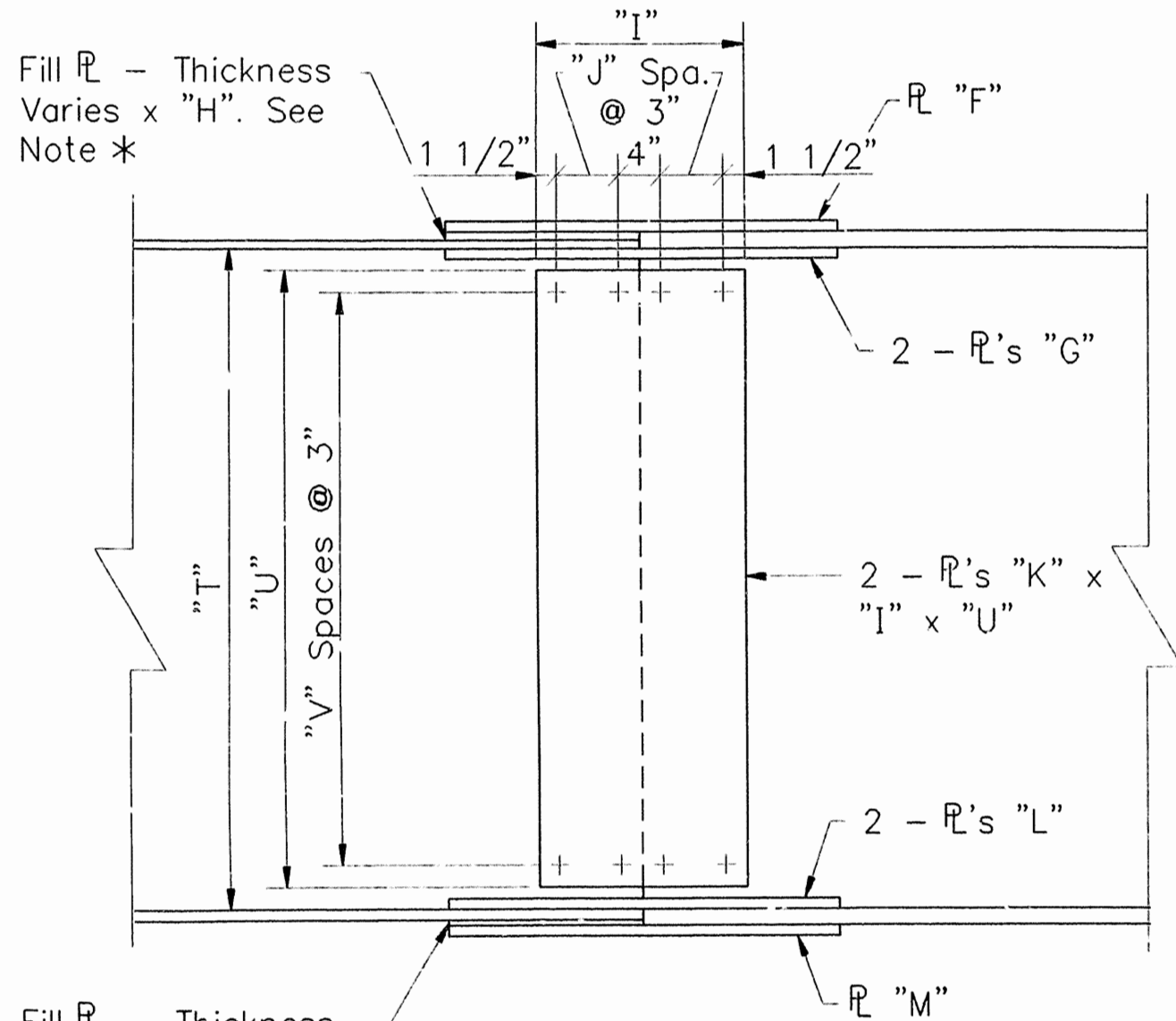
Bridge	Field Splice	Assembly Type	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"J"	"K"	"L"	"M"	"N"	"O"	"P"	"Q"	"R"	"S"	"T"	"U"	"V"
Blackburn Creek	"1"	"B"	4'-1"	7	7	2 1/2"	1 1/2"	1/2" x 14" x 4'-1"	5/8" x 6" x 4'-1"	14" x 2'-0 1/2"	25"	3	7/16"	5/8" x 8" x 5'-7"	1/2" x 18" x 5'-7"	18" x 2'-9 1/2"	5'-7"	10	10	3 1/2"	2 1/2"	66"	63"	20
	"2"	"B"	4'-1"	7	7	3"	2"	1/2" x 16" x 4'-1"	5/8" x 7" x 4'-1"	16" x 2'-0 1/2"	25"	3	7/16"	3/4" x 8" x 5'-1"	5/8" x 18" x 5'-1"	* *	5'-1"	9	9	3 1/2"	2 1/2"	78"	75"	24
	"3"	"B"	3'-7"	6	6	2 1/2"	1 1/2"	1/2" x 14" x 3'-7"	5/8" x 6" x 3'-7"	14" x 1'-9 1/2"	25"	3	7/16"	3/4" x 7" x 4'-1"	5/8" x 16" x 4'-1"	16" x 2'-0 1/2"	4'-1"	7	7	3"	2"	78"	75"	24
	"4"	"B"	4'-1"	7	7	3"	2"	1/2" x 16" x 4'-1"	5/8" x 7" x 4'-1"	16" x 2'-0 1/2"	25"	3	7/16"	3/4" x 7" x 4'-7"	5/8" x 16" x 4'-7"	* *	4'-7"	8	8	3"	2"	78"	75"	24
	"5"	"B"	3'-7"	6	6	2 1/2"	1 1/2"	1/2" x 14" x 3'-7"	5/8" x 6" x 3'-7"	14" x 1'-9 1/2"	25"	3	7/16"	5/8" x 8" x 5'-1"	1/2" x 18" x 5'-1"	18" x 2'-6 1/2"	5'-1"	9	9	3 1/2"	2 1/2"	66"	63"	20
	"6"	"A"	7'-7"	14	14	3 1/2"	2 1/2"	1/2" x 12" x 7'-7"	5/8" x 5" x 7'-7"	12" x 3'-9 1/2"	25"	3	7/16"	5/8" x 6" x 4'-1"	1/2" x 14" x 4'-1"	14" x 2'-0 1/2"	4'-1"	7	7	2 1/2"	1 1/2"	66"	63"	20
Deadman Hollow	"1"	"B"	3'-7"	6	6	3"	2"	1/2" x 16" x 3'-7"	5/8" x 7" x 3'-7"	16" x 1'-9 1/2"	25"	3	7/16"	5/8" x 9" x 5'-1"	9/16" x 20" x 5'-1"	* *	5'-1"	9	9	4"	3"	78"	75"	24
	"2"	"B"	3'-1"	5	5	2 1/2"	1 1/2"	1/2" x 14" x 3'-1"	5/8" x 6" x 3'-1"	14" x 1'-6 1/2"	25"	3	3/8"	9/16" x 8" x 4'-7"	1/2" x 18" x 4'-7"	18" x 2'-3 1/2"	4'-7"	8	8	3 1/2"	2 1/2"	78"	75"	24
	"3"	"B"	3'-7"	6	6	3"	2"	1/2" x 16" x 3'-7"	5/8" x 7" x 3'-7"	16" x 1'-9 1/2"	25"	3	3/8"	5/8" x 8" x 4'-7"	9/16" x 18" x 4'-7"	* *	4'-7"	8	8	3 1/2"	2 1/2"	78"	75"	24



PLAN-TOP FLANGE

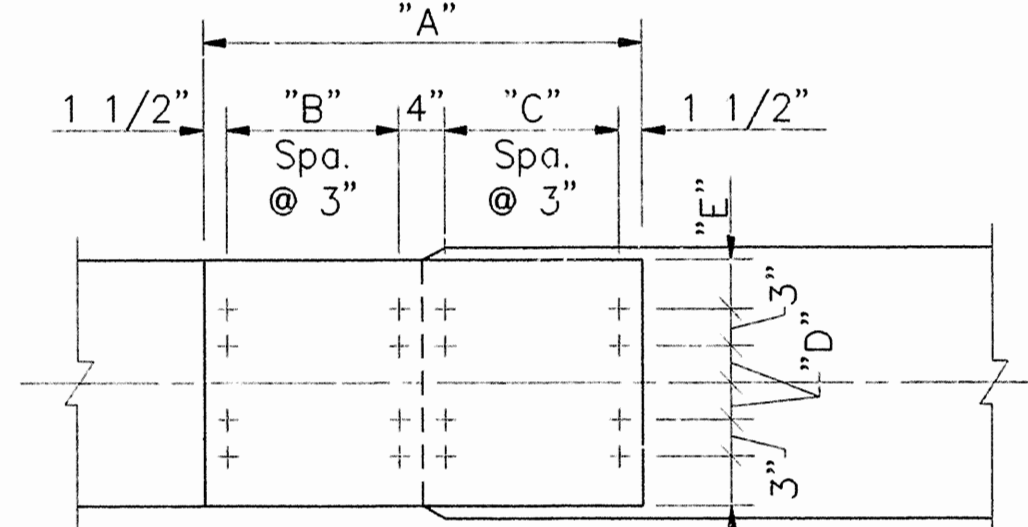


PLAN-BOTTOM FLANGE

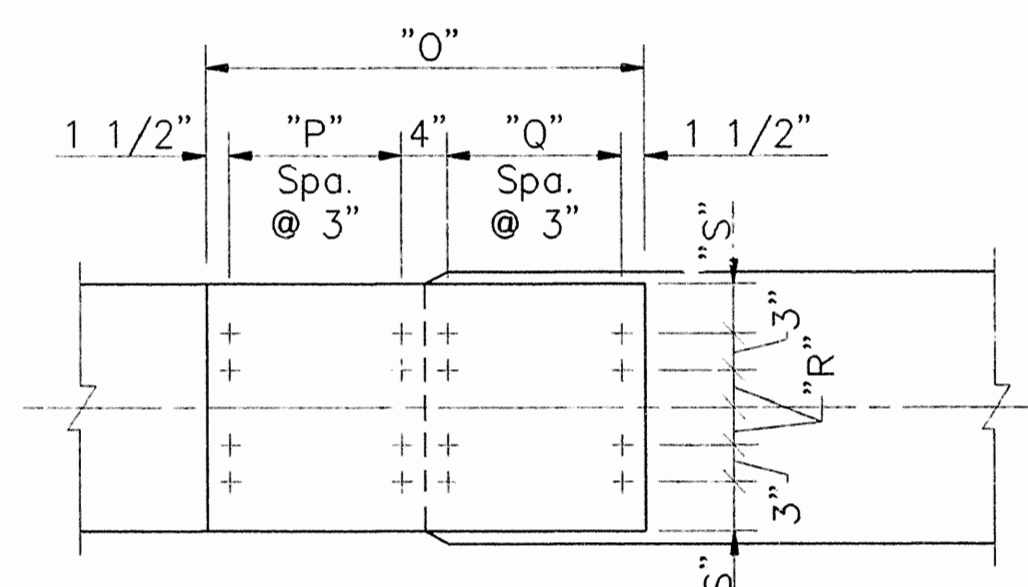


Fill R - Thickness
Varies x "N". See
Note *

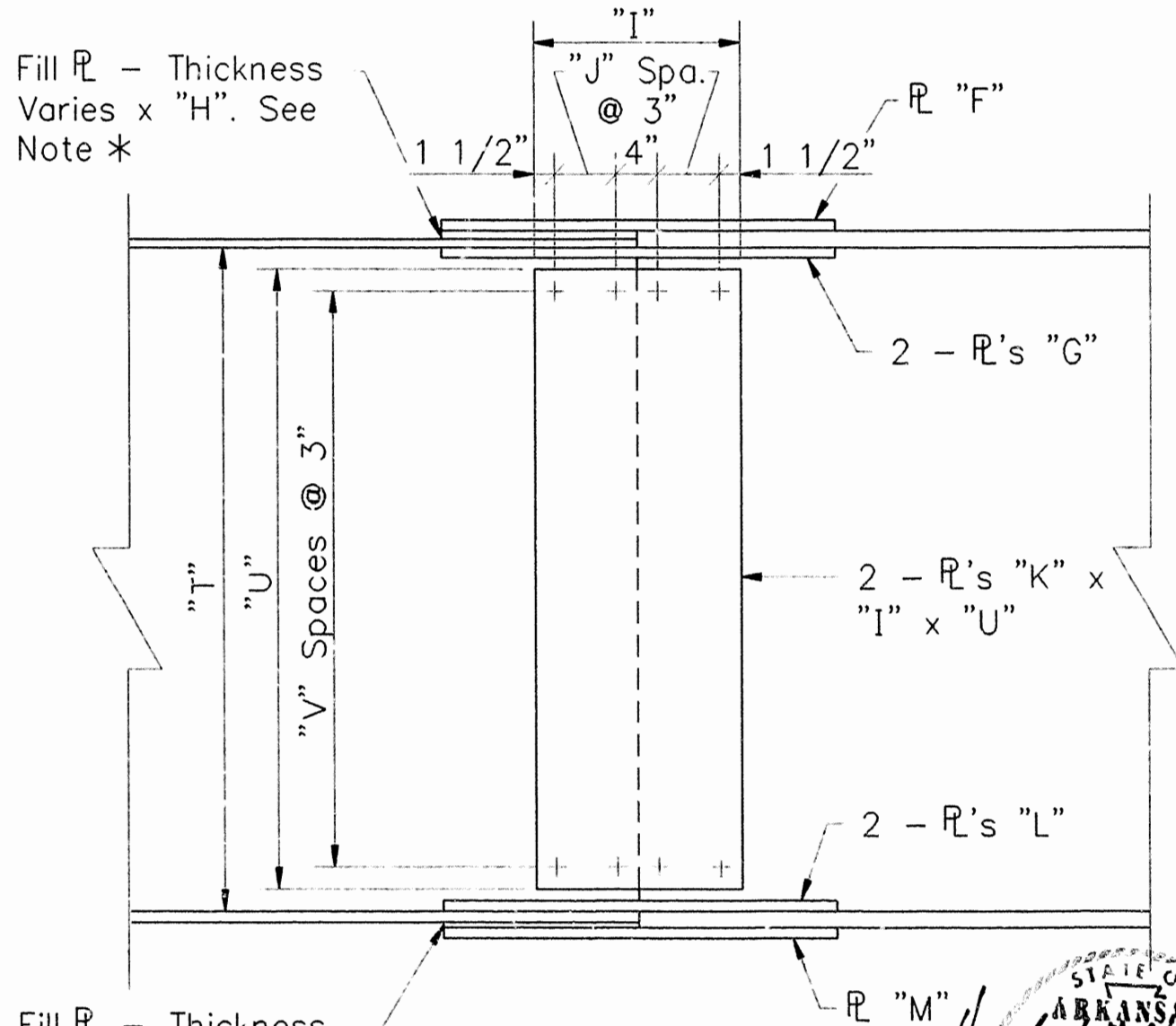
ELEVATION
DETAILS OF FIELD SPLICES
TYPE "A" ASSEMBLY



PLAN-TOP FLANGE



PLAN-BOTTOM FLANGE



Fill R - Thickness
Varies x "N". See
Note *

ELEVATION
DETAILS OF FIELD SPLICES
TYPE "B" ASSEMBLY

NOTE: 7/8"Ø High Tensile Strength Bolts Per
ASTM A325 Shall Be Used In All Field
Splices.

*: Fill Plate Thickness Equals Difference In Thickness
Of Flanges @ Various Splice Locations.

* *: Fill R Not Req'd. @ This Location.

SHEET 1 OF 1

DETAILS OF FIELD SPLICES

U.S. HIGHWAY 71 OVER BLACKBURN CREEK
AND DEADMAN HOLLOW

WASHINGTON COUNTY
ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: H.E.W. DATE: FEB., 1993

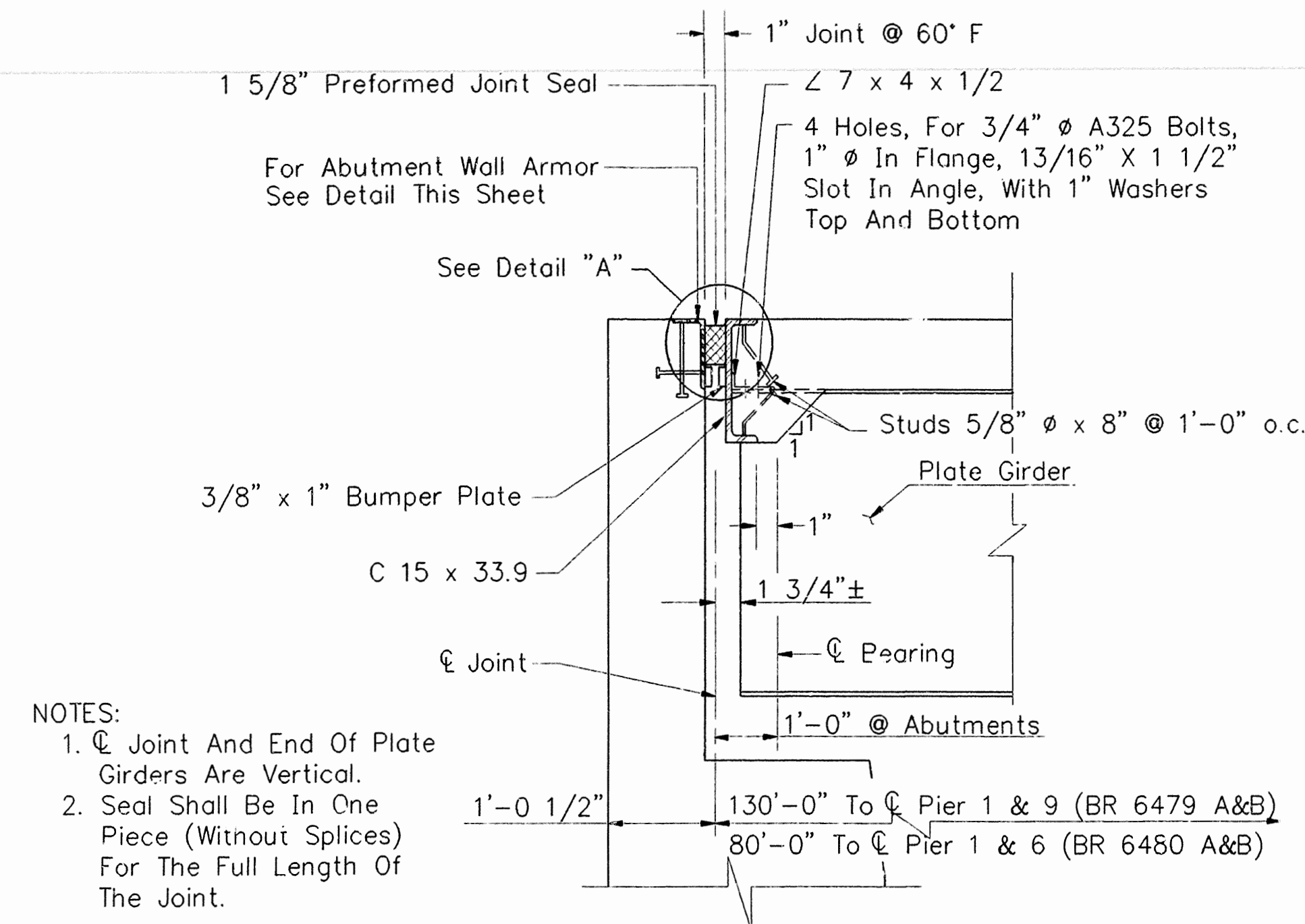
CHECKED BY: N.D.T./R.L.E. DATE: FEB., 1993

DESIGNED BY: J.H.R./N.D.T. DATE: FEB., 1993

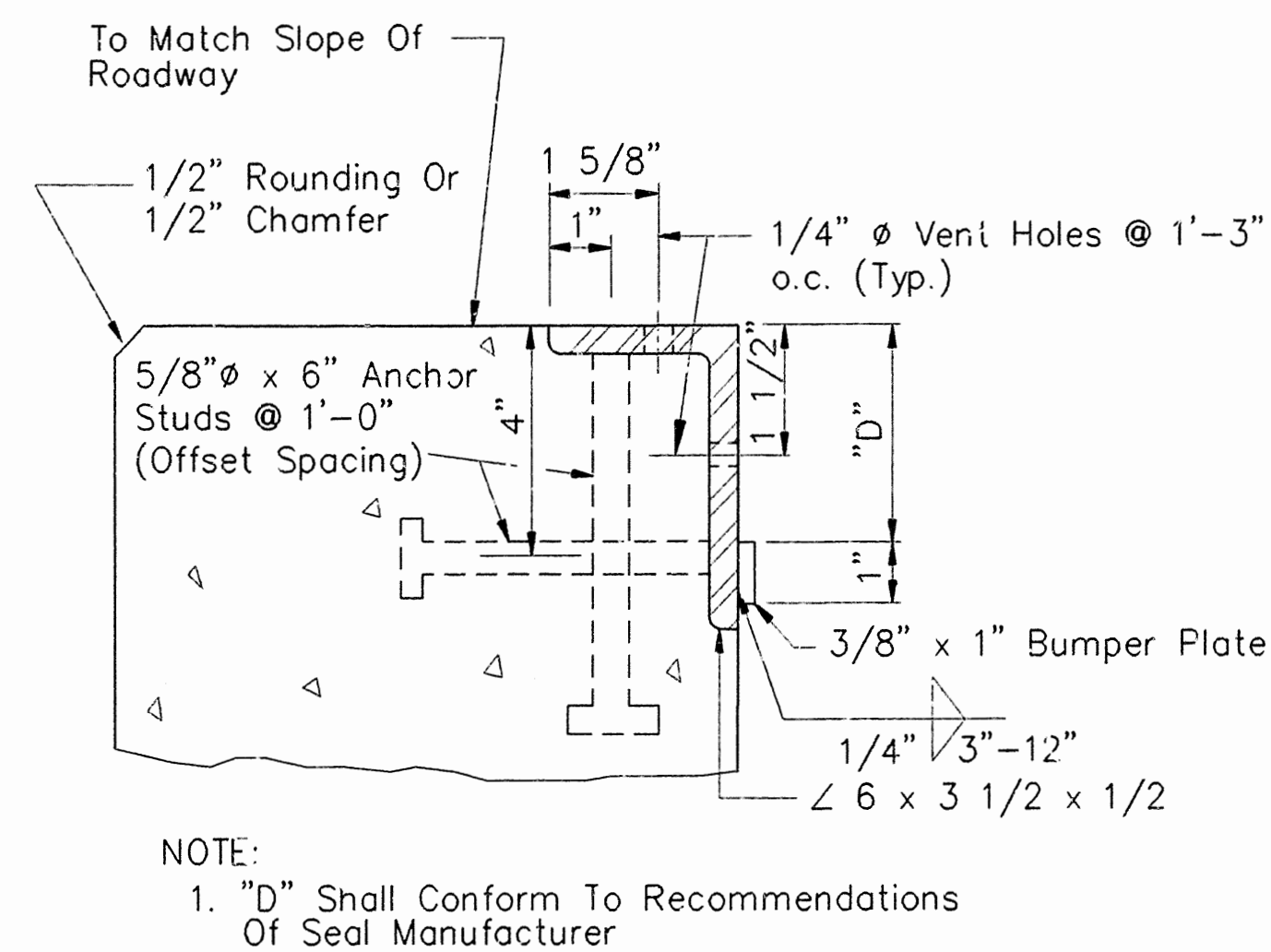
SCALE: AS NOTED

BRIDGE NO. 6479 A&B AND 6480 A&B DRAWING NO. 34024

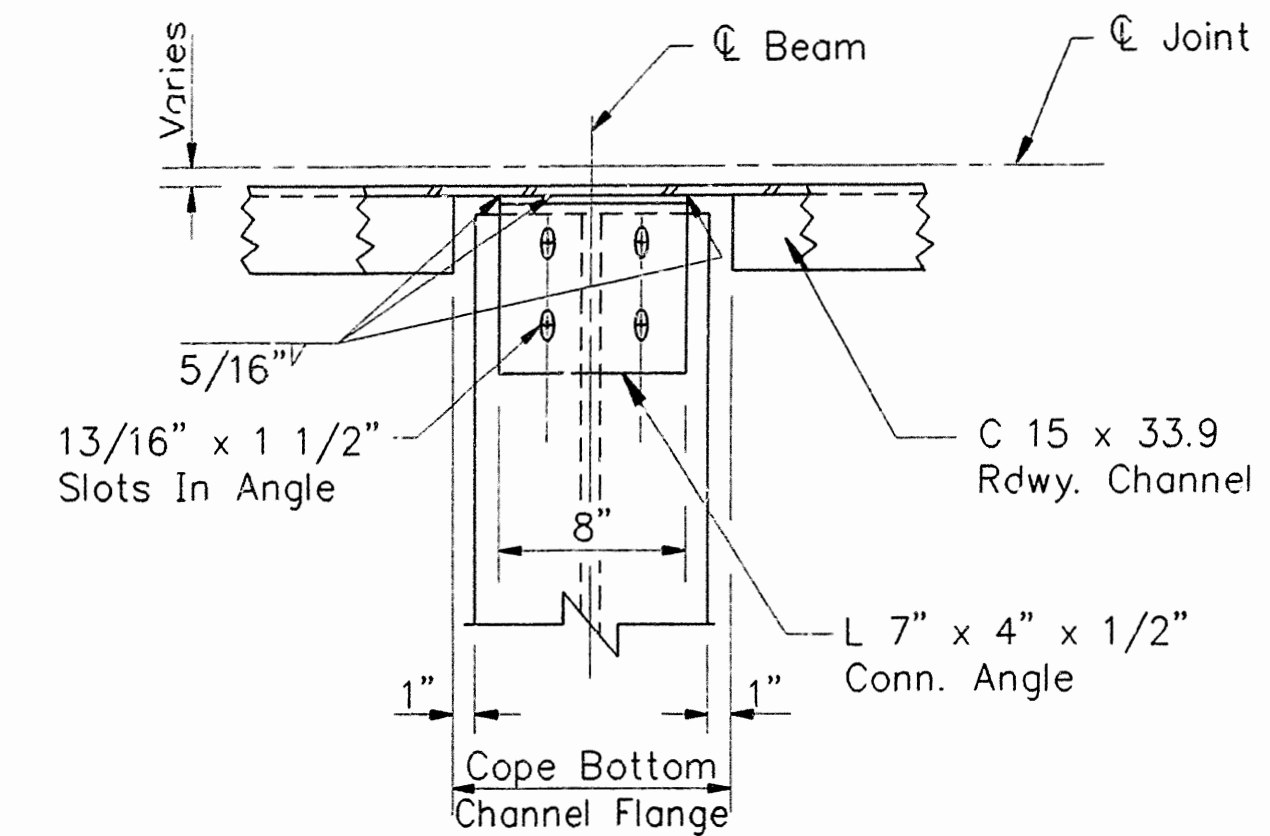
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				JOB NO.		R40039		
				① 6479 & 6480 A&B DTLS PREF JT		34025		



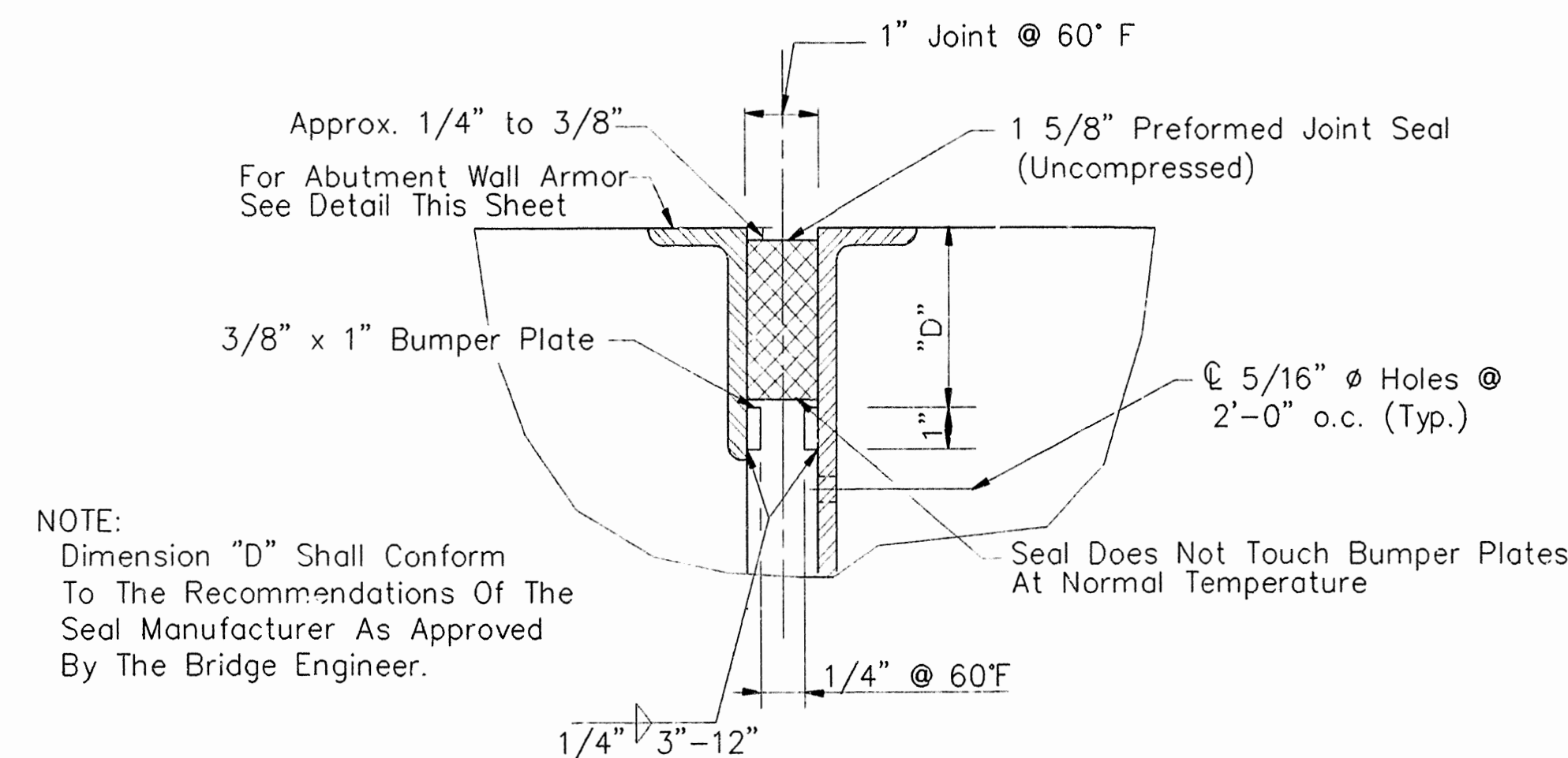
DETAILS OF PREFORMED EXPANSION DEVICE AT ABUTMENTS
Scale: None



ABUTMENT WALL ARMOR DETAIL
Scale: None



TYPICAL CHANNEL CONNECTION DETAIL
Scale: 1 1/2" = 1'-0"

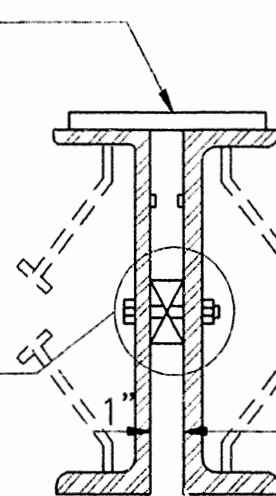


DETAIL "A"
Scale: None

One Of Two Different Blocking Systems Is Required Depending On The Type Of Span Finishing Machine That Is Used.

For Transverse Strike-off: Plate, Angle Or Other Shapes, Attached To Channels (Or Angles) For Blocking

For Longitudinal Strike-off: Bolt & Spacer Attached To Channels For Blocking



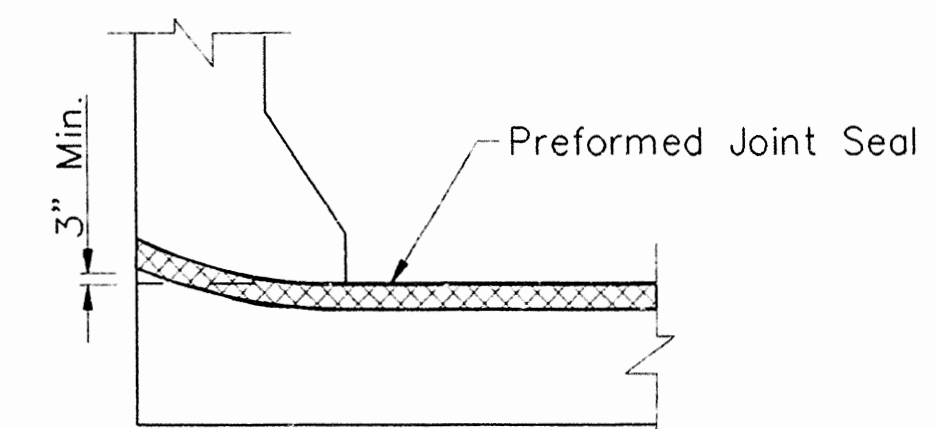
NOTE:

Each Expansion Joint Device Shall Be Blocked In The Shop By The Fabricator, 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 And Final Adjustment Of The Joint Opening Shall Be Just Before Pouring The Second Side Of The Joint, As Directed By The Engineer.

NOTE:

Blocking Detail Shown For Joint At Int. Bent. Joint At End Bent Is Similar.

