

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
8-15-91	8-15-91	1-30-92	1-30-92	6	ARK.			
8-16-91	8-19-91							
8-23-91	8-29-91							
				JOB NO.		R40044	16	
(1) 6237 A&B SCHEDULE OF BRID. QUA. 29841								

SCHEDULE OF BRIDGE QUANTITIES													
BRIDGE NO. CODE NO. NAME PLATE TITLE	UNIT OF BRIDGE	ITEM NO.	SP 801	802	802	SP 802	803	804	804	805	807	812	816
		ITEM	UNCLASSIFIED EXCAVATION FOR STRUCTURES-- BRIDGE*	CLASS B CONCRETE	CLASS S CONCRETE	CLASS S(AE) CONCRETE	BOILED LINSEED OIL	REINFORCING STEEL (GRADE 60)	EPOXY COATED REINFORCING STEEL (GRADE 60)	STEEL PILES (HP 12 x 53)	STRUCTURAL STEEL IN PLATE GIRDER SPANS (A588)	BRIDGE NAME PLATES (TYPE C)	FILTER BLANKET
6237 B X271 RAVINE	UNIT		CU. YD.	CU. YD.	CU. YD.	CU. YD.	GAL.	LB.	LB.	LIN. FT.	LB.	EA.	SQ. YD.
	SOUTH ABUTMENT		0		85.6	5.6		6,695	1,254	1,238	2,260		523
	PIER 1		518 497	133.3	426.7			55,288					
	PIER 2		350 242	133.3	421.3			54,823					
	PIER 3		966 700	133.3	693.7			81,000			348		
	PIER 4		664 395	156.4	780.7			99,278					
	PIER 5		449 243	156.4	715.0			93,200					
	PIER 6		843 786	332.4	625.2			91,632					
	NORTH ABUTMENT		0		86.5	5.0		6,549	1,112	868	2,260	1	494
	421'-1" CONT. COMP. GIRDER SPAN-UNIT 1					553.9	59	157,057			596,702		
	601'-1" CONT. COMP. GIRDER SPAN-UNIT 2					791.4	63	224,277			927,466		
	TOTAL BRIDGE "B"		3,790 2,566	1,045.1	3,834.7	1,355.9	122	488,465	383,700	2,106	1,529,036	1	1,017
	SOUTH ABUTMENT		0		85.6	5.6		6,695	1,254	1,014	2,260	1	524
	PIER 1		199 494	133.3	371.1			47,448					
6237 A X271 RAVINE	PIER 2		295 216	133.3	404.3			51,521			348		
	PIER 3		697 399	184.9	680.2			91,018					
	PIER 4		431 399	156.4	734.4			95,175					
	PIER 5		174 788	184.9	622.5			82,802					
	NORTH ABUTMENT		0		86.5	5.0		6,549	1,112	920	2,260		414
	281'-1" CONT. COMP. GIRDER SPAN-UNIT 3					370.0	44	102,980			391,740		
	601'-1" CONT. COMP. GIRDER SPAN-UNIT 2					791.4	63	224,277			927,466		
	TOTAL BRIDGE "A"		1,796 1,974	792.8	2,984.6	1,172.0	107	381,208	329,623	1,934	1,324,074	1	938
	TOTAL FOR JOB R40044		5,586 4,540	1,837.9	6,819.3	2,527.9	229	869,673	713,323	4,040	2,853,110	2	1,955

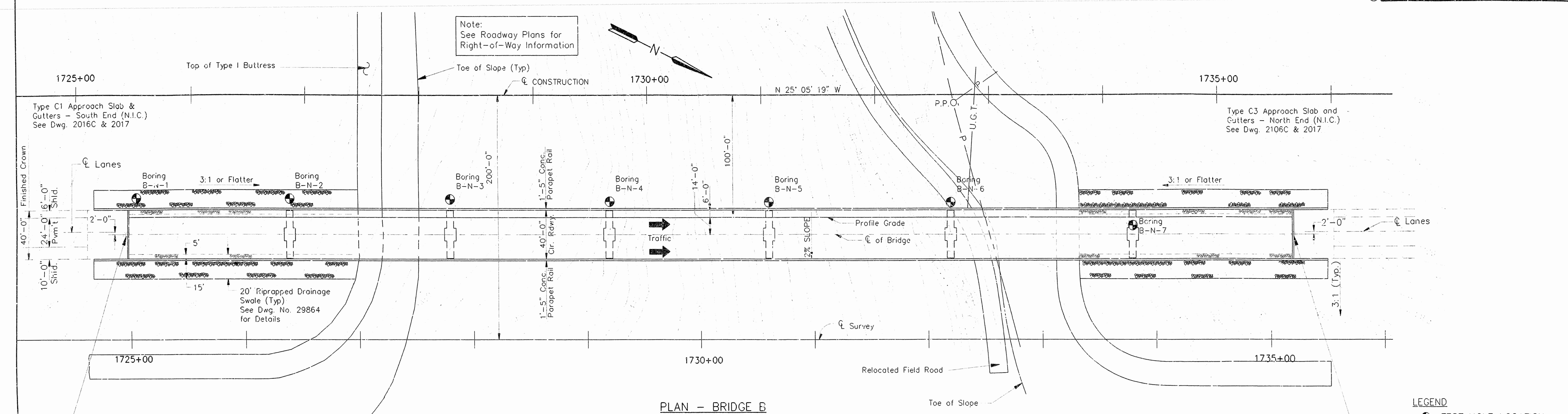
*ESTIMATED QUANTITY OF ROCK EXCAVATION - JOB R40044 = 1,638 CU. YD.
 ** SEE NOTE 18 UNDER GENERAL NOTES, DWG 29845 1,761

SHEET 1 OF 1
 SCHEDULE OF BRIDGE QUANTITIES
 U.S. HIGHWAY 71 OVER RAVINE
 WASHINGTON COUNTY
 ROUTE SEC.
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 DRAWN BY: L.D.T. DATE: June, 1988
 CHECKED BY: T.B.H. DATE: Feb., 1990
 DESIGNED BY: R.F. DATE: Feb., 1990
 SCALE: AS NOTED
 BRIDGE NO. 6237 A & B DRAWING NO. 29841



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
11-25-91	11-25-91			6	ARK.			
				JOB NO.		R40044	34	
				(1) 6237B PLAN AND ELEVATION		29842		

Note:
See Roadway Plans for
Right-of-Way Information

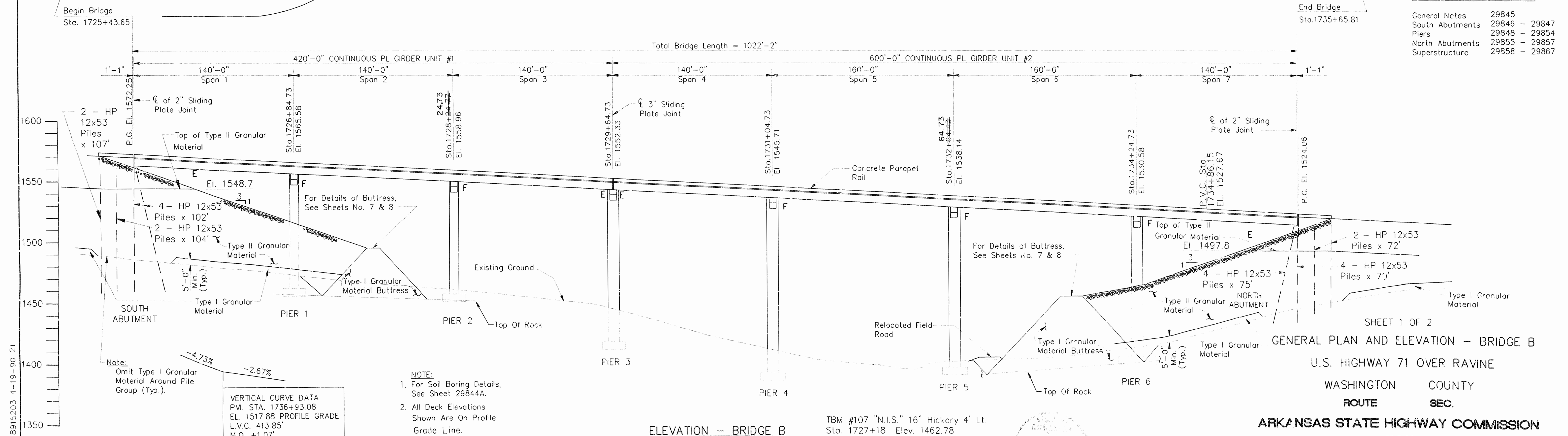


PLAN - BRIDGE B

LEGEND
● TEST HOLE LOCATION

DRAWING REFERENCE NUMBERS

General Notes	29845
South Abutments	29846 - 29847
Piers	29848 - 29854
North Abutments	29855 - 29857
Superstructure	29858 - 29867



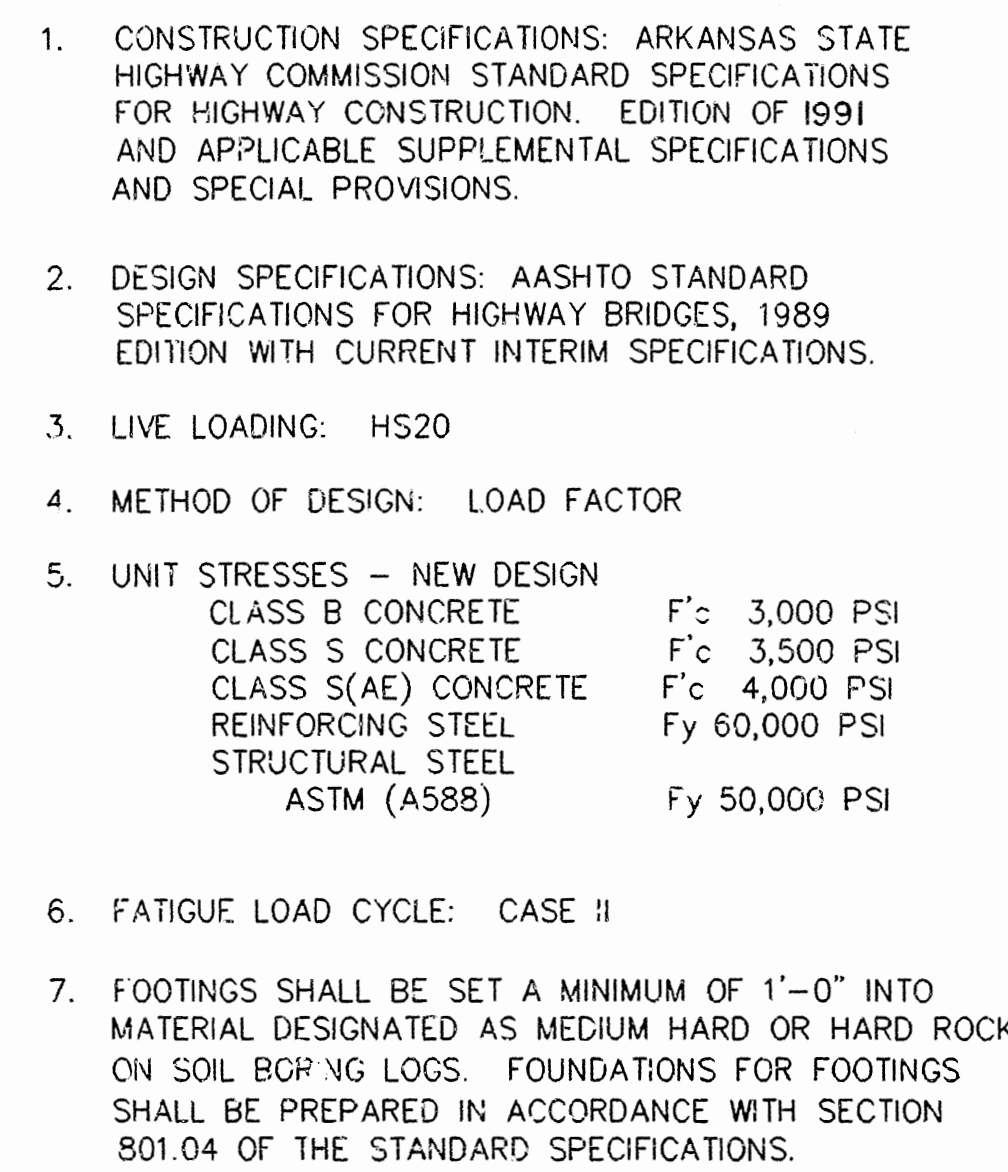
ELEVATION - BRIDGE B

SHEET 1 OF 2
GENERAL PLAN AND ELEVATION - BRIDGE B
U.S. HIGHWAY 71 OVER RAVINE
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: D.E.H. DATE: Sept. 1989
CHECKED BY: H.J.P. DATE: Sept. 1989
DESIGNED BY: T.B.H. DATE: Sept. 1989
SCALE: 1" = 40'-0"
BRIDGE NO. 6237 B
DRAWING NO. 29842

TBM #107 "N.I.S." 16" Hickory 4' Lt.
Sta. 1727+18 Elev. 1462.78
TBM #108 "N.I.S." Power Pole 143' Rt.
Sta. 1733+03 Elev. 1398.16
TBM #50 "C.P.S." 5" Cedar Lt.
Sta. 1737+66 Elev. 1455.30

DEH/LDT RAV-N 8915203 4-19-90 21

① 6237A PLAN & ELEVATION 29843



LEGEND

 TEST HOLE LOCATION

ELEVATION - BRIDGE A

Total Length of Bridge = 882'-2"

280' CONTINUOUS PLATE GIRDER UNIT #3
600' CONTINUOUS PLATE GIRDER UNIT #2

Spans: Span 1 (140'-0"), Span 2 (140'-0"), Span 3 (140'-0"), Span 4 (160'-0"), Span 5 (160'-0"), Span 6 (140'-0")

Joints: 2" Sliding Plate Joint, 3" Sliding Plate Joint

Piers: PIER 1, PIER 2, PIER 3, PIER 4, PIER 5

Abutments: SOUTH ABUTMENT, NORTH ABUTMENT

Structural Details:
 - HP 12x53 Piles x 89'
 - HP 12x53 Piles x 86'
 - 4 - HP 12x53 Piles x 83'
 - Type I Granular Material
 - Type II Granular Material
 - Concrete Parapet Rail
 - Relocated Field Road
 - Top of Rock

Vertical Curve Data:
 PVI STA. 1741+86.15
 ELEV. 1494.56 PROFILE GRADE
 LVC 1400'
 M.O. +12.22

Grades: -4.73%, 2.25%

Note: All Deck Elevations Shown are on Profile Grade Line.

Note: Omit Type I Granular Material around Pile Group (Typical)

For Details of Buttress see Sheets No. 7 & 8

Stationing: 1725+00 to 1735+00



2x53 SHEET 2 OF 2
GENERAL PLAN AND ELEVATION - BRIDGE A
U.S. HIGHWAY 71 OVER RAVINE

WASHINGTON		COUNTY
ROUTE	SEC.	
ARKANSAS STATE HIGHWAY COMMISSION		
LITTLE ROCK, ARK.		
DRAWN BY: L.D.T.	DATE: Sept., 1989	
CHECKED BY: H.J.P.	DATE: Sept., 1989	SCALE: 1" = 40'-0"
DESIGNED BY: T.B.H.	DATE: Sept., 1989	
BRIDGE NO. 6237 A	DRAWING NO. 29843	

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	36	
				1 SOIL BORINGS		29844		

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC.
BORING NO. B-5-1
PAGE NO. 1 of 1

Job No. R40044 Washington County Date December 18, 1989
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation
Station No. 1725+44 Equipment CME TR Drill
Location 134' Left of Center Line of Construction Logged By Wade Holdcraft
Completion Depth 22.8 ft. Depth to Water at hrs. ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1490.9						
5		Moist, Stiff, Brown Silty, Sandy Clay with Sandstone Cobbles and Boulders						
10		Hard, Gray Limestone				100%	R.O.D.	99
15		Cavity (10.2' to 10.6')				80%	R.O.D.	92
20		Hard, Gray Limestone				68%	R.O.D.	82
25		Cavity (14.8' to 15.1')						
30		Hard, Gray Limestone				44%	R.O.D.	94
35		Cavity (15.6' to 15.8')						
40		Hard, Gray Limestone						
45		Hard, Gray Limestone Interbedded with Soft, Dark Gray Shale						
50		Boring Terminated						

REMARKS Hollow stem augers were utilized to a depth of 5.5'.

FORM M & R-147

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC.
BORING NO. B-5-2
PAGE NO. 1 of 1

Job No. R40044 Washington County Date November 29, 1989
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation
Station No. 1725+44 Equipment CME TR Drill
Location 114' Left of Center Line of Construction Logged By Steven Ward
Completion Depth 22.9 ft. Depth to Water at hrs. ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1490.7						
5		Moist, Very Stiff, Brown Silty, Sandy Clay with Sandstone and Limestone Fragments					8	
10		Hard, Gray Fossiliferous Limestone				91%	R.O.D.	99
15						96%	R.O.D.	99
20						99%	R.O.D.	99
25		Boring Terminated						

REMARKS Hollow stem augers were utilized to a depth of 8.2'.

FORM M & R-147

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC.
BORING NO. B-5-3
PAGE NO. 1 of 1

Job No. R40044 Washington County Date December 5, 1989
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation
Station No. 1726+85 Equipment CME TR Drill
Location 129' Left of Center Line of Construction Logged By Steven Ward
Completion Depth 16.9 ft. Depth to Water at hrs. ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1477.2						
5		Moist, Stiff, Brown Silty, Sandy Clay with Sandstone Fragments						
10		Hard, Gray Limestone						
15		Medium Hard, Dark Gray Calcareous Hard, Gray Limestone						
20		Medium Hard, Dark Gray Shale						
25		Hard, Gray Limestone						
30		Boring Terminated						

REMARKS A hollow stem auger was utilized to a depth of 4.0'.

FORM M & R-147

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC.
BORING NO. B-5-4
PAGE NO. 1 of 1

Job No. R40044 Washington County Date November 30, 1989
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation
Station No. 1726+85 Equipment CME TR Drill
Location 114' Left of Center Line of Construction Logged By Steven Ward
Completion Depth 22.7 ft. Depth to Water at hrs. ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1477.6						
5		Moist, Stiff, Brown and Gray Silty, Sandy Clay with Sandstone and Limestone Fragments					60(0.4')	
10		Hard, Gray Fractured Limestone with Clay Seams				48%	R.O.D.	66
15		Cavity (6.7' to 8.3')						
20		Hard, Gray Fractured Limestone with Some Clay Seams				40%	R.O.D.	88
25		Soft, Dark Gray Shale				92%	R.O.D.	98
30		Hard, Gray Fossiliferous Limestone						
35						94%	R.O.D.	96
40		Boring Terminated						

REMARKS A hollow stem auger was utilized to a depth of 4.0'.

FORM M & R-147

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC.
BORING NO. B-5-5
PAGE NO. 1 of 1

Job No. R40044 Washington County Date December 4, 1989
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation
Station No. 1728+25 Equipment CME TR Drill
Location 114' Left of Center Line of Construction Logged By Steven Ward
Completion Depth 23.0 ft. Depth to Water at hrs. ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1467.4*						
5		Moist, Very Stiff, Brown and Gray Silty, Sandy Clay with Sandstone Fragments				77%	R.O.D.	81
10		Hard, Gray Limestone Boulder						
15		Moist, Very Stiff, Brown Sandy Clay						58
20		Soft, Brown Weathered Sandstone						
25		Hard, Gray and Brown Limestone				62%	R.O.D.	94
30						88%	R.O.D.	99
35		Hard, Gray Limestone				100%	R.O.D.	99
40		Boring Terminated						

REMARKS A hollow stem auger was utilized to a depth of 3.0'.

* A bulldozer was utilized to make a working pad for drilling equipment.

FORM M & R-147

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC.
BORING NO. B-5-6
PAGE NO. 1 of 1

Job No. R40044 Washington Co. Date December 1, 1989
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation
Station No. 1726+85 Equipment CME TR Drill
Location 94' Left of Center Line of Construction Logged By Steven Ward
Completion Depth 17 ft. Depth to Water at hrs. ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1477.4						
5		Moist, Stiff, Brown Silty, Sandy Clay with Sandstone Fragments						
10		Hard, Gray Limestone						
15		Wet, Soft, Brown Calcareous Clay						
20		Hard, Gray Limestone with Some Clay Seams						
25		Hard, Gray Limestone with Some Thin Sandstone Seams						
30		Medium Hard, Dark Gray Shale						
35		Hard, Gray Limestone						
40		Boring Terminated						

REMARKS Hollow stem augers were utilized to a depth of 3.0'.

FORM M & R-147

NOTE: ALL STATIONS ARE FROM CENTER LINE CONSTRUCTION - SHEET 1 & 2.

SHEET 1 OF 3
SOIL BORINGS
U.S. HIGHWAY 71 OVER RAVINE
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: D.E.H. DATE: FEB. 1990
CHECKED BY: H.J.P. DATE: FEB. 1990
DESIGNED BY: H.J.P. DATE: FEB. 1990
SCALE: NONE
BRIDGE ENGINEER BRIDGE NO. 6237 A DRAWING NO. 29844

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	37	
				① SOIL BORINGS		29844A		

ARKANSAS HWY. & TRANS. DEPARTMENT				BORING NO. 8-5-7				
MATERIALS & RESEARCH DIVISION — GEOTECHNICAL SEC.				PAGE NO. 1 of 1				
Job No. R40044 Washington County		Date December 4 & 5, 1989		Job Name Woolsey - West Fork		Type of Drilling Rotary Wash		
U.S. 71 Relocation				Equipment CME TR Drill				
Station No. 1729+65		Location 114' Left of Center Line of Construction		Logged By Steven Ward				
Completion Depth 38 ft.		Depth to Water of _____ ft.						
DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO BLOWS /6 INCHES	% RECOVERY
0		Surface Elevation 1427.6*						
5		Moist, Very Stiff to Stiff, Brown Silty, Sandy Clay with Sandstone Fragments					5 7-10	
10		Moist, Very Dense, Brown and Gray Sandstone and Limestone Fragments with Silty, Sandy Clay					8-60(0.2')	
15		Hard, Gray and Brown Fractured Sandstone with Some Calcareous Seams			19%	R.O.D.	43	
20		Soft, Gray Calcareous Weathered Shell						
25		Hard, Gray Limestone			14%	R.O.D.	64	
30		Moist, Very Stiff, Brown Clay						
35		Hard, Gray Limestone with Thin Brown and Gray Clay Seams			99%	R.O.D.	98	
40		Hard, Gray Limestone						
45		Hard, Gray Limestone with Thin Brown and Gray Clay Seams			64%	R.O.D.	84	
50		Hard, Gray Limestone						
55		Hard, Gray Limestone			96%	R.O.D.	92	
60		Boring Terminated						
REMARKS: Hollow stem augers were utilized to a depth of 12.5'. * A bulldozer was utilized to make a working pad for drilling equipment.								
FORM M & R-147								

ARKANSAS HWY. & TRANS. DEPARTMENT				BORING NO. 8-5-8				
MATERIALS & RESEARCH DIVISION — GEOTECHNICAL SEC.				PAGE NO. 1 of 1				
Job No. R40044 Washington County		Date December 6, 1989		Job Name Woolsey - West Fork		Type of Drilling Rotary Wash		
U.S. 71 Relocation				Equipment CME TR Drill				
Station No. 1731+25		Location 114' Left of Center of Construction		Logged By Steven Ward				
Completion Depth 31.5 ft.		Depth to Water of _____ ft.						
DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO BLOWS /6 INCHES	% RECOVERY
0		Surface Elevation 1408.3						
5		Moist, Stiff, Brown Silty, Sandy Clay with Sandstone Fragments					66%	R.O.D. 82
10		Hard, Gray Limestone						
15		Cavity (8.1' to 9.3')				26%	R.O.D.	32
20		Soft, Brown Clay						
25		Hard, Gray Limestone			93%	R.O.D.	88	
30		Hard, Gray Sandstone						
35		Hard, Gray Limestone with Thin Dark Gray Shale Seams			16%	R.O.D.	78	
40		Medium Hard, Dark Gray Shale Interbedded with Hard, Gray Limestone			72%	R.O.D.	94	
45		Hard, Gray Limestone						
50		Medium Hard, Dark Gray Shale			86%	R.O.D.	99	
55		Hard, Gray Limestone						
60		Boring Terminated						
REMARKS: A hollow stem auger was utilized to a depth of 3.0'.								
FORM M & R-147								

ARKANSAS HWY. & TRANS. DEPARTMENT				BORING NO. 8-5-9				
MATERIALS & RESEARCH DIVISION — GEOTECHNICAL SEC.				PAGE NO. 1 of 1				
Job No. R40044 Washington County		Date December 13, 1989		Job Name Woolsey - West Fork		Type of Drilling Rotary Wash		
U.S. 71 Relocation				Equipment CME TR Drill				
Station No. 1731+25		Location 94' Left of Center Line of Construction		Logged By Wade Holdcraft				
Completion Depth 29.7 ft.		Depth to Water of _____ ft.						
DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO BLOWS /6 INCHES	% RECOVERY
0		Surface Elevation 1406.9						
5		Moist, Very Stiff, Brown Silty, Sandy Clay with Sandstone Fragments						
10		Hard, Gray Limestone						
15		Cavity (6.7' to 7.7')						
20		Hard, Gray Limestone						
25		Cavity (9.1' to 13.5')						
30		Hard, Gray Limestone with Some Thin Dark Gray Shale Seams						
35		Medium Hard, Dark Gray Shale Interbedded with Hard, Gray Limestone			14%	R.O.D.	99	
40		Moist, Stiff, Gray Calcareous Silty, Sandy Clay						
45		Hard, Gray Limestone			76%	R.O.D.	99	
50		Boring Terminated						
REMARKS: Hollow stem augers were utilized to a depth of 5.2'.								
FORM M & R-147								

ARKANSAS HWY. & TRANS. DEPARTMENT				BORING NO. 8-5-10				
MATERIALS & RESEARCH DIVISION — GEOTECHNICAL SEC.				PAGE NO. 1 of 1				
Job No. R40044 Washington County		Date December 7, 1989		Job Name Woolsey - West Fork		Type of Drilling Rotary Wash		
U.S. 71 Relocation				Equipment CME TR Drill				
Station No. 1732+85		Location 114' Left of Center Line of Construction		Logged By Steven Ward				
Completion Depth 22 ft.		Depth to Water of _____ ft.						
DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO BLOWS /6 INCHES	% RECOVERY
0		Surface Elevation 1414.2						
5		Moist, Very Stiff, Brown Silty, Sandy Clay with Sandstone Cobbles					0%	R.O.D. 70
10		Hard, Gray Fossiliferous Limestone					82%	R.O.D. 99
15		Cavity (7.5' to 8.3')					74%	R.O.D. 84
20		Hard, Gray Limestone with Some Thin Sandstone Seams						
25		Hard, Gray Fossiliferous Limestone*					100%	R.O.D. 95
30		Boring Terminated					50%	R.O.D. 96
REMARKS: A hollow stem auger was utilized to a depth of 1.0'. * A soft, dark gray shale seam was encountered from 20.6' to 20.8'.								
FORM M & R-147								

ARKANSAS HWY. & TRANS. DEPARTMENT				BORING NO. 8-5-11				
MATERIALS & RESEARCH DIVISION — GEOTECHNICAL SEC.				PAGE NO. 1 of 1				
Job No. R40044 Washington County		Date December 13, 1989		Job Name Woolsey - West Fork		Type of Drilling Rotary Wash		
U.S. 71 Relocation				Equipment CME TR Drill				
Station No. 1734+25		Location 114' Left of Center Line of Construction		Logged By Wade Holdcraft				
Completion Depth 22.4 ft.		Depth to Water of _____ ft.						
DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO BLOWS /6 INCHES	% RECOVERY
0		Surface Elevation 1458.5						
5		Moist, Very Stiff, Brown Silty, Sandy Clay with Cobbles						
10		Moist, Very Dense, Gray Limestone Fragments with Silty, Sandy Clay			34%	R.O.D.	46	
15		Hard, Gray Limestone						
20		Moist, Very Stiff, Brown Clay			80%	R.O.D.	96	
25		Hard, Gray Limestone *						
30					86%	R.O.D.	99	
35								
40					100%	R.O.D.	99	
45		Boring Terminated						
REMARKS: A hollow stem auger was utilized to a depth of 4.7'. * A cavity was encountered from 9.9' to 10.0'.								
FORM M & R-147								

SHEET 2 OF 3
SOIL BORINGS
U.S. HIGHWAY 71 OVER RAVINE
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: D.E.H. DATE: FEB. 1990
CHECKED BY: H.J.P. DATE: FEB. 1990
DESIGNED BY: H.J.P. DATE: FEB. 1990
SCALE: NONE
BRIDGE ENGINEER BRIDGE NO. 6237 A DRAWING NO. 29844 A

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC. BORING NO. B-N-1
PAGE NO. 1 of 1

Job No. R40044 Washington County Date December 15, 1987
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation - Unnamed Creek Br. Equipment CME AT Drill
Station No. 1724+99
Location 114' Left of Center Line of Survey Logged By Alvis Arnold
Completion Depth 40.5 ft. Depth to Water at _____ ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1489.2						
5		Hard, Brown Sandstone Boulder						
10		Moist, Medium Stiff, Brown Clay with Sandstone Fragments and Some Cobbles						
15		Moist, Stiff to Very Stiff, Brown Clay with Sandstone Fragments						
20		Moist, Medium Dense, Brown Clayey Sand with Sandstone Fragments					23	7-12
25		Hard, Gray Limestone						
30		Soft, Dark Gray Highly Weathered Calcareous Shale					88%	R.O.D. 96
35		Hard, Gray Limestone*					92%	R.O.D. 92
40		Medium Hard, Dark Gray Calcareous Shale					96%	R.O.D. 99
45		Hard, Gray Limestone					99%	R.O.D. 99
45		Boring Terminated						

REMARKS Hollow stem augers were utilized to a depth of 19.2'.
*A stiff, brown clay seam was encountered from 28.1' to 28.7'.
FORM M & R-147

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC. BORING NO. B-N-2
PAGE NO. 1 of 1

Job No. R40044 Washington County Date December 10-14, 1987
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation - Unnamed Creek Br. Equipment CME AT Drill
Station No. 1724+80
Location 110' Left of Center Line of Survey Logged By Alvis Arnold
Completion Depth 27.5 ft. Depth to Water at _____ ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1475.6						
5		Moist, Medium Stiff, Brown Clay with Sandstone Fragments					8	8-18
10		Moist, Very Stiff, Brown Clay with Sandstone Fragments						
15		Hard, Gray Limestone					80%	R.O.D. 96
20		Moist, Stiff, Brown Clay					44%	R.O.D. 66
25		Hard, Gray Limestone						
30		Moist, Stiff, Brown Clay						
35		Hard, Gray Limestone*					66%	R.O.D. 90
40		Soft, Brown Highly Weathered Calcareous Shale						
45		Medium Hard, Dark Gray Calcareous Shale					98%	R.O.D. 99
50		Hard, Gray Limestone						
55		Boring Terminated					92%	R.O.D. 99

REMARKS Hollow stem augers were utilized to a depth of 7.0'.
*A hard, brown sandstone seam was encountered from 14.6' to 14.8'.
FORM M & R-147

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC. BORING NO. B-N-3
PAGE NO. 1 of 1

Job No. R40044 Washington County Date December 8-9, 1987
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation - Unnamed Creek Br. Equipment CME AT Drill
Station No. 1724+80
Location 114' Left of Center Line of Survey Logged By Alvis Arnold
Completion Depth 40.5 ft. Depth to Water at _____ ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1463.9						
5		Moist, Medium Stiff, Brown Clay with Sandstone Fragments and Cobbles					96%	R.O.D. 99
10		Hard, Gray Limestone with Some Brown Sandstone Seams					34%	R.O.D. 52
15		Moist, Soft, Brown Clay						
20		Hard, Gray Limestone with Some Brown Sandstone Seams					48%	R.O.D. 84
25		Moist, Soft, Brown Clay						
30		Hard, Gray Limestone with Some Brown Sandstone Seams					92%	R.O.D. 99
35		Hard, Gray Limestone						
40		Cavity					22%	R.O.D. 42
45		Hard, Gray Limestone					74%	R.O.D. 96
50		Moist, Stiff, Brown Clay						
55		Hard, Gray Limestone with Some Thin Dark Gray Shale Seams					92%	R.O.D. 99
60		Hard, Gray Limestone						
65		Hard, Gray Limestone					92%	R.O.D. 98
70		Boring Terminated						

REMARKS
FORM M & R-147

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC. BORING NO. B-N-4
PAGE NO. 1 of 2

Job No. R40044 Washington County Date December 7-8, 1987
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation - Unnamed Creek Br. Equipment CME AT Drill
Station No. 1724+13
Location 114' Left of Center Line of Survey Logged By Alvis Arnold
Completion Depth 51.7 ft. Depth to Water at _____ ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1468.3						
5		Moist, Medium Stiff, Brown Clay with Sandstone Fragments and Cobbles						
10		Moist, Very Stiff, Reddish Brown Clay with Sandstone Fragments					14	20-17
15		Moist, Very Stiff, Brown and Gray Clay with Sandstone Fragments					18	19-21
20		Moist, Stiff, Reddish Brown Clay with Some Sandstone Fragments					4	7-7
25		Medium Hard, Gray and Brown Highly Weathered Shale with Sandstone Fragments					56(0.4)	
30		Hard, Gray and Brown Sandstone					8%	R.O.D. 70
35		Soft, Gray and Brown Highly Weathered Shale						
40		Medium Hard, Brown Sandstone					0%	R.O.D. 50
45		Moist, Soft, Brown and Gray Clay with Sandstone Fragments					2	2-2
50		Hard, Brown and Gray Sandstone with Some Weathered Shale Seams						
55		Moist, Soft, Brown Clay					82%	R.O.D. 96
60		Hard, Gray Limestone*						

REMARKS *A soft, gray and brown sandstone seam was encountered from 37.7' to 38.2'.
FORM M & R-147

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC. BORING NO. B-N-5
PAGE NO. 2 of 2

Job No. R40044 Washington County Date December 7-8, 1987
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation - Unnamed Creek Br. Equipment CME AT Drill
Station No. 1724+13
Location 114' Left of Center Line of Survey Logged By Alvis Arnold
Completion Depth 51.7 ft. Depth to Water at _____ ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1468.3						
5		Hard, Gray Limestone					86%	R.O.D. 99
10		Hard, Gray Limestone with Some Thin Dark Gray Shale Seams					68%	R.O.D. 99
15		Boring Terminated						

REMARKS
FORM M & R-147

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC. BORING NO. B-N-6
PAGE NO. 1 of 1

Job No. R40044 Washington County Date November 19, 1987
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation - Unnamed Creek Bridge Equipment CME AT Drill
Station No. 1730+60
Location 114' Left of Center Line of Survey Logged By Alvis Arnold
Completion Depth 36 ft. Depth to Water at _____ ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1409.0						
5		Moist, Stiff, Brown Clay with Sandstone Fragments and Cobbles					6	6-3
10		Moist, Medium Stiff, Brown Clay with Sandstone Fragments					3	7-7
15		Hard, Gray Limestone					20%	R.O.D. 52
20		Moist, Soft, Gray Clay						
25		Hard, Gray Limestone Interbedded with Soft, Dark Gray Shale					0%	R.O.D. 99
30		Soft, Dark Gray Weathered Shale						
35		Alternating Layers of Hard, Gray Limestone and Soft, Dark Gray Calcareous Shale					65(0.5)	
40		Moist, Medium Stiff, Gray Calcareous Clay with Some Thin Gray Limestone					66%	R.O.D. 99
45		Hard, Gray Limestone*					98%	R.O.D. 99
50		Boring Terminated					90%	R.O.D. 99

REMARKS
FORM M & R-147

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC. BORING NO. B-N-7
PAGE NO. 1 of 1

Job No. R40044 Washington County Date November 17, 1987
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation - Unnamed Creek Bridge Equipment CME AT Drill
Station No. 1732+20
Location 118' Left of Center Line of Survey Logged By Alvis Arnold
Completion Depth 29.2 ft. Depth to Water at _____ ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1407.1						
5		Moist Medium Dense, Brown Sandstone Fragments and Cobbles with Some Clay Seams					7	21-4
10		Hard, Gray Limestone Interbedded with Medium Hard, Dark Gray Calcareous Shale					99%	R.O.D. 99
15		Soft, Gray and Brown Highly Weathered Calcareous Shale					5	10-3
20		Hard, Gray Limestone					99%	R.O.D. 99
25		Medium Hard, Dark Gray Calcareous Shale					78%	R.O.D. 99
30		Hard, Gray Limestone					92%	R.O.D. 99
35		Soft, Gray Weathered Calcareous Shale						
40		Hard, Gray Limestone					90%	R.O.D. 99
45		Boring Terminated						

REMARKS
FORM M & R-147

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC. BORING NO. B-N-8
PAGE NO. 1 of 2

Job No. R40044 Washington County Date November 17-18, 1987
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation - Unnamed Creek Bridge Equipment CME AT Drill
Station No. 1732+81
Location 117' Left of Center Line of Survey Logged By Alvis Arnold
Completion Depth 42.1 ft. Depth to Water at _____ ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1415.0						
5		Moist, Dense, Brown Sandstone Fragments and Cobbles with Sandy Clay					5	10-43
10		Moist, Medium Dense, Brown Sandstone Fragments and Some Clay					4	5-7
15		Hard, Gray Limestone Interbedded with Soft, Dark Gray Shale					50%	R.O.D. 92
20		Soft, Gray Weathered Shale					6	27-61
25		Hard, Gray Limestone						
30		Moist, Stiff, Brown Clay with Some Thin Gray Limestone Seams					28%	R.O.D. 36
35		Moist, Stiff, Brown Clay						
40		Hard, Gray Limestone					86%	R.O.D. 90
45		Soft, Gray Highly Weathered Shale					88%	R.O.D. 94
50		Hard, Gray Limestone						
55		Moist, Stiff, Brown Clay						
60		Hard, Gray Limestone with Some Thin Dark Gray Shale Seams						

REMARKS
FORM M & R-147

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS & RESEARCH DIVISION - GEOTECHNICAL SEC. BORING NO. B-N-9
PAGE NO. 2 of 2

Job No. R40044 Washington County Date November 17-18, 1987
Job Name Woolsey - West Fork Type of Drilling Rotary Wash
U.S. 71 Relocation - Unnamed Creek Bridge Equipment CME AT Drill
Station No. 1732+81
Location 117' Left of Center Line of Survey Logged By Alvis Arnold
Completion Depth 42.1 ft. Depth to Water at _____ ft.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOISTURE	UNIT DRY WT. LBS./CU. FT.	NO. BLOWS / 6 INCHES	% RECOVERY
0		Surface Elevation 1415.0						
5		Hard, Gray Limestone with Some Thin Dark Gray Shale Seams					68%	R.O.D. 99
10		Boring Terminated						

REMARKS
FORM M & R-147

NOTE: ALL STATIONS ARE FROM ORIGINAL CENTER LINE SURVEY.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	39	
				① 6237A&B GEN NOTES 29845				

GENERAL NOTES — JOB R40044

- ALL BEARINGS REFER TO TRUE NORTH.
- LEVEL DATUM IS MEAN SEA LEVEL REFERENCED TO U.S.C. AND G.S.
- GRADE LINE DENOTES FINISHED GRADE.
- DRAWINGS SHOW GENERAL FEATURES OF DESIGN ONLY. SHOP DRAWINGS SHOWING DETAILS OF STRUCTURAL STEEL AND PERMANENT STEEL FORMS SHALL BE PREPARED, SUBMITTED AND APPROVED BEFORE FABRICATION IS BEGUN.
- ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE RESPECTIVE OWNERS, UNLESS OTHERWISE PROVIDED.
- ALL CONCRETE IN THE SUPERSTRUCTURE SLABS AND PARAPET SHALL BE CLASS S(AE). ALL OTHER CONCRETE SHALL BE CLASS S, EXCEPT CLASS B SHALL BE USED IN THE PIER FOOTINGS.
- ALL CONCRETE SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.
- ALL CONCRETE SHALL BE POURED AND SCREEDED OFF PRIOR TO INITIAL SET. THE CONCRETE DECK SHALL BE FINISHED WITH A METAL TINE IN ACCORDANCE WITH SUBSECTION 802.20 OF THE STANDARD SPECIFICATIONS. MOVEMENT OF THE FINISHING MACHINE ACROSS NEW CONCRETE SHALL BE ON PLANKS PLACED ON THE SURFACE AND SHALL BE PROHIBITED FOR 72 HOURS AFTER FINISHING THE POUR.
- THE BRIDGE SLAB SHALL BE MADE BY PLACING THE SAME NUMBERED POURS SIMULTANEOUSLY OR SEPARATELY — WITH PARTICULAR EMPHASIS ON THE REQUIREMENT THAT THE LOWER NUMBERED POURS SHALL BE MADE PRIOR TO ANY ADJACENT HIGHER NUMBERED POUR. THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE ENGINEER IF HE ELECTS TO MAKE POURS OTHER THAN SHOWN. FORTY-EIGHT HOURS SHALL ELAPSE BETWEEN POURS WHICH ARE NOT ADJACENT. SEVENTY-TWO HOURS SHALL ELAPSE BETWEEN ADJACENT POURS. ALL PARAPET POURS MADE BEFORE ENTIRE SLAB UNIT HAS BEEN PLACED MUST BE APPROVED BY THE ENGINEER.
- REINFORCING STEEL SHALL BE ASTM A615 OR A617 GRADE 60 DEFORMED BARS. LAP SPLICES SHALL BE A MINIMUM OF 32 BAR DIAMETERS IN LENGTH UNLESS OTHERWISE NOTED. BAR SIZES ARE DESIGNATED BY NUMBER, THE FIRST DIGIT OR DIGITS INDICATING THE SIZE OF THE BAR. BARS SHALL BE ACCURATELY LOCATED IN THE FORMS AND FIRMLY HELD IN PLACE BY STEEL SUPPORTS SUFFICIENT IN NUMBER AND SIZE TO PREVENT DISPLACEMENT DURING THE COURSE OF CONSTRUCTION. THE WIRE SUPPORTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM OF "REINFORCING STEEL."
- DIMENSIONS SHOWN IN REINFORCING BAR BENDING DIAGRAMS ARE TO OUTER EDGE OF BARS, UNLESS OTHERWISE NOTED.
- REINFORCING STEEL IN 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.
- THE TRANSVERSE TRUSS BARS SHOWN IN NON-SKEWED SUPERSTRUCTURE SLABS MAY BE REPLACED WITH FULL LENGTH STRAIGHT BARS OF THE SAME SIZE IN THE TOP AND BOTTOM MAT OF THE SLAB. THE BARS IN THE TOP MAT SHALL BE EPOXY COATED. THE BASIS OF PAYMENT SHALL BE THE TRUSS BARS.
- BOILED LINSEED OIL SHALL BE APPLIED TO THE ROADWAY SURFACE AND THE FRONT AND TOP OF RAIL OF ALL BRIDGE DECKS.
- 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)."
- PILES IN ABUTMENTS TO BE DRIVEN AFTER EMBANKMENT TO BOTTOM OF CAP IS IN PLACE.
- STEEL BEARING PILING SHALL BE DRIVEN WITH AN APPROVED AIR, STEAM, OR DIESEL HAMMER WITH A MINIMUM ENERGY OF 19,000 FOOT POUNDS PER BLOW. HP 12 x 53 PILES SHALL BE DRIVEN TO A CAPACITY OF 70 TONS. LENGTHS SHOWN ARE FOR ESTIMATING QUANTITIES AND FOR USE IN DETERMINING PAYMENT FOR CUT-OFF AND BUILDUP.
- MANUFACTURED PILE TIPS SHALL BE INSTALLED ON ALL PILES ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS. THE PILE TIPS SHALL BE HARD BITE HP77600 H-PILE POINTS MANUFACTURED BY ASSOCIATED PIPE AND FITTING CORPORATION, VERSA-BITE 300P ROCK DUTY SERIES H-PILE POINTS, MANUFACTURED BY VERSA-STEEL, INC., OR EQUAL AS APPROVED BY THE BRIDGE ENGINEER. PILE TIPS WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM OF "STEEL PILING."
- CONCRETE IN THE BRIDGE SUPERSTRUCTURE SHALL BE PLACED AND CONSOLIDATED FOR THE ENTIRE POUR BEFORE ANY CONCRETE HAS TAKEN ITS INITIAL SET.

