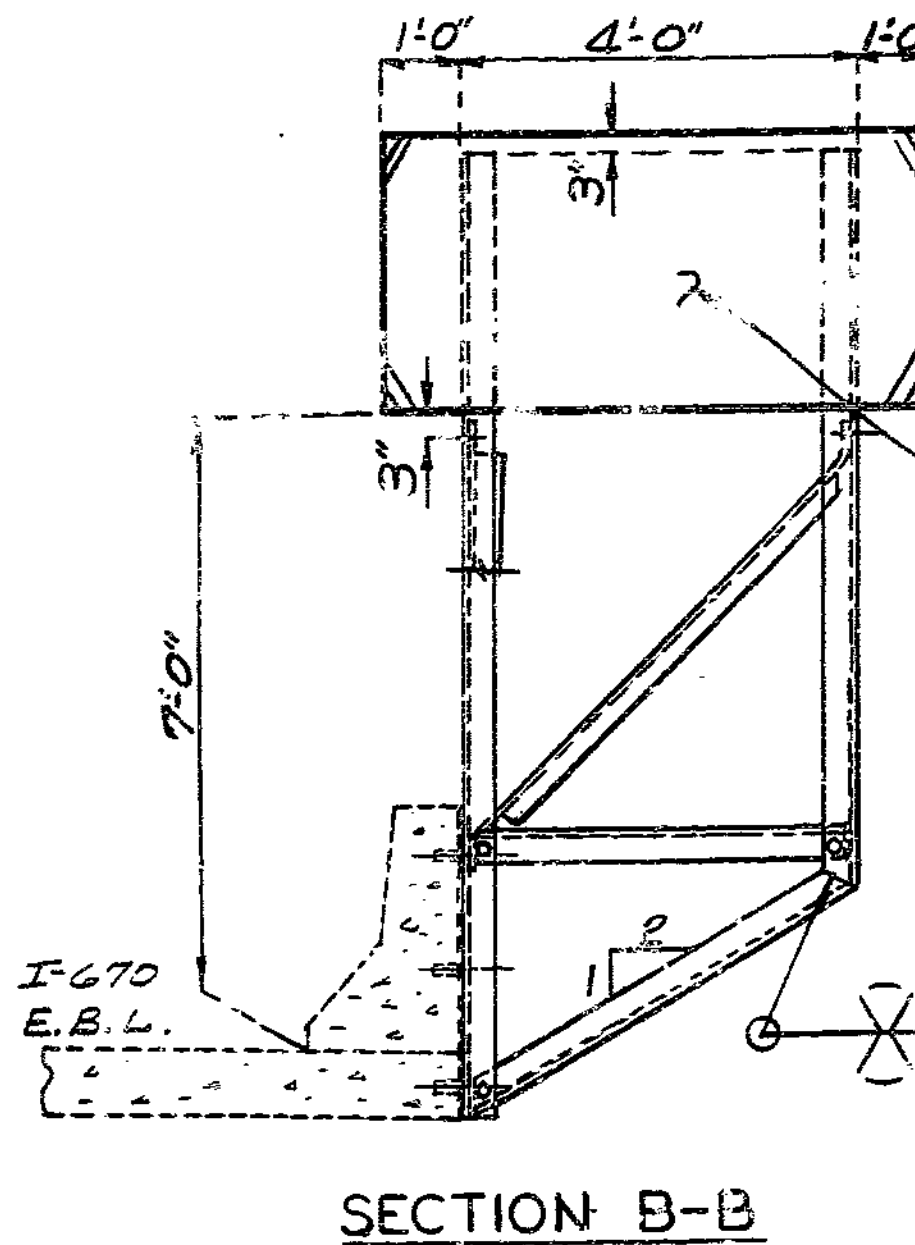


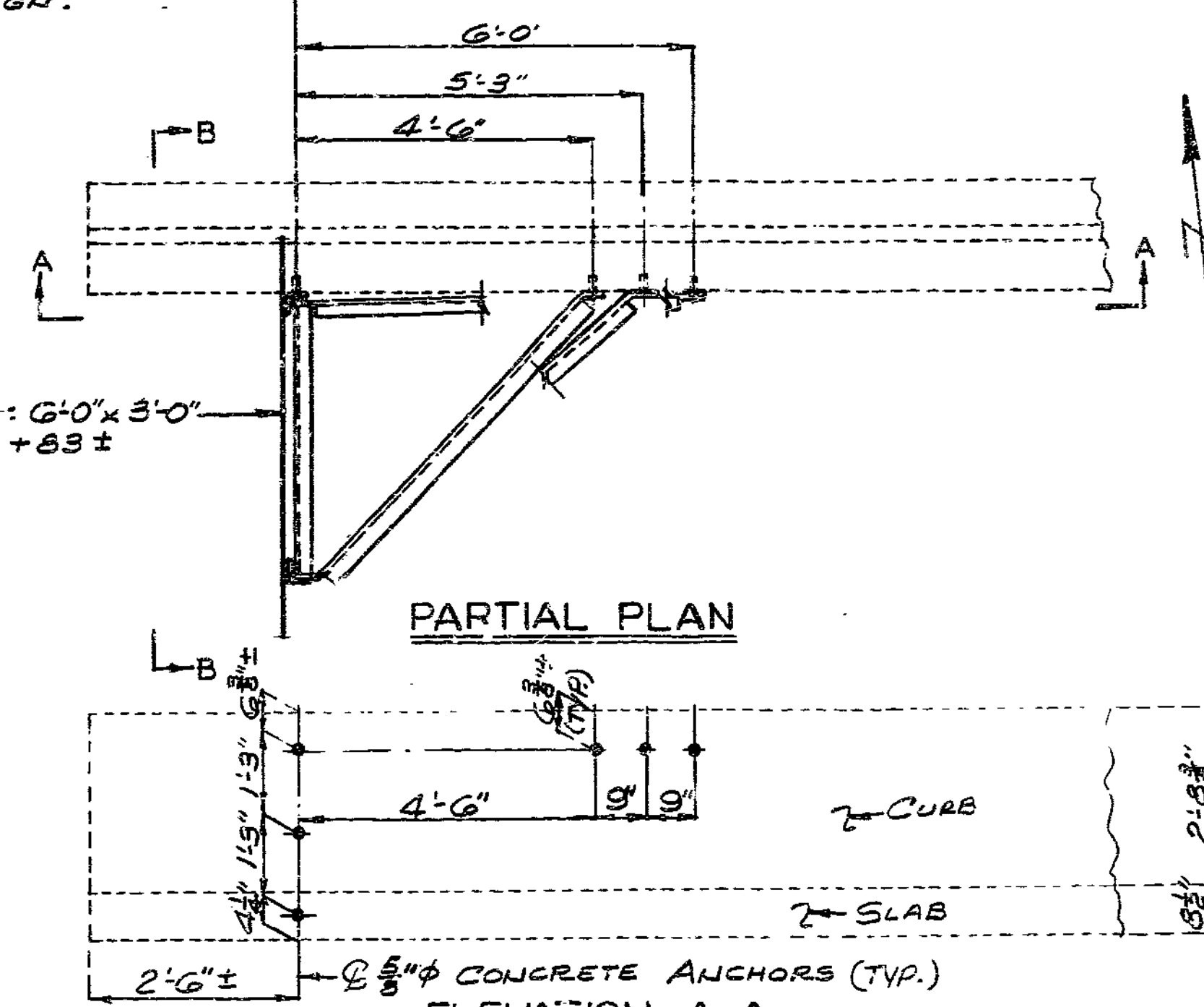
MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

STATE	PROJ. NO.	SHEET NO.
MO.		
SEC./SUR.	TWP.	RGE.

NOTE: CENTER AND LEVEL SIGN ON SUPPORTS.
 DRILL $\frac{1}{2}$ " ϕ HOLES IN THE VERTICAL ANGLES AND PROVIDE $\frac{7}{16}$ " ϕ BOLTS FOR ATTACHMENT OF SIGN.



SECTION B-B



PARTIAL PLAN

ELEVATION A-A

NOTES:
 ALL ANGLES SHALL BE 4x4x $\frac{3}{8}$, ASTM A36, GALVANIZED.
 FIELD CONNECTIONS: HIGH STRENGTH BOLTS $\frac{5}{8}$ " ϕ , HOLES $\frac{3}{4}$ " ϕ .
 ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.
 CONCRETE ANCHORS SHALL BE THE NON-DRILLING EXPANSION TYPE.
 THEY SHALL HAVE A CERTIFIED CONCRETE FUL-OUT STRENGTH (ULTIMATE LOAD) OF AT LEAST 8,300 POUNDS IN 3,000 PSI CONCRETE. THE HOLE SHALL BE PRE-DRILLED WITH A CONVENTIONAL CARBIDE MASONRY BIT. DEC. 1989 SHEET No. 1 OF 1

SIGN SUPPORTS

JACKSON CO. BRIDGE NO. A-3136

B.M.

BRIDGE *Sign Supports*

STATE ROAD
 ABOUT
 PROJECT NO.
 JOB NO.

STA.
 RTE.
 COUNTY

Jackson
 DATE

STD.
STD.
A-3136

DESIGNED	19
DETAILED	19
CHECKED	19

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1 of 1

265

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION
SUBSTRUCTURE BENTS 12-30

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	70	
SEC./SUR.		TWP. 49N RGE. 33W			

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6	GENERAL PLAN AND ELEVATION	46	SUBSTRUCTURE REINFORCING SCHEDULE (12-15)
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11	BORINGS	51	BENT 12 W.B. AND E.B.
12	BORINGS	52	BENT 13 W.B. AND E.B.
13	BORINGS	53	BENT 14 W.B. AND E.B.
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15	SUBSTRUCTURE REINFORCING SCHEDULE (12-15)	55	BENT 16 W.B. AND E.B.
16	SUBSTRUCTURE REINFORCING SCHEDULE (16-19)	56	BENT 17 W.B. AND E.B.
17	SUBSTRUCTURE REINFORCING SCHEDULE (20-22)	57	BENT 18 W.B. AND E.B.
18	SUBSTRUCTURE REINFORCING SCHEDULE (23-25)	58	BENT 19 W.B. AND E.B.
19	SUBSTRUCTURE REINFORCING SCHEDULE (26-30)	59	BENT 20 W.B. AND E.B.
20	BENT 12 W.B. AND E.B.	60	BENT 21 W.B. AND E.B.
21	BENT 13 W.B. AND E.B.	61	BENT 22 W.B. AND E.B.
22	BENT 14 W.B. AND E.B.	62	BENT 23 W.B. AND E.B.
23	BENT 15 W.B. AND E.B.	63	BENT 24 W.B. AND E.B.
24	BENT 16 W.B. AND E.B.	64	BENT 24 RAMP E-W
25	BENT 17 W.B. AND E.B.	65	BENT 25 W.B.
26	BENT 18 W.B. AND E.B.	66	BENT 25 E.B.
27	BENT 19 W.B. AND E.B.	67	BENT 26 W.B.
28	BENT 20 W.B. AND E.B.	68	BENT 26 E.B.
29	BENT 21 W.B. AND E.B.	69	BENT 27 W.B.
30	BENT 22 W.B. AND E.B.	70	BENT 27 E.B.
31	BENT 23 W.B. AND E.B.	71	BENT 28 W.B.
32	BENT 24 W.B. AND E.B.	72	BENT 28 E.B.
33	BENT 24 RAMP E-W	73	BENT 29 W.B.
34	BENT 25 W.B.	74	BENT 29 E.B.
35	BENT 25 E.B.	75	END BENT 30
36	BENT 26 W.B.	76	END BENT 30 DETAILS
37	BENT 26 E.B.	77	MISCELLANEOUS
38	BENT 27 W.B.	78	SUBSTRUCTURE REINFORCING SCHEDULE SUPPLEMENT
39	BENT 27 E.B.	79	DRAINAGE DETAILS
40	BENT 28 W.B.	80	DRAINAGE DETAILS
		81	DRAINAGE DETAILS
		82	DRAINAGE DETAILS

GENERAL NOTES

DESIGN SPECIFICATIONS: A.A.S.H.T.O., 1977 and Interim Specifications 1978. Load Factor Design.

DESIGN LOADING: HS20-44 and Alternate Military Loading with 15 #/sq.ft. for future wearing surfacing. Earth: 120 #/cu.ft. Equivalent Fluid Pressure: 30 #/cu.ft. Fatigue Stress: Case I.

DESIGN UNIT STRESSES:
Class B Concrete $f'c = 3,000$ psi
Reinforcing Steel ASTM A615, Grade 60 $f_y = 60,000$ psi
Steel Pile ASTM A36-70a $f_b = 12,000$ psi

CONCRETE: Concrete shall be Class B except pedestal pile shall be seal class concrete.

REINFORCING STEEL:

Bar sizes are designated on the plans by numbers. The first digit after the letter in three-digit marks and the first two digits after the letter in four-digit marks indicate the size of the bar.

Dimensions shown on the plans are clear dimensions unless otherwise indicated. Minimum clearance to reinforcing steel shall be 1" unless shown otherwise.

All bending dimensions are "out-to-out" of bars, hooks and bends, unless otherwise shown, shall be in accordance with the ACI Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI-318-71).

All reinforcing bars in tops of substructure capbeams or columns shall be spaced to clear anchor bolts for bearings by at least 2".

UTILITIES: All utilities, unless shown otherwise, shall be removed or relocated by others. The Contractor shall notify the owner of the utilities of his work schedule sufficiently in advance to allow time for disposition of utilities.

CONSTRUCTION CLEARANCES: A minimum vertical clearance of 22'-9" from top of rails and a minimum lateral clearance of 8'-6" from the centerline of track to nearest temporary construction falsework shall be maintained during construction for railroads. The Contractor must maintain a 13'-6" vertical by 28'-0" horizontal opening for city streets during construction.

SLOPES: See "Special Provisions" for the treatment of vegetation on the slopes above and below Beardsley Road.

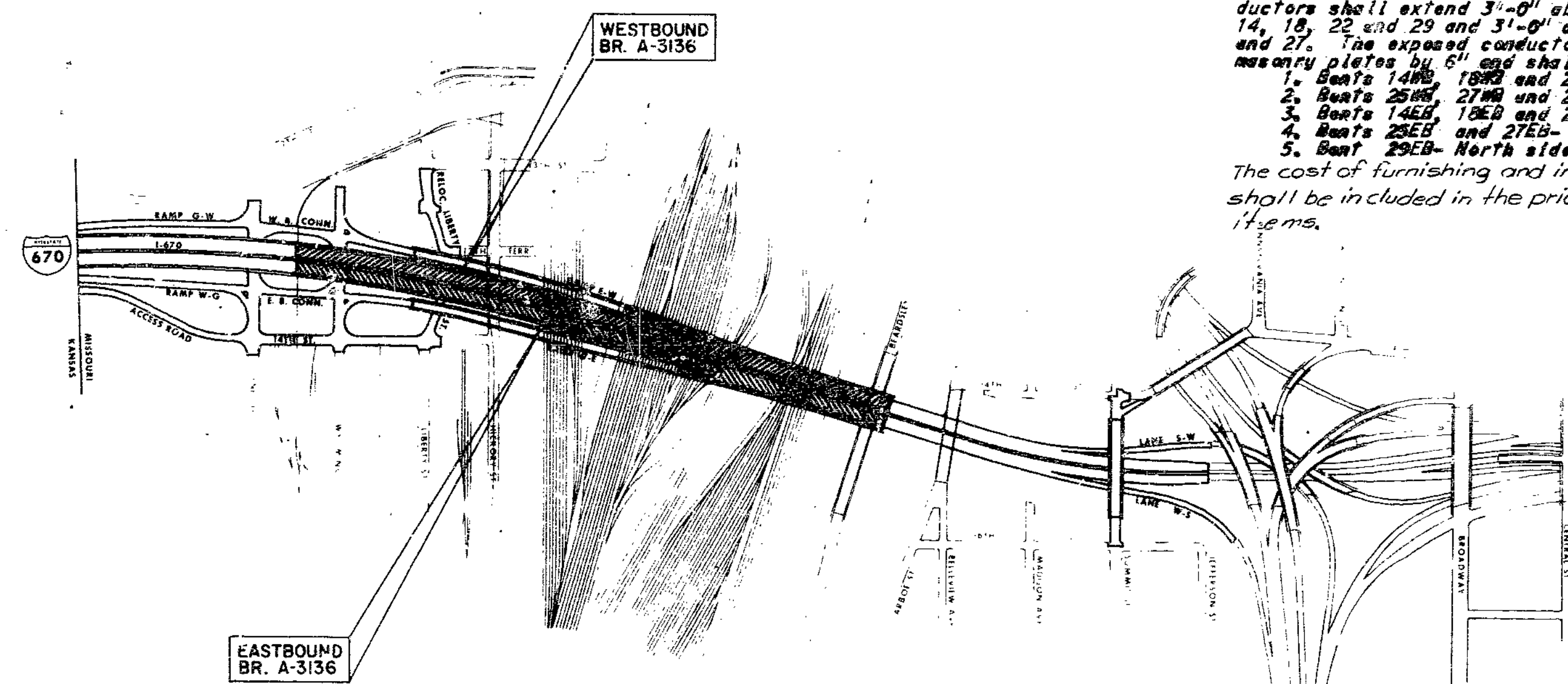
ELECTRICAL GROUNDS: Electrical grounds shall be provided at Fixed Bents 14, 18, 22, 25, 27 and 29. The grounding conductor shall be size #10 and shall be bare stranded solid-copper wire electrically welded to the upper end of a steel pile or extended to a coil 20' in length at the bottom of a pedestal pile. The coil shall be secured in contact with the founding material and shall be placed before concrete is poured. The conductors shall be embedded in the north column of the westbound lanes and in the south column of the eastbound lanes for two column bents and shall be in the center column of three column bents. Conductors shall extend 3'-0" above the top of cap beam at bents 14, 18, 22 and 29 and 3'-0" above the top of column at bents 25 and 27. The exposed conductors shall clear the bearing device masonry plates by 6" and shall be situated as follows:

- Bents 14WB, 18WB and 22WB-South side of Girder B
- Bents 25WB, 27WB and 29WB-South side of Girder C
- Bents 14EB, 18EB and 22EB-North side of Girder N
- Bents 25EB and 27EB-North side of Girder 17
- Bent 29EB-North side of Girder A.

The cost of furnishing and installing electrical grounds shall be included in the price bid for other items.

GENERAL NOTES CON'T.

Anchor Bolts: Anchor bolts for bearings to be furnished and installed with fabricated structural steel.



LOCATION SKETCH

B.M. U.S.G.S. DATUM

- H-71 R.R. spike in N. side of base of P.P., S.E. corner of 12th St. and Genessee. Elev. 748.63
- H-72 Top of head of arrow on top of fire hydrant, S.E. corner of 12th St. and Wyoming. Elev. 751.18
- H-74 "X" in N. bolt in top flange of fire hydrant, S.E. corner of 12th St. and Liberty. Elev. 750.95
- H-75 "X" in N. bolt in top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E. side of Wyoming. Elev. 752.18

BRIDGE I-670 VIADUCT

STATE ROAD - INTERSTATE ROUTE 670

IN KANSAS CITY

PROJECT NO. IG-670-1(17) STA. 52+79.657 KAN. STATE LINE

JOB NO. 4 I-670 46C RTE. I-670

JACKSON COUNTY

STL
STD. 703.36
A-3136

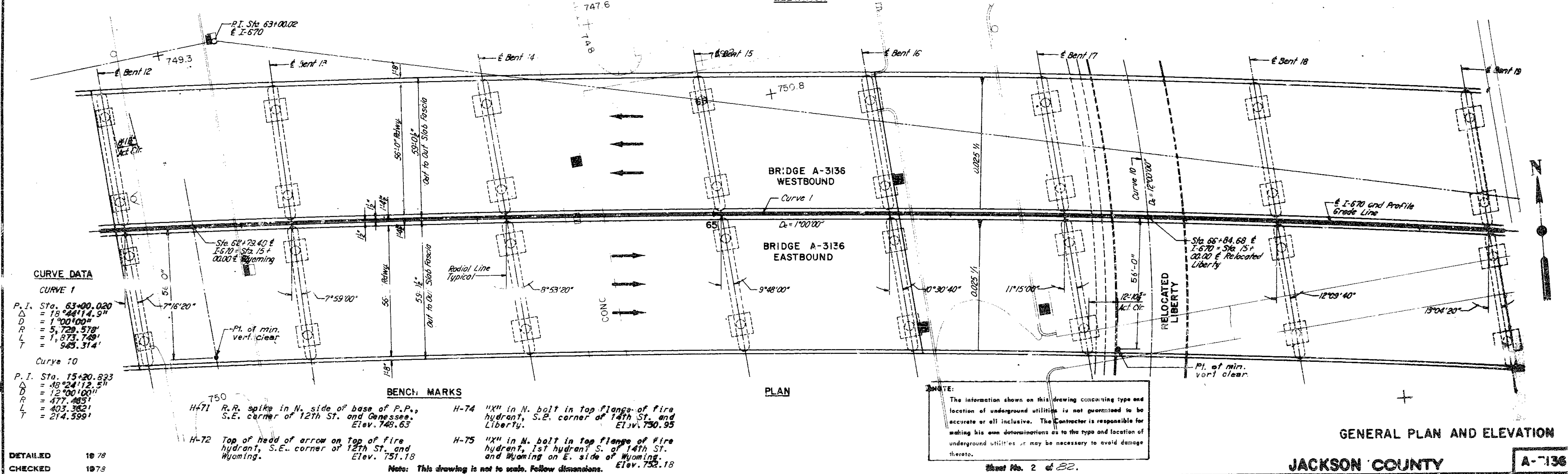
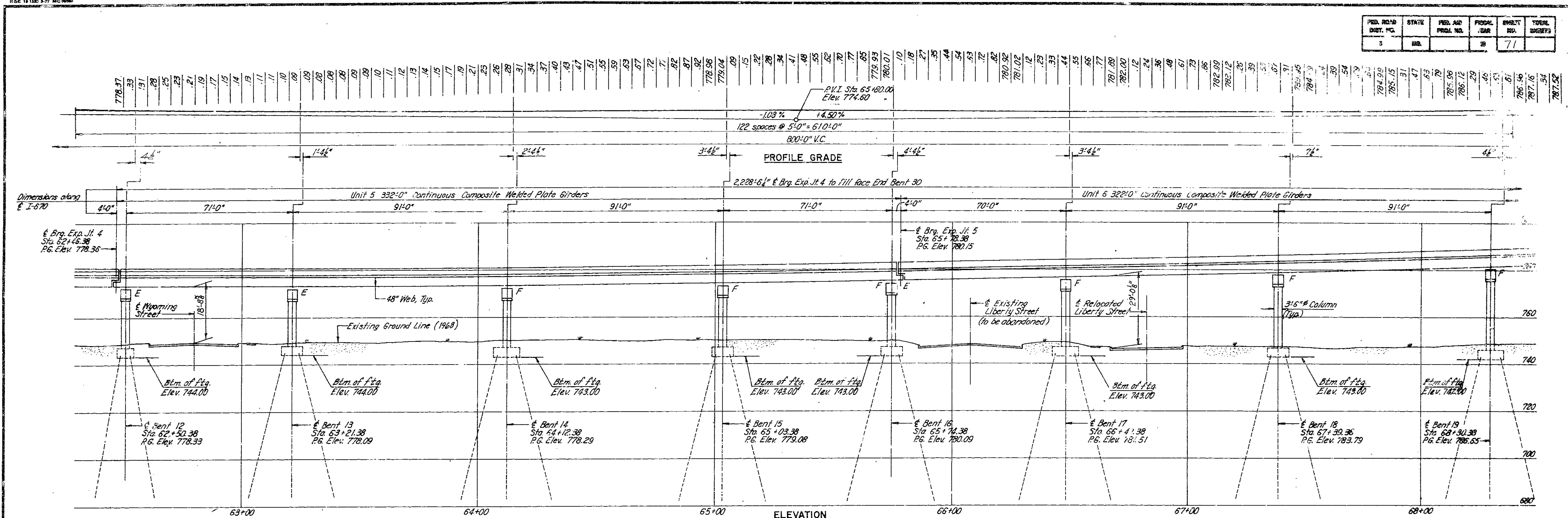
DESIGNED 1979
DETAILED 1978
CHECKED 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1 of 82.

DATE

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FED. YEAR	SHEET NO.	TOTAL SHEETS
3	MO.		68	71	



276

CURVE DATA
CURVE 1
 P.I. Sta. 63+00.020
 $\Delta = 18^{\circ}44'14.9''$
 $D = 1^{\circ}00'00''$
 $R = 5,729.578'$
 $L = 1,873.748'$
 $T = 943.314'$
Curve 10
 P.I. Sta. 15+20.833
 $\Delta = 48^{\circ}24'12.5''$
 $D = 1^{\circ}00'00''$
 $R = 477.465'$
 $L = 403.362'$
 $T = 214.399'$

BENCH MARKS
 H-71 R.R. spike in N. side of base of P.P., S.E. corner of 12th St. and Genessee. Elev. 748.63
 H-72 Top of head of arrow on top of fire hydrant, S.E. corner of 12th St. and Wyoming. Elev. 751.18
 H-74 "X" in N. bolt in top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 750.95
 H-75 "X" in N. bolt in top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E. side of Wyoming. Elev. 752.18
 Note: This drawing is not to scale. Follow dimensions.

NOTE:
 The information shown on this drawing 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.

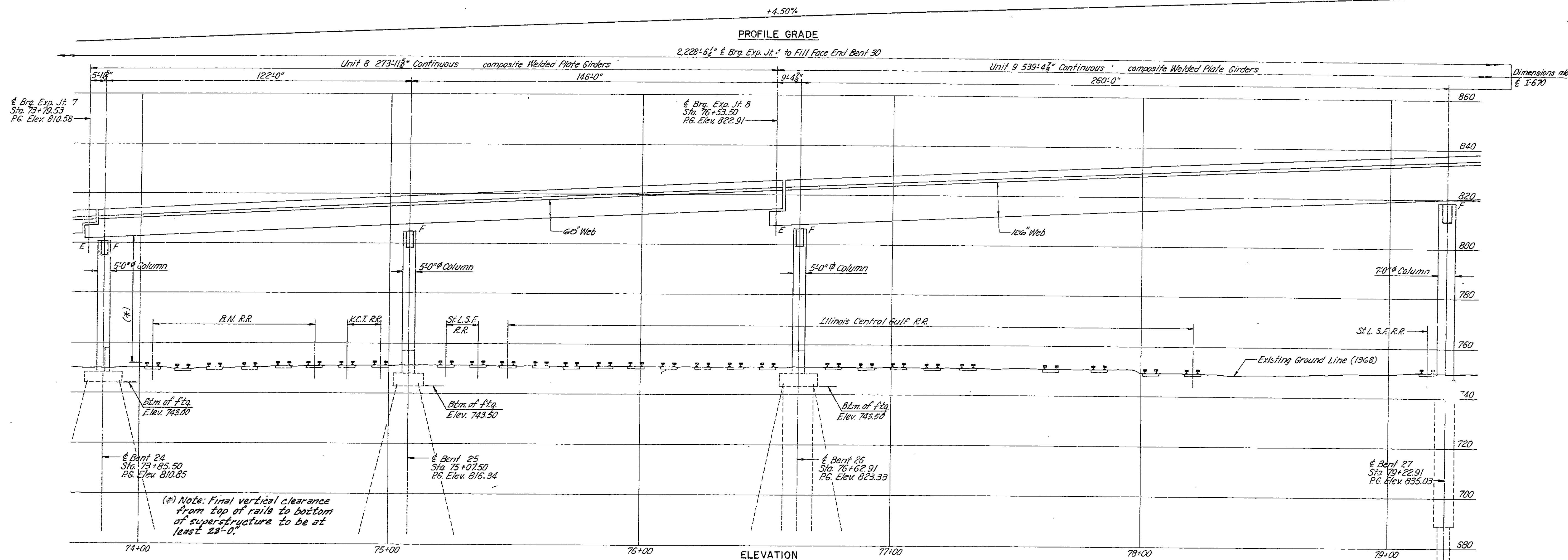
DETAILED 1978
 CHECKED 1978

Sheet No. 2 of 82.

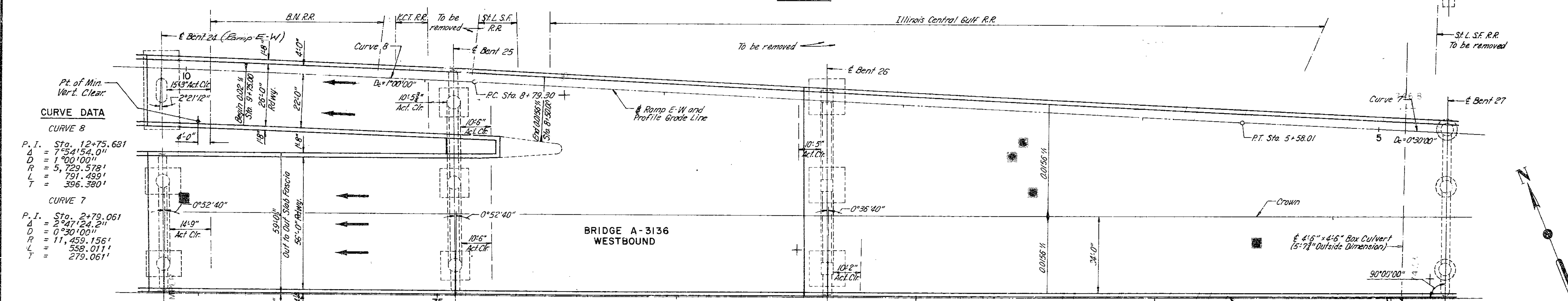
GENERAL PLAN AND ELEVATION

JACKSON COUNTY A-136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		80	73	



(* Note: Final vertical clearance from top of rails to bottom of superstructure to be at least 23'-0".



CURVE DATA

CURVE 8

P.I. Sta. 12+75.631
 $\Delta = 7^{\circ}54'54.0''$
 $D = 1^{\circ}00'00''$
 $R = 5,729.578'$
 $L = 791.499'$
 $T = 396.380'$

CURVE 7

P.I. Sta. 2+79.061
 $\Delta = 2^{\circ}47'24.2''$
 $D = 0^{\circ}30'00''$
 $R = 11,459.156'$
 $L = 558.011'$
 $T = 279.061'$

BENCH MARKS

H-71 R.R. spike in N. side of base of P.P., S.E. corner of 12th St. and Genessee. Elev. 748.63	H-74 "X" in N. bolt in top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 750.95
H-72 Top of head of arrow on top of fire hydrant, S.E. corner of 12th St. and Wyoming. Elev. 751.18	H-75 "X" in N. bolt in top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E. side of Wyoming. Elev. 752.18

Note: This drawing is not to scale. Follow dimensions.

NOTE:
 The information shown on this drawing 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.

278

DETAILED 1978
 CHECKED 1978

Sheet No. 4 of 82.

JACKSON COUNTY

A-3136

GENERAL PLAN AND ELEVATION

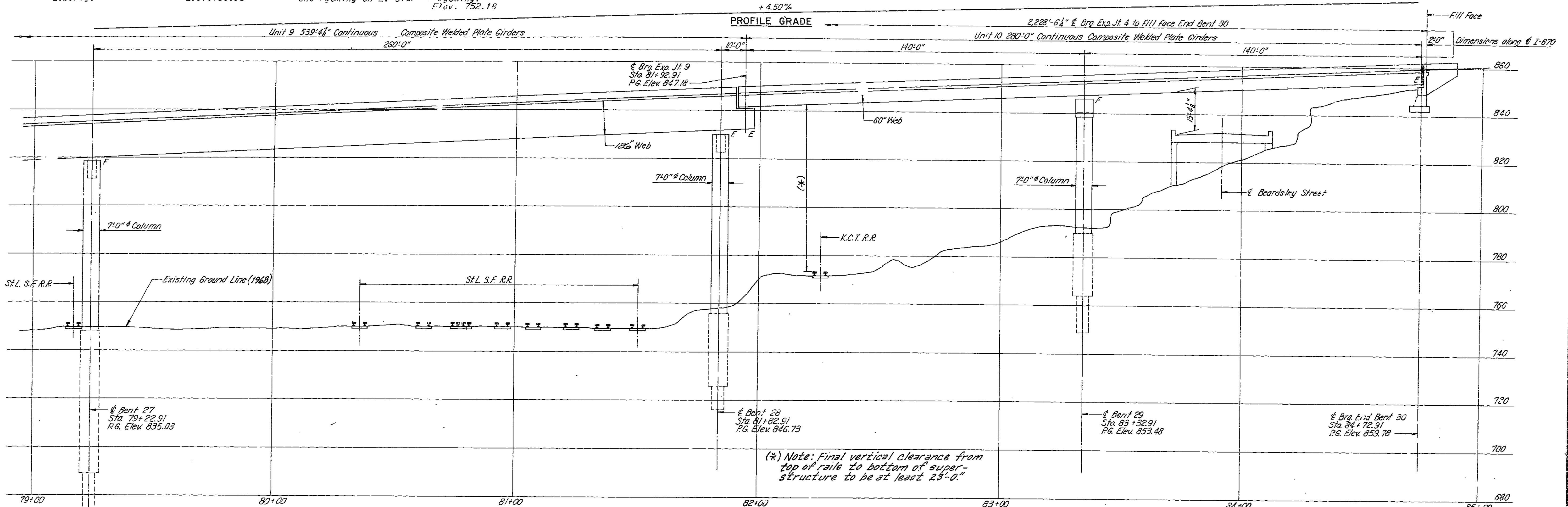
PLAN

ELEVATION

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO		88	75	

BENCH MARKS

H-74 "X" in N. bolt in top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 750.95
 H-75 "X" in N. bolt in top flange of fire hydrant, 1st hydrant S. 14th St. and Wyoming on E. side. Elev. 752.18



(* Note: Final vertical clearance from top of rails to bottom of superstructure to be at least 25'-0".

ELEVATION

NOTE:
 The information shown on this drawing 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.

CURVE DATA

CURVE 6
 P.I. Sta. 19+09.190
 Δ = 2°40'37.6"
 D = 0°30'00"
 R = 11,459.156'
 L = 535.422'
 T = 267.760'

CURVE 7
 P.I. Sta. 2+79.061
 Δ = 2°47'24.2"
 D = 0°30'00"
 R = 11,459.156'
 L = 535.011'
 T = 279.061'

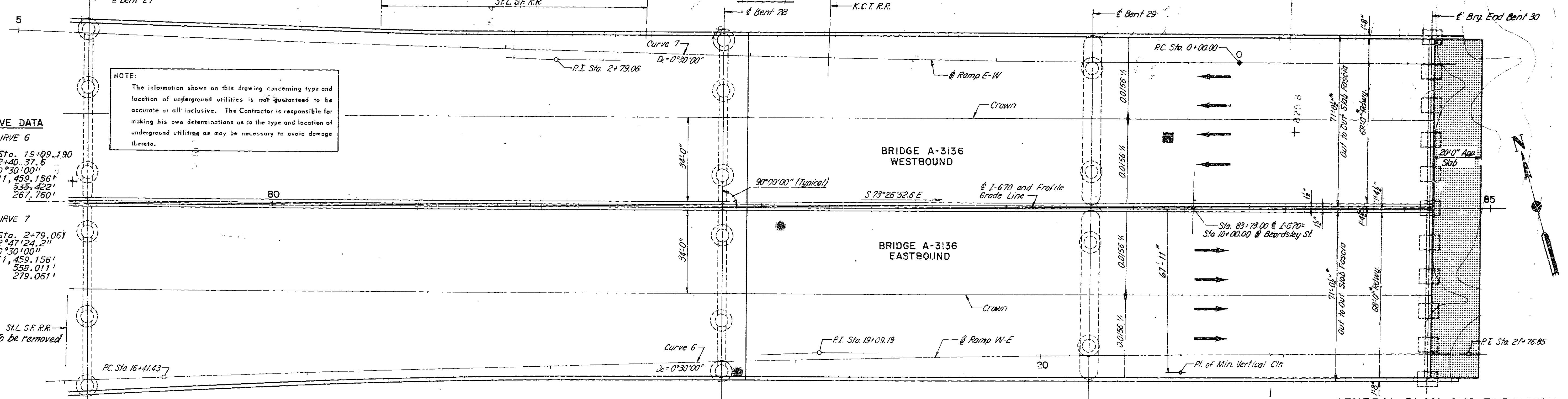
780

S.L. S.F.R.R. To be removed

PC Sta. 16+41.43

Curve 6 Δ = 0°30'00"

PLAN



*Dimensions typical from Sta. 81+19.38 @ I-670 Eastbound Lane and Sta. 3+36.00 @ Ramp E-W to Fill Face End Bent 30.

DETAILED 1978
 CHECKED 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 6 of 82.

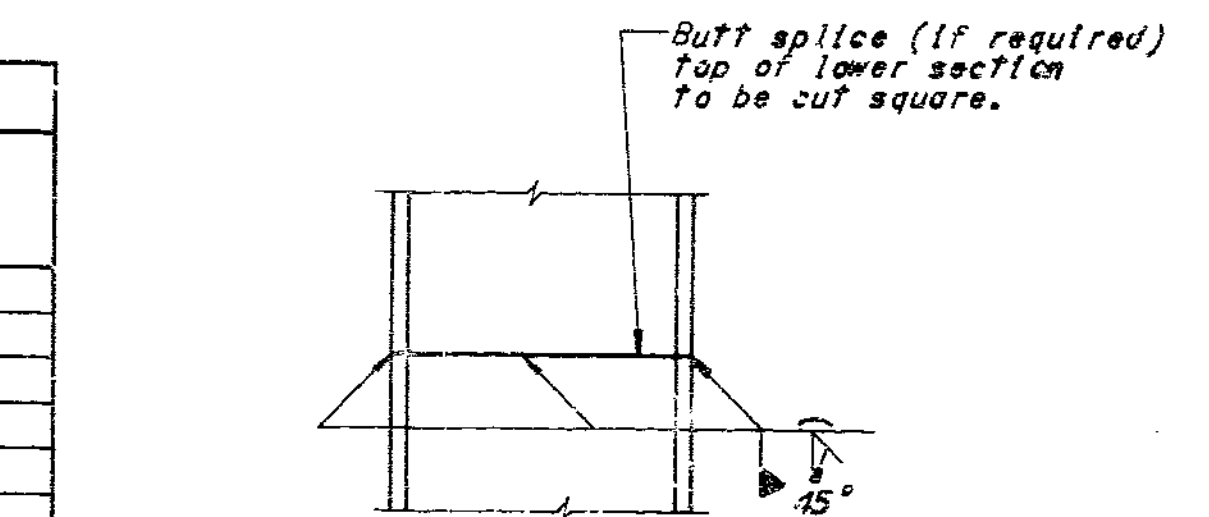
PER. PROJ. DIST. NO.	STATE	PER. PROJ. NO.	FEDERAL PROJ. YEAR	BUDGET NO.	PER. DISTRICT
5	MO.		80	70	

ESTIMATED QUANTITIES - PILE FOOTING ALTERNATE "A"																	
ITEM	UNIT	WESTBOUND LANE SUBSTRUCTURE							EASTBOUND LANE SUBSTRUCTURE							TOTAL	
		UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10	TOTAL	UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10	TOTAL		
Class 1 Excavation	Cu. Yd.	270	170	300	470	260	70	1,480	270	170	300	220	260	444	505	1,725	3,205
Pedestal Pile (96"Ø)	Lin.Ft.					342	82	424					345	82	427	851	
Structural Steel Piles (HP12x53)	Lin. Ft.	2,986	2,108	3,446	3,545	1,947		14,032	2,986	2,108	3,446	2,050	1,838		12,478	26,510	
Loading Tests (See Spec. Prov.)	Each	1			1			2								2	
Class B Concrete	Cu. Yd.	387.1	265.9	580.2	807.5	1261.4	278.6	3,580.7	382.1	263.6	575.8	450.4	1264.1	44	447.5	3,388.5	6,964.2
Reinforcing Steel	Pound	66,510	50,050	90,380	121,680	310,550	63,680	682,850	65,640	49,630	88,180	58,220	314,690	882,640	659,000	1,341,850	
Drainage System (on Structure)	Lump Sum																

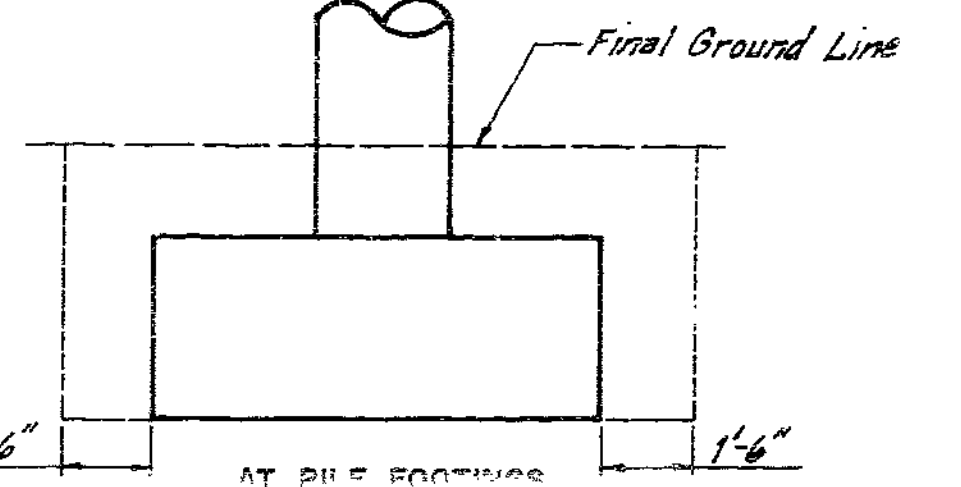
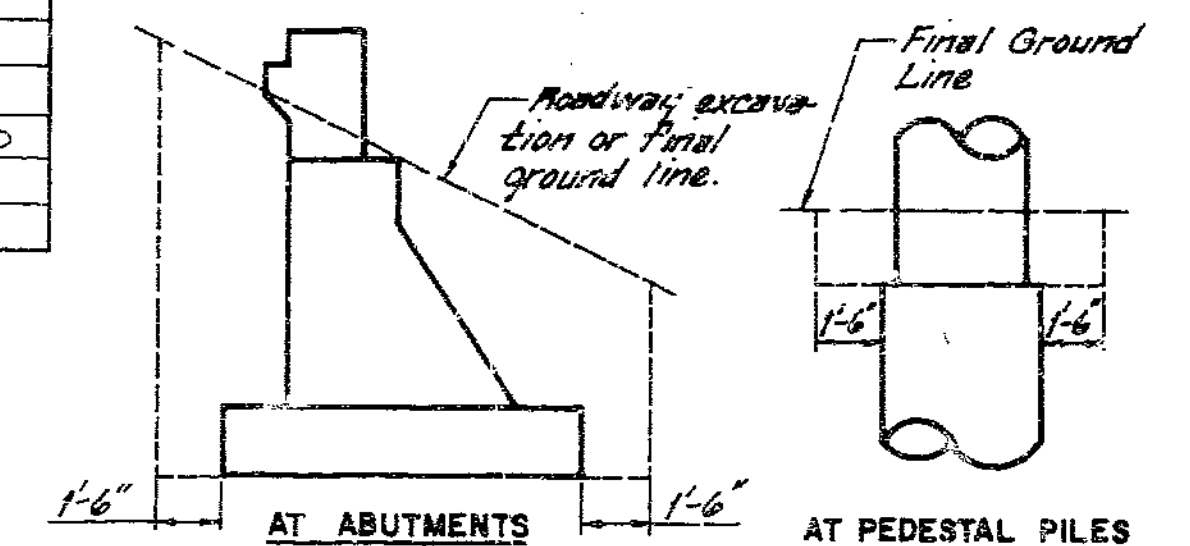
ΔIncludes 18,960 pounds for End Bent 30.
 ΔΔIncludes 168.9 Cu. Yds. for End Bent 30.
 ΔΔΔIncludes 495 Cu. Yds. for End Bent 30.

ESTIMATED QUANTITIES - PILE FOOTING ALTERNATE "B"																	
ITEM	UNIT	WESTBOUND LANE SUBSTRUCTURE							EASTBOUND LANE SUBSTRUCTURE							TOTAL	
		UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10	TOTAL	UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10	TOTAL		
Class 1 Excavation	Cu. Yd.	20	20	35	225	70	10	380	20	20	35	30	70	444	505	680	1,060
Pedestal Pile (96"Ø)	Lin.Ft.					574	82	656					511	82	659	1,315	
Pedestal Pile (66"Ø)	Lin.Ft.				377			377				298				298	675
Pedestal Pile (60"Ø)	Lin.Ft.			544				544			544					544	1,088
Pedestal Pile (48"Ø)	Lin.Ft.	720	431					1,151	720	431						1,151	2,302
Structural Steel Piles (HP12x53)	Lin.Ft.				885			885								885	
Loading Tests (See Spec. Prov.)	Each				1			1								1	
Class B Concrete	Cu. Yd.	280.6	201.9	451.1	677.5	1,136.4	278.6	3,026.1	275.6	199.6	446.8	351.5	1,139.1	44	447.5	2,860.1	5,886.2
Reinforcing Steel	Pound	114,000	83,540	150,900	159,910	525,800	63,680	957,230	113,170	83,130	150,710	96,020	388,160	82,640	913,830	1,371,660	
Drainage System (on Structure)	Lump Sum																

Cost of concrete in pedestal piles is to be included in unit price and per linear foot of pedestal pile. See Special Provisions for bidding on Pile Footing Alternate "A" or "B".



STEEL PILE SPLICE DETAIL



LIMITS OF EXCAVATION

PILE AND FOOTING DATA - WESTBOUND LANE																				
BENT	BENT 12	BENT 13	BENT 14	BENT 15	BENT 16	BENT 17	BENT 18	BENT 19	BENT 20	BENT 21	BENT 22	BENT 23	BENT 24	BENT 24 RAMP E-W	BENT 25	BENT 26	BENT 27	BENT 28	BENT 29	END BENT 30
Pile Type and Size	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53				
Number	8	10	12	10	8	12	10	12	10	16	16	16	12	15	32	33				
Approximate Length (Ft.)	61	62	62	63	63	63	62	61	63	58	59	59	59	59	61	59				
Design Bearing Value (Tons)	84	88	91	88	94	86	94	85	91	89	92	91	92	61	94	94				
Hammer Energy Required (Ft. Lbs.)	19,800	20,500	21,400	20,500	21,900	20,200	21,900	20,000	21,200	21,400	22,100	21,800	21,600	15,000	22,600	22,600				

PILE AND FOOTING DATA - EASTBOUND LANE																			
BENT	BENT 12	BENT 13	BENT 14	BENT 15	BENT 16	BENT 17	BENT 18	BENT 19	BENT 20	BENT 21	BENT 22	BENT 23	BENT 24	BENT 25	BENT 26	BENT 27	BENT 28	BENT 29	END BENT 30
Pile Type and Size	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53				
Number	8	10	12	10	8	12	10	12	10	16	16	16	12	22	32				
Approximate Length (Ft.)	61	62	62	63	63	63	62	61	63	58	59	59	59	61	59				
Design Bearing Value (Tons)	84	88	91	88	94	86	94	85	91	89	92	91	92	61	94				
Hammer Energy Required (Ft. Lbs.)	19,800	20,500	21,400	20,500	21,900	20,200	21,900	20,000	21,200	21,400	22,100	20,500	21,600	22,900	21,900				

Minimum energy requirement of hammer based on plan length and design bearing value of piles. All piles shall be driven to practical refusal.

PEDESTAL PILE DATA - WESTBOUND AND EASTBOUND LANES																		
BENT	BENT 12	BENT 13	BENT 14	BENT 15	BENT 16	BENT 17	BENT 18	BENT 19	BENT 20	BENT 21	BENT 22	BENT 23	BENT 24	BENT 25	BENT 26	BENT 27	BENT 28	BENT 29
Pedestal Pile Diameter (Inches)	48	48	48	48	48	48	48	48	60	60	60	60	66	66	96	96	96	96
Load at top of Socket (Tons)	331	424	443	427	335	433	445	454	448	638	735	680	573	1114	1350	1351	1017	1102

SUMMARY OF QUANTITIES PILE AND FOOTING DATA

1978
 1079

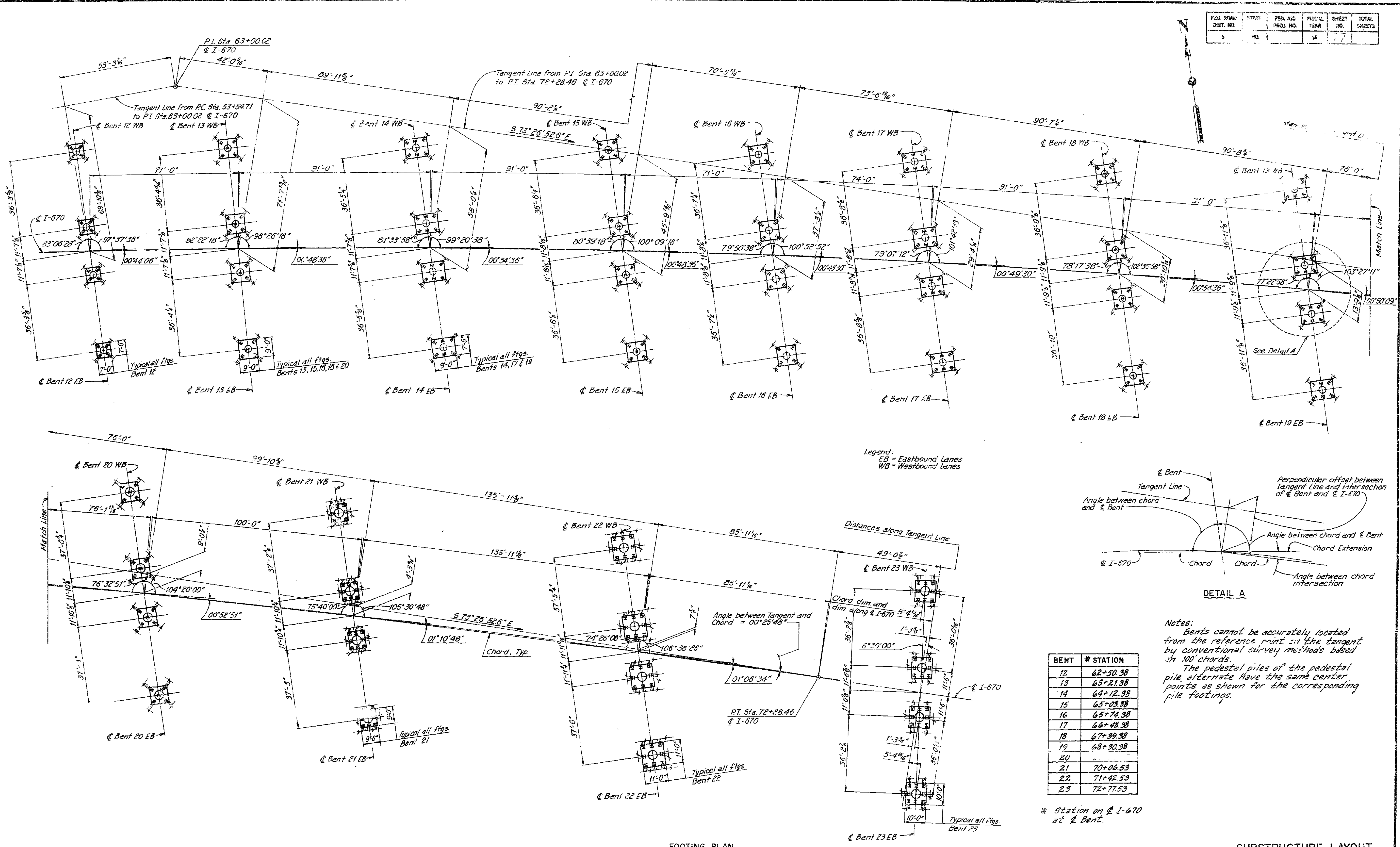
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 7 of 82.

JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		18	7	



* Station on @ I-670 at @ Bent.

FOOTING PLAN

SUBSTRUCTURE LAYOUT

DETAILED 1978
CHECKED 1978

Note: This drawing is not to scale. Follow dimensions.

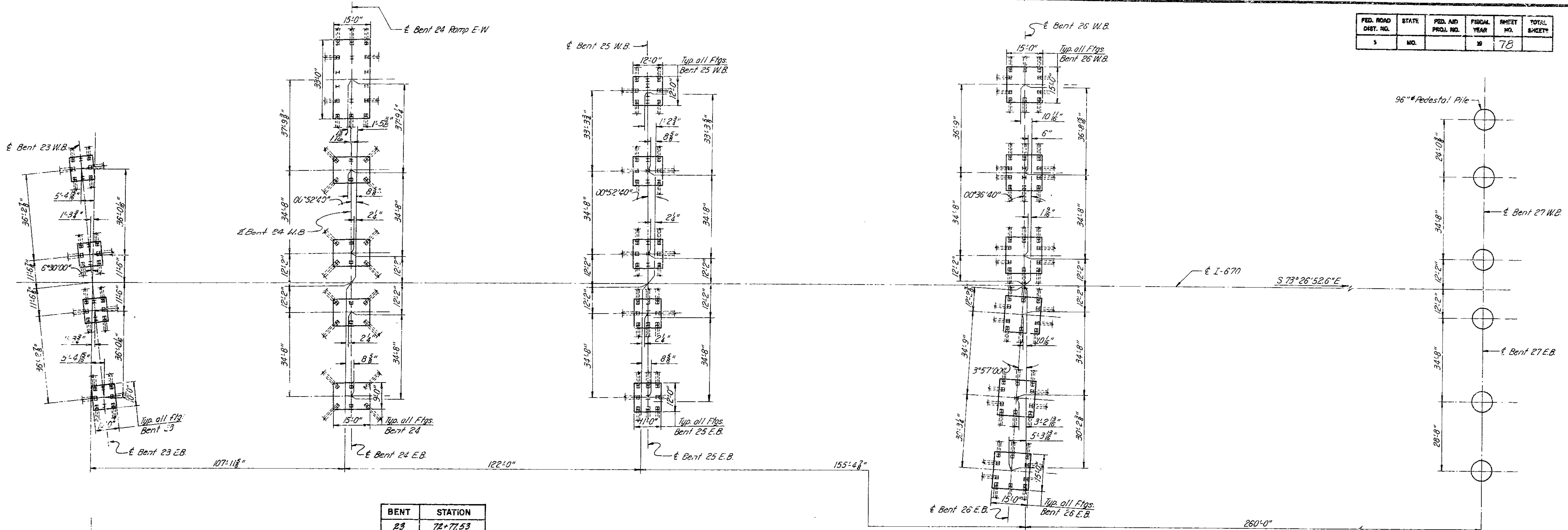
Sheet No. 8 of 22.

JACKSON COUNTY

A-3136

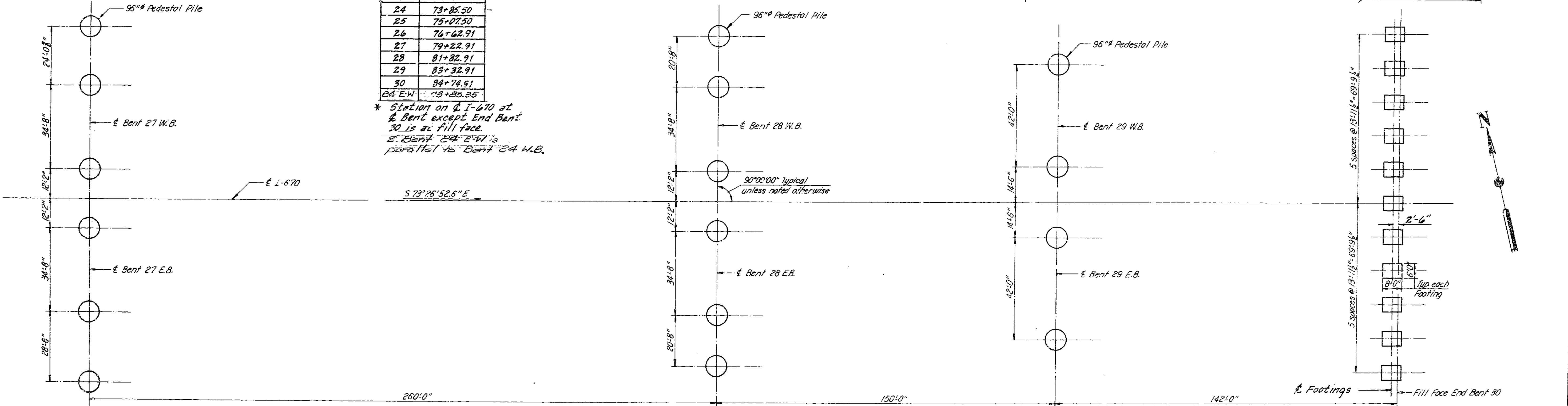
787

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		80	78	



BENT	STATION
23	72+77.53
24	73+85.50
25	75+07.50
26	76+62.91
27	79+22.91
28	81+82.91
29	83+32.91
30	84+74.91
24 E-W	73+25.25

* Station on I-670 at Bent except End Bent 30 is at fill face.
 E Bent 24 E-W is parallel to Bent 24 W.B.



FOOTING PLAN

SUBSTRUCTURE LAYOUT

Legend:
 W.B. denotes Westbound Lanes
 E.B. denotes Eastbound Lanes

DESIGNED 1072
 CHECKED 1075

Note: This drawing is not to scale. Follow dimensions.

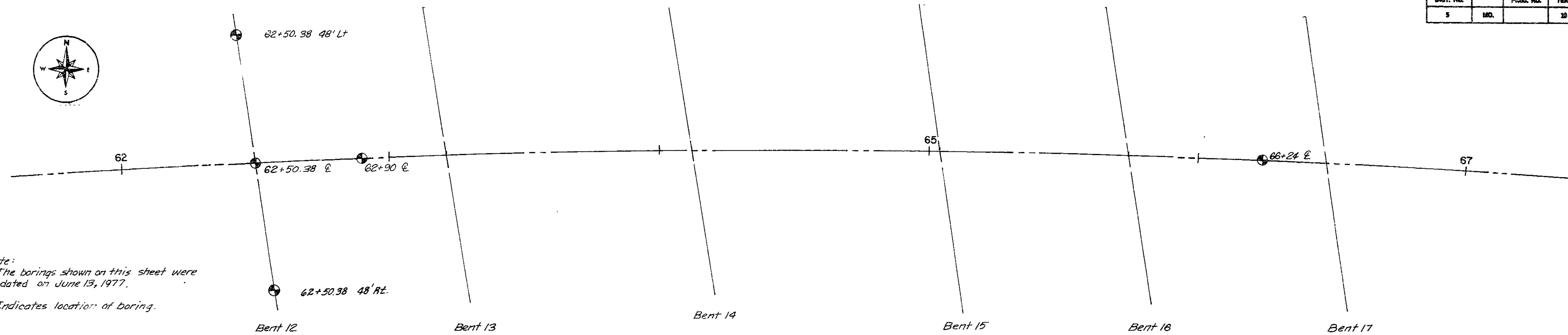
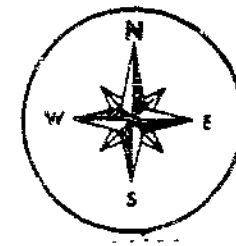
Sheet No. 9 of 22.

JACKSON COUNTY

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283

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		58	79	



Note:
The borings shown on this sheet were dated on June 13, 1977.

⊙ Indicates location of boring.

BORING LOCATION SKETCH

Depth	Boring 1 (62+50.38 48' Lt.)	Boring 2 (62+50.38 48' Rt.)	Boring 3 (62+50.38 48' Rt.)	Boring 4 (62+90)	Boring 5 (66+24)	Depth
750	749.2 Surface 748.0 Brick and concrete pavement	749.3 Surface 748.3 Brick and concrete	749.4 Surface 748.4 Brick and concrete	749.3 Surface 748.3 Asphalt and brick 748.2 Brown silty clay and debris, soft.	748.0 Surface 747.0 Asphalt and granite	750
740	739.2 Brown sandy clay	739.3 Brown clayey sand very fine.	740.4 Brown silty clay	741.3 Brownish gray silty clay to clay, soft to medium	741.0 Gray silt loam, stiff.	740
730	Fine compact sand	Brown sand, fine, firm, dry.		20 5/12/15	731.0	730
720			Fine brown sand	20 7/12/34	718.0	720
710	714.2			30 5/6/6	718.0	710
700	Very compact, fine sand.	Gray sand fine, wet clayey, firm.		40 4/7/12	708.0	700
690	694.2			50 6/9/7	700.0	690
	Sand and gray clay			60 7/7/9	681.5	
680	684.0 Shaly limestone 682.2	683.2 Limestone 682.7	683.2 Hard Limestone 682.4	683.5 Gray sand, medium, slightly compact 683.5 Gray limestone, hard, thin bedded 680.4 Fractured scattered seams 679.8 Gray shaly lime, hard 679.2 Gray shale, hard, P.P. 9+ 678.8 Black limy shale, very hard 675.1 Gray limestone, hard, solid, minor fracturing 674.5 Gray shale, hard P.P. 9+ 673.6 Gray limestone, hard sporadic shaly lime seams. 673.3 Gray shale, hard, P.P. 9+	681.5 Gray sand, medium to coarse, slightly compact, with clay layers. 700.0 Gray sand, medium to coarse, compact to very compact. 681.5 Gray limestone, hard, thin bedded, fractured 679.8 Gray shale, medium hard 679.5 Gray shale, medium hard 678.8 Gray limestone, hard solid 673.8 Dark gray shale, hard P.P. 9+ 671.3 Gray limestone hard, thin to medium bedded, solid.	680
670						670

*Standard Penetration Test: The number of blows of a 140 lb hammer falling 30" required to drive a 2" O.D., 1 3/8" I.D. split barrel sampler 12".

NOTE:
Subsurface information shown on this drawing was obtained solely for use in establishing design controls for the project. The accuracy of this information is not guaranteed and it is not to be construed as part of the plans governing construction of the project.

284

62+50.38 48' Lt

62+50.38 Rt

62+50.38 48' Rt

62+90

66+24

DETAILED 19 78
CHECKED 19 78

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 10 of 22.

JACKSON COUNTY

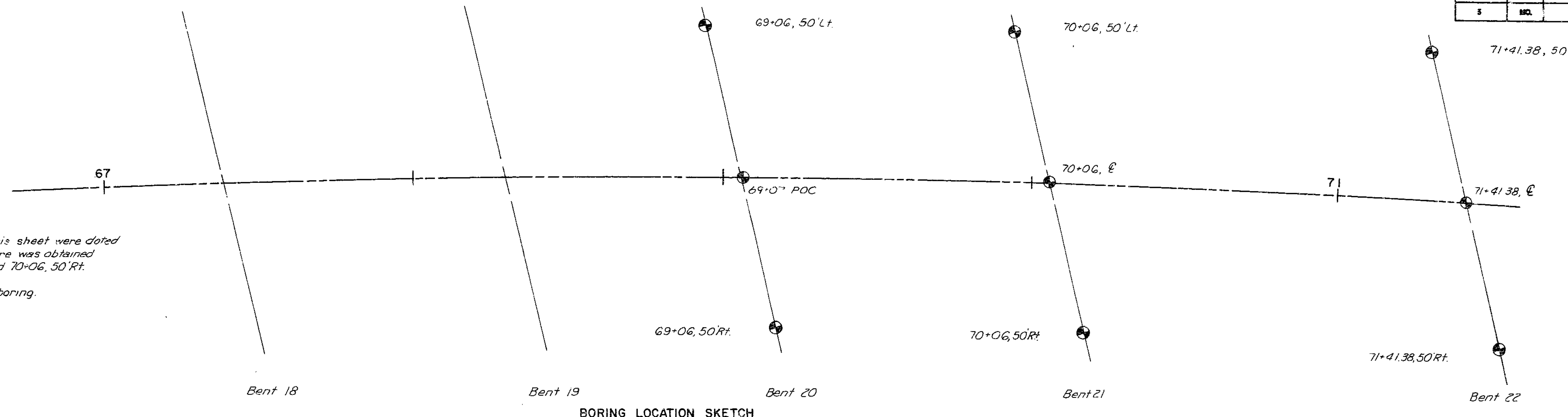
BORINGS

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	PROJ. YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	80	

Note:
The borings shown on this sheet were dated June 16, 1969; June 13, 1973. Core was obtained in borings 69+06, 50' Lt. and 70+06, 50' Rt.

⊕ Indicates location of boring.



BORING LOCATION SKETCH

760 _____ 760

Standard Penetration Test* Depth Blows/6"	747.8 - Surface Bricks and rubble 745.8 Brown and gray mottled clayey sand, very fine, soft, loose	747.8 745.8	Surface Brick and rubble Brown silty clay, soft	747.2 742.2	Surface Concrete and rubble fill 746.5 744.5	Surface Rubble and fill 746.4 - Surface 742.4 Rubble, fill and concrete Brown clayey sand, firm with gray clay stringers	751.3 747.3	Surface Fill 750.6 746.6	Surface Fill 750.3 745.3	750
10 2/2/2	432.8 732.8	732.8	Brown sandy clay with sand stringers, medium stiff	Tan silty clay	Brown clayey sand, wet, firm		Brown sandy clay	Silty clay, soft P.A.W.T.	Sand and silt P.A.W.T.	740
20 9/9/12			Brown silty sand, firm				Sandy silt, soft	Sand, loose and very wet		730
30 27/23/19	417.8 717.8	717.8	Brown coarse sand, compact, wet	724.1 718.6 714.7 711.6	716.5	Brown sand, wet, firm	Gray clay			720
40 10/7/4	707.3 706.0			721.9 718.6 714.7 711.6	701.5	Gray, well graded, clean, medium to coarse sand				710
50 10/29/52	697.3 692.8			686.6 684.1 681.1 682.7		Gray sand, very fine to fine, compact				700
60 5/4/4	684.2 683.8			685.1 683.0 684.7		Gray sand, fine, very compact				690
	682.8 682.7	679.8 679.5	Limestone (cut with rock bit)	682.7 681.9	683.0 684.7	Gray sandy clay, medium to stiff				680
	682.3 681.4		Gray limestone, thin bedded	682.7 681.9		Limestone, gray, dense, very jointed				
	676.8 673.8		Gray shale	677.9 674.1		Gray limestone, thin bedded				
			Gray limestone, thin bedded	677.9 674.1		Gray shale, soft to firm fissile with limestone gravel imbedded near bottom (Ladore Fm.)				
			Gray limestone, thin to medium bedded (Sniabar Mbr.)	677.9 674.1		Hard limestone				
			Gray limestone, thin bedded	677.9 674.1		Greenish gray shale				
			Gray limestone, thin bedded	677.9 674.1		Gray limestone, thin to medium bedded, with few green shale partings				
			Gray limestone, thin bedded	677.9 674.1		Hard limestone at 688.5				
			Gray limestone, thin bedded	677.9 674.1		Boulders				
			Gray limestone, thin bedded	677.9 674.1		Hard limestone				

* Standard Penetration Test: The number of blows of a 140 lb hammer falling 30" required to drive a 2.0" O.D., 1 3/8" I.D. split barrel sampler 12."

NOTE:
Subsurface information shown on this drawing was obtained solely for use in establishing design controls for the project. The accuracy of this information is not guaranteed and it is not to be construed as part of the plans governing construction of the project.

285

DETAILED 19 78
CHECKED 19 78

Note: This drawing is not to scale. Follow dimensions.

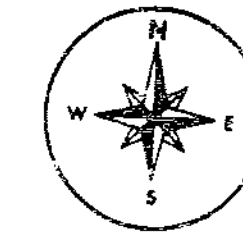
Sheet No. 1 of 82.

JACKSON COUNTY

BORINGS

A-3136

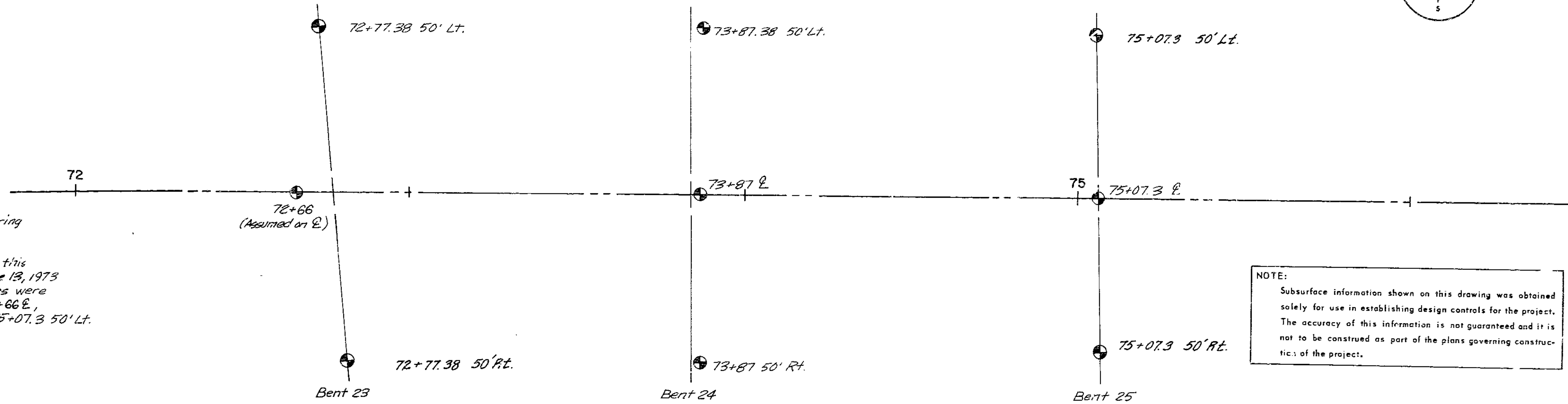
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		55	81	



⊕ Indicates location of boring

Note:
The borings shown on this sheet were dated June 13, 1973 and June 16, 1969, cores were obtained in borings 72+66 E, 73+87.38 50' Lt. and 75+07.3 50' Lt.

NOTE:
Subsurface information shown on this drawing was obtained solely for use in establishing design controls for the project. The accuracy of this information is not guaranteed and it is not to be construed as part of the plans governing construction of the project.



BORING LOCATION SKETCH

Standard Penetration Test* Depth Blows	748.7 Surface	748.8 Surface	748.2 Surface	749.6 Surface	749.7 Surface	749.8 Surface	749.7 Surface	750.2 Surface	750.3 Surface	750.2 Surface	750
	748.7	748.8	748.2	749.6	749.7	749.8	749.7	750.2	750.3	750.2	750
	Surface	Soil and rubble fill	Soil and rubble fill	749.6 Pavement	Asphalt and fill	Asphalt and fill	Asphalt and fill	Fill and clay	Fill and clay	Fill and clay	750
740	10 2/11/11	741.8	742.2	744.6	746.7	745.8	746.7	741.2	746.3	746.2	740
	Gray silty clay, very soft, limonite and organic stained, scattered gravel, pieces of bricks, debris.	Brown silty clay, soft.	Brown silty sand, firm.	741.6 Brown silty clay	Gray sandy clay, soft, wet	Gray silty clay, soft.		Sandy clay			740
730	20 6/8/17	733.8		741.6	741.7	726.8		Very fine brown silty sand.			730
	729.7 Gray sand, very fine, slightly compact, wet, well sorted.	Brown silty sand, firm, soft.		741.6	741.7	726.8					730
720	30 18/33/48		725.2	741.6	741.7	724.8					720
	723.7 Gray sand, fine grained, very compact, moist, well sorted, oxidized.	Brown silty sand, firm, soft.		741.6	741.7	724.8					720
710	40 14/23/14		703.2	741.6	741.7	724.8					710
	713.7 Dark gray clayey sand, medium grained, poorly sorted, compact, wet	Brown silty sand, firm, soft.		741.6	741.7	724.8					710
700	50 3/3/8	703.8		741.6	741.7	724.8					700
	703.7 Dark gray clayey sand, medium grained, poorly sorted, compact, wet	Gray sand and gravel, wet, firm to compact.		741.6	741.7	724.8					700
690	60 25/27/19		703.2	741.6	741.7	724.8					690
	695.7 Boulders or limestone	Gray sand and gravel, wet, firm to compact.		741.6	741.7	724.8					690
680	63 23/50/36		695.2	741.6	741.7	724.8					680
	685.7 Fat clay (3") grading into 682.4 dark gray shale, hard.	Gray sand and gravel, wet, firm to compact.		741.6	741.7	724.8					680
670			684.8	741.6	741.7	724.8					670
	680.2 Limy shale, greenish gray, 680.2 grades to shaly lime.		684.8	741.6	741.7	724.8					670
	675.5 Dark gray shale, hard - both med @ 73.4' shale.		684.8	741.6	741.7	724.8					670
			684.8	741.6	741.7	724.8					670

* Standard Penetration Test: The number of blows of a 140 lb hammer falling 30" required to drive a 2" O.D., 1 3/8" I.D. split barrel sampler 12" in instances when penetration lacked 12 inches, the data is shown as Blows/Penetration.

72+66 E (assumed) (Core) 72+77.38 50' Lt. 72+77.38 50' Rt. 73+87.38 50' Lt. (Core) 73+87 E 73+87 50' Rt. 10+08 E (A-3140) 75+07.3 50' Lt.

286

DETAILED 10 78
CHECKED 10 78

Note: This drawing is not to scale. Follow dimensions.

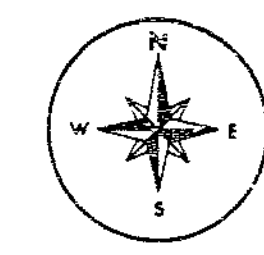
Sheet No. 12 of 32.

BORINGS

JACKSON COUNTY

A-3136

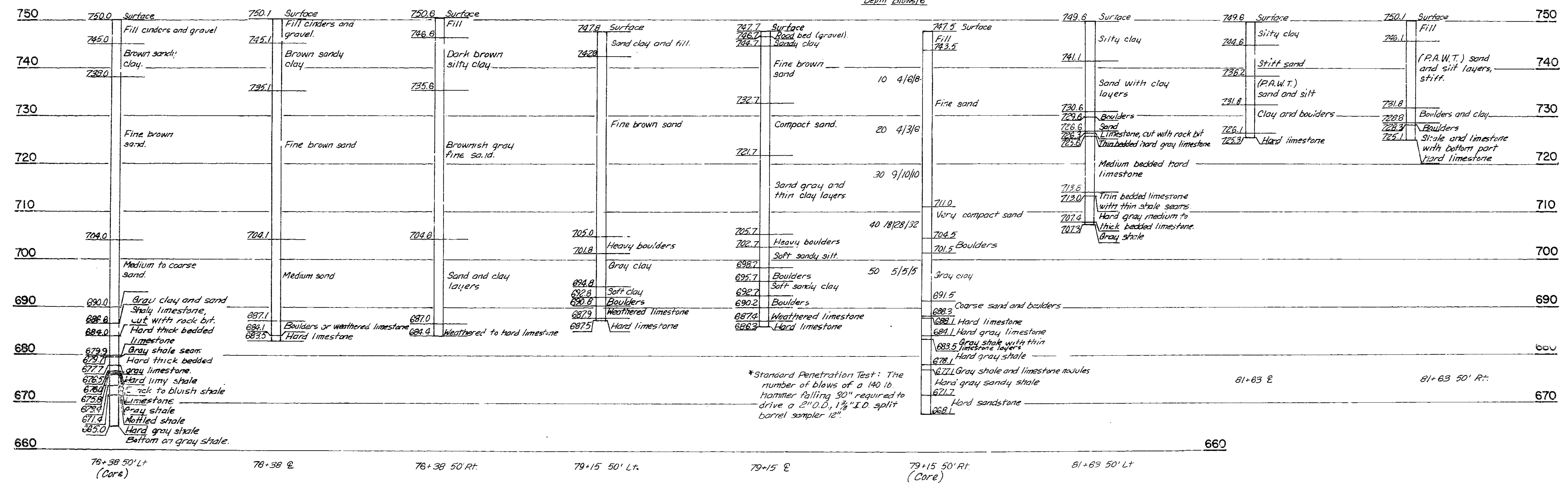
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		68	82	



Note:
The borings shown on this sheet were diked June 13, 1973 cores were obtained in borings 76+38 50' Lt. and 79+15 50' Rt.
⊙ Indicates location of boring.

BORING LOCATION SKETCH

Standard Penetration Test*
Depth Blows/6"



*Standard Penetration Test: The number of blows of a 140 lb. hammer falling 30" required to drive a 2" O.D., 1 1/8" I.D. split barrel sampler 12"

NOTE:
Subsurface information shown on this drawing was obtained solely for use in establishing design controls for the project. The accuracy of this information is not guaranteed and it is not to be construed as part of the plans governing construction of the project.

287

DETAILED 1078
CHECKED 1079

Note: This drawing is not to scale. Follow dimensions.

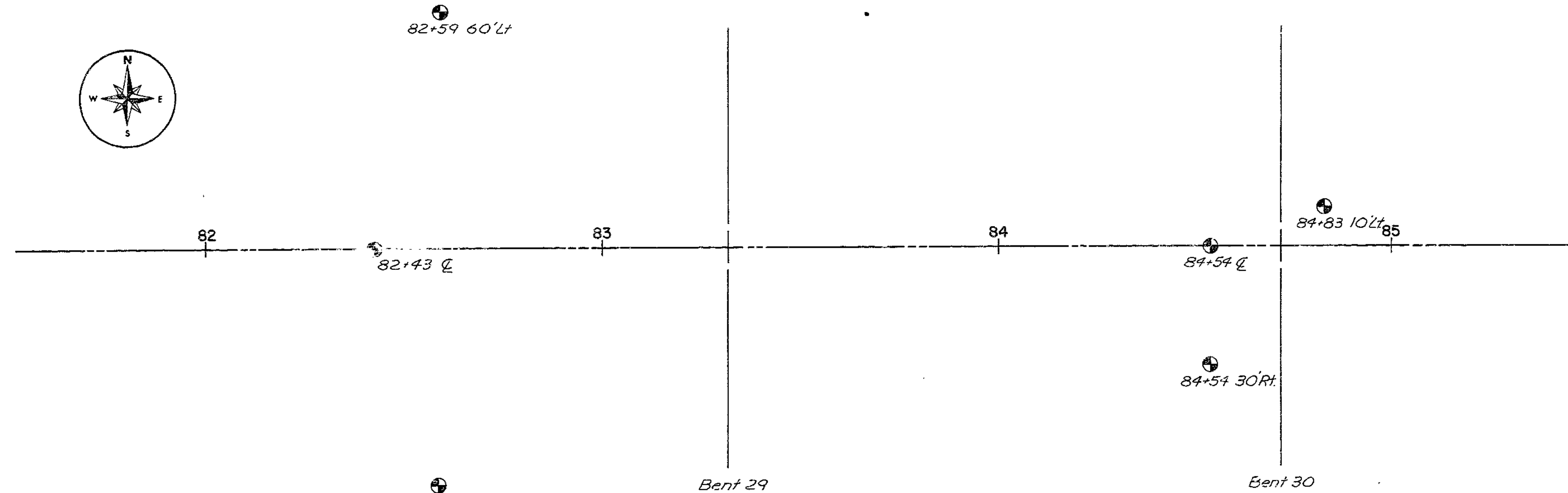
Sheet No. 13 of 82.

JACKSON COUNTY

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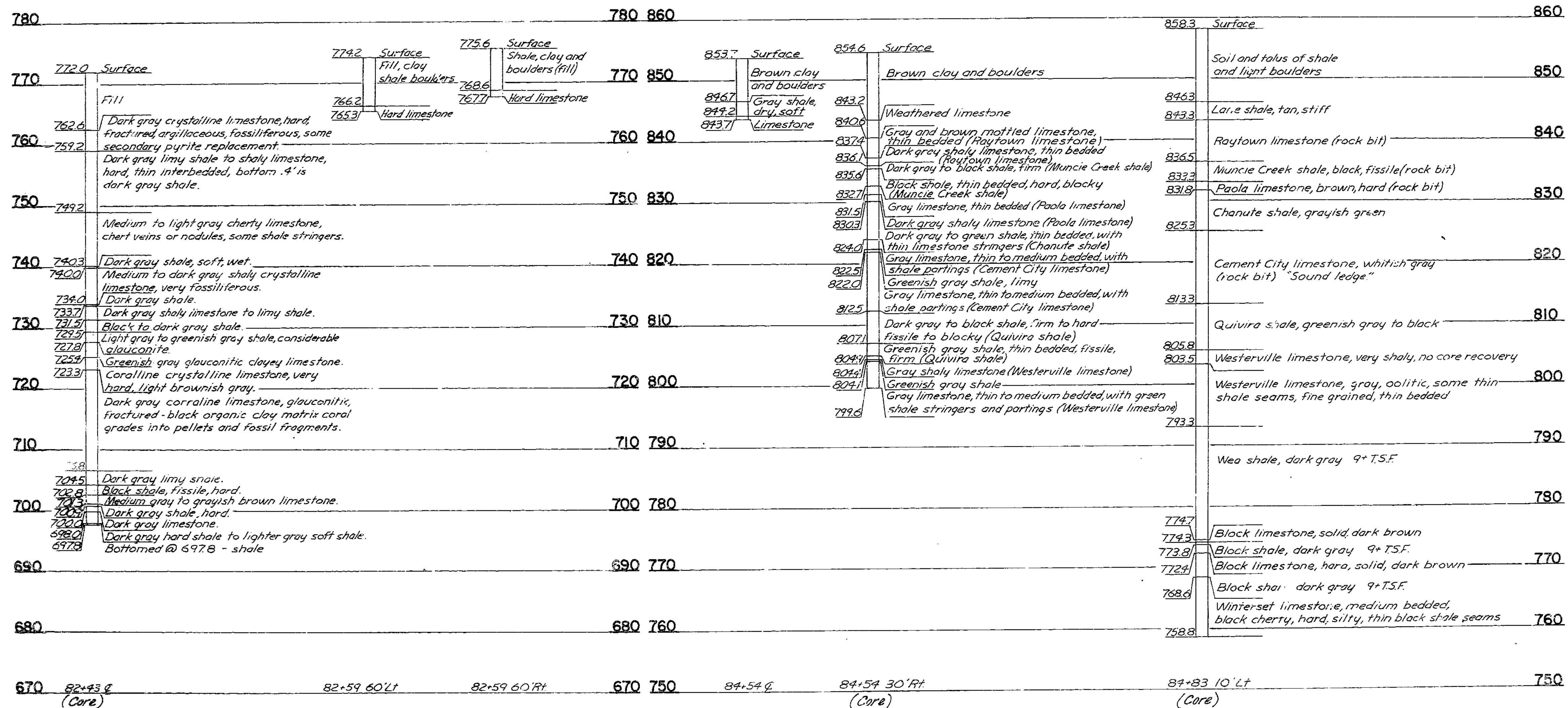
BORINGS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	83	



⊕ Indicates location of boring
 Note: The borings shown on this sheet were dated June 16, 1969 and June 13, 1973. Cores were obtained in borings 82+43 Q, 84+54, 30' Rt and 84+83, 10' Lt.

BORING LOCATION SKETCH



NOTE: Subsurface information shown on this drawing was obtained solely for use in establishing design controls for the project. The accuracy of this information is not guaranteed and it is not to be construed as part of the plans governing construction of the project.

283

DETAILED 1078
 CHECKED 1078

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 14 of 80.

JACKSON COUNTY

BORINGS

A-3136

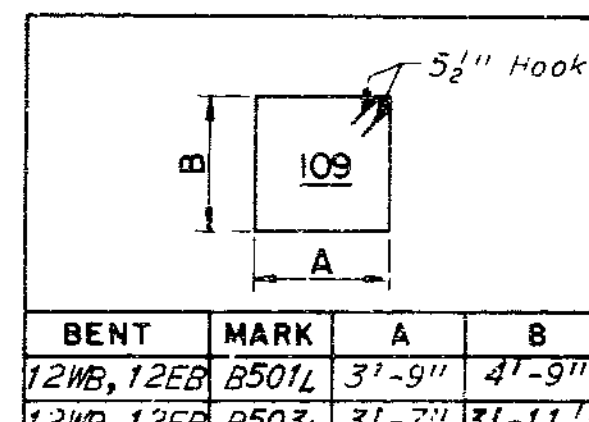
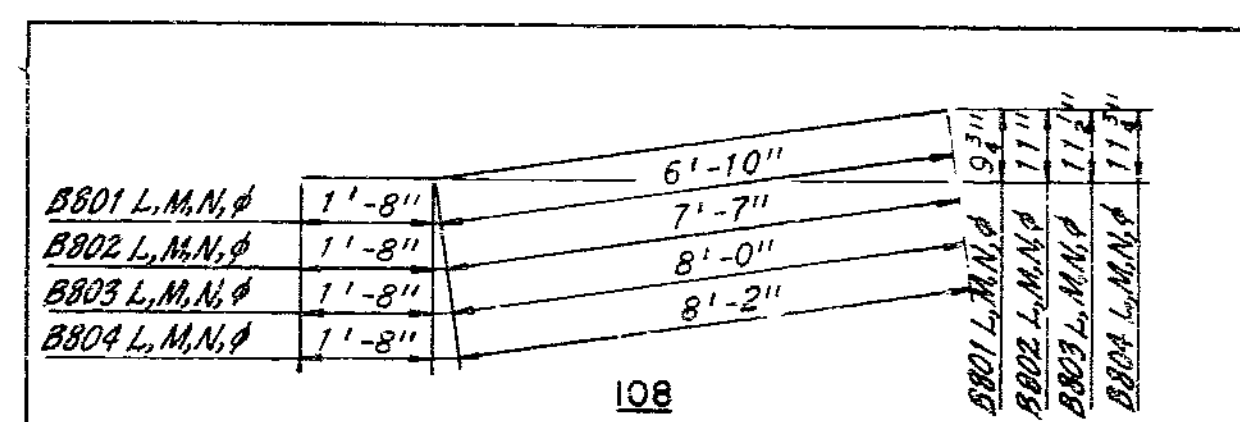
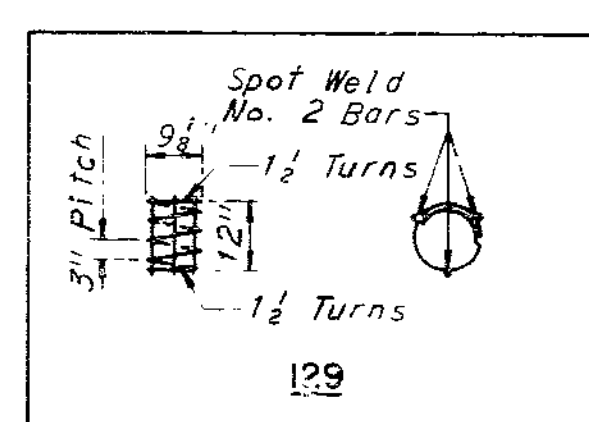
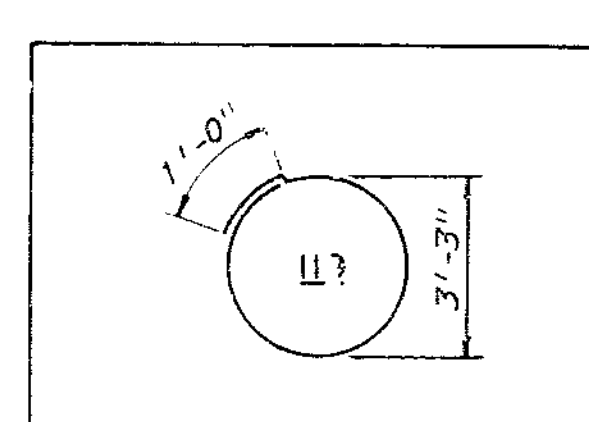
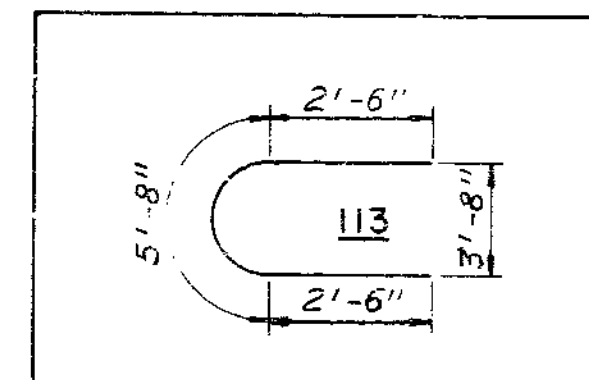
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		84	84	

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 12 WESTBOUND				
A201L	14	19'-9"	129	Capbeam
B401L	31	6'-1"	105	Capbeam
B402L	2	6'-0"	105	Capbeam
B403L	2	5'-7"	105	Capbeam
B501L	47	17'-7"	109	Capbeam
B502L	5	33'-10"	*109	Capbeam
B503L	2	16'-0"	109	Capbeam
B601L	4	52'-9"	Str.	Capbeam
B701L	10	10'-8"	113	Capbeam
B801L	4	8'-6"	108	Capbeam
B802L	4	9'-3"	108	Capbeam
B803L	4	9'-3"	108	Capbeam
B804L	4	9'-10"	108	Capbeam
B1001L	2	56'-5"	100	Capbeam
B1002L	2	58'-2"	100	Capbeam
B1003L	2	58'-9"	100	Capbeam
B1004L	2	59'-1"	100	Capbeam
B1005L	6	32'-0"	Str.	Capbeam
B1006L	8	44'-1"	100	Capbeam
C401L	41	11'-1"	119	Column
C1101L	10	24'-9"	Str.	Column
C1102L	10	23'-10"	Str.	Column
F501L	40	7'-8"	100	Footing
F1101L	20	13'-1"	101	Footing
BENT 12 EASTBOUND				
A201L	14	19'-9"	129	Capbeam
B401L	31	6'-1"	105	Capbeam
B402L	2	6'-0"	105	Capbeam
B403L	2	5'-7"	105	Capbeam
B501L	47	17'-7"	109	Capbeam
B502L	5	33'-10"	*109	Capbeam
B503L	2	16'-0"	109	Capbeam
B601L	4	52'-9"	Str.	Capbeam
B701L	10	10'-8"	113	Capbeam
B801L	4	8'-6"	108	Capbeam
B802L	4	9'-3"	108	Capbeam
B803L	4	9'-3"	108	Capbeam
B804L	4	9'-10"	108	Capbeam
B1001L	2	56'-5"	100	Capbeam
B1002L	2	58'-2"	100	Capbeam
B1003L	2	58'-9"	100	Capbeam
B1004L	2	59'-1"	100	Capbeam
B1005L	6	32'-0"	Str.	Capbeam
B1006L	8	44'-1"	100	Capbeam
C401L	37	11'-1"	119	Column
C1103L	10	23'-3"	Str.	Column
C1104L	10	22'-4"	Str.	Column
F501L	40	7'-8"	100	Footing
F1101L	20	13'-1"	101	Footing

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 13 WESTBOUND				
A201M	14	19'-9"	129	Capbeam
B401M	31	6'-1"	105	Capbeam
B402M	2	6'-0"	105	Capbeam
B403M	2	5'-7"	105	Capbeam
B501M	11	17'-7"	109	Capbeam
B502M	64	15'-7"	109	Capbeam
B503M	9	33'-8"	*109	Capbeam
B504M	2	15'-8"	109	Capbeam
B601M	4	52'-10"	Str.	Capbeam
B701M	10	10'-8"	113	Capbeam
B801M	4	8'-6"	108	Capbeam
B802M	4	9'-3"	108	Capbeam
B803M	4	9'-3"	108	Capbeam
B804M	4	9'-10"	108	Capbeam
B1101M	2	56'-10"	100	Capbeam
B1102M	2	58'-7"	100	Capbeam
B1103M	2	59'-2"	100	Capbeam
B1104M	2	59'-6"	100	Capbeam
B1105M	8	44'-6"	100	Capbeam
B1106M	8	32'-0"	Str.	Capbeam
C401M	40	11'-1"	119	Column
C1103M	10	24'-5"	Str.	Column
C1104M	10	23'-8"	Str.	Column
F701M	48	10'-2"	100	Footing
F1101M	20	13'-1"	101	Footing
BENT 13 EASTBOUND				
A201M	14	19'-9"	129	Capbeam
B401M	31	6'-1"	105	Capbeam
B402M	2	6'-0"	105	Capbeam
B403M	2	5'-7"	105	Capbeam
B501M	11	17'-7"	109	Capbeam
B502M	64	15'-7"	109	Capbeam
B503M	9	33'-8"	*109	Capbeam
B504M	2	15'-8"	109	Capbeam
B601M	4	52'-10"	Str.	Capbeam
B701M	10	10'-8"	113	Capbeam
B801M	4	8'-6"	108	Capbeam
B802M	4	9'-3"	108	Capbeam
B803M	4	9'-3"	108	Capbeam
B804M	4	9'-10"	108	Capbeam
B1101M	2	56'-10"	100	Capbeam
B1102M	2	58'-7"	100	Capbeam
B1103M	2	59'-2"	100	Capbeam
B1104M	2	59'-6"	100	Capbeam
B1105M	8	44'-6"	100	Capbeam
B1106M	8	32'-0"	Str.	Capbeam
C401M	37	11'-1"	119	Column
C1103M	10	23'-0"	Str.	Column
C1104M	10	22'-1"	Str.	Column
F701M	48	10'-2"	100	Footing
F1101M	20	13'-1"	101	Footing

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 14 WESTBOUND				
A201N	14	19'-9"	129	Capbeam
B401N	31	6'-1"	105	Capbeam
B402N	2	6'-0"	105	Capbeam
B403N	2	5'-7"	105	Capbeam
B501N	11	17'-7"	109	Capbeam
B502N	64	15'-7"	109	Capbeam
B503N	9	33'-8"	*109	Capbeam
B504N	2	15'-8"	109	Capbeam
B601N	4	52'-10"	Str.	Capbeam
B701N	10	10'-8"	113	Capbeam
B801N	4	8'-6"	108	Capbeam
B802N	4	9'-3"	108	Capbeam
B803N	4	9'-3"	108	Capbeam
B804N	4	9'-10"	108	Capbeam
B1101N	2	56'-11"	100	Capbeam
B1102N	2	58'-8"	100	Capbeam
B1103N	2	59'-3"	100	Capbeam
B1104N	2	59'-7"	100	Capbeam
B1105N	8	44'-7"	100	Capbeam
B1106N	8	16'-0"	Str.	Capbeam
C401N	43	11'-1"	119	Column
C1001N	12	26'-3"	Str.	Column
C1002N	12	25'-4"	Str.	Column
F601N	24	8'-4"	100	Footing
F701N	24	10'-2"	100	Footing
F802N	24	13'-7"	101	Footing
F100N	24	12'-11"	101	Footing
BENT 14 EASTBOUND				
A201N	14	19'-9"	129	Capbeam
B401N	31	6'-1"	105	Capbeam
B402N	2	6'-0"	105	Capbeam
B403N	2	5'-7"	105	Capbeam
B501N	11	17'-7"	109	Capbeam
B502N	64	15'-7"	109	Capbeam
B503N	9	33'-8"	*109	Capbeam
B504N	2	15'-8"	109	Capbeam
B601N	4	52'-10"	Str.	Capbeam
B701N	10	10'-8"	113	Capbeam
B801N	4	8'-6"	108	Capbeam
B802N	4	9'-3"	108	Capbeam
B803N	4	9'-3"	108	Capbeam
B804N	4	9'-10"	108	Capbeam
B1101N	2	56'-11"	100	Capbeam
B1102N	2	58'-8"	100	Capbeam
B1103N	2	59'-3"	100	Capbeam
B1104N	2	59'-7"	100	Capbeam
B1105N	8	44'-7"	100	Capbeam
B1106N	8	16'-0"	Str.	Capbeam
C401N	41	11'-1"	119	Column
C1003N	12	24'-10"	Str.	Column
C1004N	12	23'-11"	Str.	Column
F601N	24	8'-4"	100	Footing
F701N	24	10'-2"	100	Footing
F802N	24	13'-7"	101	Footing
F100N	24	12'-11"	101	Footing

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 15 WESTBOUND				
A201P	14	19'-9"	129	Capbeam
B401P	31	6'-1"	105	Capbeam
B402P	2	6'-0"	105	Capbeam
B403P	2	5'-7"	105	Capbeam
B501P	11	17'-7"	109	Capbeam
B502P	64	15'-7"	109	Capbeam
B503P	9	33'-8"	*109	Capbeam
B504P	2	15'-8"	109	Capbeam
B601P	4	52'-10"	Str.	Capbeam
B701P	10	10'-8"	113	Capbeam
B801P	4	8'-6"	108	Capbeam
B802P	4	9'-3"	108	Capbeam
B803P	4	9'-3"	108	Capbeam
B804P	4	9'-10"	108	Capbeam
B1101P	2	57'-0"	100	Capbeam
B1102P	2	58'-9"	100	Capbeam
B1103P	2	59'-4"	100	Capbeam
B1104P	2	59'-8"	100	Capbeam
B1105P	8	44'-8"	100	Capbeam
B1106P	8	44'-8"	100	Capbeam
C401P	45	11'-1"	119	Column
C1101P	10	27'-0"	Str.	Column
C1102P	10	26'-2"	Str.	Column
F701P	48	10'-2"	100	Footing
F1101P	20	13'-1"	101	Footing
BENT 15 EASTBOUND				
A201P	14	19'-9"	129	Capbeam
B401P	31	6'-1"	105	Capbeam
B402P	2	6'-0"	105	Capbeam
B403P	2	5'-7"	105	Capbeam
B501P	11	17'-7"	109	Capbeam
B502P	64	15'-7"	109	Capbeam
B503P	9	33'-8"	*109	Capbeam
B504P	2	15'-8"	109	Capbeam
B601P	4	52'-10"	Str.	Capbeam
B701P	10	10'-8"	113	Capbeam
B801P	4	8'-6"	108	Capbeam
B802P	4	9'-3"	108	Capbeam
B803P	4	9'-3"	108	Capbeam
B804P	4	9'-10"	108	Capbeam
B1101P	2	57'-0"	100	Capbeam
B1102P	2	58'-9"	100	Capbeam
B1103P	2	59'-4"	100	Capbeam
B1104P	2	59'-8"	100	Capbeam
B1105P	8	44'-8"	100	Capbeam
B1106P	8	44'-8"	100	Capbeam
C401P	43	11'-1"	119	Column
C1103P	10	25'-8"	Str.	Column
C1104P	10	24'-10"	Str.	Column
F701P	48	10'-2"	100	Footing
F1101P	20	13'-1"	101	Footing



BENT	MARK	A	B
12WB	F1101L	11'-6"	11'-7"
12EB	F1101L	11'-6"	11'-7"
13WB	F1101M	11'-6"	11'-7"
13EB	F1101M	11'-6"	11'-7"
14WB	F 802N	12'-8"	11"
14EB	F1001N	11'-6"	11'-5"
15WB	F1101P	11'-6"	11'-7"
15EB	F1101P	11'-6"	11'-7"

BENT	MARK	A	B
12WB	B1001L	53'-7"	11'-5"
12WB	B1002L	55'-4"	11'-5"
12WB	B1003L	55'-11"	11'-5"
12WB	B1004L</		

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		85		

BILL OF REINFORCEMENT					
MARK	NO.	LENGTH	SHAPE	LOCATION	
BENT 16 WESTBOUND					
A201p	14	19'-9"	129	Capbeam	
B401p	31	6'-1"	105	Capbeam	
B402p	2	6'-0"	105	Capbeam	
B403p	2	5'-7"	105	Capbeam	
B501p	47	17'-7"	109	Capbeam	
B502p	5	33'-10"	*109	Capbeam	
B503p	2	15'-8"	109	Capbeam	
B601p	4	53'-0"	Str.	Capbeam	
B701p	10	10'-8"	113	Capbeam	
B801p	4	8'-6"	108	Capbeam	
B802p	4	9'-3"	108	Capbeam	
B803p	4	9'-8"	108	Capbeam	
B804p	4	9'-10"	108	Capbeam	
B1001p	2	56'-9"	100	Capbeam	
B1002p	2	58'-6"	100	Capbeam	
B1003p	2	59'-1"	100	Capbeam	
B1004p	2	59'-5"	100	Capbeam	
B1005p	6	32'-0"	Str.	Capbeam	
B1006p	8	44'-5"	100	Capbeam	
C401p	47	11'-1"	119	Column	
C1101p	12	27'-11"	Str.	Column	
C1102p	12	27'-2"	Str.	Column	
F701p	48	10'-2"	100	Footing	
F1101p	24	13'-1"	101	Footing	
BENT 16 EASTBOUND					
A201p	14	19'-9"	129	Capbeam	
B401p	31	6'-1"	105	Capbeam	
B402p	2	6'-0"	105	Capbeam	
B403p	2	5'-7"	105	Capbeam	
B501p	47	17'-7"	109	Capbeam	
B502p	5	33'-10"	*109	Capbeam	
B503p	2	15'-8"	109	Capbeam	
B601p	4	53'-0"	Str.	Capbeam	
B701p	10	10'-8"	113	Capbeam	
B801p	4	8'-6"	108	Capbeam	
B802p	4	9'-3"	108	Capbeam	
B803p	4	9'-8"	108	Capbeam	
B804p	4	9'-10"	108	Capbeam	
B1001p	2	56'-9"	100	Capbeam	
B1002p	2	58'-6"	100	Capbeam	
B1003p	2	59'-1"	100	Capbeam	
B1004p	2	59'-5"	100	Capbeam	
B1005p	6	32'-0"	Str.	Capbeam	
B1006p	8	44'-5"	100	Capbeam	
C401p	45	11'-1"	119	Column	
C1103p	12	26'-8"	Str.	Column	
C1104p	12	25'-11"	Str.	Column	
F701p	48	10'-2"	100	Footing	
F1101p	24	13'-1"	101	Footing	

BILL OF REINFORCEMENT					
MARK	NO.	LENGTH	SHAPE	LOCATION	
BENT 17 WESTBOUND					
A201q	14	19'-9"	129	Capbeam	
B401q	31	6'-1"	105	Capbeam	
B402q	2	6'-0"	105	Capbeam	
B403q	2	5'-7"	105	Capbeam	
B501q	11	17'-7"	109	Capbeam	
B502q	64	15'-7"	109	Capbeam	
B503q	9	33'-8"	*109	Capbeam	
B601q	2	15'-8"	109	Capbeam	
B601q	4	53'-0"	Str.	Capbeam	
B701q	10	10'-8"	113	Capbeam	
B801q	4	8'-6"	108	Capbeam	
B802q	4	9'-3"	108	Capbeam	
B803q	4	9'-8"	108	Capbeam	
B804q	4	9'-10"	108	Capbeam	
B1101q	2	57'-2"	100	Capbeam	
B1102q	2	58'-11"	100	Capbeam	
B1103q	2	59'-1"	100	Capbeam	
B1104q	2	59'-8"	100	Capbeam	
B1105q	8	32'-0"	Str.	Capbeam	
B1106q	8	44'-10"	100	Capbeam	
C401q	50	11'-1"	119	Column	
C1001q	12	28'-4"	Str.	Column	
C1002q	12	28'-7"	Str.	Column	
F601q	24	8'-4"	100	Footing	
F701q	24	10'-2"	100	Footing	
F801q	24	13'-7"	101	Footing	
F1001q	24	12'-11"	101	Footing	
BENT 17 EASTBOUND					
A201q	14	19'-9"	129	Capbeam	
B401q	31	6'-1"	105	Capbeam	
B402q	2	6'-0"	105	Capbeam	
B403q	2	5'-7"	105	Capbeam	
B501q	11	17'-7"	109	Capbeam	
B502q	64	15'-7"	109	Capbeam	
B503q	9	33'-8"	*109	Capbeam	
B601q	2	15'-8"	109	Capbeam	
B601q	4	53'-0"	Str.	Capbeam	
B701q	10	10'-8"	113	Capbeam	
B801q	4	8'-6"	108	Capbeam	
B802q	4	9'-3"	108	Capbeam	
B803q	4	9'-8"	108	Capbeam	
B804q	4	9'-10"	108	Capbeam	
B1101q	2	57'-2"	100	Capbeam	
B1102q	2	58'-11"	100	Capbeam	
B1103q	2	59'-1"	100	Capbeam	
B1104q	2	59'-8"	100	Capbeam	
B1105q	8	32'-0"	Str.	Capbeam	
B1106q	8	44'-10"	100	Capbeam	
C401q	47	11'-1"	119	Column	
C1003q	12	28'-1"	Str.	Column	
C1004q	12	27'-5"	Str.	Column	
F601q	24	8'-4"	100	Footing	
F701q	24	10'-2"	100	Footing	
F801q	24	13'-7"	101	Footing	
F1001q	24	12'-11"	101	Footing	

BILL OF REINFORCEMENT					
MARK	NO.	LENGTH	SHAPE	LOCATION	
BENT 18 WESTBOUND					
A201r	14	19'-9"	129	Capbeam	
B401r	31	6'-1"	105	Capbeam	
B402r	2	6'-0"	105	Capbeam	
B403r	2	5'-7"	105	Capbeam	
B501r	11	17'-7"	109	Capbeam	
B502r	64	15'-7"	109	Capbeam	
B503r	9	33'-8"	*109	Capbeam	
B601r	2	15'-8"	109	Capbeam	
B601r	4	53'-4"	Str.	Capbeam	
B701r	10	10'-8"	113	Capbeam	
B801r	4	8'-6"	108	Capbeam	
B802r	4	9'-3"	108	Capbeam	
B803r	4	9'-8"	108	Capbeam	
B804r	4	9'-10"	108	Capbeam	
B1101r	2	57'-4"	100	Capbeam	
B1102r	2	59'-1"	100	Capbeam	
B1103r	2	59'-8"	100	Capbeam	
B1104r	2	60'-0"	100	Capbeam	
B1105r	8	45'-0"	100	Capbeam	
B1106r	8	32'-0"	Str.	Capbeam	
B1107r	2	16'-0"	Str.	Capbeam	
C401r	54	11'-1"	119	Column	
C1101r	10	31'-6"	Str.	Column	
C1102r	10	30'-10"	Str.	Column	
F701r	48	10'-2"	100	Footing	
F1101r	20	13'-1"	101	Footing	
BENT 18 EASTBOUND					
A201r	14	19'-9"	129	Capbeam	
B401r	31	6'-1"	105	Capbeam	
B402r	2	6'-0"	105	Capbeam	
B403r	2	5'-7"	105	Capbeam	
B501r	11	17'-7"	109	Capbeam	
B502r	64	15'-7"	109	Capbeam	
B503r	9	33'-8"	*109	Capbeam	
B601r	2	15'-8"	109	Capbeam	
B601r	4	53'-4"	Str.	Capbeam	
B701r	10	10'-8"	113	Capbeam	
B801r	4	8'-6"	108	Capbeam	
B802r	4	9'-3"	108	Capbeam	
B803r	4	9'-8"	108	Capbeam	
B804r	4	9'-10"	108	Capbeam	
B1101r	2	57'-4"	100	Capbeam	
B1102r	2	59'-1"	100	Capbeam	
B1103r	2	59'-8"	100	Capbeam	
B1104r	2	60'-1"	100	Capbeam	
B1105r	8	32'-0"	Str.	Capbeam	
B1106r	8	44'-8"	100	Capbeam	
B1107r	2	16'-0"	Str.	Capbeam	
C401r	52	11'-1"	119	Column	
C1103r	10	30'-5"	Str.	Column	
C1104r	10	29'-9"	Str.	Column	
F701r	48	10'-2"	100	Footing	
F1101r	20	13'-1"	101	Footing	

BILL OF REINFORCEMENT					
MARK	NO.	LENGTH	SHAPE	LOCATION	
BENT 19 WESTBOUND					
A201s	14	19'-9"	129	Capbeam	
B401s	31	6'-1"	105	Capbeam	
B402s	2	6'-0"	105	Capbeam	
B403s	2	5'-7"	105	Capbeam	
B501s	11	17'-7"	109	Capbeam	
B502s	64	15'-7"	109	Capbeam	
B503s	9	33'-8"	*109	Capbeam	
B601s	2	15'-7"	109	Capbeam	
B601s	4	53'-5"	Str.	Capbeam	
B701s	10	10'-8"	113	Capbeam	
B801s	4	8'-6"	108	Capbeam	
B802s	4	9'-3"	108	Capbeam	
B803s	4	9'-8"	108	Capbeam	
B804s	4	9'-10"	108	Capbeam	
B1101s	2	57'-5"	100	Capbeam	
B1102s	2	60'-1"	100	Capbeam	
B1103s	2	59'-9"	100	Capbeam	
B1104s	2	60'-0"	100	Capbeam	
B1105s	8	32'-0"	Str.	Capbeam	
B1106s	8	44'-8"	100	Capbeam	
D401s	16	11'-1"	119	Collision Wall	
D501s	42	4'-0"	105	Collision Wall	
D502s	48	7'-3"	Str.	Collision Wall	
D503s	14	21'-8"	120	Collision Wall	
D504s	16	20'-5"	108	Collision Wall	
D801s	2	23'-2"	120	Collision Wall	
D802s	4	21'-7"	108	Collision Wall	
D1101s	12	35'-4"	Str.	Collision Wall	
D1102s	12	34'-9"	Str.	Collision Wall	
F501s	10	5'-11"	101	Footing	
F601s	24	8'-4"	100	Footing	
F701s	24	10'-2"	100	Footing	
F1101s	24	14'-11"	101	Footing	
F1102s	24	21'-3"	101	Footing	
BENT 19 EASTBOUND					
A201s	14	19'-9"	129	Capbeam	
B401s	31	6'-1"	105	Capbeam	
B402s	2	6'-0"	105	Capbeam	
B403s	2	5'-7"	105	Capbeam	
B501s	11	17'-7"	109	Capbeam	
B502s	64	15'-7"	109	Capbeam	
B503s	9	33'-8"	*109	Capbeam	
B601s	2	15'-7"	109	Capbeam	
B601s	4	53'-5"	Str.	Capbeam	
B701s	10	10'-8"	113	Capbeam	
B801s	4	8'-6"	108	Capbeam	
B802s	4	9'-3"	108	Capbeam	
B803s	4	9'-8"	108	Capbeam	
B804s	4	9'-10"	108	Capbeam	
B1101s	2	57'-5"	100	Capbeam	
B1102s	2	59'-2"	100	Capbeam	
B1103s	2	59'-9"	10		

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FEDERAL ROAD DIST. NO.	CONTRACT NO.	TOTAL SHEETS
1	MS			86	

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 20 WESTBOUND				
A201 _T	14	19'-9"	129	Capbeam
B401 _T	31	6'-9"	105	Capbeam
B402 _T	2	6'-5"	105	Capbeam
B403 _T	2	5'-10"	105	Capbeam
B501 _T	37	20'-11"	109	Capbeam
B502 _T	6	40'-5"	*109	Capbeam
B503 _T	2	18'-11"	109	Capbeam
B601 _T	6	52'-11"	Str.	Capbeam
B701 _T	12	11'-8"	113	Capbeam
B801 _T	4	7'-5"	108	Capbeam
B802 _T	4	8'-7"	108	Capbeam
B803 _T	4	9'-0"	108	Capbeam
B804 _T	6	9'-3"	108	Capbeam
B1101 _T	2	56'-7"	100	Capbeam
B1102 _T	2	59'-11"	100	Capbeam
B1103 _T	2	59'-9"	100	Capbeam
B1104 _T	2	60'-3"	100	Capbeam
B1105 _T	1	60'-5"	100	Capbeam
B1106 _T	9	46'-3"	100	Capbeam
B1107 _T	2	32'-0"	Str.	Capbeam
C401 _T	62	14'-3"	119	Column
C1101 _T	16	35'-0"	Str.	Column
C1102 _T	16	34'-5"	Str.	Column
F601 _T	48	9'-10"	100	Footing
F1101 _T	32	13'-7"	101	Footing
BENT 20 EASTBOUND				
A201 _T	14	19'-9"	129	Capbeam
B401 _T	31	6'-9"	105	Capbeam
B402 _T	2	6'-5"	105	Capbeam
B403 _T	2	5'-10"	105	Capbeam
B501 _T	37	20'-11"	109	Capbeam
B502 _T	6	40'-5"	*109	Capbeam
B503 _T	2	18'-11"	109	Capbeam
B601 _T	6	52'-11"	Str.	Capbeam
B701 _T	12	11'-8"	113	Capbeam
B801 _T	4	7'-5"	108	Capbeam
B802 _T	4	8'-7"	108	Capbeam
B803 _T	4	9'-0"	108	Capbeam
B804 _T	6	9'-3"	108	Capbeam
B1101 _T	2	56'-7"	100	Capbeam
B1102 _T	2	59'-11"	100	Capbeam
B1103 _T	2	59'-9"	100	Capbeam
B1104 _T	2	60'-3"	100	Capbeam
B1105 _T	1	60'-5"	100	Capbeam
B1106 _T	9	46'-3"	100	Capbeam
B1107 _T	2	32'-0"	Str.	Capbeam
C401 _T	60	14'-3"	119	Column
C1103 _T	16	34'-1"	Str.	Column
C1104 _T	16	33'-6"	Str.	Column
F601 _T	48	9'-10"	100	Footing
F1101 _T	32	13'-7"	101	Footing

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 21 WESTBOUND				
A201 _U	14	19'-9"	129	Capbeam
B401 _U	36	6'-9"	105	Capbeam
B402 _U	2	6'-7"	105	Capbeam
B403 _U	2	6'-3"	105	Capbeam
B404 _U	2	5'-8"	105	Capbeam
B501 _U	19	20'-11"	109	Capbeam
B502 _U	8	40'-6"	*109	Capbeam
B503 _U	2	19'-1"	109	Capbeam
B601 _U	6	53'-1"	Str.	Capbeam
B602 _U	48	17'-10"	109	Capbeam
B701 _U	12	11'-8"	113	Capbeam
B801 _U	4	7'-5"	108	Capbeam
B802 _U	4	8'-7"	108	Capbeam
B803 _U	4	9'-0"	108	Capbeam
B804 _U	6	9'-3"	108	Capbeam
B1101 _U	2	56'-8"	100	Capbeam
B1102 _U	2	59'-0"	100	Capbeam
B1103 _U	2	59'-10"	100	Capbeam
B1104 _U	2	60'-4"	100	Capbeam
B1105 _U	1	60'-6"	100	Capbeam
B1106 _U	9	46'-5"	100	Capbeam
B1107 _U	11	32'-6"	Str.	Capbeam
C401 _U	73	14'-3"	119	Column
C1101 _U	16	40'-8"	Str.	Column
C1102 _U	16	40'-2"	Str.	Column
F701 _U	24	10'-2"	100	Footing
F702 _U	24	10'-8"	100	Footing
F1101 _U	32	13'-7"	101	Footing
BENT 21 EASTBOUND				
A201 _U	14	19'-9"	129	Capbeam
B401 _U	36	6'-9"	105	Capbeam
B402 _U	2	6'-7"	105	Capbeam
B403 _U	2	6'-3"	105	Capbeam
B404 _U	2	5'-8"	105	Capbeam
B501 _U	19	20'-11"	109	Capbeam
B502 _U	8	40'-6"	109	Capbeam
B503 _U	2	19'-1"	109	Capbeam
B601 _U	6	53'-1"	Str.	Capbeam
B602 _U	48	17'-10"	109	Capbeam
B701 _U	12	11'-8"	113	Capbeam
B801 _U	4	7'-5"	108	Capbeam
B802 _U	4	8'-7"	108	Capbeam
B803 _U	4	9'-0"	108	Capbeam
B804 _U	6	9'-3"	108	Capbeam
B1101 _U	2	56'-8"	100	Capbeam
B1102 _U	2	59'-0"	100	Capbeam
B1103 _U	2	59'-10"	100	Capbeam
B1104 _U	2	60'-4"	100	Capbeam
B1105 _U	1	60'-6"	100	Capbeam
B1106 _U	9	46'-5"	100	Capbeam
B1107 _U	11	32'-6"	Str.	Capbeam
C401 _U	71	14'-3"	119	Column
C1103 _U	16	39'-11"	Str.	Column
C1104 _U	16	39'-6"	Str.	Column
F701 _U	24	10'-2"	100	Footing
F702 _U	24	10'-8"	100	Footing
F1101 _U	32	13'-7"	101	Footing

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 22 WESTBOUND				
A201 _V	14	19'-9"	129	Capbeam
B401 _V	36	6'-9"	105	Capbeam
B402 _V	2	6'-7"	105	Capbeam
B403 _V	2	6'-3"	105	Capbeam
B404 _V	2	5'-8"	105	Capbeam
B501 _V	19	20'-11"	109	Capbeam
B502 _V	10	40'-6"	*109	Capbeam
B503 _V	2	19'-3"	109	Capbeam
B601 _V	6	53'-4"	Str.	Capbeam
B602 _V	56	17'-10"	109	Capbeam
B701 _V	12	11'-8"	113	Capbeam
B801 _V	4	7'-5"	108	Capbeam
B802 _V	4	8'-7"	108	Capbeam
B803 _V	4	9'-0"	108	Capbeam
B804 _V	6	9'-3"	108	Capbeam
B1101 _V	2	57'-0"	100	Capbeam
B1102 _V	2	59'-4"	100	Capbeam
B1103 _V	2	60'-2"	100	Capbeam
B1104 _V	2	60'-8"	100	Capbeam
B1105 _V	1	60'-10"	100	Capbeam
B1106 _V	9	46'-8"	100	Capbeam
B1107 _V	13	32'-6"	Str.	Capbeam
C401 _V	62	14'-3"	119	Column
C1101 _V	16	35'-3"	Str.	Column
C1102 _V	16	34'-9"	Str.	Column
D401 _V	20	14'-3"	119	Collision Wall
D501 _V	48	9'-2"-3"	Str.	Collision Wall
D502 _V	40	6'-6"	105	Collision Wall
D503 _V	36	22'-7"	120	Collision Wall
D504 _V	3	41'-0"	Str.	Collision Wall
D801 _V	4	24'-1"	120	Collision Wall
D802 _V	3	41'-0"	Str.	Collision Wall
F501 _V	12	6'-5"	101	Footing
F801 _V	48	12'-4"	100	Footing
F901 _V	32	18'-11"	101	Footing
F1101 _V	32	22'-11"	101	Footing
BENT 22 EASTBOUND				
A201 _V	14	19'-9"	129	Capbeam
B401 _V	36	6'-9"	105	Capbeam
B402 _V	2	6'-7"	105	Capbeam
B403 _V	2	6'-3"	105	Capbeam
B404 _V	2	5'-8"	105	Capbeam
B501 _V	19	20'-11"	109	Capbeam
B502 _V	10	40'-6"	*109	Capbeam
B503 _V	2	19'-3"	109	Capbeam
B601 _V	6	53'-4"	Str.	Capbeam
B602 _V	56	17'-10"	109	Capbeam
B701 _V	12	11'-8"	113	Capbeam
B801 _V	4	7'-5"	108	Capbeam
B802 _V	4	8'-7"	108	Capbeam
B803 _V	4	9'-0"	108	Capbeam
B804 _V	6	9'-3"	108	Capbeam
B1101 _V	2	57'-0"	100	Capbeam
B1102 _V	2	59'-4"	100	Capbeam
B1103 _V	2	60'-2"	100	Capbeam
B1104 _V	2	60'-8"	100	Capbeam
B1105 _V	1	60'-10"	100	Capbeam
B1106 _V	9	46'-8"	100	Capbeam
B1107 _V	13	32'-6"	Str.	Capbeam
C401 _V	62	14'-3"	119	Column
C1101 _V	16	35'-3"	Str.	Column
C1102 _V	16	34'-9"	Str.	Column
D401 _V	20	14'-3"	119	Collision Wall
D501 _V	48	9'-2"-3"	Str.	Collision Wall
D502 _V	40	6'-6"	105	Collision Wall
D503 _V	36	22'-7"	120	Collision Wall
D504 _V	3	41'-0"	Str.	Collision Wall
D801 _V	4	24'-1"	120	Collision Wall
D802 _V	3	41'-0"	Str.	Collision Wall
F501 _V	12	6'-5"	101	Footing
F801 _V	48	12'-4"	100	Footing
F901 _V	32	18'-11"	101	Footing
F1101 _V	32	22'-11"	101	Footing

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 22 EASTBOUND (cont.)				
B1103 _V	2	60'-2"	100	Capbeam
B1104 _V	2	60'-8"	100	Capbeam
B1105 _V	1	60'-10"	100	Capbeam
B1106 _V	9	46'-8"	100	Capbeam
B1107 _V	13	32'-6"	Str.	Capbeam
C401 _V	61	14'-3"	119	Column
C1103 _V	16	34'-6"	Str.	Column
C1104 _V	16	34'-2"	Str.	Column
D401 _V	20	14'-3"	119	Collision Wall
D501 _V	48	9'-2"-3"	Str.	Collision Wall
D502 _V	40	6'-6"	105	Collision Wall
D503 _V	36	22'-7"	120	Collision Wall
D504 _V	3	41'-0"	Str.	Collision Wall
D801 _V	4	24'-1"	120	Collision Wall
D802 _V	3	41'-0"	Str.	Collision Wall
F501 _V	12	6'-5"	101	Footing
F801 _V	48	12'-4"	100	Footing
F901 _V	32	18'-11"	101	Footing
F1101 _V	32	22'-11"	101	Footing
Diagram 101: U-shaped capbeam with dimensions 2'-6" and 6'-8".				
Diagram 102: Circular capbeam with diameter 1'-0" and height 4'-3".				
Diagram 103: Spot weld detail showing 2 bars with 1/2 turns.				
Diagram 104: Footing detail with dimensions 1'-8", 5'-9", 6'-11", 7'-4", 7'-7".				
Diagram 105: Rectangular capbeam with dimensions A and B.				
Diagram 106: Rectangular capbeam with dimensions A and B.				
Diagram 107: Rectangular footing with dimensions A, B, C, D, E.				
Diagram 108: Footing detail with dimensions 1'-8", 5'-9", 6'-11", 7'-4", 7'-7".				
Diagram 109: Rectangular capbeam with dimensions A and B.				
Diagram 110: Rectangular capbeam with dimensions A and B.				
Diagram 111: Rectangular footing with dimensions A, B, C, D, E.				
Diagram 112: Footing detail with dimensions 1'-8", 5'-9", 6'-11", 7'-4", 7'-7".				
Diagram 113: Rectangular capbeam with dimensions A and B.				
Diagram 114: Rectangular capbeam with dimensions A and B.				
Diagram 115: Rectangular footing with dimensions A, B, C, D, E.				
Diagram 116: Footing detail with dimensions 1'-8				

FED. ROAD DIST. NO.	SECTION	FED. AID PROJ. NO.	FISCAL YEAR	CONTRACT NO.	SHEET NO.
				87	

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 23 WESTBOUND				
A201W	14	19'-9"	129	Capbeam
B401W	36	6'-9"	105	Capbeam
B402W	2	6'-4"	105	Capbeam
B403W	2	5'-9"	105	Capbeam
B404W	2	6'-8"	105	Capbeam
B501W	18	20'-11"	109	Capbeam
B504W	8	40'-6"	*109	Capbeam
B503W	2	18'-7"	109	Capbeam
B601W	6	52'-1"	Str.	Capbeam
B602W	52	17'-10"	109	Capbeam
B701W	12	11'-8"	113	Capbeam
B801W	4	7'-5"	108	Capbeam
B802W	4	8'-7"	108	Capbeam
B803W	4	9'-0"	108	Capbeam
B804W	6	9'-3"	108	Capbeam
B1101W	2	55'-9"	100	Capbeam
B1102W	2	58'-11"	100	Capbeam
B1105W	2	58'-11"	100	Capbeam
B1104W	2	59'-5"	100	Capbeam
B1105W	2	52'-0"	Str.	Capbeam
B1106W	9	31'-6"	Str.	Capbeam
B1107W	9	45'-5"	100	Capbeam
C401W	92	14'-3"	119	Column
C1101W	32	49'-8"	Str.	Column
BENT 23 EASTBOUND				
A201W	14	19'-9"	129	Capbeam
B401W	36	6'-9"	105	Capbeam
B402W	2	6'-4"	105	Capbeam
B403W	2	5'-9"	105	Capbeam
B404W	2	6'-8"	105	Capbeam
B501W	18	20'-11"	109	Capbeam
B504W	8	40'-6"	*109	Capbeam
B503W	2	18'-7"	109	Capbeam
B601W	6	52'-1"	Str.	Capbeam
B602W	43	17'-10"	109	Capbeam
B701W	12	11'-8"	113	Capbeam
B801W	4	7'-5"	108	Capbeam
B802W	4	8'-7"	108	Capbeam
B803W	4	9'-0"	108	Capbeam
B804W	6	9'-3"	108	Capbeam
B1101W	2	55'-9"	100	Capbeam
B1102W	2	58'-11"	100	Capbeam
B1103W	2	58'-11"	100	Capbeam
B1104W	2	59'-5"	100	Capbeam
B1105W	2	52'-0"	Str.	Capbeam
B1106W	9	31'-6"	Str.	Capbeam
B1107W	9	45'-5"	100	Capbeam
C401W	91	14'-3"	119	Column
C1102W	16	49'-7"	Str.	Column
C1103W	15	49'-3"	Str.	Column
BENT 24 WESTBOUND				
A201W	14	23'-0"	129	Beam
B401W	16	4'-7"	105	Beam
B601W	71	19'-8"	109	Beam
B602W	2	19'-0"	109	Beam
B603W	2	17'-8"	109	Beam
B604W	6	33'-0"	Str.	Beam
B605W	6	31'-3"	Str.	Beam
B606W	6	33'-0"	Str.	Beam
C401W	94	15'-10"	119	Column
C1103W	5	46'-0"	Str.	Column
BENT 24 EASTBOUND				
A201W	14	23'-0"	129	Beam
B401W	16	4'-7"	105	Beam
B601W	71	19'-8"	109	Beam
B602W	2	19'-0"	109	Beam
B603W	2	17'-8"	109	Beam
B604W	6	33'-0"	Str.	Beam
B605W	6	31'-3"	Str.	Beam
B606W	6	33'-0"	Str.	Beam
C401W	94	15'-10"	119	Column
C1103W	5	46'-0"	Str.	Column
BENT 24 RAMP E-W				
A201W	8	23'-0"	129	Capbeam
B401W	12	4'-9"	105	Capbeam
B402W	2	4'-4"	105	Capbeam
B501W	20	10'-10"	105	Capbeam
B502W	14	21'-0"	*105	Capbeam
B503W	4	9'-1"	105	Capbeam
B701W	6	22'-9"	Str.	Capbeam
B702W	8	11'-0"	113	Capbeam
B703W	4	13'-11"	108	Capbeam

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 24 WESTBOUND (cont.)				
B601W	29	19'-8"	109	Beam
B602W	1	19'-0"	109	Beam
B603W	1	17'-8"	109	Beam
B604W	6	31'-3"	Str.	Beam
B605W	6	33'-0"	Str.	Beam
C401W	94	15'-10"	119	Column
C1101W	36	46'-5"	Str.	Column
BENT 24 EASTBOUND (cont.)				
D401W	18	15'-10"	119	Collision Wall
D501W	40	4'-6"	105	Collision Wall
D502W	46	8'-9"	Str.	Collision Wall
D503W	14	21'-4"	120	Collision Wall
D504W	7	37'-2"	Str.	Collision Wall
D601W	2	21'-7"	120	Collision Wall
D602W	2	38'-0"	Str.	Collision Wall
D801W	2	22'-10"	120	Collision Wall
D802W	2	38'-0"	Str.	Collision Wall
F501W	10	6'-11"	101	Footing
F502W	28	9'-8"	100	Footing
F801W	24	16'-4"	100	Footing
F1101W	36	23'-1"	101	Footing
BENT 24 RAMP E-W (cont.)				
A201W	8	23'-0"	129	Capbeam
B401W	12	4'-9"	105	Capbeam
B402W	2	4'-4"	105	Capbeam
B501W	20	10'-10"	105	Capbeam
B502W	14	21'-0"	*105	Capbeam
B503W	4	9'-1"	105	Capbeam
B701W	6	22'-9"	Str.	Capbeam
B702W	8	11'-0"	113	Capbeam
B703W	4	13'-11"	108	Capbeam

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 24 RAMP E-W (cont.)				
B704W	4	12'-3"	108	Capbeam
B801W	20	17'-5"	101	Capbeam
C401W	100	13'-6"	113	Shaft
C402W	550	4'-8"	116	Shaft
C1101W	36	54'-0"	Str.	Shaft
F501W	33	14'-6"	Str.	Footing
F502W	15	32'-6"	Str.	Footing
F701W	34	16'-2"	100	Footing
F1101W	15	35'-8"	100	Footing
F1102W	36	15'-1"	101	Footing
BENT 25 WESTBOUND				
A201W	24	23'-0"	129	Beam
B401W	18	5'-8"	105	Beam
B402W	1	4'-6"	105	Beam
B801W	2	14'-6"	Str.	Beam
B802W	2	17'-1"	Str.	Beam
B1101W	10	29'-4"	Str.	Beam
B1102W	6	31'-0"	Str.	Beam
B1103W	6	34'-8"	Str.	Beam
B1104W	14	28'-8"	Str.	Beam
B1105W	6	32'-10"	Str.	Beam
C401W	150	19'-6"	109	Column
C402W	1272	5'-8"	116	Column
C1101W	24	53'-1"	Str.	Column
C1102W	60	51'-5"	Str.	Column
D401W	30	19'-6"	109	Collision Wall
D501W	84	8'-9"	Str.	Collision Wall
D502W	70	6'-10"	105	Collision Wall
D503W	36	36'-7"	Str.	Collision Wall
D701W	5	51'-0"	Str.	Collision Wall
D702W	5	23'-5"	Str.	Collision Wall
D801W	5	51'-0"	Str.	Collision Wall
D802W	5	27'-5"	Str.	Collision Wall
F501W	28	6'-11"	101	Footing
F901W	48	17'-0"	100	Footing
F1101W	48	17'-4"	100	Footing
F1102W	84	23'-1"	101	Footing
BENT 25 EASTBOUND				
A201W	14	23'-0"	129	Beam
B401W	13	4'-11"	105	Beam
B601W	8	59'-6"	Str.	Beam
B602W	10	19'-9"	Str.	Beam
B1101W	18	31'-3"	Str.	Beam
B1102W	6	59'-6"	Str.	Beam
C401W	104	15'-10"	119	Column
C1101W	28	49'-6"	Str.	Column
C1102W	8	51'-9"	Str.	Column

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 25 EASTBOUND (cont.)				
D401W	18	15'-10"	119	Collision Wall
D501W	40	21'-4"	120	Collision Wall
D502W	3	38'-8"	Str.	Collision Wall
D503W	44	8'-9"	Str.	Collision Wall
D504W	36	7'-0"	105	Collision Wall
D801W	4	22'-10"	120	Collision Wall
D802W	3	38'-8"	Str.	Collision Wall
F501W	12	6'-11"	101	Footing
F801W	24	12'-4"	100	Footing
F802W	36	20'-7"	101	Footing
F901W	24	14'-0"	100	Footing
F1101W	36	24'-11"	101	Footing
BENT 26 WESTBOUND				
A201W	22	23'-0"	129	Beam
B401W	23	4'-7"	105	Beam
B1004W	10	19'-9"	Str.	Beam
B1005W	6	30'-4"	Str.	Beam
B1006W	6	59'-8"	Str.	Beam
B1007W	12	52'-9"	Str.	Beam
B1008W	6	34'-6"	Str.	Beam
B1009W	8	30'-8"	Str.	Beam
C401W	159	19'-6"	109	Column
C402W	1272	5'-8"	116	Column
C1101W	24	53'-1"	Str.	Column
C1102W	60	51'-5"	Str.	Column
D401W	30	19'-6"	109	Collision Wall
D501W	84	8'-9"	Str.	Collision Wall
D502W	70	6'-10"	105	Collision Wall
D503W	36	36'-7"	Str.	Collision Wall
D701W	5	51'-0"	Str.	Collision Wall
D702W	5	23'-5"	Str.	Collision Wall
D801W	5	51'-0"	Str.	Collision Wall
D802W	5	27'-5"	Str.	Collision Wall
F501W	28	6'-11"	101	Footing
F901W	48	17'-0"	100	Footing
F1101W	48	17'-4"	100	Footing
F1102W	84	23'-1"	101	Footing

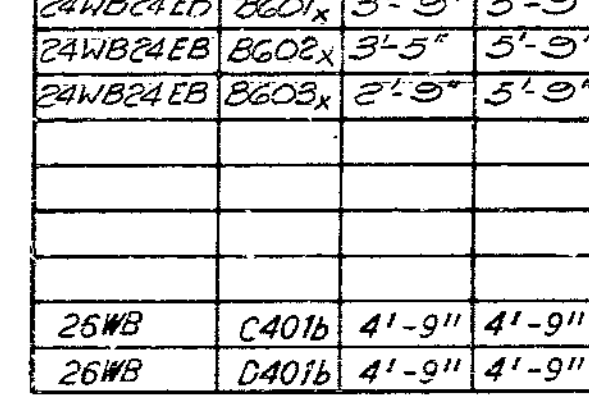
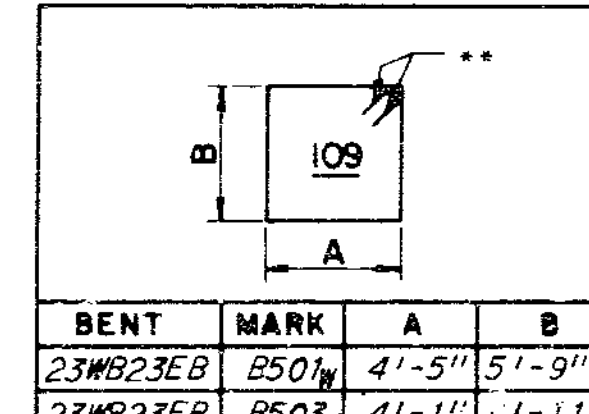
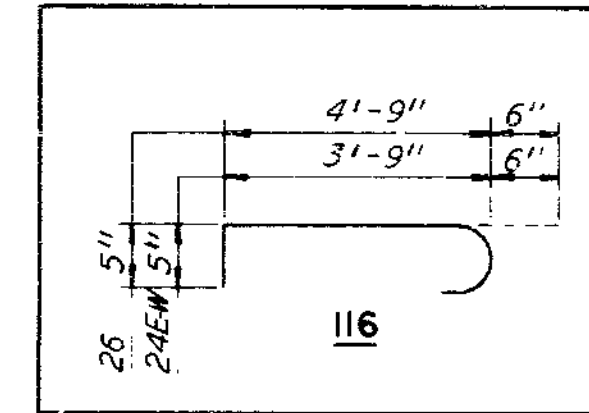
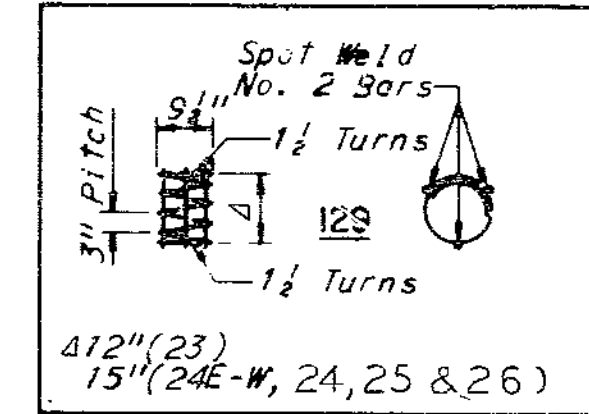
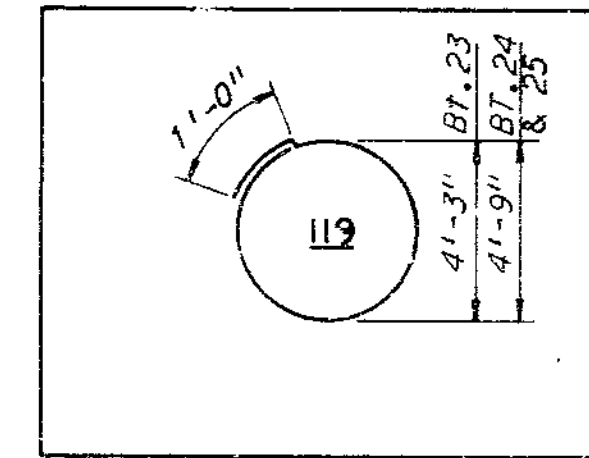
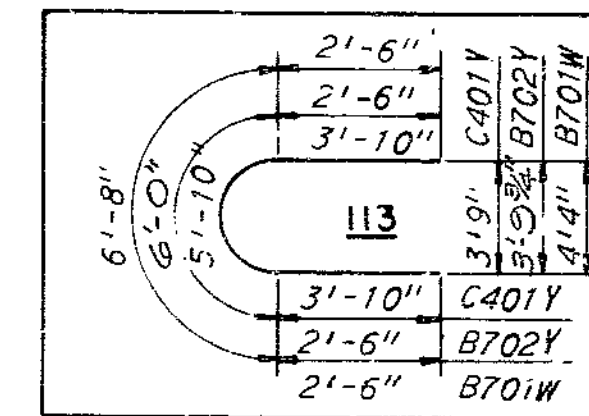


TABLE OF CUTTING DIMENSIONS				
BENT	MARK	A	B	C
23WB	F702W	17'-8"	10"	
23WB	F1101W	13'-10"	11'-7"	
23WB	F1102W	12'-0"	11'-7"	
24WB24EB	F501W	6'-4"	7"	
24WB24EB	F1101W	21'-6"	11'-7"	
24E-W	F1102W	13'-6"	11'-7"	
24E-W	B801W	16'-6"	11"	
25WB	F1103W	21'-5"	11'-7"	
25WB	F501W	6'-3"	7"	
25WB	F502W	6'-4"	7"	
25WB	F802W	19'-8"	11"	
25WB	F1106W	23'-4"	11'-7"	
26WB	F501W	6'-4"	7"	
26WB	F1101W	21'-6"	11'-7"	

TABLE OF CUTTING DIMENSIONS				
BENT	MARK	A	B	C
23WB23EB	B1101W	52'-7"	11'-7"	
23WB23EB	B1102W	54'-11"	11'-7"	
23WB23EB	B1103W	55'-9"	11'-7"	
23WB23EB	B1104W	56'-3"	11'-7"	

FED. ROAD DIST. NO.	STATE	FED. AID FUND. NO.	FED. PROJ. NO.	CHECK NO.	TOTAL SHEETS
1	GA		3	33	34

BILL OF REINFORCEMENT

MARK	NO.	LENGTH	SHAPE	LOCATION
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BENT 26 EASTBOUND

A201c	24	23'-0"	129	Beam
B401c	15	4'-7"	105	Beam
B1102c	6	30'-4"	Str.	Beam
B1103c	4	19'-5"	Str.	Beam
B1104c	4	29'-11"	Str.	Beam
B1105c	6	32'-6"	Str.	Beam
B1106c	10	30'-3"	Str.	Beam
B1107c	6	23'-8"	Str.	Beam
B1108c	12	32'-4"	Str.	Beam
B1111c	2	26'-0"	Str.	Beam
C401c	152	19'-6"	109	Column
C402c	122	5'-8"	116	Column
C1101c	24	52'-9"	Str.	Column
C1102c	20	51'-2"	Str.	Column
D401c	30	19'-6"	109	Collision Wall
D501c	74	8'-5"	Str.	Collision Wall
D502c	62	6'-10"	105	Collision Wall
D503c	36	33'-4"	Str.	Collision Wall
D701c	5	5'-10"	Str.	Collision Wall
D702c	5	17'-0"	Str.	Collision Wall
D801c	5	5'-10"	Str.	Collision Wall
D802c	5	21'-0"	Str.	Collision Wall
F501c	24	6'-11"	101	Footing
F901c	48	17'-0"	100	Footing
F1101c	84	23'-1"	101	Footing
F1102c	48	17'-8"	100	Footing

BENT 27 WESTBOUND

A201d	20	23'-0"	129	Beam
B401d	25	4'-7"	105	Beam
B1101d	2	30'-0"	101	Beam
B1102d	7	13'-0"	Str.	Beam
B1103d	6	21'-8"	Str.	Beam
B1104d	14	29'-8"	Str.	Beam
B1105d	6	32'-0"	Str.	Beam
C401d	225	22'-1"	119	Column
C1101d	116	40'-0"	Str.	Column
C1102d	48	38'-0"	Str.	Column
C1103d	24	45'-2"	Str.	Column
C1104d	32	47'-0"	Str.	Column
C1105d	12	43'-3"	Str.	Column
F401d	30	24'-6"	119	Pedestal Pile
F901d	84	13'-10"	Str.	Socket
F1101d	72	12'-5"	Str.	Pedestal Pile
F1102d	44	15'-4"	Str.	Pedestal Pile
F1103d	144	57'-10"	Str.	Pedestal Pile
F1104d	78	20'-7"	Str.	Socket

BENT 27 EASTBOUND

A201e	20	23'-0"	129	Beam
B401e	25	4'-7"	105	Beam
B1101e	2	30'-0"	101	Beam
B1102e	7	13'-0"	Str.	Beam
B1103e	6	21'-8"	Str.	Beam
B1104e	14	29'-8"	Str.	Beam
B1105e	6	32'-0"	Str.	Beam
C401e	225	22'-1"	119	Column
C1101e	116	40'-0"	Str.	Column
C1102e	48	38'-0"	Str.	Column
C1103e	24	45'-2"	Str.	Column
C1104e	32	47'-0"	Str.	Column
C1105e	12	43'-3"	Str.	Column
F401e	30	24'-6"	119	Pedestal Pile
F901e	84	13'-10"	Str.	Socket
F1101e	72	12'-5"	Str.	Pedestal Pile
F1102e	44	15'-4"	Str.	Pedestal Pile
F1103e	144	57'-10"	Str.	Pedestal Pile
F1104e	78	20'-7"	Str.	Socket

BILL OF REINFORCEMENT

MARK	NO.	LENGTH	SHAPE	LOCATION
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BENT 27 EASTBOUND(cont.)

F1101f	116	40'-0"	Str.	Column
F1102f	48	38'-0"	Str.	Column
C1103f	24	43'-2"	Str.	Column
C1104f	32	41'-0"	Str.	Column
C1105f	12	43'-3"	Str.	Column
F401f	174	24'-6"	119	Pedestal Pile
F402f	51	18'-11"	119	Socket
F1101f	72	12'-5"	Str.	Pedestal Pile
F1102f	44	15'-4"	Str.	Pedestal Pile
F1103f	144	57'-10"	Str.	Pedestal Pile
F1104f	52	20'-7"	Str.	Socket
F1105f	26	23'-7"	Str.	Socket

BENT 28 WESTBOUND

A201f	18	23'-0"	129	Beam
B401f	22	4'-7"	105	Beam
B402f	1	4'-3"	105	Beam
B1101f	8	27'-11"	101	Beam
B1102f	6	44'-5"	Str.	Beam
B1103f	10	38'-11"	Str.	Beam
B1104f	9	29'-0"	Str.	Beam
B1105f	6	33'-3"	Str.	Beam
C401f	234	22'-1"	119	Column
C1101f	48	43'-9"	Str.	Column
C1102f	32	46'-8"	Str.	Column
C1103f	24	45'-5"	Str.	Column
C1104f	116	40'-0"	Str.	Column
C1105f	12	47'-3"	Str.	Column
F401f	90	24'-6"	119	Pedestal Pile
F402f	30	15'-10"	119	Socket
F901f	84	13'-10"	Str.	Socket
F1101f	72	12'-5"	Str.	Pedestal Pile
F1102f	44	15'-4"	Str.	Pedestal Pile
F1103f	144	29'-10"	Str.	Pedestal Pile

BENT 28 EASTBOUND

A201g	18	23'-0"	129	Beam
B401g	22	4'-7"	105	Beam
B402g	1	4'-3"	105	Beam
B1101g	8	27'-11"	101	Beam
B1102g	6	44'-5"	Str.	Beam
B1103g	10	38'-11"	Str.	Beam
B1104g	9	29'-0"	Str.	Beam
B1105g	6	33'-3"	Str.	Beam
C401g	234	22'-1"	119	Column
C1101g	48	43'-9"	Str.	Column
C1102g	32	46'-8"	Str.	Column
C1103g	24	45'-5"	Str.	Column
C1104g	116	40'-0"	Str.	Column
C1105g	12	47'-3"	Str.	Column
F401g	90	24'-6"	119	Pedestal Pile
F402g	30	15'-10"	119	Socket
F901g	84	13'-10"	Str.	Socket
F1101g	72	12'-5"	Str.	Pedestal Pile
F1102g	44	15'-4"	Str.	Pedestal Pile
F1103g	144	29'-10"	Str.	Pedestal Pile

BENT 29 WESTBOUND

A201h	18	19'-9"	129	Capbeam
B401h	46	9'-5"	105	Capbeam
B402h	2	9'-2"	105	Capbeam

BILL OF REINFORCEMENT

MARK	NO.	LENGTH	SHAPE	LOCATION
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BENT 29 WESTBOUND(cont.)

B403f	2	8'-10"	105	Capbeam
B404f	2	8'-4"	105	Capbeam
B405f	2	7'-6"	105	Capbeam
B501f	76	24'-11"	109	Capbeam
B502f	16	48'-2"	109	Capbeam
B503f	4	22'-7"	109	Capbeam
B504f	4	21'-5"	109	Capbeam
B501f	16	31'-10"	Str.	Capbeam
B602f	16	25'-0"	109	Capbeam
B701f	14	15'-11"	113	Capbeam
B801f	4	8'-2"	108	Capbeam
B802f	4	9'-11"	108	Capbeam
B803f	4	10'-6"	108	Capbeam
B804f	4	10'-10"	108	Capbeam
B805f	12	11'-1"	108	Capbeam
B1101f	4	37'-0"	101	Capbeam
B1102f	4	38'-9"	101	Capbeam
B1103f	4	39'-3"	101	Capbeam
B1104f	4	39'-7"	101	Capbeam
B1105f	12	39'-10"	101	Capbeam
B1106f	4	29'-3"	101	Capbeam
B1107f	4	32'-1"	101	Capbeam
B1108f	8	35'-0"	Str.	Capbeam
B1109f	14	49'-6"	Str.	Capbeam
B603f	6	21'-0"	Str.	Capbeam
C401f	100	22'-1"	119	Column
C1101f	72	53'-10"	Str.	Column
F401f	54	24'-6"	119	Pedestal Pile
F402f	32	15'-10"	119	Socket
F901f	56	18'-10"	Str.	Socket
F1101f	96	25'-10"	Str.	Pedestal Pile
F1102f	72	13'-6"	Str.	Pedestal Pile

BENT 29 EASTBOUND

A201i	18	19'-9"	129	Capbeam
B401i	46	9'-5"	105	Capbeam
B402i	2	9'-2"	105	Capbeam
B403i	2	8'-10"	105	Capbeam
B404i	2	8'-4"	105	Capbeam
B405i	2	7'-6"	105	Capbeam
B501i	76	24'-11"	109	Capbeam
B502i	16	48'-2"	109	Capbeam
B503i	4	22'-7"	109	Capbeam
B504i	4	21'-5"	109	Capbeam
B601i	16	31'-10"	Str.	Capbeam
B602i	16	25'-0"	109	Capbeam
B701i	14	15'-11"	113	Capbeam
B801i	4	8'-2"	108	Capbeam
B802i	4	9'-11"	108	Capbeam
B803i	4	10'-6"	108	Capbeam
B804i	4	10'-10"	108	Capbeam
B805i	12	11'-1"	108	Capbeam
B1101i	4	37'-0"	101	Capbeam
B1102i	4	38'-9"	101	Capbeam
B1103i	4	39'-3"	101	Capbeam
B1104i	4	39'-7"	101	Capbeam
B1105i	12	39'-10"	101	Capbeam
B1106i	4	29'-3"	101	Capbeam
B1107i	4	32'-1"	101	Capbeam
B1108i	8	35'-0"	Str.	Capbeam
B1109i	14	49'-6"	Str.	Capbeam
B603i	6	21'-0"	Str.	Capbeam
C401i	100	22'-1"	119	Column
C1101i	72	53'-10"	Str.	Column
F401i	54	24'-6"	119	Pedestal Pile

BILL OF REINFORCEMENT

MARK	NO.	LENGTH	SHAPE	LOCATION
------	-----	--------	-------	----------

BENT 29 EASTBOUND(cont.)

F402f	32	15'-10"	119	Socket
F901f	56	18'-10"	Str.	Socket
F1101f	96	25'-10"	Str.	Pedestal Pile
F1102f	72	13'-6"	Str.	Pedestal Pile

END BENT 30

A201j	36	19'-9"	129	Barrel
C401j	55	13'-10"	*105	Footing Shaft
C402j	44	4'-7"	Str.	Footing Shaft
F501j	121	6'-8"	100	Footing
F502j	66	8'-8"	100	Footing
F601j	66	10'-10"	101	Footing
F602j	44	11'-9"	101	Footing
H401j	16	46'-3"	Str.	Wingwall
H402j	8	51'-4"	Str.	Backwall
H403j	12	6'-2"	105	Wingwall
H601j	8	46'-3"	Str.	Barrel
H602j	4	51'-8"	Str.	Backwall
H603j	8	13'-8"	Str.	Wingwall
H604j	16	18'-7"	*Str.	Wingwall
H605j	8	8'-4"	*Str.	Wingwall
H606j	20	7'-0"	117	Wingwall
H607j	4	13'-9"	Str.	Wingwall
H901j	10	21'-9"	101	Barrel
H902j	10	32'-9"	Str.	Barrel
H903j	10	35'-0"	Str.	Barrel
H904j	10	46'-3"	Str.	Barrel
H905j	5	59'-2"	Str.	Barrel

V401

V401	4	7'-2"	Str.	Maskwall
V402	4	11'-6"	Str.	Backwall
V403	15	12'-2"	109	Barrel
V404	18	12'-8"	109	Barrel
V405	6	3'-1"	105	Barrel
V501	292	8'-2"	Str.	Backwall
V502	132	12'-3"	109	Barrel
V503	100	12'-9"	109	Barrel
V601	4	10'-11"	104	Maskwall
V602	4	20'-0"	117	Wingwall
V603	26	14'-8"	*Str.	Wingwall

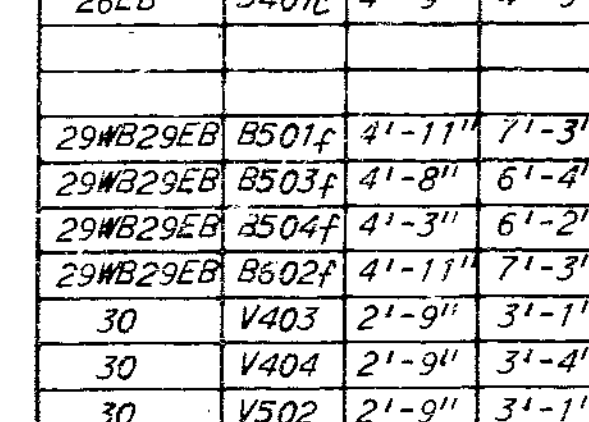
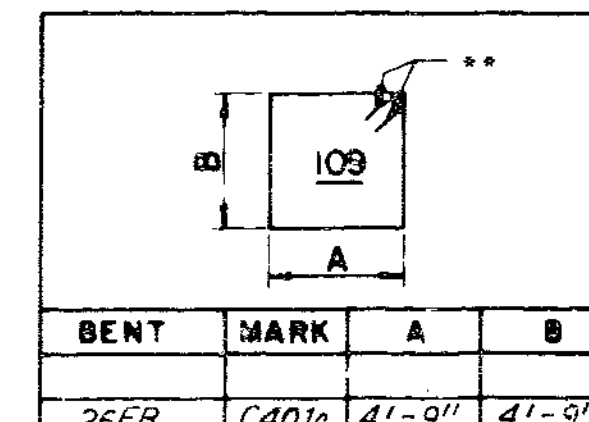
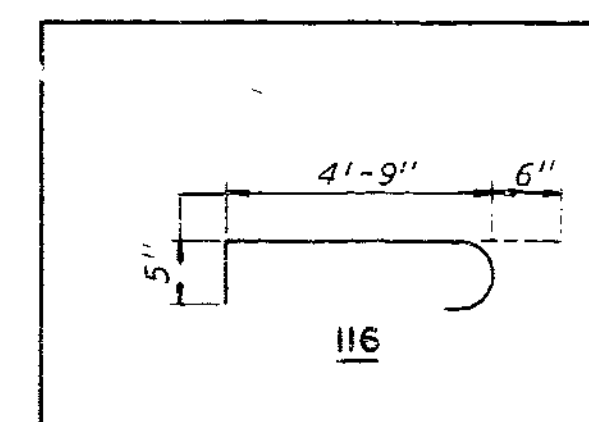
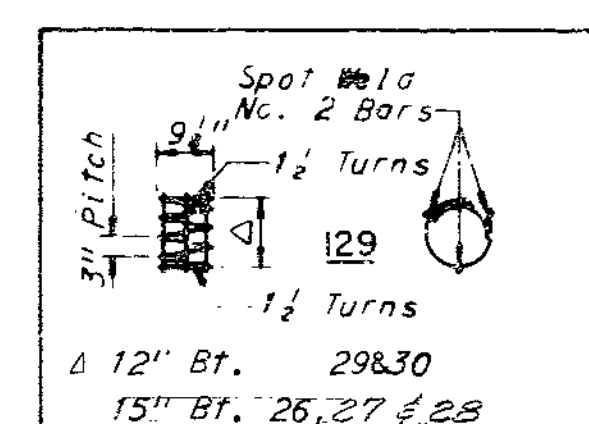
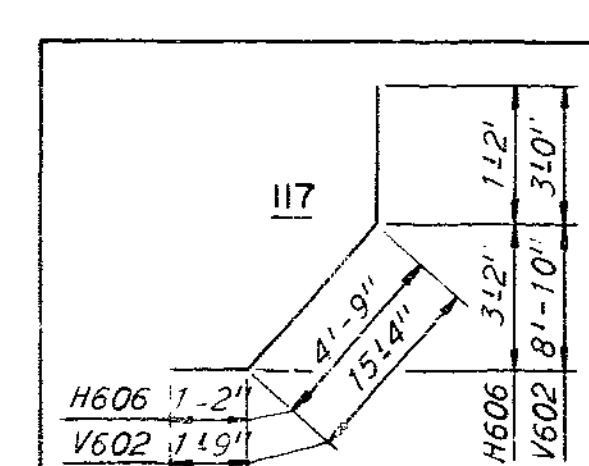
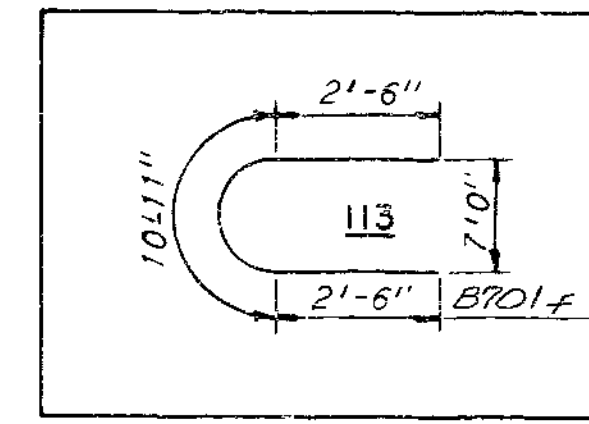


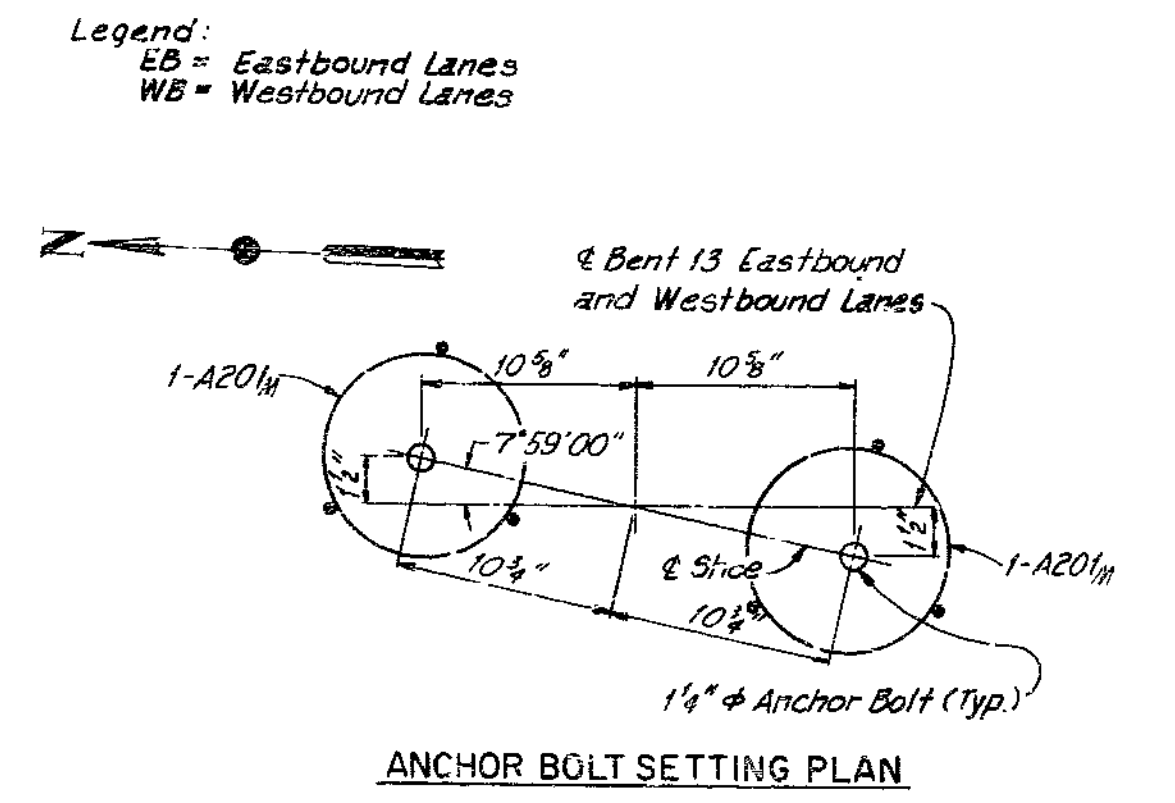
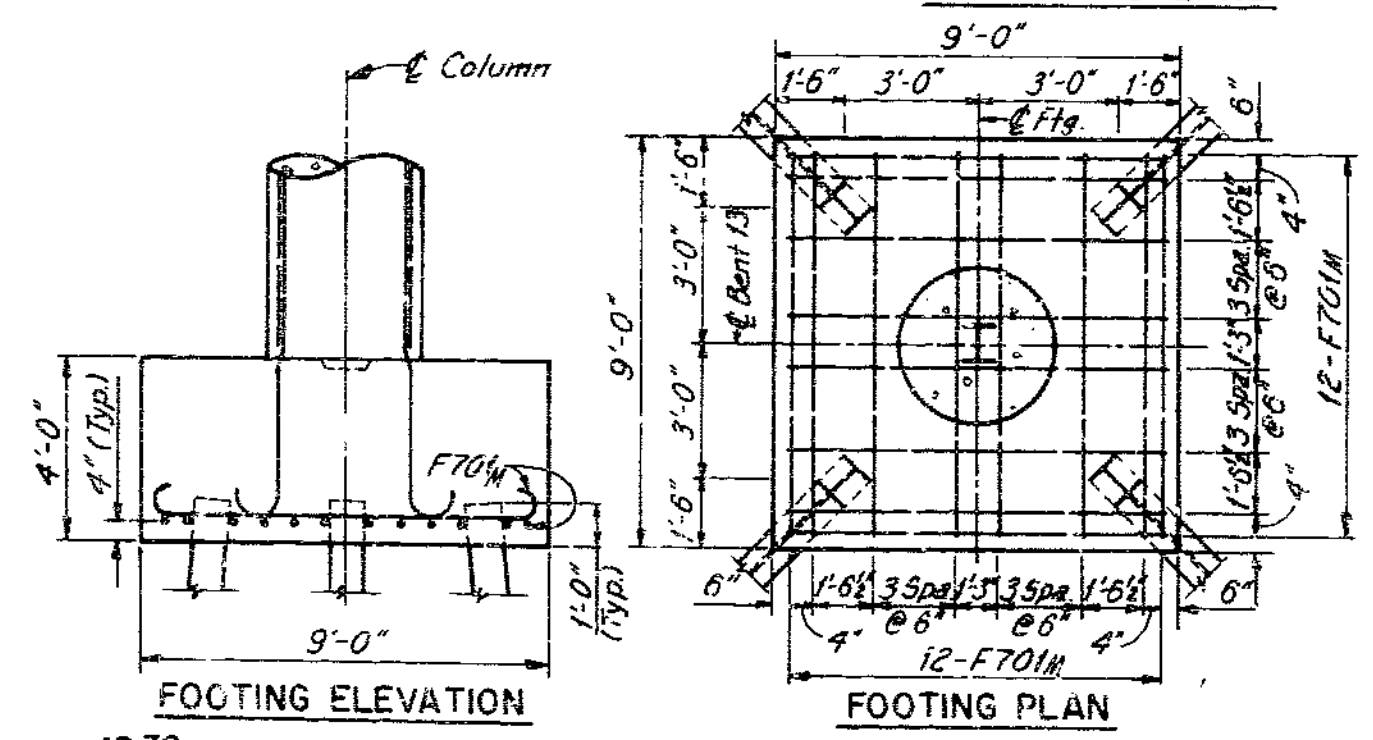
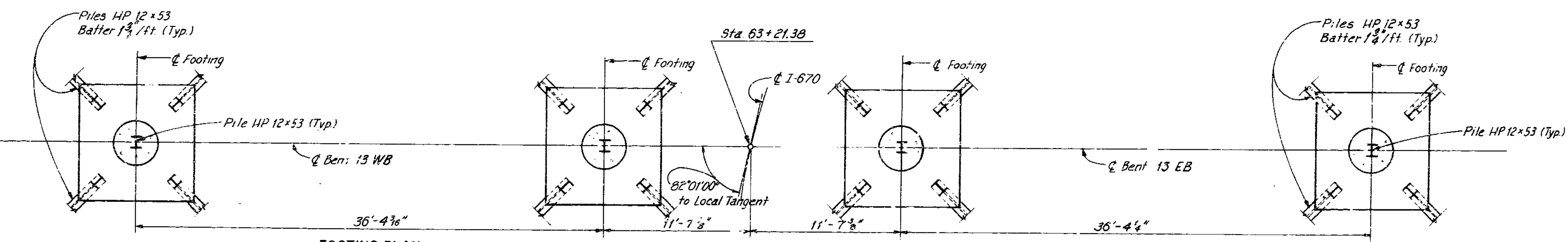
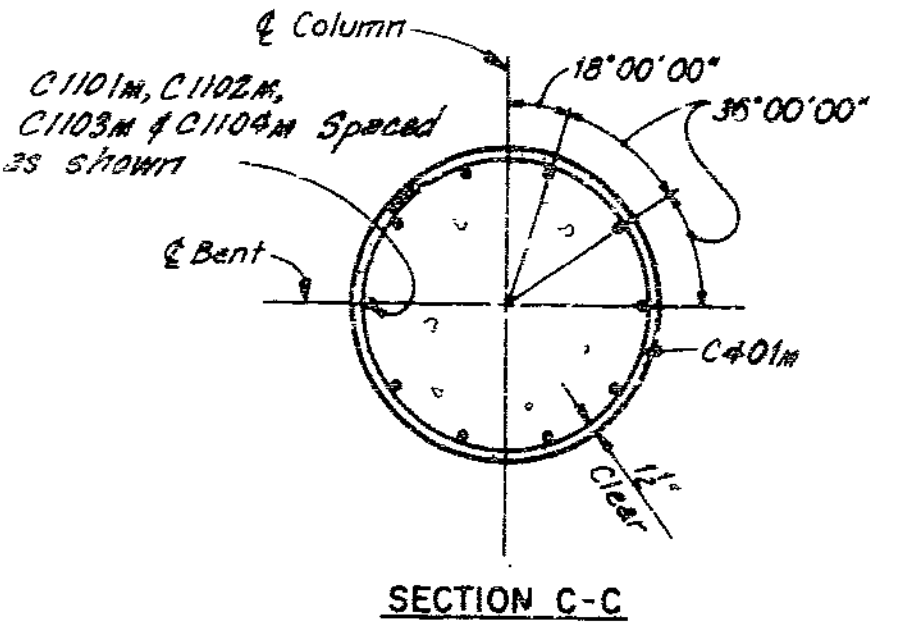
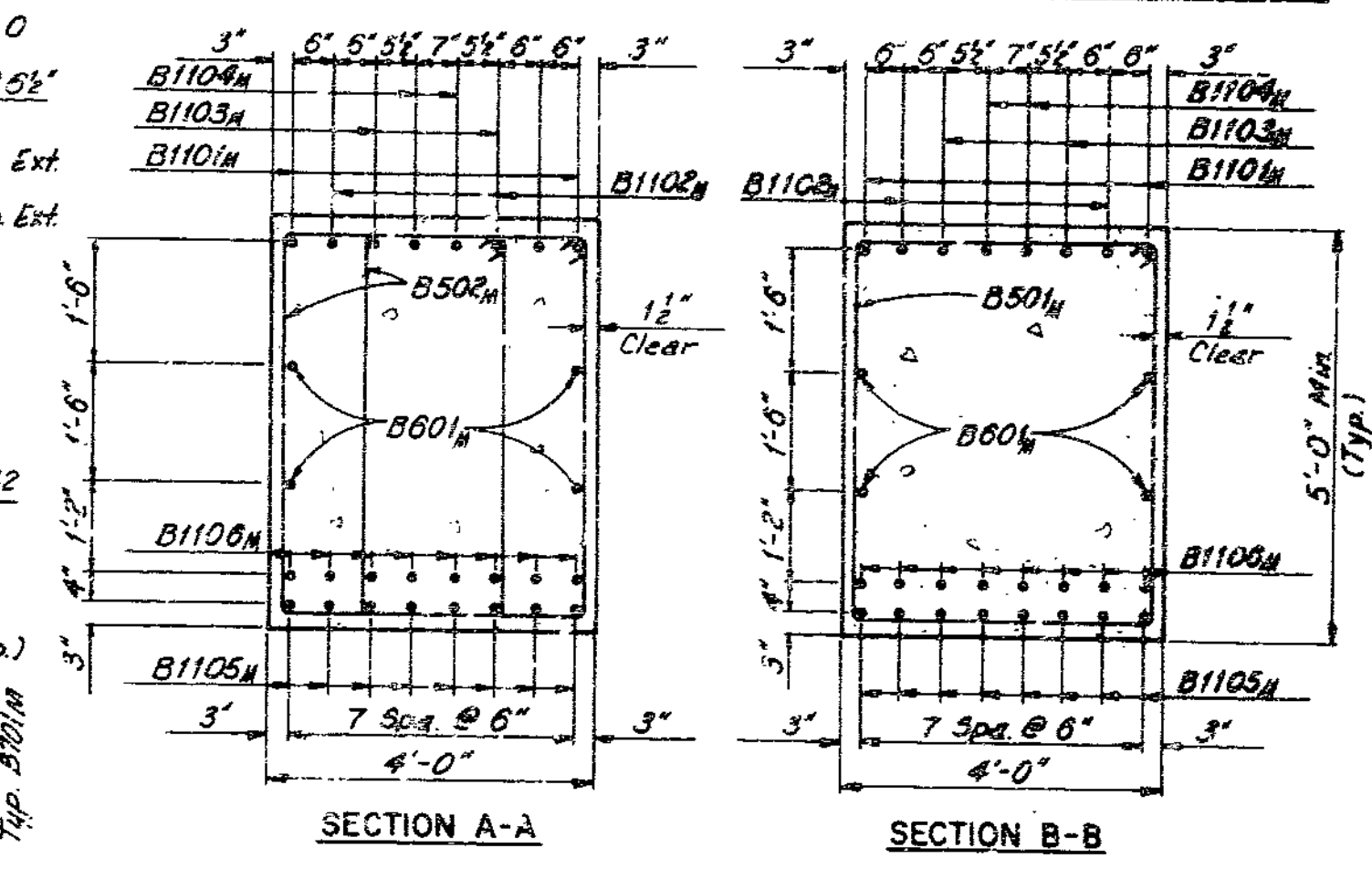
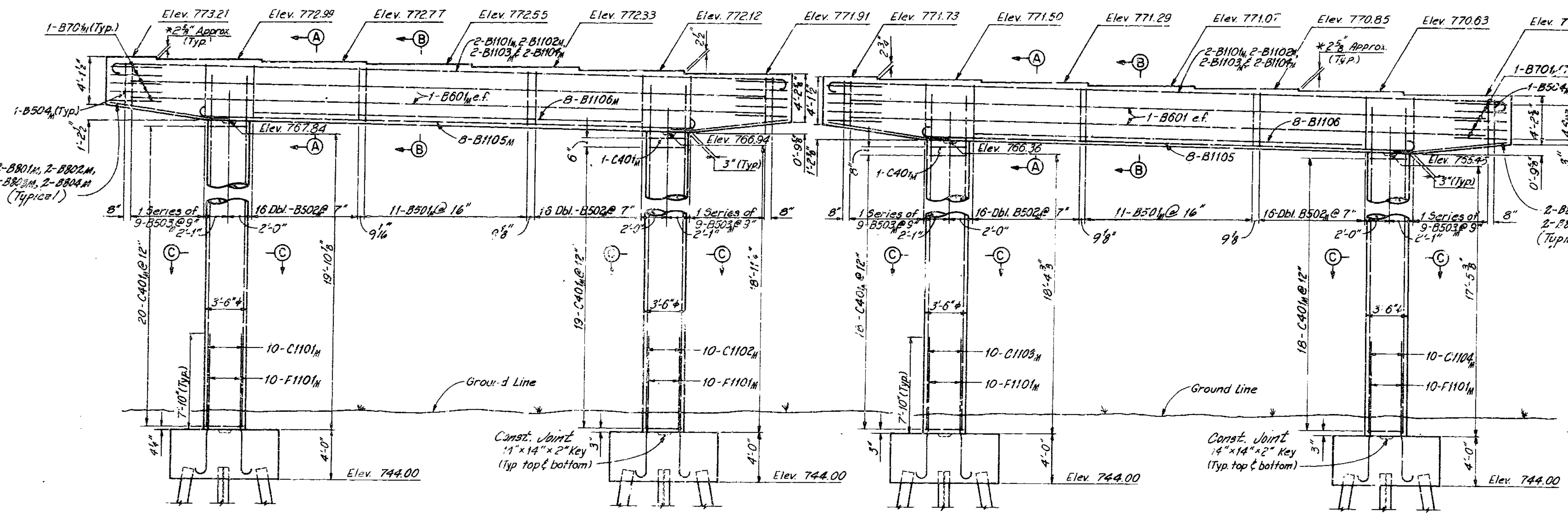
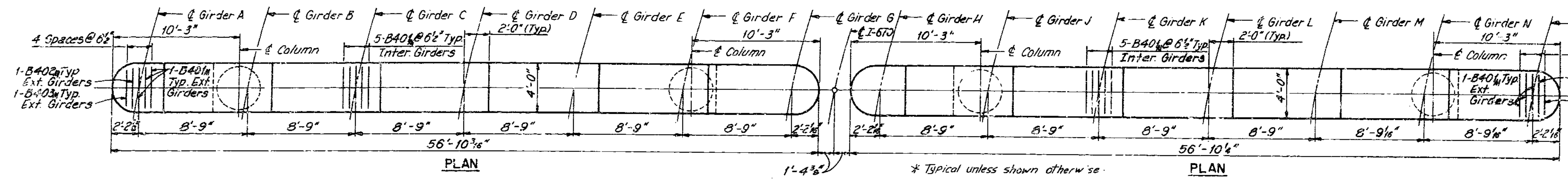
TABLE OF CUTTING DIMENSIONS

BENT	MARK	A	B
------	------	---	---

26EB	F901c	14'-6"	11'-3"
26EB	F1102c	14'-6"	11'-7"
30	F501c	5'-6"	7"
30	F502c	7'-6"	7"

29WB	B901f	11'-8"	6'-6"	10"
29WB	B802f	11'-8"	8'-3"	11"
29WB	B803f	11'-8"	8'-10"	11 1/2"
29WB				

FED. RES. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		88	90	



Notes:
 Pile spacing is measured at bottom of footing.
 For section thru cap at anchor bolt locations see sheet 77.

295

DETAILED 1073
 CHECKED 1078

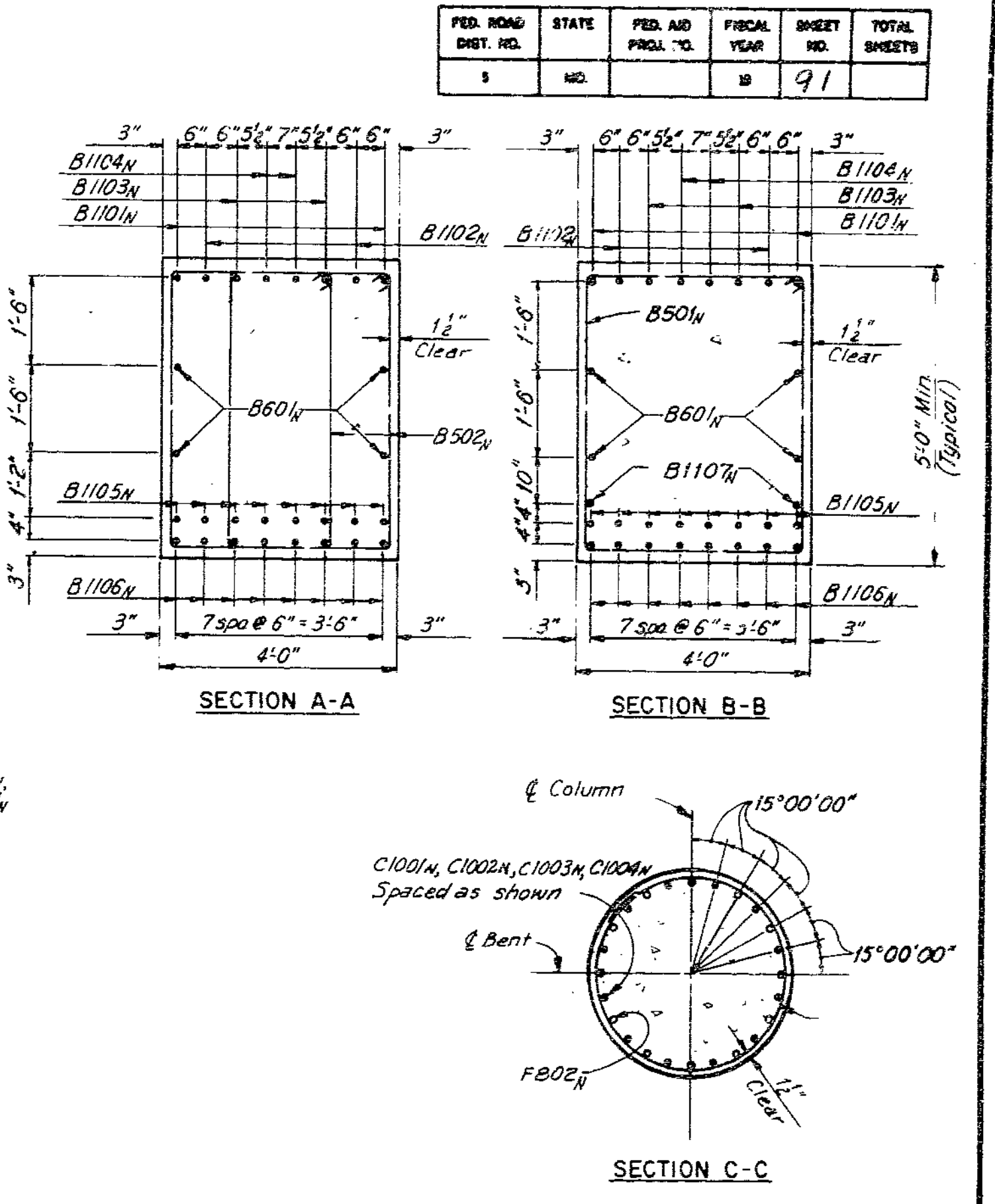
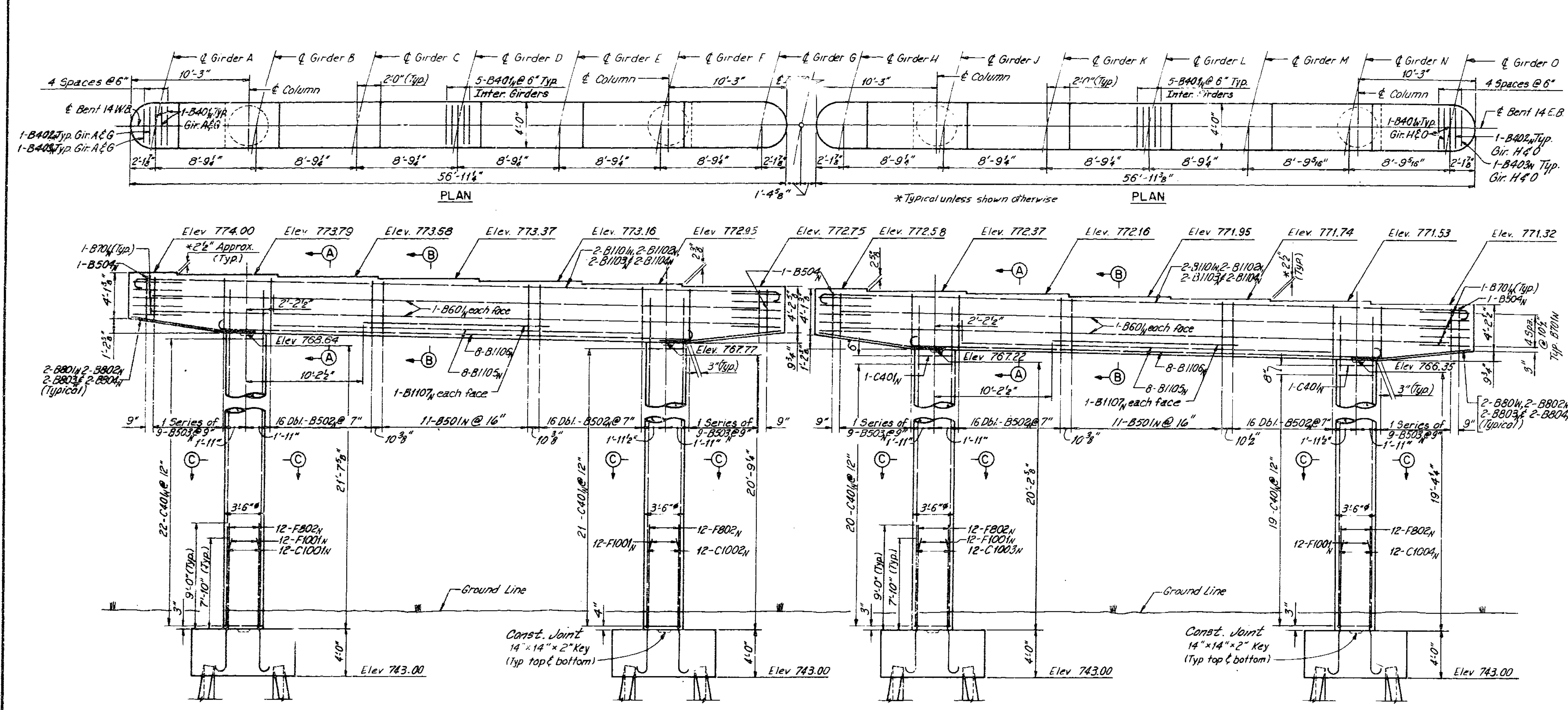
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 21 of 22.

BENT 13 WESTBOUND AND EASTBOUND
 PILE FOOTING ALTERNATE
 JACKSON COUNTY

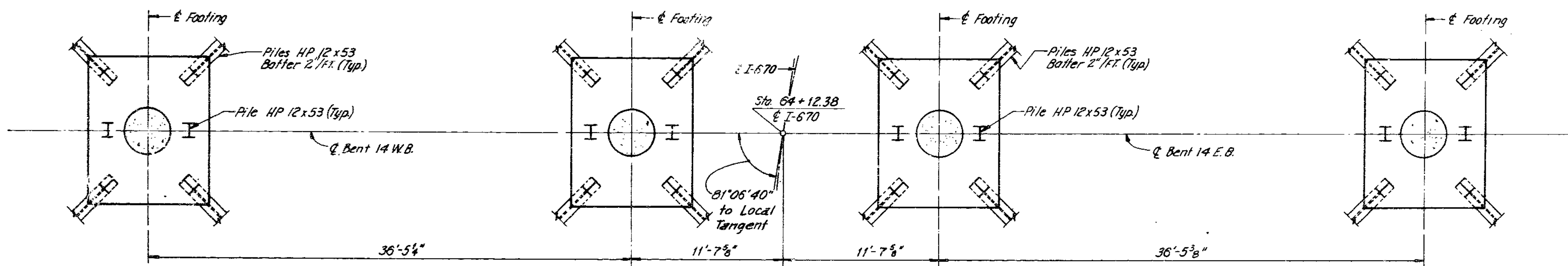
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		19	91	



ELEVATION

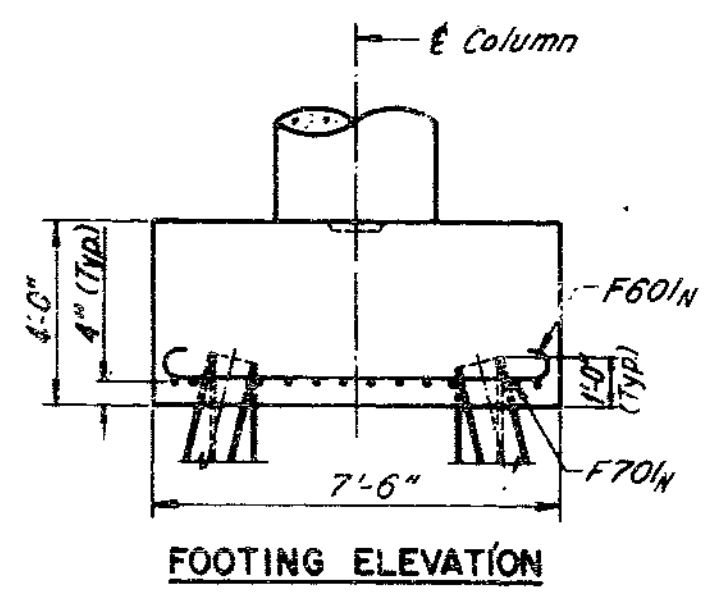
ELEVATION



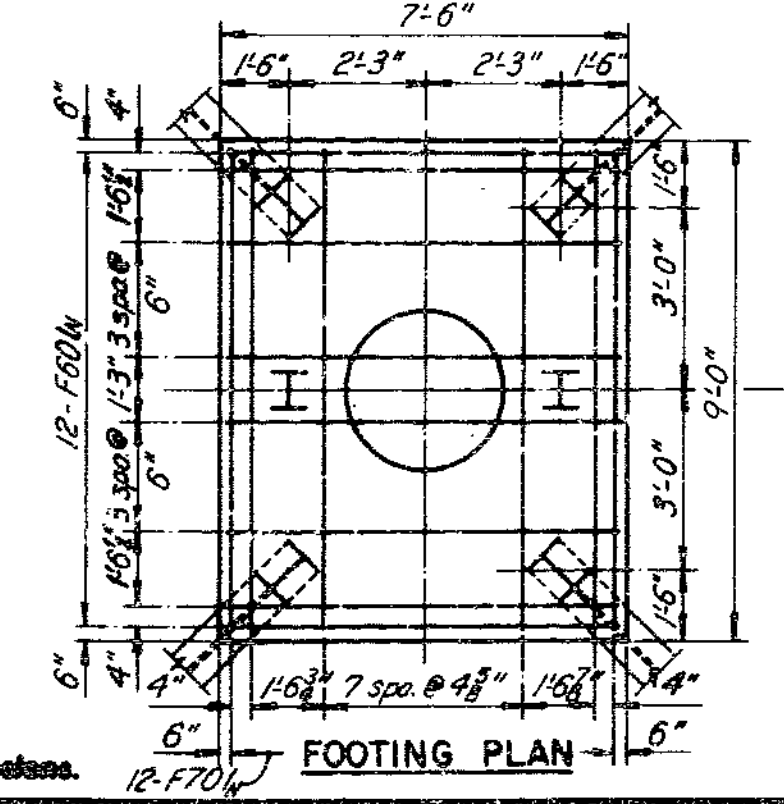
FOOTING PLAN WESTBOUND LANE

FOOTING PLAN EASTBOUND LANE

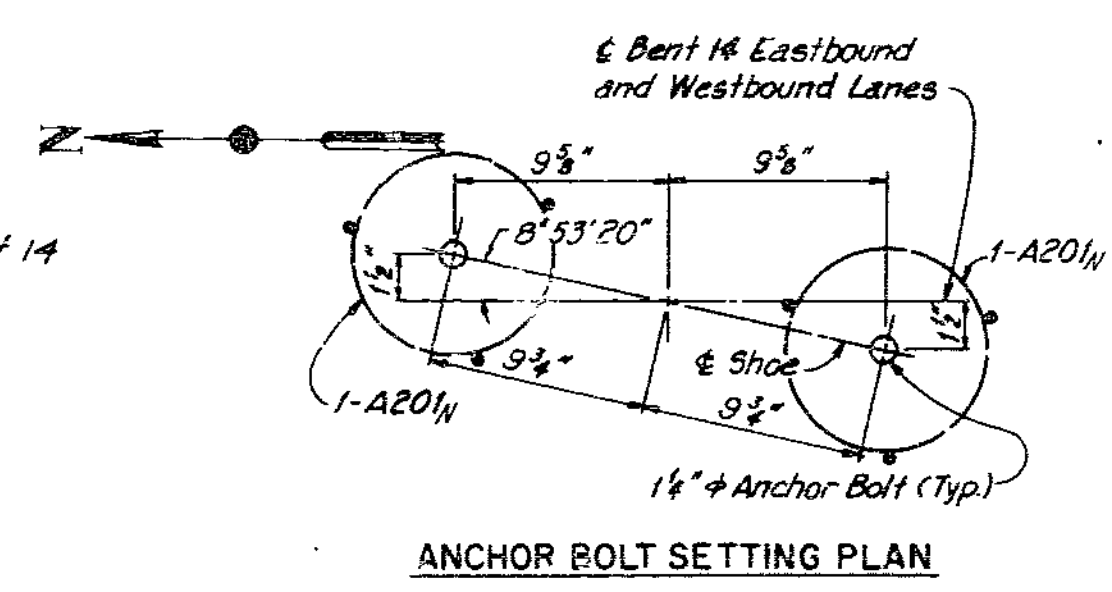
Legend:
W.B. = Westbound Lanes
E.B. = Eastbound Lanes



FOOTING ELEVATION



FOOTING PLAN



ANCHOR BOLT SETTING PLAN

Notes:
Pile spacing is measured at bottom of footing.
For station thru cap at anchor bolt locations see sheet 77.

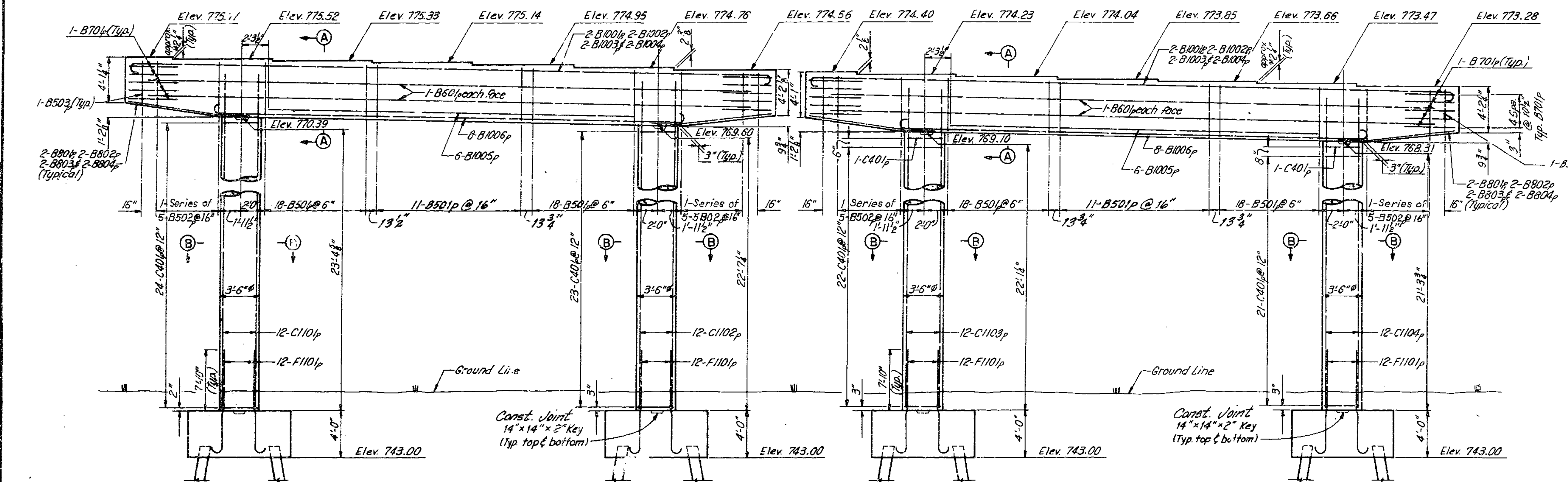
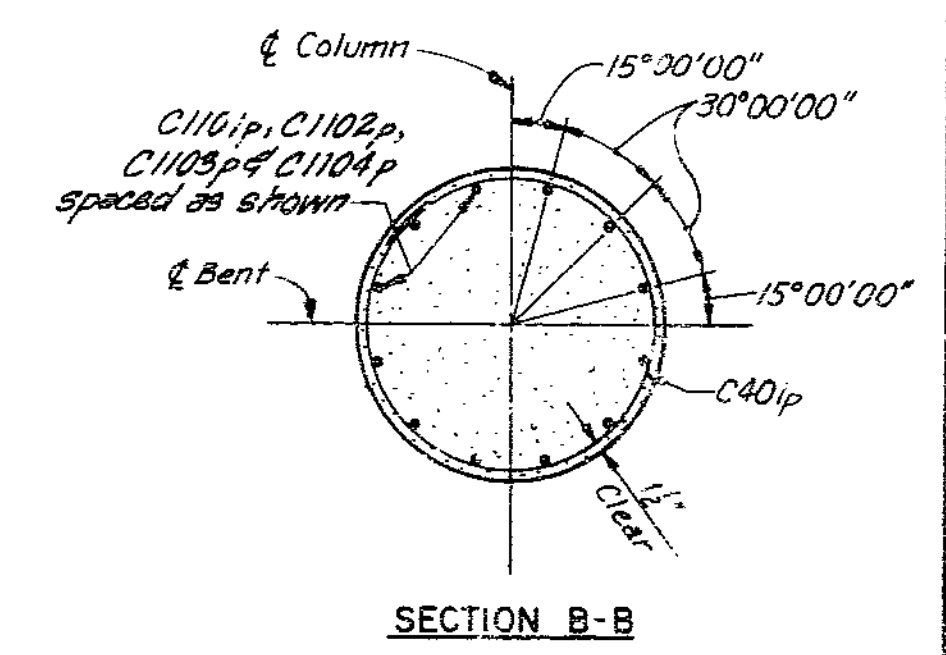
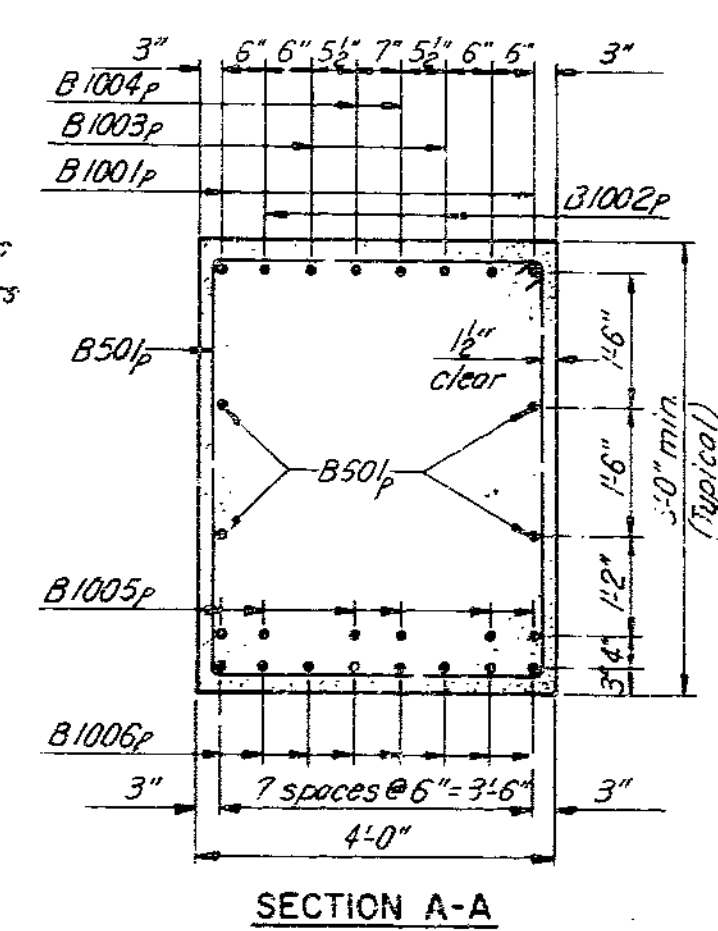
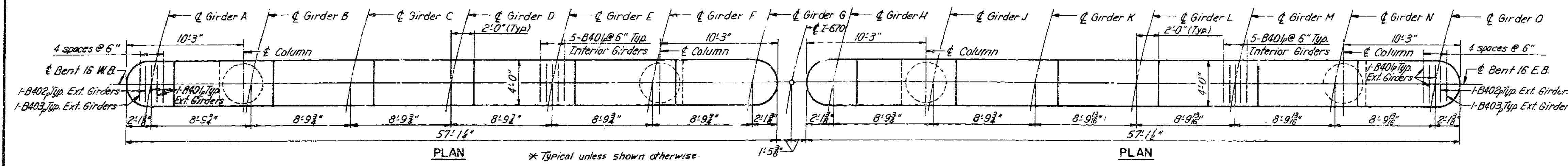
BENT 14 WESTBOUND AND EASTBOUND PILE FOOTING ALTERNATE
JACKSON COUNTY
A-3136

296
DETAILS 1978
CHECKED 1978

Note: This drawing is not to scale. Refer dimensions.

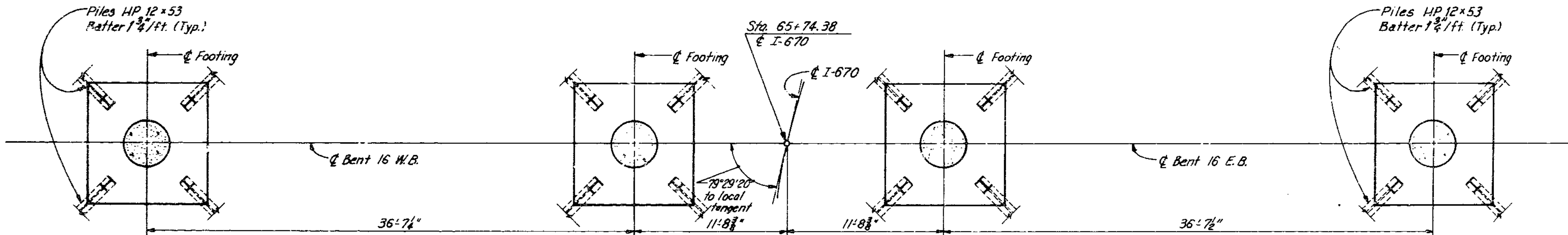
Sheet No. 22 of 82.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	MO.		18	93	



ELEVATION

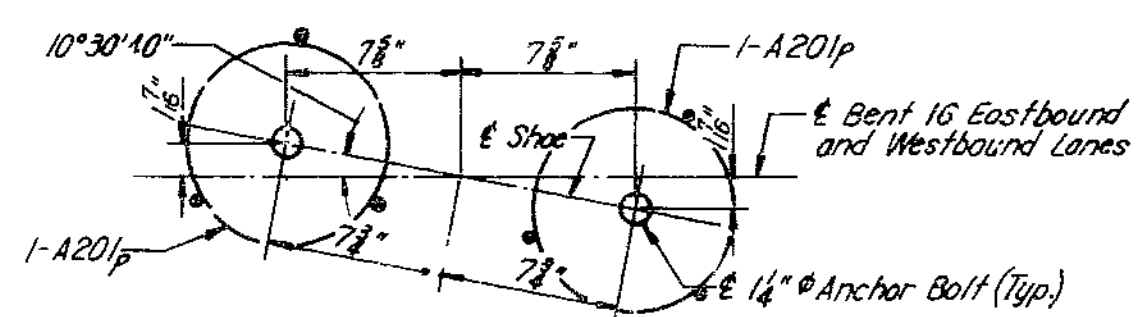
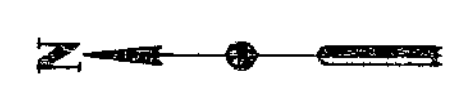
ELEVATION



FOOTING PLAN WESTBOUND LANE

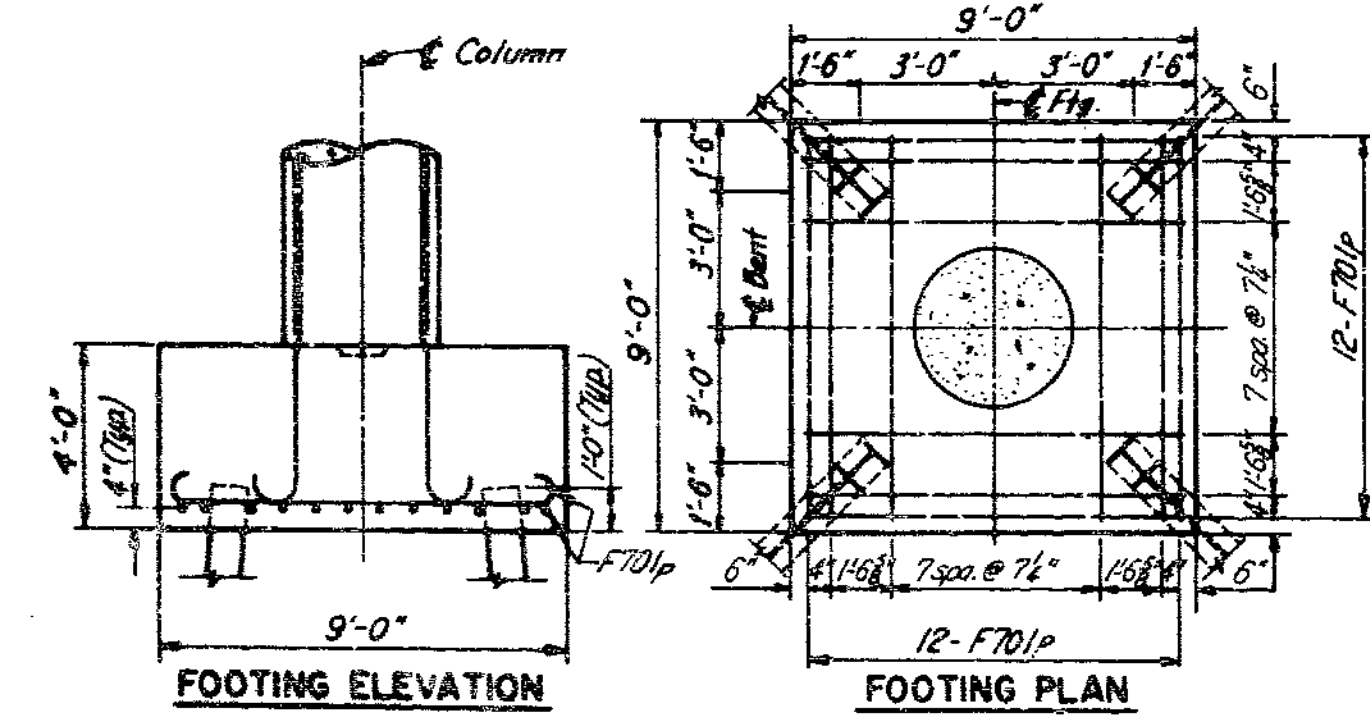
FOOTING PLAN EASTBOUND LANE

Legend:
W.B. denotes Westbound Lanes
E.B. denotes Eastbound Lanes



ANCHOR BOLT SETTING PLAN

Notes:
Pile spacing is measured at bottom of footing.
For section thru cap at anchor bolt locations see sheet 77.



FOOTING ELEVATION

FOOTING PLAN

DESIGNED 10 79
CHECKED 10 78

Note: This drawing is not to scale. Follow dimensions.

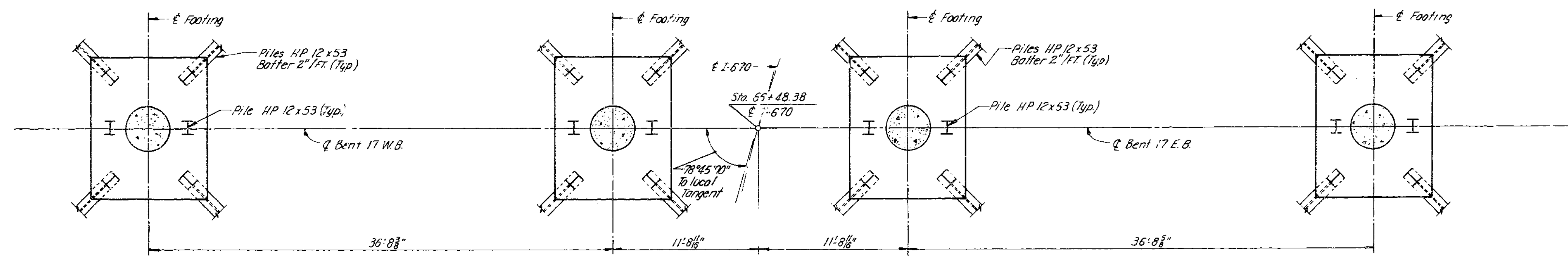
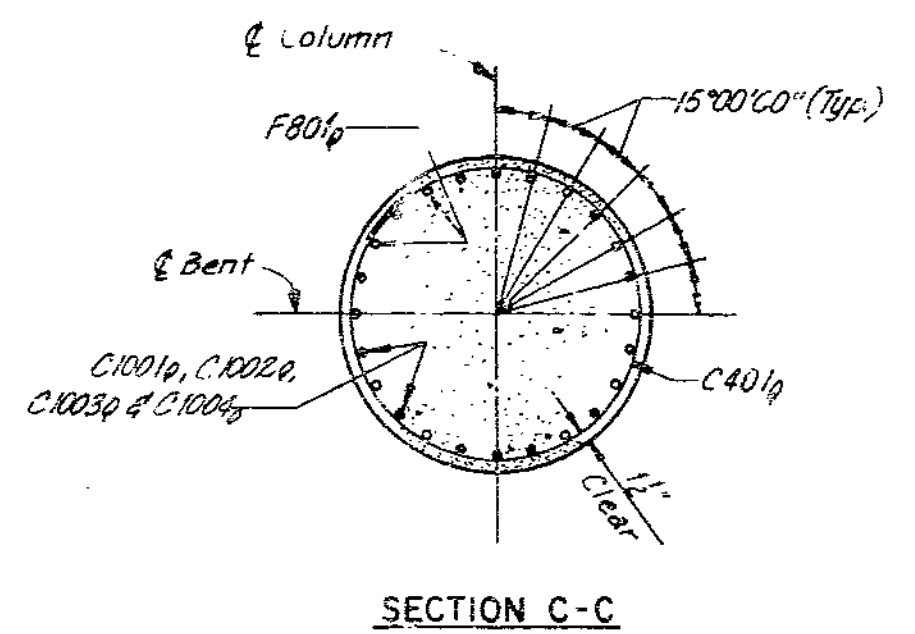
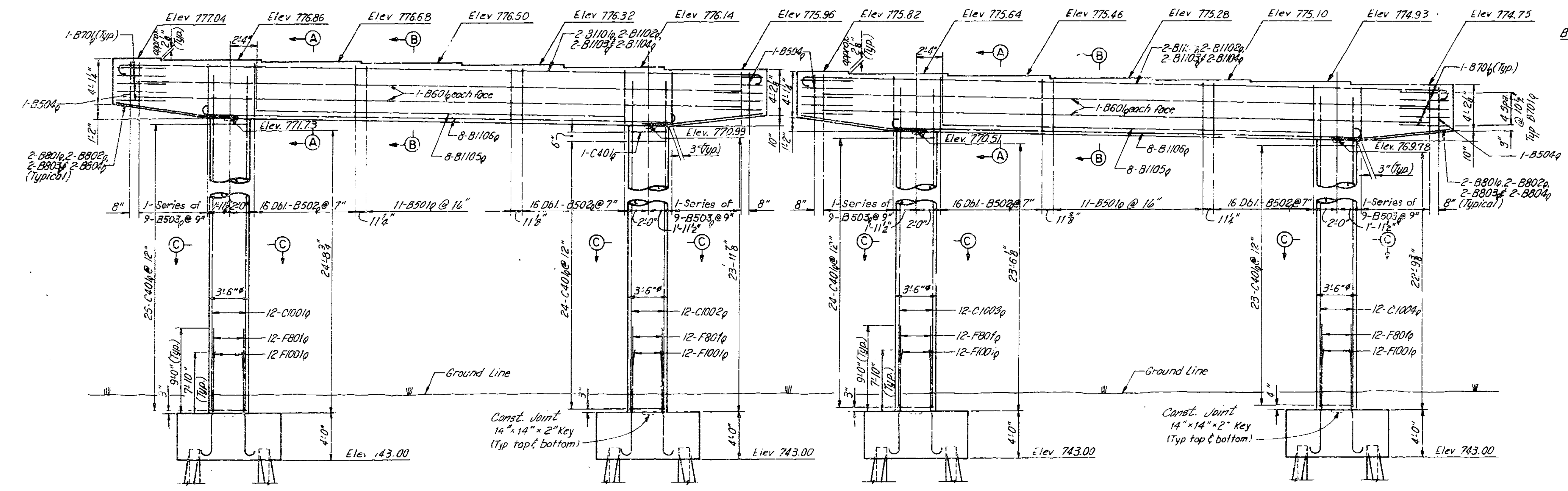
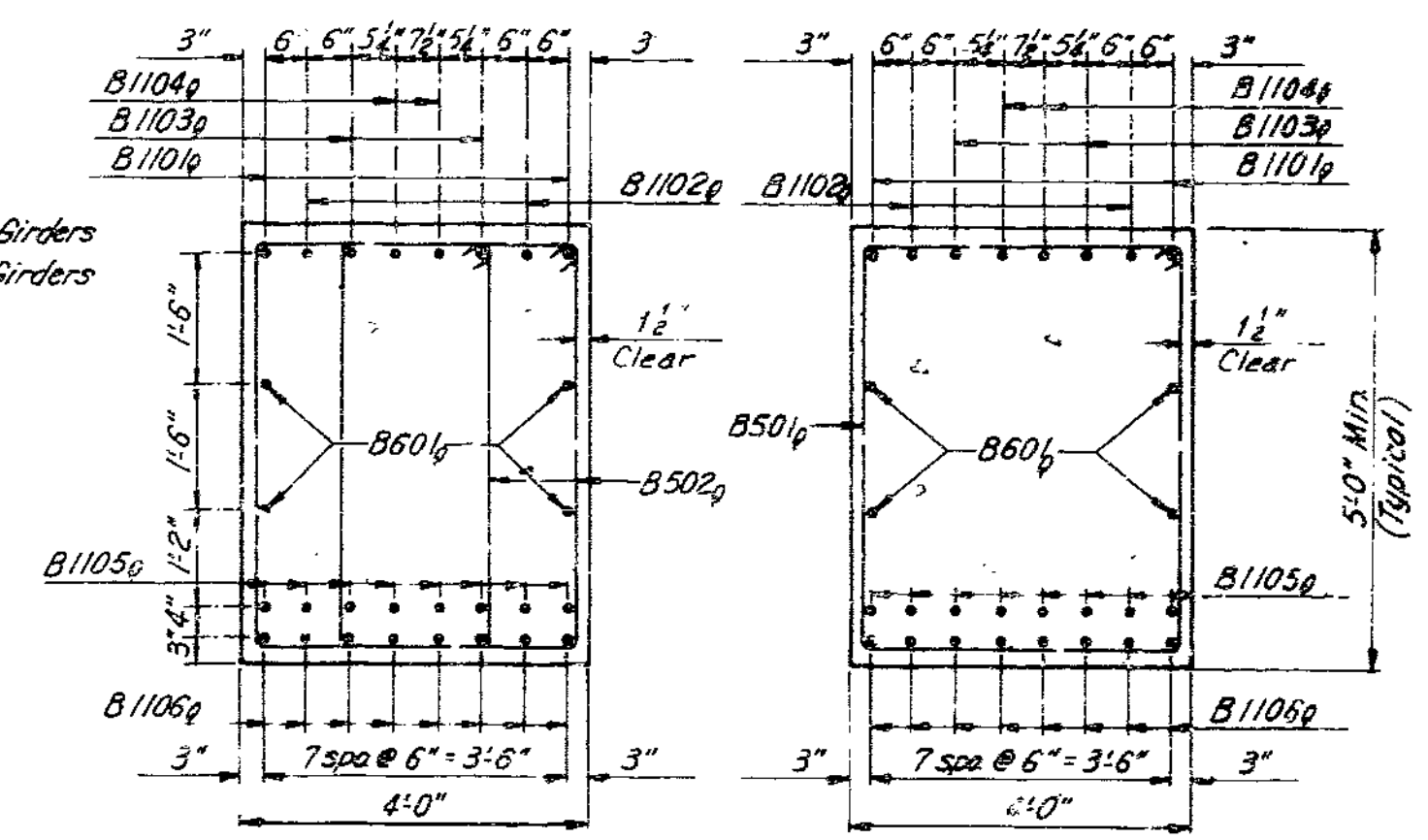
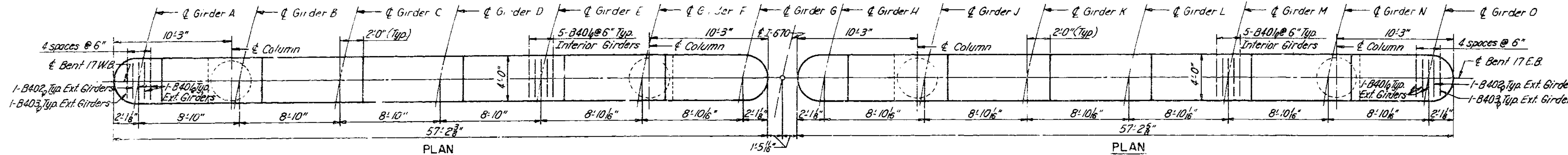
Sheet No. 24 of 32.

BENT 16 WESTBOUND AND EASTBOUND
PILE FOOTING ALTERNATE
JACKSON COUNTY

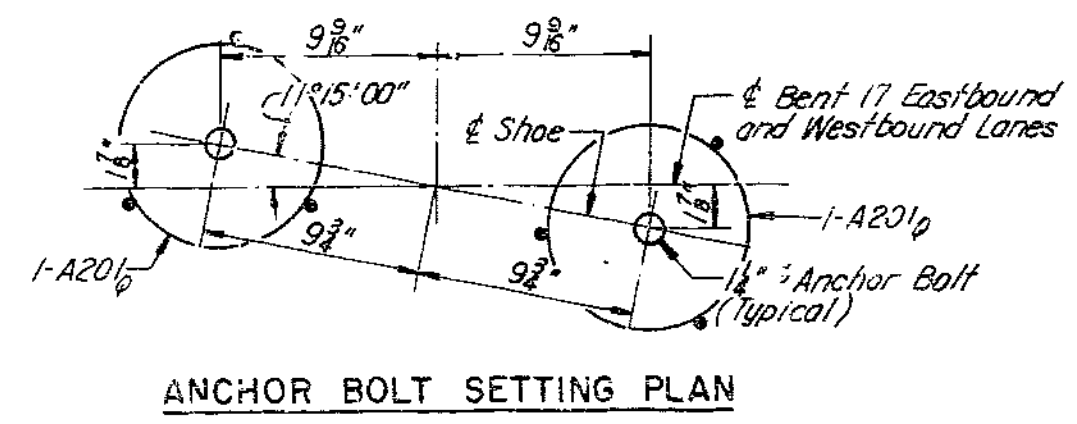
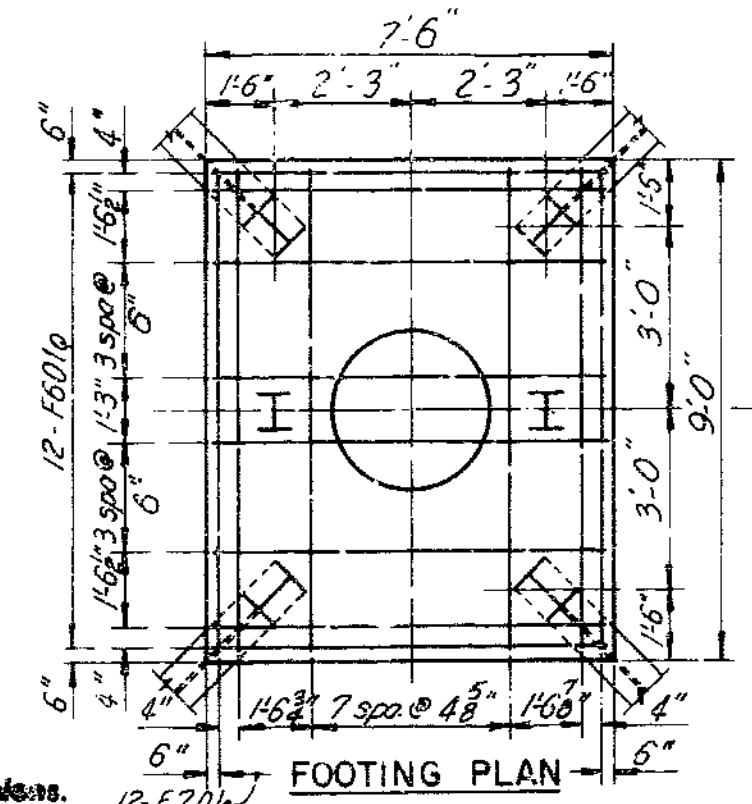
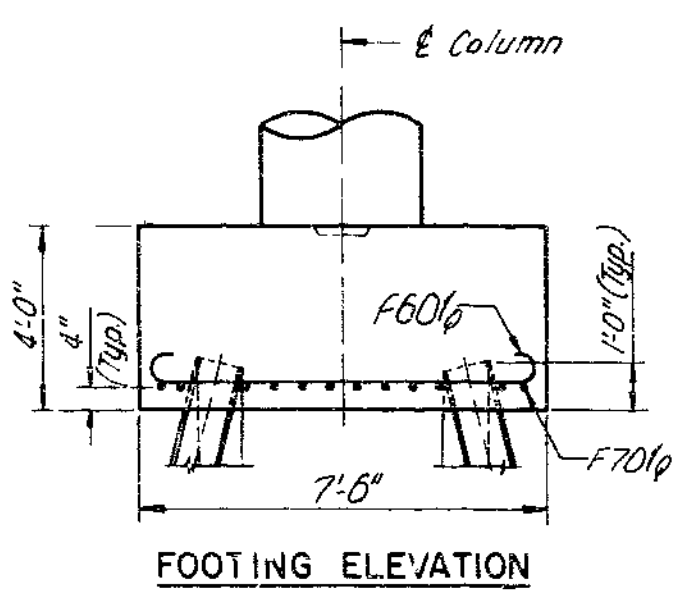
A-3136

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	MO.			94	



Legend:
 W.B. denotes Westbound Lanes
 E.B. denotes Eastbound Lanes



Notes:
 Pile spacing is measured at bottom of footing.
 For section thru cap at anchor bolt locations see sheet 77.

299

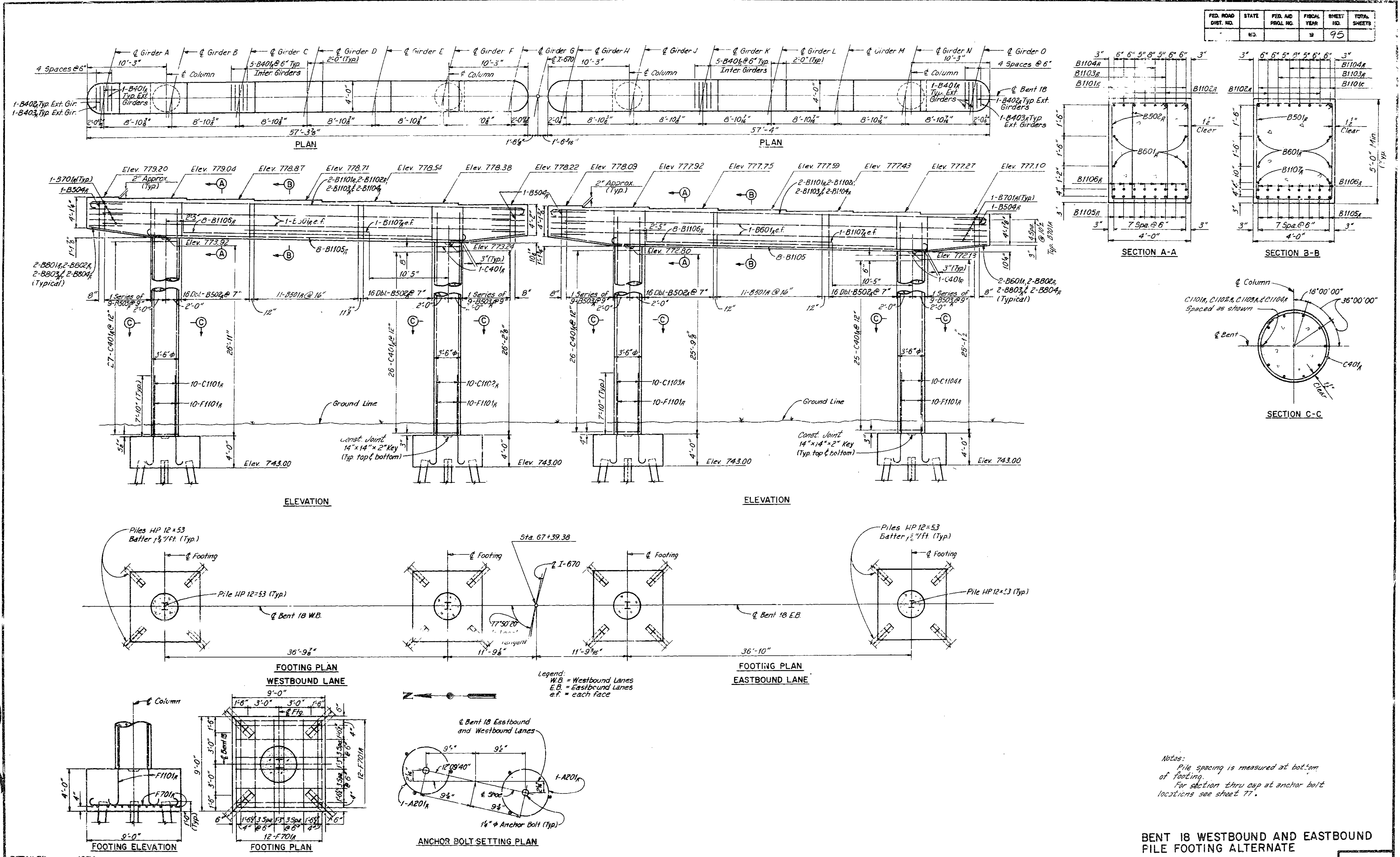
DETAILED 1978
 CHECKED 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 25 of 82.

BENT 17 WESTBOUND AND EASTBOUND
 PILE FOOTING ALTERNATE
 JACKSON COUNTY
 A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	MO.		19	95	



300

DETAILS CHECKED 1978

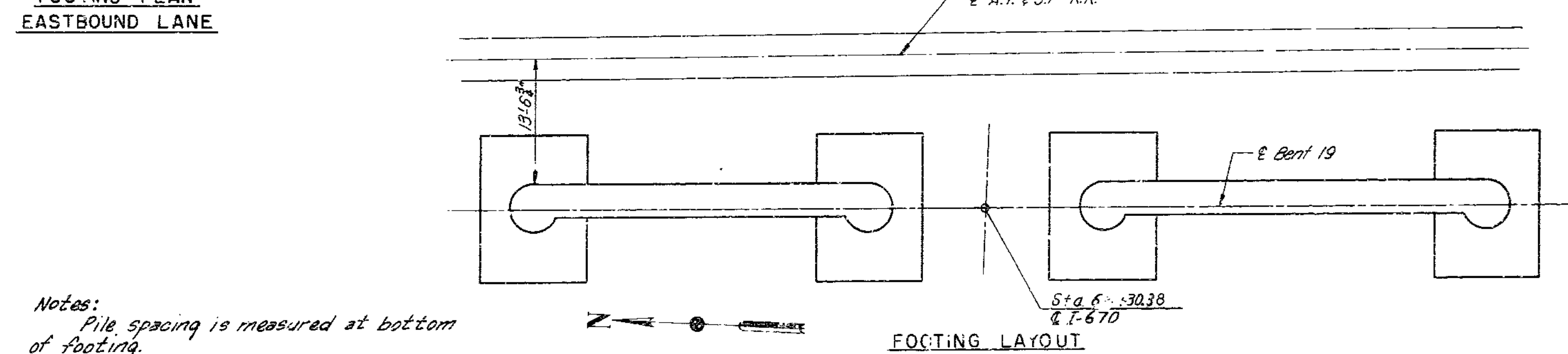
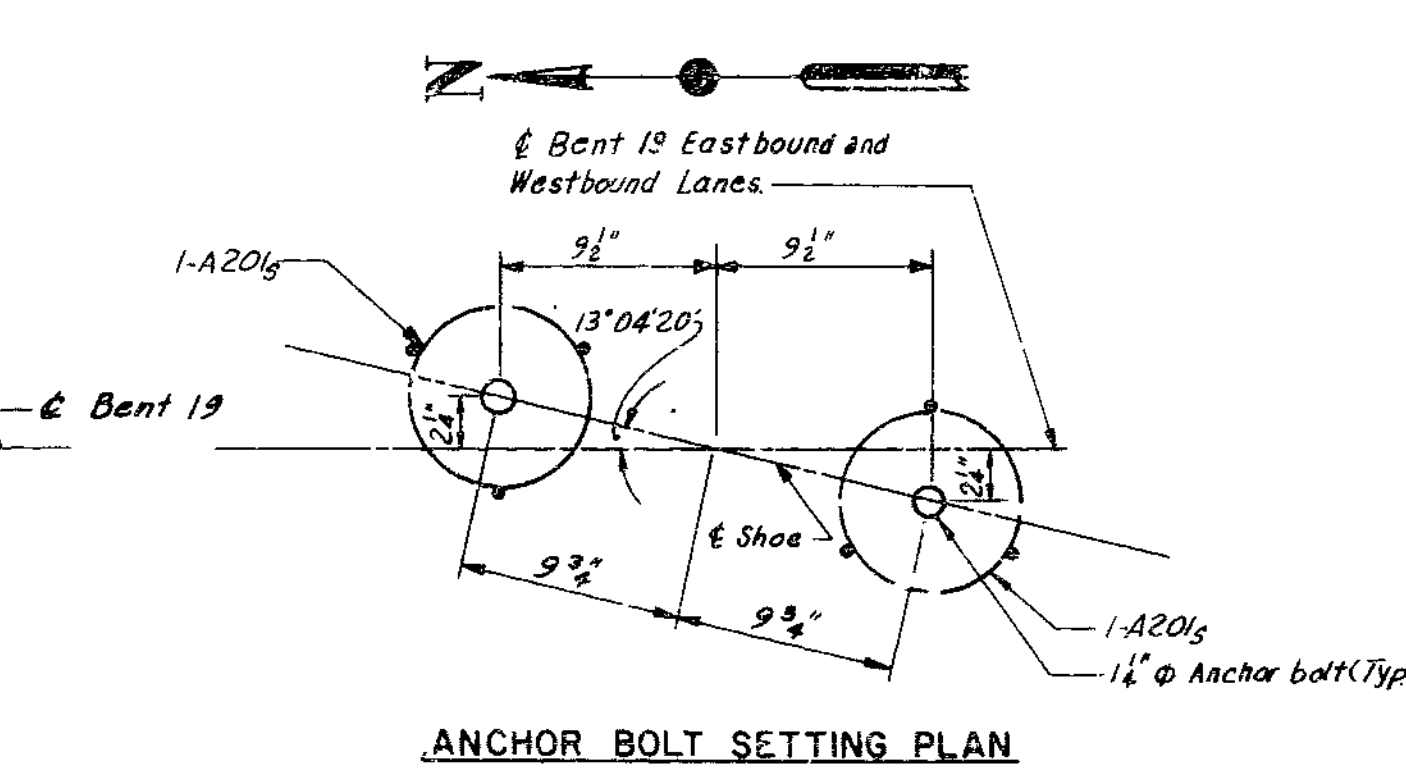
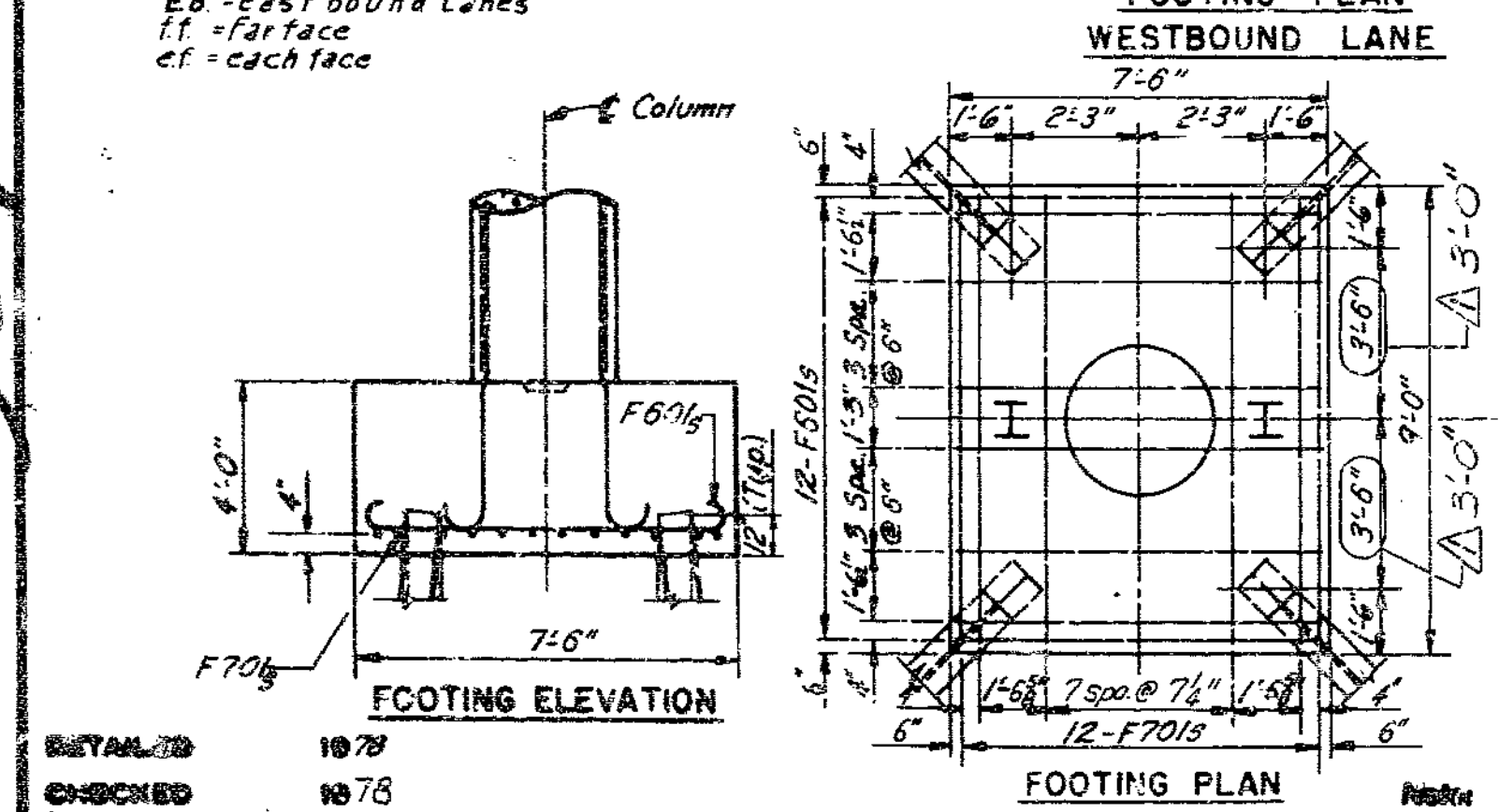
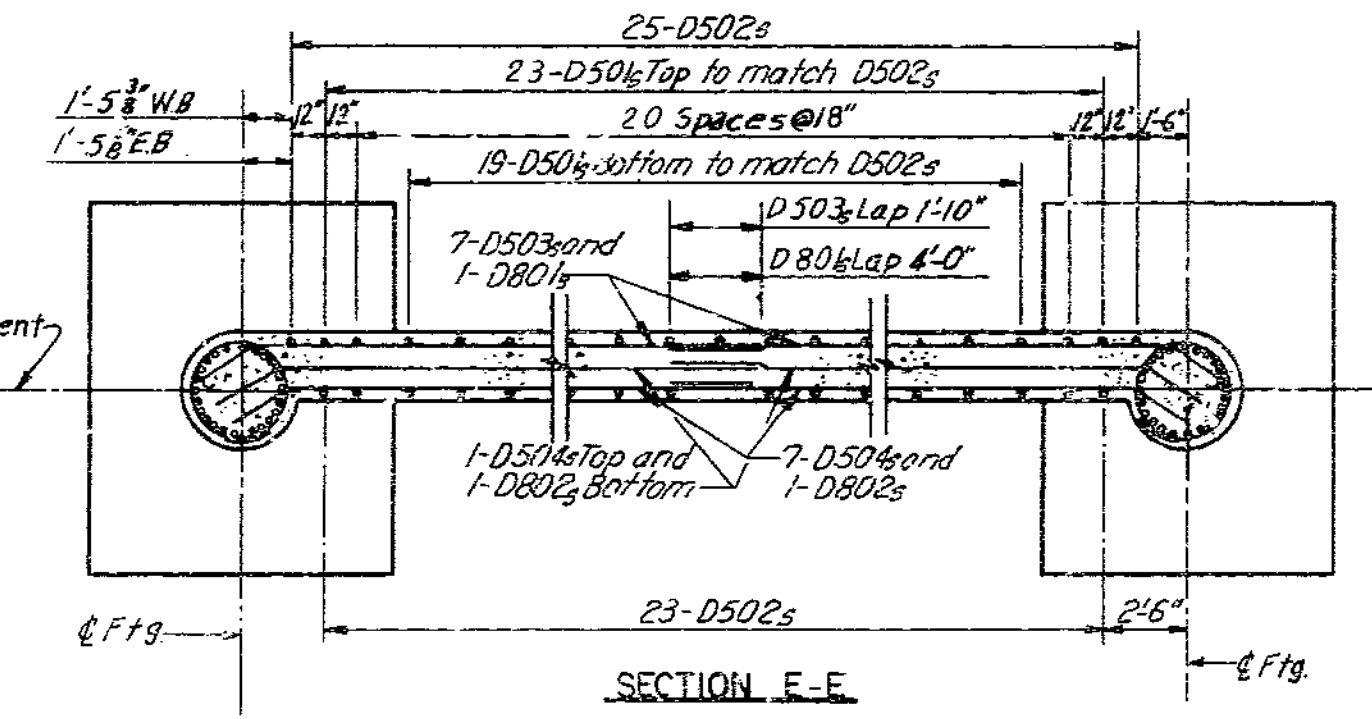
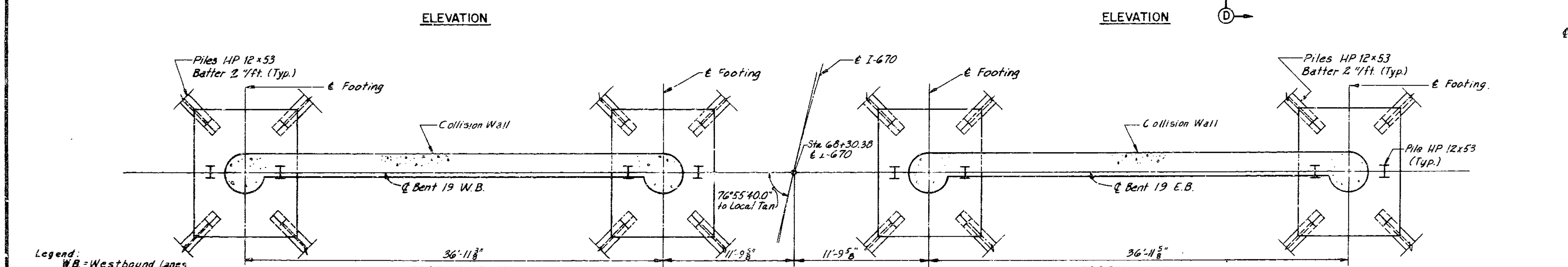
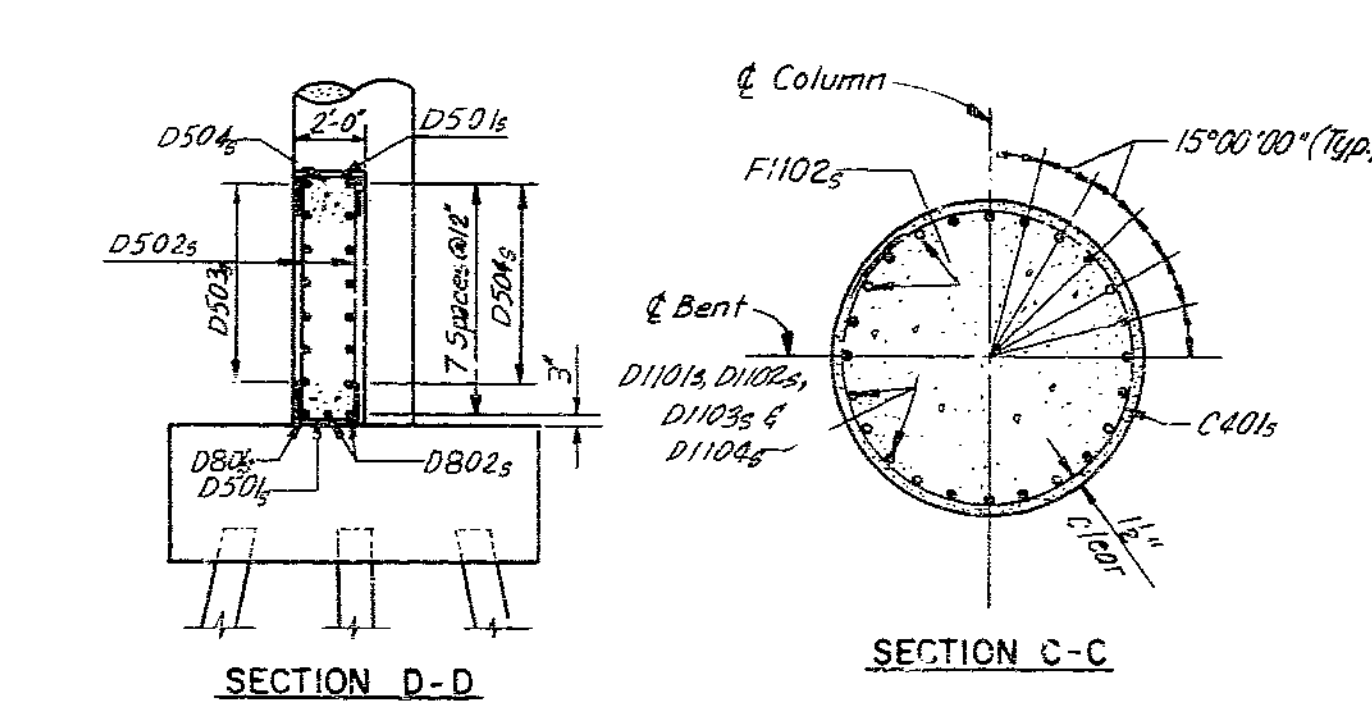
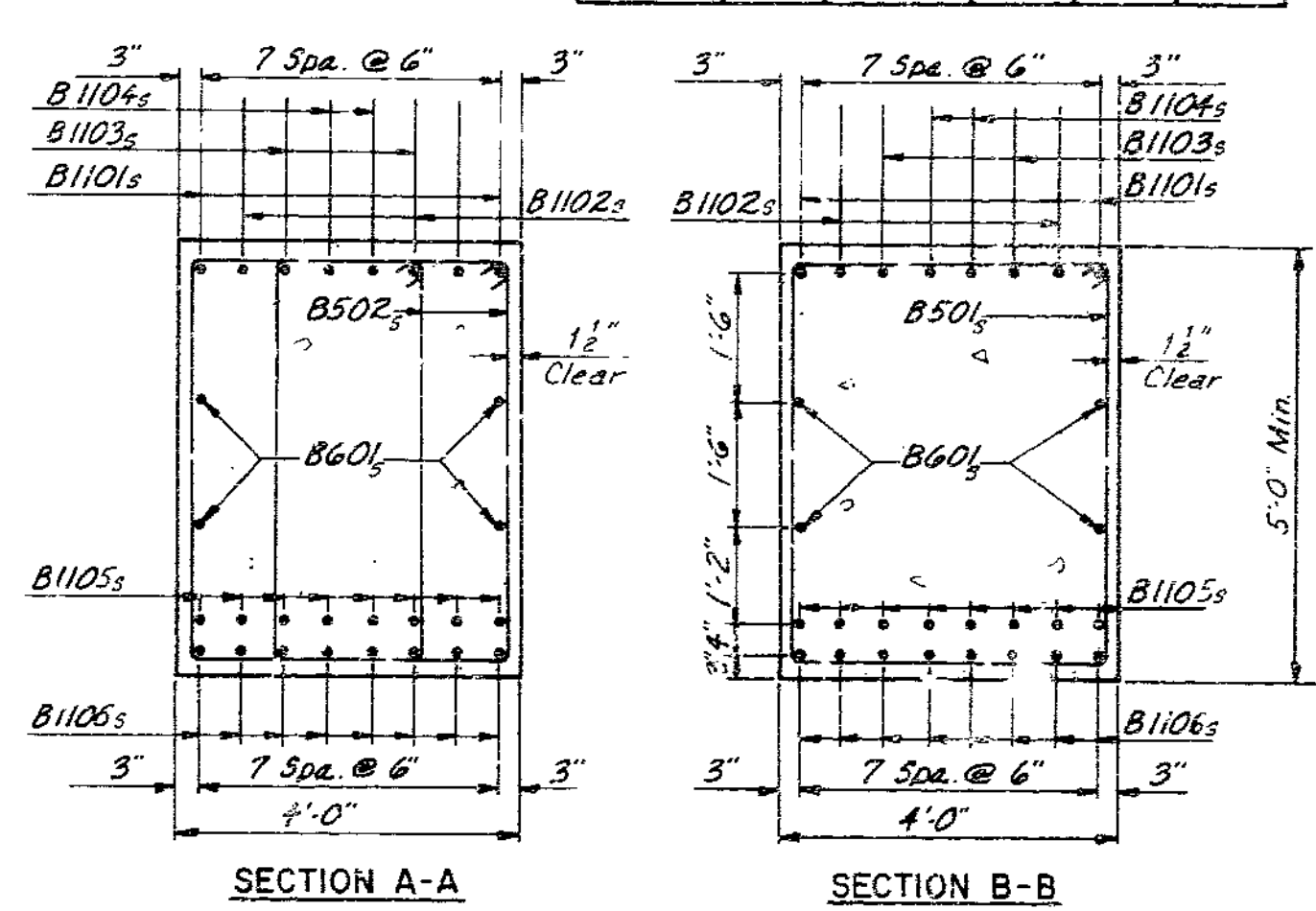
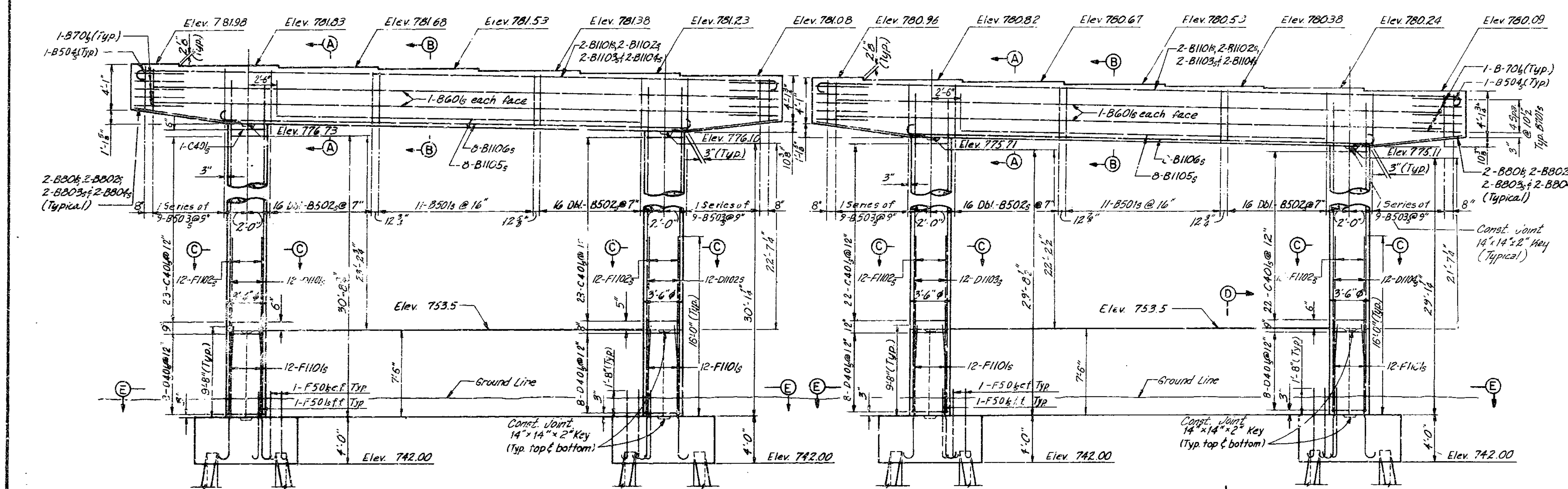
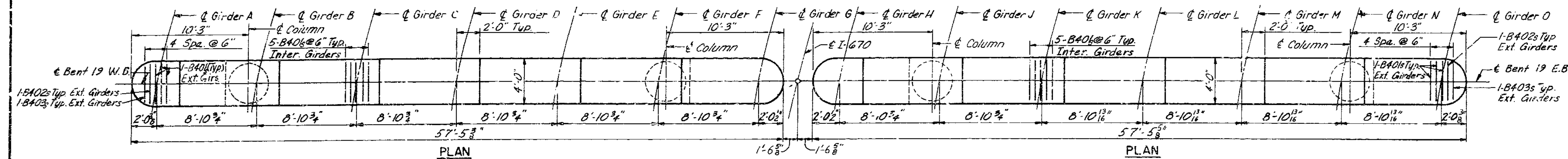
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 26 of 32.

Notes:
Pile spacing is measured at bottom of footing.
For section thru osp at anchor bolt locations see sheet 77.

BENT 18 WESTBOUND AND EASTBOUND FILE FOOTING ALTERNATE
JACKSON COUNTY A-3136

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	MO.			96	



Notes:
 Pile spacing is measured at bottom of footing.
 For section thru cap at anchor bolt locations see sheet 77.

BENT 19 WESTBOUND AND EASTBOUND PILE FOOTING ALTERNATE
 JACKSON COUNTY

301

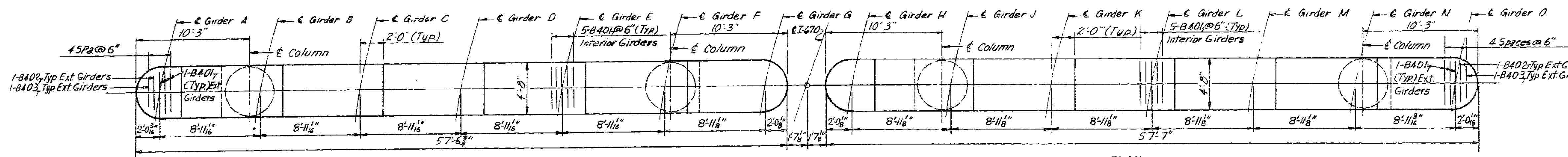
DESIGNED 10/78
 CHECKED 10/78

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 27 of 22. Revised 8/10/82

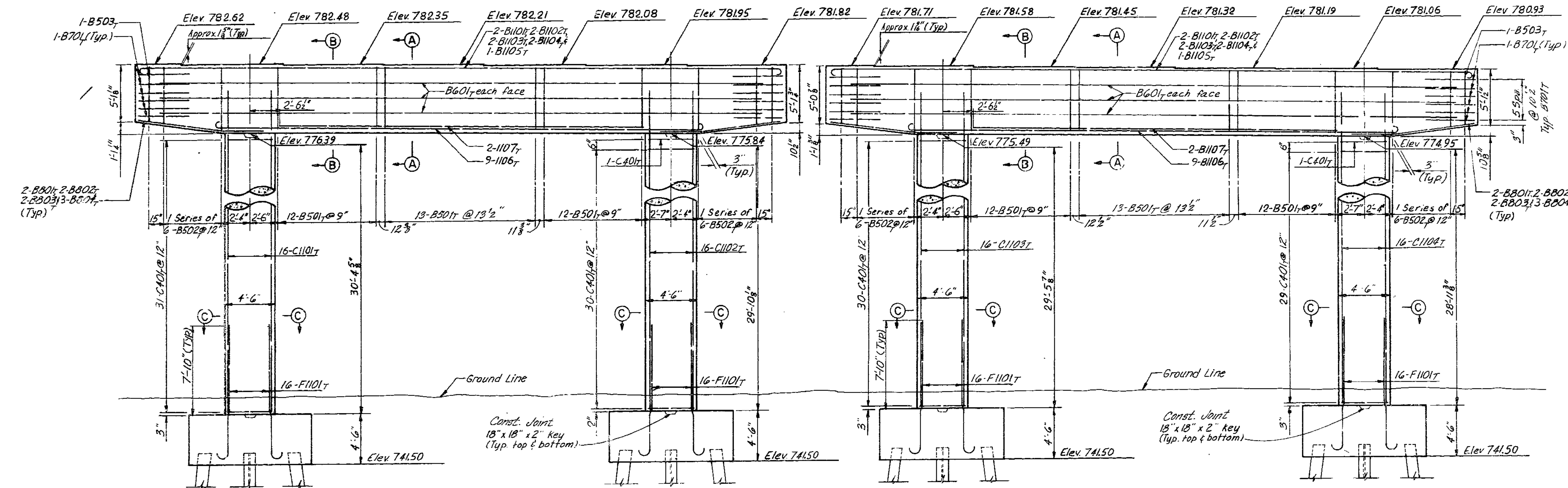
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		18	97	



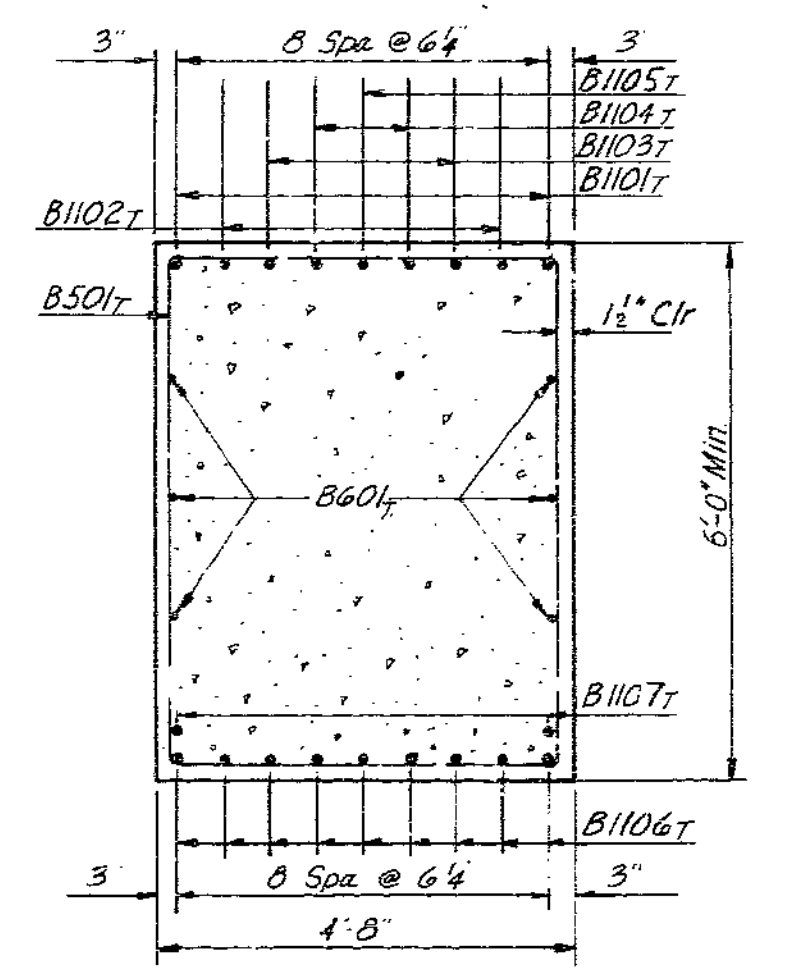
PLAN

PLAN

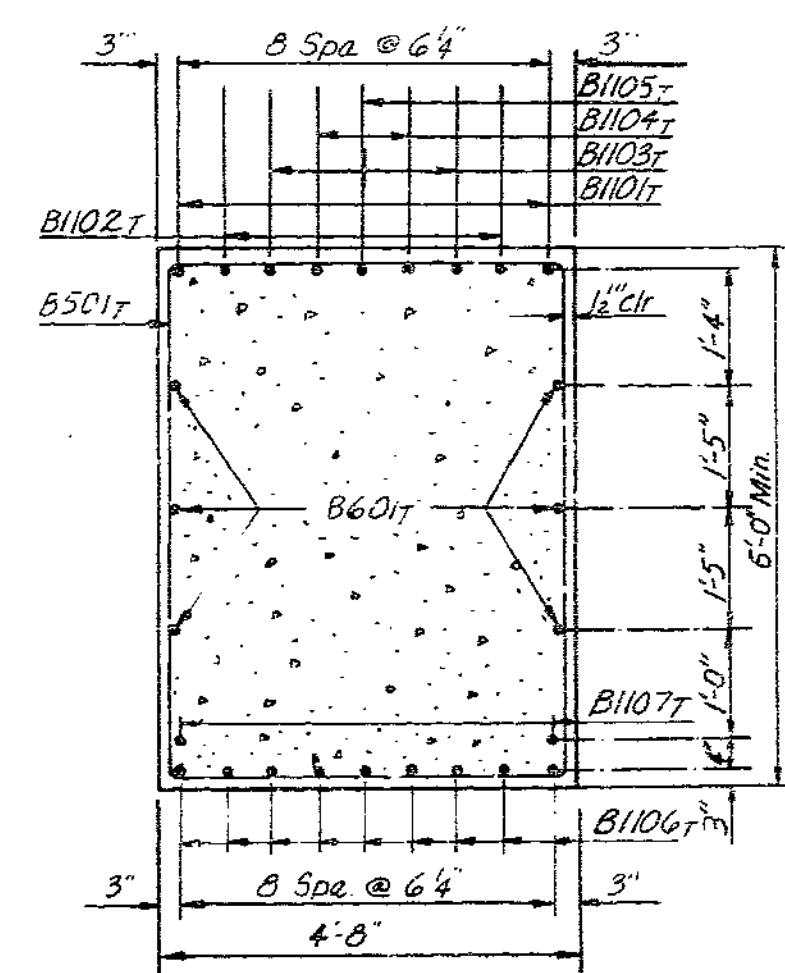


ELEVATION

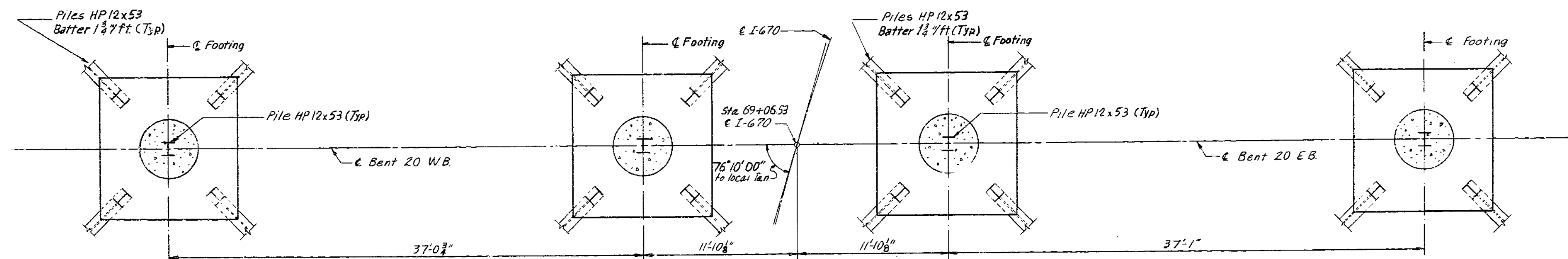
ELEVATION



SECTION A-A

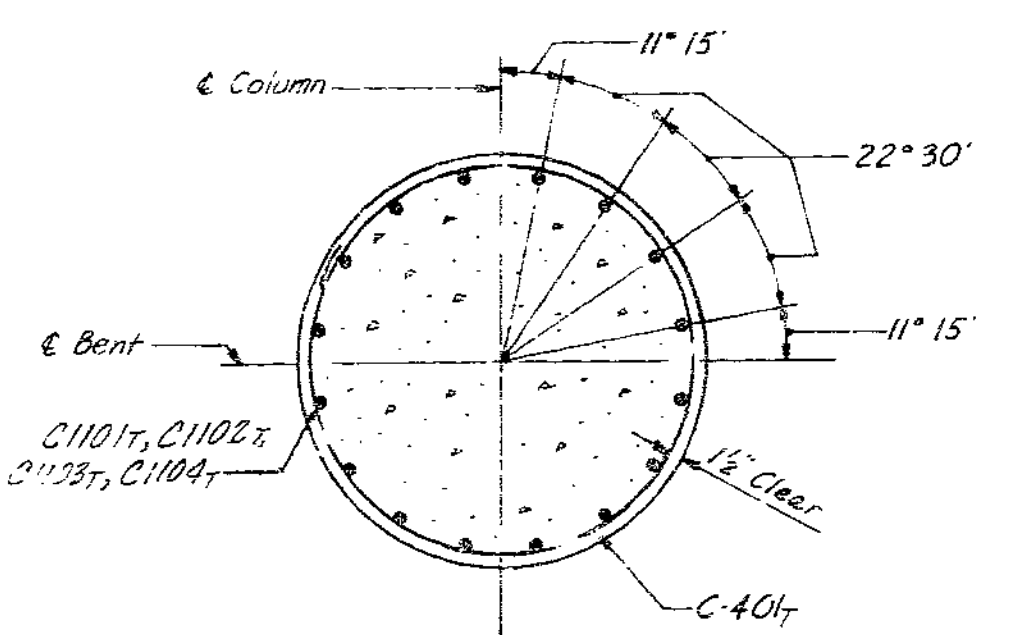


SECTION B-B

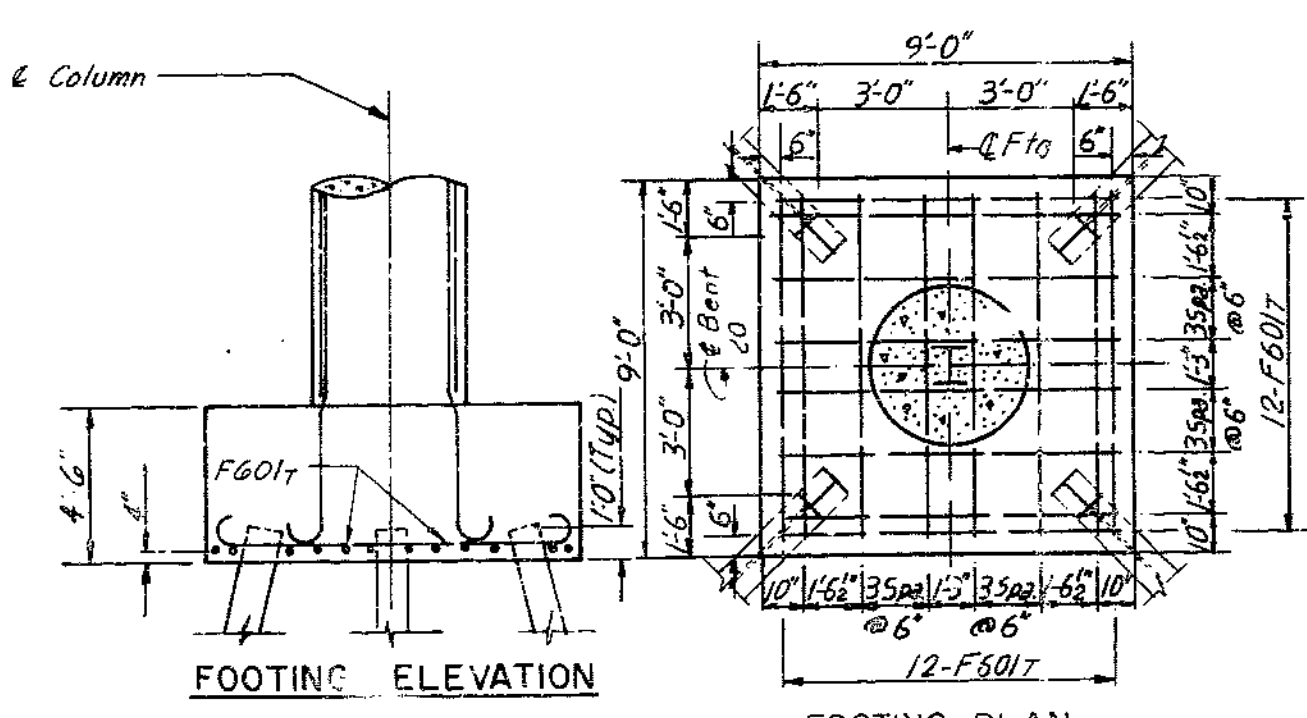


FOOTING PLAN WESTBOUND LANE

FOOTING PLAN EASTBOUND LANE

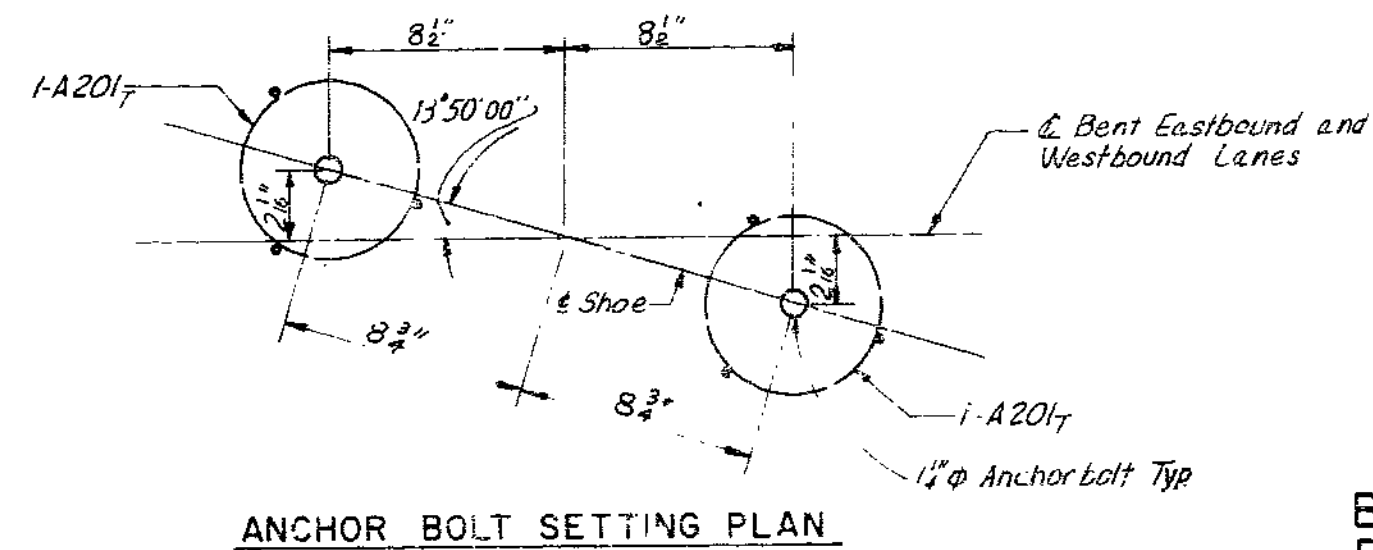


SECTION C-C



FOOTING ELEVATION

FOOTING PLAN



ANCHOR BOLT SETTING PLAN

Notes:
Pile spacing is measured at bottom of footing.
For section thru cap at anchor bolt locations see sheet 77.

BENT 20 WESTBOUND AND EASTBOUND PILE FOOTING ALTERNATE JACKSON COUNTY

A-3136

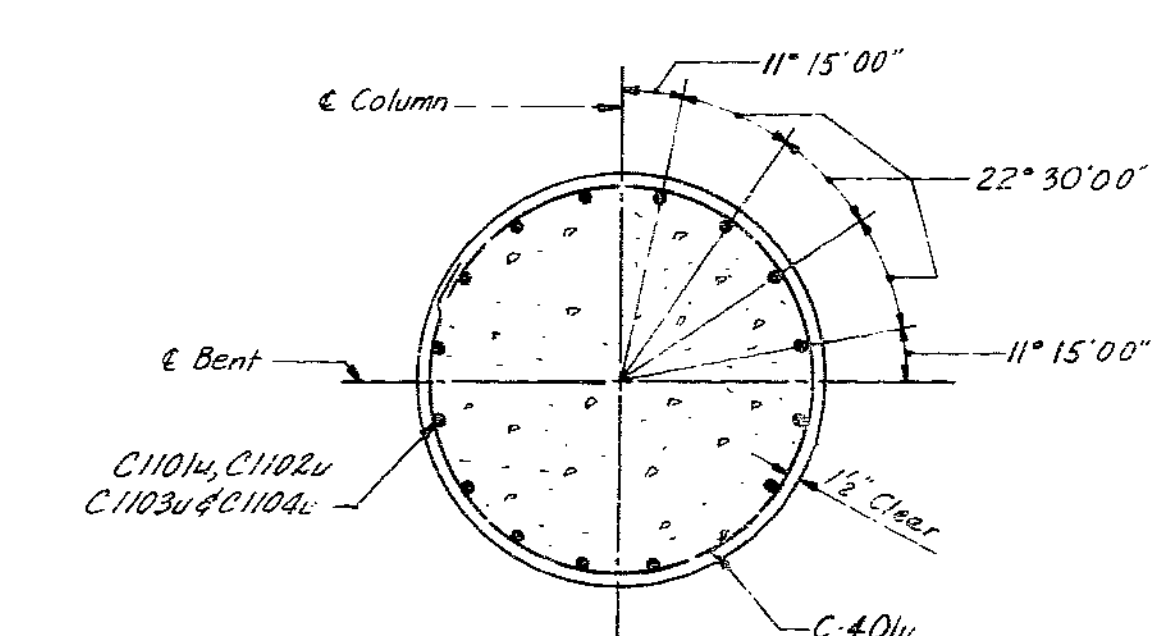
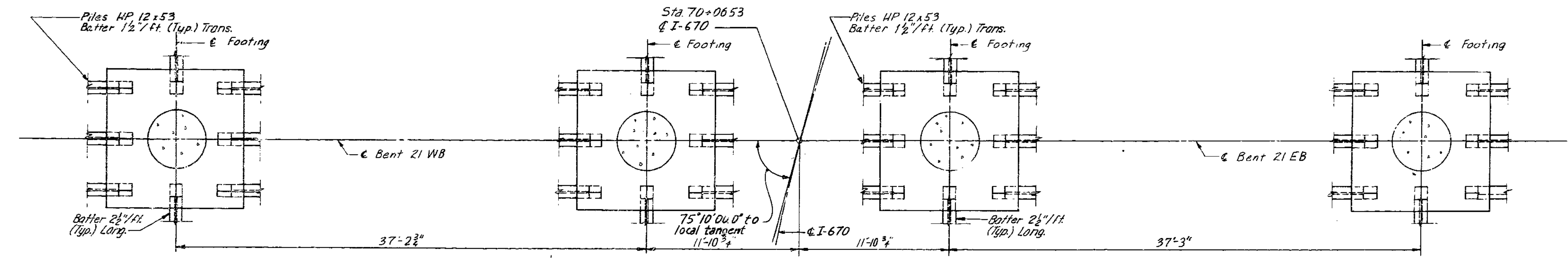
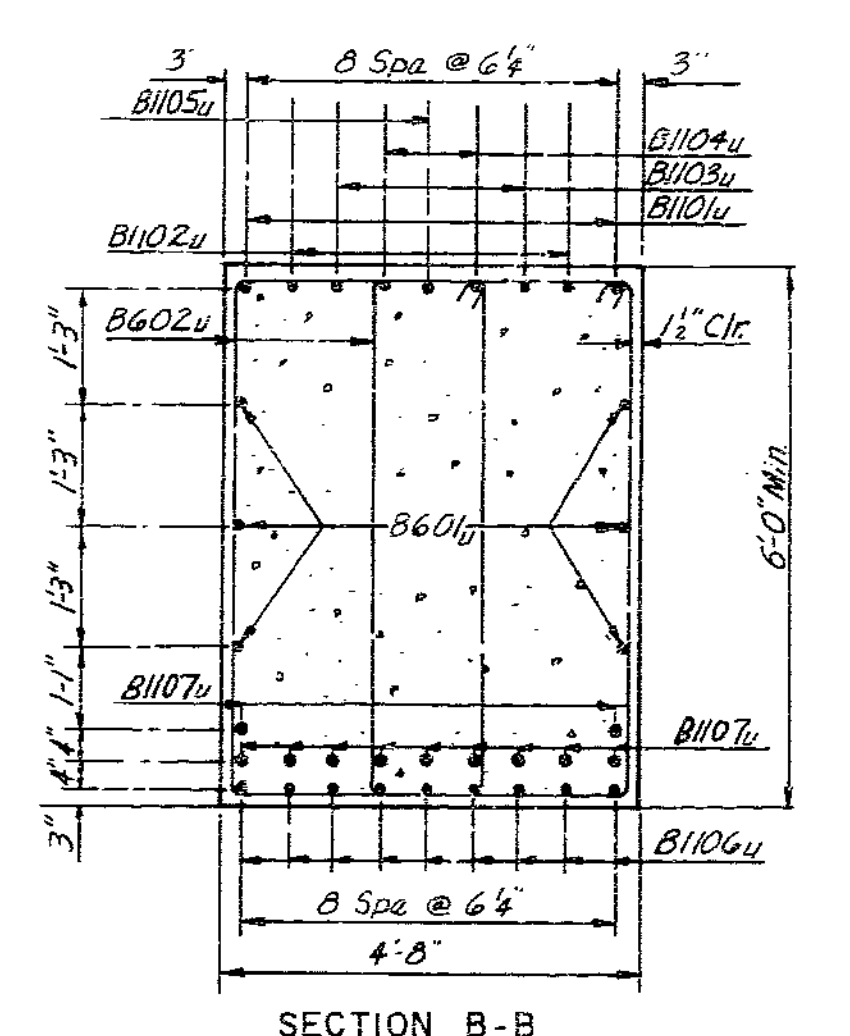
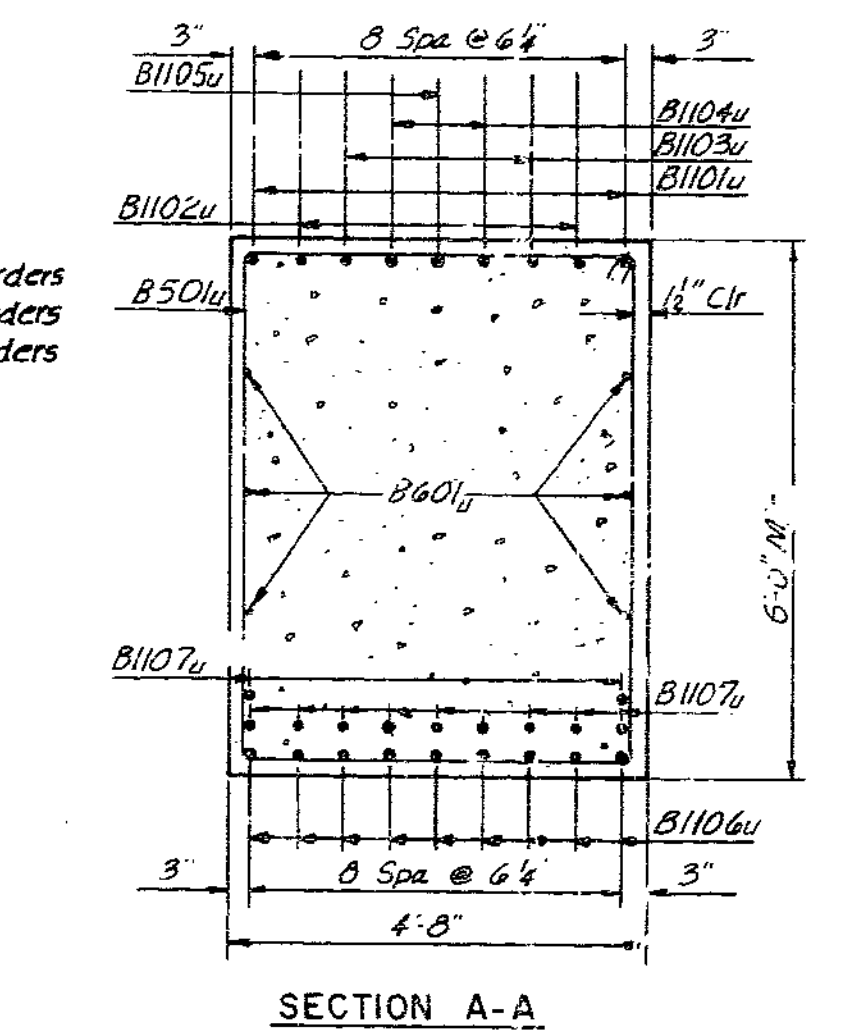
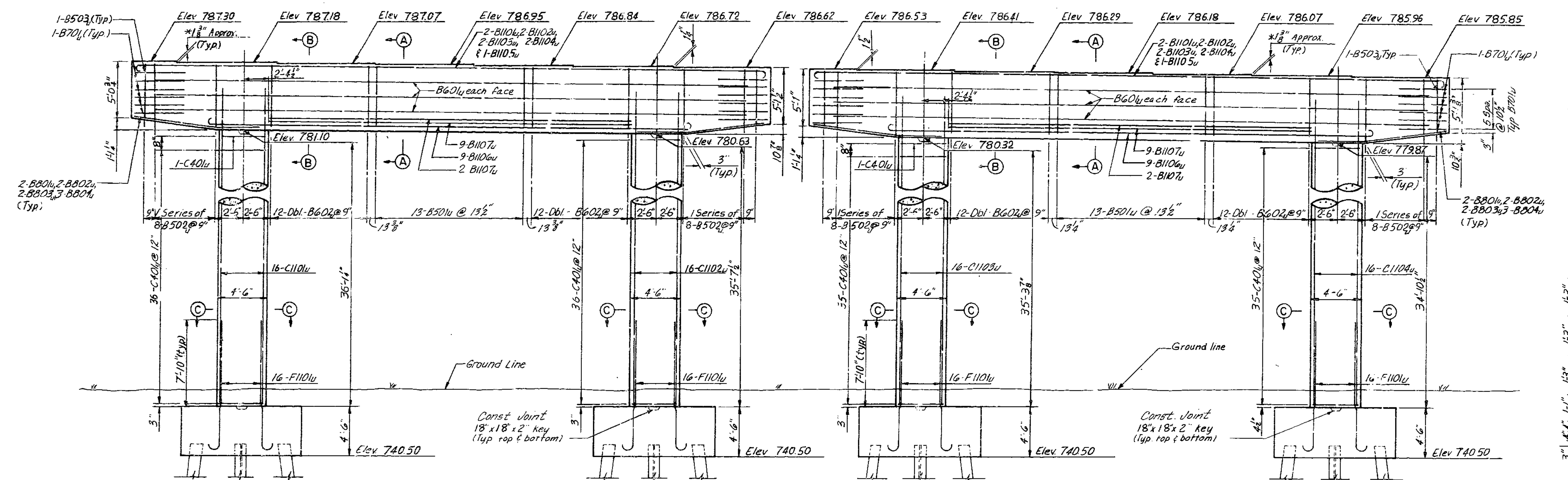
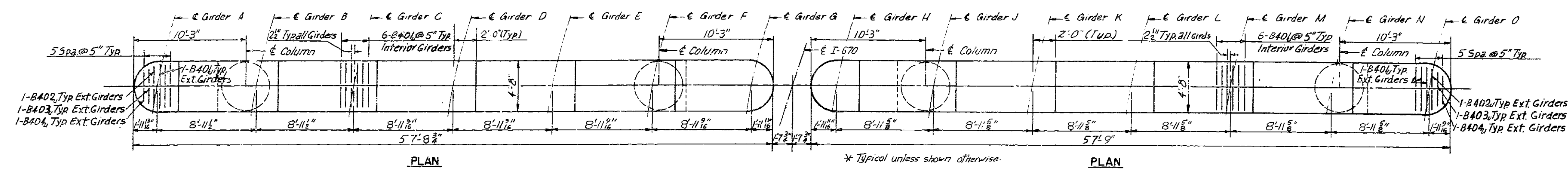
DETAILED 1978
CHECKED 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 28 of 32.

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2	MO.		88	98	



Legend
 W.B. = Westbound Lanes
 E.B. = Eastbound Lanes

Notes:
 Pile spacing is measured at bottom of footing.
 For section thru cap at anchor bolt locations see sheet 77.

BENT 21 WESTBOUND AND EASTBOUND PILE FOOTING ALTERNATE

303

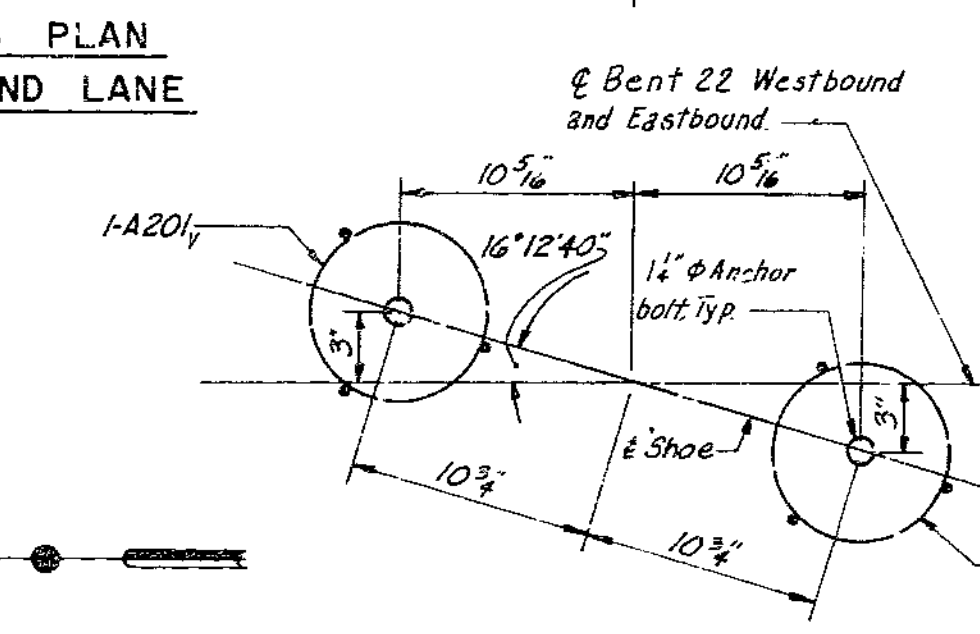
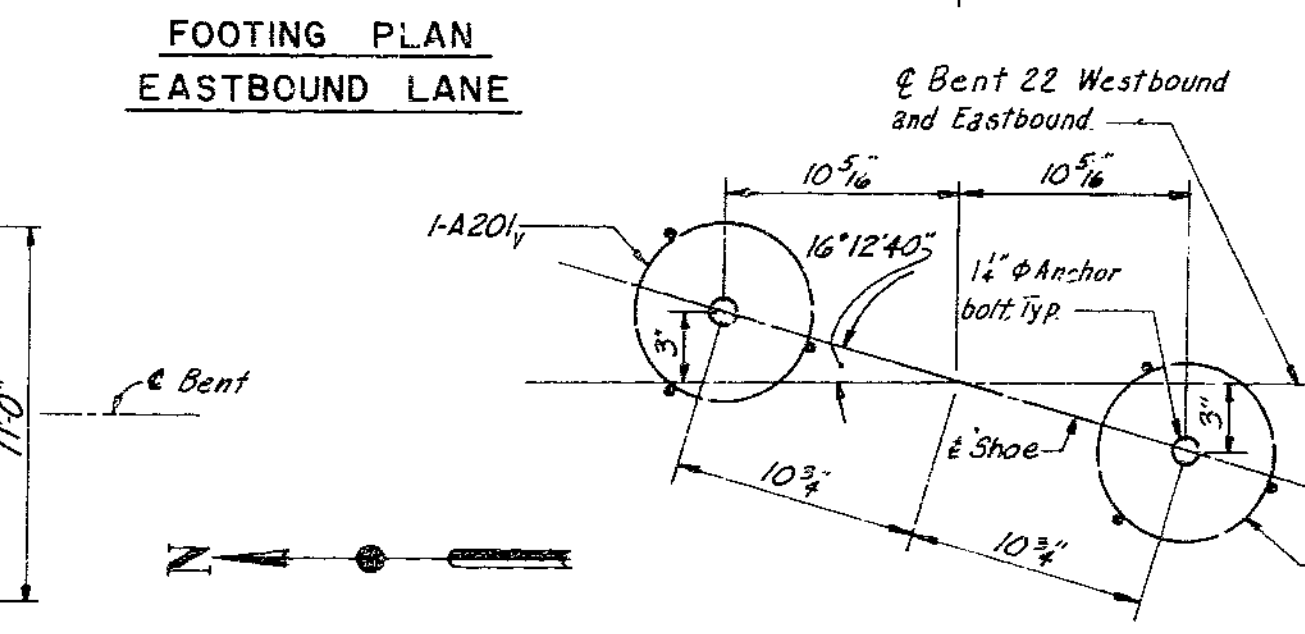
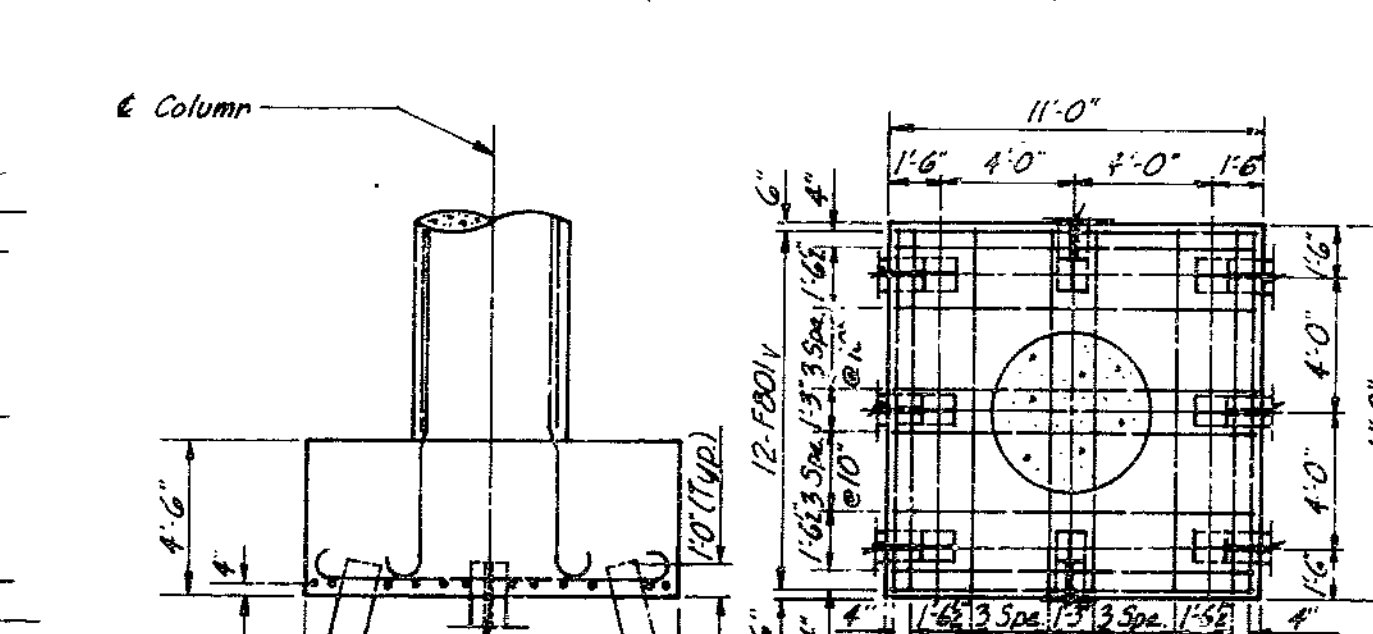
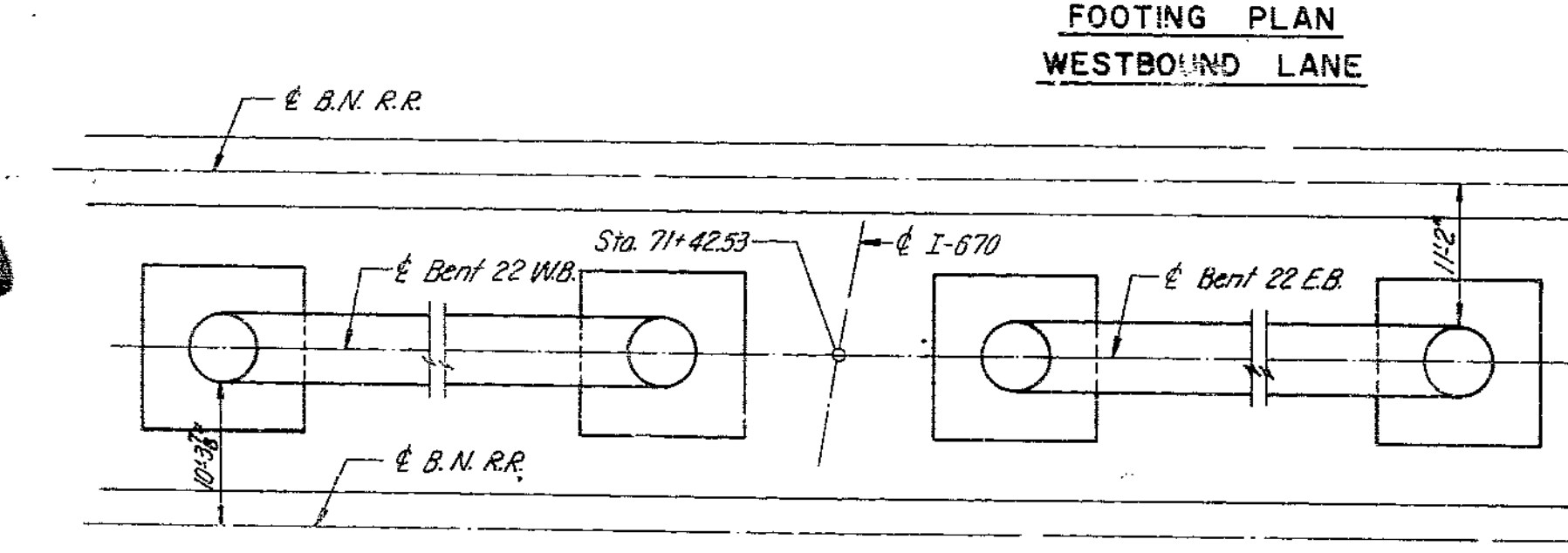
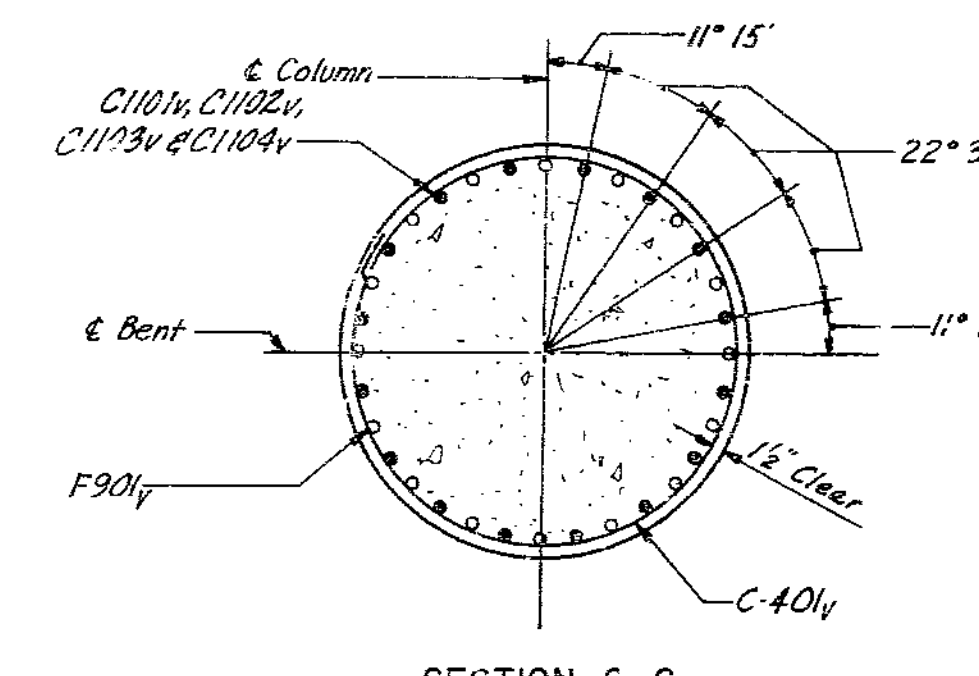
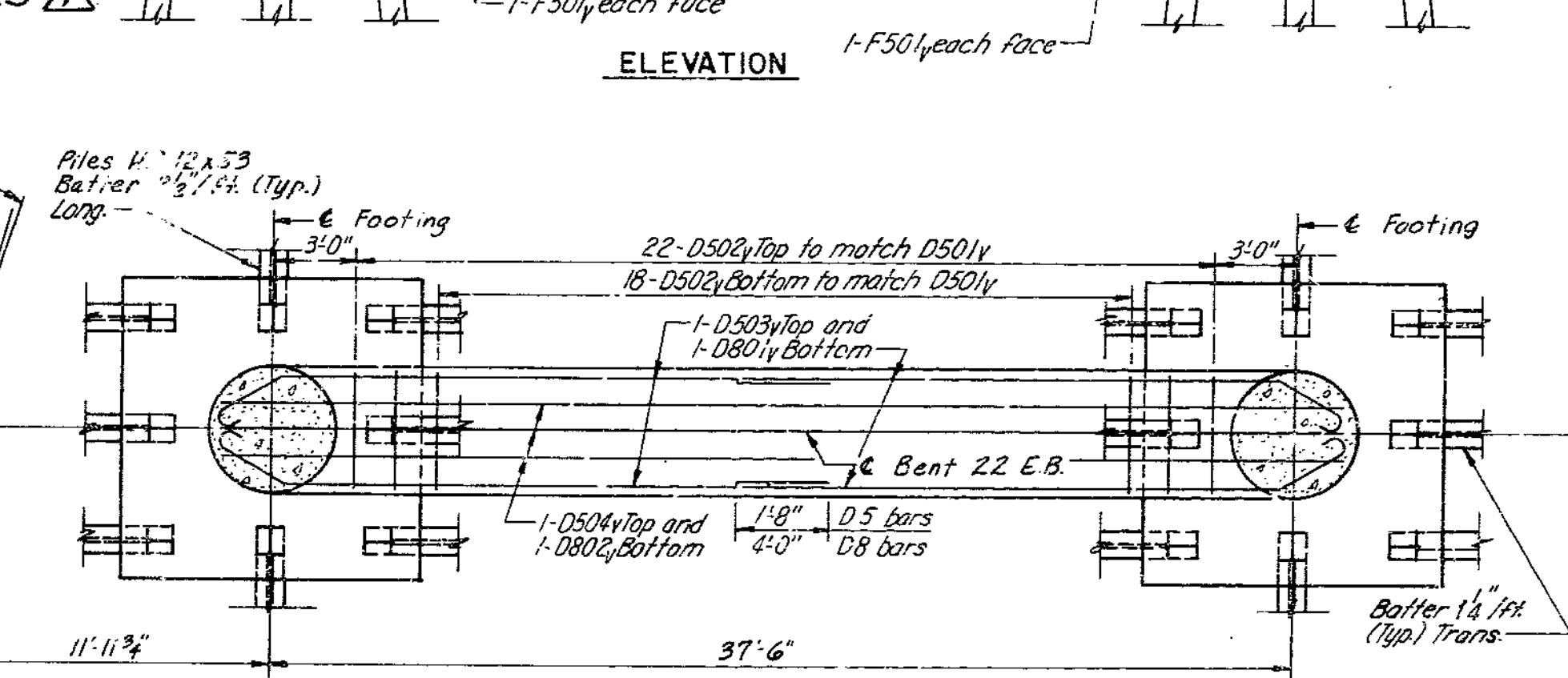
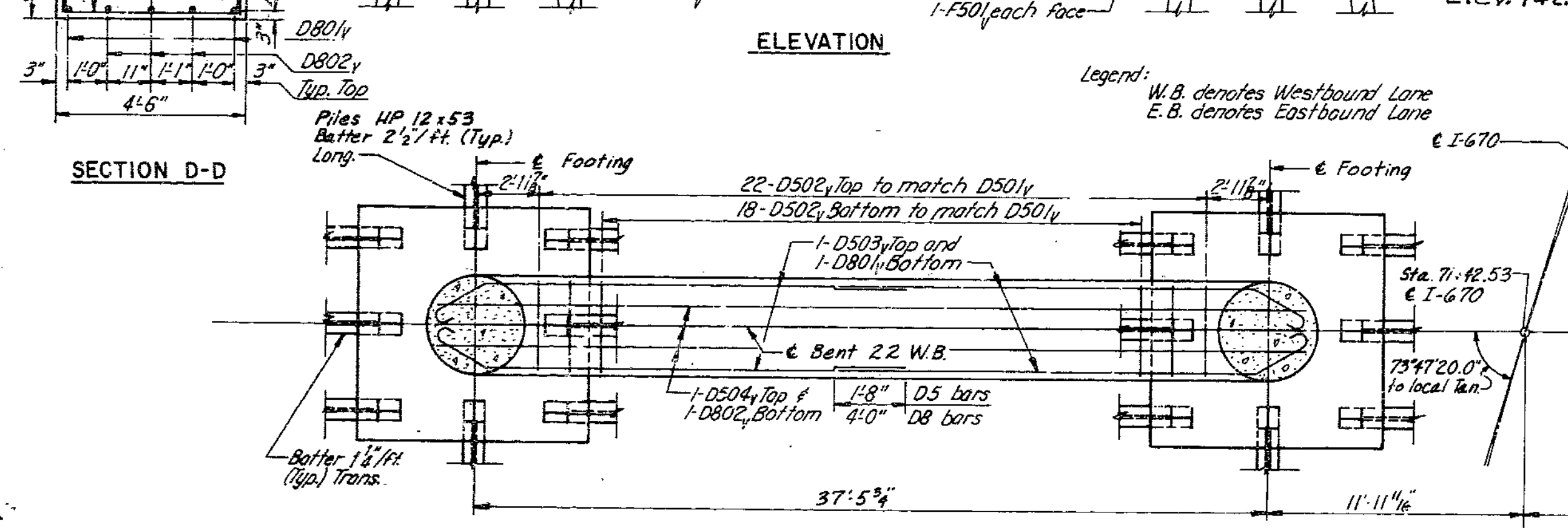
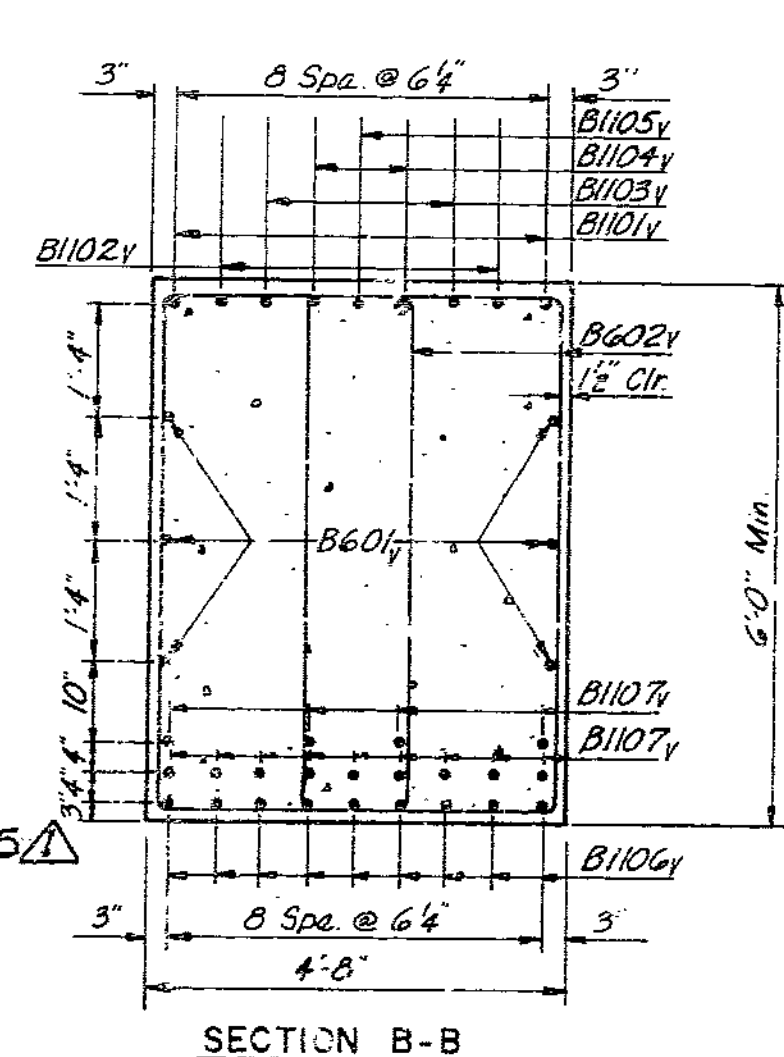
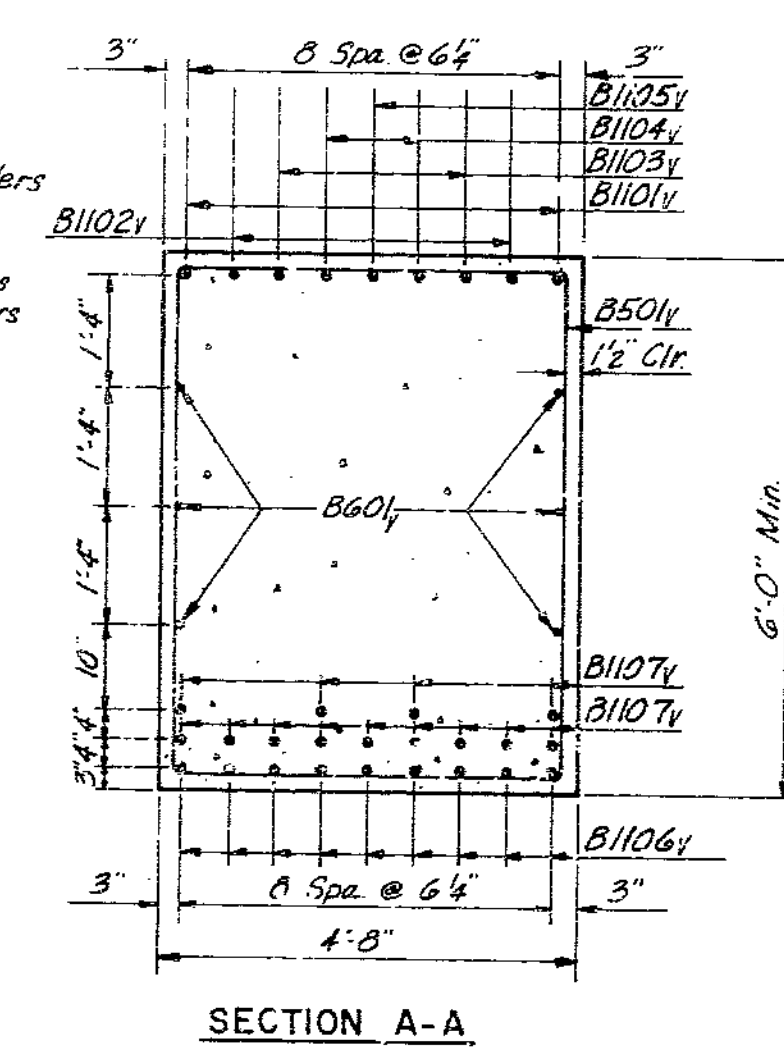
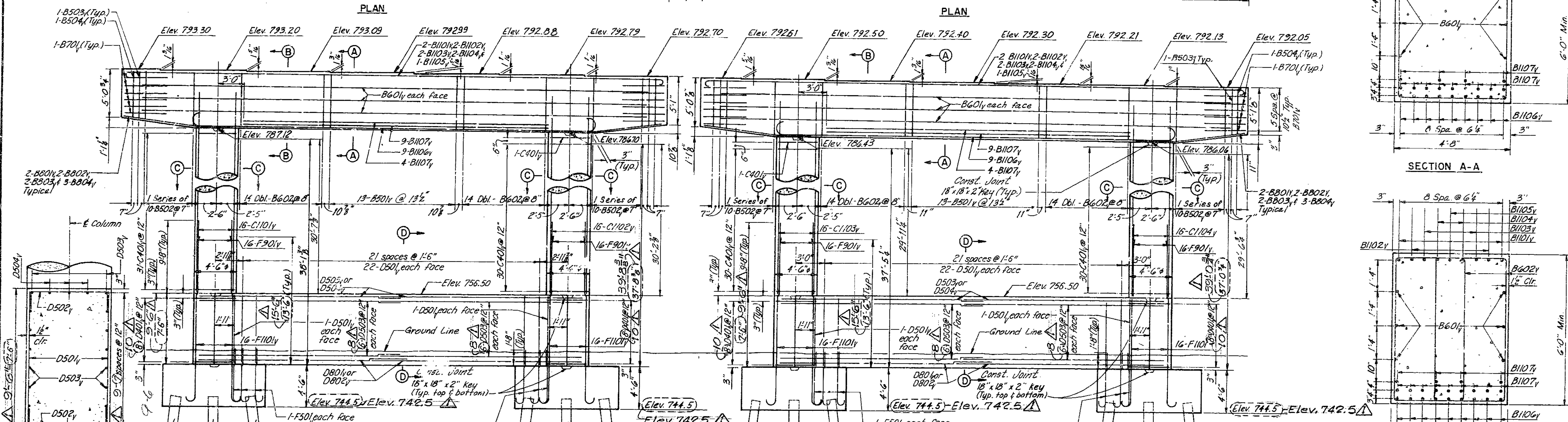
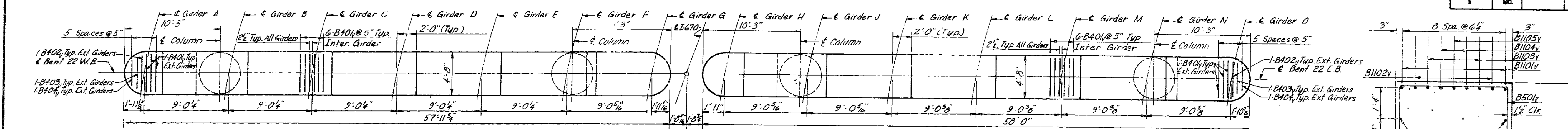
DETAILED 1978
 CHECKED 1978

Note: This drawing is not to scale. Follow dimensions.

FOOTING ELEVATION

ANCHOR BOLT SETTING PLAN

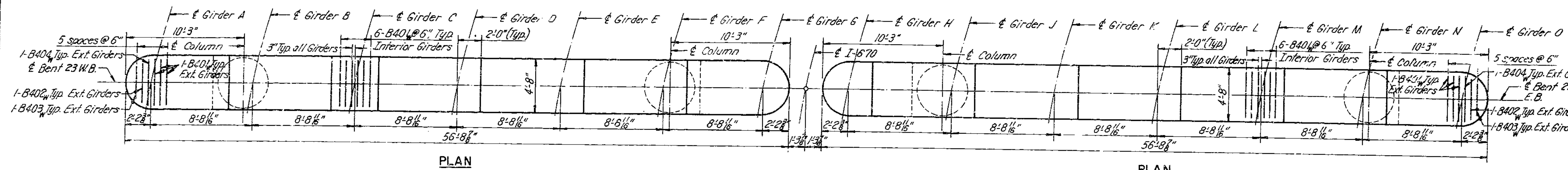
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	99	



Notes:
 Pile spacing is measured at bottom of footing.
 For section thru cap at anchor bolt locations see sheet 77.

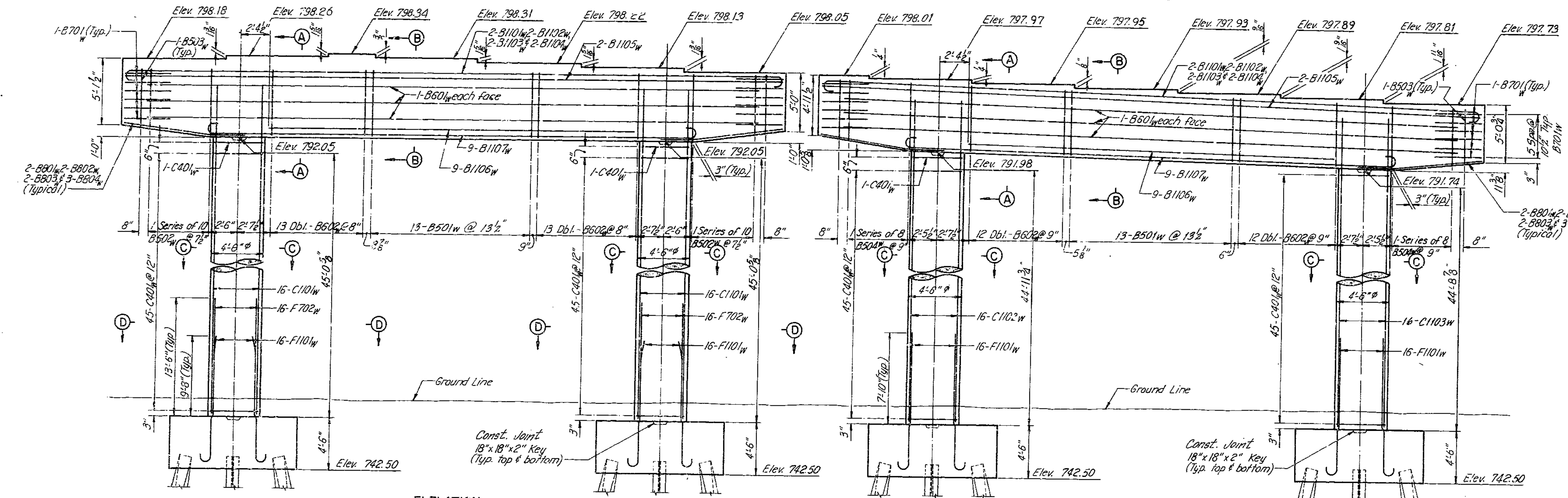
309

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		19	100	



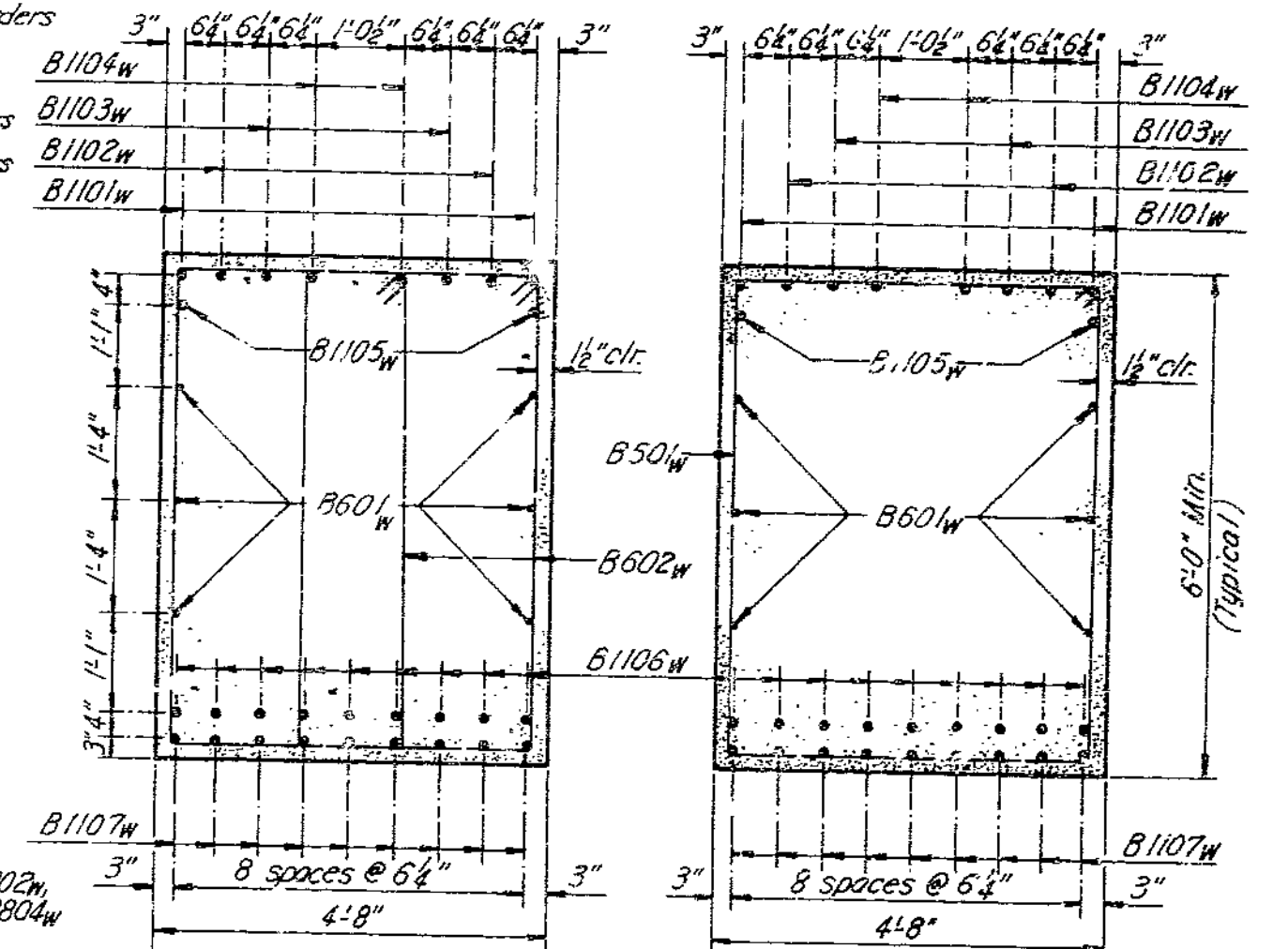
PLAN

PLAN



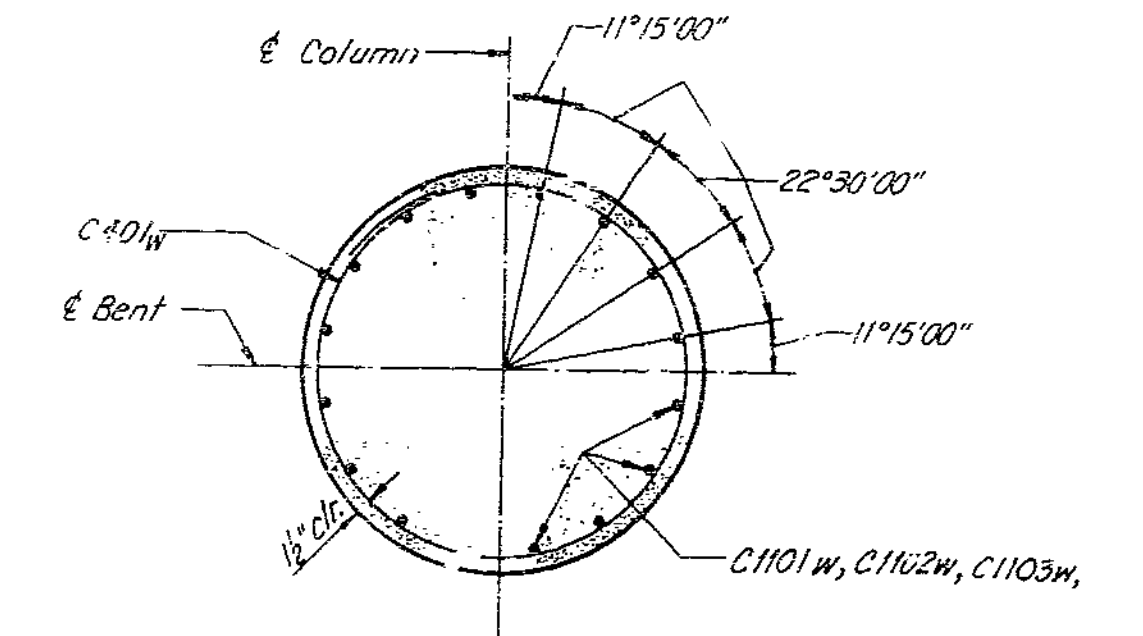
ELEVATION

ELEVATION

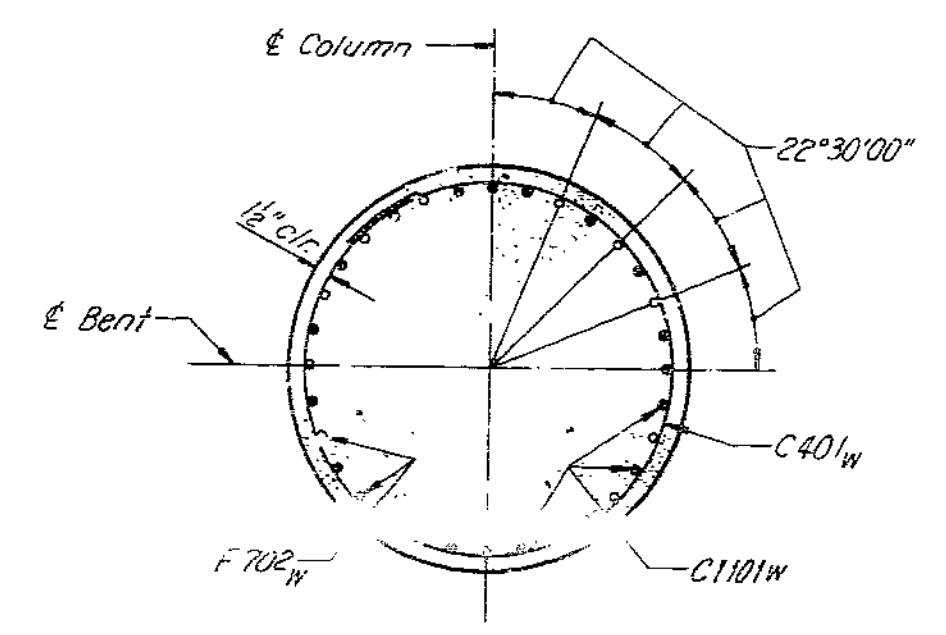


SECTION A-A

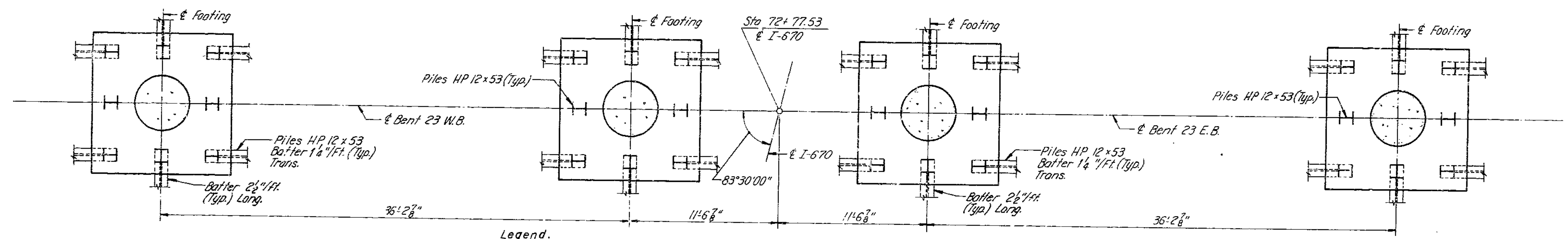
SECTION B-P



SECTION C-C



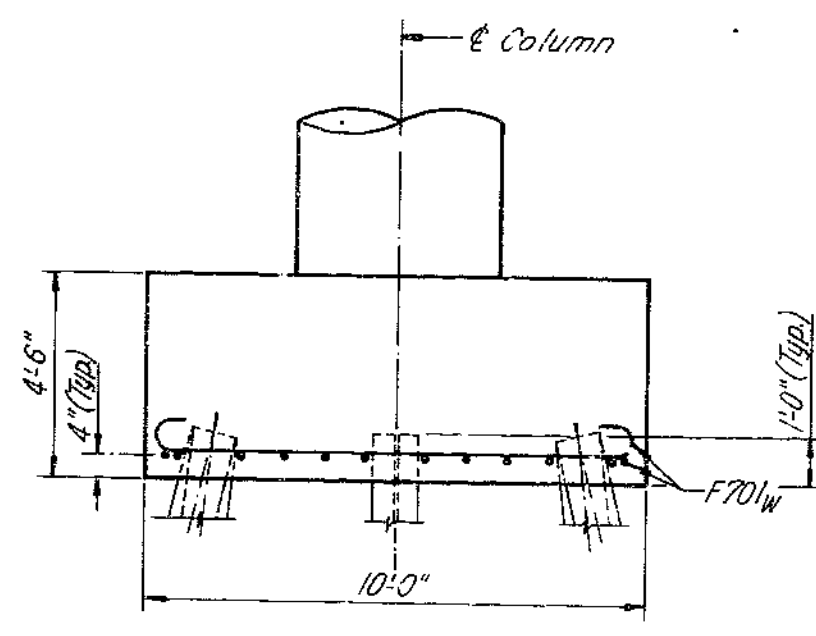
SECTION D-D



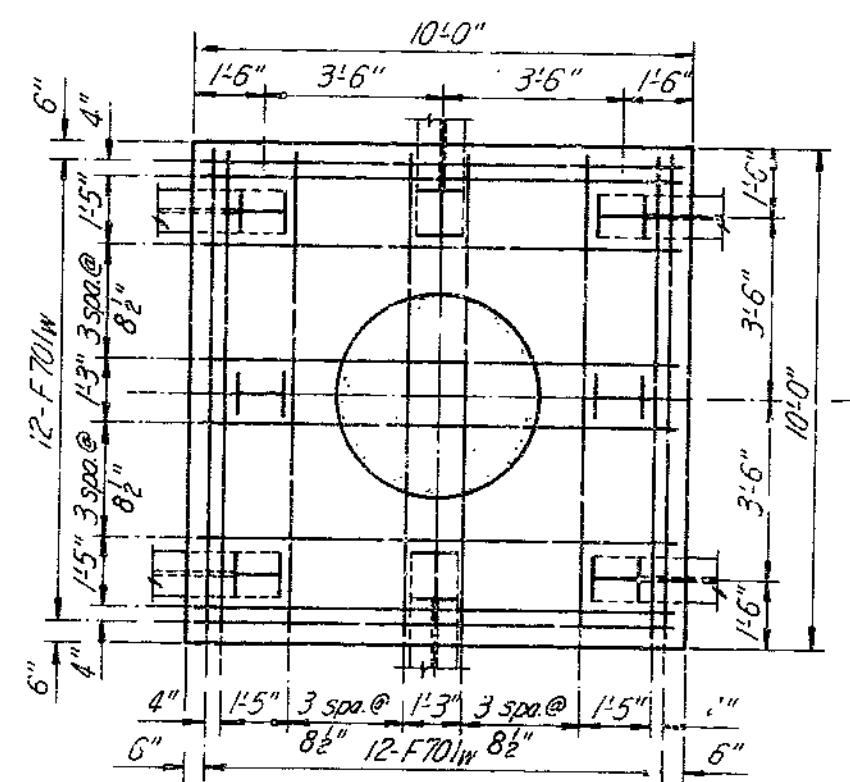
FOOTING PLAN WESTBOUND LANE

FOOTING PLAN EASTBOUND LANE

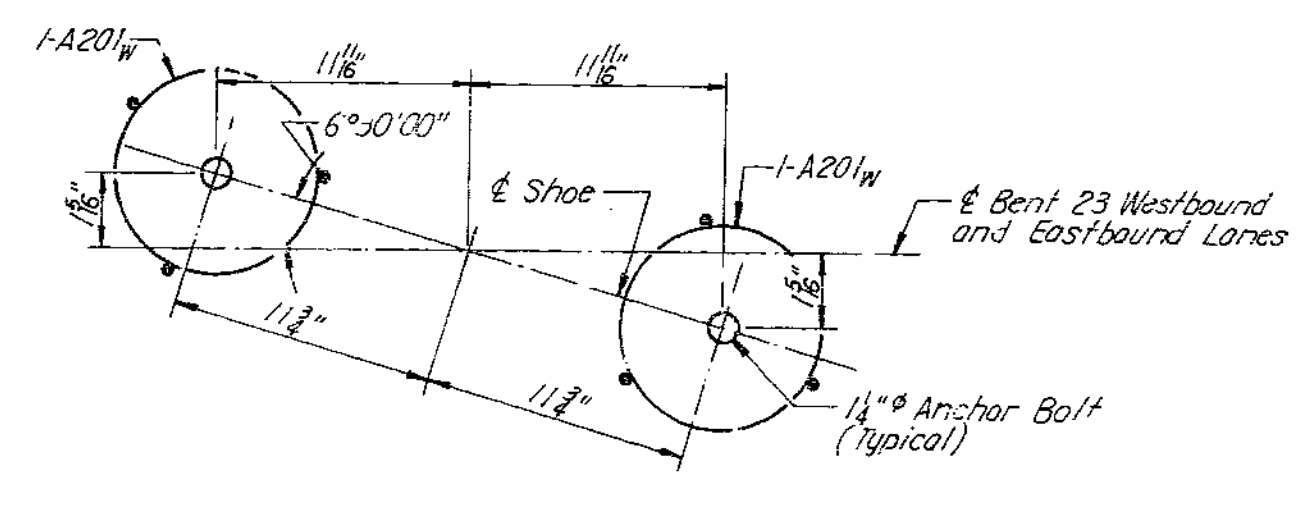
Legend.
W.B. denotes Westbound Lanes
E.B. denotes Eastbound Lanes



FOOTING ELEVATION



FOOTING PLAN



ANCHOR BOLT SETTING PLAN

Notes:
Pile spacing is measured at bottom of footing.
For section thru cap at anchor bolt locations see sheet 77.

305

DATE: 10/78
CHECKED: 10/78

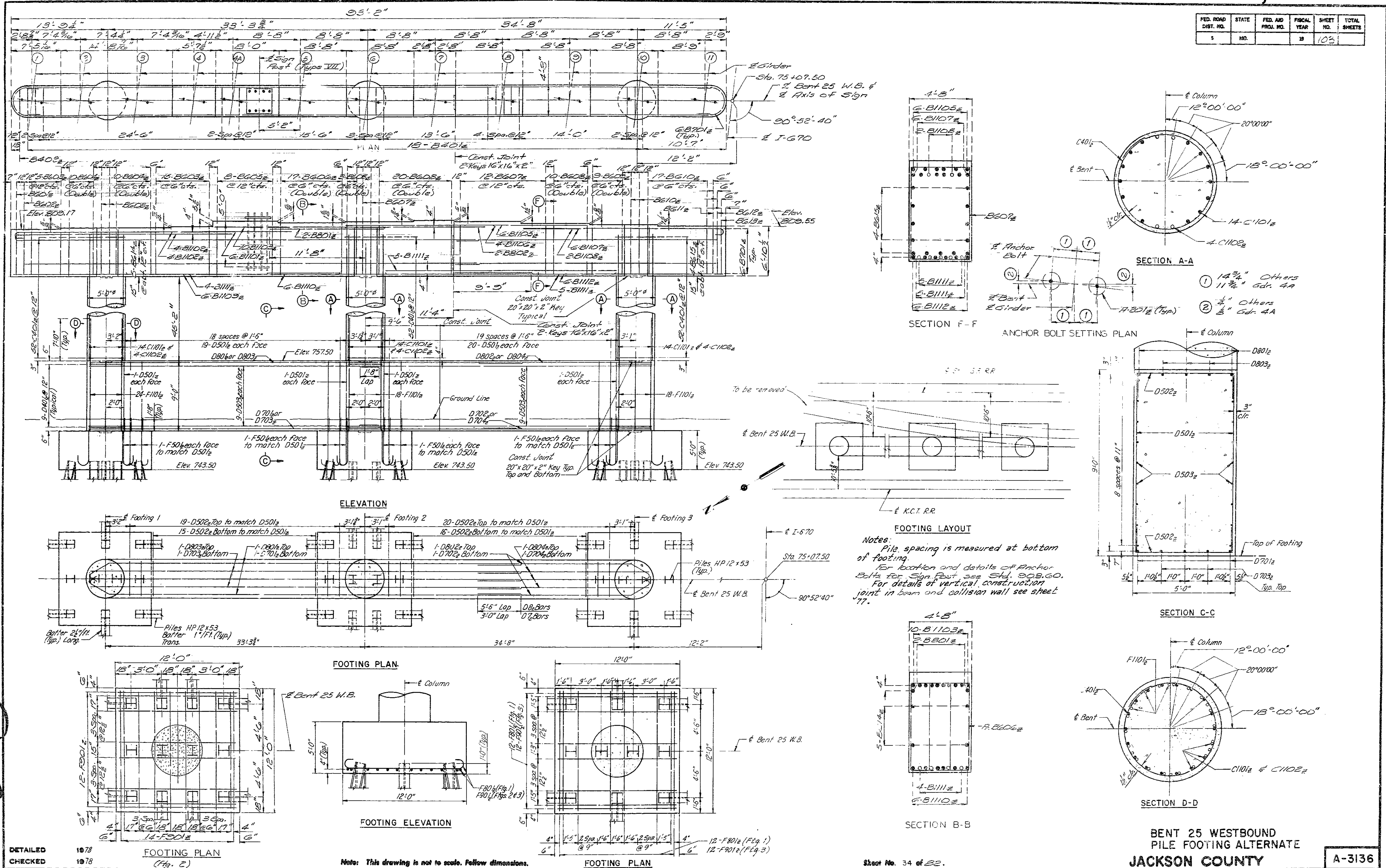
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 31 of 82.

BENT 23 WESTBOUND AND EASTBOUND
PILE FOOTING ALTERNATE
JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		18	103	



308

DETAILED 1978
 CHECKED 1978

FOOTING PLAN (Fig. 2)

Note: This drawing is not to scale. Follow dimensions.

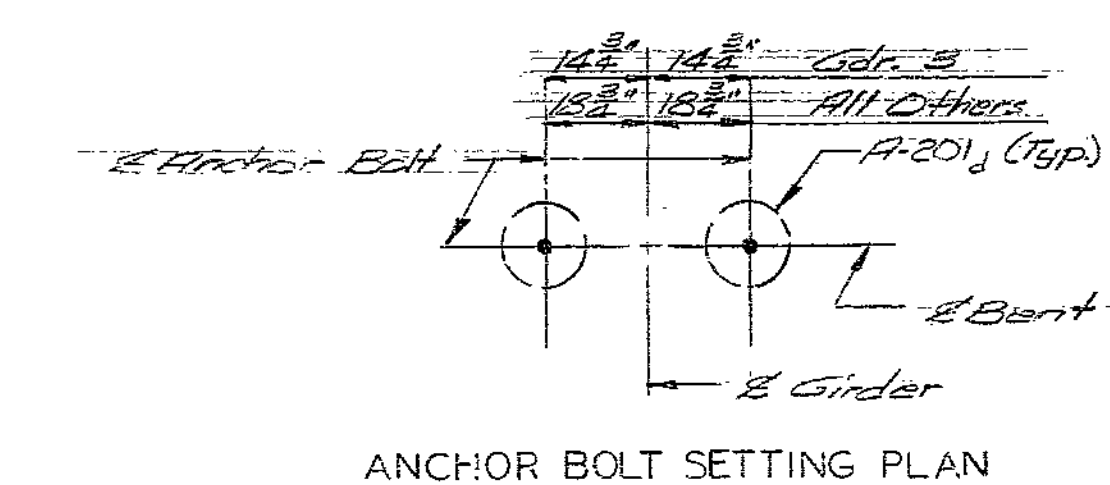
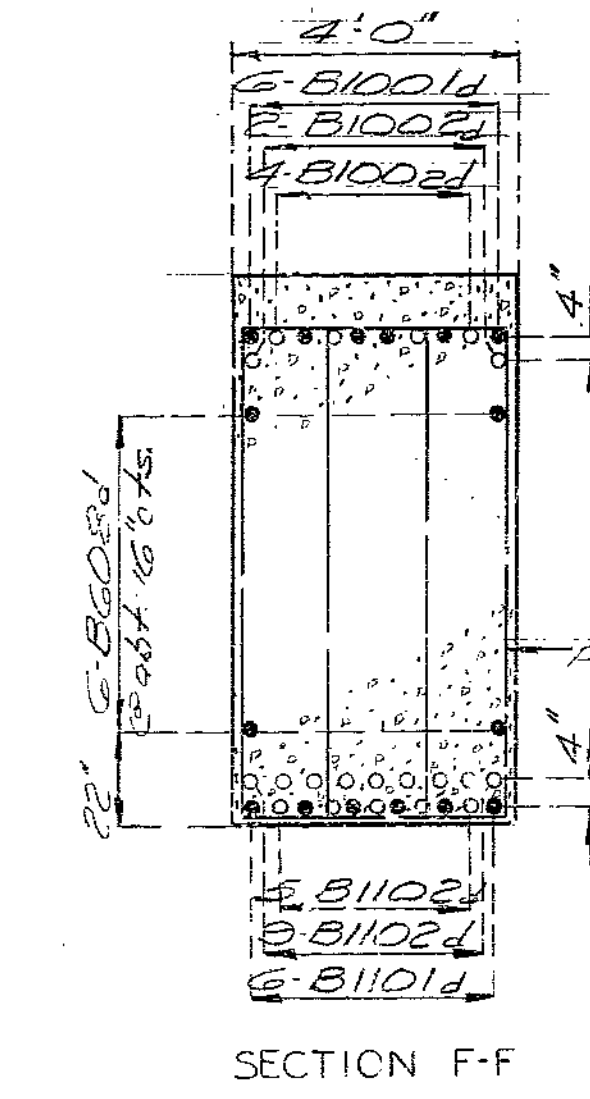
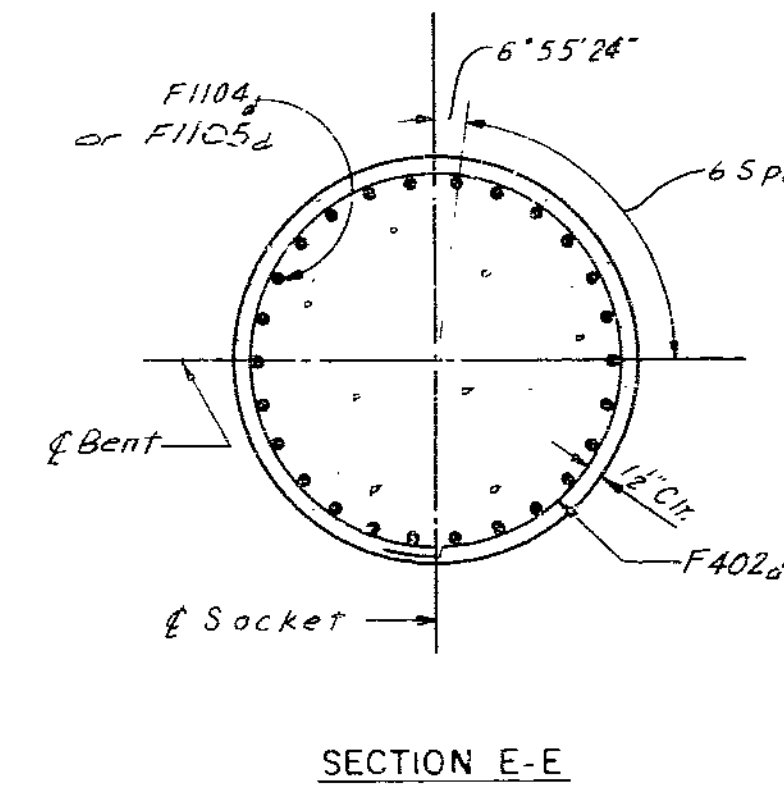
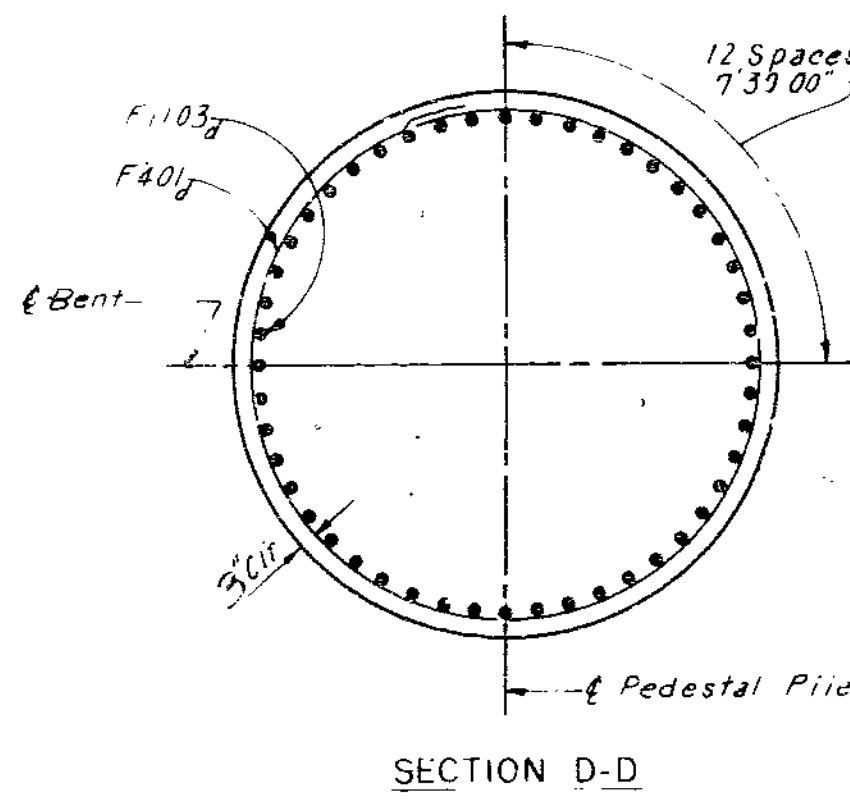
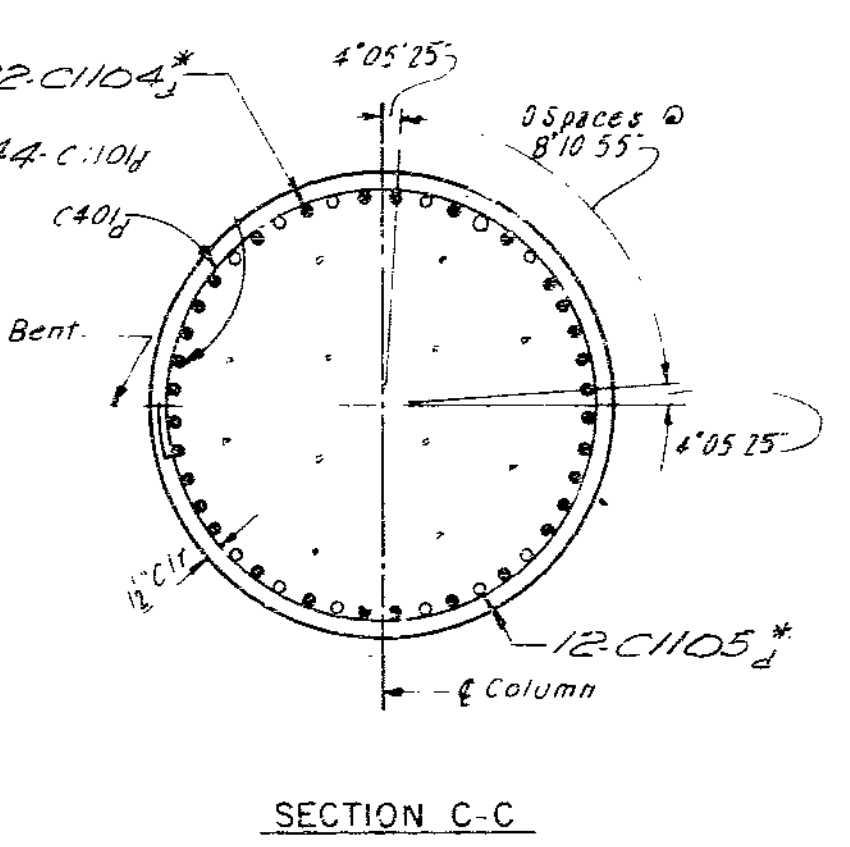
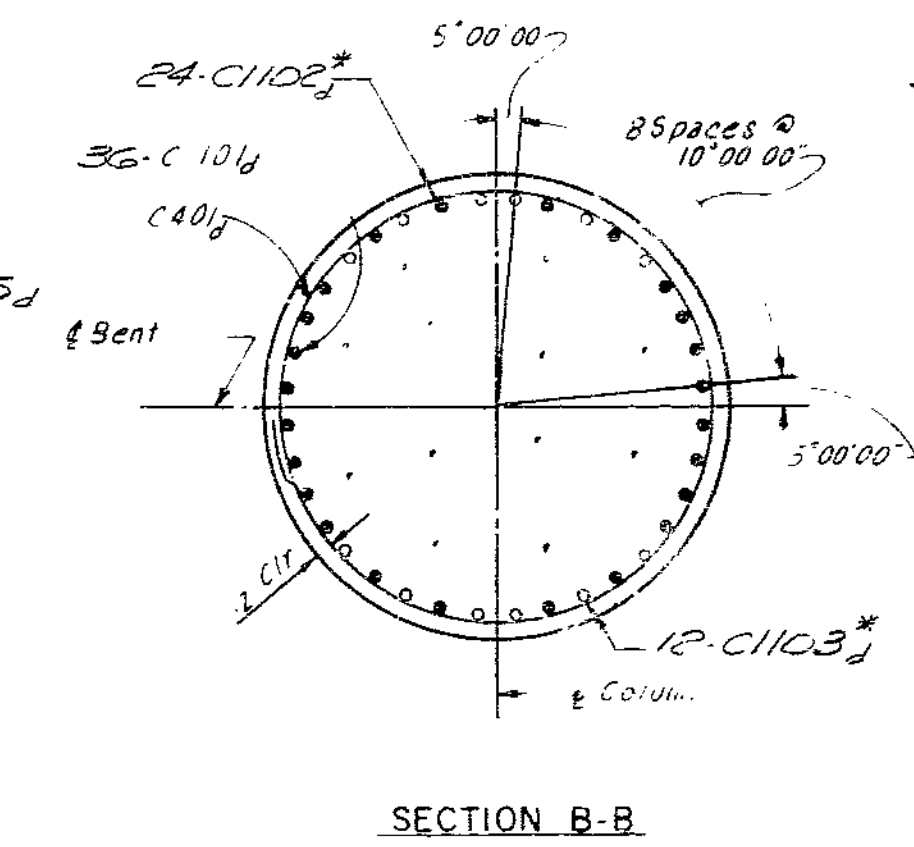
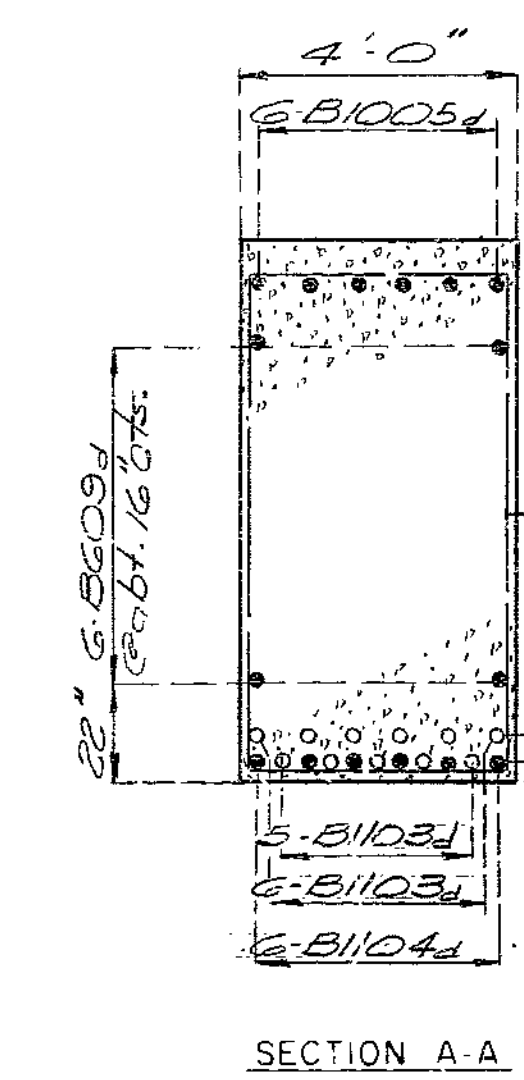
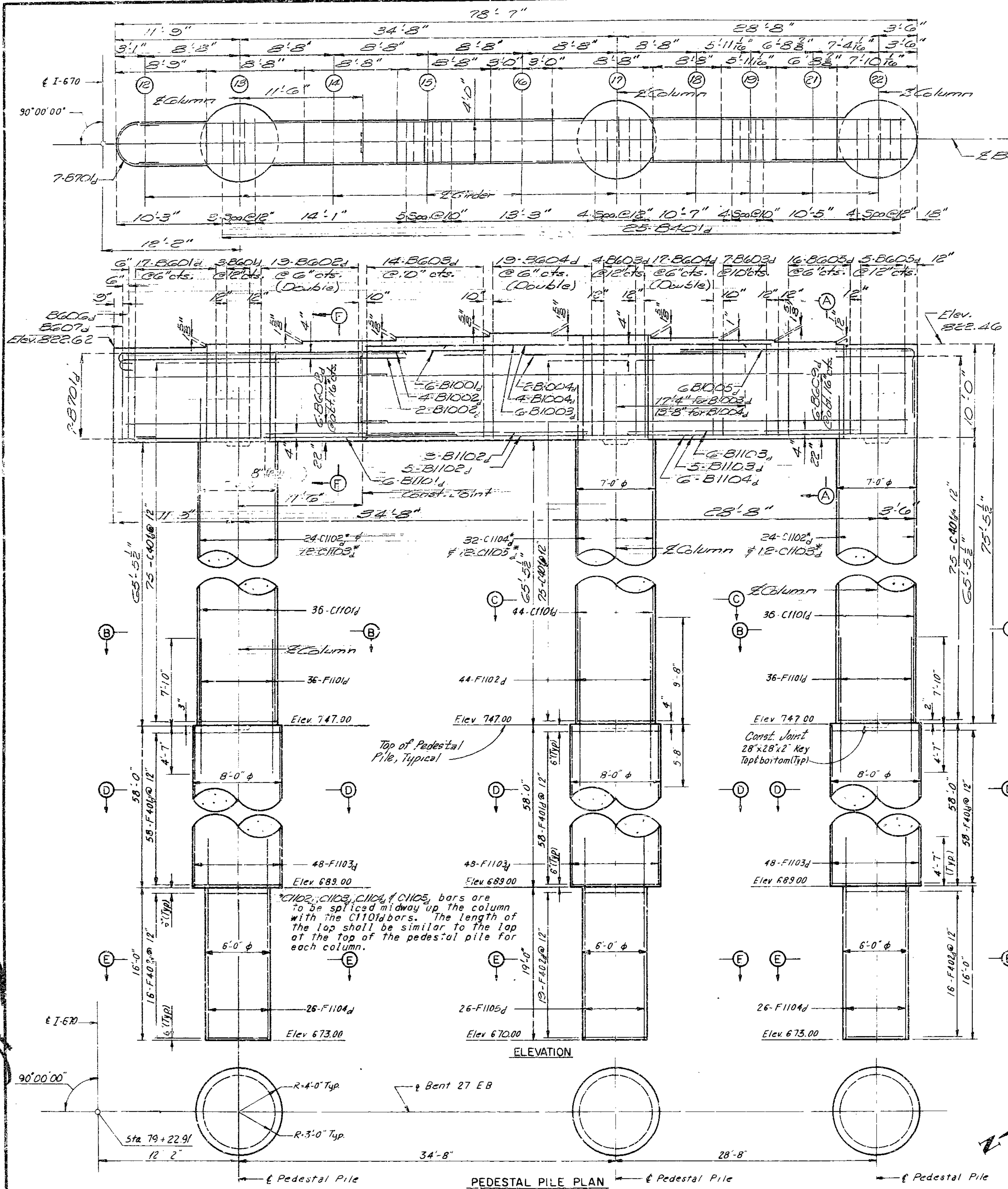
FOOTING PLAN

Sheet No. 34 of 82.

BENT 25 WESTBOUND
 PILE FOOTING ALTERNATE
 JACKSON COUNTY

A-3136

PROJ. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		88	108	



Notes: For details of vertical construction joint in beam see Sht. 77.

5/3

DETAILED 1978
CHECKED 1978

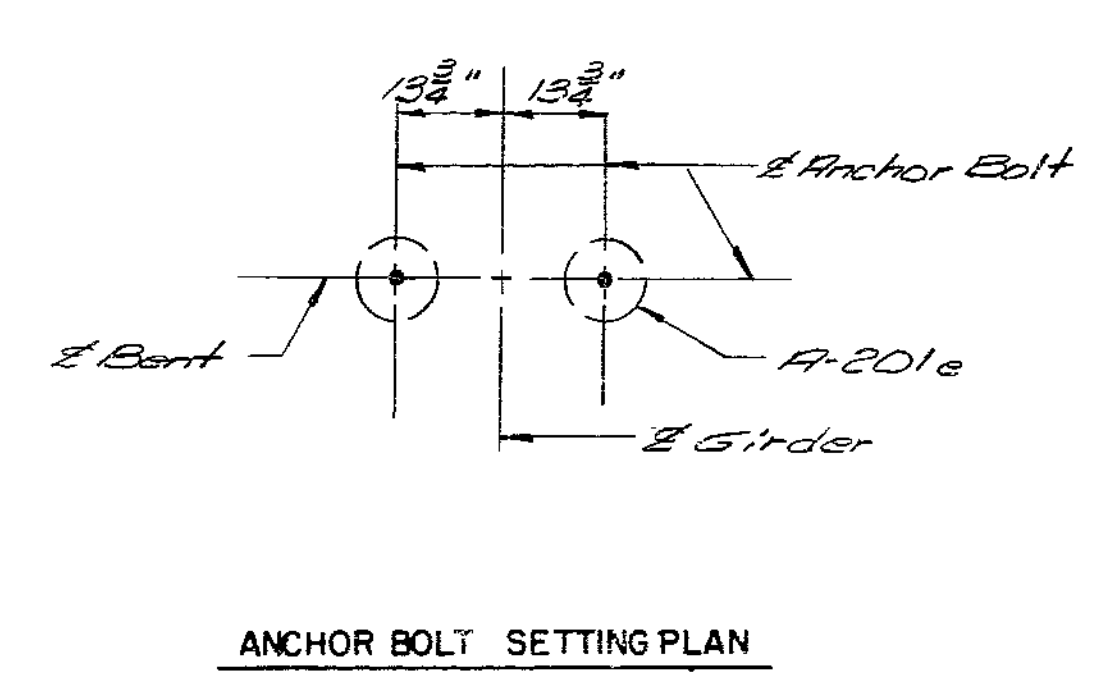
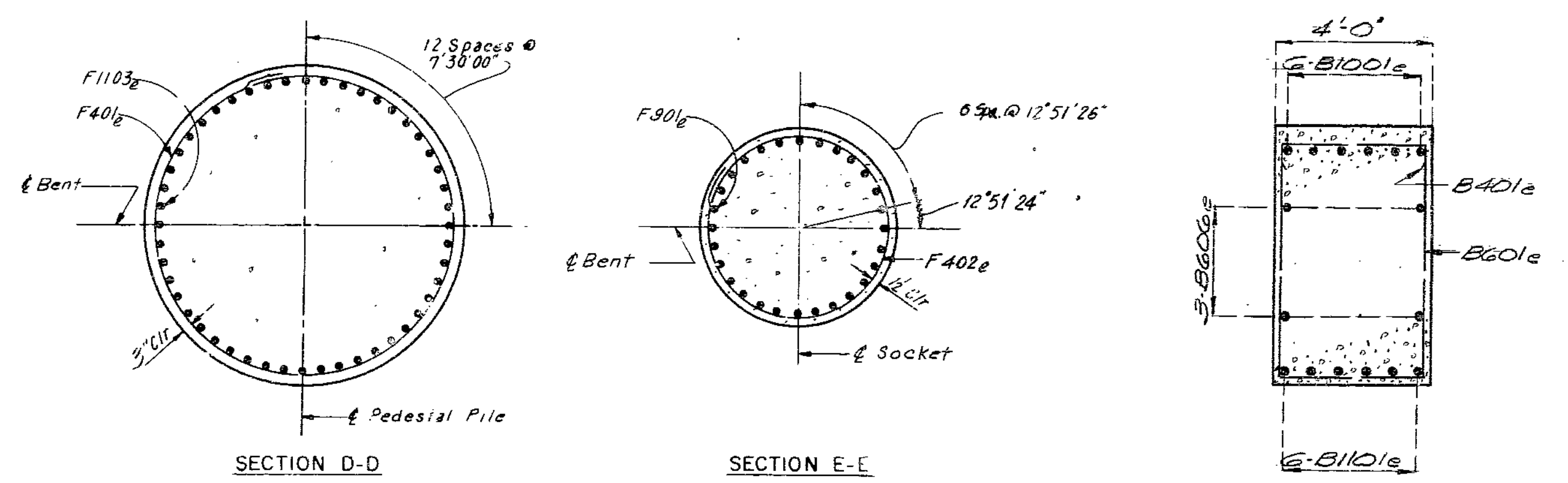
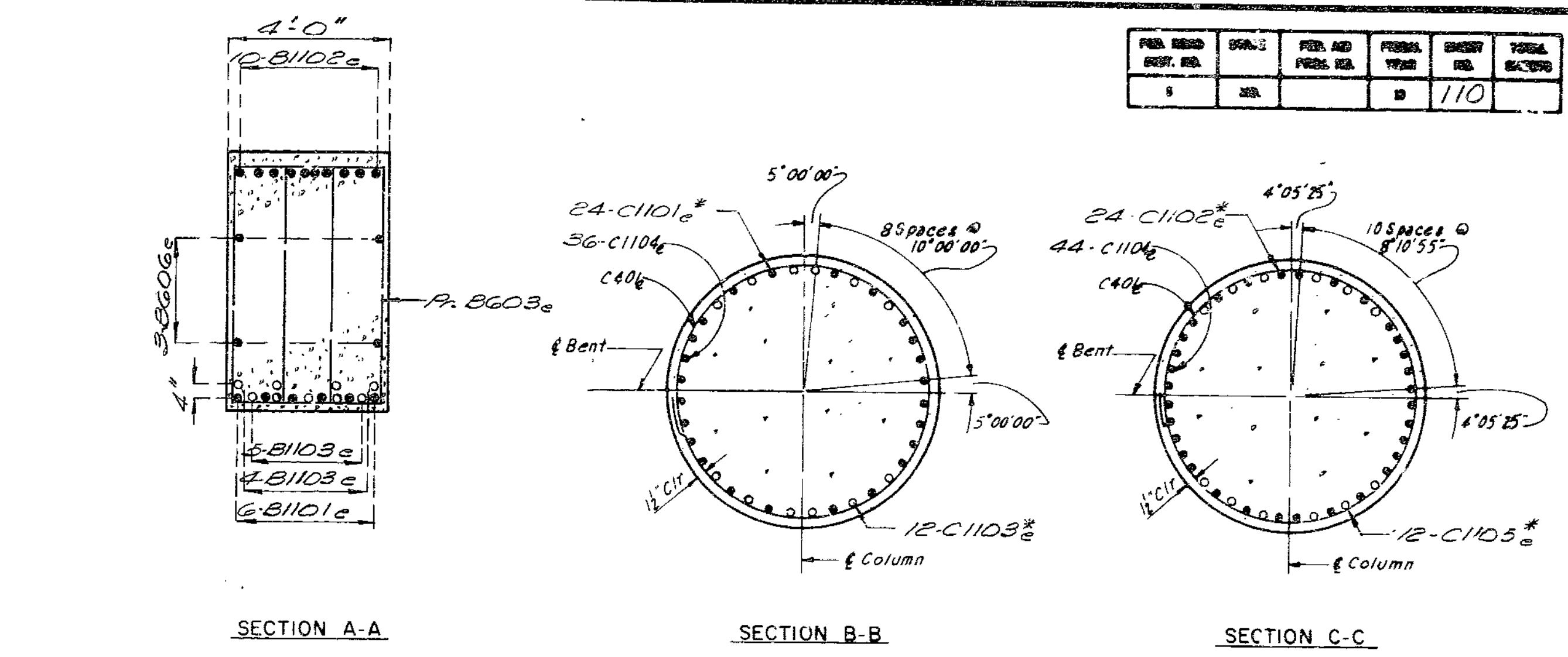
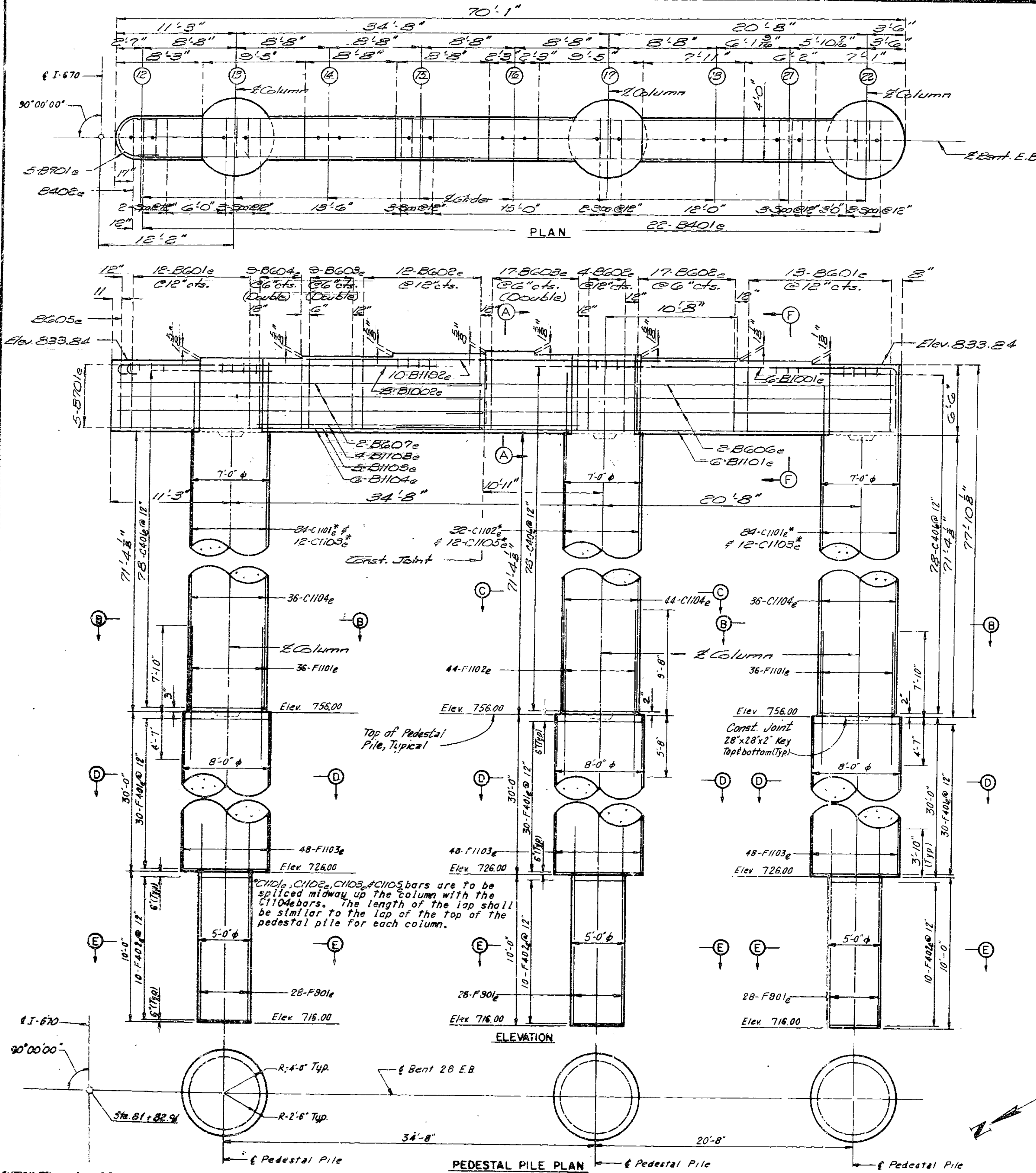
Notes: This drawing is not to scale. Follow dimensions.