DETAILS FOR BLOCKING EXPANSION JOINT DEVICE
Scale: None



PREFORMED JOINT SEAL PLACEMENT DETAIL
Scale: None

SHEET 1 OF 1

DETAILS OF PREFORMED EXPANSION JOINTS

U.S. HIGHWAY 71 OVER BLACKBURN CREEK AND DEADMAN HOLLOW

WASHINGTON COUNTY

ROUTE 71 SEC. 18

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

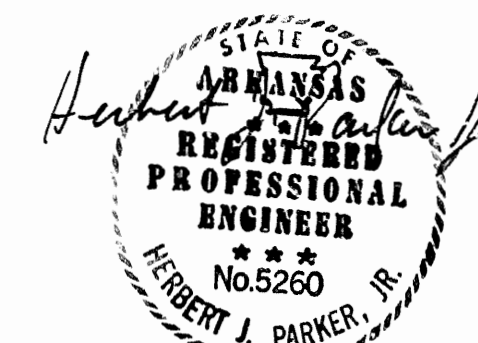
DRAWN BY: HEW DATE: JAN. 1993

CHECKED BY: JHR DATE: JAN. 1993

DESIGNED BY: RLE DATE: JAN. 1993

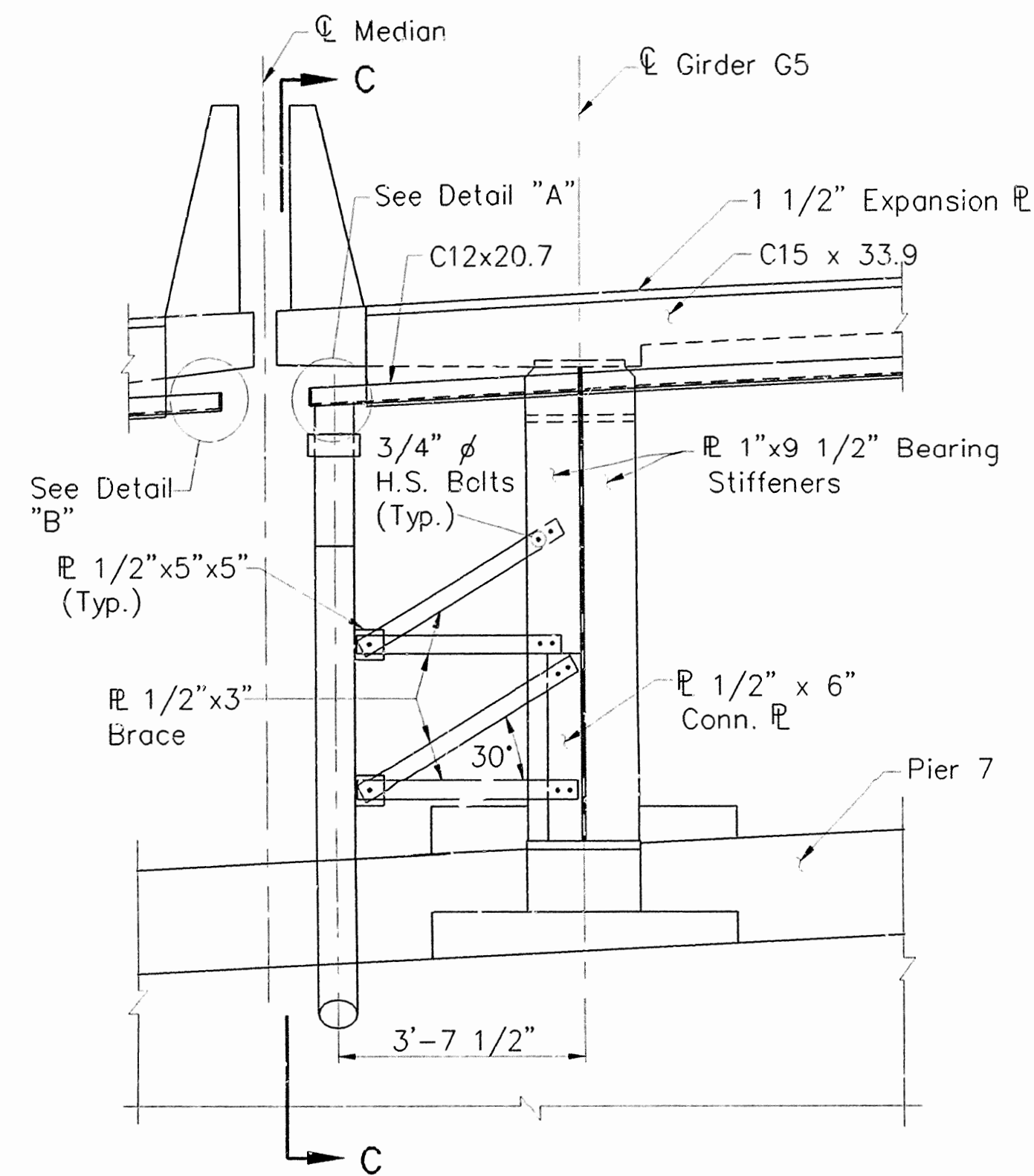
SCALE: AS SHOWN

BRIDGE NO. 6479 & 6480 A&B DRAWING NO. 34025

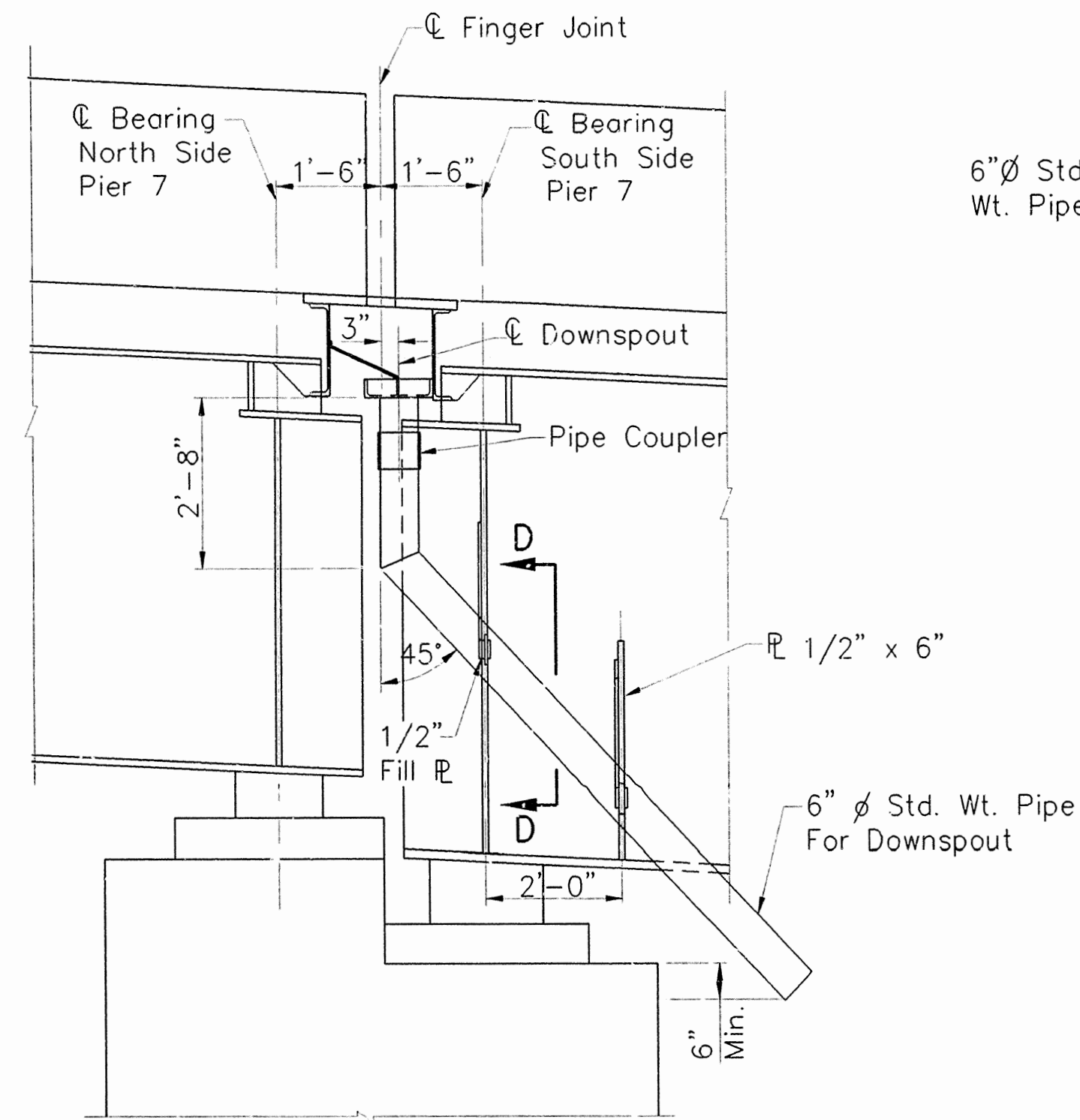


BRIDGE ENGINEER

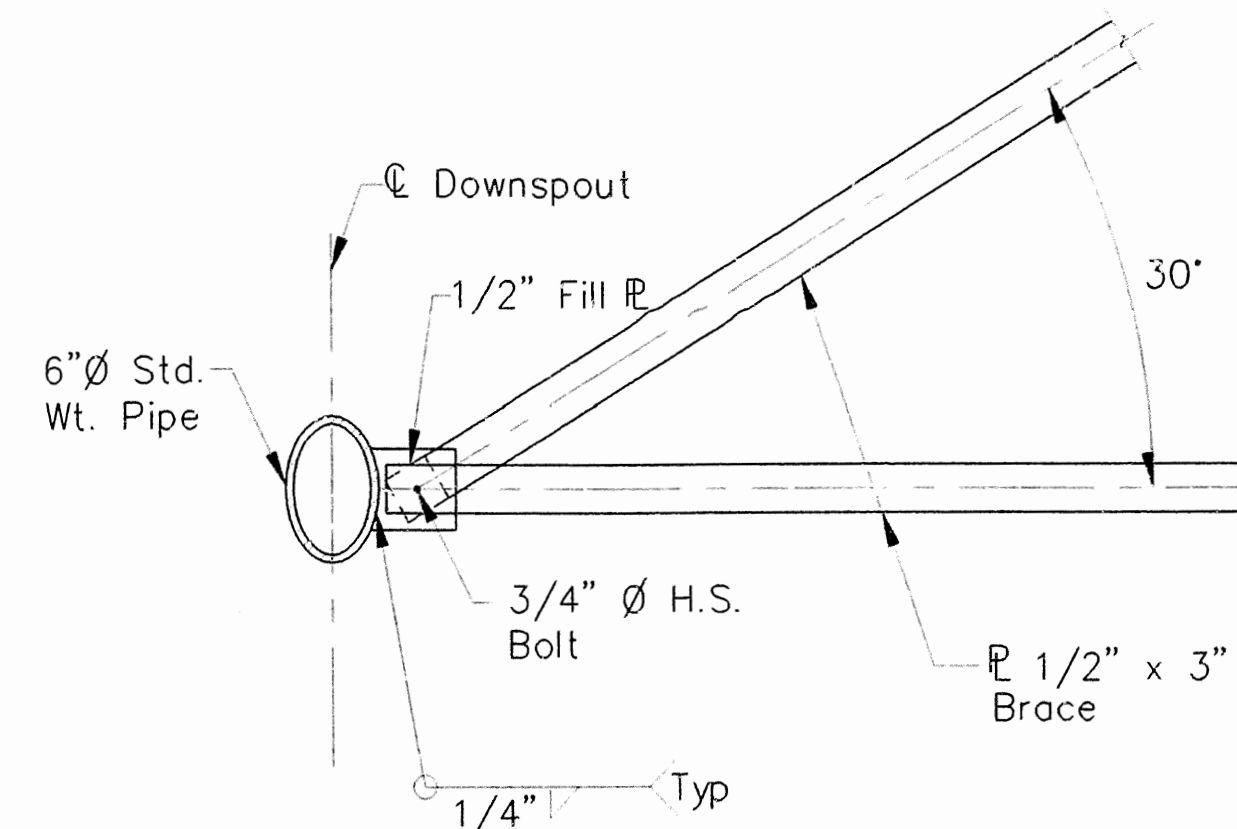
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
2-7-97	2-19-97			6	ARK.		86	
				JOB NO.		R40039		
				① 6479 A&B DTLS FING JT DR				34028



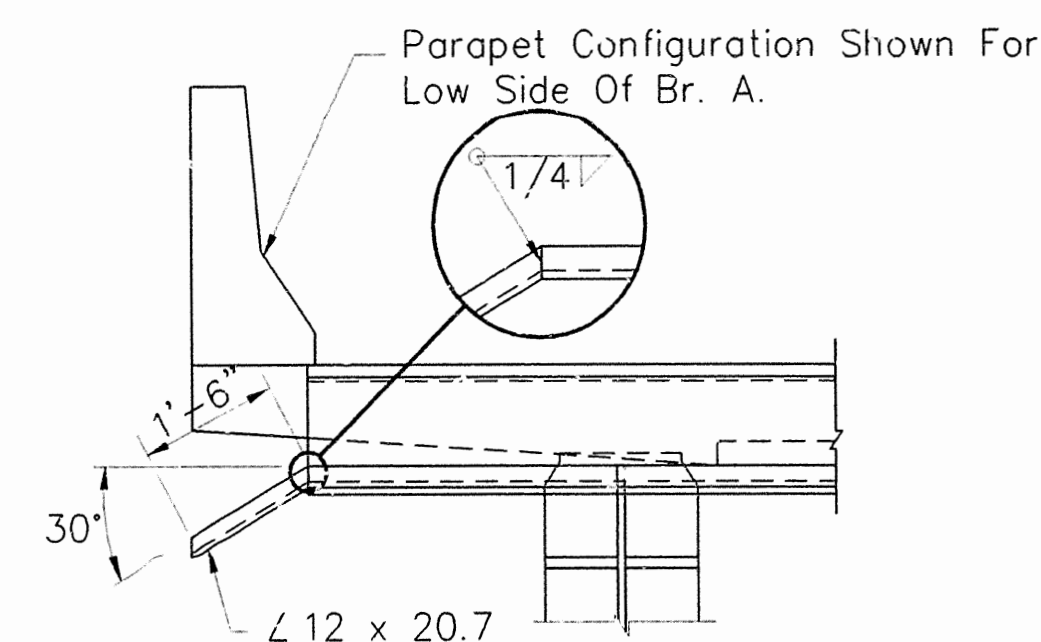
FINGER JOINT DRAIN @ PIER 7
LOW SIDE BR B ONLY
Scale: 1/2" = 1'-0"



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



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



FINGER JOINT DRAIN @ PIER 2 - LOW SIDE BR. A&B
FINGER JOINT DRAIN @ PIER 7 - LOW SIDE BR. A
Scale: 1/2" = 1'-0"

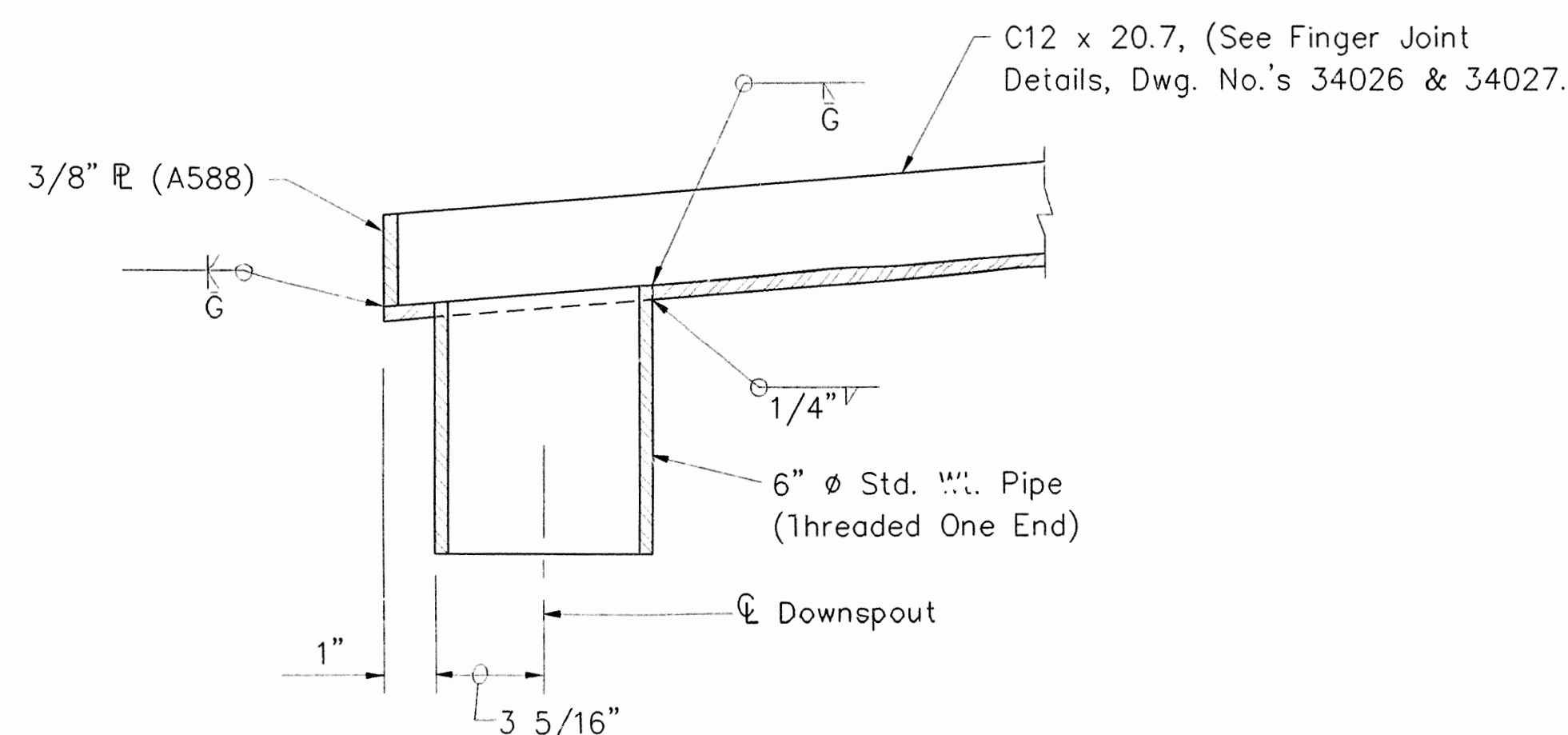
Note:

Standard Weight Pipe for Finger Joint Drains Shall Conform To ASTM A501. All Other Structural Steel Shall Be A36. After Fabrication, All Structural Steel In Drains Shall Be Galvanized In Accordance With ASTM A123. Exposed Surfaces Of Finger Joint Drains Shall Be Painted To Closely Match The Color Of The A588 Girders. Finger Joint Drains Shall Be Paid For At The Unit Price Bid For "Structural Steel In Plate Girder Spans (A588)."

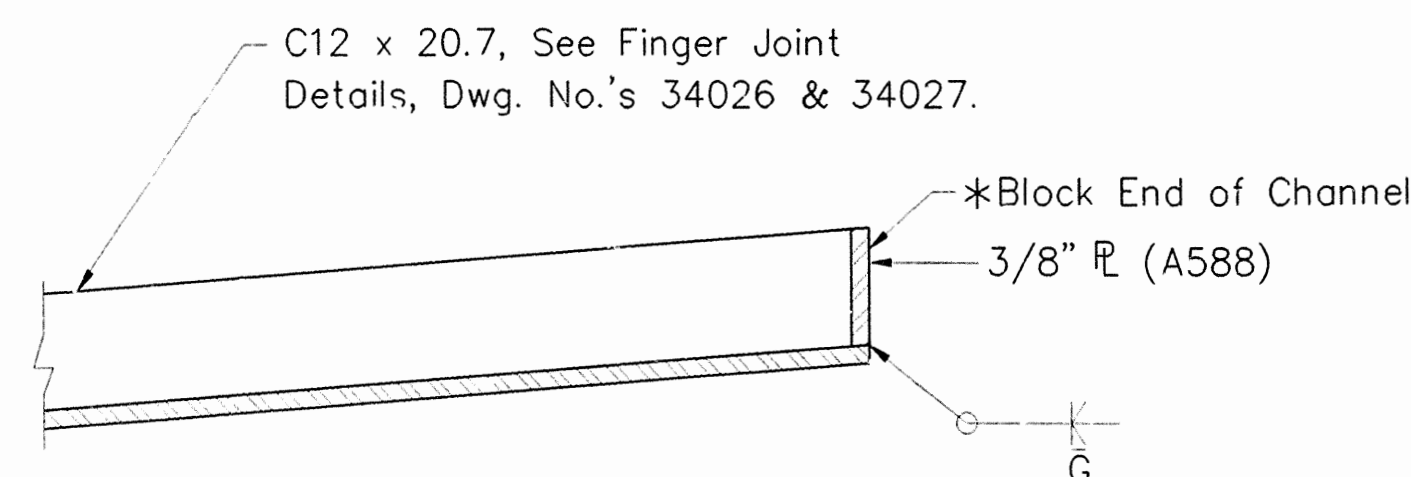
In General, Painted Portions Of Finger Joint Drains Shall Meet The Requirements Of Section 807 Of The Standard Specifications, Except That A Commercially Available Paint Such As PRO-MAR BRONZE TONE ENAMEL - LOW LUSTER FINISH (Product B39N 1) As Manufactured By The Sherwin-Williams Co. Or Equal May Be Used. Painting, Including Prime Coats, Shall Be In Accordance With Manufacturers Recommendations. Painting Of Finger Joint Drains Will Not Be Paid For Directly, But Will Be Considered Subsidiary To The Item "Structural Steel In Plate Girder Spans (A588)."

Steel Fasteners Shall Be Galvanized In Accordance With ASTM A153 Or B695, Class 40 Or 50.

① Revised Median Side Parapet Configuration



DETAIL "A"
N.T.S.



DETAIL "B"
N.T.S.

*Typ. High Side Of Br. A&B
@ Pier 2 & 7



BRIDGE ENGINEER

SHEET 1 OF 1
DETAILS OF FINGER JOINT DRAINS
U.S. HIGHWAY 71 OVER BLACKBURN CREEK
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: P.B.B. DATE: FEB. 1993
CHECKED BY: H.J.P. DATE: FEB. 1993
DESIGNED BY: J.H.R. DATE: FEB. 1993
SCALE: AS NOTED
BRIDGE NO. 6479 A&B DRAWING NO. 34028

ARK/HEW 71B65, O: 911480134, 2-8-97

Deck Drain Assembly:

- Step 1. Assemble Grate And Drain Pipe With Conical Form In Place And Place In Position.
Step 2. After Concrete Has Set Unscrew Grate And Remove Conical Form.
Step 3. Refasten Grate.

See Dwg. No. 34031 For Parapet Rail Configuration and Details.

See Detail "A"

1/2" x 2" x 1'-2 1/2" (Typ.)

3/8" x 1" x 1'-10 5/8" (Notched Into 1/2" Bar)

1 1/4" x 2" x 2'-0 1/8" (Each End)

PLAN

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

See Dwg. No. 34031 For Parapet Rail Configuration and Details.

SECTION A-A

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

FLOW

See Detail "B"

SECTION B-B

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

DETAIL "B"

Scale: None

DETAIL OF DECK DRAIN

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

SECTION C-C

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

DETAIL "A"

Scale: None

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
2-7-97	2-19-97			6	ARK.		87	
				JOB NO.		R40039		
				① 6479 & 6480 A&B DECK DRAINS			34029	

STATIONS FOR DECK DRAIN LOCATIONS

Stations @ Median	
Blackburn Creek	Deadman Hollow
1206+73	1263+80
1207+17	1264+90
1208+03	1265+50
1208+47	1266+60
1209+43	1267+20
1209+97	1268+40
1211+10	1269+10
1211+70	1270+30
1212+90	1270+90
1213+50	1272+00
1214+70	1272+60
1215+30	1273+30
1216+43	
1216+97	
1217+95	
1218+35	
1219+23	
1219+67	
1220+53	
1220+97	

NOTE:

Drain Location Stations Shown Are For One Deck Drain On Each Bridge. Drains Are Placed At Low Side Of Roadway Only. For Portions Of Br. No. 6479 A&B In Horizontal Curve, Deck Drains Are Placed On Radial Projection From Drain Locations Shown.

For Location Of Deck Drains, See Slab Plans.

Deck Drains May Be Adjusted To Clear Cross Frame Or Lateral Bracing Connections.

NOTE:

Standard Weight Pipe For Decking Drains Shall Conform To ASTM A501. All Other Structural Steel Shall Be A36. After Fabrication, All Structural Steel In Drains Shall Be Galvanized In Accordance With ASTM A123. Exposed Surfaces Of Deck Drains, Except Removable Grates, Shall Be Painted To Closely Match The Color Of The A588 Girders. Deck Drains Shall Be Paid For At The Unit Price Bid For "Structural Steel In Plate Girder Spans (A588)." Conical Forms Will Not Be Paid For Directly But Considered Subsidiary To The Item "Structural Steel In Plate Girder Spans (A588)."

In General, Painted Portions Of Deck Drains Shall Meet The Requirements Of Section 807 Of The Standard Specifications, Except That A Commercially Available Paint Such As PRO-MAR BRONZE TONE ENAMEL-LOW LUSTER FINISH (Product B39N 1) As Manufactured By The Sherwin-Williams Co., Or Equal May Be Used. Painting, Including Prime Coats, Shall Be In Accordance With Manufacturers Recommendations. Painting Of Deck Drains Will Not Be Paid For Directly, But Will Be Considered Subsidiary To The Item "Structural Steel In Plate Girder Spans (A588)."

Steel Fasteners Shall Be Galvanized In Accordance With ASTM A153 Or B695, Class 40 Or 50.

① Revised Median Side Parapet Configuration

SHEET 1 OF 1

DETAILS OF DECK DRAINS

U.S. HIGHWAY 71 OVER BLACKBURN CREEK

AND DEADMAN HOLLOW

WASHINGTON COUNTY

ROUTE 71

SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: H.E.W. DATE: FEB. 1993
CHECKED BY: H.J.P. DATE: FEB. 1993
DESIGNED BY: R.L.E. DATE: FEB. 1993

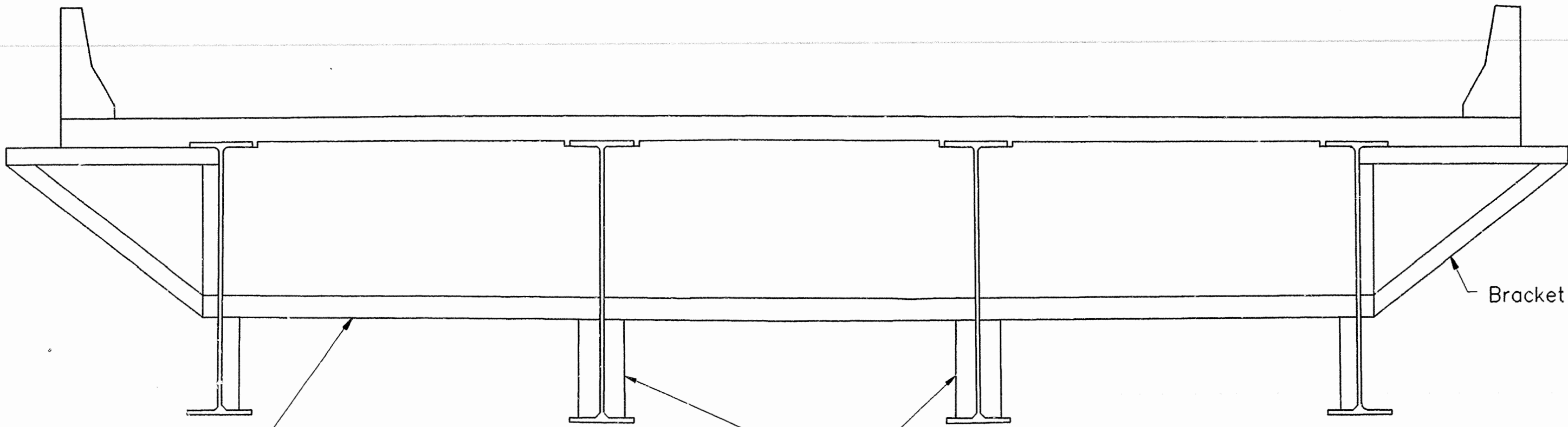
SCALE: AS NOTED

BRIDGE NO. 6479 A&B and 6480 A&B DRAWING NO. 34029



BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		88	
				JOB NO.		R40039		
				1 6479 & 6480 A&B MISC. DTLs			34030	



4" x 4" (Min.) Timber Bracing at Each Bracket Location (Wedge Tight), as Required for Beams and Girder Webs Less Than 48" Deep to Prevent Web Buckling. For Girder Webs Greater Than or Equal to 48" Deep, Bracing Shall Extend Across All Bays.

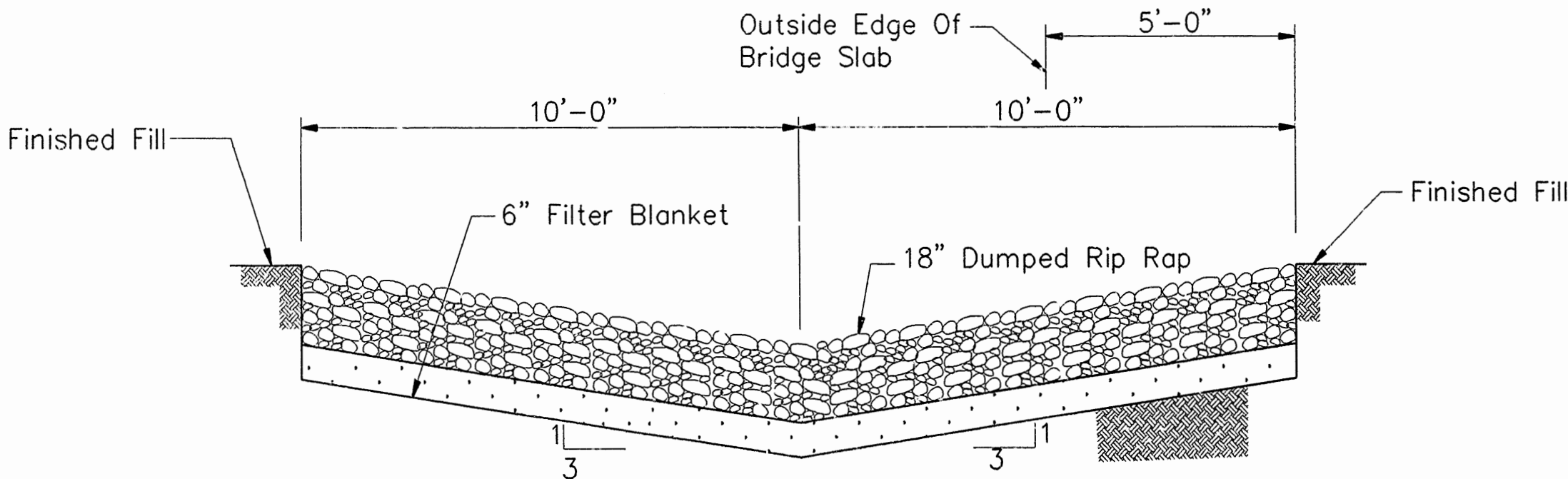
Positive Support Under Bracing To Prevent Bracket & Wedge From Falling.

Note:

1. If a Transverse Finishing Machine is Used, The Rail Shall be Supported Directly Over the Exterior Stringer, or as an Alternate, The Rail May Be Supported by the Overhang Brackets if the Above Strutting System is Used.
2. Brackets and 4" x 4" Bracing Shall Not Be Paid for Directly But Considered Subsidiary to "Structural Steel in ... Spans (A588)."

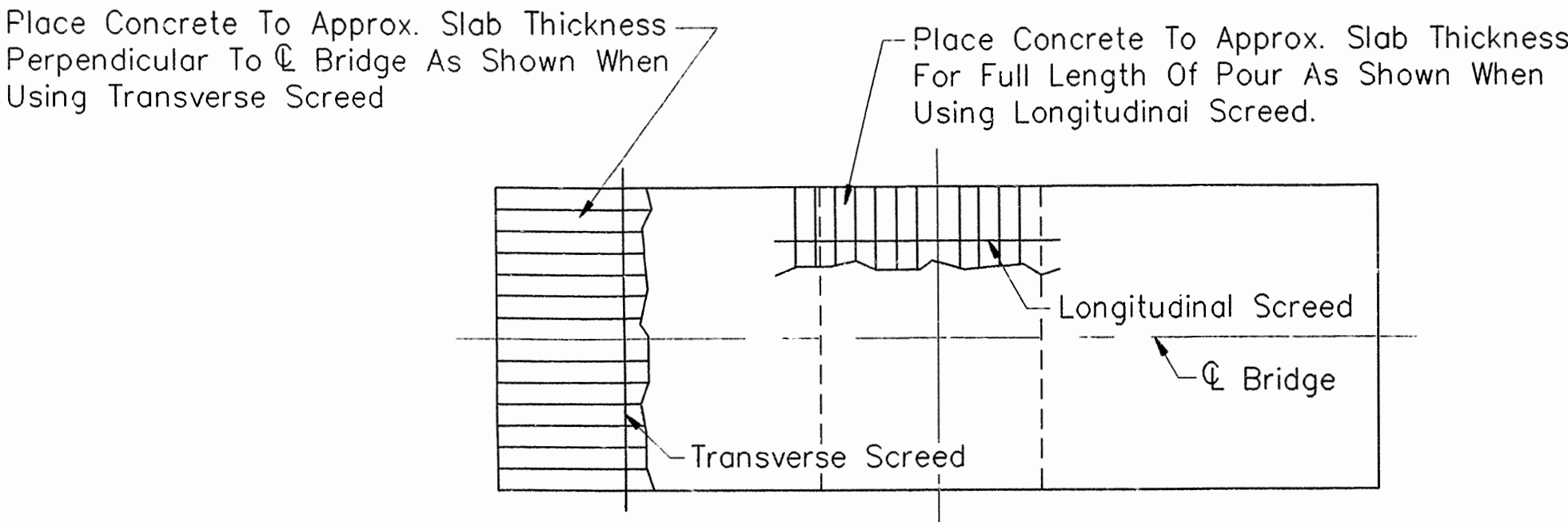
SCREED RAIL SUPPORT DETAIL

Scale: None



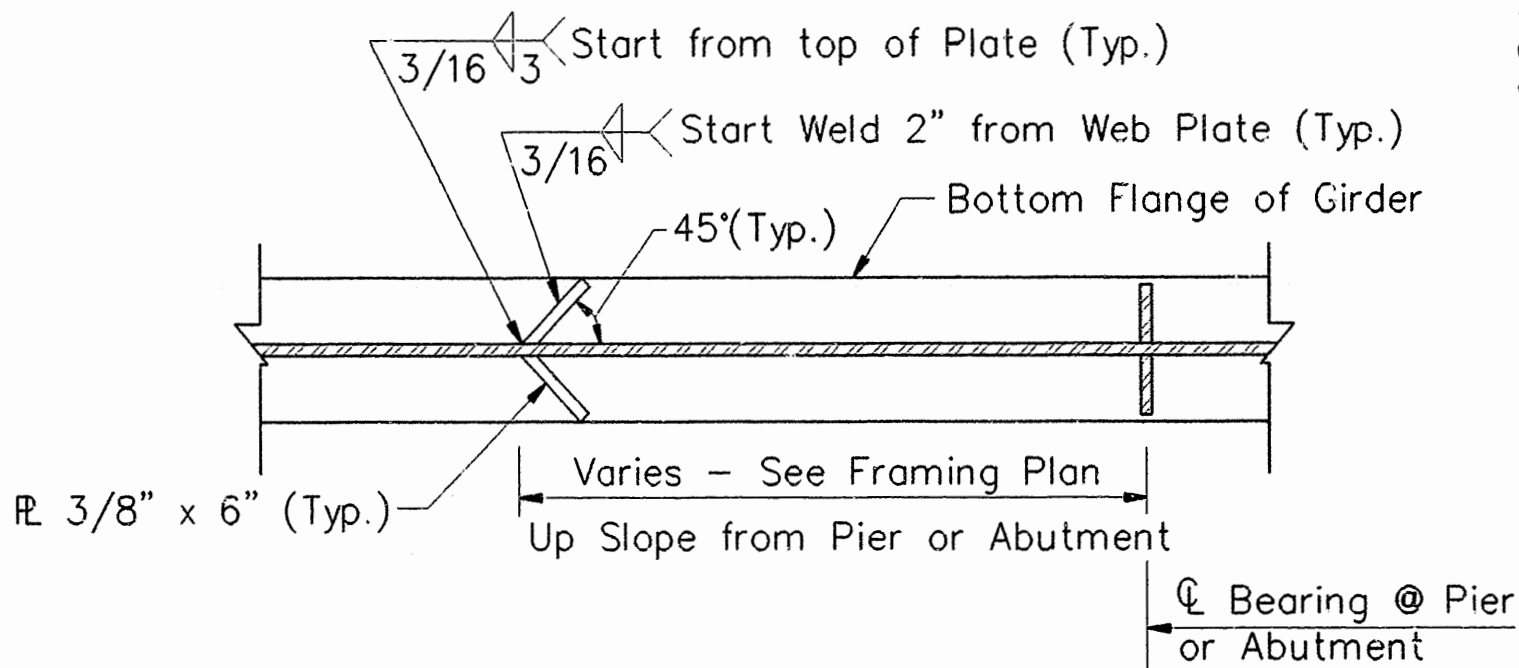
DRAINAGE SWALE DETAIL

Scale: None



CONCRETE PLACEMENT PROCEDURE

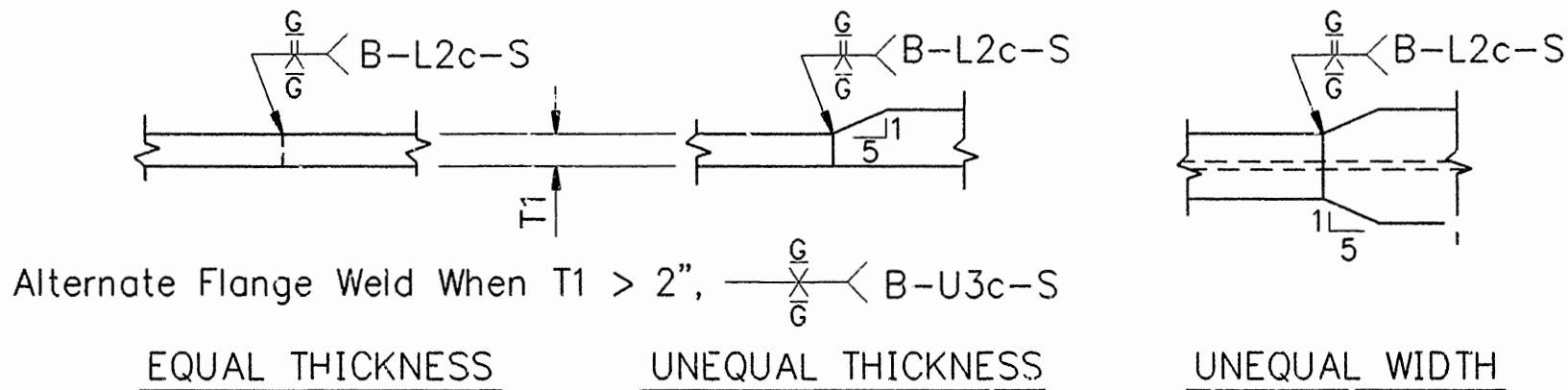
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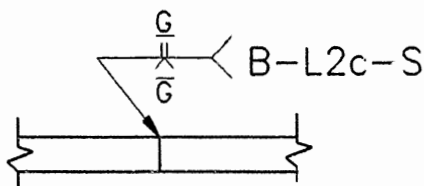
NOTE: Drip stop to be full Width and Placed on Both Faces of Girder.