STRUCTURAL STEEL NOTES

- ALL STRUCTURAL STEEL SHALL BE A588.
- STRUCTURAL SHAPES OF EQUAL OR GREATER STRENGTH MAY BE SUBSTITUTED FOR SHAPES SHOWN IF APPROVAL IS OBTAINED FROM THE BRIDGE ENGINEER. PAYMENT WILL BE MADE ON THE BASIS OF SHAPES SHOWN.
- ALL FLANGE AND WEB PLATES, ARE CONSIDERED MAIN LOAD CARRYING MEMBERS AND SHALL MEET THE REQUIREMENTS OF THE LONGITUDINAL CHARPY V-NOTCH TEST AS SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS. GROOVE WELDS IN THESE MAIN MEMBERS SHALL BE QUALITY CONTROL (Q.C.) TESTED BY NONDESTRUCTIVE TESTING AS REQUIRED BY THE GOVERNING SPECIFICATIONS.
- ALL WELDING SHALL CONFORM TO SUBSECTION 807.24 OF THE STANDARD SPECIFICATIONS.
- FILLET WELDS AT FLANGE TO WEB PLATE CONNECTIONS SHALL BE Q.C. TESTED BY THE MAGNETIC PARTICLE METHOD.
- ALL QUALITY CONTROL (Q.C.) TESTING IS AT THE CONTRACTOR'S EXPENSE.
- ALL WELDS TO BE MADE DURING FABRICATION, BOTH TEMPORARY AND PERMANENT, SHALL BE FULLY DETAILED ON THE SHOP DRAWINGS. ADDITIONAL WELDS FOR ERECTION PURPOSES, BOTH PERMANENT AND TEMPORARY, SHALL BE FULLY DETAILED AND SUBMITTED TO THE BRIDGE DESIGN DIVISION OF THE ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT FOR APPROVAL.
- ALL GIRDERS SHALL BE BLOCKED IN THEIR TRUE POSITON, WITH WEBS HORIZONTAL, IN THE SHOP. THE CAMBER, LENGTH OF SECTIONS, DISTANCE BETWEEN BEARINGS AND OPENING OF JOINTS SHALL BE MEASURED WITH THE BEAMS IN THIS POSITION AND THIS INFORMATION SHALL BECOME A PART OF THE PERMANENT RECORDS OF THIS JOB.
- DIAPHRAGMS AND CROSSFRAMES SHALL BE INSTALLED AS BEAMS ARE ERECTED. ALL DIAPHRAGMS OR FRAMES SHALL BE INSTALLED AND COMPLETELY BOLTED PRIOR TO POURING OF FLOOR SLABS.
- OVERSIZED HOLES 3/16" GREATER THAN THE BOLT DIAMETER MAY BE USED AT ALL BOLTED CONNECTIONS OTHER THAN FIELD SPLICES FOR BOLTS 7/8" AND LESS IN DIAMETER. WASHERS UNDER BOTH NUT AND HEAD OF THE BOLT SHALL BE USED WITH OVERSIZED BOLT HOLES.
- FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER BOLTS UNLESS OTHERWISE NOTED. THE MINIMUM DISTANCE BETWEEN THE CENTERS OF 7/8" DIAMETER BOLTS SHALL NOT BE LESS THAN 3 TIMES THE DIAMETER OF THE BOLT AND PREFERABLY NOT LESS THAN 3". THE MINIMUM DISTANCE FROM THE CENTER OF A 7/8" DIAMETER BOLT TO A SHEARED OR FLAME CUT EDGE SHALL BE 1 1/2" AND TO A ROLLED OR PLANED EDGE SHALL BE 1 1/4". BOLT HOLES IN FIELD SPLICES SHALL NOT EXCEED 15/16" IN DIAMETER. BOLT HEADS AT FIELD SPLICES SHALL BE PLACED ON THE EXTERIOR SIDE OF BEAMS, AND BOTTOM OF BEAM FLANGES.
-
- BEARINGS SHALL BE FIRMLY SEATED IN ACCORDANCE WITH SUBSECTION 807.51 OF THE STANDARD SPECIFICATIONS. THIS ITEM OF WORK AND MATERIAL IS TO BE CONSIDERED AS SUBSIDIARY TO THE ITEM OF "STRUCTURAL STEEL IN PLATE GIRDER SPANS (A588)" AND WILL NOT BE PAID FOR DIRECTLY.
- THE BEARING ASSEMBLIES SHALL BE SET IN A VERTICAL POSITION AT 60 DEGREES F.
- ALL METAL BEARINGS AND ROADWAY EXPANSION DEVICES SHALL BE PAID FOR AS "STRUCTURAL STEEL IN PLATE GIRDER SPANS (A588)."
- STRUCTURAL STEEL WILL NOT BE PAINTED.
- GIRDER WEBS MAY BE MADE BY SHOP SPLICING WITH A MINIMUM LENGTH OF 25'-0" FOR SECTIONS. NO ADDITIONAL PAYMENT FOR WELDS FOR THESE SPLICES WILL BE MADE.
- ALL WEB AND FLANGE PLATES AND FLANGE SPlice PLATES MUST BE PLACED SO THAT THE DIRECTION IN WHICH THE PLATES ARE ROLLED IS ALONG THE LONGITUDINAL AXIS OF THE GIRDER.
- TRANSVERSE INTERMEDIATE STIFFENERS SHALL BE SET NORMAL TO THE TOP FLANGE AND ON THE SIDE OF THE GIRDER WEB AS INDICATED ON THE FRAMING PLANS. NO TRANSVERSE INTERMEDIATE STIFFENERS ARE TO BE PLACED ON THE OUTSIDE OF THE EXTERIOR GIRDERS.

SHEET 1 OF 1
GENERAL NOTES FOR STRUCTURES
U.S. HIGHWAY 71 OVER RAVINE

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

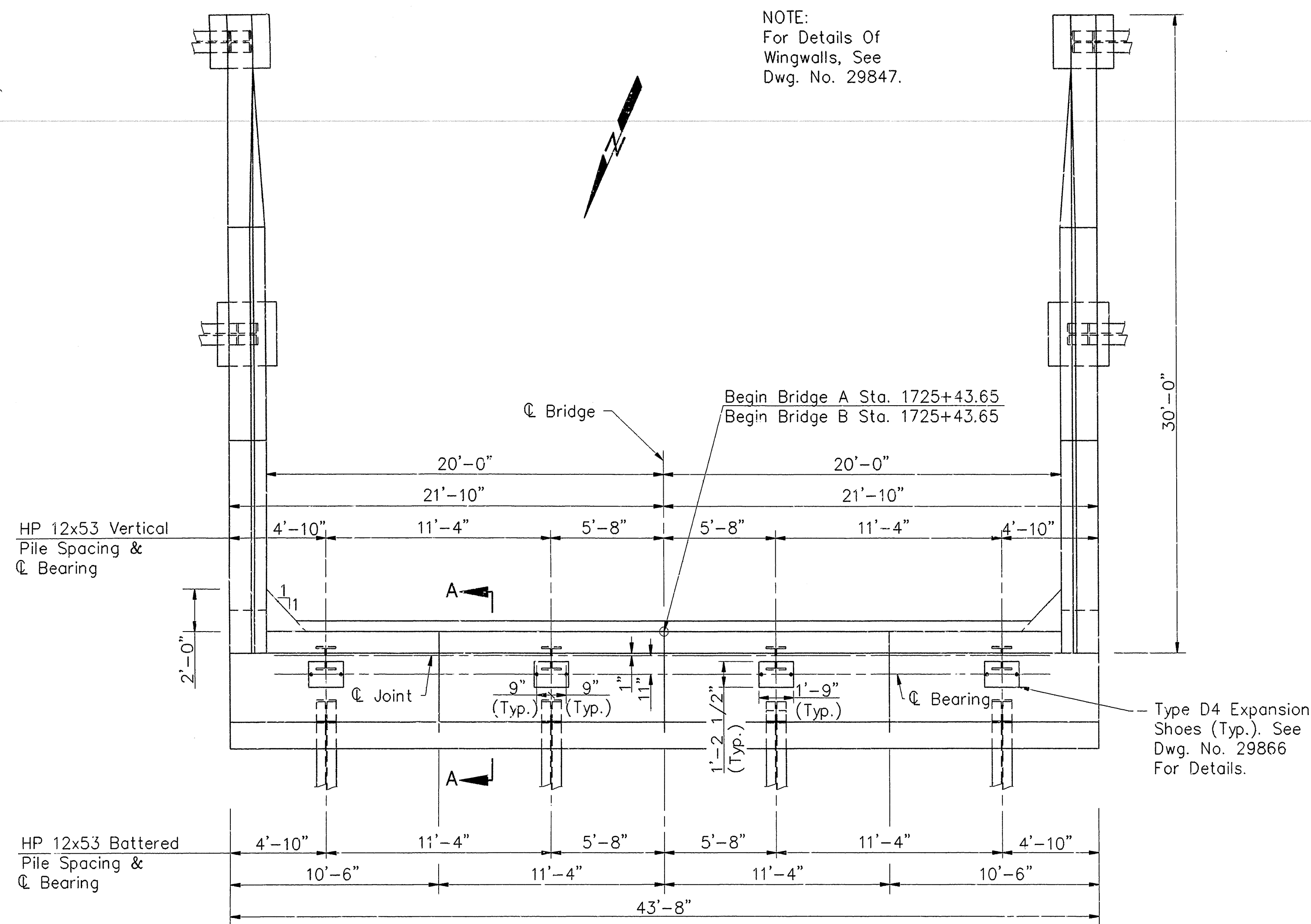
DRAWN BY: P.B.B. DATE June, 1988
CHECKED BY: H.J.P. DATE June, 1988 SCALE: NONE
DESIGNED BY: D.C.W. DATE June, 1988

BRIDGE NO. 6237 A & B DRAWING NO. 29845

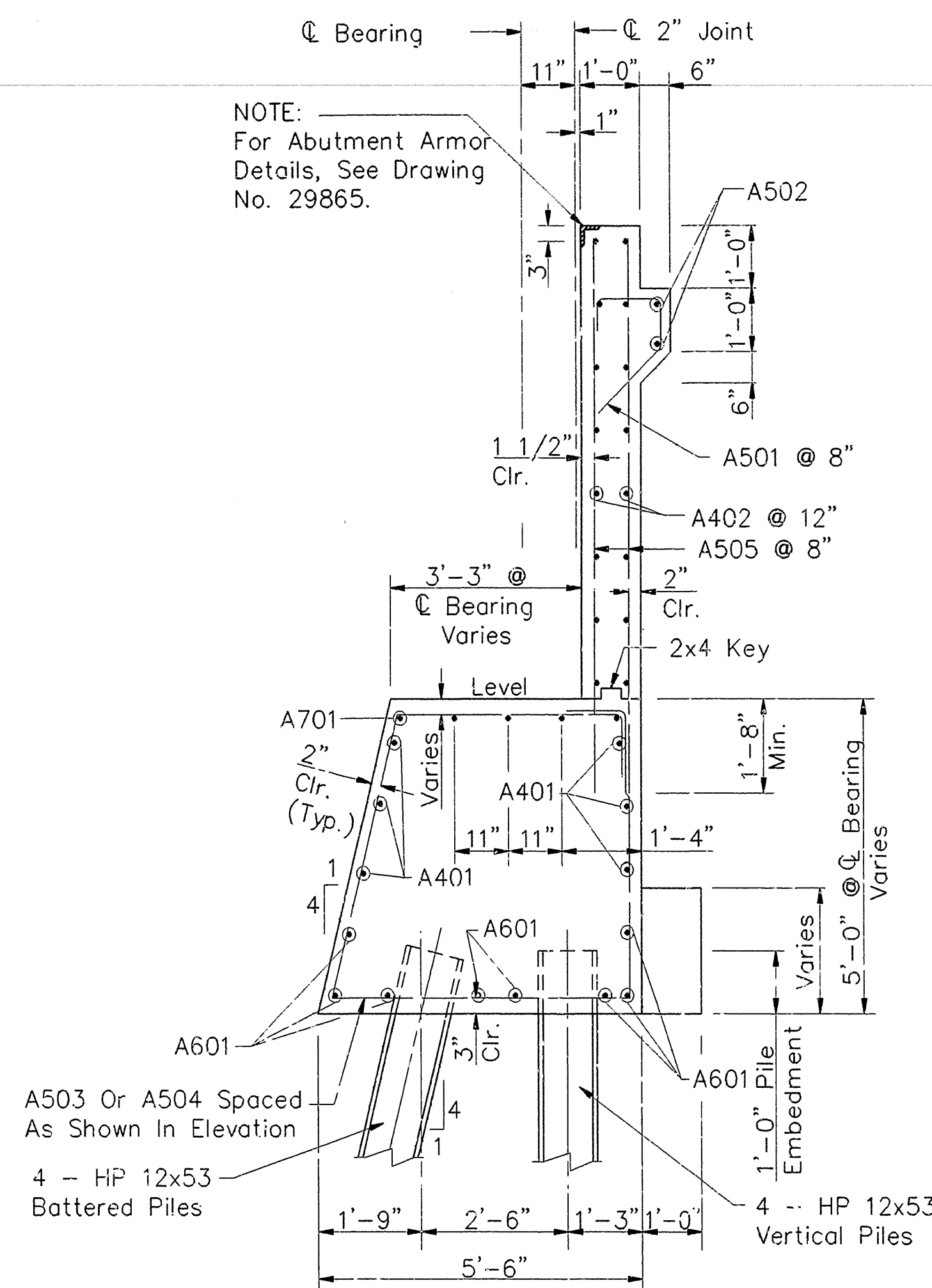


BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	40	
				(1) 6237A&B DTLS N. ABUT.'S		29846		

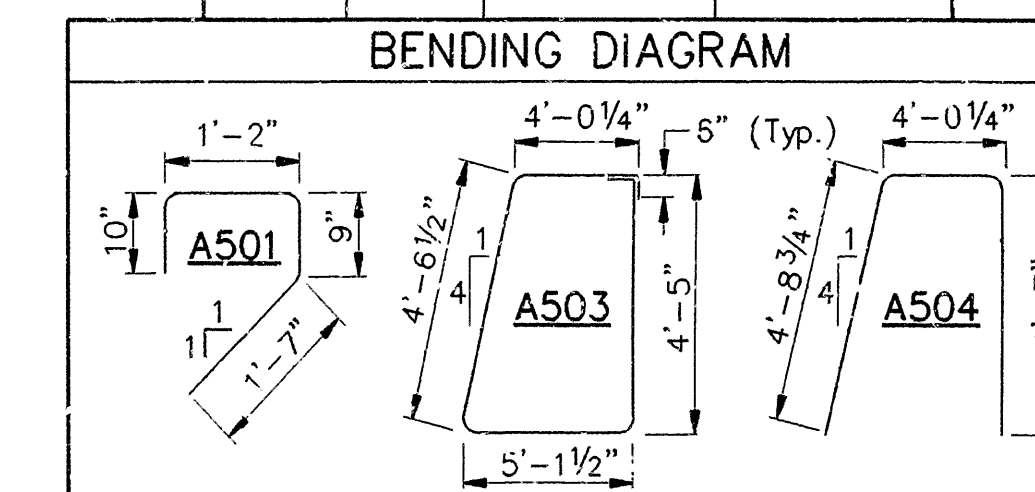


PLAN
SCALE: 1/4" = 1'-0"

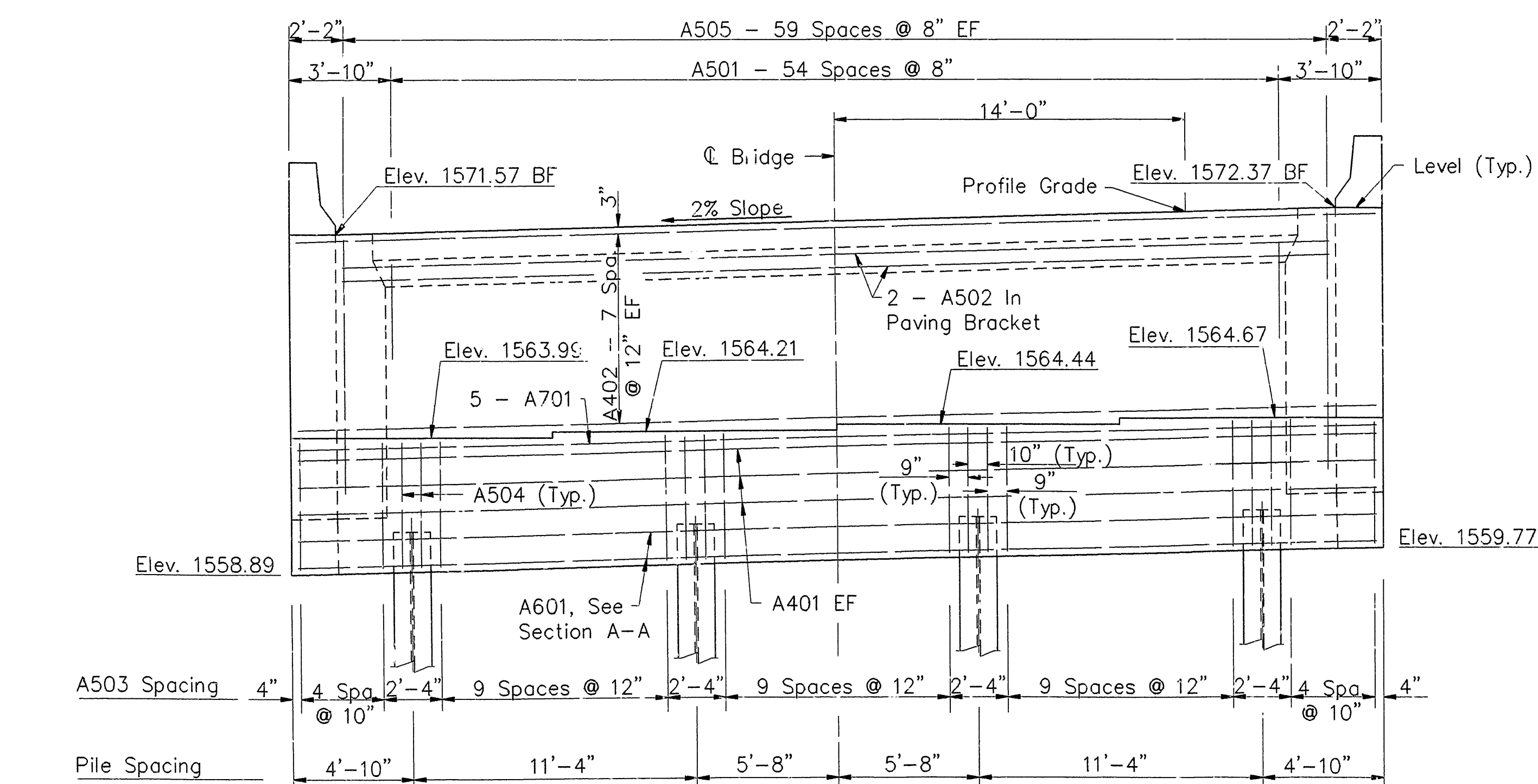


SECTION A-A
SCALE: 1/2" = 1'-0"

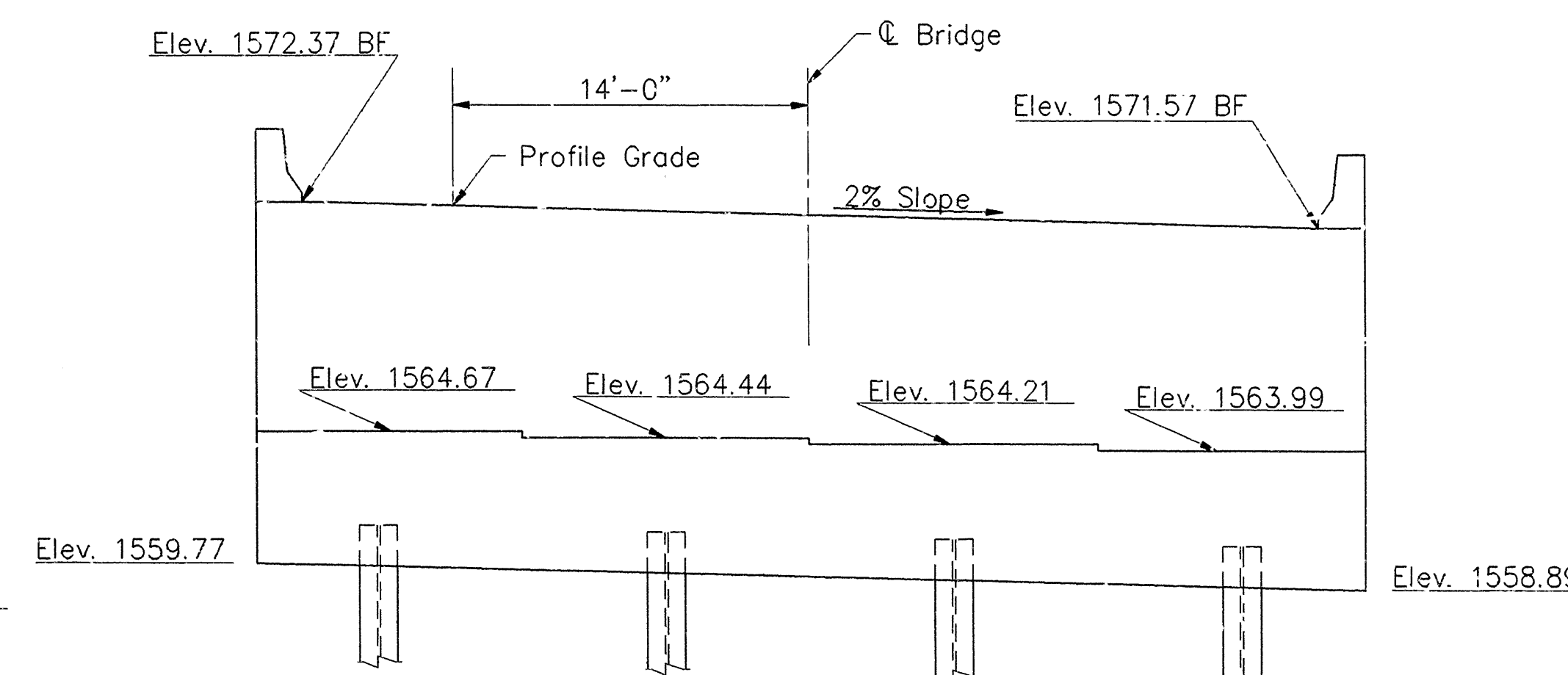
MARK	NO	LENGTH	PIN DIA
A401	6	43'-2"	STR
A402	16	43'-4"	STR
A501	55	4'-0"	2 1/2"
A502	2	39'-8"	STR
A503	40	18'-7"	2 1/2"
A504	8	13'-1 1/2"	2 1/2"
A505	120	9'-4"	STR
A601	8	43'-2"	STR
A701	5	43'-2"	STR



NOTE:
1. Dimension of Bars in Bending Diagram are Out-To-Out.
2. Reinforcement Schedule for One Abutment Only.



ELEVATION
BEGIN BRIDGE B - (LOOKING BACK)
SCALE: 1/4" = 1'-0"



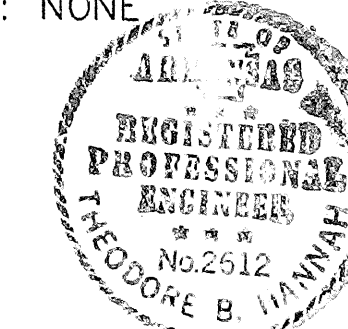
ELEVATION
BEGIN BRIDGE A - (LOOKING BACK)
SCALE: NONE

LEGEND

EF Each Face
NF Near Face
BF Back Face

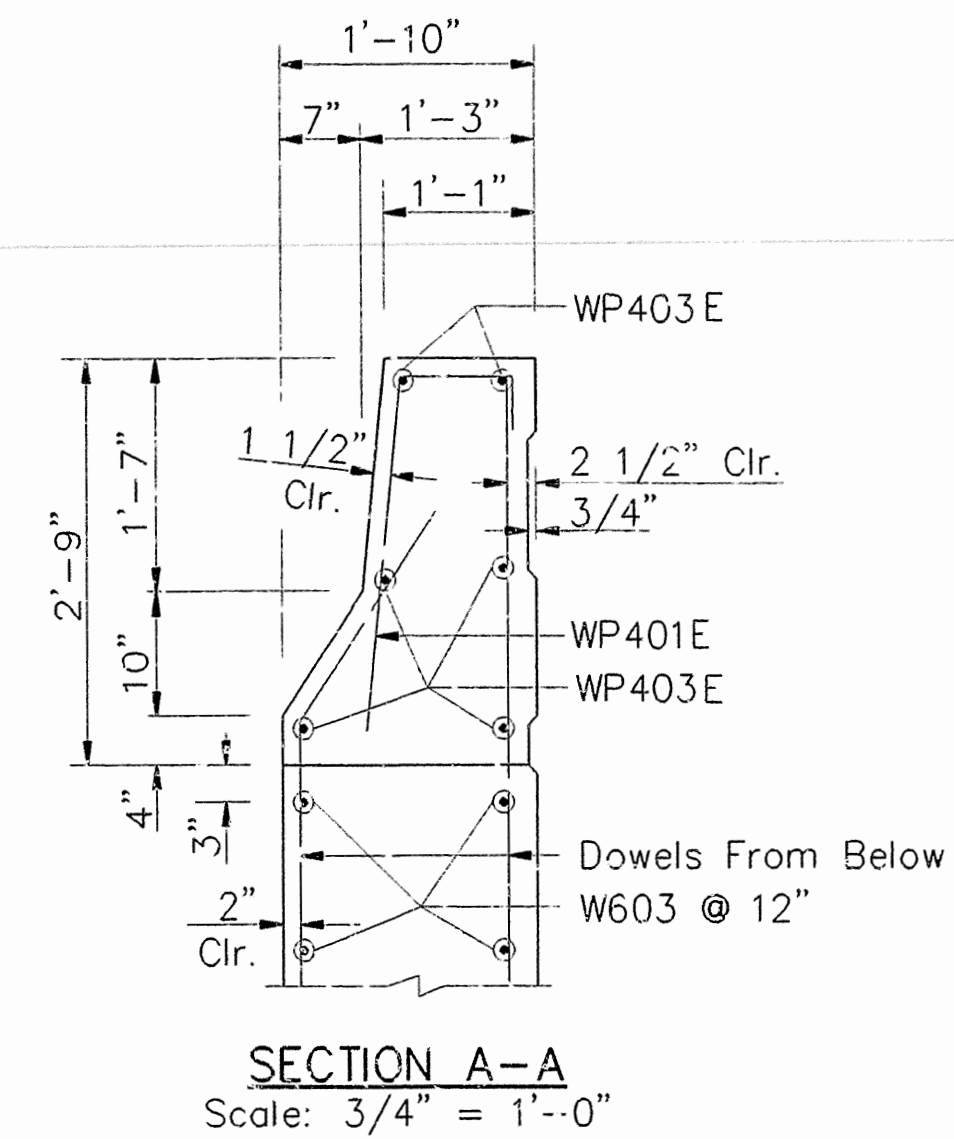
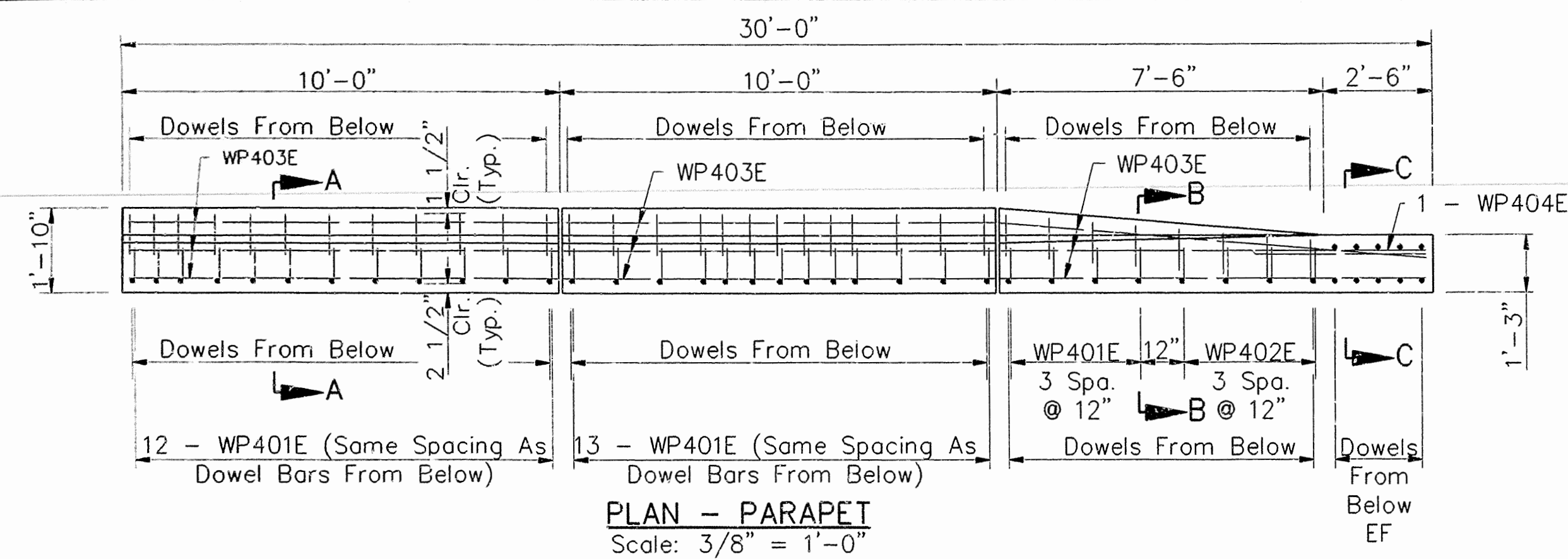
SHEET 1 OF 2
DETAILS OF SOUTH ABUTMENTS
U.S. HIGHWAY 71 OVER RAVINE

WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: R.N.F. DATE: Jan., 1990
CHECKED BY: T.B.H. DATE: Feb., 1990
DESIGNED BY: D.C.W. DATE: Jan., 1990
SCALE: AS NOTED
BRIDGE NO. 6237 A & B DRAWING NO. 29846



BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	41	
				(1) 6237A&B DTL. S. ABUT.		29847		



MARK	NO	LENGTH	PIN DIA	A	MARK	NO	LENGTH	PIN DIA	A
W401	1	13'-2"	STR.		W452 E	1	6'-6"	2	4'-10"
W402	1	12'-11 1/2"	STR.		W453		3'-2"		
W403	1	12'-9"	STR.		TO	2 EA.	TO	STR.	
W404		12'-6 1/2"			W455		9'-6"		
TO	1 EA.	TO	STR.		W456	9	7'-8"	2	
W410		11'-0"			W457	3	9'-3"	STR.	
W411		10'-10 1/2"			W458	4	8'-4"	2	1'-10"
TO	1 EA.	TO	STR.		W459	4	10'-0"	2	2'-2"
W414		10'-1 1/2"			W460	4	12'-4"	2	
W415		10'-1 1/2"			W461	3	1'-6"	STR.	
TO	1 EA.	TO	STR.		W601 E	4	9'-2"	STR.	
W418		9'-2 1/2"			W602 E	6	8'-0"	STR.	
W419		9'-0 3/4"			W603	10	28'-10"		
TO	1 EA.	TO	STR.		W604	6	14'-0"	STR.	
W425		7'-3"			W605	20	4'-10"	4 1/2	
W426	1	7'-2"	STR.		W606	2	13'-2"	STR.	
W427 E	1	12'-6"	2	10'-10"	W607 E	2	12'-6"	4 1/2	10'-10"
W428 E	1	12'-3 1/2"	2	10'-7 1/2"	W608		15'-10"		
W429 E	1	12'-1"	2	10'-5"	TO	2 EA.	TO	STR.	
W430 E		11'-10 1/2"		10'-2 1/2"	W610		21'-6"		
TO	1 EA.	TO	2	TO	W611	5	12'-0"	STR.	
W436 E		10'-4"		8'-8"	W612 E	5	11'-4"	4 1/2	9'-8"
W437 E		10'-2 1/2"		8'-6 1/2"	W613	3	2'-8"	STR.	
TO	1 EA.	TO	2	TO					
W440 E		9'-5 1/2"		7'-9 1/2"					
W441 E		9'-5 1/2"		7'-9 1/2"	WP401 E	29	4'-2 1/2"	2	
TO	1 EA.	TO	2	TO	WP402 E	4	4'-5 1/2"	2	
W444 E		8'-6 1/2"		6'-10 1/2"	WP403 E	18	9'-8"	STR.	
W445 E		8'-4 3/4"		6'-8 3/4"	WP404 E	1	2'-2"	STR.	
TO	1 EA.	TO	2	TO					
W451 E		6'-7"		4'-11"					

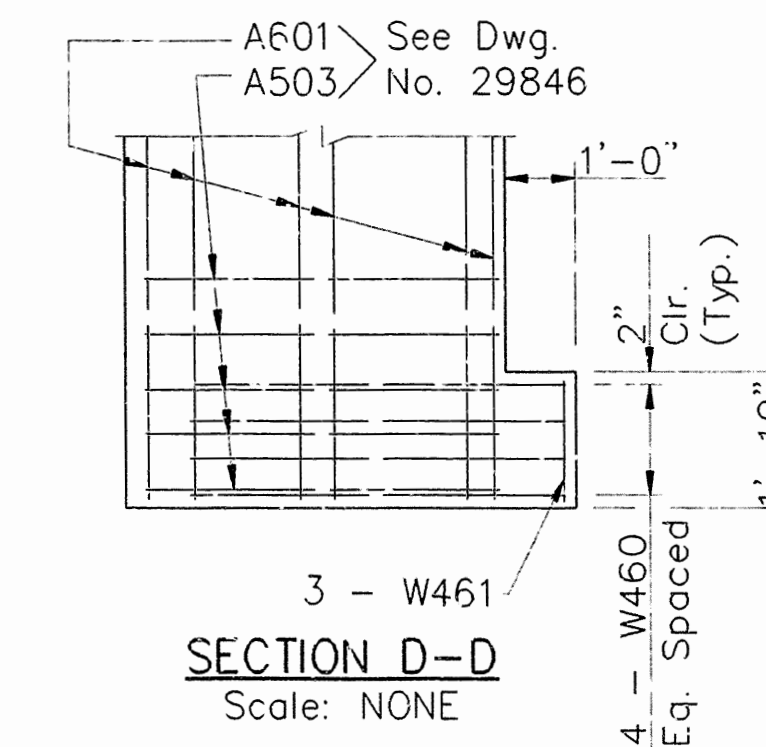
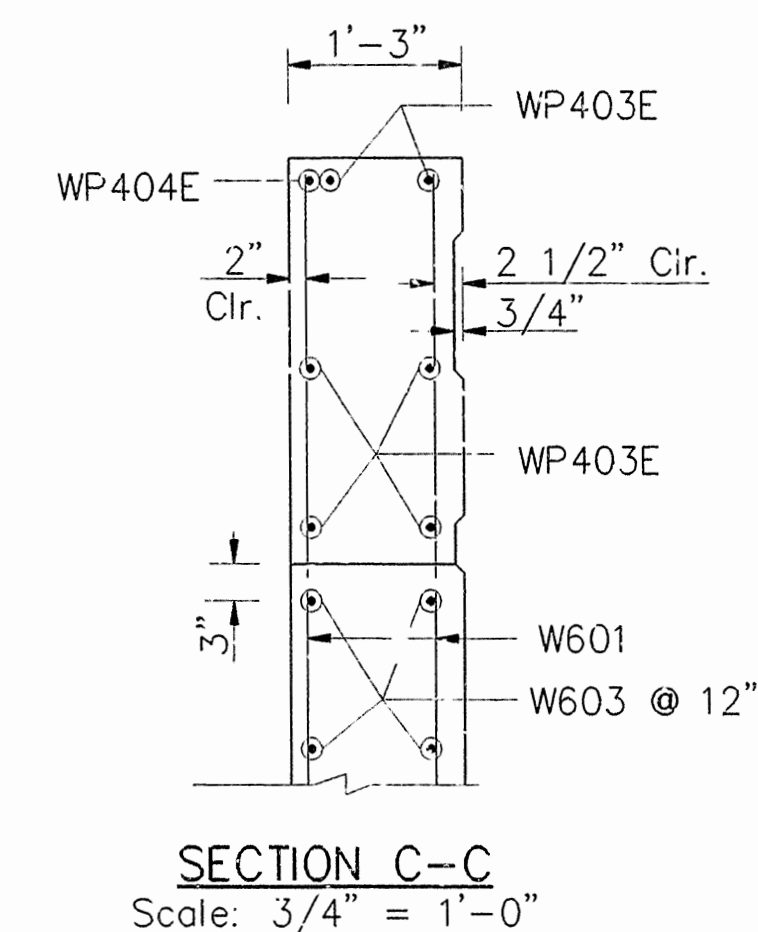
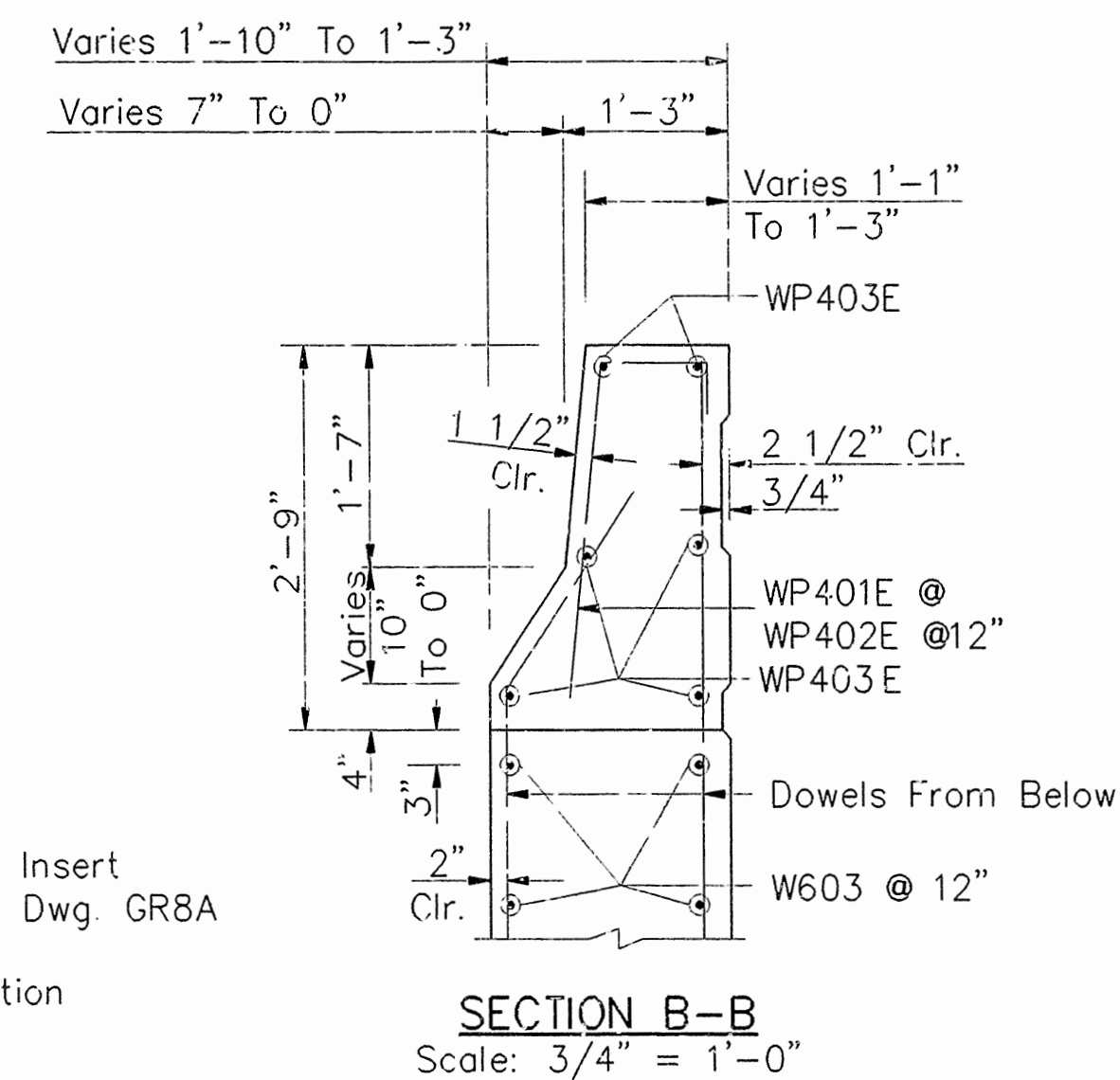
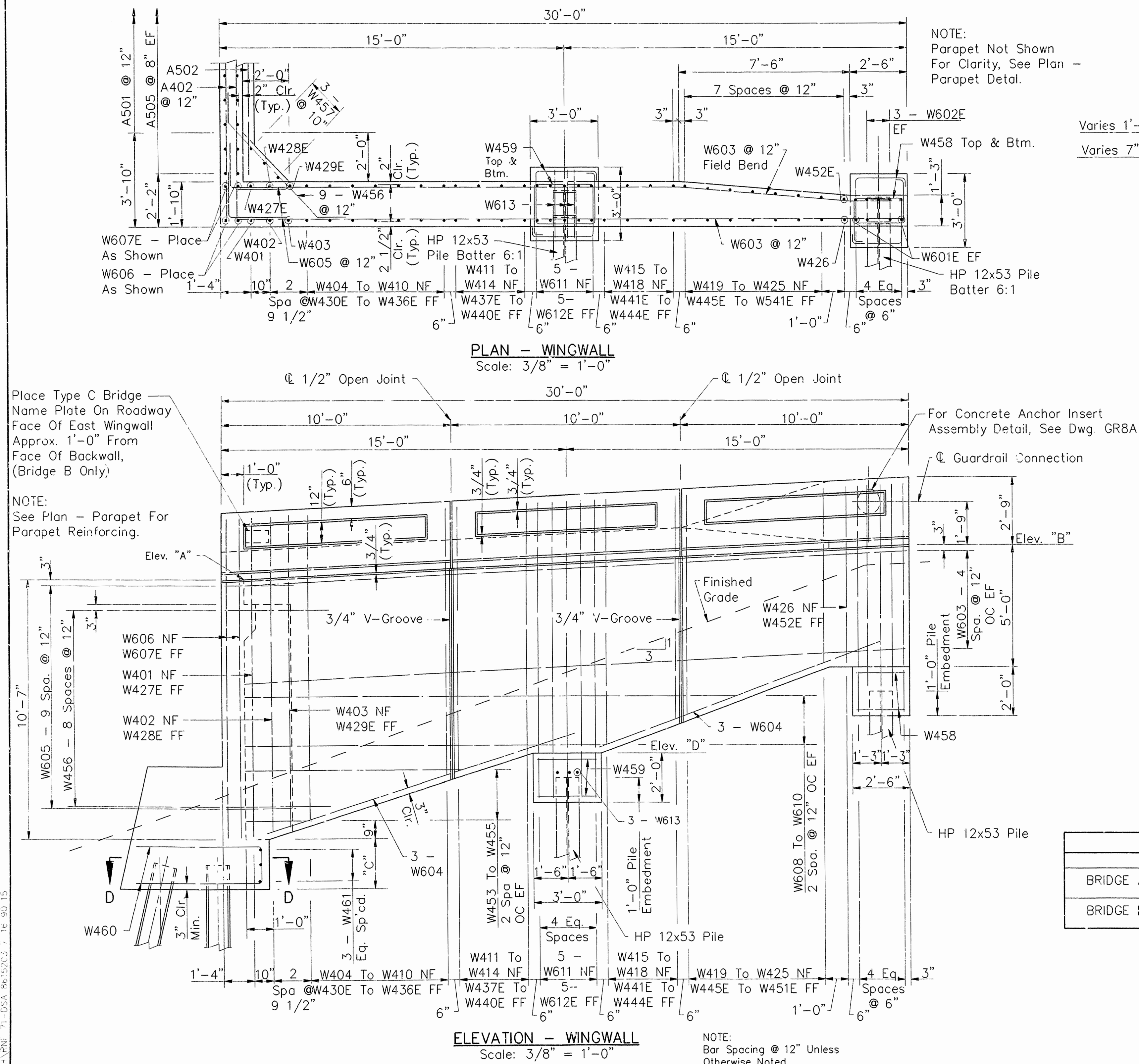
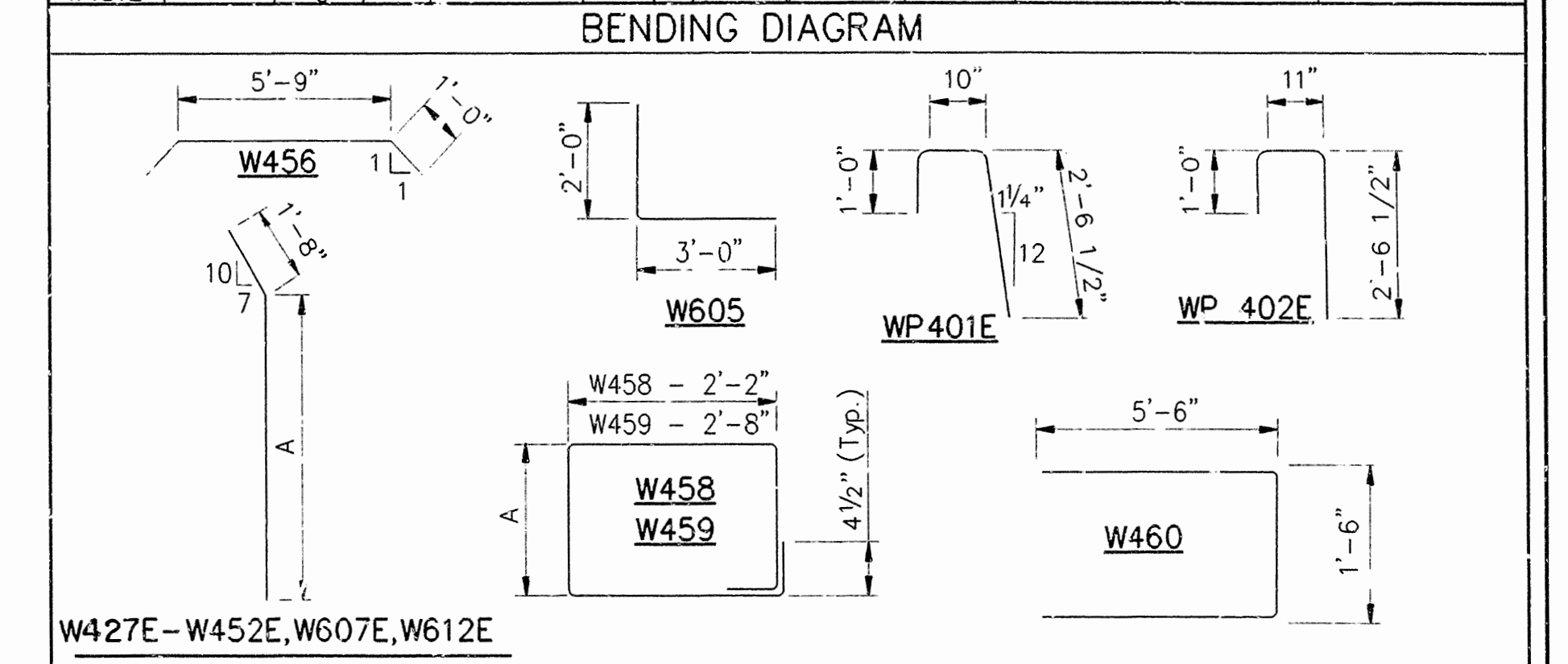