Sheet No. 39 of 88.

BENT 27 EASTBOUND
PILE FOOTING ALTERNATE
JACKSON COUNTY

A-3136

NO.	DATE	BY	CHKD.	APP'D.	TITLE
110					



Note: For details of vertical construction joint in beam see Sht. 77.

315
REV. C.H. 3-28-82

DETAILS 1076
CHECKED 1078

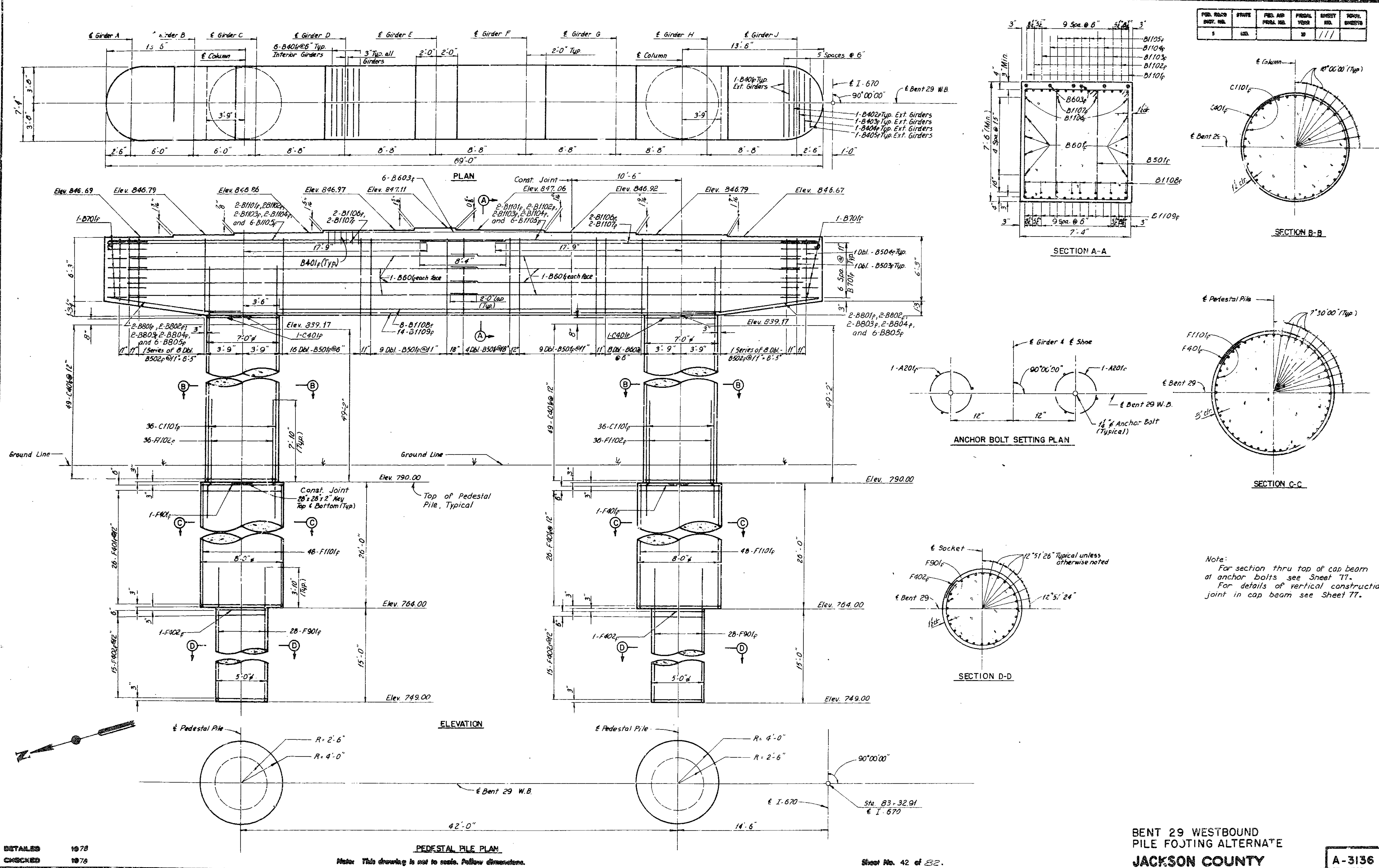
PEDESTAL PILE PLAN
Note: Reinforcing to rest on grade. Follow dimensions.

Sheet No. 41 of 82.

BENT 28 EASTBOUND
PILE FOOTING ALTERNATE
JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FED. AID YEAR	SHEET NO.	TOTAL SHEETS
5	GA.		19	111	



316

Note:
 For section thru top of cap beam at anchor bolts see Sheet 77.
 For details of vertical construction joint in cap beam see Sheet 77.

DESIGNED 1078
 CHECKED 1078

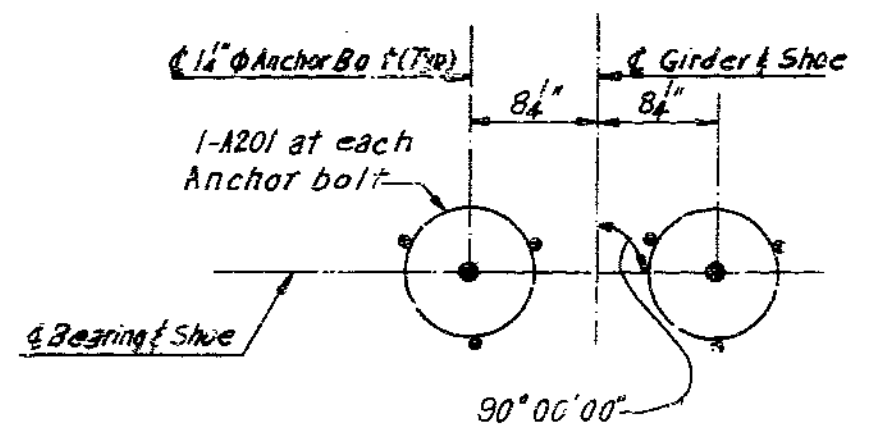
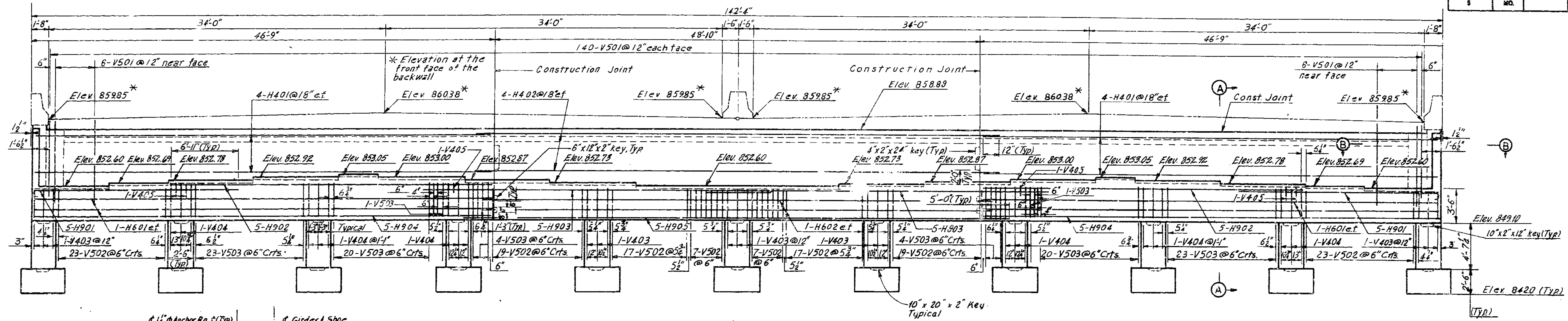
PEDESTAL PILE PLAN
 Note: This drawing is not to scale. Follow dimensions.

Sheet No. 42 of 82.

BENT 29 WESTBOUND
 PILE FOOTING ALTERNATE
 JACKSON COUNTY

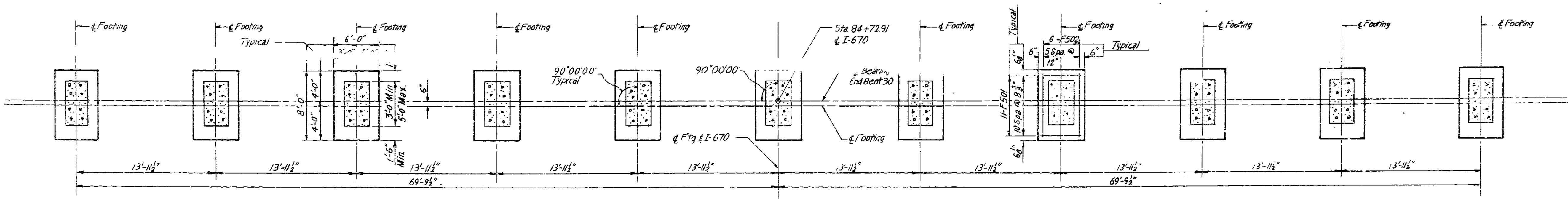
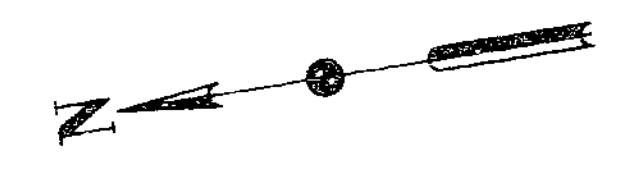
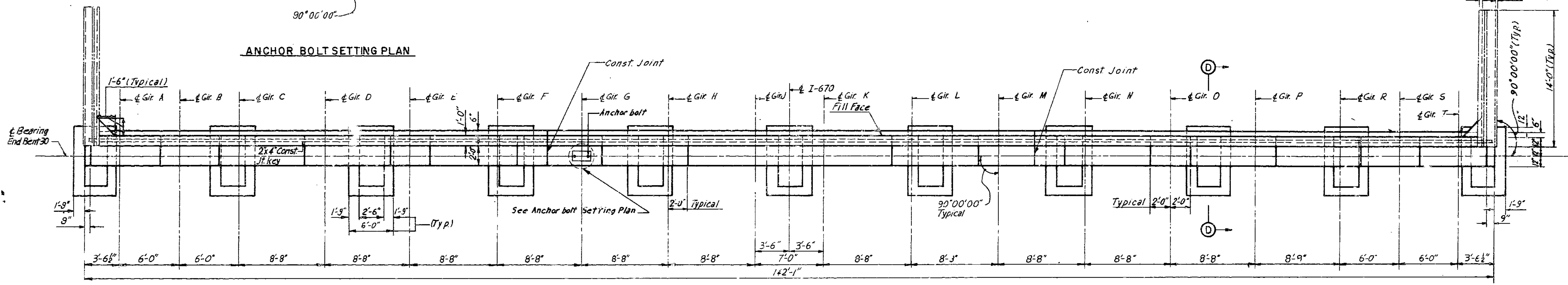
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		82	113	



NOTES:
 The V405 bars are equally spaced between the V404 bars.
 For Section A-A, Section B-B and Section D-D See Sheet 45.

Legend:
 ef = each face



318

DETAILED 1078
 CHECKED 1078

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 44 of 82.

END BENT 30
 PILE FOOTING ALTERNATE
 JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		78	115	

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 12 WESTBOUND				
A201L	14	19'-9"	129	Capbeam
B401L	31	6'-1"	105	Capbeam
B402L	2	6'-0"	105	Capbeam
B403L	2	5'-7"	105	Capbeam
B501L	47	17'-7"	109	Capbeam
B502L	5	33'-10"	*109	Capbeam
B503L	2	15'-8"	109	Capbeam
B601L	4	52'-9"	Str.	Capbeam
B701L	10	10'-8"	113	Capbeam
B801L	4	8'-6"	108	Capbeam
B802L	4	9'-3"	108	Capbeam
B803L	4	9'-8"	108	Capbeam
B804L	4	9'-10"	108	Capbeam
B1001L	2	56'-5"	100	Capbeam
B1002L	2	58'-2"	100	Capbeam
B1003L	2	58'-9"	100	Capbeam
B1004L	2	59'-1"	100	Capbeam
B1005L	6	32'-0"	Str.	Capbeam
B1006L	8	44'-1"	100	Capbeam
BENT 12 EASTBOUND				
A201R	14	19'-9"	129	Capbeam
B401R	31	6'-1"	105	Capbeam
B402R	2	6'-0"	105	Capbeam
B403R	2	5'-7"	105	Capbeam
B501R	47	17'-7"	109	Capbeam
B502R	5	33'-10"	*109	Capbeam
B503R	2	15'-8"	109	Capbeam
B601R	4	52'-9"	Str.	Capbeam
B701R	10	10'-8"	113	Capbeam
B801R	4	8'-6"	108	Capbeam
B802R	4	9'-3"	108	Capbeam
B803R	4	9'-8"	108	Capbeam
B804R	4	9'-10"	108	Capbeam
B1001R	2	56'-5"	100	Capbeam
B1002R	2	58'-2"	100	Capbeam
B1003R	2	58'-9"	100	Capbeam
B1004R	2	59'-1"	100	Capbeam
B1005R	6	32'-0"	Str.	Capbeam
B1006R	8	44'-1"	100	Capbeam
C401L	37	11'-1"	119	Column
C1101L	10	24'-9"	Str.	Column
C1102L	10	23'-10"	Str.	Column
F401L	130	12'-0"	119	Pedestal Pile
F402L	14	9'-6"	119	Socket
F901L	36	40'-0"	Str.	Pedestal Pile
F902L	36	29'-4"	Str.	Pedestal Pile
F903L	20	10'-0"	Str.	Socket
F1101L	20	12'-5"	Str.	Pedestal Pile

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 13 WESTBOUND				
A201M	14	19'-9"	129	Capbeam
B401M	31	6'-1"	105	Capbeam
B402M	2	6'-0"	105	Capbeam
B403M	2	5'-7"	105	Capbeam
B501M	11	17'-7"	109	Capbeam
B502M	64	15'-7"	109	Capbeam
B503M	9	33'-8"	*109	Capbeam
B504M	2	15'-8"	109	Capbeam
B601M	4	52'-10"	Str.	Capbeam
B701M	10	10'-8"	113	Capbeam
B801M	4	8'-6"	108	Capbeam
B802M	4	9'-3"	108	Capbeam
B803M	4	9'-8"	108	Capbeam
B804M	4	9'-10"	108	Capbeam
B110M	2	56'-10"	100	Capbeam
B1102M	2	58'-7"	100	Capbeam
B1103M	2	59'-2"	100	Capbeam
B1104M	2	59'-6"	100	Capbeam
B1105M	8	44'-6"	100	Capbeam
B1106M	8	32'-0"	Str.	Capbeam
C401M	40	11'-1"	119	Column
C1101M	10	24'-5"	Str.	Column
C1102M	10	23'-6"	Str.	Column
F401M	130	12'-0"	119	Pedestal Pile
F402M	14	9'-6"	119	Socket
F901M	36	40'-0"	Str.	Pedestal Pile
F902M	36	29'-4"	Str.	Pedestal Pile
F903M	20	9'-6"	Str.	Socket
F110M	20	12'-5"	Str.	Pedestal Pile

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 14 WESTBOUND				
A201W	14	19'-9"	129	Capbeam
B401W	31	6'-1"	105	Capbeam
B402W	2	6'-0"	105	Capbeam
B403W	2	5'-7"	105	Capbeam
B501W	11	17'-7"	109	Capbeam
B502W	64	15'-7"	109	Capbeam
B503W	9	33'-8"	*109	Capbeam
B504W	2	15'-8"	109	Capbeam
B601W	4	52'-10"	Str.	Capbeam
B701W	10	10'-8"	113	Capbeam
B801W	4	8'-6"	108	Capbeam
B802W	4	9'-3"	108	Capbeam
B803W	4	9'-8"	108	Capbeam
B804W	4	9'-10"	108	Capbeam
B110W	2	56'-11"	100	Capbeam
B1102W	2	58'-8"	100	Capbeam
B1103W	2	59'-3"	100	Capbeam
B1104W	2	59'-7"	100	Capbeam
B1105W	8	32'-0"	Str.	Capbeam
B1106W	8	44'-7"	100	Capbeam
B1107W	2	16'-0"	Str.	Capbeam
C401W	43	11'-1"	119	Column
C1101W	12	26'-3"	Str.	Column
C1102W	12	25'-4"	Str.	Column
F401W	130	12'-0"	119	Pedestal Pile
F402W	10	9'-6"	119	Socket
F901W	24	11'-10"	Str.	Pedestal Pile
F902W	36	40'-0"	Str.	Pedestal Pile
F903W	36	29'-10"	Str.	Pedestal Pile
F903W	20	7'-6"	Str.	Socket
F100W	24	12'-5"	Str.	Pedestal Pile

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 15 WESTBOUND				
A201P	14	19'-9"	129	Capbeam
B401P	31	6'-1"	105	Capbeam
B402P	2	6'-0"	105	Capbeam
B403P	2	5'-7"	105	Capbeam
B501P	11	17'-7"	109	Capbeam
B502P	64	15'-7"	109	Capbeam
B503P	9	33'-8"	*109	Capbeam
B504P	2	15'-8"	109	Capbeam
B601P	4	53'-0"	Str.	Capbeam
B701P	10	10'-8"	113	Capbeam
B801P	4	8'-6"	108	Capbeam
B802P	4	9'-3"	108	Capbeam
B803P	4	9'-8"	108	Capbeam
B804P	4	9'-10"	108	Capbeam
B1101P	2	57'-0"	100	Capbeam
B1102P	2	58'-9"	100	Capbeam
B1103P	2	59'-4"	100	Capbeam
B1104P	2	59'-8"	100	Capbeam
B1105P	8	32'-0"	Str.	Capbeam
B1106P	8	44'-8"	100	Capbeam
C401P	45	11'-1"	119	Column
C1101P	10	27'-0"	Str.	Column
C1102P	10	26'-2"	Str.	Column
F401P	130	12'-0"	119	Pedestal Pile
F402P	22	9'-6"	119	Socket
F901P	36	40'-0"	Str.	Pedestal Pile
F902P	36	29'-10"	Str.	Pedestal Pile
F903P	20	13'-2"	Str.	Socket
F1101P	20	12'-5"	Str.	Pedestal Pile

BENT	MARK	A	B
12WB, 12EB	B1001L	53'-7"	1'-5"
12WB, 12EB	B1002L	55'-4"	1'-5"
12WB, 12EB	B1003L	55'-11"	1'-5"
12WB, 12EB	B1004L	56'-3"	1'-5"
12WB, 12EB	B1006L	41'-3"	1'-5"
12EB	B1001L	53'-7"	1'-5"
12EB	B1002L	55'-4"	1'-5"
12EB	B1003L	55'-11"	1'-5"
12EB	B1004L	56'-3"	1'-5"
12EB	B1006L	41'-3"	1'-5"
13WB	B1101M	53'-8"	1'-7"
13WB	B1102M	55'-5"	1'-7"
13WB	B1103M	56'-0"	1'-7"
13WB	B1104M	56'-4"	1'-7"
13WB	B1105M	41'-4"	1'-7"
13WB	B1106M	53'-9"	1'-7"
14WB	B1101W	53'-8"	1'-7"
14WB	B1102W	55'-5"	1'-7"
14WB	B1103W	56'-1"	1'-7"
14WB	B1104W	56'-5"	1'-7"
14WB	B1106W	41'-5"	1'-7"
14WB	B1107W	16'-0"	
15WB	B1101P	53'-9"	1'-7"
15WB	B1102P	55'-6"	1'-7"
15WB	B1103P	56'-1"	1'-7"
15WB	B1104P	56'-5"	1'-7"
15WB	B1106P	41'-6"	1'-7"
15WB	B1107P	16'-0"	

TABLE OF CUTTING DIMENSIONS										
BENT	MARK	A	B	C	D	E	G	H	J	K
12WB, 12EB	B502L	33'-10"	16'-3"	17'-7"	17'-7"	16'-3"	4"	5	5	10
13WB, 13EB	B503M	33'-8"	16'-1"	17'-7"	17'-7"	16'-1"	2 1/2"	9	9	18
14WB, 14EB	B503W	33'-8"	16'-1"	17'-7"	17'-7"	16'-1"	2 1/2"	9	9	18
15WB, 15EB	B502P	33'-8"	16'-1"	17'-7"	17'-7"	16'-1"	2 1/2"	9	9	18

H = No. of bars
J = Cut
K = Bend

*Denotes series bar, see table of cutting dimensions.
 Note: BARS IN ALL BENTS WILL BE BILLED AND TAGGED SEPARATELY. Hooks and bends shall be in accordance with A.C.I. Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI-318-71).

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DETAILED 1978
CHECKED 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 46 of 82.

Legend:
W.B. denotes Westbound Lanes
E.B. denotes Eastbound Lanes

SUBSTRUCTURE REINFORCING SCHEDULE
PEDESTAL PILE ALTERNATE
JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE NO.	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		88	116	

BILL OF REINFORCEMENT					
MARK	NO.	LENGTH	SHAPE	LOCATION	
BENT 16 WESTBOUND					
A201P	14	19'-9"	129	Capbeam	
B401P	31	6'-1"	105	Capbeam	
B402P	2	6'-0"	105	Capbeam	
B403P	2	5'-7"	105	Capbeam	
B501P	47	17'-7"	109	Capbeam	
B502P	5	33'-10"	*109	Capbeam	
B503P	2	15'-8"	109	Capbeam	
B504P	4	53'-0"	Str.	Capbeam	
B601P	10	10'-8"	113	Capbeam	
B602P	4	8'-6"	108	Capbeam	
B603P	4	9'-3"	108	Capbeam	
B604P	4	9'-10"	108	Capbeam	
B701P	2	58'-6"	100	Capbeam	
B702P	2	59'-1"	100	Capbeam	
B703P	2	59'-6"	100	Capbeam	
B704P	2	59'-10"	100	Capbeam	
B705P	6	32'-0"	Str.	Capbeam	
B706P	8	44'-5"	100	Capbeam	
C401P	47	11'-1"	119	Column	
C1101P	12	27'-11"	Str.	Column	
C1102P	12	27'-2"	Str.	Column	
F401P	130	12'-0"	119	Pedestal Pile	
F402P	18	9'-6"	119	Socket	
F901P	36	40'-0"	Str.	Pedestal Pile	
F902P	36	29'-10"	Str.	Pedestal Pile	
F903P	20	12'-0"	Str.	Socket	
F1101P	24	12'-5"	Str.	Pedestal Pile	
BENT 16 EASTBOUND					
A201P	14	19'-9"	129	Capbeam	
B401P	31	6'-1"	105	Capbeam	
B402P	2	6'-0"	105	Capbeam	
B403P	2	5'-7"	105	Capbeam	
B501P	47	17'-7"	109	Capbeam	
B502P	5	33'-10"	*109	Capbeam	
B503P	2	15'-8"	109	Capbeam	
B504P	4	53'-0"	Str.	Capbeam	
B601P	10	10'-8"	113	Capbeam	
B602P	4	8'-6"	108	Capbeam	
B603P	4	9'-3"	108	Capbeam	
B604P	4	9'-10"	108	Capbeam	
B701P	2	58'-6"	100	Capbeam	
B702P	2	59'-1"	100	Capbeam	
B703P	2	59'-6"	100	Capbeam	
B704P	2	59'-10"	100	Capbeam	
B705P	6	32'-0"	Str.	Capbeam	
B706P	8	44'-5"	100	Capbeam	
C401P	45	11'-1"	119	Column	
C1103P	12	26'-8"	Str.	Column	
C1104P	12	25'-11"	Str.	Column	
F401P	130	12'-0"	119	Pedestal Pile	
F402P	18	9'-6"	119	Socket	
F901P	36	40'-0"	Str.	Pedestal Pile	
F902P	36	29'-10"	Str.	Pedestal Pile	
F903P	20	12'-0"	Str.	Socket	
F1101P	24	12'-5"	Str.	Pedestal Pile	

BILL OF REINFORCEMENT					
MARK	NO.	LENGTH	SHAPE	LOCATION	
BENT 17 WESTBOUND					
A201P	14	19'-9"	129	Capbeam	
B401P	31	6'-1"	105	Capbeam	
B402P	2	6'-0"	105	Capbeam	
B403P	2	5'-7"	105	Capbeam	
B501P	11	17'-7"	109	Capbeam	
B502P	64	15'-7"	109	Capbeam	
B503P	9	33'-8"	*109	Capbeam	
B504P	2	15'-8"	109	Capbeam	
B601P	4	53'-0"	Str.	Capbeam	
B602P	10	10'-8"	113	Capbeam	
B603P	4	8'-6"	108	Capbeam	
B604P	4	9'-3"	108	Capbeam	
B605P	4	9'-10"	108	Capbeam	
B701P	2	57'-2"	100	Capbeam	
B702P	2	58'-11"	100	Capbeam	
B703P	2	59'-1"	100	Capbeam	
B704P	2	59'-10"	100	Capbeam	
B705P	8	32'-0"	Str.	Capbeam	
B706P	8	44'-10"	100	Capbeam	
C401P	50	11'-1"	119	Column	
C1001P	12	29'-4"	Str.	Column	
C1002P	12	28'-7"	Str.	Column	
F401P	132	12'-0"	119	Pedestal Pile	
F402P	16	9'-6"	119	Socket	
F901P	24	13'-8"	Str.	Pedestal Pile	
F902P	36	40'-0"	Str.	Pedestal Pile	
F903P	36	30'-4"	Str.	Pedestal Pile	
F904P	20	10'-10"	Str.	Socket	
F1001P	24	12'-5"	Str.	Pedestal Pile	
BENT 17 EASTBOUND					
A201P	14	19'-9"	129	Capbeam	
B401P	31	6'-1"	105	Capbeam	
B402P	2	6'-0"	105	Capbeam	
B403P	2	5'-7"	105	Capbeam	
B501P	11	17'-7"	109	Capbeam	
B502P	64	15'-7"	109	Capbeam	
B503P	9	33'-8"	*109	Capbeam	
B504P	2	15'-8"	109	Capbeam	
B601P	4	53'-0"	Str.	Capbeam	
B602P	10	10'-8"	113	Capbeam	
B603P	4	8'-6"	108	Capbeam	
B604P	4	9'-3"	108	Capbeam	
B605P	4	9'-10"	108	Capbeam	
B701P	2	57'-2"	100	Capbeam	
B702P	2	58'-11"	100	Capbeam	
B703P	2	59'-1"	100	Capbeam	
B704P	2	59'-10"	100	Capbeam	
B705P	8	32'-0"	Str.	Capbeam	
B706P	8	44'-10"	100	Capbeam	
C401P	47	11'-1"	119	Column	
C1103P	12	28'-1"	Str.	Column	
C1104P	12	27'-5"	Str.	Column	
F401P	132	12'-0"	119	Pedestal Pile	
F402P	16	9'-6"	119	Socket	
F901P	24	13'-8"	Str.	Pedestal Pile	
F902P	36	40'-0"	Str.	Pedestal Pile	
F903P	36	30'-4"	Str.	Pedestal Pile	
F904P	20	10'-10"	Str.	Socket	
F1001P	24	12'-5"	Str.	Pedestal Pile	

BILL OF REINFORCEMENT					
MARK	NO.	LENGTH	SHAPE	LOCATION	
BENT 18 WESTBOUND					
A201P	14	19'-9"	129	Capbeam	
B401P	31	6'-1"	105	Capbeam	
B402P	2	6'-0"	105	Capbeam	
B403P	2	5'-7"	105	Capbeam	
B501P	11	17'-7"	109	Capbeam	
B502P	64	15'-7"	109	Capbeam	
B503P	9	33'-8"	*109	Capbeam	
B504P	2	15'-8"	109	Capbeam	
B601P	4	53'-0"	Str.	Capbeam	
B602P	10	10'-8"	113	Capbeam	
B603P	4	8'-6"	108	Capbeam	
B604P	4	9'-3"	108	Capbeam	
B605P	4	9'-10"	108	Capbeam	
B701P	2	57'-4"	100	Capbeam	
B702P	2	59'-1"	100	Capbeam	
B703P	2	59'-6"	100	Capbeam	
B704P	2	59'-10"	100	Capbeam	
B705P	8	32'-0"	Str.	Capbeam	
B706P	8	44'-10"	100	Capbeam	
C401P	54	11'-1"	119	Column	
C1001P	12	30'-10"	Str.	Column	
C1002P	12	31'-6"	Str.	Column	
F401P	130	12'-0"	119	Pedestal Pile	
F402P	16	9'-6"	119	Socket	
F901P	24	14'-8"	Str.	Pedestal Pile	
F902P	36	40'-0"	Str.	Pedestal Pile	
F903P	36	29'-4"	Str.	Pedestal Pile	
F904P	20	10'-6"	Str.	Socket	
F1001P	24	12'-5"	Str.	Pedestal Pile	
BENT 18 EASTBOUND					
A201P	14	19'-9"	129	Capbeam	
B401P	31	6'-1"	105	Capbeam	
B402P	2	6'-0"	105	Capbeam	
B403P	2	5'-7"	105	Capbeam	
B501P	11	17'-7"	109	Capbeam	
B502P	64	15'-7"	109	Capbeam	
B503P	9	33'-8"	*109	Capbeam	
B504P	2	15'-8"	109	Capbeam	
B601P	4	53'-0"	Str.	Capbeam	
B602P	10	10'-8"	113	Capbeam	
B603P	4	8'-6"	108	Capbeam	
B604P	4	9'-3"	108	Capbeam	
B605P	4	9'-10"	108	Capbeam	
B701P	2	57'-4"	100	Capbeam	
B702P	2	59'-1"	100	Capbeam	
B703P	2	59'-6"	100	Capbeam	
B704P	2	59'-10"	100	Capbeam	
B705P	8	32'-0"	Str.	Capbeam	
B706P	8	44'-10"	100	Capbeam	
C401P	52	11'-1"	119	Column	
C1103P	12	30'-5"	Str.	Column	
C1104P	12	29'-9"	Str.	Column	
F401P	130	12'-0"	119	Pedestal Pile	
F402P	16	9'-6"	119	Socket	
F901P	24	14'-8"	Str.	Pedestal Pile	
F902P	36	40'-0"	Str.	Pedestal Pile	
F903P	36	29'-4"	Str.	Pedestal Pile	
F904P	20	10'-6"	Str.	Socket	
F1001P	24	12'-5"	Str.	Pedestal Pile	

BILL OF REINFORCEMENT					
MARK	NO.	LENGTH	SHAPE	LOCATION	
BENT 19 WESTBOUND					
A201P	14	19'-9"	129	Capbeam	
B401P	31	6'-1"	105	Capbeam	
B402P	2	6'-0"	105	Capbeam	
B403P	2	5'-7"	105	Capbeam	
B501P	11	17'-7"	109	Capbeam	
B502P	64	15'-7"	109	Capbeam	
B503P	9	33'-8"	*109	Capbeam	
B504P	2	15'-8"	109	Capbeam	
B601P	4	53'-0"	Str.	Capbeam	
B602P	10	10'-8"	113	Capbeam	
B603P	4	8'-6"	108	Capbeam	
B604P	4	9'-3"	108	Capbeam	
B605P	4	9'-10"	108	Capbeam	
B701P	2	57'-5"	100	Capbeam	
B702P	2	59'-2"	100	Capbeam	
B703P	2	59'-9"	100	Capbeam	
B704P	2	60'-1"	100	Capbeam	
B705P	8	32'-0"	Str.	Capbeam	
B706P	8	44'-8"	100	Capbeam	
C401P	47	11'-1"	119	Column	
D401P	16	11'-1"	119	Collision Wall	
D501P	46	4'-0"	105	Collision Wall	
D502P	48	7'-3"	Str.	Collision Wall	
D503P	14	21'-8"	120	Collision Wall	
D504P	16	20'-5"	Str.	Collision Wall	
D901P	8	25'-0"	120	Collision Wall	
D902P	8	24'-6"	104	Collision Wall	
D1101P	12	35'-0"	Str.	Collision Wall	
D1102P	12	34'-9"	Str.	Collision Wall	
F401P	126	12'-0"	119	Pedestal Pile	
F402P	16	9'-6"	119	Socket	
F901P	20	10'-6"	Str.	Socket	
F902P	40	27'-4"	Str.	Pedestal Pile	
F1101P	24	21'-8"	Str.	Pedestal Pile	
F1102P	24	15'-4"	Str.	Pedestal Pile</	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		18	117	

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 20 WESTBOUND				
A201 _w	14	19'-9"	129	Capbeam
B401 _w	31	6'-9"	105	Capbeam
B402 _w	2	6'-5"	105	Capbeam
B403 _w	2	5'-10"	105	Capbeam
B501 _w	37	20'-11"	109	Capbeam
B502 _w	6	40'-6"	*109	Capbeam
B503 _w	2	18'-11"	109	Capbeam
B601 _w	6	52'-11"	Str.	Capbeam
B701 _w	13	11'-8"	113	Capbeam
B801 _w	4	7'-5"	108	Capbeam
B802 _w	4	8'-7"	108	Capbeam
B803 _w	4	9'-0"	108	Capbeam
B804 _w	6	9'-3"	108	Capbeam
B1101 _w	2	56'-7"	100	Capbeam
B1102 _w	2	58'-11"	100	Capbeam
B1103 _w	2	59'-9"	100	Capbeam
B1104 _w	2	60'-3"	100	Capbeam
B1105 _w	1	60'-5"	100	Capbeam
B1106 _w	9	46'-3"	100	Capbeam
B1107 _w	2	32'-9"	Str.	Capbeam
C401 _w	62	14'-3"	119	Column
C1101 _w	16	35'-0"	Str.	Column
C1102 _w	16	34'-5"	Str.	Column
F401 _w	124	15'-1"	119	Pedestal Pile
F402 _w	16	9'-6"	119	Socket
F901 _w	56	40'-0"	Str.	Pedestal Pile
F902 _w	56	26'-10"	Str.	Pedestal Pile
F903 _w	20	10'-6"	Str.	Socket
F1101 _w	32	12'-5"	Str.	Pedestal Pile
BENT 20 EASTBOUND				
A201 _e	14	19'-9"	129	Capbeam
B401 _e	31	6'-9"	105	Capbeam
B402 _e	2	6'-5"	105	Capbeam
B403 _e	2	5'-10"	105	Capbeam
B501 _e	37	20'-11"	109	Capbeam
B502 _e	6	40'-6"	*109	Capbeam
B503 _e	2	18'-11"	109	Capbeam
B601 _e	6	52'-11"	Str.	Capbeam
B701 _e	12	11'-8"	113	Capbeam
B801 _e	4	7'-5"	108	Capbeam
B802 _e	4	8'-7"	108	Capbeam
B803 _e	4	9'-0"	108	Capbeam
B804 _e	6	9'-3"	108	Capbeam
B1101 _e	2	56'-7"	100	Capbeam
B1102 _e	2	58'-11"	100	Capbeam
B1103 _e	2	59'-9"	100	Capbeam
B1104 _e	2	60'-3"	100	Capbeam
B1105 _e	1	60'-5"	100	Capbeam
B1106 _e	9	46'-3"	100	Capbeam
B1107 _e	2	32'-0"	Str.	Capbeam
C401 _e	60	14'-3"	119	Column
C1103 _e	16	34'-1"	Str.	Column
C1104 _e	16	33'-6"	Str.	Column
F401 _e	128	15'-1"	119	Pedestal Pile
F402 _e	12	9'-6"	119	Socket
F901 _e	56	40'-0"	Str.	Pedestal Pile
F902 _e	28	27'-10"	Str.	Pedestal Pile
F903 _e	10	9'-6"	Str.	Socket
F904 _e	28	29'-10"	Str.	Pedestal Pile
F905 _e	10	7'-6"	Str.	Socket
F1101 _e	32	12'-5"	Str.	Pedestal Pile

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 21 WESTBOUND				
A201 _w	14	19'-9"	129	Capbeam
B401 _w	36	6'-9"	105	Capbeam
B402 _w	2	6'-7"	105	Capbeam
B403 _w	2	6'-3"	105	Capbeam
B404 _w	2	5'-8"	105	Capbeam
B501 _w	13	20'-11"	109	Capbeam
B502 _w	8	40'-6"	*109	Capbeam
B503 _w	2	19'-1"	109	Capbeam
B601 _w	6	53'-1"	Str.	Capbeam
B602 _w	48	17'-10"	109	Capbeam
B701 _w	12	11'-8"	113	Capbeam
B801 _w	4	7'-5"	108	Capbeam
B802 _w	4	8'-7"	108	Capbeam
B803 _w	4	9'-0"	108	Capbeam
B804 _w	6	9'-3"	108	Capbeam
B1101 _w	2	56'-8"	100	Capbeam
B1102 _w	2	59'-0"	100	Capbeam
B1103 _w	2	59'-10"	100	Capbeam
B1104 _w	2	60'-2"	100	Capbeam
B1105 _w	1	60'-6"	100	Capbeam
B1106 _w	9	46'-5"	100	Capbeam
B1107 _w	1	32'-6"	Str.	Capbeam
C401 _w	73	14'-3"	119	Column
C1101 _w	16	40'-8"	Str.	Column
C1102 _w	16	40'-2"	Str.	Column
F401 _w	120	15'-1"	119	Pedestal Pile
F402 _w	14	11'-1"	119	Socket
F901 _w	56	40'-0"	Str.	Pedestal Pile
F902 _w	56	24'-10"	Str.	Pedestal Pile
F903 _w	28	9'-7"	Str.	Socket
F1101 _w	32	12'-5"	Str.	Pedestal Pile
BENT 21 EASTBOUND				
A201 _e	14	19'-9"	129	Capbeam
B401 _e	36	6'-9"	105	Capbeam
B402 _e	2	6'-7"	105	Capbeam
B403 _e	2	6'-3"	105	Capbeam
B404 _e	2	5'-8"	105	Capbeam
B501 _e	13	20'-11"	109	Capbeam
B502 _e	8	40'-6"	*109	Capbeam
B503 _e	2	19'-1"	109	Capbeam
B601 _e	6	53'-1"	Str.	Capbeam
B602 _e	48	17'-10"	109	Capbeam
B701 _e	12	11'-8"	113	Capbeam
B801 _e	4	7'-5"	108	Capbeam
B802 _e	4	8'-7"	108	Capbeam
B803 _e	4	9'-0"	108	Capbeam
B804 _e	6	9'-3"	108	Capbeam
B1101 _e	2	56'-8"	100	Capbeam
B1102 _e	2	59'-0"	100	Capbeam
B1103 _e	2	59'-10"	100	Capbeam
B1104 _e	2	60'-4"	100	Capbeam
B1105 _e	1	60'-6"	100	Capbeam
B1106 _e	9	46'-5"	100	Capbeam
B1107 _e	11	32'-6"	Str.	Capbeam
C401 _e	71	14'-3"	119	Column
C1103 _e	16	39'-11"	Str.	Column
C1104 _e	16	39'-6"	Str.	Column
F401 _e	120	15'-1"	119	Pedestal Pile
F402 _e	14	11'-1"	119	Socket
F901 _e	56	40'-0"	Str.	Pedestal Pile
F902 _e	56	24'-10"	Str.	Pedestal Pile
F903 _e	28	9'-7"	Str.	Socket
F1101 _e	32	12'-5"	Str.	Pedestal Pile

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 22 WESTBOUND				
A201 _w	14	19'-9"	129	Capbeam
B401 _w	36	6'-9"	105	Capbeam
B402 _w	2	5'-7"	105	Capbeam
B403 _w	2	6'-3"	105	Capbeam
B404 _w	2	5'-8"	105	Capbeam
B501 _w	13	20'-11"	109	Capbeam
B502 _w	10	40'-6"	*109	Capbeam
B503 _w	2	19'-3"	109	Capbeam
B504 _w	2	18'-3"	109	Capbeam
B601 _w	6	53'-4"	Str.	Capbeam
B602 _w	56	17'-10"	109	Capbeam
B701 _w	12	11'-8"	113	Capbeam
B801 _w	4	7'-5"	108	Capbeam
B802 _w	4	8'-7"	108	Capbeam
B803 _w	4	9'-0"	108	Capbeam
B804 _w	6	9'-3"	108	Capbeam
B1101 _w	2	57'-0"	100	Capbeam
B1102 _w	2	59'-4"	100	Capbeam
B1103 _w	2	60'-2"	100	Capbeam
B1104 _w	2	60'-8"	100	Capbeam
B1105 _w	1	60'-10"	100	Capbeam
B1106 _w	9	46'-8"	100	Capbeam
B1107 _w	13	32'-6"	Str.	Capbeam
C401 _w	62	14'-3"	119	Column
C1101 _w	16	35'-3"	Str.	Column
C1102 _w	16	34'-9"	Str.	Column
D401 _w	2015	14'-3"	119	Collision Wall
D501 _w	48	5'-7"	105	Collision Wall
D502 _w	44	5'-6"	105	Collision Wall
D503 _w	24	22'-7"	120	Collision Wall
D801 _w	4	24'-10"	120	Collision Wall
D802 _w	12	23'-0"	120	Collision Wall
D803 _w	4	24'-1"	120	Collision Wall
D804 _w	12	22'-3"	120	Collision Wall
F401 _w	120	15'-1"	119	Pedestal Pile
F402 _w	18	11'-1"	119	Socket
F901 _w	28	12'-0"	Str.	Socket
F902 _w	56	24'-10"	Str.	Pedestal Pile
F1001 _w	32	17'-7"	Str.	Pedestal Pile
F1102 _w	56	40'-0"	Str.	Pedestal Pile
F1101 _w	32	22'-10"	Str.	Pedestal Pile
BENT 22 EASTBOUND				
A201 _e	14	19'-9"	129	Capbeam
B401 _e	36	6'-9"	105	Capbeam
B402 _e	2	6'-7"	105	Capbeam
B403 _e	2	6'-3"	105	Capbeam
B404 _e	2	5'-8"	105	Capbeam
B501 _e	13	20'-11"	109	Capbeam
B502 _e	10	40'-6"	*109	Capbeam
B503 _e	2	19'-3"	109	Capbeam
B504 _e	2	18'-3"	109	Capbeam
B601 _e	6	53'-4"	Str.	Capbeam
B602 _e	56	17'-10"	109	Capbeam
B701 _e	12	11'-8"	113	Capbeam
B801 _e	4	7'-5"	108	Capbeam
B802 _e	4	8'-7"	108	Capbeam
B803 _e	4	9'-0"	108	Capbeam
B804 _e	6	9'-3"	108	Capbeam
B1101 _e	2	57'-0"	100	Capbeam
B1102 _e	2	59'-4"	100	Capbeam
B1103 _e	2	60'-2"	100	Capbeam
B1104 _e	2	60'-8"	100	Capbeam
B1105 _e	1	60'-10"	100	Capbeam
B1106 _e	9	46'-8"	100	Capbeam
B1107 _e	2	59'-4"	100	Capbeam
C401 _e	71	14'-3"	119	Column
C1103 _e	16	39'-11"	Str.	Column
C1104 _e	16	39'-6"	Str.	Column
D401 _e	2015	14'-3"	119	Collision Wall
D501 _e	48	5'-7"	105	Collision Wall
D502 _e	44	5'-6"	105	Collision Wall
D503 _e	24	22'-7"	120	Collision Wall
D801 _e	4	24'-10"	120	Collision Wall
D802 _e	12	23'-0"	120	Collision Wall
D803 _e	4	24'-1"	120	Collision Wall
D804 _e	12	22'-3"	120	Collision Wall
F401 _e	120	15'-1"	119	Pedestal Pile
F402 _e	18	11'-1"	119	Socket
F901 _e	28	12'-0"	Str.	Socket
F902 _e	56	24'-10"	Str.	Pedestal Pile
F1001 _e	32	17'-7"	Str.	Pedestal Pile
F1102 _e	56	40'-0"	Str.	Pedestal Pile
F1101 _e	32	22'-10"	Str.	Pedestal Pile

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 22 EASTBOUND (cont.)				
B1103 _e	2	59'-2"	100	Capbeam
B1104 _e	2	60'-8"	100	Capbeam
B1105 _e	1	60'-10"	100	Capbeam
B1106 _e	9	46'-8"	10	

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BILL OF REINFORCEMENT

MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 23 WESTBOUND				
A201W	14	19'-9"	T29	Capbeam
B401W	36	6'-9"	105	Capbeam
B402W	2	6'-4"	105	Capbeam
B403W	2	5'-9"	105	Capbeam
B404W	2	6'-8"	105	Capbeam
B501W	13	20'-11"	109	Capbeam
B502W	10	40'-4"	*109	Capbeam
B503W	2	13'-7"	109	Capbeam
B601W	6	52'-1"	Str.	Capbeam
B602W	52	17'-10"	109	Capbeam
B701W	12	11'-8"	113	Capbeam
B801W	4	7'-5"	108	Capbeam
B802W	4	8'-7"	108	Capbeam
B803W	4	9'-0"	108	Capbeam
B804W	6	9'-3"	108	Capbeam
B1101W	2	55'-9"	100	Capbeam
B1102W	2	58'-11"	100	Capbeam
B1103W	2	58'-11"	100	Capbeam
B1104W	2	59'-5"	100	Capbeam
B1105W	2	52'-0"	Str.	Capbeam
B1106W	9	31'-6"	Str.	Capbeam
B1107W	9	45'-5"	Str.	Capbeam
C401W	92	14'-3"	119	Column
C1101W	32	49'-1"	119	Column
F401W	124	15'-1"	119	Pedestal Pile
F402W	12	11'-1"	119	Socket
F801W	32	21'-4"	Str.	Pedestal Pile
F901W	28	8'-6"	Str.	Socket
F1001W	48	27'-6"	Str.	Pedestal Pile
F1101W	48	40'-0"	Str.	Pedestal Pile
F1102W	32	15'-4"	Str.	Pedestal Pile
BENT 23 EASTBOUND				
A201E	14	19'-9"	T29	Capbeam
B401E	36	6'-9"	105	Capbeam
B402E	2	6'-4"	105	Capbeam
B403E	2	5'-9"	105	Capbeam
B404E	2	6'-8"	105	Capbeam
B501E	13	20'-11"	109	Capbeam
B502E	8	40'-6"	*109	Capbeam
B503E	2	13'-7"	109	Capbeam
B601E	6	52'-1"	Str.	Capbeam
B602E	48	17'-10"	109	Capbeam
B701E	12	11'-8"	113	Capbeam
B801E	4	7'-5"	108	Capbeam
B802E	4	8'-7"	108	Capbeam
B803E	4	9'-0"	108	Capbeam
B804E	6	9'-3"	108	Capbeam
B1101E	2	55'-9"	100	Capbeam
B1102E	2	58'-11"	100	Capbeam
B1103E	2	58'-11"	100	Capbeam
B1104E	2	59'-5"	100	Capbeam
B1105E	2	52'-0"	Str.	Capbeam
B1106E	9	31'-6"	Str.	Capbeam
B1107E	9	45'-5"	Str.	Capbeam
C401E	91	14'-3"	119	Column
C1102E	16	49'-7"	Str.	Column
C1103E	16	49'-3"	Str.	Column
F401E	124	15'-1"	119	Pedestal Pile
F402E	12	11'-1"	119	Socket
F801E	32	21'-4"	Str.	Pedestal Pile
F901E	28	8'-6"	Str.	Socket
F1001E	48	27'-6"	Str.	Pedestal Pile
F1101E	48	40'-0"	Str.	Pedestal Pile
F1102E	32	15'-4"	Str.	Pedestal Pile
BENT 24 WESTBOUND				
A201W	14	23'-0"	T29	Beam
B401W	16	4'-7"	105	Beam
B601W	7	19'-0"	109	Beam
B602W	7	17'-8"	109	Beam
B1101W	6	31'-3"	Str.	Beam
B1102W	6	33'-0"	Str.	Beam
C401W	94	15'-10"	119	Column
C1101W	36	46'-3"	Str.	Column
D401W	18	15'-10"	119	Collision Wall
D501W	40	4'-6"	105	Collision Wall
D502W	42	8'-9"	Str.	Collision Wall
D503W	16	21'-4"	120	Collision Wall
D504W	16	18'-2"	Str.	Collision Wall
D1001W	4	25'-9"	120	Collision Wall
D1002W	6	24'-8"	101	Collision Wall
D1003W	4	24'-6"	120	Collision Wall
D1004W	4	23'-5"	101	Collision Wall
F401W	124	16'-6"	119	Pedestal Pile
F402W	14	9'-6"	119	Socket
F901W	68	40'-0"	Str.	Pedestal Pile
F902W	68	26'-10"	Str.	Pedestal Pile
F903W	20	9'-6"	Str.	Socket
F1101W	36	21'-5"	Str.	Pedestal Pile
BENT 24 EASTBOUND				
A201E	14	23'-0"	T29	Beam
B401E	16	4'-7"	105	Beam
B601E	7	19'-0"	109	Beam
B602E	7	17'-8"	109	Beam
B1101E	6	31'-3"	Str.	Beam
B1102E	6	33'-0"	Str.	Beam
C401E	94	15'-10"	119	Column
C1102E	36	46'-3"	Str.	Column
D401E	18	15'-10"	119	Collision Wall
D501E	40	4'-6"	105	Collision Wall
D502E	42	8'-9"	Str.	Collision Wall
D503E	16	21'-4"	120	Collision Wall
D504E	16	18'-2"	Str.	Collision Wall
D1001E	4	25'-9"	120	Collision Wall
D1002E	6	24'-8"	101	Collision Wall
D1003E	4	24'-6"	120	Collision Wall
D1004E	4	23'-5"	101	Collision Wall
F401E	124	16'-6"	119	Pedestal Pile
F402E	14	9'-6"	119	Socket
F901E	68	40'-0"	Str.	Pedestal Pile
F902E	68	26'-10"	Str.	Pedestal Pile
F903E	20	9'-6"	Str.	Socket
F1101E	36	21'-5"	Str.	Pedestal Pile
BENT 24 RAMP E-W				
A201Y	8	23'-0"	T29	Capbeam
B401Y	12	4'-9"	105	Capbeam
B402Y	2	4'-4"	105	Capbeam
B501Y	20	10'-10"	105	Capbeam
B502Y	14	21'-0"	*105	Capbeam
B503Y	4	9'-1"	105	Capbeam
B701Y	6	22'-3"	Str.	Capbeam
B702Y	8	11'-0"	113	Capbeam
B703Y	4	13'-11"	108	Capbeam

BILL OF REINFORCEMENT

MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 24 WESTBOUND(cont.)				
B601X	29	19'-8"	109	Beam
B602X	7	19'-0"	109	Beam
B603X	7	17'-8"	109	Beam
B1101X	6	31'-3"	Str.	Beam
B1102X	6	33'-0"	Str.	Beam
C401X	94	15'-10"	119	Column
C1101X	36	46'-3"	Str.	Column
D401X	18	15'-10"	119	Collision Wall
D501X	40	4'-6"	105	Collision Wall
D502X	42	8'-9"	Str.	Collision Wall
D503X	16	21'-4"	120	Collision Wall
D504X	16	18'-2"	Str.	Collision Wall
D1001X	4	25'-9"	120	Collision Wall
D1002X	6	24'-8"	101	Collision Wall
D1003X	4	24'-6"	120	Collision Wall
D1004X	4	23'-5"	101	Collision Wall
F401X	124	16'-6"	119	Pedestal Pile
F402X	14	9'-6"	119	Socket
F901X	68	40'-0"	Str.	Pedestal Pile
F902X	68	26'-10"	Str.	Pedestal Pile
F903X	20	9'-6"	Str.	Socket
F1101X	36	21'-5"	Str.	Pedestal Pile
BENT 25 WESTBOUND				
A201Z	24	23'-0"	T29	Beam
B401Z	18	5'-8"	105	Beam
B402Z	1	4'-6"	105	Beam
B801Z	8	14'-6"	Str.	Beam
B802Z	2	17'-1"	Str.	Beam
B1103Z	10	23'-4"	Str.	Beam
B1104Z	6	31'-0"	Str.	Beam
B1105Z	6	21'-10"	Str.	Beam
B1106Z	14	41'-10"	Str.	Beam
B1107Z	14	28'-8"	Str.	Beam
B1108Z	6	32'-10"	Str.	Beam
C401Z	136	15'-10"	119	Column
C1101Z	42	49'-10"	Str.	Column
C1102Z	18	21'-5"	Str.	Column
F903Z	14	20'-0"	Str.	Socket
D401Z	27	15'-10"	119	Collision Wall
D501Z	85	8'-9"	Str.	Collision Wall
D502Z	78	6'-9"	105	Collision Wall
D503Z	28	38'-3"	120	Collision Wall
D1001Z	2	52'-0"	120	Collision Wall
D1002Z	2	32'-6"	120	Collision Wall
D1003Z	4	51'-5"	101	Collision Wall
D1004Z	4	31'-10"	101	Collision Wall
D1101Z	2	52'-2"	120	Collision Wall
D1102Z	2	31'-8"	120	Collision Wall
D1103Z	4	51'-7"	101	Collision Wall
D1104Z	4	31'-1"	101	Collision Wall
F401Z	195	16'-6"	119	Pedestal Pile
F402Z	47	11'-1"	119	Socket
F901Z	28	17'-6"	Str.	Socket
F902Z	102	35'-0"	Str.	Pedestal Pile
F1101Z	54	24'-4"	Str.	Pedestal Pile
F1102Z	54	20'-8"	Str.	Pedestal Pile
F1103Z	102	34'-4"	Str.	Pedestal Pile
BENT 25 EASTBOUND				
A201A	14	23'-0"	T29	Beam
B401A	18	4'-11"	105	Beam
B601A	8	59'-6"	Str.	Beam
B602A	10	19'-9"	Str.	Beam
B1101A	12	31'-3"	Str.	Beam
B1102A	6	59'-6"	Str.	Beam
C401A	104	15'-10"	119	Column
C1101A	28	49'-6"	Str.	Column
C1102A	8	51'-3"	Str.	Column

BILL OF REINFORCEMENT

MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 24 RAMP E-W(cont.)				
B704Y	4	12'-3"	108	Capbeam
B801Y	20	17'-5"	101	Capbeam
C401Y	100	13'-6"	113	Shaft
C402Y	550	4'-8"	116	Shaft
C1101Y	36	54'-0"	Str.	Shaft
F501Y	33	14'-6"	Str.	Footing
F502Y	15	32'-6"	Str.	Footing
F701Y	34	15'-2"	100	Footing
F1101Y	16	35'-8"	100	Footing
F1102Y	36	15'-1"	101	Footing
BENT 25 WESTBOUND				
A201Z	24	23'-0"	T29	Beam
B401Z	18	5'-8"	105	Beam
B402Z	1	4'-6"	105	Beam
B801Z	8	14'-6"	Str.	Beam
B802Z	2	17'-1"	Str.	Beam
B1103Z	10	23'-4"	Str.	Beam
B1104Z	6	31'-0"	Str.	Beam
B1105Z	6	21'-10"	Str.	Beam
B1106Z	14	41'-10"	Str.	Beam
B1107Z	14	28'-8"	Str.	Beam
B1108Z	6	32'-10"	Str.	Beam
C401Z	136	15'-10"	119	Column
C1101Z	42	49'-10"	Str.	Column
C1102Z	18	21'-5"	Str.	Column
F903Z	14	20'-0"	Str.	Socket
D401Z	27	15'-10"	119	Collision Wall
D501Z	85	8'-9"	Str.	Collision Wall
D502Z	78	6'-9"	105	Collision Wall
D503Z	28	38'-3"	120	Collision Wall
D1001Z	2	52'-0"	120	Collision Wall
D1002Z	2	32'-6"	120	Collision Wall
D1003Z	4	51'-5"	101	Collision Wall
D1004Z	4	31'-10"	101	Collision Wall
D1101Z	2	52'-2"	120	Collision Wall
D1102Z	2	31'-8"	120	Collision Wall
D1103Z	4	51'-7"	101	Collision Wall
D1104Z	4	31'-1"	101	Collision Wall
F401Z	195	16'-6"	119	Pedestal Pile
F402Z	47	11'-1"	119	Socket
F901Z	28	17'-6"	Str.	Socket
F902Z	102	35'-0"	Str.	Pedestal Pile
F1101Z	54	24'-4"	Str.	Pedestal

FED. ROAD DIST. NO.	STA. 7E	FED. AID YEAR	FUND. YEAR	SHEET NO.	TOTAL SHEETS
0	0	0	0	119	

BILL OF REINFORCEMENT

MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 26 EASTBOUND				
A201c	24	23'-0"	129	Beam
B401c	15	4'-7"	105	Beam
B1102c	6	30'-4"	101	Beam
B1103c	4	19'-2"	101	Beam
B1104c	4	23'-11"	101	Beam
B1105c	6	32'-6"	101	Beam
B1106c	10	30'-3"	101	Beam
B1107c	6	43'-8"	101	Beam
B1108c	12	32'-4"	101	Beam
B1109c	2	26'-0"	101	Beam
C401c	150	19'-6"	109	Column
C402c	1272	5'-8"	116	Column
C1101c	20	51'-2"	119	Column
C1102c	24	52'-9"	119	Column

D401c	30	19'-6"	109	Collision Wall
D501c	74	8'-9"	105	Collision Wall
D502c	70	6'-10"	105	Collision Wall
D503c	28	33'-4"	101	Collision Wall
D1001c	8	57'-11"	101	Collision Wall
D1002c	8	23'-2"	101	Collision Wall
D1101c	9	55'-0"	101	Collision Wall
D1102c	9	22'-1"	101	Collision Wall
F401c	189	24'-6"	119	Pedestal Pile
F402c	45	15'-10"	119	Socket
F501c	8	3'-4"	109	Pedestal Pile
F901c	84	17'-8"	109	Socket
F1101c	144	32'-0"	119	Pedestal Pile
F1102c	144	40'-0"	119	Pedestal Pile
F1103c	114	24'-4"	119	Pedestal Pile

BENT 27 WESTBOUND

A201d	20	23'-0"	129	Beam
B401d	25	4'-7"	105	Beam
B1101d	2	30'-0"	101	Beam
B1102d	7	18'-0"	101	Beam
B1103d	6	49'-8"	101	Beam
B1104d	14	23'-8"	101	Beam
B1105d	6	32'-0"	101	Beam
C401d	225	22'-1"	119	Column

C1101d	116	40'-0"	119	Column
C1102d	48	43'-9"	119	Column
C1103d	24	43'-2"	119	Column
C1104d	32	41'-0"	119	Column
C1105d	12	45'-3"	119	Column
F401d	174	24'-6"	119	Pedestal Pile
F402d	48	18'-11"	119	Socket
F1101d	72	12'-5"	119	Pedestal Pile
F1102d	44	15'-4"	119	Pedestal Pile
F1103d	144	57'-10"	119	Pedestal Pile
F1104d	78	20'-7"	119	Socket

BENT 27 EASTBOUND

A201e	20	23'-0"	129	Beam
B401e	25	4'-7"	105	Beam
B1101e	6	35'-9"	101	Beam
B1102e	6	31'-8"	101	Beam
B1103e	6	40'-5"	101	Beam
B1104e	6	28'-10"	101	Beam
B1105e	2	32'-0"	101	Beam
B1106e	14	29'-0"	101	Beam
B1107e	11	25'-8"	101	Beam
B1108e	6	34'-4"	101	Beam
C401e	225	22'-3"	119	Column

BILL OF REINFORCEMENT

MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 27 EASTBOUND (cont.)				
C1101e	116	40'-0"	119	Column
C1102e	48	43'-9"	119	Column
C1103e	24	43'-2"	119	Column
C1104e	32	41'-0"	119	Column
C1105e	12	45'-3"	119	Column
F401e	174	24'-6"	119	Pedestal Pile
F402e	51	18'-11"	119	Socket
F1101e	72	12'-5"	119	Pedestal Pile
F1102e	44	15'-4"	119	Pedestal Pile
F1103e	144	57'-10"	119	Pedestal Pile
F1104e	78	20'-7"	119	Socket

BENT 28 WESTBOUND

A201f	18	19'-9"	129	Capbeam
B401f	22	4'-7"	105	Beam
B402f	1	4'-5"	105	Beam
B1101f	3	27'-11"	101	Beam
B1102f	6	44'-8"	101	Beam
B1103f	10	38'-11"	101	Beam
B1104f	9	28'-0"	101	Beam
B1105f	6	33'-3"	101	Beam
C401f	234	22'-1"	119	Column

C1101f	48	43'-9"	119	Column
C1102f	32	46'-8"	119	Column
C1103f	24	45'-5"	119	Column
C1104f	116	40'-0"	119	Column
C1105f	12	47'-3"	119	Column
F401f	90	24'-6"	119	Pedestal Pile
F402f	30	15'-10"	119	Socket
F901f	84	13'-10"	119	Socket
F1101f	72	12'-5"	119	Pedestal Pile
F1102f	44	15'-4"	119	Pedestal Pile
F1103f	144	29'-10"	119	Pedestal Pile

BENT 28 EASTBOUND

A201g	18	19'-9"	129	Capbeam
B401g	22	4'-7"	105	Beam
B402g	1	4'-5"	105	Beam
B1101g	3	27'-11"	101	Beam
B1102g	6	44'-8"	101	Beam
B1103g	10	38'-11"	101	Beam
B1104g	9	28'-0"	101	Beam
B1105g	6	33'-3"	101	Beam
C401g	234	22'-1"	119	Column

C1101g	48	43'-9"	119	Column
C1102g	32	46'-8"	119	Column
C1103g	24	45'-5"	119	Column
C1104g	116	40'-0"	119	Column
C1105g	12	47'-3"	119	Column
F401g	90	24'-6"	119	Pedestal Pile
F402g	30	15'-10"	119	Socket
F901g	84	13'-10"	119	Socket
F1101g	72	12'-5"	119	Pedestal Pile
F1102g	44	15'-4"	119	Pedestal Pile
F1103g	144	29'-10"	119	Pedestal Pile

BENT 29 WESTBOUND

A201f	18	19'-9"	129	Capbeam
B401f	46	9'-3"	105	Capbeam
B402f	2	9'-2"	105	Capbeam

BILL OF REINFORCEMENT

MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 29 WESTBOUND (cont.)				
B402f	2	8'-10"	105	Capbeam
B404f	2	8'-4"	105	Capbeam
B405f	2	7'-6"	105	Capbeam
B501f	76	24'-11"	109	Capbeam
B502f	16	48'-2"	*109	Capbeam
B503f	4	22'-7"	109	Capbeam
B504f	4	21'-5"	109	Capbeam
B701f	16	31'-10"	109	Capbeam
B801f	16	25'-0"	109	Capbeam
B701f	14	15'-11"	113	Capbeam
B801f	4	8'-2"	108	Capbeam
B802f	4	9'-11"	108	Capbeam
B803f	4	10'-6"	108	Capbeam
B804f	4	10'-10"	108	Capbeam
B805f	12	11'-1"	108	Capbeam
B1101f	4	37'-0"	101	Capbeam
B1102f	4	38'-9"	101	Capbeam
B1103f	4	39'-3"	101	Capbeam
B1104f	4	39'-7"	101	Capbeam
B1105f	12	39'-10"	101	Capbeam
B1106f	4	29'-3"	101	Capbeam
B1107f	4	32'-1"	101	Capbeam
B1108f	4	35'-0"	101	Capbeam
B1109f	14	49'-6"	101	Capbeam
B603f	6	21'-0"	Str.	Capbeam
C401f	100	22'-1"	119	Column
C1101f	72	53'-10"	119	Column

BENT 29 EASTBOUND

F401f	54	24'-6"	119	Pedestal Pile
F402f	32	15'-10"	119	Socket
F901f	56	18'-10"	119	Socket
F1101f	96	25'-10"	119	Pedestal Pile
F1102f	72	13'-6"	119	Pedestal Pile

BENT 29 EASTBOUND (cont.)

A201f	18	19'-9"	129	Capbeam
B401f	46	9'-5"	105	Capbeam
B402f	2	9'-2"	105	Capbeam
B403f	2	8'-10"	105	Capbeam
B404f	2	8'-4"	105	Capbeam
B405f	2	7'-6"	105	Capbeam
B501f	76	24'-11"	109	Capbeam
B502f	16	48'-2"	*109	Capbeam
B503f	4	22'-7"	109	Capbeam
B504f	4	21'-5"	109	Capbeam
B601f	16	31'-10"	109	Capbeam
B602f	16	25'-0"	109	Capbeam
B701f	14	15'-11"	113	Capbeam
B801f	4	8'-2"	108	Capbeam
B802f	4	9'-11"	108	Capbeam
B803f	4	10'-6"	108	Capbeam
B804f	4	10'-10"	108	Capbeam
B805f	12	11'-1"	108	Capbeam
B1101f	4	37'-0"	101	Capbeam
B1102f	4	38'-9"	101	Capbeam
B1103f	4	39'-3"	101	Capbeam
B1104f	4	39'-7"	101	Capbeam
B1105f	12	39'-10"	101	Capbeam
B1106f	4	29'-3"	101	Capbeam
B1107f	4	32'-1"	101	Capbeam
B1108f	4	35'-0"	101	Capbeam
B1109f	14	49'-6"	101	Capbeam
B603f	6	21'-0"	Str.	Capbeam
C401f	100	22'-1"	119	Column
C1101f	72	53'-10"	119	Column

BILL OF REINFORCEMENT

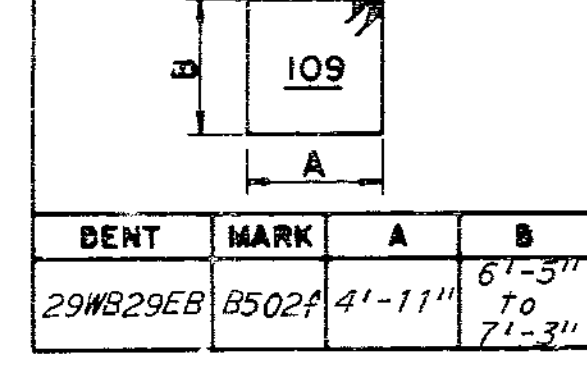
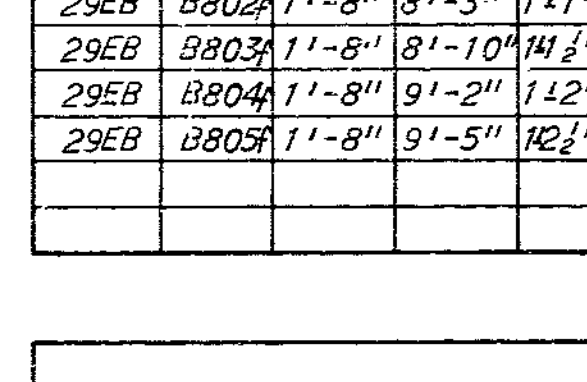
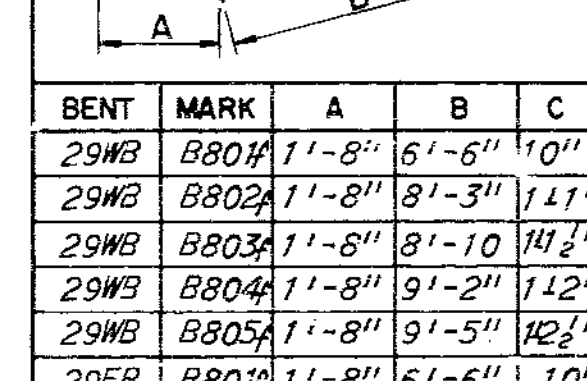
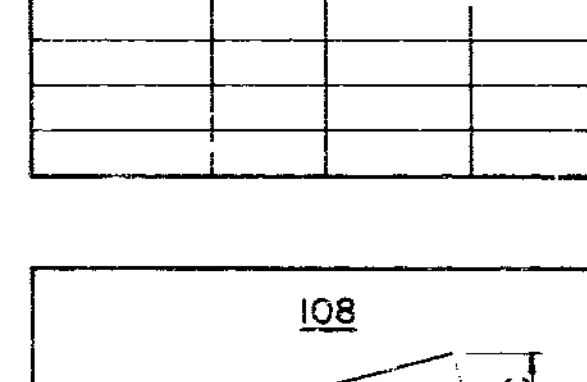
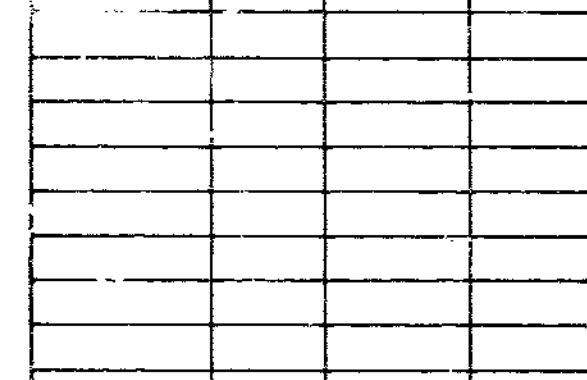
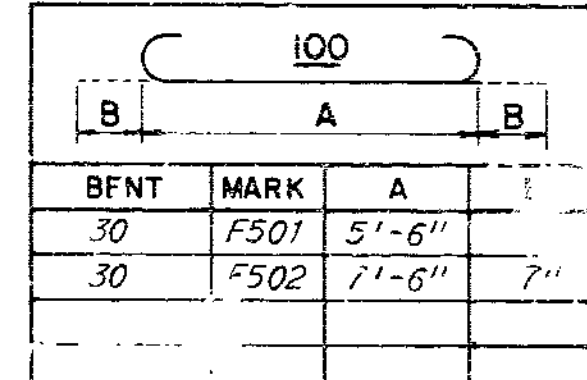
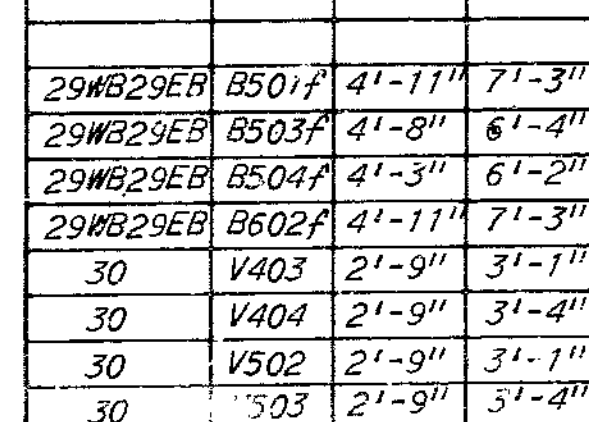
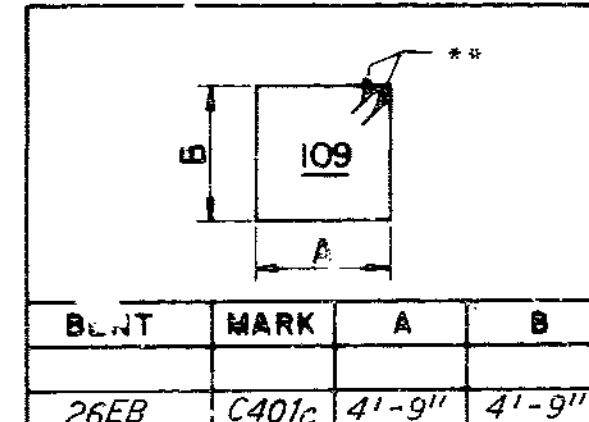
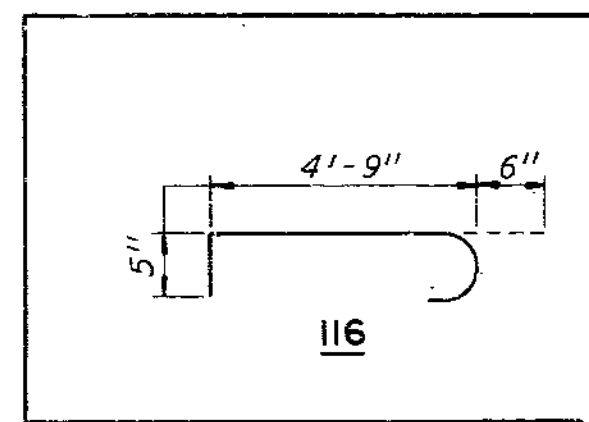
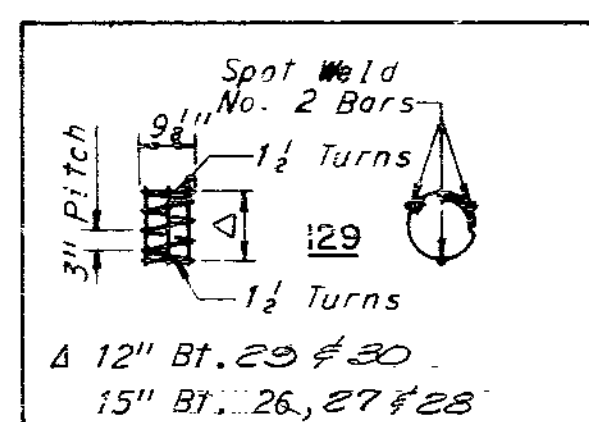
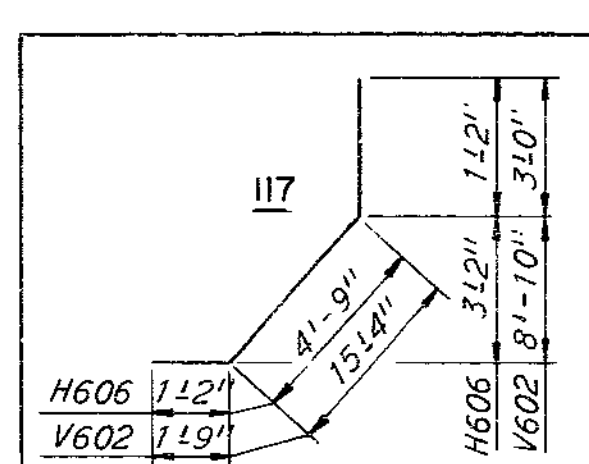
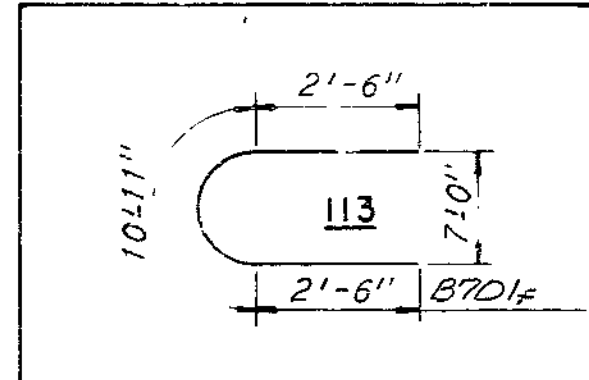
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 29 EASTBOUND (cont.)				
F402f	32	15'-10"	119	Socket
F901f	56	18'-10"	119	Socket
F1101f	96	25'-10"	119	Pedestal Pile
F1102f	72	13'-6"	119	Pedestal Pile

END BENT 30

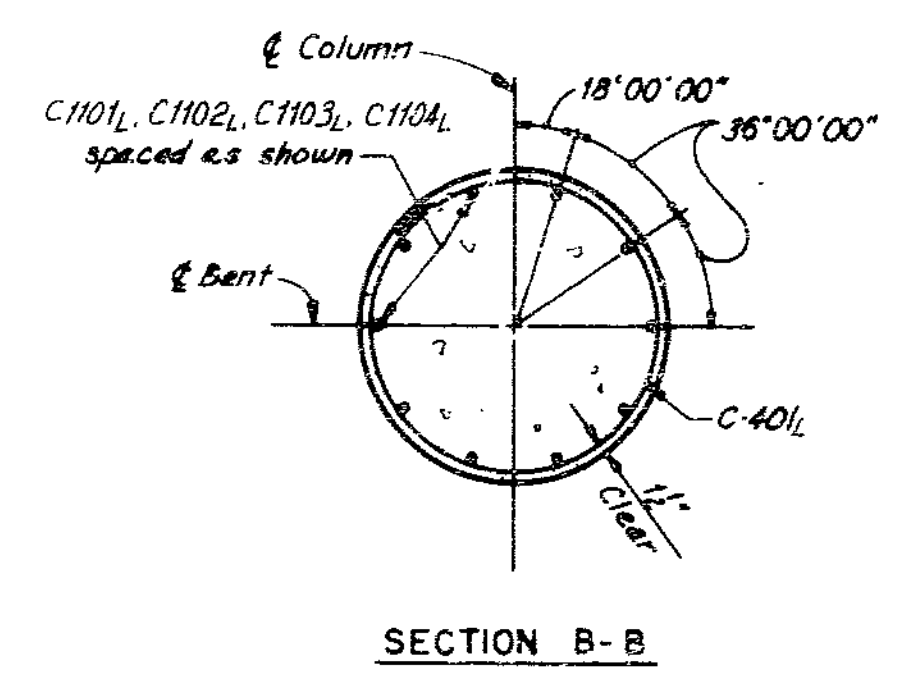
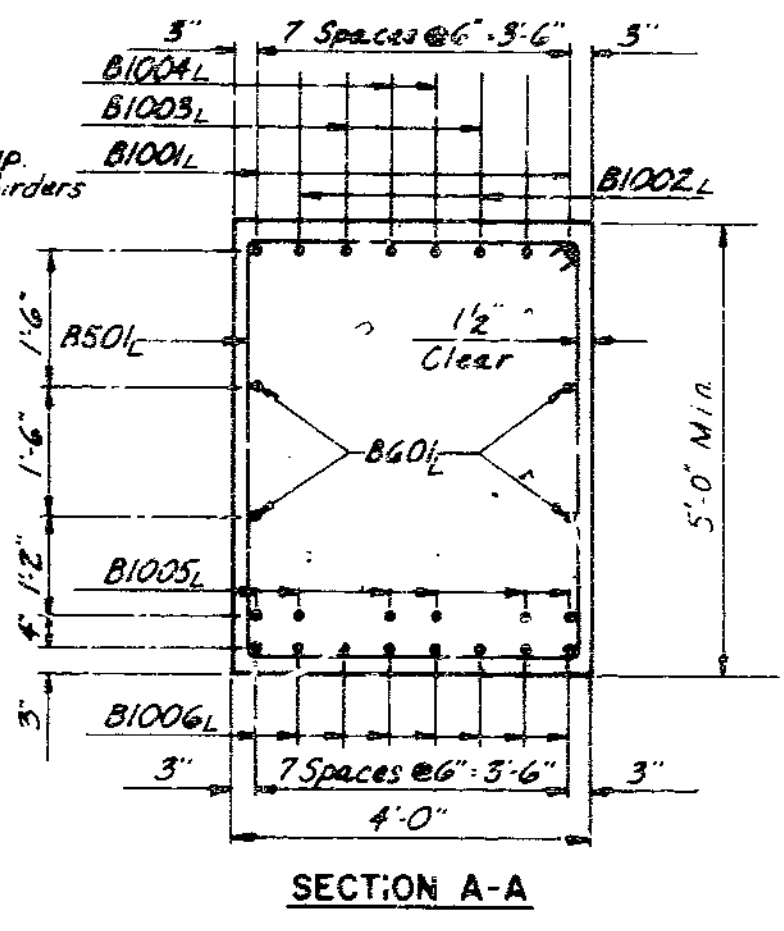
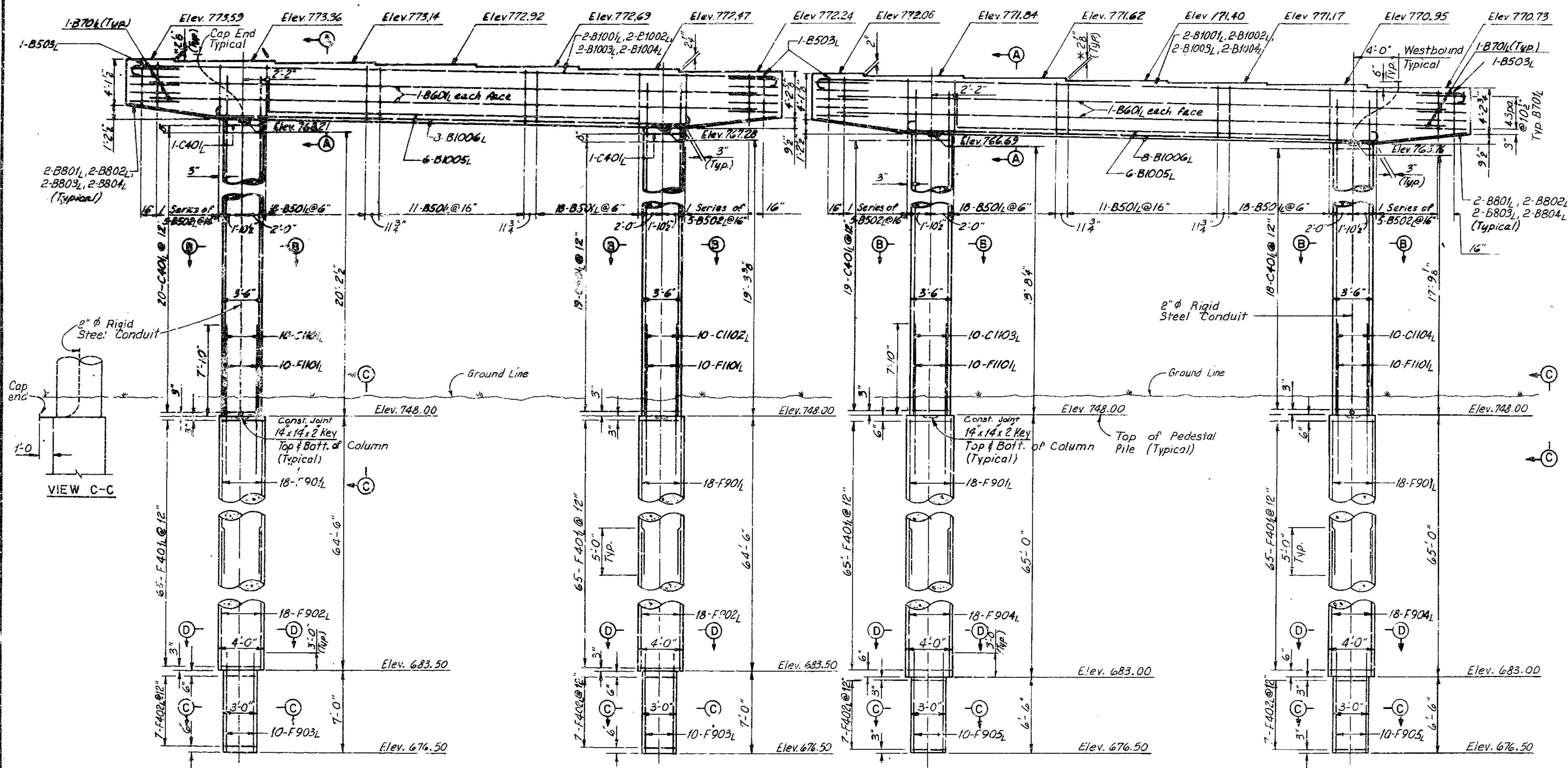
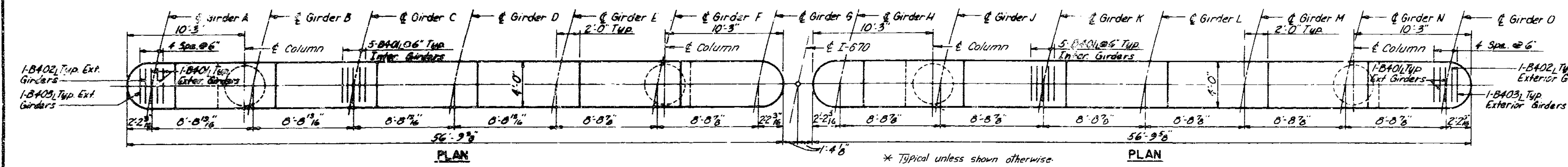
A201	36	19'-9"	129	Barrel
C401	55	13'-10"	*105	Footing Shaft
C402	44	4'-7"	105	Footing Shaft
F501	121	6'-8"	100	Footing
F502	66	8'-8"	100	Footing
F601	66	10'-10"	101	Footing
F602	44	11'-9"	101	Footing
H401	16	46'-3"	101	Wingwall
H402	8	51'-4"	101	Backwall
H403	12	6'-2"	105	Wingwall
H601	8	46'-3"	101	Barrel
H602	4	51'-8"	101	Backwall
H603	8	13'-8"	101	Wingwall
H604	16	18'-7"	*Str.	Wingwall
H605	8	8'-4"	*Str.	Wingwall
H606	20	7'-0"	117	Wingwall
H607	4	13'-9"	101	Wingwall
H901	10	21'-9"	101	Barrel
H902	10	32'-9"	101	Barrel
H903	10	35'-0"	101	Barrel
H904	10	46'-3"	101	Barrel
H905	5	53'-2"	101	Barrel

BENT 29 EASTBOUND (cont.)

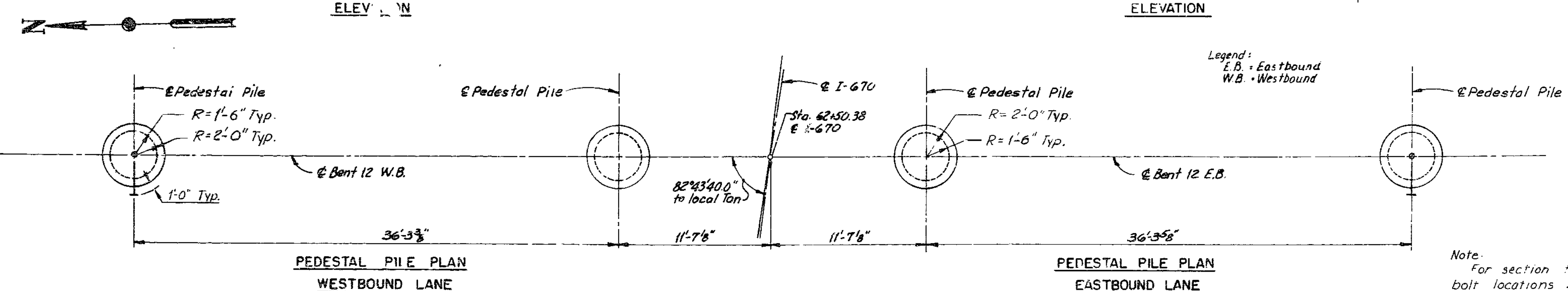
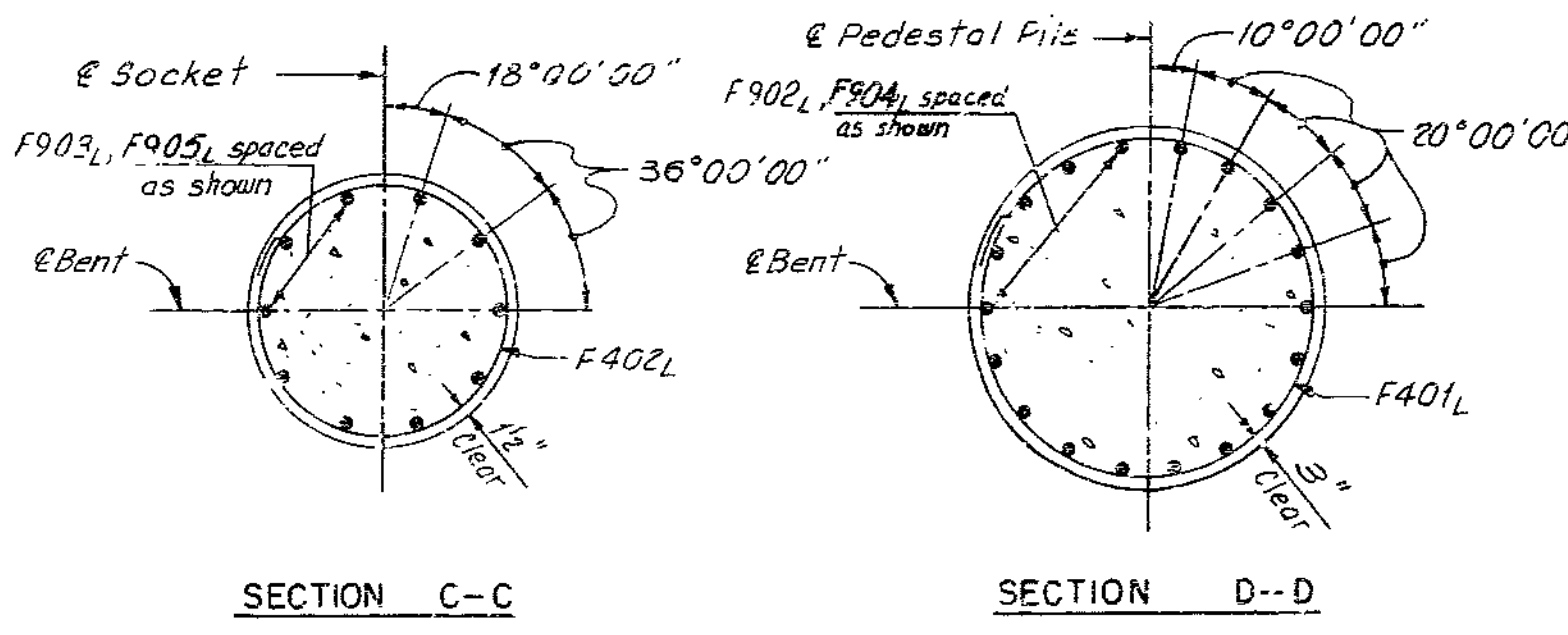
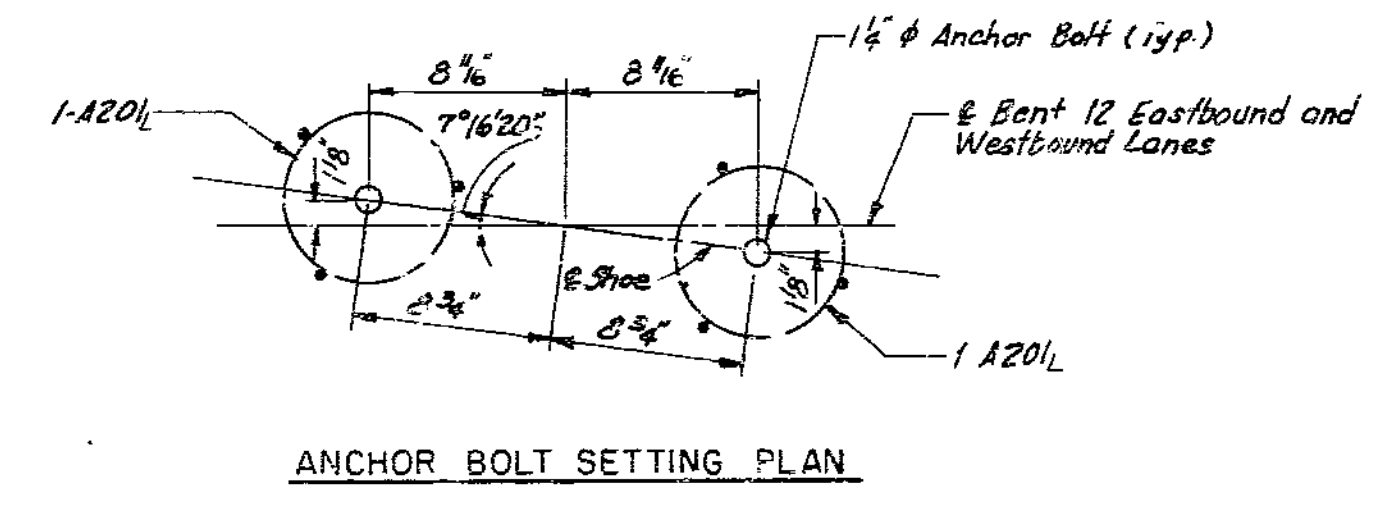
V401	4	7'-2"	101	Maskwall
V402	4	11'-6"	101	Backwall
V403	15	12'-2"	109	Barrel
V404	18	12'-8"	109	Barrel
V405	6	3'-1"	105	Barrel
V501	292	8'-2"	109	Backwall
V502	132	12'-3"	109	Barrel
V503	100	12'-9"	109	Barrel
V601	4	10'-11"	104	Maskwall
V602	4	20'-0"	117	Wingwall
V603	26	14'-8"	*Str.	Wingwall



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		8	120	



Note: The cost of the 2" Rigid Steel Conduit is to be included in the price bid for "Class B Concrete".



Note: For section thru cap at anchor bolt locations see Sheet 77.

BENT 12 WESTBOUND AND EASTBOUND PEDESTAL PILE ALTERNATE JACKSON COUNTY

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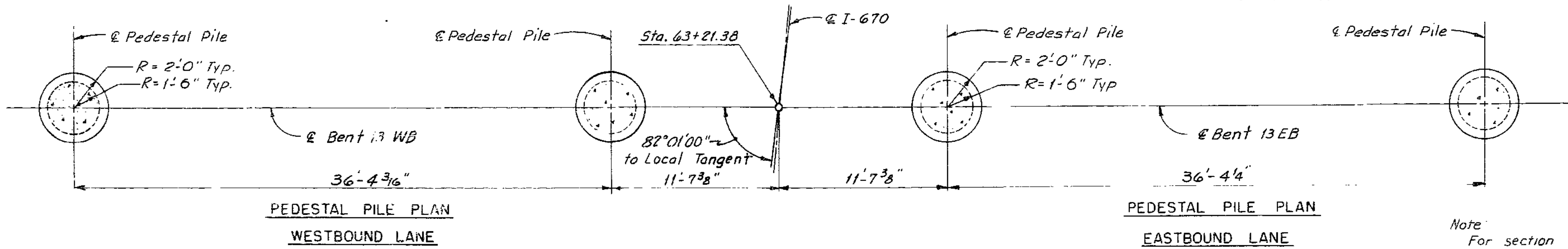
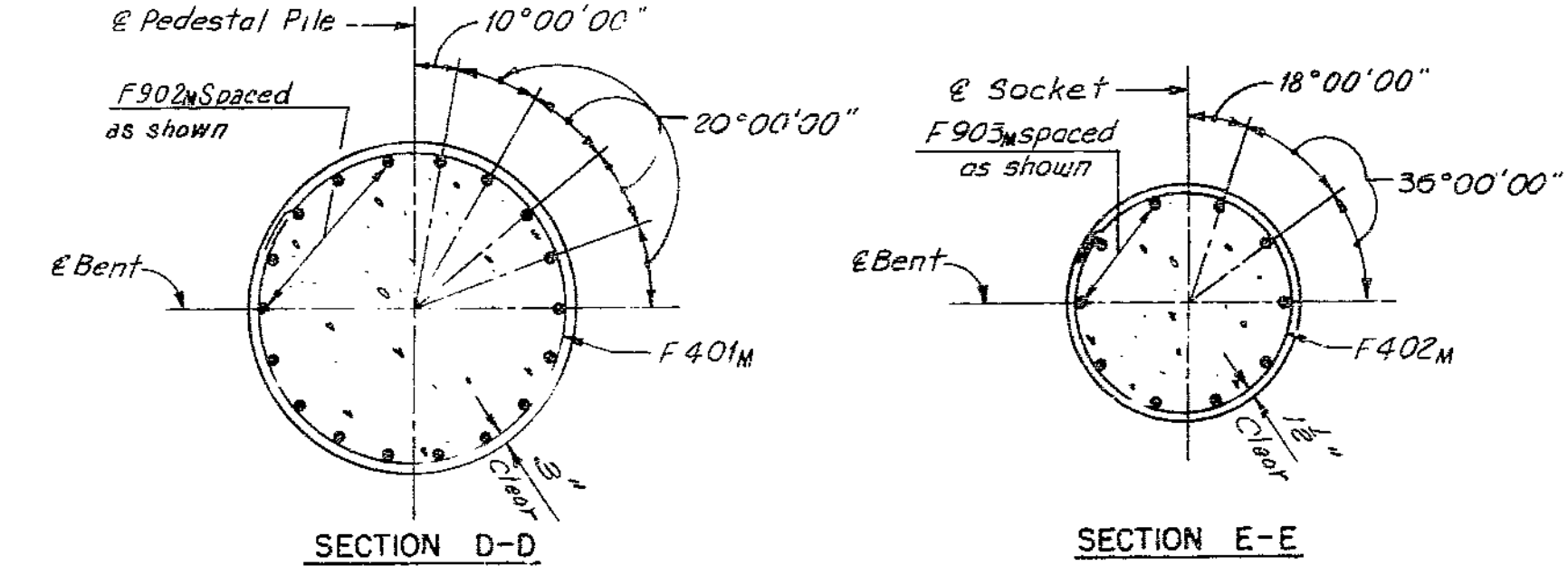
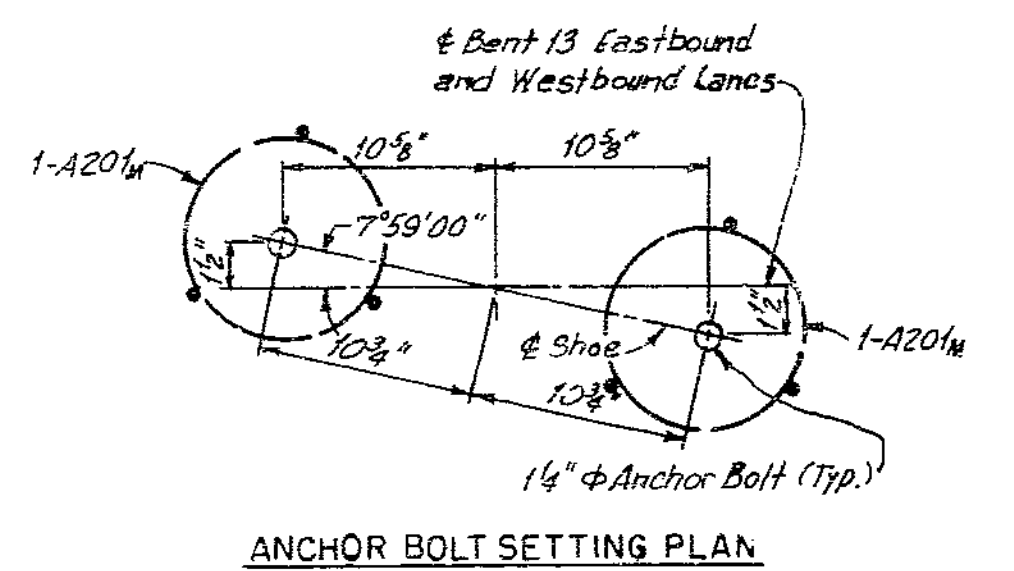
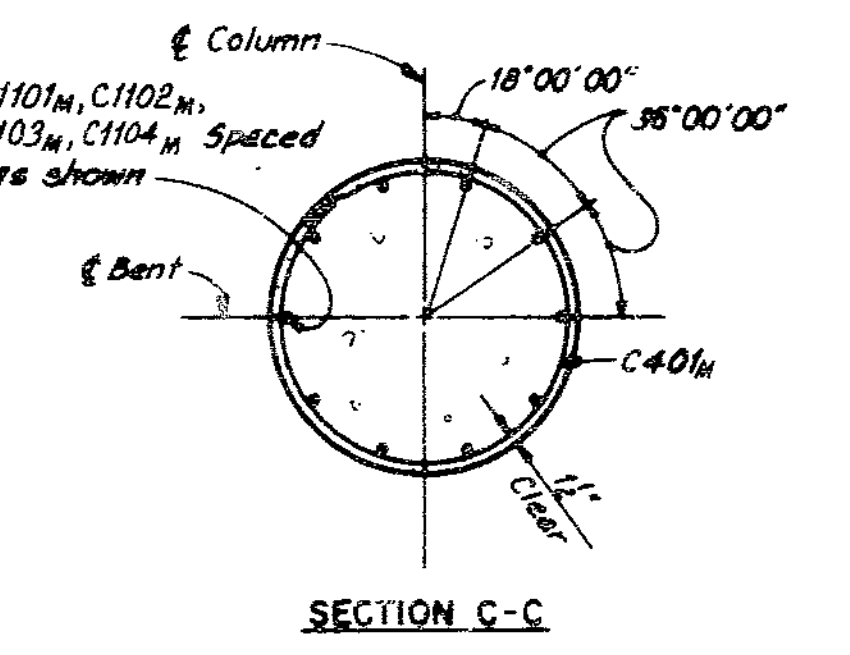
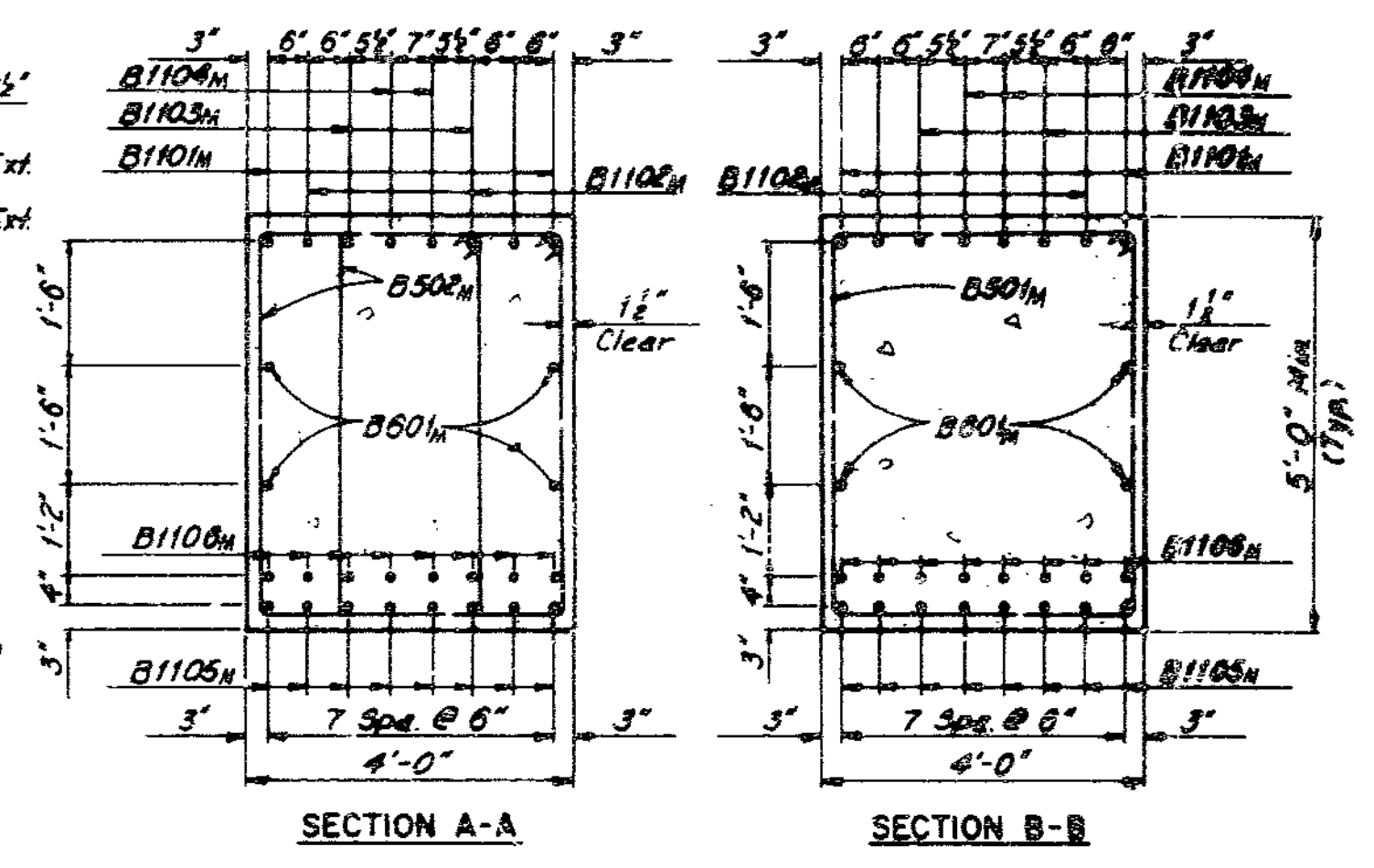
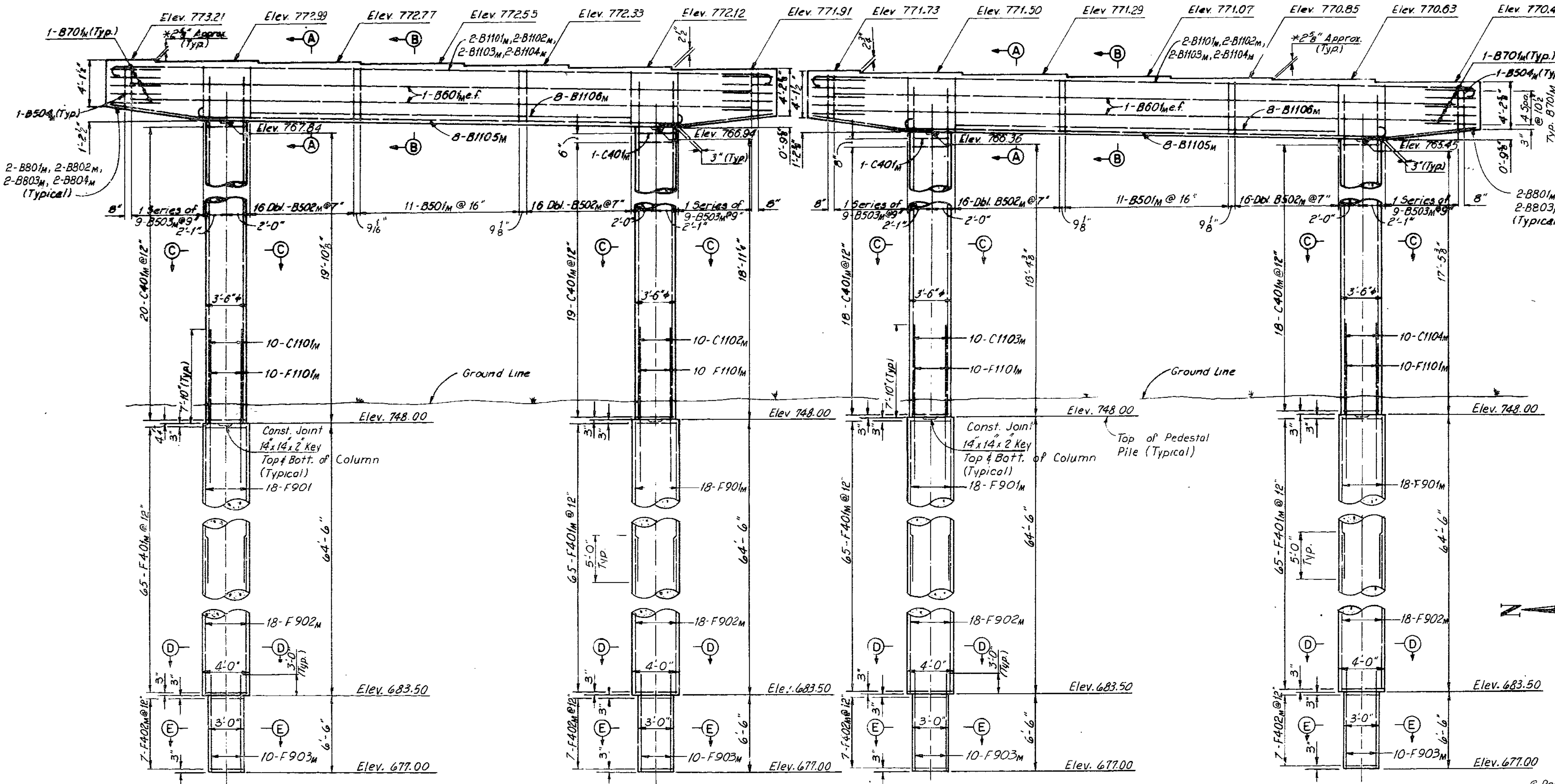
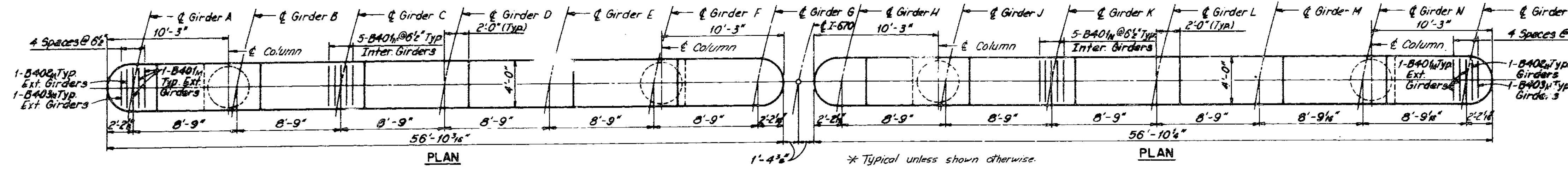
DATE: 10/78
 CHECKED: 10/78

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 51 of 82.

325

REV. NO.	DATE	BY	CHKD.	APP. NO.	APP. DATE
1				121	



Note: For section thru cap at anchor bolt locations see Sheet 77.

BENT 13 WESTBOUND AND EASTBOUND PEDESTAL PILE ALTERNATE
JACKSON COUNTY
 A-3136

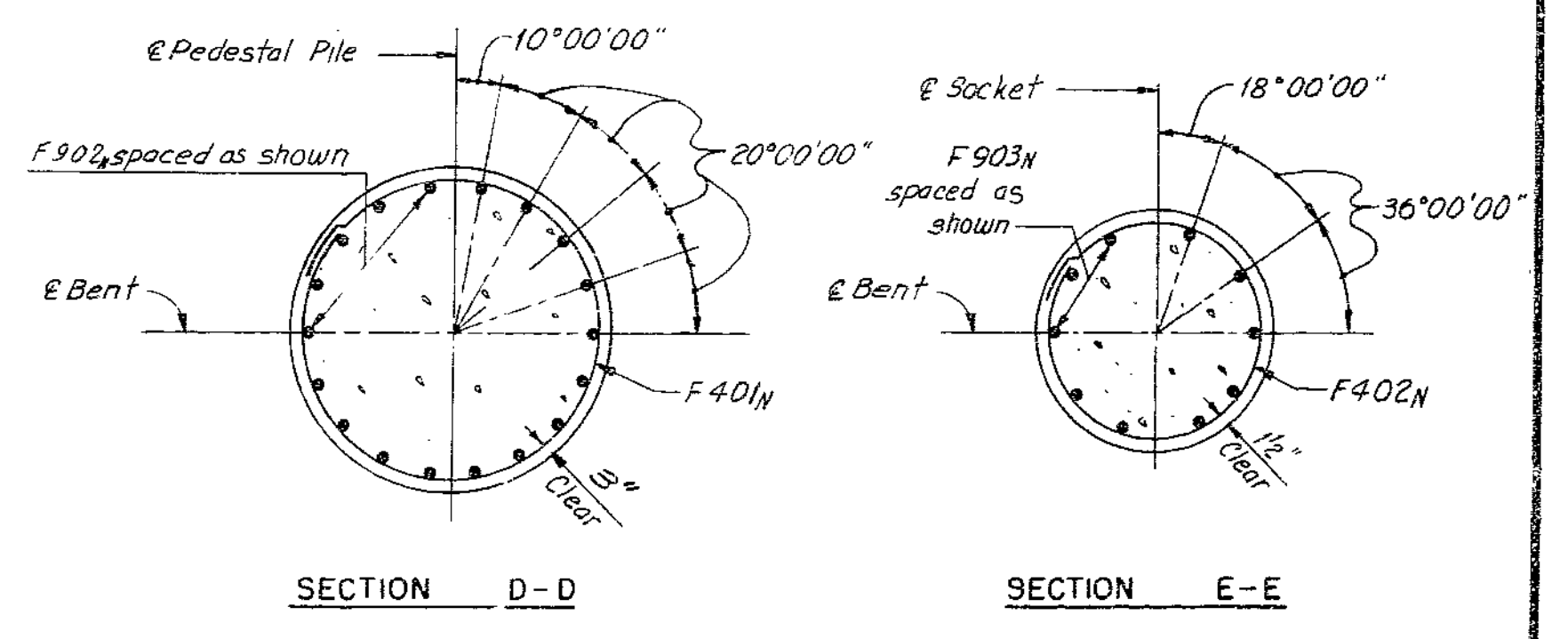
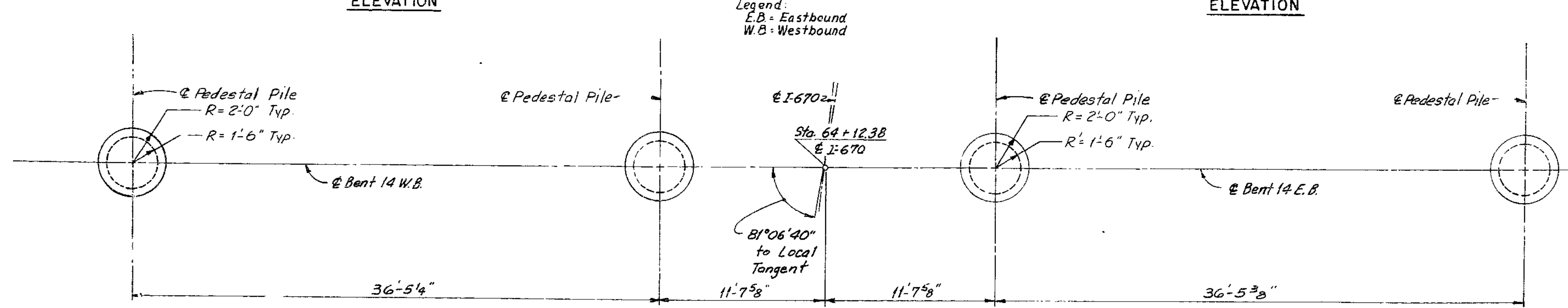
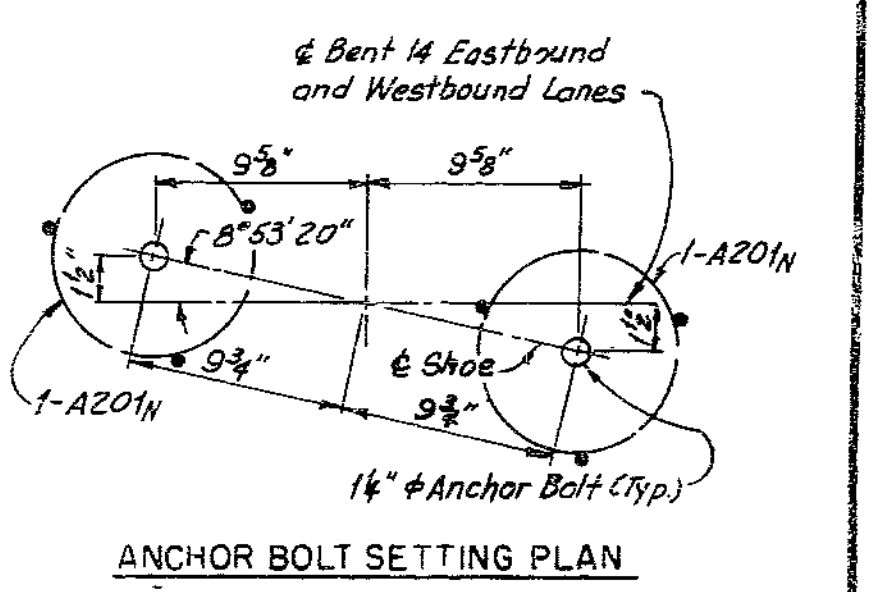
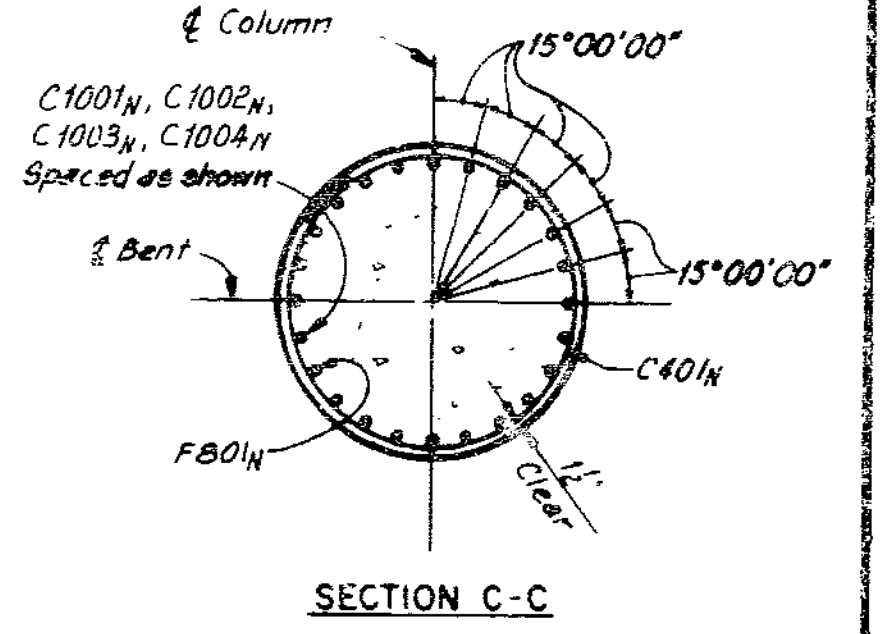
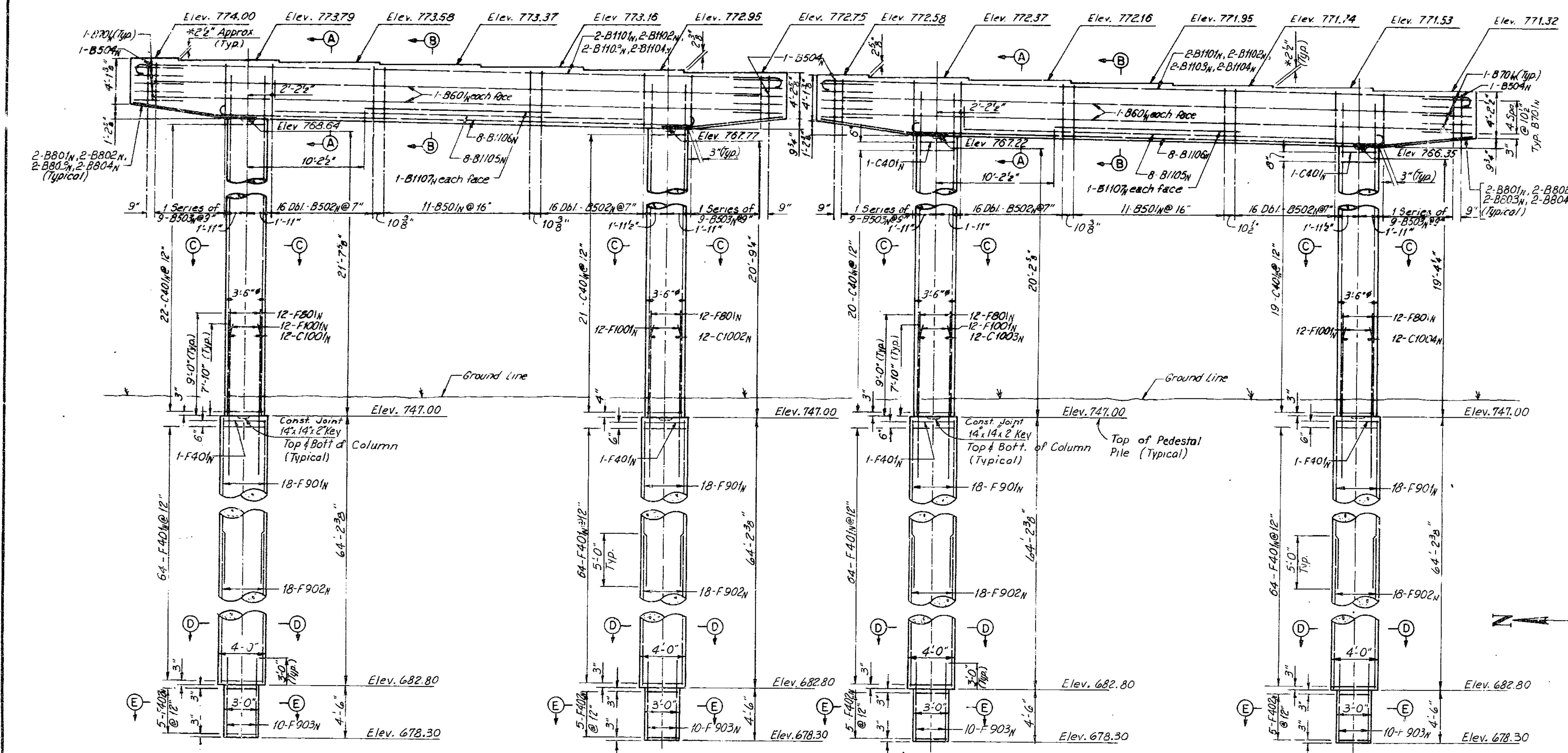
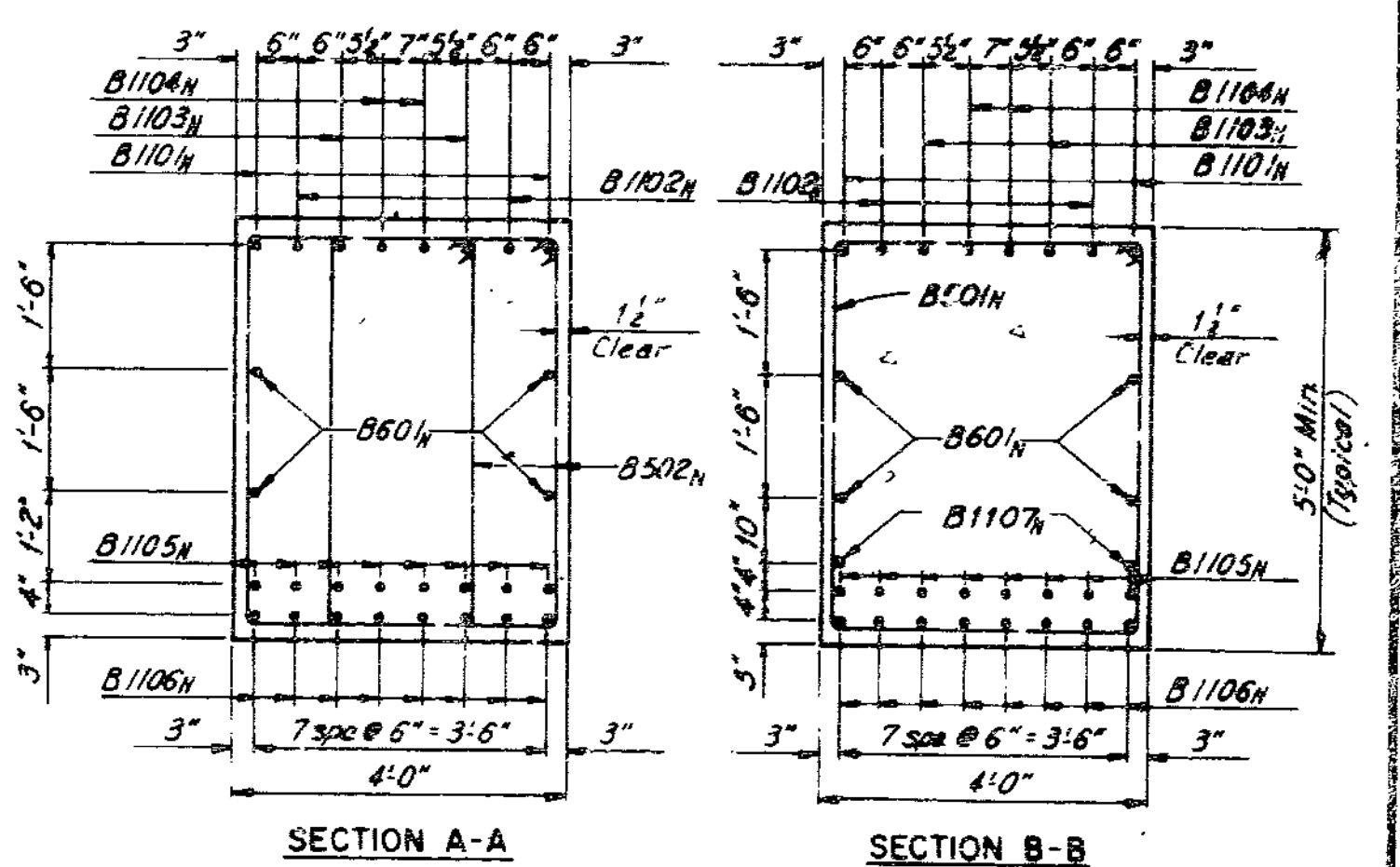
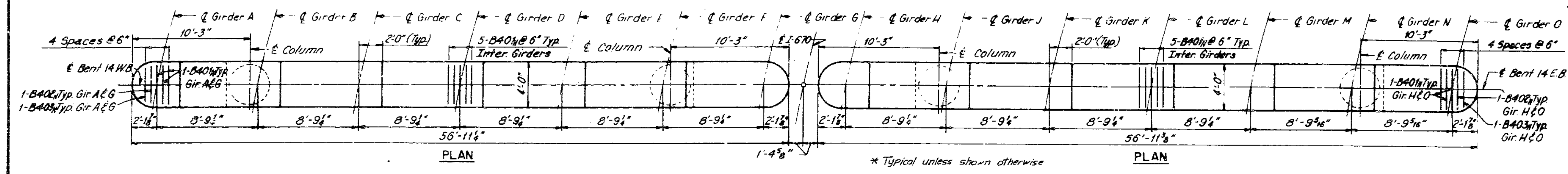
326

DETAILED 1978
 CHECKED 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 52 of 82.

PER. DESIG.	DATE	PER. DES.	PER. DES.	NO.	TOTAL SHEETS
1	12/22			122	



Note:
For section thru cap at anchor bolt locations see Sheet 77.

BENT 14 WESTBOUND AND EASTBOUND PEDESTAL PILE ALTERNATE
JACKSON COUNTY

A-3136

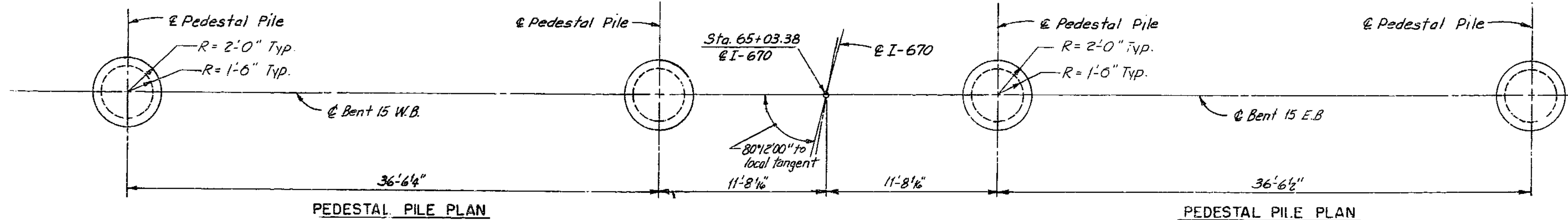
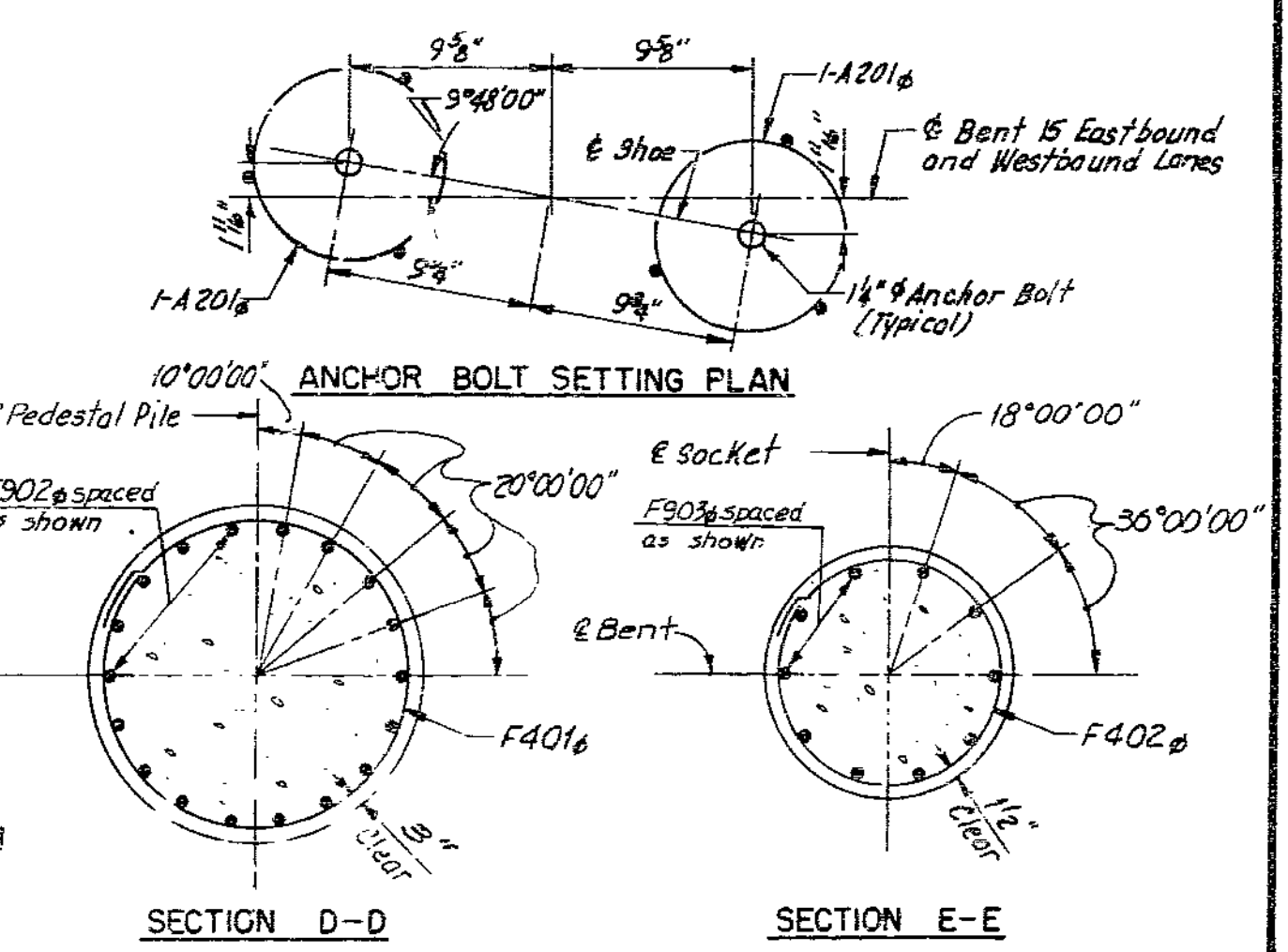
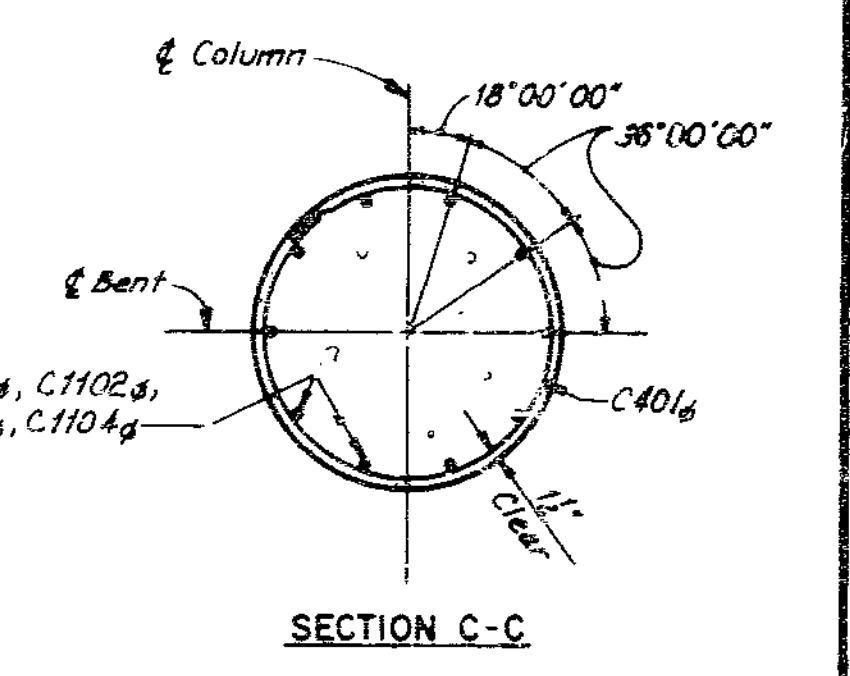
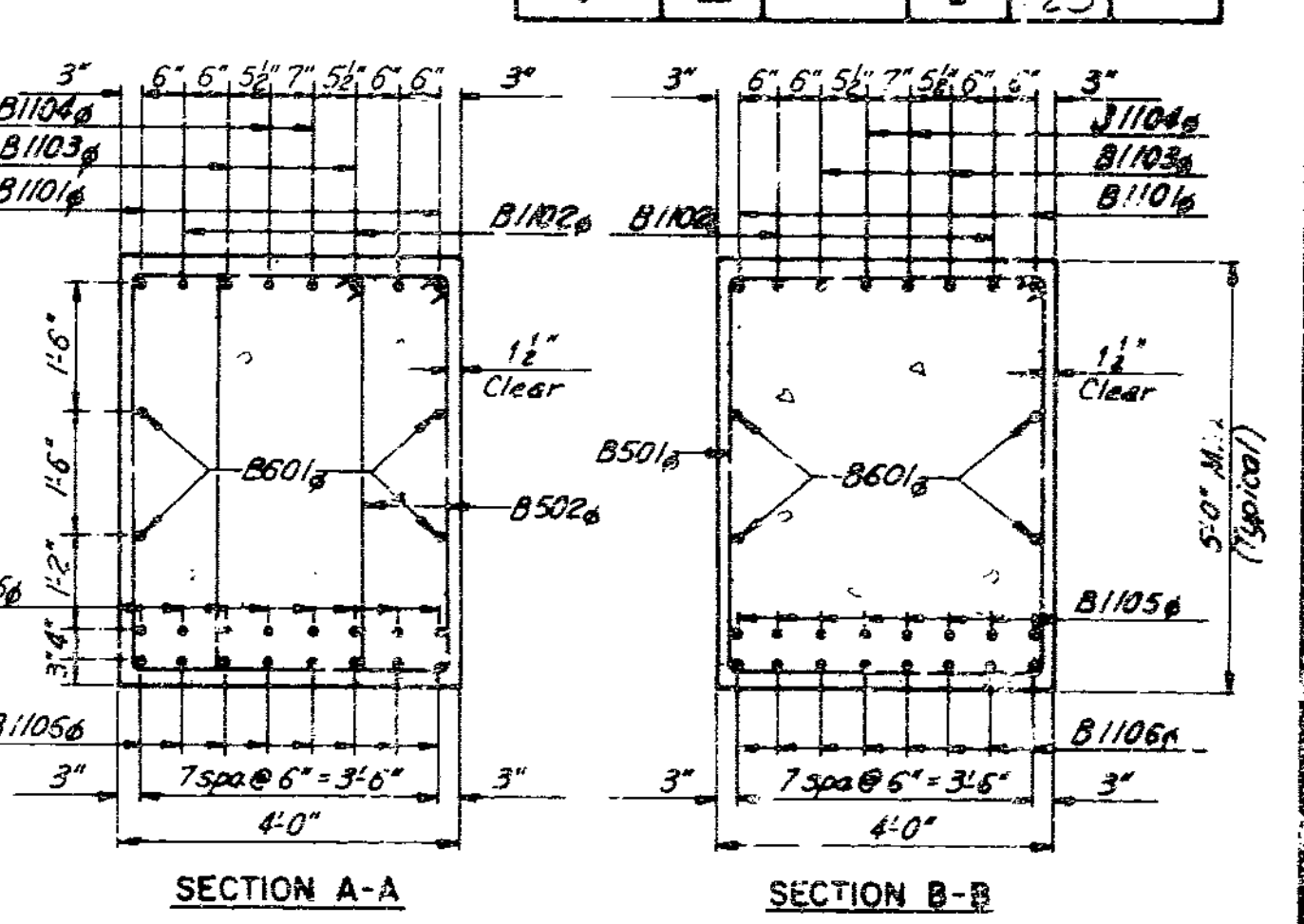
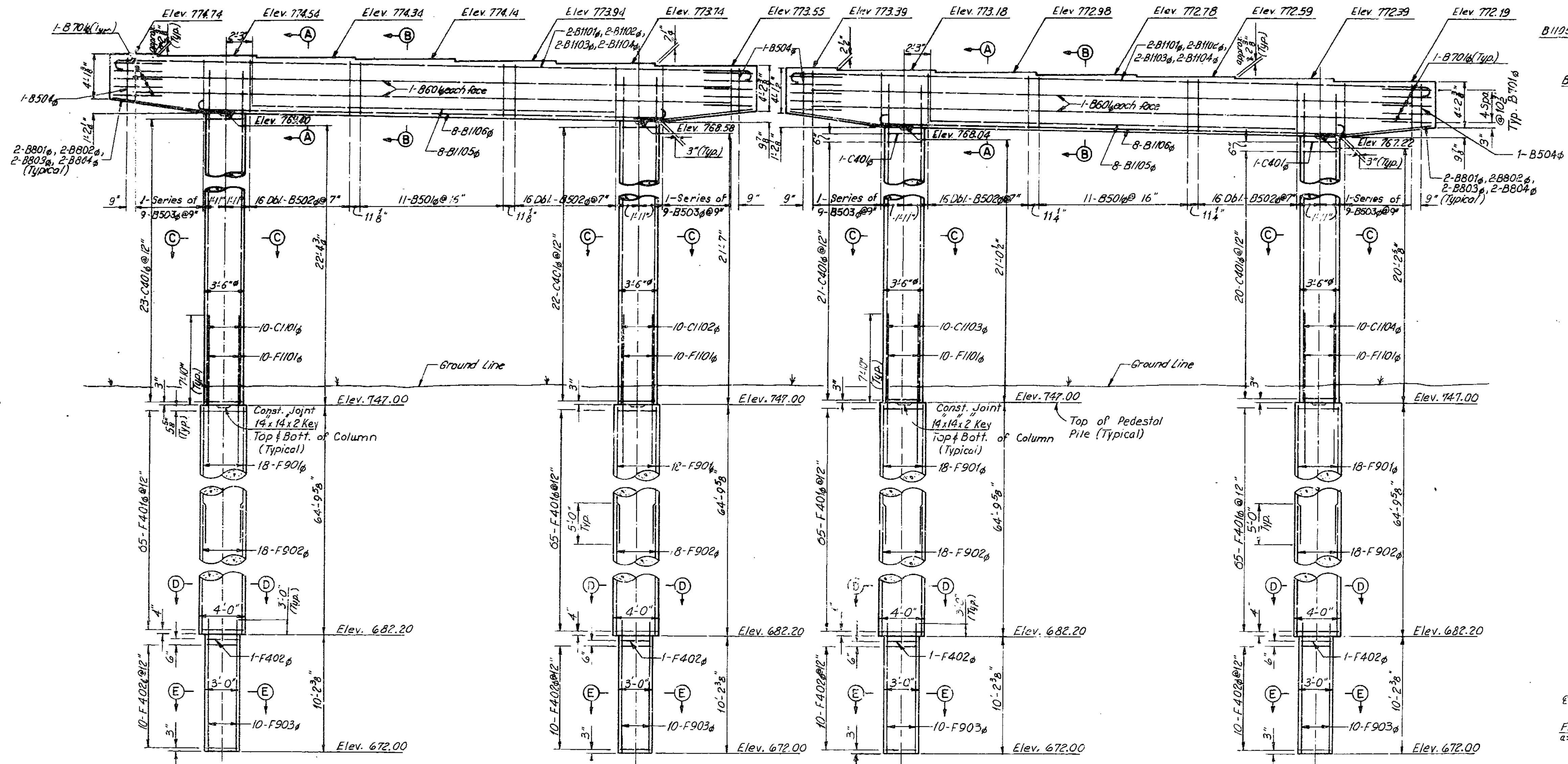
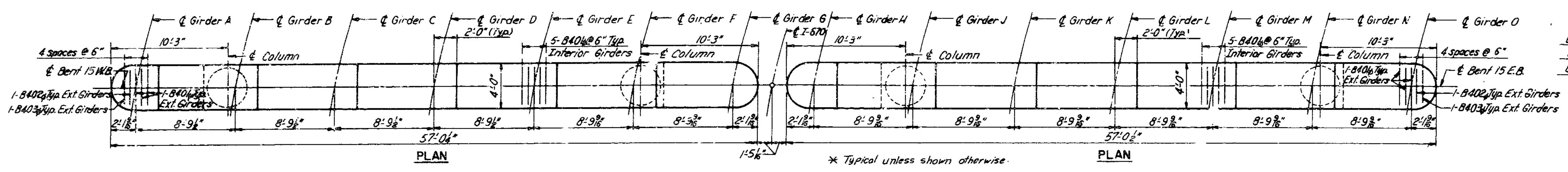
327

DETAILED 12/28
CHECKED 12/18

Note: This drawing is not to scale. Refer to drawings.

Sheet No. 53 of 82.

REV.	DATE	BY	CHKD.	APP.	REVISION
1					



328

Note: For section thru cap at anchor bolt locations see Sheet 77.

PEDESTAL PILE PLAN WESTBOUND LANE

PEDESTAL PILE PLAN EASTBOUND LANE

BENT 15 WESTBOUND AND EASTBOUND PEDESTAL PILE ALTERNATE JACKSON COUNTY

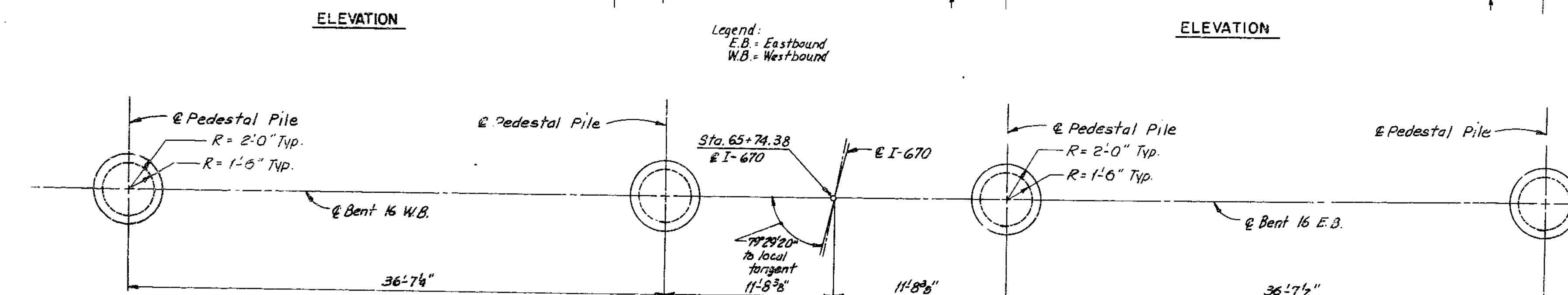
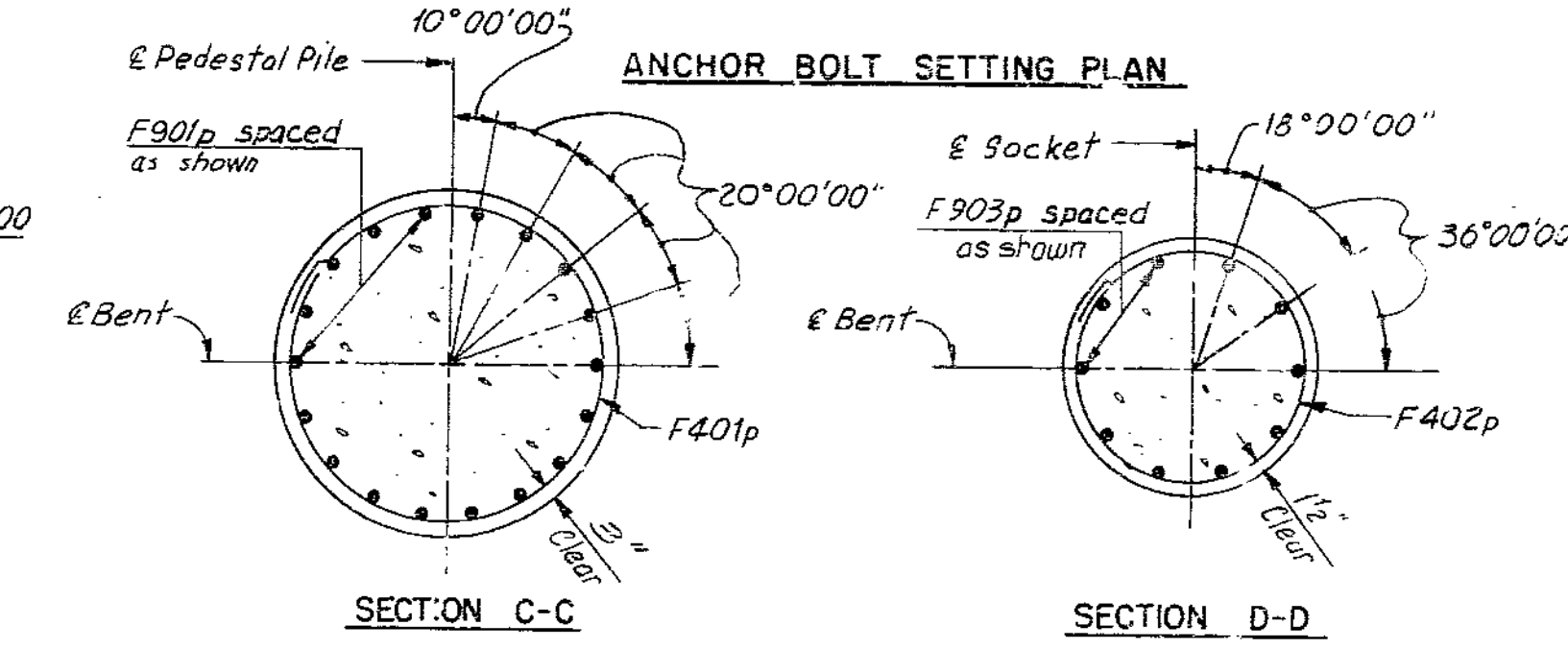
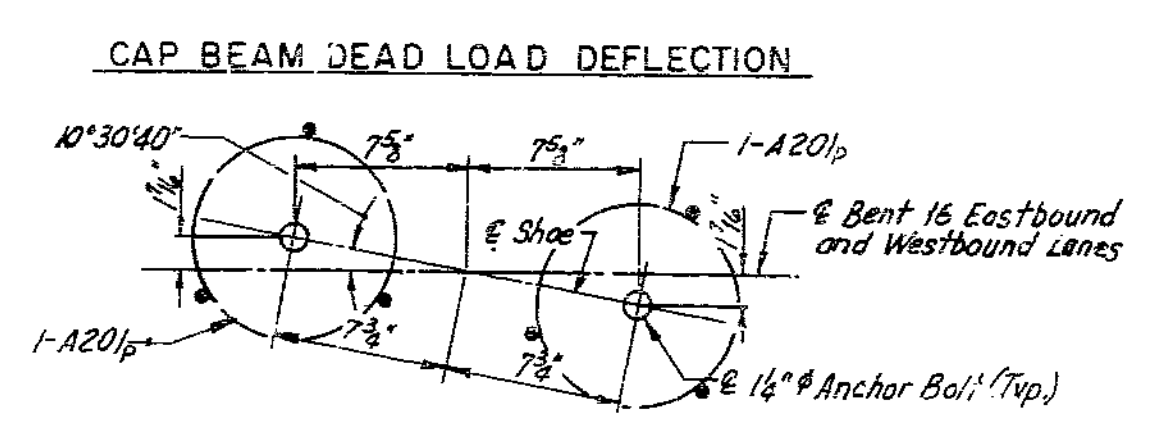
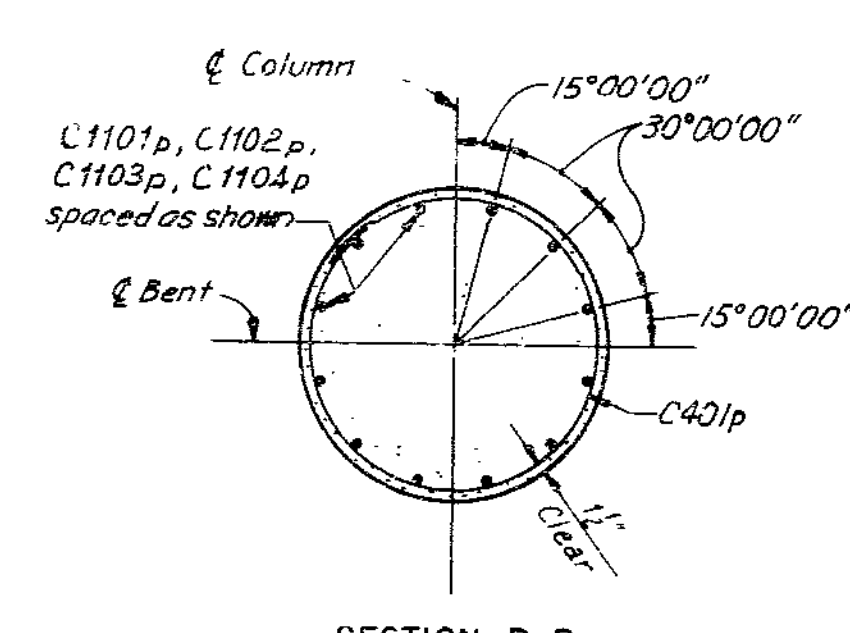
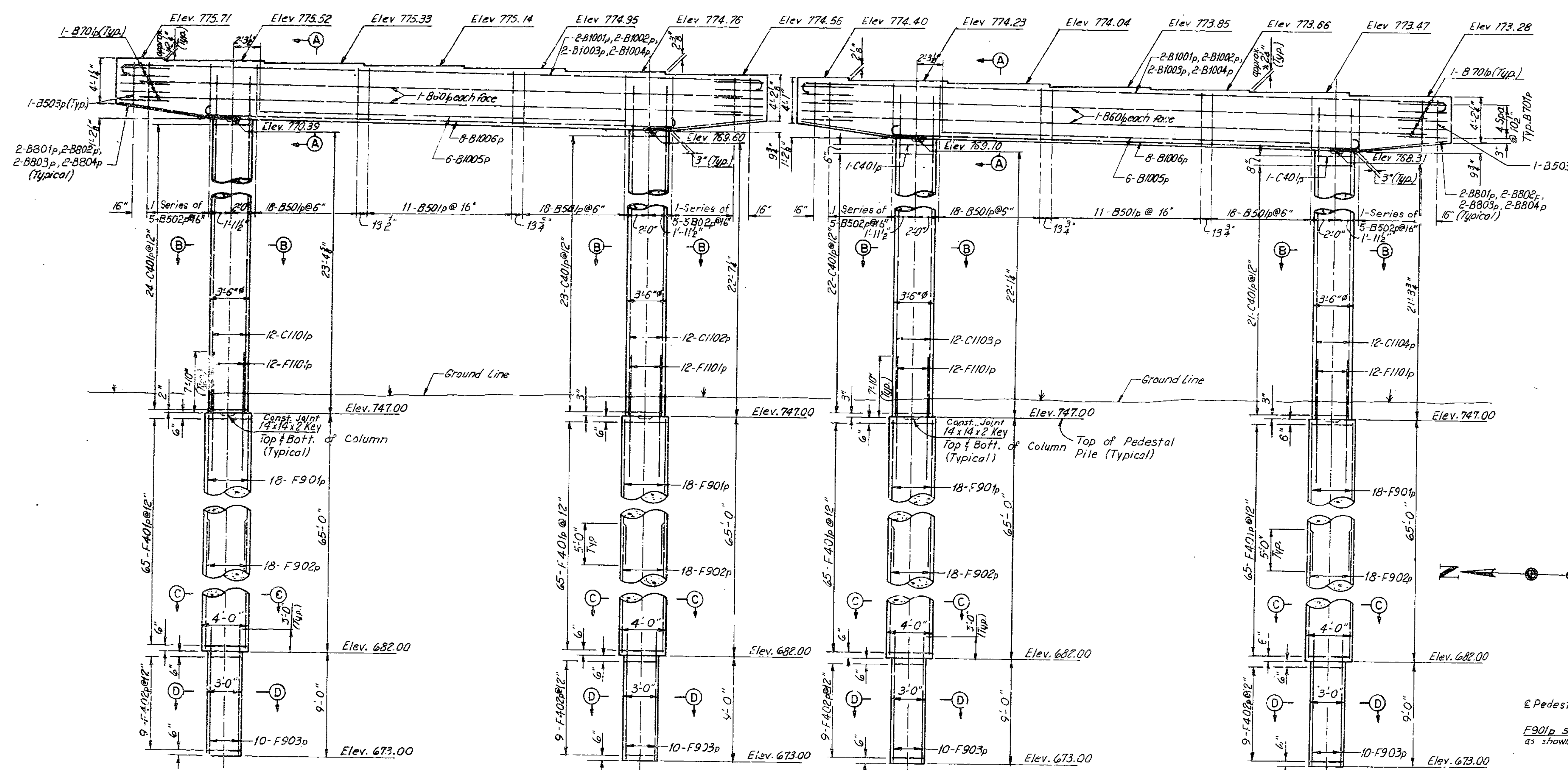
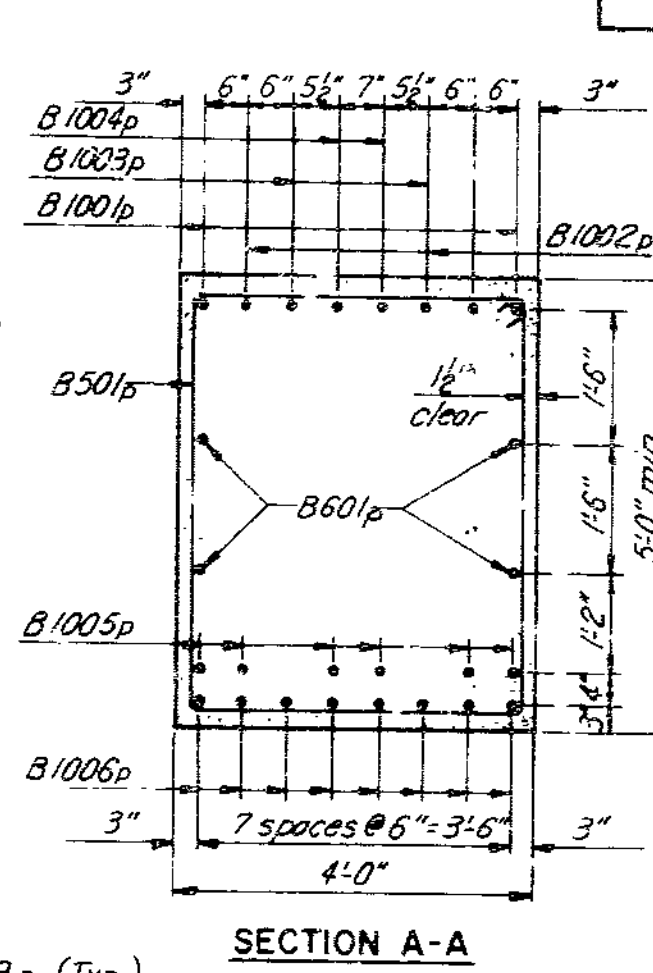
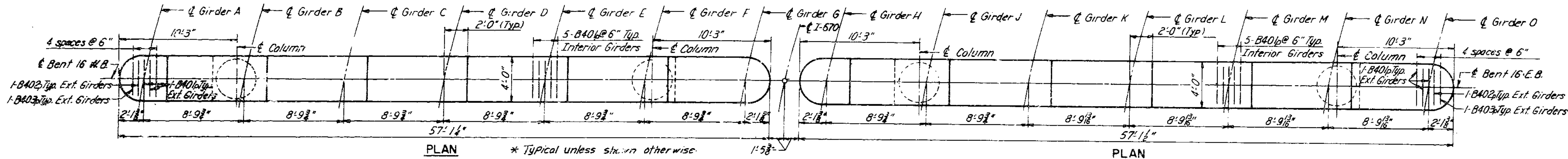
DETAILED 10/78
CHECKED 10/78

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 54 of 52.

A-3136

PER. ROAD	STATE	PER. A/C	FISCAL	EMET	TOTAL
DEPT. NO.	NO.	PREL. NO.	YEAR	NO.	SHEETS
1	NO.		18	124	



Legend:
E.B. = Eastbound
W.B. = Westbound

Note:
For section thru cap at anchor bolt locations see Sheet 71.

379

DETAILS 1078
CHECKED 1079

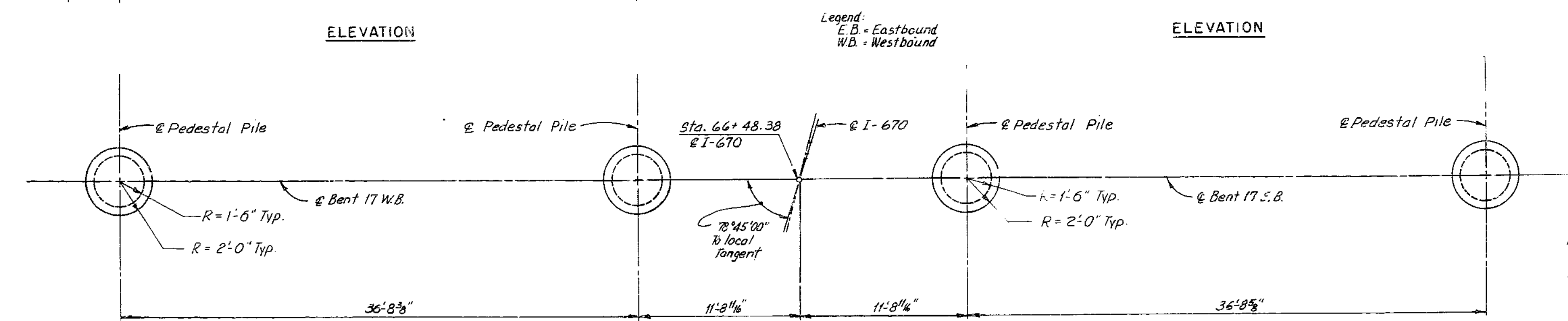
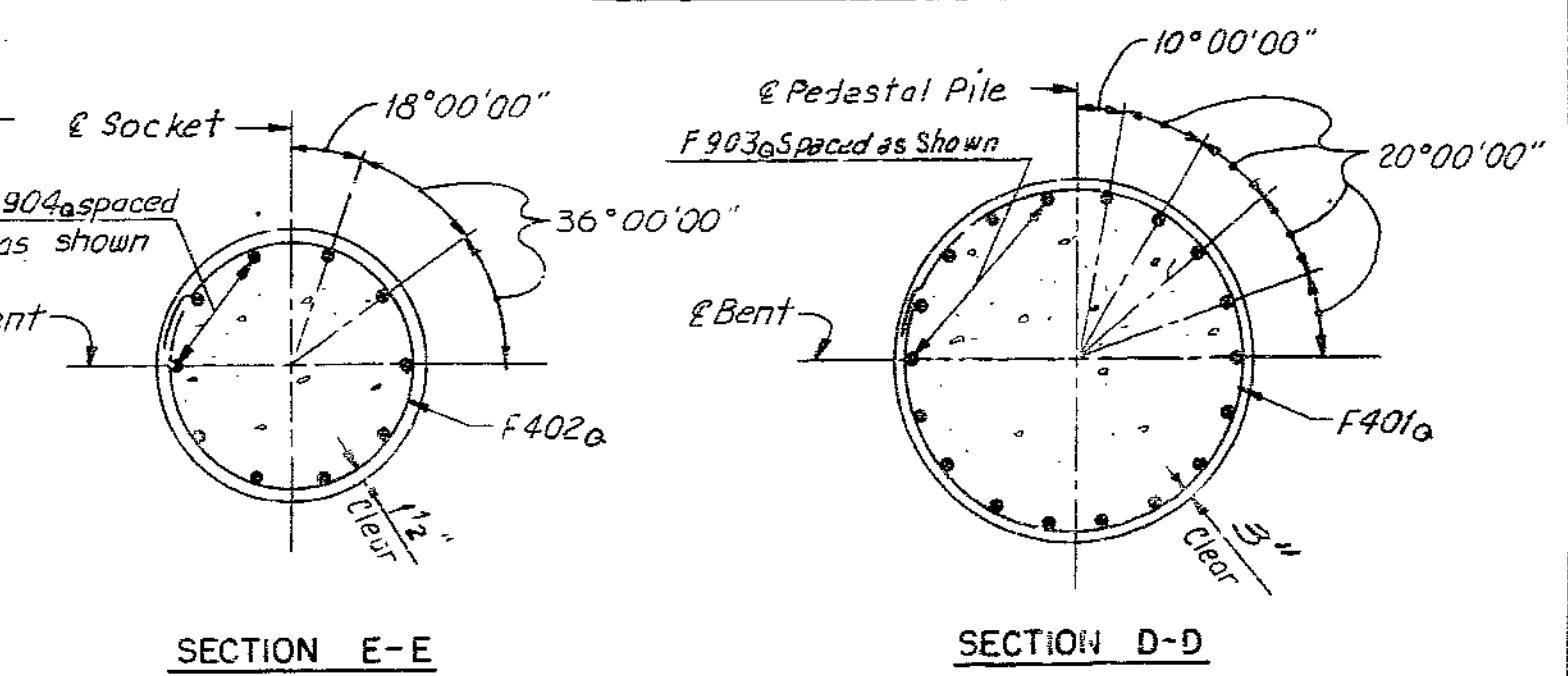
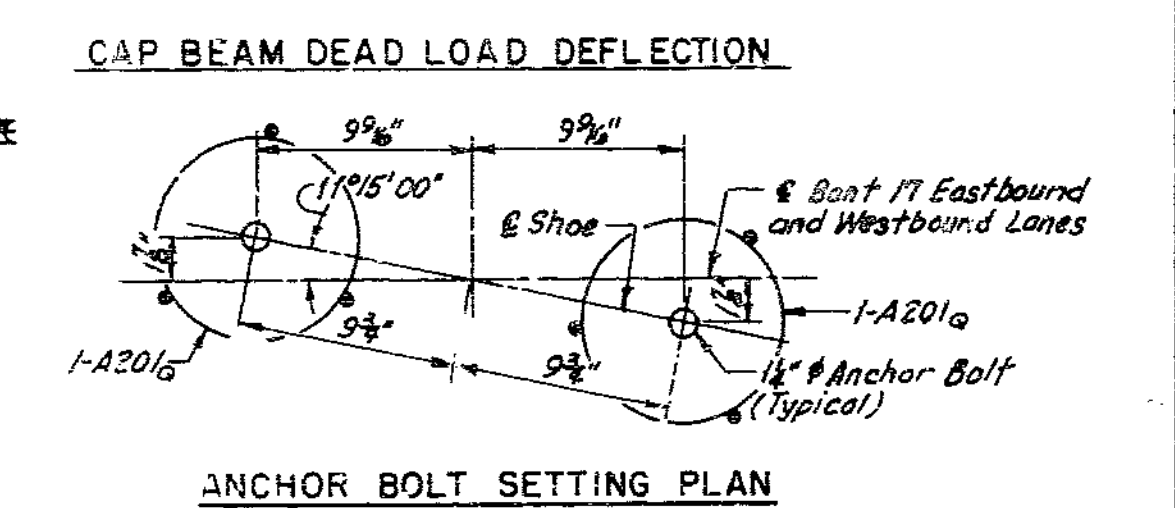
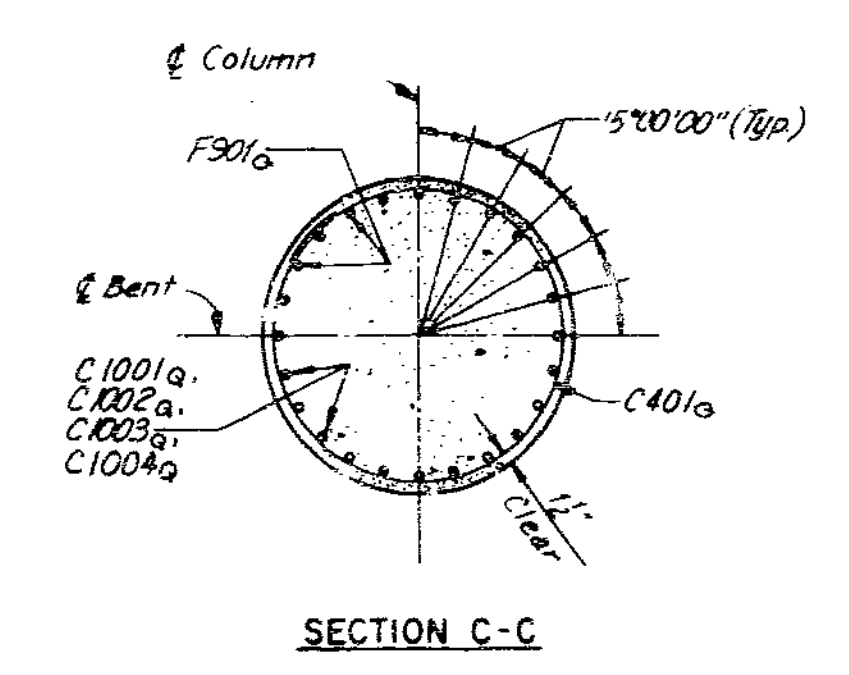
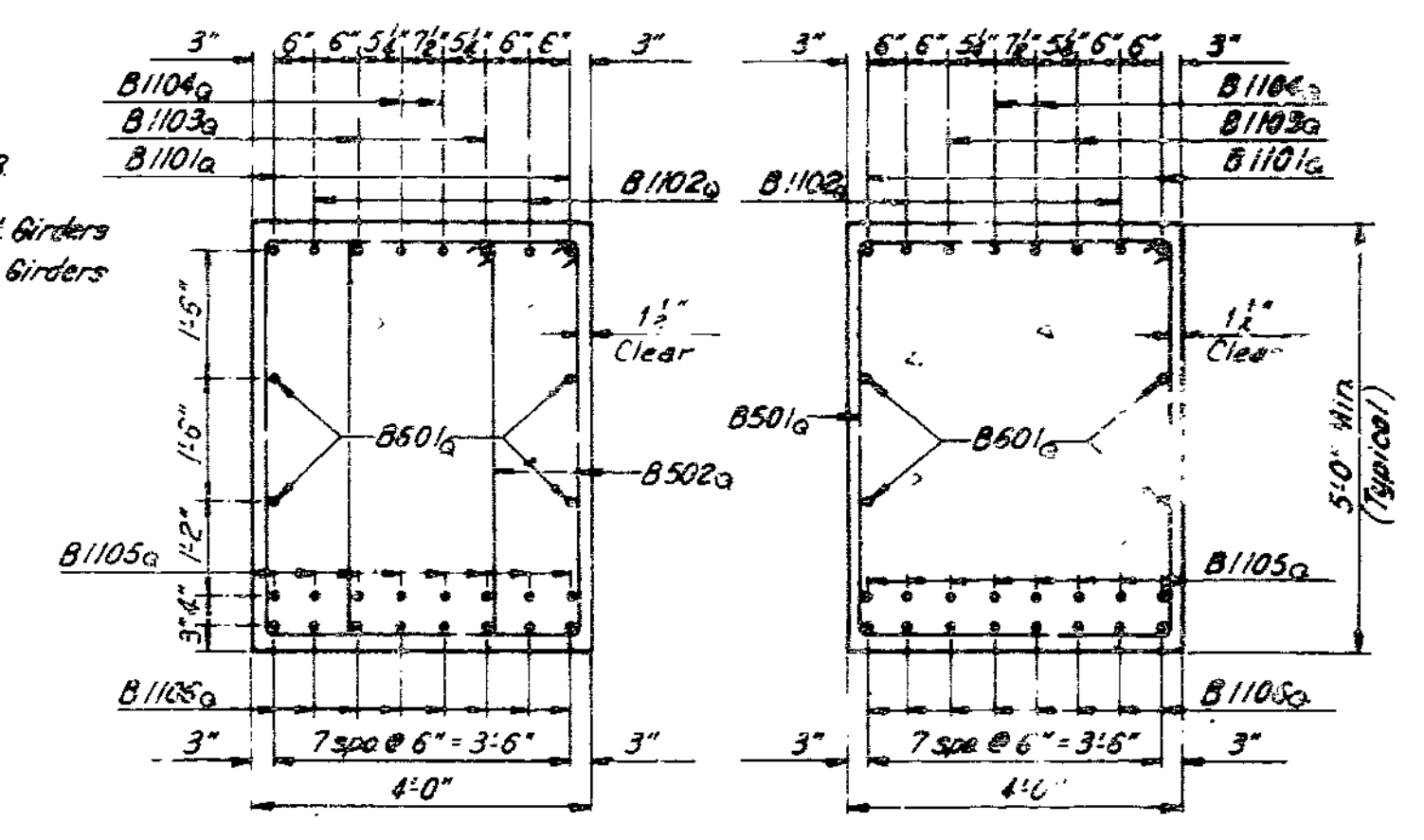
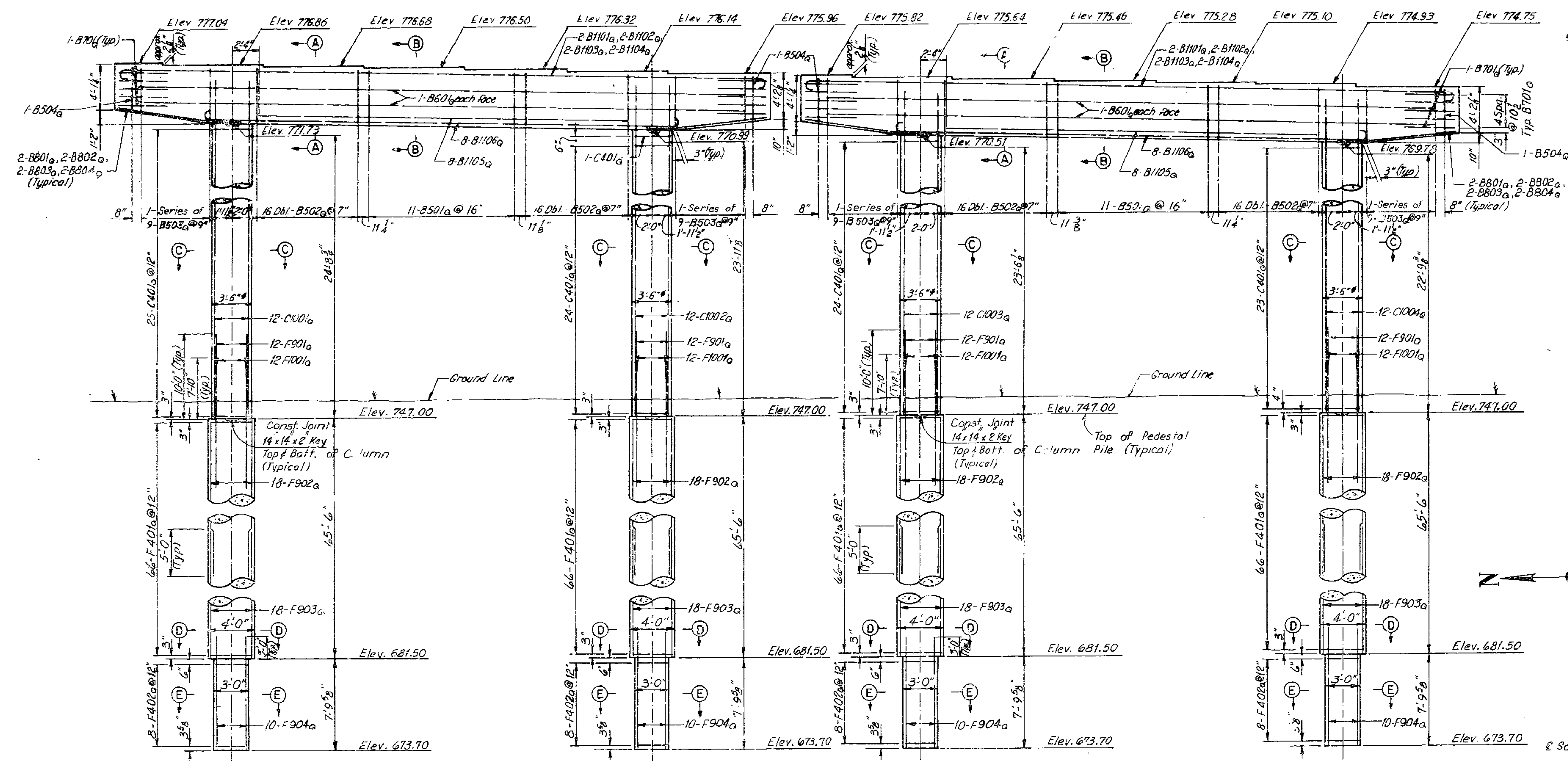
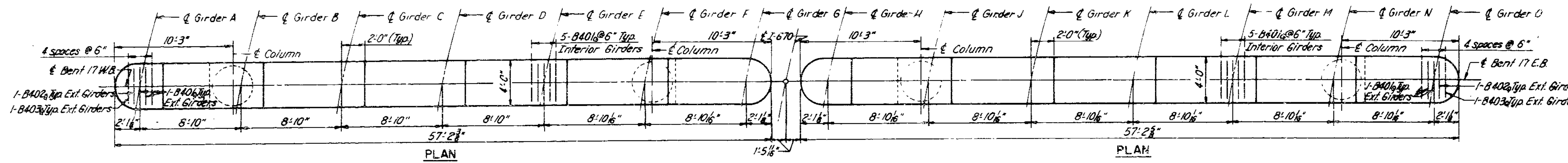
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 55 of 52.

BENT 16 WESTBOUND AND EASTBOUND
PEDESTAL PILE ALTERNATE
JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FED. PROJ. YEAR	SHEET NO.	TOTAL SHEETS
1	MO.			125	



Note: For section thru cap at anchor bolt locations see Sheet 77.

BENT 17 WESTBOUND AND EASTBOUND PEDESTAL PILE ALTERNATE JACKSON COUNTY

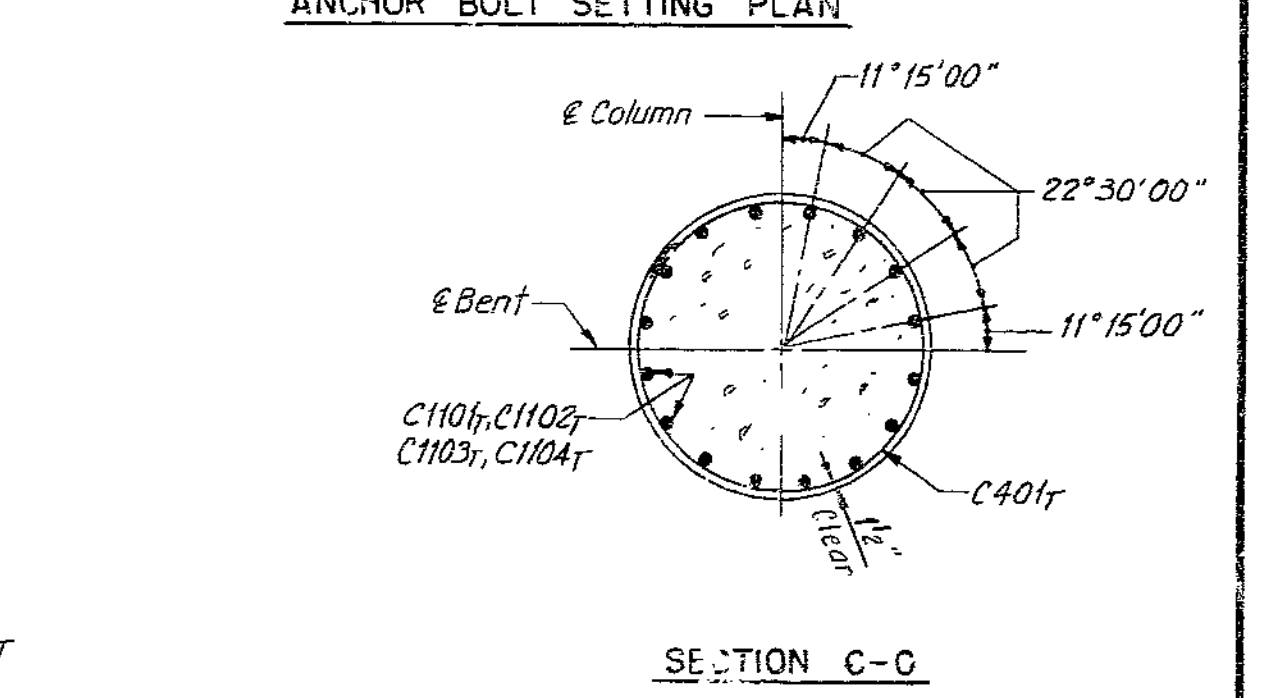
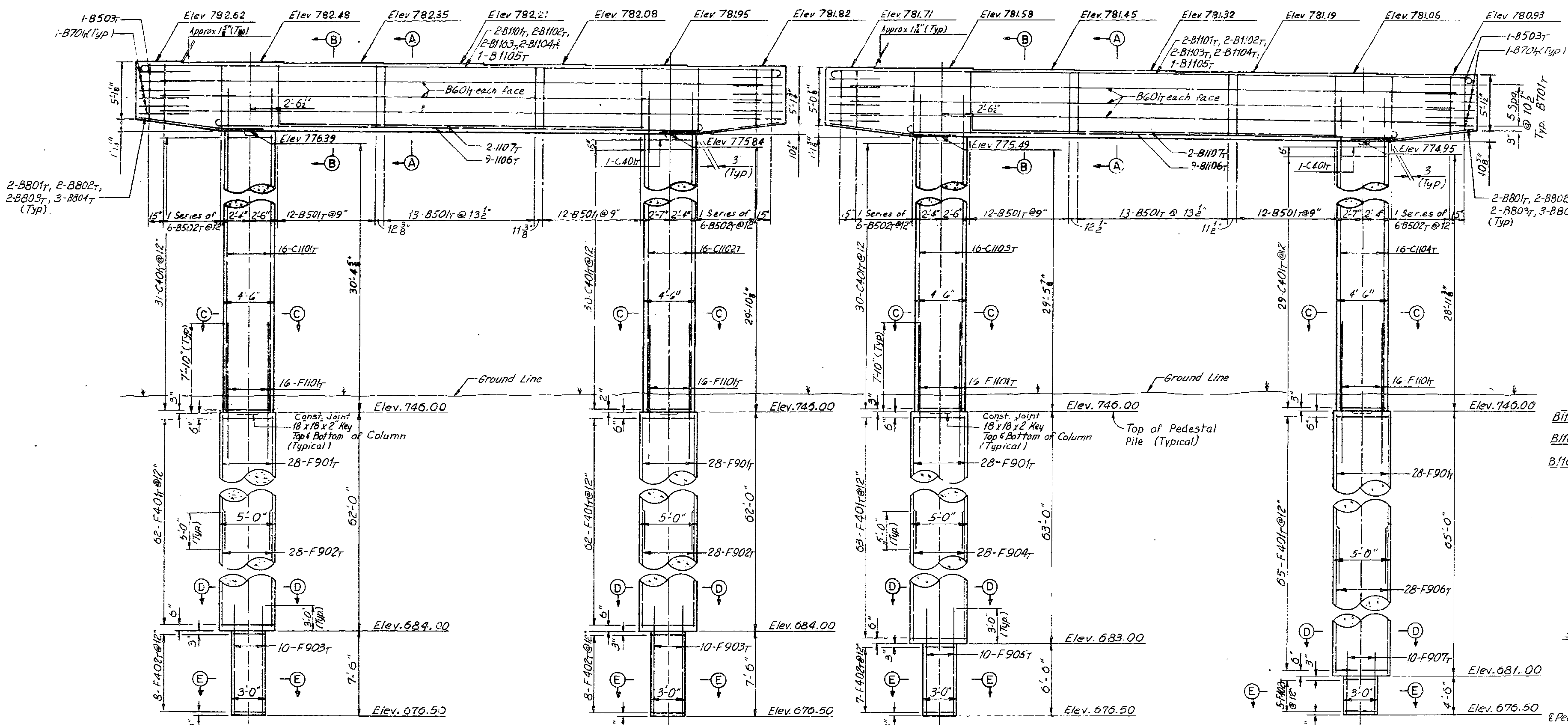
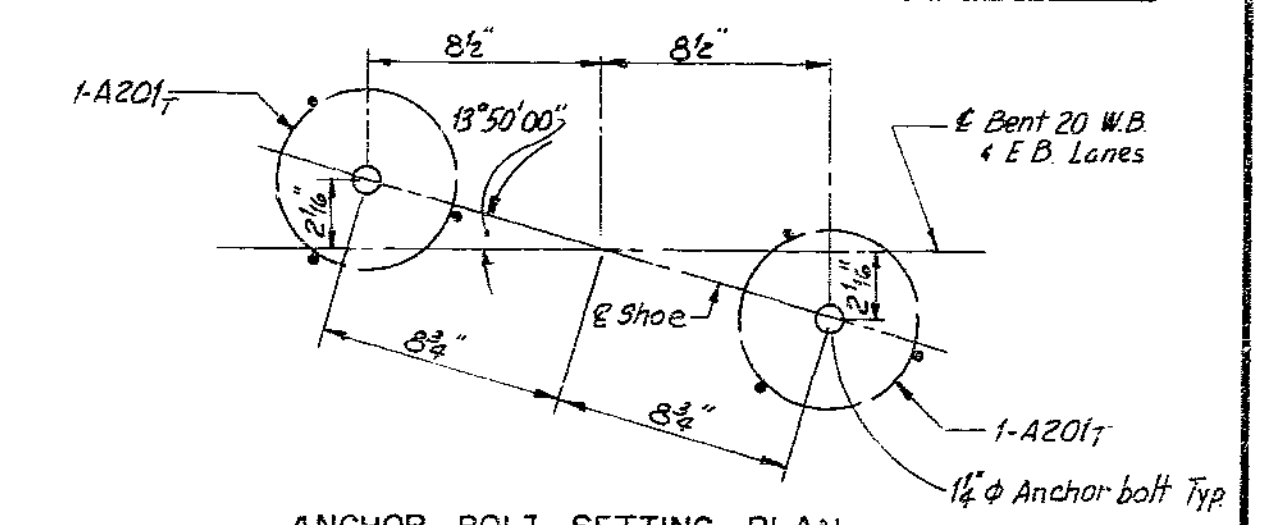
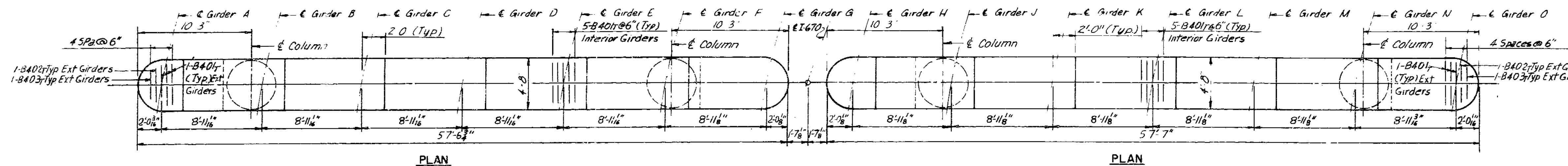
330
 DETAILED 1979
 CHECKED 1978

PEDESTAL PILE PLAN WESTBOUND LANE
 Note: This drawing is not to scale. Follow dimensions

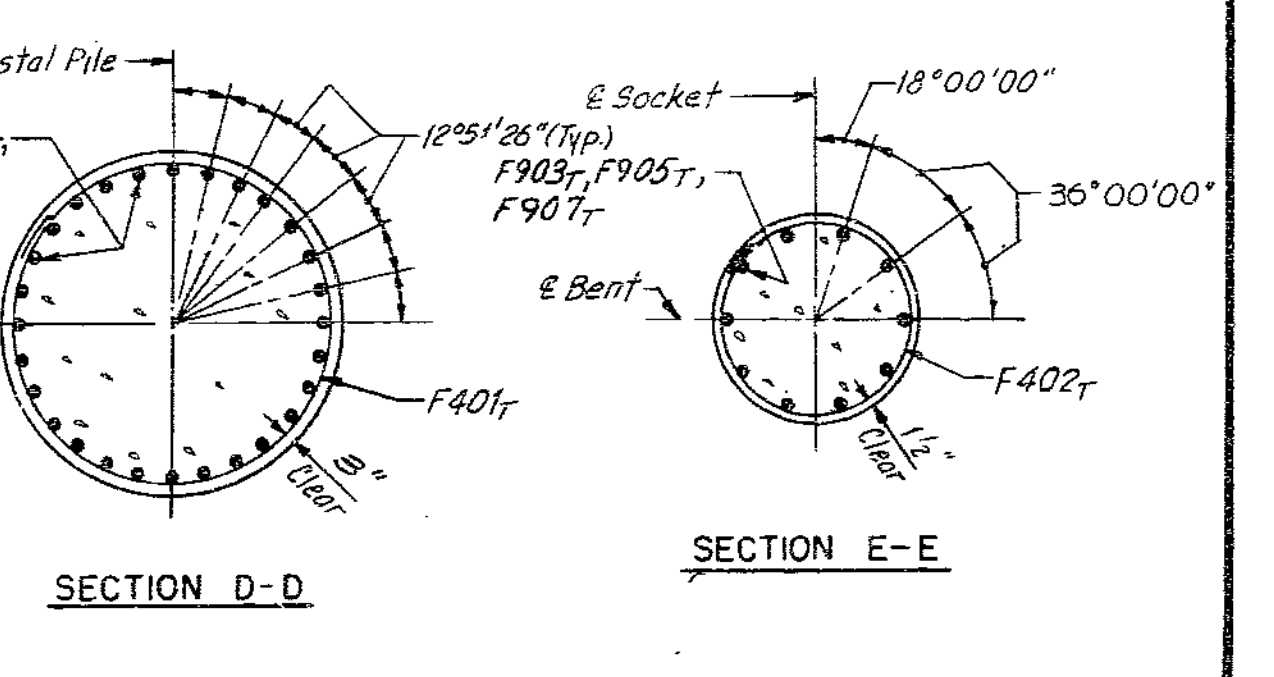
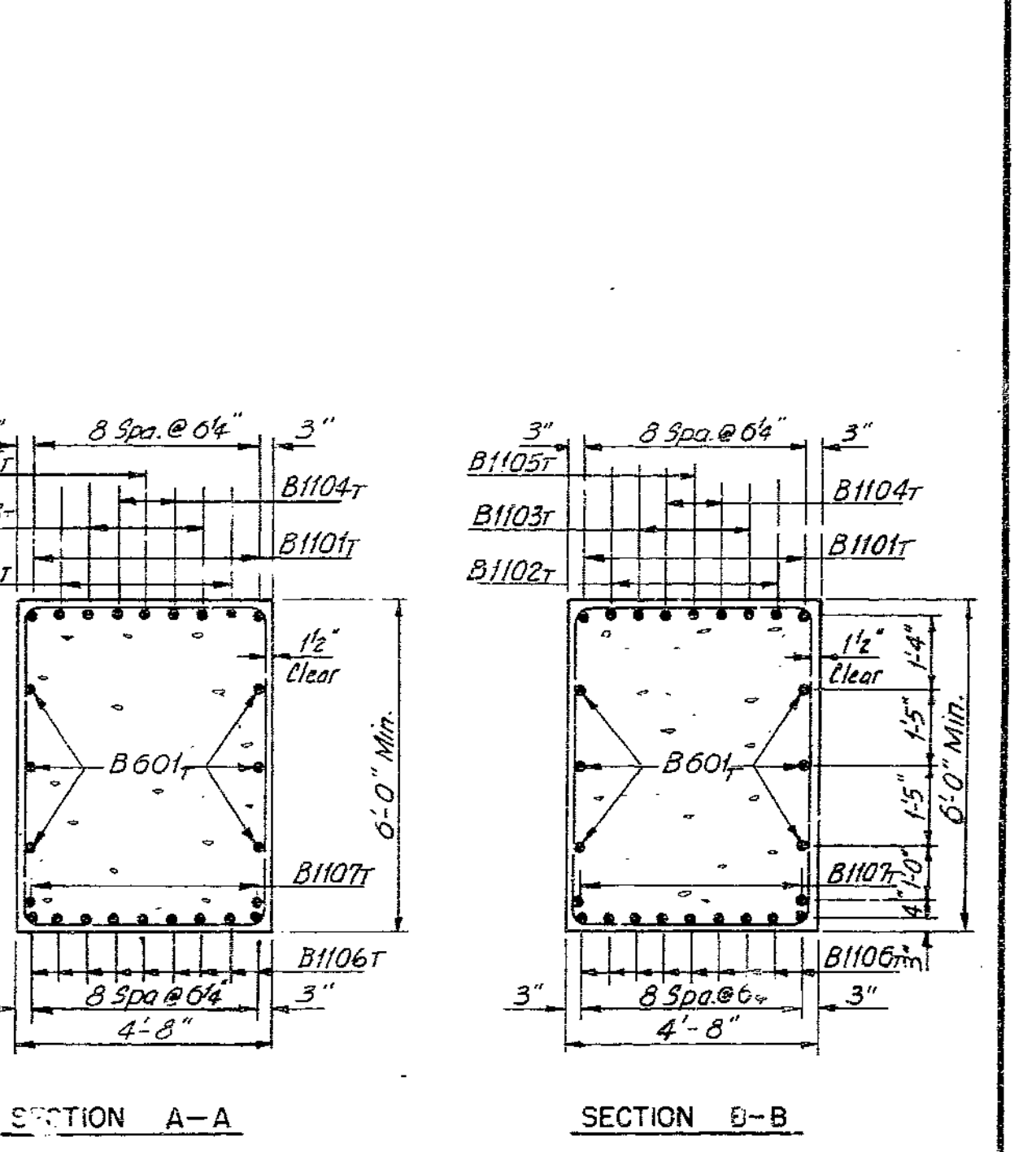
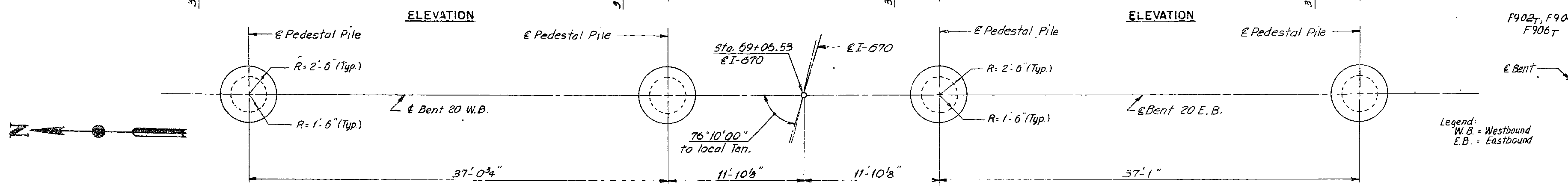
PEDESTAL PILE PLAN EASTBOUND LANE
 Sheet No. 56 of 52.

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		15	128	



33



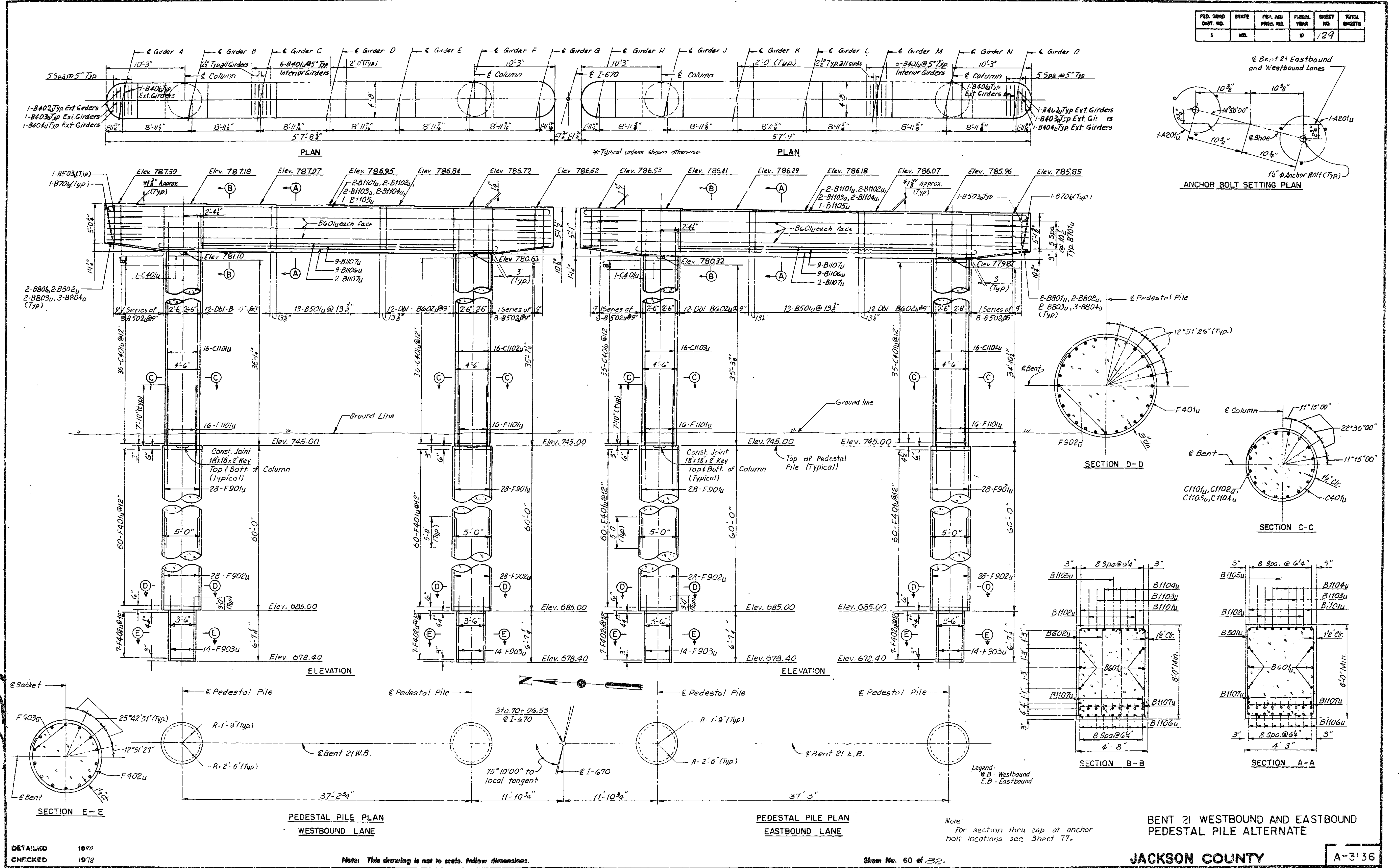
DETAILS 1978
CHECKED 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 59 of 82.

BENT 20 WESTBOUND AND EASTBOUND
PEDESTAL PILE ALTERNATE
JACKSON COUNTY
A-3136

PRI. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		68	129	



337

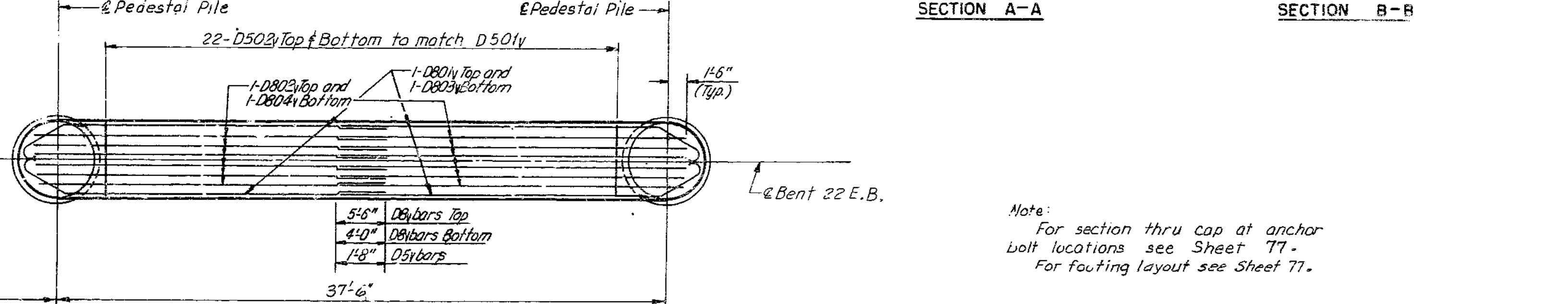
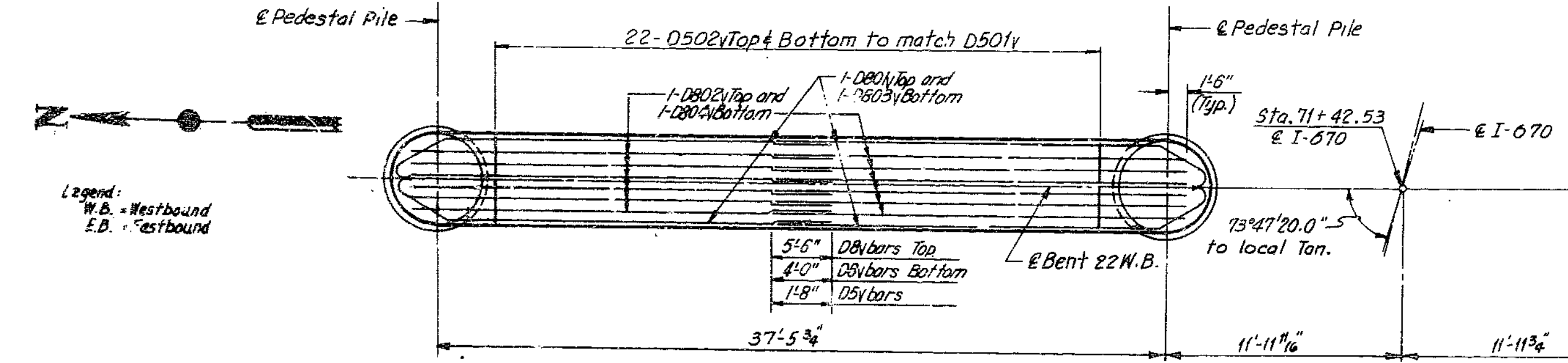
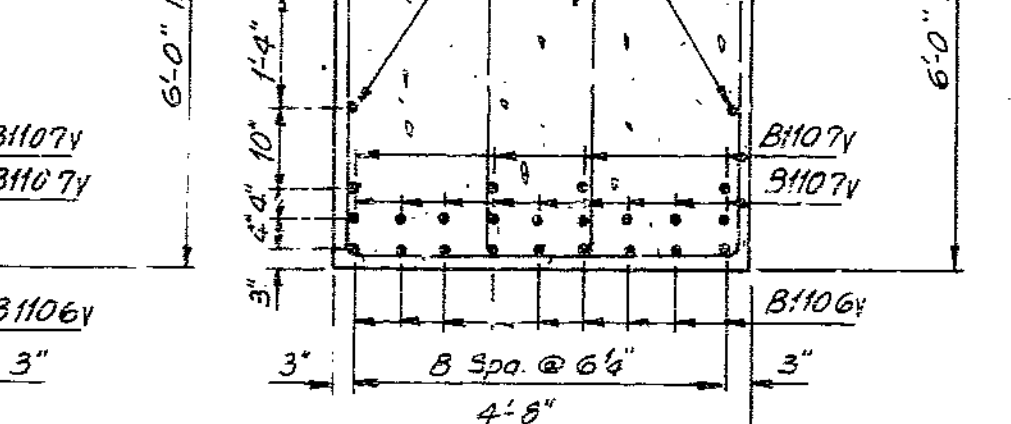
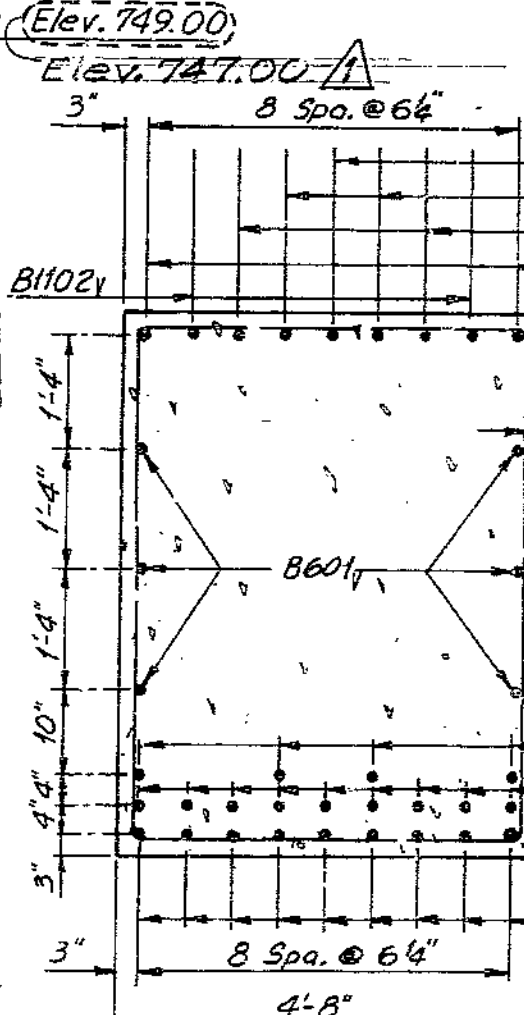
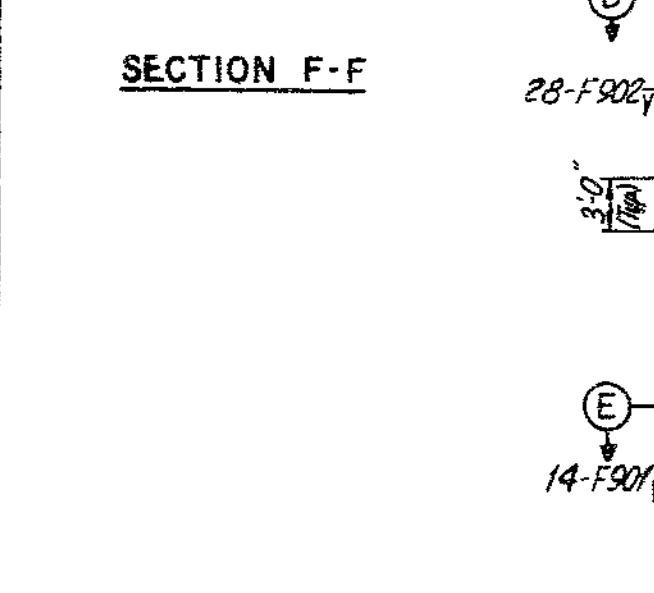
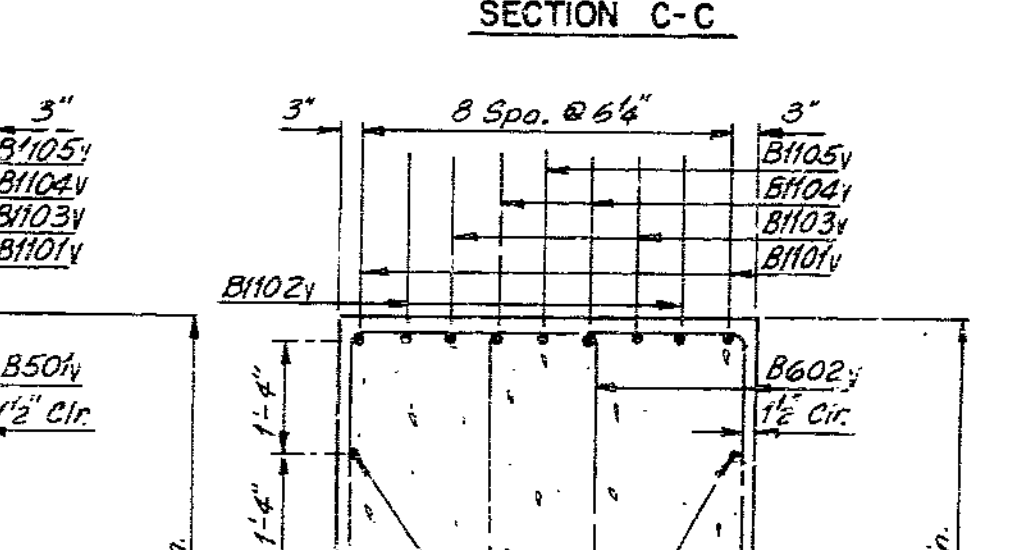
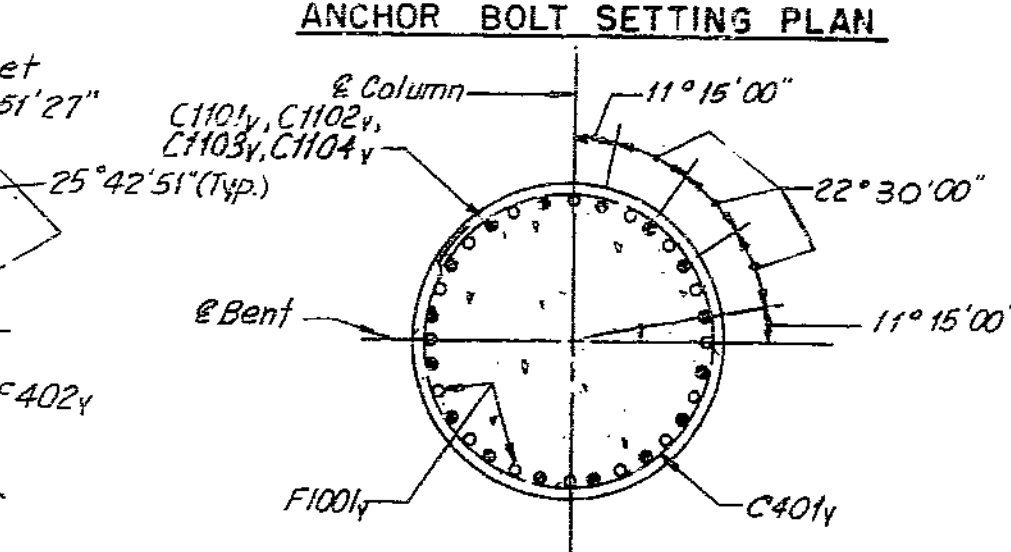
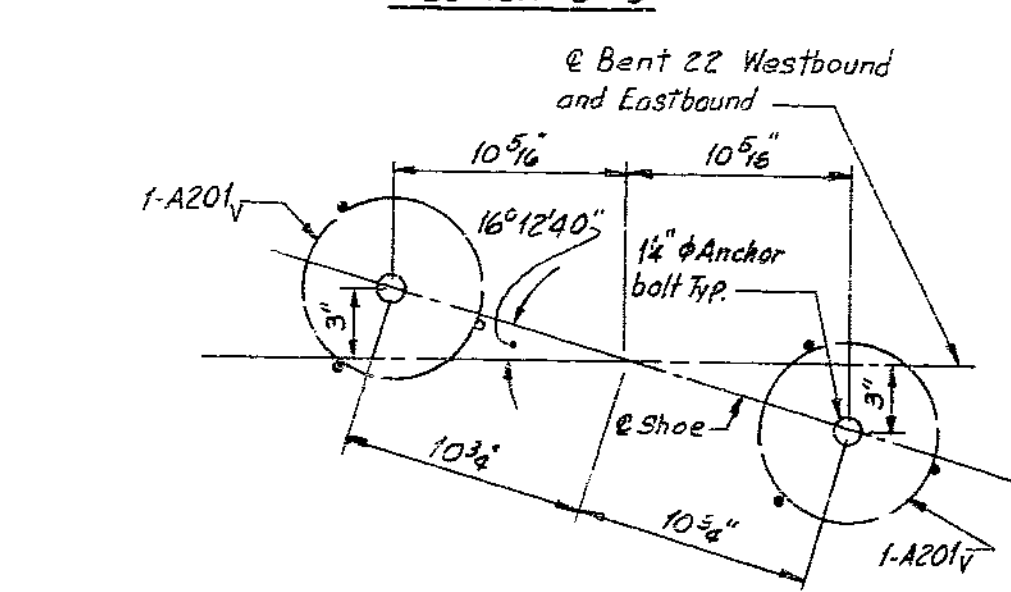
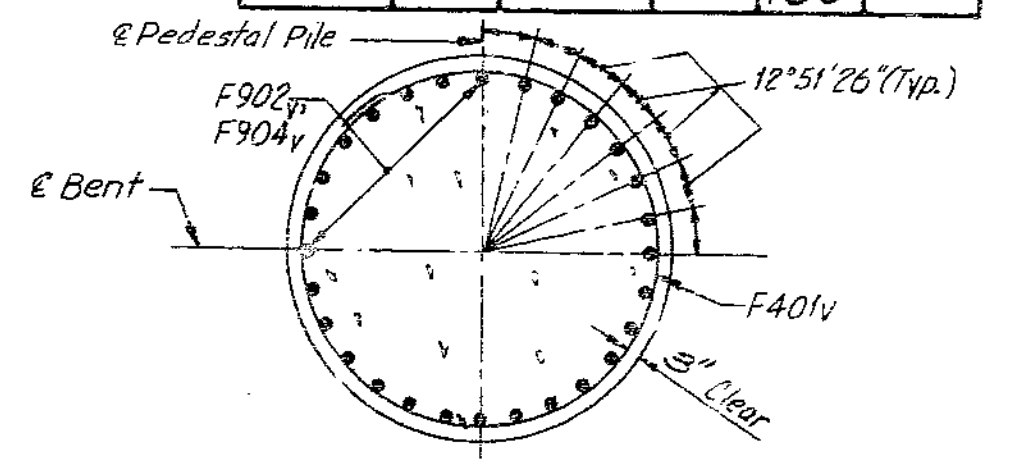
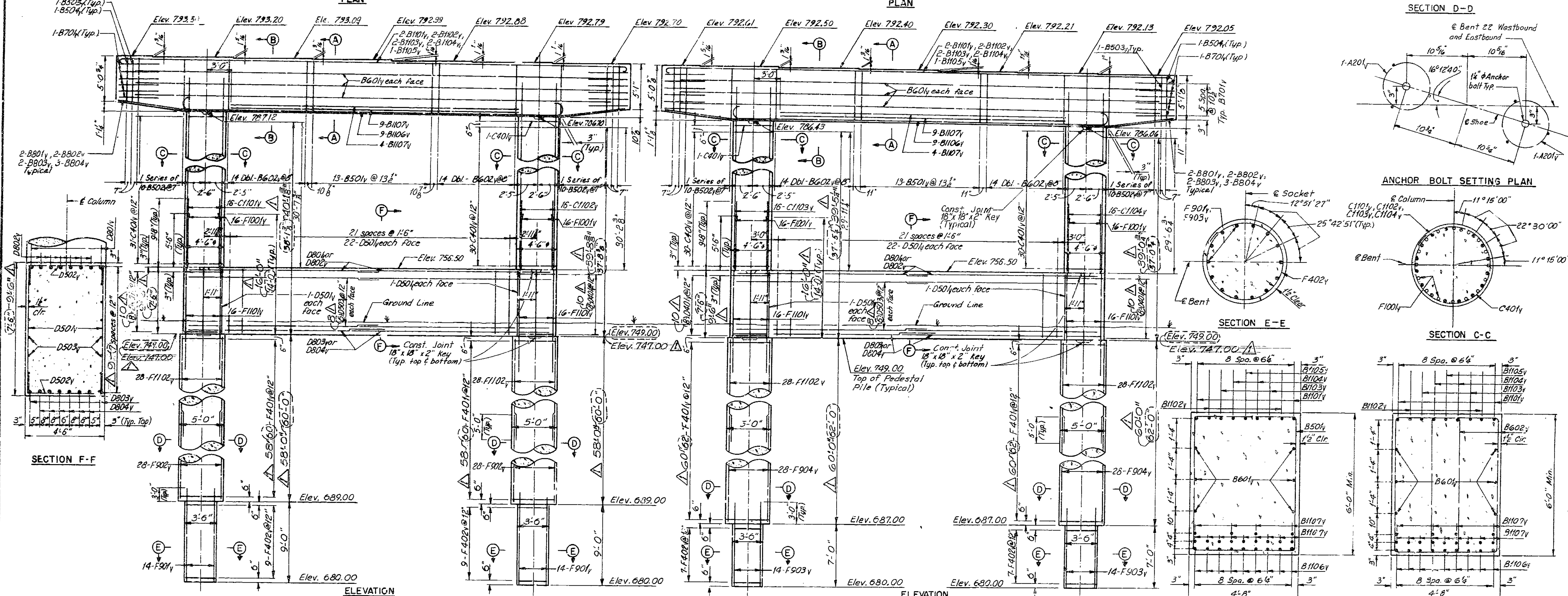
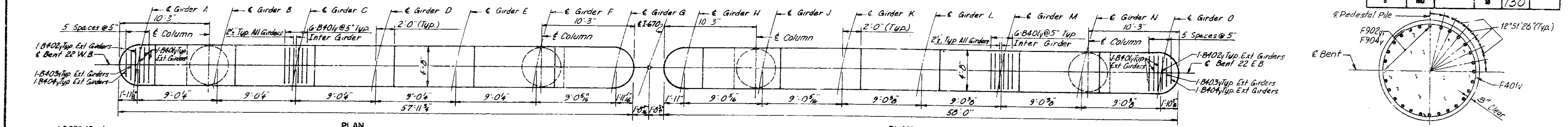
DETAILED 1978
 CHECKED 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 60 of 82.

JACKSON COUNTY A-3'36

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO			130	



335

Legend:
W.B. - Westbound
E.B. - Eastbound

Note:
For section thru cap at anchor bolt locations see Sheet 77.
For footing layout see Sheet 77.

DRAWN 1978
CHECKED 1978

PEDESTAL PILE PLAN
WESTBOUND LANE

PEDESTAL PILE PLAN
EASTBOUND LANE

BENT 22 WESTBOUND AND EASTBOUND
PEDESTAL PILE ALTERNATE

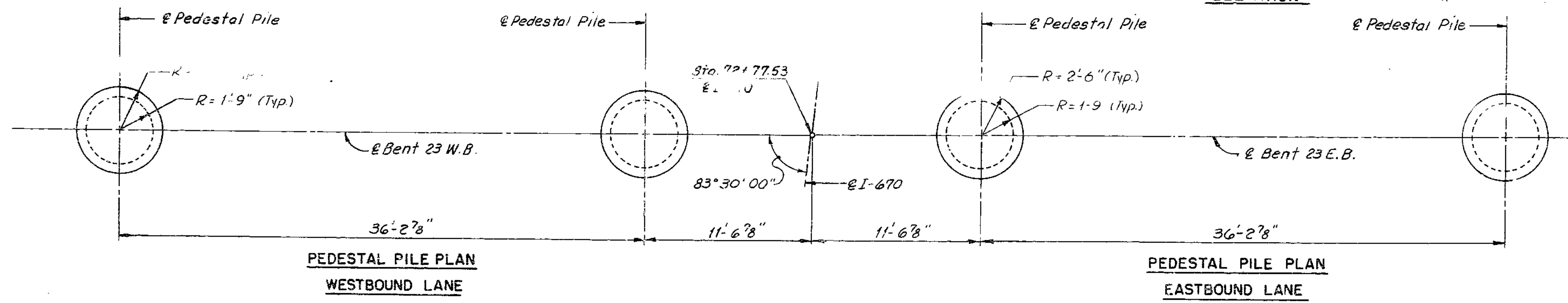
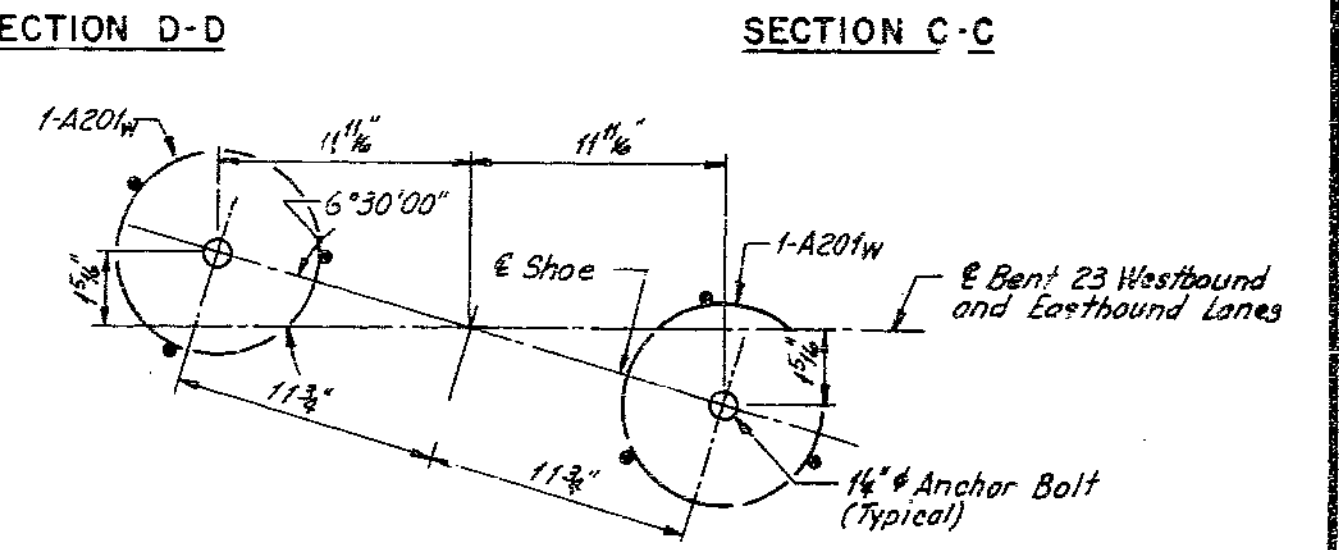
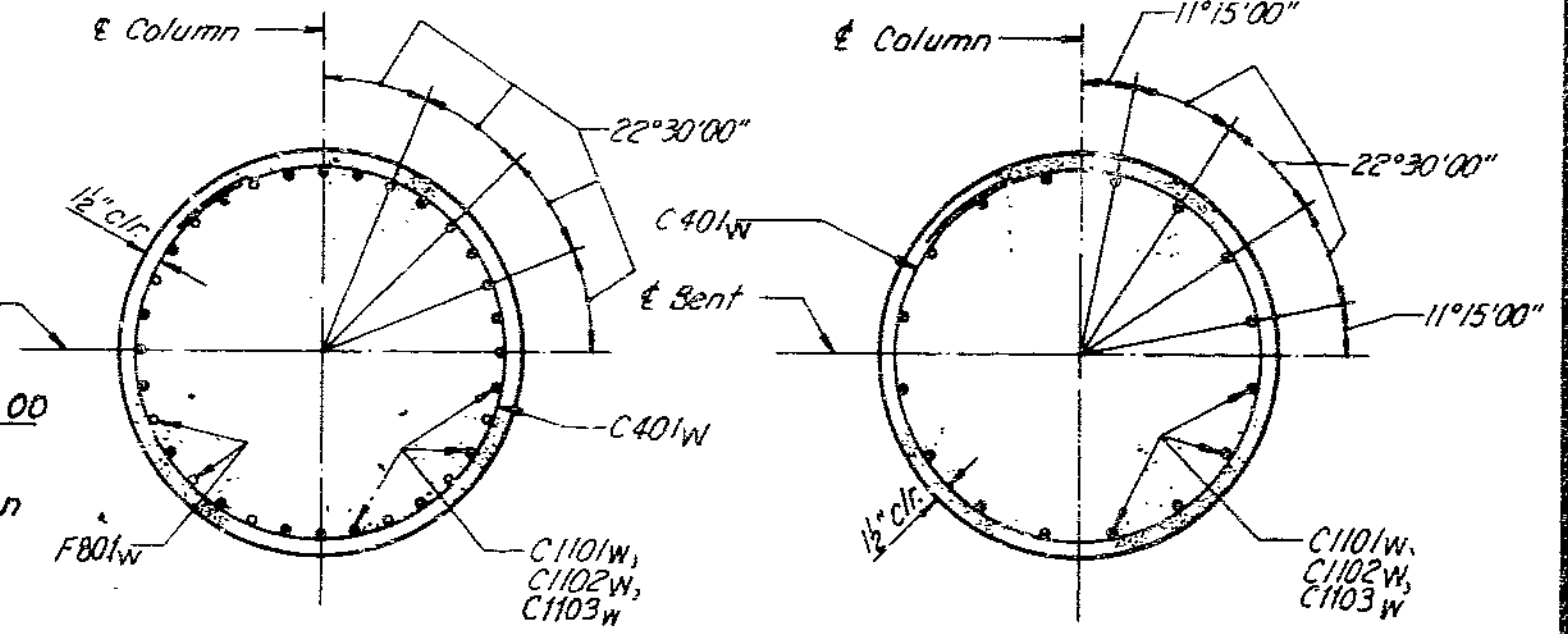
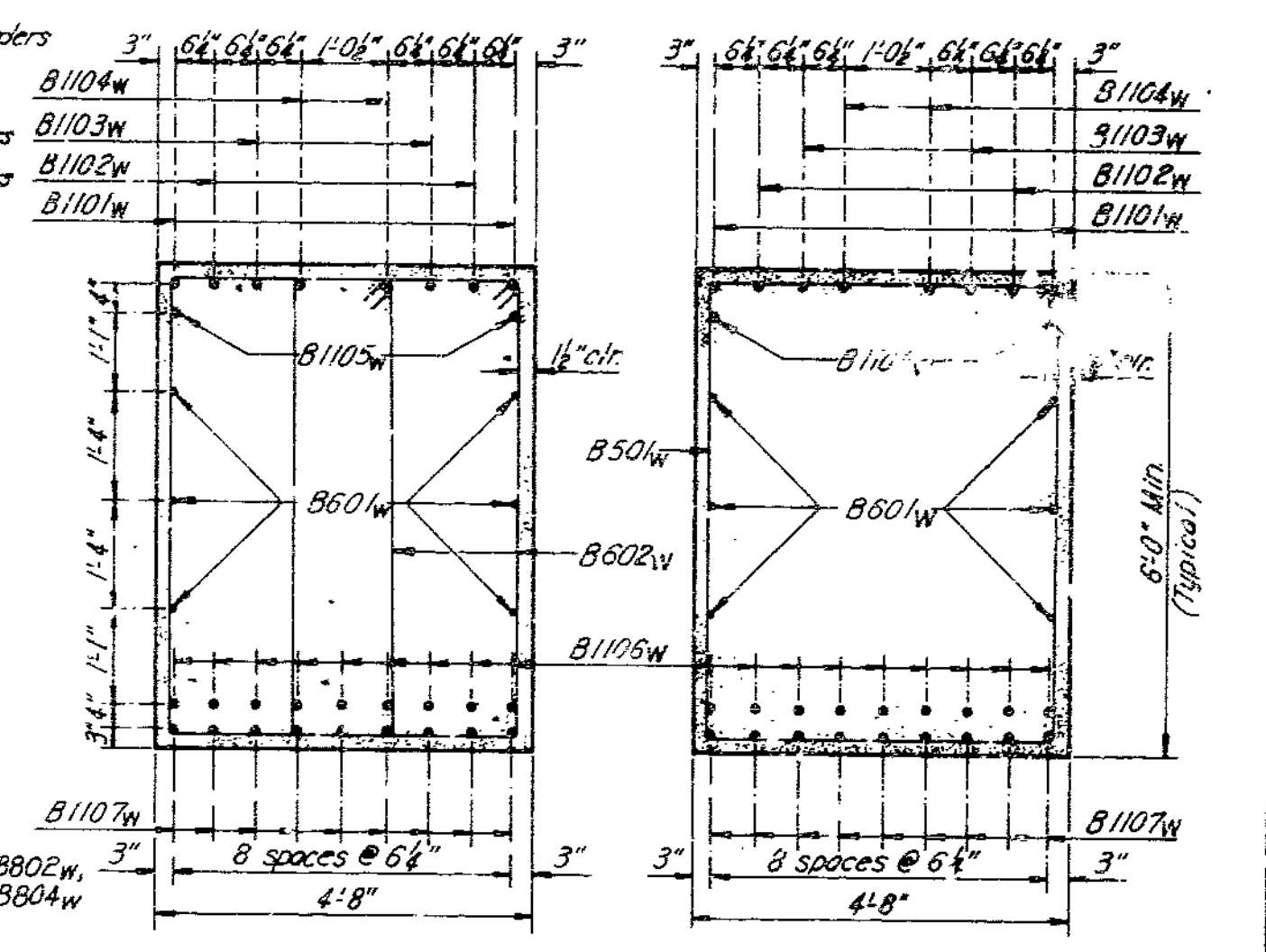
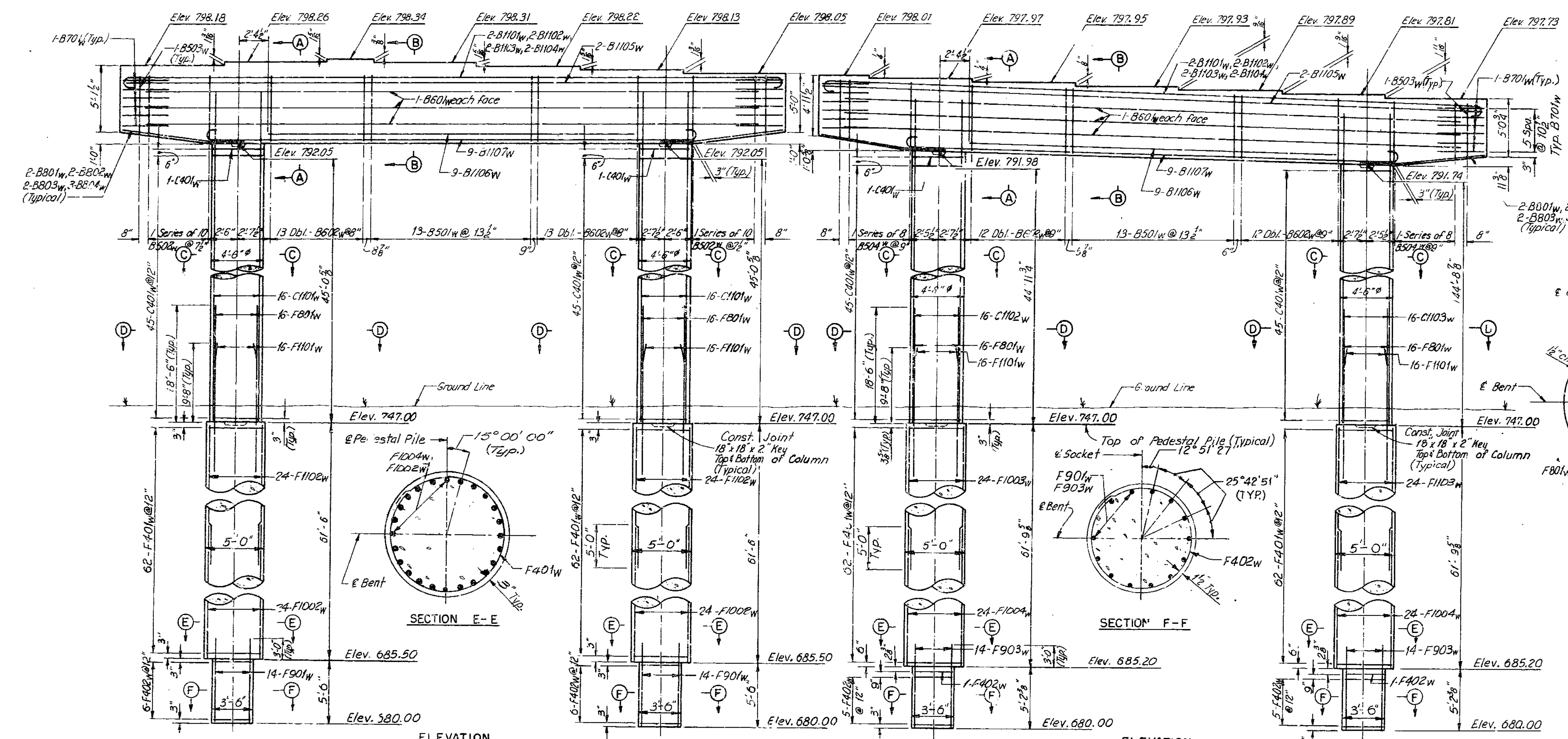
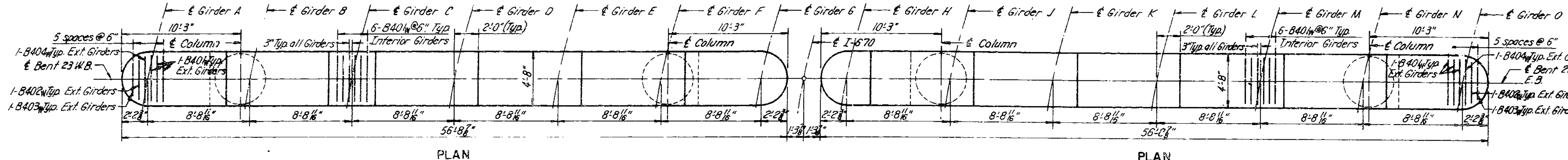
JACKSON COUNTY

A-3136

Note: This drawing is not to scale. Fewer dimensions.

Sheet No. 61 of 82. Revised 7/30/82

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MO.		15	131	



Legend:
W.B. - Westbound
E.B. - Eastbound

Note:
For section thru cap at anchor bolt locations see Sheet 77.

336

DETAILED 10/78
CHECKED 10/78

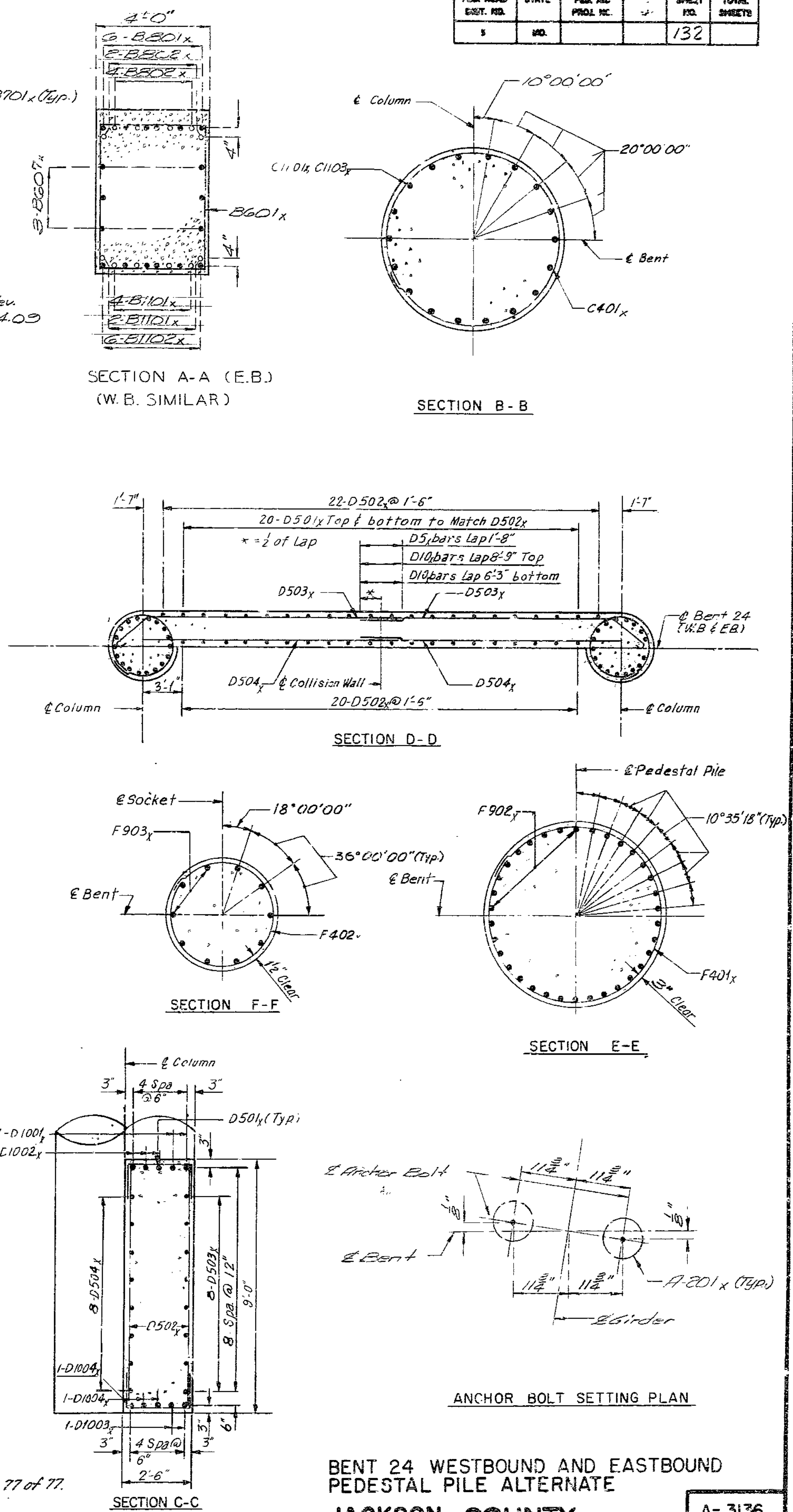
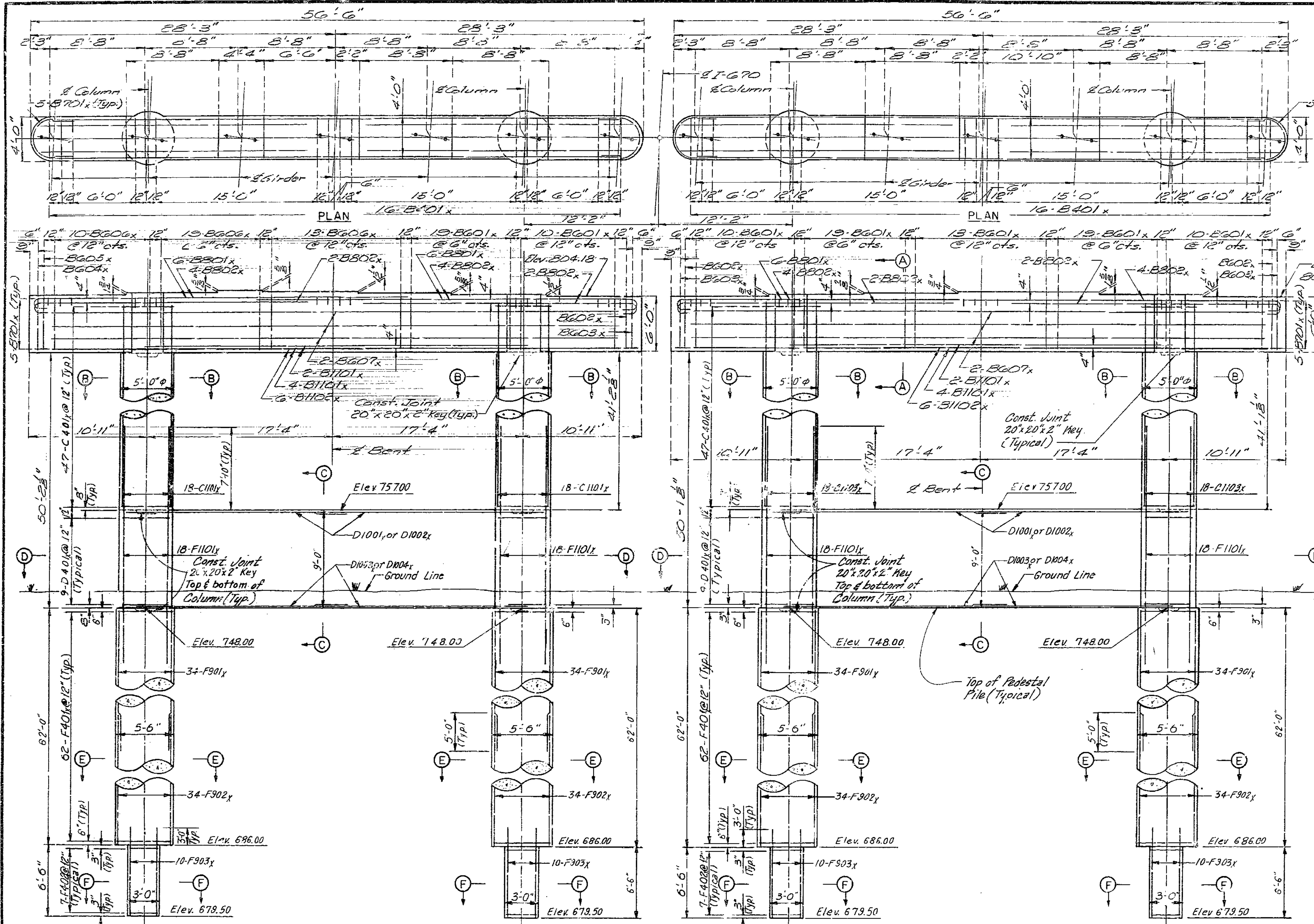
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 62 of 82.

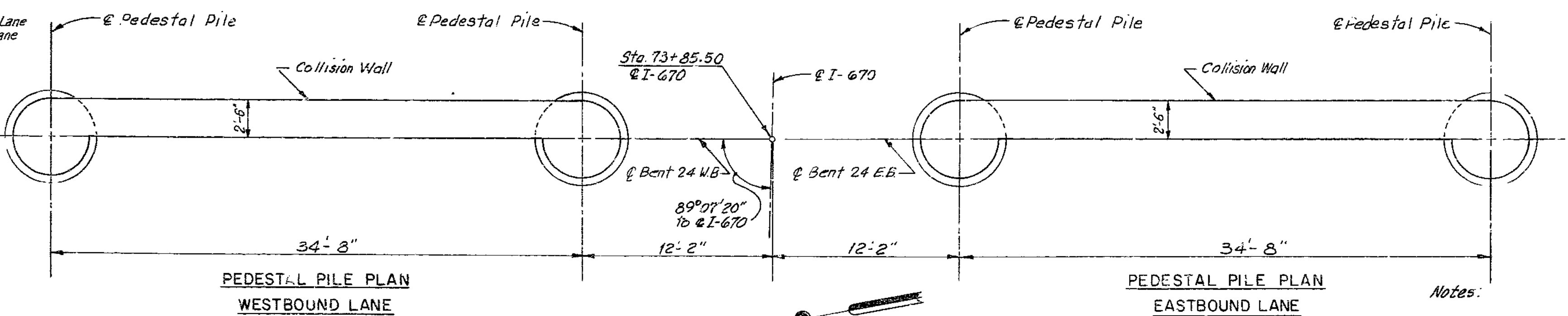
BENT 23 WESTBOUND AND EASTBOUND
PEDESTAL PILE ALTERNATE
JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MO.		132	



Legend:
W.B. - Westbound Lane
E.B. - Eastbound Lane



Note: This drawing is not to scale. Follow dimensions.

Notes:
For footing layout see Sheet 77 of 77.

Sheet No. 63 of 82.

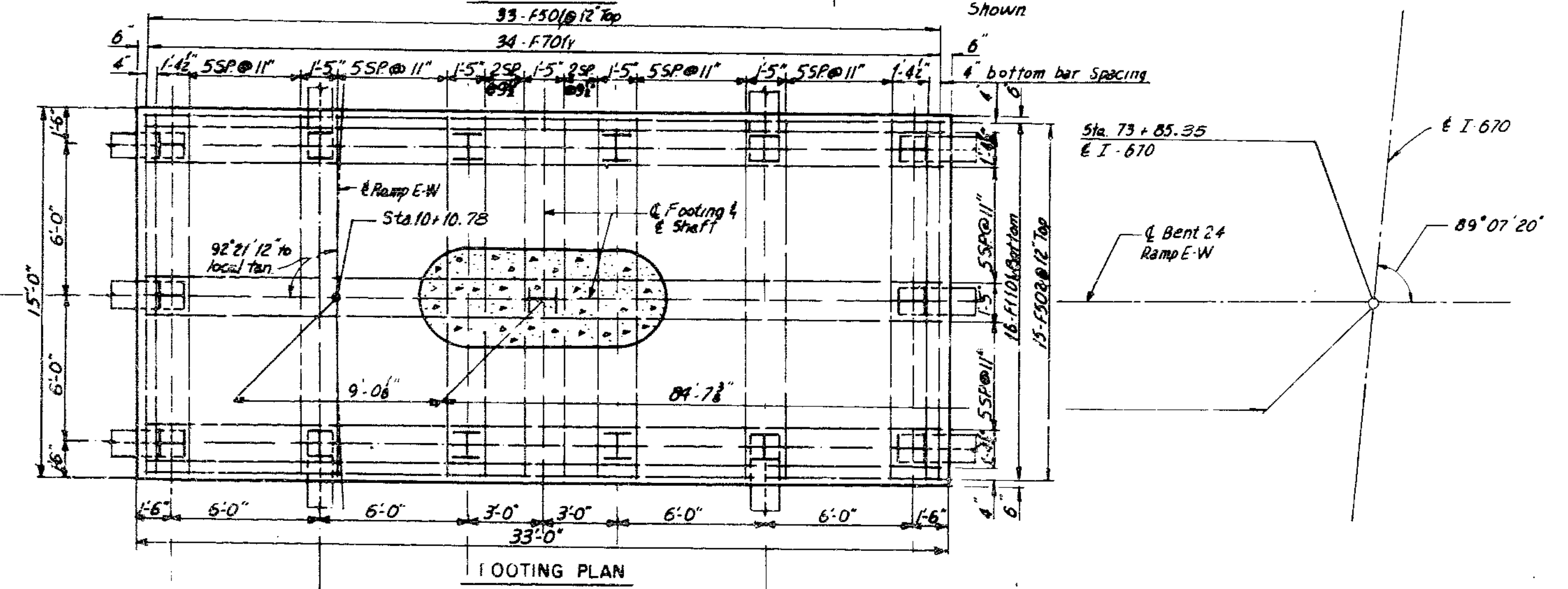
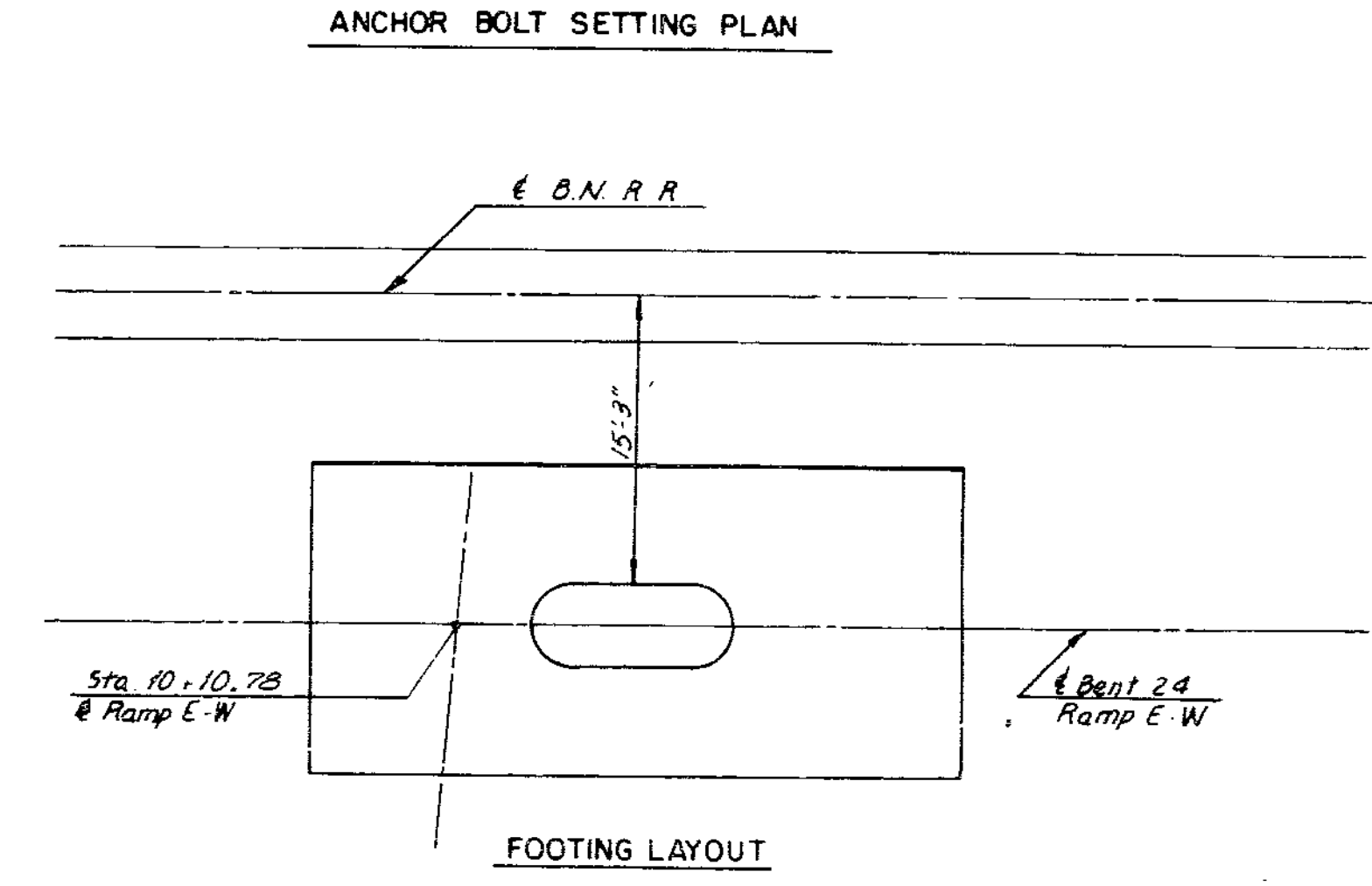
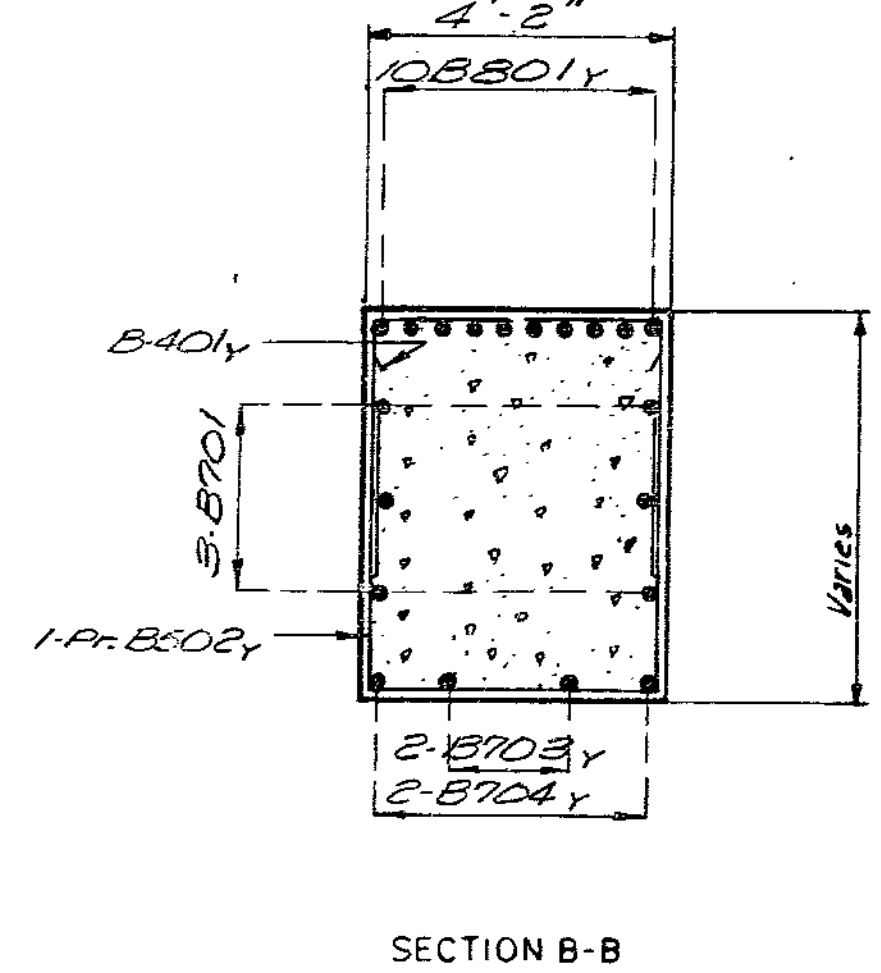
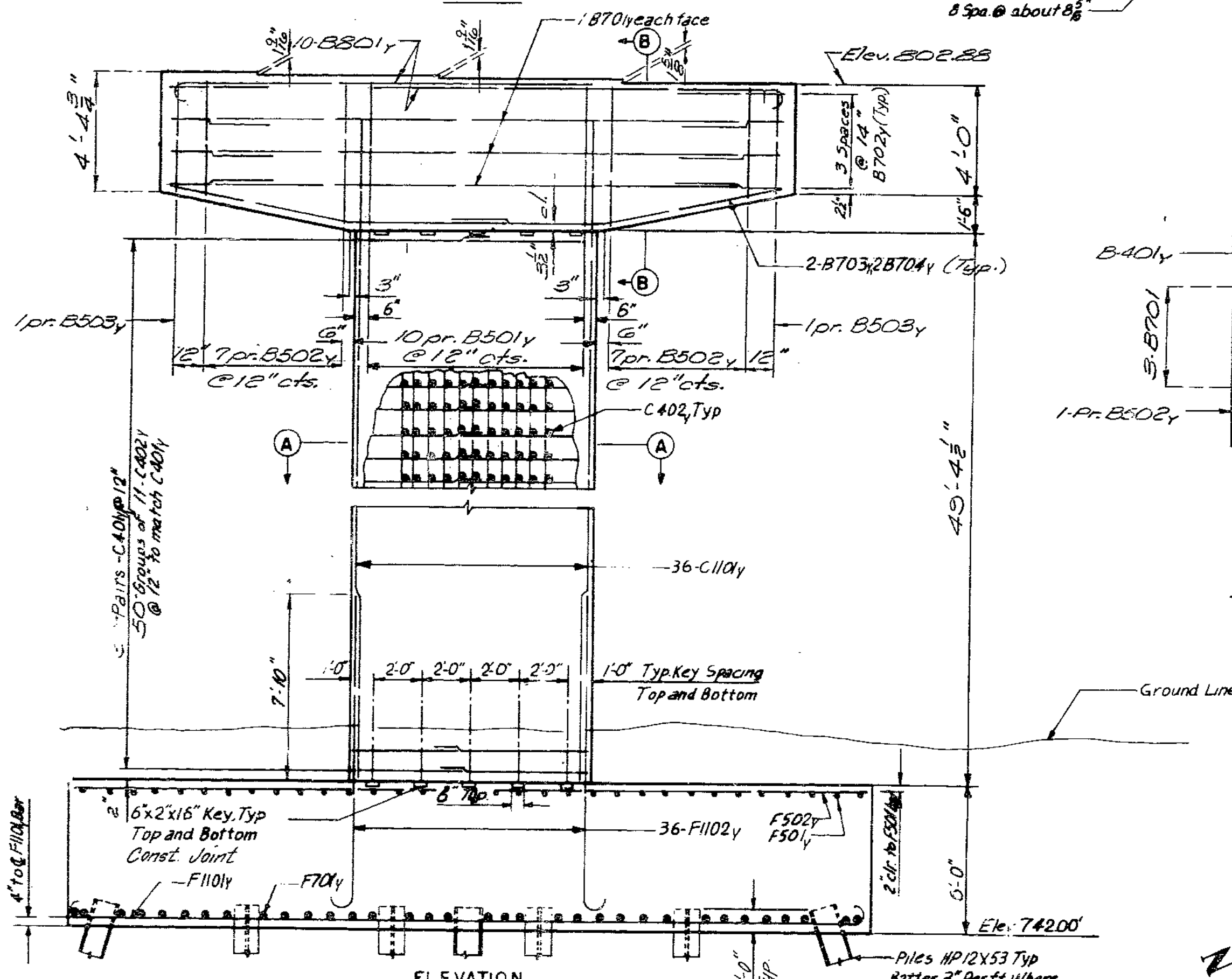
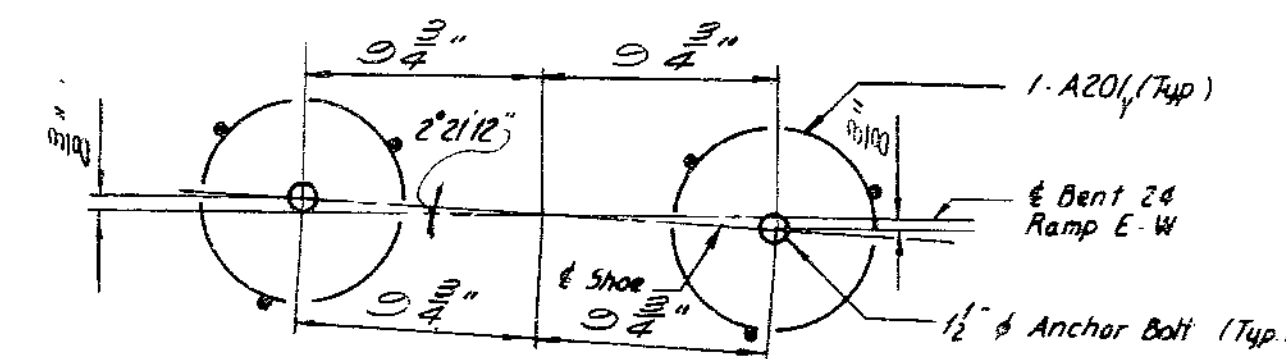
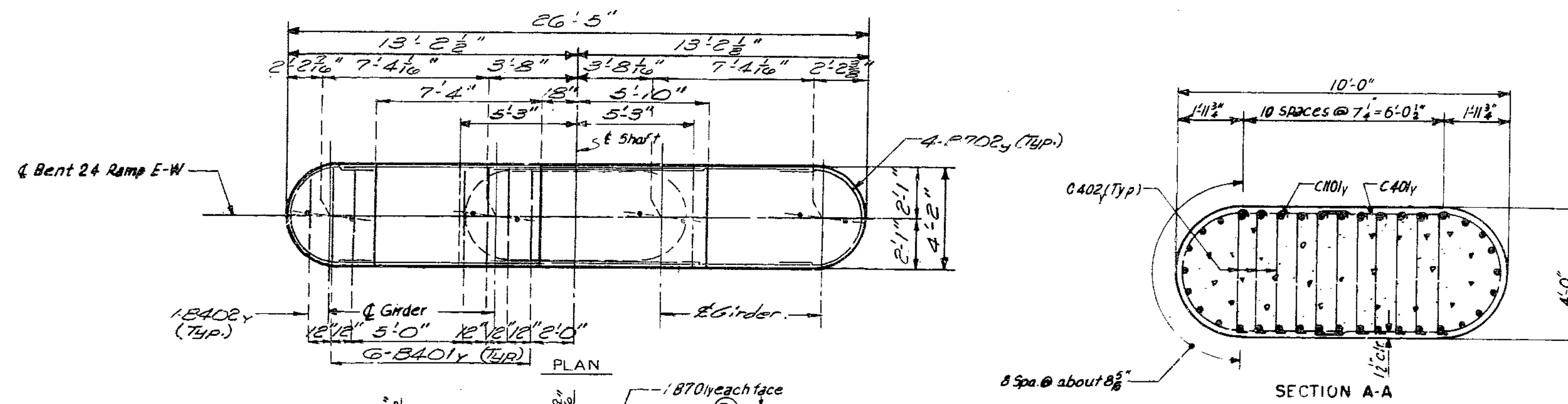
BENT 24 WESTBOUND AND EASTBOUND
PEDESTAL PILE ALTERNATE
JACKSON COUNTY

A-3136

337

DETAILED 10/16
CHECKED 10/18

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SCALE YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		89	133	



Notes:
Pile spacing is measured at bottom of footing.

338

DETAILED 1078
CHECKED 1078

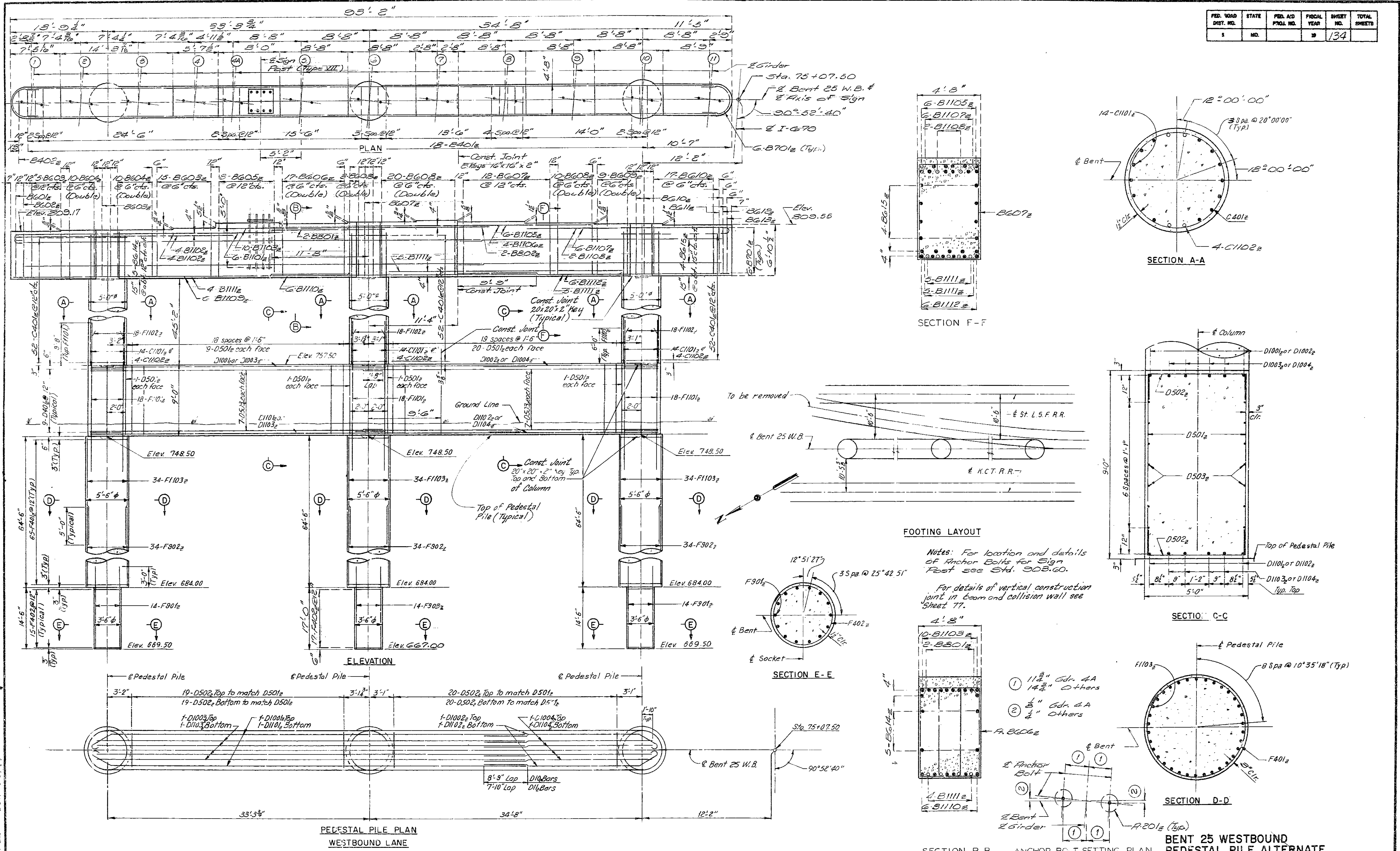
Note: This drawing is not to scale. Follow dimensions.

Sheet No. CA of 82.

BENT 24 RAMP E-W
PEDESTAL PILE ALTERNATE
JACKSON COUNTY

A- 3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		1978	134	



Notes: For location and details of Anchor Bolts for Sign Post see Std. 905.60.
For details of vertical construction joint in beam and collision wall see Sheet 77.

339

DETAILED 1978
CHECKED 1978

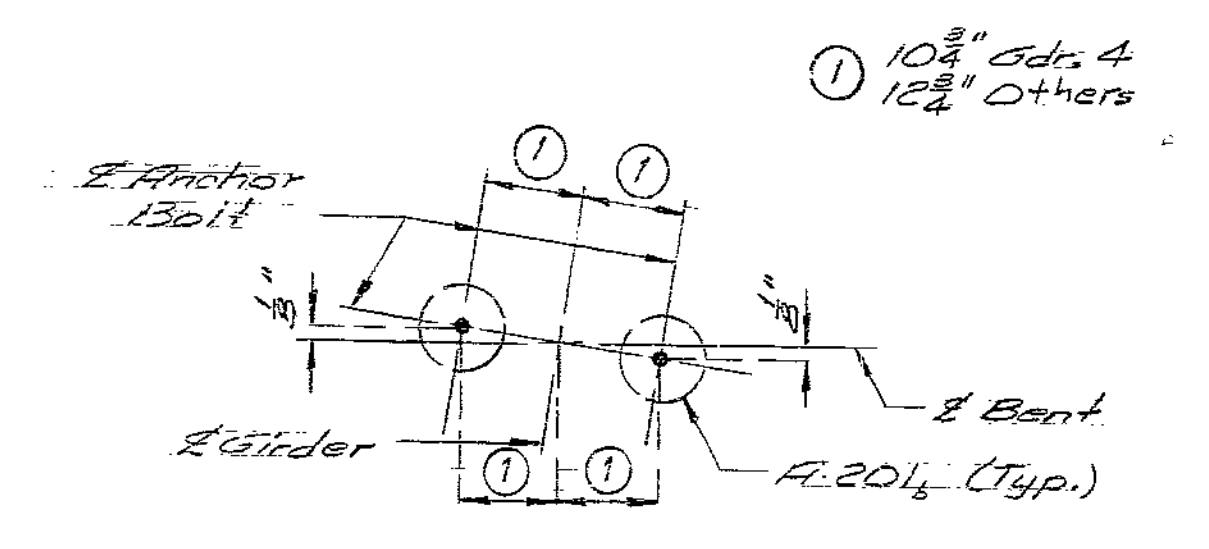
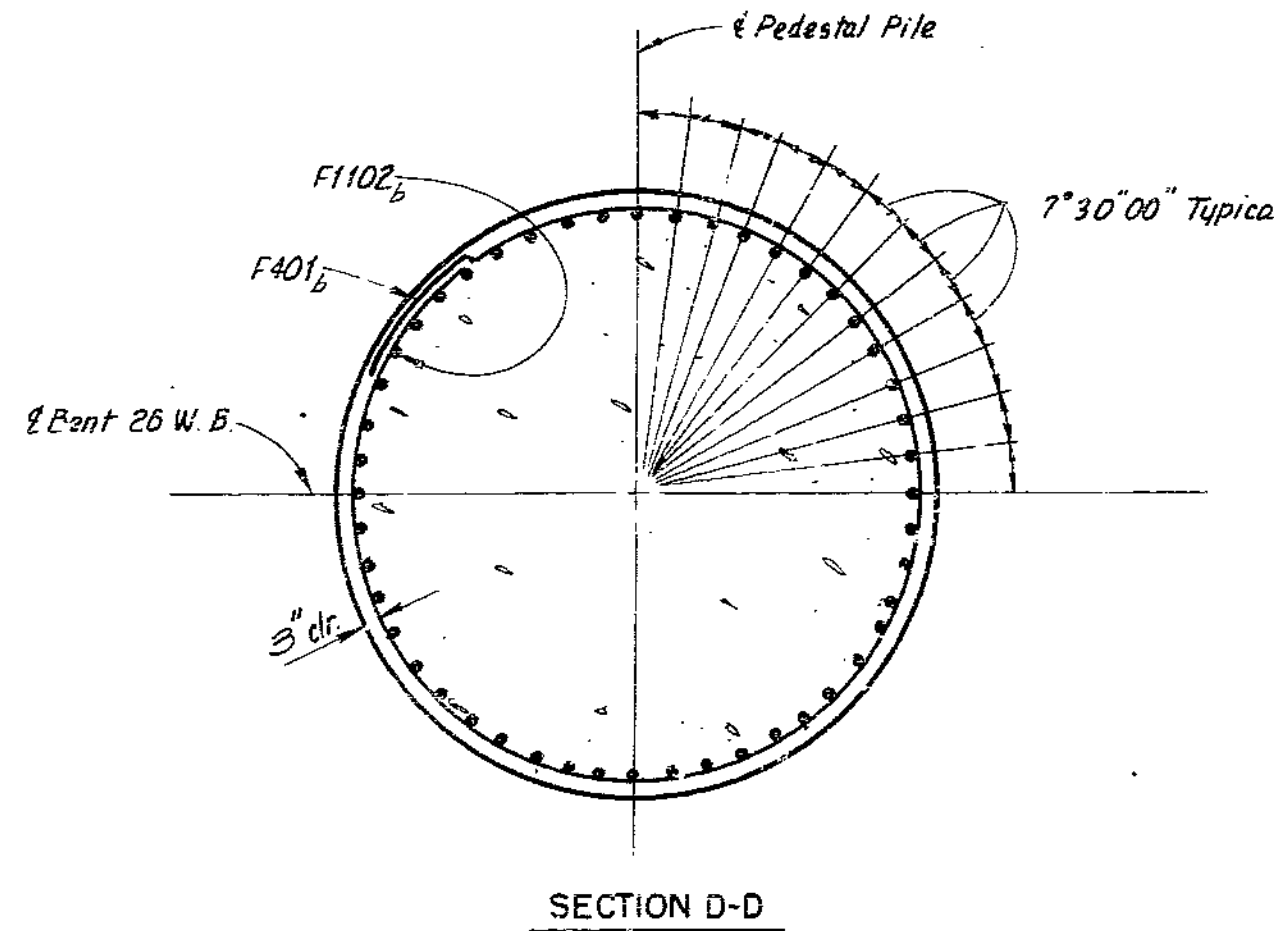
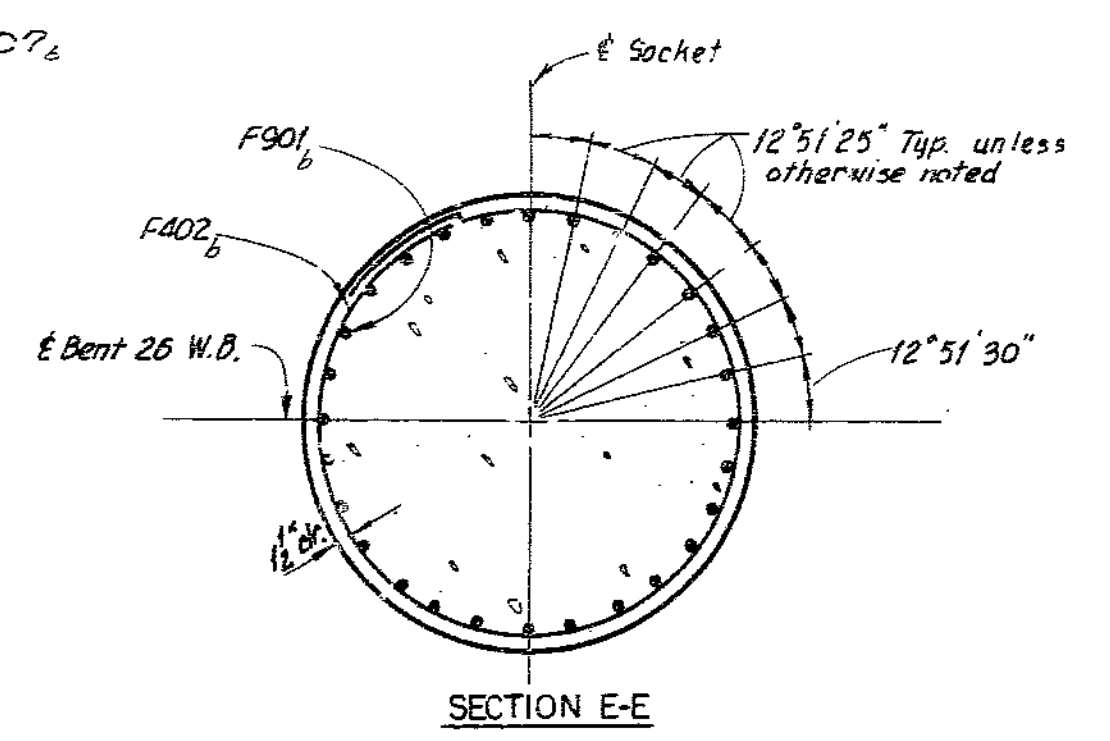
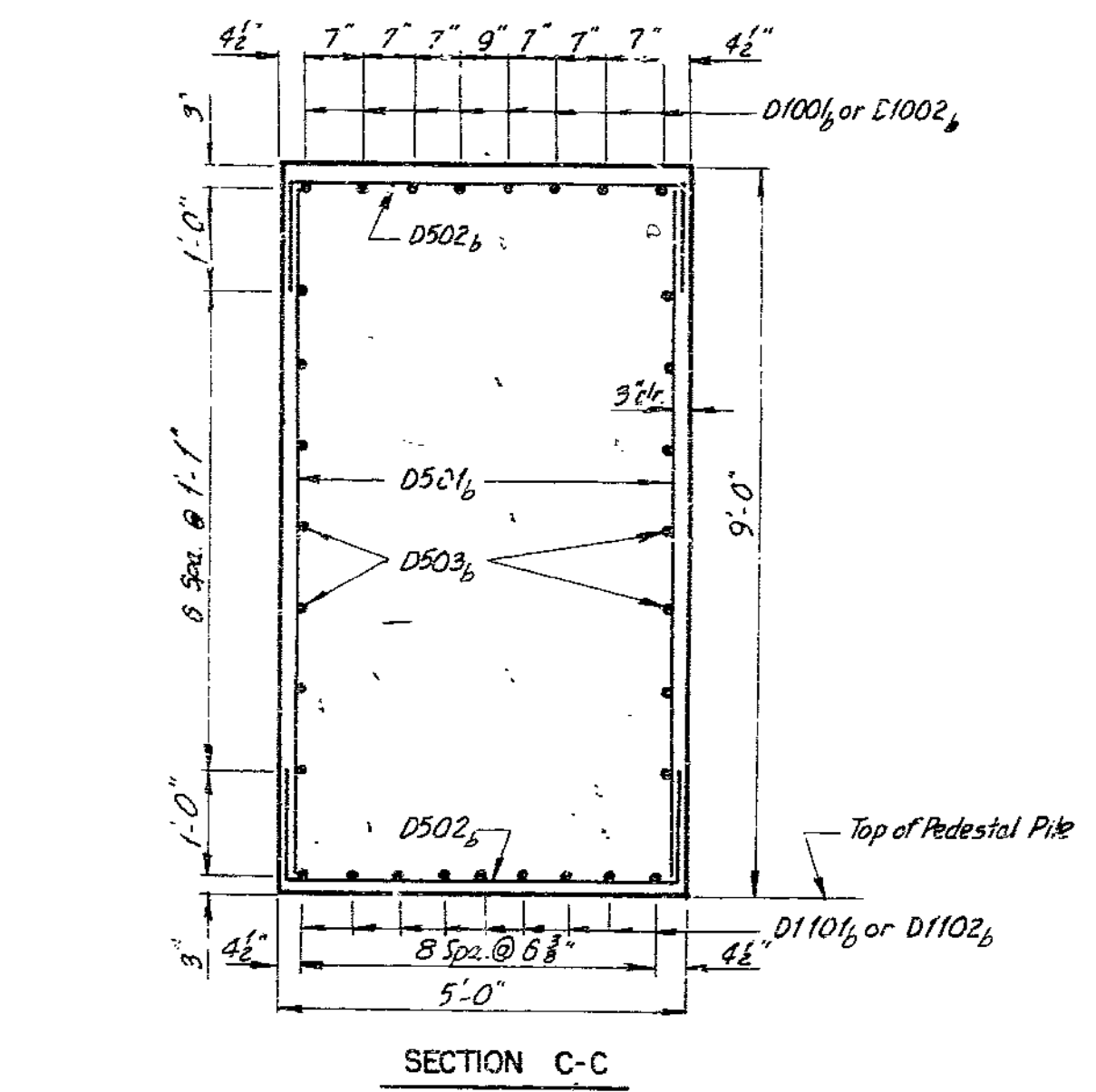
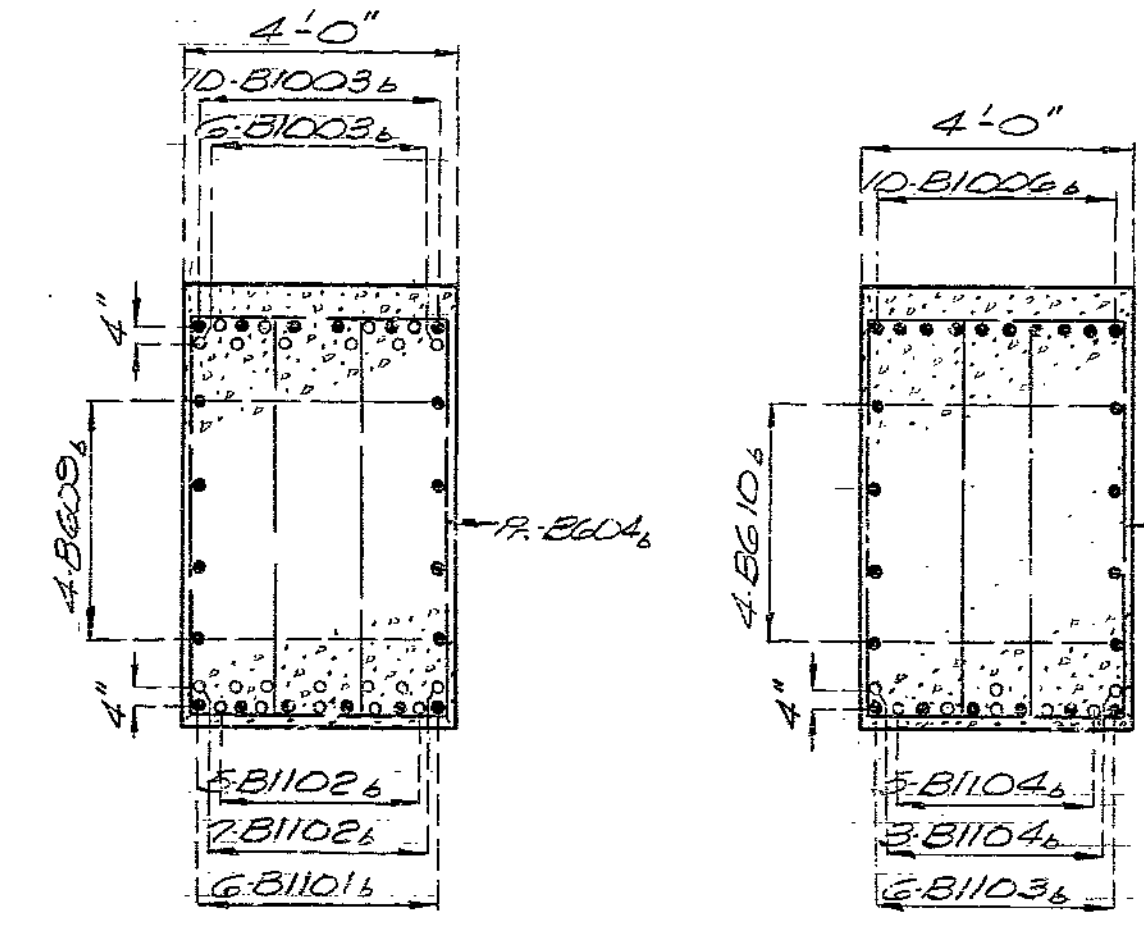
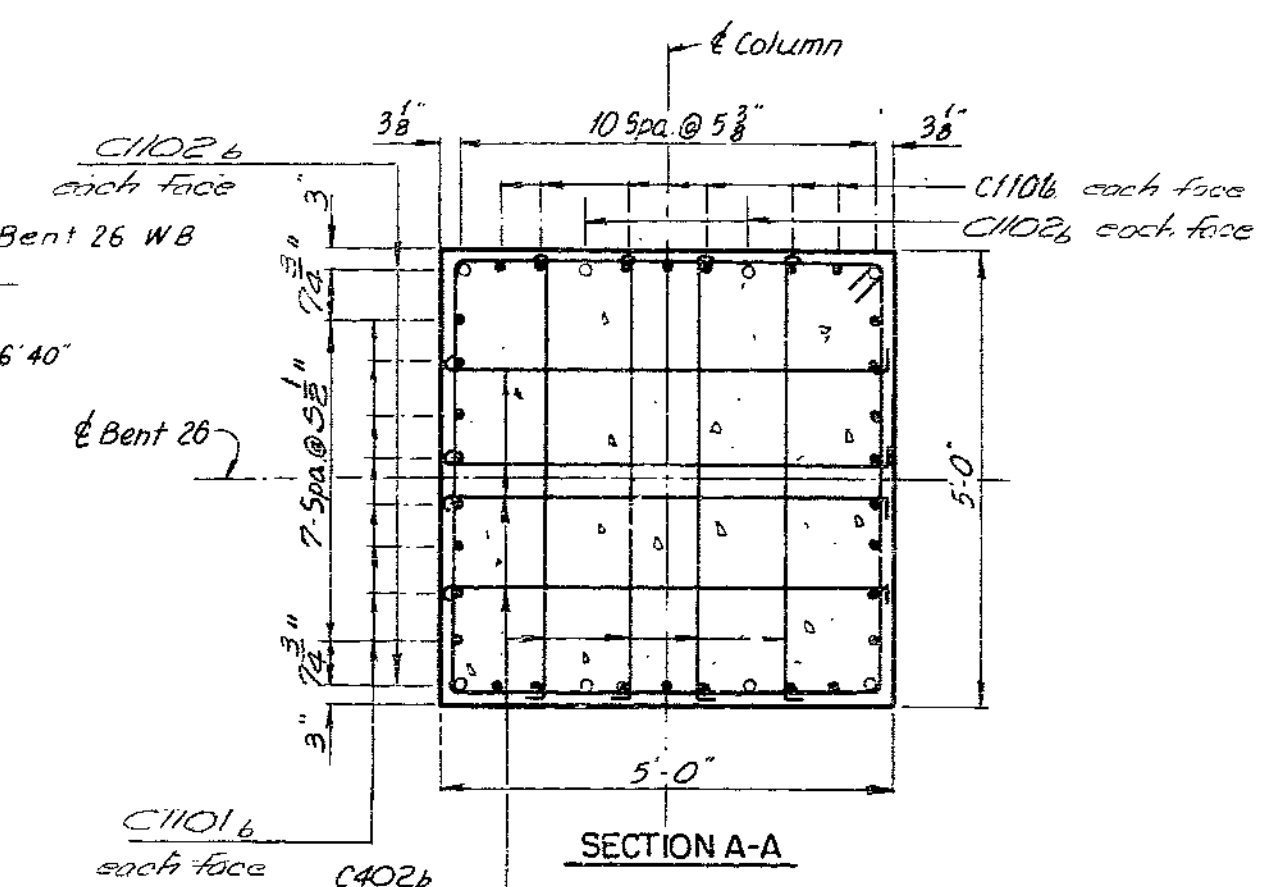
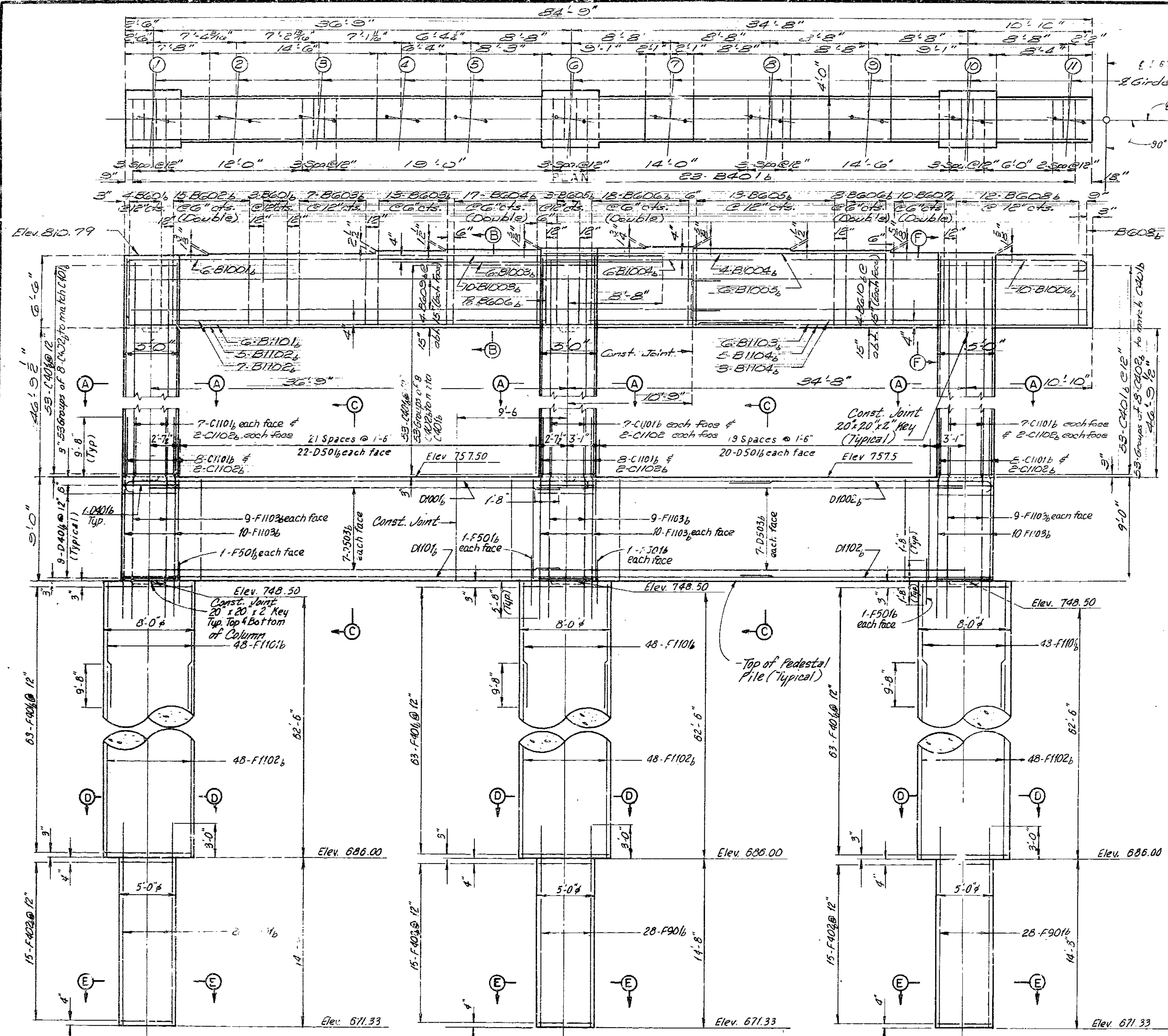
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 65 of 82.

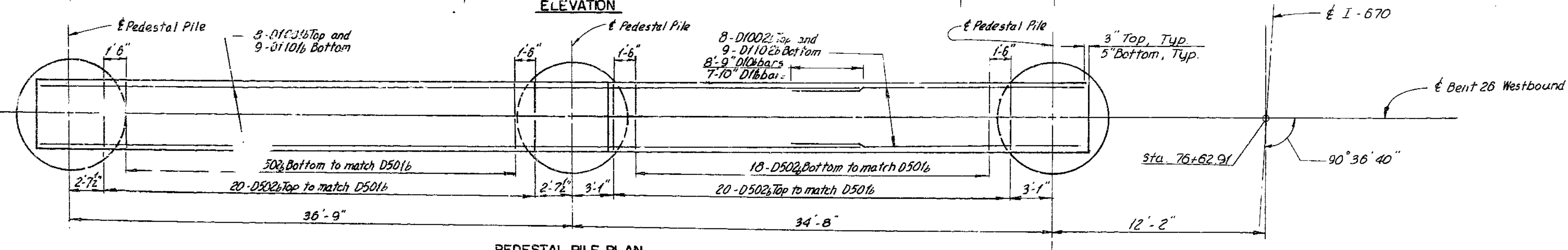
BENT 25 WESTBOUND
PEDESTAL PILE ALTERNATE
JACKSON COUNTY

A-3136

PAC. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	MO.		89	136	



Notes:
 For details of vertical construction joint in beam & collision wall see Sheet 77.
 For footing layout see Sheet 77.



341

DETAILED 1978
 CHECKED 1978

PEDESTAL PILE PLAN

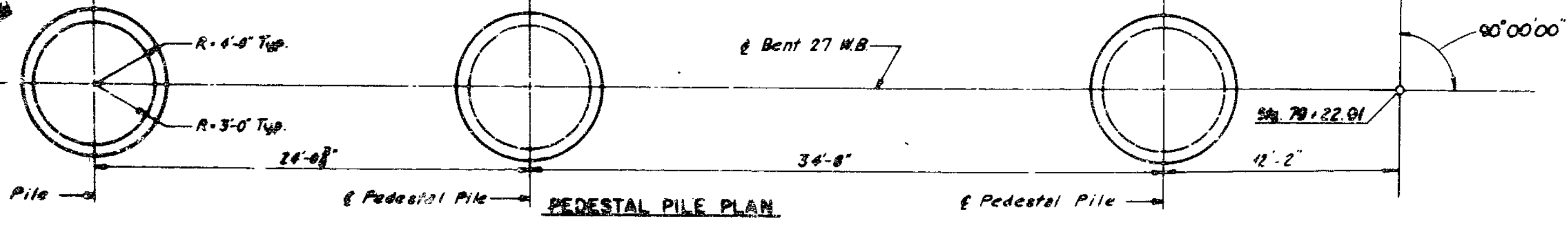
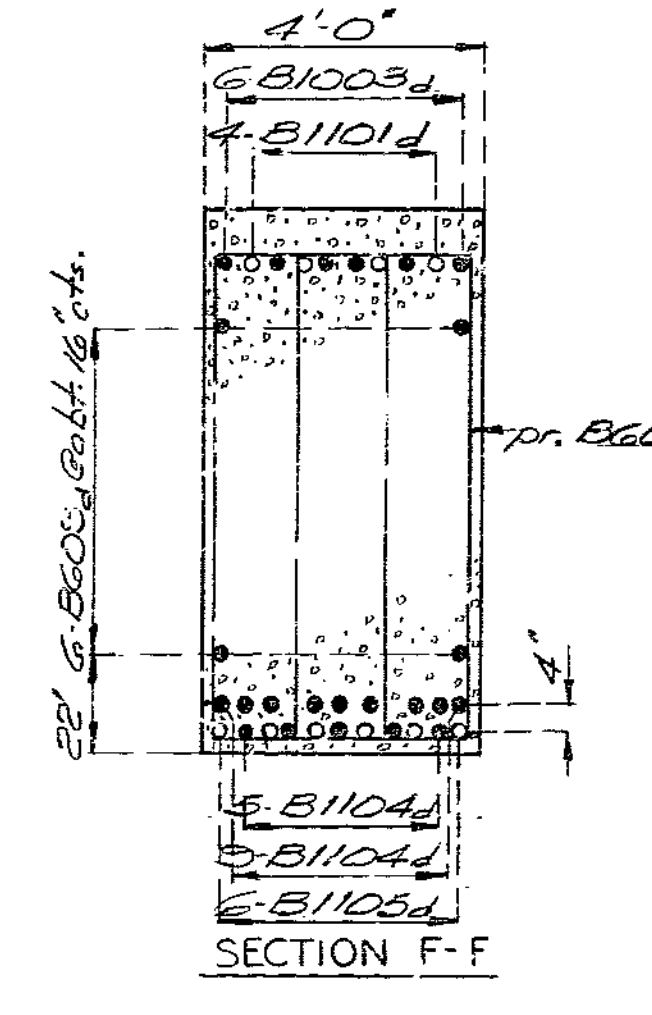
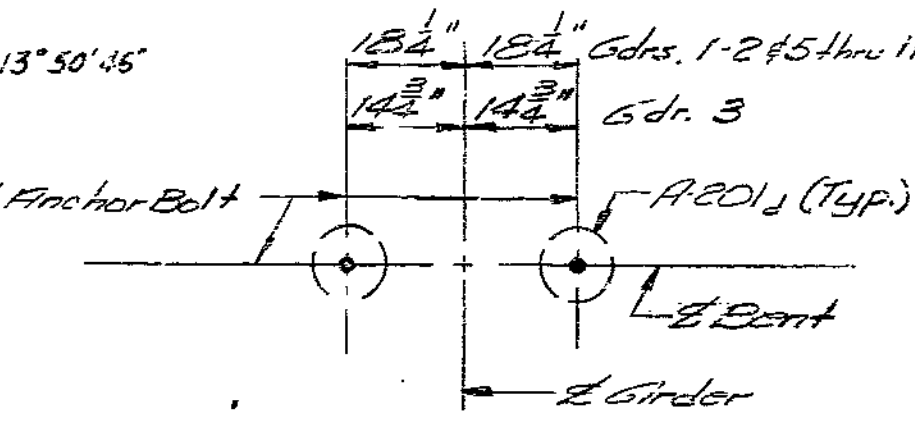
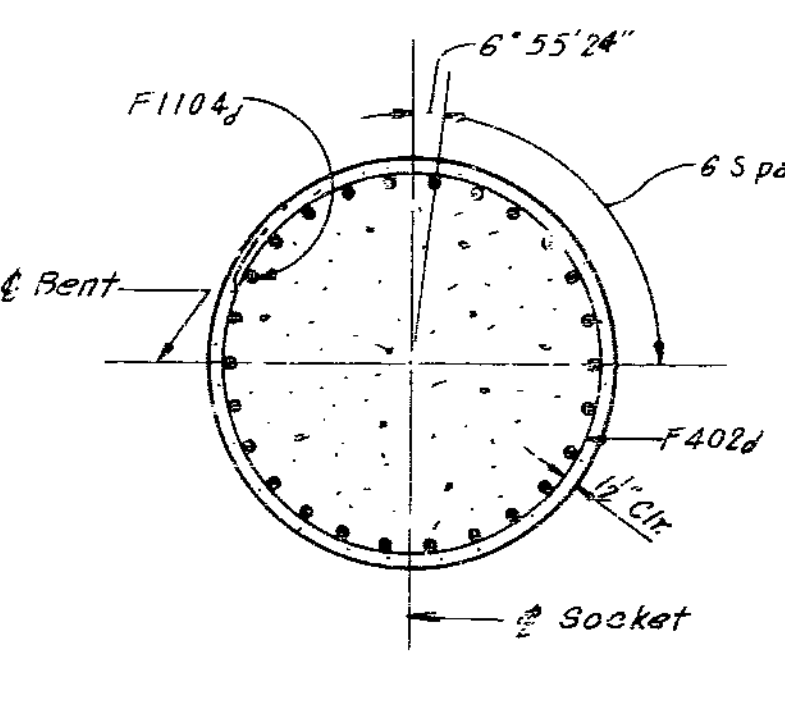
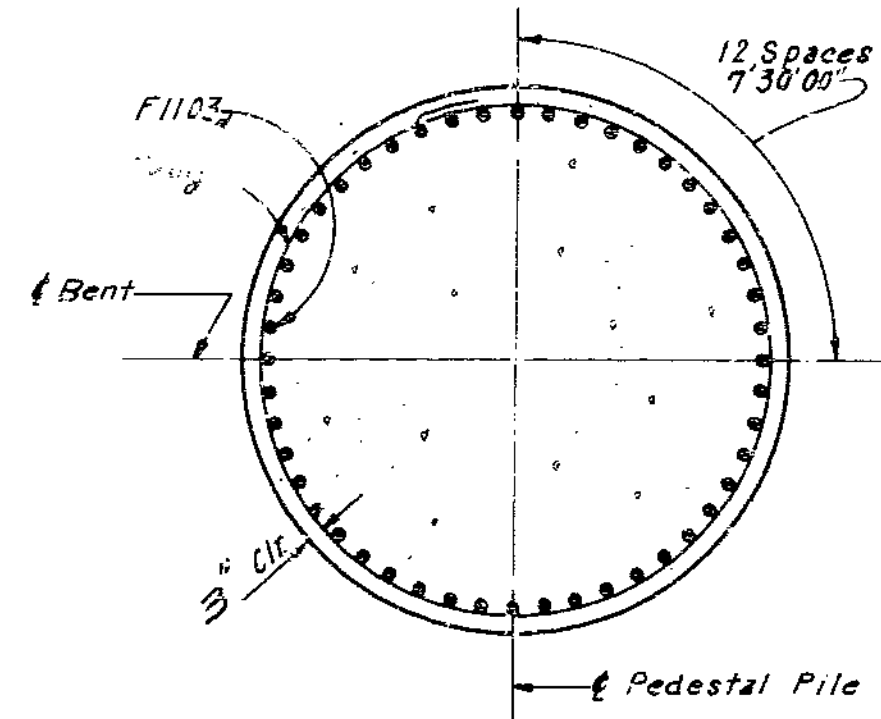
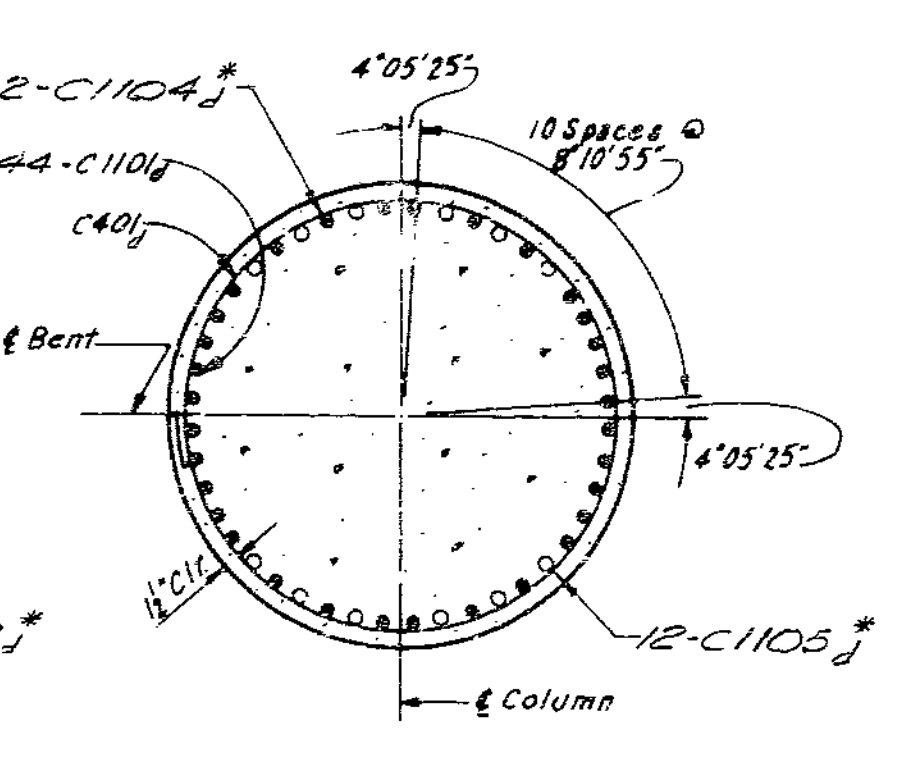
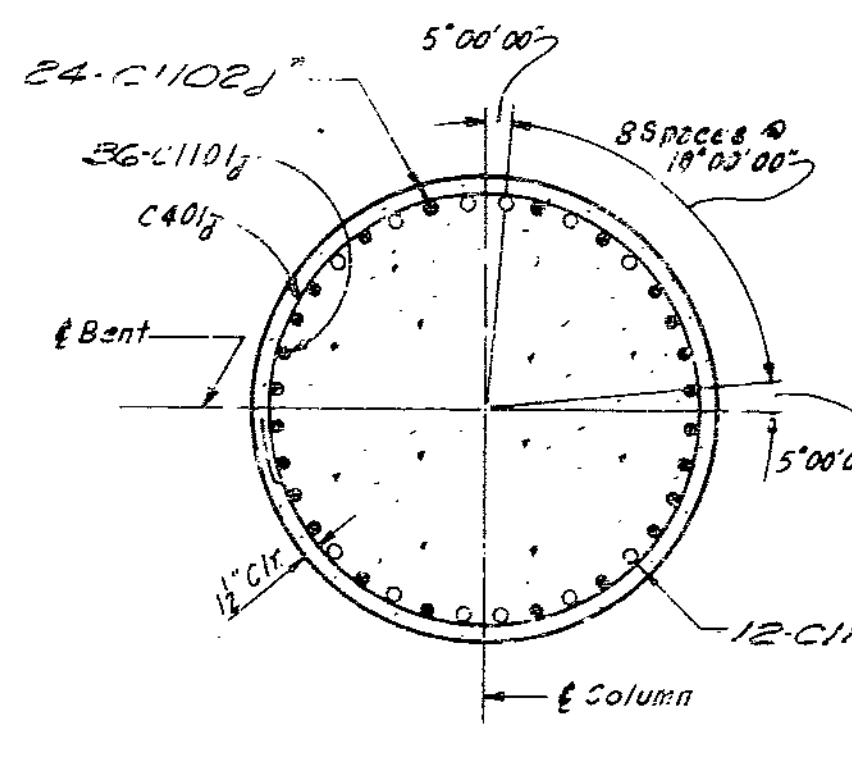
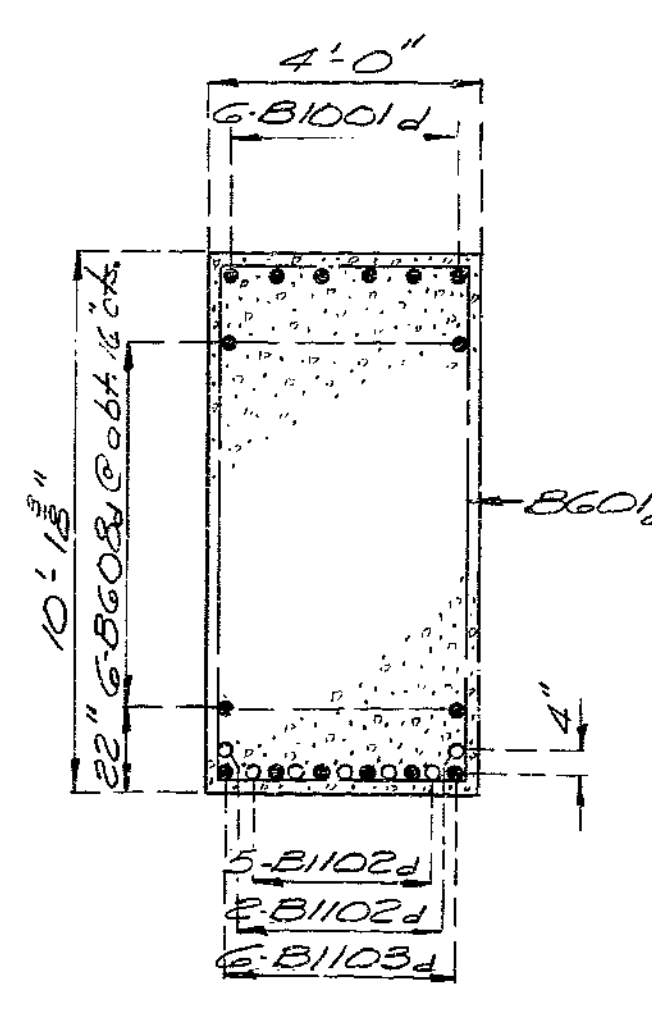
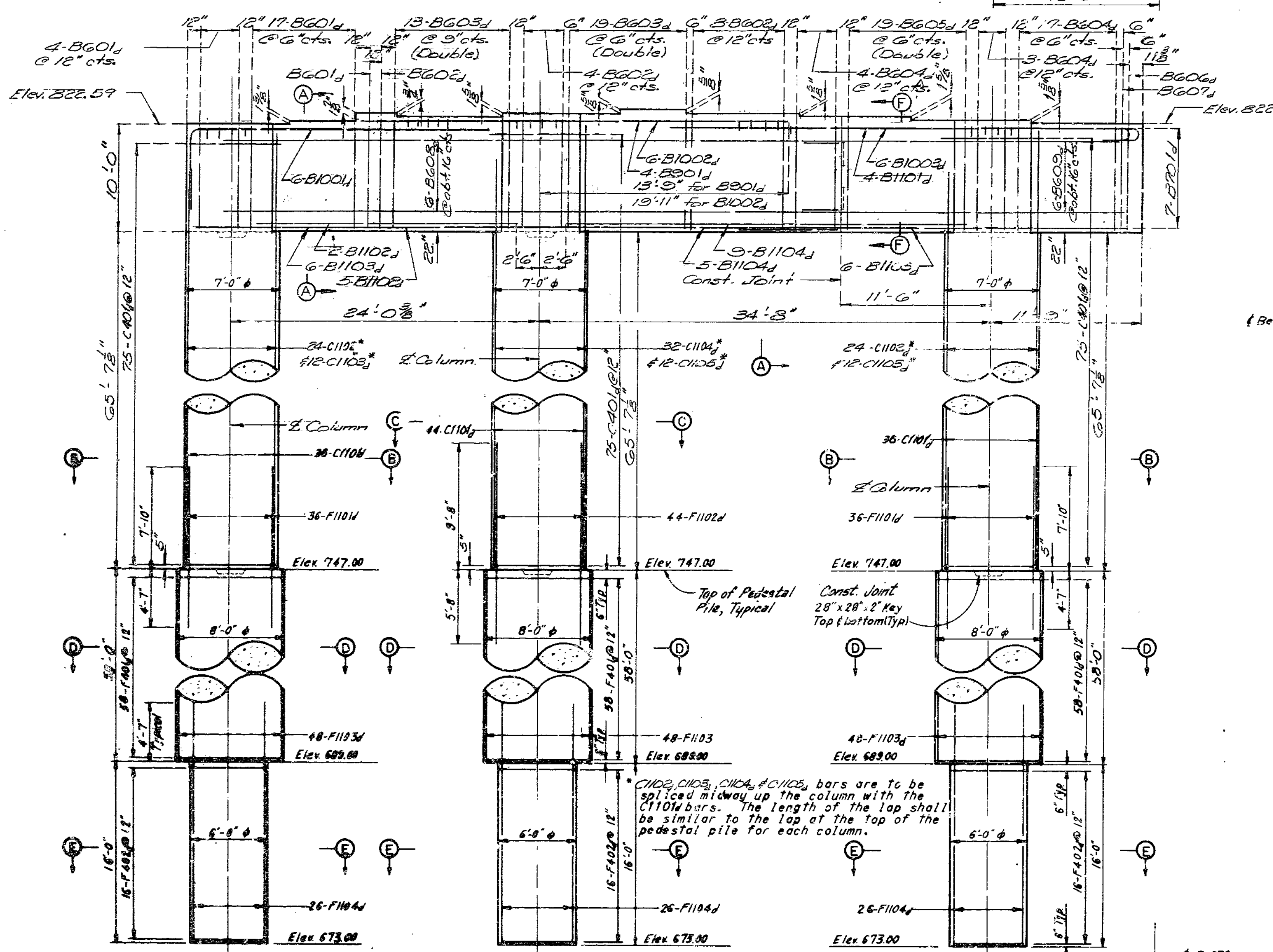
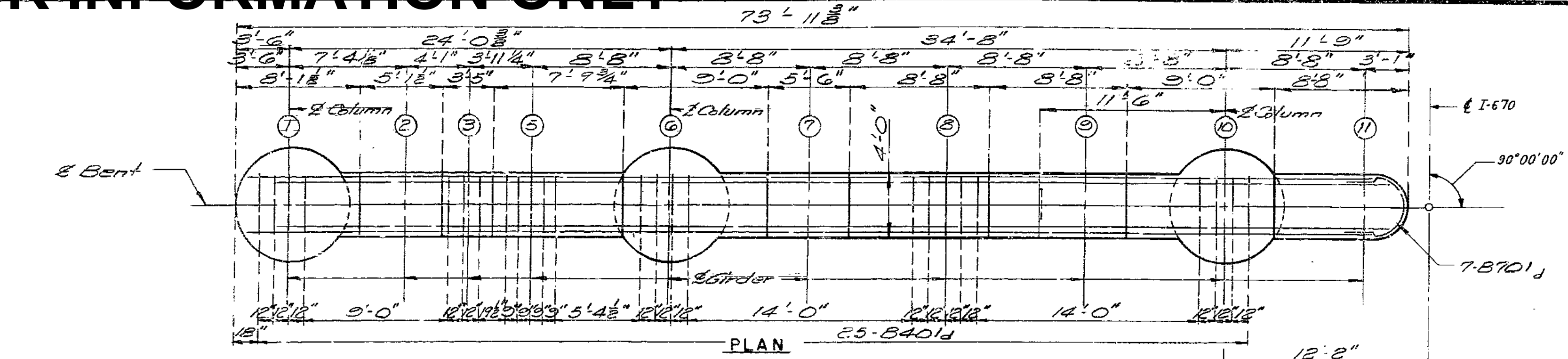
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 67 of 82.

BENT 26 WESTBOUND
 PEDESTAL PILE ALTERNATE
 JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FY	FY	FY	FY	FY	FY
5	MO.	1960	1961	1962	1963	1964	1965



Note: For details of vertical construction joint in beam see Sht. No. 77.

373

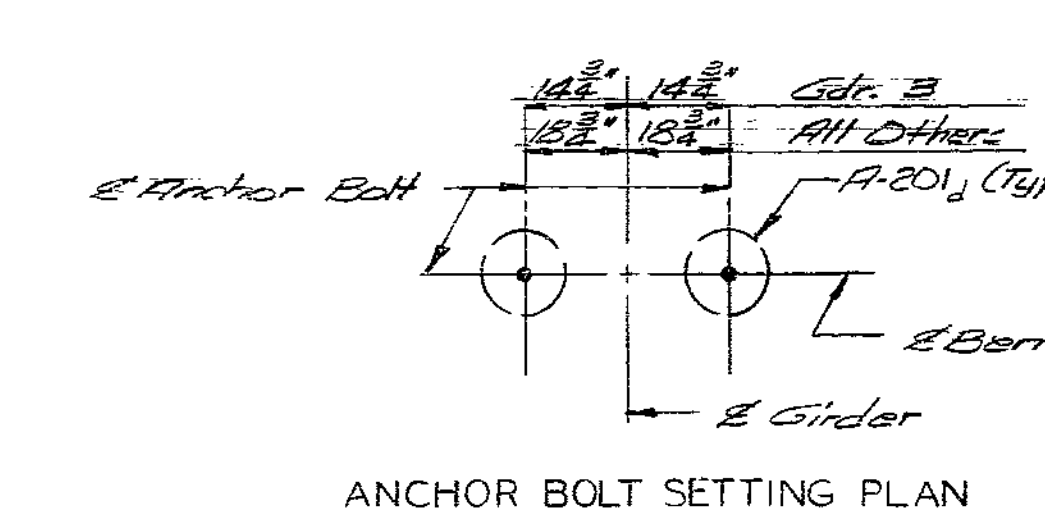
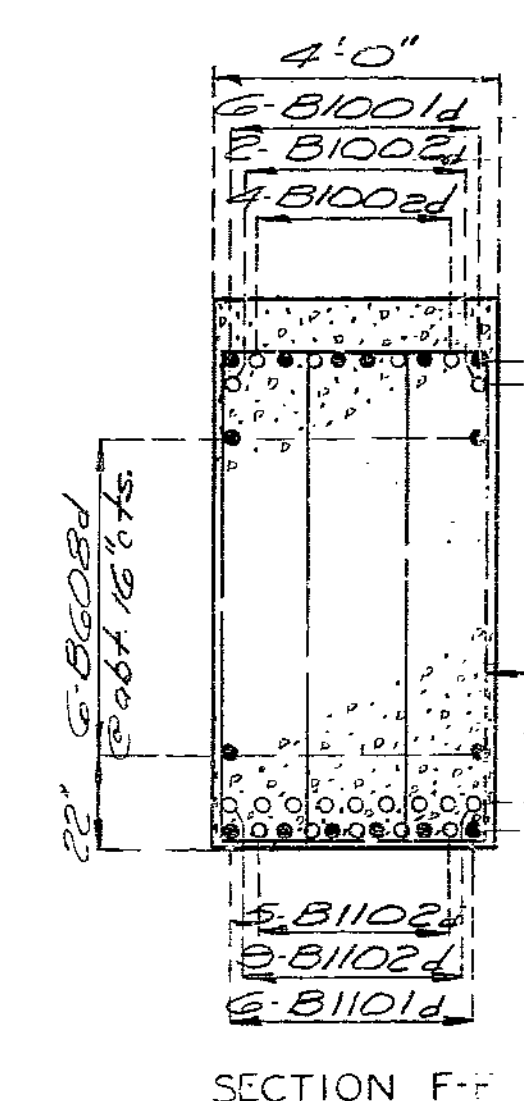
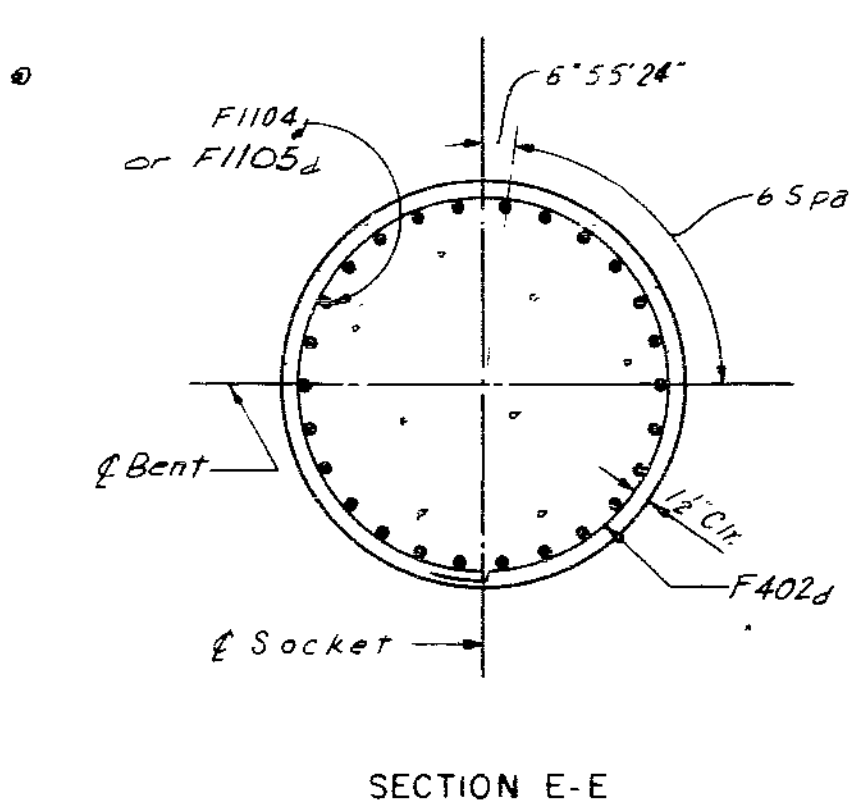
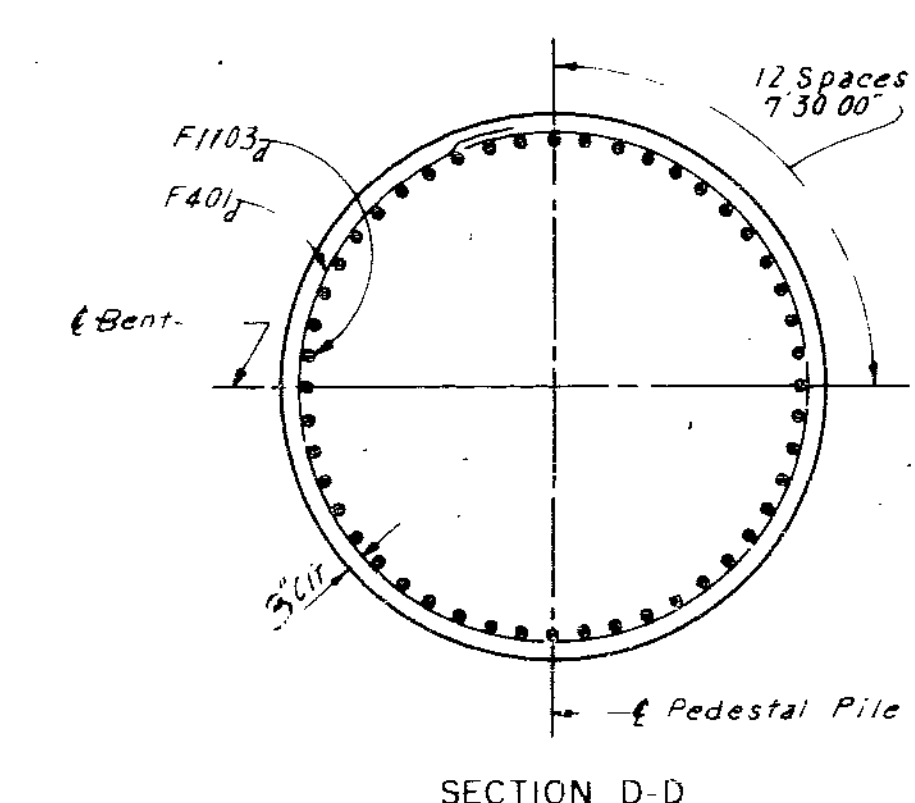
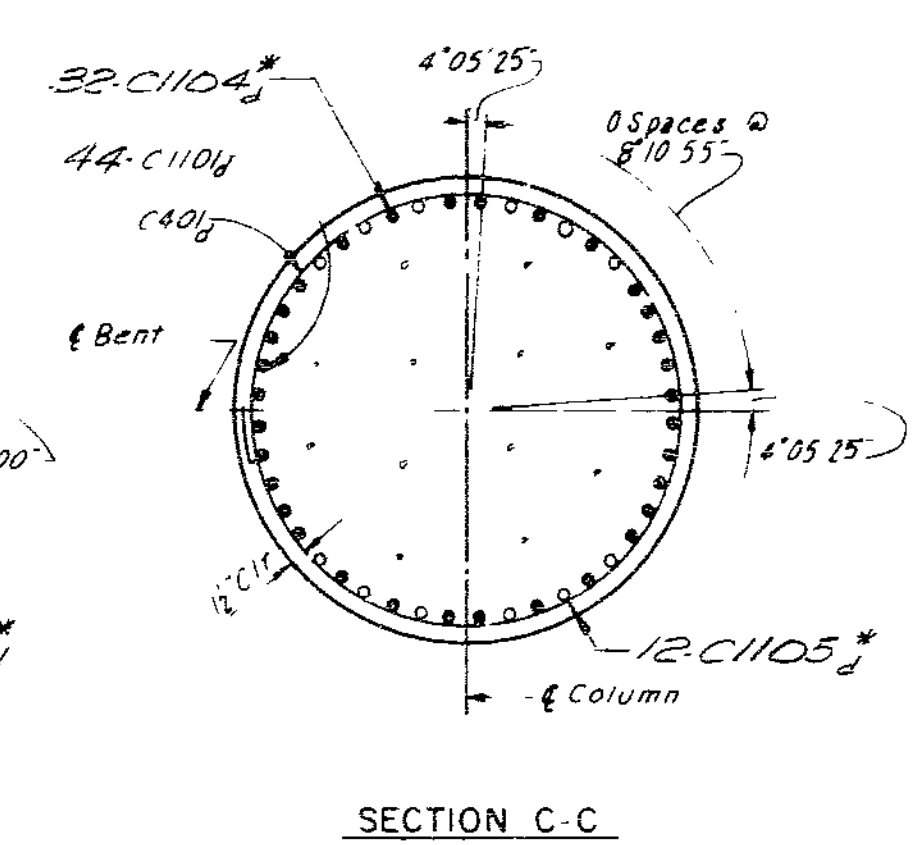
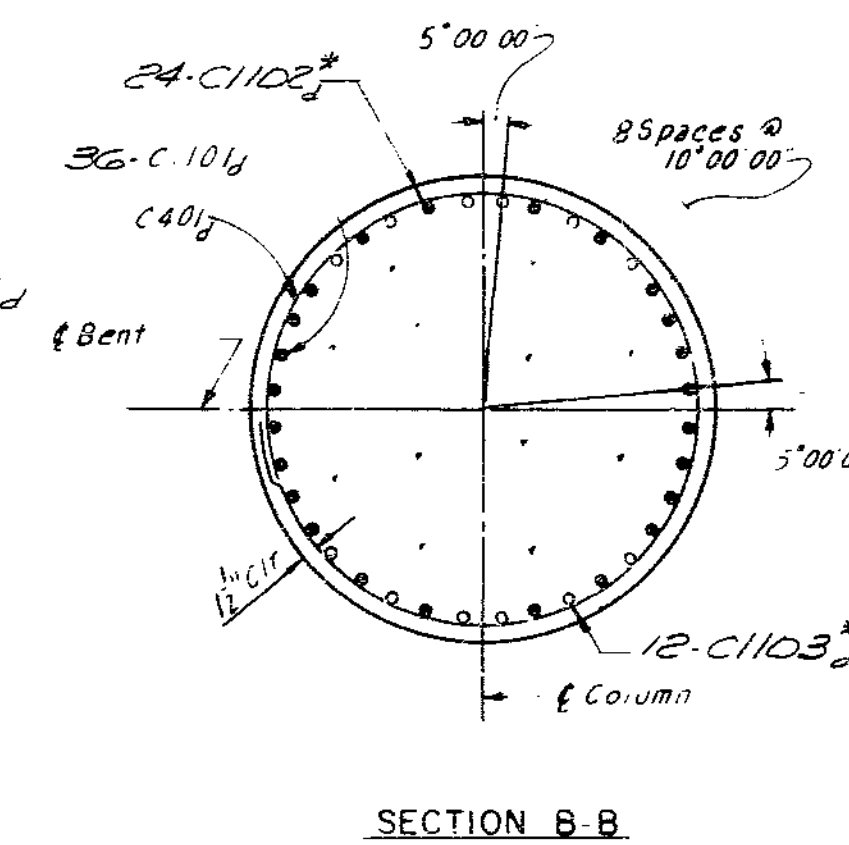
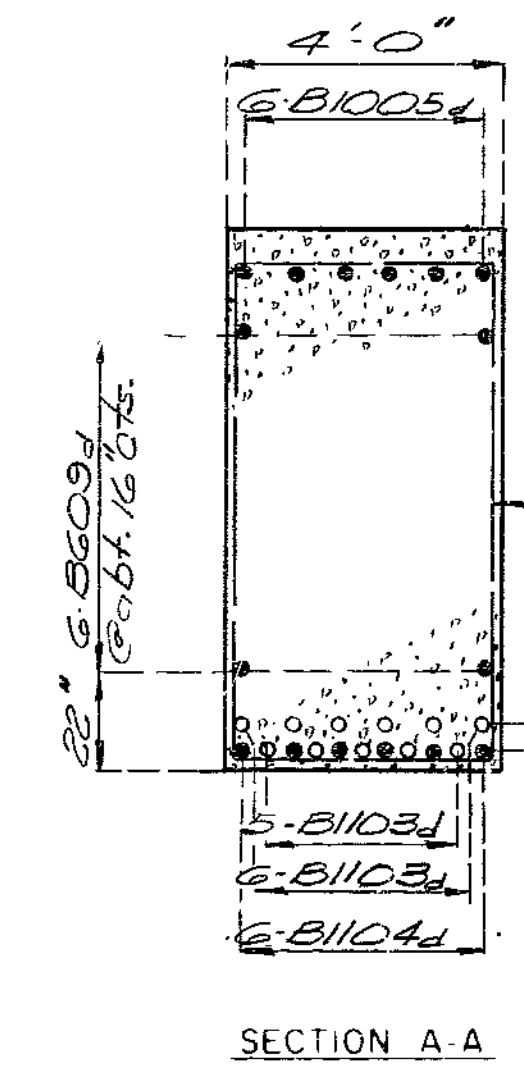
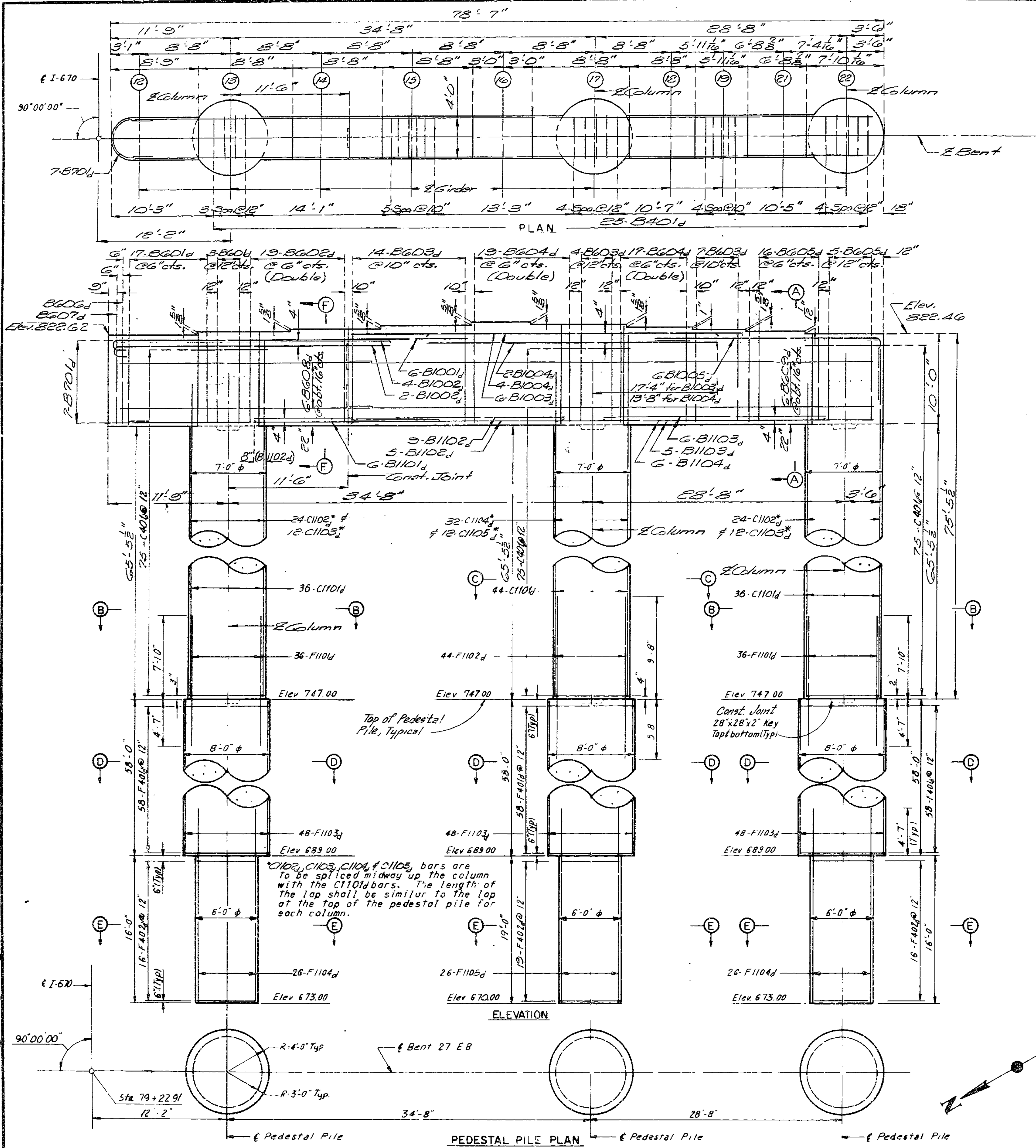
BENT 27 WESTBOUND
FEDESTAL PILE ALTERNATE
JACKSON COUNTY

A-3136

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 69 of 82.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.			139	



Note: For details of vertical construction joint in beam see sheet 77.

344

DETAILED 1078
 CHECKED 1078

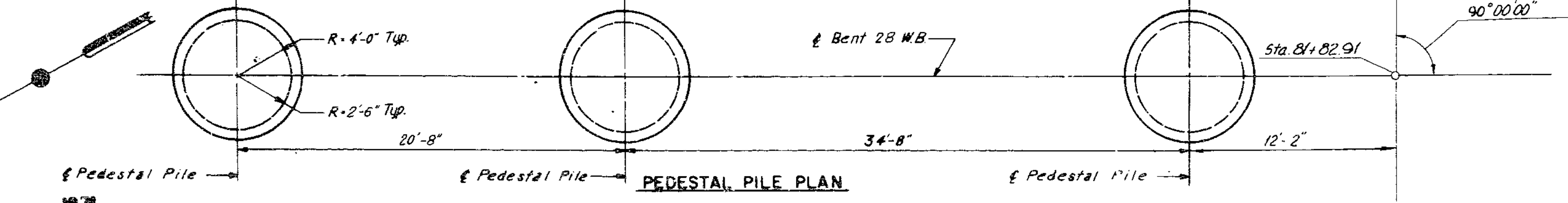
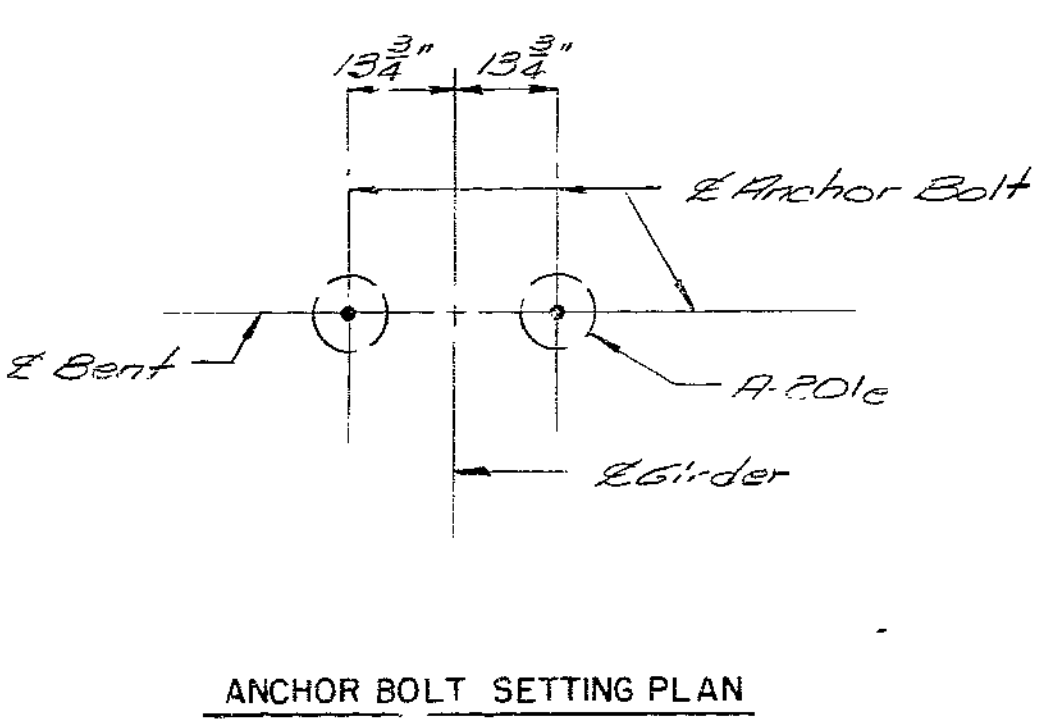
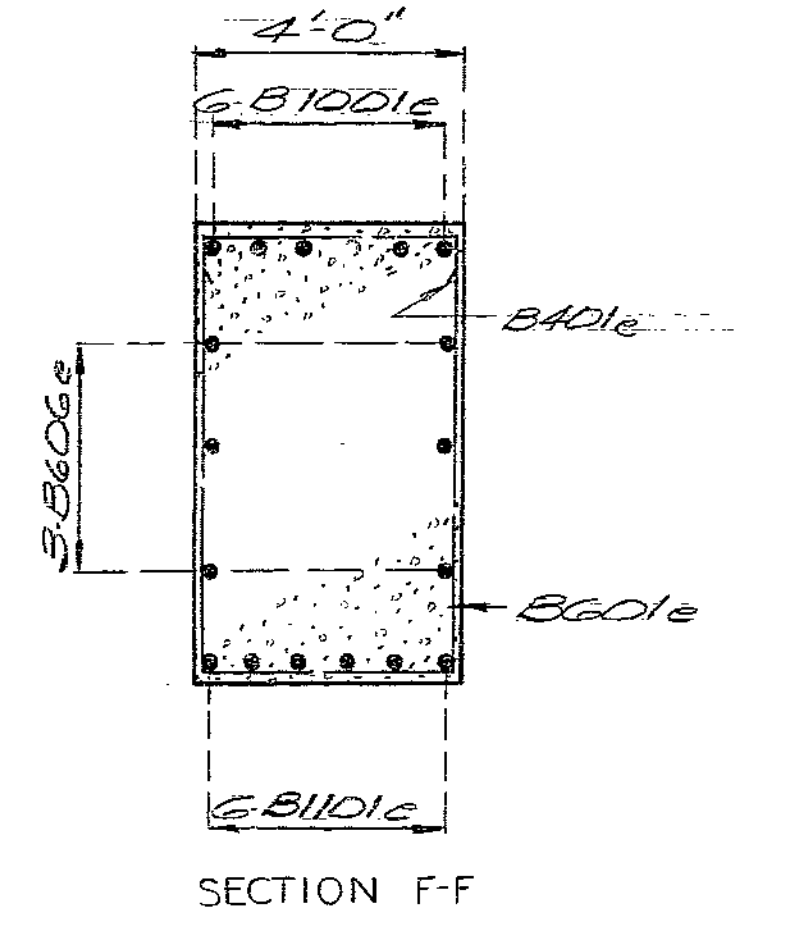
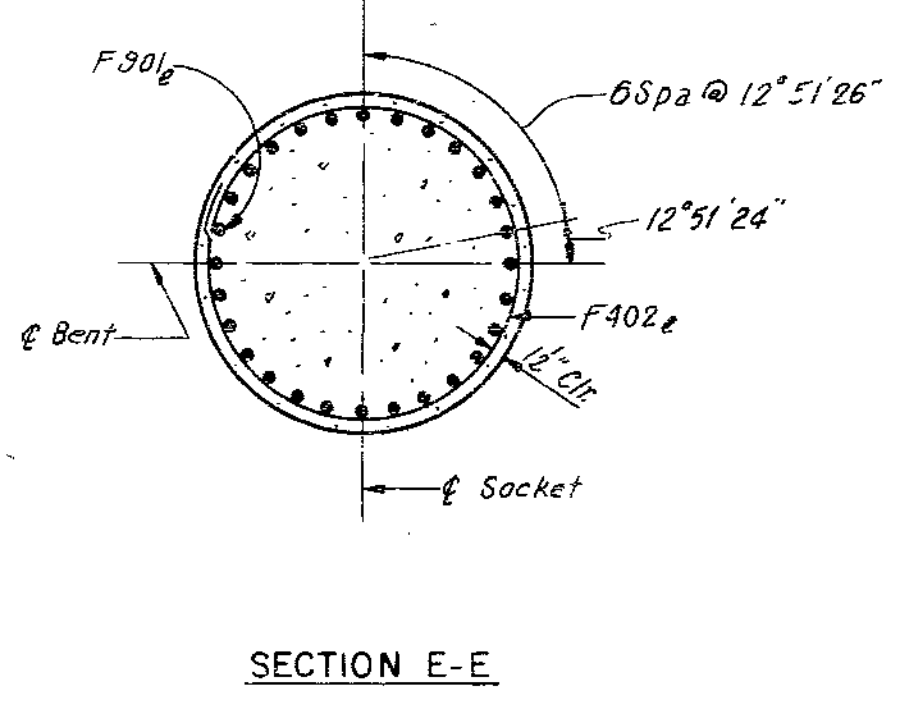
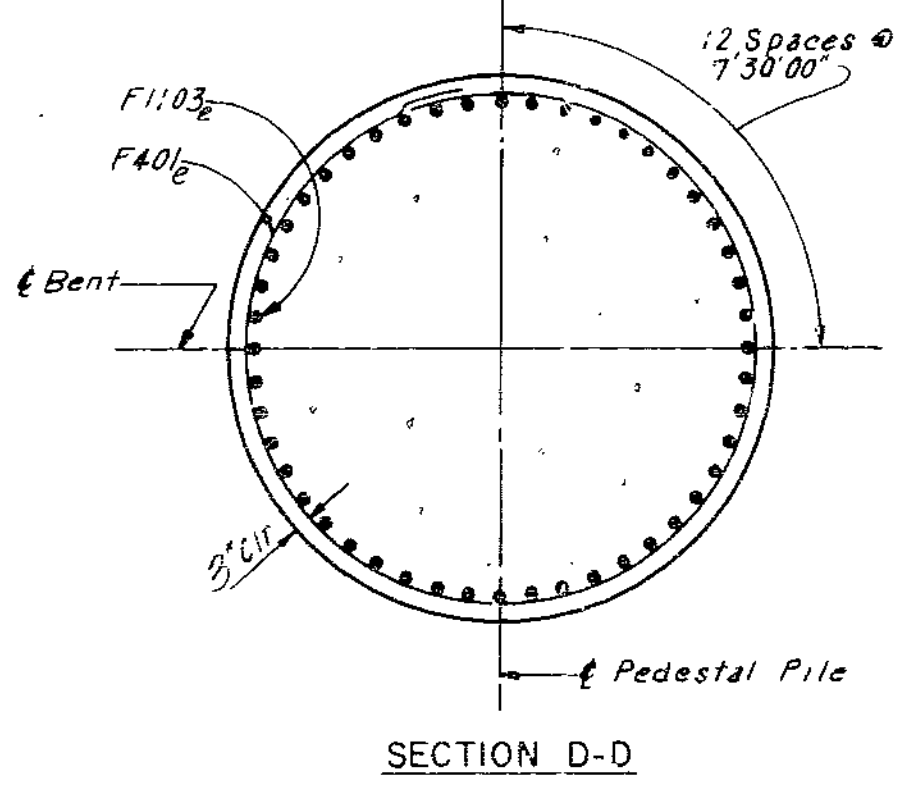
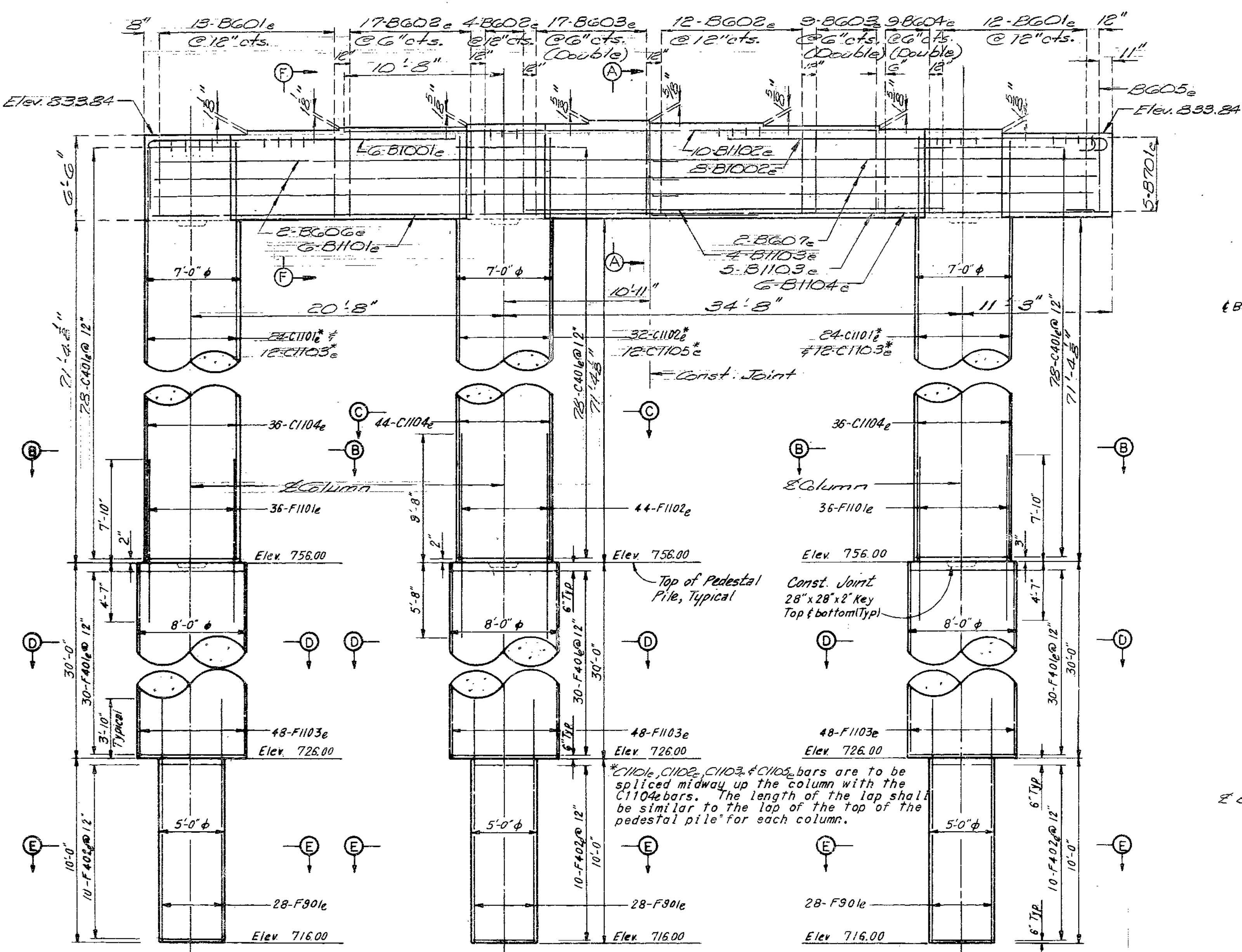
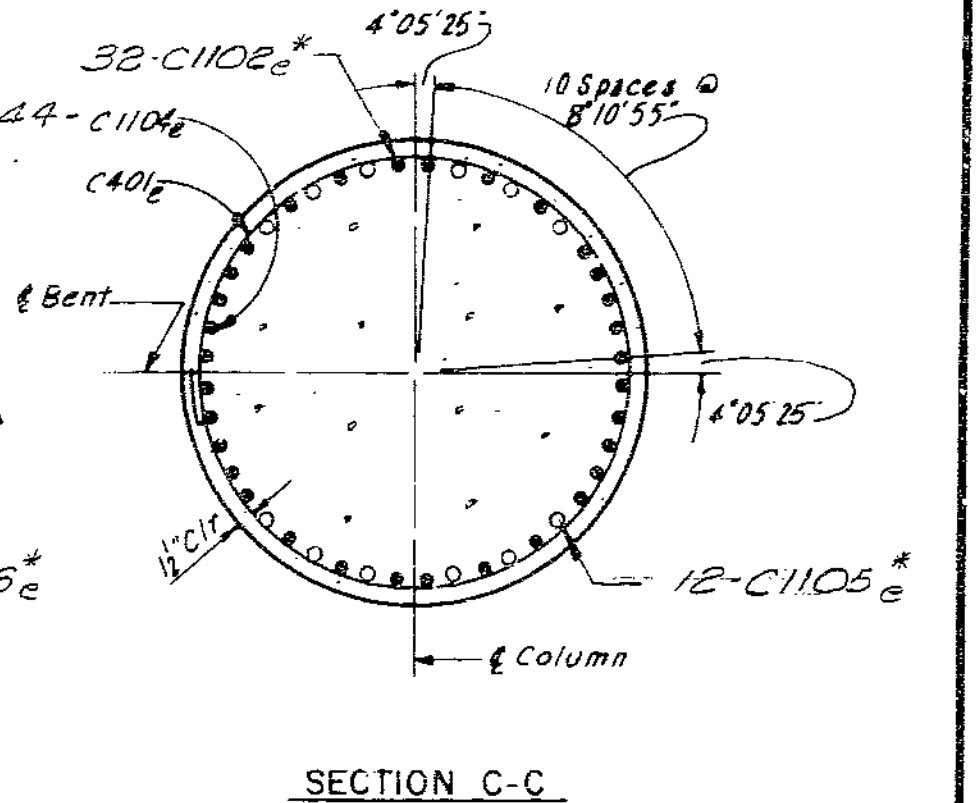
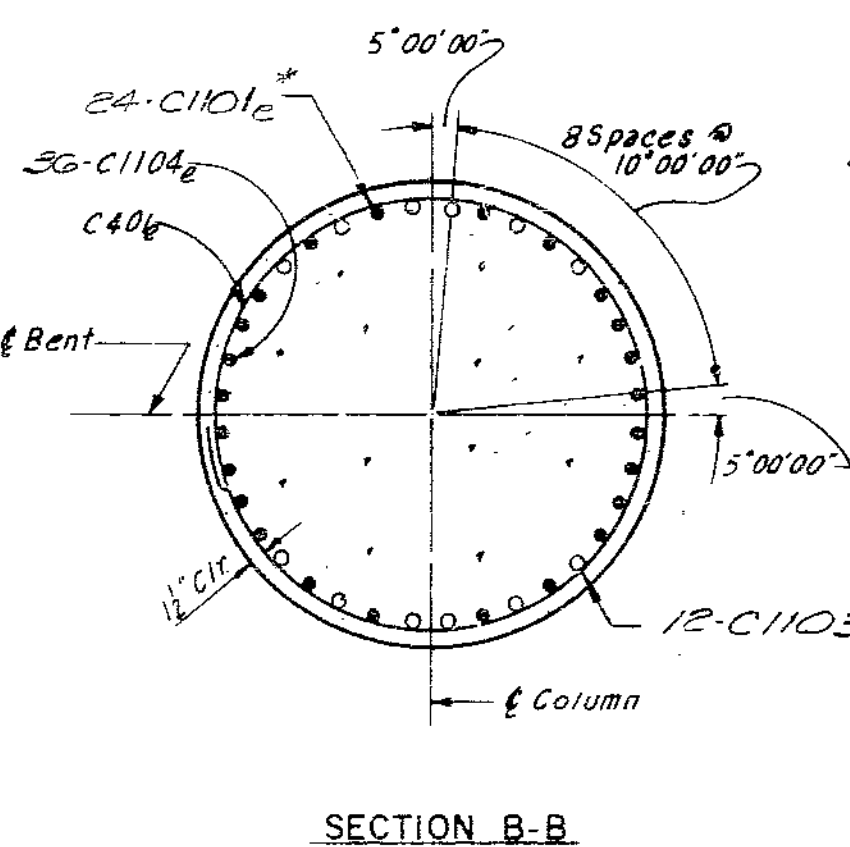
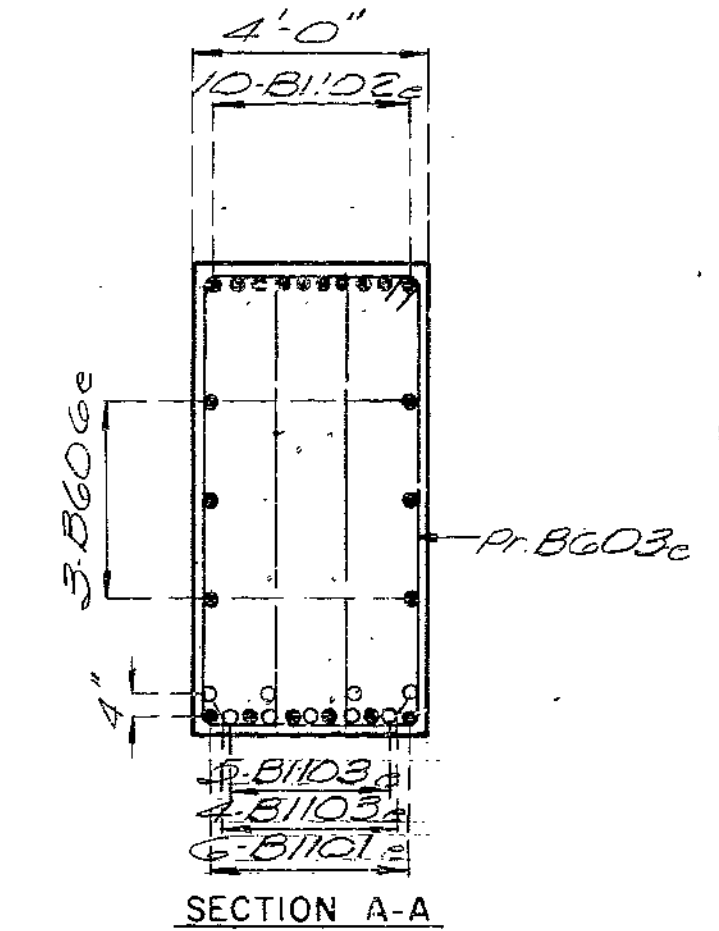
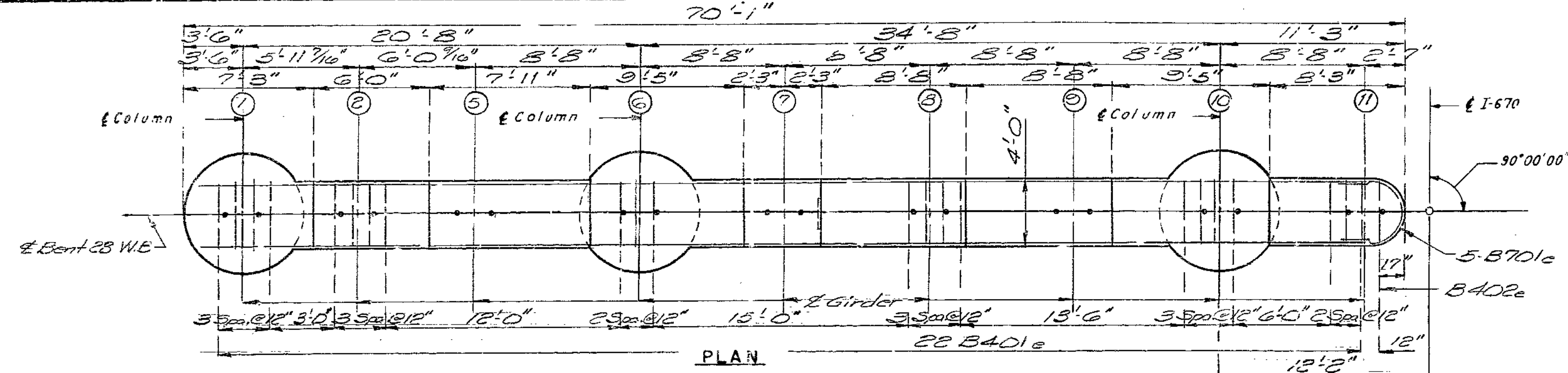
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 10 of 22.

BENT 27 EASTBOUND
 PEDESTAL PILE ALTERNATE
 JACKSON COUNTY

A-3136

FED. EMP. DIST. NO.	STATE	FED. AID PROJ. NO.	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MO.			140	



Note: For details of vertical construction joint in beam see sht. 77.