DRIP STOP DETAIL

Scale: None



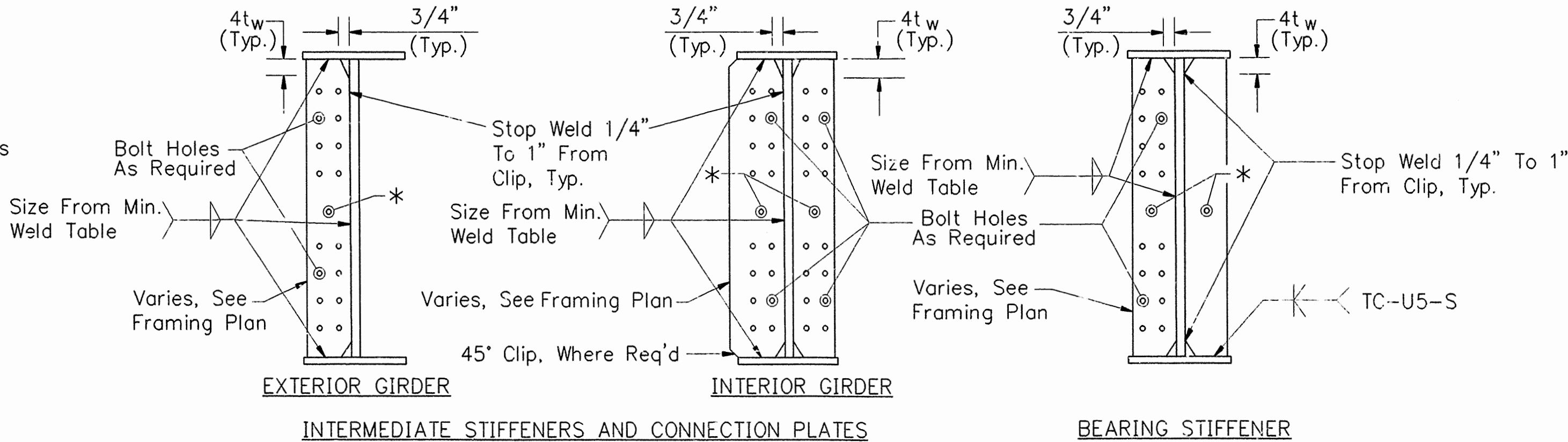
FLANGE SPLICES



WEB SPLICE

DETAILS OF WELDED SPLICES

Scale: None

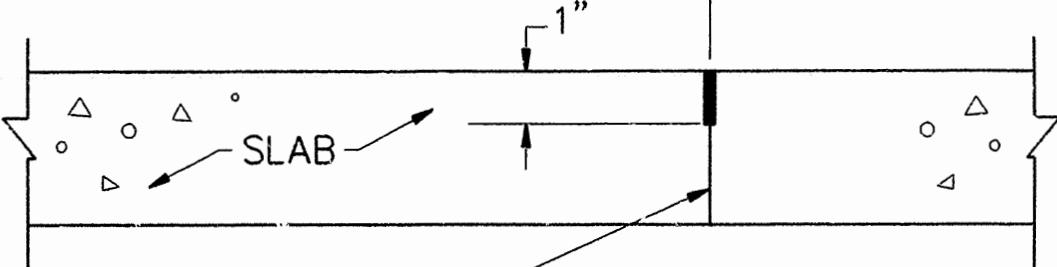


* 1" ϕ Hole For Safety Handrails As Required

PLATE GIRDER CONNECTION AND STIFFENER PLATE DETAILS

Scale: None

ϕ Of 1/4" x 1" Type 6 Poured Synthetic Polymer Joint In Slab (To Be Paid For As Class S(AE) Concrete). If Slab Joints Are To Be Sawed, They Shall Be Sawed Before Any Vehicular Traffic Is Allowed On The Unit. See Subsection 501.03(H) And 501.04(J) For Material And Construction Specifications. See "Slab Plans" For Location Of Joints.

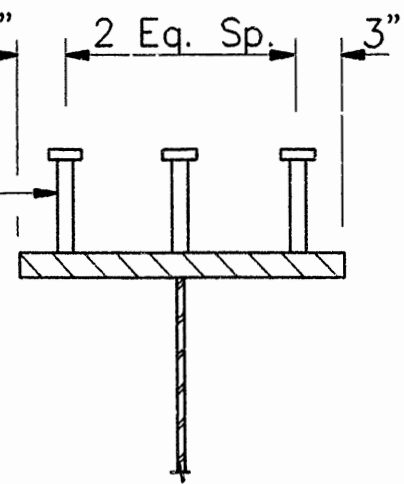


Break in Slab Pour at Construction Joint only

SLAB JOINT DETAIL

Scale: None

Stud Shear Connectors shown shall be Granular Flux Filled, Solid Fluxed or equal and Auto-matically end Welded to Flanges in Accordance with the Recommendations of the Manufacturer. 3/4" Diameter Studs may be Substituted for the 7/8" Diameter Studs at the Ratio of 1.37-3/4" Studs in place of 1-7/8" Stud. The 7/8" Stud shall be used as the Basis of Payment (98.1 lbs. per One Hundred 7/8" ϕ x 5" Studs and 115.3 lbs. per One Hundred 7/8" ϕ x 6" Studs). Maximum Stud Spacing Equals 24".



SHEAR CONNECTOR DETAIL

Scale: None

TABLE FOR MINIMUM FILLET WELD SIZE

Material Thickness Of Thicker Part Joined	Minimum Size Of Fillet Weld	Single Pass Weld Must be Used
$T \leq 3/4"$	1/4"	
$T > 3/4"$	5/16"	

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 1 OF 1
MISCELLANEOUS DETAILS
U.S. HIGHWAY 71 OVER BLACKBURN CREEK
AND DEADMAN HOLLOW
WASHINGTON COUNTY
ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION

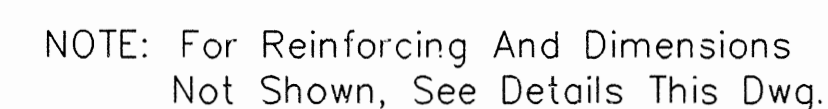
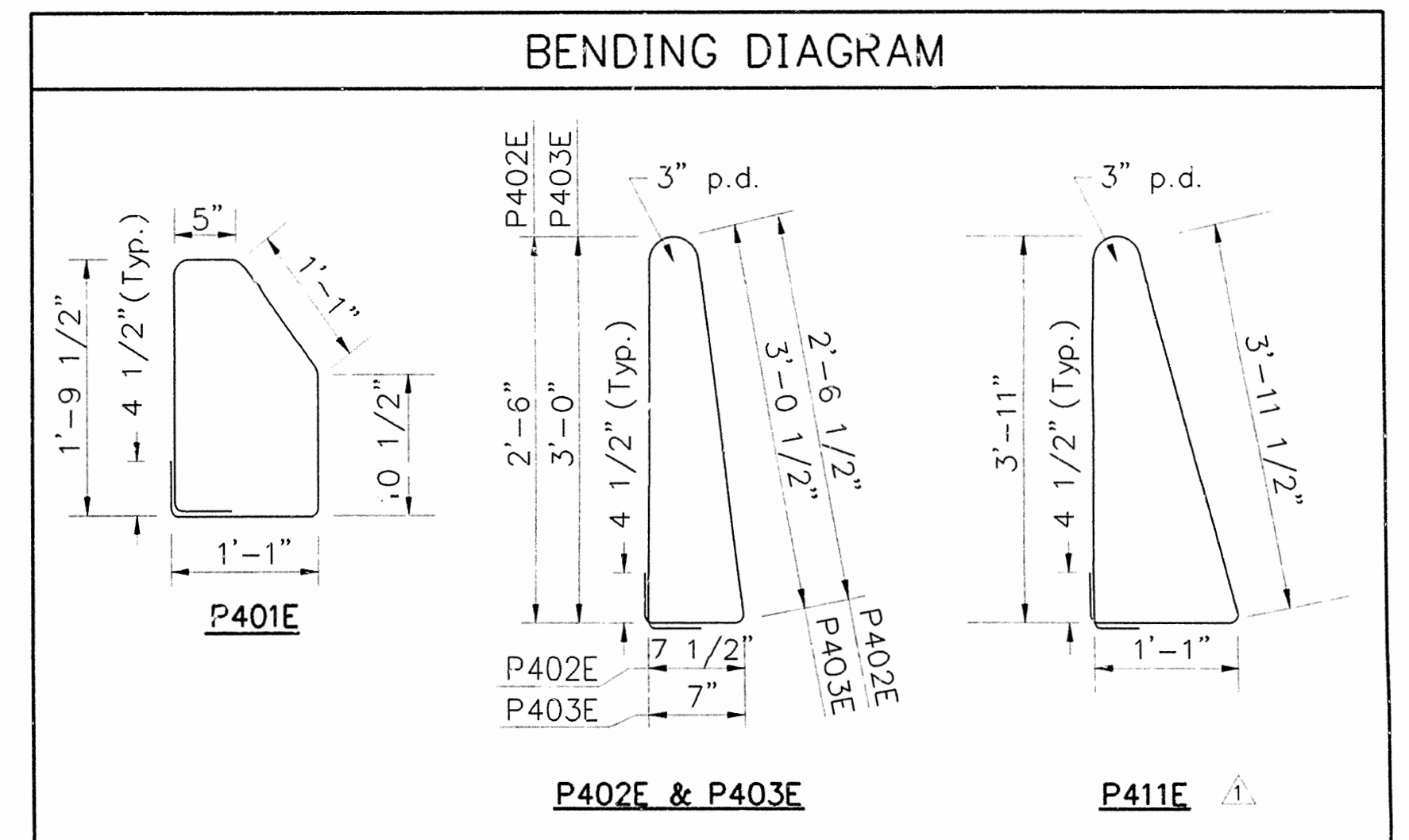
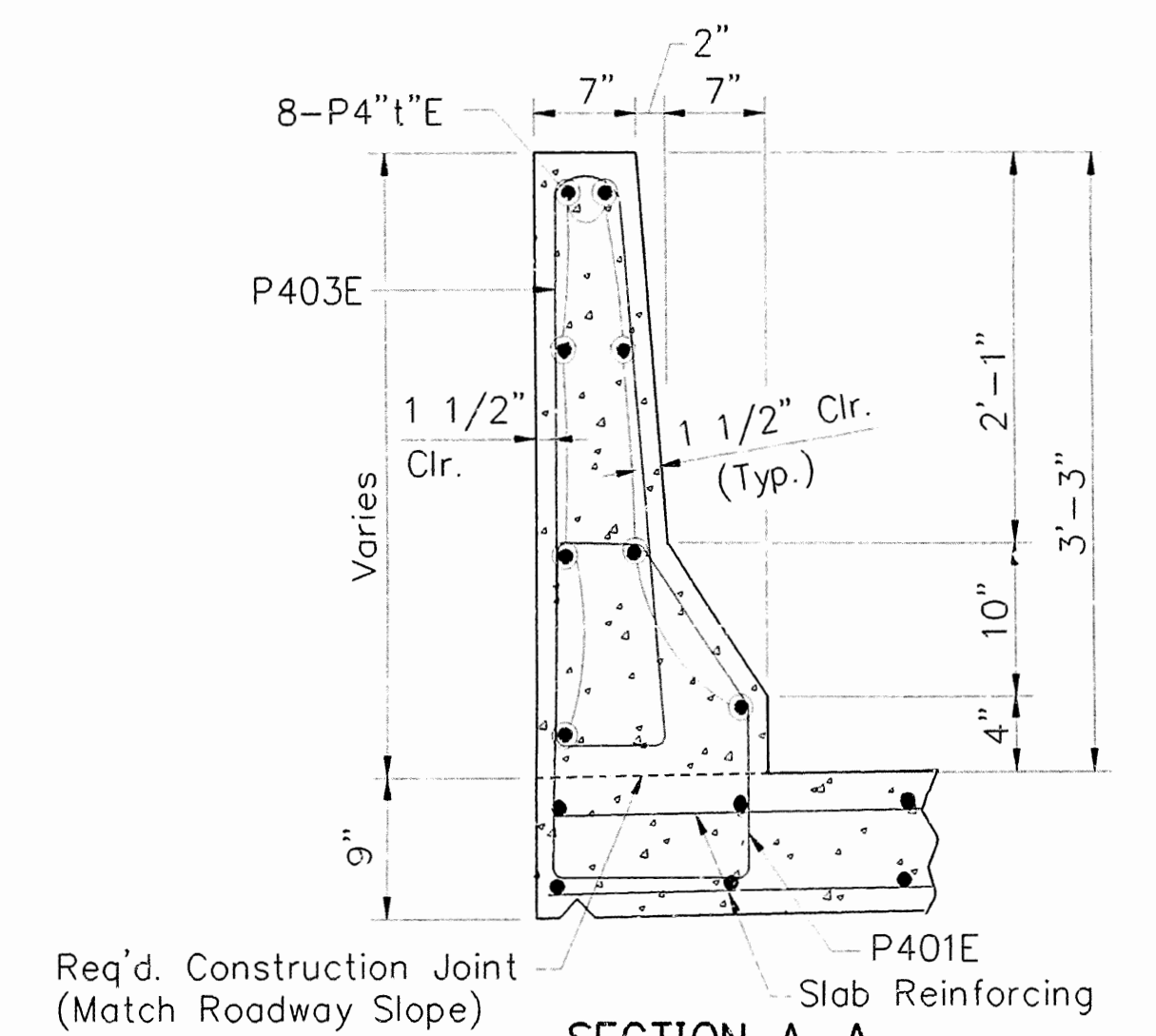
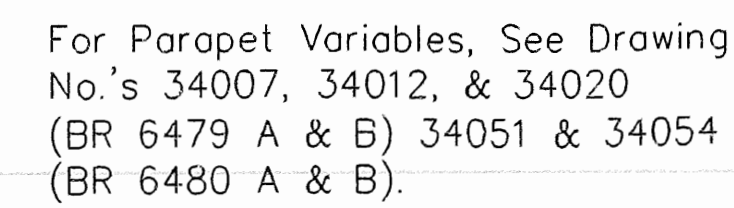
LITTLE ROCK, ARK.

DRAWN BY: H.E.W. DATE: JAN., 1993
CHECKED BY: J.H.R. DATE: JAN., 1993
DESIGNED BY: N.D.T. DATE: JAN., 1993

SCALE: AS NOTED

BRIDGE NO. 6479 A&B AND 6480 A&B DRAWING NO. 34030

BRIDGE ENGINEER

P.IK/PBB 71B54 91148014 2-7-97

1. All Panels Shall Be Braced As Shown To Prevent Racking. All Open Joints Shall Be Sawed As Soon As Practical To A Minimum Width Of 1/4". To Control Cracking Before Sawing All Joints Must Be Grooved Before The Concrete Is Set. Sawing Of The Joints Must Be Controlled So It Will Follow The Grooved Joint.
2. The Extruded Parapet Shall Conform To The Horizontal And Vertical Lines Shown On The Plans Or As Directed By The Engineer And Shall Present A Smooth, Uniform Appearance And Texture. Exposed Surfaces May Be Given A Light Brush Finish Or A Class 3, Sprayed Finish, In Place Of Class 2, Rubbed Finish.

1. All Bars in Parapet Are Epoxy Coated
2. Dimensions Of Bars Are Out-To-Out

DETAILS OF PARAPET RAIL
U.S. HIGHWAY 71 OVER BLACKBURN CREEK
AND DEADMAN HOLLOW
WASHINGTON COUNTY
ROUTE 71 SEC. 16

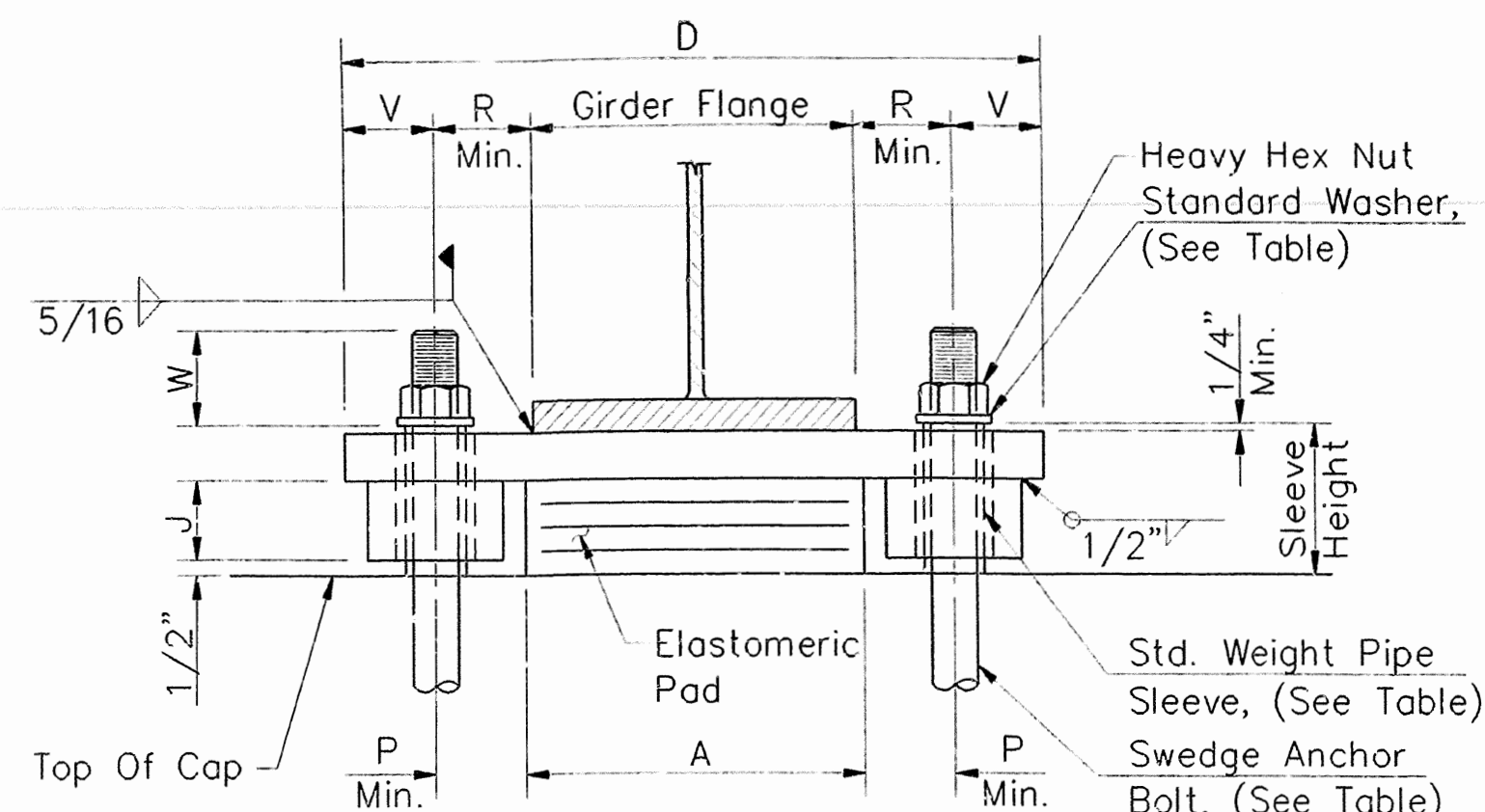
DRAWN BY: J.B.M. DATE: JAN. 1993
 CHECKED BY: J.D.G. DATE: JAN. 1993
 DESIGNED BY: J.H.R. DATE: JAN. 1993

SCALE: AS NOTED

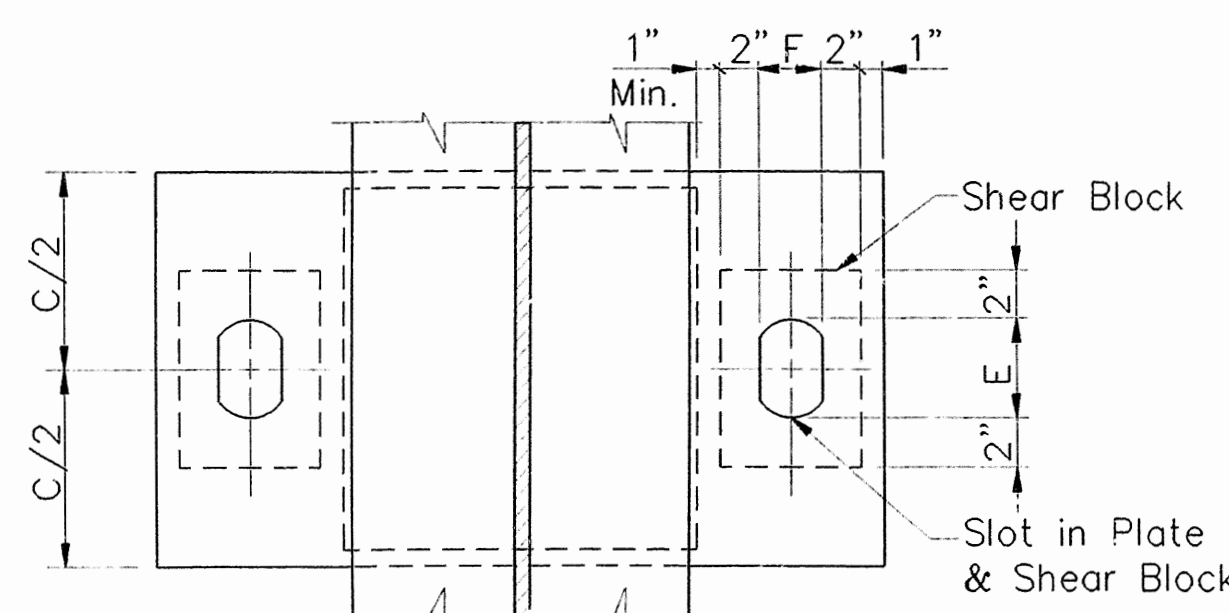
BRIDGE NO. 6479 A&B AND 6480 A&B DRAWING NO. 34031

BRIDGE ENGINEER

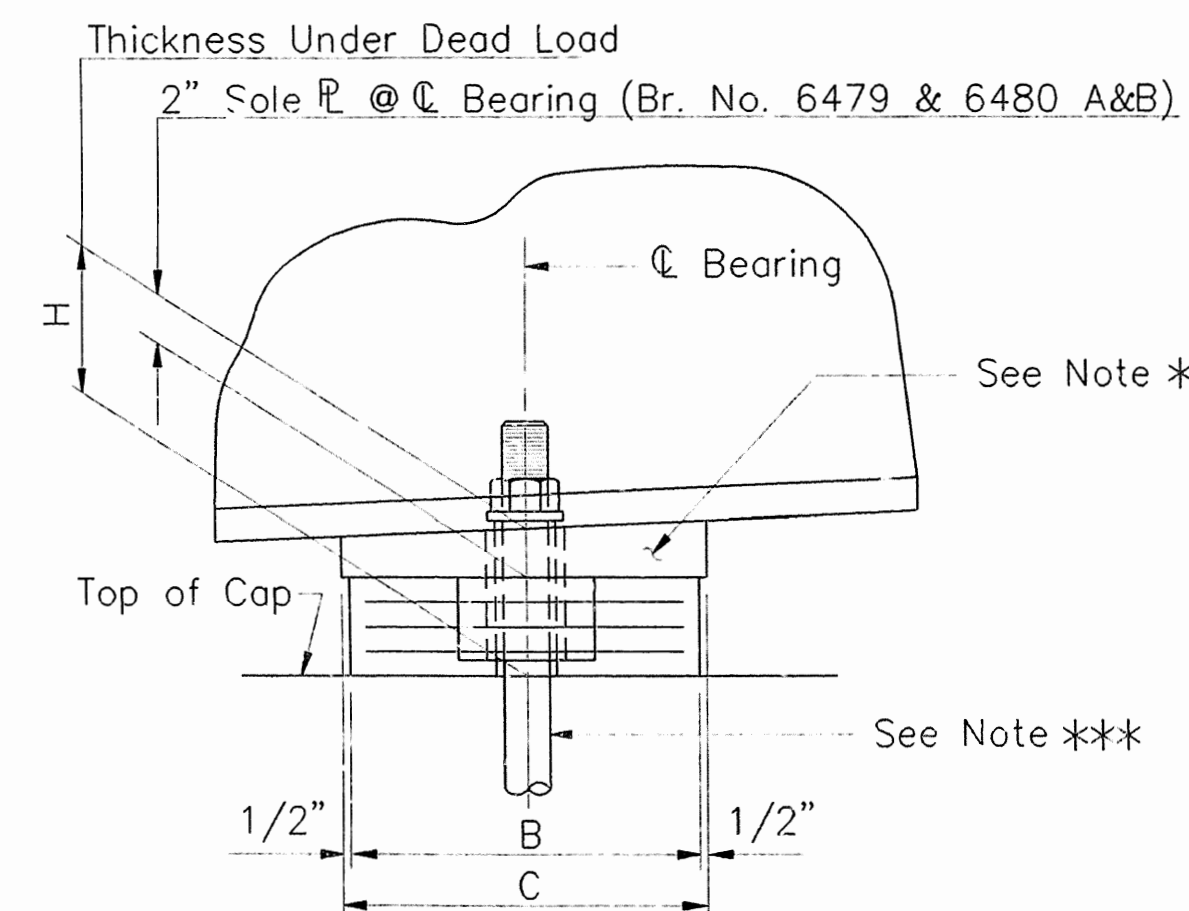
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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				JOB NO.		R40039		
				① 6479 & 6480 A&B DTLS BRGS.			34032	