TABLE OF VARIABLES					
LOCATION		ELEV. "A"	ELEV. "B"	"C"	ELEV. "
BRIDGE A	WEST WINGWALL	1571.57	1572.70	2'-0 1/2"	1564.4
	EAST WINGWALL	1572.37	1573.37	1'-11 5/8"	1565.3
BRIDGE B	EAST WINGWALL	1572.37	1573.37	1'-11 5/8"	1565.3
	WEST WINGWALL	1571.57	1572.70	2'-0 1/2"	1564.4

1
Eg
SHEET 2 OF 2

DETAILS SOUTH ABUTMENTS
U.S. HIGHWAY 71 OVER RAVINE

WASHINGTON COUNTY
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

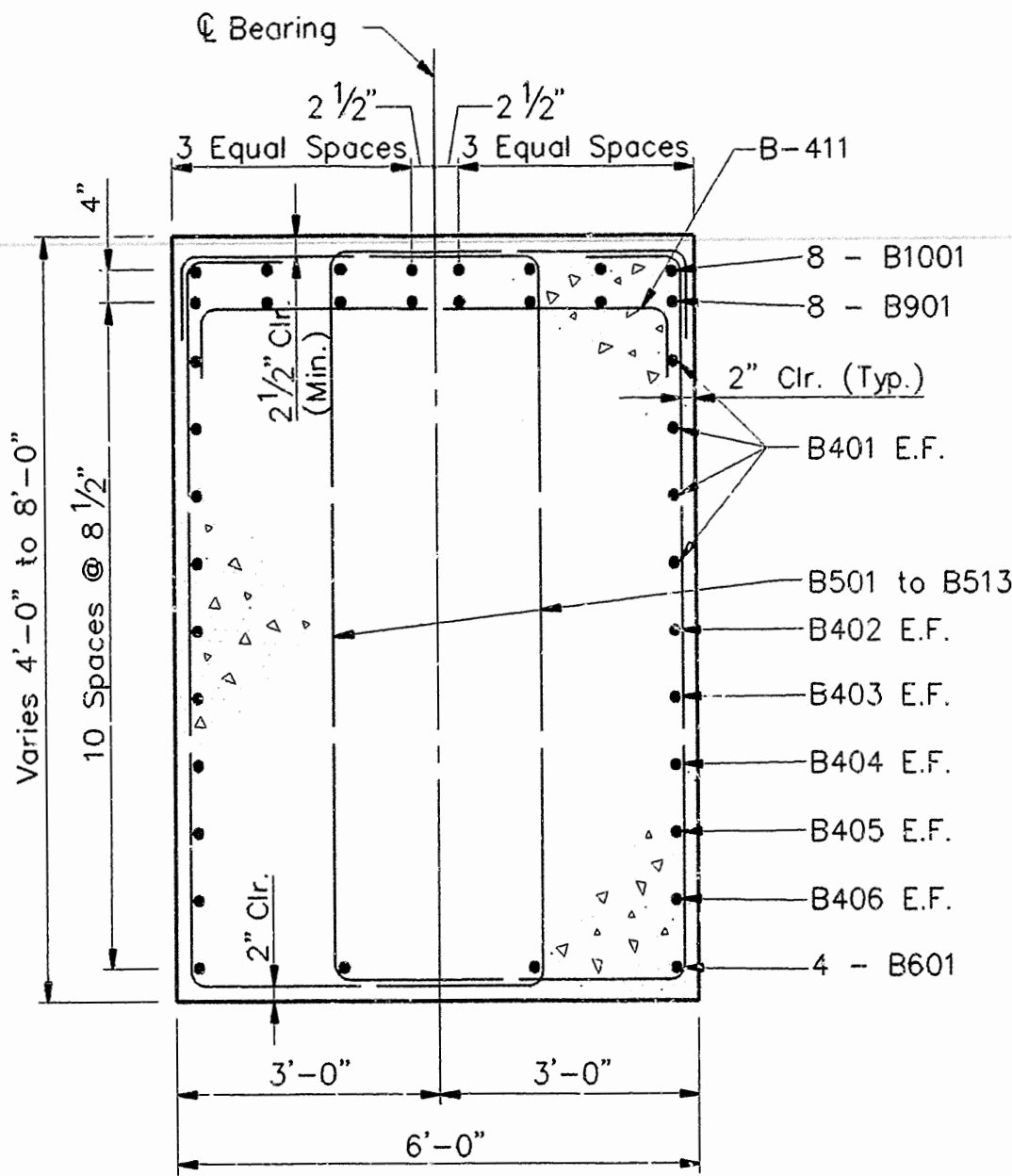
DRAWN BY: R.N.F. DATE: Jan., 1990
CHECKED BY: HJP/TBH DATE: Feb., 1990
DESIGNED BY: D.C.W. DATE: Jan., 1990

SCALE: AS NOTED

BRIDGE NO. 6237 A & B DRAWING NO. 29847

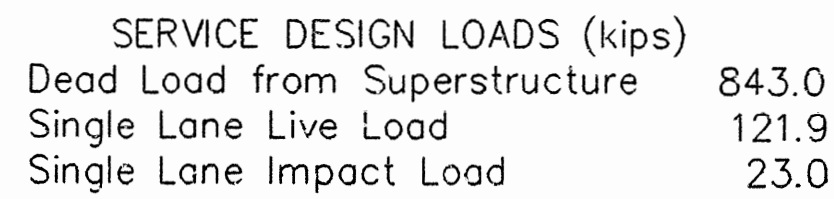
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	42	
(1) 6237B PIERS 1B, 2S 29848								

SERVICE DESIGN LOADS (kips)
Dead Load from Superstructure 1188.6
Single Lane Live Load 124.6
Single Lane Impact Load 23.5

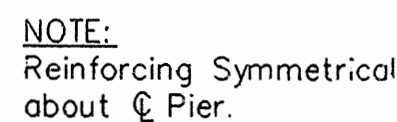


REINFORCEMENT SCHEDULE														
COMMON BARS	MARK	NO	LENGTH	PIN DIA	A	COMMON BARS	MARK	NO	LENGTH	PIN DIA	A			
	B401	16	13'-0"				F401	30	19'-6"	STR				
	B402	4 EA	12'-3"	STR			F402	20	29'-6"	STR				
	TO		TO		F701		12	21'-2"	5 1/4"					
	B406		3'-7"	STR			F1001	23	22'-4"	10"				
	B407	36	10'-6"	2"	F1002		27	32'-4"	10"					
	B411	46	8'-3 1/2"	3"	F1101		54	14'-7"	11 1/4"					
	B501	4 EA	2'-6"		7'-6"		B408	194	25'-4"	2"	4'-11"			
	TO		TO		B409		194	23'-10"	2"	4'-2"				
	B509		18'-2"	4'-10"										
B510	4 EA	17'-6"		4'-6"	B410	388	6'-5 1/2"	2"						
TO		TO		B1101	108	43'-4"	STR							
B513		15'-10"	2 1/2"	TO	B1102	54	22'-9"	STR						
B601	8	14'-11"	4 1/2"		B408	192	25'-4"	2"	4'-11"					
B901	8	37'-6"	STR		B409	192	23'-10"	2"	4'-2"					
B1001	8	40'-6"	10"		B410	384	6'-5 1/2"	2"						
					B1101	108	43'-4"	STR						
					B1102	54	21'-5"	STR						
</														

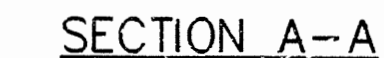
(1)	6237B PIER 3B 29849
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Type D4 Expansion Shoes (Typ.)
See Dwg. No. 29866 for Details.



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



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



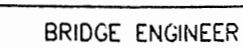
Scale: $3/8" = 1'-0'$



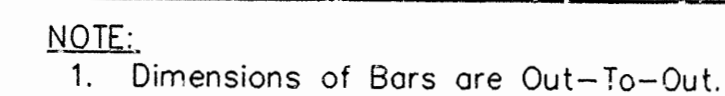
Scale: $1/4" = 1'-0"$

NOTE:
1. All Pressures are Service Load.

NOTE:
1. All Pressures are Service Load.



BENDING DIAGRAMS



NOTE:
1. Dimensions of Bars are Out-To-Out.

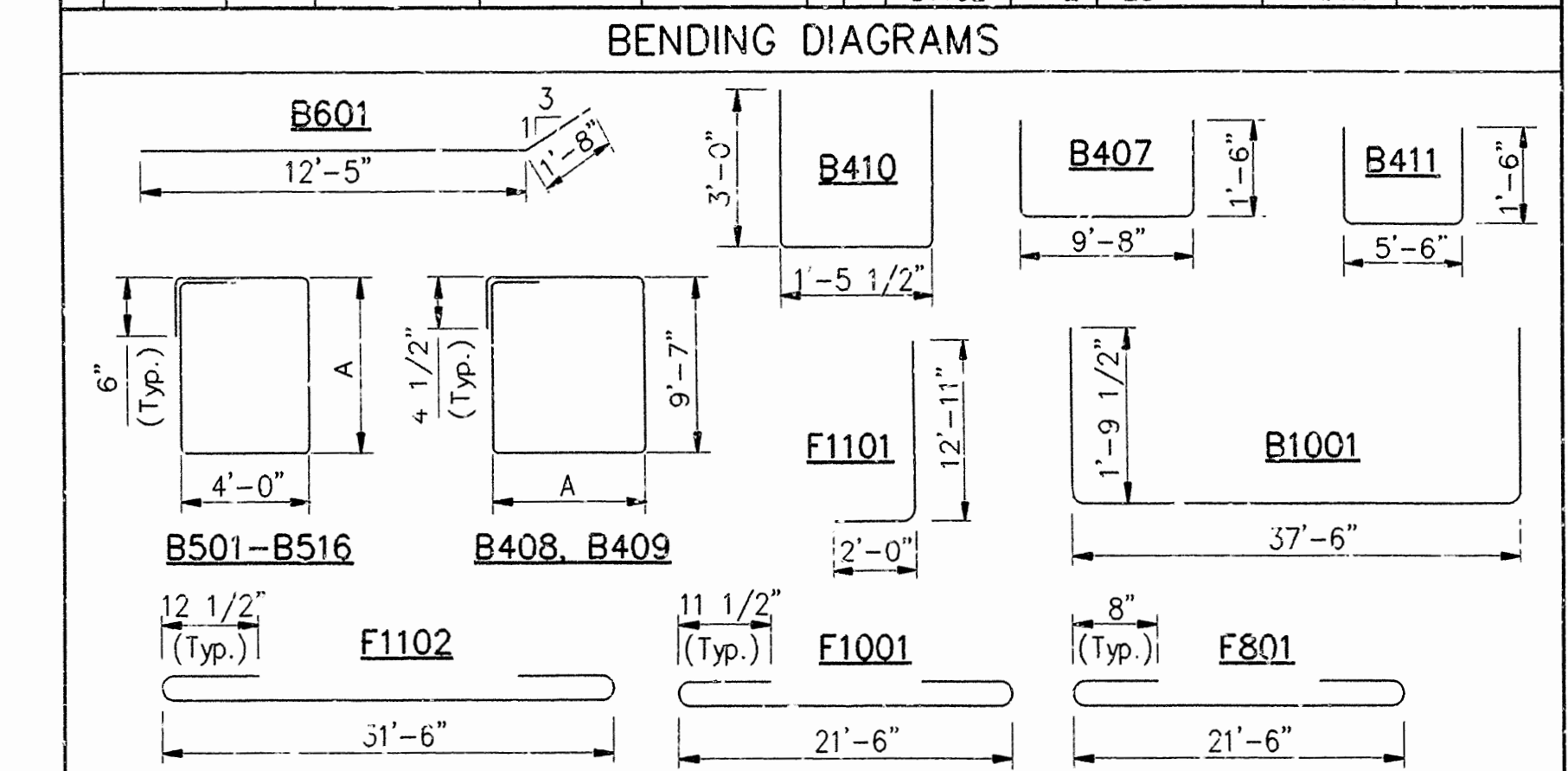
WASHINGTON	COUNTY
ROUTE	SEC.
1	1
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3	3
4	4
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95	95
96	96
97	97
98	98
99	99
100	100

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: V.W. DATE June, 1988
CHECKED BY: HJP/TBH DATE June 88/Feb. 90 SCALE: AS NOTED
DESIGNED BY: W.R.W. DATE June, 1988
BRIDGE NO. 6237 B **DRAWING NO. 29849**

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
					JOB NO.	R40044	44	
				(1) 6237A&B PIERS 4A, 4B&5B 29850				

SERVICE DESIGN LOADS (kips)				
Load	Pier	4A	4B	5B
Dead Load from Superstructure		1210.6	1297.0	1210.6
Single Lane Live Load		126.4	133.5	126.4
Single Lane Impact Load		22.1	24.3	22.1

REINFORCEMENT SCHEDULE									
MARK	NO	LENGTH	PIN DIA	A	MARK	NO	LENGTH	PIN DIA	A
B401	16	13'-0"	STR		F401	33	21'-6"	STR	
B402	23	31'-6"	STR		F402	23	31'-6"	STR	
B403	4	EA	TO	STR	F801	10	23'-4"	6"	
B404	44	10'-6"	2"		F1001	34	24'-4"	10"	
B405	52	8'-3 1/2"	3"		F1101	72	14'-7"	11 1/4"	
B406	52	8'-3 1/2"	3"		F1102	34	34'-6"	11 1/4"	
B501	4	EA	TO	2 1/2"	B408	274	28'-10"	2"	
B502	4	EA	TO	2 1/2"	B409	274	27'-7"	2"	
B503	4	EA	TO	2 1/2"	B410	548	7'-3 1/2"	2"	
B504	4	EA	TO	2 1/2"	B1102	72	27'-1"	STR	
B505	4	EA	TO	2 1/2"	B408	292	28'-10"	2"	
B506	4	EA	TO	2 1/2"	B409	292	27'-7"	2"	
B507	4	EA	TO	2 1/2"	B410	584	7'-3 1/2"	2"	
B508	4	EA	TO	2 1/2"	B1102	72	36'-0"	STR	
B509	4	EA	TO	2 1/2"	B408	266	28'-10"	2"	
B510	4	EA	TO	2 1/2"	B409	266	27'-7"	2"	
B511	4	EA	TO	2 1/2"	B410	532	7'-3 1/2"	2"	
B512	4	EA	TO	2 1/2"	B1102	72	23'-4"	STR	

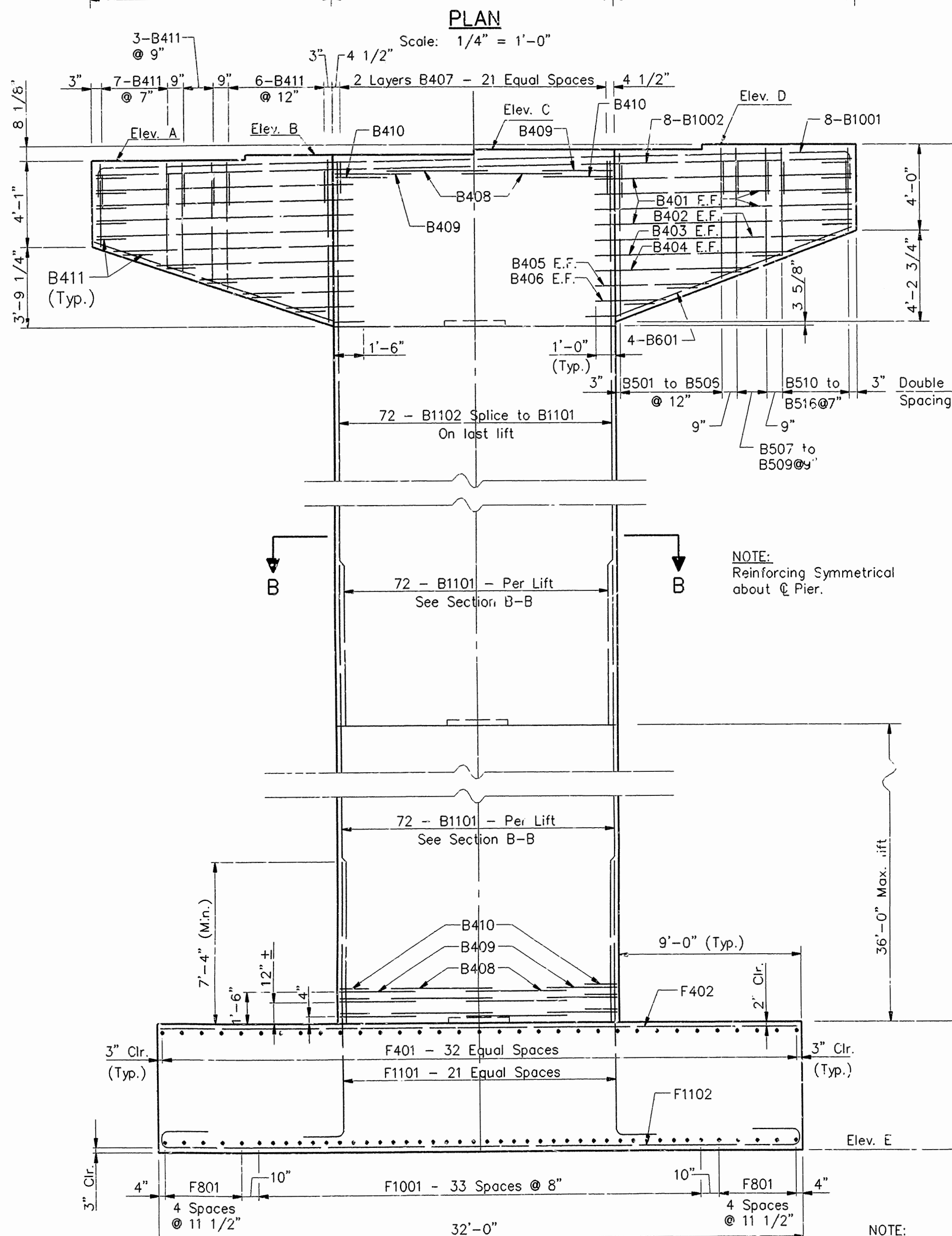
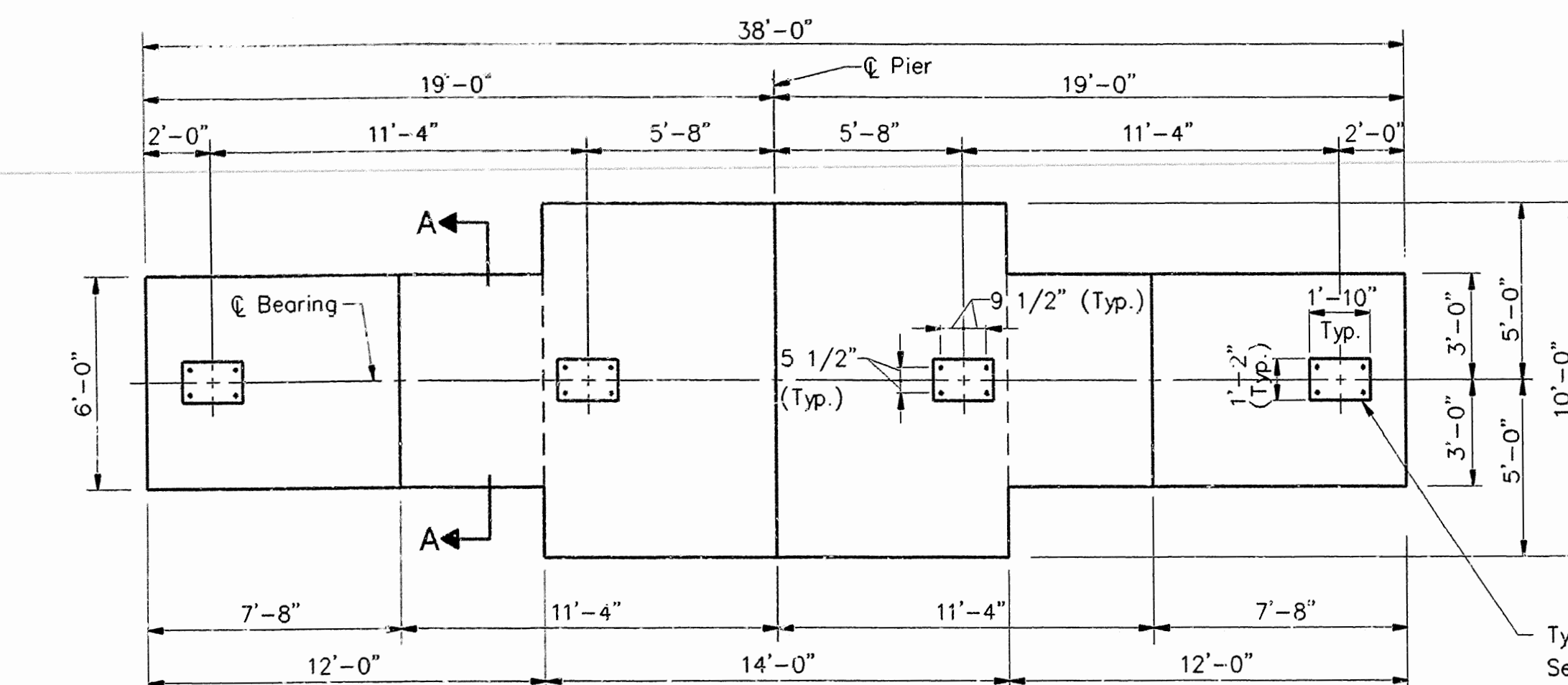


NOTE:
1. Dimensions of Bars are Out-To-Out.

TABLE OF VARIABLES							
Pier	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	F	G
4A	1536.08	1536.30	1536.53	1536.76	1395.00	135'-9 1/8"	133
4B	1537.01	1537.24	1537.46	1537.69	1387.00	144'-6 1/4"	142
5B	1529.45	1529.68	1529.90	1530.13	1392.10	132'-0 3/8"	129

MAXIMUM TOE PRESSURE (Kips / Sq. ft.)											
Pier	Group I	Group II	Group III	Group IV	Group V	Group VI	Group I	Group II	Group III	Group IV	Group V
	Max.	Allow.	Max.	Allow.	Max.	Allow.	Max.	Allow.	Max.	Allow.	Max.
4A	8.8	13.5	13.4	16.9	11.8	16.9	N/A	N/A	N/A	N/A	N/A
4B	10.5	17.4	15.6	21.8	13.8	21.8	12.5	21.8	17.7	24.4	16.0
5B	9.0	11.7	13.5	14.6	12.0	14.6	N/A	N/A	N/A	N/A	N/A

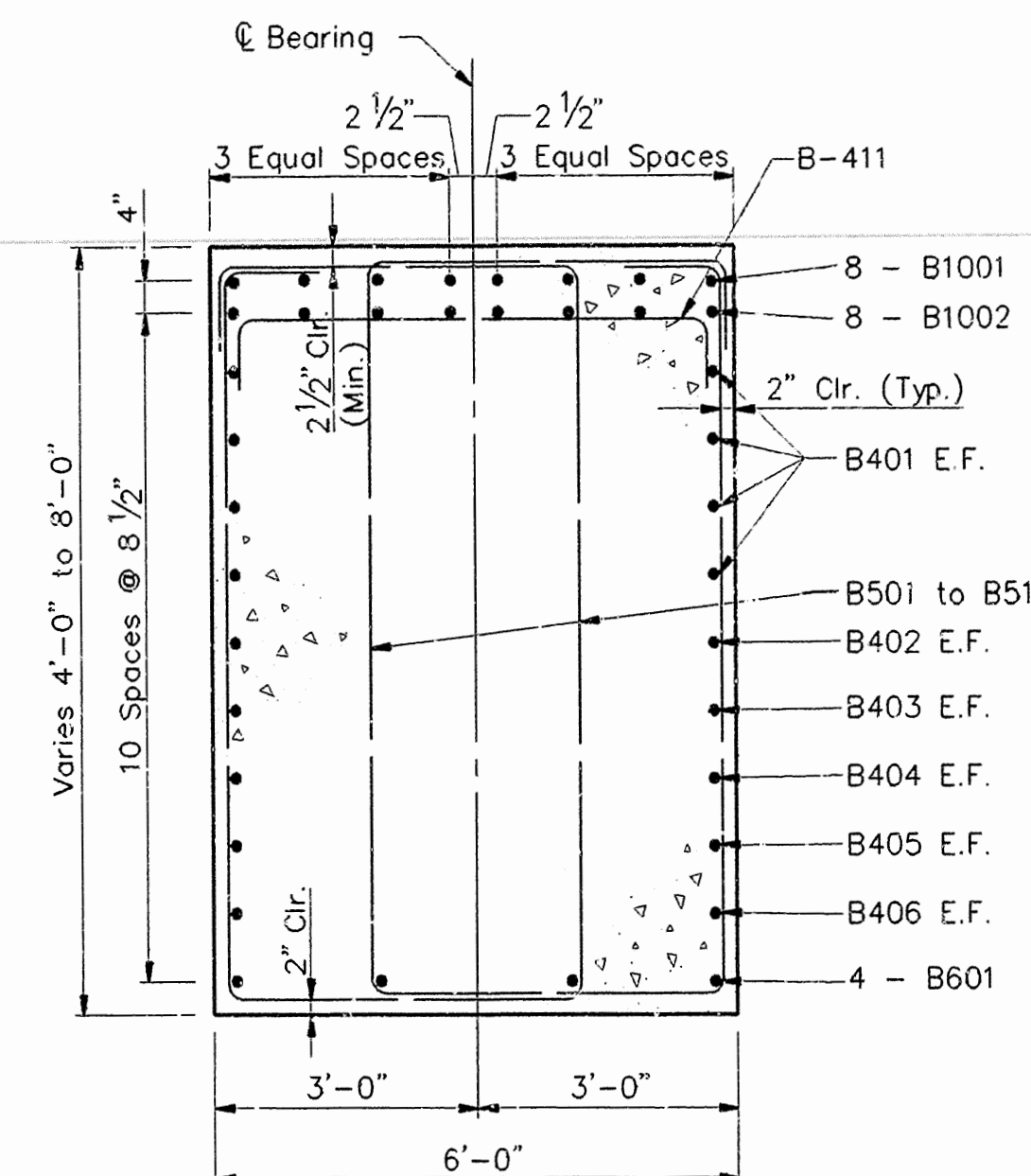
NOTE:
1. All Pressures are Service Load.



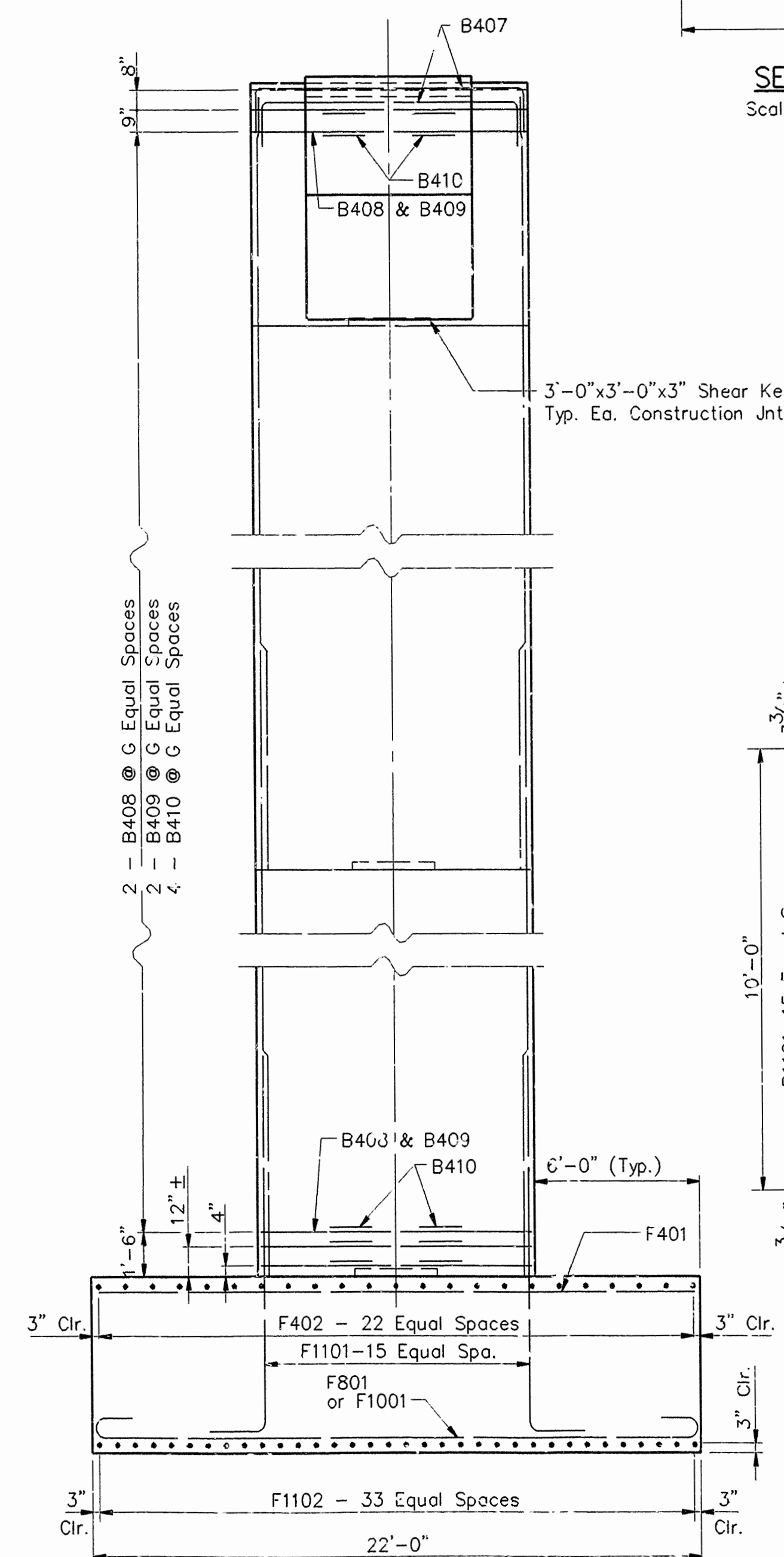
FRONT ELEVATION

PIER 4A LOOKING FORWARD
PIERS 4B & 5B LOOKING BACK
Scale: 1/4" = 1'-0"

NOTE:
Use Class B concrete in footing & Class S concrete in column and cap.