395

DESIGNED 10/78
CHECKED 10/78

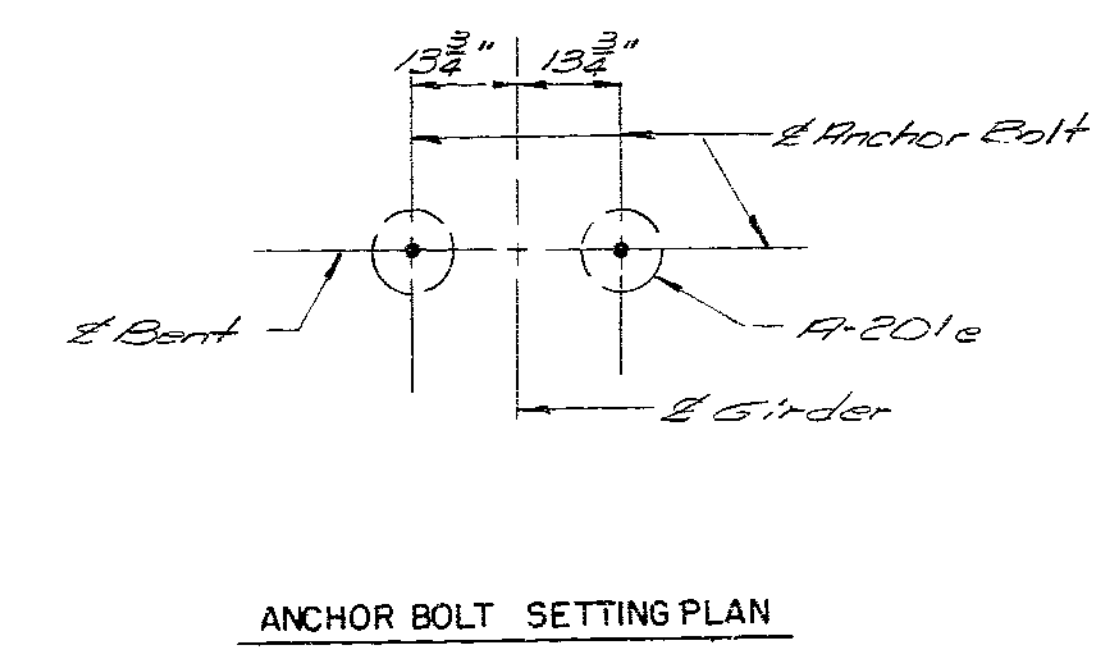
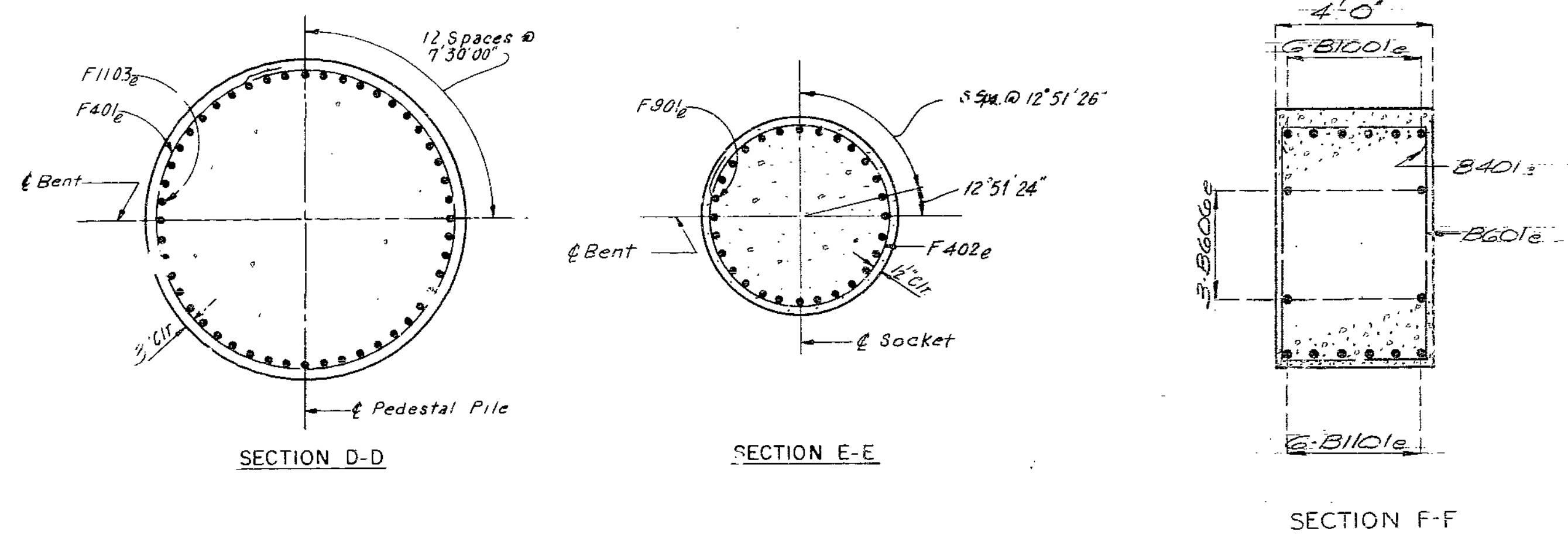
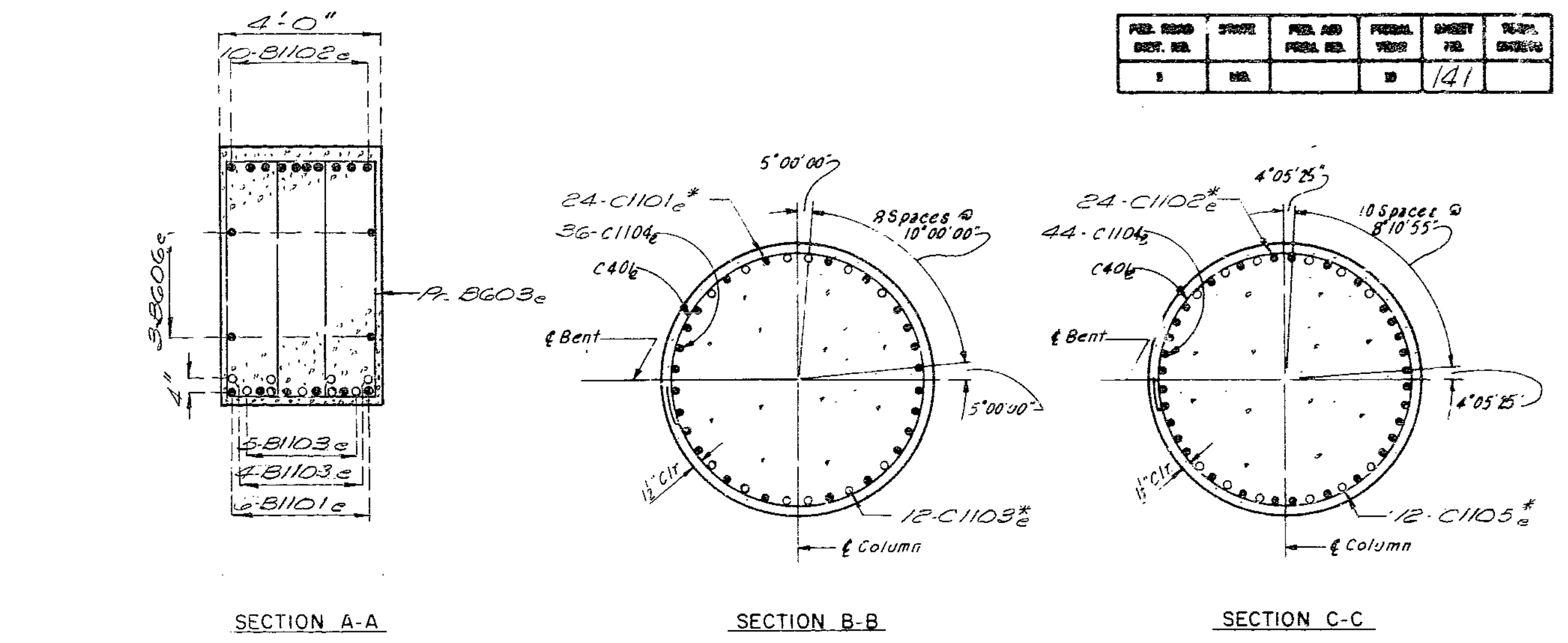
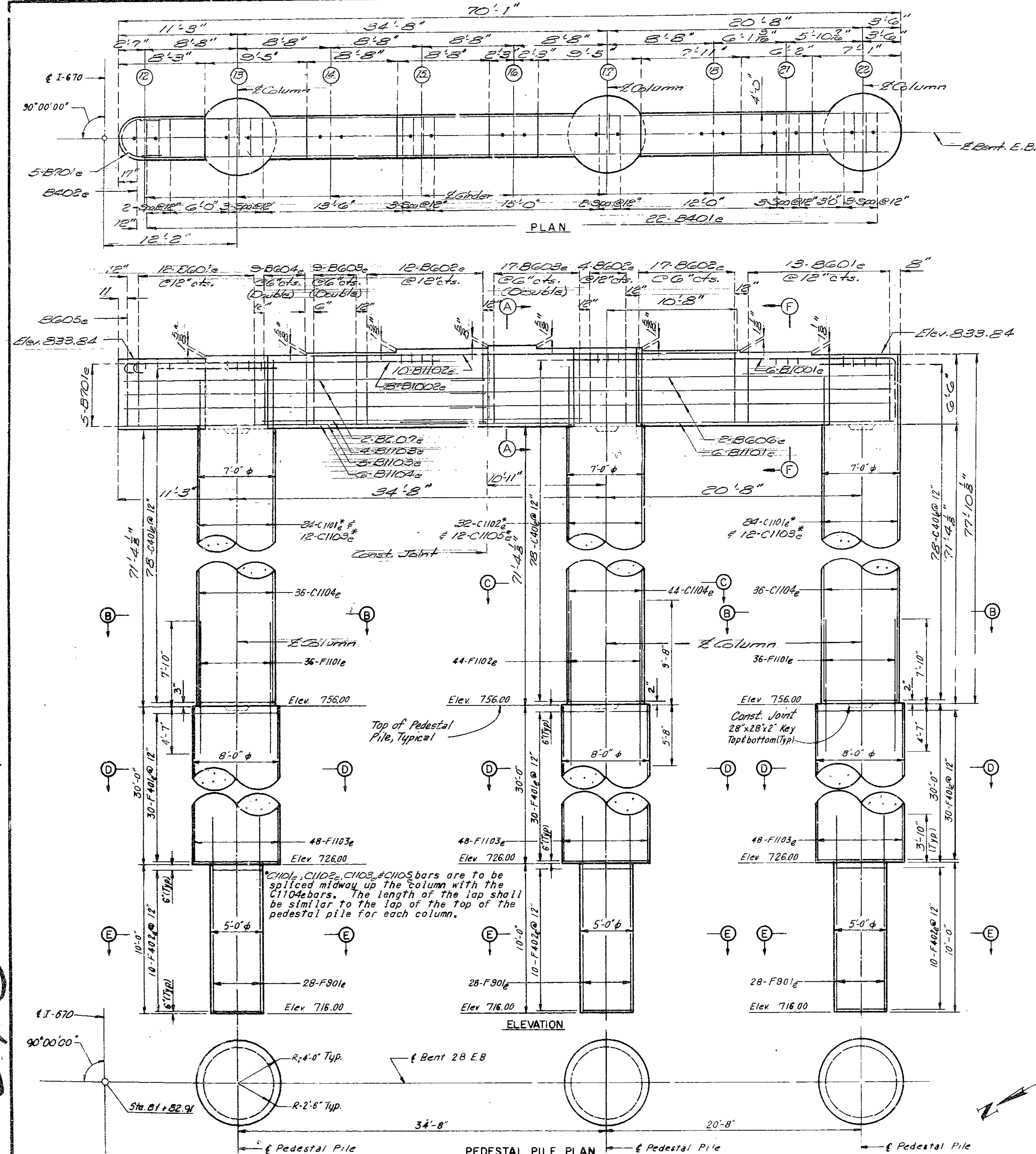
Note: This drawing is not to scale. Follow dimensions.

Sheet 71 of 82.

BENT 28 WESTBOUND
PEDESTAL PILE ALTERNATE
JACKSON COUNTY

A-3136

REV.	NO.	DATE	BY	CHKD.	DESCRIPTION
1	1				



Notes: For details of vertical construction joint in beam see Sht. 77.

346

DRAWN 10/78
CHECKED 10/78

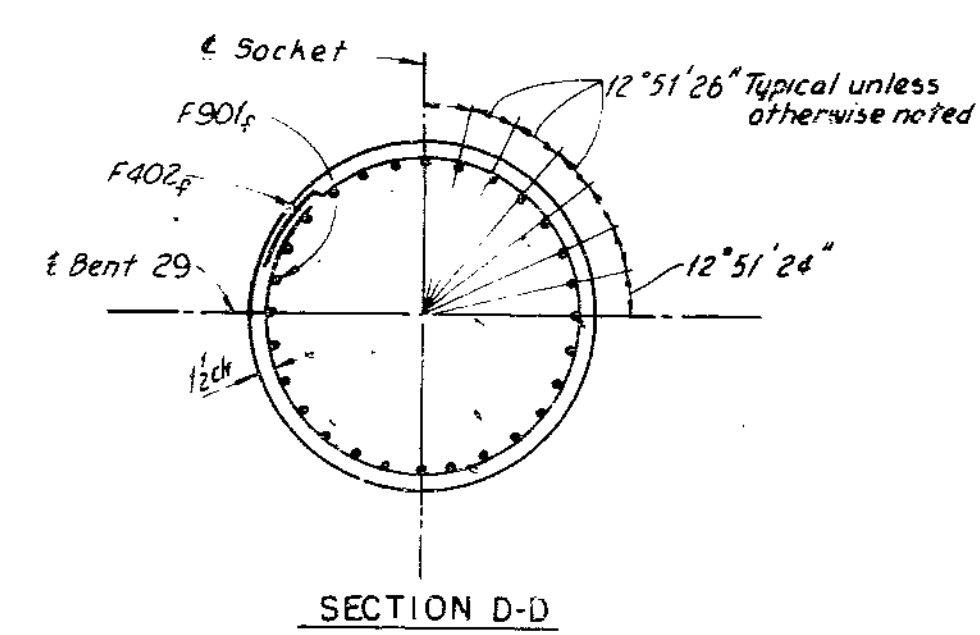
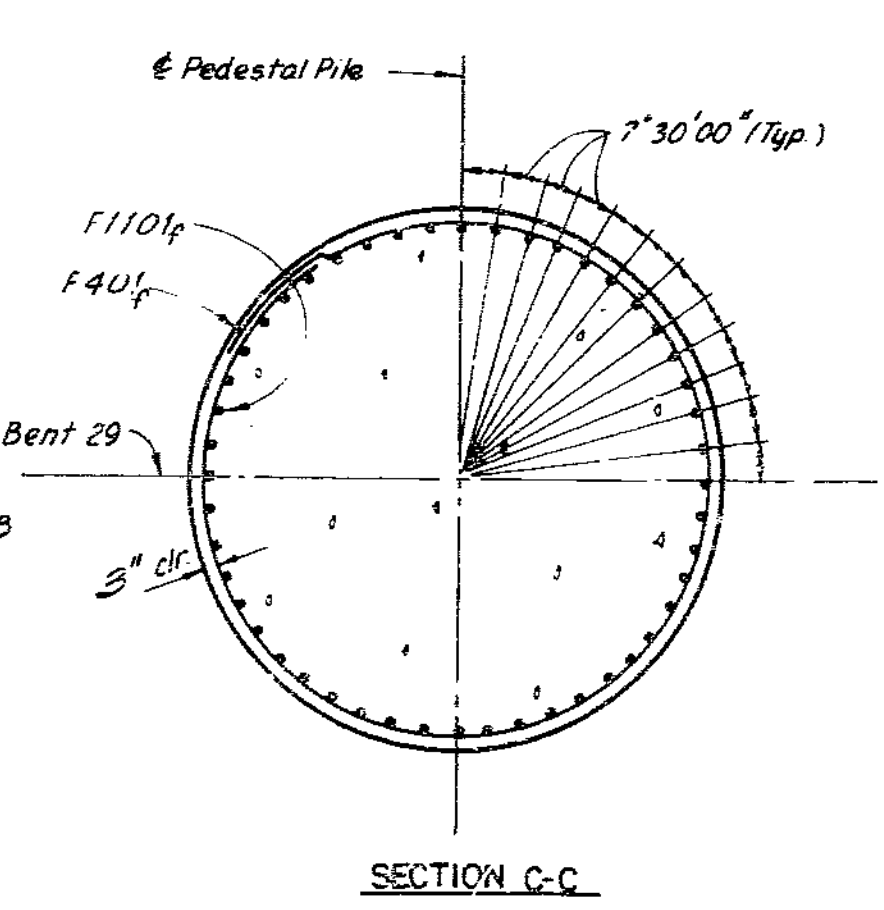
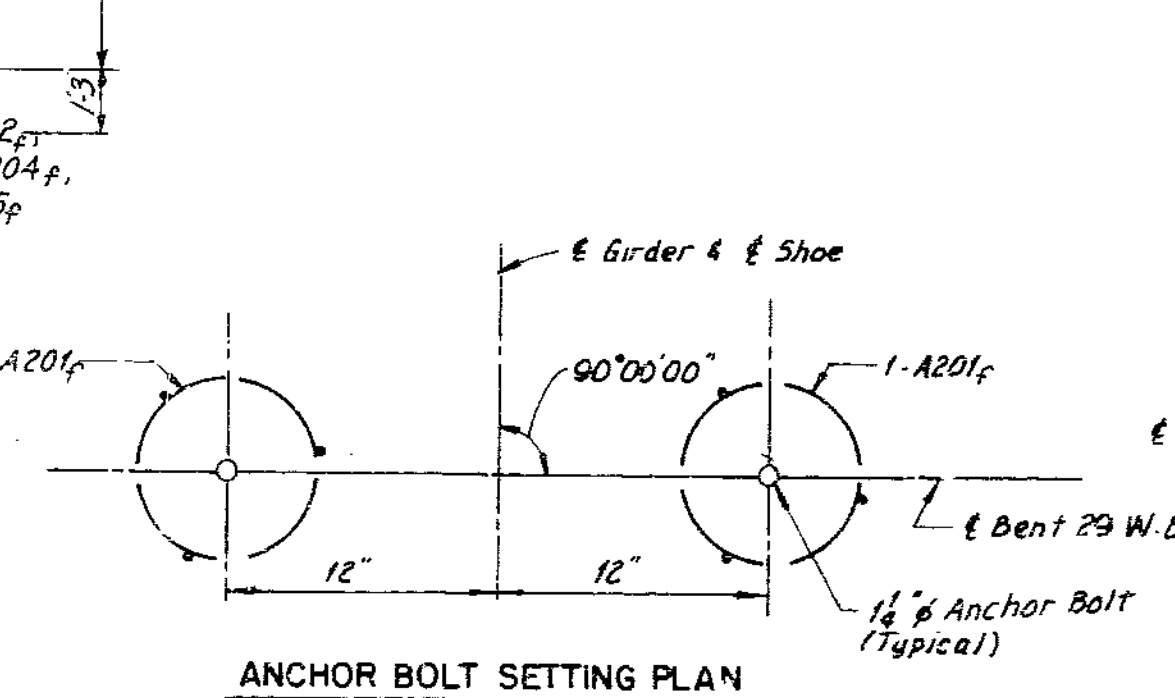
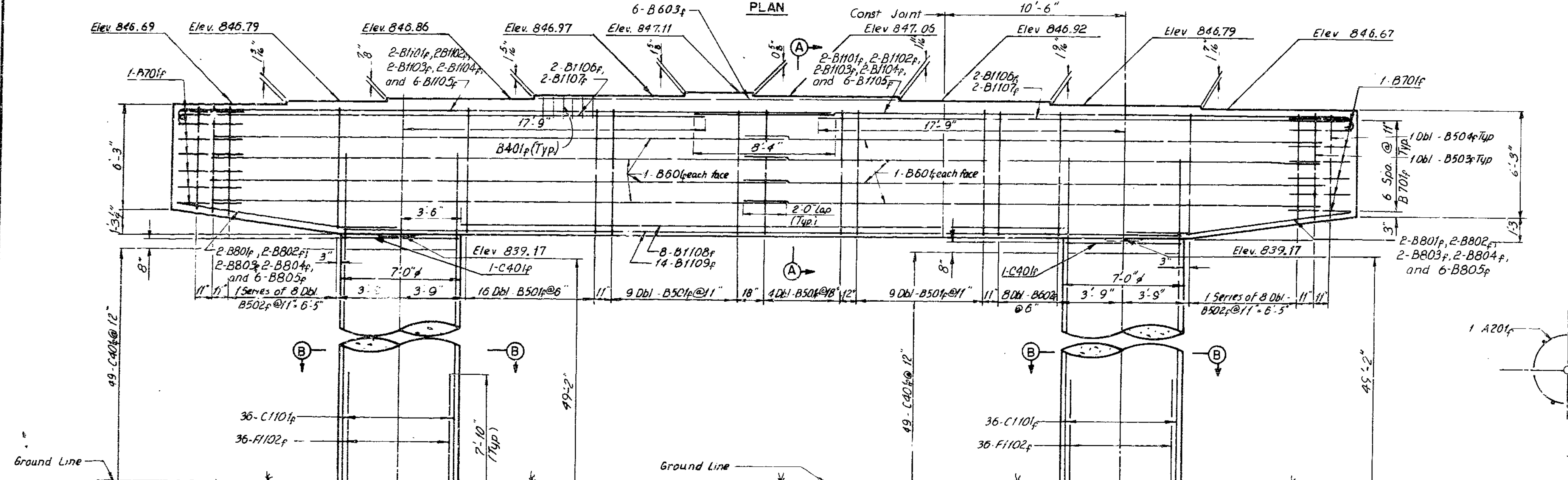
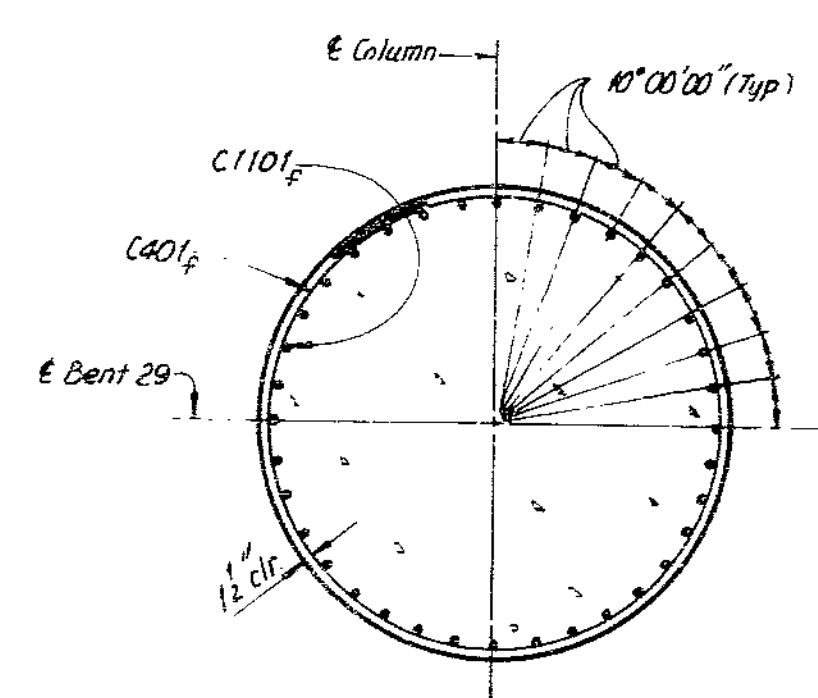
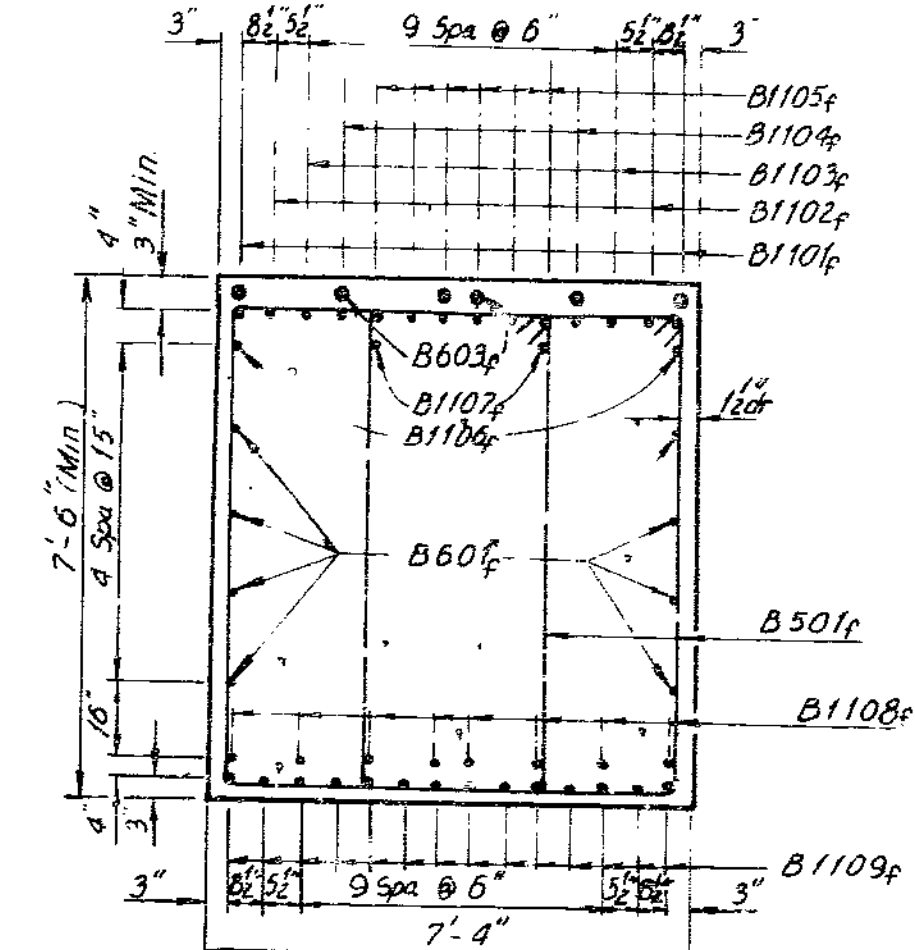
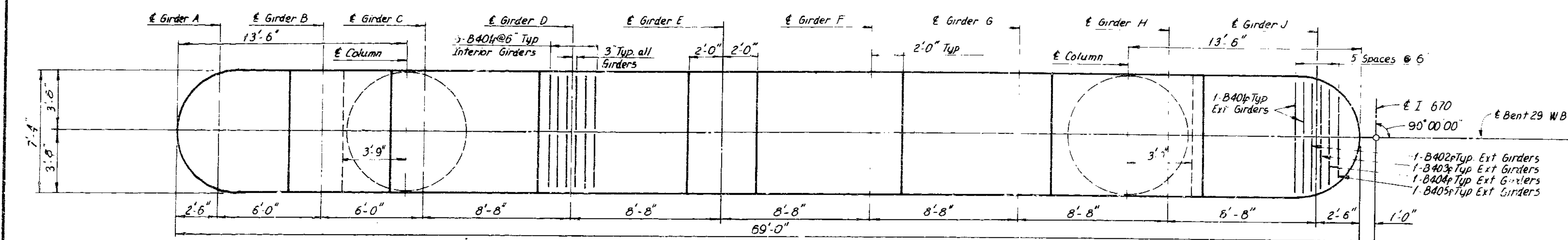
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 78 of 82.

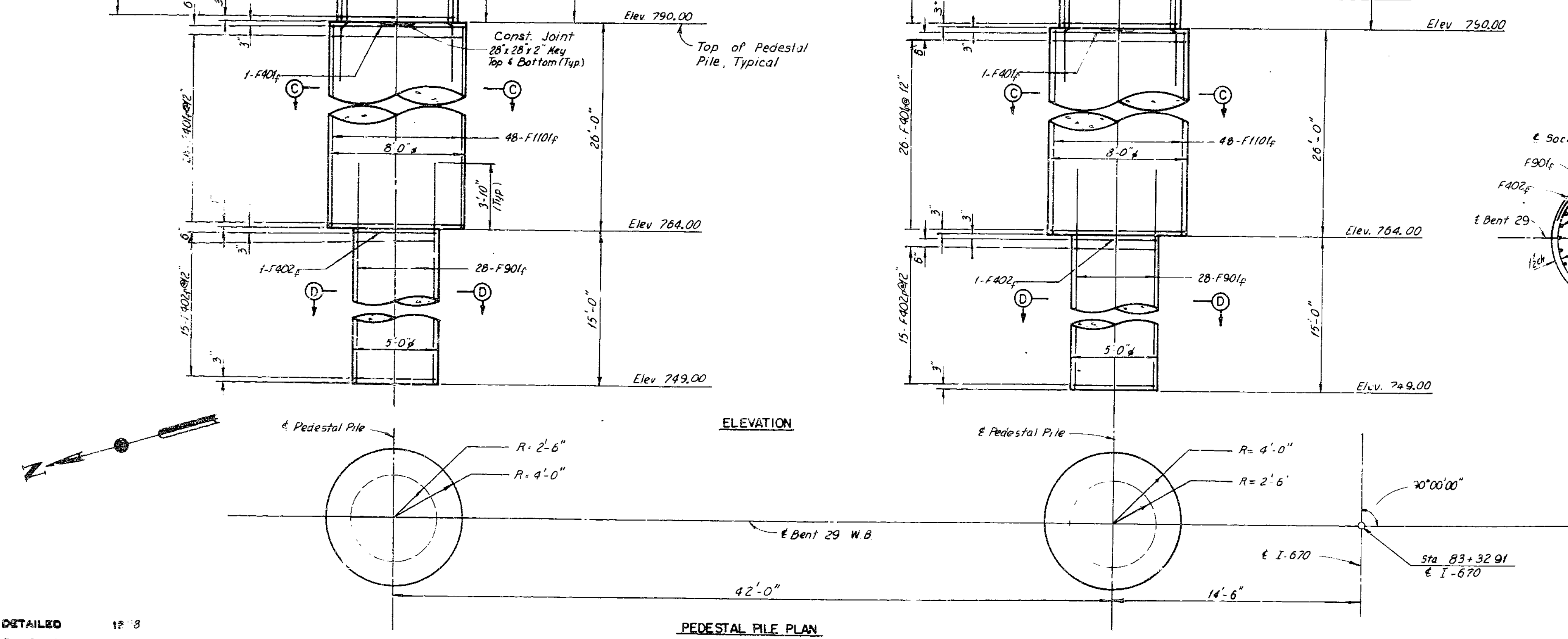
BENT 28 EASTBOUND
PEDESTAL PILE ALTERNATE
JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	122	



Note:
For section thru top of cap beam at anchor bolts see Sheet 77.
For details of vertical construction joint in cap beam see Sheet 77.



347

DETAILED 12-13
CHECKED 11-13

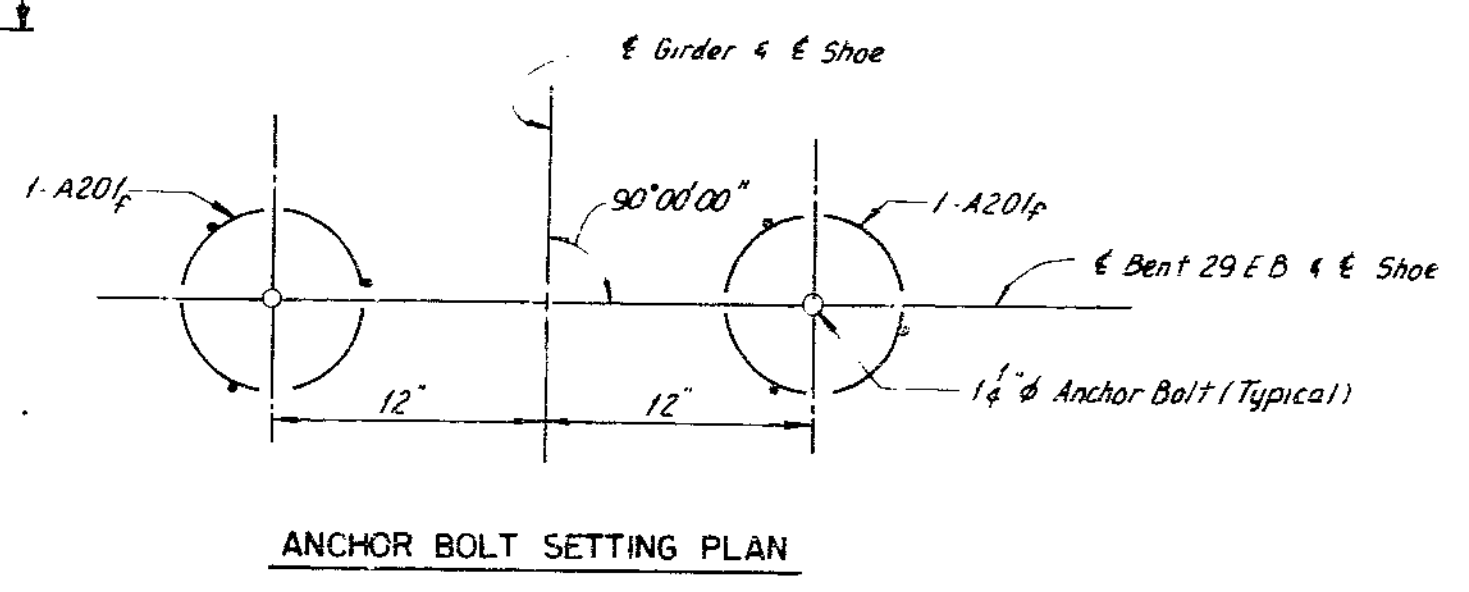
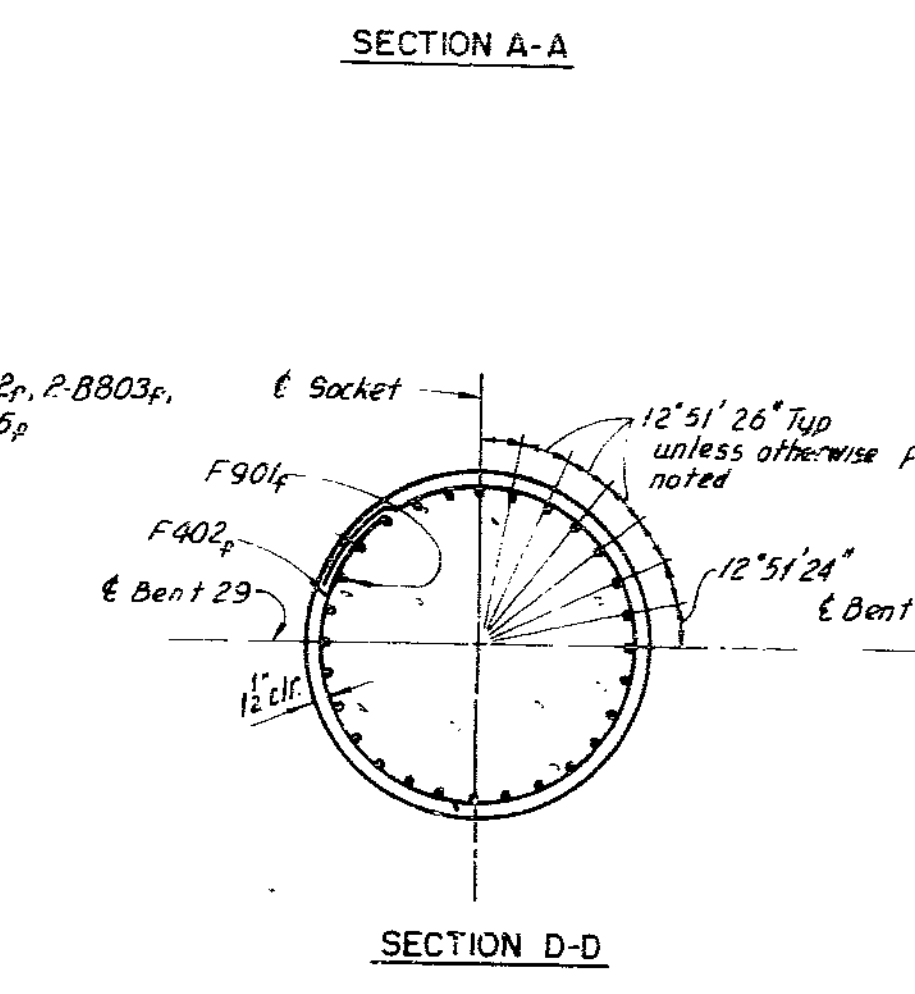
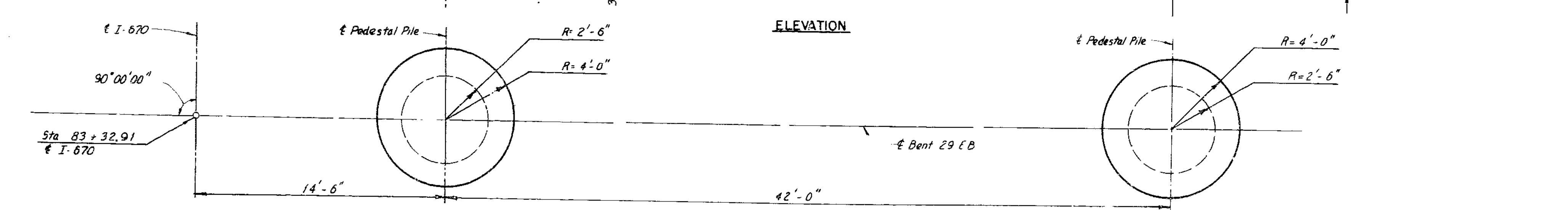
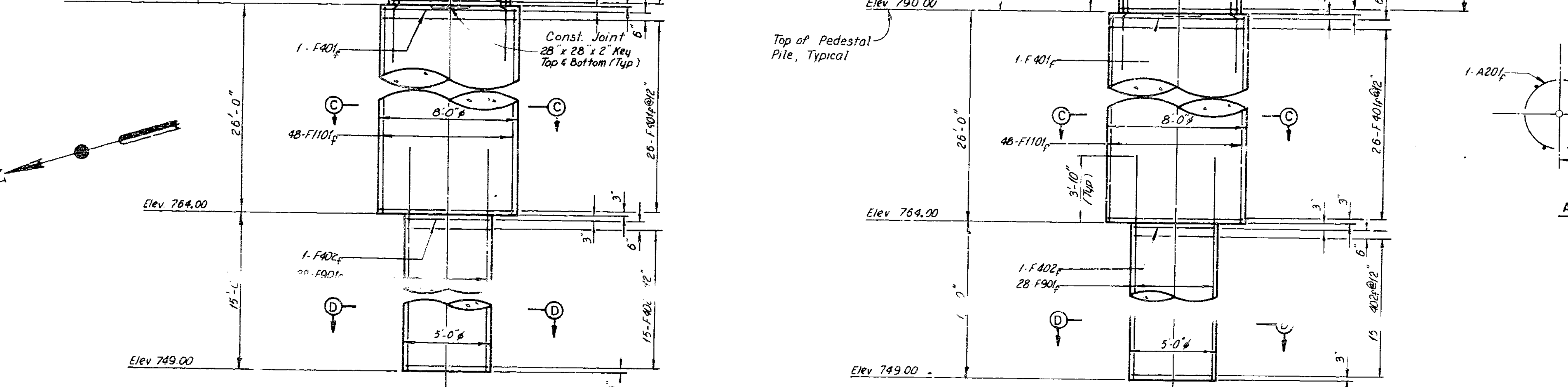
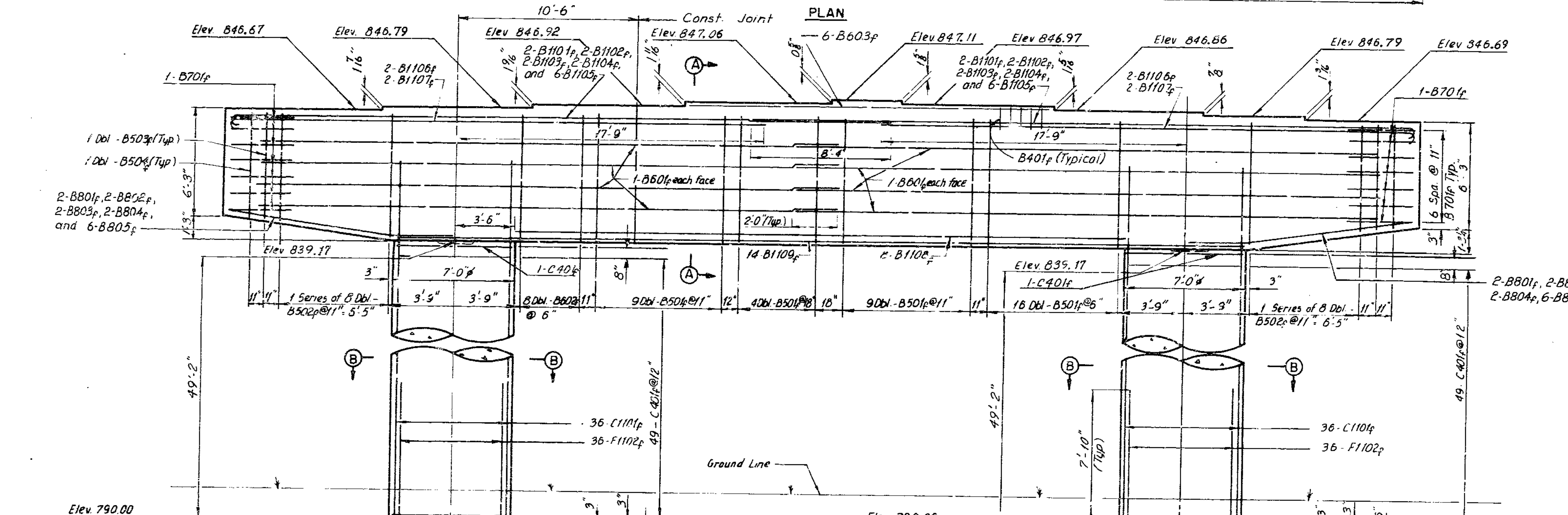
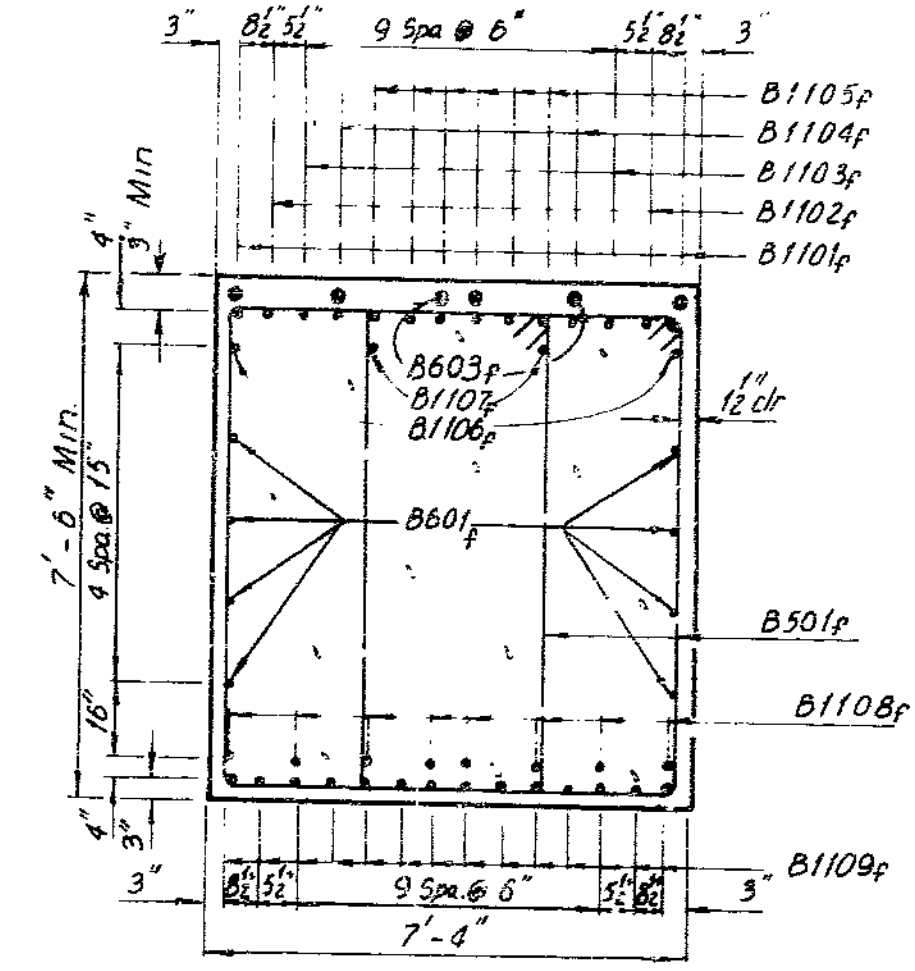
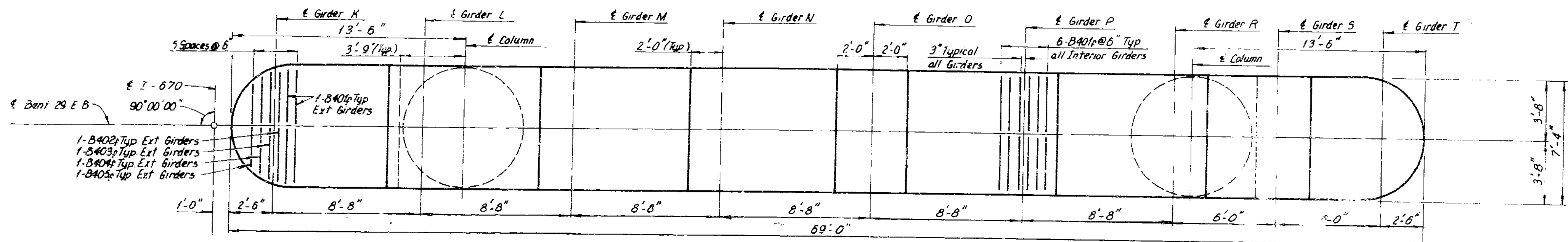
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 73 of 82.

BENT 29 WESTBOUND
PEDESTAL PILE ALTERNATE
JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	143	



Note:
 For section thru top of cap beam at anchor bolts see Sheet 77.
 For details of vertical construction joint in cap beam see Sheet 77.

348

DETAILED 1976
 CHECKED 1978

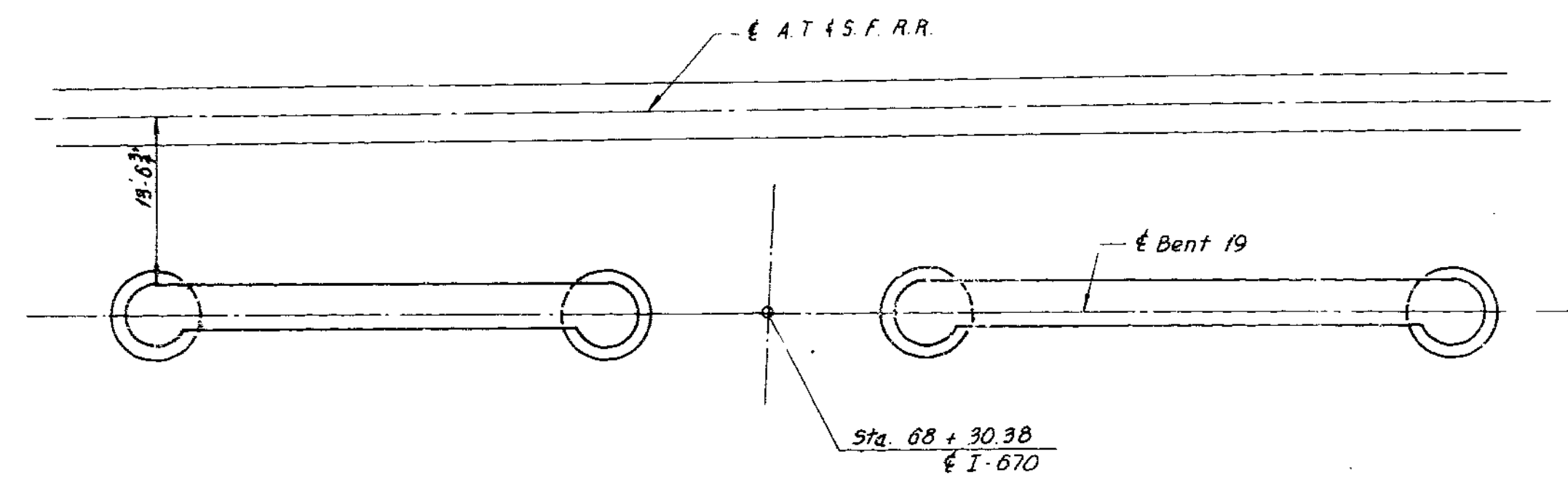
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 74 of 32.

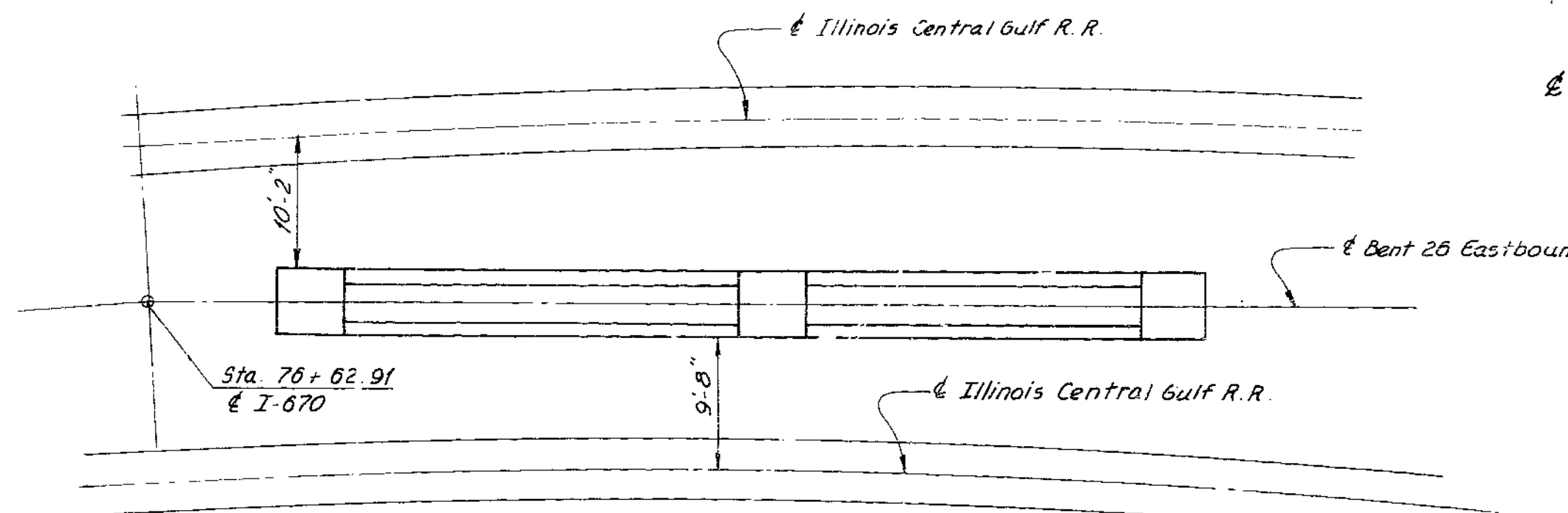
BENT 29 EASTBOUND
 PEDESTAL PILE ALTERNATE
 JACKSON COUNTY

A-3136

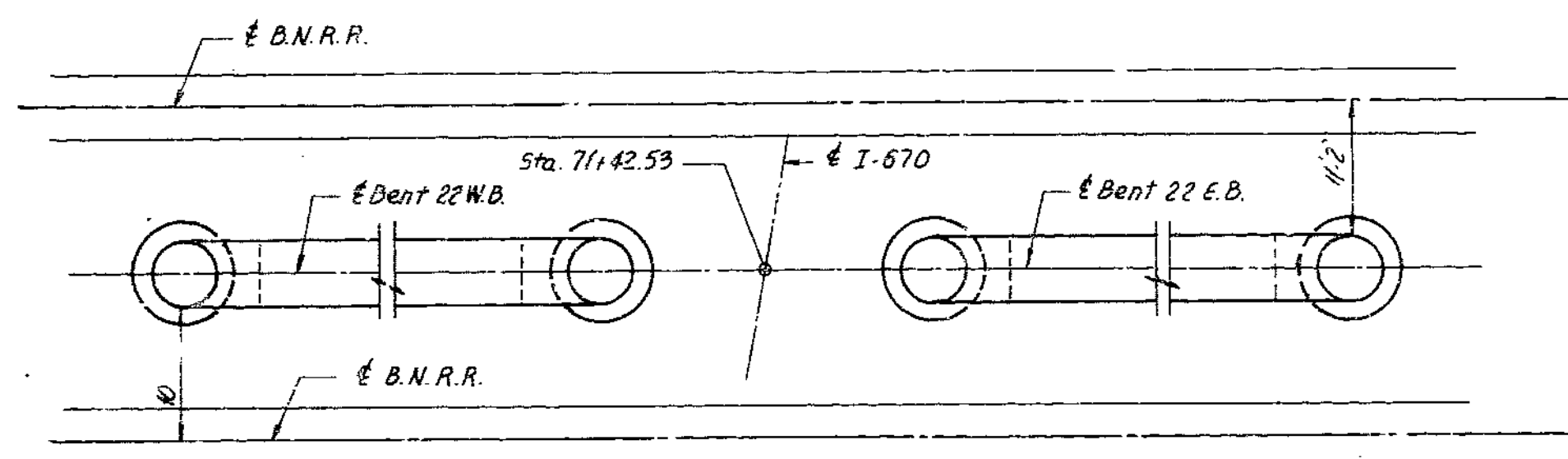
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	146	



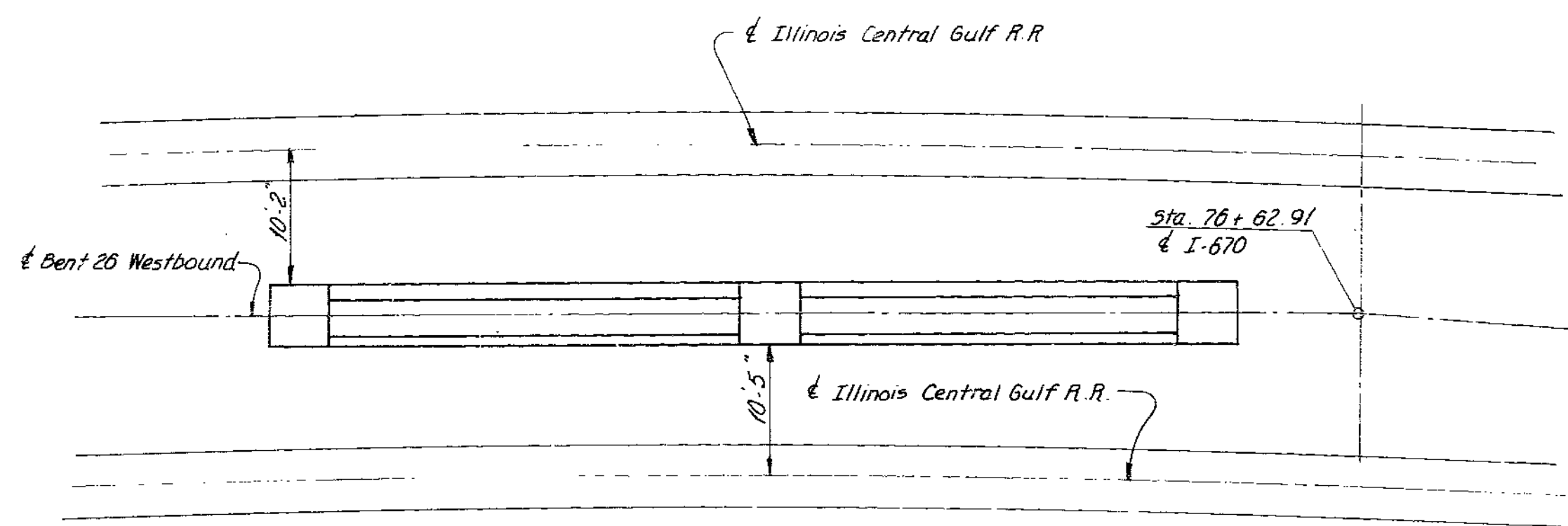
FOOTING LAYOUT
BENT 19 WESTBOUND AND EASTBOUND



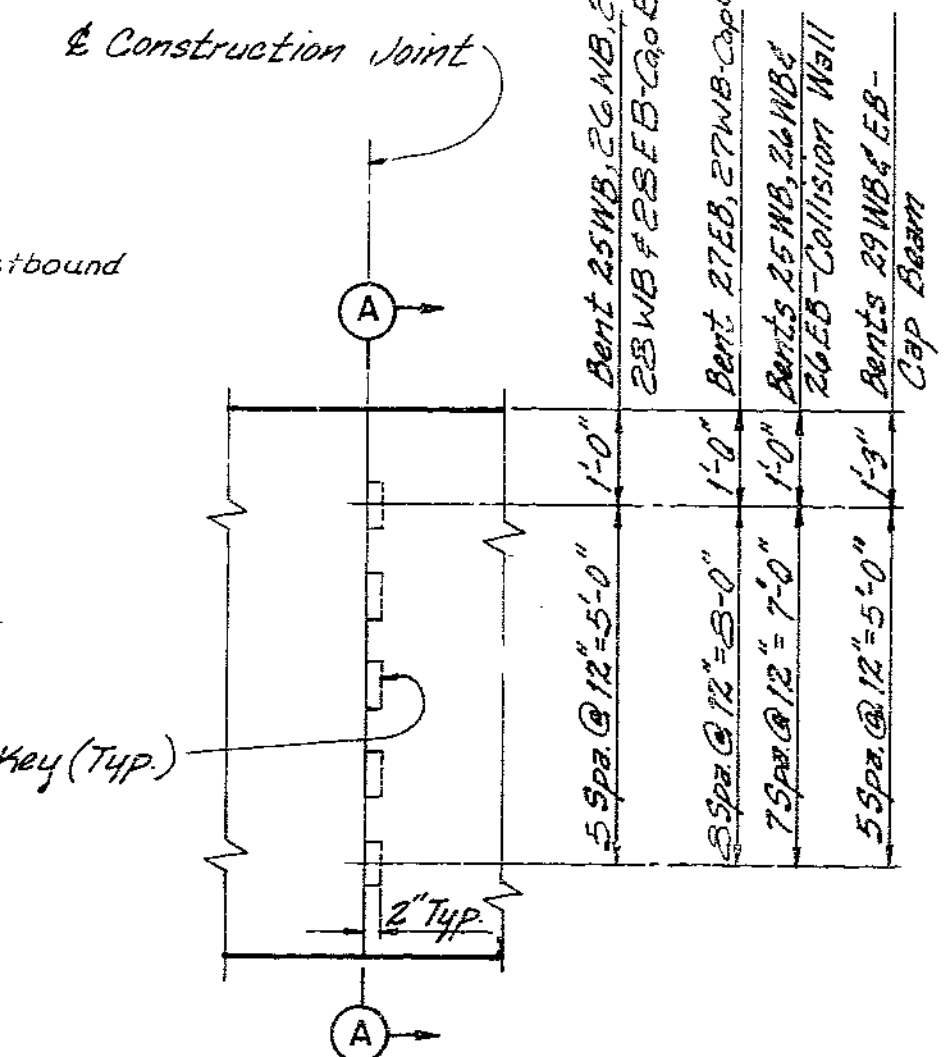
FOOTING LAYOUT
BENT 26 EASTBOUND



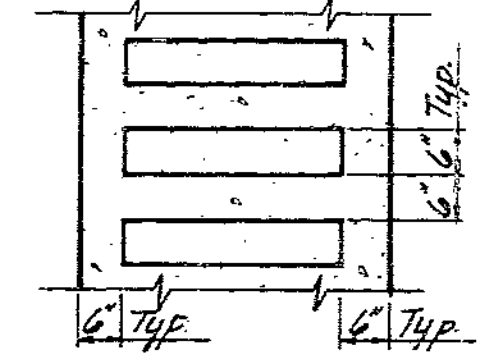
FOOTING LAYOUT
BENT 22 WESTBOUND AND EASTBOUND



FOOTING LAYOUT
BENT 26 WESTBOUND

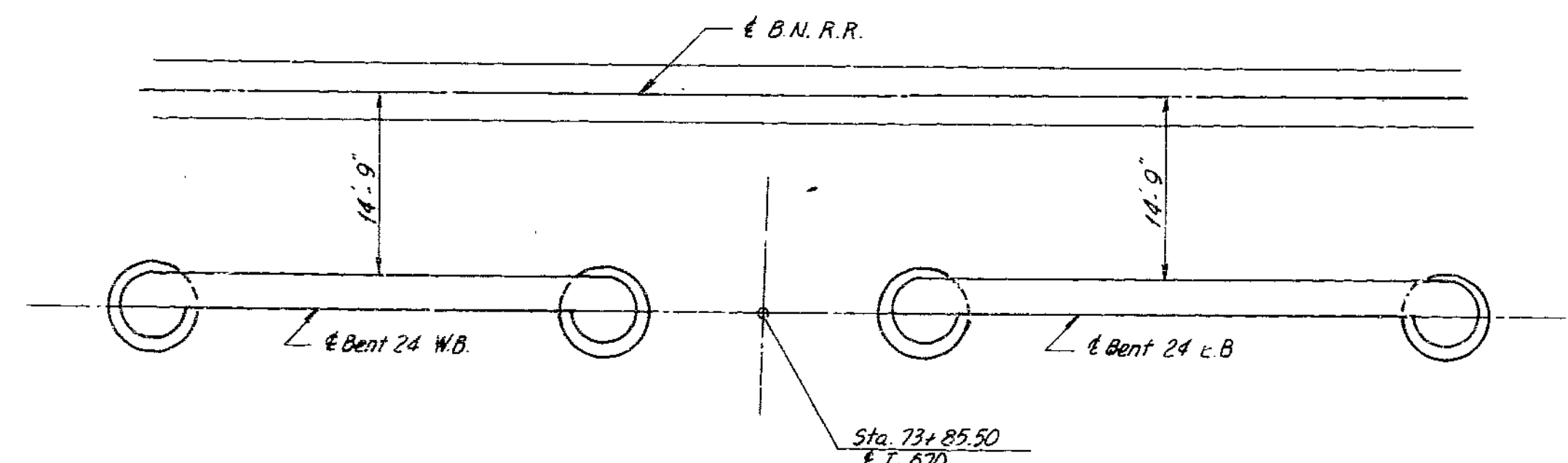


ELEVATION

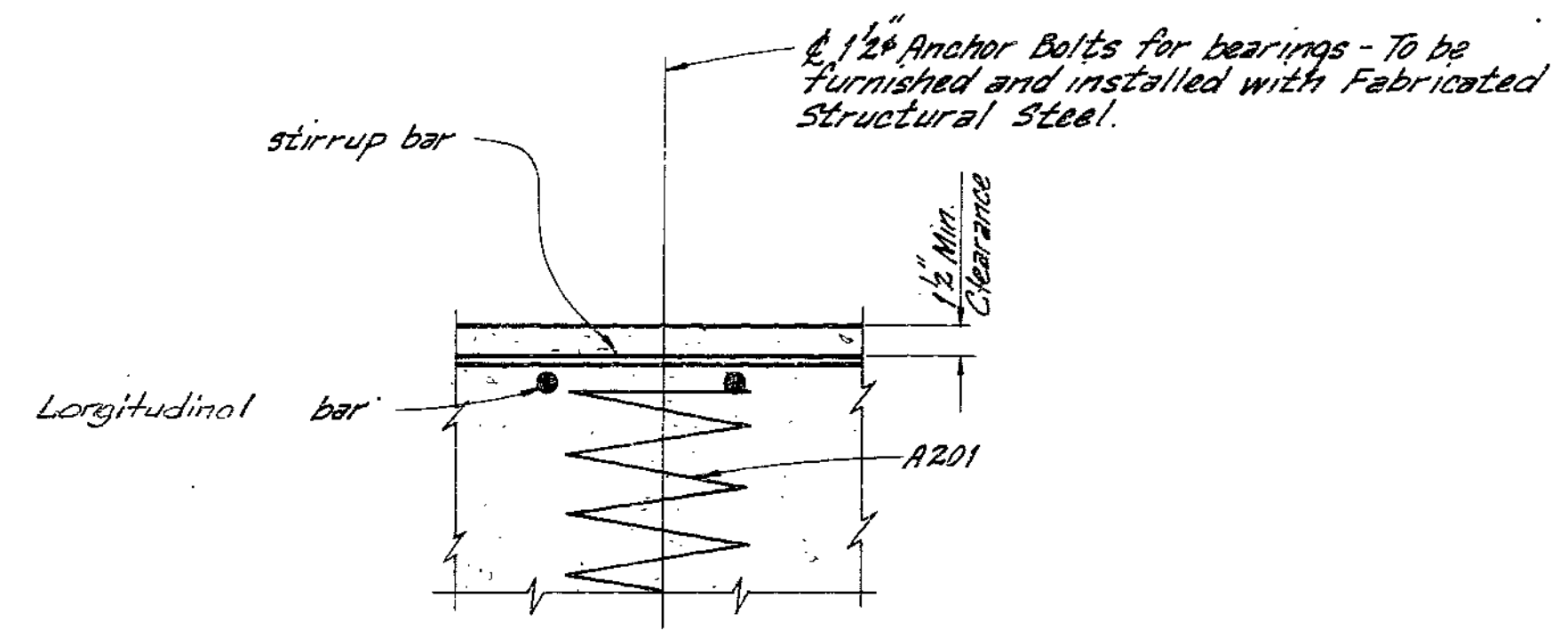


PART SECTION A-A

CAPBEAM AND COLLISION WALL
VERTICAL CONSTRUCTION JOINTS



FOOTING LAYOUT
BENT 24 WESTBOUND AND EASTBOUND



SECTION THRU TOP OF CAPBEAM
(Typical for Bents 12 thru 29)

Note:
All reinforcing bars in top of capbeam or column to clear anchor bolts for bearings by at least 1/2". See Bent details for anchor bolt and reinforcing bar plan locations.

MISCELLANEOUS DETAILS

351

DETAILED 1978
CHECKED 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 77 of 82.

JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		13	147	

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 24 WESTBOUND				
B604 _x	1	18'-0"	109	Beam
B605 _x	1	19'-4"	109	Beam
B606 _x	4	20'-0"	109	Beam
B607 _x	6	53'-0"	Str.	Beam
B701 _x	10	10'-9"	113	Beam
B801 _x	12	32'-6"	101	Beam
B802 _x	13	24'-6"	101	Beam
BENT 24 EASTBOUND				
B701 _x	10	10'-9"	113	Beam
B801 _x	6	54'-10"	100	Beam
B802 _x	12	24'-6"	101	Beam
BENT 25 WESTBOUND				
B601 _e	1	18'-6"	109	Beam
B602 _e	1	21'-6"	109	Beam
B603 _e	22	22'-0"	109	Beam
B604 _e	40	19'-2"	109	Beam
B605 _e	8	23'-0"	109	Beam
B606 _e	34	20'-2"	109	Beam
B607 _e	14	23'-3"	109	Beam
B608 _e	66	20'-5"	109	Beam
B609 _e	18	19'-11"	109	Beam
B610 _e	19	22'-9"	109	Beam
B611 _e	1	22'-3"	109	Beam
B612 _e	1	21'-2"	109	Beam
B613 _e	1	19'-3"	109	Beam
B614 _e	10	60'-0"	Str.	Beam
B615 _e	8	32'-10"	Str.	Beam
B701 _e	12	11'-9"	113	Beam
B1101 _e	6	43'-10"	101	Beam
B1102 _e	8	31'-6"	101	Beam
B1103 _e	6	32'-7"	101	Beam
B1104 _e	2	29'-8"	101	Beam
BENT 25 EASTBOUND				
B501 _a	22	22'-4"	109	Beam
B502 _a	38	19'-8"	109	Beam
B503 _a	40	22'-8"	109	Beam
B504 _a	38	20'-0"	109	Beam
B505 _a	1	21'-9"	109	Beam
B506 _a	1	20'-8"	109	Beam
B507 _a	1	18'-4"	109	Beam
B701 _a	6	11'-3"	113	Beam
B1001 _a	6	33'-1"	101	Beam
B1002 _a	4	27'-11"	101	Beam
B1003 _a	6	36'-8"	101	Beam
B1004 _a	5	33'-10"	101	Beam
BENT 26 WESTBOUND				
B601 _w	14	20'-8"	109	Beam
B602 _w	30	18'-2"	109	Beam
B603 _w	13	21'-4"	109	Beam
B604 _w	34	18'-10"	109	Beam
B605 _w	16	21'-10"	109	Beam
B606 _w	32	19'-4"	109	Beam

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 26 WESTBOUND (CONT.)				
B607 _w	20	18'-9"	109	Beam
B608 _w	13	21'-5"	109	Beam
B609 _w	8	33'-1"	Str.	Beam
B610 _w	8	34'-6"	Str.	Beam
B1001 _w	6	35'-4"	104	Beam
B1003 _w	16	25'-8"	Str.	Beam
B1004 _w	10	29'-11"	101	Beam
BENT 26 EASTBOUND				
B601 _e	22	21'-11"	109	Beam
B602 _e	18	19'-4"	109	Beam
B603 _e	52	19'-10"	109	Beam
B604 _e	17	22'-4"	109	Beam
B605 _e	34	19'-0"	109	Beam
B606 _e	25	20'-3"	109	Beam
B607 _e	30	18'-2"	109	Beam
B608 _e	8	32'-0"	Str.	Beam
B609 _e	8	60'-0"	Str.	Beam
B610 _e	14	2'-6"	109	Beam
B1101 _e	8	29'-1"	101	Beam
B1102 _e	6	53'-11"	101	Beam
B1103 _e	9	30'-1"	101	Beam
BENT 27 WESTBOUND				
B601 _w	22	27'-8"	109	Beam
B602 _w	19	28'-2"	109	Beam
B603 _w	24	25'-8"	109	Beam
B604 _w	24	27'-9"	109	Beam
B605 _w	38	25'-3"	109	Beam
B606 _w	1	27'-5"	109	Beam
B607 _w	1	26'-6"	109	Beam
B608 _w	12	49'-8"	Str.	Beam
B609 _w	12	25'-7"	Str.	Beam
B701 _w	7	10'-9"	113	Beam
B901 _w	4	24'-10"	Str.	Beam
E 701 _w	6	28'-6"	104	Beam
B1002 _w	6	32'-6"	Str.	Beam
B1003 _w	6	33'-3"	101	Beam
BENT 27 EASTBOUND				
B601 _e	20	28'-0"	109	Beam
B602 _e	38	25'-6"	109	Beam
B603 _e	23	28'-2"	109	Beam
B604 _e	72	25'-8"	109	Beam
B605 _e	21	27'-8"	109	Beam
B606 _e	1	27'-4"	109	Beam
B607 _e	1	26'-1"	109	Beam
B608 _e	12	27'-8"	Str.	Beam
B609 _e	12	34'-0"	Str.	Beam
B701 _e	7	10'-9"	113	Beam
B1005 _e	6	30'-5"	104	Beam
BENT 28 WESTBOUND				
B601 _w	25	20'-3"	109	Beam
B602 _w	33	21'-0"	109	Beam
B603 _w	52	18'-6"	109	Beam
B604 _w	18	18'-3"	109	Beam
B605 _w	1	19'-5"	109	Beam
B606 _w	6	38'-0"	Str.	Beam
B607 _w	6	33'-1"	Str.	Beam
B701 _w	5	10'-9"	113	Beam
B1001 _w	6	27'-9"	104	Beam

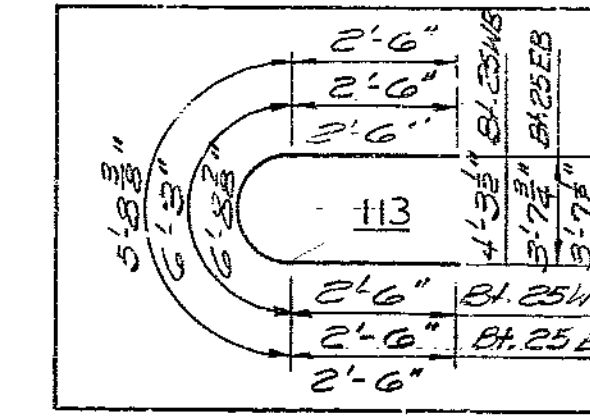
BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 28 WESTBOUND (CONT.)				
B606 _e	6	38'-0"	Str.	Beam
B607 _e	6	33'-1"	Str.	Beam
B701 _e	5	10'-9"	113	Beam
B1001 _e	6	27'-9"	104	Beam
BENT 28 EASTBOUND				
B601 _e	25	20'-3"	109	Beam
B602 _e	33	21'-0"	109	Beam
B603 _e	52	18'-6"	109	Beam
B604 _e	18	18'-3"	109	Beam
B605 _e	1	19'-5"	109	Beam
B606 _e	6	38'-0"	Str.	Beam
B607 _e	6	33'-1"	Str.	Beam
B701 _e	5	10'-9"	113	Beam
B1001 _e	6	27'-9"	104	Beam

SADDLE WALLS				
MARK	NO.	LENGTH	SHAPE	LOCATION
W501	203	1'-5"	Str.	Saddle Wall
W502	40	2'-2"	Str.	Saddle Wall
W503	16	15'-8"	Str.	Saddle Wall
W504	16	8'-0"	Str.	Saddle Wall
W505	8	14'-9"	Str.	Saddle Wall
W506	8	7'-6"	Str.	Saddle Wall
W507	24	3'-2"	Str.	Saddle Wall
W508	48	5'-1"	101	Saddle Wall

Note: The bars in the saddle walls are not included in the price bid item "Reinforcing Steel (Grade 60)" instead are in the price bid item "Drainage System (on Structure)".

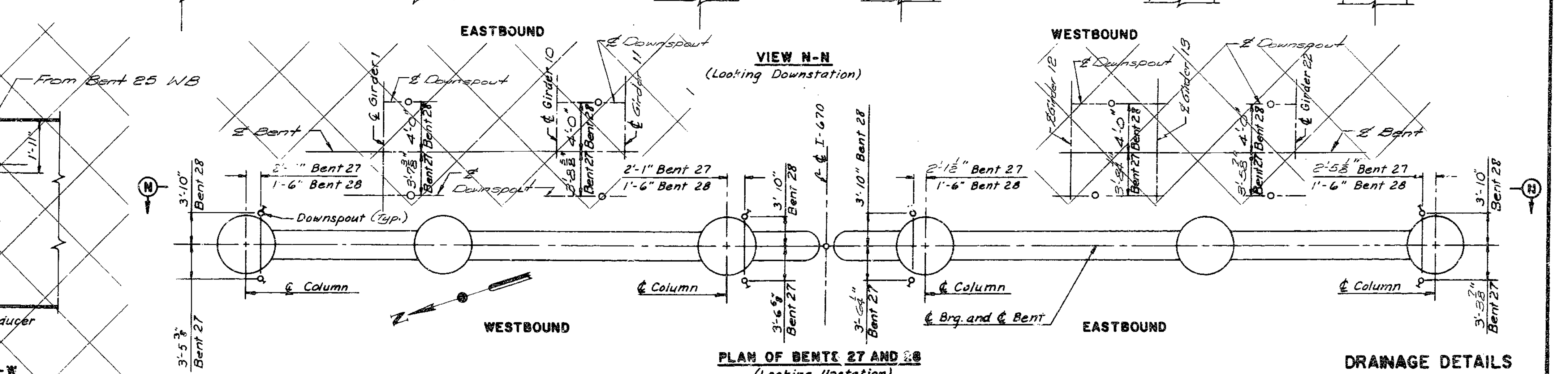
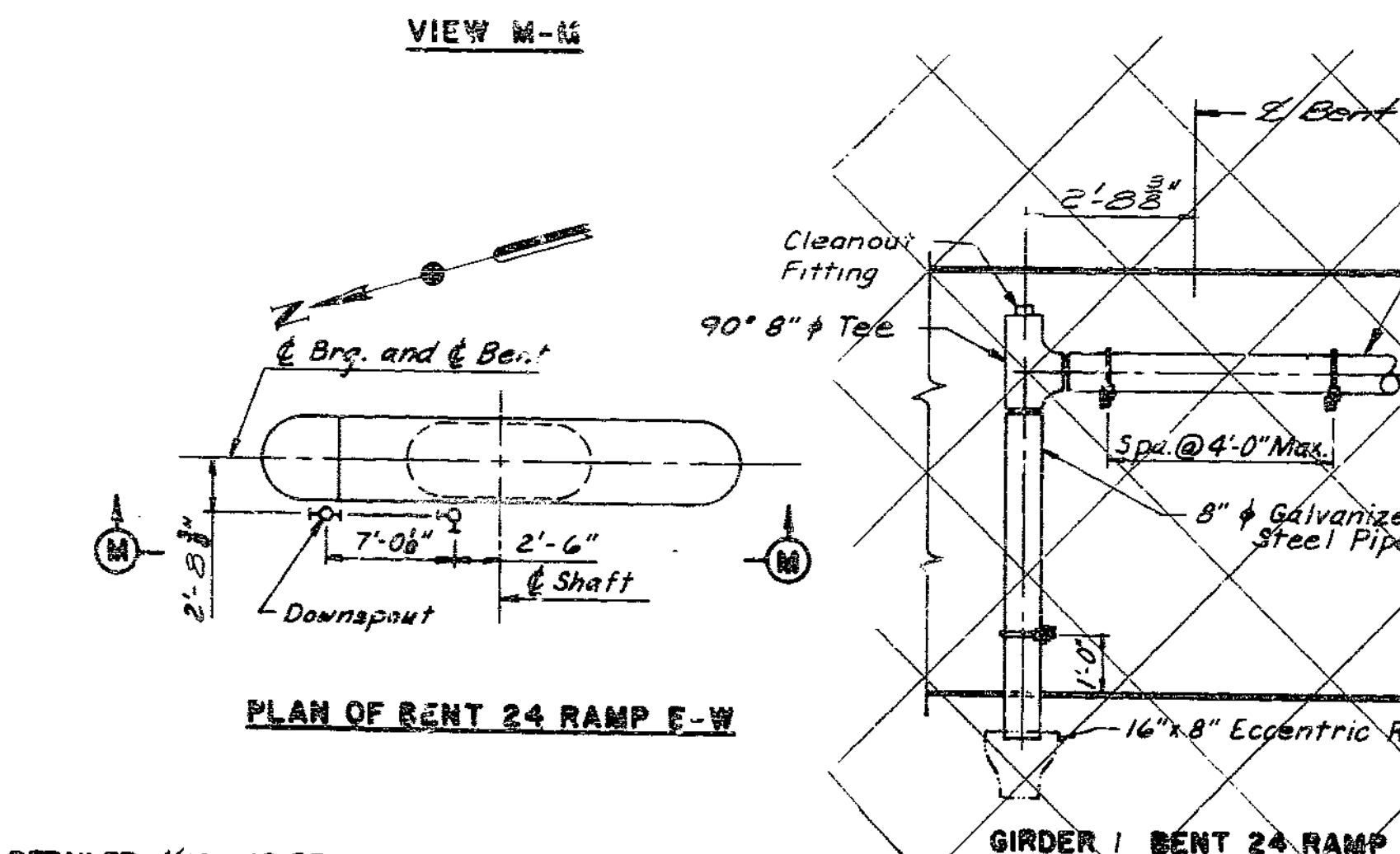
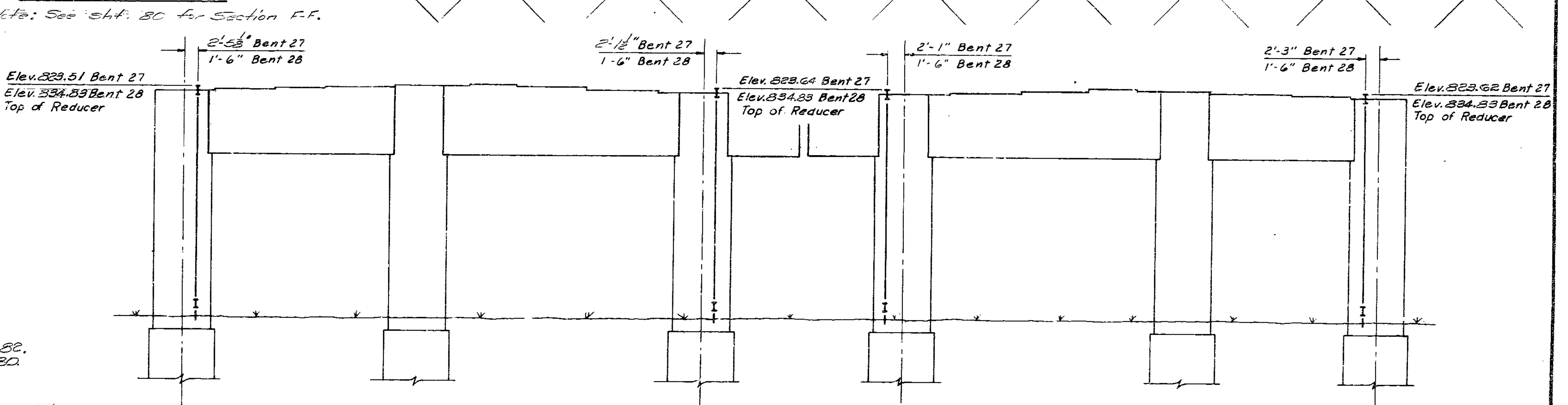
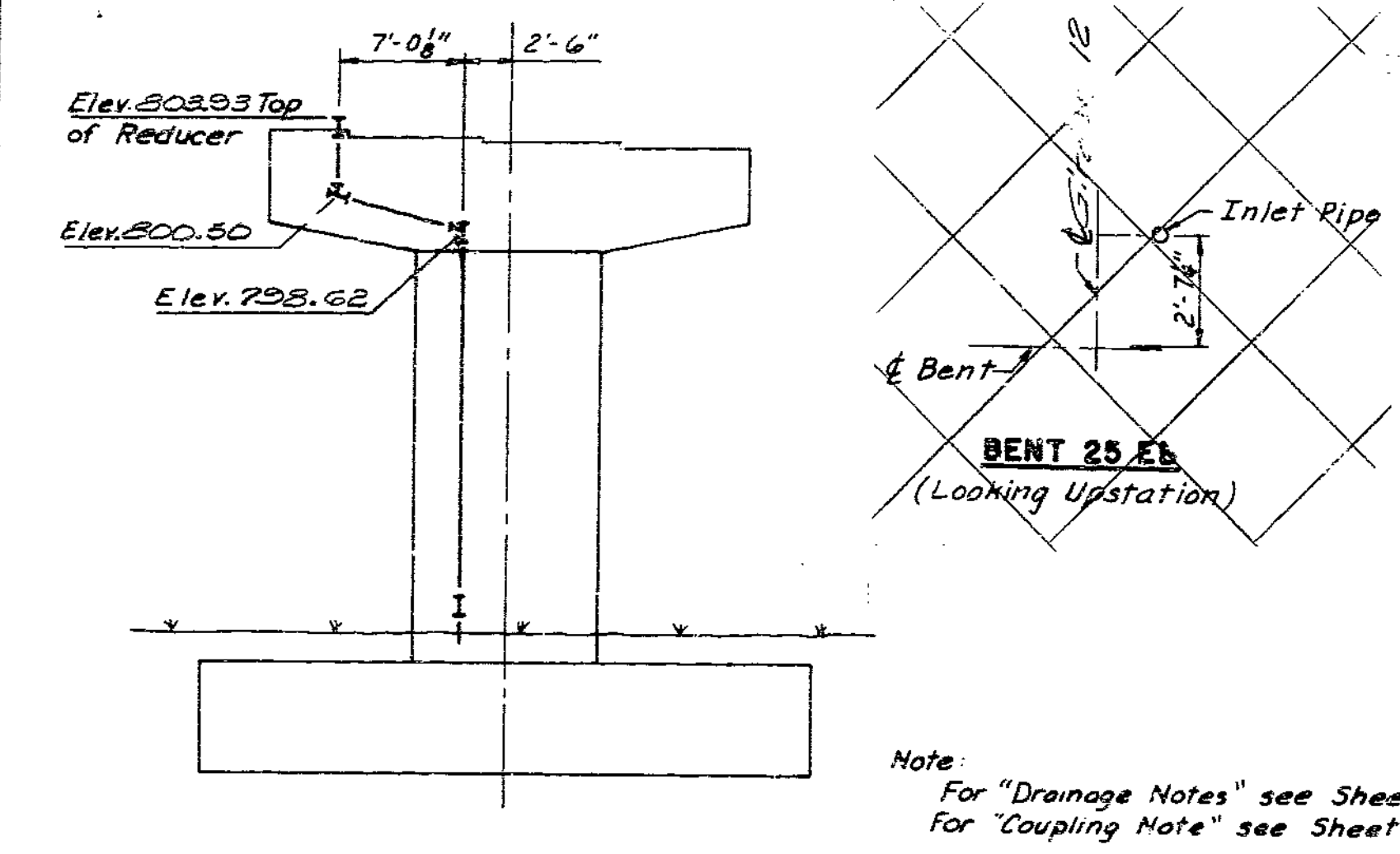
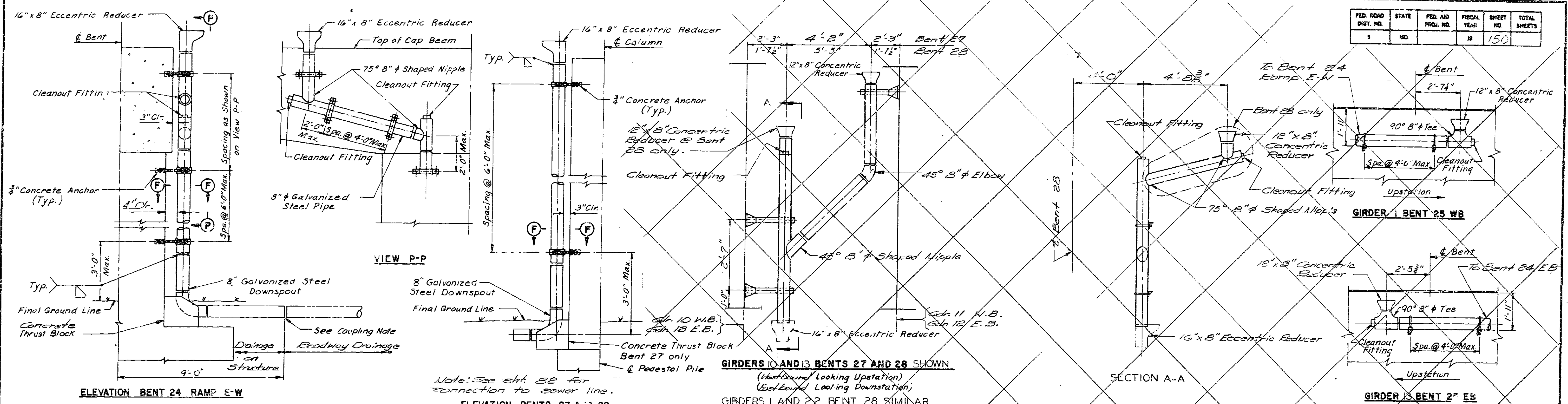
BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 28 WESTBOUND				
B601 _w	25	20'-3"	109	Beam
B602 _w	33	21'-0"	109	Beam
B603 _w	52	18'-6"	109	Beam
B604 _w	18	18'-3"	109	Beam
B605 _w	1	19'-5"	109	Beam

Note: Bars in all bents will be billed and tagged separately. Hooks and bends shall be in accordance with A.C.I. Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI-318-71). All reinforcing steel shall be grade 60. W.B. denotes Westbound Lanes. E.B. denotes Eastbound Lanes.



BENT	MARK	A	B
24 WB	B801 _a	31'-7"	11"
24 WB	B802 _a	23'-7"	11"
24 EB	B802 _e	23'-7"	11"
25 WB	B1101 _e	42'-3"	1'-7"
25 WB	B1102 _e	29'-11"	1'-7"
25 WB	B1103 _e	31'-0"	1'-7"
25 WB	B1104 _e	28'-1"	1'-7"
25 EB	B1001 _e	26'-8"	1'-5"
25 EB	B1002 _e	26'-6"	1'-5"
25 WB	B604 _e	3'-0"	6'-3"
25 WB	B605 _e	3'-0"	6'-3"
25 WB	B606 _e	4'-1 1/2"	6'-3"
25 WB	B607 _e	4'-5"	6'-3"
25 WB	B608 _e	4'-5"	6'-3"
25 WB	B609 _e	4'-5"	6'-3"
25 WB	B610 _e	4'-5"	6'-3"
25 WB	B611 _e	4'-5"	6'-3"
25 WB	B612 _e	4'-5"	6'-3"
25 WB	B613 _e	4'-5"	6'-3"
25 WB	B614 _e	4'-5"	6'-3"
25 WB	B615 _e	4'-5"	6'-3"
25 WB	B616 _e	4'-5"	6'-3"
25 WB	B617 _e	4'-5"	6'-3"
25 WB	B618 _e	4'-5"	6'-3"
25 WB	B619 _e	4'-5"	6'-3"
25 WB	B620 _e	4'-5"	6'-3"
25 WB	B621 _e	4'-5"	6'-3"
25 WB	B622 _e	4'-5"	6'-3"
25 WB	B623 _e	4'-5"	6'-3"
25 WB	B624 _e	4'-5"	6'-3"
25 WB	B625 _e	4'-5"	6'-3"
25 WB	B626 _e	4'-5"	6'-3"
25 WB	B627 _e	4'-5"	6'-3"
25 WB	B628 _e	4'-5"	6'-3"
25 WB	B629 _e	4'-5"	6'-3"
25 WB	B630 _e	4'-5"	6'-3"
25 WB	B631 _e	4'-5"	6'-3"
25 WB	B632 _e	4'-5"	6'-3"
25 WB	B633 _e	4'-5"	6'-3"
25 WB	B634 _e	4'-5"	6'-3"
25 WB	B635 _e	4'-5"	6'-3"
25 WB	B636 _e	4'-5"	6'-3"
25 WB	B637 _e	4'-5"	6'-3"
25 WB	B638 _e	4'-5"	6'-3"
25 WB	B639 _e	4'-5"	6'-3"
25 WB	B640 _e	4'-5"	6'-3"
25 WB	B641 _e	4'-5"	6'-3"
25 WB	B642 _e	4'-5"	6'-3"
25 WB	B643 _e	4'-5"	6'-3"
25 WB	B644 _e	4'-5"	6'-3"
25 WB	B645 _e	4'-5"	6'-3"
25 WB	B646 _e	4'-5"	6'-3"
25 WB	B647 _e	4'-5"	6'-3"
25 WB	B648 _e	4'-5"	6'-3"
25 WB	B649 _e	4'-5"	6'-3"
25 WB	B650 _e	4'-5"	6'-3"
25 WB	B651 _e	4'-5"	6'-3"
25 WB	B652 _e	4'-5"	6'-3"
25 WB	B653 _e	4'-5"	6'-3"
25 WB	B654 _e	4'-5"	6'-3"
25 WB	B655 _e	4'-5"	6'-3"
25 WB	B656 _e	4'-5"	6'-3"
25 WB	B657 _e	4'-5"	6'-3"
25 WB	B658 _e	4'-5"	6'-3"
25 WB	B659 _e	4'-5"	6'-3"
25 WB	B660 _e	4'-5"	6'-3"
25 WB	B661 _e	4'-5"	6'-3"
25 WB	B662 _e	4'-5"	6'-3"
25 WB	B663 _e	4'-5"	6'-3"
25 WB	B664 _e	4'-5"	6'-3"
25 WB	B665 _e	4'-5"	6'-3"
25 WB	B666 _e	4'-5"	6'-3"
25 WB	B667 _e	4'-5"	6'-3"
25 WB	B668 _e	4'-5"	6'-3"
25 WB	B669 _e	4'-5"	6'-3"
25 WB	B670 _e	4'-5"	6'-3"
25 WB	B671 _e	4'-5"	6'-3"
25 WB	B672 _e	4'-5"	6'-3"
25 WB	B673 _e	4'-5"	6'-3"
25 WB	B674 _e	4'-5"	6'-3"
25 WB	B675 _e	4'-5"	6'-3"
25 WB	B676 _e	4'-5"	6'-3"
25 WB	B677<		

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		10	150	



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DETAILED March 1982
CHECKED 19

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 81 of 82.

JACKSON COUNTY

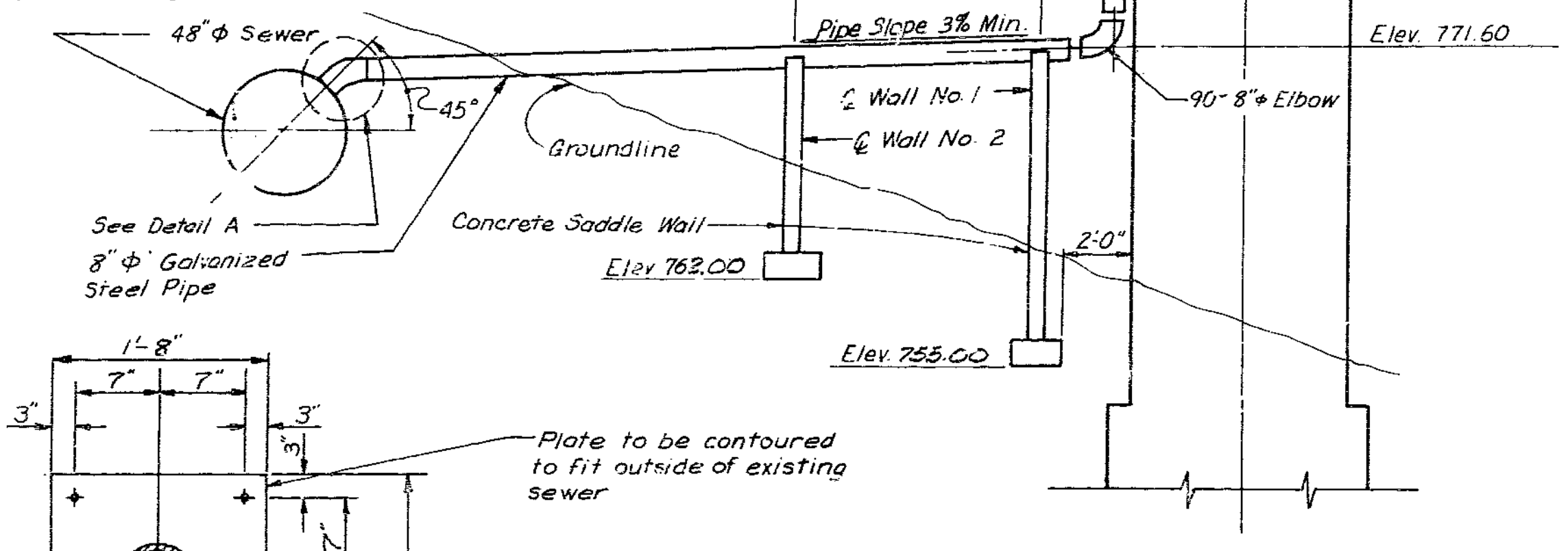
A-3136

Drainage Notes:

See Slab Plans for location of deck inlets. Cut slab reinforcing bars to clear deck inlets. Additional reinforcing bars D601 and D602 shall be set between top and bottom bars. All notes for deck inlet and supports shall be as shown except where shown otherwise and shall be governed by other fabrication. Cost of furnishing and installing concrete inserts, threaded anchor rods, nuts, washers, anchor stops, downspouts, connecting to sewer and other necessary drainage system incidentals shall be included in the Lump Sum price bid "Drainage System (On Structure)." Concrete anchors shall be of self-drilling expansion type made of case hardened and drawn carburized steel with self-cutting annular broaching grooves equal to Red Head (Phillips Drill Co.) or Bulldog (U. D. Polis Mfg. Co.).

The cost of concrete thrust block is to be included in the price bid for "Drainage System (On Structure)." For details of the Concrete Thrust Block see Sections K-K and I-I, Sheet 79. For position of the Concrete Thrust Block pedestal alternate is built, see "Elevation Bent 27 and 28", Sheet 81.

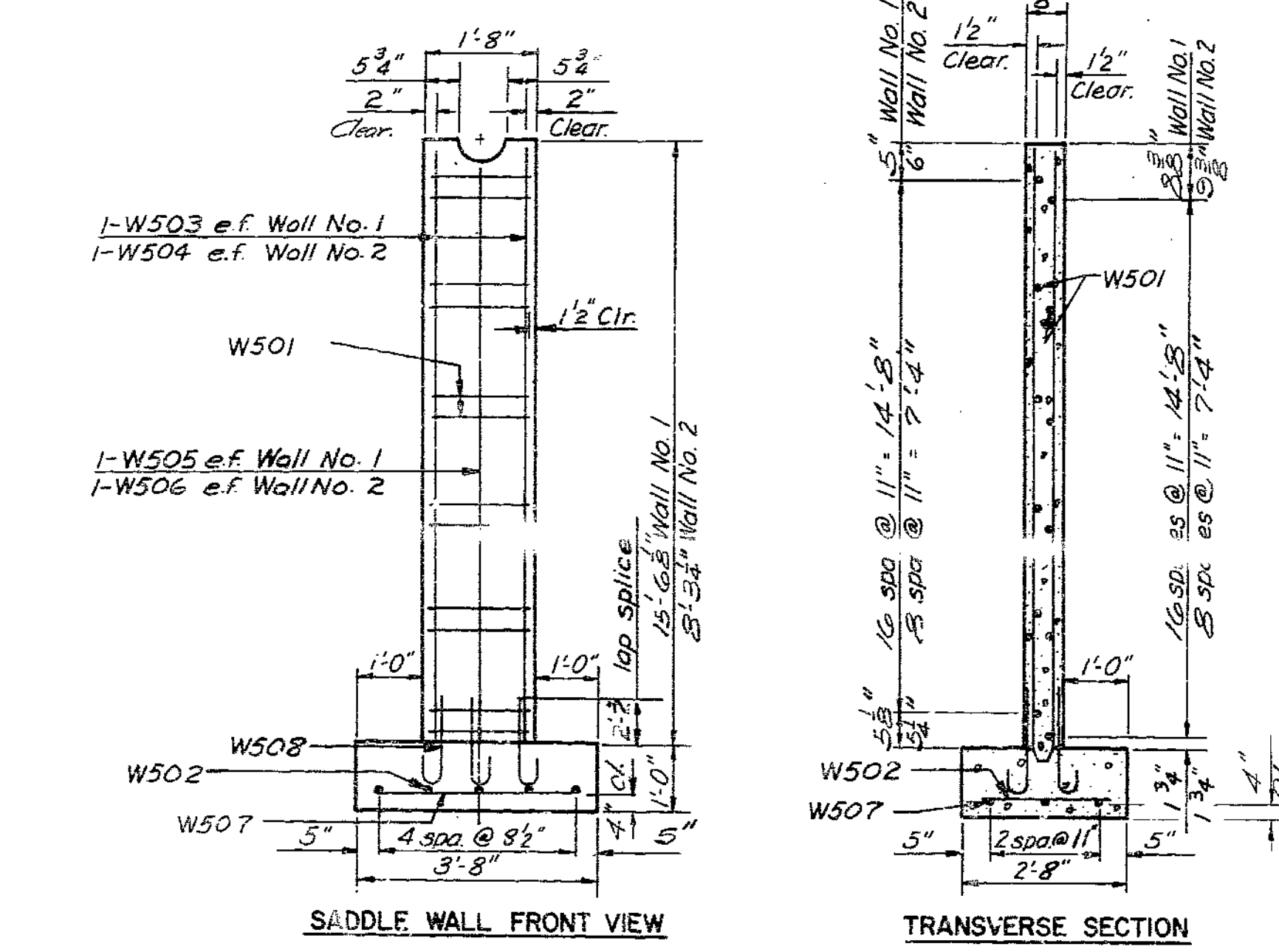
The length of pipe below final ground line is the same for the pedestal pile alternate as the pile footing alternate.



ELEVATION VIEW BENT 28

Note: The cost of excavation, backfilling and materials for the Saddle Walls is to be included in the Price bid for "Drainage System (on Structure)." See Sheet 78 for "Bill of Reinforcement" for the Saddle Walls.

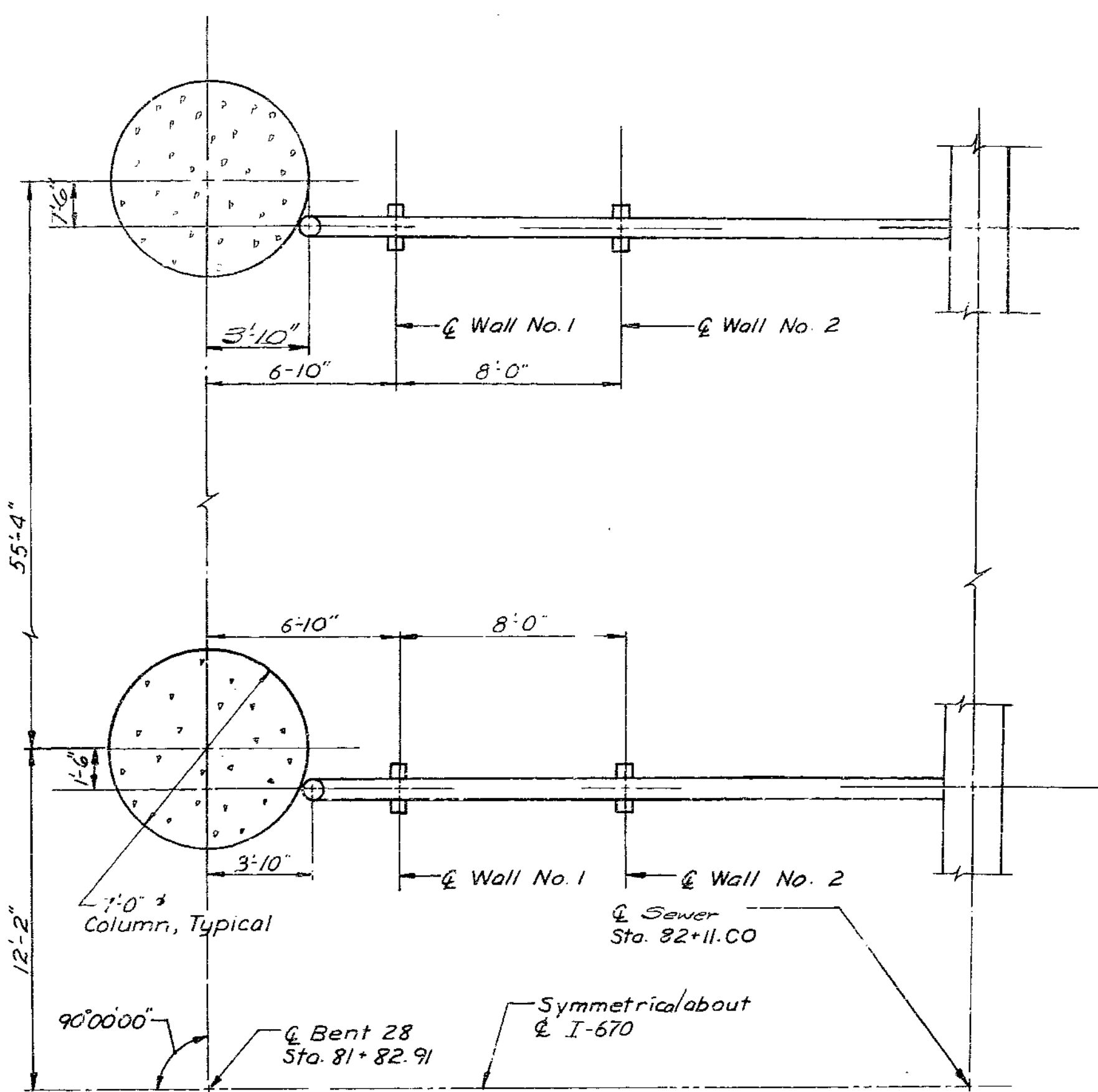
SADDLE PLATE BENT 28



SADDLE WALL FRONT VIEW

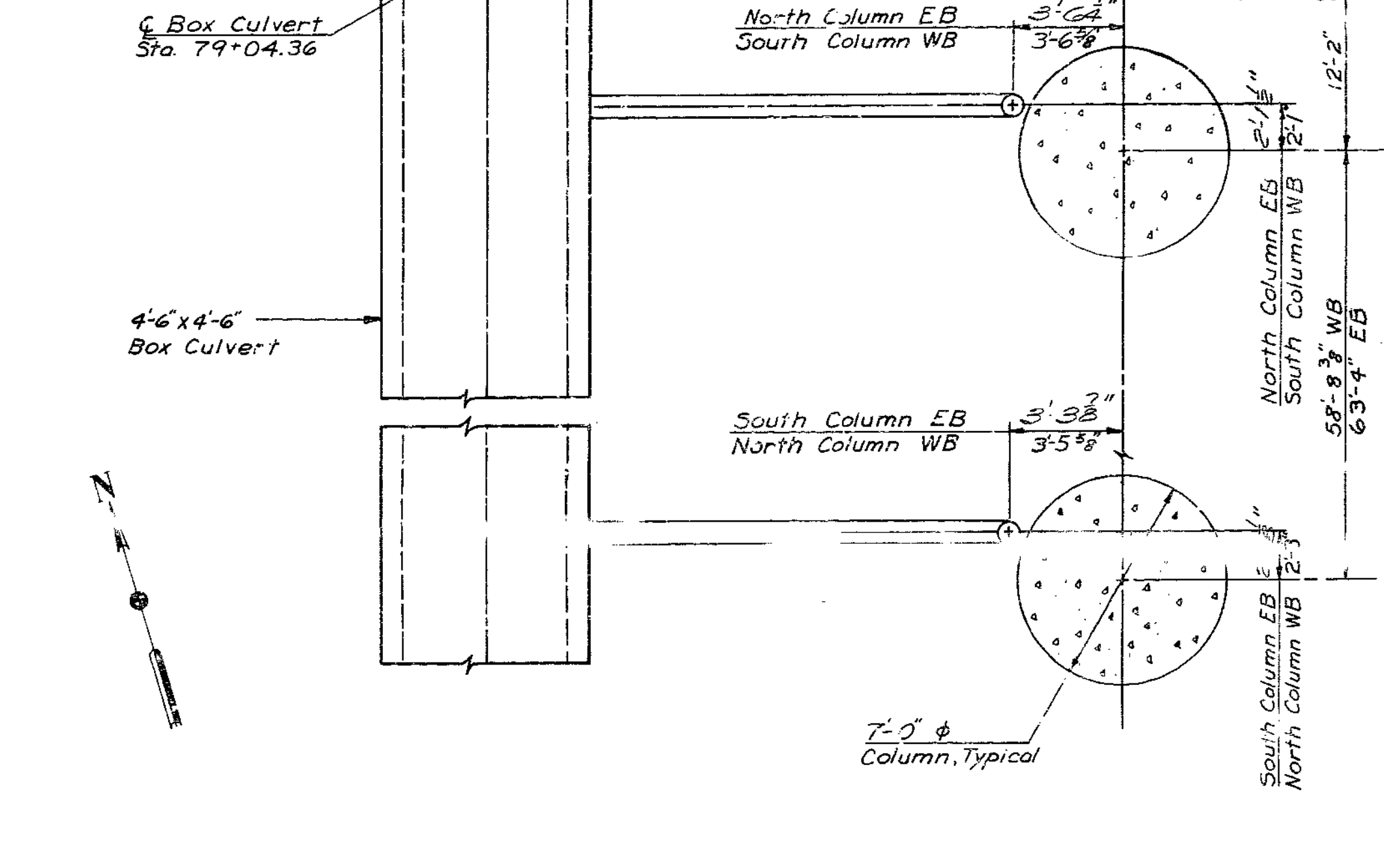
TRANSVERSE SECTION

Legend: e.f. denotes each face

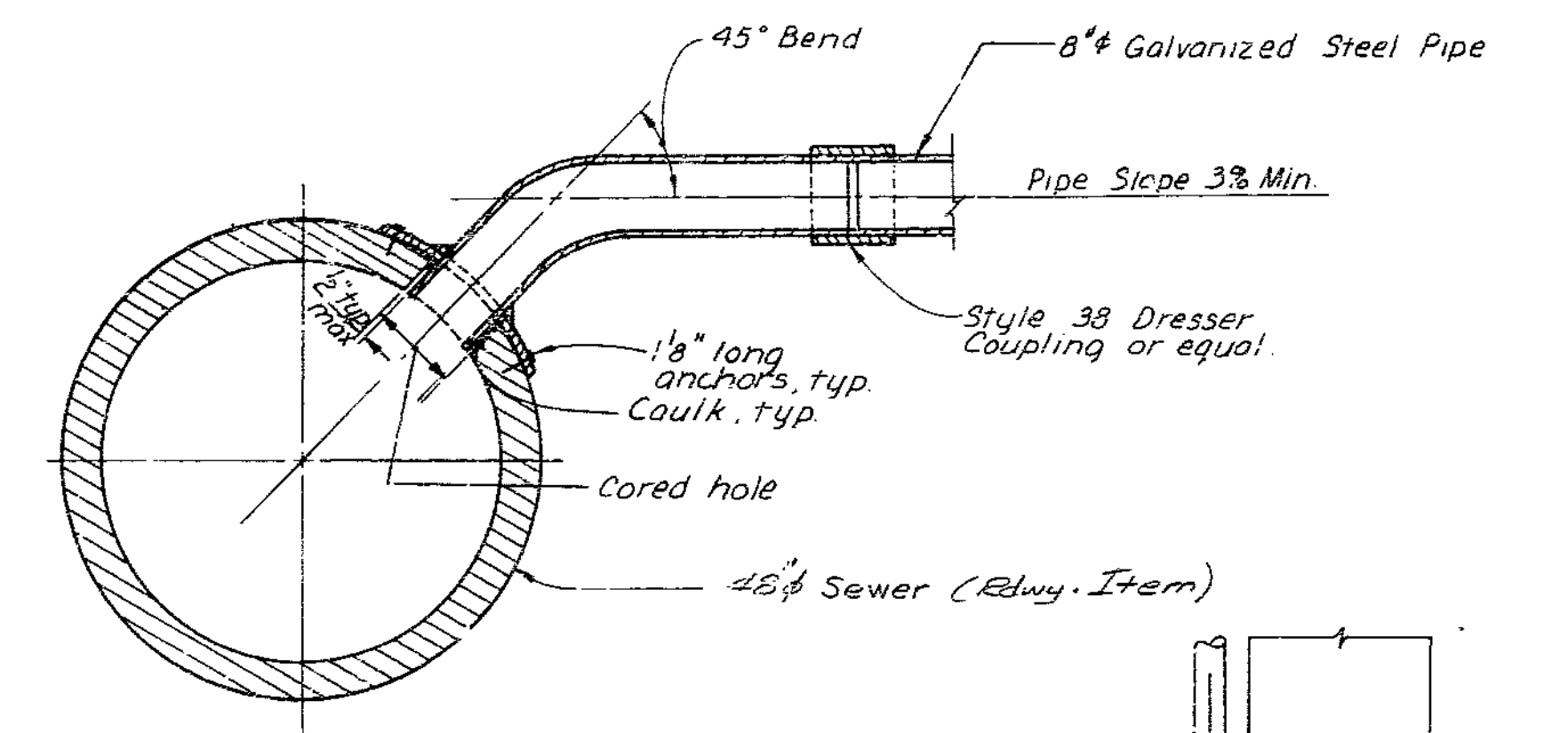


PLAN BENT 28

Symmetrical about \bar{C} -I-670 unless otherwise shown

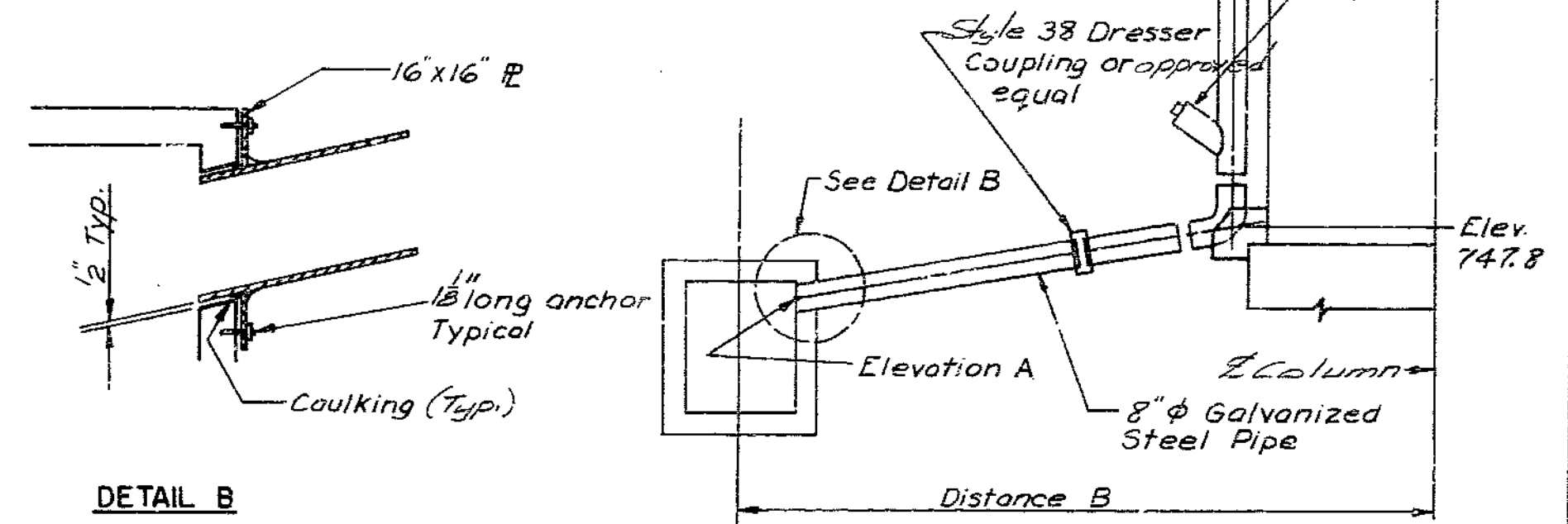


PLAN BENT 27



DETAIL A

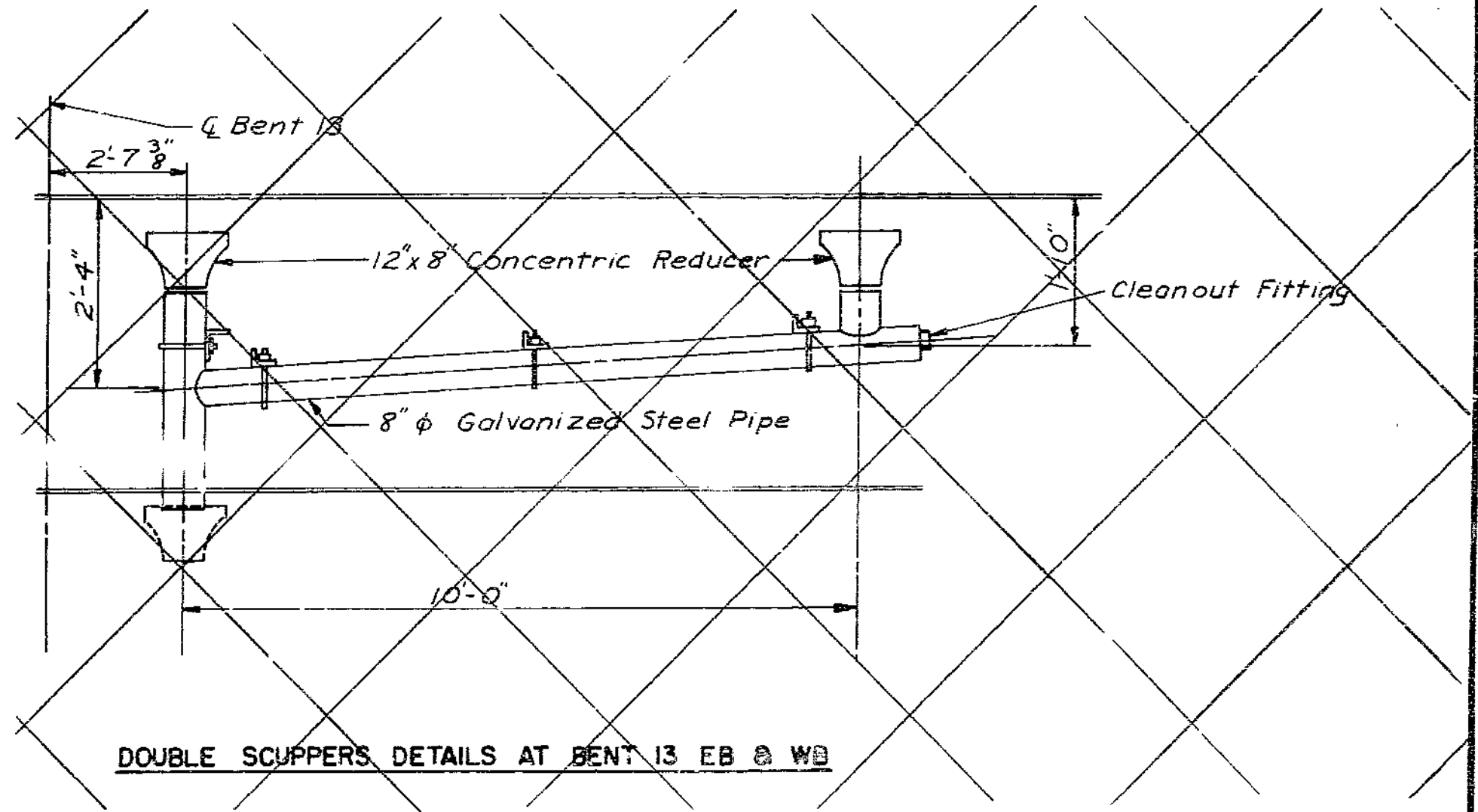
Note: All pipes and fittings to be galvanized.



DETAIL B

ELEVATION VIEW BENT 27

LOCATION	ELEVATION A	DISTANCE B
North Column WB	742.5	17.4
South Column WB	742.7	18.4
North Column EB	742.8	18.7
South Column EB	743.0	19.7



DOUBLE SCUPPERS DETAILS AT BENT 13 EB & WB

DRAINAGE DETAILS

DETAILED 18 79
CHECKED 18 79

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 82 of 82.

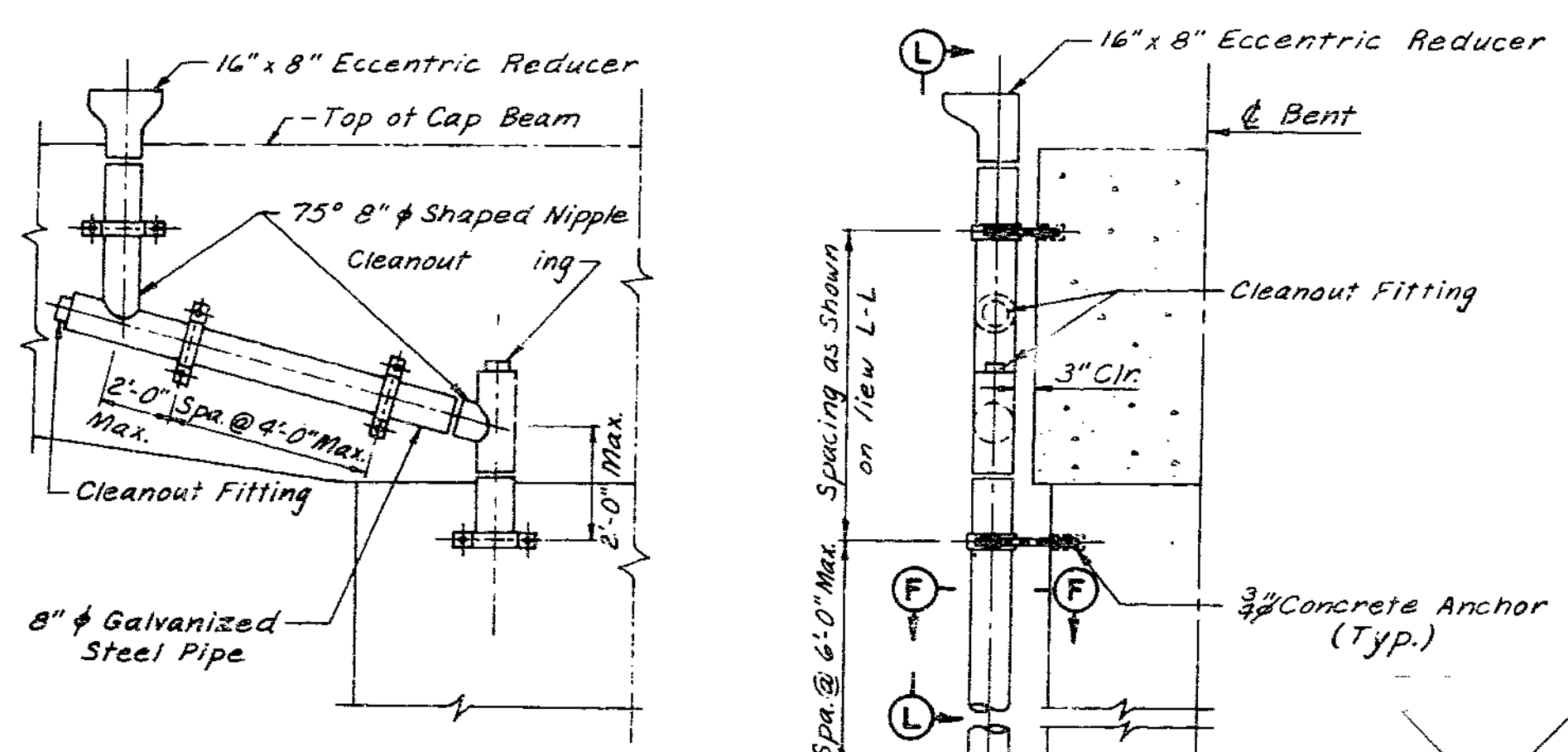
JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		18	149	

For Section F-F See Sheet 45.

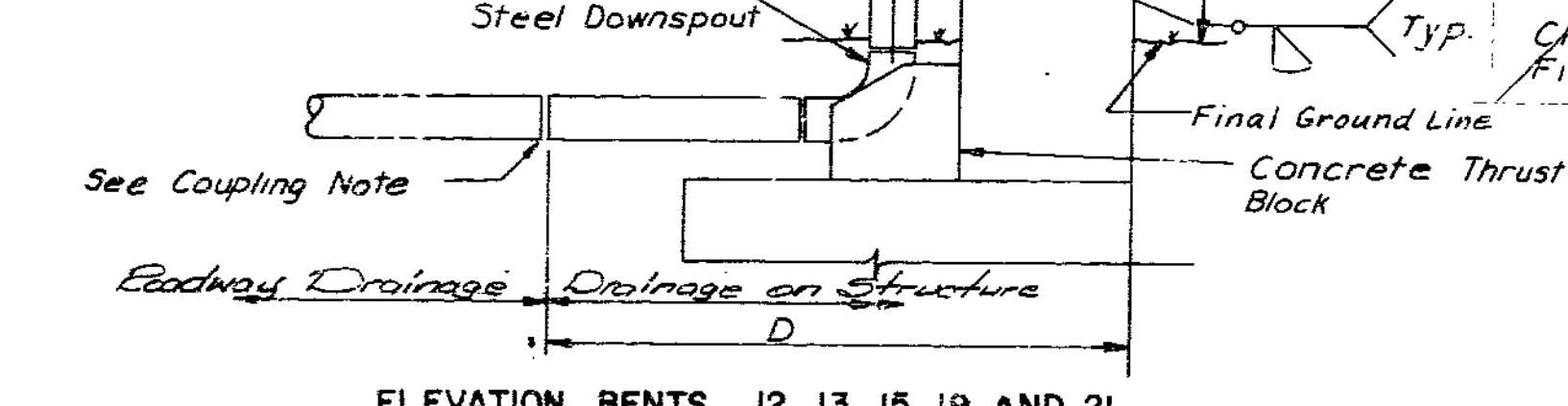


TABULATION OF BENTS 12, 13, 15, 19, AND 21

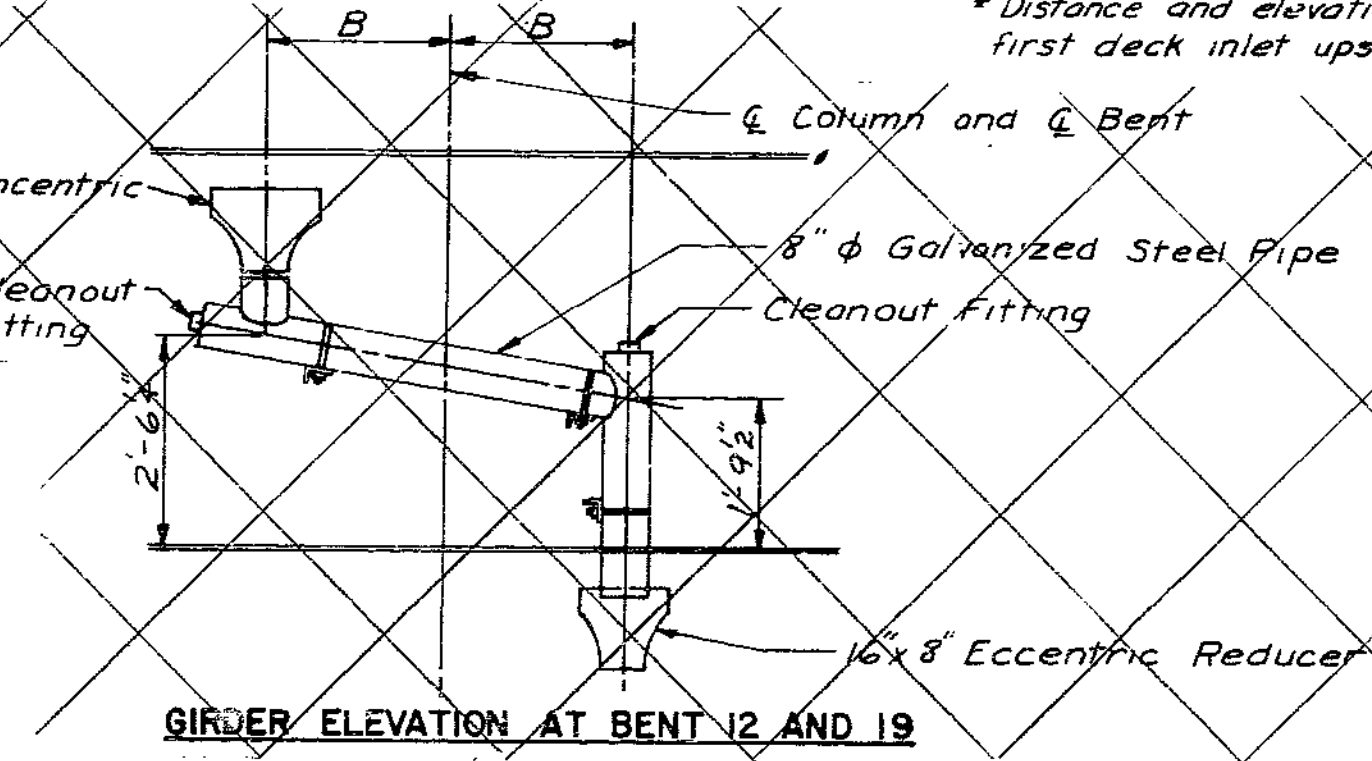
BENT	LANES	DISTANCE			ELEVATION			LIMITS OF PIPE
		A	B	C	A	B	C	
12	Westbound	6'-9 3/4"	2'-7 3/8"	2'-9 8"	773.25	770.02	768.20	5'-0"
12	Eastbound	6'-9 3/8"	2'-7 3/8"	2'-9 8"	771.73	768.63	766.80	5'-0"
13	Westbound*	6'-10 1/4"	2'-7 3/8"	2'-9"	772.91	769.84	768.00	6'-0"
13	Eastbound*	6'-10 1/4"	2'-7 3/8"	2'-9"	771.43	768.34	766.50	6'-0"
15	Westbound	6'-11 3/4"	2'-7 3/8"	2'-8 1/2"	774.05	771.37	769.50	6'-0"
15	Eastbound	6'-11 3/4"	2'-7 3/8"	2'-8 1/2"	772.70	770.07	768.20	6'-0"
19	Westbound	7'-2 3/4"	2'-7 3/8"	2'-8 1/4"	781.60	778.94	777.00	6'-0"
19	Eastbound	7'-2 3/4"	2'-7 3/8"	2'-8 1/2"	780.61	777.94	776.00	6'-0"
21	Westbound	7'-5 1/4"	2'-11 3/8"	3'-0 1/4"	787.12	783.62	781.83	6'-3"
21	Eastbound	7'-5 1/4"	2'-11 3/8"	3'-0 1/4"	786.35	782.85	780.06	6'-3"

* Distance and elevation shown are for the first deck inlet upstation from Bent 13.

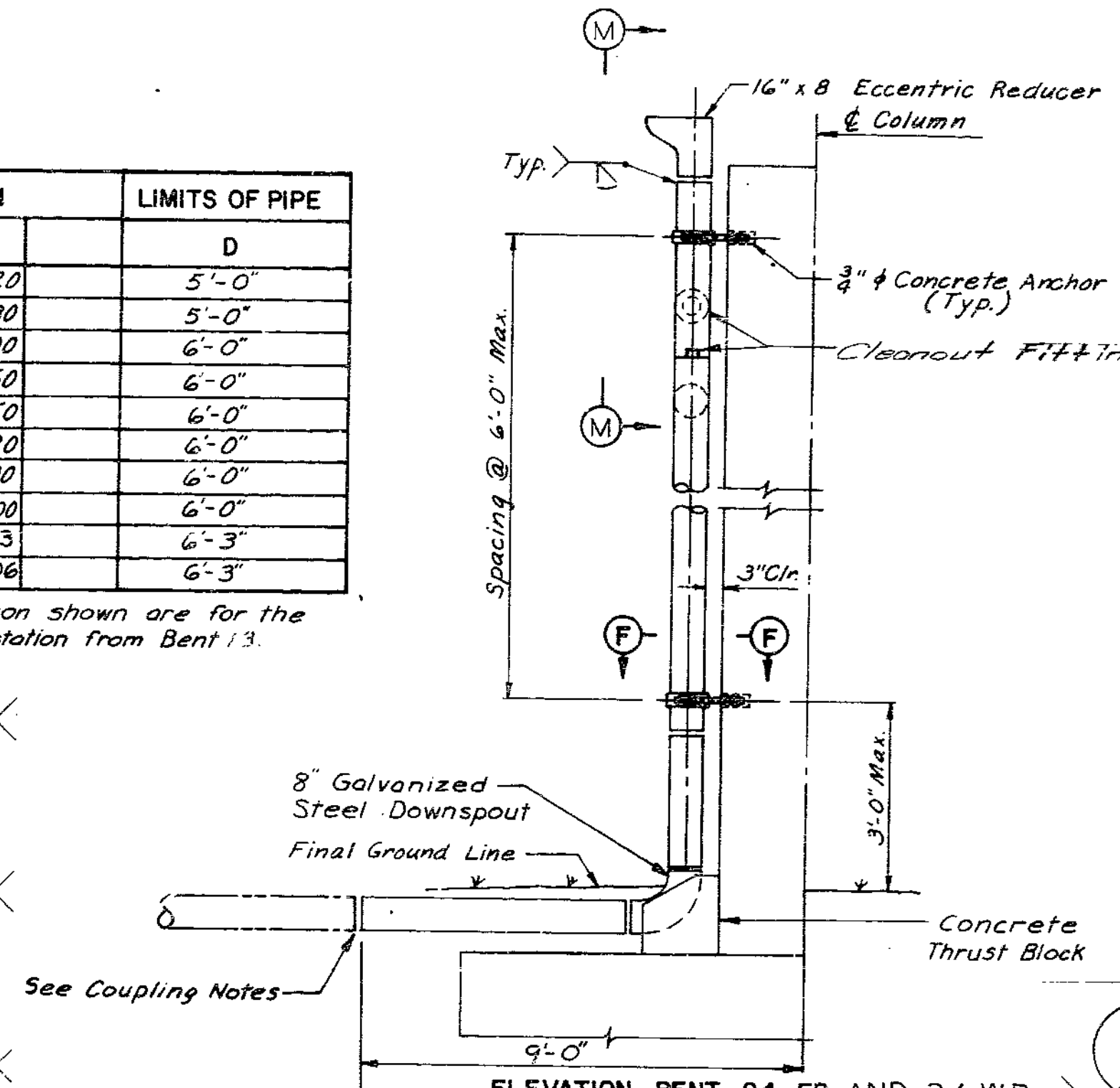
VIEW I-L SHOWN
VIEW M-M SIMILAR



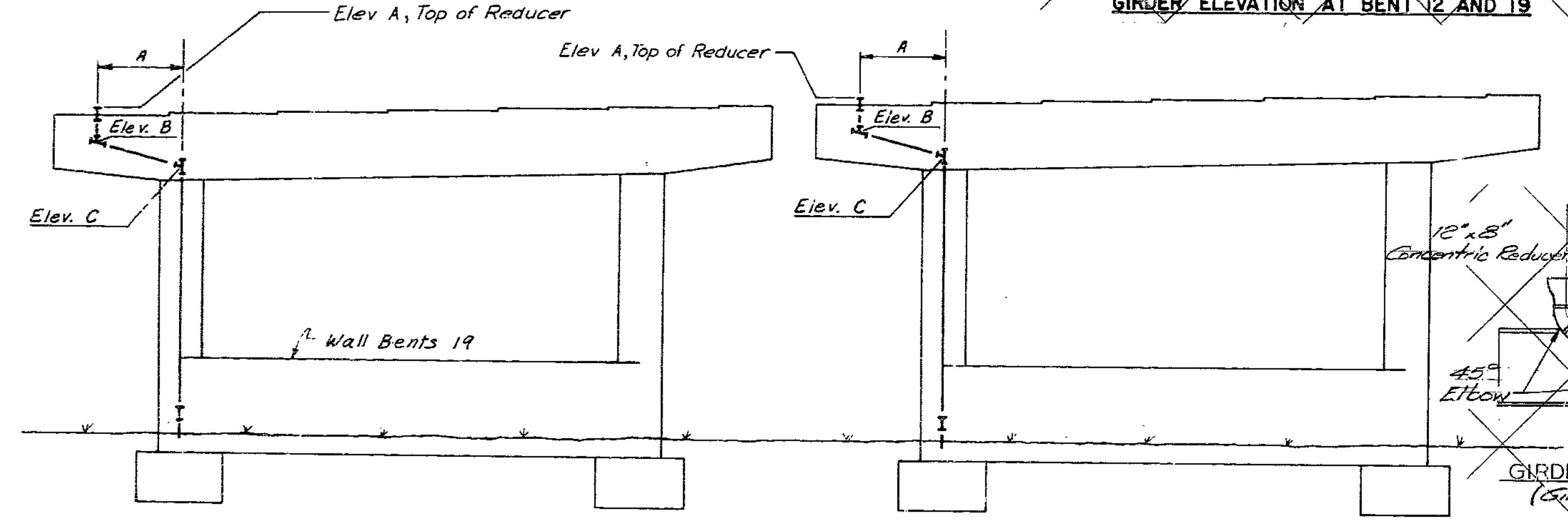
ELEVATION BENTS 12, 13, 15, 19 AND 21



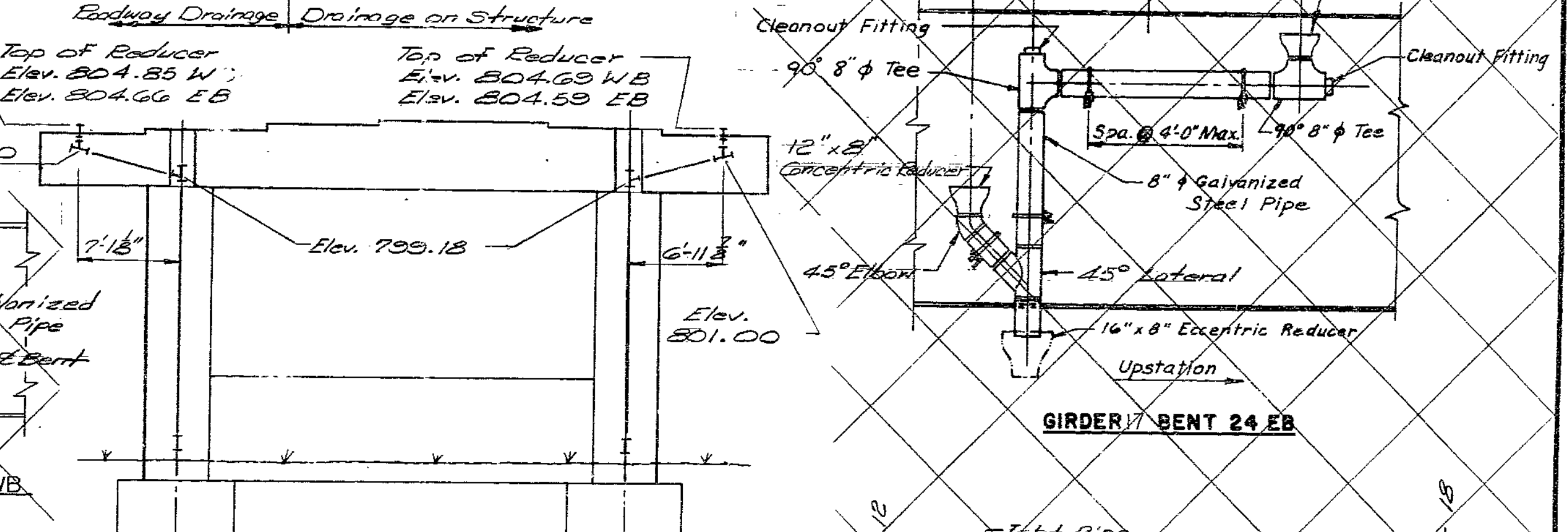
GIRDER ELEVATION AT BENT 12 AND 19



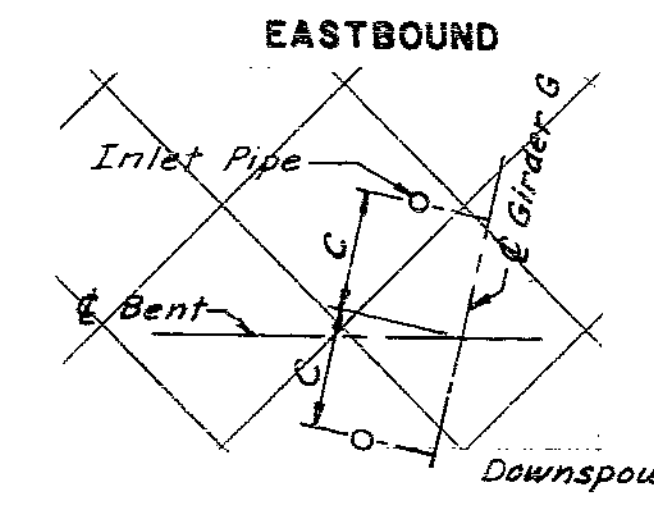
ELEVATION BENT 24 EB AND 24 WB



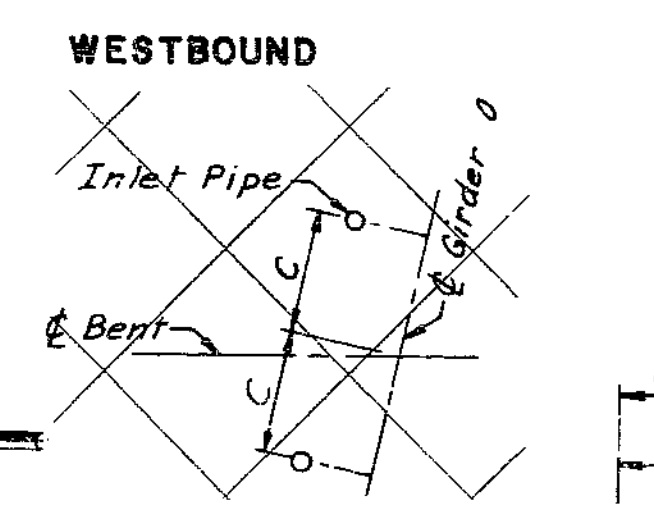
PLAN OF BENTS 12, 13, 15, 19 AND 21 (Looking Upstation)



PLAN OF BENTS 24 EB AND 24 WB (Looking Upstation)



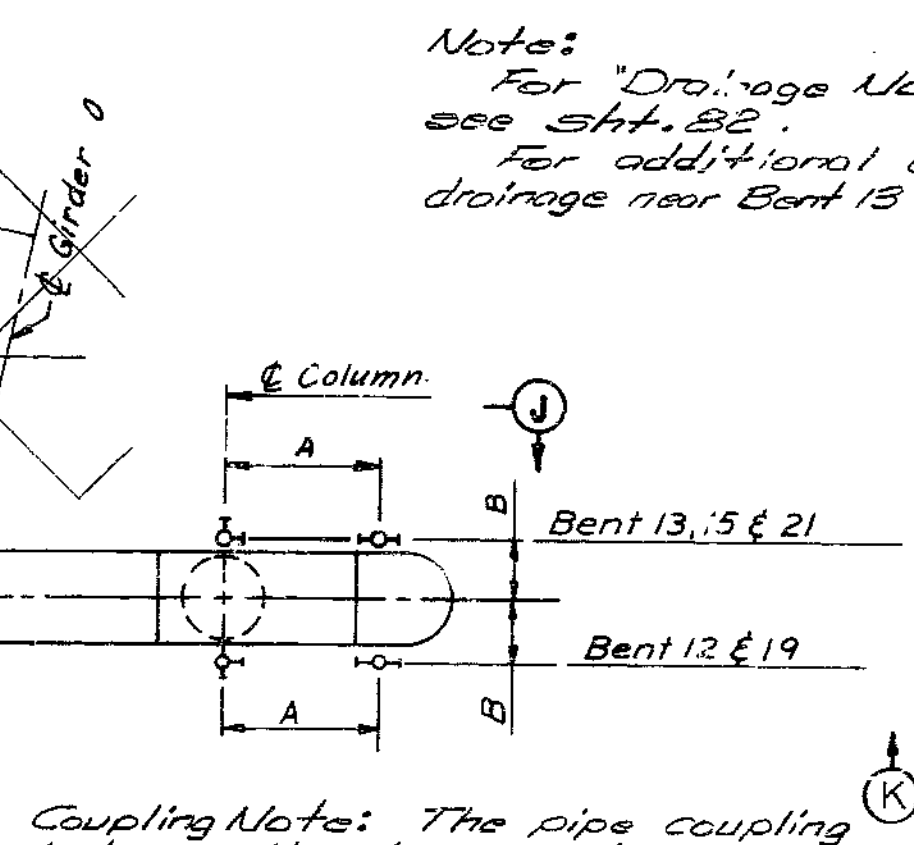
EASTBOUND



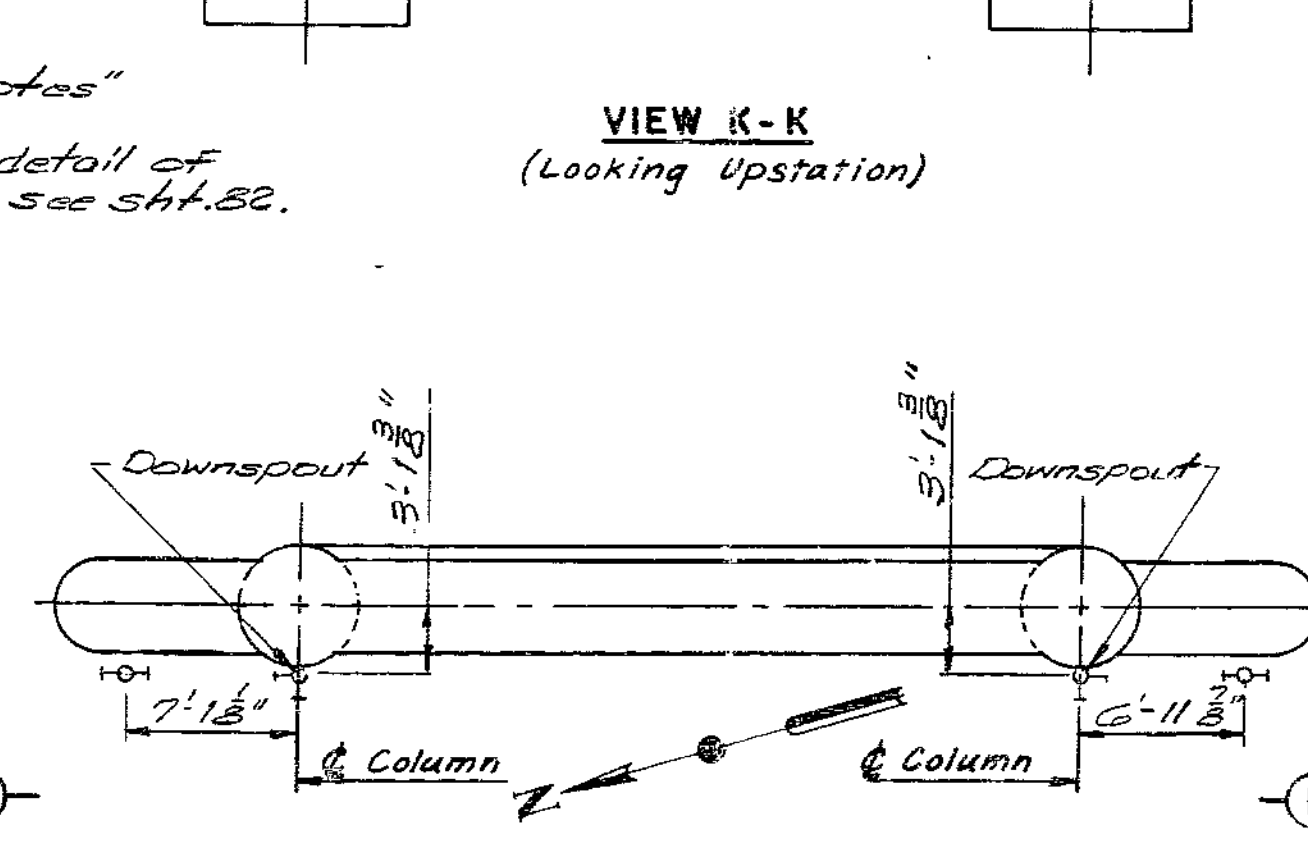
WESTBOUND

VIEW J-J (Looking Backstation)

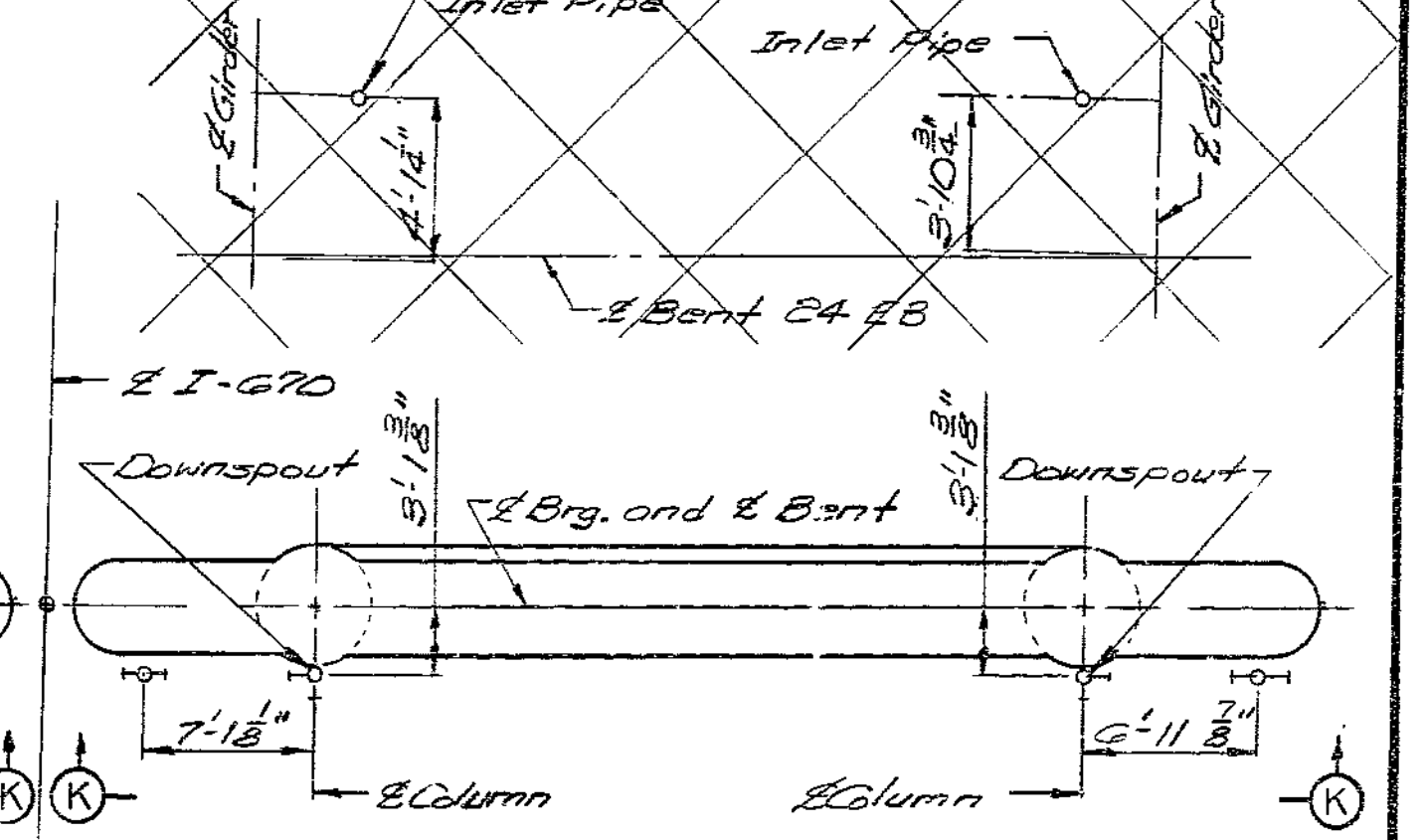
VIEW K-K (Looking Upstation)



EASTBOUND



WESTBOUND



EASTBOUND

DRAINAGE DETAILS

Notes: For "Drainage Notes" see Sht. 82. For additional detail of drainage near Bent 13 see Sht. 82.

Coupling Note: The pipe coupling between the downspout and sewer is to be furnished and installed in this contract. The pipe coupling is to be a Dresser, Style 38, or approved equal.

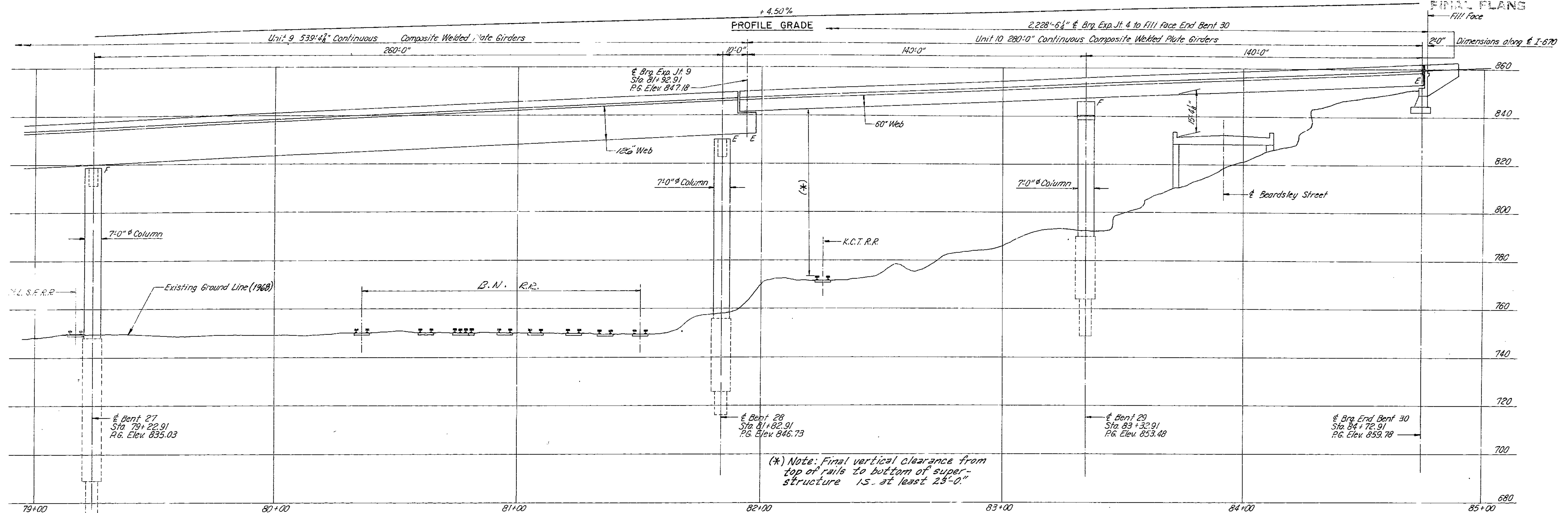
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DETAILED 10 79
CHECKED 10 79

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 80 of 82.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		75	75	



CURVE DATA

CURVE 6

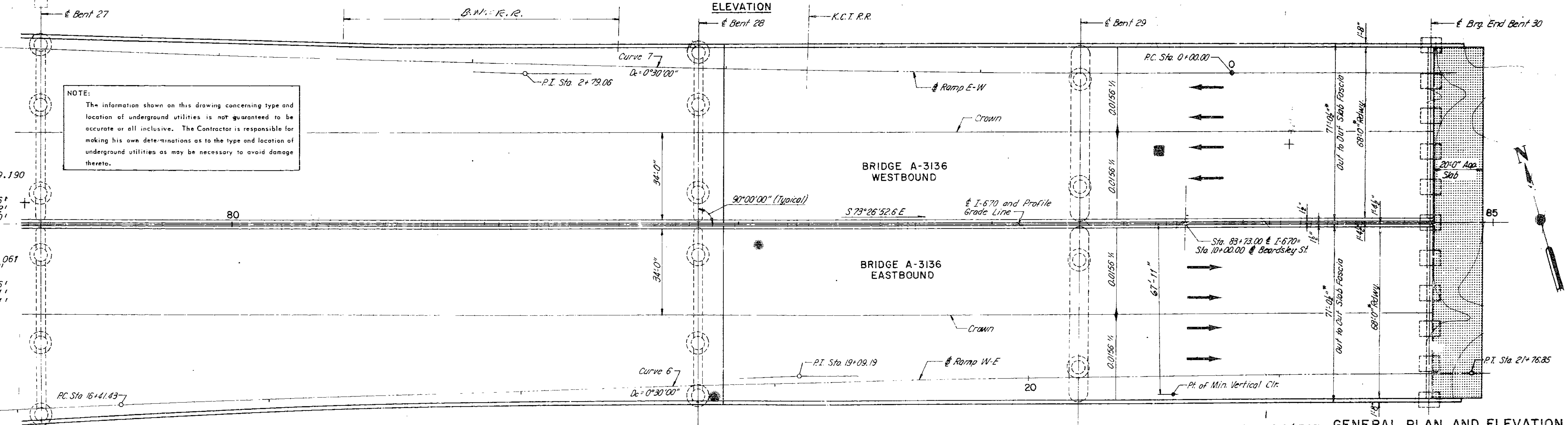
P.I. Sta. 19+09.190
 $\Delta = 2^\circ 40' 37.6''$
 $D = 0^\circ 30' 10.0''$
 $R = 11,459.156'$
 $L = 535.422'$
 $T = 267.760'$

CURVE 7

P.I. Sta. 2+79.061
 $\Delta = 2^\circ 47' 24.2''$
 $D = 0^\circ 30' 10.0''$
 $R = 11,459.156'$
 $L = 558.011'$
 $T = 279.061'$

NOTE:
 The information shown on this drawing 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.

357



DETAILED 1978
 CHECKED 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 6 of 57

*Dimensions typical from Sta 81+19.38 @ I-670 Eastbound Lane and Sta 3+36.00 @ Ramp E-W to Fill Face End Bent 30.

GENERAL PLAN AND ELEVATION

JACKSON COUNTY

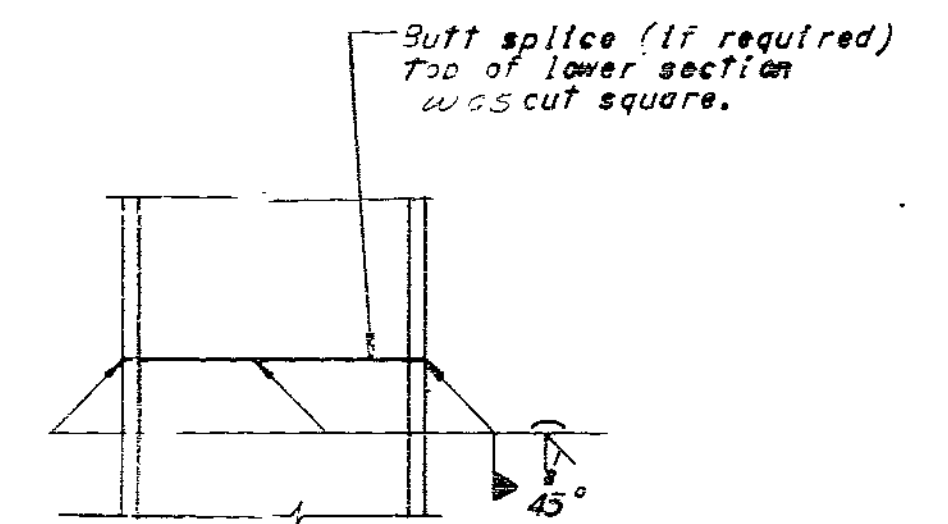
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	AL		70		

FINAL PLANS

ITEM	UNIT	WESTBOUND LANE SUBSTRUCTURE							EASTBOUND LANE SUBSTRUCTURE							TOTAL
		UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10	UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10			
Class 1 Excavation	Cu. Yd.	267.3	150.4	280.7	501.3	514.9	41.9	1458.5	277.4	153.9	276.5	211.7	224.3	776.2	1919.0	3377.5
Pedestal Pile (96" dia)	Lin. Ft.					345.7	78.2	423.9					348.5	77.1	425.6	849.5
Structural Steel Piles (HP12x53)	Lin. Ft.	3092	2197	3438	3577	2000		14364	3126	2815	3446	2095	1978		12823	27126
Loading Tests (See Spec. Prov.)	Each	1			1			2							2	
Class B Concrete	Cu. Yd.	387.1	265.9	593.9	807.5	1261.4	279.5	3594.4	382.1	263.6	589.5	450.4	1264.1	445.2	3394.9	6929.3
Reinforcing Steel	Pound	66,570	50,050	91,050	101,680	313,970	63,660	686,940	65,640	49,630	88,850	58,220	317,880	182,690	662,910	1,349,850
Drainage System (on structure)	Lump Sum															1
Contingent Item: Test holes							36	12	48				36	* 64	100	148

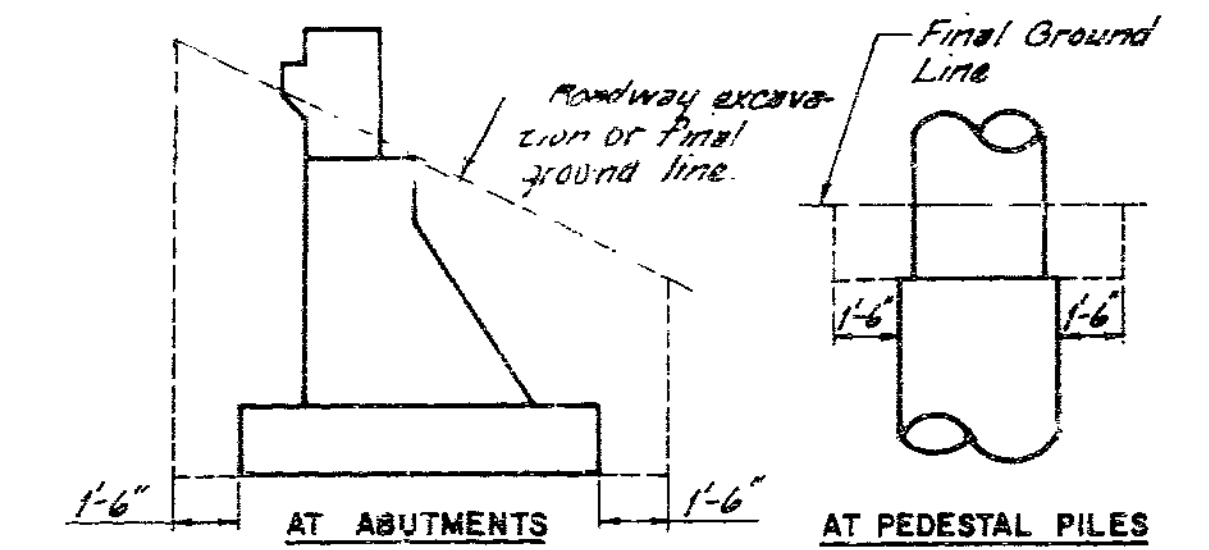
Includes 9 010 pounds for End Bent 30.
 Includes 166.6 Cu. Yds. for End Bent 30.
 Includes 730.5 Cu. Yds. for End Bent 30.
 * Includes 52 Lin. Ft. for End Bent 30



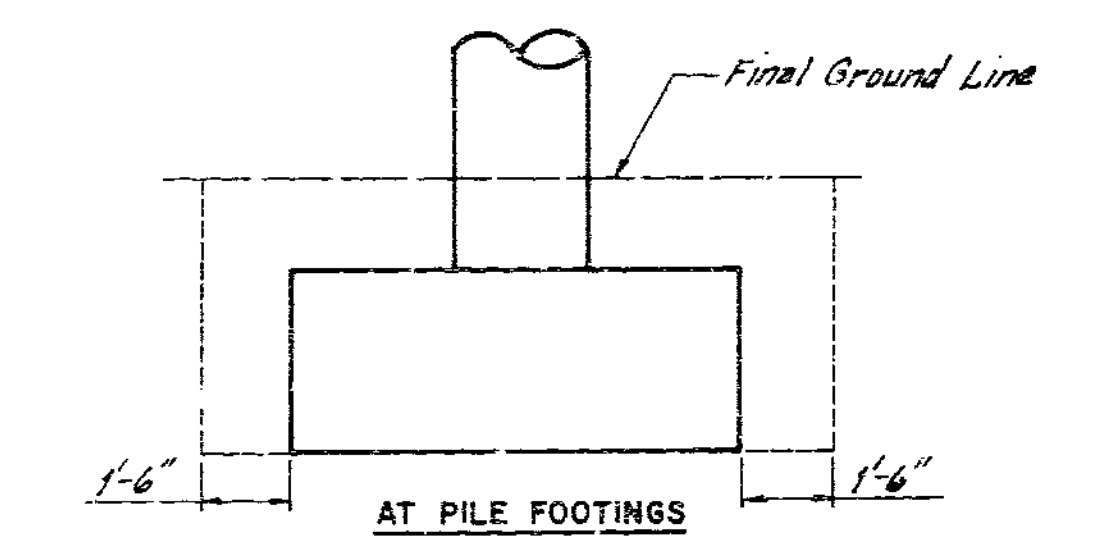
STEEL PILE SPICE DETAIL

Cost of concrete in pedestal piles was included in unit price bid per linear foot of pedestal pile

PILE AND FOOTING DATA - WESTBOUND LANE																				
BENT	BENT 12	BENT 13	BENT 14	BENT 15	BENT 16	BENT 17	BENT 18	BENT 19	BENT 20	BENT 21	BENT 22	BENT 23	BENT 24	BENT 24 RAMP E-W	BENT 25	BENT 26	BENT 27	BENT 28	BENT 29	END BENT 30
Pile Type and Size	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53				
Number	8	10	12	10	8	12	10	12	10	16	16	15	12	15	32	33				
Approximate Length (ft.)	63	63	66	65	64	63	69	62	59	57	58	62	62	57	62	61				
Design Bearing Value (Tons)	84	88	91	88	74	86	72	85	71	89	72	91	92	61	24	54				
Hammer Energy Required (Ft.Lbs.)	19,400	20,500	21,400	20,500	21,900	20,200	21,900	20,200	21,200	21,400	21,100	21,800	1,000	22,600	22,800					
Average Pile Tip Elevation	681	683	678	680	679	682	675	683	685	683	685	681	683	688	683	686	671	716	751	



PILE AND FOOTING DATA - EASTBOUND LANE																			
BENT	BENT 12	BENT 13	BENT 14	BENT 15	BENT 16	BENT 17	BENT 18	BENT 19	BENT 20	BENT 21	BENT 22	BENT 23	BENT 24	BENT 25	BENT 26	BENT 27	BENT 28	BENT 29	END BENT 30
Pile Type and Size	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53				
Number	8	10	12	10	8	12	10	12	10	16	16	15	12	15	32	33			
Approximate Length (ft.)	63	64	66	65	64	62	69	65	59	57	58	62	62	62	60				
Design Bearing Value (Tons)	84	88	91	88	74	86	72	85	71	89	72	91	92	61	24	54			
Hammer Energy Required (Ft.Lbs.)	19,800	20,500	21,400	20,500	21,900	20,200	21,900	20,200	21,200	21,400	22,100	20,500	21,600	22,900					
Average Pile Tip Elevation	681	682	678	679	679	682	676	684	685	683	685	682	683	684	685	671	716	751	



LIMITS OF EXCAVATION

Minimum energy requirement of hammer based on plan length and design bearing value of piles.
 All piles were driven to practical refusal.

PEDESTAL PILE DATA - WESTBOUND AND EASTBOUND LANES			
BENT	BENT 27	BENT 28	BENT 29
Pedestal Pile Diameter (inches)	96	96	96
Lead of top of Socket (feet)	19.51	10.14	11.02

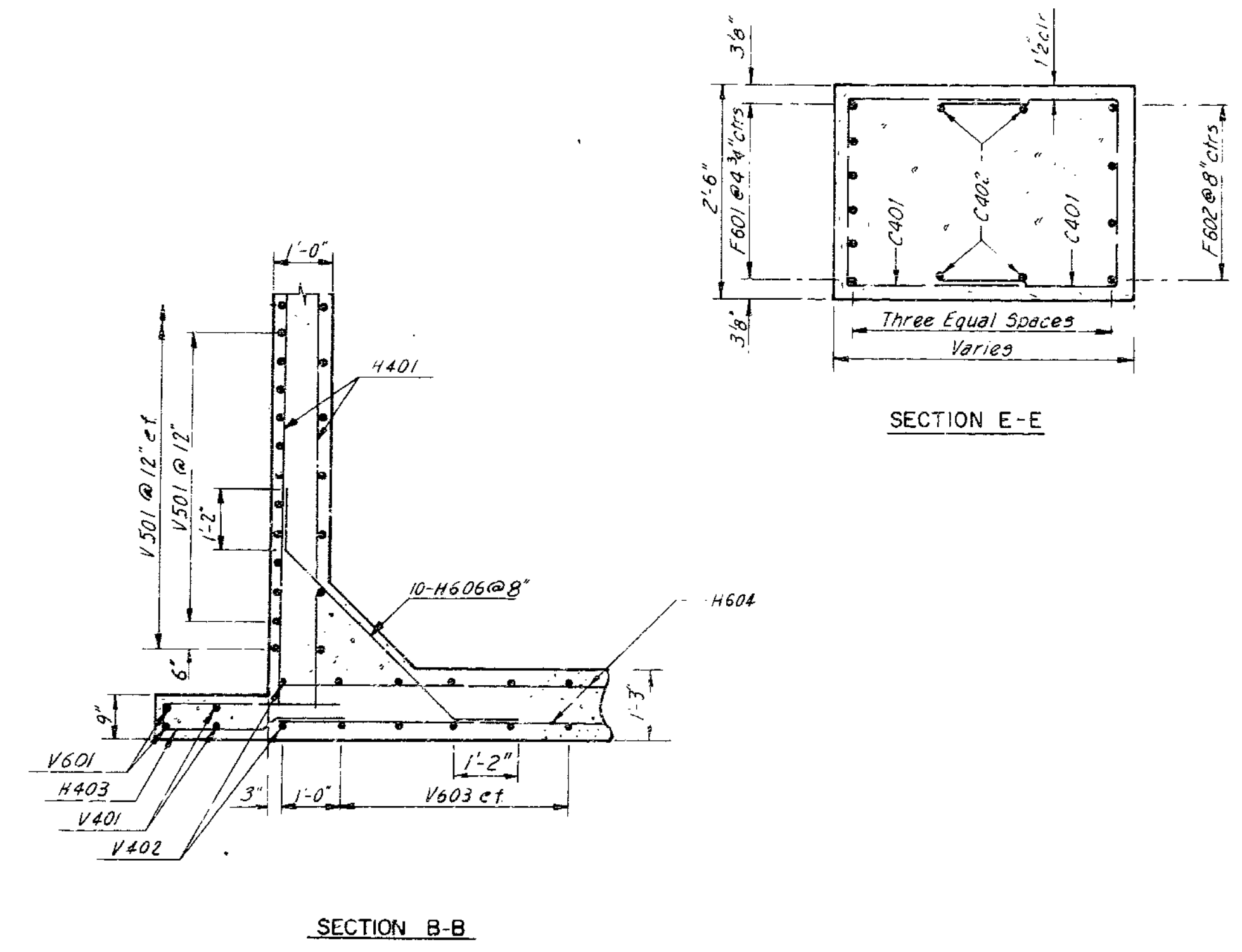
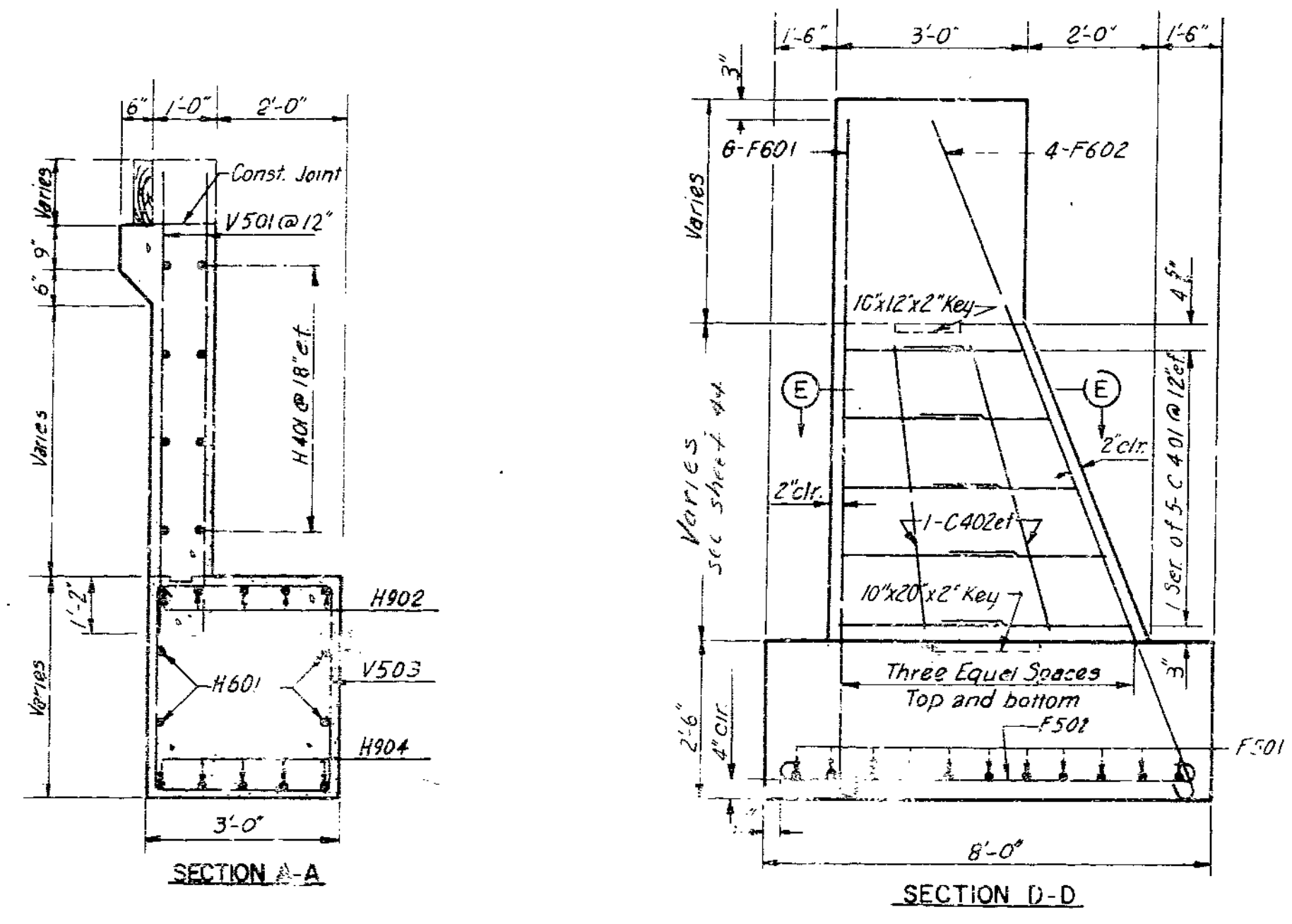
SUMMARY OF QUANTITIES
 PILE AND FOOTING DATA

358

FED. ROAD DIST. NO.	STATE	PG. A&D PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		88	114	

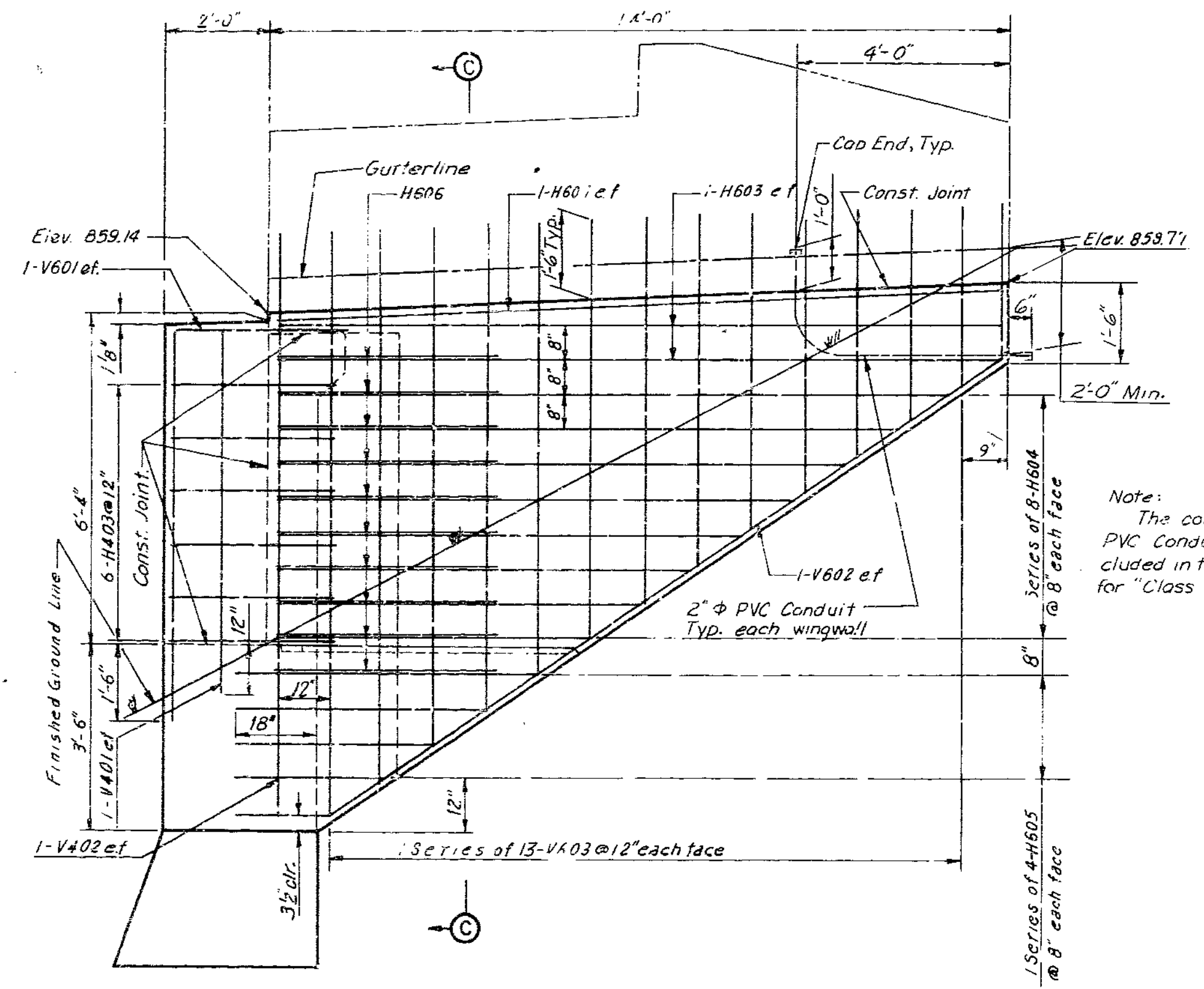
FIG. 11 PLANS

Note:
D,d Paint exposed bars with zinc rich paint, see Special Provisions

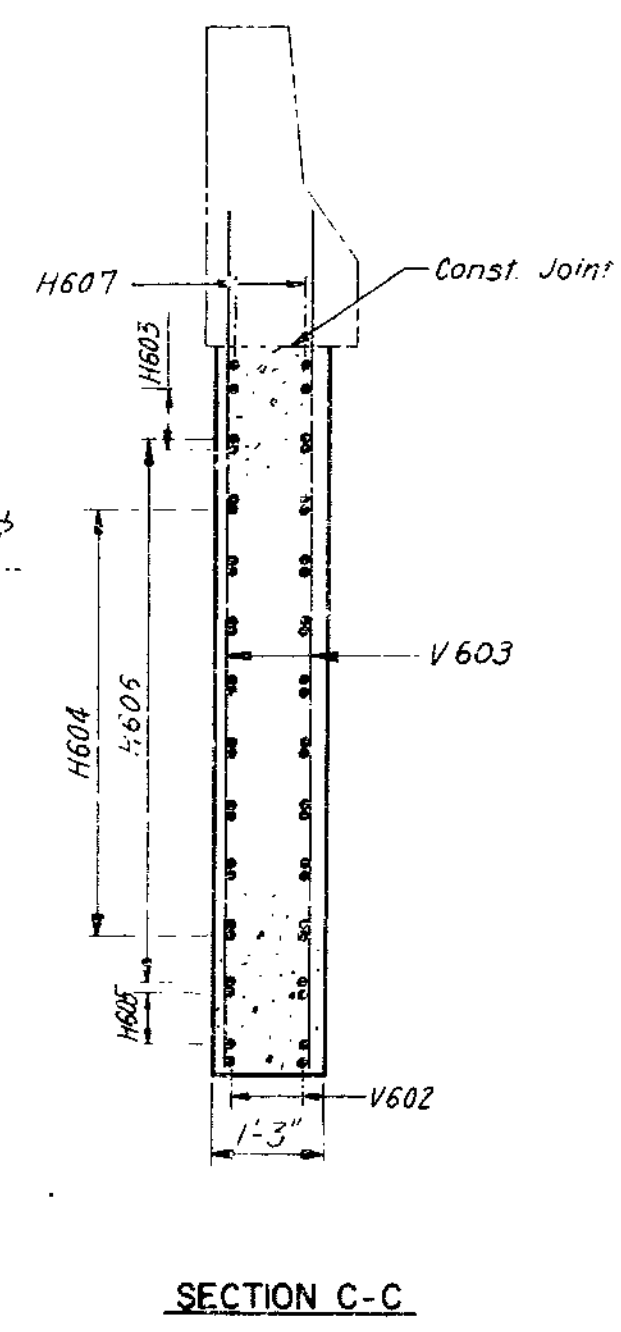


Note:
For location of Section A-A, Section B-B and Section D-D See Sheet 44.

Legend
ef. = each face.



Note:
The cost of the 2" ϕ PVC Conduit is included in the price bid for "Class B Concrete."



360

SOUTH WINGWALL ELEVATION
(North wingwall similar)

SECTION C-C

DETAILED 1078
CHECKED 1078

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 45A of 57

END BENT 30 DETAILS
PILE FOOTING ALTERNATE
JACKSON COUNTY

A- 3136

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

SUBSTRUCTURE - BENTS 1-11

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		79	93	

INDEX OF SHEETS

1	INDEX AND GENERAL NOTES	19	BENT 8 W.B. AND E.B.
2	GENERAL PLAN AND ELEVATION	20	BENT 9 W.B. AND E.B.
3	GENERAL PLAN AND ELEVATION	21	BENT 10 W.B. AND E.B.
4	SUMMARY OF QUANTITIES	22	BENT 11 W.B. AND E.B.
5	SUBSTRUCTURE LAYOUT (BENT 1-11)	23	SUBSTRUCTURE REINFORCING SCHEDULE (1-4)
6	BORINGS	24	SUBSTRUCTURE REINFORCING SCHEDULE (5-8)
7	BORINGS	25	SUBSTRUCTURE REINFORCING SCHEDULE (9-11)
8	BORINGS	26	BENT 1 W.B. AND E.B.
9	SUBSTRUCTURE REINFORCING SCHEDULE (1-4)	27	BENT 2 W.B. AND E.B.
10	SUBSTRUCTURE REINFORCING SCHEDULE (5-8)	28	BENT 3 W.B. AND E.B.
11	SUBSTRUCTURE REINFORCING SCHEDULE (9-11)	29	BENT 4 W.B. AND E.B.
12	BENT 1 W.B. AND E.B.	30	BENT 5 W.B. AND E.B.
13	BENT 2 W.B. AND E.B.	31	BENT 6 W.B. AND E.B.
14	BENT 3 W.B. AND E.B.	32	BENT 7 W.B. AND E.B.
15	BENT 4 W.B. AND E.B.	33	BENT 8 W.B. AND E.B.
16	BENT 5 W.B. AND E.B.	34	BENT 9 W.B. AND E.B.
17	BENT 6 W.B. AND E.B.	35	BENT 10 W.B. AND E.B.
18	BENT 7 W.B. AND E.B.	36	BENT 11 W.B. AND E.B.

PILE FOOTING ALTERNATE

PEDESTAL PILE ALTERNATE

GENERAL NOTES

DESIGN SPECIFICATIONS: A.A.S.H.T.O., 1977 and Interim Specifications 1978, Load Factor Design.

DESIGN LOADING: HS20-44 and Alternate Military Loading with 15 #/sq.ft. for future wearing surfacing. Earth: 120 #/cu.ft. Equivalent Fluid Pressure: 30 #/cu.ft. Fatigue Stress: Case I.

CONSTRUCTION SPECIFICATIONS: Missouri Standard Specifications for Highway Construction, 1977.

DESIGN UNIT STRESSES:
 Class B Concrete $f'c = 3,000$ psi
 Reinforcing Steel -- ASTM A615, Grade 60 $f_y = 60,000$ psi
 Steel Pile ASTM A36-70a $f_b = 12,000$ psi

CONCRETE: Concrete shall be Class B.

REINFORCING STEEL:

Bar sizes are designated on the plans by numbers. The first digit after the letter in three-digit marks and the first two digits after the letter in four-digit marks indicate the size of the bar.

Dimensions shown on the plans from the reinforcing steel to the outside edge of concrete are clear dimensions unless otherwise indicated. Minimum clearance to reinforcing steel shall be 1/2" unless shown otherwise.

All bending dimensions are "out-to-out" of bars, hooks and bends, unless otherwise shown, shall be in accordance with the ACI Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI-318-71).

All reinforcing bars in tops of substructure capbeams or columns shall be spaced to clear anchor bolts for bearings by at least 2".

UTILITIES: All utilities, unless shown otherwise, shall be removed or relocated by others. The Contractor shall notify the owner of the utilities of his work schedule sufficiently in advance to allow time for disposition of utilities.

CONSTRUCTION CLEARANCES: The Contractor must maintain a 12'6" vertical by 22'0" horizontal opening for city streets during construction.

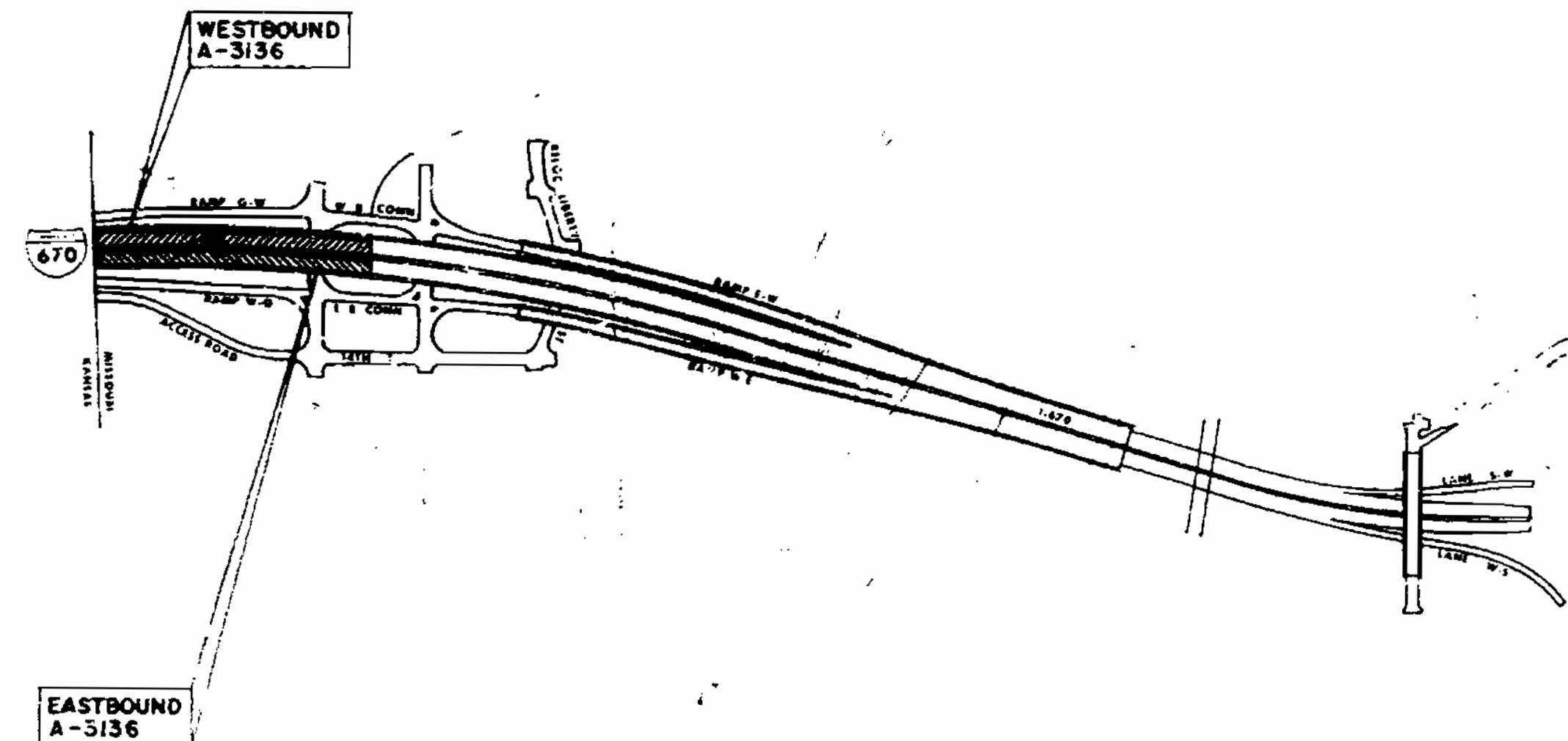
ELECTRICAL GROUNDS: Electrical grounds shall be provided at Bent 2, 6, 8 and 11. The grounding conductor shall be size 1/0 and shall be bare stranded solid-copper wire, exothermically welded to the upper end of a steel pile or extended to a coil 20' in length at the bottom of a pedestal pile. The coil shall be secured in contact with the founding material and shall be placed before the concrete is poured. The conductors shall be embedded in the north columns of the westbound lanes and in the south columns of the east bound lanes and shall extend 3'-0" above the top of cap beam. The exposed conductors shall clear the bearing device masonry plates by 6" and shall be situated as follows:

- Bents 2WB, 6WB, 8WB and 11WB- South side of Girder B
- Bents 2EB, 6EB, 8EB and 11EB- North side of Girder N.

Anchor Bolts: Cost of furnishing anchor bolts shall be included in the price bid for "Fabricated Structural Low Alloy Steel". See Special Provisions.

B.M. U.S.G.S. DATUM

- H-71 R.R. spike in N. side of base of P.P., S.E. corner of 12th St. and Genessee, Elev. 748.63
- H-72 Top of head of arrow on top of fire hydrant, S.E. corner of 12th St. and Wyoming, Elev. 751.18
- H-74 "X" in N. bolt in top flange of fire hydrant, S.E. corner of 14th St. and Liberty, Elev. 750.25
- H-75 "X" in N. bolt in top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E. side of Wyoming, Elev. 752.18



LOCATION SKETCH

565



SUBMITTED BY: *Daniel W. Matthews*
 REGISTERED PROFESSIONAL ENGINEER
 MISSOURI NO. E-786C

DESIGNED D.W.M. 1076
 DETAILED L.F.L. 1075
 CHECKED L.J.R. 1078

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1 of 36.

BRIDGE I-670 VIADUCT

STATE ROAD - INTERSTATE ROUTE 670

IN KANSAS CITY

PROJECT NO. IG-670-1005 STA. 52+79.857

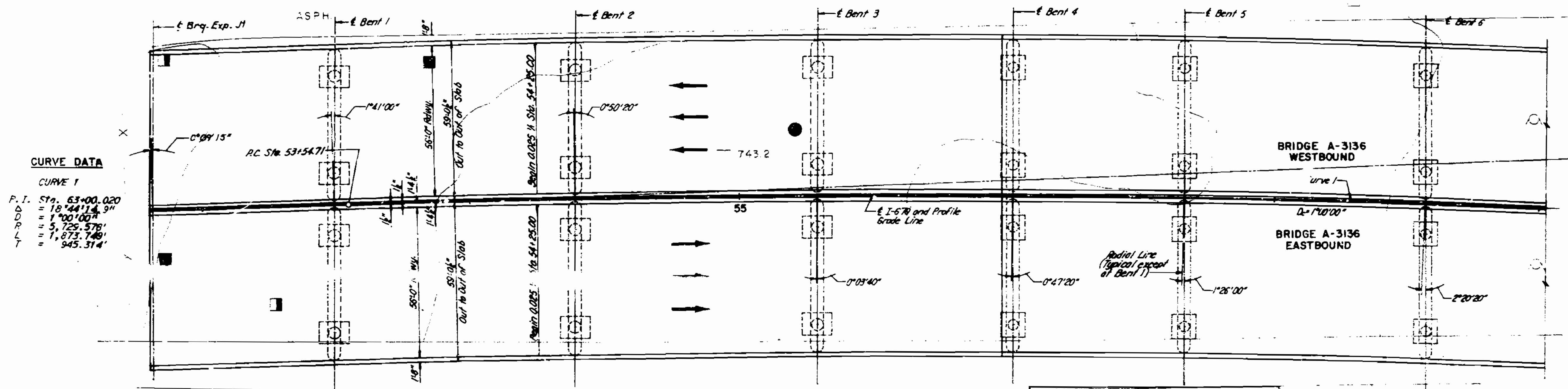
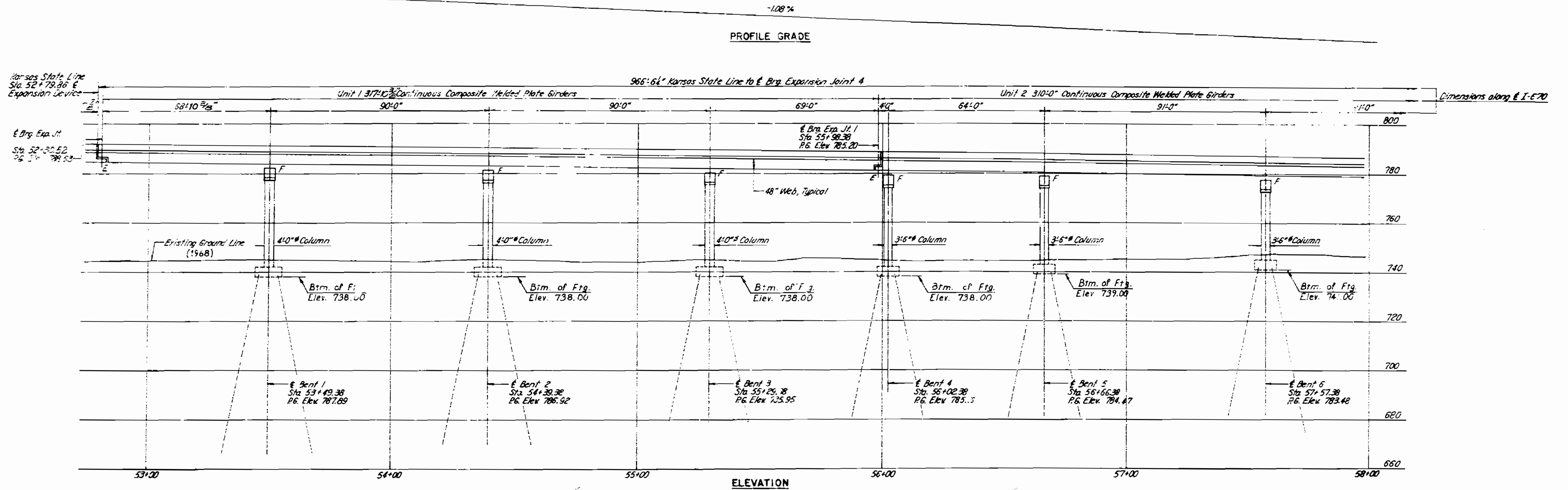
JOB NO. 4 I-670 463 RTE. I-670

JACKSON COUNTY

DATE 5/11/77

STD.
STD. 706.35
A-3136

NO.	DATE	BY	CHKD.	APP.	TITLE
1					100



NOTE:
The information shown on this drawing 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.

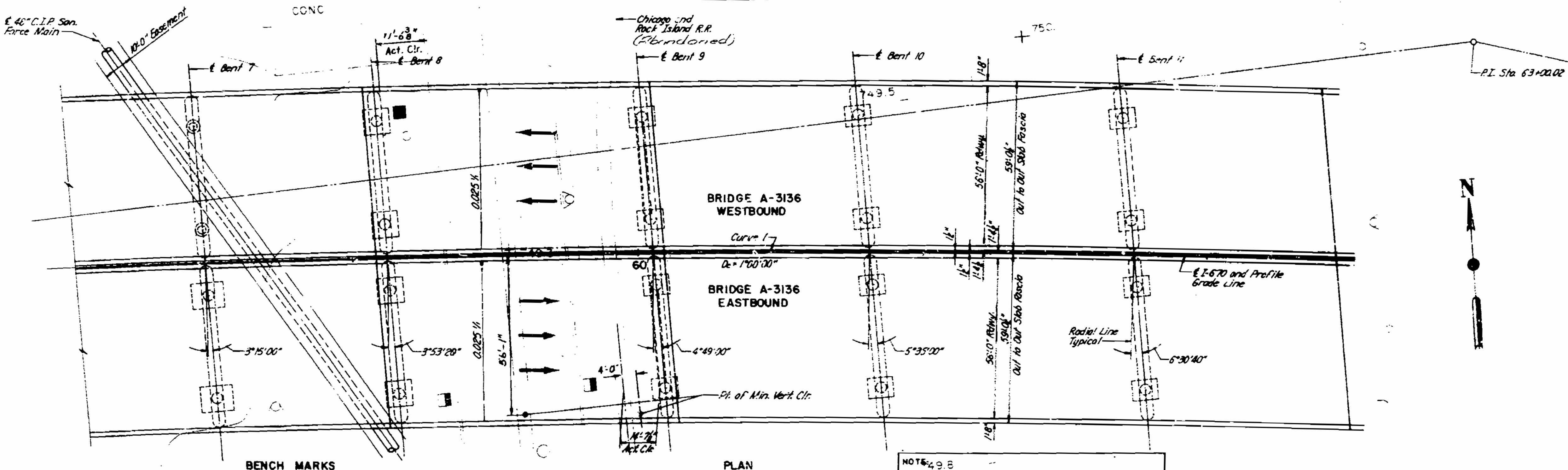
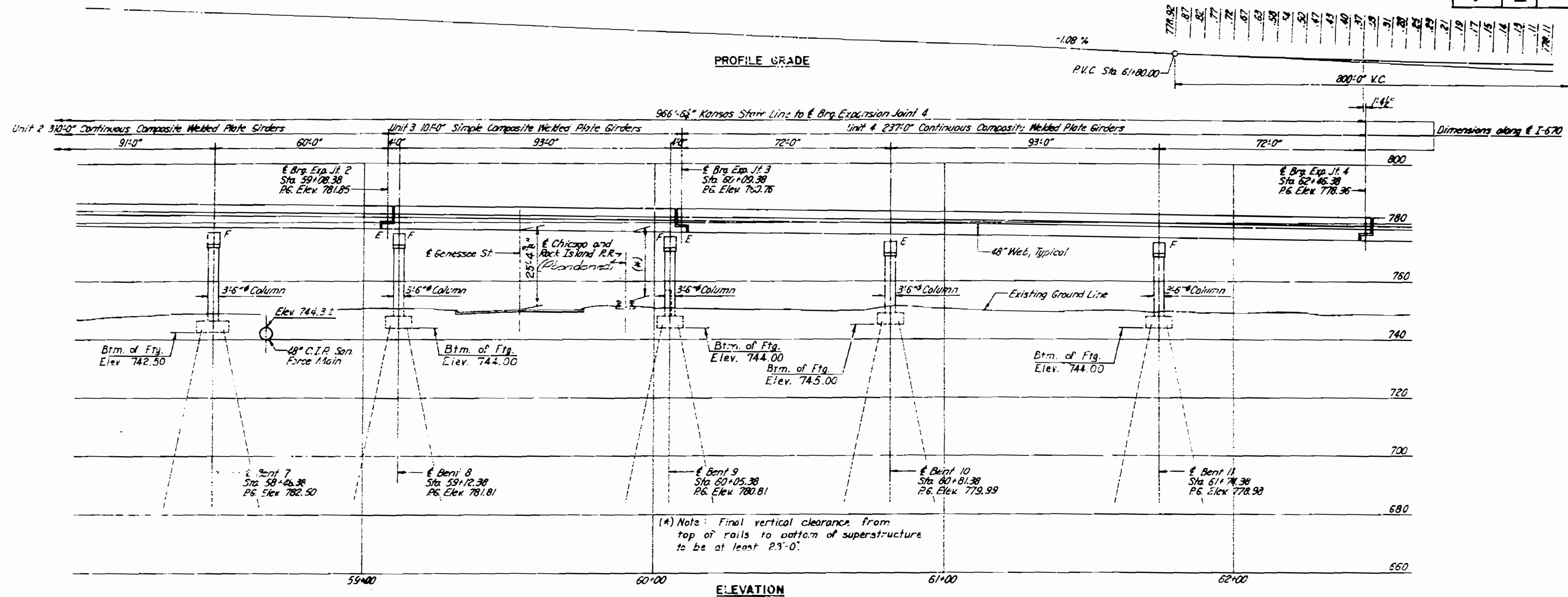
GENERAL PLAN AND ELEVATION

JACKSON COUNTY A-3136

Sheet No. 2 of 36

267
 DETAILED BY 1078
 CHECKED LJR 1078

DATE	BY	CHKD	APP'D



CURVE DATA
 CURVE 1
 P.I. Sta. E3+00.020
 $\Delta = 18^\circ 44' 11.9''$
 $D = 1^\circ 00' 00''$
 $R = 5,729.578'$
 $L = 1,572.749'$
 $T = 345.314'$

- BENCH MARKS**
- H-71 R.R. spike in N. side of base of P.P., S.E. corner of 12th St. and Genessee. Elev. 748.63
 - H-72 Top of head of arrow on top of fire hydrant, S.E. corner of 12th St. and Wyoming. Elev. 751.18
 - H-74 "X" in N. bolt in top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 750.95
 - H-75 "X" in N. bolt in top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E. side of Wyoming. Elev. 752.18

NOTE 49.8
 The information shown on this drawing 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.

DETAILED BJT 10/78
 CHECKED LJR 10/78

No. 2: This drawing is not to scale. Follow dimensions. Sheet No. 3 of 36.

GENERAL PLAN AND ELEVATION
 JACKSON COUNTY
 A-3136

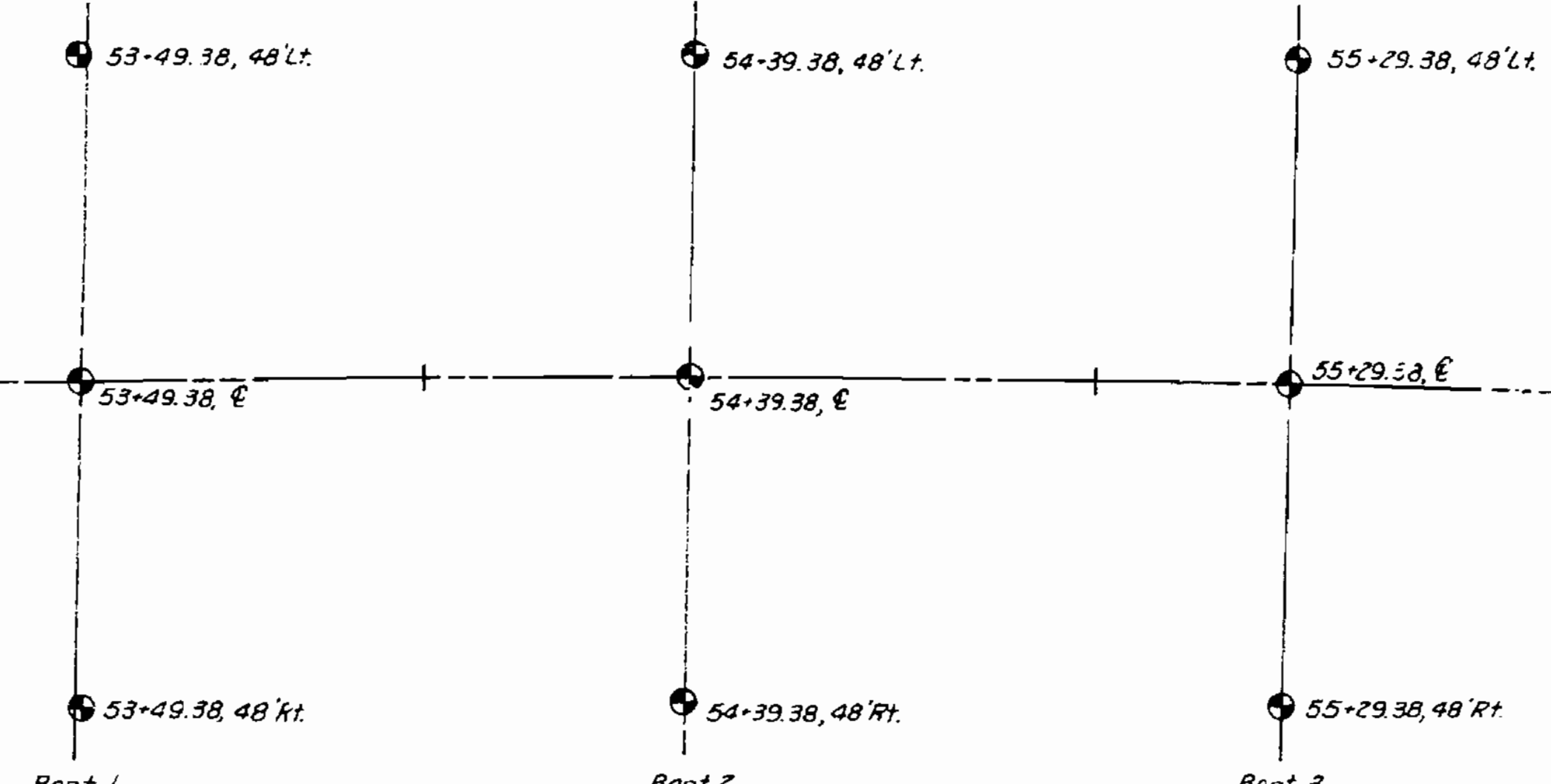
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		1973	105	



Note:
The borings shown on this sheet were dated June 13, 1973.

⊙ Indicates location of boring

Kansas Missouri



BORING LOCATION SKETCH

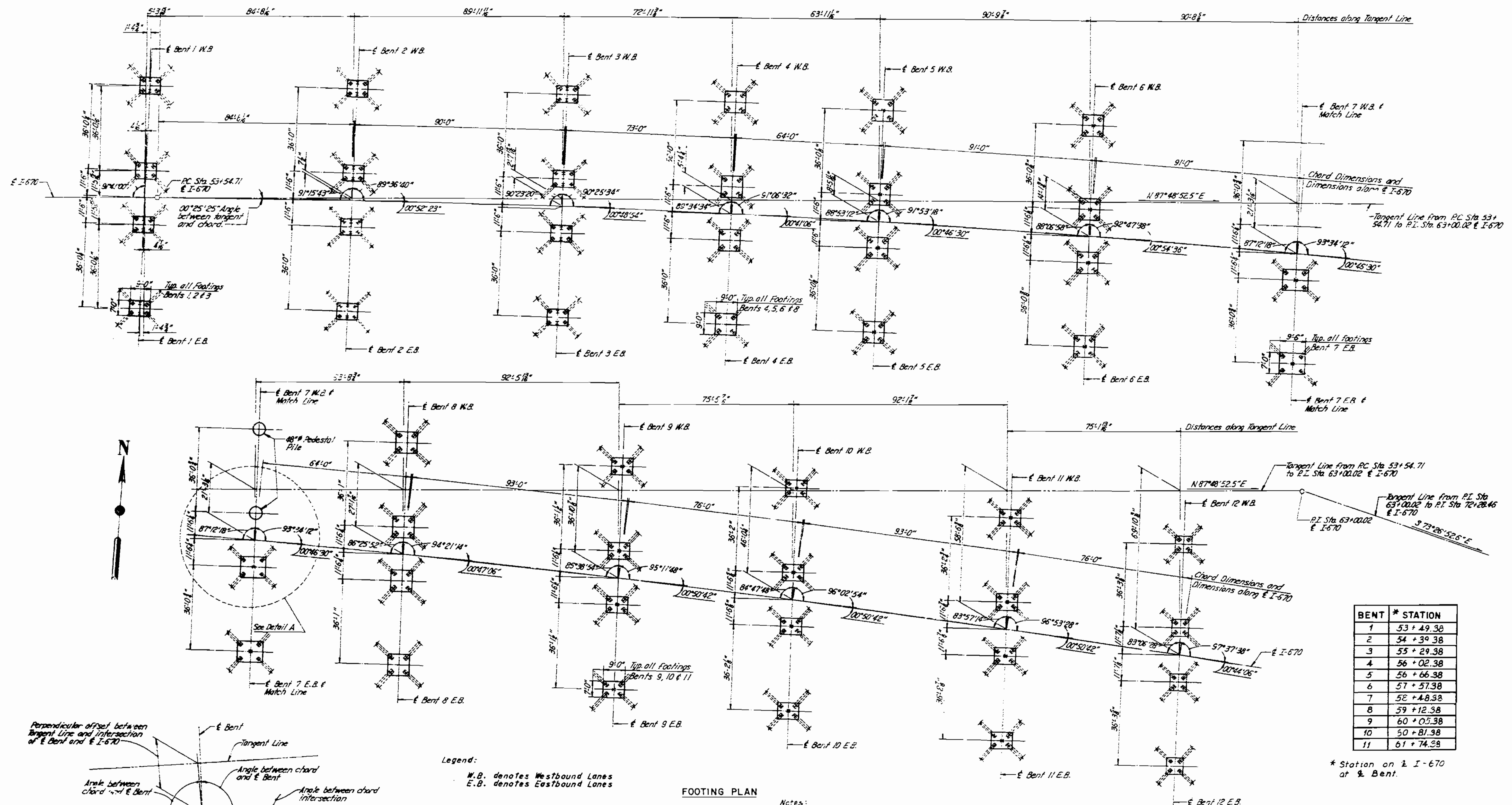
740		730		720		710		700		690		680		670		660	
743.5	743.1	743.5	743.1	743.5	743.1	743.5	743.1	743.5	743.1	743.5	743.1	743.5	743.1	743.5	743.1	743.5	743.1
Surface	Bricks f sand (rubble)	Surface	Bricks f sand (rubble)	Surface	Bricks f sand (fill)	Surface	Bricks f sand (fill)	Surface	Bricks f sand (fill)	Surface	Bricks f sand (fill)	Surface	Bricks f sand (fill)	Surface	Bricks f sand (fill)	Surface	Bricks f sand (fill)
Standard Penetration Test*		Standard Penetration Test*		Standard Penetration Test*		Standard Penetration Test*		Standard Penetration Test*		Standard Penetration Test*		Standard Penetration Test*		Standard Penetration Test*		Standard Penetration Test*	
Depth	Blows/6"	Depth	Blows/6"	Depth	Blows/6"	Depth	Blows/6"	Depth	Blows/6"	Depth	Blows/6"	Depth	Blows/6"	Depth	Blows/6"	Depth	Blows/6"
739.5	5	738.9	10	729.9	15	729.9	20	723.9	25	723.9	30	723.9	35	723.9	40	698.9	45
730.5	10	729.9	20	723.9	25	723.9	30	723.9	35	723.9	40	698.9	45	698.9	50	684.5	55
720.5	15	720.5	20	720.5	25	720.5	30	720.5	35	720.5	40	684.5	45	684.5	50	684.5	55
710.5	20	710.5	25	710.5	30	710.5	35	710.5	40	710.5	45	710.5	50	710.5	55	684.5	60
700.5	25	700.5	30	700.5	35	700.5	40	700.5	45	700.5	50	700.5	55	700.5	60	684.5	65
690.5	30	690.5	35	690.5	40	690.5	45	690.5	50	690.5	55	690.5	60	690.5	65	684.5	70
680.5	35	680.5	40	680.5	45	680.5	50	680.5	55	680.5	60	680.5	65	680.5	70	684.5	75
670.5	40	670.5	45	670.5	50	670.5	55	670.5	60	670.5	65	670.5	70	670.5	75	684.5	80
660.5	45	660.5	50	660.5	55	660.5	60	660.5	65	660.5	70	660.5	75	660.5	80	684.5	85
660.5	50	660.5	55	660.5	60	660.5	65	660.5	70	660.5	75	660.5	80	660.5	85	684.5	90
660.5	55	660.5	60	660.5	65	660.5	70	660.5	75	660.5	80	660.5	85	660.5	90	684.5	95
660.5	60	660.5	65	660.5	70	660.5	75	660.5	80	660.5	85	660.5	90	660.5	95	684.5	100

NOTE:
Subsurface information shown on this drawing was obtained solely for use in establishing design controls for the project. The accuracy of this information is not guaranteed and it is not to be construed as part of the plans governing construction of the project.

* Standard Penetration Test: The number of blows of a 140 lb hammer falling 30" required to drive a 2.5" O.D., 1 3/8" I.D. split barrel sampler 12".

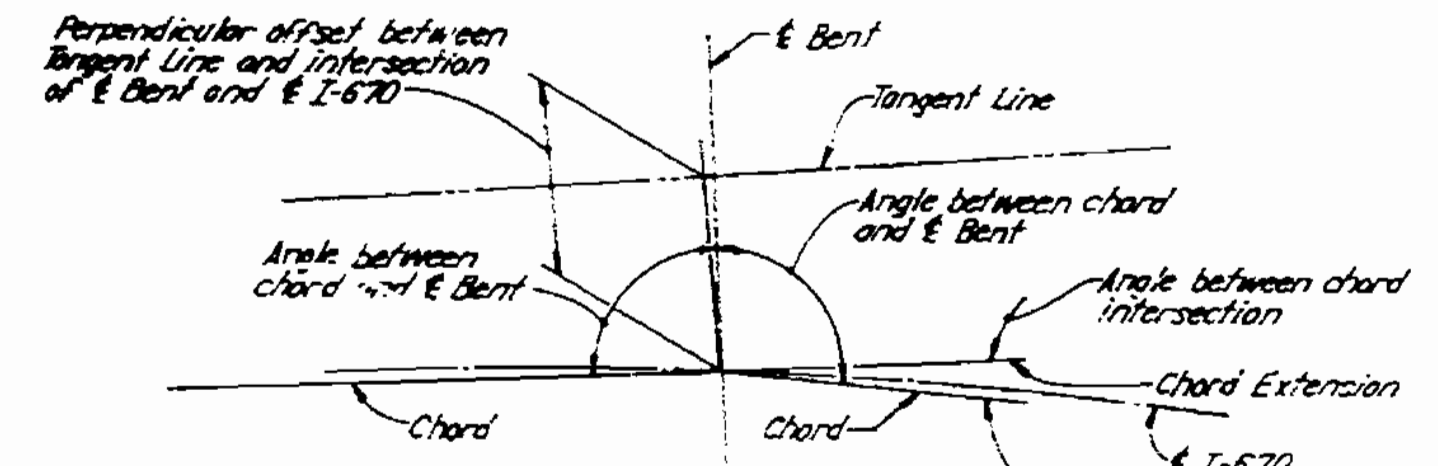
Note: This drawing is not to scale. Follow dimensions.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		8	103	



BENT	* STATION
1	53 + 49.38
2	54 + 39.38
3	55 + 29.38
4	56 + 02.38
5	56 + 66.38
6	57 + 57.38
7	58 + 48.38
8	59 + 12.38
9	60 + 05.38
10	60 + 81.38
11	61 + 74.38

* Station on \pm I-670 at $\&$ Bent.



DETAIL A

Legend:
 W.B. denotes Westbound Lanes
 E.B. denotes Eastbound Lanes

FOOTING PLAN

Notes:
 Bents cannot be accurately located from the reference point on the tangent by conventional survey methods based on 100' chords.
 The pedestal piles of the pedestal pile alternate have the same center points as shown for the corresponding pile footings.

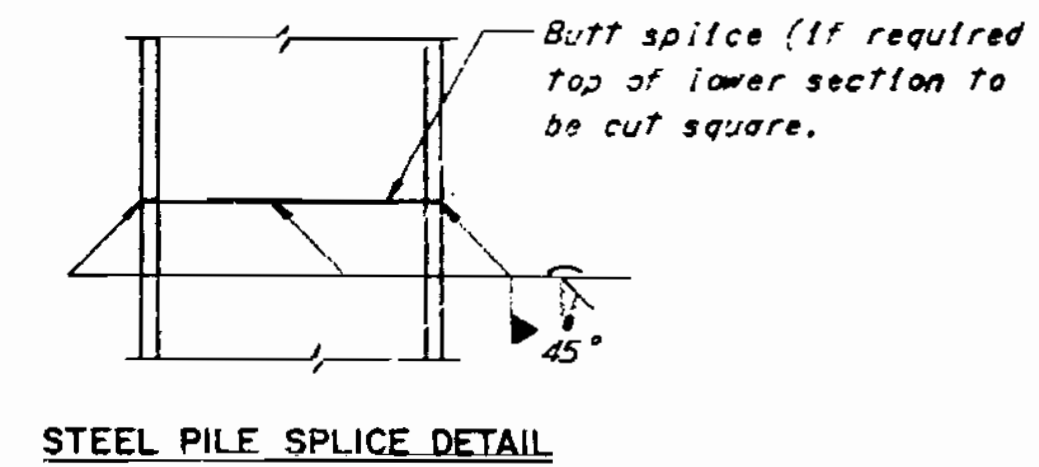
Note: This drawing is not to scale. Follow dimensions.

SUBSTRUCTURE LAYOUT

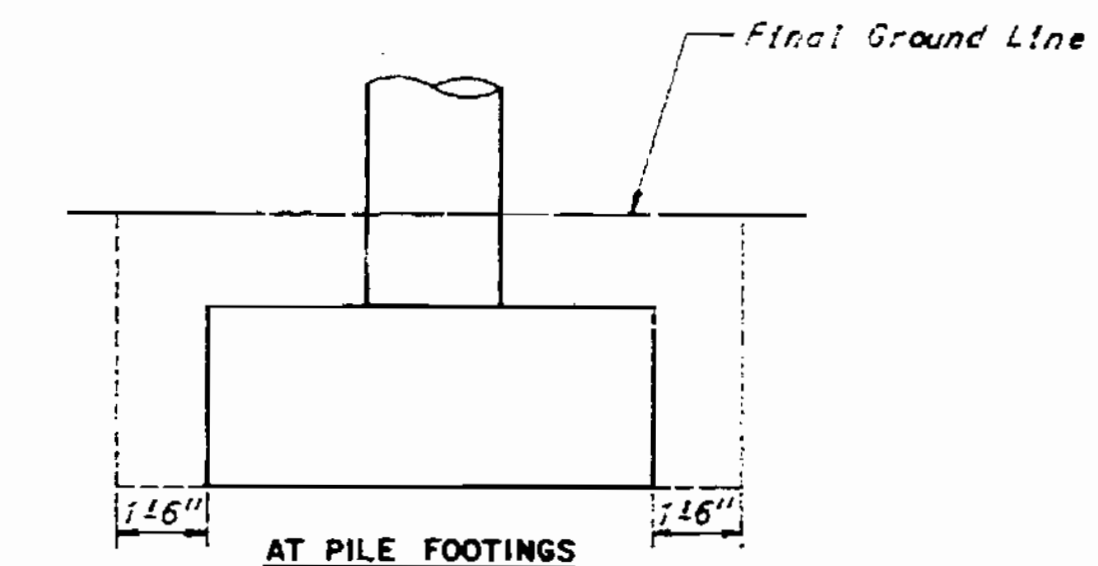
DETAILED BJT 10 78
 CHECKED LJR 10 78

FILE NO.	DATE	FILE NO.	FILE NO.	PROJECT NO.	TOTAL SHEETS
5	NOV.			102	

ESTIMATED QUANTITIES-PILE FOOTING ALTERNATE 'A'												
ITEM	UNIT	WESTBOUND LANE SUBSTRUCTURE					EASTBOUND LANE SUBSTRUCTURE					TOTAL
		UNIT 1	UNIT 2	UNIT 3	UNIT 4	TOTAL	UNIT 1	UNIT 2	UNIT 3	UNIT 4	TOTAL	
Class I Excavation	Cu. Yd.	145	180	115	100	540	145	230	115	100	590	1,130
Asph. 5" x 3" x 1/2" (48" x 1/2")	Lin. Ft.		149			149						149
Structural Steel Piles (HP12x53)	Lin. Ft.	2,436	1,674	1,108	1,250	6,468	2,436	2,418	1,108	1,250	7,212	13,680
Loading	Each	1		1		2					2	2
Class B Concrete	Cu. Yd.	279.3	320.6	177.7	149.2	926.8	275.7	336.1	175.5	147.0	934.3	1,861.1
Reinforcing Steel	Pound	49,250	71,610	28,340	27,070	176,270	48,690	62,570	27,960	26,700	165,920	342,190



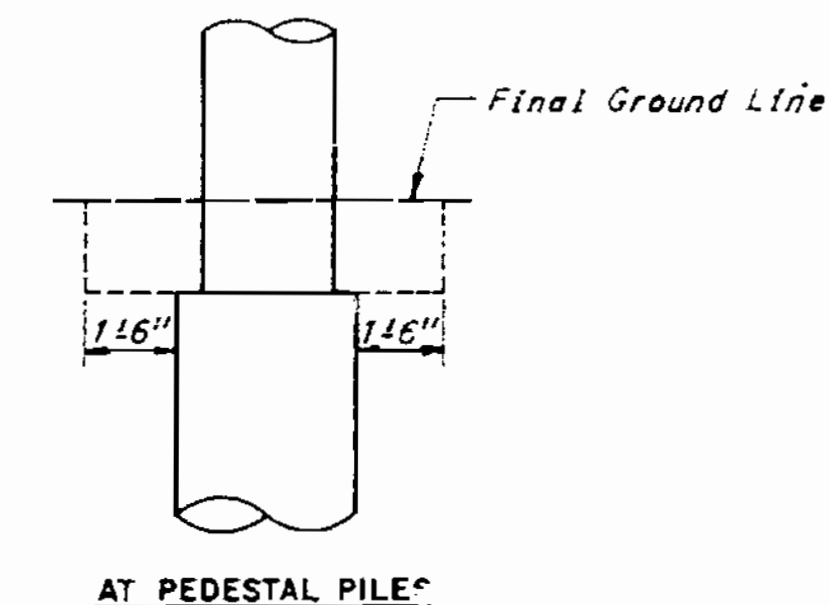
ESTIMATED QUANTITIES-PEDESTAL PILE ALTERNATE 'B'												
ITEM	UNIT	WESTBOUND LANE SUBSTRUCTURE					EASTBOUND LANE SUBSTRUCTURE					TOTAL
		UNIT 1	UNIT 2	UNIT 3	UNIT 4	TOTAL	UNIT 1	UNIT 2	UNIT 3	UNIT 4	TOTAL	
Class I Excavation	Cu. Yd.	15	15	10	10	50	15	15	10	10	50	100
Pedestal Pile Shaft (54" dia)	Lin. Ft.	473				473	473				473	946
Pedestal Pile Shaft (48" dia)	Lin. Ft.		590	285	296	1171		591	285	296	1172	2,343
Class B Concrete	Cu. Yd.	223.2	248.6	135.0	111.8	718.6	219.6	244.4	132.8	109.6	706.4	1,425.0
Reinforcing Steel	Pound	91,650	102,960	47,560	45,900	288,070	50,910	102,290	47,180	46,530	286,910	575,870



Note: Cost of concrete in pedestal piles is to be included in unit price bid per linear foot of pedestal pile.

Note: See Special Provisions for bidding on pile Alternate "A" or "B".

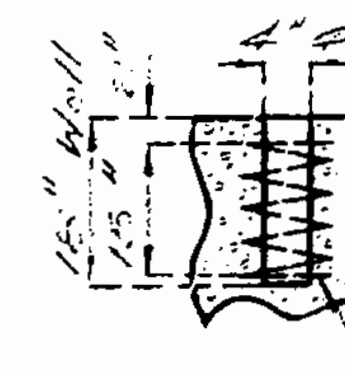
PILE AND FOOTING DATA-WESTBOUND LANE											
BENT	BENT 1	BENT 2	BENT 3	BENT 4	BENT 5	BENT 6	BENT 7	BENT 8	BENT 9	BENT 10	BENT 11
Pile Type and Size	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53		HP12x53	HP12x53	HP12x53	HP12x53
Number	12	12	12	8	10	10		8	10	10	10
Approximate Length (Ft.)	73'	69'	61'	58'	60'	61'		61'	62'	63'	62'
Design Bearing Value (Tons)	92	86	93	93	89	94		93	88	93	94
Hammer Energy Required (Ft. Lbs.)	21,400	20,000	21,600	21,600	20,700	21,800		21,700	20,700	21,900	22,100



PILE AND FOOTING DATA-EASTBOUND LANE											
BENT	BENT 1	BENT 2	BENT 3	BENT 4	BENT 5	BENT 6	BENT 7	BENT 8	BENT 9	BENT 10	BENT 11
Pile Type and Size	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53
Number	12	12	12	8	10	10	12	8	10	10	10
Approximate Length (Ft.)	73'	69'	61'	58'	60'	61'	62'	61'	62'	63'	62'
Design Bearing Value (Tons)	92	86	93	93	89	94	86	93	88	93	94
Hammer Energy Required (Ft. Lbs.)	21,400	20,000	21,600	21,600	20,700	21,800	20,300	21,700	20,700	21,900	22,100

Minimum energy requirement of hammer based on plan length and design bearing value of piles. All piles shall be driven to practical refusal.

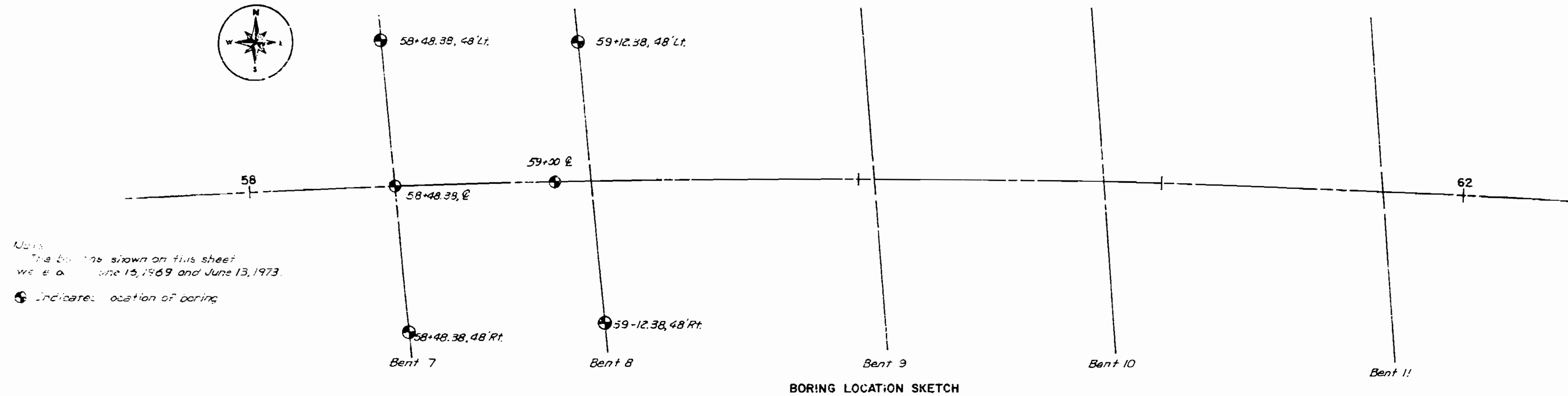
PEDESTAL PILE DATA WESTBOUND AND EASTBOUND LANES											
BENT	BENT 1	BENT 2	BENT 3	BENT 4	BENT 5	BENT 6	BENT 7	BENT 8	BENT 9	BENT 10	BENT 11
Pedestal Pile Diameter (Inches)	54	54	54	48	48	48	48	48	48	48	48
Load at Top of Socket (Tons)	476	483	459	331	418	454	414	371	414	437	441



Note: All reinforcing bars to clear anchor bolts for bearings by at least 2". See Bent details for anchor bolt and reinforcing bar plan locations.

SUMMARY OF QUANTITIES PILE AND FOOTING DATA

FOR. BOND	DATE	FOR. AMT.	PERCENT	AMOUNT	TOTAL
1	10/6		100		



Standard Penetration Test	Standard Penetration Test	Standard Penetration Test	Standard Penetration Test	Standard Penetration Test
Depth	Blows/10'	747.7-Surface	748.0 Surface	748.1 Surface
750		747.7-Surface	748.0 Surface	748.1 Surface
		747.7	748.0 Bricks (fill)	748.1 Bricks (fill)
740	5 3/3/74	742.7 Fine sand	746.0 Fine brown sand	746.1 Fine brown sand
	10 7/8/79			10 5/15/80
730	15 13/21/80	732.7 Logs and fill (hard to get bit in hole)		20 17/37/58
	20 11/13/73	727.7 Compact sand		
720	25 26/42/43	722.7 Very compact fine sand		30 24/44/50
	30 18/56/61			
710	35 16/31/36	710.7 Gray medium river sand		40 8/19/24
	40 15/16/15			
700	45 9/18/25			50 8/16/12
	50 26/22/18			
690	55 9/10/16		692.0 Gray sand & fine gravel	60 13/26/27
	60 14/14/24			
680		682.5 Hard limestone, cut with rock bit	682.0 Limestone	682.1 Hard limestone
		677.2		682.2 Gray limestone, hard, thin bedded, thin weathered seams, sporadic fracturing, highly fossiliferous.
				682.3 Dark gray shaly limestone, hard
				682.4 grading into a limy shale.
				682.5 Dark gray limy shale hard P.P.9+
670		58+48.38, 48' Lt. (Core)	58+48.38, 48' Lt.	59+00 (Core)
				59+12.38, 48' Lt.
				59+12.38, 48' Lt.

* Standard Penetration Test: The number of blows of a 140 lb. hammer falling 20" required to drive a 2.0" O.D., 1 3/8" I.D. split barrel sampler 12".

NOTE:
Subsurface information shown on this drawing was obtained solely for use in establishing design controls for the project. The accuracy of this information is not guaranteed and it is not to be construed as part of the plans governing construction of the project.

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4 Bent 4 WB and EB on 10'

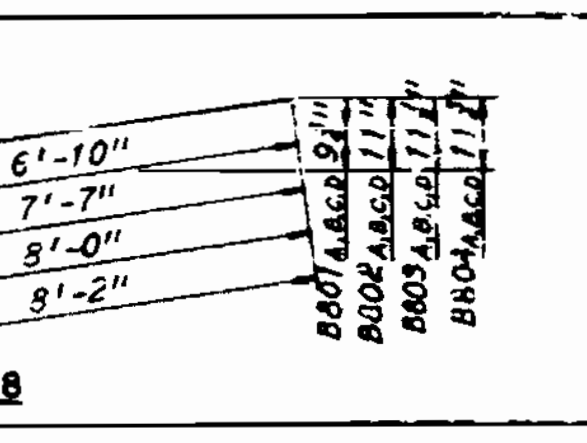
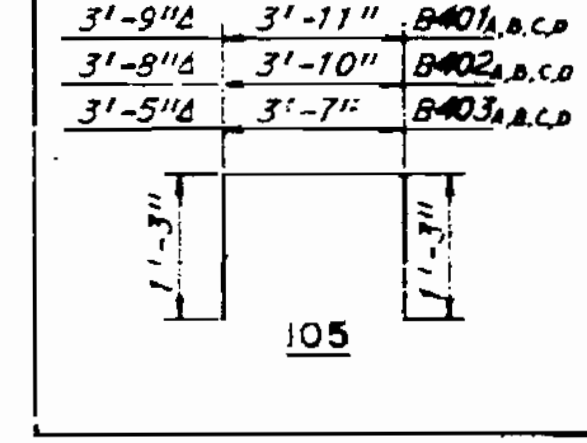
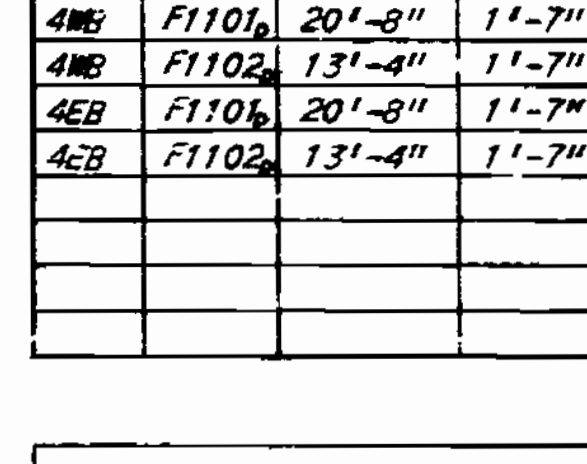
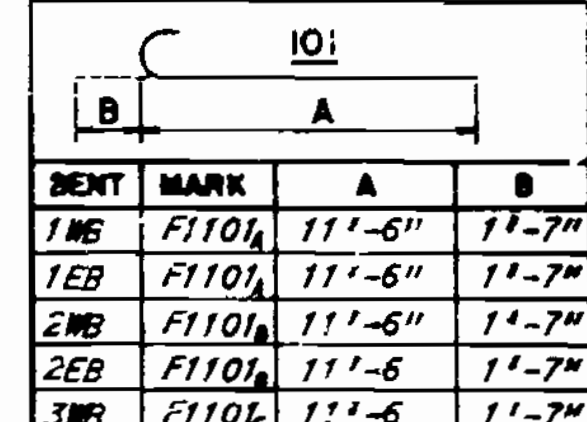
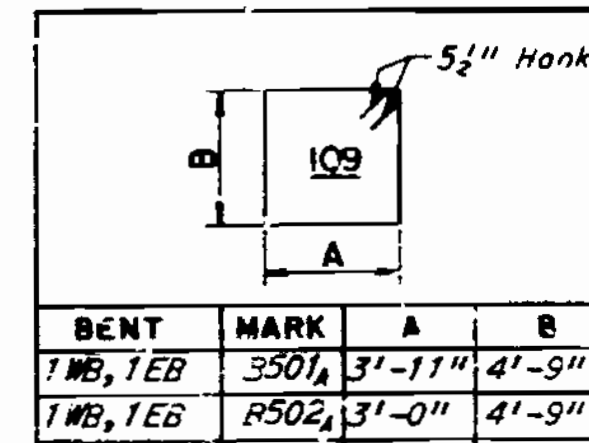
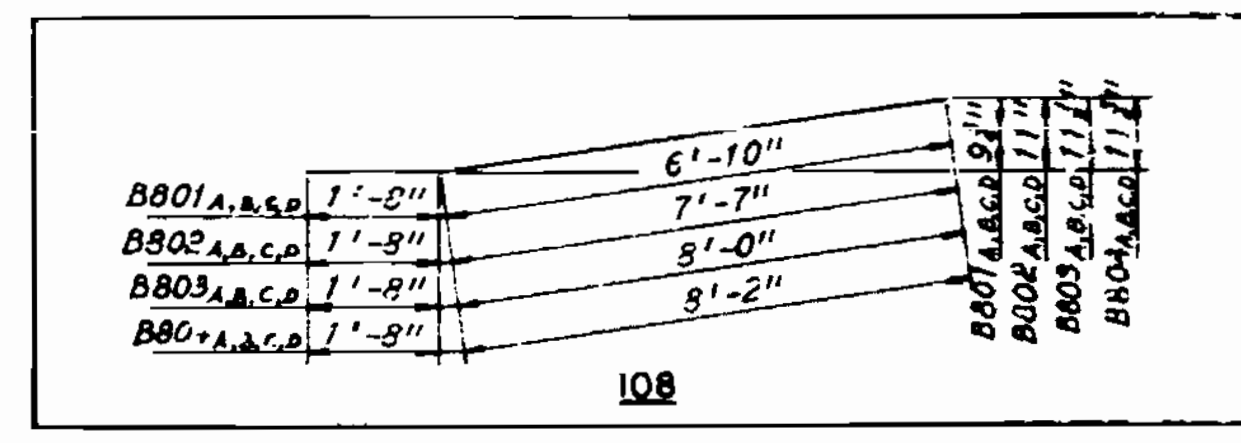
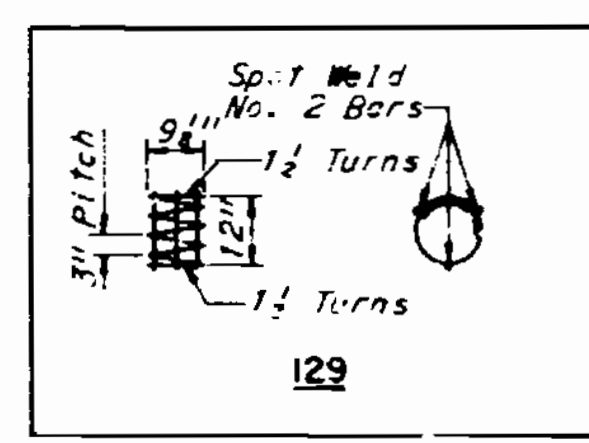
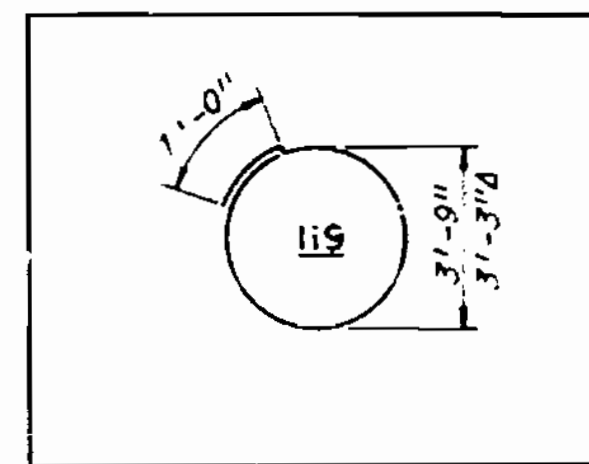
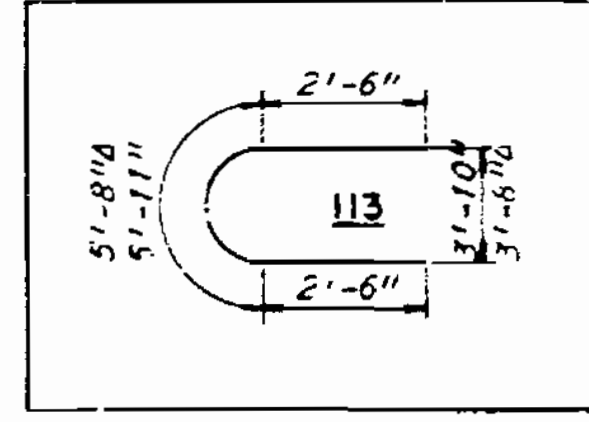
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1	1	107		

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 1 WESTBOUND				
A201A	14	19'-9"	129	Capbeam
B401A	31	6'-3"	105	Capbeam
B402A	2	6'-2"	105	Capbeam
B403A	2	5'-11"	105	Capbeam
B501A	20	17'-11"	109	Capbeam
B502A	52	16'-1"	109	Capbeam
B503A	8	34'-4"	*109	Capbeam
B504A	2	16'-1"	109	Capbeam
B601A	4	52'-4"	Str.	Capbeam
B701A	10	10'-11"	113	Capbeam
B801A	4	9'-6"	108	Capbeam
B802A	4	9'-3"	108	Capbeam
B803A	4	9'-8"	108	Capbeam
B804A	4	9'-10"	108	Capbeam
B1101A	2	56'-6"	100	Capbeam
B1102A	2	58'-3"	100	Capbeam
B1103A	2	58'-10"	100	Capbeam
B1104A	2	59'-2"	100	Capbeam
B1105A	8	44'-8"	100	Capbeam
B1106A	8	31'-6"	Str.	Capbeam
C401A	73	12'-8"	119	Column
C1101A	12	39'-10"	Str.	Column
C1102A	12	39'-11"	Str.	Column
F601A	24	7'-10"	100	Footing
F801A	16	10'-4"	100	Footing
F1101A	24	13'-1"	101	Footing
BENT 1 EASTBOUND				
A201A	14	19'-9"	129	Capbeam
B401A	31	6'-3"	105	Capbeam
B402A	2	6'-2"	105	Capbeam
B403A	2	5'-11"	105	Capbeam
B501A	20	17'-11"	109	Capbeam
B502A	52	16'-1"	109	Capbeam
B503A	8	34'-4"	*109	Capbeam
B504A	2	16'-1"	109	Capbeam
B601A	4	52'-4"	Str.	Capbeam
B701A	10	10'-11"	113	Capbeam
B801A	4	9'-6"	108	Capbeam
B802A	4	9'-3"	108	Capbeam
B803A	4	9'-8"	108	Capbeam
B804A	4	9'-10"	108	Capbeam
B1101A	2	56'-6"	100	Capbeam
B1102A	2	58'-3"	100	Capbeam
B1103A	2	58'-10"	100	Capbeam
B1104A	2	59'-2"	100	Capbeam
B1105A	8	44'-8"	100	Capbeam
B1106A	8	31'-6"	Str.	Capbeam
C401A	71	12'-8"	119	Column
C1103A	12	39'-3"	Str.	Column
C1104A	12	39'-1"	Str.	Column
F601A	24	7'-10"	100	Footing
F801A	16	10'-4"	100	Footing
F1101A	24	13'-1"	101	Footing

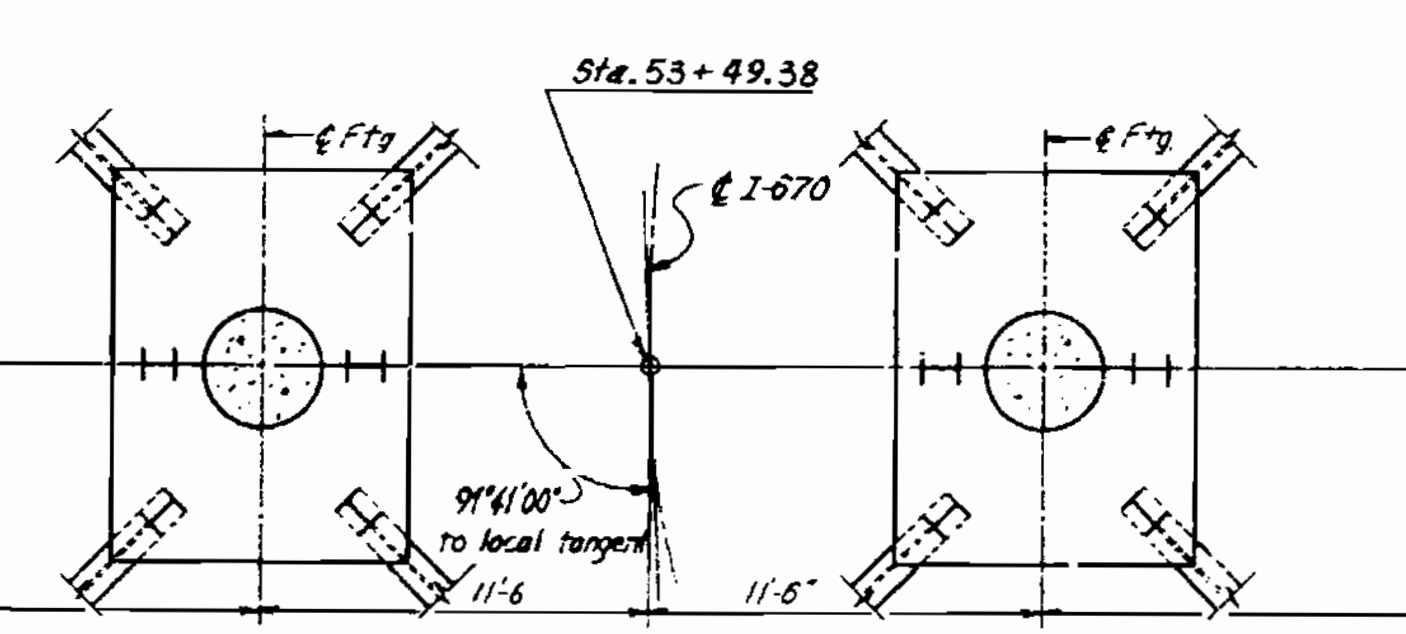
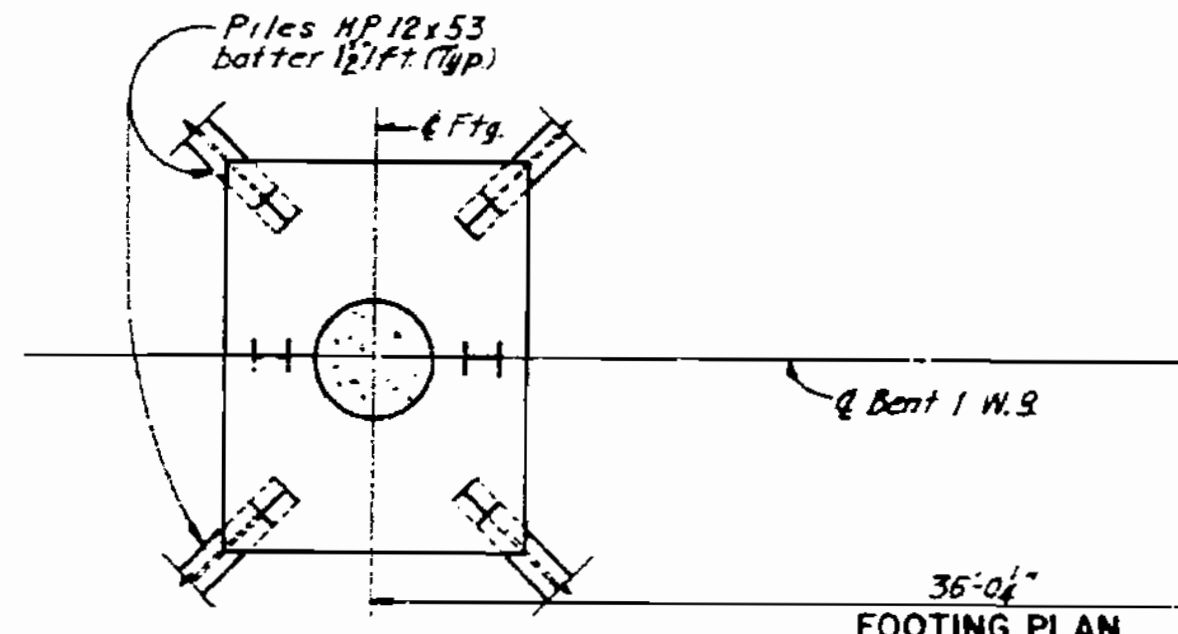
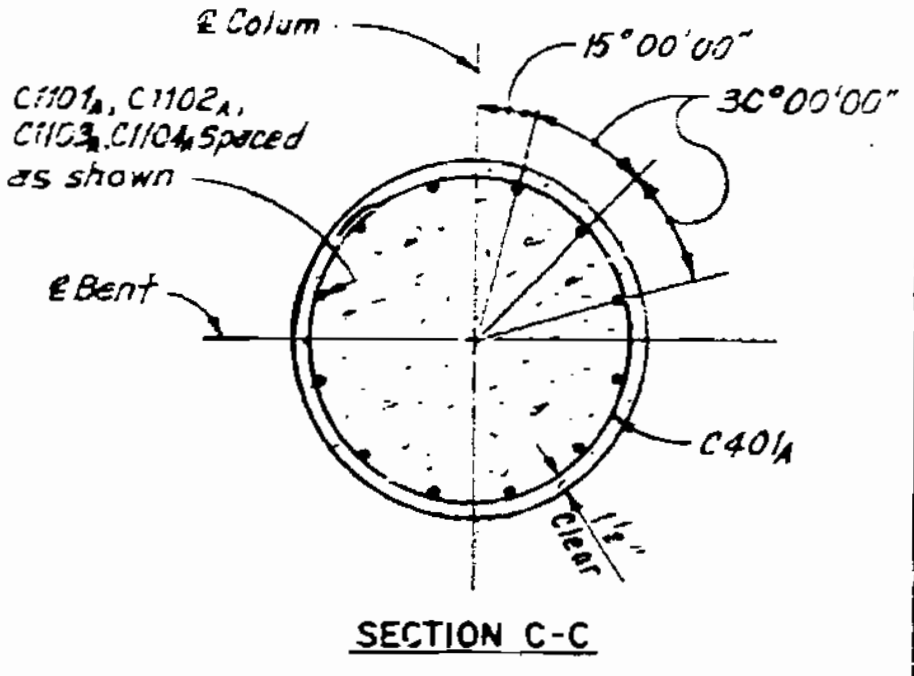
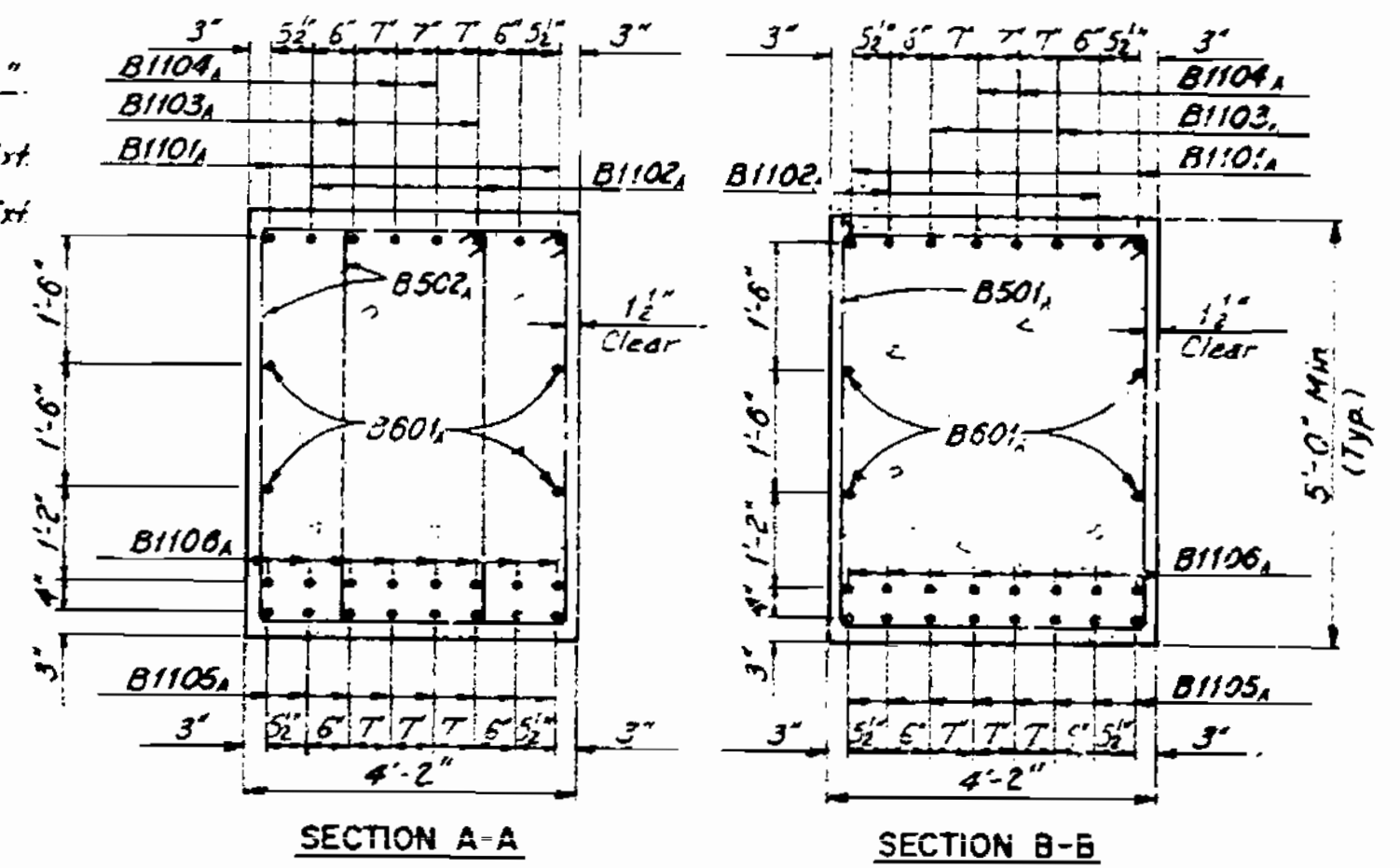
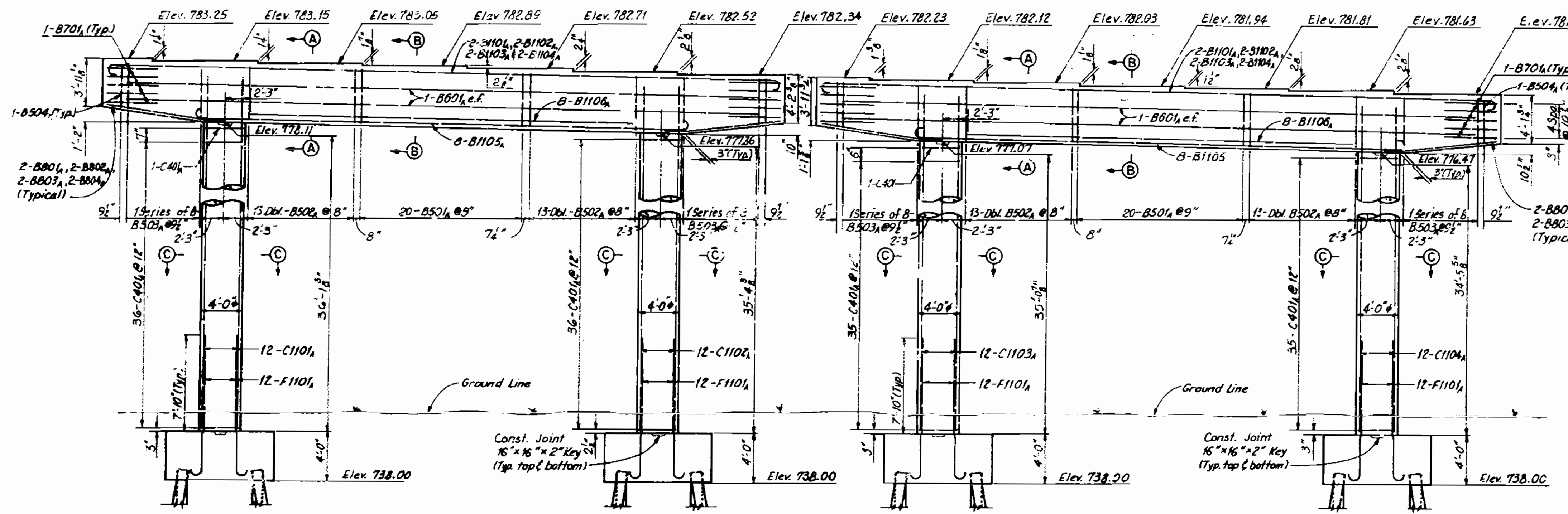
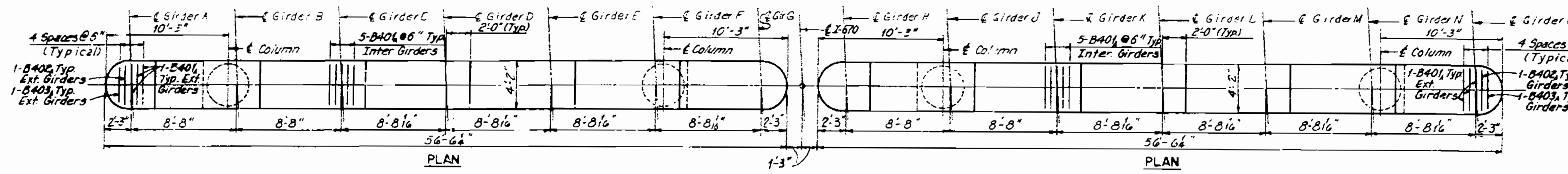
BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 2 WESTBOUND				
A201	14	19'-9"	129	Capbeam
B401B	31	6'-3"	105	Capbeam
B402B	2	6'-2"	105	Capbeam
B403B	2	5'-11"	105	Capbeam
B501B	20	17'-11"	109	Capbeam
B502B	52	16'-1"	109	Capbeam
B503B	8	34'-4"	*109	Capbeam
B504B	2	16'-1"	109	Capbeam
B601B	4	52'-4"	Str.	Capbeam
B701B	10	10'-11"	113	Capbeam
B801B	4	9'-6"	108	Capbeam
B802B	4	9'-3"	108	Capbeam
B803B	4	9'-8"	108	Capbeam
B804B	4	9'-10"	108	Capbeam
B1101B	2	56'-6"	100	Capbeam
B1102B	2	58'-3"	100	Capbeam
B1103B	2	58'-10"	100	Capbeam
B1104B	2	59'-2"	100	Capbeam
B1105B	8	44'-8"	100	Capbeam
B1106B	8	31'-6"	Str.	Capbeam
C401B	71	12'-8"	119	Column
C1101B	12	39'-10"	Str.	Column
C1102B	12	39'-0"	Str.	Column
F601B	24	7'-10"	100	Footing
F801B	16	10'-4"	100	Footing
F1101B	24	13'-1"	101	Footing
BENT 2 EASTBOUND				
A201B	14	19'-9"	129	Capbeam
B401B	31	6'-3"	105	Capbeam
B402B	2	6'-2"	105	Capbeam
B403B	2	5'-11"	105	Capbeam
B501B	20	17'-11"	109	Capbeam
B502B	52	16'-1"	109	Capbeam
B503B	8	34'-4"	*109	Capbeam
B504B	2	16'-1"	109	Capbeam
B601B	4	52'-4"	Str.	Capbeam
B701B	10	10'-11"	113	Capbeam
B801B	4	9'-6"	108	Capbeam
B802B	4	9'-3"	108	Capbeam
B803B	4	9'-8"	108	Capbeam
B804B	4	9'-10"	108	Capbeam
B1101B	2	56'-6"	100	Capbeam
B1102B	2	58'-3"	100	Capbeam
B1103B	2	58'-10"	100	Capbeam
B1104B	2	59'-2"	100	Capbeam
B1105B	8	44'-8"	100	Capbeam
B1106B	8	31'-6"	Str.	Capbeam
C401B	69	12'-8"	119	Column
C1103B	12	39'-5"	Str.	Column
C1104B	12	37'-6"	Str.	Column
F601B	24	7'-10"	100	Footing
F801B	16	10'-4"	100	Footing
F1101B	24	13'-1"	101	Footing

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 3 WESTBOUND				
A201C	14	19'-9"	129	Capbeam
B401C	31	6'-3"	105	Capbeam
B402C	2	6'-2"	105	Capbeam
B403C	2	5'-11"	105	Capbeam
B501C	20	17'-11"	109	Capbeam
B502C	52	16'-1"	109	Capbeam
B503C	8	34'-4"	*109	Capbeam
B504C	2	16'-1"	109	Capbeam
B601C	4	52'-4"	Str.	Capbeam
B701C	10	10'-11"	113	Capbeam
B801C	4	9'-6"	108	Capbeam
B802C	4	9'-3"	108	Capbeam
B803C	4	9'-8"	108	Capbeam
B804C	4	9'-10"	108	Capbeam
B1101C	2	56'-6"	100	Capbeam
B1102C	2	58'-3"	100	Capbeam
B1103C	2	58'-10"	100	Capbeam
B1104C	2	59'-2"	100	Capbeam
B1105C	8	44'-8"	100	Capbeam
B1106C	8	31'-6"	Str.	Capbeam
C401C	69	12'-8"	119	Column
C1101C	12	38'-11"	Str.	Column
C1102C	12	38'-0"	Str.	Column
F601C	24	7'-10"	100	Footing
F801C	16	10'-4"	100	Footing
F1101C	24	13'-1"	101	Footing
BENT 3 EASTBOUND				
A201C	14	19'-9"	129	Capbeam
B401C	31	6'-3"	105	Capbeam
B402C	2	6'-2"	105	Capbeam
B403C	2	5'-11"	105	Capbeam
B501C	20	17'-11"	109	Capbeam
B502C	52	16'-1"	109	Capbeam
B503C	8	34'-4"	*109	Capbeam
B504C	2	16'-1"	109	Capbeam
B601C	4	52'-4"	Str.	Capbeam
B701C	10	10'-11"	113	Capbeam
B801C	4	9'-6"	108	Capbeam
B802C	4	9'-3"	108	Capbeam
B803C	4	9'-8"	108	Capbeam
B804C	4	9'-10"	108	Capbeam
B1101C	2	56'-6"	100	Capbeam
B1102C	2	58'-3"	100	Capbeam
B1103C	2	58'-10"	100	Capbeam
B1104C	2	59'-2"	100	Capbeam
B1105C	8	44'-8"	100	Capbeam
B1106C	8	31'-6"	Str.	Capbeam
C401C	67	12'-8"	119	Column
C1103C	12	37'-5"	Str.	Column
C1104C	12	36'-6"	Str.	Column
F601C	24	7'-10"	100	Footing
F801C	16	10'-4"	100	Footing
F1101C	24	13'-1"	101	Footing

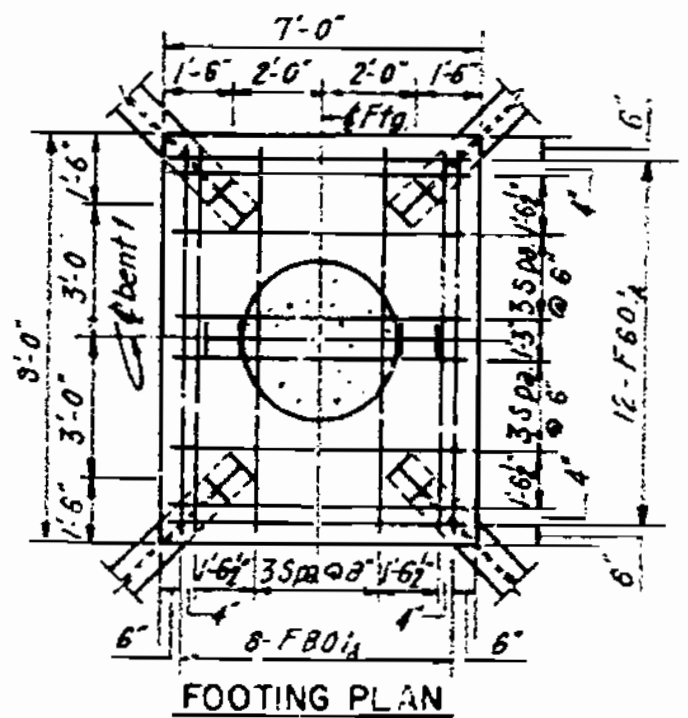
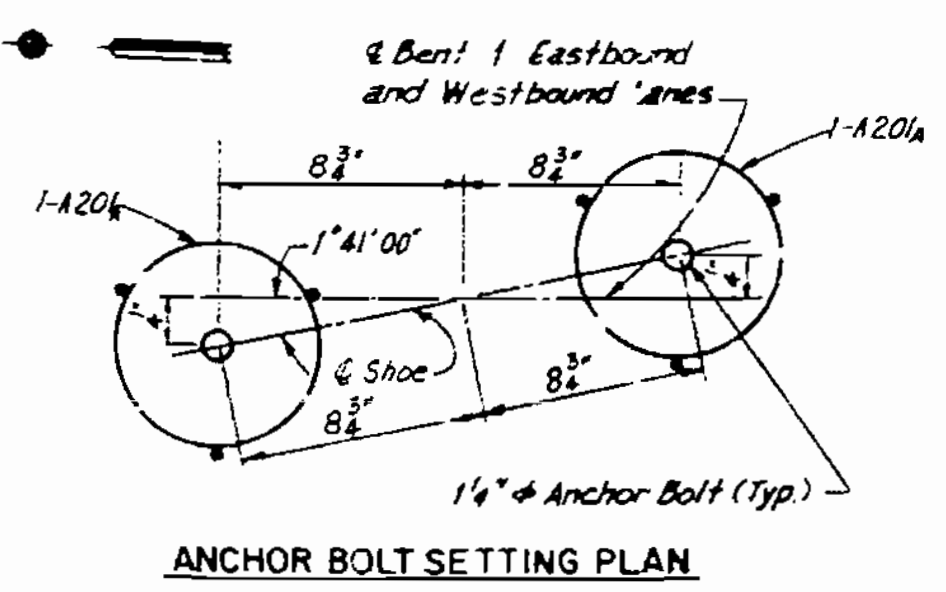
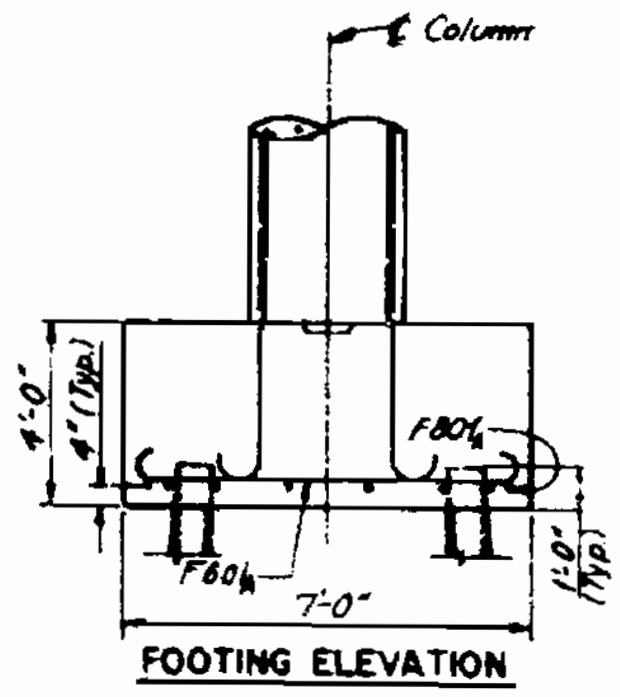
BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 4 WESTBOUND				
A201D	14	19'-9"	129	Capbeam
B401D	31	6'-3"	105	Capbeam
B402D	2	6'-0"	105	Capbeam
B403D	2	5'-9"	105	Capbeam
B501D	49	17'-7"	109	Capbeam
B502D	5	32'-3"	*109	Capbeam
B503D	2	15'-9"	109	Capbeam
B601D	4	52'-6"	Str.	Capbeam
B701D	10	10'-8"	113	Capbeam
B801D	4	9'-6"	108	Capbeam
B802D	4	9'-3"	108	Capbeam
B803D	4	9'-8"	108	Capbeam
B804D	4	9'-10"	108	Capbeam
B1001D	2	56'-2"	100	Capbeam
B1002D	2	57'-11"	100	Capbeam
B1003D	2	58'-6"	100	Capbeam
B1004D	2	58'-10"	100	Capbeam
B1101D	8	44'-2"	100	Capbeam
B1102D	4	32'-0"	Str.	Capbeam
C401D	67	11'-1"	119	Column
C1101D	10	38'-2"	Str.	Column
C1102D	10	37'-3"	Str.	Column
F701D	48	10'-2"	100	Footing
F1101D	20	22'-3"	101	Footing
F1102D	20	14'-11"	101	Footing
BENT 4 EASTBOUND				
A201D	14	19'-9"	129	Capbeam
B401D	31	6'-3"	105	Capbeam
B402D	2	6'-0"	105	Capbeam
B403D	2	5'-9"	105	Capbeam
B501D	49	17'-7"	109	Capbeam
B502D	5	32'-3"	*109	Capbeam
B503D	2	15'-9"	109	Capbeam
B601D	4	52'-6"	Str.	Capbeam
B701D	10	10'-8"	113	Capbeam
B801D	4	9'-6"	108	Capbeam
B802D	4	9'-3"	108	Capbeam
B803D	4	9'-8"	108	Capbeam
B804D	4	9'-10"	108	Capbeam
B1001D	2	56'-2"	100	Capbeam
B1002D	2	57'-11"	100	Capbeam
B1003D	2	58'-6"	100	Capbeam
B1004D	2	58'-10"	100	Capbeam
B1101D	8	44'-2"	100	Capbeam
B1102D	4	32'-0"	Str.	Capbeam
C401D	65	11'-1"	119	Column
C1103D	10	36'-3"	Str.	Column
C1104D	10	35'-9"	Str.	Column
F701D	48	10'-2"	100	Footing
F1101D	20	22'-3"	101	Footing
F1102D	20	14'-11"	101	Footing



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		13	110	



Legend:
 EB = Eastbound Lanes
 WB = Westbound Lanes



Notes:
 Pile spacing is measured at bottom of footing.
 For section thru cap at anchor bolt locations see Sheet 4 of 36.

DETAILED M.A.U. 1078
 CHECKED L.J.R. 1078

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 12 of 36

REV. NO.	DATE	BY	CHKD.	APP. NO.
1				108

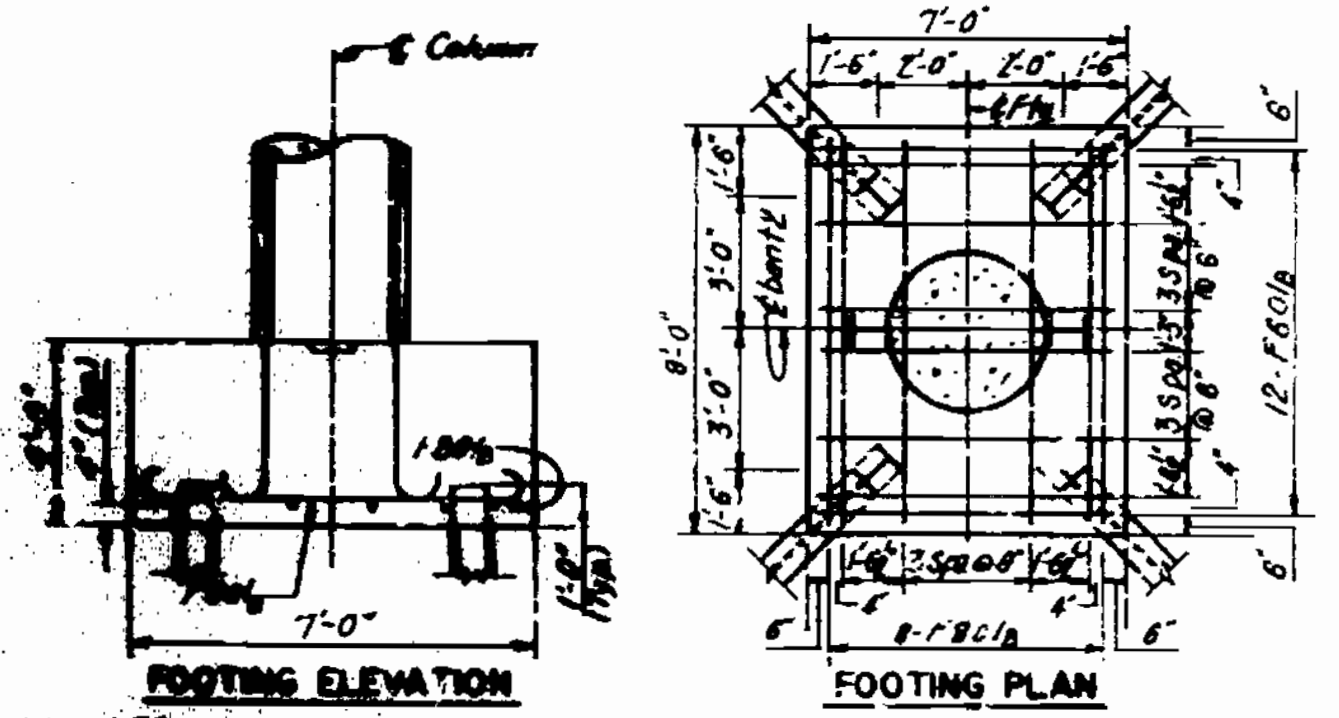
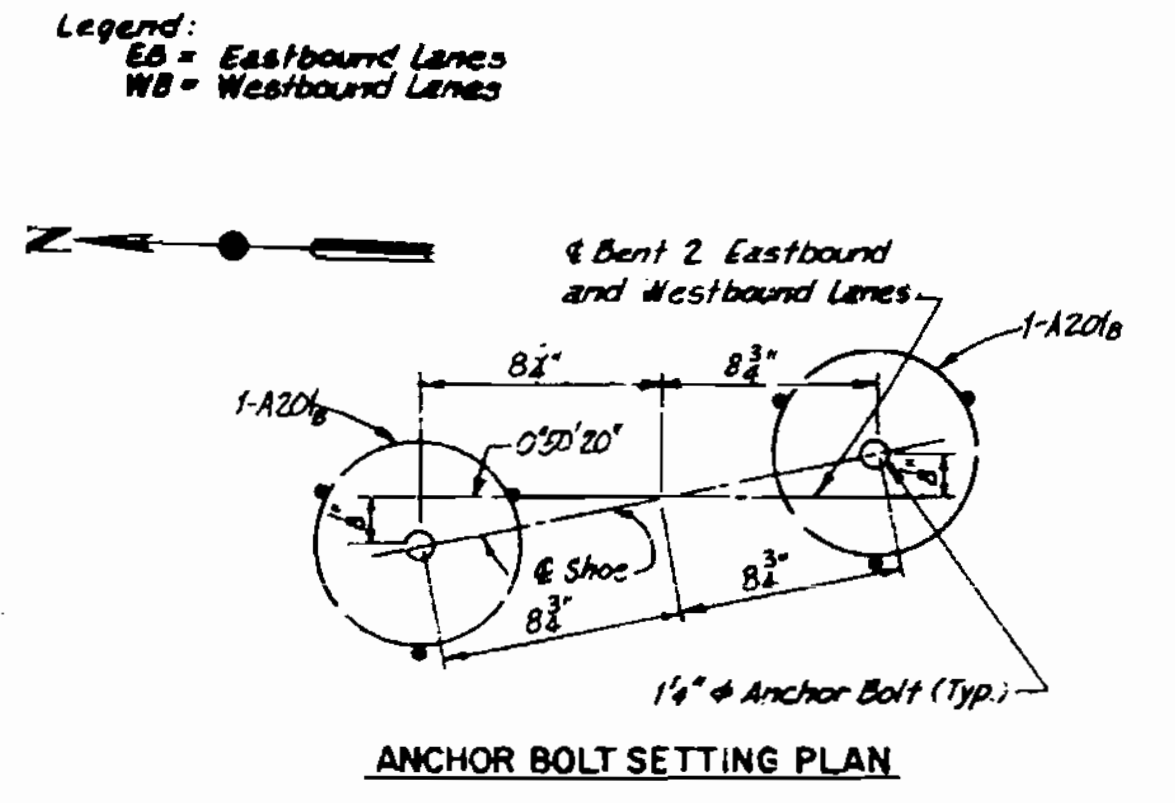
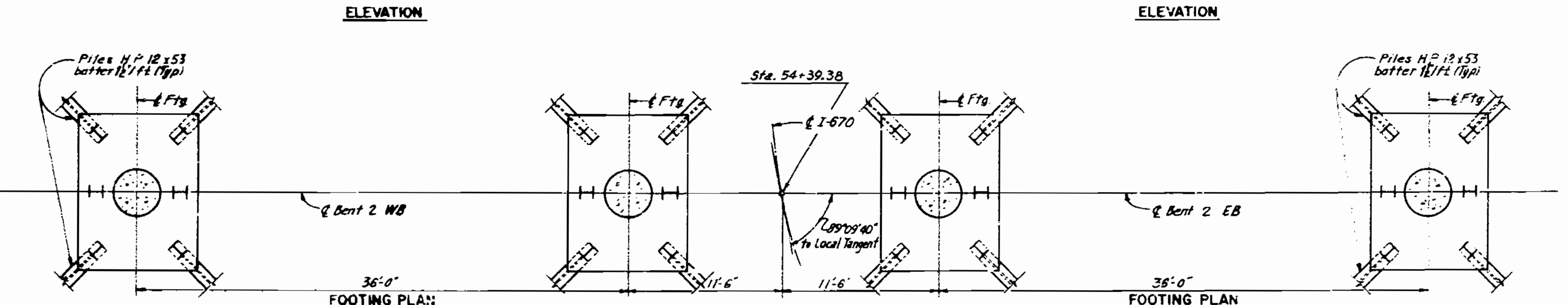
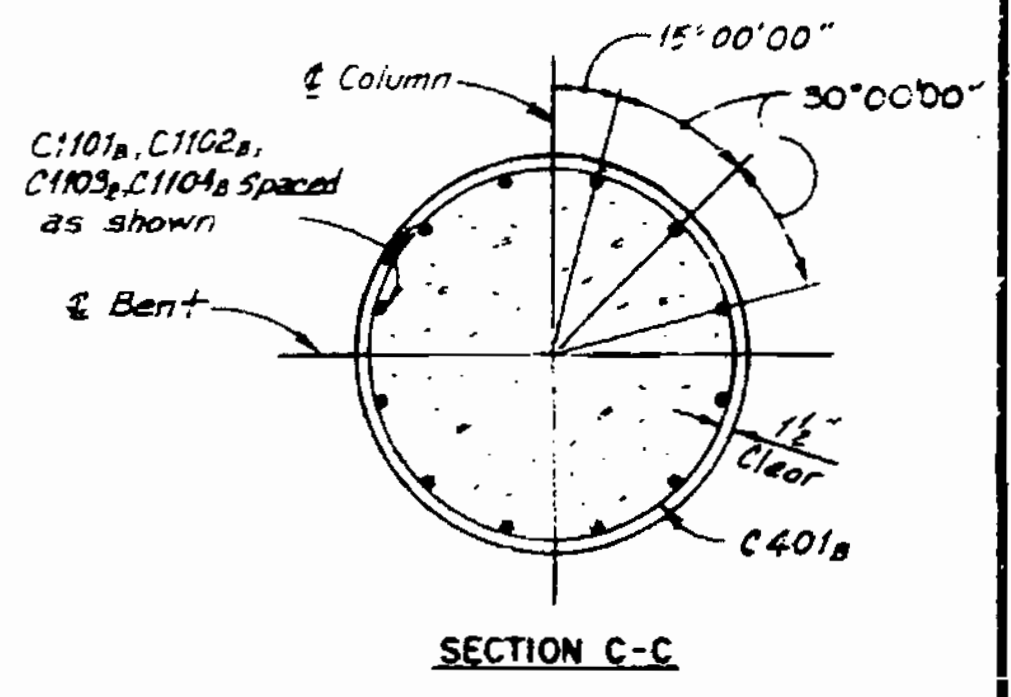
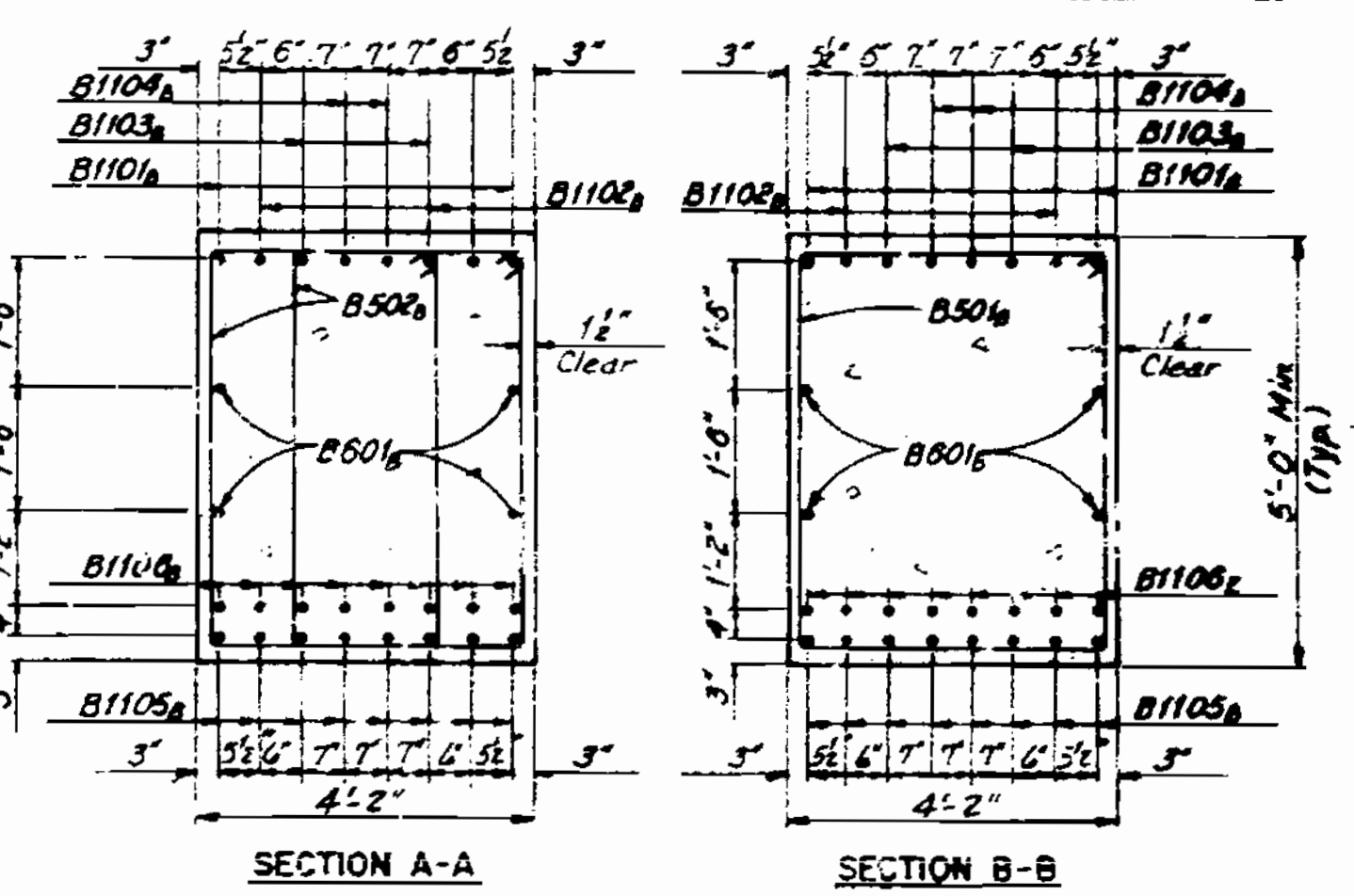
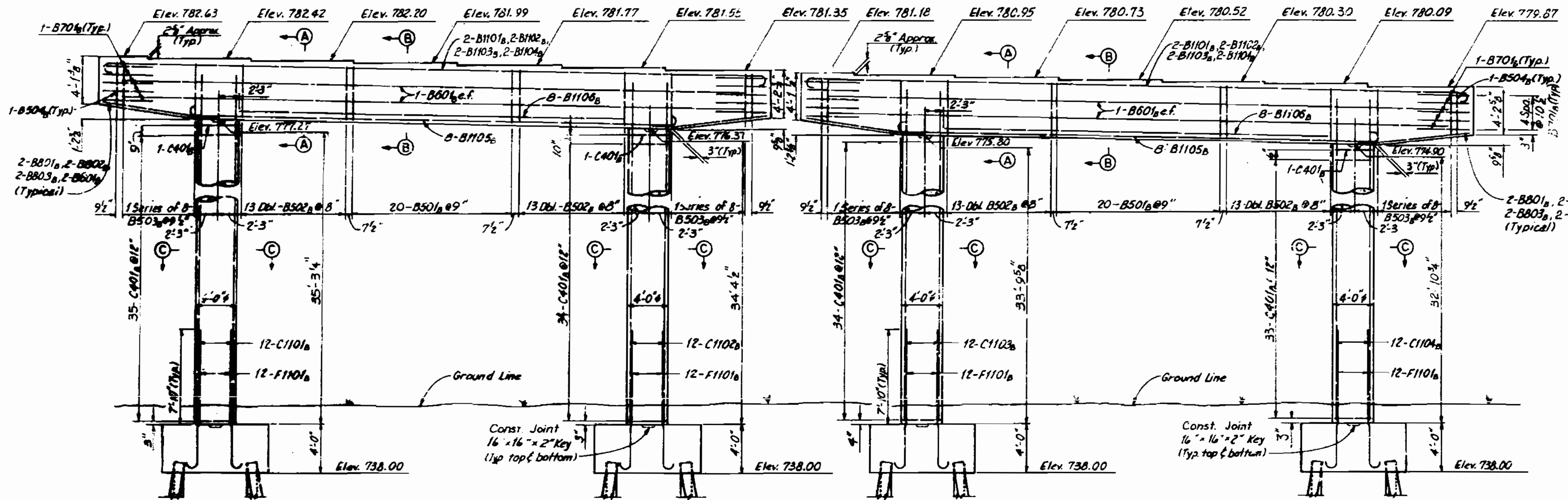
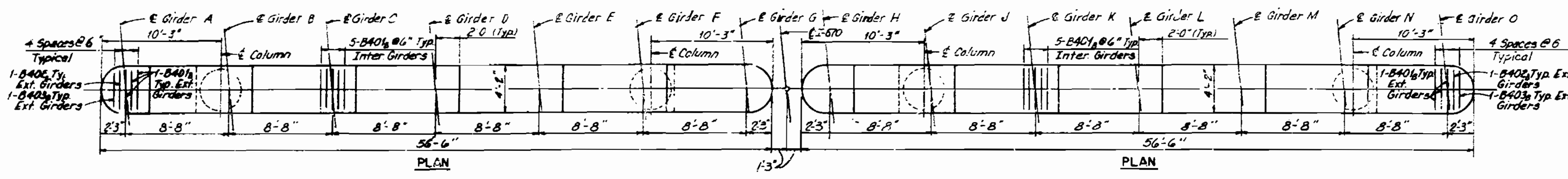
BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 5 WESTBOUND				
A201 _E	14	19'-9"	129	Capbeam
B401 _E	31	6'-1"	105	Capbeam
B402 _E	2	6'-0"	105	Capbeam
B403 _E	2	5'-9"	105	Capbeam
B501 _E	17	17'-7"	109	Capbeam
B502 _E	56	15'-7"	109	Capbeam
B503 _E	8	33'-8"	*109	Capbeam
B504 _E	2	15'-9"	109	Capbeam
B601 _E	4	52'-6"	STR.	Capbeam
B701 _E	10	10'-8"	113	Capbeam
B801 _E	4	8'-6"	108	Capbeam
B802 _E	4	9'-3"	108	Capbeam
B803 _E	4	9'-8"	108	Capbeam
B804 _E	4	9'-10"	108	Capbeam
B1101 _E	2	56'-6"	100	Capbeam
B1102 _E	2	58'-3"	100	Capbeam
B1103 _E	2	58'-10"	100	Capbeam
B1104 _E	2	59'-2"	100	Capbeam
B1105 _E	8	44'-2"	100	Capbeam
B1106 _E	8	32'-0"	STR.	Capbeam
C401 _E	64	11'-1"	119	Column
C1101 _E	12	36'-6"	STR.	Column
C1102 _E	12	35'-6"	STR.	Column
F701 _E	48	10'-2"	100	Footing
F801 _E	24	15'-7"	101	Footing
F100 _E	24	12'-11"	101	Footing
BENT 5 EASTBOUND				
A201 _E	14	19'-9"	129	Capbeam
B401 _E	31	6'-1"	105	Capbeam
B402 _E	2	6'-0"	105	Capbeam
B403 _E	2	5'-9"	105	Capbeam
B501 _E	17	17'-7"	109	Capbeam
B502 _E	56	15'-7"	109	Capbeam
B503 _E	8	33'-8"	*109	Capbeam
B504 _E	2	15'-9"	109	Capbeam
B601 _E	4	52'-6"	STR.	Capbeam
B701 _E	10	10'-8"	113	Capbeam
B801 _E	4	8'-6"	108	Capbeam
B802 _E	4	9'-3"	108	Capbeam
B803 _E	4	9'-8"	108	Capbeam
B804 _E	4	9'-10"	108	Capbeam
B1101 _E	2	56'-6"	100	Capbeam
B1102 _E	2	58'-3"	100	Capbeam
B1103 _E	2	58'-10"	100	Capbeam
B1104 _E	2	59'-2"	100	Capbeam
B1105 _E	8	44'-2"	100	Capbeam
B1106 _E	8	32'-0"	STR.	Capbeam
C401 _E	61	11'-1"	119	Column
C1103 _E	12	35'-0"	STR.	Column
C1104 _E	12	34'-0"	STR.	Column
F701 _E	48	10'-2"	100	Footing
F801 _E	24	15'-7"	101	Footing
F100 _E	24	12'-11"	101	Footing

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 6 WESTBOUND				
A201 _E	14	19'-9"	129	Capbeam
B401 _E	31	6'-1"	105	Capbeam
B402 _E	2	6'-0"	105	Capbeam
B403 _E	2	5'-9"	105	Capbeam
B501 _E	17	17'-7"	109	Capbeam
B502 _E	56	15'-7"	109	Capbeam
B503 _E	8	33'-8"	*109	Capbeam
B504 _E	2	15'-9"	109	Capbeam
B601 _E	4	52'-6"	STR.	Capbeam
B701 _E	10	10'-8"	113	Capbeam
B801 _E	4	8'-6"	108	Capbeam
B802 _E	4	9'-3"	108	Capbeam
B803 _E	4	9'-8"	108	Capbeam
B804 _E	4	9'-10"	108	Capbeam
B1101 _E	2	56'-6"	100	Capbeam
B1102 _E	2	58'-3"	100	Capbeam
B1103 _E	2	58'-10"	100	Capbeam
B1104 _E	2	59'-2"	100	Capbeam
B1105 _E	8	44'-2"	100	Capbeam
B1106 _E	8	32'-0"	STR.	Capbeam
B1107 _E	2	20'-0"	STR.	Capbeam
C401 _E	58	11'-1"	119	Column
C1101 _E	10	33'-5"	STR.	Column
C1102 _E	10	32'-6"	STR.	Column
F701 _E	48	10'-2"	100	Footing
F110 _E	20	13'-1"	101	Footing
BENT 6 EASTBOUND				
A201 _E	14	19'-9"	129	Capbeam
B401 _E	31	6'-1"	105	Capbeam
B402 _E	2	6'-0"	105	Capbeam
B403 _E	2	5'-9"	105	Capbeam
B501 _E	17	17'-7"	109	Capbeam
B502 _E	56	15'-7"	109	Capbeam
B503 _E	8	33'-8"	*109	Capbeam
B504 _E	2	15'-9"	109	Capbeam
B601 _E	4	52'-6"	STR.	Capbeam
B701 _E	10	10'-8"	113	Capbeam
B801 _E	4	8'-6"	108	Capbeam
B802 _E	4	9'-3"	108	Capbeam
B803 _E	4	9'-8"	108	Capbeam
B804 _E	4	9'-10"	108	Capbeam
B1101 _E	2	56'-6"	100	Capbeam
B1102 _E	2	58'-3"	100	Capbeam
B1103 _E	2	58'-10"	100	Capbeam
B1104 _E	2	59'-2"	100	Capbeam
B1105 _E	8	44'-2"	100	Capbeam
B1106 _E	8	32'-0"	STR.	Capbeam
B1107 _E	2	20'-0"	STR.	Capbeam
C401 _E	55	11'-1"	119	Column
C1103 _E	10	31'-11"	STR.	Column
C1104 _E	10	31'-0"	STR.	Column
F701 _E	48	10'-2"	100	Footing
F110 _E	20	13'-1"	101	Footing

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 7 WESTBOUND				
A201 _E	14	19'-9"	129	Capbeam
B401 _E	31	6'-1"	105	Capbeam
B402 _E	2	6'-0"	105	Capbeam
B403 _E	2	5'-9"	105	Capbeam
B501 _E	17	17'-7"	109	Capbeam
B502 _E	56	15'-7"	109	Capbeam
B503 _E	8	33'-8"	*109	Capbeam
B504 _E	2	15'-9"	109	Capbeam
B601 _E	4	52'-6"	STR.	Capbeam
B701 _E	10	10'-8"	113	Capbeam
B801 _E	4	8'-6"	108	Capbeam
B802 _E	4	9'-3"	108	Capbeam
B803 _E	4	9'-8"	108	Capbeam
B804 _E	4	9'-10"	108	Capbeam
B1101 _E	2	56'-6"	100	Capbeam
B1102 _E	2	58'-3"	100	Capbeam
B1103 _E	2	58'-10"	100	Capbeam
B1104 _E	2	59'-2"	100	Capbeam
B1105 _E	8	44'-2"	100	Capbeam
B1106 _E	8	32'-1"	STR.	Capbeam
B1107 _E	2	20'-0"	STR.	Capbeam
C401 _E	53	11'-1"	119	Column
C1101 _E	12	31'-0"	STR.	Column
C1102 _E	12	30'-1"	STR.	Column
F401 _E	128	12'-2"	119	Pedestal Pile
F402 _E	22	9'-6"	119	Socket
F501 _E	36	40'-0"	STR.	Pedestal Pile
F502 _E	36	28'-4"	STR.	Pedestal Pile
F503 _E	20	14'-0"	STR.	Socket
F110 _E	24	12'-5"	STR.	Pedestal Pile
BENT 7 EASTBOUND				
A201 _E	14	19'-9"	129	Capbeam
B401 _E	31	6'-1"	105	Capbeam
B402 _E	2	6'-0"	105	Capbeam
B403 _E	2	5'-9"	105	Capbeam
B501 _E	17	17'-7"	109	Capbeam
B502 _E	56	15'-7"	109	Capbeam
B503 _E	8	33'-8"	*109	Capbeam
B504 _E	2	15'-9"	109	Capbeam
B601 _E	4	52'-6"	STR.	Capbeam
B701 _E	10	10'-8"	113	Capbeam
B801 _E	4	8'-6"	108	Capbeam
B802 _E	4	9'-3"	108	Capbeam
B803 _E	4	9'-8"	108	Capbeam
B804 _E	4	9'-10"	108	Capbeam
B1101 _E	2	56'-6"	100	Capbeam
B1102 _E	2	58'-3"	100	Capbeam
B1103 _E	2	58'-10"	100	Capbeam
B1104 _E	2	59'-2"	100	Capbeam
B1105 _E	8	44'-3"	100	Capbeam
B1106 _E	8	32'-1"	STR.	Capbeam
B1107 _E	2	20'-0"	STR.	Capbeam
C401 _E	51	11'-1"	119	Column
C1103 _E	10	29'-6"	STR.	Column
C1104 _E	10	28'-7"	STR.	Column
F601 _E	24	7'-10"	100	Footing
F801 _E	20	10'-10"	100	Footing
F1102 _E	20	19'-9"	101	Footing
F1103 _E	20	14'-11"	101	Footing

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 8 WESTBOUND				
A201 _E	14	19'-9"	129	Capbeam
B401 _E	31	6'-1"	105	Capbeam
B402 _E	2	6'-0"	105	Capbeam
B403 _E	2	5'-9"	105	Capbeam
B501 _E	17	17'-7"	109	Capbeam
B502 _E	44	15'-7"	109	Capbeam
B503 _E	8	33'-8"	*109	Capbeam
B504 _E	2	15'-9"	109	Capbeam
B601 _E	4	52'-7"	STR.	Capbeam
B701 _E	10	10'-8"	113	Capbeam
B801 _E	4	8'-6"	108	Capbeam
B802 _E	4	9'-3"	108	Capbeam
B803 _E	4	9'-8"	108	Capbeam
B804 _E	4	9'-10"	108	Capbeam
B1101 _E	2	56'-3"	100	Capbeam
B1102 _E	2	58'-0"	100	Capbeam
B1103 _E	2	58'-7"	100	Capbeam
B1104 _E	2	58'-11"	100	Capbeam
B1105 _E	8	44'-3"	100	Capbeam
B1106 _E	6	32'-1"	STR.	Capbeam
C401 _E	49	11'-1"	119	Column
C1101 _E	10	28'-10"	STR.	Column
C1102 _E	10	27'-11"	STR.	Column
F701 _E	48	10'-2"	100	Footing
F110 _E	20	13'-1"	101	Footing
BENT 8 EASTBOUND				
A201 _E	14	19'-9"	129	Capbeam
B401 _E	31	6'-1"	105	Capbeam
B402 _E	2	6'-0"	105	Capbeam
B403 _E	2	5'-9"	105	Capbeam
B501 _E	17	17'-7"	109	Capbeam
B502 _E	44	15'-7"	109	Capbeam
B503 _E	8	33'-8"	*109	Capbeam
B504 _E	2	15'-9"	109	Capbeam
B601 _E	4	52'-7"	STR.	Capbeam
B701 _E	10	10'-8"	113	Capbeam
B801 _E	4	8'-6"	108	Capbeam
B802 _E	4	9'-3"	108	Capbeam
B803 _E	4	9'-8"	108	Capbeam
B804 _E	4	9'-10"	108	Capbeam
B1101 _E	2	56'-3"	100	Capbeam
B1102 _E	2	58'-0"	100	Capbeam
B1103 _E	2	58'-7"	100	Capbeam
B1104 _E	2	58'-11"	100	Capbeam
B1105 _E	8	44'-3"	100	Capbeam
B1106 _E	6	32'-1"	STR.	Capbeam
C401 _E	45	11'-1"	119	Column
C1103 _E	10			

REV. NO.	DATE	BY	CHKD.	APP. NO.	TITLE
1					



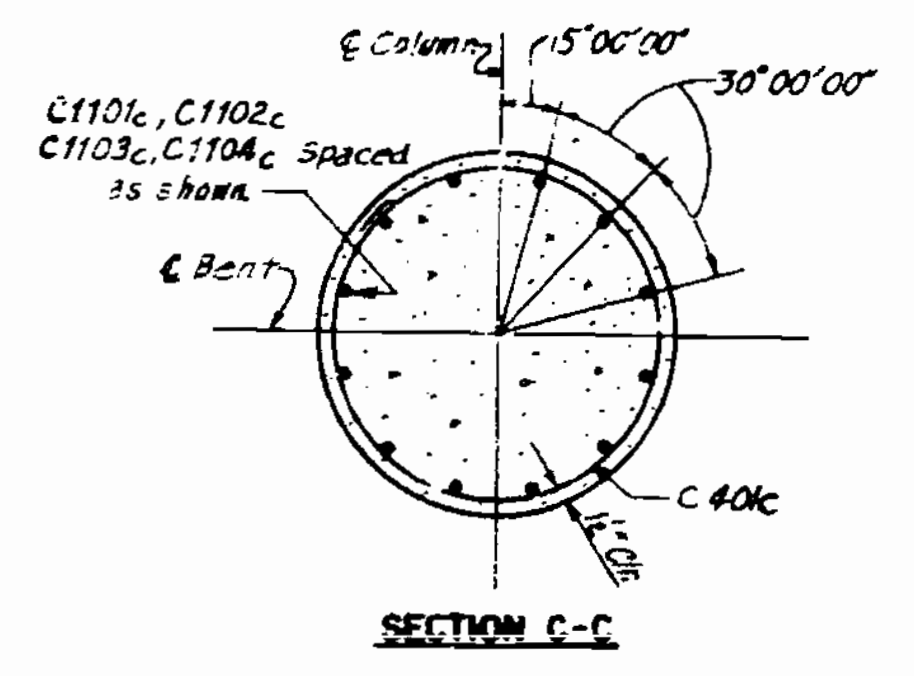
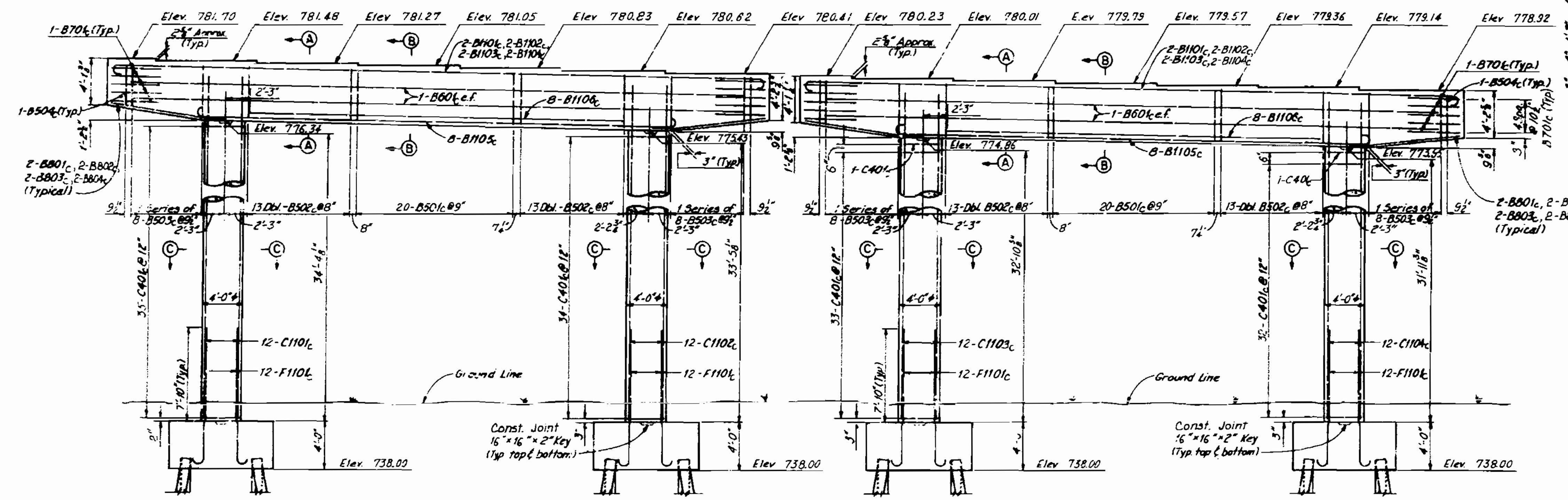
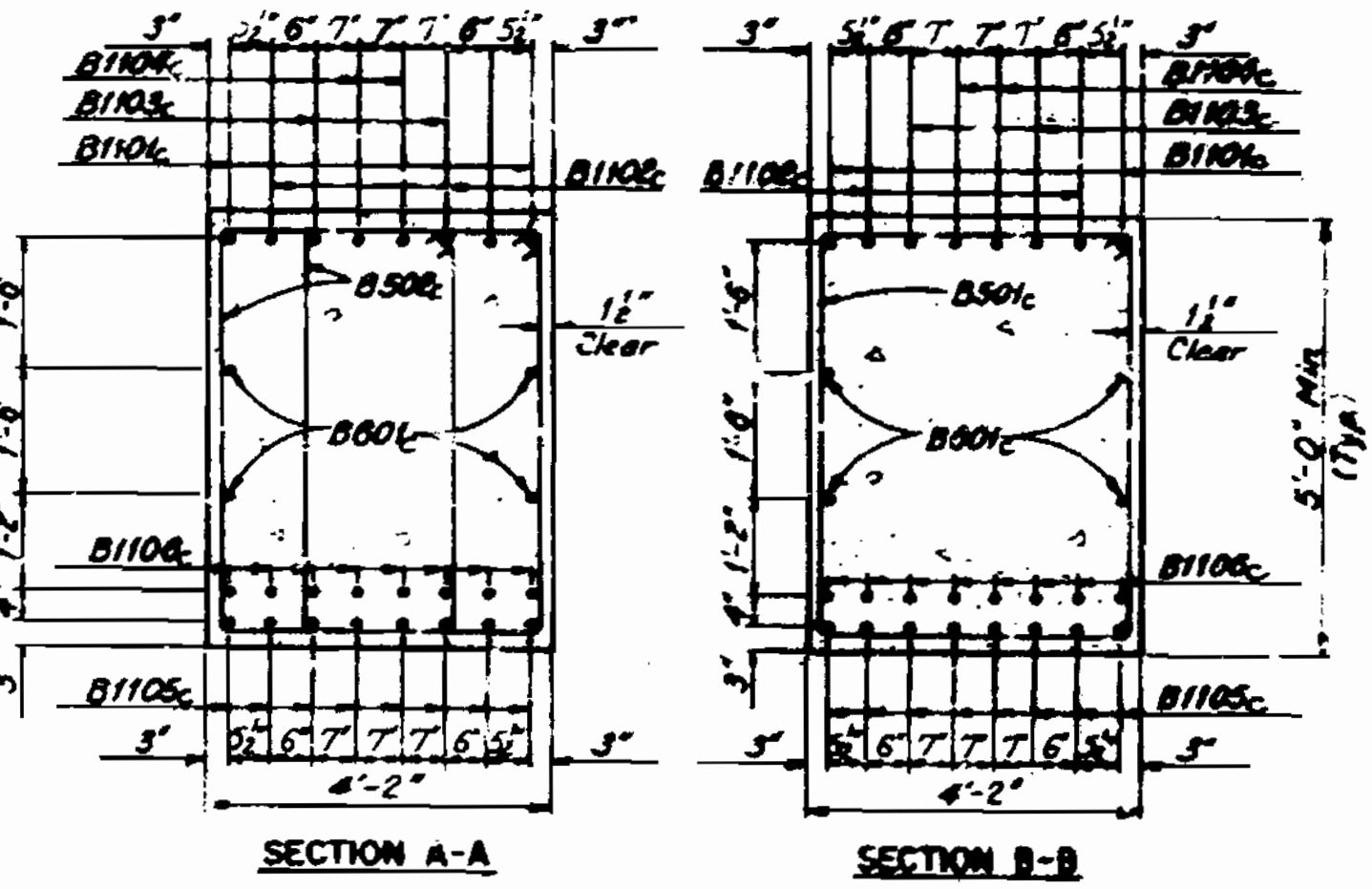
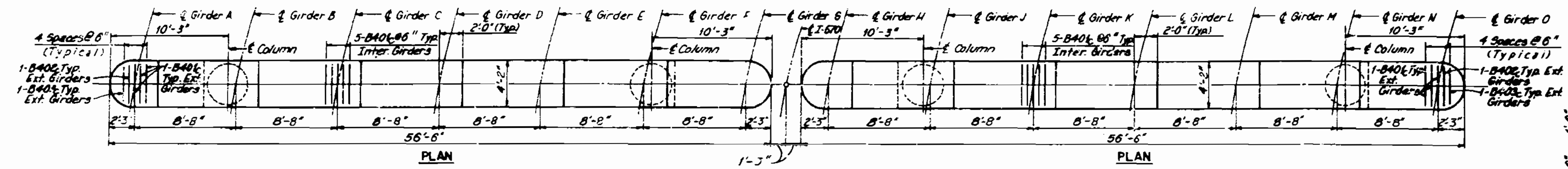
Notes:
 Pile spacing is measured at bottom of footing.
 For section thru cap at anchor bar locations see Sheet 4 of 36.

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 13 of 36

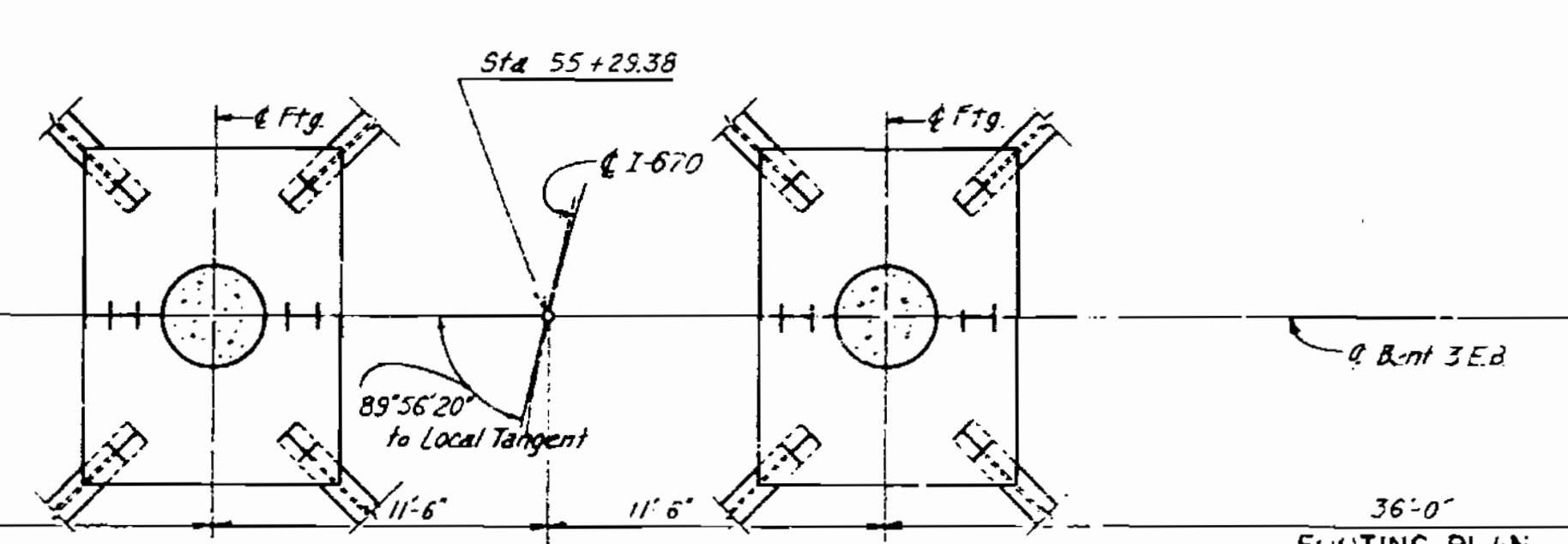
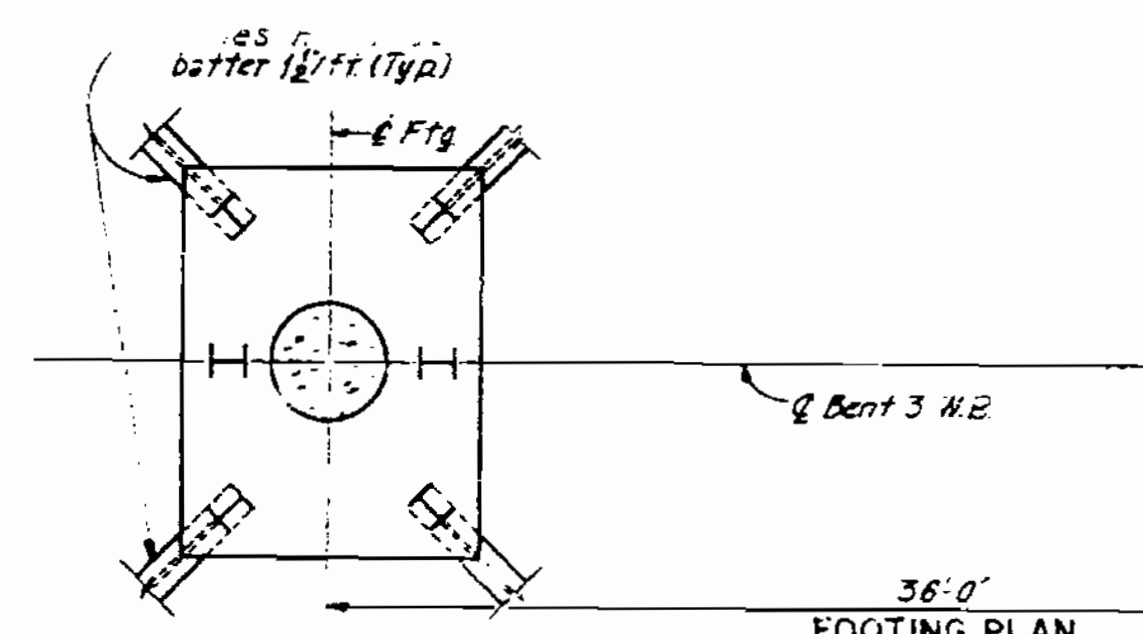
BENT 2 WESTBOUND AND EASTBOUND PILE FOOTING ALTERNATE
 JACKSON COUNTY
 A-3136

REV. NO.	DATE	BY	CHKD.	APP.
1				

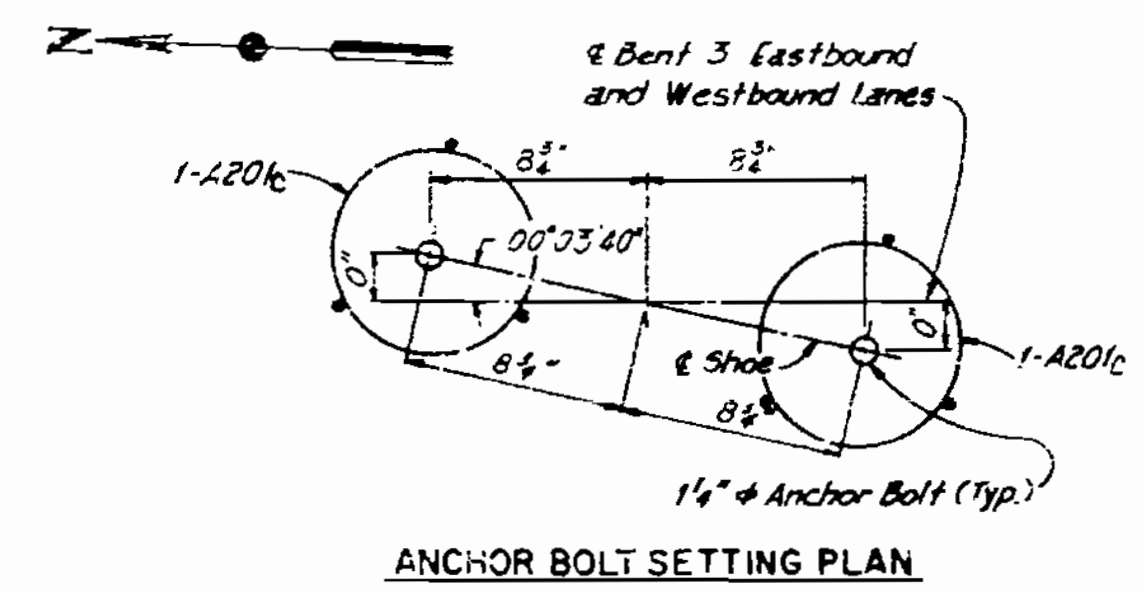
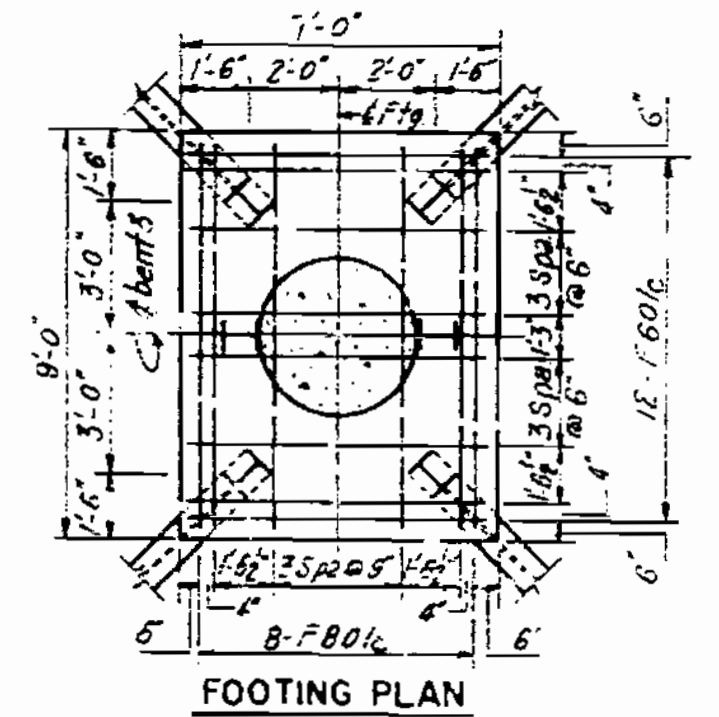
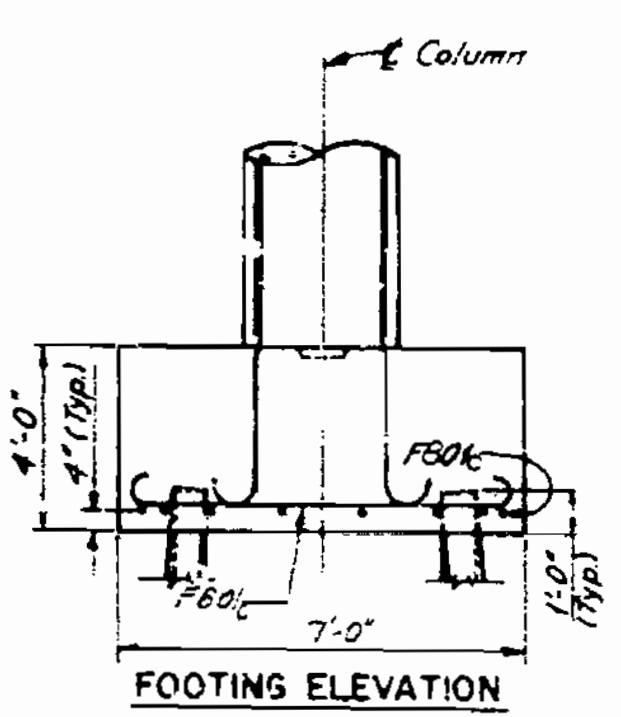


ELEVATION

ELEVATION



Legend:
EB = Eastbound Lanes
WB = Westbound Lanes



Notes:
Pile spacing is measured at bottom of footing.
For section thru cap of anchor bolt locations see Sheet 4 of 36.

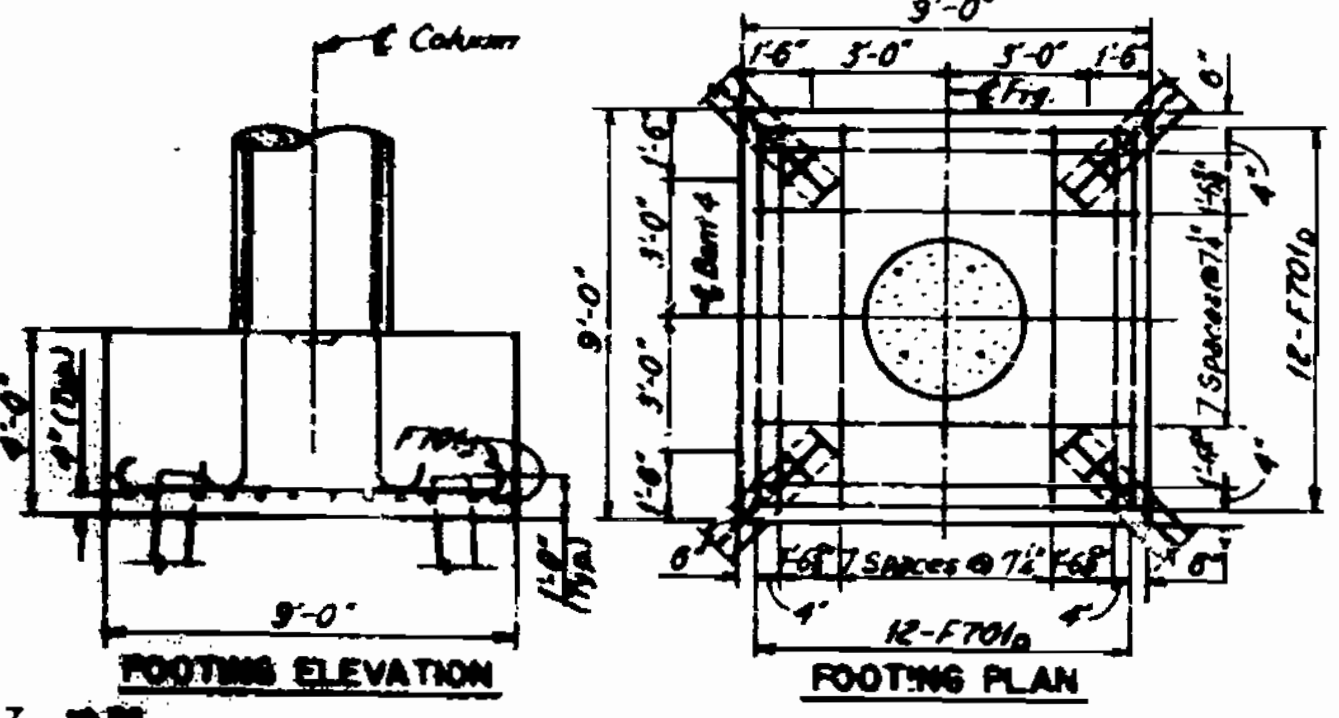
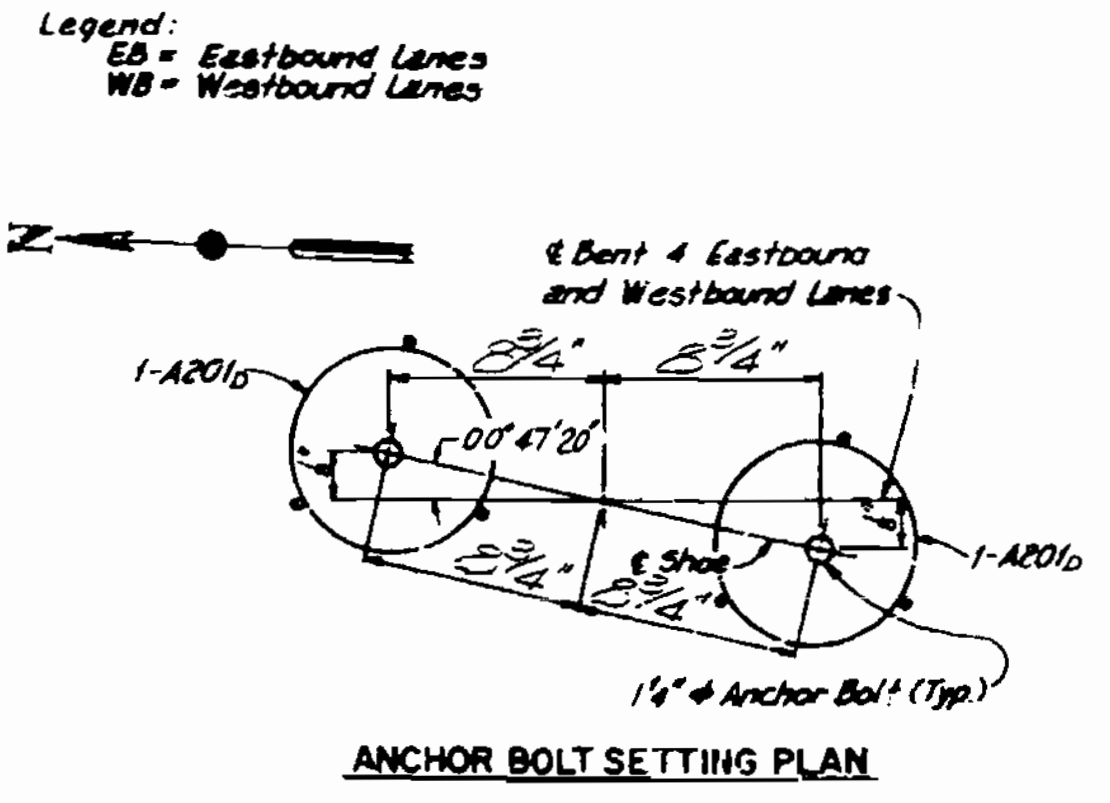
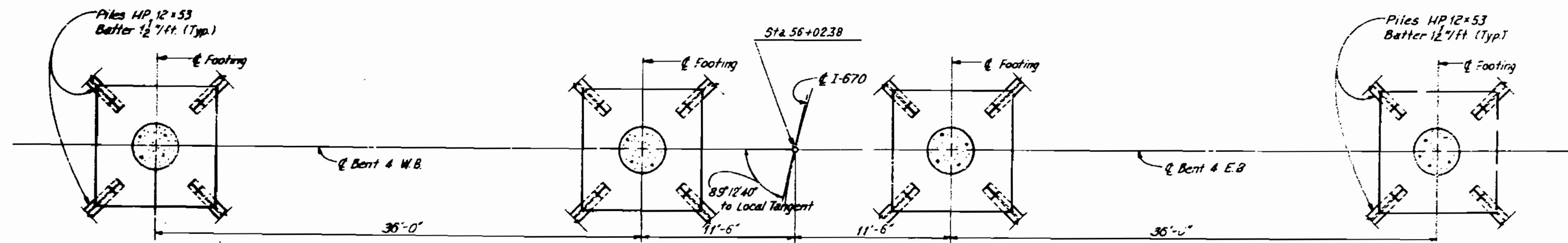
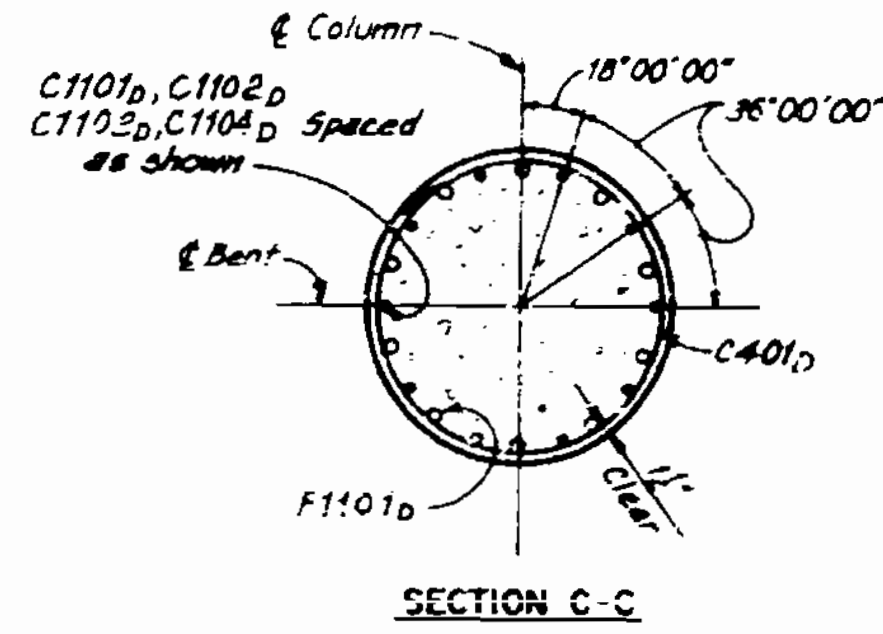
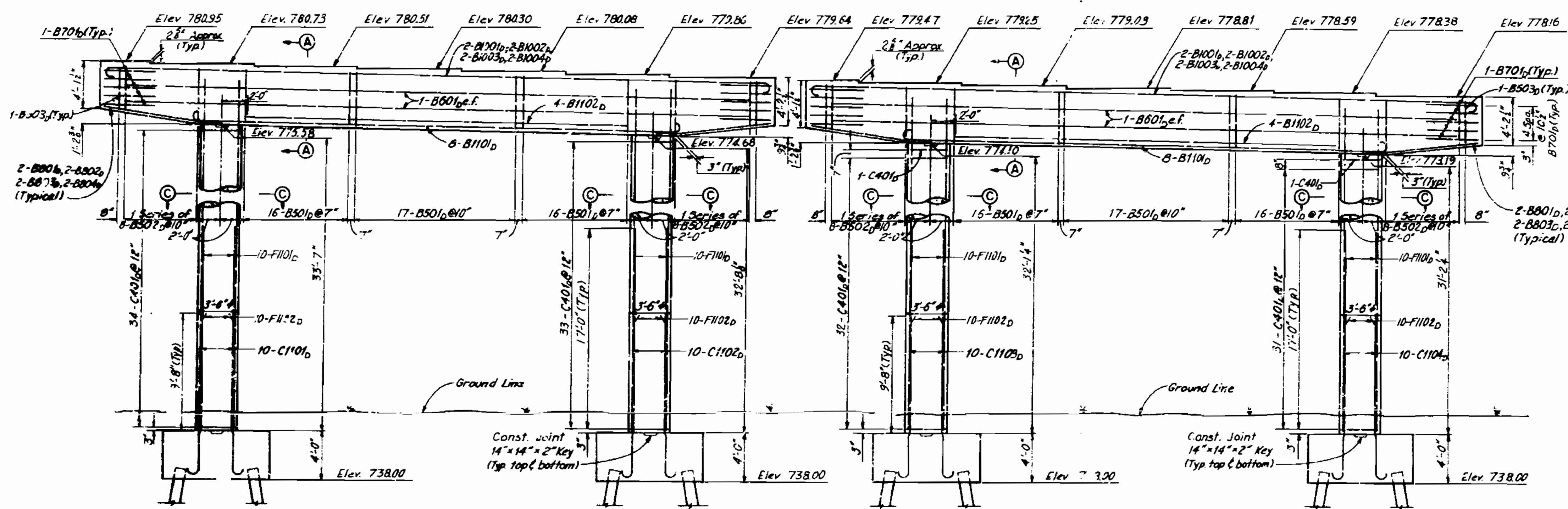
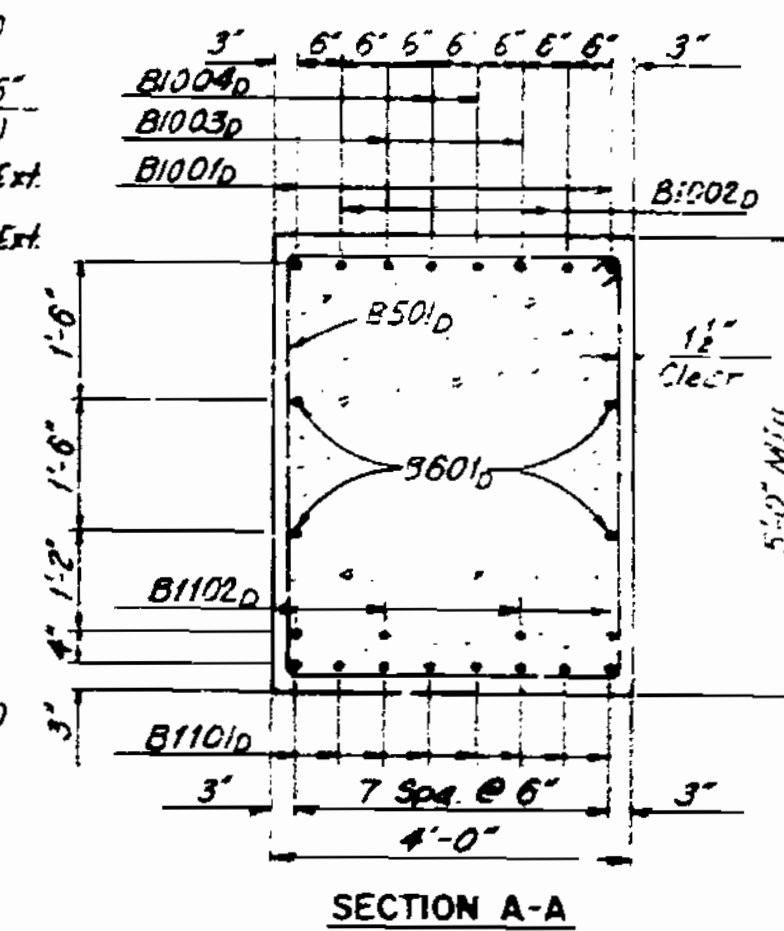
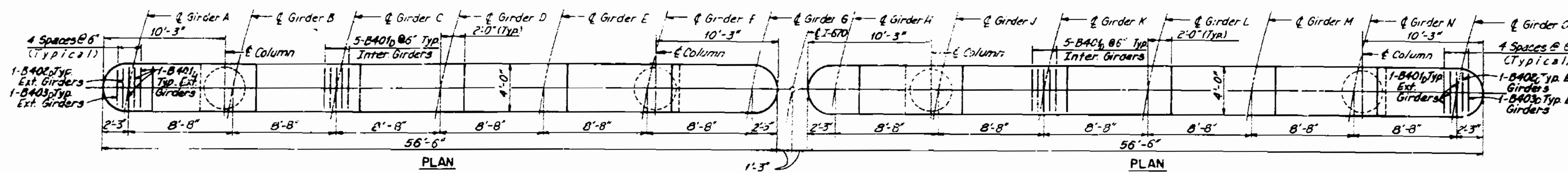
DETAILED B&Z 1978
CHECKED LJR 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 14 of 36

BENT 3 WESTBOUND AND EASTBOUND
PILE FOOTING ALTERNATE
JACKSON COUNTY A-3136

PROJ. NO.	STATE	PROJ. YEAR	SHEET NO.	TOTAL SHEETS
1	MO.	13	13	



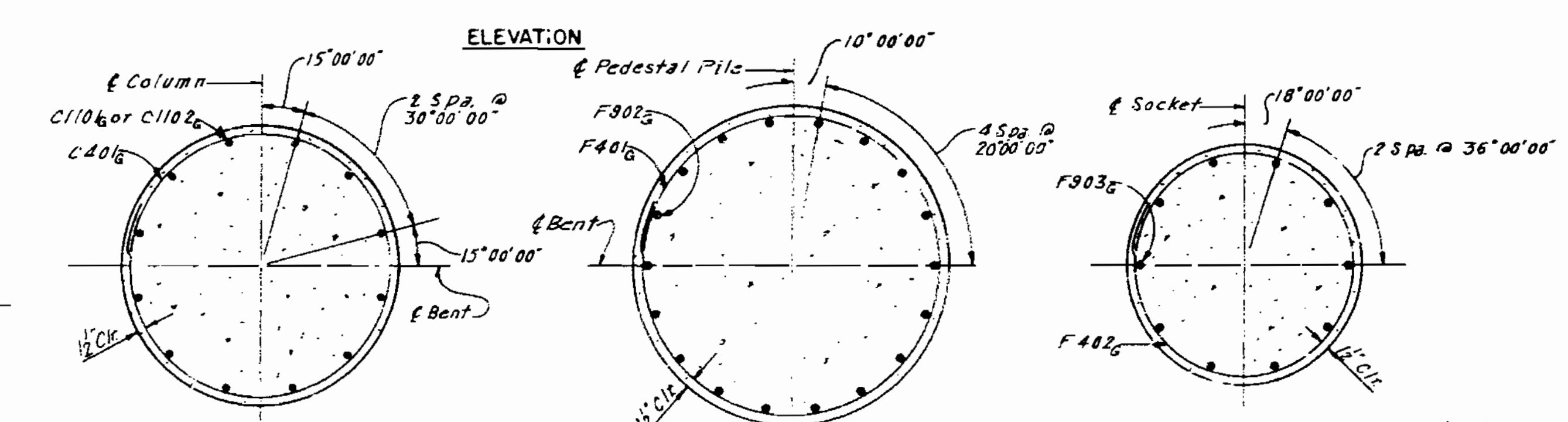
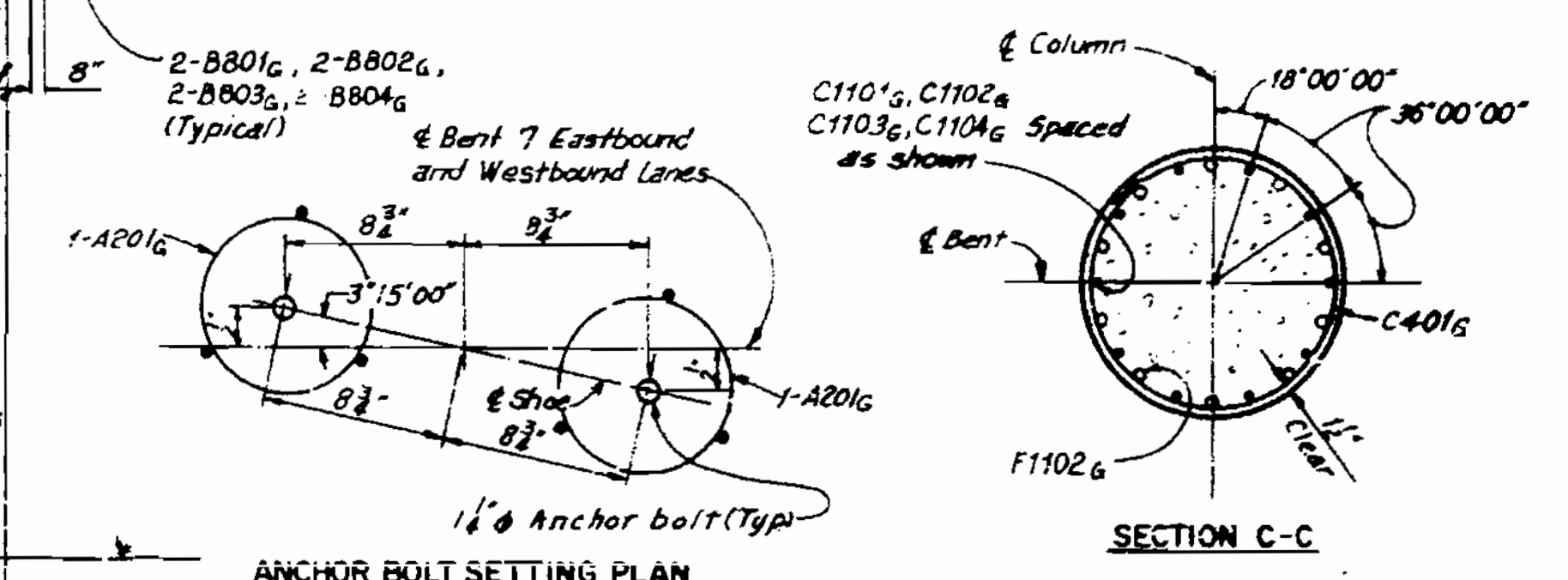
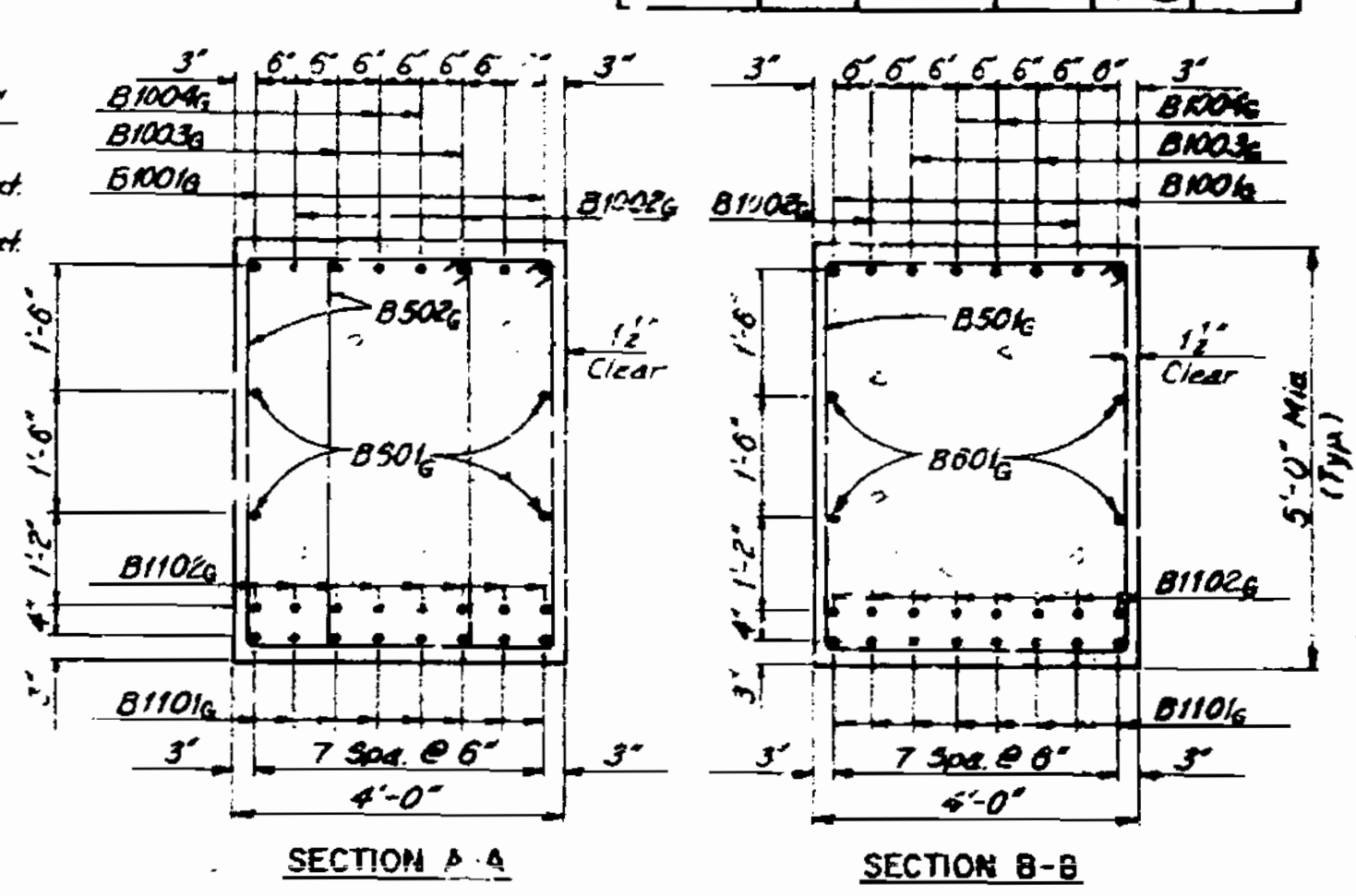
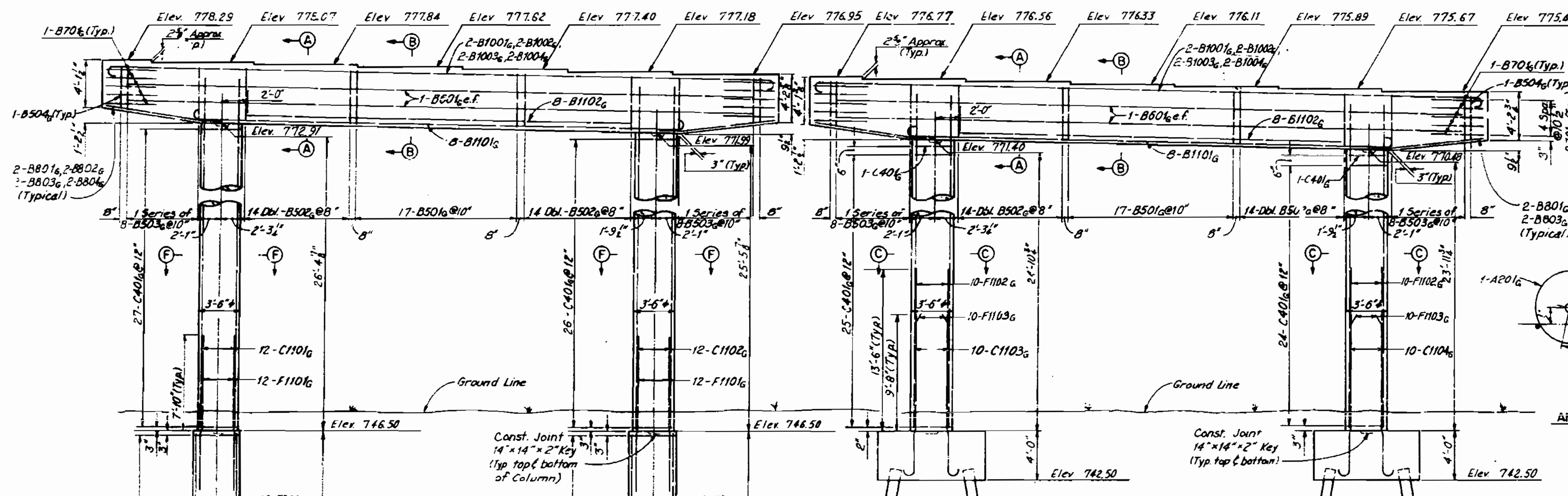
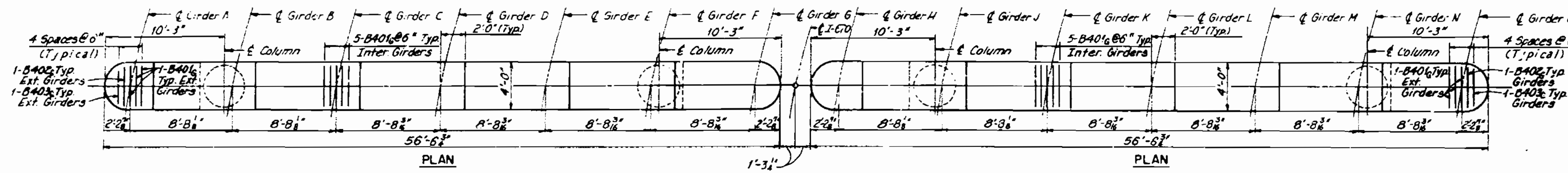
Notes:
 Pile spacing is measured at bottom of footing.
 For section thru cap at anchor bolt locations see Sheet 4 of 36.

Note: This drawing is not to scale. Follow dimensions.

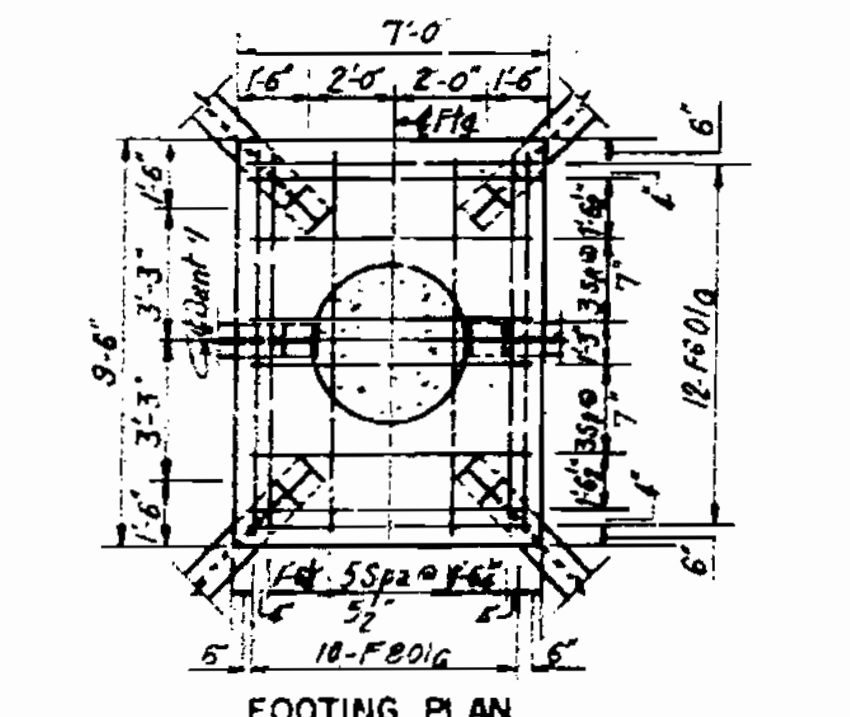
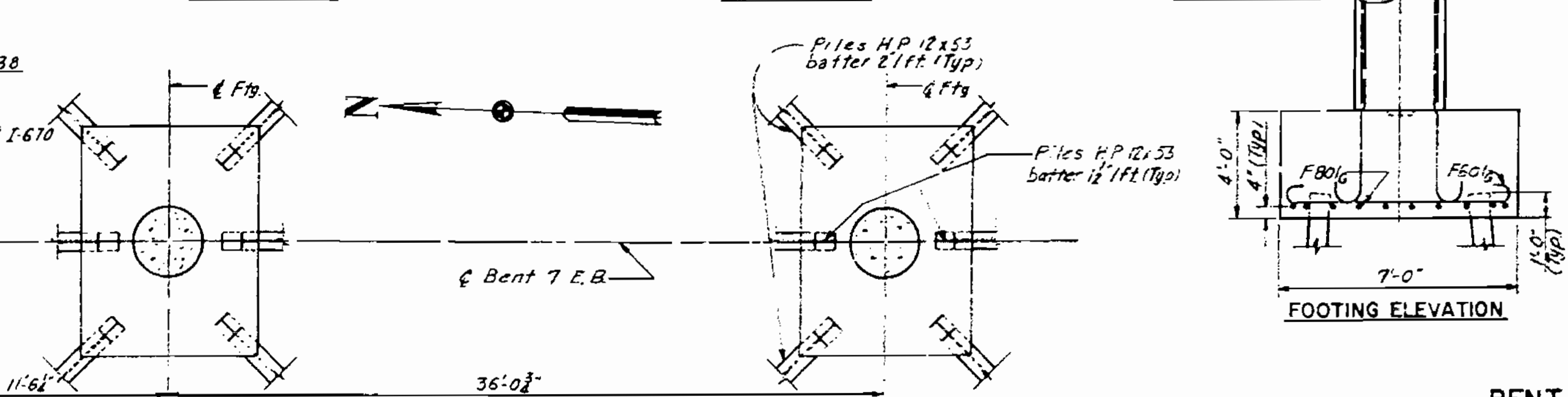
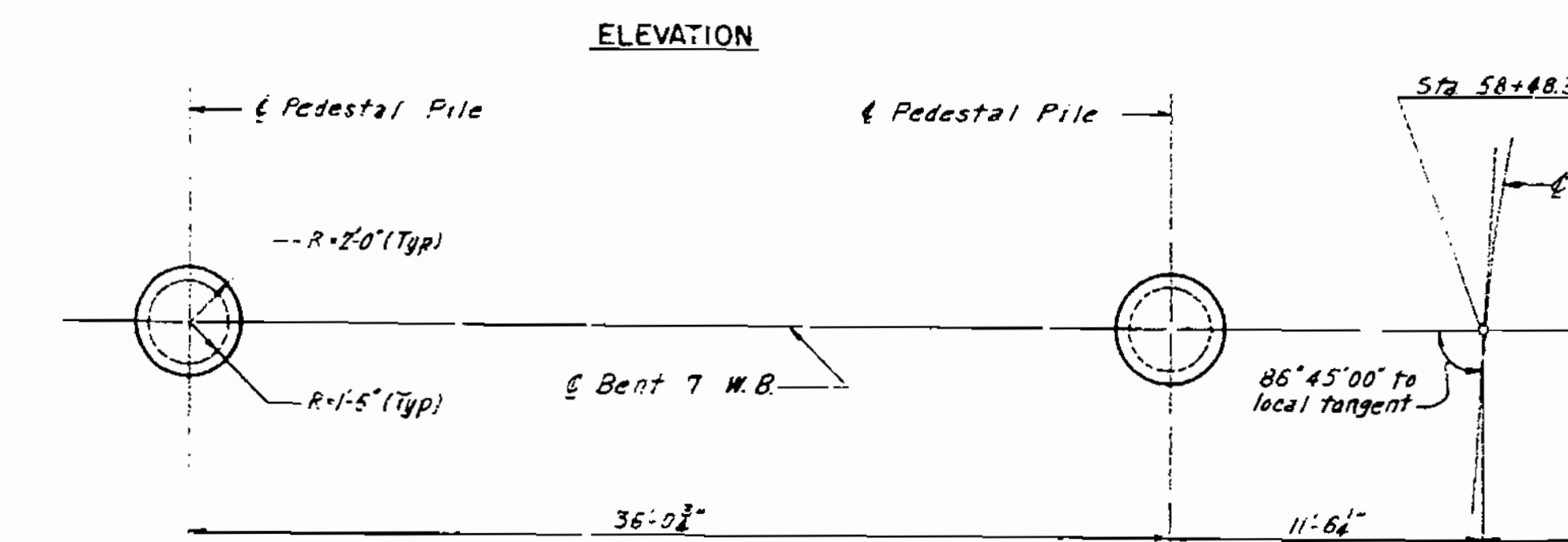
Sheet No. 15 of 36

BENT 4 WESTBOUND AND EASTBOUND PILE FOOTING ALTERNATE
 JACKSON COUNTY

REV. NO.	DATE	BY	CHKD.	APP. NO.	REVISION
1					



Notes:
Pile spacing is measured at bottom of footing.
For section thru cap at anchor bolt locations see Sheet 4 of 36.