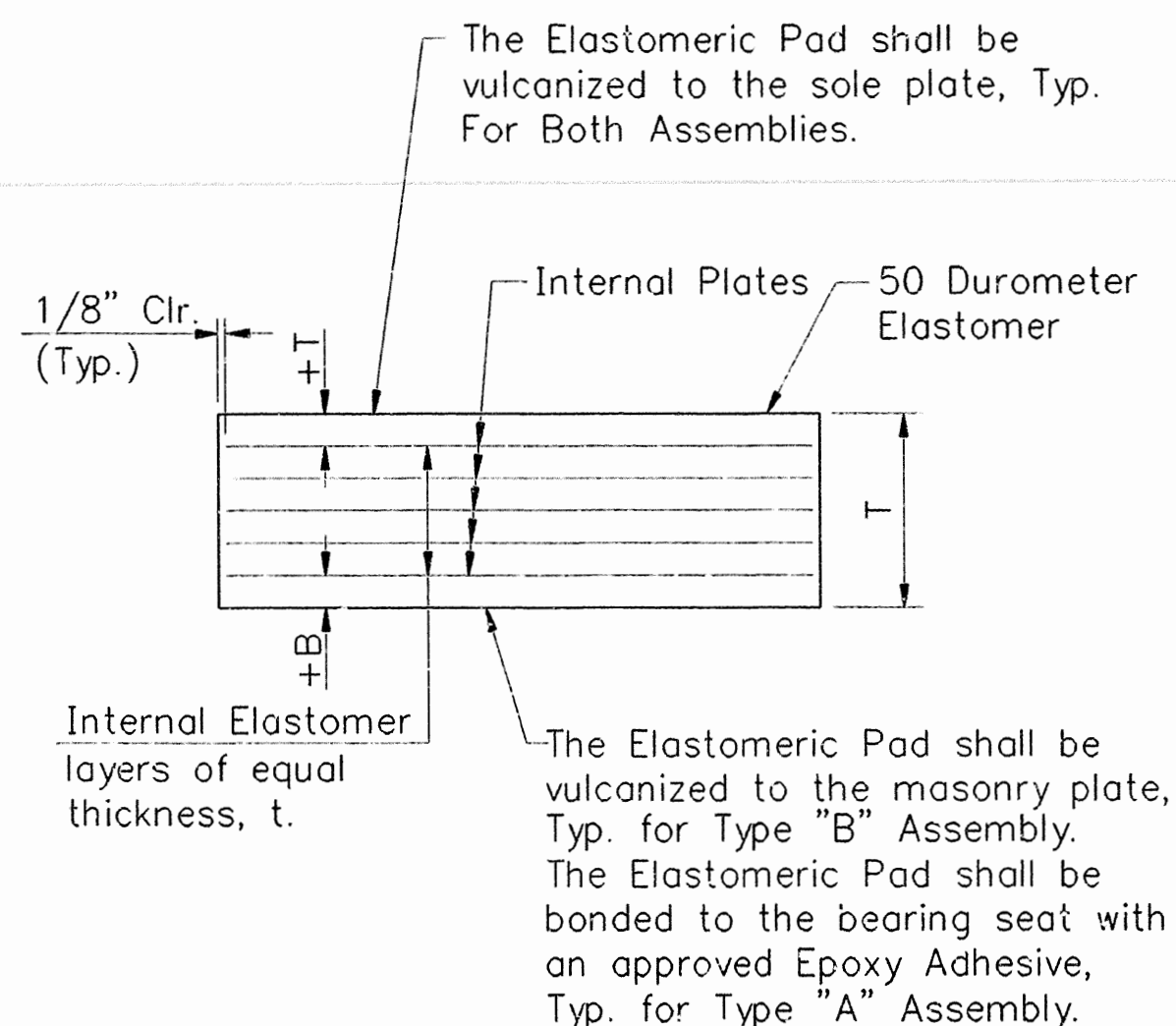
FRONT VIEW - TYPE "A" ASSEMBLY



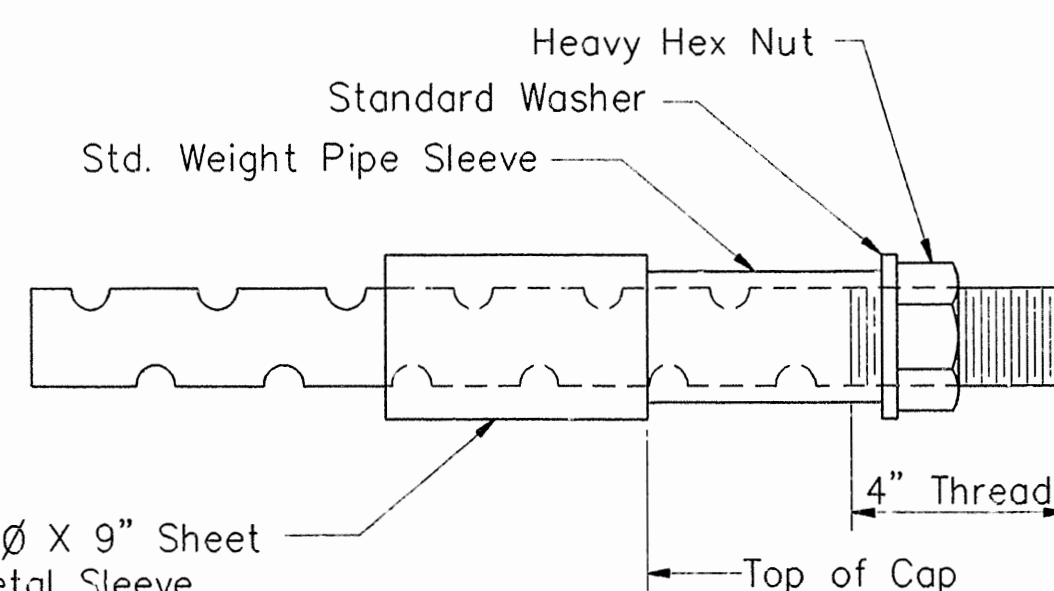
PLAN VIEW - TYPE "A" ASSEMBLY



SIDE VIEW - TYPE "A" ASSEMBLY

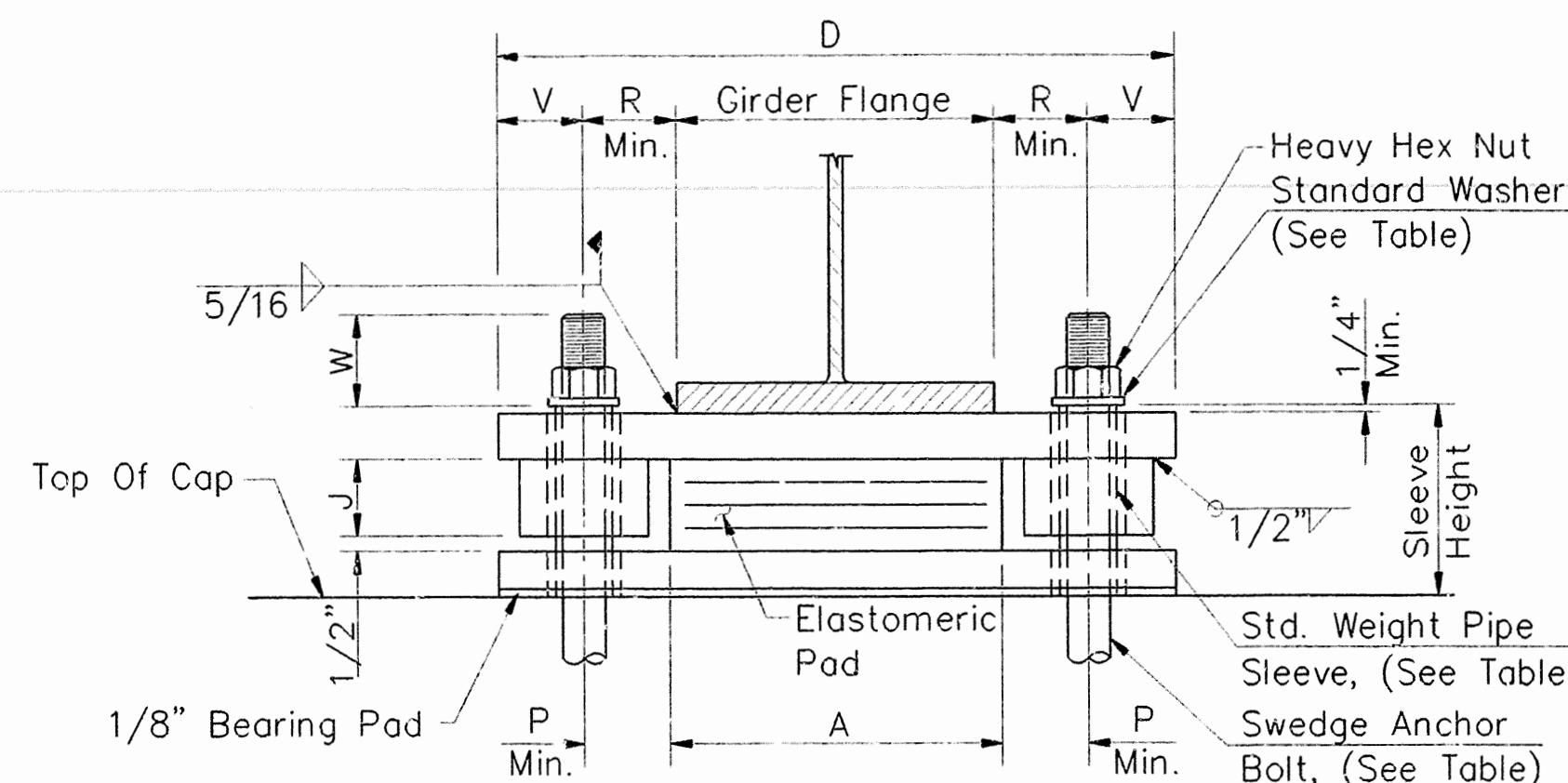


ELASTOMERIC PAD

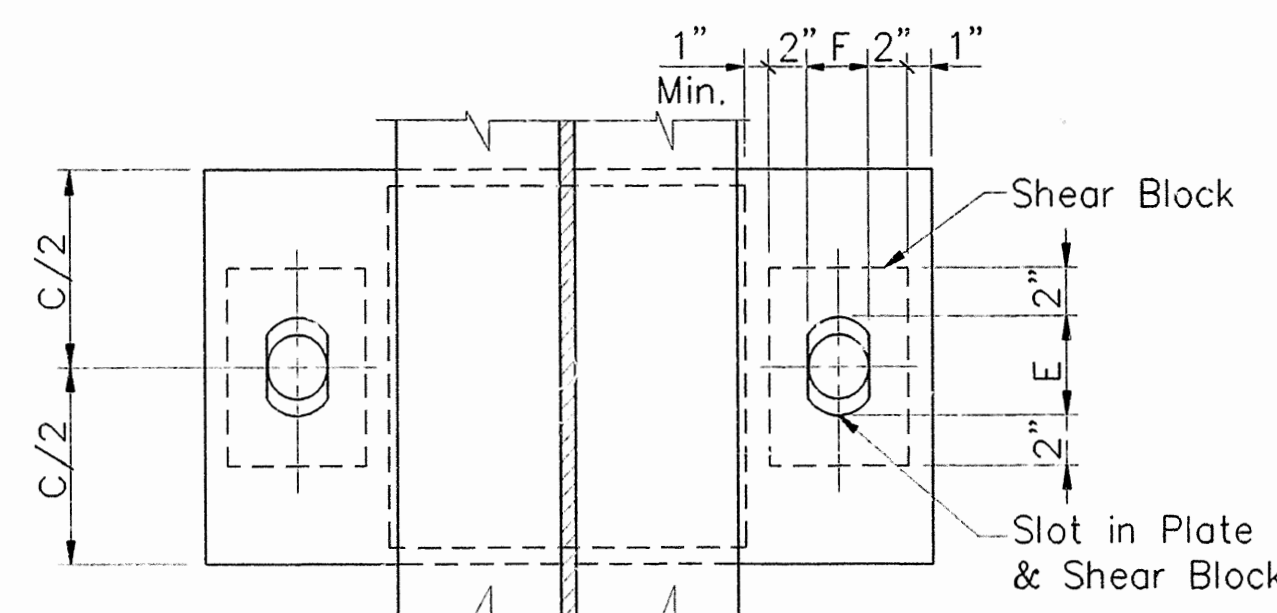


ANCHOR BOLT DETAIL

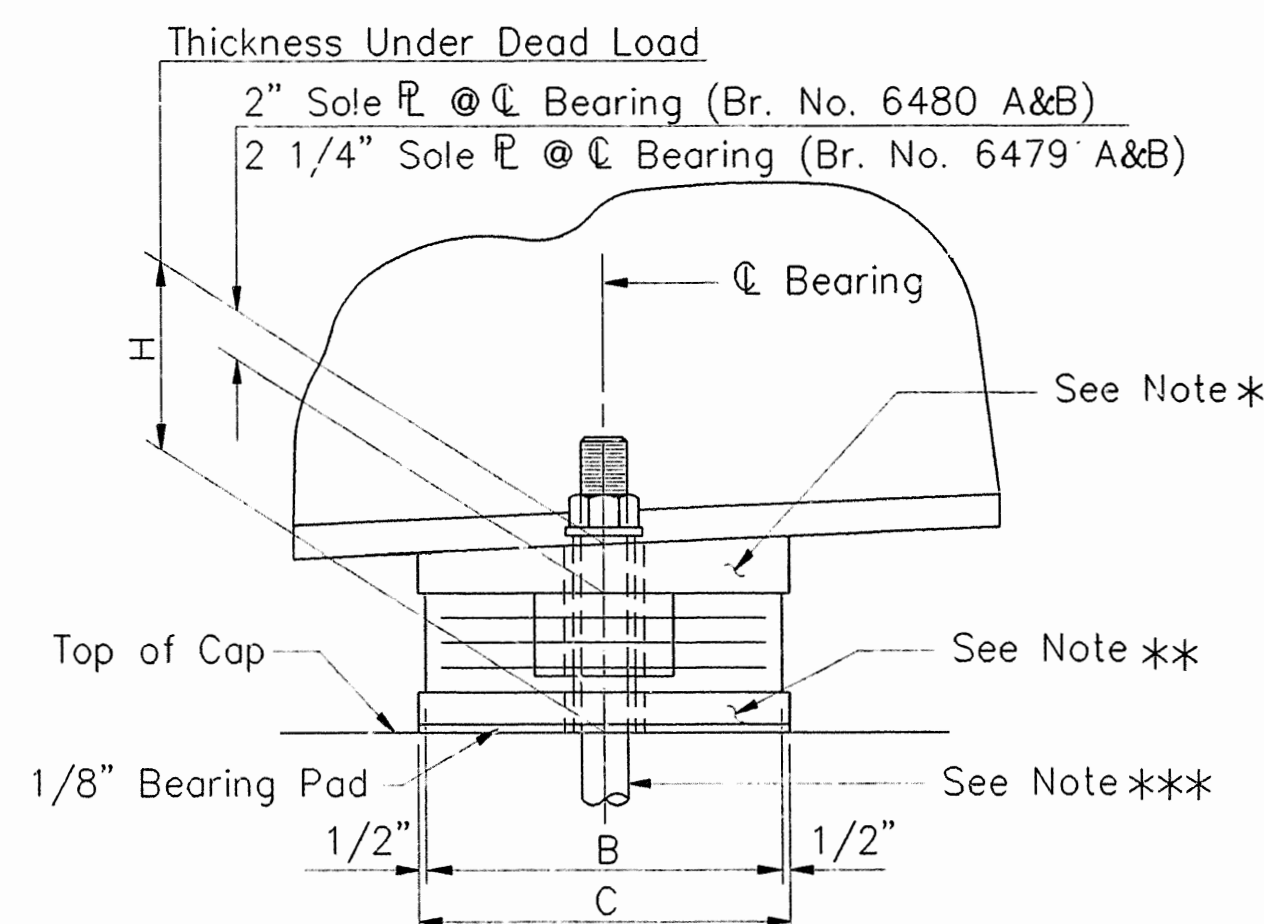
NOTE:
Anchor Bolts may be cast in place or drilled and grouted into place. If Anchor Bolts are to be drilled and grouted into place, the 3"Ø x 9" Galvanized Sheet Metal Sleeve shall be cast in place as shown. It shall be dry packed with styrofoam or urethane foam or approved equal prior to pouring concrete. After pouring of the cap and prior to erection of Structural Steel, the dry pack shall be removed and holes for the anchor bolts shall be accurately drilled into the masonry. The bolts shall then be set and fixed with Portland Cement grout or an approved non-shrink grout, completely filling the holes.
If anchor bolts are to be cast in place, the 3"Ø x 9" Galvanized Sheet Metal Sleeve will not be required. Galvanized Sheet Metal Sleeves are to be considered subsidiary to the item "Structural Steel in Plate Girder Spans (A588)".



FRONT VIEW - TYPE "B" ASSEMBLY



PLAN VIEW - TYPE "B" ASSEMBLY



SIDE VIEW - TYPE "B" ASSEMBLY

- NOTE:
* Bevel Plate To Match Slope Of Girder After Dead Load Deflection (To Nearest 1/32" Total Difference In Thickness Across Plate For Bearing)
** 1" Masonry Plate With F Holes (See Table Of Anchor Bolt Variables)
*** The Location Of The Anchor Bolts In Relation To The Holes In The Sole Plate Shall Correspond With The Temperature At The Time Of Erection. At 60° F The Holes Should Center On The Anchor Bolts.

TABLE OF ANCHOR BOLT VARIABLES								
Anchor Bolt Diameter	Pipe Sleeve Nominal Diameter	Standard Washer Size (O.D.)	Minimum Embedment Length	Slot Width F	P Min.	R Min.	V	W
1"	1 1/4"	2"	10"	2"Ø	4"	2"	4"	1 1/2"
1 1/4"	1 1/4"	2 1/2"	12"	2"Ø	4"	2 1/4"	4"	1 3/4"
1 1/2"	1 1/2"	3"	15"	2 1/4"Ø	4 1/8"	2 1/2"	4 1/8"	2"
1 3/4"	2"	3 3/8"	18"	2 5/8"Ø	4 5/16"	2 3/4"	4 5/16"	2 1/4"
2"	2 1/2"	3 3/4"	20"	3 1/8"Ø	4 9/16"	3"	4 9/16"	2 1/2"
2 1/4"	2 1/2"	4"	23"	3 1/8"Ø	4 9/16"	3"	4 9/16"	2 3/4"
2 1/2"	3"	4 1/2"	25"	3 3/4"Ø	4 7/8"	3 1/4"	4 7/8"	3"

GENERAL NOTES

Pipe Sleeves shall be ASTM A53, Grade B, and shall be galvanized to conform to ASTM A153. Sleeves shall be paid for at the unit price bid for "Structural Steel in Plate Girder Spans (A588)".

Anchor Bolts, Nuts and Washers shall be ASTM A36 Steel Galvanized to conform to ASTM A153 and shall be paid for at the unit price bid for "Structural Steel in Plate Girder Spans (A588)".

Sole Plates, Masonry Plates and Shear Blocks shall be ASTM A588 Steel. Sole Plates, Masonry Plates and Shear Blocks will not be paid for directly, but will be considered as part of the item "Elastomeric Bearings".

Sole Plates, Masonry Plates and Shear Blocks shall not be painted. Sole Plates, Masonry Plates and Shear Block shall be cleaned in accordance with Subsection 807.67 (e) of the Standard Specifications.

Elastomeric Pads shall conform to Section 808 of the Standard Specifications and shall be paid for at the unit price bid for "Elastomeric Bearings".

All Bearings shall be firmly seated in accordance with Subsection 807.51 of the Standard Specifications. This work and material shall be considered subsidiary to the item "Elastomeric Bearings" and shall not be paid for directly.

TABLE OF VARIABLES

Bridge Name	Bridge	Location	Bearing Type	Assembly Type	No. of Brgs. Each Bent	H	A	B	T	+T	+B	No. & Thickness For (t)	No. & Thickness Of Internal PL	C	D	E	J	Anchor Bolt Size	Sleeve Height
Blackburn Creek (BR. No. 6479)	A & B	N. & S. Abut.	Fix	A	4	11 1/16"	20"	14"	2 3/4"	3/8"	3/8"	3 @ 1/2"	4 @ 1/8"	15"	36 1/2"	2 1/4"	2 1/4"	1 1/2"Ø x 22"	5"
	A & B	Pier 1	Fix	B	4	6 15/16"	26"	20"	3 5/8"	1/2"	1/2"	4 @ 1/2"	5 @ 1/8"	21"	44 1/4"	3 1/8"	3 1/8"	2 1/4"Ø x 33"	7 1/4"
	A & B	Pier 2 - S. Side	Exp.	B	4	7 5/16"	20"	14"	3/8"	3/8"	3/8"	5 @ 1/2"	6 @ 1/8"	15"	36 1/2"	5 1/2"	3 1/2"	1 1/2"Ø x 25"	7 5/8"
	A & B	Pier 2 - N. Side	Exp.	B	4	10 1/8"	21"	21"	6 7/8"	3/4"	3/4"	6 @ 3/4"	7 @ 1/8"	22"	37 1/2"	7 3/4"	6 3/8"	1 1/2"Ø x 27 1/2"	10 1/2"
	A & B	Piers 3 & 6	Exp.	B	4	8 7/16"	28"	26"	5 1/8"	3/4"	3/4"	4 @ 3/4"	5 @ 1/8"	27"	47 1/2"	7 1/8"	4 5/8"	2 1/2"Ø x 37"	8 3/4"
	A & B	Piers 4 & 5	Fix	B	4	7 9/16"	27"	22"	4 1/4"	1/2"	1/2"	5 @ 1/2"	6 @ 1/8"	23"	46 1/2"	3 3/4"	3 3/4"	2 1/2"Ø x 36"	7 7/8"
	A & B	Pier 7 - S. Side	Exp.	B	4	10 1/8"	21"	21"	6 7/8"	3/4"	3/4"	6 @ 3/4"	7 @ 1/8"	22"	37 1/2"	7 3/4"	6 3/8"	1 1/2"Ø x 27 1/2"	10 1/2"
	A & B	Pier 7 - N. Side	Exp.	B	4	9 1/4"	20"	19"	6"	3/4"	3/4"	5 @ 3/4"	6 @ 1/8"	20"	36 1/2"	7 1/8"	5 1/2"	1 1/2"Ø x 27"	9 5/8"
	A & B	Pier 8	Exp.	B	4	7 9/16"	22"	22"	4 1/4"	1/2"	1/2"	5 @ 1/2"	6 @ 1/8"	23"	40 1/4"	6 3/8"	3 3/4"	2 1/4"Ø x 34"	7 7/8"
Deadman Hollow (BR. No. 6480)	A & B	Pier 9	Fix	B	4	6 15/16"	22"	22"	3 5/8"	1/2"	1/2"	4 @ 1/2"	5 @ 1/8"	23"	40 1/4"	3 1/8"	3 1/8"	2 1/4"Ø x 33"	7 1/4"
	A & B	N. & S. Abut.	Fix	A	4	4 3/8"	18"	14"	2 3/8"	3/8"	3/8"	3 @ 3/8"	4 @ 1/8"	15"	34"	2"	1 7/8"	1 1/4"Ø x 18 1/2"	4 5/8"
	A & B	Pier 1 - S. Side	Exp.	A	4	4 3/8"	18"	14"	2 3/8"	3/8"	3/8"	3 @ 3/8"	4 @ 1/8"	15"	34"	3"	1 7/8"	1 1/4"Ø x 18 1/2"	4 5/8"
	A & B	Pier 1 - N. Side	Exp.	B	4	9 15/16"	22"	22"	6 7/8"	3/4"	3/4"	6 @ 3/4"	7 @ 1/8"	23"	38 1/2"	7 3/4"	6 3/8"	1 1/2"Ø x 27 1/2"	10 1/4"
	A & B	Piers 2 & 5	Exp.	B	4	8 3/16"	30"	24"	5 1/8"	3/4"	3/4"	4 @ 3/4"	5 @ 1/8"	25"	49 1/2"	7 1/4"	4 5/8"	2 1/2"Ø x 36 1/2"	8 1/2"
	A & B	Pier 3 & 4	Fix	B	4	7 5/16"	27"	22"	4 1/4"	1/2"	1/2"	5 @ 1/2"	6 @ 1/8"	23"	46 1/2"	3 3/4"	3 3/4"	2 1/2"Ø x 36"	7 5/8"
	A & B	Pier 6 - S. Side	Exp.	B	4	9 15/16"	22"	22"	6 7/8"	3/4"	3/4"	6 @ 3/4"	7 @ 1/8"	23"	38 1/2"	7 3/4"	6 3/8"	1 1/2"Ø x 27 1/2"	10 1/4"
	A & B	Pier 6 - N. Side	Exp.	A	4	4 3/8"	18"	14"	2 3/8"	3/8"	3/8"	3 @ 3/8"	4 @ 1/8"	15"	34"	3"	1 7/8"	1 1/4"Ø x 18 1/2"	4 5/8"



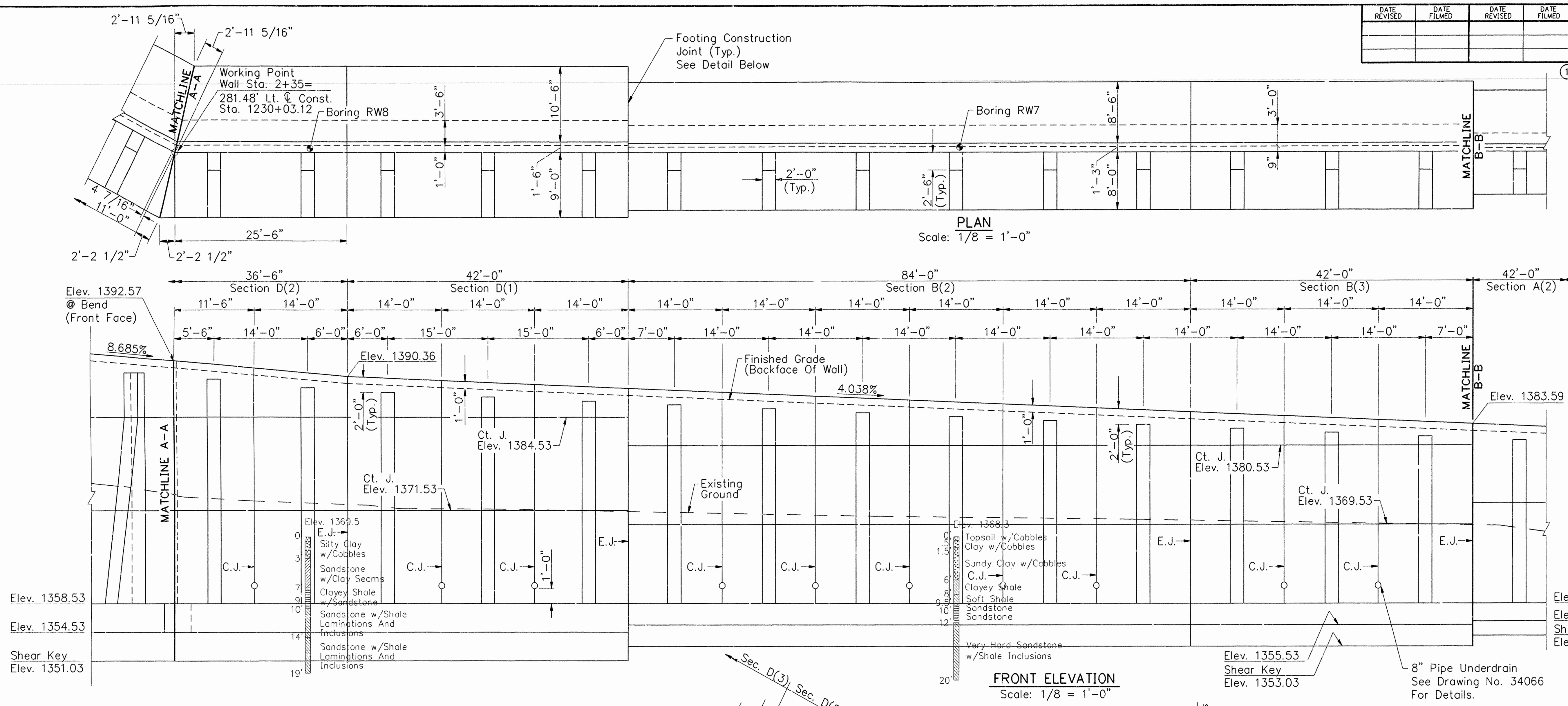
SHEET 1 OF 1
DETAILS OF ELASTOMERIC BEARINGS
U.S. HIGHWAY 71 OVER BLACKBURN CREEK AND DEADMAN HOLLOW
WASHINGTON COUNTY
ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: P.B.B. DATE: JAN. 1993
CHECKED BY: J.D.G./R.L.E. DATE: JAN. 1993
DESIGNED BY: J.H.R./N.D.T. DATE: JAN. 1993
SCALE: AS NOTED

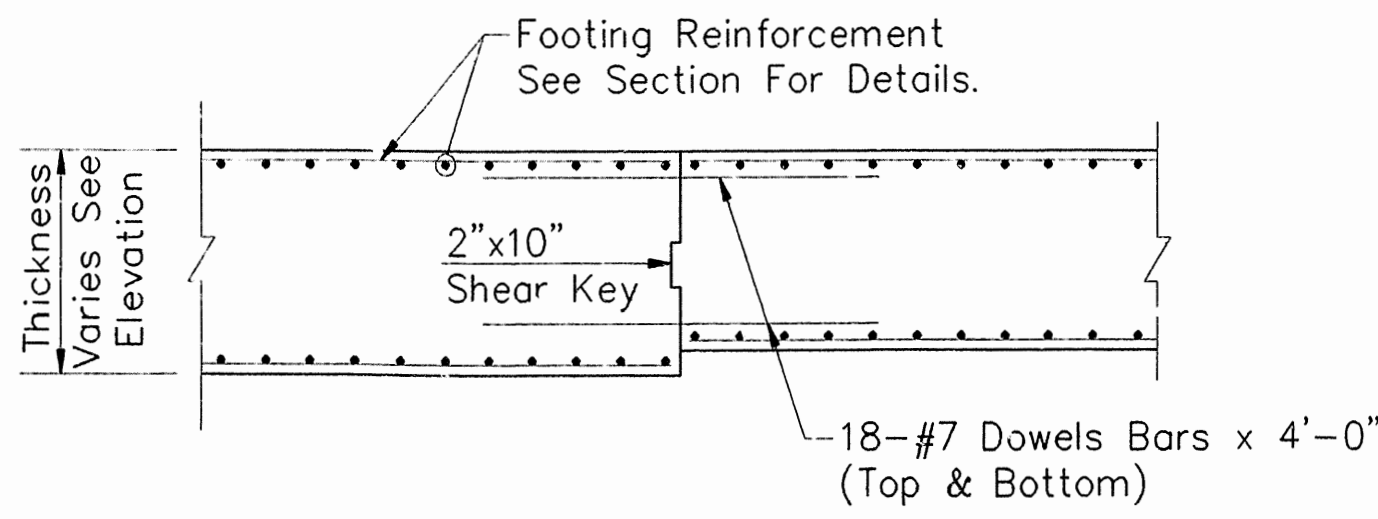
BRIDGE NO. 6479 A&B AND 6480 A&B DRAWING NO. 34032

BRIDGE ENGINEER

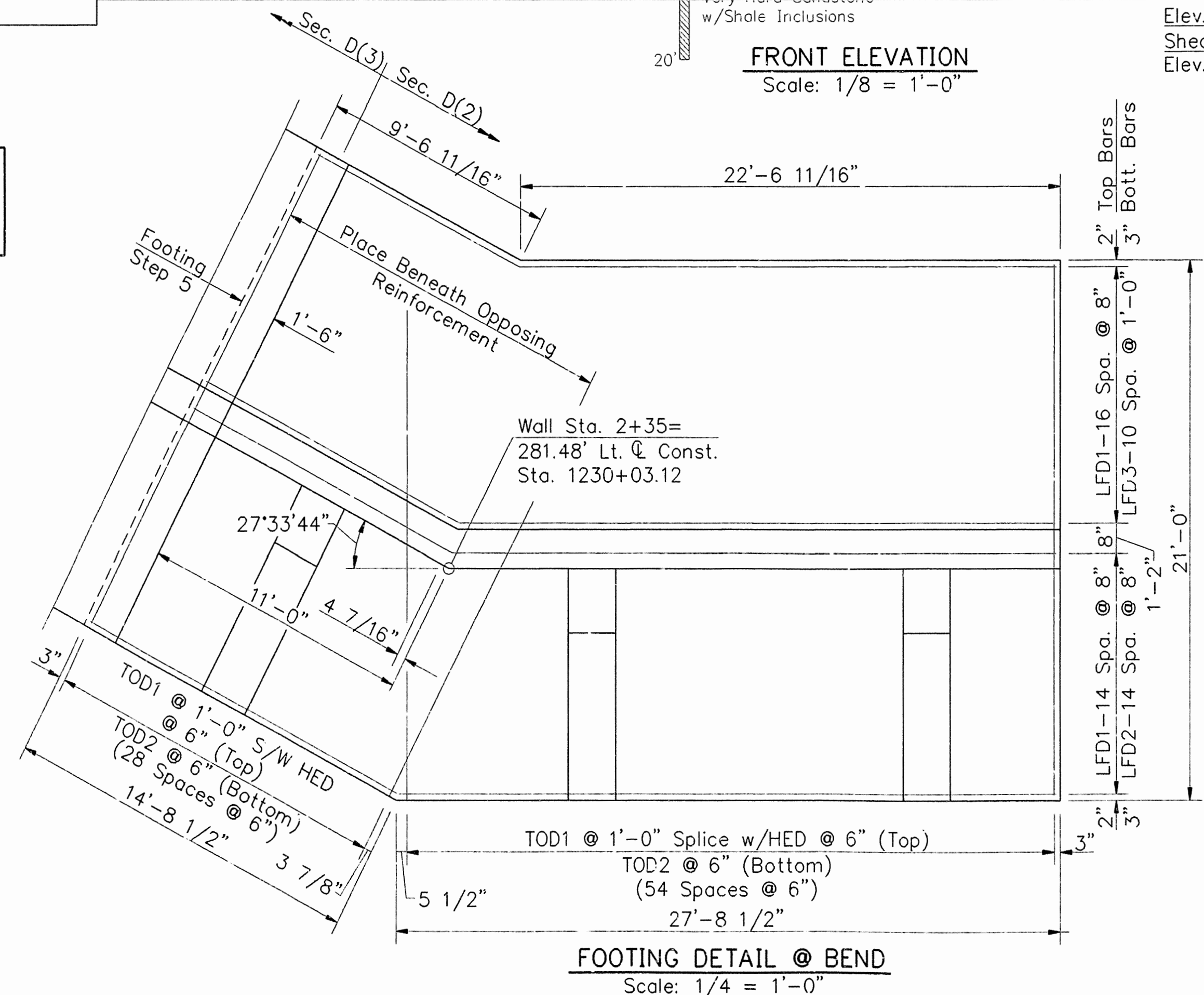
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				JOB NO. R40039		DTLS RETAINING WALL 34060		



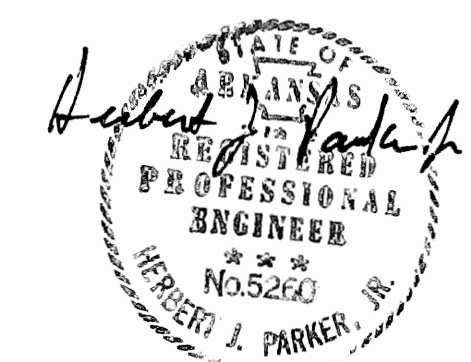
LEGEND
 C.J. - Construction Joint
 E.J. - Expansion Joint
 Ct. J. - Construction Joint



TYP. FOOTING CONSTRUCTION JOINT DETAIL
 Scale: None



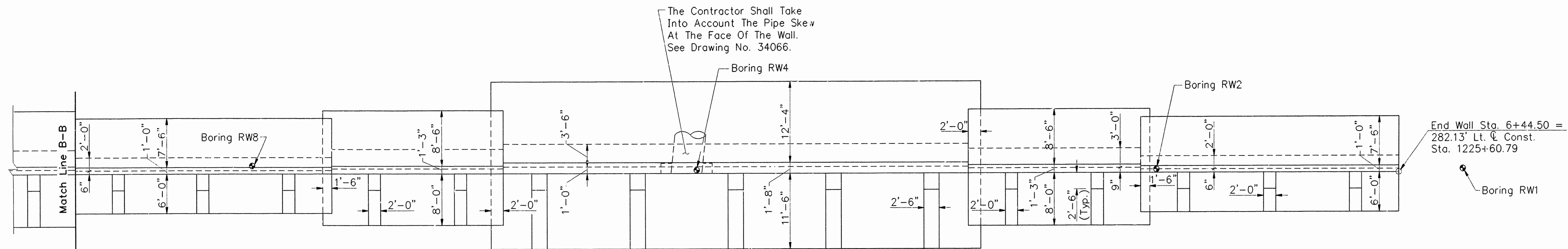
FOOTING DETAIL @ BEND
 Scale: 1/4 = 1'-0"



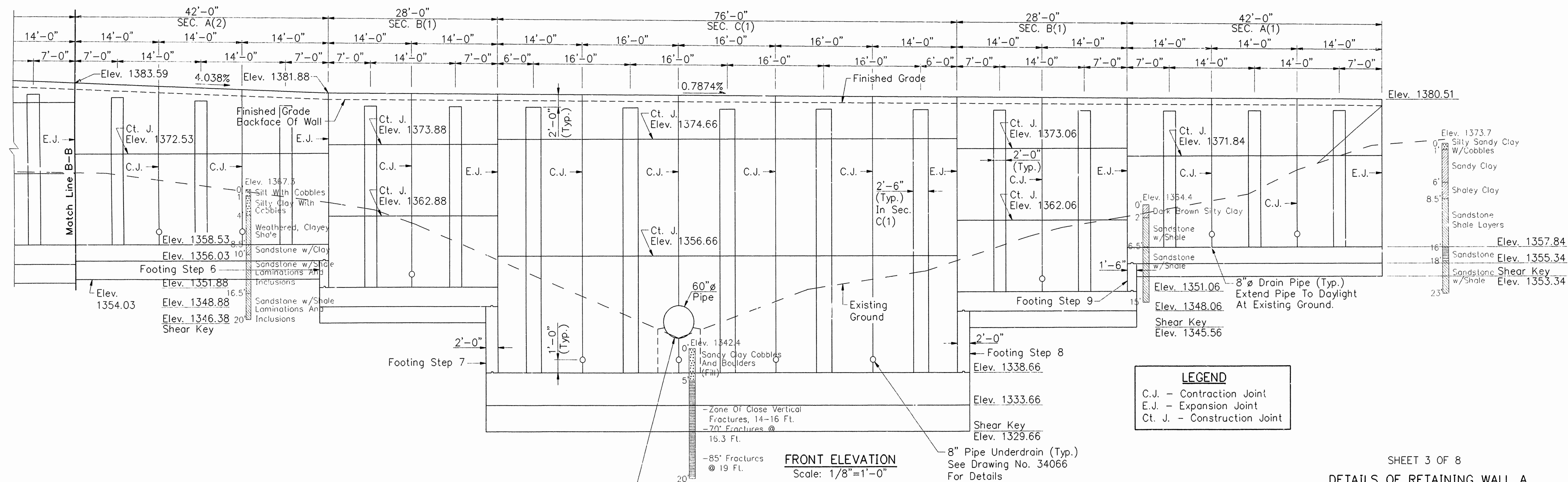
SHEET 2 OF 8
 DETAILS OF RETAINING WALL A
 U.S. HIGHWAY 71
 WASHINGTON COUNTY
 ROUTE 71 SEC. 16
ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 DRAWN BY: HEW DATE: MAR. 1993
 CHECKED BY: DCW DATE: MAR. 1993
 DESIGNED BY: JHR DATE: MAR. 1993
 SCALE: AS NOTED
 BRIDGE NO. DRAWING NO. 34060