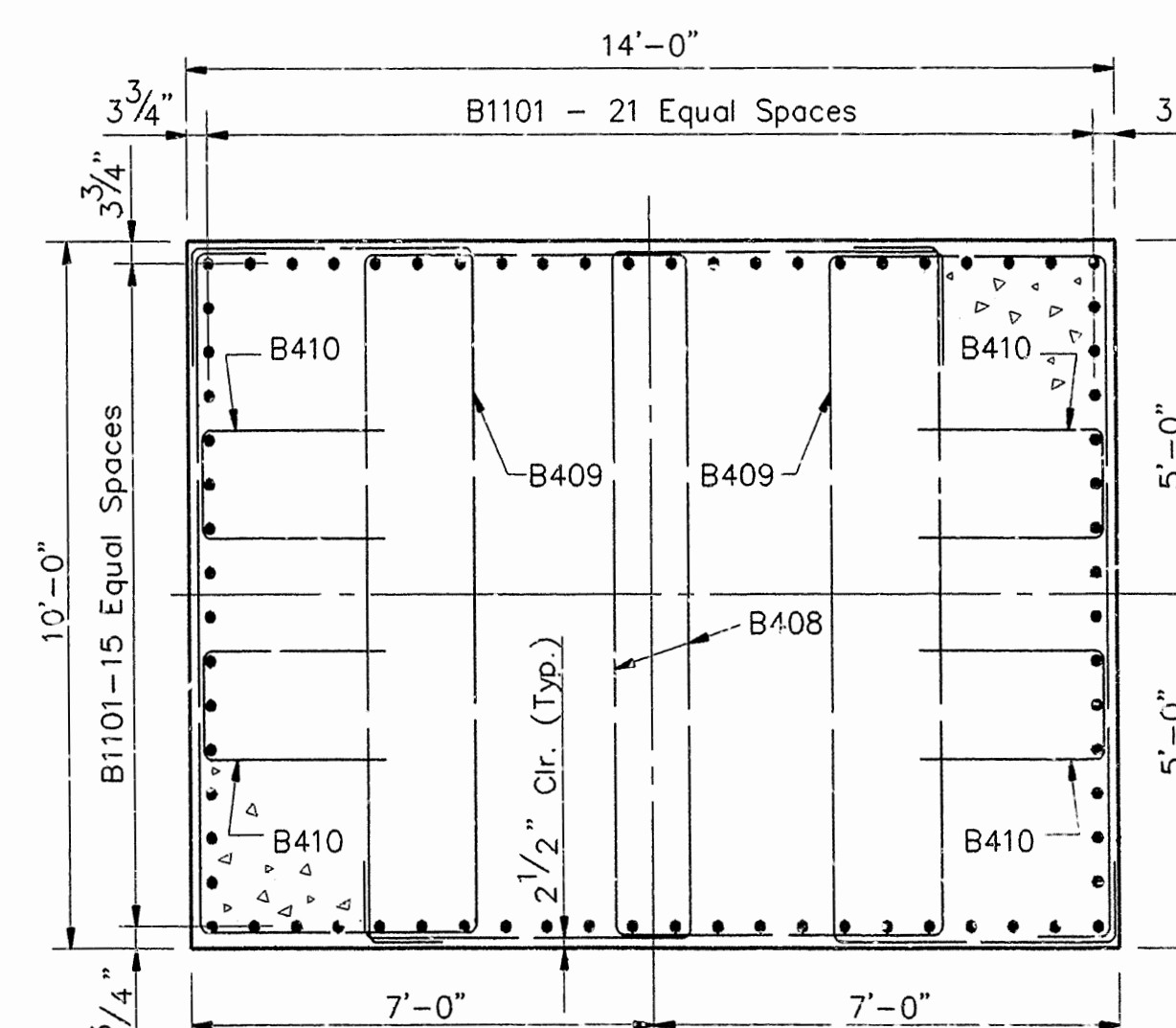


SECTION A-A
Scale: 1/2" = 1'-0"



END ELEVATION

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

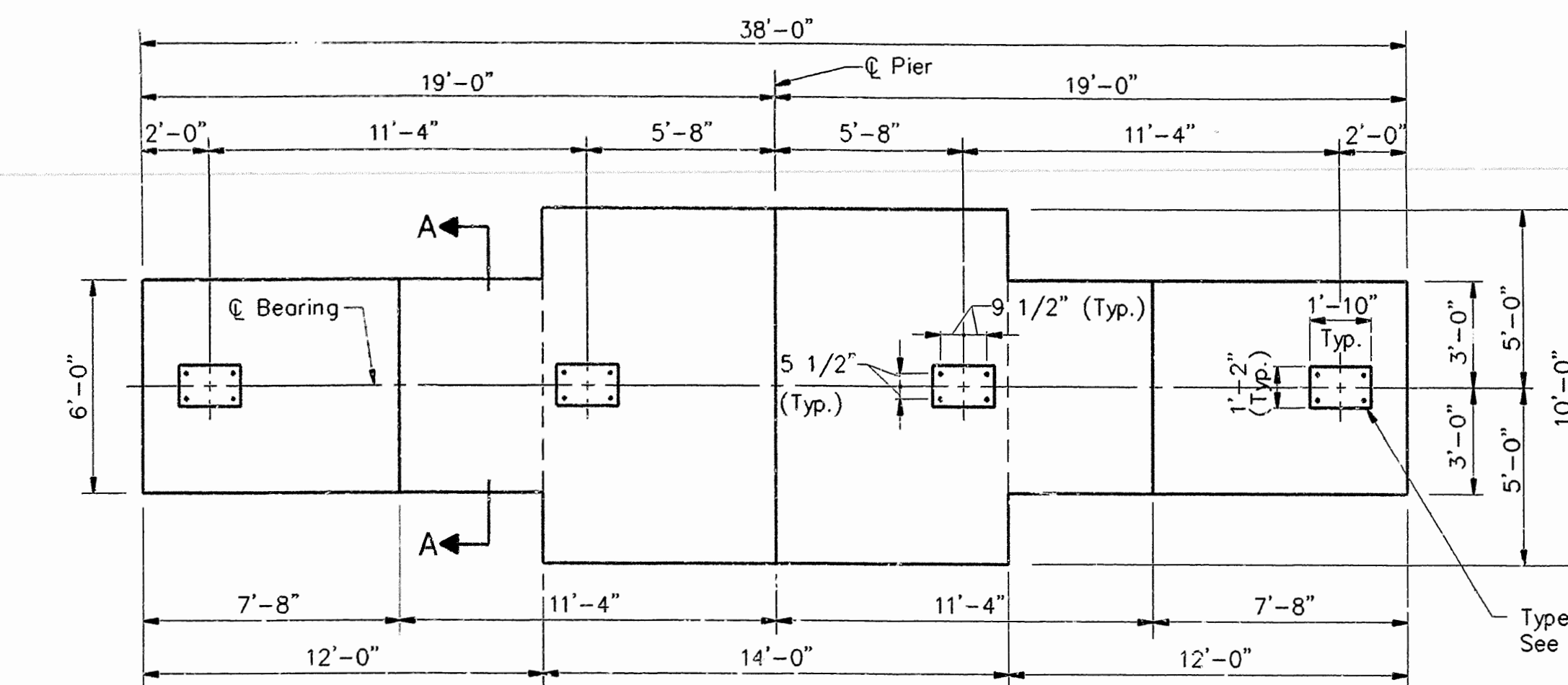


SECTION B-B
Scale: 3/8" = 1'-0"



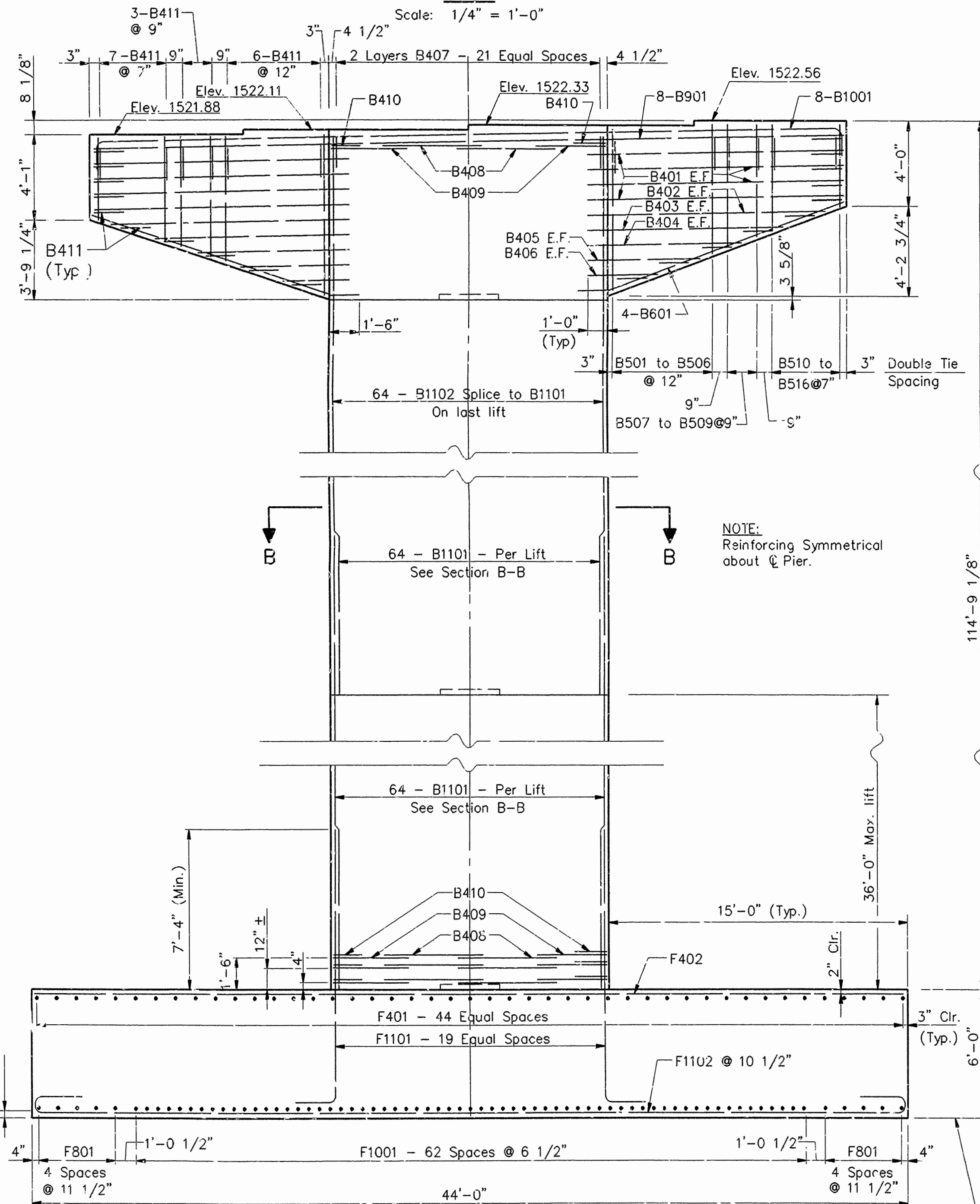
SHEET 1 OF 1
DETAILS OF PIERS 4A, 4B & 5B
U.S. HIGHWAY 71 OVER RAVINE
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: V.W. DATE: June, 1988
CHECKED BY: HJP/TBH DATE: June 88/Feb. 90 SCALE: AS NOTED
DESIGNED BY: W.R.W. DATE: June, 1988
BRIDGE NO. 6237 A&B DRAWING NO. 29850

BRIDGE ENGINEER



PLAN

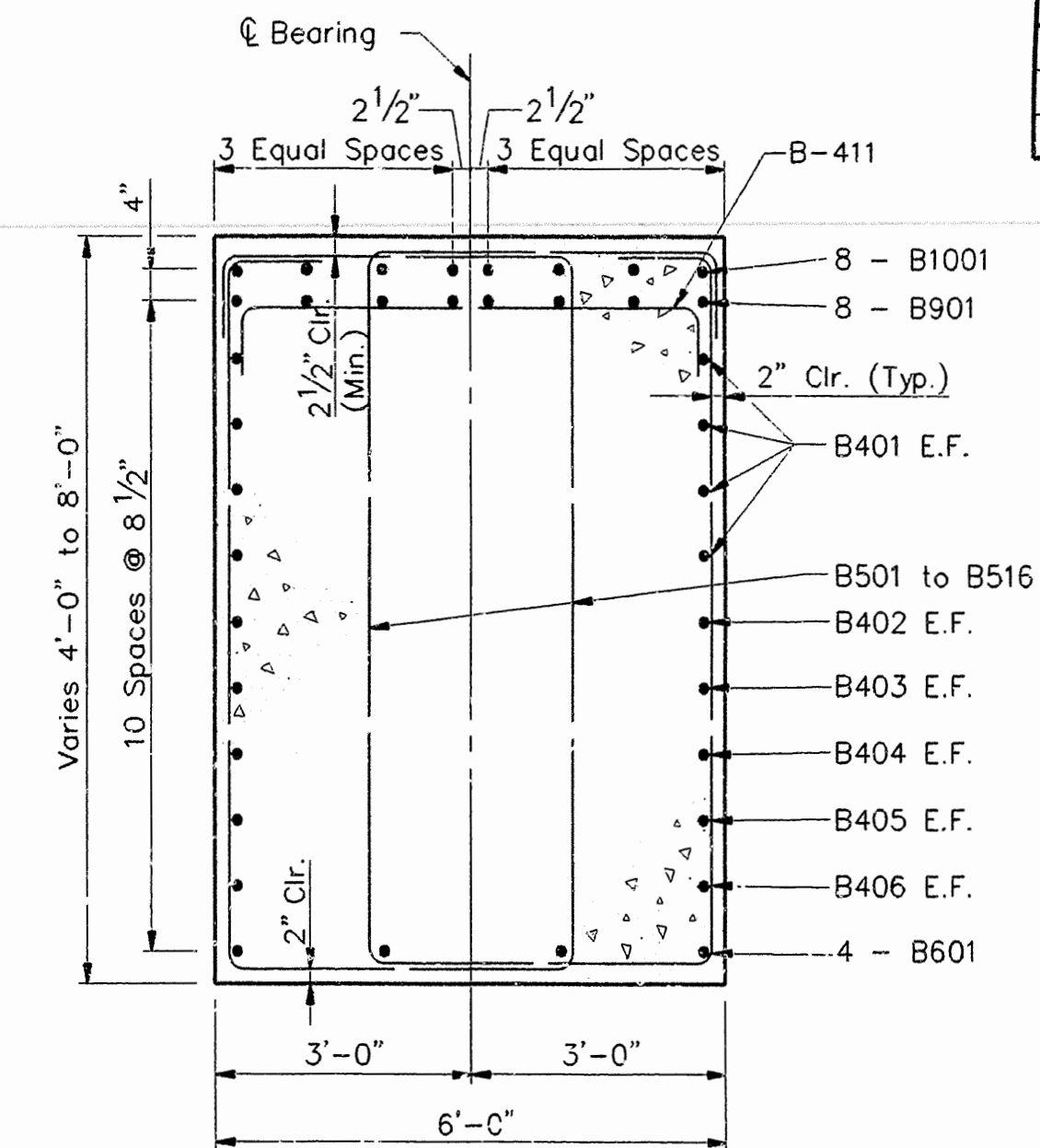
Scale: $1/4" = 1'-0"$



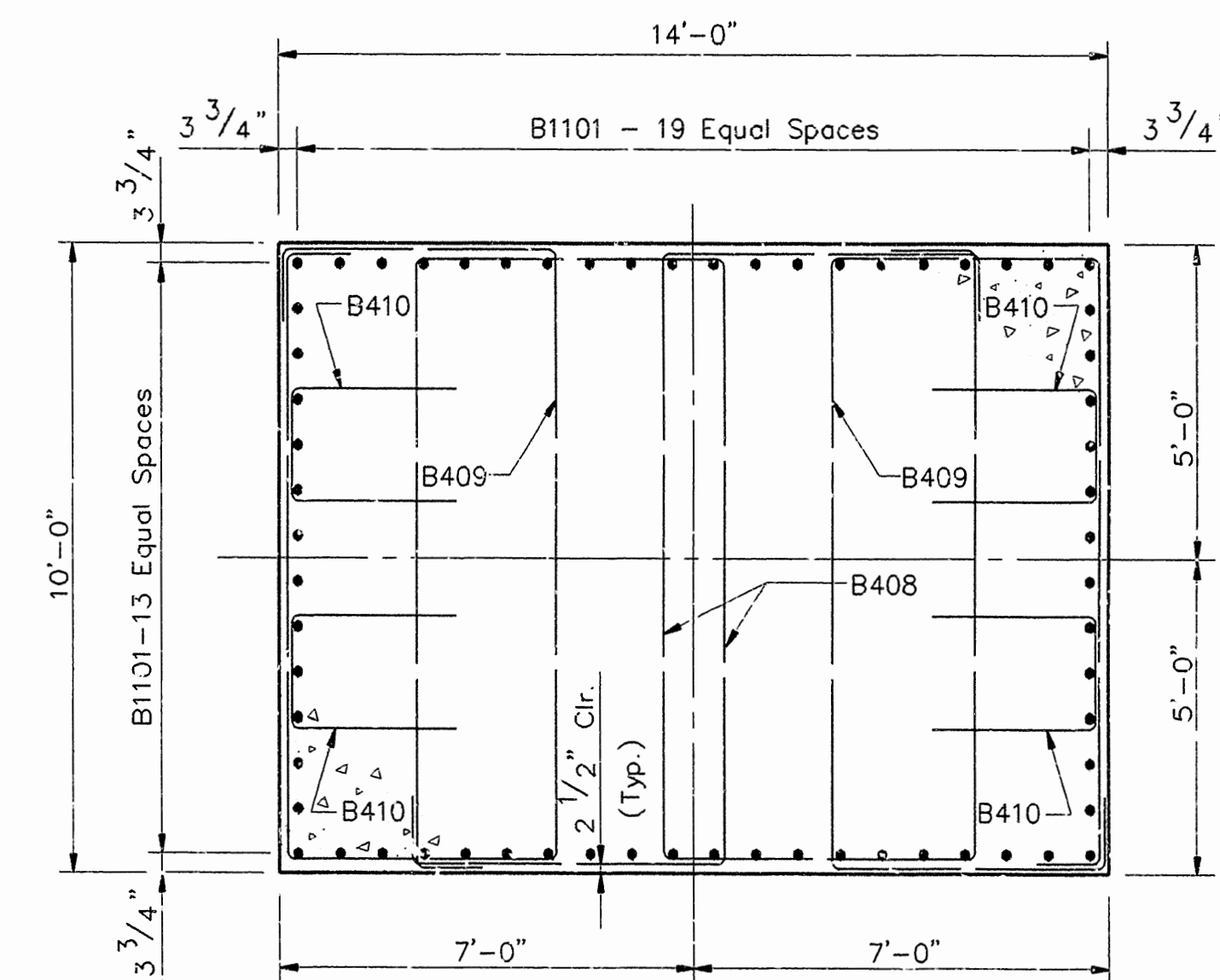
FRONT ELEVATION

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

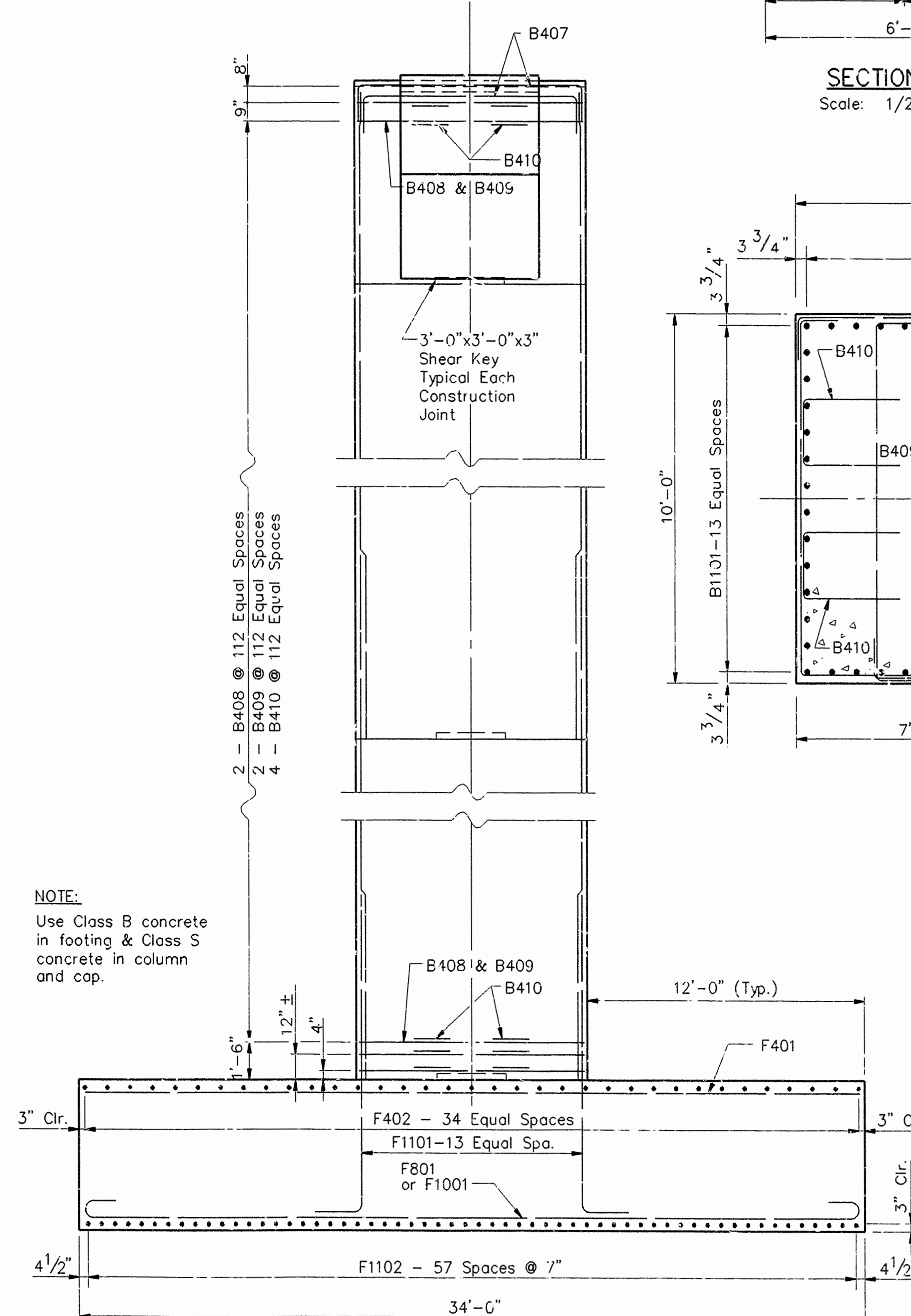
SERVICE DESIGN LOADS (kips)	
Dead Load from Superstructure	1297.0
Single Lane Live Load	133.5
Single Lane Impact Load	24.3



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



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

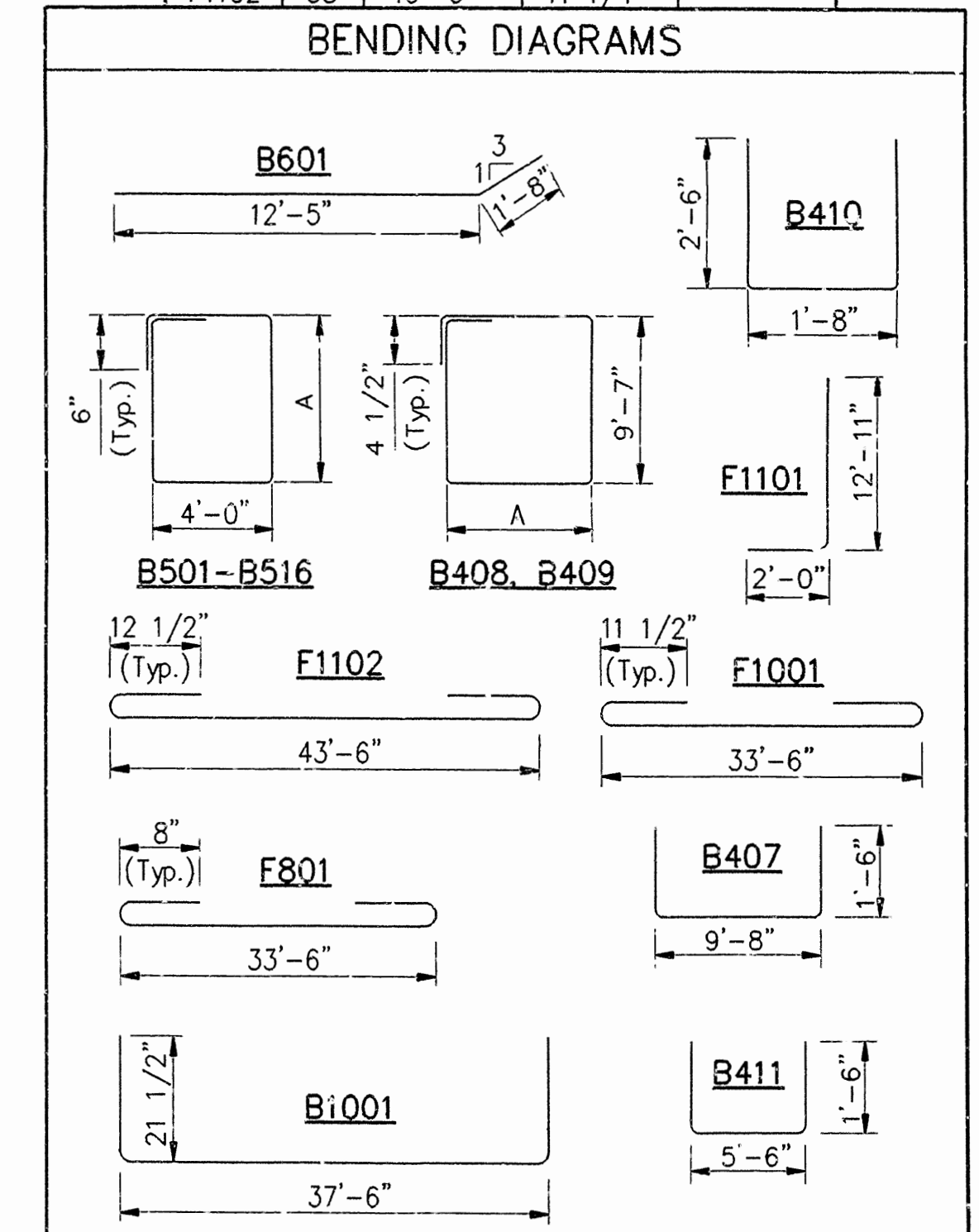


END ELEVATION

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

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	25	

MARK	NO	LENGTH	PIN DIA	A
B401	16	13'-0"	STR	
B402	4 EA	12'-3"		
		TO		
B406		3'-7"	STR	
B407	44	10'-6"	2"	
B408	232	29'-10"	2"	5'-2"
B409	232	28'-5"	2"	4'-5 1/2"
B410	464	6'-6"	2"	
B411	52	8'-3 1/2"	3"	
B501	4 EA	23'-6"		7'-6"
		TO	2 1/2"	TO
B506		20'-1"		5'-9 1/2"
B507	4 EA	19'-7"		5'-6 1/2"
		TO	2 1/2"	TO
B509		18'-7"		5'-0 1/2"
B510	4 EA	18'-2"	2 1/2"	4'-10"
		TO		TO
B516		15'-10"		3'-8"
B601	8	14'-1"	4 1/2"	
B901	8	37'-6"	STR	
B1001	8	40'-6"	10"	
B1101	128	43'-4"	STR	
B1102	64	42'-1"	STR	
F401	45	33'-6"	STR	
F402	35	43'-6"	STR	
F801	10	35'-4"	6"	
F1001	63	36'-4"	10"	
F1101	64	14'-7"	11 1/4"	
F1102	58	46'-6"	11 1/4"	



NOTE:
1. Dimensions of Bars are Out-To-Out.

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.
9.5	9.4	11.1	11.8	10.9	11.8	11.0	11.8	12.0	13.2	11.9	13.2

NOTE:
1. All Pressures are Service Load.



oad.
SHEET 1 OF 1
DETAILS OF PIER 6B
U.S. HIGHWAY 71 OVER RAVINE
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

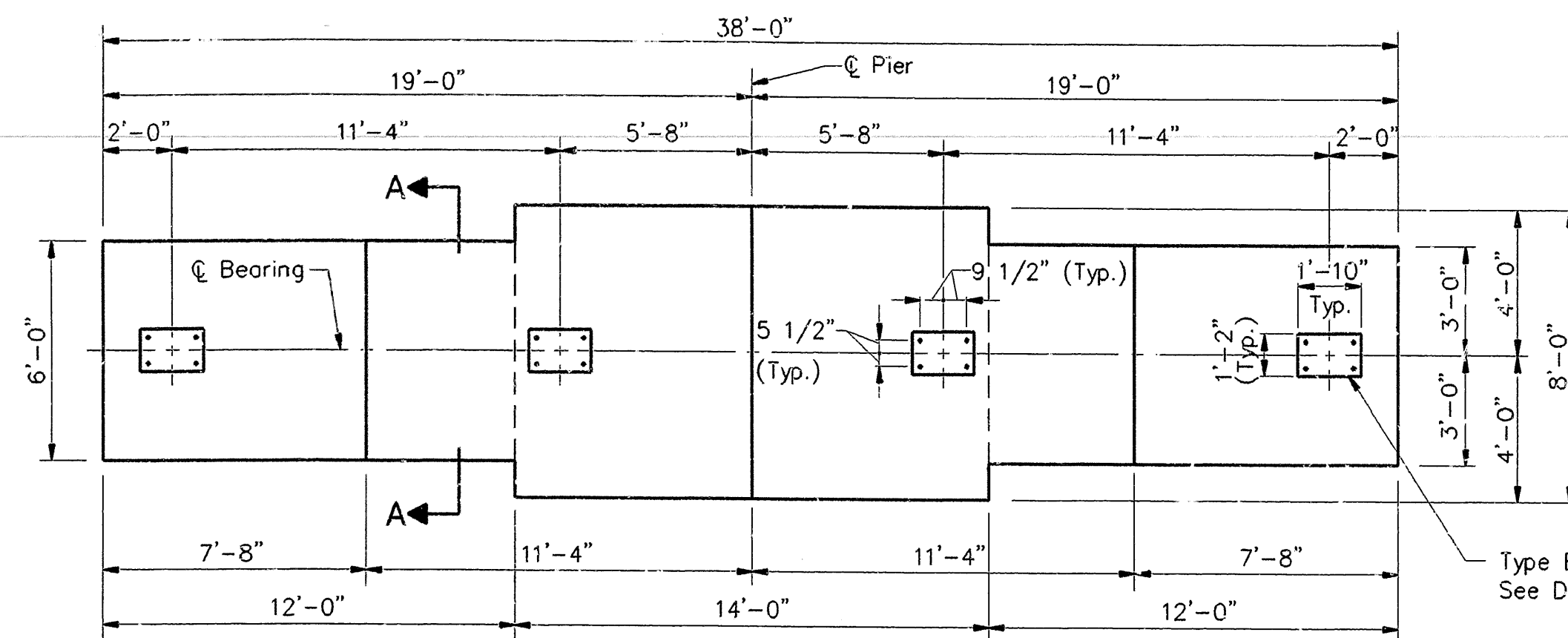
DRAWN BY: V.W. DATE: June, 1988
CHECKED BY: HJP/TBH DATE: June 88/Feb. 90 SCALE: AS NOTED
DESIGNED BY: W.R.W. DATE: June, 1988

BRIDGE NO. 6237 B DRAWING NO. 29851

BRIDGE ENGINEER

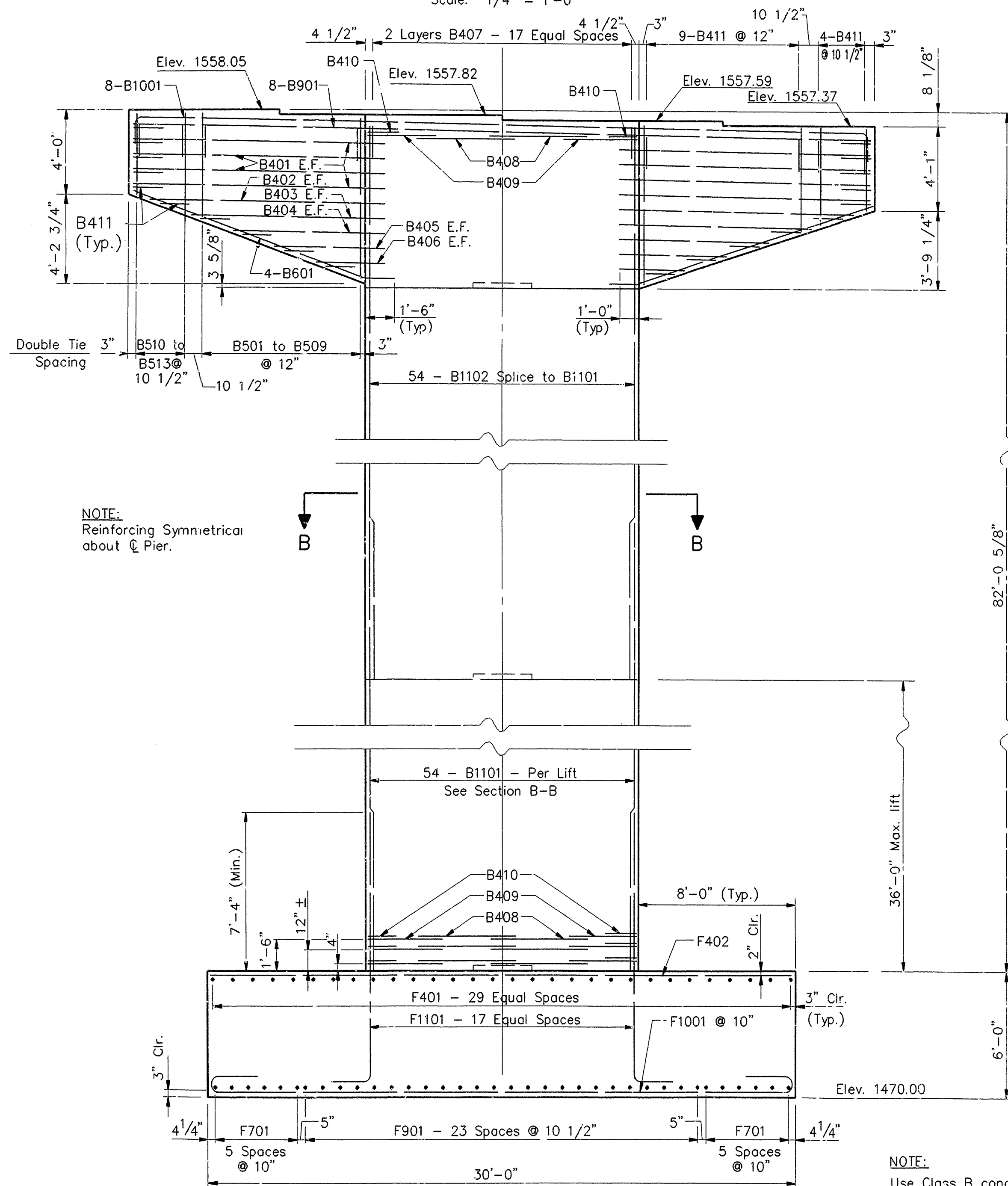
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO.	R40044	46
						6237A PIER 1A	29852	

SERVICE DESIGN LOADS (kips)
Dead Load from Superstructure 1351.2
Single Lane Live Load 138.0
Single Lane Impact Load 26.1



PLAN

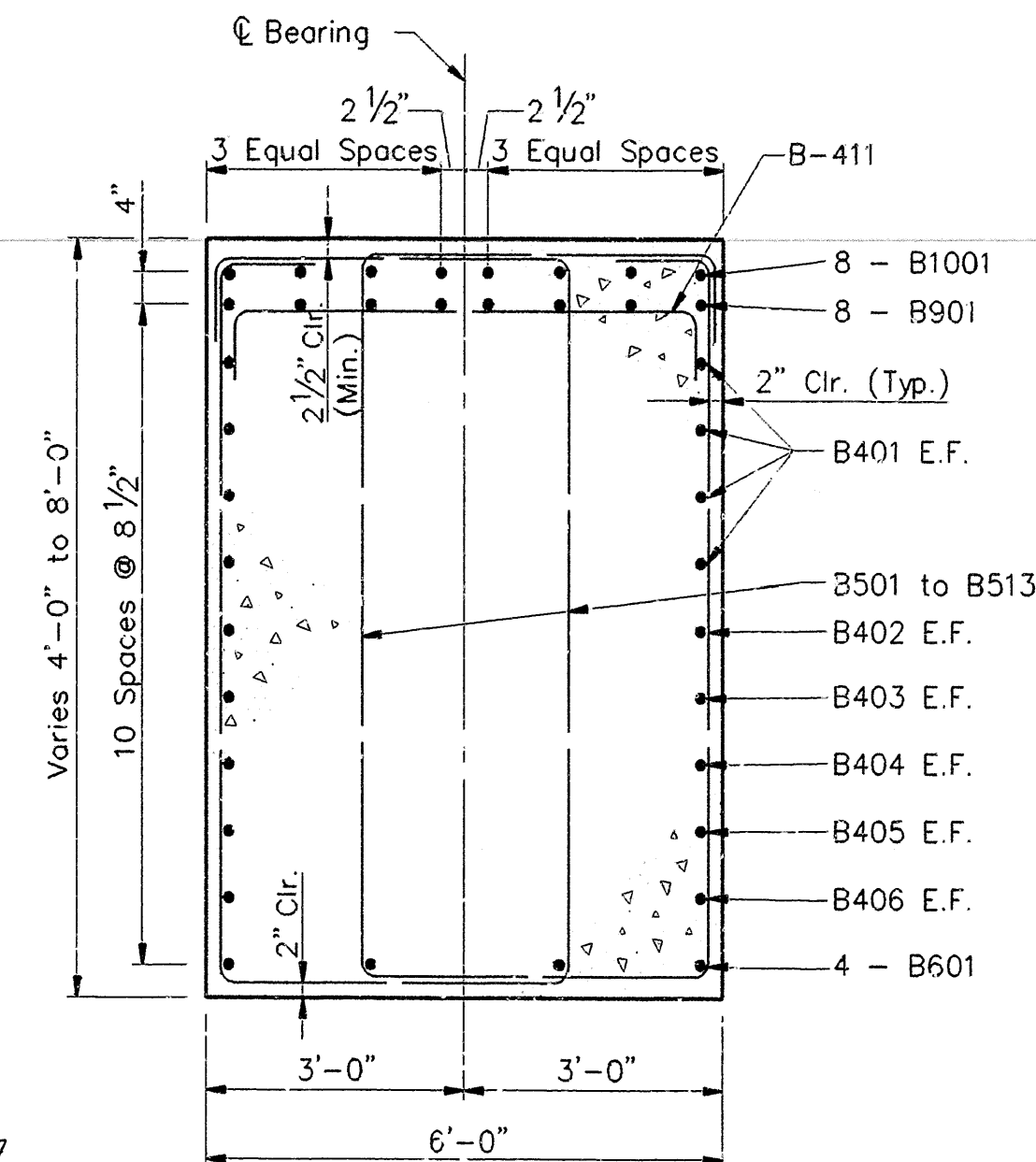
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FRONT ELEVATION

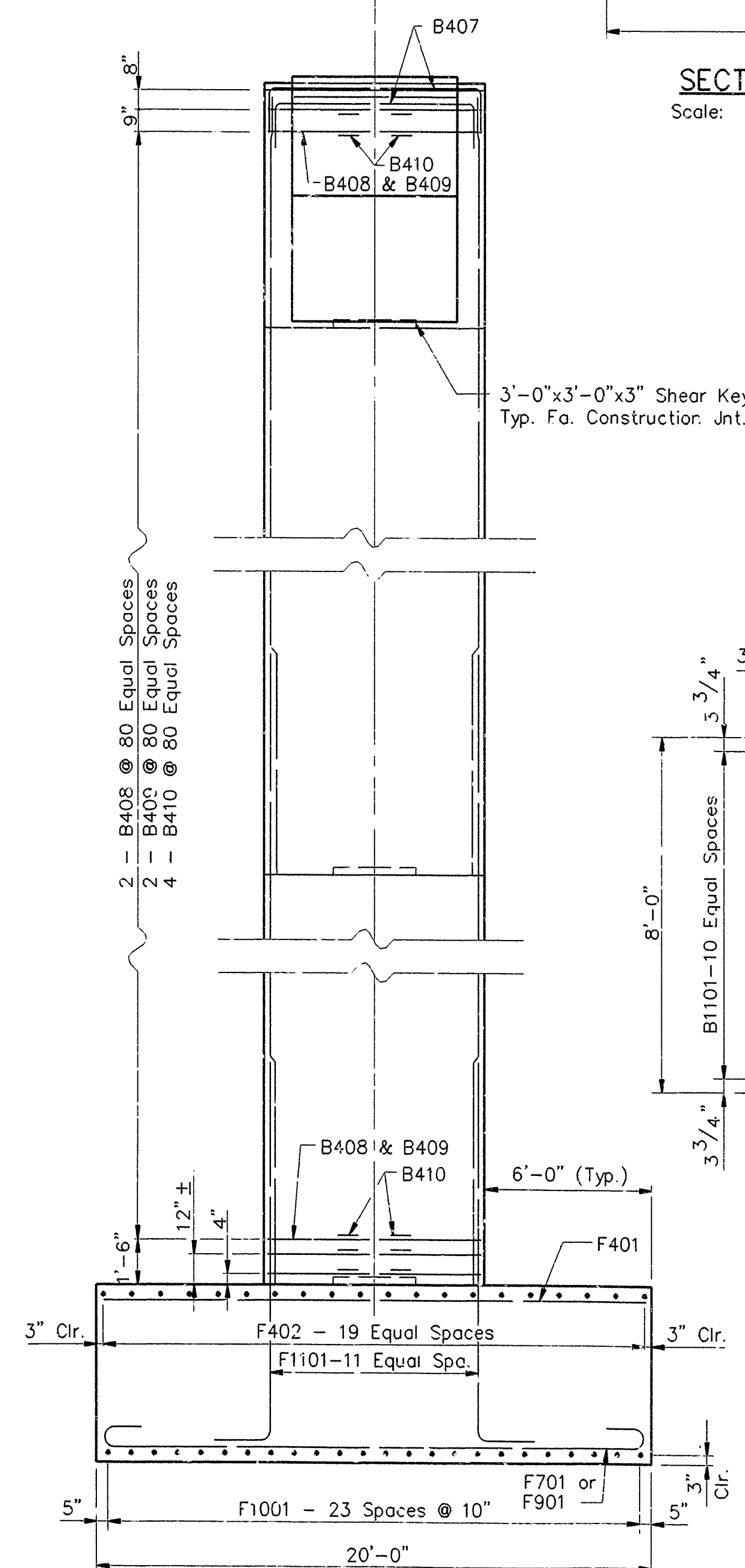
LOOKING BACK
Scale: 1/4" = 1'-0"

NOTE:
Use Class B concrete
in footing & Class S
concrete in column
and cap.



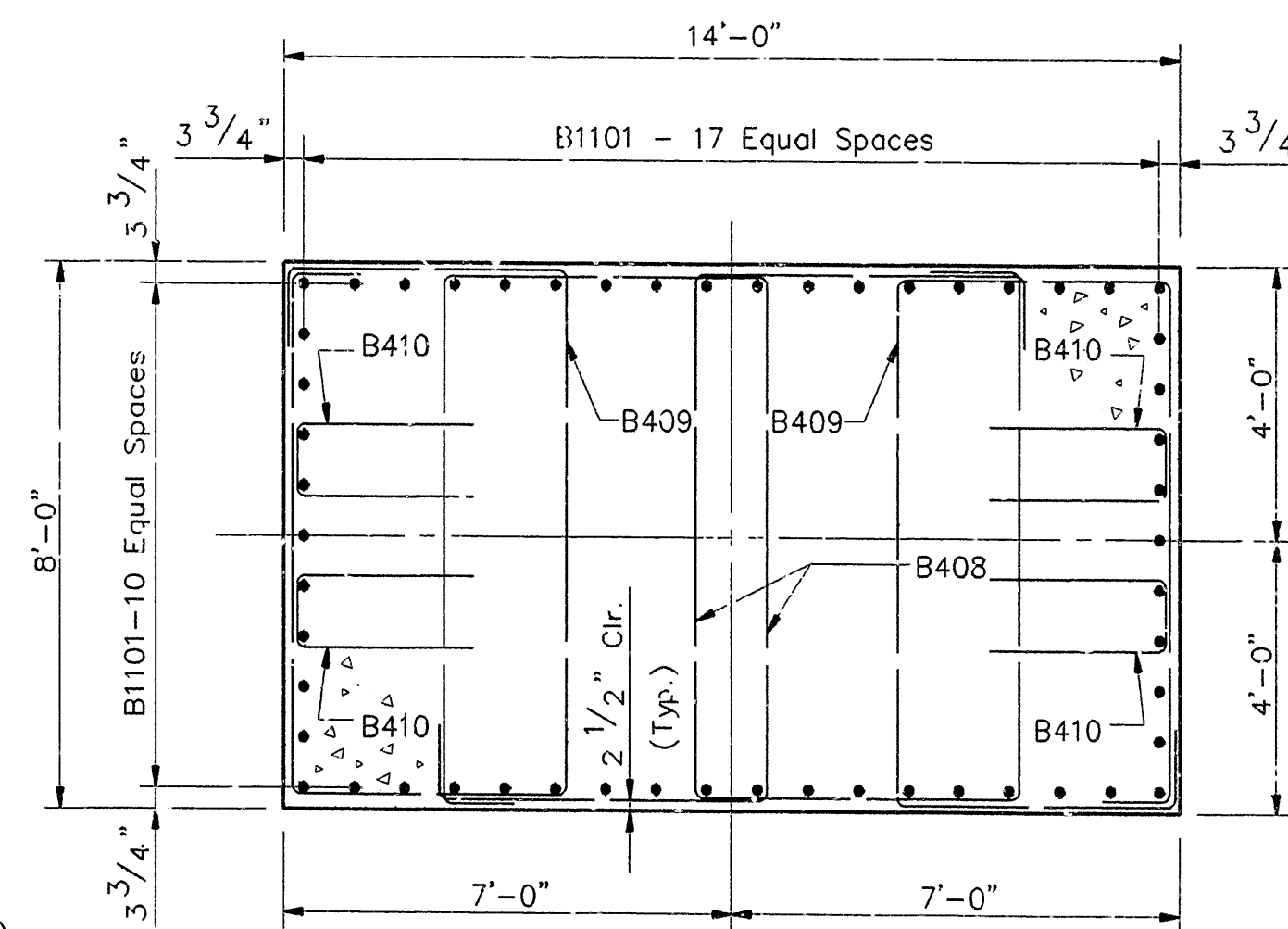
SECTION A-A

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



END ELEVATION

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



SECTION B-B

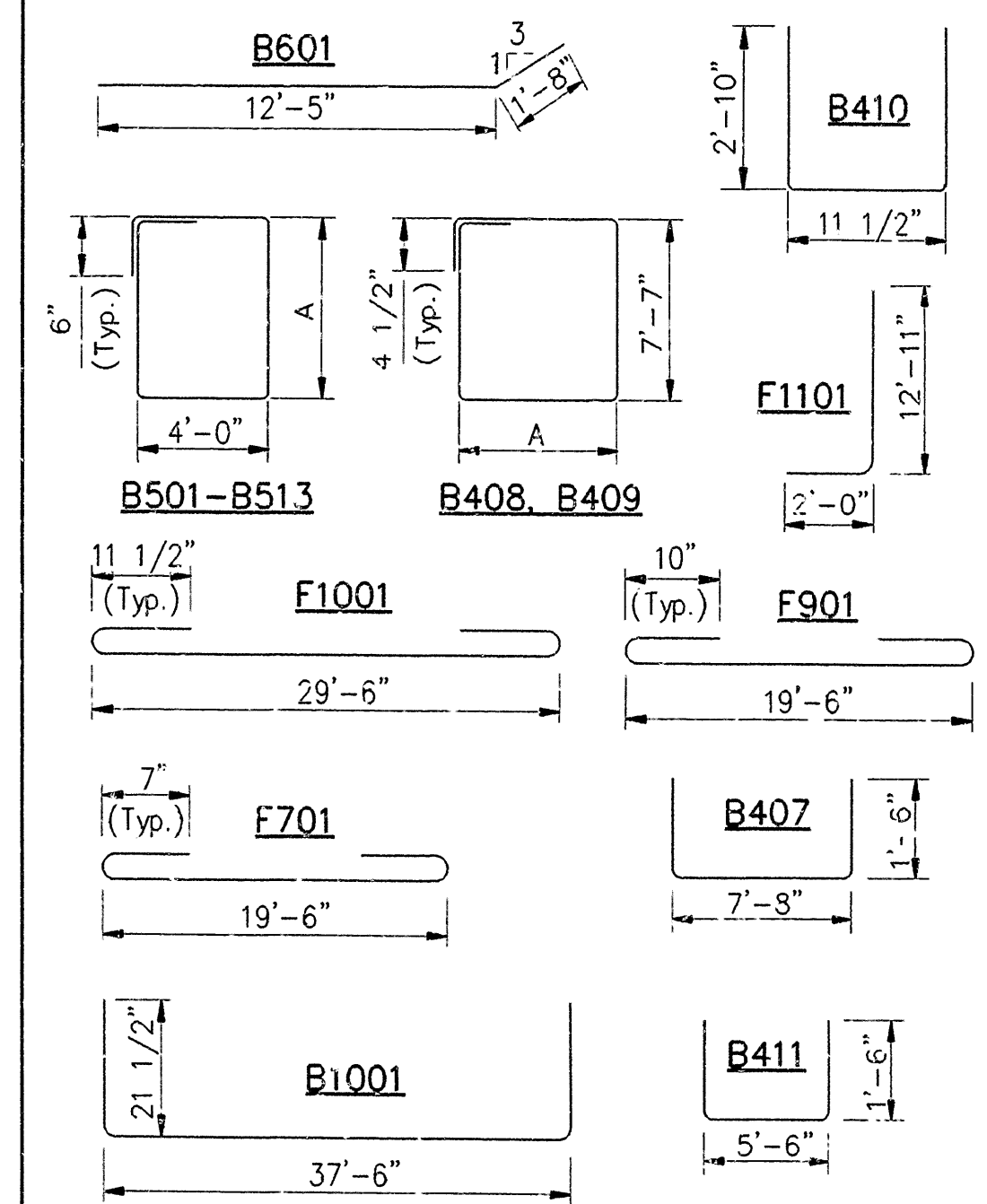
Scale: 3/8" = 1'-0"

MAXIMUM TOE PRESSURE (Kips/Sq. ft.)					
Group I		Group II		Group III	
Max.	Allow	Max.	Allow	Max.	Allow
11.5	12.8	14.1	16.0	14.1	16.0



REINFORCEMENT SCHEDULE				
MARK	NO	LENGTH	PIN DIA	A
B401	16	13'-0"	STR	
B402	4 EA	12'-3"	TO	
B406	36	10'-6"	2"	
B408	168	25'-4"	2"	4'-11"
B409	168	23'-10"	2"	4'-2"
B410	336	6'-5 1/2"	2"	
B411	46	8'-3 1/2"	3"	
B501	4 EA	23'-6"	TO	7'-6"
B509	4 EA	18'-2"	TO	4'-10"
B510	4 EA	17'-6"	TO	4'-6"
B513	4 EA	15'-10"	TO	3'-8"
B601	8	14'-1"	4 1/2"	
B901	8	37'-6"	STR	
B1001	8	40'-6"	10"	
B1101	54	43'-4"	STR	
B1102	54	45'-5"	STR	
F401	30	19'-6"	STR	
F402	20	29'-6"	STR	
F701	12	21'-2"	5 1/4"	
F901	24	22'-0"	9"	
F1001	24	32'-4"	10"	
F1101	54	14'-7"	11 1/4"	

BENDING DIAGRAMS



NOTE:
1. Dimensions of Bars are Out-to-Out.