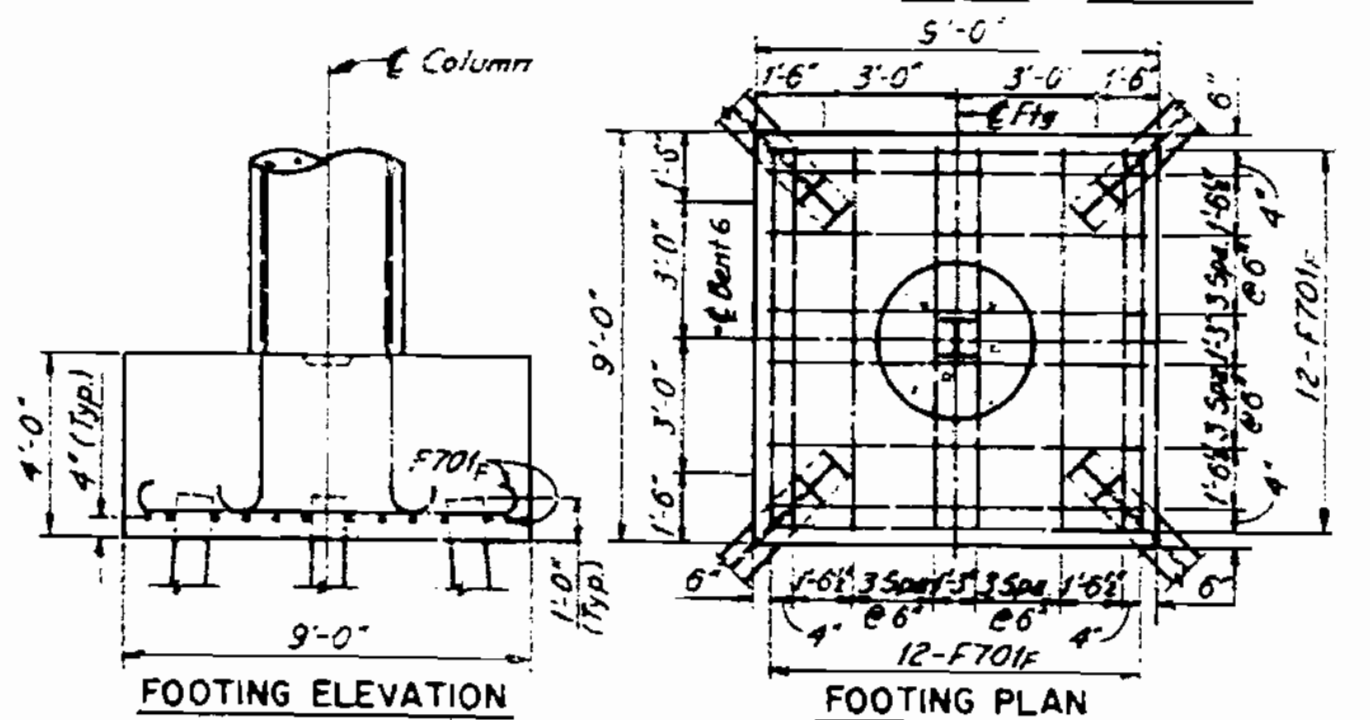
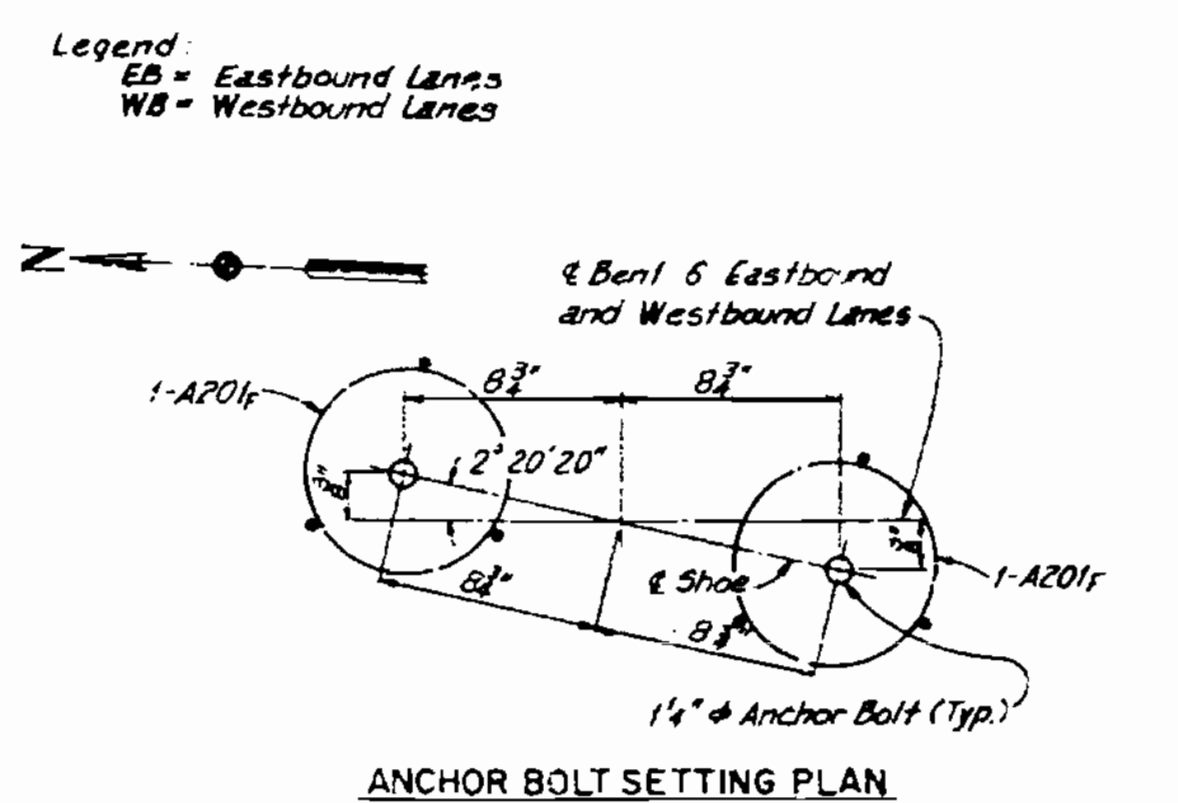
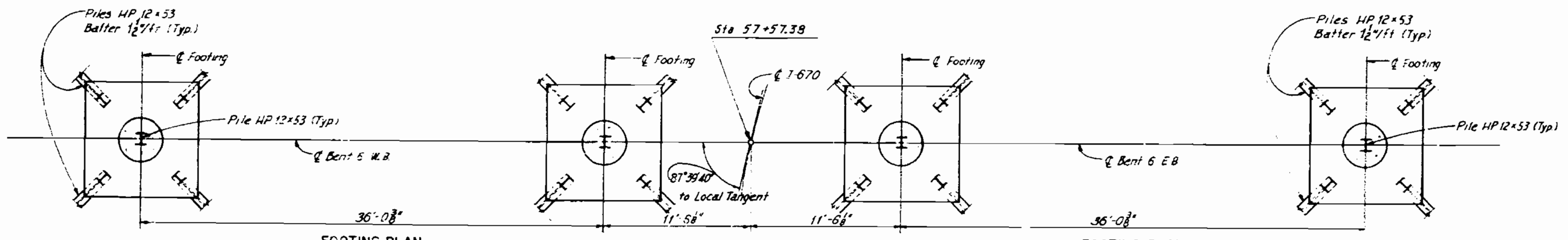
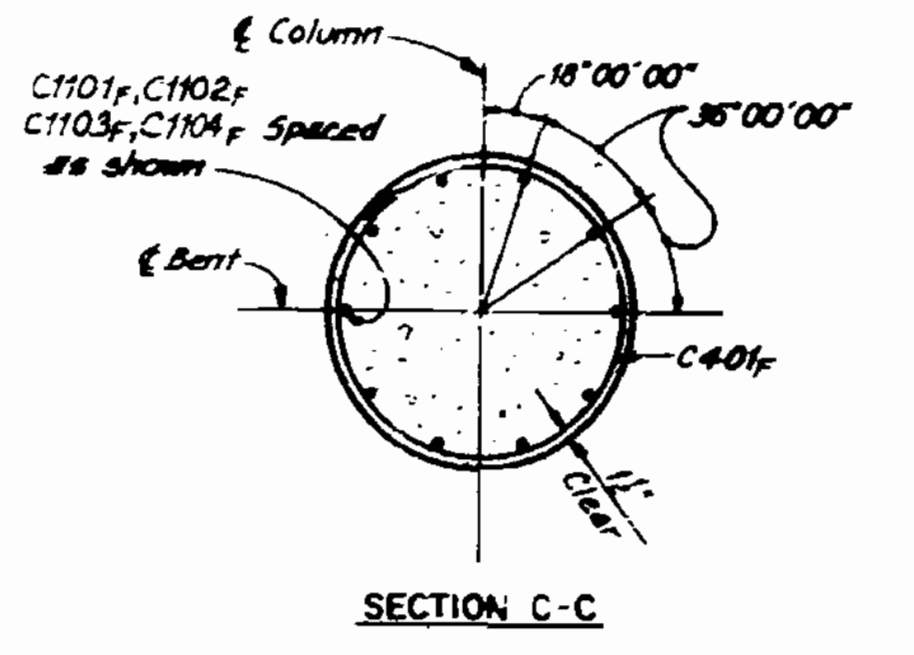
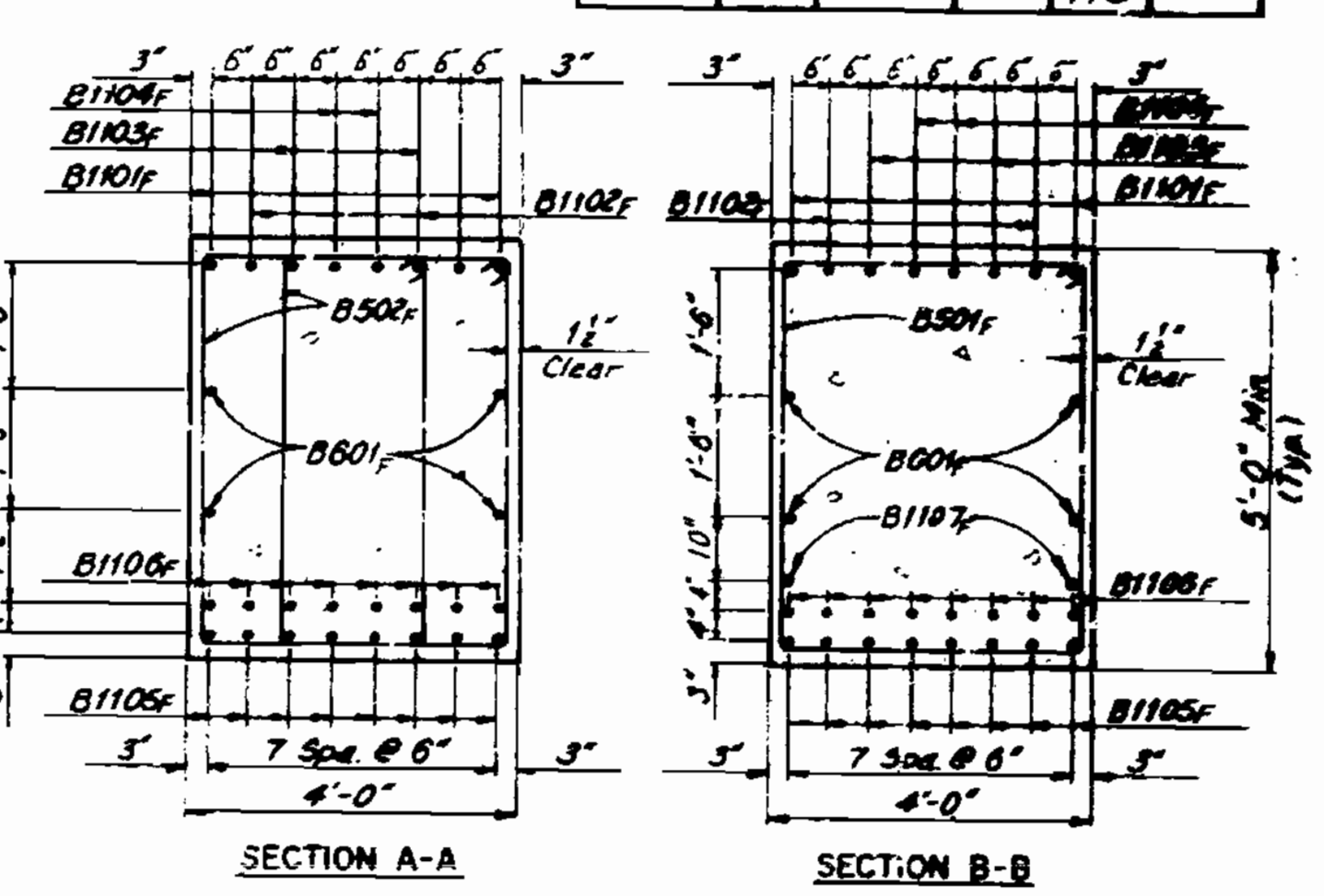
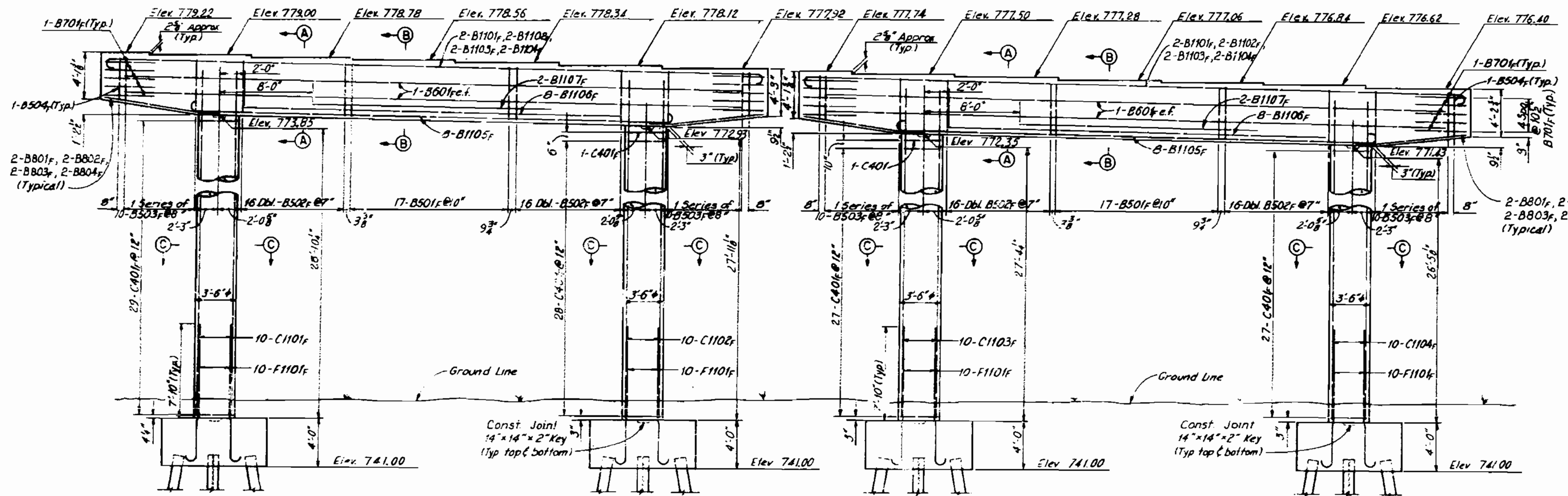
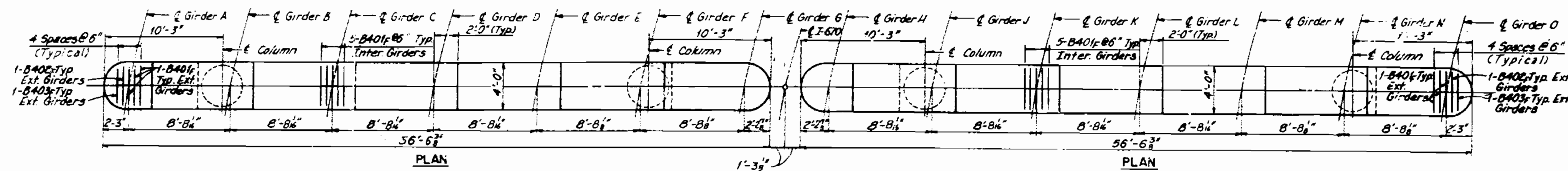
DETAILED 3/12 1978
CHECKED LJR 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 18 of 36

BENT 7 WESTBOUND AND EASTBOUND
PILE FOOTING ALTERNATE
JACKSON COUNTY
A-3136

REV.	DATE	BY	CHKD.	APP'D.
115				



Legend:
EB = Eastbound Lanes
WB = Westbound Lanes

Notes:
Pile spacing is measured at bottom of footing.
For section thru cap at anchor bolt locations see Sheet 4 of 36.

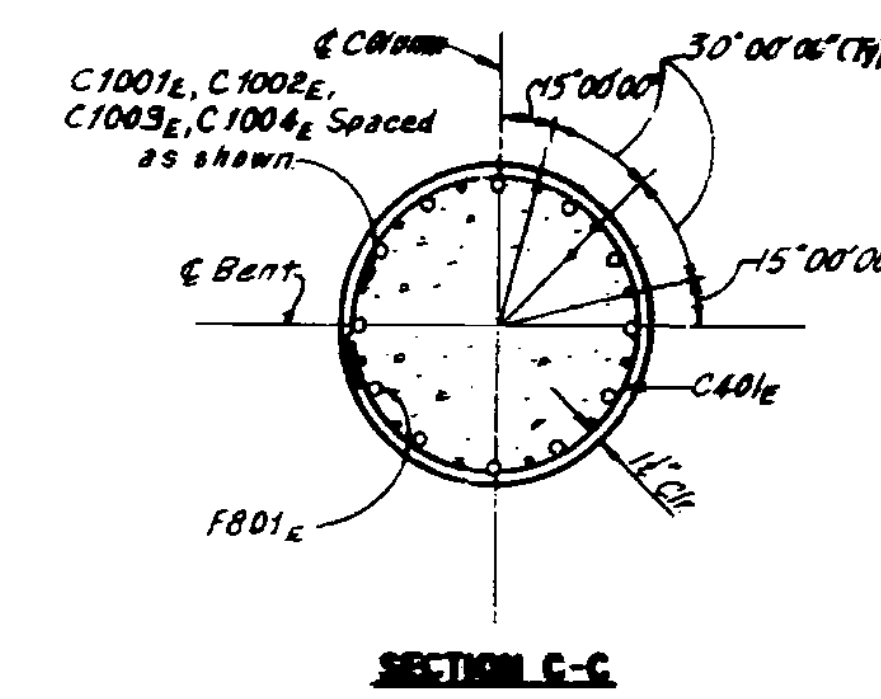
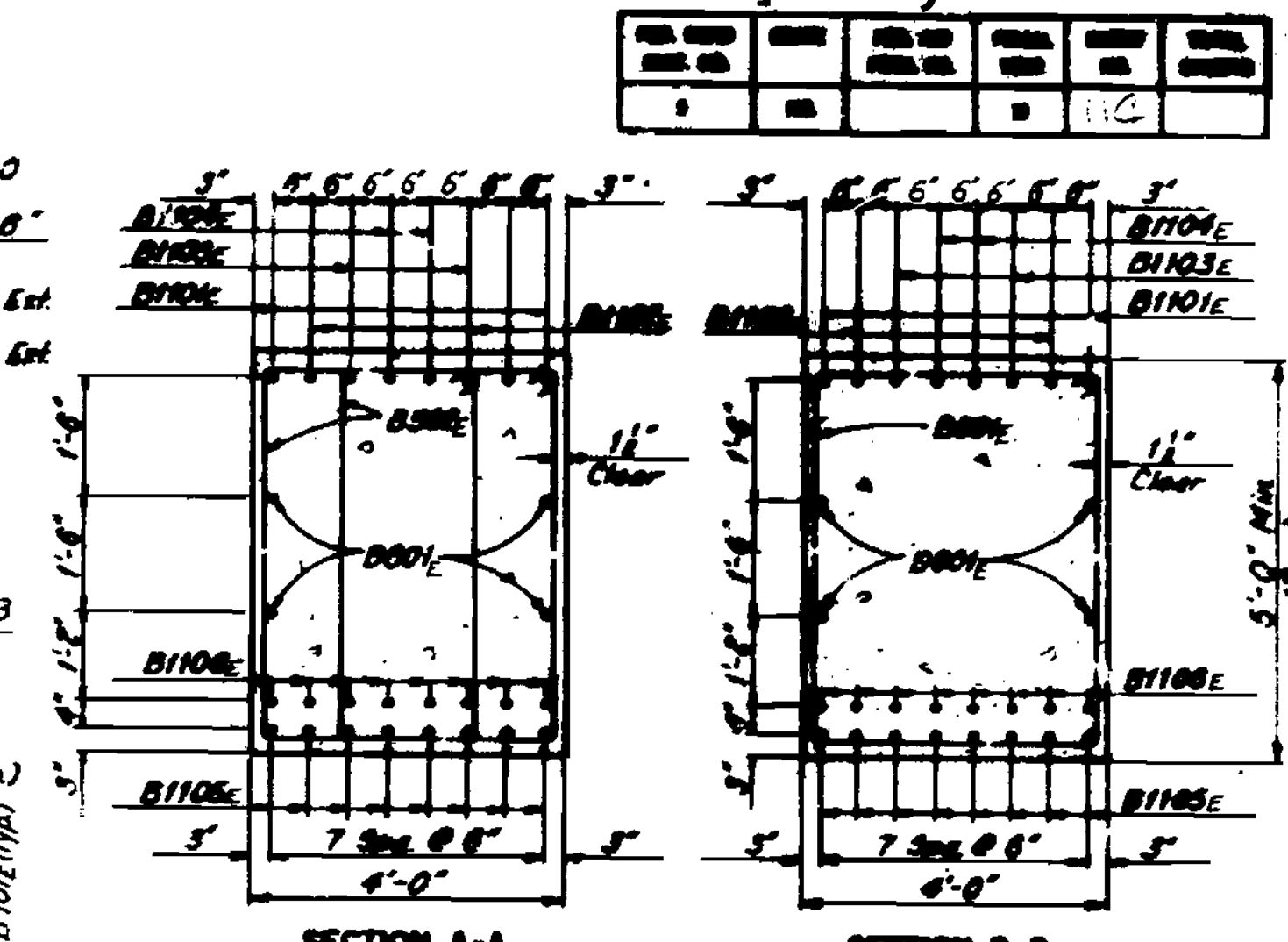
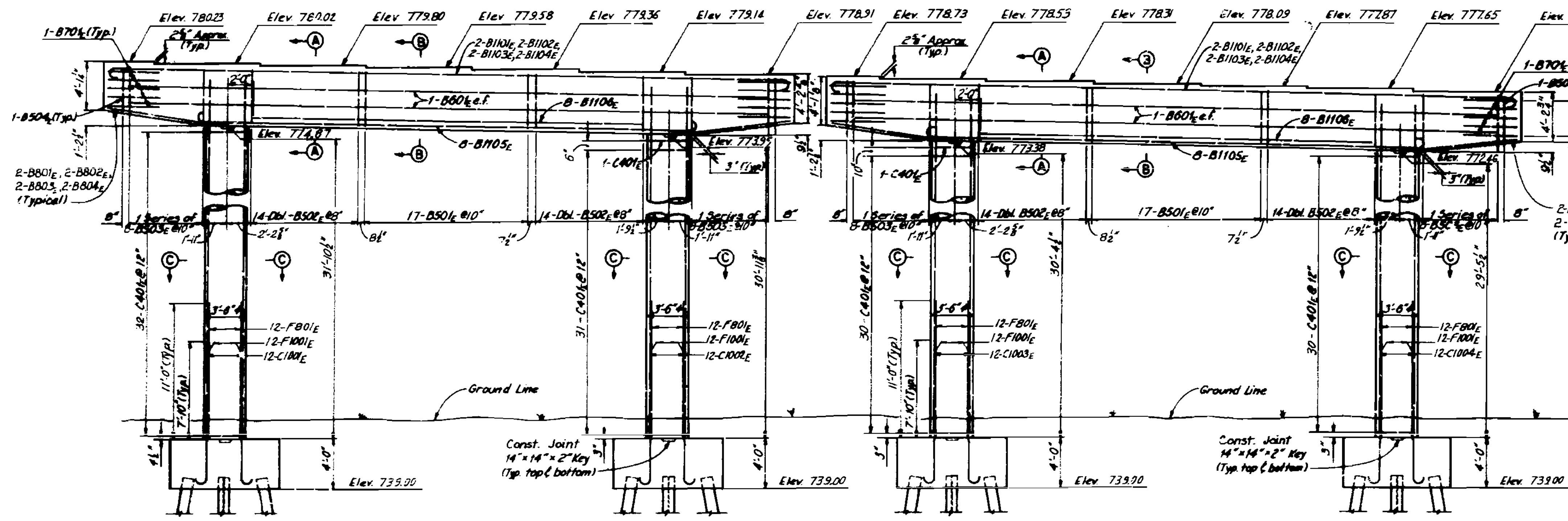
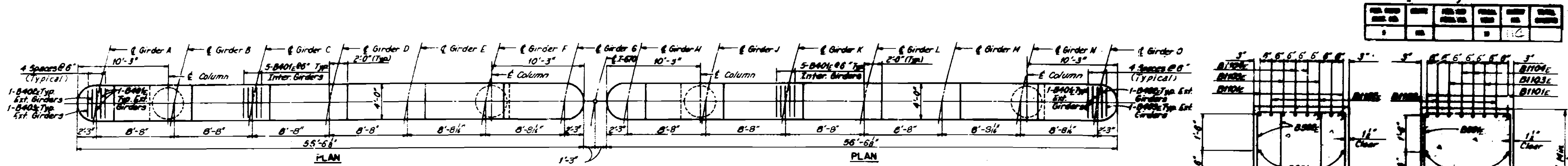
DETAILED BAZ 1078
CHECKED LJR 1078

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 17 of 36

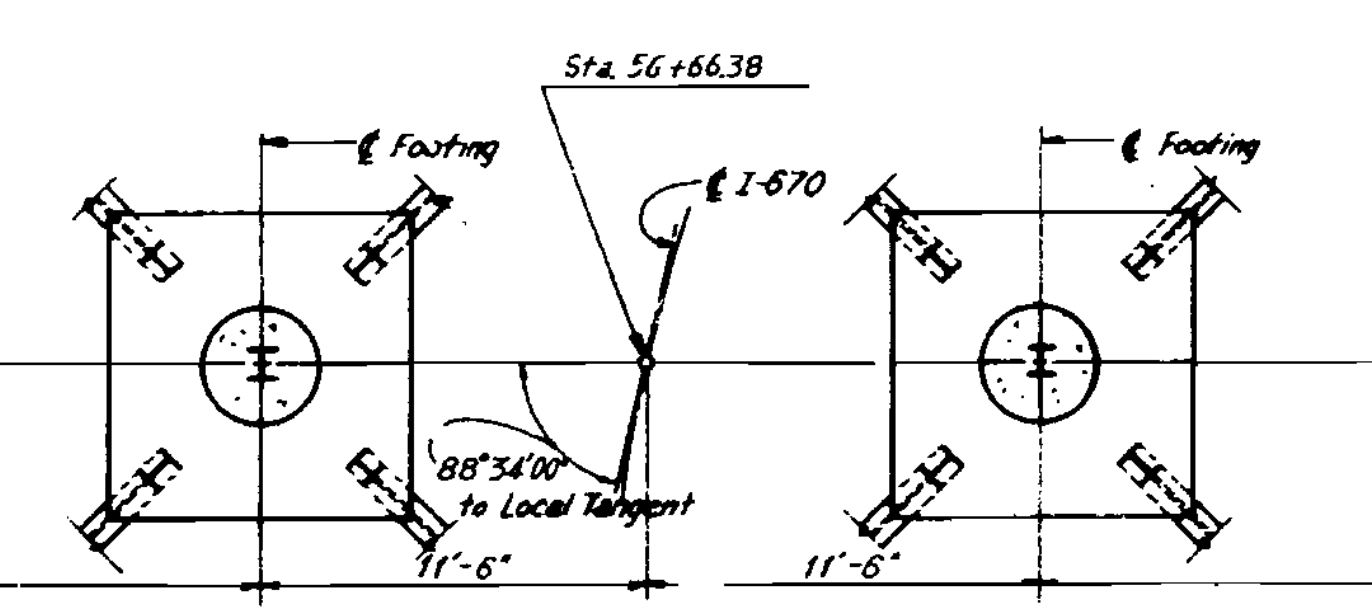
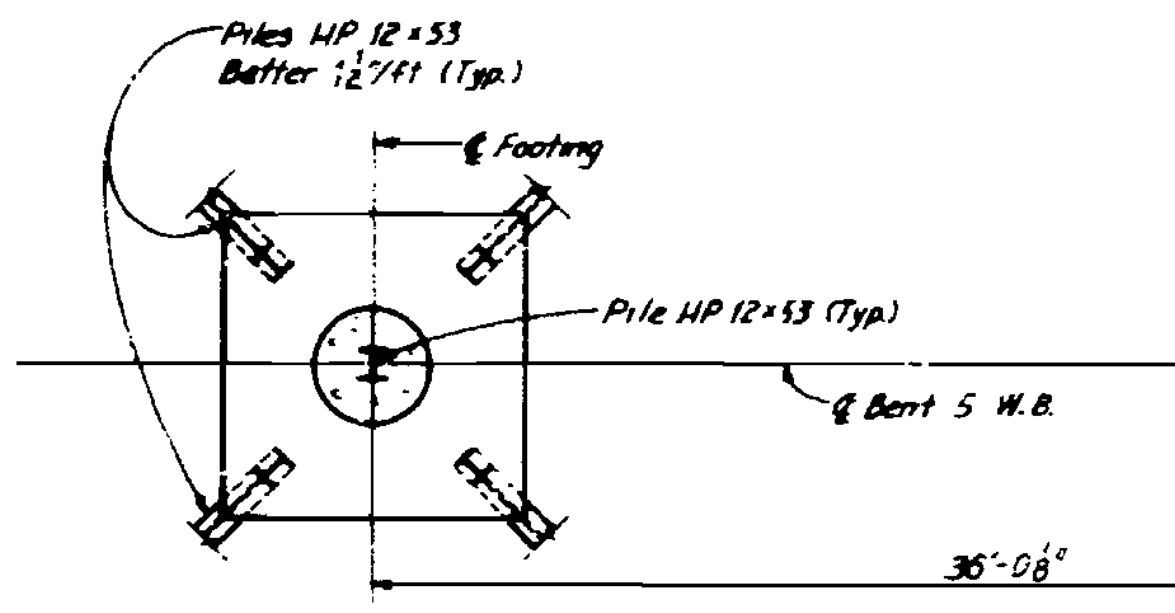
BENT 6 WESTBOUND AND EASTBOUND
PILE FOOTING ALTERNATE
JACKSON COUNTY

A-3136

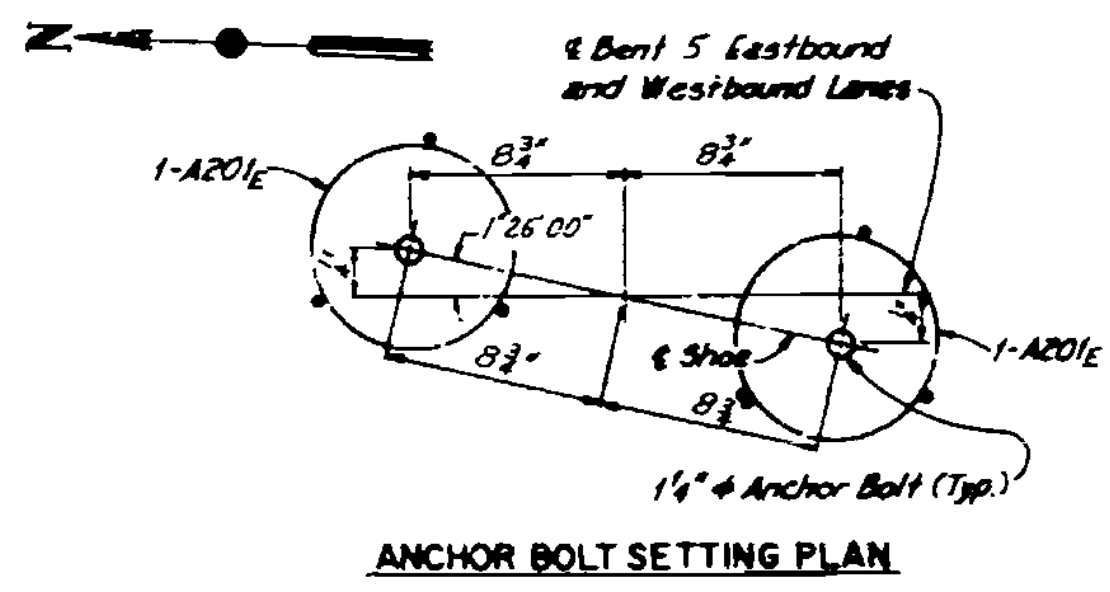
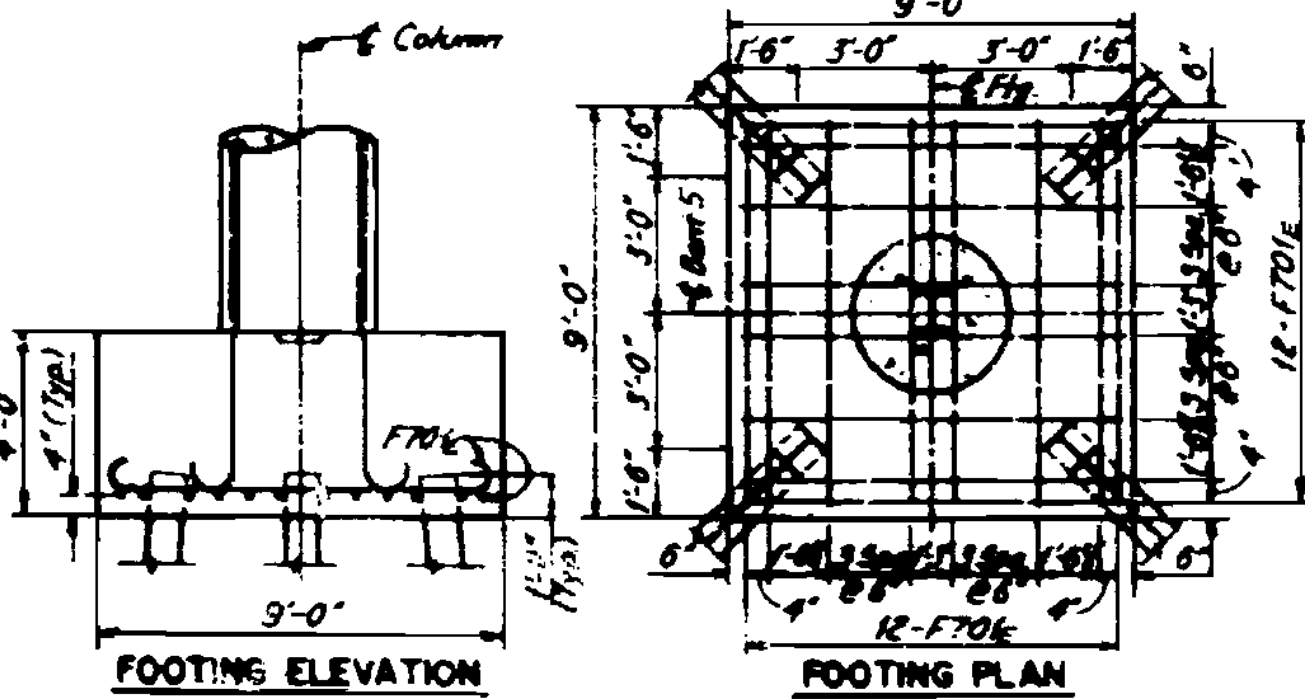


ELEVATION

ELEVATION



Legend:
 EB = Eastbound Lanes
 WB = Westbound Lanes



Notes:
 Pile spacing is measured at bottom of footing.
 For section thru cap at anchor bolt locations see Sheet 4 of 36.

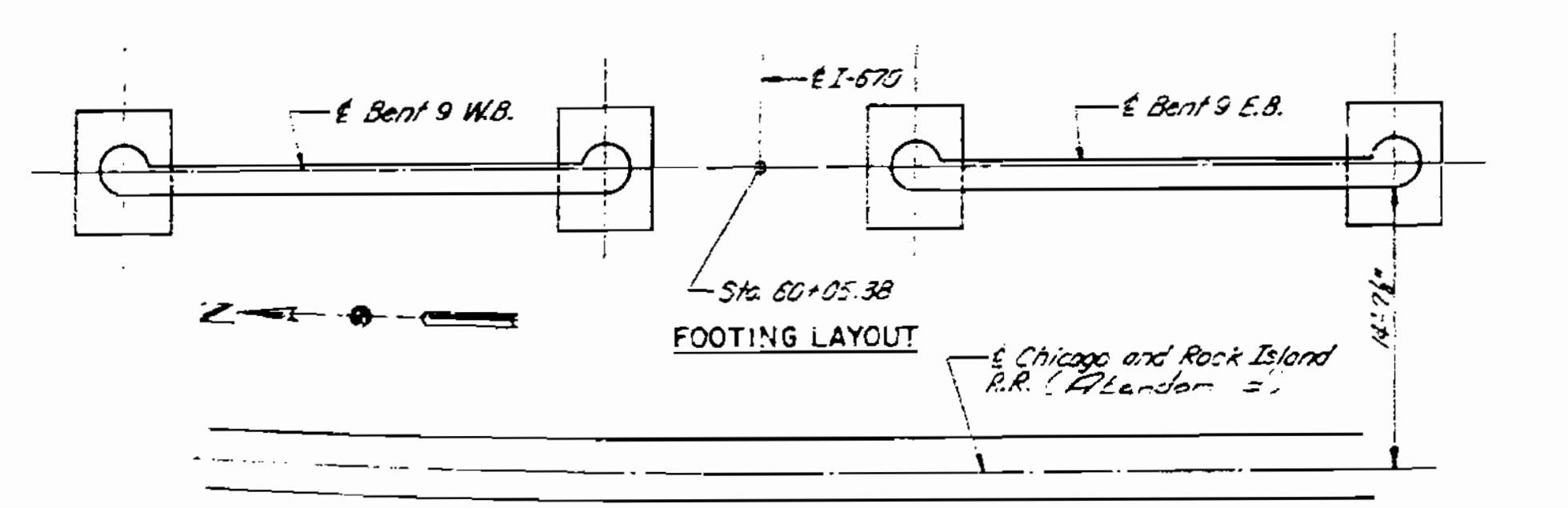
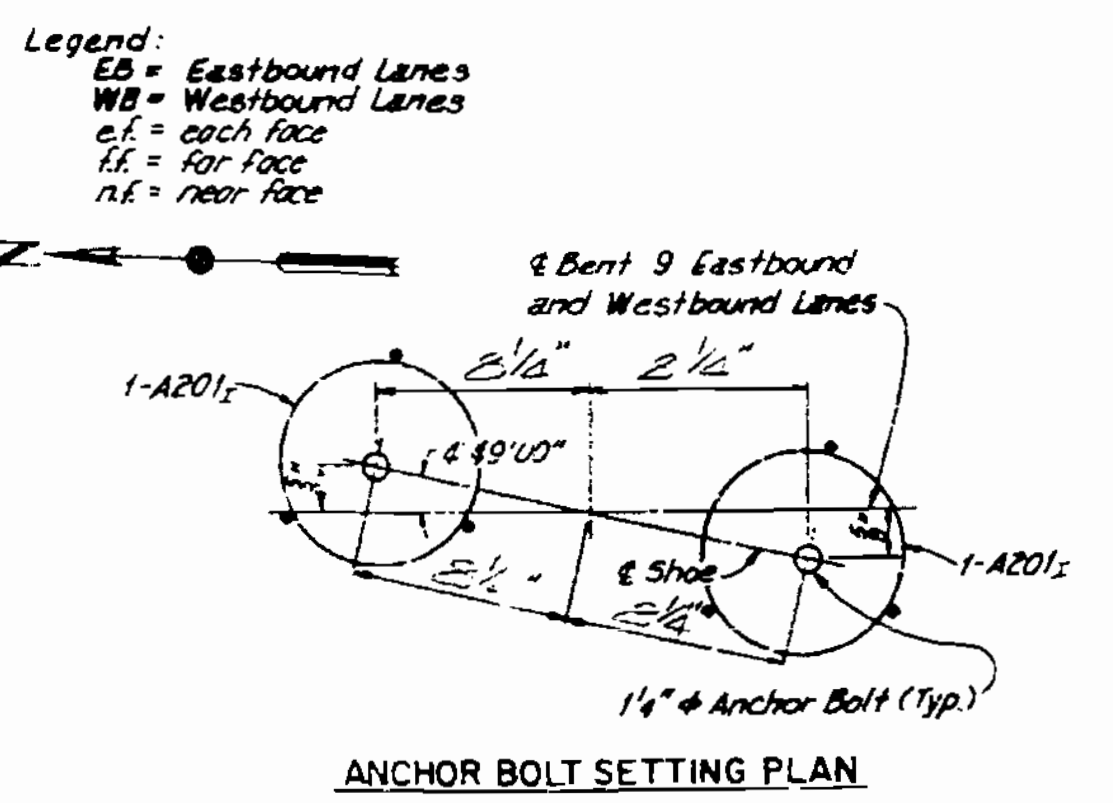
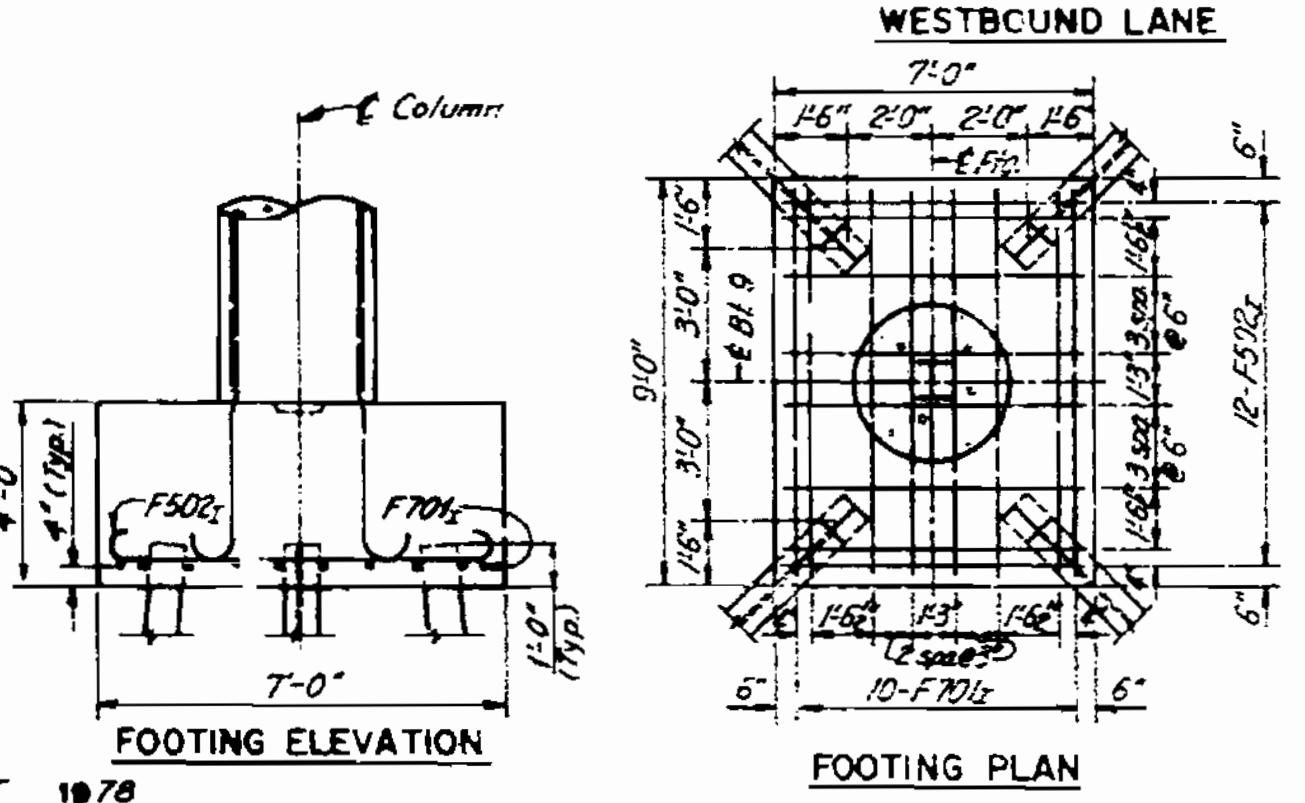
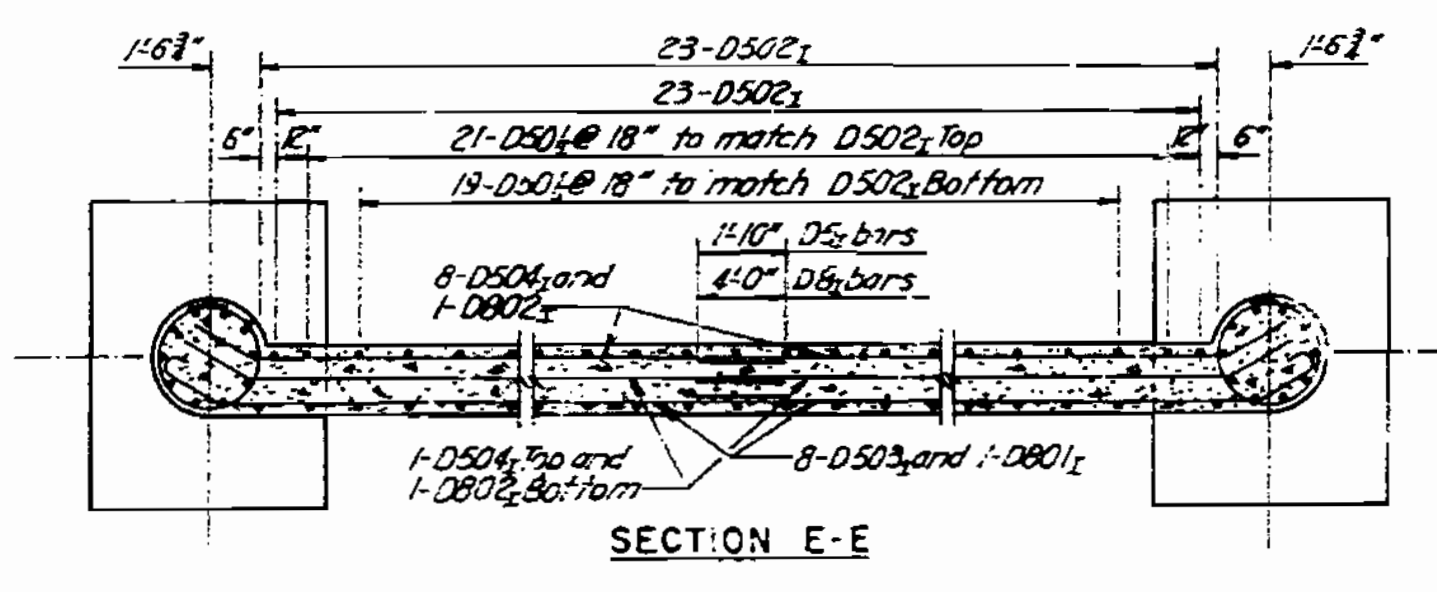
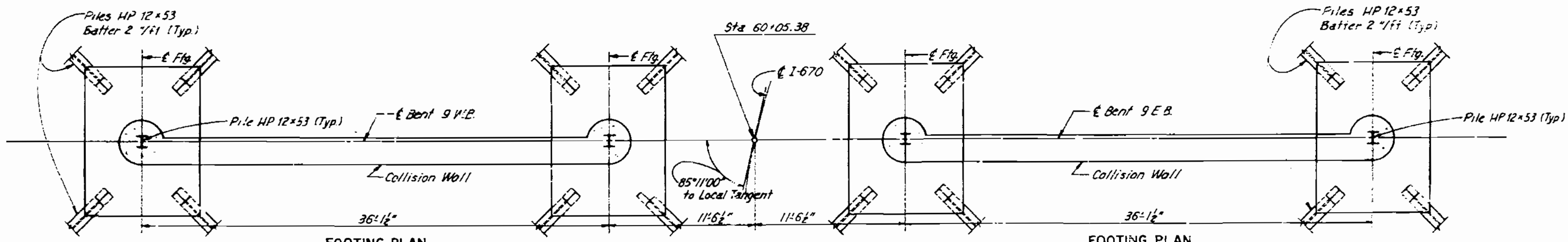
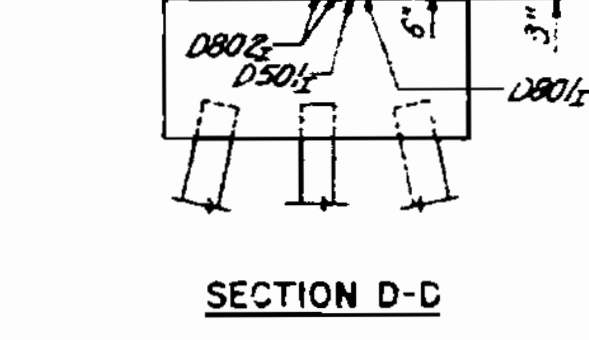
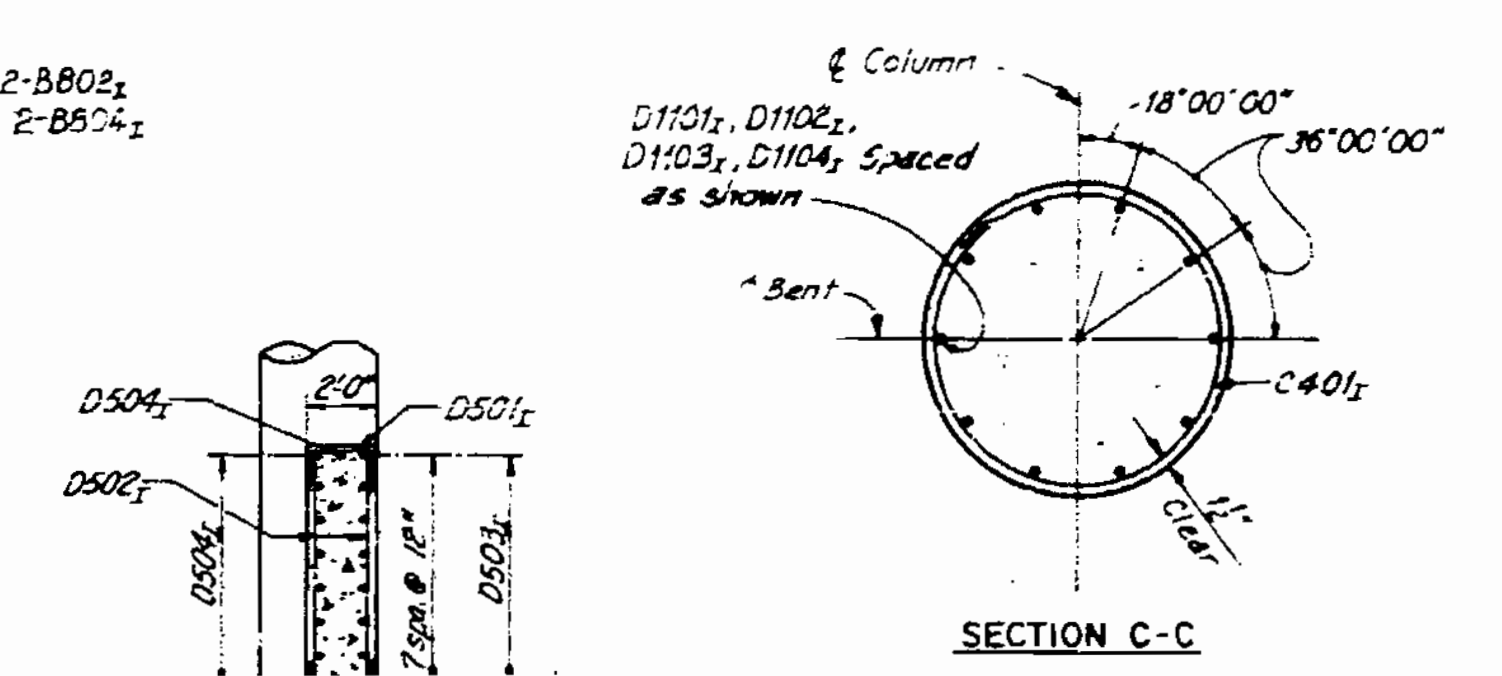
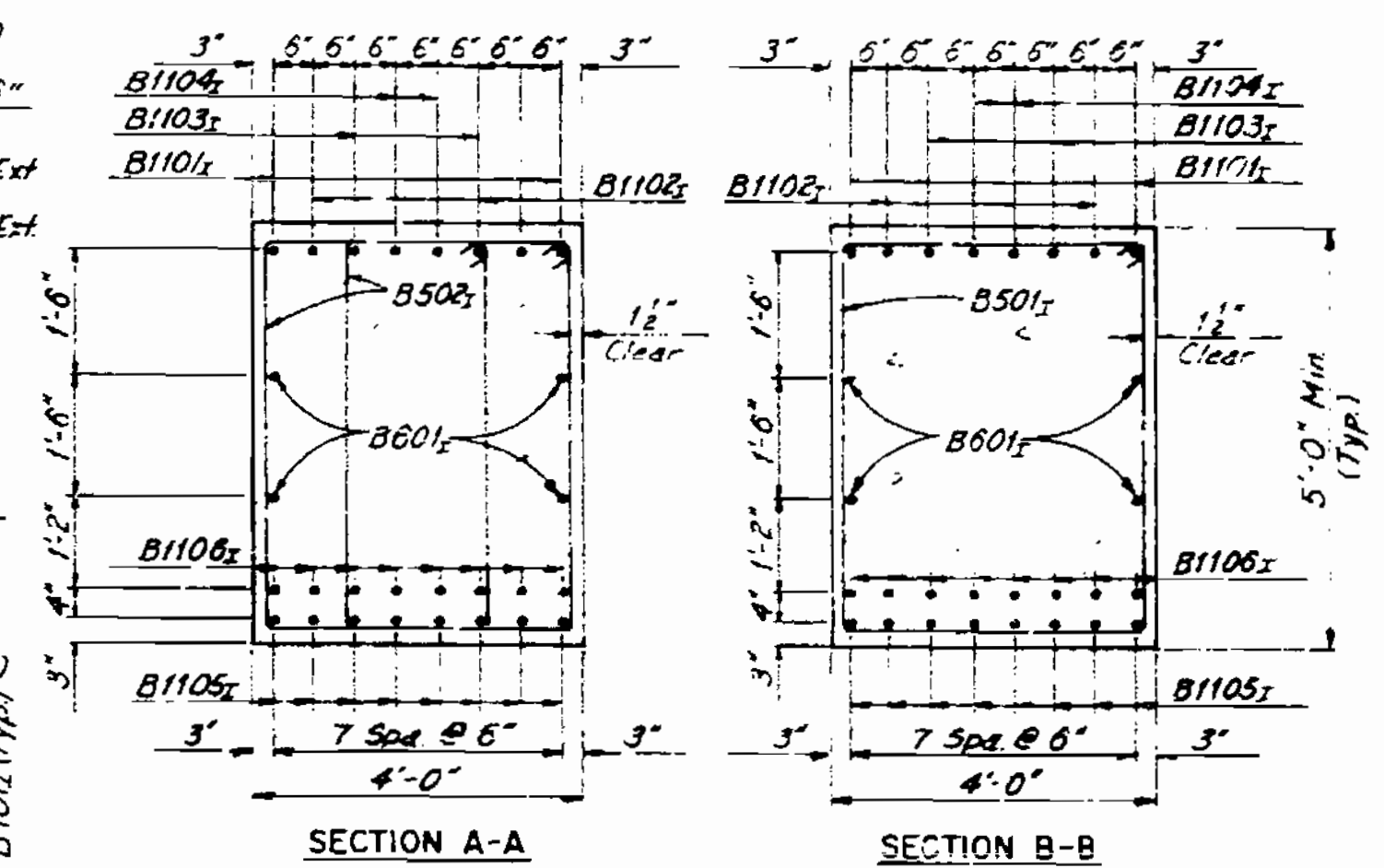
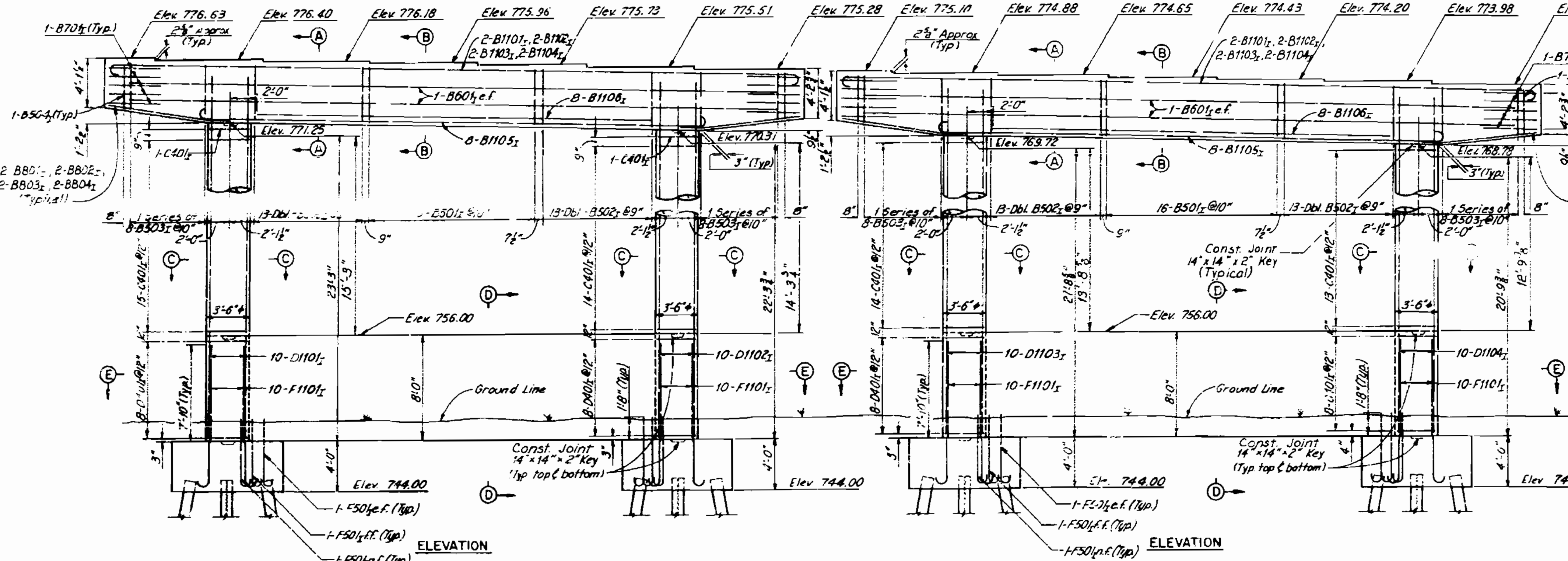
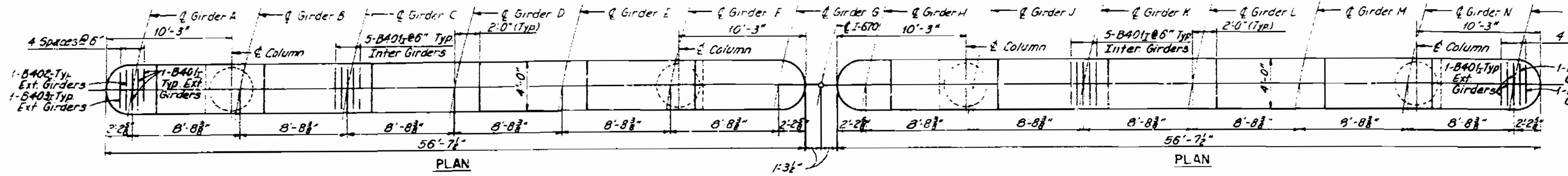
DETAILS BAZ 1078
 CHECKED LJR 1078

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 16 of 36

BENT 5 WESTBOUND AND EASTBOUND
 PILE FOOTING ALTERNATE
 JACKSON COUNTY
 A-3136

FED. ROAD DIST. NO.	STATE NO.	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		59	18	



Notes:
 Pile spacing is measured at bottom of footing.
 For section thru cap at anchor bolt locations see Sheet 4 of 36.

Legend:
 EB = Eastbound Lanes
 WB = Westbound Lanes
 e.f. = each face
 f.f. = for face
 r.f. = rear face

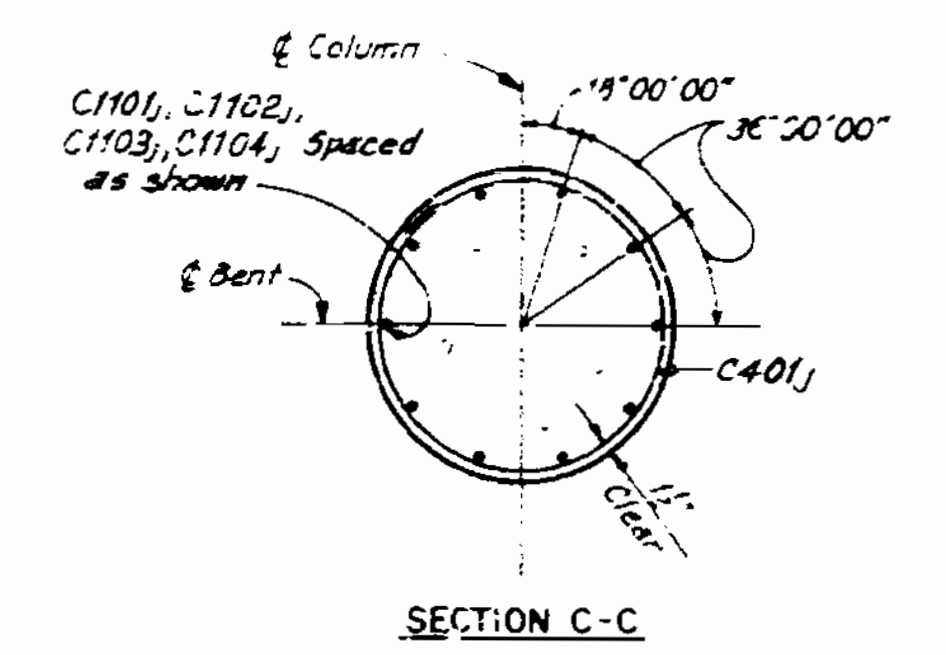
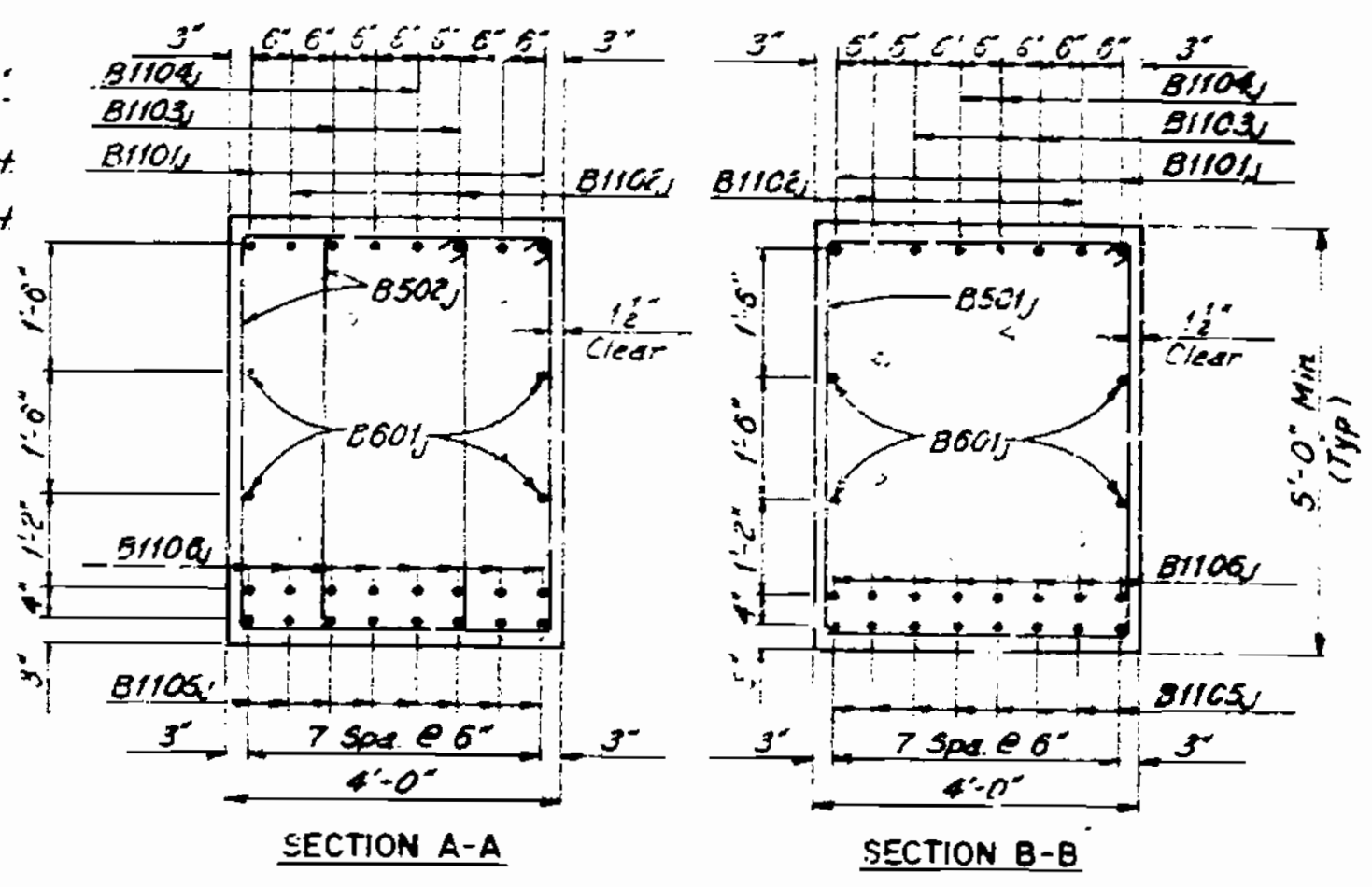
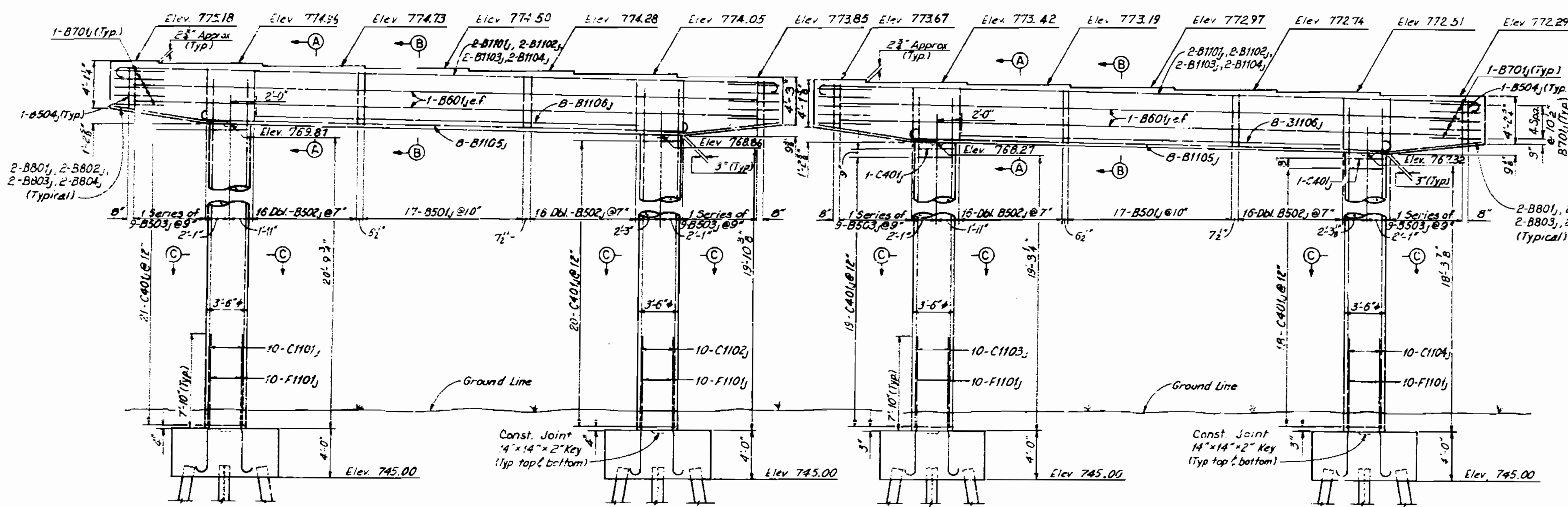
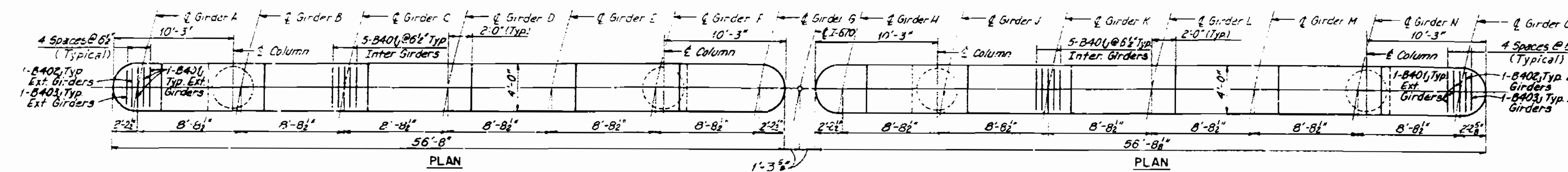
Note: This drawing is not to scale. Follow dimensions.

DETAILED 3.17 1978
 CHECKED L.J.R. 1978

Sheet No. 20 of 36

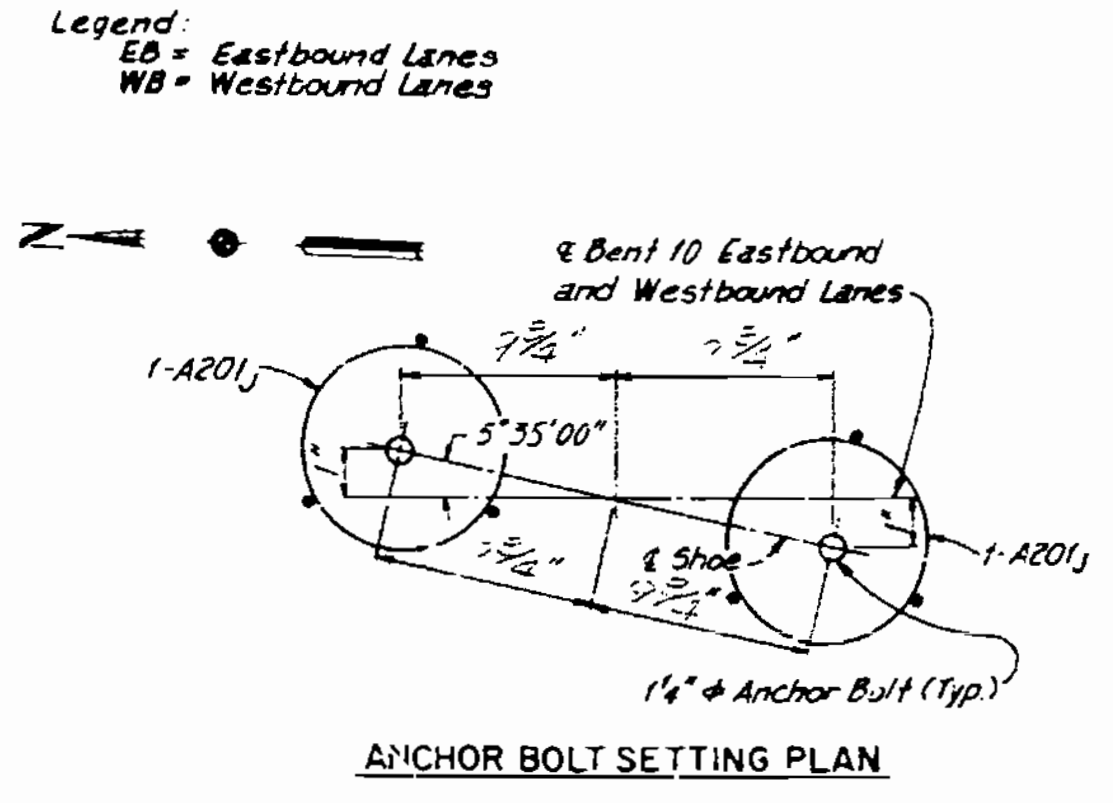
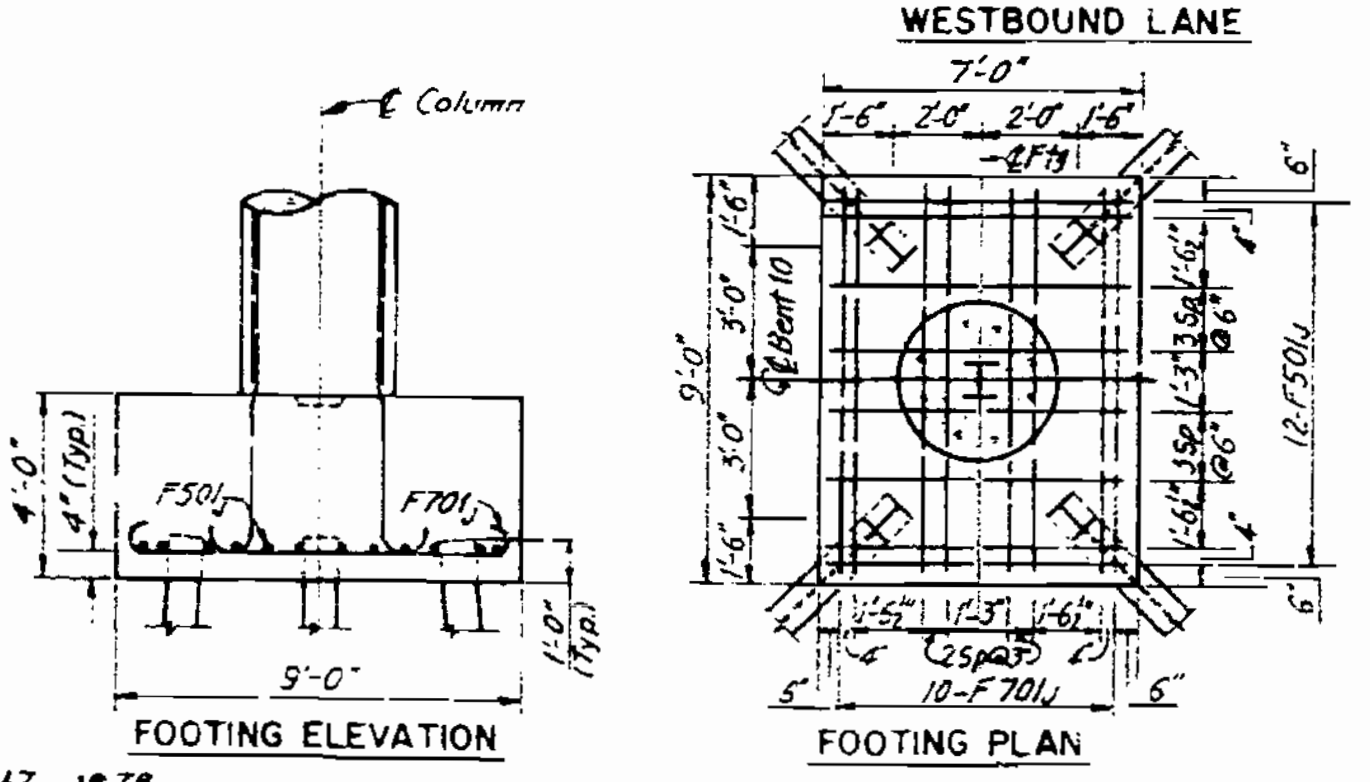
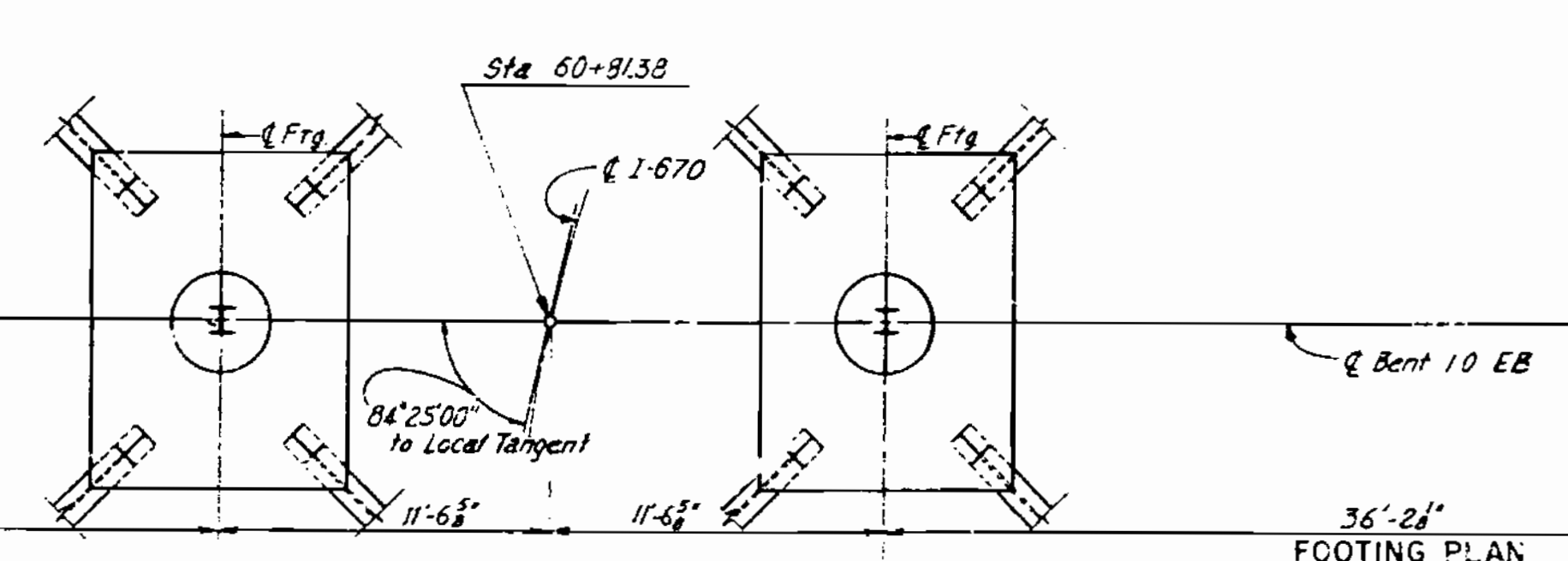
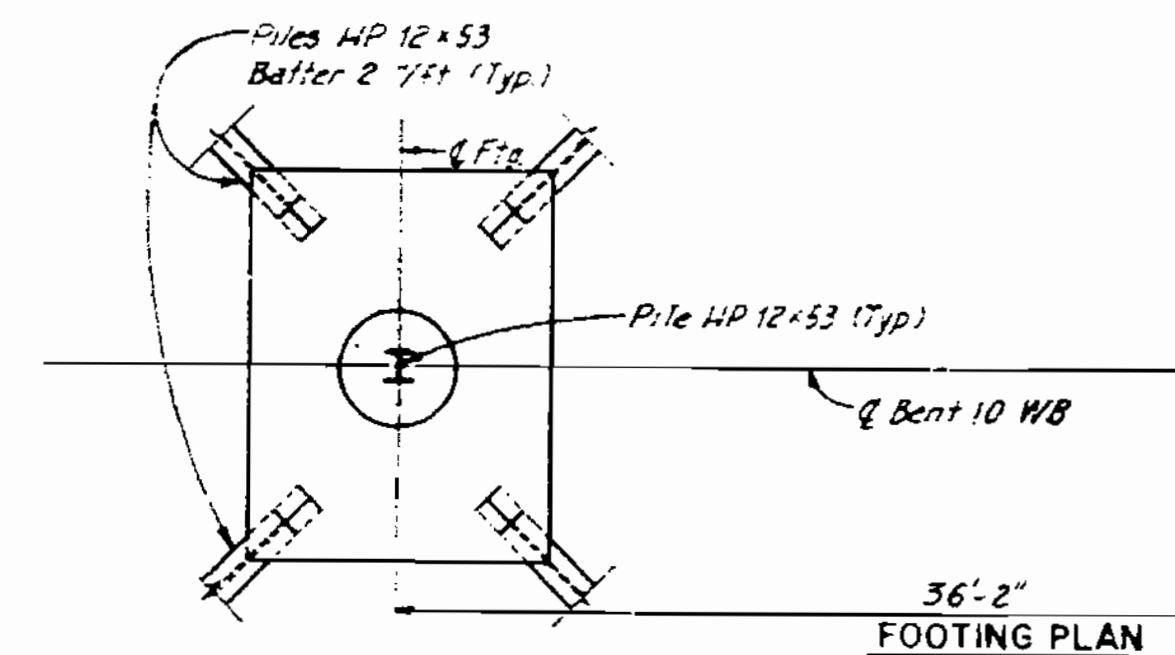
BENT 9 WESTBOUND AND EASTBOUND PILE FOOTING ALTERNATE
 JACKSON COUNTY A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		68	3	3



ELEVATION

ELEVATION



Notes:
 Pile spacing is measured at bottom of footing.
 For section thru cap of anchor bolt locations see Sheet 4 of 36.

DATE: 2/2 1978
 CHECKED: LJR 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 21 of 36

BENT 10 WESTBOUND AND EASTBOUND
 PILE FOOTING ALTERNATE
JACKSON COUNTY

A-3136

4 Bent 4 WB and EB only

Table with columns: FED. ROAD DIST. NO., STATE, FED. AID PROJ. NO., FISCAL YEAR, SHEET NO., TOTAL SHEETS

BILL OF REINFORCEMENT BENT 1 WESTBOUND. Table with columns: MARK, NO., LENGTH, SHAPE, LOCATION. Includes items A201A, B401A, B402A, B403A, B501A, B502A, B503A, B504A, B601A, B701A, B801A, B802A, B803A, B804A, B1101A, B1102A, B1103A, B1104A, B1105A, B1106A, C401A, C1101A, C1102A, F401A, F402A, F901A, F902A, F903A, F904A, F905A, F1101A.

BILL OF REINFORCEMENT BENT 2 WESTBOUND. Table with columns: MARK, NO., LENGTH, SHAPE, LOCATION. Includes items A201B, B401B, B402B, B403B, B501B, B502B, B503B, B504B, B601B, B701B, B801B, B802B, B803B, B804B, B1101B, B1102B, B1103B, B1104B, B1105B, B1106B, C401B, C1101B, C1102B, F401B, F402B, F901B, F902B, F903B, F904B, F905B, F1101B.

BILL OF REINFORCEMENT BENT 3 WESTBOUND. Table with columns: MARK, NO., LENGTH, SHAPE, LOCATION. Includes items A201C, B401C, B402C, B403C, B501C, B502C, B503C, B504C, B601C, B701C, B801C, B802C, B803C, B804C, B1101C, B1102C, B1103C, B1104C, B1105C, B1106C, C401C, C1101C, C1102C, F401C, F402C, F901C, F902C, F903C, F904C, F905C, F1101C.

BILL OF REINFORCEMENT BENT 4 WESTBOUND. Table with columns: MARK, NO., LENGTH, SHAPE, LOCATION. Includes items A201D, B401D, B402D, B403D, B501D, B502D, B503D, B504D, B601D, B701D, B801D, B802D, B803D, B804D, B1101D, B1102D, B1103D, B1104D, B1105D, B1106D, C401D, C1101D, C1102D, F401D, F402D, F701D, F901D, F902D, F903D, F1101D.

BILL OF REINFORCEMENT BENT 1 EASTBOUND. Table with columns: MARK, NO., LENGTH, SHAPE, LOCATION. Includes items A201A, B401A, B402A, B403A, B501A, B502A, B503A, B504A, B601A, B701A, B801A, B802A, B803A, B804A, B1101A, B1102A, B1103A, B1104A, B1105A, B1106A, C401A, C1101A, C1102A, F401A, F402A, F901A, F902A, F903A, F904A, F905A, F1101A.

BILL OF REINFORCEMENT BENT 2 EASTBOUND. Table with columns: MARK, NO., LENGTH, SHAPE, LOCATION. Includes items A201B, B401B, B402B, B403B, B501B, B502B, B503B, B504B, B601B, B701B, B801B, B802B, B803B, B804B, B1101B, B1102B, B1103B, B1104B, B1105B, B1106B, C401B, C1101B, C1102B, F401B, F402B, F901B, F902B, F903B, F904B, F905B, F1101B.

BILL OF REINFORCEMENT BENT 3 EASTBOUND. Table with columns: MARK, NO., LENGTH, SHAPE, LOCATION. Includes items A201C, B401C, B402C, B403C, B501C, B502C, B503C, B504C, B601C, B701C, B801C, B802C, B803C, B804C, B1101C, B1102C, B1103C, B1104C, B1105C, B1106C, C401C, C1101C, C1102C, F401C, F402C, F901C, F902C, F903C, F904C, F905C, F1101C.

BILL OF REINFORCEMENT BENT 4 EASTBOUND. Table with columns: MARK, NO., LENGTH, SHAPE, LOCATION. Includes items A201D, B401D, B402D, B403D, B501D, B502D, B503D, B504D, B601D, B701D, B801D, B802D, B803D, B804D, B1101D, B1102D, B1103D, B1104D, B1105D, B1106D, C401D, C1101D, C1102D, F401D, F402D, F701D, F901D, F902D, F903D, F1101D.

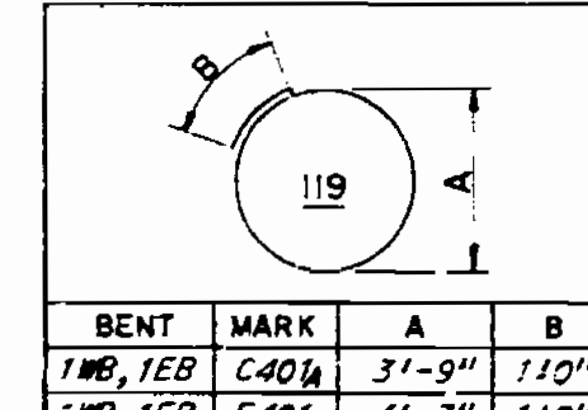
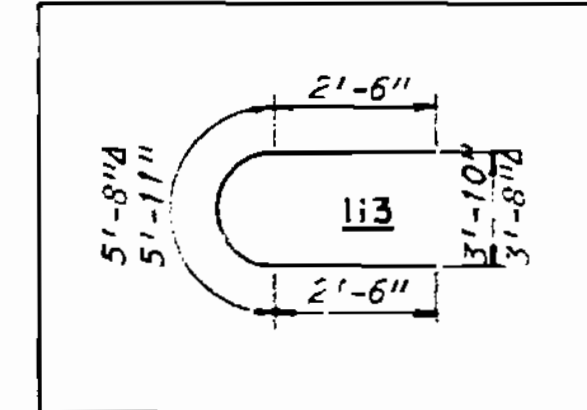


Table with columns: BENT, MARK, A, B. Includes items BENT 1WB, 1EB, 2WB, 2EB, 3WB, 3EB, 4WB, 4EB.

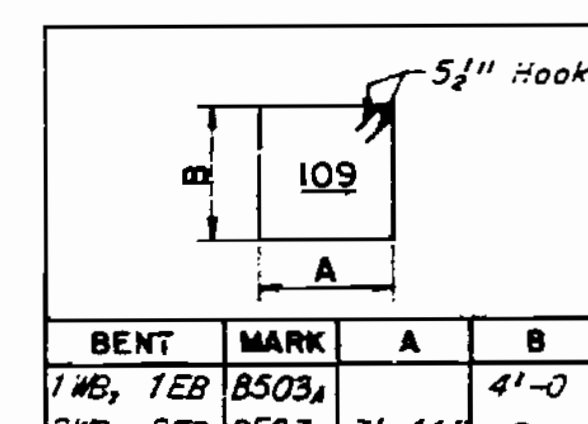
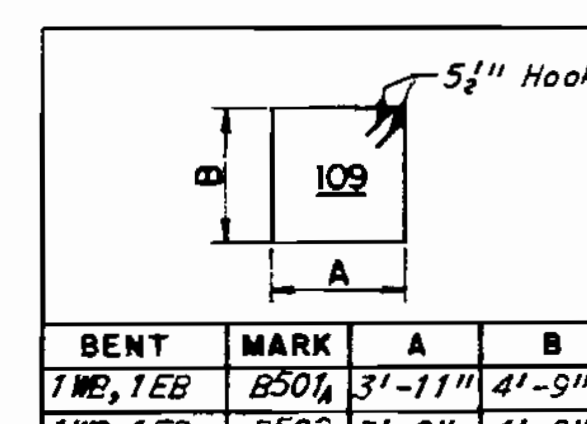
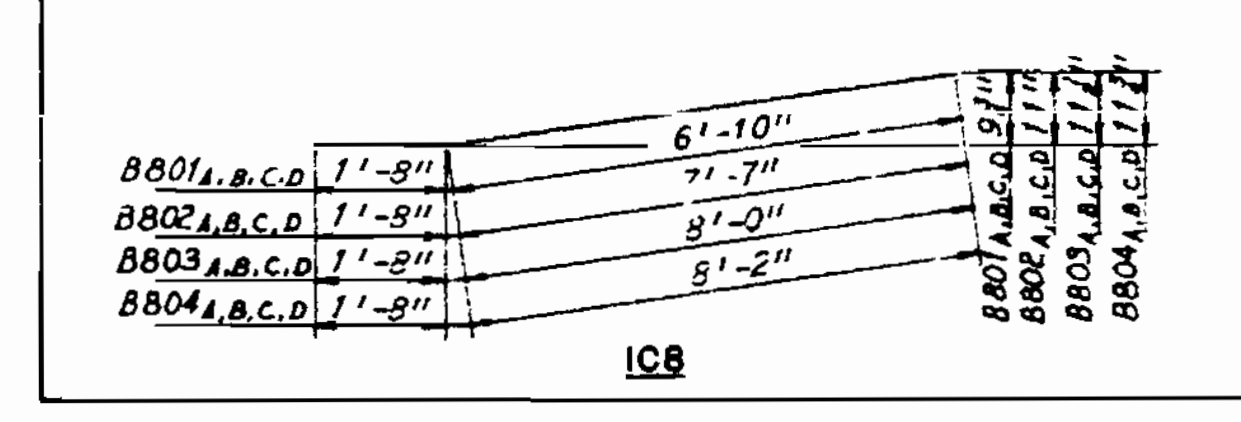
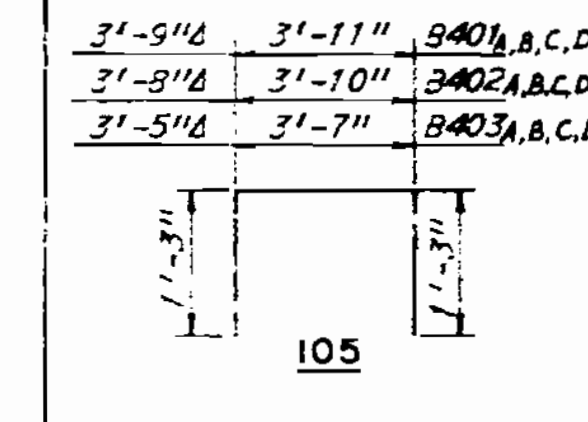
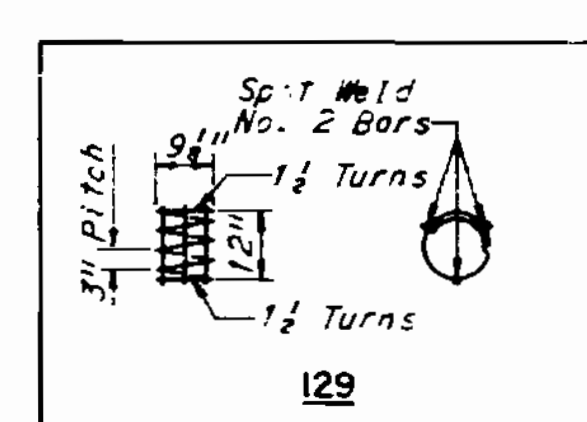


Table with columns: BENT, MARK, A, B. Includes items 1WB, 1EB, 2WB, 2EB, 3WB, 3EB, 4WB, 4EB.

Table with columns: BENT, MARK, A, B. Includes items 1WB, 1EB, 2WB, 2EB, 3WB, 3EB, 4WB, 4EB.

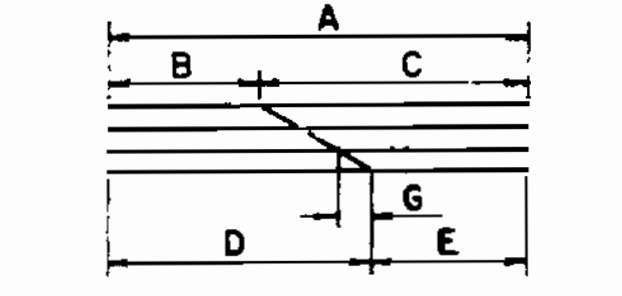


TABLE OF CUTTING DIMENSIONS. Table with columns: BENT, MARK, A, B, C, D, E, G, H, J, K. Includes items 1WB, 1EB, 2WB, 2EB, 3WB, 3EB, 4WB, 4EB.

H = No. of bars, J = Cut, K = Bend

DETAILED BJT 1978, CHECKED LJR 1978

*Denotes series bar, see table of cutting dimensions.

Note: BARS IN ALL BENTS WILL BE BILLED AND TAGGED SEPARATELY. Hooks and bends shall be in accordance with A.C.I. Manual of Standard Practice For Detailing Reinforced Concrete Structures (ACI-318-71). All reinforcing steel shall be Grade 60.

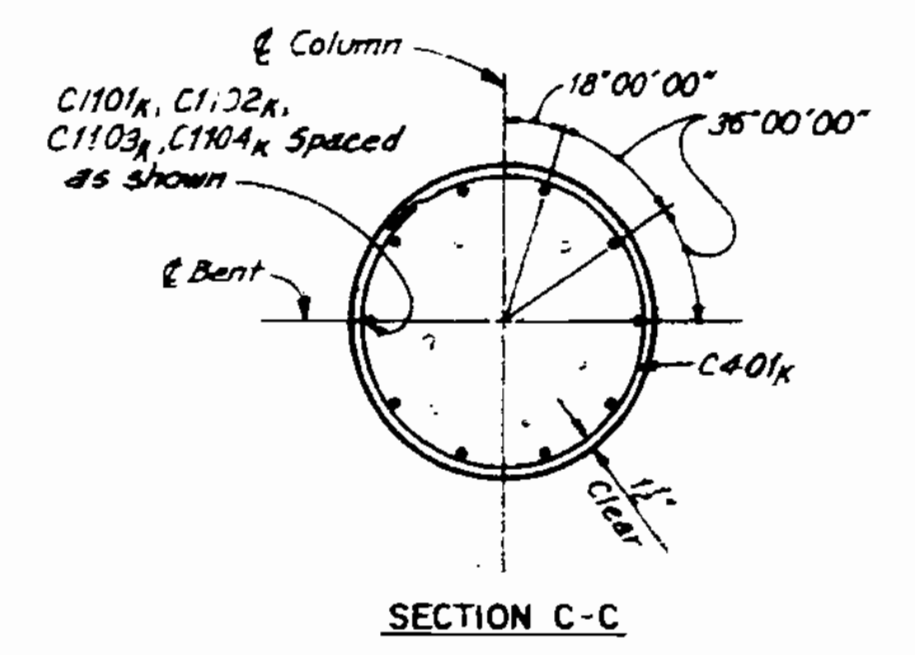
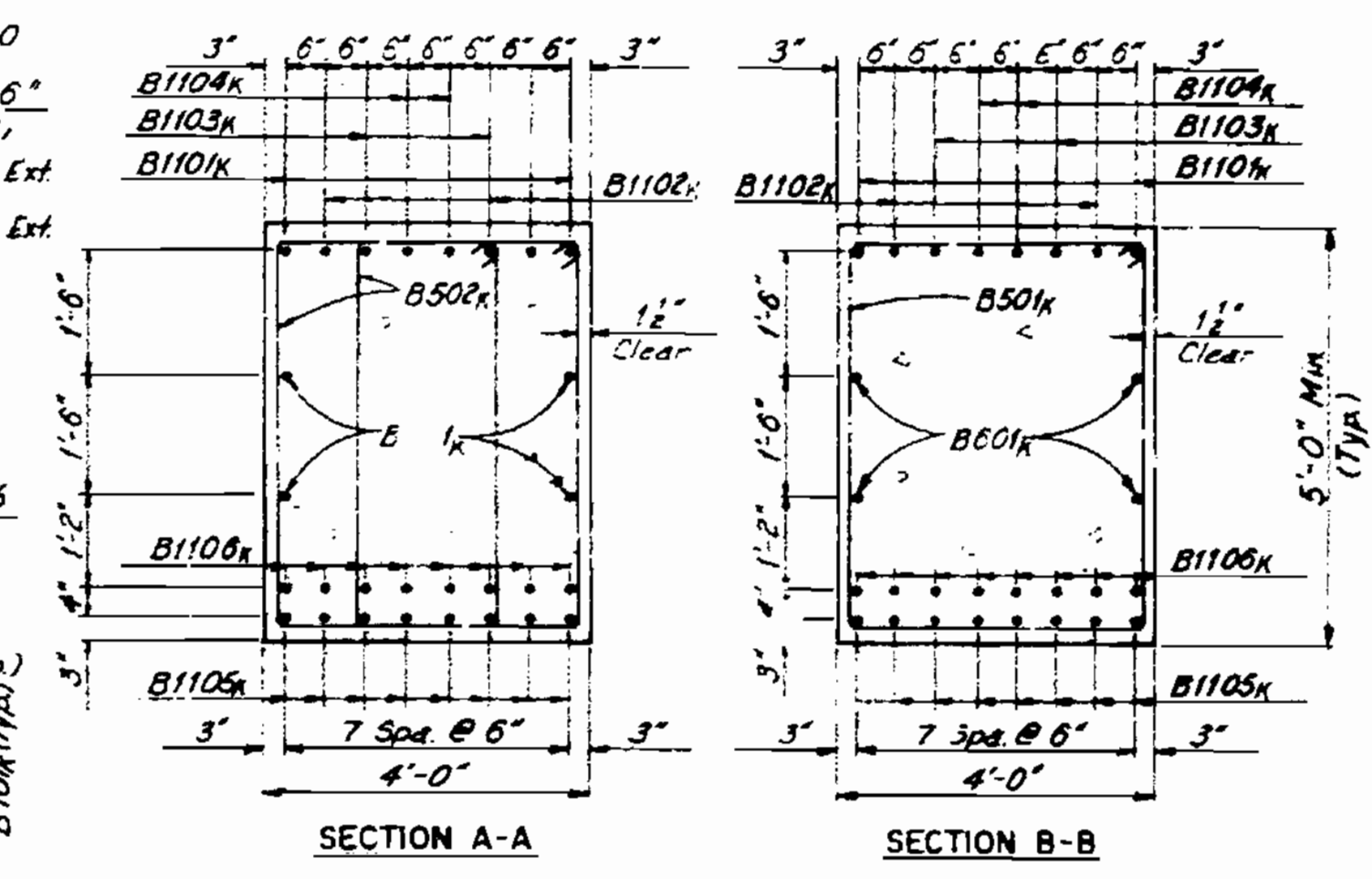
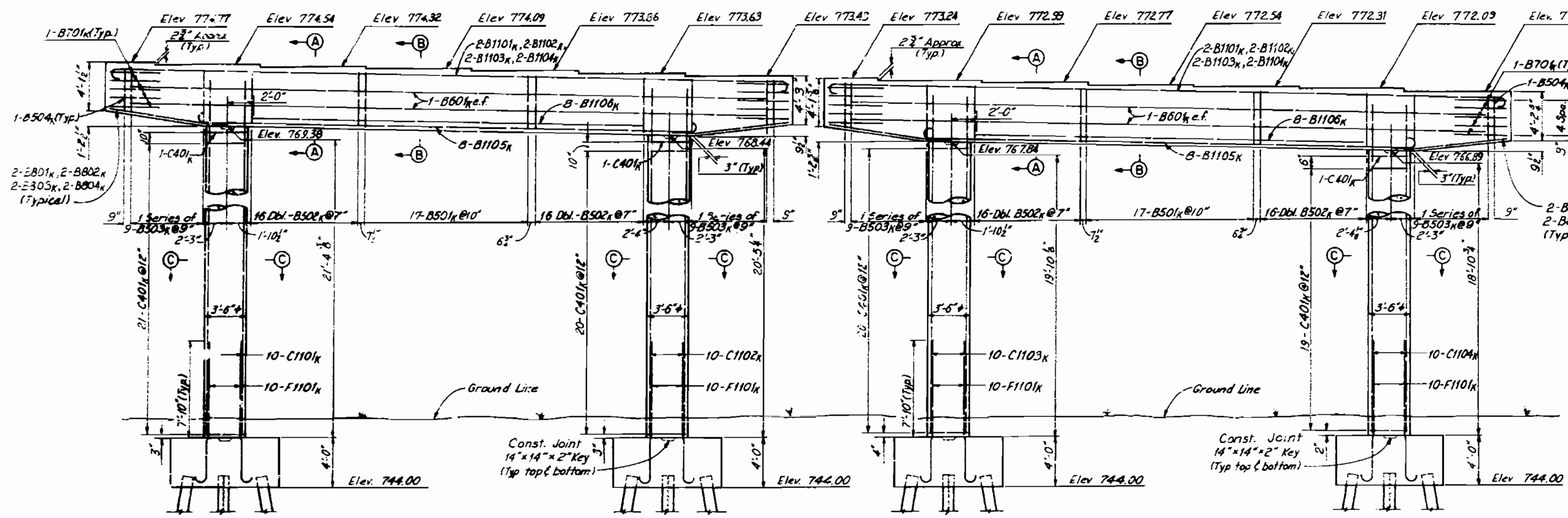
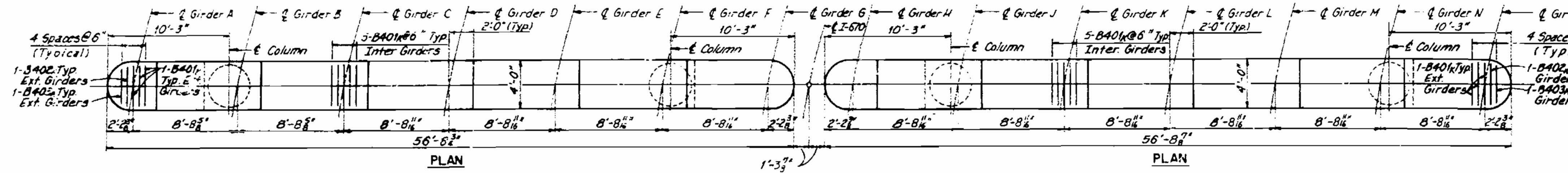
Legend: W.B. denotes Westbound Lanes, E.S. denotes Eastbound Lanes

SUBSTRUCTURE REINFORCING SCHEDULE PEDESTAL PILE ALTERNATE

JACKSON COUNTY

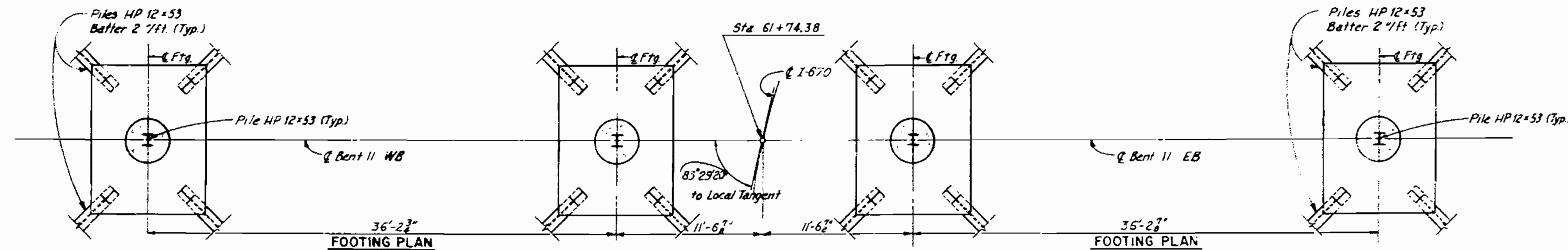
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		78	20	



ELEVATION

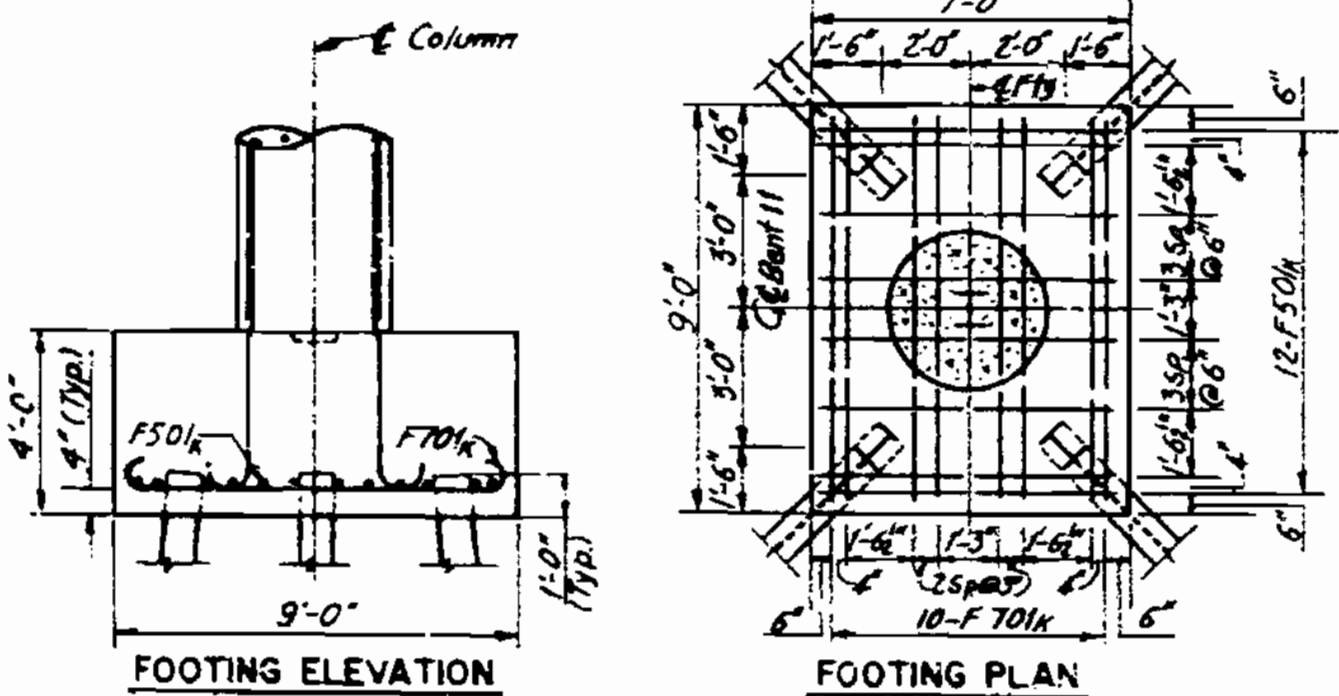
ELEVATION



FOOTING PLAN WESTBOUND LANE

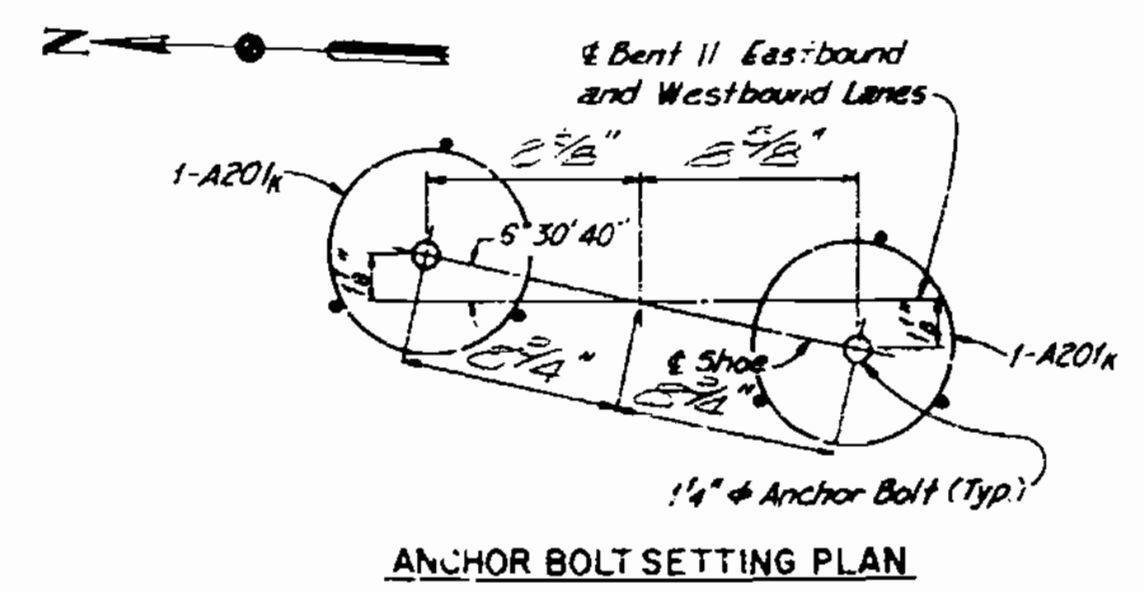
FOOTING PLAN EASTBOUND LANE

Legend:
EB = Eastbound Lanes
WB = Westbound Lanes



FOOTING ELEVATION

FOOTING PLAN



ANCHOR BOLT SETTING PLAN

Notes:
Pile spacing is measured at bottom of footing.
For section thru cap at anchor bolt locations see Sheet 4 of 36.

BENT 11 WESTBOUND AND EASTBOUND PILE FOOTING ALTERNATE
JACKSON COUNTY

DETAILED BAZ 1078
CHECKED LJR 1072

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 22 of 36

A-3136

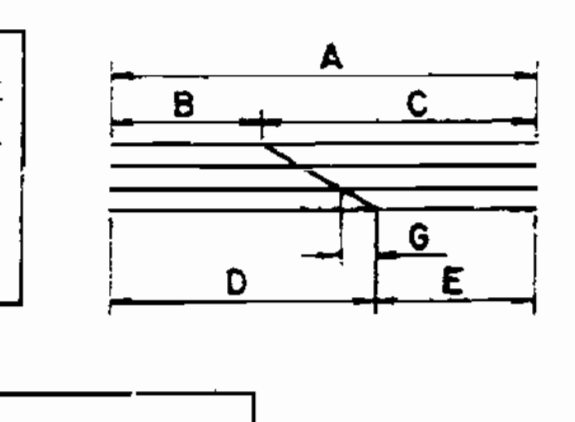
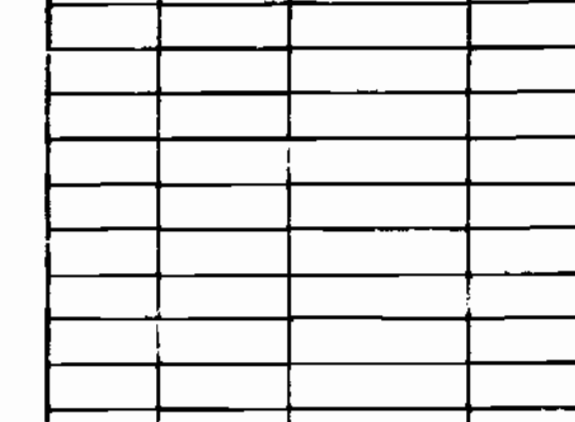
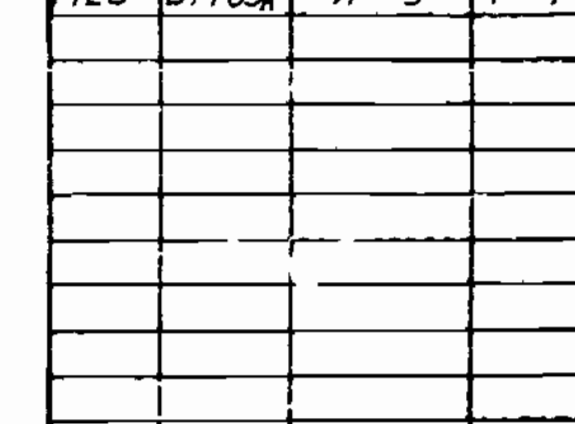
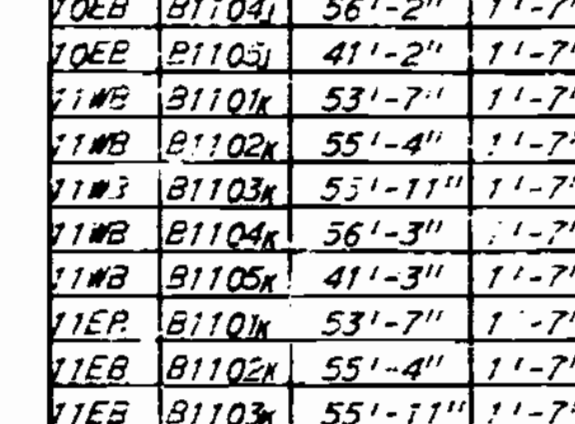
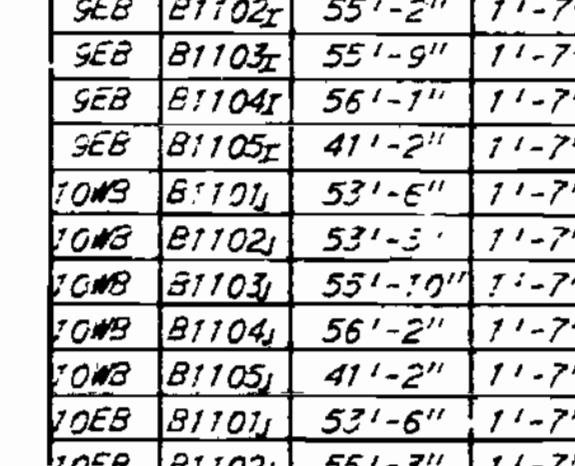
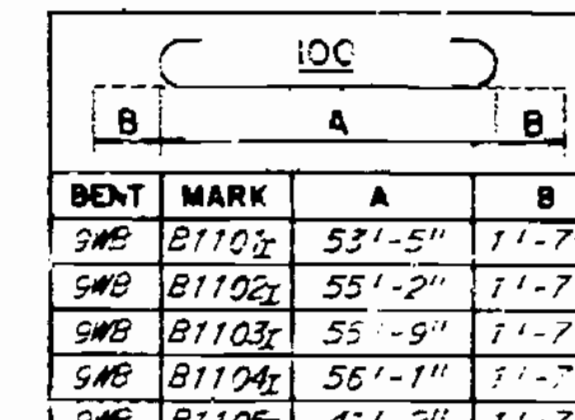
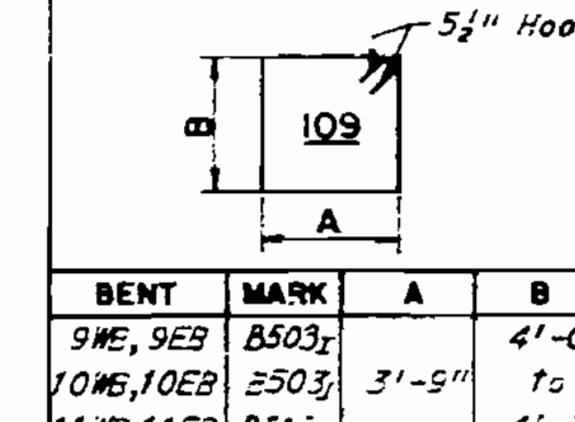
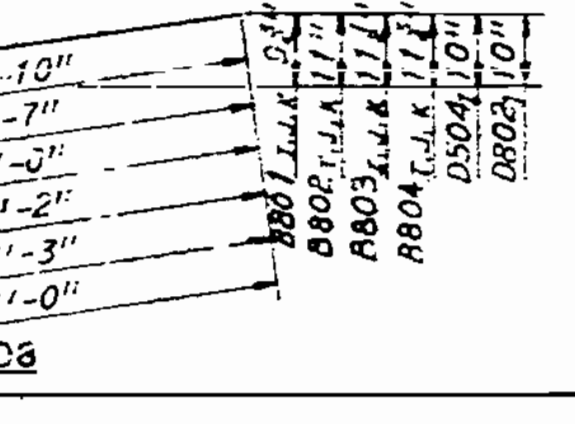
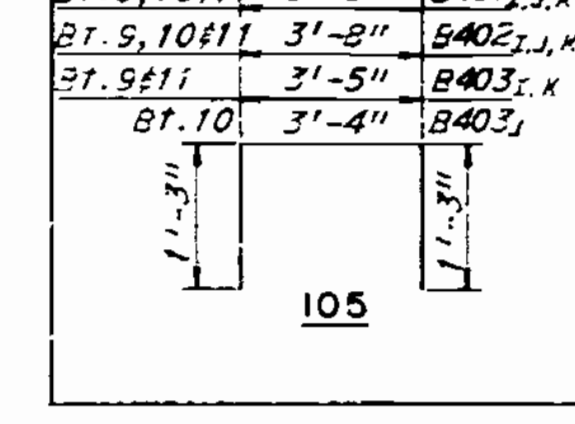
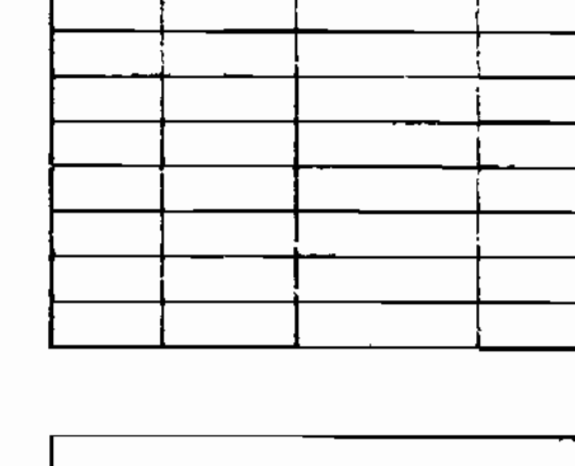
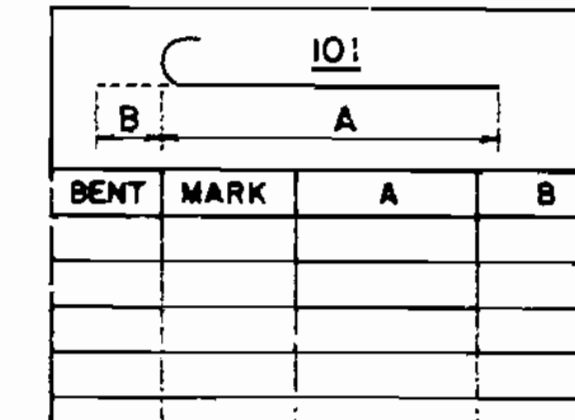
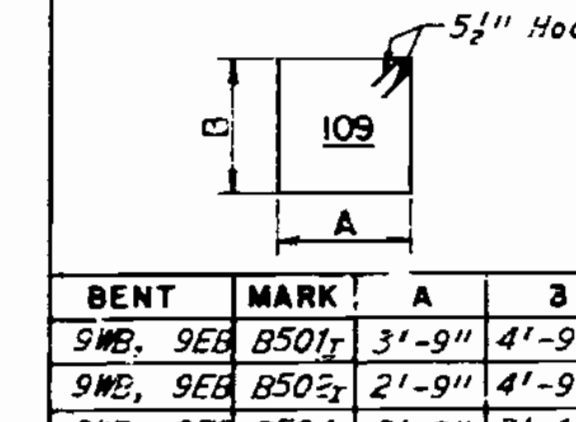
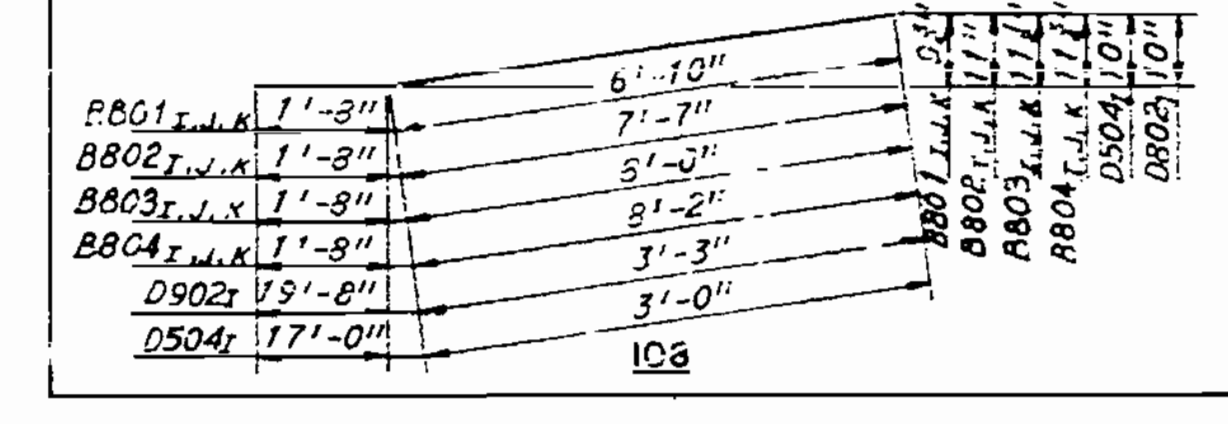
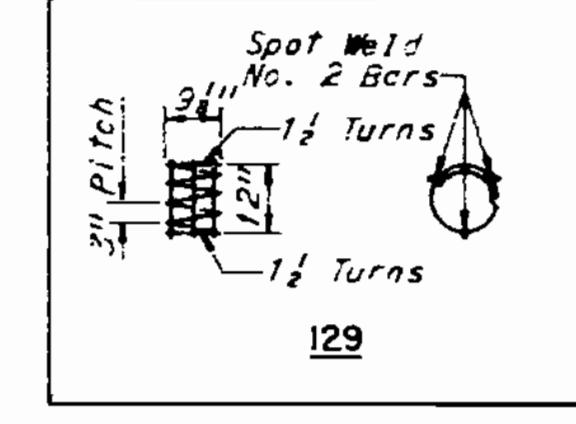
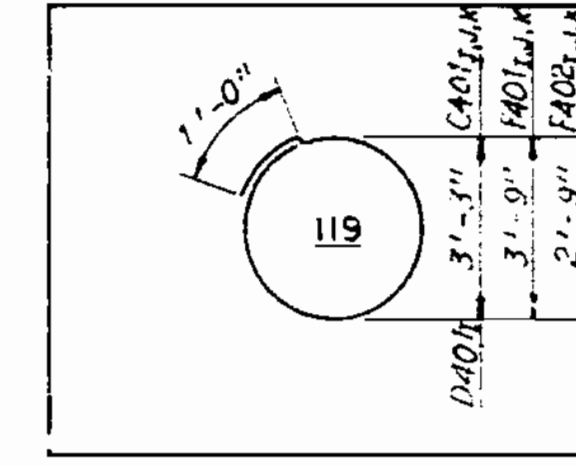
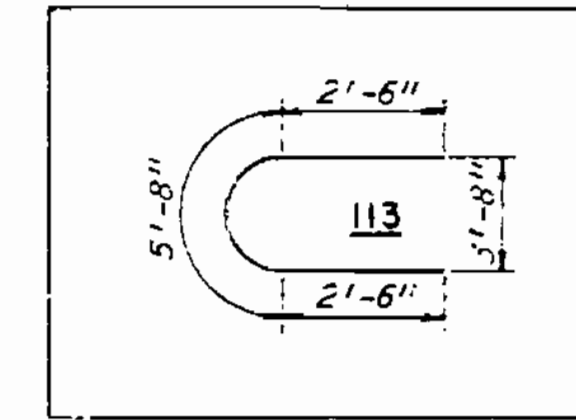
FILE NO.	DATE	FILE NO.	FILE NO.	FILE NO.	TOTAL SHEETS
1				123	

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 9 WESTBOUND				
A201 _L	14	19'-9"	129	Capbeam
B401 _L	31	6'-1"	105	Capbeam
B402 _L	2	6'-0"	105	Capbeam
B403 _L	2	5'-9"	105	Capbeam
B501 _L	16	17'-7"	109	Capbeam
B502 _L	52	15'-7"	109	Capbeam
B503 _L	9	33'-8"	*109	Capbeam
B601 _L	4	52'-7"	Str.	Capbeam
B701 _L	10	10'-8"	113	Capbeam
B801 _L	4	8'-6"	108	Capbeam
B802 _L	4	9'-3"	108	Capbeam
B803 _L	4	9'-8"	108	Capbeam
B804 _L	4	9'-10"	108	Capbeam
B1101 _L	2	56'-7"	100	Capbeam
B1102 _L	2	58'-5"	100	Capbeam
B1103 _L	2	59'-0"	100	Capbeam
B1104 _L	2	59'-4"	100	Capbeam
B1105 _L	3	44'-4"	100	Capbeam
B1106 _L	3	32'-2"	Str.	Capbeam
C401 _L	31	11'-1"	119	Column
D401 _L	16	11'-1"	119	Collision Wall
D501 _L	42	4'-0"	105	Collision Wall
D502 _L	46	7'-9"	Str.	Collision Wall
D503 _L	14	21'-3"	120	Collision Wall
D504 _L	14	20'-0"	108	Collision Wall
D901 _L	4	24'-8"	120	Collision Wall
D902 _L	8	22'-11"	108	Collision Wall
D1101 _L	10	27'-10"	Str.	Collision Wall
D1102 _L	10	26'-11"	Str.	Collision Wall
BENT 9 EASTBOUND				
A201 _R	14	19'-9"	129	Capbeam
B401 _R	31	6'-1"	105	Capbeam
B402 _R	2	6'-0"	105	Capbeam
B403 _R	2	5'-9"	105	Capbeam
B501 _R	16	17'-7"	109	Capbeam
B502 _R	52	15'-7"	109	Capbeam
B503 _R	9	33'-8"	*109	Capbeam
B601 _R	4	52'-7"	Str.	Capbeam
B701 _R	10	10'-8"	113	Capbeam
B801 _R	4	8'-6"	108	Capbeam
B802 _R	4	9'-3"	108	Capbeam
B803 _R	4	9'-8"	108	Capbeam
B804 _R	4	9'-10"	108	Capbeam
B1101 _R	2	56'-7"	100	Capbeam
B1102 _R	2	58'-5"	100	Capbeam
B1103 _R	2	59'-0"	100	Capbeam
B1104 _R	2	59'-4"	100	Capbeam
B1105 _R	3	44'-4"	100	Capbeam
B1106 _R	3	32'-2"	Str.	Capbeam
C401 _R	31	11'-1"	119	Column
D401 _R	16	11'-1"	119	Collision Wall
D501 _R	42	4'-0"	105	Collision Wall
D502 _R	46	7'-9"	Str.	Collision Wall
D503 _R	14	21'-3"	120	Collision Wall
D504 _R	14	20'-0"	108	Collision Wall
D901 _R	4	24'-8"	120	Collision Wall
D902 _R	8	22'-11"	108	Collision Wall
D1101 _R	10	27'-10"	Str.	Collision Wall
D1102 _R	10	26'-11"	Str.	Collision Wall

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 9 EASTBOUND (cont.)				
F401 _L	128	12'-8"	119	Pedestal Pile
F402 _L	22	9'-6"	119	Socket
F901 _L	36	40'-0"	Str.	Pedestal Pile
F902 _L	36	28'-10"	Str.	Pedestal Pile
F903 _L	20	13'-3"	Str.	Socket
F1101 _L	20	12'-5"	Str.	Pedestal Pile
BENT 10 WESTBOUND				
A201 _L	14	19'-9"	129	Capbeam
B401 _L	31	6'-1"	105	Capbeam
B402 _L	2	6'-0"	105	Capbeam
B403 _L	2	5'-9"	105	Capbeam
B501 _L	17	17'-7"	109	Capbeam
B502 _L	64	15'-7"	109	Capbeam
B503 _L	9	33'-8"	*109	Capbeam
B504 _L	2	15'-7"	109	Capbeam
B601 _L	4	52'-9"	Str.	Capbeam
B701 _L	10	10'-8"	113	Capbeam
B801 _L	4	8'-6"	108	Capbeam
B802 _L	4	9'-3"	108	Capbeam
B803 _L	4	9'-8"	108	Capbeam
B804 _L	4	9'-10"	108	Capbeam
B1101 _L	2	56'-9"	100	Capbeam
B1102 _L	2	58'-5"	100	Capbeam
B1103 _L	2	59'-0"	100	Capbeam
B1104 _L	2	59'-4"	100	Capbeam
B1105 _L	3	44'-4"	100	Capbeam
B1106 _L	3	32'-2"	Str.	Capbeam
C401 _L	41	11'-1"	119	Column
C1101 _L	10	25'-11"	Str.	Column
C1102 _L	10	24'-4"	Str.	Column
BENT 10 EASTBOUND				
A201 _R	14	19'-9"	129	Capbeam
B401 _R	31	6'-1"	105	Capbeam
B402 _R	2	6'-0"	105	Capbeam
B403 _R	2	5'-9"	105	Capbeam
B501 _R	17	17'-7"	109	Capbeam
B502 _R	64	15'-7"	109	Capbeam
B503 _R	9	33'-8"	*109	Capbeam
B504 _R	2	15'-7"	109	Capbeam
B601 _R	4	52'-9"	Str.	Capbeam
B701 _R	10	10'-8"	113	Capbeam
B801 _R	4	8'-6"	108	Capbeam
B802 _R	4	9'-3"	108	Capbeam
B803 _R	4	9'-8"	108	Capbeam
B804 _R	4	9'-10"	108	Capbeam
B1101 _R	2	56'-9"	100	Capbeam
B1102 _R	2	58'-5"	100	Capbeam
B1103 _R	2	59'-0"	100	Capbeam
B1104 _R	2	59'-4"	100	Capbeam
B1105 _R	3	44'-4"	100	Capbeam
B1106 _R	3	32'-2"	Str.	Capbeam
C401 _R	39	11'-1"	119	Column
C1103 _R	10	23'-8"	Str.	Column
C1104 _R	10	22'-9"	Str.	Column

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 10 EASTBOUND (cont.)				
F401 _R	132	12'-8"	119	Pedestal Pile
F402 _R	20	9'-6"	119	Socket
F901 _R	36	40'-0"	Str.	Pedestal Pile
F902 _R	36	30'-4"	Str.	Pedestal Pile
F903 _R	20	12'-6"	Str.	Socket
F1101 _R	20	12'-5"	Str.	Pedestal Pile
BENT 11 WESTBOUND				
A201 _L	14	19'-9"	129	Capbeam
B401 _L	31	6'-1"	105	Capbeam
B402 _L	2	6'-0"	105	Capbeam
B403 _L	2	5'-9"	105	Capbeam
B501 _L	17	17'-7"	109	Capbeam
B502 _L	64	15'-7"	109	Capbeam
B503 _L	9	33'-8"	*109	Capbeam
B504 _L	2	15'-3"	109	Capbeam
B601 _L	4	52'-9"	Str.	Capbeam
B701 _L	10	10'-8"	113	Capbeam
B801 _L	4	8'-6"	108	Capbeam
B802 _L	4	9'-3"	108	Capbeam
B803 _L	4	9'-8"	108	Capbeam
B804 _L	4	9'-10"	108	Capbeam
B1101 _L	2	56'-9"	100	Capbeam
B1102 _L	2	58'-6"	100	Capbeam
B1103 _L	2	59'-1"	100	Capbeam
B1104 _L	2	59'-5"	100	Capbeam
B1105 _L	3	44'-5"	100	Capbeam
B1106 _L	3	32'-3"	Str.	Capbeam
C401 _L	43	11'-1"	119	Column
C1101 _L	10	25'-11"	Str.	Column
C1102 _L	10	25'-0"	Str.	Column
BENT 11 EASTBOUND				
A201 _R	14	19'-9"	129	Capbeam
B401 _R	31	6'-1"	105	Capbeam
B402 _R	2	6'-0"	105	Capbeam
B403 _R	2	5'-9"	105	Capbeam
B501 _R	17	17'-7"	109	Capbeam
B502 _R	64	15'-7"	109	Capbeam
B503 _R	9	33'-8"	*109	Capbeam
B504 _R	2	15'-3"	109	Capbeam
B601 _R	4	52'-9"	Str.	Capbeam
B701 _R	10	10'-8"	113	Capbeam
B801 _R	4	8'-6"	108	Capbeam
B802 _R	4	9'-3"	108	Capbeam
B803 _R	4	9'-8"	108	Capbeam
B804 _R	4	9'-10"	108	Capbeam
B1101 _R	2	56'-9"	100	Capbeam
B1102 _R	2	58'-6"	100	Capbeam
B1103 _R	2	59'-1"	100	Capbeam
B1104 _R	2	59'-5"	100	Capbeam
B1105 _R	3	44'-5"	100	Capbeam
B1106 _R	3	32'-3"	Str.	Capbeam
C401 _R	40	11'-1"	119	Column
C1103 _R	10	24'-5"	Str.	Column
C1104 _R	10	23'-5"	Str.	Column

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
BENT 11 EASTBOUND (cont.)				
F401 _R	130	12'-8"	119	Pedestal Pile
F402 _R	18	9'-6"	119	Socket
F901 _R	36	40'-0"	Str.	Pedestal Pile
F902 _R	36	29'-4"	Str.	Pedestal Pile
F903 _R	20	11'-6"	Str.	Socket
F1101 _R	20	12'-5"	Str.	Pedestal Pile



BENT	MARK	A	B
9WB, 9EB	B501 _L	3'-9"	4'-9"
9WB, 9EB	B502 _L	2'-9"	4'-9"
9WB, 9EB	B504 _L	3'-8"	3'-11"
10WB, 10EB	B501 _R	3'-9"	4'-5"
10WB, 10EB	B502 _R	2'-9"	4'-9"
10WB, 10EB	B504 _R	3'-7"	3'-11"
11WB, 11EB	B501 _L	3'-9"	4'-9"
11WB, 11EB	B502 _L	2'-9"	4'-9"
11WB, 11EB	B504 _L	3'-5"	3'-11"

BENT	MARK	A	B	C	D	E	G	H	J	K
9WB, 9EB	B503 _L	33'-8"	16'-1"	17'-7"	17'-7"	16'-1"	2 1/2"	3	3	16
10WB, 10EB	B503 _R	33'-8"	16'-1"	17'-7"	17'-7"	16'-1"	2 1/2"	3	3	16
11WB, 11EB	B503 _L	33'-8"	16'-1"	17'-7"	17'-7"	16'-1"	2 1/2"	3	3	16

TABLE OF CUTTING DIMENSIONS

H = No. of bars
J = Cut
K = Bend

387

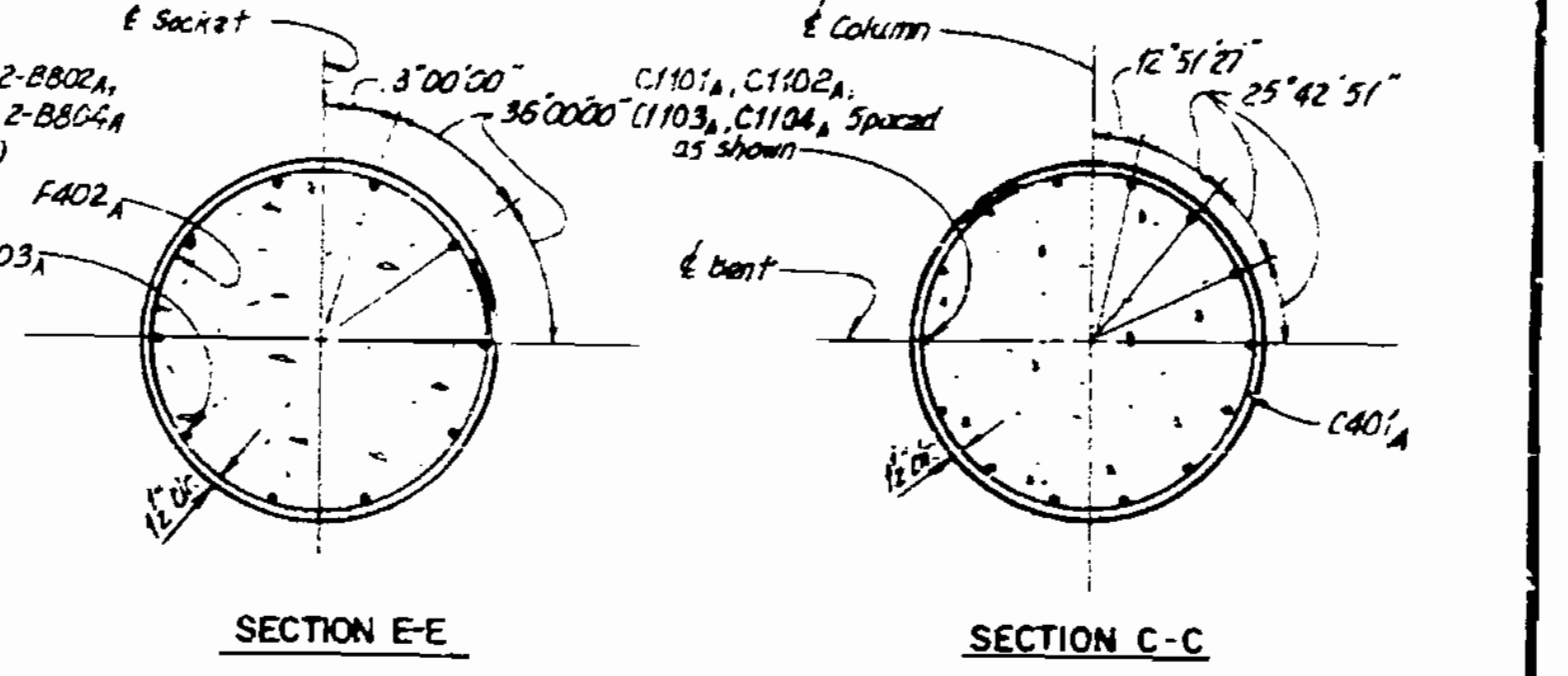
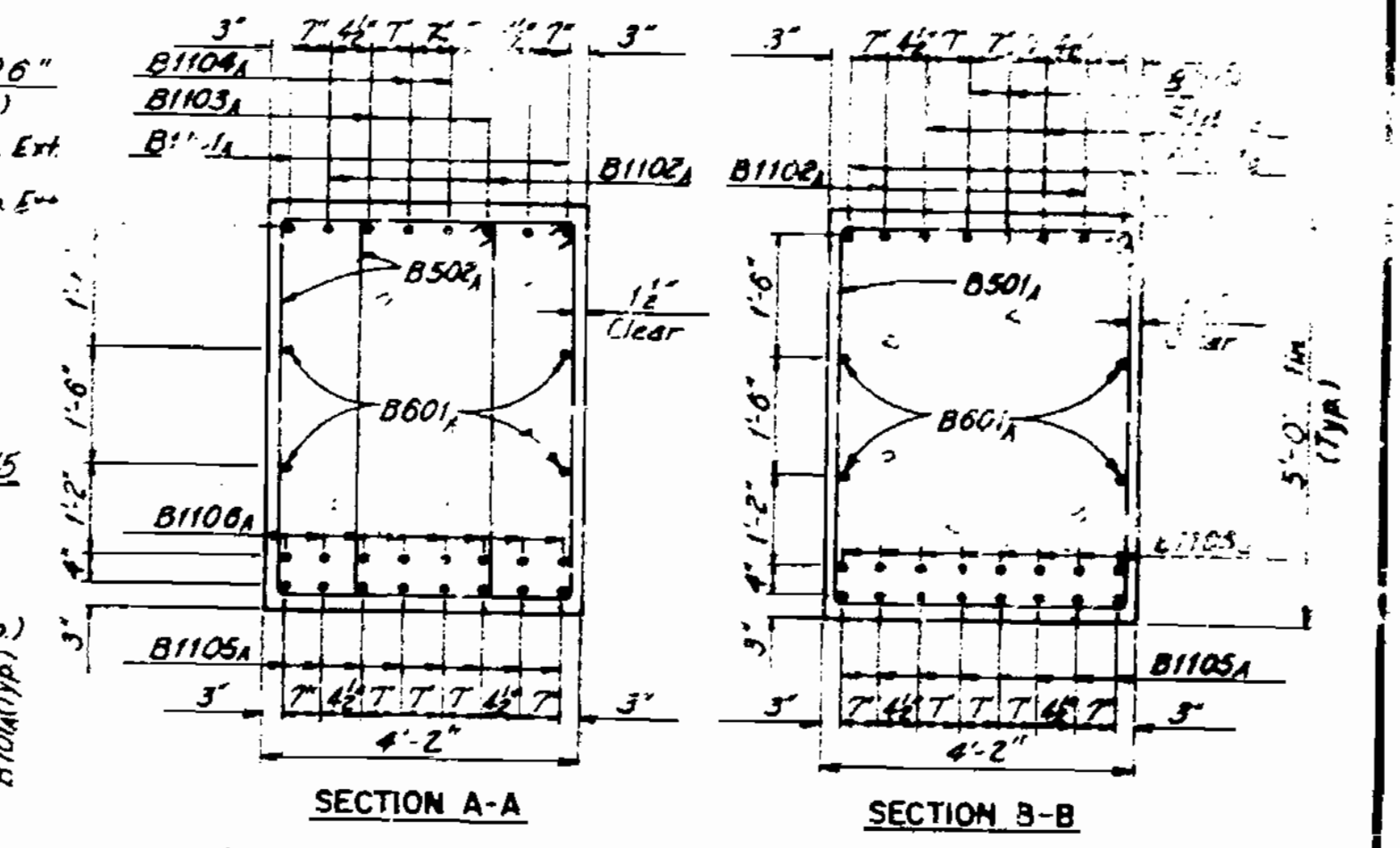
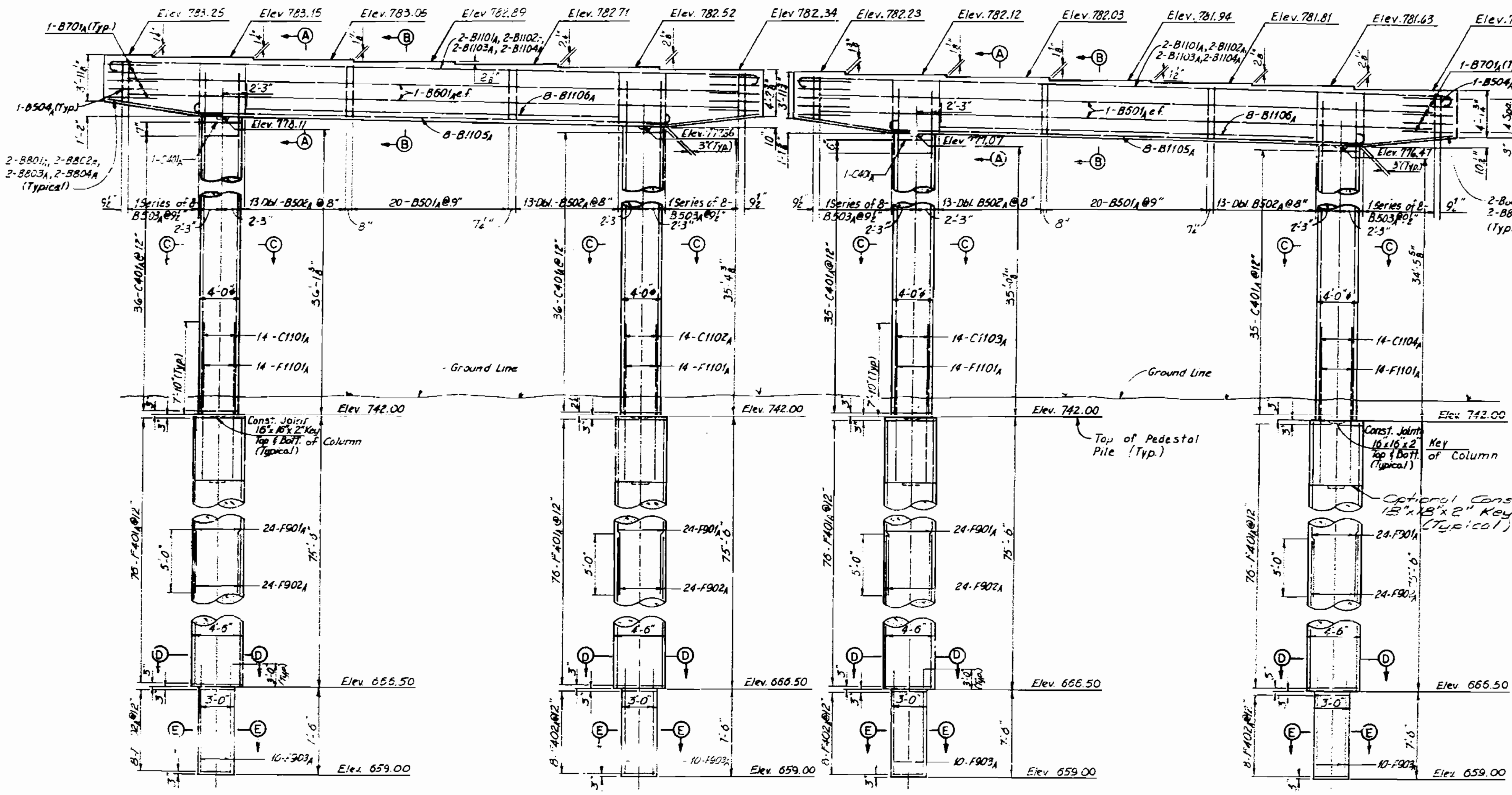
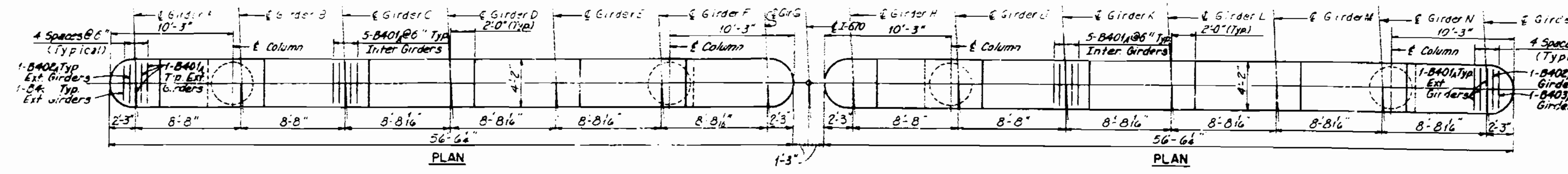
*Denotes series bar, see Table of cutting dimensions.

Note: BARS IN ALL BENTS WILL BE BILLED AND TAGGED SEPARATELY. Hooks and bends shall be in accordance with A.C.I. Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI-318-71). All reinforcing steel shall be Grade 60.

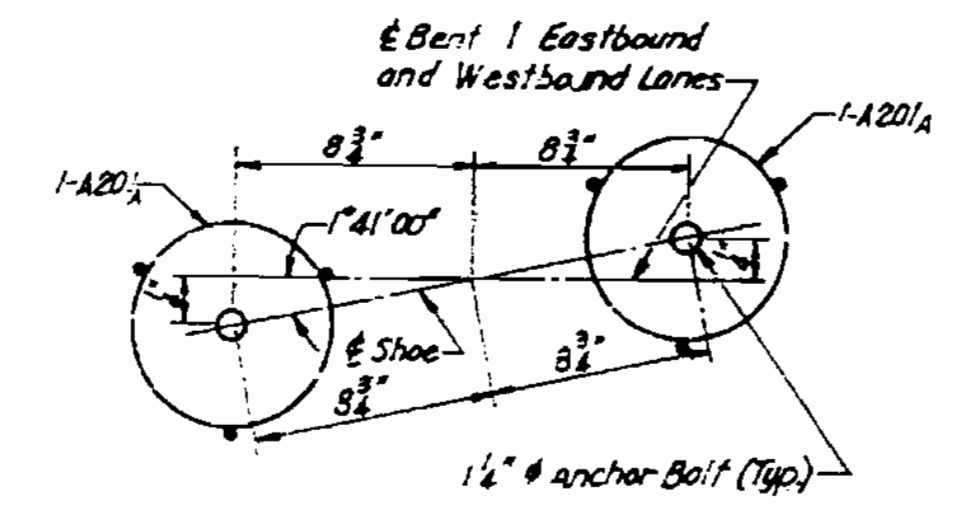
Note: This drawing is not to scale. Follow dimensions.

Legend: W.B. denotes Westbound Lanes
E.B. denotes Eastbound Lanes

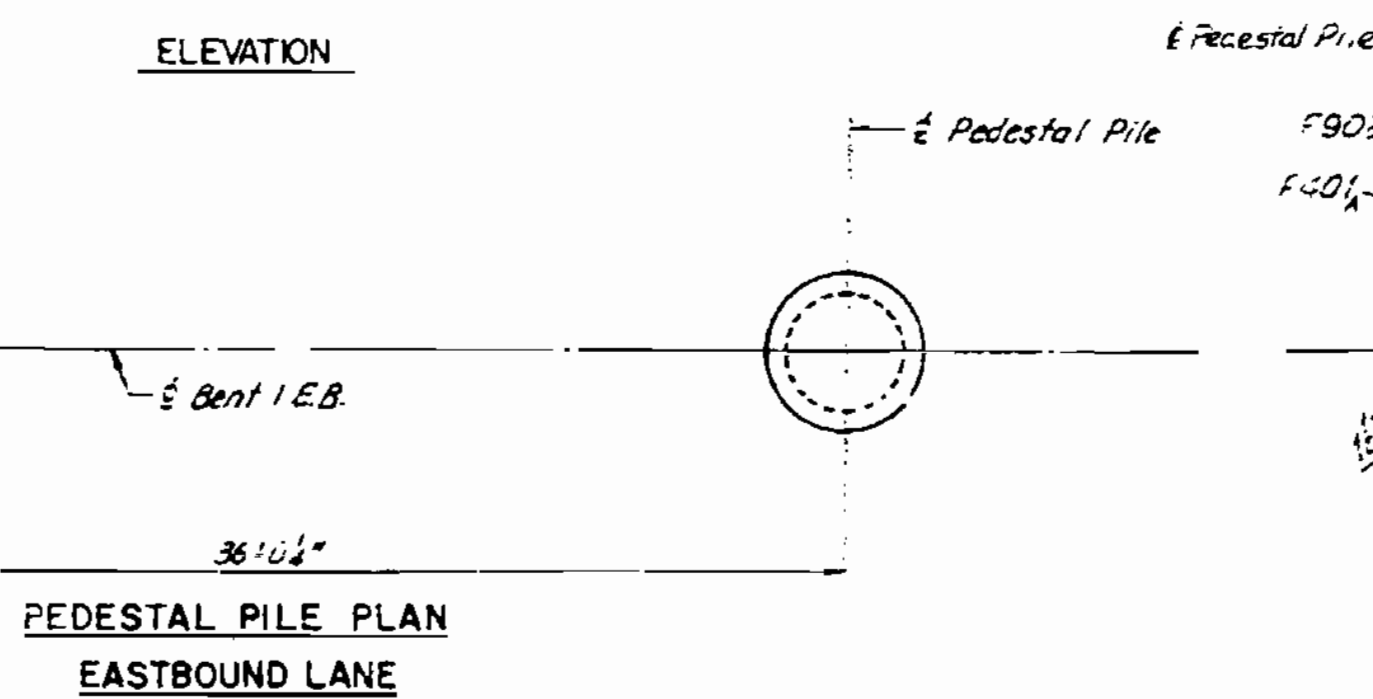
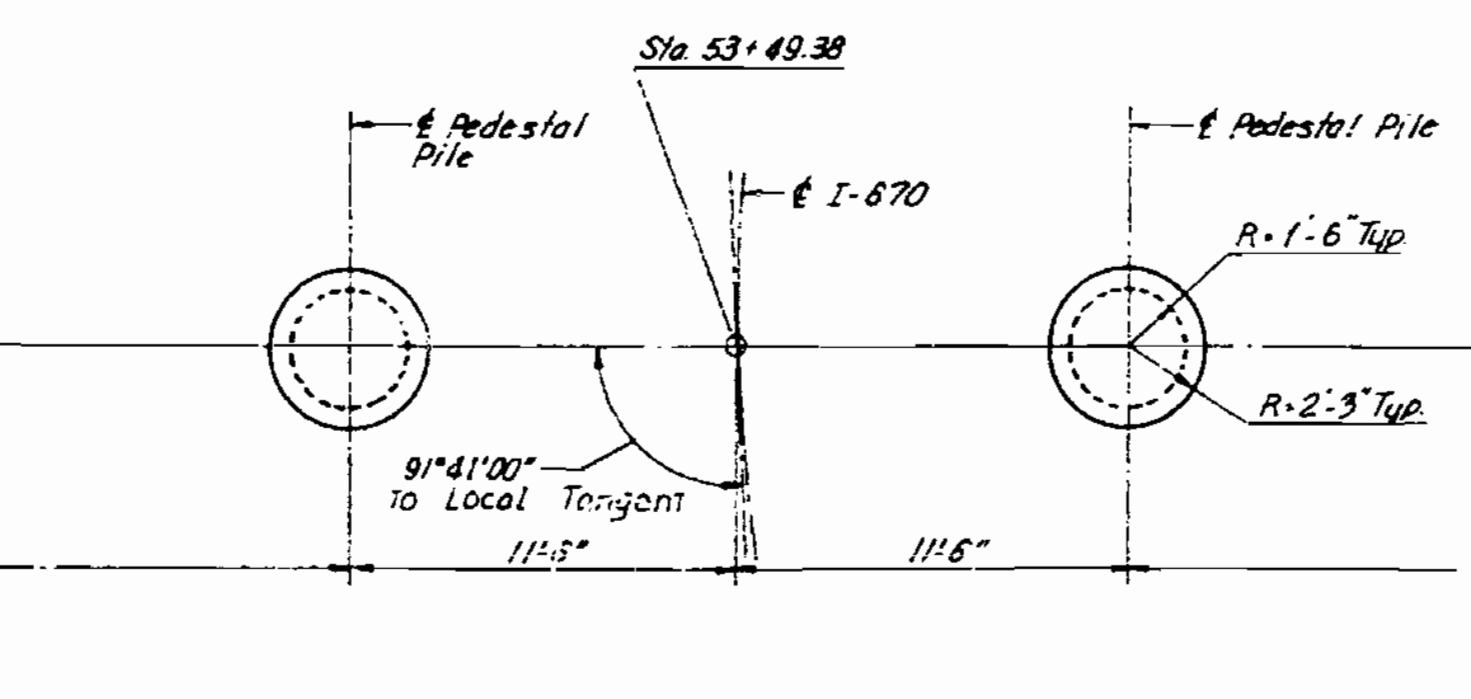
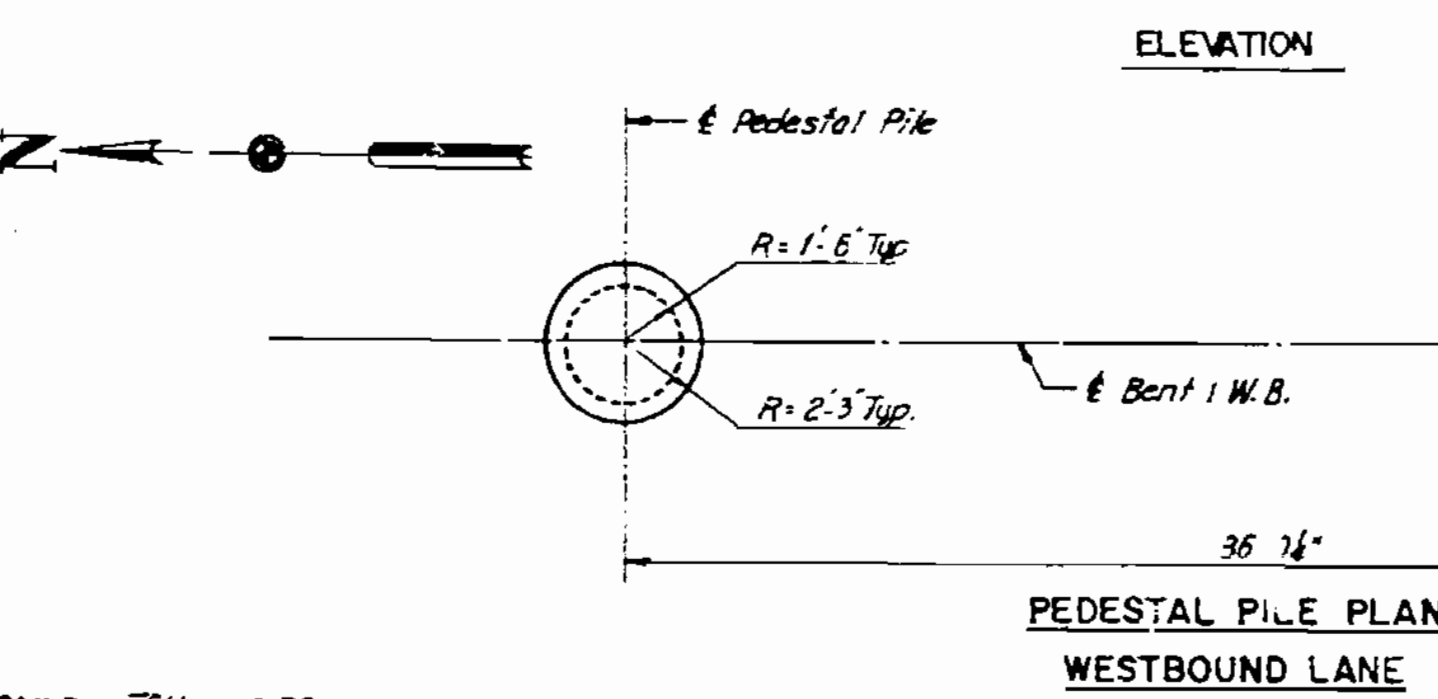
REV. NO.	DATE	BY	CHKD.	APP. NO.	REVISION
1					



Legend
 EB = Eastbound
 WB = Westbound
 e.f. = each face



Note:
 For section thru cap at anchor bolt locations see Sheet 4 of 36.



BENT I WESTBOUND AND EASTBOUND
 PEDESTAL PILE ALTERNATE

DATE: J.T.S. 10/78
 CHECKED: L.J.R. 10/78

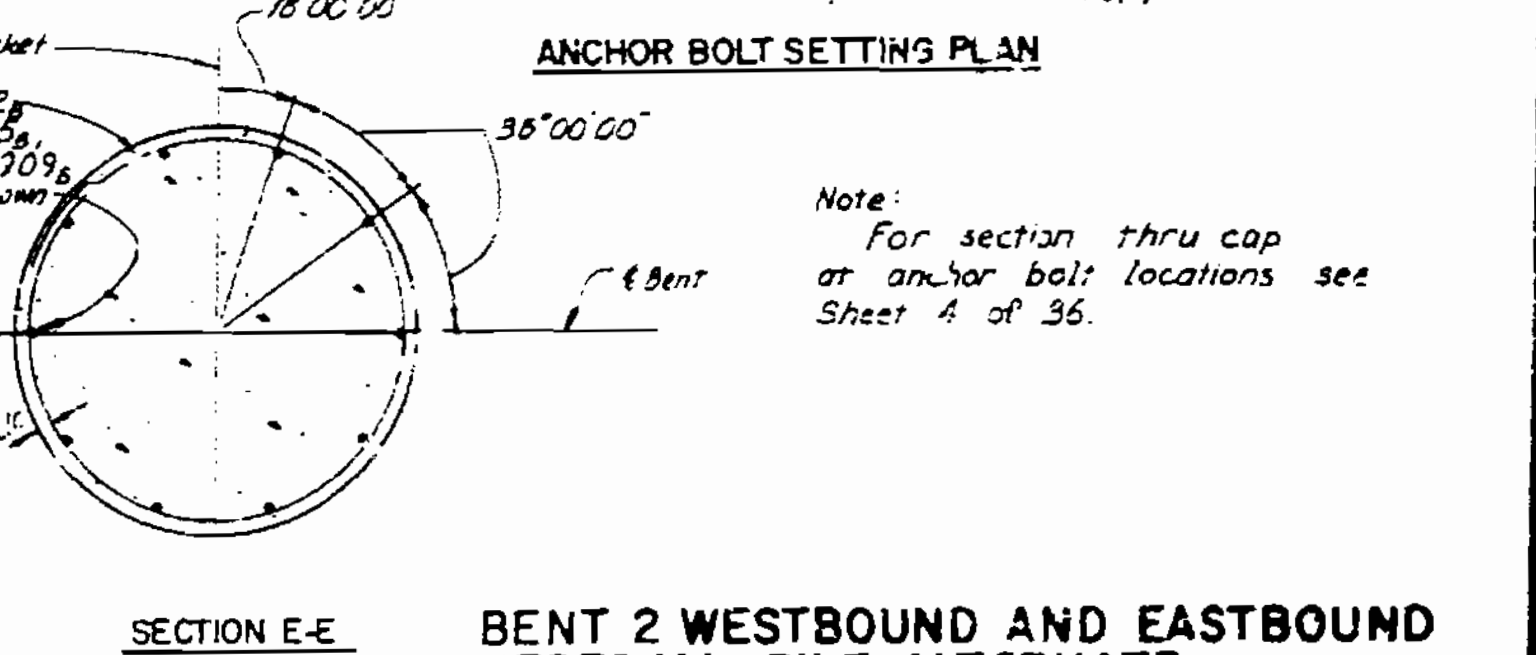
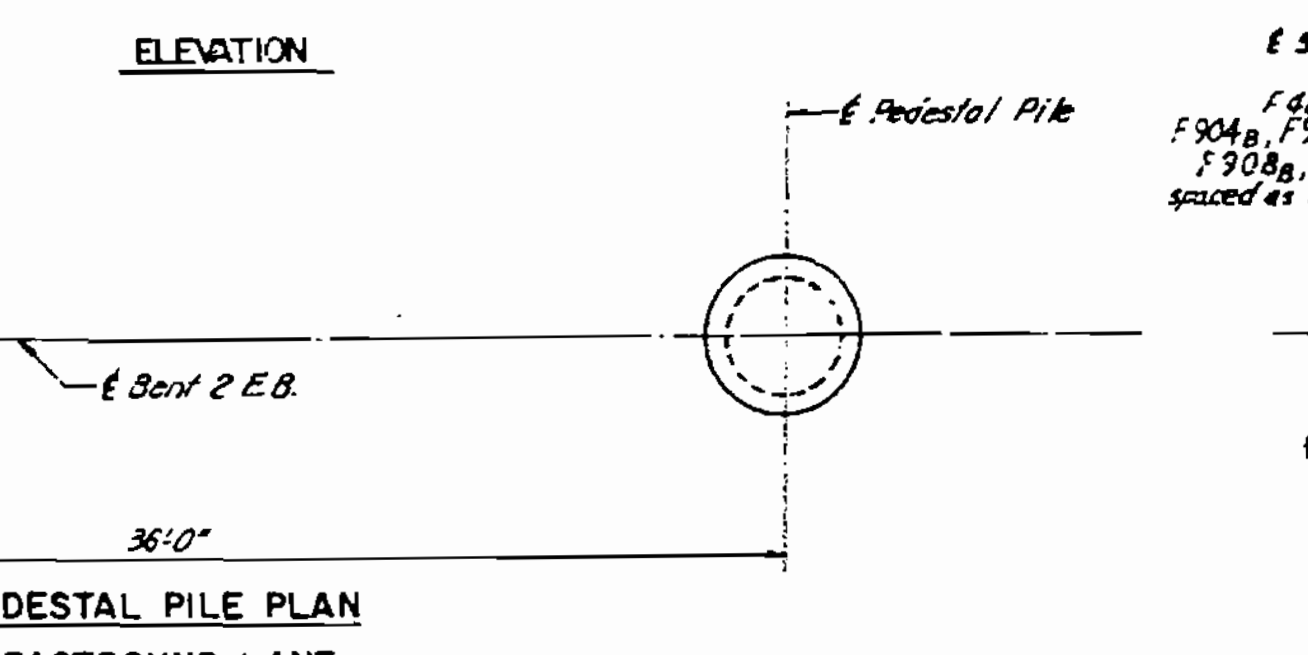
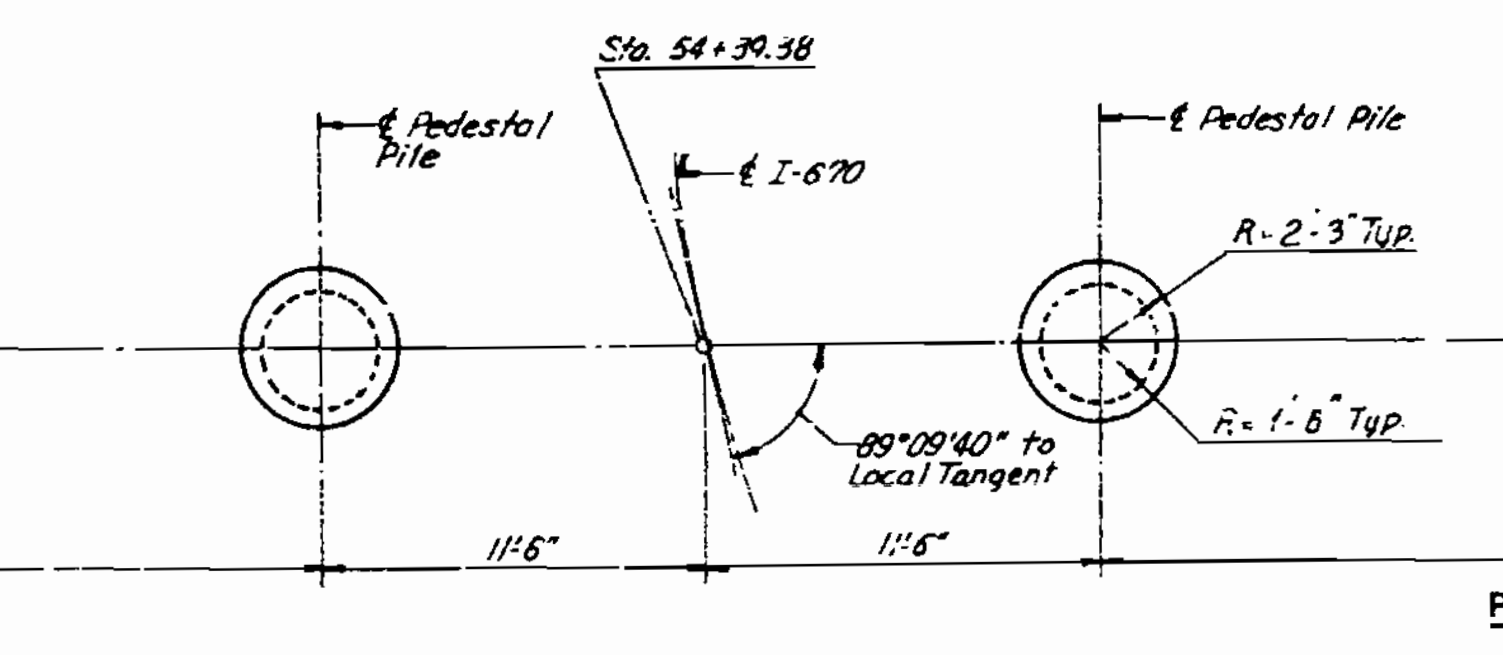
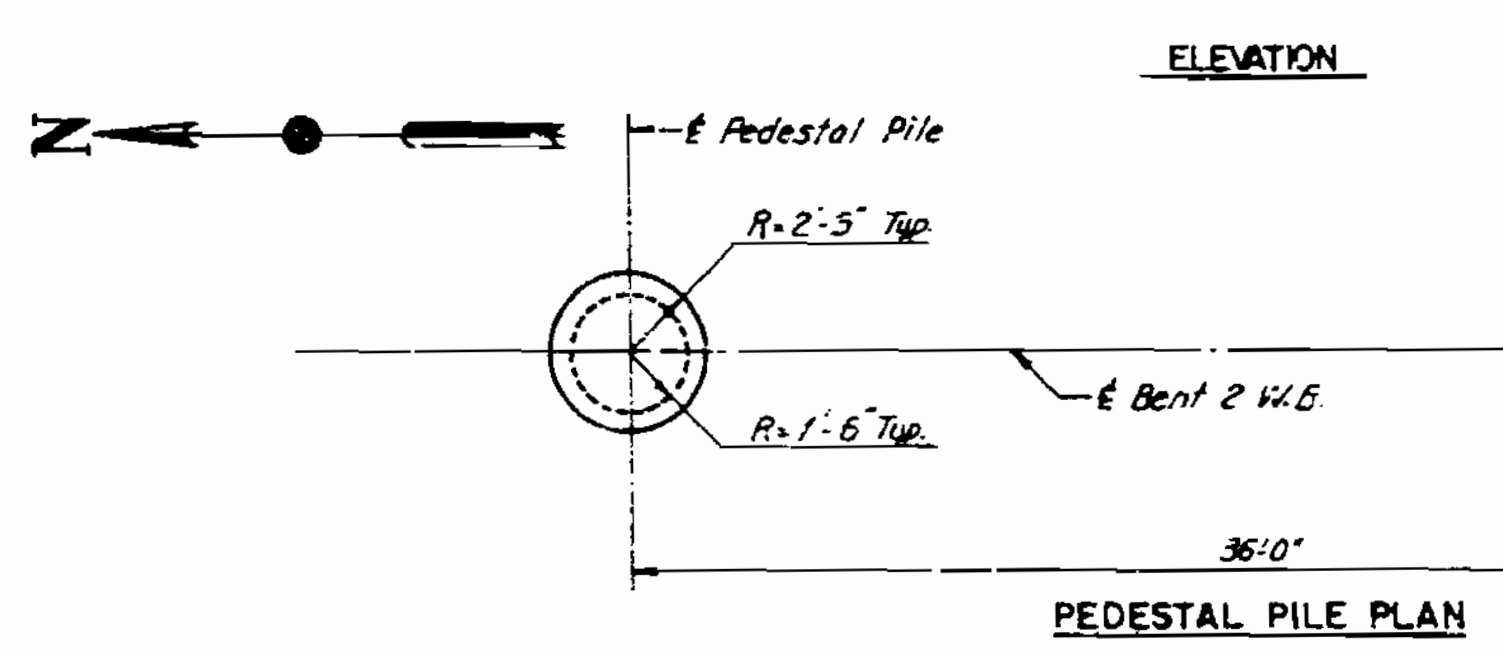
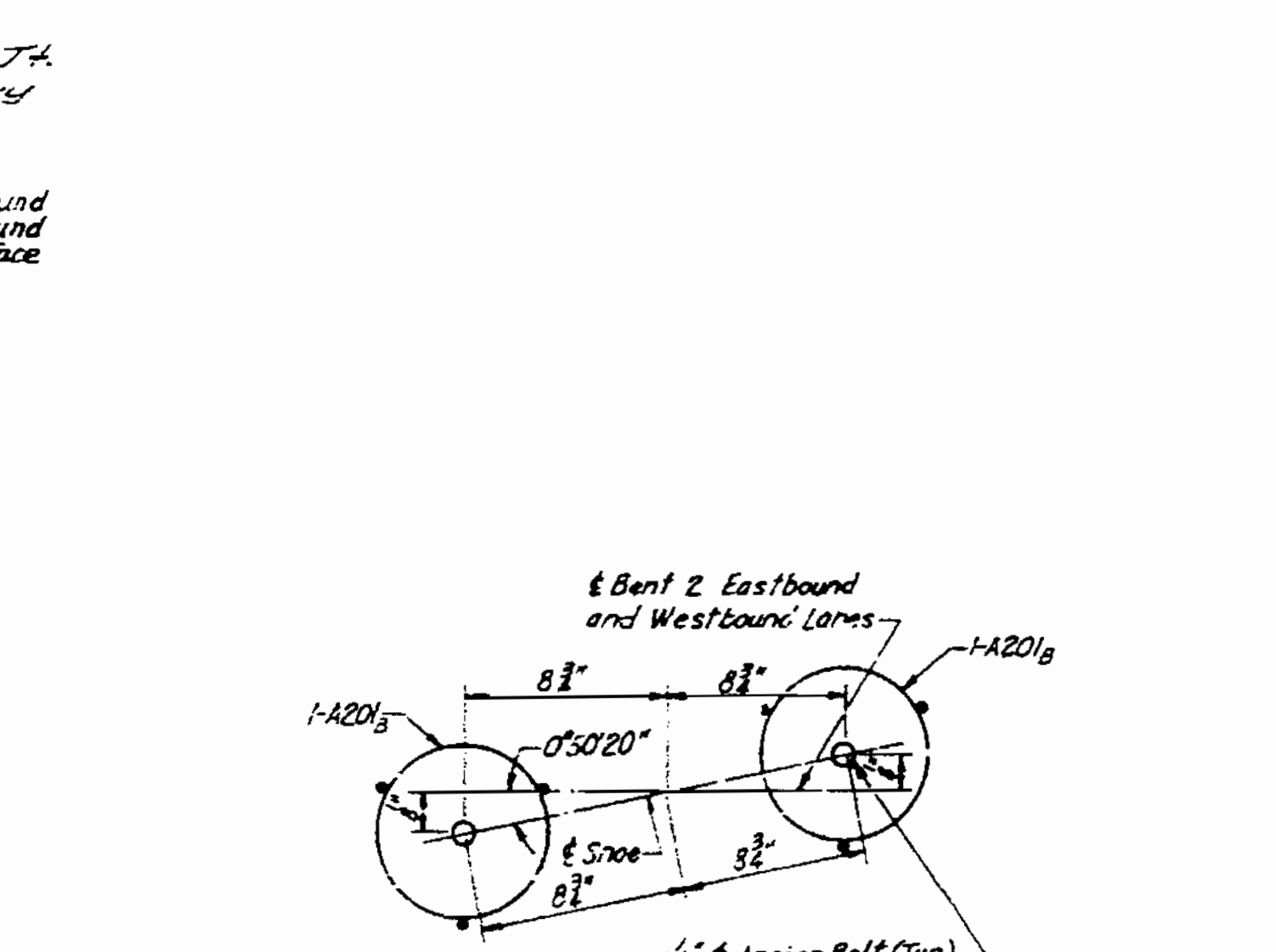
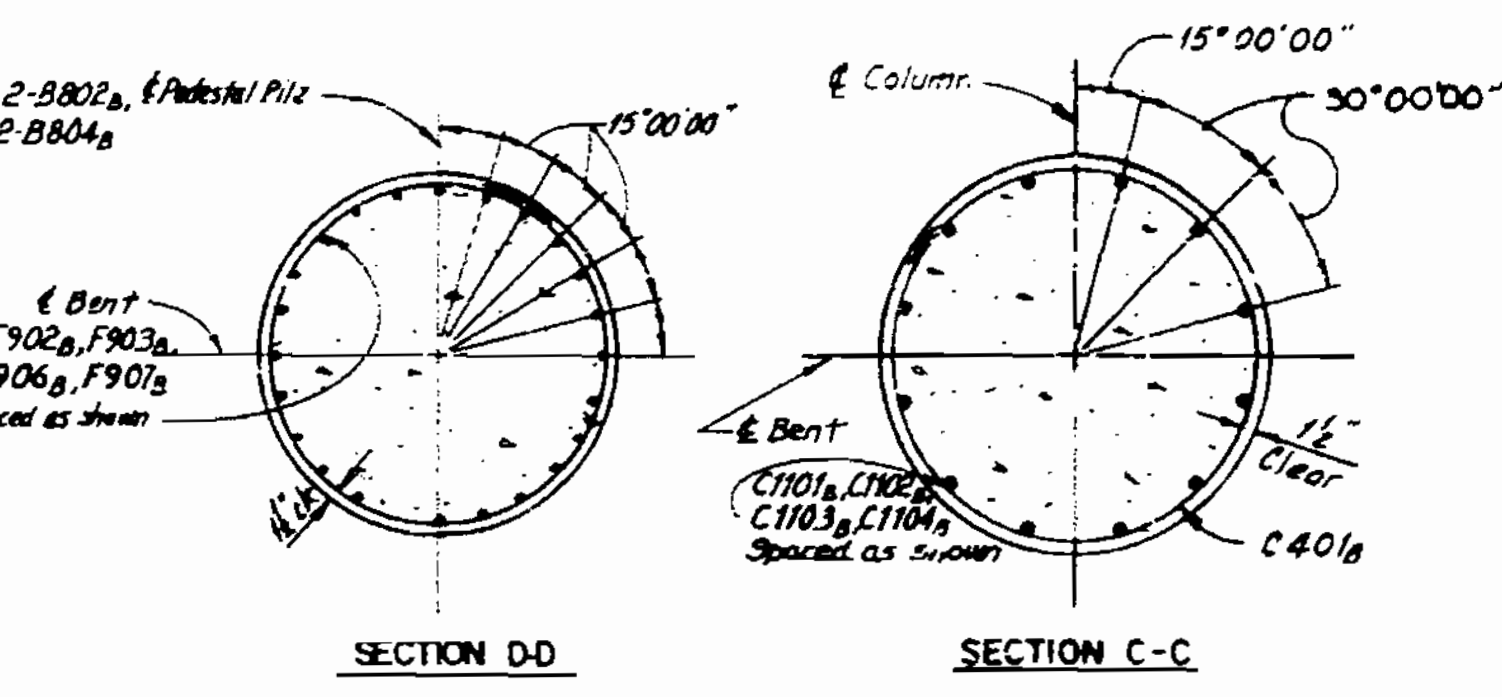
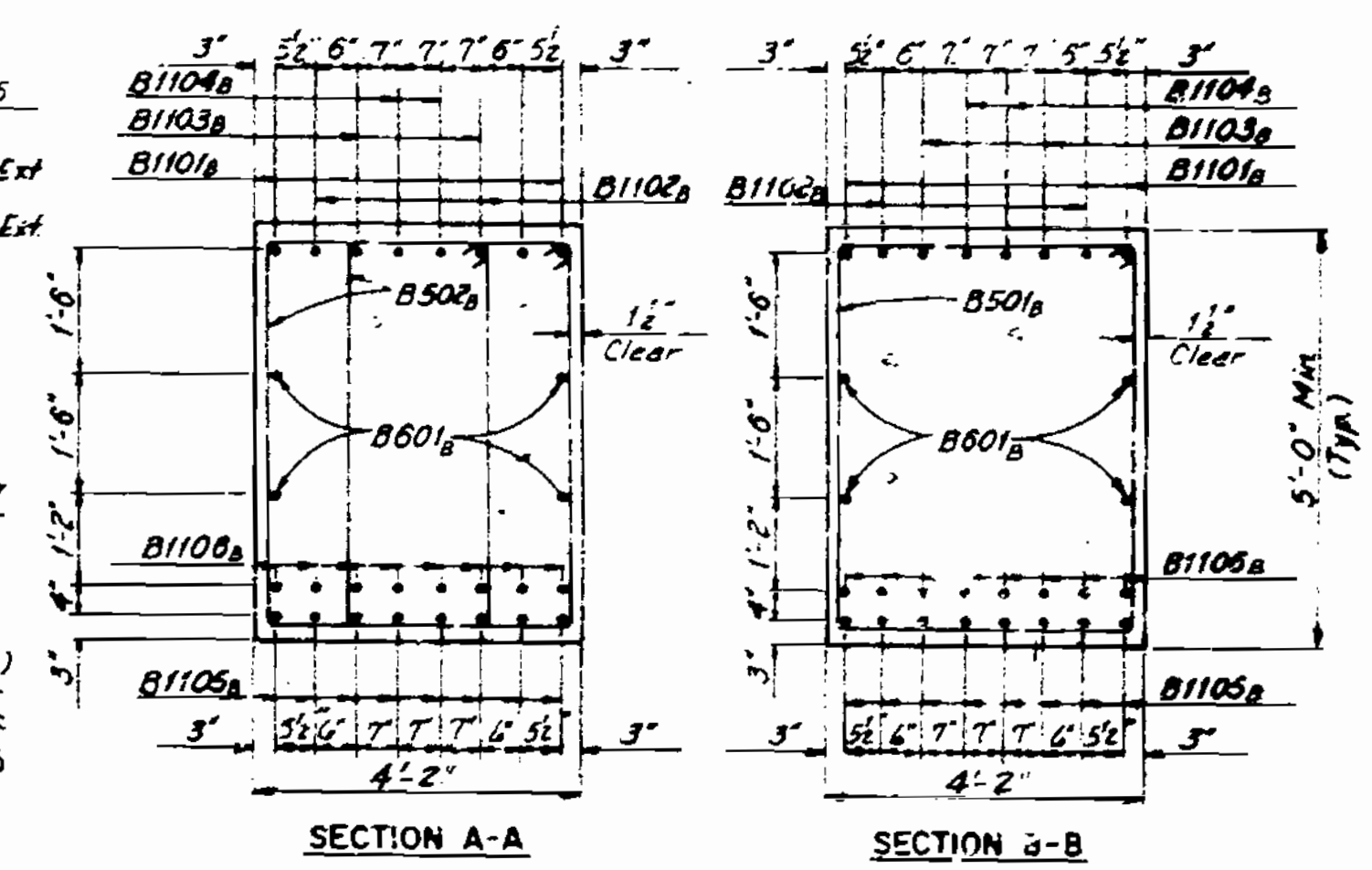
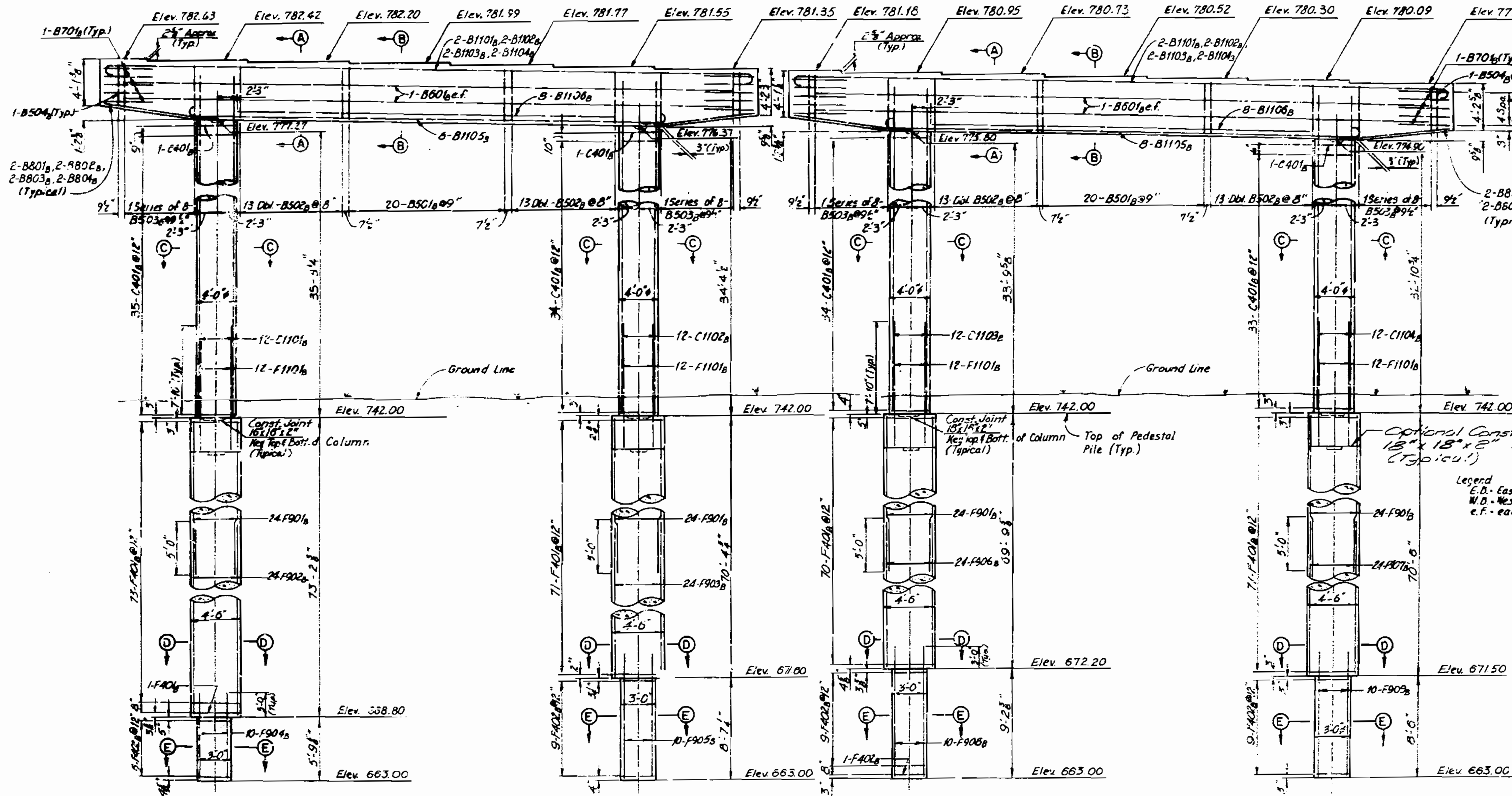
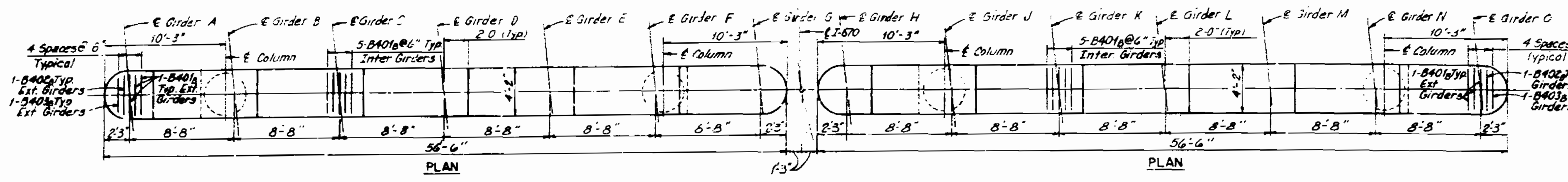
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 26 of 36

JACKSON COUNTY

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FILE NO.	DATE	FILE NO.	DATE	FILE NO.	DATE
1				25	



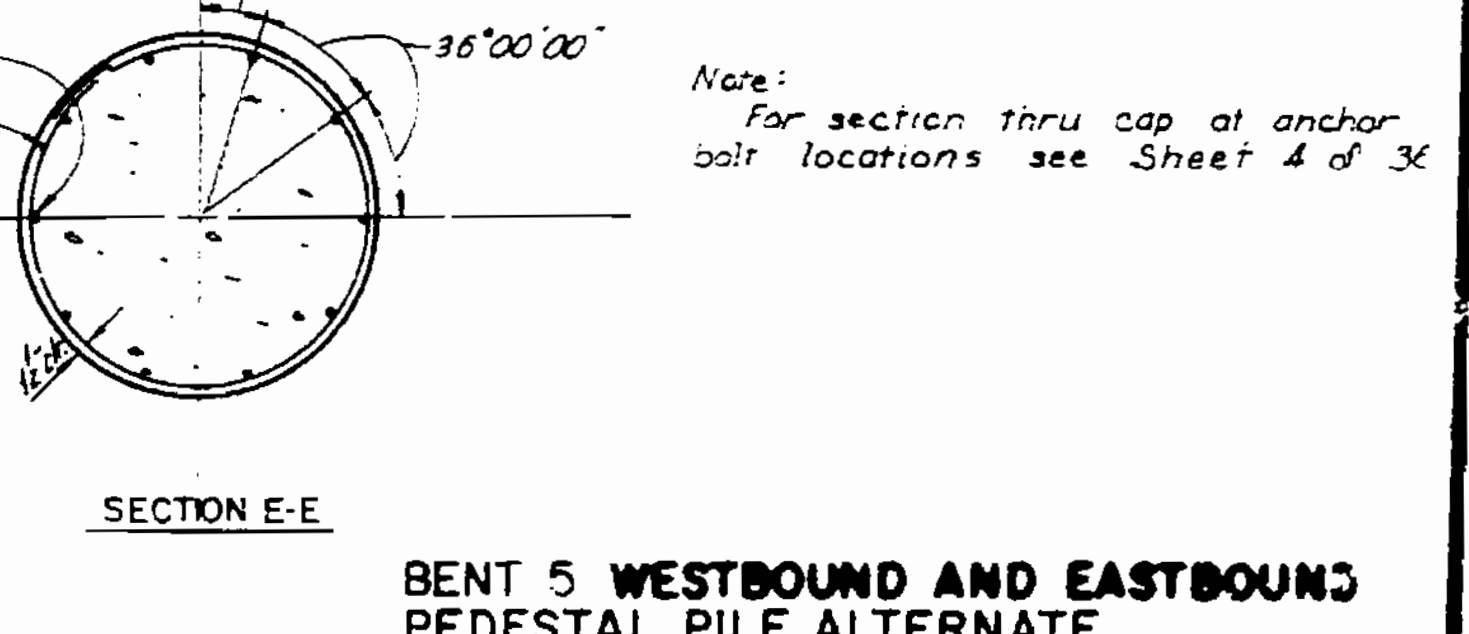
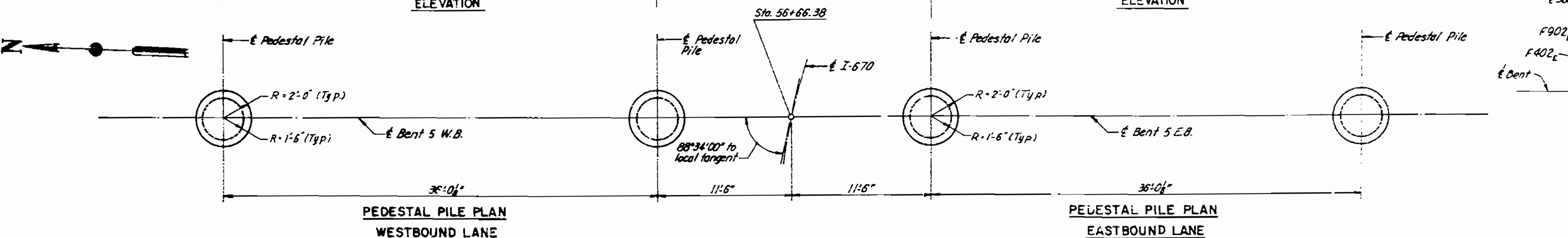
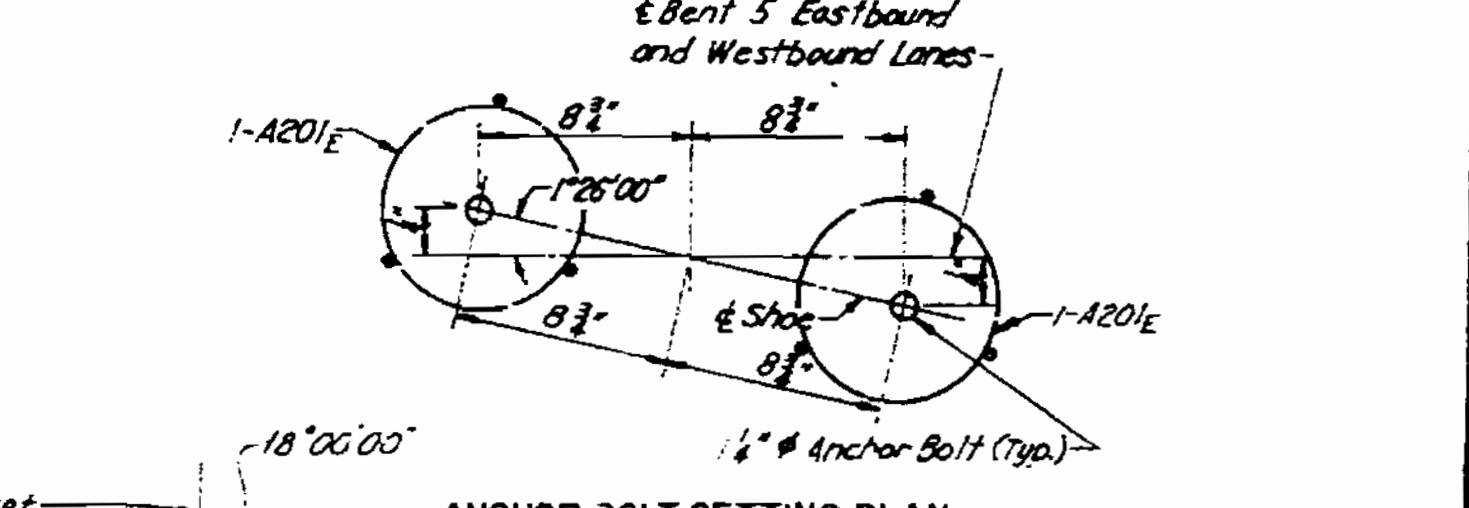
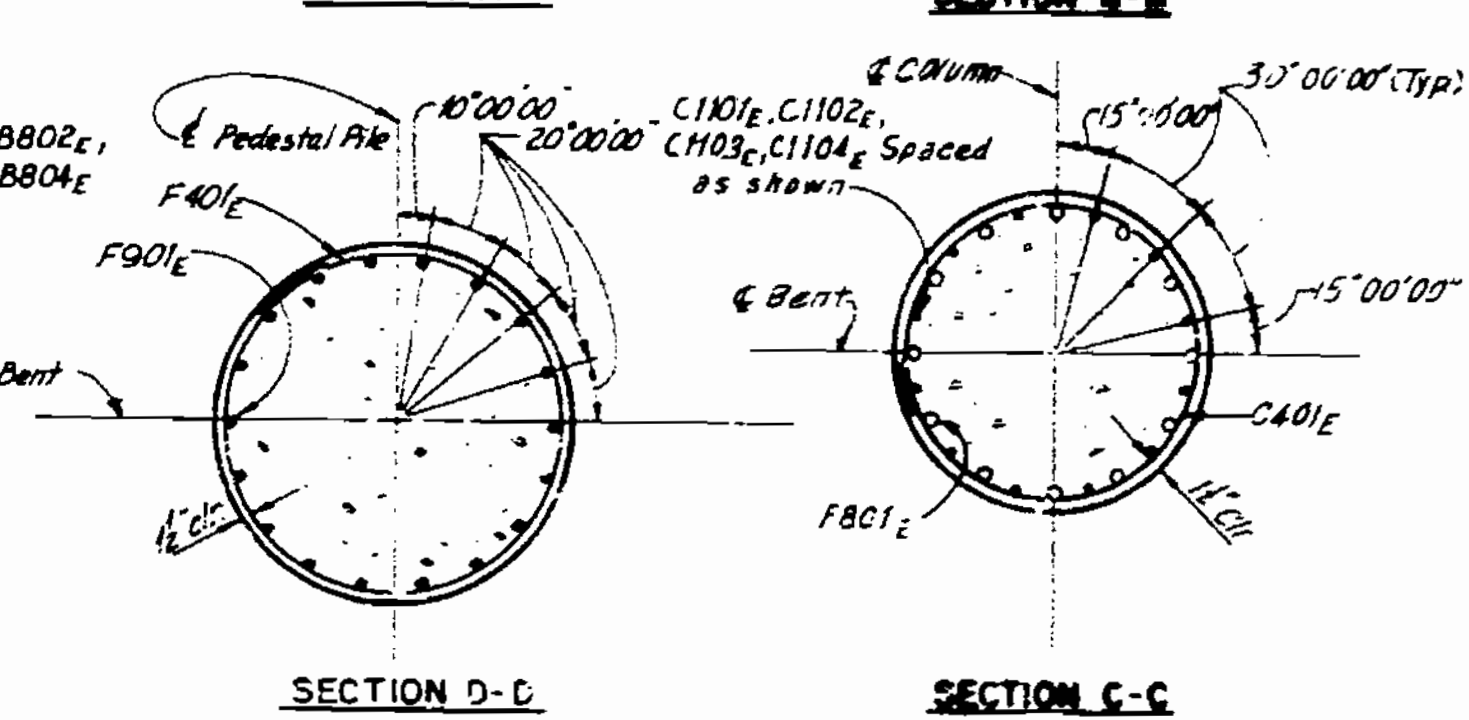
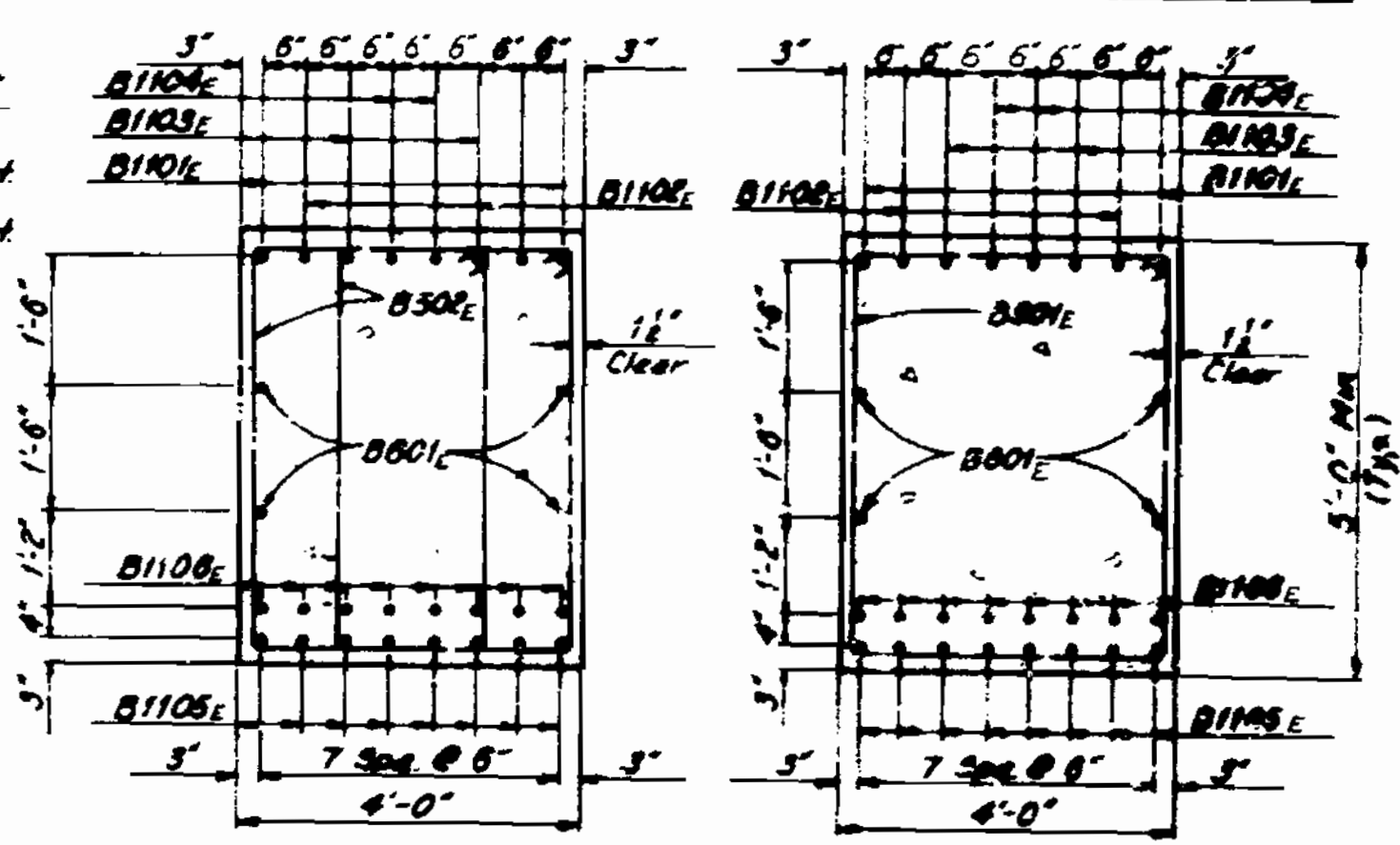
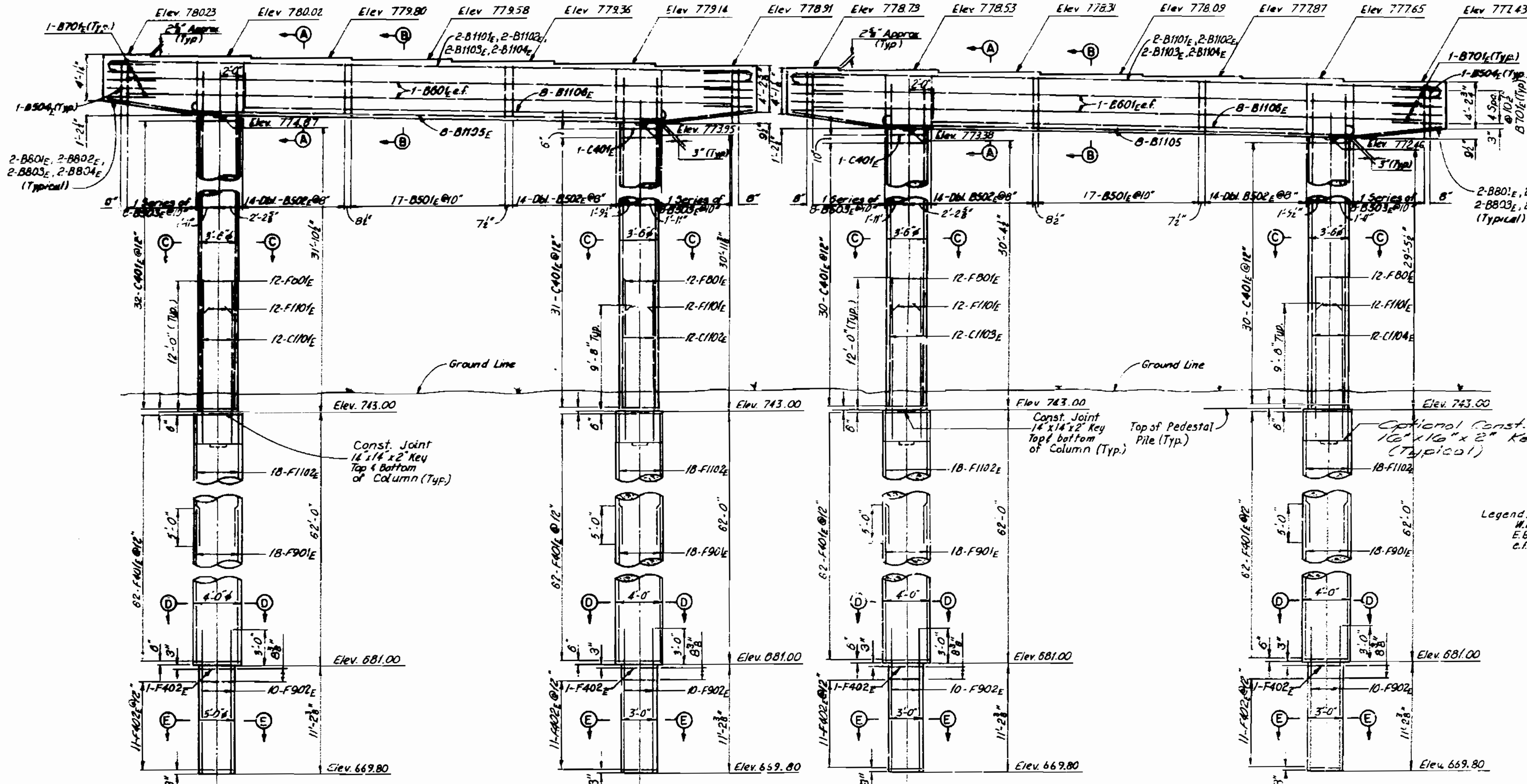
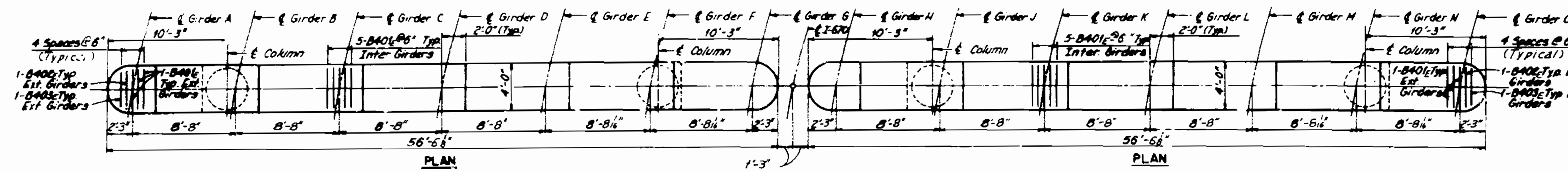
DESIGNED TSU 1978
CHECKED LJR 1978

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 27 of 36.

JACKSON COUNTY A-3136

REV.	DATE	BY	CHKD.	APP'D.
1				



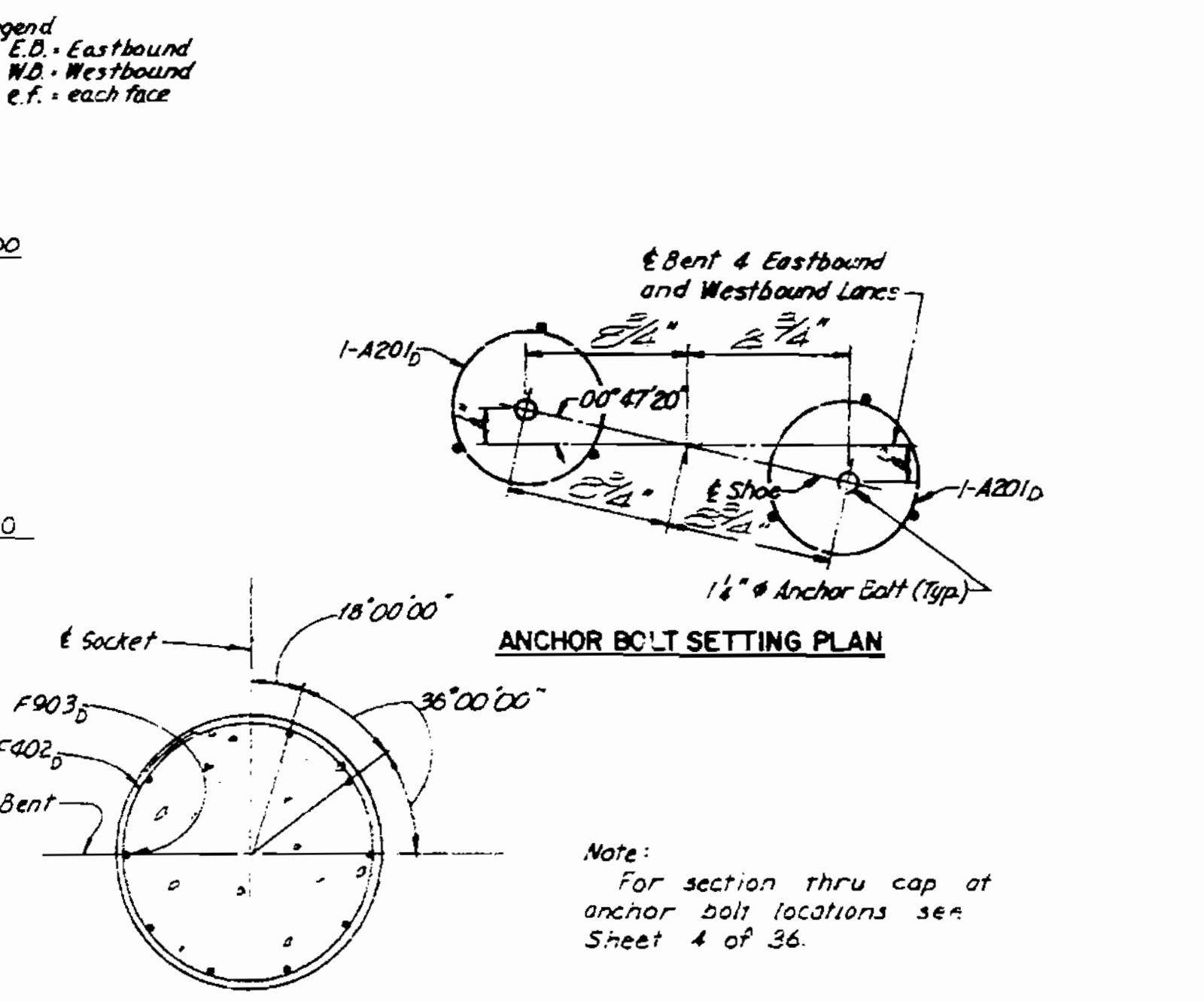
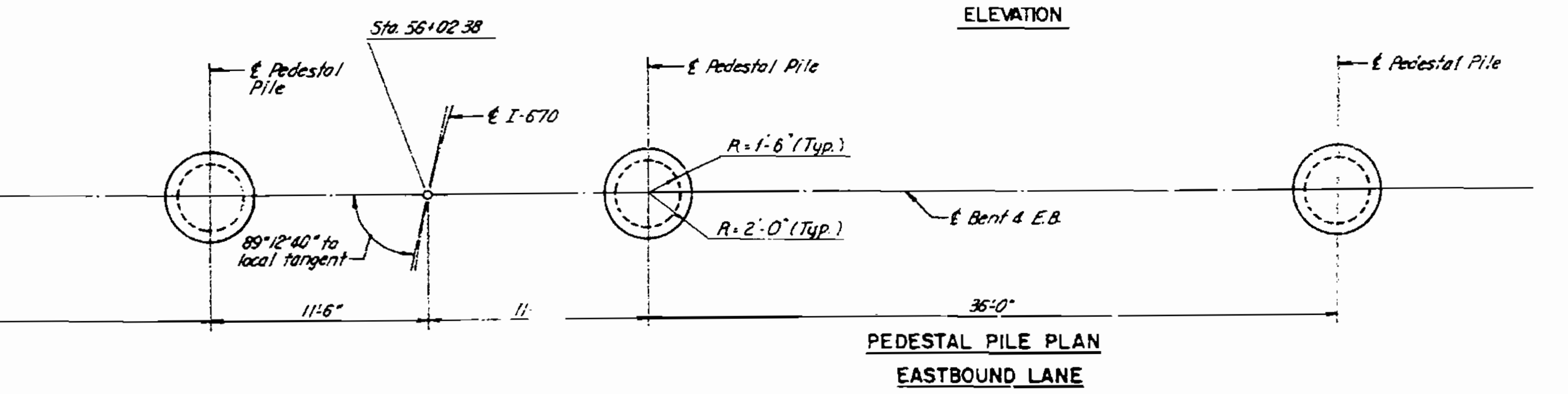
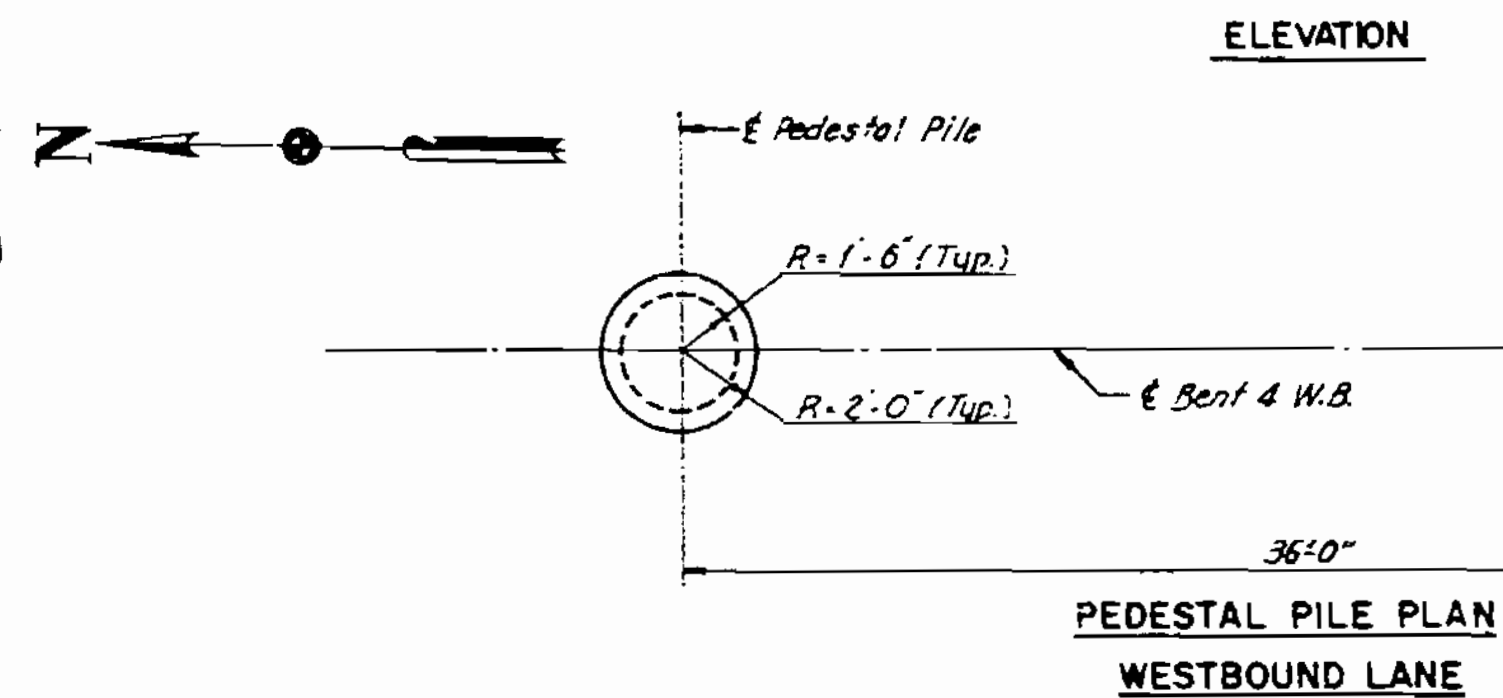
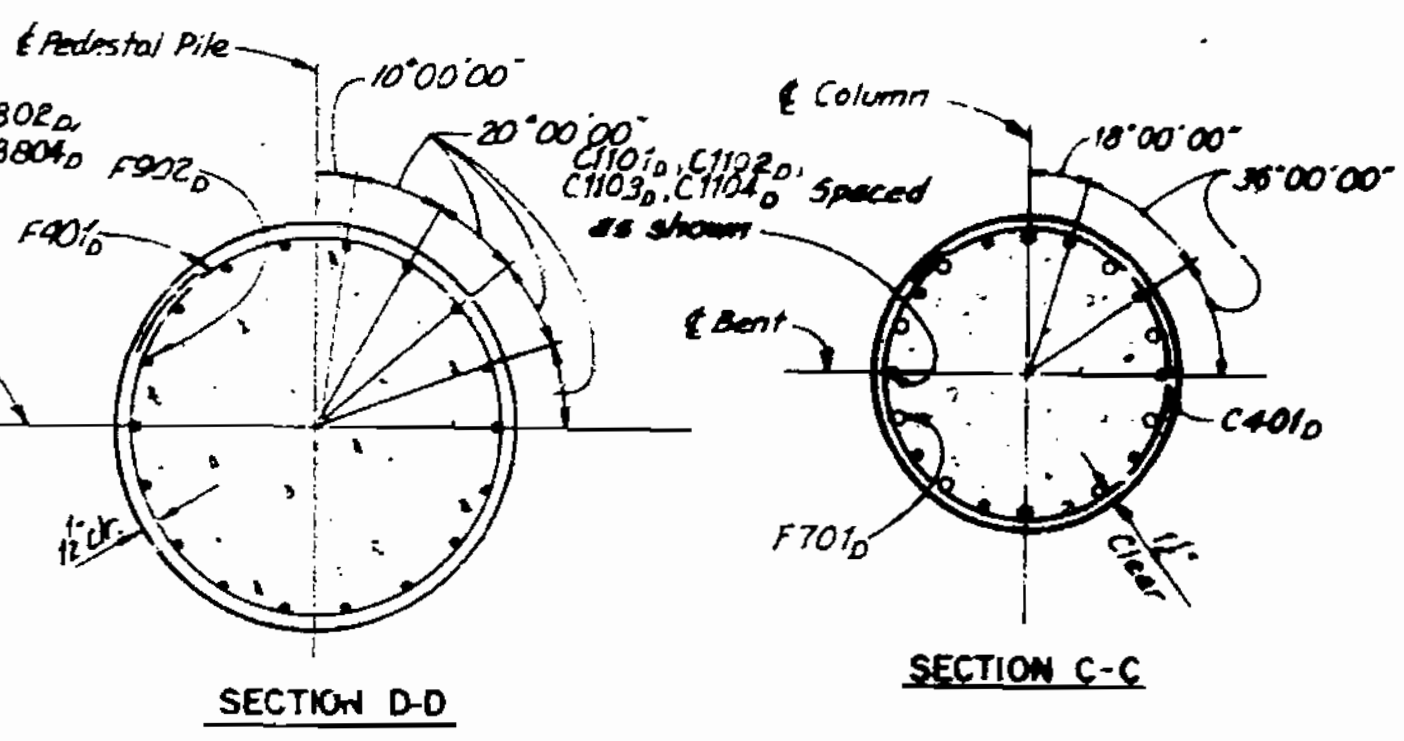
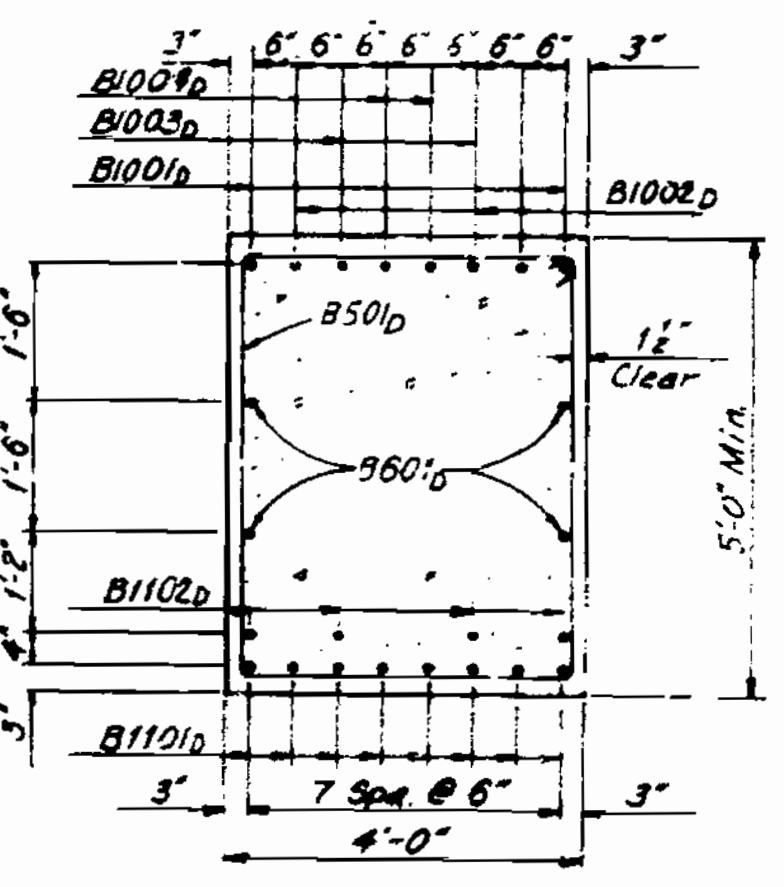
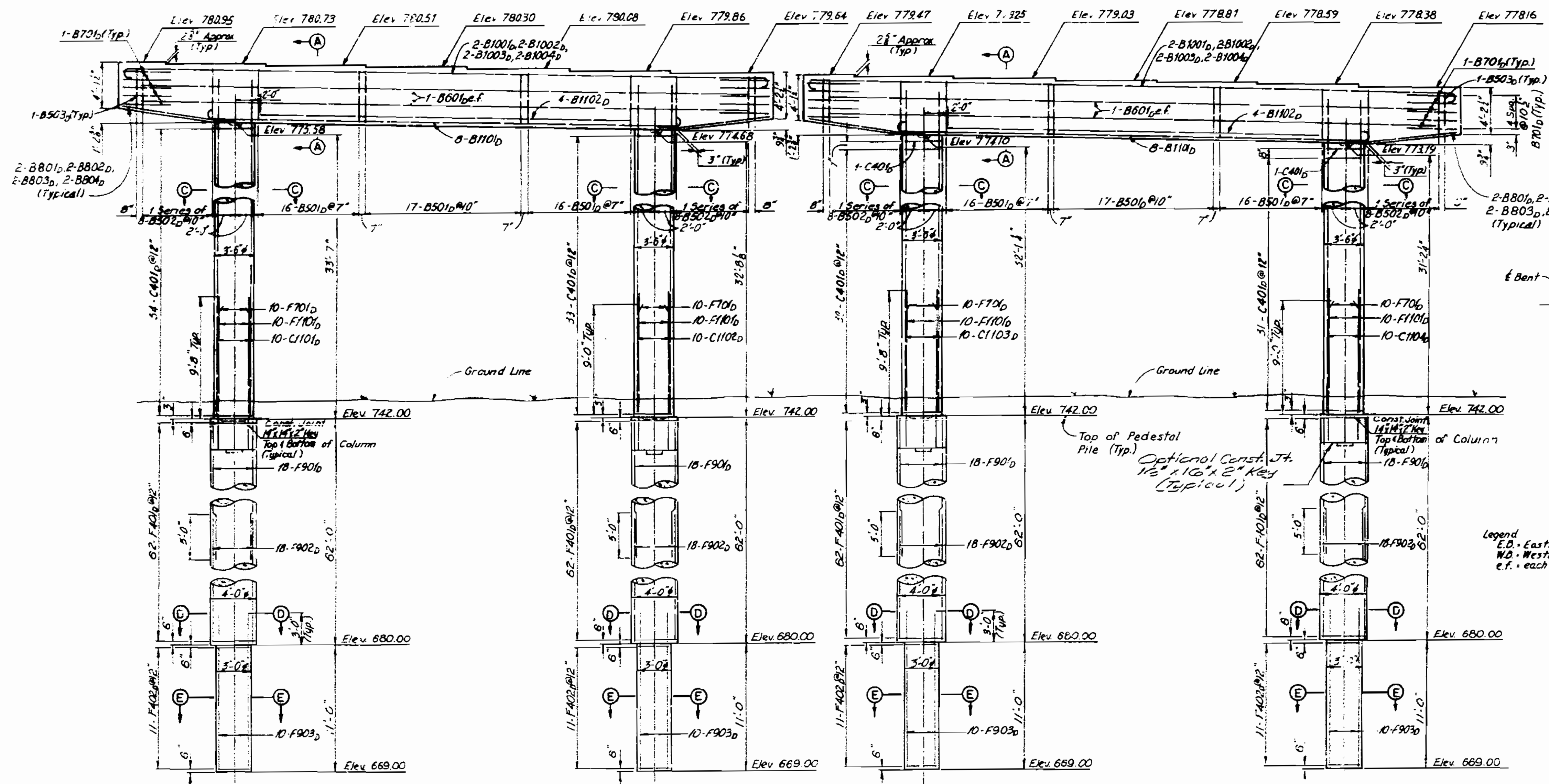
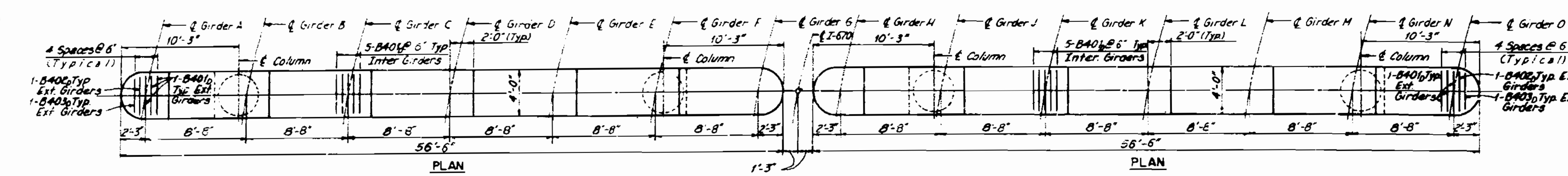
DESIGNED 7/94 1878
 CHECKED LJR 1078

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 30 of 36

BENT 5 WESTBOUND AND EASTBOUNDS
 PEDESTAL PILE ALTERNATE
JACKSON COUNTY
A-3136

DATE	BY	CHKD	APP'D	SCALE	NO.
				1/2"	127



BENT 4 WESTBOUND AND EASTBOUND
PEDESTAL PILE ALTERNATE
JACKSON COUNTY

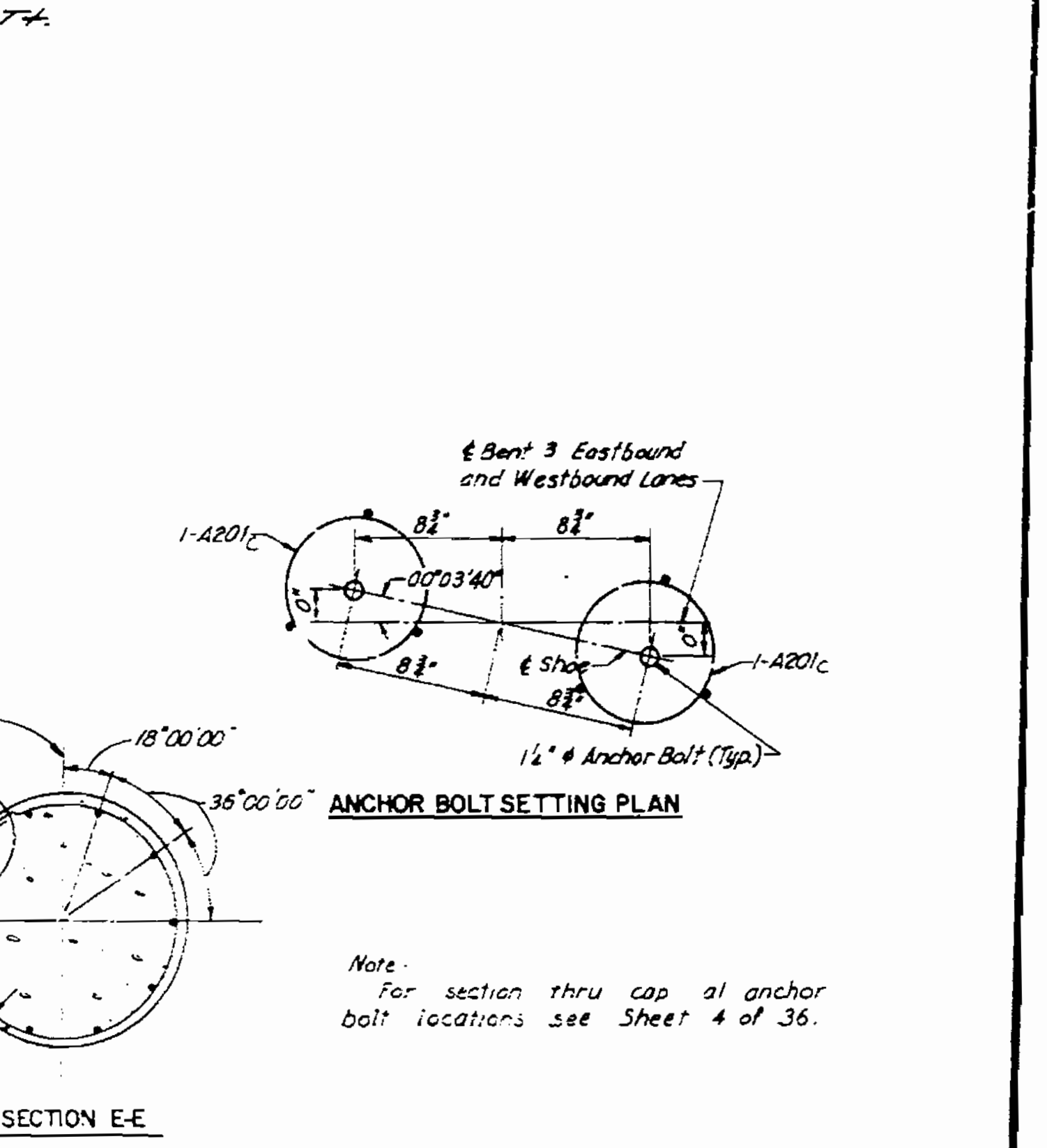
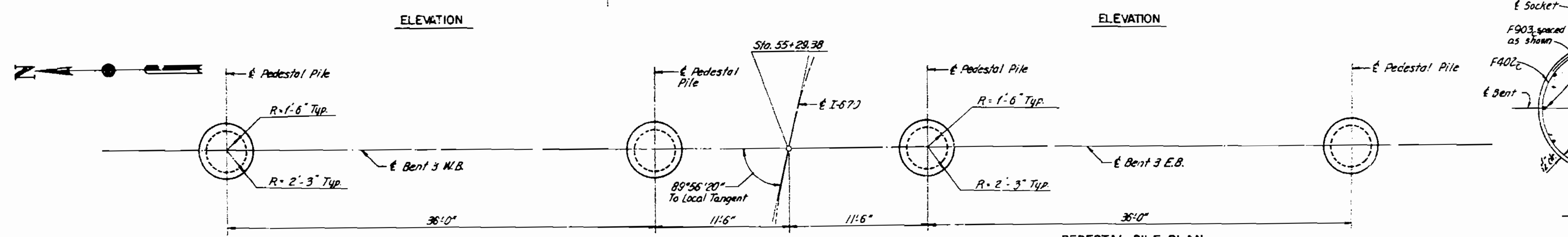
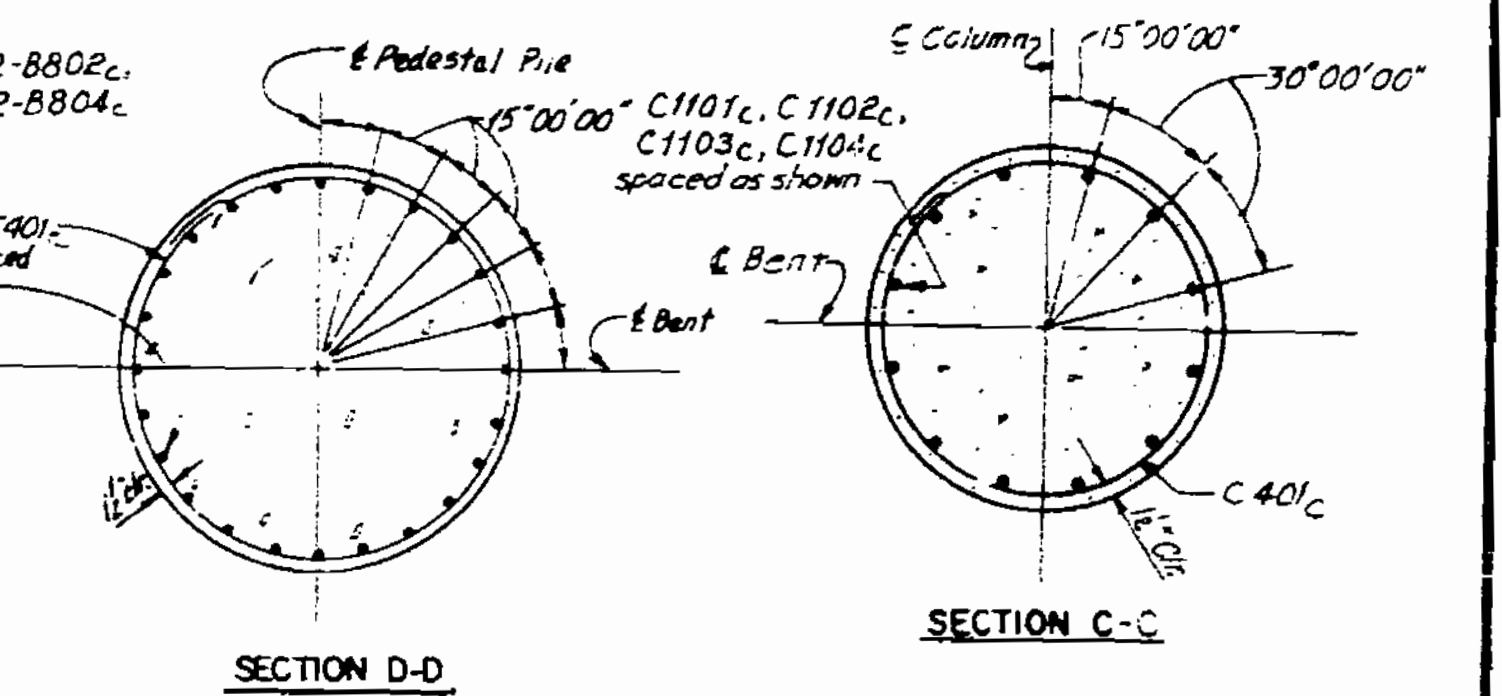
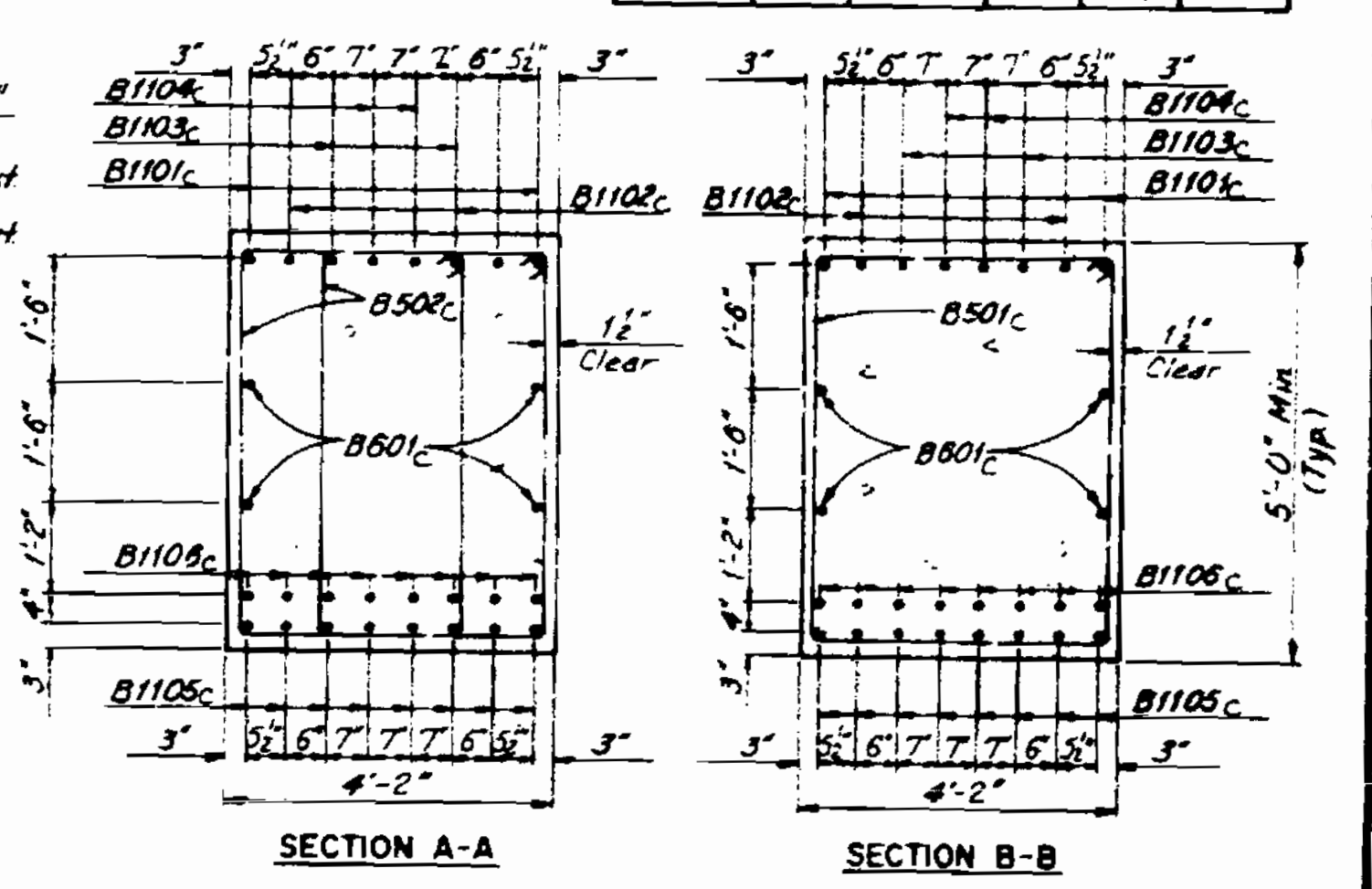
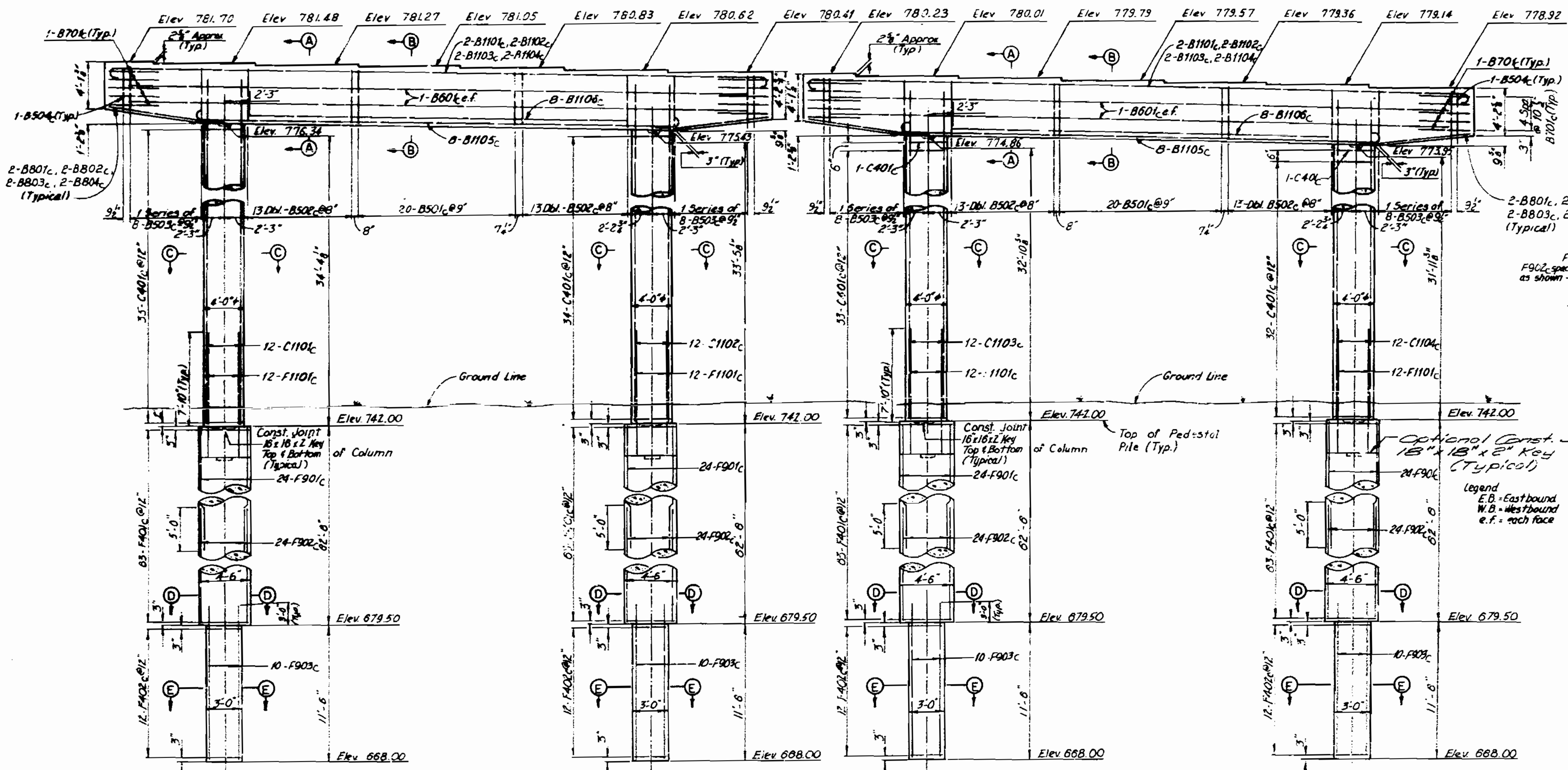
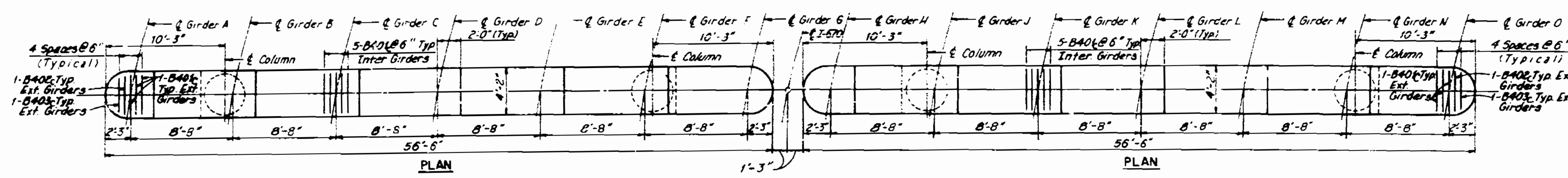
DETAILED TSU 1076
CHECKED LJR 1078

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 29 of 36.

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FIG. NO.	DATE	BY	CHKD.	APP'D.	SHEET NO.	TOTAL SHEETS
1					26	



BENT 3 WESTBOUND AND EASTBOUND PEDESTAL PILE ALTERNATE

JACKSON COUNTY

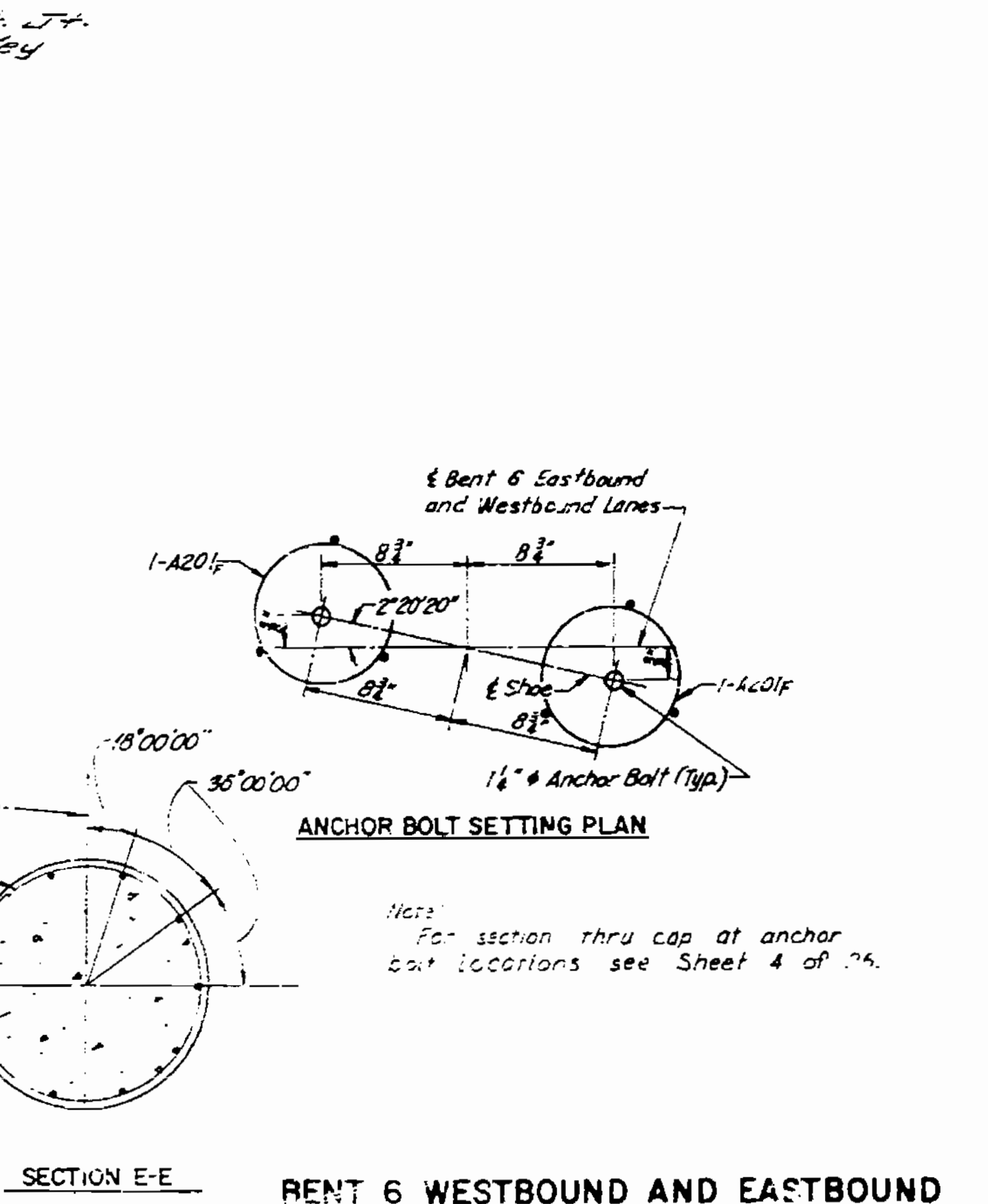
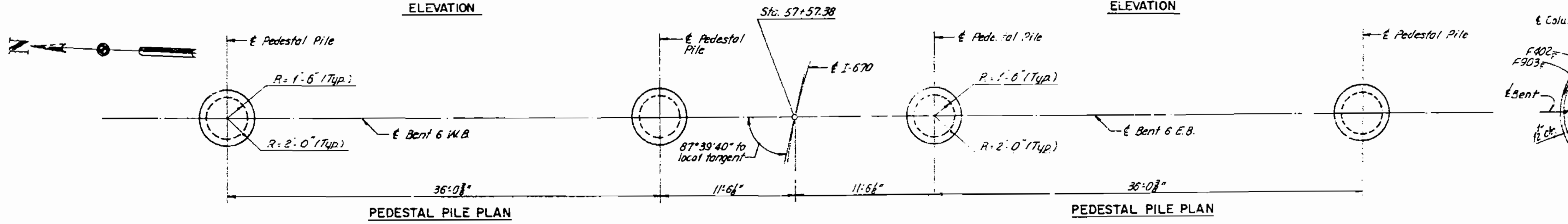
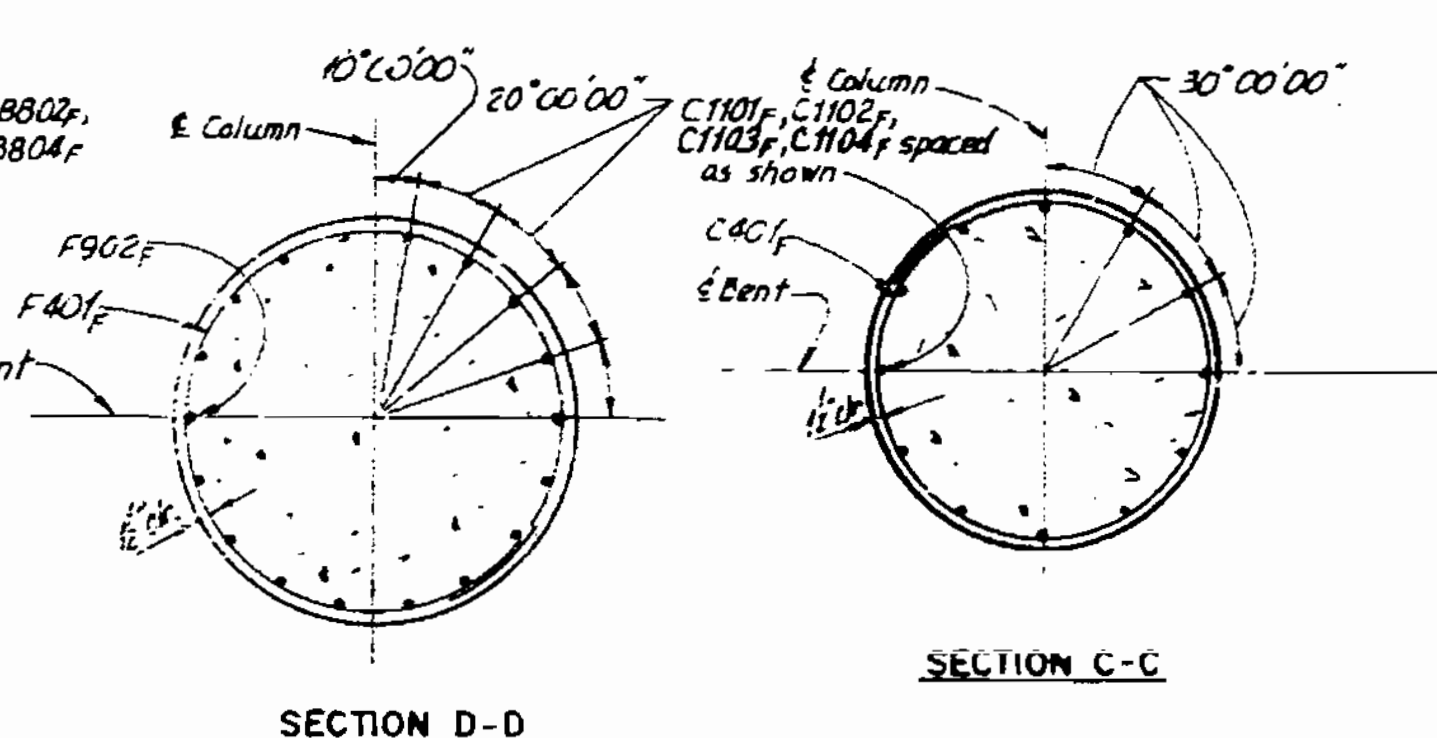
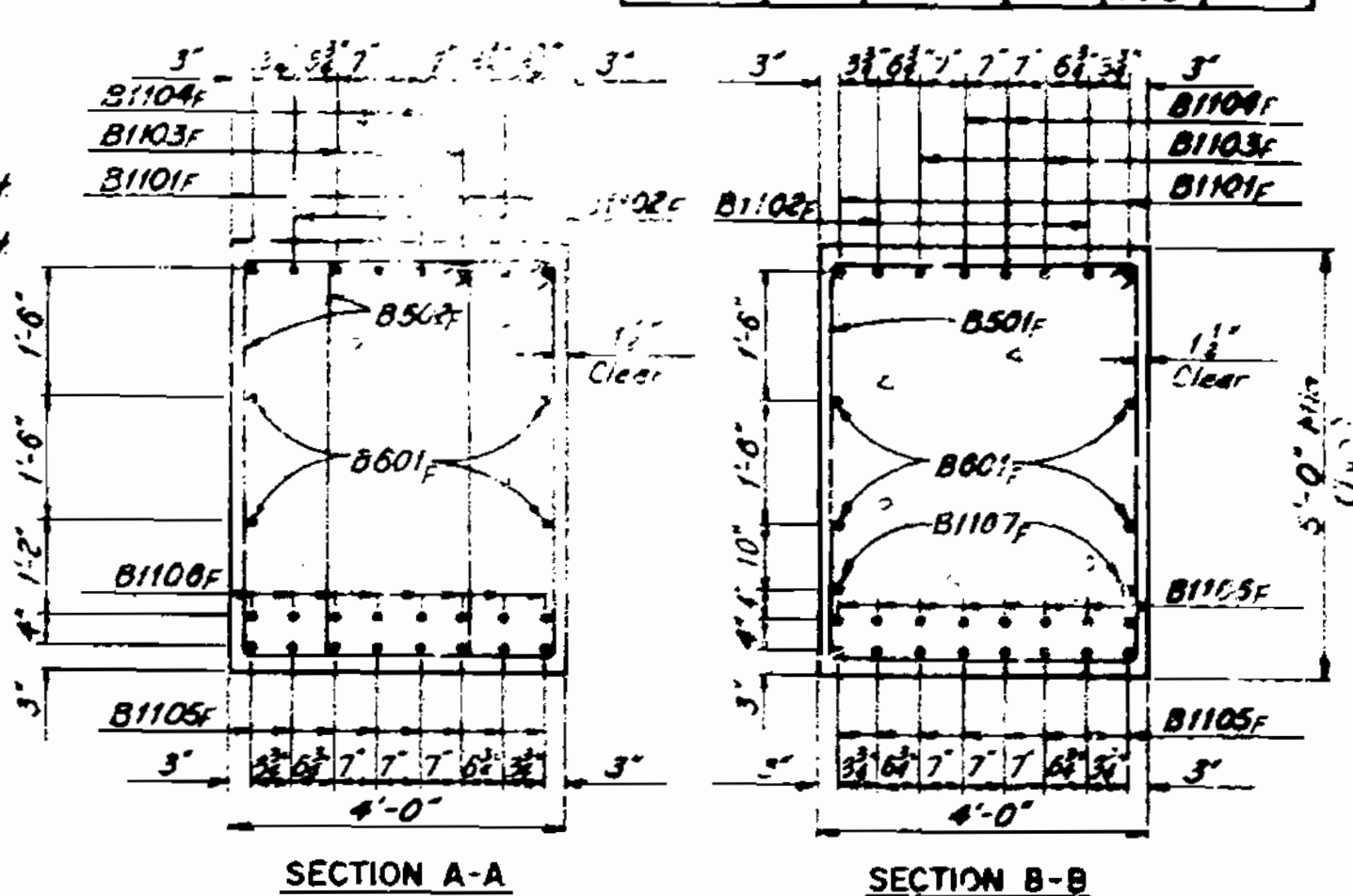
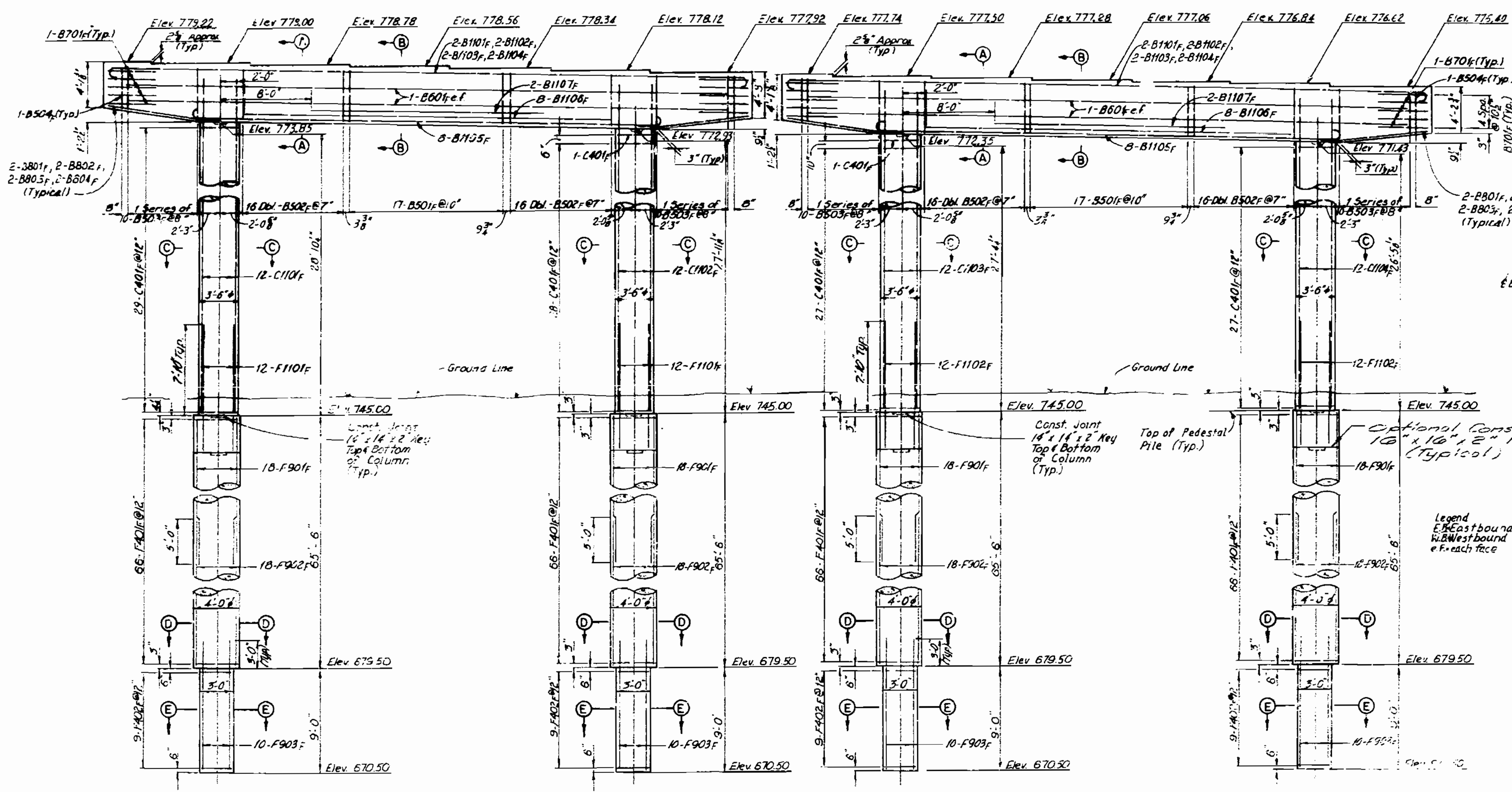
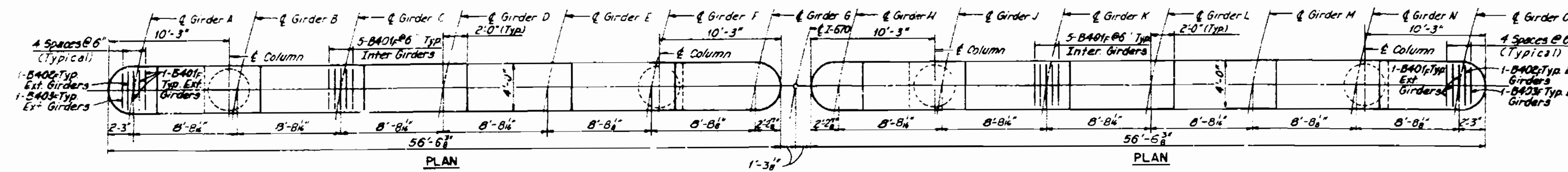
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DESIGNED T.S.U. 1078
CHECKED L.J.R. 1078

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 28 of 36

REV.	DATE	BY	CHKD.	APP.	TITLE
129					



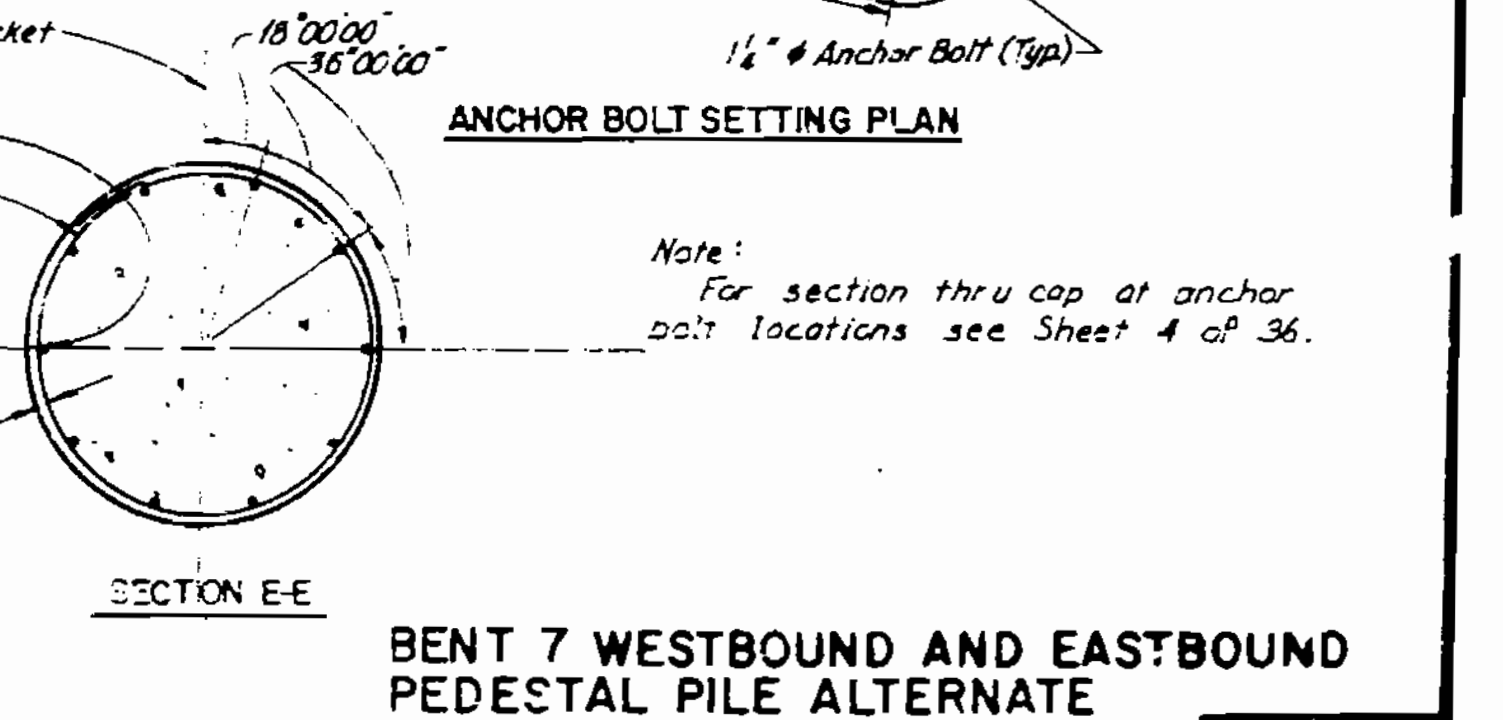
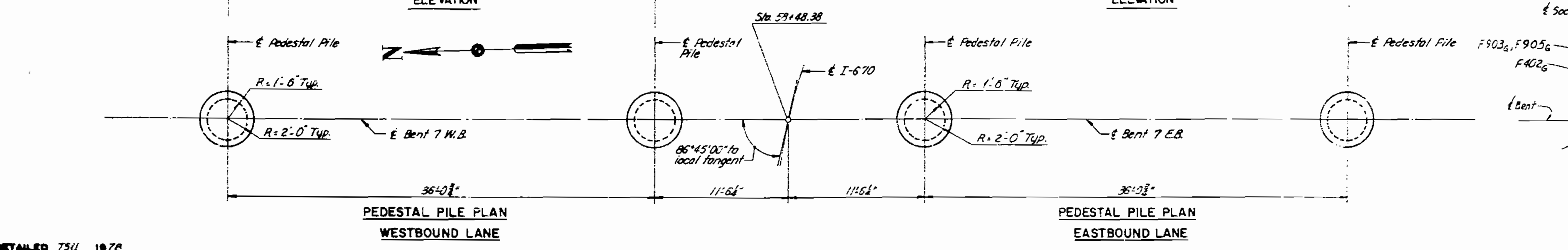
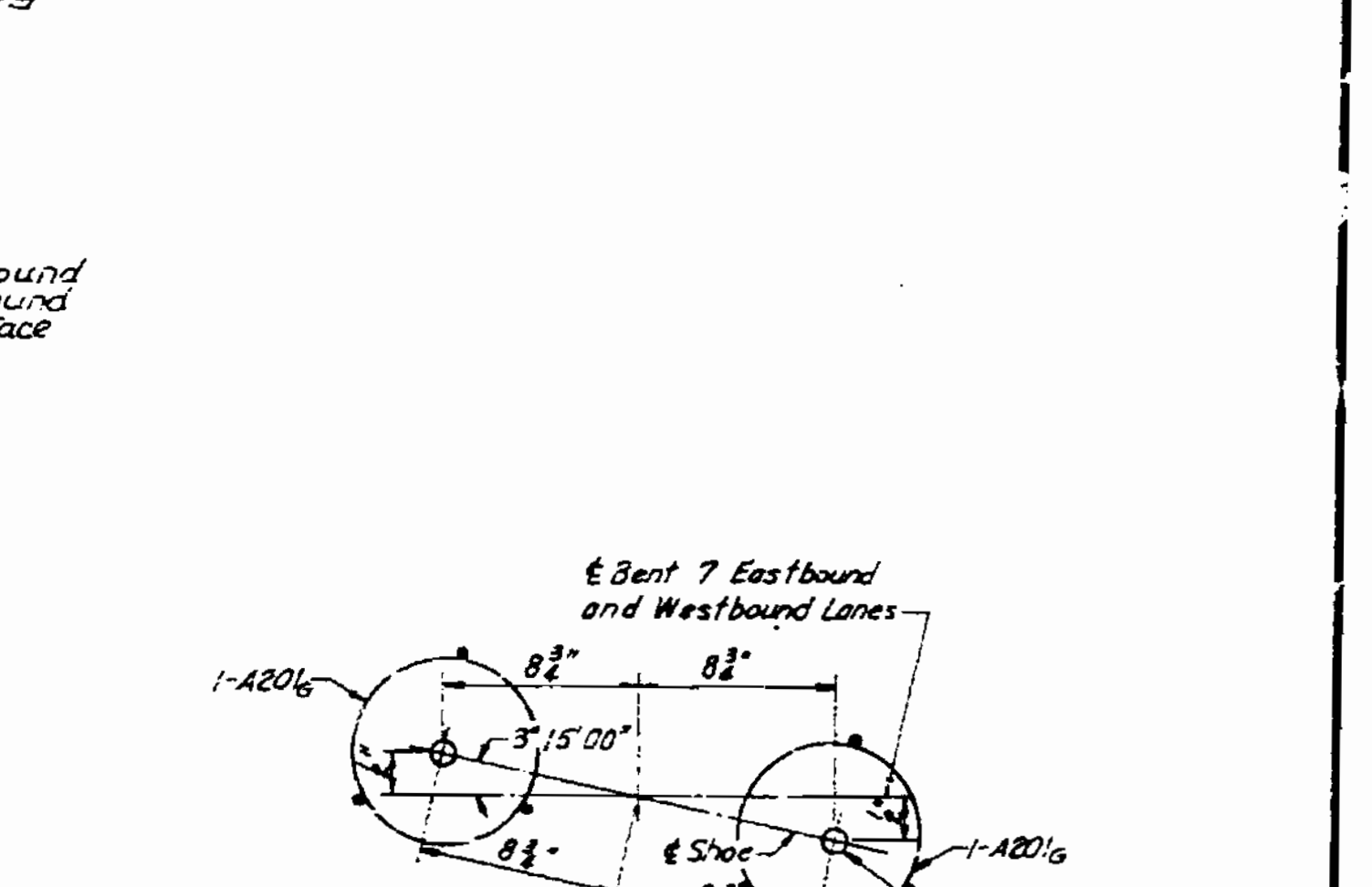
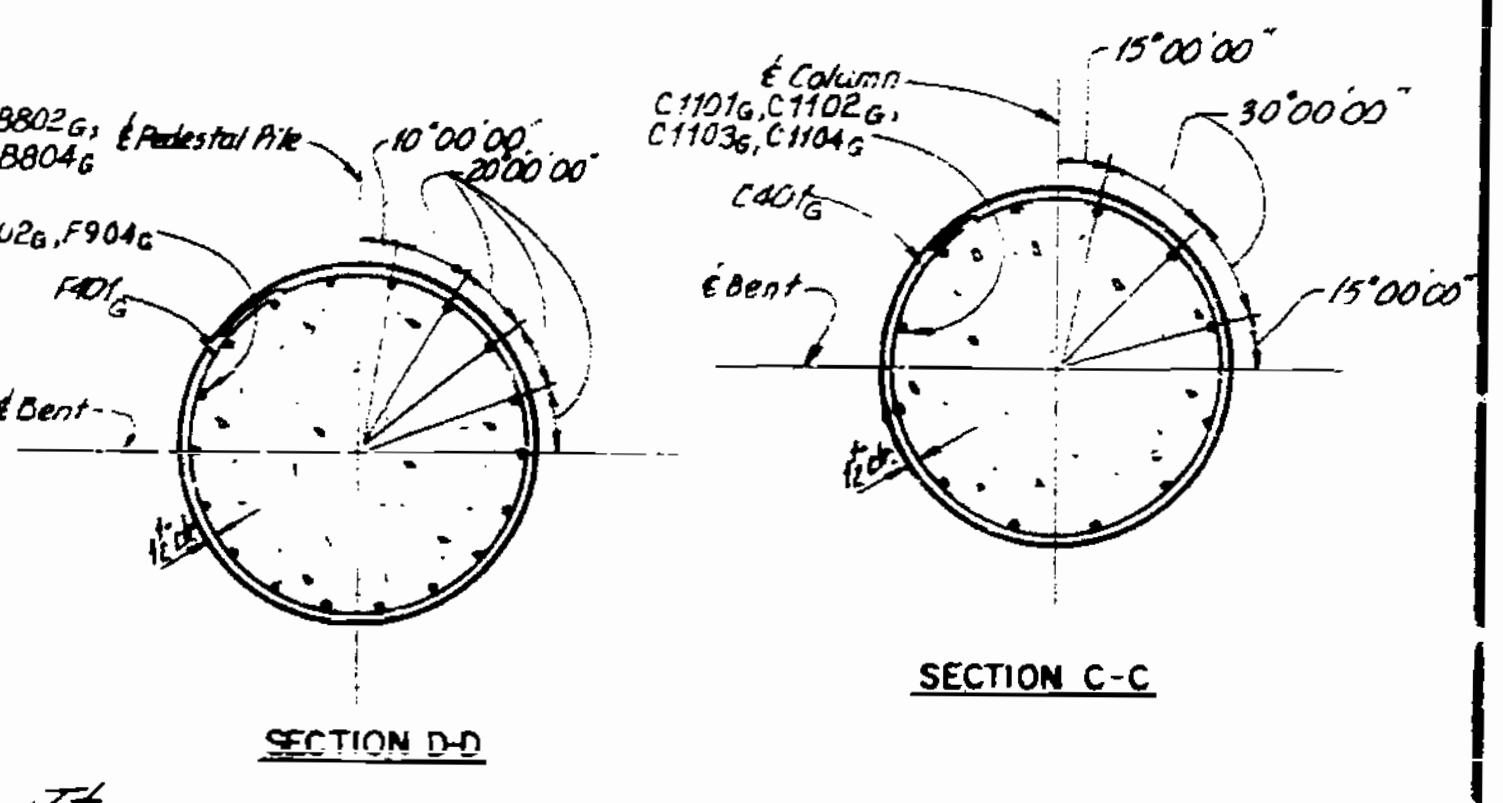
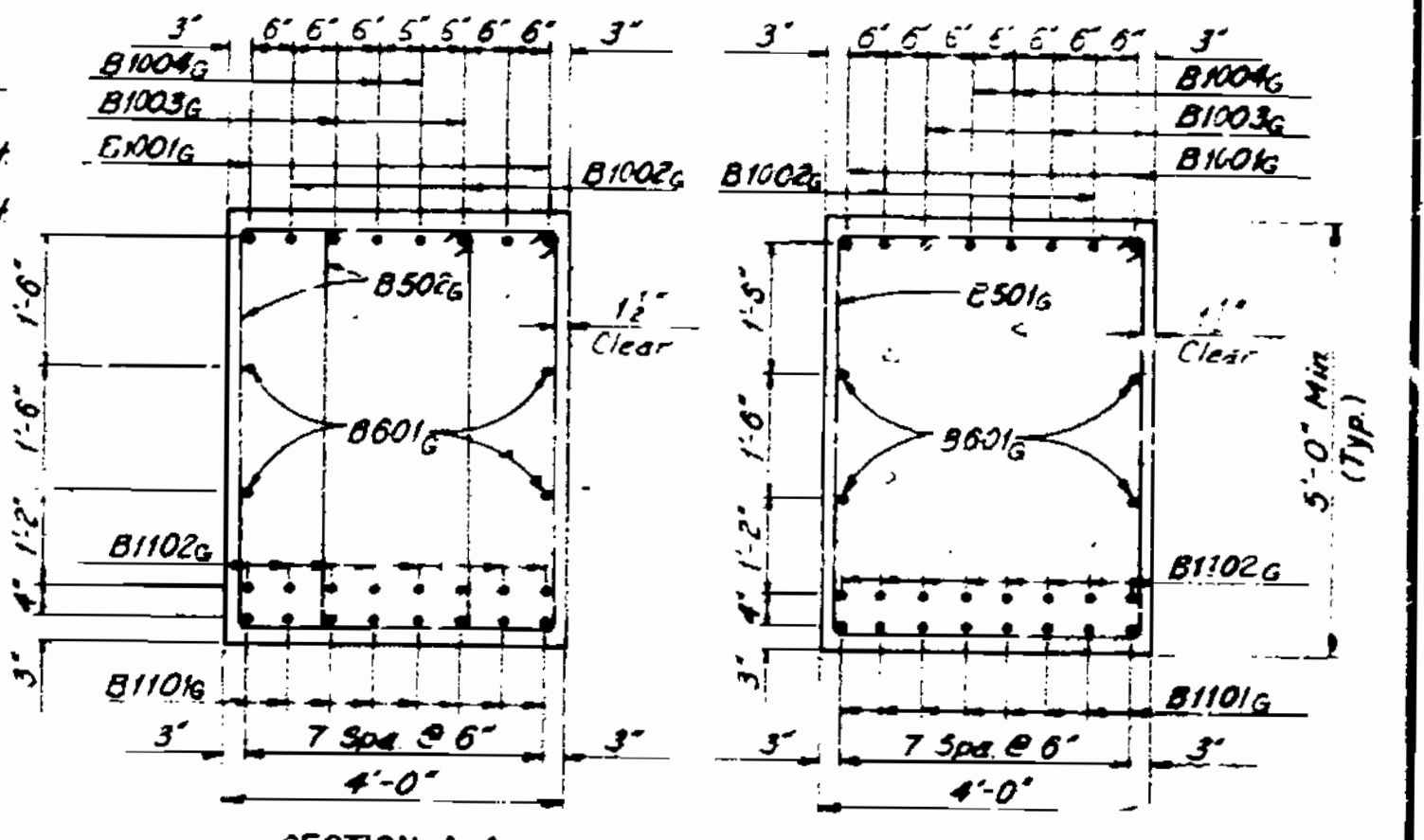
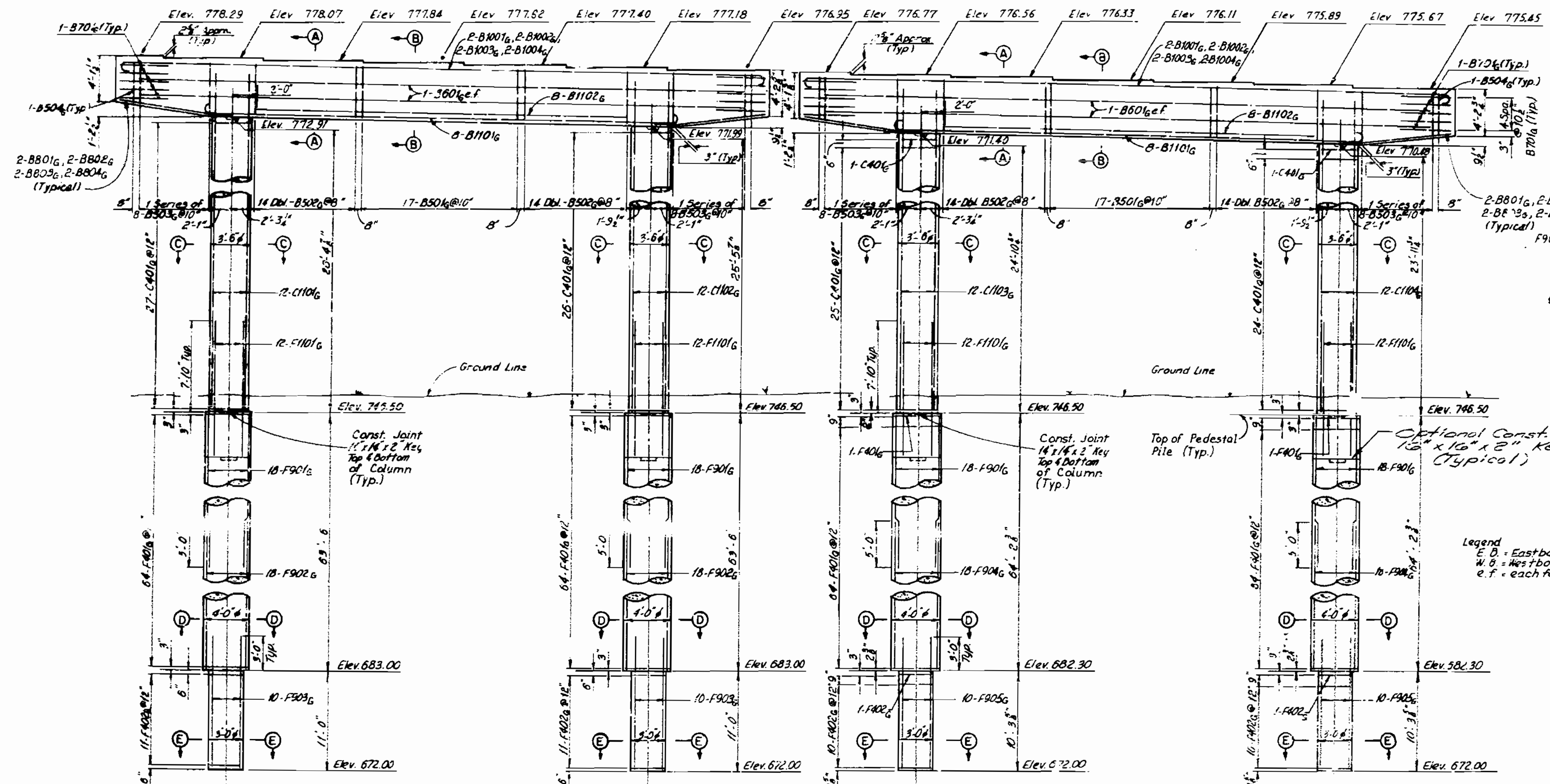
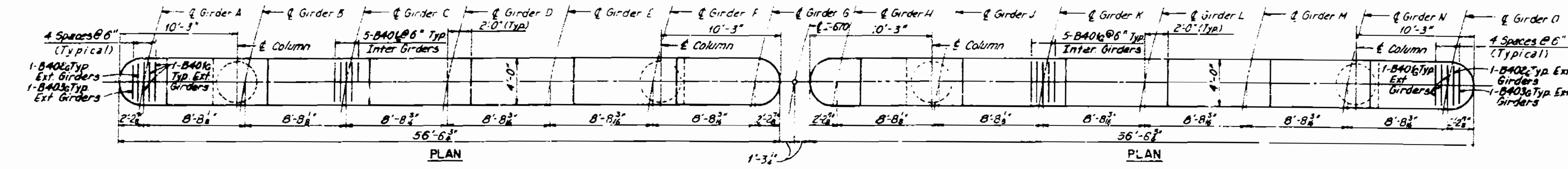
DETAILED TSL 1078
CHECKED LJR 1078

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 31 of 36

RENT 6 WESTBOUND AND EASTBOUND
PEDESTAL PILE ALTERNATE
JACKSON COUNTY
A-3136

FILE NO.	STATE	FILE NO.	FILE NO.	DATE	BY
1	IND.	IND.	IND.	10/30	



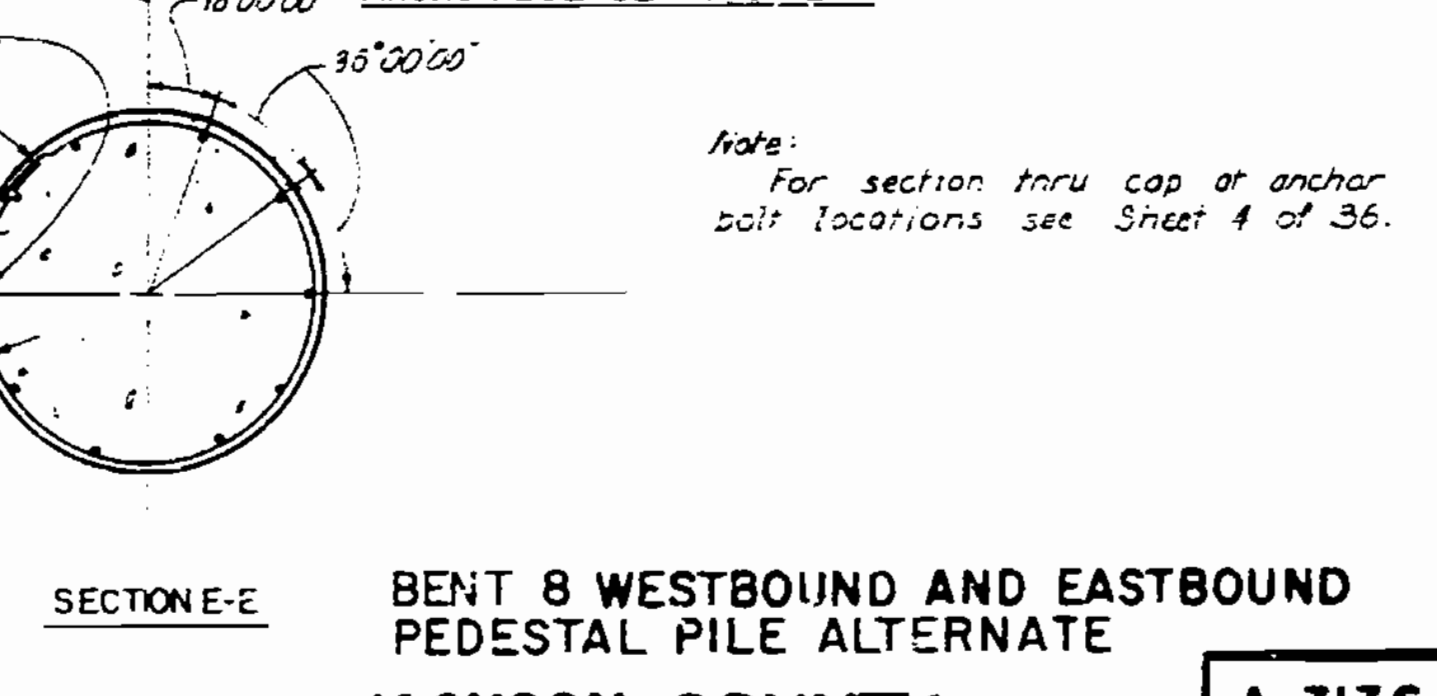
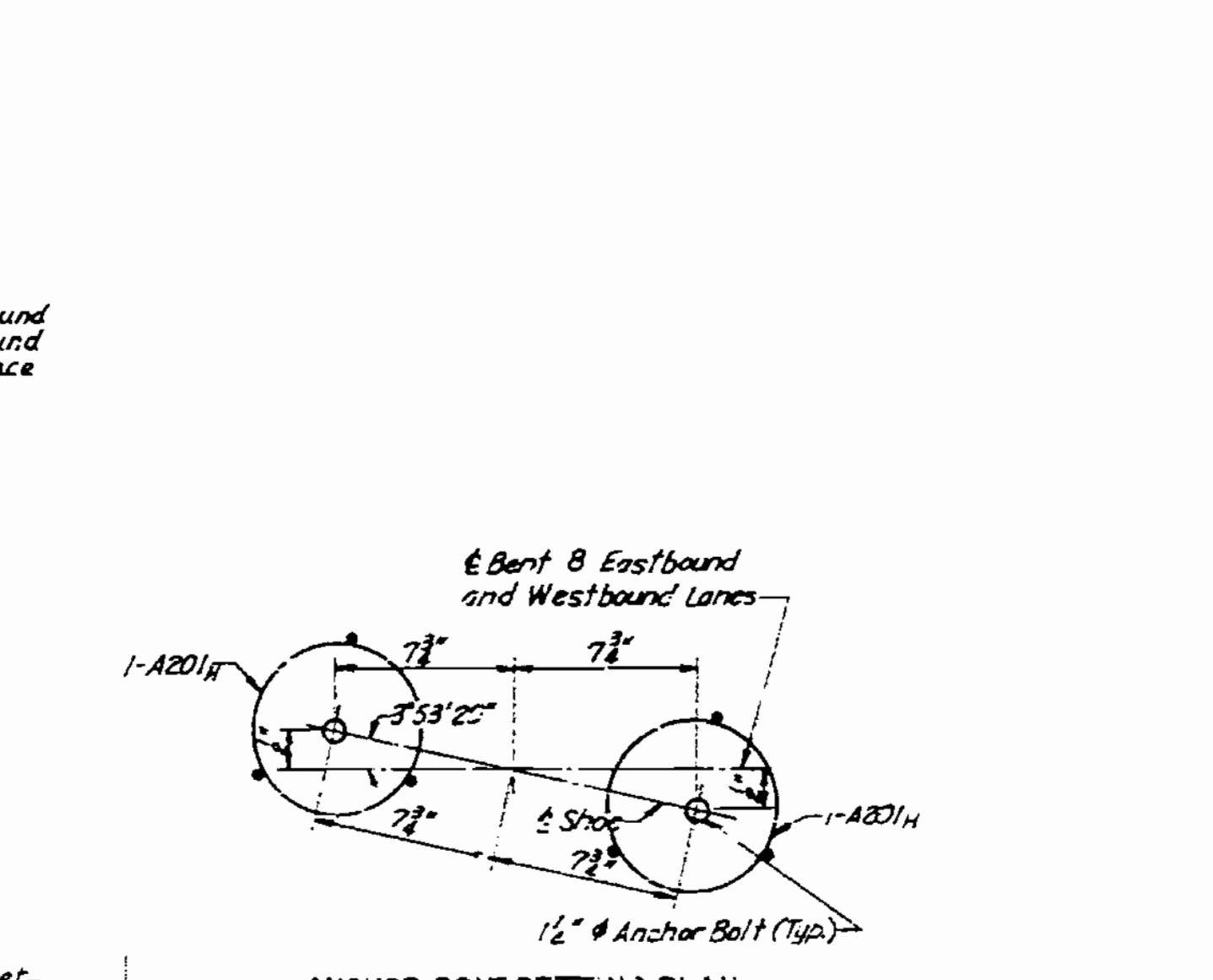
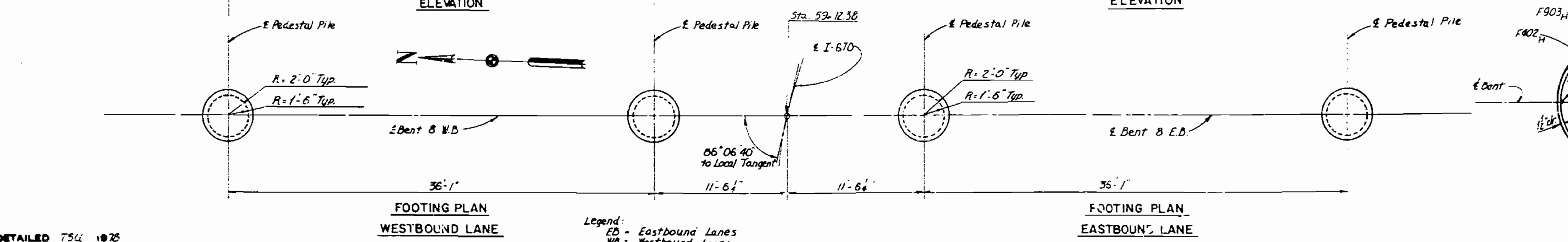
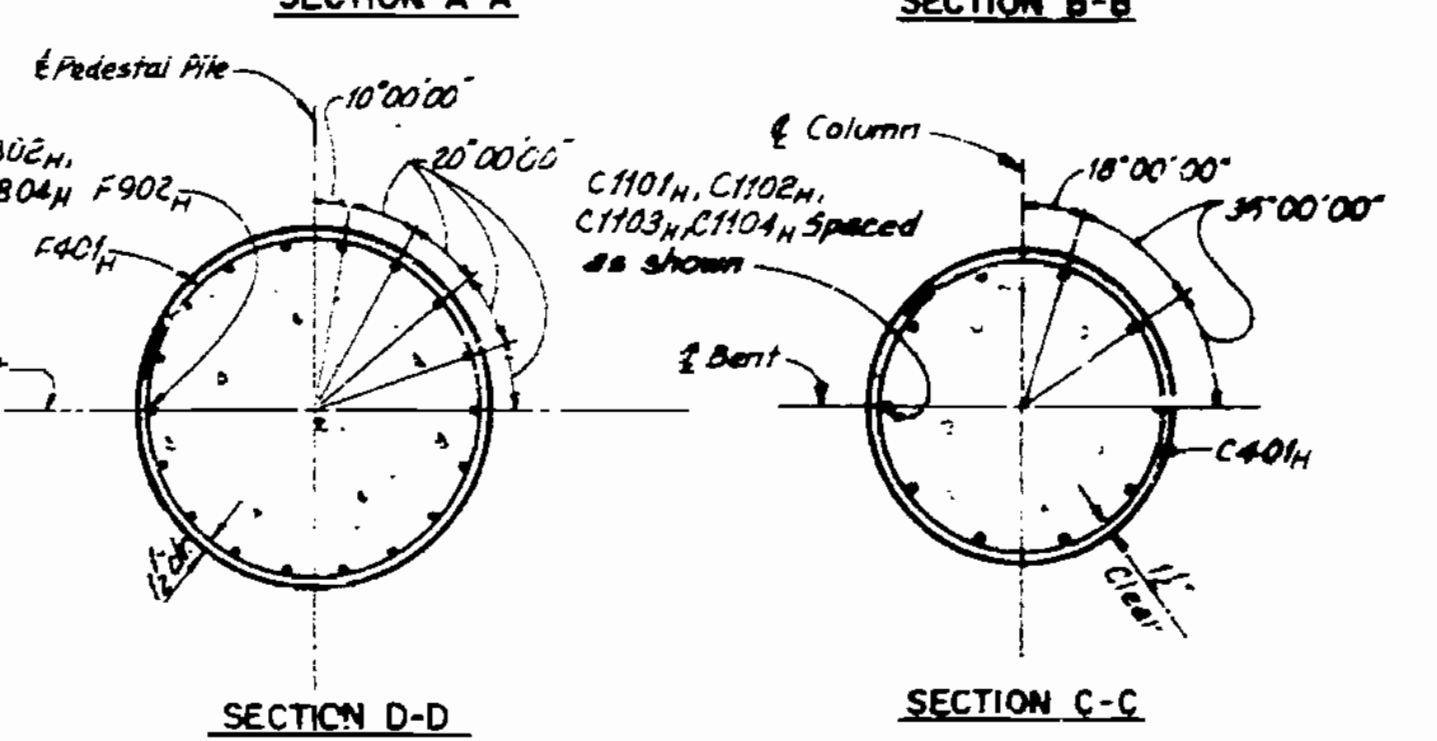
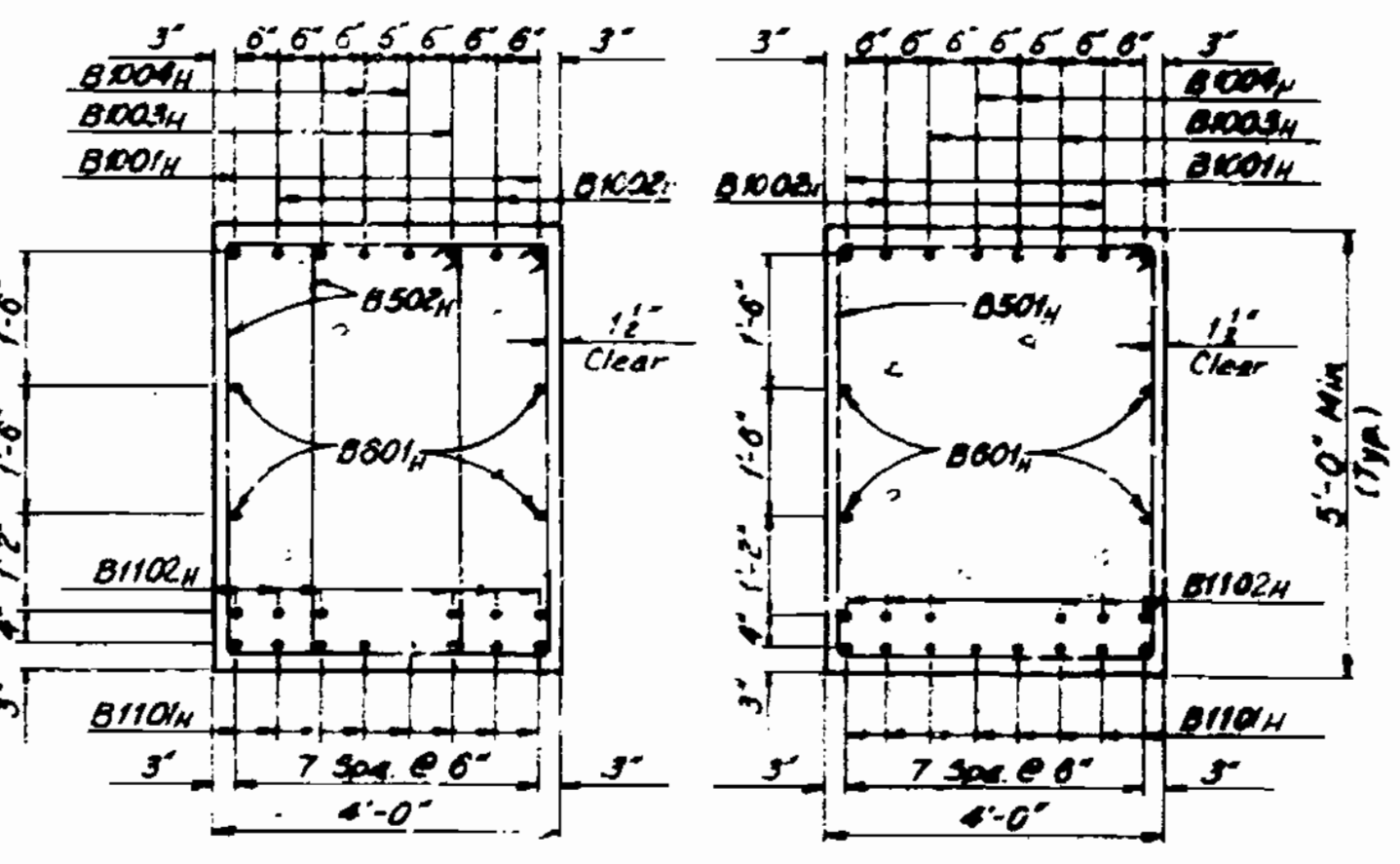
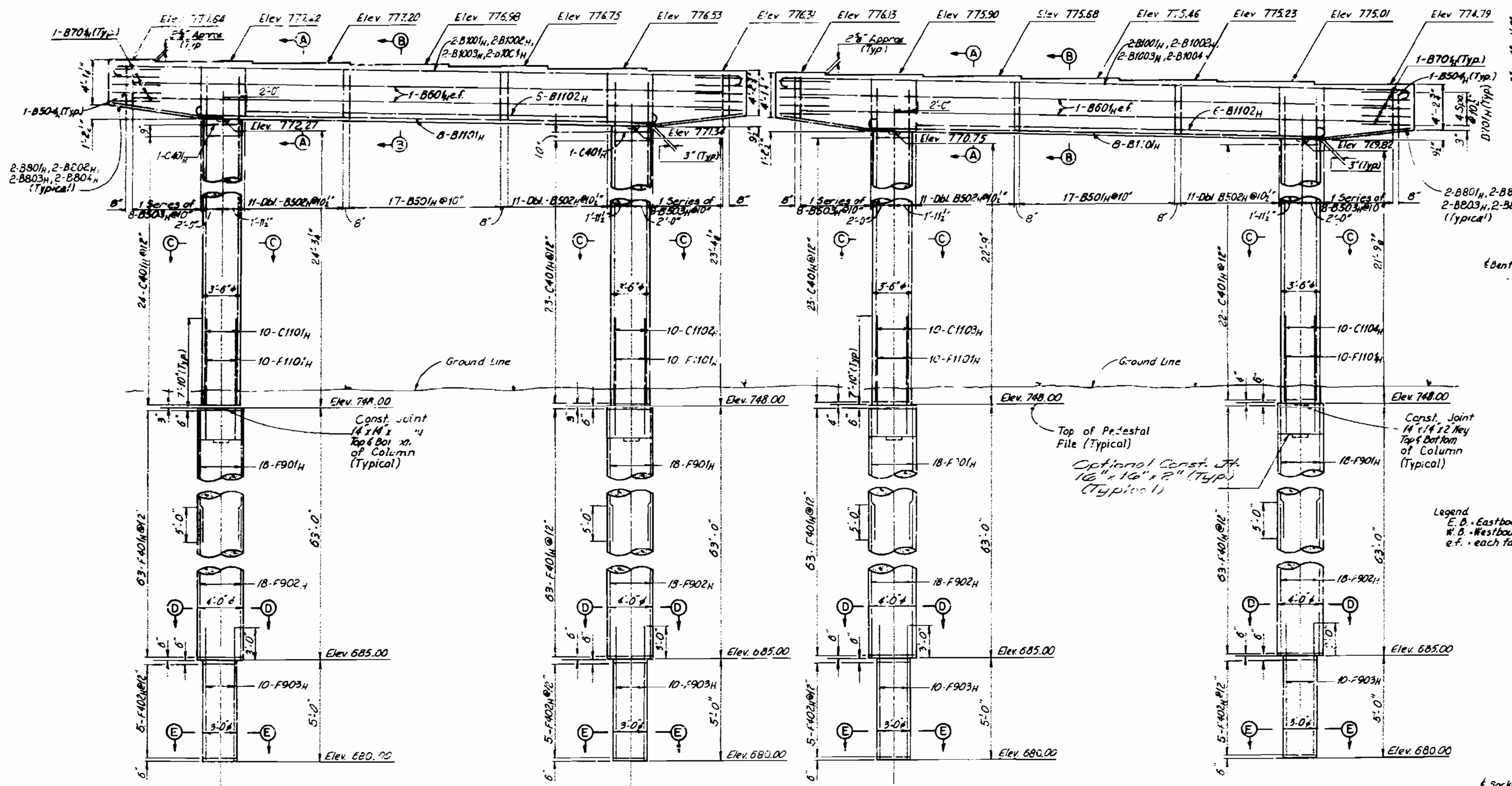
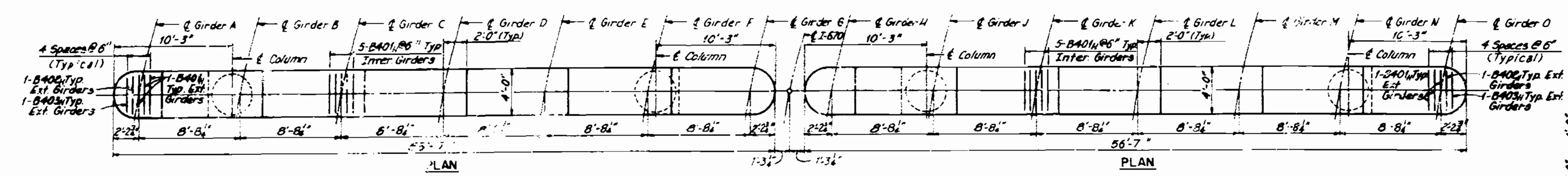
DETAILED 75U 1078
CHECKED LJR 1078

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 32 of 36

BENT 7 WESTBOUND AND EASTBOUND
PEDESTAL PILE ALTERNATE
JACKSON COUNTY
A-3136

REV.	DATE	BY	CHKD.	APP'D.
1				



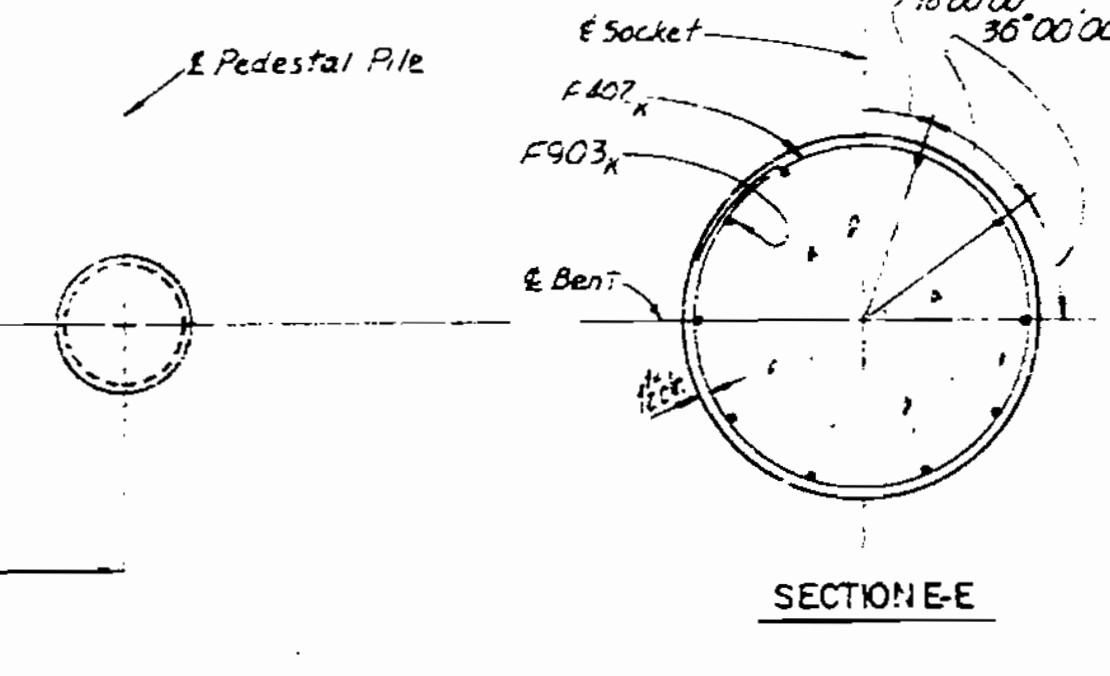
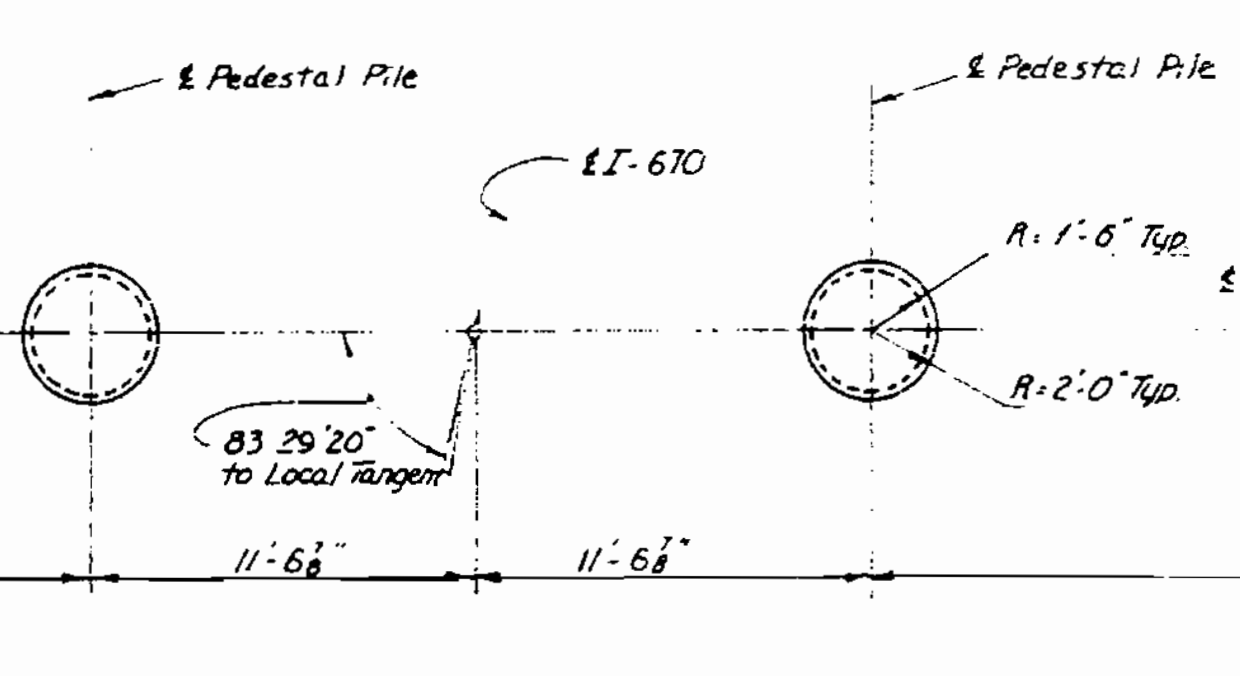
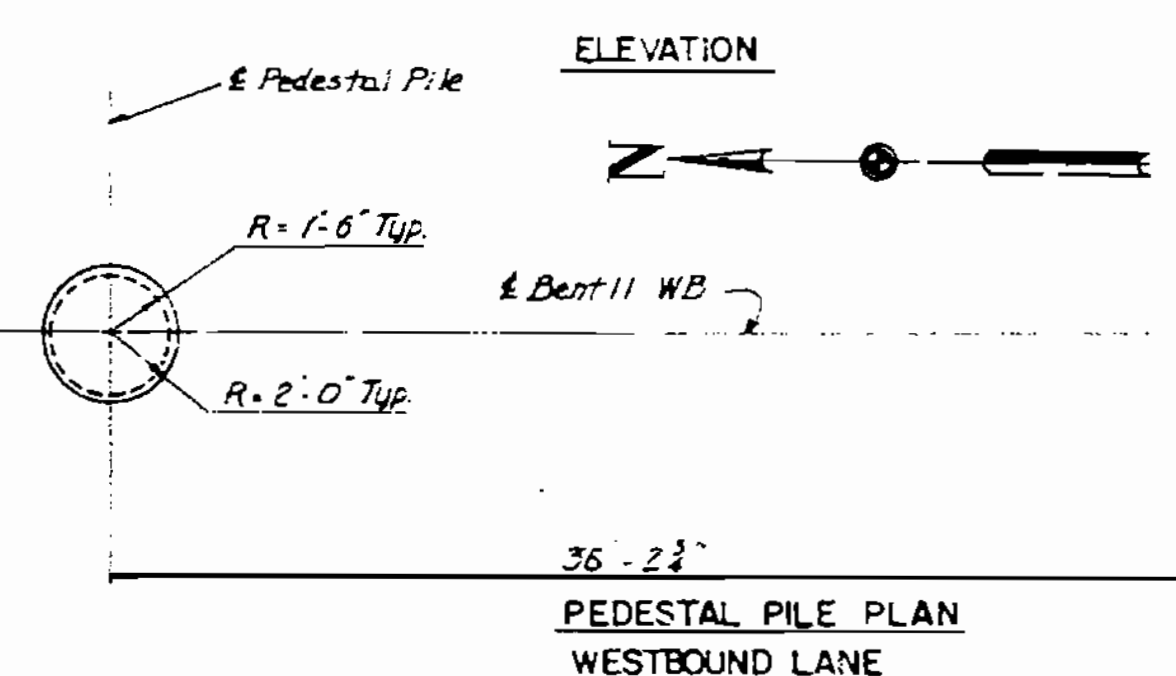
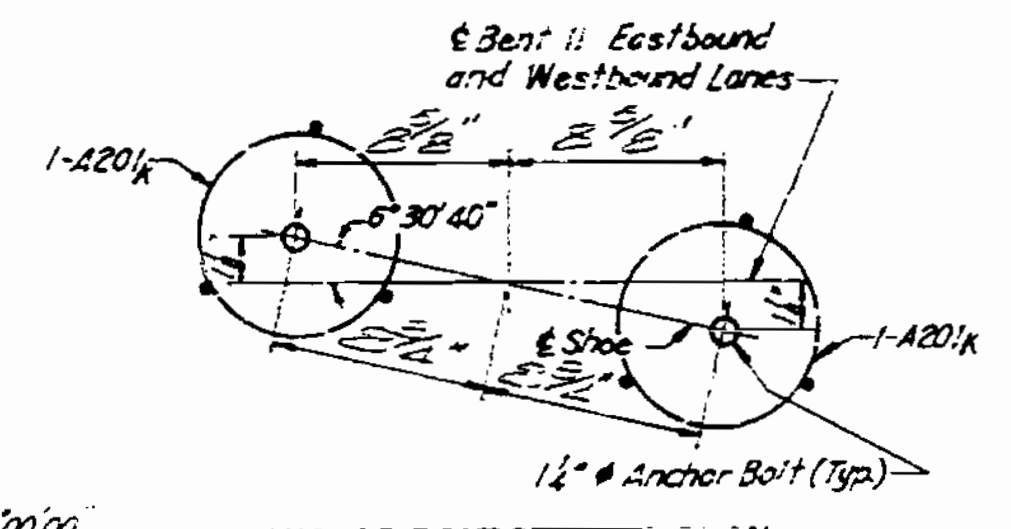
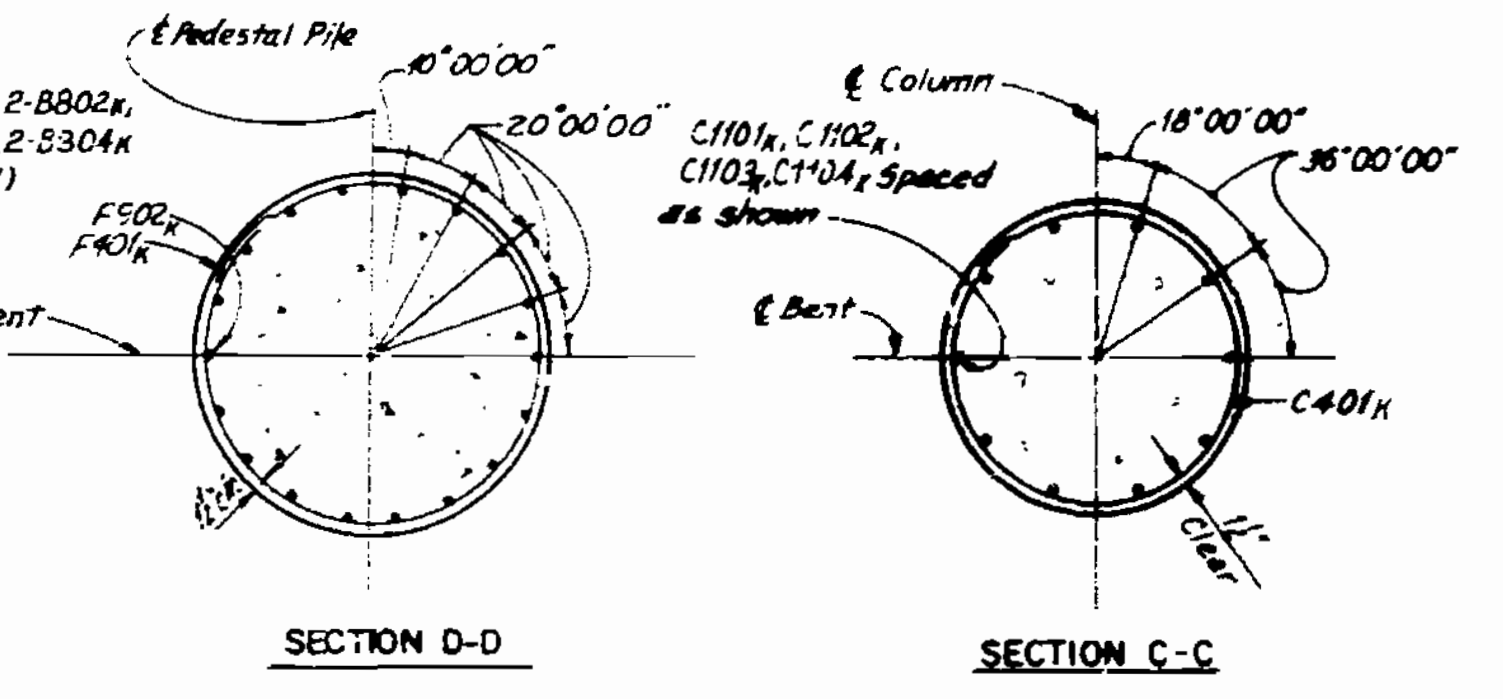
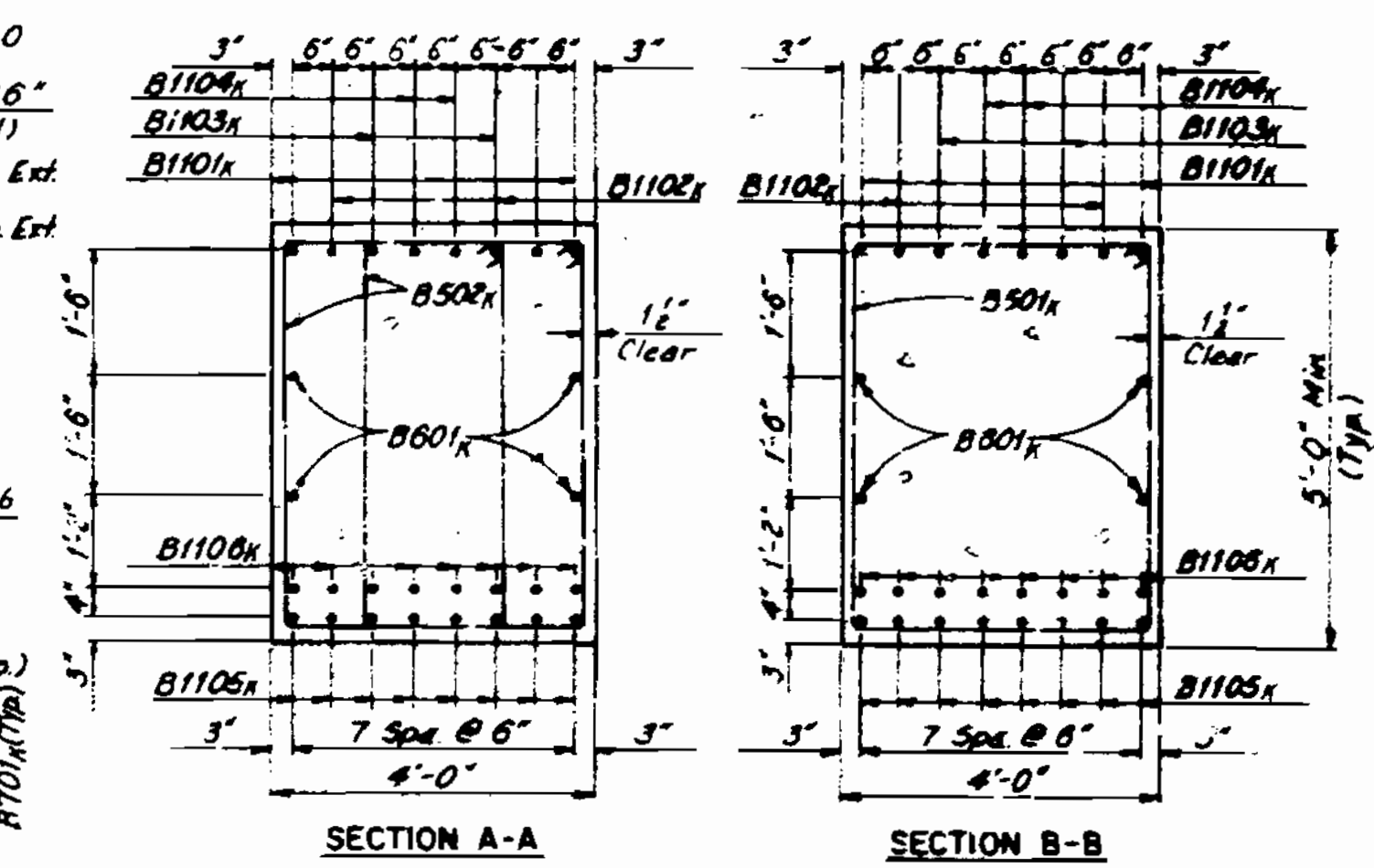
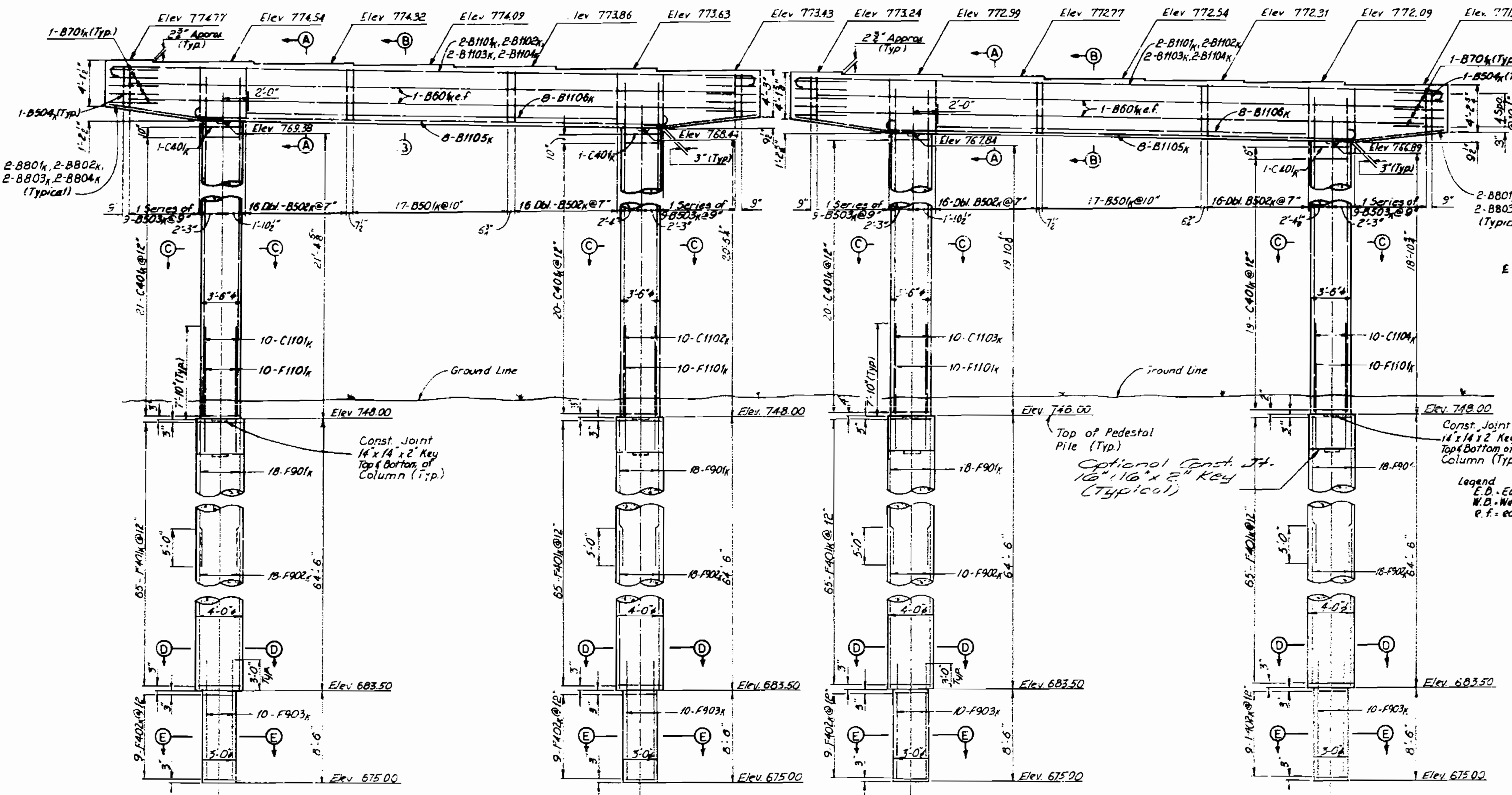
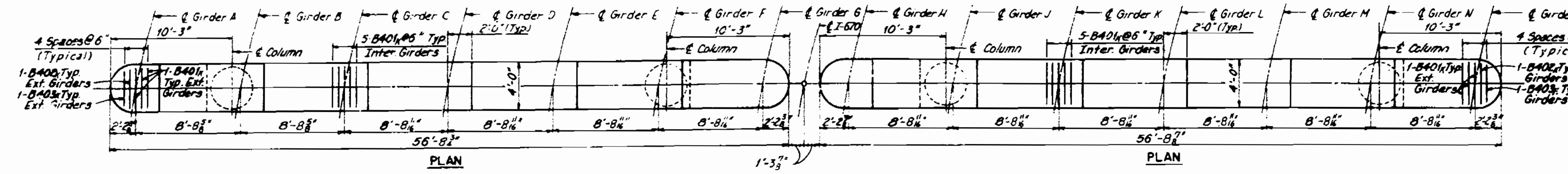
DETAILED 754 1078
CHECKED LJR 1078

Legend:
EB - Eastbound Lanes
WB - Westbound Lanes
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 33 of 36

BENT 8 WESTBOUND AND EASTBOUND
PEDESTAL PILE ALTERNATE
JACKSON COUNTY
A-3136

REV.	DATE	BY	CHKD.	APP'D.
1				



BENT II: WESTBOUND AND EASTBOUND PEDESTAL PILE ALTERNATE
JACKSON COUNTY

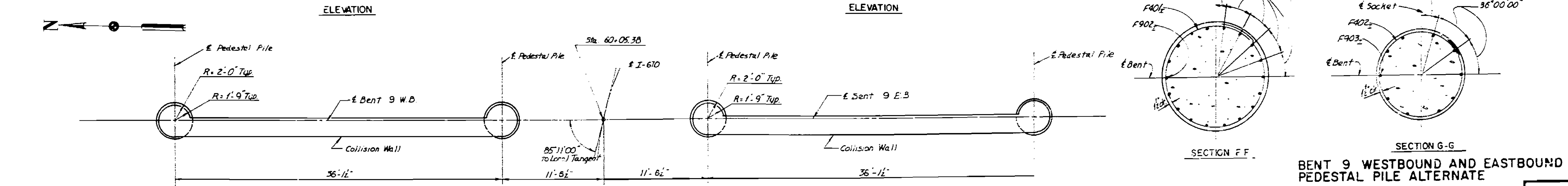
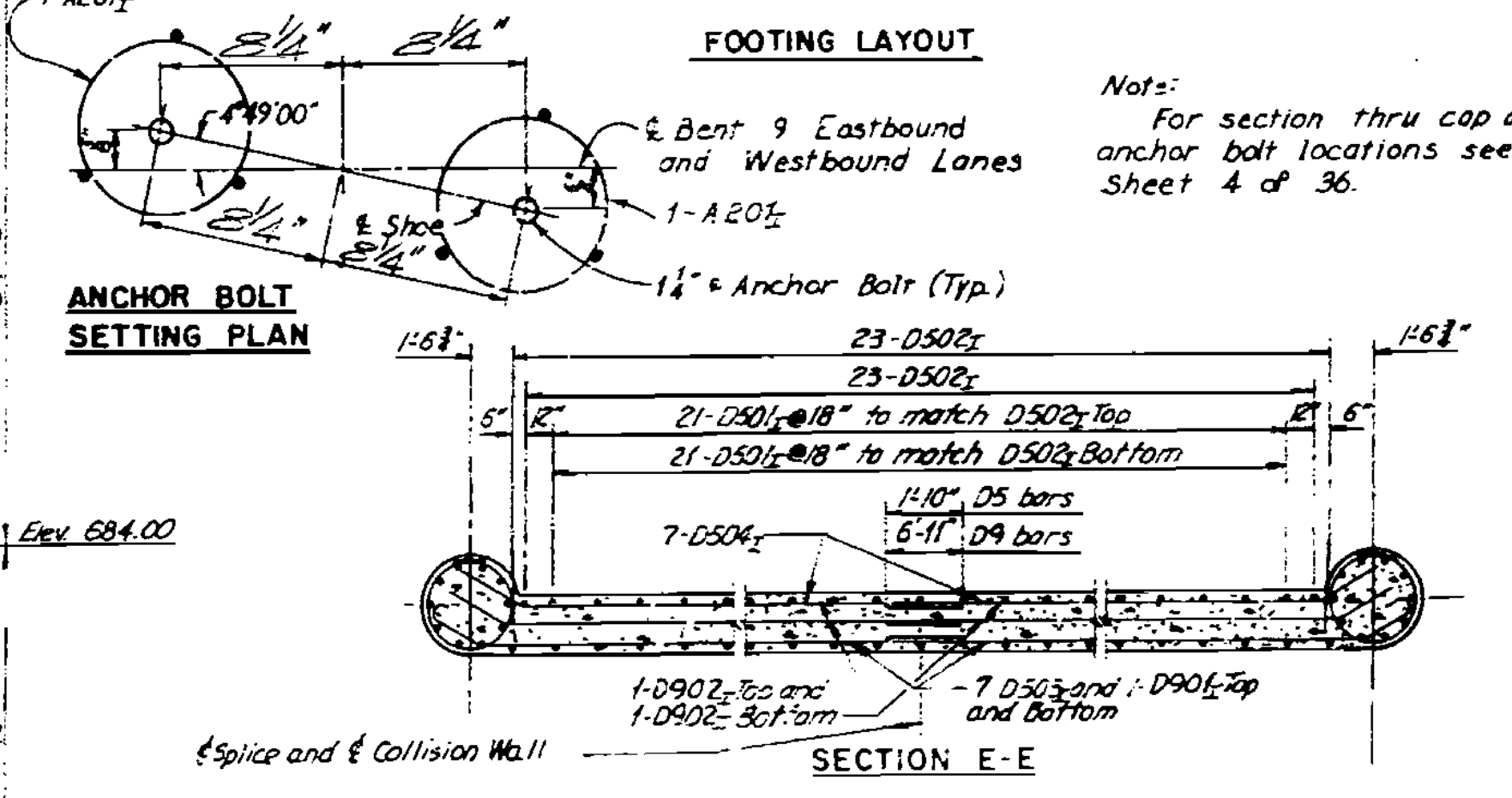
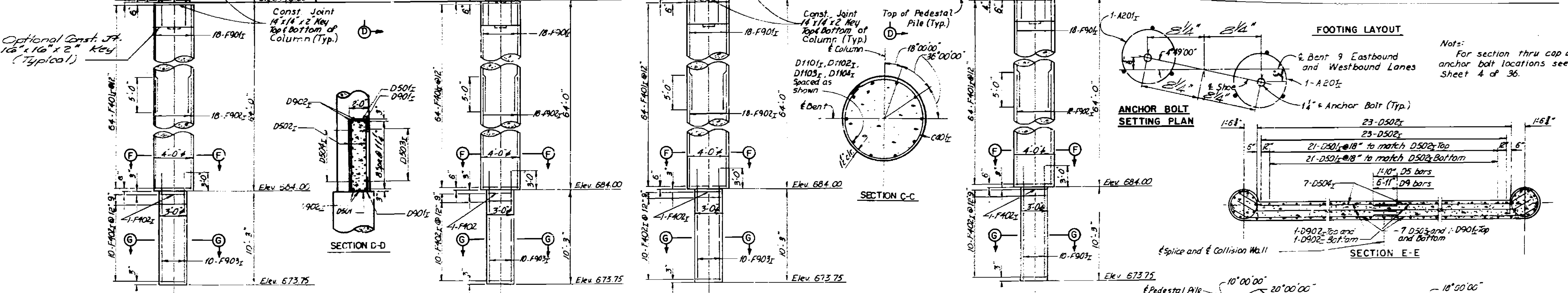
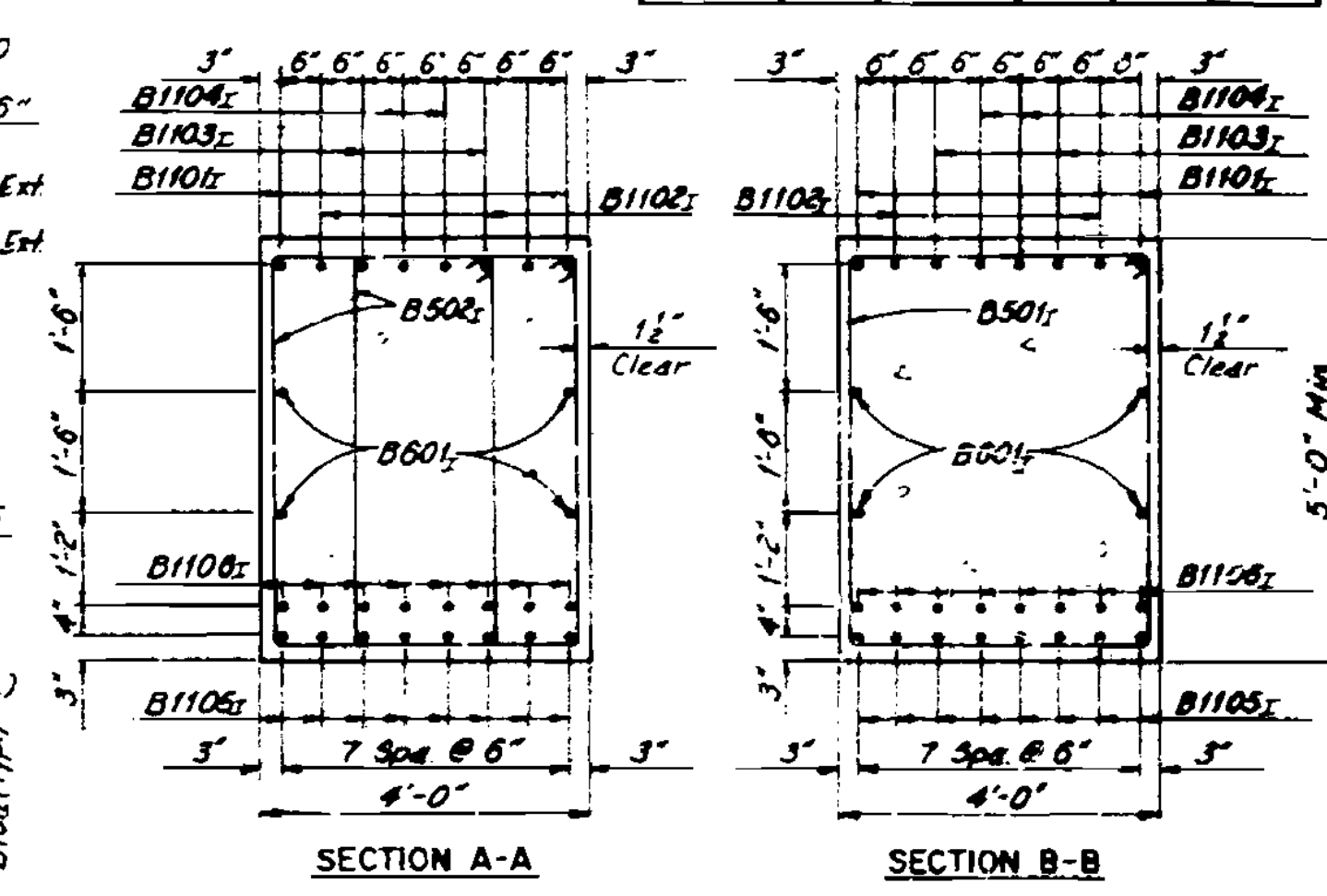
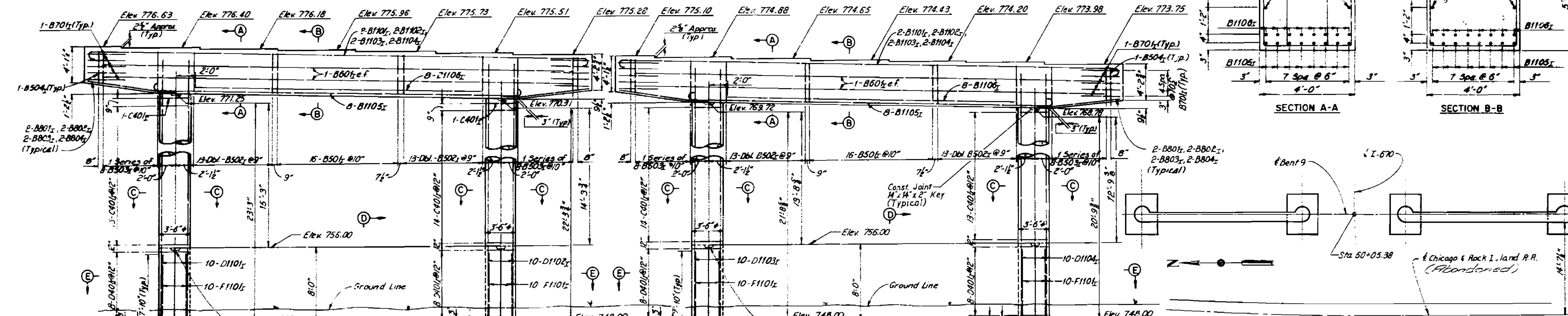
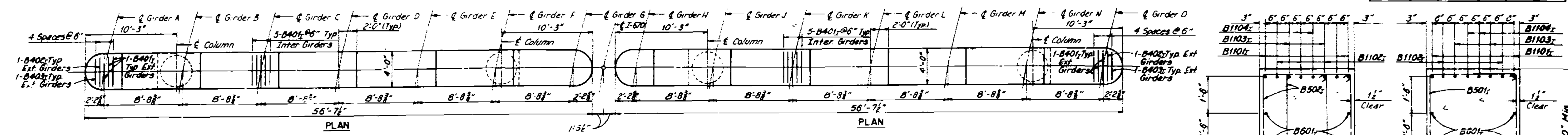
DETAILED T54 1978
 CHECKED LJR 1976

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 36 of 36

A-3136

132



BENT 9 WESTBOUND AND EASTBOUND PEDESTAL PILE ALTERNATE

216

DATE: 10/78
CHECKED: LJR 1978

Note: This drawing is not to scale. Follow dimensions.

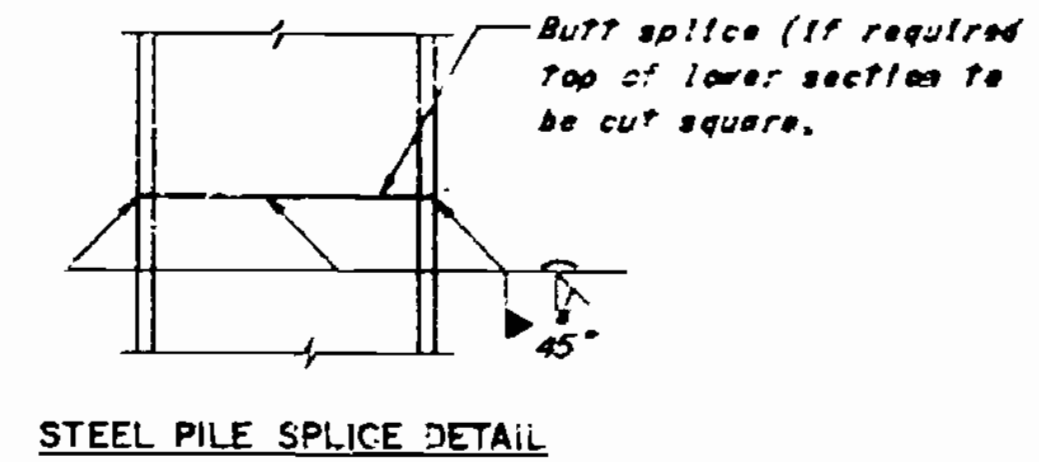
Sheet No. 34 of 36

JACKSON COUNTY A-3136

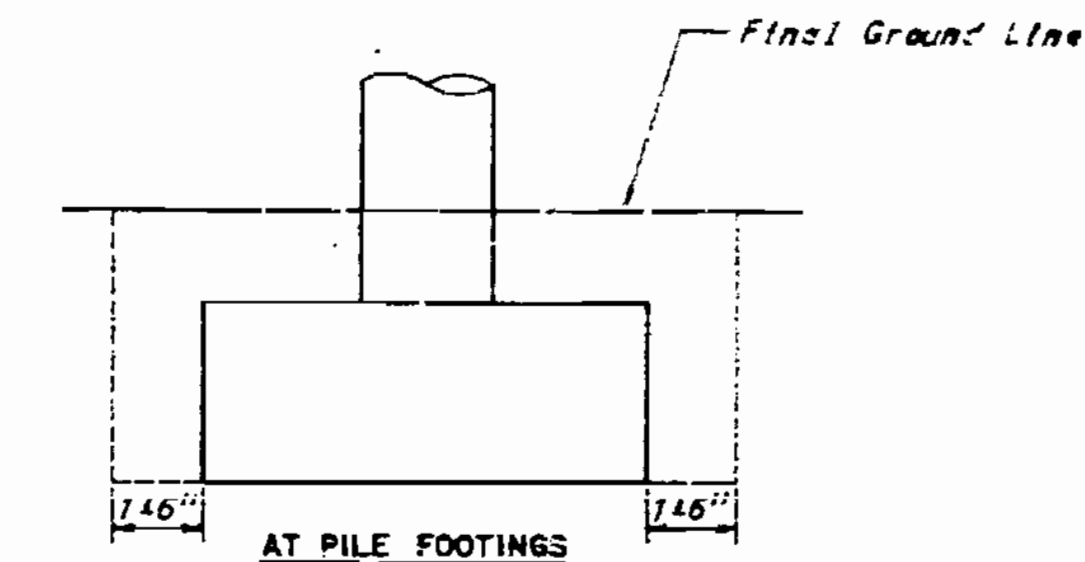
REV. NO.	DATE	REV. NO.	DATE	REV. NO.	DATE
1		2		3	

FINAL PLANS

ESTIMATED QUANTITIES-PILE FOOTING ALTERNATE "A"												
ITEM	UNIT	WESTBOUND LANE SUBSTRUCTURE					EASTBOUND LANE SUBSTRUCTURE					TOTAL
		UNIT 1	UNIT 2	UNIT 3	UNIT 4	TOTAL	UNIT 1	UNIT 2	UNIT 3	UNIT 4	TOTAL	
Class I Excavation	Cu. Yd.	148.0	161.5	96.2	78.7	484.4	144.0	207.3	95.0	89.8	536.1	1020.5
Pedestal Pile Shaft (48" dia)	Lin. Ft.		152.4			152.4						152.4
Structural Steel Piles (HP12x53)	Lin. Ft.	2454	2444	1096	1203	7197	2424	1708	1091	1201	6724	13,621
Loading Tests	Each											0
Class B Concrete	Cu. Yd.	279.3	320.6	177.7	130.2	907.8	275.7	336.1	175.5	127.9	915.2	1,823.0
Reinforcing Steel	Pound	49,250	72,080	25,340	22,460	172,130	48,690	62,570	27,960	22,090	161,310	333,440
Contingent Items												
Cost Piles	Lin. Ft.		11			11						11



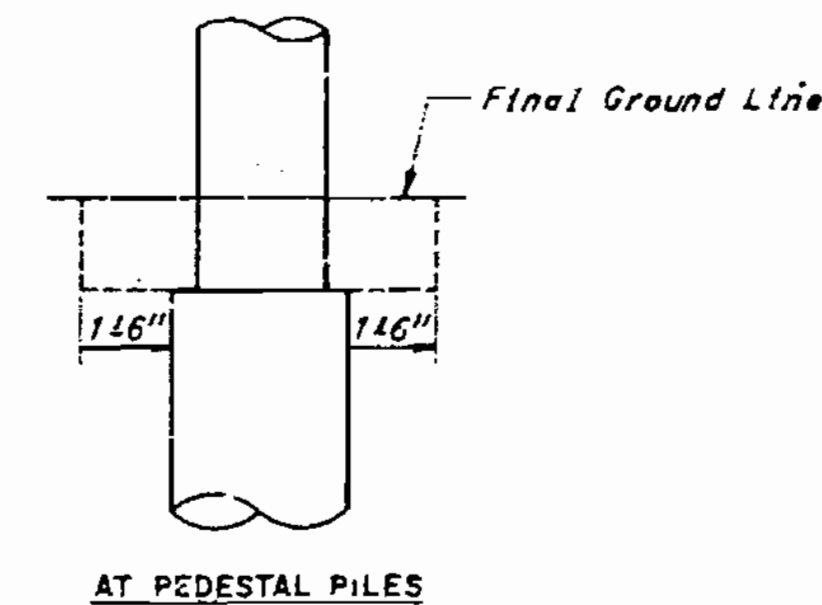
ESTIMATED QUANTITIES-PEDESTAL PILE ALTERNATE "B"												
ITEM	UNIT	WESTBOUND LANE SUBSTRUCTURE					EASTBOUND LANE SUBSTRUCTURE					TOTAL
		UNIT 1	UNIT 2	UNIT 3	UNIT 4	TOTAL	UNIT 1	UNIT 2	UNIT 3	UNIT 4	TOTAL	
Class I Excavation	Cu. Yd.	15	15	10	10	50	15	15	10	10	50	100
Pedestal Pile Shaft (54" dia)	Lin. Ft.	473				473	473				473	946
Pedestal Pile Shaft (48" dia)	Lin. Ft.		590	285	296	1171		591	285	296	1172	2,343
Class B Concrete	Cu. Yd.	223.2	248.6	135.0	111.8	718.6	219.6	244.4	132.8	109.6	706.4	1,425.0
Reinforcing Steel	Pound	91,650	102,880	47,560	46,900	288,990	90,910	102,480	47,180	46,530	286,900	575,890



Note: Cost of concrete in pedestal piles is to be included in unit price bid per linear foot of pedestal pile.

Note: See Special Provisions for bidding on pile Alternate "A" or "B".

PILE AND FOOTING DATA - WESTBOUND LANE											
BENT	BENT 1	BENT 2	BENT 3	BENT 4	BENT 5	BENT 6	BENT 7	BENT 8	BENT 9	BENT 10	BENT 11
Pile Type and Size	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53		HP12x53	HP12x53	HP12x53	HP12x53
Number	12	12	12	8	10	10		8	10	10	10
Approximate Length (Ft.)	73'	72'	60'	60'	60'	63'		61'	60'	61'	60'
Design Bearing Value (Tons)	92	86	93	93	89	94		93	88	93	94
Hammer Energy Required (Ft.-Lbs.)	21,400	20,000	21,600	21,600	20,700	21,800		21,700	20,700	21,900	22,100

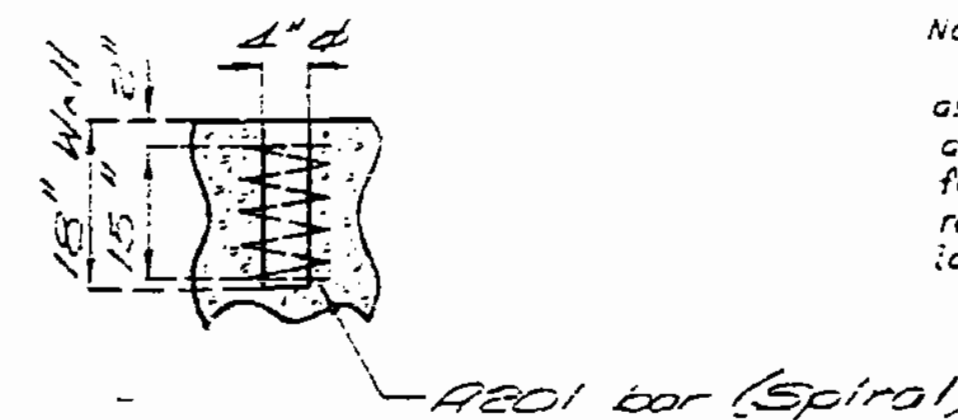


PILE AND FOOTING DATA - EASTBOUND LANE											
BENT	BENT 1	BENT 2	BENT 3	BENT 4	BENT 5	BENT 6	BENT 7	BENT 8	BENT 9	BENT 10	BENT 11
Pile Type and Size	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53	HP12x53
Number	12	12	12	8	10	10	12	8	10	10	10
Approximate Length (Ft.)	73'	70'	60'	59'	60'	63'	62'	62'	60'	60'	60'
Design Bearing Value (Tons)	92	86	93	93	89	94	86	93	88	93	94
Hammer Energy Required (Ft.-Lbs.)	21,400	20,000	21,600	21,600	20,700	21,800	20,300	21,700	20,700	21,900	22,100

Minimum energy requirement of hammer based on plan length and design bearing value of piles.
All piles shall be driven to practical refusal.

PEDESTAL PILE DATA - WESTBOUND AND EASTBOUND LANES											
BENT	BENT 1	BENT 2	BENT 3	BENT 4	BENT 5	BENT 6	BENT 7	BENT 8	BENT 9	BENT 10	BENT 11
Pedestal Pile Diameter (Inches)	54	54	54	48	48	48	48	48	48	48	48
Load at Top of Socket (Tons)	476	485	459	391	418	454	414	377	474	437	441

W.B. Lanes only



SECTION THRU CAP AT ANCHOR BOLT LOCATION

Note: All reinforcing bars to clear anchor bolts for bearings by at least 2". See Bent details for anchor bolt and reinforcing bar plan locations.

SUMMARY OF QUANTITIES PILE AND FOOTING DATA

399

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

SUPERSTRUCTURE STEEL
BENTS 1 THRU 11

REV. NO.	DATE	BY	CHKD.	APP'D.	REASON
1					

INDEX OF SHEETS

- 1 INDEX AND GENERAL NOTES
- 2 GENERAL PLAN AND ELEVATION
- 3 GENERAL PLAN AND ELEVATION
- 4 SUMMARY OF QUANTITIES AND TYPICAL SECTION
- 5 FRAMING PLAN - UNIT 1 WESTBOUND
- 6 GIRDER ELEVATION - UNIT 1 WESTBOUND
- 7 FRAMING PLAN - UNIT 1 EASTBOUND
- 8 GIRDER ELEVATION - UNIT 1 EASTBOUND
- 9 FRAMING PLAN - UNIT 2 AND 3 WESTBOUND
- 10 GIRDER ELEVATION - UNIT 2 WESTBOUND
- 11 FRAMING PLAN - UNITS 2 AND 3 EASTBOUND
- 12 GIRDER ELEVATION - UNIT 2 EASTBOUND
- 13 DEFLECTIONS AND CAMBER - UNITS 1, 2 AND 3 WESTBOUND
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- 16 GIRDER ELEVATION - UNITS 3 AND 4 WESTBOUND
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- 19 GIRDER ELEVATION - UNITS 3 AND 4 EASTBOUND
- 20 GIRDER ELEVATION - UNIT 4 EASTBOUND
- 21 FIELD SPLICES AND MISCELLANEOUS DETAILS
- 22 GIRDER EXPANSION JOINTS
- 23 DIAPHRAGM DETAILS
- 24 BEARING DEVICES

GENERAL NOTES

DESIGN SPECIFICATIONS: AASHTO, 1977 and Interim Specifications, 1978 Load Factor Design.

DESIGN LOADING: HS20-44 and Alternate Military Loading with 15# / sq.ft. for future wearing surfacing. Fatigue Stress: Case 1.

CONSTRUCTION SPECIFICATIONS: Missouri Standard Specifications for Highway Construction, 1971.

DESIGN UNIT STRESSES:

ASTM A36 $f_y = 36,000$ psi
ASTM A57 $f_y = 50,000$ psi

UTILITIES: All utilities, unless shown otherwise, shall be removed or relocated by others. The contractor shall notify the owner of the utilities of his work schedule sufficiently in advance to allow time for disposition of utilities.

CONSTRUCTION CLEARANCES: The contractor must maintain a 13'-6" vertical by 38'-0" horizontal opening for city streets during construction.
ANCHOR BOLTS: Cost of furnishing anchor bolts shall be included in the price bid for "Fabricated Structural Carbon Low Alloy Steel" See Special Provisions.

Bolts shall be ASTM A325 7/8" ϕ with 3/4" ϕ holes, unless otherwise shown or noted.

By approval of the Engineer, the Contractor may omit any shop splice, if desired, by extending the heavier plate and providing approved modifications of details of field splices and elsewhere as required. All costs of any required design, plan revisions or rechecking of shop drawings shall be borne by the Contractor. Payweight in any case will be based on material shown on design plans.

WELDING: Shop welded web splices may be fabricated by the Contractor when detailed on the drawing and approved by the Engineer. No additional payment will be made for optional shop welded web splices.

All shop web splices shall be located at least 1'-0" from shop flange splices.

By approval of the Engineer, the Contractor may, if desired, substitute a shop welded splice for field bolted splices by providing approved modifications of details required. All cost shall be borne by the Contractor and payweight in any case will be based on materials in the splice used.

ERECTION: Dimension between ϕ of bearings shall be checked in field before fabrication of girders. Contractor will be responsible for proper fit.

GIRDER CAMBER: Plate girders shall be fabricated to conform with the camber diagrams. Camber includes allowance for vertical curvature, superelevation, transition and dead load deflection due to slab and structural steel.

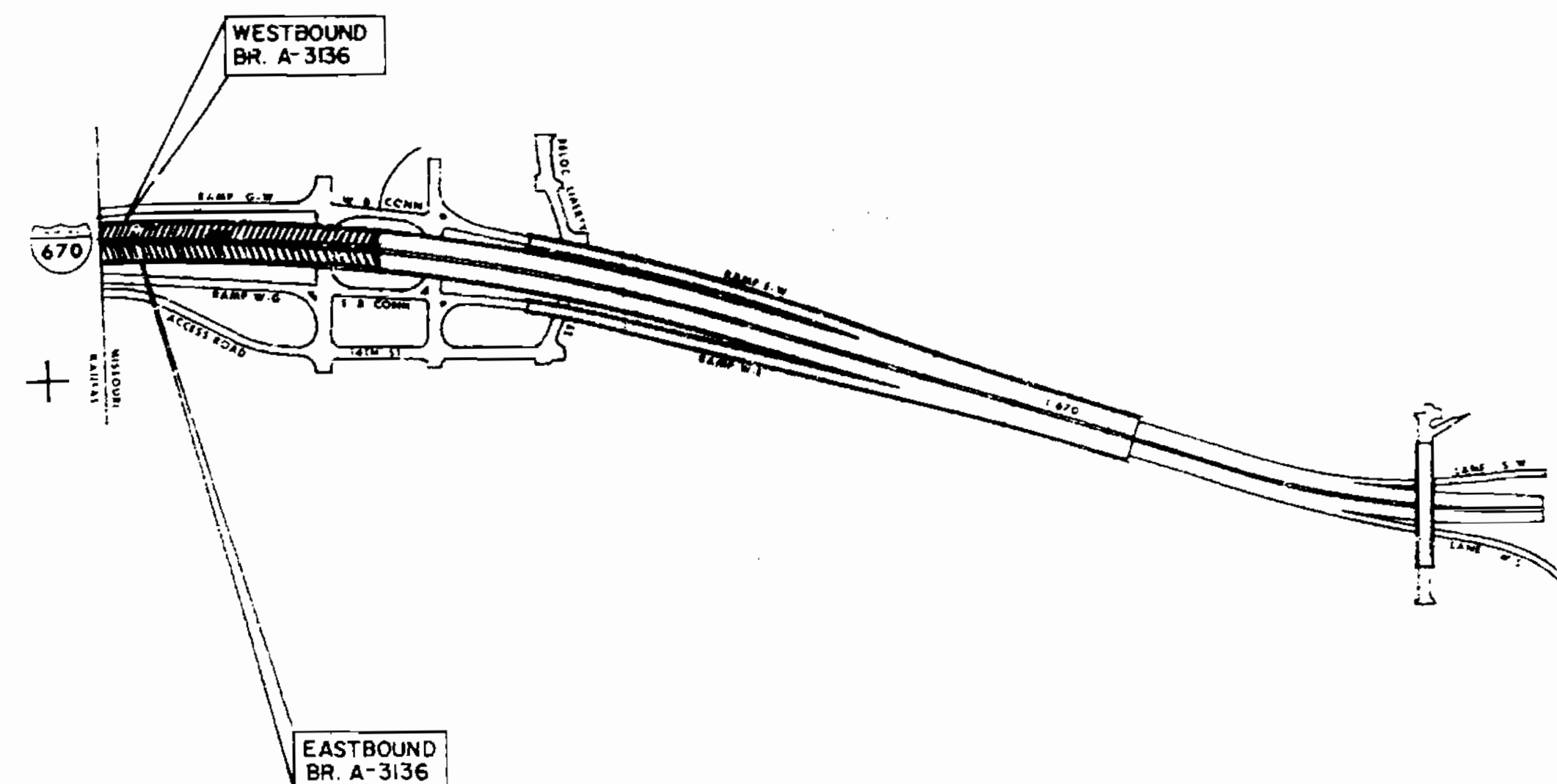
ELECTRICAL GROUNDS: Electrical grounds have been provided at the following locations:

- Bents 2WB, 6WB, 8WB and 11WB - South side of Girder B
- Bents 2EB, 6EB, 8EB and 11EB - North side of Girder W

Each grounding conductor which protrudes above the cap beam shall be externally welded to the nearest girder web. Cost shall be included in the unit price bid for other items in the Contract.