HEW 71BRWA 91148010 4-1-93 21

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		119	
				JOB NO.		R40039		
				DTLS RETAINING WALL			34061	



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



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

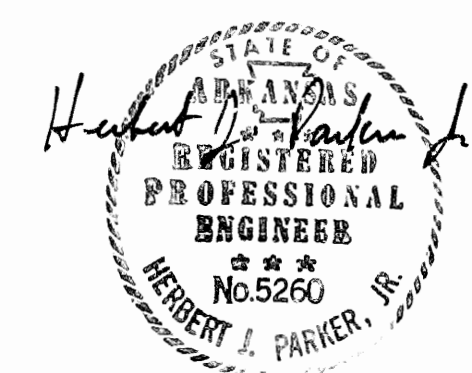
SHEET 3 OF 8
DETAILS OF RETAINING WALL A
U.S. HIGHWAY 71

WASHINGTON COUNTY
ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

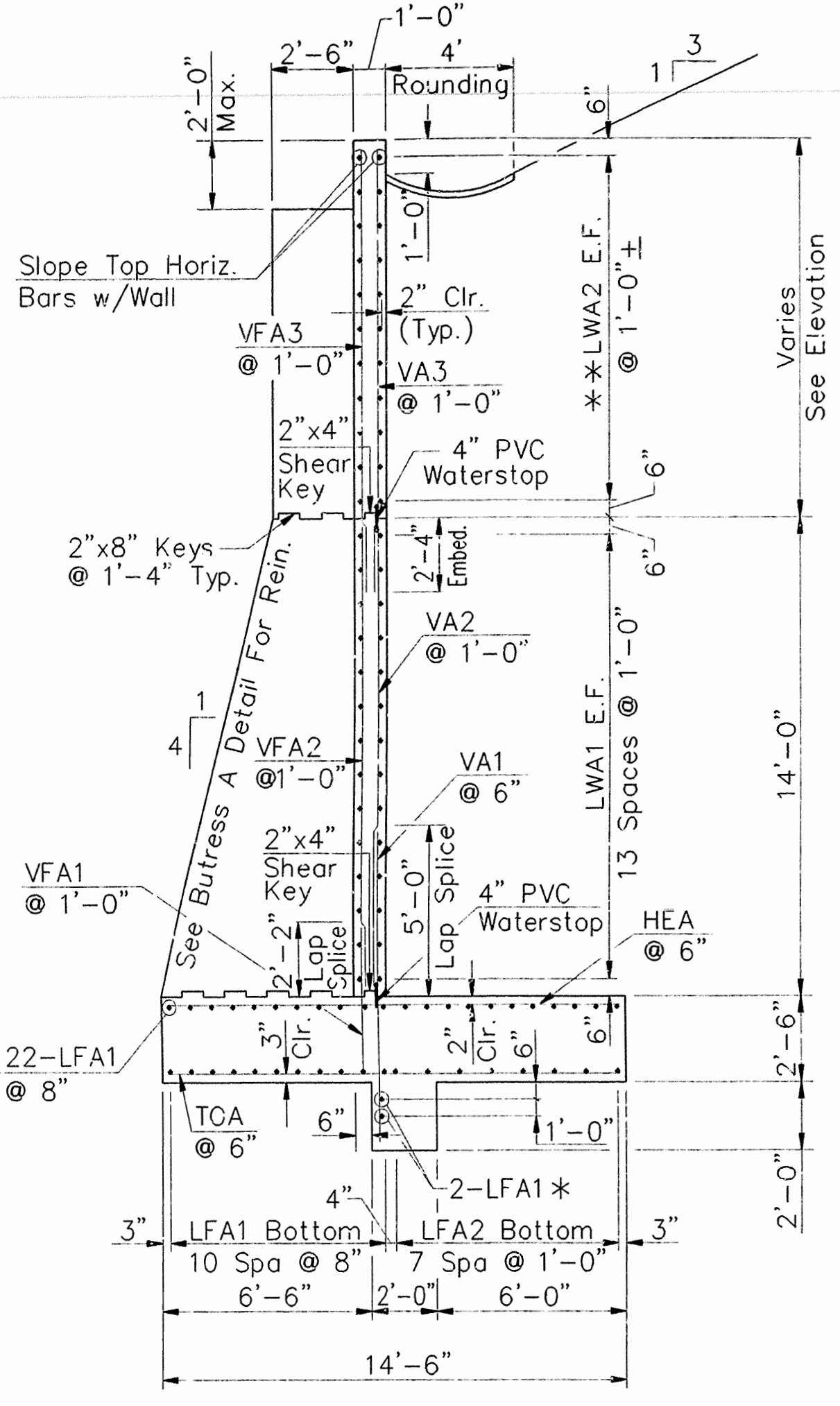
DRAWN BY: HEW DATE: MARCH 1993
CHECKED BY: DCW DATE: MARCH 1993
DESIGNED BY: JHR/DCW DATE: MARCH 1993

BRIDGE NO. DRAWING NO. 34061



HEW/HEW 71BWB 91148010 3-15-93 21

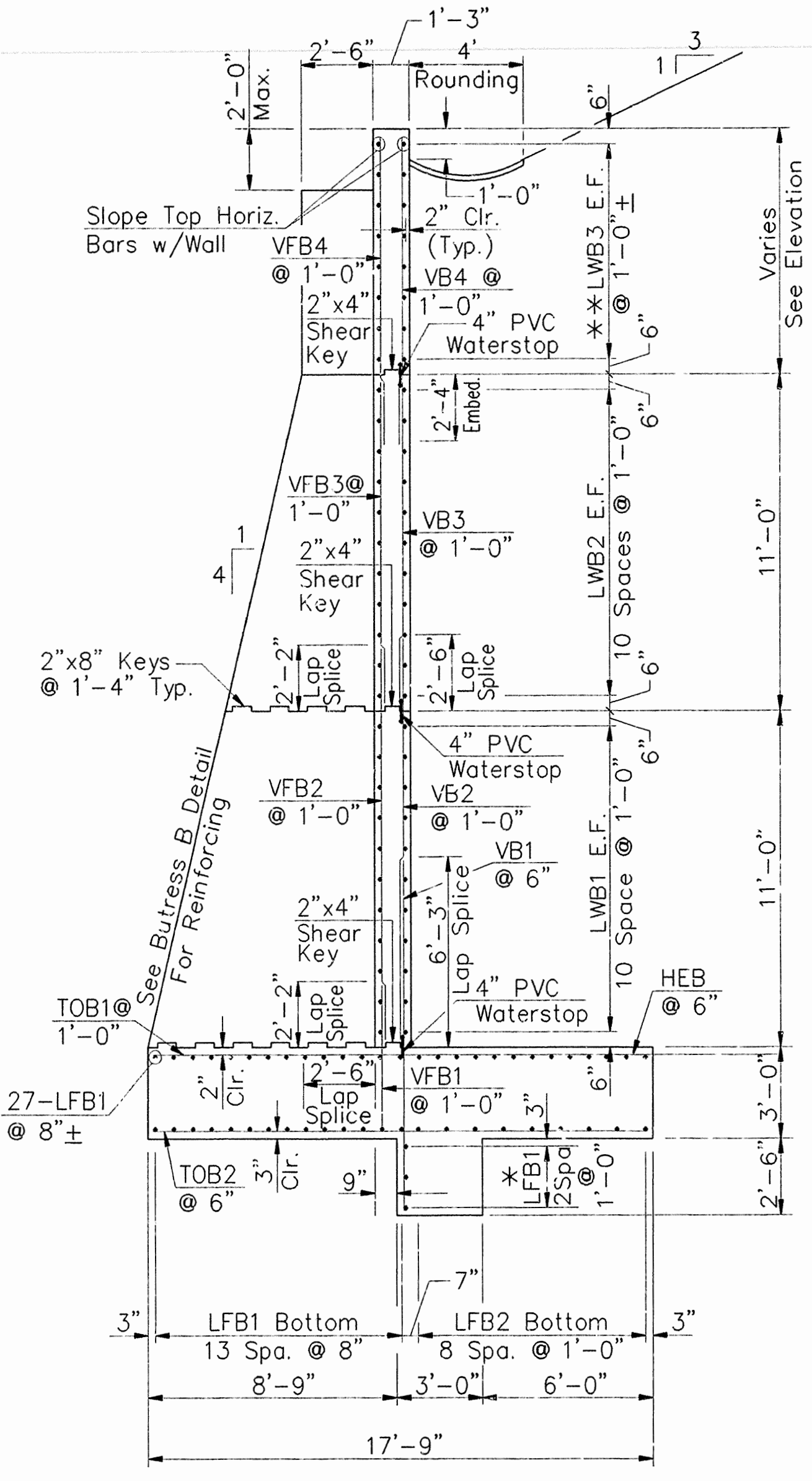
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				① DTLS RETAINING WALL				34062



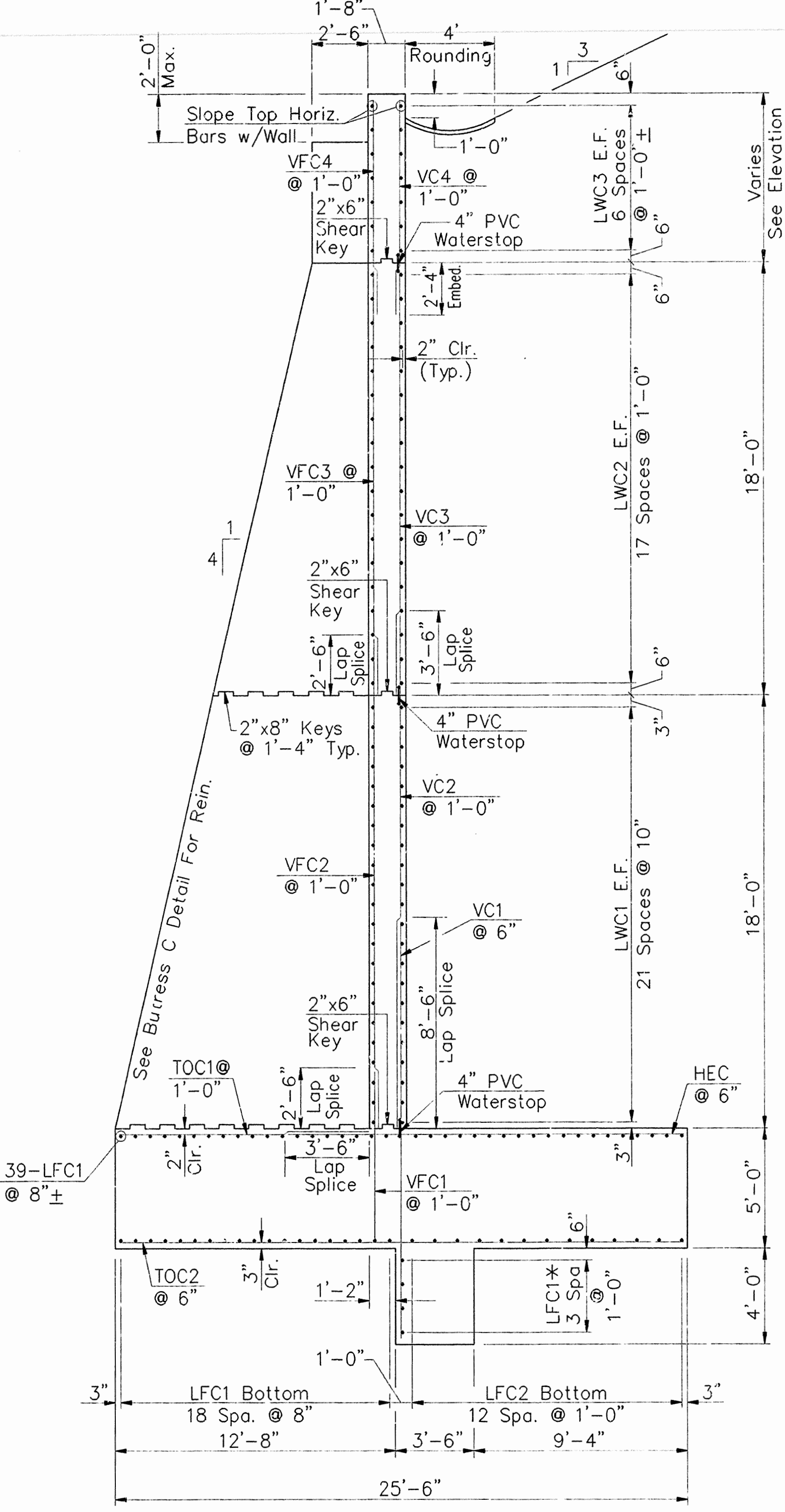
SECTION A
Scale: 1/4" = 1'-0"

* Trim Horizontal Bars In Shear Keys To Allow 2" Clearance At Footing Steps (As Required).

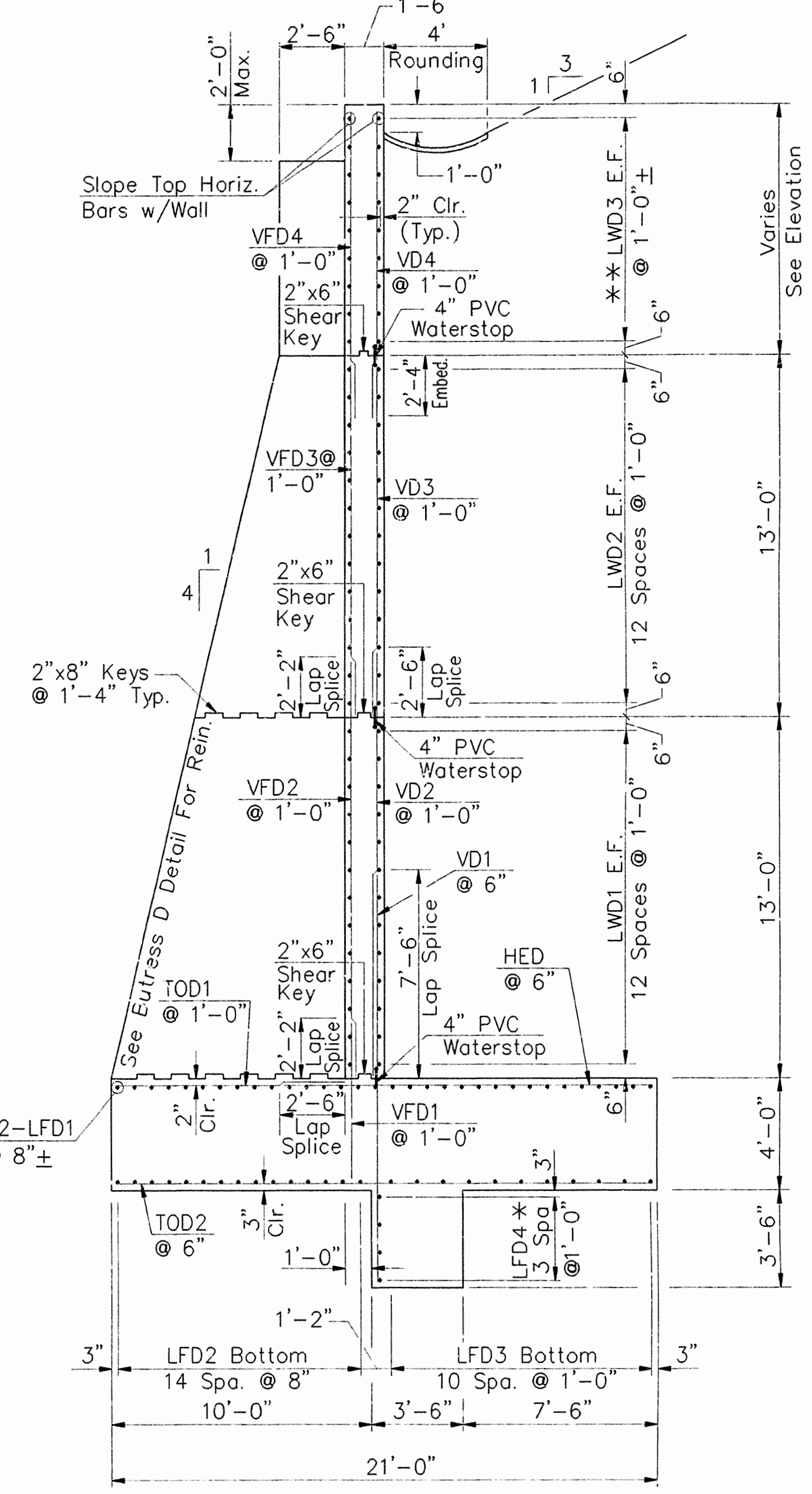
** Flare Spacing Of Horizontal Reinforcing To Account For Wall Slope In All Sections Except A(3), A(4), D(3) & D(4).



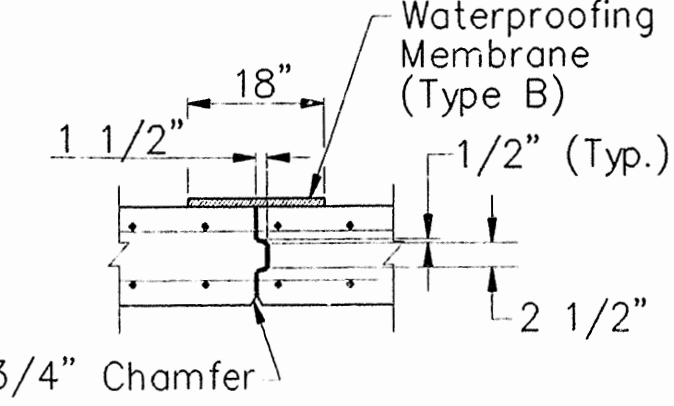
SECTION B
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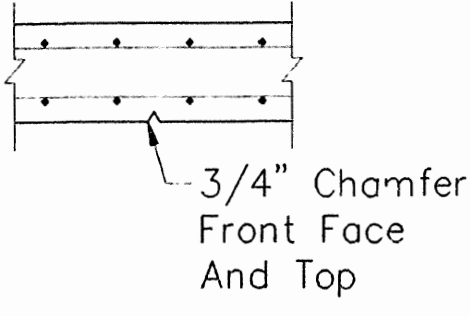
SECTION C
Scale: 1/4" = 1'-0"



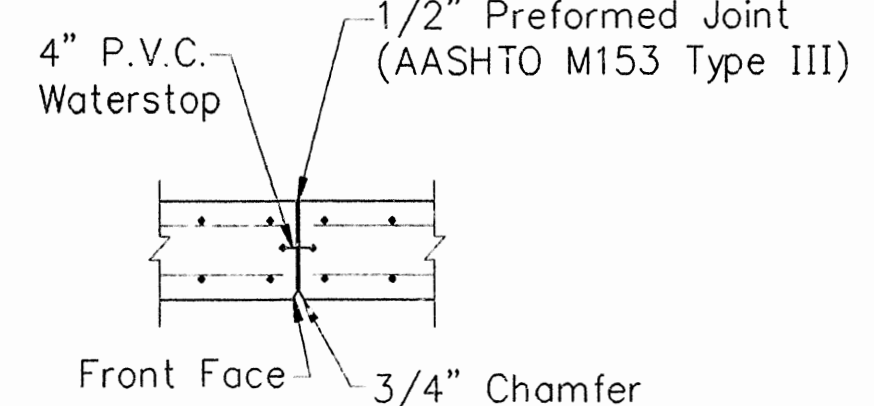
SECTION D
Scale: 1/4" = 1'-0"



CONSTRUCTION JOINT



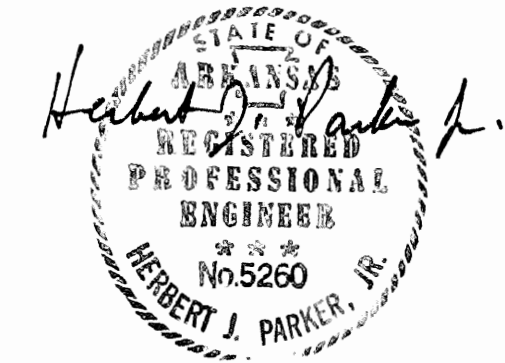
CONTRACTION JOINT



EXPANSION JOINT

Note:
Construction Joint May Be Combined With Contraction Joint Or Expansion Joint.

VERTICAL JOINT DETAILS



SHEET 4 OF 8
DETAILS OF RETAINING WALL A
U.S. HIGHWAY 71
WASHINGTON COUNTY
ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.
DRAWN BY: HEW DATE: MAR. 1993
CHECKED BY: PCW DATE: MAR. 1993
DESIGNED BY: JHR/DCW DATE: MAR. 1993

BRIDGE NO. DRAWING NO. 34062

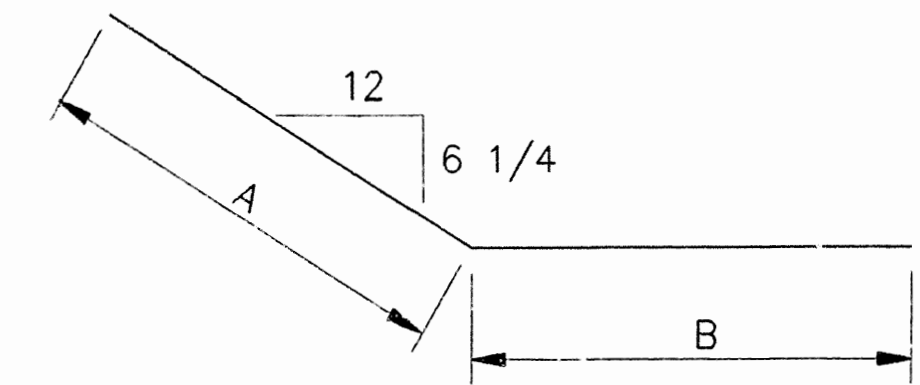
HEW 71BRW44 91148010 3-15-93 21

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		121	
				JOB NO.		R40039		
① DTLS RETAINING WALL								34063

WALL DIMENSIONS AND REINFORCEMENT SCHEDULE																											
FOOTING				TOE "TO"				HEEL "HE"				STEM "V"				FRONT FACE "VF"				"LW" BARS IN WALL				"LF" BARS IN FOOTING			
SECTION	TOE	HEEL	WIDTH	MARK	SIZE	NO.	LENGTH	MARK	SIZE	NO.	LENGTH	MARK	SIZE	NO.	LENGTH	MARK	SIZE	NO.	LENGTH	MARK	SIZE	NO.	LENGTH	MARK	SIZE	NO.	LENGTH
A (1)	6'-0"	7'-6"	14'-6"	TOA	#6	84	14'-0"	HEA	#6	84	14'-0"	VA1	#5	84	9'-3"	VFA1	#5	42	4'-6"	LWA1	#7	28	41'-8"	LFA1	#7	35	41'-8"
												VA2	#5	42	13'-10"	VFA2	#5	42	13'-10"	LWA2	#5	18	41'-8"	LFA2	#6	8	41'-8"
												VA3	#5	42	Varies 11'-2" To 10'-10"	VFA3	#5	42	Varies 11'-2" To 10'-10"								
A (2)	6'-0"	7'-6"	14'-6"	TOA	#6	84	14'-0"	HEA	#6	84	14'-0"	VA1	#5	84	9'-3"	VFA1	#5	42	4'-6"	LWA1	#7	28	41'-8"	LFA1	#7	35	41'-8"
												VA2	#5	42	13'-10"	VFA2	#5	42	13'-10"	LWA2	#5	22	41'-8"	LFA2	#6	8	41'-8"
												VA3	#5	42	Varies 13'-2" To 11'-6"	VFA3	#5	42	Varies 13'-2" To 11'-6"								
A (3)	6'-0"	7'-6"	14'-6"	TOA	#6	87	14'-0"	HEA	#6	87	14'-0"	VA1	#5	84	9'-3"	VFA1	#5	42	4'-6"	LWA1	#7	28	41'-8"	LFA1	#7	35	42'-8"
(2 Sections Req'd)												VA2	#5	42	13'-10"	VFA2	#5	42	13'-10"	LWA2	#5	2	42'-5"(Placed Along Slope)	LFA2	#6	8	42'-8"
												VA3	#5	42	Varies 11'-2" To 3'-0"	VFA3	#5	42	Varies 11'-2" To 3'-0"			7EF	Varies 6'-8" To 37'-4"				
																					2	41'-8" (Placed Hor.)					
A (4)	6'-0"	7'-6"	14'-6"	TOA	#6	55	14'-0"	HEA	#6	55	14'-0"	VA1	#5	56	9'-3"	VFA1	#5	28	4'-6"	LWA1	#7	28	27'-8"	LFA1	#7	35	27'-8"
												VA2	#5	28	13'-10"	VFA2	#5	28	13'-10"	LWA2	#5	2	28'-2"(Placed Along Slope)	LFA2	#6	8	27'-8"
												VA3	#5	28	Varies 11'-2" To 5'-9"	VFA3	#5	28	Varies 11'-2" To 5'-9"			5EF	Varies 6'-8" To 27'-3"				
																					6	27'-8" (Placed Hor.)					
B (1)	8'-0"	8'-6"	17'-9"	TOB1	#6	30	7'-9"	HEB	#8	59	12'-0"	VB1	#6	56	11'-6"	VFB1	#5	28	5'-0"	LWB1	#7	22	27'-8"	LFB1	#7	44	29'-2"
(2 Sections Req'd)				TOB2	#7	59	17'-3"					VB2	#6	28	13'-6"	VFB2	#5	28	13'-2"	LWB2	#6	22	27'-8"	LFB2	#6	9	29'-2"
												VB3	#6	28	10'-10"	VFB3	#5	28	10'-10"	LWB3	#5	16	27'-8"				
												VB4	#5	28	Varies 10'-2" To 10'-0"	VFB4	#5	28	Varies 10'-2" To 10'-0"								
B (2)	8'-0"	8'-6"	17'-9"	TOB1	#6	84	7'-9"	HEB	#8	168	12'-0"	VB1	#6	168	11'-6"	VFB1	#5	84	5'-0"	LWB1	#7	22	* 83'-8"	LFB1	#7	44	* 83'-8"
				TOB2	#7	168	17'-3"					VB2	#6	84	13'-6"	VFB2	#5	84	13'-2"	LWB2	#6	22	* 83'-8"	LFB2	#6	9	* 83'-8"
												VB3	#6	84	10'-10"	VFB3	#5	84	10'-10"	LWB3	#5	16	* 83'-8"				
												VB4	#5	84	Varies 10'-4" To 6'-11"	VFB4	#5	84	Varies 10'-4" To 6'-11"								
B (3)	8'-0"	8'-6"	17'-9"	TOB1	#6	42	7'-9"	HEB	#8	84	12'-0"	VB1	#6	84	11'-6"	VFB1	#5	42	5'-0"	LWB1	#7	22	41'-8"	LFB1	#7	44	41'-8"
				TOB2	#7	84	17'-3"					VB2	#6	42	13'-6"	VFB2	#5	42	13'-2"	LWB2	#6	22	41'-8"	LFB2	#6	9	41'-8"
												VB3	#6	42	10'-10"	VFB3	#5	42	10'-10"	LWB3	#5	10	41'-8"				
												VB4	#5	42	Varies 6'-11" To 5'-3"	VFB4	#5	42	Varies 6'-11" To 5'-3"								
C (1)	11'-6"	12'-4"	25'-6"	TOC1	#7	80	11'-3"	HEC	#10	160	17'-6"	VC1	#7	152	17'-3"	VFC1	#6	76	7'-3"	LWC1	#7	44	* 75'-8"	LFC1	#7	62	* 79'-8"
				TOC2	#9	160	25'-0"					VC2	#7	76	21'-6"	VFC2	#6	76	20'-6"	LWC2	#7	36	* 75'-8"	LFC2	#6	13	* 76'-8"
												VC3	#7	76	17'-10"	VFC3	#6	76	17'-10"	LWC3	#5	14	* 75'-8"				
												VC4	#5	76	Varies 9'-2" To 8'-7"	VFC4	#5	76	Varies 9'-2" To 8'-7"								
D (1)	9'-0"	10'-6"	21'-0"	TOD1	#6	42	8'-9"	HED	#8	84	14'-3"	VD1	#6	84	14'-9"	VFD1	#5	42	6'-0"	LWD1	#7	26	41'-8"	LFD1	#7	32	41'-8"
				TOD2	#8	84	20'-6"					VD2	#6	42	15'-6"	VFD2	#5	42	15'-2"	LWD2	#6	26	41'-8"	LFD2	#7	15	41'-8"
												VD3	#6	42	12'-10"	VFD3	#5	42	12'-10"	LWD3	#5	12	41'-8"	LFD3	#6	11	41'-8"
												VD4	#5	42	Varies 8'-0" To 6'-4"	VFD4	#5	42	Varies 8'-0" To 6'-4"					LFD4	#7	4	41'-8"
D (2)	9'-0"	10'-6"	21'-0"	TOD1	#6	43	8'-9"	HED	#8	84	14'-3"	VD1	#7	73	14'-9"	VFD1	#5	37	6'-0"	LWD1	#8	26	35'-6"	LFD1	#8	32	Varies 31'-6" To 42'-0"
				TOD2	#8	84	20'-6"					VD2	#6	36	15'-6"	VFD2	#5	37	15'-2"	LWD2	#7	26	35'-6"	LFD2	#8	15	Varies 37'-5" To 42'-0"
												VD3	#6	36	12'-10"	VFD3	#5	37	12'-10"	LWD3	#5	18	35'-6" (Field Bend)	LFD3	#6	11	Varies 31'-6" To 36'-10"
												VB4	#5	36	Varies 11'-2" To 8'-0"	VFD4	#5	37	Varies 11'-2" To 8'-0"					LFD4	#7	4	35'-6"
D (3)	9'-0"	10'-6"	21'-0"	TOD1	#6	30	8'-9"	HED	#8	59	14'-3"	VD1	#6	56	14'-9"	VFD1	#5	28	6'-0"	LWD1	#7	26	27'-8"	LFD1	#7	32	29'-0"
				TOD2	#8	59	20'-6"					VD2	#5	28	15'-6"	VFD2	#5	28	15'-2"	LWD2	#6	26	27'-8"	LFD2	#7	15	29'-0"
												VD3	#6	28	12'-10"	VFD3	#5	28	12'-10"	LWD3	#5	2	28'-2" (Placed Along Slope)	LFD3	#6	11	29'-0"
												VD4	#5	28	Varies 11'-2" To 5'-9"	VFD4	#5	28	Varies 11'-2" To 5'-9"			5EF	Varies 6'-8" To 27'-3"	LFD4	#7	4	27'-8"
																					6	27'-8" (Placed Hor.)					
D (4)	9'-0"	10'-6"	21'-0"	TOD1	#6	44	8'-9"	HED	#8	87	14'-3"	VD1	#6	84	14'-9"	VFD1	#5	42	6'-0"	LWD1	#7	26	41'-8"	LFD1	#7	32	43'-0"
(2 Sections Req'd)				TOD2	#8	87	20'-6"					VD2	#6	42	15'-6"	VFD2	#5	42	15'-2"	LWD2	#6	26	41'-8"	LFD2	#7	15	43'-0"
												VD3	#6	42	12'-10"	VFD3	#5	42	12'-10"	LWD3	#5	2	42'-5" (Placed Along Slope)	LFD3	#6	11	43'-0"
												VD4	#5	42	Varies 11'-2" To 3'-0"	VFD4	#5	42	Varies 11'-2" To 3'-0"			7EF	Varies 6'-8" To 37'-4"	LFD4	#7	4	41'-8"
																					2	41'-8" (Placed Hor.)					

* Length Shown Does Not Include Lap Splices. For Length Of Min. Lap Splice Required, See "Table Of Min. Lap Splices". Lap Splices Shall Be Staggered So That No More Than 50% Of The Bars Are Spliced At One Location.