SHEET 1 OF 1
DETAILS OF PIER 1A
U.S. HIGHWAY 71 OVER RAVINE

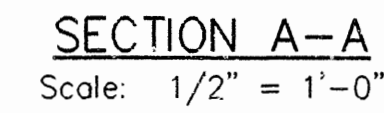
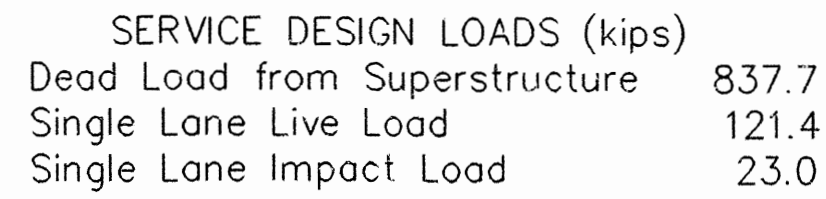
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: P.B. DATE: Feb. 1990
CHECKED BY: T.B.H. DATE: Feb. 1990
DESIGNED BY: W.R.W. DATE: Feb. 1990
SCALE: AS NOTED

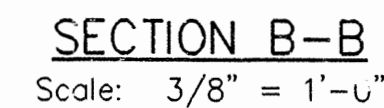
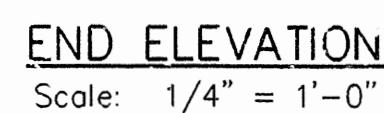
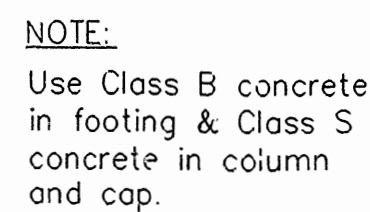
BRIDGE NO. 6237 A DRAWING NO. 29852

BRIDGE ENGINEER

①	6237A&B PIER 2A	29853
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BENDING DIAGRAMS

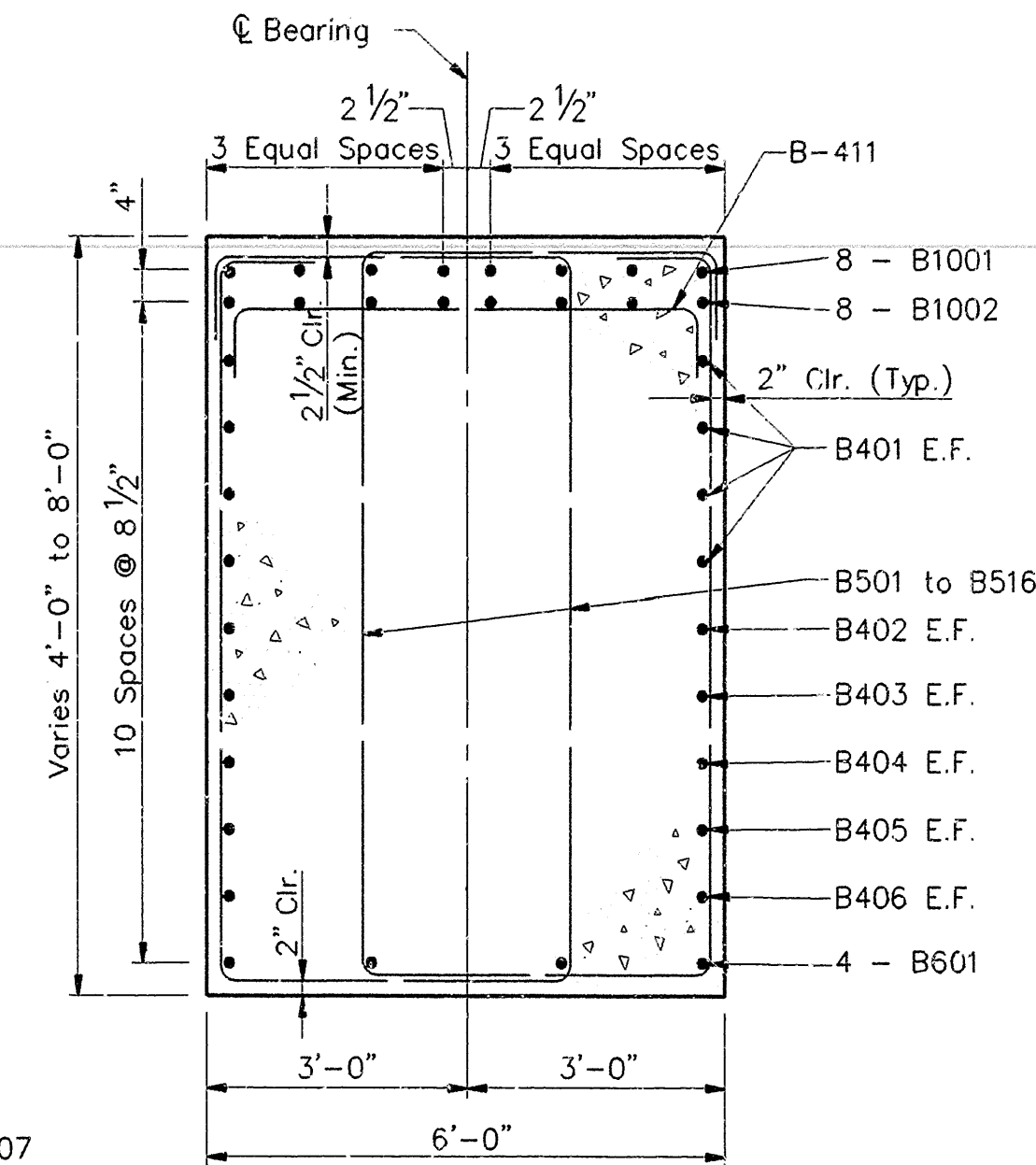
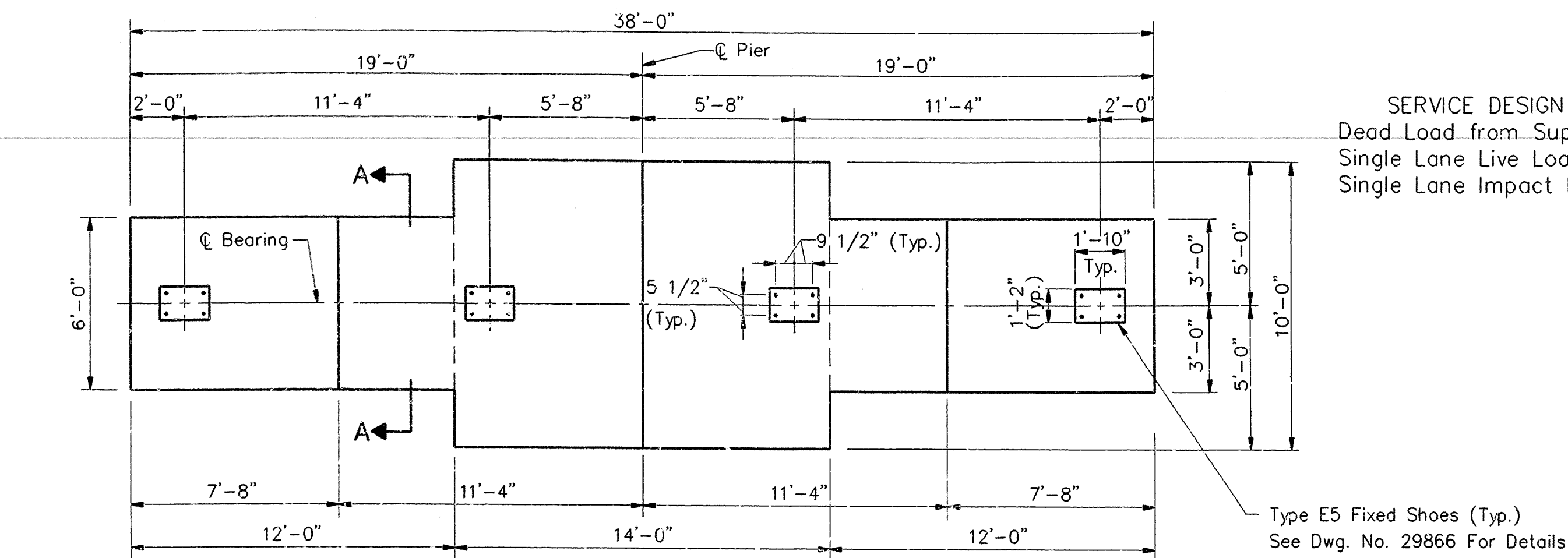


STATE OF
ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
No. 2612
THEODORE B. HANNAH

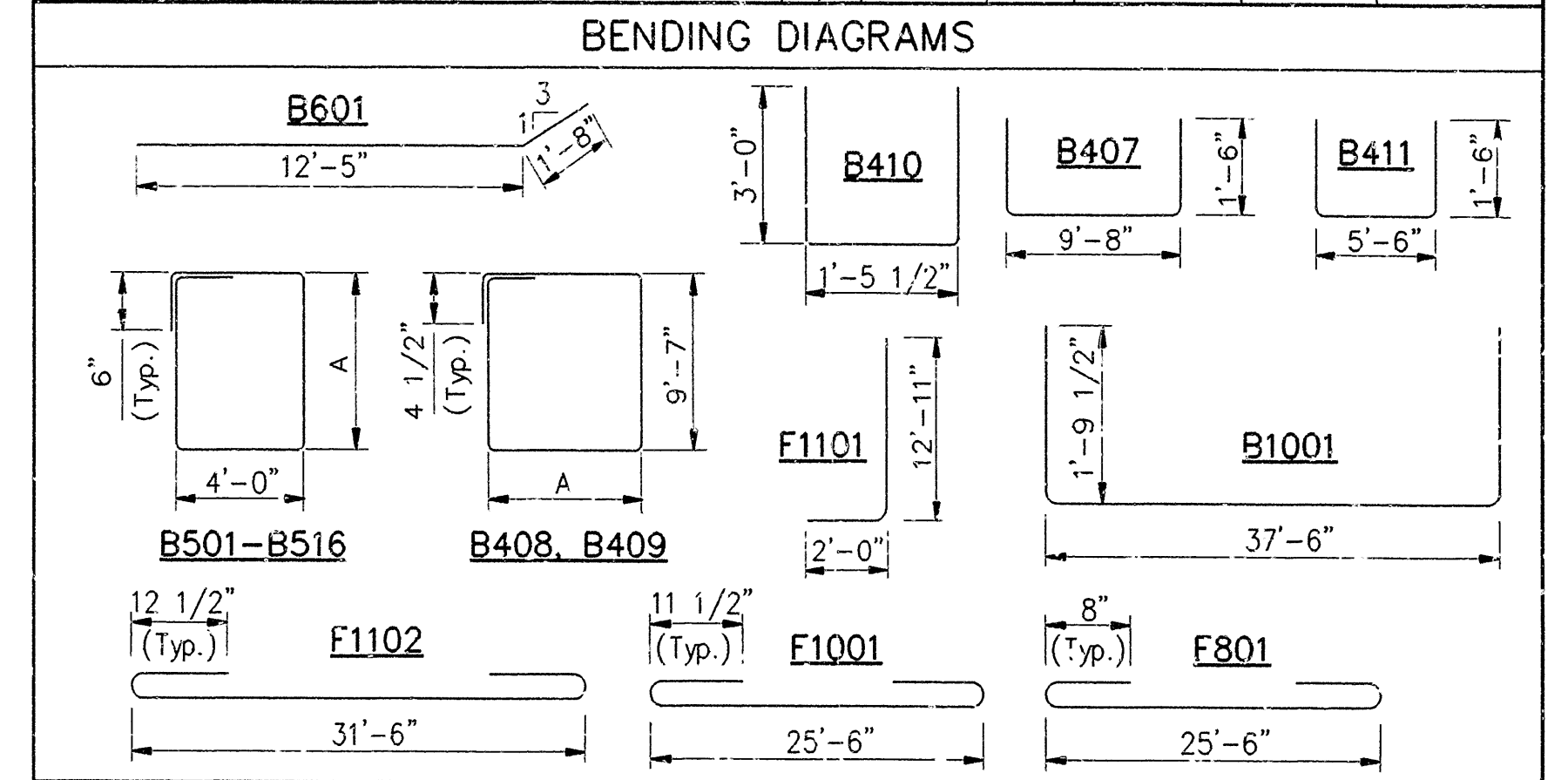
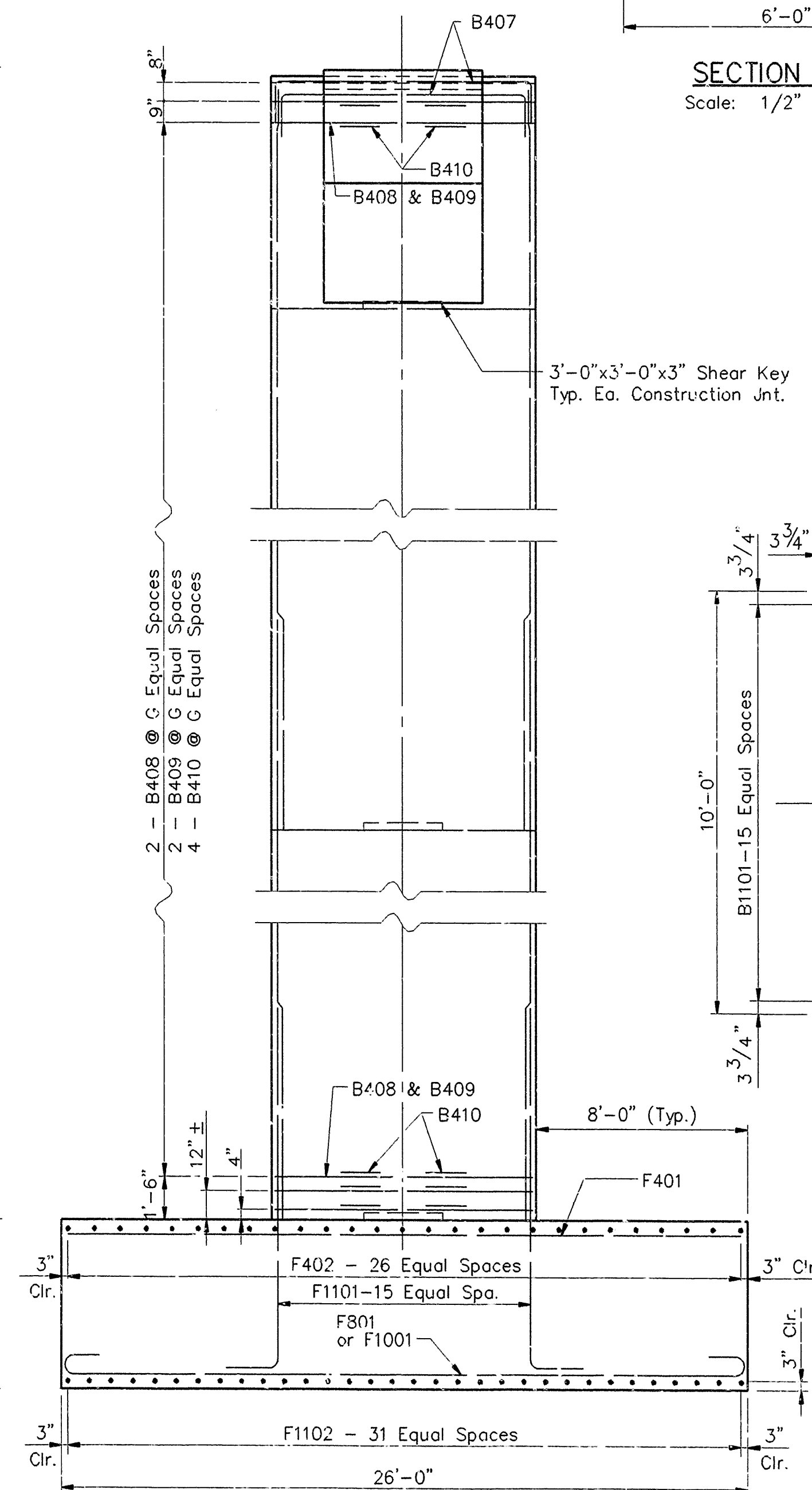
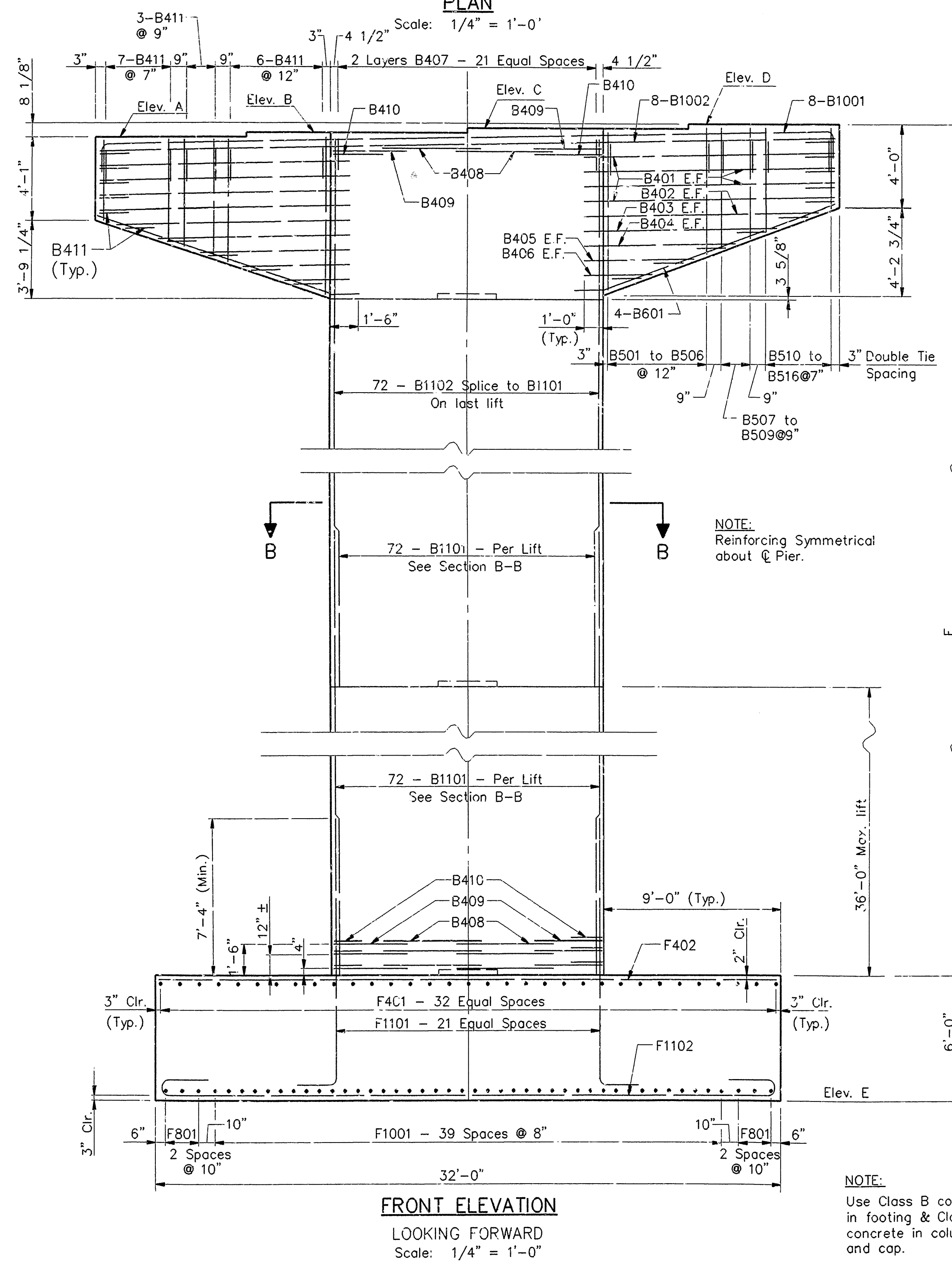


WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: P.B. DATE: Feb. 1990
CHECKED BY: T.B.H. DATE: Feb. 1990
DESIGNED BY: W.R.W. DATE: Feb. 1990
SCALE: AS NOTED
BRIDGE NO. 6237 A DRAWING NO. 29853

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	48	
				(1) 6237A PIER 3A&5A				29854



COMMON BARS					COMMON BARS					PIER 3A					PIER 5A				
MARK	NO	LENGTH	PIN DIA	A	MARK	NO	LENGTH	PIN DIA	A	MARK	NO	LENGTH	PIN DIA	A	MARK	NO	LENGTH	PIN DIA	A
B401	16	13'-0"	STR		F401	33	25'-6"	STR		B408	254	28'-10"	2"	4'-8"	B409	254	27'-7"	2"	4'-0 1/2"
B402	4 EA	12'-3"	STR		F402	27	31'-6"	STR		B410	508	7'-3 1/2"	2"		B1101	216	43'-4"	STR	
TO B406		TO 3'-7"	STR		F801	6	27'-4"	6"		B1102	72	16'-8"	STR		B408	230	28'-10"	2"	4'-8"
B407	44	10'-6"	2"		F1001	40	28'-4"	10"		B409	230	27'-7"	2"	4'-0 1/2"	B410	460	7'-3 1/2"	2"	
B411	52	8'-3 1/2"	3"		F1101	72	14'-7"	11 1/4"		B1101	144	43'-4"	STR		B1102	72	41'-6"	STR	
B501	TO 4 EA	23'-6"	2 1/2"	7'-6"	F1102	32	34'-6"	11 1/4"											
B506		TO 20'-1"		TO 5'-9 1/2"															
B507	TO 4 EA	19'-7"	2 1/2"	TO 5'-6 1/2"															
B509		TO 18'-7"		TO 5'-0 1/2"															
B510	TO 4 EA	18'-2"	2 1/2"	TO 4'-10"															
B516		TO 15'-10"		TO 3'-8"															
B601	8	14'-1"	4 1/2"																
R1001	8	40'-6"	10"																
B1002	8	37'-6"	STR																



NOTE:
1. Dimensions of Bars are Out-To-Out.

Pier	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	F	G
3A	1543.63	1543.85	1544.08	1544.31	1413.00	125'-3 3/4"	123
5A	1528.50	1528.72	1528.95	1529.18	1409.00	114'-2 1/8"	111

MAXIMUM TOE PRESSURE (Kips / Sq. ft.)												
Pier	Group I		Group II		Group III		Group IV		Group V		Group VI	
	Max.	Allow	Max.	Allow	Max.	Allow	Max.	Allow	Max.	Allow	Max.	Allow
3A	8.2	12.0	11.4	15.6	10.5	15.6	10.1	15.6	13.3	16.8	12.4	16.8
5A	13.3	15.0	15.8	19.5	15.3	19.5	15.6	19.5	18.1	21.0	17.6	21.0

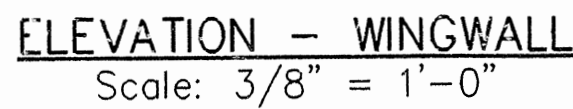
NOTE:
1. All Pressures are Service Load.

SHEET 1 OF 1
DETAILS OF PIERS 3A & 5A
U.S. HIGHWAY 71 OVER RAVINE

WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: P.B. DATE: Feb. 1990
CHECKED BY: T.B.H. DATE: Feb. 1990
DESIGNED BY: W.R.W. DATE: Feb. 1990
SCALE: AS NOTED
BRIDGE NO. 6237 A DRAWING NO. 29854

PBB\ VW 71PD3A 8615203 4-23-90 15

① 6237 A & B DETAILS N. ABUTMENTS 29856



NOTE:
Bar Spacing @ 12" Unless
Otherwise Noted.

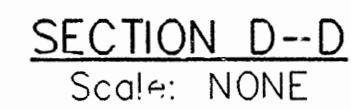
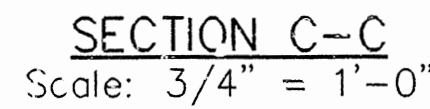
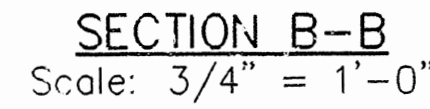
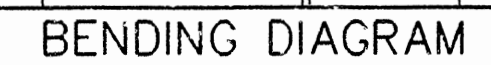


TABLE OF VARIABLES

LOCATION		ELEV. "A"	ELEV. "B"	"C"	ELEV. "D"
BRIDGE A	EAST WINGWALL	1530.64	1529.14	2'-0 3/4"	1521.89
	WEST WINGWALL	1529.84	1528.47	1'-11 1/4"	1521.09
BRIDGE B	EAST WINGWALL	1523.38	1522.11	1'-11 1/2"	1514.68
	WEST WINGWALL	1524.18	1522.78	1'-10 3/8"	1515.48

REINFORCEMENT SCHEDULE

MARK	NO	LENGTH	PIN DIA	A	MARK	NO	LENGTH	PIN DIA	A
W401		13'-8"			W601E	4	9'-4"	STR	
TO	1 EA.	TO	STR		W602E	6	8'-4"	STR	
W410		10'-6"			W603	10	24'-10"	STR	
W411	1	10'-2"	STR		W604	6	11'-0"	STR	
W412		10'-0"			W605	22	4'-10"	4 1/2"	
TO	1 EA.	TO	STR		W606	2	13'-8"	STR	
W418		7'-6"			W607E	2	13'-0"	4 1/2"	11'-4"
W419	1	7'-6"	STR		W608	5	12'-6"	STR	
W420E		13'-0"	E	11'-4"	W609E	5	11'-10"	4 1/2"	10'-2"
TO	1 EA.	TO	2"		W610	3	2'-8"	STR	
W429E		9'-10"		8'-2"					
W430E	1	9'-6"	2"	7'-10"					
W431E		9'-4"		7'-8"					
TO	1 EA.	TO	2"	TO					
W437E		6'-10"		5'-2"	WP401E	22	4'-2 1/2"	2"	
W438E	1	6'-10"	2"	5'-2"	WP402E	4	4'-5 1/2"		
W439	2	4'-7"	STR		WP403E	6	9'-8"	STR	
W440	2	7'-6"	STR		WP404E	1	2'-2"	STR	
W441		13'-6"			WP405E	6	14'-8"	STR	
TO	2 EA.	TO	STR						
W444		20'-8"							
W445	10	7'-8"	2"						
W446	3	9'-11"	STR						
W447	4	8'-4"	2"	1'-10"					
W448	4	10'-0"	2"	2'-2"					
W449	4	13'-4"	2"						
W450	3	1'-6"	STR						



1. Dimensions of Bars in Bending Diagram are Out-To-Out.
2. Reinforcement Schedule is for One Wingwall only. Two required for each abutment.
3. Reinforcing in Parapet Rail to be Epoxy Coated

EF	Each Face
NF	Near Face
BF	Back Face

SHEET 2 OF 2

DETAILS NORTH ABUTMENTS

U.S. HIGHWAY 71 OVER RAVINE

WASHINGTON COUNTY

ROUTE	SEC.
1	1
2	2
3	3
4	4
5	5
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7	7
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88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: R.N.F. DATE: Jan., 1990

CHECKED BY: T.B.H. DATE: Feb., 1990

DESIGNED BY: D.C.W. DATE: Jan., 1990

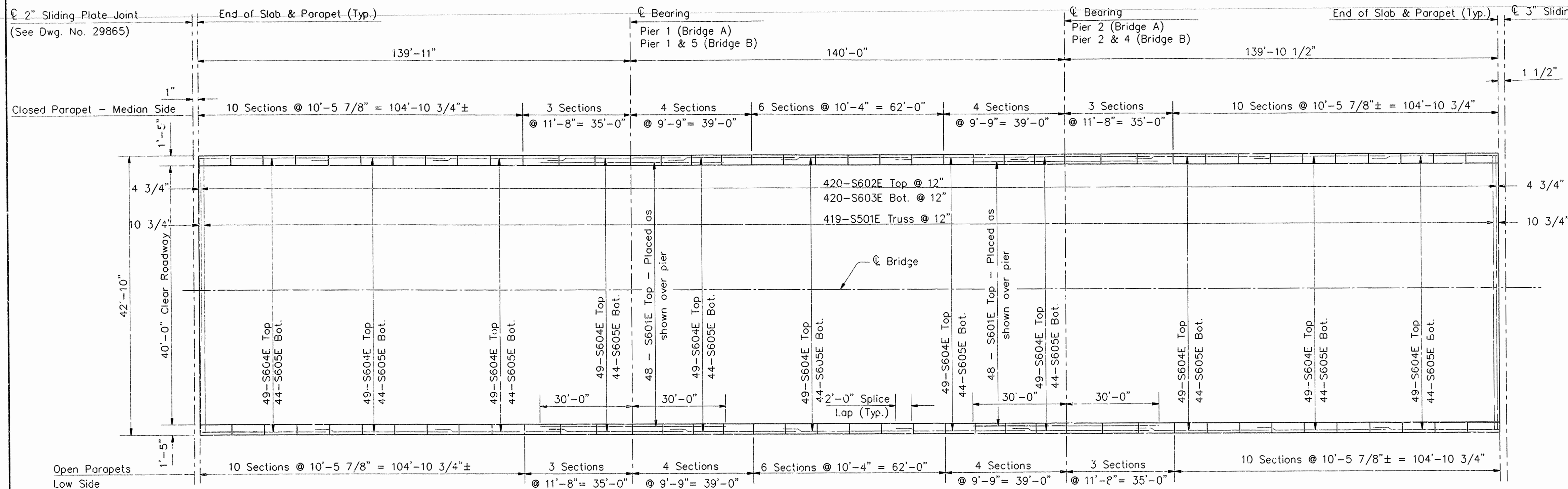
BRIDGE NO. 6237 A & B

DRAWING NO. 29856

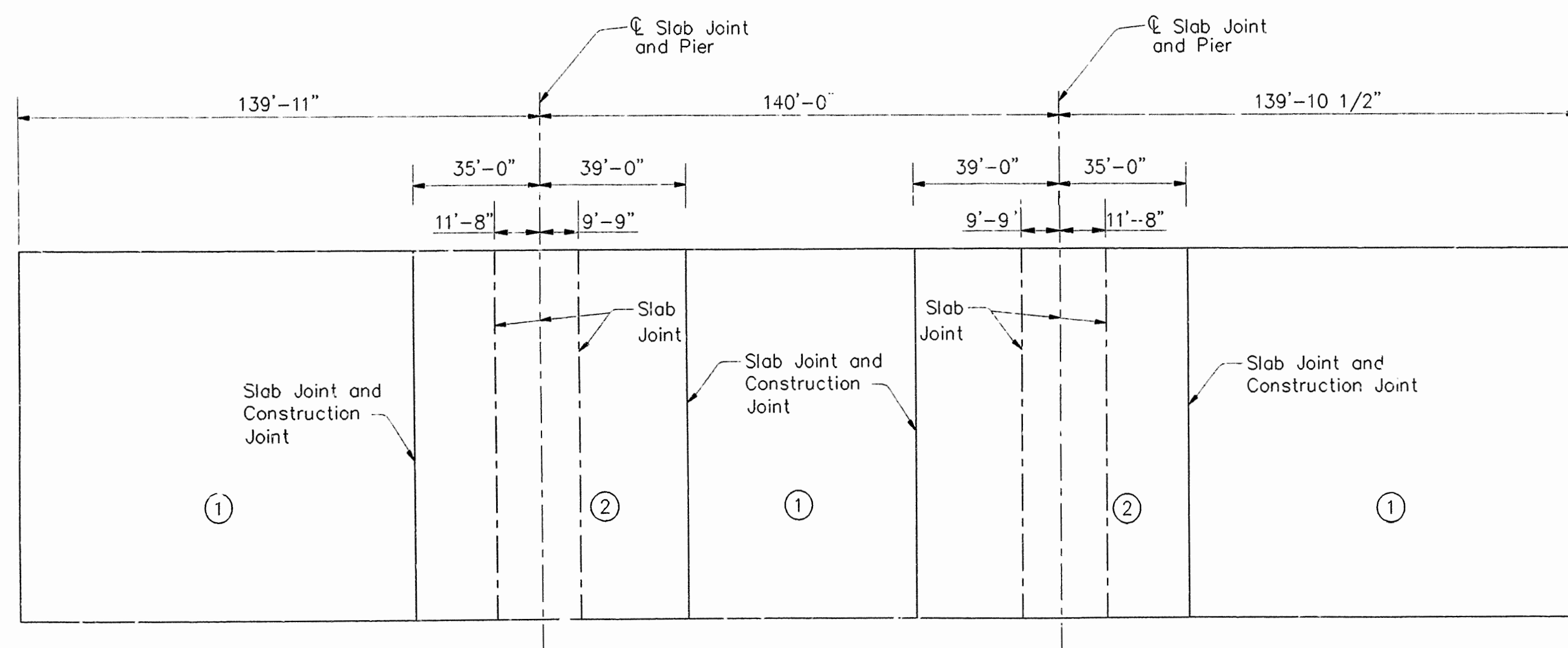
BRIDGE ENGINEER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	51	

① 6237B DTLS PL GIRD SPANS 29857



SLAB PLAN
UNIT 1 (BRIDGE B)
Scale: 1" = 20' horizontal
1" = 10' vertical



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 pours, except 72 hours shall elapse between adjacent pours. All railing pours made before entire slab unit has been placed must be approved by the Bridge Engineer.

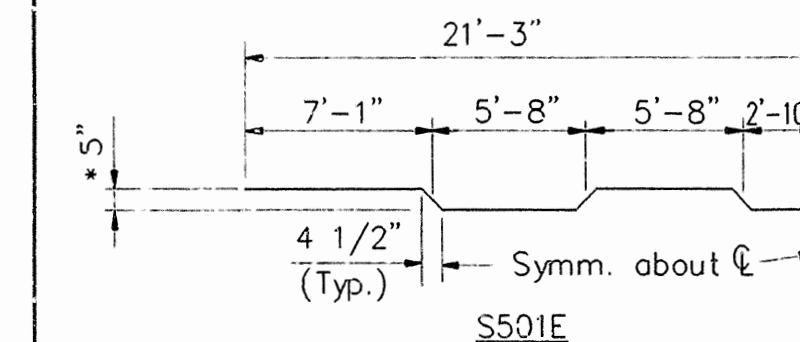
SLAB POURING SEQUENCE FOR UNIT 1 (BRIDGE B)

Scale: None

NOTE: For Joint Details, See Dwg. 29864.

UNIT 1 - BRIDGE B REINFORCEMENT SCHEDULE			
MARK	NO	LENGTH	PIN DIA
S501E	419	43'-3"	3"
S601E	96	60'-0"	Str.
S602E	420	42'-6"	Str.
S603E	420	42'-6"	Str.
S604E	539	40'-0"	Str.
S605E	484	40'-0"	Str.
P401E	838	5'-7 1/2"	2"
P402E	400	6'-4"	2"
P403E	438	5'-7"	2"
P404E	278	3'-1 1/2"	2"
P405E	278	5'-8"	2"
P406E	240	10'-2"	Str.
P407E	72	11'-4"	Str.
P408E	96	9'-5"	Str.
P409E	72	10'-0"	Str.
P606E	100	10'-2"	Str.
P607E	30	11'-4"	Str.
P608E	40	9'-5"	Str.
P609E	30	10'-0"	Str.

BENDING DIAGRAM



NOTES:
Dimensions of Bars are Out-to-Out.
• 1/2" Overtolerance, No Undertolerance
All Slab and Parapet Reinforcing to be Epoxy Coated.

VARIABLES FOR PARAPET RAILING						
"f"	OPEN PARAPET					
	a	b	c	k	m	t
10'-5 7/8"	2'-0"	6'-5 7/8"	4 1/2"	3 1/2"	6	06
11'-8"	2'-0"	7'-8"	4 1/2"	3 1/2"	7	07
9'-9"	2'-0"	5'-9"	4 1/2"	3 1/2"	5	08
10'-4"	2'-0"	6'-4"	4 1/2"	3 1/2"	6	09
"f"	CLOSED PARAPET					
	k	n				t
10'-5 7/8"	3"	10				06
11'-8"	4"	11				07
9'-9"	4 1/2"	9				08
10'-4"	3"	10				09

NOTE:
For Parapet Reinforcing and Bending Diagrams, see Drawing No. 29867.



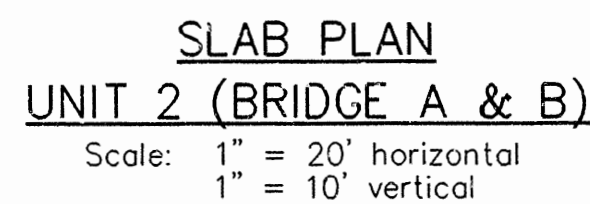
SHEET 1 OF 8
DETAILS OF PLATE GIRDER SPANS
U.S. HIGHWAY 71 OVER RAVINE

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

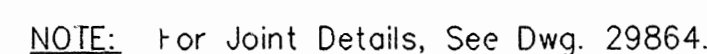
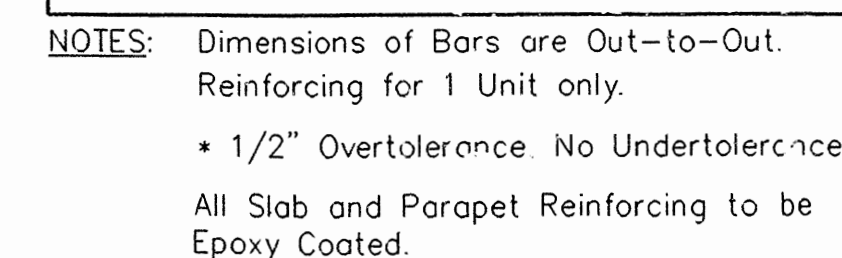
DRAWN BY: D.E.H. DATE: June, 1988
CHECKED BY: H.J.P. DATE: June, 1988
DESIGNED BY: D.C.W. DATE: June, 1988

BRIDGE NO. 6237 B DRAWING NO. 29857

BRIDGE ENGINEER

DEH\RNF 71SP-2 8615203 7-17-90 15

NOTE:
For Parapet Reinforcing and Bending Diagrams,
see Drawing No. 29867.