Structural Steel: Turn of the nut method of tensioning high strength bolts will be permitted.
Total shop vertical assembly will not be required for this structure.

For installation and quantities of shear connectors see plans for "Concrete Deck and Forming".



LOCATION SKETCH

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1 of 24.

BRIDGE I-670 VIADUCT

STATE ROAD - INTERSTATE ROUTE 670

IN KANSAS CITY

PROJECT NO. SIG-670-1(13) STA. 52+79.857

JOB NO. 4 I-670 463 RTE I-670

JACKSON COUNTY

STD.

STD.

A-3136

SUBMITTED BY:
David J. Matthews
REGISTERED PROFESSIONAL ENGINEER
MISSOURI NO. E-7800

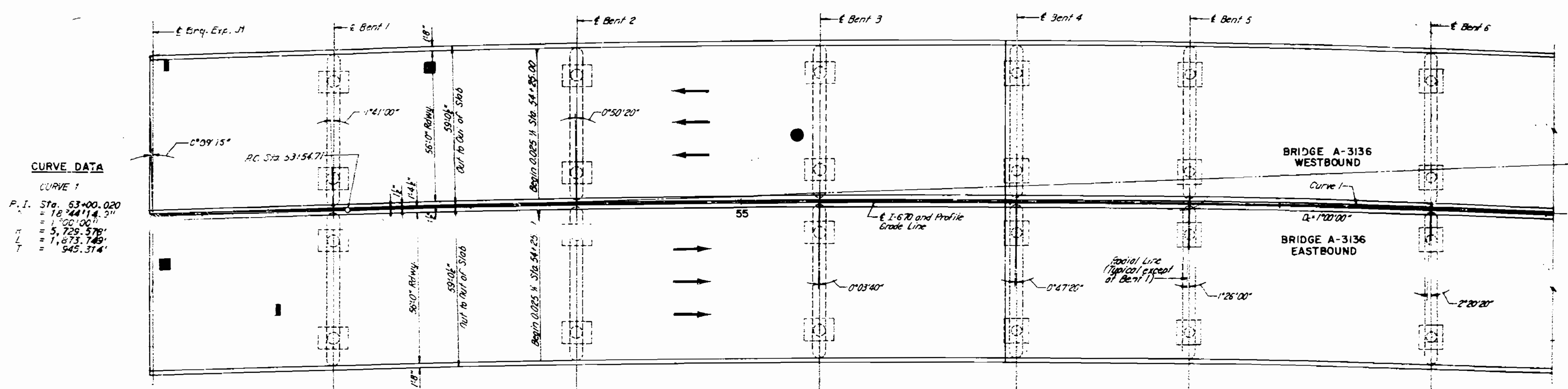
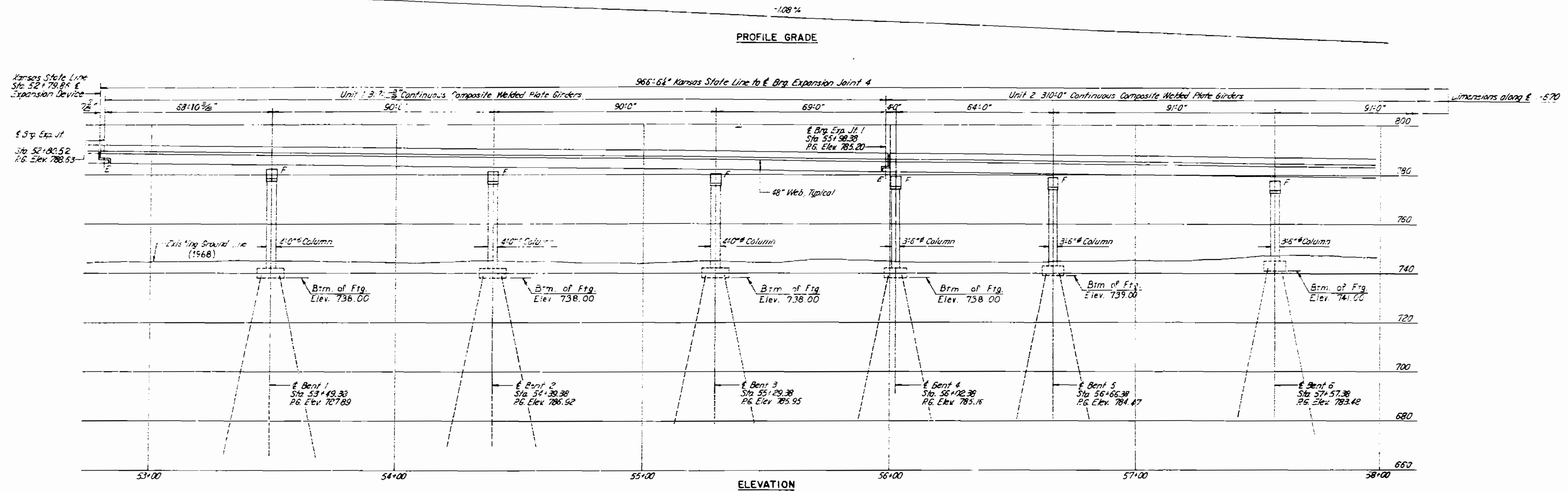
DESIGNED DLM 10/79
TJM
GWR
DETAILED LSR 10/79
CHECKED GWR 10/79

DATE 5/80

412



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		87		



CURVE DATA
 CURVE 1
 P.I. Sta. 53+00.020
 R = 18,441.4
 L = 5,729.576
 T = 1,873.749
 E = 945.374

BENCH MARKS

- H-71 R.R. spike in N. side of base of P.P., S.E. corner of 12th St. and Quesnee. Elev. 748.63
- H-72 Top of head of arrow on top of fire hydrant, S.E. corner of 12th St. and Wyoming. Elev. 751.19
- H-74 "X" in N. bolt in top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 750.95
- H-75 "X" in N. bolt in top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E. side of Wyoming. Elev. 752.18

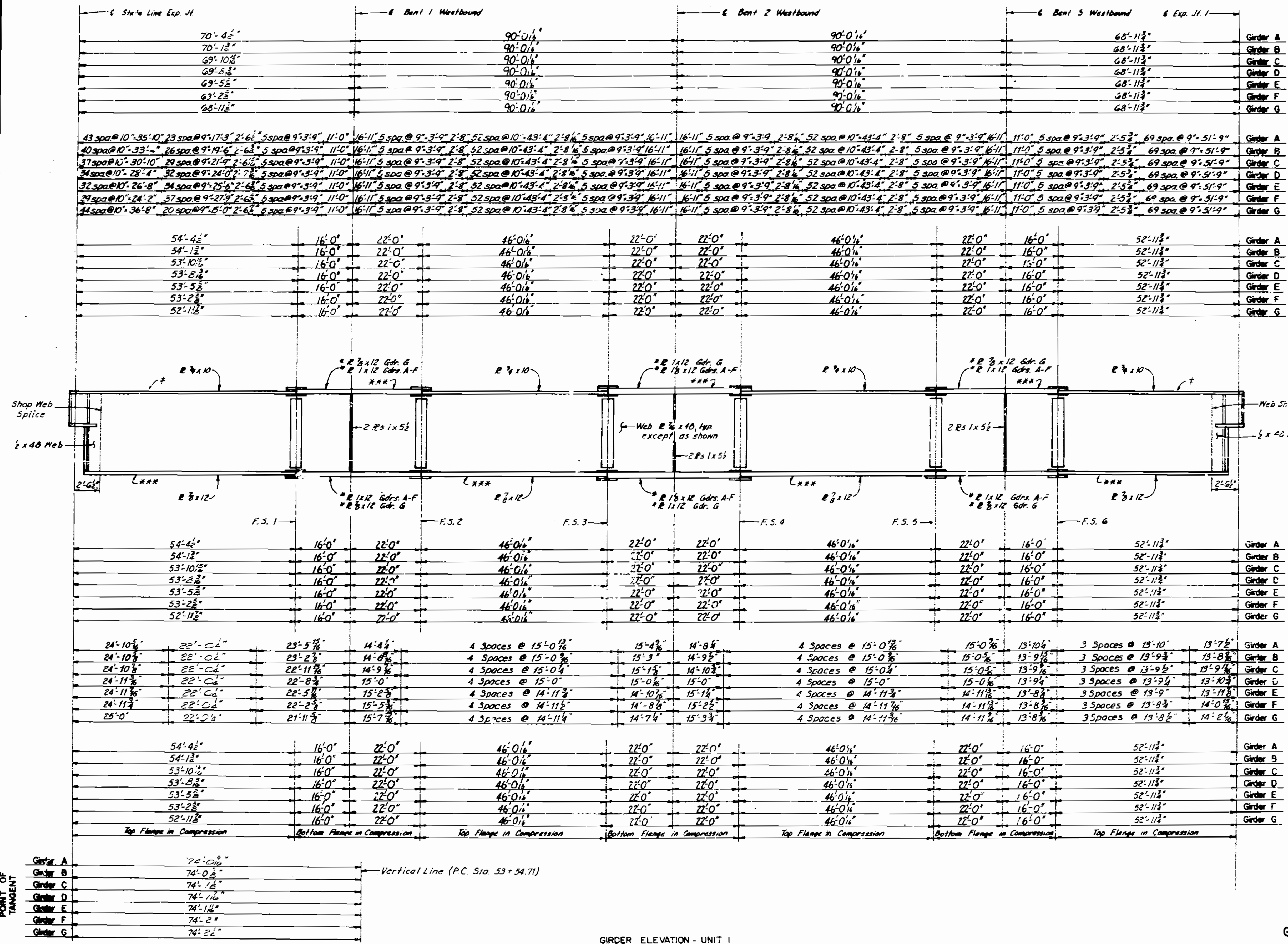
NOTE:
 The information shown on this drawing concerning type and location of underground utilities is not guaranteed to be accurate or all inclusive. The Contractor is responsible for making his own determinations as to the type and location of underground utilities as may be necessary to avoid damage thereto.

DETAILED BJT 1078
 CHECKED LJR 1078

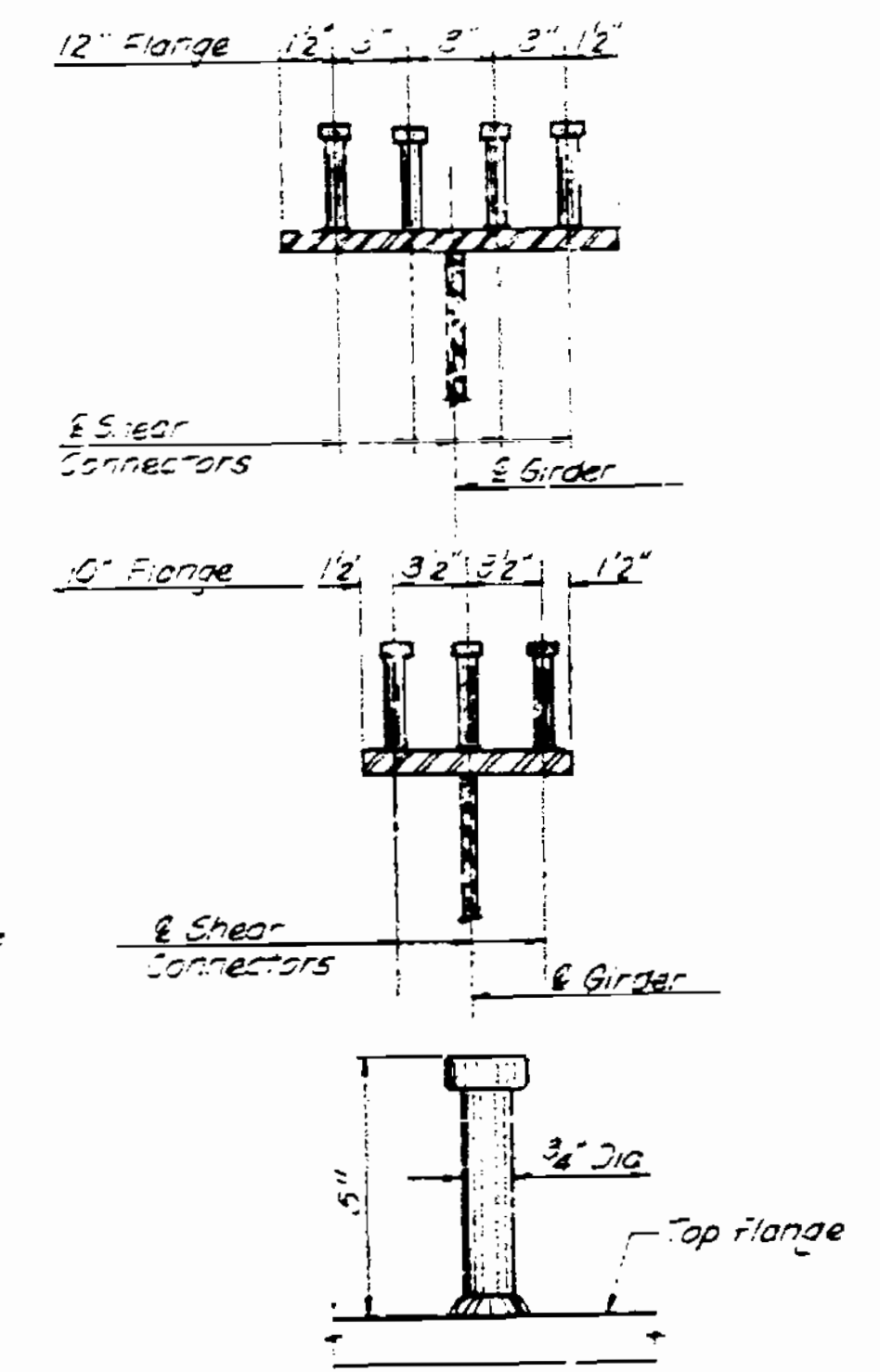
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 2 of 24.

NO.	DATE	BY	CHKD.	APP'D.	SCALE
1					AS SHOWN



Note: Shear connectors are not to be furnished or installed with the Structural Steel Contract.



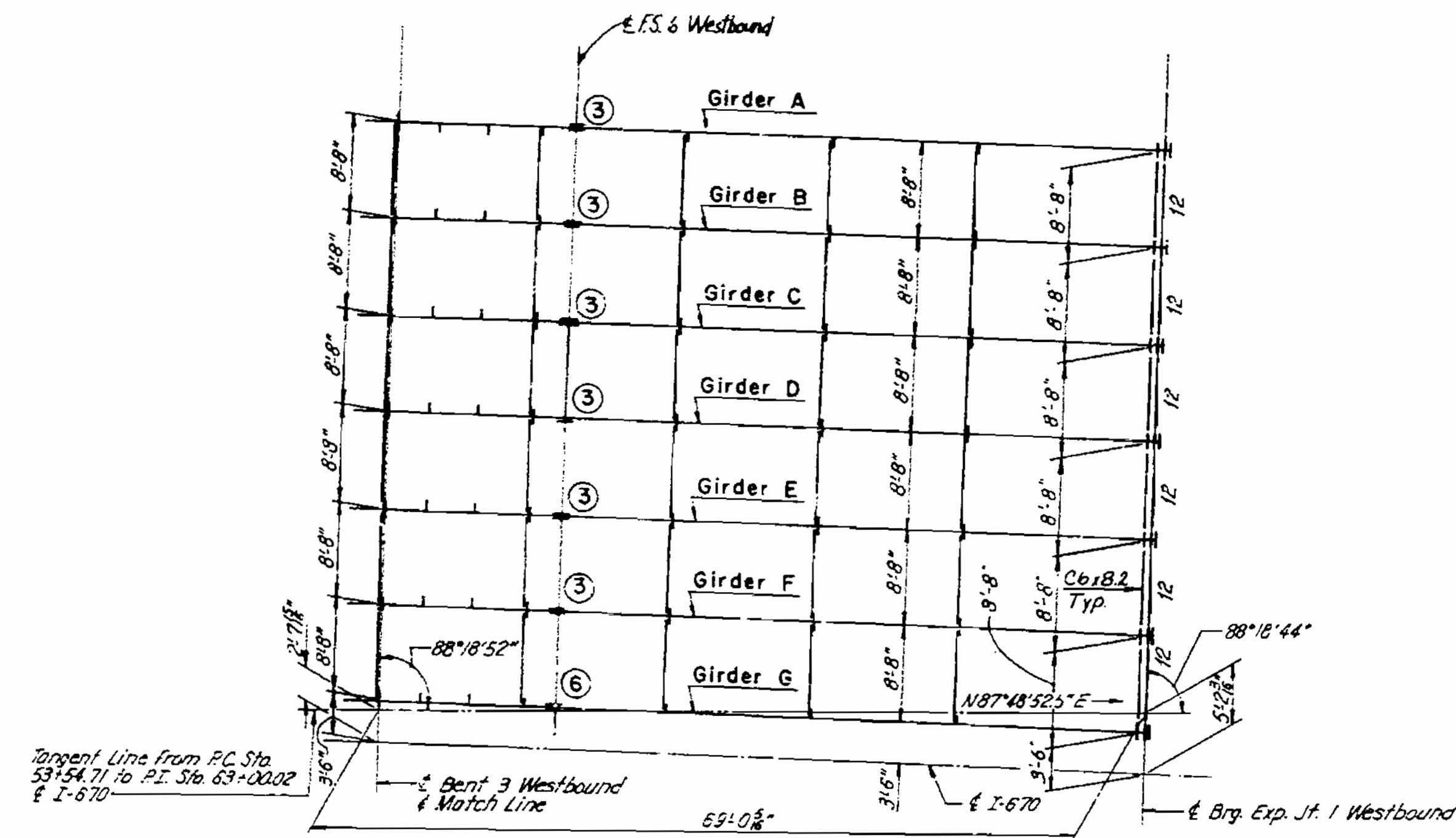
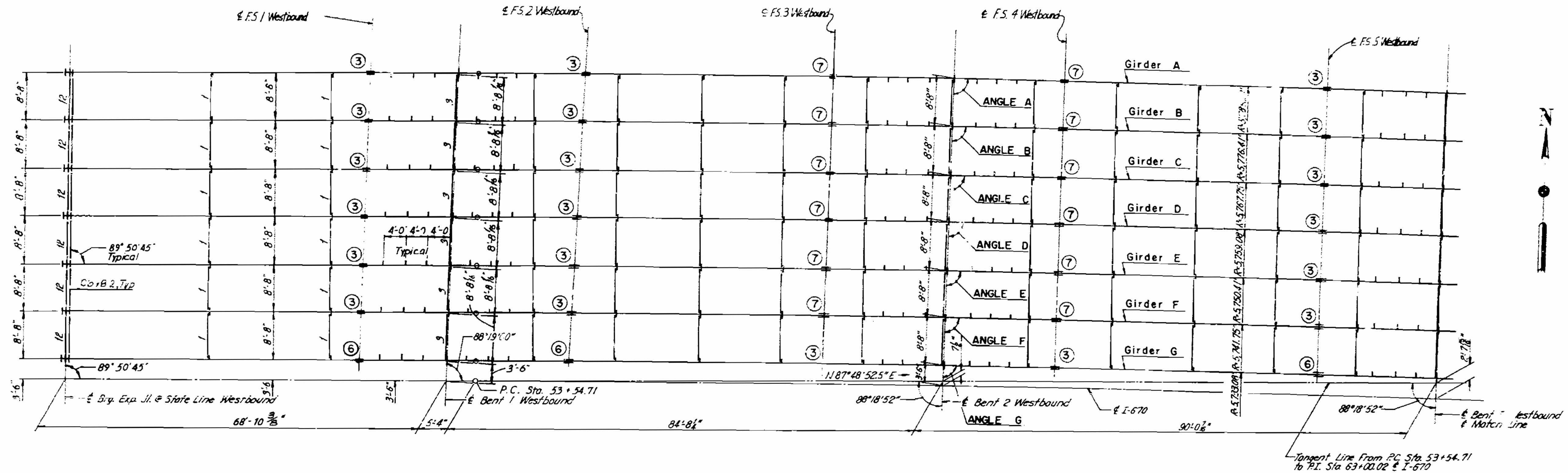
Notes:
 All dimensions are at top of web along grade and I Girders.
 Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade.
 All flanges are A-36 Steel unless noted otherwise.
 All webs are A-572 Low Alloy Steel.
 All webs are A-36 Steel.
 *** Indicates flange plates subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements.
 Heat curving of girder sections denoted by ∇ will not be allowed while in the horizontal position.

POINT OF TANGENT	74'-0 1/2"	Vertical Line (P.C. Sta. 53+54.71)
Girder A	74'-0 1/2"	
Girder B	74'-0 1/2"	
Girder C	74'-1 1/2"	
Girder D	74'-1 1/2"	
Girder E	74'-1 1/2"	
Girder F	74'-2"	
Girder G	74'-2 1/2"	

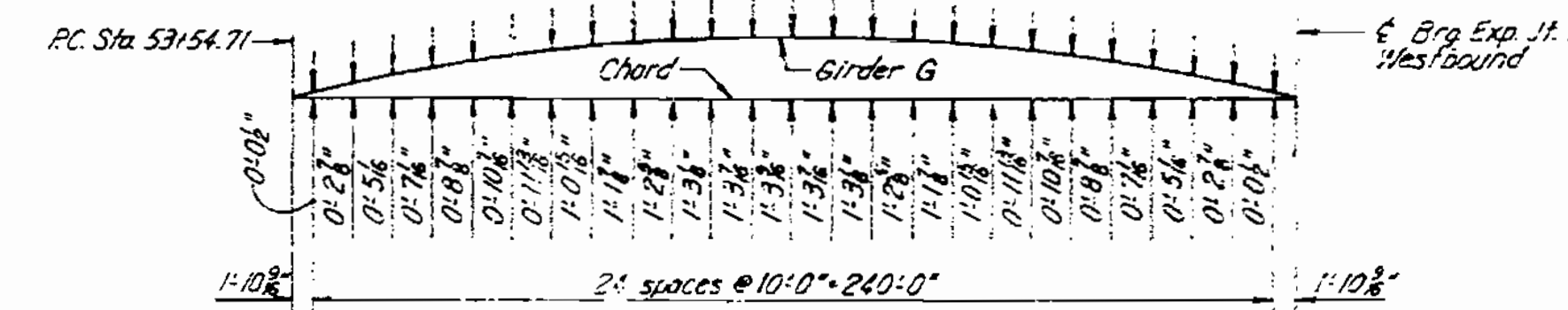
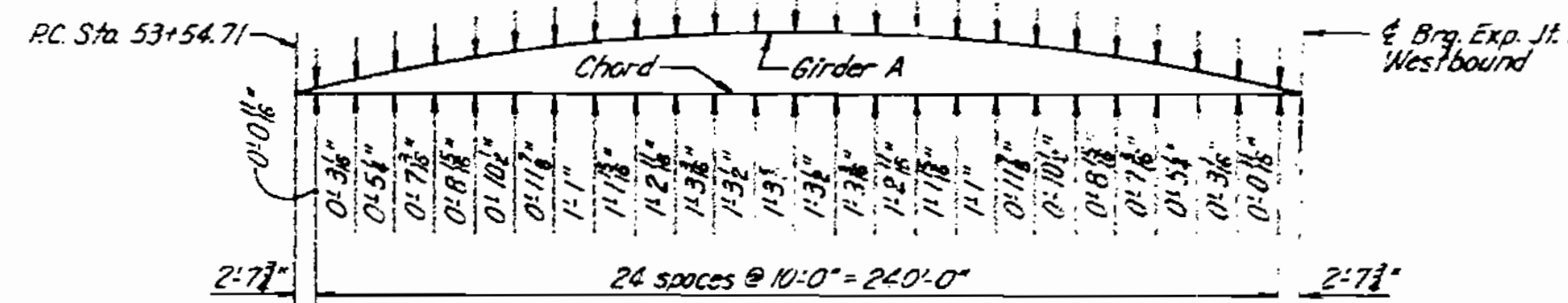
GIRDER ELEVATION - UNIT I

GIRDER ELEVATION - UNIT I WESTBOUND

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		79	152	



FRAMING PLAN - UNIT I WESTBOUND



CHORD OFFSETS TO EXTERIOR GIRDERS

ANGLE	BENT 1	BENT 2	BENT 3	BRG. EXP. JT.
ANGLE A	91° 41' 00"	90° 49' 51"	89° 56' 22"	89° 15' 30"
ANGLE B	91° 41' 00"	90° 49' 56"	89° 56' 22"	89° 15' 26"
ANGLE C	91° 41' 00"	90° 50' 00"	89° 56' 22"	89° 15' 22"
ANGLE D	91° 41' 00"	90° 50' 04"	89° 56' 21"	89° 15' 18"
ANGLE E	91° 41' 00"	90° 50' 09"	89° 56' 21"	89° 15' 14"
ANGLE F	91° 41' 00"	90° 50' 14"	89° 55' 20"	89° 15' 10"
ANGLE G	91° 41' 00"	90° 50' 18"	89° 55' 20"	89° 15' 06"

Notes:
 Dimensions shown are horizontal.
 The angle shown in the table is the angle between the Bent or Bearing of Expansion Joint and a local tangent to the girder at the location indicated.
 Intermediate stiffener plates are 1/2" x 4" and they are equally spaced between diaphragms where shown unless dimensioned otherwise.

Intermediate stiffener plates shall be placed on the side of the girder web as indicated on the framing plan.
 Diaphragm connection plates are 1/2" x 4".
 Numbers near diaphragms denote diaphragm type. The diaphragms with no number by them are type 2.
 ① designates type of field splice.
 For diaphragm details see Sheet 23.
 For field splice details see Sheet 21.
 For expansion joint details see Sheet 22.

FRAMING PLAN - UNIT I WESTBOUND

FRAMING PLAN - UNIT I WESTBOUND

DETAILED SUT 10/78
 CHECKED MGN 10/79

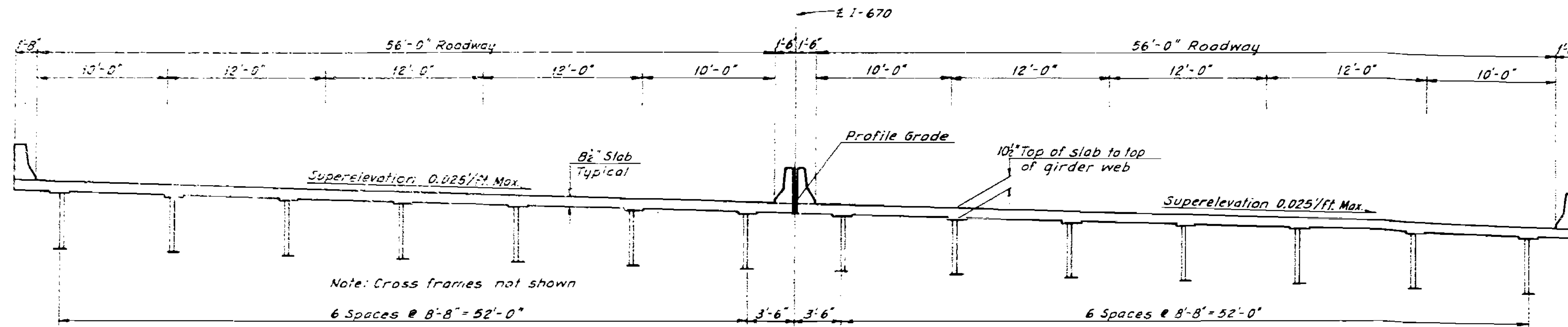
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 5 of 24.

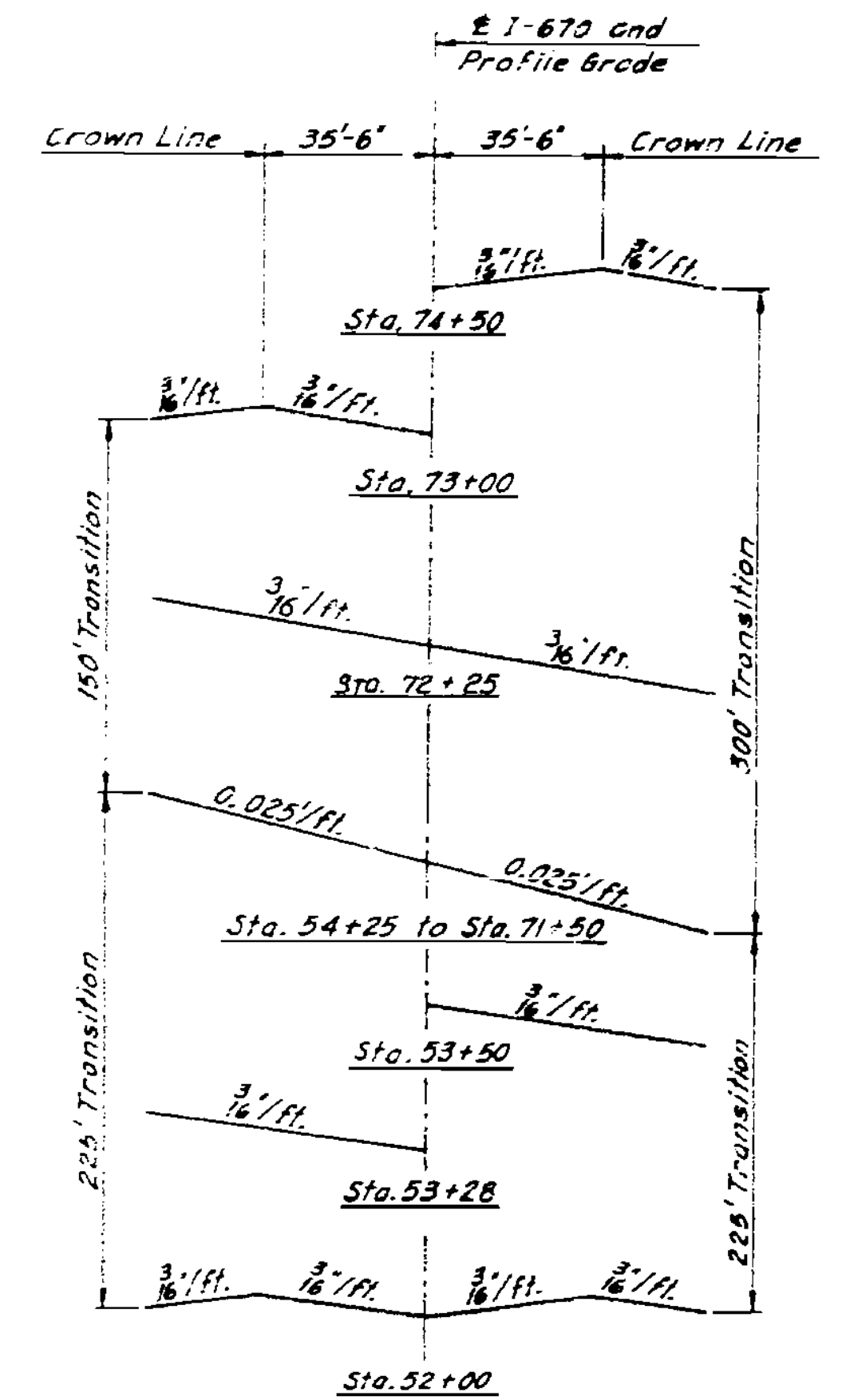
JACKSON COUNTY

A-3136

F.D. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		8	151	



TYPICAL SECTION - UNITS 1, 2, 3, AND 4

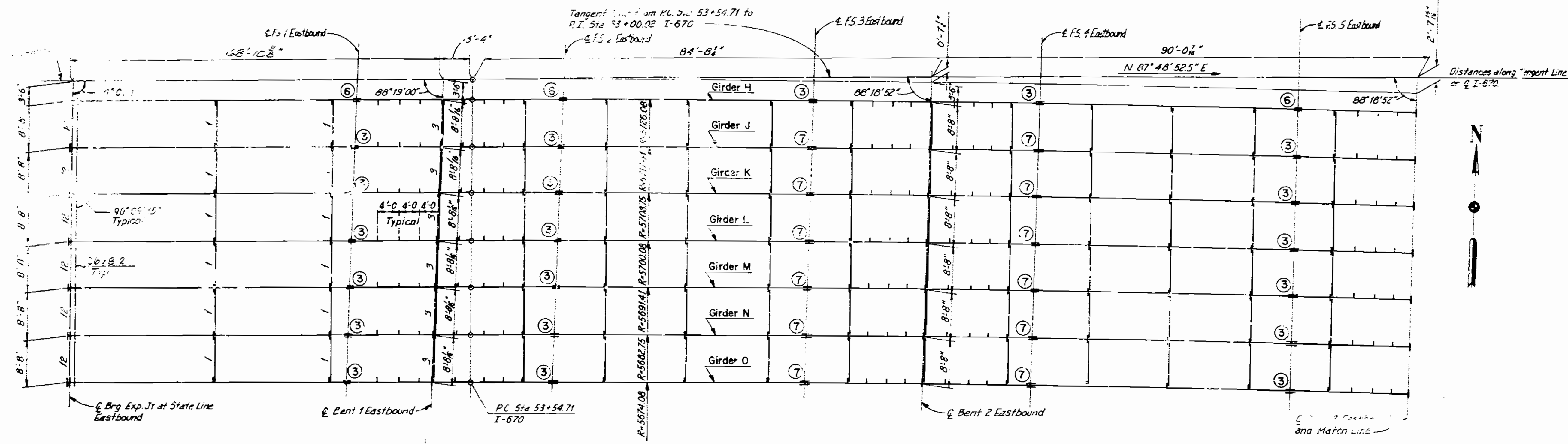


WESTBOUND EASTBOUND
SUPERELEVATION TRANSITIONS

ESTIMATED QUANTITIES												
	UNIT	WESTBOUND LANES SUPERSTRUCTURE					EASTBOUND LANES SUPERSTRUCTURE					TOTAL
		UNIT 1	UNIT 2	UNIT 3	UNIT 4	TOTAL	UNIT 1	UNIT 2	UNIT 3	UNIT 4	TOTAL	
Fabricated Structural Carbon Steel Plate Girder	Pound	319,380	335,100	110,650	250,080	1,015,210	317,900	335,120	110,520	250,110	1,013,650	2,028,860
Fabricated Structural Low Alloy Steel Plate Girder	Pound	70,730	68,080	33,550	49,950	222,310	70,730	68,080	33,550	49,950	222,310	444,620
Fabricated Structural Steel Bearings	Pound	5,400	6,870	2,970	5,940	21,180	5,400	6,870	2,970	5,940	21,180	42,360

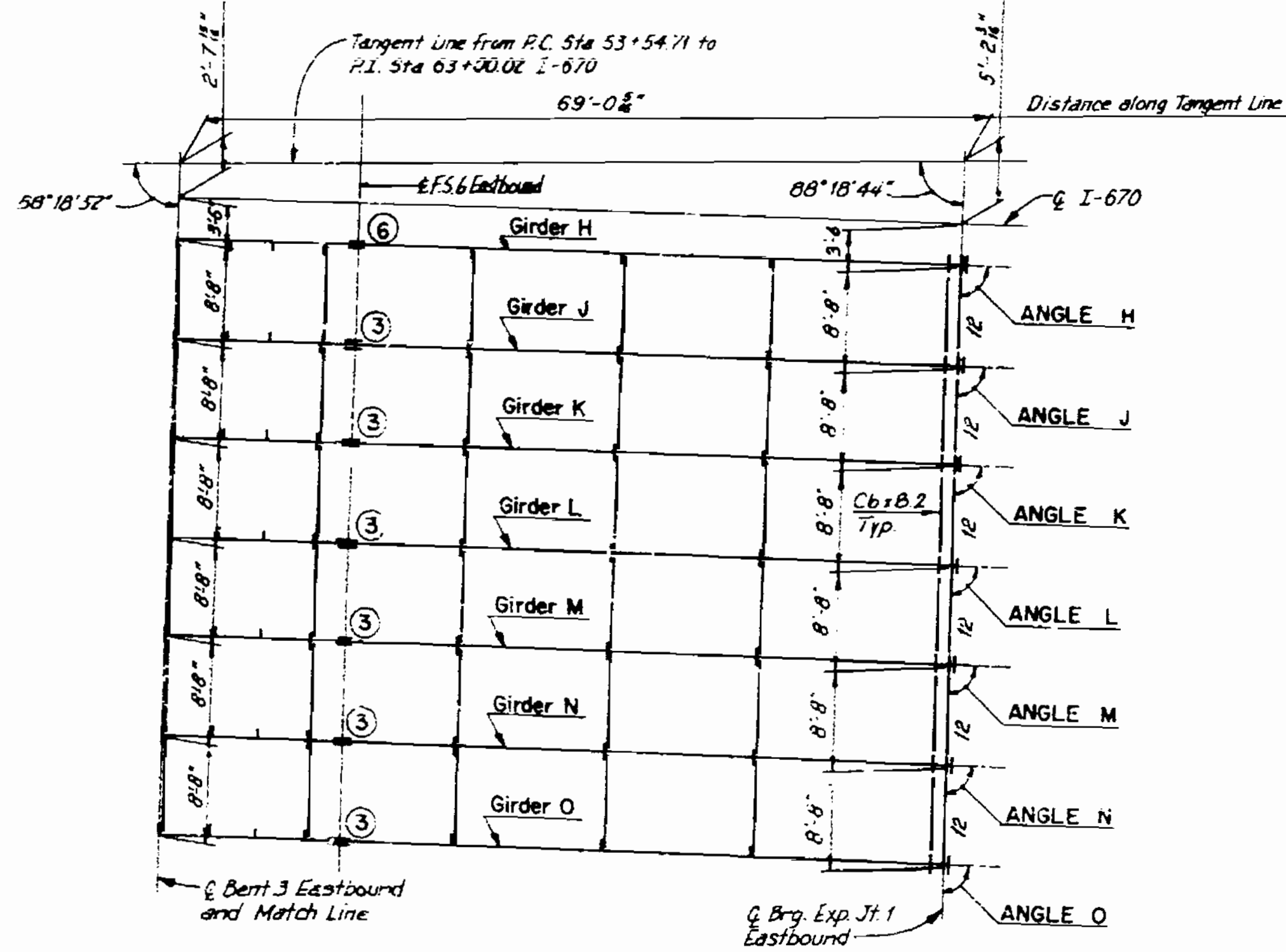
SUMMARY OF QUANTITIES AND TYPICAL SECTION

FEED. ROAD DIST. NO.	STATE	FEED. AND PROJ. NO.	FEED. YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		1978	64	

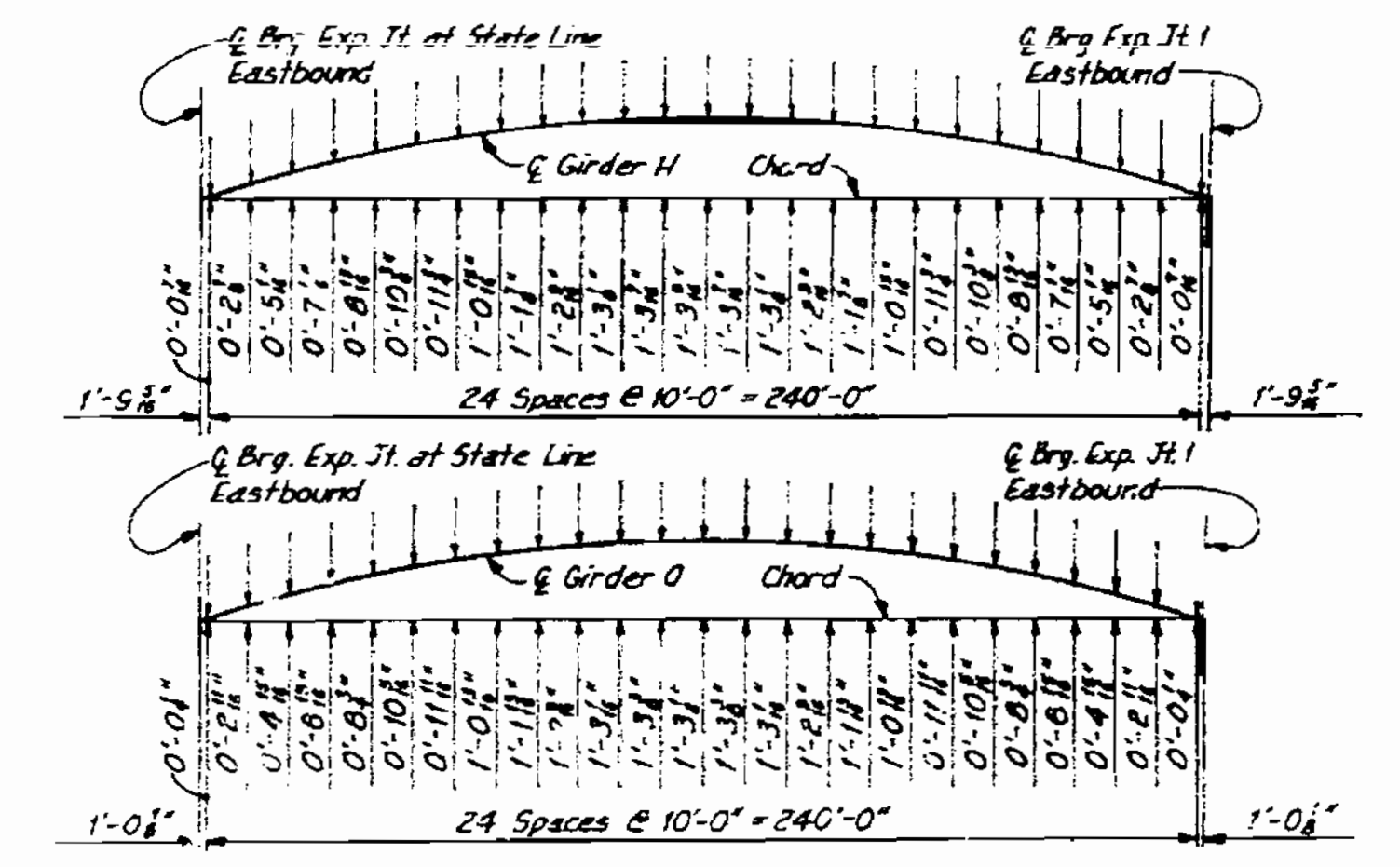


FRAMING PLAN-UNIT I EASTBOUND

ANGLE	BENT 1	BENT 2	BENT 3	BRG. EXP. JT. 1
ANGLE H	91° 41' 00"	90° 50' 22"	89° 55' 20"	89° 15' 02"
ANGLE J	91° 41' 00"	90° 50' 26"	89° 56' 19"	89° 14' 58"
ANGLE K	91° 41' 00"	90° 50' 31"	89° 56' 19"	89° 14' 54"
ANGLE L	91° 41' 00"	90° 50' 36"	89° 55' 19"	89° 14' 50"
ANGLE M	91° 41' 00"	90° 50' 40"	89° 55' 18"	89° 04' 46"
ANGLE N	91° 41' 00"	90° 50' 45"	89° 56' 18"	89° 14' 42"
ANGLE O	91° 41' 00"	90° 50' 09"	89° 56' 17"	89° 14' 38"



FRAMING PLAN-UNIT I EASTBOUND

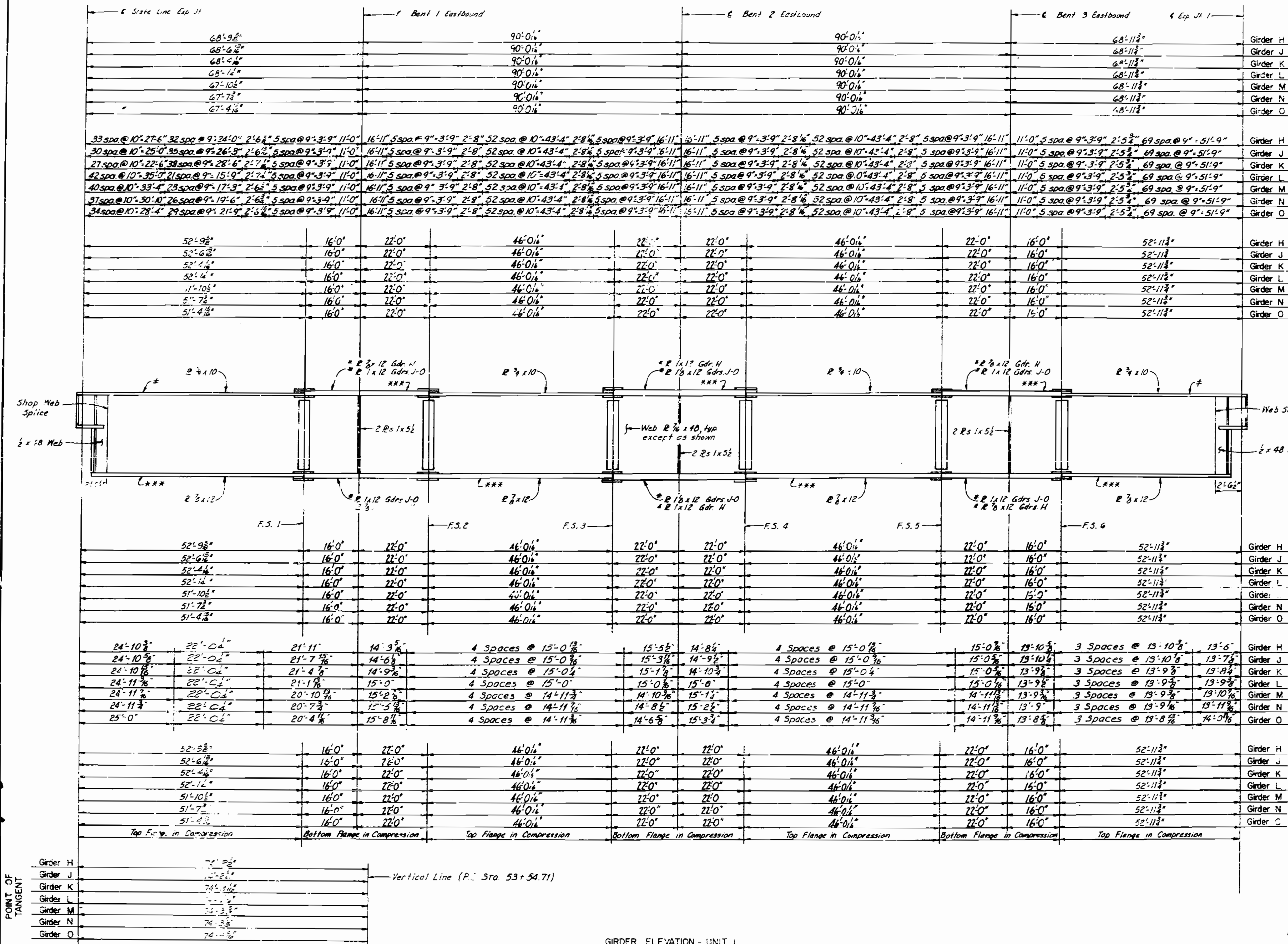


CHORD OFFSETS TO EXTERIOR GIRDERS

Notes:
 Dimensions shown are horizontal.
 The angle shown in the table is the angle between the Bent or Bearing of Expansion Joint and a local tangent to the girder at the location indicated.
 Intermediate stiffener plates are 3/4" x 4" and they are equally spaced between diaphragms where shown unless dimensioned otherwise.
 Intermediate stiffener plates shall be placed on the side of the girder web as indicated on the framing plan.
 Diaphragm connection plates are 3/4" x 4".
 Numbers near diaphragms denote diaphragm type. The diaphragms with no number by them are Type 2.
 1 designates Type of field splice.
 For diaphragm details see Sheet 21.
 For field splice details see Sheet 21.
 For expansion joint details see Sheet 22.

FRAMING PLAN - UNIT I EASTBOUND

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.			55	



SPAN LENGTH: Girder H to Girder O

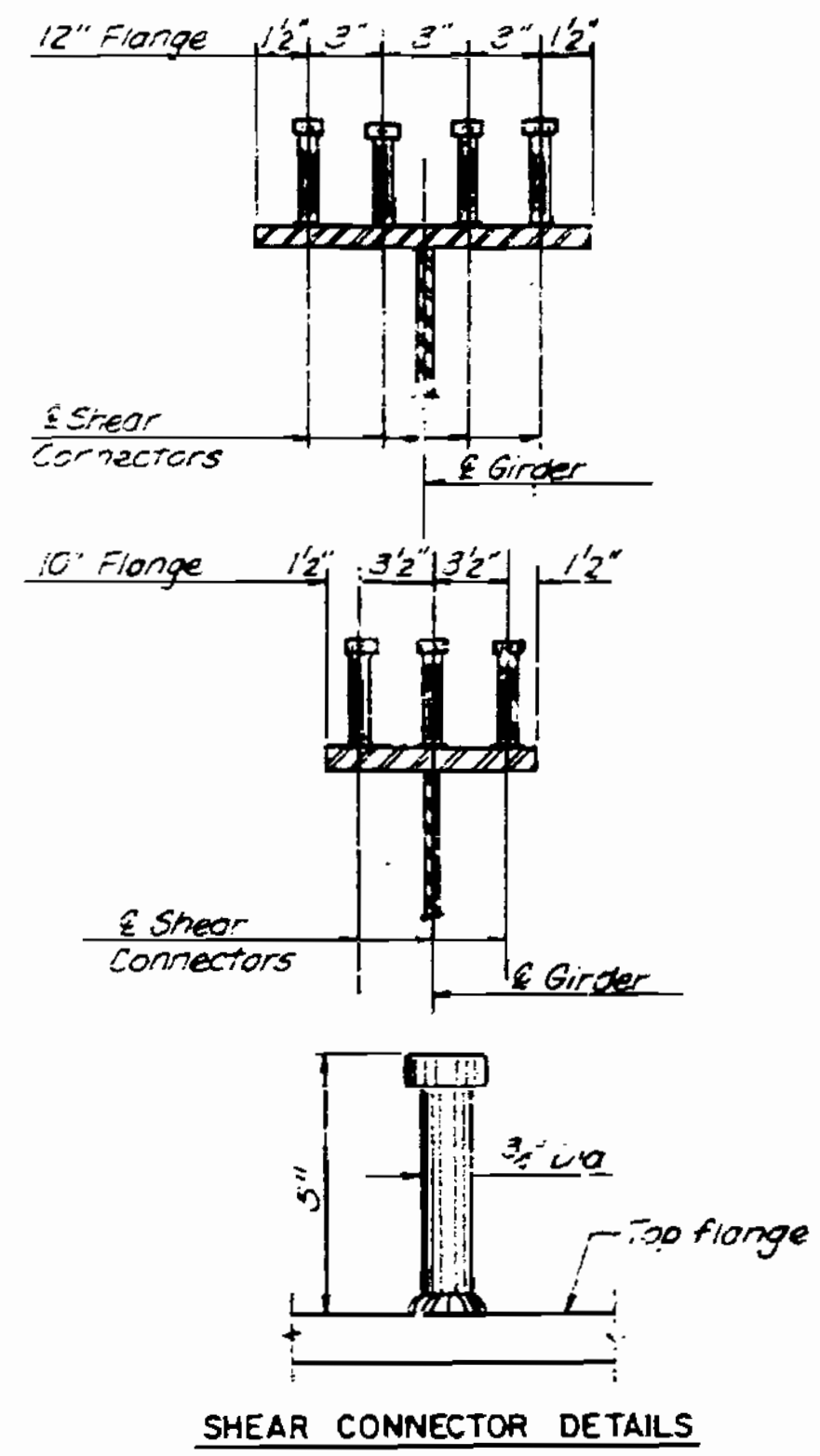
SHEAR CONNECTORS: 12" Flange, 10" Flange

TOP FLANGE PLATES: 52'-9 3/8" to 51'-4 1/8"

BOTTOM FLANGE PLATES: 24'-10 3/8" to 25'-0"

INTERMEDIATE DIAPHRAGMS: 4 Spaces @ 15'-0 3/8" to 4 Spaces @ 14'-11 3/8"

FIELD SPLICE: 52'-9 3/8" to 51'-4 1/8"

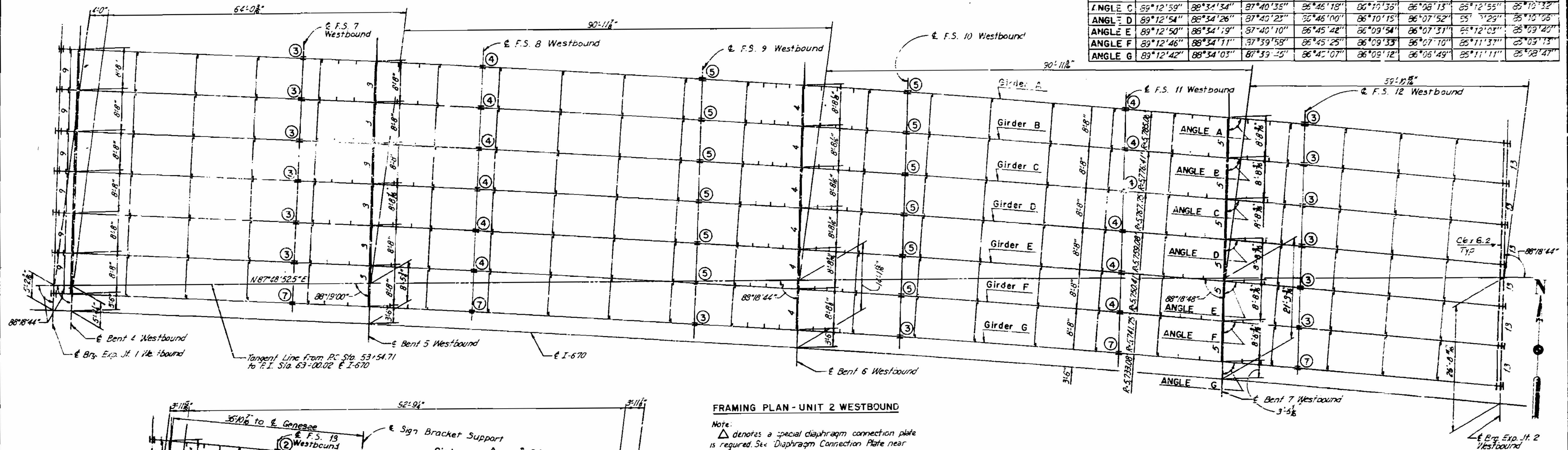


Notes:

- All connections at top of web along grade and girders.
- Unless otherwise shown, plates and bearing stiffeners are to be set normal to grade.
- All flanges are A-36 Steel unless noted otherwise.
- denotes A-572 Low Alloy Steel.
- All webs are A-36 Steel.
- *** indicates flange plates subject to notch toughness requirements.
- All web plates shall be subject to notch toughness requirements.
- Heat curving of girder sections denoted by # will not be allowed while in the horizontal position.

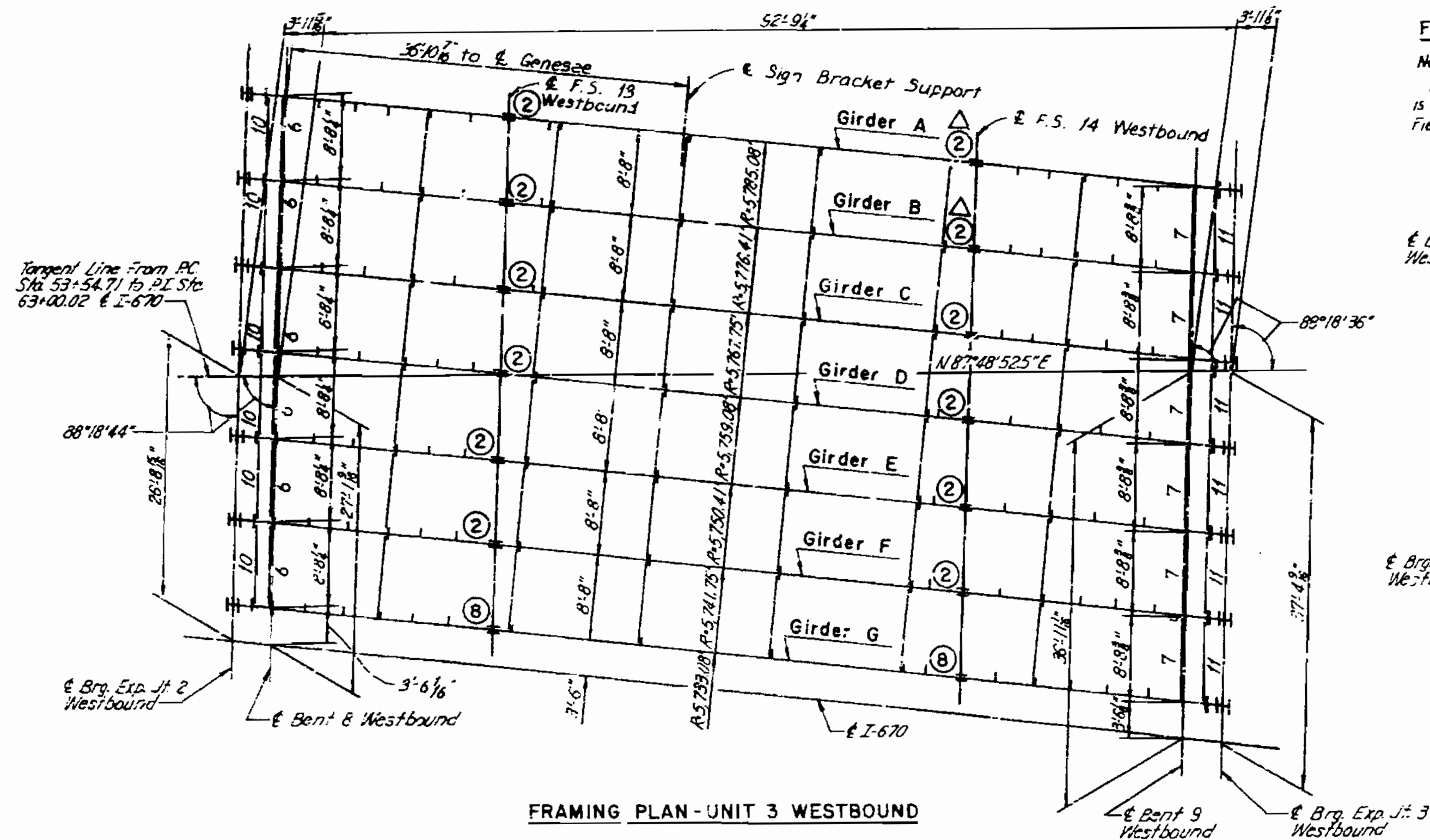
FED. ROAD DIST. NO.	STATE	PLA. AND PROJ. NO.	LOCAL YEAR	SHEET NO.	TOTAL SHEETS
3	IND.		1966	156	

ANGLE	BENT 4	BENT 5	BENT 6	BENT 7	BRG. EXP. JT. 2	BENT 9	BENT 9	BRG. EXP. JT. 3
ANGLE A	89°13'07"	88°34'50"	87°41'01"	86°46'52"	86°11'17"	86°08'54"	85°13'47"	85°11'24"
ANGLE B	89°13'03"	88°34'42"	87°40'48"	86°46'35"	86°10'56"	86°08'34"	85°13'21"	85°10'58"
ANGLE C	89°12'59"	88°34'34"	87°40'35"	86°46'18"	86°09'38"	86°08'13"	85°12'55"	85°10'32"
ANGLE D	89°12'54"	88°34'26"	87°40'23"	86°46'00"	86°10'15"	86°07'52"	85°12'29"	85°10'06"
ANGLE E	89°12'50"	88°34'19"	87°40'10"	86°45'42"	86°09'54"	86°07'31"	85°12'03"	85°09'40"
ANGLE F	89°12'46"	88°34'11"	87°39'58"	86°45'25"	86°09'33"	86°07'10"	85°11'37"	85°09'13"
ANGLE G	89°12'42"	88°34'03"	87°39'45"	86°45'07"	86°09'12"	86°06'49"	85°11'11"	85°08'47"

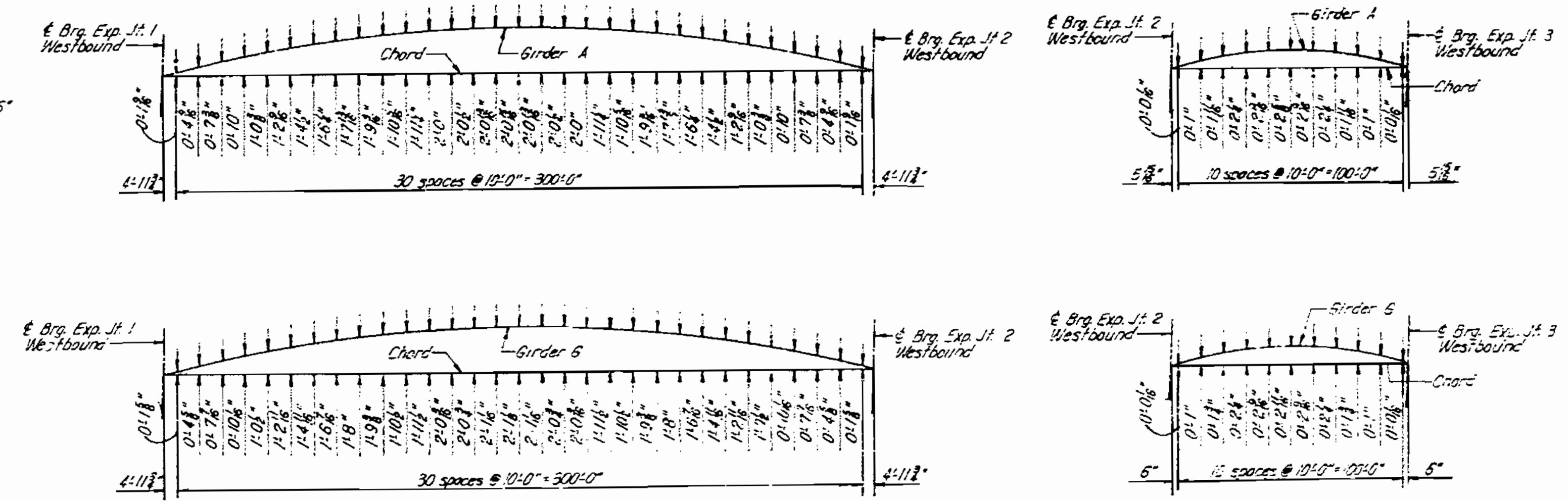


FRAMING PLAN - UNIT 2 WESTBOUND

Note:
 Δ denotes a special diaphragm connection plate is required. See "Diaphragm Connection Plate near Field Splice" sheet 23



FRAMING PLAN - UNIT 3 WESTBOUND



CHORD OFFSETS TO EXTERIOR GIRDERS

CHORD OFFSETS TO EXTERIOR GIRDERS

Notes:
 Dimensions shown are horizontal.
 The angle shown in the table is the angle between the Bent or Bearing of Expansion Joint and a local tangent to the girder at the location indicated.
 Intermediate stiffener plates are 3/4 x 4 and they are equally spaced between diaphragms where shown except in the area of the field splices. In these areas they are to be placed on whichever side of the splice that will make the spacing more nearly equal.

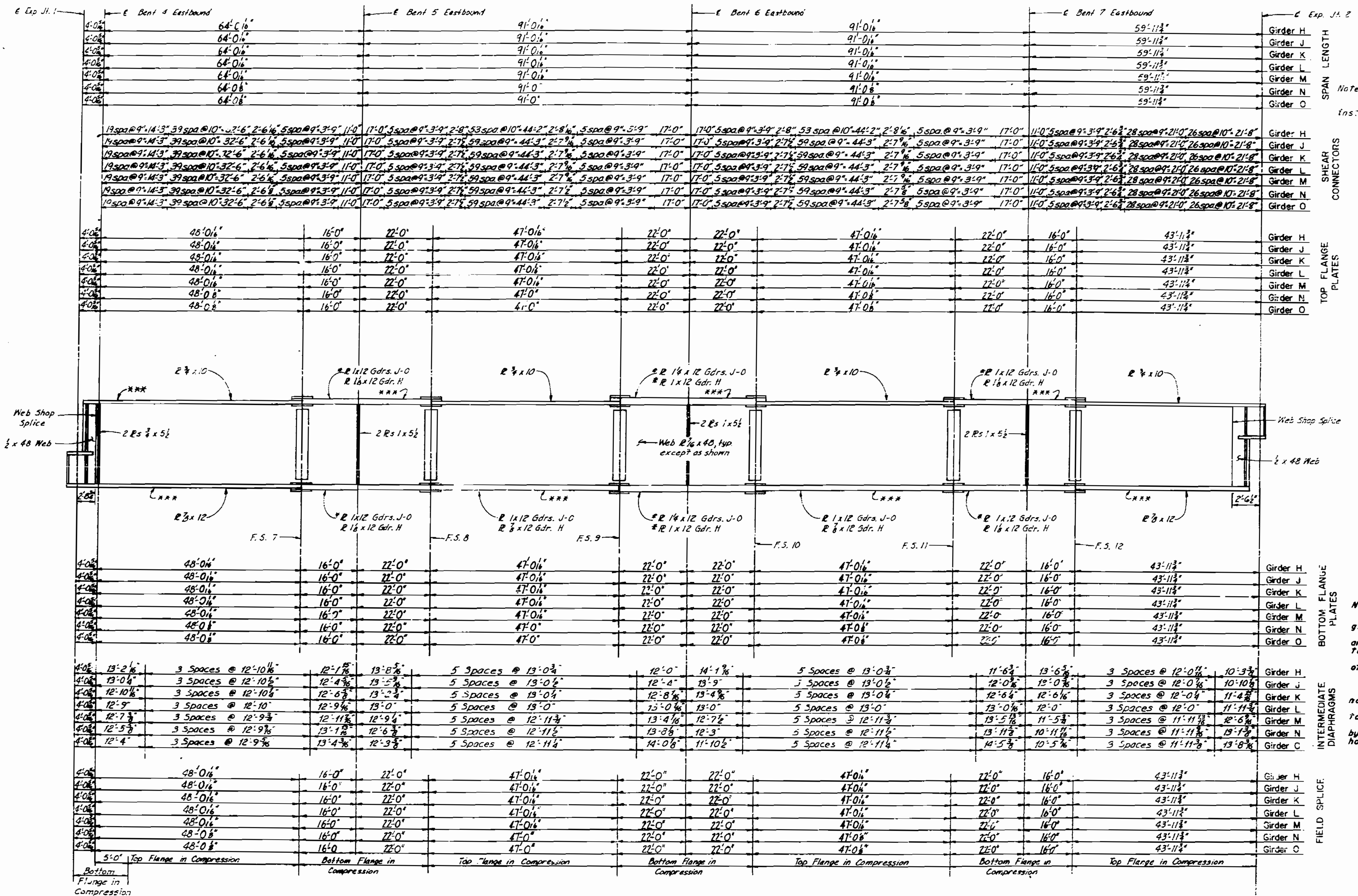
Intermediate stiffener plates shall be placed on the side of the girder web as indicated on the framing plan.
 Diaphragm connection plates are 3/4 x 4.
 Numbers near diaphragms denote diaphragm type. The diaphragms with an number by them are type 2.
 Δ designates type of field splice.
 For diaphragm details see Sheet 23.
 For field splice details see Sheet 21.
 For expansion joint details see Sheet 22.
 For detail of sign bracket see Sheet 21.
 Sheet No. 9 of 24.

FRAMING PLAN - UNITS 2 & 3 WESTBOUND

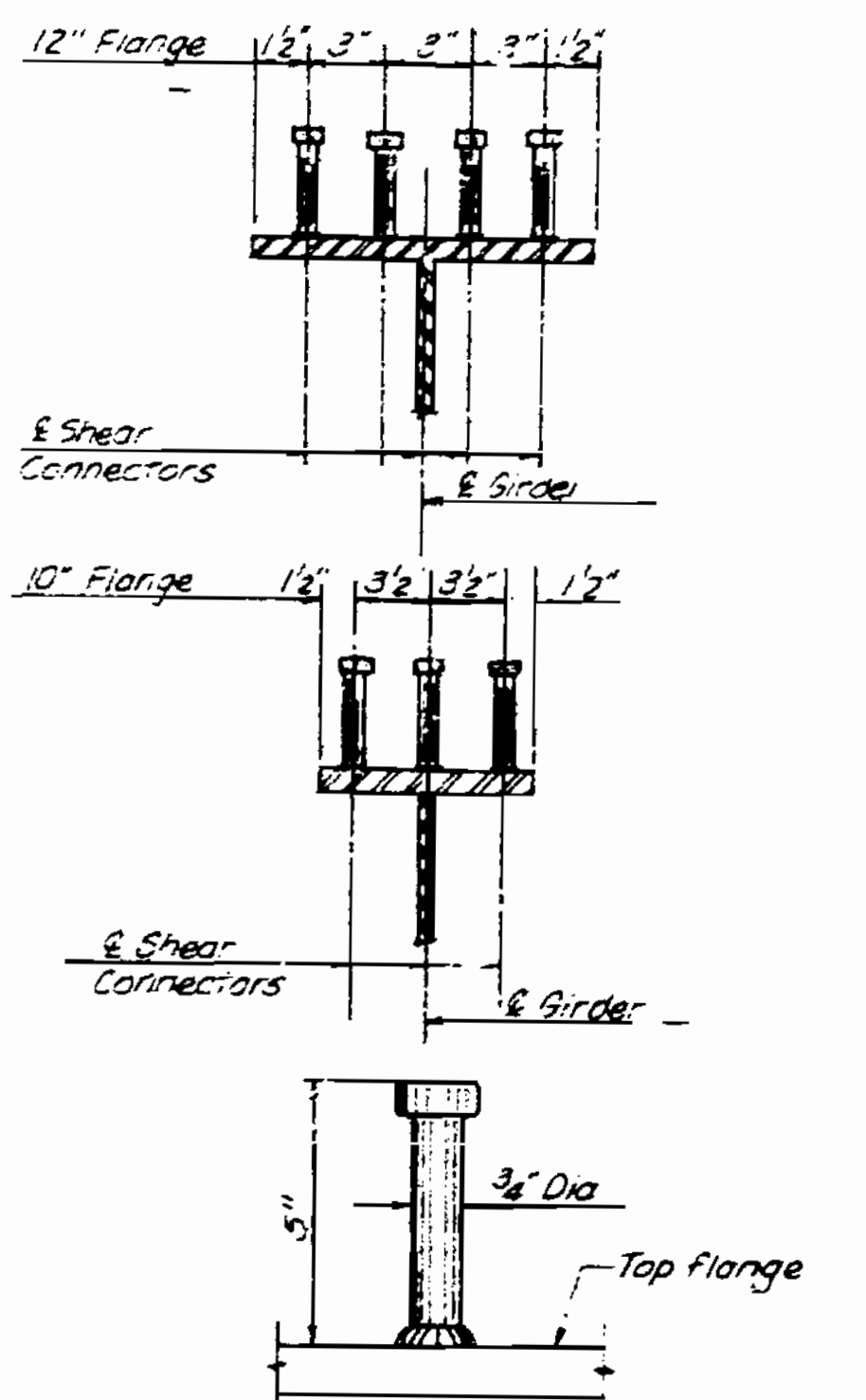
JACKSON COUNTY

A-3136

FILE NO.	STATE	FILE NO.	PROJECT	SHEET	TOTAL
5	MO.			159	160



Note: Shear connectors are not to be furnished or installed with the Structural Steel Contract.



Notes:

- All dimensions are at top of web along grade and 1/2" Girder.
- Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade.
- All flanges are A-36 Steel unless noted otherwise.
- denotes A-572 Low Alloy Steel.
- All webs are A-36 Steel.
- Indicates flange plates subject to notch toughness requirements.
- All web plates shall be subject to notch toughness requirements.
- Heat curving of girder sections denoted by \curvearrowright will not be allowed while in the horizontal position.

GIRDER ELEVATION - UNIT 2

GIRDER ELEVATION - UNIT 2 EASTBOUND

DETAILED J.R.E. 1079
CHECKED G.A.R. 1079

Note: This drawing is not to scale. Follow dimensions.

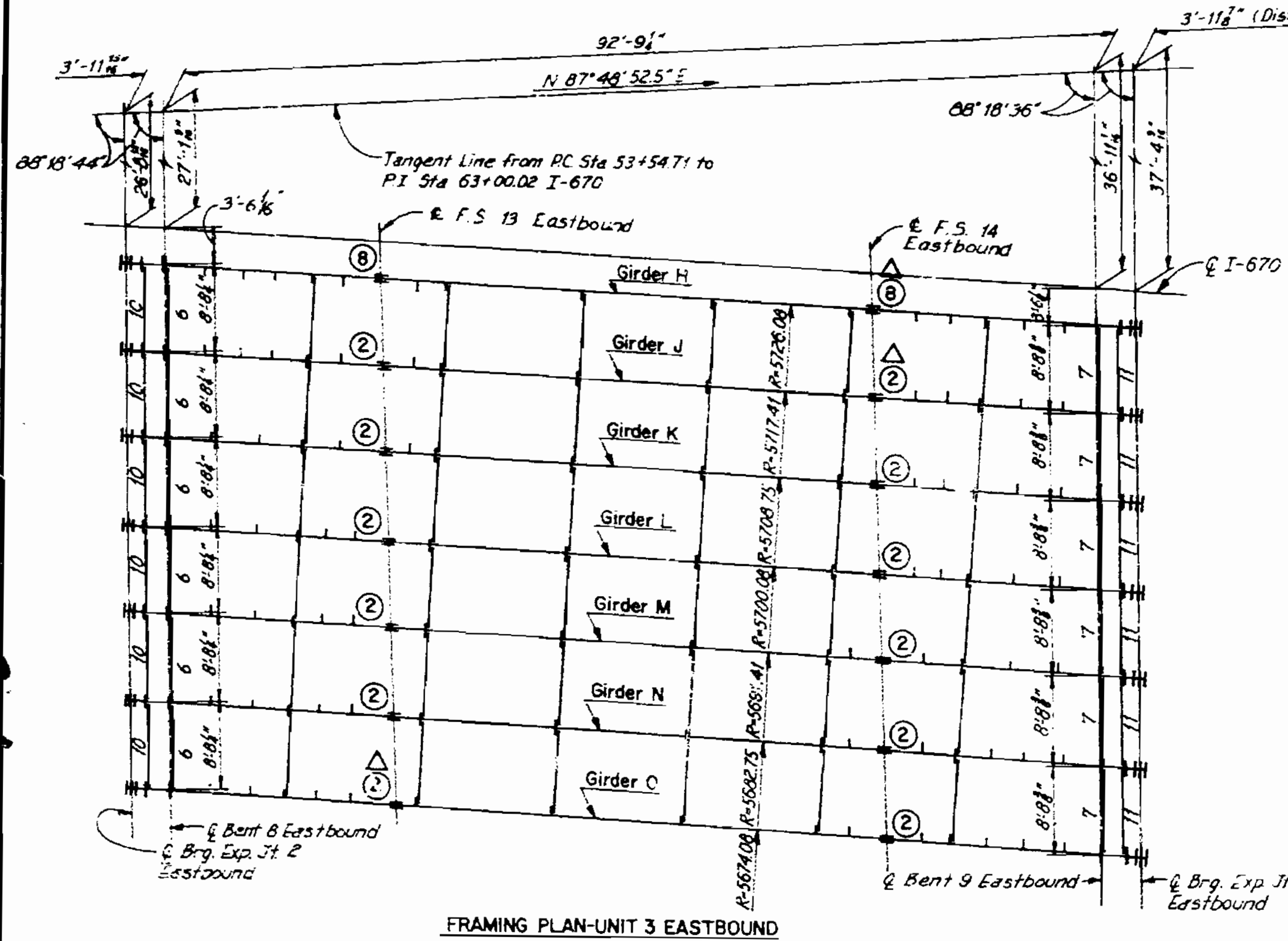
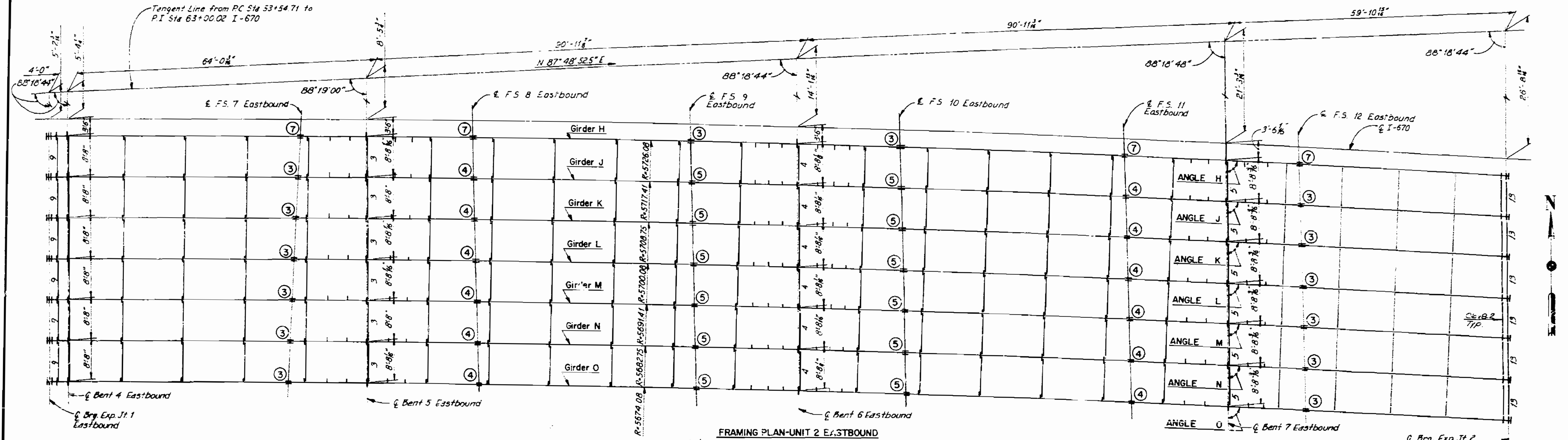
Sheet No. 12 of 24

JACKSON COUNTY

A-3136

770

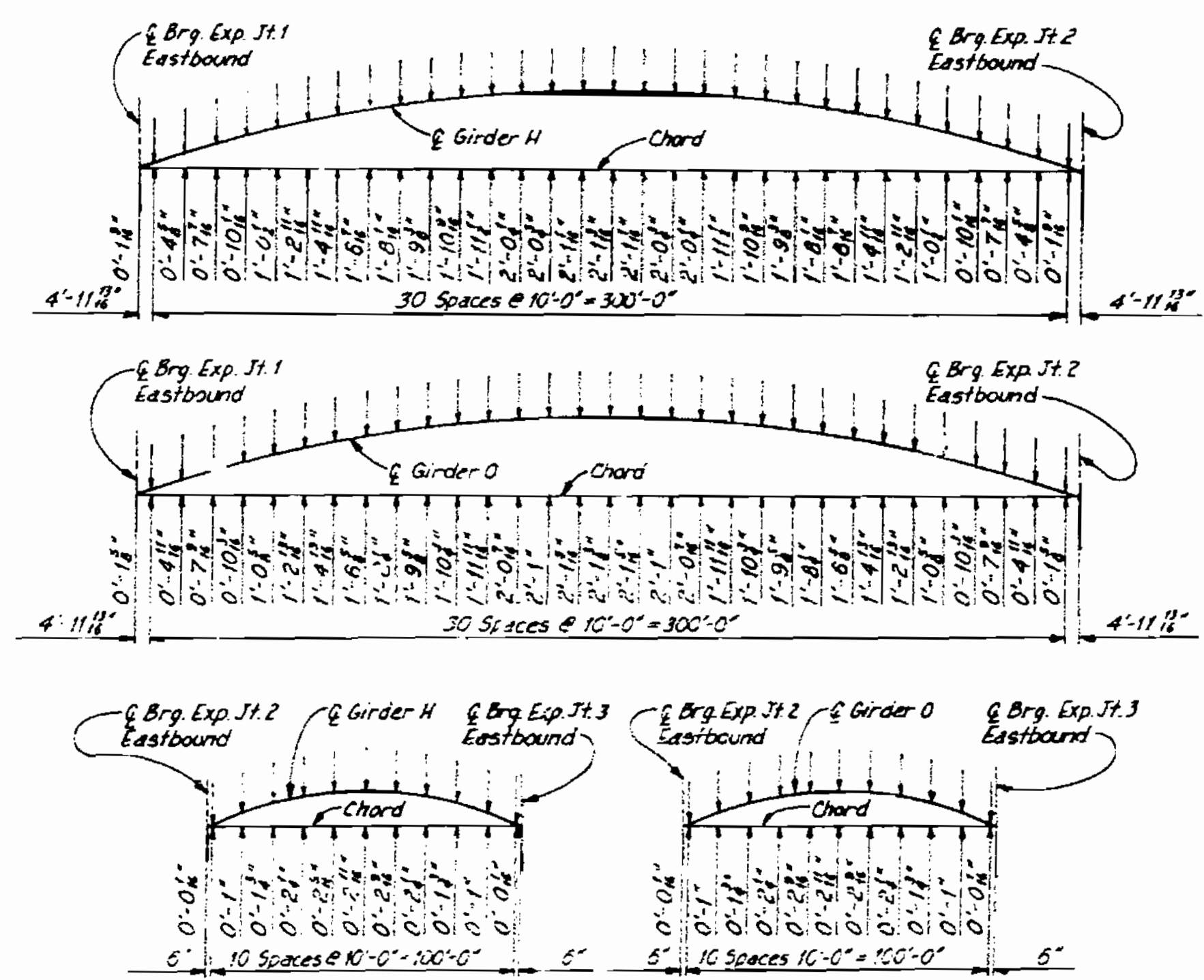
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		79	138	



ANGLE	BENT 4	BENT 5	BENT 6	BENT 7	BRG. EXP. JT. 2	BENT 8	BENT 9	BRG. EXP. JT. 3
ANGLE H	89°12'38"	88°33'57"	87°39'35"	86°44'53"	86°09'56"	86°06'31"	85°10'49"	85°08'25"
ANGLE J	89°12'34"	88°33'49"	87°39'22"	86°44'35"	86°08'34"	86°06'10"	85°10'23"	85°07'59"
ANGLE K	89°12'30"	88°33'41"	87°39'09"	86°44'17"	86°08'13"	86°05'49"	85°09'57"	85°07'32"
ANGLE L	89°12'25"	88°33'33"	87°38'56"	86°43'59"	86°07'52"	86°05'27"	85°09'30"	85°07'05"
ANGLE M	89°12'21"	88°33'25"	87°38'44"	86°43'42"	86°07'31"	86°05'06"	85°09'03"	85°06'38"
ANGLE N	89°12'17"	88°33'18"	87°38'31"	86°43'24"	86°07'19"	86°04'44"	85°08'37"	85°06'12"
ANGLE O	89°12'12"	88°33'10"	87°38'18"	86°43'05"	86°06'48"	86°04'23"	85°08'10"	85°05'45"

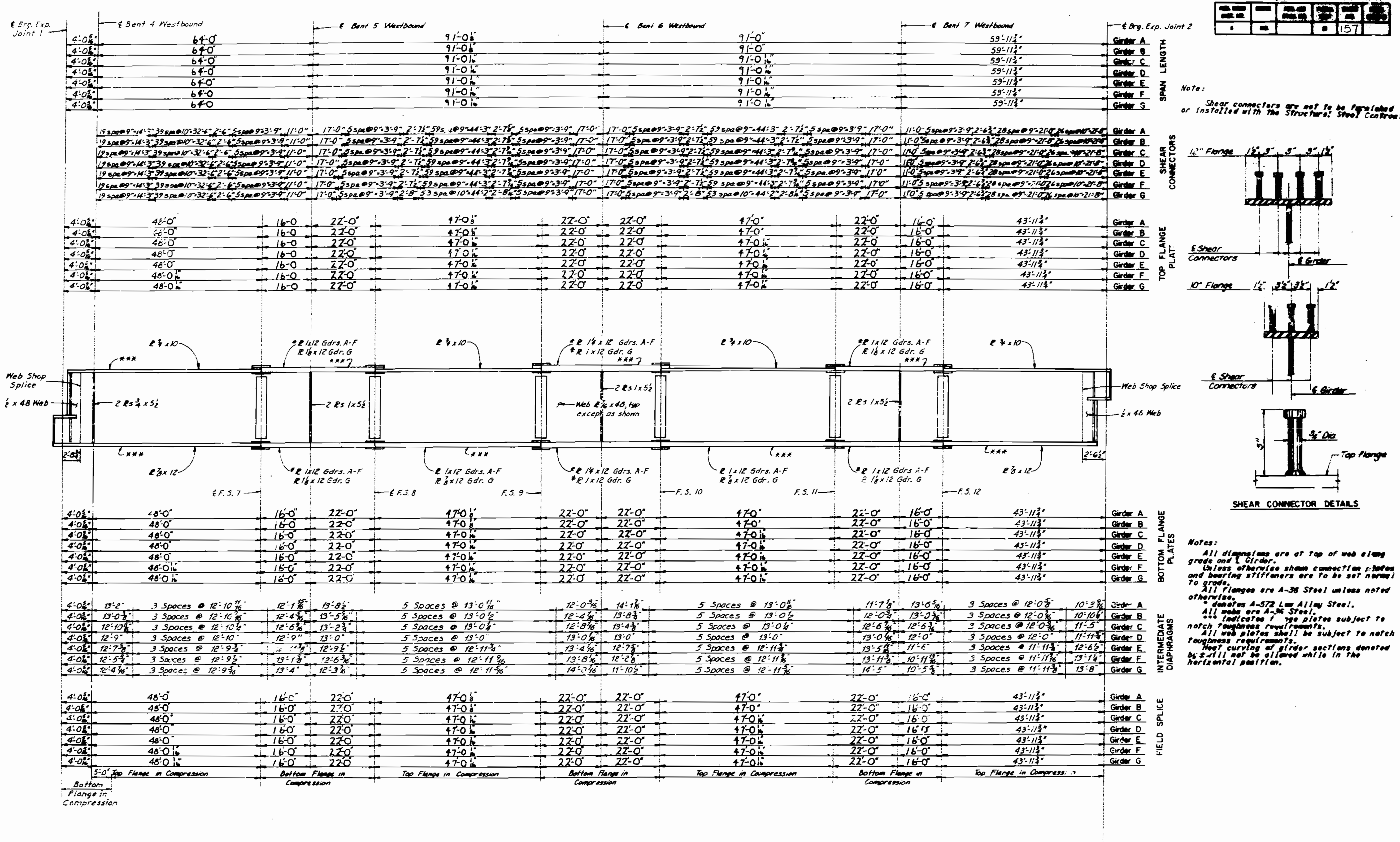
Note: Δ denotes a special diaphragm connection plate is required. See Diaphragm Connection Plate near Field Splice sheet 23.

Notes:
 Dimensions shown are horizontal.
 The angle shown in the table is the angle between ϵ Bent or ϵ Bearing of Expansion Joint and a local tangent to the girder at the location indicated.
 Intermediate stiffener plates are 2x4 and they are equally spaced between diaphragms where shown except in the area of the field splices. In these areas they are to be placed on whichever side of the splice that will make the spacing more nearly equal.
 Intermediate stiffener plates shall be placed on the side of the girder web as indicated on the Framing plan.
 Diaphragm connection plates are 2x4.
 Numbers near diaphragms denote diaphragm type. The diaphragms with no number by them are Type 2.
 $\textcircled{1}$ designates type of field splice.
 For diaphragm details see Sheet 23.
 For field splice details see Sheet 21.
 For expansion joint details see Sheet 22.

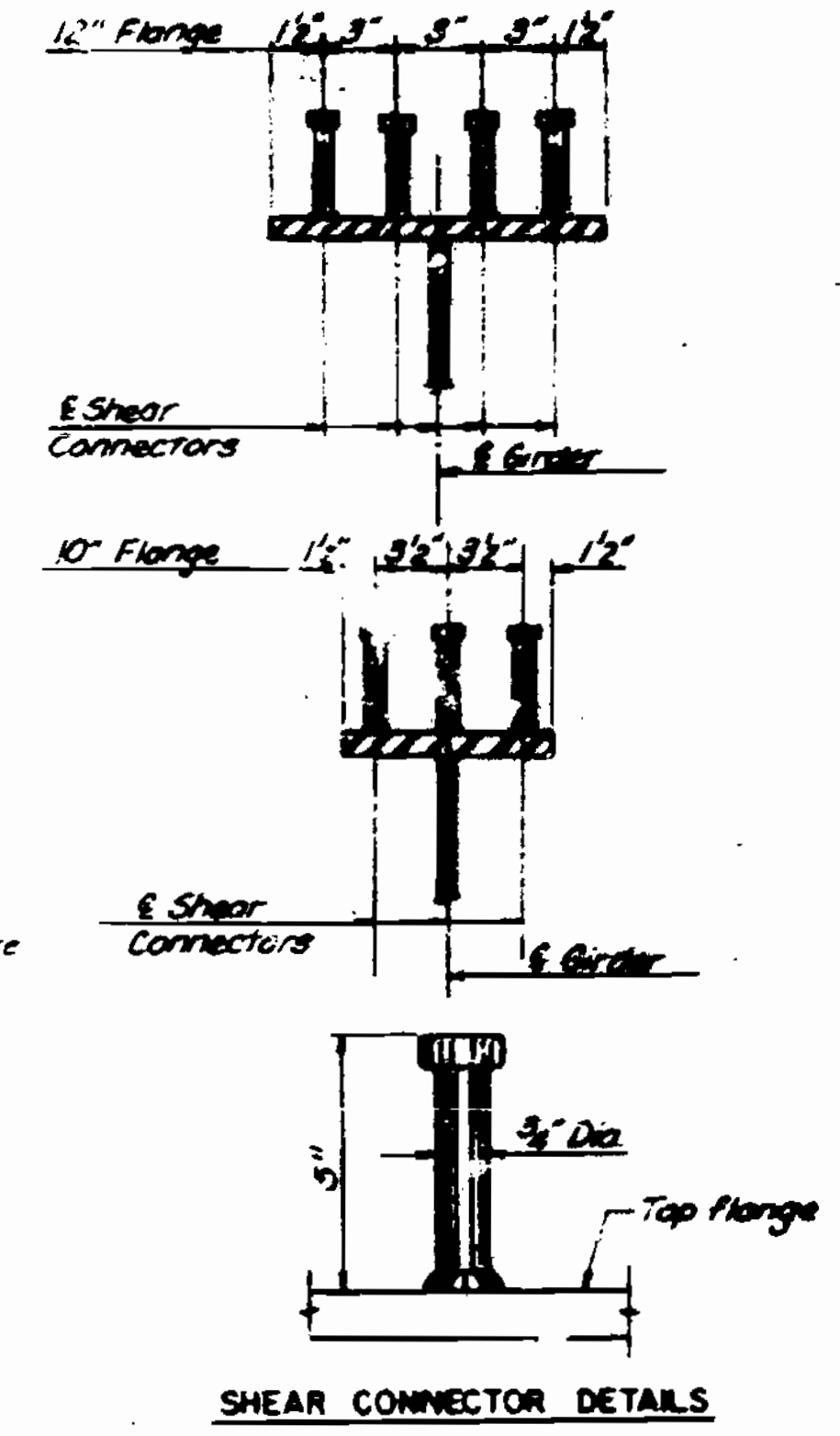


CHORD OFFSETS TO EXTERIOR GIRDERS

FRAMING PLAN - UNITS 2 & 3 EASTBOUND



Note: Shear connectors are not to be furnished or installed with the structure; Steel Control.

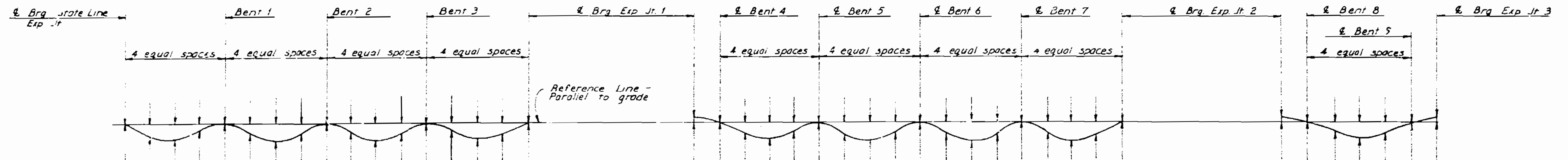


Notes: All dimensions are at top of web along grade and 1' Girder. Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade. All flanges are A-36 Steel unless noted otherwise. * denotes A-572 Low Alloy Steel. All webs are A-36 Steel. *** indicates 1/2" gage plates subject to notch toughness requirements. All web plates shall be subject to notch toughness requirements. Heat curving of girder sections denoted by 2 shall not be allowed while in the horizontal position.

GIRDER ELEVATION - UNIT 2

GIRDER ELEVATION - UNIT 2 WESTBOUND

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.			160	



Girder A	0	1/8	7/16	3/8	0	3/8	1/4	3/8	0	3/8	1/4	3/8	0	3/16	7/16	3/8	0
Girders B,C,D,E,F	0	1/16	1/2	3/16	0	1/16	3/8	3/8	0	3/8	3/8	1/8	0	3/16	1/2	3/16	0
Girder G	0	3/8	1/8	3/16	0	3/8	1/16	3/8	0	3/8	1/4	3/8	0	3/16	7/16	3/8	0

UNIT 1

Girder A	-1/8	0	3/16	3/16	1/8	0	7/16	3/4	3/8	0	3/8	3/4	7/16	0	1/8	3/16	3/16	0
Girders B,C,D,E,F	-1/8	0	3/16	3/16	1/8	0	5/16	7/16	1/8	0	1/8	3/8	1/2	0	1/8	7/16	3/16	0
Girder G	-1/8	0	1/8	1/8	0	0	1/2	3/4	3/8	7/8	3/8	3/4	1/2	0	0	1/8	1/8	0

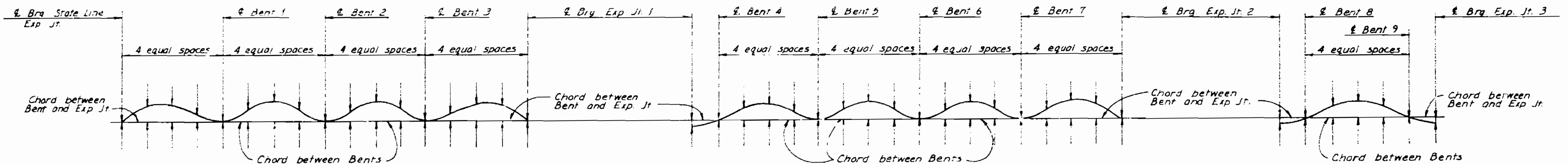
UNIT 2

Girder A	-1/8	0	2 3/16	3 3/16	2 3/4	0	-1/8
Girders B,C,D,E,F	-1/2	0	2 1/2	3 1/2	2 1/2	0	-1/8
Girder G	-1/8	0	2 3/16	3 1/4	2 3/4	0	-1/8

UNIT 3

DEAD LOAD DEFLECTION DIAGRAM

15% of dead load deflection is due to weight of structural steel.



Girder A	0	3/8	7/16	3/8	0	3/8	1/4	3/8	0	3/8	1/4	3/8	0	3/16	7/16	3/8	0
Girders B,C,D,E,F	0	1/16	1/2	3/16	0	1/16	3/8	3/8	0	3/8	3/8	1/8	0	3/16	1/2	3/16	0
Girder G	0	3/8	1/8	3/16	0	3/8	1/16	3/8	0	3/8	1/4	3/8	0	3/16	7/16	3/8	0

UNIT 1

Girder A	-1/8	0	3/16	3/16	1/8	0	7/16	3/4	3/8	0	3/8	3/4	7/16	0	1/8	3/16	3/16	0
Girders B,C,D,E,F	-1/8	0	3/16	3/16	1/8	0	5/16	7/16	1/8	0	1/8	3/8	1/2	0	1/8	7/16	3/16	0
Girder G	-1/8	0	1/8	1/8	0	0	1/2	3/4	3/8	7/8	3/8	3/4	1/2	0	0	1/8	1/8	0

UNIT 2

Girder A	-1/8	0	2 3/16	3 3/16	2 3/4	0	-1/8
Girders B,C,D,E,F	-1/2	0	2 1/2	3 1/2	2 1/2	0	-1/8
Girder G	-1/8	0	2 3/16	3 1/4	2 3/4	0	-1/8

UNIT 3

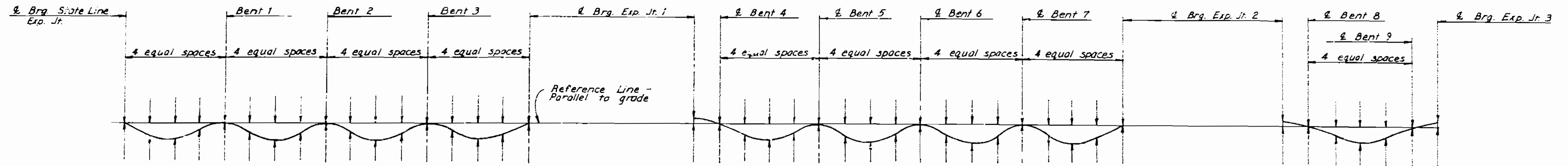
CAMBER DIAGRAM

Girder A	0	3/16	2/16	1/16	0	3/16	1 3/16	1 1/8	0
Girder B	0	1/16	1/16	1/16	0	3/16	1 3/16	1"	0
Girder C	0	1/16	1/16	1/16	0	3/16	1 3/16	3/8"	0
Girder D	0	1/16	1/16	1/16	0	3/16	1"	3/16"	0
Girder E	0	3/16	1/16	1/16	0	3/16	1 3/16	3/16"	0
Girder F	0	3/16	3/16	0	0	1/2	7/16	1/2"	0
Girder G	0	3/16	3/16	1/16	0	3/16	1 1/16	3/16"	0

Deflection and Camber Notes.
 Negative dead load deflection values are upward deflections.
 Negative camber values are cambers below the reference chord.
 Reference chords shown for camber are 10" below top of slab at & Bents and & Sealing Expansion Joints.

DEFLECTIONS AND CAMBER
 UNITS 1, 2, AND 3 WESTBOUND

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		59	61	



Girder O	0	3/8"	1/8"	3/16"	0	3/8"	1/8"	3/16"	0	3/8"	1/8"	3/16"	0	3/16"	1/8"	3/16"	0
Girders J,K,L,M,N	0	7/16"	1/2"	3/8"	0	7/16"	1/2"	3/8"	0	7/16"	1/2"	3/8"	0	7/16"	1/2"	3/8"	0
Girder H	0	3/8"	1/8"	3/16"	0	3/8"	1/8"	3/16"	0	3/8"	1/8"	3/16"	0	3/8"	1/8"	3/16"	0

UNIT 1

Girder O	-1/8"	0	3/16"	3/16"	1/8"	0	3/16"	3/16"	3/8"	0	3/16"	3/16"	3/8"	0	1/8"	3/16"	3/16"	0
Girders J,K,L,M,N	-1/8"	0	3/16"	3/16"	1/8"	0	3/16"	3/16"	3/8"	0	3/16"	3/16"	3/8"	0	1/8"	3/16"	3/16"	0
Girder H	-1/8"	0	1/8"	1/8"	0	0	1/2"	3/8"	3/8"	0	3/8"	3/8"	1/2"	0	0	1/8"	1/8"	0

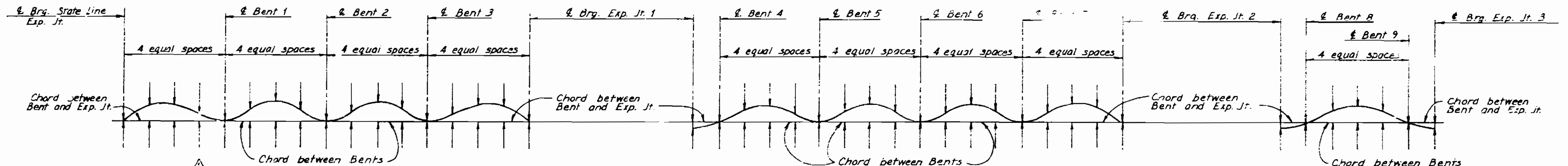
UNIT 2

Girder O	-1/8"	0	2 3/8"	3 3/8"	2 3/4"	0	-1/8"
Girders J,K,L,M,N	-1/8"	0	2 3/8"	3 3/8"	2 3/4"	0	-1/8"
Girder H	-1/8"	0	2 3/8"	3 3/4"	2 3/4"	0	-1/8"

UNIT 3

DEAD LOAD DEFLECTION DIAGRAM

15% of dead load deflection is due to weight of structural steel.



Girder O	0	3/8"	1/8"	3/16"	0	3/8"	1/8"	3/16"	0	3/8"	1/8"	3/16"	0	3/16"	1/8"	3/16"	0
Girders J,K,L,M,N	0	7/16"	1/2"	3/8"	0	7/16"	1/2"	3/8"	0	7/16"	1/2"	3/8"	0	7/16"	1/2"	3/8"	0
Girder H	0	3/8"	1/8"	3/16"	0	3/8"	1/8"	3/16"	0	3/8"	1/8"	3/16"	0	3/8"	1/8"	3/16"	0

UNIT 1

Girder O	-1/8"	0	3/16"	3/16"	1/8"	0	3/16"	3/16"	3/8"	0	3/16"	3/16"	3/8"	0	1/8"	3/16"	3/16"	0
Girders J,K,L,M,N	-1/8"	0	3/16"	3/16"	1/8"	0	3/16"	3/16"	3/8"	0	3/16"	3/16"	3/8"	0	1/8"	3/16"	3/16"	0
Girder H	-1/8"	0	1/8"	1/8"	0	0	1/2"	3/8"	3/8"	0	3/8"	3/8"	1/2"	0	0	1/8"	1/8"	0

UNIT 2

Girder O	-1/8"	0	2 3/8"	3 3/8"	2 3/4"	0	-1/8"
Girders J,K,L,M,N	-1/8"	0	2 3/8"	3 3/8"	2 3/4"	0	-1/8"
Girder H	-1/8"	0	2 3/8"	3 3/4"	2 3/4"	0	-1/8"

UNIT 3

CAMBER DIAGRAM

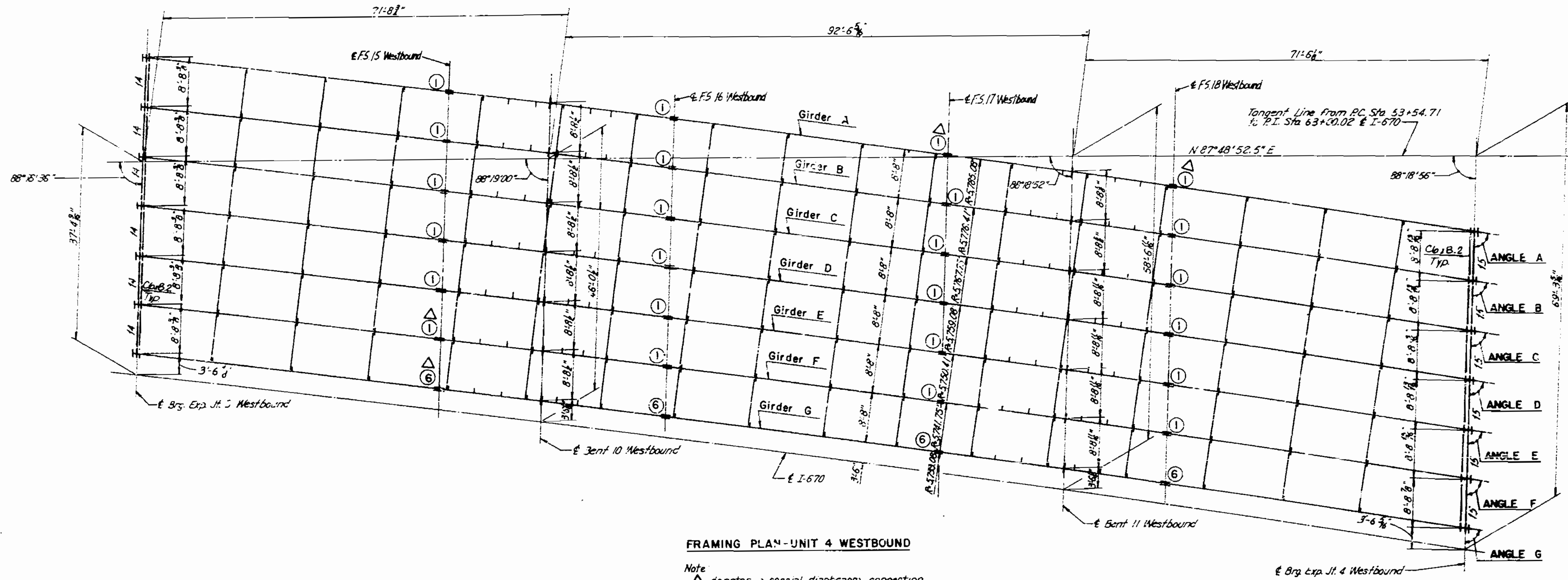
Girder O	0	1/8"	1/8"	-1/8"	0
Girder N	0	3/16"	3/16"	-3/16"	0
Girder M	0	1/4"	1/4"	-1/4"	0
Girder L	0	1/4"	1/4"	-1/4"	0
Girder K	0	3/16"	3/16"	-3/16"	0
Girder J	0	3/16"	3/16"	-3/16"	0
Girder H	0	3/16"	3/16"	-3/16"	0

Deflection and Camber Notes.
 Negative dead load deflection values are upward deflections.
 Negative camber values are cambers below the reference chord.
 Reference chords shown for camber are 102" below top of slab at & Bearing Expansion Joints.

DEFLECTIONS AND CAMBER
 UNITS 1, 2, AND 3 EASTBOUND

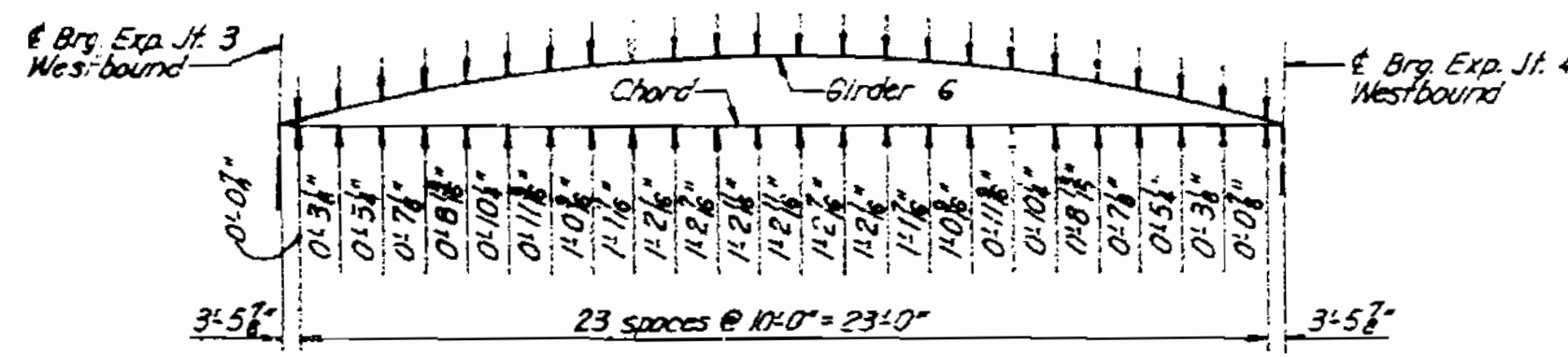
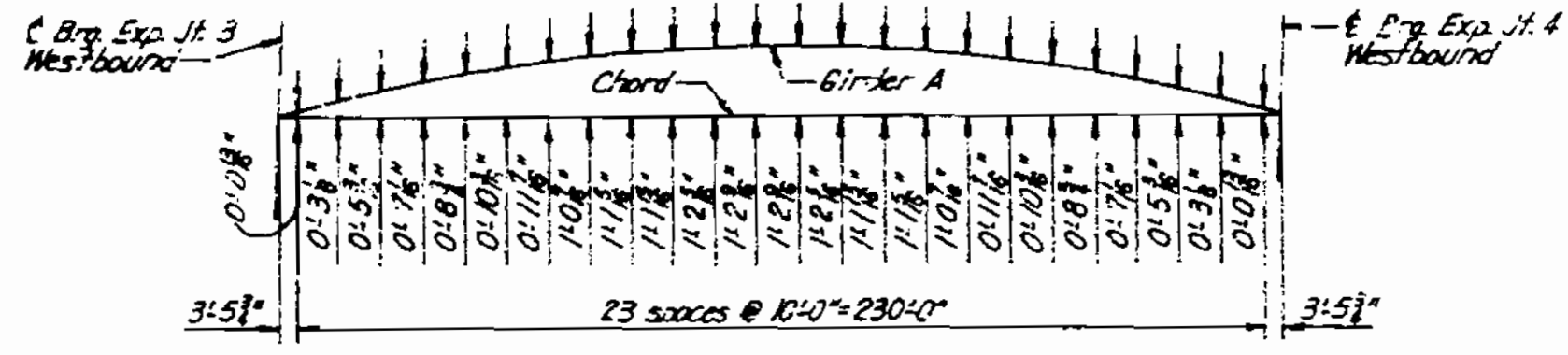
410

FILE NO.	DATE	BY	CHKD.	APP'D.	SCALE
1					1/2"



FRAMING PLAN-UNIT 4 WESTBOUND

Note
 Δ denotes a special diaphragm connection plate is required. See "Diaphragm Connection Plate near Field Splice" sheet 23.



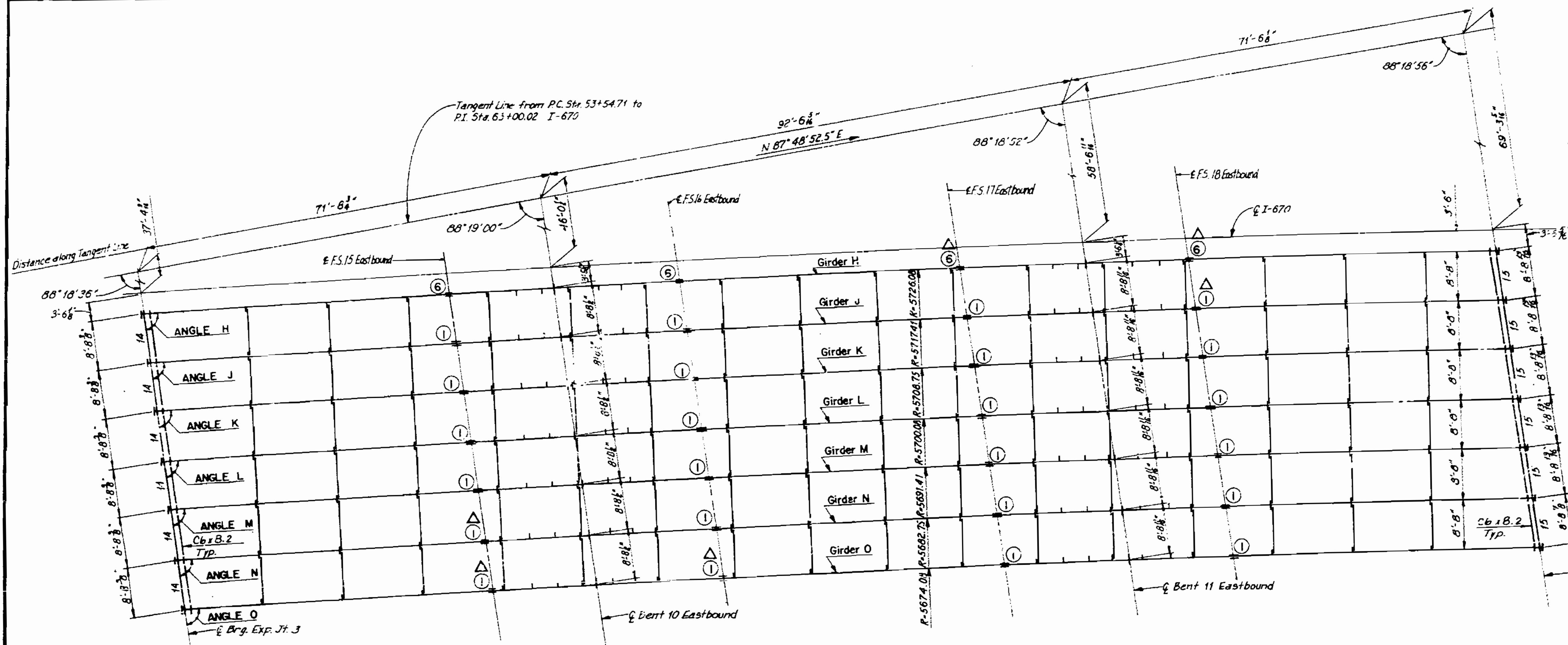
CHORD OFFSETS TO EXTERIOR GIRDERS

ANGLE	BENT 10	BENT 11	BRG. EXP. JT. 4
ANGLE A	84°28'19"	83°33'06"	82°50'15"
ANGLE B	84°27'44"	83°32'31"	82°49'36"
ANGLE C	84°27'19"	83°31'56"	82°48'57"
ANGLE D	84°26'49"	83°31'21"	82°48'15"
ANGLE E	84°26'13"	83°30'45"	82°47'33"
ANGLE F	84°25'43"	83°30'10"	82°47'00"
ANGLE G	84°25'12"	83°29'34"	82°46'20"

Notes:
 Dimensions shown are horizontal.
 The angle shown in the table is the angle between the bearing of expansion joint and a local tangent to the girder at the location indicated.
 Intermediate stiffener plates are 3x4 and they are equally spaced between diaphragms.
 Intermediate stiffener plates shall be placed on the side of the girder web as indicated on the framing plan.
 Diaphragm connection plates are 3x4.
 Numbers near diaphragm denote diaphragm type. The diaphragms with no number by them are Type 2.
 (1) denotes type of field splice.
 For diaphragm details see Sheet 23.
 For field splice details see Sheet 21.
 For expansion joint details see Sheet 22.

FRAMING PLAN - UNIT 4 WESTBOUND

FED. ROAD DIST. NO.	ROUTE	FED. AID PROJ. I.D.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	101		1978	22	22



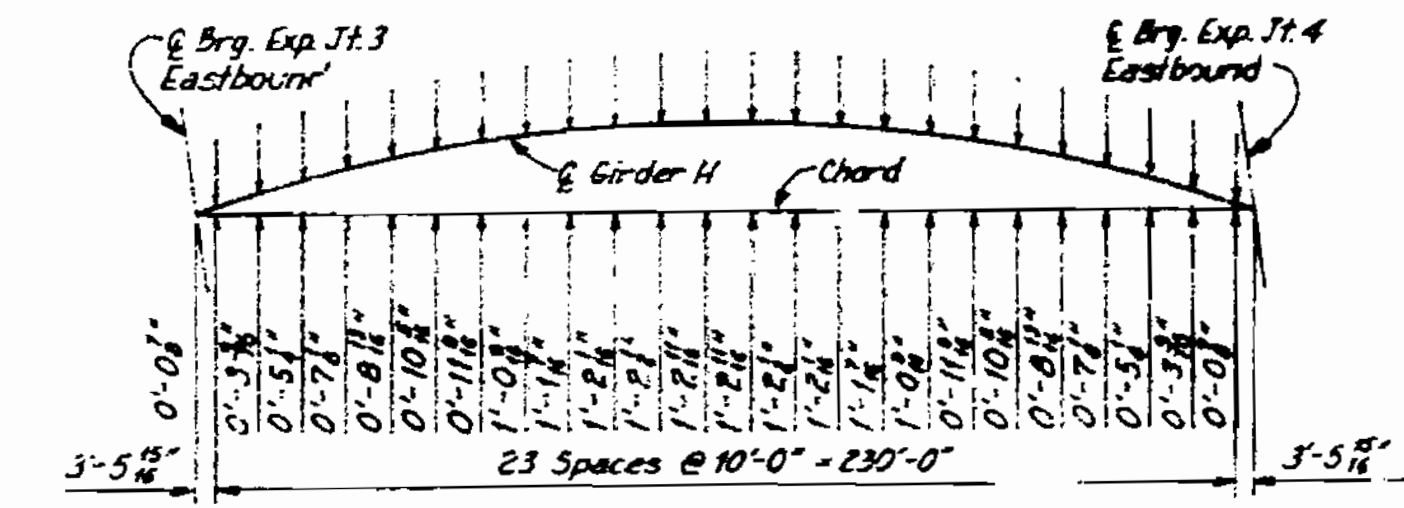
ANGLE	BENT 10	BENT 11	BRG. EXP. JT. 4
ANGLE H	84°24'43"	83°29'06"	82°45'43"
ANGLE J	84°24'17"	83°28'30"	82°45'08"
ANGLE K	84°23'46"	83°27'54"	82°44'28"
ANGLE L	84°23'16"	83°27'18"	82°43'48"
ANGLE M	84°22'45"	83°26'42"	82°43'08"
ANGLE N	84°22'14"	83°26'06"	82°42'28"
ANGLE O	84°21'43"	83°25'30"	82°41'48"

FRAMING PLAN-UNIT 4 EASTBOUND

Note:
 Δ denotes a special diaphragm connection plate is required. See "Diaphragm Connection Plate near Field Splice" sheet 23.

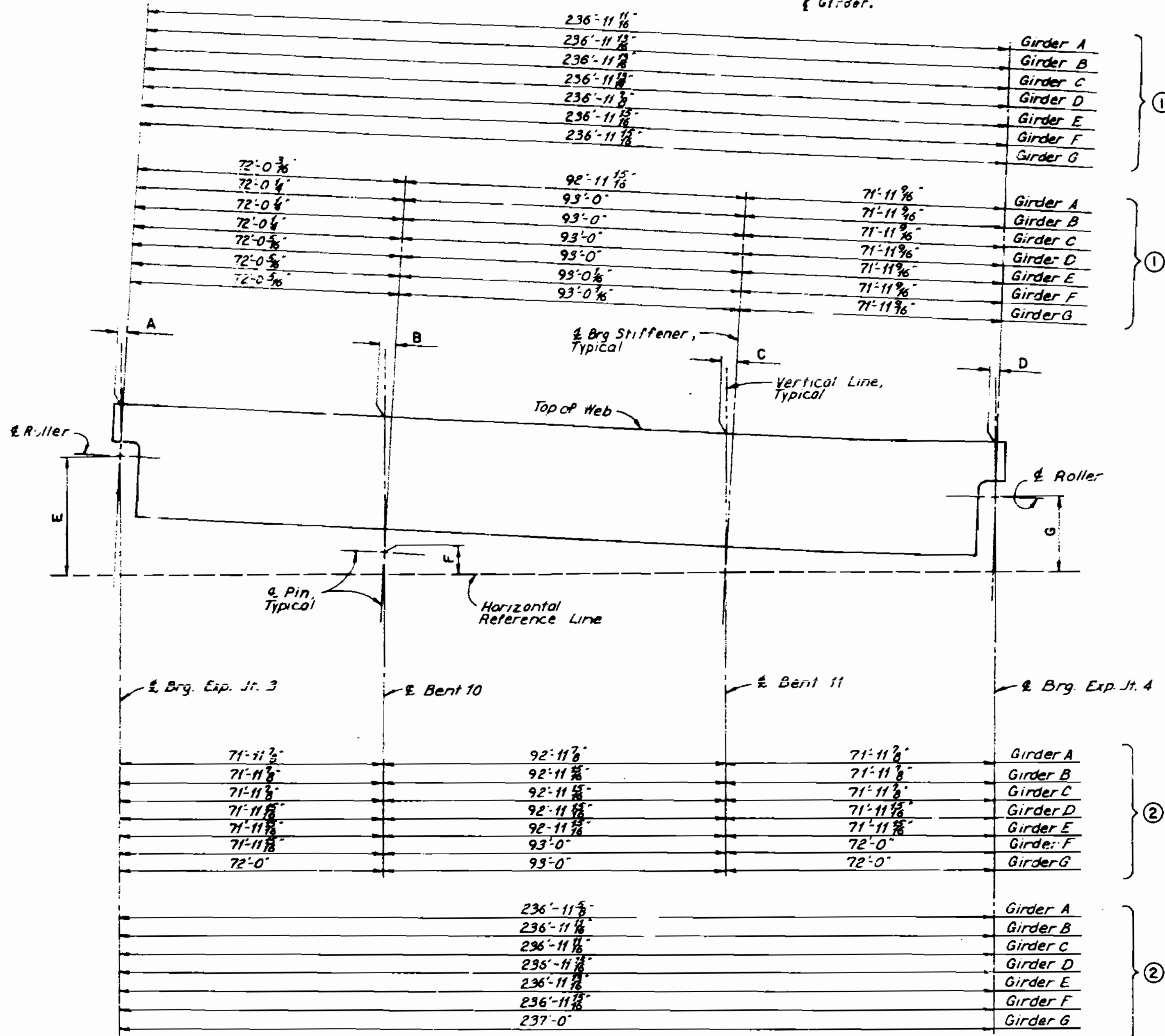
Notes:
 Dimensions shown are horizontal.
 The angle shown in the table is the angle between the Bearing of Expansion Joint and a local tangent to the girder at the location indicated.
 Intermediate stiffener plates are 3x4 and they are equally spaced between diaphragms where shown.

Intermediate stiffener plates shall be placed on the side of the girder web as indicated on the framing plan.
 Diaphragm connection plates are 3x4.
 Numbers near diaphragms denote diaphragm type. The diaphragms with no number by them are Type 2.
 Δ designates type of field splice.
 For diaphragm details see Sheet 23.
 For field splice details see Sheet 21.
 For expansion joint details see Sheet 22.



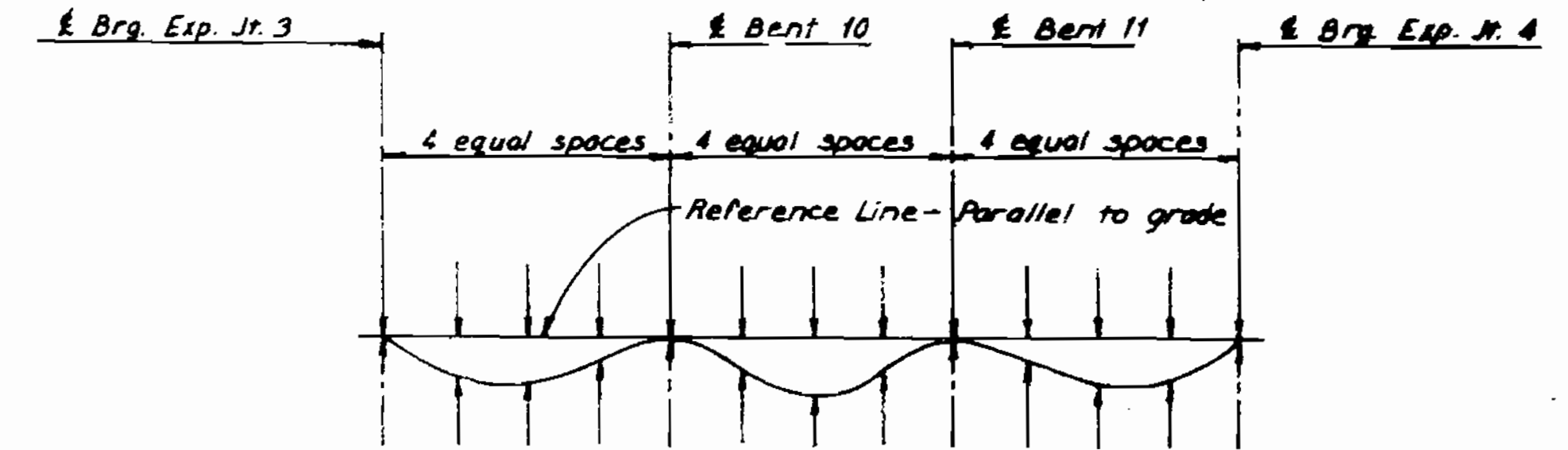
DATE	BY	CHKD	APPD	REV
1/66				

① Longitudinal dimensions are along chord lines between inter sections of top of web and bents or expansion joints and are along Girders.



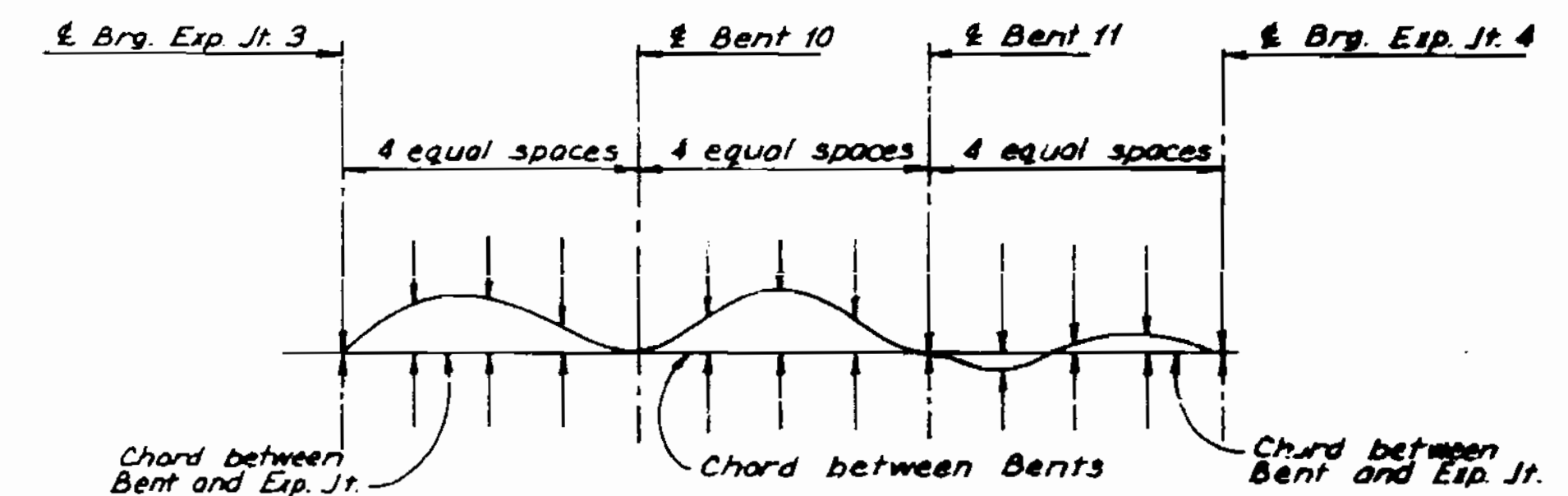
② Horizontal dimensions along G. Girder.

	A	B	C	D	E	F	G
Girder A	1/4"	3/8"	3/8"	3/8"	4'-1 1/2"	11 1/8"	3'-0 9/16"
Girder B	1/4"	3/8"	3/8"	3/8"	4'-1 3/8"	11 1/8"	3'-0 9/16"
Girder C	1/4"	3/8"	3/8"	3/8"	4'-1 3/8"	11 1/8"	3'-0 9/16"
Girder D	1/4"	3/8"	3/8"	3/8"	4'-1 3/8"	1'-0"	3'-0"
Girder E	1/4"	3/8"	3/8"	3/8"	4'-1 3/8"	1'-0"	3'-0"
Girder F	1/4"	3/8"	3/8"	3/8"	4'-1 3/8"	1'-0"	2'-11 1/8"
Girder G	1/4"	3/8"	3/8"	3/8"	4'-1 1/2"	1'-0 1/8"	2'-11 1/8"



Girder A	0	1/8"	1/8"	1/8"	0	1/8"	1/8"	1/8"	0	1/8"	1/8"	1/8"	0
Girders B,C,D,E,F	0	1/8"	1/8"	1/8"	0	1/8"	1/8"	1/8"	0	1/8"	1/8"	1/8"	0
Girder G	0	1/8"	1/8"	1/8"	0	1/8"	1/8"	1/8"	0	1/8"	1/8"	1/8"	0

DEAD LOAD DEFLECTION DIAGRAM
15% of dead load deflection is due to weight of structural steel.

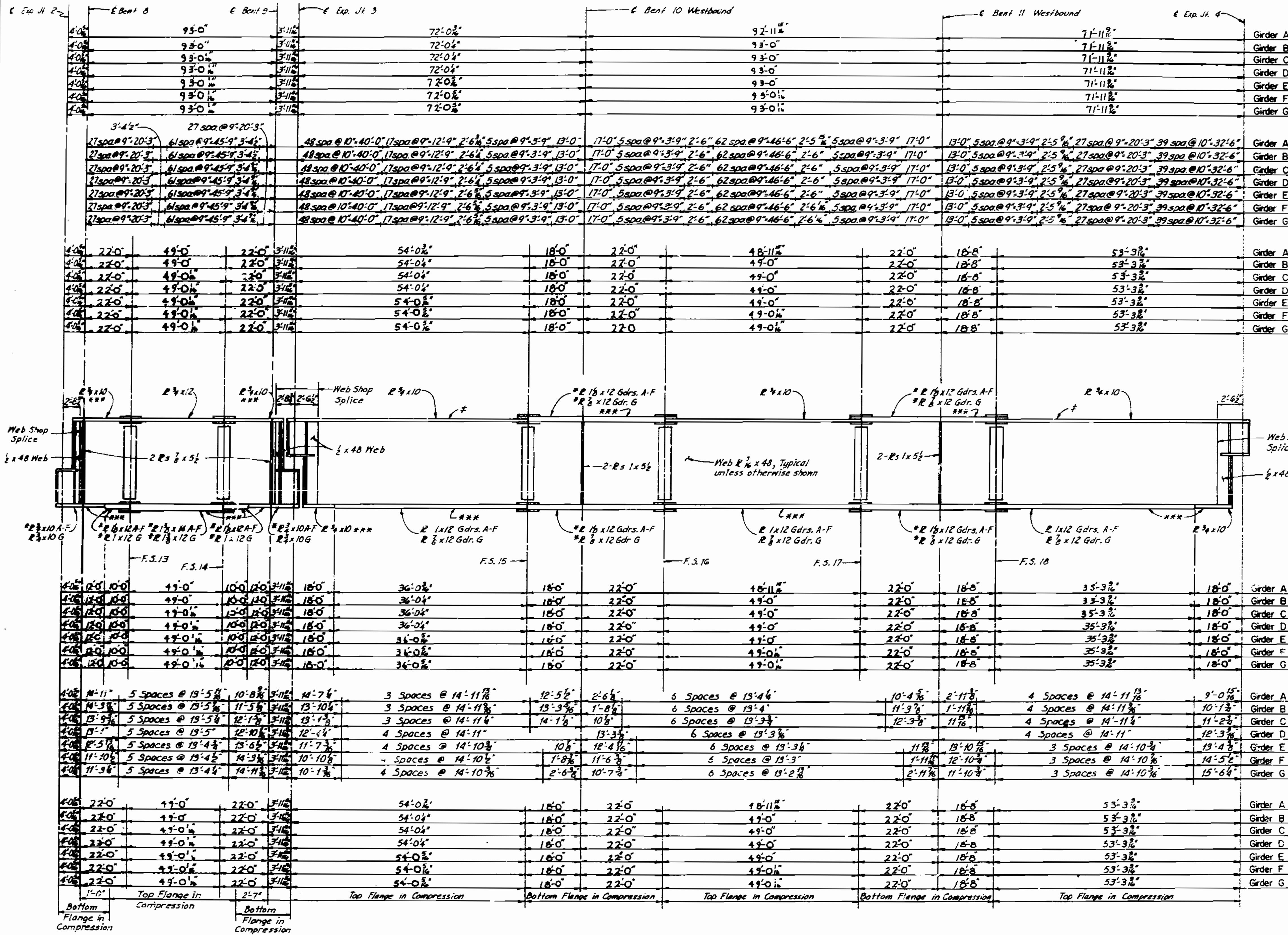


Girder A	0	1/8"	1/8"	1/8"	0	1/8"	1/8"	1/8"	0	-1/8"	1/8"	1/8"	0
Girders B,C,D,E,F	0	1/8"	1/8"	1/8"	0	1/8"	1/8"	1/8"	0	-1/8"	1/8"	1/8"	0
Girder G	0	1/8"	1/8"	1/8"	0	1/8"	1/8"	1/8"	0	-1/8"	1/8"	1/8"	0

CAMBER DIAGRAM
Deflection and Camber Notes:
Negative dead load deflection values are upward deflections.
Negative camber values are cambers below the reference chord.
Reference chords shown for camber are 10 1/2" below top of slab at Bents and Bearing Expansion Joints.

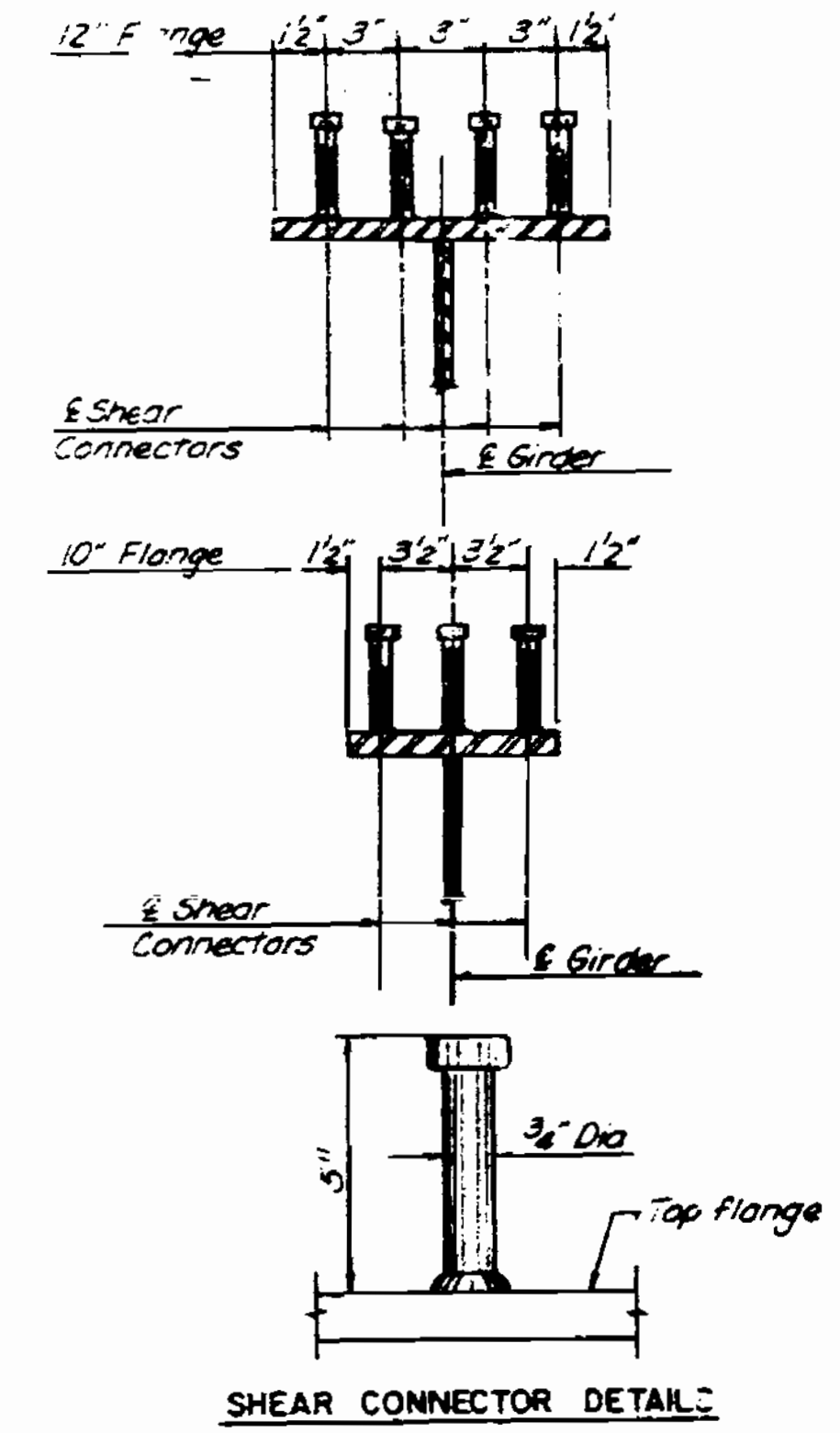
GIRDER ELEVATION - UNIT 4 WESTBOUND

REV.	DATE	BY	CHKD.	TOTAL
1				163



SPAN LENGTH
SHEAR CONNECTORS
TOP FLANGE PLATES
BOTTOM FLANGE PLATES
INTERMEDIATE DIAPHRAGMS
FIELD SPLICE

Note: Shear connectors are not to be furnished or installed with the Structural Steel Contract



Notes:
All dimensions are at top of web along grade and girders.
Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade.
All flanges are A-36 Steel unless noted otherwise.
* denotes A-572 Low Alloy Steel.
All webs are A-36 Steel.
** indicates flange plates subject to notch toughness requirements.
All web plates shall be subject to notch toughness requirements.
Heat curving of girder sections denoted by $\frac{1}{2}$ will not be allowed while in the horizontal position.

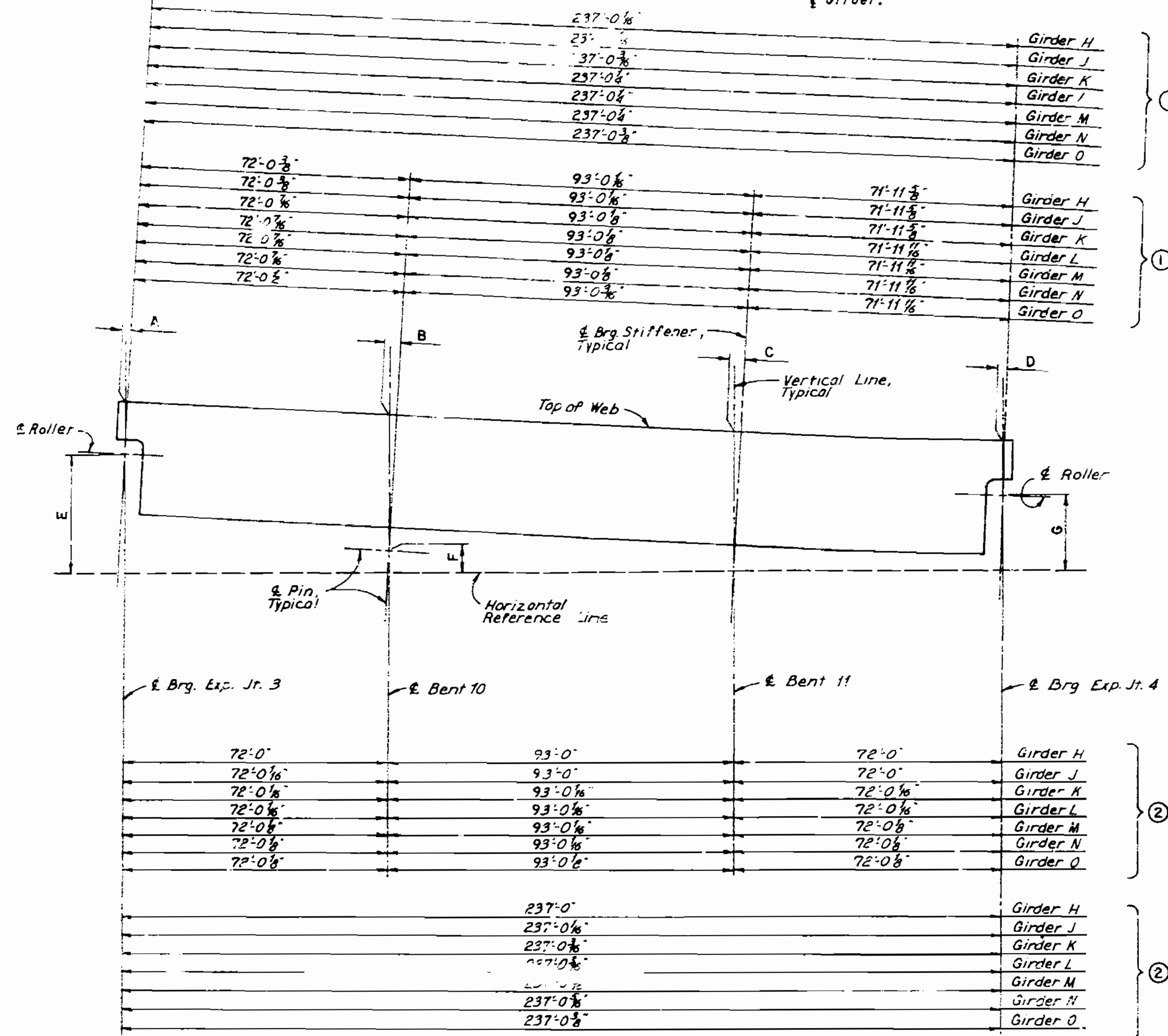
GIRDER ELEVATION - UNIT 3

GIRDER ELEVATION - UNIT 4

GIRDER ELEVATION - UNITS 3 & 4 WESTBOUND

PER. NO.	STATE	PREP.	1.	NO.	TOTAL
5	MO.				

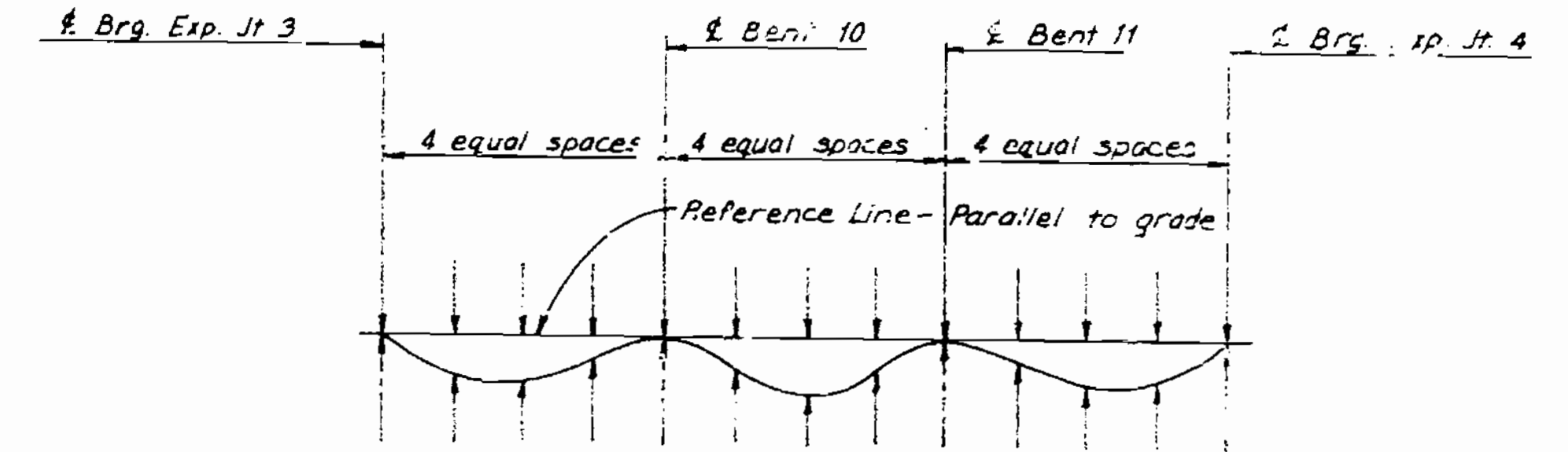
① Longitudinal dimensions are along chord lines between infer sections of top of web and bents or expansion joints and are along \perp Girder.



② Horizontal dimensions along \perp Girder.

TABLE OF DIMENSIONS

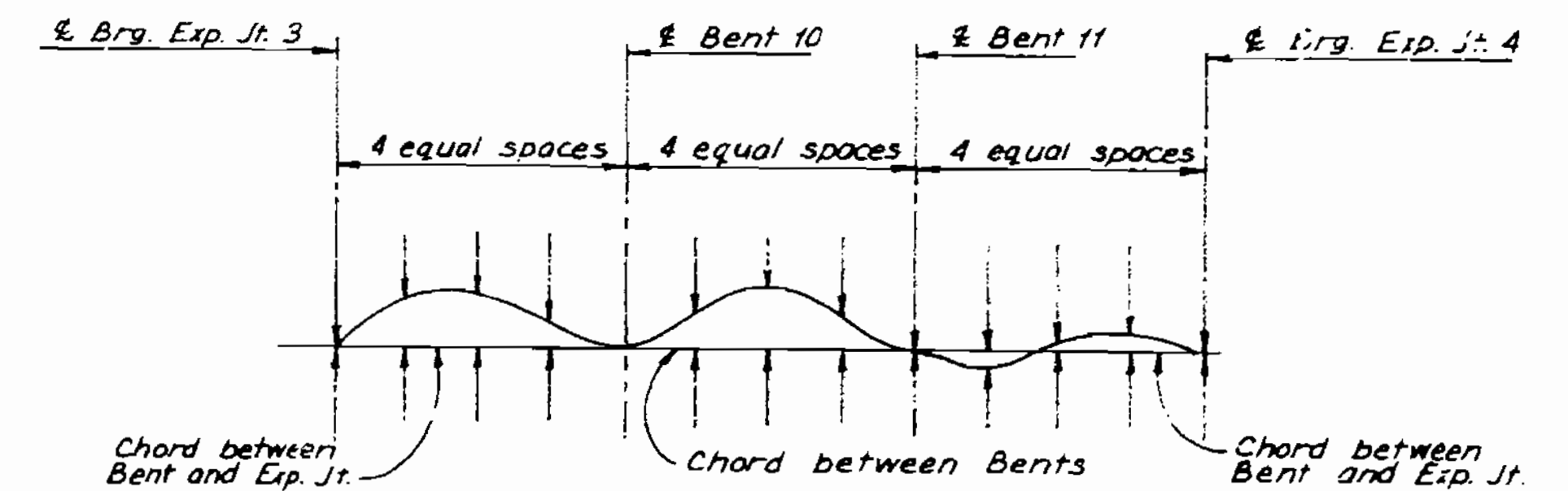
	A	B	C	D	E	F	G
Girder H	1/4"	9/16"	9/16"	1/8"	4'-1 1/2"	1'-0 1/8"	2'-11 1/8"
Girder J	1/4"	9/16"	9/16"	1/8"	4'-1 1/2"	1'-0 1/8"	2'-11 1/8"
Girder K	1/4"	9/16"	9/16"	1/8"	4'-1 1/2"	1'-0 1/8"	2'-11 1/8"
Girder L	1/4"	9/16"	9/16"	1/8"	4'-1 1/2"	1'-0 1/8"	2'-11 1/8"
Girder M	1/4"	9/16"	9/16"	1/8"	4'-1 1/2"	1'-0 1/8"	2'-11 1/8"
Girder N	1/4"	9/16"	9/16"	1/8"	4'-1 1/2"	1'-0 1/8"	2'-11 1/8"
Girder O	1/4"	9/16"	9/16"	1/8"	4'-1 1/2"	1'-0 1/8"	2'-11 1/8"



Girder O	0	1/8"	3/8"	3/8"	0	1/2"	3/8"	1/2"	0	1/8"	1/2"	3/8"	0
Girders J,K,L,M,N	0	1/8"	3/8"	3/8"	0	1/2"	3/8"	1/2"	0	1/8"	1/2"	3/8"	0
Girder H	0	1/8"	3/8"	3/8"	0	1/2"	3/8"	1/2"	0	1/8"	1/2"	3/8"	0

DEAD LOAD DEFLECTION DIAGRAM

15% of dead load deflection is due to weight of structural steel.



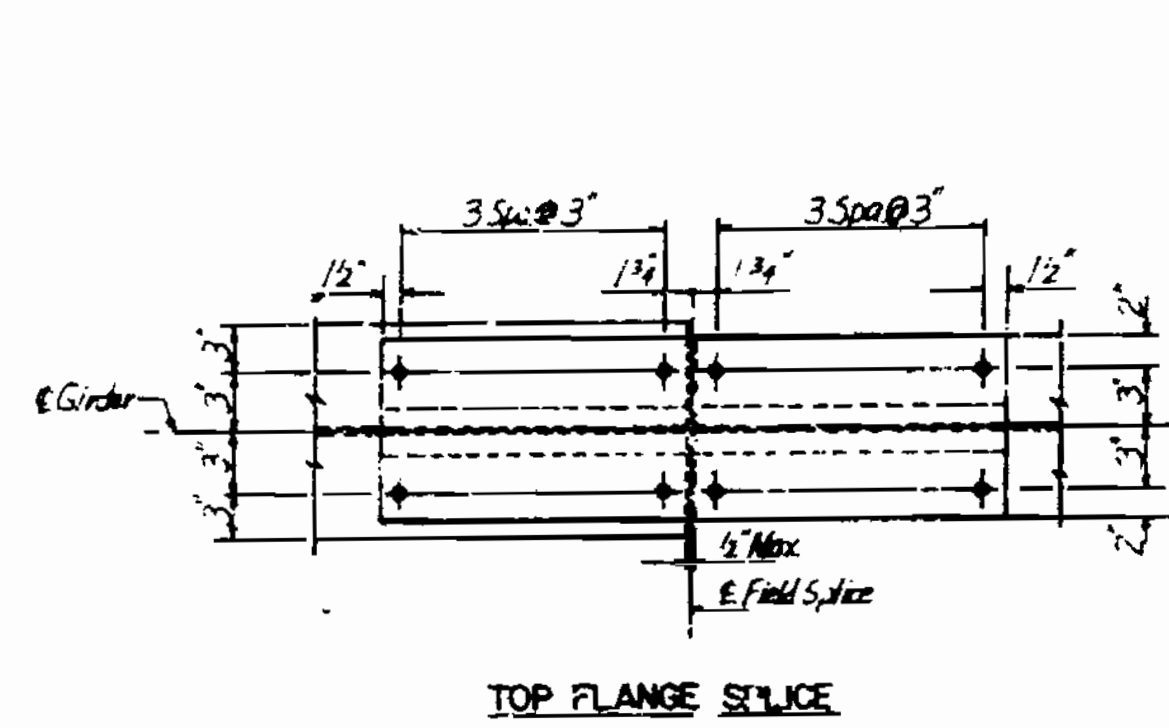
Girder O	0	1/8"	3/8"	3/8"	0	1/2"	3/8"	1/2"	0	-1/8"	1/8"	1/8"	0
Girders J,K,L,M,N	0	1/8"	3/8"	3/8"	0	1/2"	3/8"	1/2"	0	-1/8"	1/8"	1/8"	0
Girder H	0	1/8"	3/8"	3/8"	0	1/2"	3/8"	1/2"	0	-1/8"	1/8"	1/8"	0

CAMBER DIAGRAM

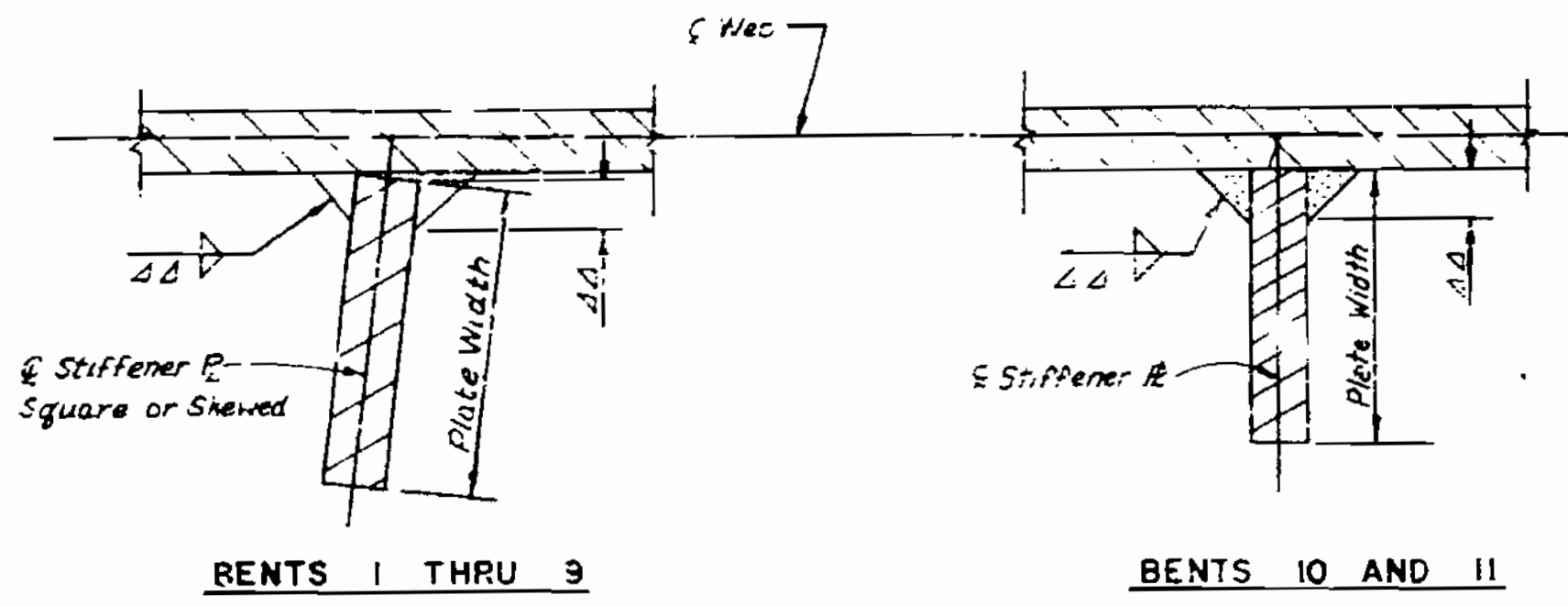
Deflection and Camber Notes.
 Negative dead load deflection values are upward deflections.
 Negative camber values are cambers below the reference chord.
 Reference chords shown for camber are 10" below top of slab at \perp Bents and \perp Bearing Expansion Joints.

GIRDER ELEVATION - UNIT 4 EASTBOUND

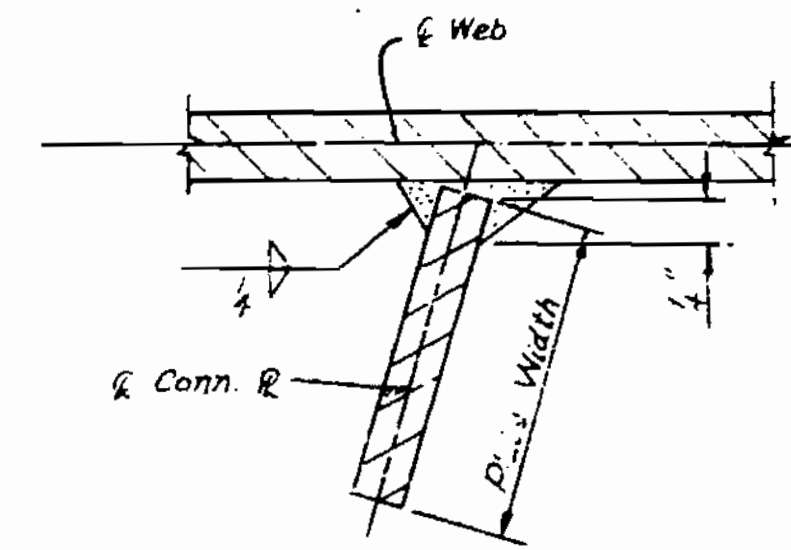
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	NC		63	63	



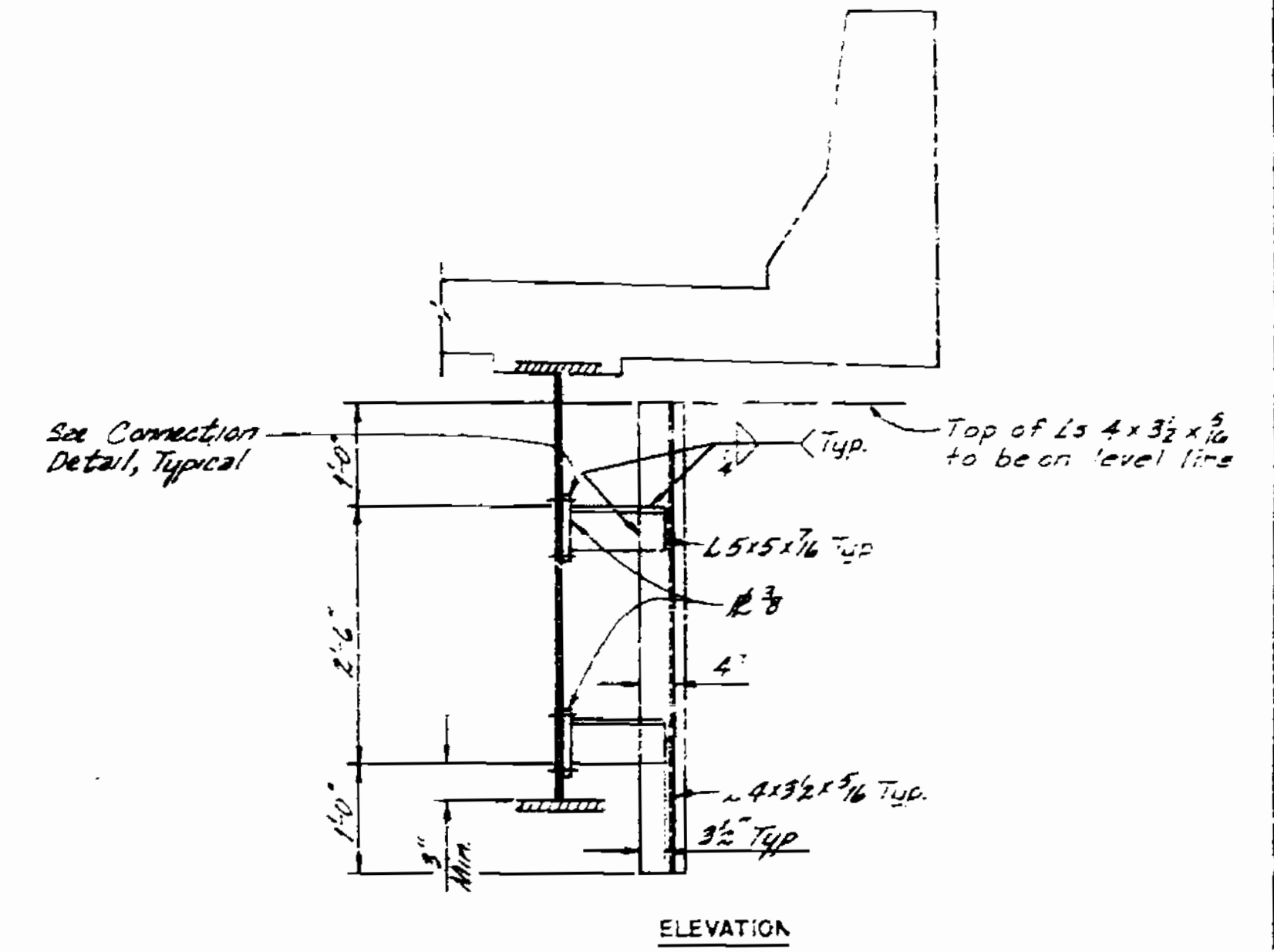
TOP FLANGE SPICE



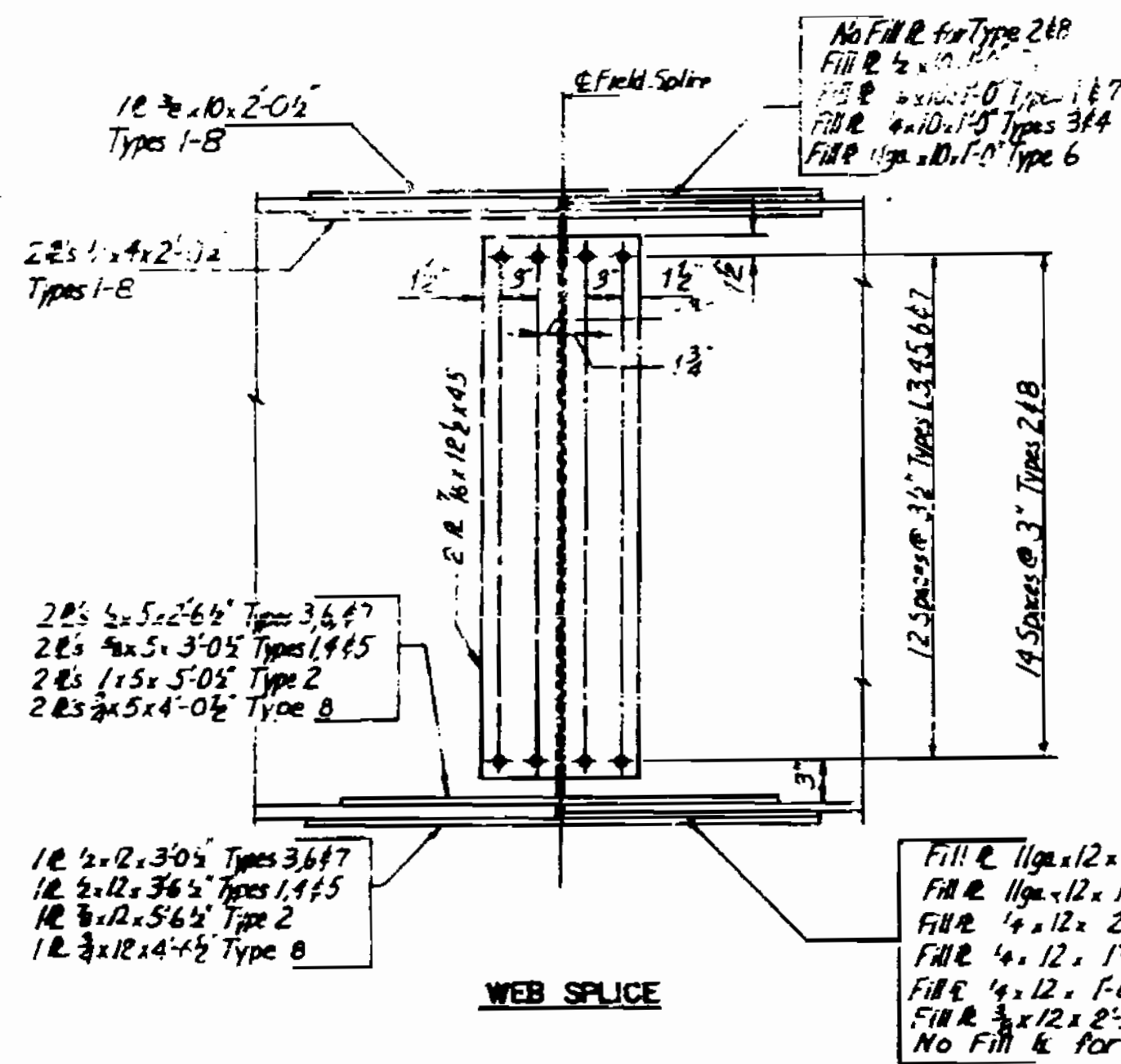
BEARING STIFFENERS-WELDING DETAILS



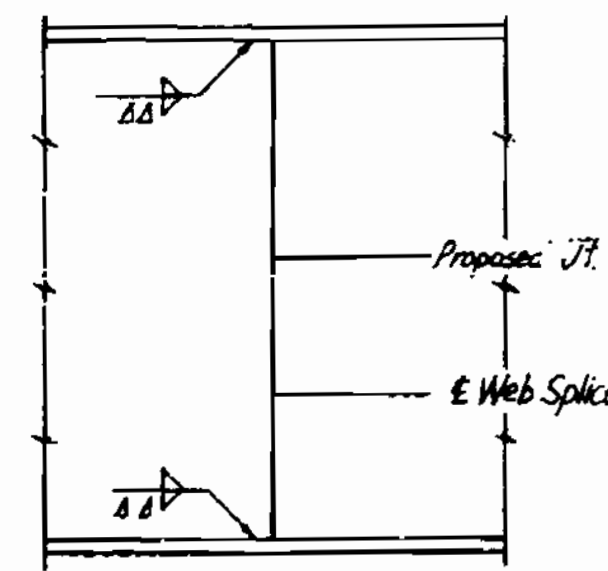
INTERMEDIATE DIAPHRAGM OR FLOORBEAM CONNECTION PLATE WELDING DETAILS



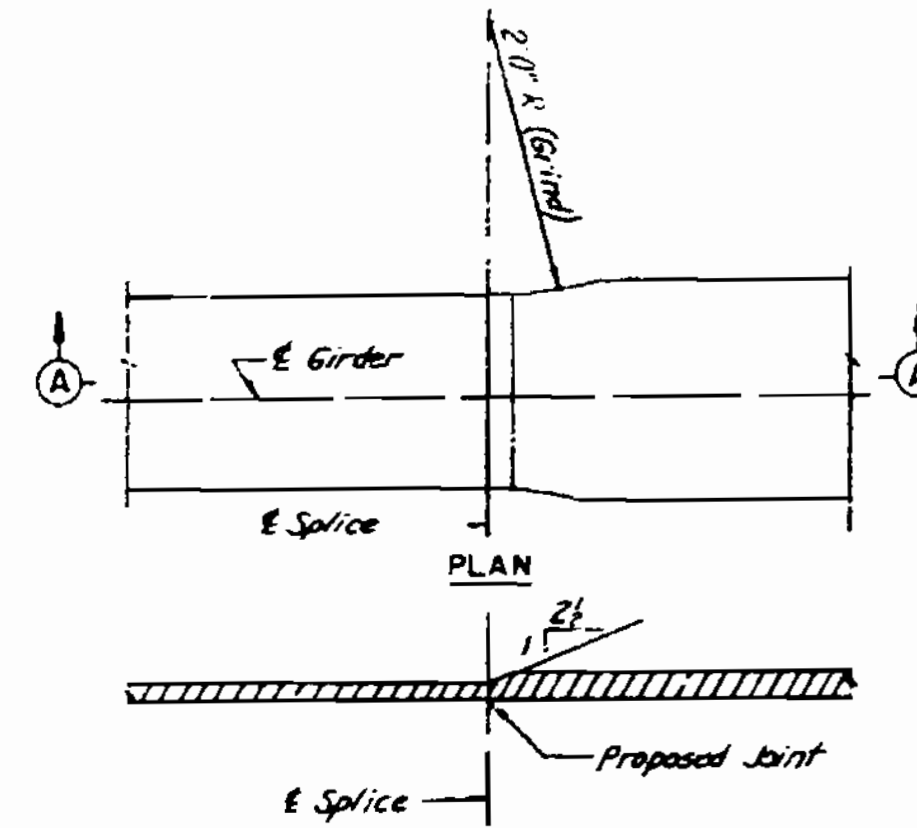
ELEVATION



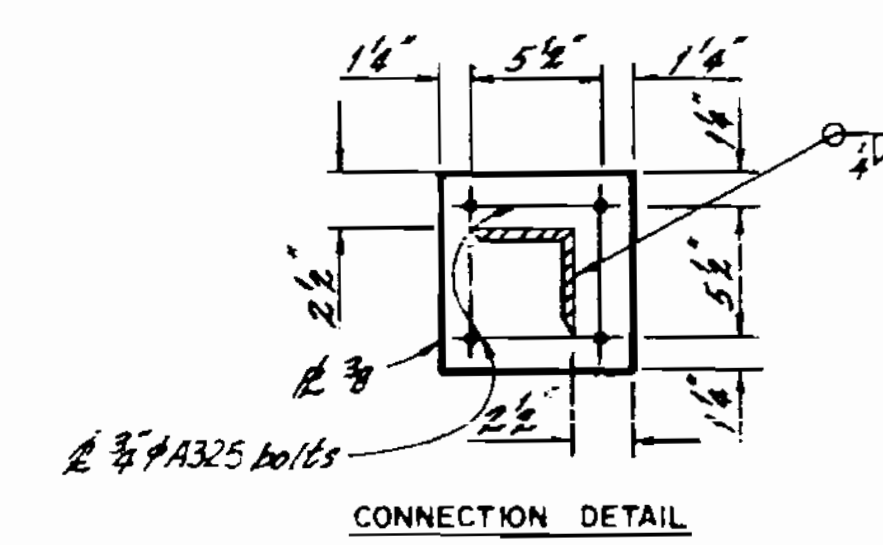
WEB SPICE



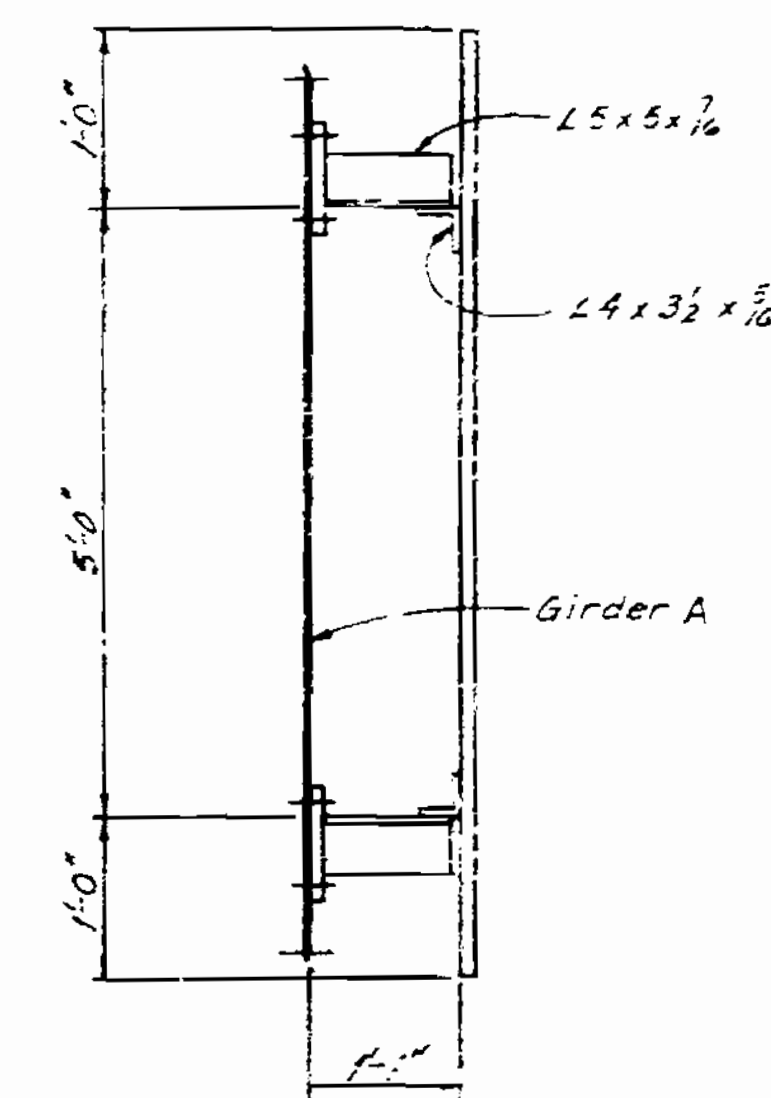
WELDED SHOP WEB SPICE



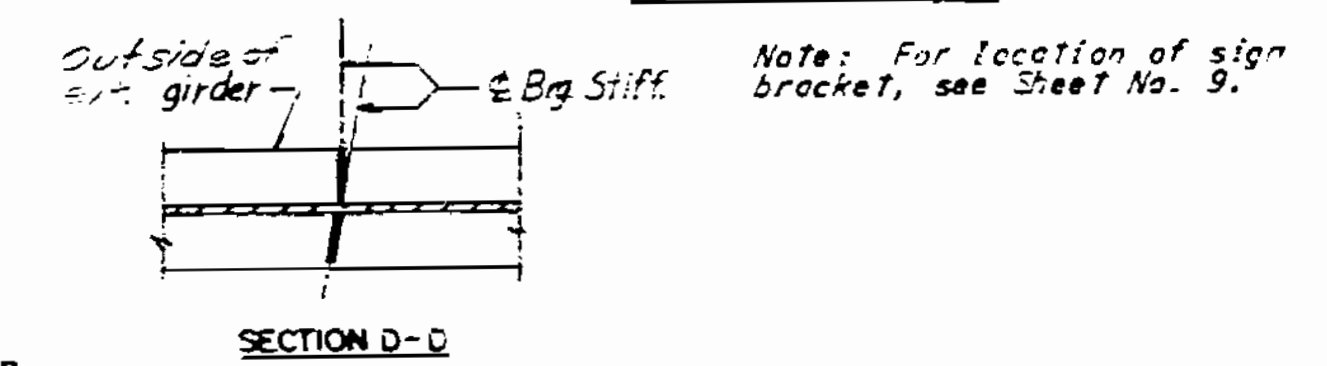
SECTION A-A WELDED SHOP FLANGE SPICE



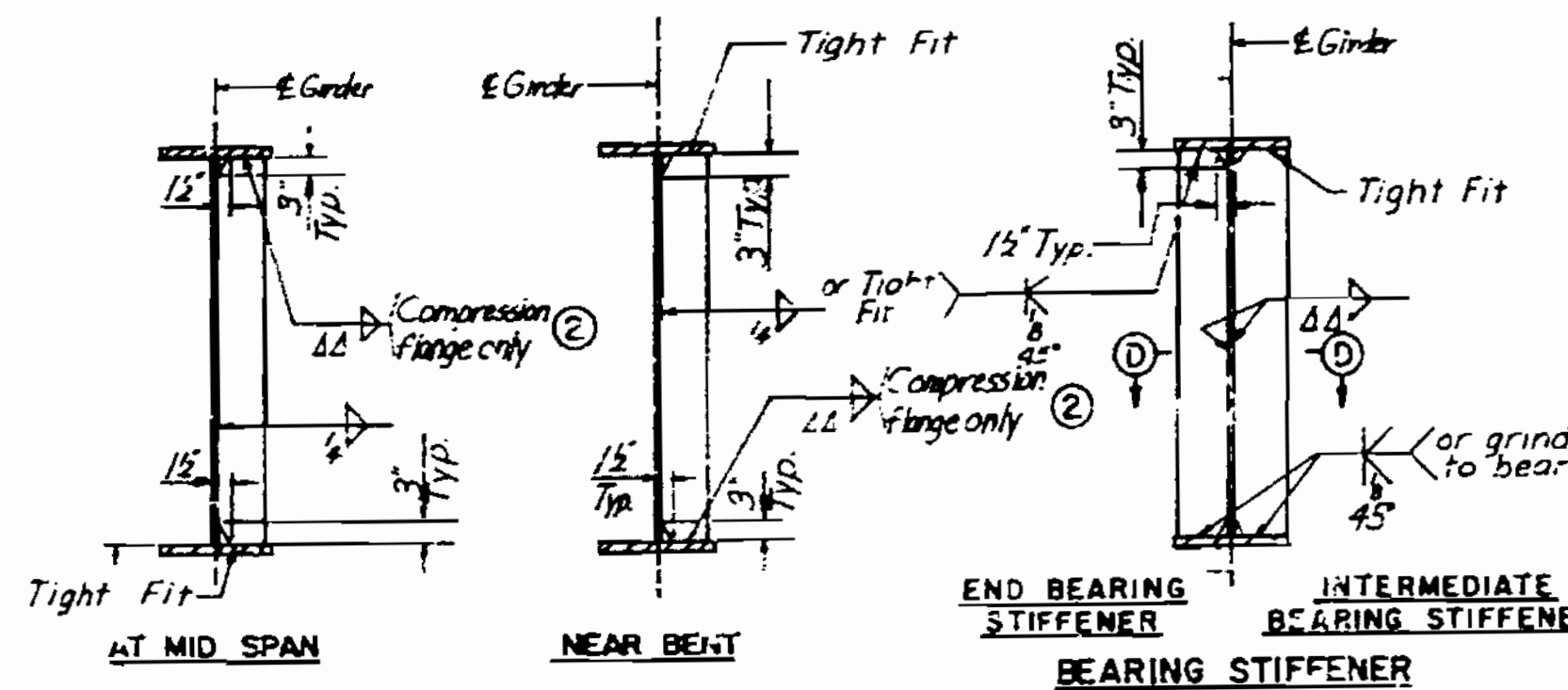
CONNECTION DETAIL



PLAN SIGN BRACKET AT GENESSEE STREET

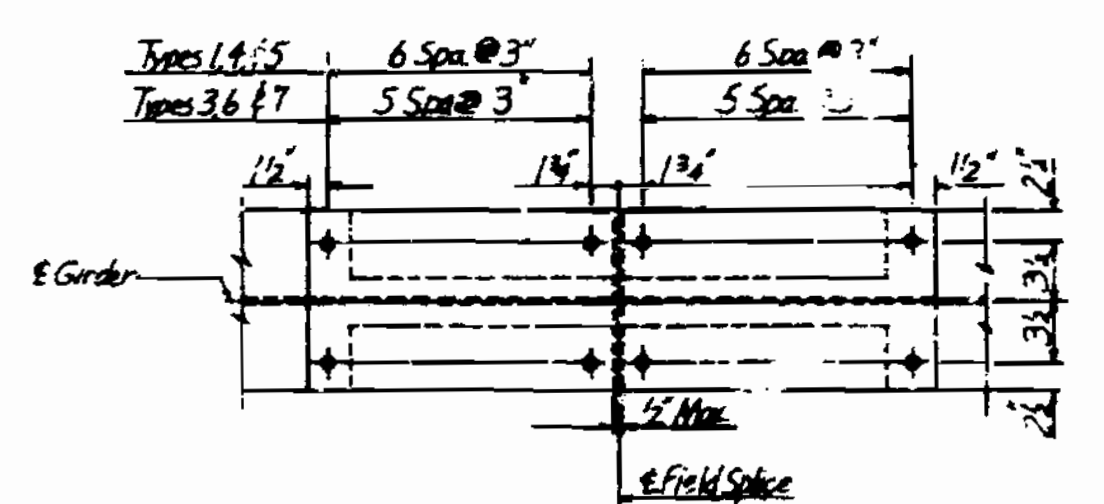


SECTION D-D

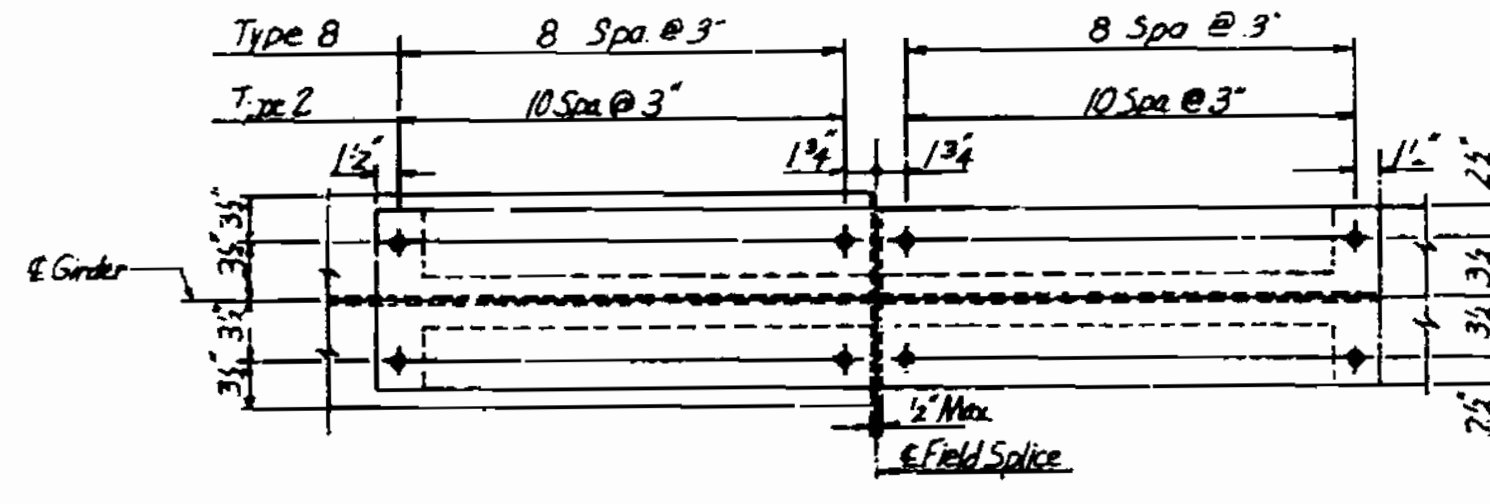


INTERMEDIATE DIAPHRAGM AND FLOORBEAM CONNECTION PLATES AND INTERMEDIATE STIFFENER DETAILS

44 1/2 for stiffener or flange plates 1/2" to 1 1/2"
 3/4 for stiffener or flange plates 1 1/2" to 2 1/2"
 1/2 for stiffener or flange plates over 2 1/2"



BOTTOM FLANGE SPICE



BOTTOM FLANGE SPICE FIELD SPICE

Note:
 All bolts are 3/4" H.S. with 15/16" holes.
 All splice plates are A36 steel unless noted otherwise.
 All web and flange splice plates shall be subject to notch toughness requirements.

Note:
 Intermediate floorbeam connection plates are the same size as the intermediate stiffeners in each unit, unless otherwise shown.
 For location of compression flanges see Girder Elevation sheets.
 (2) Weld may be omitted on interior girders and tight fit used when connection plate is required on both sides of web.
 See Sheet 23 for additional floorbeam Connection Plate details.

REV. NO.	DATE	REV. NO.	DATE	REV. NO.	DATE
1		2		3	

NOTES: TYPE "E" BEARINGS

ANCHOR BOLTS FOR TYPE "E" BEARINGS SHALL BE W8 SWEDGED BOLTS AND SHALL EXTEND 12" INTO CONCRETE WITH HEXAGON NUTS AND PLAIN WASHERS FOR FIXED BEARINGS, NO NUTS FOR EXPANSION BEARINGS.

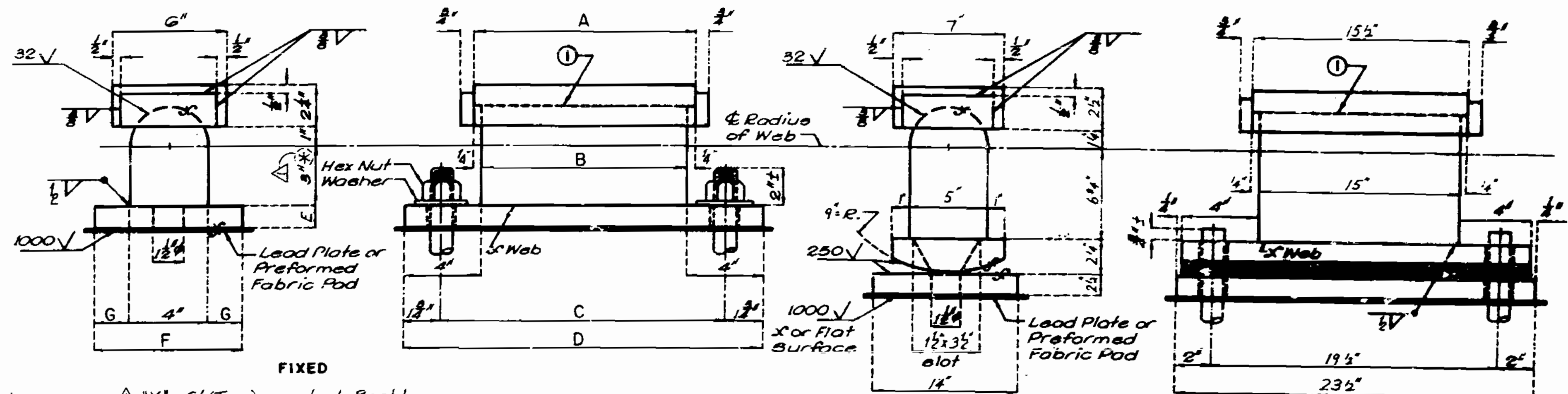
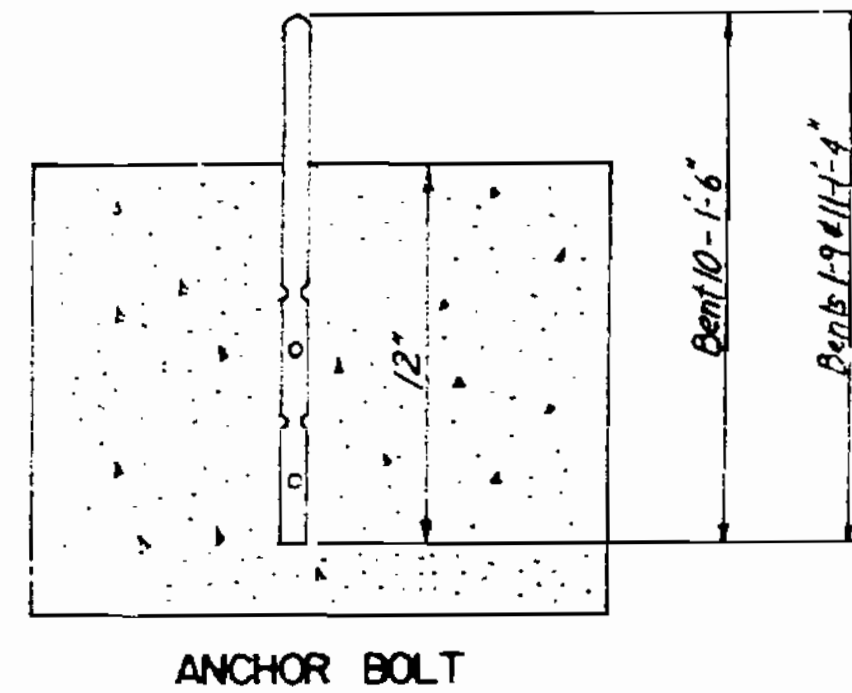
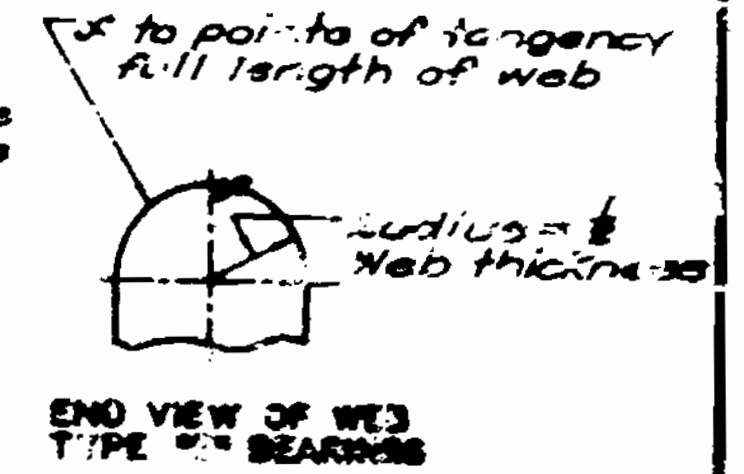
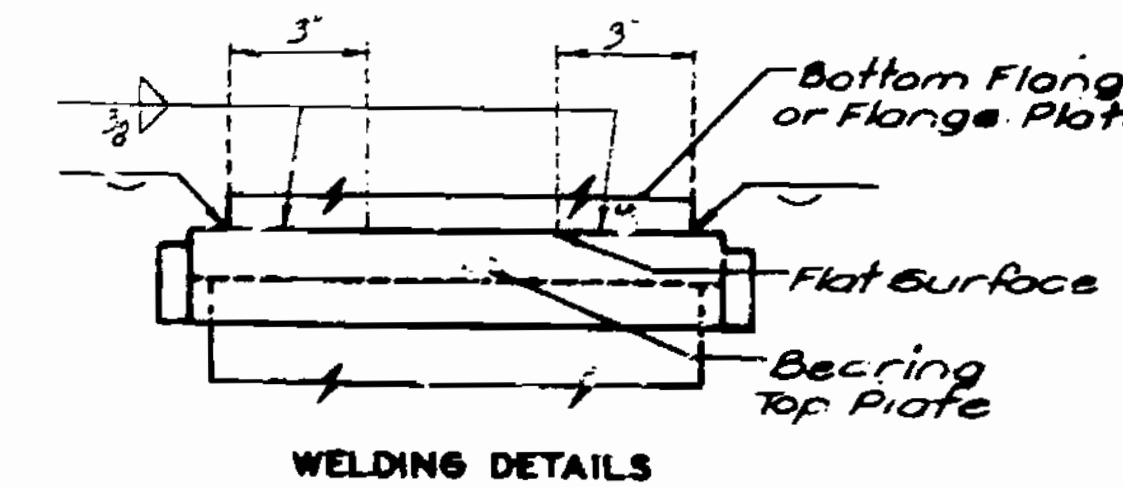
"X" INDICATES MACHINE FINISH SURFACE.

① BONDED LUBRICANT.

A LUBRICANT COATING SHALL BE APPLIED IN THE SHOP TO BOTH MATING SURFACES OF THE BEARING ASSEMBLY. THE LUBRICANT, METHOD OF CLEANING, AND APPLICATION SHALL MEET THE REQUIREMENTS OF MIL-L-23398 AND MIL-L-46147 SUCH AS DOW CORNING'S MOLYKOTE 3402 BONDED LUBRICANT. THE COATED AREAS SHALL BE PROTECTED FOR SHIPPING AND ERECTION.

SHOP DRAWINGS ARE NOT REQUIRED FOR LEAD PLATES AND/OR PREFORMED FABRIC PADS.

"ESTIMATED WEIGHT" IN THE TABLE DOES NOT INCLUDE THE WEIGHT OF THE SWEDGE ANCHOR BOLTS. COST OF THE ANCHOR BOLTS SHALL BE INCLUDED IN THE PRICE BID FOR "FABRICATED STRUCTURAL LOW ALLOY STEEL."



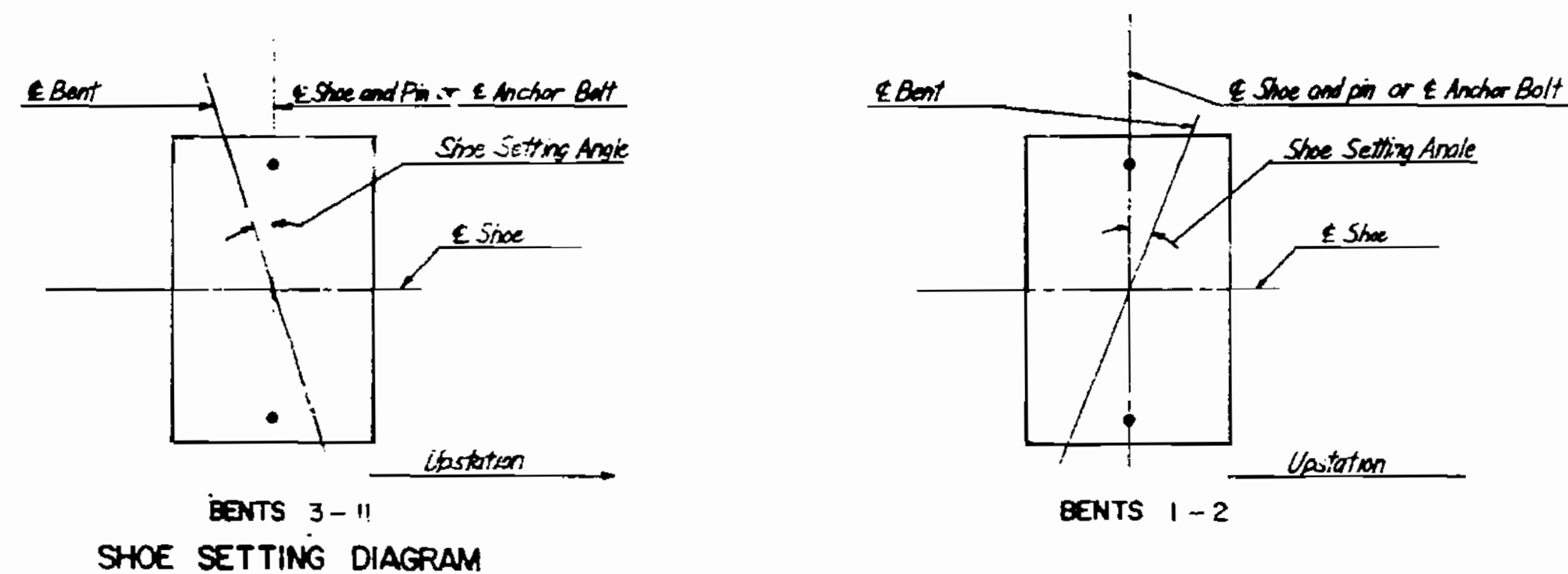
△ "X" - S (Typ.) except at Bent 1
At Bent 1, dimension as follows:

Girder A	2 1/2"
Girder B	2 1/2"
Girder C	1 1/2"
Girder D	1 3/4"
Girder E	2"
Girder F	2 1/2"
Girder G	2 1/2"
Girder H	2 1/2"
Girder J	2 1/2"
Girder K	2"
Girder L	1 3/4"
Girder M	1 1/2"
Girder N	2 1/2"
Girder O	2 1/2"

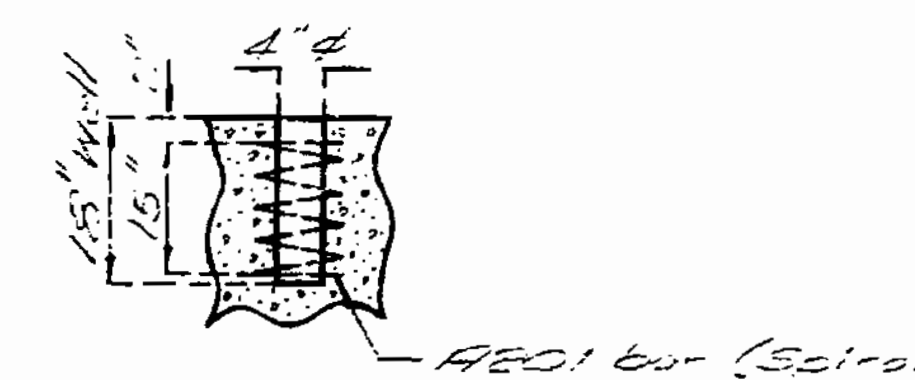
TYPE "E" BEARINGS

Note: See substructure sheets for anchor bolt setting plan.

DIMENSIONS FOR FIXED-TYPE E BEARINGS							
TYPE	A	B	C	D	E	F	G
F-1	13 1/2"	13"	17 1/2"	21"	1 1/2"	13"	4 1/2"
F-2	13 1/2"	13"	17 1/2"	21"	2"	14"	5"
F-3	17 1/2"	11"	15 1/2"	15"	1 1/2"	12"	4"
F-4	13 1/2"	13"	17 1/2"	21"	1 1/2"	11"	3 1/2"
F-5	12 1/2"	12"	16 1/2"	20"	1 1/2"	13"	4 1/2"

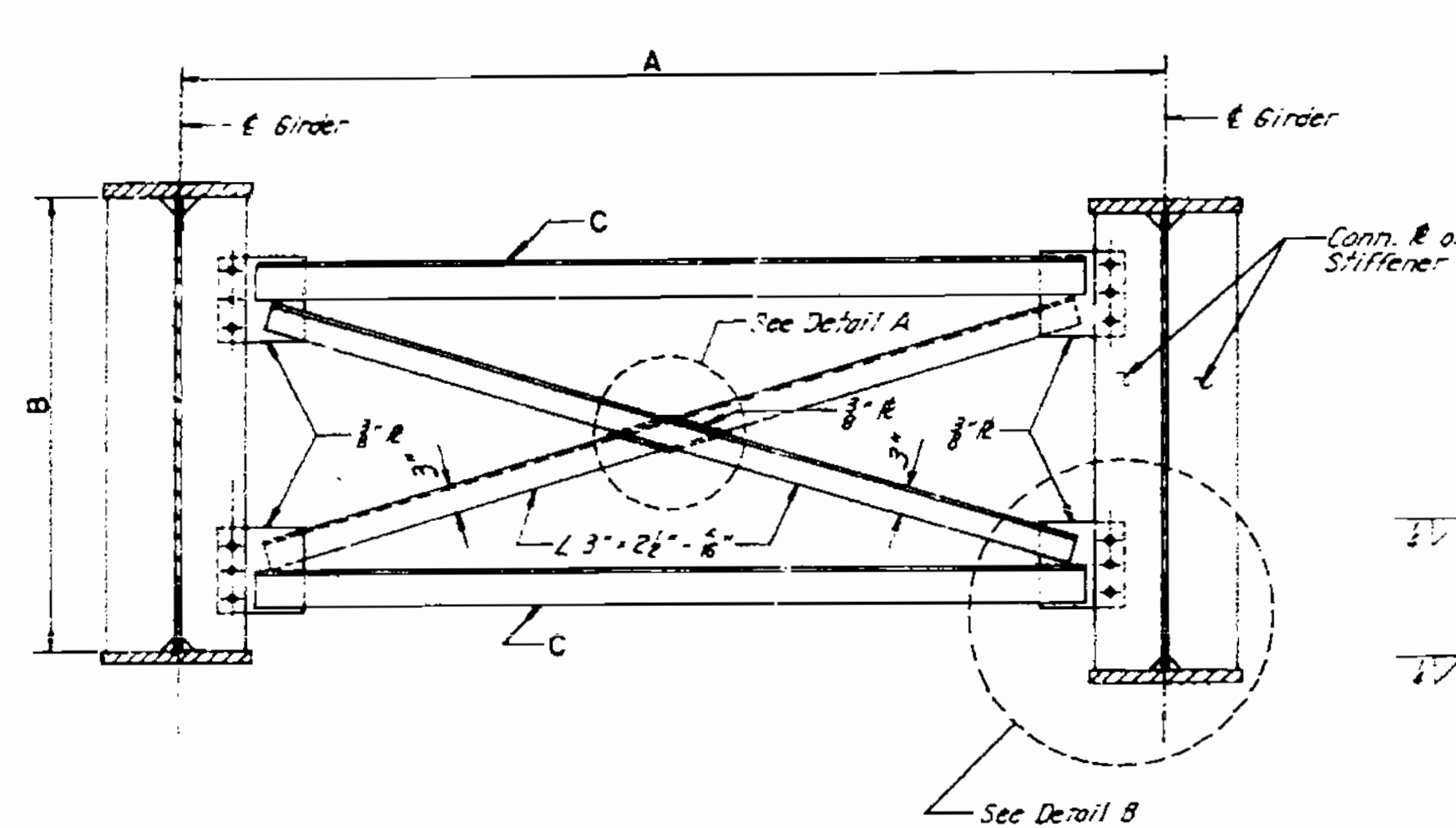


BEARING DATA											
BENT NO.	BENT 1	BENT 2	BENT 3	BENT 4	BENT 5	BENT 6	BENT 7	BENT 8	BENT 9	BENT 10	BENT 11
EXPANSION OR FIXED	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Expansion	Fixed
TYPE	F-1	F-2	F-1	F-4	F-1	F-2	F-1	F-3	F-5	E-1	F-2
SHOE SETTING ANGLE	1°41'00"	0°50'20"	0°03'40"	0°47'20"	1°26'00"	2°20'20"	3°15'00"	3°53'20"	4°49'00"	5°35'00"	6°30'40"
NO. REQUIRED	74	14	14	14	14	14	14	14	14	14	14
WEIGHT (lbs.) / SHOE	247	278	247	210	247	278	247	192	232	570	278



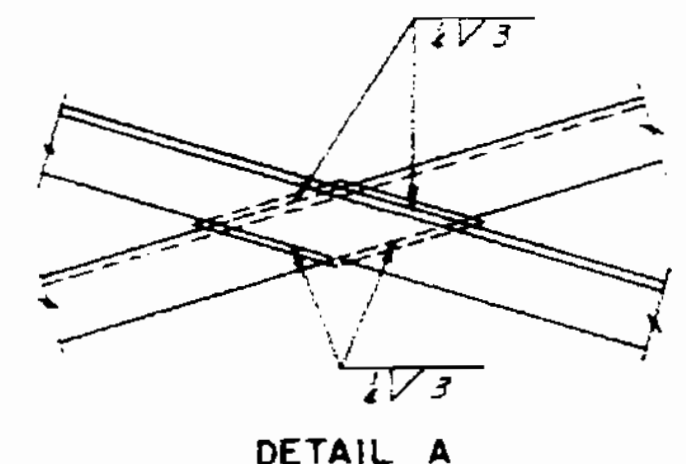
SECTION THRU CAP AT ANCHOR BOLT LOCATION

REV.	DATE	BY	CHKD.	APP.
1				

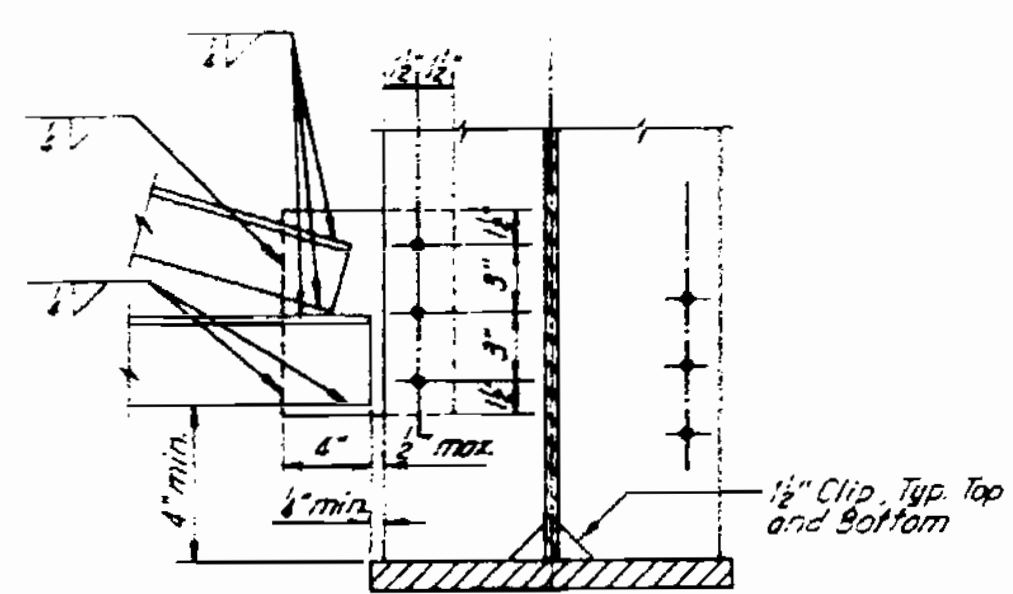


INTERMEDIATE DIAPHRAGM

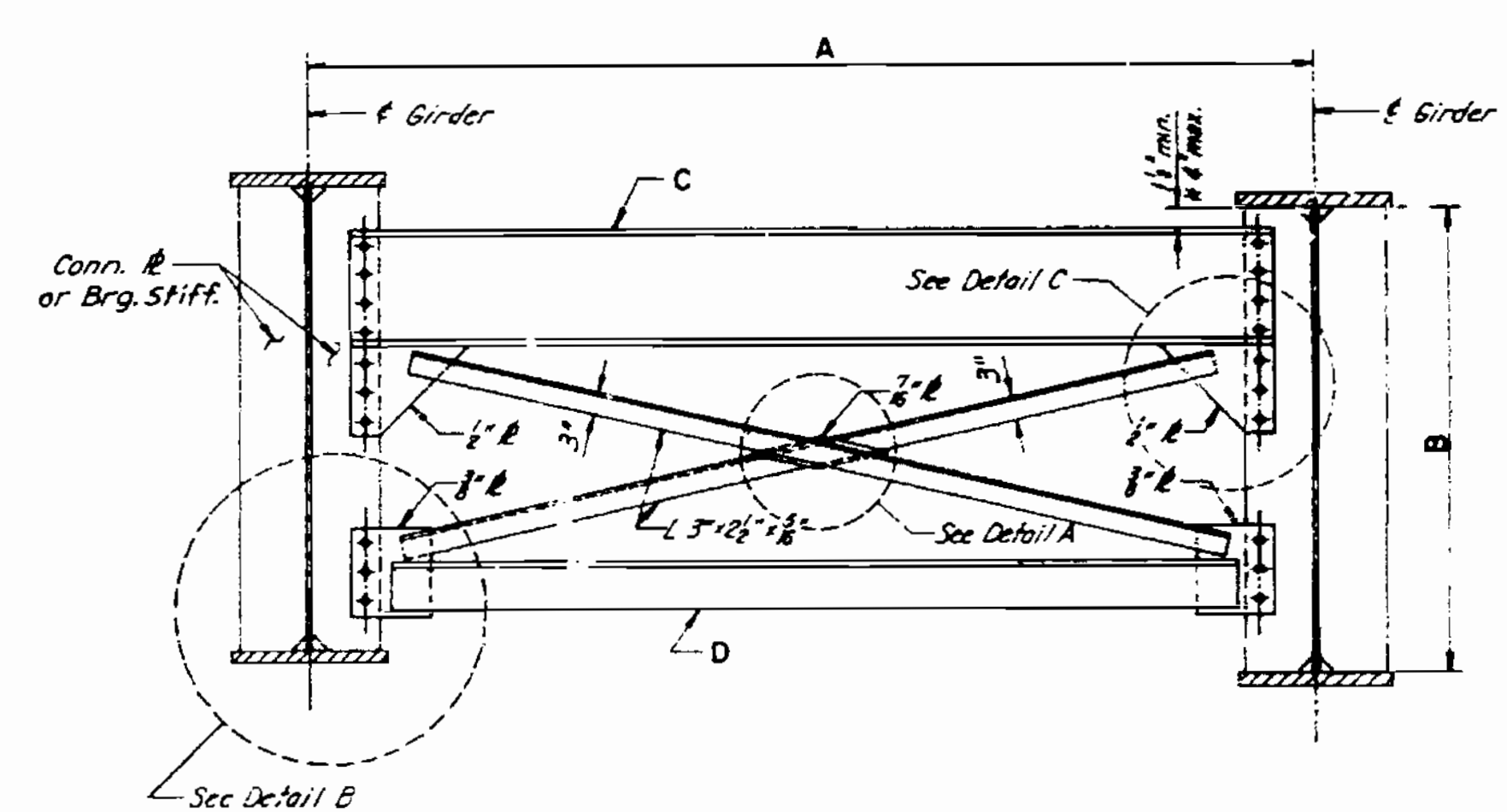
Types 1 thru 8



DETAIL A



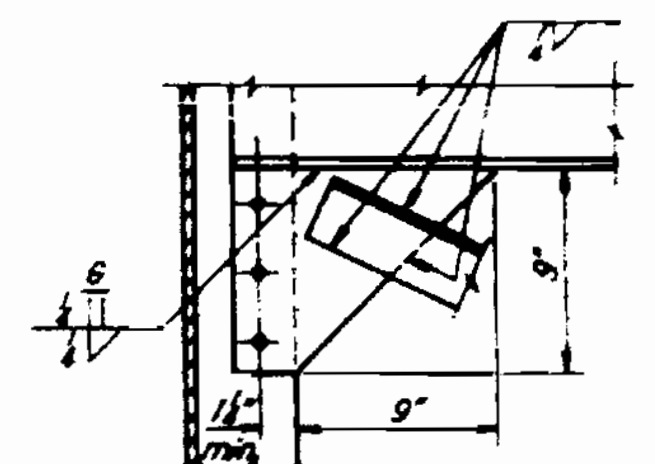
DETAIL B



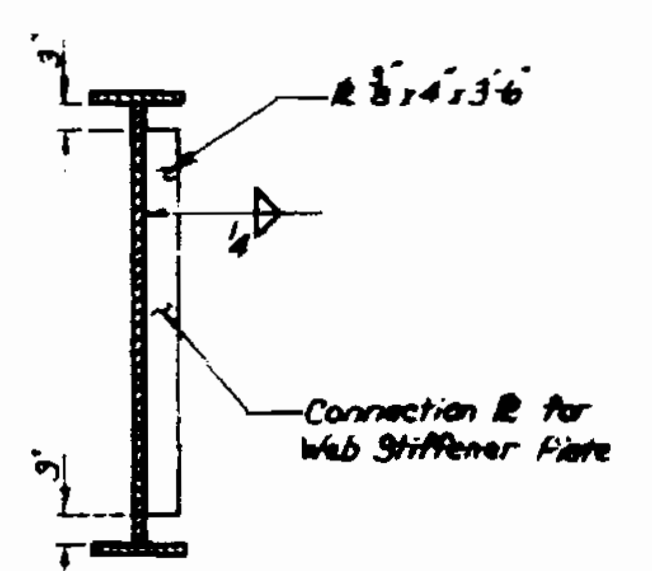
END DIAPHRAGM

Types 9 thru 11

* If distance exceeds 4", slope diaphragm



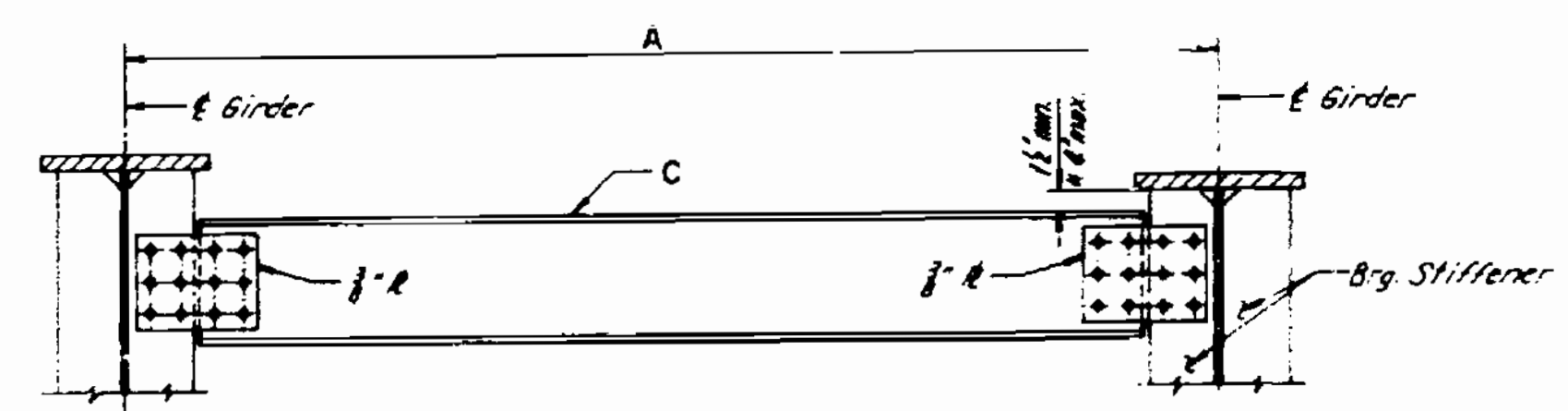
DETAIL C



DIAPHRAGM CONNECTION PLATE NEAR FIELD SPICE

Note: When intermediate diaphragm connection plates or web stiffener plates interfere with flanges splice plates and bolts, clip connection or stiffener plates as shown.

TABLE OF DIMENSIONS					
TYPE	A	B	C	D	WEIGHT
1	8'-2"	48"	L 4x3x3/8		
2	8'-8"	48"	L 5x5x3/8		
3	8'-8 1/2"	48"	L 5x5x3/8		
4	8'-8 3/4"	48"	L 5x5x3/8		
5	8'-8 7/8"	48"	L 5x5x3/8		
6	8'-8 1/2"	48"	L 5x5x3/8		
7	8'-8 3/4"	48"	L 5x5x3/8		
8	8'-8 1/2"	48"	L 5x5x3/8		
9	8'-8"	48"	C 12x20.7	L 5x5x3/8	
10	8'-8 1/2"	48"	C 12x20.7	L 5x5x3/8	
11	8'-8 3/4"	48"	C 12x25	L 5x5x3/8	
12	8'-8"	48"	C 12x20.7		
13	8'-8 1/2"	48"	C 12x20.7		
14	8'-8 3/4"	48"	C 12x25		
15	8'-8 3/4"	48"	C 12x25		



END DIAPHRAGM

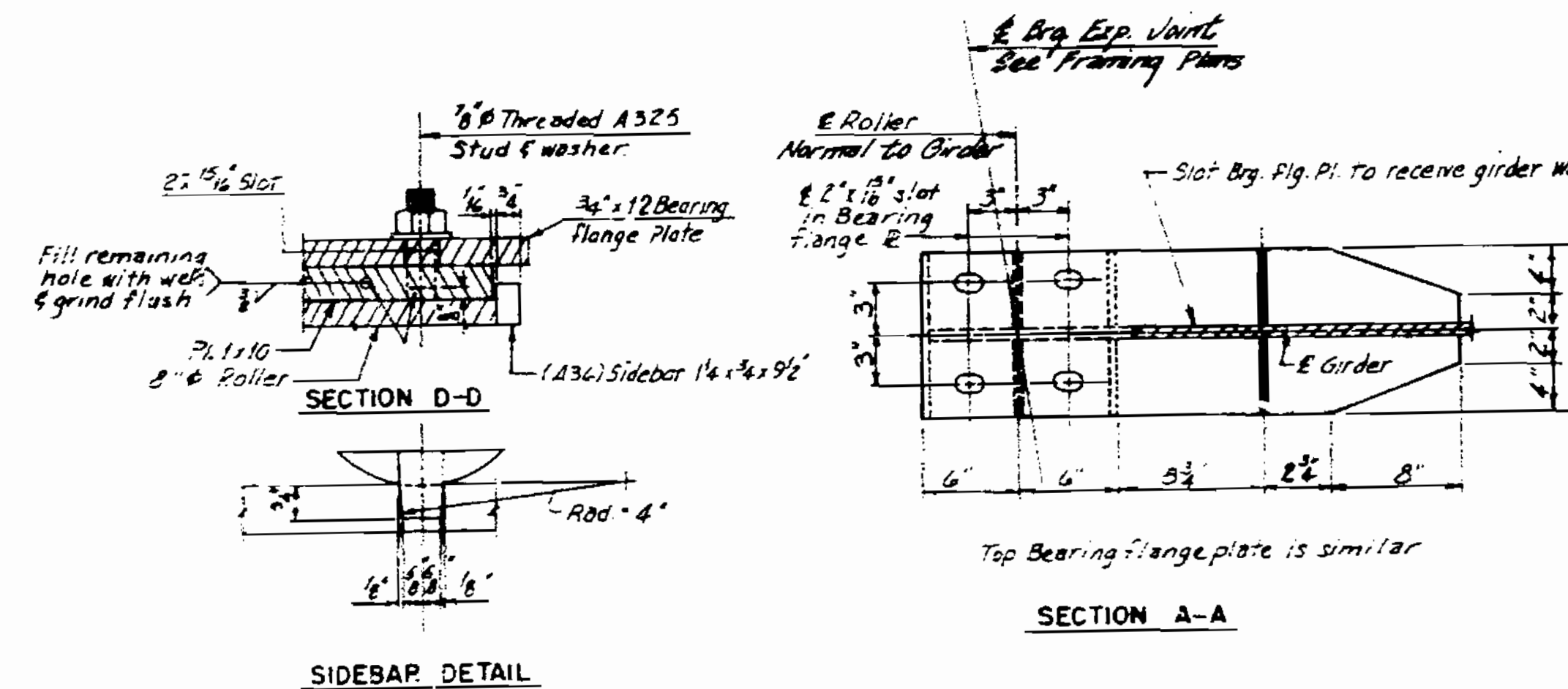
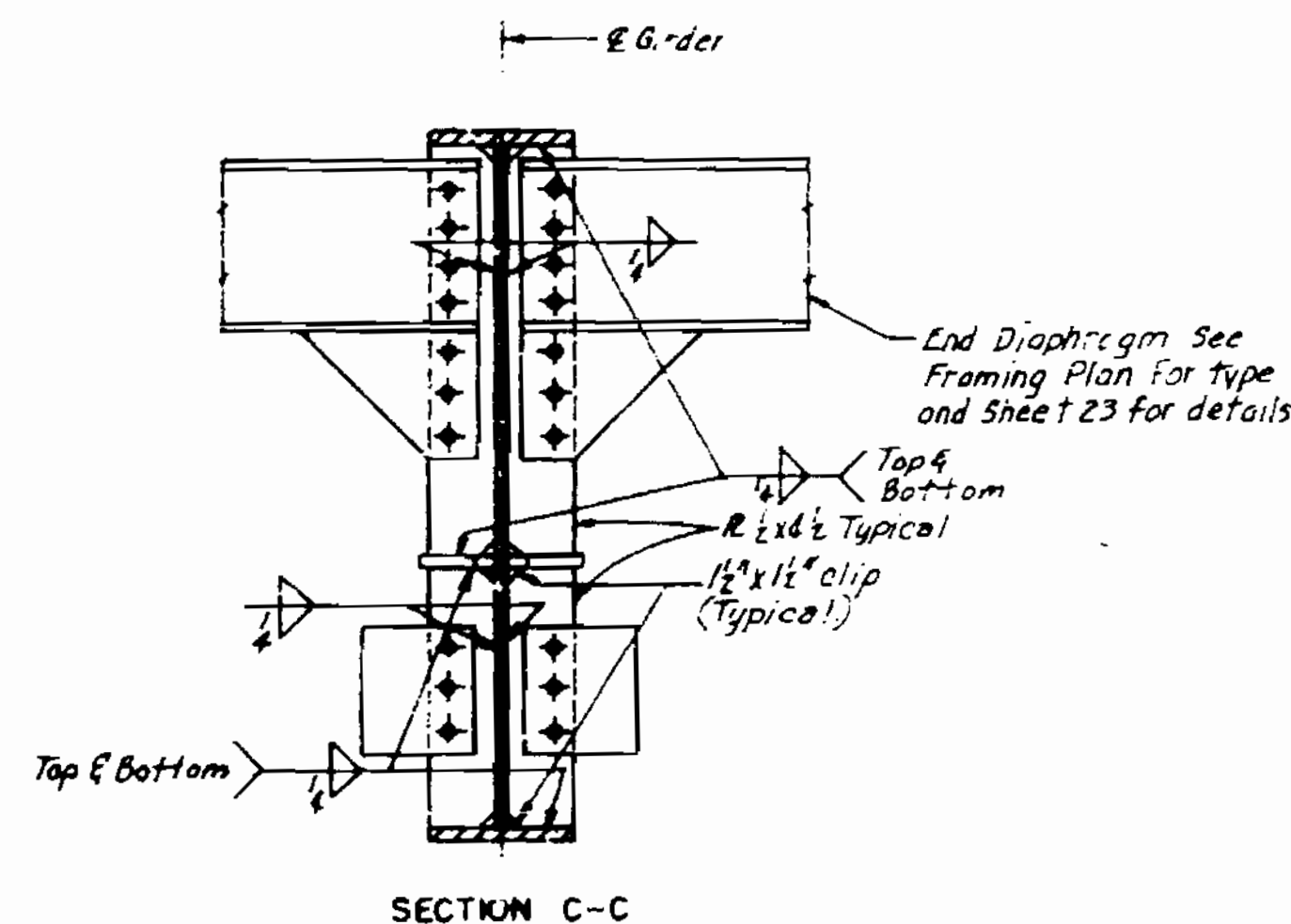
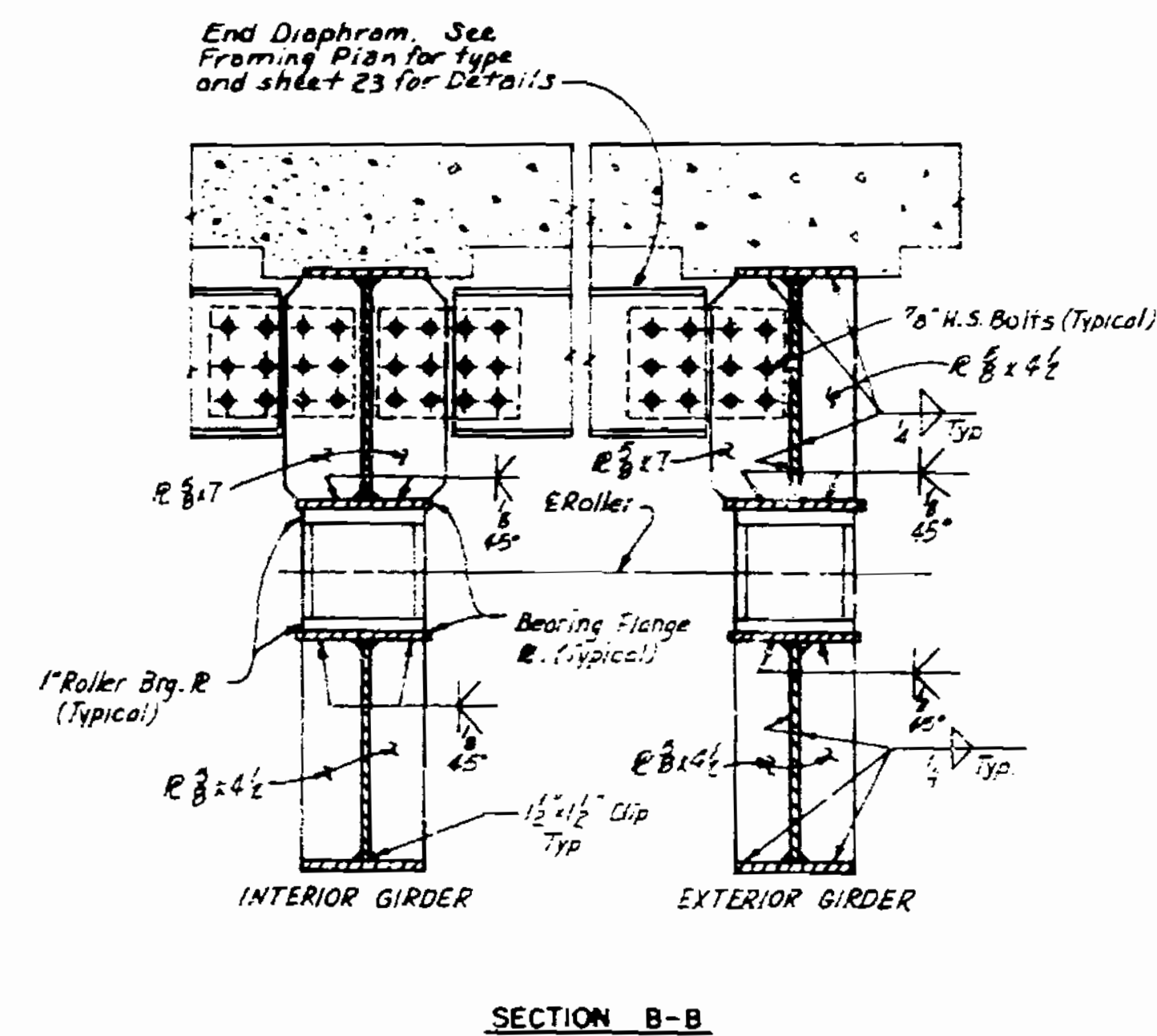
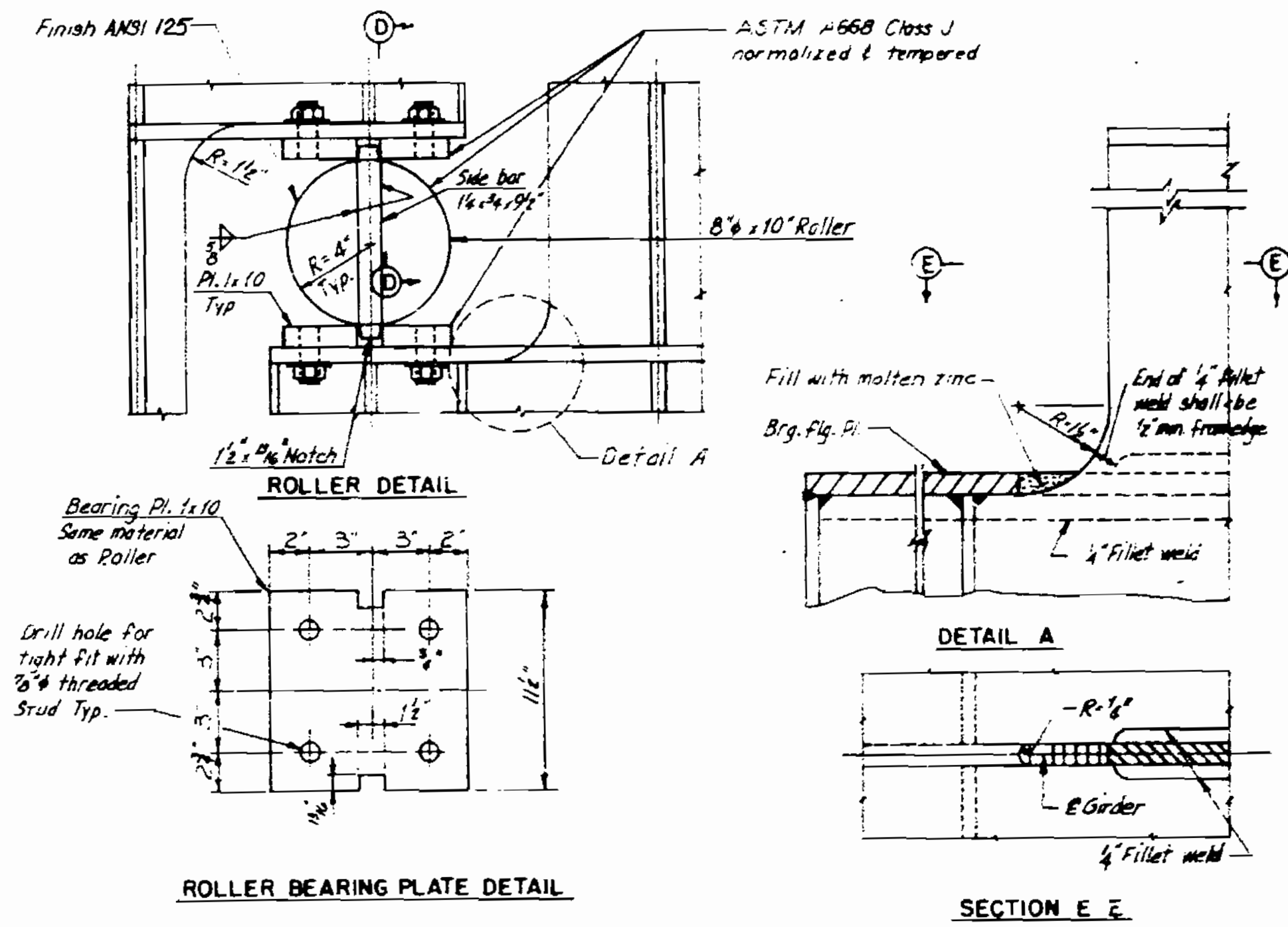
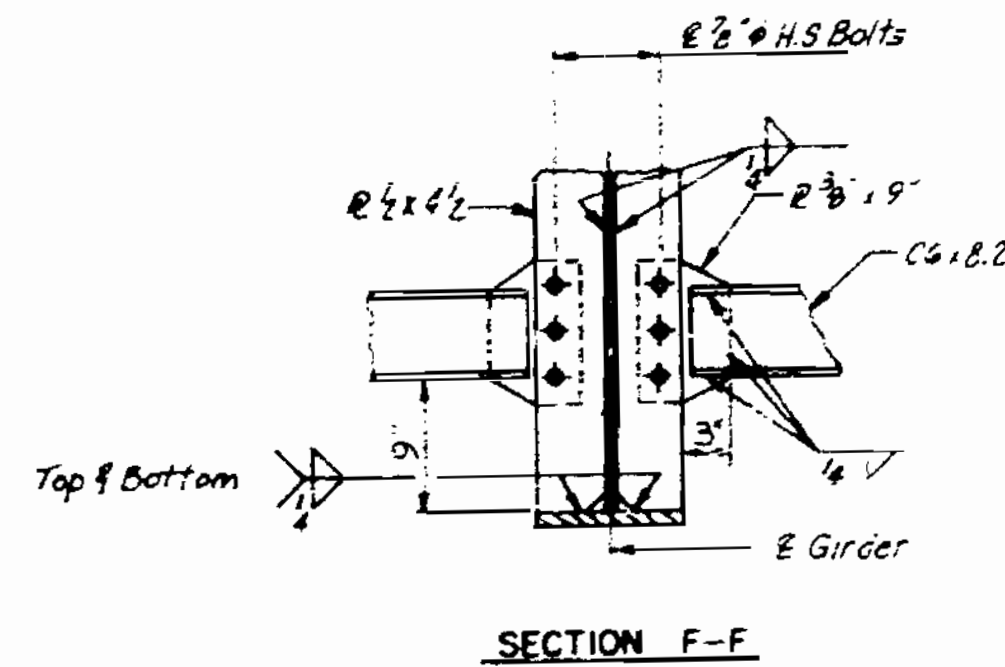
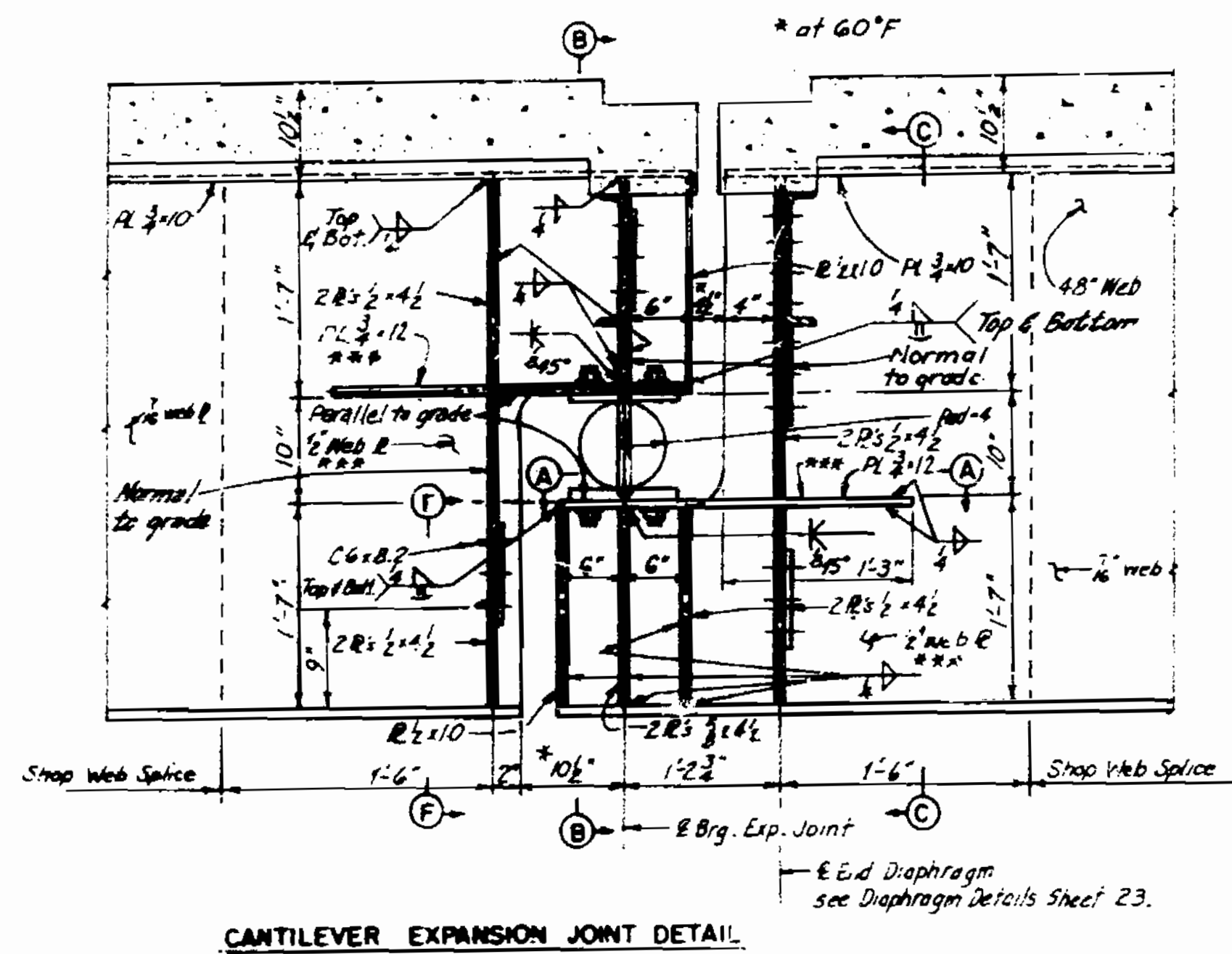
Types 12 thru 15

Note: Lengths shown for Type 9 thru Type 15 diaphragms are along L Bearing Expansion Joint.

DIAPHRAGM DETAILS

TJL

FEED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		89	162	



Notes:
 *** denotes plates subject to notch toughness requirements.
 Roller and roller bearing plates at the State Line expansion joint and at Expansion Joint 4 are to be furnished and installed as a part of this Contract.
 Weight of Roller Bearings is included in "Fabricated Structural Carbon Steel".

GIRDER EXPANSION JOINTS

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

CONCRETE DECK AND PAINTING

(UNIT 1 THRU 4)

PRI. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		8	172	

INDEX OF SHEETS

- 1 INDEX AND GENERAL NOTES
- 2 GENERAL PLAN AND ELEVATION
- 3 GENERAL PLAN AND ELEVATION
- 4 SUMMARY OF QUANTITIES AND TYPICAL SECTION
- 5 REINFORCING SCHEDULE
- 6 SLAB PLAN AND REINFORCEMENT — UNIT 1 WESTBOUND
- 7 SLAB PLAN — UNIT 1 WESTBOUND
- 8 SLAB PLAN AND REINFORCEMENT — UNIT 1 EASTBOUND
- 9 SLAB PLAN — UNIT 1 EASTBOUND
- 10 SLAB PLAN AND REINFORCEMENT — UNIT 2 WESTBOUND
- 11 SLAB PLAN — UNIT 2 WESTBOUND
- 12 SLAB PLAN AND REINFORCEMENT — UNIT 2 EASTBOUND
- 13 SLAB PLAN — UNIT 2 EASTBOUND
- 14 SLAB PLAN AND REINFORCEMENT — UNIT 3 WESTBOUND
- 15 SLAB PLAN AND REINFORCEMENT — UNIT 3 EASTBOUND
- 16 SLAB PLAN AND REINFORCEMENT — UNIT 4 WESTBOUND
- 17 SLAB PLAN AND REINFORCEMENT — UNIT 4 EASTBOUND
- 18 CURB AND LIGHTING DETAILS
- 19 RAIL POST LOCATION
- 20 BARRIER RAIL DETAILS

- 21 ELASTOMERIC EXPANSION JOINT 1, 2 AND 3
- 22 DRAINAGE
- 23 GIRDER ELEVATION — UNIT 1 WESTBOUND
- 24 GIRDER ELEVATION — UNIT 1 EASTBOUND
- 25 GIRDER ELEVATION — UNIT 2 WESTBOUND
- 26 GIRDER ELEVATION — UNIT 2 EASTBOUND
- 27 GIRDER ELEVATION — UNIT 3 & 4 WESTBOUND
- 28 GIRDER ELEVATION — UNIT 3 & 4 EASTBOUND

GENERAL NOTES

DESIGN SPECIFICATIONS: AASHTO 1977, Load Factor Design and Interim Specification 1978 and 1979.

DESIGN LOADING: HS20-44 and Alternate Military Loading with 15 Lb./Sq.Ft. for future wearing surface. Fatigue Stress -- Case I.

CONSTRUCTION SPECIFICATION: Missouri Standard Specification for Highway Construction, 1977.

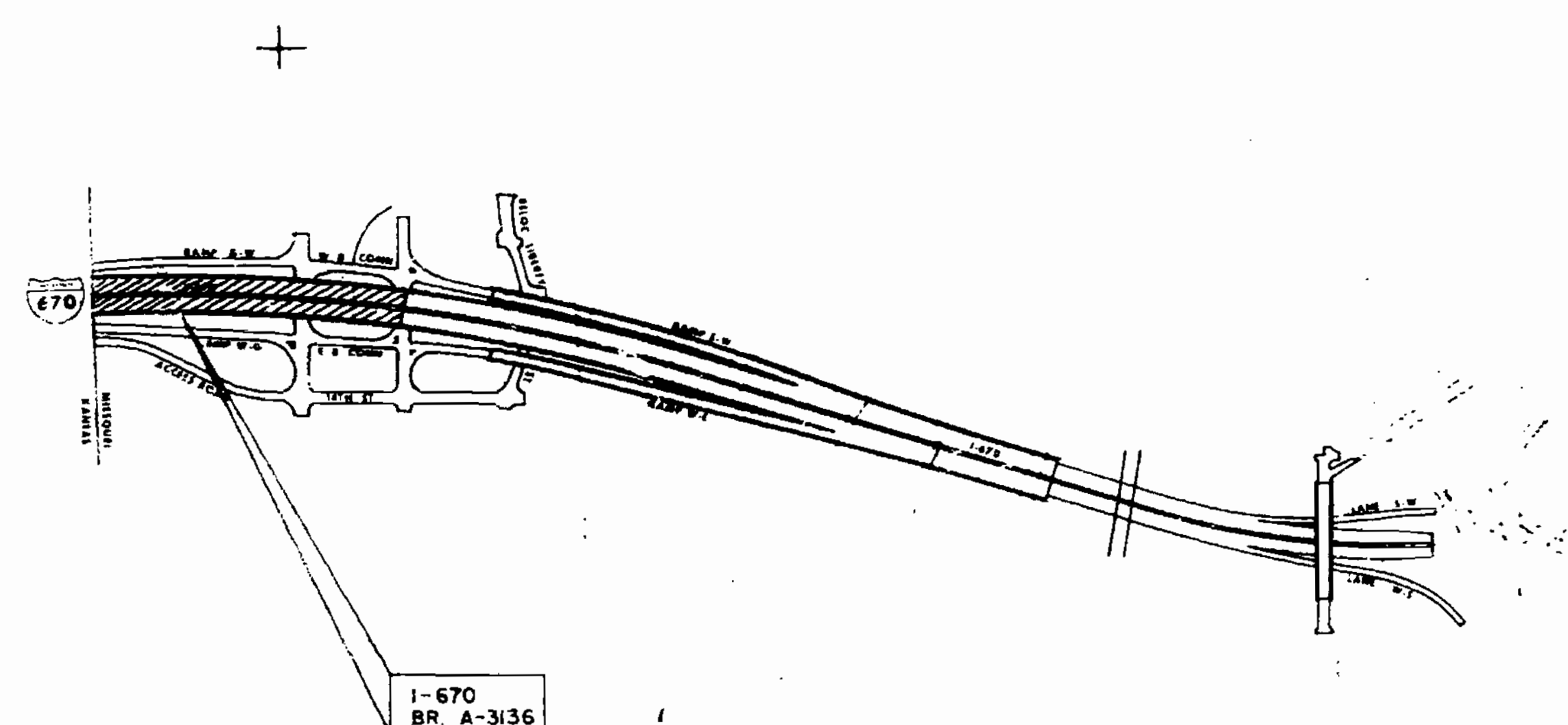
DESIGN UNIT STRESS: Class B-2 Concrete $f'_c = 4,000$ psi
 Reinforcing Steel -- Grade 60 $f_y = 60,000$ psi
 Structural Steel $f_y = 36,000$ psi
 Class B1 Concrete $f'_c = 4,000$ psi (Safety Barrier Curb only)

UTILITIES: All utilities, unless shown otherwise, shall be removed or relocated by others. The contractor shall notify the owner of the utilities of his work schedule sufficiently in advance to allow time for disposition of utilities.

PAINT: System C by contractor in accordance with Standard Specification 712.12.

REINFORCING STEEL: Bar sizes are designated on plans by number. The first digit after the letter in three digit marks and the first two digits after the letter in four digit marks indicate the size of the bar.
 Dimension shown on the plans from the reinforcing steel to the outside edge of concrete are clear dimensions unless otherwise indicated.
 Minimum clearance to reinforcing steel shall be 1 1/2" unless shown otherwise.
 All bending dimensions are "out-to-out" of bars. Hooks and bends, unless otherwise shown, shall be in accordance with ACI Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI-318-71).

JOINT FILLER: All joint filler shall meet the requirement of Standard Specification 1057.2.4.



I-670
BR. A-3136

LOCATION SKETCH

SUBMITTED BY
Shaul D. Miller
 REGISTERED PROFESSIONAL ENGINEER
 MISSOURI NO. E-7860

DESIGNED DLM 10/79
 CHECKED MKB
 DETAILED CAK 10/79
 CONCRETE DLM 10/79

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1 of 25

BRIDGE I-670 VIADUCT
 STATE ROAD-INTERSTATE ROUTE 670
 IN KANSAS CITY
 PROJECT NO. 116-670-1(3) STA. 52+79.857
 JOB NO. 4 I-670 463 RTE I-670
 JACKSON COUNTY

STB
STB 706.35
A-3136

DATE 5/1/85

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

CONCRETE DECK AND PAINTING

(UNIT 1 THRU 4)

PUB. PROJ. DIST. NO.	PROJ. NO.	PUB. PROJ. DIST. NO.	PUB. PROJ. DIST. NO.	SHEET NO.	TOTAL SHEETS
1				172	

INDEX OF SHEETS

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- 2 GENERAL PLAN AND ELEVATION
- 3 GENERAL PLAN AND ELEVATION
- 4 SUMMARY OF QUANTITIES AND TYPICAL SECTION
- 5 REINFORCING SCHEDULE
- 6 SLAB PLAN AND REINFORCEMENT - UNIT 1 WESTBOUND
- 7 SLAB PLAN - UNIT 1 WESTBOUND
- 8 SLAB PLAN AND REINFORCEMENT - UNIT 1 EASTBOUND
- 9 SLAB PLAN - UNIT 1 EASTBOUND
- 10 SLAB PLAN AND REINFORCEMENT - UNIT 2 WESTBOUND
- 11 SLAB PLAN - UNIT 2 WESTBOUND
- 12 SLAB PLAN AND REINFORCEMENT - UNIT 2 EASTBOUND
- 13 SLAB PLAN - UNIT 2 EASTBOUND
- 14 SLAB PLAN AND REINFORCEMENT - UNIT 3 WESTBOUND
- 15 SLAB PLAN AND REINFORCEMENT - UNIT 3 EASTBOUND
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- 22 DRAINAGE
- 23 GIRDER ELEVATION - UNIT 1 WESTBOUND
- 24 GIRDER ELEVATION - UNIT 1 EASTBOUND
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- 28 GIRDER ELEVATION - UNIT 3 & 4 EASTBOUND

GENERAL NOTES

DESIGN SPECIFICATIONS: AASHTO 1977, Load Factor Design and Interim Specification 1978 and 1979.

DESIGN LOADING: HS20-44 and Alternate Military Loading with 15 Lb./Sq.Ft. for future wearing surface. Fatigue Stress -- Case I.

CONSTRUCTION SPECIFICATION: Missouri Standard Specification for Highway Construction, 1977.

DESIGN UNIT STRESS: Class B-2 Concrete $f'_c = 4,000$ psi
Reinforcing Steel -- Grade 60 $f_y = 60,000$ psi
Structural Steel $f'_c = 36,000$ psi
Class B Concrete $f'_c = 4,000$ psi (Safety Barrier, Curb only)

UTILITIES: All utilities, unless shown otherwise, shall be removed or relocated by others. The contractor shall notify the owner of the utilities of his work schedule sufficiently in advance to allow time for disposition of utilities.

PAINT: System C by contractor in accordance with Standard Specification 712.12.

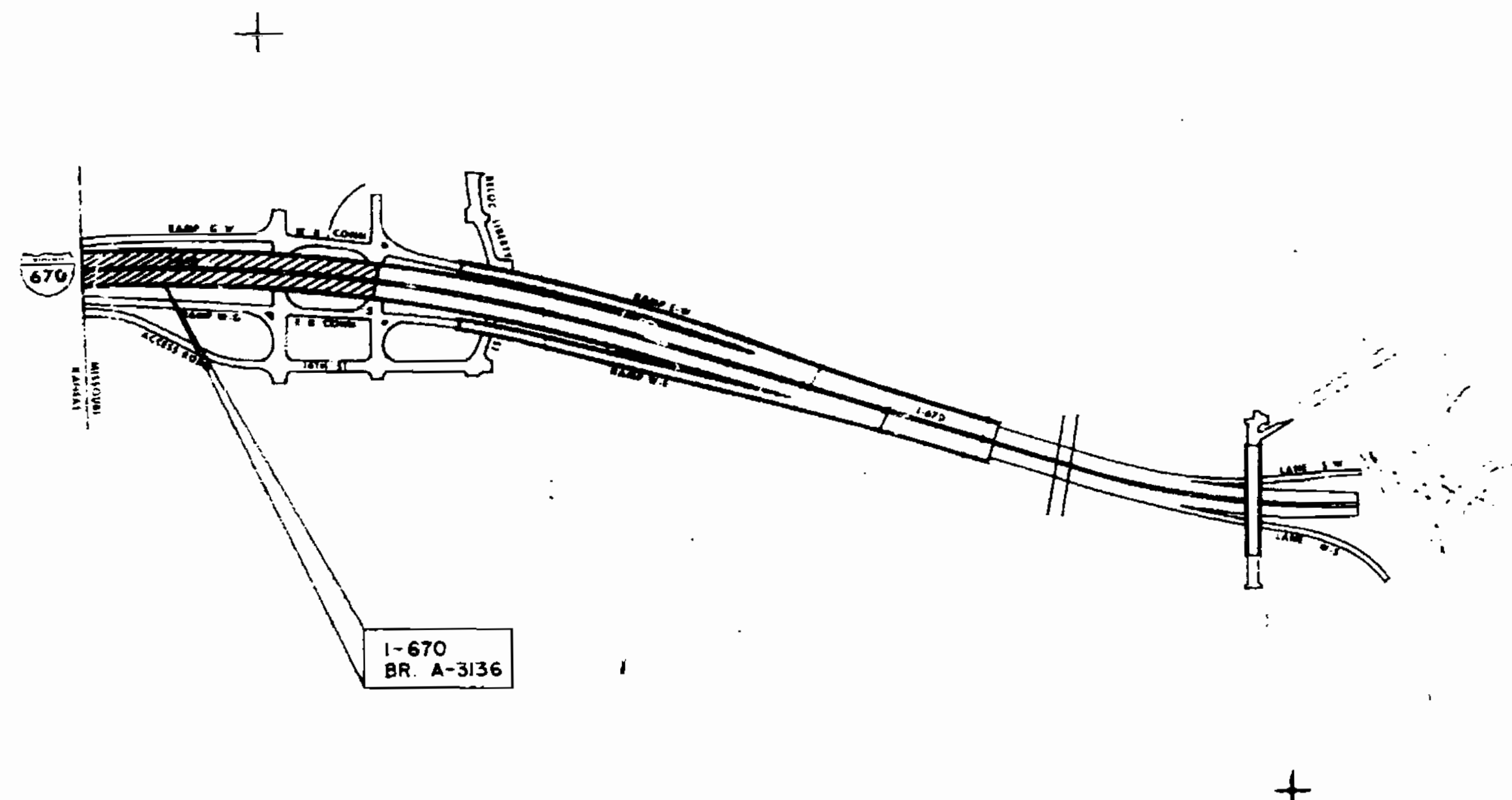
REINFORCING STEEL: Bar sizes are designated on plans by number. The first digit after the letter in three digit marks and the first two digits after the letter in four digit marks indicate the size of the bar.

Dimension shown on the plans from the reinforcing steel to the outside edge of concrete are clear dimensions unless otherwise indicated.

Minimum clearance to reinforcing steel shall be 1 1/2" unless shown otherwise.

All bending dimensions are "out-to-out" of bars. Hooks and bends, unless otherwise shown, shall be in accordance with ACI Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI-318-71).

JOINT FILLER: All joint filler shall meet the requirement of Standard Specification 1057.2.4.



LOCATION SKETCH

SUBMITTED BY
Donald J. Miller
REGISTERED PROFESSIONAL ENGINEER
MISSOURI NO. E-7860

DESIGNED DLM 1079
DETAILS MKB 1079
CHECKED CAX 1079
CHECKED DLM 1079

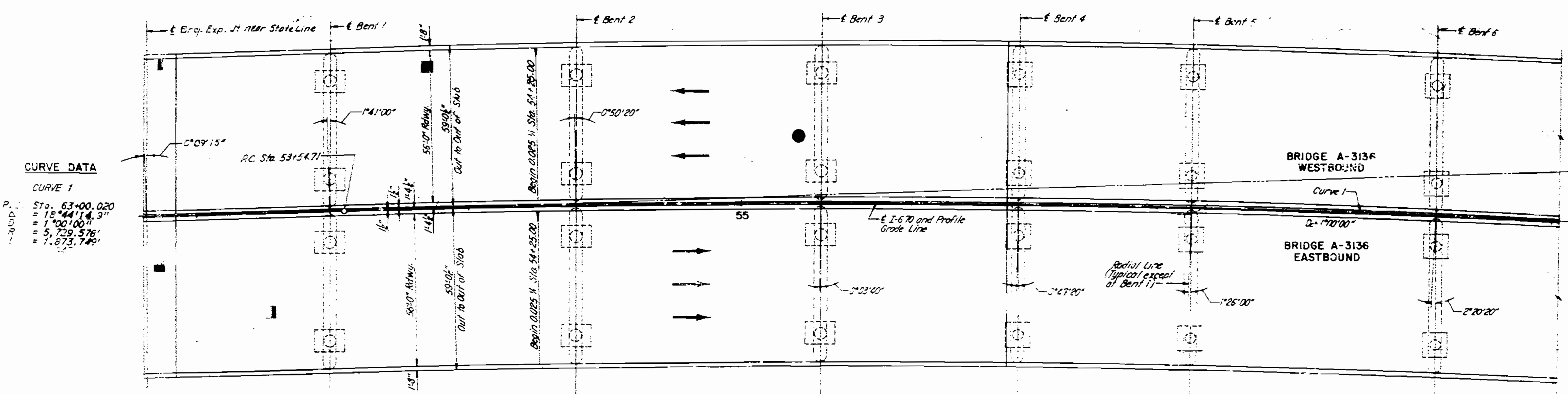
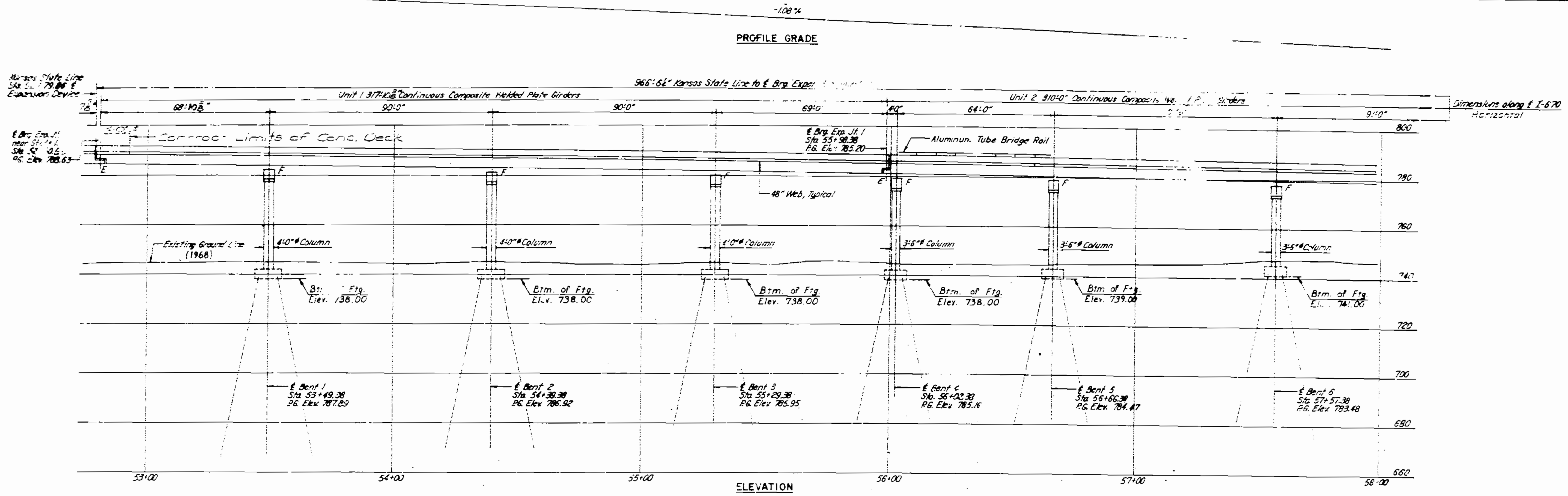
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1 of 28

BRIDGE I-670 VIADUCT
STATE ROAD-INTERSTATE ROUTE 670
IN KANSAS CITY
PROJECT NO. 816-670-100(3) STA. 52+79.857
JOB NO. 4 I-670 46B RTE I-670
JACKSON COUNTY
DATE 5/11/83

STD.
706.35
A-3136

FILE NO.	DATE	FILE NO.	DATE	FILE NO.	DATE
1	88				



BENCH MARKS

- H-71 R.P. spike in N. side of base of P.P., S.E. corner of 12th St. and Onnessee. Elev. 748.63
- H-72 Top of head of arrow or top of fire hydrant, S.E. corner of 12th St. and Wyoming. Elev. 751.15
- H-74 "X" in N. bolt in top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 750.95
- H-75 "X" in N. bolt in top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E. side of Wyoming. Elev. 752.18

Note: This drawing is not to scale. Follow dimensions.

NOTE:
The information shown on this drawing 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.

DESIGNED BY J.R. 1878
CHECKED J.R. 1878

Sheet No. 2 of 28.

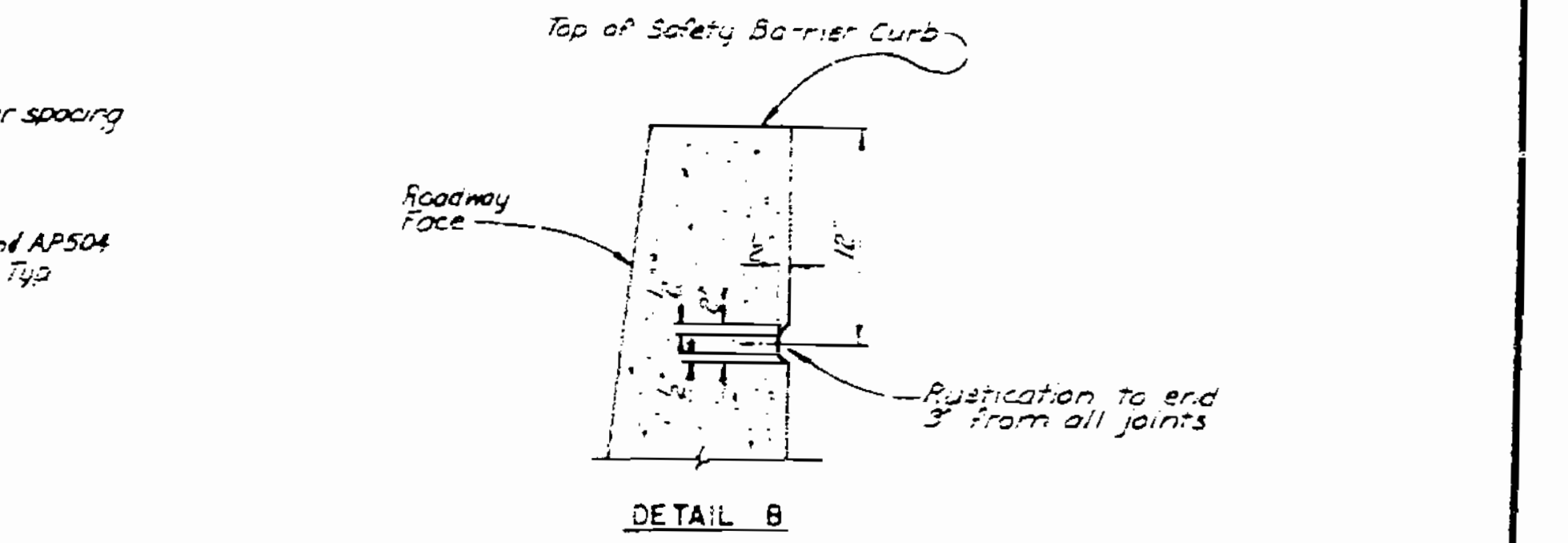
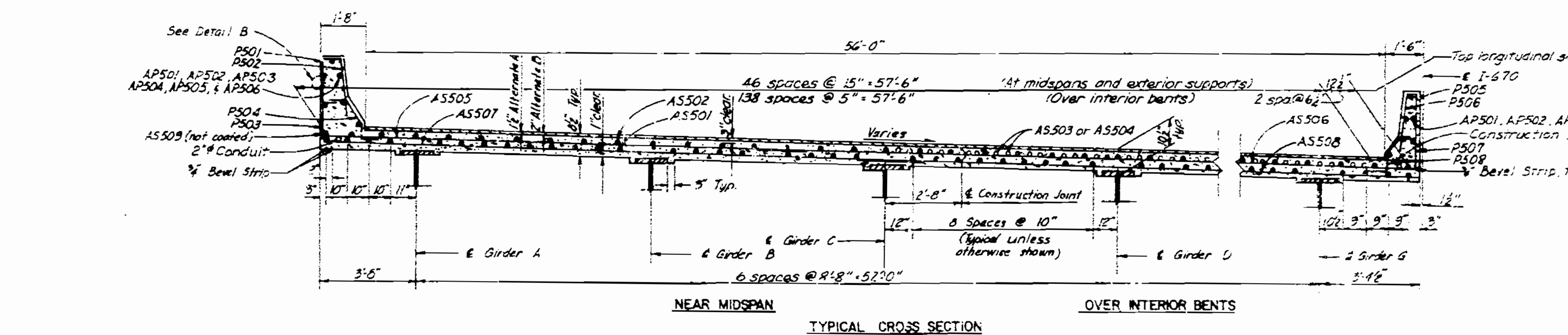
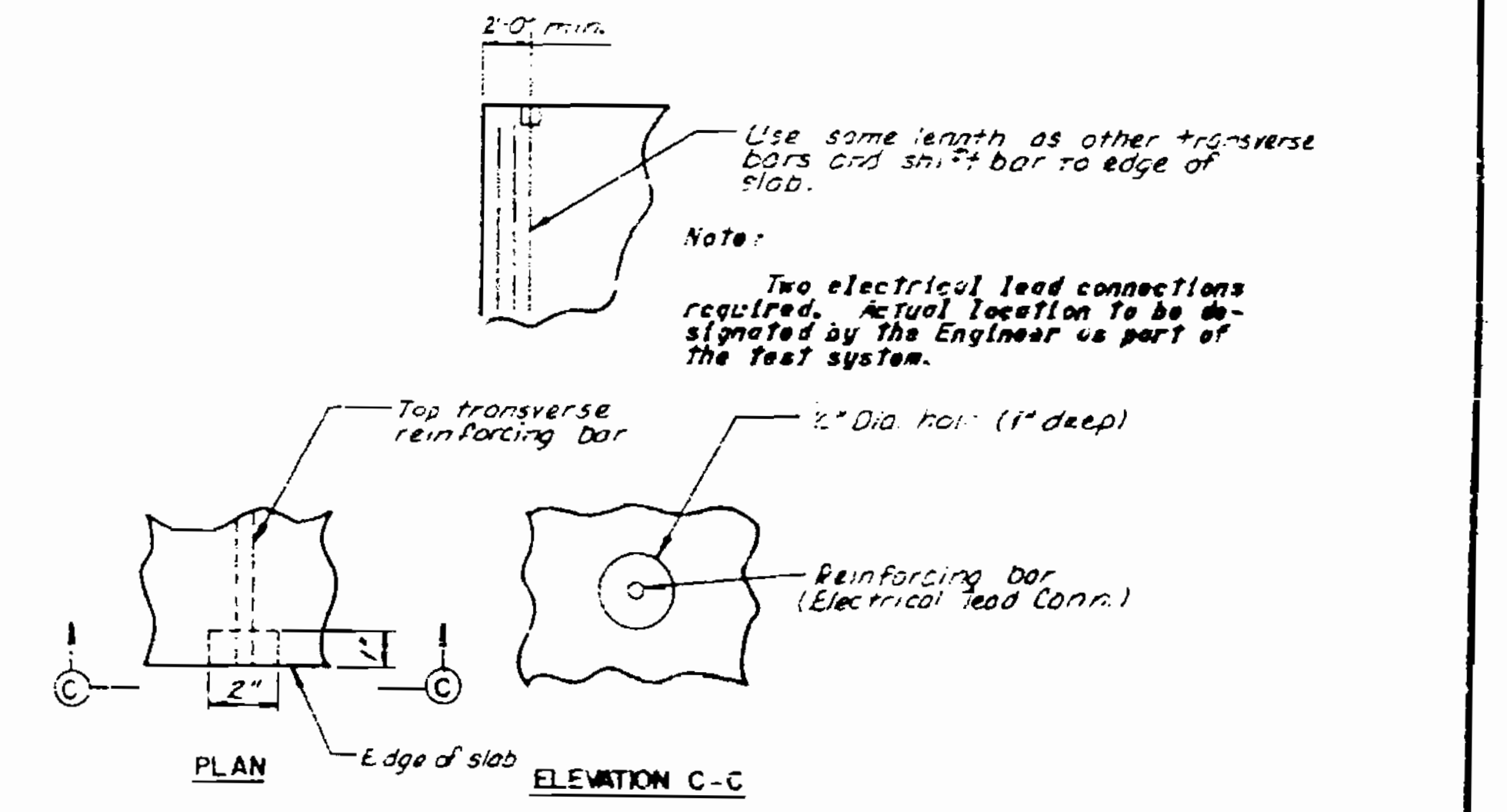
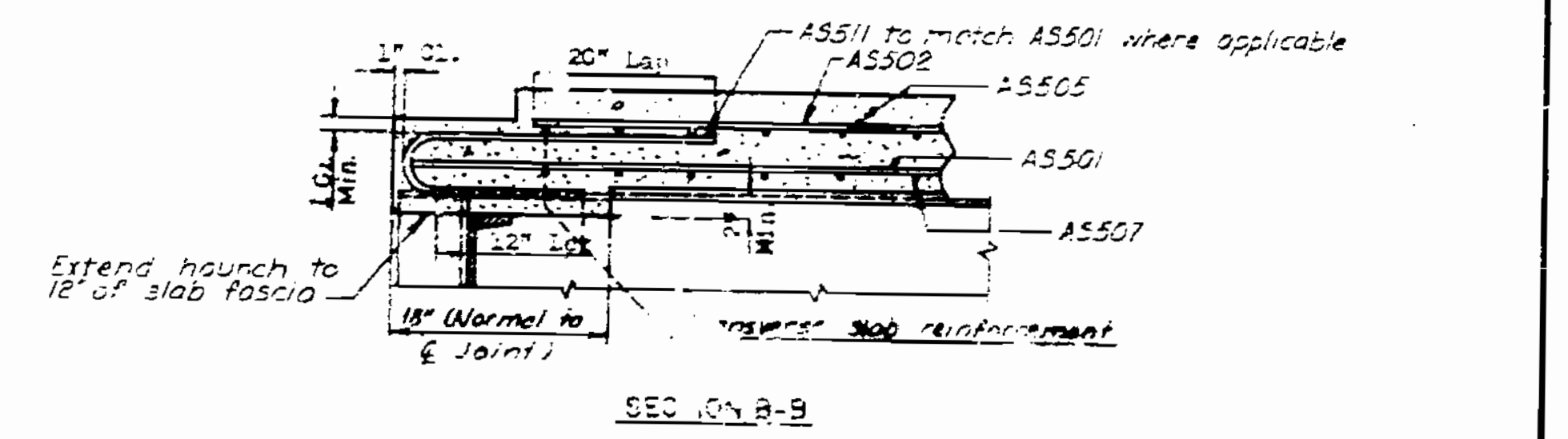
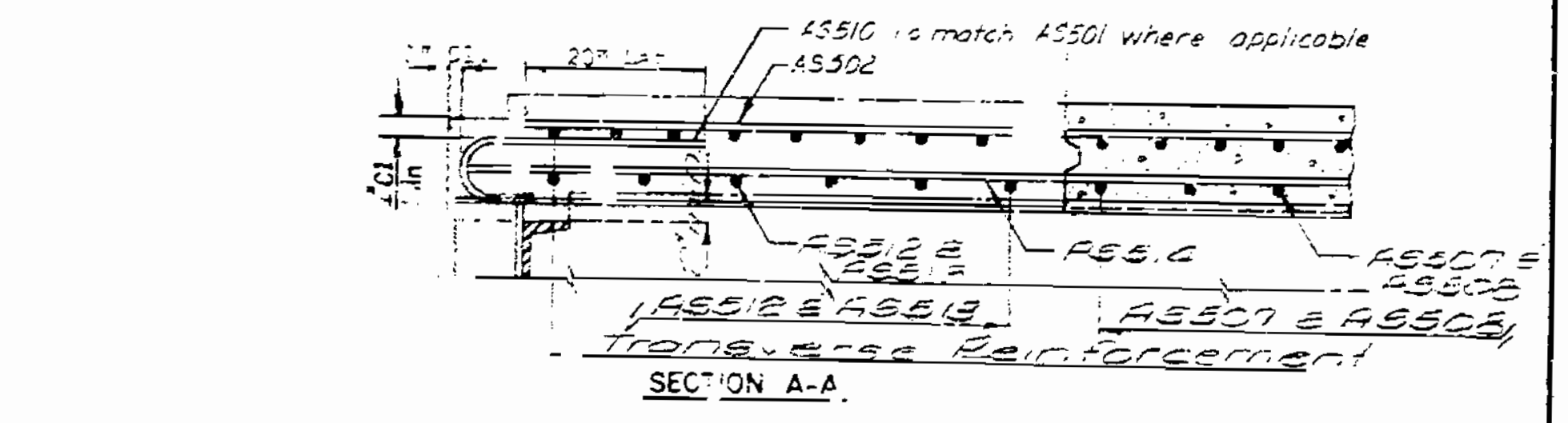
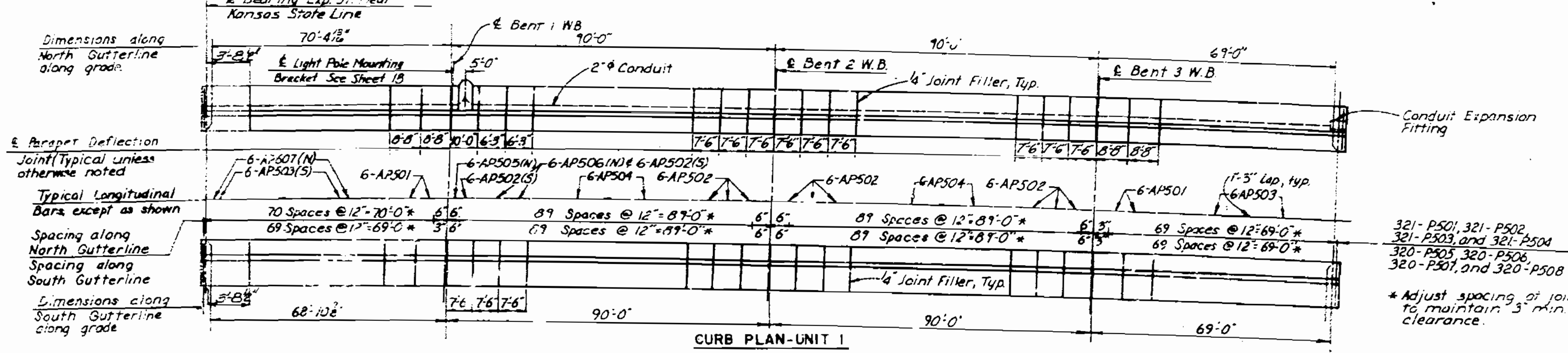
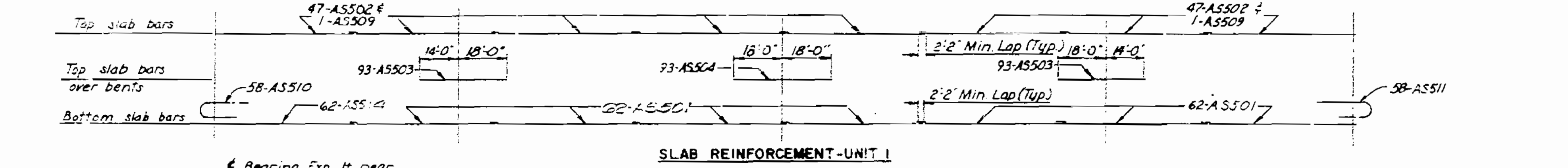
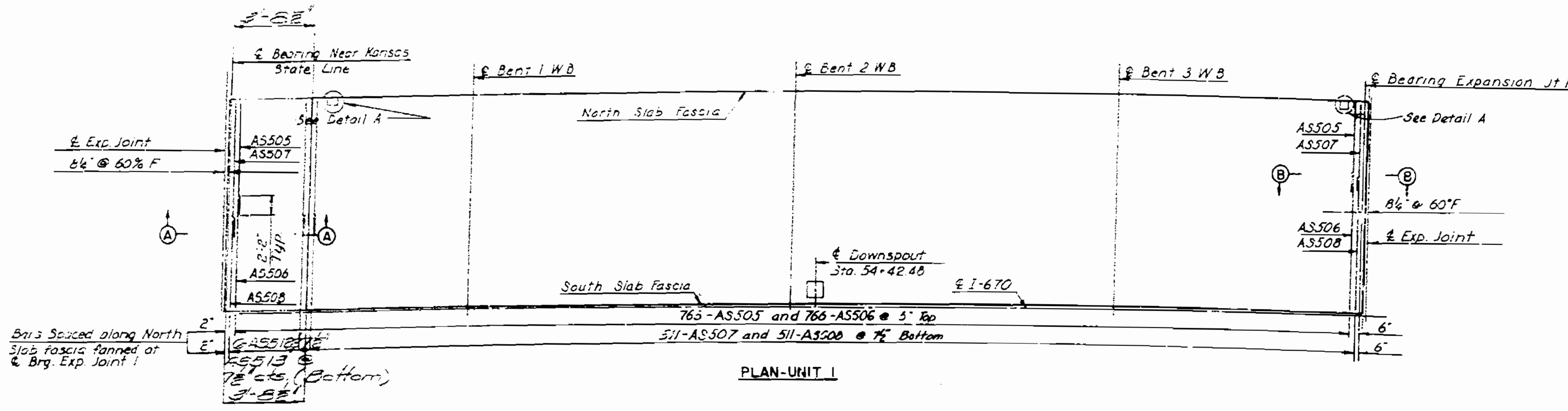
GENERAL PLAN AND ELEVATION

JACKSON COUNTY

A-3136

Reinforcement to be installed in this contract. Concrete to be placed with the Exp. Device in the future of the job.

FED. PROJ. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		77		



Note: --- indicates future work to be completed with exp. device installation.

SLAB AND CURB REINFORCEMENT UNIT I WESTBOUND

DETAILED CAR 10 79
CHECKED SLM 10 79

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 6 of 22.

JACKSON COUNTY

A-3136

NO.	MARK	LENGTH	SHAPE	LOCATION
1				
2				

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
UNIT WESTBOUND				
EPOXY COATED BARS				
AP501	45	81'-4"	Str.	Parapet
AP502	126	71'-2"	Str.	Parapet
AP503	36	261'-7"	Str.	Parapet
AP504	48	231'-0"	Str.	Parapet
AP505	8	81'-0"	Str.	Parapet &
AP506	12	511"	Str.	Parapet
AP507	12	271'-4"	Str.	Parapet
AS502	576	411'-9"	Str.	Slab
AS503	186	321'-0"	Str.	Slab
AS504	93	361'-0"	Str.	Slab
AS505	786	171'-0"	Str.	Slab
AS506	786	431'-3"	Str.	Slab
AS510	58	21'-11"	Str.	Slab
AS511	58	41'-11"	Str.	Slab
D601	12	51'-0"	Str.	Slab Drains
D602	4	61'-6"	Str.	Slab Drains
L401	3	71'-0"	Str.	Light St'd Sup.
L402	3	61'-2"	Str.	Light St'd Sup.
L501	2	71'-0"	Str.	Light St'd Sup.
L502	2	61'-3"	Str.	Light St'd Sup.
L503	2	61'-7"	Str.	Light St'd Sup.
L504	3	71'-2"	Str.	Light St'd Sup.
L601	6	31'-3"	Str.	Light St'd Sup.
P501	321	31'-4"	Str.	Parapet
P502	321	31'-11"	Str.	Parapet
P503	321	21'-2"	Str.	Parapet
P504	321	31'-11"	Str.	Parapet
P505	320	21'-8"	Str.	Parapet
P506	320	21'-8"	Str.	Parapet
P507	320	11'-11"	Str.	Parapet
P508	320	21'-10"	Str.	Parapet
NON EPOXY COATED BARS				
AS501	453	421'-3"	Str.	Slab
AS507	503	221'-0"	Str.	Slab
AS508	503	381'-11"	Str.	Slab
AS509	3	411'-9"	Str.	Slab
UNIT EASTBOUND				
EPOXY COATED BARS				
AP501	50	91'-4"	Str.	Parapet &
AP502	144	71'-2"	Str.	Parapet
AP503	48	231'-0"	Str.	Parapet
AP504	48	261'-7"	Str.	Parapet
AS501	376	411'-7"	Str.	Slab
AS503	186	321'-0"	Str.	Slab
AS504	93	361'-0"	Str.	Slab
AS505	782	341'-8"	Str.	Slab
AS506	782	261'-3"	Str.	Slab
AS510	58	21'-11"	Str.	Slab
AS511	58	41'-11"	Str.	Slab
D601	12	51'-0"	Str.	Slab Drains
D602	4	61'-6"	Str.	Slab Drains
L401	3	71'-0"	Str.	Light St'd Sup.
L402	3	61'-2"	Str.	Light St'd Sup.
L501	2	71'-0"	Str.	Light St'd Sup.
L502	2	61'-3"	Str.	Light St'd Sup.
L503	2	61'-7"	Str.	Light St'd Sup.
L504	3	71'-2"	Str.	Light St'd Sup.
L601	6	31'-3"	Str.	Light St'd Sup.
P501	318	31'-0"	Str.	Parapet
P502	318	31'-11"	Str.	Parapet
P503	318	21'-2"	Str.	Parapet
P504	318	31'-11"	Str.	Parapet
P505	318	21'-8"	Str.	Parapet
P506	318	21'-8"	Str.	Parapet
P507	318	11'-11"	Str.	Parapet
P508	318	21'-10"	Str.	Parapet
NON-EPOXY COATED BARS				
AS502	453	421'-3"	Str.	Slab
AS507	503	221'-0"	Str.	Slab
AS508	503	381'-11"	Str.	Slab

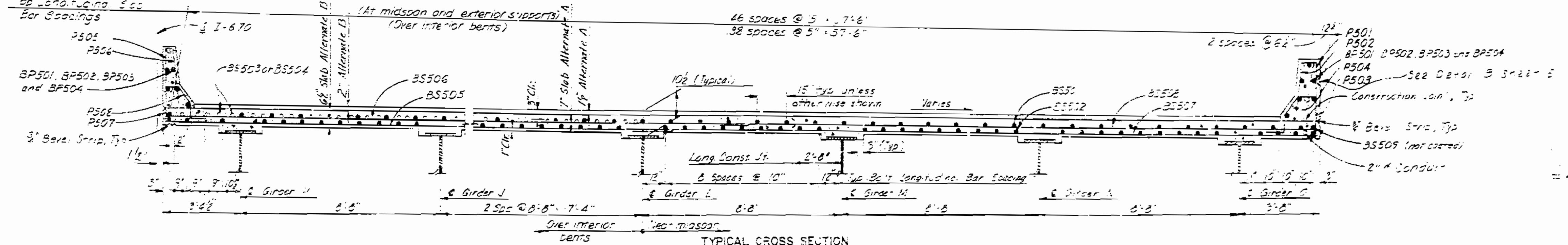
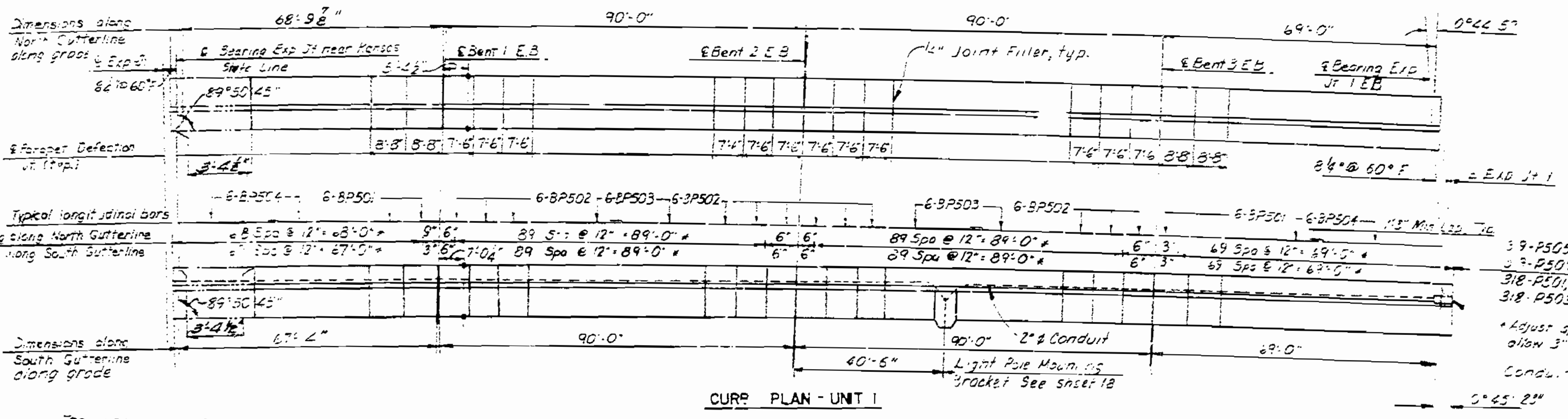
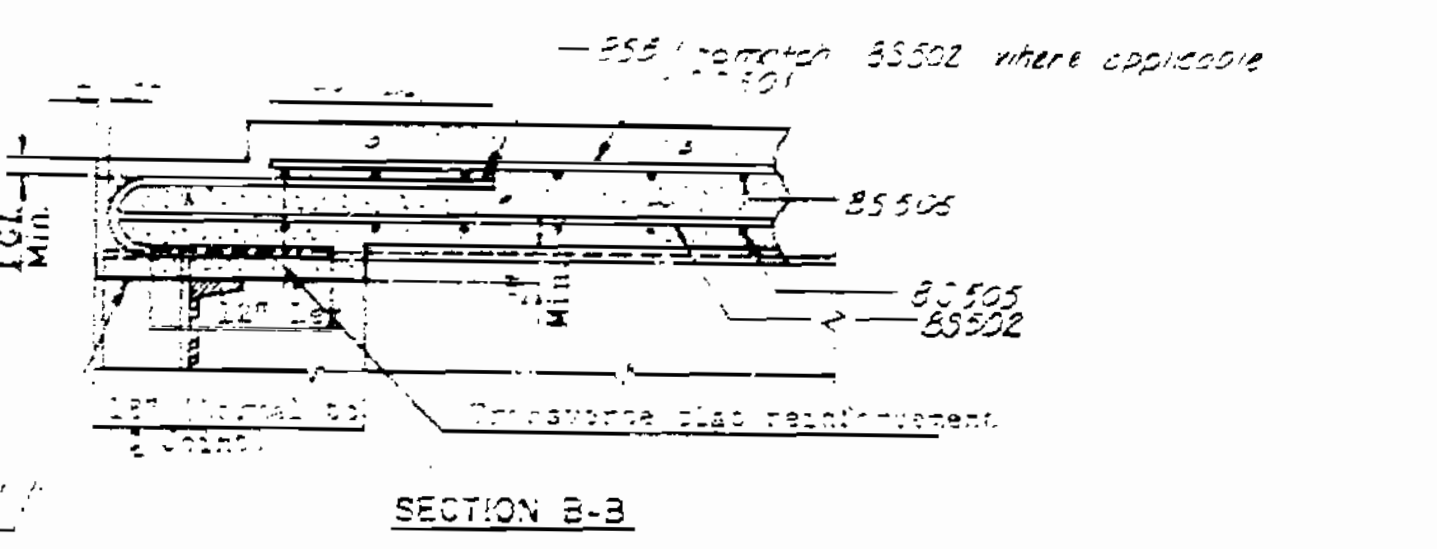
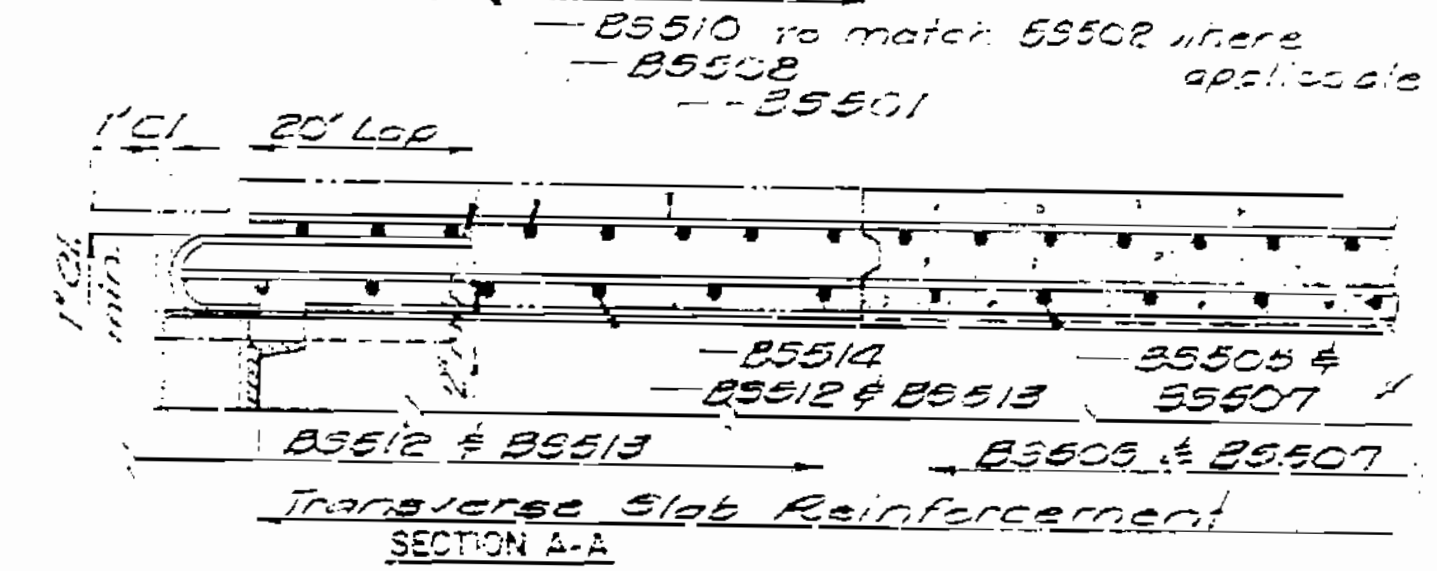
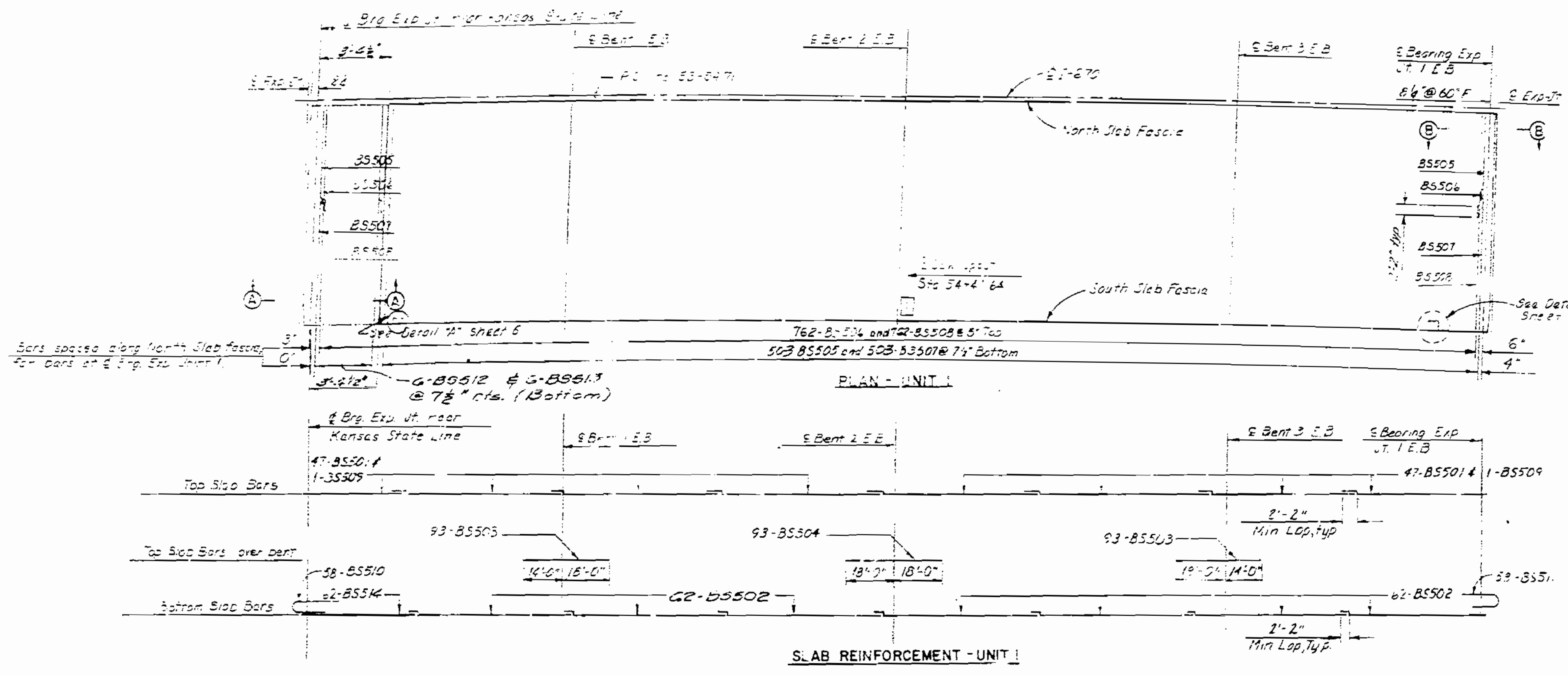
BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
UNIT 2 WESTBOUND				
EPOXY COATED BARS				
CS502	329	451'-11"	Str.	Slab
CS503	93	381'-0"	Str.	Slab
CS504	93	361'-0"	Str.	Slab
CS505	93	331'-0"	Str.	Slab
CS506	95	111'-10"	Str.	Slab &
CS507	740	71'-8"	Str.	Slab
CS508	740	431'-4"	Str.	Slab
CS512	58	41'-11"	Str.	Slab
CS513	58	21'-11"	Str.	Slab
CP501	24	71'-8"	Str.	Parapet
CP502	24	231'-0"	Str.	Parapet
CP503	168	71'-2"	Str.	Parapet
CP504	43	231'-5"	Str.	Parapet
CP505	24	231'-3"	Str.	Parapet
CP506	12	41'-10"	Str.	Parapet
D601	24	51'-0"	Str.	Slab Drains
D602	6	61'-6"	Str.	Slab Drains
L401	6	71'-0"	Str.	Light St'd Sup.
L402	6	61'-2"	Str.	Light St'd Sup.
L501	4	71'-0"	Str.	Light St'd Sup.
L502	4	61'-3"	Str.	Light St'd Sup.
L503	4	61'-7"	Str.	Light St'd Sup.
L504	6	71'-2"	Str.	Light St'd Sup.
L601	12	31'-3"	Str.	Light St'd Sup.
P501	312	31'-0"	Str.	Parapet
P502	312	31'-11"	Str.	Parapet
P503	312	21'-2"	Str.	Parapet
P504	312	31'-11"	Str.	Parapet
P505	312	21'-8"	Str.	Parapet
P506	312	21'-8"	Str.	Parapet
P507	312	11'-11"	Str.	Parapet
P508	312	21'-10"	Str.	Parapet
NON - EPOXY COATED BARS				
CS501	434	461'-11"	Str.	Slab
CS509	494	221'-0"	Str.	Slab
CS510	494	391'-11"	Str.	Slab
CS511	7	451'-11"	Str.	Slab
UNIT 2 EASTBOUND				
EPOXY COATED BARS				
D601	24	51'-0"	Str.	Slab Drains
D602	8	61'-6"	Str.	Slab Drains
AS501	376	401'-5"	Str.	Slab
CS503	93	331'-0"	Str.	Slab
CS504	93	361'-0"	Str.	Slab
CS505	93	381'-0"	Str.	Slab
CS506	95	111'-10"	Str.	Slab &
CS507	740	341'-8"	Str.	Slab
CS508	740	261'-4"	Str.	Slab
CS512	58	41'-11"	Str.	Slab
CS513	58	21'-11"	Str.	Slab
CP501	24	71'-8"	Str.	Parapet
CP502	168	71'-2"	Str.	Parapet
CP503	12	41'-10"	Str.	Parapet
CP504	24	231'-3"	Str.	Parapet
CP505	24	231'-5"	Str.	Parapet
L401	3	71'-0"	Str.	Light St'd Sup.
L402	3	61'-2"	Str.	Light St'd Sup.
L501	2	71'-0"	Str.	Light St'd Sup.
L502	2	61'-3"	Str.	Light St'd Sup.
L503	2	61'-7"	Str.	Light St'd Sup.
L504	3	71'-2"	Str.	Light St'd Sup.
L601	6	31'-3"	Str.	Light St'd Sup.
P501	311	31'-0"	Str.	Parapet
P502	311	31'-11"	Str.	Parapet
P503	311	21'-2"	Str.	Parapet
P504	311	31'-11"	Str.	Parapet
P505	311	21'-8"	Str.	Parapet
P506	311	21'-8"	Str.	Parapet
P507	311	11'-11"	Str.	Parapet
P508	311	21'-10"	Str.	Parapet
NON-EPOXY COATED BARS				
CS502	434	461'-11"	Str.	Slab
CS509	494	221'-0"	Str.	Slab
CS510	494	391'-11"	Str.	Slab
CS511	7	451'-11"	Str.	Slab

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
UNIT 3 WESTBOUND				
EPOXY COATED BARS				
D601	12	51'-0"	Str.	Slab Drains
D602	4	61'-6"	Str.	Slab Drains
ES502	141	341'-4"	Str.	Slab
ES503	128	161'-3"	Str.	Slab &
ES504	235	171'-5"	Str.	Slab
ES505	225	431'-4"	Str.	Slab
ES506	116	21'-11"	Str.	Slab
EP501	24	21'-8"	Str.	Parapet
EP502	36	31'-5"	Str.	Parapet
P501	100	31'-0"	Str.	Parapet
P502	100	31'-11"	Str.	Parapet
P503	100	21'-2"	Str.	Parapet
P504	100	31'-11"	Str.	Parapet
P505	100	21'-8"	Str.	Parapet
P506	100	21'-8"	Str.	Parapet
P507	100	11'-11"	Str.	Parapet
P508	100	21'-10"	Str.	Parapet
NON-EPOXY COATED BARS				
ES501	186	341'-8"	Str.	Slab
ES506	157	221'-0"	Str.	Slab
ES507	157	391'-11"	Str.	Slab
ES508	3	341'-2"	Str.	Slab
UNIT 3 EASTBOUND				
EPOXY COATED BARS				
D601	12	51'-0"	Str.	Slab Drains
D602	4	61'-6"	Str.	Slab Drains
FS501	141	341'-4"	Str.	Slab
FS503	128	161'-3"	Str.	Slab &
FS504	225	351'-0"	Str.	Slab
FS505	235	251'-11"	Str.	Slab
FS506	116	21'-11"	Str.	Slab
UNIT 4 WESTBOUND				
EPOXY COATED BARS				
FP501	36	301'-5"	Str.	Parapet
FP502	24	41'-8"	Str.	Parapet
L401	3	71'-0"	Str.	Light St'd Sup.
L402	3	61'-2"	Str.	Light St'd Sup.
L501	2	71'-0"	Str.	Light St'd Sup.
L502	2	61'-3"	Str.	Light St'd Sup.
L503	2	61'-7"	Str.	Light St'd Sup.
L504	3	71'-2"	Str.	Light St'd Sup.
L601	6	31'-3"	Str.	Light St'd Sup.
P501	100	31'-0"	Str.	Parapet
P502	100	31'-11"	Str.	Parapet
P503	100	21'-2"	Str.	Parapet
P504	100	31'-11"	Str.	Parapet
P505	100	21'-8"	Str.	Parapet
P506	100	21'-8"	Str.	Parapet
P507	100	11'-11"	Str.	Parapet
P508	100	21'-10"	Str.	Parapet
NON-EPOXY COATED BARS				
FS502	186	341'-8"	Str.	Slab
FS506	157	221'-0"	Str.	Slab
FS507	157	391'-11"	Str.	Slab
FS508	3	341'-2"	Str.	Slab
UNIT 4 EASTBOUND				
EPOXY COATED BARS				
D601	12	51'-0"	Str.	Slab Drains
D602	4	61'-6"	Str.	Slab Drains
HP501	72	71'-5"	Str.	Parapet
HP503	48	271'-6"	Str.	Parapet
HP504	24	231'-9"	Str.	Parapet
L401	3	71'-0"	Str.	Light St'd Sup.
L402	3	61'-2"	Str.	Light St'd Sup.
L501	2	71'-0"	Str.	Light St'd Sup.
L502	2	61'-3"	Str.	Light St'd Sup.
L503	2	61'-7"	Str.	Light St'd Sup.
L504	3	71'-2"	Str.	Light St'd Sup.
L601	6	31'-3"	Str.	Light St'd Sup.
P501	240	31'-0"	Str.	Parapet
P502	240	31'-11"	Str.	Parapet
P503	240	21'-2"	Str.	Parapet
P504	240	31'-11"	Str.	Parapet
P505	240	21'-8"	Str.	Parapet
P506	240	21'-8"	Str.	Parapet
P507	240	11'-11"	Str.	Parapet
P508	240	21'-10"	Str.	Parapet
NON-EPOXY COATED BARS				
HS501	372	411'-6"	Str.	Slab
HS506	379	361'-8"	Str.	Slab
HS507	379	391'-11"	Str.	Slab
HS508	6	411'-2"	Str.	Slab

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
UNIT 1 WESTBOUND				
EPOXY COATED BARS				
GP503	48	271'-2"	Str.	Parapet
GP504	24	231'-9"	Str.	Parapet
GS502	282	41'-0"	Str.	Slab
GS503	186	321'-0"	Str.	Slab
GS504	588	171'-9"	Str.	Slab
GS505	588	431'-7"	Str.	Slab
GS509	58	21		

All reinforcement in this area to be installed in this contract. Concrete to be placed with the Exp. Devise in the future by Kansas.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	KO.	2	73		



SLAB AND CURB REINFORCEMENT UNIT I EASTBOUND

DETAILED C&M 10-79
CHECKED 10-79

Note: This drawing is not to scale. Follow dimensions.

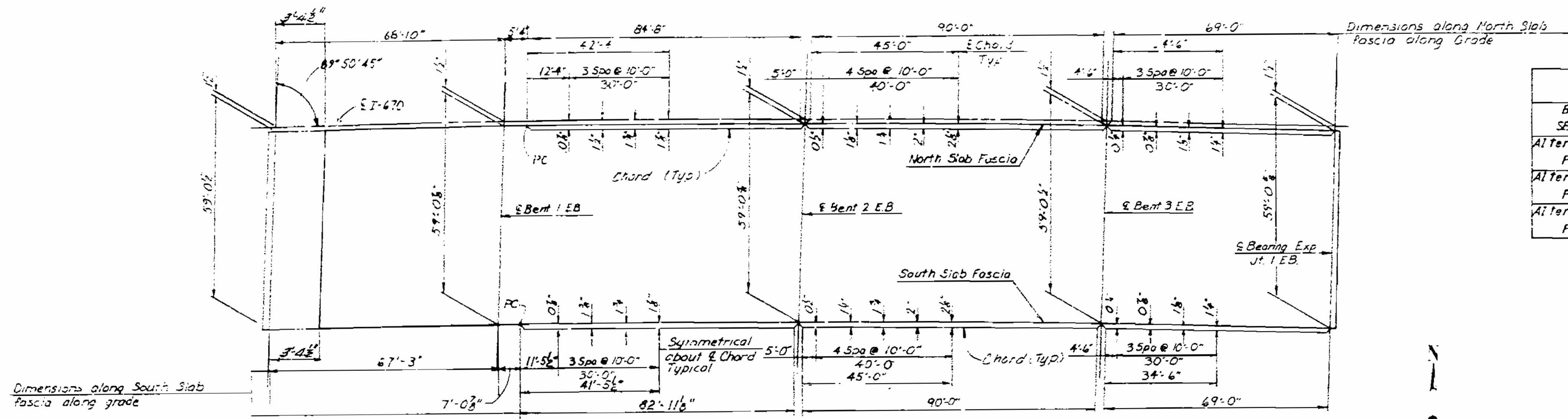
Sheet No. 1 of 23.

JACKSON COUNTY

A-3136

441

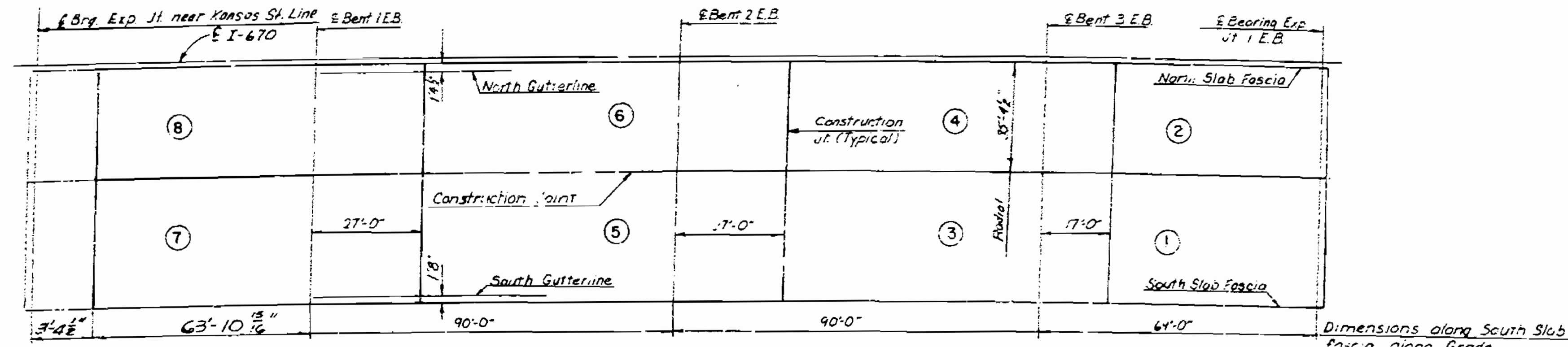
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO		3	80	



SLAB FASCIA OFFSETS - UNIT I

BASIC SEQUENCE	SEQUENCE OF POURS							
	DIRECTION							
Alternate "A"	1 + 3	5	7	2 + 4	6	8		
Alternate "B"	1 + 3	5 + 7	2 + 4	6 + 8				
Alternate "C"	1 + 3 + 5 + 7				2 + 4 + 6 + 8			
Pours	End to End				End to End			

Note:
The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 34 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 25 cubic yards per hour.
Pour 7 and 8 of Unit I to precede pours adjacent to State Line.

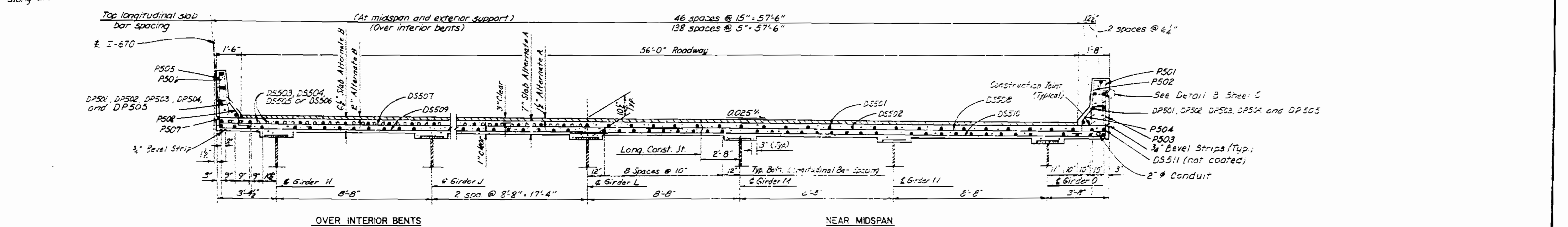
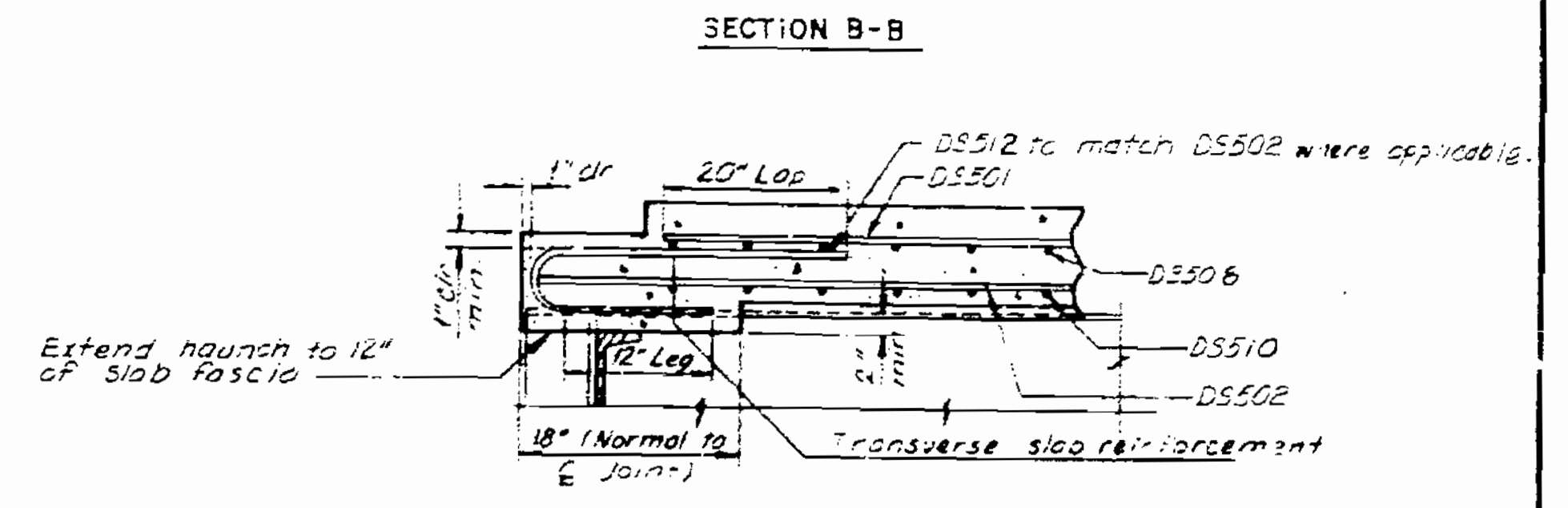
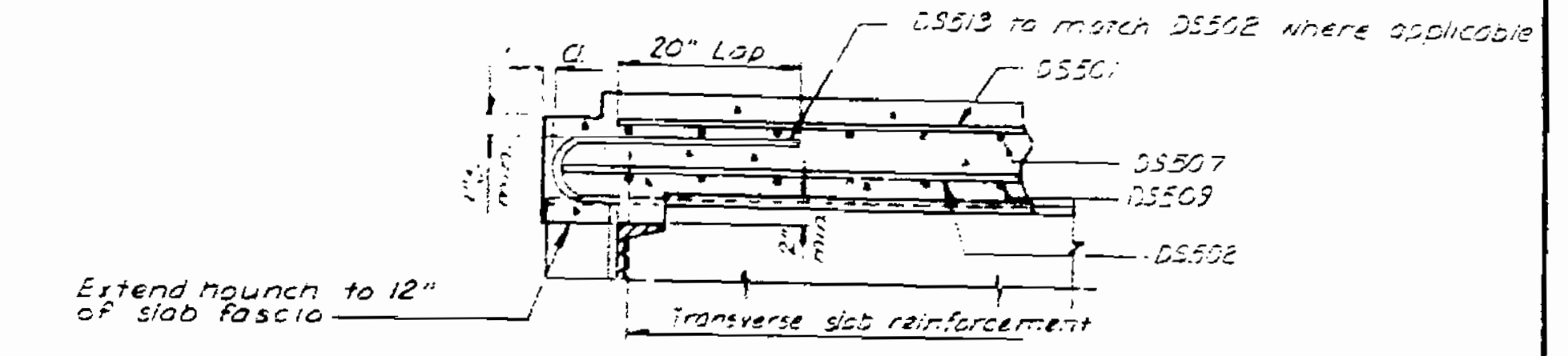
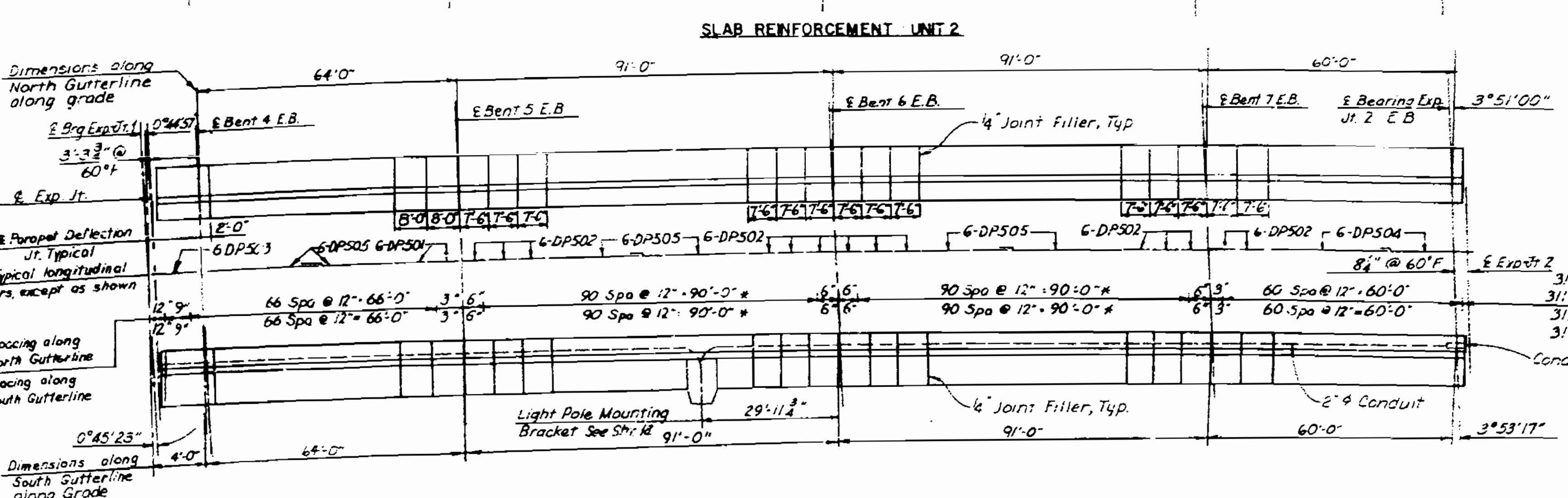
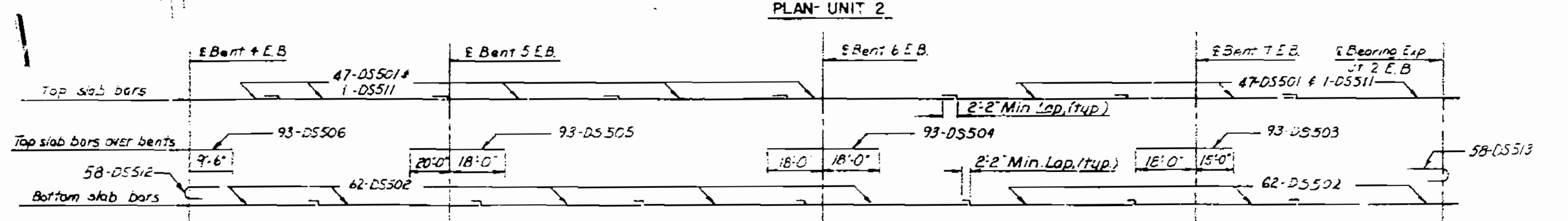
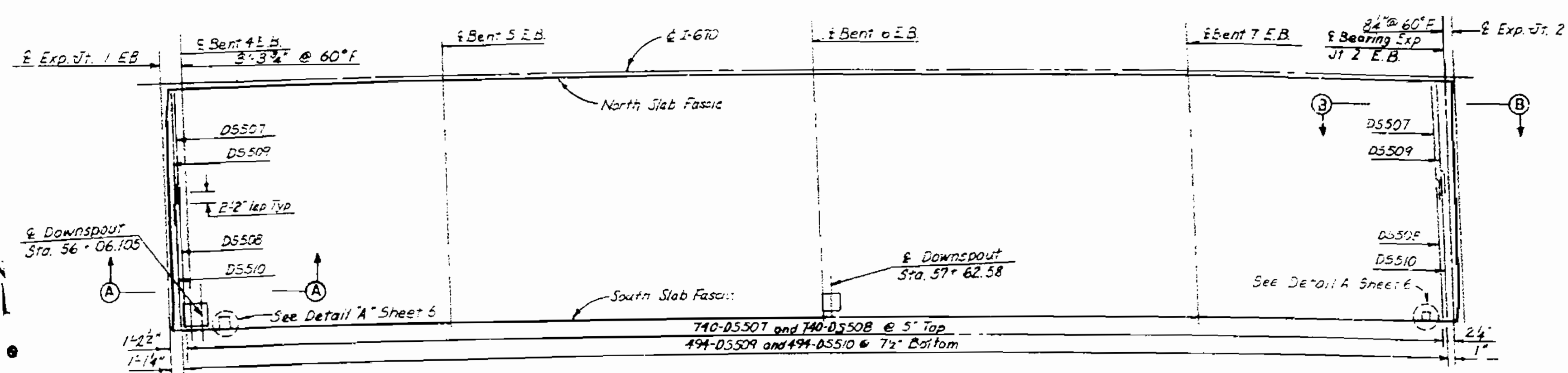


POURING SEQUENCE - UNIT I

See sheet 7 for Construction Joint Detail.

011

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		88	25	



* Adjust spacing at joints to maintain 3" min clearance

DATE FILED MAY 19 79
CHECKED DLM 1979

Note: This drawing is not to scale. Follow dimensions.

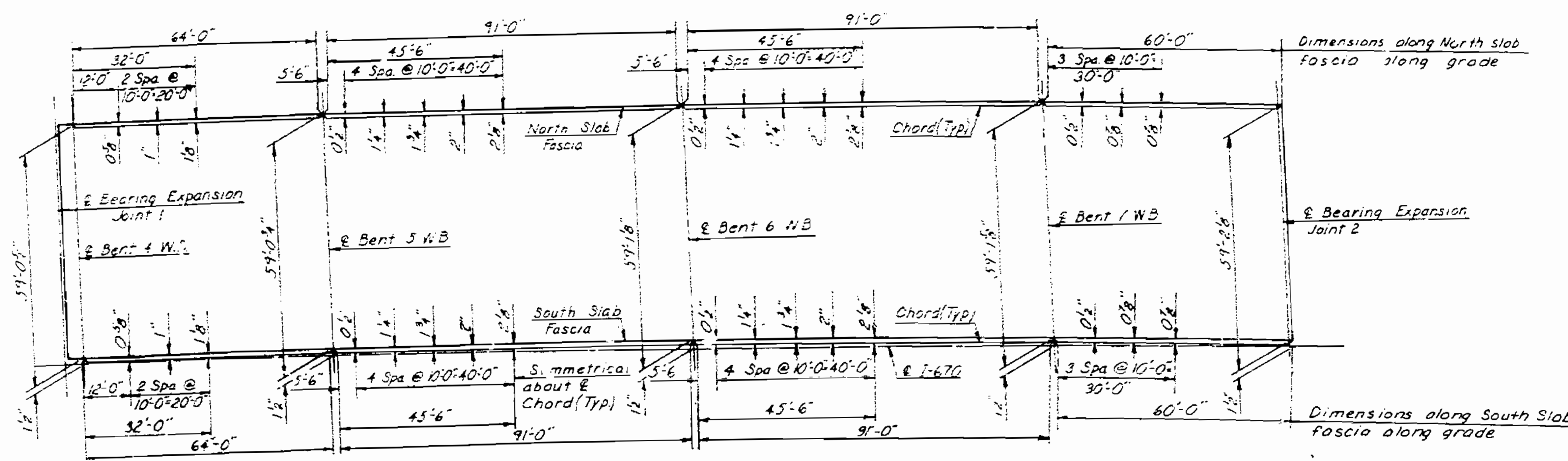
Sheet No. 12 of 25

SLAB AND CURB REINFORCEMENT
UNIT 2 EASTBOUND

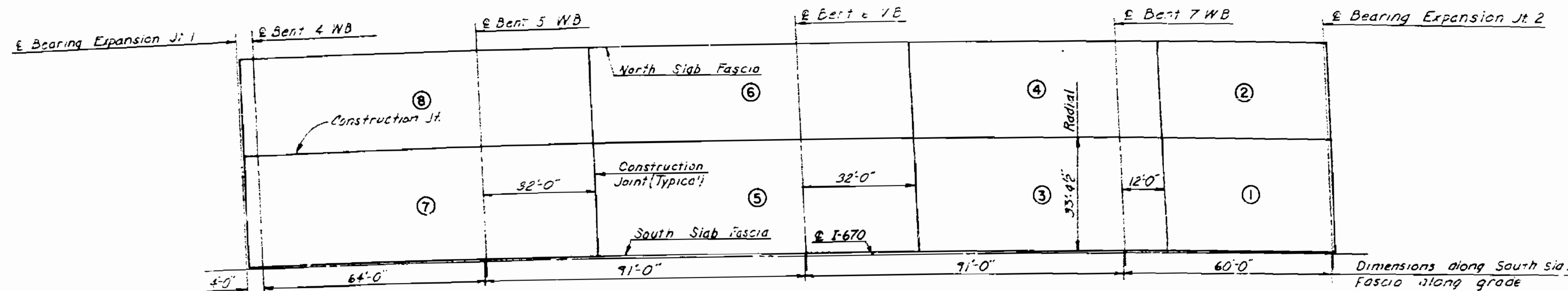
JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		87	82	



SLAB FASCIA OFFSETS-UNIT 2



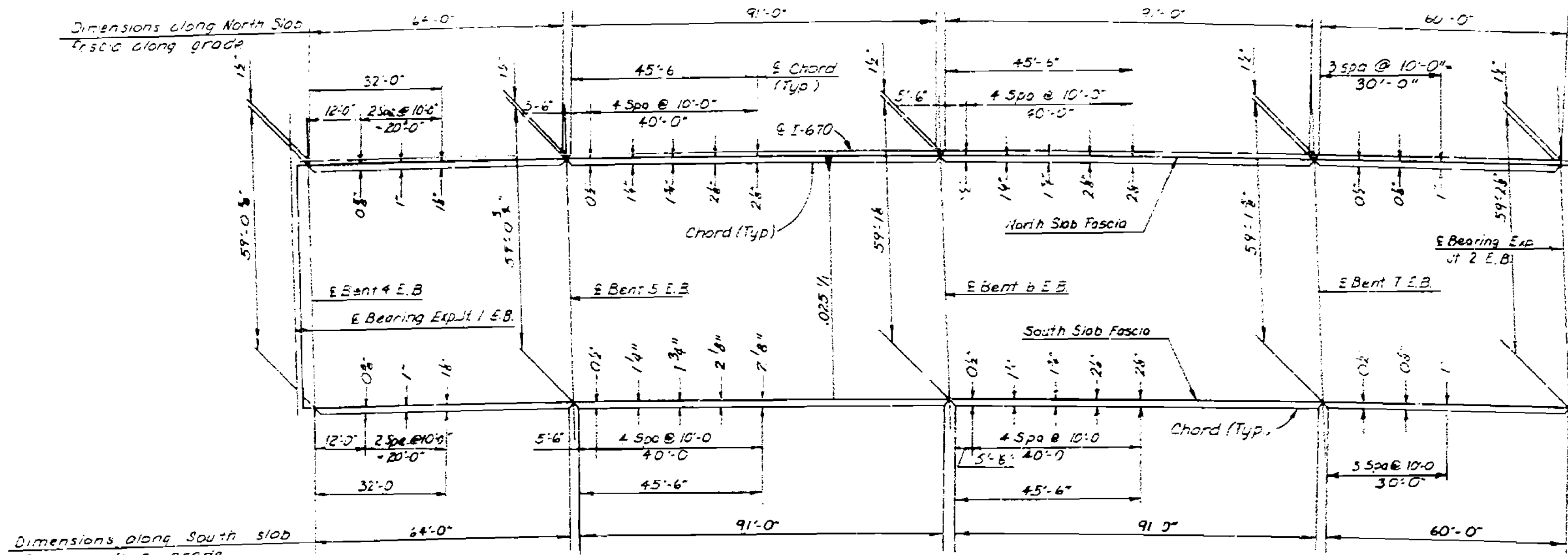
POURING SEQUENCE-UNIT 2

BASIC SEQUENCE	SEQUENCE OF POURS							
	DIRECTION							
	1	3	5	7	2	4	6	8
End to 3	1 to 5	3 to 7	5 to End	End to 4	2 to 6	4 to 8	6 to End	
Alternate "A" Pours	1 + 3	5	7	2 + 4	6	8		
Alternate "B" Pours	End to 6	3 to 7	5 to End	End to 6	4 to 8	6 to End		
Alternate "C" Pours	1 + 3	5 + 7	2 + 4	6 + 8	End to 5	3 to End	End to 6	4 to End
	1 + 3 + 5 + 7				2 + 4 + 6 + 8			
	End to End				End to End			

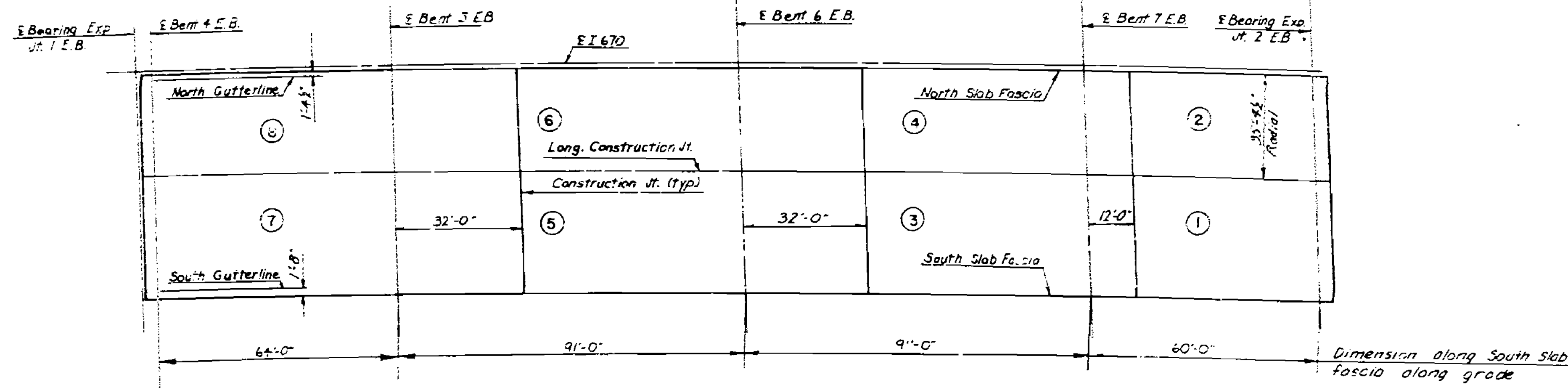
Note:
 Pours 1 and 2 of Unit 1 must precede Pours 7 and 8 of Unit 2.
 The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 35 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 25 cubic yards per hour.

Note:
 See Sheet 7 for Construction Joint Details

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO		88	22	22



SLAB FASCIA OFFSETS - UNIT 2



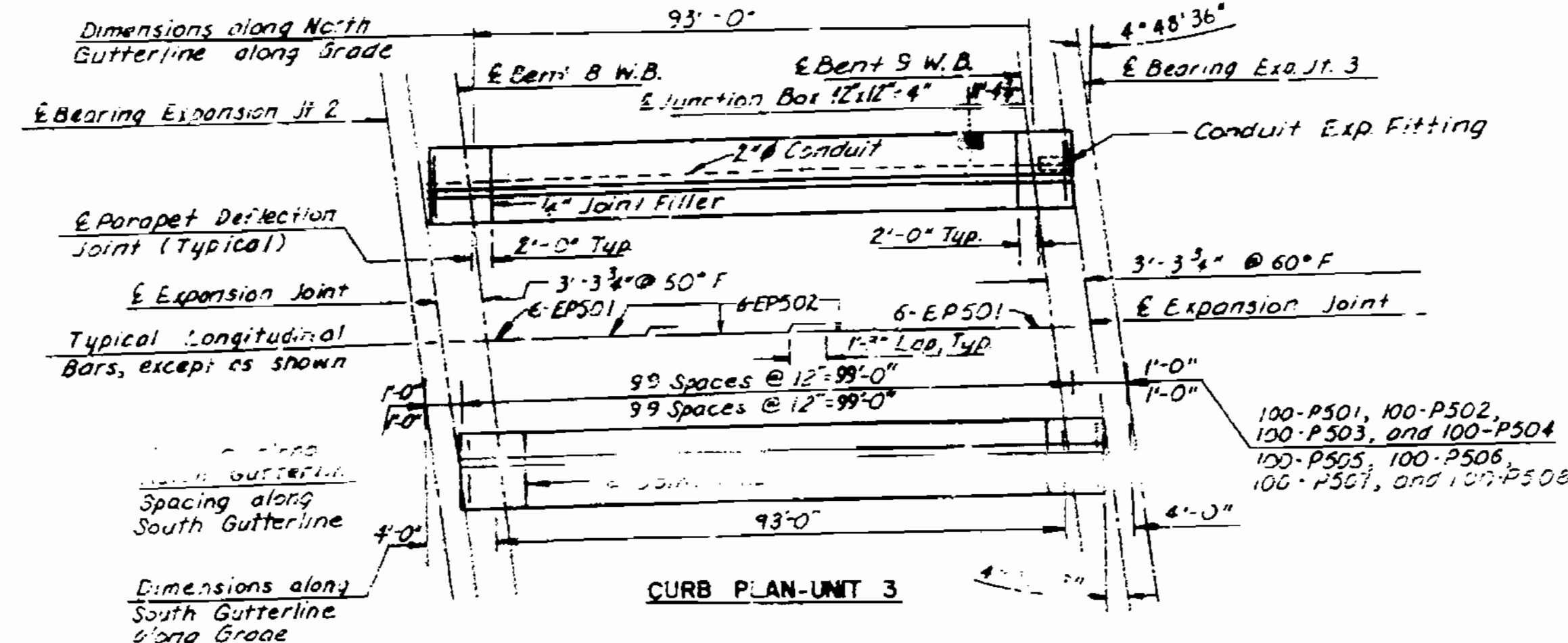
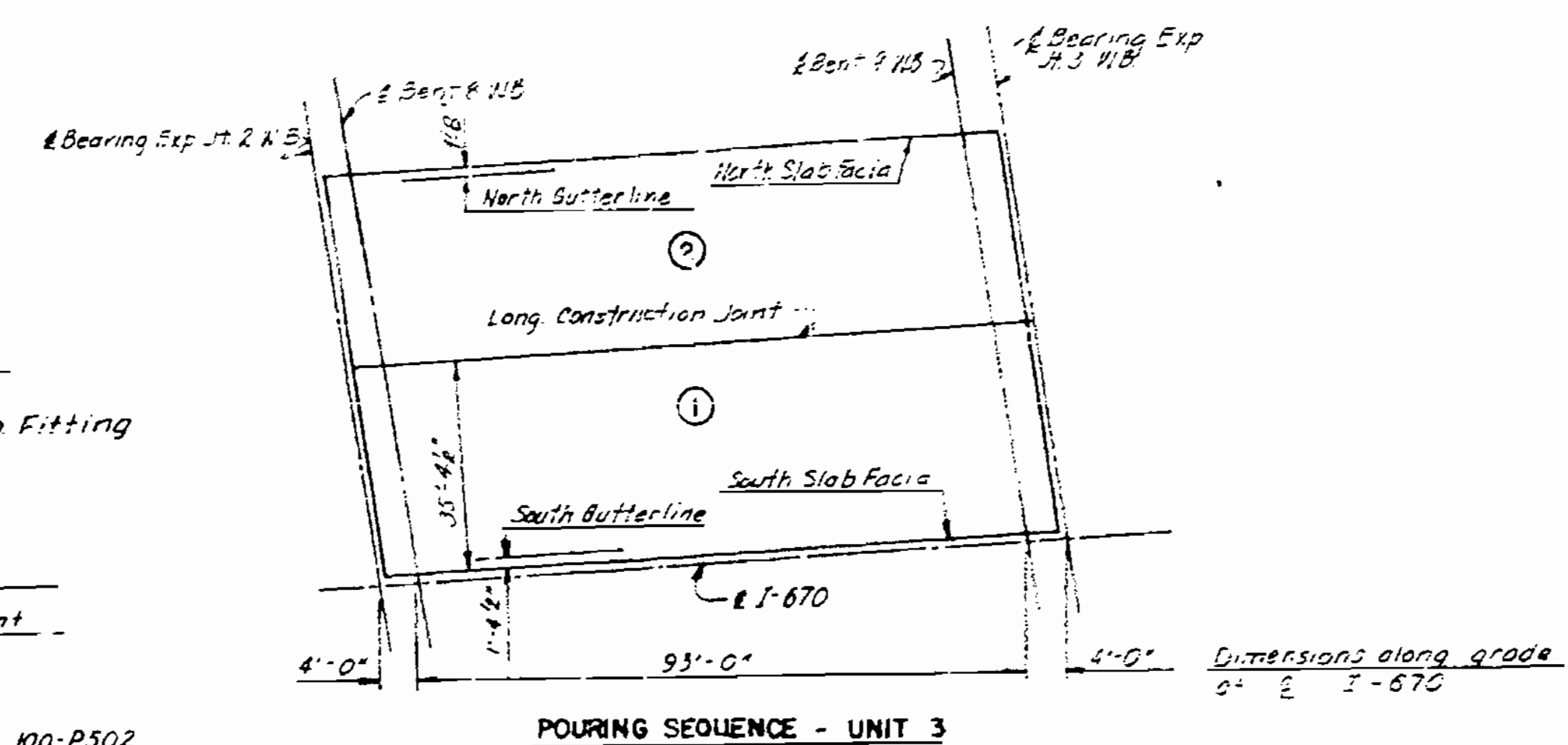
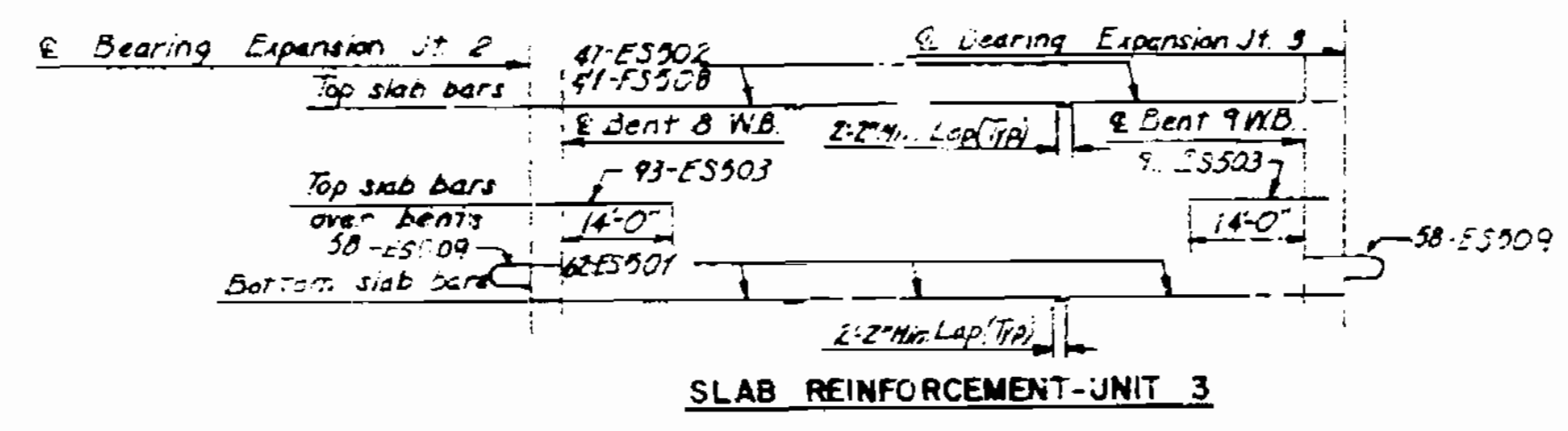
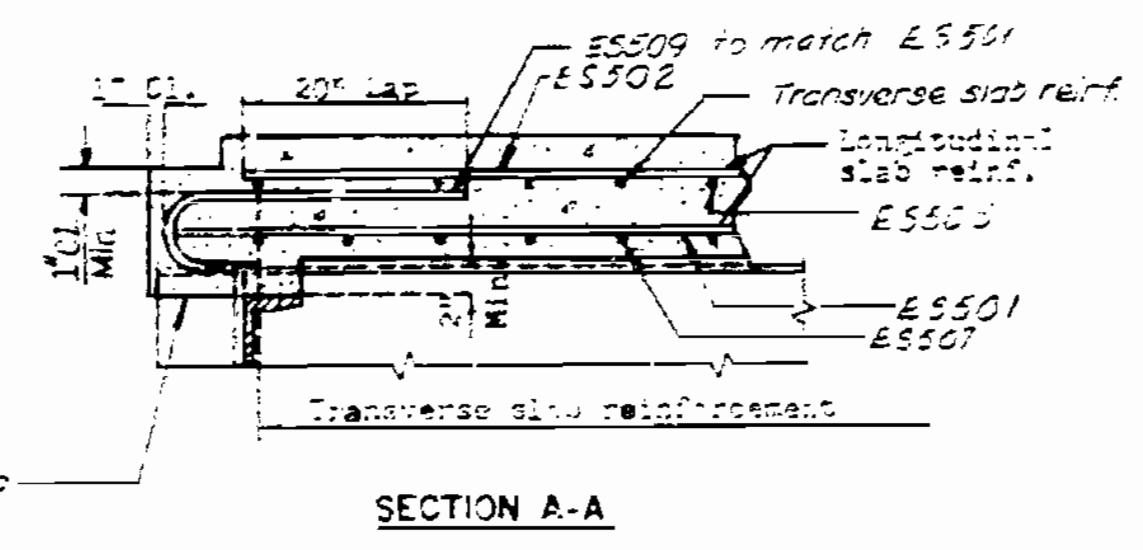
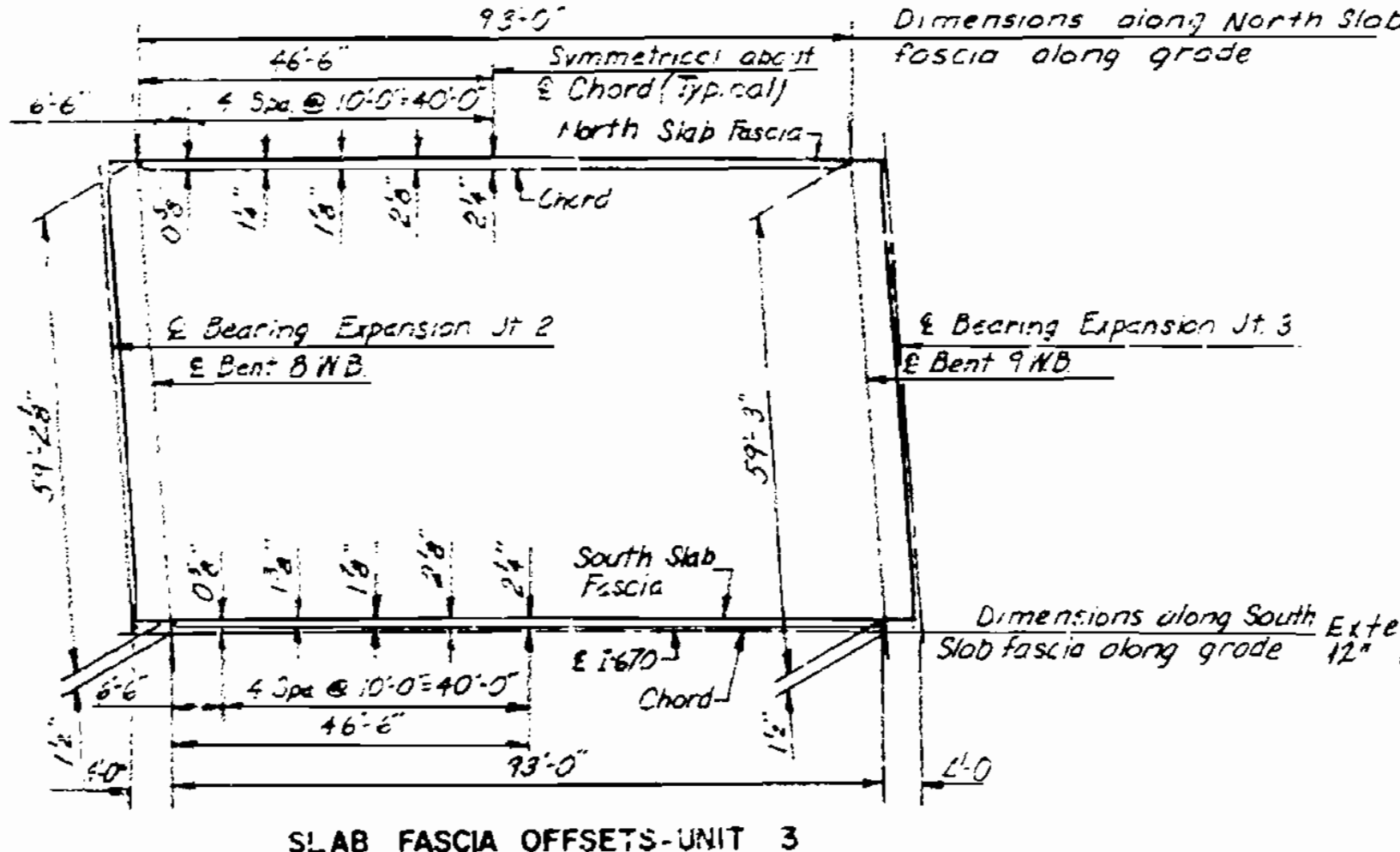
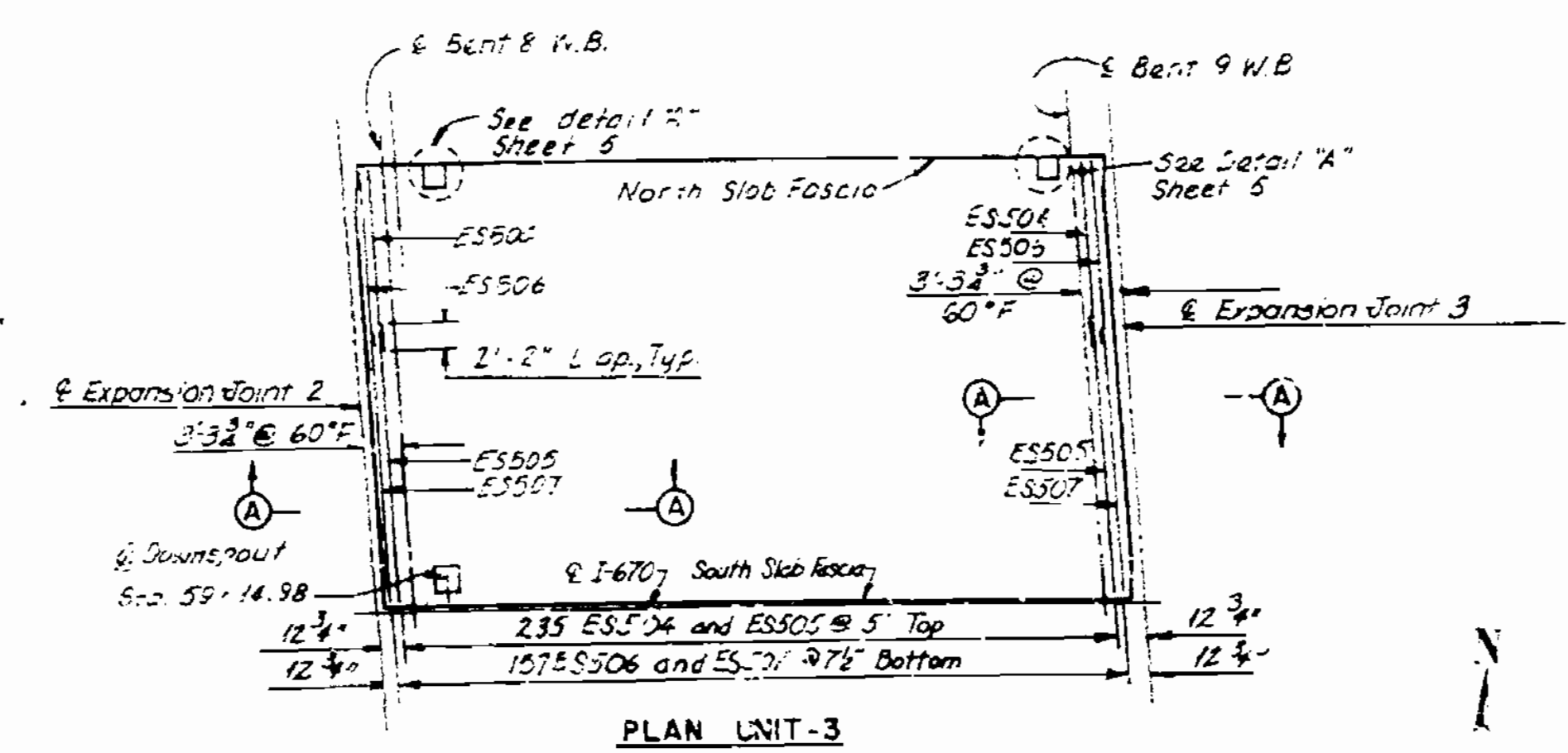
SEQUENCE OF POURS							
DIRECTION							
BASIC	1	3	5	7	2	4	6
SEQUENCE	End to 3	1 to 5	3 to 7	5 to End	End to 4	2 to 6	4 to 8
Alternate "A"	1 + 3	5	7		2 + 4	6	8
Pours	End to 6	3 to 5	5 to End		End to 6	4 to 8	6 to End
Alternate "B"	1 + 3	5 + 7			2 + 4	6 + 8	
Pours	End to 5	3 to End			End to 6	4 to End	
Alternate "C"	1 + 3 + 5 + 7				2 + 4 + 6 + 8		
Pours	End to End				End to End		

Pouring Note:
Pour 1 and 2 of Unit 1 to precede Pour 7 and 8 of Unit 2.
See Sheet 7 for construction joint detail.

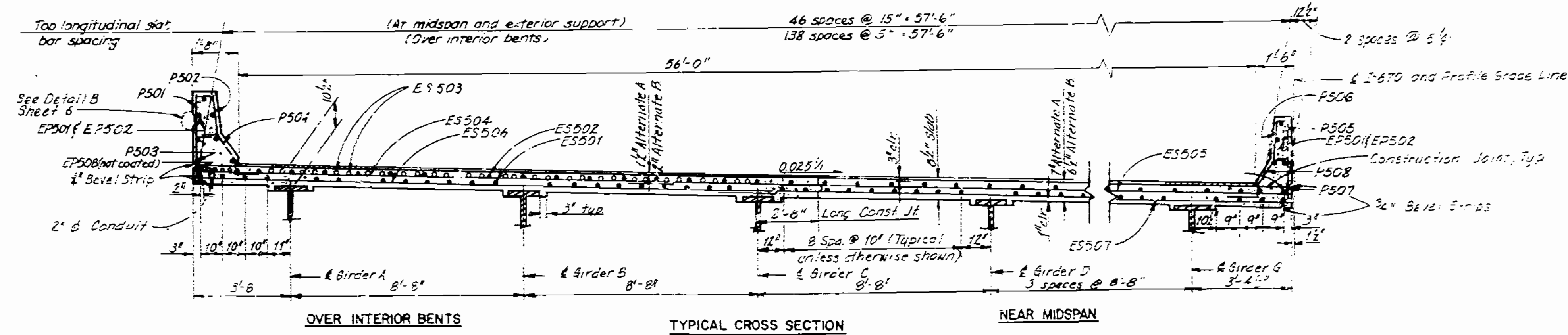
The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 35 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 25 cubic yards per hour.

477

PROJ. NO.	STATE	DATE	YEAR	SHEET NO.	TOTAL SHEETS
5	MO.			85	



Note:
The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 25 cubic yards per hour.
Pours 1 and 2 of Unit 2 and Pours 5 and 6 of Unit 4 to precede Pours 1 and 2 of Unit 3. Full width of slab pour is not permitted.



SLAB AND CURB REINFORCEMENT AND SLAB PLAN UNIT 3 WESTBOUND

DETAILED SET 10 79
CHECKED D.M. 10 79

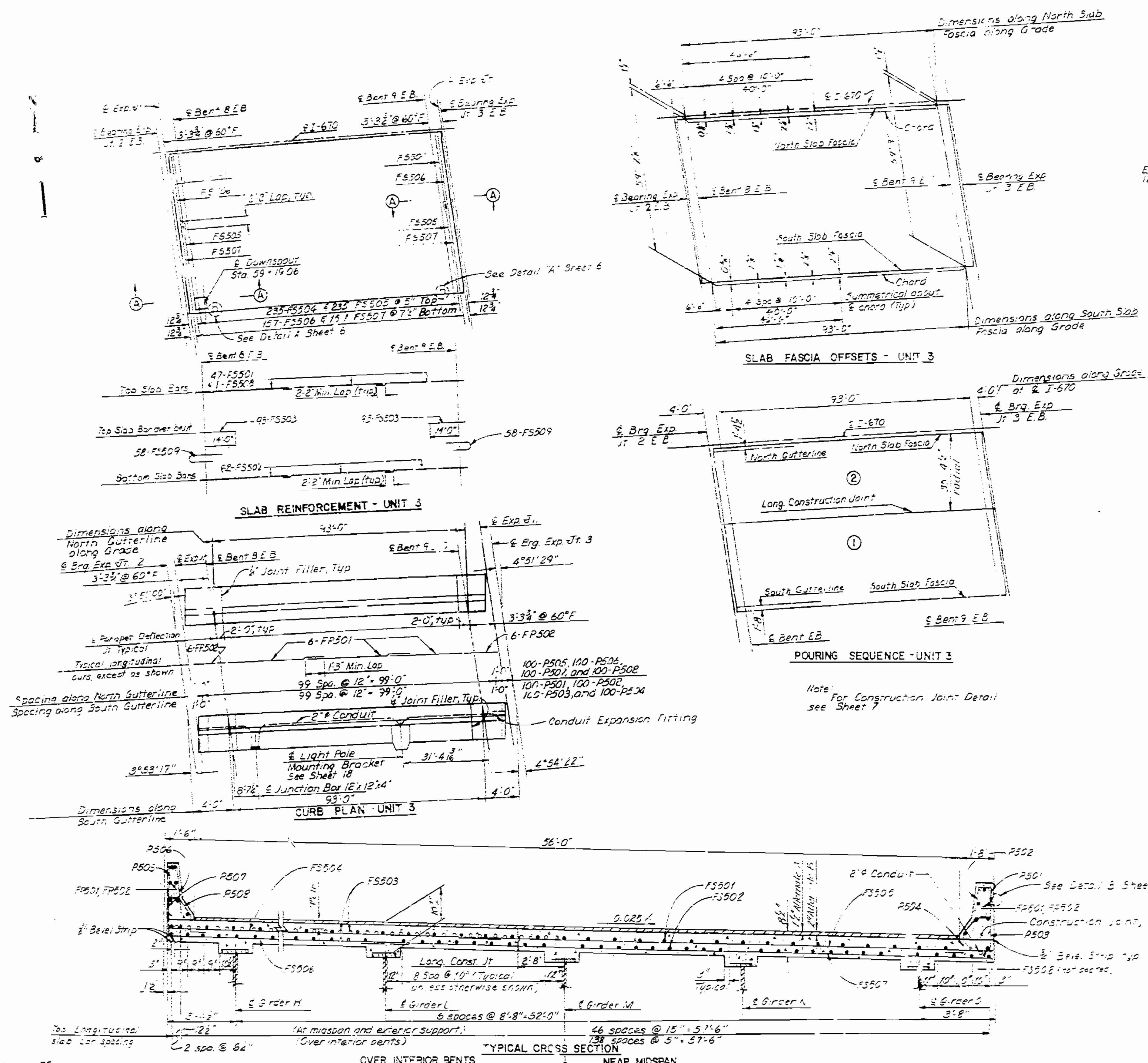
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 14 of 25

JACKSON COUNTY

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454



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHE. NO.	TOTAL SHEETS
5	MO.		88	33	

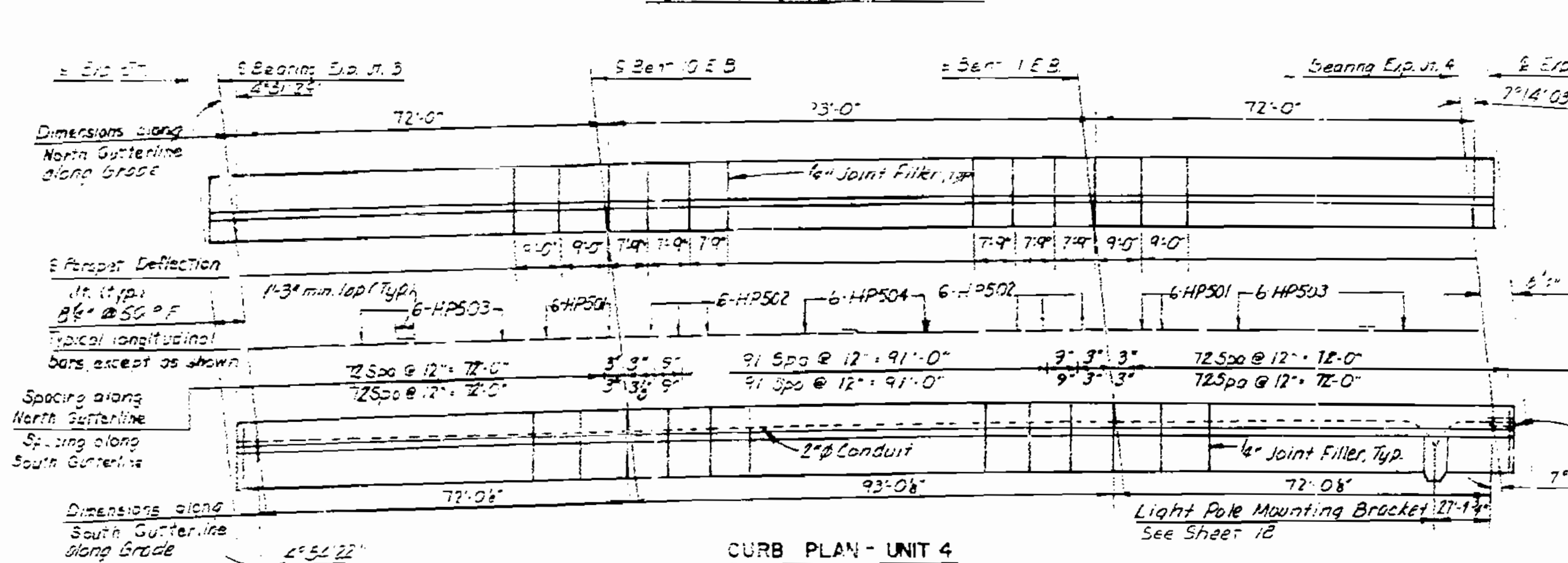
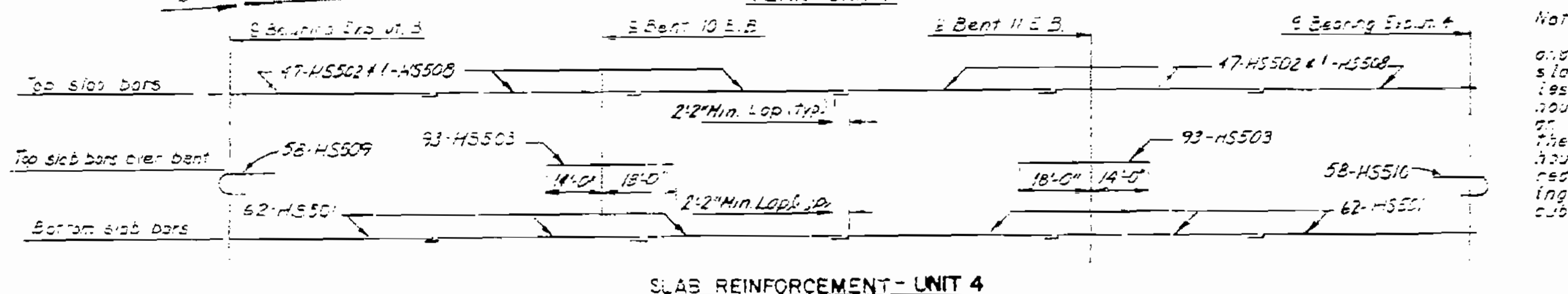
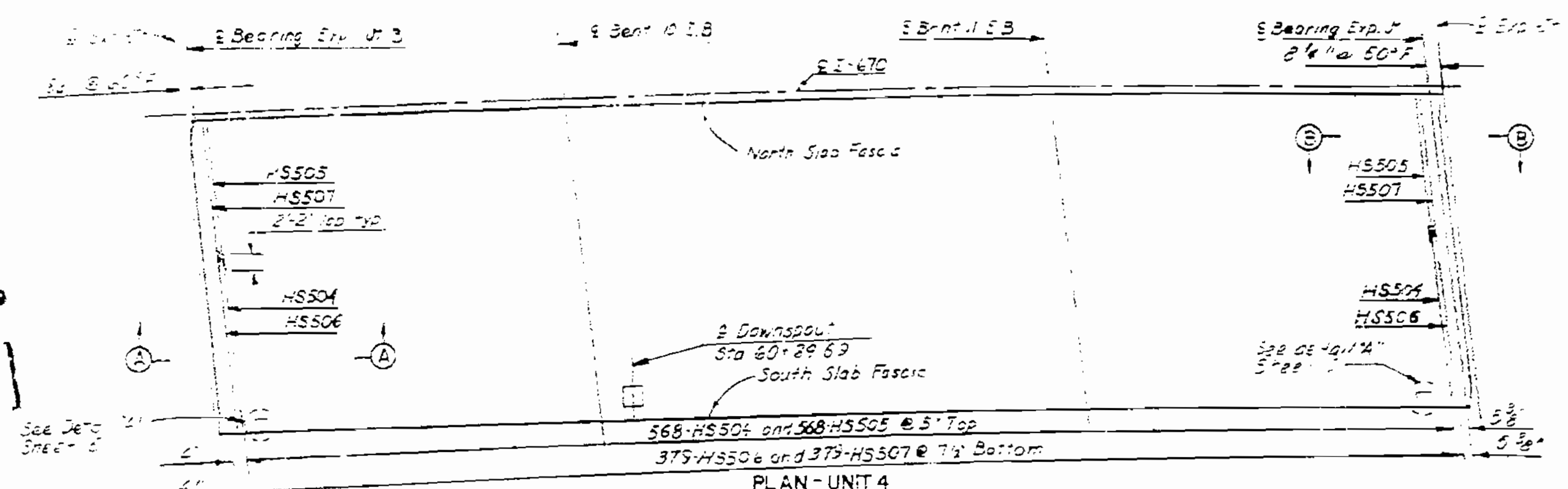
ing and placing anchor bolts for...
 be included in contract unit items.
 be rigid non-metallic conduit...
 10mm cover in concrete.
 ing steel in field where necessary...
 and junction boxes.
 wiring and fixtures to be...
 lified by others.
 standard supports to be made hori-...
 ts to be placed vertically.
 per type drain at low point in...
 boxes. Drain tube shall pro-...
 from of slab.
 and barrier curb junction boxes...
 uted and equal to O. Z. Redney...
 and or Spring City Electric Mfg...
 wall thickness to be sufficient...
 threads for watertight conduit...
 ity adaptor.