TABLE MINIMUM LAP SPLICE	
BAR SIZE	MIN. LAP SPLICE LENGTH
#5	2'-2"
#6	2'-6"
#7	3'-6"
#8	4'-7"
#9	5'-9"

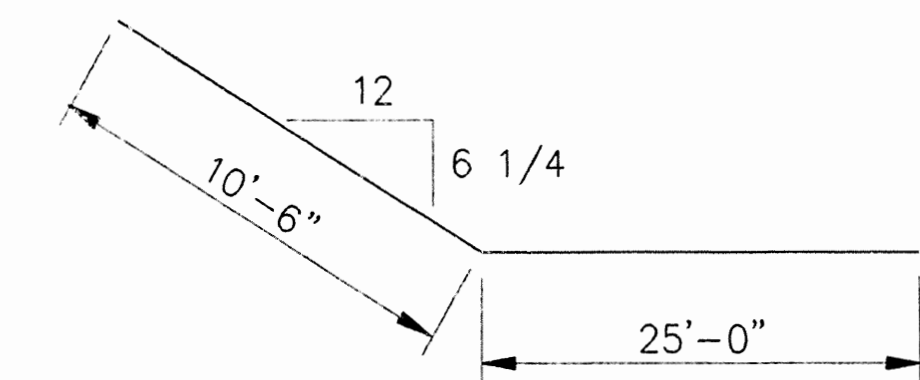


LFD1, LFD2, LFD3

LEGEND

EF = Each Face

SECTION D(2) ONLY		
TABLE OF BAR VARIABLES		
MARK	A	B
LFD1	Varies 9'-2" To 14'-6"	Varies 22'-4" To 27'-6"
LFD2	Varies 12'-3" To 14'-6"	Varies 25'-2" To 27'-6"
LFD3	Varies 9'-2" To 11'-11"	Varies 22'-4" To 24'-11"



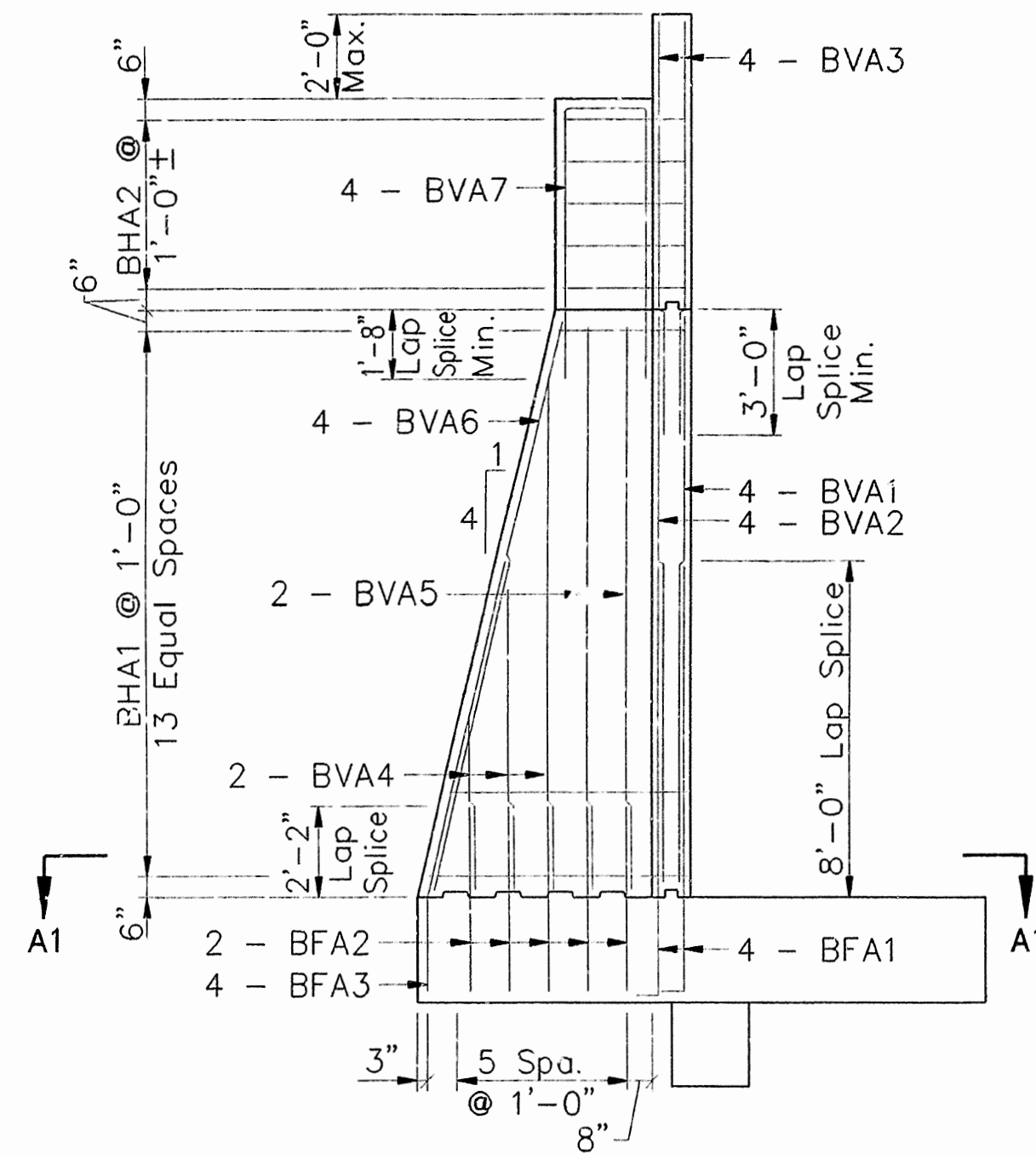
LWD1, LWD2, LFD4

Section D(2) Only

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		122	
				JOB NO.	R40039			

DTLS RETAINING WALL 34064

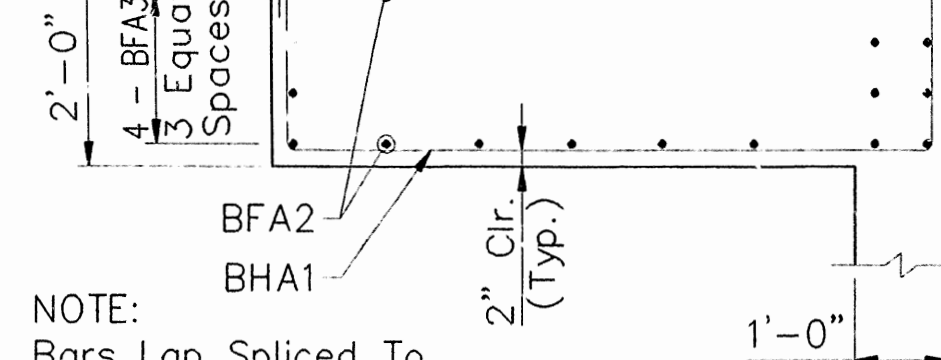
- NOTES:
1. Number Of BHA2 Bars Varies Per Buttress.
 2. Height Of The Upper Lift Varies. See Front Elevation And Details On Drawings 34059, 34061, 34062 & 34063.



BUTTRESS A

Scale: 1/4" = 1'-0"

See Drawings 34059, 34061, 34062 & 34063 For Wall And Footing Reinforcing

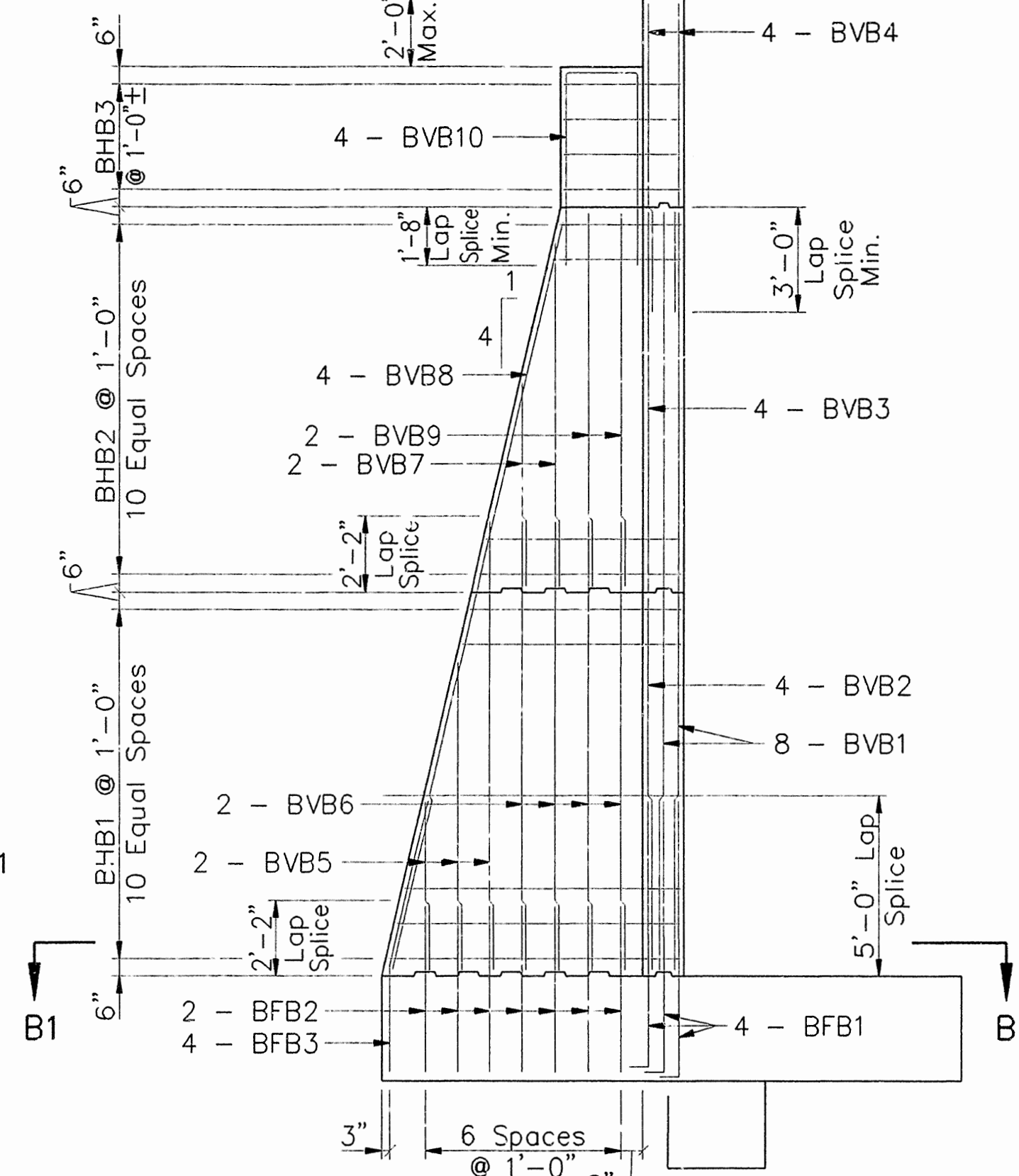


NOTE:
Bars Lap Spliced To Dowel Bars Not Shown For Clarity.

SECTION A1-A1

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

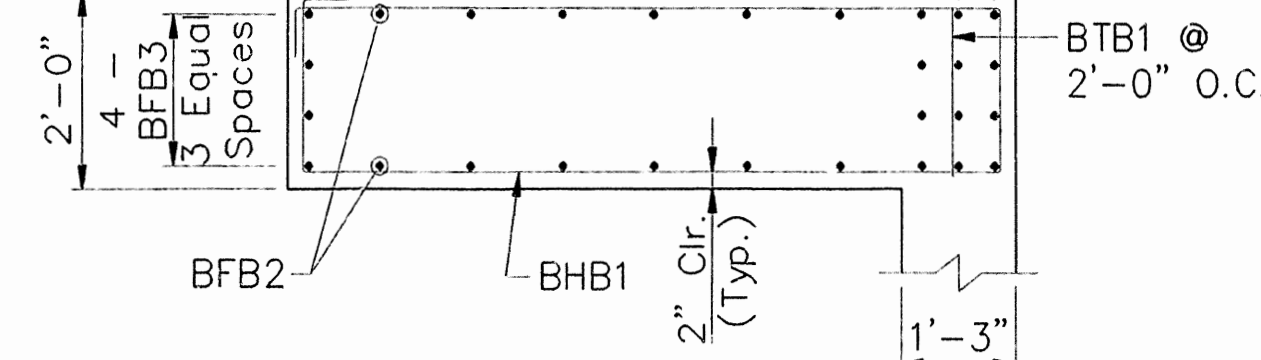
- NOTES:
1. Number Of BHB3 Bars Varies Per Buttress.
 2. Height Of The Upper Lift Varies. See Front Elevation And Details On Drawings 34060, 34061, 34062, & 34063.



BUTTRESS B

Scale: 1/4" = 1'-0"

See Drawing No.'s 34060, 34061, 34062 & 34063 For Wall And Footing Reinforcing

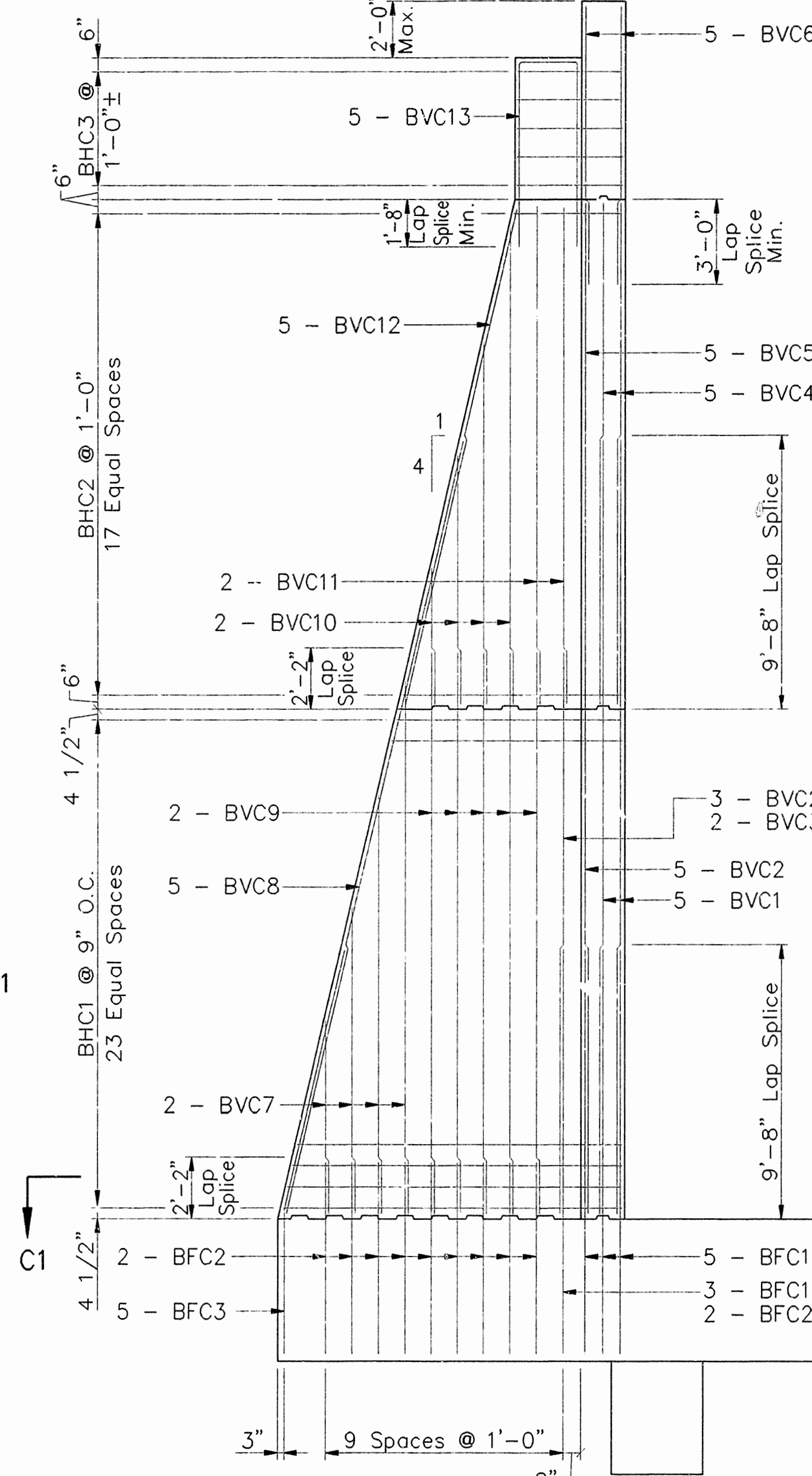


SECTION B1-B1

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

NOTE:
Bars Lap Spliced To Dowel Bars Not Shown For Clarity.

- NOTES:
1. Number Of BHC3 Bars Varies Per Buttress.
 2. Height Of The Upper Lift Varies. See Front Elevation And Details On Drawings 34061, 34062 & 34063.

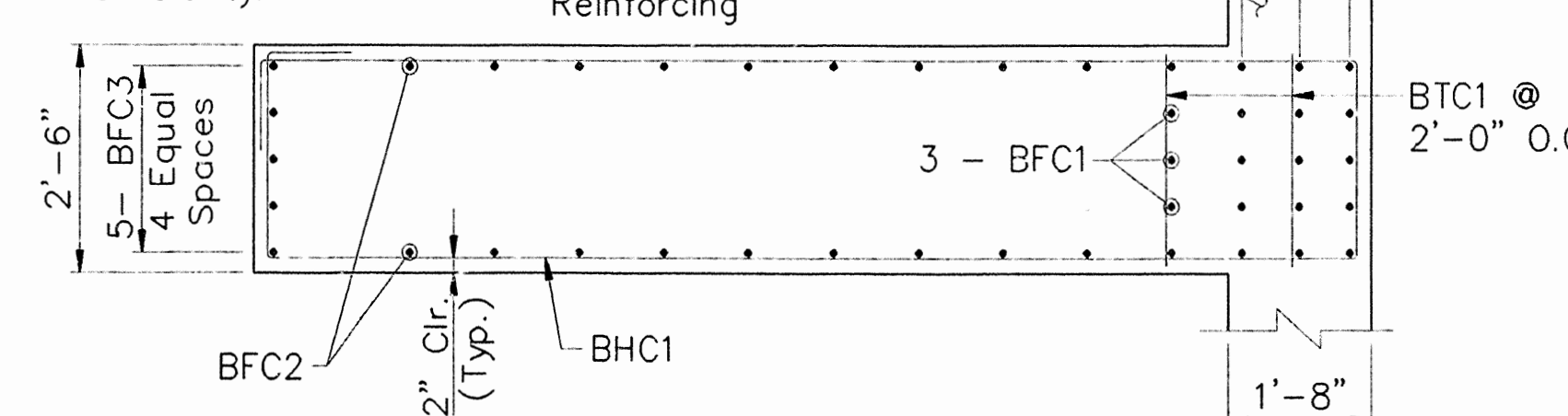


BUTTRESS C

Scale: 1/4" = 1'-0"

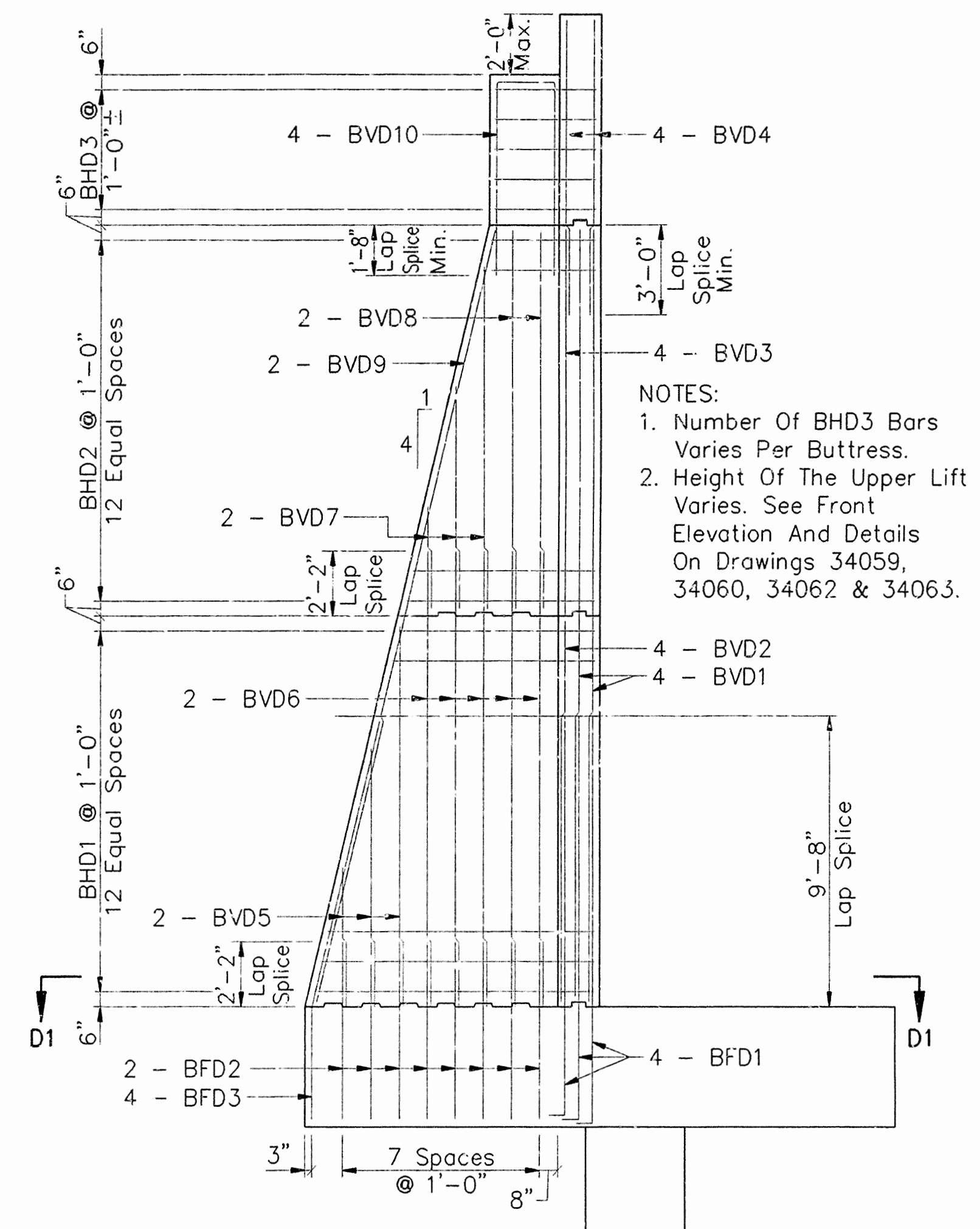
NOTE:
Bars Lap Spliced To Dowel Bars Not Shown For Clarity.

See Drawing No.'s 34061, 34062 & 34063 For Wall And Footing Reinforcing



SECTION C1-C1

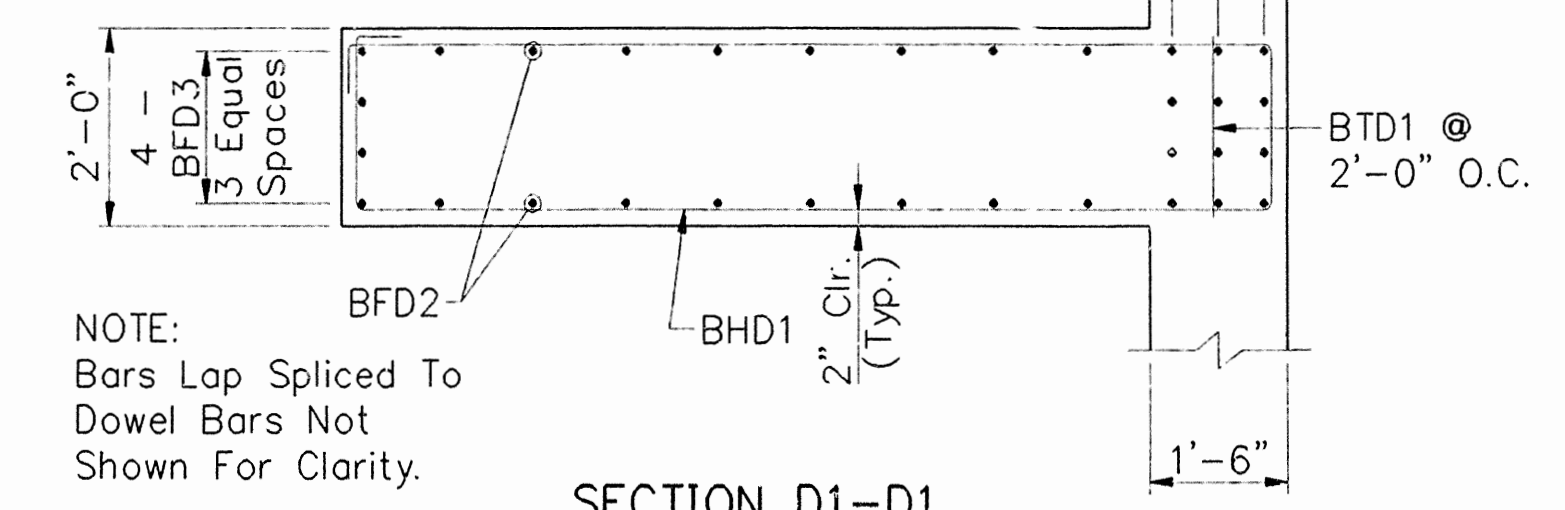
Scale: 1/2" = 1'-0"



BUTTRESS D

Scale: 1/4" = 1'-0"

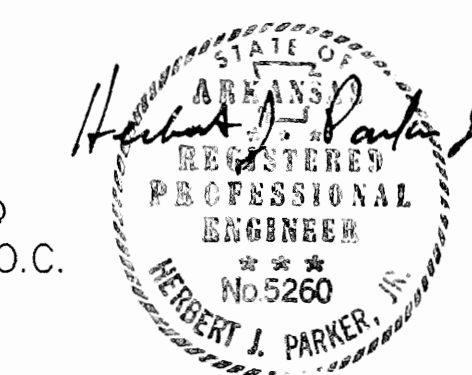
See Drawings 34059, 34060, 34062 & 34063 For Wall And Footing Reinforcing



NOTE:
Bars Lap Spliced To Dowel Bars Not Shown For Clarity.

SECTION D1-D1

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



SHEET 6 OF 8
DETAILS OF RETAINING WALL A
U.S. HIGHWAY 71

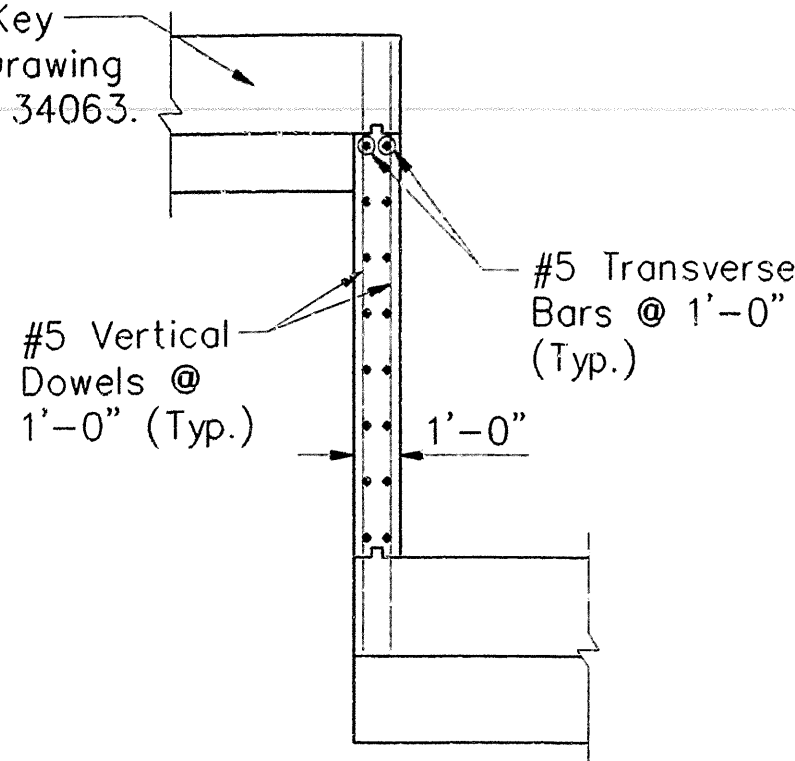
WASHINGTON COUNTY
ROUTE 8
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: JBM DATE: MARCH 1993
CHECKED BY: DCW DATE: MARCH 1993
DESIGNED BY: JHR/DCW DATE: MARCH 1993

BRIDGE NO. DRAWING NO. 34064

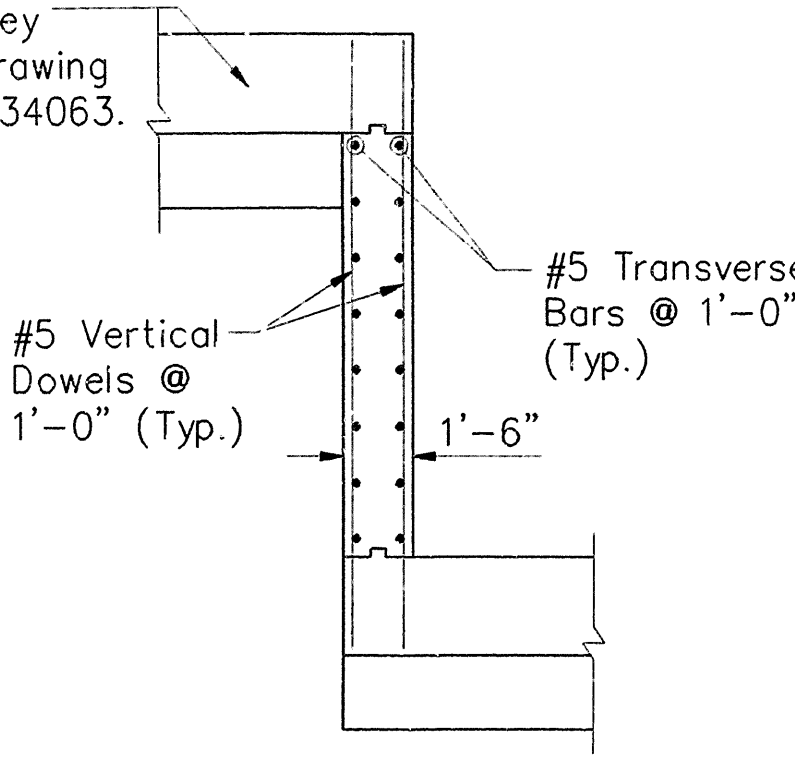
BRIDGE ENGINEER

For Footing And Key
Reinforcing, See Drawing
No.'s 34059 Thru 34063.



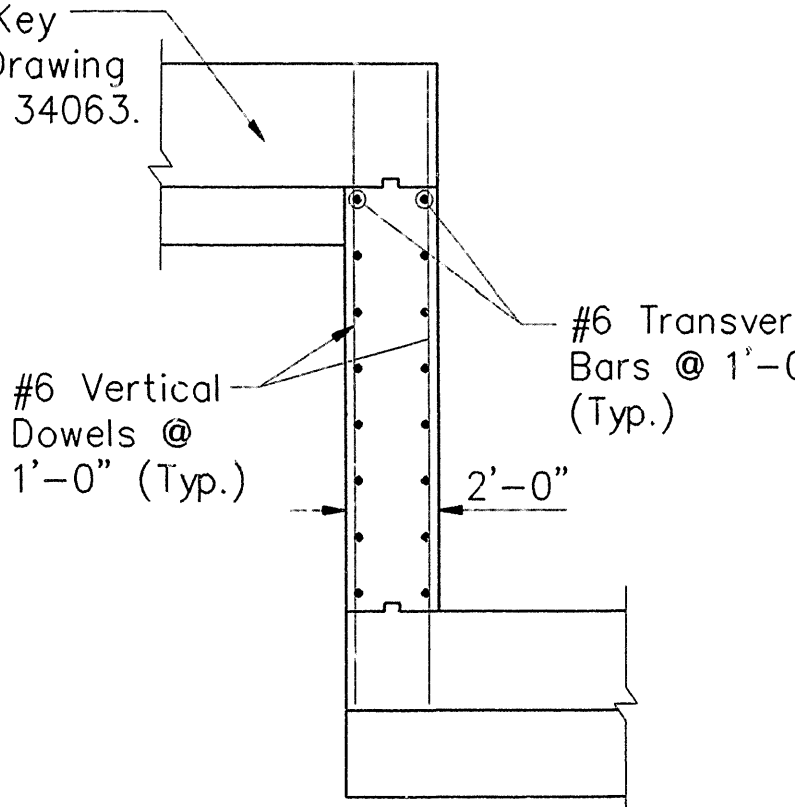
FOOTING STEPS 1 & 2 REINFORCEMENT DETAIL
Scale: None

For Footing And Key
Reinforcing, See Drawing
No.'s 34059 Thru 34063.



FOOTING STEPS 3-6 & 9 REINFORCEMENT DETAIL
Scale: None

For Footing And Key
Reinforcing, See Drawing
No.'s 34059 Thru 34063.

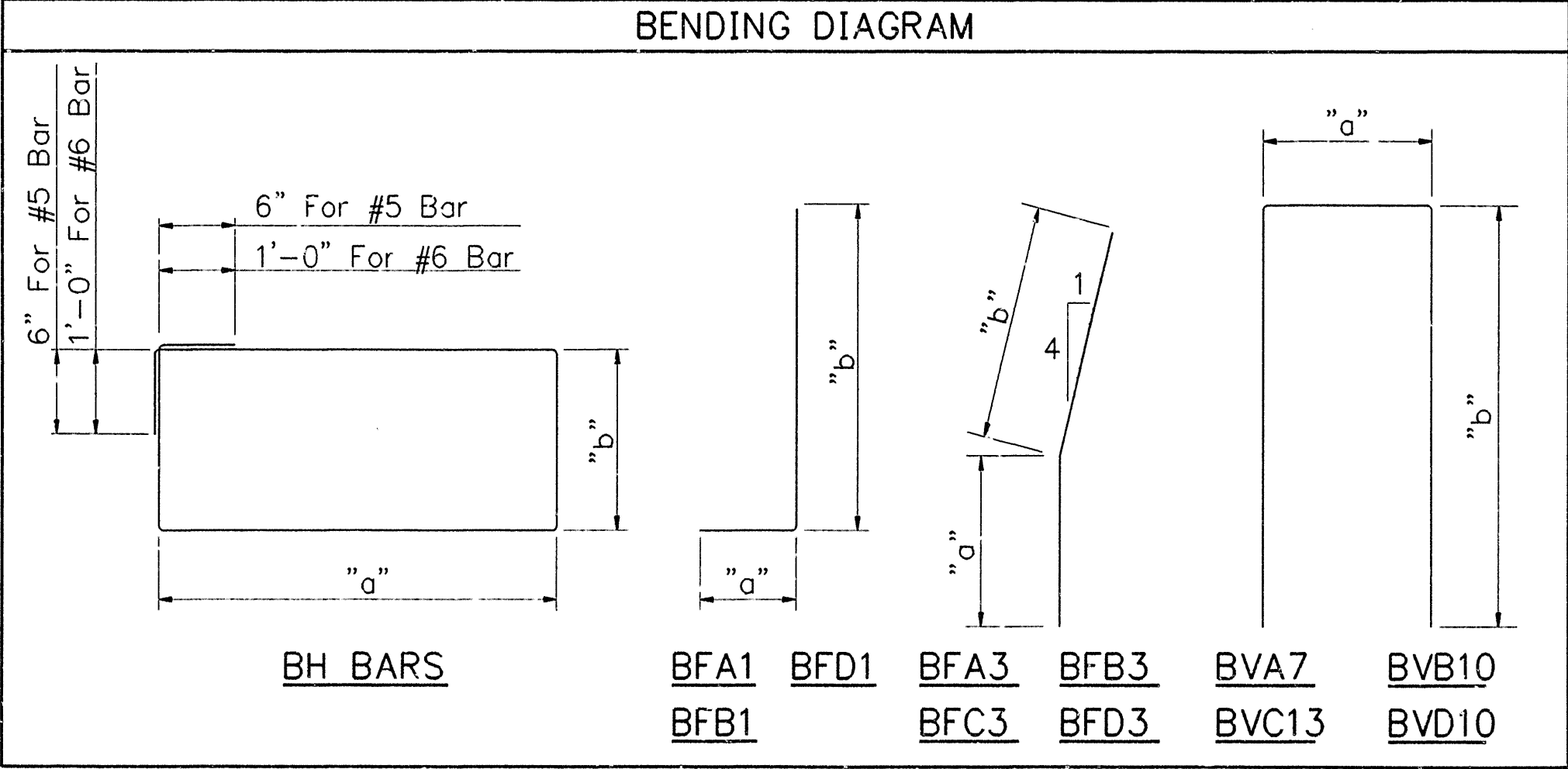


FOOTING STEPS 7 & 8 REINFORCEMENT DETAIL
Scale: None

FOOTING STEP REINFORCEMENT							
VERTICAL DOWELS				TRANSVERSE BARS			
STEP	SIZE	NO.	LENGTH	STEP	SIZE	NO.	LENGTH
1	#5	30	7'-7 1/2"	1	#5	12	14'-3"
2	#5	30	10'-4"	2	#5	14	14'-3"
3	#5	20	23'-10"	3	#5	18	14'-3"
4 *	#5	26	11'-10"	4	#5	16	20'-9"
5	#5	26	9'-1 1/2"	5	#5	10	20'-9"
6	#5	26	9'-4"	6	#5	16	14'-3"
7	#6	26	17'-10 1/2"	7	#6	16	17'-5"
8	#6	26	17'-1"	8	#6	16	17'-5"
9	#5	26	9'-5 1/2"	9	#5	16	14'-3"

* There Are Two Footing Step 4's.