STATE OF
ARKANSAS
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ENGINEER
No 2612
THEODOKE B. HANNAY

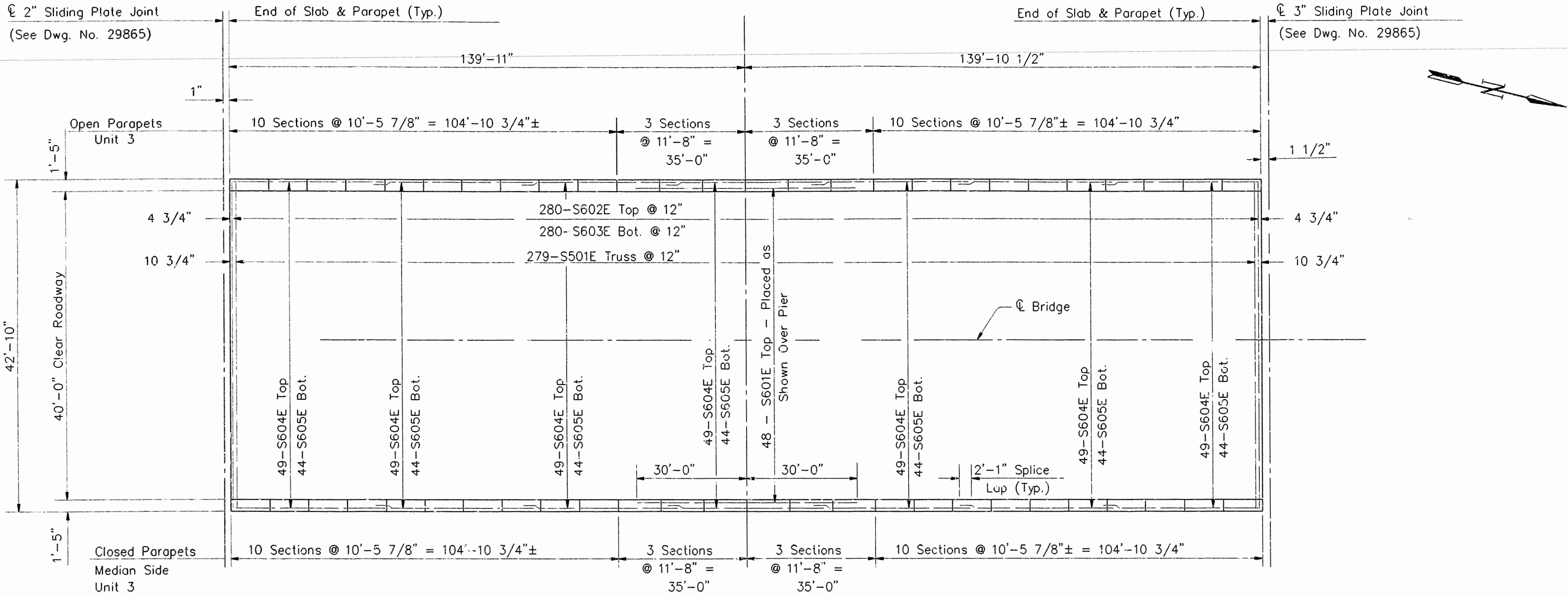
WASHINGTON	COUNTY
ROUTE	SEC.

LITTLE ROCK, ARK.

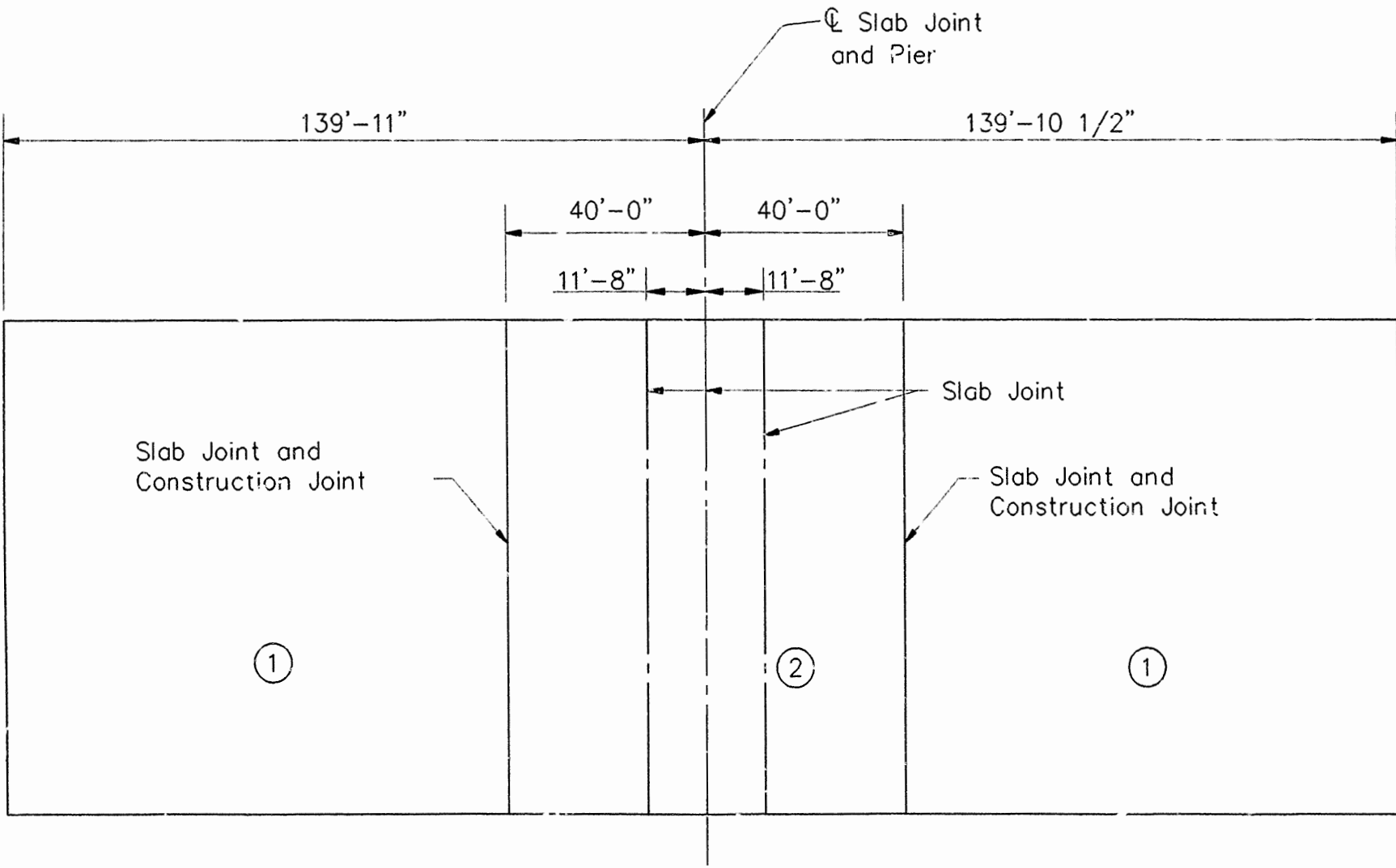
DRAWN BY: D.E.H. DATE: June, 1988
CHECKED BY: H.J.P. DATE: June, 1988 SCALE: AS NOTED
DESIGNED BY: D.C.W. DATE: June, 1988

BRIDGE NO. 6237 A&B DRAWING NO. 29858

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	R40044		53	
				6237A	DTLS PL. GIRD SPANS		29859	



SLAB PLAN
UNIT 3 (BRIDGE A)
Scale: 1" = 20' horizontal
1" = 10' vertical

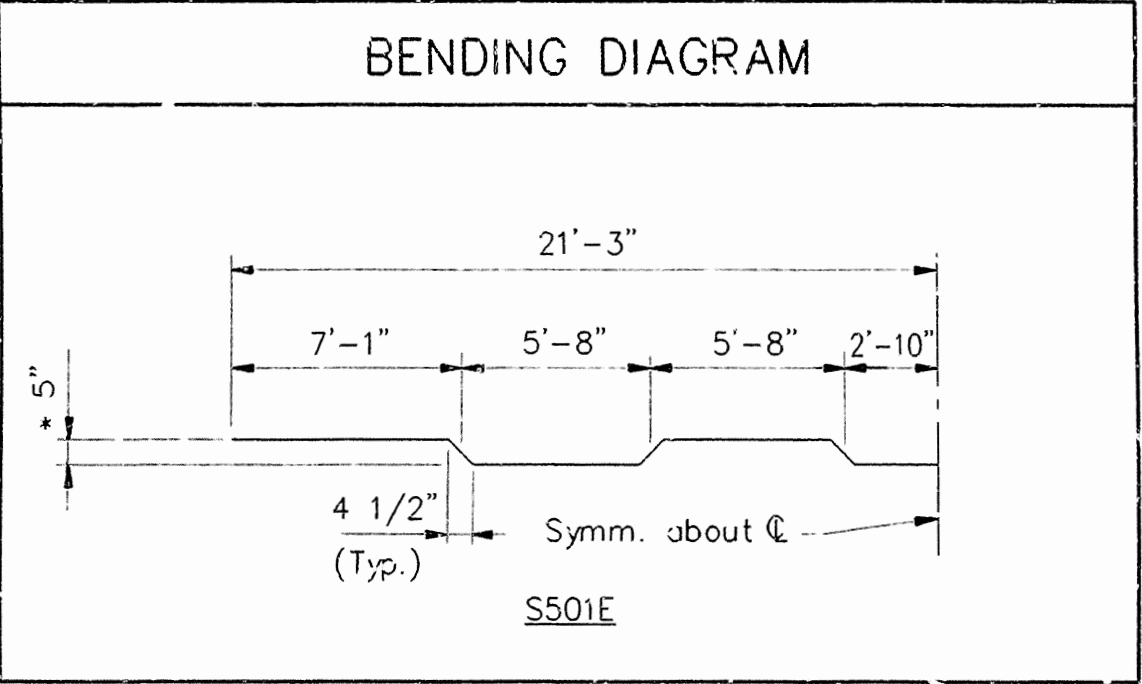


NOTE: For Joint Details, See Dwg. 29864.

SLAB POURING SEQUENCE FOR UNIT 3 (BRIDGE A)
Scale: None

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 pours, except 72 hours shall elapse between adjacent pours. All railing pours made before entire slab unit has been placed must be approved by the Bridge Engineer.

UNIT 3 BRIDGE A REINFORCEMENT SCHEDULE			
MARK	NO	LENGTH	PIN DIA
S501E	279	43'-3"	3"
S601E	48	60'-0"	Str.
S602E	280	42'-6"	Str.
S603E	280	42'-6"	Str.
S604E	343	41'-8"	Str.
S605S	308	41'-8"	Str.
P401E	552	5'-7 1/2"	2"
P402E	260	6'-4"	2"
P403E	292	5'-7"	2"
P404E	188	3'-1 1/2"	2"
P405E	188	5'-8"	2"
P406E	240	10'-2"	Str.
P407E	72	11'-4"	Str.
P606E	100	10'-2"	Str.
P607E	30	11'-4"	Str.



NOTES: Dimensions of Bars are Out-to-Out.
* 1/2" Overtolerance, No Undertolerance
All Slab and Parapet Reinforcing to be Epoxy Coated.

VARIABLES FOR PARAPET RAILING						
"f"	OPEN PARAPET					
	a	b	c	k	m	t
10'-5 7/8"	2'-0"	6'-5 7/8"	4 1/2"	3 1/2"	6	06
11'-8"	2'-0"	7'-8"	4 1/2"	3 1/2"	7	07
"f"	CLOSED PARAPET					
	k	n				t
10'-5 7/8"	3"	10				06
11'-8"	4"	11				07

NOTE: For Parapet Reinforcing and Bending Diagrams, see Drawing No. 29867.

SHEET 3 OF 8
DETAILS OF PLATE GIRDER SPANS
U.S. HIGHWAY 71 OVER RAVINE

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

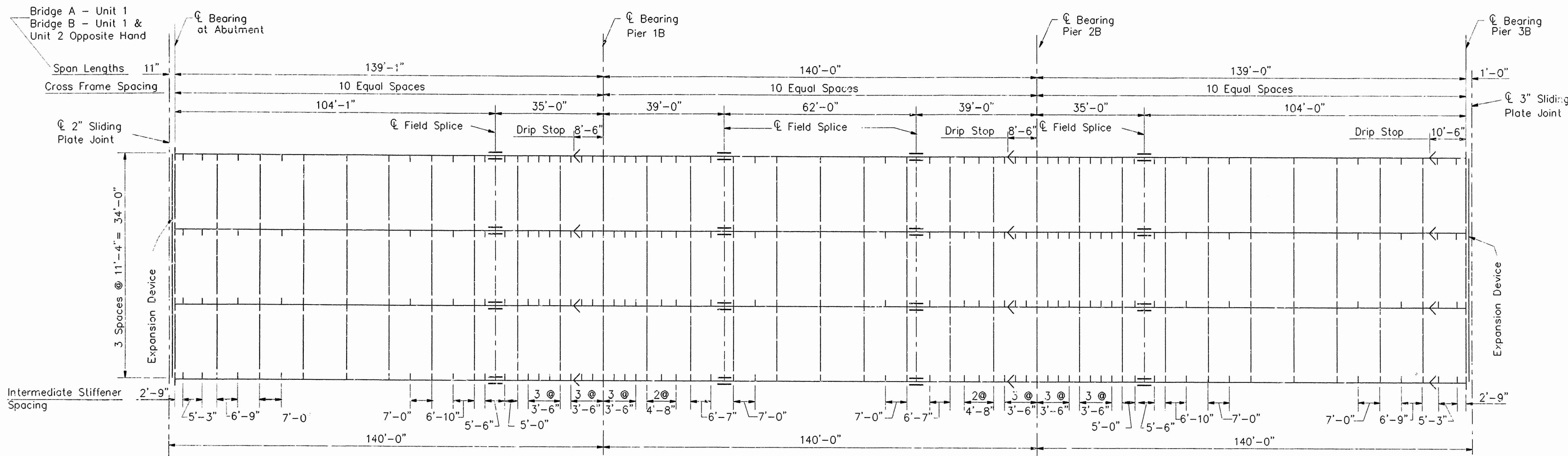
DRAWN BY: V.W. DATE: Jan., 1990
CHECKED BY: H.J.P. DATE: Jan., 1990
DESIGNED BY: D.C.W. DATE: Jan., 1990

BRIDGE NO. 6237A DRAWING NO. 29859

BRIDGE ENGINEER

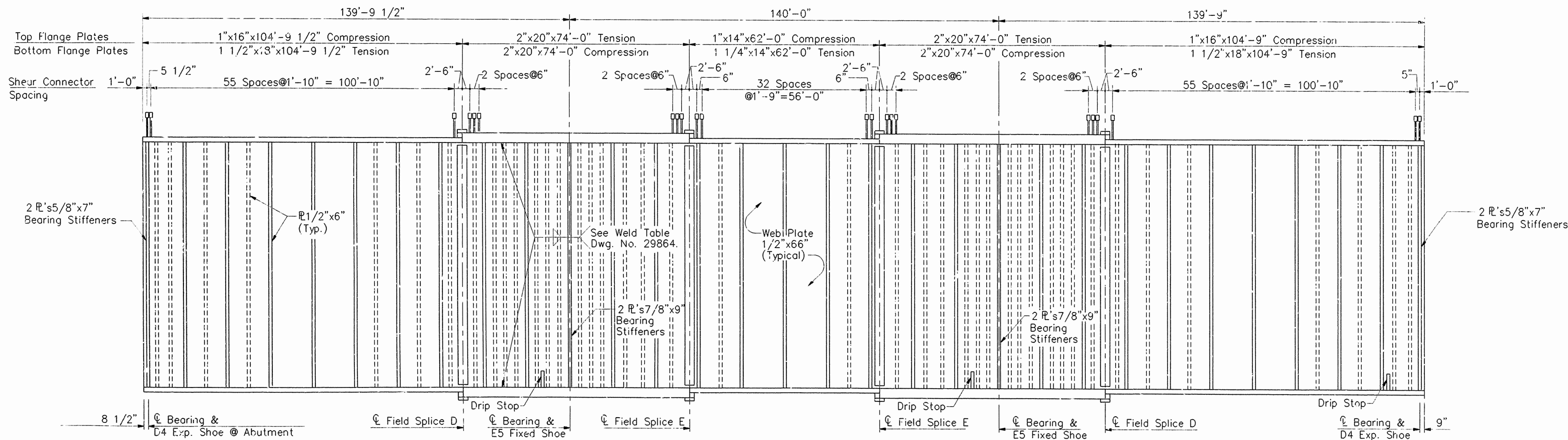


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	54	
				① 6237 B DTLs PL GIRD SPANS		29860		



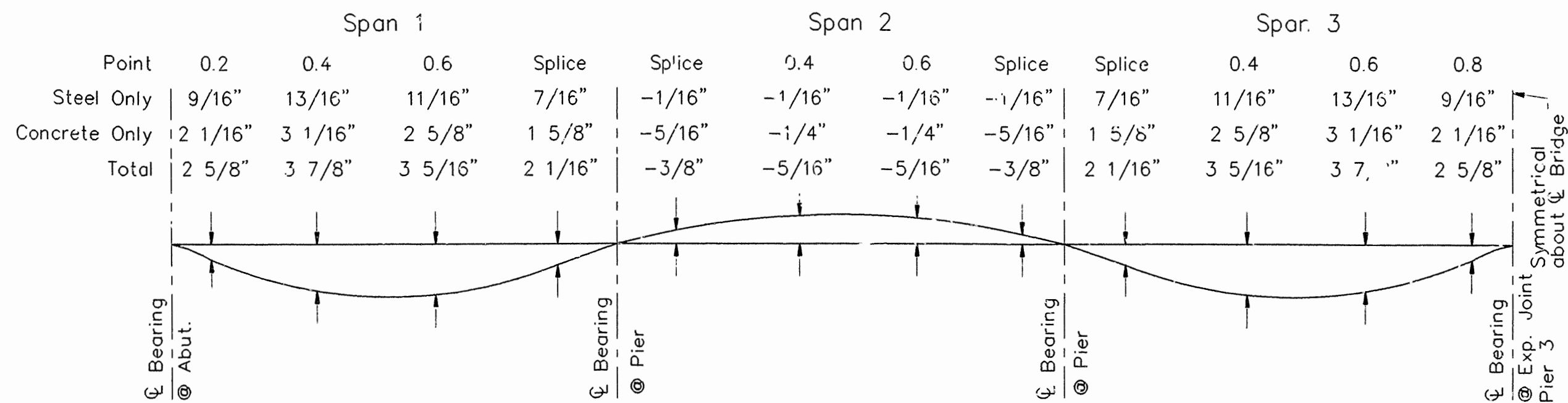
FRAMING PLAN - 420' UNIT #1

Scale: None



FRAMING ELEVATION - 420' UNIT #1

Scale: None



DEAD LOAD DEFLECTION DIAGRAM (420' UNIT)

Scale: None

NOTES:

1. FOR FLANGE AND WEB SPLICE DETAILS, SEE DRAWING NO. 29863.
2. FOR SHOE DETAILS, SEE DRAWING NO. 29866.
3. FOR SCREED RAIL SUPPORT DETAIL, SHEAR CONNECTORS, DRIP STOP AND STIFFENER CONNECTIONS, SEE DRAWING NO. 29864.

LOAD DISTRIBUTION TABLE - BRIDGE A & B		
	Interior Girder	Exterior Girder
Dead Load	1204 PLF	1072 PLF
Non Composite	+ Girder	+ Girder
Dead Load to Composite Girder*	467 PLF	403 PLF
Live Load to Compound Girder	2.06 Wheel + Impact	1.94 Wheel + Impact

*includes 24 psf for Future Wearing Surface

SHEET 4 OF 8

DETAILS OF PLATE GIRDER SPANS
U.S. HIGHWAY 71 OVER RAVINE

WASHINGTON COUNTY
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: D.E.H. DATE: June, 1988
CHECKED BY: H.J.P./TBH DATE: June, 88/Feb. 90
DESIGNED BY: D.C.W. DATE: June, 1988

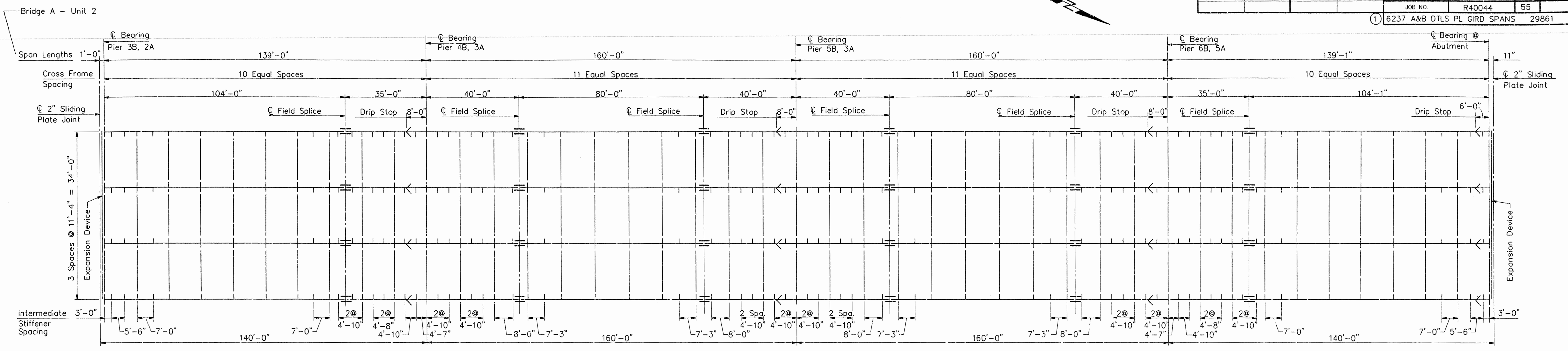
SCALE: AS NOTED

BRIDGE NO. 6237 B

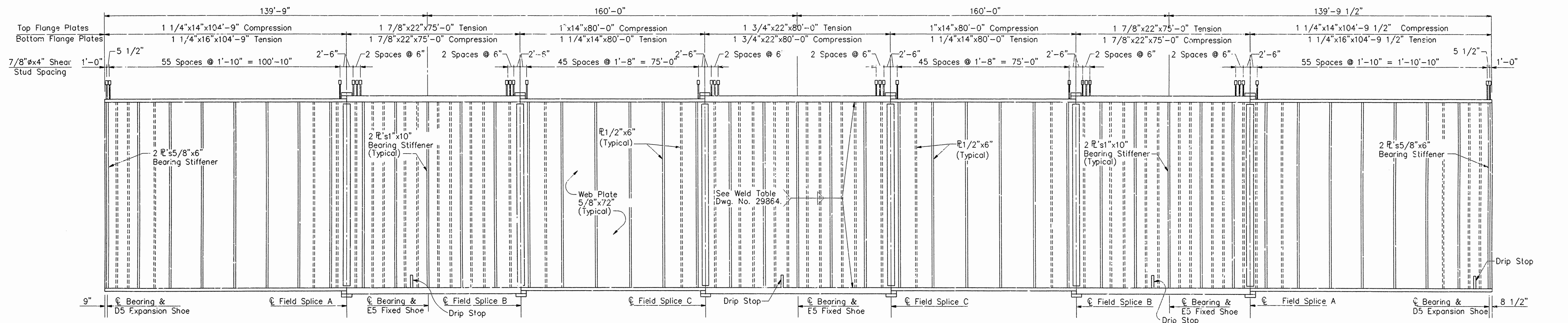
DRAWING NO. 29860

BRIDGE ENGINEER

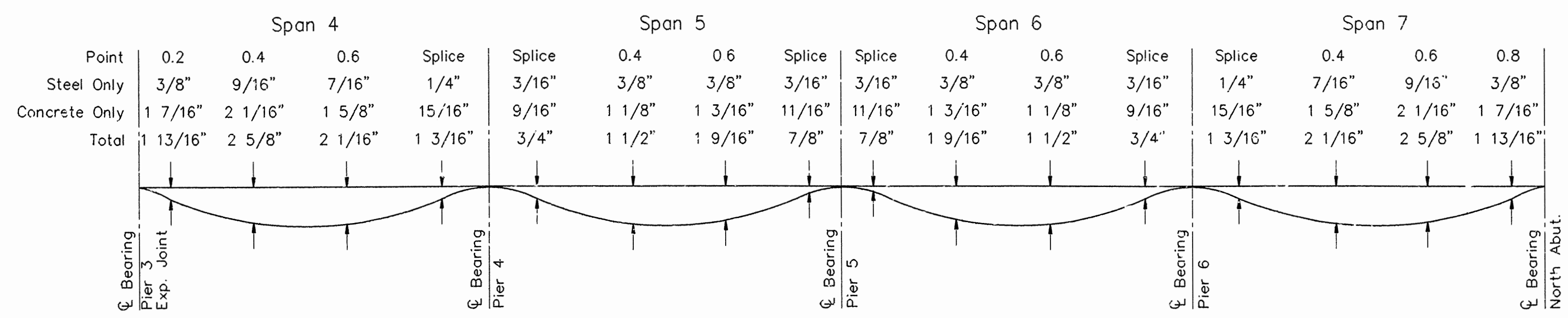
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	55	
				(1) 6237 A&B DTLS PL GIRD SPANS 29861				



FRAMING PLAN - 600' UNIT #2
Scale: None



FRAMING ELEVATION - 600' UNIT #2
Scale: None



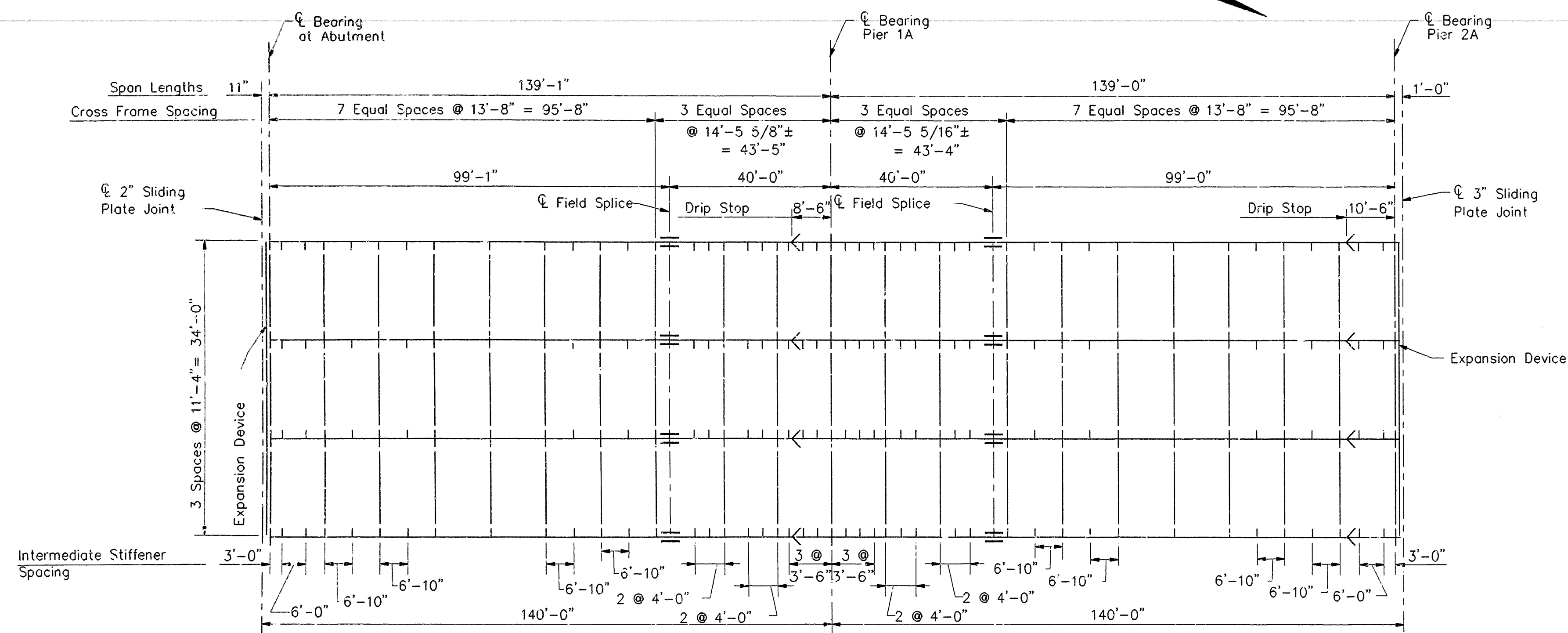
DEAD LOAD DEFLECTION DIAGRAM - 600' UNIT (BRIDGE A)
Scale: None

- NOTES:
- FOR FLANGE AND WEB SPLICE DETAILS, SEE DRAWING NO. 29863.
 - FOR SHOE DETAILS, SEE DRAWING NO. 29866.
 - FOR SCREED RAIL SUPPORT DETAIL, SHEAR CONNECTORS, DRIP STOP AND STIFFENER CONNECTIONS, SEE DRAWING NO. 29864.



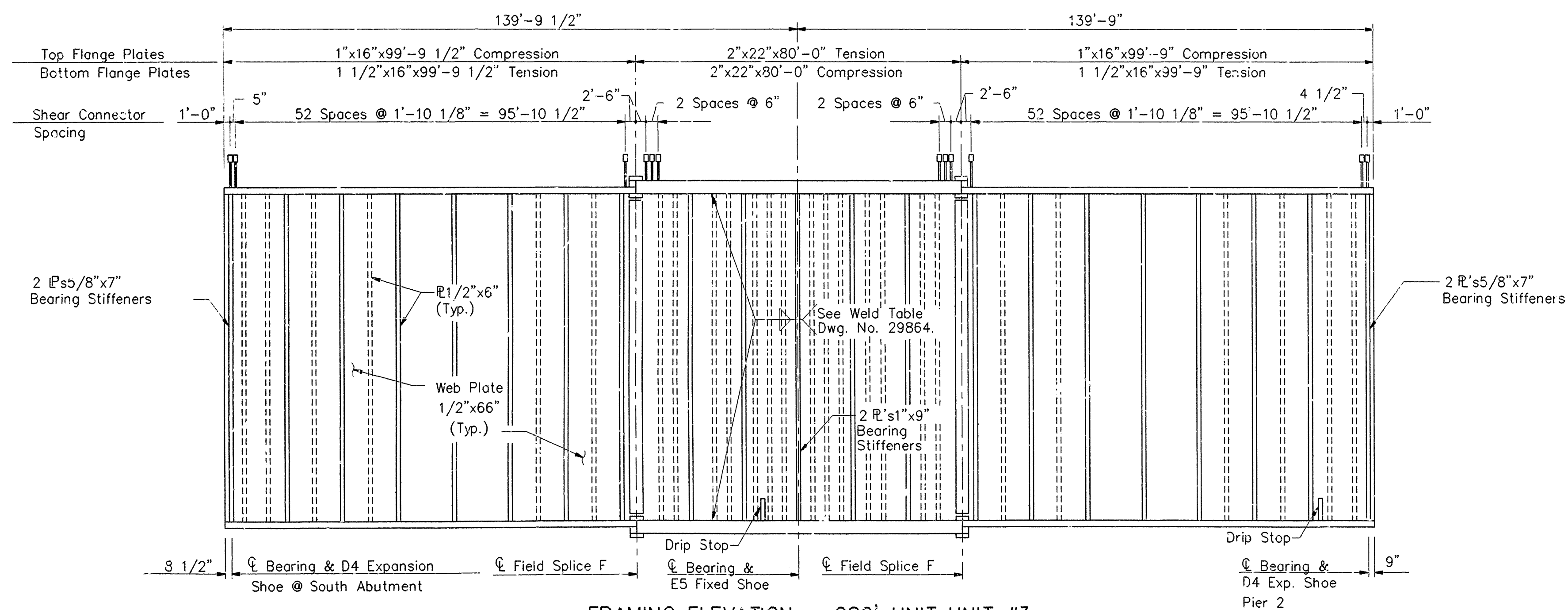
SHEET 5 OF 8
DETAILS OF PLATE GIRDER SPANS
U.S. HIGHWAY 71 OVER RAVINE
WASHINGTON COUNTY
ROUTE SEC.
ARIZONA STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: V.W. DATE: June, 1988
CHECKED BY: HJP/TBH DATE: June 88/Feb. 90
DESIGNED BY: D.C.W. DATE: June, 1988
BRIDGE NO. 6237 A&B DRAWING NO. 29861

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	56	
(1) 6237A DTLS. PL. GIRD. SPANS 29861A								



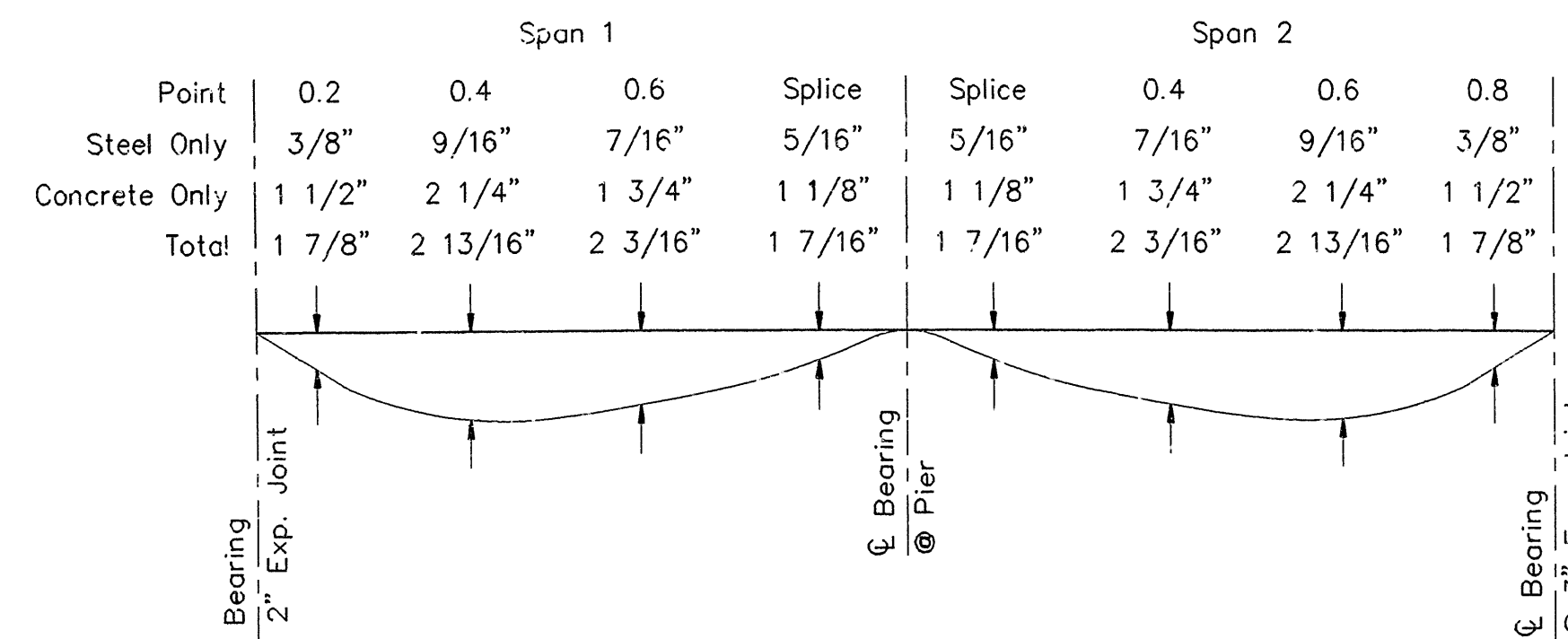
FRAMING PLAN - 280' UNIT UNIT #3

Scale: None



FRAMING ELEVATION - 280' UNIT UNIT #3

Scale: None



DEAD LOAD DEFLECTION DIAGRAM - 280' UNIT (BRIDGE A)

Scale: None

- NOTES:
- FOR FLANGE AND WEB SPLICE DETAILS, SEE DRAWING NO. 29863.
 - FOR SHOE DETAILS, SEE DRAWING NO. 29856.
 - FOR SCREED RAIL SUPPORT DETAIL, SHEAR CONNECTORS, DRIP STOP AND STIFFENER CONNECTIONS, SEE DRAWING NO. 29864.



SHEET 6 OF 8
DETAILS OF PLATE GIRDER SPANS
U.S. HIGHWAY 71 OVER RAVINE

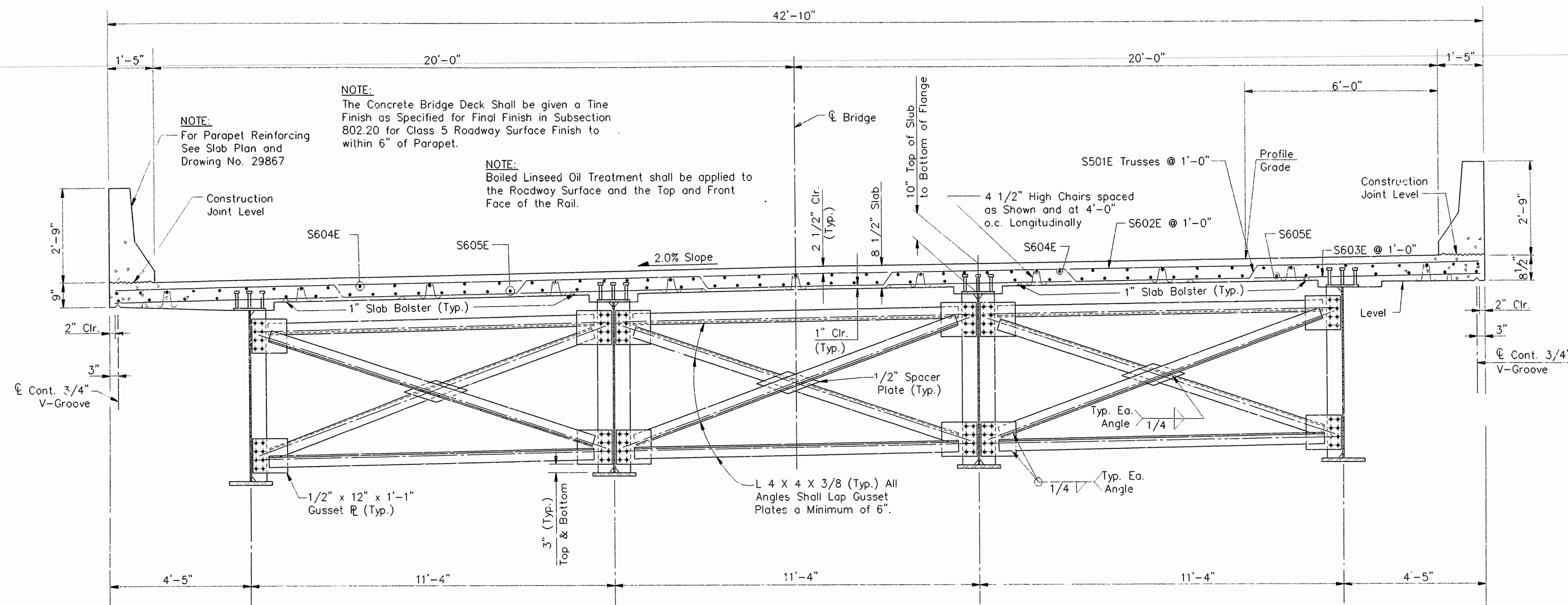
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: V.W. DATE: Jan., 1990
CHECKED BY: T.B.H. DATE: Feb., 1990
DESIGNED BY: D.C.W. DATE: Jan., 1990

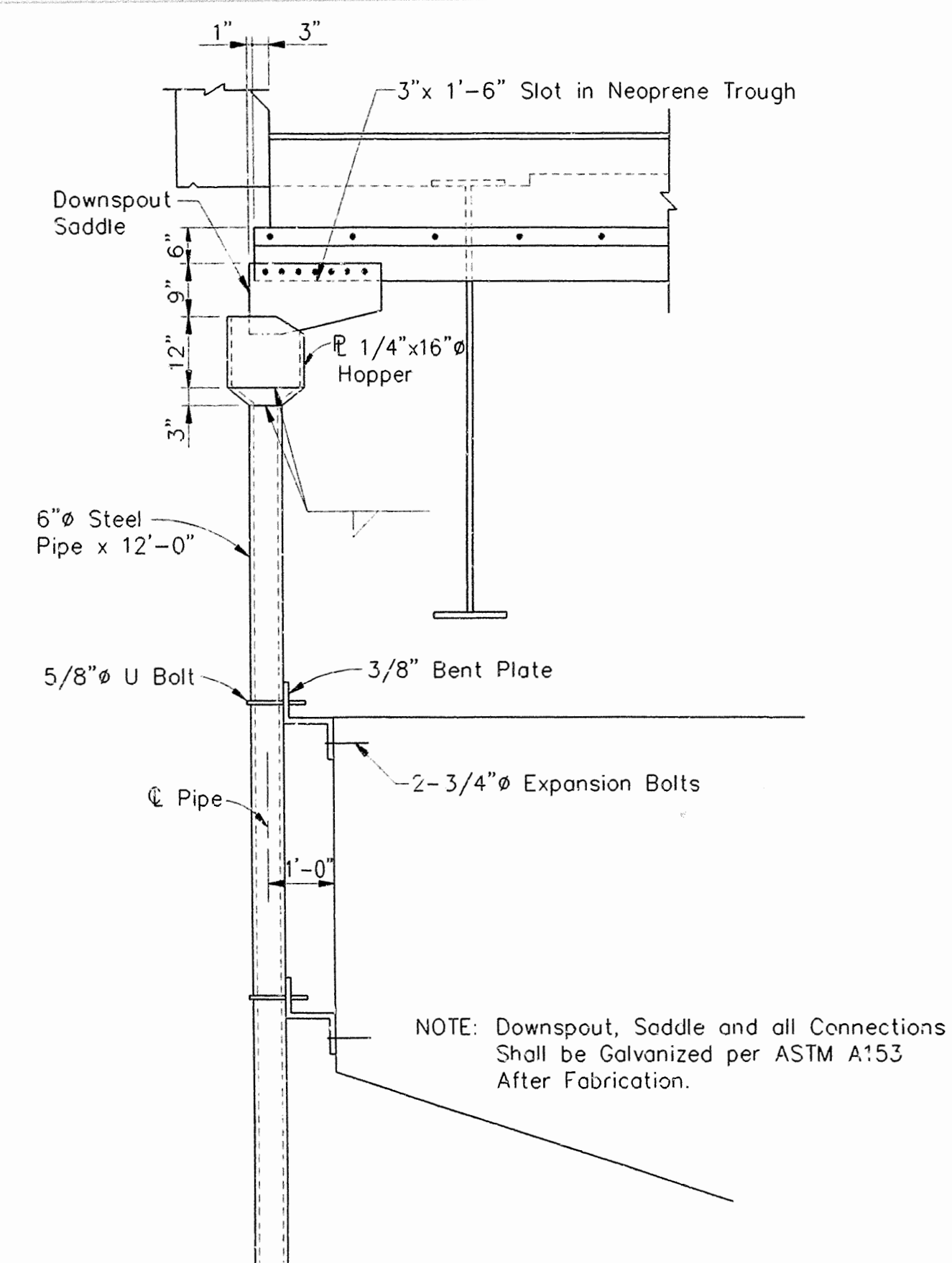
BRIDGE NO. 6237 A DRAWING NO. 29861A

BRIDGE ENGINEER

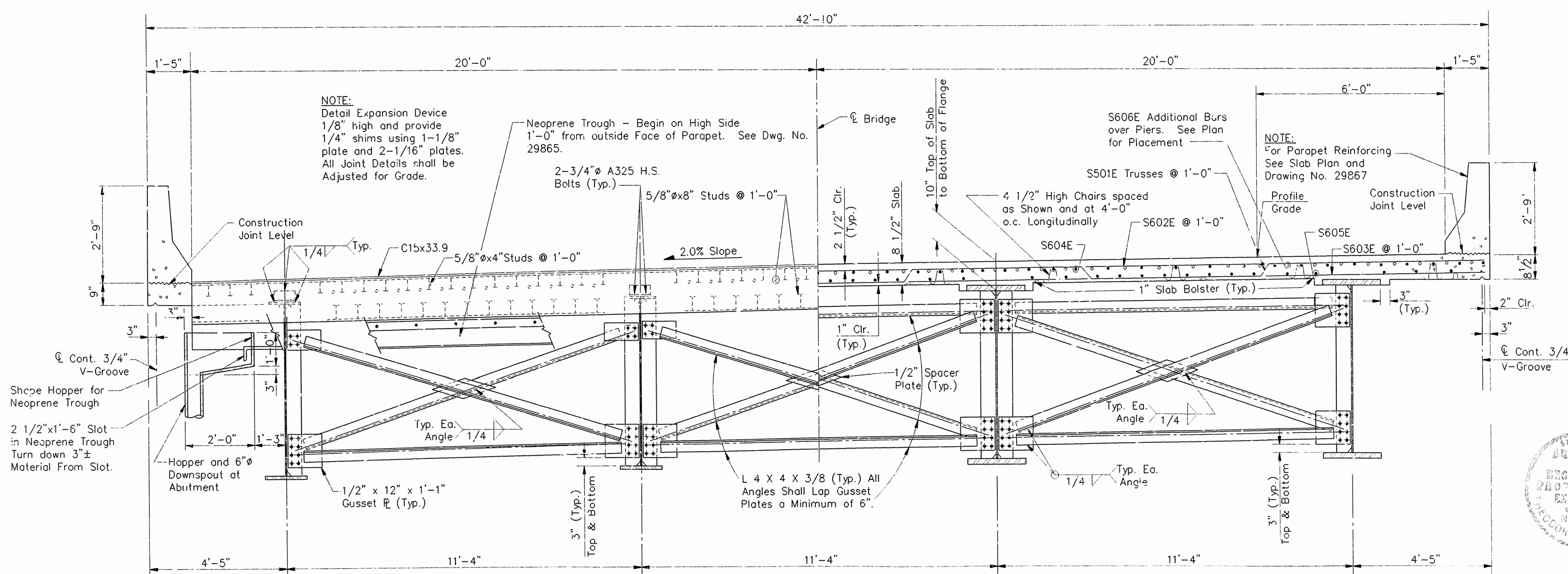
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	R40044		57	
				(1) 6237 A&B DTLS PL GIRD SPANS 29862				