DETAILED BY: 10/79
 CHECKED BY: 12/79

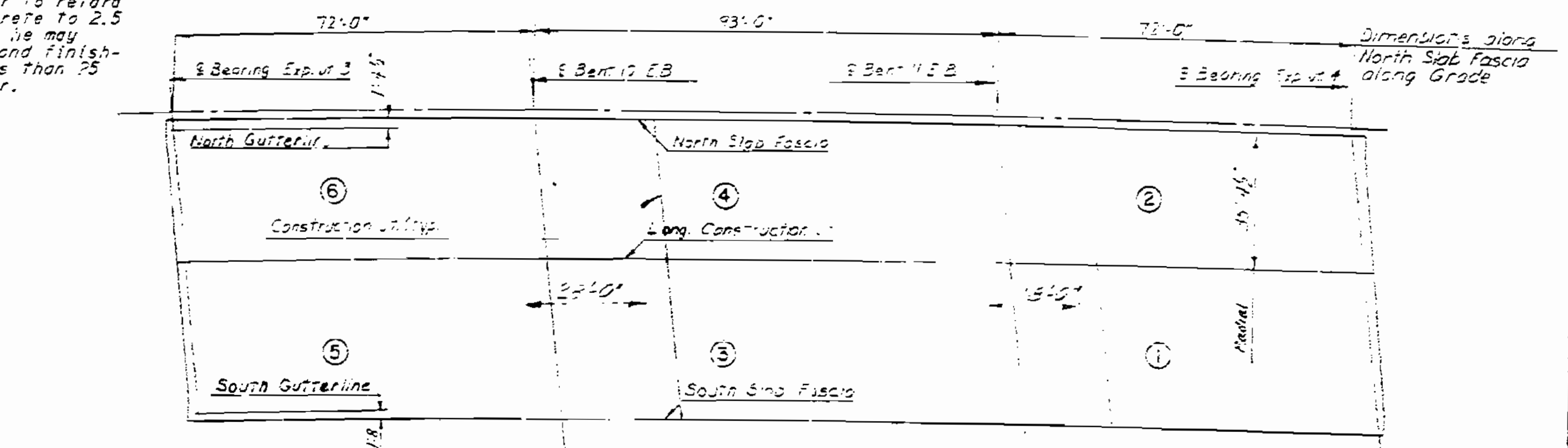
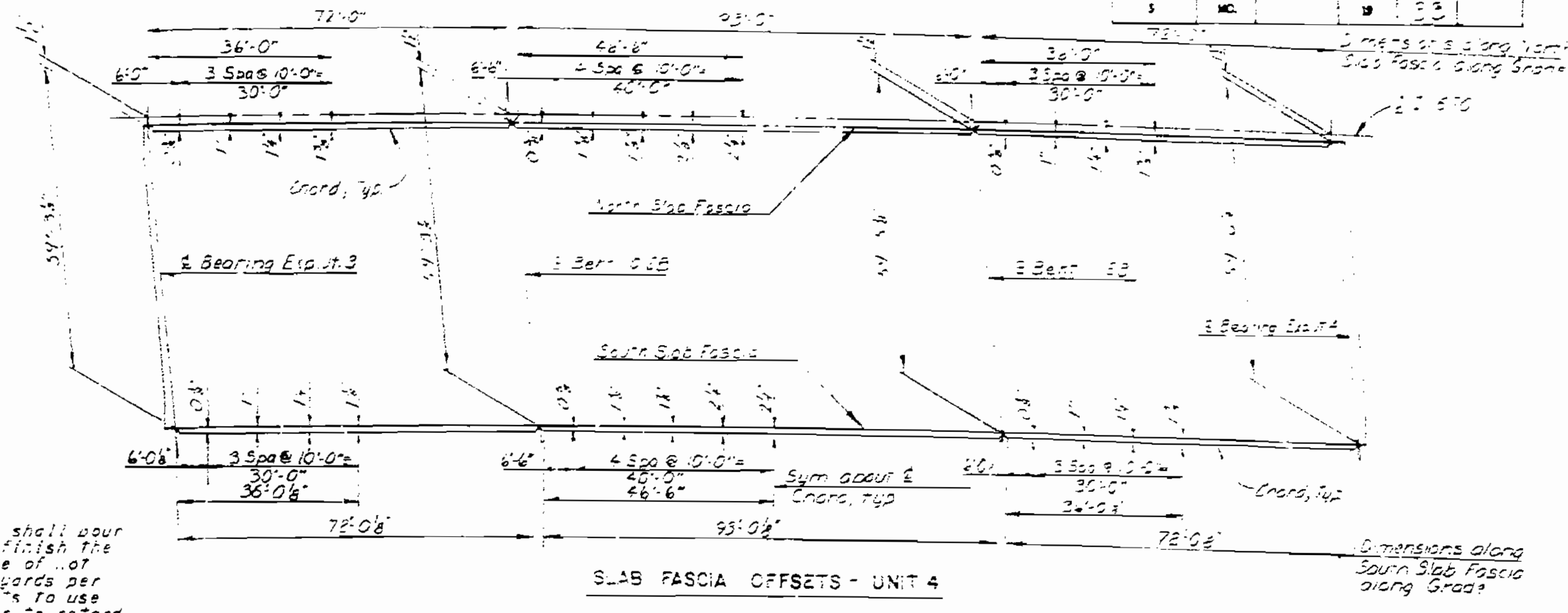
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 15 of 25.

FED. ROAD DIST. NO.	STATE	FED. AC. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		19	83	

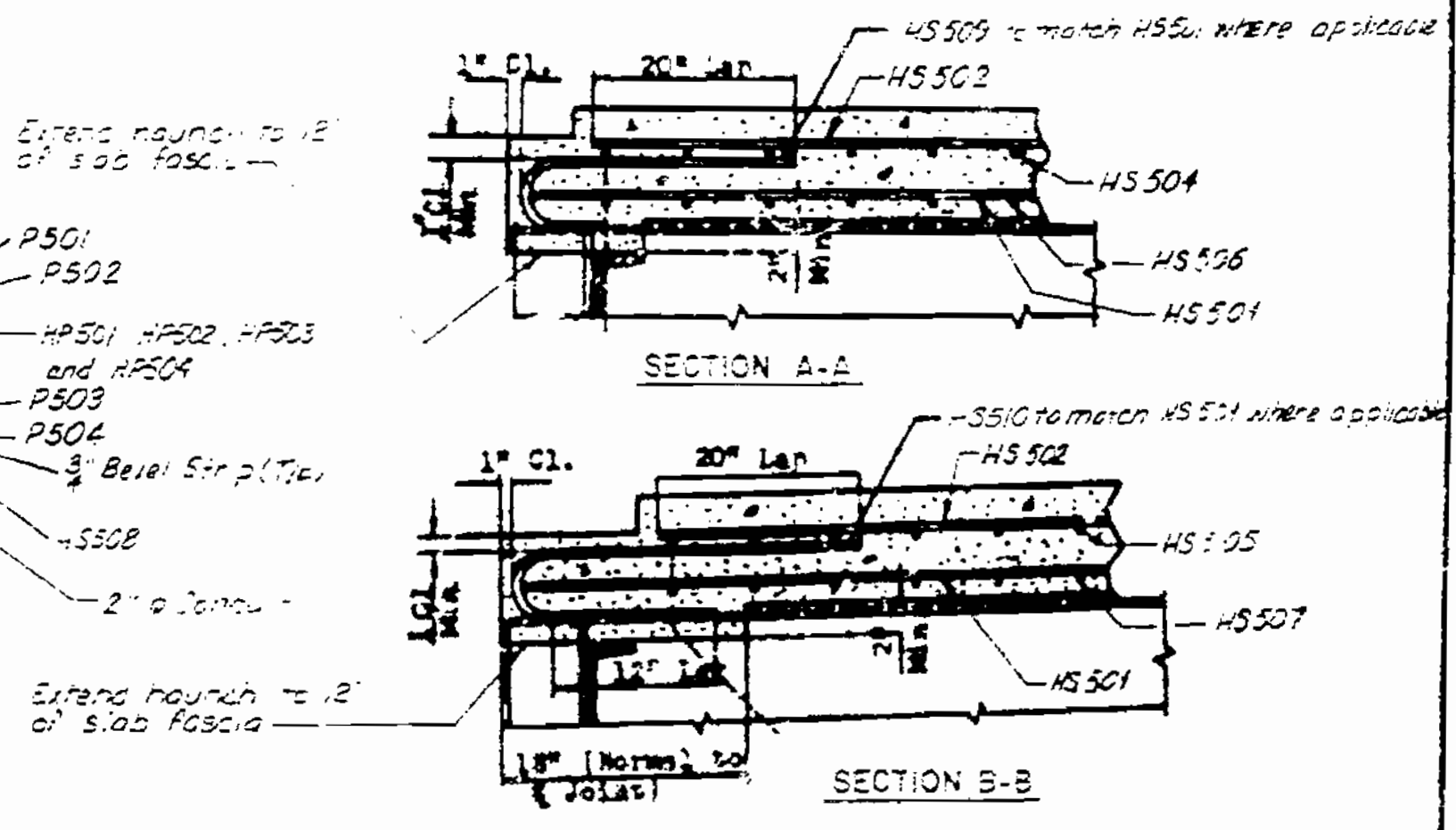
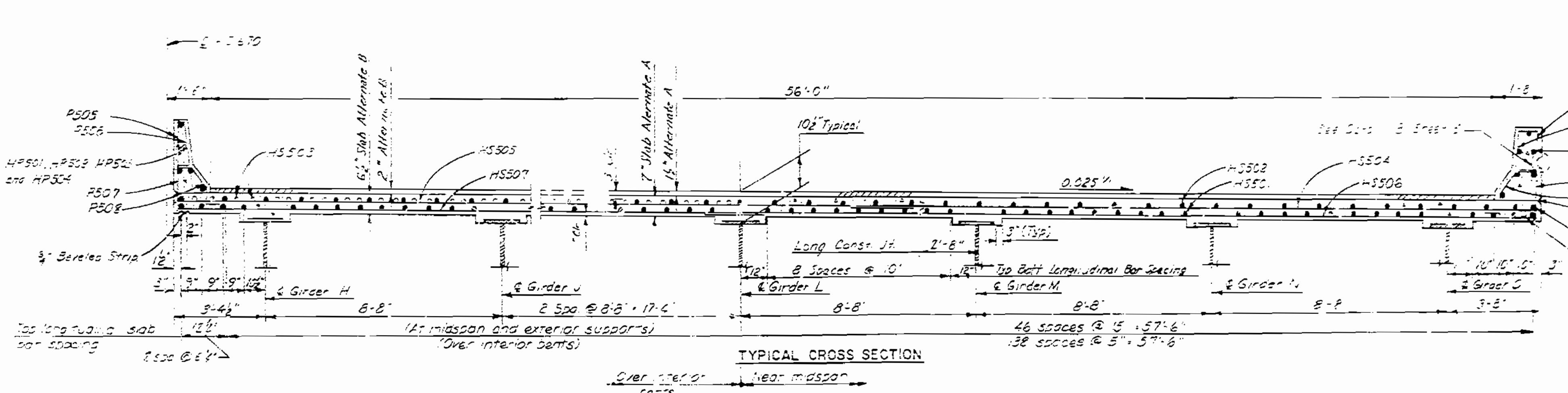


Note: The contractor shall pour and satisfactorily finish the slab pours of a rate of not less than 35 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 25 cubic yards per hour.



NOTE: For Slab Construction Joint Details see Sheet 79

Basic Sequence	SEQUENCE OF POURS					
	Direction					
Alternate A Pours	1	3	5	2	4	6
Alternate B Pours	1 + 3	5	2 + 4	6		
Alternate C Pours	1 + 3 + 5	2 + 4 + 6	End to End	End to End	End to End	End to End



SLAB AND CURB REINFORCEMENT AND SLAB PLAN UNIT 4 EASTBOUND

456

DETAILED JAN 1979
CHECKED DEC 1979

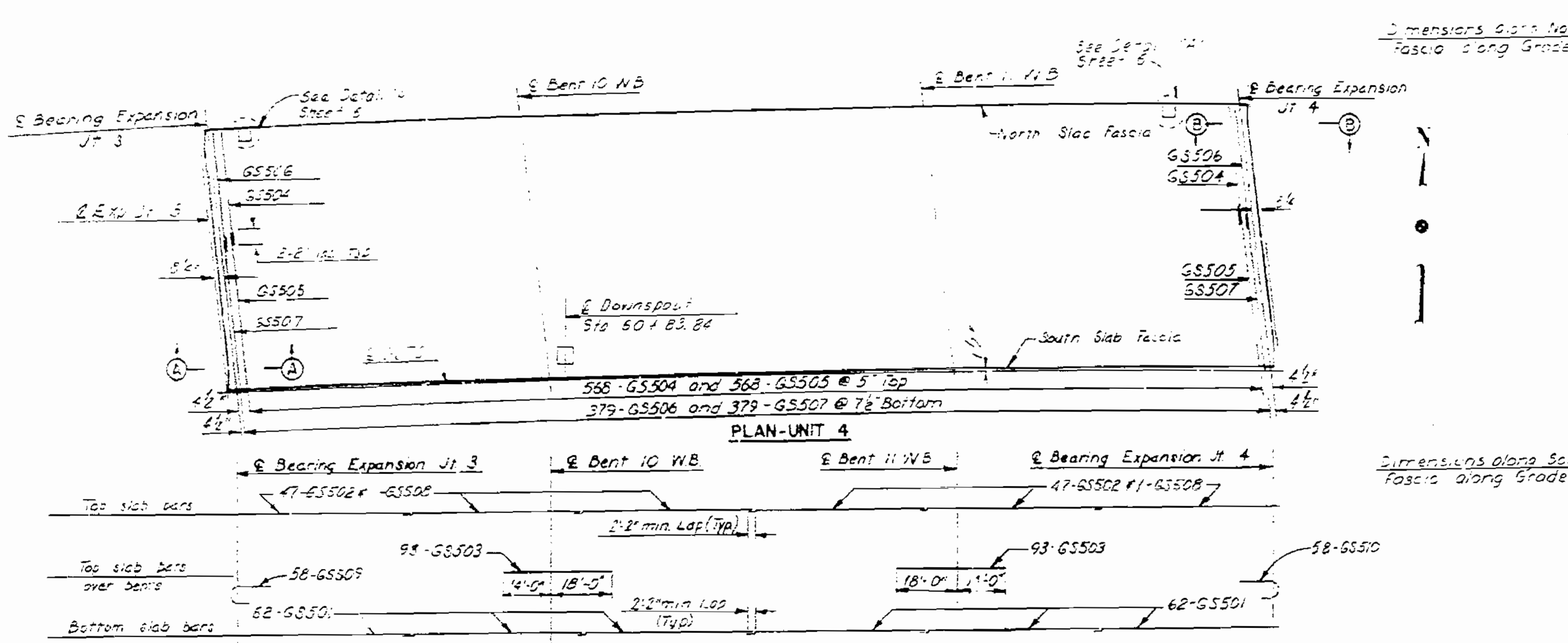
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 7 of 25

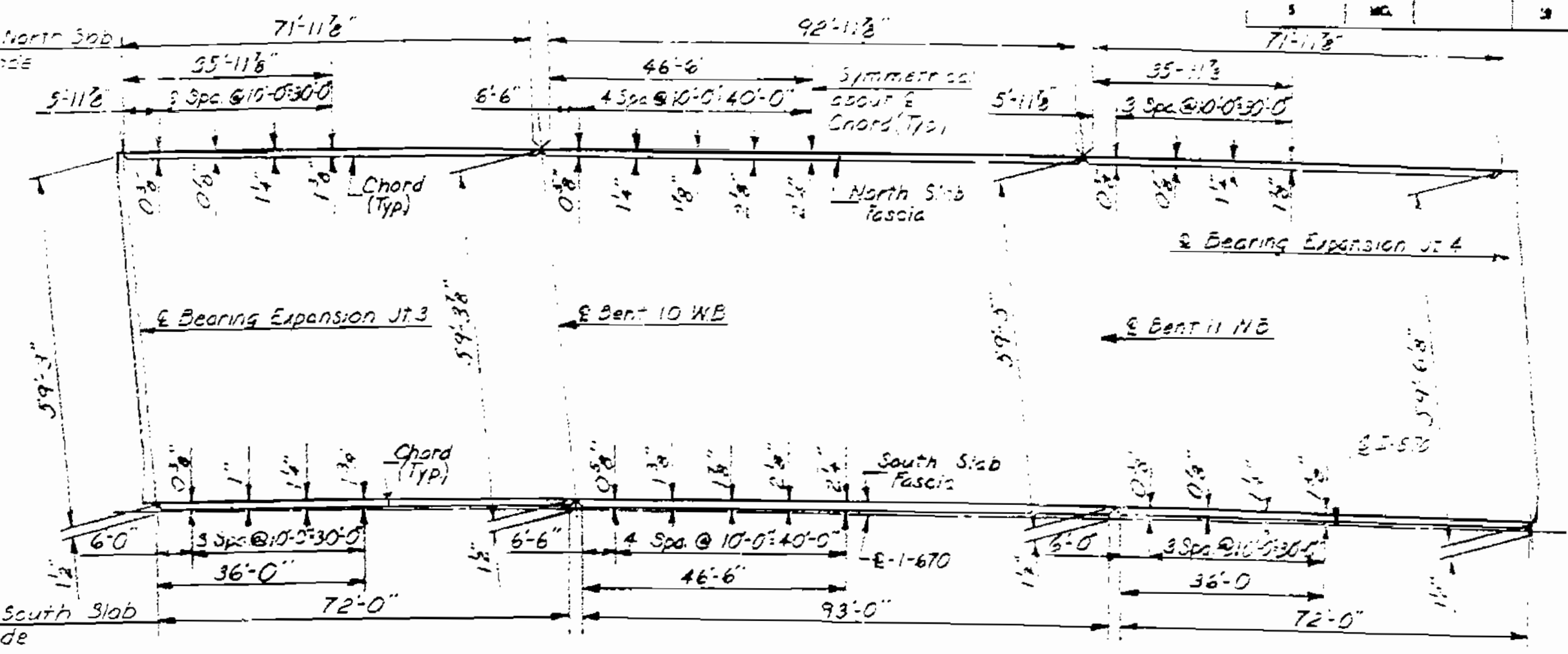
JACKSON COUNTY

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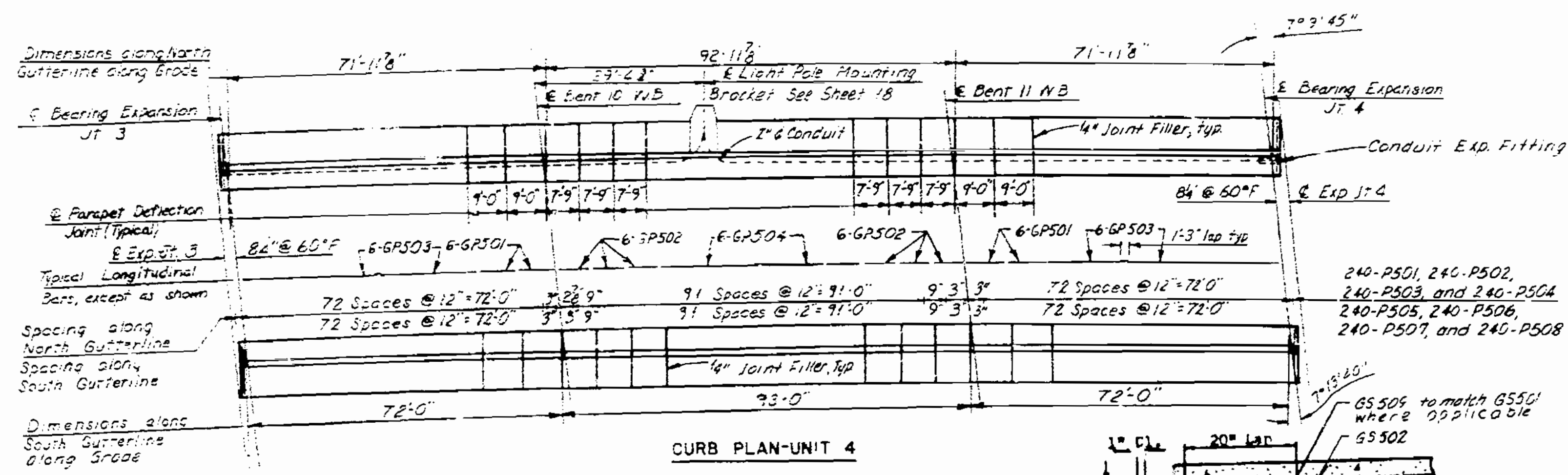
PG. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.			5	



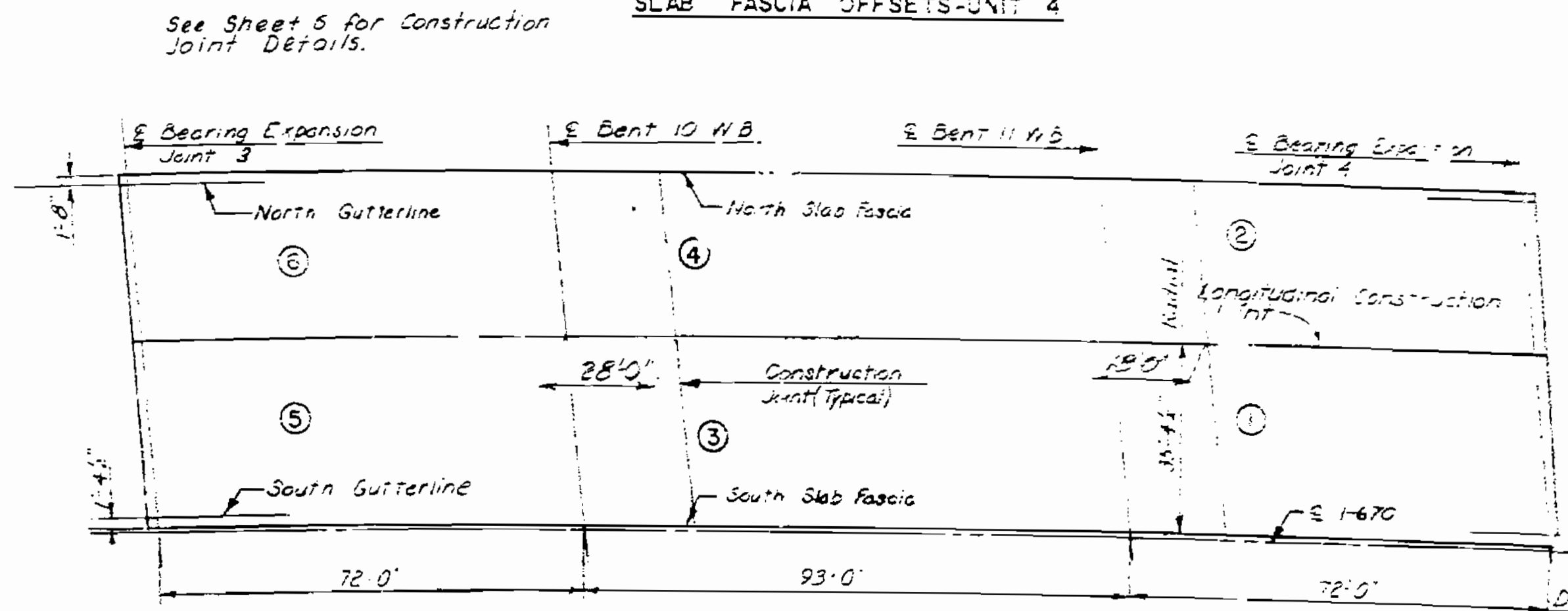
SLAB REINFORCEMENT-UNIT 4



SLAB FASCIA OFFSETS-UNIT 4

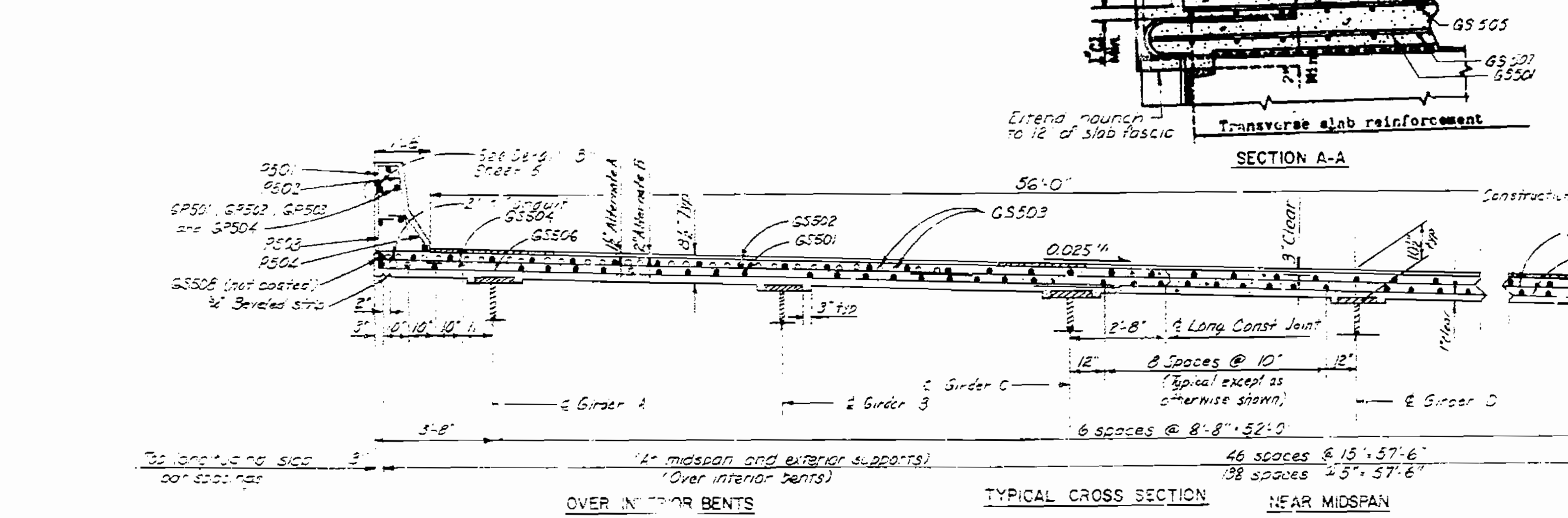
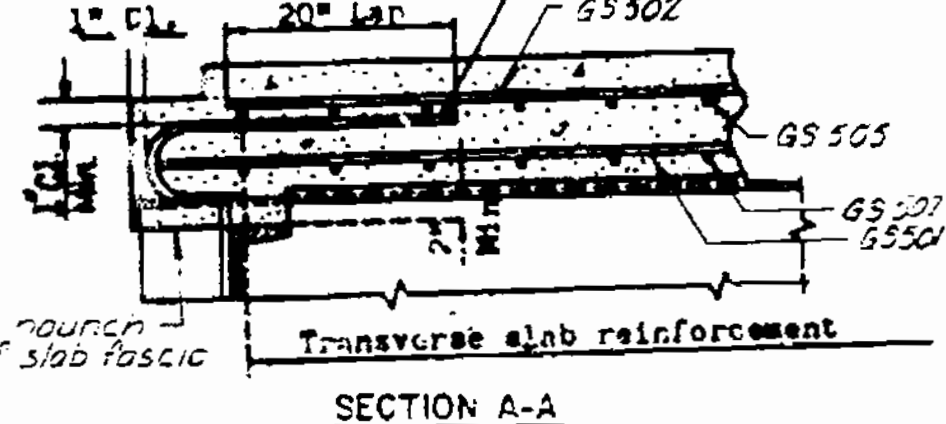
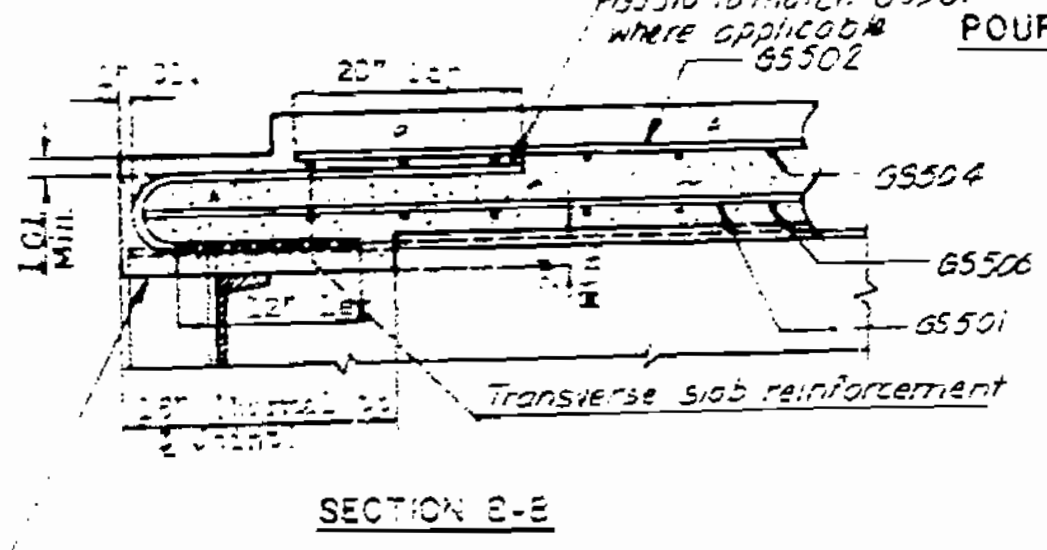


CURB PLAN-UNIT 4



POURING SEQUENCE-UNIT 4

Basic Sequence	SEQUENCE OF POURS				
	Direction				
Alternate 1 Pours	1 + 3	5	2 + 4	6	
Alternate 2 Pours	1 + 3 + 5	2 To End	End To 4	4 To 6	4 To End
Alternate 3 Pours	1 + 3 + 5	End To End	End To End	End To End	End To End



OVER INTERIOR BENTS

TYPICAL CROSS SECTION

NEAR MIDSPAN

SLAB AND CURB REINFORCEMENT AND SLAB PLAN UNIT 4 WESTBOUND

DETAILED 11/18/79
CHECKED 11/18/79

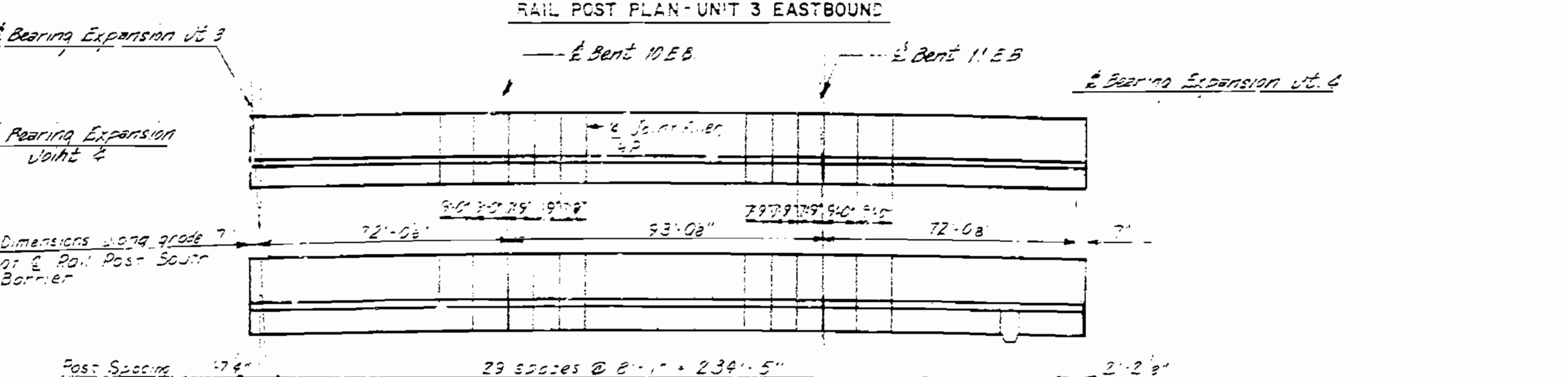
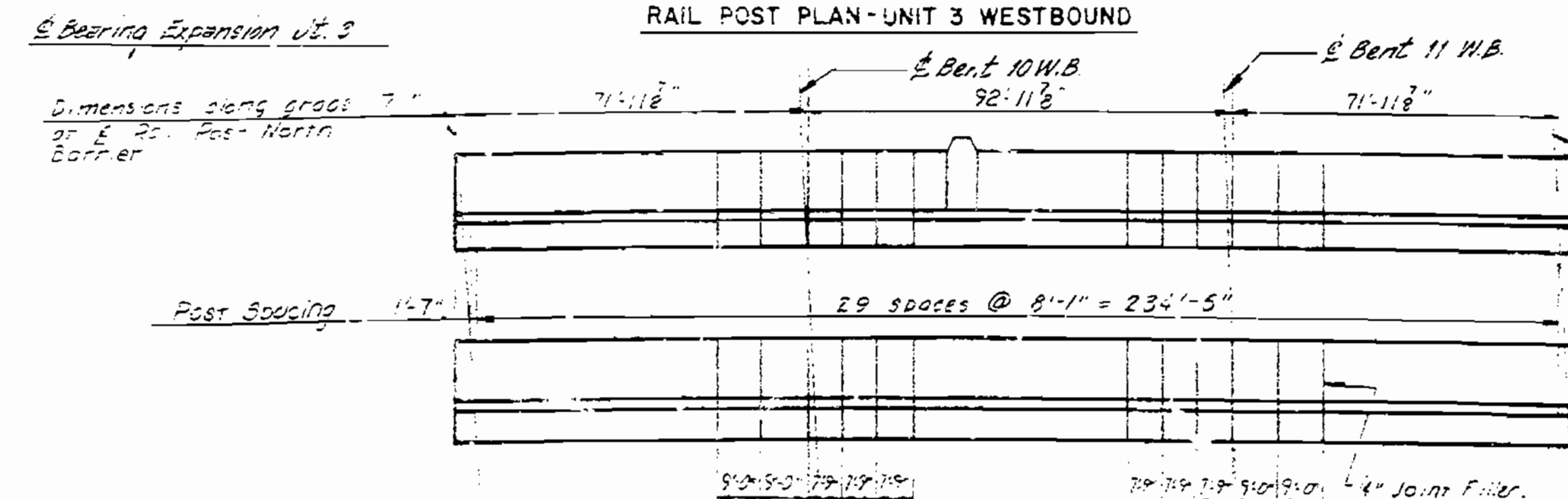
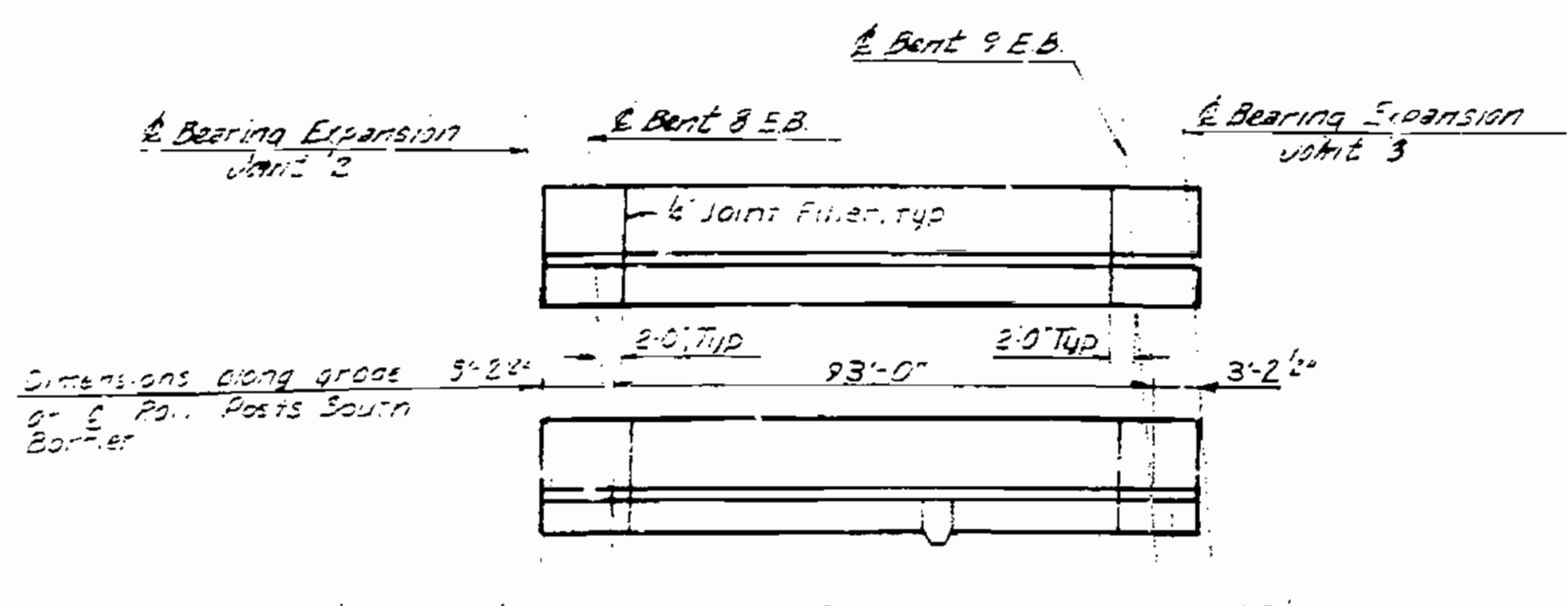
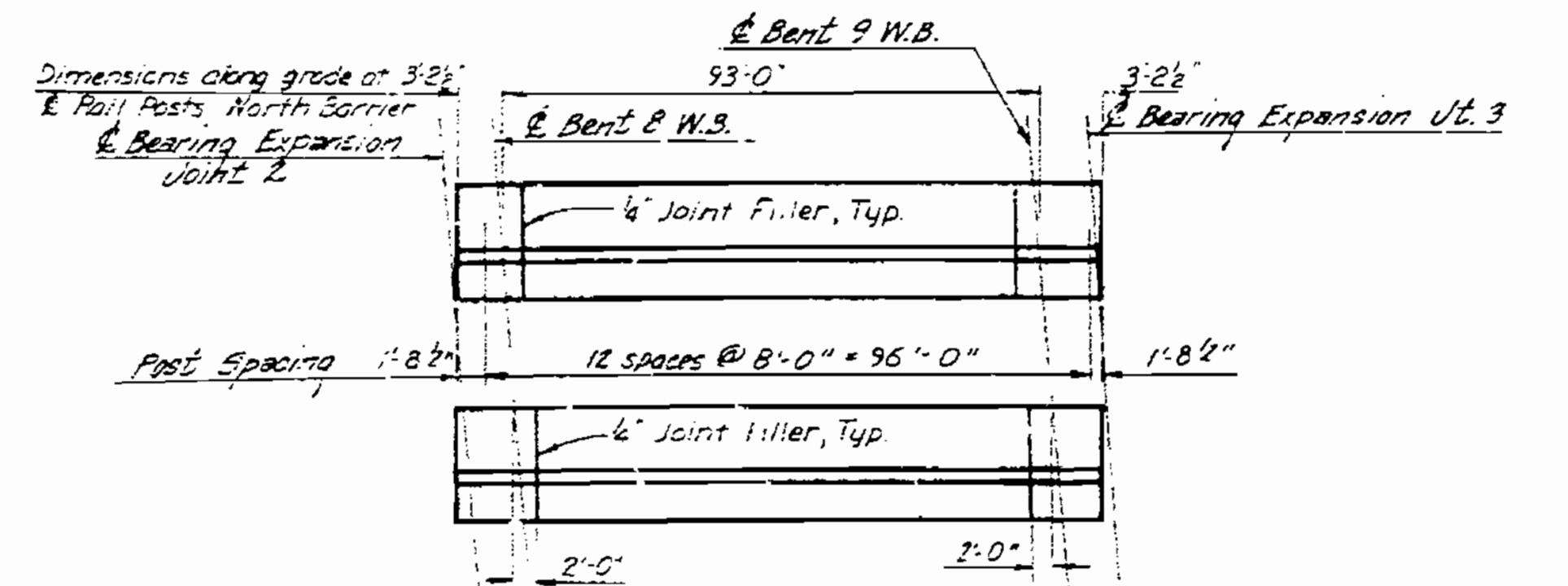
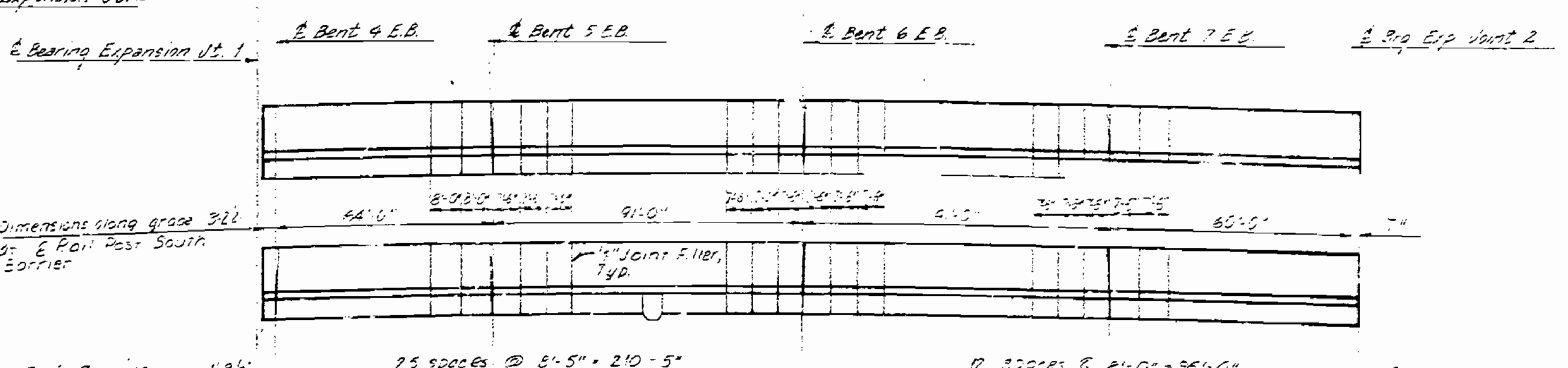
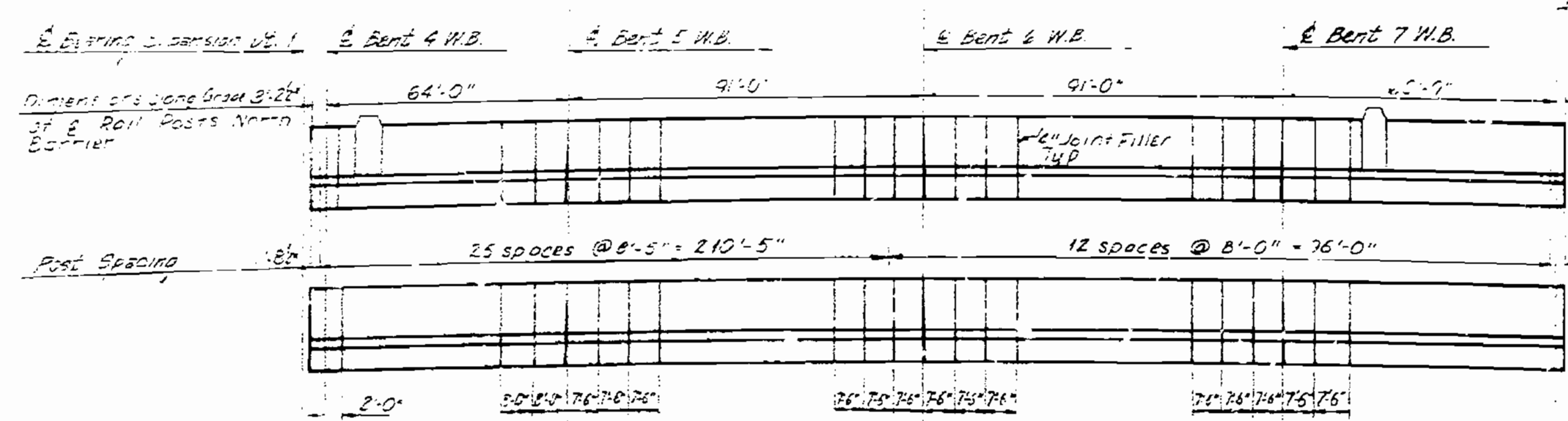
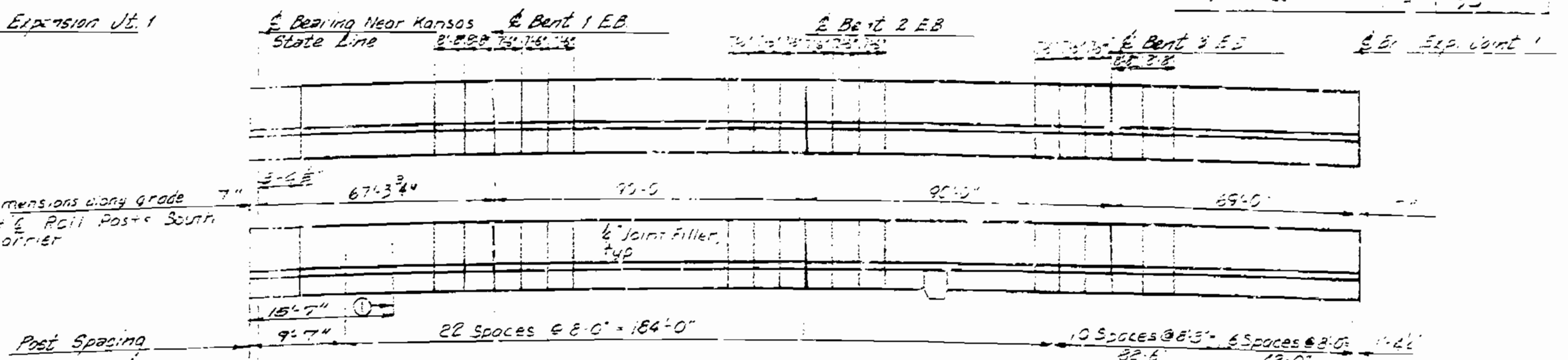
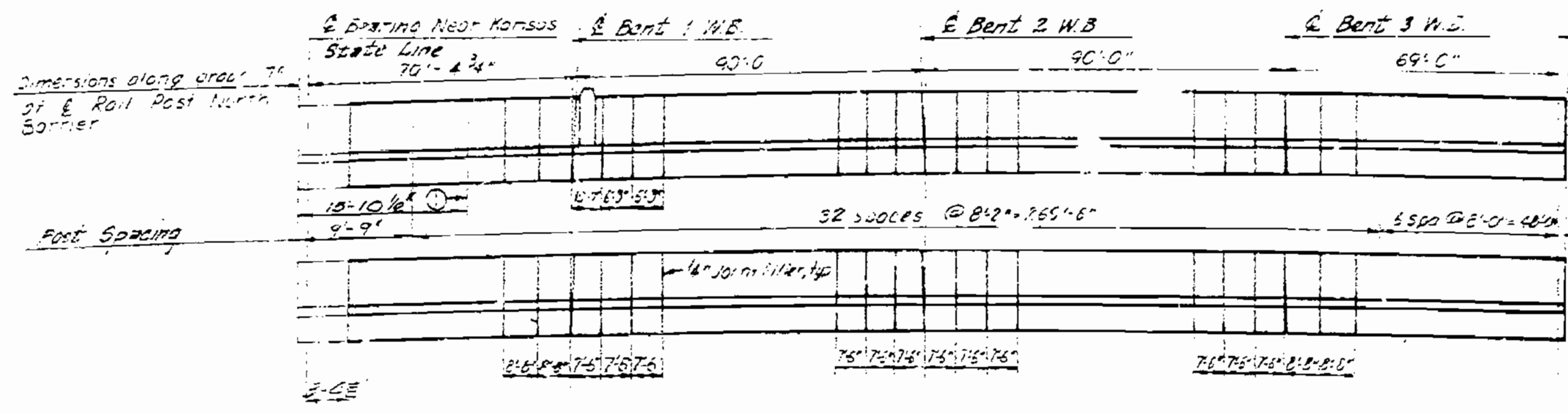
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 6 of 23

JACKSON COUNTY

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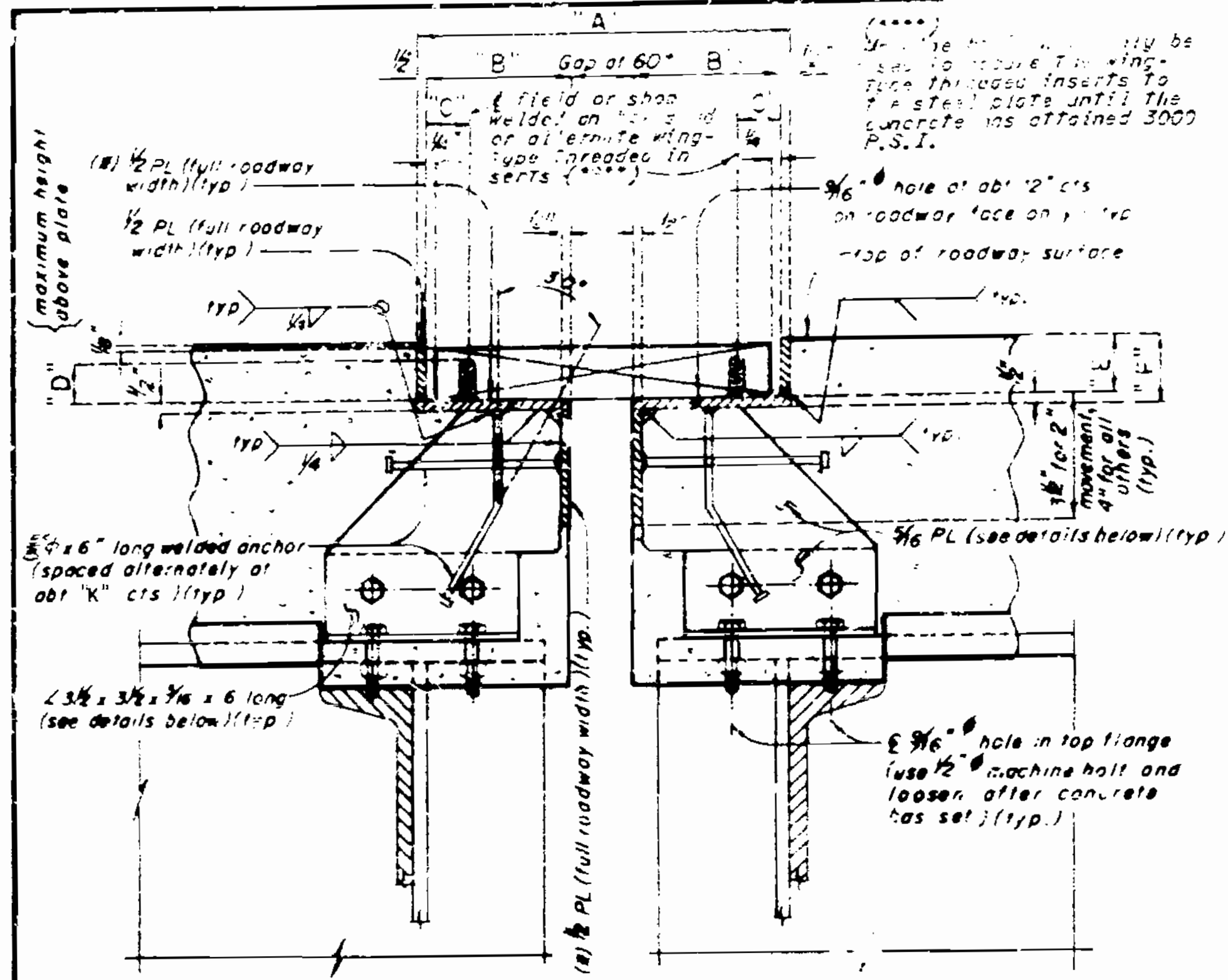
PED. ROAD DIST. NO.	STATE	PED. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
				25	



RAIL POST LOCATIONS
UNIT 1 THRU UNIT 4
WESTBOUND AND EASTBOUND

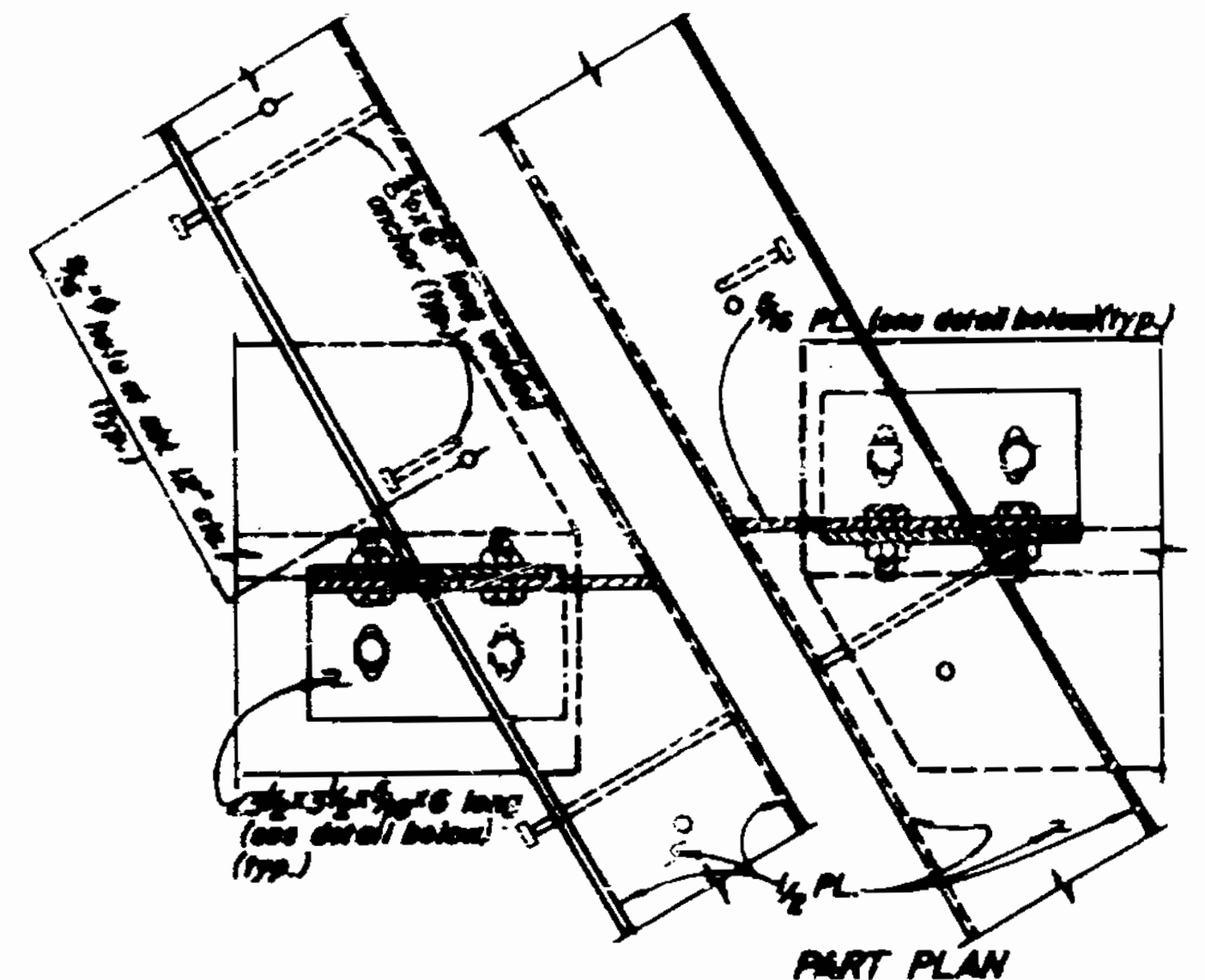
710

PROJECT	DATE	BY	SCALE	SHEET	TOTAL
				186	192



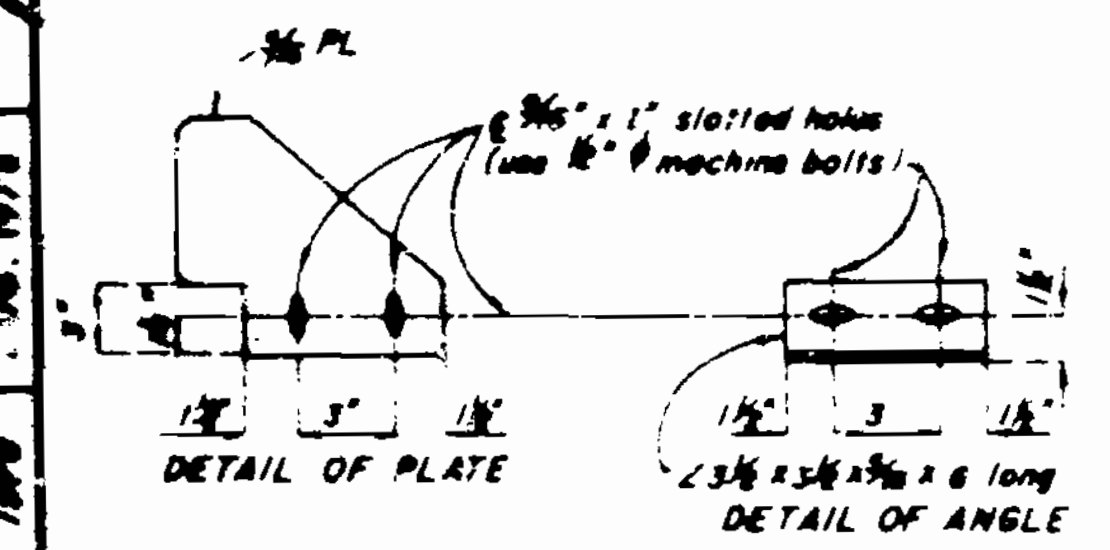
PART SECTION THRU ARMORED JOINTS 1, 2 & 3

(*) these plates may be one piece by using legs of equal or unequal angles



PART PLAN

Note: 3/16 plates placed at each girder or stringer.



DETAILED RDW 1079
CHECKED BLA 1079

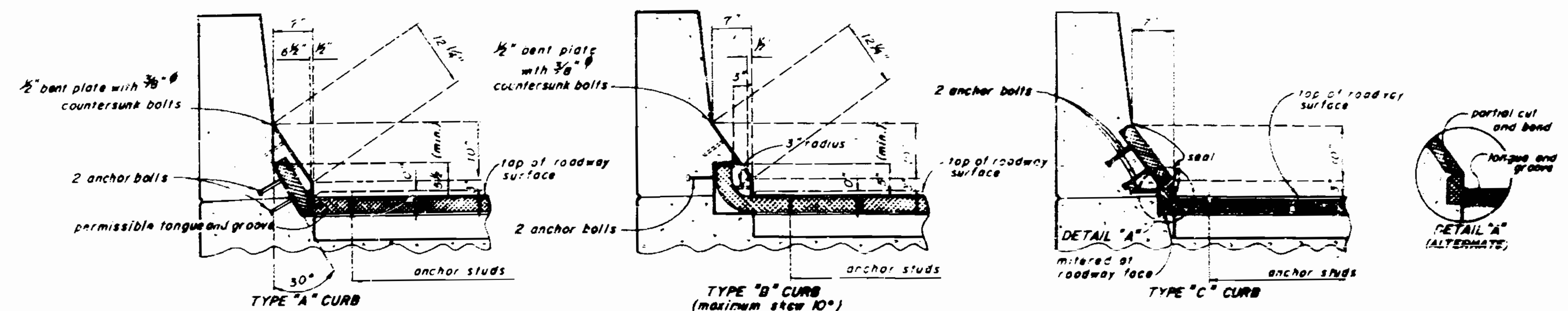
TABLE OF DIMENSIONS

LOCATION	ACCEPTABLE ALTERNATE TYPES	EXP. GAP AT 60°	"A" AT 60°	"B"	"C"	"D"	"E"	"F"	ANCHOR STUDS SIZE "a" x "b" x "c"
Joint 1	On-Flex 45	2 1/2"	11 3/4"	4 1/2"	1 3/8"	1 1/2"	2 3/4"	3 1/4"	3/8" x 5/8" x 12"
	Wabo Bendoflex 450	2 1/2"	12"	4 1/2"	1 3/8"	1 1/2"	2 3/4"	3 1/4"	3/8" x 5/8" x 12"
	Fel-Span T409 CS	2 1/2"	12 1/2"	4 1/2"	1 3/8"	1 1/2"	2 3/4"	3 1/4"	3/8" x 5/8" x 12"
	Feme Trajon TR400	2 1/2"	12"	4 1/2"	1 3/8"	1 1/2"	2 3/4"	3 1/4"	3/8" x 5/8" x 12"
	Delastiflex LM 400	2 1/2"	12 1/2"	4 1/2"	2 1/8"	1 3/8"	2 3/4"	3 1/4"	3/8" x 5/8" x 12"
	Gen-Strip CCL 4'	2 1/2"	12"	4 1/2"	1 3/8"	1 1/2"	2 3/4"	3 1/4"	3/8" x 5/8" x 12"
Joint 2 & 3	Delastiflex LM 300	2"	12 3/8"	4 1/2"	2 1/8"	1 3/8"	2 1/8"	2 3/8"	3/8" x 5/8" x 12"
	Gen-Strip CCL 3'	2"	11 3/4"	4 1/2"	1 3/8"	1 1/2"	2 3/4"	3 1/4"	3/8" x 5/8" x 12"
	On-Flex 35	2"	11 3/4"	4 1/2"	1 3/8"	1 1/2"	2 3/4"	3 1/4"	3/8" x 5/8" x 12"
	Wabo Bendoflex 450	2"	11 3/4"	4 1/2"	1 3/8"	1 1/2"	2 3/4"	3 1/4"	3/8" x 5/8" x 12"
	Fel-Span T409 CS	2"	12"	4 1/2"	1 3/8"	1 1/2"	2 3/4"	3 1/4"	3/8" x 5/8" x 12"
	Feme Trajon TR400	2"	12"	4 1/2"	1 3/8"	1 1/2"	2 3/4"	3 1/4"	3/8" x 5/8" x 12"

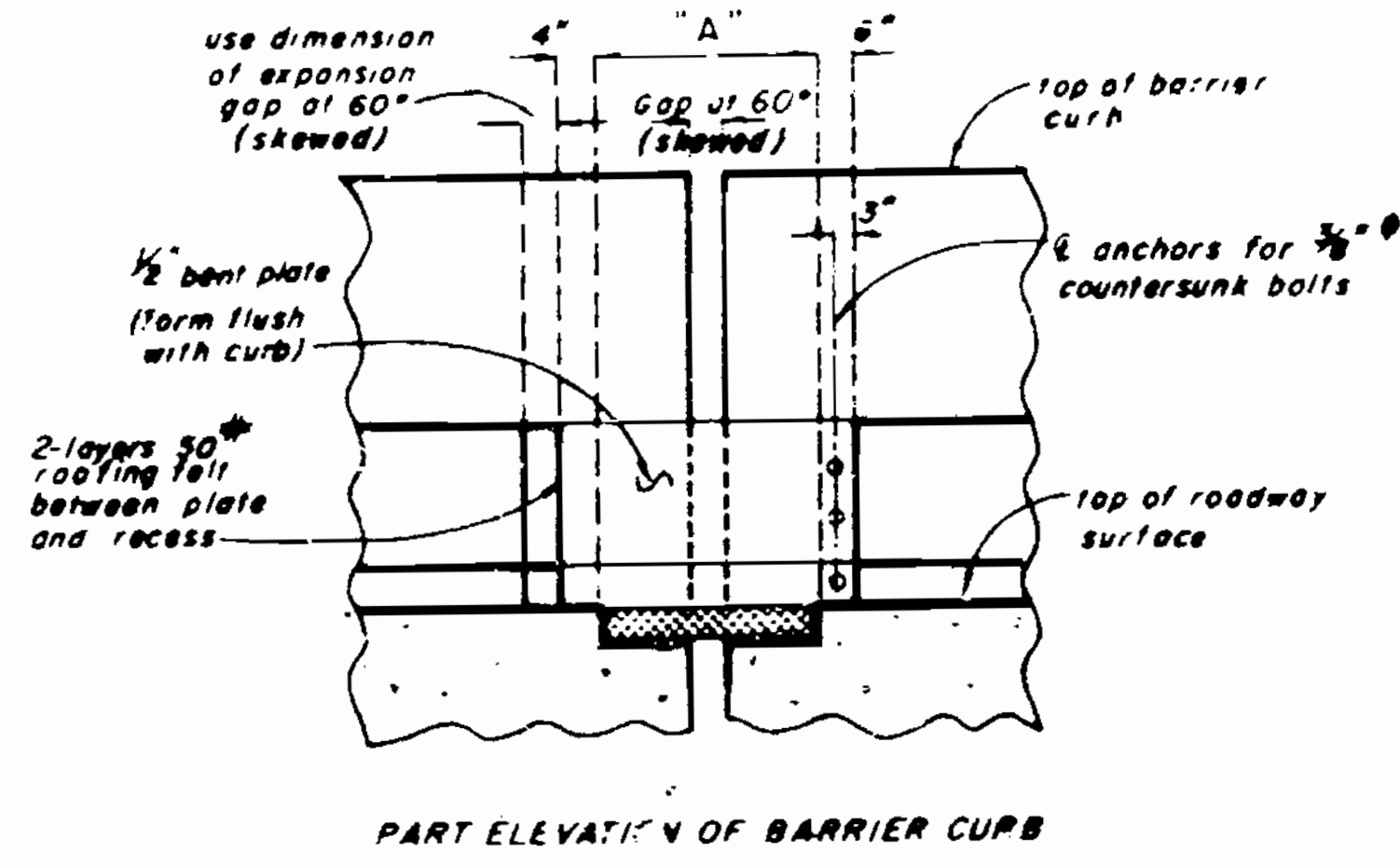
NOTE: All dimensions are at right angles. Expansion gap and dimension "A" shall be increased H for each 10° fall in temperature and decreased H for each 10° rise in temperature.

GENERAL NOTES:

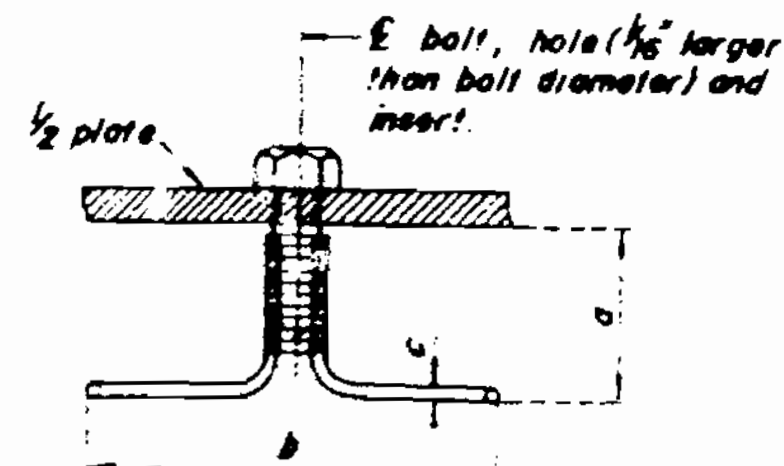
- THE EXPANSION JOINT SEAL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS SHOWN ON THE SHOP DRAWINGS AND IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
- THE NUTS ON THE ANCHOR STUDS SHALL BE TIGHTENED TO THE FOOT POUNDS (FOOT POUNDS) SPECIFIED IN THE TABLE OF DIMENSIONS. RETIGHTEN TO 20 FOOT POUNDS A MINIMUM OF 30 MINUTES AFTER INITIAL TIGHTENING. THE WELDED ANCHOR STUDS SHALL BE THE REDUCED BASE TYPE.
- MATERIAL FOR THE ARMORED JOINT SHALL BE A36 STRUCTURAL GRADE STEEL.
- ANCHORS FOR THE ARMORED JOINT SHALL BE UPGRADED STUD WELDED ANCHORS (C1010 THRU C1020).
- SEE SPECIAL PROVISIONS FOR PAINTING.
- ANCHOR BOLTS IN THE BARRIER CURB SHALL BE CAST-IN-PLACE, GROUTED OR CONE-EXPANSION TYPE. HOLES IN THE BARRIER CURB FOR ANCHORS SHALL NOT BE DRILLED UNTIL THE CONCRETE IS AT LEAST 7 DAYS OLD.
- FLAT DIMENSIONS ARE BASED ON INSTALLATION AT 60°F. THE EXPANSION GAP AND OTHER DIMENSIONS SHALL BE ADJUSTED DURING INSTALLATION FOR COMPLIANCE WITH ANY TEMPERATURE CHANGE.
- CONTACT SURFACE OF STEEL TO ALUMINUM SHALL BE INSULATED WITH THE MATERIAL SPECIFIED ON THE SHOP DRAWINGS.
- FURNISHING AND INSTALLING THE ELASTOMERIC EXPANSION JOINT SEAL WILL BE PAID FOR AT THE CONTRACT BID PRICE PER LINEAR FOOT.
- FURNISHING, PAINTING AND INSTALLING THE STRUCTURAL STEEL ARMORED JOINT WILL BE INCLUDED IN THE CONTRACT PRICE BID FOR OTHER ITEMS.



ALTERNATE CURB TREATMENTS

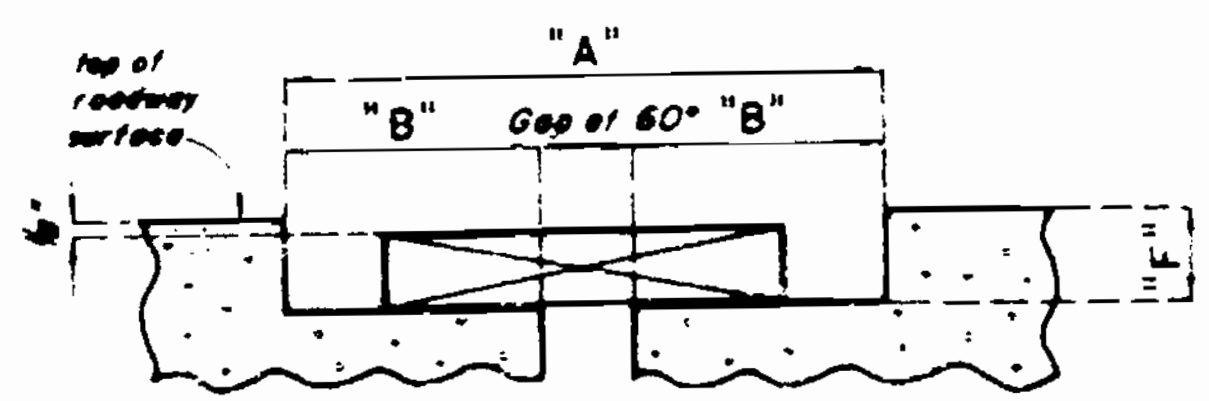


JOINT	H
Joint 1	4"
Joint 2	6"
Joint 3	8"



Bolt Diameter	Safe Dead Tension (lbs.) (min.)	Approx. Ult. Cap. Tension (lbs.) (min.)	Dimensions		
			a	b	c
1/2"	200	2,000	1-5/8"	5"	.218"
3/8"	1,350	9,200	1-5/8"	6"	.218"
3/4"	2,800	13,200	2-1/4"	6"	.262"
7/8"	2,900	16,200	2-1/2"	6-1/2"	.306"
1"	2,000	16,200	2-1/2"	6-1/2"	.306"

DETAILS OF ALTERNATE WING TYPE THREADED INSERT

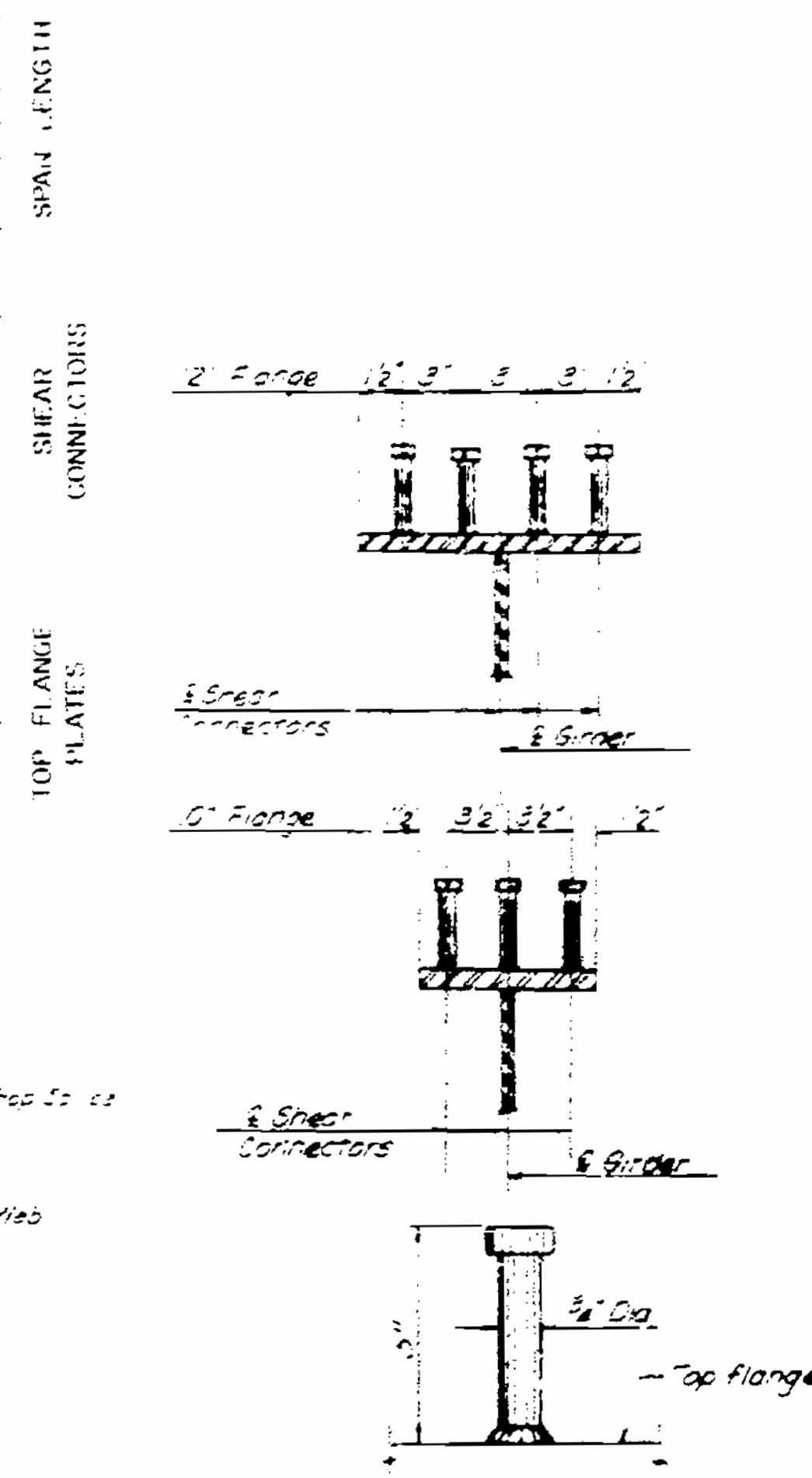
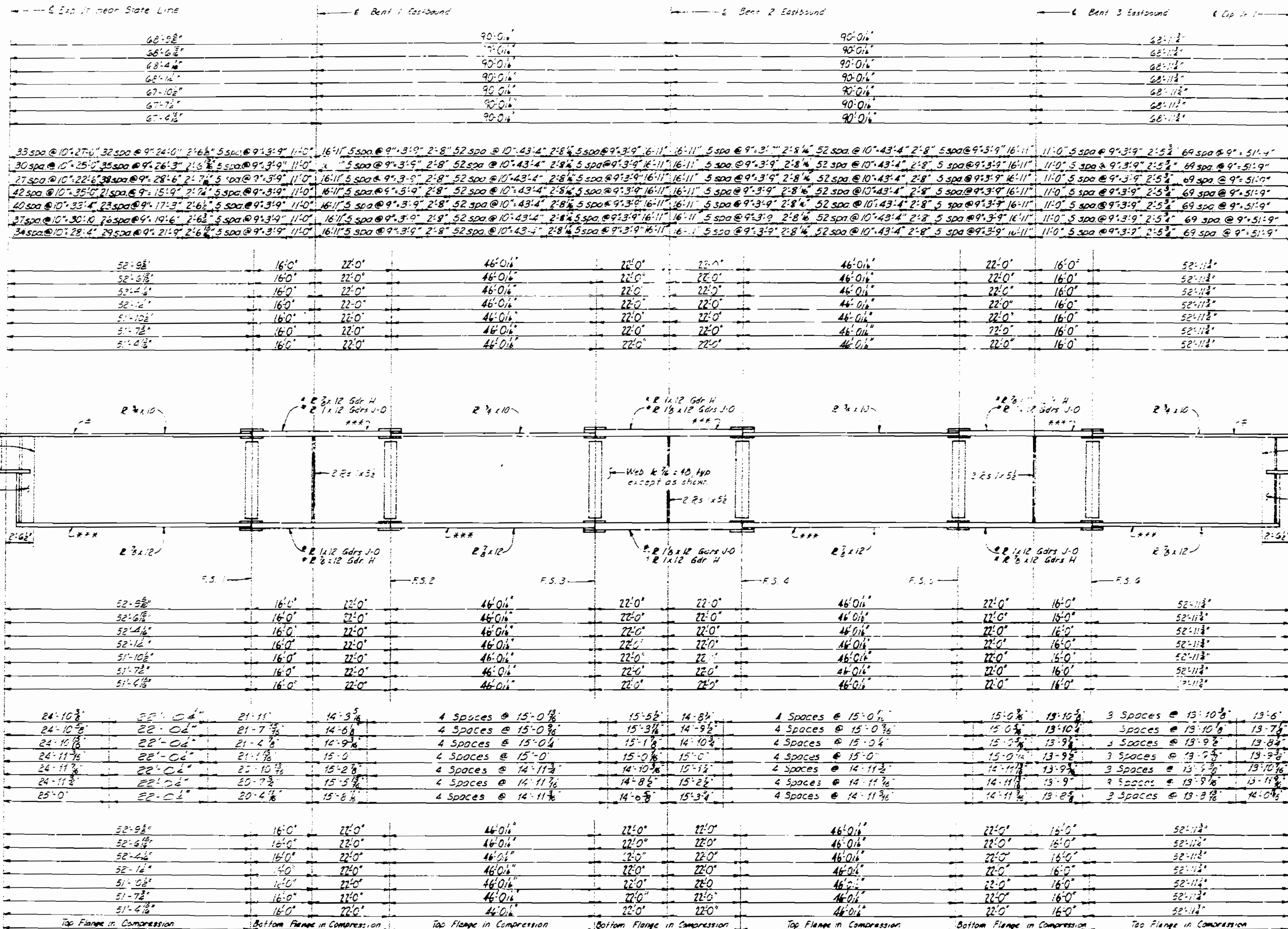


BLOCKOUT FOR MODULAR UNITS
NOTE: WHEN MODULAR UNITS ARE SPECIFIED AS AN ALTERNATE STEEL CURB PLATE TREATMENT, ARE REQUIRED.

DETAILS OF ELASTOMERIC EXPANSION JOINT SEAL AT JOINT NO. 1, 2 & 3

Note: This drawing is not to scale. Follow dimensions.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	NC			35	



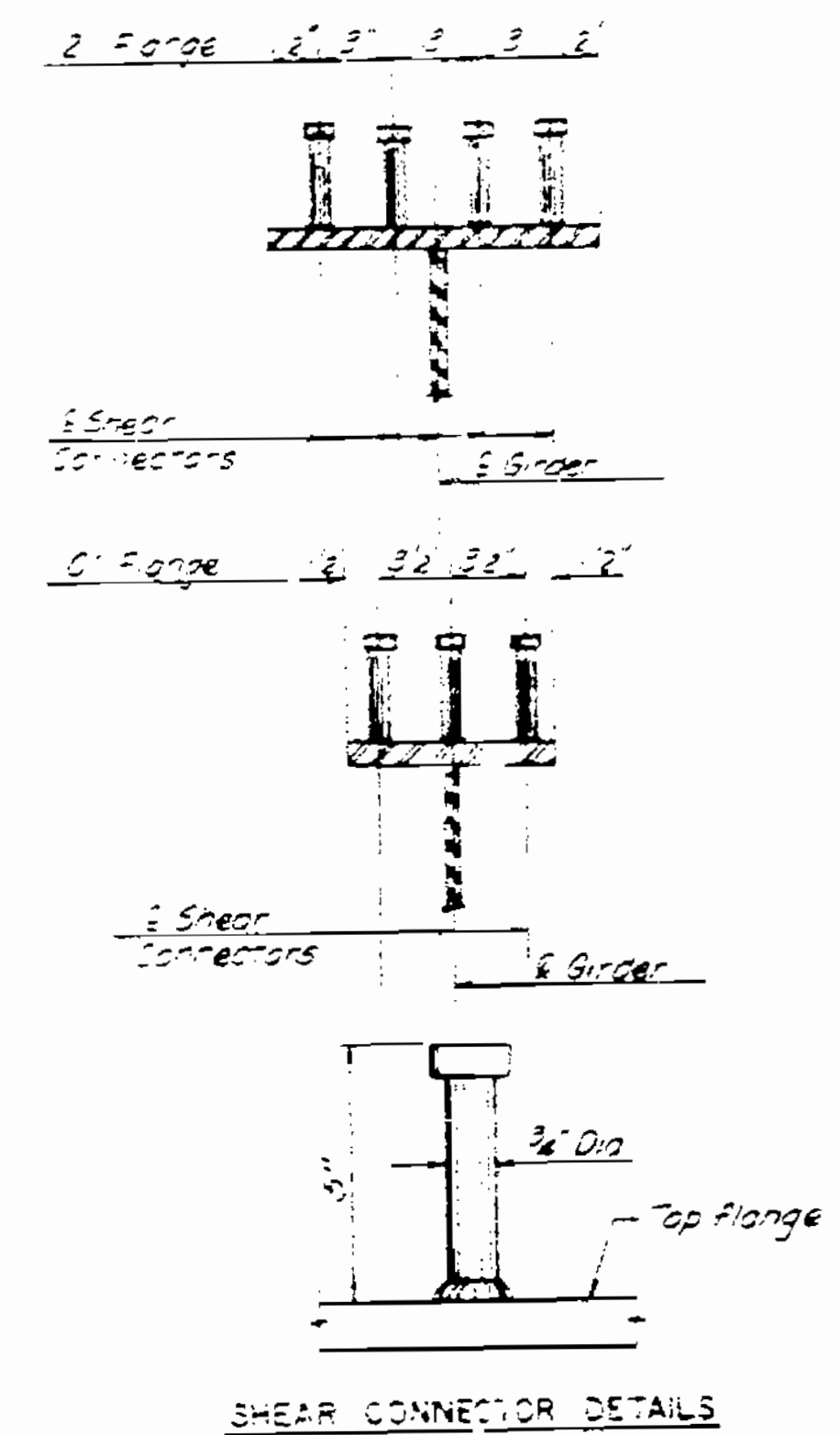
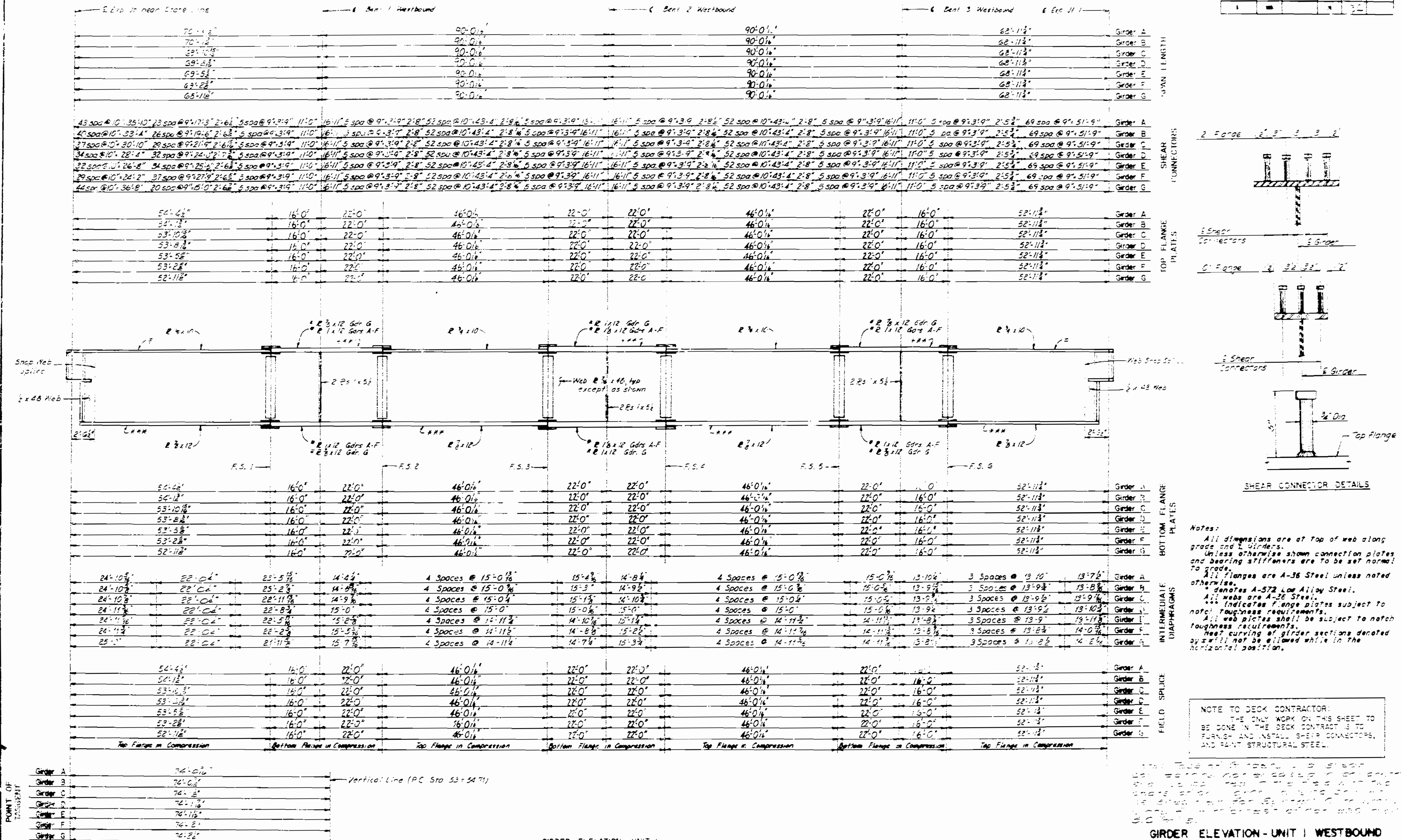
Notes:
 All dimensions are at Top of web along grade and Girders.
 Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade.
 All flanges are A-36 Steel unless noted otherwise.
 * denotes A-572 Low Alloy Steel.
 All welds are A-36 Steel.
 ** Indicates flange plates subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements.
 Next curving of girder sections denoted by S will not be allowed while in the horizontal position.

NOTE TO DECK CONTRACTOR:
 THE ONLY WORK ON THIS SHEET TO BE DONE BY THE DECK CONTRACTOR IS TO FURNISH AND INSTALL SHEAR CONNECTORS, AND PAINT STRUCTURAL STEEL.

POINT OF TANGENT	GIRDER ELEVATION - UNIT 1
Girder H	74'-2 1/2"
Girder J	74'-2 1/2"
Girder K	74'-5 1/2"
Girder L	74'-3 3/8"
Girder M	74'-3 3/8"
Girder N	74'-3 3/8"
Girder O	74'-2 1/2"

SPAN LENGTH	SHEAR CONNECTORS	TOP FLANGE PLATES	BOTTOM FLANGE PLATES	INTERMEDIATE DIAPHRAGMS	FIELD SPLICE
90'-0 1/2"	33 spa @ 10'-2 1/4"	52'-9 3/8"	52'-9 3/8"	24'-10 3/8"	52'-9 3/8"
90'-0 1/2"	30 spa @ 10'-2 1/4"	52'-6 1/8"	52'-6 1/8"	24'-10 3/8"	52'-6 1/8"
90'-0 1/2"	27 spa @ 10'-2 1/4"	52'-4 1/8"	52'-4 1/8"	24'-10 3/8"	52'-4 1/8"
90'-0 1/2"	42 spa @ 10'-2 1/4"	52'-1 1/8"	52'-1 1/8"	24'-11 3/8"	52'-1 1/8"
90'-0 1/2"	40 spa @ 10'-2 1/4"	51'-10 3/8"	51'-10 3/8"	24'-11 3/8"	51'-10 3/8"
90'-0 1/2"	37 spa @ 10'-2 1/4"	51'-7 3/8"	51'-7 3/8"	24'-11 3/8"	51'-7 3/8"
90'-0 1/2"	34 spa @ 10'-2 1/4"	51'-4 3/8"	51'-4 3/8"	25'-0"	51'-4 3/8"

REV	DATE	BY	CHKD	DESCRIPTION
1				

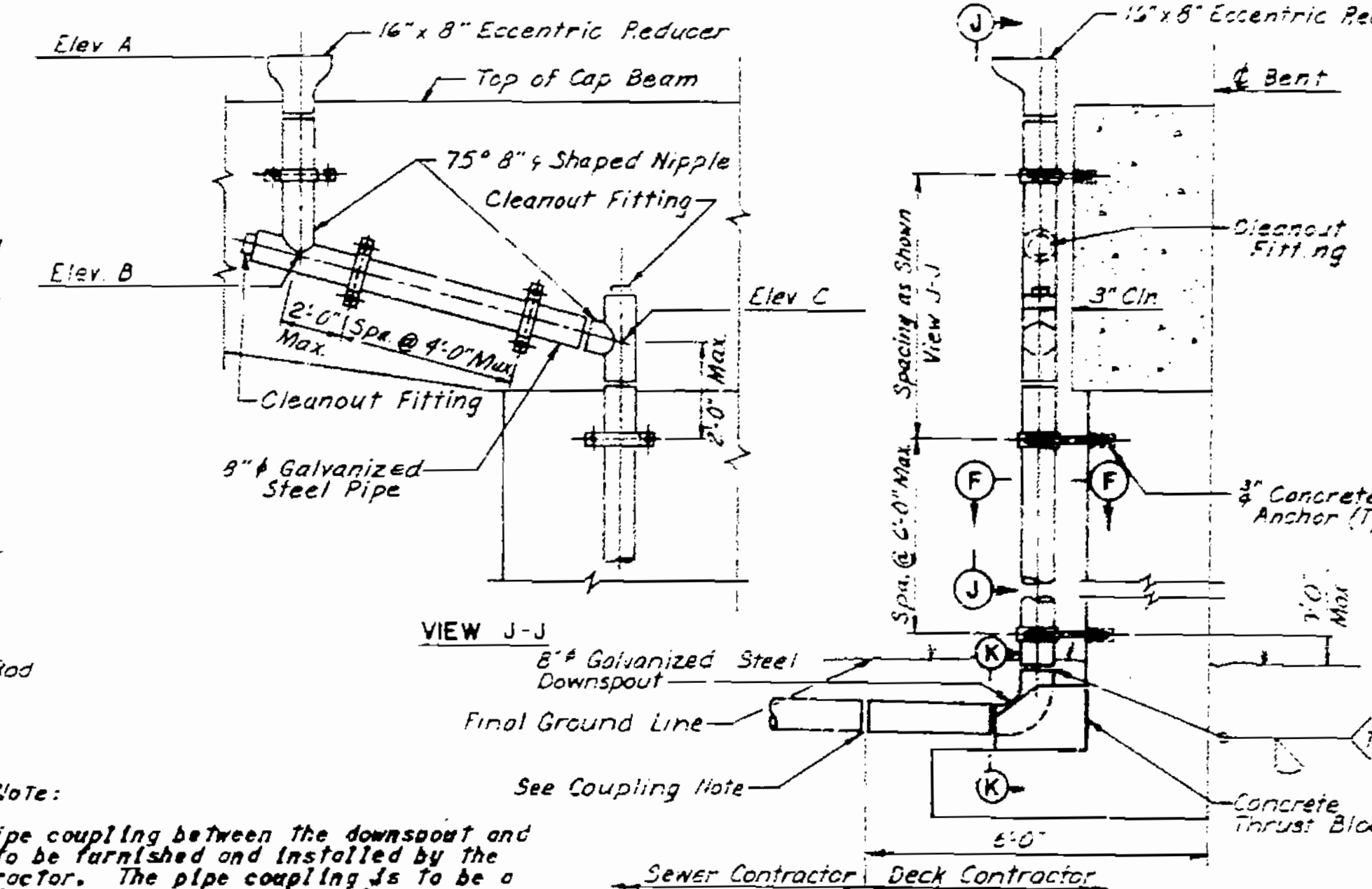
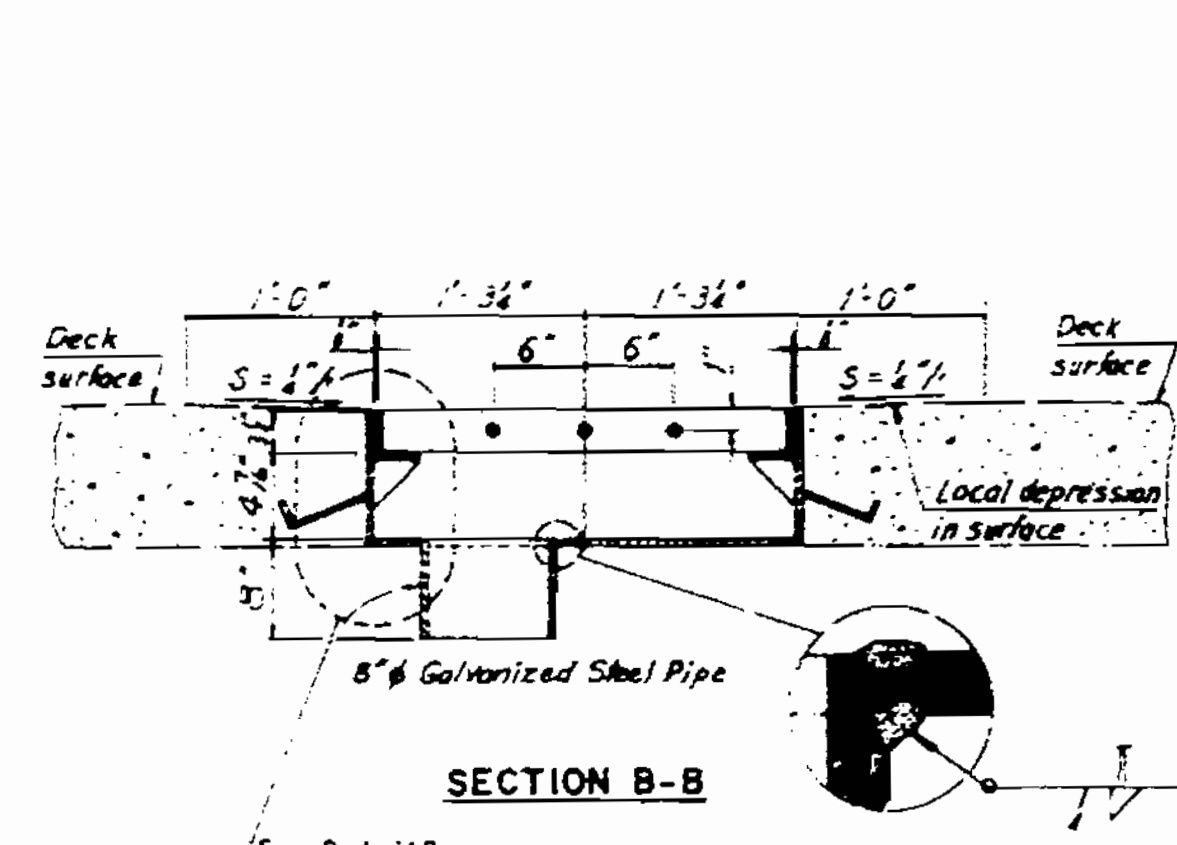
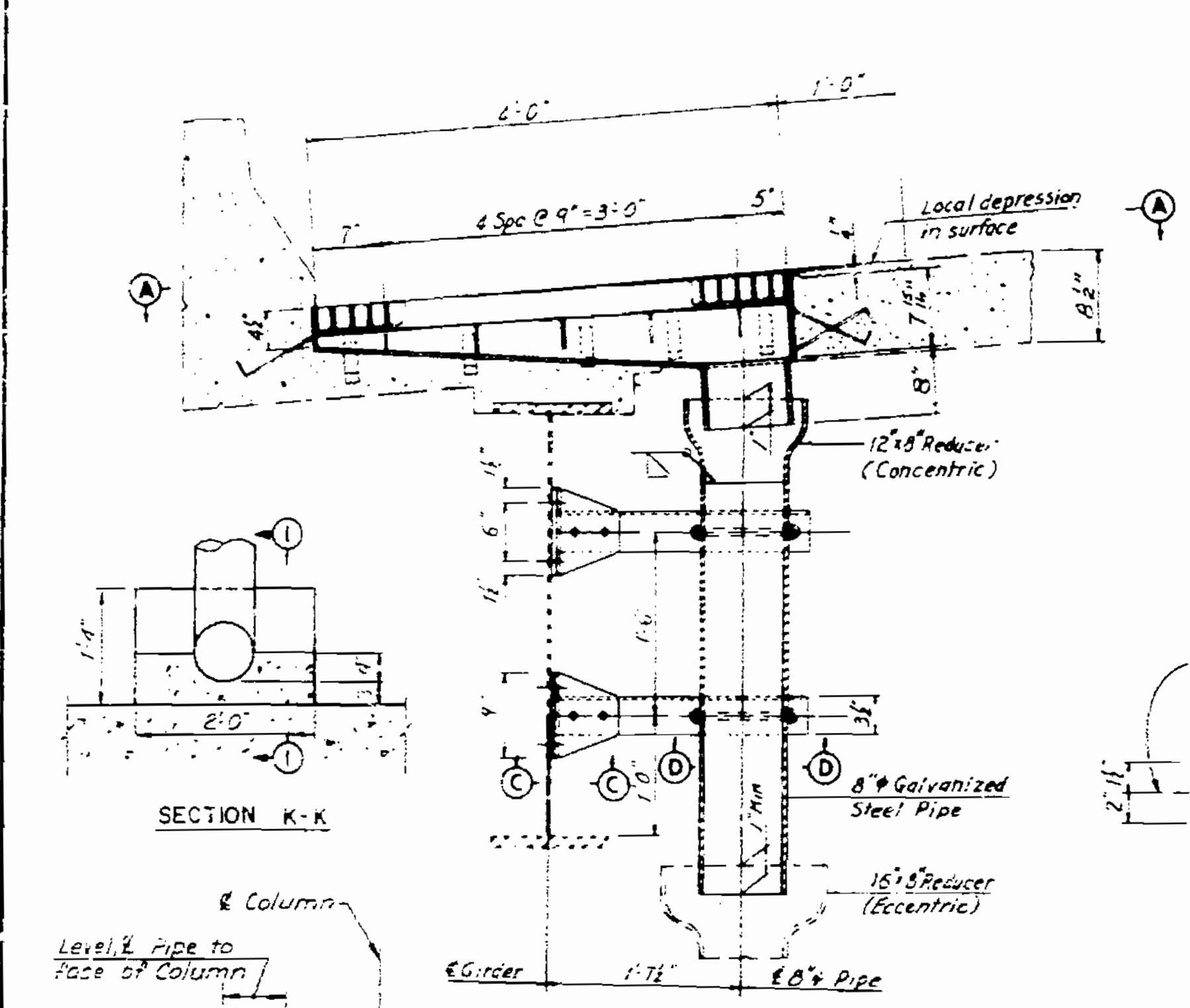


Notes:
 All dimensions are at top of web along grade and 1/2" girders.
 Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade.
 All flanges are A-36 Steel unless noted otherwise.
 * denotes A-572 Low Alloy Steel.
 All webs are A-36 Steel.
 ** indicates flange plates subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements.
 Next curving of girder sections denoted by x will not be allowed while in the horizontal position.

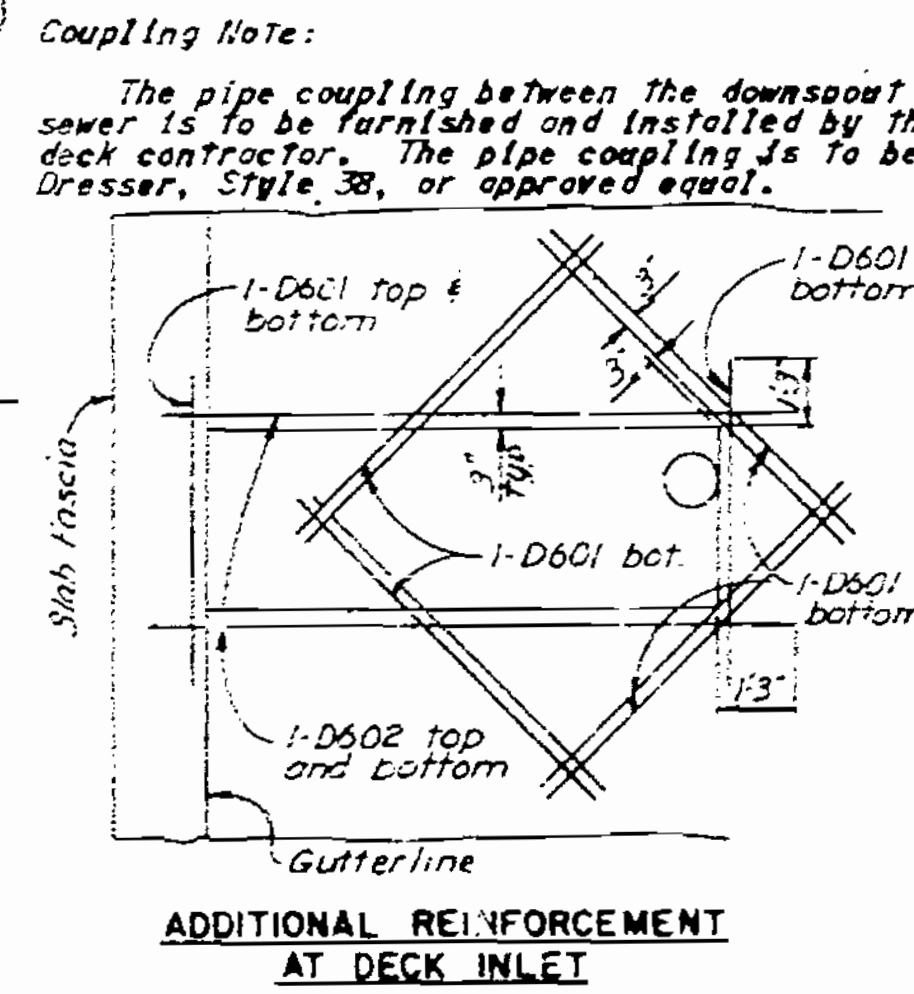
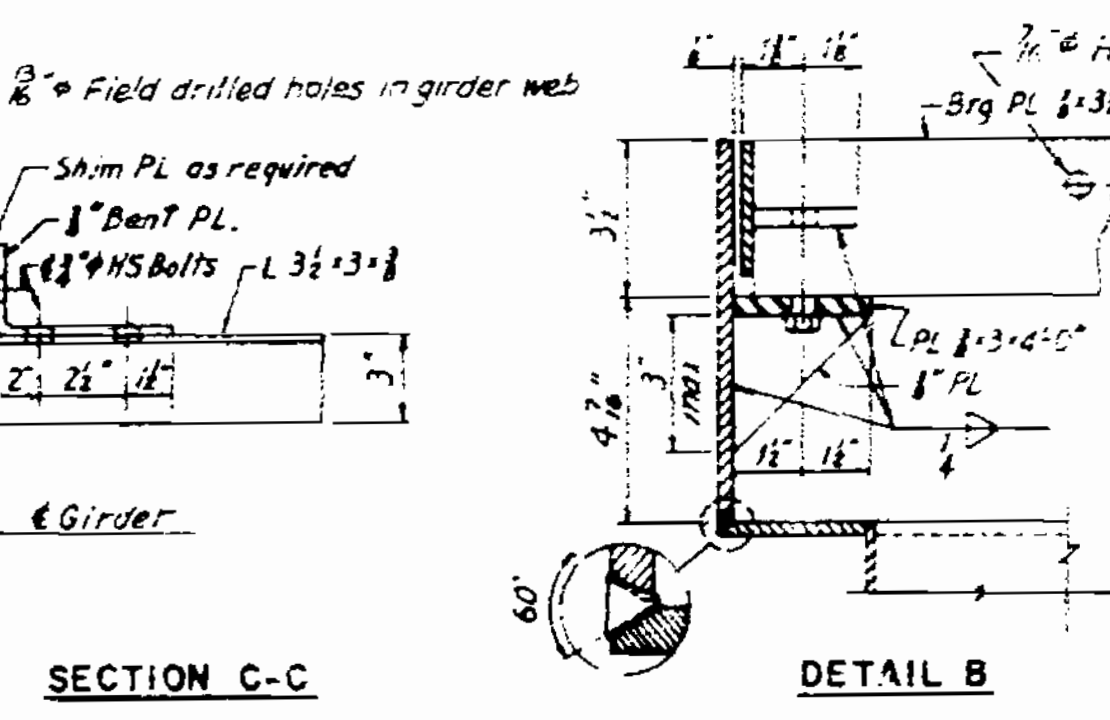
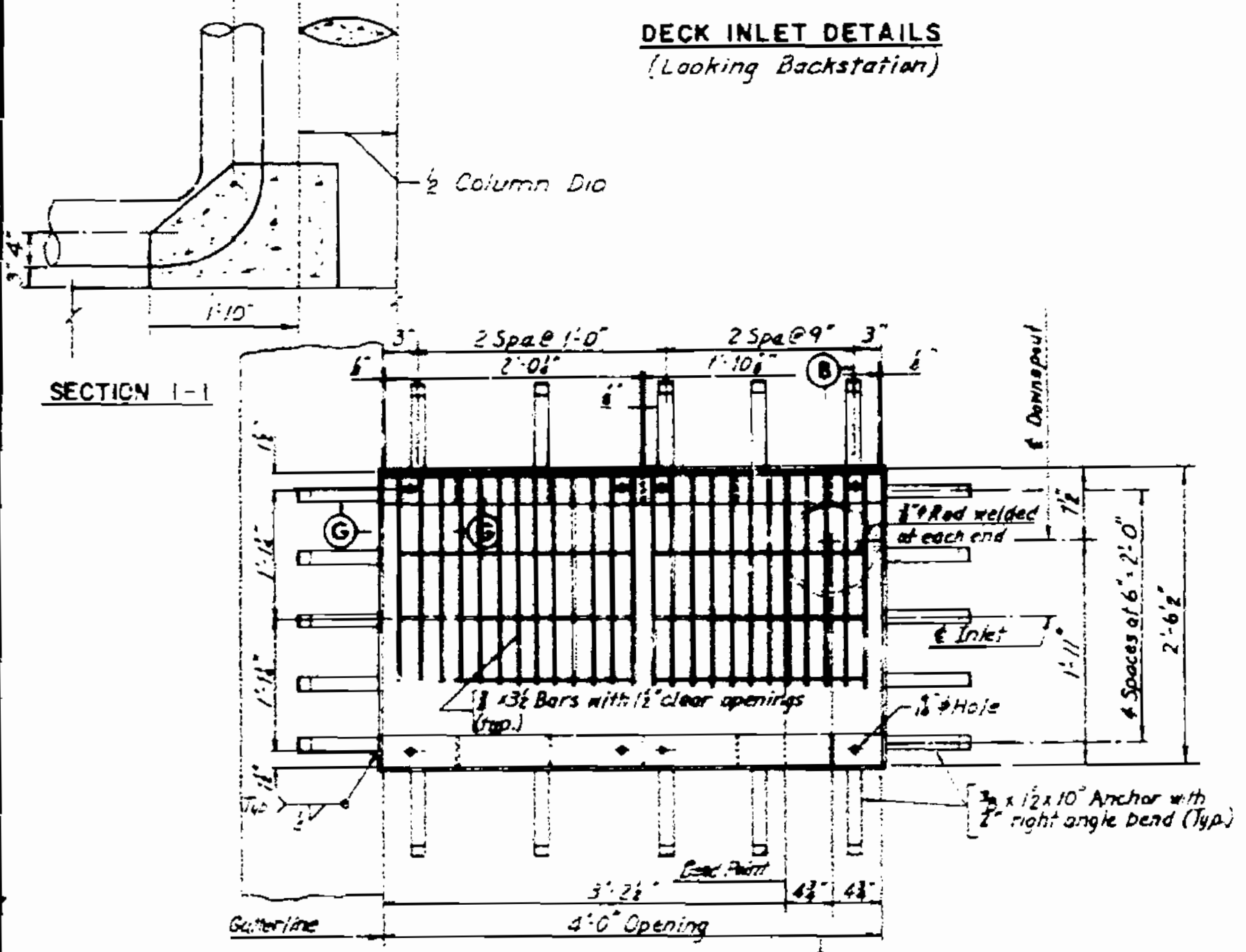
NOTE TO DECK CONTRACTOR:
 THE ONLY WORK ON THIS SHEET TO BE DONE IN THE DECK CONTRACT IS TO FURNISH AND INSTALL SHEAR CONNECTORS, AND PAINT STRUCTURAL STEEL.

POINT OF TRANSFER	SPAN LENGTH
Girder A	74'-0 1/2"
Girder B	74'-0 1/2"
Girder C	74'-0 1/2"
Girder D	74'-1 1/8"
Girder E	74'-1 1/8"
Girder F	74'-2 1/4"
Girder G	74'-2 1/4"

REV.	DATE	BY	CHKD.
1			

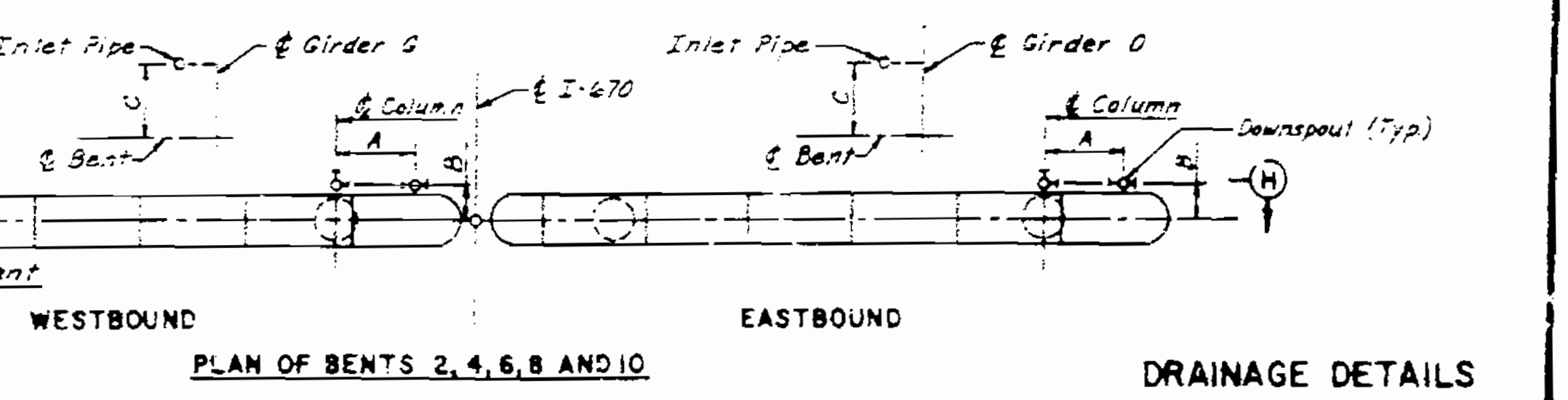
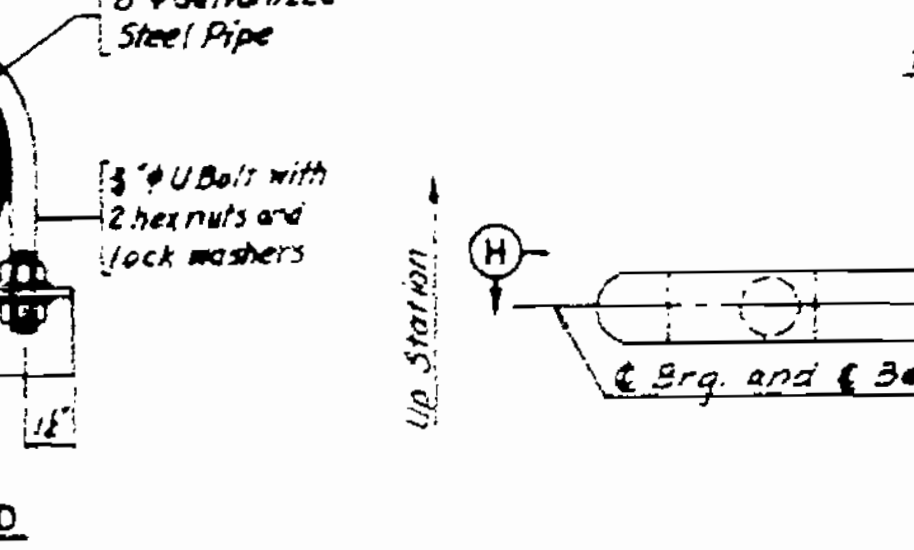
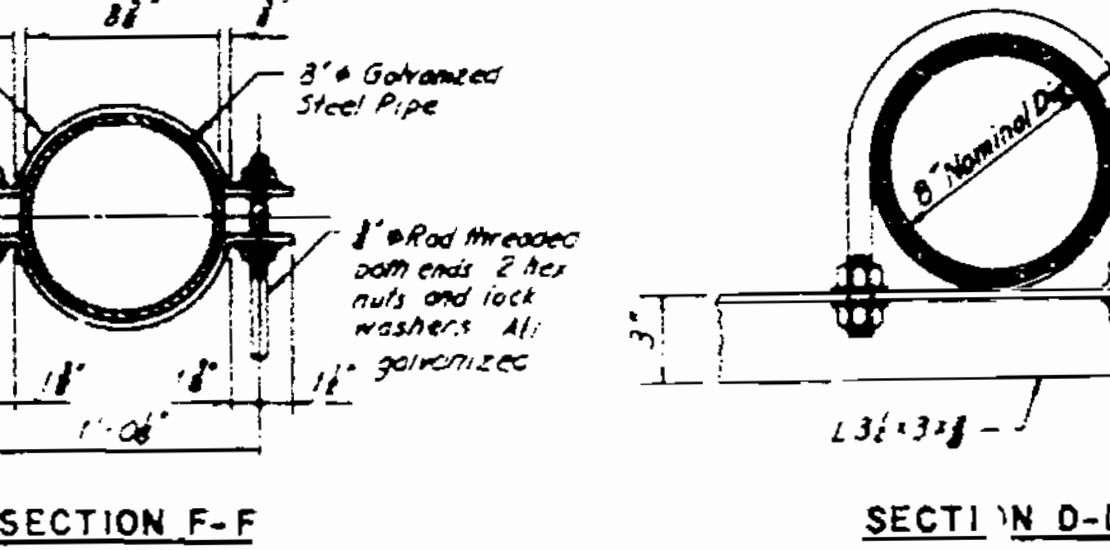
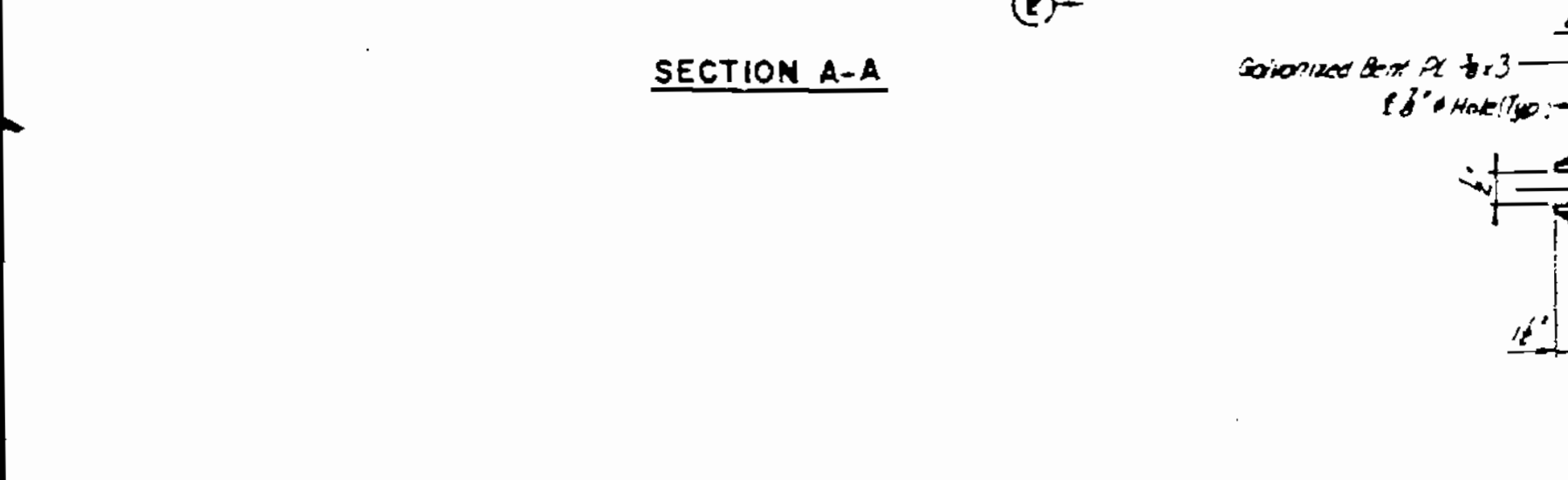
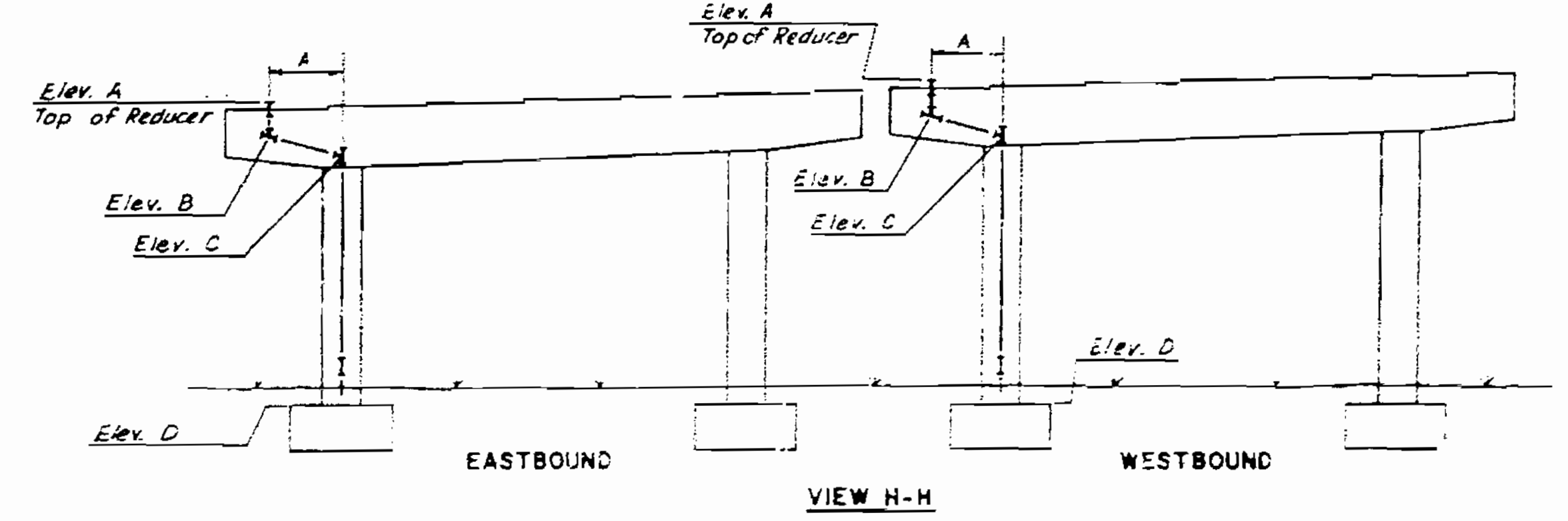
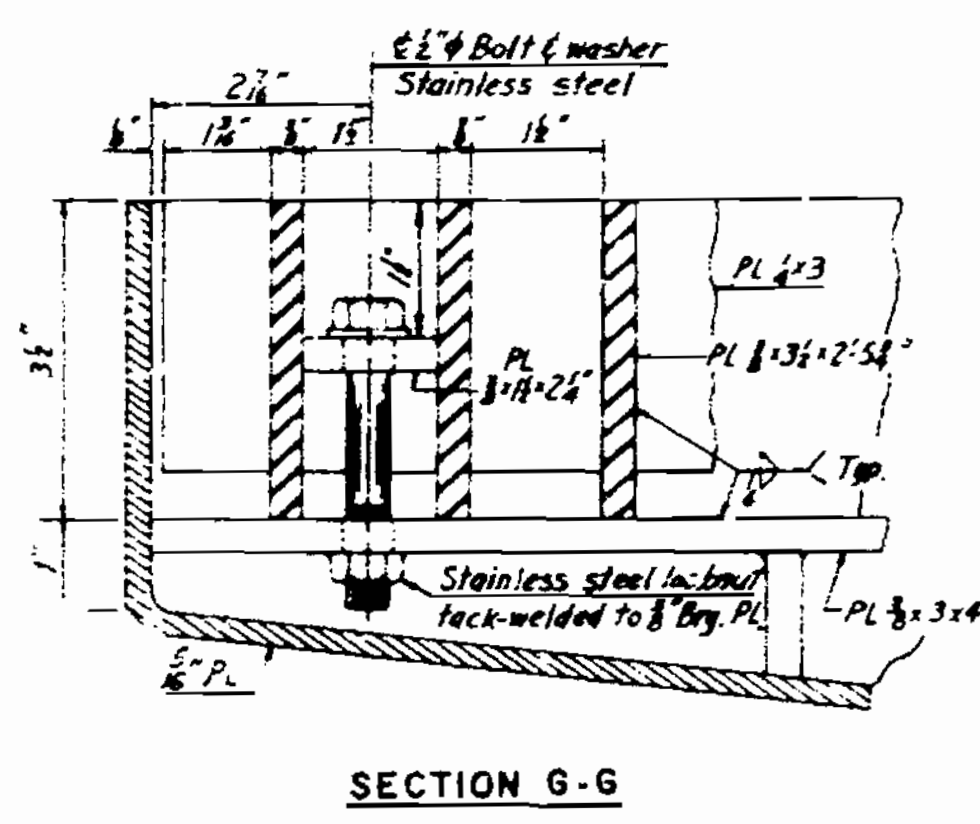


Notes:
 See Slab Plans for location of Deck Inlets. Cut steel reinforcing bars to clear deck inlets. Additional reinforcing bars 5001 and 5002 shall be set between top and bottom bars. All material for deck inlet and supports shall be A36 except where shown otherwise and shall be galvanized after fabrication. Cost of fabricating and installing concrete inserts, threaded anchor rods, nuts, washers, anchor straps, downspouts, deck inlets and other necessary drainage system incidentals shall be included in the lump sum price bid "Drainage System (on Structure)".
 Concrete anchors shall be of self-drilling expansion type made of case hardened and drawn carburized steel with self-cutting anchor or branching grooves equal to Red Head (Phillips Drill Co.) or Bulldog (J. D. Potts Mfg. Co.).
 The pipe shall be ASTM A-120 galvanized steel pipe, Schedule 40.
 The cost of concrete thrust block is to be included in the price bid for "Drainage System (on Structure)".
 The length of pipe below final ground line is the same for the pedestal pipe alternate as the pipe footing alternate.

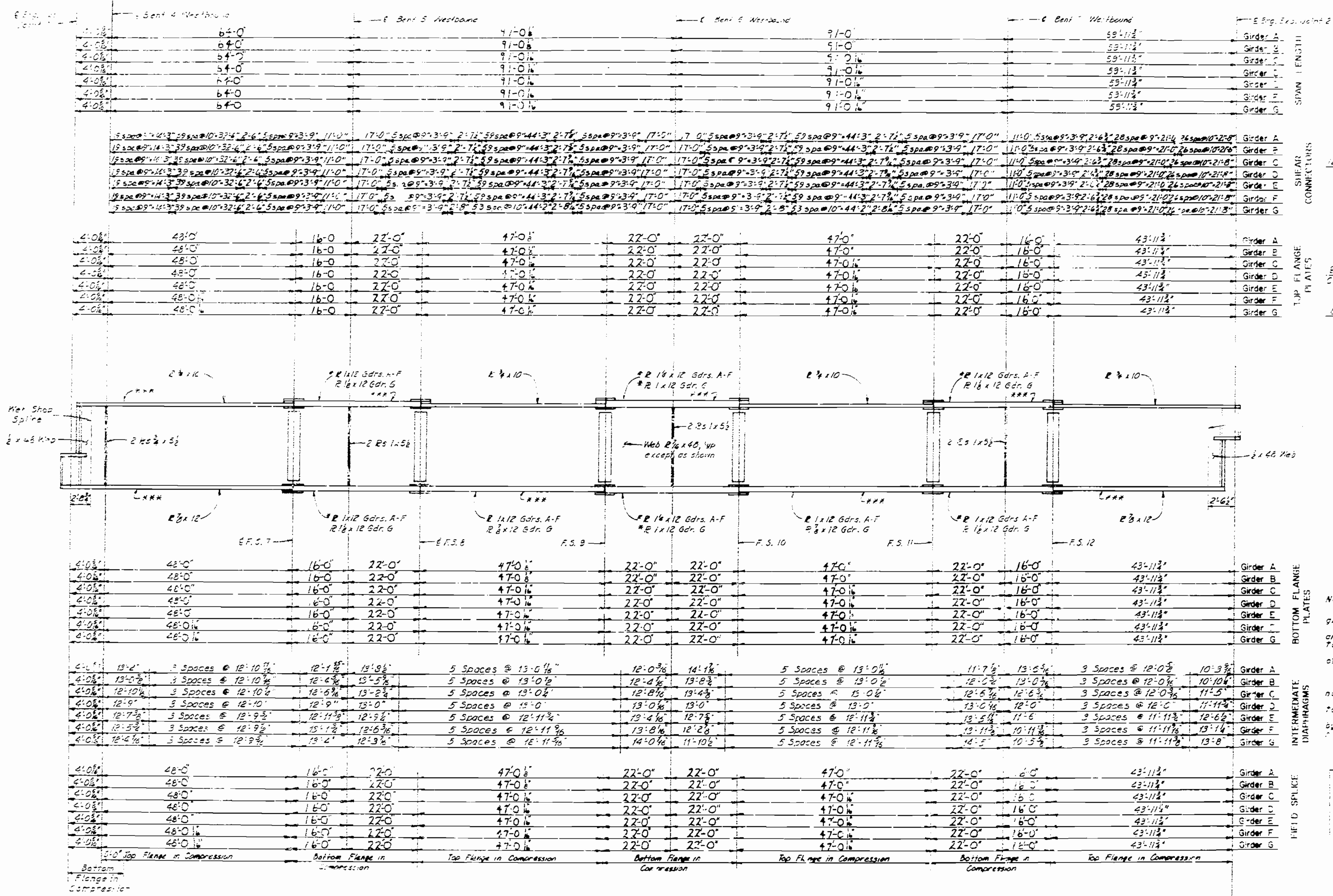


TABULATION OF BENTS 2, 4, 6, 8 AND 10

BENT	LANES	DISTANCE			ELEVATION			
		A	B	C	A	B	C	D
2	Westbound	6'-4"	2'-8 1/2"	3'-0 1/2"	782.34	779.10	777.90	743.00
2	Eastbound	6'-4"	2'-8 1/2"	4'-0 1/2"	782.87	777.60	775.90	743.00
4	Westbound	6'-5"	2'-7 1/2"	2'-11 1/2"	780.65	777.92	775.70	743.50
4	Eastbound	6'-5"	2'-7 1/2"	2'-11 1/2"	779.17	775.92	774.20	743.50
6	Westbound	6'-6"	2'-7 1/2"	2'-10 1/2"	778.90	775.64	773.90	743.50
6	Eastbound	6'-6"	2'-7 1/2"	2'-10 1/2"	777.90	774.14	772.90	743.50
8	Westbound	6'-7 1/2"	2'-7 1/2"	2'-10 1/2"	777.31	774.07	772.30	748.00
8	Eastbound	6'-7 1/2"	2'-7 1/2"	2'-10 1/2"	775.79	772.57	770.80	748.00
10	Westbound	6'-8 1/2"	2'-7 1/2"	2'-9 1/2"	774.72	771.57	769.80	749.00
10	Eastbound	6'-8 1/2"	2'-7 1/2"	2'-9 1/2"	773.18	769.99	768.20	749.00



STA. MARK	TYPE	DATE	BY	CHKD.	APP. AUTH.
1	MC				



SPAN LENGTH
GIRDER A
GIRDER B
GIRDER C
GIRDER D
GIRDER E
GIRDER F
GIRDER G

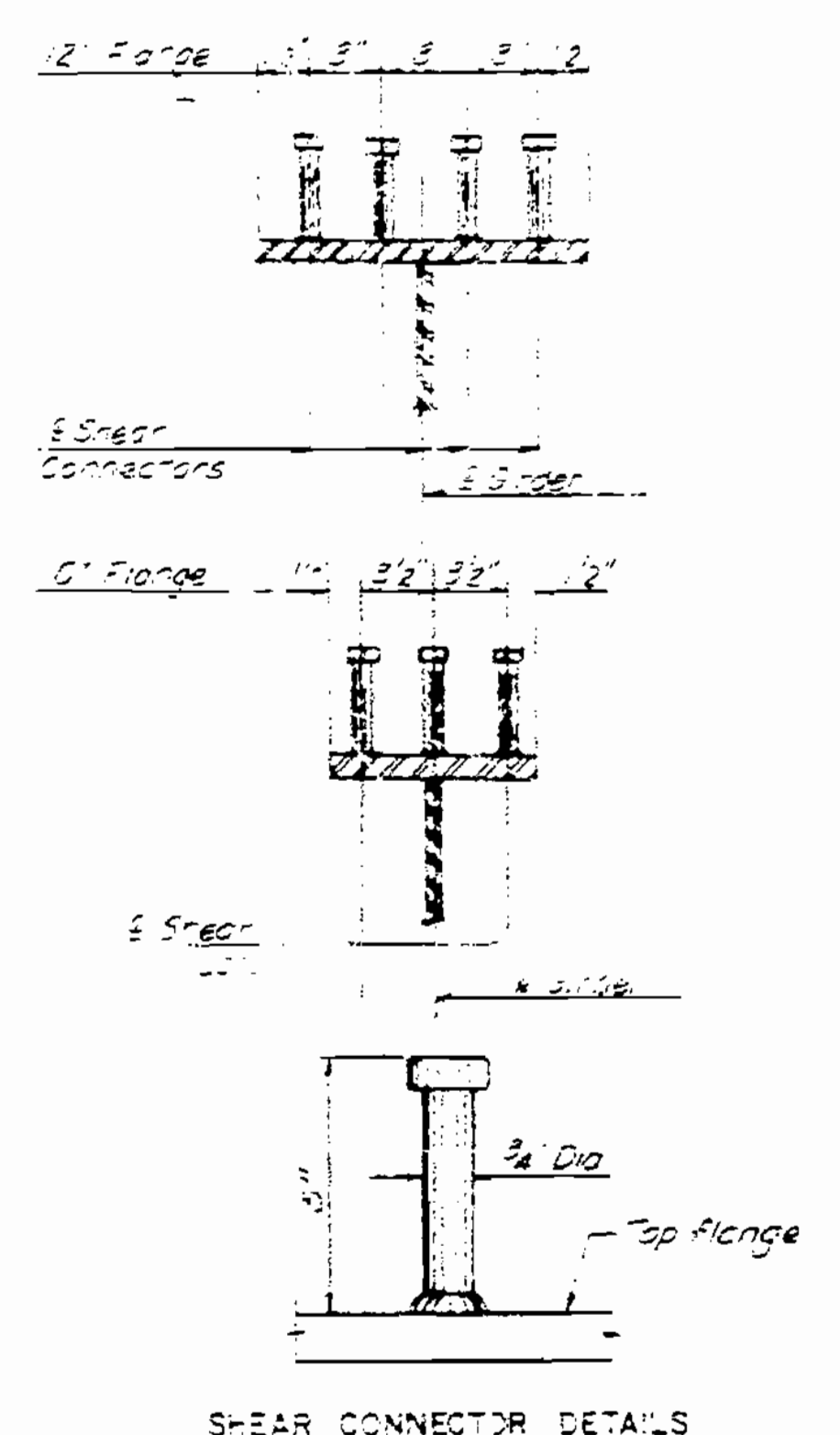
SHEAR CONNECTORS
12" Flange
E Shear Connectors
E Girder
G Flange
E Shear
2" Dia
Top flange

TOP FLANGE PLATES
GIRDER A
GIRDER B
GIRDER C
GIRDER D
GIRDER E
GIRDER F
GIRDER G

BOTTOM FLANGE PLATES
GIRDER A
GIRDER B
GIRDER C
GIRDER D
GIRDER E
GIRDER F
GIRDER G

INTERMEDIATE DIAPHRAGMS
GIRDER A
GIRDER B
GIRDER C
GIRDER D
GIRDER E
GIRDER F
GIRDER G

FIELD SPLICE
GIRDER A
GIRDER B
GIRDER C
GIRDER D
GIRDER E
GIRDER F
GIRDER G



Notes:
All dimensions are top of web along grade and 1/2" girder.
Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade.
All flanges are A-36 Steel unless noted otherwise.
A-572 denotes A-572 Low Alloy Steel.
All webs are A-36 Steel.
All indicates flange plates subject to notch toughness requirements.
All web plates shall be subject to notch toughness requirements.
Leaf curving of girder sections denoted by \curvearrowright will not be allowed while in the horizontal position.

NOTE TO DECK CONTRACTOR:
THE ONLY WORK ON THIS SHEET TO BE DONE IN THE DECK CONTRACTOR'S TO FURNISH AND INSTALL SHEAR CONNECTORS, OR STEEL PLATES.

GIRDER ELEVATION - UNIT 2

GIRDER ELEVATION - UNIT 2 WESTBOUND

DETAILED JRE 10/79
CHECKED SRF 10/79

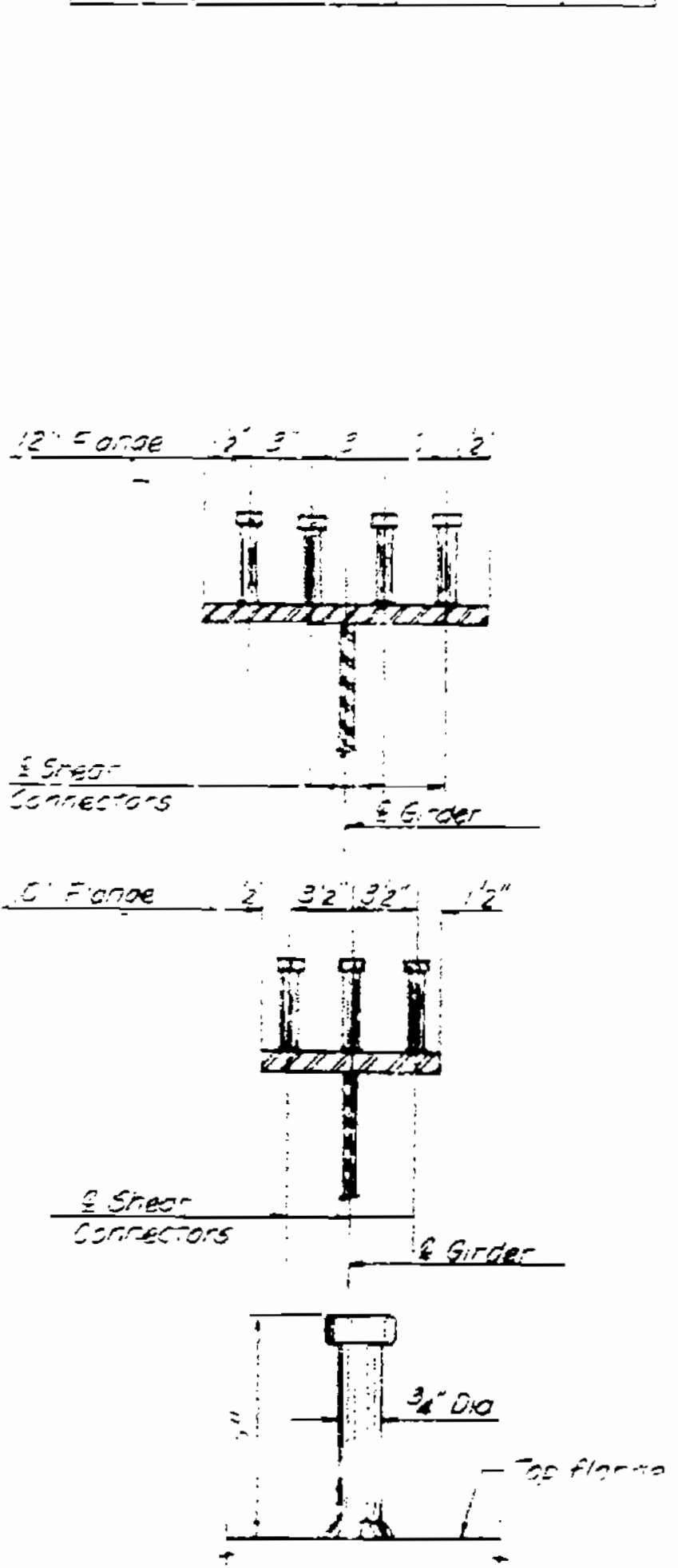
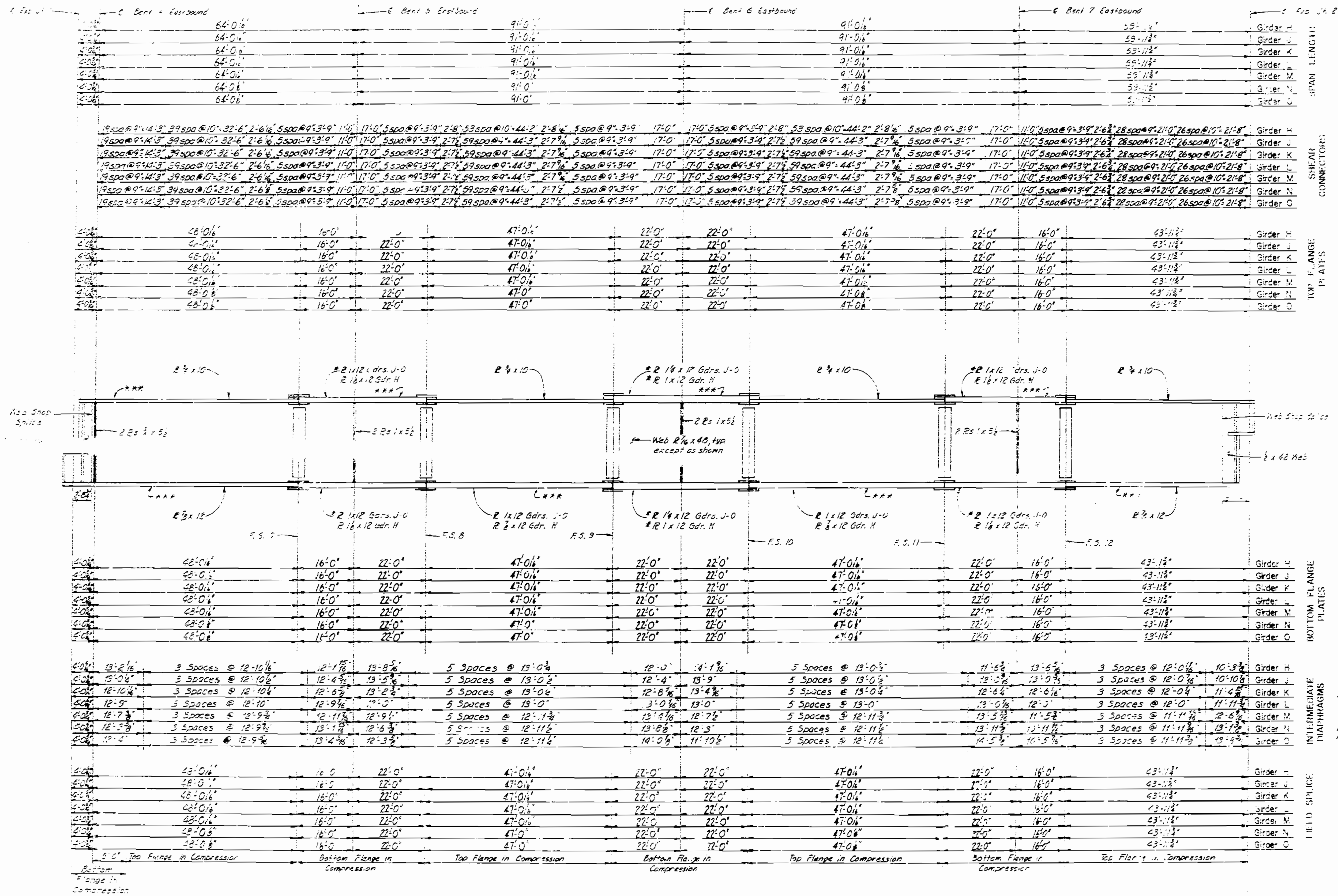
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 27 of 28

JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	NC			3	5



NOTES:
 All dimensions are at top of web along grade and 1' Girder.
 Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade.
 All flanges are A-36 Steel unless noted otherwise.
 * denotes A-572 Low Alloy Steel.
 All webs are A-36 Steel.
 *** indicates flange plates subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements.
 Heat curving of girder sections denoted by α will not be eliminated while in the horizontal position.

NOTE TO DECK CONTRACTOR:
 THE ONLY WORK ON THIS SHEET TO BE DONE IN THE DECK CONTRACT IS TO FURNISH AND INSTALL SHEAR CONNECTORS AND TOP AND BOTTOM FLANGES.

GIRDER ELEVATION - UNIT 2

GIRDER ELEVATION - UNIT 2 EASTBOUND

DATE: 10/18/79
CHECKED: 10/18/79

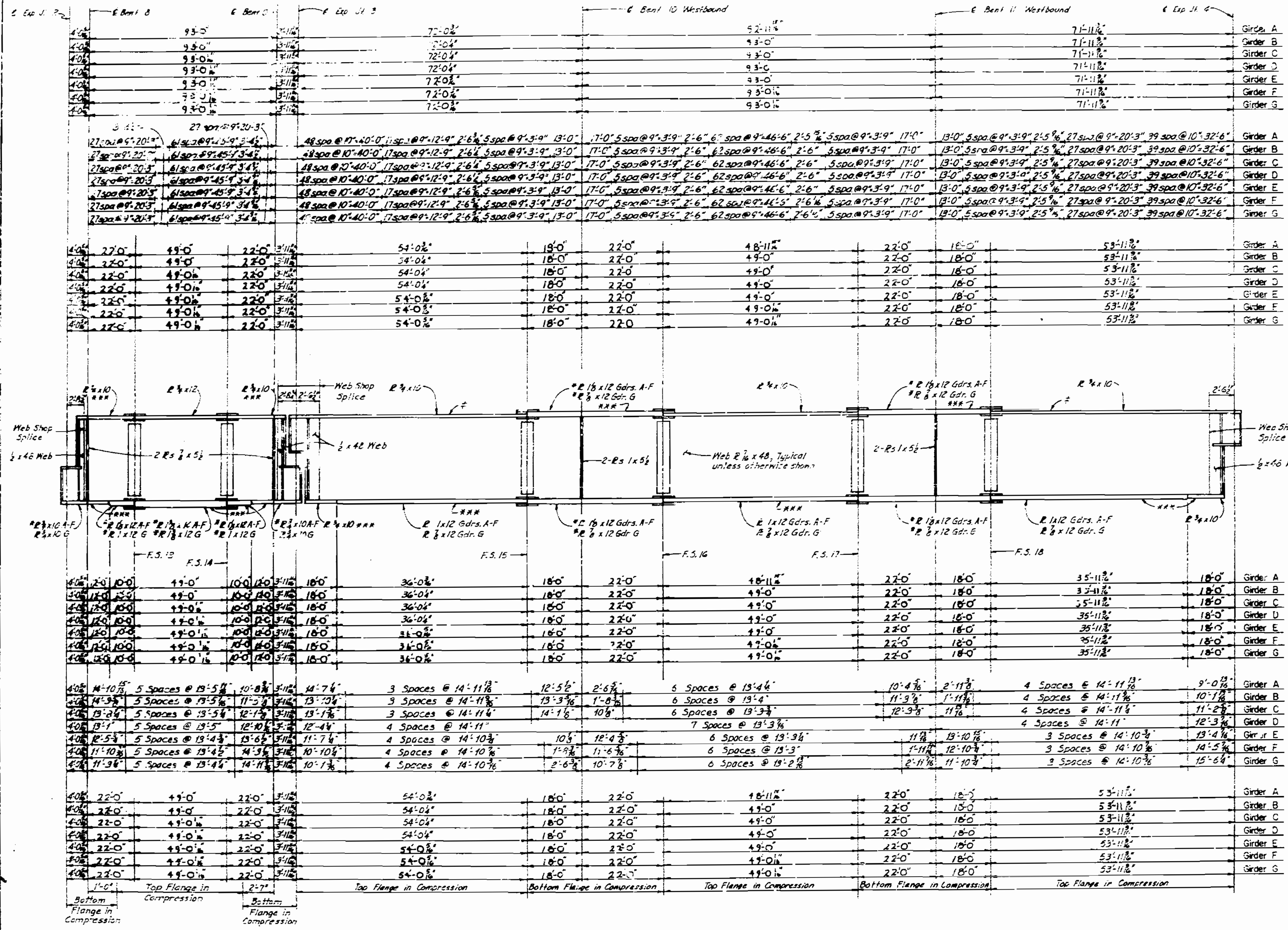
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 20 of 25

JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	TRAC. PLAN	SHEET NO.	TOTAL SHEETS
1	MO.		11	36	



SPAN LENGTH

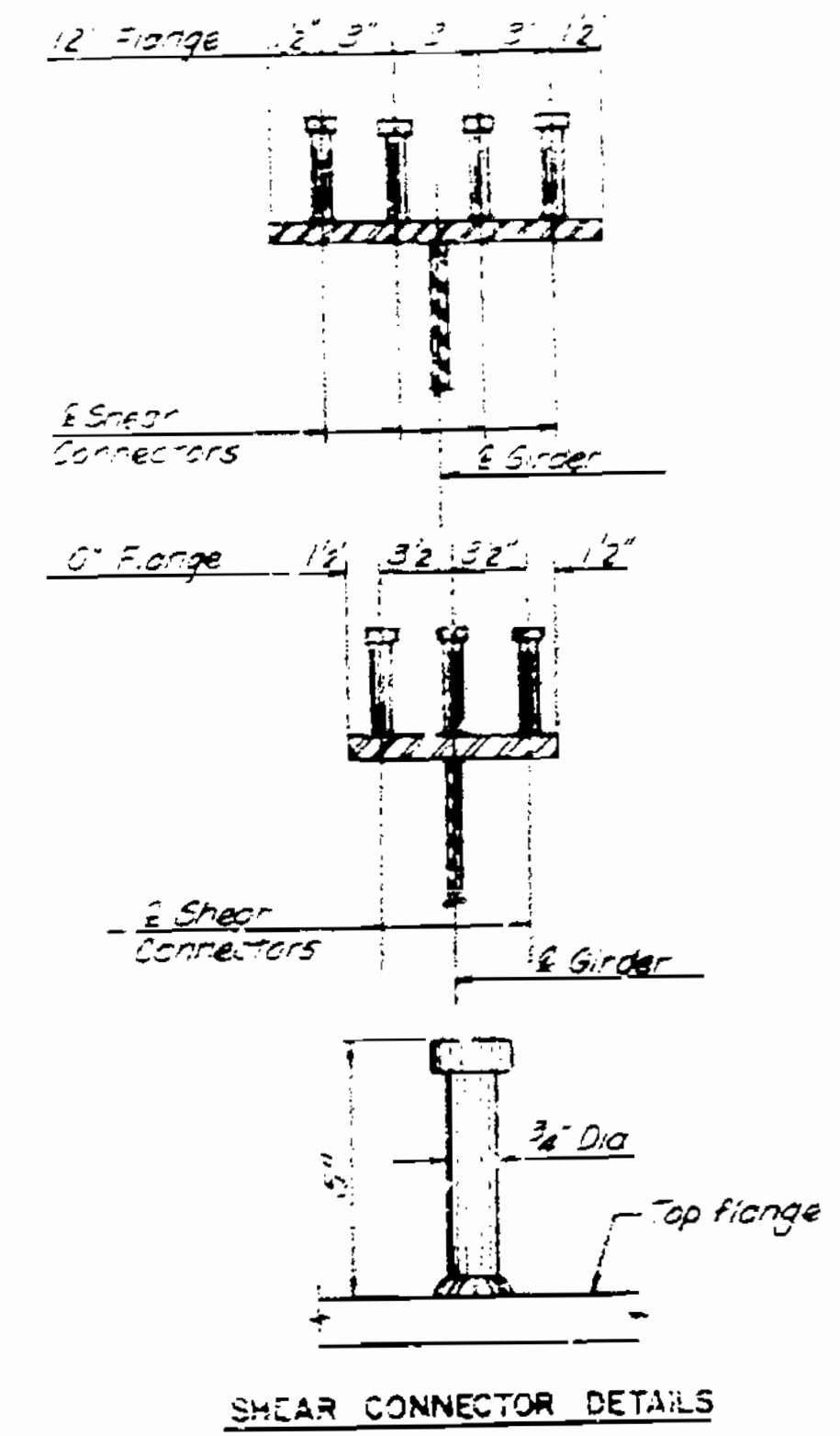
SHEAR CONNECTORS

TOP FLANGE PLATES

BOTTOM FLANGE PLATES

INTERMEDIATE DIAGRAMS

FIELD SPLICE



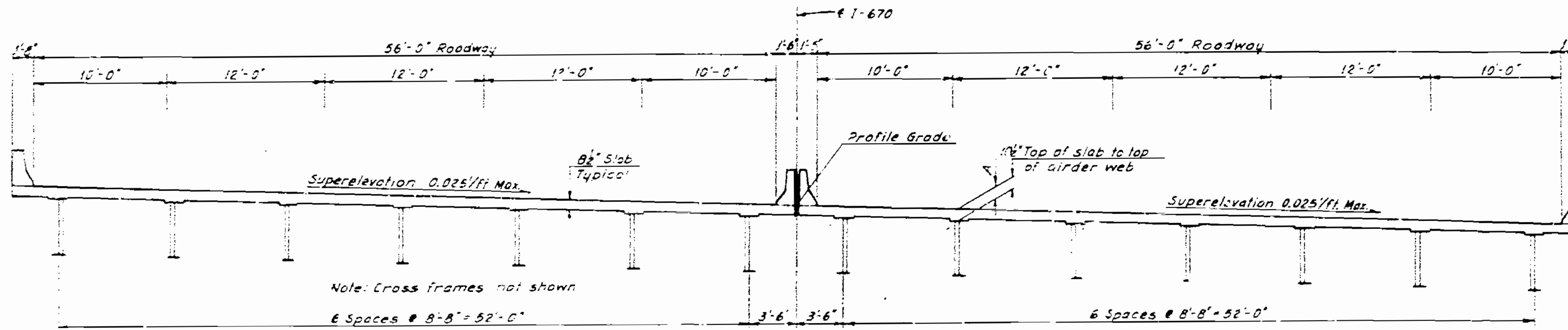
Notes:
 All dimensions are of top of web along grade.
 Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade.
 All flanges are A-36 Steel unless noted otherwise.
 * denotes A-572 Low Alloy Steel.
 All webs are A-36 Steel.
 *** indicates flange plates subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements.
 Heat curving of girder sections denoted by # will not be allowed while in the horizontal position.

NOTE TO DECK CONTRACTOR:
 THE ONLY WORK ON THIS SHEET TO BE DONE IN THE DECK CONTRACT IS TO FURNISH AND INSTALL SHEAR CONNECTORS, and do not structure steel.

GIRDER ELEVATION - UNITS 3 & 4 WESTBOUND

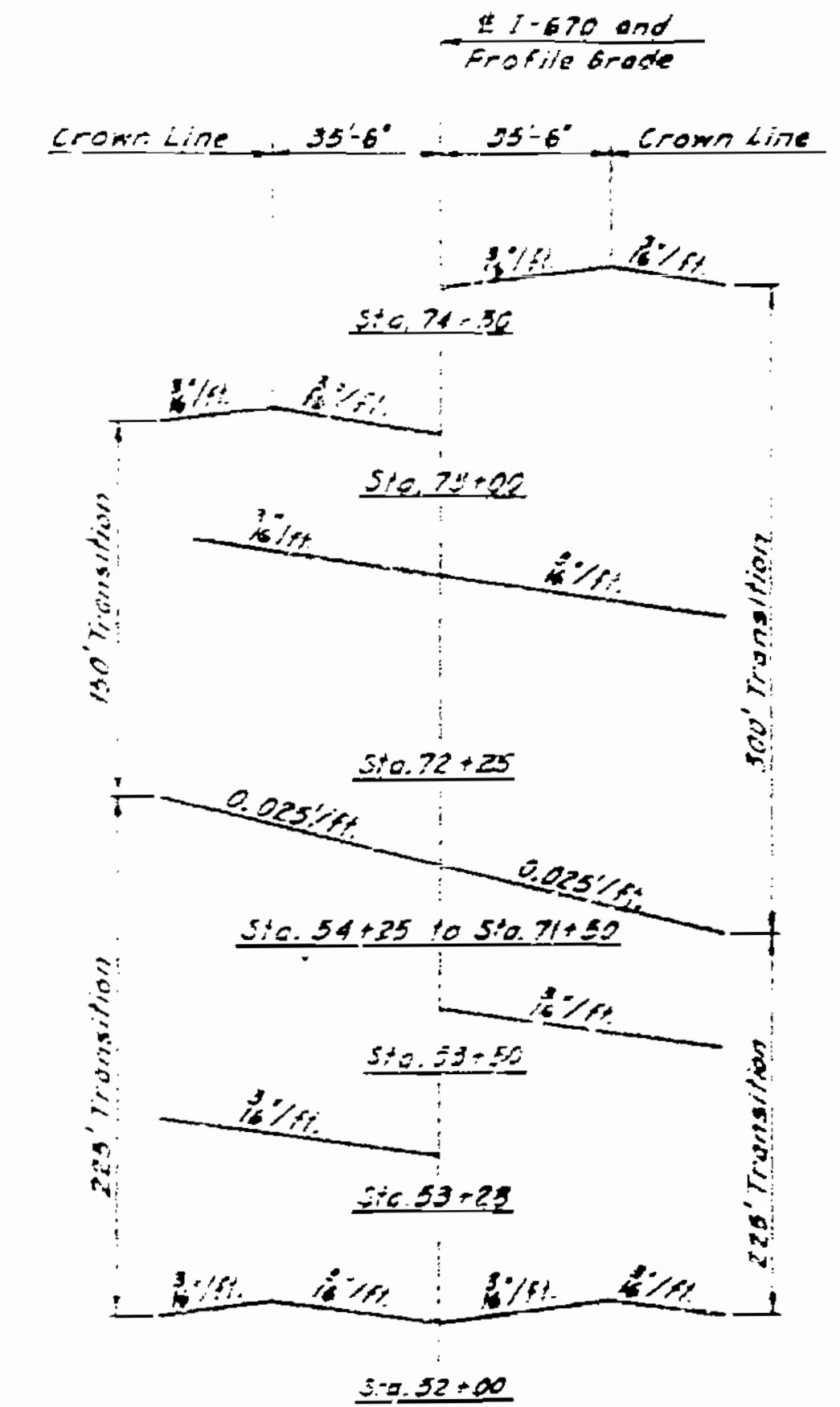
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.			127	

Final Plans



TYPICAL SECTION - UNITS 1, 2, AND 4

"A" dimension may vary if girder camber after erection differs from plan camber by more than the percentage of D.L. deflection due to weight of structural steel. No payment will be made for additional forming or concrete required for variation in haunching.



WESTBOUND EASTBOUND
SUPERELEVATION TRANSITIONS

ITEM	UNIT	ESTIMATED QUANTITIES										TOTAL
		WESTBOUND LANES SUPERSTRUCTURE				TOTAL	EASTBOUND LANES SUPERSTRUCTURE				TOTAL	
		UNIT 1	UNIT 2	UNIT 3	UNIT 4		UNIT 1	UNIT 2	UNIT 3	UNIT 4		
DRAINAGE SYSTEM (ON STRUCTURE)	Lump Sum	✓	✓	✓	✓		✓	✓	✓	✓		
CLASS B-2 CONCRETE (Alt. B)	Cu. Yd.	394.4	331.3	122.3	292.9	1190.7	392.5	320.7	122.9	299.2	1189.3	2380.7
CONCRETE WEARING SURFACE (*)	Sq. Yd.	1969	1929	619	1483	6000	1961	1929	619	1483	5992	12,365
ELASTOMERIC EXP. JOINT SEAL (3")	Lin. Ft.	56	0	56	0	112	56	0	56	0	112	224
ELASTOMERIC EXP. JOINT SEAL (4")	Lin. Ft.	0	56	0	0	56	0	56	0	0	56	112
REINFORCING STEEL (GRADE 60)	Lbs.	57,440	52,470	14,800	40,610	161,520	51,200	52,760	14,800	40,610	161,370	322,890
REINFORCING STEEL (EPOXY COATED)	Lbs.	89,680	78,400	27,180	63,730	258,990	89,300	86,080	27,300	63,180	266,410	533,120
CONDUIT SYSTEM ON STRUCTURE	Lump Sum	✓	✓	✓	✓		✓	✓	✓	✓		
FABRICATED STRUCTURAL CARBON STEEL	Lbs.	4610	4440	2200	3520	14,870	4580	4440	2200	3520	14,840	29,710
PAINTING (SYSTEM C) GREEN	Tons	✓	✓	✓	✓		✓	✓	✓	✓		1226.3
HIGH-STRENGTH BRIDGE RAIL (ONE TUBE)	Lin. Ft.	304	310	100	235	952	303	310	100	232	951	1903
CLASS B-1 CONCRETE (Alt. E)	Cu. Yd.	69.5	68.2	21.9	52.4	212.0	69.2	68.2	21.9	52.4	211.7	423.7

(*) See Job Special Provisions for alternate use of concrete wearing surface. Alternate A is Latex Modified Concrete and Alternate E is Low Slump Concrete.

SUMMARY OF QUANTITIES AND TYPICAL SECTION

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION
 CONCRETE DECK AND PAINTING
 (UNITS 5 THROUGH 10)

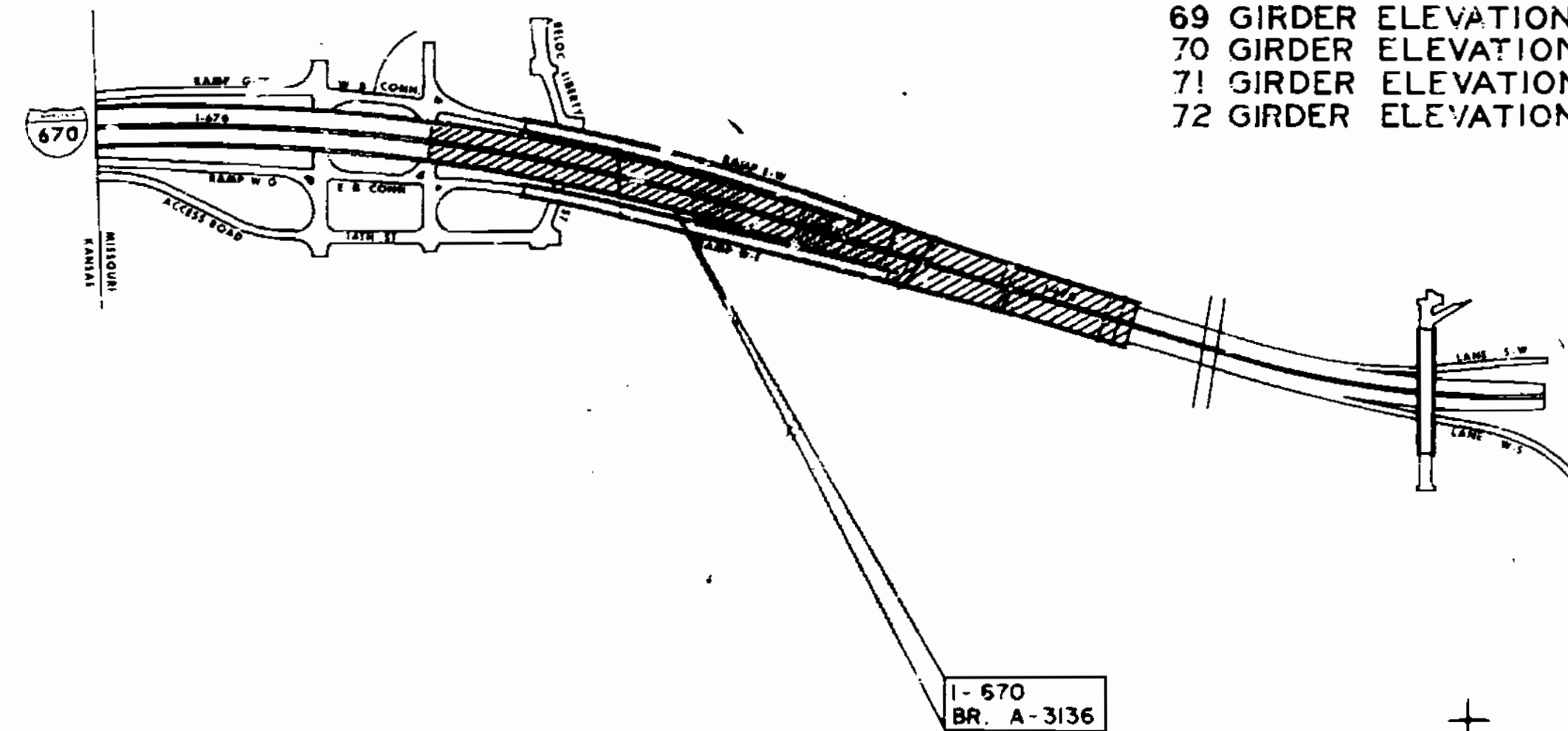
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		5	24	

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- | | |
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| 2 GENERAL PLAN AND ELEVATION | 30 SLAB AND CURB REINFORCEMENT — UNIT 9 EASTBOUND |
| 3 GENERAL PLAN AND ELEVATION | 31 SLAB AND CURB REINFORCEMENT — UNIT 9 EASTBOUND |
| 4 GENERAL PLAN AND ELEVATION | 32 SLAB PLAN — UNIT 9 EASTBOUND |
| 5 GENERAL PLAN AND ELEVATION | 33 SLAB AND CURB REINFORCEMENT — UNIT 10 WESTBOUND |
| 6 GENERAL PLAN AND ELEVATION | 34 SLAB AND CURB REINFORCEMENT — UNIT 10 EASTBOUND |
| 7 SUMMARY OF QUANTITIES AND TYPICAL SECTION | 35 RAMP NOSE AND WINGWALL DETAIL — RAMP E-W |
| 8 REINFORCEMENT SCHEDULE | 36 RAMP NOSE DETAILS — RAMP W-E |
| 9 REINFORCEMENT SCHEDULE | 37 BARRIER AND LIGHTING DETAILS |
| 10 REINFORCEMENT SCHEDULE | 38 BARRIER RAIL DETAILS |
| 11 SLAB AND CURB REINFORCEMENT — UNIT 5 WESTBOUND | 39 RAIL POST LOCATIONS |
| 12 SLAB PLAN — UNIT 5 WESTBOUND | 40 ELASTOMERIC EXPANSION JOINT 4.5.5. 8 WB |
| 13 SLAB AND CURB REINFORCEMENT — UNIT 5 EASTBOUND | 41 ELASTOMERIC EXPANSION JOINT 8 EB |
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| 18 SLAB PLAN — UNIT 6 EASTBOUND | 46 DRAINAGE DETAILS |
| 19 SLAB AND CURB REINFORCEMENT — UNIT 7 WESTBOUND | 47 DRAINAGE DETAILS |
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| 25 SLAB PLAN — UNIT 8 WESTBOUND | 53 GIRDER ELEVATION — UNIT 7 WESTBOUND |
| 26 SLAB AND CURB REINFORCEMENT — UNIT 8 EASTBOUND | 54 GIRDER ELEVATION — UNIT 7 EASTBOUND |
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| 28 SLAB AND CURB REINFORCEMENT — UNIT 9 WESTBOUND | 56 GIRDER ELEVATION — UNIT 8 WESTBOUND |
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| | 59 FRAMING PLAN — UNIT 8 EASTBOUND |
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| | 63 GIRDER ELEVATION — UNIT 9 WESTBOUND |
| | 64 GIRDER ELEVATION — UNIT 9 WESTBOUND |
| | 65 FRAMING PLAN — UNIT 9 EASTBOUND |
| | 66 GIRDER ELEVATION — UNIT 9 EASTBOUND |
| | 67 GIRDER ELEVATION — UNIT 9 EASTBOUND |
| | 68 GIRDER ELEVATION — UNIT 9 EASTBOUND |
| | 69 GIRDER ELEVATION — UNIT 9 EASTBOUND |
| | 70 GIRDER ELEVATION — UNIT 9 EASTBOUND |
| | 71 GIRDER ELEVATION — UNIT 10 WESTBOUND |
| | 72 GIRDER ELEVATION — UNIT 10 EASTBOUND |

GENERAL NOTES

- DESIGN SPECIFICATIONS:** AASHTO 1977, Load Factor Design and Interim Specification 1978 and 1979.
- DESIGN LOADING:** HS20-44 and Alternate Military Loading with 15 Lb./Sq.Ft. for future wearing surface. Fatigue Stress -- Case I.
- CONSTRUCTION SPECIFICATION:** Missouri Standard Specification for Highway Construction, 1981
- DESIGN UNIT STRESS:**
 Class B-1 Concrete (Barrier Curb) $f'_c = 4,000$ psi
 Class B-2 Concrete (S&B) $f'_c = 4,000$ psi
 Reinforcing Steel -- Grade 60 $f_y = 60,000$ psi
 Structural Steel $f_y = 36,000$ psi
- UTILITIES:** All utilities, unless shown otherwise, shall be removed or relocated by others. The contractor shall notify the owner of the utilities of his work schedule sufficiently in advance to allow time for disposition of utilities.
- PAINT:** System C by contractor in accordance with Standard Specification 712.12.
- REINFORCING STEEL:** Bar sizes are designated on plans by number. The first digit after the letter in three digit marks and the first two digits after the letter in four digit marks indicate the size of the bar.
 Dimension shown on the plans from the reinforcing steel to the outside edge of concrete are clear dimensions unless otherwise indicated.
 Minimum clearance to reinforcing steel shall be 1 1/2" unless shown otherwise.
 All bending dimensions are "out-to-out" of bars. Hooks and bends, unless otherwise shown, shall be in accordance with ACI Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI-318-71).
- JOINT FILLER:** All joint filler shall meet the requirement of Standard Specification 1057.2.4.



LOCATION SKETCH

BRIDGE I-670 VIADUCT

STATE ROAD-INTERSTATE ROUTE 670

IN KANSAS CITY

PROJECT NO. I-IG-670-K52

STA. 52+79.857

JOB NO. 4 I-67C 46

RTE I-670

JACKSON COUNTY

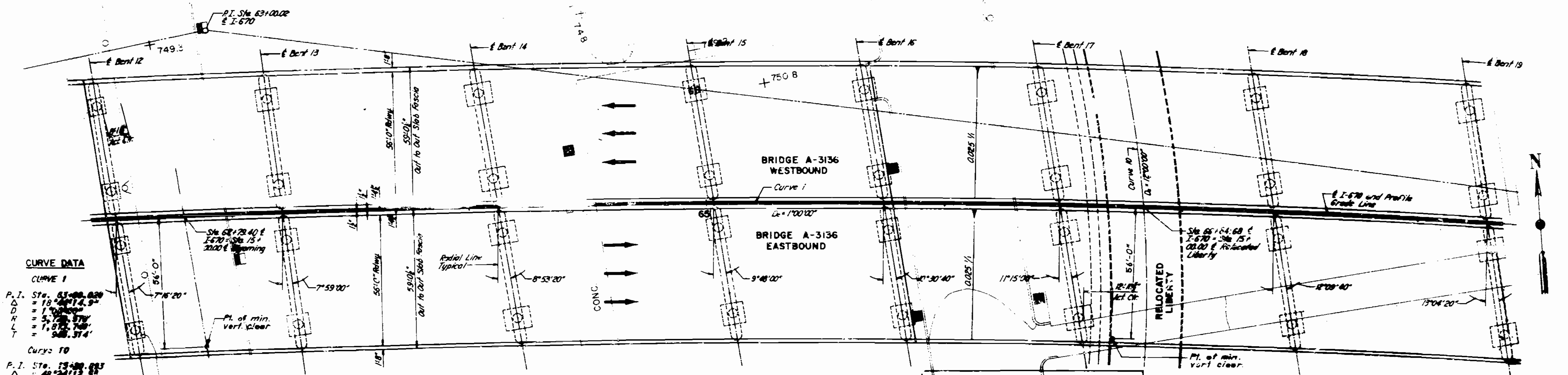
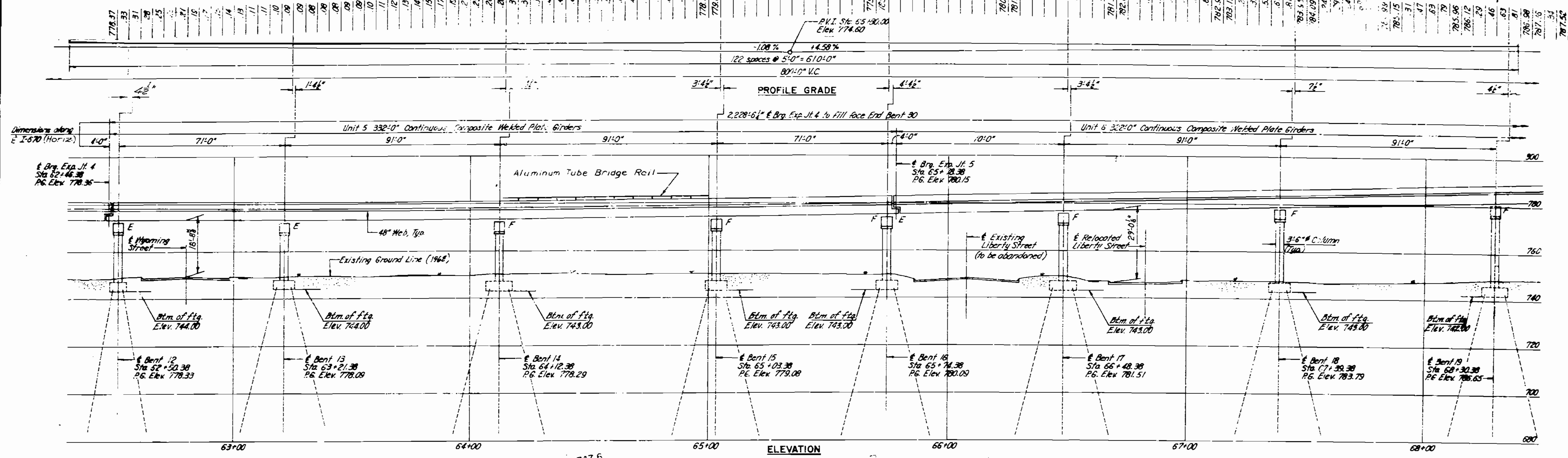
SYD.
705.35
A-3136

DESIGNED 10 79
 DETAILED 10 79
 CHECKED 10 79

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1 of 72.

FILE NO.	SCALE	DATE	BY	CHKD	APP'D
45					



CURVE DATA

CURVE 1

P.I. Sta. 63+00.00
 Δ = 18° 44' 14.9"
 D = 120.00'
 H = 5.78'
 L = 1,812.74'
 T = 548.374'

Curve 10

P.I. Sta. 67+00.00
 Δ = 48° 24' 12.5"
 D = 120.00'
 H = 47.78'
 L = 403.384'
 T = 214.384'

BENCH MARKS

H-71 "X" in N. side of base of P.P. S.E. corner of 12th St. and Gasconne. Elev. 748.83

H-74 "X" in N. half in top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 780.85

H-75 "X" in N. half in top flange of fire hydrant, 1st hydrant S. of 14th St. and Myring on E. side of Myring. Elev. 781.18

H-72 Top of head of arrow on top of fire hydrant, S.E. corner of 12th St. and Myring. Elev. 781.18

Note: This drawing is not to scale. Follow dimensions.

NOTE:

The information shown on this drawing regarding 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.

DETAILED 1078
 CHECKED 1078

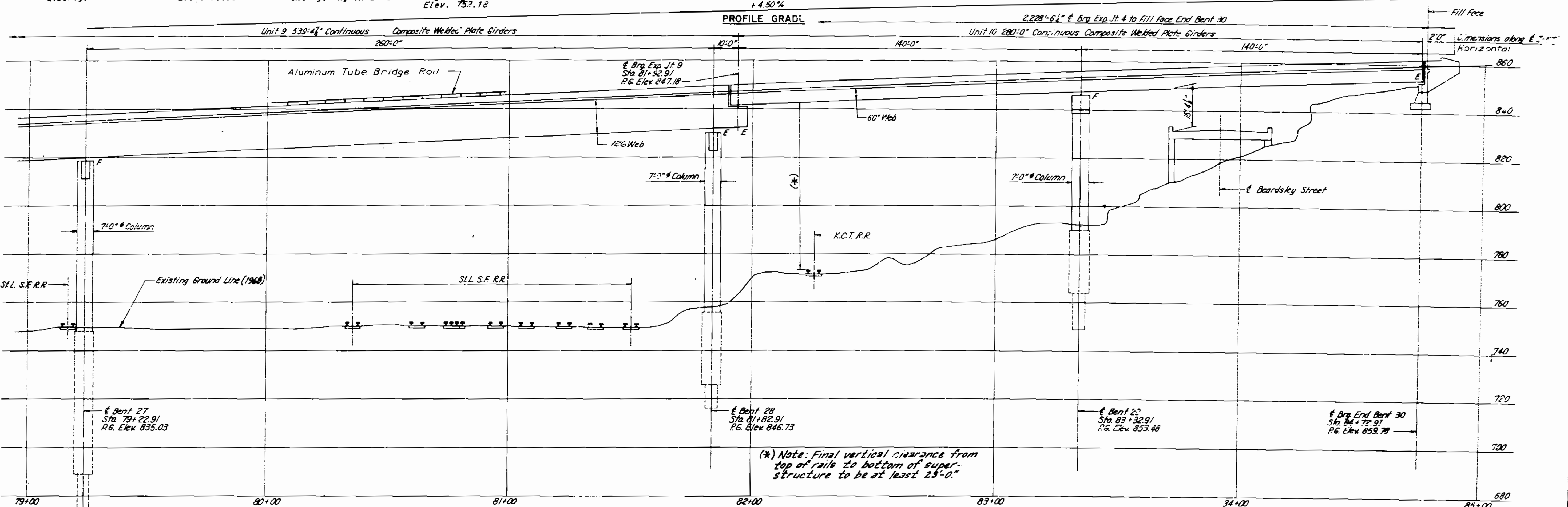
GENERAL PLAN AND ELEVATION

JACKSON COUNTY A-3136

Sheet No. 2 of 72

FILE NO.	STATE	FILE NO.	PROJECT	SHEET	TOTAL SHEETS
1	MO.	1	49	49	

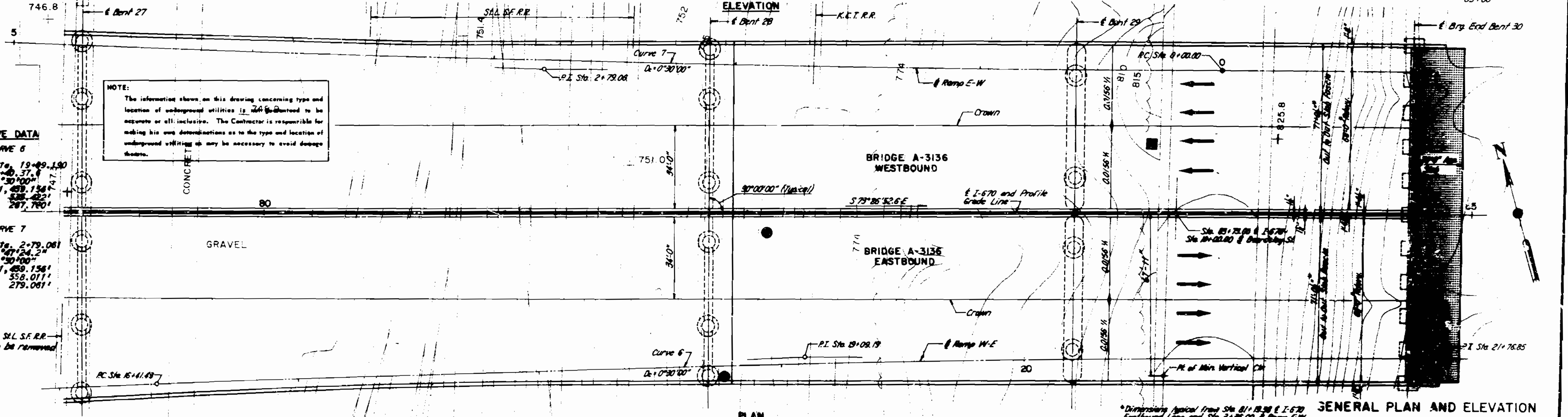
BENCH MARKS
 H-74 1/2" in N. bolt in top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 750.95
 H-75 1/2" in N. bolt in top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E. side of Wyoming. Elev. 752.18



(* Note: Final vertical clearance from top of rails to bottom of superstructure to be at least 25'-0".

NOTE:
 The information shown on this drawing concerning type and location of underground utilities is ~~to be~~ assumed 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.

CURVE DATA
CURVE 6
 P.I. = Sta. 19+09.130
 Δ = 2°40'30"
 D = 0°30'00"
 R = 11,458.156'
 L = 358.022'
 T = 287.760'
CURVE 7
 P.I. = Sta. 2+79.081
 Δ = 2°40'30"
 D = 0°30'00"
 R = 11,458.156'
 L = 358.011'
 T = 279.081'



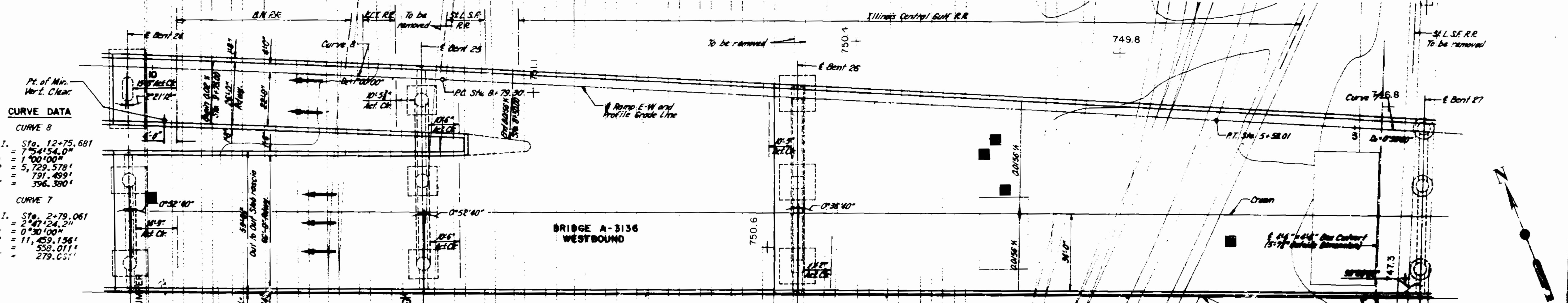
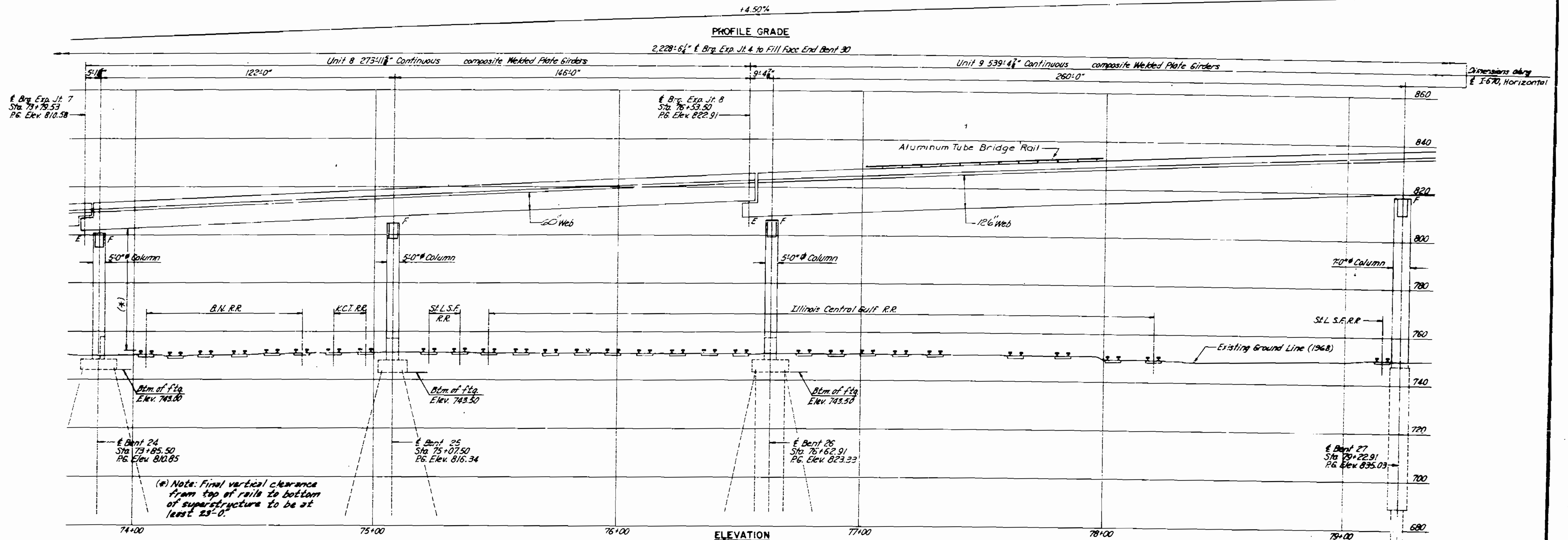
DETAILED 10/78
 CHECKED 10/78

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 6 of 72.

GENERAL PLAN AND ELEVATION
 JACKSON COUNTY
 A-3136

PER. ROAD	DATE	PER. A.D.	PER. V.C.	SHEET	TOTAL
NO.	NO.	NO.	NO.	NO.	NO.
1				47	



CURVE DATA

CURVE 8

P.I. Sta. 12+75.681
 A = 7°54'54.0"
 D = 1°00'00"
 R = 5,729.578'
 L = 791.499'
 T = 396.380'

CURVE 7

P.I. Sta. 2+79.061
 A = 2°47'24.21"
 D = 0°30'00"
 R = 11,459.156'
 L = 558.011'
 T = 279.051'

- BENCH MARKS**
- H-71 R.R. spike in N. side of base of P.A. S.E. corner of 12th St. and Conesdale. Elev. 740.63
 - H-72 Top of head of arrow on top of fire hydrant, S.E. corner of 12th St. and Wyoming. Elev. 731.18
 - H-74 "X" in N. bolt in top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 730.99
 - H-75 "X" in N. bolt in top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E. side of Wyoming. Elev. 732.18

NOTE:
 The information on this drawing regarding type and location of underground utilities is not represented by evidence or photographs. 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.

DETAILED 10 78
 CHECKED 10 78

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 4 of 72

JACKSON COUNTY

A-3136

FILE NO.	DATE	FILE NO.	FILE NO.	DATE	TOTAL SHEETS
1				51	

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
UNIT 5 WESTBOUND				
EPOXY COATED BARS				
D601	50	5'-0"	Str.	Slab Drains
D602	16	6'-6"	Str.	Slab Drains
JP501	50	8'-8"	Str.	Parapet
JP502	24	48'-8"	Str.	Parapet
JP503	144	7'-2"	Str.	Parapet
JP504	48	23'-6"	Str.	Parapet
JP505	24	5'-9"	Str.	Parapet
JSS01	376	43'-0"	Str.	Slab
JSS03	93	45'-0"	Str.	Slab
JSS04	186	33'-6"	Str.	Slab
JSS05	186	12'-6"	Str.	Slab
JSS06	394	44'-11"	Str.	Slab
JSS07	789	26'-6"	Str.	Slab
JSS08	394	35'-5"	Str.	Slab
JSS13	58	4'-7"	101	Slab
JSS14	58	2'-11"	101	Slab
L401	5	7'-0"	141	Light Std. Sup.
L402	3	6'-2"	110	Light Std. Sup.
L501	2	7'-0"	141	Light Std. Sup.
L502	2	6'-3"	110	Light Std. Sup.
L503	2	6'-7"	170	Light Std. Sup.
L504	3	7'-2"	170	Light Std. Sup.
L601	5	3'-3"	Str.	Light Std. Sup.
PS01	330	3'-0"	104	Parapet
PS02	330	3'-1"	108	Parapet
PS03	330	2'-2"	104	Parapet
PS04	330	3'-1"	163	Parapet
PS05	330	2'-8"	104	Parapet
PS06	330	2'-8"	108	Parapet
PS07	330	1'-11"	104	Parapet
PS08	330	2'-10"	163	Parapet
NON-EPOXY COATED BARS				
JSS02	496	43'-2"	Str.	Slab
JSS09	526	30'-7"	Str.	Slab
JSS10	263	39'-1"	Str.	Slab
JSS11	263	39'-9"	Str.	Slab
JSS12	8	43'-0"	Str.	Slab
UNIT 5 EASTBOUND				
EPOXY COATED BARS				
D601	50	5'-0"	Str.	Slab Drains
D602	16	6'-6"	Str.	Slab Drains
JP501	50	8'-8"	Str.	Parapet
JP502	24	48'-8"	Str.	Parapet
JP503	144	7'-2"	Str.	Parapet
JP504	48	23'-6"	Str.	Parapet
JP505	24	5'-9"	Str.	Parapet
JSS01	376	43'-0"	Str.	Slab
JSS03	93	45'-0"	Str.	Slab
JSS04	186	33'-6"	Str.	Slab
JSS05	186	12'-6"	Str.	Slab
JSS06	395	35'-2"	Str.	Slab
JSS07	789	26'-6"	Str.	Slab
JSS08	394	35'-5"	Str.	Slab
JSS13	58	4'-7"	101	Slab
JSS14	58	2'-11"	101	Slab
L401	5	7'-0"	141	Light Std. Sup.
L402	3	6'-2"	110	Light Std. Sup.
L501	2	7'-0"	141	Light Std. Sup.
L502	2	6'-3"	110	Light Std. Sup.
L503	2	6'-7"	170	Light Std. Sup.
L504	3	7'-2"	170	Light Std. Sup.

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
L601	6	3'-3"	Str.	Light Std. Sup.
PS01	330	3'-0"	104	Parapet
PS02	330	3'-1"	108	Parapet
PS03	330	2'-2"	104	Parapet
PS04	330	3'-1"	163	Parapet
PS05	330	2'-8"	104	Parapet
PS06	330	2'-8"	108	Parapet
PS07	330	1'-11"	104	Parapet
PS08	330	2'-10"	163	Parapet
NON-EPOXY COATED BARS				
JSS02	496	43'-2"	Str.	Slab
JSS09	526	30'-7"	Str.	Slab
JSS10	263	39'-1"	Str.	Slab
JSS11	263	39'-9"	Str.	Slab
JSS12	8	43'-0"	Str.	Slab
UNIT 6 WESTBOUND				
EPOXY COATED BARS				
D601	14	5'-0"	Str.	Slab Drains
D602	4	6'-6"	Str.	Slab Drains
RP501	48	23'-6"	Str.	Parapet
RP502	48	25'-11"	Str.	Parapet
RP503	3	8'-5"	Str.	Parapet
RP504	144	7'-2"	Str.	Parapet
KSS01	423	37'-8"	Str.	Slab
KSS03	93	45'-0"	Str.	Slab
KSS04	186	40'-0"	Str.	Slab
KSS05	186	17'-10"	Str.	Slab
KSS06	258	44'-3"	Str.	Slab
KSS07	257	44'-6"	Str.	Slab
KSS08	257	44'-9"	Str.	Slab
KSS14	58	2'-11"	101	Slab
KSS15	58	4'-1"	101	Slab
L401	5	7'-0"	141	Light Std. Sup.
L402	6	6'-2"	110	Light Std. Sup.
L501	4	7'-0"	141	Light Std. Sup.
L502	4	6'-3"	110	Light Std. Sup.
L503	4	6'-7"	170	Light Std. Sup.
L504	6	7'-2"	170	Light Std. Sup.
L601	12	3'-3"	Str.	Light Std. Sup.
PS01	324	3'-0"	104	Parapet
PS02	324	3'-1"	108	Parapet
PS03	324	2'-2"	104	Parapet
PS04	324	3'-1"	163	Parapet
PS05	324	2'-8"	104	Parapet
PS06	324	2'-8"	108	Parapet
PS07	324	1'-11"	104	Parapet
PS08	324	2'-10"	163	Parapet
NON-EPOXY COATED BARS				
KSS02	558	37'-10"	Str.	Slab
KSS09	575	22'-3"	Str.	Slab
KSS10	172	40'-0"	Str.	Slab
KSS11	172	40'-3"	Str.	Slab
KSS12	171	40'-6"	Str.	Slab
KSS13	9	37'-8"	Str.	Slab
UNIT 6 EASTBOUND				
EPOXY COATED BARS				
D601	14	5'-0"	Str.	Slab Drains
D602	4	6'-6"	Str.	Slab Drains
LP501	48	27'-11"	Str.	Parapet
LP502	50	8'-5"	Str.	Parapet
LP503	144	7'-2"	Str.	Parapet
LP504	48	23'-6"	Str.	Parapet
LSS01	423	37'-8"	Str.	Slab
LSS03	93	45'-0"	Str.	Slab
LSS04	186	40'-0"	Str.	Slab
LSS05	186	17'-10"	Str.	Slab

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
LSS06	258	35'-3"	Str.	Slab
LSS07	257	35'-5"	Str.	Slab
LSS08	257	35'-8"	Str.	Slab
LSS14	58	2'-11"	101	Slab
LSS15	58	4'-1"	101	Slab
L401	5	7'-0"	141	Light Std. Sup.
L402	3	6'-2"	110	Light Std. Sup.
L501	2	7'-0"	141	Light Std. Sup.
L502	2	6'-3"	110	Light Std. Sup.
L503	2	6'-7"	170	Light Std. Sup.
L504	3	7'-2"	170	Light Std. Sup.
L601	6	3'-3"	Str.	Light Std. Sup.
PS01	324	3'-0"	104	Parapet
PS02	324	3'-1"	108	Parapet
PS03	324	2'-2"	104	Parapet
PS04	324	3'-1"	163	Parapet
PS05	324	2'-8"	104	Parapet
PS06	324	2'-8"	108	Parapet
PS07	324	1'-11"	104	Parapet
PS08	324	2'-10"	163	Parapet
NON-EPOXY COATED BARS				
LSS02	558	37'-10"	Str.	Slab
LSS09	575	31'-6"	Str.	Slab
LSS10	172	30'-8"	Str.	Slab
LSS11	172	30'-11"	Str.	Slab
LSS12	171	31'-2"	Str.	Slab
LSS13	9	37'-8"	Str.	Slab
UNIT 7 WESTBOUND				
EPOXY COATED BARS				
D601	50	5'-0"	Str.	Slab Drains
D602	12	6'-6"	Str.	Slab Drains
L401	5	7'-0"	141	Light Std. Sup.
L402	6	6'-2"	110	Light Std. Sup.
L501	4	7'-0"	141	Light Std. Sup.
L502	4	6'-3"	110	Light Std. Sup.
L503	4	6'-7"	170	Light Std. Sup.
L504	6	7'-2"	170	Light Std. Sup.
L601	12	3'-3"	Str.	Light Std. Sup.
MP501	206	8'-2"	Str.	Parapet
MP502	24	36'-2"	Str.	Parapet
MP503	12	33'-9"	Str.	Parapet
MP504	12	37'-0"	Str.	Parapet
MP505	66	8'-0"	Str.	Parapet
MP506	12	34'-2"	Str.	Parapet
MP507	12	41'-0"	Str.	Parapet
MP508	12	39'-3"	Str.	Parapet
MP509	6	9'-8"	Str.	Parapet
MP510	12	34'-6"	Str.	Parapet
PS01	497	3'-0"	104	Parapet
PS02	497	3'-1"	108	Parapet
PS03	497	2'-2"	104	Parapet
PS04	497	3'-1"	163	Parapet
PS05	480	2'-8"	104	Parapet
PS06	480	2'-8"	108	Parapet
PS07	480	1'-11"	104	Parapet
PS08	480	2'-10"	163	Parapet
MSS01	23	29'-0"	*Str.	Slab
MSS02	564	41'-6"	Str.	Slab
MSS05	93	19'-5"	Str.	Slab
MSS06	186	33'-7"	Str.	Slab
MSS07	186	34'-11"	Str.	Slab
MSS08	93	52'-0"	Str.	Slab
MSS09	58	41'-1"	101	Slab
MSS10	1	6'-8"	Str.	Slab
MSS12	1146	43'-3"	Str.	Slab
MSS13	1172	17'-8"	Str.	Slab
MSS14	13	49'-0"	*Str.	Slab
MSS15	5	26'-2"	*Str.	Slab

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
MSS21	5	6'-4"	Str.	Slab
NON-EPOXY COATED				
MSS03	31	34'-9"	*Str.	Slab
MSS04	744	41'-6"	Str.	Slab
MSS11	7	22'-4"	Str.	Slab
MSS16	764	39'-0"	Str.	Slab
MSS17	780	22'-0"	Str.	Slab
MSS18	8	44'-10"	*Str.	Slab
MSS19	4	28'-8"	*Str.	Slab
MSS20	12	41'-6"	Str.	Slab
MSS22	3	6'-2"	Str.	Slab
UNIT 7 EASTBOUND				
EPOXY COATED BARS				
D601	14	5'-0"	Str.	Slab Drains
D602	4	6'-6"	Str.	Slab Drains
L401	5	7'-0"	141	Light Std. Sup.
L402	6	6'-2"	110	Light Std. Sup.
L501	4	7'-0"	141	Light Std. Sup.
L502	4	6'-3"	110	Light Std. Sup.
L503	4	6'-7"	170	Light Std. Sup.
L504	6	7'-2"	170	Light Std. Sup.
L601	12	3'-3"	Str.	Light Std. Sup.
NP501	278	2'-2"	Str.	Parapet
NP502	24	36'-2"	Str.	Parapet
NP503	24	34'-8"	Str.	Parapet
NP504	12	33'-11"	Str.	Parapet
NP505	12	28'-7"	Str.	Parapet
NP506	12	39'-11"	Str.	Parapet
NP507	12	36'-5"	Str.	Parapet
NSS01	564	40'-2"	Str.	Slab
NSS02	23	31'-3"	Str.	Slab
NSS05	186	34'-1"	Str.	Slab
NSS06	53	52'-0"	Str.	Slab
NSS07	93	19'-0"	Str.	Slab
NSS08	1121	34'-8"	Str.	Slab
NSS09	1105	26'-3"	Str.	Slab
NSS10	8	30'-0"	Str.	Slab
NSS11	10	40'-10"	Str.	Slab
NSS17	58	4'-1"	101	Slab
NSS18	1	25'-5"	Str.	Slab
NSS20	4	6'-2"	Str.	Slab
NSS21	186	33'-7"	Str.	Slab
PS01	463	3'-0"	104	Parapet
PS02	463	3'-1"		

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR
1	MO.	1	02

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
UNIT 8 WESTBOUND				
EPOXY COATED BARS				
L401	5	71'-0"	141	Light St'd. Sup.
L402	5	51'-2"	110	Light St'd. Sup.
L501	4	71'-0"	141	Light St'd. Sup.
L502	4	51'-3"	110	Light St'd. Sup.
L503	4	51'-7"	170	Light St'd. Sup.
L504	5	71'-2"	170	Light St'd. Sup.
L601	12	31'-3"	Str.	Light St'd. Sup.
OP501	84	9'-8"	Str.	Parapet
OP502	50	8'-2"	Str.	Parapet Δ
OP503	46	45'-2"	Str.	Parapet
OP504	35	37'-11"	Str.	Parapet
OP505	12	9'-1"	Str.	Parapet
OP506	24	51'-5"	Str.	Parapet
OS502	498	40'-10"	Str.	Slab
OS504	551	43'-3"	Str.	Slab
OS506	315	17'-5"	Str.	Slab
OS507	30	24'-2"	Str.	Slab
OS508	30	23'-7"	Str.	Slab
OS509	30	23'-0"	Str.	Slab
OS510	30	22'-5"	Str.	Slab
OS511	30	21'-10"	Str.	Slab
OS512	30	21'-3"	Str.	Slab
OS513	30	20'-8"	Str.	Slab
OS514	30	20'-1"	Str.	Slab
OS515	30	19'-6"	Str.	Slab
OS516	30	18'-11"	Str.	Slab
OS517	33	18'-4"	Str.	Slab
OS531	319	29'-0"	Str.	Slab
OS532	138	23'-0"	Str.	Slab
OS533	333	30'-8"	Str.	Slab
OS537	10	38'-6"	Str.	Slab
OS539	27	4'-1"	101	Slab
OS540	138	11'-0"	Str.	Slab
PS01	563	3'-0"	104	Parapet
PS02	562	3'-1"	106	Parapet
PS03	568	2'-2"	104	Parapet
PS04	563	3'-1"	163	Parapet
PS05	274	2'-8"	104	Parapet
PS06	274	2'-8"	108	Parapet
PS07	274	1'-11"	104	Parapet
PS08	274	2'-10"	163	Parapet
PS26	6	14'-2"	*Str.	Parapet
PS27	18	4'-9"	104	Parapet
D601	14	51'-0"	Str.	Slab Drains Δ
D602	12	61'-6"	Str.	Slab Drains
NON - EPOXY COATED BARS				
QS501	513	41'-0"	Str.	Slab
QS503	13	40'-10"	Str.	Slab
QS505	434	39'-9"	Str.	Slab
QS518	212	21'-11"	Str.	Slab
QS519	213	29'-0"	Str.	Slab
QS520	20	28'-1"	Str.	Slab
QS521	20	27'-4"	Str.	Slab
QS522	20	26'-9"	Str.	Slab
QS523	20	26'-2"	Str.	Slab
QS524	20	25'-7"	Str.	Slab
QS525	20	25'-0"	Str.	Slab
QS526	20	24'-5"	Str.	Slab
QS527	20	23'-10"	Str.	Slab
QS528	20	23'-3"	Str.	Slab
QS529	20	22'-8"	Str.	Slab
QS530	22	22'-1"	Str.	Slab
QS534	222	31'-6"	Str.	Slab
QS535	22	38'-1"	Str.	Slab
QS536	8	32'-3"	Str.	Slab

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
UNIT 8 EASTBOUND				
EPOXY COATED BARS				
D601	55	51'-0"	Str.	Slab Drains Δ
D602	12	61'-6"	Str.	Slab Drains
L401	5	71'-0"	141	Light St'd. Sup.
L402	3	61'-2"	110	Light St'd. Sup.
L501	2	71'-0"	141	Light St'd. Sup.
L502	2	51'-3"	110	Light St'd. Sup.
L503	2	51'-7"	170	Light St'd. Sup.
L504	3	71'-2"	170	Light St'd. Sup.
L601	6	31'-3"	Str.	Light St'd. Sup.
PS01	269	3'-0"	104	Parapet
PS02	269	3'-1"	108	Parapet
PS03	269	2'-2"	104	Parapet
PS04	269	3'-7"	163	Parapet
PS05	274	2'-8"	104	Parapet
PS06	274	2'-8"	108	Parapet
PS07	274	1'-11"	104	Parapet
PS08	274	2'-10"	163	Parapet
PP501	36	9'-6"	Str.	Parapet
PP502	50	8'-11"	Str.	Parapet Δ
PP503	12	5'-5"	Str.	Parapet
PP504	24	45'-2"	Str.	Parapet
PP505	18	37'-4"	Str.	Parapet
PP506	18	35'-0"	Str.	Parapet
FS501	262	45'-0"	Str.	Slab
FS503	93	22'-3"	Str.	Slab
FS504	93	40'-0"	Str.	Slab
FS506	58	4'-1"	101	Slab
FS507	641	43'-3"	Str.	Slab
FS508	629	17'-8"	Str.	Slab
FS511	23	29'-2"	*Str.	Slab
FS513	1	11'-5"	Str.	Slab
FS515	4	50'-4"	*Str.	Slab
FS517	1	12'-7"	Str.	Slab
FS518	1	7'-5"	Str.	Slab
NON - EPOXY COATED BARS				
QS502	5	45'-0"	Str.	Slab
QS505	277	42'-5"	Str.	Slab
QS508	426	22'-0"	Str.	Slab
QS512	31	35'-2"	*Str.	Slab
QS514	1	11'-4"	Str.	Slab
QS516	2	38'-10"	*Str.	Slab
QS519	1	15'-4"	Str.	Slab
QS520	1	8'-8"	Str.	Slab
QS521	25	36'-6"	Str.	Slab
QS522	25	36'-0"	Str.	Slab
QS523	25	35'-6"	Str.	Slab
QS524	25	35'-0"	Str.	Slab
QS525	25	34'-6"	Str.	Slab
QS526	25	34'-0"	Str.	Slab
QS527	25	33'-6"	Str.	Slab
QS528	25	33'-0"	Str.	Slab
QS529	25	32'-6"	Str.	Slab
QS530	25	32'-0"	Str.	Slab
QS531	25	31'-6"	Str.	Slab
QS532	25	31'-0"	Str.	Slab
QS533	25	30'-8"	Str.	Slab
QS534	25	30'-4"	Str.	Slab
QS535	67	31'-0"	Str.	Slab
QS536	366	30'-8"	Str.	Slab

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
UNIT 9 WESTBOUND				
EPOXY COATED BARS				
D501	25	51'-0"	Str.	Slab Drain Δ
D502	16	61'-6"	Str.	Slab Drain
L401	5	71'-0"	141	Light St'd. Sup.
L402	5	51'-2"	110	Light St'd. Sup.
L501	4	71'-0"	141	Light St'd. Sup.
L502	4	51'-3"	110	Light St'd. Sup.
L503	4	51'-7"	170	Light St'd. Sup.
L504	6	71'-2"	170	Light St'd. Sup.
L501	12	31'-3"	Str.	Light St'd. Sup.
PS01	539	3'-0"	104	Parapet
PS02	539	3'-1"	106	Parapet
PS03	539	2'-2"	104	Parapet
PS04	539	3'-1"	153	Parapet
PS05	539	2'-8"	104	Parapet
PS06	538	2'-8"	108	Parapet
PS07	538	1'-11"	104	Parapet
PS08	538	2'-10"	163	Parapet
QP501	168	8'-11"	Str.	Parapet
QP502	144	33'-10"	Str.	Parapet
QP503	12	7'-10"	Str.	Parapet
QP504	14	8'-3"	Str.	Parapet Δ
QS501	26	46'-2"	Str.	Slab
QS502	25	45'-8"	Str.	Slab
QS503	25	45'-3"	Str.	Slab
QS504	25	44'-9"	Str.	Slab
QS505	25	44'-3"	Str.	Slab
QS506	25	43'-9"	Str.	Slab
QS507	25	43'-3"	Str.	Slab
QS508	25	42'-9"	Str.	Slab
QS509	25	42'-4"	Str.	Slab
QS510	25	41'-10"	Str.	Slab
QS511	25	41'-4"	Str.	Slab
QS512	25	40'-10"	Str.	Slab
QS513	25	40'-4"	Str.	Slab
QS514	25	39'-10"	Str.	Slab
QS515	25	39'-5"	Str.	Slab
QS516	25	38'-11"	Str.	Slab
QS517	25	38'-5"	Str.	Slab
QS518	25	37'-11"	Str.	Slab
QS519	25	37'-5"	Str.	Slab
QS520	25	36'-11"	Str.	Slab
QS521	25	36'-6"	Str.	Slab
QS522	25	36'-0"	Str.	Slab
QS523	25	35'-6"	Str.	Slab
QS524	25	35'-0"	Str.	Slab
QS525	25	34'-6"	Str.	Slab
QS526	25	34'-0"	Str.	Slab
QS527	25	33'-6"	Str.	Slab
QS528	25	33'-0"	Str.	Slab
QS529	25	32'-6"	Str.	Slab
QS530	25	32'-0"	Str.	Slab
QS531	25	31'-6"	Str.	Slab
QS532	25	31'-0"	Str.	Slab
QS533	25	30'-8"	Str.	Slab
QS534	25	30'-4"	Str.	Slab
QS535	67	31'-0"	Str.	Slab
QS536	366	30'-8"	Str.	Slab

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
QS573	1282	43'-3"	Str.	Slab
QS575	741	43'-4"	Str.	Slab
QS577	252	47'-0"	Str.	Slab
QS578	120	50'-1"	Str.	Slab
QS580	85	41'-1"	101	Slab
QS581	120	30'-2"	Str.	Slab
QS582	63	35'-7"	Str.	Slab
QS583	7	34'-3"	Str.	Slab
QS584	7	11'-5"	Str.	Slab
QS574	856	39'-0"	Str.	Slab
QS576	13	43'-4"	Str.	Slab
QS579	1028	43'-5"	Str.	Slab
QS585	8	28'-0"	Str.	Slab
QS586	8	17'-8"	Str.	Slab

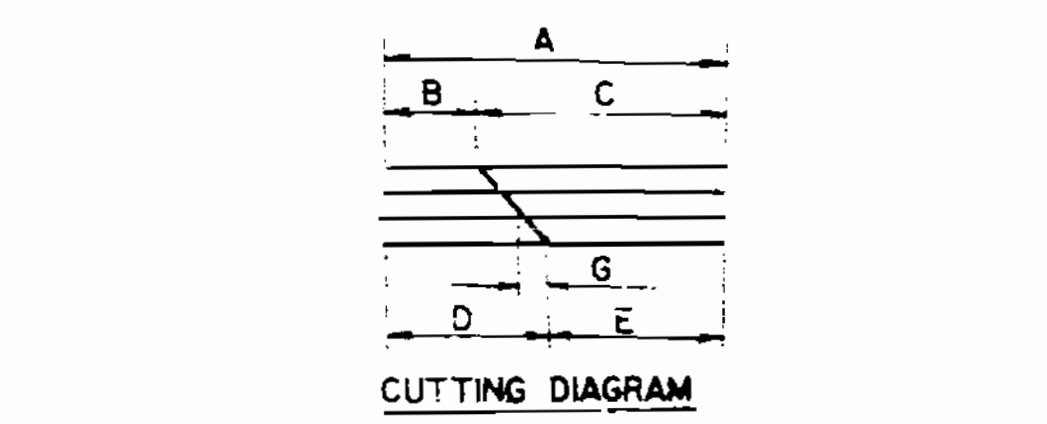
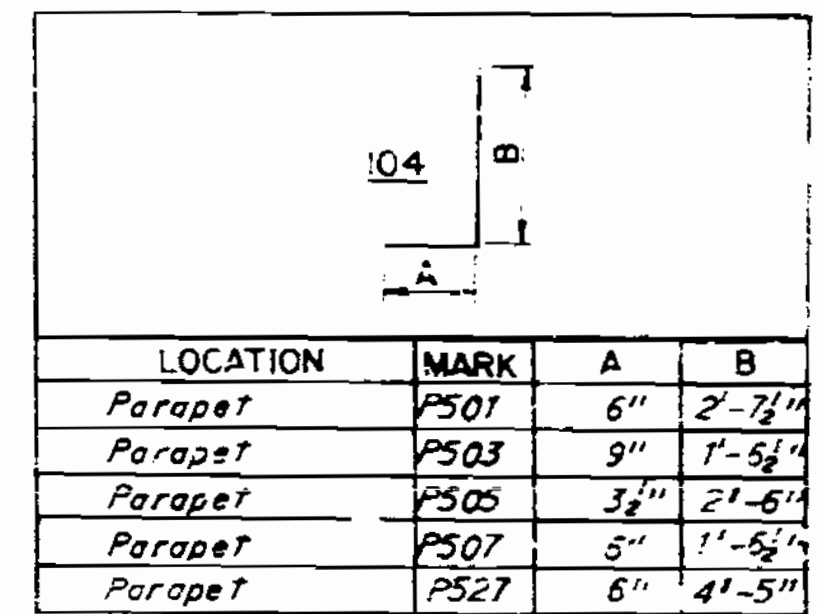
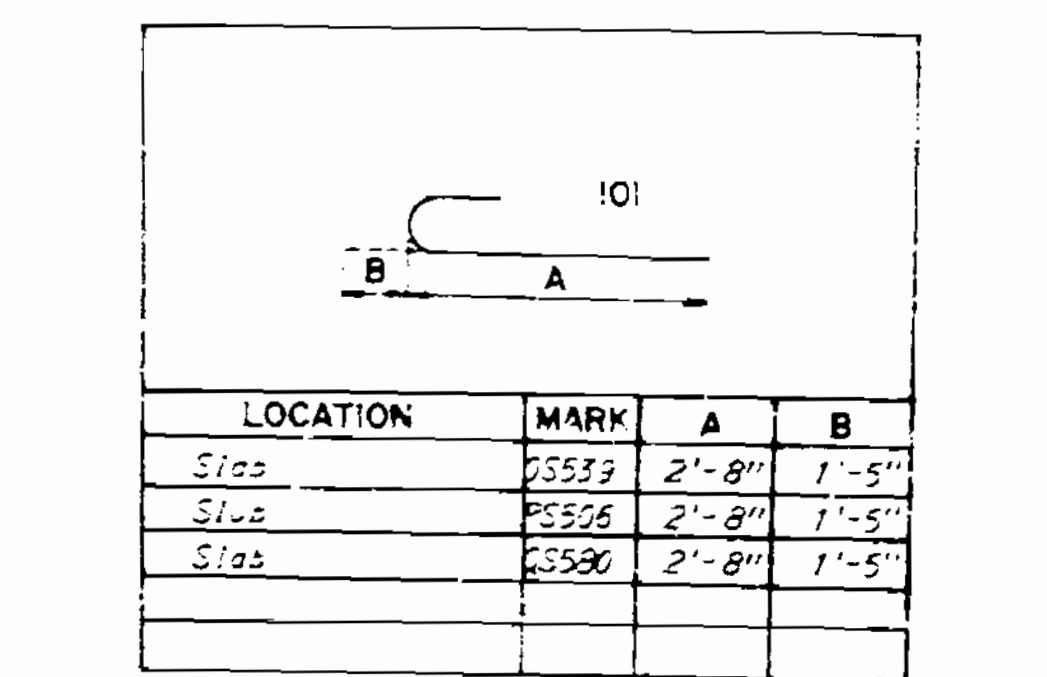
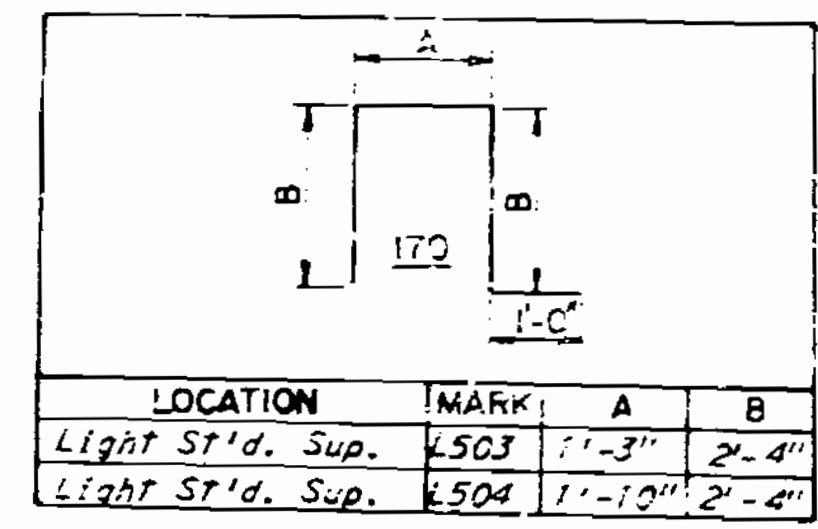
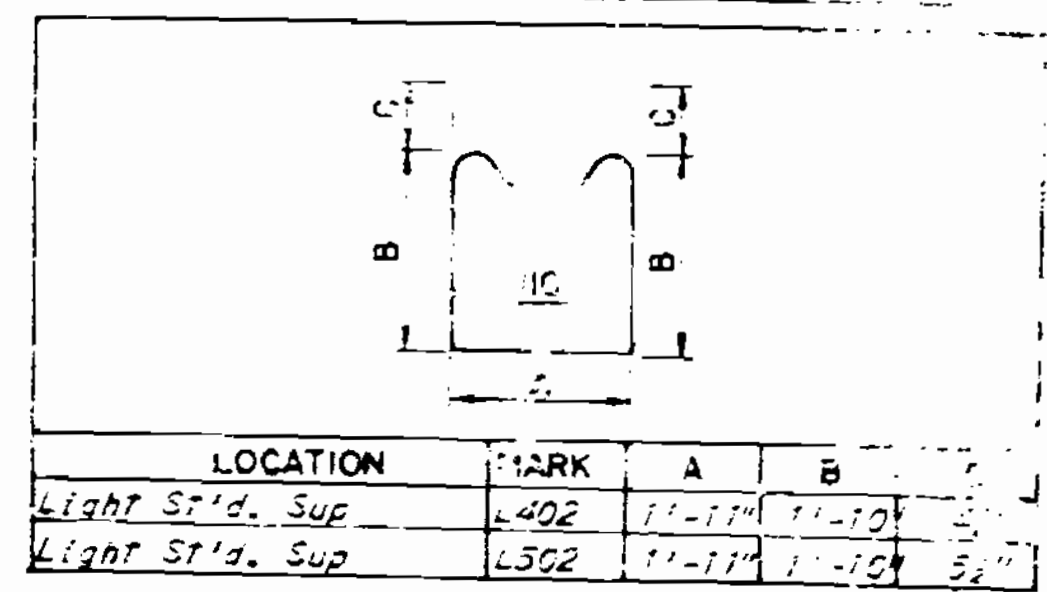
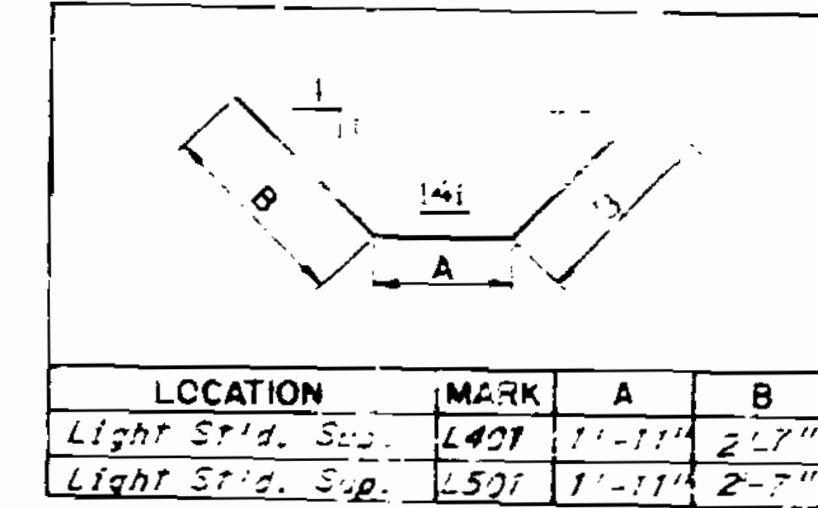


TABLE OF CUTTING DIMENSIONS										
UNIT	MARK	A	B	C	D	E	G	H	J	K
UNIT 8 E.B.	PS511	28'-2"	11'-6"	16'-8"	14'-0"	14'-11"	11"	23	23	-
	PS515	50'-4"	7'-1"	43'-3"	22'-7"	27'-9"	5'-2"	4	4	-
	PS512	35'-2"	15'-0"							

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		83	53	

BILL OF REINFORCEMENT				
M. MK.	NO.	LENGTH	SHAPE	LOCATION
UNIT 9 EASTBOUND				
EPOXY COATED BARS				
L401	11	71'-0"	141	Light St'd. Sup.
L402	9	51'-2"	110	Light St'd. Sup.
L501	5	71'-0"	141	Light St'd. Sup.
L502	6	51'-3"	110	Light St'd. Sup.
L503	5	51'-7"	170	Light St'd. Sup.
L504	5	71'-2"	170	Light St'd. Sup.
L601	18	31'-3"	Str.	Light St'd. Sup.
PS01	562	31'-0"	104	Parapet
PS02	562	31'-0"	104	Parapet
PS03	562	21'-2"	104	Parapet
PS04	562	31'-1"	163	Parapet
PS05	538	21'-8"	104	Parapet
PS06	538	21'-8"	104	Parapet
PS07	538	11'-11"	104	Parapet
PS08	538	21'-10"	163	Parapet
PS09	2	51'-11"	104	Median
PS10	22	31'-1"	163	Median
PS11	10	91'-6"	*123	Median
PS12	4	91'-7"	*155	Median
PS13	45	91'-7"	*142	Median
PS14	162	21'-1"	141	Median
PS15	2	31'-6"	Str.	Median
PS15	2	11'-2"	Str.	Median
PS17	2	3'-2"	Str.	Median
PS18	1	171'-0"	Str.	Median
PS19	128	41'-4"	Str.	Median
PS20	10	44'-9"	Str.	Median
PS21	1	41'-7"	103	Median
RP501	144	81'-11"	Str.	Parapet
RP502	108	331'-7"	Str.	Parapet
RP503	36	341'-7"	Str.	Parapet
RP504	12	71'-10"	Str.	Parapet
RP505	12	81'-3"	Str.	Parapet
RP506	6	91'-8"	Str.	Parapet
RP507	20	81'-8"	Str.	Parapet
RS501	741	431'-8"	Str.	Slab
RS502	258	461'-6"	Str.	Slab
RS503	252	401'-0"	Str.	Slab
RS506	3	401'-9"	Str.	Slab
RS507	1284	431'-3"	Str.	Slab
RS508	3	531'-11"	Str.	Slab
RS509	1	101'-0"	Str.	Slab
RS510	30	501'-2"	Str.	Slab
RS511	30	491'-7"	Str.	Slab
RS512	30	491'-0"	Str.	Slab
RS513	30	481'-5"	Str.	Slab
RS514	30	471'-10"	Str.	Slab
RS515	30	471'-3"	Str.	Slab
RS516	30	461'-8"	Str.	Slab
RS517	30	461'-1"	Str.	Slab
RS518	30	451'-5"	Str.	Slab
RS519	30	441'-11"	Str.	Slab
RS520	30	441'-4"	Str.	Slab
RS521	30	431'-9"	Str.	Slab
RS522	30	431'-2"	Str.	Slab
RS523	30	421'-7"	Str.	Slab
RS524	30	421'-0"	Str.	Slab
RS525	30	41'-5"	Str.	Slab
RS526	30	401'-10"	Str.	Slab
RS527	30	401'-3"	Str.	Slab
RS528	30	391'-8"	Str.	Slab
RS529	30	391'-1"	Str.	Slab
RS530	30	381'-6"	Str.	Slab

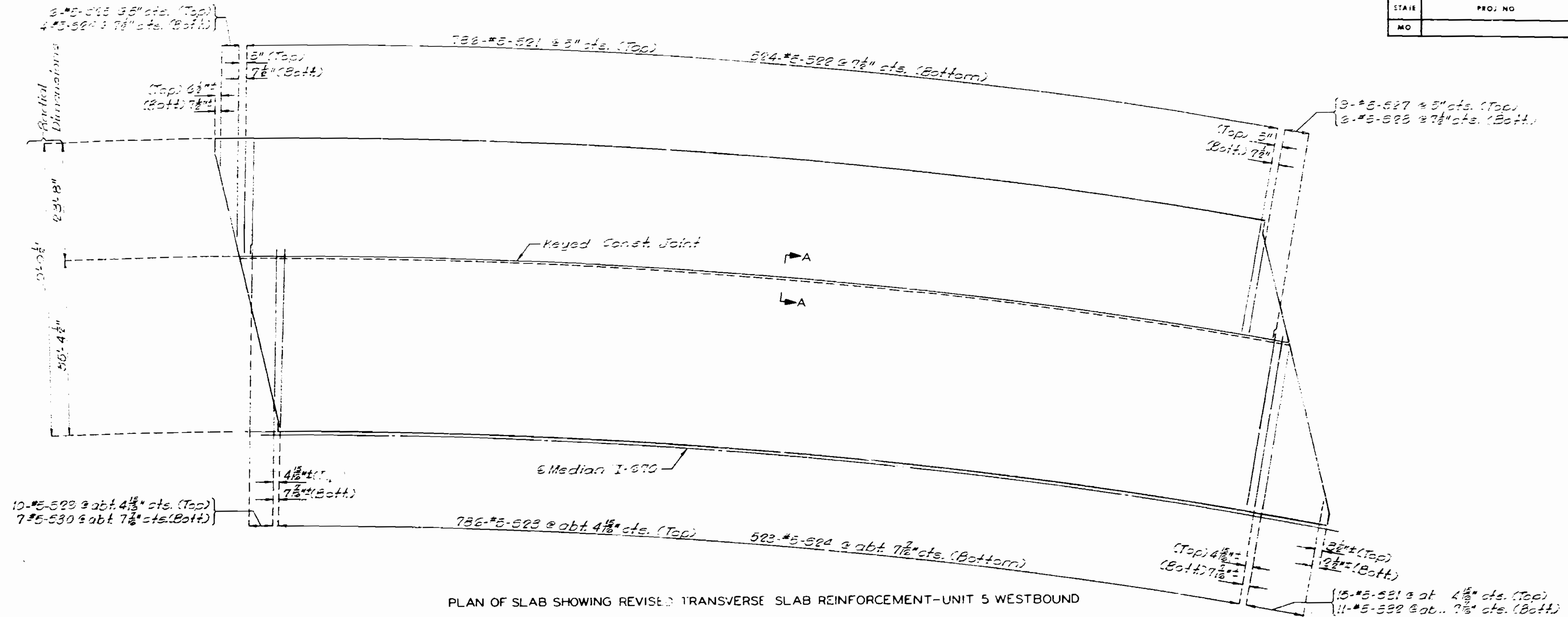
BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
RS531	30	371'-11"	Str.	Slab
RS532	30	371'-4"	Str.	Slab
RS533	30	361'-9"	Str.	Slab
RS534	30	361'-2"	Str.	Slab
RS535	30	351'-7"	Str.	Slab
RS536	30	351'-0"	Str.	Slab
RS537	30	341'-5"	Str.	Slab
RS538	30	331'-10"	Str.	Slab
RS539	30	331'-3"	Str.	Slab
RS540	30	321'-8"	Str.	Slab
RS541	30	321'-1"	Str.	Slab
RS542	30	311'-6"	Str.	Slab
RS543	30	311'-3"	Str.	Slab
RS544	30	301'-9"	Str.	Slab
RS545	30	301'-4"	Str.	Slab
RS546	30	301'-0"	Str.	Slab
RS547	174	291'-8"	Str.	Slab
RS548	30	291'-1"	Str.	Slab
RS549	136	291'-6"	Str.	Slab
RS549	6	291'-4"	Str.	Slab
D601	6D	51'-0"	Str.	Slab Drains
D602	16	61'-6"	Str.	Slab Drains
NON-EPOXY COATED BARS				
RS501	13	431'-8"	Str.	Slab
RS505	637	431'-10"	Str.	Slab
RS548	2	451'-0"	Str.	Slab
RS549	2	511'-0"	Str.	Slab
RS550	1	101'-0"	Str.	Slab
RS551	24	451'-9"	Str.	Slab
RS552	20	451'-2"	Str.	Slab
RS553	20	441'-7"	Str.	Slab
RS554	20	441'-0"	Str.	Slab
RS555	20	431'-5"	Str.	Slab
RS556	20	421'-10"	Str.	Slab
RS557	20	421'-3"	Str.	Slab
RS558	20	411'-8"	Str.	Slab
RS559	20	411'-1"	Str.	Slab
RS560	20	401'-6"	Str.	Slab
RS561	20	361'-11"	Str.	Slab
RS562	20	391'-4"	Str.	Slab
RS563	20	381'-9"	Str.	Slab
RS564	20	381'-2"	Str.	Slab
RS565	20	371'-7"	Str.	Slab
RS566	20	371'-0"	Str.	Slab
RS567	20	361'-5"	Str.	Slab
RS568	20	351'-10"	Str.	Slab
RS569	20	351'-3"	Str.	Slab
RS570	20	341'-8"	Str.	Slab
RS571	20	341'-1"	Str.	Slab
RS572	20	331'-6"	Str.	Slab
RS573	20	321'-11"	Str.	Slab
RS574	20	321'-4"	Str.	Slab
RS575	20	311'-9"	Str.	Slab
RS576	20	311'-2"	Str.	Slab
RS577	20	301'-7"	Str.	Slab
RS578	20	301'-0"	Str.	Slab
RS579	20	291'-5"	Str.	Slab
RS580	20	281'-10"	Str.	Slab
RS581	20	281'-3"	Str.	Slab
RS582	20	271'-8"	Str.	Slab
RS583	20	271'-1"	Str.	Slab
RS584	20	261'-10"	Str.	Slab
RS585	20	261'-4"	Str.	Slab
RS586	20	251'-10"	Str.	Slab
RS587	20	251'-6"	Str.	Slab
RS588	116	251'-2"	Str.	Slab
RS589	856	471'-9"	Str.	Slab

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
RS591	402	271'-3"	Str.	Slab
RS592	9	121'-2"	Str.	Slab
RS593	9	371'-3"	Str.	Slab
RS594	14	381'-5"	Str.	Slab
RS595	9	101'-11"	Str.	Slab
RS596	7	411'-3"	Str.	Slab
RS597	7	81'-2"	Str.	Slab
UNIT 10 WESTBOUND				
EPOXY COATED BARS				
L401	5	71'-0"	141	Light St'd. Sup.
L402	5	61'-2"	110	Light St'd. Sup.
L501	2	71'-0"	141	Light St'd. Sup.
L502	4	61'-2"	110	Light St'd. Sup.
L503	2	61'-7"	170	Light St'd. Sup.
L504	3	71'-2"	170	Light St'd. Sup.
L601	14	31'-3"	Str.	Light St'd. Sup.
PS01	282	31'-0"	104	Parapet
PS02	282	31'-1"	108	Parapet
PS03	282	21'-2"	104	Parapet
PS04	282	31'-1"	163	Parapet
PS05	282	21'-8"	104	Parapet
PS06	282	21'-8"	108	Parapet
PS07	282	11'-11"	104	Parapet
PS08	282	21'-10"	163	Parapet
SP501	98	81'-5"	Str.	Parapet
SP502	72	361'-2"	Str.	Parapet
SS501	399	411'-11"	Str.	Slab
SS503	224	361'-1"	Str.	Slab
SS504	672	291'-7"	Str.	Slab
SS505	672	431'-4"	Str.	Slab
NON EPOXY COATED BARS				
SS502	532	421'-1"	Str.	Slab
SS506	44P	331'-11"	Str.	Slab
SS507	448	391'-0"	Str.	Slab
SS508	7	411'-11"	Str.	Slab
UNIT 10 EASTBOUND				
EPOXY COATED BARS				
L401	5	71'-0"	141	Light St'd. Sup.
L402	3	61'-2"	110	Light St'd. Sup.
L501	2	71'-0"	141	Light St'd. Sup.
L502	2	61'-3"	110	Light St'd. Sup.
L503	2	61'-7"	170	Light St'd. Sup.
L504	3	71'-2"	170	Light St'd. Sup.
L601	2	31'-3"	Str.	Light St'd. Sup.
PS01	282	31'-0"	104	Parapet
PS02	282	31'-1"	108	Parapet
PS03	282	21'-2"	104	Parapet
PS04	282	31'-1"	163	Parapet
PS05	282	21'-8"	104	Parapet
PS06	282	21'-8"	108	Parapet
PS07	282	11'-11"	104	Parapet
PS08	282	21'-10"	163	Parapet
TP501	72	81'-5"	Str.	Parapet
TP502	72	361'-2"	Str.	Parapet
TP503	20	81'-0"	Str.	Parapet
TP504	6	91'-8"	Str.	Parapet

BILL OF REINFORCEMENT												
MARK	NO.	LENGTH	SHAPE	LOCATION								
TS502	399	411'-11"	Str.	Slab								
TS503	224	361'-1"	Str.	Slab								
TS504	672	431'-4"	Str.	Slab								
TS505	672	291'-7"	Str.	Slab								
NON EPOXY COATED BARS												
TS501	532	421'-1"	Str.	Slab								
TS506	448	391'-0"	Str.	Slab								
TS507	448	331'-11"	Str.	Slab								
TS508	7	411'-11"	Str.	Slab								
WINGWALL AND BACKWALL												
EPOXY COATED BARS												
PS01	36	31'-0"	104	Parapet								
PS02	36	31'-1"	108	Parapet								
PS03	54	21'-2"	104	Parapet								
PS08	4	31'-1"	163	Parapet								
PS28	20	21'-6"	104	Parapet								
PS31	22	131'-8"	Str.	Parapet								
PS32	2	121'-6"	Str.	Parapet								
PS33	4	121'-0"	Str.	Parapet								
PS34	4	51'-10"	108	Parapet								
PS36	28	31'-1"	164	Parapet								
PS37	8	351'-6"	Str.	Backwall								
PS38	4	21'-5"	108	Parapet								
CUTTING DIAGRAM												
<table border="1"> <tr> <th>LOCATION</th> <th>MARK</th> <th>A</th> <th>B</th> </tr> <tr> <td>Median</td> <td>PS21</td> <td>3</td> <td>12"</td> </tr> </table>					LOCATION	MARK	A	B	Median	PS21	3	12"
LOCATION	MARK	A	B									
Median	PS21	3	12"									
<table border="1"> <tr> <th>LOCATION</th> <th>MARK</th> <th>A</th> <th>B</th> </tr> <tr> <td>Parapet</td> <td>PS35</td> <td>5"</td> <td>12"</td> </tr> </table>					LOCATION	MARK	A	B	Parapet	PS35	5"	12"
LOCATION	MARK	A	B									
Parapet	PS35	5"	12"									

BILL OF REINFORCEMENT																				
MARK	NO.	LENGTH	SHAPE	LOCATION																
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LOCATION	MARK	A	B																	
Parapet	PS04	9"	12"																	
Parapet	PS08	6"	12"																	
Median	PS10	5"	12"																	
<table border="1"> <tr> <th>LOCATION</th> <th>MARK</th> <th>A</th> <th>B</th> </tr> <tr> <td>Light St'd. Sup.</td> <td>L503</td> <td>1</td></tr></table>					LOCATION	MARK	A	B	Light St'd. Sup.	L503	1									
LOCATION	MARK	A	B																	
Light St'd. Sup.	L503	1																		

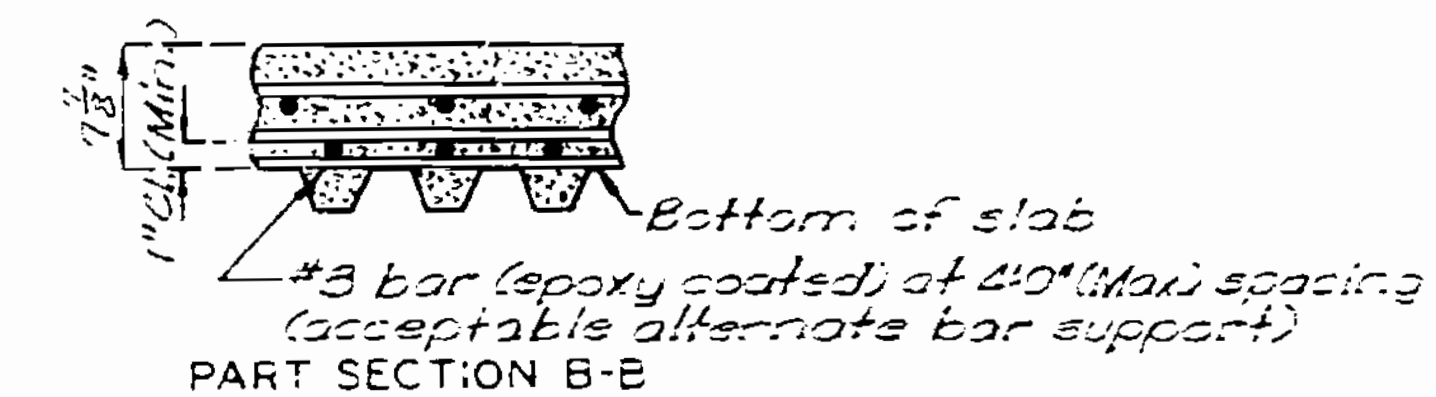
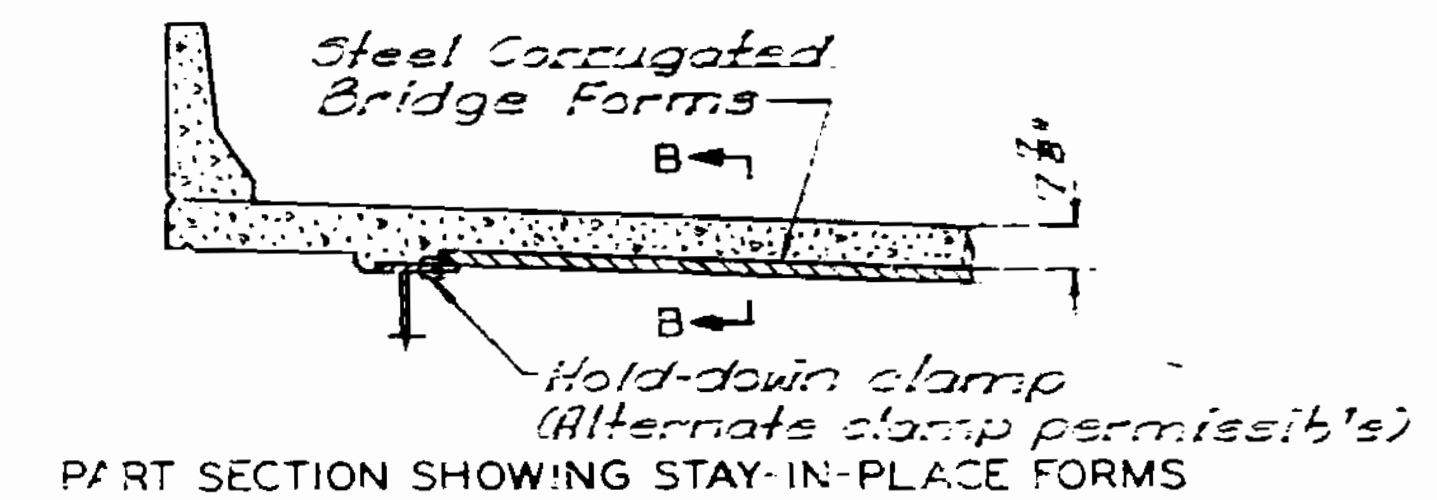
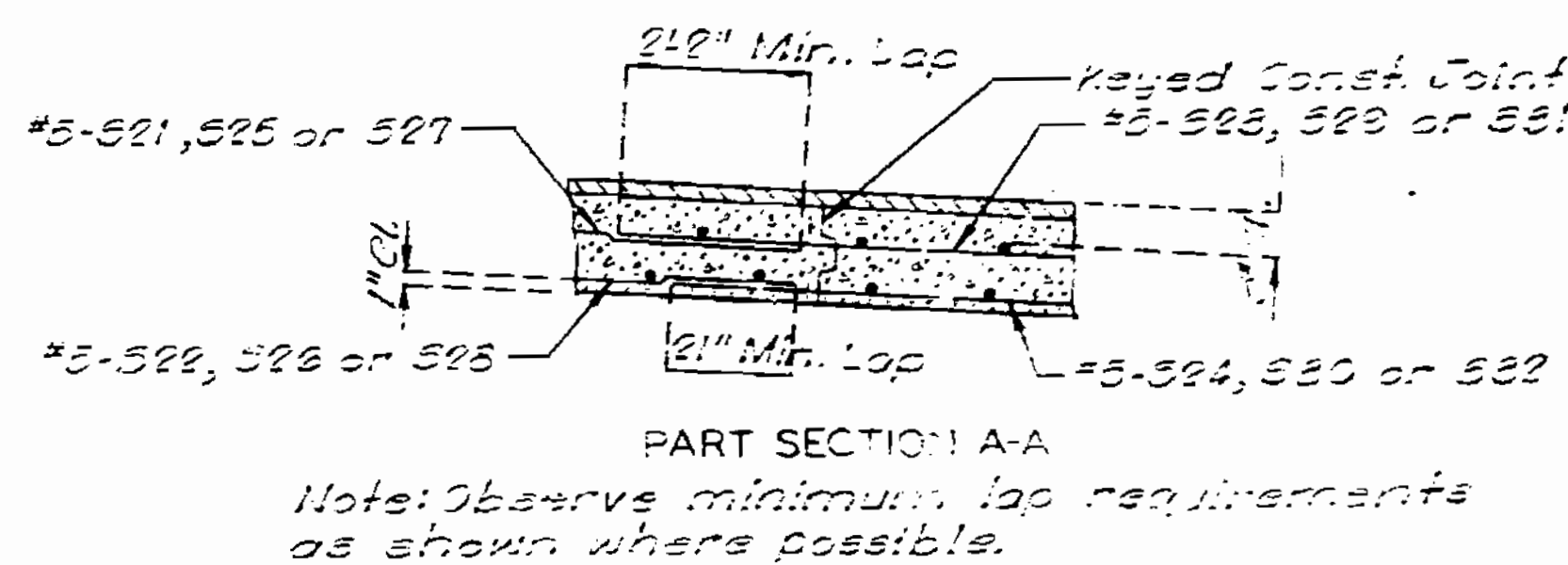
STATE	PROJ NO	SHEET NO
MO		



PLAN OF SLAB SHOWING REVISED TRANSVERSE SLAB REINFORCEMENT-UNIT 5 WESTBOUND

BILL OF REVISED TRANSVERSE SLAB REINFORCEMENT UNIT 5 WESTBOUND								
NO.	SIZE	MARK	(E)	SHAPE	(V)	NO. EACH	LENGTH	WEIGHT
786	#5	521	E	Str.	—	—	23'5"	19,197
524	#5	522	—	Str.	—	—	22'5"	12,798
786	#5	523	E	Str.	—	—	37'7"	30,511
522	#5	524	—	Str.	—	—	37'2"	20,235
6	#5	525	E	Str.	V	1	5'7"	
Incr = 3'4"							22'5"	88
4	#5	526	—	Str.	V	1	5'3"	
Incr = 4'11"							20'0"	53
9	#5	527	E	Str.	V	1	3'2"	
Incr = 2'3"							2'12"	114
6	#5	528	—	Str.	V	1	3'2"	
Incr = 3'4"							13'10"	72
10	#5	529	E	Str.	V	1	2'2"	
Incr = 3'3"							35'3"	217
7	#5	530	—	Str.	V	1	2'0"	
Incr = 4'11"							35'6"	152
15	#5	531	E	Str.	V	1	2'5"	
Incr = 2'2 1/2"							33'4"	280
11	#5	532	—	Str.	V	1	2'1"	
Incr = 3'4"							35'5"	215

Notes:
 E = Epoxy coated reinforcement.
 V = Bar dimensions vary in equal increments between dimensions shown on this line and the following line.
 No. Each = Number of bars of each length.
 Total Weight of Plain Reinforcement is 33,530.
 Total Weight of Epoxy Coated Reinforcement is 50,710.

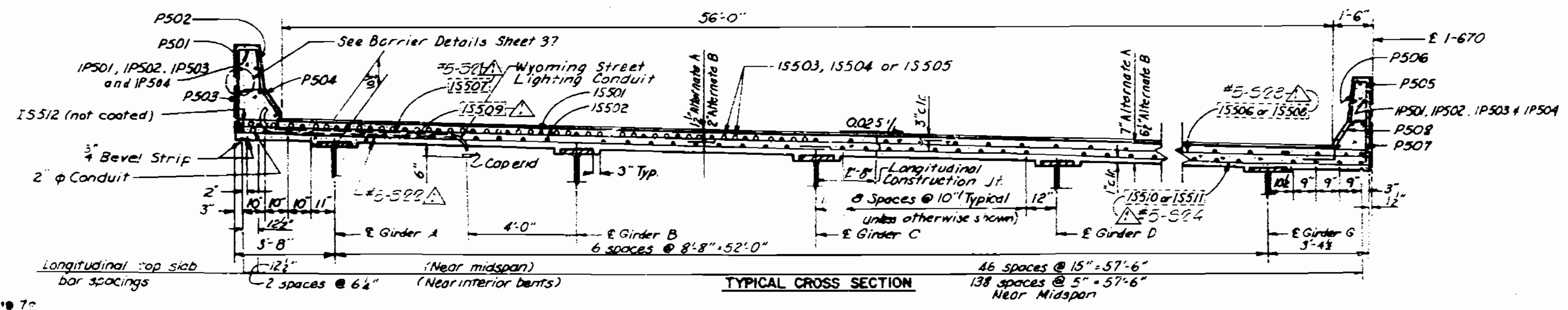
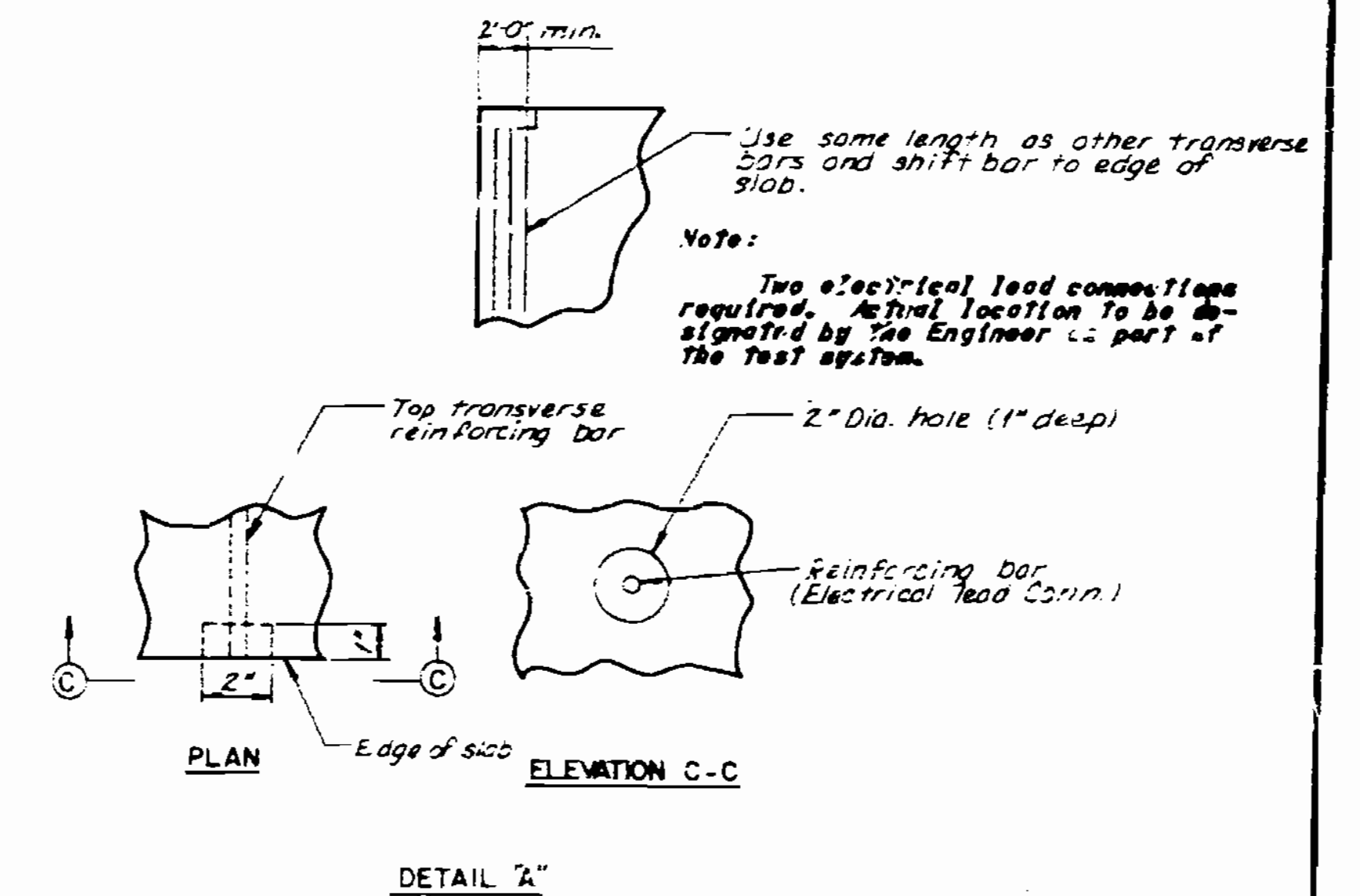
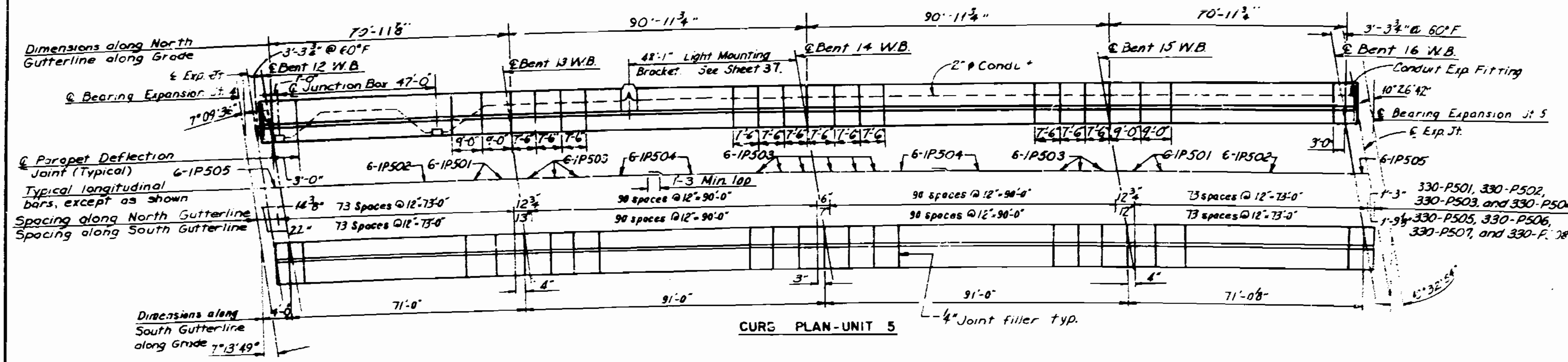
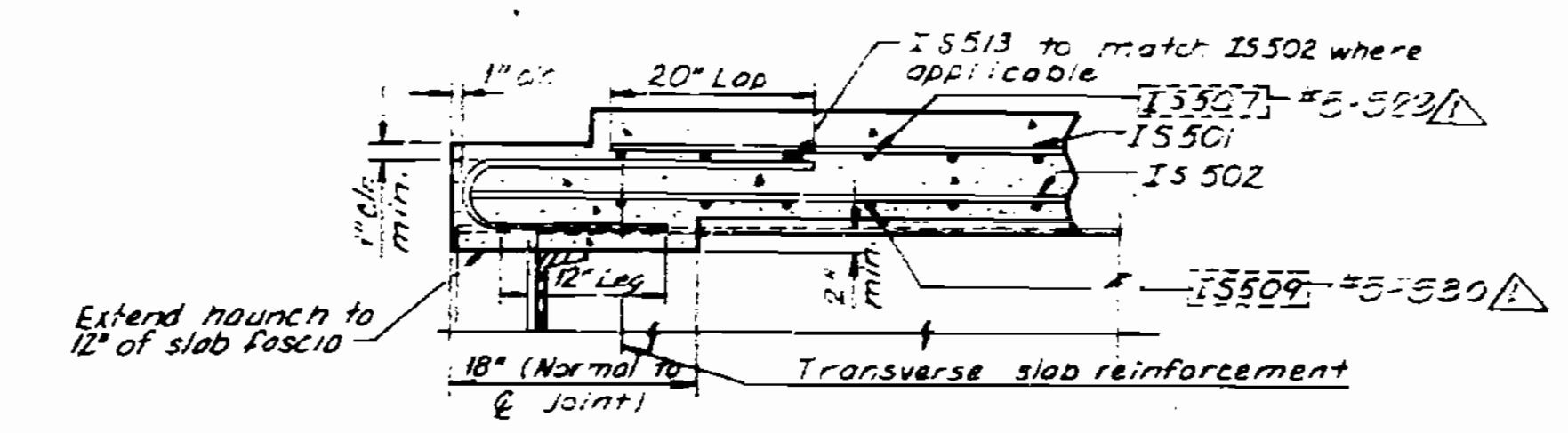
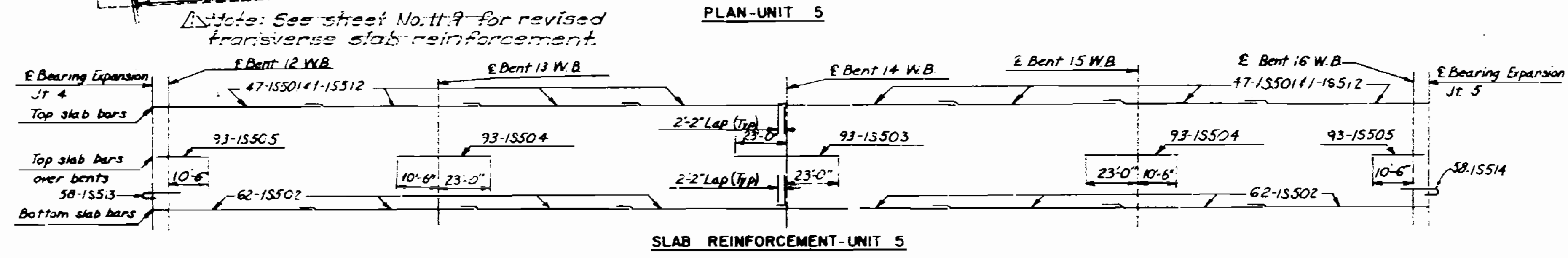
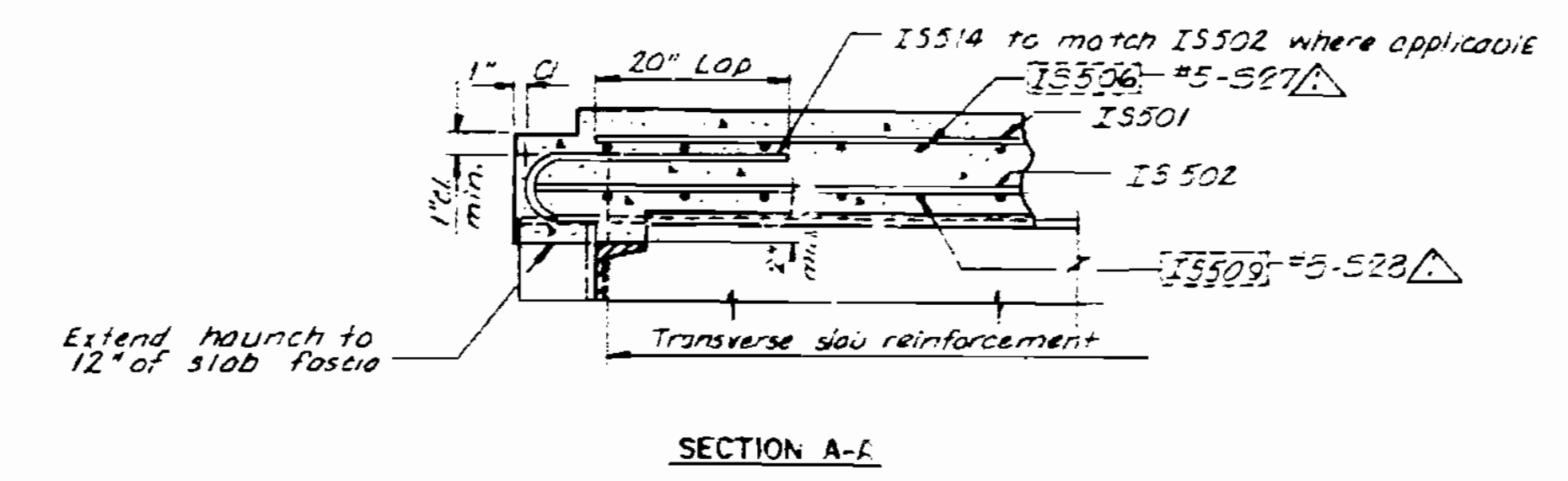
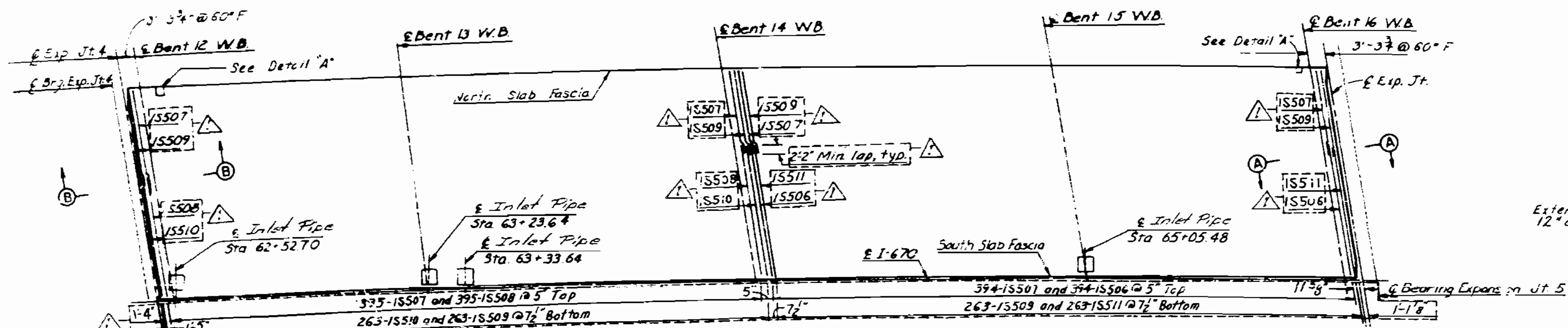


Note: Bottom transverse reinforcing steel shall be placed to match form corrugations.
 To determine haunch for the stay-in-place alternate add 3/8" to the haunch for the cast-in-place alternate.

REVISED TRANSVERSE SLAB REINFORCEMENT
UNIT 5 WESTBOUND

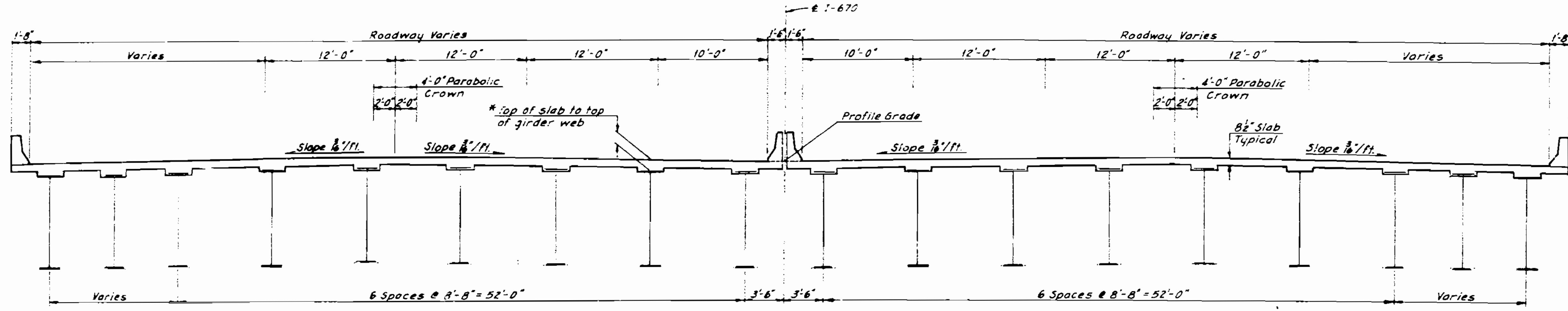
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PUB. NO.	STAGE	PUB. AND PREL. NO.	PREL. YEAR	SHEET NO.	TOTAL SHEETS
3	NO.			54	



SLAB AND CURB REINFORCEMENT UNIT 5 WESTBOUND

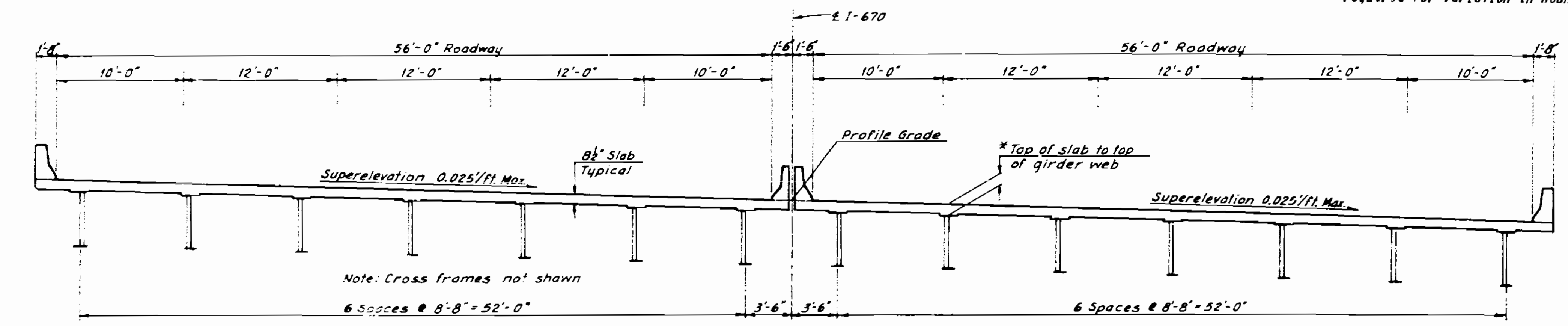
PBL. NO.	STATE	PBL. NO.	PBL. NO.	SHEET	TOTAL
1	MO.			50	



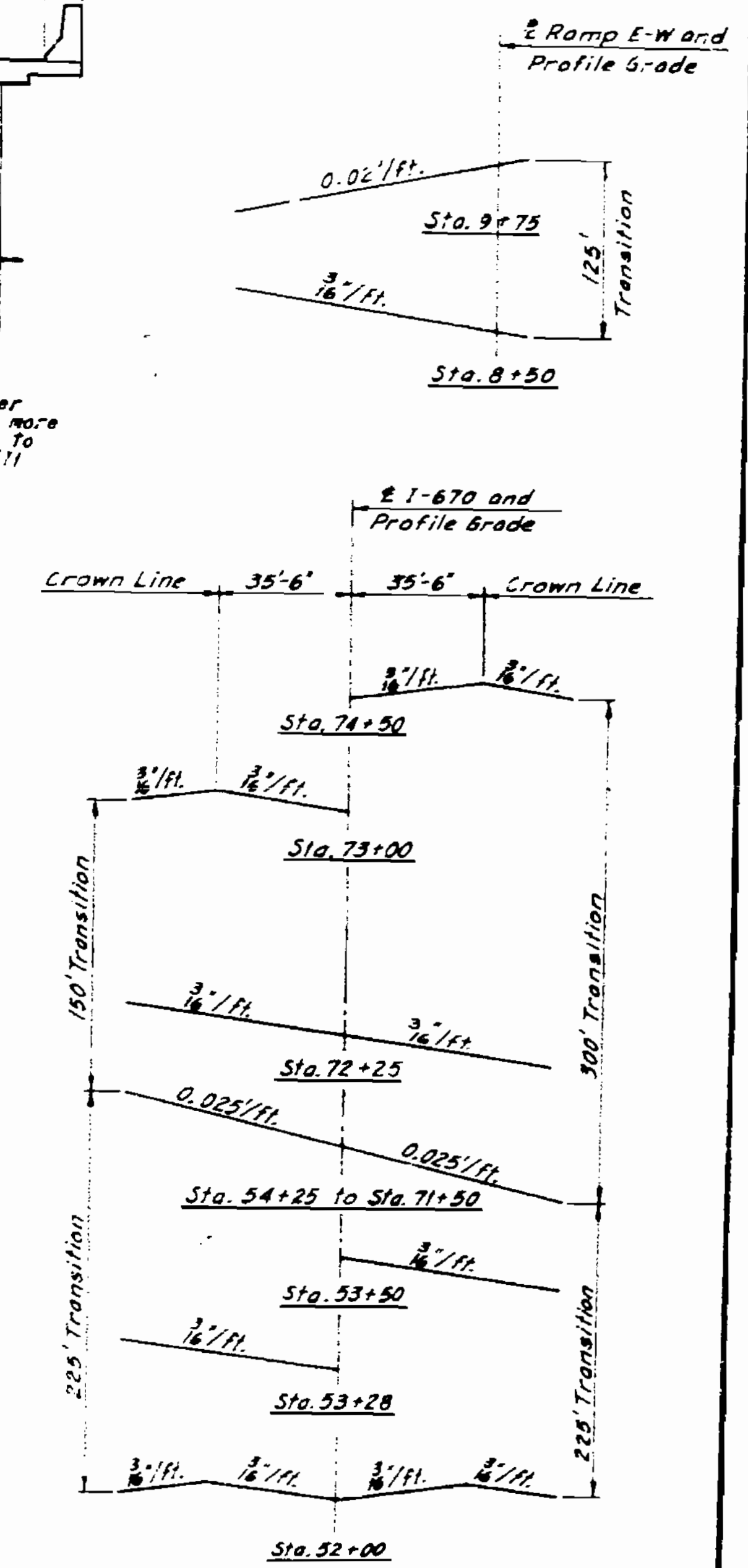
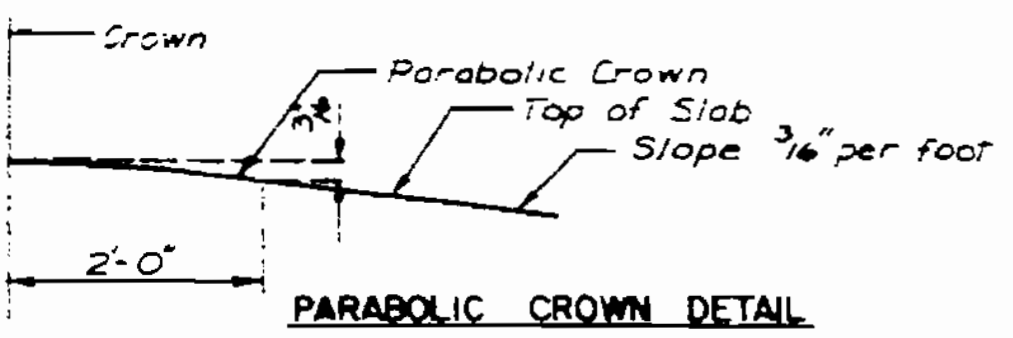
TYPICAL SECTION - UNITS 8 AND 9

- * Units 5 & 6 - 10 1/2"
- Unit 7 - 11"
- Unit 8 - 11 1/2"
- Unit 9 - 11 1/2"
- Unit 10 - 11 1/2"

Note: "s" dimension may vary if girder camber after erection differs from plan camber by more than the percentage of D.L. deflection due to weight of structural steel. No payment will be made for additional forming or concrete required for variation in haunching.



TYPICAL SECTION - UNITS 5, 6 AND 7
(Cast-in-place option)



WESTBOUND EASTBOUND
SUPERELEVATION TRANSITIONS

ITEM	UNIT	WESTBOUND LANE SUPERSTRUCTURE							EASTBOUND LANE SUPERSTRUCTURE							TOTAL
		UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10	TOTAL	UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10	TOTAL	
DRAINAGE SYSTEM (On Structure)	Lump Sum	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1
Protective Coating (Cora Etc. Coltonius Etc.)	Lump Sum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CLASS B-2 CONCRETE (Alternate A)	Cu. Yd.	240.8	226.3	653.6	506.4	351.9	460.0	3493.0	420.1	228.3	322.1	399.0	1003.3	290.3	3313.3	6217.3
CLASS B-2 CONCRETE (Alternate B)	Cu. Yd.	210.2	396.0	603.2	523.4	382.6	429.2	3262.7	406.1	397.1	583.3	342.3	337.3	429.3	3034.3	6370
CONCRETE WEARING SURFACE (*)	Sq. Yd.	2079	2012	3032	2385	4875	2123	16,200	2056	2013	2927	1622	2015	2123	15,410	31,610
ELASTOMERIC EXP. JOINT SEAL (3")	Ltn. Ft.	0	56	0	0	0	0	56	0	56	0	0	0	0	56	112
ELASTOMERIC EXP. JOINT SEAL (4")	Ltn. Ft.	56	0	56	0	24	0	196	56	0	56	0	56	0	168	364
Finger-Fit Exp. Device	Ltn. Ft.	0	0	0	56 (4 1/2")	0	68 (6 1/2")	124	0	0	0	56 (4 1/2")	0	68 (6 1/2")	124	348
PREFORMED COMPRESSION EXP. JT. SEAL (3.5")	Ltn. Ft.	0	0	0	0	0	68	68	0	0	0	0	0	68	68	136
REINFORCING STEEL (GRADE 60)	Pound	56540	55940	83360	70,350	118,070	57730	441,970	56590	55900	80350	46,000	123,460	57730	420,030	862,000
REINFORCING STEEL (EPOXY COATED)	Pound	93530	91000	137120	109,800	183,630	87070	701,920	93700	90880	123,900	71,110	193,480	26970	1,274,140	1,376,060
CONDUIT SYSTEM ON STRUCTURE	Lump Sum	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1
FABRICATED STRUCTURAL CARBON STEEL (Misc)	Pound	5670	5150	5390	2030	3470	3780	29,970	5860	5660	5280	1860	3350	3780	29,370	53,540
PAINTING (SYSTEM C) GREEN	Tons	221.6	217.1	377.6	143.8	1243.0	290.6	2214.7	221.7	217.3	359.7	271.1	1224.3	290.6	2743.0	5560.7
HIGH STRENGTH BRIDGE RAIL (ONE TUBE)	Ltn. Ft.	331	323	496	540	538	282	2,510	331	324	463	269	543	282	2,212	4,722
CLASS B-1 CONCRETE (ALTERNATE A)	Cu. Yd.	72.5	70.7	106.0	97.3	117.1	21.9	325.5	71.7	70.3	102.4	52.9	132.1	61.4	503.7	1023.2
CLASS B-1 CONCRETE (ALTERNATE B)	Cu. Yd.	74.0	72.2	108.2	99.3	119.5	22.2	336.6	72.2	71.6	104.5	60.1	141.7	62.6	512.7	1055.3

SUMMARY OF QUANTITIES AND TYPICAL SECTIONS

DETAILED 10 79
CHECKED 10 79

Note: This drawing is not to scale. Follow dimensions.

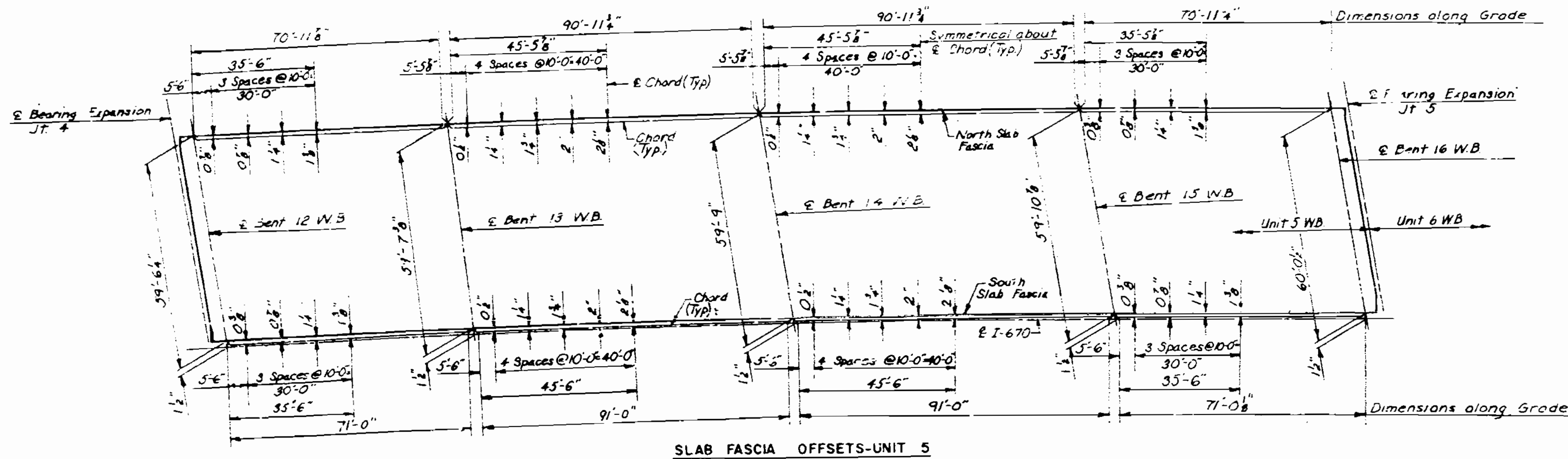
(*) See Job Special Provisions for alternate use of concrete wearing surface. Alternate A is Latex Modified Concrete and Alternate B is Low Slump Concrete.

Sheet No. 7 of 72 Revised 2/23/24

JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.		8	55	



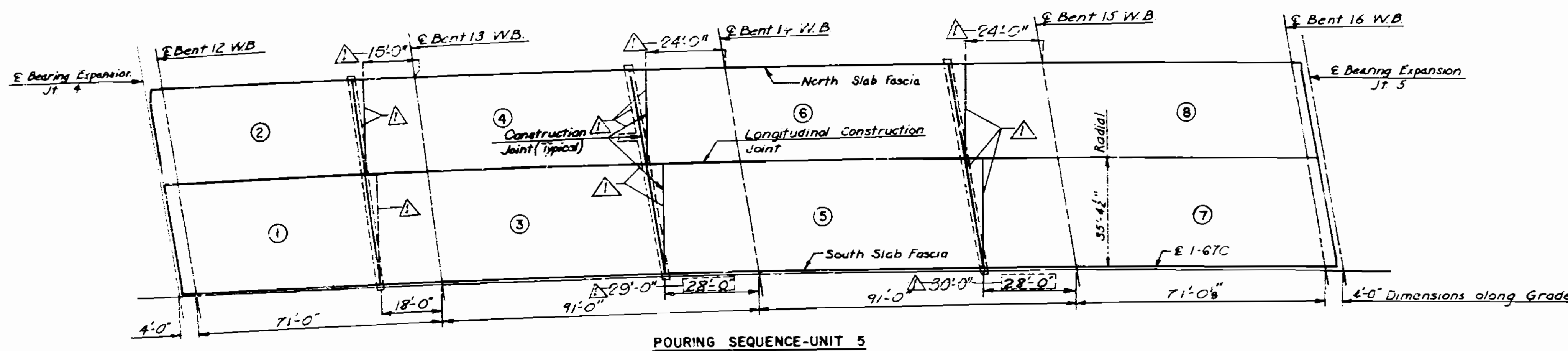
SEQUENCE	SEQUENCE OF POURS							
	DIRECTION							
BASIC	1	3	5	7	2	4	5	8
Alternate "A"	End to 3	1 To 5	3 To 7	5 To End	End to 4	2 To 6	4 To 8	6 To End
Pours	1 + 3	5	7		2 + 4	6	8	
Alternate "B"	End to 5	3 To 7	5 To End		End to 6	4 To 8	6 To End	
Pours	1 + 3	5 + 7			2 + 4	6 + 8		
Alternate "C"	End to 5	3 To End			End to 6	4 To End		
Pours	1 + 3 + 5 + 7				2 + 4 + 6 + 8			
	End to End				End to End			

Notes:

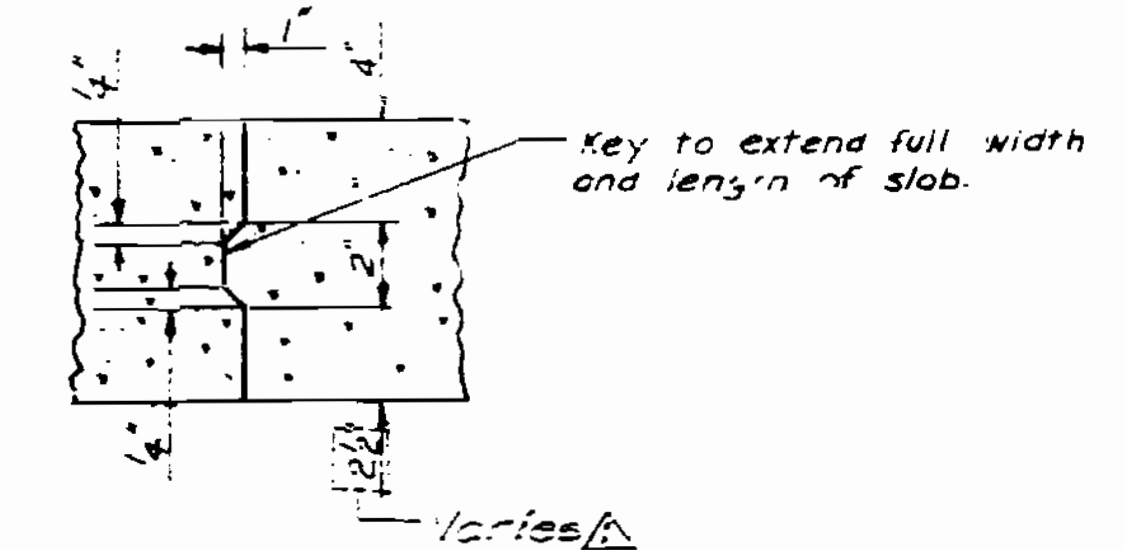
The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 37 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 25 cubic yards per hour.

Note:

Pour 7 and 8 of Unit 4 to precede Pour 1 and 2 of Unit 5. Pour 1 and 2 of Unit 6 to precede Pour 7 and 8 of Unit 5.



△ Note: Place transverse construction joints radially at the dimensions shown.



DETAILED 1079
CHECKED 1079

Note: This drawing is not to scale. Follow dimensions.

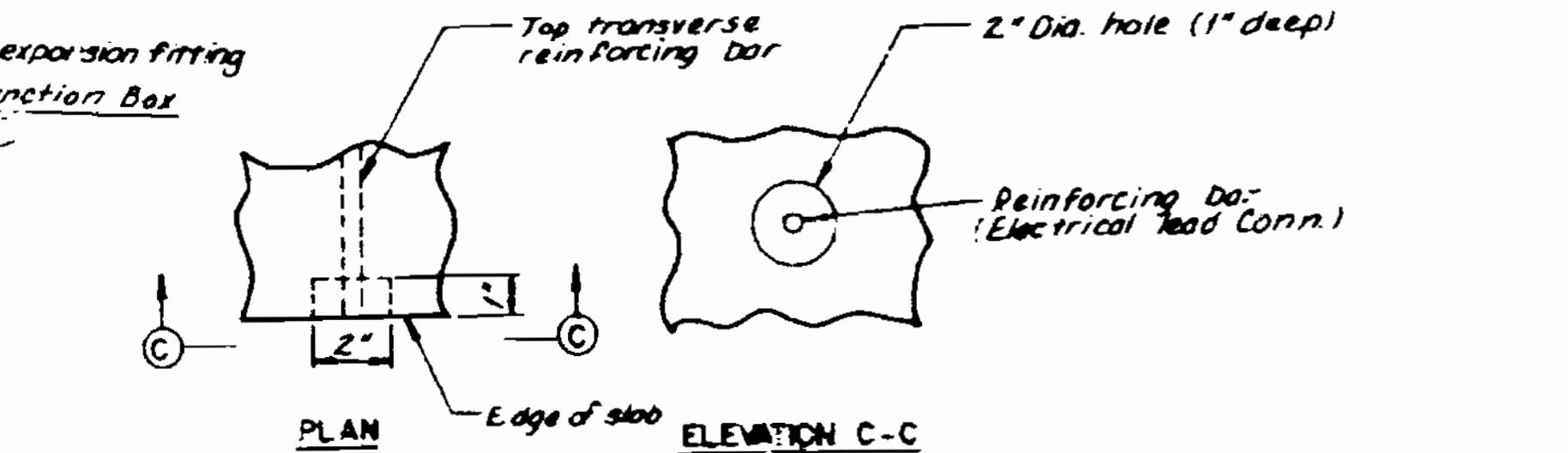
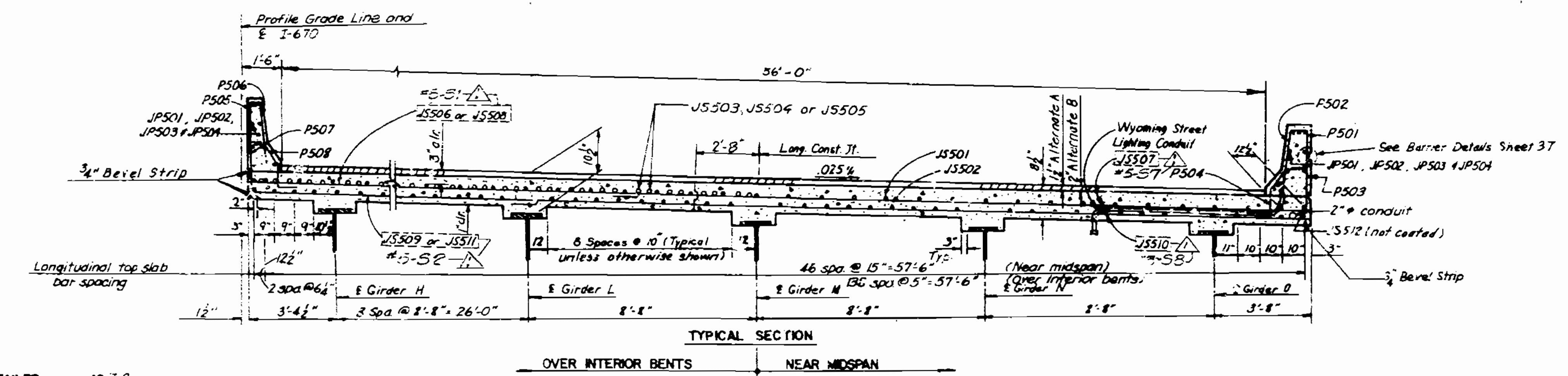
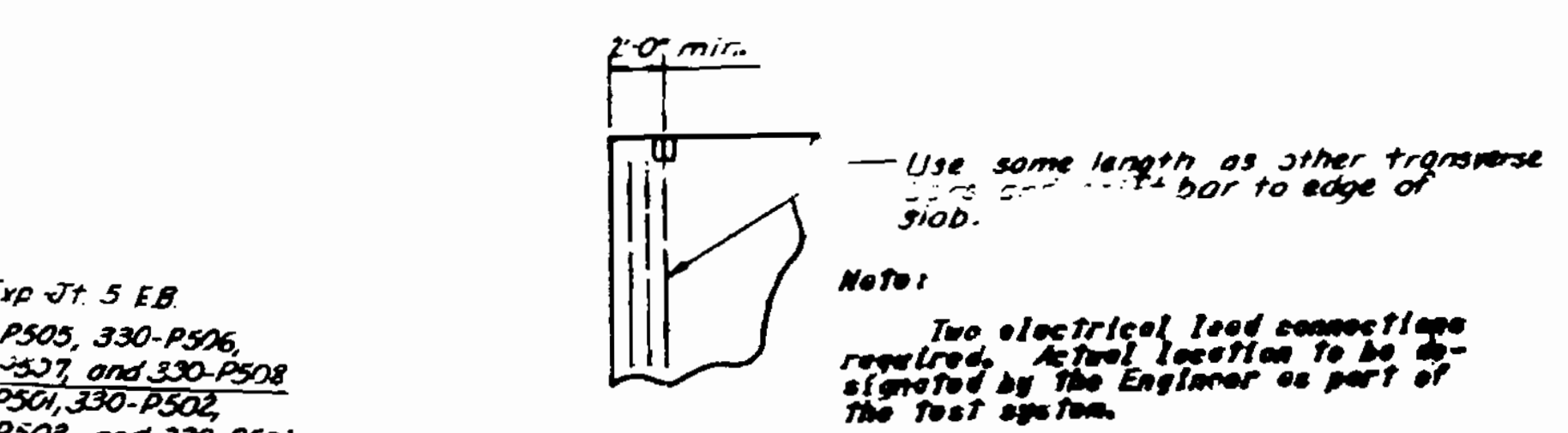
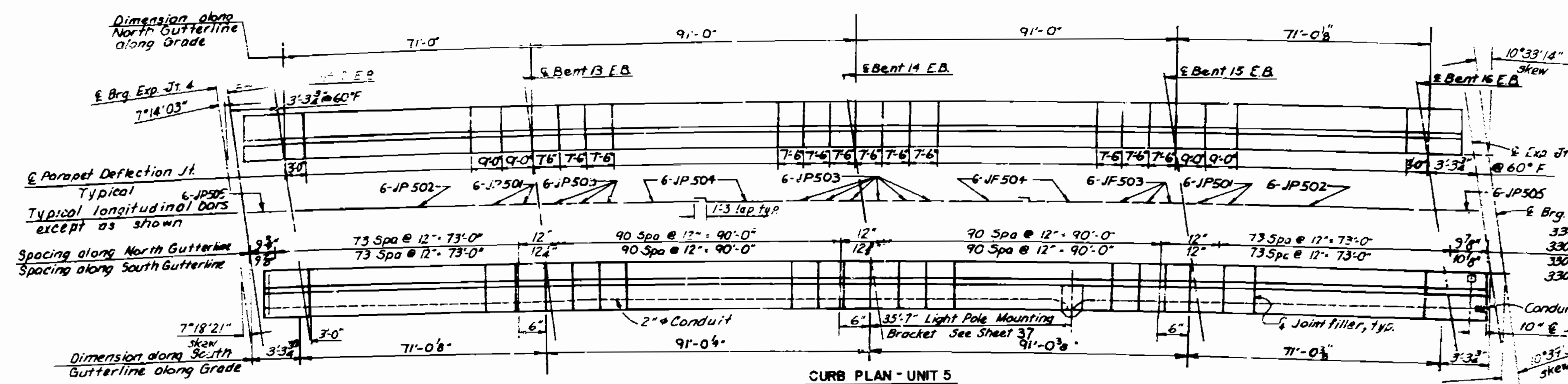
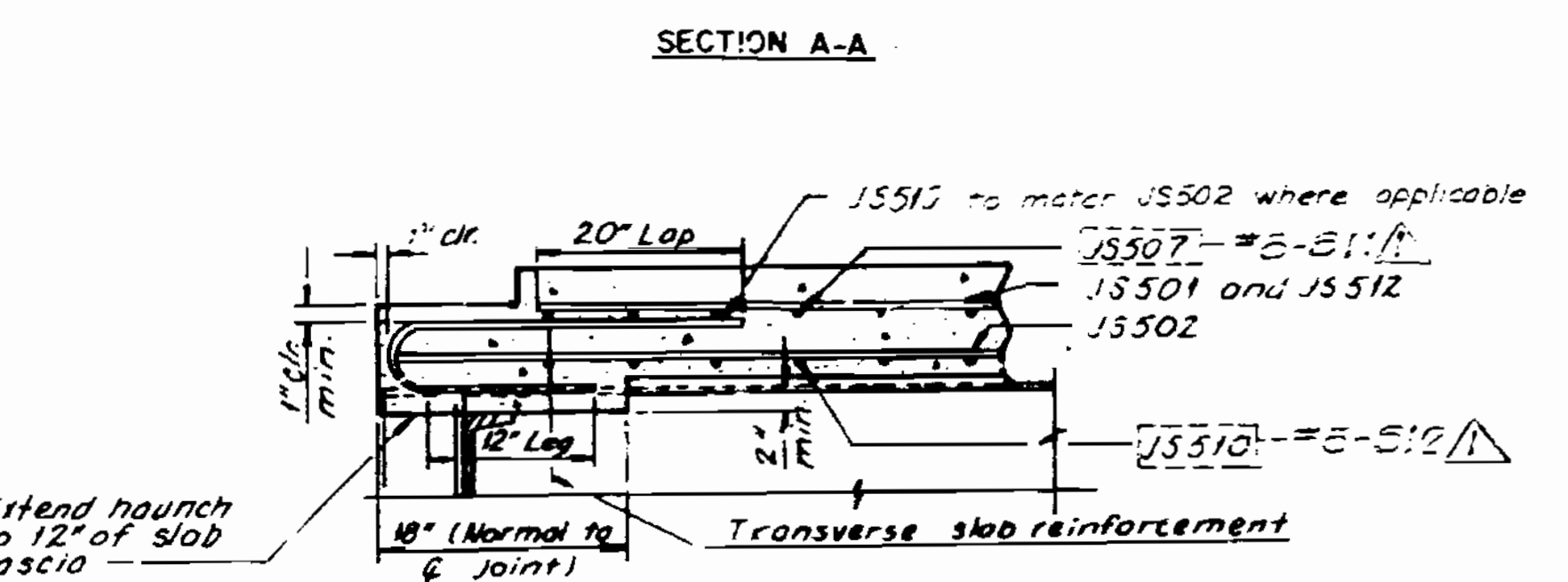
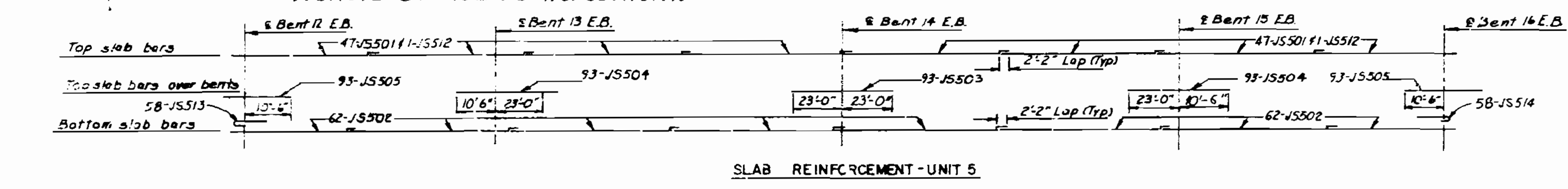
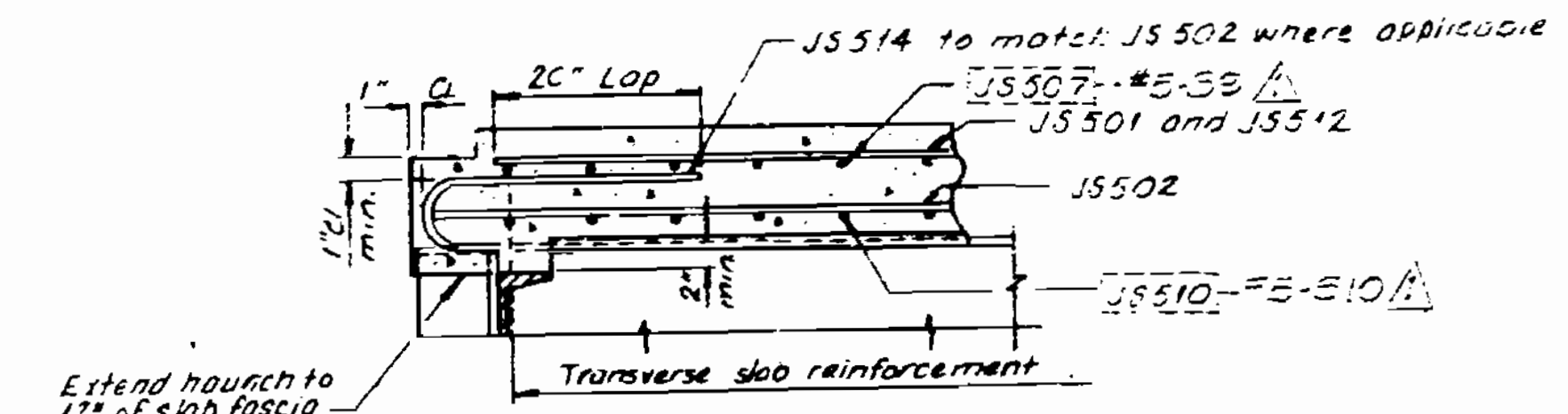
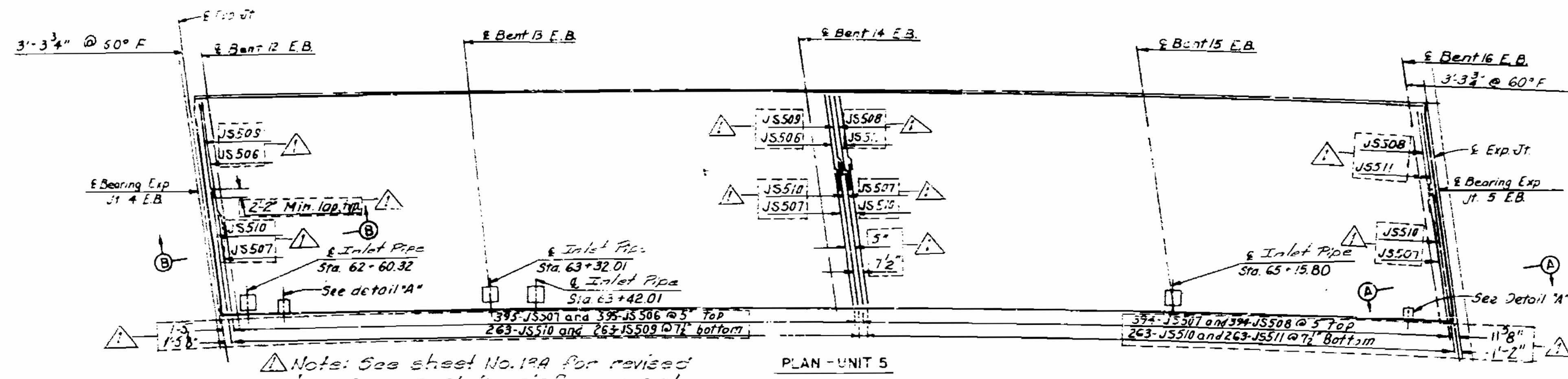
Sheet No. 12 of 12. Revised 8/28/84

JACKSON COUNTY

A-3136

SLAB PLAN
UNIT 5 WESTBOUND

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		79	56	



SLAB AND CURB REINFORCEMENT UNIT 5 EASTBOUND

DETAILED 10 79
CHECKED 10 79

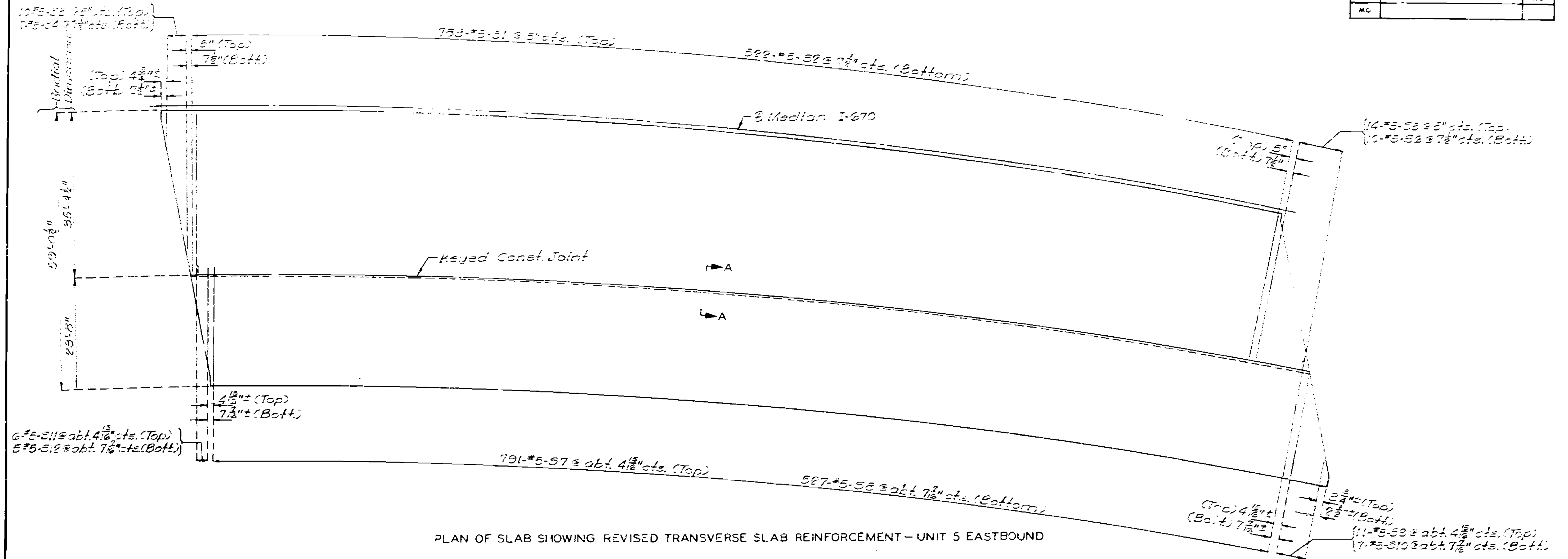
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 13 of 23. Revised 8/23/84

JACKSON COUNTY

A-3136

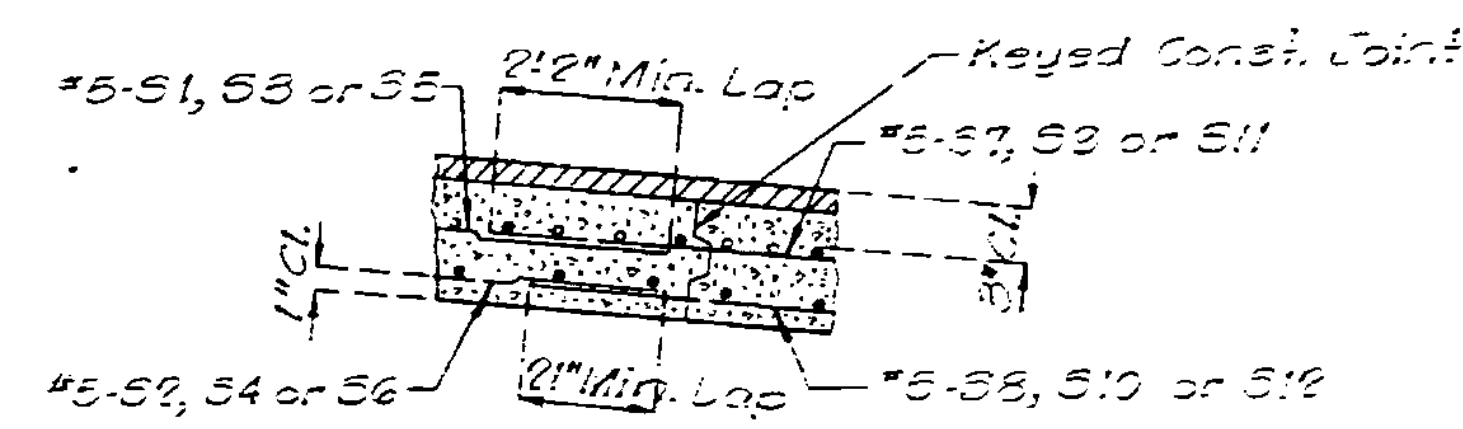
STATE	PROJ. NO.	SHEET NO.
MC		



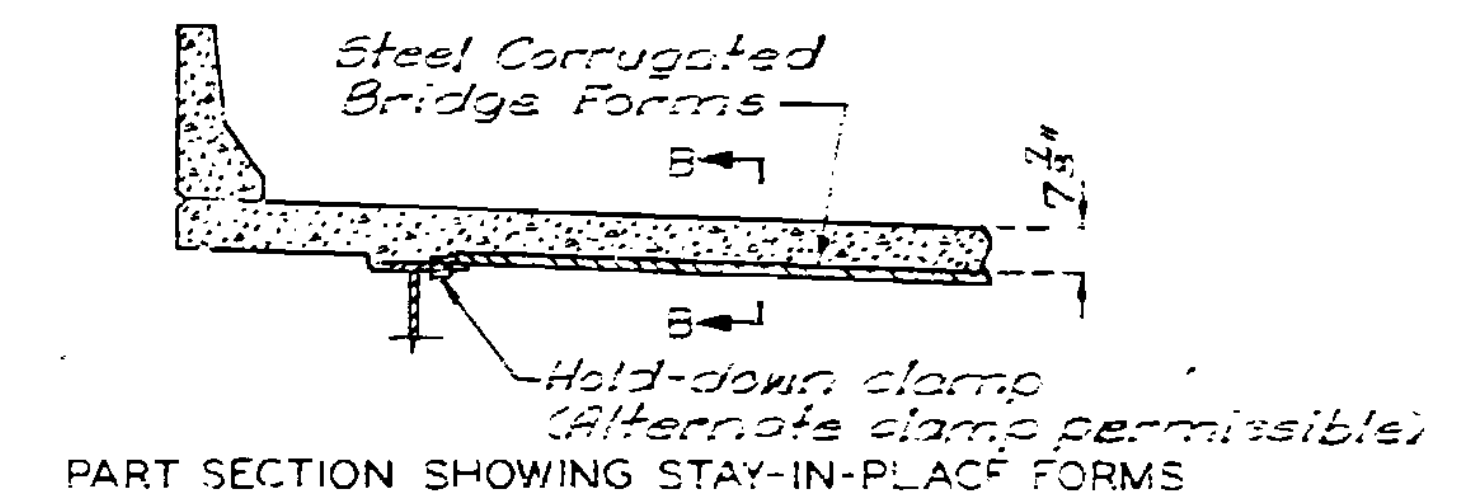
PLAN OF SLAB SHOWING REVISED TRANSVERSE SLAB REINFORCEMENT - UNIT 5 EASTBOUND

BILL OF REVISED TRANSVERSE SLAB REINFORCEMENT
UNIT 5 EASTBOUND

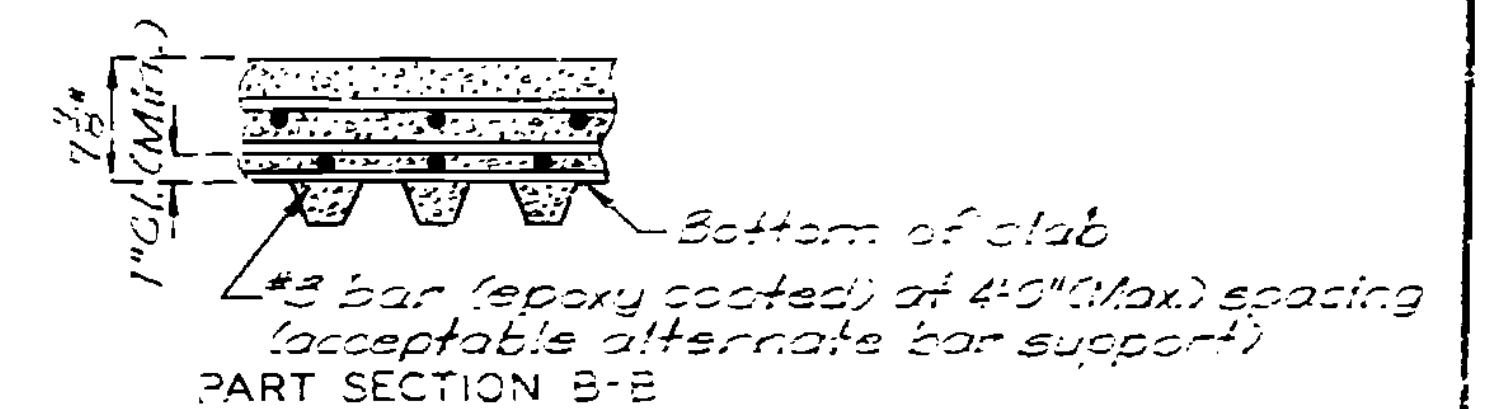
NO.	SIZE	MARK	(E)	SHAPE	(V)	NO. EACH	LENGTH	WEIGHT
783	#5	S1	E	Str.	-	-	35' 1"	23,651
522	#5	S2	-	Str.	-	-	35' 1"	19,101
10	#5	S3	E	Str.	V	1	2' 11"	
Incr = 2' 3"							2' 3"	193
7	#5	S4	-	Str.	V	1	2' 6"	
Incr = 4' 10"							3' 11"	124
14	#5	S5	E	Str.	V	1	3' 11"	
Incr = 2' 2"							3' 21"	263
10	#5	S6	-	Str.	V	1	2' 3"	
Incr = 3' 4"							3' 2' 3"	180
791	#5	S7	E	Str.	-	-	25' 10"	21,313
527	#5	S8	-	Str.	-	-	25' 5"	13,971
11	#5	S9	E	Str.	V	1	2' 10"	
Incr = 2' 2"							2' 4' 6"	157
7	#5	S10	-	Str.	V	1	2' 4"	
Incr = 3' 3 1/2"							2' 2' 1"	89
6	#5	S11	E	Str.	V	1	4' 0"	
Incr = 2' 3"							2' 0' 3"	76
5	#5	S12	-	Str.	V	1	2' 4"	
Incr = 4' 10 1/2"							2' 3' 10"	73



PART SECTION A-A
Note: Observe minimum lap requirements as shown where possible.



PART SECTION B-B SHOWING STAY-IN-PLACE FORMS



Note: Bottom transverse reinforcing steel shall be placed to match form corrugations.
To determine haunch for the stay-in-place alternate add 3/8" to the haunch for the cast-in-place alternate.

REVISED TRANSVERSE SLAB REINFORCEMENT
UNIT 5 EASTBOUND

63

DETAILED 12/19/84
CHECKED 12/19/84

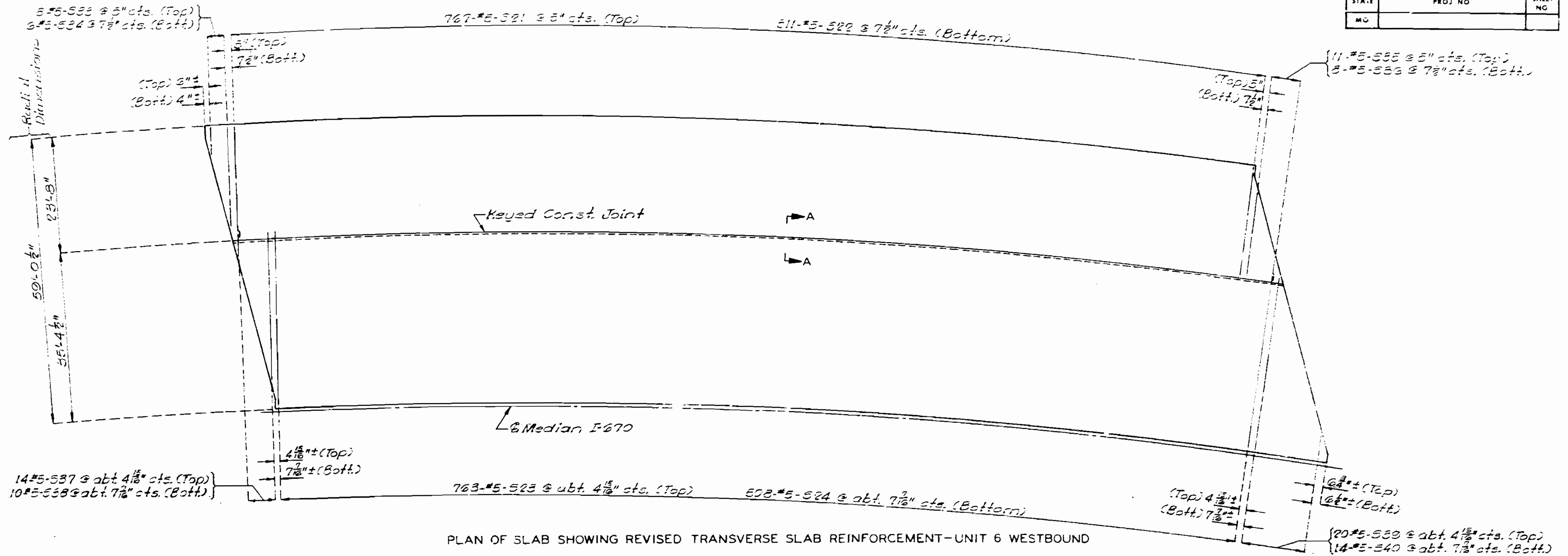
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 13A of 72 Revisited 3/23/84

JACKSON COUNTY

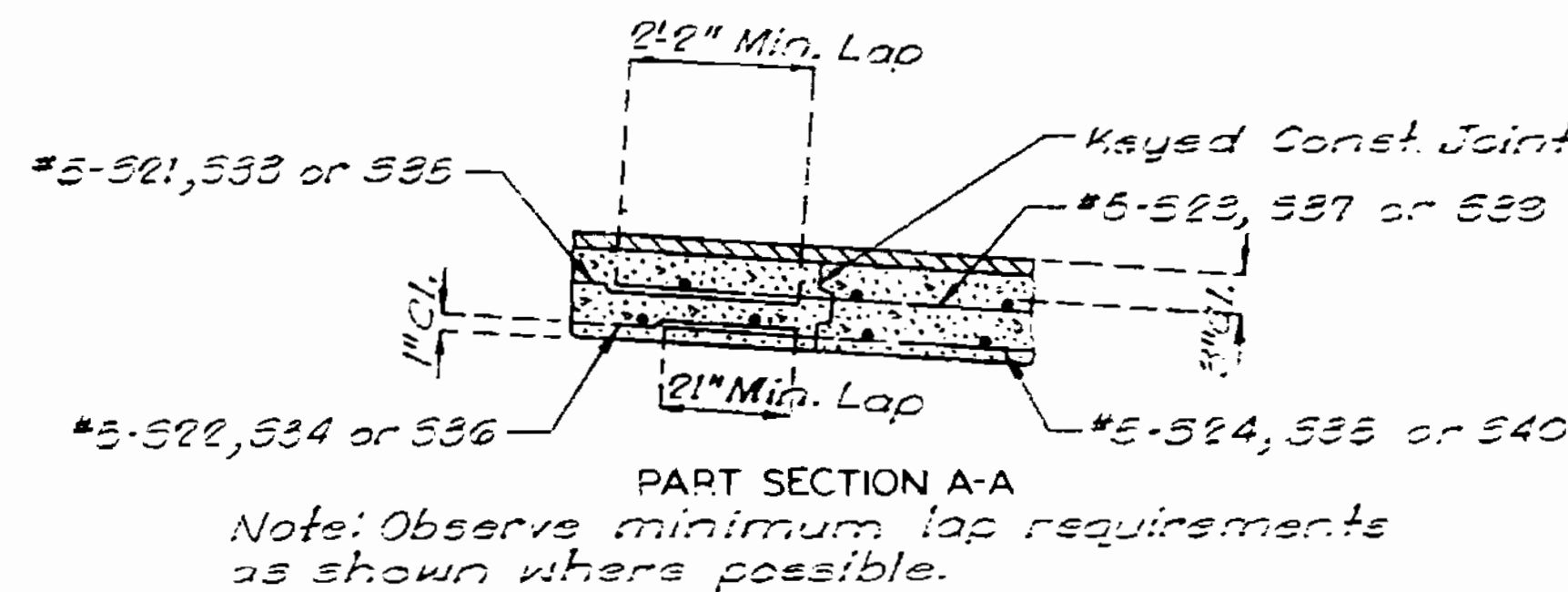
A-3136

STATE	PROJ NO	SHEET NO
MO		

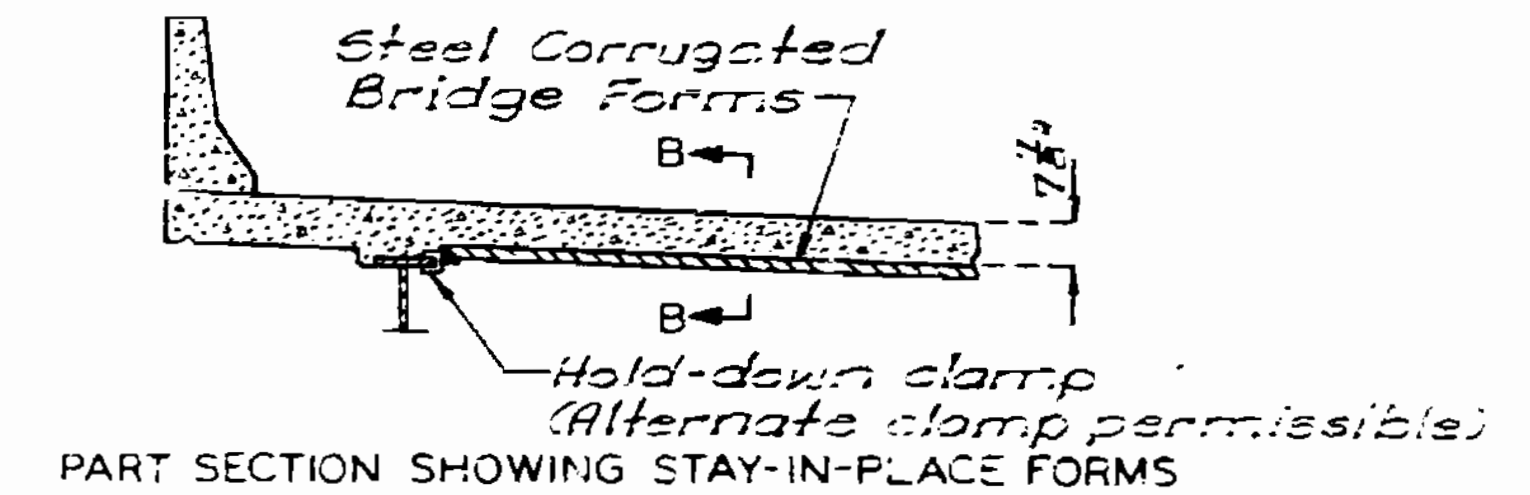


PLAN OF SLAB SHOWING REVISED TRANSVERSE SLAB REINFORCEMENT—UNIT 6 WESTBOUND

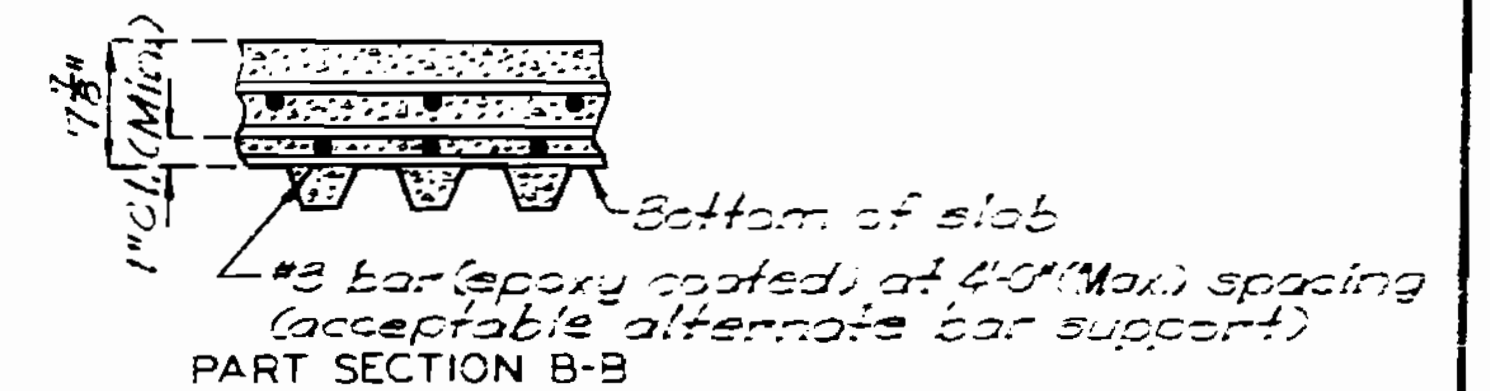
BILL OF REVISED TRANSVERSE SLAB REINFORCEMENT UNIT 6 WESTBOUND								
NO.	SIZE	MARK	(E)	SHAPE	(V)	NO. EACH	LENGTH	WEIGHT
767	#5	521	E	Str.	—	—	23'5"	18,733
511	#5	522	—	Str.	—	—	23'5"	12,480
763	#5	523	E	Str.	—	—	37'7"	29,909
508	#5	524	—	Str.	—	—	37'2"	19,693
B	#5	533	E	Str.	V	1	3'10"	
Incr = 2'5"							19'7"	98
G	#5	534	—	Str.	V	1	3'0"	
Incr = 3'4"							19'8"	71
H	#5	535	E	Str.	V	1	3'4"	
Incr = 2'0"							20'0"	134
B	#5	536	—	Str.	V	1	3'0"	
Incr = 2'6"							20'6"	98
J	#5	537	E	Str.	V	1	4'5"	
Incr = 2'3"							33'8"	278
K	#5	538	—	Str.	V	1	4'6"	
Incr = 3'4"							34'6"	293
L	#5	540	E	Str.	V	1	3'0"	
Incr = 2'6"							34'6"	293
Incr = 2'6"							35'6"	281



Part Section A-A
Note: Observe minimum lap requirements as shown where possible.



PART SECTION SHOWING STAY-IN-PLACE FORMS



Note: Bottom transverse reinforcing steel shall be placed to match form corrugations. To determine haunch for the stay-in-place alternate add 3/8" to the haunch for the cast-in-place alternate.

REVISED TRANSVERSE SLAB REINFORCEMENT
UNIT 6 WESTBOUND

Note:
E = Epoxy coated reinforcement.
V = Bar dimensions vary in equal increments between dimensions shown on this line and the following line.
No. Each = Number of bars of each length.
Total Weight of Plain Reinforcement is 30,830
Total Weight of Epoxy Coated Reinforcement is 40,550

66
DETAILED Aug 19 54
CHECKED Aug 19 54

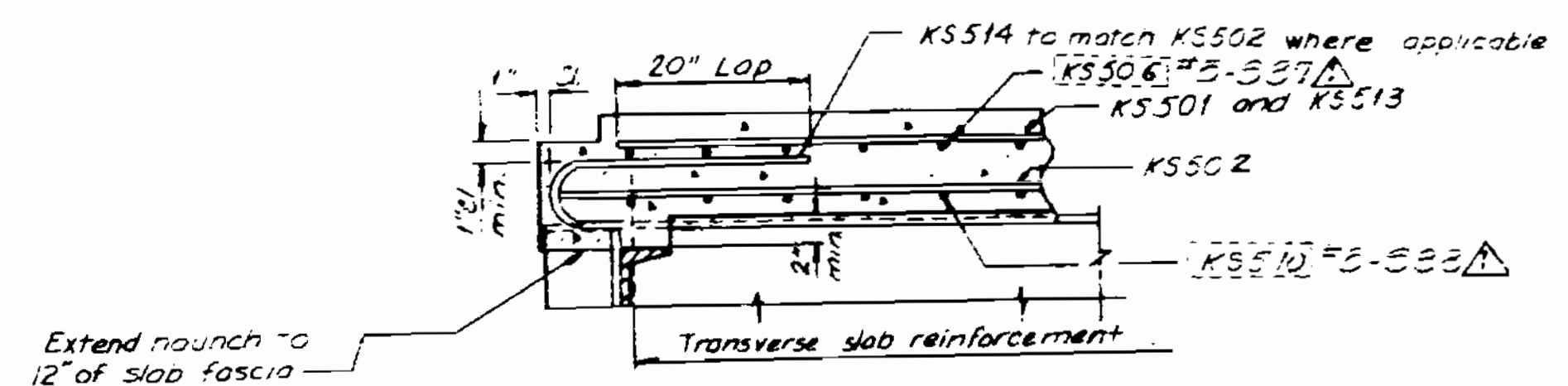
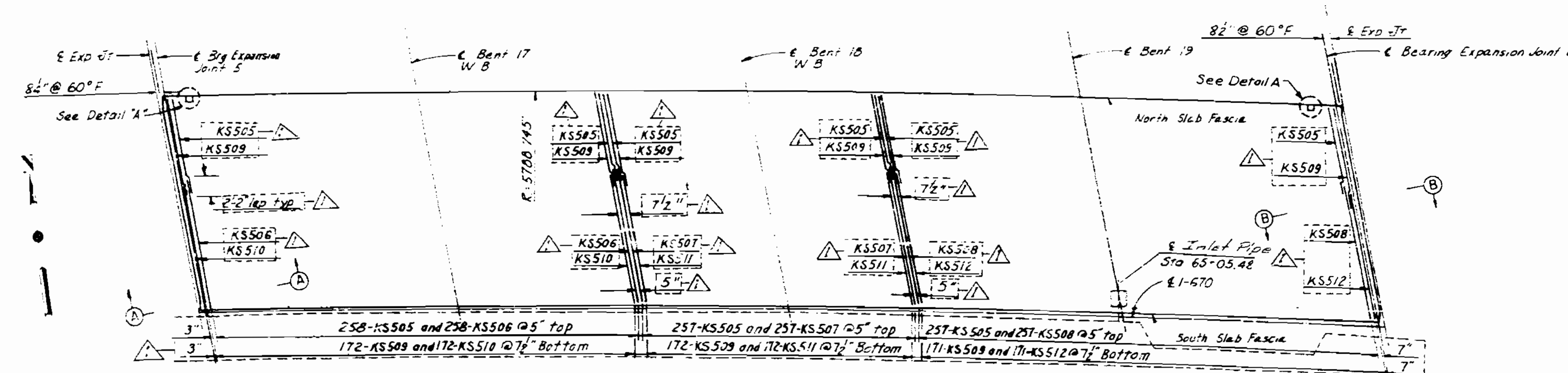
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 15A of 12 Revised 2/22/34

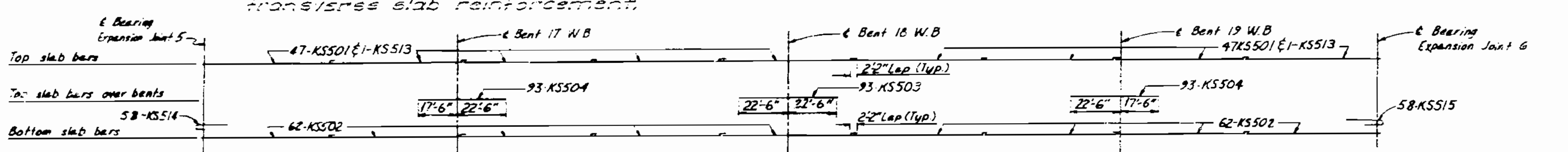
JACKSON COUNTY

A-3136

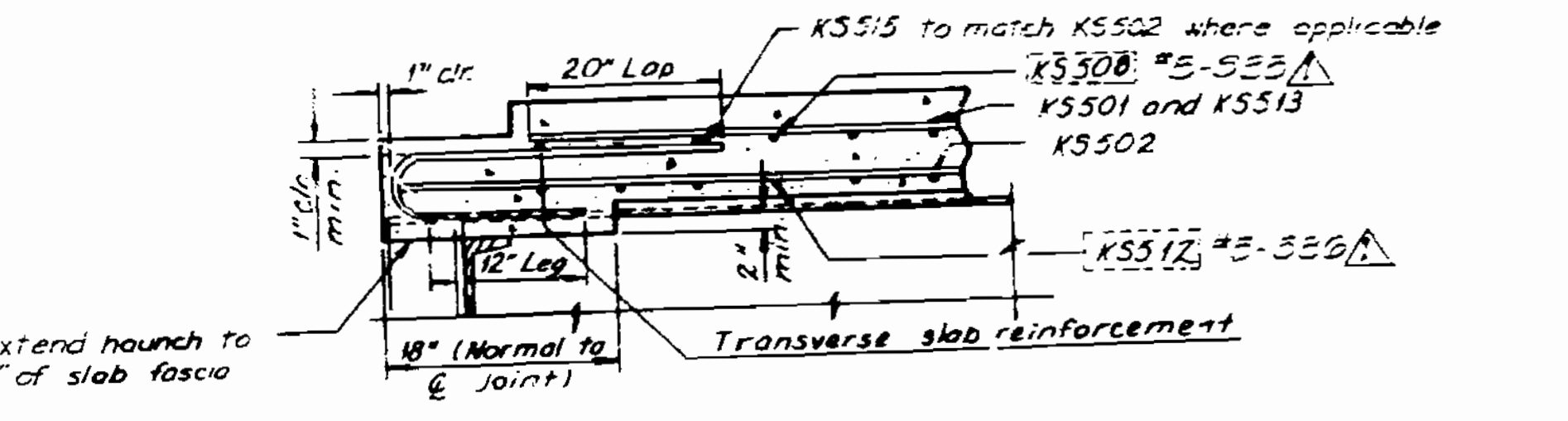
DATE	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		88	58	



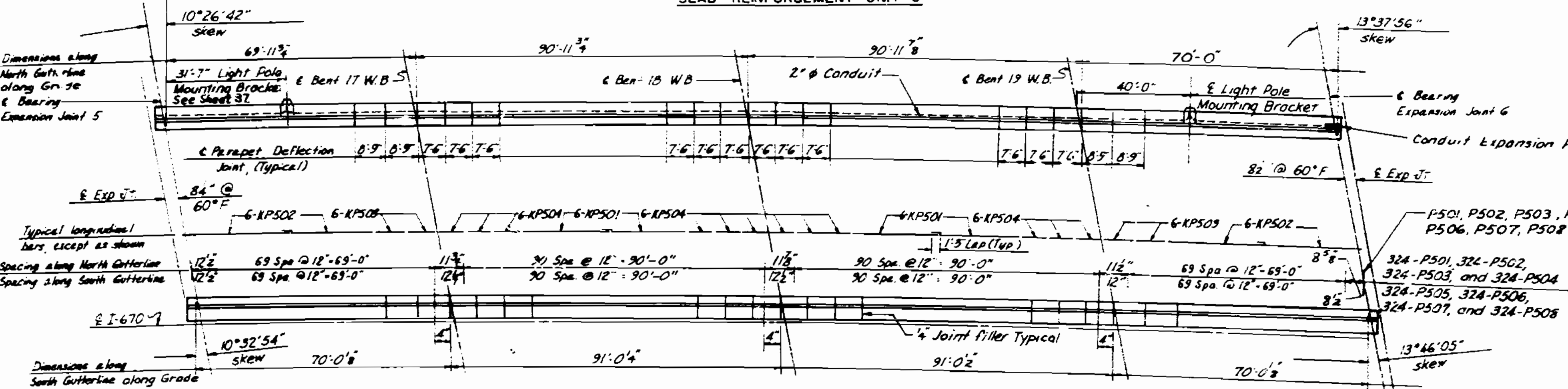
SECTION A-A



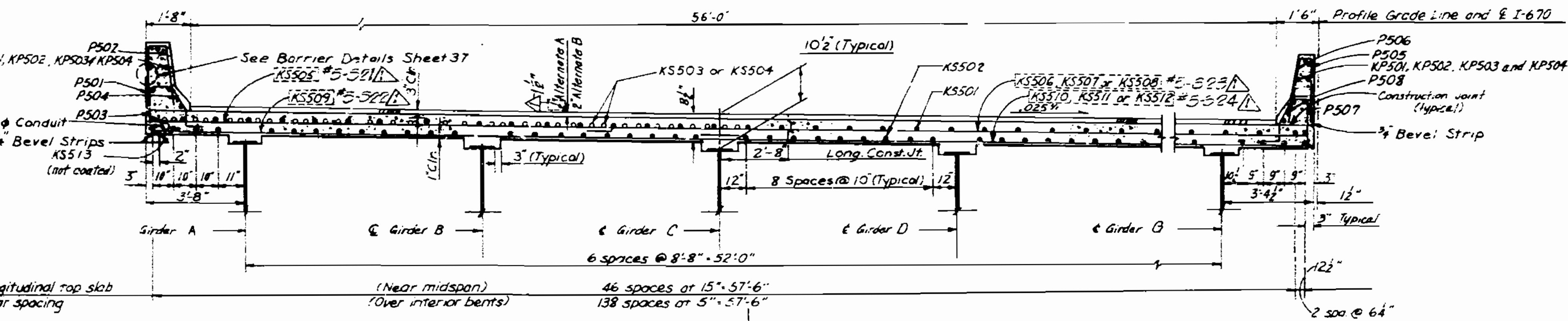
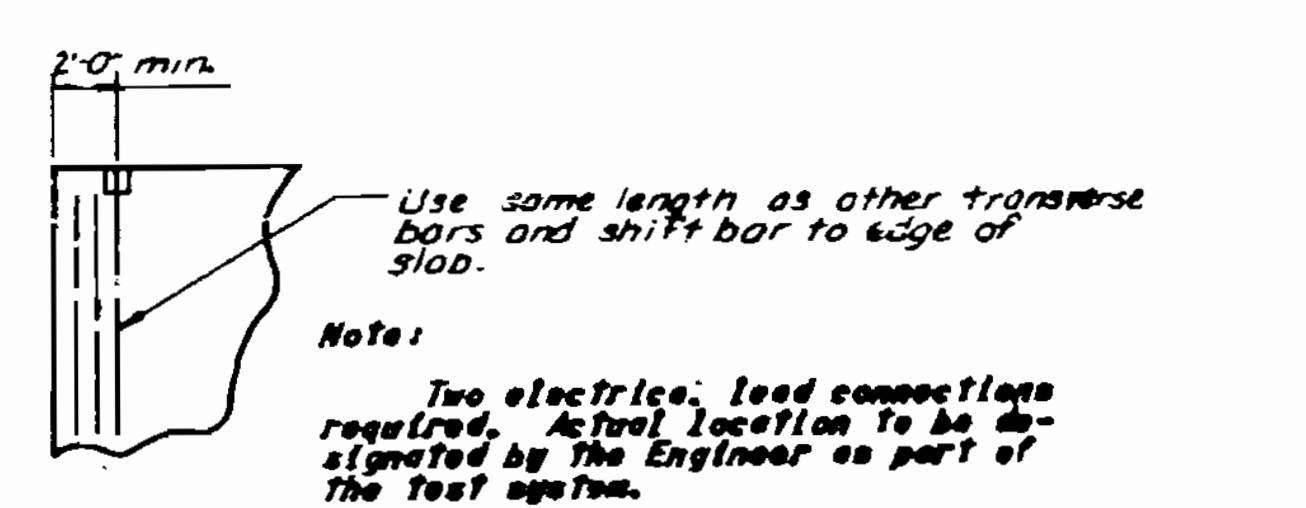
SLAB REINFORCEMENT - UNIT 6



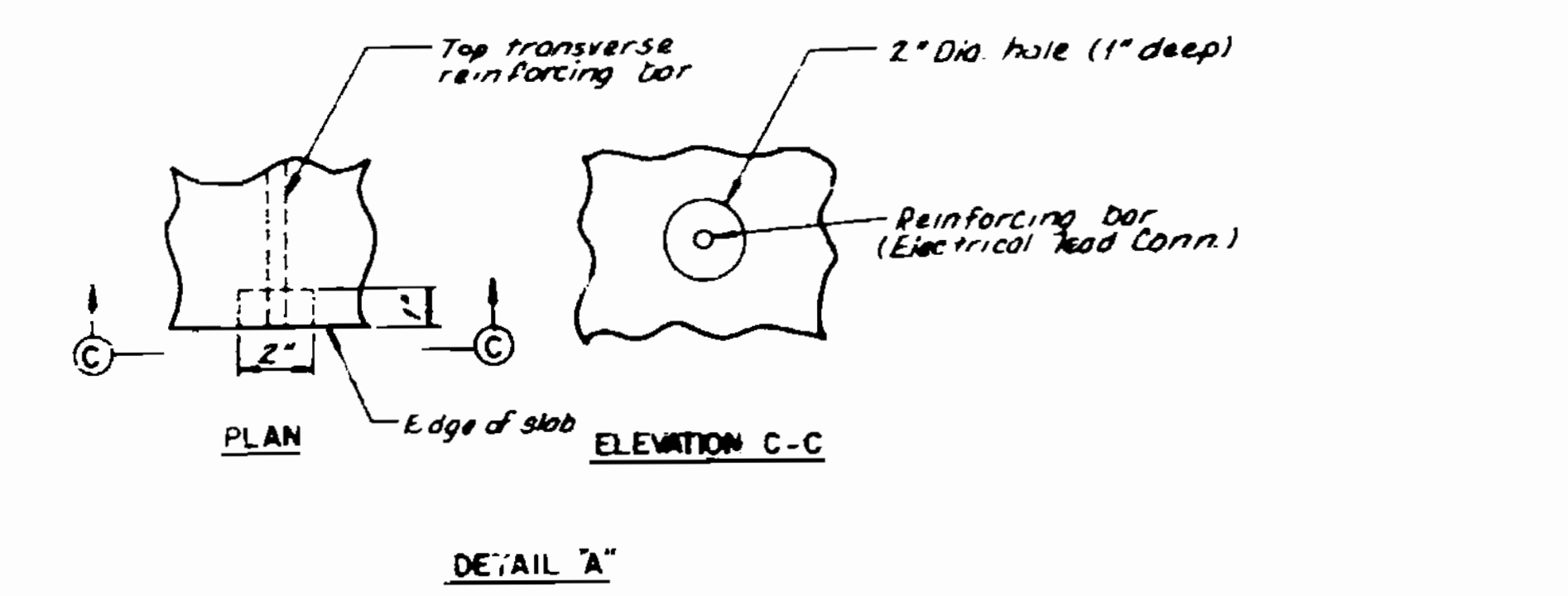
SECTION B-B



CURB PLAN - UNIT 6



TYPICAL SECTION OVER INTERIOR BENTS



DETAIL A

SLAB AND CURB REINFORCEMENT UNIT 6 WESTBOUND

DETAILED 10 79
CHECKED 10 79

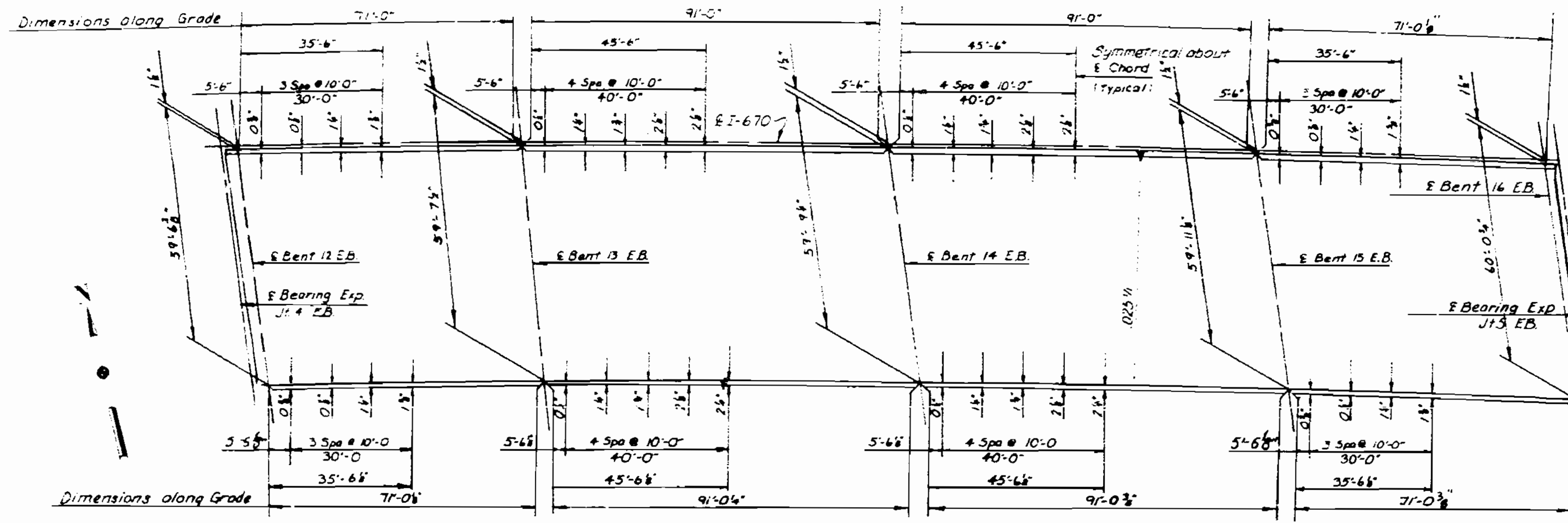
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 15 of 72. Revised 8/28/84

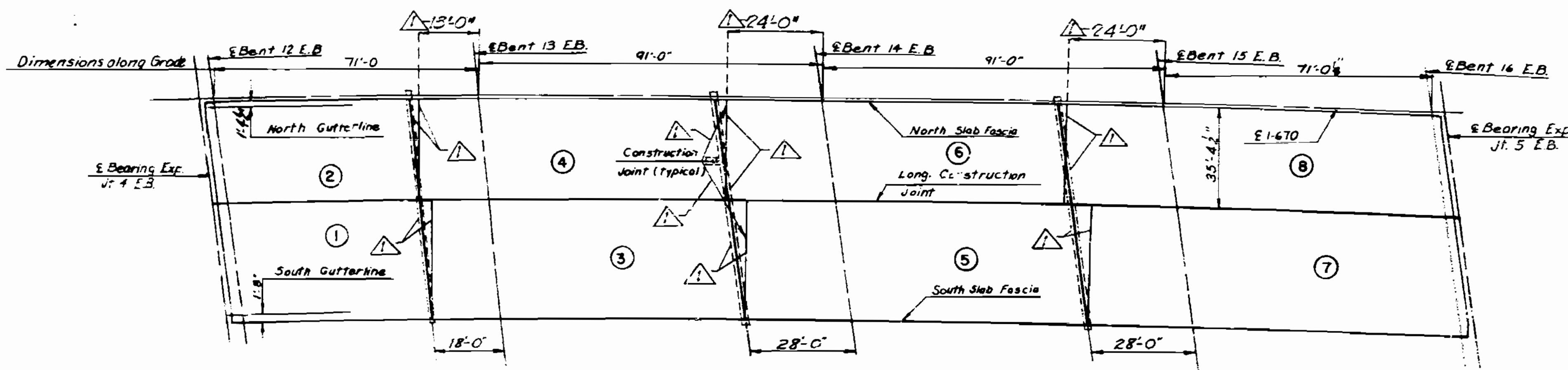
JACKSON COUNTY

A-3136

PER. ROAD DIST. NO.	TYPE	PER. NO.	PICAL YEAR	SHEET NO.	TOTAL SHEETS
1	NO.		19	57	



SLAB FASCIA OFFSETS-UNIT 5



POURING SEQUENCE-UNIT 5

△ Note: Place transverse construction joints radially at the dimensions shown.

BASIC SEQUENCE	SEQUENCE OF POURS													
	DIRECTION													
Alternate "A"	1 + 3	5	7	2 + 4	6	8	End to 3	1 to 5	3 to 7	5 to End	End to 4	2 to 6	4 to 8	6 to End
Alternate "B"	1 + 3	5 + 7	2 + 4	6 + 8	End to 5	3 to 7	5 to End	End to 6	4 to 8	6 to End	1 + 3 + 5 + 7	2 + 4 + 6 + 8	End to End	End to End

Notes:

The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 37 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 25 cubic yards per hour.

Note: Pour 7 and 8 of Unit 4 to precede Pour 1 and 2 of Unit 5. Pour 1 and 2 of Unit 6 to precede Pour 7 and 8 of Unit 5.

Note:

See Sheet 12 for detail of longitudinal and transverse slab construction joint.

DETAILED 10 7 9
CHECKED 10 7 9

Note: This drawing is not to scale. Follow dimensions.

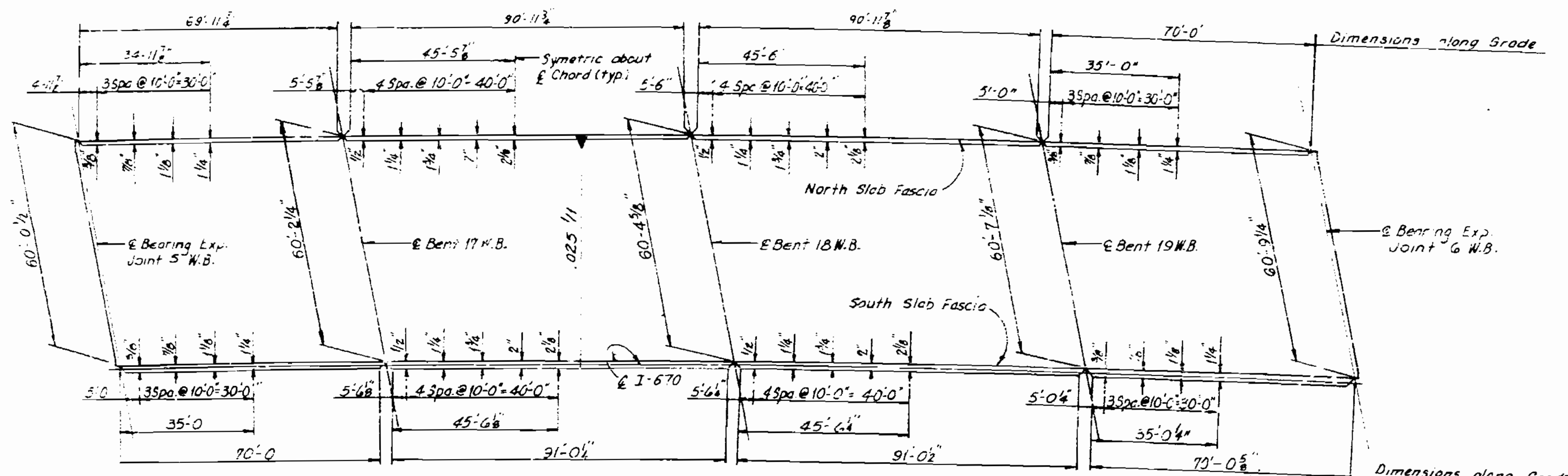
Sheet No. 14 of 72. Revised 8/26/34

JACKSON COUNTY

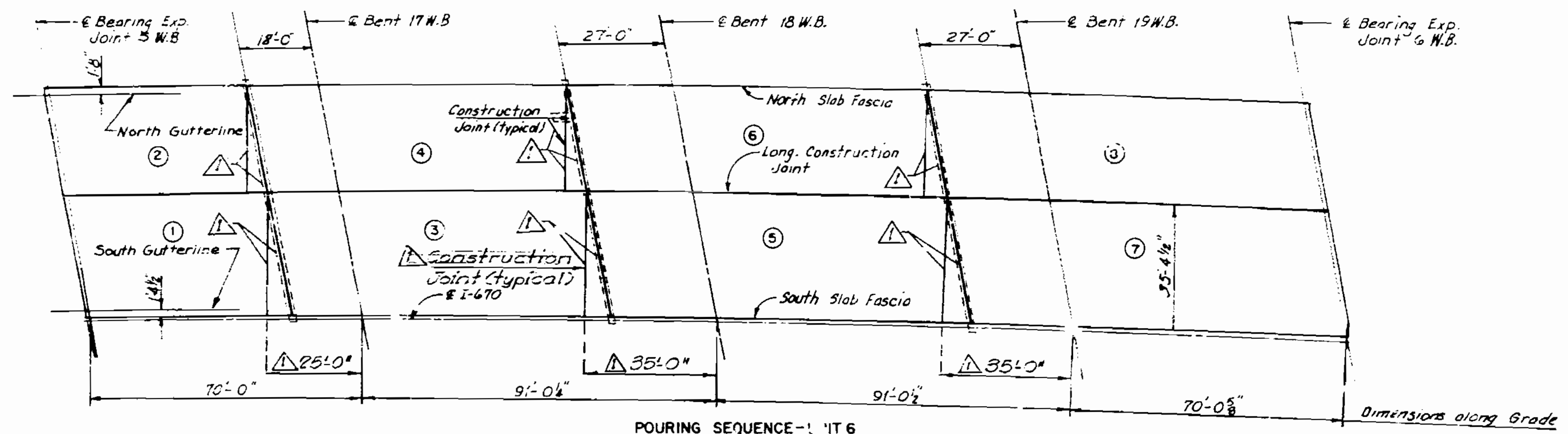
SLAB PLAN
UNIT 5 EASTBOUND

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		84	59	



SLAB FASCIA OFFSETS - UNIT 6



POURING SEQUENCE - UNIT 6

Note: Place transverse construction joints radially at the dimensions shown.

	SEQUENCE OF POURS							
	DIRECTION							
BASIC SEQUENCE	1	3	5	7	2	4	6	8
Alternate "A"	End to 3	1 to 5	3 to 7	5 to End	End to 4	2 to 6	4 to 8	6 to End
Alternate "B"	1 + 3	5 + 7	2 + 4	6 + 8	End to 5	3 to 7	5 to End	End to 6
Alternate "C"	1 + 3 + 5 + 7	2 + 4 + 6 + 8	End to 6	4 to End	End to 5	3 to End	End to 6	4 to End

Notes:
The Contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 37 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 25 cubic yards per hour.

Note:
See Sheet 12 for detail of longitudinal and transverse slab construction joint.

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DETAILED 1979
CHECKED 1979

Note: This drawing is not to scale. Follow dimensions.