BUTTRESS REINFORCEMENT SCHEDULE (PER BUTTRESS)							
BUTTRESS	MARK	SIZE	NO.	LENGTH	"a"	"b"	Pin. Dia.
A Common Bars	BFA1	#9	8	11'-8"	1'-8"	10'-3"	9"
	BFA2	#6	10	4'-5"			STR.
	BFA3	#7	4	10'-6"	2'-6"	8'-0"	5 1/4"
	BVA1	#9	4	13'-10"			STR.
	BVA2	#7	4	13'-10"			STR.
	BVA3	#7	8	13'-10"			STR.
	BVA4	#6	3EF	Varies 4'-8" To 12'-8"			STR.
	BVA5	#6	4	13'-10"			STR.
	BVA6	#7	4	14'-3"			STR.
	BVA7	#5	4	22'-11 1/2"	2'-2"	10'-6"	2 1/2"
	BHA1	#5	14	Varies 16'-11" To 10'-5"	Varies 6'-6 1/2" To 3'-3 1/2"	1'-8"	2 1/2"
* SECT. A(1)	BHA2	#5	21	10'-2"	3'-2"	1'-8"	2 1/2"
* SECT. A(2)	BHA2	#5	25	10'-2"	3'-2"	1'-8"	2 1/2"
* SECT. A(3)	BHA2	#5	9	10'-2"	3'-2"	1'-8"	2 1/2"
* SECT. A(4)	BHA2	#5	9	10'-2"	3'-2"	1'-8"	2 1/2"
B Common Bars	BFB1	#9	12	9'-2"	1'-8"	7'-9"	9"
	BFB2	#6	14	4'-11"			STR.
	BFB3	#8	4	8'-0"	3'-0"	5'-0"	6"
	BVB1	#9	8	21'-10"			STR.
	BVB2	#9	4	10'-10"			STR.
	BVB3	#7	4	10'-10"			STR.
	BVB4	#7	8	10'-10"			STR.
	BVB5	#6	3EF	Varies 4'-8" To 12'-8"			STR.
	BVB6	#6	8	13'-2"			STR.
	BVB7	#6	2EF	Varies 5'-8" To 9'-8"			STR.
	BVB8	#7	4	22'-6"			STR.
	BVB9	#6	4	10'-10"			STR.
	BVB10	#5	4	16'-11 1/2"	2'-2"	7'-6"	2 1/2"
	BTB1	#5	12	2'-0"			STR.
	BHB1	#6	11	Varies 22'-11" To 17'-1"	Varies 8'-9 1/2" To 6'-3 1/2"	1'-8"	4 1/2"
	BHB2	#5	11	Varies 15'-11" To 10'-11"	Varies 6'-0 1/2" To 3'-6 1/2"	1'-8"	2 1/2"
* SECT. B(1)	BHB3	#5	12	10'-8"	3'-5"	1'-8"	2 1/2"
* SECT. B(2)	BHB3	#5	27	10'-8"	3'-5"	1'-8"	2 1/2"
* SECT. B(3)	BHB3	#5	5	10'-8"	3'-5"	1'-8"	2 1/2"



* The Number Of Bars Shown For Bars BHA2, BHB3, BHC3, And BHD3
Are For The Entire Section Shown.

BUTTRESS REINFORCEMENT SCHEDULE (PER BUTTRESS)							
BUTTRESS	MARK	SIZE	NO.	LENGTH	"a"	"b"	Pin. Dia.
C Common Bars	BFC1	#11	18	14'-5"			STR.
	BFC2	#7	20	6'-11"			STR.
	BFC3	#8	5	14'-6"	5'-0"	9'-6"	6"
	BVC1	#11	10	27'-8"			STR.
	BVC2	#11	8	17'-10"			STR.
	BVC3	#6	2	20'-2"			STR.
	BVC4	#11	10	17'-10"			STR.
	BVC5	#7	5	17'-10"			STR.
	BVC6	#7	10	9'-10"			STR.
	BVC7	#6	4EF	Varies 6'-8" To 18'-8"			STR.
D Common Bars	BVC8	#8	5	28'-6"			STR.
	BVC9	#6	10	20'-2"			STR.
	BVC10	#6	4EF	Varies 4'-8" To 16'-8"			STR.
	BVC11	#6	4	17'-10"			STR.
	BVC12	#8	5	18'-4"			STR.
	BVC13	#5	5	15'-2"	2'-2"	6'-6"	2 1/2"
	BTC1	#5	27	2'-2"			STR.
	BHC1	#6	24	Varies 31'-0" To 22'-4"	Varies 12'-9" To 8'-5"	2'-2"	4 1/2"
	BHC2	#5	18	Varies 21'-3" To 12'-9"	Varies 8'-2 1/2" To 3'-11 1/2"	2'-2"	2 1/2"
* SECT. C(1)	BHC3	#5	25	12'-6"	3'-10"	2'-2"	2 1/2"
D Common Bars	BFD1	#11	12	15'-1"	13'-5"	2'-0"	STR.
	BFD2	#7	16	5'-11"			STR.
	BFD3	#8	4	13'-6"	4'-0"	9'-6"	6"
	BVD1	#11	8	25'-10"			STR.
	BVD2	#11	4	12'-8"			STR.
	BVD3	#7	4	12'-8"			STR.
	BVD4	#7	8	11'-10"			STR.
	BVD5	#6	3EF	Varies 4'-8" To 12'-8"			STR.
	BVD6	#6	10	15'-2"			STR.
	BVD7	#6	3EF	Varies 3'-8" To 11'-8"			STR.
D Common Bars	BVD8	#6	4	12'-10"			STR.
	BVD9	#8	4	26'-5"			STR.
	BVD10	#5	4	18'-3"	2'-2"	8'-0 1/2"	2 1/2"
	BDT1	#5	12	2'-0"			STR.
	BHD1	#6	13	Varies 24'-7" To 18'-7"	Varies 10'-0 1/2" To 7'-0 1/2"	1'-8"	4 1/2"
	BHD2	#5	13	Varies 17'-5" To 11'-5"	Varies 6'-9 1/2" To 3'-9 1/2"	1'-8"	2 1/2"
* SECT. D(1)	BHD3	#5	9	11'-2"	3'-8"	1'-8"	2 1/2"
* SECT. D(2)	BHD3	#5	15	11'-2"	3'-8"	1'-8"	2 1/2"
* SECT. D(3)	BHD3	#5	9	11'-2"	3'-8"	1'-8"	2 1/2"
* SECT. D(4)	BHD3	#5	9	11'-2"	3'-8"	1'-8"	2 1/2"

SHEET 7 OF 8
DETAILS OF RETAINING WALL A
U.S. HIGHWAY 71

WASHINGTON COUNTY
ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

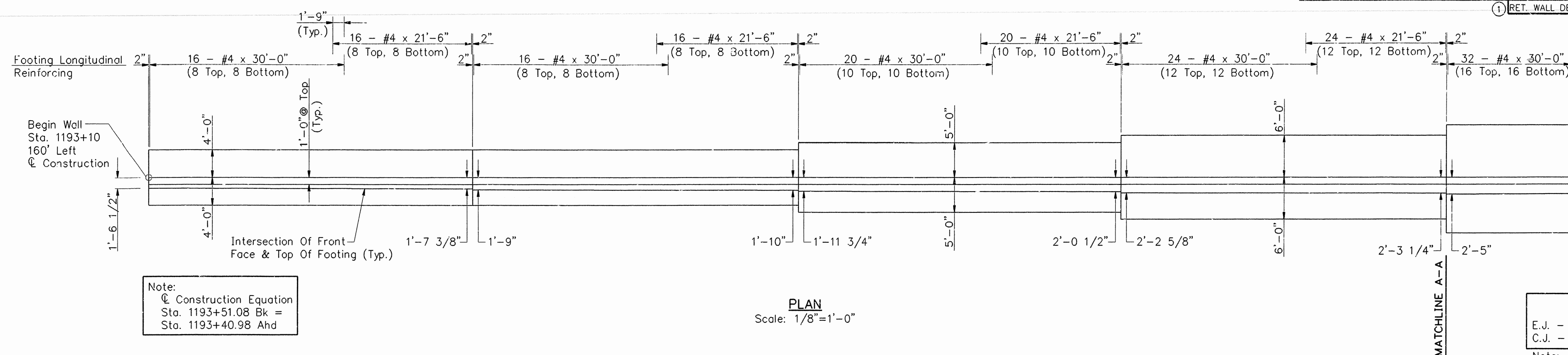
DRAWN BY: PBB DATE: MARCH 1993
CHECKED BY: JDC DATE: MARCH 1993
DESIGNED BY: DCW DATE: MARCH 1993
SCALE: AS NOTED

BRIDGE NO. DRAWING NO. 34065

BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		125	
				JOB NO.		R40039		

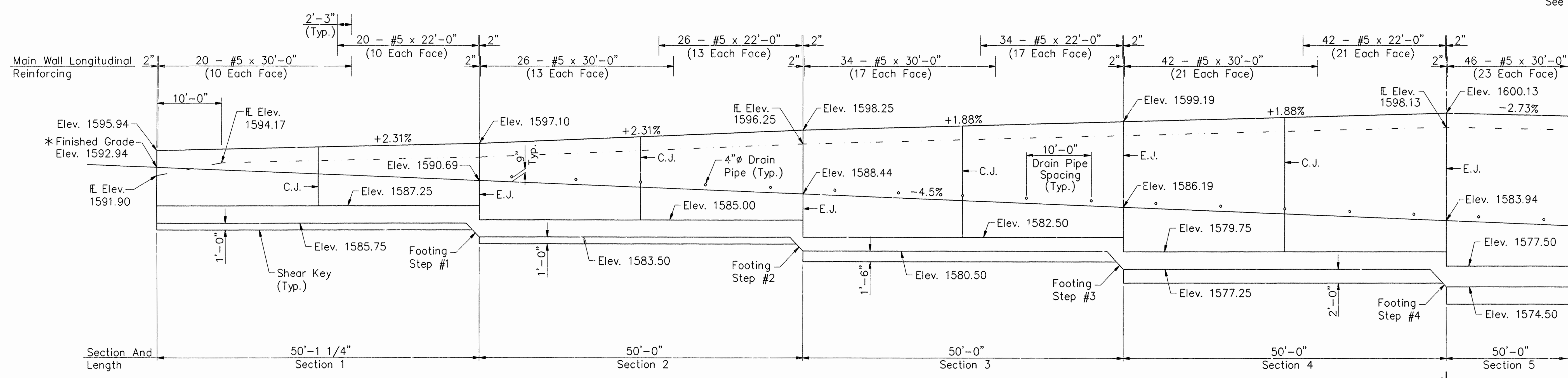
RET. WALL DETAILS 34067



Note:
 Construction Equation
 Sta. 1193+51.08 Bk =
 Sta. 1193+40.98 Ahd

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

LEGEND
 E.J. - Expansion Joint
 C.J. - Contraction Joint
 Note: For Joint Details,
 See Drawing No. 34070B



FOOTING STEP REINFORCEMENT					
STEP	SIZE	NO.	A	LENGTH	LOCATION
#1	#4	8	2'-3"	7'-8"	TOP
		8	2'-3"	7'-8"	BOTTOM
#2	#4	8	2'-6"	8'-0"	TOP
		8	3'-0"	8'-9"	BOTTOM
#3	#4	10	2'-9"	8'-5"	TOP
		10	3'-3"	9'-1"	BOTTOM
#4	#4	12	2'-3"	7'-8"	TOP
		12	2'-9"	8'-5"	BOTTOM

* Finished Grade Elevations
 Shown Are At The Intersection
 Of The 3:1 Roadway Slope
 And The Back Face Of The
 Retaining Wall. (See Typical
 Views On Dwg. No. 34070A)

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

LONGITUDINAL REINFORCEMENT (SECTION 1 THRU 4)					
WALL			FOOTING		
SIZE	NO.	LENGTH	SIZE	NO.	LENGTH
#5	122	30'-0"	#4	76	30'-0"
#5	122	22'-0"	#4	76	21'-6"

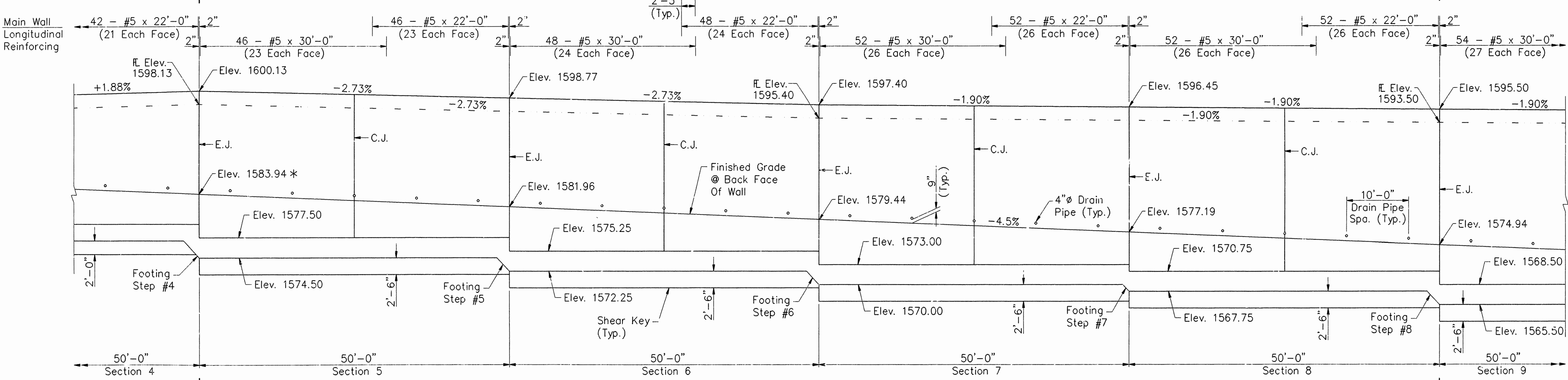
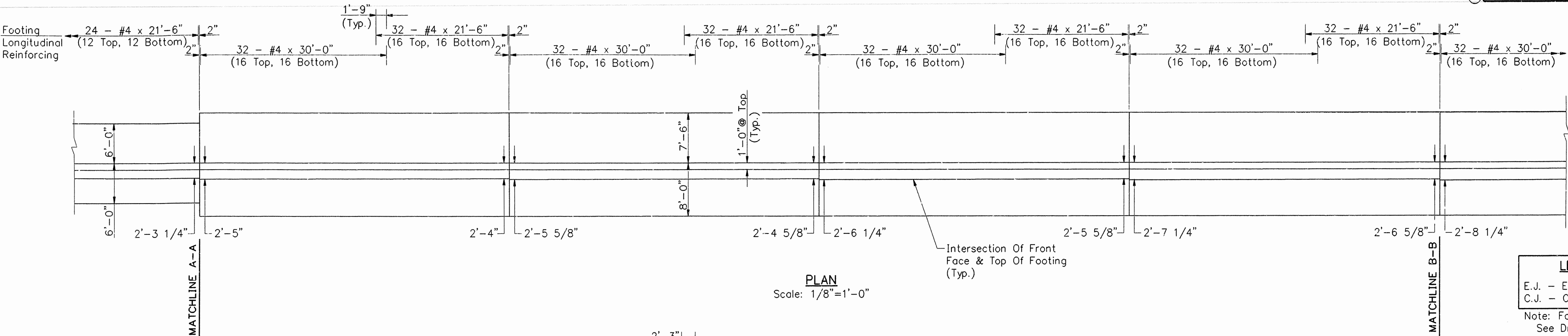


Notes: 1. For General Notes, See Drawing
 No. 34070B.
 2. For Typical Views, See Drawing
 No. 34070A.
 3. For Footing Step Reinforcement
 Detail, See Drawing No. 34070B.

REINFORCEMENT SCHEDULE																																									
SECTION	TYPICAL VIEW	TO1				HE1				VFD				VF1				VF2				VF3				VD				V1				V2				V3			
		SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH				
1	E	#6	1'-0"	50	7'-6"	#6	1'-0"	50	7'-6"	#5	1'-0"	50	3'-6"	#5	1'-0"	50	8'-5" 9'-7"	(NONE REQ'D.)				(NONE REQ'D.)				#6	1'-0"	50	4'-10"	#6	1'-0"	50	8'-5" 9'-7"	(NONE REQ'D.)				(NONE REQ'D.)			
2	D	#6	1'-0"	50	7'-6"	#6	1'-0"	50	7'-6"	#5	1'-0"	50	3'-6"	#5	1'-0"	50	8'-3" 8'-10"	#5	1'-0"	50	5'-10" 7'-0"	(NONE REQ'D.)				#7	1'-0"	50	5'-9"	#7	1'-0"	50	8'-6"	#6	1'-0"	50	5'-10" 7'-0"	(NONE REQ'D.)			
3	C	#5	6"	100	9'-6"	#6	6"	100	9'-6"	#5	1'-0"	51	4'-0"	#5	1'-0"	51	10'-3" 7'-8"	#5	1'-0"	51	7'-8" 8'-6"	(NONE REQ'D.)				#7	6"	100	7'-9"	#6	6"	100	10'-3"	#5	6"	100	7'-6" 8'-6"	(NONE REQ'D.)			
4	B	#6	6"	100	11'-6"	#7	6"	100	11'-6"	#5	1'-0"	51	4'-6"	#5	1'-0"	51	9'-3" 6'-2"	#5	1'-0"	51	9'-3" 6'-2"	#5	1'-0"	51	5'-2" 6'-2"	#8	6"	100	9'-3"	#7	6"	100	10'-0"	#6	6"	100	9'-3" 5'-2"	#5	6"	100	5'-2" 6'-2"

SHEET 1 OF 6
 DETAILS OF RETAINING WALL B
 U.S. HIGHWAY 71
 WASHINGTON COUNTY
 ROUTE 71 SEC. 16
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 DRAWN BY: HEW DATE: NOV. 1993
 CHECKED BY: HJP DATE: NOV. 1993
 DESIGNED BY: JHR DATE: NOV. 1993
 SCALE: AS NOTED
 BRIDGE NO. DRAWING NO. 34067

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		126	
				JOB NO. R40039		RET. WALL DETAILS 34068		



FOOTING STEP REINFORCEMENT					
STEP	SIZE	NO.	A	LENGTH	LOCATION
#5	#4	16	2'-3"	7'-8"	TOP
		16	2'-3"	7'-8"	BOTTOM
#6	#4	16	2'-3"	7'-8"	TOP
		16	2'-3"	7'-8"	BOTTOM
#7	#4	16	2'-3"	7'-8"	TOP
		16	2'-3"	7'-8"	BOTTOM
#8	#4	16	2'-3"	7'-8"	TOP
		16	2'-3"	7'-8"	BOTTOM

2'-3" A 2'-3"

1 1

* Finished Grade Elevations Shown Are At The Intersection Of The 3:1 Roadway Slope And The Back Face Of The Retaining Wall. (See Typical Views On Dwg. No. 34070A)

ELEVATION

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

LONGITUDINAL REINFORCEMENT (SECTION 5 THRU 8)					
WALL			FOOTING		
SIZE	NO.	LENGTH	SIZE	NO.	LENGTH
#5	198	30'-0"	#4	128	30'-0"
#5	198	22'-0"	#4	128	21'-6"

REINFORCEMENT SCHEDULE

SECTION	TYPICAL VIEW	T01				HE1				VFD				VF1				VF2				VF3				VD				V1				V2				V3			
		SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH
5	A	#6	6"	100	15'-0"	#8	6"	100	15'-0"	#5	1'-0"	51	5'-0"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#10	6"	100	12'-3"	#9	6"	100	11'-6"	#7	6"	100	10'-6"	#5	6"	100	8'-4" To 7'-3" To 6'-0"
6	A	#6	6"	100	15'-0"	#8	6"	100	15'-0"	#5	1'-0"	51	5'-0"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#10	6"	100	12'-3"	#9	6"	100	11'-6"	#7	6"	100	10'-6"	#5	6"	100	7'-3" To 6'-0"
7	A	#6	6"	100	15'-0"	#8	6"	100	15'-0"	#5	1'-0"	51	5'-0"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#10	6"	100	12'-3"	#9	6"	100	11'-6"	#7	6"	100	10'-6"	#5	6"	100	8'-2" To 7'-3" To 6'-0"
8	A	#6	6"	100	15'-0"	#8	6"	100	15'-0"	#5	1'-0"	51	5'-0"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#10	6"	100	12'-3"	#9	6"	100	11'-6"	#7	6"	100	10'-6"	#5	6"	100	9'-6" To 8'-6"



SHEET 2 OF 6

DETAILS OF RETAINING WALL B

U.S. HIGHWAY 71

WASHINGTON COUNTY

ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: NOV. 1993

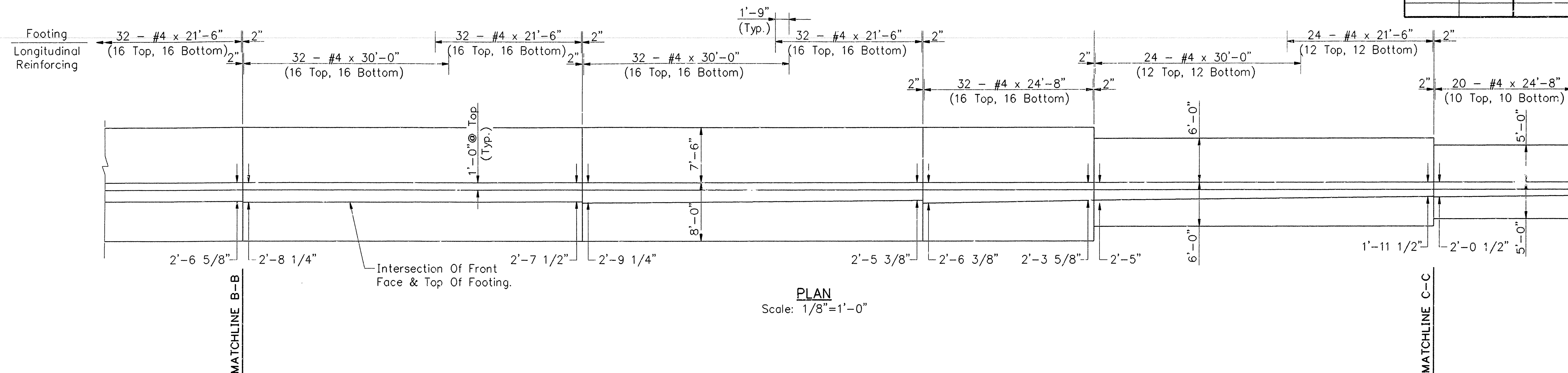
CHECKED BY: HJP DATE: NOV. 1993

DESIGNED BY: JHR DATE: NOV. 1993

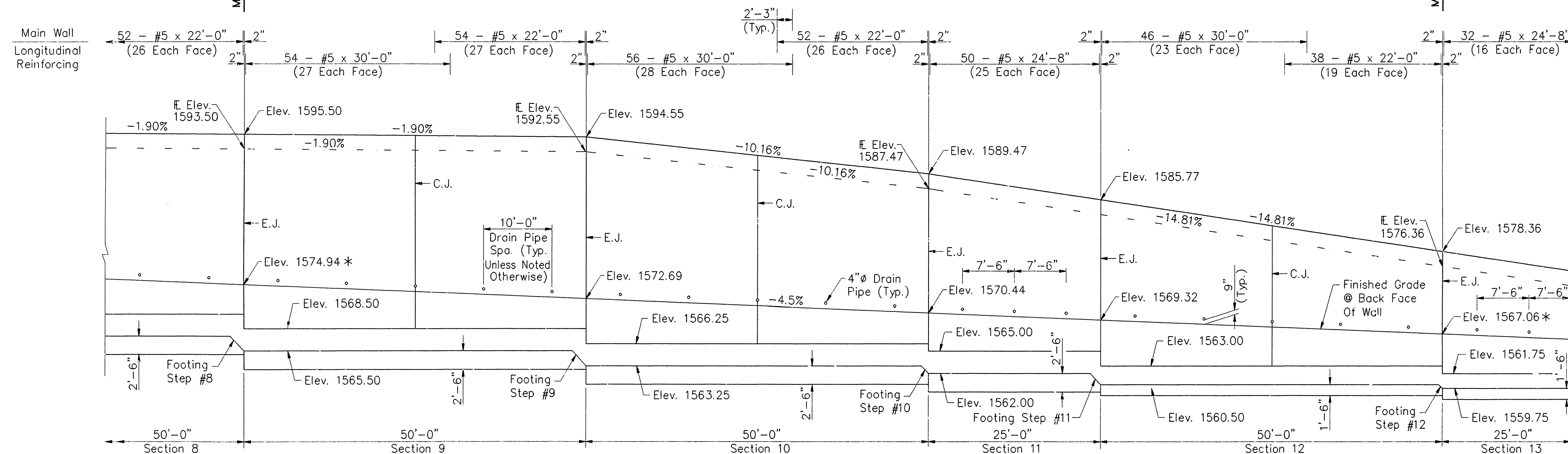
SCALE: AS NOTED

BRIDGE NO. DRAWING NO. 34068

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		127	
				JOB NO.		R40039		
				(1) RET. WALL DETAIL				34069



LEGEND
E.J. - Expansion Joint
C.J. - Contraction Joint
Note: For Joint Details,
See Drawing No. 34070B



FOOTING STEP REINFORCEMENT					
STEP	SIZE	NO.	A	LENGTH	LOCATION
#9	#4	16	2'-3"	7'-8"	TOP
		16	2'-3"	7'-8"	BOTTOM
#10	#4	16	1'-3"	6'-3"	TOP
		16	1'-3"	6'-3"	BOTTOM
#11	#4	12	2'-0"	7'-4"	TOP
		12	1'-6"	6'-8"	BOTTOM
#12	#4	10	1'-3"	6'-3"	TOP
		10	9"	5'-7"	BOTTOM

* Finished Grade Elevations
Shown Are At The Intersection
Of The 3:1 Roadway Slope
And The Back Face Of The
Retaining Wall. (See Typical
Views On Dwg. No. 34070A)

LONGITUDINAL REINFORCEMENT (SECTION 9 THRU 12)					
WALL			FOOTING		
SIZE	NO.	LENGTH	SIZE	NO.	LENGTH
#5	156	30'-0"	#4	88	30'-0"
#5	144	22'-0"	#4	88	21'-6"
#5	50	24'-8"	#4	32	24'-8"

▲ - Bars V3 & VF3 Are Not Req'd. For The Last 8'-6" Of Section Of 12. The Projection Of
Bars V2 & VF2 Into The Last Pour Of Section 12 Shall Be Trimmed As Req'd.

REINFORCEMENT SCHEDULE																																													
SECTION	TYPICAL VIEW	TO1				HE1				VFD				VF1				VF2				VF3				VD				V1				V2				V3							
		SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH								
9	A	#6	6"	100	15'-0"	#8	6"	100	15'-0"	#5	1'-0"	51	5'-0"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"				
10	A	#6	6"	100	15'-0"	#8	6"	100	15'-0"	#5	1'-0"	51	5'-0"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"	#5	1'-0"	51	10'-3"				
11	A	#6	6"	50	15'-0"	#8	6"	50	15'-0"	#5	1'-0"	26	5'-0"	#5	1'-0"	26	10'-3"	#5	1'-0"	26	10'-3"	#5	1'-0"	26	10'-3"	#5	1'-0"	26	10'-3"	#5	1'-0"	26	10'-3"	#5	1'-0"	26	10'-3"	#5	1'-0"	26	10'-3"				
12	B	#6	6"	100	11'-6"	#7	6"	100	11'-6"	#5	1'-0"	51	4'-6"	#5	1'-0"	51	9'-3"	#5	1'-0"	51	9'-3"	#5	1'-0"	51	9'-3"	#5	1'-0"	42▲	8'-6" 2'-5"	#8	6"	100	9'-3"	#7	6"	100	10'-0"	#6	6"	100	9'-3"	#5	6"	83▲	8'-6" 2'-5"

Notes: 1. For General Notes, See Drawing
No. 34070B.
2. For Typical Views, See Drawing
No. 34070A.
3. For Footing Step Reinforcement
Detail, See Drawing No. 34070B.

SHEET 3 OF 6
DETAILS OF RETAINING WALL B
U.S. HIGHWAY 71

WASHINGTON COUNTY
ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

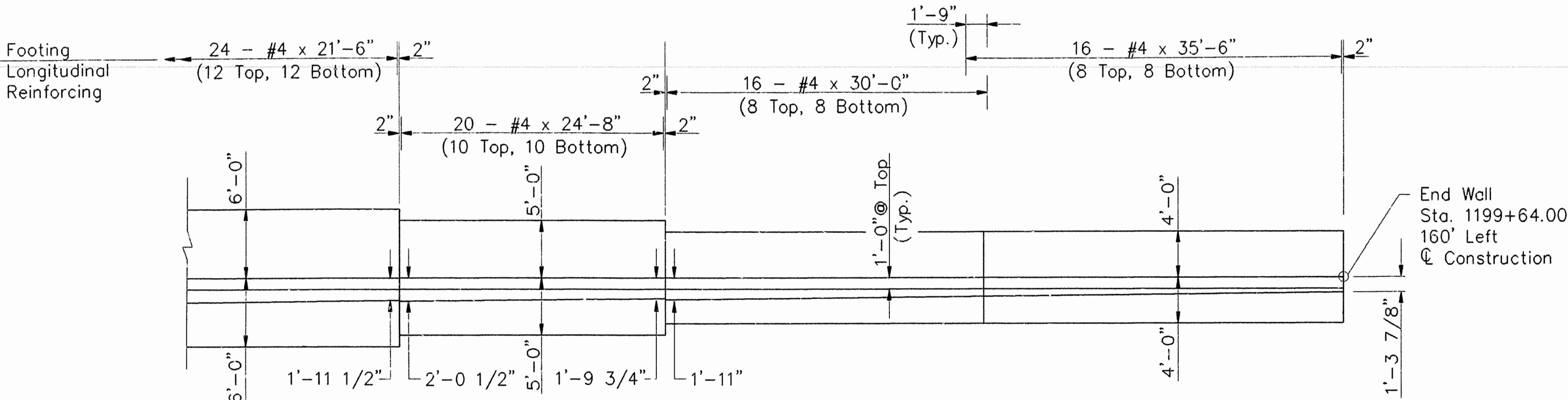
DRAWN BY: HEW DATE: NOV. 1993
CHECKED BY: HJP DATE: NOV. 1993
DESIGNED BY: JHR DATE: NOV. 1993

BRIDGE NO. - DRAWING NO. 34069



BRIDGE ENGINEER

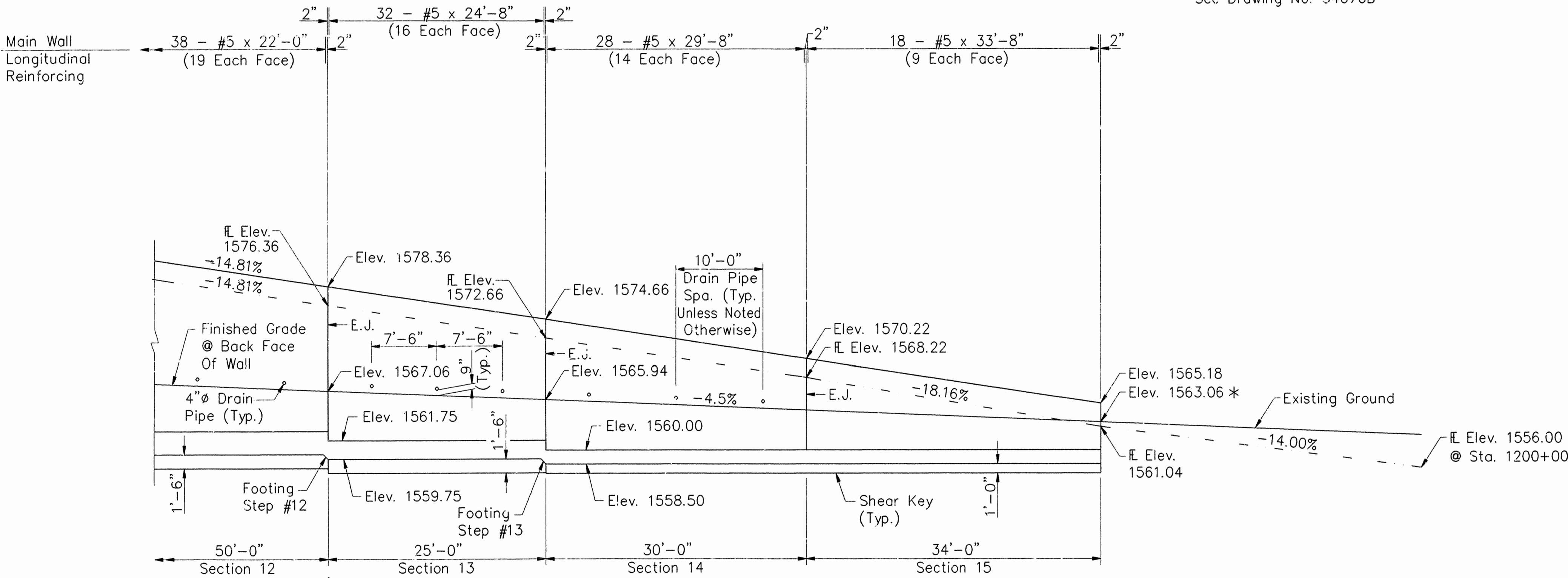
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		128	
				JOB NO. R40039		34070		
				RET. WALL DETAILS				



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

LEGEND
E.J. - Expansion Joint
C.J. - Contraction Joint
Note: For Joint Details,
See Drawing No. 34070B

FOOTING STEP REINFORCEMENT					
STEP	SIZE	NO.	A	LENGTH	LOCATION
#13	#4	8	1'-9"	7'-0"	TOP
		8	1'-3"	6'-3"	BOTTOM

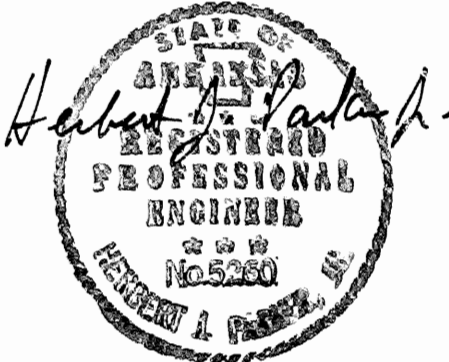


ELEVATION
Scale: 1/8"=1'-0"

* Finished Grade Elevations
Shown Are At The Intersection
Of The 3:1 Roadway Slope
And The Back Face Of The
Retaining Wall. (See Typical
Views On Dwg. No. 34070A)

LONGITUDINAL REINFORCEMENT (SECTION 13 THRU 15)					
WALL			FOOTING		
SIZE	NO.	LENGTH	SIZE	NO.	LENGTH
#5	32	24'-8"	#4	20	24'-8"
#5	28	29'-8"	#4	16	30'-0"
#5	18	33'-8"	#4	16	35'-6"

- Notes: 1. For General Notes, See Drawing
No. 34070B.
2. For Typical Views, See Drawing
No. 34070A.
3. For Footing Step Reinforcement
Detail, See Drawing No. 34070B.