TYPICAL SECTION AT MIDSPAN
Scale: 1/2" = 1'-0"

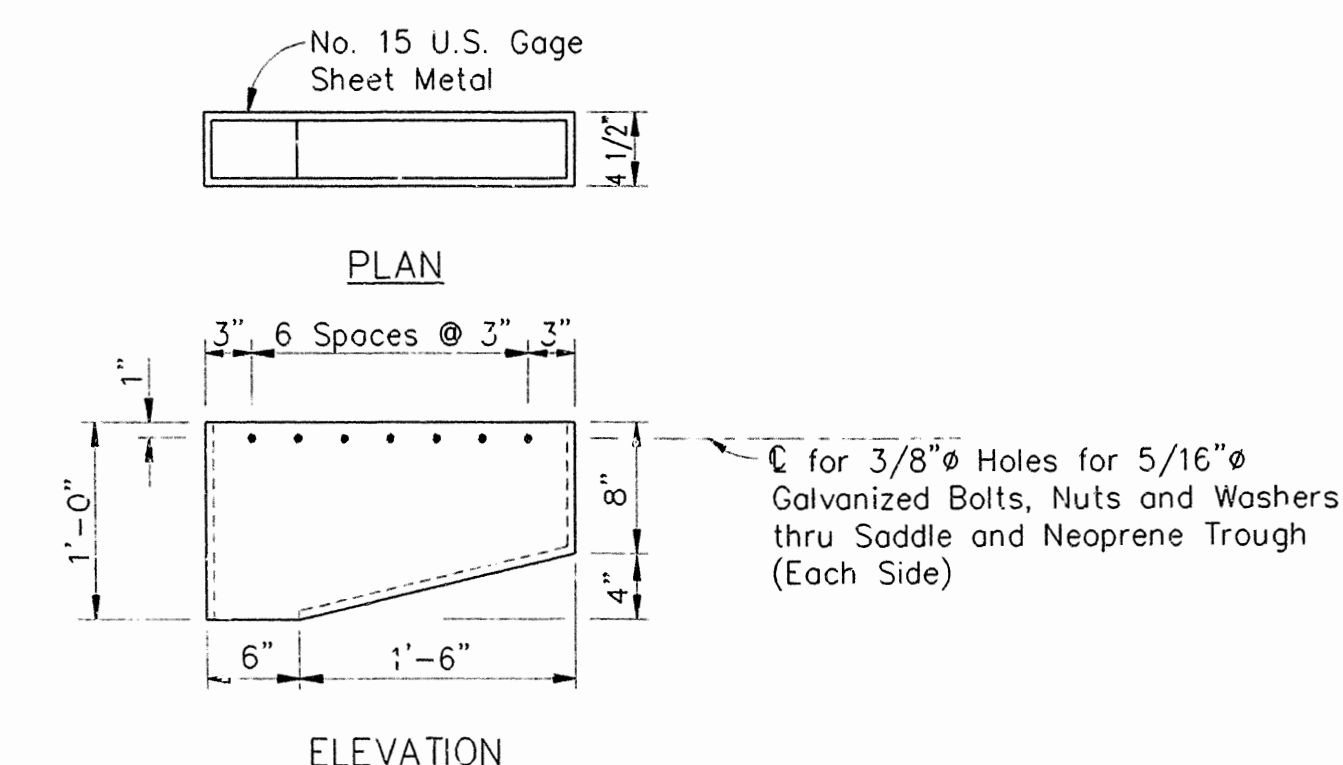


DOWNSPOUT PIER 2A & 3B
Scale: 1/2" = 1'-0"



HALF SECTION AT EXPANSION DEVICE
Scale: 1/2" = 1'-0"

HALF SECTION NEAR PIER
Scale: 1/2" = 1'-0"



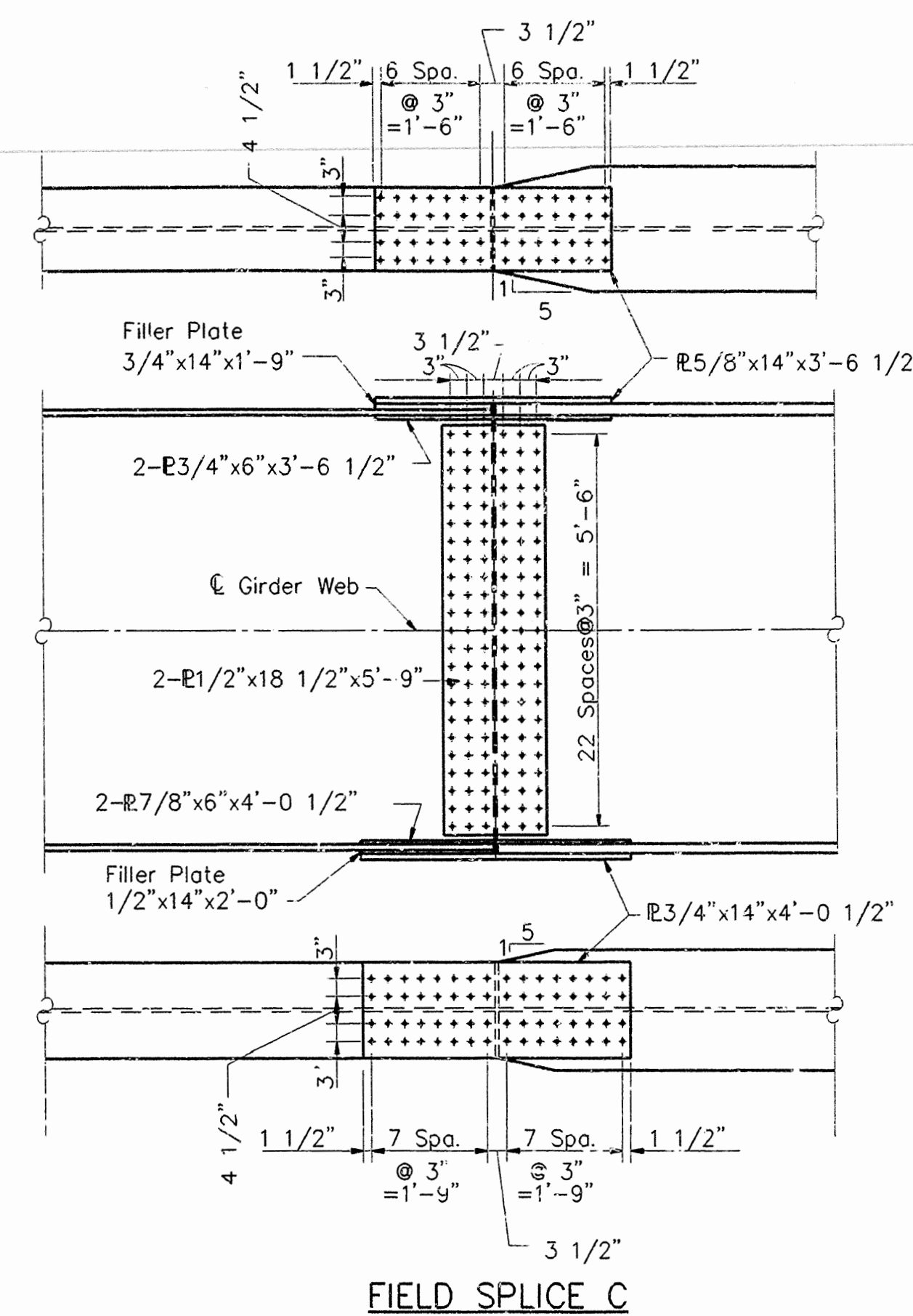
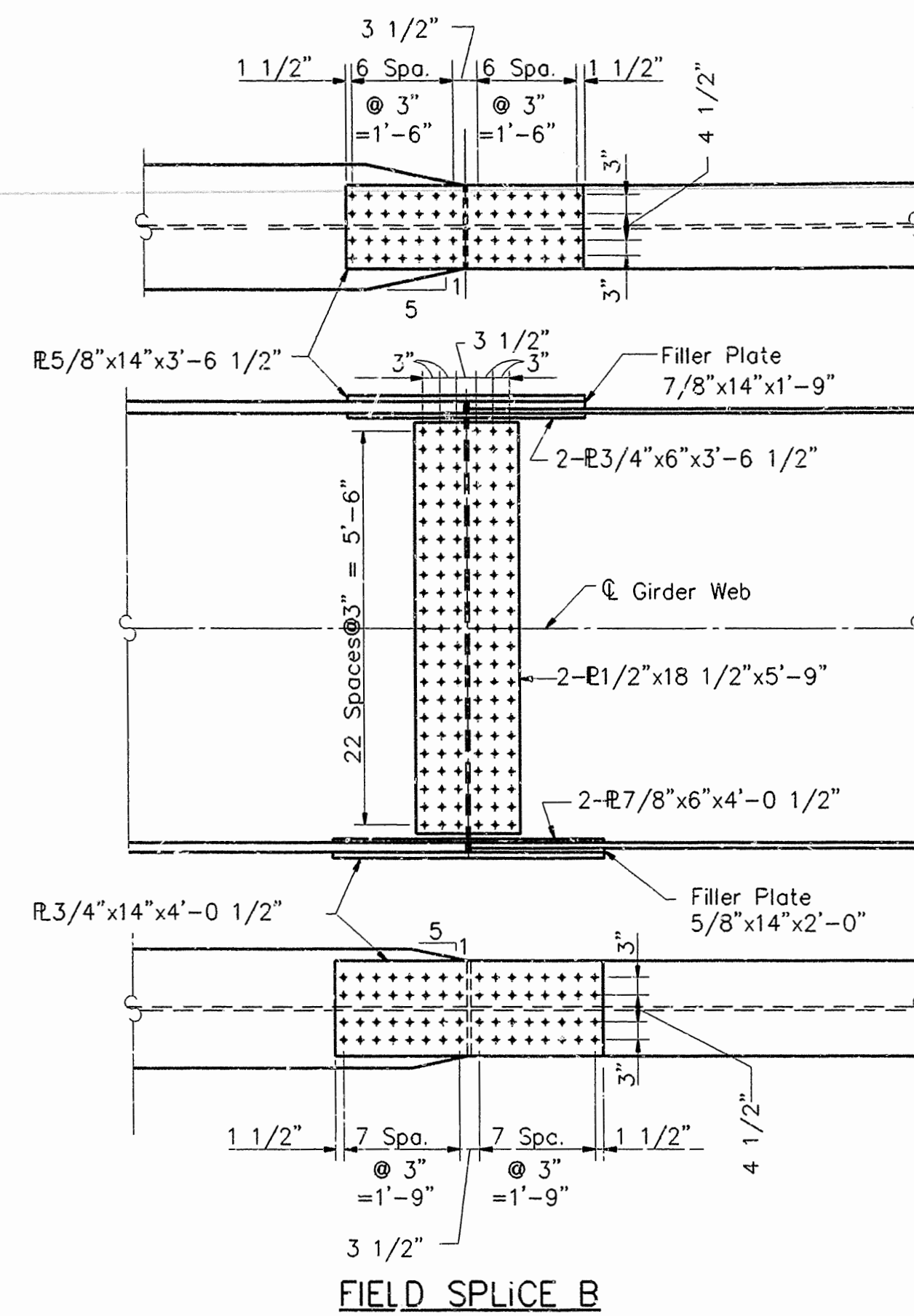
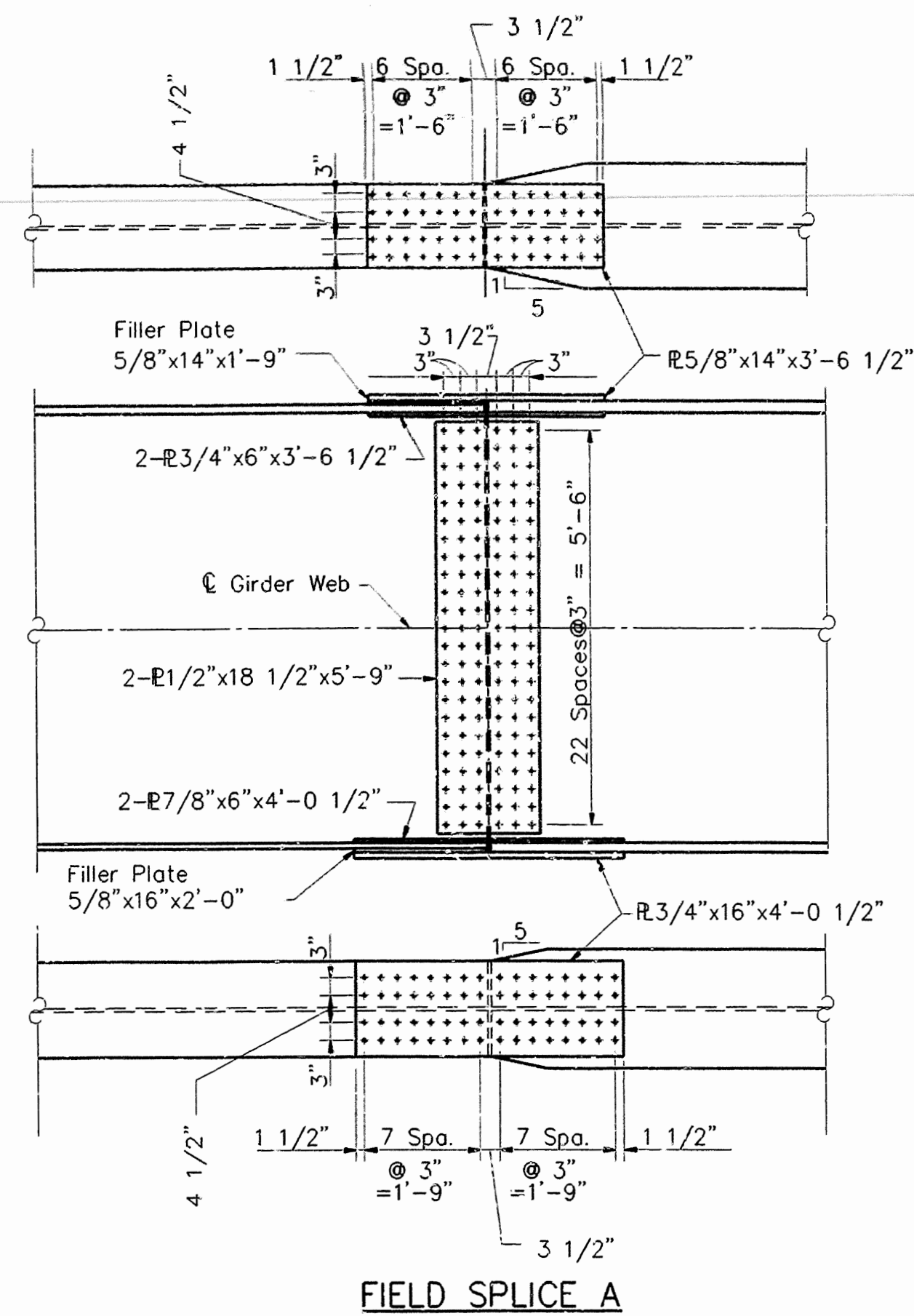
DOWNSPOUT SADDLE DETAILS
Scale: 1" = 1'-0"

SHEET 7 OF 8
DETAILS OF PLATE GIRDER SPANS
U.S. HIGHWAY 71 OVER RAVINE
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: V.W. DATE: June, 1988
CHECKED BY: GAF/TBH DATE: June 88/Fe. 89
DESIGNED BY: D.C.W. DATE: June, 1988

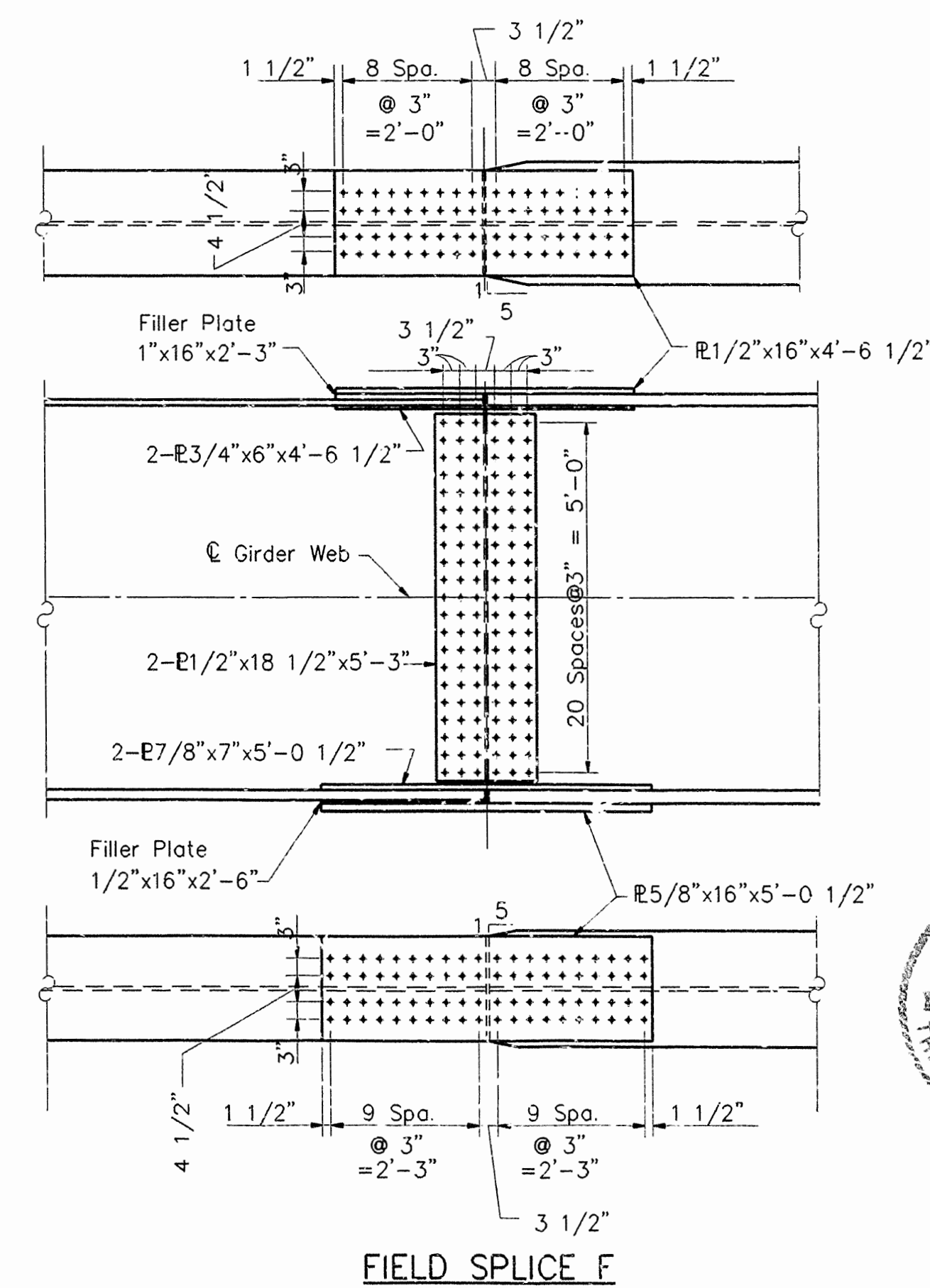
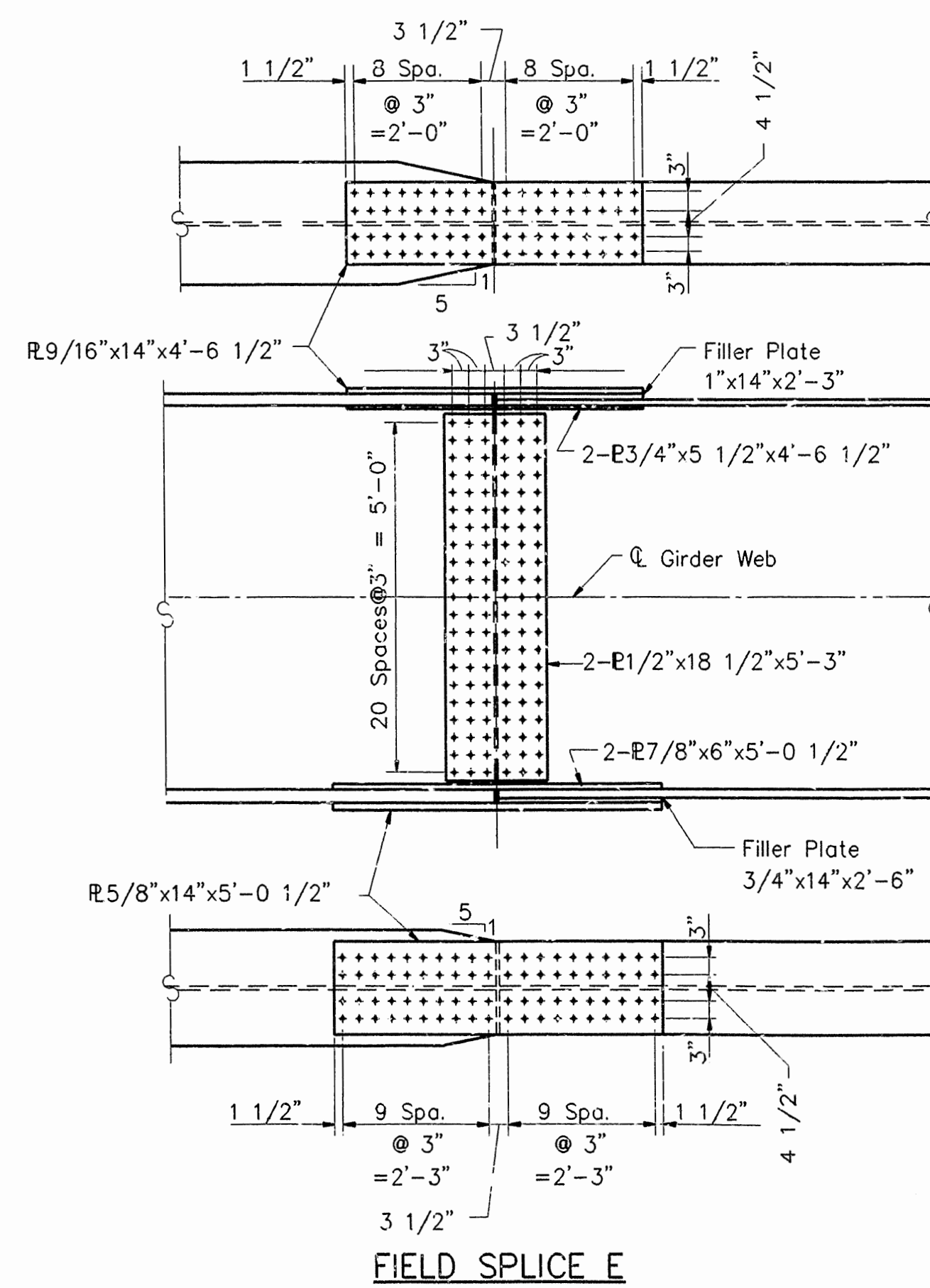
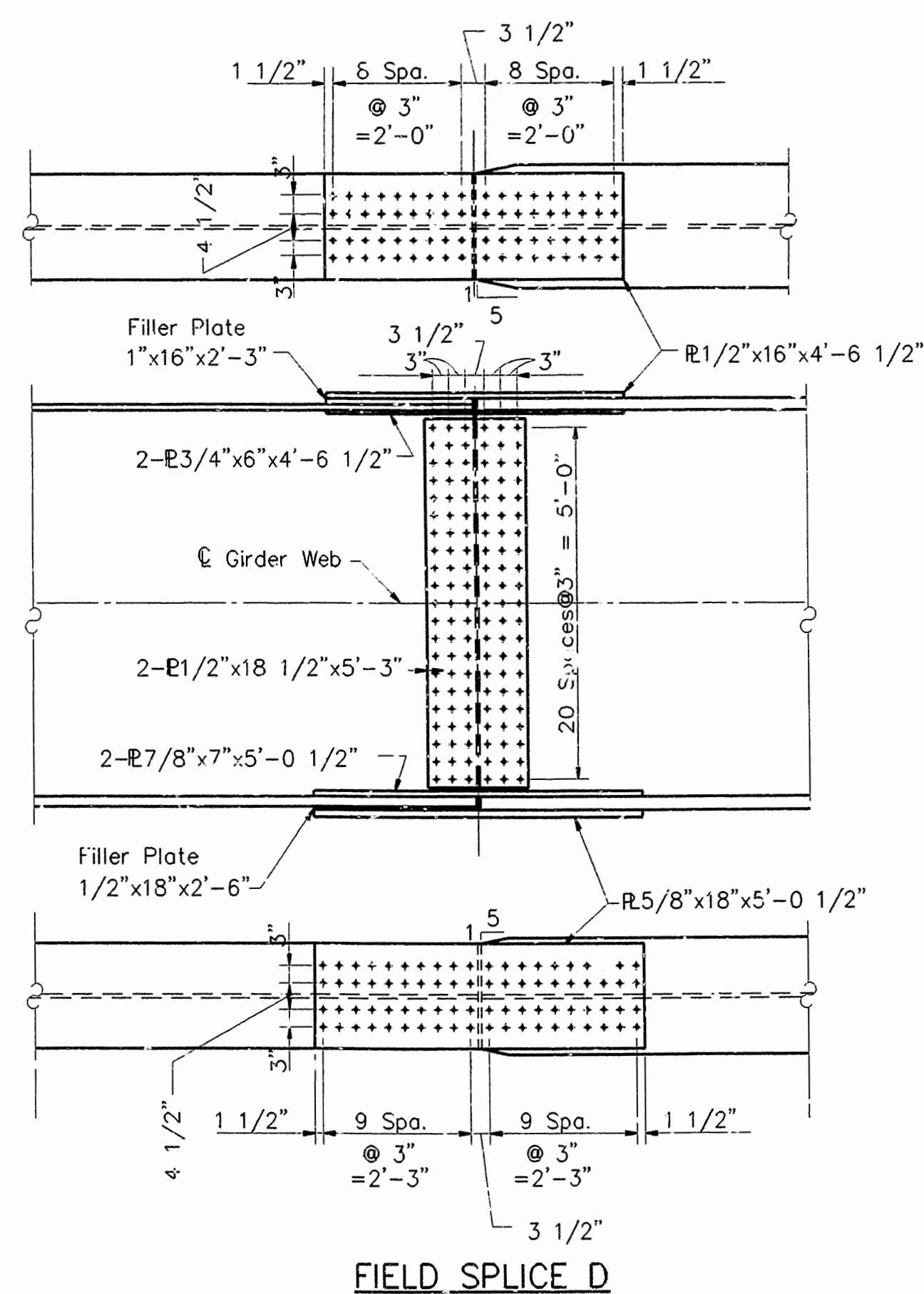
BRIDGE NO. 6237 A&B DRAWING NO. 29862

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	58	
				① 6237A&B DTLS OF PL GIRDER SPANS 29863				



TYPICAL FIELD SPLICES 140'-160'-160'-140' SPANS

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



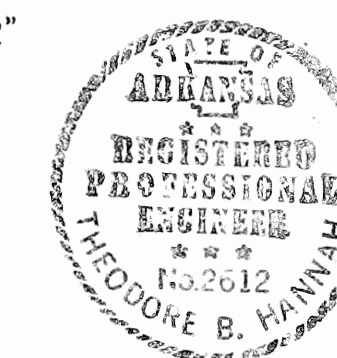
TYPICAL FIELD SPLICES 140'-140'-140' & 140'-140' SPANS

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

TYPICAL FIELD SPlice 140'-140' SPAN

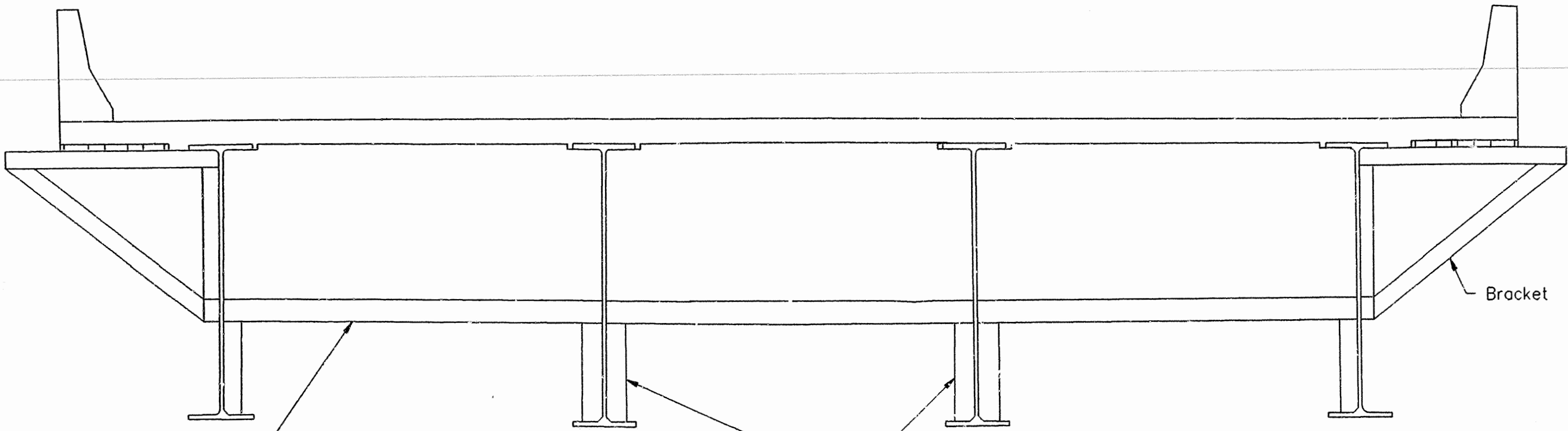
SCALE: 1/2" = 1'-0"

NOTE: All Field Connections Shall Be Made With 7/8" Diameter Bolts.
For Additional Structure Steel Assembly Notes, See Dwg. 29845.
Structural Steel In Field Splice Plates Shall Be A588.
Structural Steel In Field Splice Plates Are Not Subject To
Charpy V-Notch Test Requirements.



SHEET 8 OF 8
DETAILS OF PLATE GIRDER SPANS
U.S. HIGHWAY 71 OVER RAVINE
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: D.E.H. DATE: June, 1988
CHECKED BY: HJP/TBH DATE: June 88/Febr. 90
DESIGNED BY: D.C.W. DATE: June, 1988
SCALE: AS NOTED
BRIDGE NO. 6237 A & B DRAWING NO. 29863

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	59	
				6237A&B MISC. DETAILS 29864				



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.

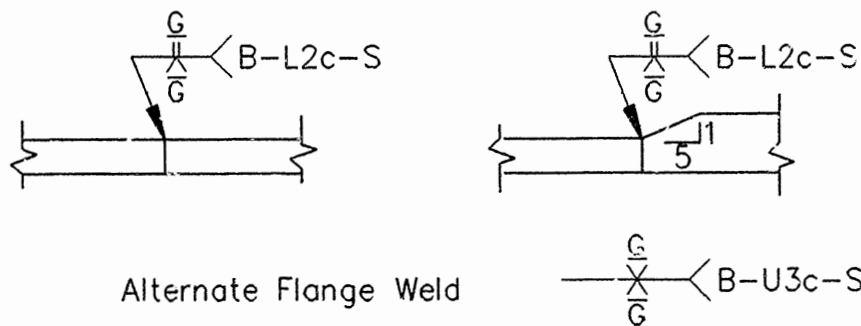
- Note:**
- If a Transverse Finishing Machine is Used, The Rail Shall be Supported Directly Over the Exterior Stringer, or as an Alternate, The Rail May Be Supported by the Overhang Brackets if the Above Strutting System is Used.
 - Brackets and 4x4 Bracing Shall Not Be Paid for Directly But Considered Subsidiary to "Structural Steel in ... Spans (A36)."

SCREED RAIL SUPPORT DETAIL
Scale: None

TABLE FOR MINIMUM FILLET WELD SIZE

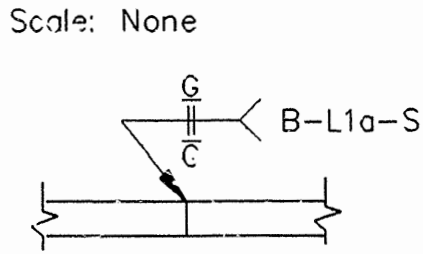
Material Thickness Of Thicker Part Joined (Inches)	Minimum Size Of Fillet Weld (Inches)	Single Pass Weld Must be Used
To 1/2" Inclusive	3/16"	Single Pass Weld Must be Used
Over 1/2" to 3/4"	1/4"	
Over 3/4"	5/16"	

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.



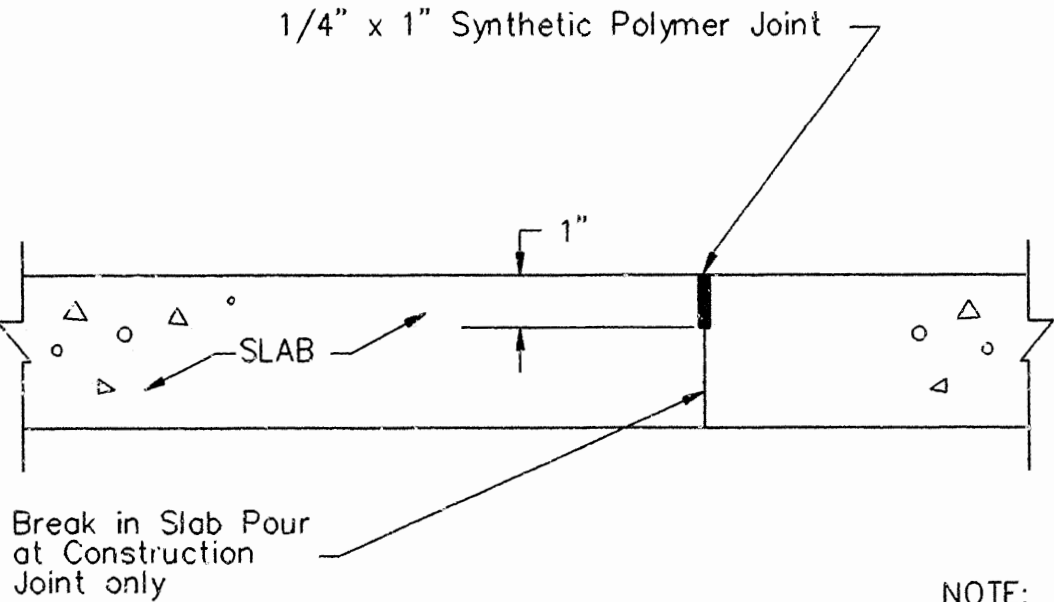
EQUAL THICKNESS UNEQUAL THICKNESS

FLANGE SPLICES



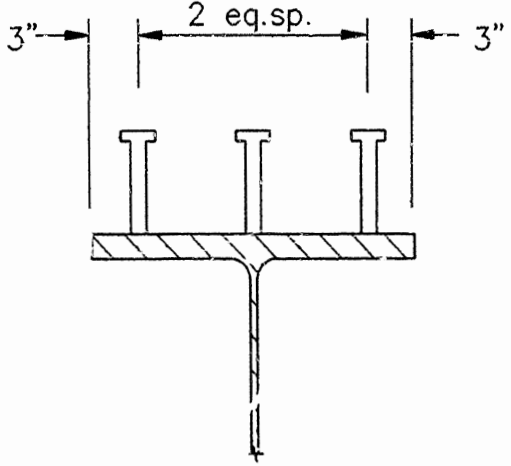
WEB SPLICE

Scale: None



SLAB JOINT DETAIL
Scale: None

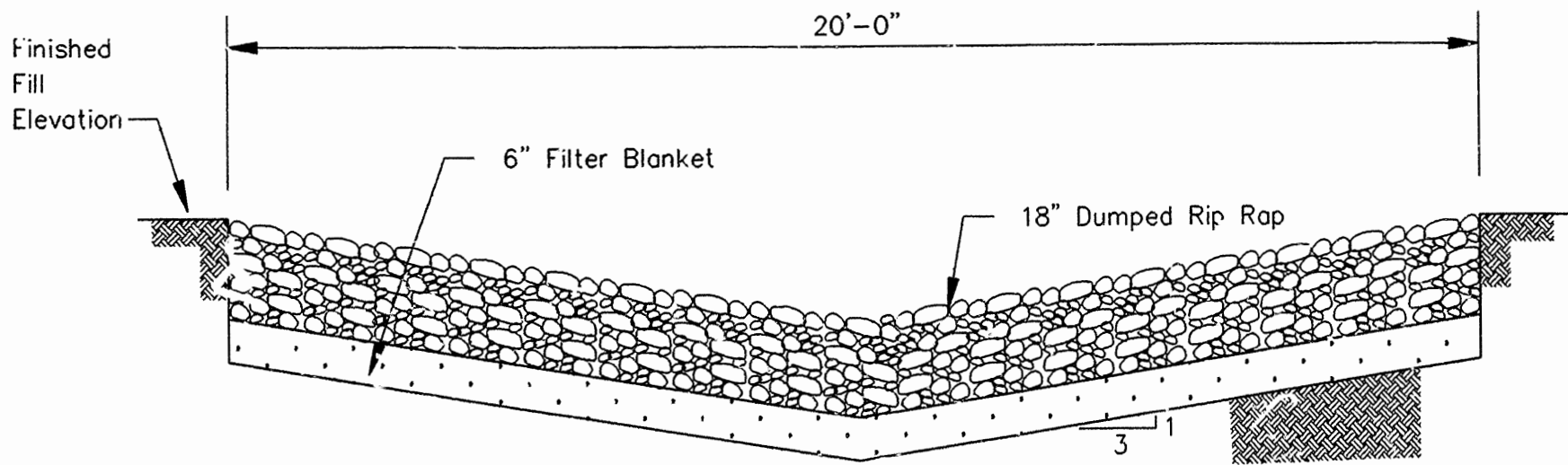
NOTE:
For Location of Slab Joints and Construction Joints, See Bridge Slab Pouring Sequence. Joints Shall be Paid For as Class S(AE) Concrete.



Studs Shear Connectors shown shall be 7/8" x 4" long Granular Flux Filled, Solid Fluxed or equal and Automatically 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 of 81.0 lbs. per one hundred Studs.