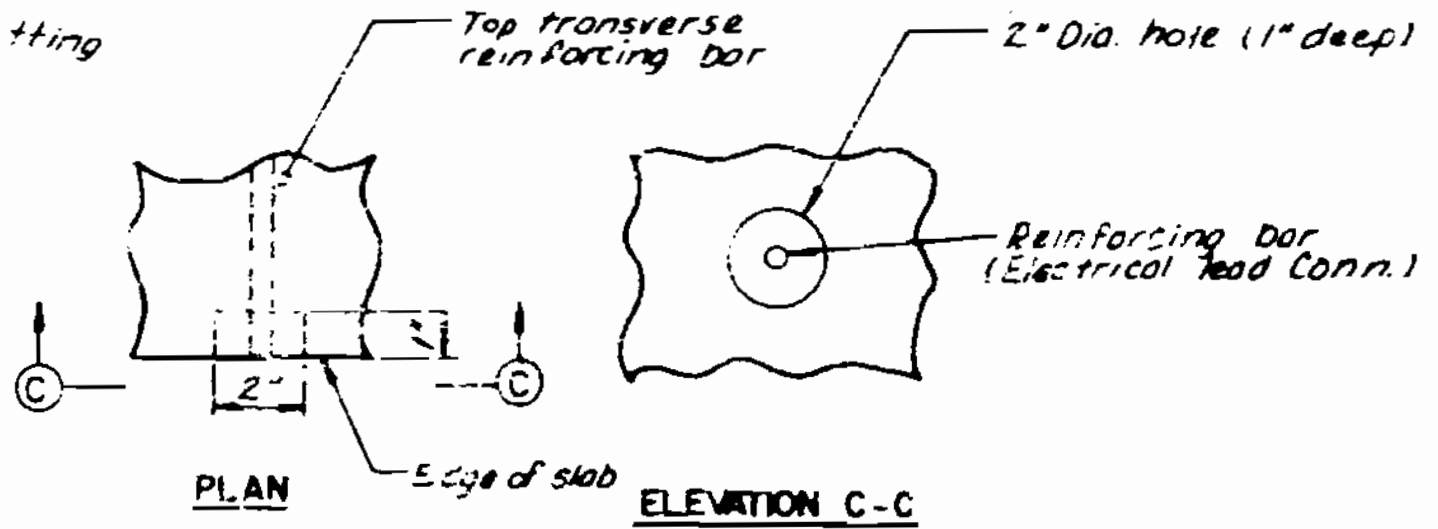
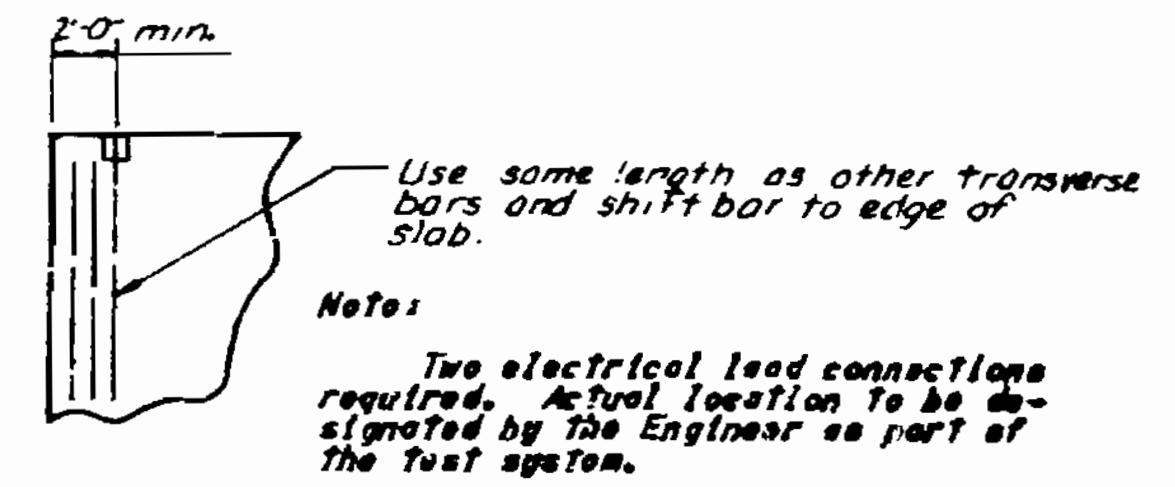
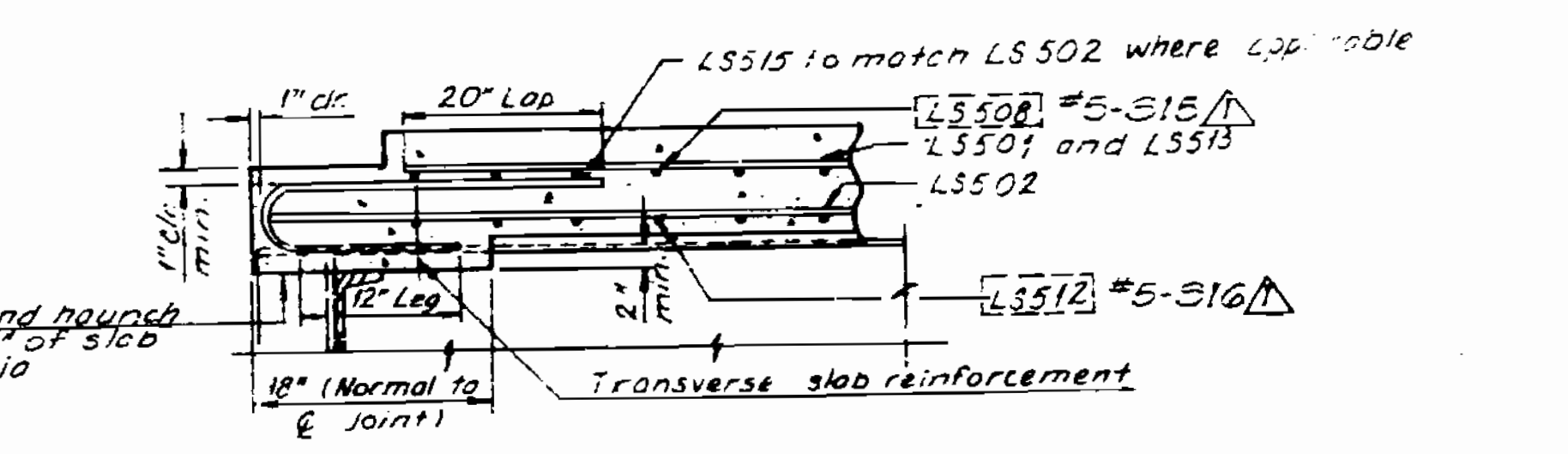
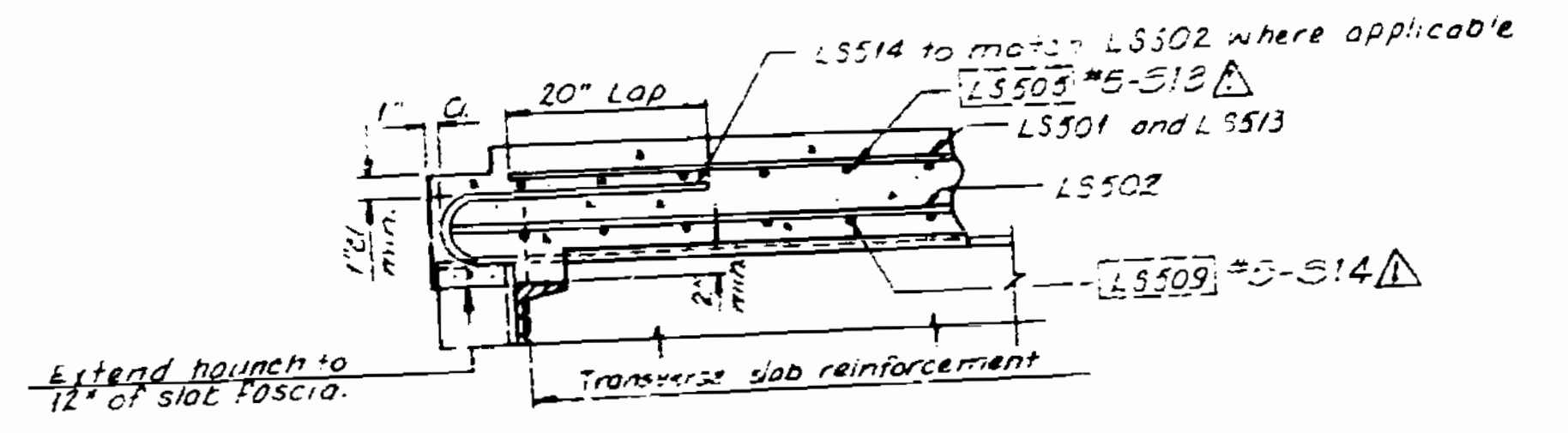
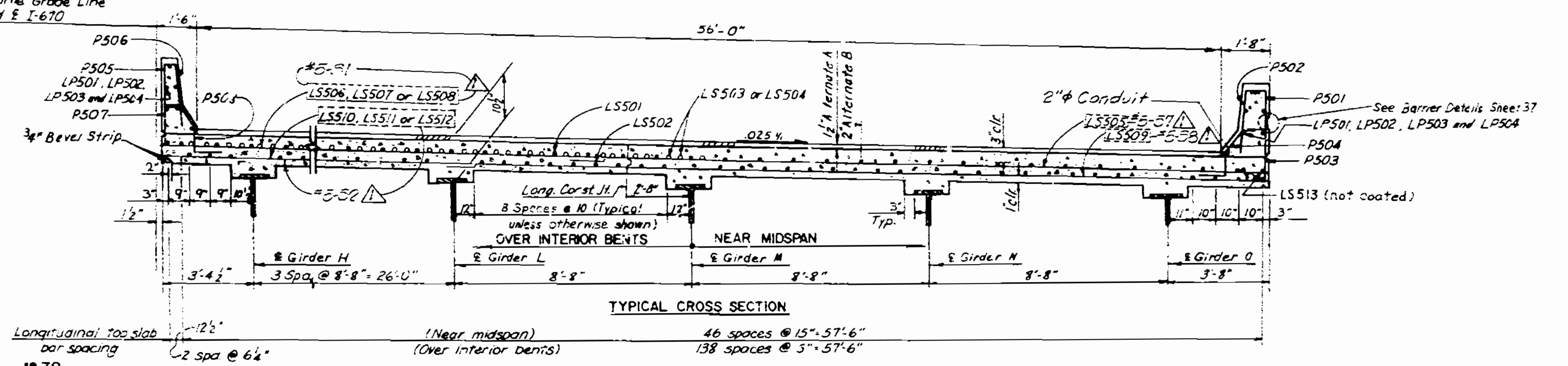
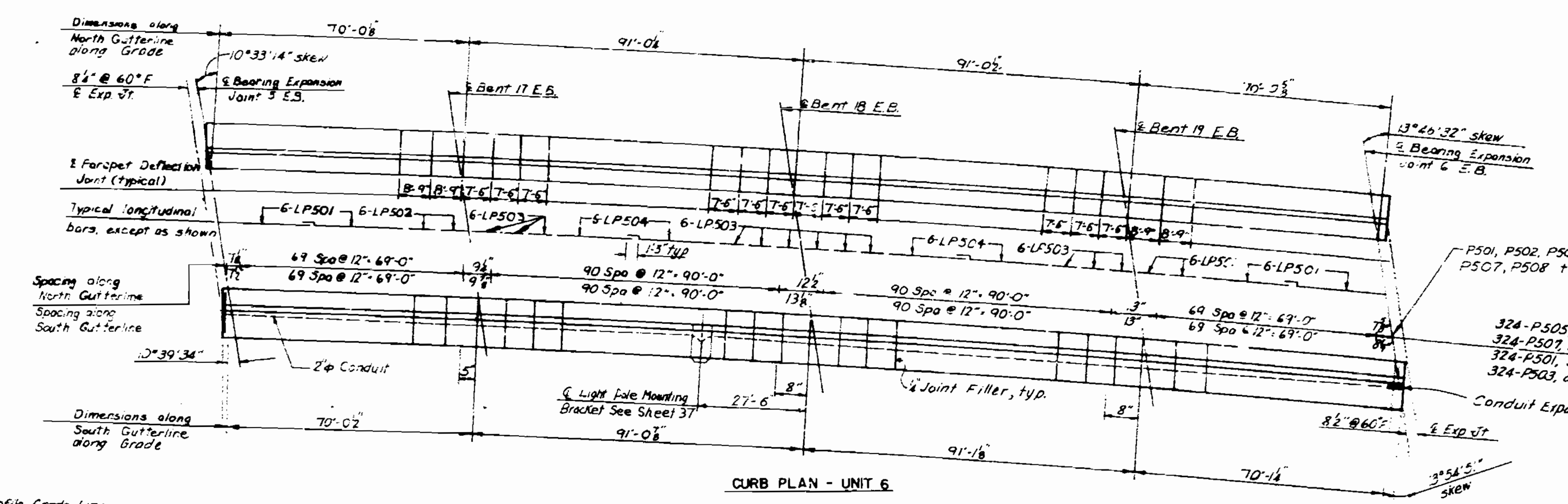
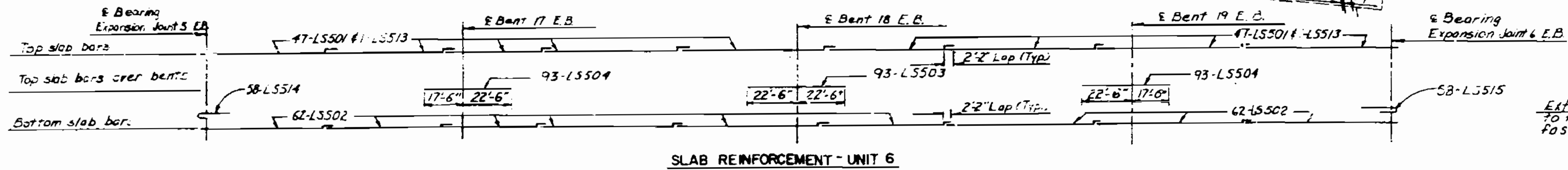
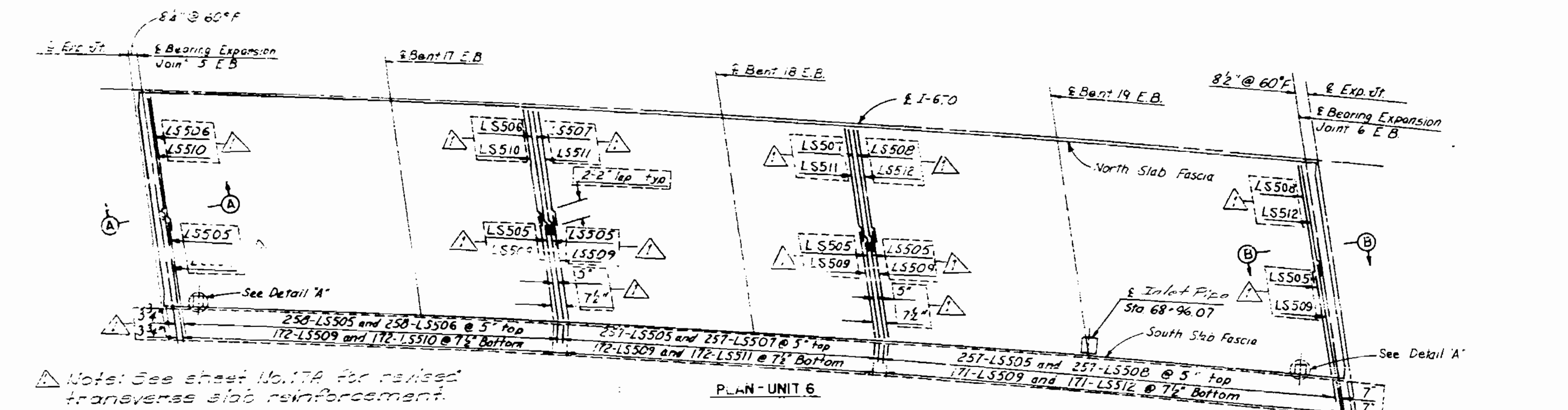
Sheet No. 16 of 72. Revised 3/22/84

JACKSON COUNTY

A-3136

SLAB PLAN
UNIT 6 WESTBOUND

PER. NO.	DATE	BY	NO.	NO.	NO.
1				60	



Longitudinal Top slab bar spacing: 2 spa @ 6 1/2"
 (Near midspan) 46 spaces @ 15'-57'-6"
 (Over interior bents) 138 spaces @ 5'-57'-6"

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 17 of 72. Revised 3/28/84

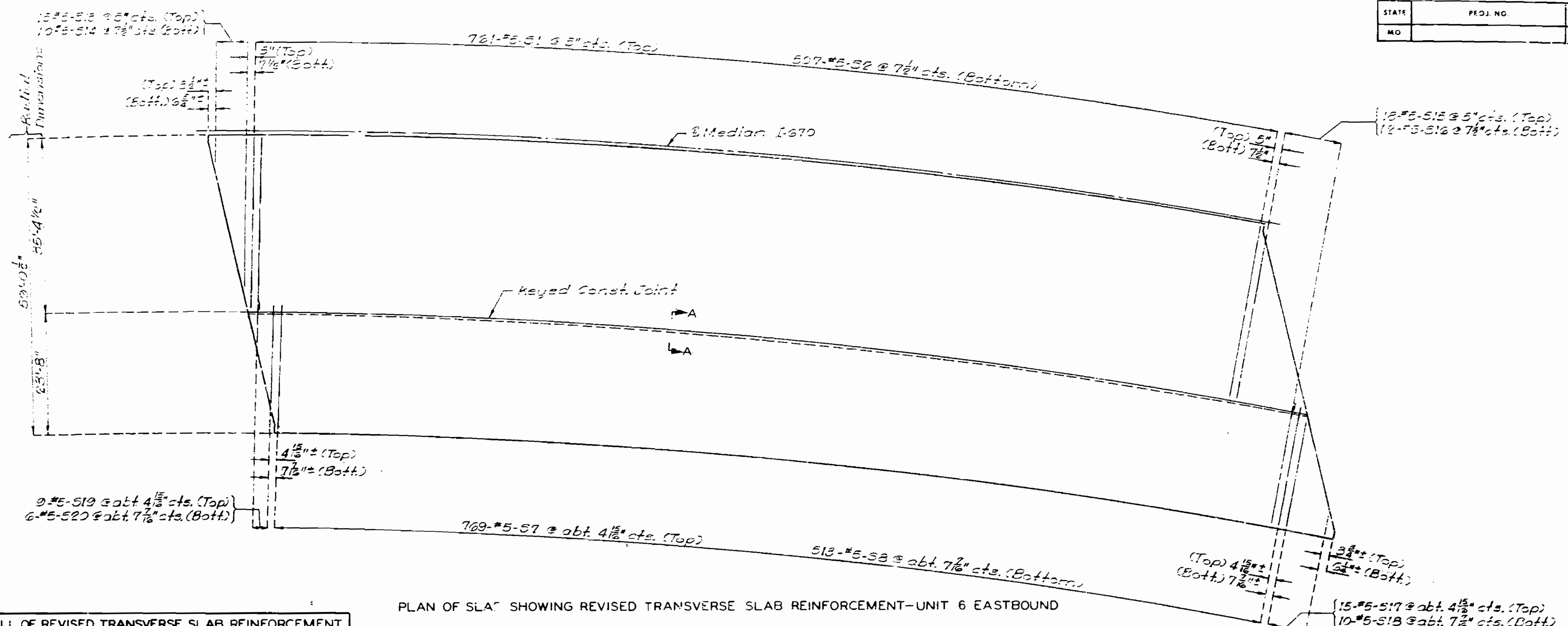
JACKSON COUNTY

A-3136

60

DETAILED 10 79
 CHECKED 10 79

STATE	PROJ. NO.	SHEET NO.
MO		

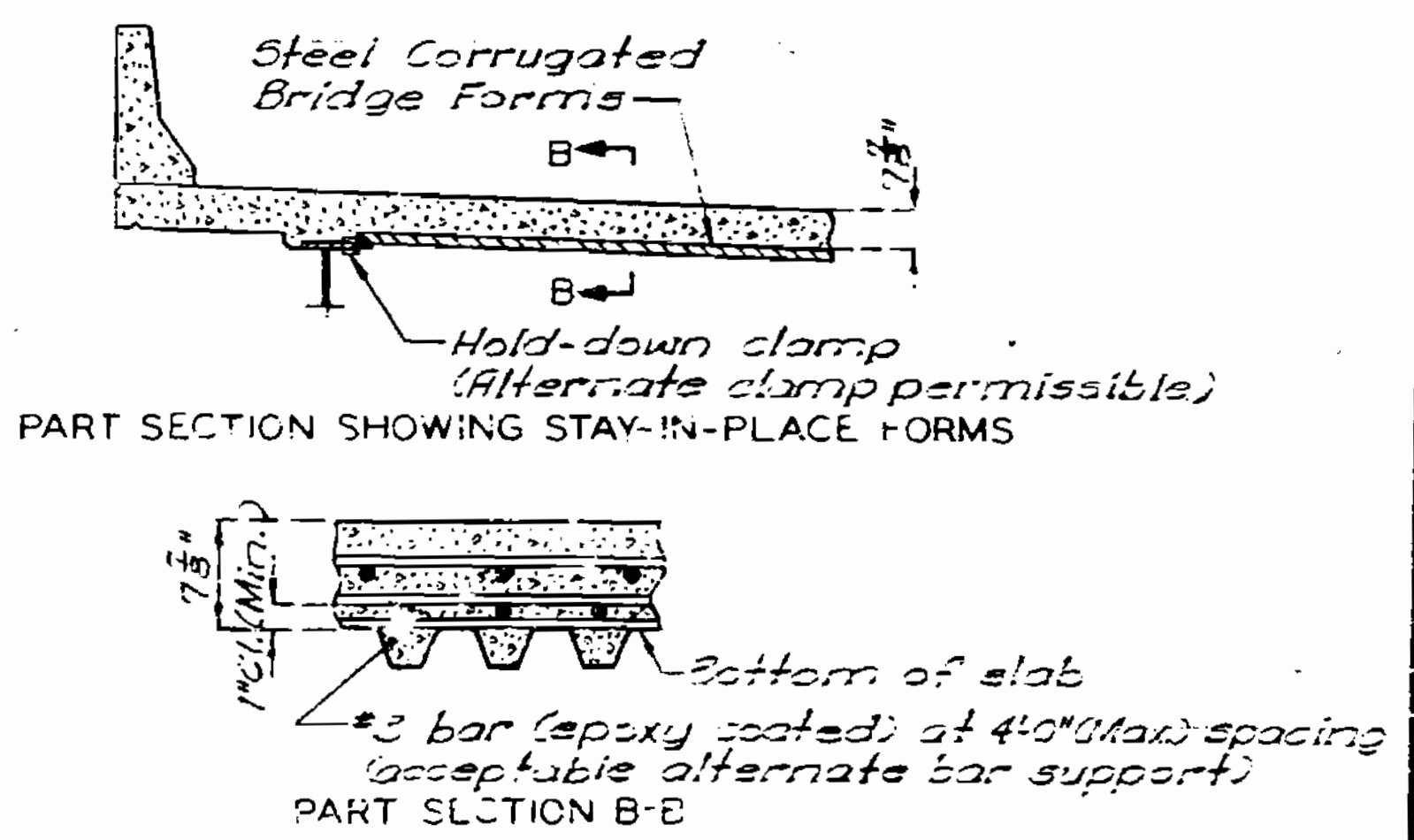
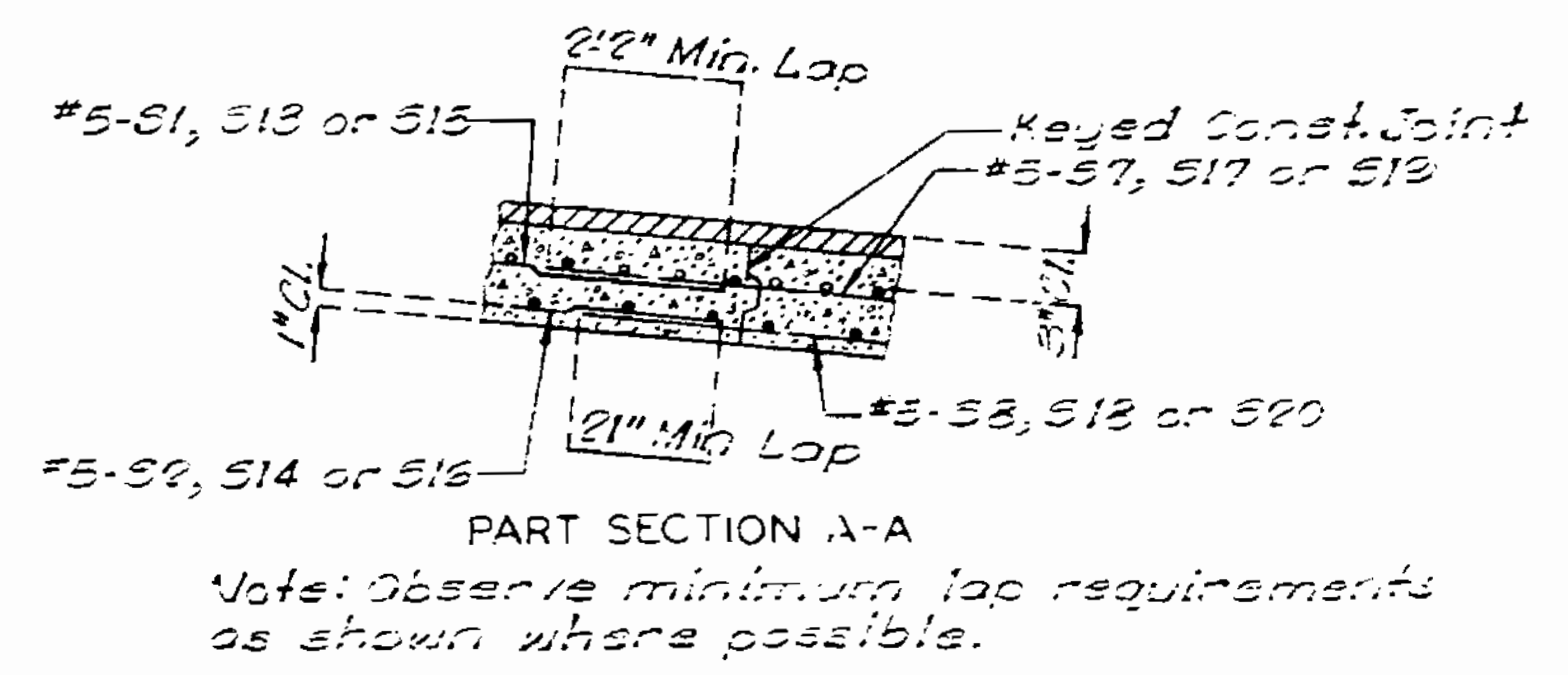


PLAN OF SLAB SHOWING REVISED TRANSVERSE SLAB REINFORCEMENT-UNIT 6 EASTBOUND

BILL OF REVISED TRANSVERSE SLAB REINFORCEMENT UNIT 6 EASTBOUND

NO.	SIZE	MARK	(E)	SHAPE	(V)	NO. EACH	LENGTH	WEIGHT
761	#5	51	E	Str.	—	—	35.1"	27,846
507	#5	52	—	Str.	—	—	35.1"	18,552
769	#5	57	E	Str.	—	—	25.10"	20,720
513	#5	58	—	Str.	—	—	25.5"	13,599
5	#5	513	E	Str.	V	1	2.6"	
Incr = 2.2 1/2"							33.5"	280
10	#5	514	—	Str.	V	1	3.10"	
Incr = 3.4"							33.10"	196
18	#5	515	E	Str.	V	1	3.10"	
Incr = 20"							32.2"	337
12	#5	516	—	Str.	V	1	5.10"	
Incr = 2.6"							32.2"	235
15	#5	517	E	Str.	V	1	2.6"	
Incr = 20"							25.10"	222
10	#5	518	—	Str.	V	1	3.4"	
Incr = 2.6"							25.10"	152
9	#5	519	E	Str.	V	1	3.0"	
Incr = 2.8 1/2"							22.3"	130
6	#5	520	—	Str.	V	1	3.7"	
Incr = 3.4"							20.3"	75

Note:
 E = Epoxy coated reinforcement.
 V = Bar dimensions vary in equal increments between dimensions shown on this line and the following line.
 No. Each = Number of bars of each length.
 Total Weight of Plain Reinforcement is 32,810.
 Total Weight of Epoxy Coated Reinforcement is 49,540.



REVISED TRANSVERSE SLAB REINFORCEMENT UNIT 6 EASTBOUND

69

DETAILED Aug 19 84
 CHECKED Aug 19 84

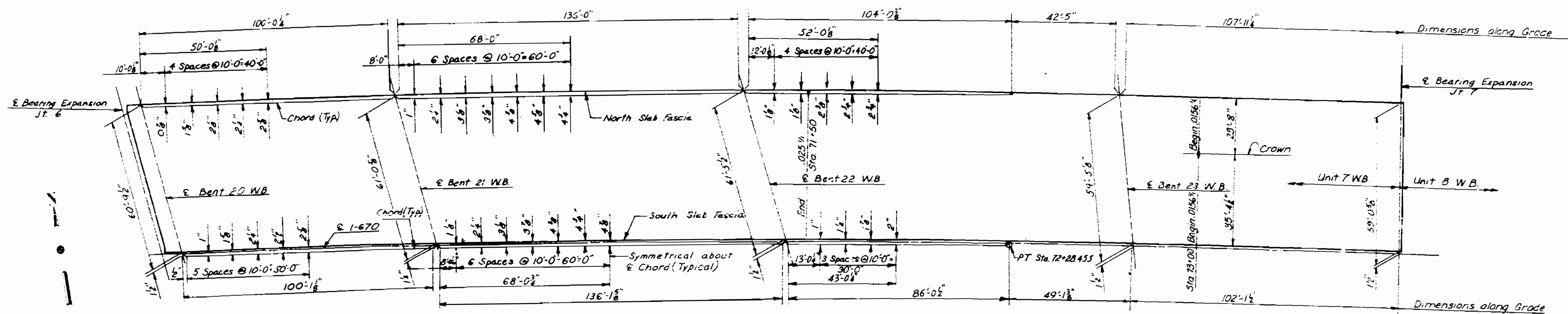
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 17A of 72 Revised 8/28/84

JACKSON COUNTY

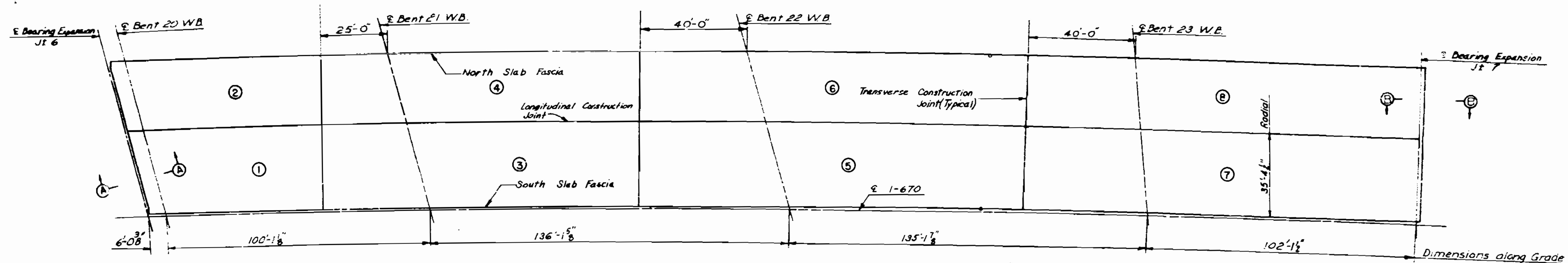
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		88	23	



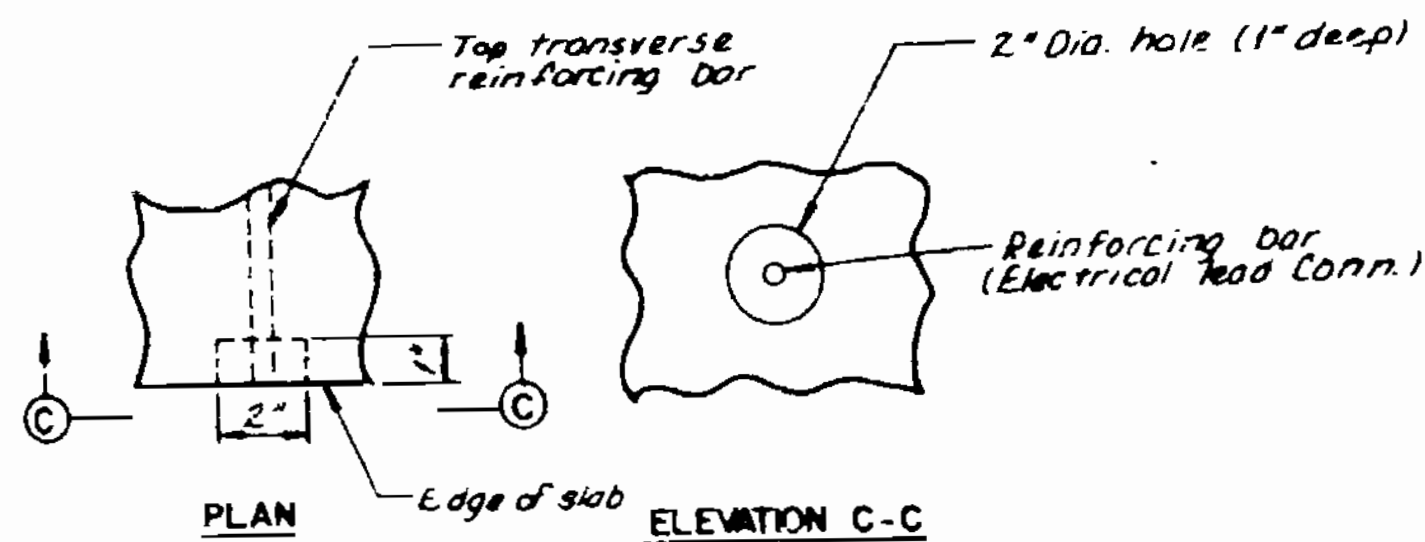
SLAB FASCIA OFFSETS-UNIT 7

Note:
See Sheet 12 for details of longitudinal and transverse slab construction joint.

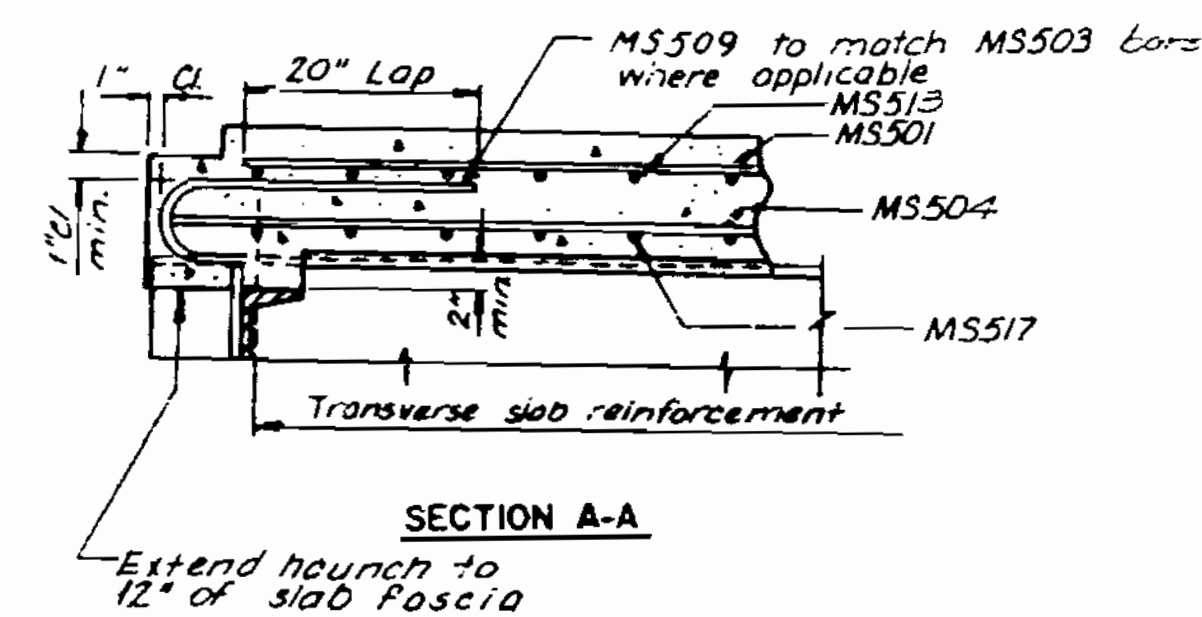


POURING SEQUENCE-UNIT 7

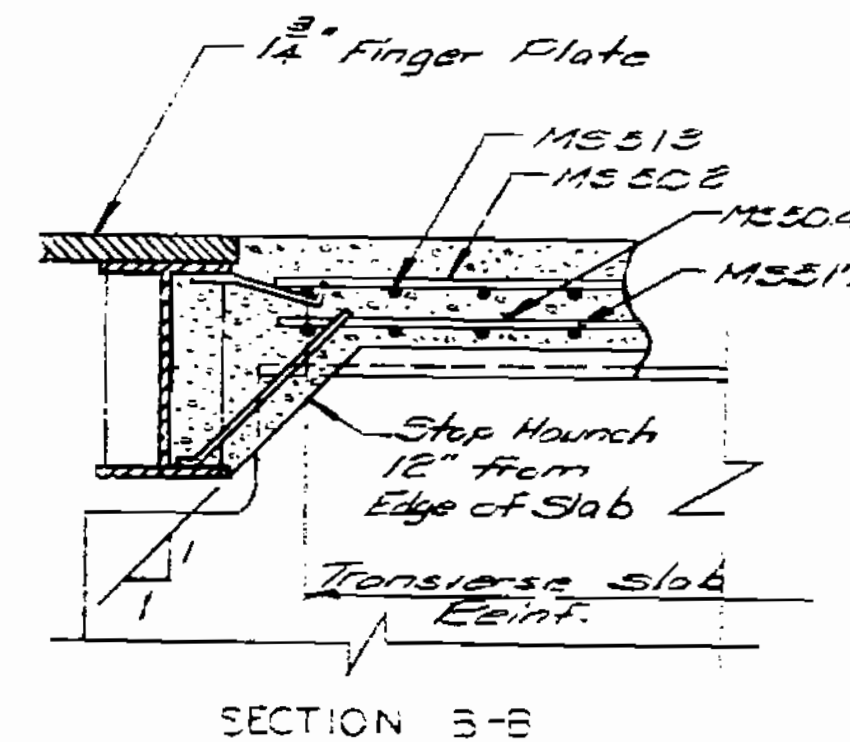
Use same length as other transverse bars and shift bar to edge of slab.
Notes:
Two electrical lead connections required. Actual location to be designated by the Engineer as part of the test system.



DETAIL 'A'



SECTION A-A



SECTION B-B

BASIC SEQUENCE	SEQUENCE OF POURS							
	DIRECTION							
	1	3	5	7	2	4	6	8
Alternate "A" Pours	End to 3	1 to 5	3 to 7	5 to End	End to 4	2 to 6	4 to 8	6 to End
Alternate "B" Pours	End to 5	1 + 3	3 to 7	5 to End	End to 6	2 + 4	4 to 8	6 to End
Alternate "C" Pours	End to 5	1 + 3	5 + 7	3 to End	End to 6	2 + 4	6 + 8	4 to End
	1 + 3 + 5 + 7				2 + 4 + 6 + 8			
	End to End				End to End			

Notes:

The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 54 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 32 cubic yards per hour.

Note: Pour 7 and 8 of Unit 6 to precede pour 1 and 2 of Unit 7.

SLAB PLAN UNIT 7 WESTBOUND

DETAILED 10 79
CHECKED 10 79

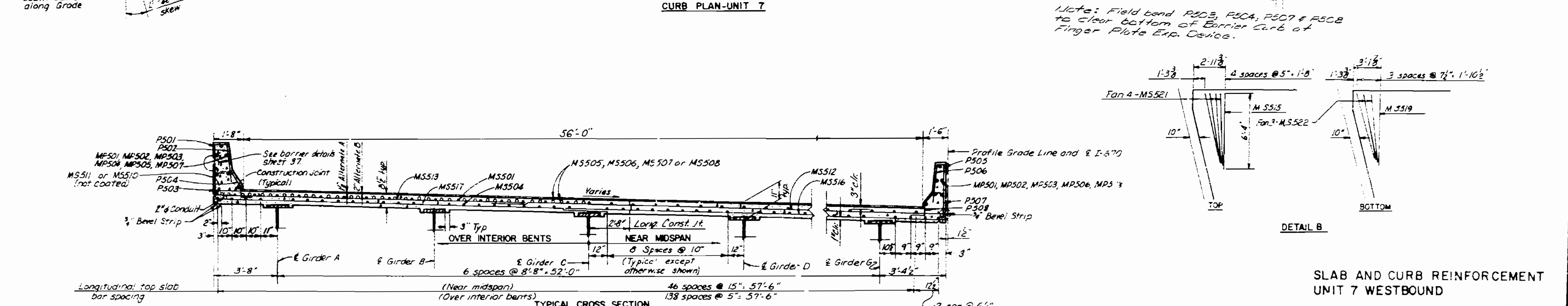
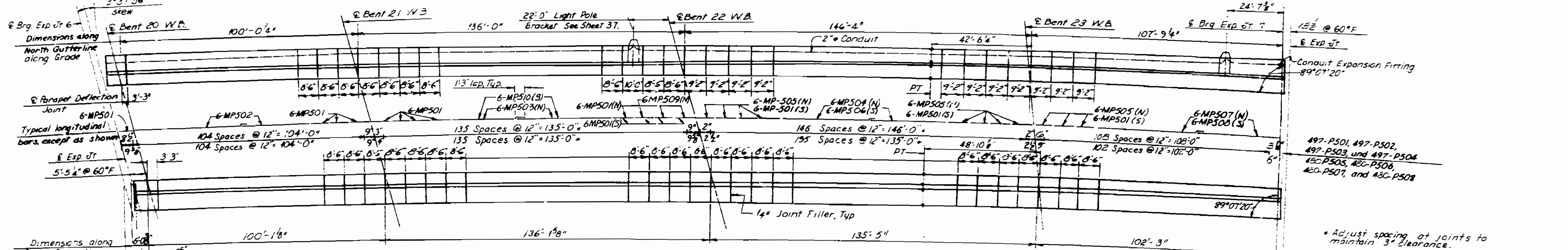
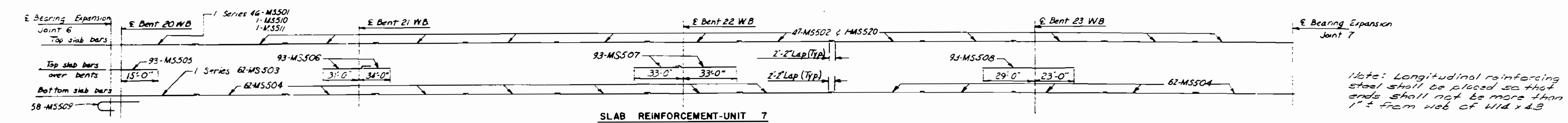
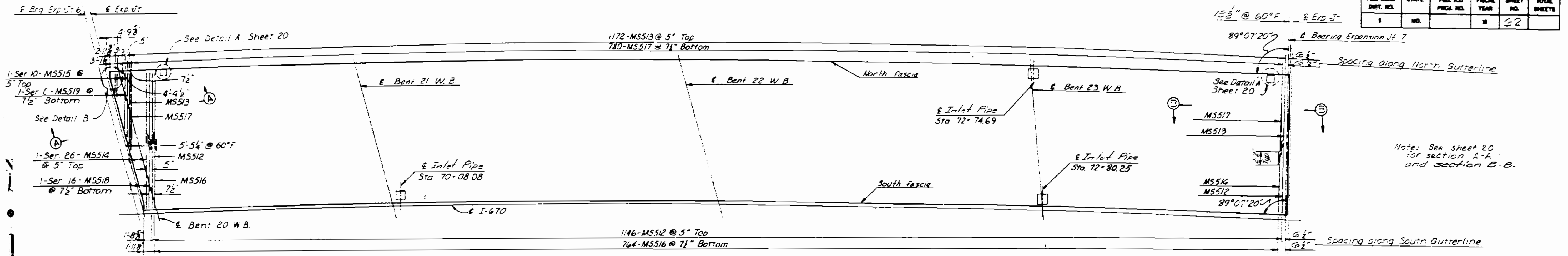
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 23 of 72.

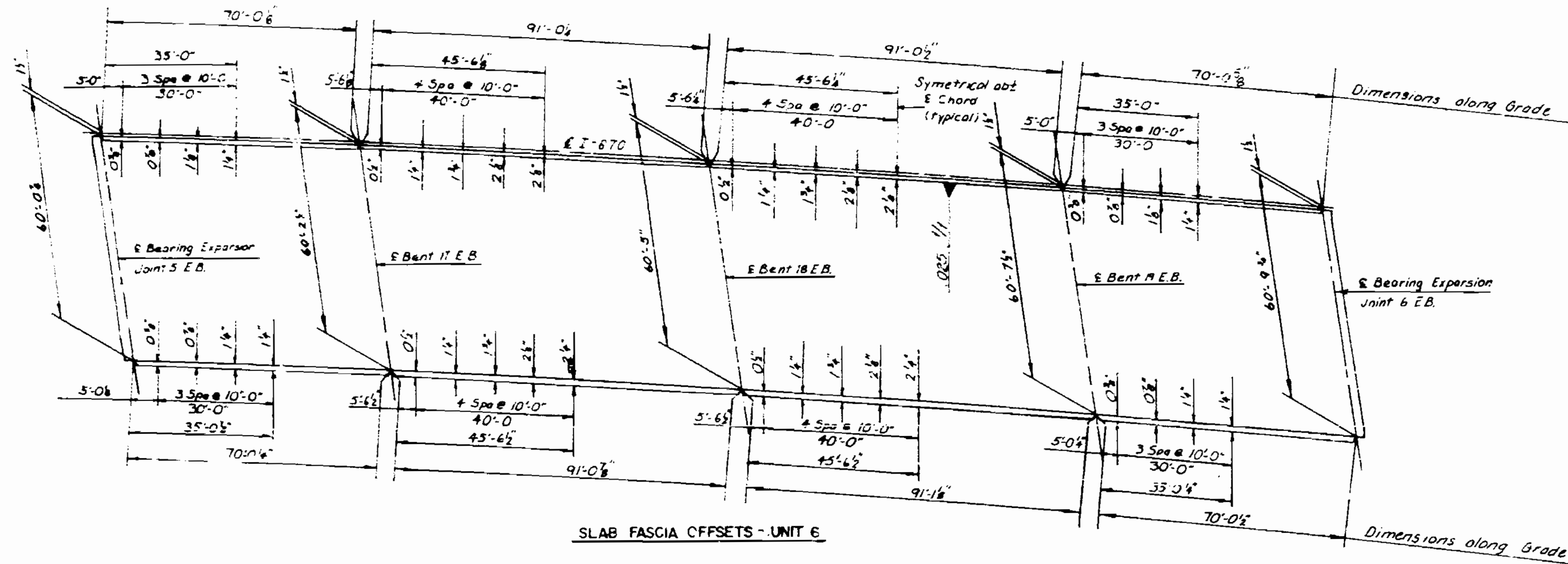
JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		8	62	

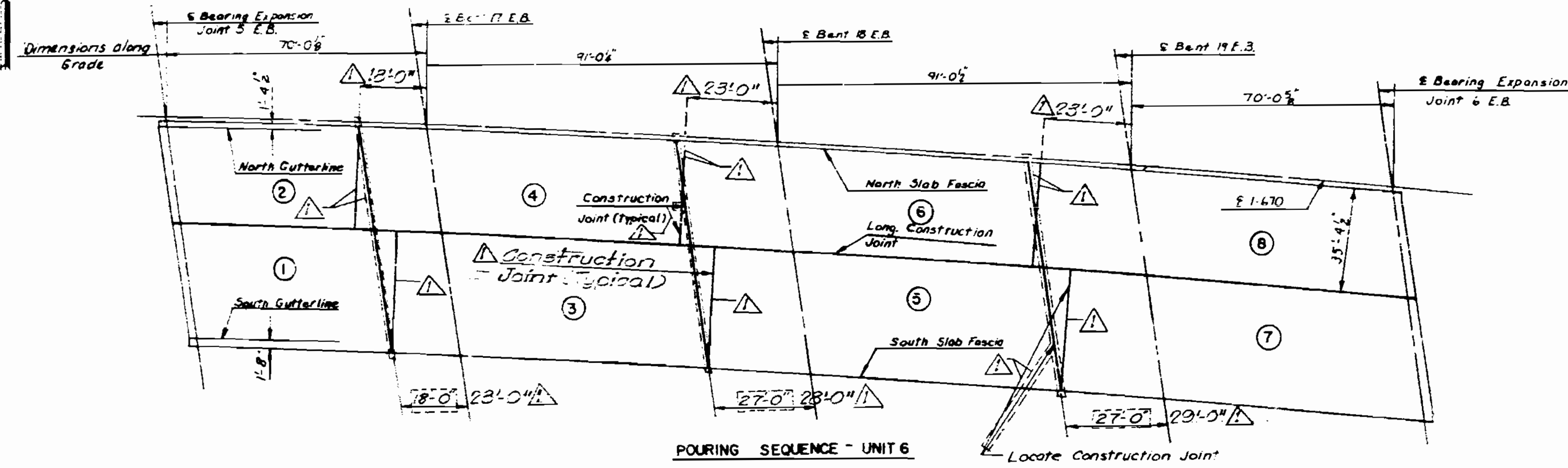


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.			61	



SEQUENCE	SEQUENCE OF POURS							
	DIRECTION							
BASIC	1	3	5	7	2	4	6	8
SEQUENCE	End to 3	1 To 5	3 To 7	5 To End	End To 4	2 To 6	4 To 8	6 To End
Alternate "A"	1 + 3	5	7	2 + 4	6	8		
Pours	End to 5	3 To 7	5 To End	End to 6	4 To 8	6 To End		
Alternate "B"	1 + 3	5 + 7	2 + 4	6 + 8				
Pours	End to 5	3 To End	End to 6	4 To End				
Alternate "C"	1 + 3 + 5 + 7	2 + 4 + 6 + 8						
Pours	End to End	End to End						

Note:
The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 37 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 25 cubic yards per hour.



Note: Place transverse construction joints radially at the dimensions shown.

Note:
See Sheet 12 for detail of longitudinal and transverse slab construction joint.

DETAILED 10 79
CHECKED 10 79

Note: This drawing is not to scale. Follow dimensions.

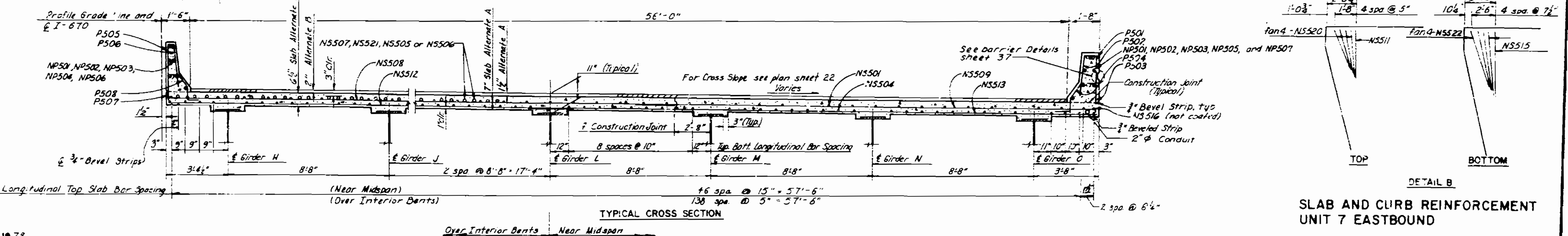
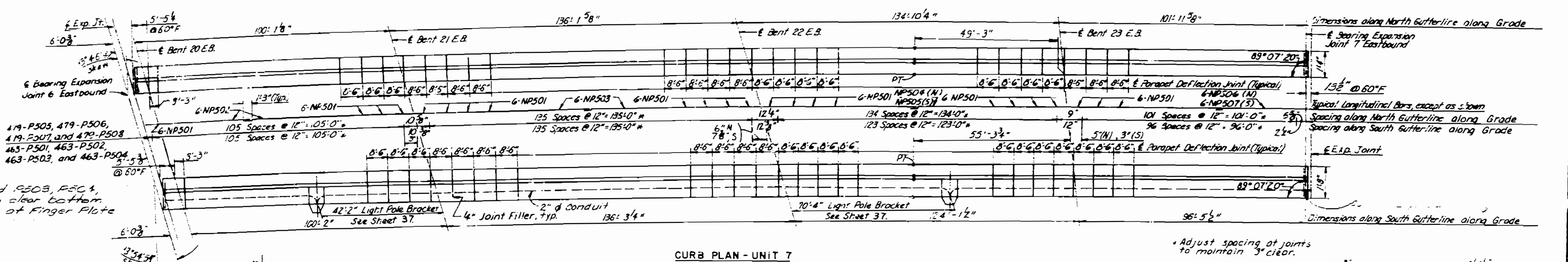
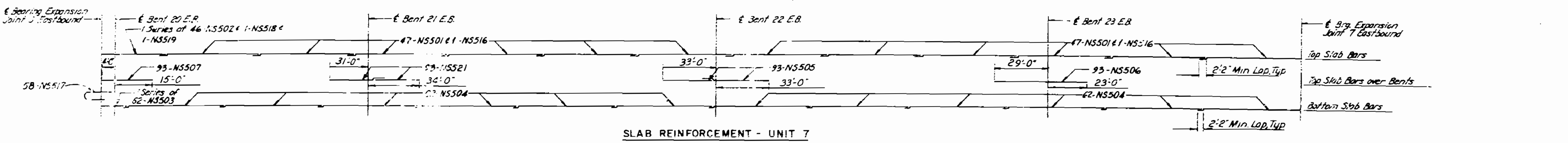
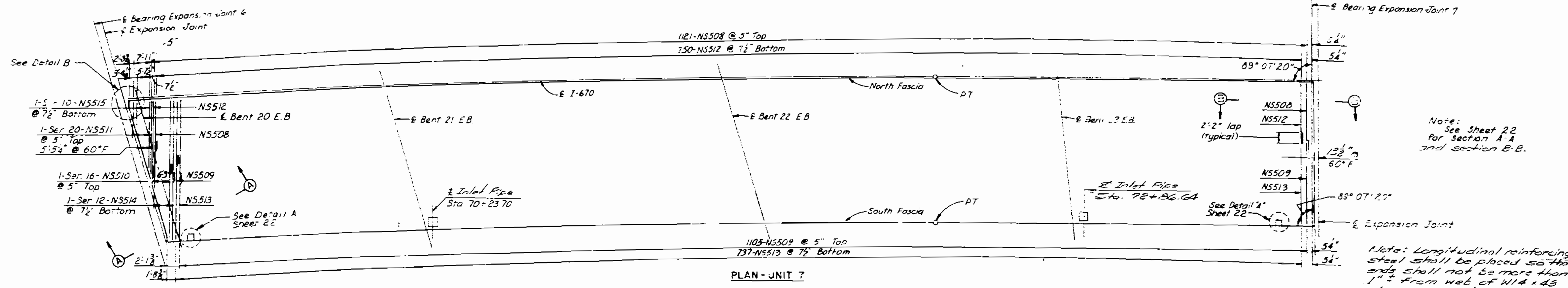
Sheet No. 18 of 72. Revised 3/28/84

JACKSON COUNTY

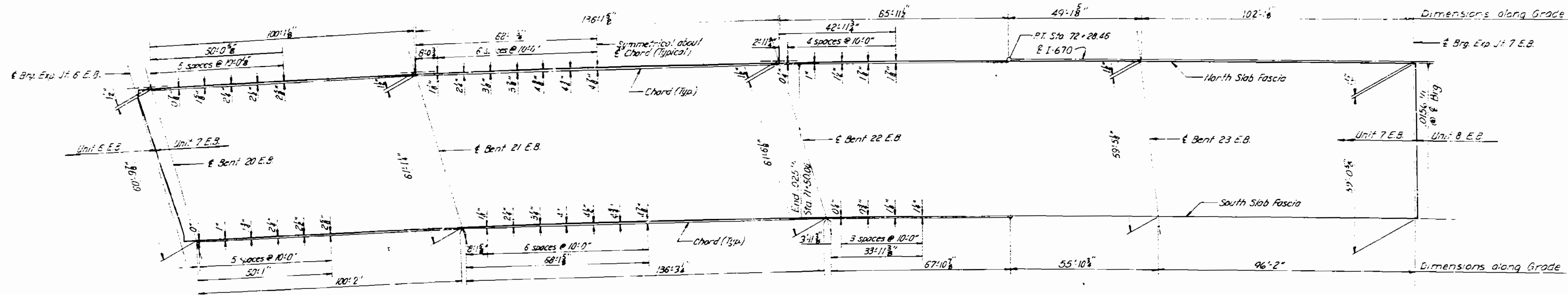
SLAB PLAN
UNIT 6 EASTBOUND

A-3136

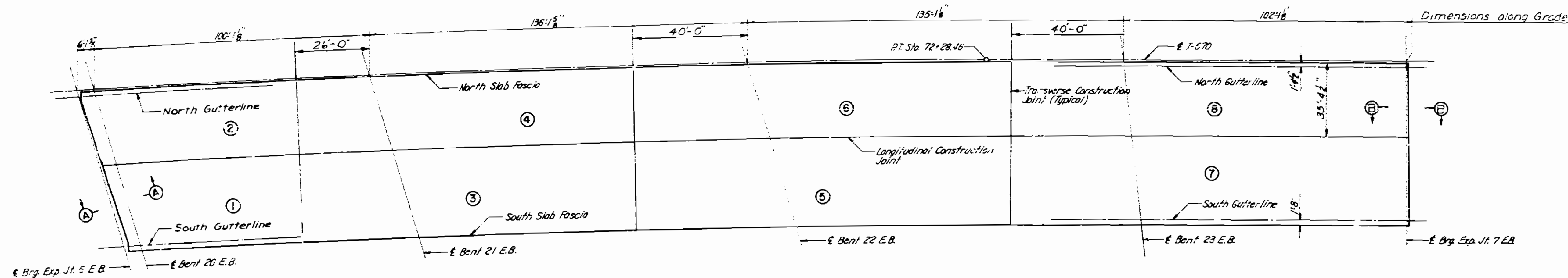
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		7	64	



FED. PROJ. DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		0	25	

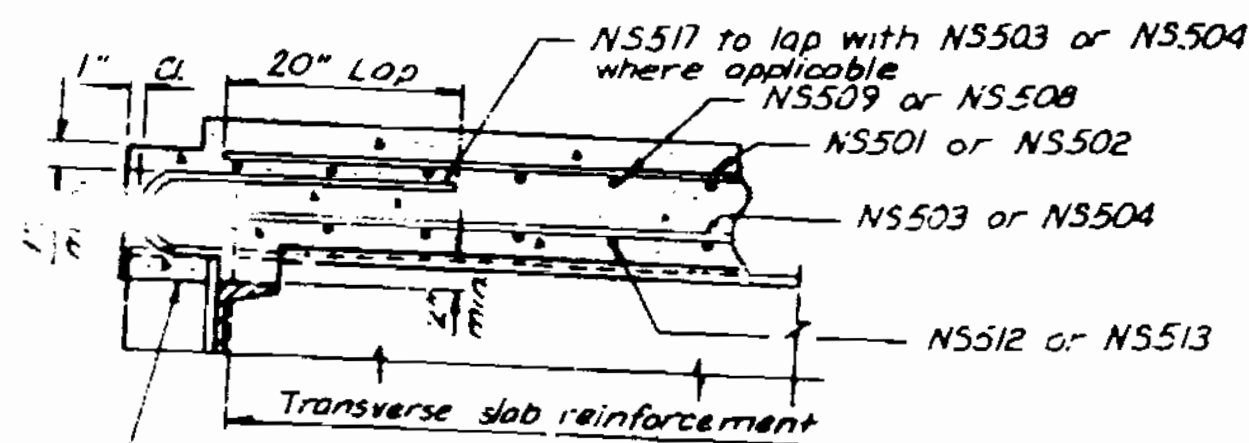


SLAB FASCIA OFFSETS - UNIT 7



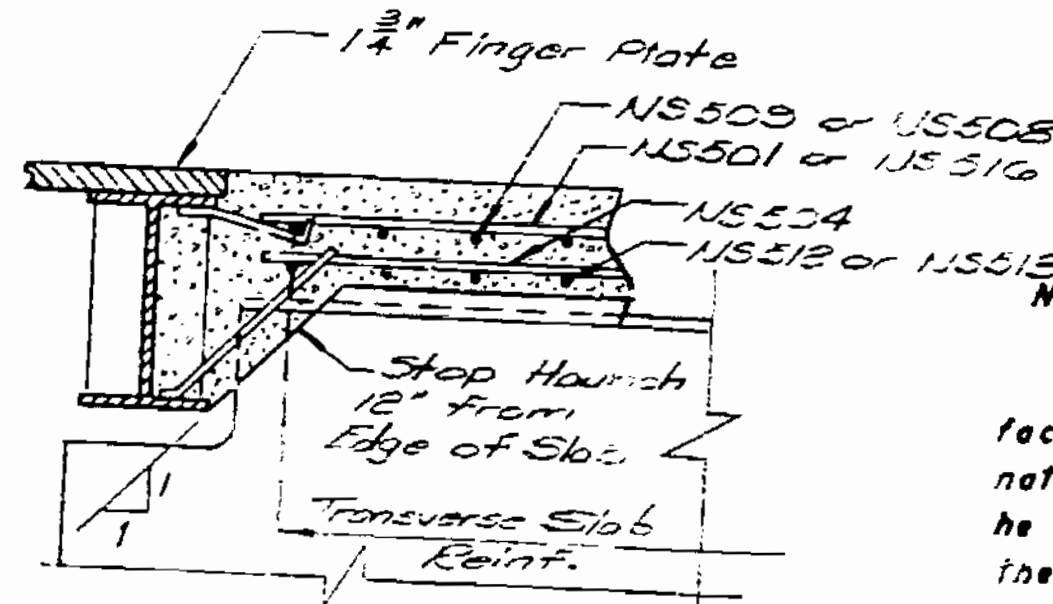
POURING SEQUENCE - UNIT 7

2'-0" min.
Use same length as other transverse bars and shift bar to edge of
Notes:
Two electrical lead connections required. Actual location to be designated by the Engineer as part of the test system.



SECTION A-A

Note:
See Sheet 12 for detail of longitudinal and transverse slab construction joint.

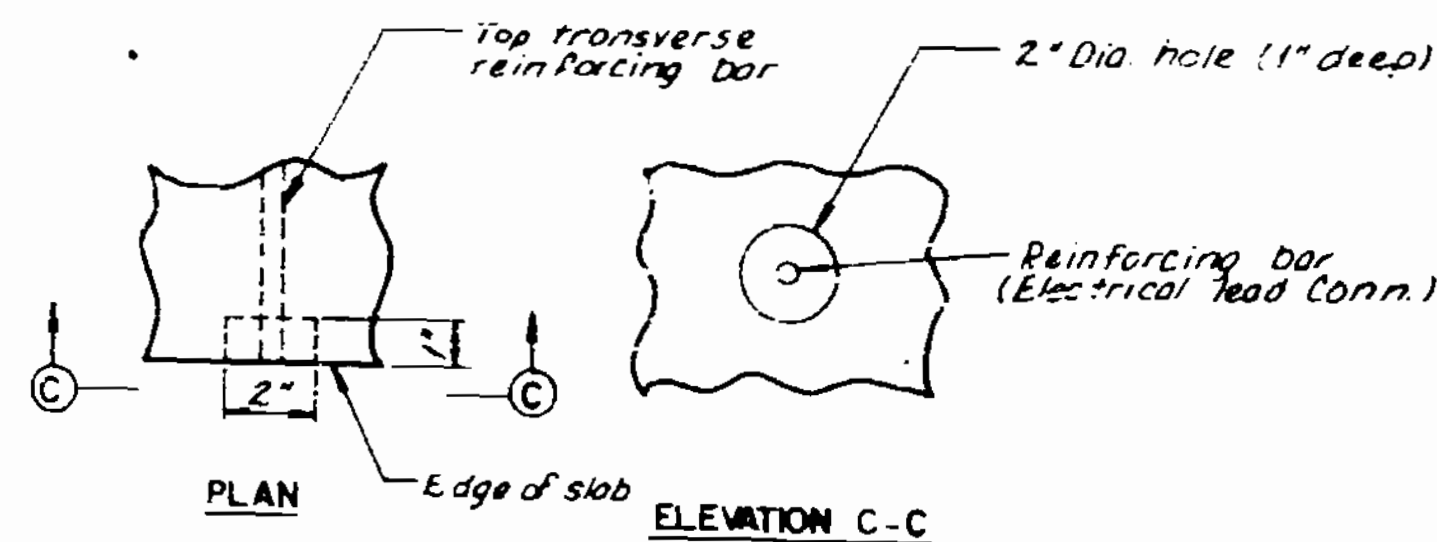


SECTION B-B

BASIC SEQUENCE	SEQUENCE OF POURS							
	DIRECTION							
	1	3	5	7	2	4	6	8
Alternate "A"	End to 3	1 to 5	3 to 7	5 to End	End to 4	2 to 6	4 to 8	6 to End
Pours	1 + 3	5	7	5	2 + 4	6	8	
Alternate "B"	End to 5	3 to 7	5 to End	End to 6	4 to 8	6 to End		
Pours	1 + 3	5 + 7	2 + 4	6 + 8				
Alternate "C"	End to 5	3 to End	End to 6	4 to End				
Pours	1 + 3 + 5 + 7	2 + 4 + 6 + 8	End to End	End to End				

Note:
Pour 7 and 8 of Unit 6 to precede Pour 1 and 2 of Unit 7.

Notes:
The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 52 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 31 cubic yards per hour.



DETAIL "A"

DETAILED 10 79
CHECKED 0 79

Note: This drawing is not to scale. Follow dimensions.

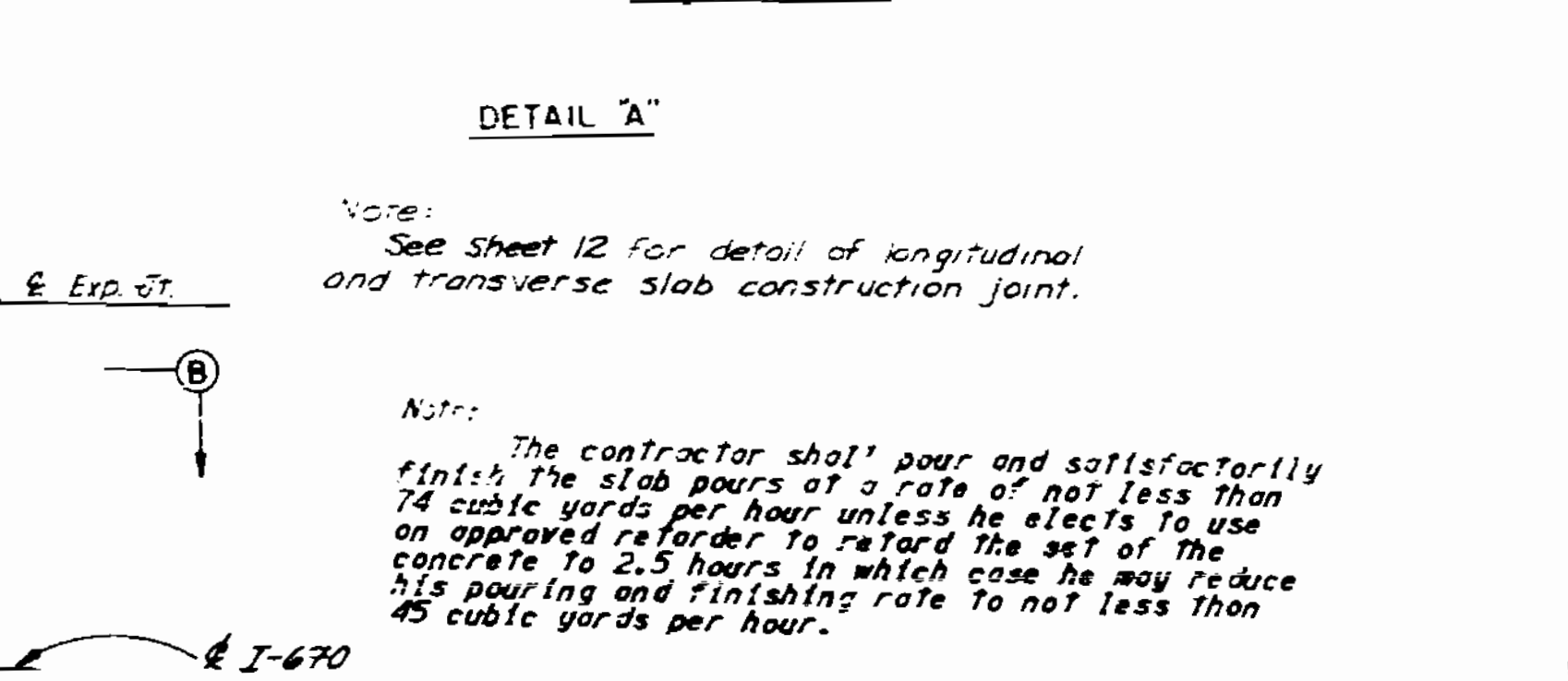
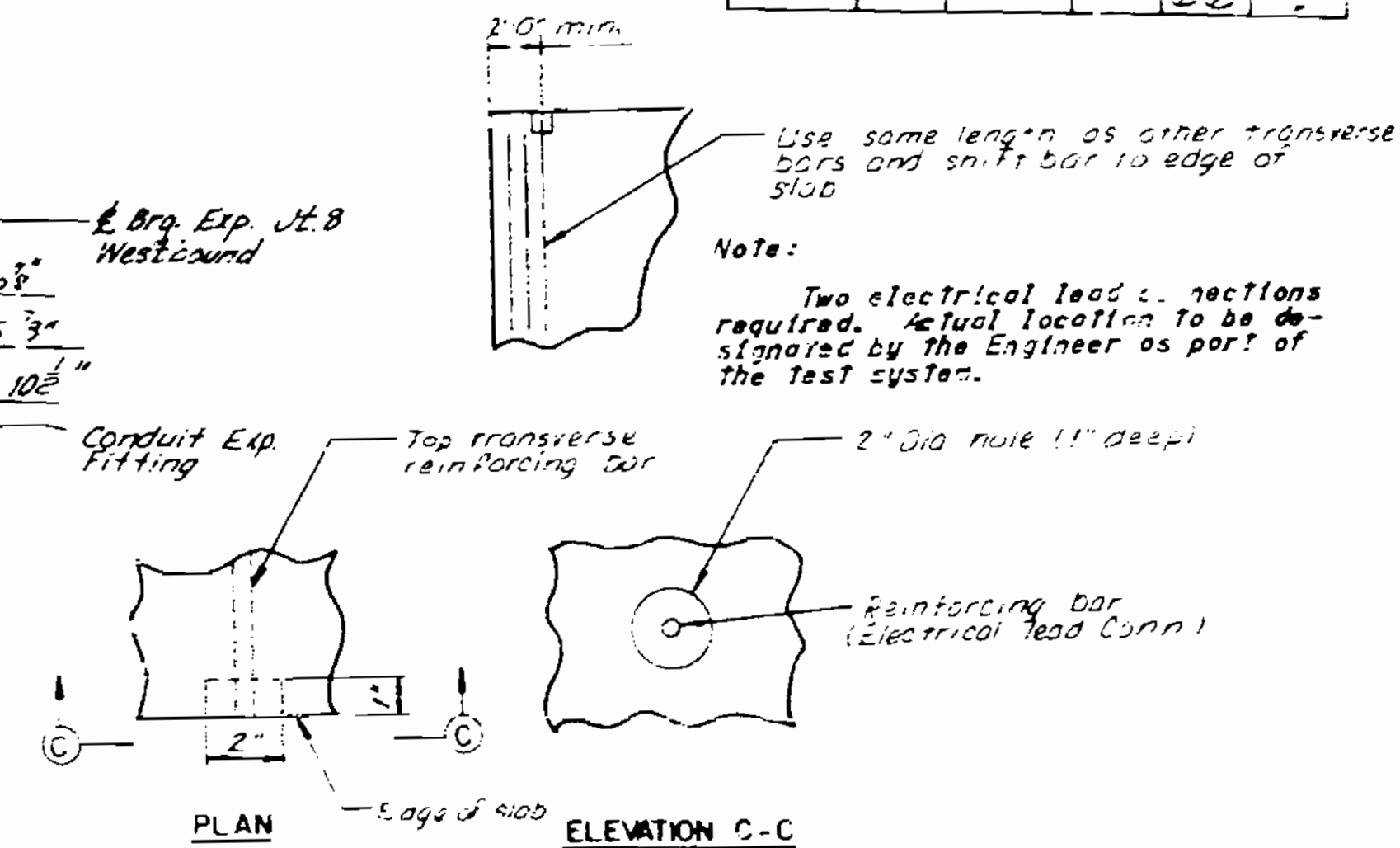
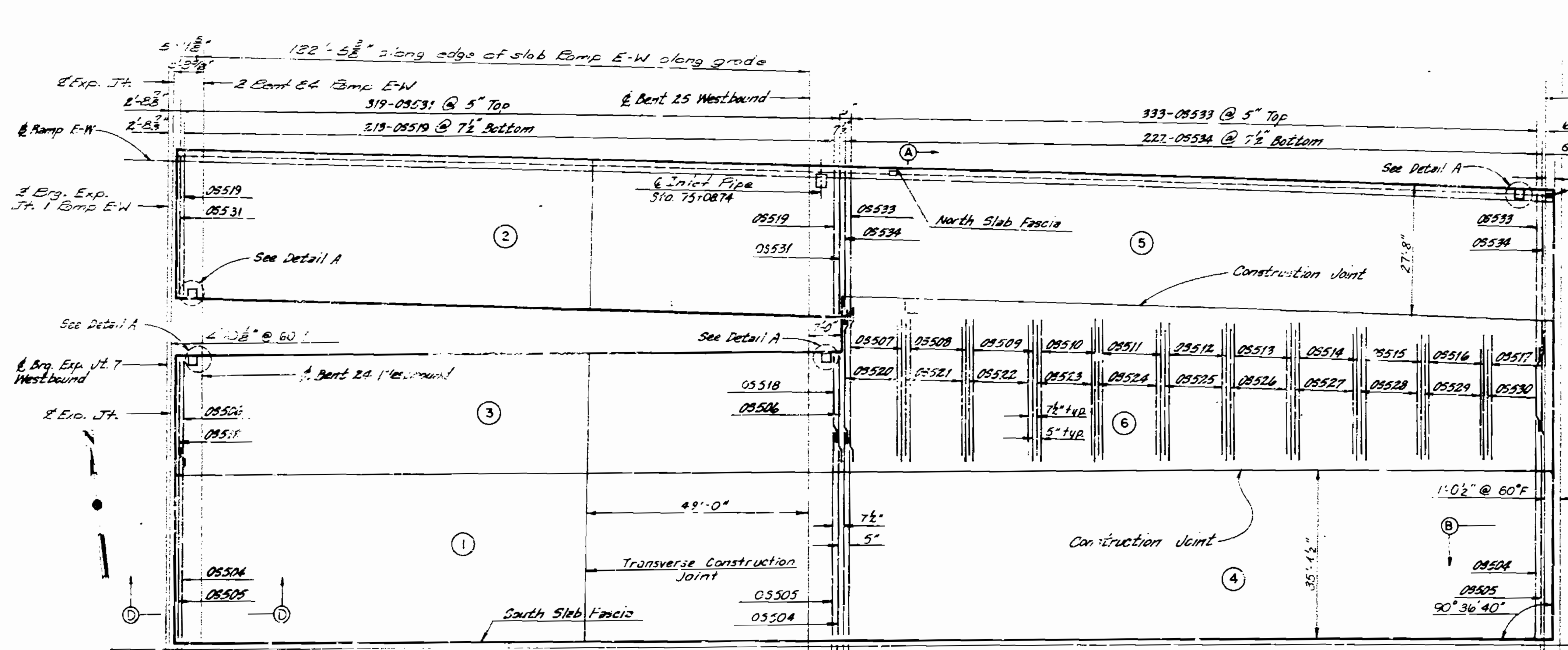
Sheet No. 22 of 72.

SLAB PLAN
UNIT 7 EASTBOUND

JACKSON COUNTY

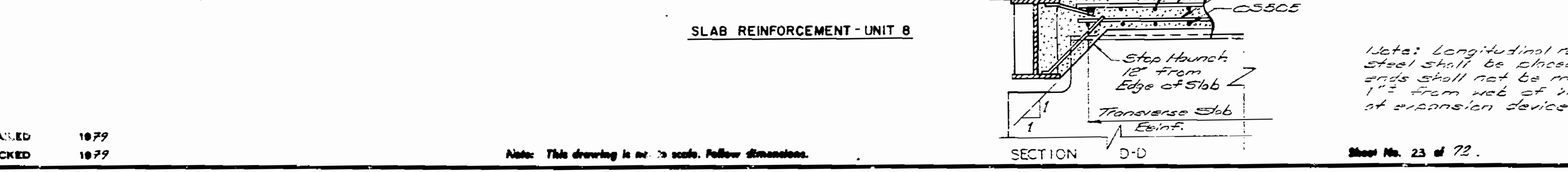
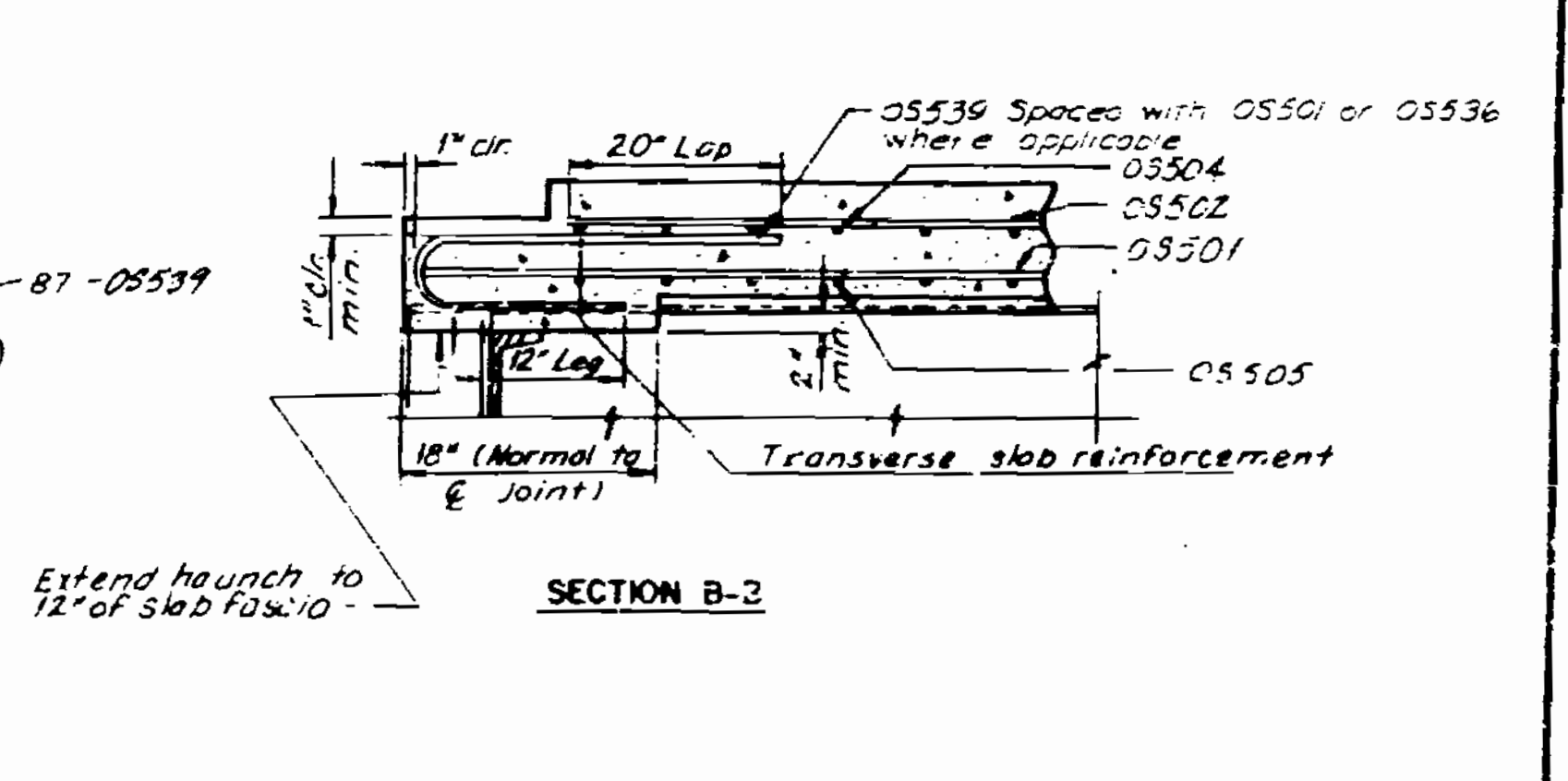
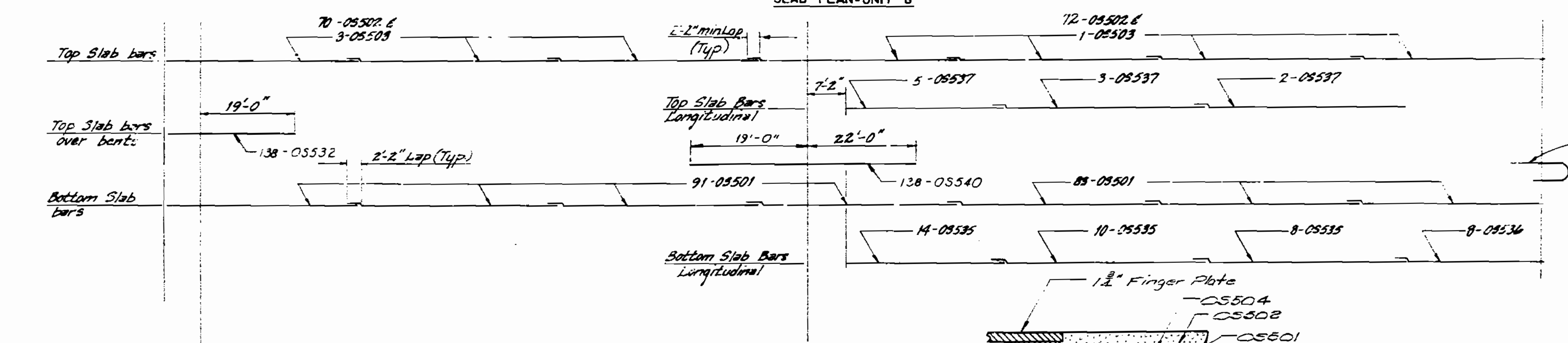
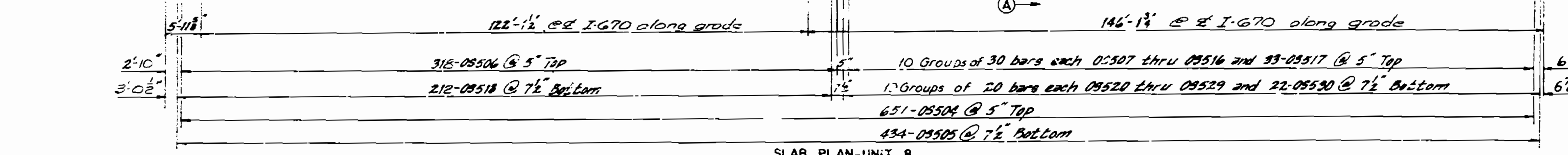
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		8	66	



SEQUENCE OF POURS	DIRECTION					
	1	4	3	6	2	5
Basic Sequence	End To 4	1 To End	End To 3	3 To End	End To 2	2 To End
Alternate "A"	1 + 4		3 + 6		2	5
Pours	End To End		End To End		End To End	
Alternate "B"	1 + 4		3 + 6		2 + 5	
Pours	End To End		End To End		End To End	

Note: Pour 7 of Unit 7 to precede Pour 1 of Unit 8.



Note: Longitudinal reinforcing steel shall be placed so that ends shall not be more than 1 1/2" from web of 2114 x 48 of expansion device

SLAB AND CURB REINFORCEMENT UNIT 8 WESTBOUND

DATE: 1079
CHECKED: 1079

Note: This drawing is not to scale. Follow dimensions.

SECTION D-D

Sheet No. 23 of 72.

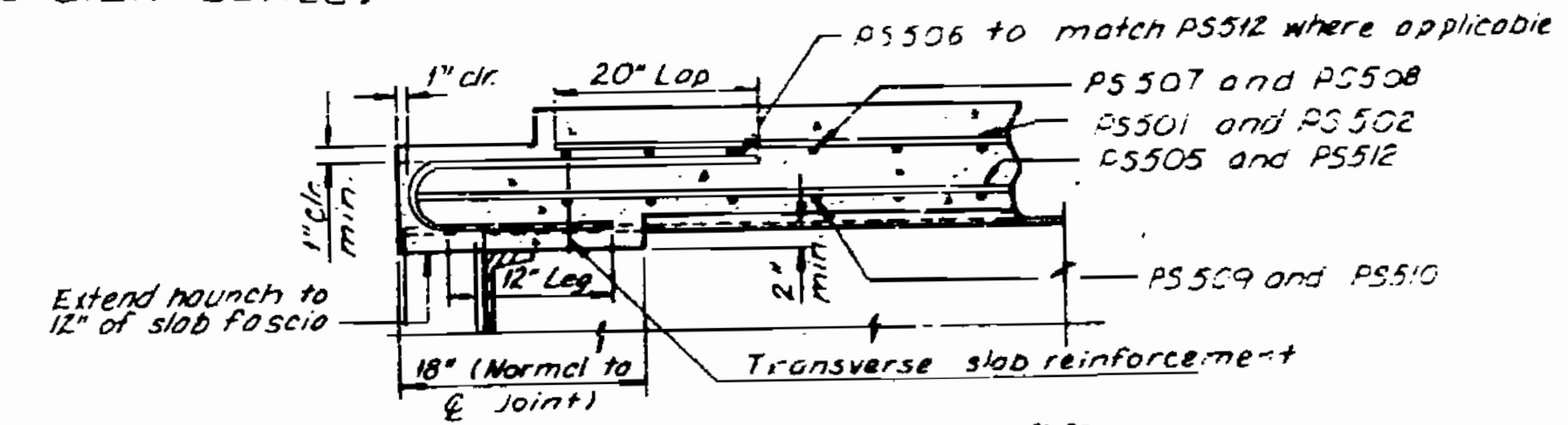
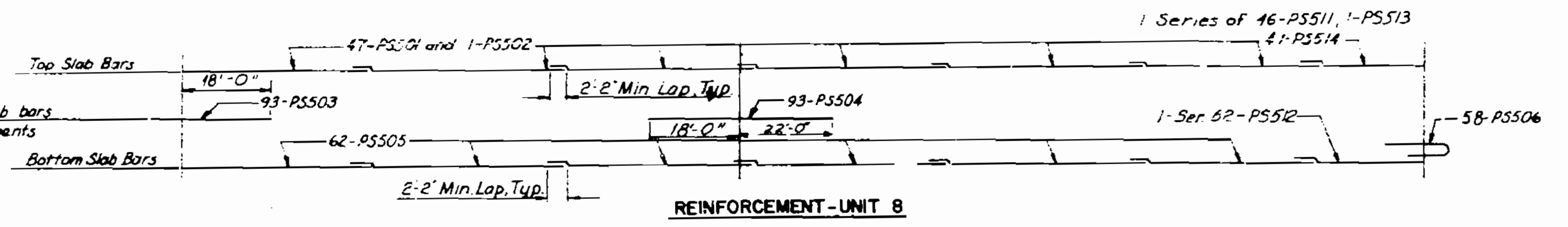
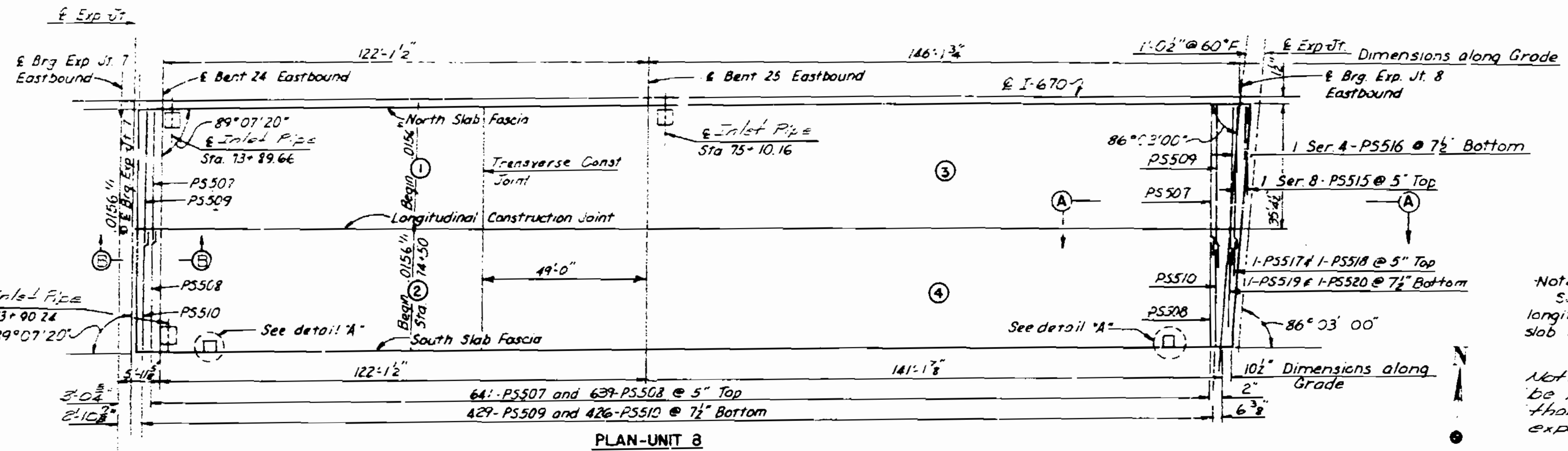
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		8	23	

Basic Sequence	SEQUENCE OF FOUR DIRECTIONS			
	1	3	2	4
Alternate "A" Pours	End To 3, 1 To End	End To 4, 2 To End	1 + 3	2 + 4
	End To End	End To End		

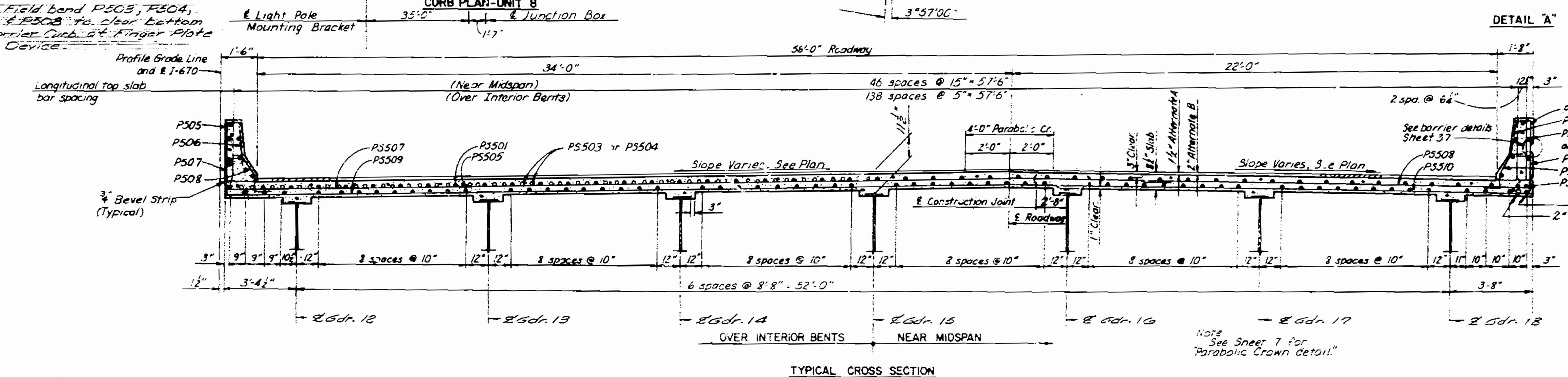
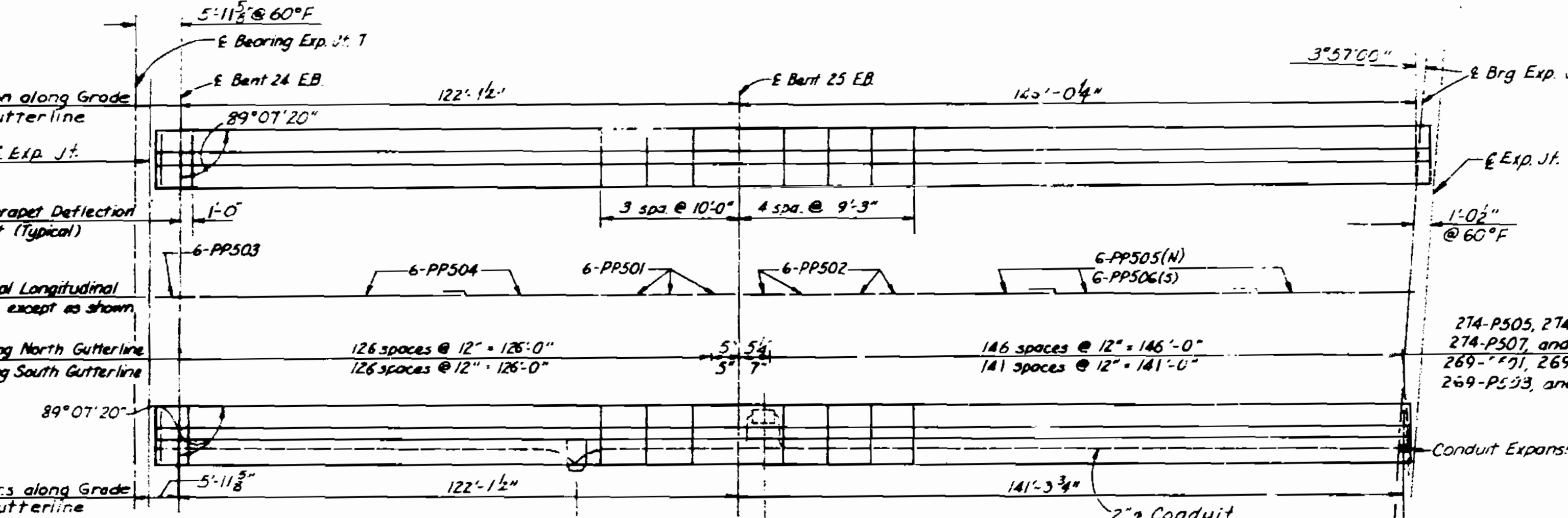
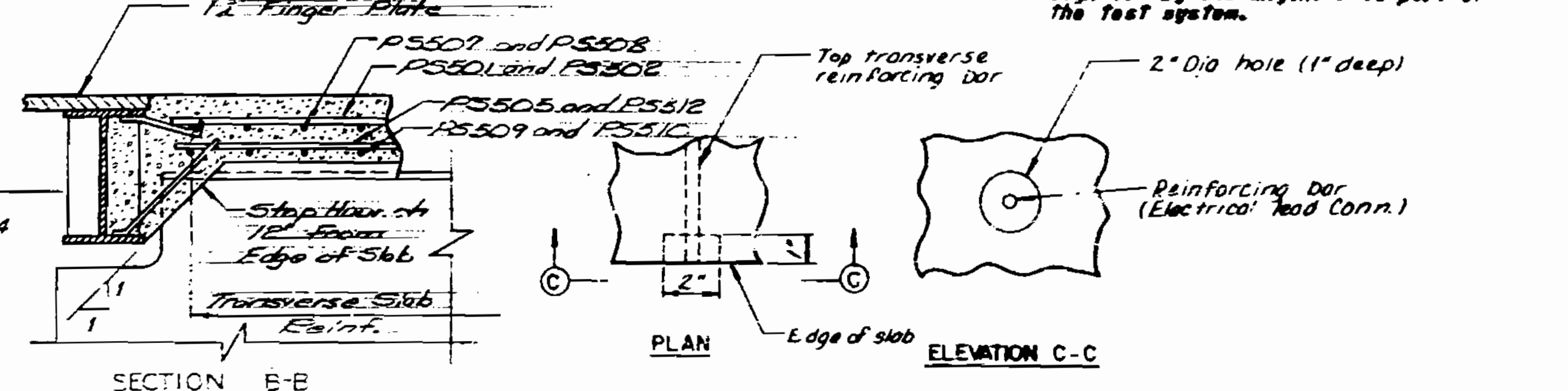
Note: See Sheet 12 for detail of longitudinal and transverse slab construction joint.

Note: Pour 8 of Unit 7 to precede Pour 1 of Unit 8. Pour 7 of Unit 7 to precede Pour 2 of Unit 8.

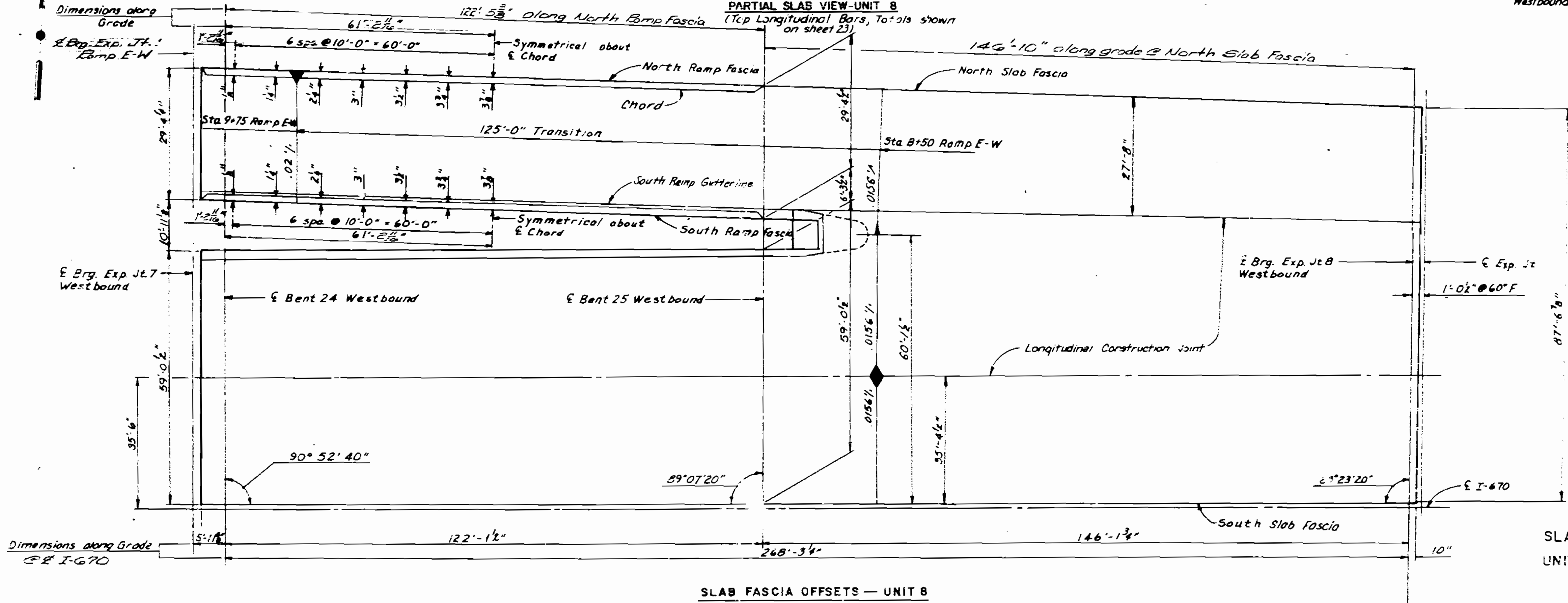
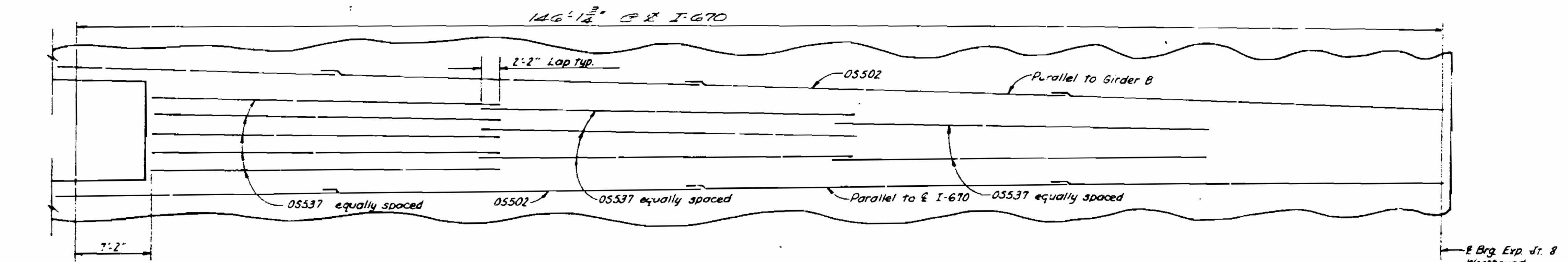
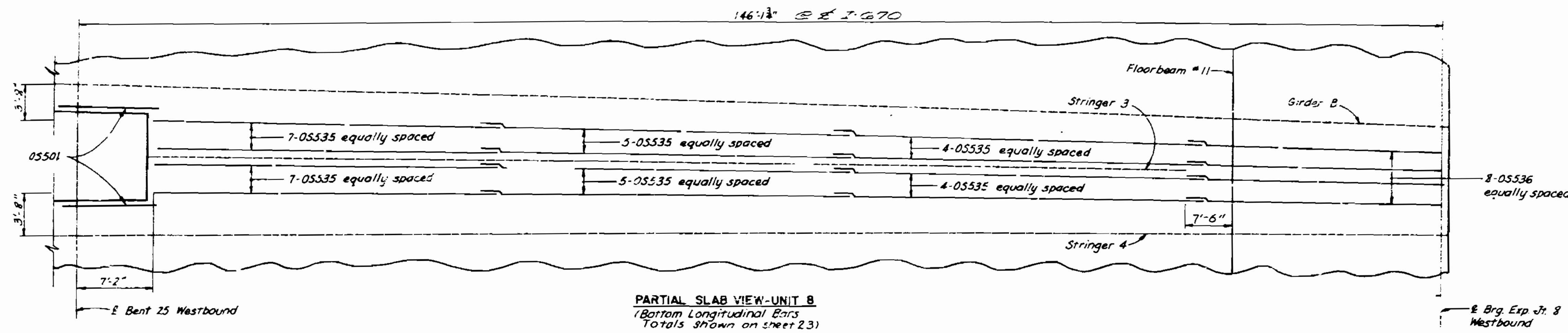
Note: Longitudinal reinforcing steel shall be placed so that ends shall not be more than 1" from web of W14 x 43 at expansion device.



The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 73 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 44 cubic yards per hour.



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		88	68	



SLAB PLAN
UNIT 8 WESTBOUND

DETAILED 10 79
CHECKED 10 79

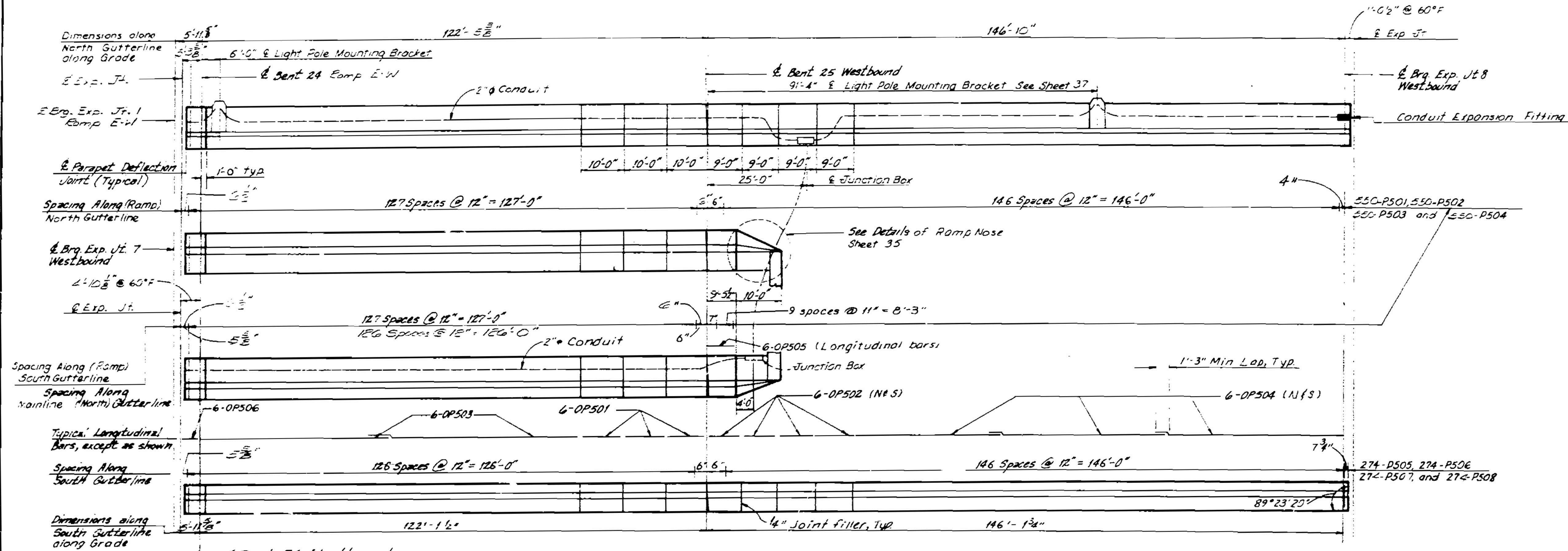
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 25 of 72.

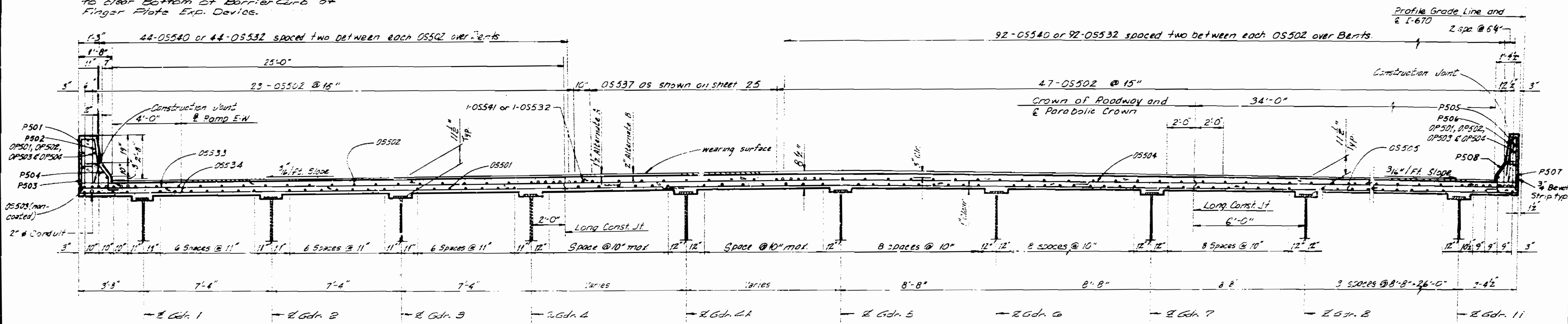
JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		8	67	



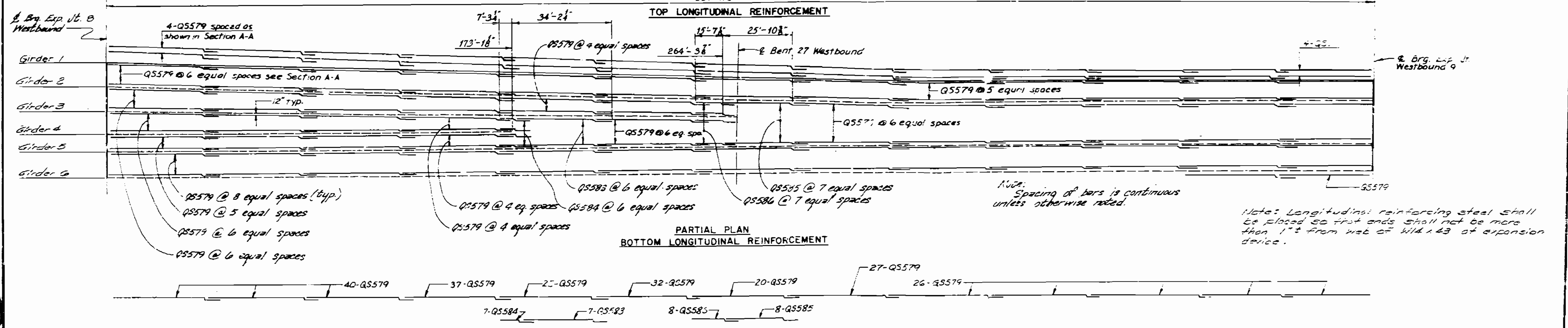
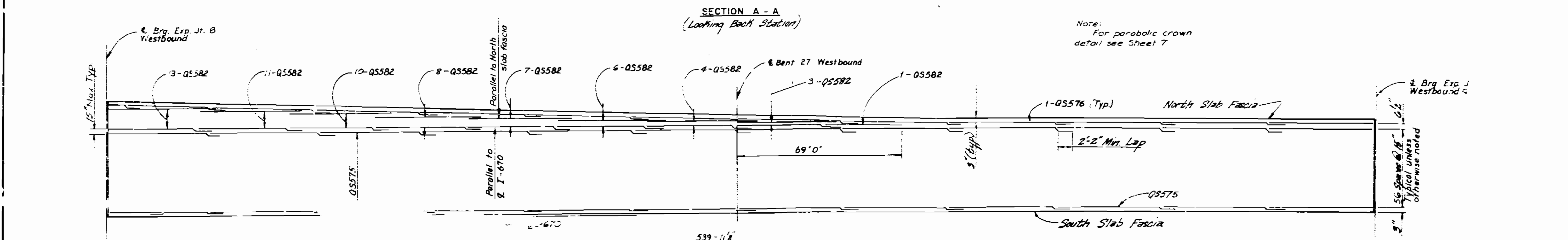
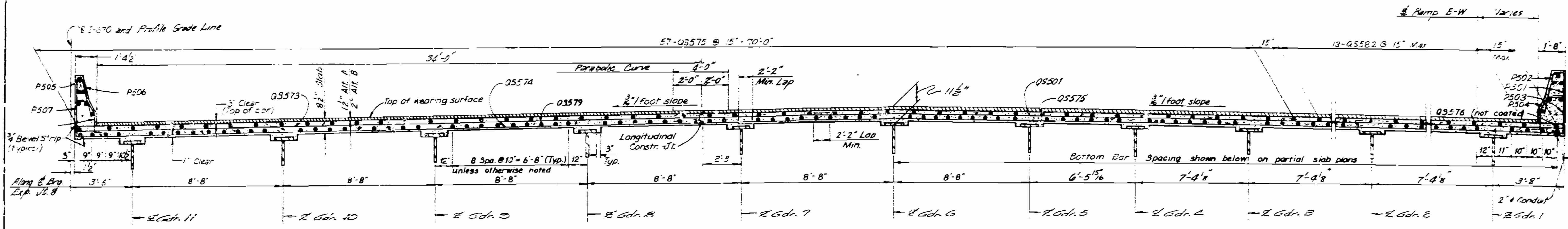
Note: Field Bend P509, P50A, P507 & P508 to clear bottom of Barrier Curb of Finger Plate Exp. Device.



Note: For detail of parabolic crown see sheet 7. For location of Section A-A see sheet 23.

SLAB AND CURB REINFORCEMENT UNIT 8 WESTBOUND

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO		68	77	



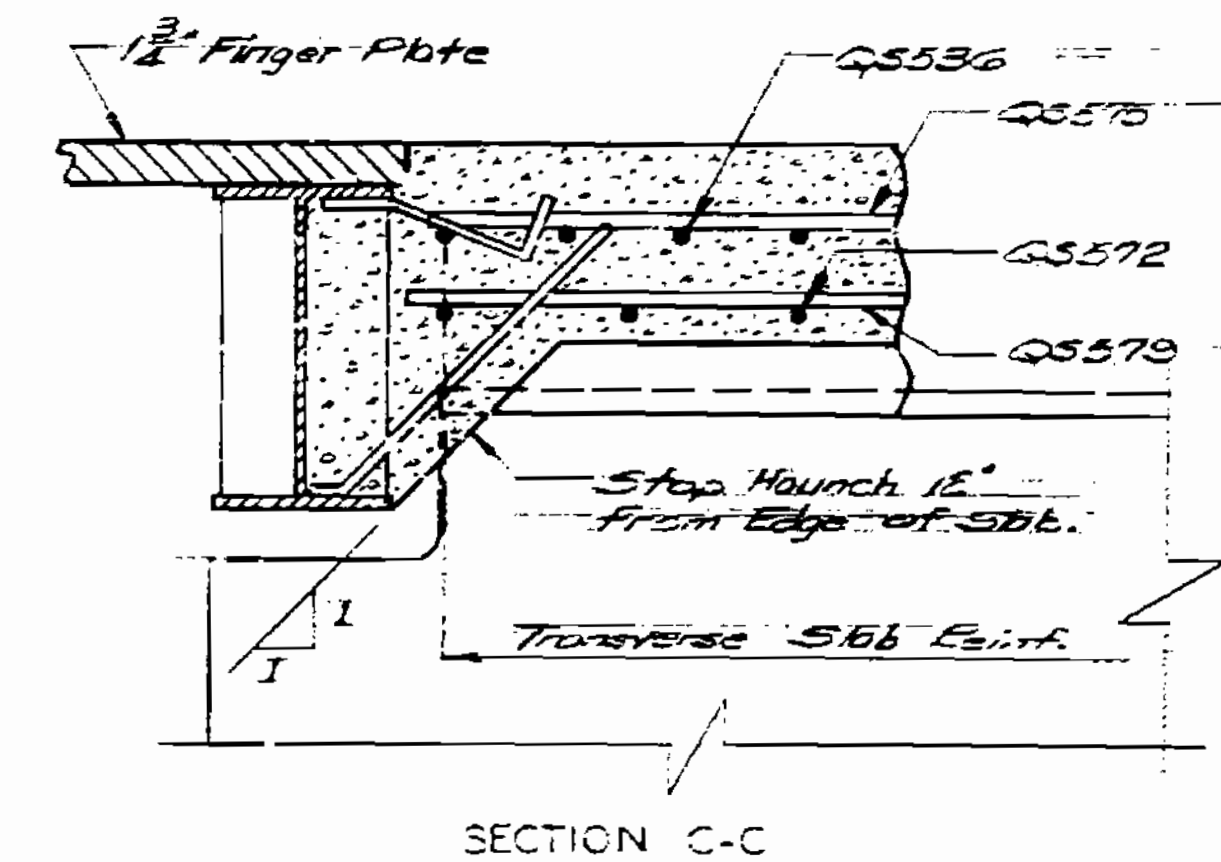
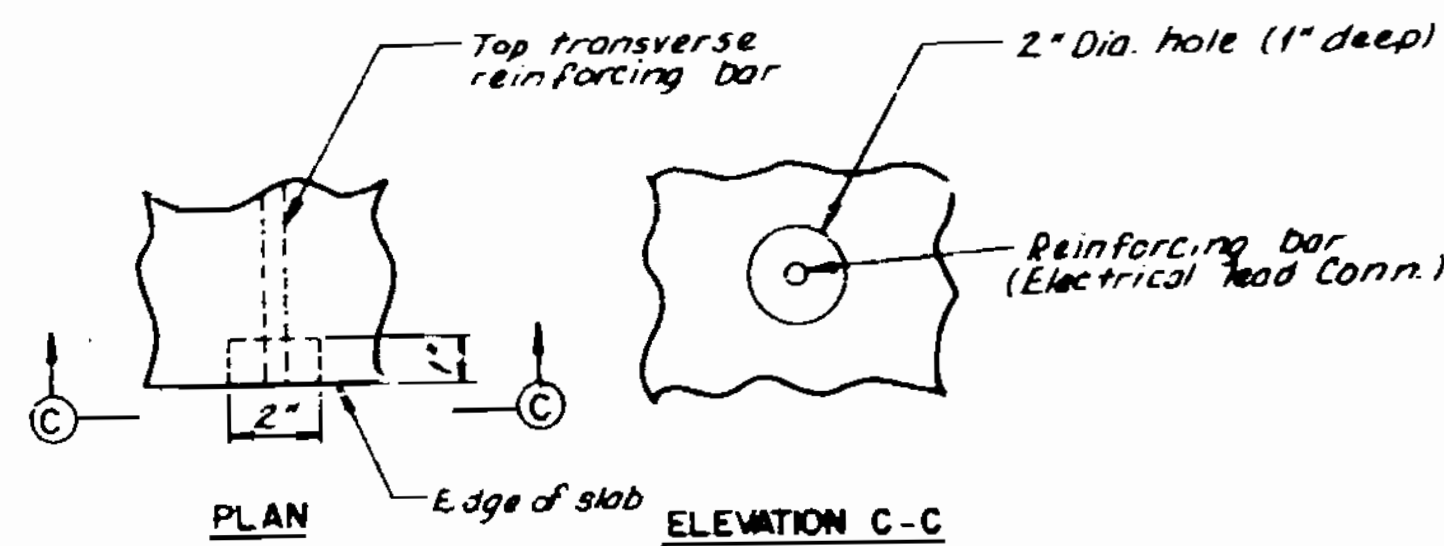
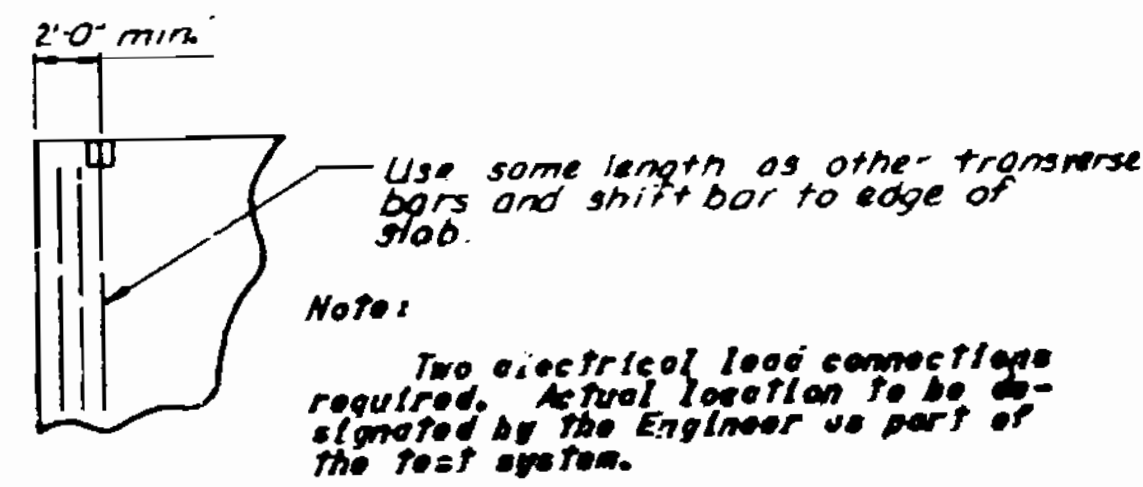
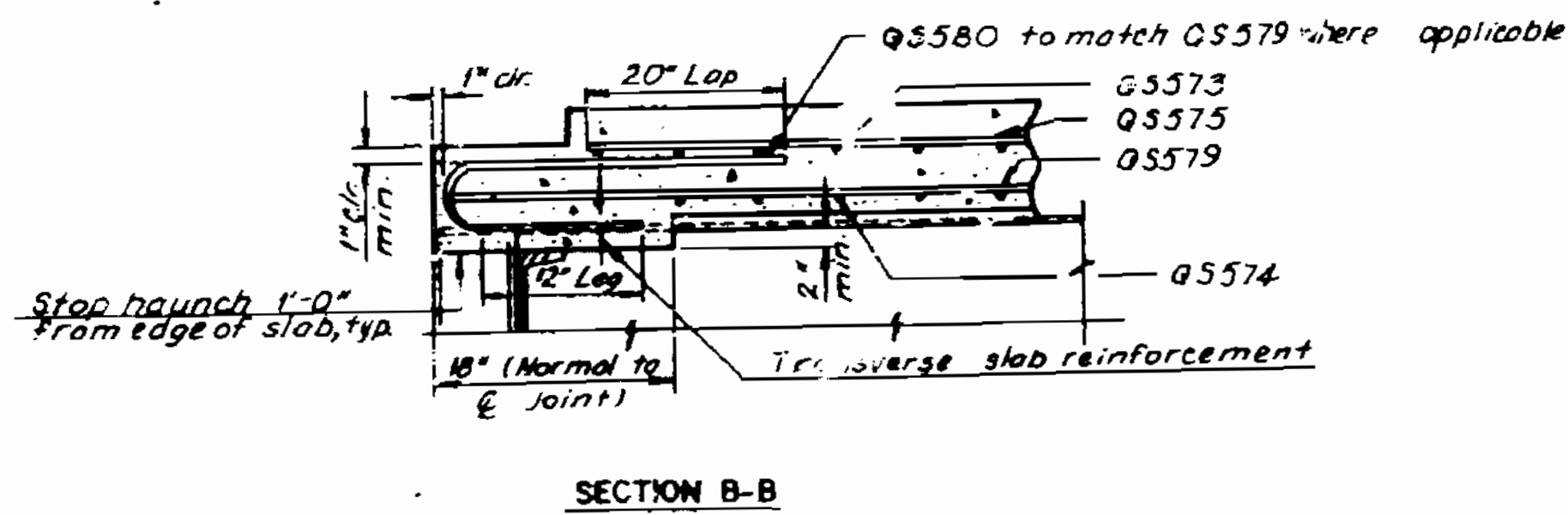
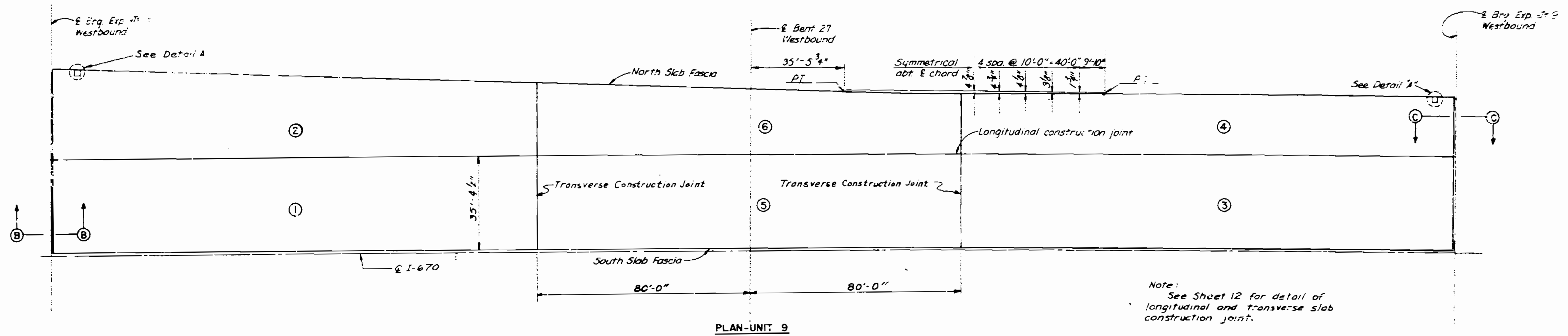
SLAB AND CURB REINFORCEMENT UNIT 9 WESTBOUND

DETAILED 1079
CHECKED 1079

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 28 of 72.

FED. ROAD DIST. NO.	STATE	F.C.D. AND PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		72	72	



POURING SEQUENCE						
Direction						
Basic	1	3	5	2	4	5
Sequence	End to 5	5 to End	1 to 3	End to 6	6 to End	2 to 4
Alternate "A"	1 - 3 - 5			2 - 4 - 6		
Pours	End to End			End to End		

Note: The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 75 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 44 cubic yards per hour.

Note: Pour 4 of Unit 8 to precede 1 of Unit 9, and Pour 1 of Unit 10 to precede Pour 3 of Unit 9. Pours 5 and 6 of Unit 8 to precede 2 of Unit 9. 3rd Pour 2 of Unit 10 to precede Pour 4 of Unit 9.

SLAB PLAN
UNIT 9 WESTBOUND

DETAILED 10 79
CHECKED 10 79

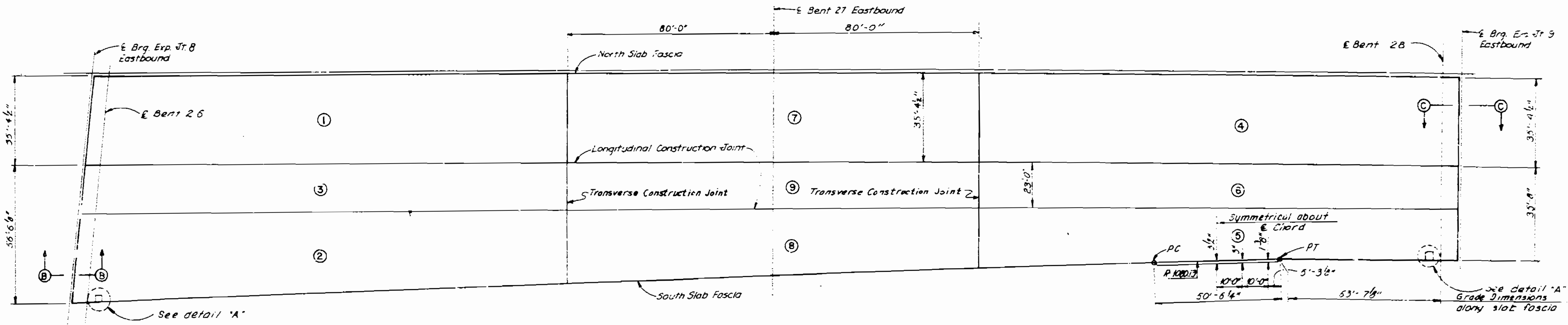
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 29 of 72.

JACKSON COUNTY

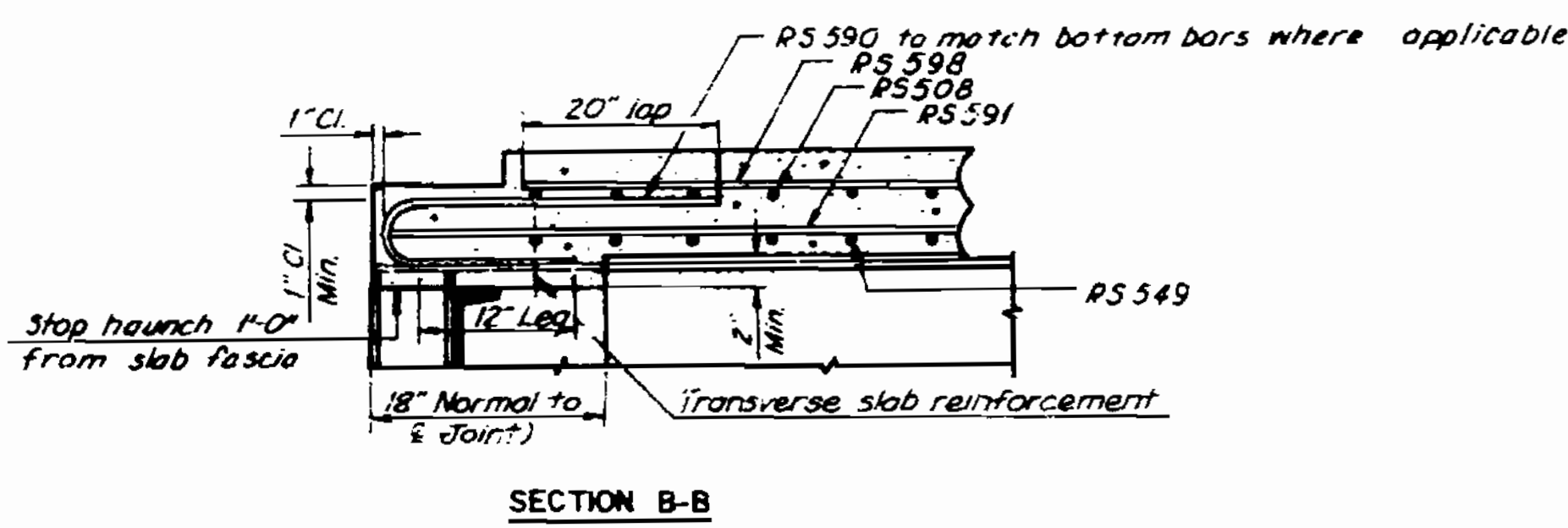
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		8	72	

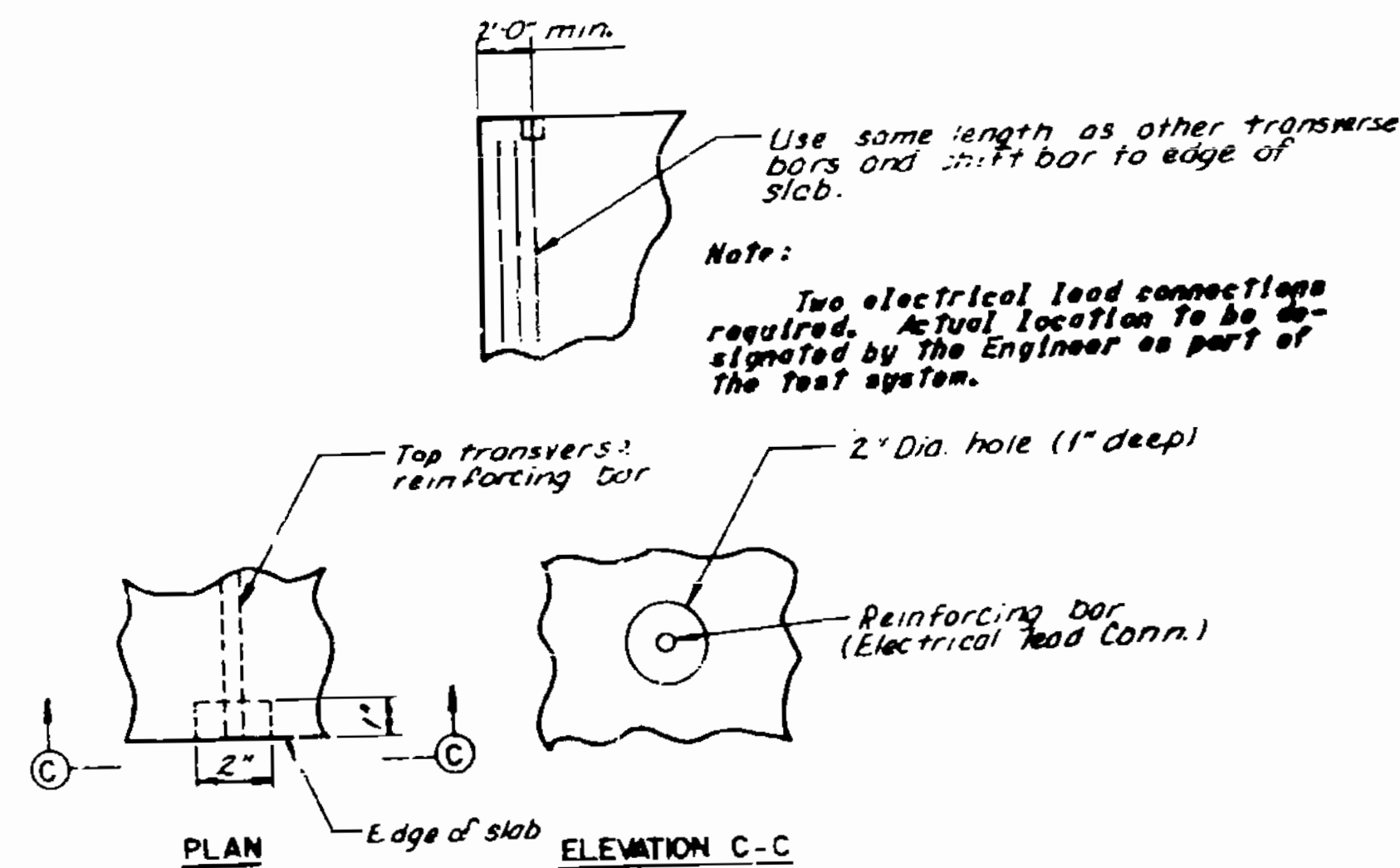


PLAN-UNIT 9

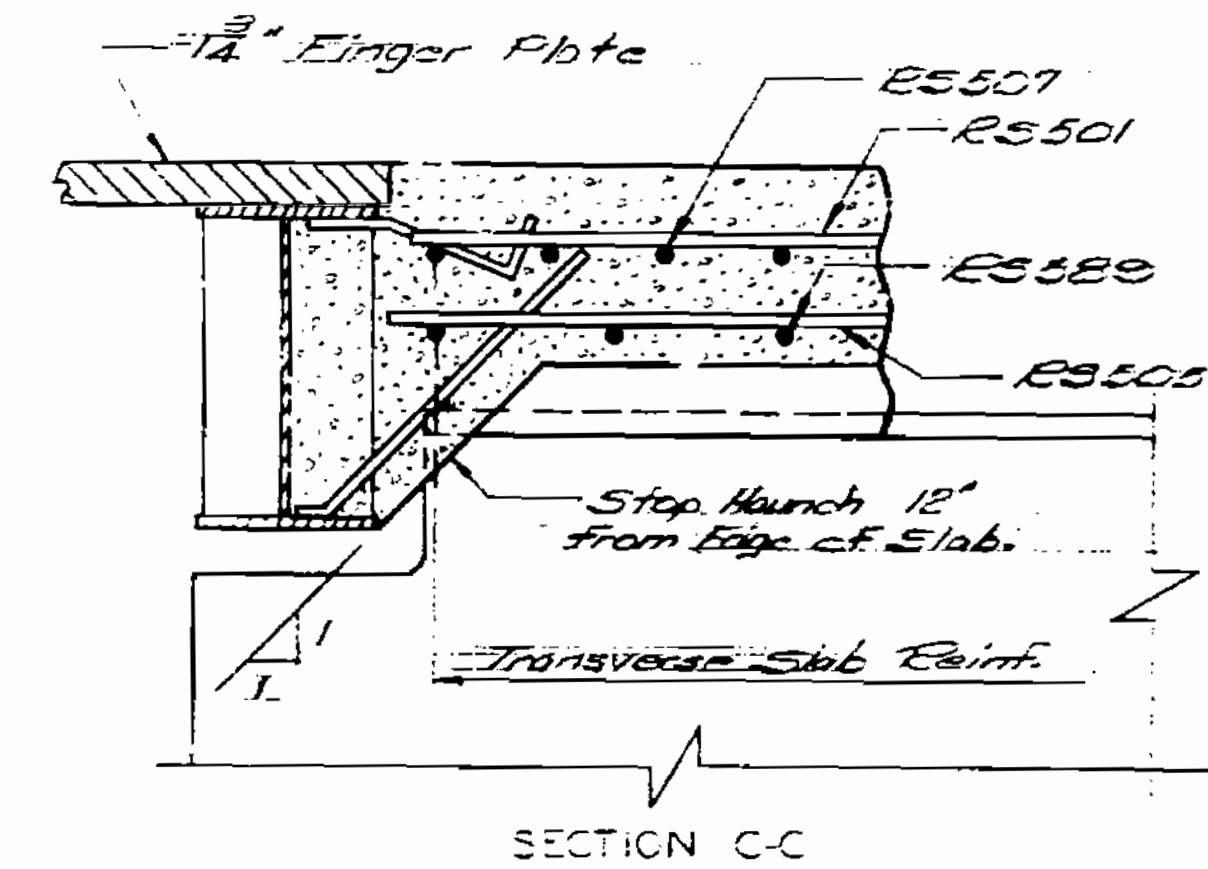
Note:
See sheet 12 for detail of longitudinal and transverse slab construction joint.



SECTION B-B



DETAIL 'A'



SECTION C-C

Note:

The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 73 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 44 cubic yards per hour.

	SEQUENCE OF POURS								
	DIRECTION								
Basic	1	4	7	2	5	8	3	6	9
Sequence	End to 7	7 to End	1 to 4	End to 8	8 to End	2 to 5	End to 9	9 to End	3 to 6
Alternate "A"	1 + 4 + 7			2 + 5 + 8			3 + 6 + 9		
Pour	End to End			End to End			End to End		

Note:

Pour 3 of Unit 8 to precede Pour 1 of Unit 9, and Pour 1 of Unit 10 to precede Pour 3 of Unit 9.

DETAILED 10 79
CHECKED 10 79

Note: This drawing is not to scale. Follow dimensions.

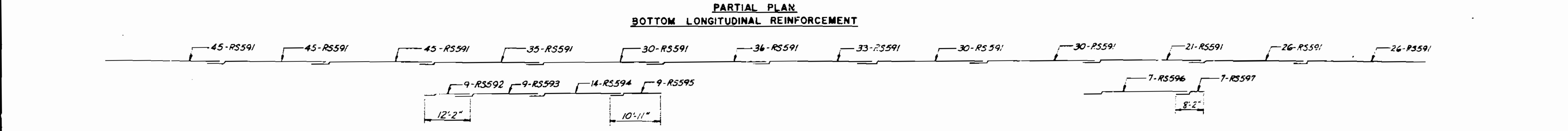
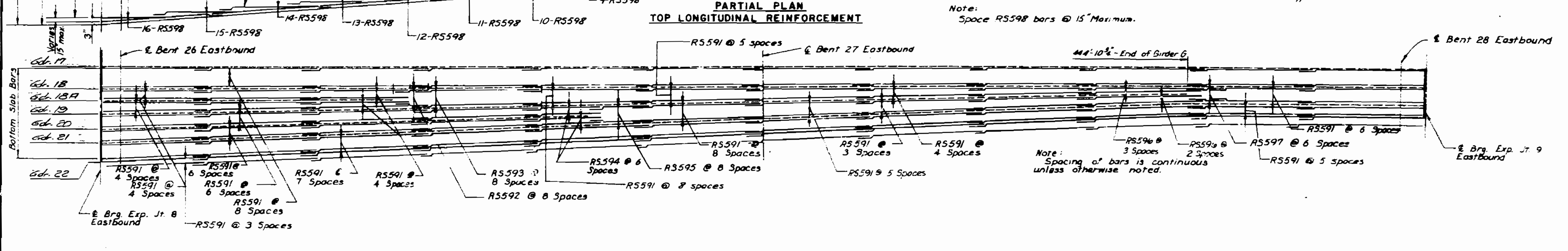
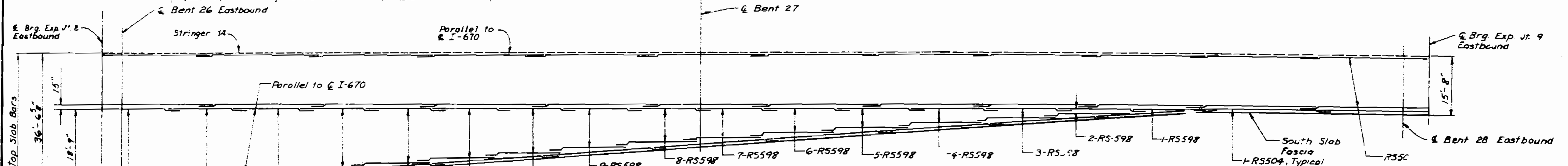
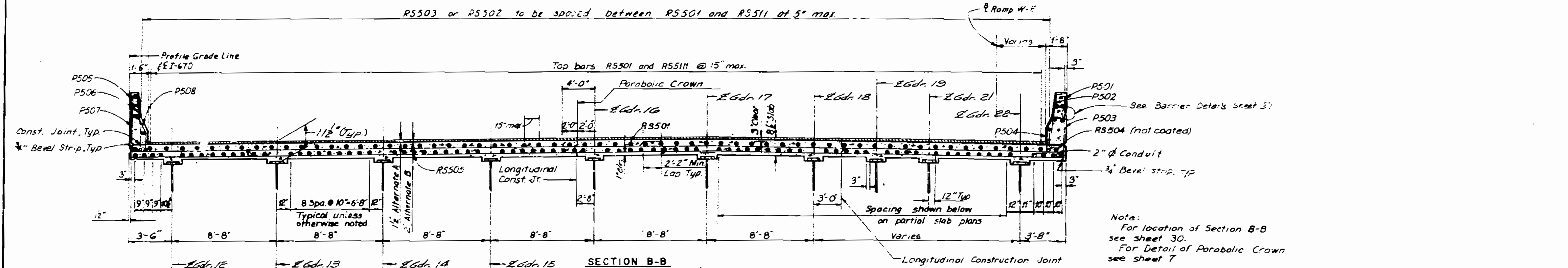
Sheet No. 32 of 72.

SLAB PLAN
UNIT 9 EASTBOUND

JACKSON COUNTY

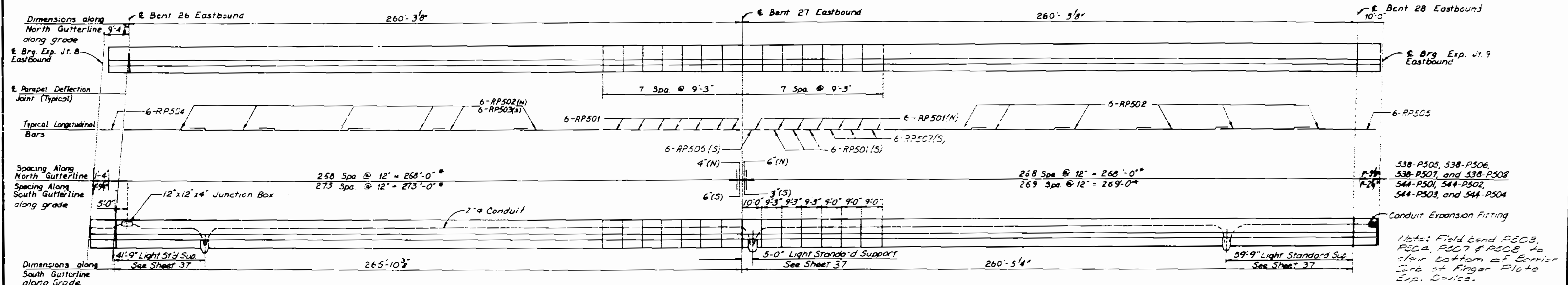
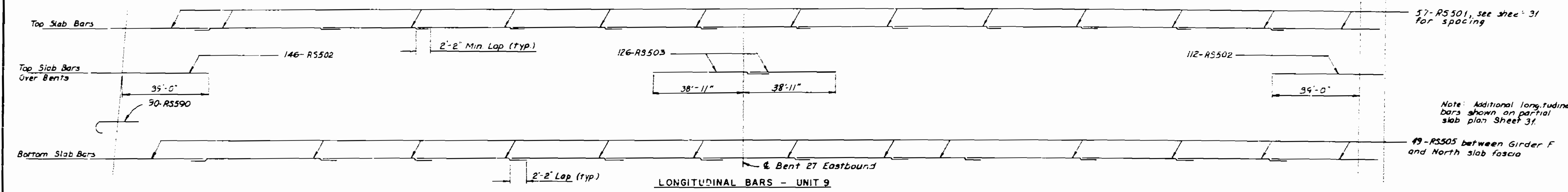
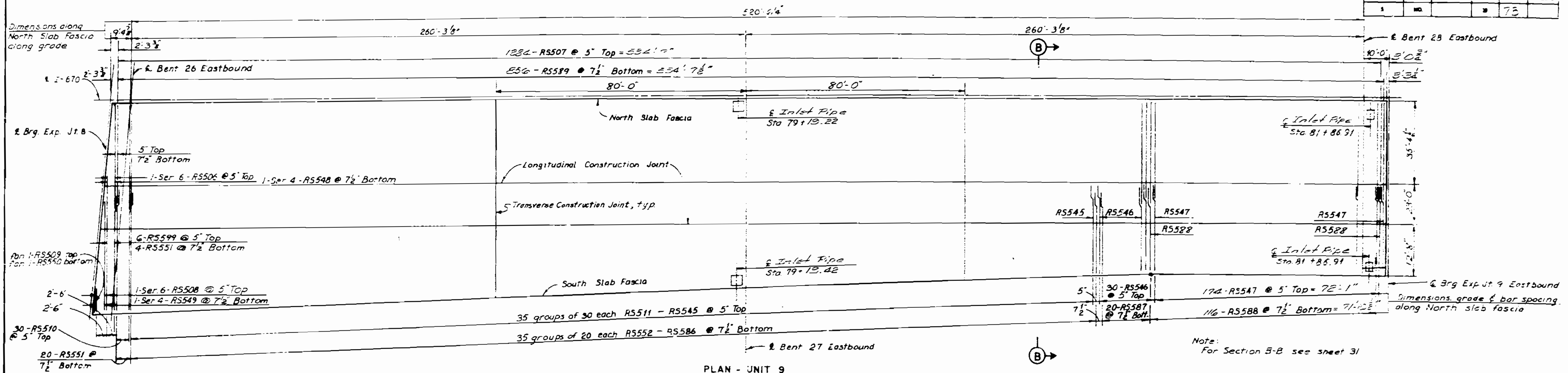
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID FUND. REL.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		74	74	

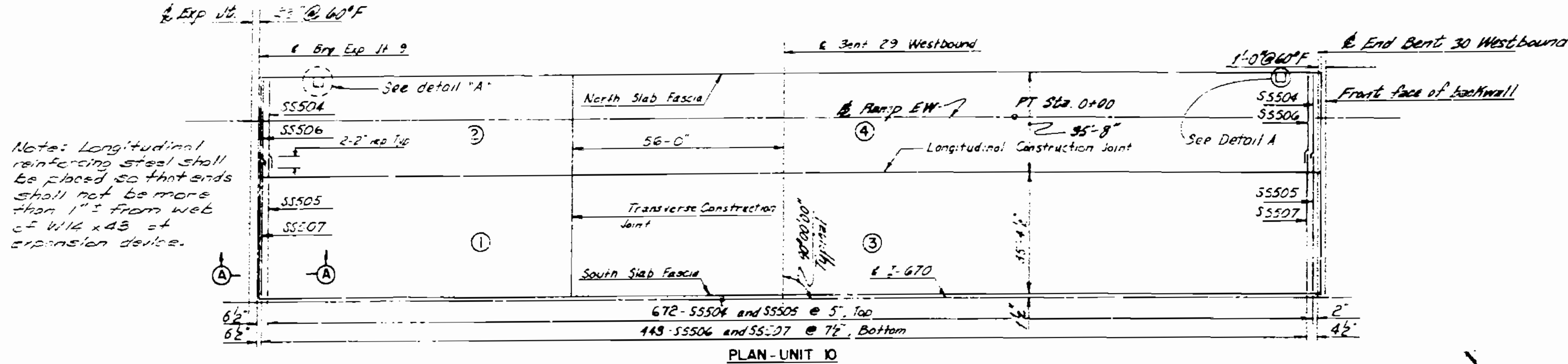


SLAB AND CURB REINFORCEMENT UNIT 9 EASTBOUND

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		89	73	



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		88	76	

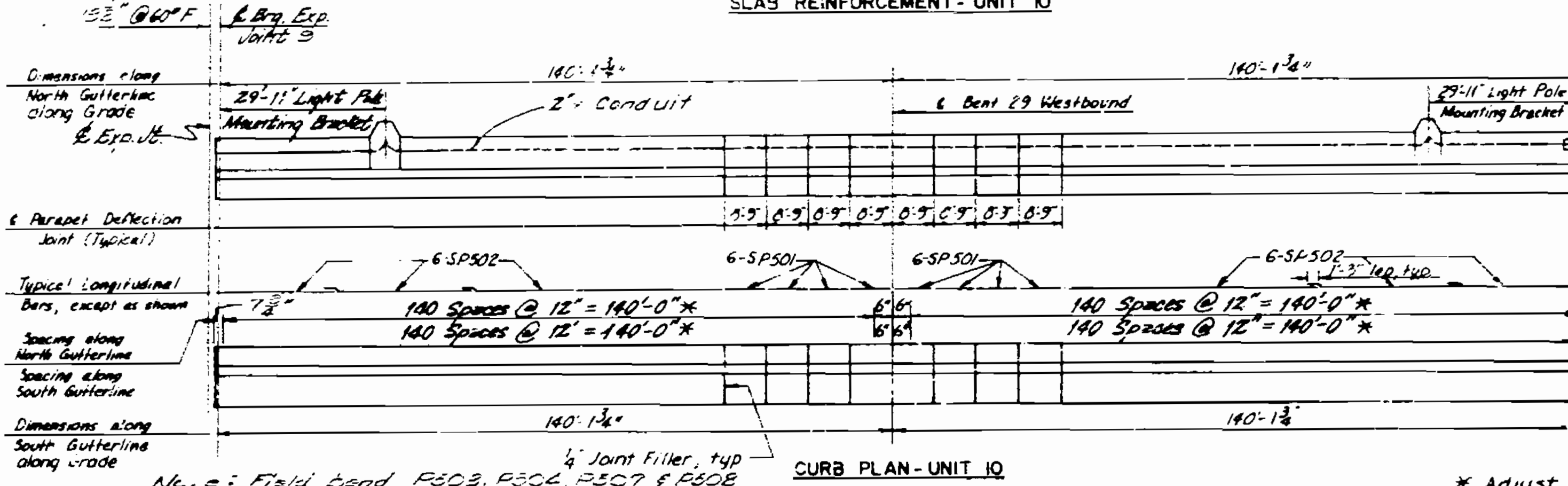
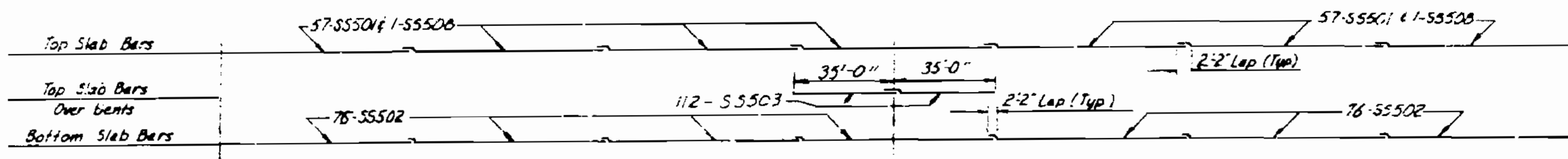


Notes: Longitudinal reinforcing steel shall be placed so that ends shall not be more than 1" from web of W14 x 43 expansion device.

Note: Pours 1 and 2 of Unit 10 must precede Pours 3 and 4 of Unit 9.

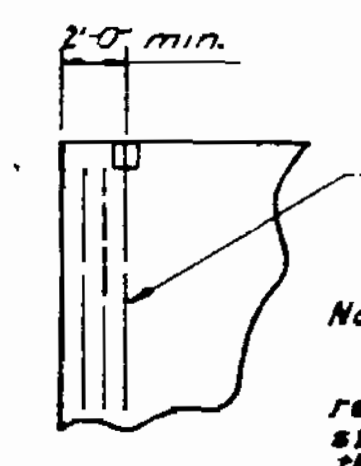
Basic Sequence	SEQUENCE OF POURS	
	DIRECTION 1	DIRECTION 2
Alternate "A" Pours	End to 3 to End	End to 4 to End
	1 - 3	2 - 4
	End to End	End to End

The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 76 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 45 cubic yards per hour.

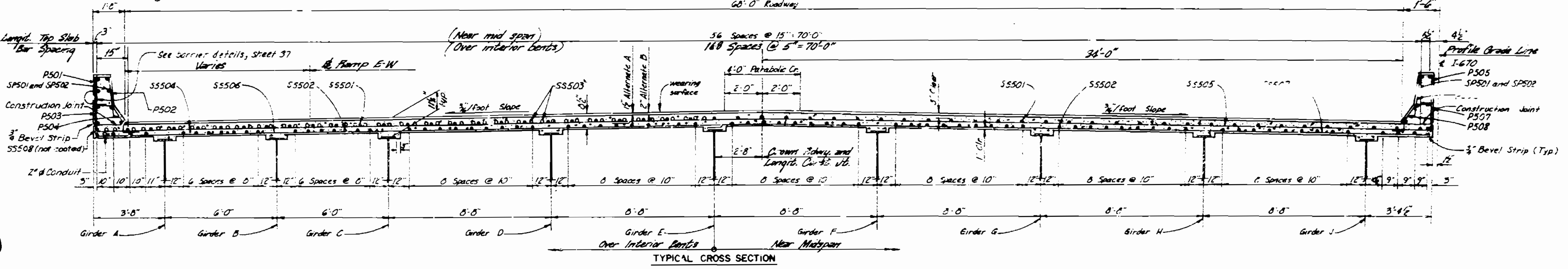
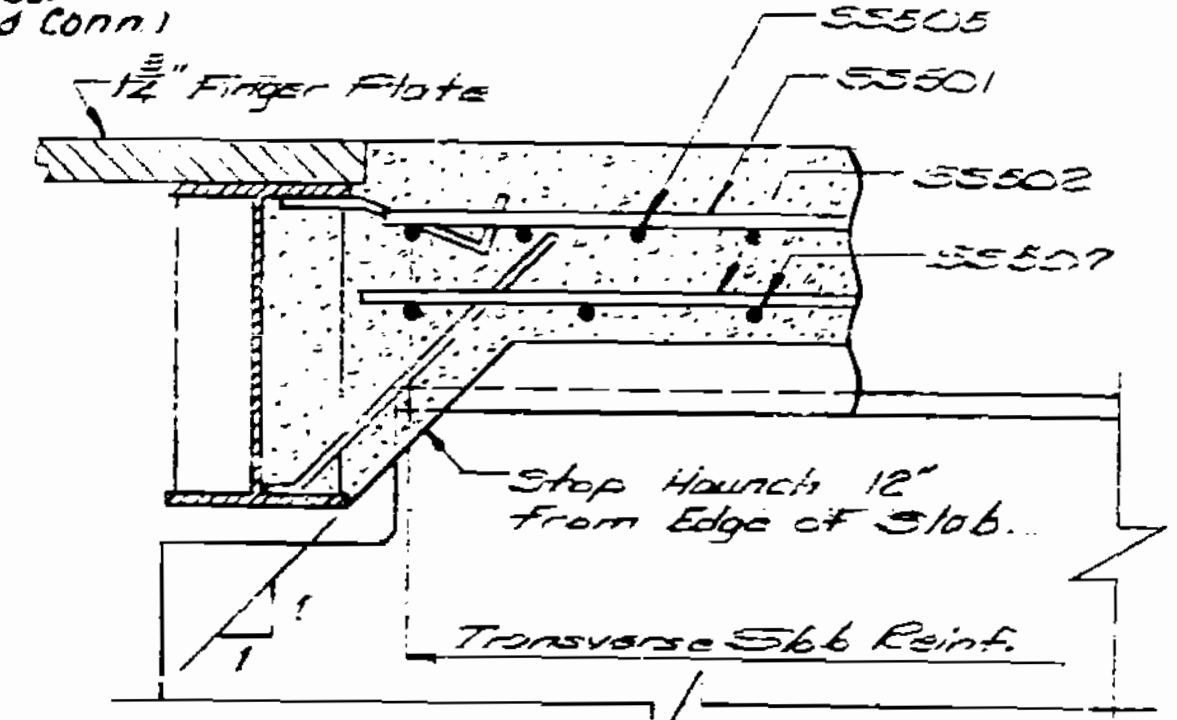
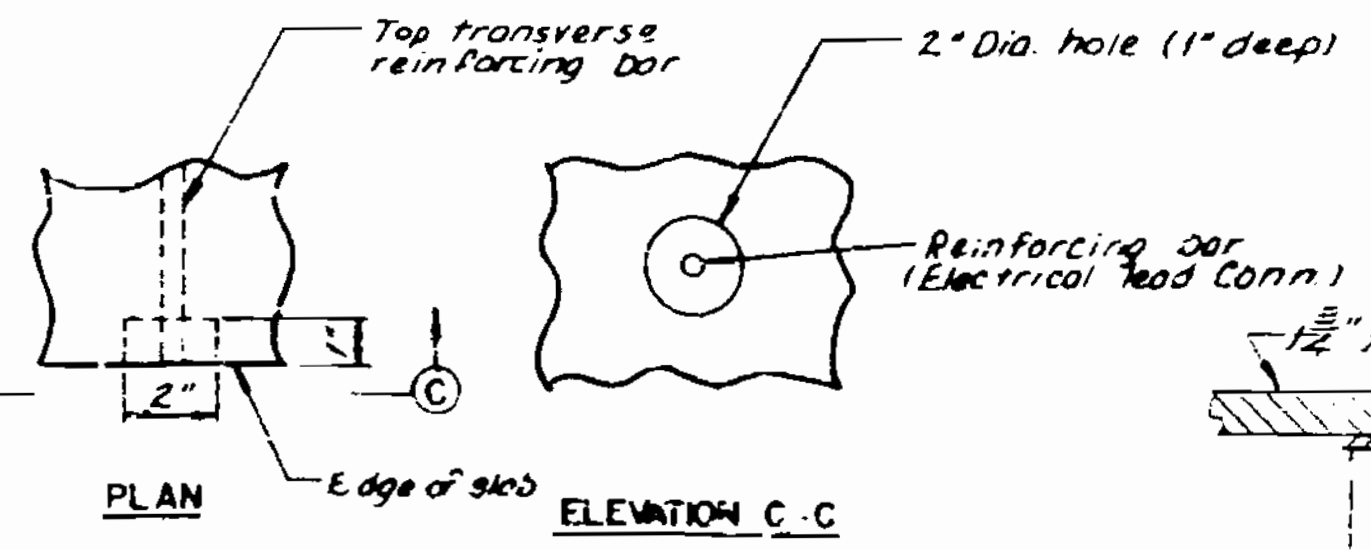


Note: Field Band P503, P504, P507 & P508 to clear bottom of Barrier Curb at Finger Plate Exp. Device.

* Adjust bars adjacent to Joints to maintain 3" min. clearance



Note: Two electrical lead connections required. Actual location to be designated by the Engineer as part of the Test system.



Note: See Sheet 7 for Parabolic Crown Detail.

SLAB AND CURB REINFORCEMENT UNIT 10 WESTBOUND

DETAILED 1079
CHECKED 1079

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 33 of 72.

JACKSON COUNTY

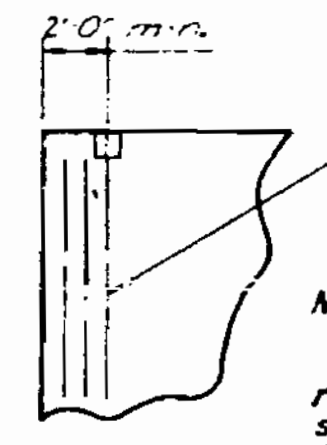
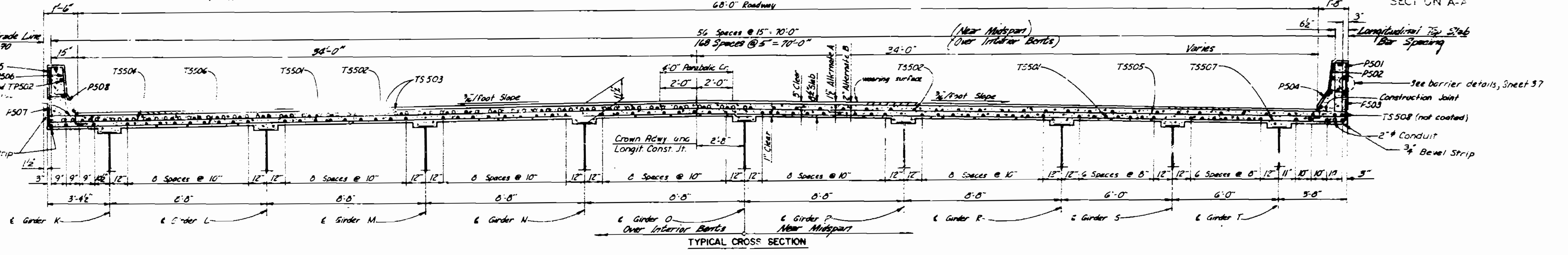
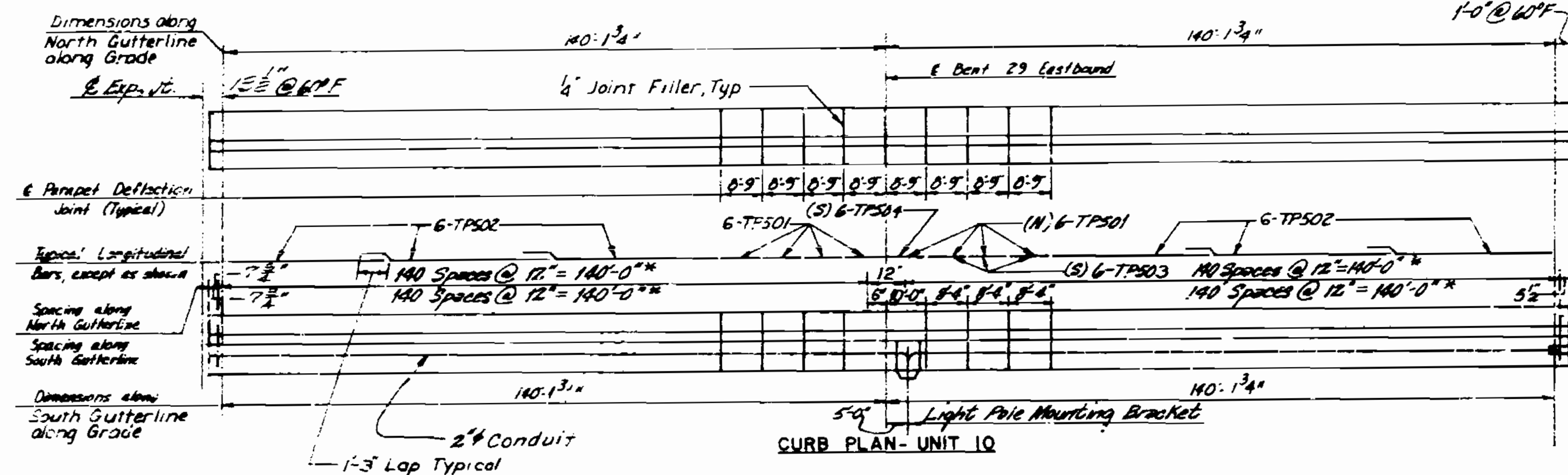
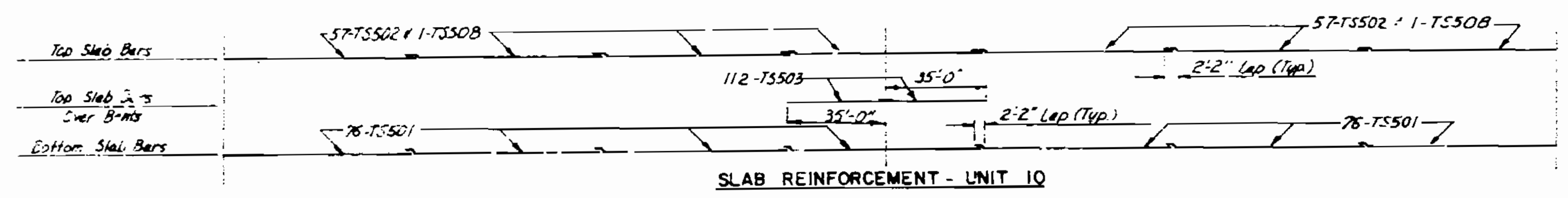
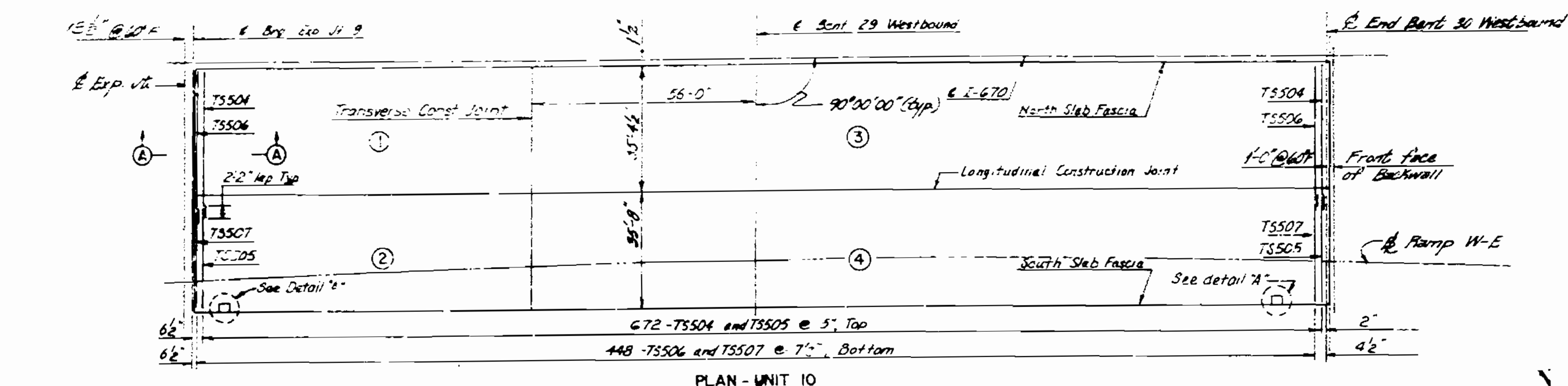
A-3136

Note: Pours 1 and 2 of Unit 10 must precede Pours 3 and 4 of Unit 9.

PROJECT NO.	DATE	SCALE	SHEET NO.	TOTAL SHEETS
			3	7

Basic Sequence	DIRECTION OF POURS			
	1	3	2	4
Alternate "A" Pours	End To 3	1 To End	End To 4	2 To End
	1 + 3		2 + 4	
	End to End		End to End	

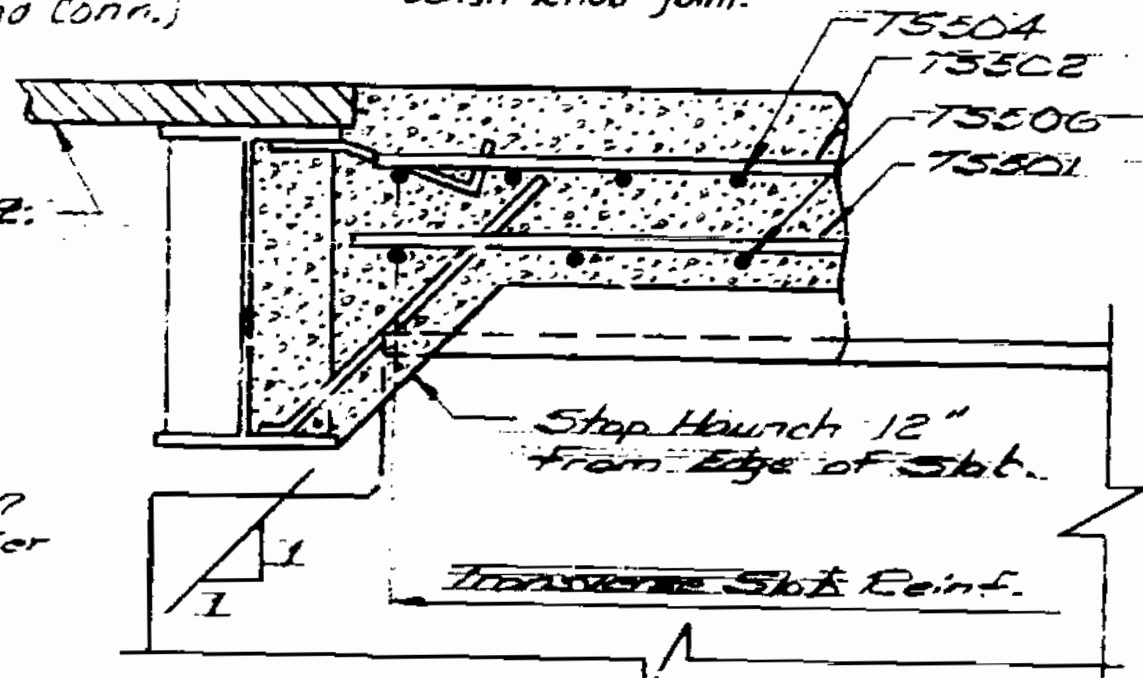
The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 75 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 45 cubic yards per hour.



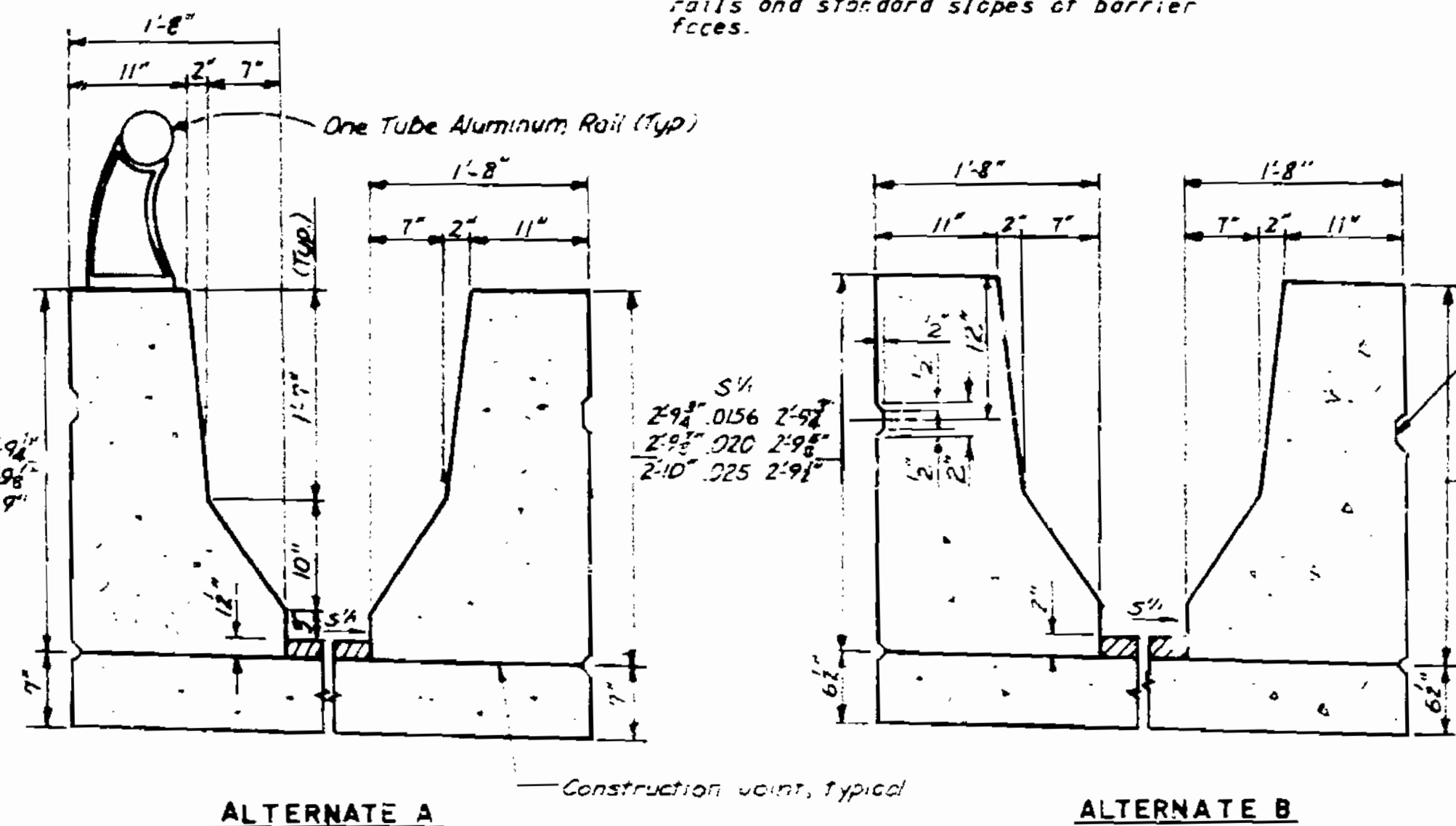
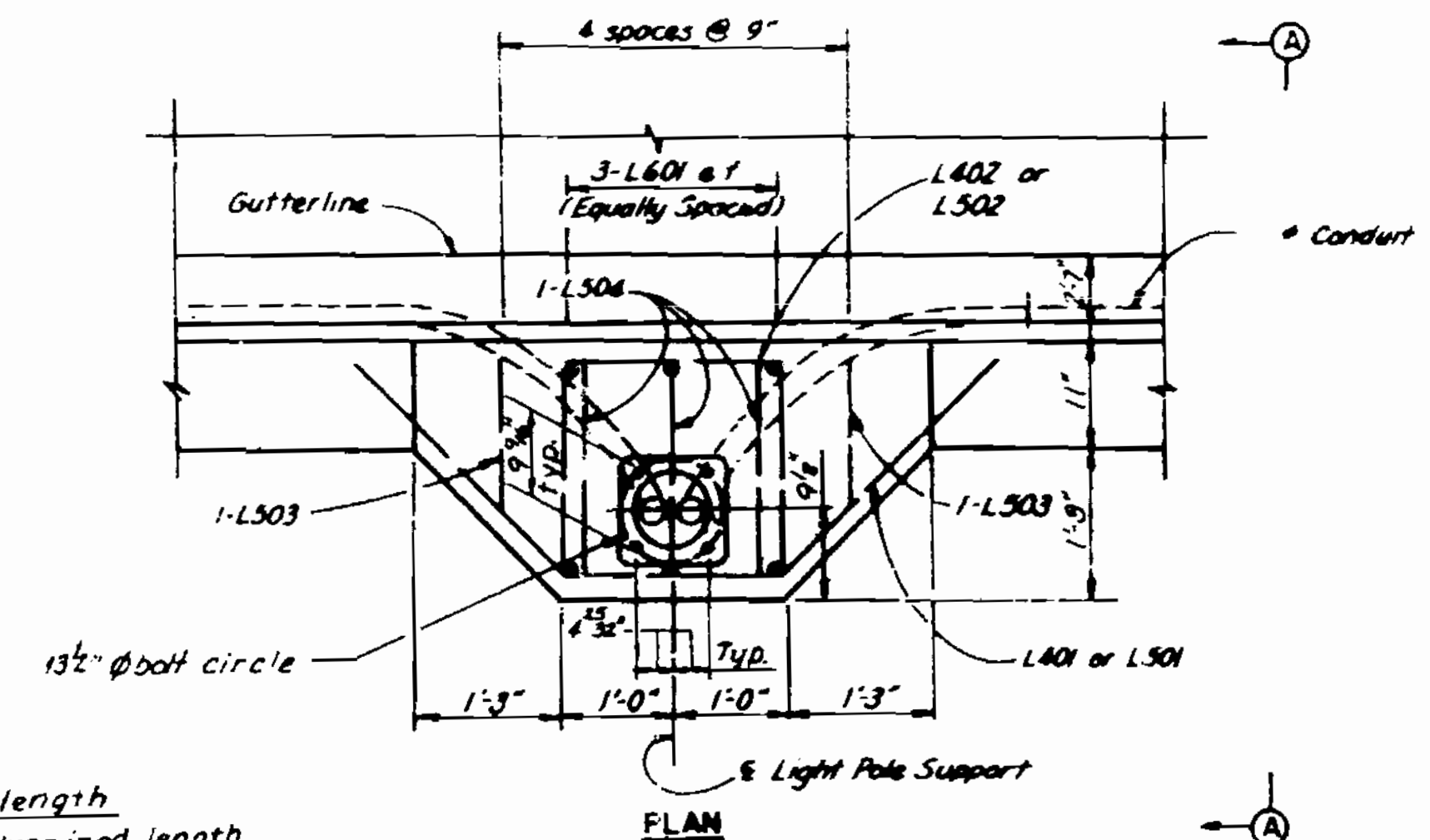
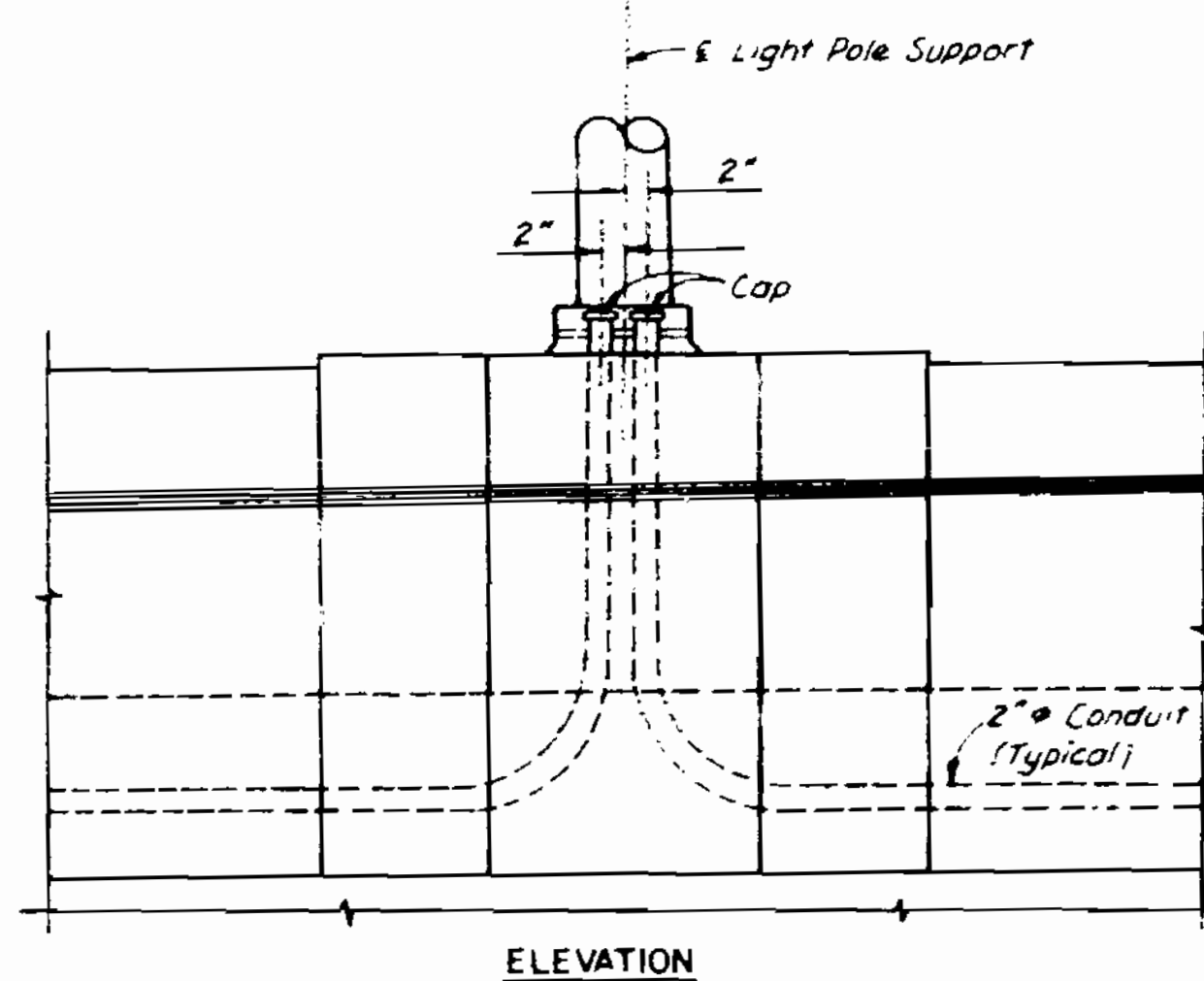
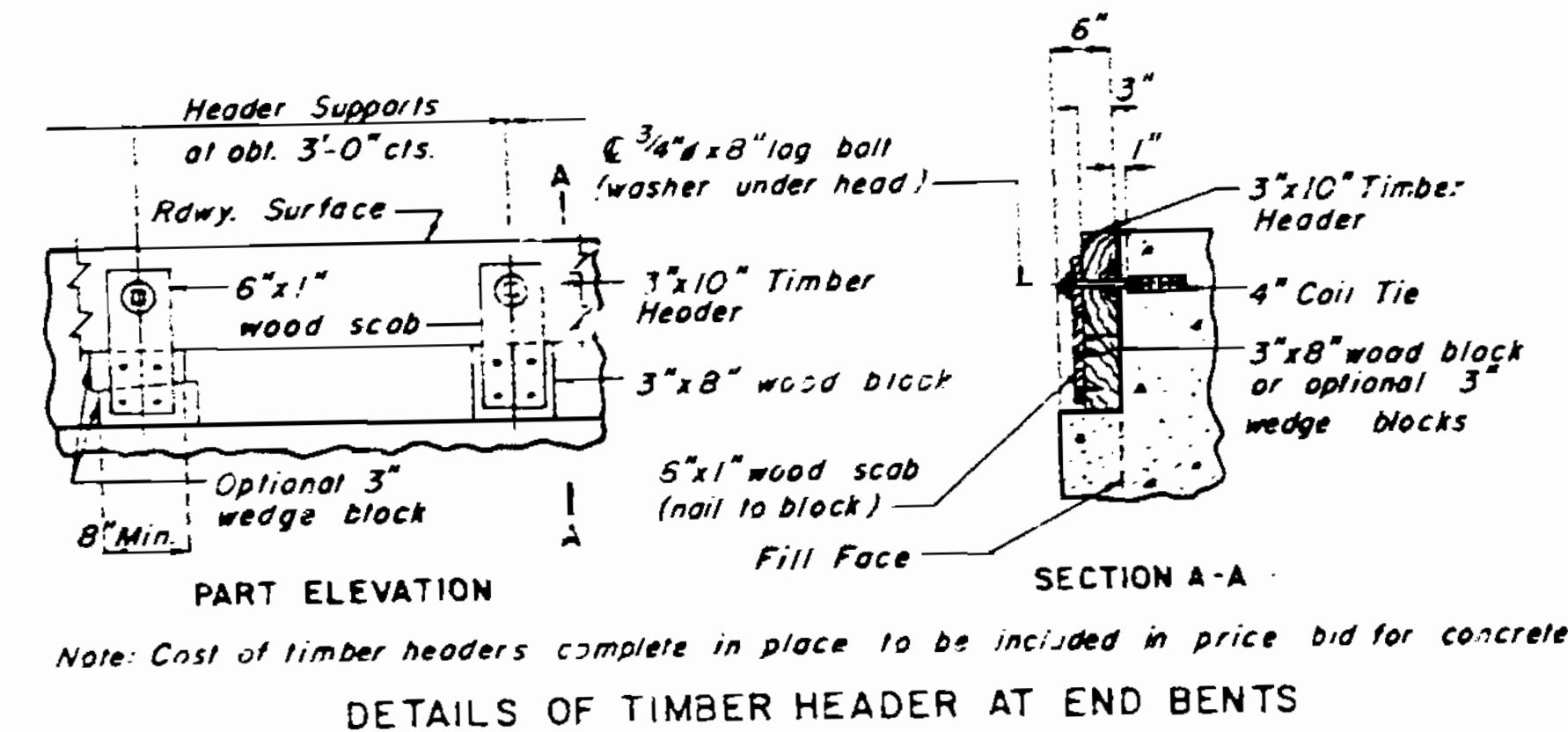
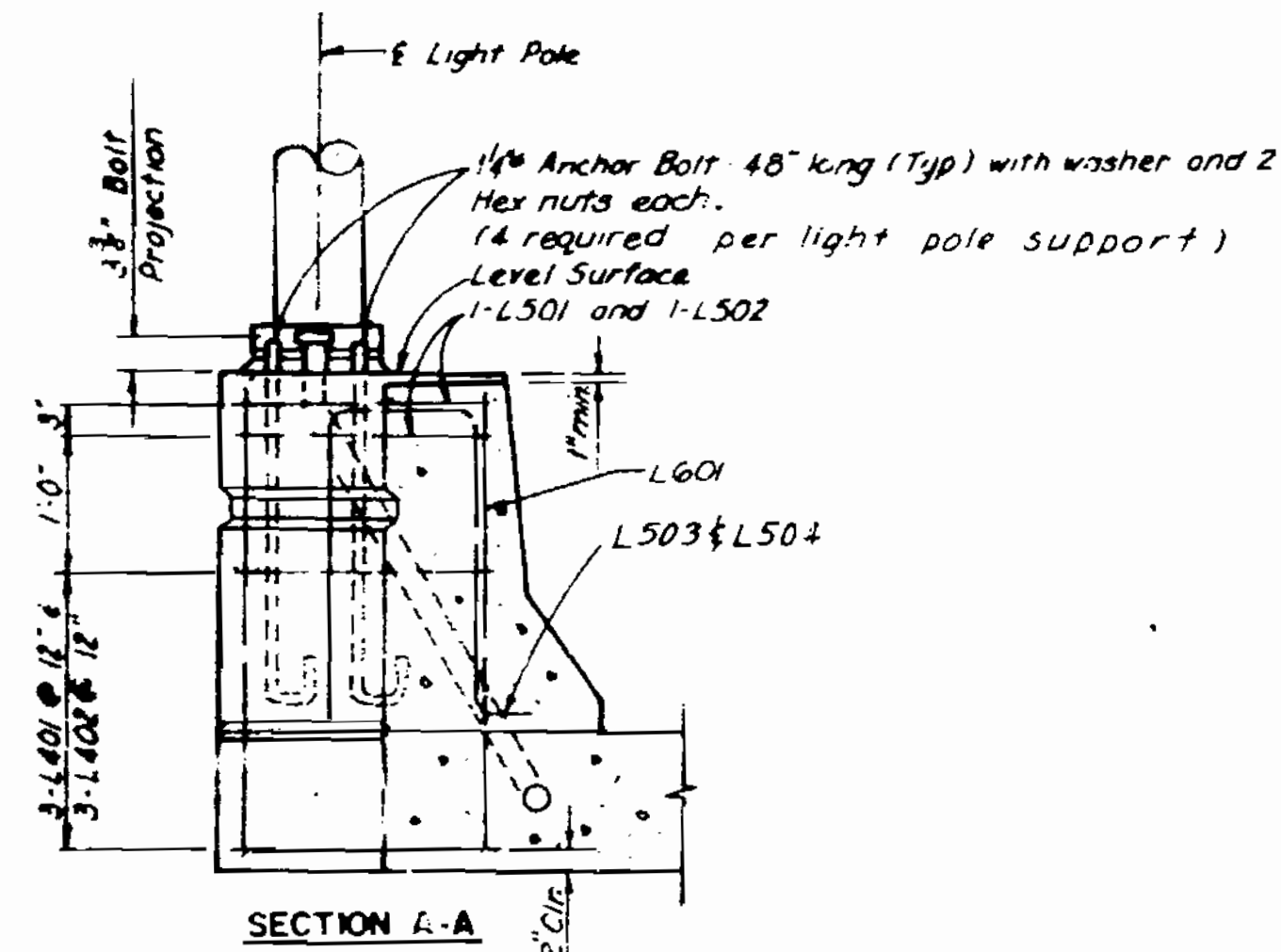
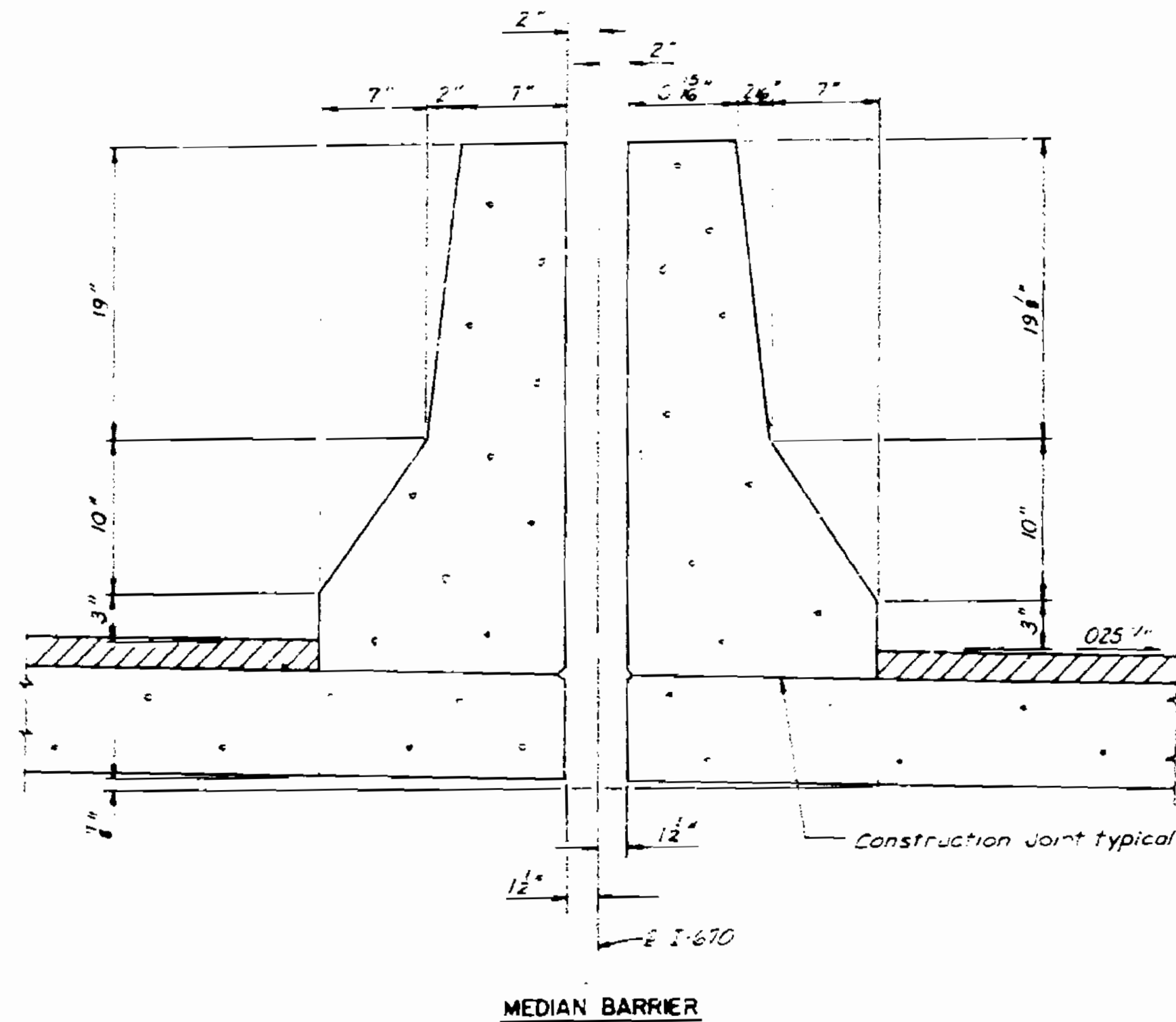
Note: Use same length as other transverse bars and shift bar to edge of slab.
 Note: Two electrical lead connections required. Actual location to be designated by the Engineer as part of the test system.

282-P505, 282-P506, 282-P507 and 282-P503; 282-P501, 282-P502, 282-P503, and 282-P504.
 Conduit Expansion Fitting * Adjust bars adjacent to joints to maintain 3" min clearance.

Note: Field bend P503, P504, P507 & P508 to clear bottom of Barrier Curb at Finger Plate Exp. Device.



REV.	DATE	BY	CHKD.	APP.
1				ES



Rustication to end 3" from all joints

NOTES:

Cost of furnishing and placing anchor bolts for light standard shall be included in contract unit price bid for other items.

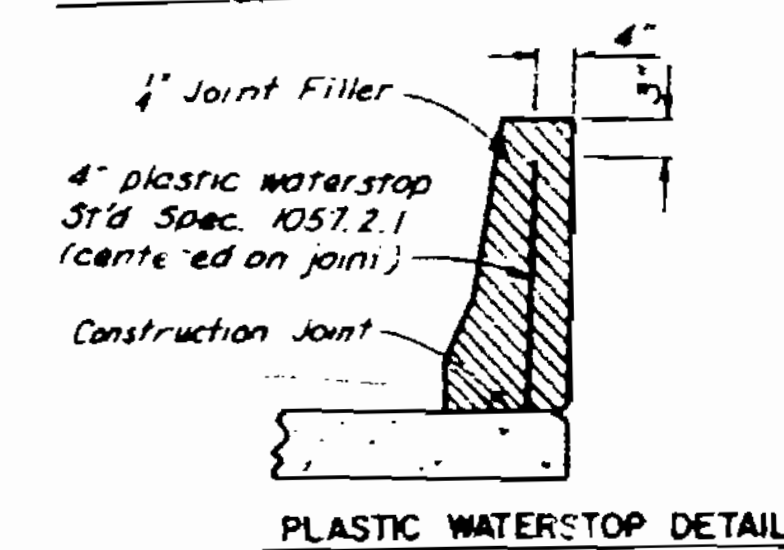
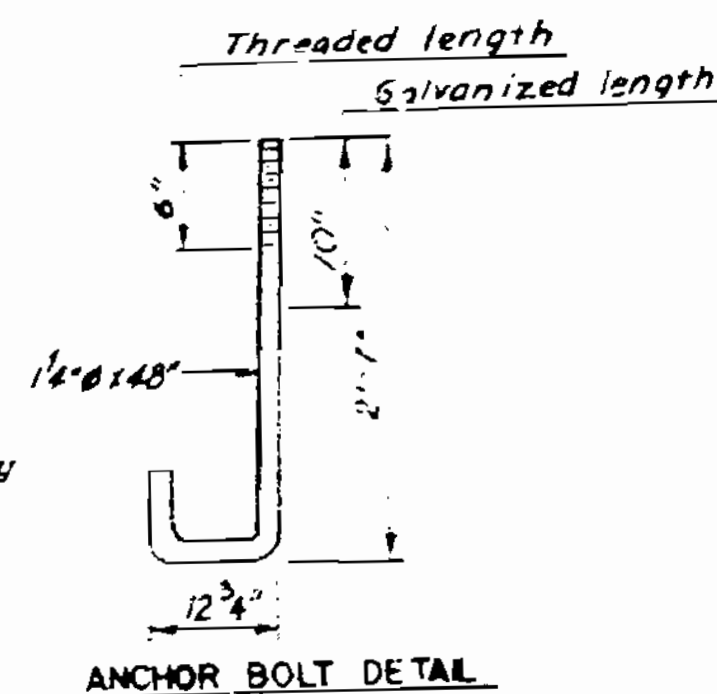
All conduit to be rigid non-metallic conduit (PVC) (Schedule 40) with 5" cover in concrete. Shift reinforcing steel in field where necessary to clear conduit and junction boxes.

Light standards, wiring and fixtures to be furnished and installed by others.

Top of light standard supports to be made horizontal, anchor bolts to be placed vertically.

Place 1/2" copper type drain at low point in conduit and junction boxes. Drain tube shall protrude 1" from bottom of slab.

All end bent and barrier curb junction boxes shall be flush-mounted and equal to G. Z. Gentry Company Type "HYP" and or Spring City Electric Mfg. Company Type "HER". Wall thickness to be sufficient to provide five full threads for watertight conduit joint, with conduit adaptor.

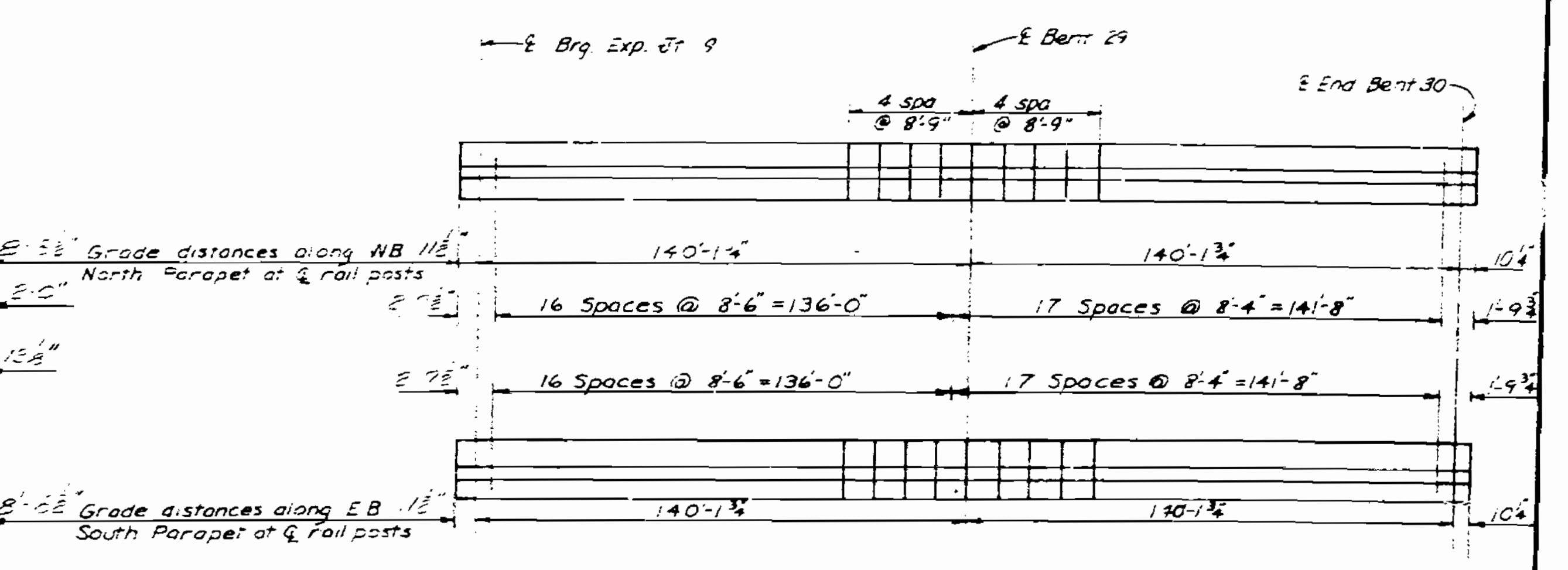
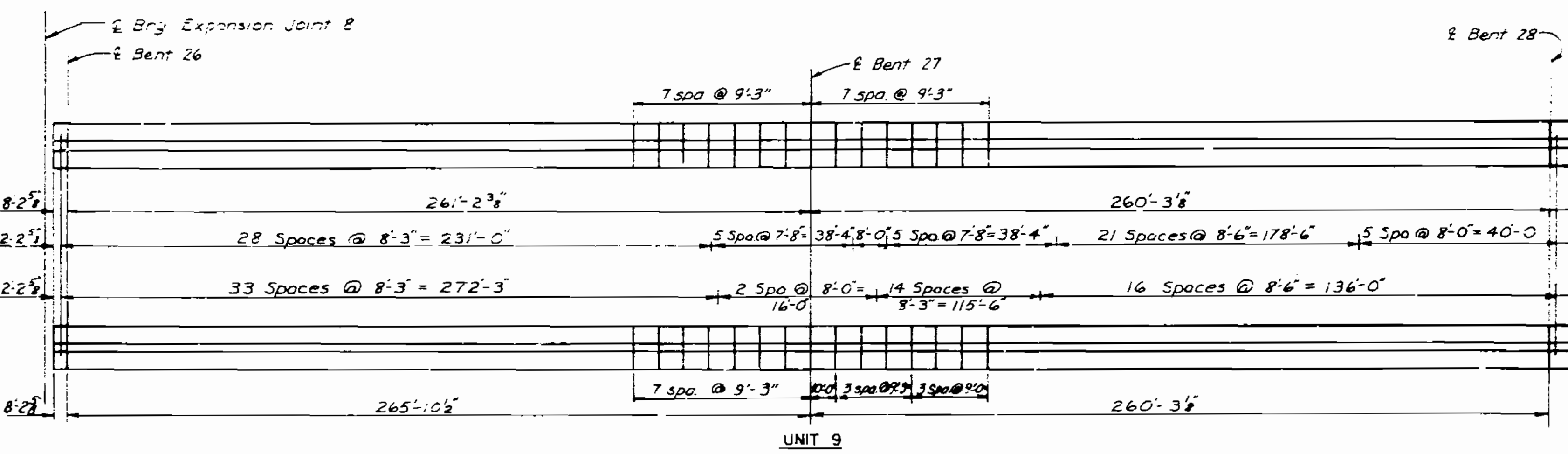
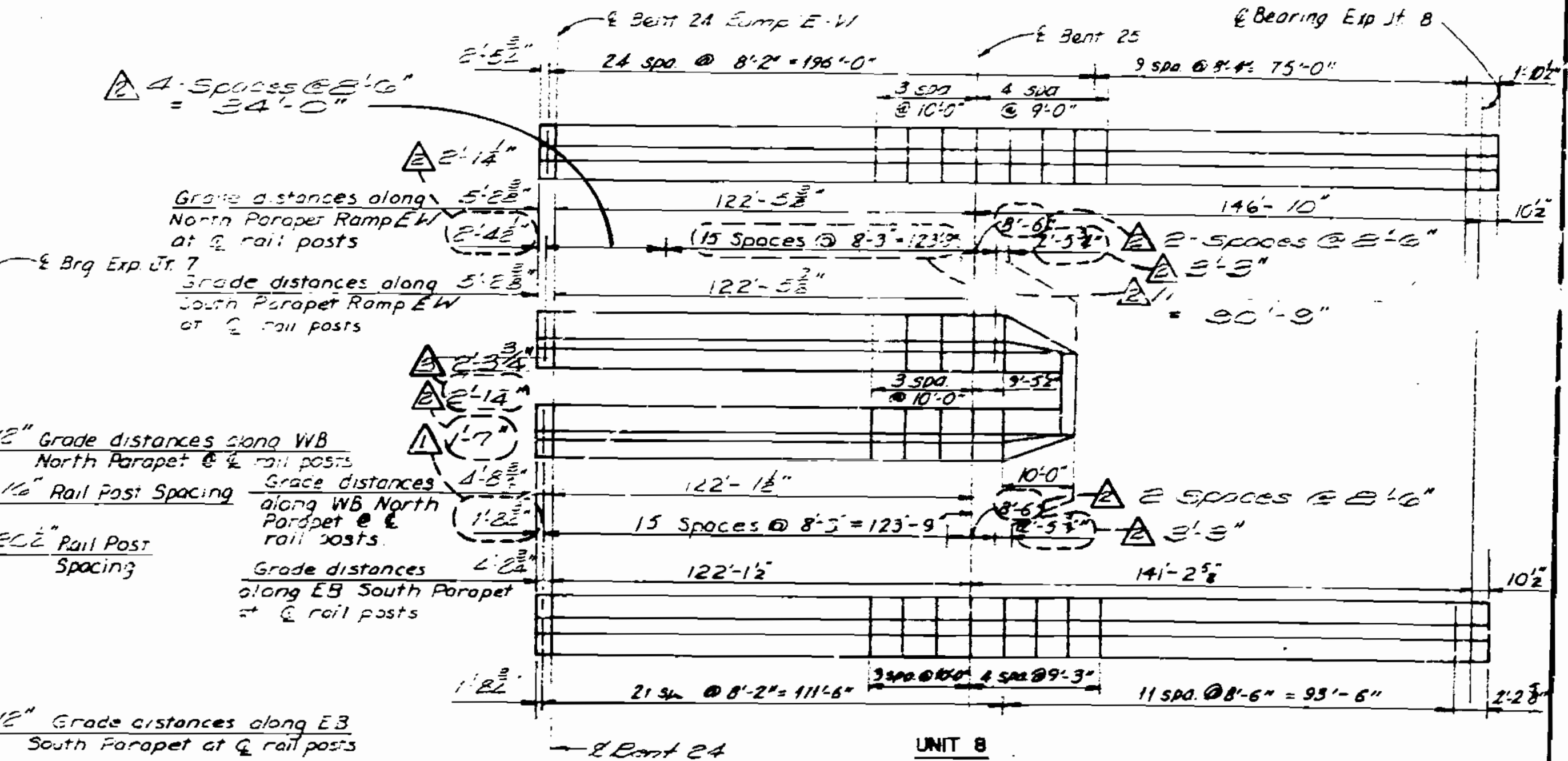
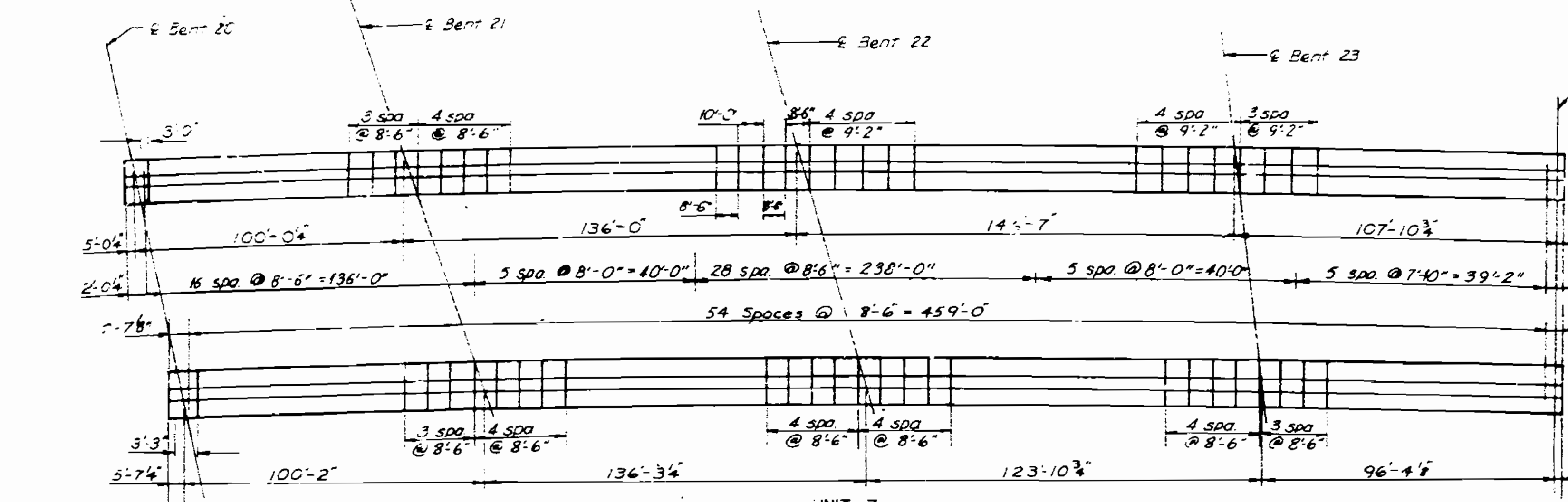
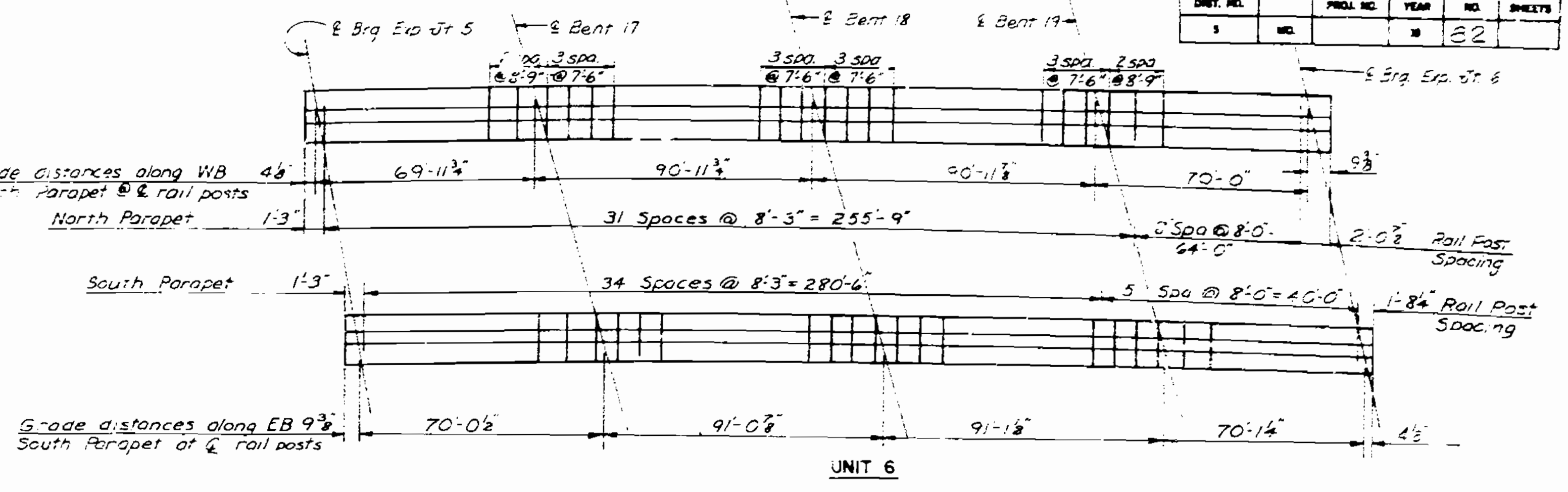
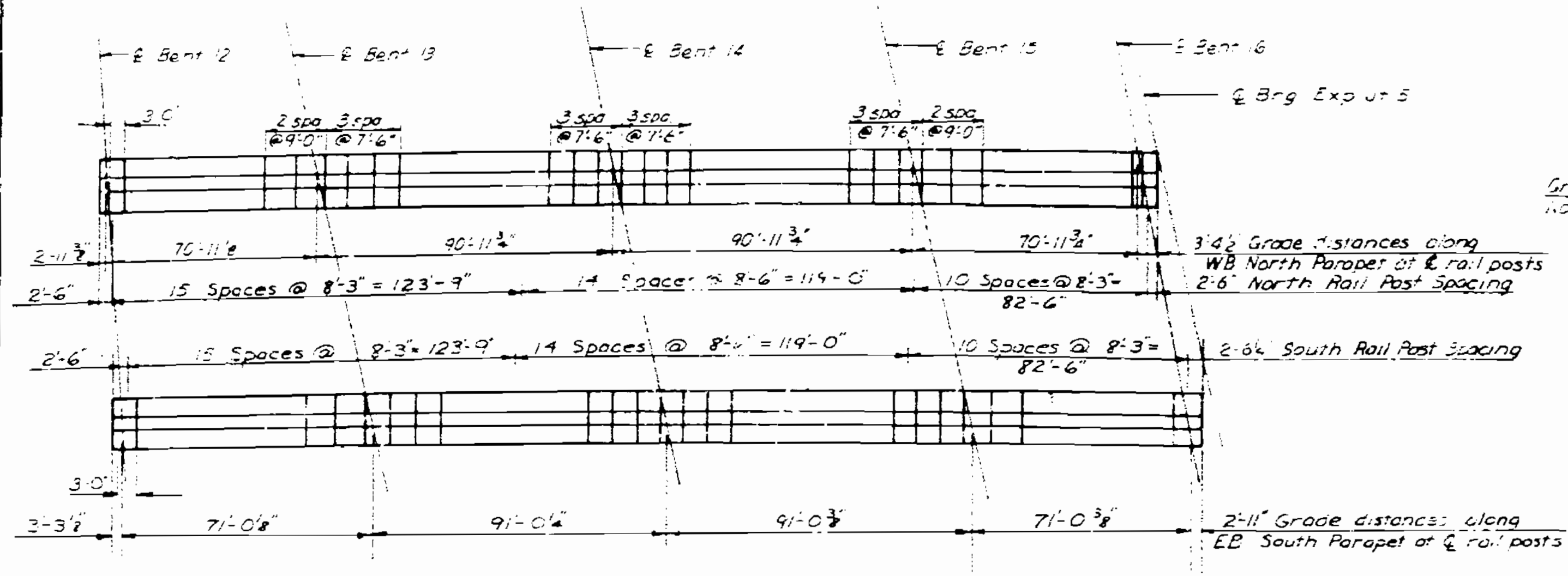


Note: To allow for expansion and contraction at open joints, an oversize sleeve of a length to allow required movement shall be cemented to the deck conduit. The other conduit shall be slipped into the sleeve a minimum of half the length of the sleeve and on 1/2" ring installed over the conduit and inside the sleeve to provide a moisture-tight joint.

Notes: Plastic waterstop shall be placed in all safety barrier curb filled joints. Cost of plastic waterstop complete in place to be included in unit price bid for concrete.

BARRIER AND LIGHTING DETAILS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	MO.		88	32	



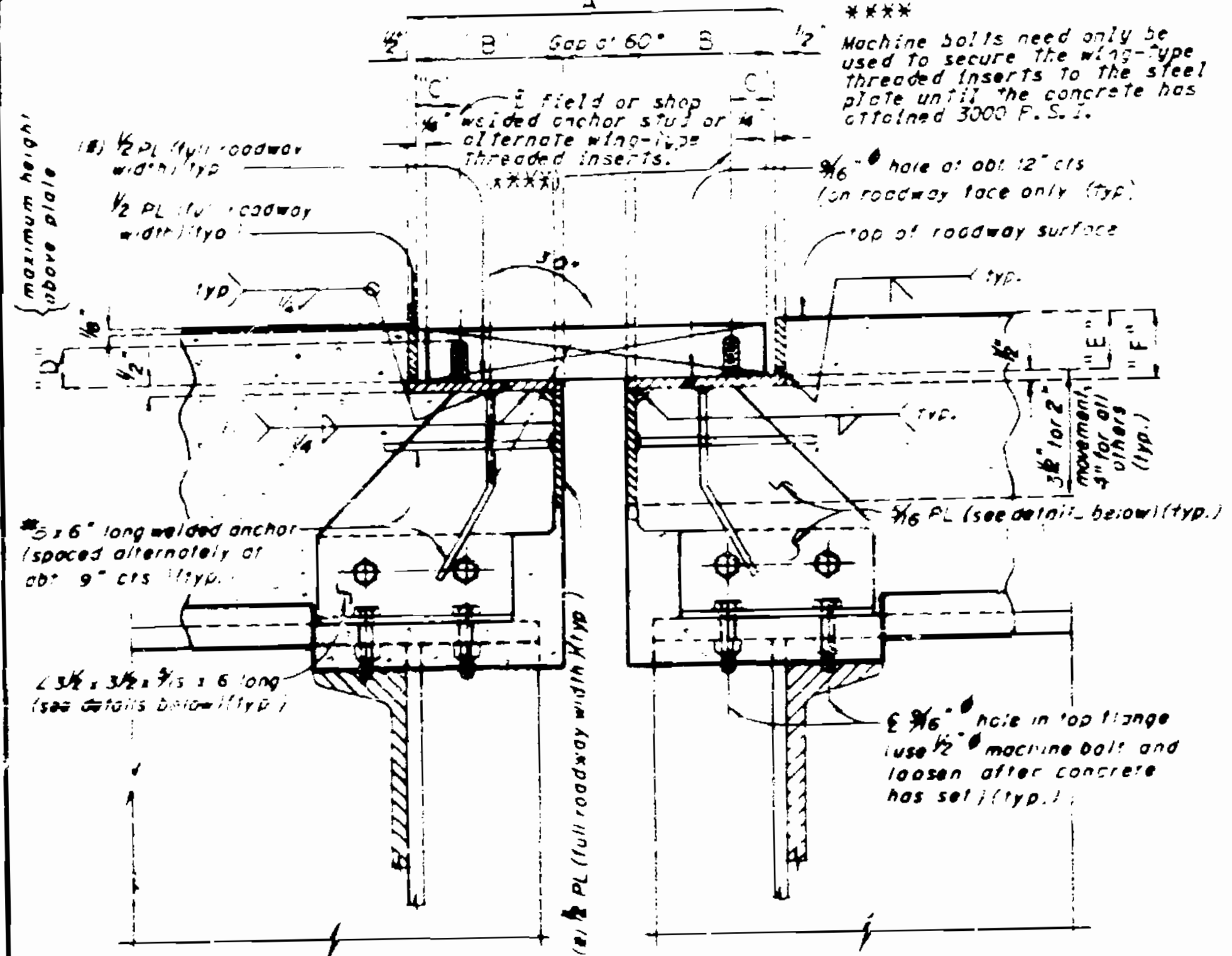
- ▲ Revised 10-16-84
- ▲ Revised 10-5-84
- ▲ Revised 7-28-84

DETAILED 10 79
CHECKED 10 80

Note: This drawing is not to scale. Follow dimensions.

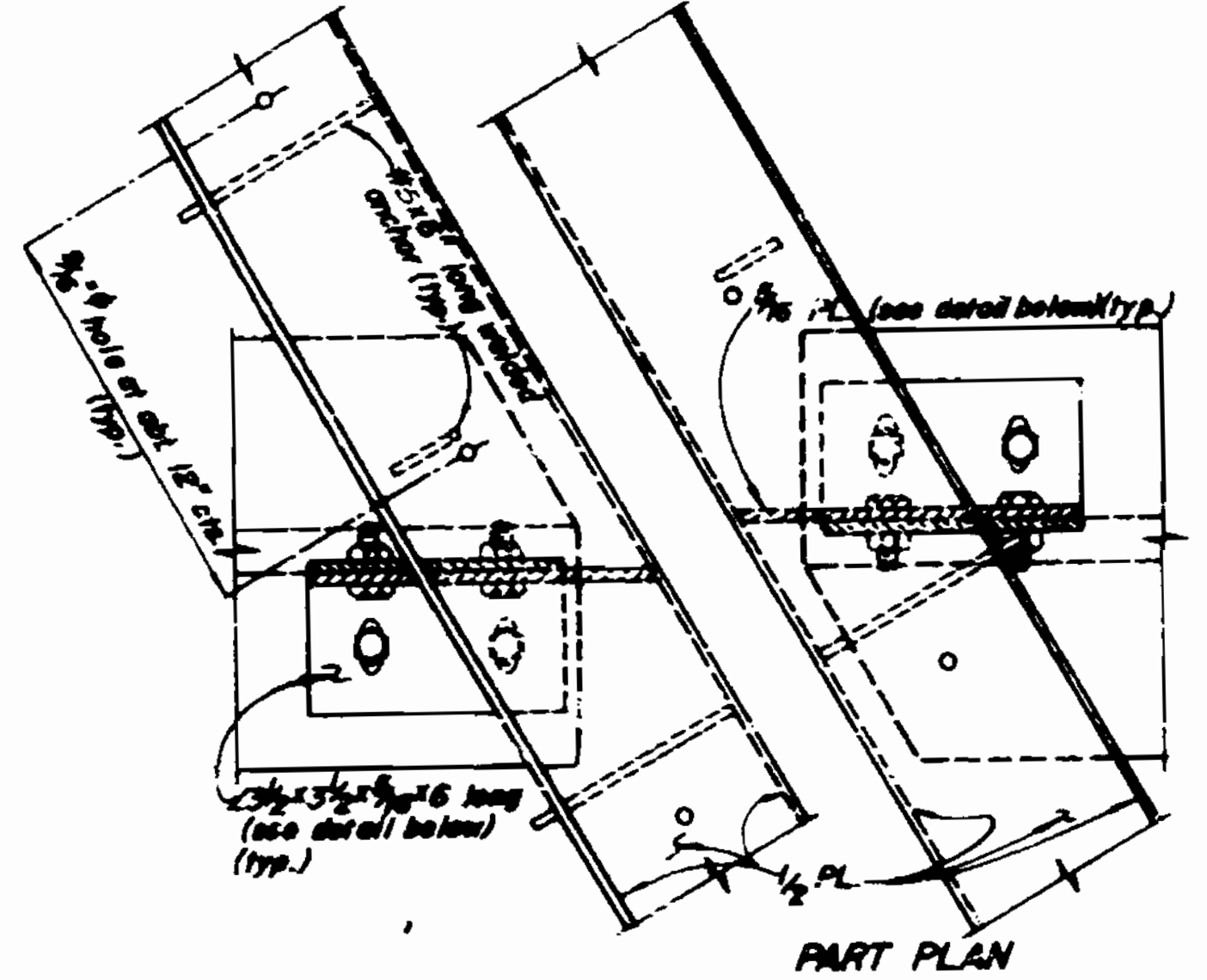
Sheet No. 39 of 72.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO		88	23	



PART SECTION THRU ARMORED JOINT

(#) these plates may be one piece by using legs of equal or unequal angles



Note: 3/16" plates placed at each girder or stringer.

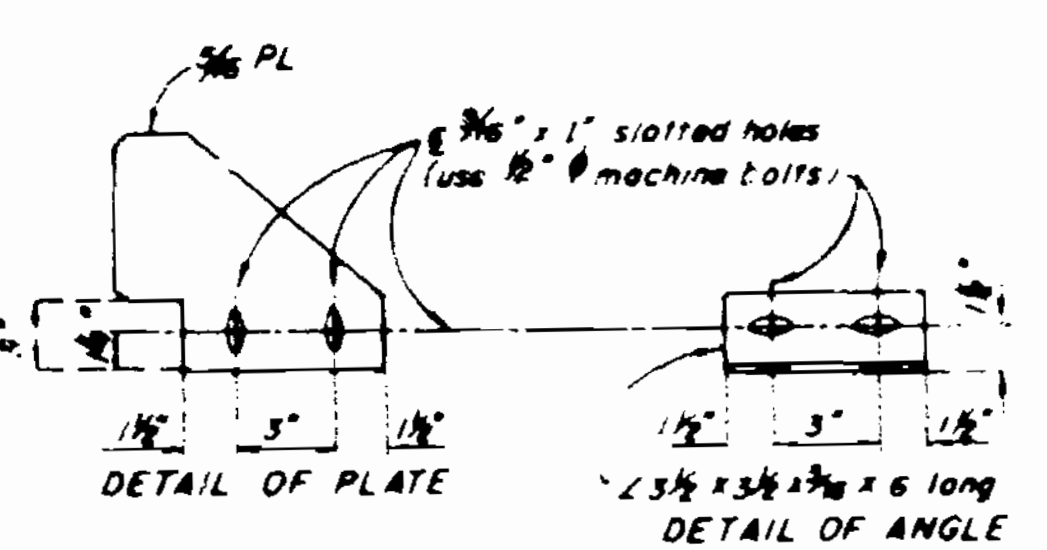
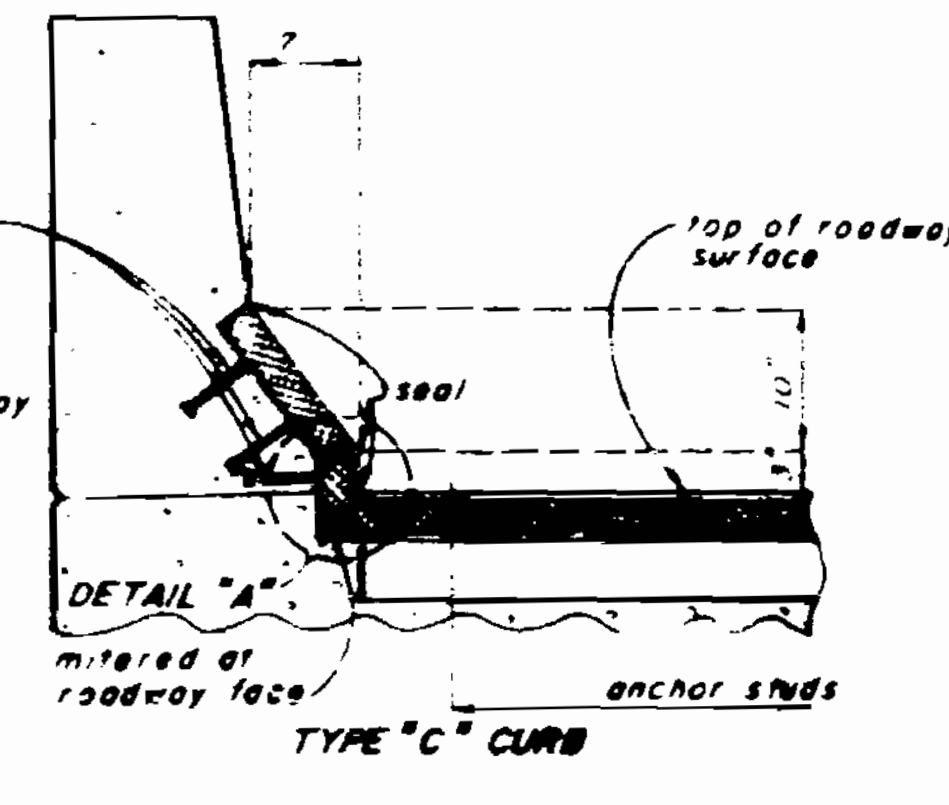
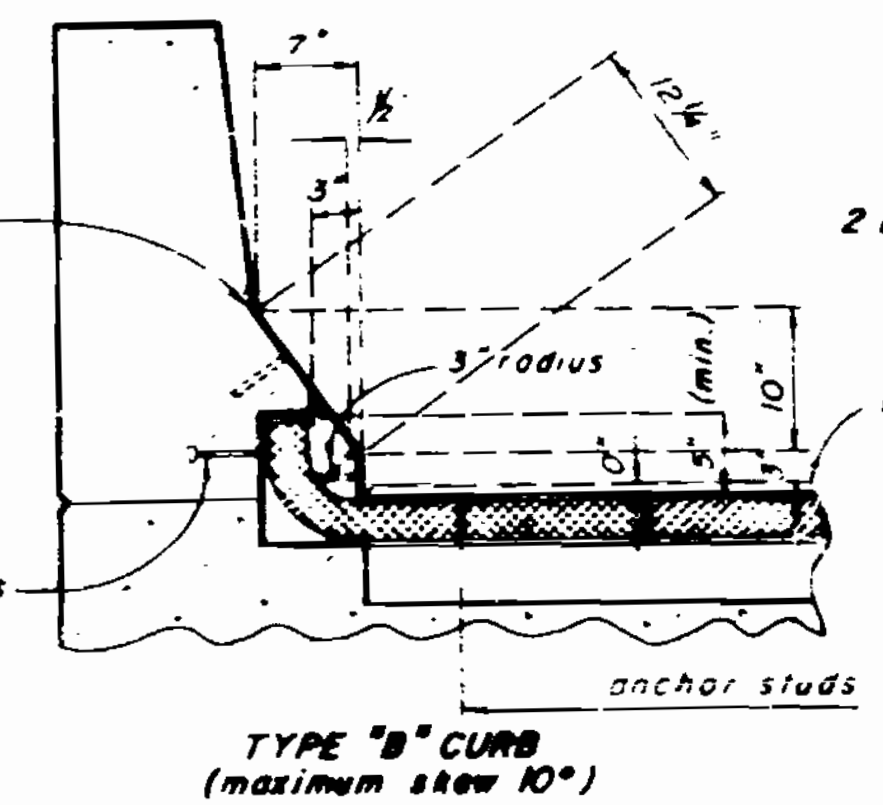
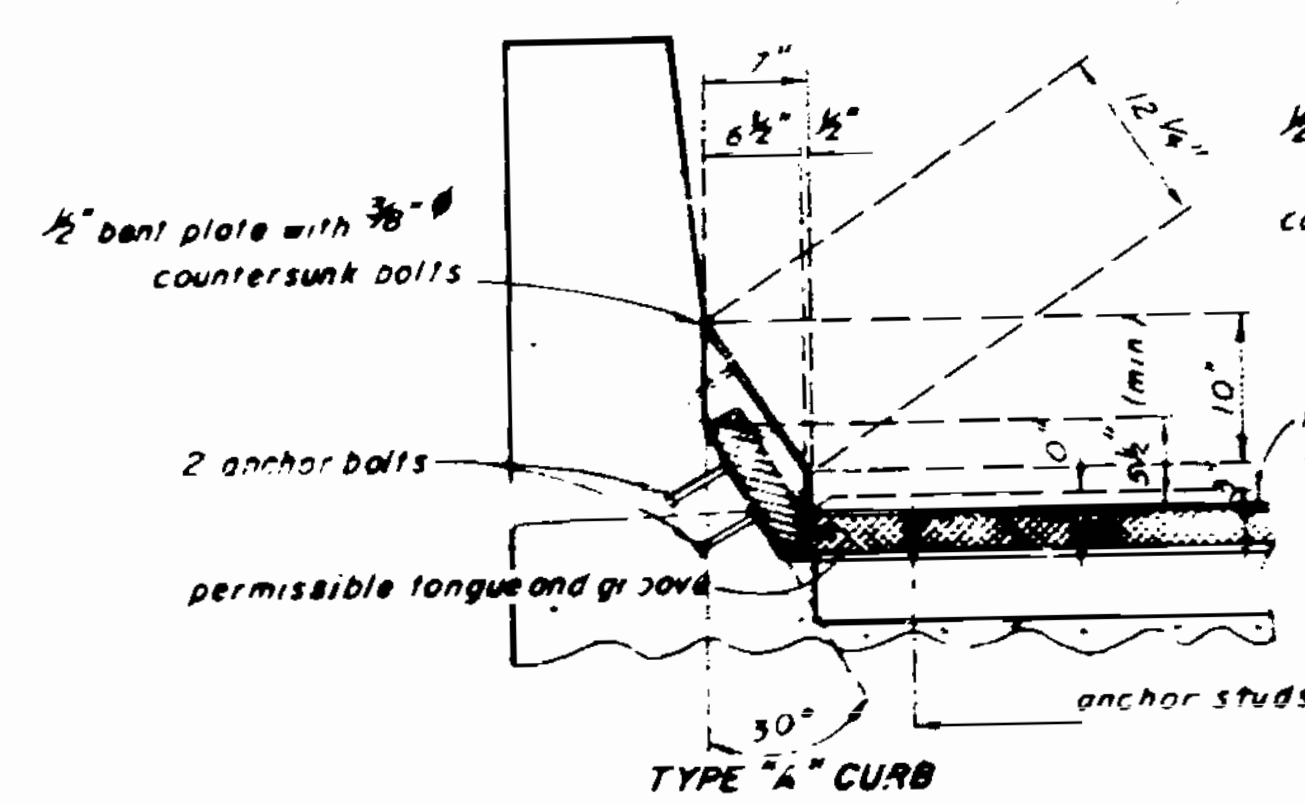


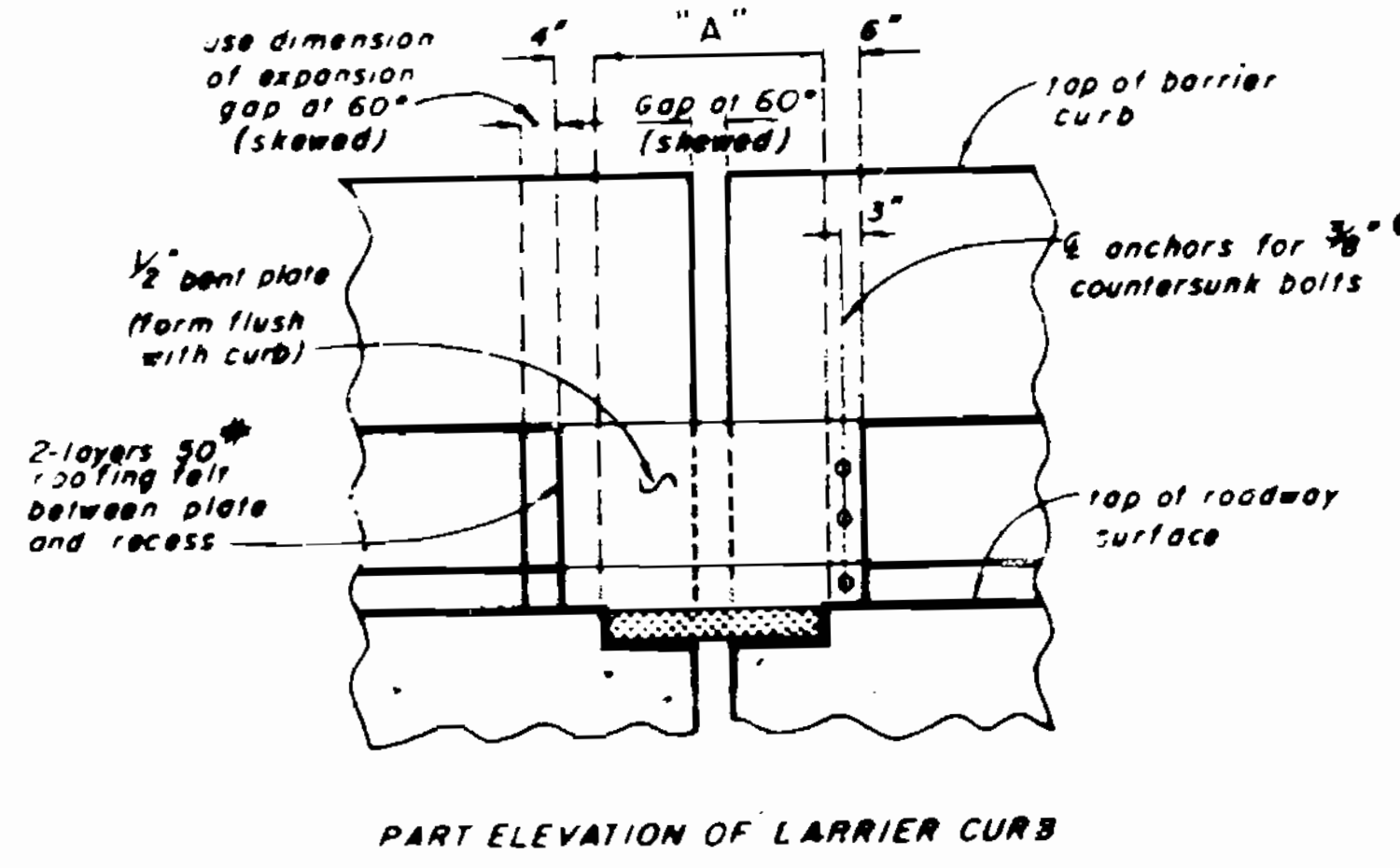
TABLE OF DIMENSIONS

LOCATION	ACCEPTABLE ALTERNATE TYPES	EXP. GAP AT 60°	"A" AT 60°	"B"	"C"	"D"	"E"	"F"	ANCHOR STUDS SIZE
Joint 5	Form-Flex or TE300	2"	11 1/2"	4 1/2"	1 3/4"	1 1/2"	1 3/4"	2 1/4"	1/2" 20
	Gen-Slip CCL E 1/2"	2 1/4"	11 1/4"	4"	1 3/4"	1 1/2"	1 3/4"	2 1/4"	3/8" 20
	Waco Bando-Flex 250	2"	11 1/2"	4 1/2"	1 3/4"	1 1/2"	1 3/4"	2 3/4"	1/2" 20
	Fel-Span T50 LS	1 3/4"	11 3/4"	4 1/2"	1 3/4"	1 1/2"	1 3/4"	2 1/4"	1/2" 20
Joint 4, 6, 8 WB	On-Flex 25	1 1/2"	11"	4 1/4"	1 3/4"	1 1/4"	1 3/4"	2 1/4"	1/2" 20
	On-Flex 45	2 1/2"	11 3/4"	4 1/2"	1 3/4"	1 1/2"	2 3/4"	2 1/4"	1/2" 20
	Waco Bando-Flex 450	2 1/2"	12"	4 1/2"	1 3/4"	1 1/4"	2 3/4"	2 1/4"	1/2" 20
	Fel-Span T40 LS	2 1/4"	12 1/4"	4 1/2"	1 3/4"	1 1/2"	2 1/4"	2 3/4"	1/2" 20

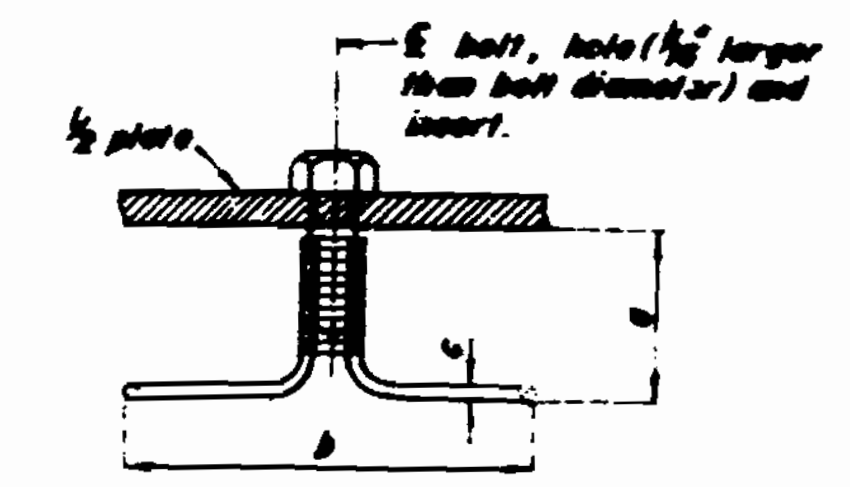
NOTE All dimensions are at right angles. Expansion gap and dimension "A" shall be increased H for each 10° fall in temperature and decreased H for each 10° rise in temperature



ALTERNATE CURB TREATMENT

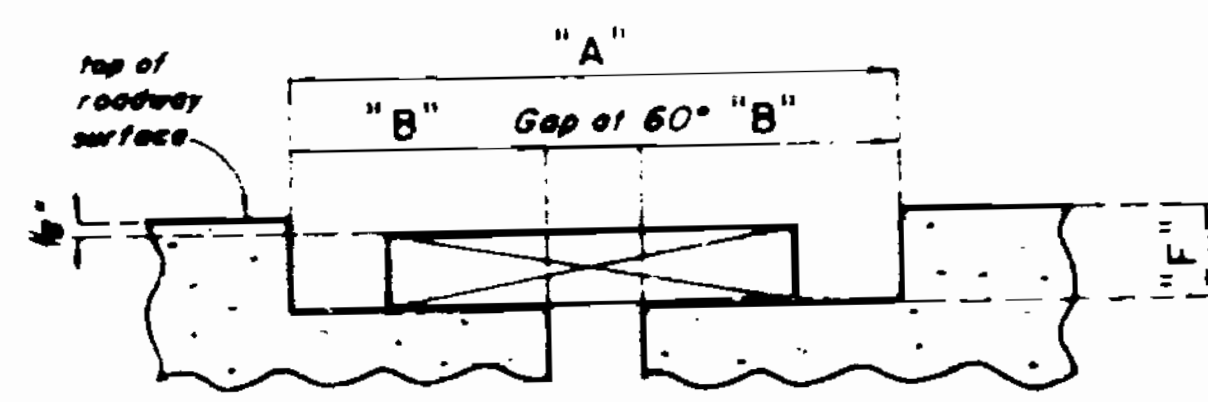


LOCATION	H
Joint 4	4"
Joint 5	8"
Joint 6	4"
Joint 7	4"
Joint 8	4"



DETAILS OF ALTERNATE WING TYPE THREADED JOINT

Bolt Diameter	Safe Load Tension (lbs.) (min.)	Approx. Ult. Cap. Tension (lbs.) (min.)	Dimensions (min.)
			a b c
1/2"	300	3,000	1-5/8" 3" .218"
5/8"	1,300	9,200	1-5/8" 5" .218"
3/4"	1,800	13,200	2-1/4" 6" .282"
7/8"	2,000	16,200	2-1/2" 6-1/2" .306"
1"	2,000	16,200	2-1/2" 6-1/2" .306"



NOTE: WHEN MODULAR UNITS ARE SPECIFIED AS AN ALTERNATE STEEL CURB PLATE TREATMENTS ARE REQUIRED.

DETAILS OF ELASTOMERIC EXPANSION JOINT SEAL AT JOINT NO. 4, 5, 6 & 8 WB

FEB. 1978 AUG. 1978

DETAILED 10/79
CHECKED 10/79

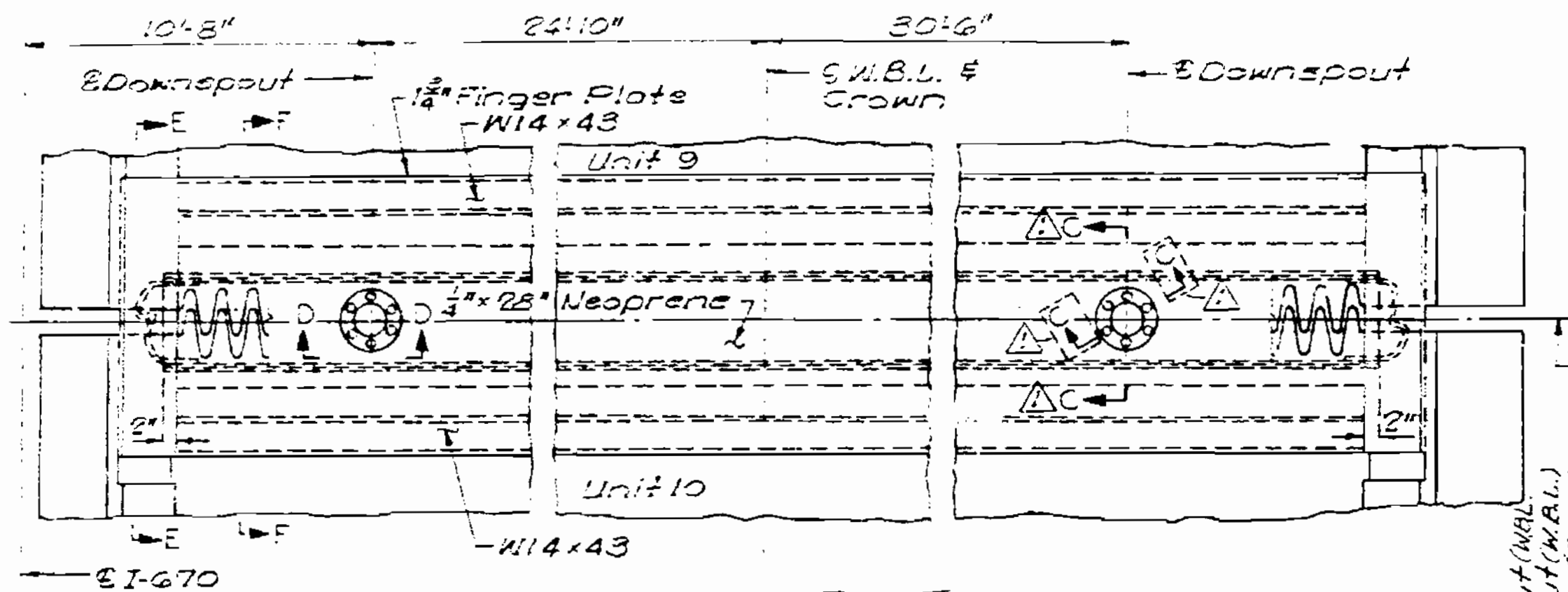
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 40 of 72

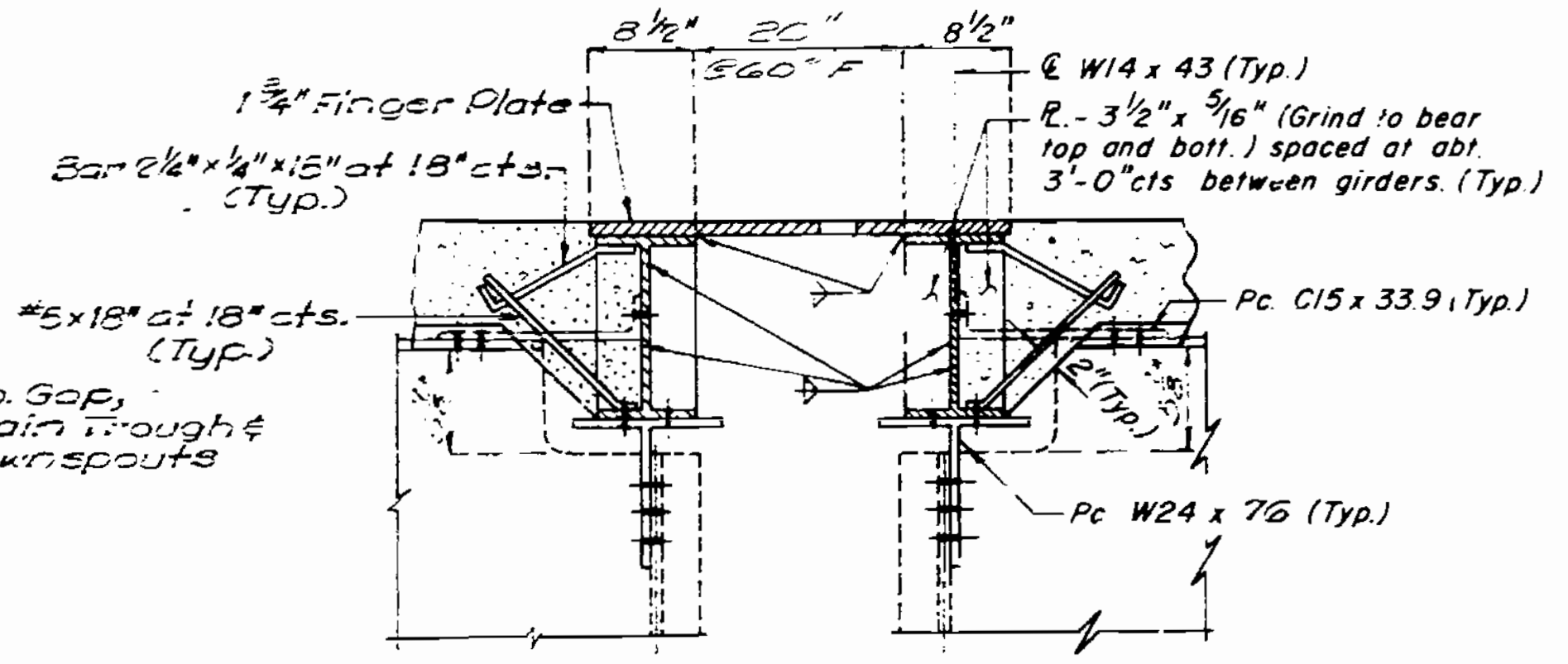
JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO			87	



PART PLAN OF GUTTER
W.B.U. Shows - E.S.L. Similar



PART SECTION THRU EXP. DEVICE

GENERAL NOTES:
Finger plates shall be cut with a machine guided gas torch from one plate 33" x 13 3/4". The surface of cut shall be perpendicular to the surface of plate. The cut shall not exceed 1/8" in width. The centerline of cut shall not deviate more than 1/16" from the position of centerline cut shown. No part of expansion device may be spliced.

Plan dimensions are based on installation at 60°F. The expansion gap and other dimensions shall be adjusted during installation for compliance with any temperature change.

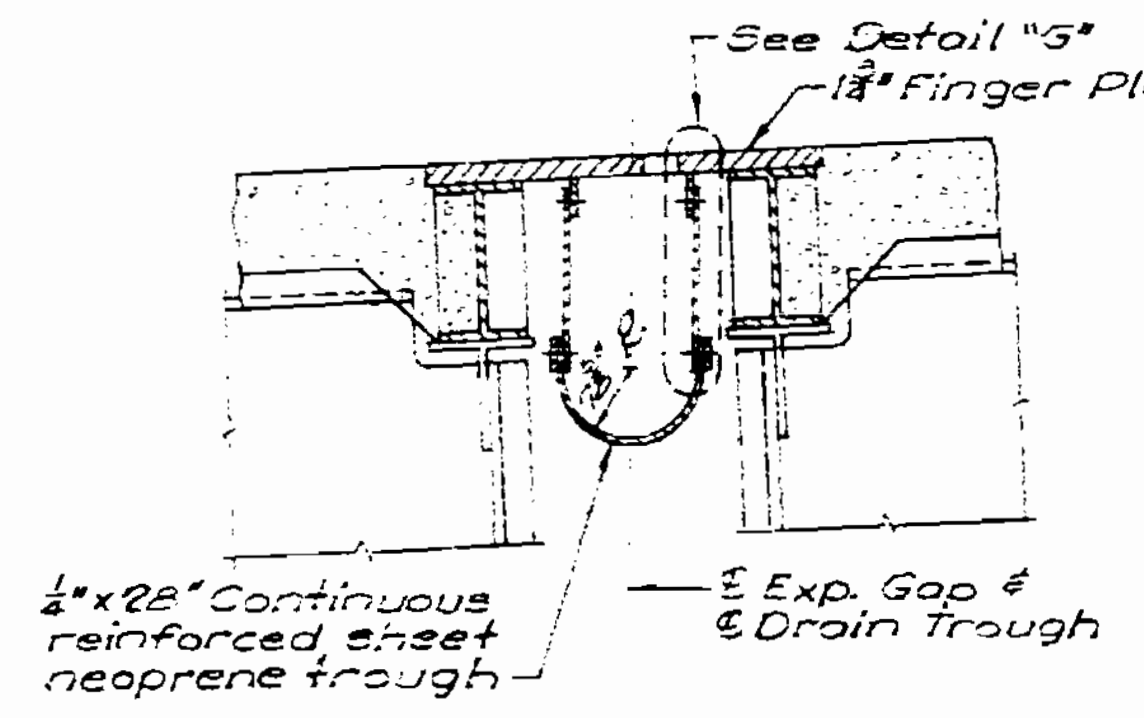
No. 5 reinforcing bars shall be structural grade deformed bars.

The roadway plate and curb plate shall be painted in the shop with two coats of an inorganic zinc primer as specified for System C to produce a dry film thickness of not less than 5.0 mils. No finish coat shall be applied to the roadway plate and curb plate.

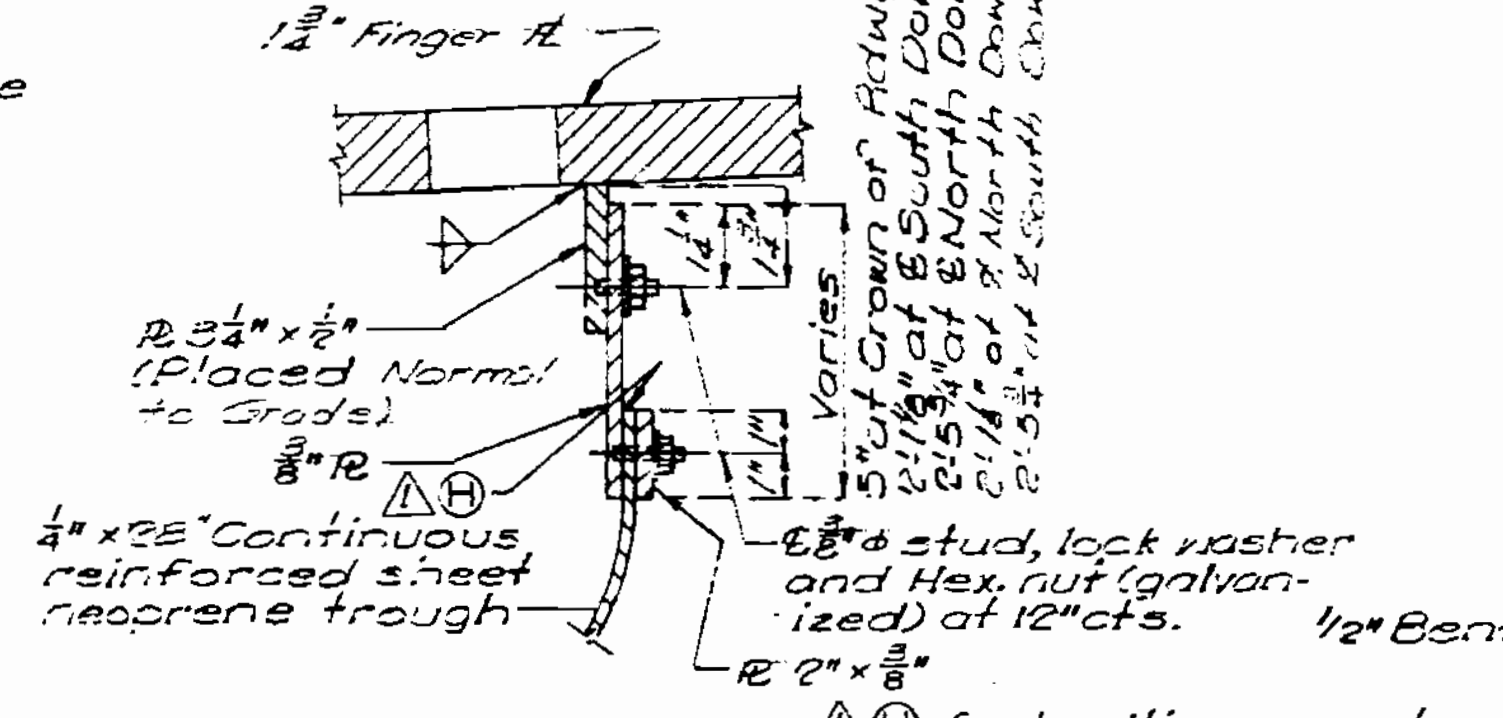
Payment for furnishing, painting, and installing structural steel for the expansion device will be made at the contract unit price per "Lin. Ft." of Finger Plate Exp. Device.

All holes shown to be suspended 1/16" and reamed to 13/16" in field.

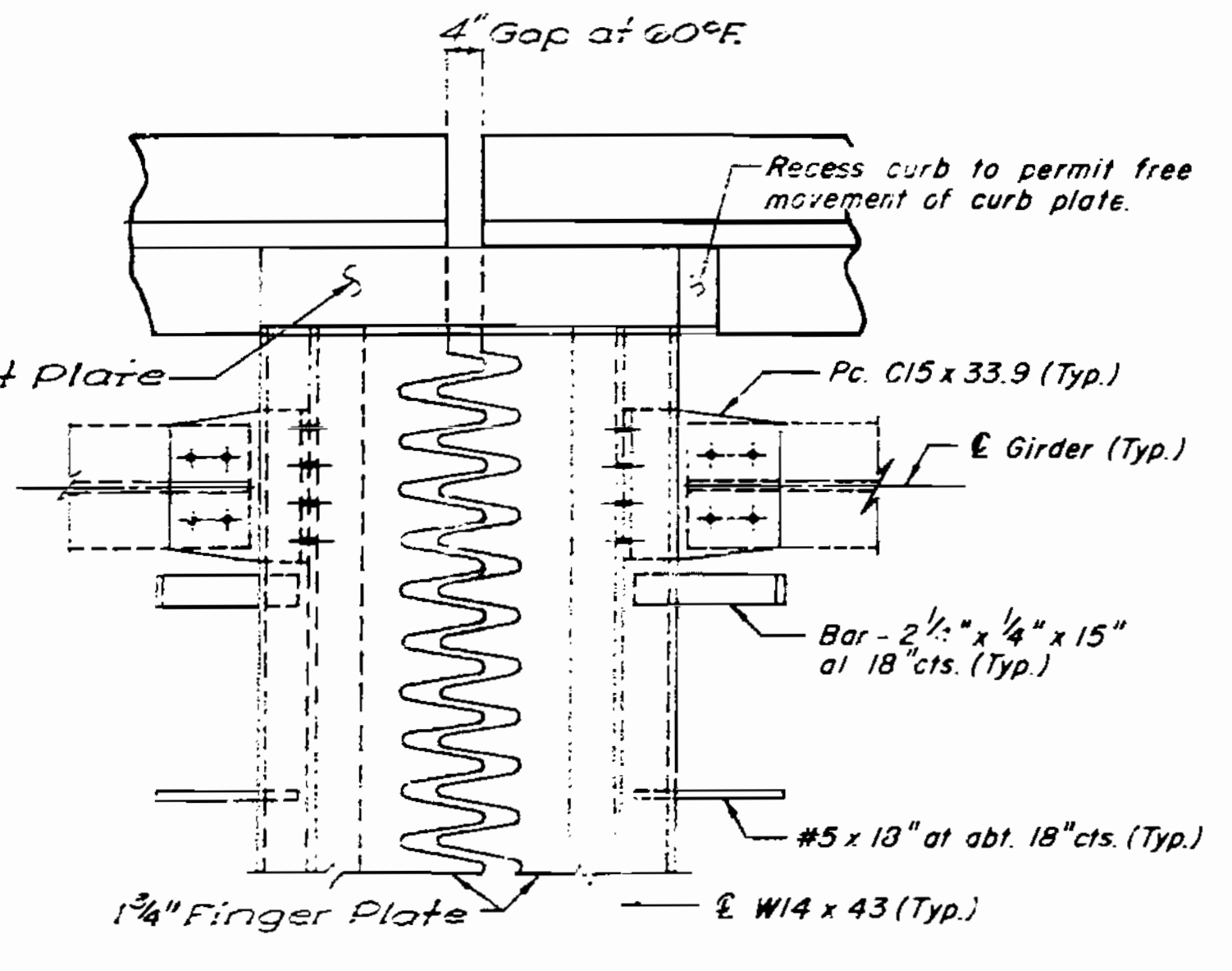
1 1/2" Finger Plate and W14 x 43 shall be bent to conform to crown of roadway.



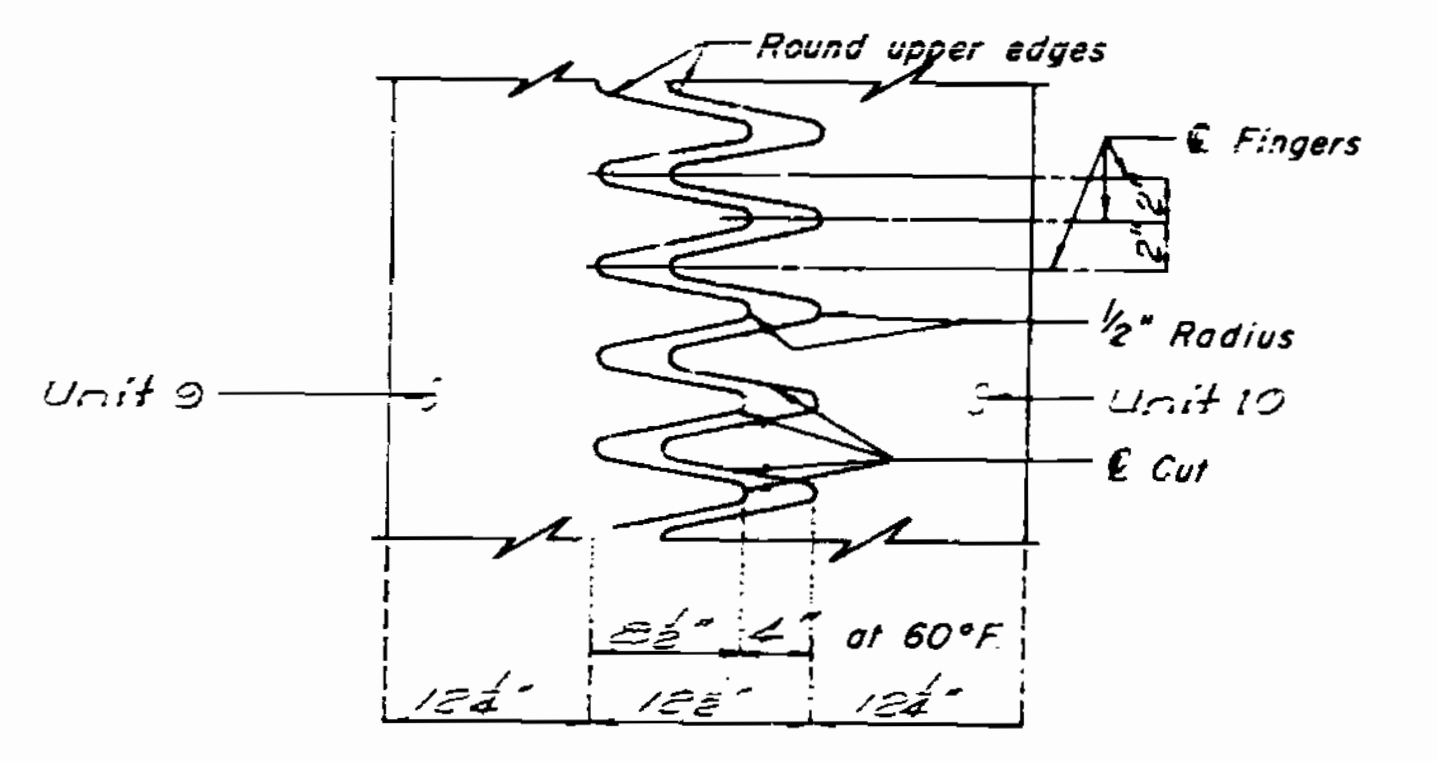
SECTION F-F



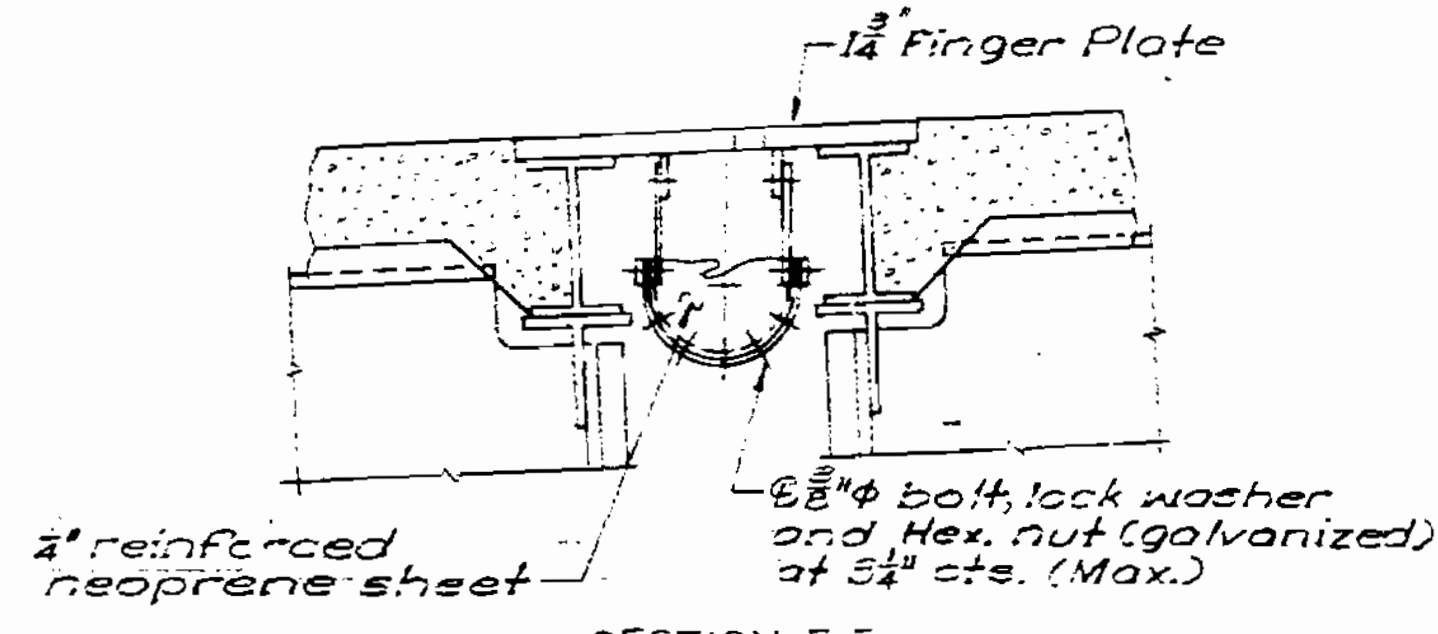
DETAIL 'G'



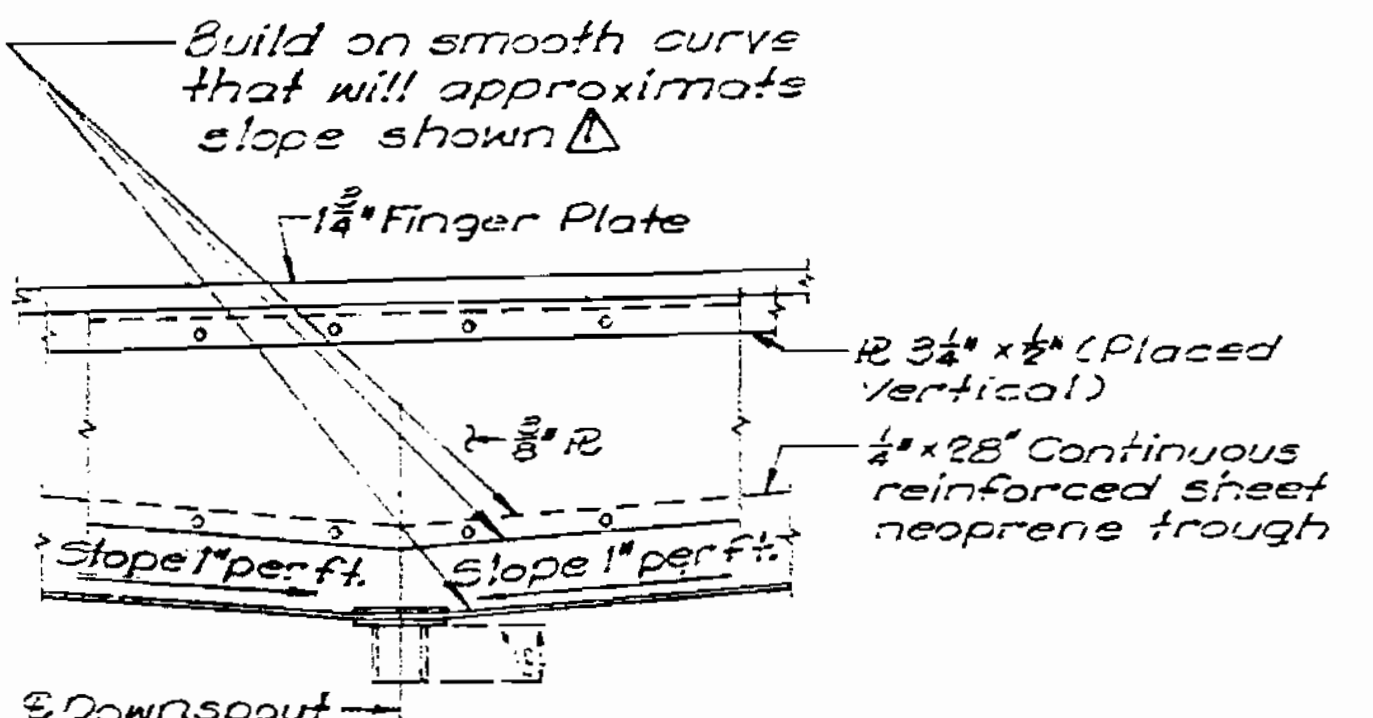
PART PLAN OF EXP. DEVICE



TYPICAL PLAN OF PLATE

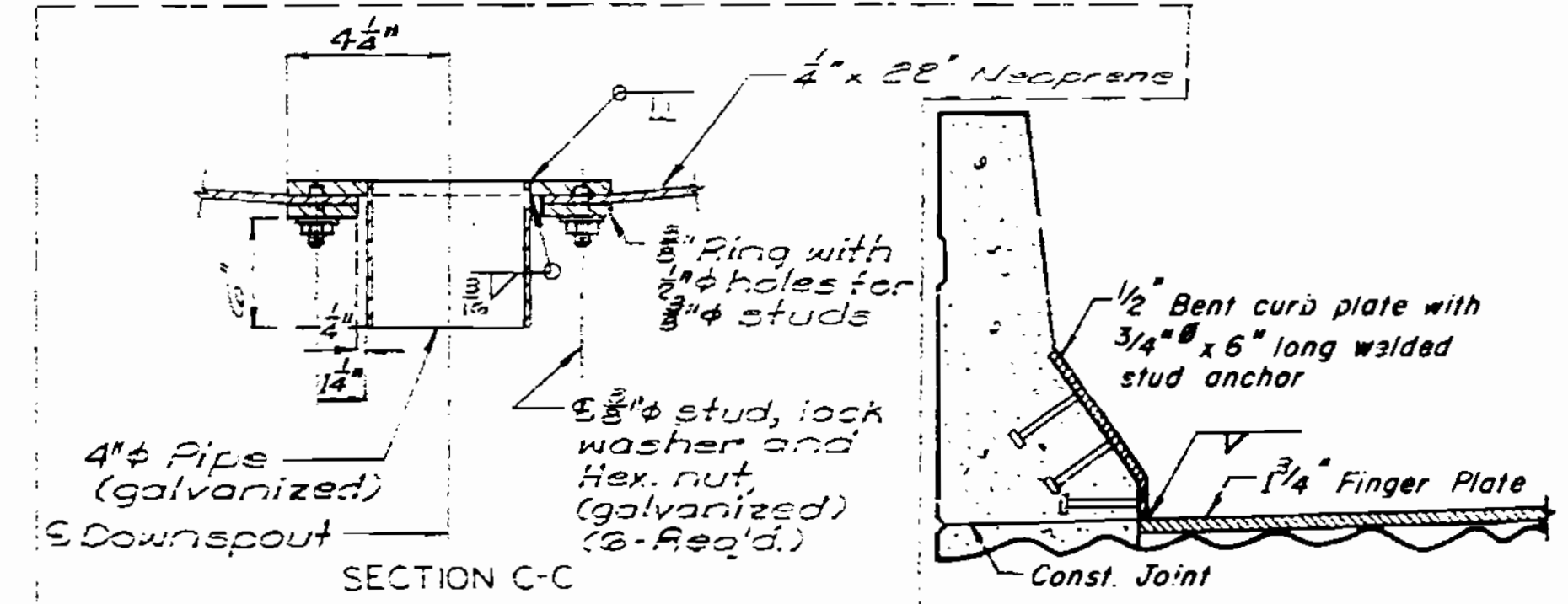


SECTION E-E

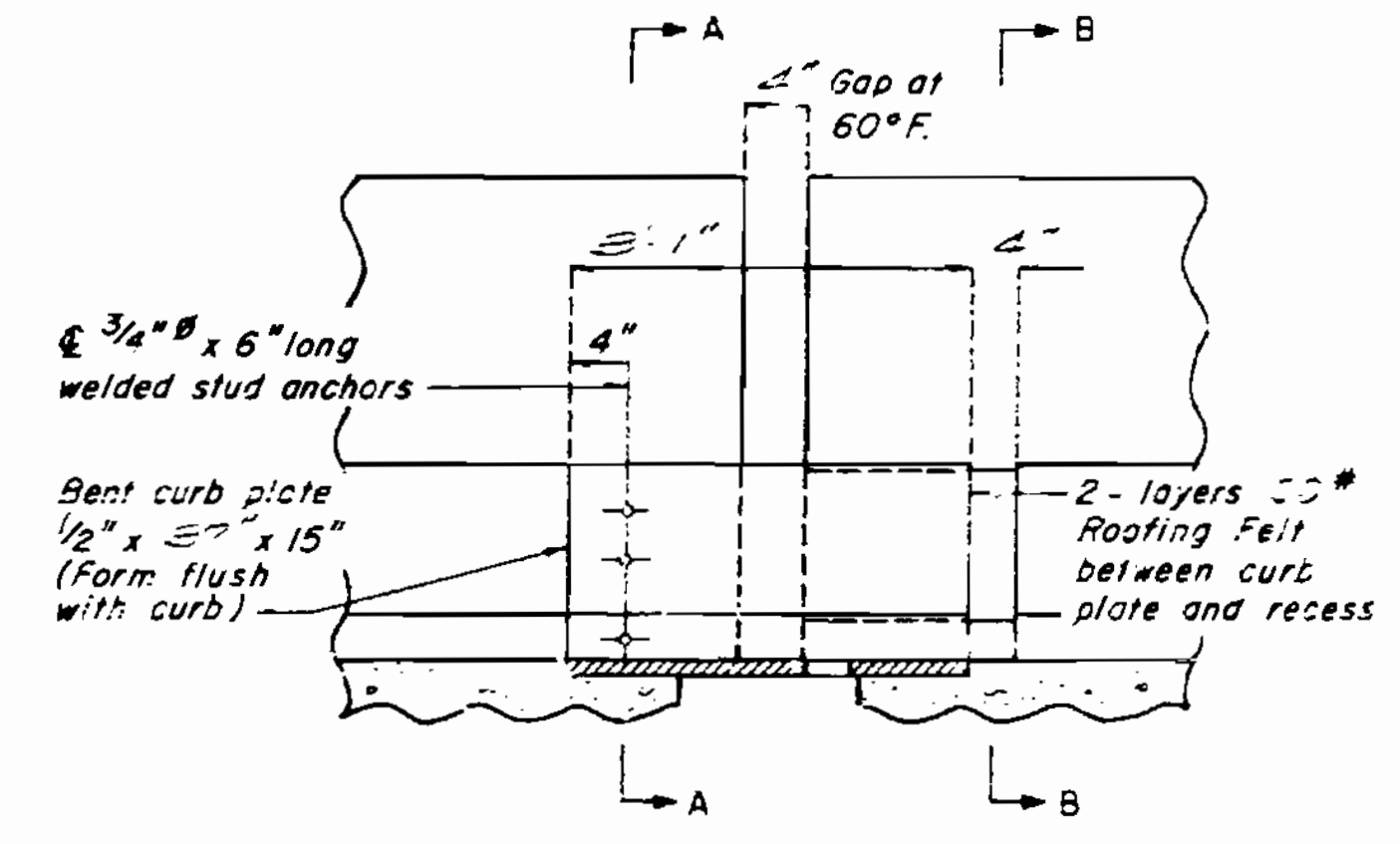


SECTION D-D

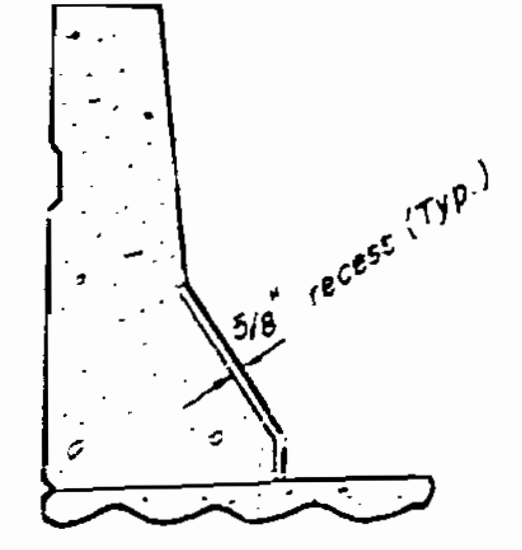
DRAIN TROUGH NOTES:
Plates for gutter shall be A.S.T.M. A-36 steel and galvanized in accordance with A.S.T.M. A123.
Plan dimensions are based on installation at 60°F. The expansion gap and other dimensions shall be adjusted during installation for compliance with any temperature change.
Payment for furnishing and installing the structural steel and 1/2" Neoprene trough will be made at the contract unit price for Finger Plate Expansion Device per Lin. Ft.
Repair of galvanizing at welded joints will be required.



DETAILS OF FINGER PLATE EXPANSION DEVICE AT BENT NO. 28



PART ELEVATION OF CURB



PART SECTION B-B

Nov. 1981

DETAILED 10-82
CHECKED 10-82

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 44 of 72. Revised 3/16/84

JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MO.			85	

NOTES FOR PREFORMED COMPRESSION JOINT SEAL:
 STRUCTURAL STEEL FOR EXPANSION DEVICE SHALL BE FABRICATED IN ONE SECTION EXCEPT THAT WHEN THE LENGTH IS OVER 50' SPlicing IS PERMISSIBLE.

THE EXPANSION DEVICE SHALL BE BENT TO CONFORM TO CROWN AND GRADE OF ROADWAY.

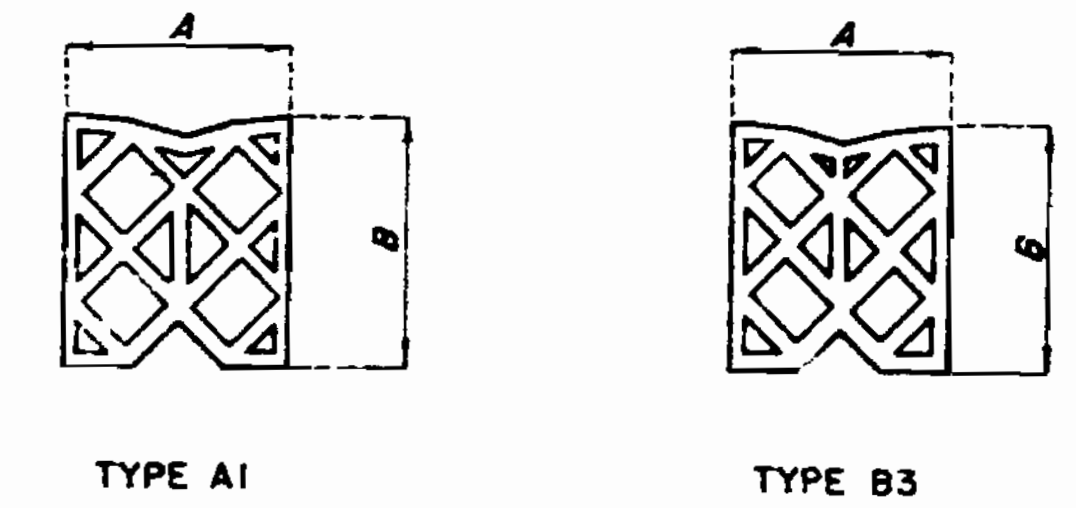
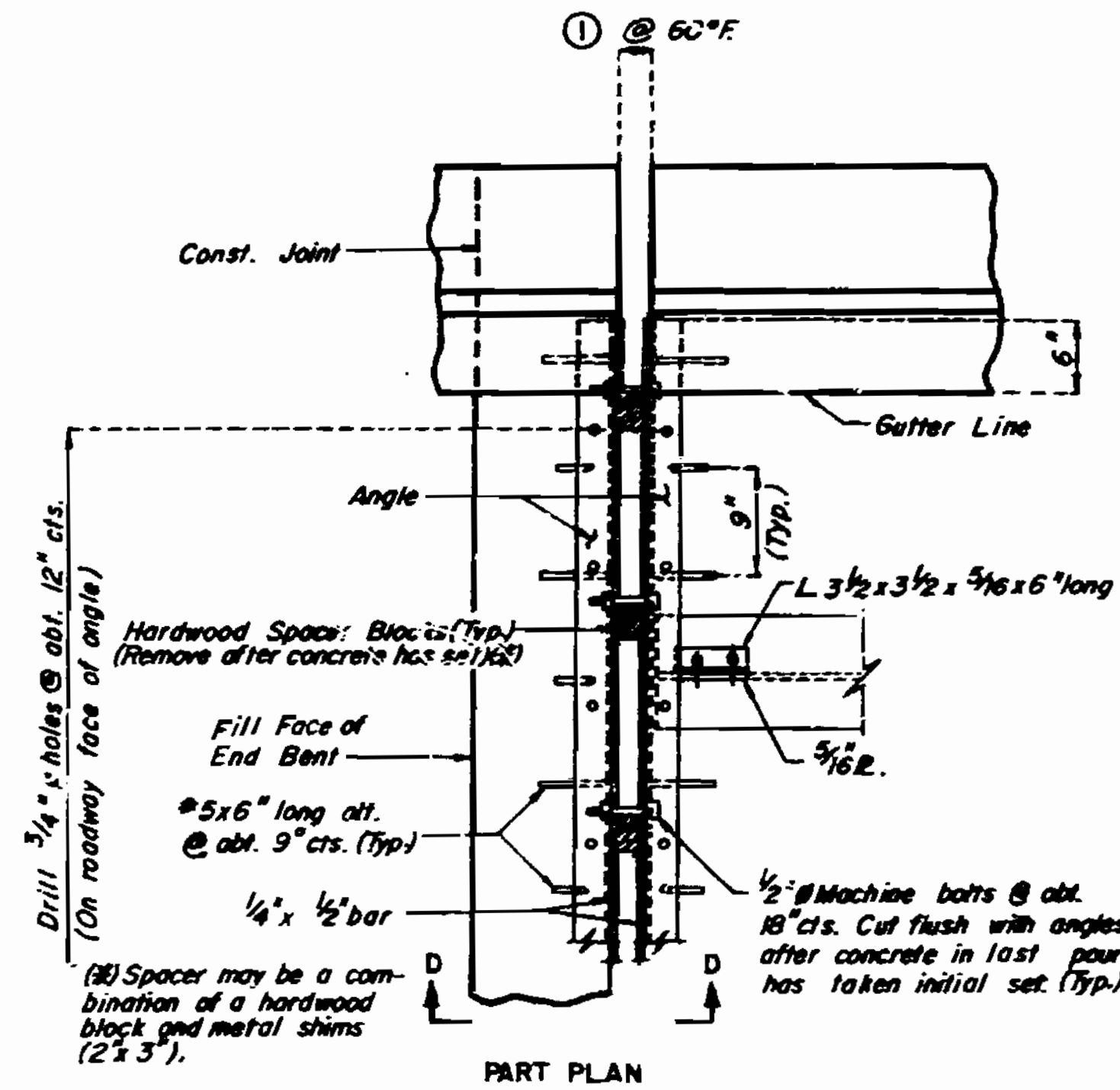
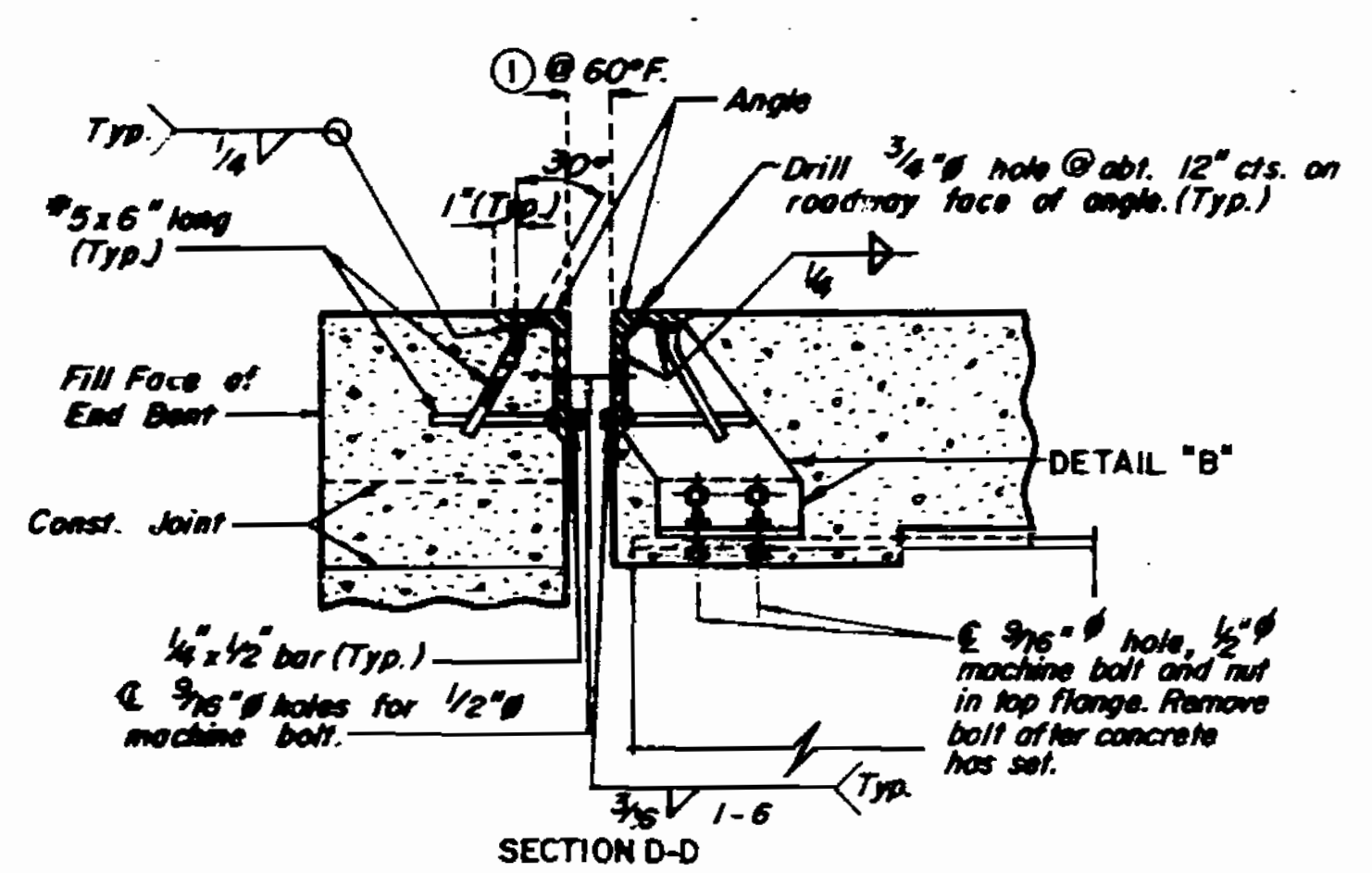
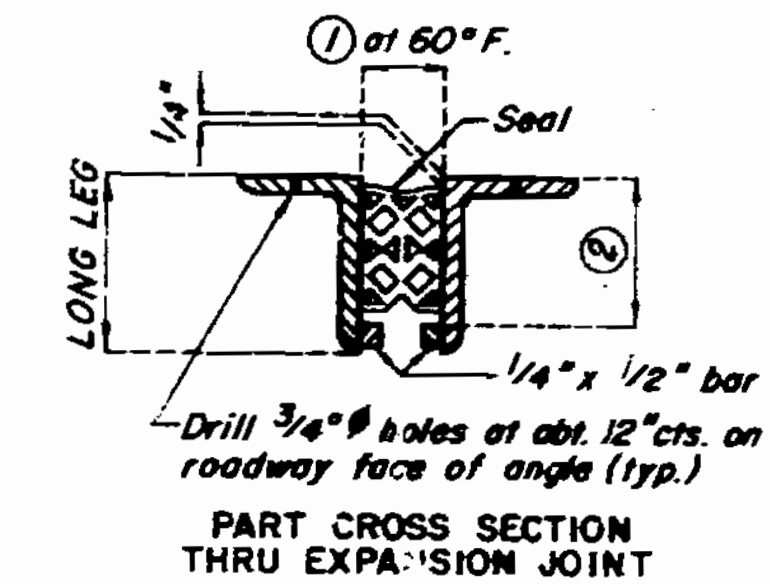
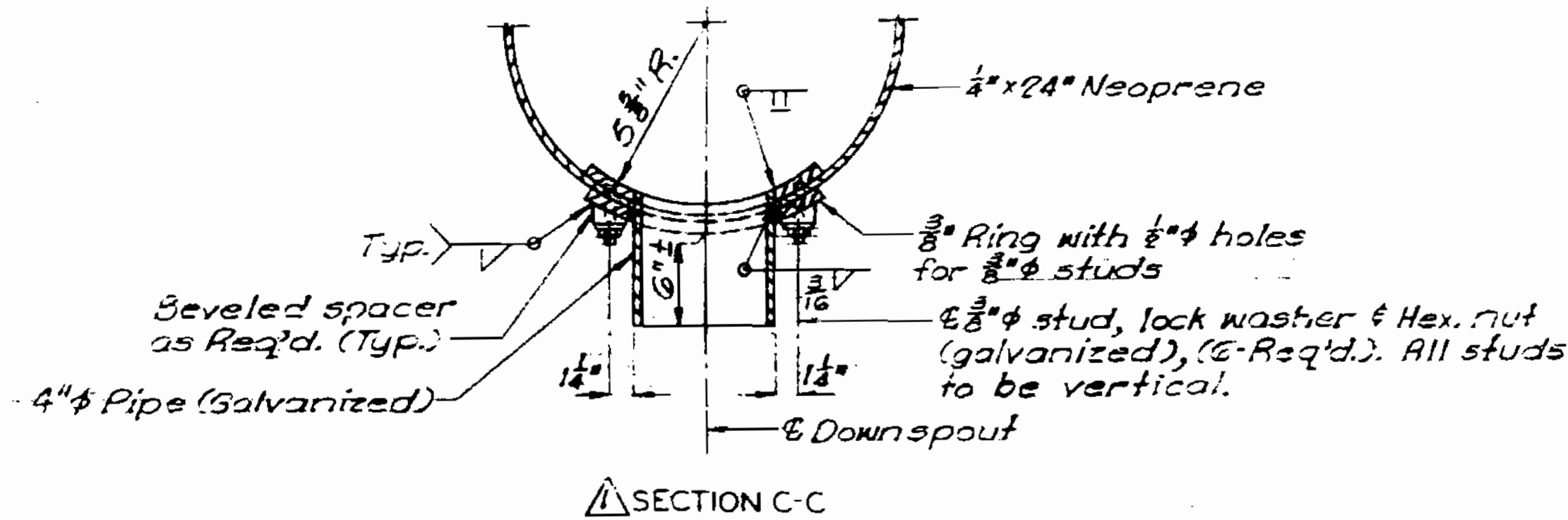
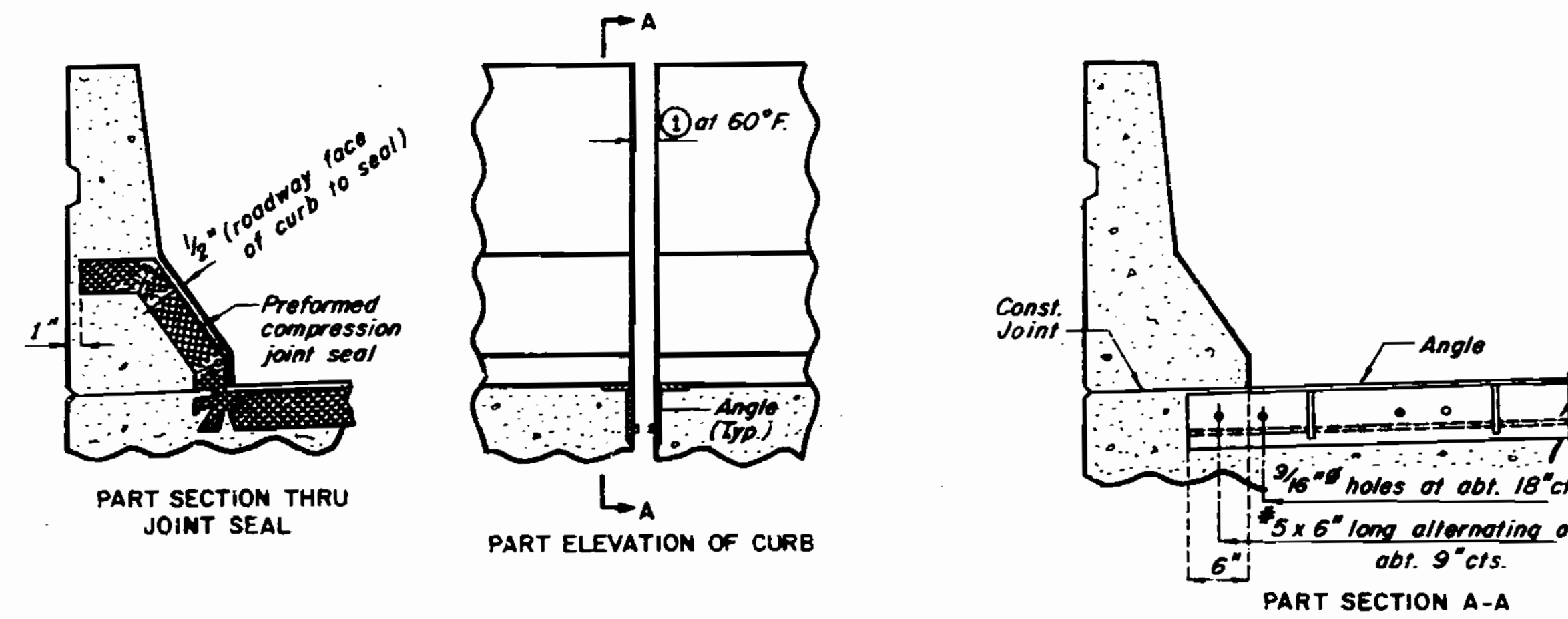
NO. 5 BARS FOR EXPANSION DEVICE SHALL BE STRUCTURAL GRADE.

APPROVED STUD WELDED ANCHORS (C-1010 THRU C-1920) OR DEFORMED BAR ANCHORS (ASTM A496) MAY BE USED IN LIEU OF NO. 5 BARS SHOWN.

PLAN DIMENSIONS ARE BASED ON INSTALLATION AT 60° F.

DIMENSION ① SHALL BE INCREASED 1/8" FOR EACH 10° FALL IN TEMPERATURE AND DECREASED 1/8" FOR EACH 10° RISE IN TEMPERATURE AT INSTALLATION.

SEE SPECIAL PROVISIONS FOR THE REQUIREMENTS OF COMPRESSION JOINT SEAL.



TYPE	"A" (WIDTH)	"B" (HEIGHT)	①	②	MAX. LIMIT OF COMPRESSIBILITY
A1 OR B3	2.5"	NOT LESS THAN "A"	1 7/8"	"B" + 1/2"	46%
A1 OR B3	3.0"	NOT LESS THAN "A"	1 7/8"	"B" + 1/2"	43%
A1 OR B3	3.5"	NOT LESS THAN "A"	2 1/8"	"B" + 1/2"	42%
A1 OR B3	4.0"	NOT LESS THAN "A"	2 3/8"	"B" + 1/2"	42%
A1 OR B3	4.5"	NOT LESS THAN "A"	2 3/8"	"B" + 1/2"	40%
A1 OR B3	5.0"	NOT LESS THAN "A"	2 7/8"	"B" + 1/2"	40%

SIZE OF ARMOR ANGLE.
 VERTICAL LEG OF ANGLE SHALL BE A MINIMUM OF "B" + 1/4".
 HORIZONTAL LEG OF ANGLE SHALL BE A MINIMUM OF 3". MINIMUM THICKNESS OF ANGLE SHALL BE 3/8" FOR SEAL WIDTHS THROUGH 3.5" AND 1/2" FOR SEAL WIDTHS GREATER THAN 3.5".

IN LIEU OF THE SPECIFIED SEAL, THE NEXT LARGER SEAL MAY BE SUBSTITUTED. DIMENSIONS AND LIMITS SHALL CORRESPOND TO THE ACTUAL SEAL INSTALLED.

DETAILS OF PREFORMED COMPRESSION JOINT SEAL AT JOINT NO. 10

OCT. 1973 | OCT. 1983

DETAILED 19 82
 CHECKED 19 82

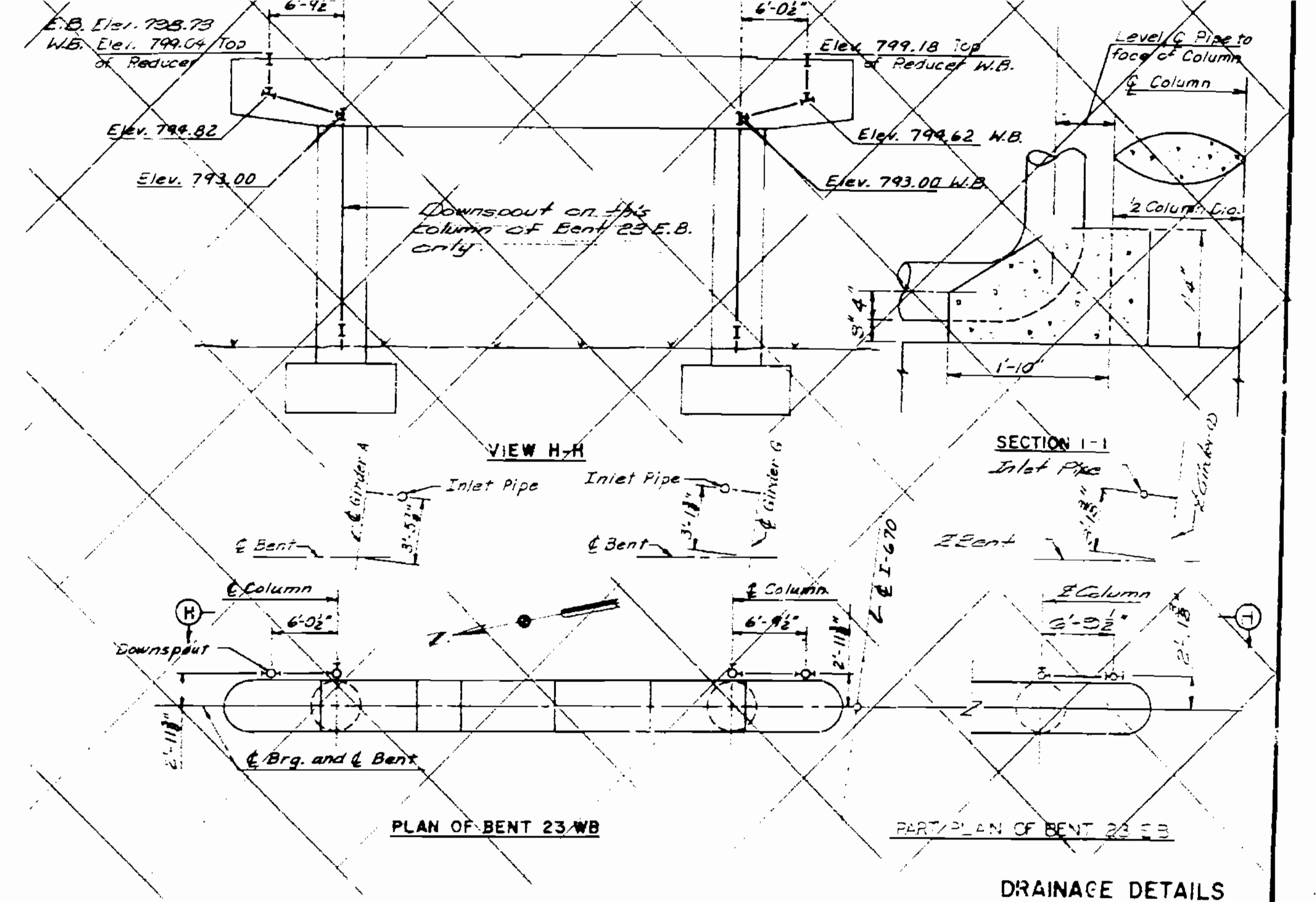
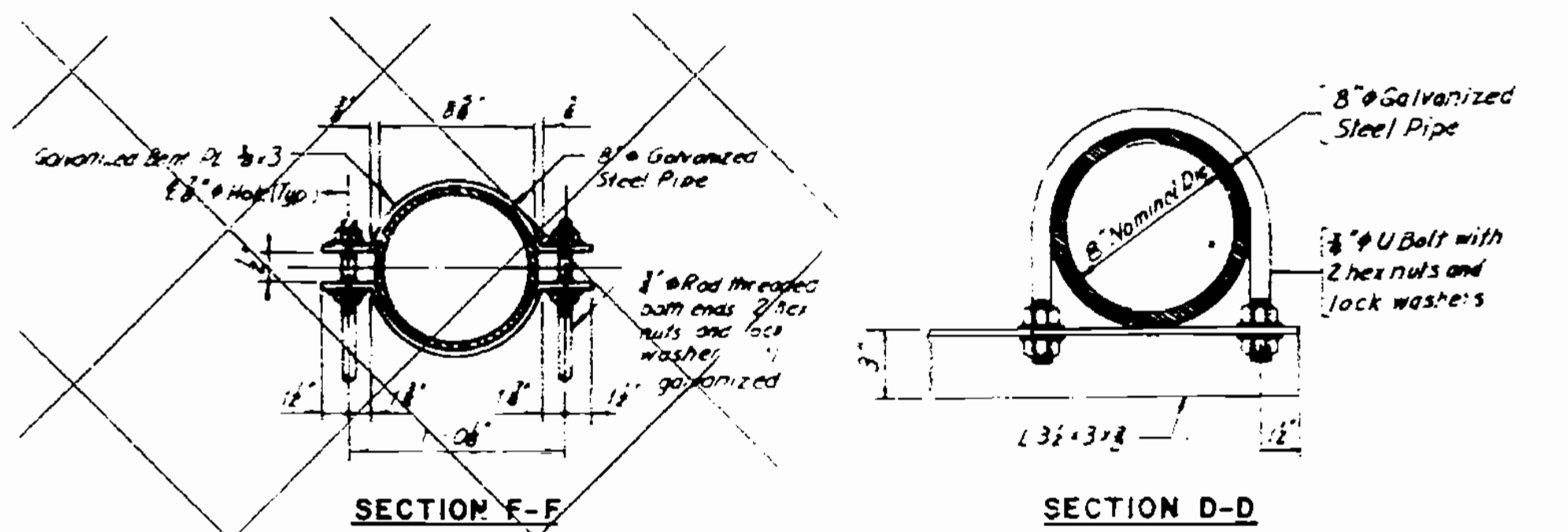
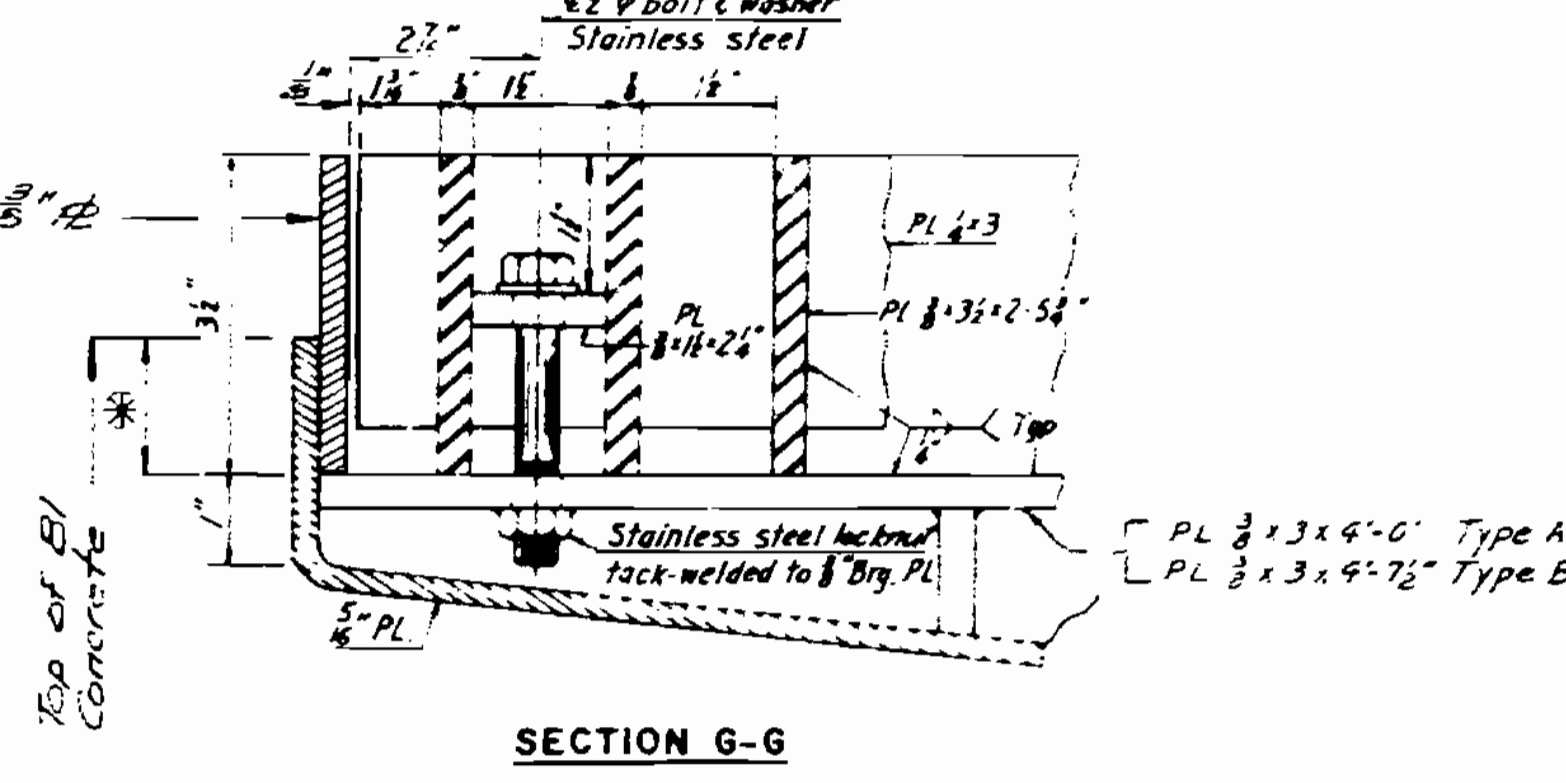
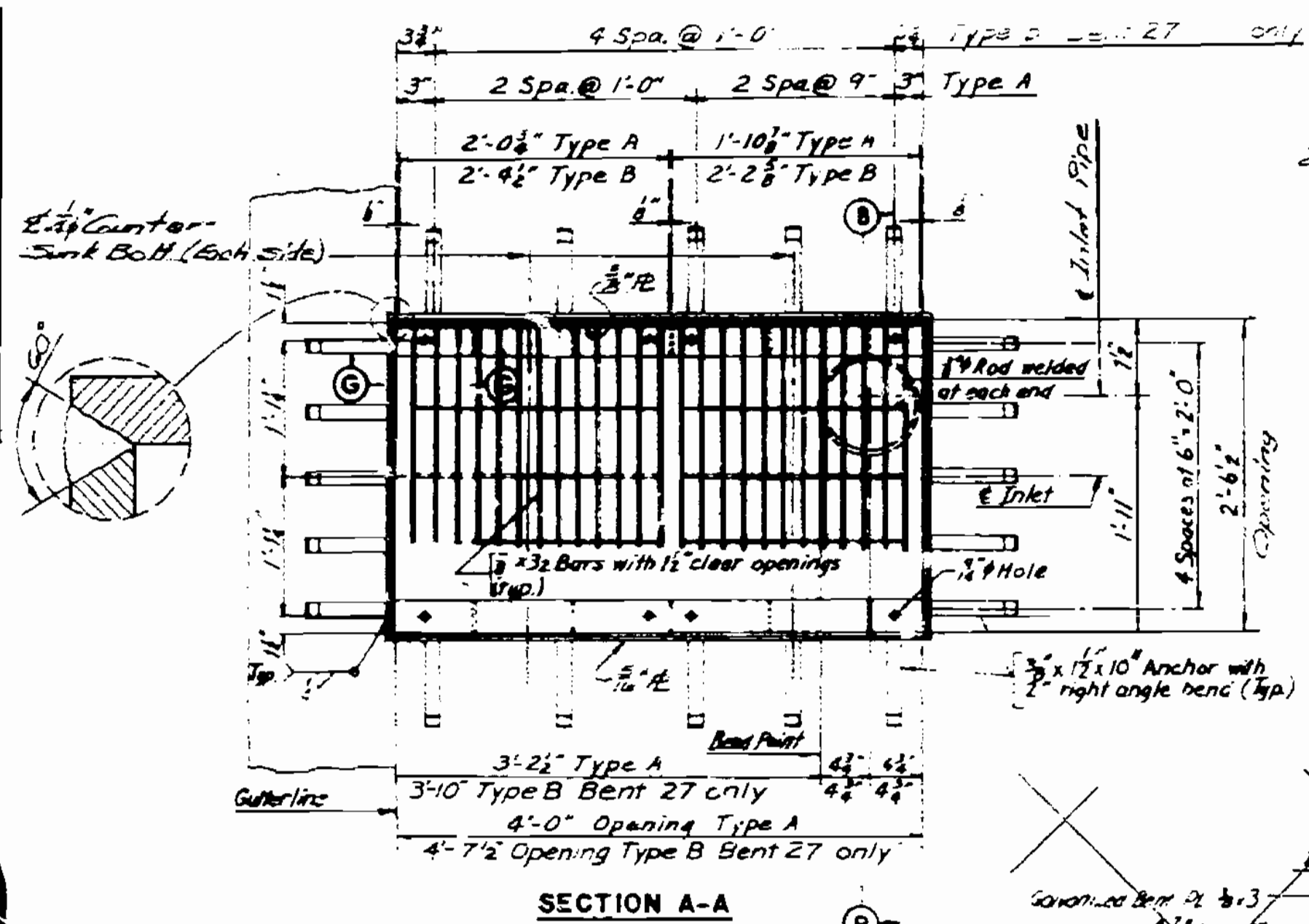
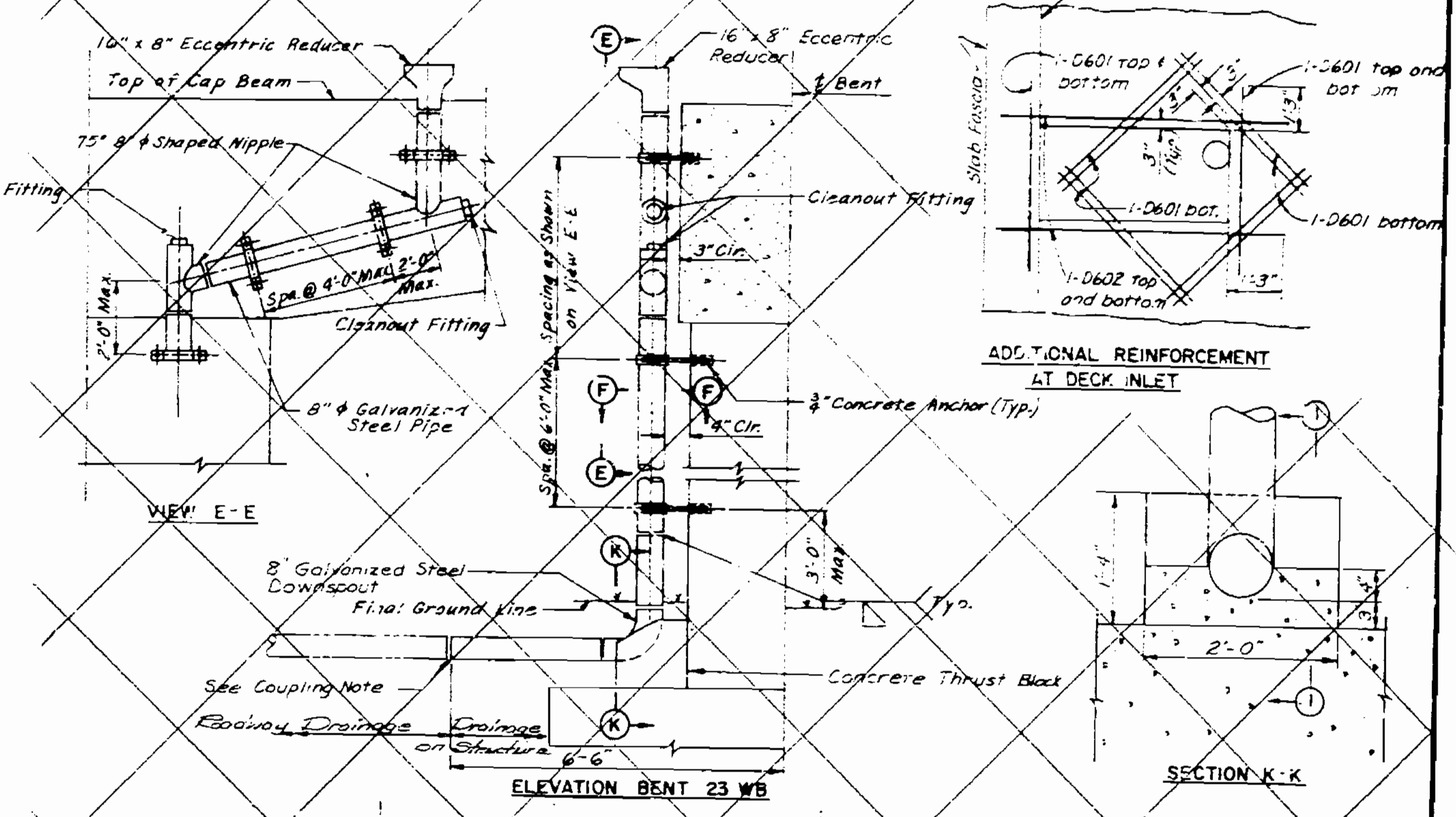
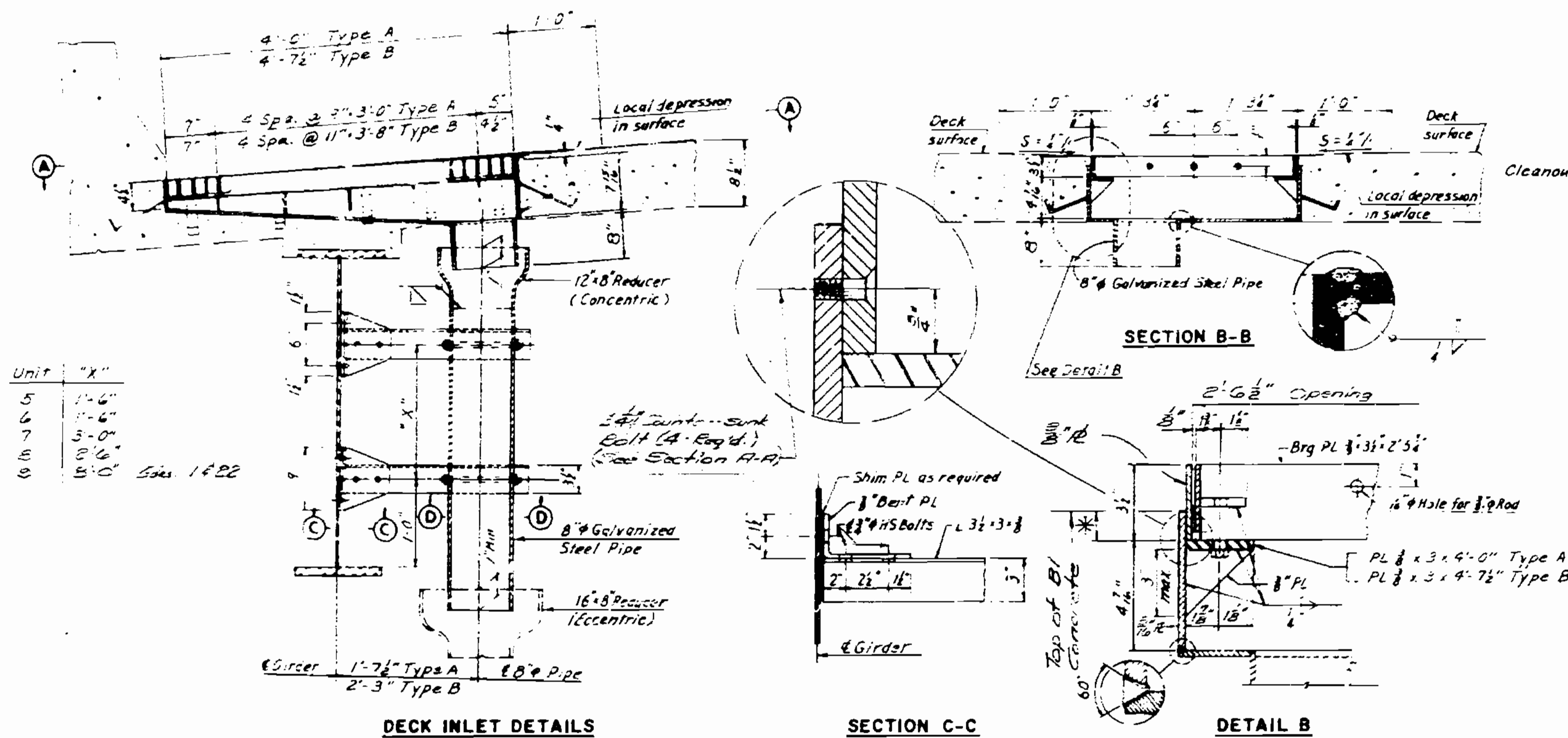
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 42 of 72. Revised 9/28/84

JACKSON COUNTY

A-3136

REV. NO.	DATE	BY	CHKD.	NO.	TOTAL SHEETS
1	NO.			39	



Note: Type B inlet to be used at Bent 27 only. All other inlets to be Type A.

Note: For "Drainage Notes" see sht. 47. For "Coupling Note" see sht. 44.

Note: This drawing is not to scale. Follow dimensions.

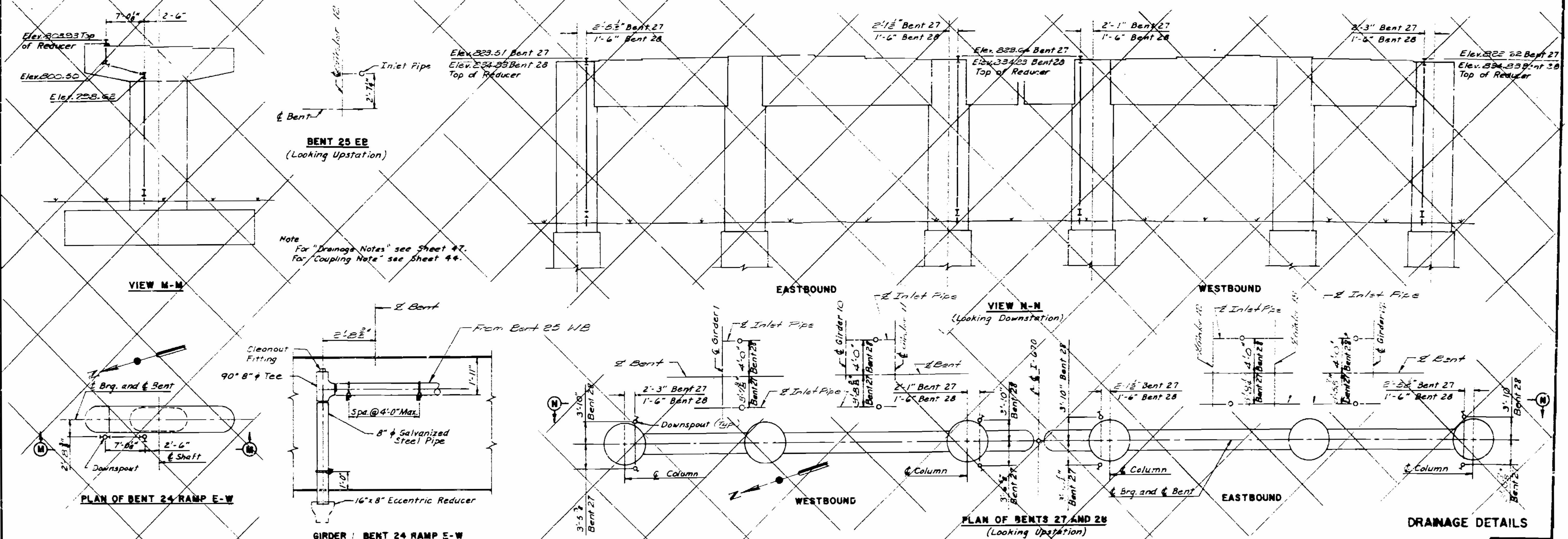
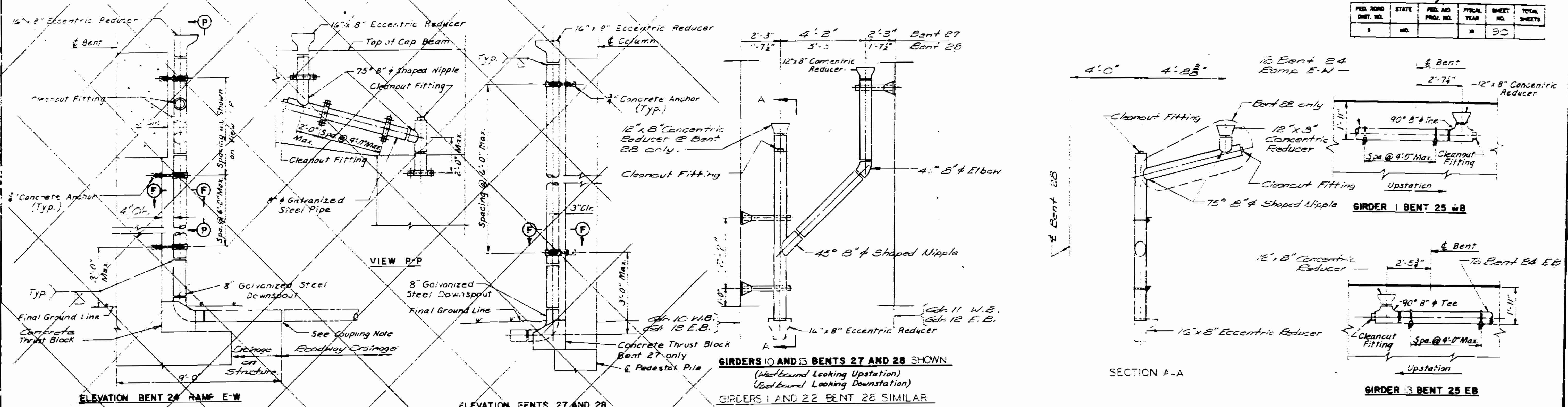
DATE: 10/79
CHECKED: 10/79

Sheet No. 46 of 72.

JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		88	90	



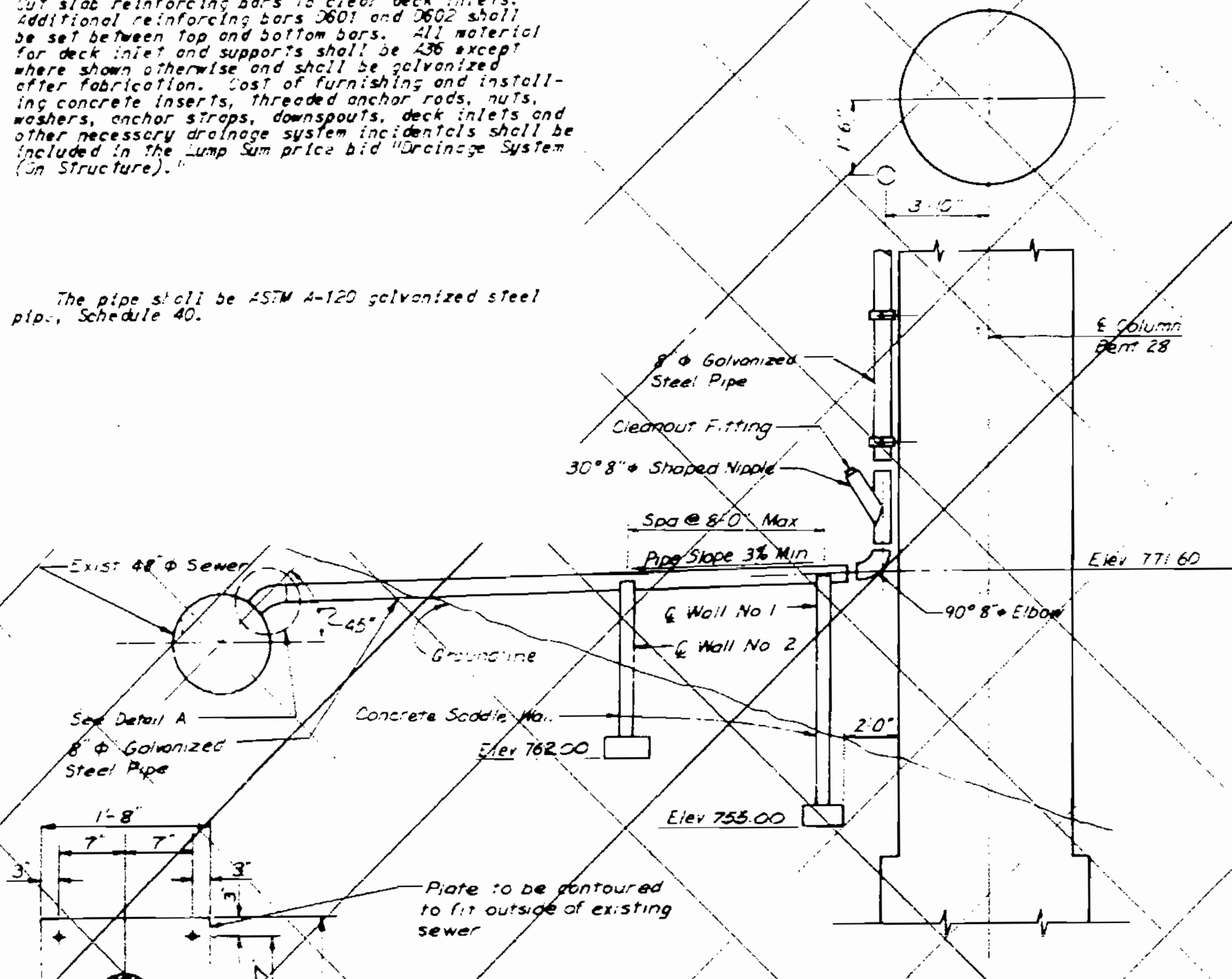
Drainage Notes:

See Slab Plans for location of deck inlets. Cut slab reinforcing bars to clear deck inlets. Additional reinforcing bars #601 and #602 shall be set between top and bottom bars. All material for deck inlet and supports shall be #36 except where shown otherwise and shall be galvanized after fabrication. Cost of furnishing and installing concrete inserts, threaded anchor rods, nuts, washers, anchor straps, downspouts, deck inlets and other necessary drainage system incidentals shall be included in the lump sum price bid "Drainage System (on Structure)".

The pipe shall be ASTM A-120 galvanized steel pipe, Schedule 40.

PER. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		78	2	

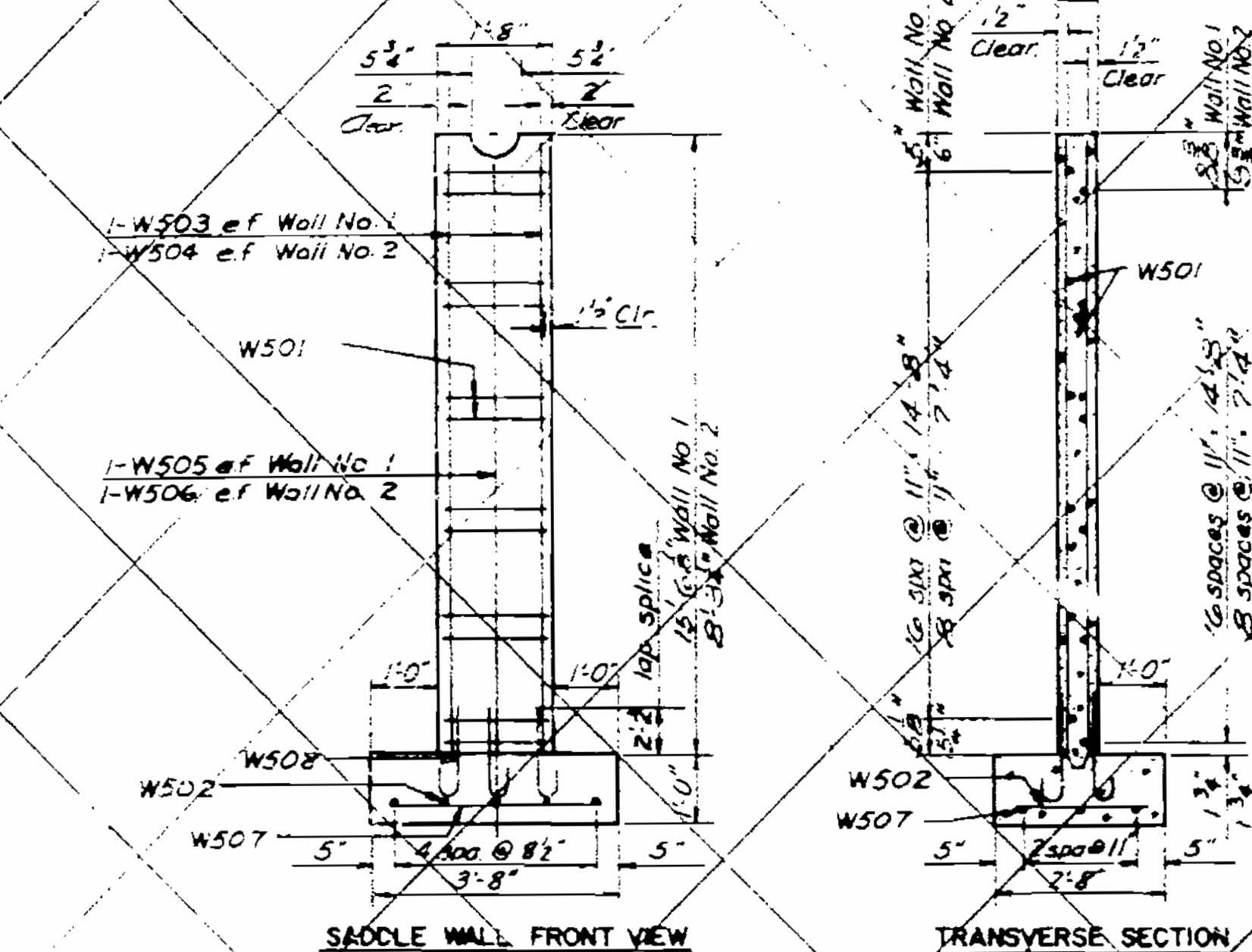
Note: All dimensions to be verified in the field during construction.



ELEVATION VIEW BENT 28

Note: The cost of excavation, backfilling and materials for the Saddle Walls is to be included in the Price bid for "Drainage System (on Structure)". See Sheet for "Bill of Reinforcement" for the Saddle Walls.

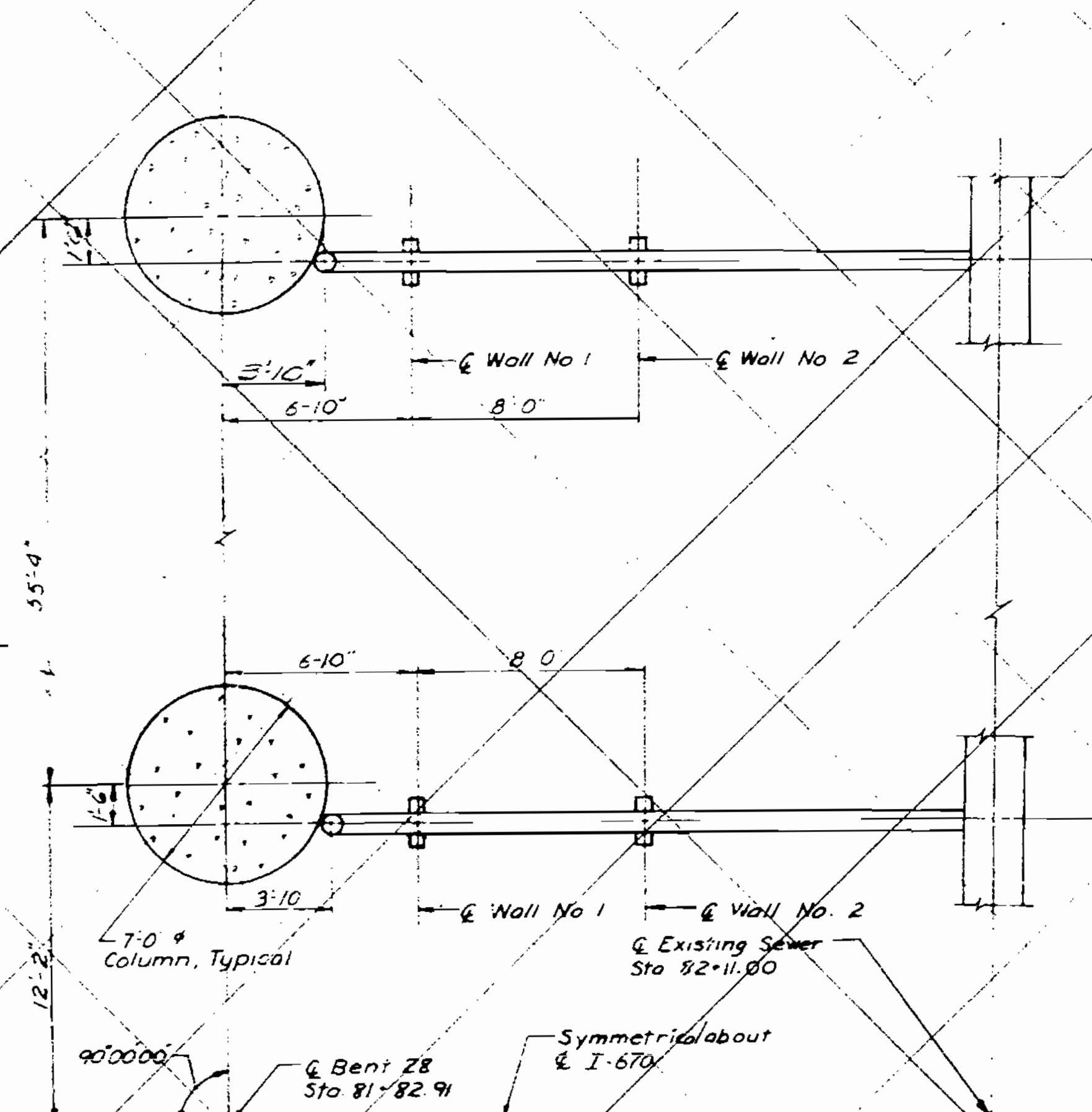
SADDLE PLATE BENT 28



SADDLE WALL FRONT VIEW

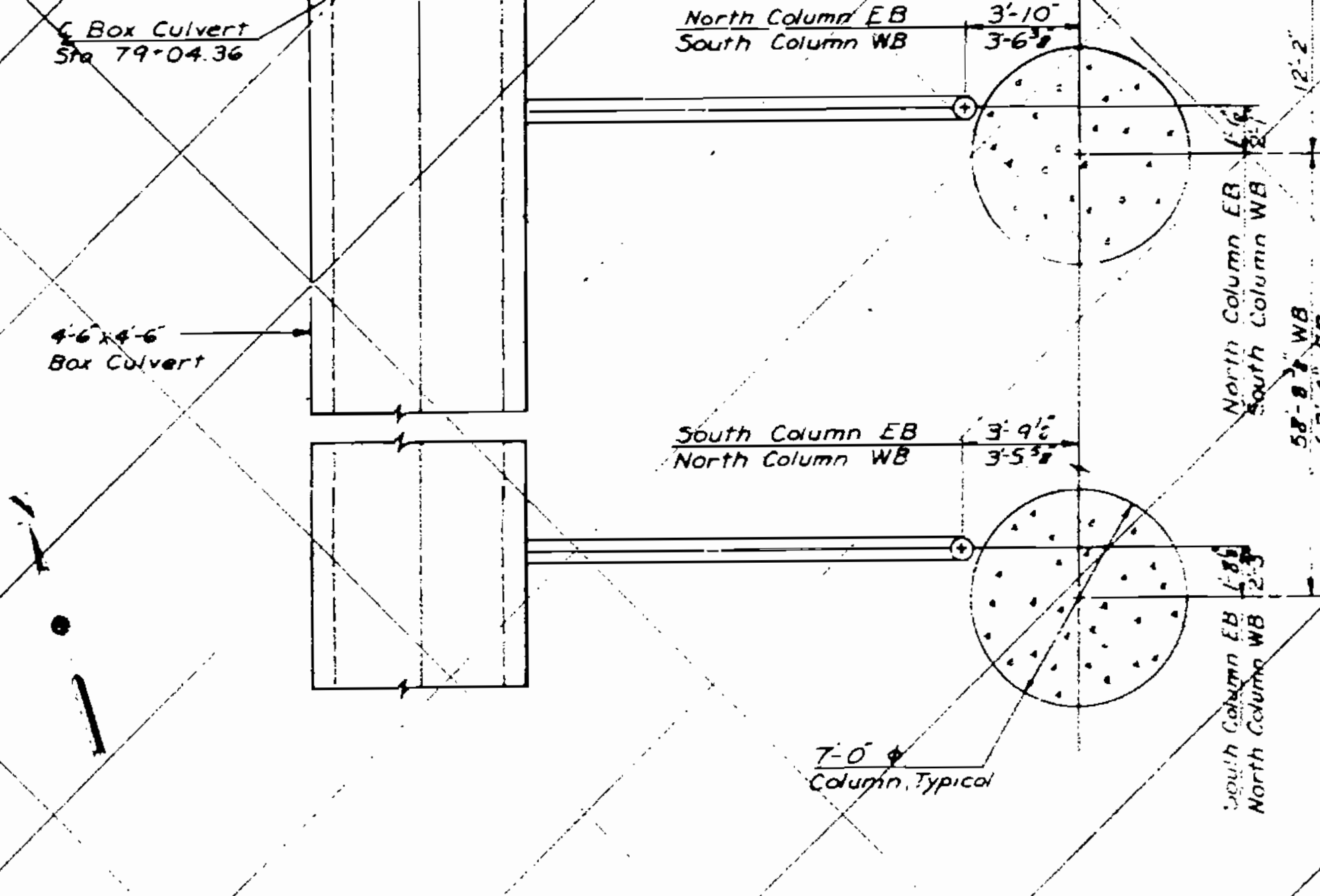
TRANSVERSE SECTION

Legend: e.f. denotes each face

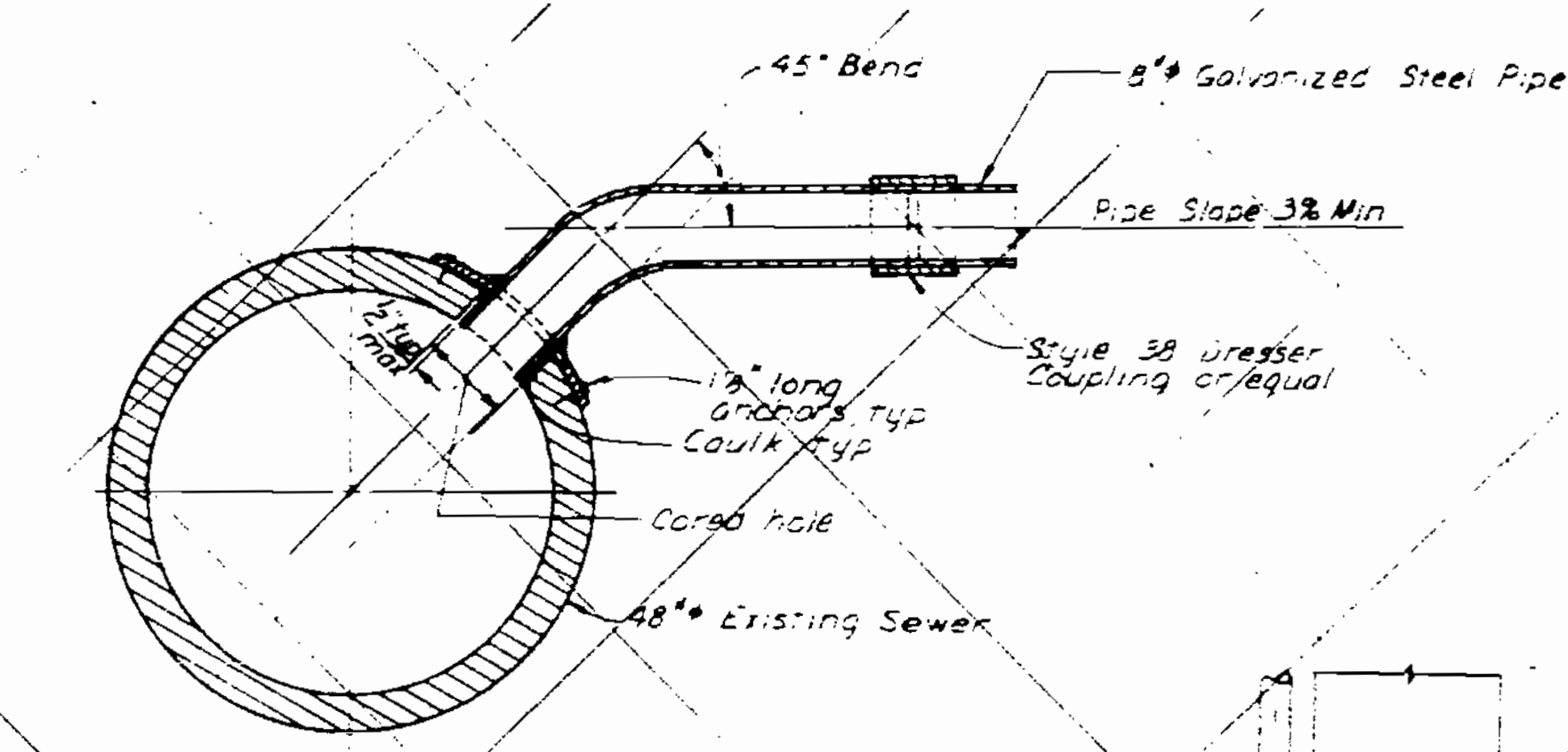


PLAN BENT 28

Symmetrical about I-670 unless otherwise shown

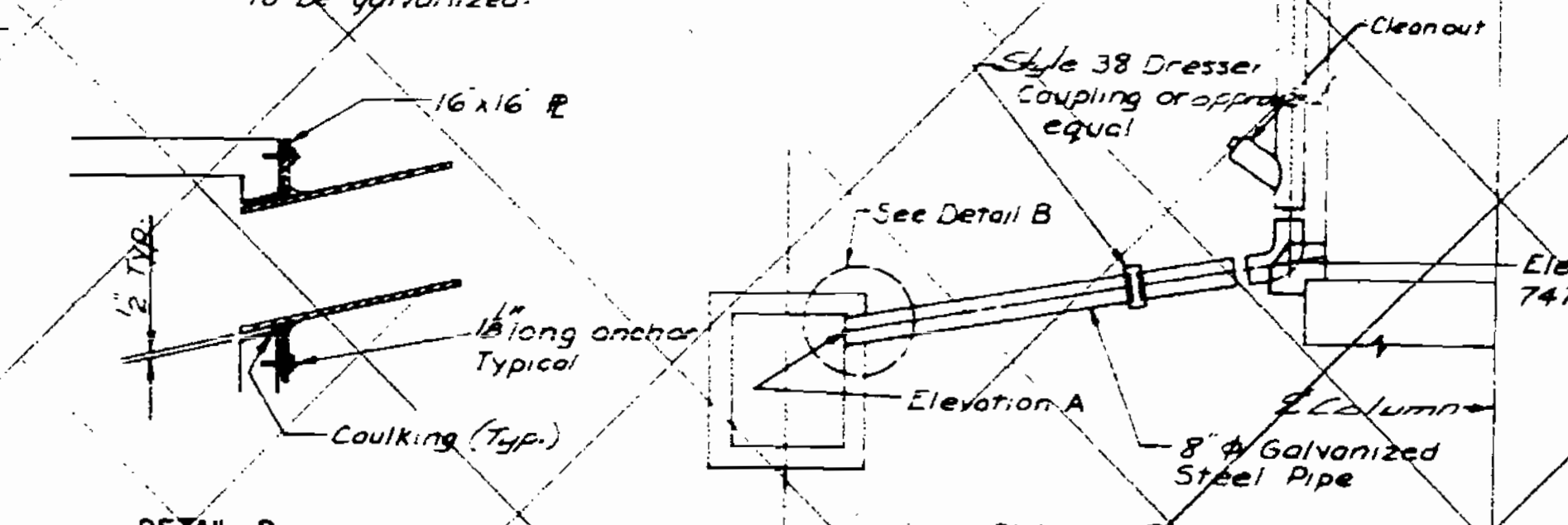


PLAN BENT 27



DETAIL A

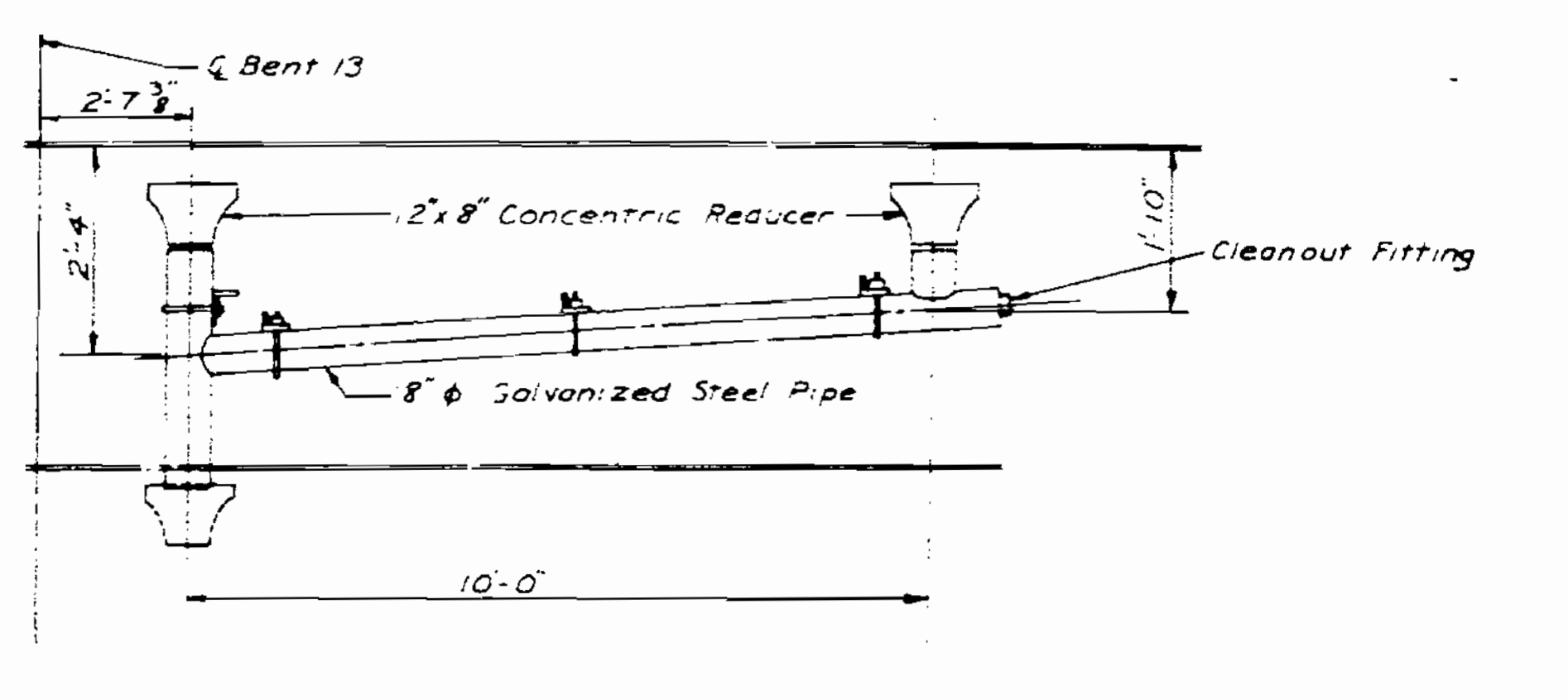
Note: All pipes and fittings to be galvanized.



DETAIL B

LOCATION	ELEVATION A	DISTANCE B
North/Column WB	742.5	17.4
South Column WB	742.7	18.4
North Column EB	742.8	18.7
South Column EB	743.0	19.7

ELEVATION VIEW BENT 27



DOUBLE SCUPPERS DETAILS AT BENT 13 EB & WB

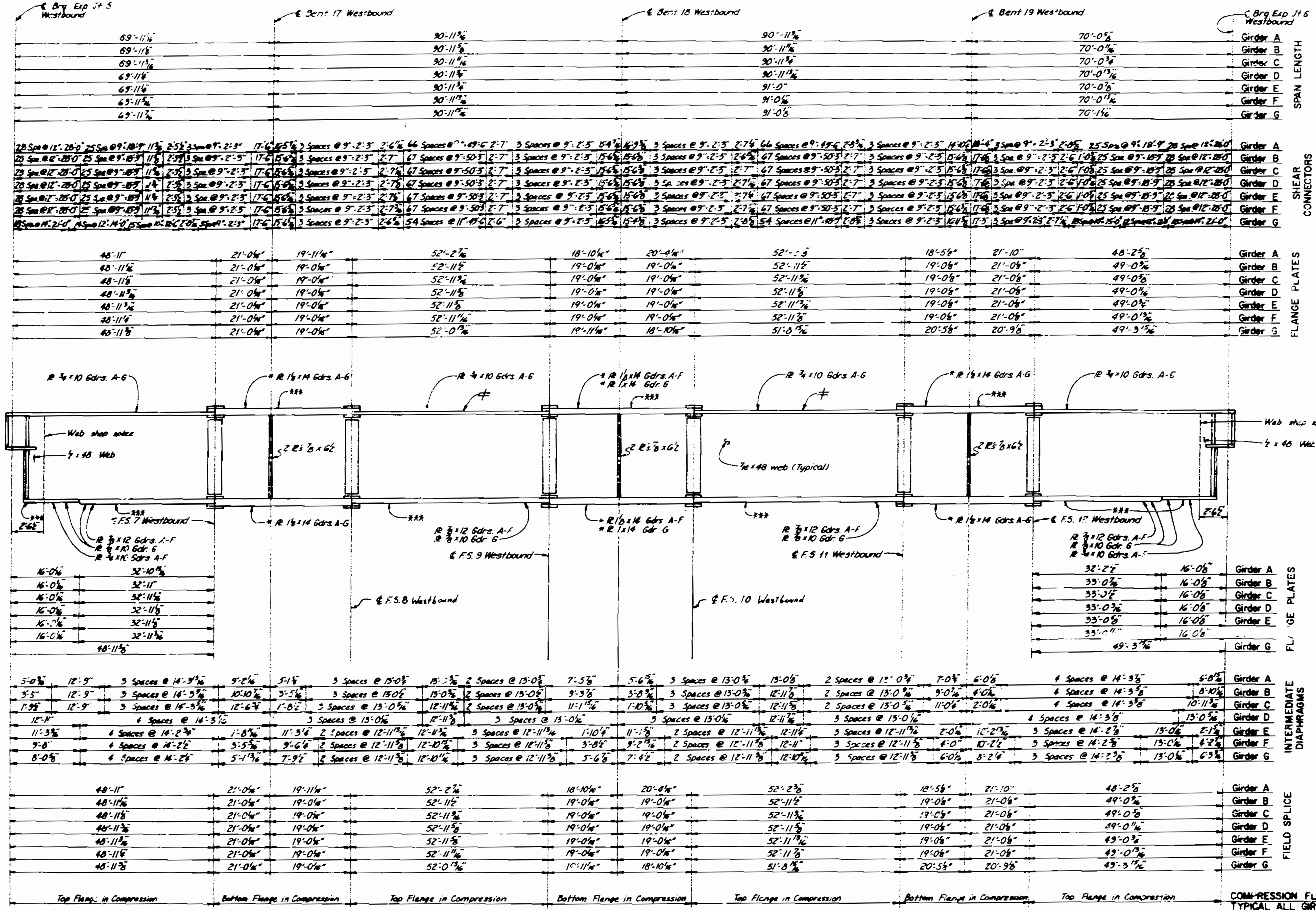
DRAINAGE DETAILS

DATE: 10/79
CHECKED: 10/79

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 48 of 72

REV.	DATE	BY	CHKD.	APP.	TITLE
1					92



Notes:

- All flanges are A-36 Steel unless noted otherwise.
- * Denotes A-572 Low Alloy Steel.
- All webs are A-36 Steel.
- *** Indicates Flange Plates subject to

All web plates shall be subject to notch toughness requirements. Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade. All dimensions are at top of web along grade. Heat curving of girder sections denoted by \neq will not be allowed while in the horizontal position.

NOTE TO DECK CONTRACTOR:

THE ONLY WORK ON THIS SHEET TO BE DONE IN THE DECK CONTRACTOR'S TRACT IS TO FURNISH AND INSTALL SHEAR CONNECTORS.

GIRDER ELEVATION - UNIT 6

GIRDER ELEVATION - UNIT 6 WESTBOUND

DETAILED 1078
CHECKED 1079

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 51 of 72.

JACKSON COUNTY

A-3136

FILE NO.	STATE	FED. AC. PROJ. NO.	FED. YEAR	SHEET NO.	TOTAL SHEETS
3	MO.		88	251	256

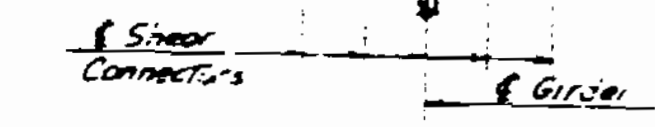
Span Length	Bent 20 Westbound		Bent 21 Westbound		Bent 22 Westbound		Bent 23 Westbound	
5'-0"	99'-11 1/2"	136'-0 3/4"	136'-0 3/4"	145'-8 3/8"	107'-8 1/2"			
5'-0"	100'-0"	136'-0 3/4"	136'-0 3/4"	144'-1 1/2"	106'-9 3/4"			
5'-0"	100'-0 1/2"	136'-0 3/4"	136'-0 3/4"	142'-5 3/4"	105'-11 1/2"			
5'-0"	100'-0 1/2"	136'-0 3/4"	136'-0 3/4"	140'-9 3/4"	105'-1 1/4"			
5'-0"	100'-0 3/4"	136'-1 1/4"	136'-1 1/4"	139'-1 1/2"	104'-2 1/2"			
5'-0"	100'-0 3/4"	136'-1 1/4"	136'-1 1/4"	137'-5 3/8"	103'-4 3/8"			
5'-0"	100'-0 1/2"	136'-1 1/2"	136'-1 1/2"	135'-9 3/4"	102'-6 3/4"			

16' Flange 25'-2 1/2" 25'-2 1/2" 25'-2 1/2" 25'-2 1/2"

14' Flange 15'-2 1/2" 25'-2 1/2" 25'-2 1/2" 25'-2 1/2"

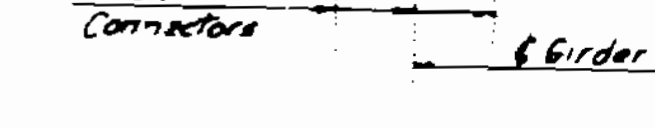
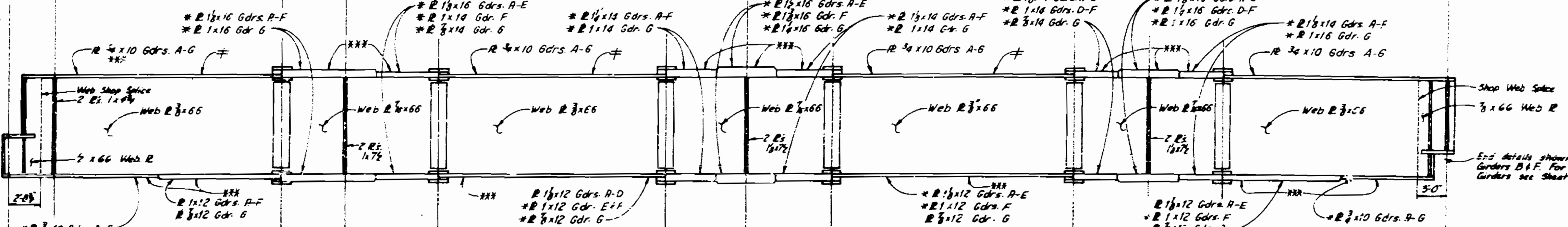
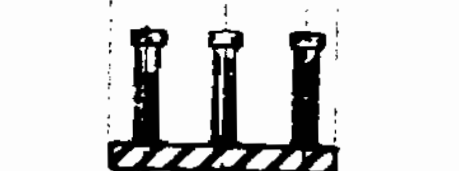


Span Length	Bent 20 Westbound		Bent 21 Westbound		Bent 22 Westbound		Bent 23 Westbound	
6'-1 1/2"	6 Sp. @ 12'-0"	5 Sp. @ 12'-0"	5 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"
6'-1 1/2"	6 Sp. @ 12'-0"	5 Sp. @ 12'-0"	5 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"
6'-1 1/2"	6 Sp. @ 12'-0"	5 Sp. @ 12'-0"	5 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"
6'-1 1/2"	6 Sp. @ 12'-0"	5 Sp. @ 12'-0"	5 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"
6'-1 1/2"	6 Sp. @ 12'-0"	5 Sp. @ 12'-0"	5 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"
6'-1 1/2"	6 Sp. @ 12'-0"	5 Sp. @ 12'-0"	5 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"
6'-1 1/2"	6 Sp. @ 12'-0"	5 Sp. @ 12'-0"	5 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"	6 Sp. @ 12'-0"



Span Length	Bent 20 Westbound		Bent 21 Westbound		Bent 22 Westbound		Bent 23 Westbound	
6'-0"	74'-11 1/2"	25'-0 1/2"	37'-0 3/4"	62'-11 1/2"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
5'-0"	74'-11 1/2"	25'-0 1/2"	35'-0 3/4"	61'-11 1/2"	23'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
5'-0"	73'-8 1/2"	26'-3 3/4"	33'-9 3/4"	68'-2 1/2"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	20'-0 1/2"
6'-0"	75'-11 1/2"	26'-0 1/2"	36'-3 3/4"	66'-0"	24'-0 1/2"	10'-0 1/2"	10'-0 1/2"	23'-0 1/2"
6'-0"	75'-0 1/2"	25'-0 1/2"	35'-0 1/2"	67'-0 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	75'-0 1/2"	25'-0 1/2"	35'-0 1/2"	68'-0 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	75'-0 1/2"	25'-0 1/2"	35'-0 1/2"	67'-9 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"

10' Flange 15'-2 1/2" 25'-2 1/2" 25'-2 1/2" 25'-2 1/2"



Span Length	Bent 20 Westbound		Bent 21 Westbound		Bent 22 Westbound		Bent 23 Westbound	
6'-0"	54'-11 1/2"	39'-11 1/2"	25'-0 1/2"	37'-0 3/4"	62'-11 1/2"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"
6'-0"	54'-11 1/2"	39'-11 1/2"	25'-0 1/2"	35'-0 3/4"	61'-11 1/2"	23'-0 1/2"	10'-0 1/2"	10'-0 1/2"
6'-0"	54'-11 1/2"	38'-8 1/2"	26'-3 3/4"	33'-9 3/4"	68'-2 1/2"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"
6'-0"	54'-11 1/2"	41'-0"	26'-0 1/2"	36'-3 3/4"	66'-0"	24'-0 1/2"	10'-0 1/2"	10'-0 1/2"
6'-0"	55'-0"	40'-0 1/2"	25'-0 1/2"	35'-0 1/2"	67'-0 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"
6'-0"	55'-0"	40'-0 1/2"	25'-0 1/2"	35'-0 1/2"	68'-0 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"
6'-0"	55'-0"	40'-0 1/2"	25'-0 1/2"	35'-0 1/2"	67'-9 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"

Notes:
 All flanges are A36 Steel unless noted otherwise.
 * denotes A572 Low Alloy Steel.
 All webs are A36 Steel.