SHEET 4 OF 6
DETAILS OF RETAINING WALL B
U.S. HIGHWAY 71
WASHINGTON COUNTY
ROUTE 71 SEC. 16

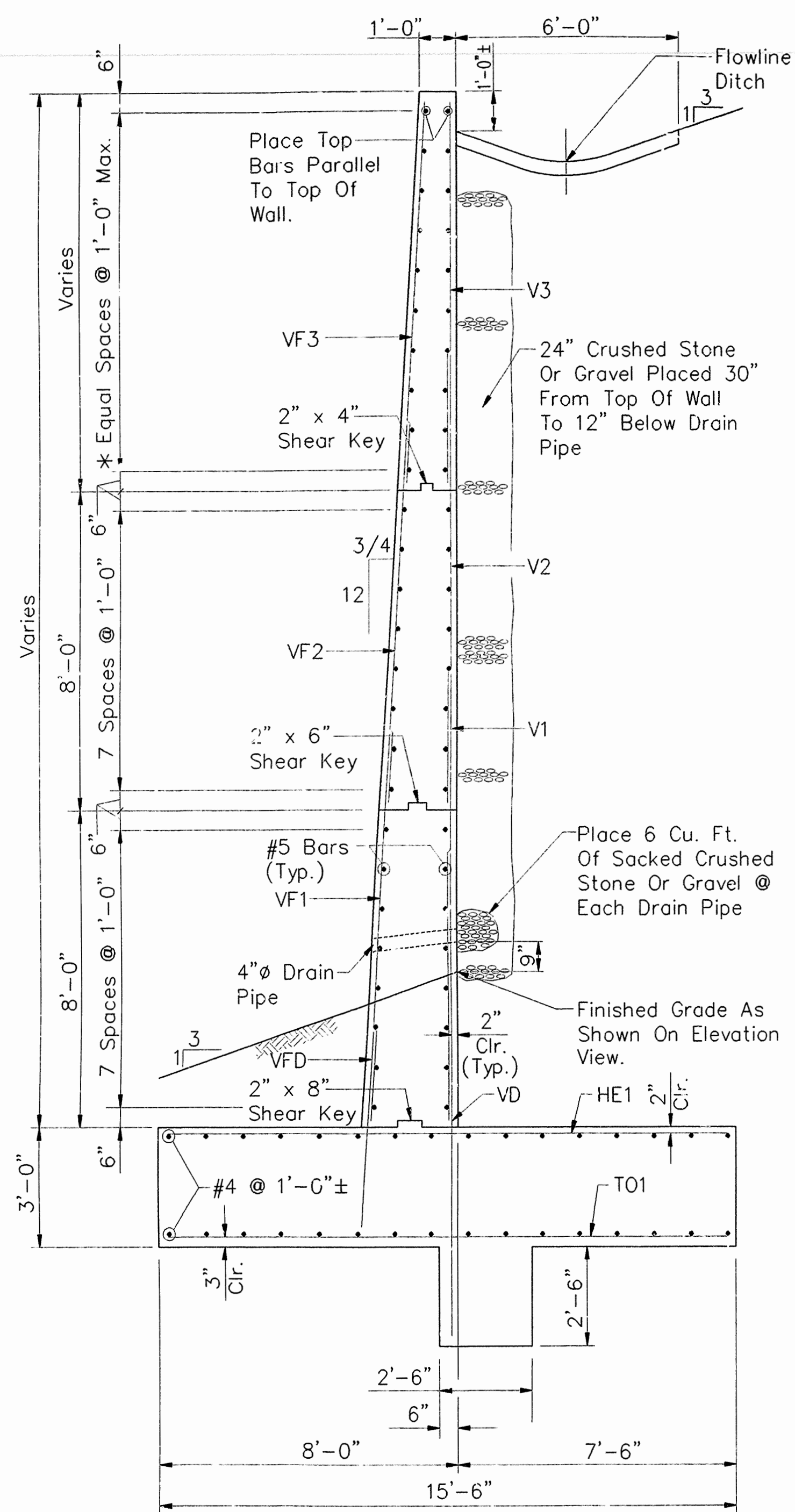
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: NOV. 1993
CHECKED BY: HJP DATE: NOV. 1993
DESIGNED BY: JHR DATE: NOV. 1993

BRIDGE ENGINEER
DRAWING NO. 34070

REINFORCEMENT SCHEDULE																																									
SECTION	TYPICAL VIEW	T01				HE1				VFD				VF1				VF2				VF 3				VD				V1				V2				V3			
		SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH	SIZE	SPA.	NO.	LENGTH				
13	C	#5	6"	50	9'-6"	#6	6"	50	9'-6"	#5	1'-0"	26	4'-0"	#5	1'-0"	26	10'-3"	#5	1'-0"	26	8'-4" 4'-8" ¹⁰	(NONE REQ'D.)				#7	6"	50	7'-9"	#6	6"	50	10'-3"	#5	6"	50	8'-4" 4'-8" ¹⁰	(NONE REQ'D.)			
14	D	#6	1'-0"	30	7'-6"	#6	1'-0"	30	7'-6"	#5	1'-0"	30	3'-6"	#5	1'-0"	30	8'-3"	#5	1'-0"	30	8'-5" 4'-0" ¹⁰	(NONE REQ'D.)				#7	1'-0"	30	5'-9"	#7	1'-0"	30	8'-6"	#6	1'-0"	30	8'-5" 4'-0" ¹⁰	(NONE REQ'D.)			
15	E	#6	1'-0"	34	7'-6"	#6	1'-0"	34	7'-6"	#5	1'-0"	34	3'-6"	#5	1'-0"	34	10'-0" 5'-0" ¹⁰	(NONE REQ'D.)				(NONE REQ'D.)				#6	1'-0"	34	4'-10"	#6	1'-0"	34	10'-0" 5'-0" ¹⁰	(NONE REQ'D.)				(NONE REQ'D.)			

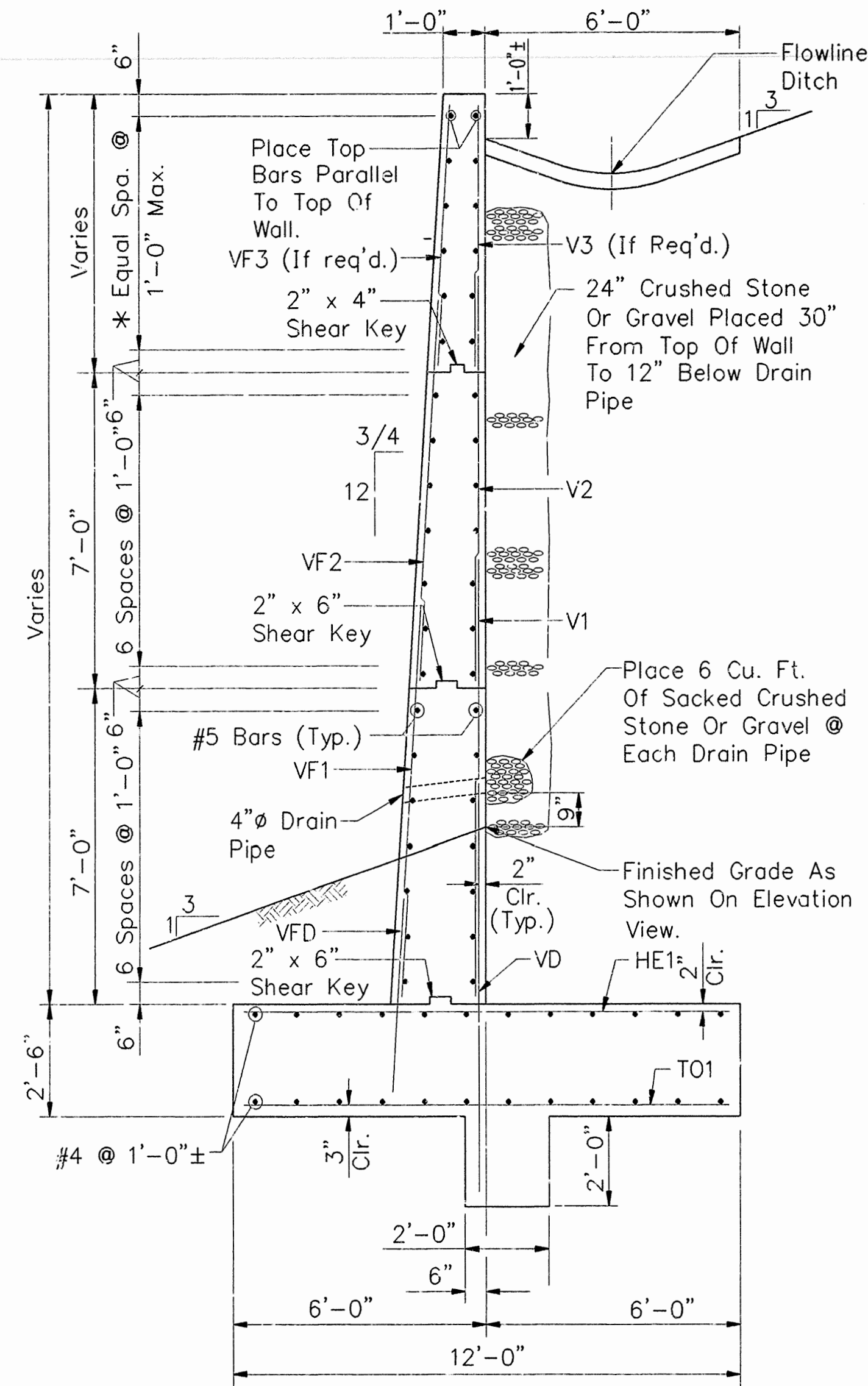
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		129	
				JOB NO.		R40039		
				RET. WALL DTLS				34070A



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

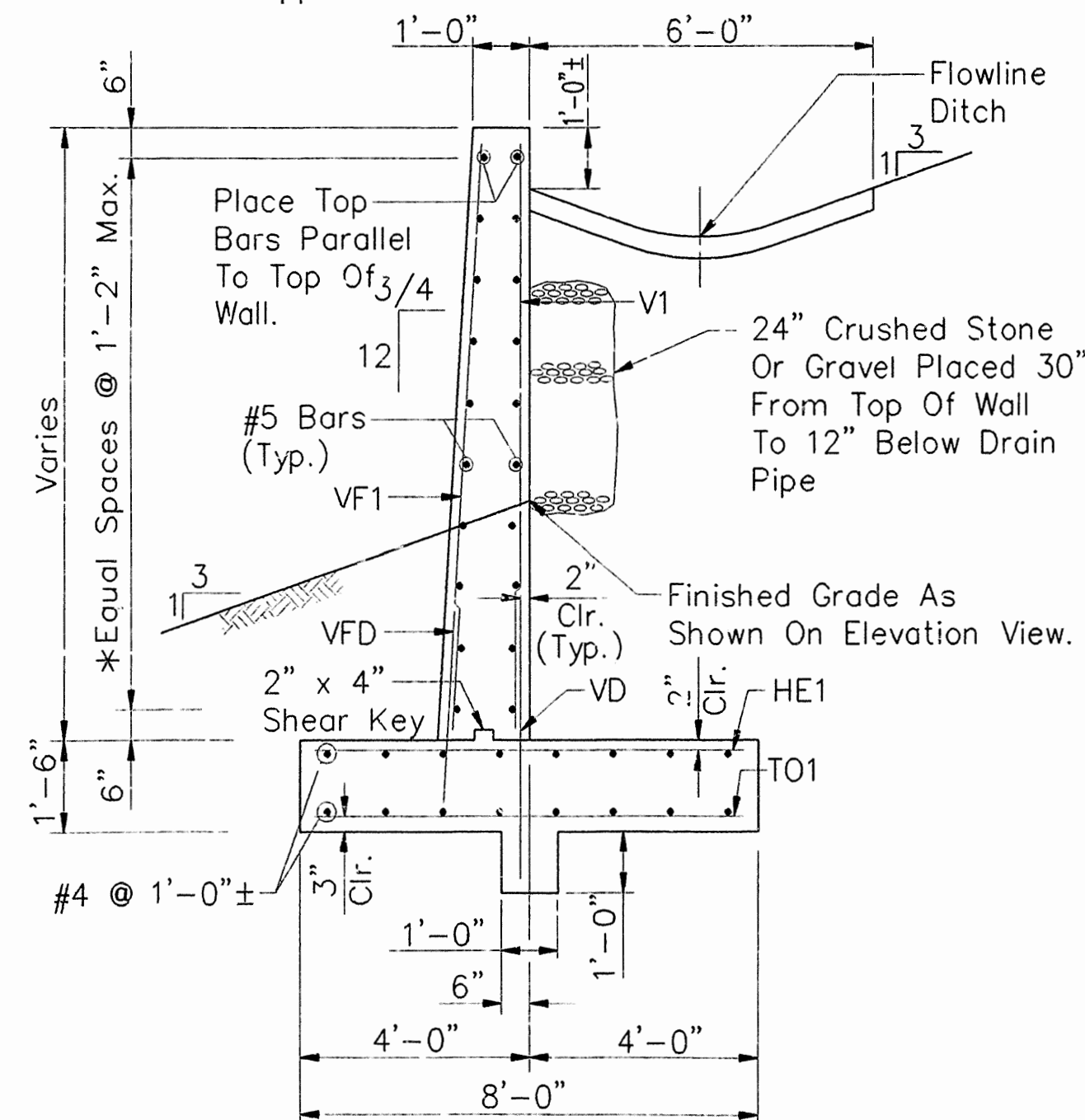
Approximate Wall Ht: 28' To 22'

* - Adjust Bar Spacing As Req'd.
To Match Slope Of Top Of Wall.



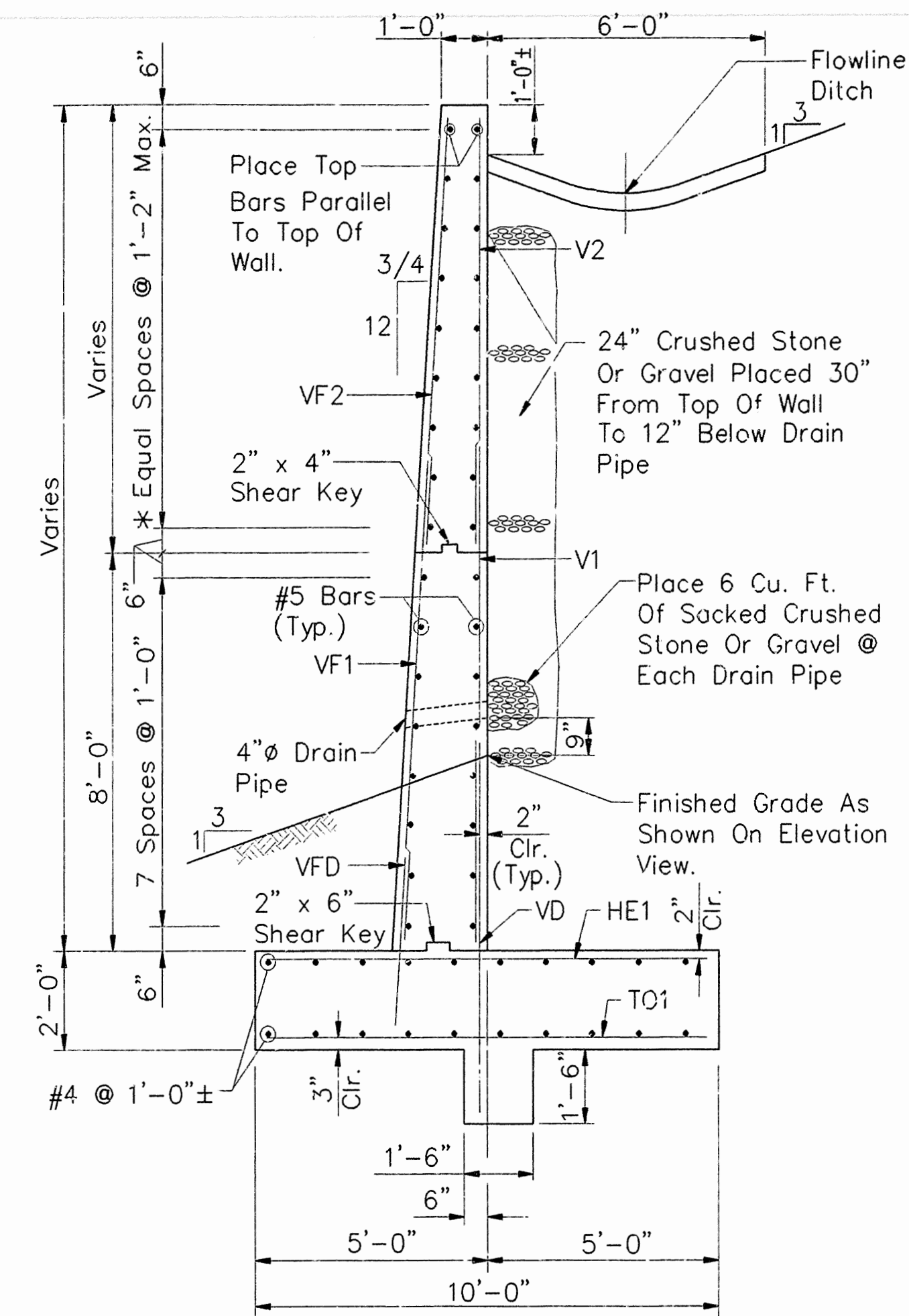
TYPICAL VIEW B
Scale: 3/8" = 1'-0"

Approximate Wall Ht: 22' To 17'



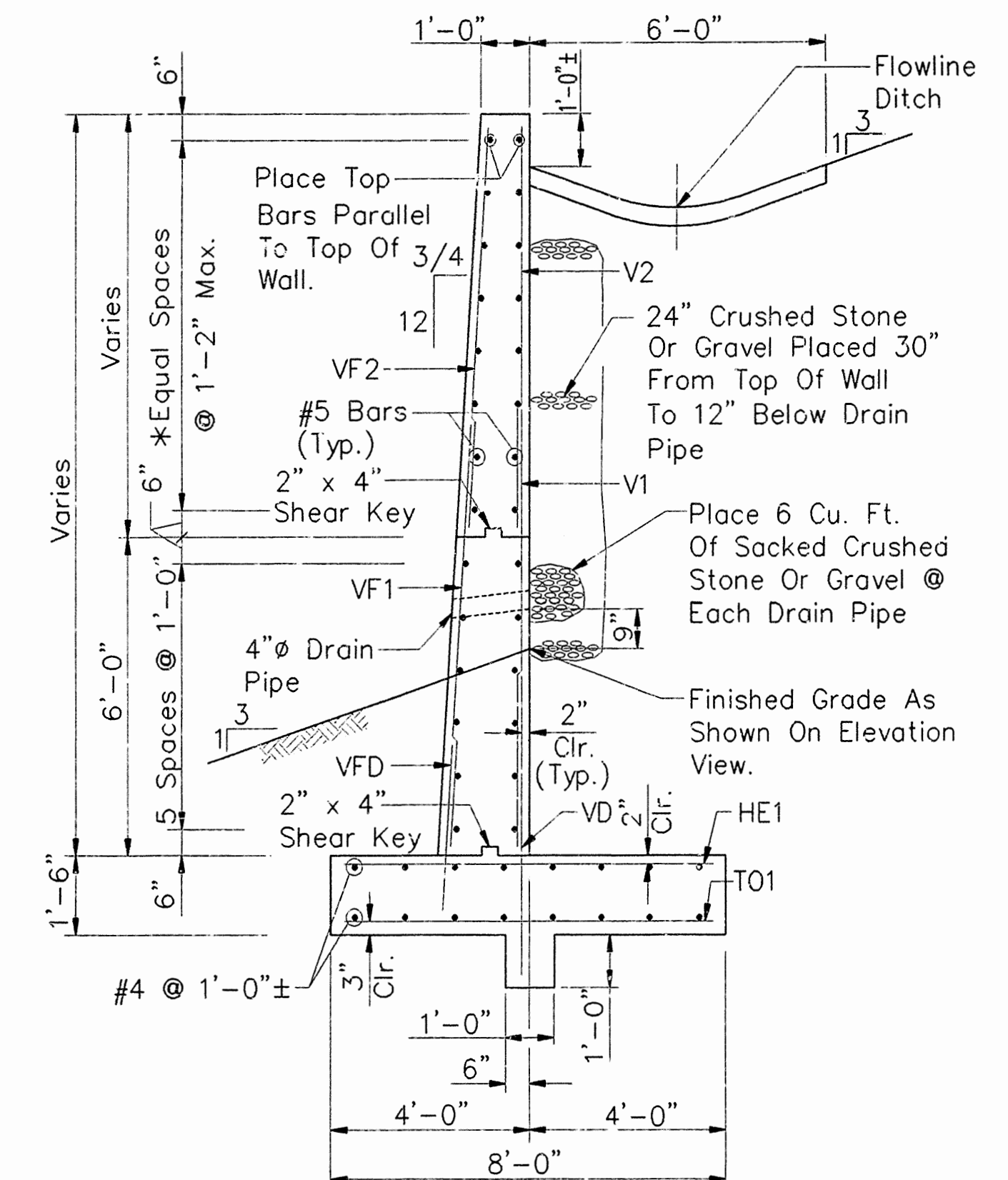
TYPICAL VIEW E
Scale: 3/8" = 1'-0"

Approximate Wall Ht: Less Than 10'



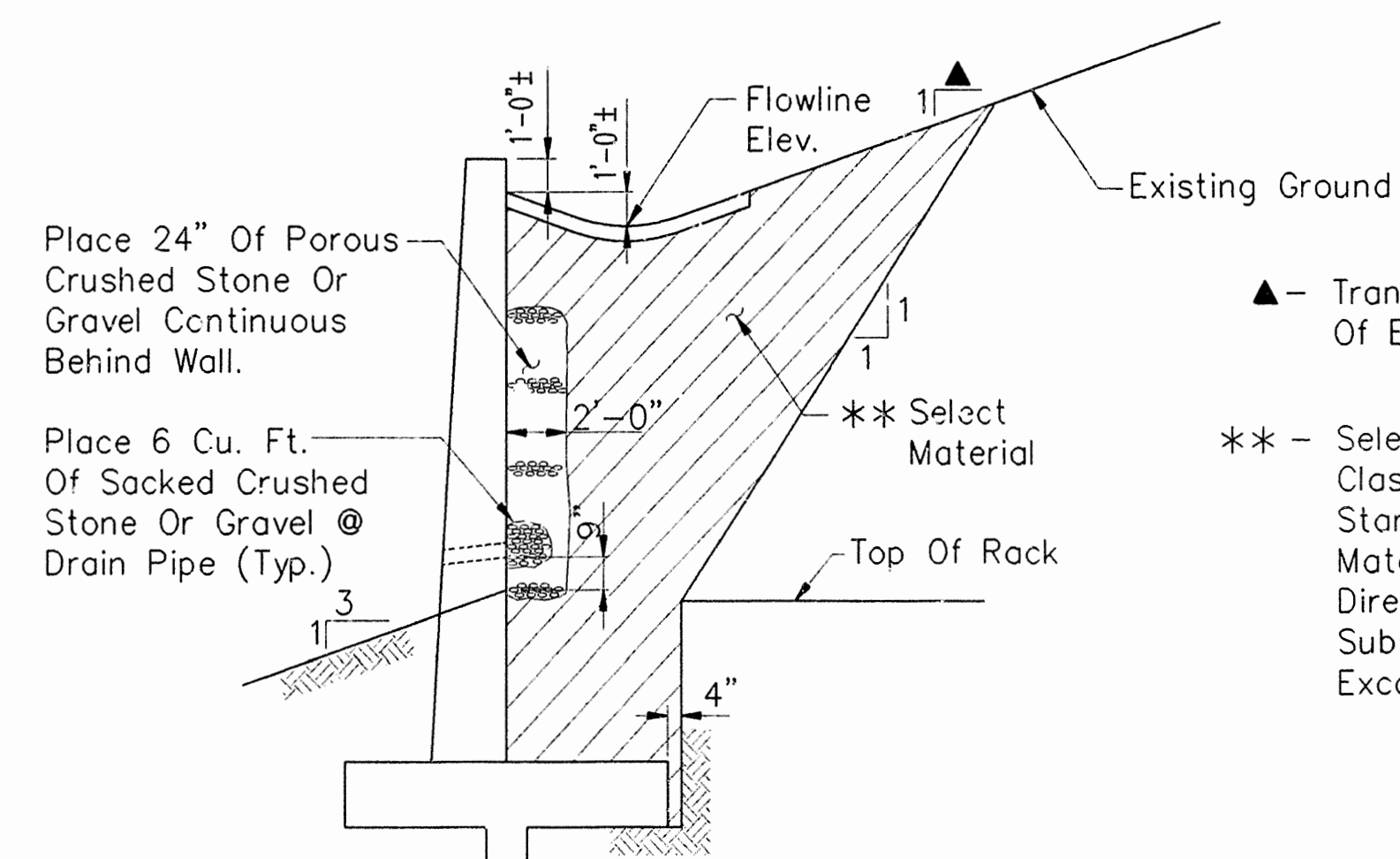
TYPICAL VIEW C
Scale: 3/8" = 1'-0"

Approximate Wall Ht: 17' To 14'



TYPICAL VIEW D
Scale: 3/8" = 1'-0"

Approximate Wall Ht: 14' To 10'



BACKFILL SECTION
Scale: None

▲ - Transition To Slope
Of Existing Ground.

** - Select Material Shall Conform To
Class SM-1 Of Section 302 Of The
Standard Specifications. The Select
Material Will Not Be Paid For
Directly, But Will Be Considered
Subsidiary To The Item "Unclassified
Excavation - Roadway".

SHEET 5 OF 6
DETAILS OF RETAINING WALL B
U.S. HIGHWAY 71

WASHINGTON COUNTY
ROUTE 71 SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

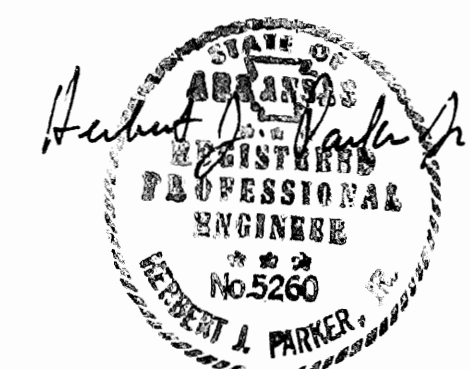
DRAWN BY: PBB DATE: NOV. 1993
CHECKED BY: HJP DATE: NOV. 1993
DESIGNED BY: JHR DATE: NOV. 1993

SCALE: AS NOTED

BRIDGE NO. -

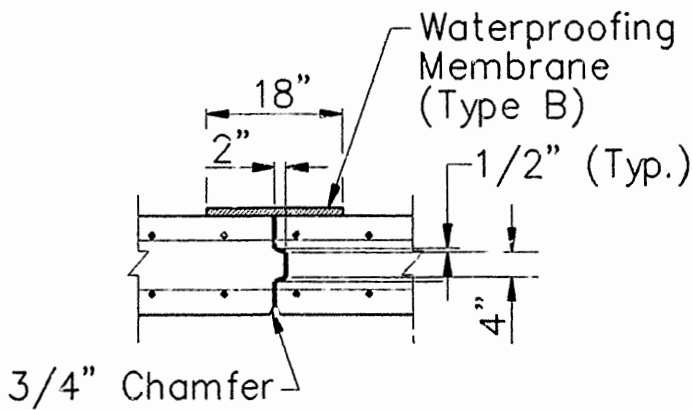
DRAWING NO. 34070A

BRIDGE ENGINEER



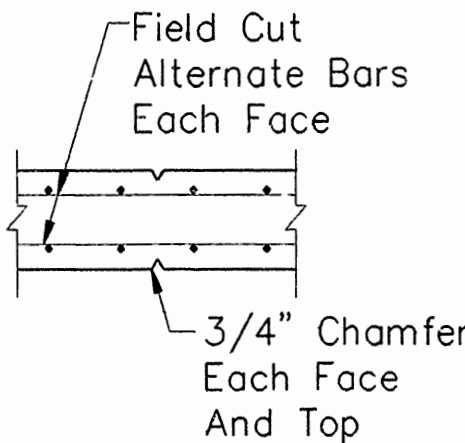
SUMMARY OF QUANTITIES				
ITEM NO.	207	801	802	SS & 804
ITEM	STONE BACKFILL	UNCLASSIFIED EXCAVATION FOR STRUCTURES ROADWAY	CLASS S CONCRETE ROADWAY	REINFORCING STEEL- ROADWAY (GRADE 60)
UNIT	TON	CU. YD.	CU. YD.	LB.
	1,200.86	10,963	1,691.88	219,960

Includes 2,076 Cubic Yards Of Rock Excavation.

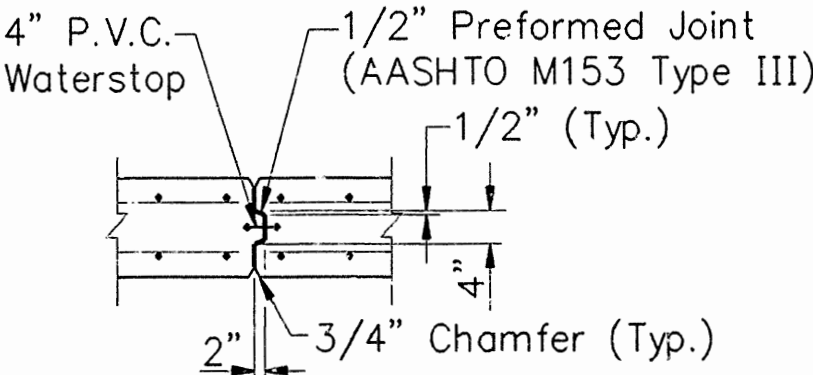


CONSTRUCTION JOINT
Spacing Optional

Note:
Construction Joint May Be Combined
With Contraction Joint Or Expansion
Joint.

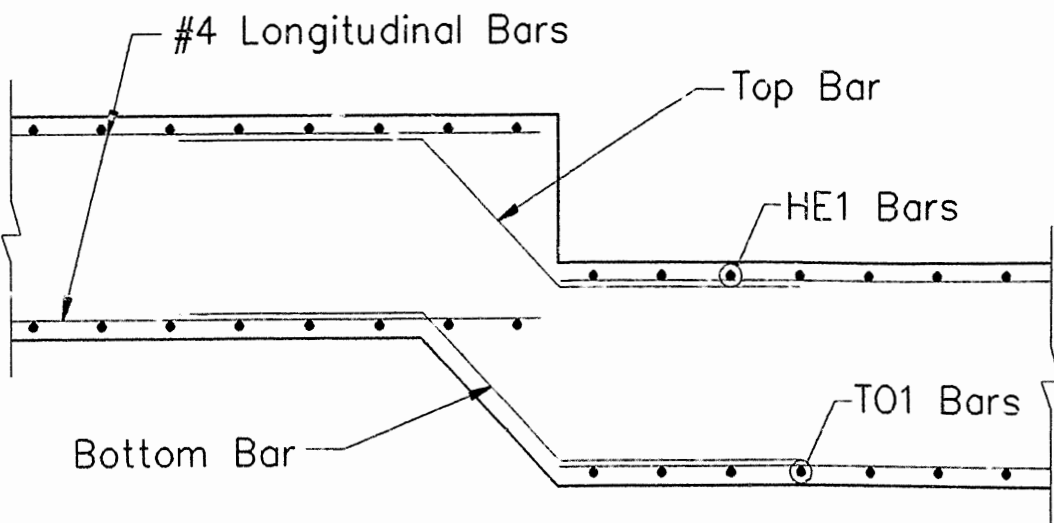


CONTRACTION JOINT
30' Maximum Spacing



EXPANSION JOINT
90' Maximum Spacing

VERTICAL JOINT DETAILS



FOOTING STEP REINFORCEMENT DETAIL
Scale: None

DESIGN SOIL PARAMETERS

Unit Weight Of Soil 120 pcf
Active Pressure Coeff. (Ka.) 0.40
Allowable Brg. Press. 6 ksf

GENERAL NOTES

1. All Concrete Shall Be Class "S" - Roadway With A Minimum 28 Day Compressive Strength $f'_c = 3500$ psi.
2. Reinforcing Steel Shall Conform To ASTM A615 Or A617, Grade 60.
3. All Concrete Shall Be Poured In The Dry. All Exposed Corners Shall Be Chamfered 3/4" Unless Otherwise Noted.
4. The Preformed Joints, Water-Proofing Membrane, 4"Ø Drain Pipe, And Waterstops Will Not Be Paid For By Directly, But Will Be Considered Subsidiary To Class "S" Concrete - Roadway.
5. Water-Proofing Membrane And 4" PVC Waterstop Shall Extend From Top Of Footing To 2'-0" Below Top Of Wall.
6. A Prefabricated Drainage System Will Not Be Allowed As An Alternate To Crushed Stone Backfill.
7. The Contractor Shall Have The Option Of Using An Alternate Design In Accordance With Job R40039 Special Provision "Retaining Walls".
8. Wall Height Range For Typical Views Are Approximate. Actual Wall Height May Vary From Height Range In Some Cases.
9. Prior To The Placement Of The Footing Concrete, The Foundation Material Shall Be Thoroughly Inspected To Determine The Quality Of The Material. Any Soft Or Compressible Material Shall Be Overexcavated And Backfilled With Select Material Conforming To Class SM-1 Of Section 302 Of The Standard Specifications.
10. Time For Open Excavations Shall Be Kept To A Minimum. Footings Shall Be Poured As Soon As Excavations Are Approved And Standing Water Will Be Pumped Continuously Until Backfill Is Complete. Backfill Around Footings Will Be Made 72 Hours After Concrete Is Placed And Backfill Behind Stems Will Be Made As Soon As Concrete Has Reached A Minimum Strength Of 3500 psi.



SHEET 6 OF 6
DETAILS OF RETAINING WALL B
U.S. HIGHWAY 71

WASHINGTON COUNTY
ROUTE 71 SEC. 16

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: HEW DATE: NOV. 1993
CHECKED BY: HJP DATE: NOV. 1993
DESIGNED BY: JHR DATE: NOV. 1993

BRIDGE NO. -

DRAWING NO. 34070B

BRIDGE ENGINEER