SHEAR CONNECTOR DETAIL

Scale: None



DRAINAGE SWALE DETAIL
Scale: None

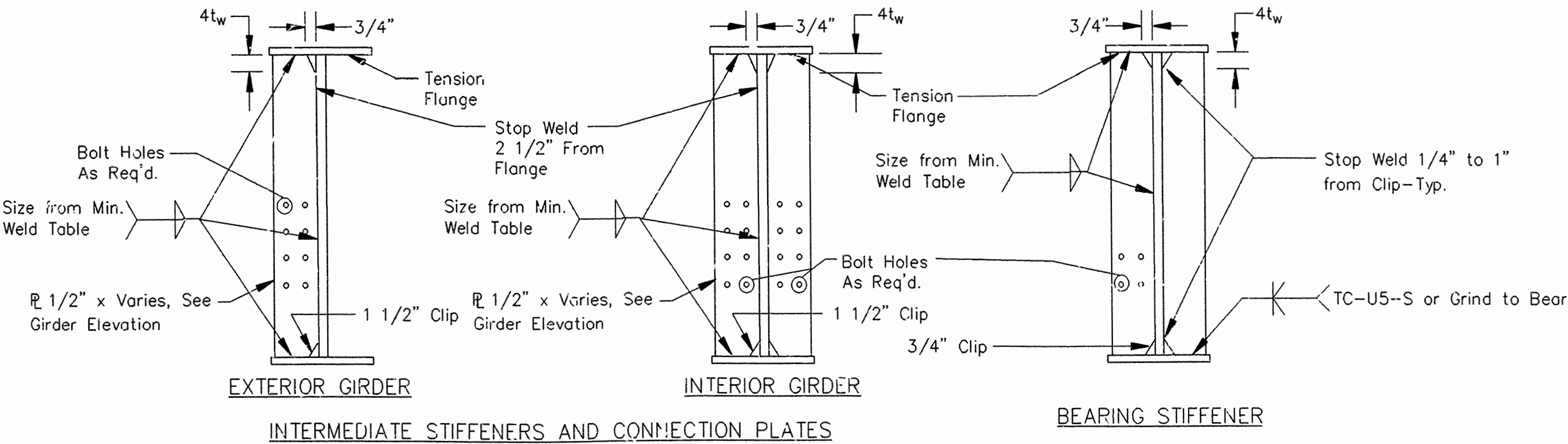


PLATE GIRDER CONNECTION AND STIFFENER PLATE DETAILS
Scale: 1"=1'-0"



SHEET 1 OF 1
MISCELLANEOUS DETAILS
U.S. HIGHWAY 71 OVER RAVINE
WASHINGTON COUNTY
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: L.D.T. DATE: June, 1988
CHECKED BY: HJP/TBH DATE: June 88/Feb. 90
DESIGNED BY: D.C.W. DATE: June, 1988

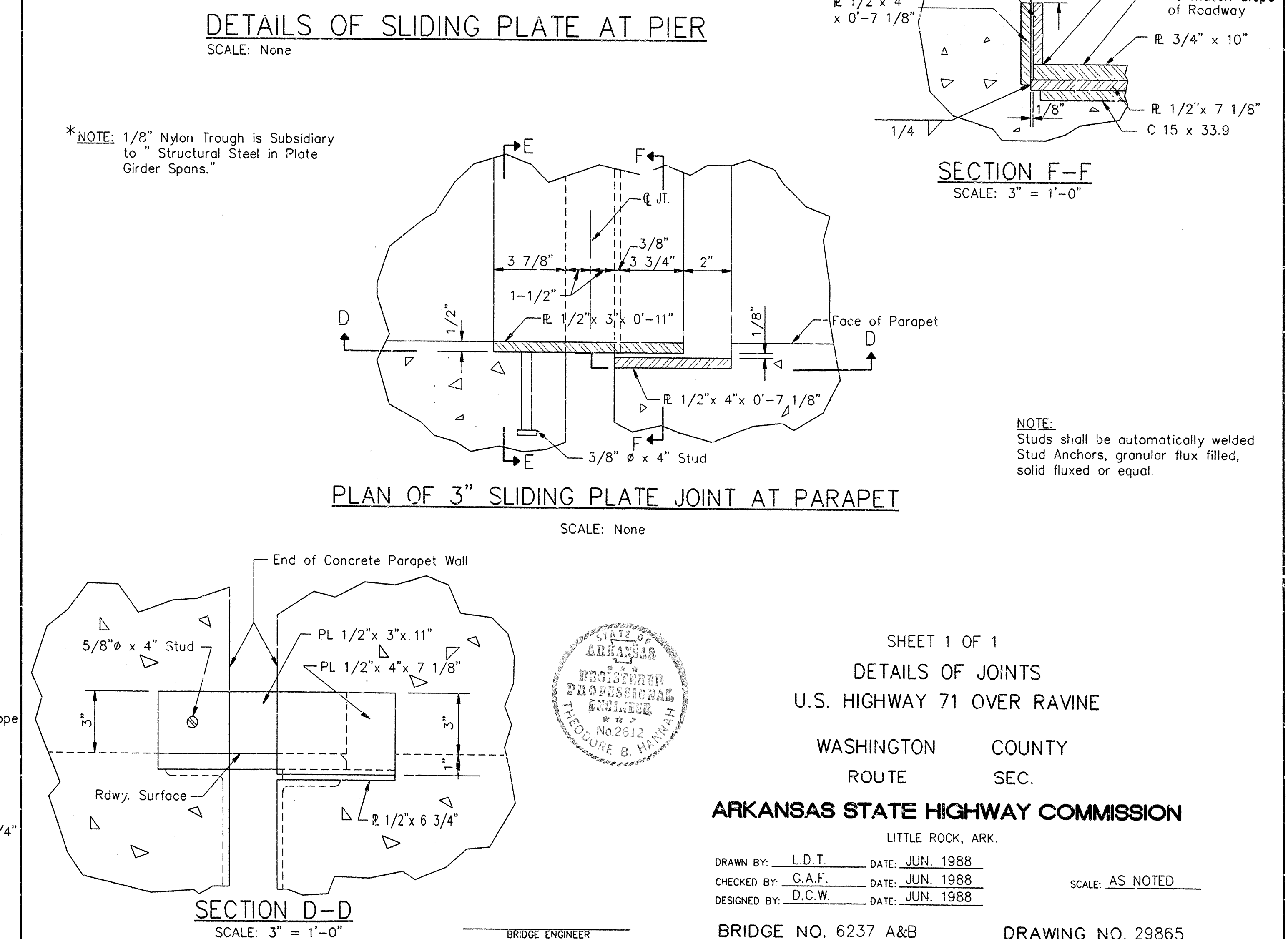
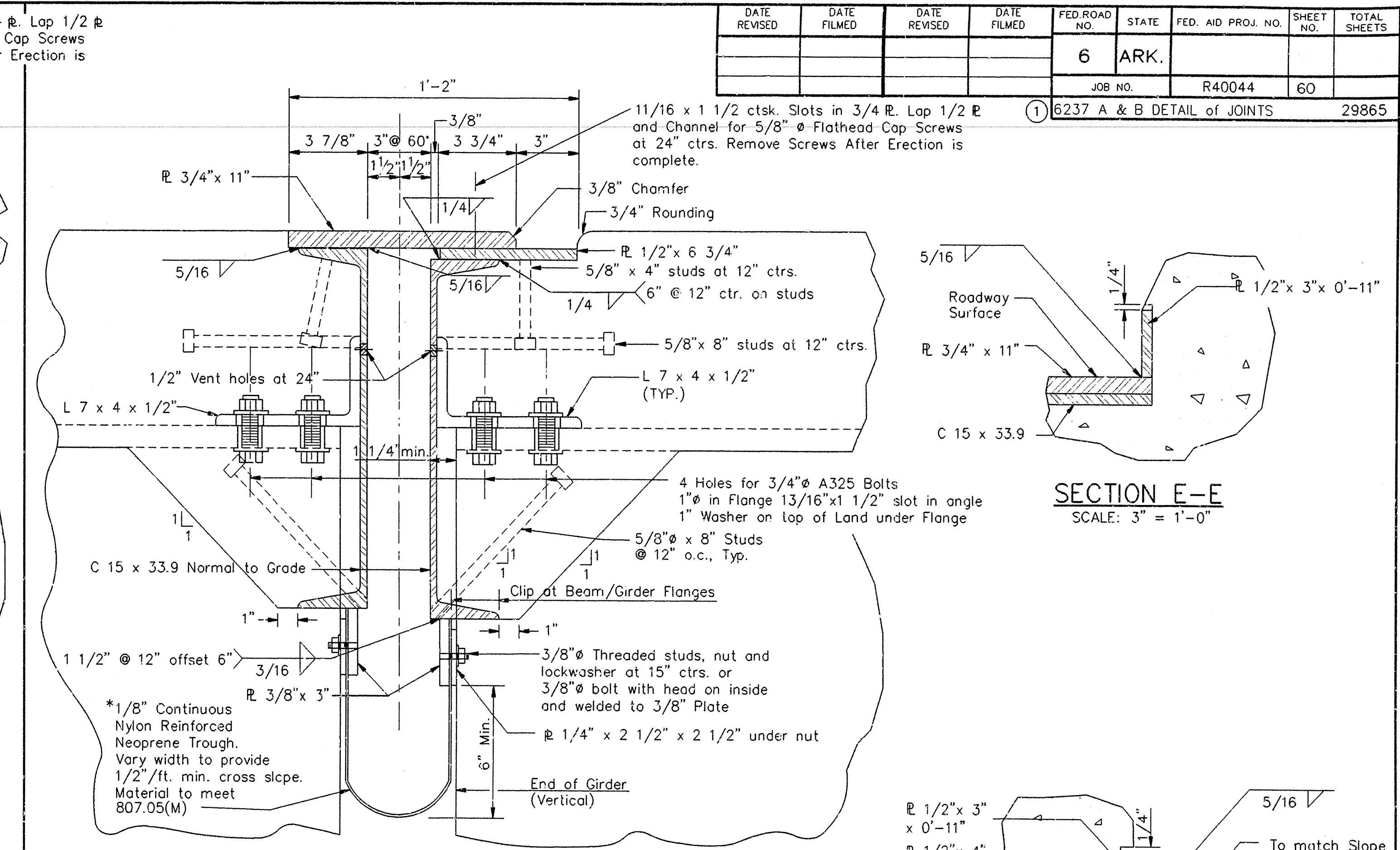
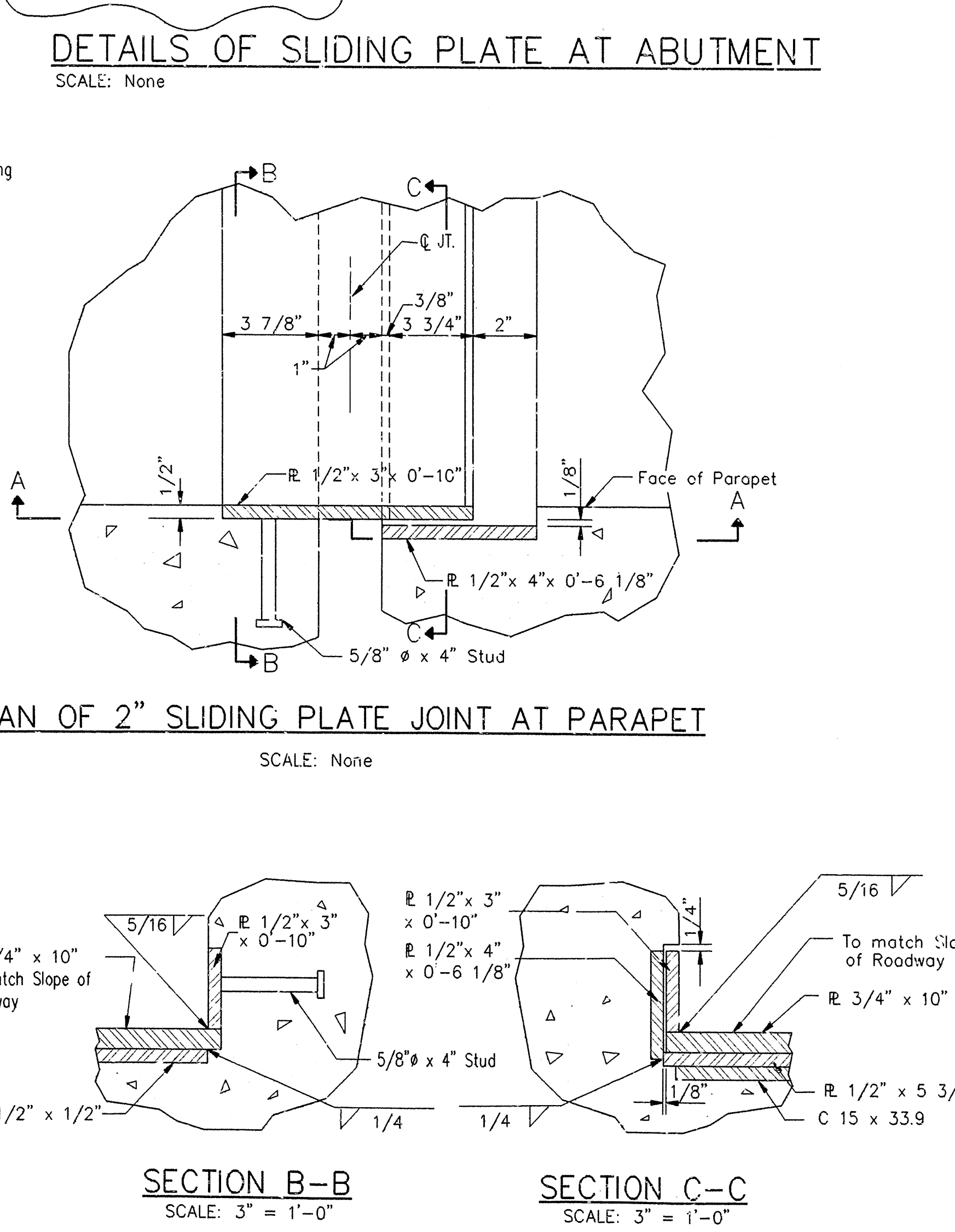
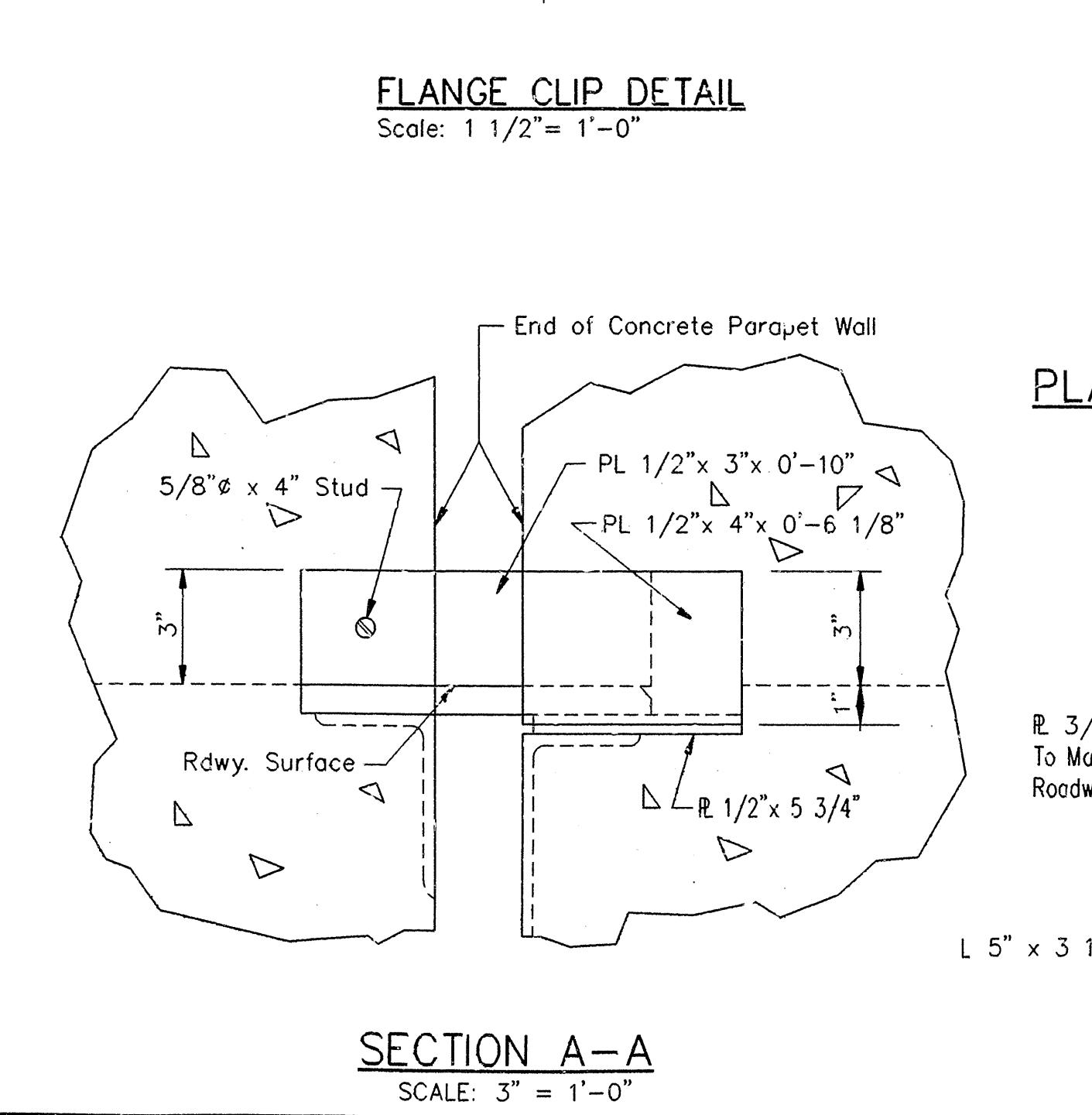
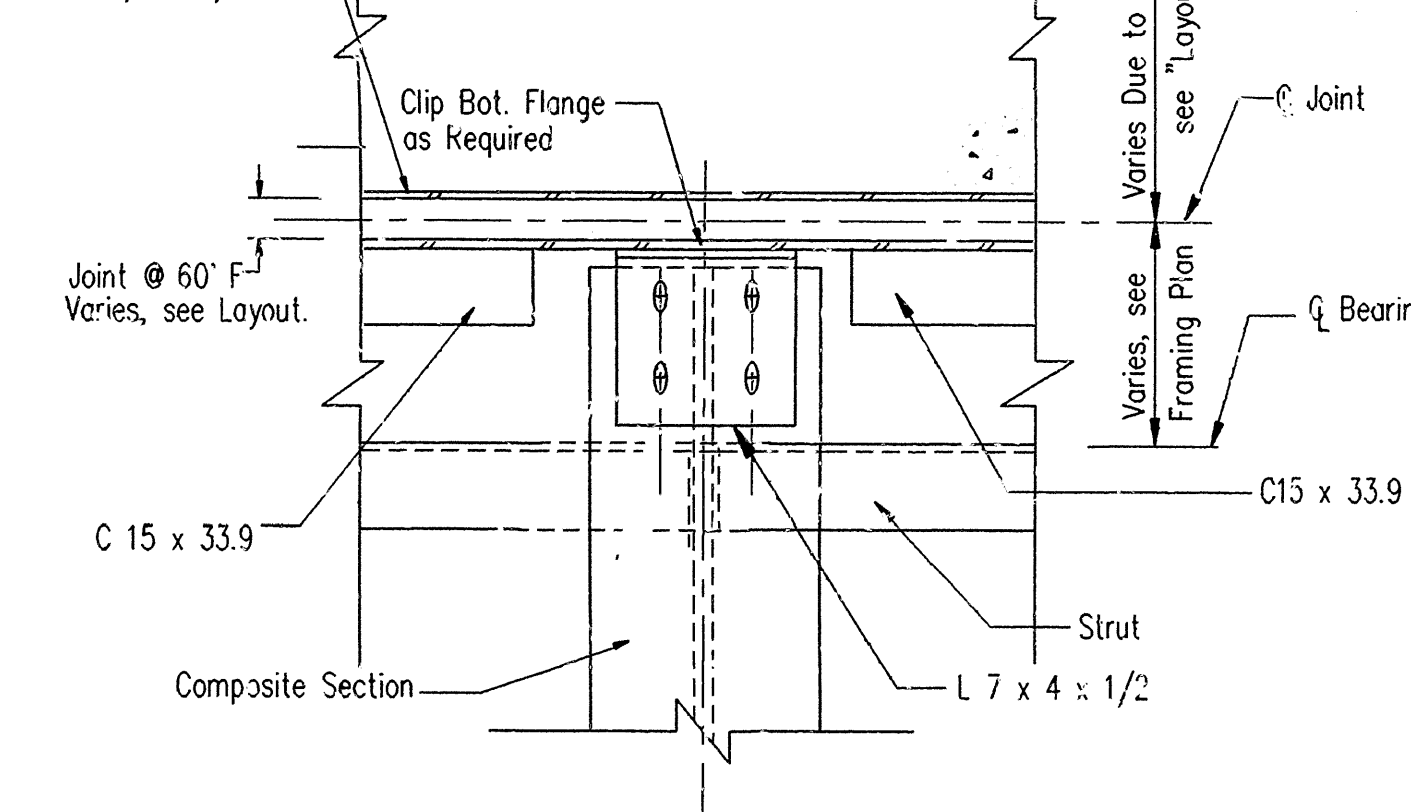
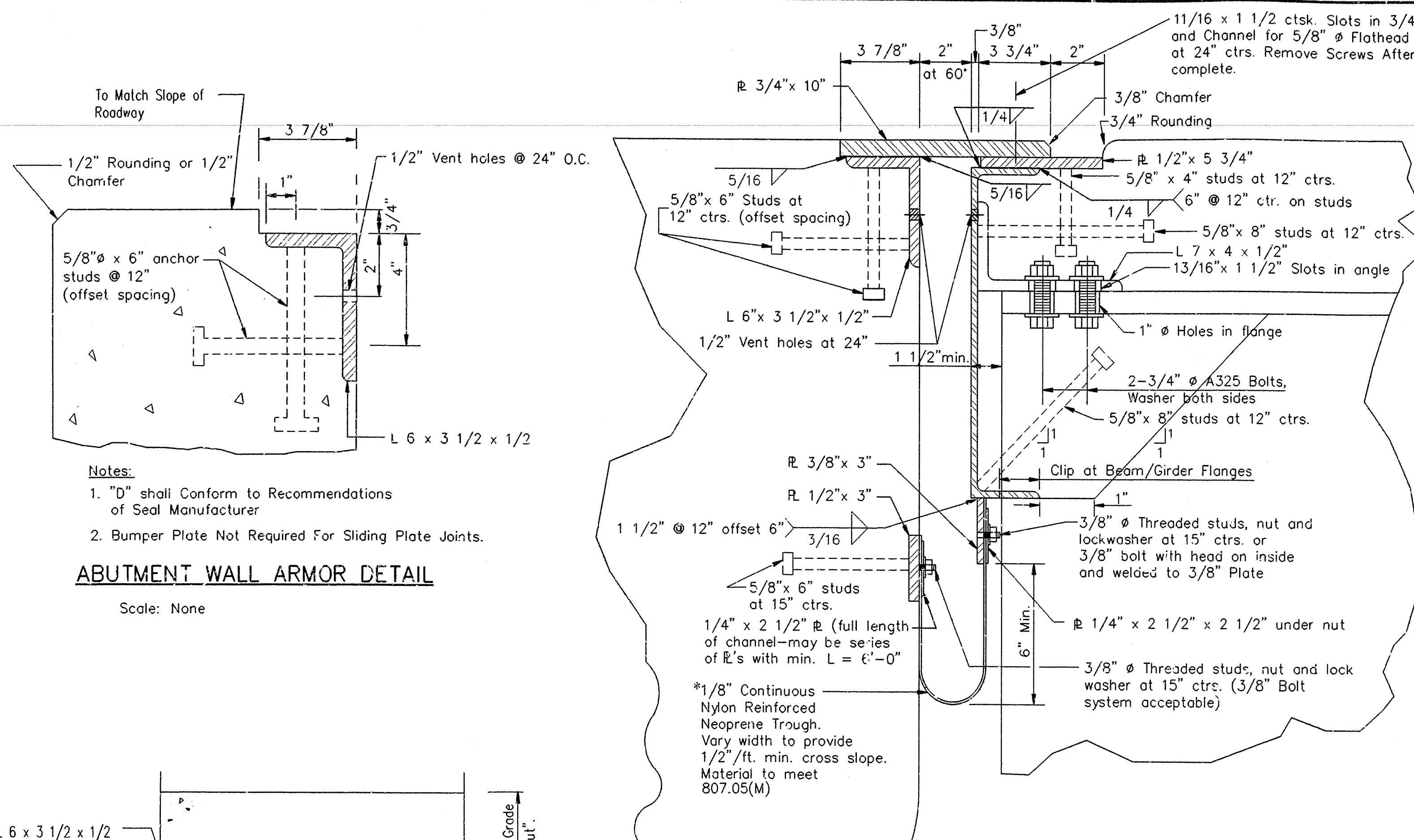
BRIDGE NO. 6237 A & B DRAWING NO. 29864

BRIDGE ENGINEER

6237A&B-71
10/14/88

PBB\NRF 71-MD 8615203 4-25-90 15

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		R40044	60	
				6237 A & B DETAIL of JOINTS				29865

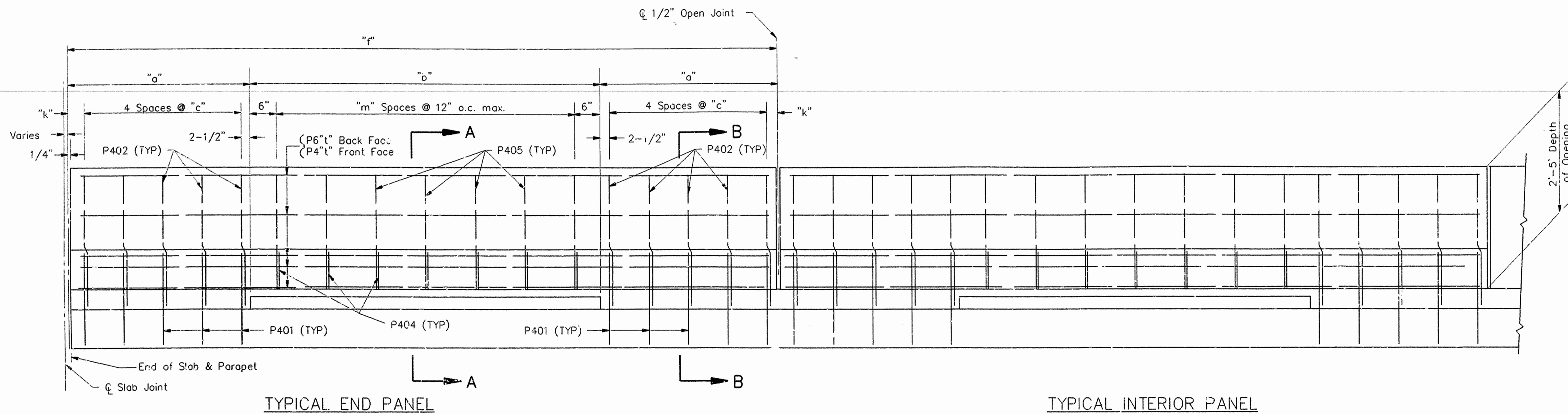


SHEET 1 OF 1
DETAILS OF JOINTS
U.S. HIGHWAY 71 OVER RAVINE
WASHINGTON COUNTY
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

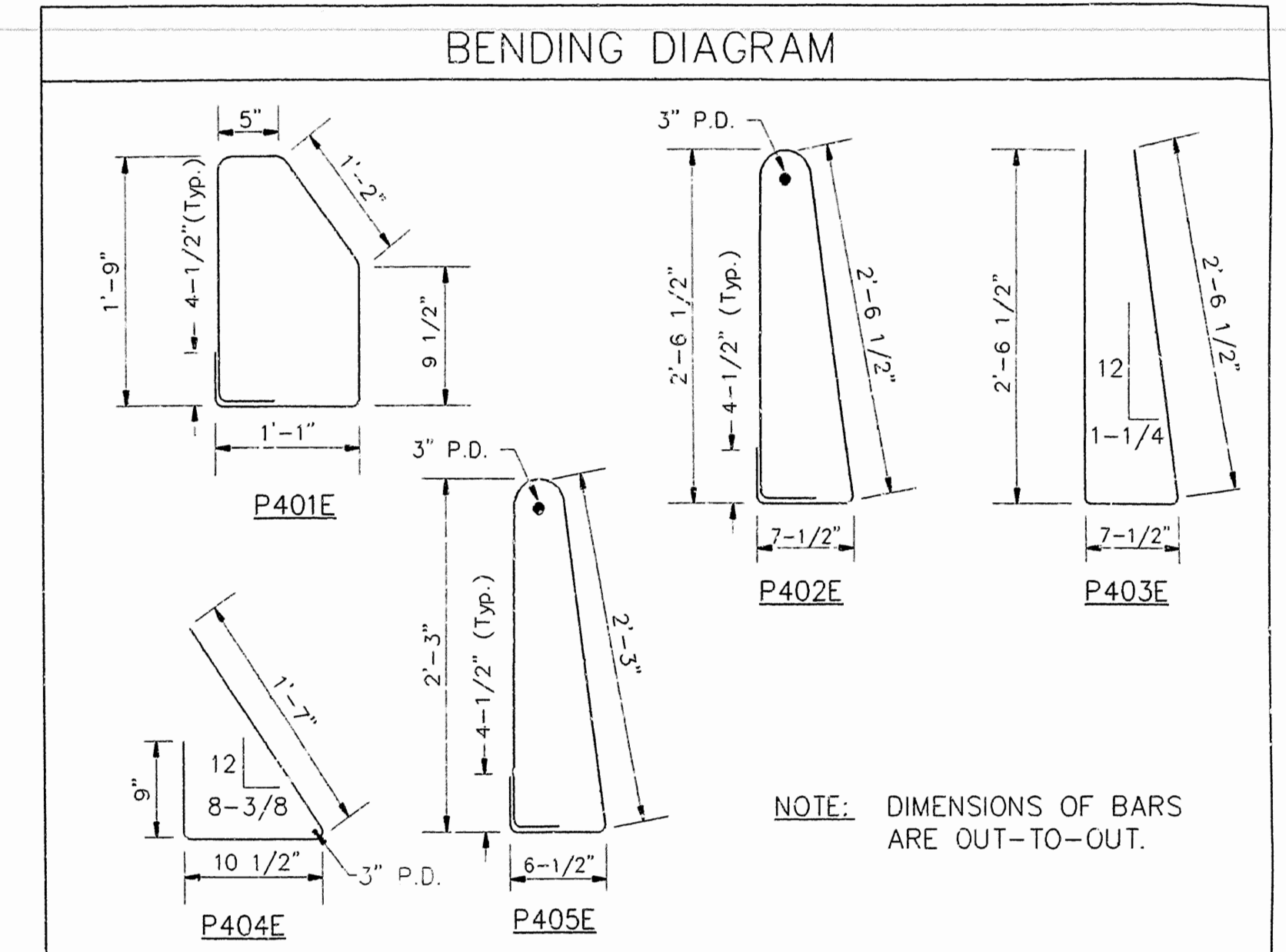
DRAWN BY: L.D.T. DATE: JUN. 1988
CHECKED BY: G.A.F. DATE: JUN. 1988
DESIGNED BY: D.C.W. DATE: JUN. 1988

BRIDGE NO. 6237 A&B
DRAWING NO. 29865

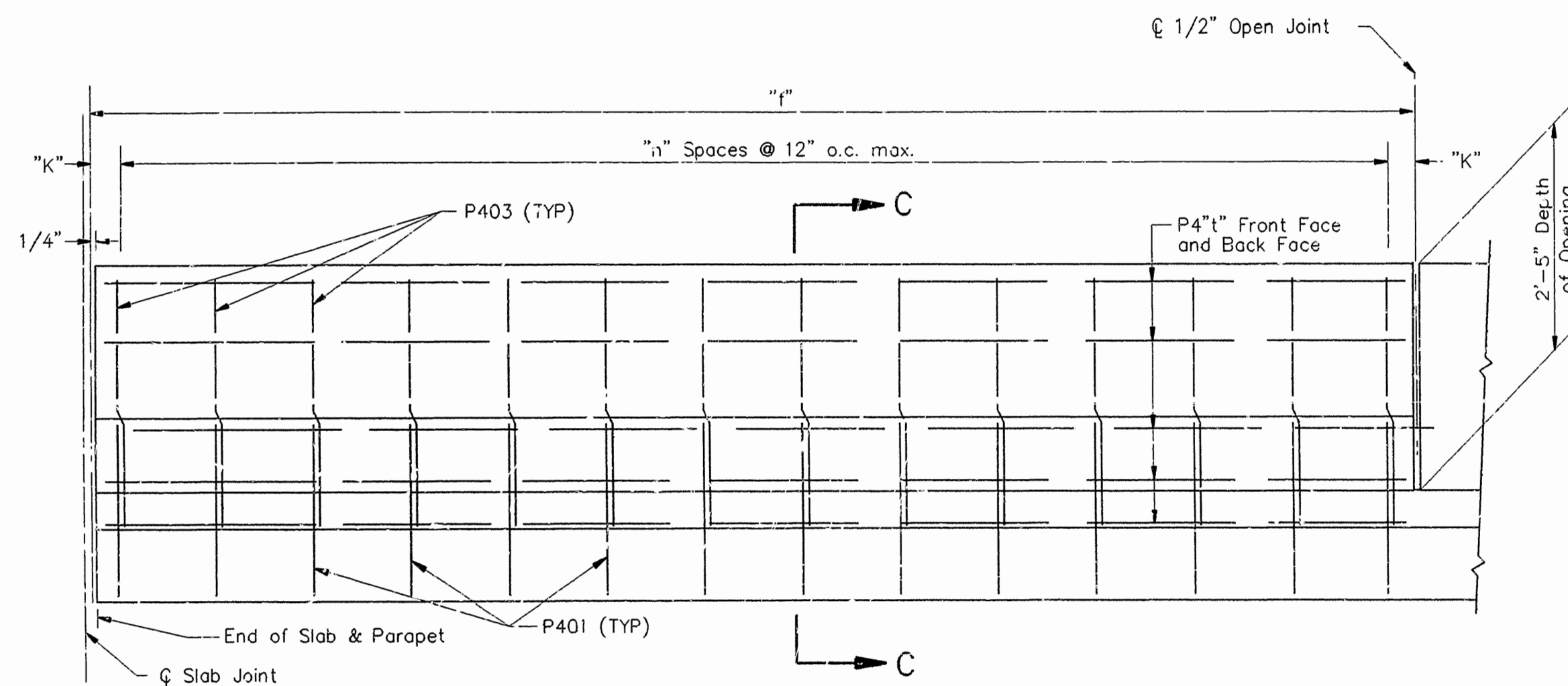
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				6	ARK.			
				JOB NO.	R40044		62	
(1) 6237A&B DTLS OF PARAPET 29867								



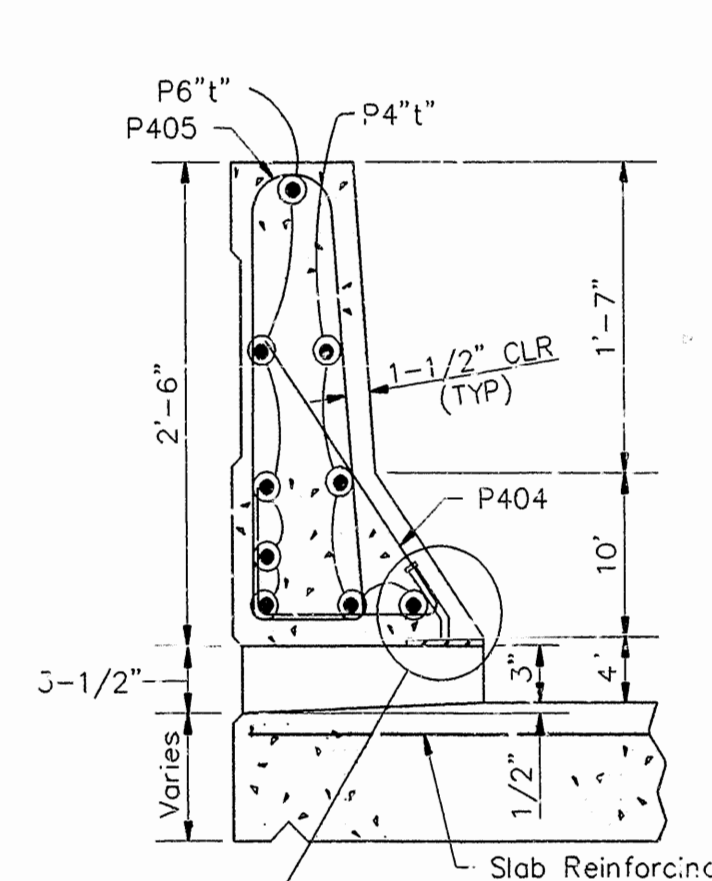
LONGITUDINAL SECTION AT CURB FOR OPEN PARAPET RAIL
SCALE: NONE



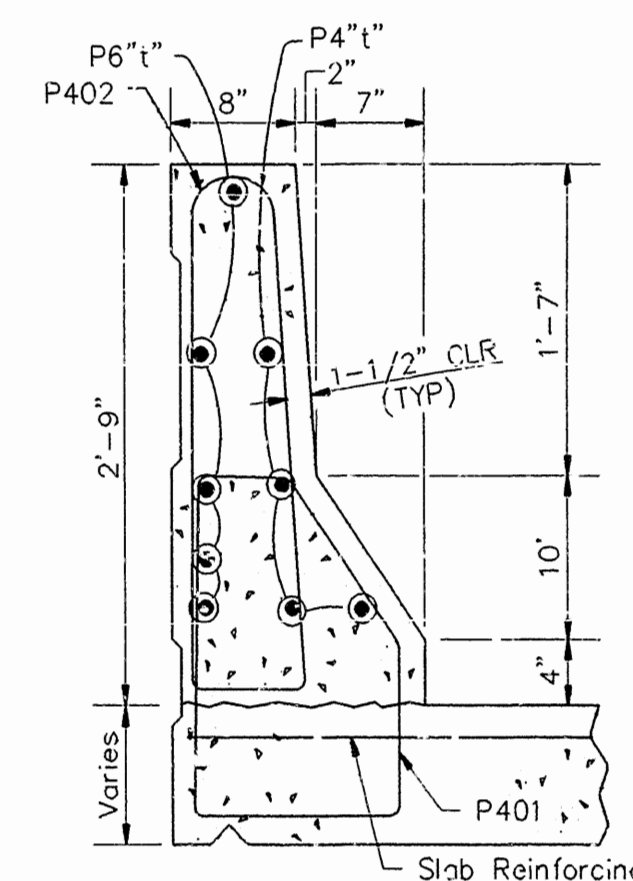
ALL BARS IN PARAPET ARE EPOXY COATED



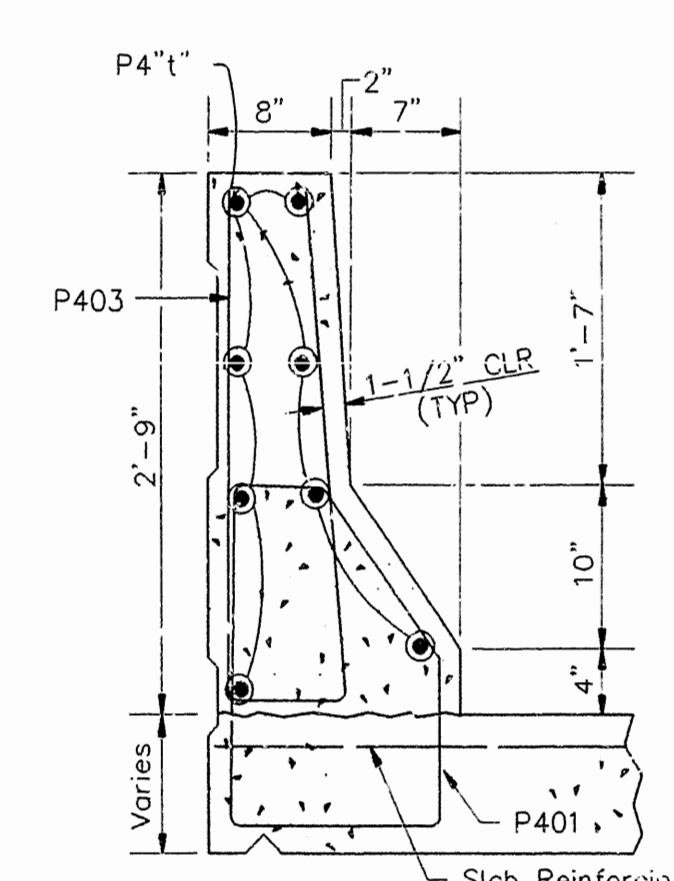
LONGITUDINAL SECTION AT CURB FOR CLOSED PARAPET RAIL
SCALE: NONE



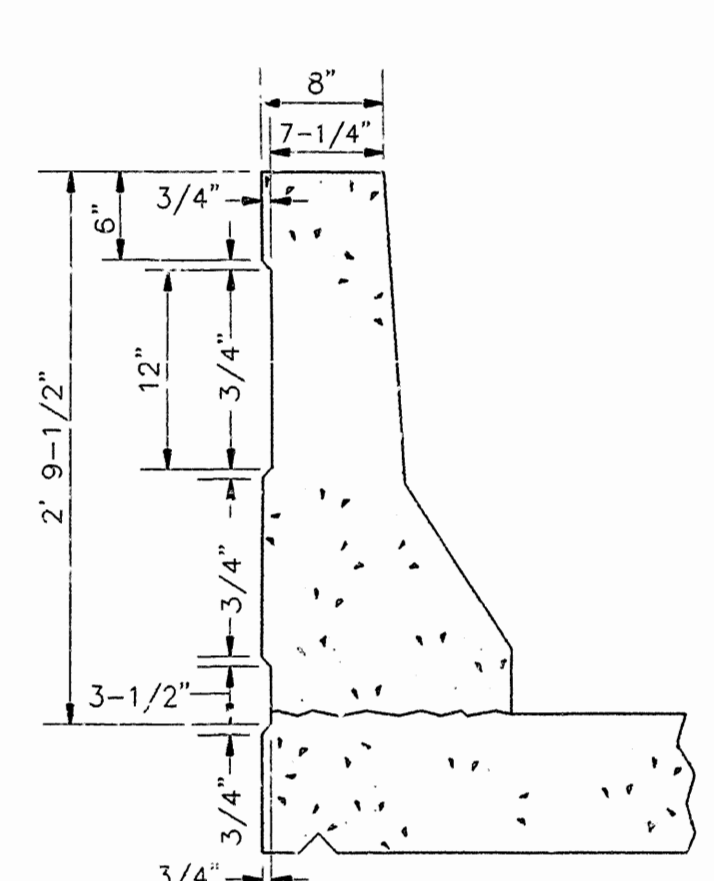
SECTION A-A
SCALE: 1" = 1'-0"



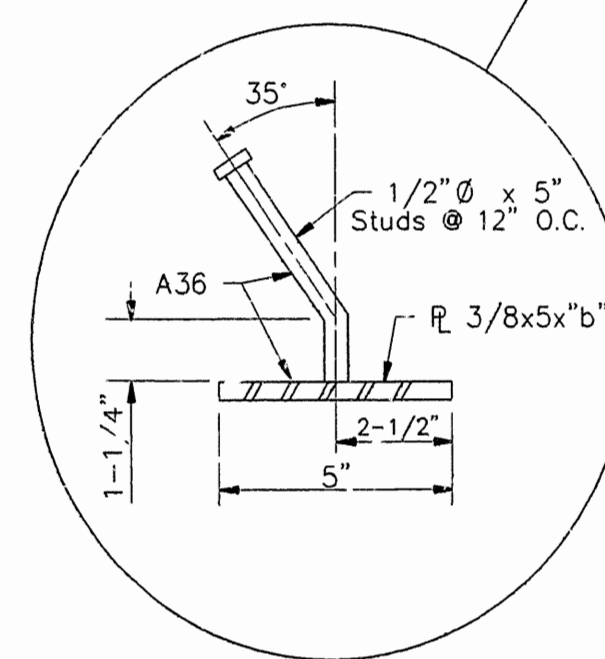
SECTION B-B
SCALE: 1" = 1'-0"



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



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



NOTES:

1. Studs Shall Be 5" Long, Granular Flux Filled, Solid Fluxed or Equal and Automatically Welded to Plate. Studs and Plate to be Measured and Paid for as "Structural Steel in ... Spans (A36).
2. The Surfaces of the 3/8" Plate Which Will Not Be In Contact With Concrete Shall Receive Two Coats of Paint in the Shop. These Coats Shall Be Those Specified as Shop Prime Coat and Finish Coat in Subsection 807.59 of the Standard Specifications or Section 638.



SHEET 1 OF 1
DETAILS OF PARAPET
U.S. HIGHWAY 71 OVER RAVINE

WASHINGTON COUNTY
ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: L.D.T. DATE: June, 1988
CHECKED BY: HJP/TBH DATE: June 88/Feb. 90
DESIGNED BY: D.C.W. DATE: June, 1968

SCALE: AS NOTED

BRIDGE NO. 6237 A & B

DRAWING NO. 29867

ELEVATION SHOWING TREATMENT FOR OUTSIDE PARAPET RAILING
SCALE: NONE