*** Indicates Flange Plates subject to notch toughness requirements.

All web plates shall be subject to notch toughness requirements. Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade.

All dimensions are at top of web along grade. Most curving of girder sections denoted by ⚡ will not be allowed while in the horizontal position.

NOTE TO DECK CONTRACTOR:
 THE ONLY WORK ON THIS SHEET TO BE DONE IN THE DECK CONTRACT IS TO FURNISH AND INSTALL SHEAR CONNECTORS.

Span Length	Bent 20 Westbound		Bent 21 Westbound		Bent 22 Westbound		Bent 23 Westbound	
6'-0"	13'-7 1/2"	6 Spaces @ 13'-3 1/2"	6'-5 1/2"	4 Spaces @ 13'-7 1/2"	13'-9 1/2"	4 Spaces @ 13'-7 1/2"	6'-1 1/2"	7'-6"
6'-0"	11'-5 1/2"	6 Spaces @ 13'-3 1/2"	8'-8 1/2"	4 Spaces @ 13'-7 1/2"	13'-9 1/2"	4 Spaces @ 13'-7 1/2"	8'-7 1/2"	5'-0"
6'-0"	9'-9 1/2"	6 Spaces @ 13'-3 1/2"	10'-4 1/2"	4 Spaces @ 13'-7 1/2"	13'-8 1/2"	4 Spaces @ 13'-7 1/2"	11'-7 1/2"	2'-6"
6'-0"	8'-2 1/2"	7 Spaces @ 13'-3 1/2"	10'-4 1/2"	4 Spaces @ 13'-7 1/2"	13'-8 1/2"	5 Spaces @ 13'-7 1/2"	11'-7 1/2"	2'-6"
6'-0"	5'-0"	7 Spaces @ 13'-2 1/2"	2'-3 1/2"	3 Spaces @ 13'-6 1/2"	13'-4 1/2"	5 Spaces @ 13'-6 1/2"	2'-6"	12'-5 1/2"
6'-0"	2'-0"	7 Spaces @ 13'-2 1/2"	8'-6 1/2"	3 Spaces @ 13'-6 1/2"	13'-7 1/2"	5 Spaces @ 13'-6 1/2"	5'-0"	9'-11 1/2"
6'-0"	15'-11 1/2"	6 Spaces @ 13'-2 1/2"	5'-10 1/2"	3 Spaces @ 13'-6 1/2"	13'-7 1/2"	5 Spaces @ 13'-6 1/2"	7'-6"	7'-5 1/2"

Span Length	Bent 20 Westbound		Bent 21 Westbound		Bent 22 Westbound		Bent 23 Westbound	
6'-0"	74'-11 1/2"	25'-0 1/2"	37'-0 3/4"	62'-11 1/2"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	74'-11 1/2"	25'-0 1/2"	35'-0 3/4"	61'-11 1/2"	23'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	73'-8 1/2"	26'-3 3/4"	33'-9 3/4"	68'-2 1/2"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	20'-0 1/2"
6'-0"	75'-11 1/2"	26'-0 1/2"	36'-3 3/4"	66'-0"	24'-0 1/2"	10'-0 1/2"	10'-0 1/2"	23'-0 1/2"
6'-0"	75'-0 1/2"	25'-0 1/2"	35'-0 1/2"	67'-0 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	75'-0 1/2"	25'-0 1/2"	35'-0 1/2"	68'-0 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	75'-0 1/2"	25'-0 1/2"	35'-0 1/2"	67'-9 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"

Span Length	Bent 20 Westbound		Bent 21 Westbound		Bent 22 Westbound		Bent 23 Westbound	
6'-0"	74'-11 1/2"	25'-0 1/2"	37'-0 3/4"	62'-11 1/2"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	74'-11 1/2"	25'-0 1/2"	35'-0 3/4"	61'-11 1/2"	23'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	73'-8 1/2"	26'-3 3/4"	33'-9 3/4"	68'-2 1/2"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	20'-0 1/2"
6'-0"	75'-11 1/2"	26'-0 1/2"	36'-3 3/4"	66'-0"	24'-0 1/2"	10'-0 1/2"	10'-0 1/2"	23'-0 1/2"
6'-0"	75'-0 1/2"	25'-0 1/2"	35'-0 1/2"	67'-0 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	75'-0 1/2"	25'-0 1/2"	35'-0 1/2"	68'-0 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	75'-0 1/2"	25'-0 1/2"	35'-0 1/2"	67'-9 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"

Span Length	Bent 20 Westbound		Bent 21 Westbound		Bent 22 Westbound		Bent 23 Westbound	
6'-0"	74'-11 1/2"	25'-0 1/2"	37'-0 3/4"	62'-11 1/2"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	74'-11 1/2"	25'-0 1/2"	35'-0 3/4"	61'-11 1/2"	23'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	73'-8 1/2"	26'-3 3/4"	33'-9 3/4"	68'-2 1/2"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	20'-0 1/2"
6'-0"	75'-11 1/2"	26'-0 1/2"	36'-3 3/4"	66'-0"	24'-0 1/2"	10'-0 1/2"	10'-0 1/2"	23'-0 1/2"
6'-0"	75'-0 1/2"	25'-0 1/2"	35'-0 1/2"	67'-0 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	75'-0 1/2"	25'-0 1/2"	35'-0 1/2"	68'-0 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"
6'-0"	75'-0 1/2"	25'-0 1/2"	35'-0 1/2"	67'-9 3/4"	26'-0 1/2"	10'-0 1/2"	10'-0 1/2"	21'-0 1/2"

GIRDER ELEVATION UNIT 7

GIRDER ELEVATION - UNIT 7 WESTBOUND

DETAILED 1075
 CHECKED 1077

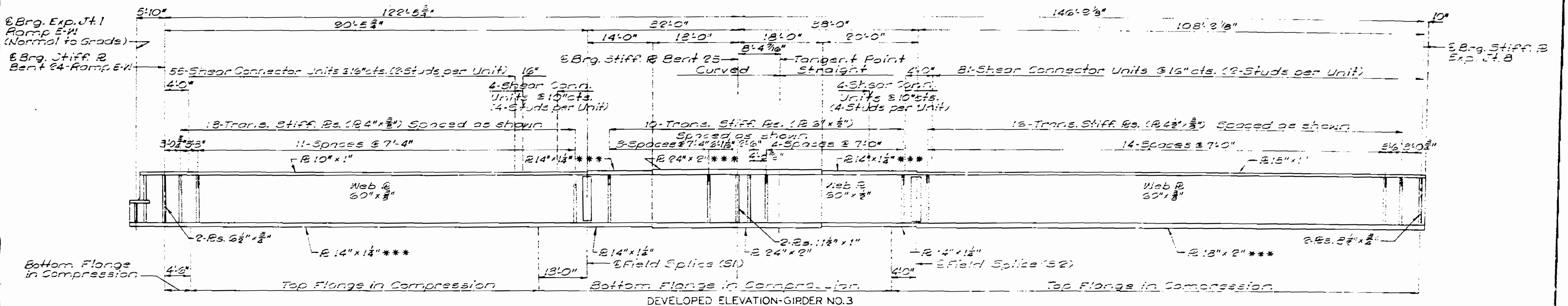
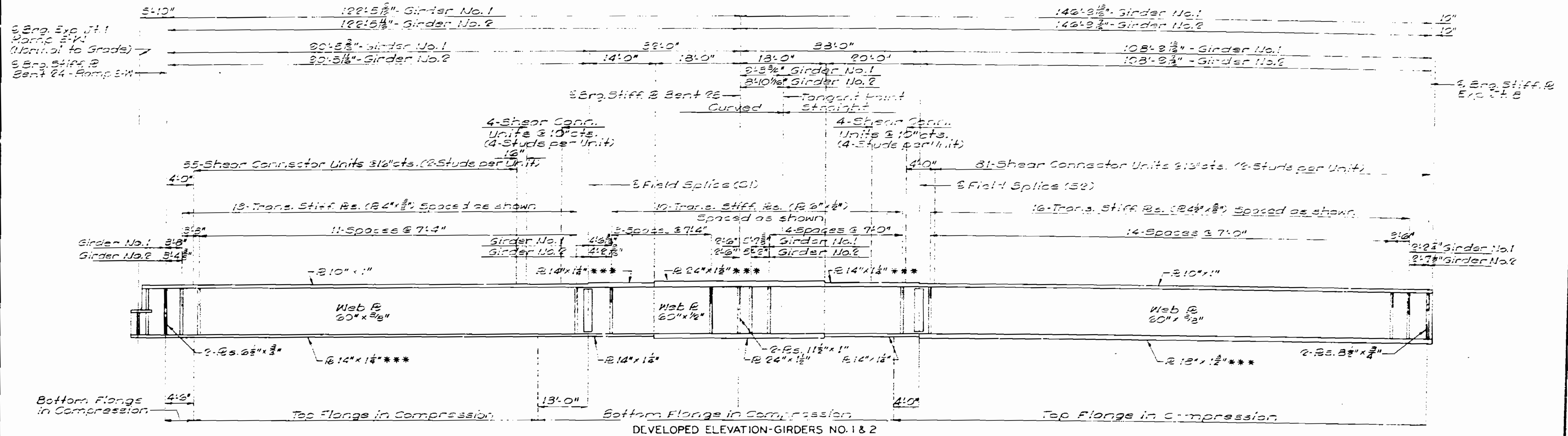
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 53 of 72.

JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	NC		8	33	



Note: Longitudinal dimensions are along & girder at top of web. (See Elevation of Longitudinal Steel on sheet No. 30). Fabricated structural steel shall be A36. Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 10. Transverse web stiffeners shall be oriented as shown in Framing Plan. ***Inflated Flange Plates subject to notch toughness requirements. All web plates shall be subject to notch toughness requirements. Shear connectors are not to be furnished or installed with Structural Steel Contract.

NOTE TO DECK CONTRACTOR
The only work on this sheet to be done in the Deck Contract is to furnish and install shear connectors.

GIRDER ELEVATION-UNIT 8 WESTBOUND
GIRDERS NO. 1, 2 & 3

DETAILED 13.82
CHECKED 13.82

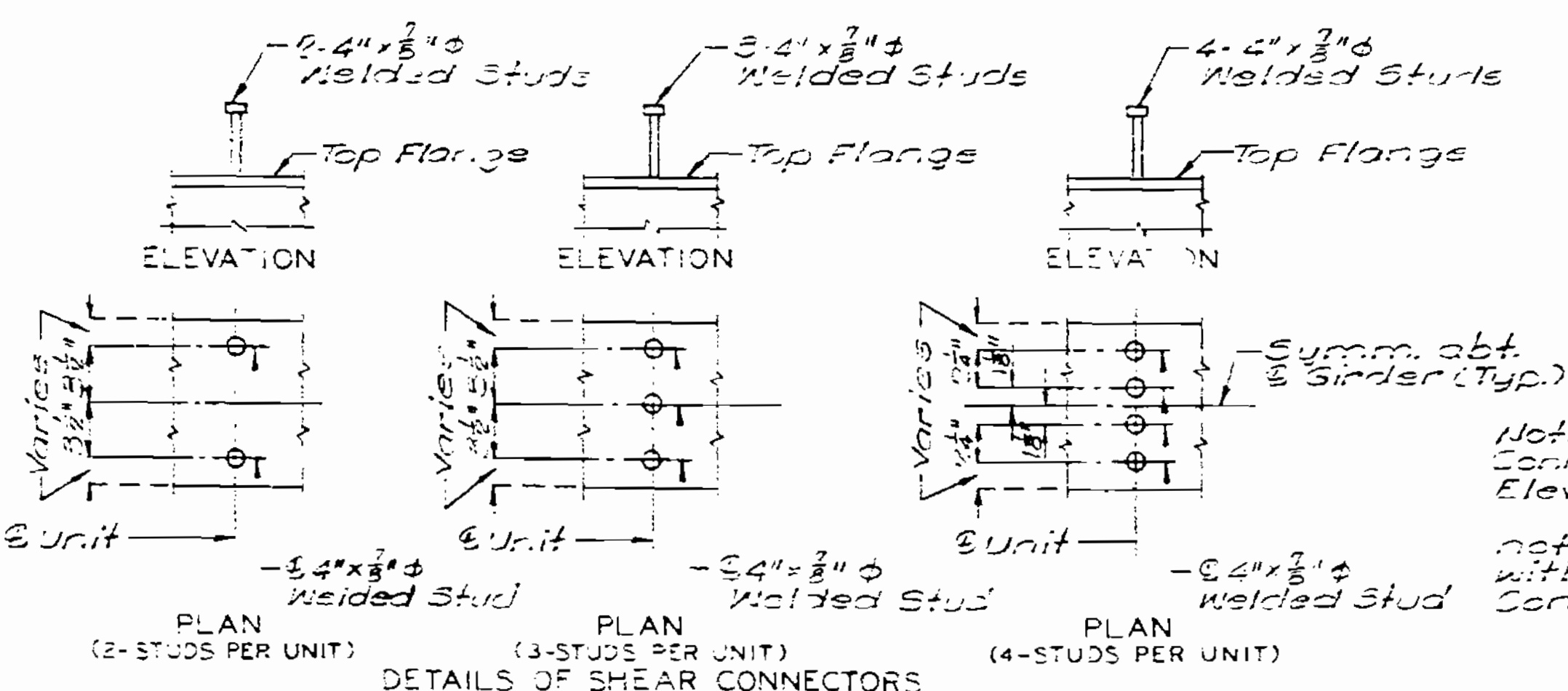
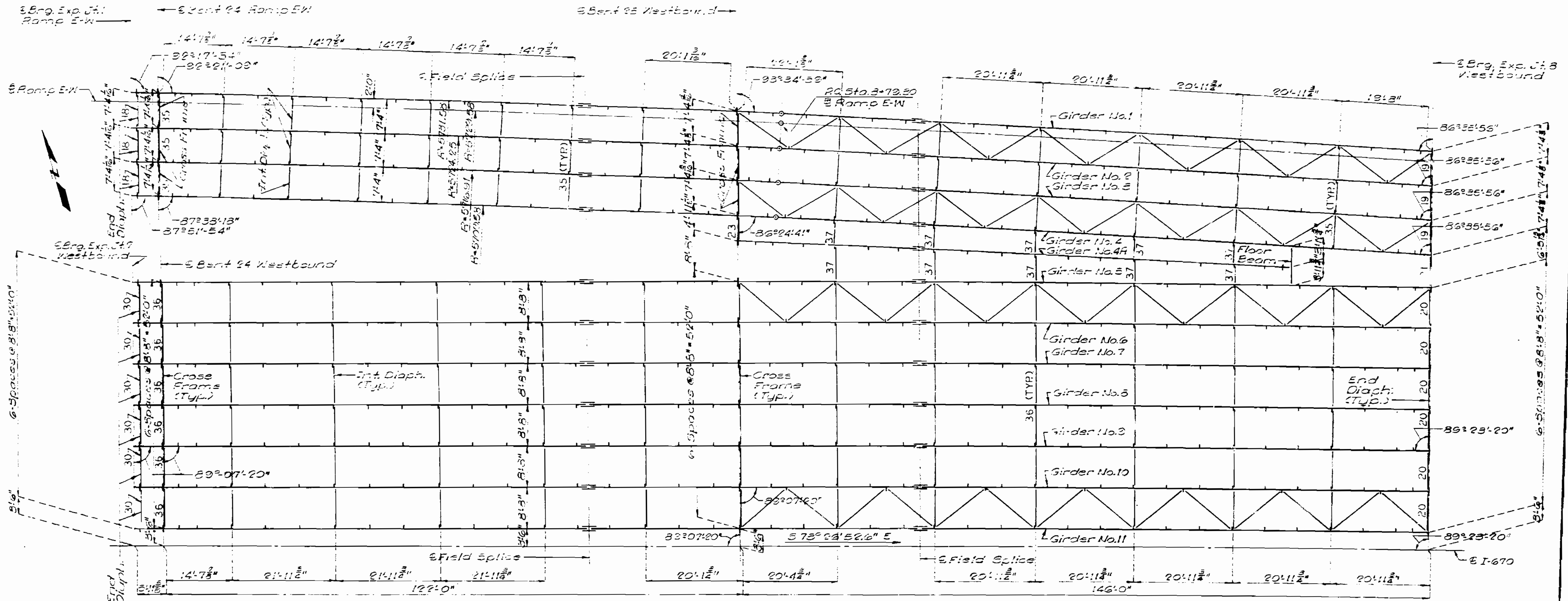
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 56 of 72.

JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISC. YEAR	SHEET NO.	TOTL. SHEETS
5	MO.		J	23	



NOTE TO DECK CONTRACTOR
 The only work on this sheet to be done in the Deck Contract is to furnish and install shear connectors.

Note: Dimensions shown are horizontal.
 The angles shown on the curved part of Girders No. 1 & 4 is the angle between S of Bent or S of Bearing of expansion joint and a local tangent to the girder at the location indicated.
 Transverse web stiffener plates shall be oriented as shown in Framing Plan.
 Spacing for transverse web stiffener plates may be adjusted a maximum of 6" in either direction to match the spacing for the intermediate diaphragms.
 For lateral bracing details see sheet No. 58.
 Number near diaphragms and cross frames indicates type to be used at that location. See sheet No. 58 for diaphragm details.
 Size of additional connection plates for diaphragms shall be the same size as the adjacent transverse web stiffener plates.

Note: For spacing of Shear Connector Units see Girder Elevation sheets.
 Shear connectors are not to be furnished or installed with the Structural Steel Contract.

DETAILED 1932
 CHECKED 1932

Note: This drawing is not to scale. Follow dimensions.

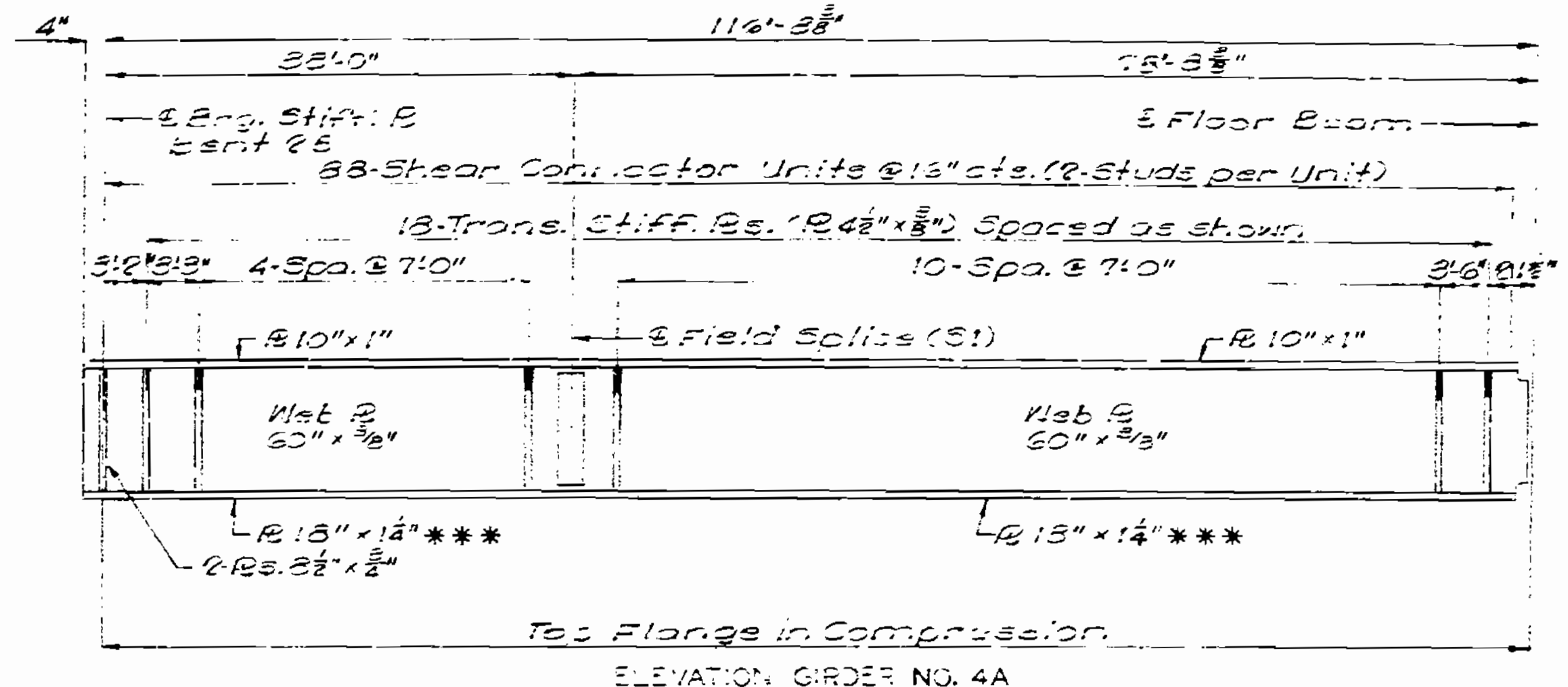
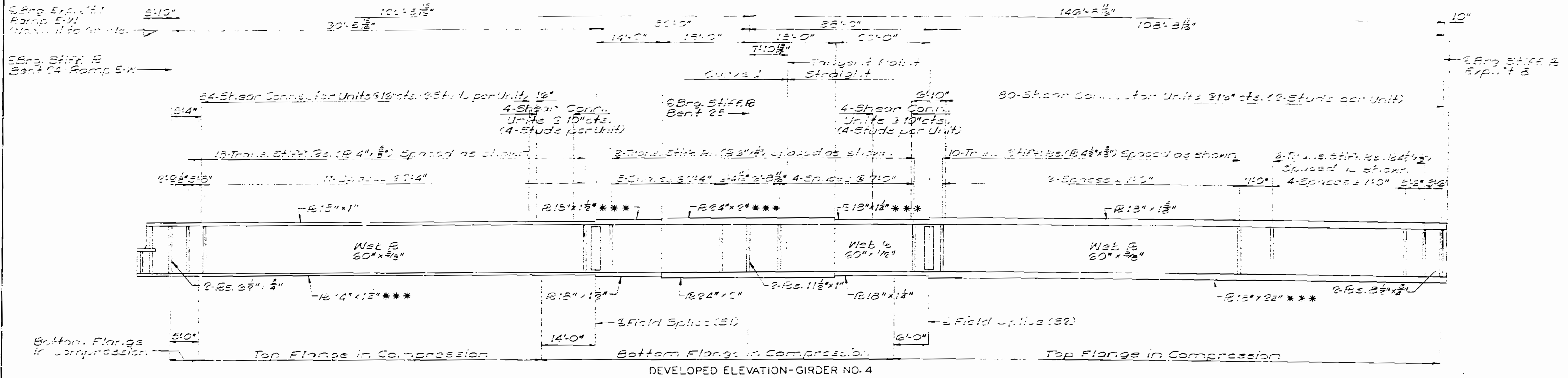
Sheet No. 55 of 72.

FRAMING PLAN - UNIT 8 WESTBOUND

JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO		19	100	



Note: Longitudinal dimensions are along & Girder at top of web. (See Elevation of Longitudinal Steel on sheet No. 3).
 Fabricated structural steel shall be A572.
 Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 32.
 Transverse web stiffeners shall be oriented as shown in Framing Plan.
 ***Indicates Flange Plates subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements.
 Shear connectors are not to be furnished or installed with Structural Steel Contract.

NOTE TO DECK CONTRACTOR
 The only work on this sheet to be done in the Deck Contract is to furnish and install shear connectors.

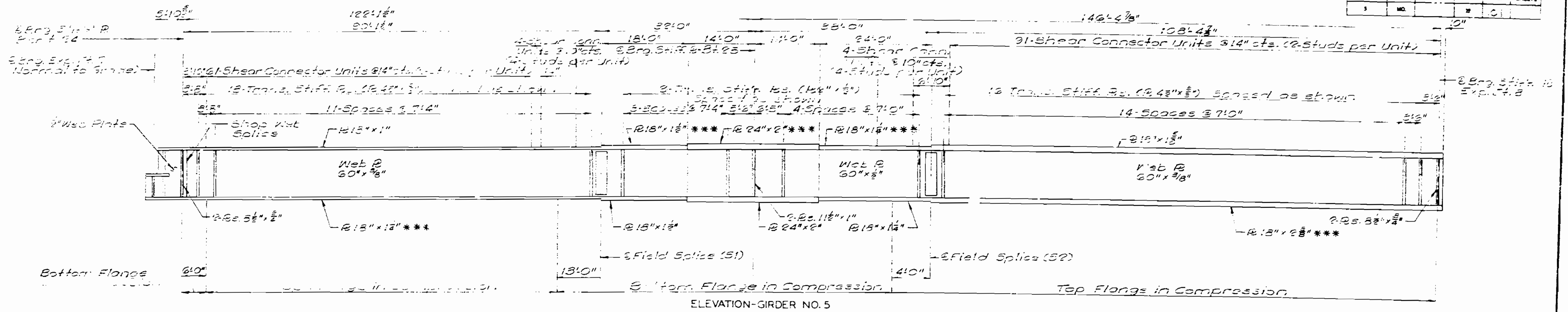
GIRDER ELEVATION-UNIT 8 WESTBOUND
 GIRDERS NO. 4 & 4A

DETAILED 10/82
 CHECKED 10/82

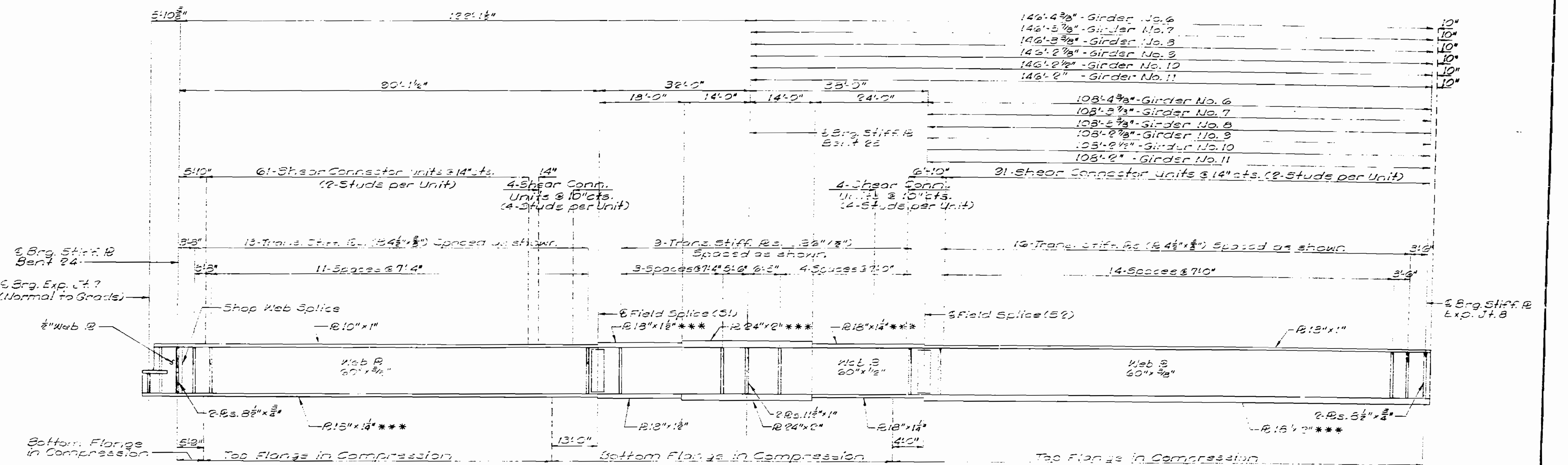
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 57 of 72.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.			17	21



ELEVATION-GIRDER NO. 5



ELEVATION-GIRDERS NO. 6, 7, 8, 9, 10 & 11

Notes: Longitudinal dimensions are parallel to grade.
 Fabricated structural steel shall be A36.
 Plate girders shall be fabricated to conform with Cantilever Diagram shown on sheet No. 53.
 Transverse web stiffeners shall be oriented as shown in Framing Plan.
 *** Indicates Flange Plates subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements.
 Note: This drawing is not to scale. Follow dimensions.

Note: Shear connectors are not to be furnished or installed with the Structural Steel Contract.

NOTE TO DECK CONTRACTOR
 The only work on this sheet to be done in the Deck Contract is to furnish and install shear connectors.

GIRDER ELEVATION-UNIT 8 WESTBOUND
 GIRDERS NO. 5 THRU 11

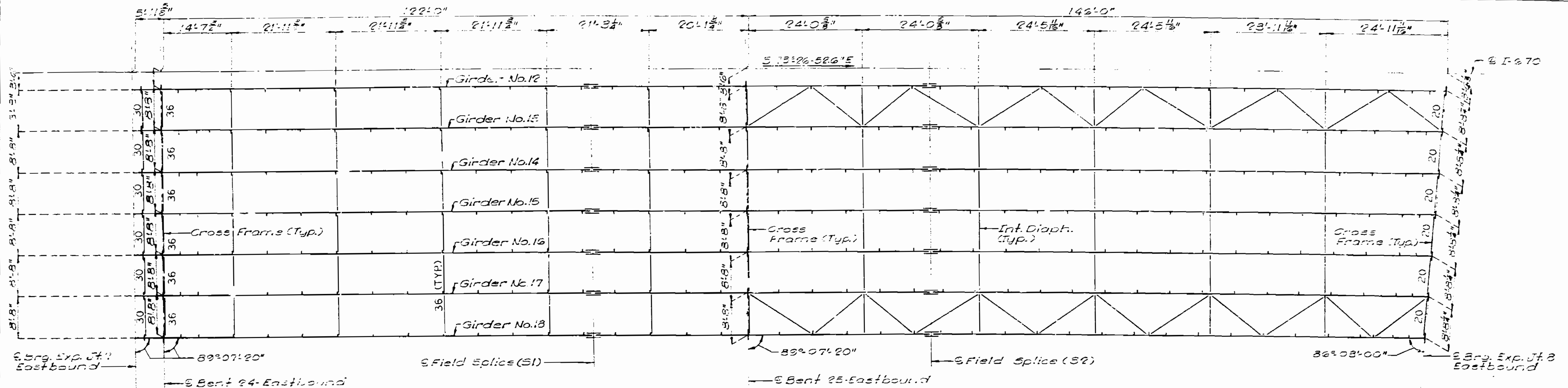
DETAILED 10 22
 CHECKED 10 52

Sheet No. 53 of 72.

JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO		88	102	



Note: Dimensions shown are horizontal.
 Transverse web stiffener plates shall be oriented as shown in Framing Plan.
 Spacing for transverse web stiffener plates may be adjusted a maximum of 3" in either direction to match the spacing for the intermediate diaphragms.
 Intermediate diaphragms are to be placed parallel to Bent 25-Eastbound.
 Number near diaphragms and cross frames indicates type to be used at that location. See sheet No. 55 for diaphragm details.
 For lateral bracing details see sheet No. 58.
 Size of additional connection plates for diaphragms shall be the same size as the adjacent transverse web stiffener plates.

FOR REFERENCE ONLY

FRAMING PLAN-UNIT 8 EASTBOUND

DETAILED 10 82
 CHECKED 10 82

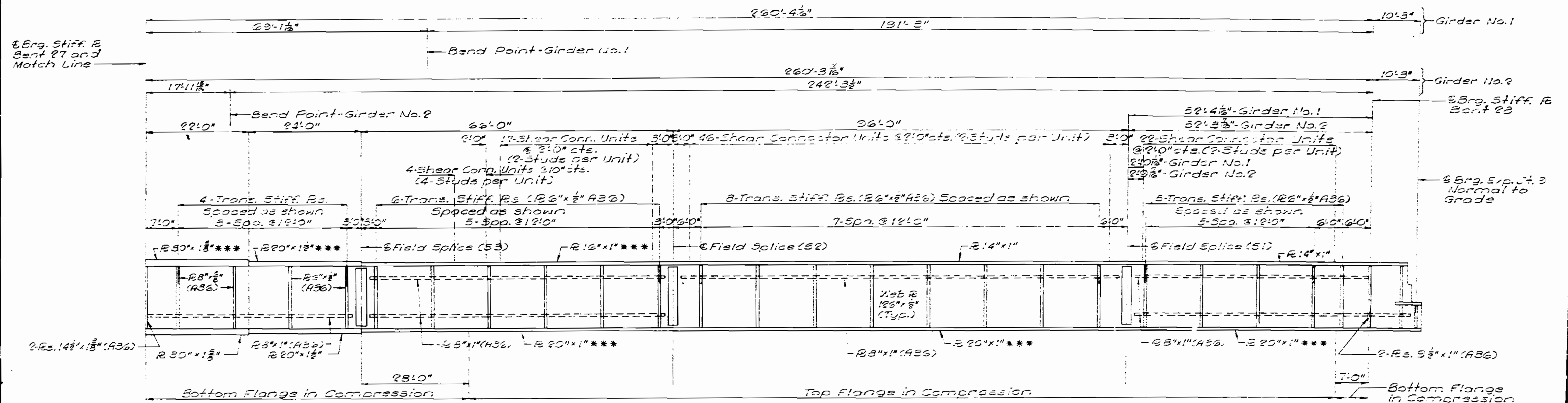
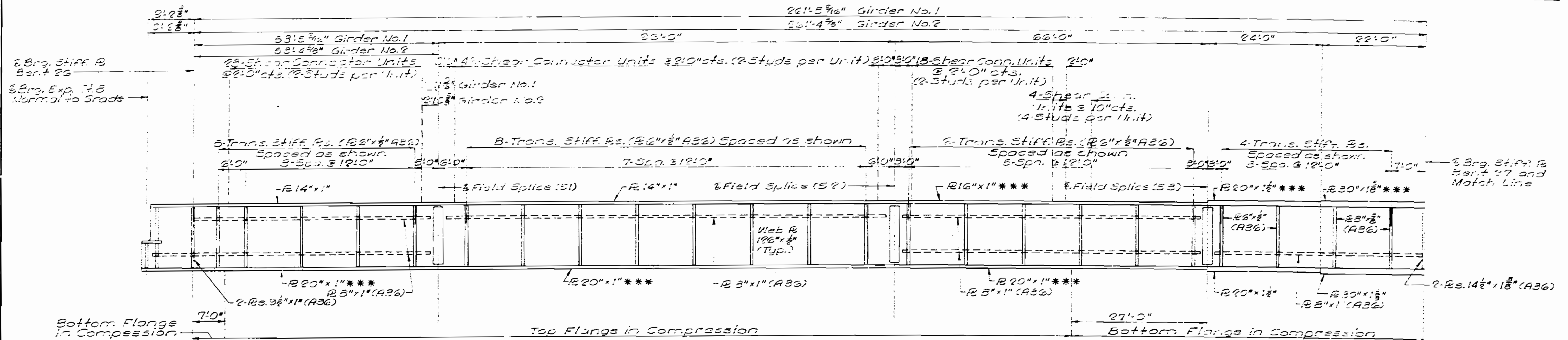
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 59 of 72.

JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MD.		88	05	



Notes: Longitudinal dimensions are parallel to grade.
Fabricated structural steel shall be A572 except as shown.
***Indicates Flange Plates subject to notch toughness requirements.
All web plates shall be subject to notch toughness requirements.
Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 33

Note: Whenever longitudinal stiffeners (R3"x1") interfere with bolting the diaphragms in place, clip stiffeners.
Longitudinal web stiffeners shall be placed on the outside of exterior girders and on the side opposite to transverse web stiffener plates for interior girders.
Transverse web stiffeners shall be oriented as shown in Framing Plan.
Shear connectors are not to be furnished or installed with structural steel contract.

NOTE TO DECK CONTRACTOR
The only work on this sheet to be done in the Deck Contract is to finish and install shear connectors

GIRDER ELEVATION-UNIT 9 WESTBOUND
GIRDERS NO. 1 & 2

DETAILED 10/82
CHECKED 10/82

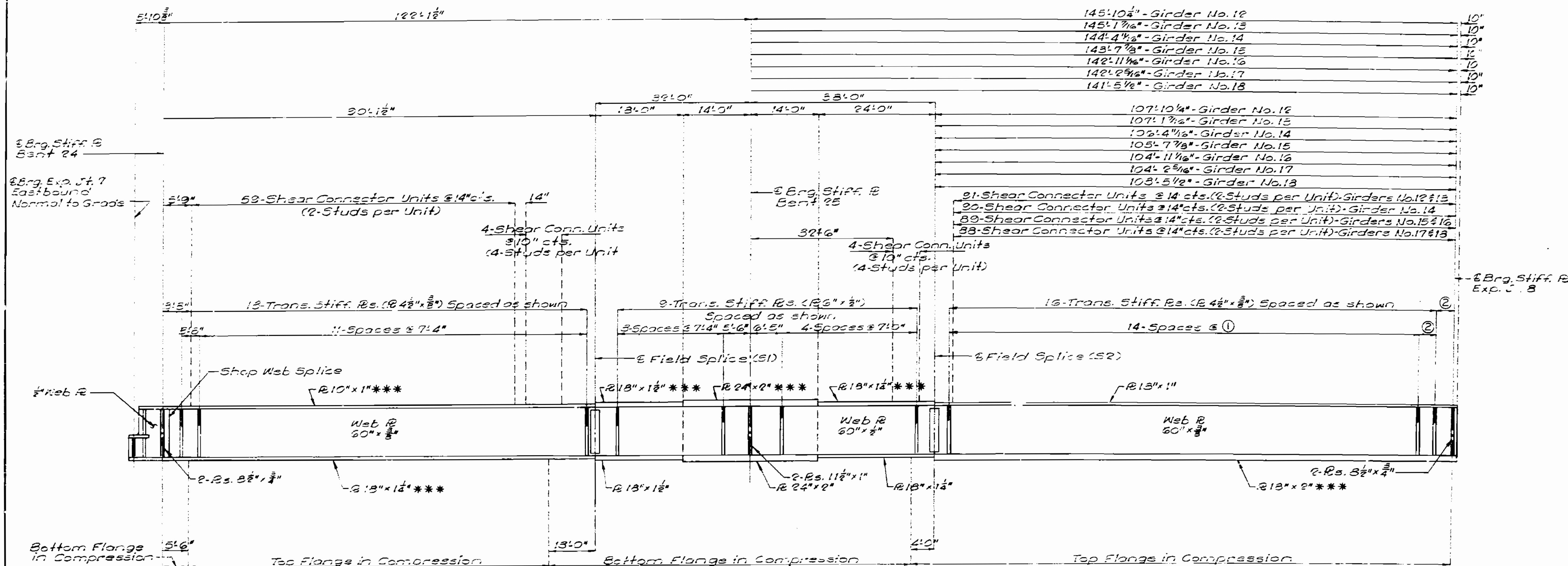
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 22 of 72.

JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO		19	103	



Note: Longitudinal dimensions are parallel to grade at top of web.
 Fabricated structural steel shall be A36.
 Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 33.
 Transverse web stiffeners shall be oriented as shown in Framing Plan.
 *** Indicates Flange Plates subject to notch toughness requirements.
 Shear connectors are not to be furnished or installed with Structural Steel Contract.

- ① { 7'-0" - Girders No. 12 & 13
 6'-11" - Girders No. 14 & 15
 6'-10" - Girder No. 16
 6'-9" - Girders No. 17 & 18
- ② { 3'-6" - Girders No. 12 & 13
 3'-3 1/2" - Girders No. 14 & 15
 3'-5" - Girder No. 16
 3'-4 1/2" - Girders No. 17 & 18

NOTE TO DECK CONTRACTOR
 The only work on this sheet to be done in the Deck Contract is to furnish and install shear connectors.

GIRDER ELEVATION-UNIT 8 EASTBOUND
 GIRDERS NO 12 THRU 18

DETAILED 10 52
 CHECKED 10 50

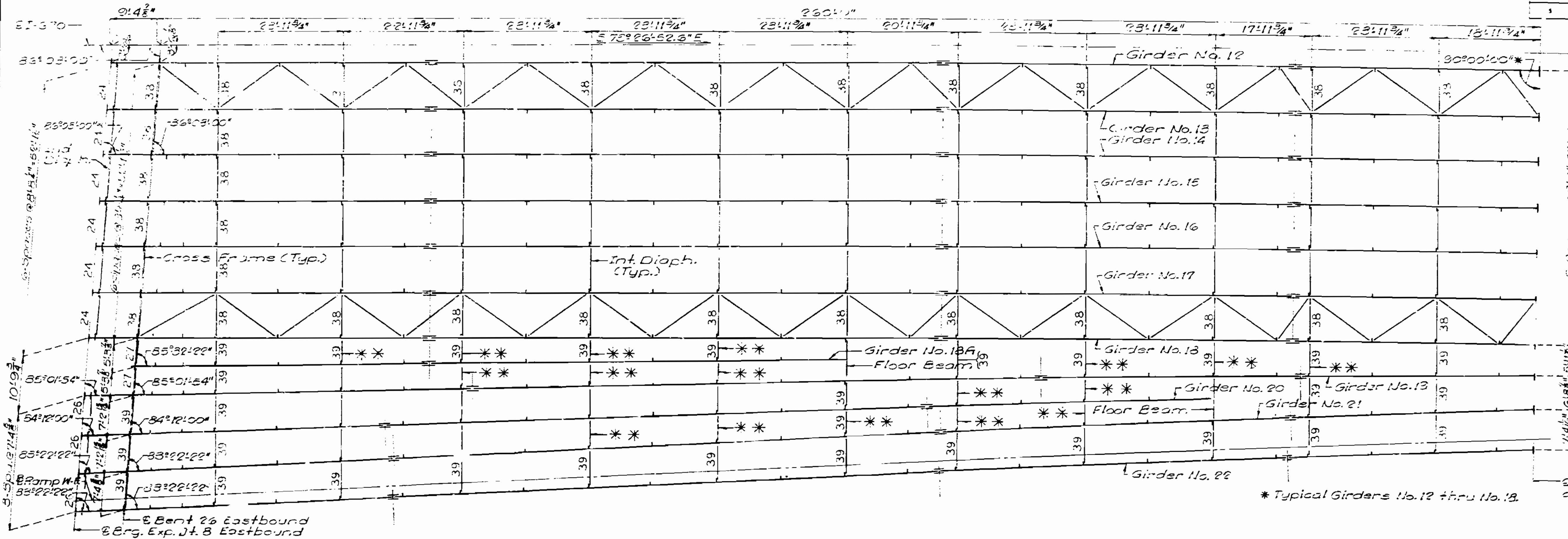
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 60 of 72.

JACKSON COUNTY

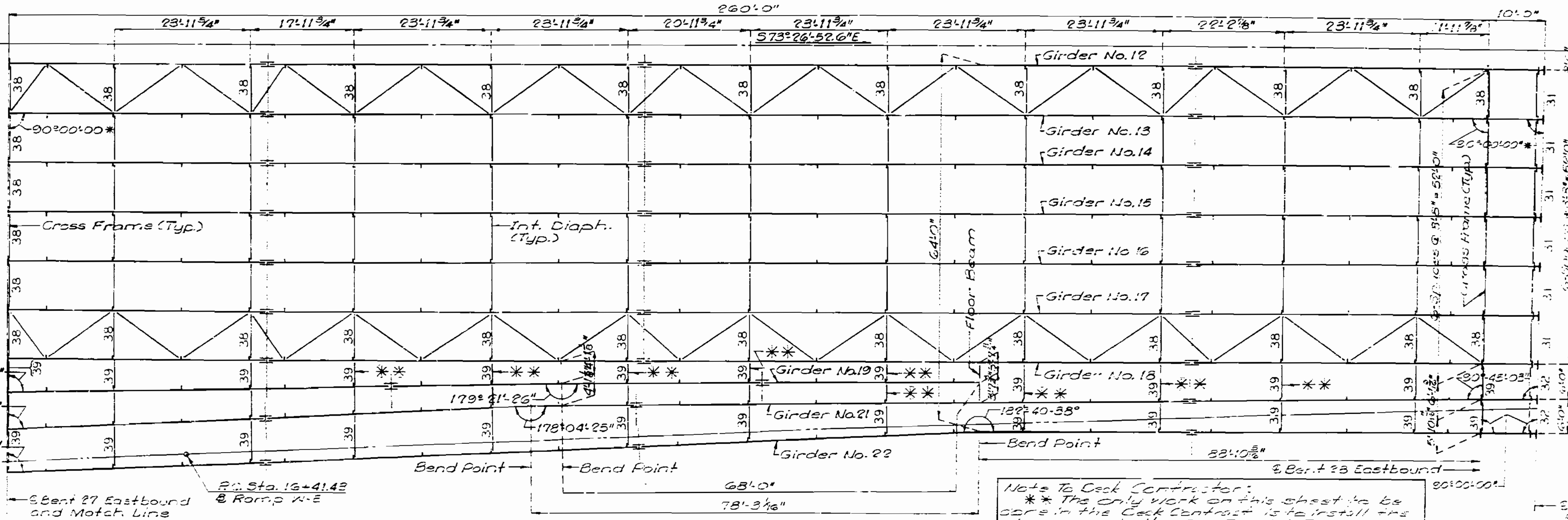
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO		19	68	



* Typical Girders No. 12 thru No. 18.

Bent 27 Eastbound and Match Line



Note: Dimensions shown are horizontal.
 Transverse web stiffener plates shall be oriented as shown in Framing Plan.
 Spacing for transverse web stiffener plates may be adjusted a maximum of 3" in either direction to match the spacing for the intermediate diaphragms.
 All intermediate diaphragms shown on this sheet are to be placed perpendicular to S 1670.
 For lateral bracing details see sheet No. 28.
 Number near diaphragms and cross frames indicates type to be used at that location. See sheet No. 25 for diaphragm details.
 Size of additional connection plates for diaphragms shall be the same size as the adjacent transverse web stiffener plates.

Note To Deck Contractor:
 * * The only work on this sheet to be done in the Deck Contract is to install the diaphragm bolts. See Special Provision "Fabricated Structural Carbon Steel Diaphragms" for installation of bolts at diaphragms.

DETAILED 10/22
 CHECKED 10/92

Note: This drawing is not to scale. Follow dimensions.

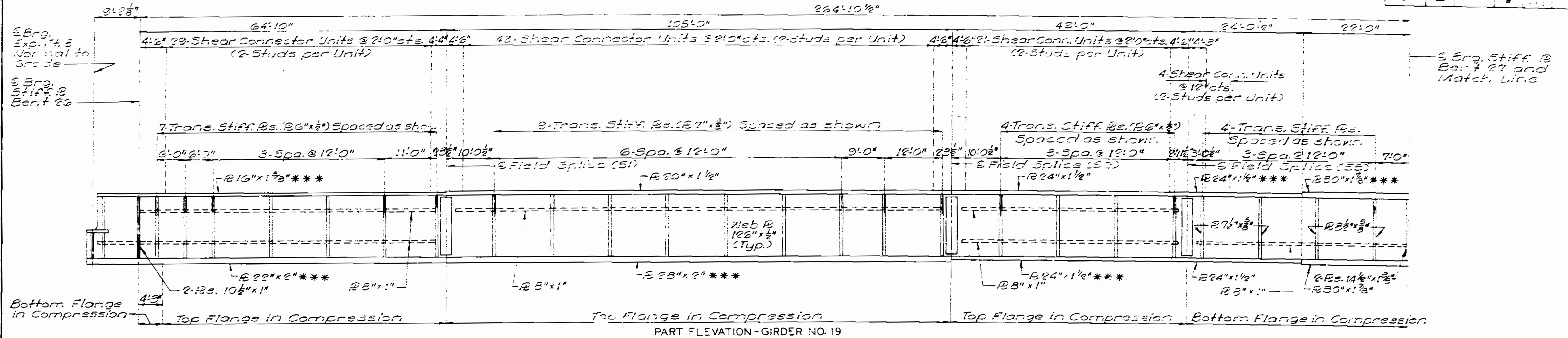
Sheet No. 65 of 72.

JACKSON COUNTY

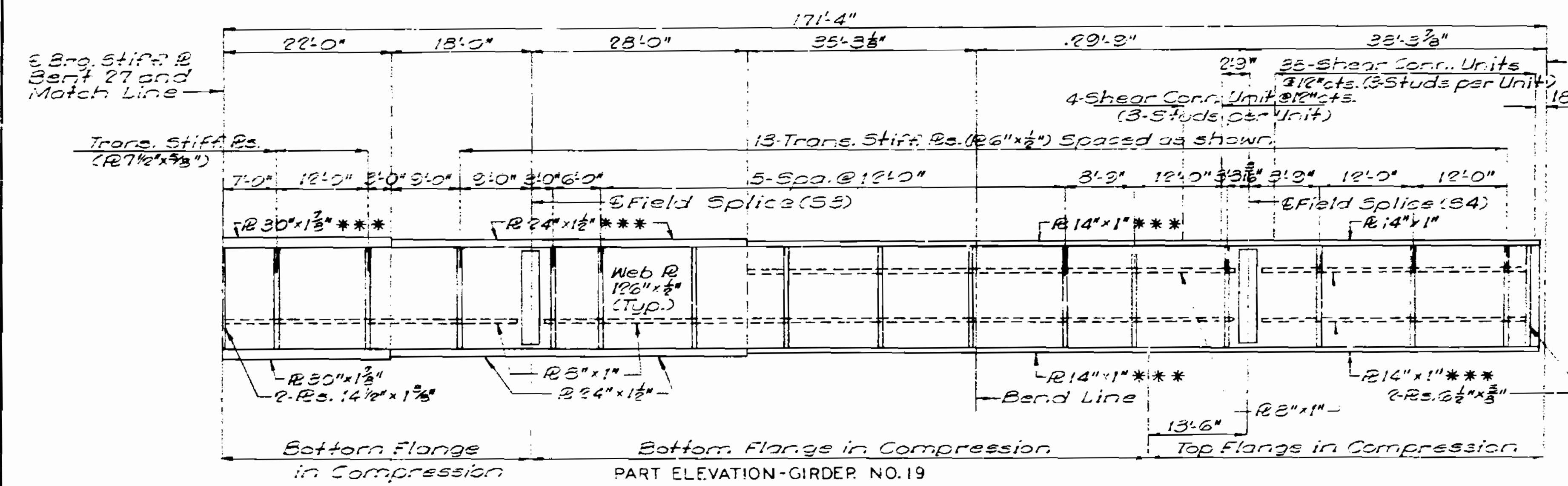
A-3136

FRAMING PLAN-UNIT 9 EASTBOUND

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		18		

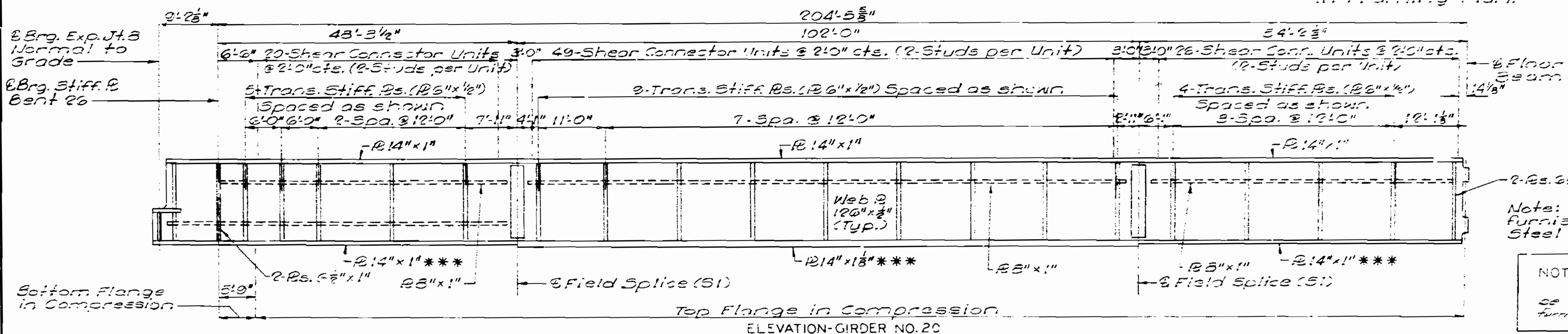


PART ELEVATION-GIRDER NO. 19



PART ELEVATION-GIRDER NO. 19

Note: Fabricated structural steel shall be A36.
 Longitudinal dimensions are parallel to grade at top of web.
 ***Indicates Flange Plates subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements.
 Plate girders shall be fabricated to conform with Combar Diagram shown on sheet No. 33.
 Where longitudinal stiffeners (R3"x1" A36) interferes with bolting the diaphragms in place, clip stiffeners.
 Longitudinal web stiffeners shall be placed on the outside of exterior girders and on the side opposite to transverse web stiffener plates for interior girders.
 Transverse web stiffeners shall be oriented as shown in Framing Plan.



ELEVATION-GIRDER NO. 20

Note: For details of Floor beam, for Girder No. 20 see sheet No. 57.
 Note: Shear connectors are not to be furnished or installed with Structural Steel Contract.

NOTE TO DECK CONTRACTOR
 The only work on this sheet to be done in the Deck Contract is to furnish and install shear connectors.

GIRDER ELEVATION-UNIT 9 EASTBOUND
 GIRDERS NO. 19 & 20

DETAILED 1082
 CHECKED 1082

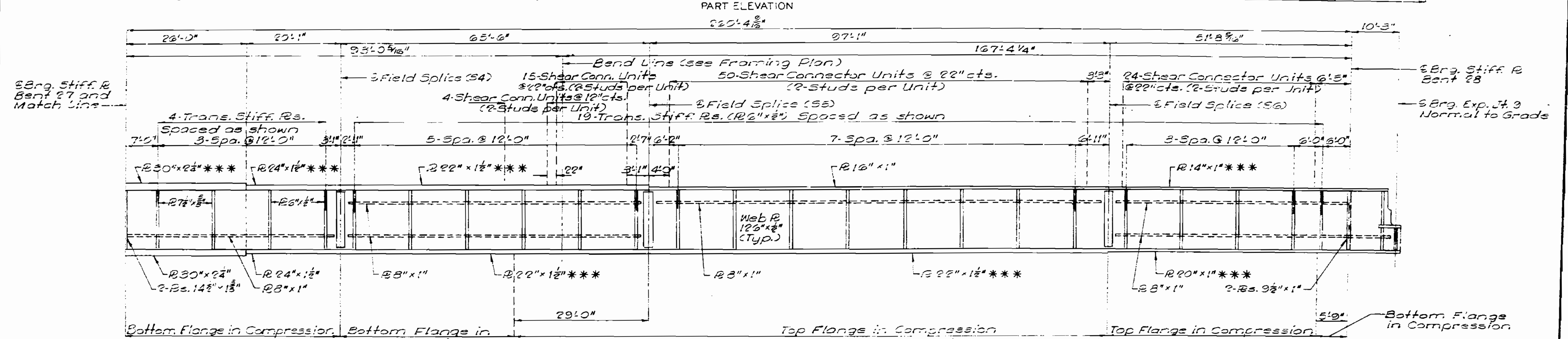
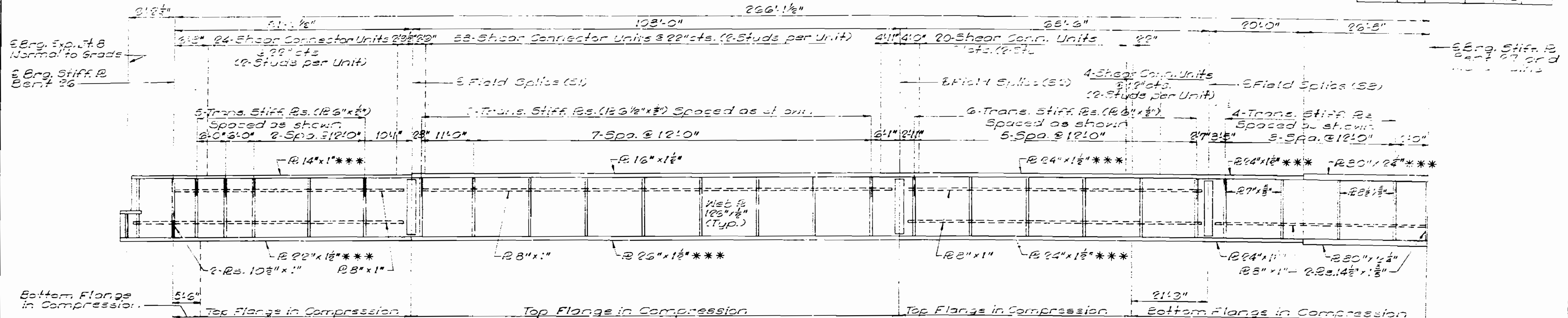
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 62 of 72.

JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO		19	2	



Note: Longitudinal dimensions are parallel to grade at top of web. Fabricated structural steel shall be A36.
 *** Indicates Flange Plates subject to notch toughness requirements. All flange plates shall be subject to notch toughness requirements. Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 33.
 Where longitudinal stiffeners (R 8"x1") interferes with bolting the diaphragms in place, clip stiffeners.
 Longitudinal web stiffeners shall be placed on the outside of exterior girders and on the side opposite to transverse web stiffener plates for interior girders.
 Transverse web stiffeners shall be oriented as shown in Framing Plan. Shear connectors are not to be furnished or installed with Structural Steel Contract.

NOTE TO DECK CONTRACTOR
 The only work on this sheet to be done in the Deck Contract is to furnish and install shear connectors
 GIRDER ELEVATION-UNIT 9 EASTBOUND
 GIRDER NO. 21

DETAILED 10 32
 CHECKED 10 32

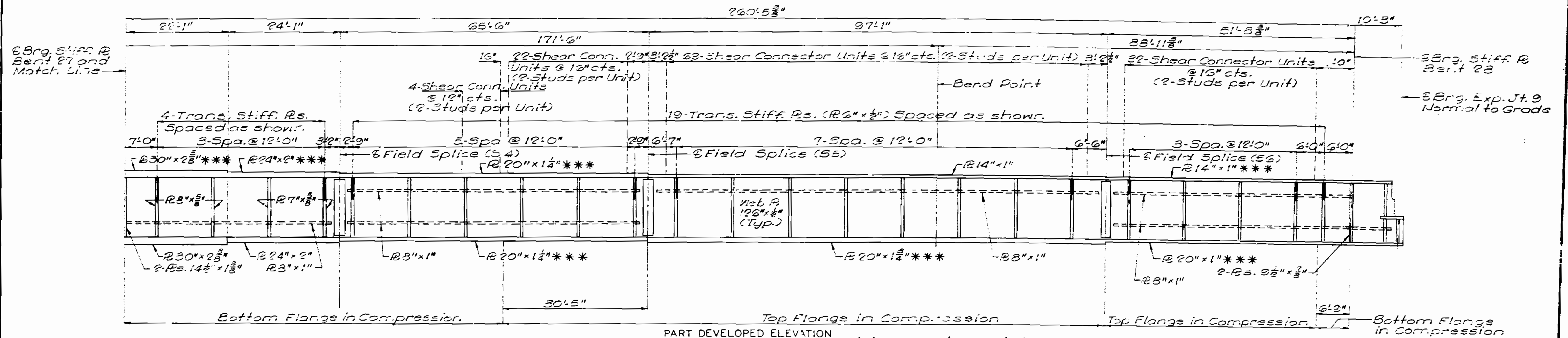
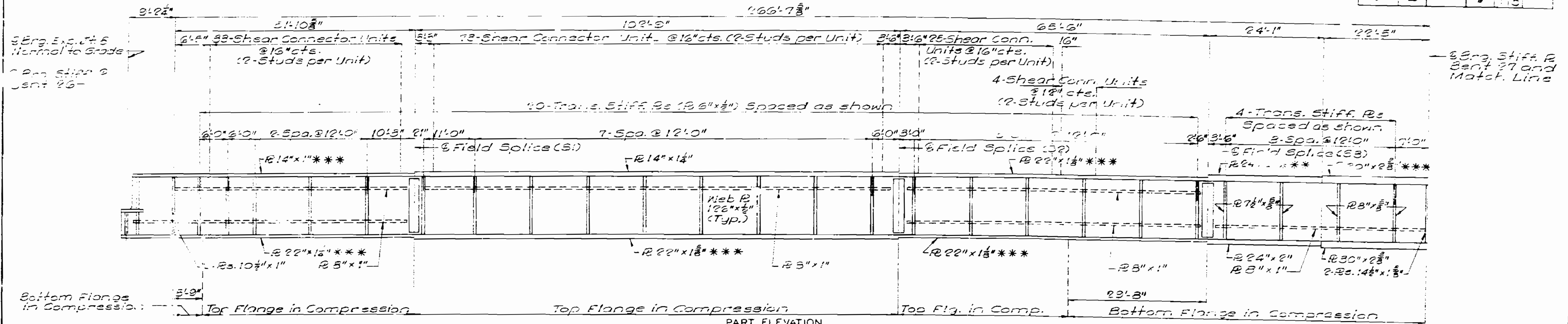
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 33 of 76.

JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO		19	3	



Note: Longitudinal dimensions are parallel to grade at top of web.
 Fabricated structural steel shall be A36.
 ***Indicates Flange Plates subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements.
 Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 37
 Where longitudinal stiffeners (R8"x1") interfere with bolting the diaphragms in place, clip stiffeners.
 Longitudinal web stiffeners shall be placed on the outside of exterior girders and on the side opposite to transverse web stiffener plates for interior girders.
 Transverse web stiffeners shall be oriented as shown in Framing Plan.
 Shear connectors are not to be furnished or installed with Structural Steel Contract.

NOTE TO DECK CONTRACTOR
 The only work on this sheet to be done in the Deck Contract is to furnish and install shear connectors.

GIRDER ELEVATION - UNIT 9 EASTBOUND
 GIRDER NO. 22

DETAILED 1082
 CHECKED 1082

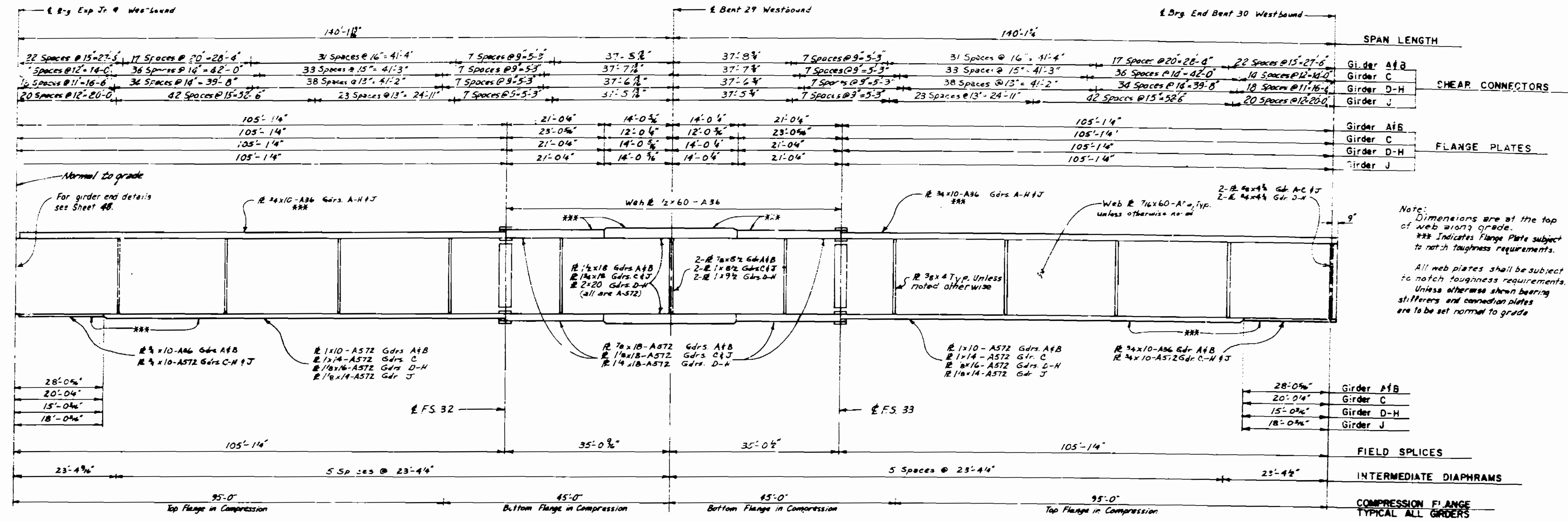
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 70 of 72.

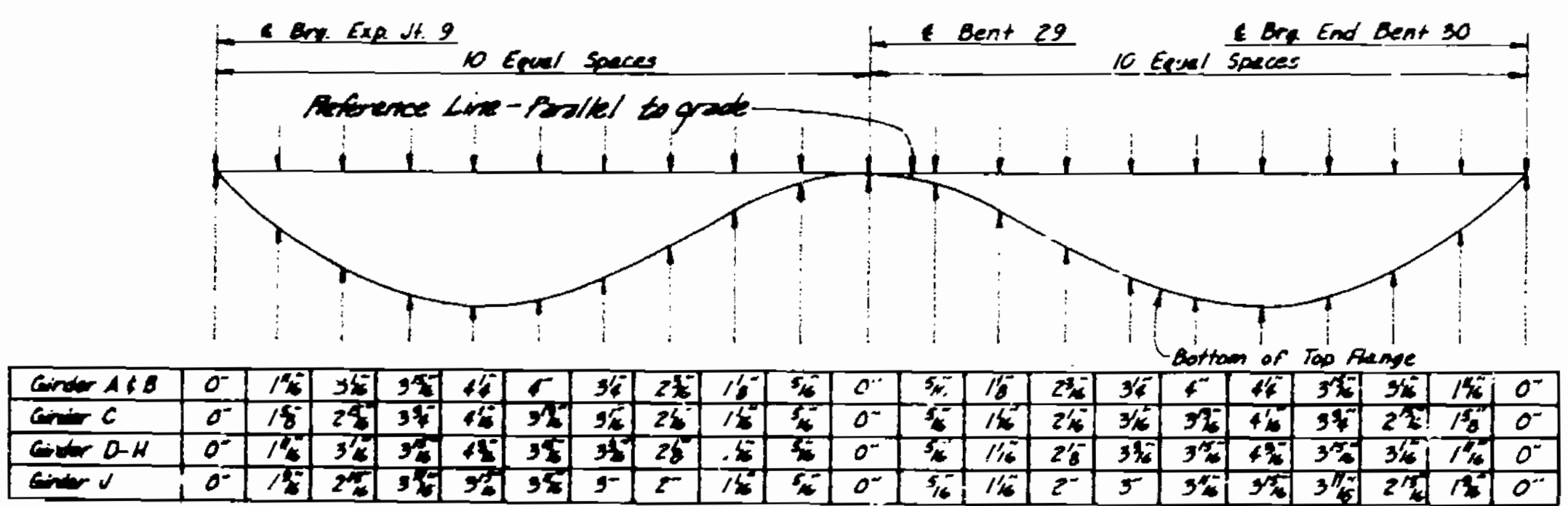
JACKSON COUNTY

A-3136

PLC. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		88	269	

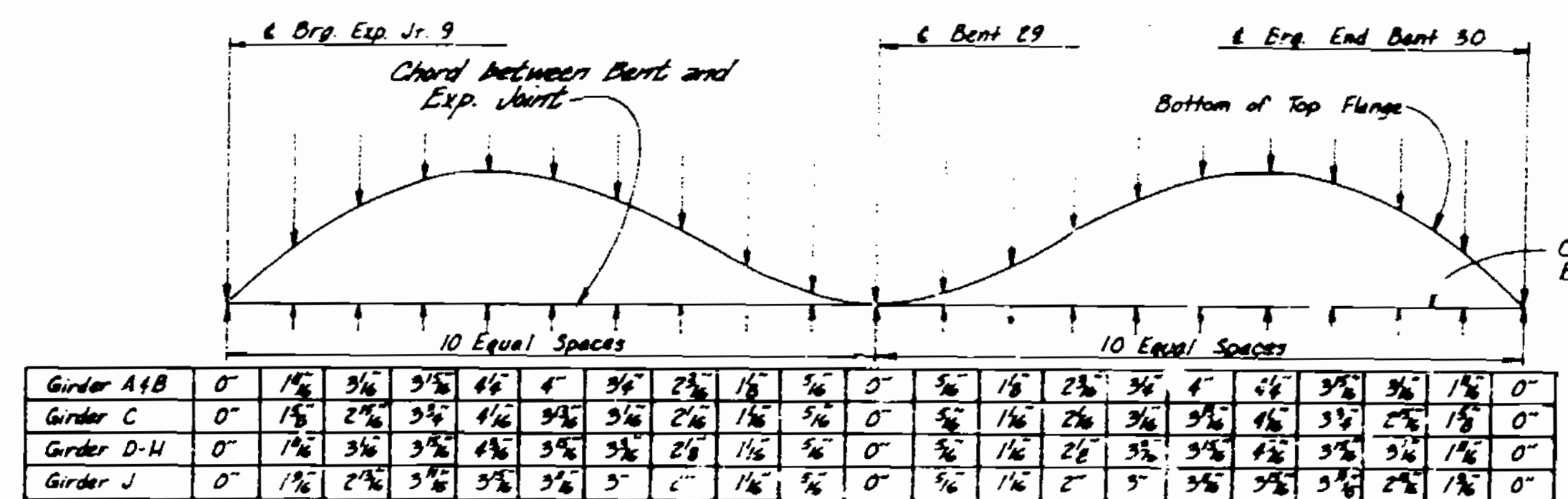


Note: Dimensions are at the top of web along grade.
 *** Indicates Flange Plate subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements. Unless otherwise shown bearing stiffeners and connection plates are to be set normal to grade.

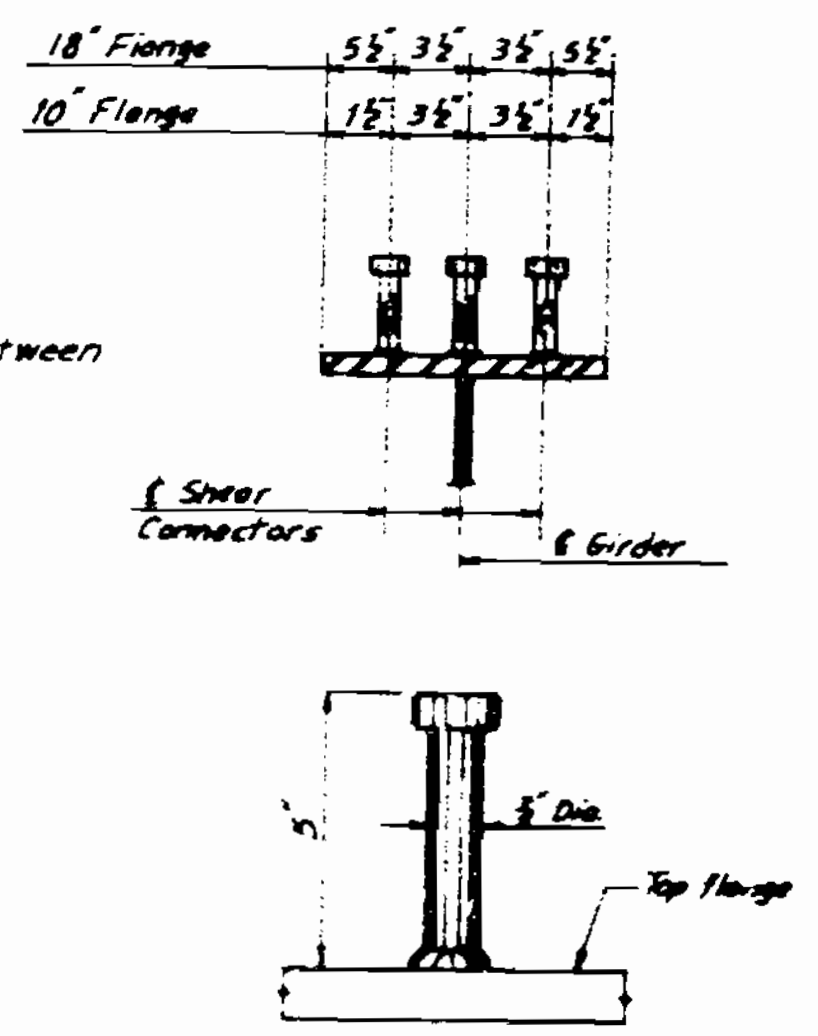


DEAD LOAD DEFLECTION DIAGRAM

Deflection and Camber Notes:
 20% of dead load deflection is due to weight of structural steel.
 Reference chords shown for camber are 1 1/2" below top of slab at Bents and Bearing Expansion Joints.



CAMBER DIAGRAM



SHEAR CONNECTOR DETAILS

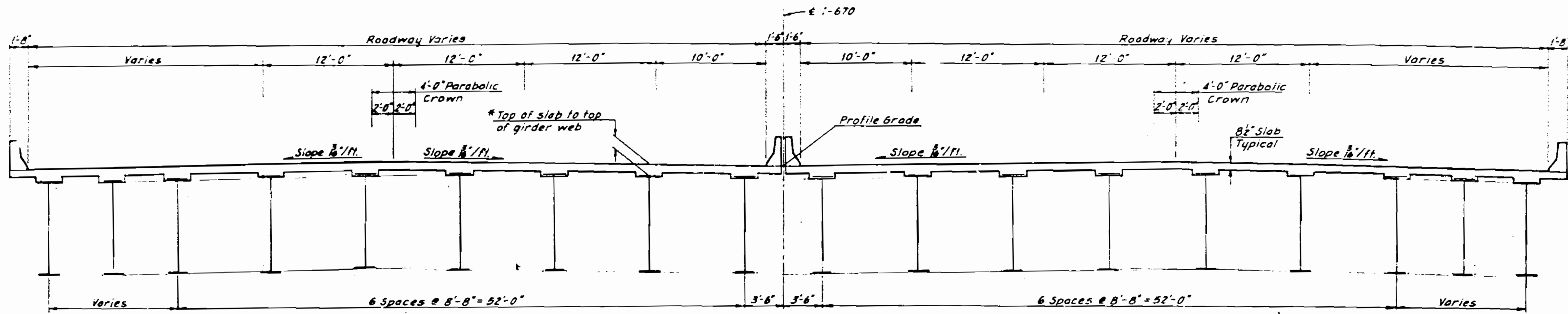
NOTE TO DECK CONTRACTOR:
 THE ONLY WORK ON THIS SHEET TO BE DONE IN THE DECK CONTRACT IS TO FURNISH AND INSTALL SHEAR CONNECTORS.

PER. MARK	STATE	PER. AD.	PER. AD.	SHEET	TOTAL
NO.	NO.	NO.	NO.	NO.	SHEETS
1	NO.	NO.	NO.	51	

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
UNIT 5 WESTBOUND				
EPOXY COATED BARS				
D501	50	51'-0"	Str.	Slab Drains
D502	15	61'-6"	Str.	Slab Drains
IP501	50	81'-2"	Str.	Parapet
IP502	24	49'-8"	Str.	Parapet
IP503	144	71'-2"	Str.	Parapet
IP504	48	23'-6"	Str.	Parapet
IP505	24	51'-9"	Str.	Parapet
NON-EPOXY COATED BARS				
JSS01	374	43'-0"	Str.	Slab
JSS02	97	46'-0"	Str.	Slab
JSS04	186	33'-6"	Str.	Slab
JSS05	186	12'-6"	Str.	Slab
JSS06	394	42'-7"	Str.	Slab
JSS07	789	17'-8"	Str.	Slab
JSS09	526	43'-10"	Str.	Slab
JSS13	58	41'-1"	101	Slab
JSS14	58	71'-0"	101	Slab
L401	8	71'-0"	141	Light St'd Sup.
L402	6	61'-2"	110	Light St'd Sup.
L501	2	71'-0"	141	Light St'd Sup.
L502	2	61'-3"	110	Light St'd Sup.
L503	2	61'-7"	170	Light St'd Sup.
L504	3	71'-2"	170	Light St'd Sup.
L601	6	31'-3"	Str.	Light St'd Sup.
P501	330	31'-0"	104	Parapet
P502	330	31'-1"	108	Parapet
P503	330	21'-2"	104	Parapet
P504	330	31'-1"	163	Parapet
P505	330	21'-8"	104	Parapet
P506	330	21'-8"	108	Parapet
P507	330	11'-1"	104	Parapet
P508	330	21'-10"	163	Parapet
NON-EPOXY COATED BARS				
JSS02	496	43'-2"	Str.	Slab
JSS09	526	22'-1"	Str.	Slab
JSS10	263	39'-6"	Str.	Slab
JSS11	263	39'-9"	Str.	Slab
JSS12	8	43'-0"	Str.	Slab
UNIT 5 EASTBOUND				
EPOXY COATED BARS				
D601	50	51'-0"	Str.	Slab Drains
D602	15	61'-6"	Str.	Slab Drains
IP501	50	81'-8"	Str.	Parapet
IP502	24	49'-8"	Str.	Parapet
IP503	144	71'-2"	Str.	Parapet
IP504	48	23'-6"	Str.	Parapet
IP505	24	51'-9"	Str.	Parapet
NON-EPOXY COATED BARS				
JSS01	374	43'-0"	Str.	Slab
JSS03	97	46'-0"	Str.	Slab
JSS04	186	33'-6"	Str.	Slab
JSS05	186	12'-6"	Str.	Slab
JSS06	394	42'-7"	Str.	Slab
JSS07	789	17'-8"	Str.	Slab
JSS09	526	43'-10"	Str.	Slab
JSS13	58	41'-1"	101	Slab
JSS14	58	71'-0"	101	Slab
L401	8	71'-0"	141	Light St'd Sup.
L402	6	61'-2"	110	Light St'd Sup.
L501	2	71'-0"	141	Light St'd Sup.
L502	2	61'-3"	110	Light St'd Sup.
L503	2	61'-7"	170	Light St'd Sup.
L504	3	71'-2"	170	Light St'd Sup.
L601	6	31'-3"	Str.	Light St'd Sup.
LP501	48	23'-6"	Str.	Parapet
LP502	48	26'-11"	Str.	Parapet
LP503	50	81'-5"	Str.	Parapet
LP504	144	71'-2"	Str.	Parapet
NON-EPOXY COATED BARS				
JSS02	496	43'-2"	Str.	Slab
JSS09	526	22'-1"	Str.	Slab
JSS10	263	39'-6"	Str.	Slab
JSS11	263	39'-9"	Str.	Slab
JSS12	8	43'-0"	Str.	Slab
UNIT 6 WESTBOUND				
EPOXY COATED BARS				
D601	14	51'-0"	Str.	Slab Drains
D602	4	61'-6"	Str.	Slab Drains
KP501	48	23'-6"	Str.	Parapet
KP502	48	26'-11"	Str.	Parapet
KP503	50	81'-5"	Str.	Parapet
KP504	144	71'-2"	Str.	Parapet
NON-EPOXY COATED BARS				
KSS01	423	37'-8"	Str.	Slab
KSS03	93	45'-0"	Str.	Slab
KSS04	186	40'-0"	Str.	Slab
KSS05	772	171'-10"	Str.	Slab
KSS06	258	44'-3"	Str.	Slab
KSS07	257	44'-6"	Str.	Slab
KSS08	257	44'-9"	Str.	Slab
KSS14	58	21'-7"	101	Slab
KSS15	58	41'-1"	101	Slab
L401	8	71'-0"	141	Light St'd Sup.
L402	6	61'-2"	110	Light St'd Sup.
L501	4	71'-0"	141	Light St'd Sup.
L502	4	61'-3"	110	Light St'd Sup.
L503	4	61'-7"	170	Light St'd Sup.
L504	6	71'-2"	170	Light St'd Sup.
L601	12	31'-3"	Str.	Light St'd Sup.
MP501	324	21'-0"	104	Parapet
MP502	324	31'-1"	108	Parapet
MP503	324	21'-2"	104	Parapet
MP504	324	31'-1"	163	Parapet
MP505	324	21'-8"	104	Parapet
MP506	324	21'-8"	108	Parapet
MP507	324	11'-1"	104	Parapet
MP508	324	21'-10"	163	Parapet
NON-EPOXY COATED BARS				
LSS02	558	37'-10"	Str.	Slab
LSS09	515	31'-6"	Str.	Slab
LSS10	172	30'-8"	Str.	Slab
LSS11	172	30'-11"	Str.	Slab
LSS12	171	31'-2"	Str.	Slab
LSS13	5	37'-8"	Str.	Slab
UNIT 7 WESTBOUND				
EPOXY COATED BARS				
D601	50	51'-0"	Str.	Slab Drains
D602	12	61'-6"	Str.	Slab Drains
L401	8	71'-0"	141	Light St'd Sup.
L402	6	61'-2"	110	Light St'd Sup.
L501	4	71'-0"	141	Light St'd Sup.
L502	4	61'-3"	110	Light St'd Sup.
L503	4	61'-7"	170	Light St'd Sup.
L504	6	71'-2"	170	Light St'd Sup.
L601	12	31'-3"	Str.	Light St'd Sup.
NP501	206	81'-2"	Str.	Parapet
NP502	24	36'-2"	Str.	Parapet
NP503	12	33'-9"	Str.	Parapet
NP504	12	37'-0"	Str.	Parapet
NP505	66	81'-10"	Str.	Parapet
NP506	12	34'-2"	Str.	Parapet
NP507	12	41'-0"	Str.	Parapet
NP508	12	39'-3"	Str.	Parapet
NP509	6	91'-8"	Str.	Parapet
NP510	12	34'-6"	Str.	Parapet
PS01	497	31'-0"	104	Parapet
PS02	497	31'-1"	108	Parapet
PS03	497	21'-2"	104	Parapet
PS04	497	31'-1"	163	Parapet
PS05	480	21'-8"	104	Parapet
PS06	480	21'-8"	108	Parapet
PS07	480	11'-1"	104	Parapet
PS08	480	21'-10"	163	Parapet
NON-EPOXY COATED BARS				
NSS01	23	29'-0"	*Str.	Slab
NSS02	564	41'-6"	Str.	Slab
NSS05	93	19'-5"	Str.	Slab
NSS06	186	33'-7"	Str.	Slab
NSS07	186	12'-6"	Str.	Slab
NSS08	93	52'-0"	Str.	Slab
NSS09	93	19'-0"	Str.	Slab
NSS10	1121	34'-8"	Str.	Slab
NSS11	1105	26'-3"	Str.	Slab
NSS17	8	30'-0"	Str.	Slab
NSS18	10	40'-10"	Str.	Slab
NSS19	28	41'-7"	101	Slab
NSS20	4	25'-5"	Str.	Slab
NSS21	186	33'-7"	Str.	Slab
PS01	463	31'-0"	104	Parapet
PS02	463	31'-1"	108	Parapet
PS03	463	21'-2"	104	Parapet
PS04	463	31'-1"	163	Parapet
PS05	479	21'-8"	104	Parapet
PS06	479	21'-8"	108	Parapet
PS07	479	11'-1"	104	Parapet
PS08	479	21'-10"	163	Parapet
NON-EPOXY COATED BARS				
NSS03	31	34'-9"	*Str.	Slab
NSS04	744	41'-6"	Str.	Slab
NSS12	750	30'-4"	Str.	Slab
NSS13	737	30'-7"	Str.	Slab
NSS14	5	35'-6"	Str.	Slab
NSS15	5	35'-0"	Str.	Slab
NSS16	12	40'-2"	Str.	Slab
NSS19	1	51'-10	Str.	Slab
NSS22	4	71'-8"	Str.	Slab

BILL OF REINFORCEMENT				
MARK	NO.	LENGTH	SHAPE	LOCATION
L601	6	31'-3"	Str.	Light St'd Sup.
UNIT 6 WESTBOUND				
EPOXY COATED BARS				
D601	14	51'-0"	Str.	Slab Drains
D602	4	61'-6"	Str.	Slab Drains
KP501	48	23'-6"	Str.	Parapet
KP502	48	26'-11"	Str.	Parapet
KP503	50	81'-5"	Str.	Parapet
KP504	144	71'-2"	Str.	Parapet
NON-EPOXY COATED BARS				
KSS01	423	37'-8"	Str.	Slab
KSS03	93	45'-0"	Str.	Slab
KSS04	186	40'-0"	Str.	Slab
KSS05	772	171'-10"	Str.	Slab
KSS06	258	44'-3"	Str.	Slab
KSS07	257	44'-6"	Str.	Slab
KSS08	257	44'-9"	Str.	Slab
KSS14	58	21'-7"	101	Slab
KSS15	58	41'-1"	101	Slab
L401	8	71'-0"	141	Light St'd Sup.
L402	6	61'-2"	110	Light St'd Sup.
L501	4	71'-0"	141	Light St'd Sup.
L502	4	61'-3"	110	Light St'd Sup.
L503	4	61'-7"	170	Light St'd Sup.
L504	6	71'-2"	170	Light St'd Sup.
L601	12	31'-3"	Str.	Light St'd Sup.
MP501	324	21'-0"	104	Parapet
MP502	324	31'-1"	108	Parapet
MP503	324	21'-2"	104	Parapet
MP504	324	31'-1"	163	Parapet
MP505	324	21'-8"	104	Parapet
MP506	324	21'-8"	108	Parapet
MP507	324	11'-1"	104	Parapet
MP508	324	21'-10"	163	Parapet
NON-EPOXY COATED BARS				
LSS02	558	37'-10"	Str.	Slab
LSS09	515	31'-6"	Str.	Slab
LSS10	172	30'-8"	Str.	Slab
LSS11	172	30'-11"	Str.	Slab
LSS12	171	31'-2"	Str.	Slab
LSS13	5	37'-8"	Str.	Slab
UNIT 6 EASTBOUND				
EPOXY COATED BARS				
D601	14	51'-0"	Str.	Slab Drains
D602	4	61'-6"	Str.	Slab Drains
LP501	48	23'-6"	Str.	Parapet
LP502	48	26'-11"	Str.	Parapet
LP503	50	81'-5"	Str.	Parapet
LP504	144	71'-2"	Str.	Parapet
NON-EPOXY COATED BARS				
LSS02	558	37'-10"	Str.	Slab
LSS09	515	31'-6"	Str.	Slab
LSS10	172	30'-8"	Str.	Slab
LSS11	172	30'-11"	Str.	Slab
LSS12	171	31'-2"	Str.	Slab
LSS13	5	37'-8"	Str.	Slab
UNIT 7 EASTBOUND				
EPOXY COATED BARS				
D601	14	51'-0"	Str.	Slab Drains
D602	4	61'-6"	Str.	Slab Drains
L401	8	71'-0"	141	Light St'd Sup.
L402	6	61'-2"	110	Light St'd Sup.
L501	4	71'-0"	141	Light St'd Sup.
L502	4	61'-3"	110	Light St'd Sup.
L503	4	61'-7"	170	Light St'd Sup.
L504	6	71'-2"	170	Light St'd Sup.
L601	12	31'-3"	Str.	Light St'd Sup.
NP501	206	81'-		

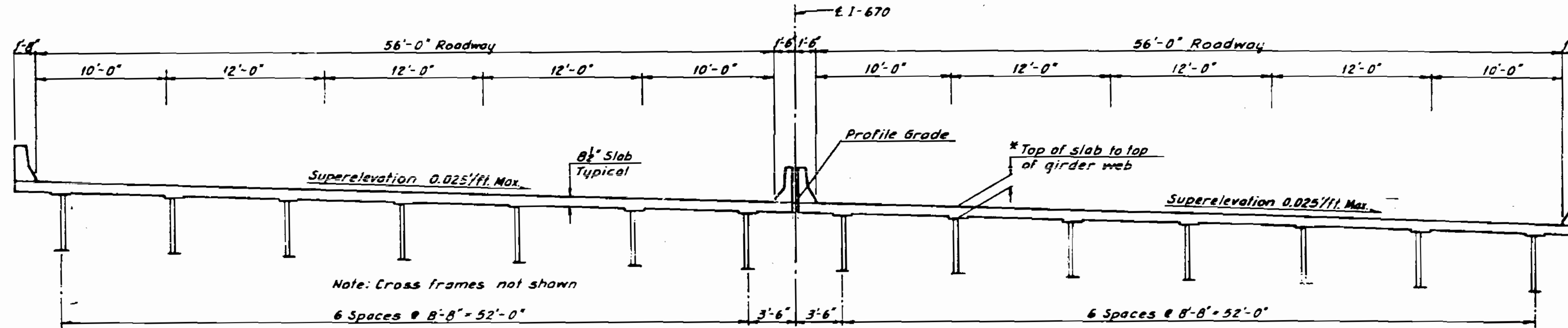
FED. ROAD DIST. NO.	STATE	FED. AC. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.	11	11	50	



TYPICAL SECTION - UNITS 8 AND 9

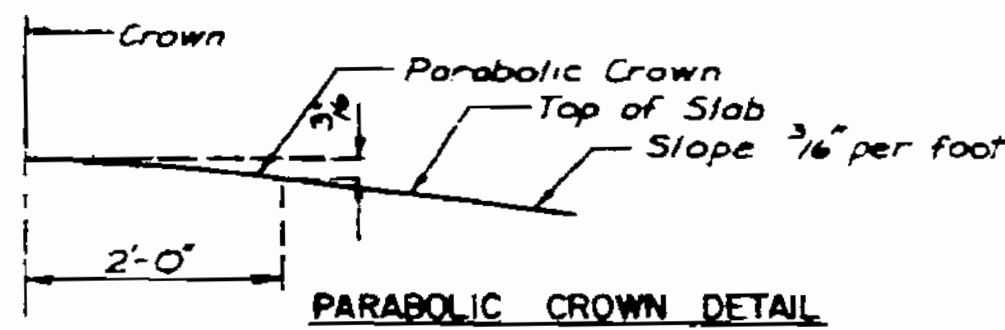
- * Units 5 & 6 - 10 1/2"
- Unit 7 - 11"
- Unit 8 - 11 1/2"
- Unit 9 - 11 1/2"
- Unit 10 - 11 1/2"

Note: "H" dimension may vary if girder camber after erection differs from plan camber by more than the percentage of D.L. deflection due to weight of structural steel. No payment will be made for additional forming or concrete required for variation in haunching.



TYPICAL SECTION - UNITS 5, 6 AND 7

Note: Cross frames not shown
6 Spaces @ 8'-8" = 52'-0"

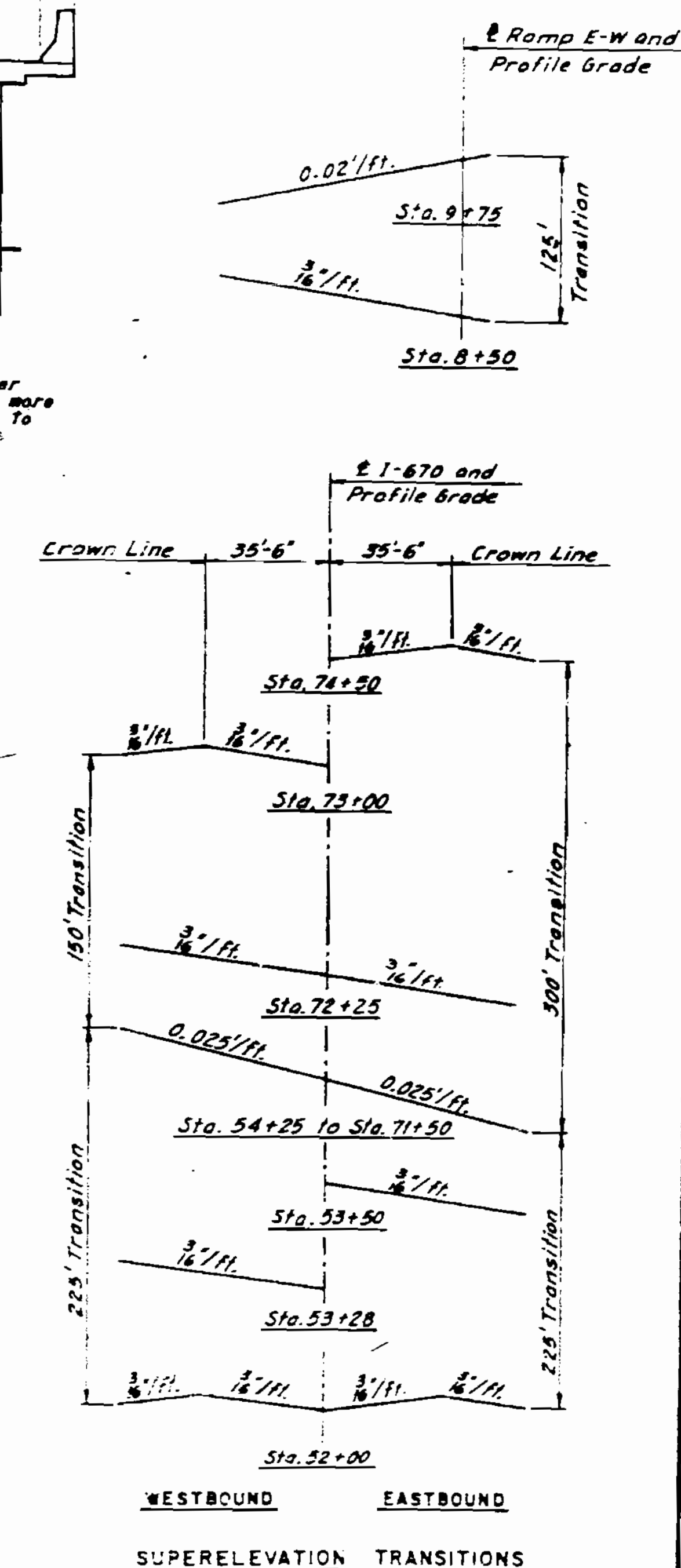


ESTIMATED QUANTITIES

ITEM	UNIT	WESTBOUND LANE SUPERSTRUCTURE							EASTBOUND LANE SUPERSTRUCTURE							TOTAL	
		UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10	TOTAL	UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10	TOTAL		
DRAINAGE SYSTEM (On Structure)	Lump Sum	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Protective Coating - Conc. Elns. (Deleterious Agents)	Lump Sum	0	0	0	✓	0	✓	✓	0	0	0	✓	0	✓	✓	✓	✓
CLASS B-1 CONCRETE (ALTERNATE B)	Cu. Yd.	74.0	72.2	108.2	97.5	119.5	63.2	536.6	73.2	71.6	114.5	111.1	127.7	22.6	513.7	1050.3	
CLASS B-2 CONCRETE (ALTERNATE B)	Cu. Yd.	210.2	596.8	608.2	522.2	522.2	222.2	2222.7	2106.7	337.7	322.2	342.2	337.2	422.2	3024.5	6337.0	
CONCRETE WEARING SURFACE (*)	Sq. Yd.	2029	2012	3032	2585	2875	2123	16,206	2056	2013	2027	1622	2415	2123	15,416	31,622	
ELASTOMERIC EXP. JOINT SEAL (3")	Ltn. Ft.	0	56	0	0	0	0	56	0	56	0	0	0	0	56	112	
ELASTOMERIC EXP. JOINT SEAL (4")	Ltn. Ft.	56	0	56	0	84	0	196	56	0	56	0	56	0	168	336	
FLIPPED PITCH EXP. DEVICE	Ltn. Ft.	0	0	0	56 (4 1/2")	0	68 (6 1/2")	124	0	0	0	56 (4 1/2")	0	68 (6 1/2")	124	252	
PREFORMED COMPRESSION EXP. JO. SEAL (3.5")	Ltn. Ft.	0	0	0	0	0	68	68	0	0	0	0	52	52	104	166	
REINFORCING STEEL (GRADE 60)	Pound	56540	55945	83360	70,330	118,070	57730	441,970	56529	55900	80350	44,000	123,440	57730	421,330	8,300	
REINFORCING STEEL (EPOXY COATED)	Pound	32530	91000	137120	109,500	123,680	87090	701,920	93700	90980	122,900	71,110	123,480	26,970	676,120	1,000,000	
CONDUIT SYSTEM ON STRUCTURE	Lump Sum	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
FABRICATED STRUCTURAL CARBON STEEL (Misc.)	Pound	5870	5550	5820	3030	3470	3760	29,970	5950	5680	5220	1820	3550	3720	26,370	53,340	
PAINTING (SYSTEM C) GREEN	Tons	221.6	217.1	377.6	443.8	1265.0	290.6	2215.7	281.7	211.3	327.7	271.1	1224.6	290.6	2743.3	5360.7	
HIGH STRENGTH BRIDGE PAIL (ONE TUBE)	Ltn. Ft.	321	323	495	540	538	282	2,510	331	324	463	269	543	232	2,212	4,722	
Miscellaneous Exp. Items	Ft.															2662.02	
REINFORCEMENT DRILLING	L.S.															18,232.63	

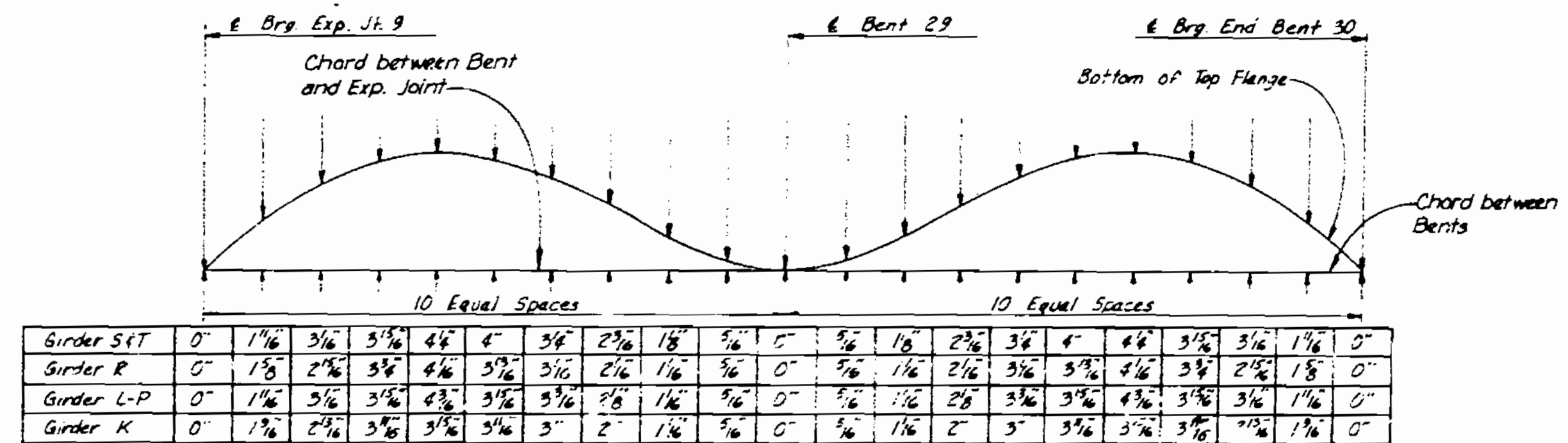
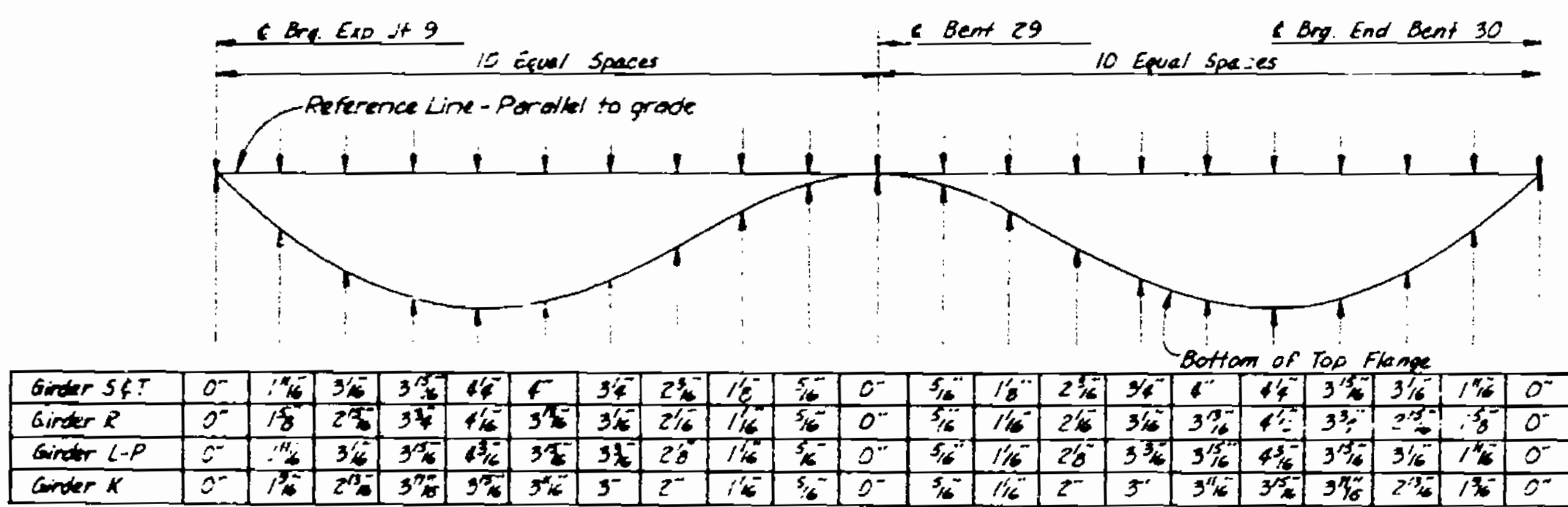
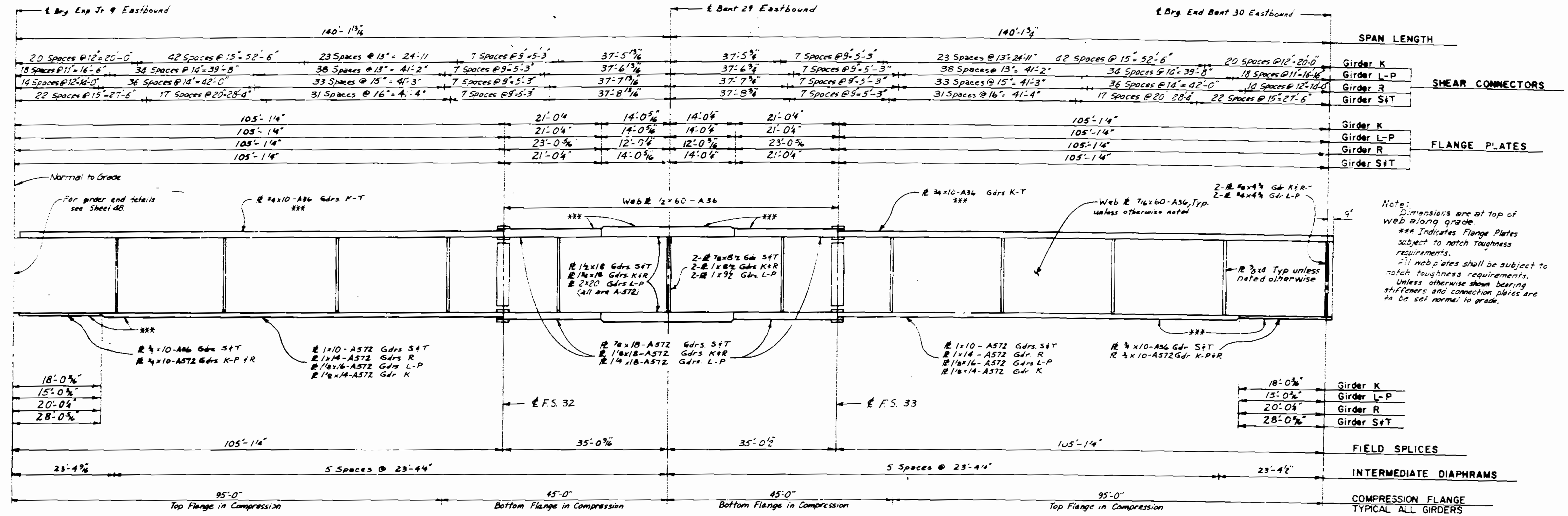
Note: This drawing is not to scale. Follow dimensions. ALTERNATE B IS LOW STUMP CONCRETE.

Sheet No. 74 of 72



SUMMARY OF QUANTITIES AND TYPICAL SECTIONS

FILE NO.	REV.	DATE	BY	CHKD.	APP.
1					

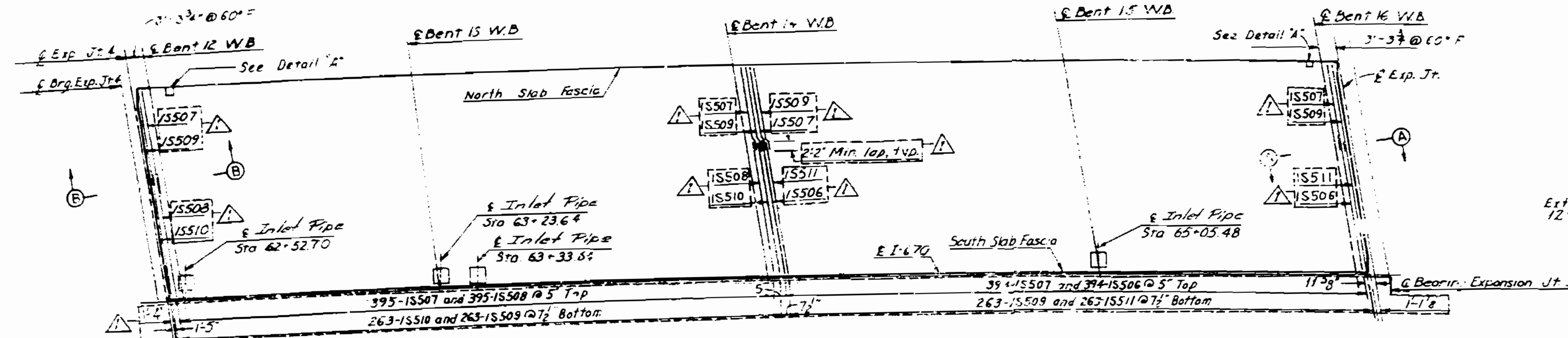


Deflection and Camber Notes:
 20% of dead load deflection is due to weight of structural steel.
 Reference chords shown for camber are 1 1/2" below top of slab at Bent and Bearing Expansion joints.

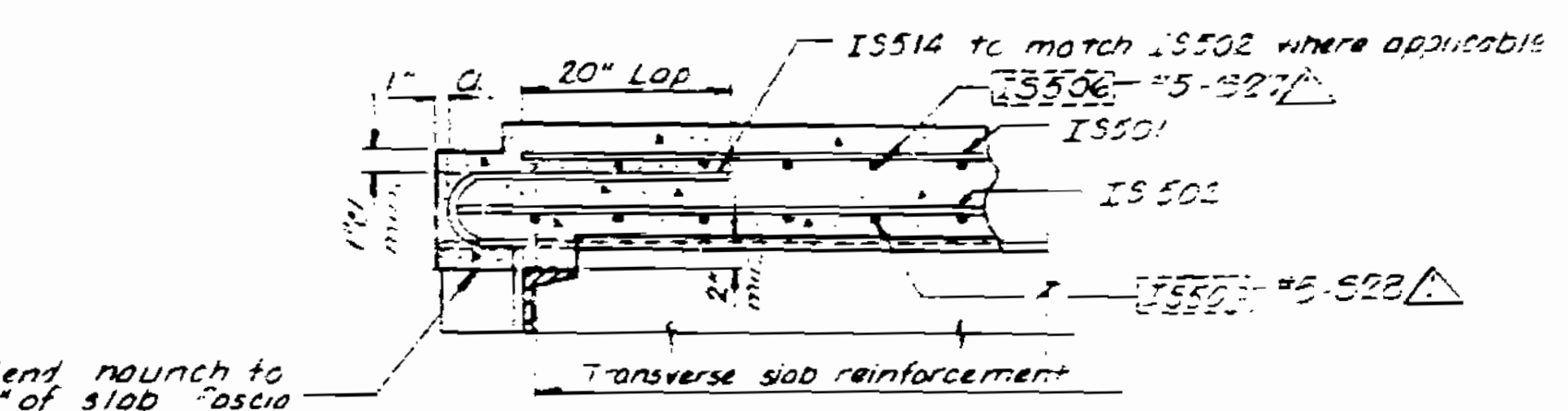
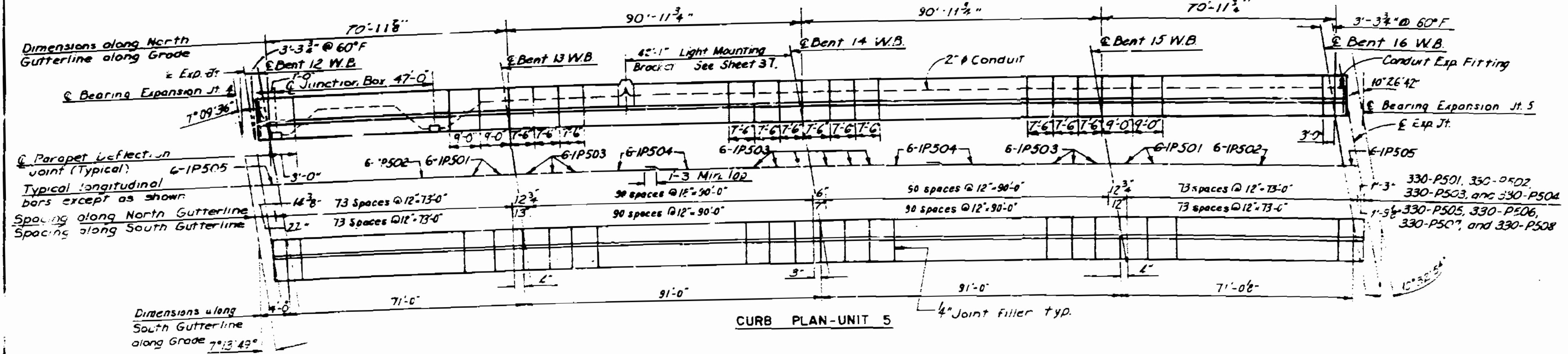
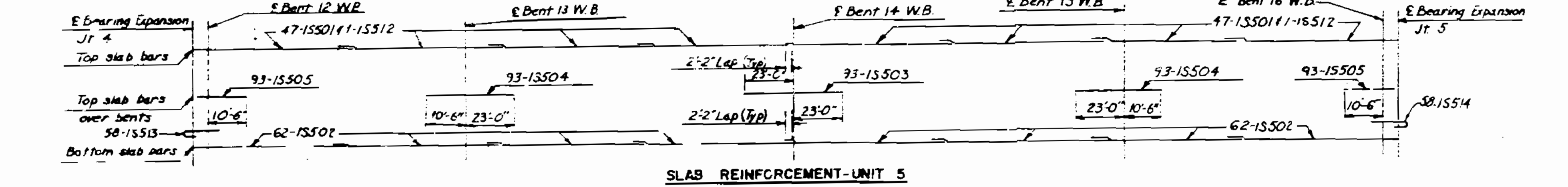
NOTE TO DECK CONTRACTOR:
 THE ONLY WORK ON THIS SHEET TO BE DONE IN THE DECK CONTRACT IS TO FURNISH AND INSTALL SHEAR CONNECTORS.

FEED PLAN SHEET NO.	STATE	PROJECT NO.	FEED PLAN YEAR	SHEET NO.	TOTAL SHEETS
1	IN	100	1978	54	54

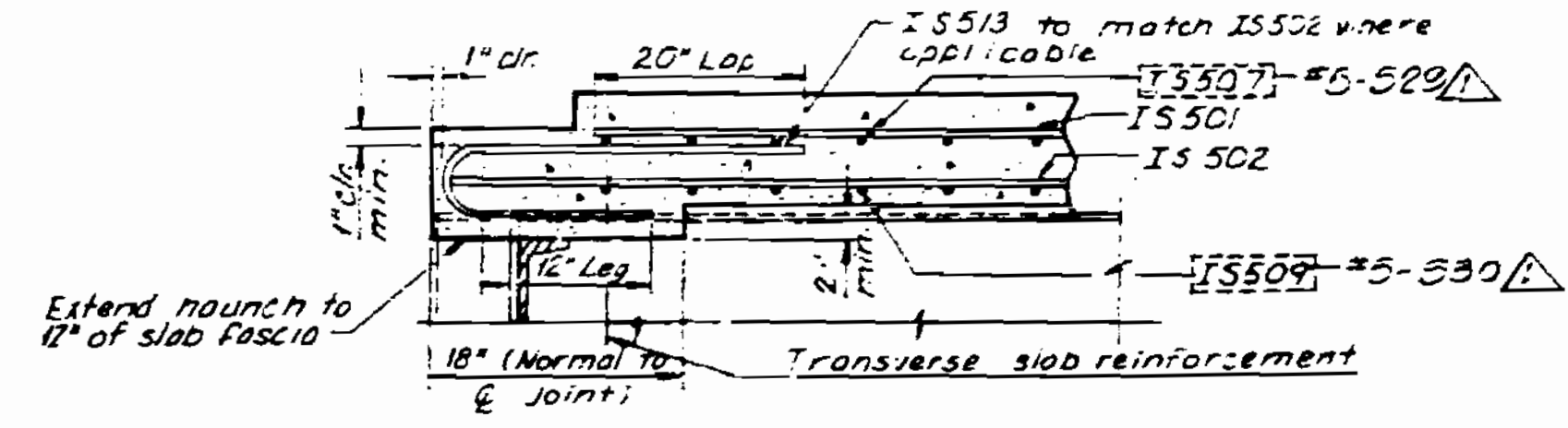
REINFORCEMENT PLANS



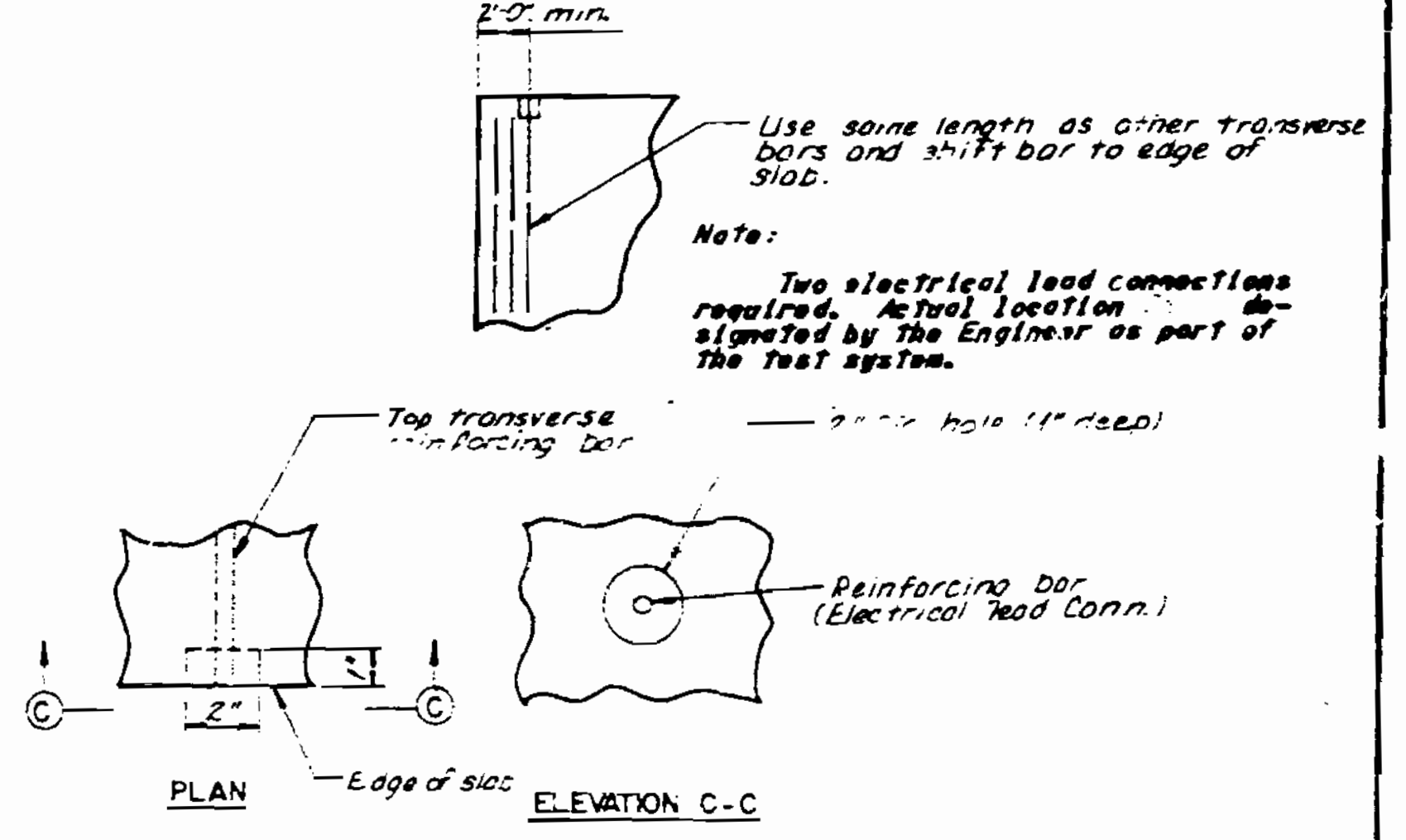
Note: See sheet No. 11A for revised transverse slab reinforcement.



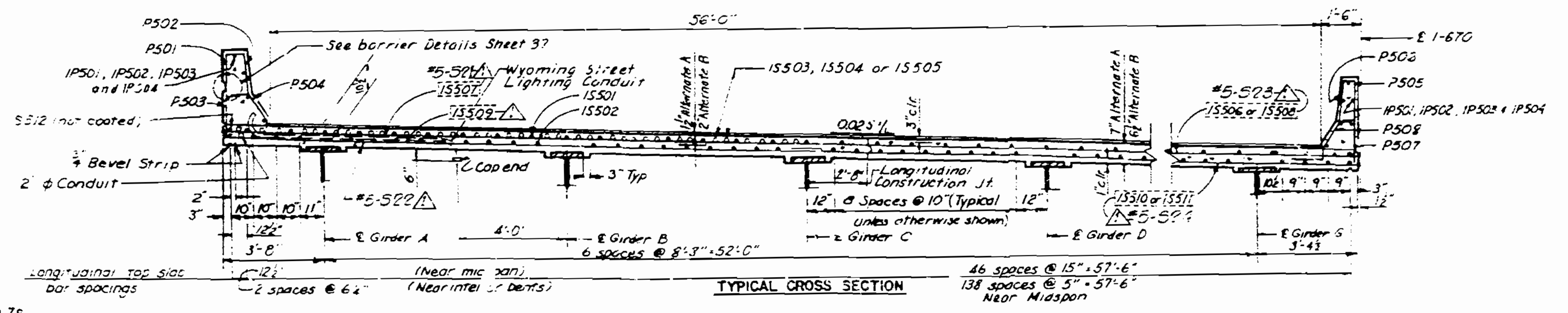
SECTION A-A



SECTION B-B



DETAIL A



TYPICAL CROSS SECTION

SLAB AND CURB REINFORCEMENT UNIT 5 WESTBOUND

107

DETAILED 10 79
CHECKED 14 79

Note: This drawing is not to scale. Follow dimensions.

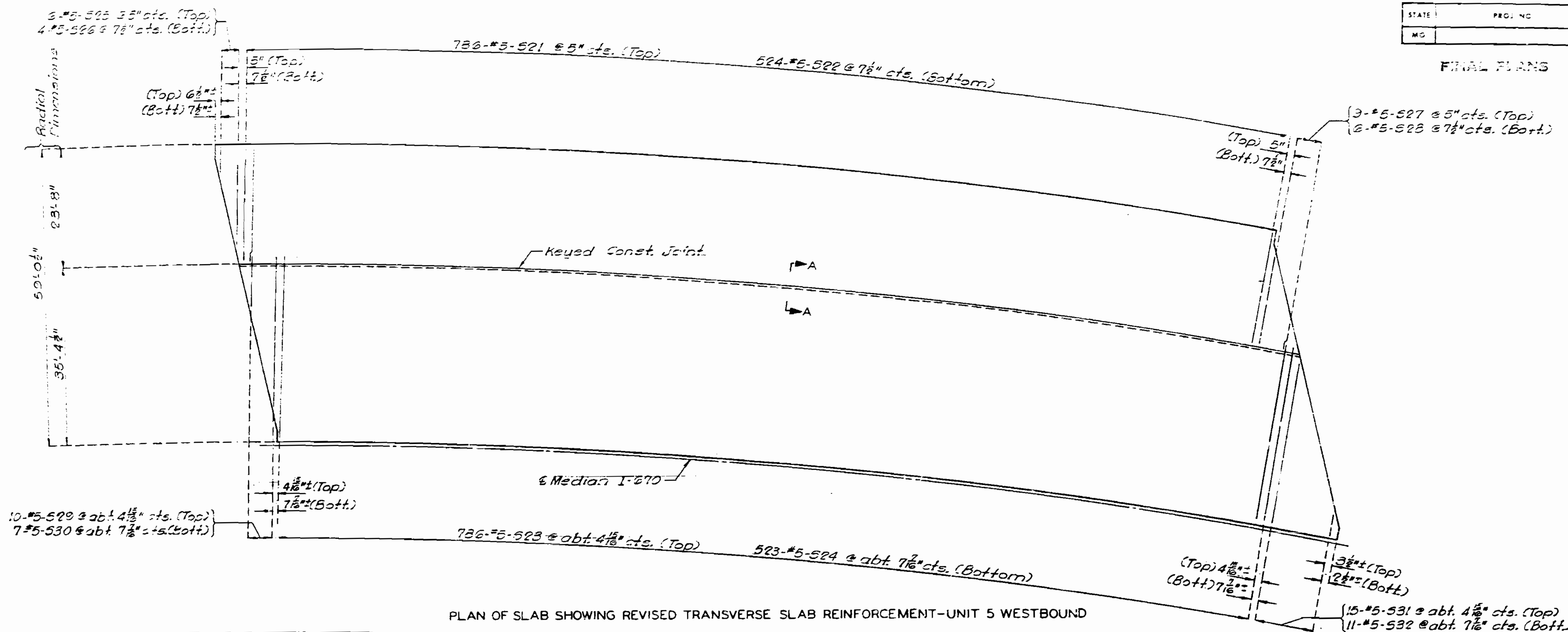
Sheet No. 2 of 10. Revised 8/28/84

JACKSON COUNTY

A-3136

STATE	PROJECT NO.	SHEET NO.
MO		54A

FINAL PLANS

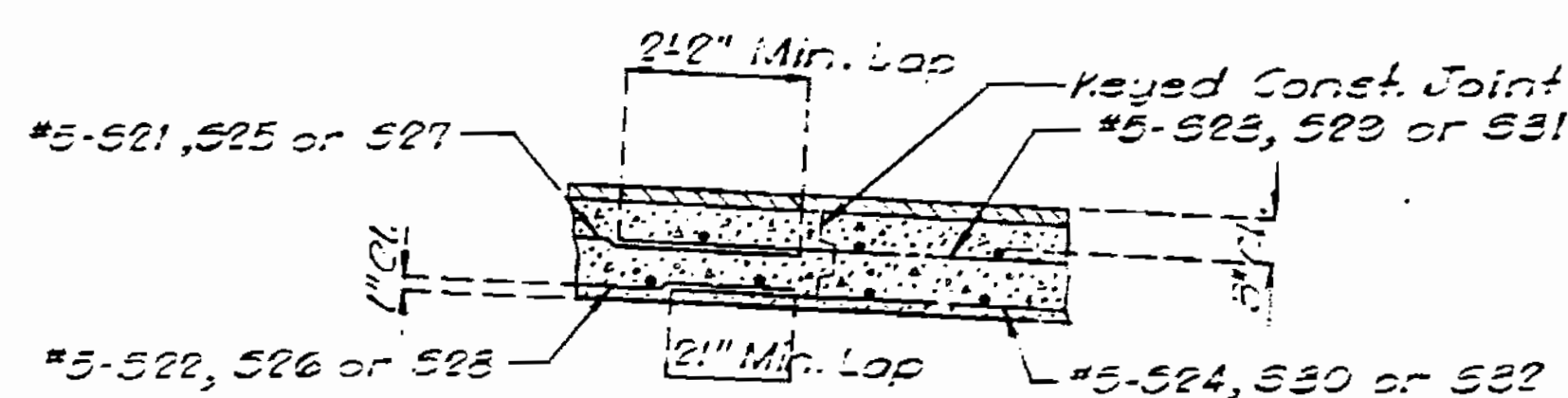


PLAN OF SLAB SHOWING REVISED TRANSVERSE SLAB REINFORCEMENT-UNIT 5 WESTBOUND

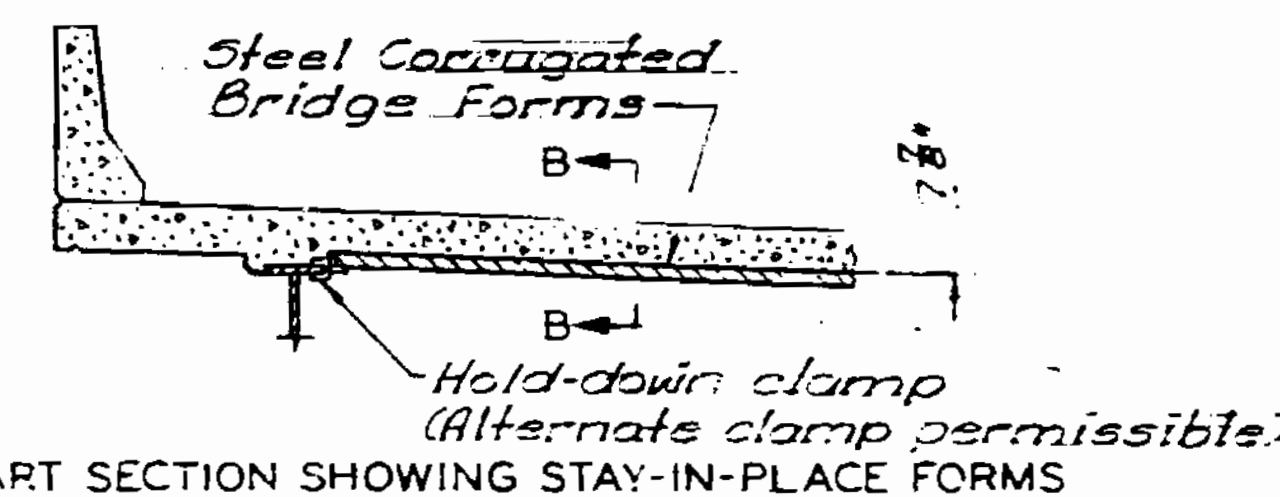
BILL OF REVISED TRANSVERSE SLAB REINFORCEMENT
UNIT 5 WESTBOUND

NO.	SIZE	MARK	EPOXY	SHAPE	VARIABLES	NC.	INCR.	LENGTH	WEIGHT
786	#5	521	E	Str.				23'5"	19,197
524	#5	522		Str.				23'5"	12,798
786	#5	523	E	Str.				37'7"	30,811
522	#5	524		Str.				37'2"	20,223
6	#5	525	E	Str.	V	1		3'7"	
Incr = 3'4"								22'5"	88
4	#5	526		Str.	V	1		3'3"	
Incr = 4'11"								20'0"	53
9	#5	527	E	Str.	V	1		3'2"	
Incr = 2'5"								21'2"	114
6	#5	528		Str.	V	1		3'2"	
Incr = 3'4"								19'10"	72
10	#5	529	E	Str.	V	1		2'2"	
Incr = 3'5"								35'5"	217
7	#5	530		Str.	V	1		2'0"	
Incr = 4'11"								35'6"	132
15	#5	531	E	Str.	V	1		2'3"	
Incr = 2'2 1/2"								33'4"	220
11	#5	532		Str.	V	1		2'1"	
Incr = 3'4"								35'5"	215

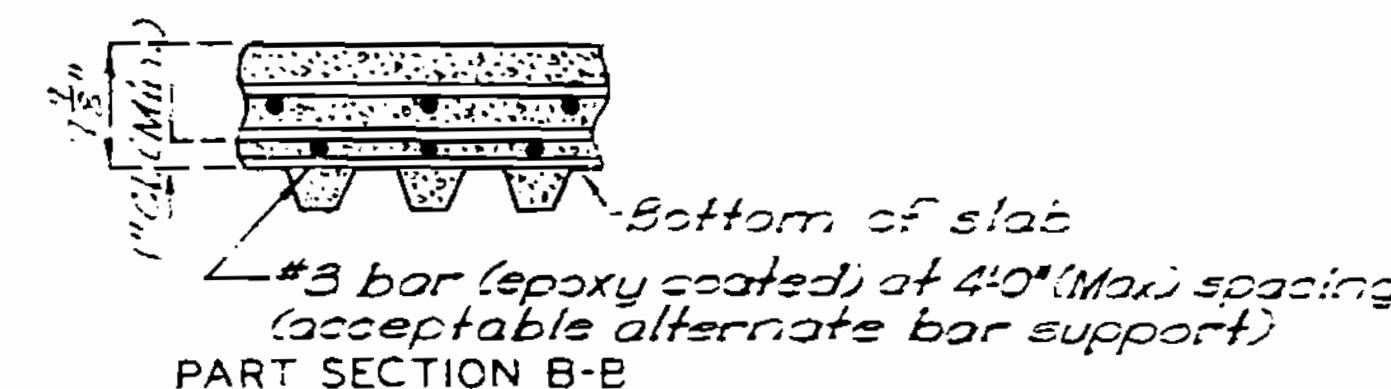
Note:
E = Epoxy coated reinforcement.
V = Bar dimensions vary in equal increments between dimensions shown on this line and the following line.
No. Each = Number of bars at each length.
Total Weight of Plain Reinforcement is 33,520.
Total Weight of Epoxy Coated Reinforcement is 50,716.



PART SECTION A-A
Note: Observe minimum lap requirements as shown where possible.



PART SECTION B-B



Note: Bottom transverse reinforcing steel placed to match form corrugations. To determine haunch for the stay-in-place alternate add 3/8" to the haunch for the cast-in-place alternate.

REVISED TRANSVERSE SLAB REINFORCEMENT
UNIT 5 WESTBOUND

DESIGNED BY 19 54
CHECKED BY 19 54

Note: This drawing is not to scale. Follow dimensions.

11A-Final Sheet
Sheet No. 11A of 72 Revised 3/23/82

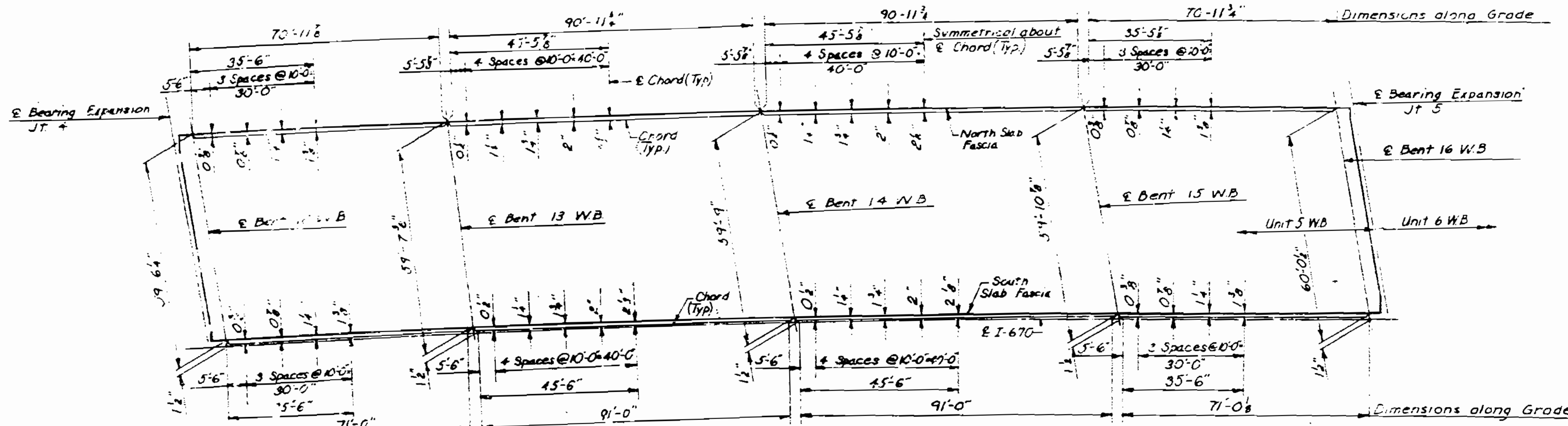
JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		55	55	

FINAL PLANS

BASIC SEQUENCE	SEQUENCE OF POURS	
	DIRECTION	
Alternate "A"		
Alternate "B"		
Alternate "C"	1 + 3 + 5 + 7	2 + 4 + 6 + 8
	End to End	End to End



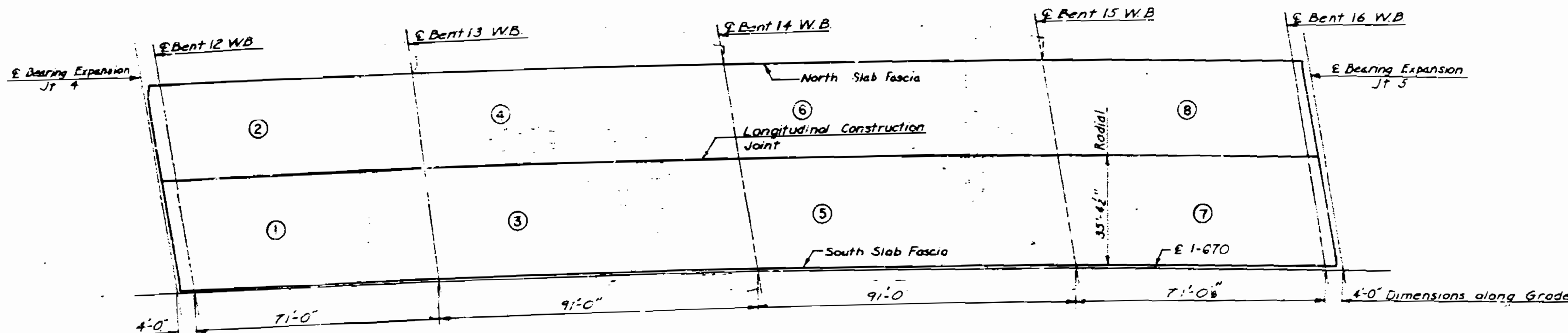
SLAB FASCIA OFFSETS-UNIT 5

Notes:

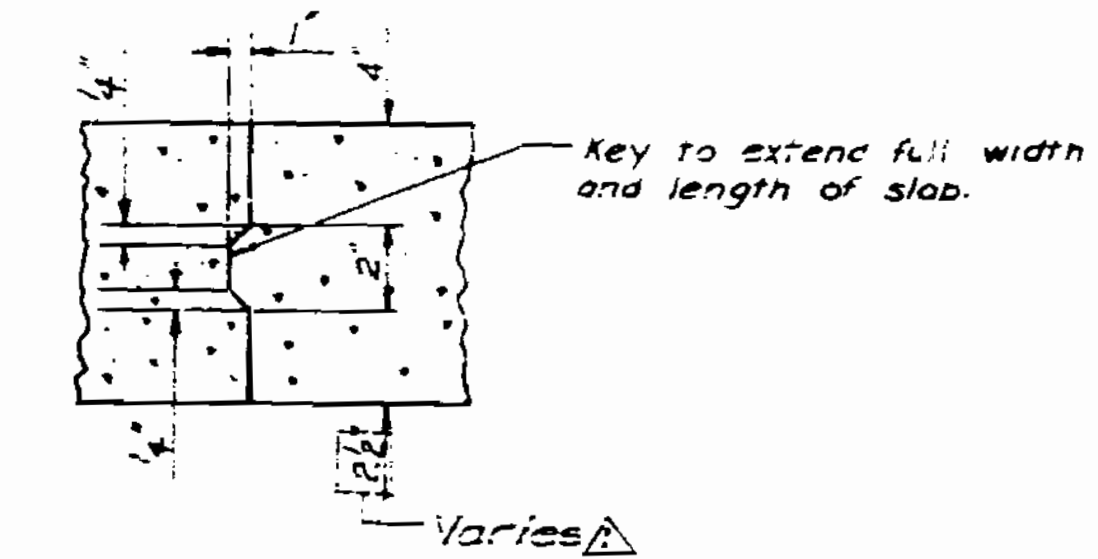
The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 37 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 25 cubic yards per hour.

Note:

Pour 1 and 2 of unit 6 to precede Pour 7 and 8 of Unit 5.



POURING SEQUENCE-UNIT 5



CONSTRUCTION JOINT DETAIL

SLAB PLAN
UNIT 5 WESTBOUND

101
 DETAILED 10 79
 CHECKED 10 79

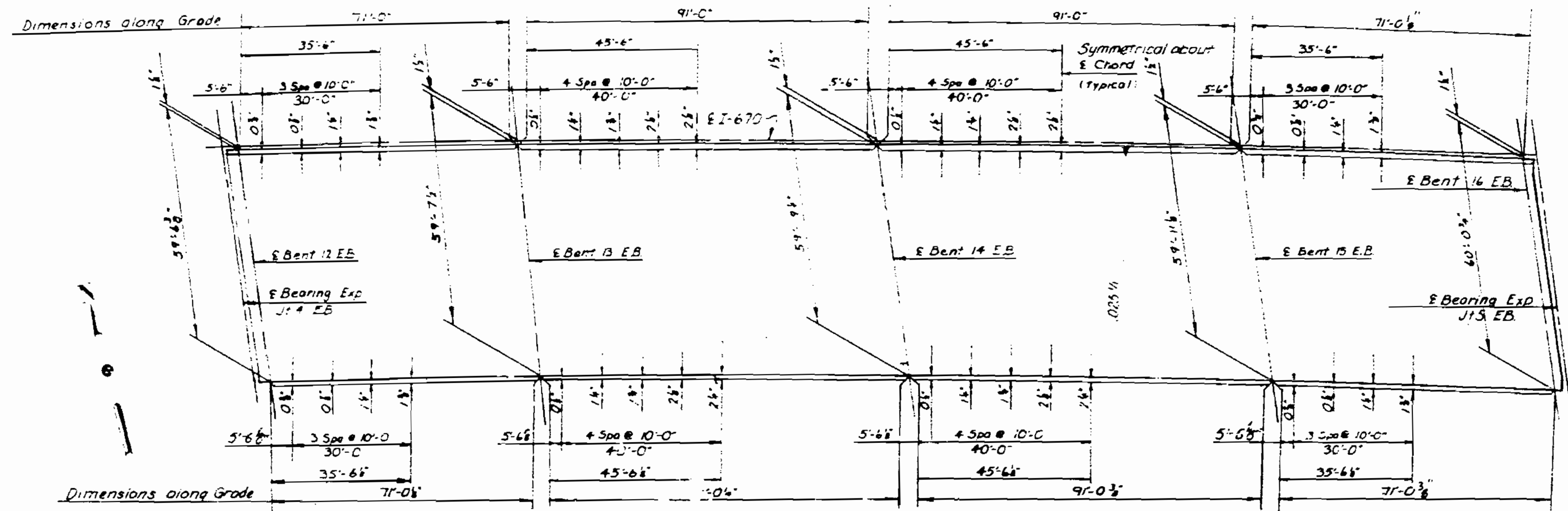
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 12 of 15. Revised 8/28/84

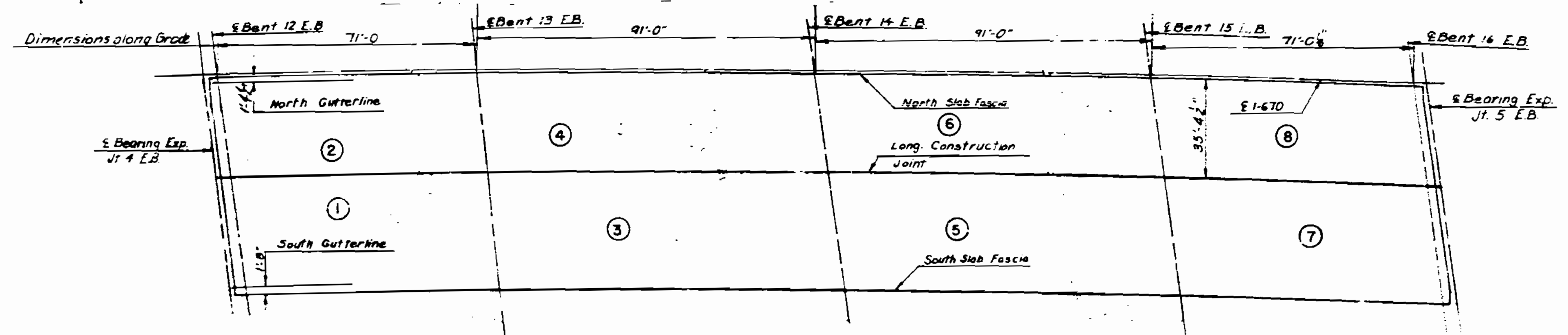
JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		74	57	



SLAB FASCIA OFFSETS - UNIT 5



POURING SEQUENCE - UNIT 5

FINAL PLANS

BASIC SEQUENCE	SEQUENCE OF POURS	
	DIRECTION	
Alternate "A"		
POURS		
Alternate "B"		
POURS		
Alternate "C"	1 + 3 + 5 + 7	2 + 4 + 6 + 8
POURS	End To End	End To End

Notes:

The contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 37 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 25 cubic yards per hour.

Note: Pour 1 and 2 of Unit 6 to precede Pour 7 and 8 of Unit 5.

Note: See Sheet 12 for detail of longitudinal and transverse slab construction joint.

DETAILED 10 7 5
CHECKED 10 7 5

Note: This drawing is not to scale. Follow dimensions.

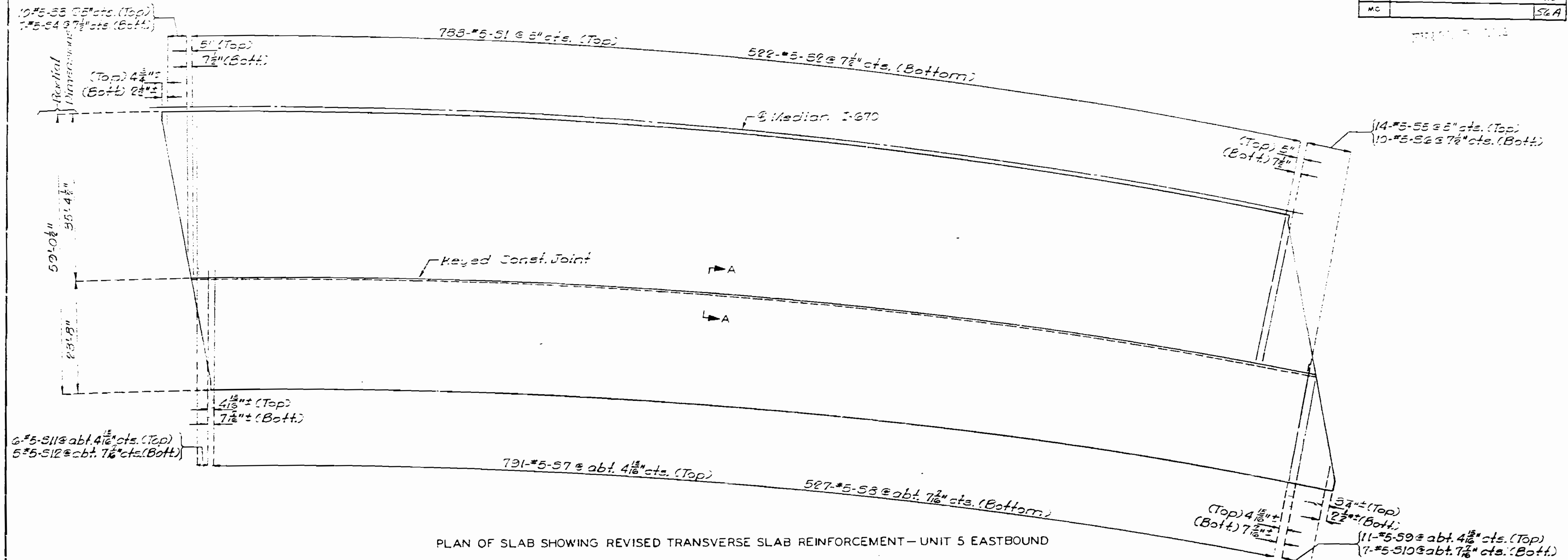
Sheet No. 4 of 72.1 Revised 8/23/84

JACKSON COUNTY

A-313E

SLAB PLAN
UNIT 5 EASTBOUND

STATE	PROJ. NO.	SHEET
NC		56A

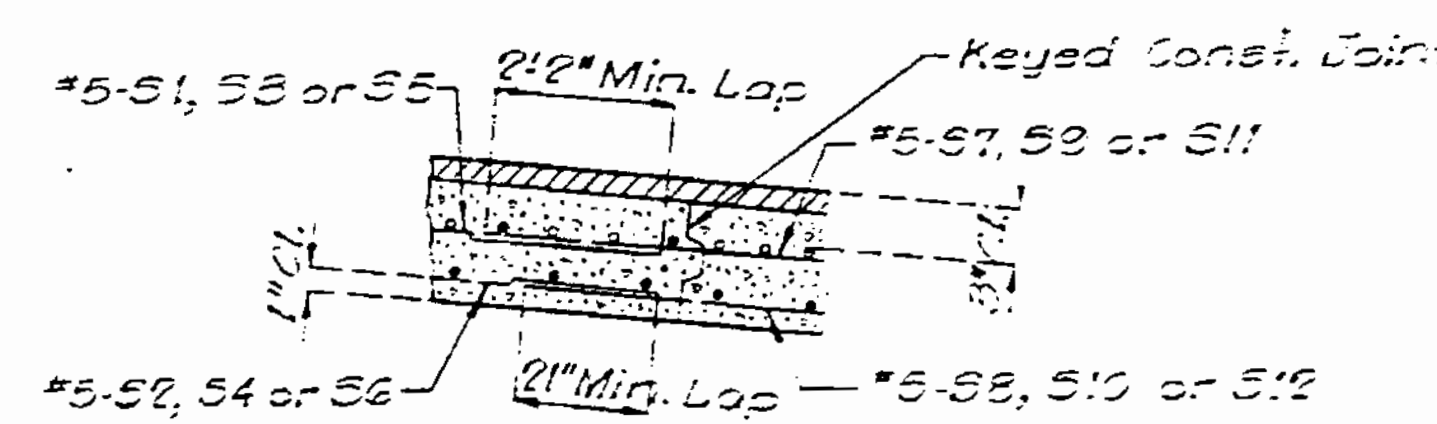


PLAN OF SLAB SHOWING REVISED TRANSVERSE SLAB REINFORCEMENT - UNIT 5 EASTBOUND

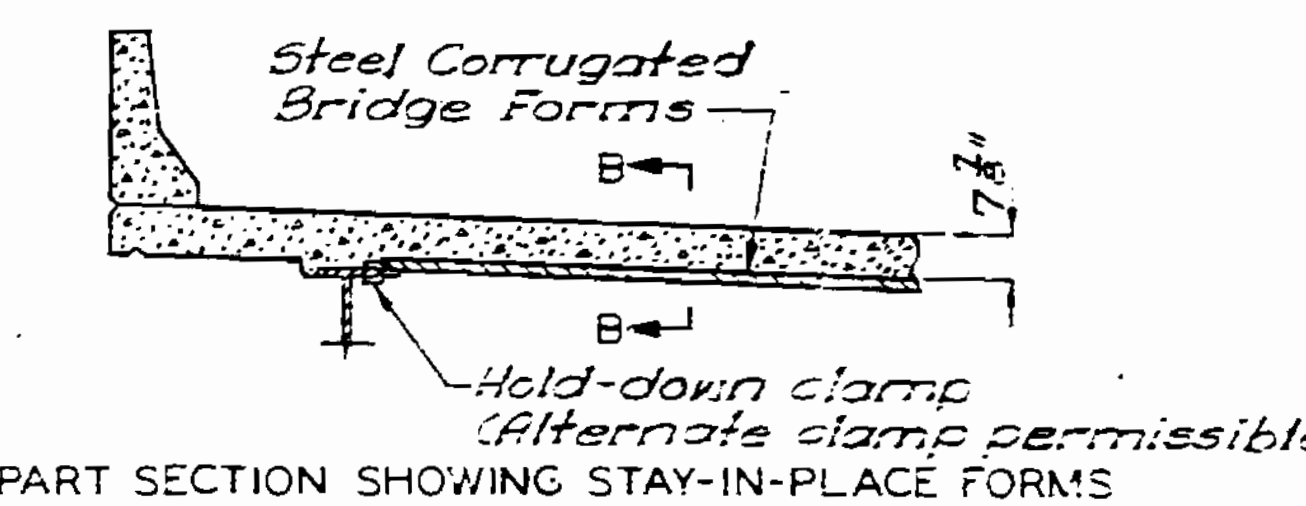
BILL OF REVISED TRANSVERSE SLAB REINFORCEMENT
UNIT 5 EASTBOUND

NO.	SIZE	MARK	(E)	SHAPE	(V)	NO. EACH	LENGTH	WEIGHT
783	#5	51	E	Str.	-	-	351.1"	28.651
522	#5	52	-	Str.	-	-	251.1"	19.101
10	#5	55	E	Str.	✓	1	31.1"	1.93
Incr. = 21.9"							33.2"	1.93
7	#5	54	-	Str.	✓	1	21.6"	1.24
Incr. = 4'-10"							31.6"	1.24
14	#5	55	E	Str.	✓	1	31.1"	2.63
Incr. = 21.0"							32.1"	2.63
10	#5	56	-	Str.	✓	1	21.3"	1.80
Incr. = 31.4"							32.3"	1.80
791	#5	57	E	Str.	-	-	284.0"	21.319
527	#5	58	-	Str.	-	-	251.5"	19.271
11	#5	59	E	Str.	✓	1	21.0"	1.37
Incr. = 21.2"							24.2"	1.37
7	#5	510	-	Str.	✓	1	21.2"	1.37
Incr. = 31.5 1/2"							22.1"	1.37
6	#5	511	E	Str.	✓	1	41.0"	7.6
Incr. = 21.8"							20.8"	7.6
5	#5	512	-	Str.	✓	1	21.2"	1.37
Incr. = 4'-10 1/2"							23.10"	1.37

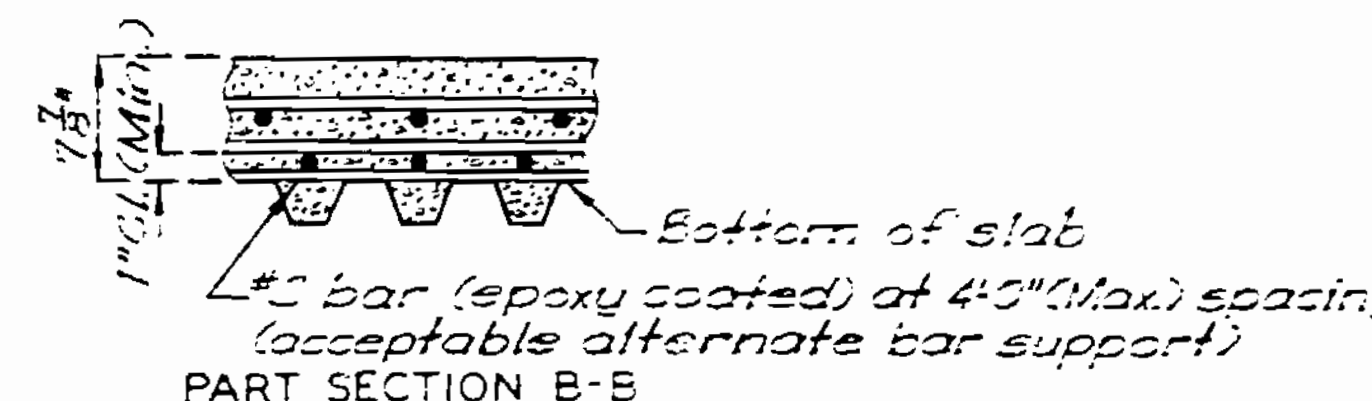
Note:
 E = Epoxy coated reinforcement.
 V = Bar dimensions vary in equal increments between dimensions shown on this line and the following line.
 No. Each = Number of bars of each length.
 Total Weight of Plain Reinforcement is 58,540.
 Total Weight of Epoxy Coated Reinforcement is 59,950.



PART SECTION A-A
 Note: Observe minimum lap requirements as shown where possible.



PART SECTION B-B SHOWING STAY-IN-PLACE FORMS



Note: Bottom transverse reinforcing steel placed to match form corrugations.
 To determine haunch for the stay-in-place alternate add 3/8" to the haunch for the cost-in-place alternate.

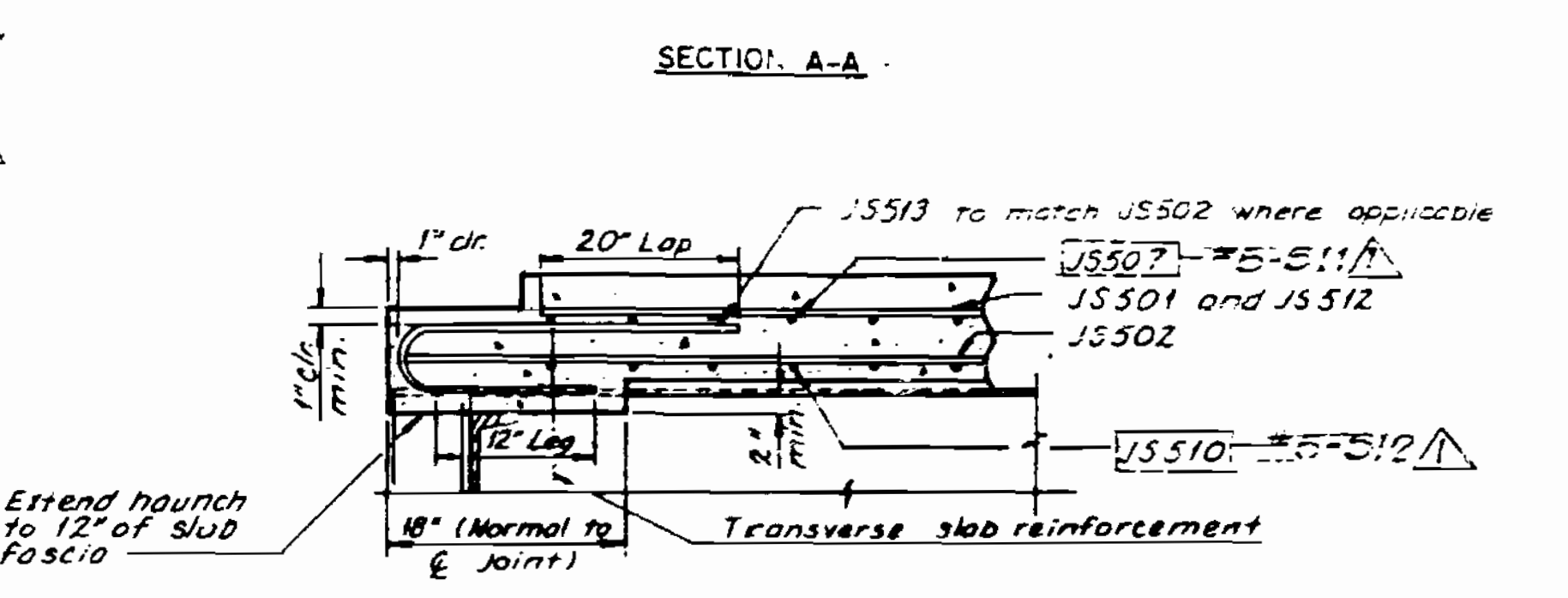
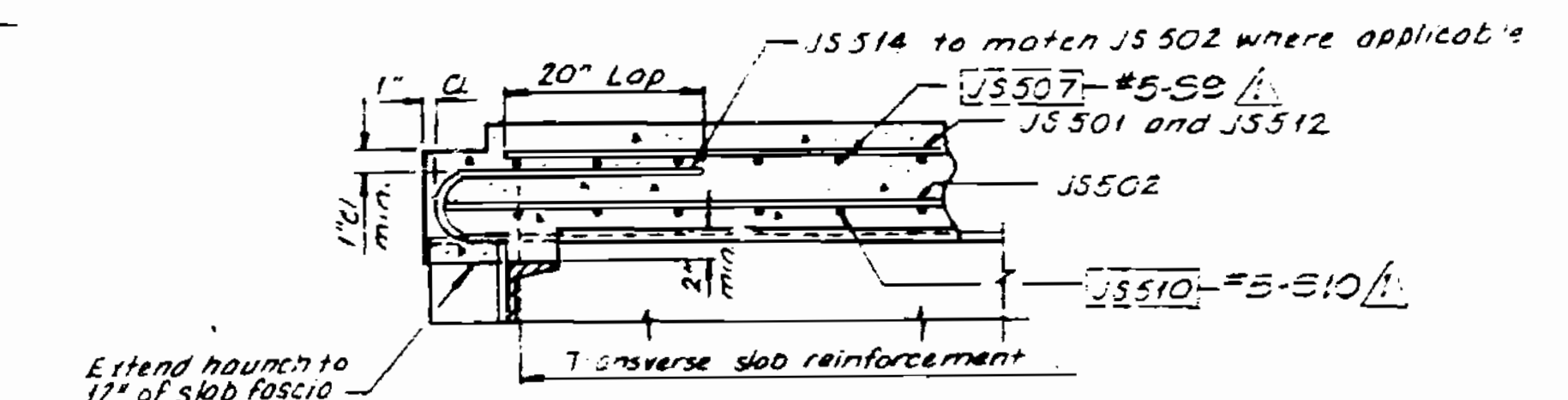
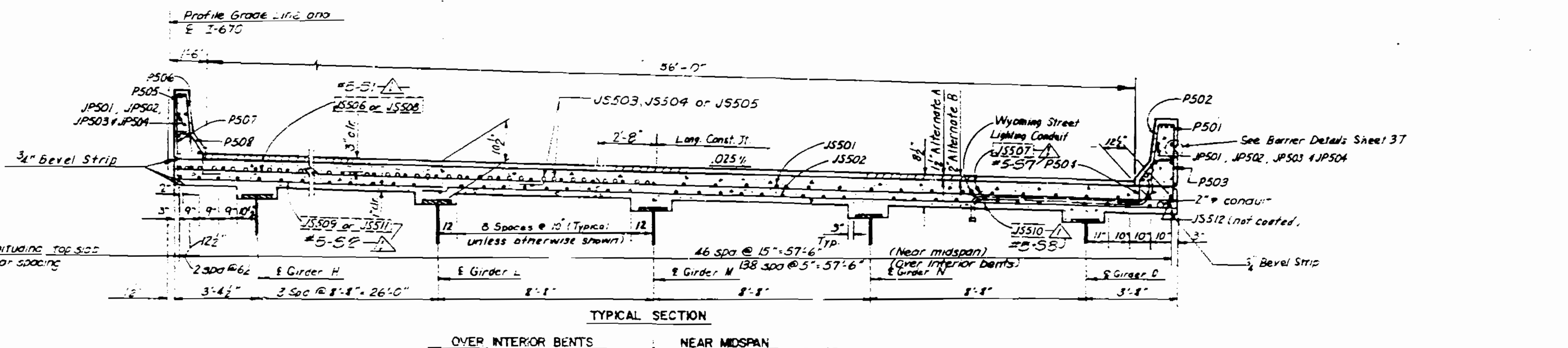
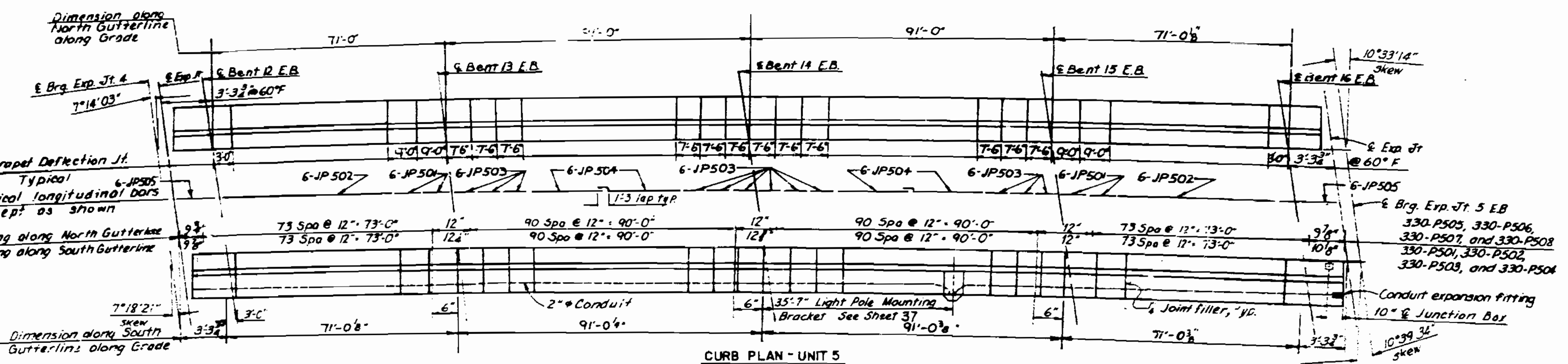
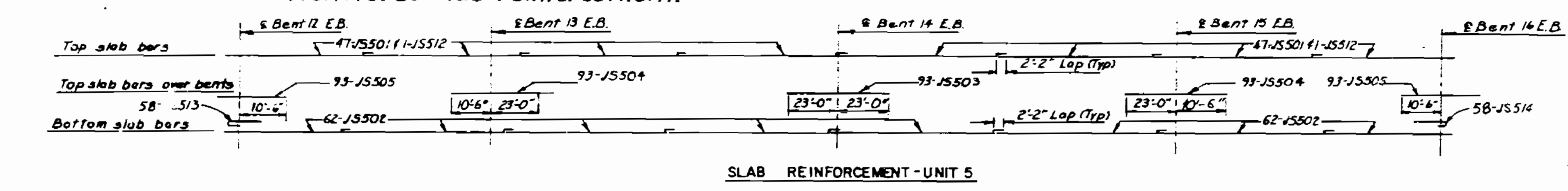
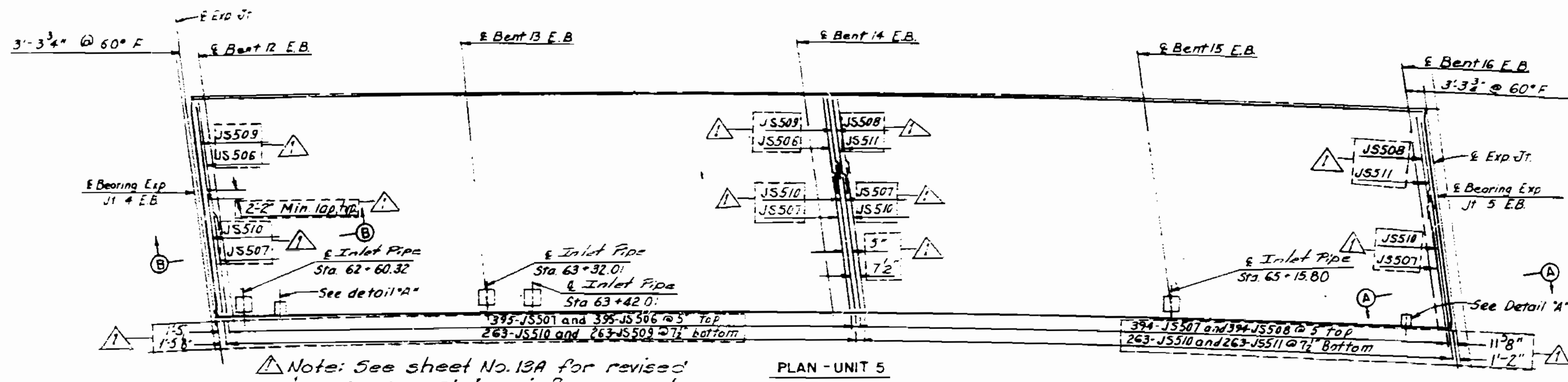
REVISED TRANSVERSE SLAB REINFORCEMENT
UNIT 5 EASTBOUND

DETAILED 19 5/16
 CHECKED 19 5/16

Note: This drawing is not to scale. Follow dimensions.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		3	56	

FINAL PLANS



DETAILED 10-7-9
 CHECKED 10-7-9

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 136 of 72. Revised 8/28/13

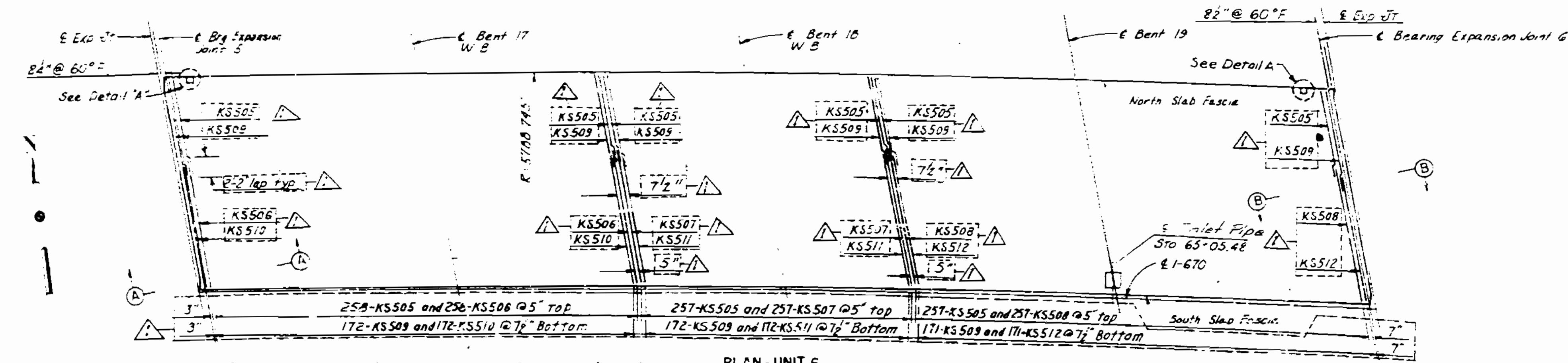
JACKSON COUNTY

A-3136

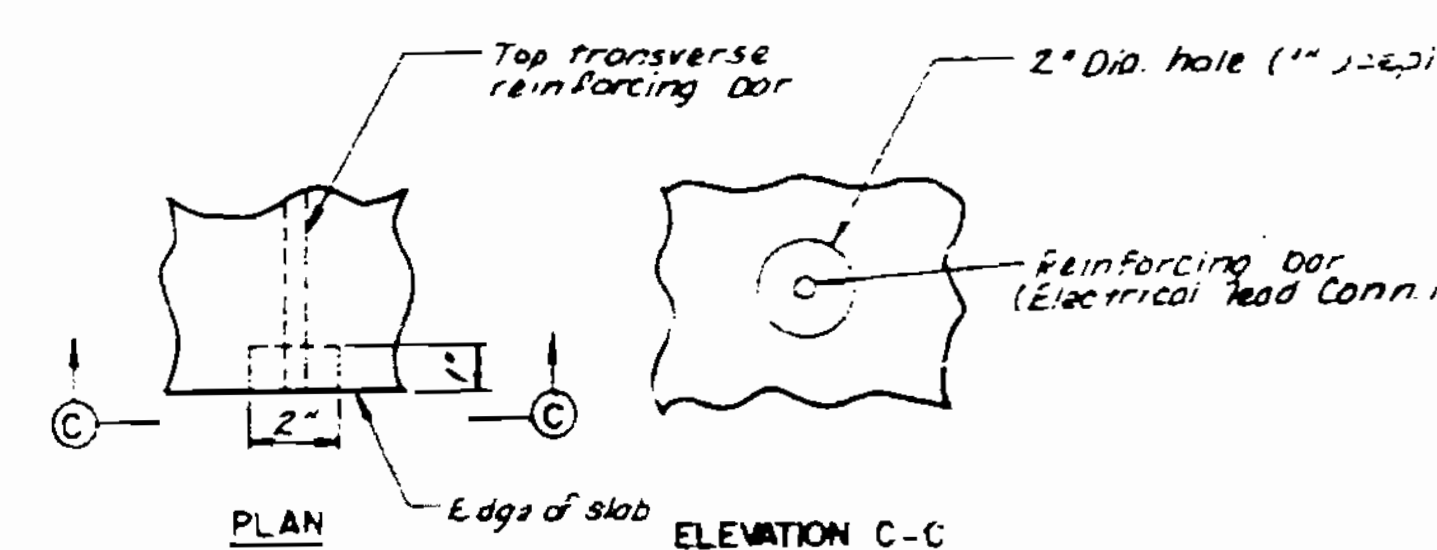
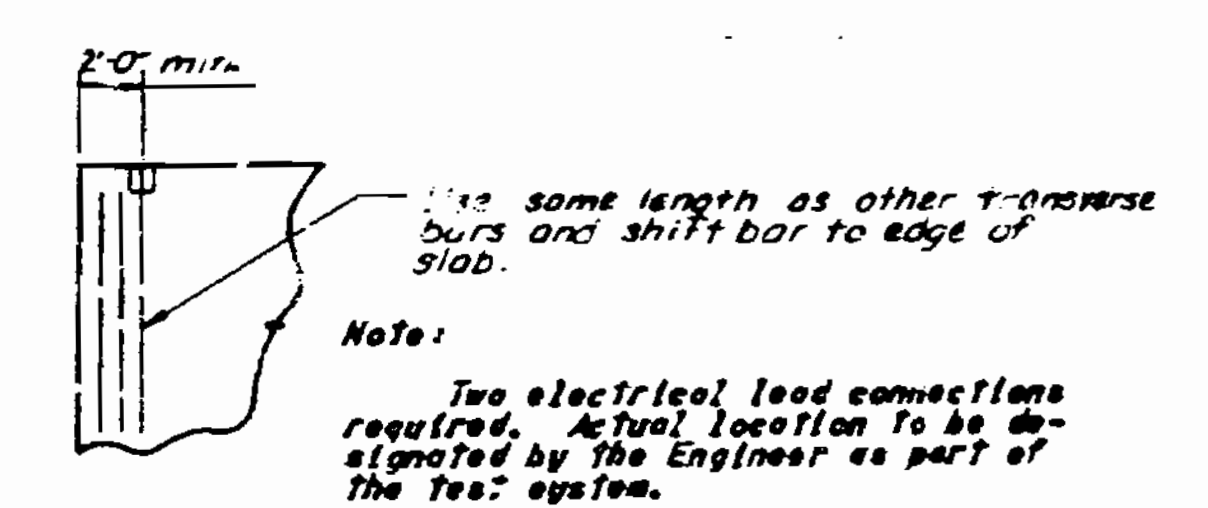
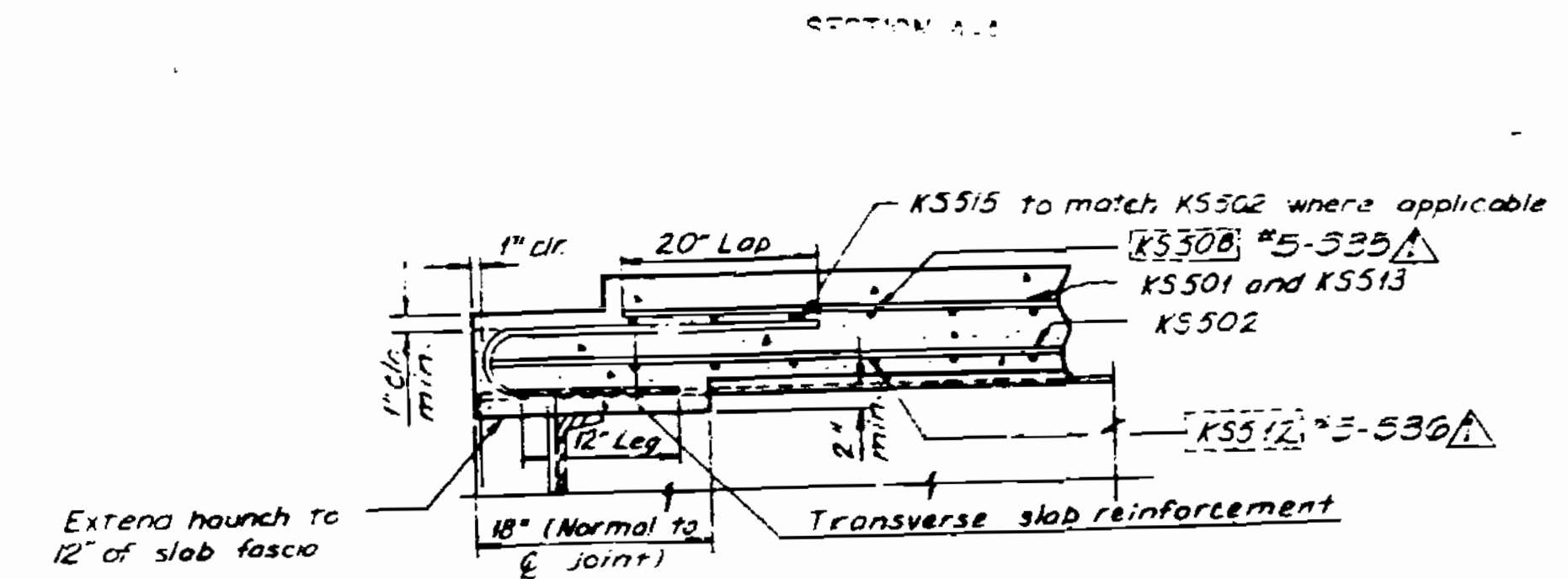
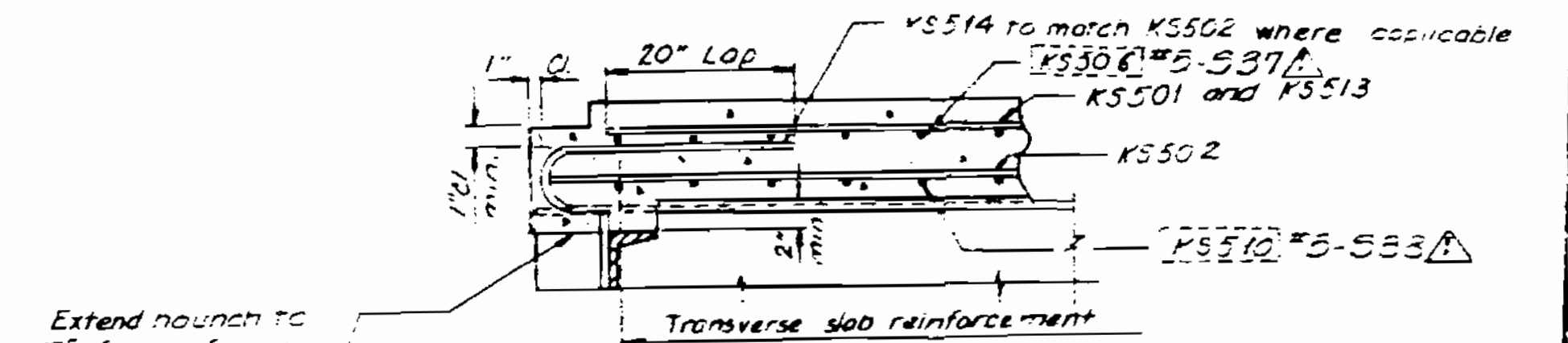
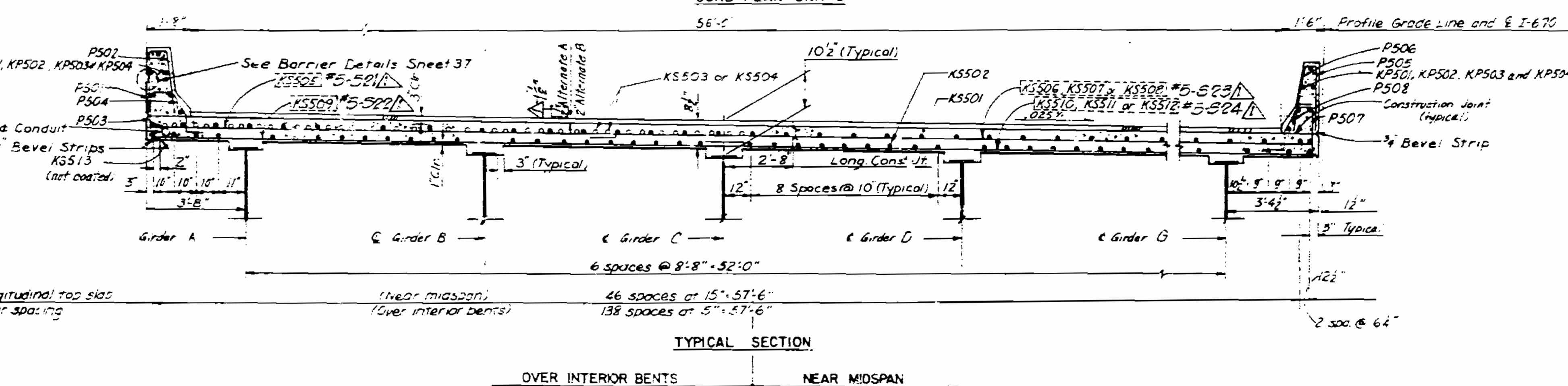
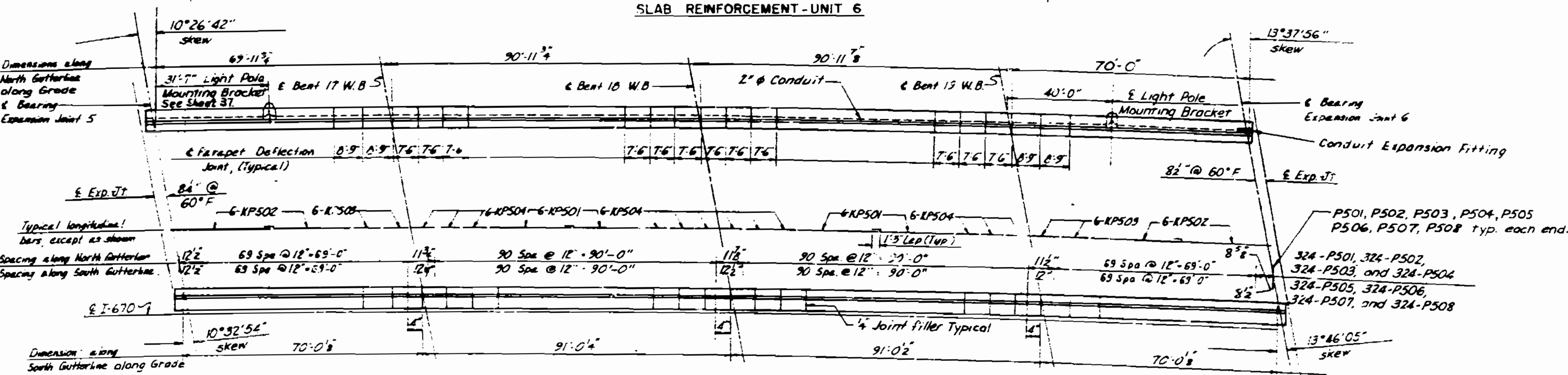
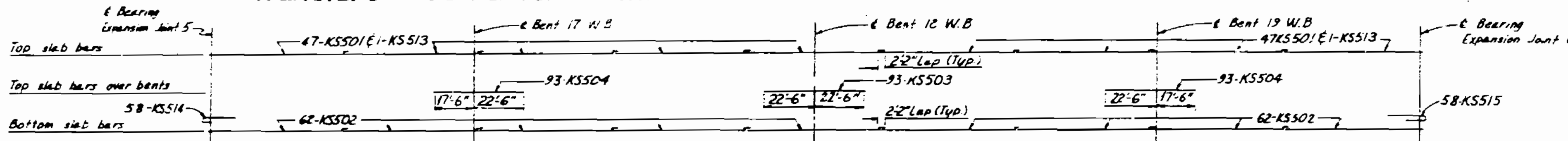
SLAB AND CURB REINFORCEMENT
 UNIT 5 EASTBOUND

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		7	58	

REIN. PLANS



Note: See sheet No. 15A for revised transverse slab reinforcement.



DETAIL 'A'

SLAB AND CURB REINFORCEMENT UNIT 6 WESTBOUND

33

DATE: 10 79
CHECKED: 10 79

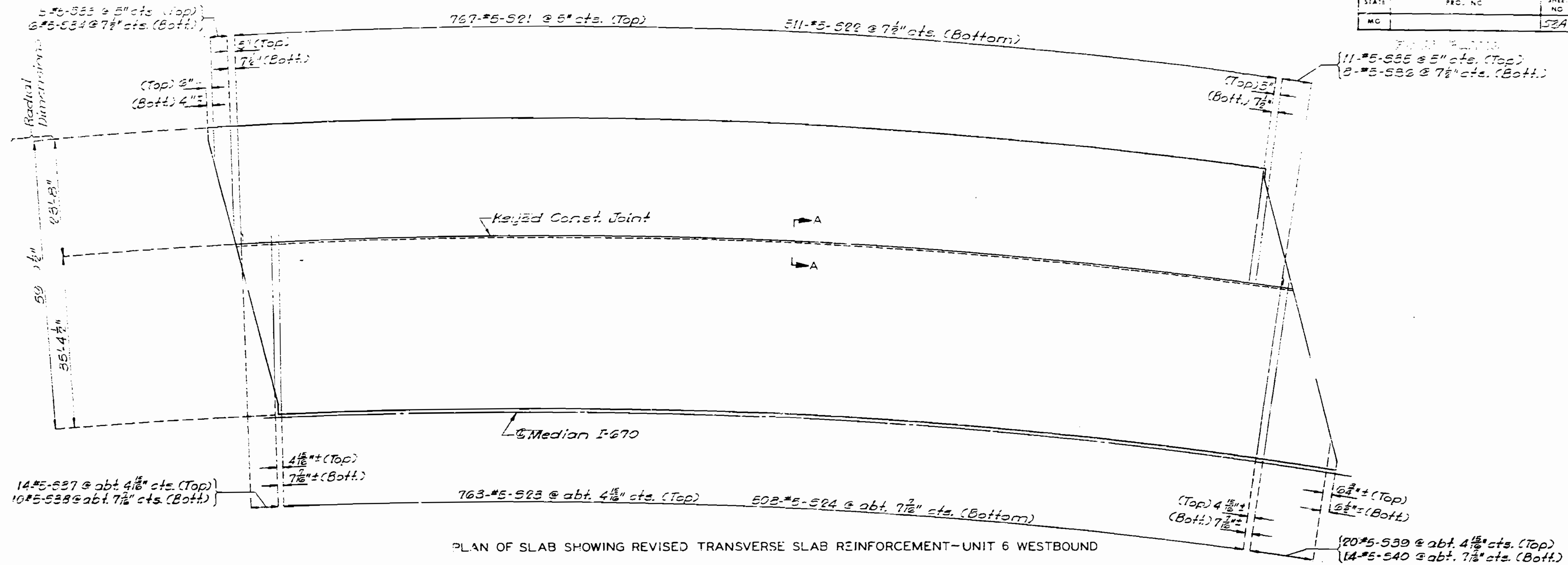
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 15 of 72. Revised 8/28/84

JACKSON COUNTY

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STATE	PRG. NO.	SHEET NO.
MC		52A

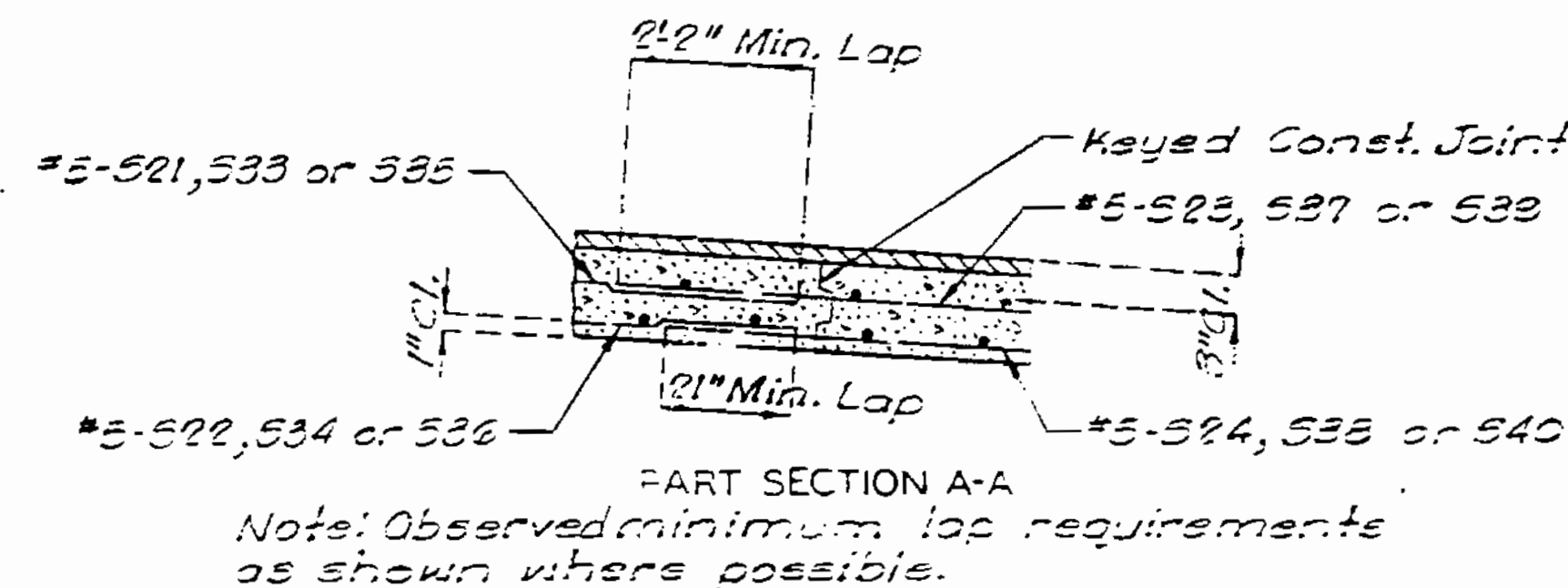


PLAN OF SLAB SHOWING REVISED TRANSVERSE SLAB REINFORCEMENT-UNIT 6 WESTBOUND

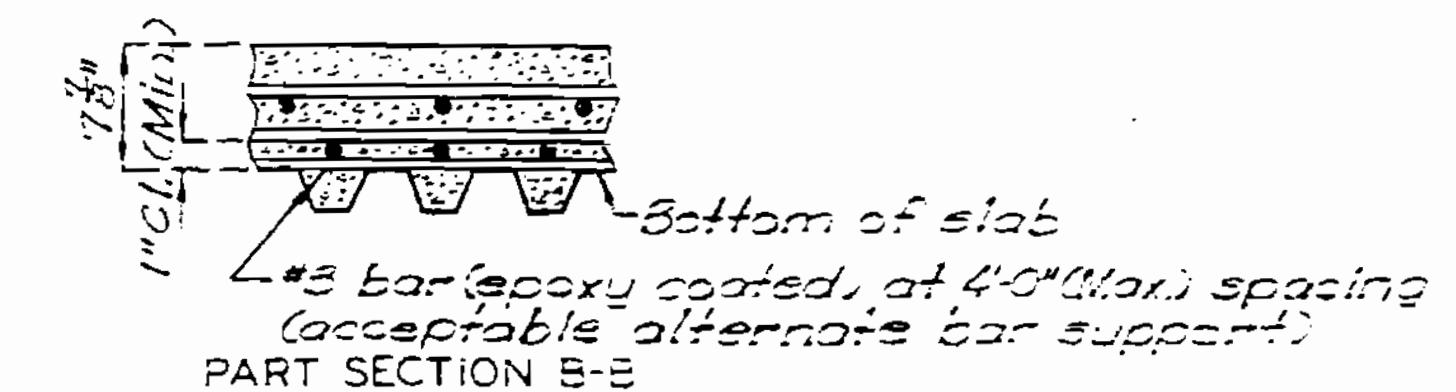
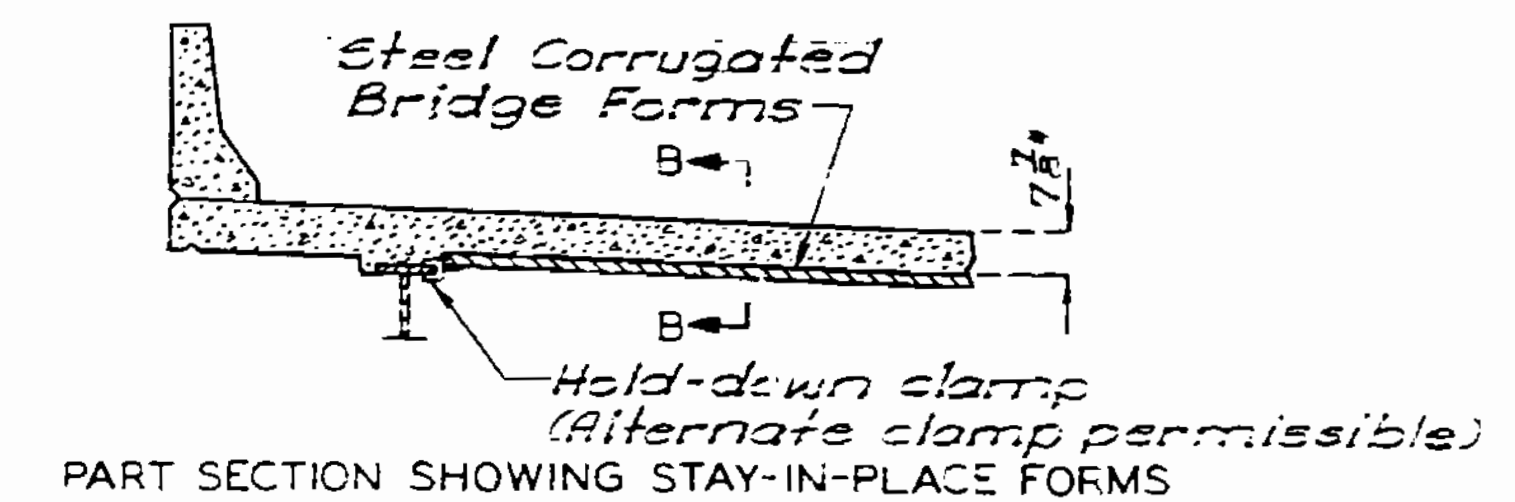
BILL OF REVISED TRANSVERSE SLAB REINFORCEMENT UNIT 6 WESTBOUND

NO.	SIZE	MARK	(E)	SHAPE	(V)	NO. EACH	LENGTH	WEIGHT
767	#5	521	E	Str.	—	—	23'5"	12,733
511	#5	522	—	Str.	—	—	23'5"	12,480
763	#5	523	E	Str.	—	—	37'7"	22,909
502	#5	524	—	Str.	—	—	37'2"	19,693
5	#5	533	E	Str.	V	1	3'10"	
Incr. = 2'8"							12'7"	35
6	#5	534	—	Str.	V	1	3'0"	
Incr. = 3'2"							13'8"	71
11	#5	535	E	Str.	V	1	3'2"	
Incr. = 2'0"							20'0"	134
3	#5	536	—	Str.	V	1	3'0"	
Incr. = 2'6"							20'6"	93
14	#5	537	E	Str.	V	1	4'5"	
Incr. = 2'3"							35'8"	278
10	#5	538	—	Str.	V	1	4'2"	
Incr. = 3'4"							34'6"	203
20	#5	539	E	Str.	V	1	3'0"	
Incr. = 2'0"							34'8"	223
14	#5	540	—	Str.	V	1	3'0"	
Incr. = 2'6"							35'6"	221

Notes:
 E = Epoxy coated reinforcement.
 V = Bar dimensions vary in equal increments between dimensions shown on this line and the following line.
 No. Each = Number of bars of each length.
 Total Weight of Plain Reinforcement is 82,880
 Total Weight of Epoxy Coated Reinforcement is 49,550



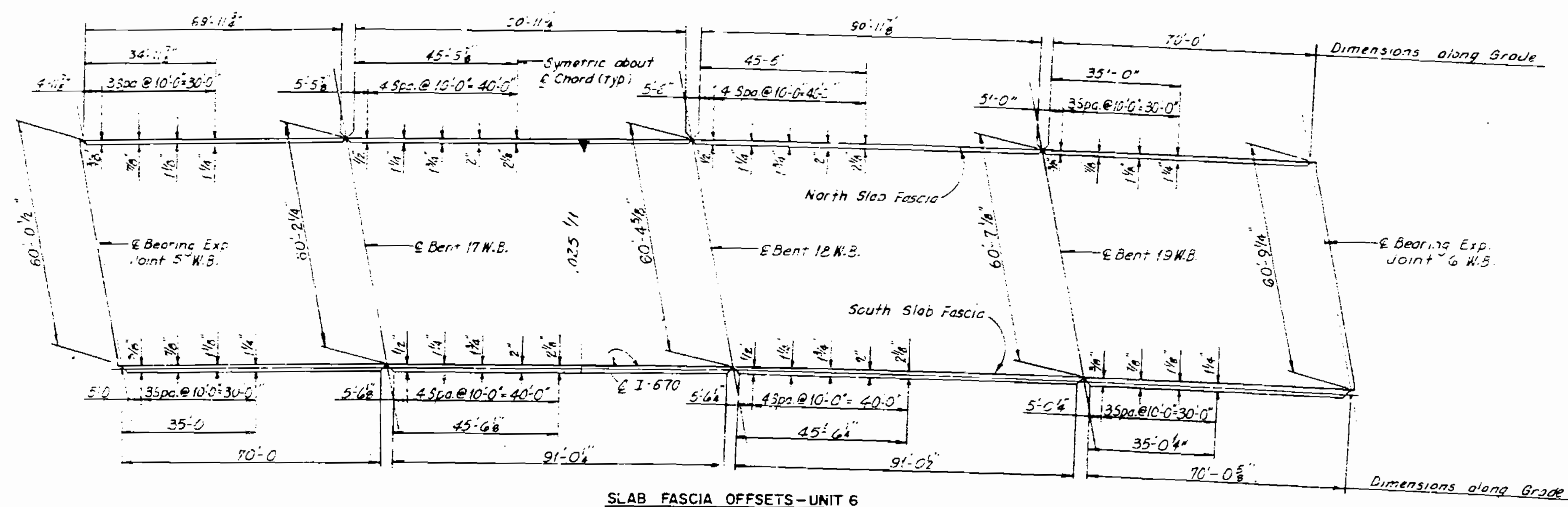
Notes: Observed minimum lap requirements as shown where possible.



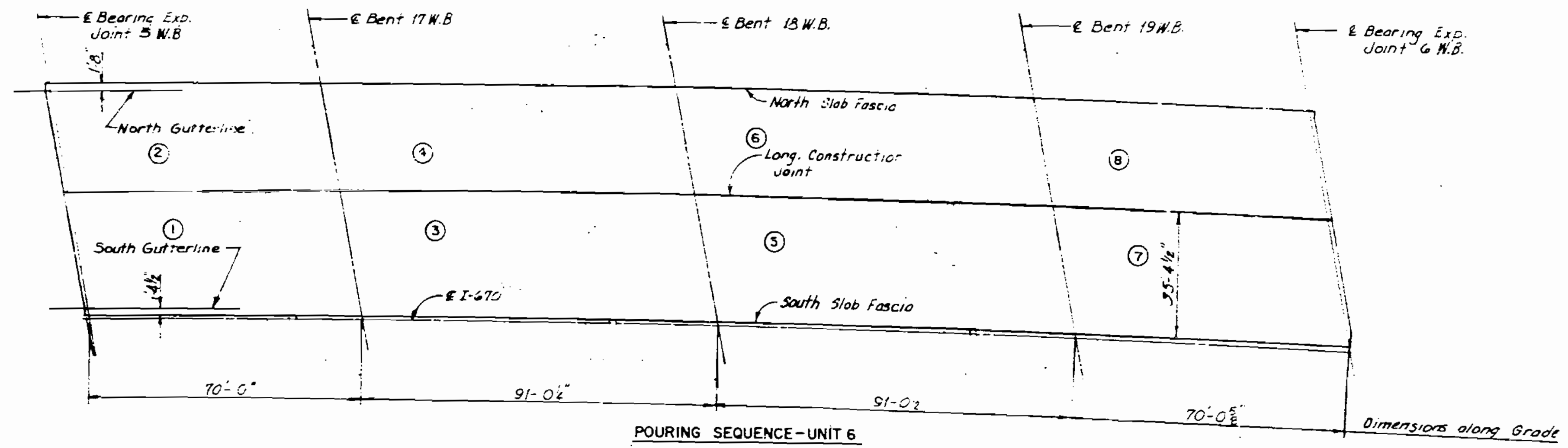
Notes: Bottom transverse reinforcing steel placed to match form corrugations. In determining haunch for the stay-in-place alternate add 3/8" to the haunch for the cast-in-place alternate.

REVISED TRANSVERSE SLAB REINFORCEMENT UNIT 6 WESTBOUND

FED. ROAD DIST. NO.	STATE	FED. AC. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		81	59	



SLAB FASCIA OFFSETS - UNIT 6



POURING SEQUENCE - UNIT 6

SEVERAL PLANS

BASIC SEQUENCE	SEQUENCE OF POURS	
	DIRECTION	
Alternate "A"		
Pours		
Alternate "B"		
Pours		
Alternate "C"	1 + 3 + 5 + 7	2 + 4 + 6 + 8
Pours	End To End	End To End

Notes:
The Contractor shall pour and satisfactorily finish the slab pours at a rate of not less than 37 cubic yards per hour unless he elects to use an approved retarder to retard the set of the concrete to 2.5 hours in which case he may reduce his pouring and finishing rate to not less than 25 cubic yards per hour.

Note:
See Sheet 12 for detail of longitudinal and transverse slab construction joint.

135

DETAILED 10 79
CHECKED 10 79

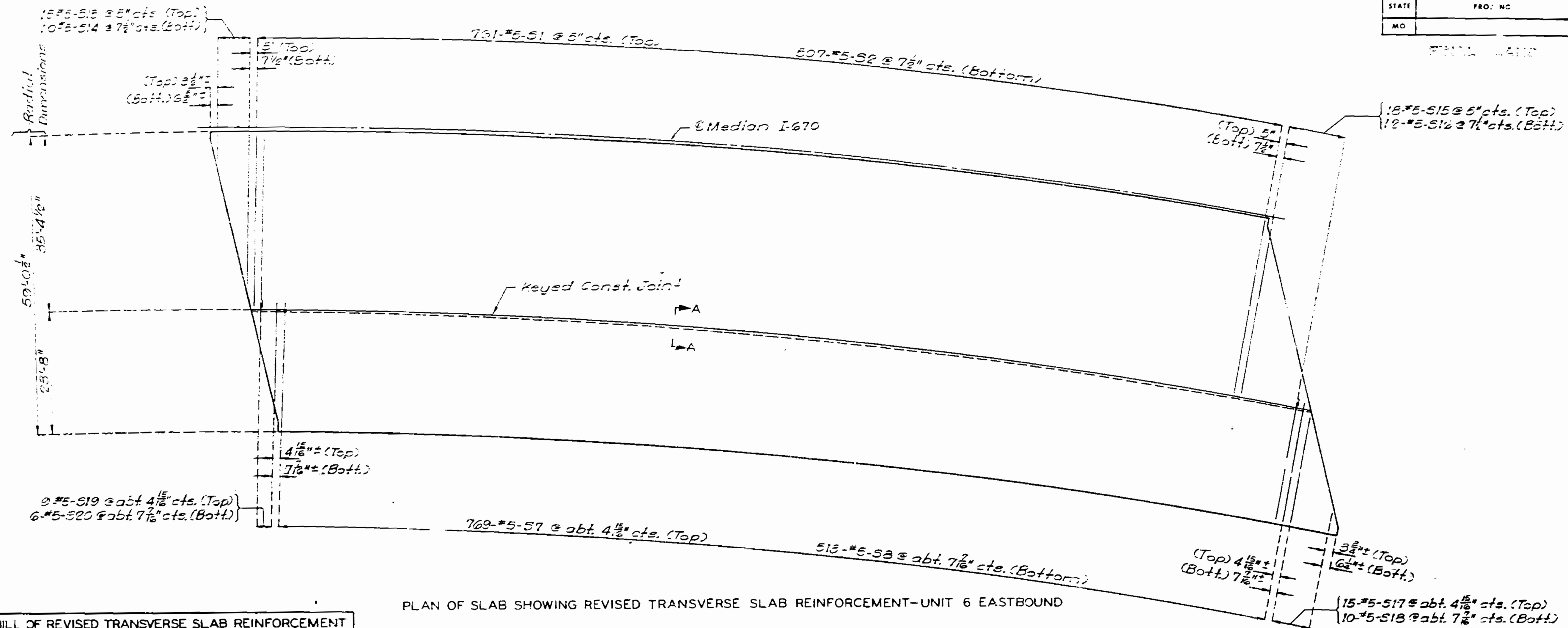
Note: This drawing is not to scale, follow dimensions.

Sheet No. 68 of 72, Revised 8/23/84

JACKSON COUNTY A-3136

SLAB PLAN
UNIT 6 WESTBOUND

STATE	PROJ. NO.	SHEET NO.
MO		283

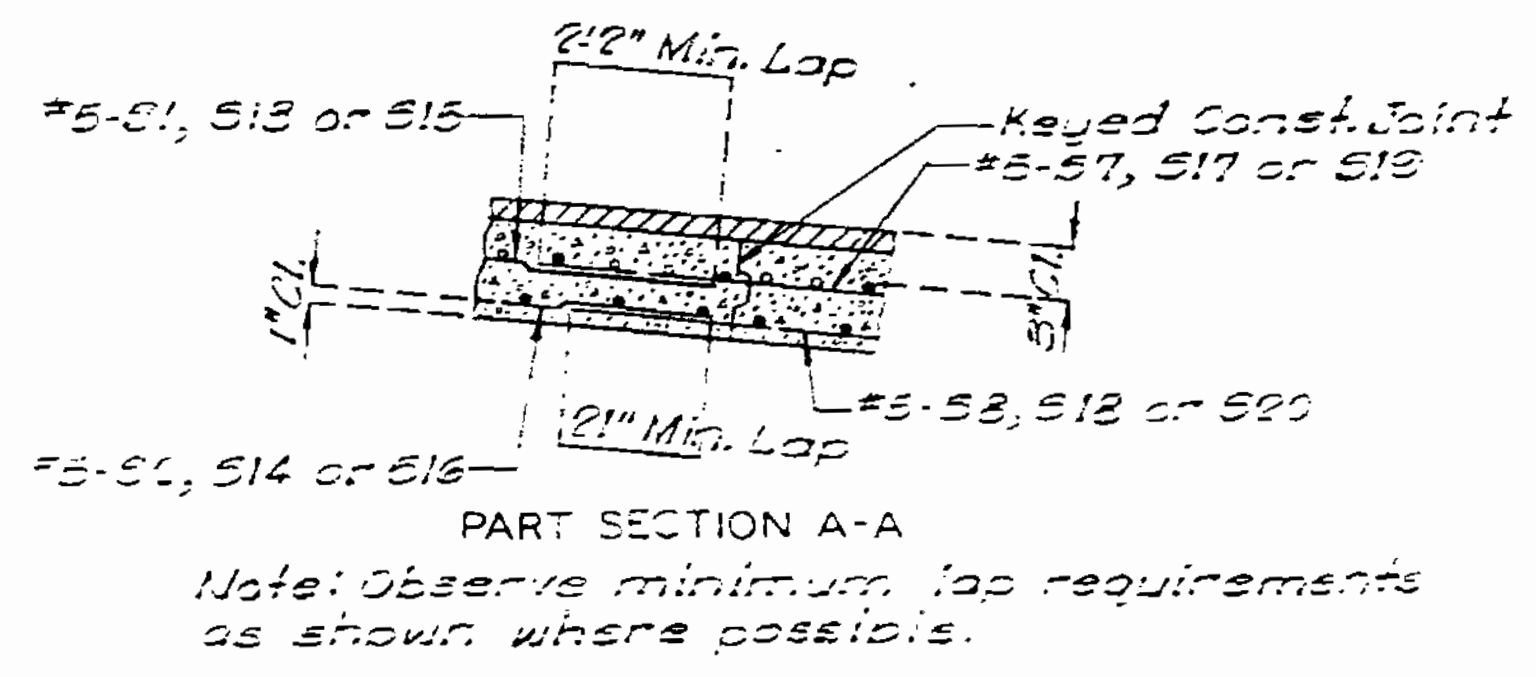


PLAN OF SLAB SHOWING REVISED TRANSVERSE SLAB REINFORCEMENT—UNIT 6 EASTBOUND

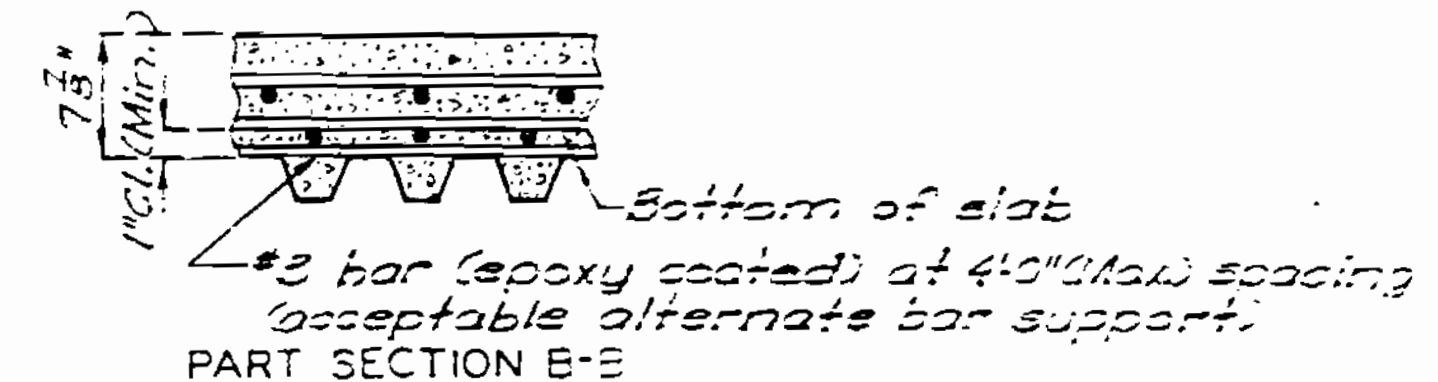
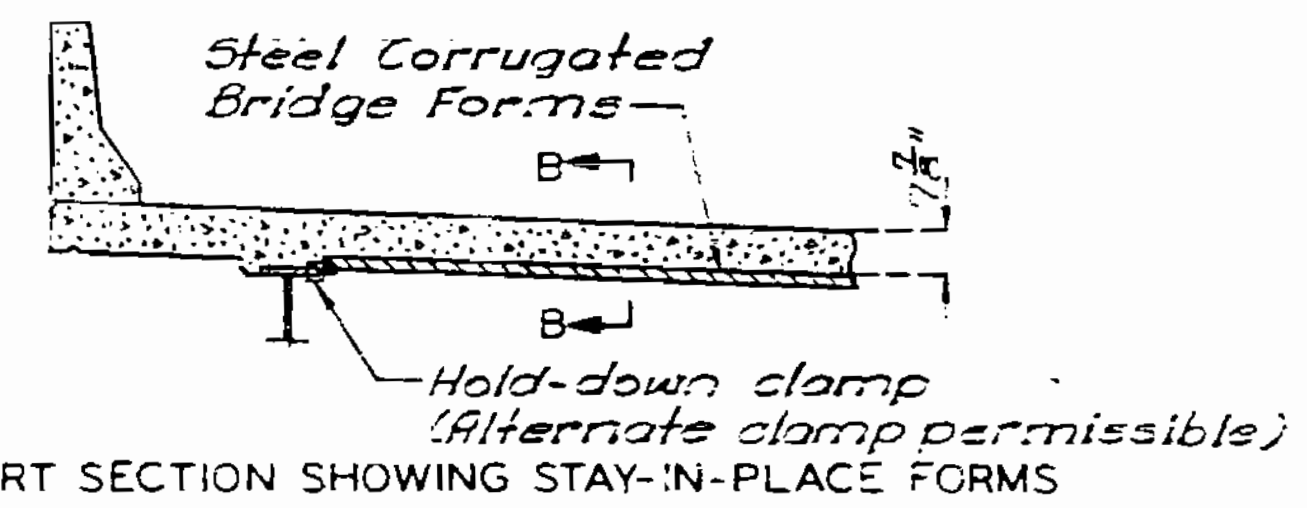
BILL OF REVISED TRANSVERSE SLAB REINFORCEMENT
UNIT 6 EASTBOUND

NO.	SIZE	MARK	(E)	SHAPE	(V)	NO. EACH	LENGTH	WEIGHT
761	#5	S1	E	Str.	—	—	35.1"	27,846
507	#5	S2	—	Str.	—	—	35.1"	18,552
769	#5	S7	E	Str.	—	—	25.10"	20,720
513	#5	S8	—	Str.	—	—	25.5"	13,592
13	#5	S13	E	Str.	V	1	21.6"	
Incr.	= 2 1/2"						33.5"	280
10	#5	S14	—	Str.	V	1	31.0"	
Incr.	= 3.4"						33.10"	196
18	#5	S15	E	Str.	V	1	31.0"	
Incr.	= 20"						32.2"	397
12	#5	S16	—	Str.	V	1	31.0"	
Incr.	= 2 1/2"						32.2"	235
15	#5	S17	E	Str.	V	1	21.6"	
Incr.	= 20"						23.10"	222
10	#5	S18	—	Str.	V	1	31.4"	
Incr.	= 2 1/2"						25.10"	152
9	#5	S19	E	Str.	V	1	31.0"	
Incr.	= 2 1/2"						22.3"	130
6	#5	S20	—	Str.	V	1	31.7"	
Incr.	= 3.4"						20.2"	75

Note:
 E = Epoxy coated reinforcement.
 V = Bar dimensions vary in equal increments between dimensions shown on this line and the following line.
 No. Each = Number of bars of each length.
 Total Weight of Plain Reinforcement is 32,810.
 Total Weight of Epoxy Coated Reinforcement is 49,546.



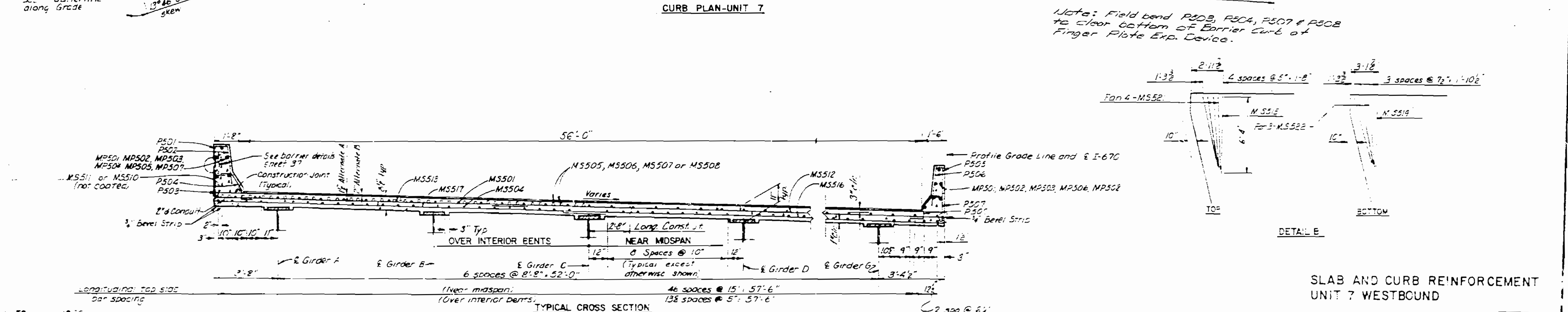
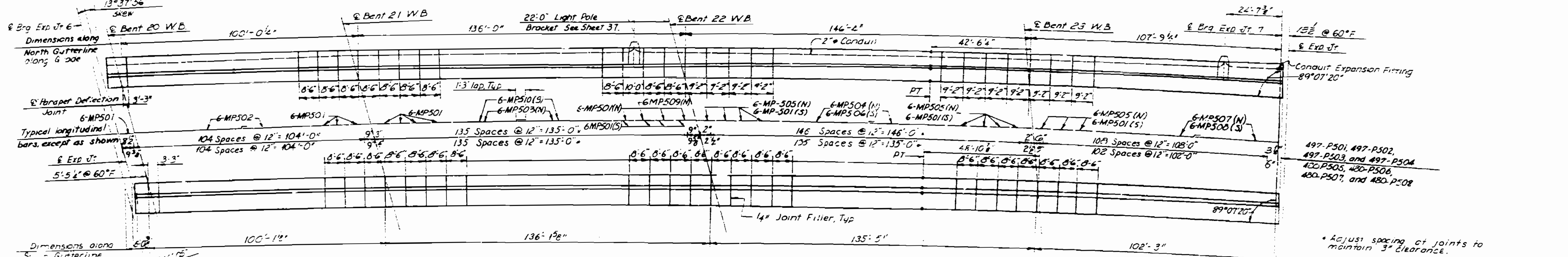
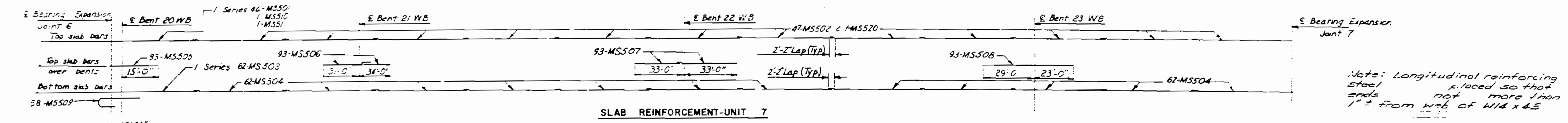
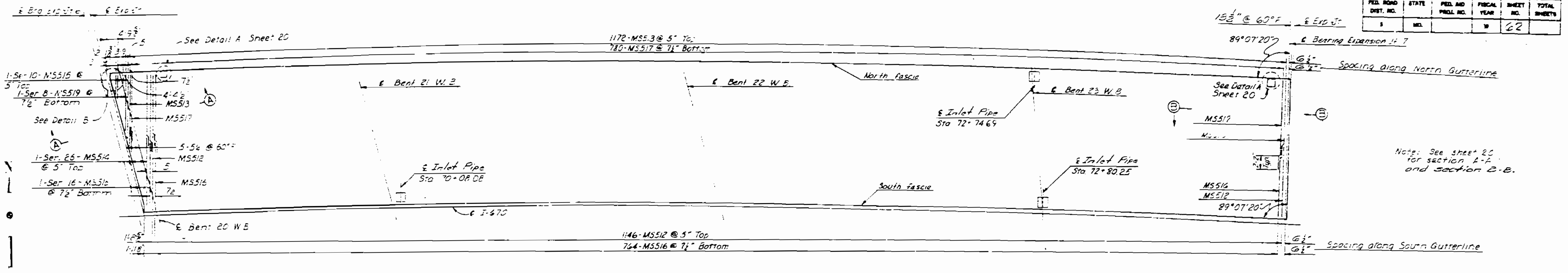
PART SECTION A-A
 Note: Observe minimum lap requirements as shown where possible.



Note: Bottom transverse reinforcing steel placed to match form corrugations.
 To determine haunch for the stay-in-place alternate add 3/8" to the haunch for the cast-in-place alternate.

REVISED TRANSVERSE SLAB REINFORCEMENT
 UNIT 6 EASTBOUND

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.			22	



139

DESIGNED 10/70
CHECKED 10/70

Note: This drawing is not to scale, follow dimensions.

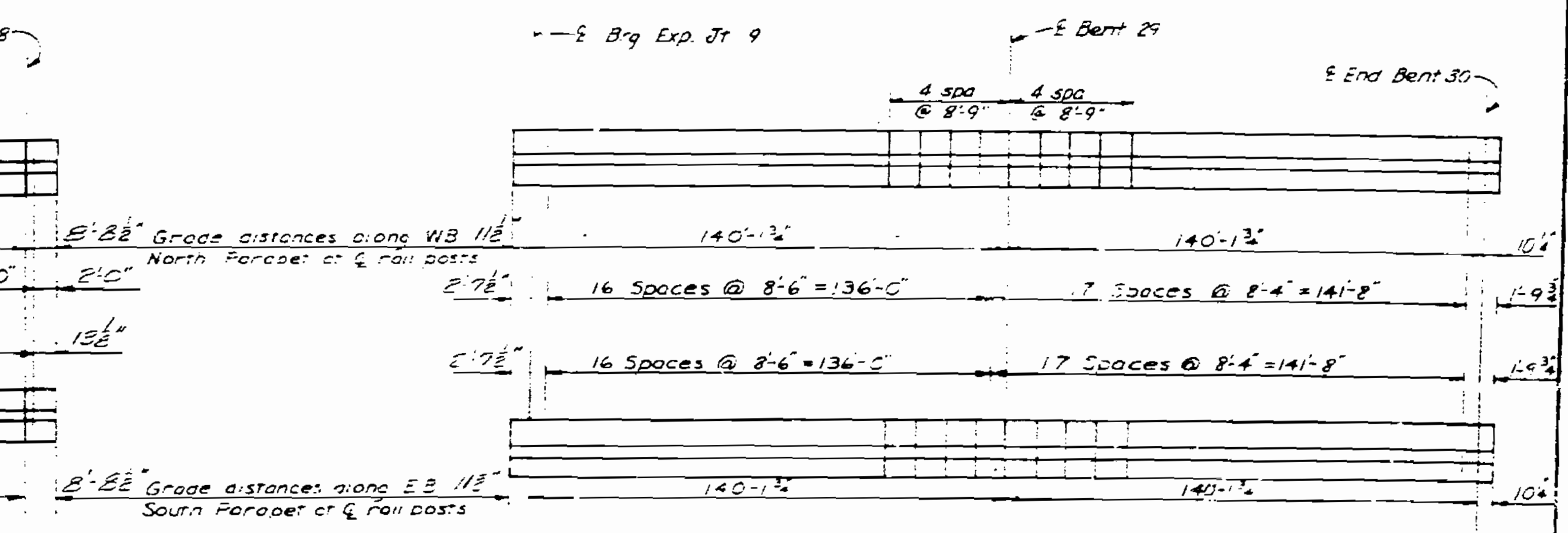
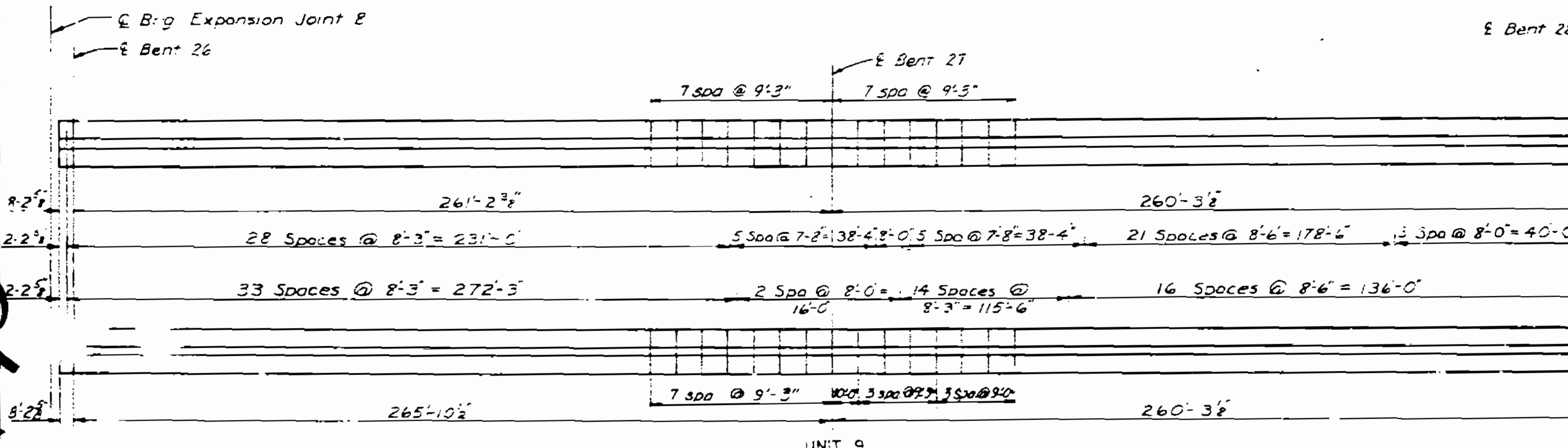
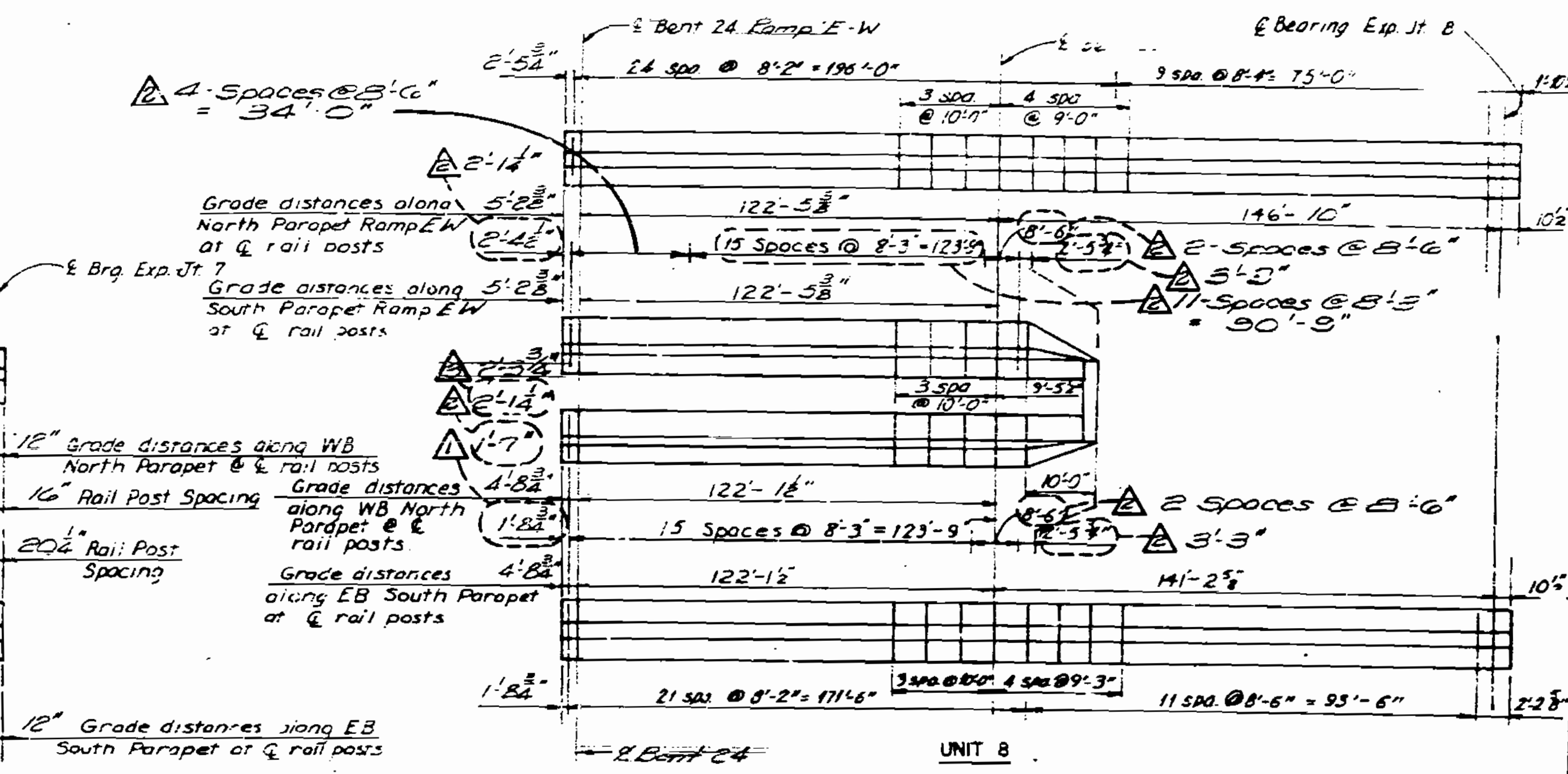
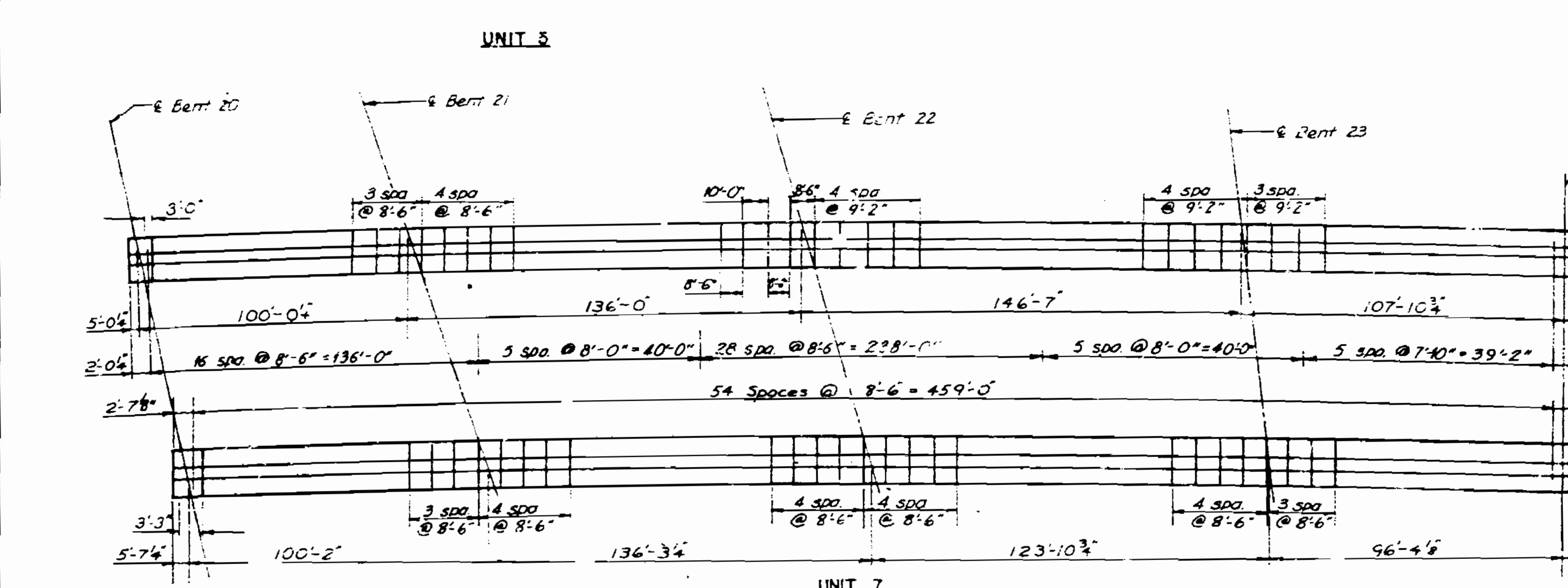
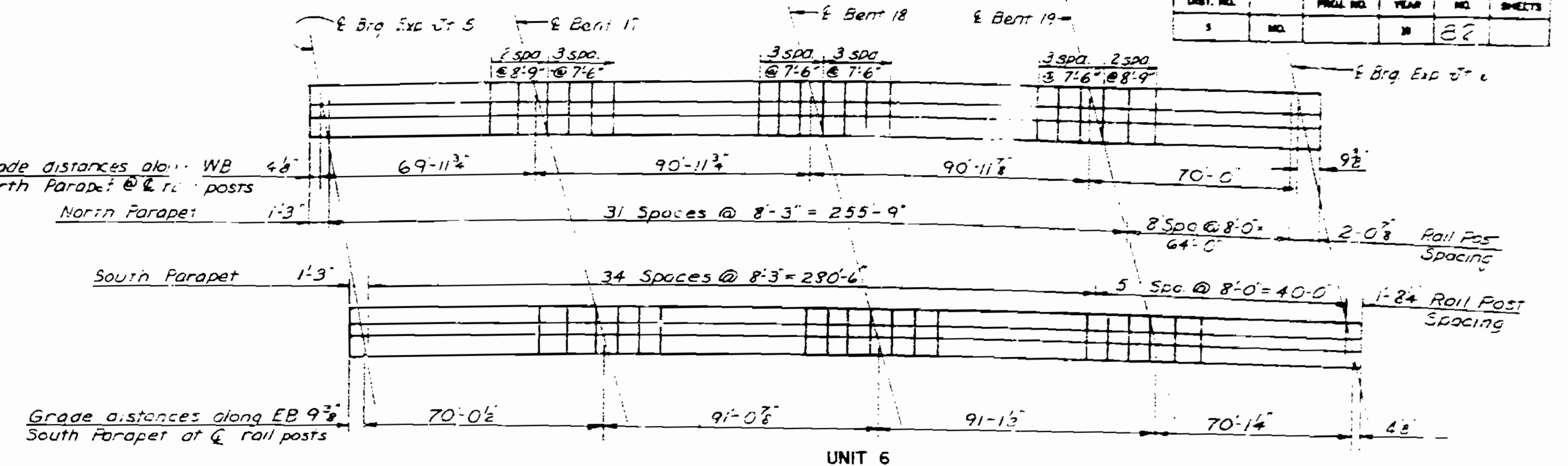
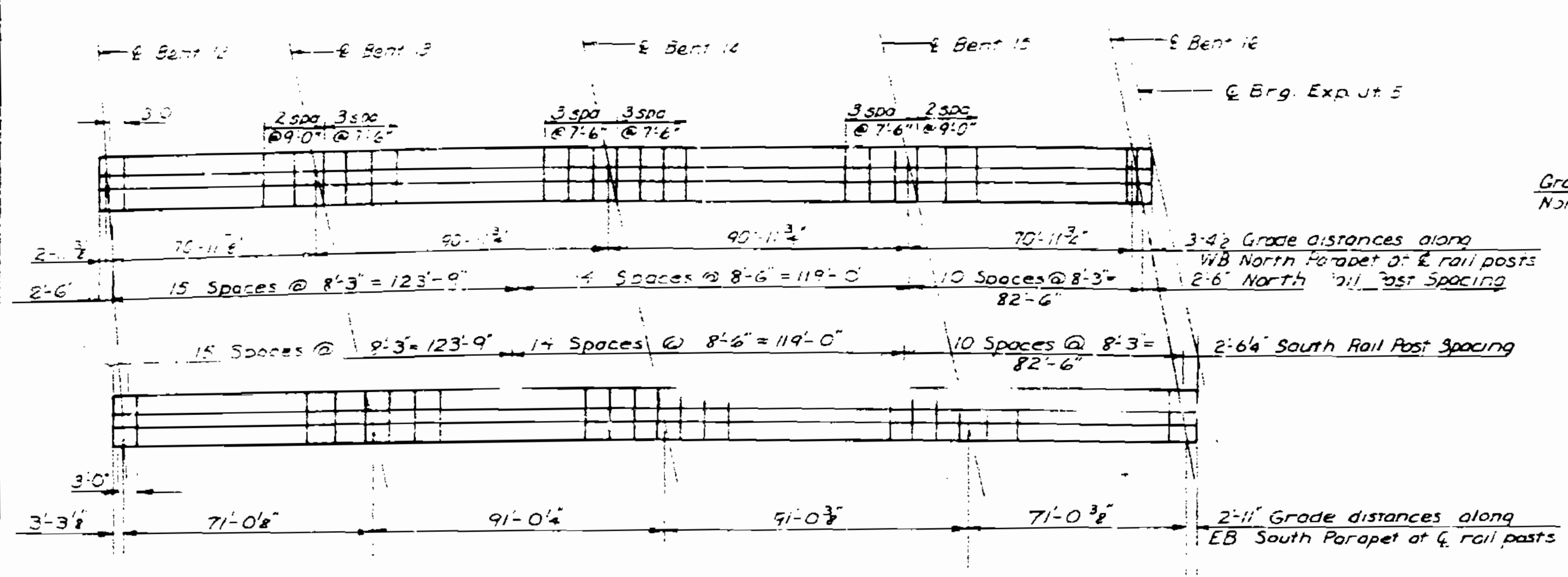
Sheet No. 15A of 72

JACKSON COUNTY

A-3136

RAIL PLANE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		88	28	32



140

- △ Revised 10-16-84
- △ Revised 10-3-84
- △ Revised 9-28-84

RAIL POST LOCATIONS

JACKSON COUNTY

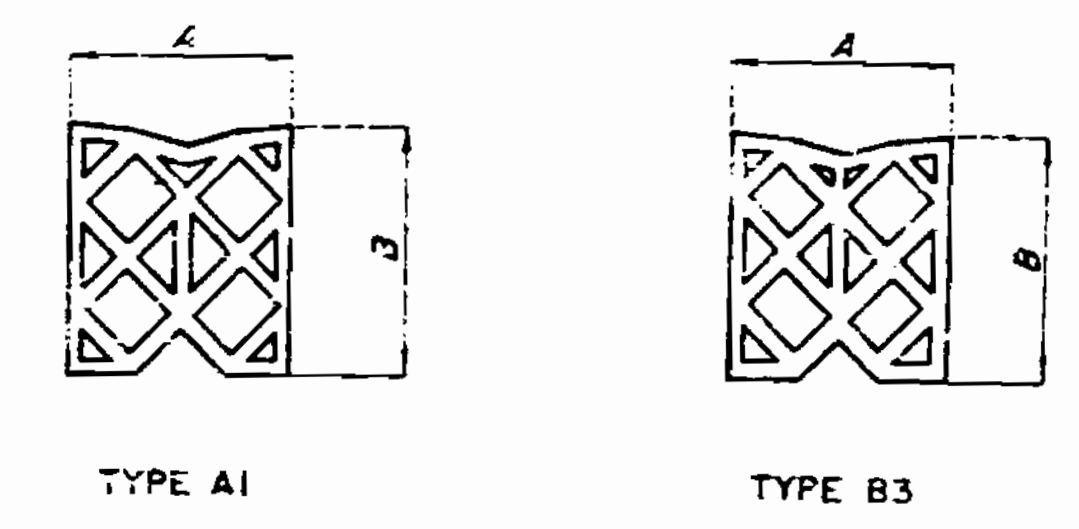
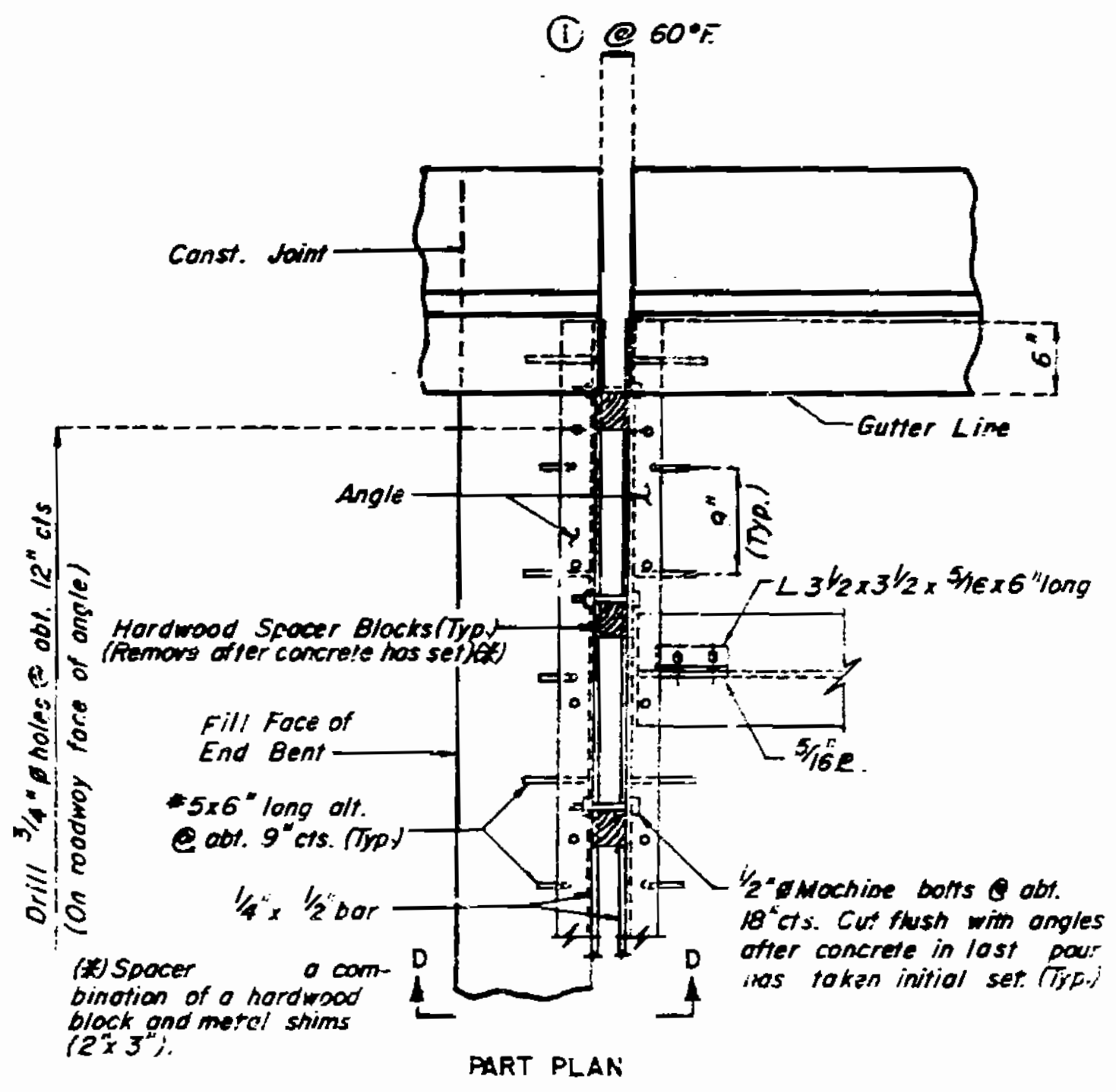
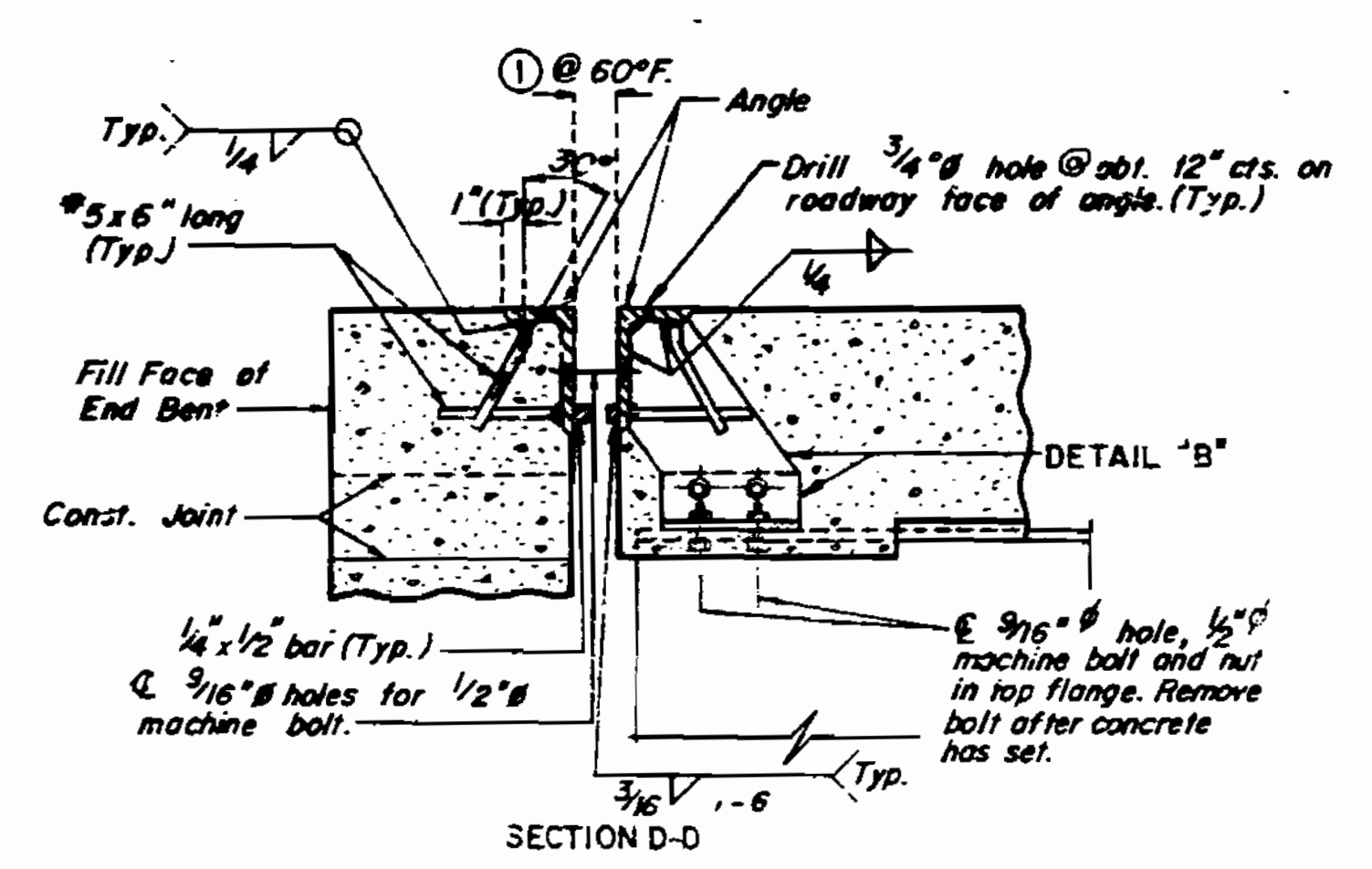
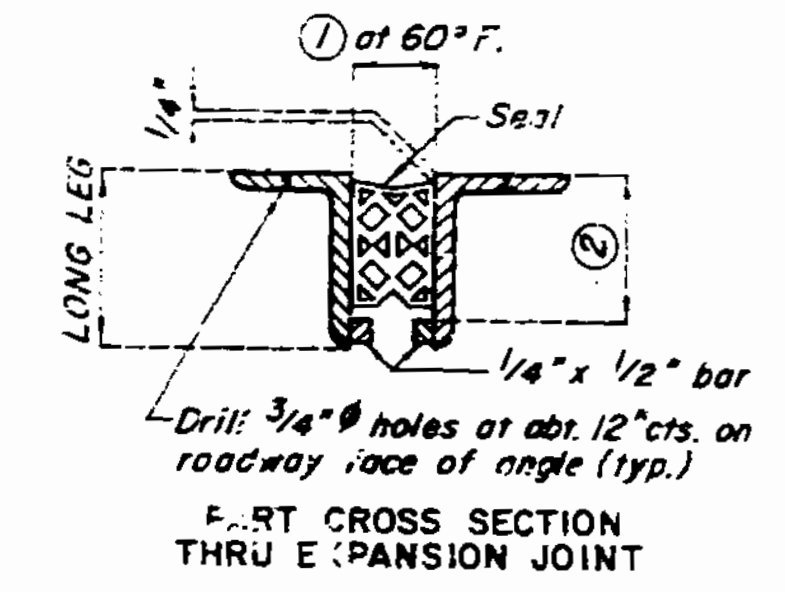
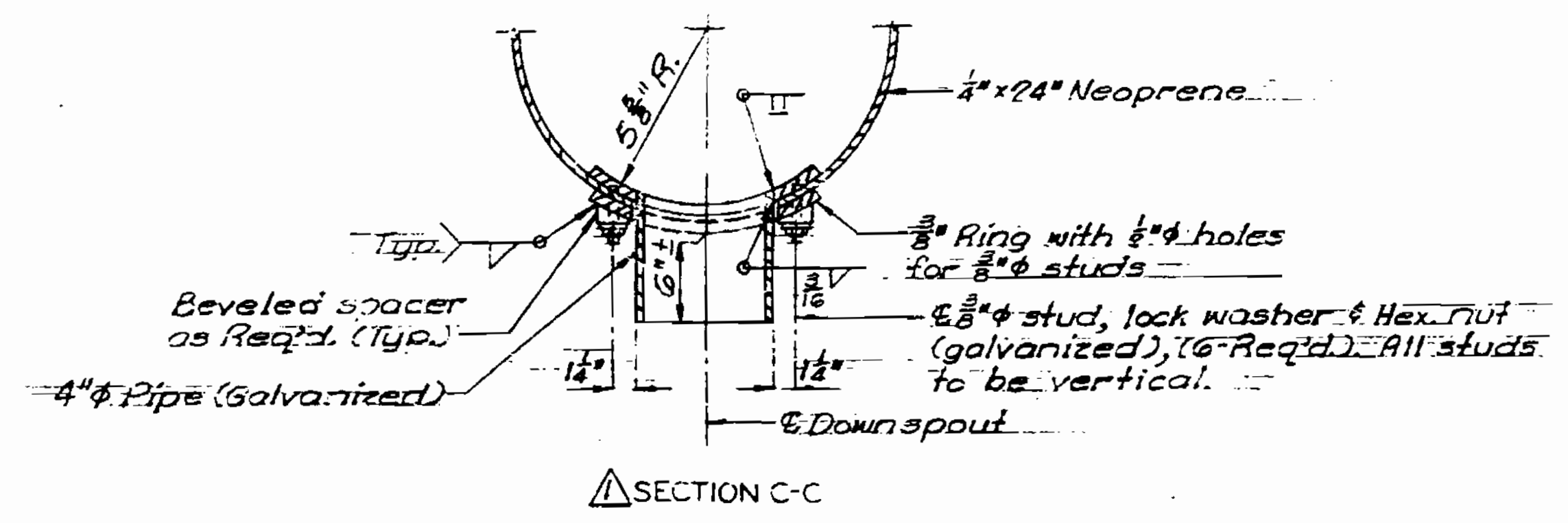
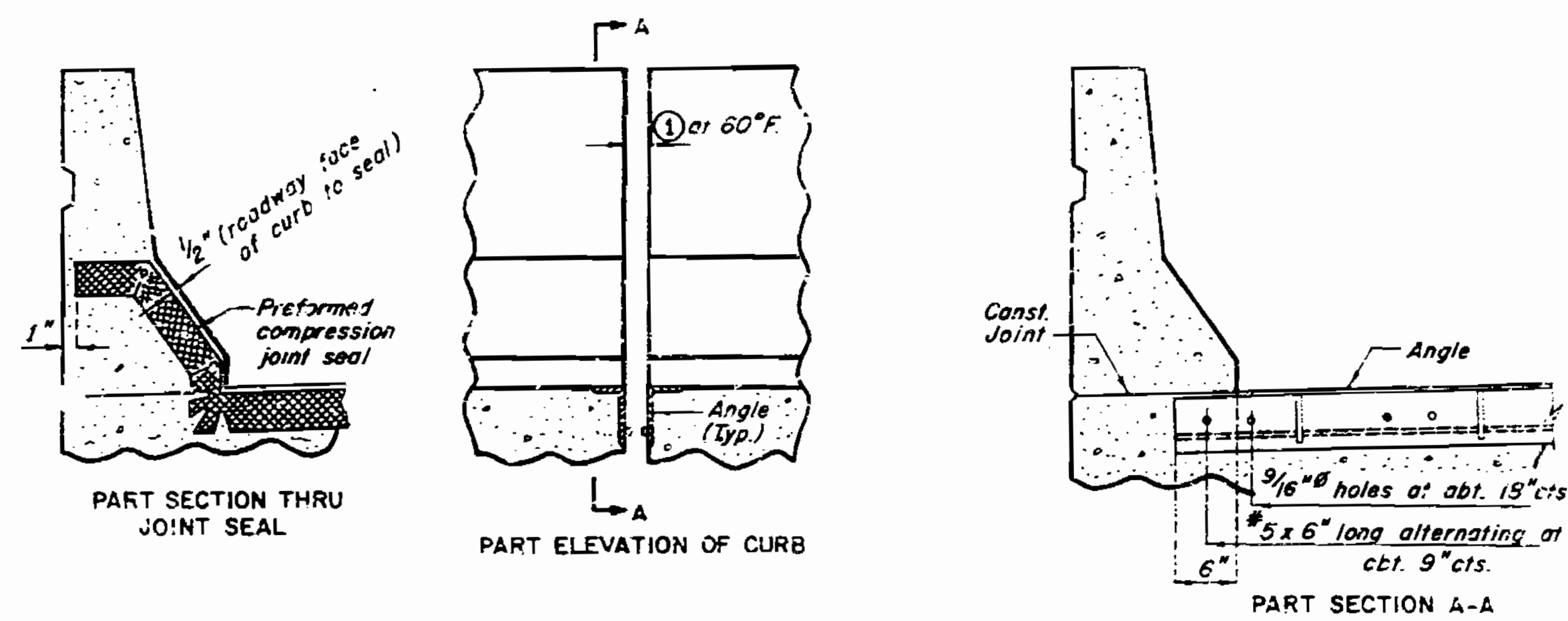
A-3136

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 39 of 72

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO			25	

NOTES FOR PREFORMED COMPRESSION JOINT SEAL:
 STRUCTURAL STEEL FOR EXPANSION DEVICE FABRICATED IN ONE SECTION EXCEPT THAT WHEN THE LENGTH IS OVER 50' SPLICING IS PERMISSIBLE.
 THE EXPANSION DEVICE BENT TO CONFORM TO CROWN AND GRADE OF ROADWAY.
 NO. 5 BARS FOR EXPANSION DEVICE STRUCTURAL GRADE.
 APPROVED STUD WELDED ANCHORS (AISC SPEC. C-1020) OR DEFORMED BAR ANCHORS (ASTM A496) MAY BE USED IN LIEU OF NO. 5 BARS SHOWN.
 PLAN DIMENSIONS ARE BASED ON INSTALLATION AT 60° F.
 DIMENSION ① INCREASED 1/8" FOR EACH 10° FALL IN TEMPERATURE AND DECREASED 1/8" FOR EACH 10° RISE IN TEMPERATURE AT INSTALLATION.
 SEE SPECIAL PROVISIONS FOR THE REQUIREMENTS OF COMPRESSION JOINT SEAL.



TYPE	"A" (WIDTH)	"B" (HEIGHT)	①	②	MAX. LIMIT OF COMPRESSIBILITY
A1 OR B3	2.5"	NOT LESS THAN "A"	1 7/8"	"B" + 1/2"	16%
A1 OR B3	3.0"	NOT LESS THAN "A"	1 7/8"	"B" + 1/2"	43%
A1 OR B3	3.5"	NOT LESS THAN "A"	2 1/4"	"B" + 1/2"	42%
A1 OR B3	4.0"	NOT LESS THAN "A"	2 5/8"	"B" + 1/2"	42%
A1 OR B3	4.5"	NOT LESS THAN "A"	2 3/4"	"B" + 1/2"	40%
A1 OR B3	5.0"	NOT LESS THAN "A"	2 7/8"	"B" + 1/2"	40%

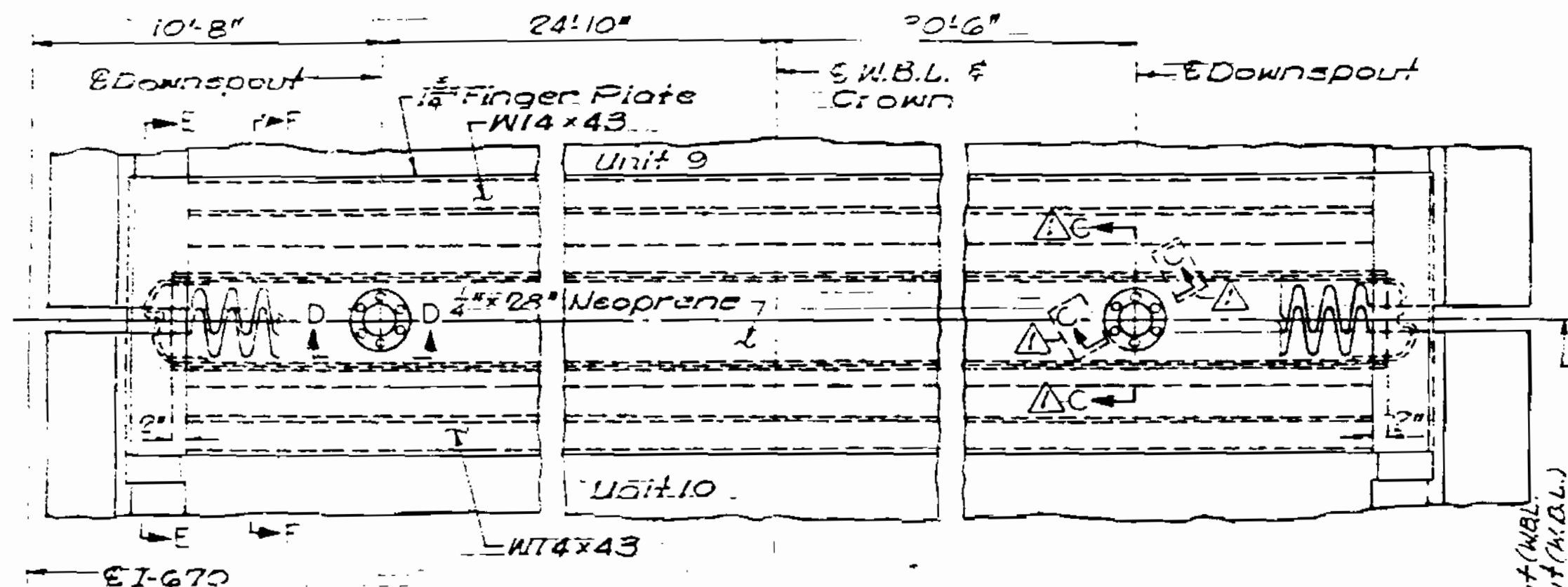
SIZE OF ARMOR ANGLE:
 VERTICAL LEG OF ANGLE: A MINIMUM OF "B" + 1/4"
 HORIZONTAL LEG OF ANGLE: A MINIMUM OF 3"
 THICKNESS OF ANGLE: 3/8" FOR SEAL WIDTHS THROUGH 3.5" AND 1/2" FOR SEAL WIDTHS GREATER THAN 3.5"
 IN LIEU OF THE SPECIFIED SEAL, THE NEXT LARGER SEAL SUBSTITUTED. DIMENSIONS AND LIMITS CORRESPOND TO THE ACTUAL SEAL INSTALLED.

DETAILS OF PREFORMED COMPRESSION JOINT SEAL AT JOINT NO. 10

REVISED OCT. 1983
 OCT. 1977
 DETAILED 18 22
 CHECKED 18 22

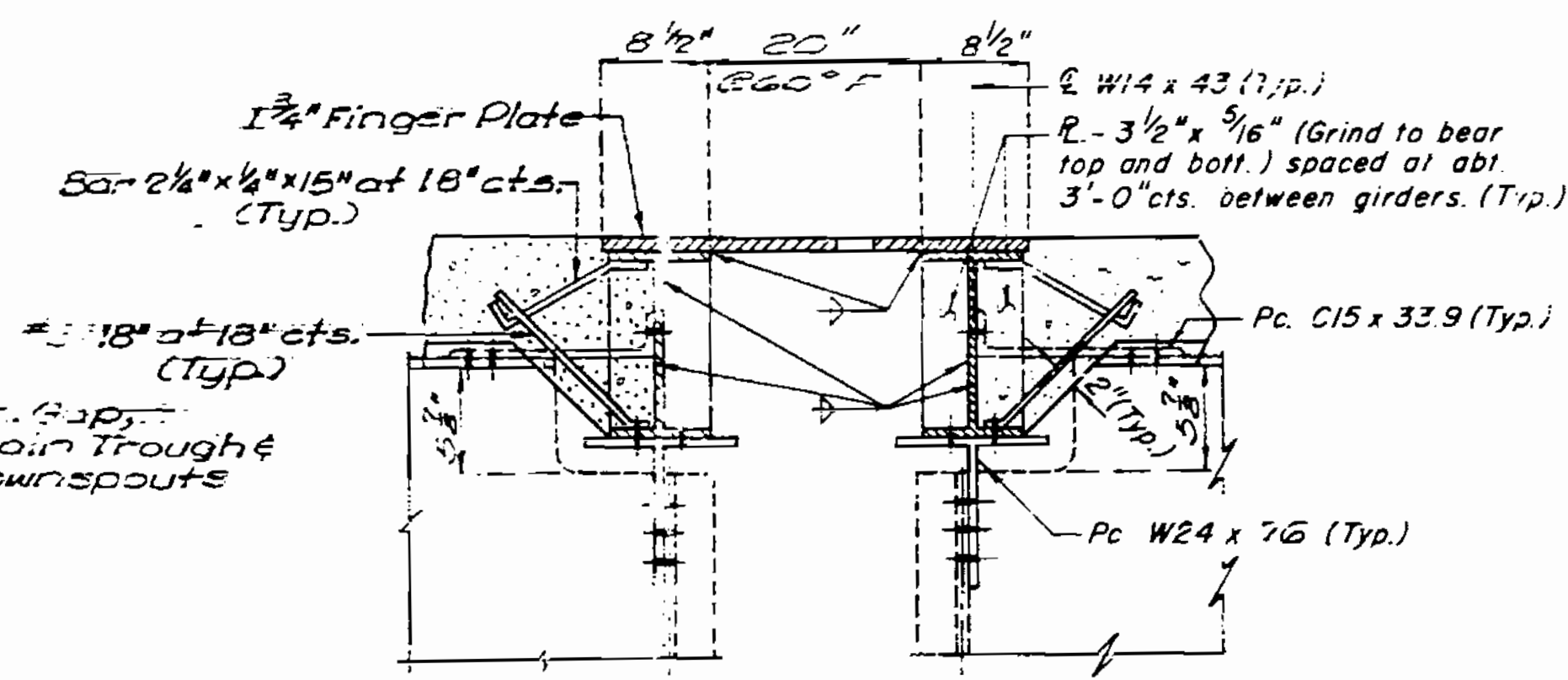
Note: This drawing is not to scale. Follow dimensions.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO		87	27	



PART PLAN OF GUTTER

W.B.L. Shown - E.B.L. Similar



PART SECTION THRU EXP. DEVICE

GENERAL NOTES:

Finger plates cut with a machine guided gas torch from one plate $23" \times 13/4"$. The surface of cut perpendicular to the surface of plate. The cut not exceed $1/8"$ in width. The centerline of cut not deviate more than $1/16"$ from the position of centerline cut shown. No part of expansion device spliced.

Plan dimensions are based on installation at $60^\circ F$. The expansion gap and other dimensions adjusted during installation for compliance with any temperature change.

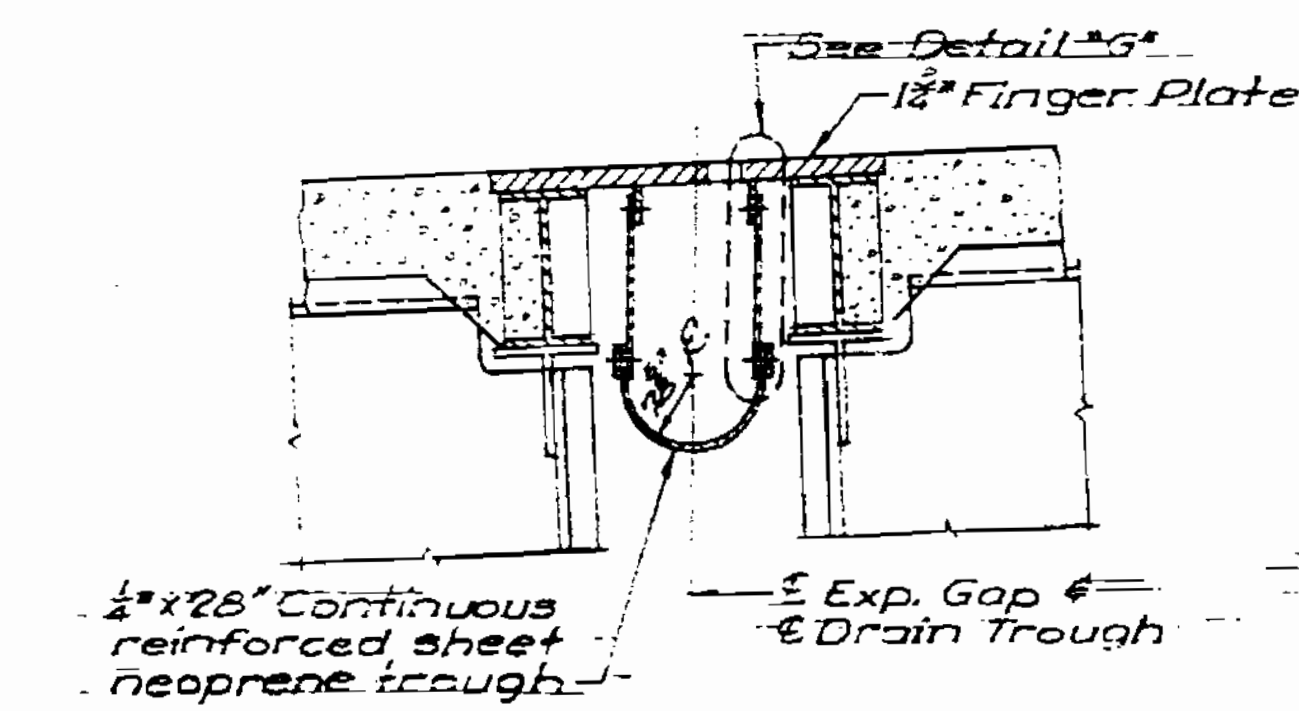
No. 5 reinforcing bars structural grade deformed bars.

The roadway plate and curb plate \dots in the shop

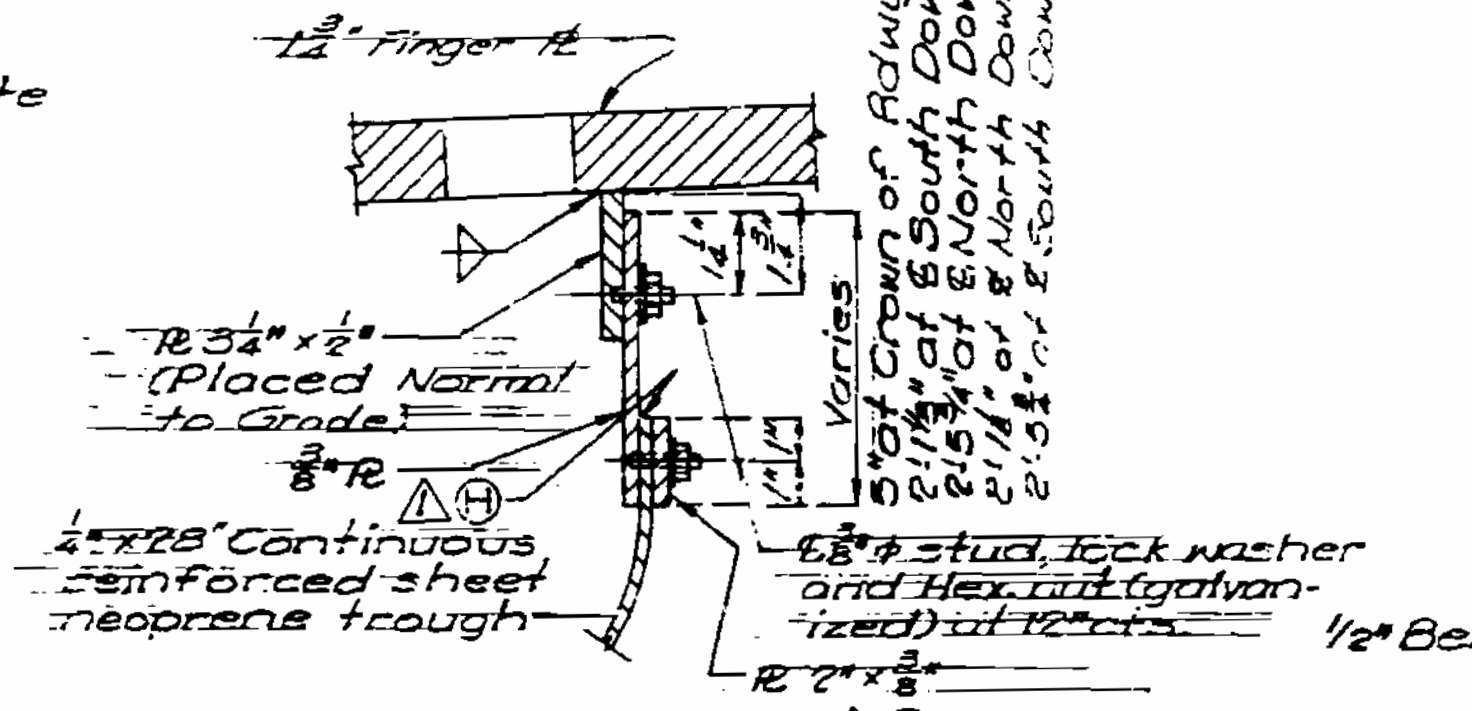
Payment for furnishing, \dots and installing structural steel for the expansion device made at the contract unit price per "Lin. Ft." of Finger Plate Exp. Device.

All holes shown subpunched $1/16"$ and reamed to $3/16"$ in field.

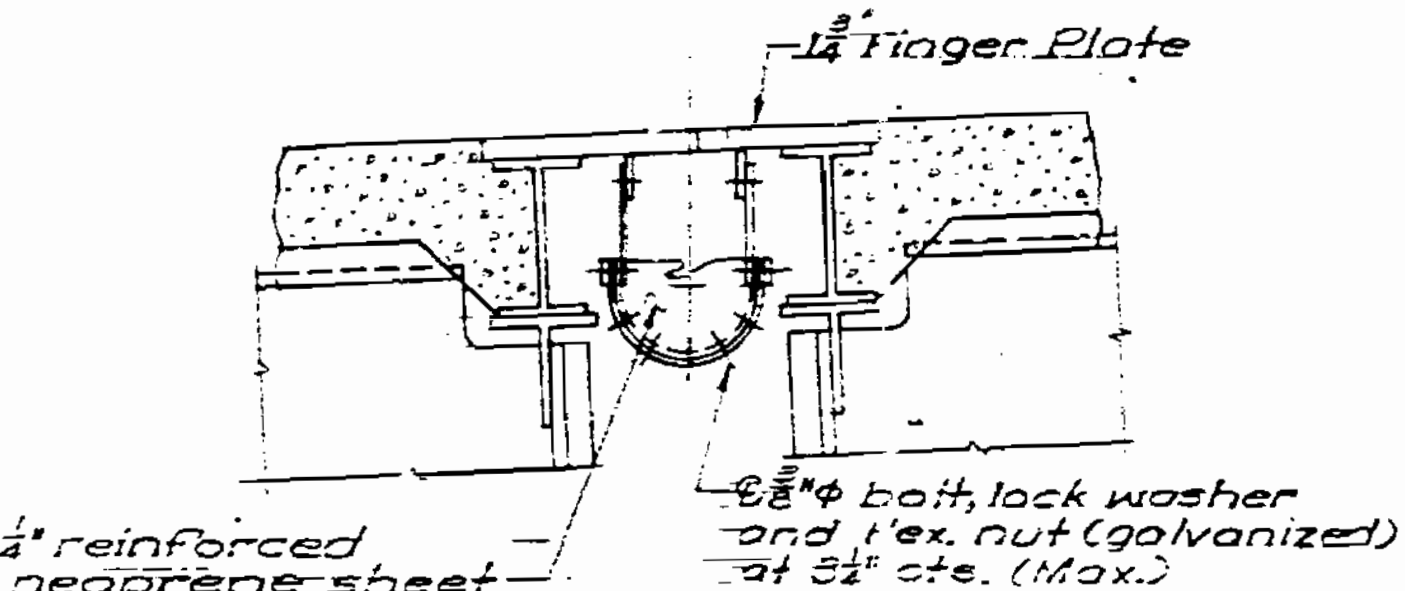
$1/2"$ Finger Plate and $W14 \times 43$ bent to conform to crown of roadway.



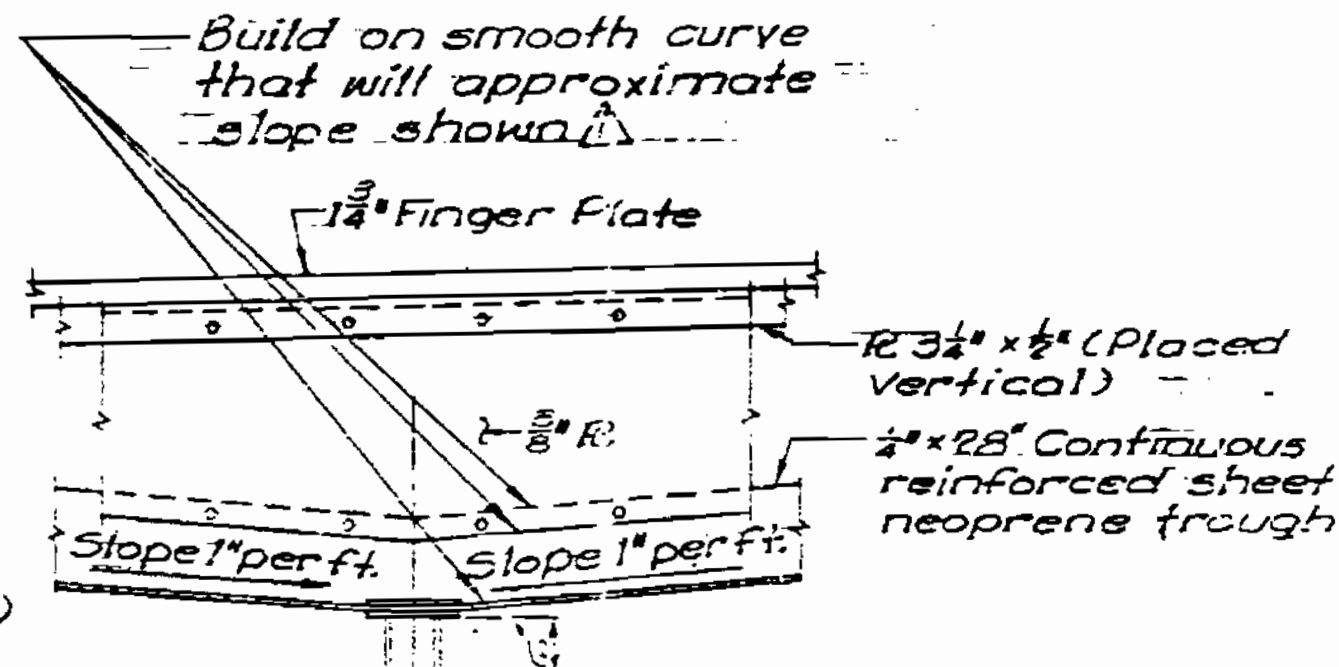
SECTION F-F



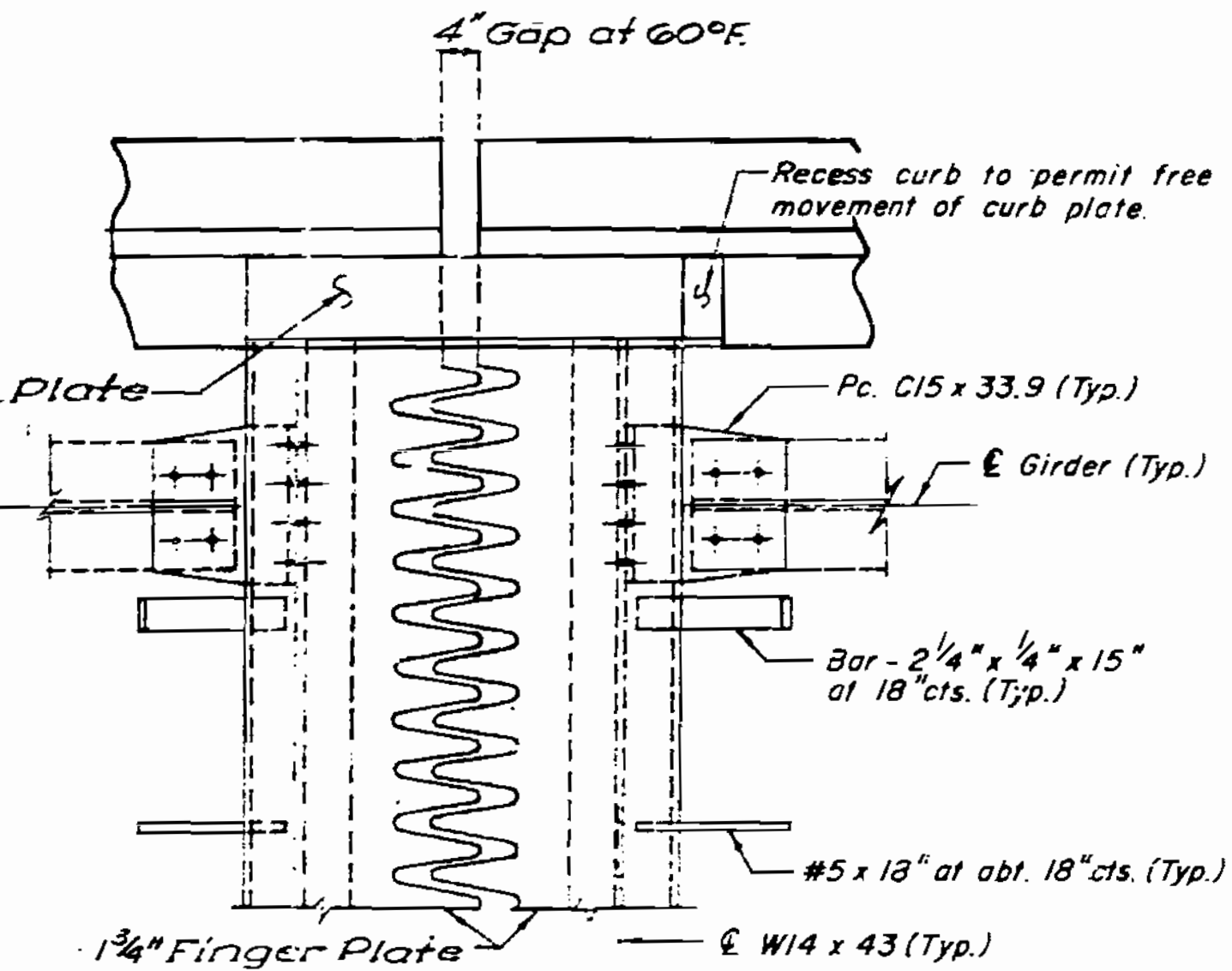
DETAIL 'G'



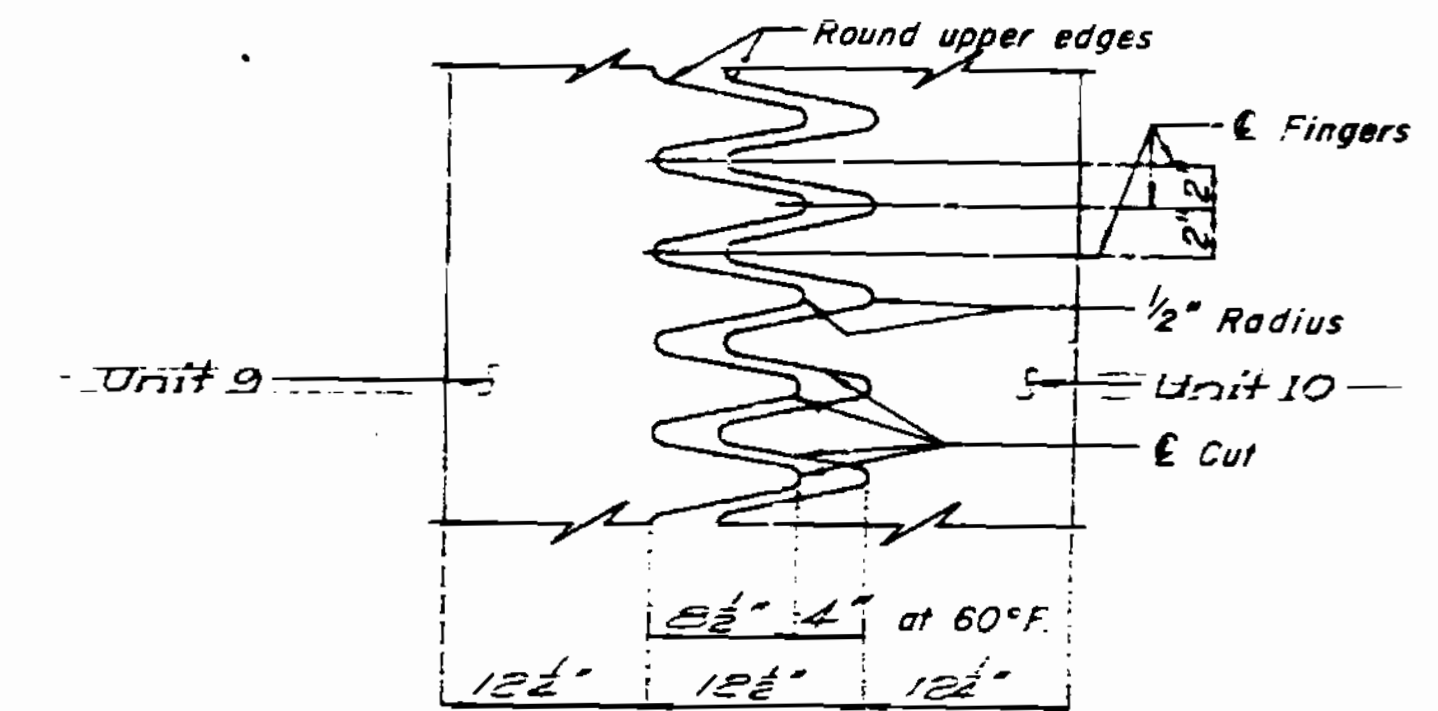
SECTION E-E



SECTION D-D



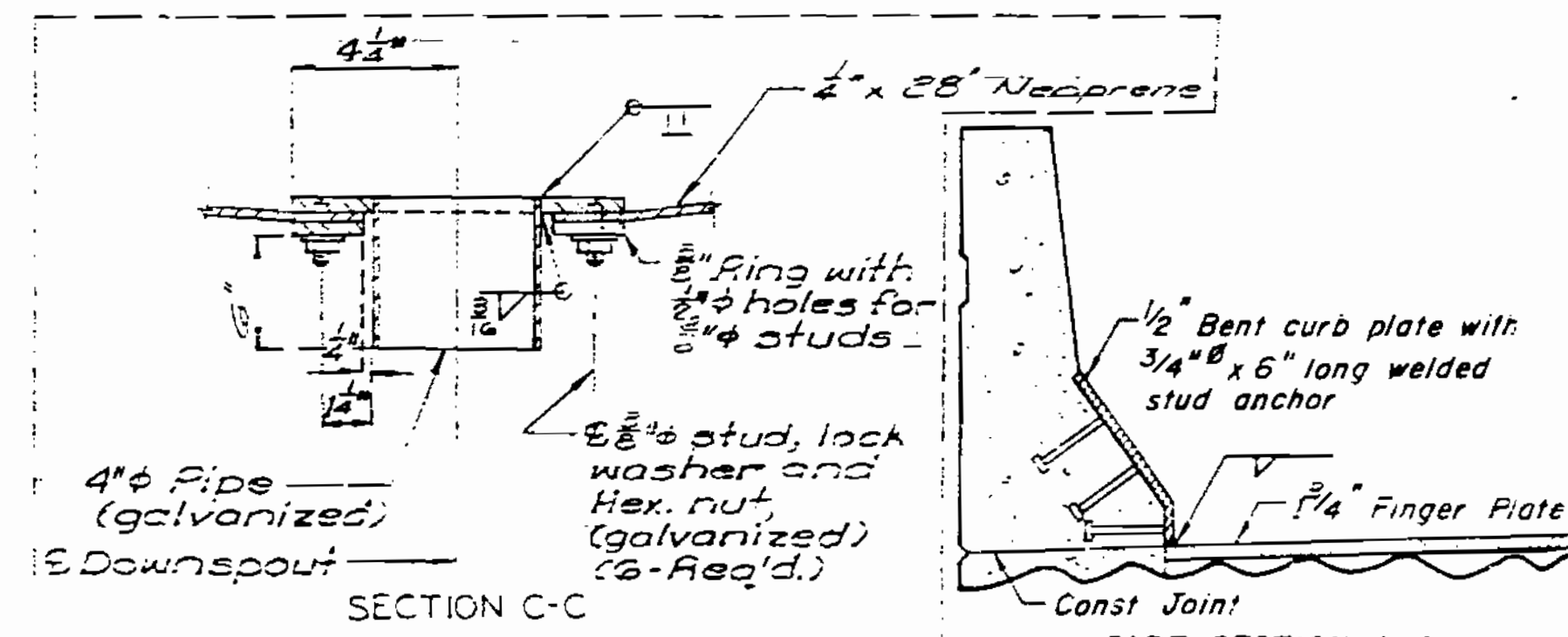
PART PLAN OF EXP. DEVICE



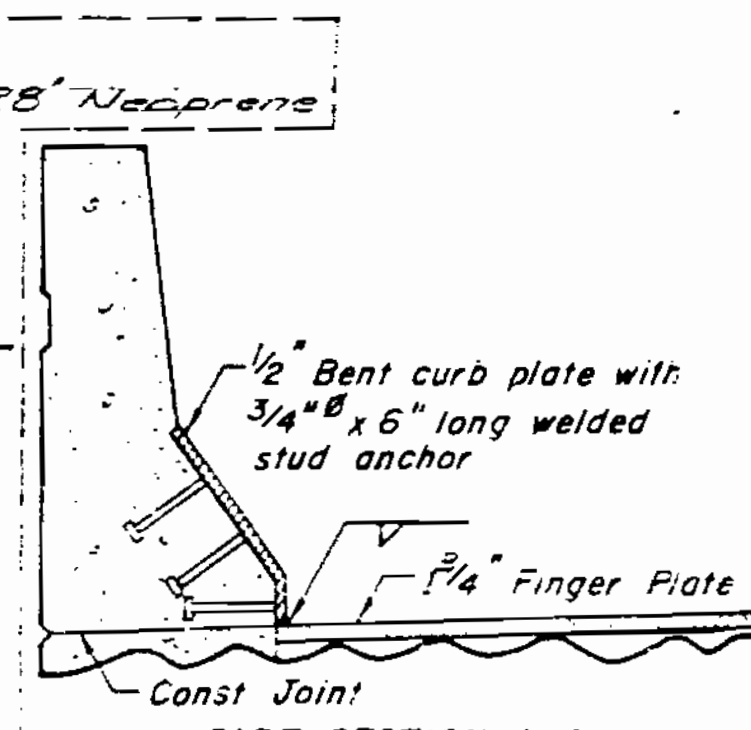
TYPICAL PLAN OF PLATE

DRAIN TROUGH NOTES:

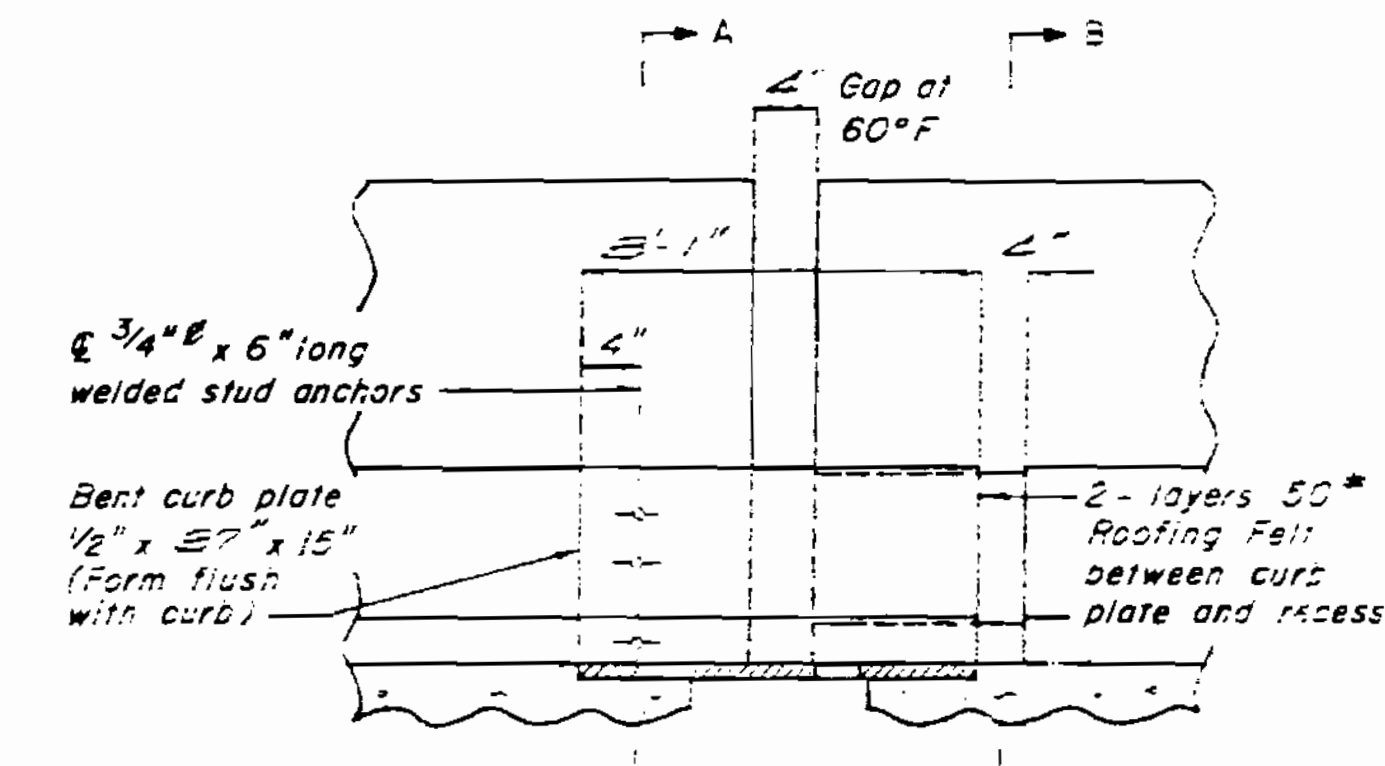
Plates for gutter A.S.T.M. A-36 steel and galvanized in accordance with A.S.T.M. A123. Plan dimensions are based on installation at $60^\circ F$. The expansion gap and other dimensions adjusted during installation for compliance with any temperature change. Payment for furnishing and installing the structural steel and 2" Neoprene trough made at the contract unit price for Finger Plate Expansion Device per Lin. Ft. Repair of galvanizing at welded joints required.



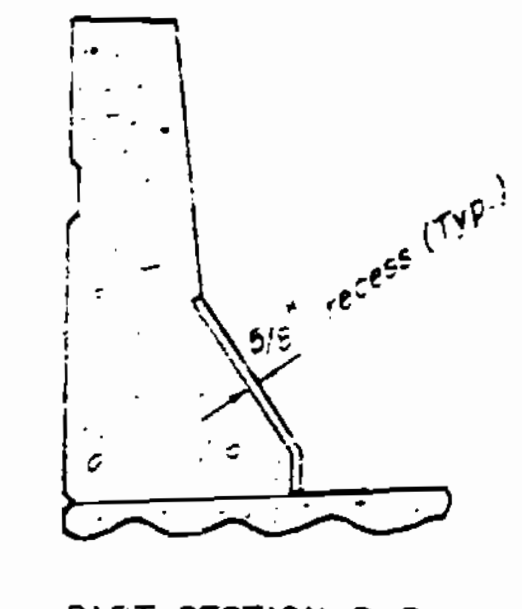
SECTION C-C



PART SECTION A-A



PART ELEVATION OF CURB



PART SECTION B-B

DETAILS OF FINGER PLATE EXPANSION DEVICE AT BENT NO. 28

See sheet No. 42 for revised Section C-C

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 44 of 72. Revised 9/23/84

JACKSON

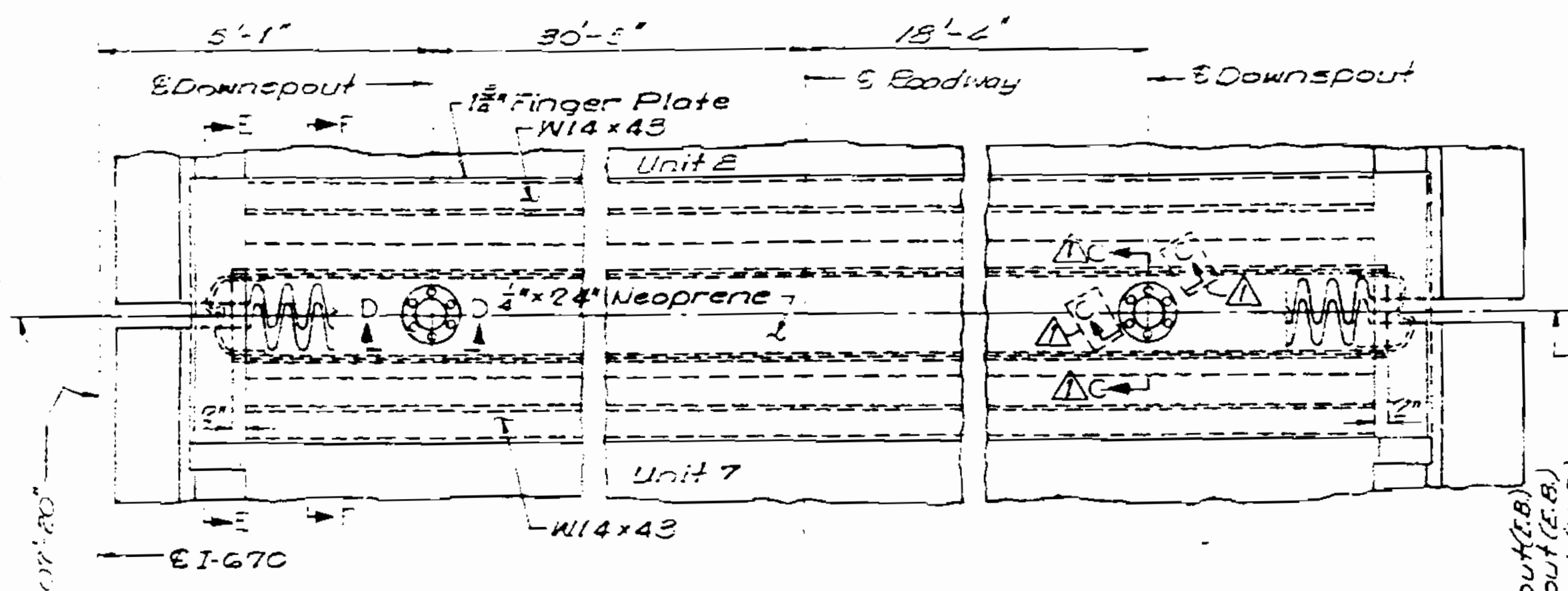
COUNTY

A-3136

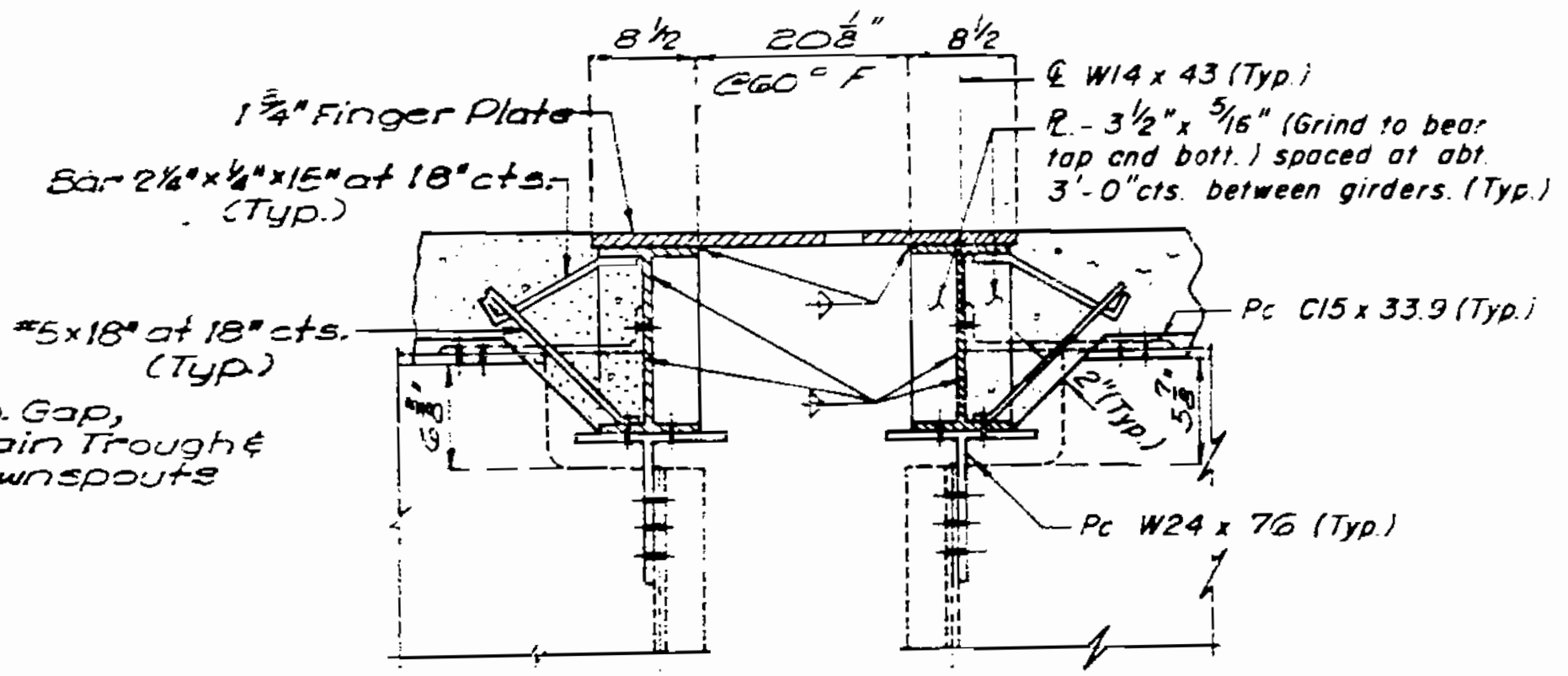
143

Nov 1987
 DETAILED 10-2
 CHECKED 10-2

FED. ROAD DIST. NO.	STATE	FED. A.C. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO		19	86	



PART PLAN OF GUTTER
(E.B. Shown - W.B. Similar)



PART SECTION THRU EXP. DEVICE

GENERAL NOTES:
Finger plates cut with a machine guided gas torch from one plate $34\frac{1}{2} \times 1\frac{3}{4}$. The surface of cut perpendicular to the surface of plate. The cut exceed $\frac{1}{8}$ " in width. The centerline of cut did not deviate more than $\frac{1}{16}$ " from the position of centerline cut shown. No part of expansion device spliced.

Plan dimensions are based on installation at 60°F. The expansion gap and other dimensions adjusted during installation for compliance with any temperature change.

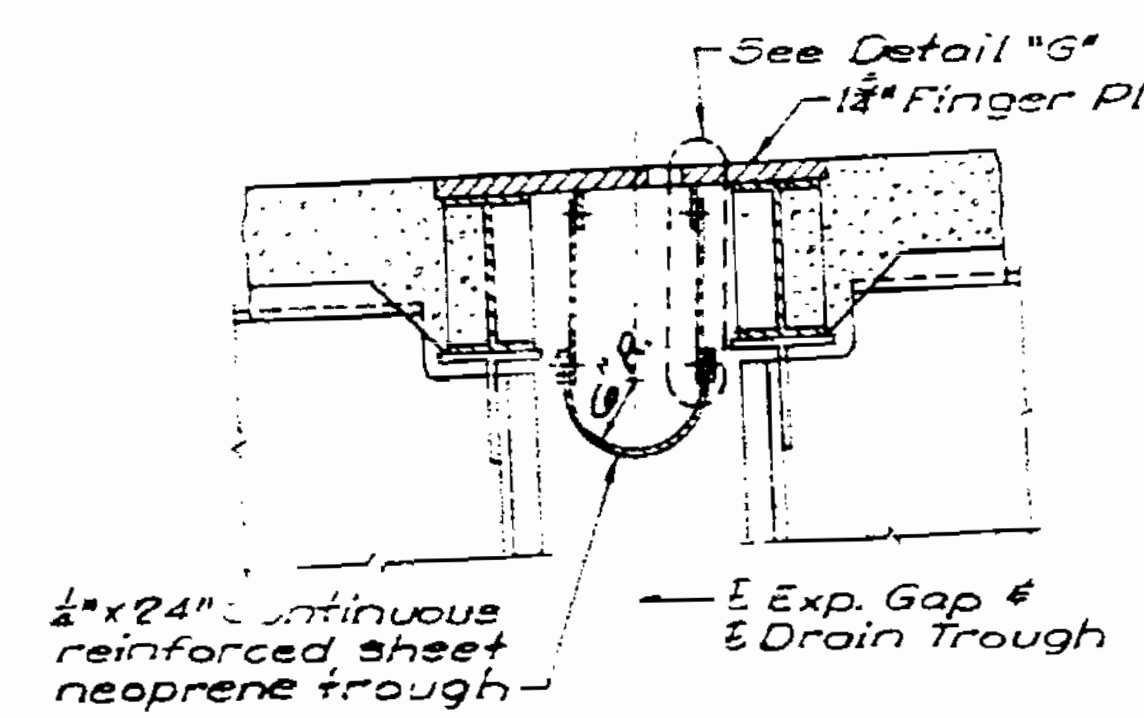
No. 5 reinforcing bars structural grade deformed bars

The roadway plate and curb plate in the shop

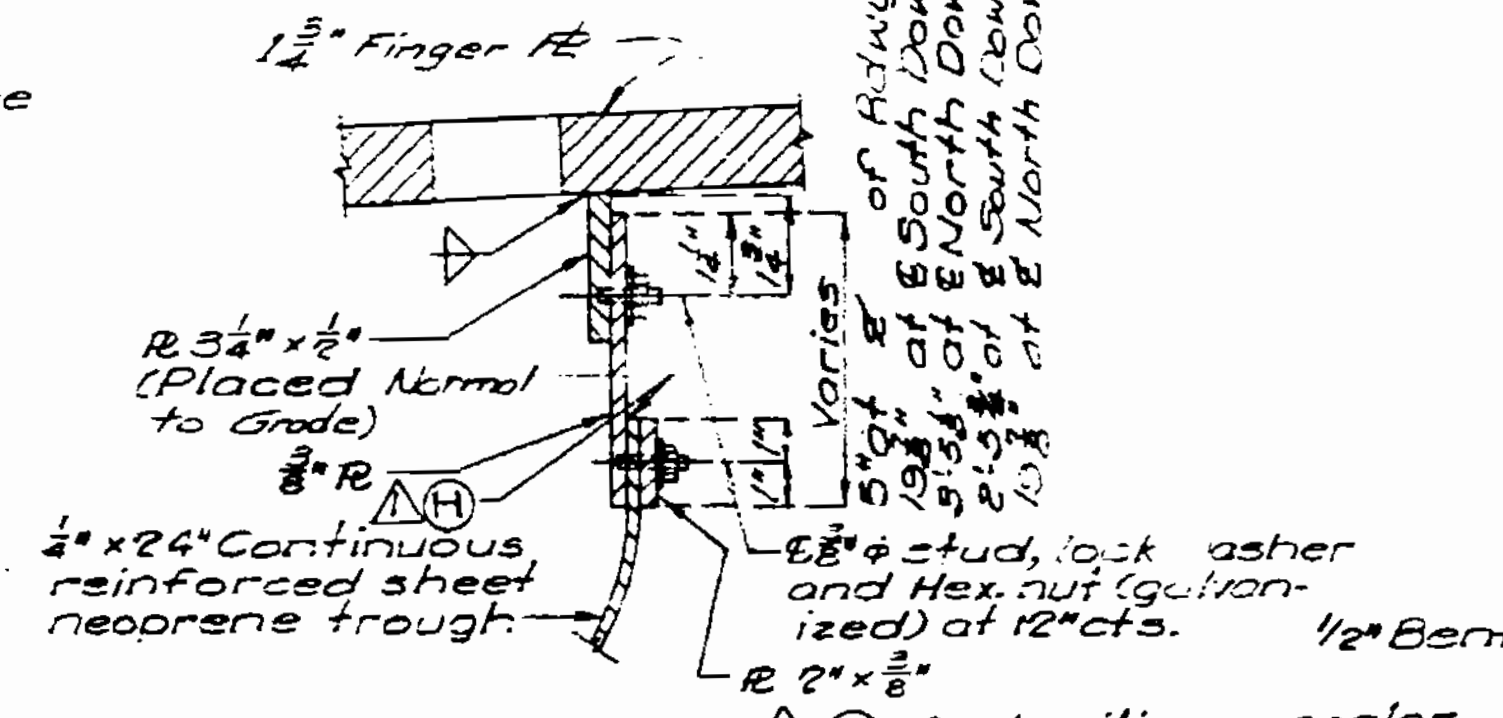
Payment for furnishing, erecting and installing structural steel for the expansion device made at the contract unit price per "Lin. Ft." of Finger & Exp. Device.

All holes shown subpunched $\frac{1}{16}$ " and reamed to $\frac{13}{16}$ " in field.

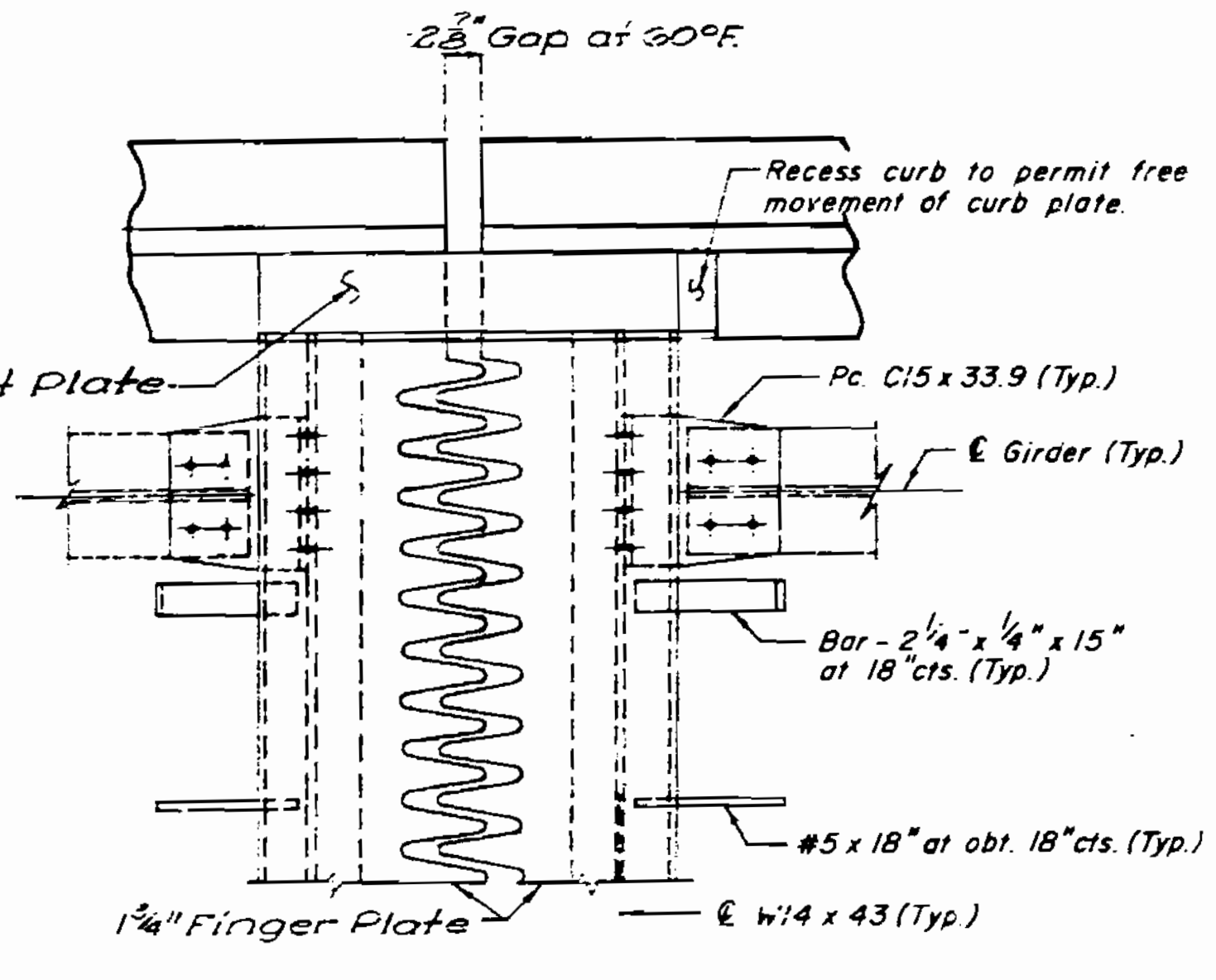
$\frac{1}{2}$ " Finger Plate and W14 x 43 bent to conform to crown of roadway.



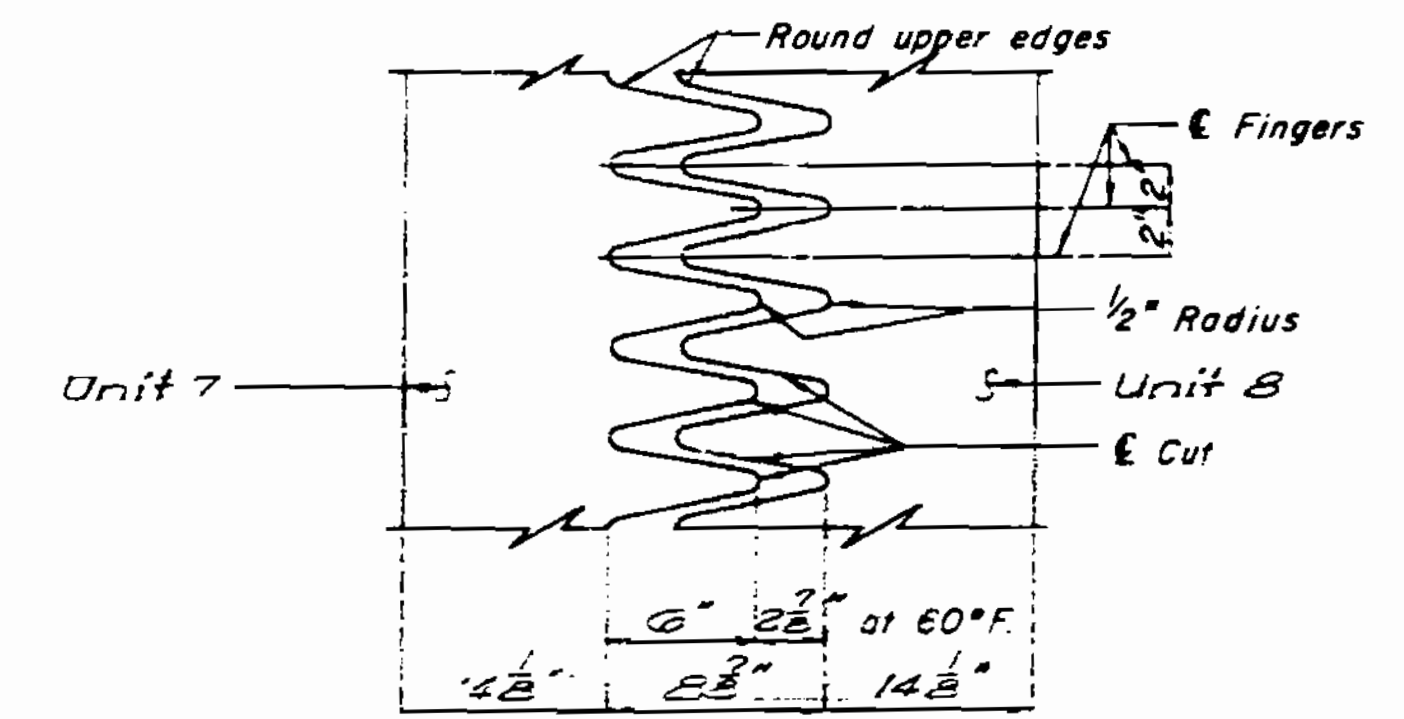
SECTION F-F



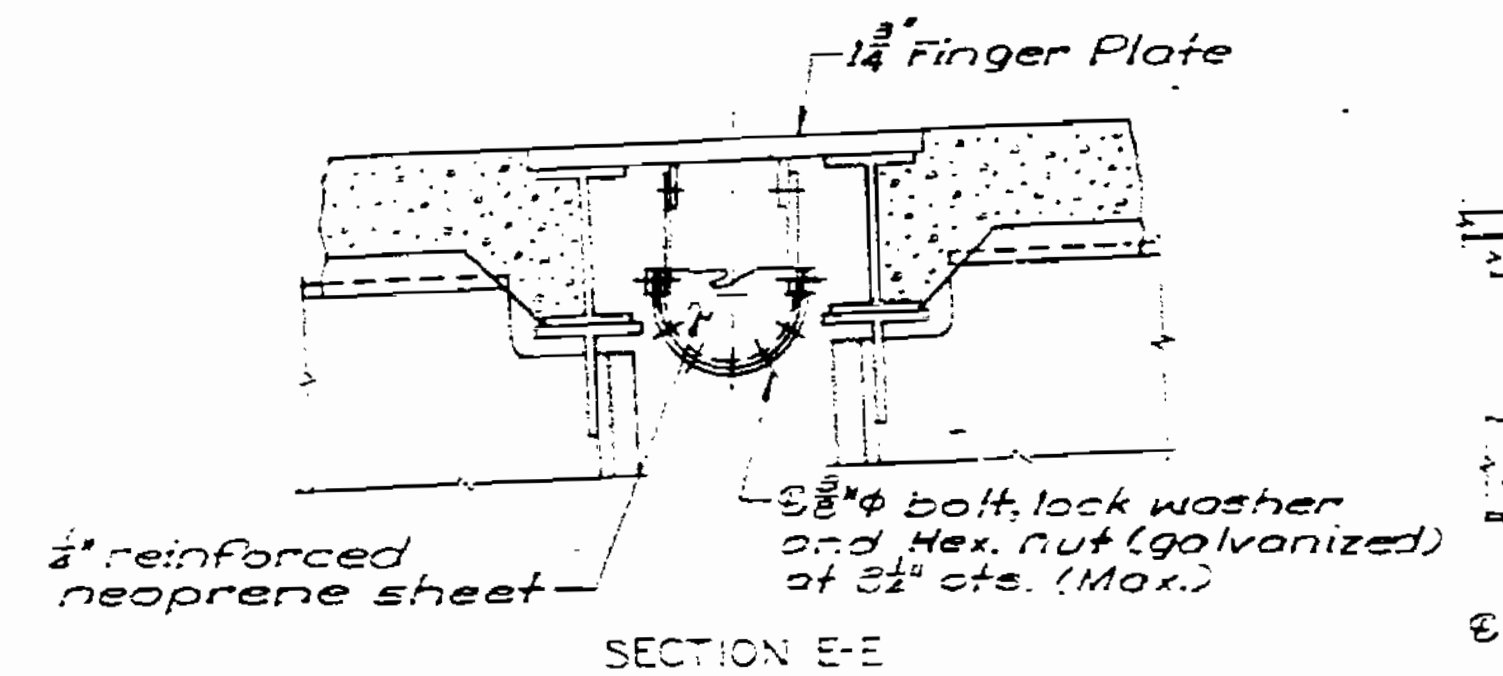
DETAIL G Apply silicone sealer as required.



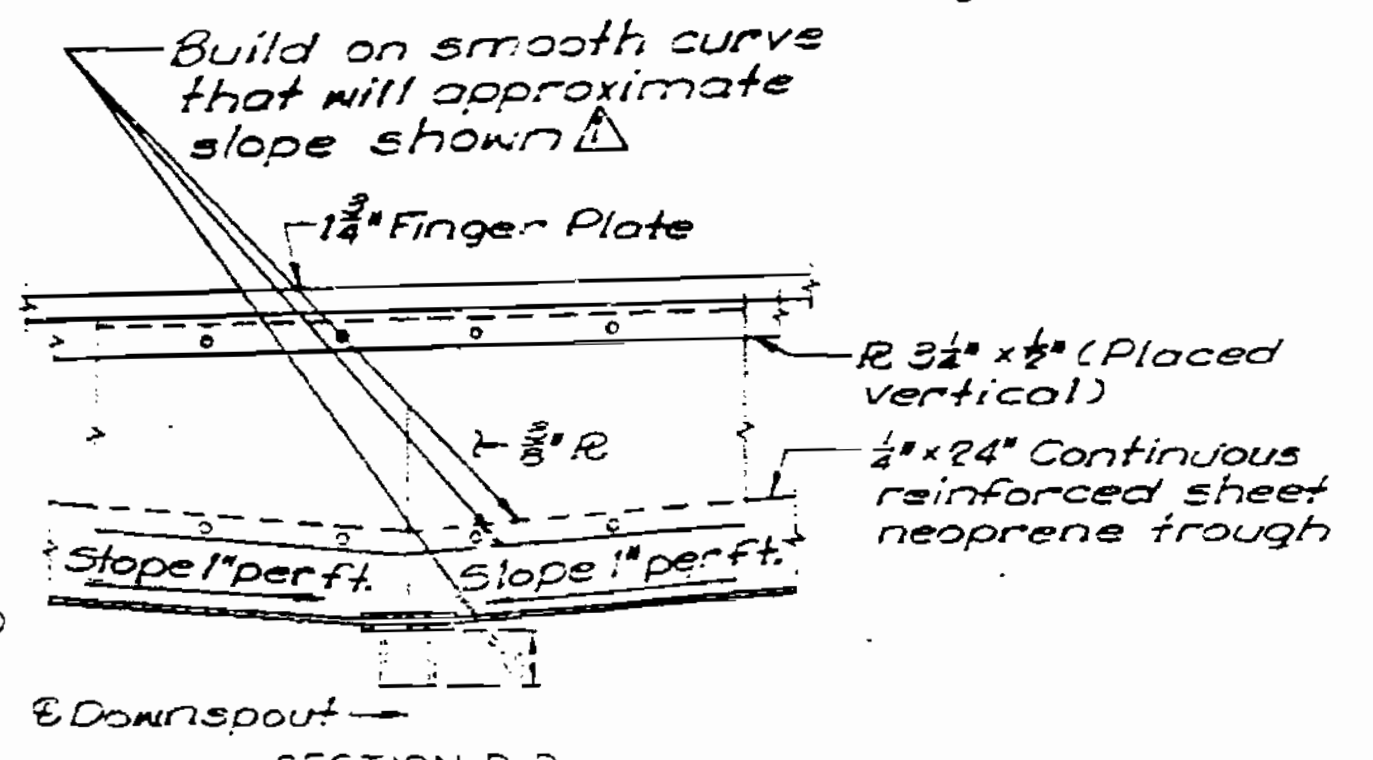
PART PLAN OF EXP. DEVICE



TYPICAL PLAN OF PLATE

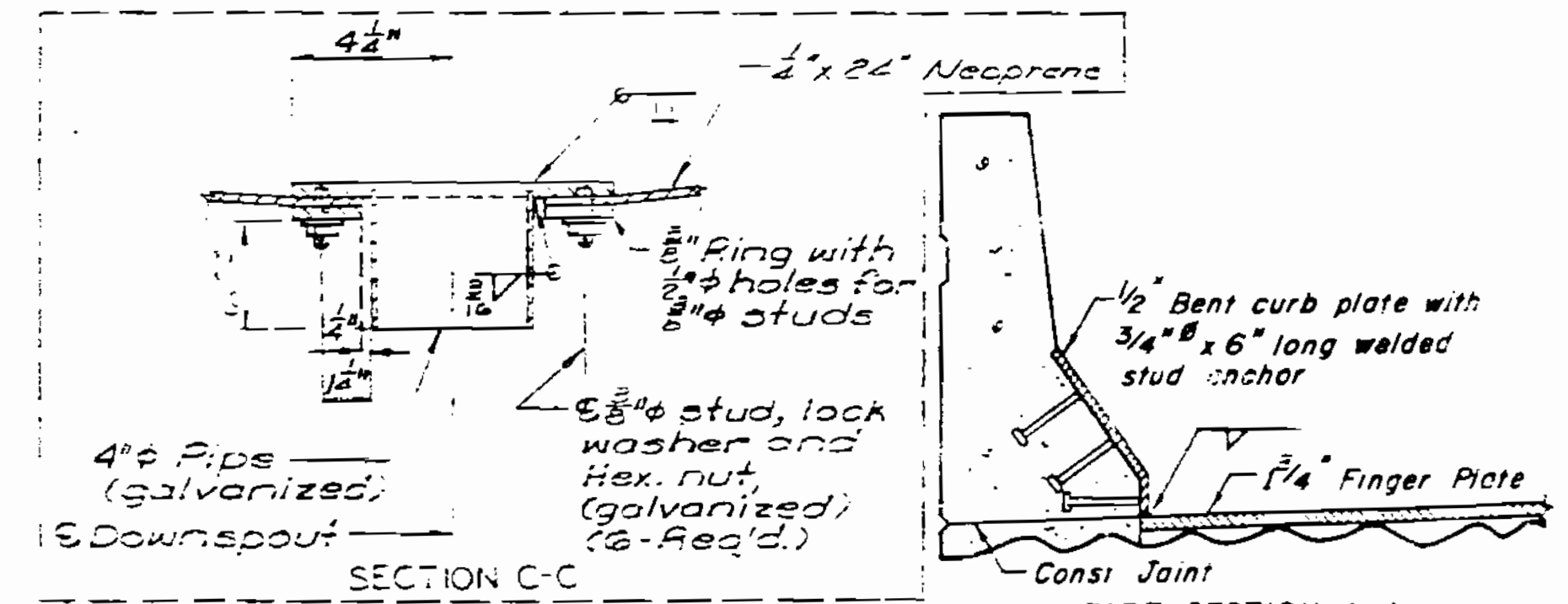


SECTION E-E

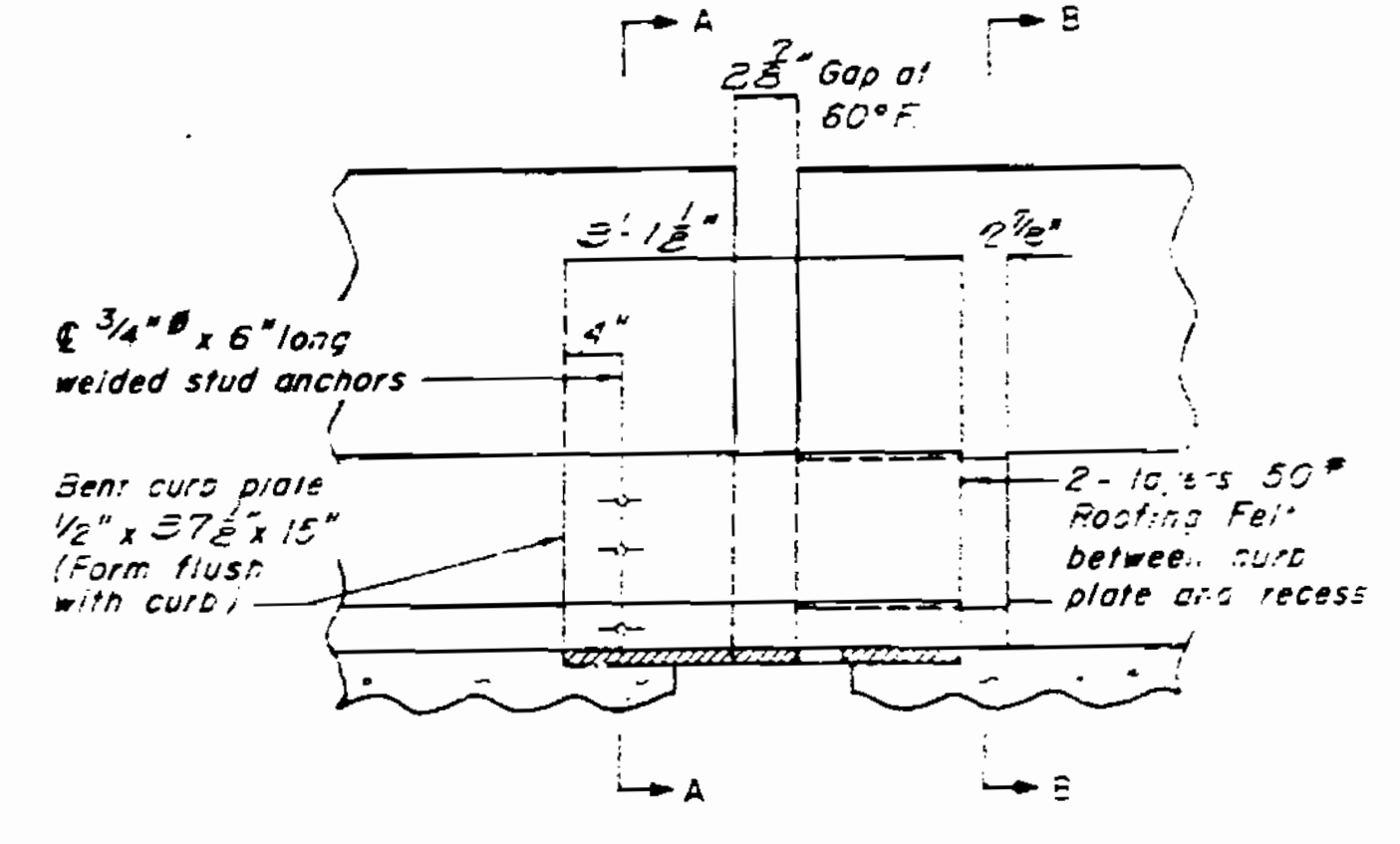


SECTION D-D

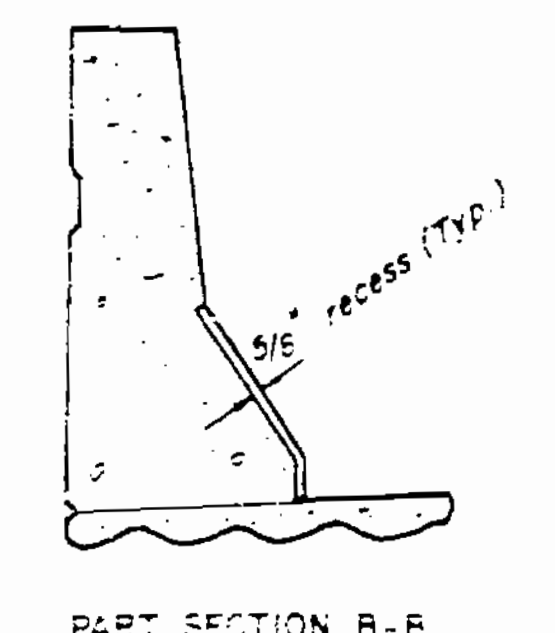
DRAIN TROUGH NOTES:
Plates for gutter A.S.T.M. A-36 steel and galvanized in accordance with A.S.T.M. A123. Plan dimensions are based on installation at 60°F. The expansion gap and other dimensions adjusted during installation for compliance with any temperature change.
Payment for furnishing and installing the structural steel and 1/2" Neoprene trough made at the contract unit price for Finger Plate Expansion Device per Lin. Ft.
Repair of galvanizing at welded joints required.



DETAILS OF FINGER PLATE EXPANSION DEVICE AT BENT NO. 24



PART ELEVATION OF CURB



PART SECTION B-B

147

Nov. 1966
DETAILED 19
CHECKED 19

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 42 Revised 9/23/34

JACKSON COUNTY

A-3136

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION
STRUCTURAL STEEL BENTS 12 THRU 30

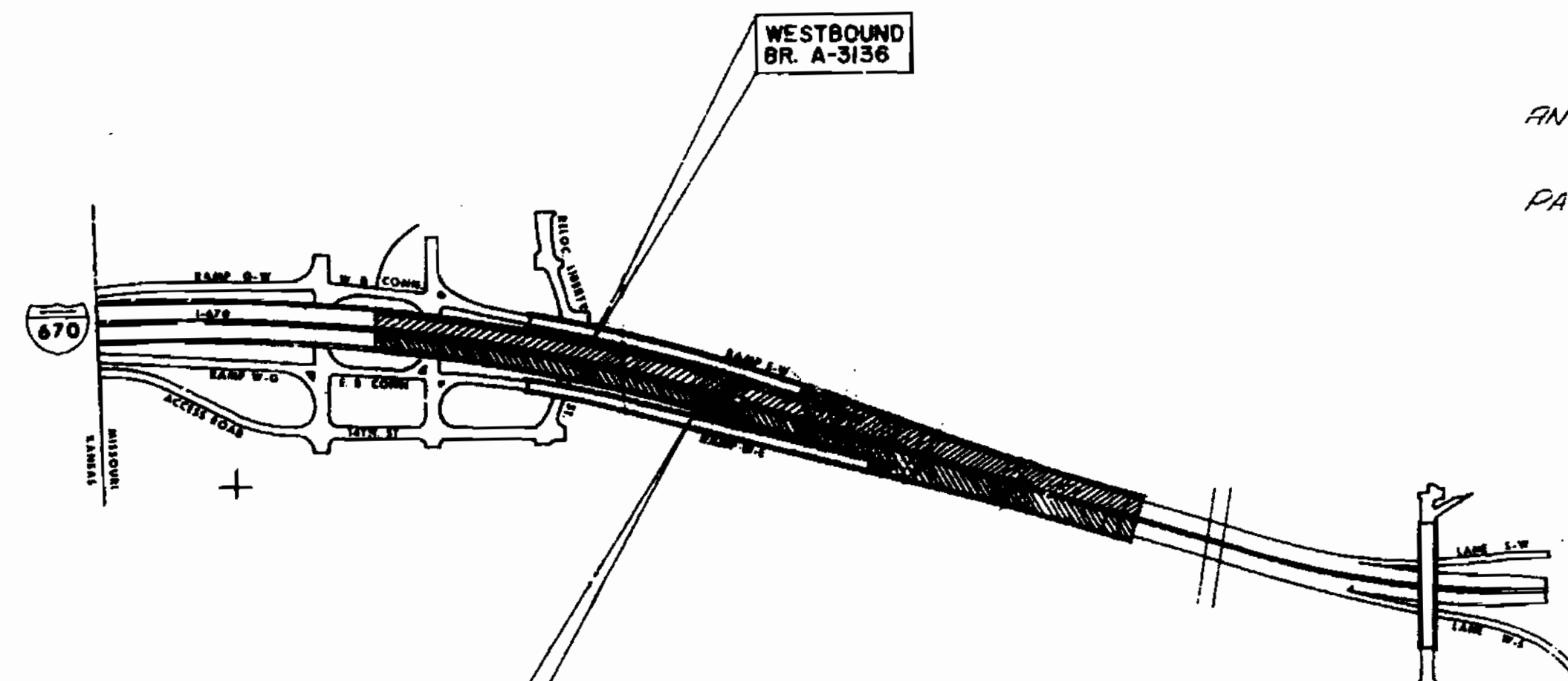
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		78	2	

INDEX OF SHEETS

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| 2 GENERAL PLAN AND ELEVATION | 35 GIRDER ELEVATION - UNIT 9 WESTBOUND |
| 3 GENERAL PLAN AND ELEVATION | 36 GIRDER ELEVATION - UNIT 9 WESTBOUND |
| 4 GENERAL PLAN AND ELEVATION | 37 GIRDER ELEVATION - UNIT 9 WESTBOUND |
| 5 GENERAL PLAN AND ELEVATION | 38 FRAMING PLAN - UNIT 9 EASTBOUND |
| 6 GENERAL PLAN AND ELEVATION | 39 GIRDER ELEVATION - UNIT 9 EASTBOUND |
| 7 SUMMARY OF QUANTITIES | 40 GIRDER ELEVATION - UNIT 9 EASTBOUND |
| 8 FRAMING PLAN - UNIT 5 WESTBOUND | 41 GIRDER ELEVATION - UNIT 9 EASTBOUND |
| 9 GIRDER ELEVATION - UNIT 5 WESTBOUND | 42 GIRDER ELEVATION - UNIT 9 EASTBOUND |
| 10 GIRDER ELEVATION - UNIT 5 WESTBOUND | 43 GIRDER ELEVATION - UNIT 9 EASTBOUND |
| 11 FRAMING PLAN - UNIT 5 EASTBOUND | 44 FRAMING PLAN - UNIT 10 WESTBOUND |
| 12 GIRDER ELEVATION - UNIT 5 EASTBOUND | 45 GIRDER ELEVATION - UNIT 10 WESTBOUND |
| 13 GIRDER ELEVATION - UNIT 5 EASTBOUND | 46 FRAMING PLAN - UNIT 10 EASTBOUND |
| 14 FRAMING PLAN - UNIT 6 WESTBOUND | 47 GIRDER ELEVATION - UNIT 10 EASTBOUND |
| 15 GIRDER ELEVATION - UNIT 6 WESTBOUND | 48 FIELD SPLICES - UNITS 5, 6, 7 AND 10 |
| 16 GIRDER ELEVATION - UNIT 6 WESTBOUND | 49 FIELD SPLICES - UNITS 8 AND 9 |
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| 18 GIRDER ELEVATION - UNIT 6 EASTBOUND | 51 GIRDER EXPANSION JOINTS |
| 19 GIRDER ELEVATION - UNIT 6 EASTBOUND | 52 GIRDER EXPANSION JOINTS |
| 20 FRAMING PLAN - UNIT 7 WESTBOUND | 53 GIRDER EXPANSION JOINTS |
| 21 GIRDER ELEVATION - UNIT 7 WESTBOUND | 54 MISCELLANEOUS DETAIL |
| 22 GIRDER ELEVATION - UNIT 7 WESTBOUND | 55 DIAPHRAGM DETAILS |
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| 24 GIRDER ELEVATION - UNIT 7 EASTBOUND | 57 FLOOR BEAMS - UNIT 9 EASTBOUND |
| 25 GIRDER ELEVATION - UNIT 7 EASTBOUND | 58 LATERAL DETAILS |
| 26 FRAMING PLAN - UNIT 8 WESTBOUND | 59 BEARING DEVICES |
| 27 GIRDER ELEVATION - UNIT 8 WESTBOUND | |
| 28 GIRDER ELEVATION - UNIT 8 WESTBOUND | |
| 29 GIRDER ELEVATION - UNIT 8 WESTBOUND | |
| 30 GIRDER DETAILS - UNIT 8 WESTBOUND | |
| 31 FRAMING PLAN - UNIT 8 EASTBOUND | |
| 32 GIRDER ELEVATION - UNIT 8 EASTBOUND | |
| 33 DEAD LOAD DEFLECTION AND CAMBER DIAGRAM UNIT 8 & 9 | |

GENERAL NOTES

- DESIGN SPECIFICATIONS: AASHTO, 1977 and Interim Specifications, 1978. Load Factor Design.
- DESIGN LOADING: HS20-44 and Alternate Military Loading with 15 #/ sq. ft. for future wearing surfacing. Fatigue Stress: Case I.
- CONSTRUCTION SPECIFICATIONS: Missouri Standard Specifications for Highway Construction, 1981
- DESIGN UNIT STRESSES:
- | | |
|-----------|----------------------------|
| ASTM A36 | $f_y = 36,000 \text{ psi}$ |
| ASTM A572 | $f_y = 50,000 \text{ psi}$ |
| ASTM A588 | $f_y = 50,000 \text{ psi}$ |
- UTILITIES: All utilities, unless shown otherwise, shall be removed or relocated by others. The Contractor shall notify the owner of the utilities of his work schedule sufficiently in advance to allow time for disposition of utilities.
- CONSTRUCTION CLEARANCES: A minimum vertical clearance of 22'-9" from top of rails and a minimum lateral clearance of 8'-6" from the centerline of track to nearest temporary construction falsework shall be maintained during construction for railroads. The Contractor must maintain a 13'-6" vertical by 28'-0" horizontal opening for city streets during construction.
- ANCHOR BOLTS: Anchor bolts of the diameters shown shall be drilled and grouted at the locations shown.
- PLATE GIRDERS: Bolts shall be ASTM A325 7/8" with 3/4" holes, unless otherwise shown or noted.
By approval of the Engineer, the Contractor may omit any shop splice, if desired, by extending the heavier plate and providing approved modifications of details of field splices and elsewhere as required. All costs of any required design, plan revisions or rechecking of shop drawings shall be borne by the Contractor. Payweight in any case will be based on material shown on design plans.
- WELDING: Shop welded web splices may be fabricated by the Contractor when detailed on the drawings and approved by the Engineer. No additional payment will be made for optional shop welded web splices.
All shop web splices shall be located at least 1'-0" from shop flange splices.
By approval of the Engineer, the Contractor may, if desired, substitute a shop welded splice for field bolted splices by providing approved modifications of details required. All cost shall be borne by the Contractor. Payweight in any case shall be based on materials shown on the design plans.
- ERECTION: Dimensions between ϵ of bearing shall be checked in field before fabrication of girders. Contractor will be responsible for proper fit.
- GIRDER CAMBER: Plate girders shall be fabricated to conform with the camber diagrams. Camber includes allowance for vertical curvature, superelevation transition and dead load deflection due to slab and structural steel.
- ELECTRICAL GROUNDS: Electrical grounds have been provided at the following locations:
Bents 14WB, 16WB, 22WB - South side of Girder B
Bents 25WB, 27WB, 29WB - South side of Girder G
Bents 14EB, 18EB, 22EB - North side of Girder M
Bents 25EB, 27EB - North side of Girder N
Bent 29EB - North side of Girder E.
Each grounding conductor which protrudes above the cap beam or column shall be exothermically welded to the nearest girder web. Cost shall be included in the unit price bid for other items in the Contract.
- ANCHOR BOLTS: Anchor bolts for bearings shall be furnished and installed with fabricated structural steel.
- PAINTING: See Special Provisions



LOCATION SKETCH

DESIGNED 1079
DETAILED 1079
CHECKED 1079

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1 of 2

BRIDGE I-670 VIADUCT

STATE ROAD - INTERSTATE ROUTE 670

IN KANSAS CITY

PROJECT NO. IDG-670-1(2) STA. 52+79.857 KANSAS STATE LINE

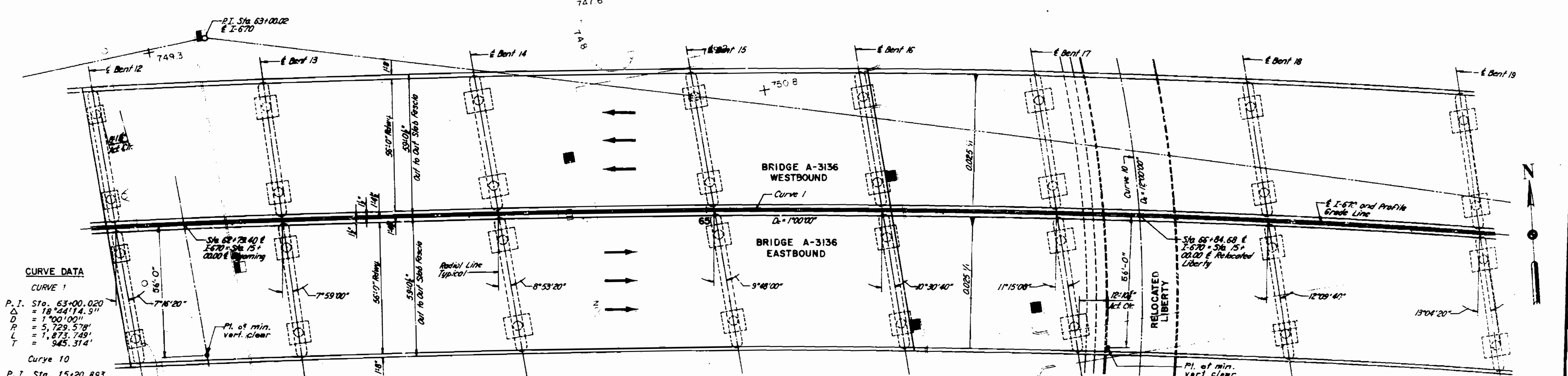
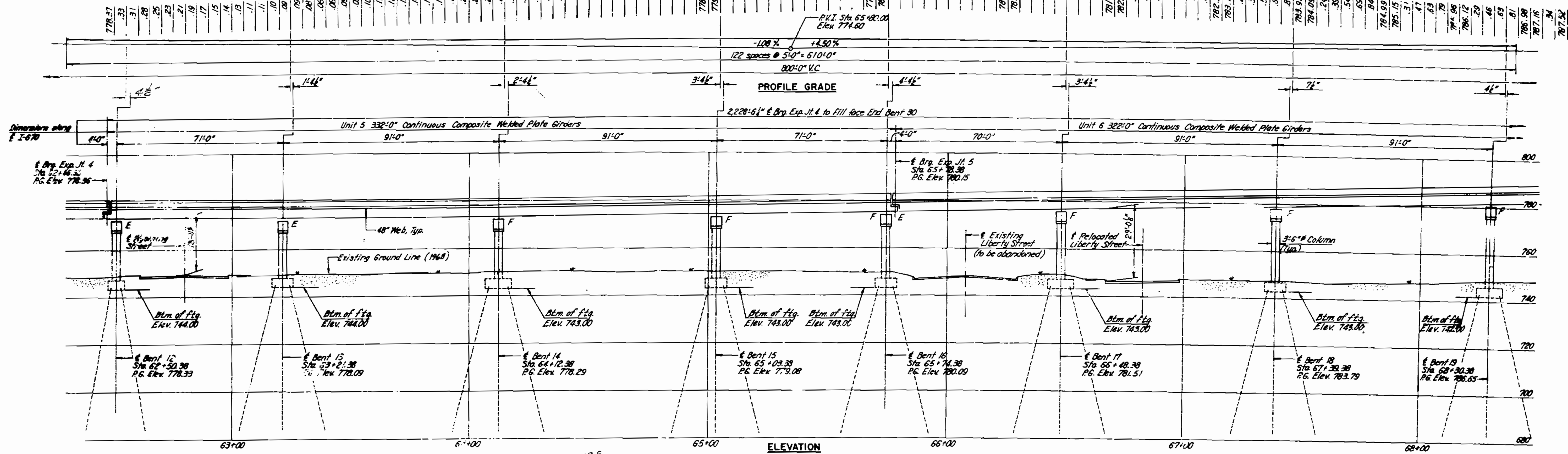
JOB NO. 4 I-670 46D RTE. I-670

JACKSON COUNTY

DATE 1/1/83

STD.
STD.
A-3136

NO.	DATE	BY	CHKD.	APP'D.	REVISION
1					



CURVE DATA

CURVE 1

P.I. Sta. 63+00.020
 Δ = 18°44'14.91"
 D = 1'00'00"
 R = 5,729.578'
 L = 1,873.748'
 T = 945.314'

Curve 10

P.I. Sta. 15+20.893
 Δ = 48°24'12.54"
 D = 12'00'00"
 R = 477.465'
 L = 403.362'
 T = 214.595'

BENCH MARKS

H-71 R.R. spike in N. side of base of P.P., S.E. corner of 12th St. and Genessee. Elev. 748.63

H-72 Top of head of arrow on top of fire hydrant, S.E. corner of 12th St. and Wyoming. Elev. 751.18

H-74 "X" in N. bolt in top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 750.95

H-75 "X" in N. bolt in top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E. side of Wyoming. Elev. 752.18

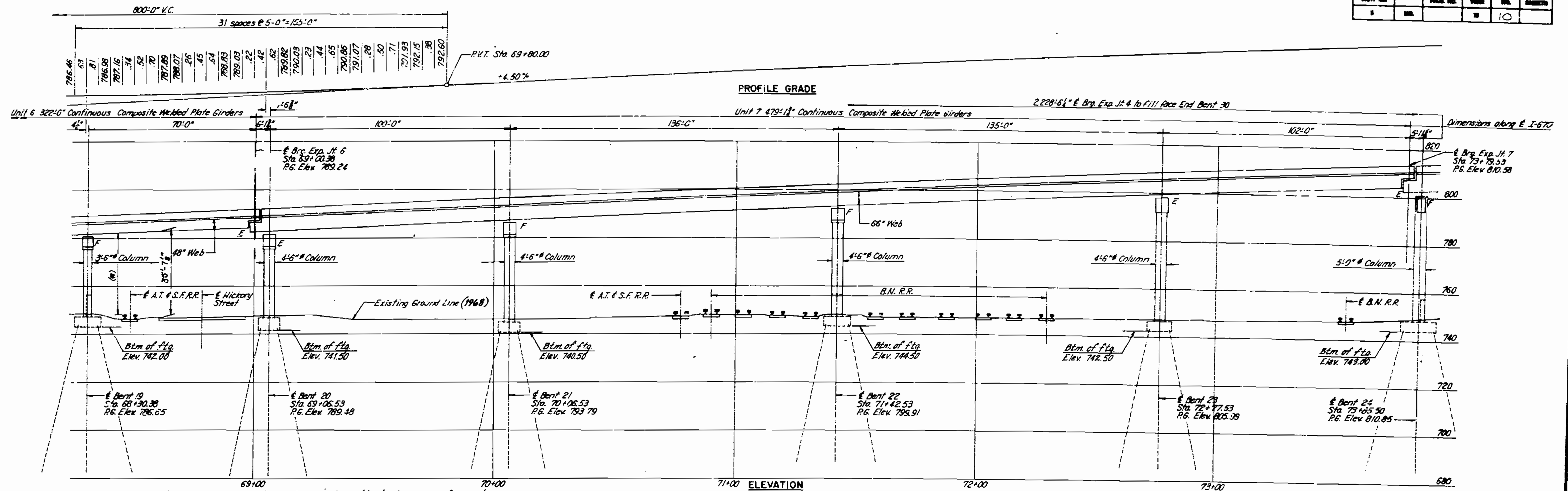
Note: This drawing is not to scale. Follow dimensions.

DETAILED 1978
 CHECKED 1978

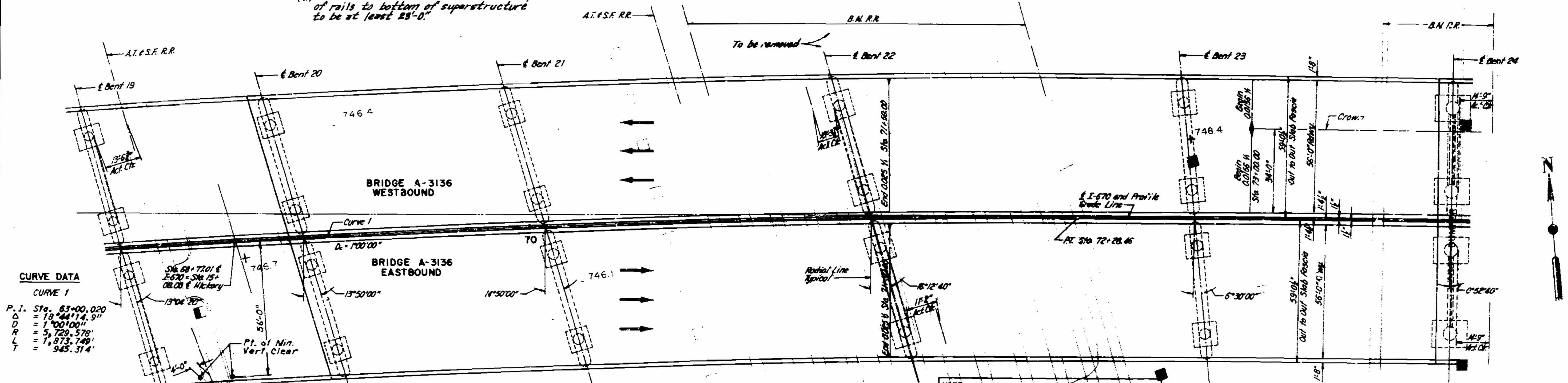
GENERAL PLAN AND ELEVATION
 JACKSON COUNTY
 A-3136

Sheet No. 2 of 59.

FILE NO.	DATE	BY	CHKD.	APP'D.	TITLE
1					



(* Note: Final vertical clearance from top of rails to bottom of superstructure to be at least 23'-0".



CURVE DATA
 CURVE 1
 P.I. Sta. 63+00.020
 Δ = 18°44'14.91"
 D = 100'00"
 R = 5,729.578'
 L = 1,873.749'
 T = 945.314'

BENCH MARKS
 H-71 R.R. spike in N. side of base of P.P., S.E. corner of 12th St. and Genesee. Elev. 748.63
 H-72 Top of head of arrow on top of fire hydrant, S.E. corner of 12th St. and Wyoming. Elev. 751.12
 H-74 "X" in N. bolt in top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 750.95
 H-75 "X" in N. bolt in top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E. side of Wyoming. Elev. 752.18

NOTE:
 The information shown on this drawing concerning type and location of underground utilities is not guaranteed to be accurate or all inclusive. The Contractor is responsible for making his own determination as to the type and location of underground utilities as may be necessary to avoid damage thereto.

DETAILED 10/78
 CHECKED 10/78

GENERAL PLAN AND ELEVATION

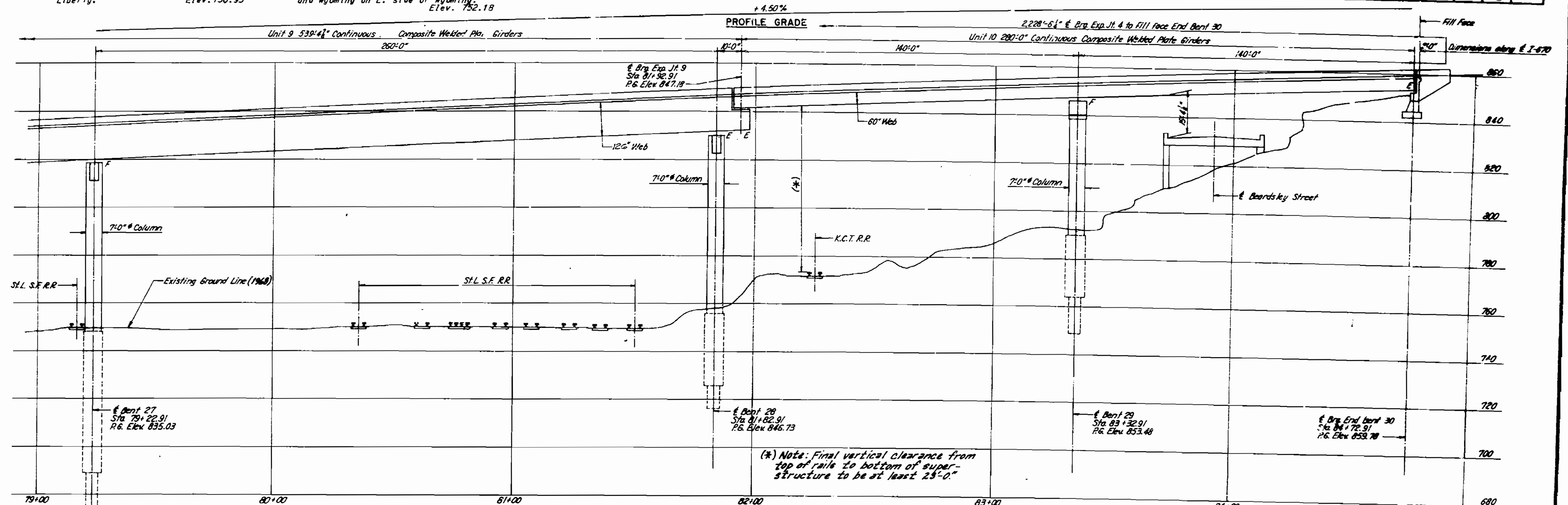
JACKSON COUNTY A-3136

Sheet No. 3 of 59.

BENCH MARKS

H-74 "X" in N. bolt in Top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 750.95
 H-75 "X" in N. bolt in Top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E. side of Wyoming. Elev. 752.18

DATE	BY	CHECKED	SCALE
			1" = 40'



(* Note: Final vertical clearance from top of rails to bottom of superstructure to be at least 25'-0"

NOTE: The information shown on this drawing 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.

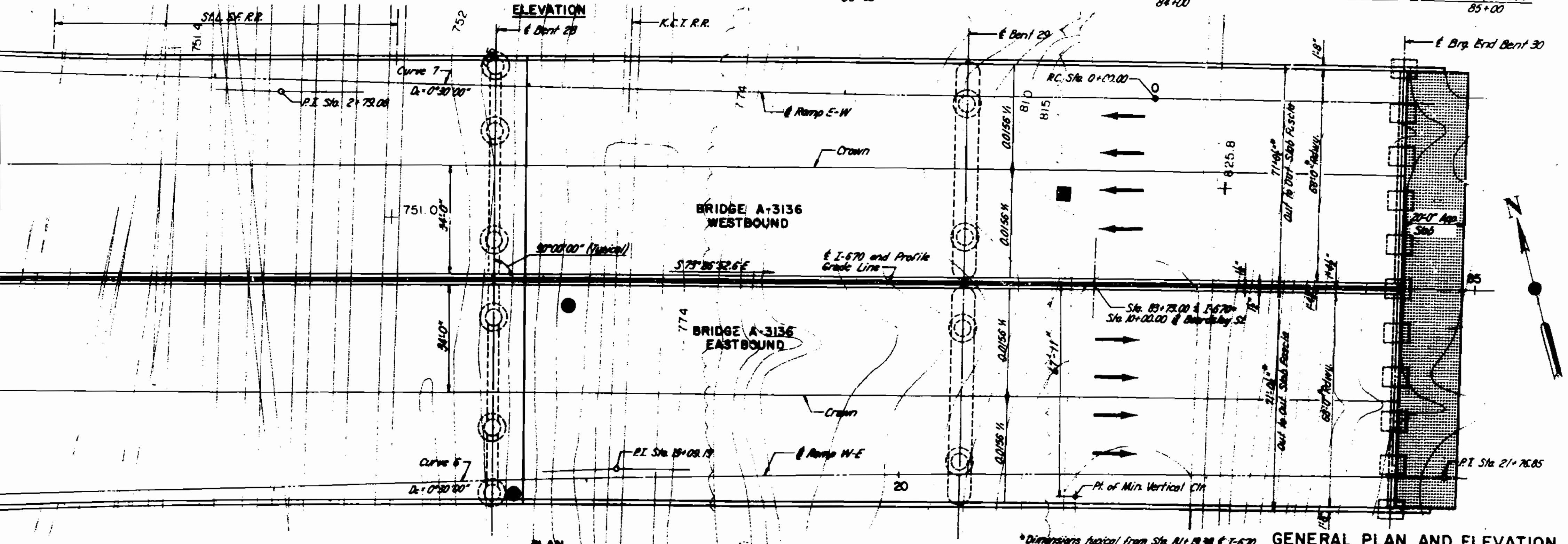
CURVE DATA

CURVE 6
 P.I. Sta. 19+03.190
 A = 2+40.37.8
 D = 0°30'00"
 R = 11,459.156'
 L = 535.422'
 T = 267.760'

CURVE 7
 P.I. Sta. 2+79.061
 A = 2+47'24.21"
 D = 0°30'00"
 R = 11,459.156'
 L = 558.011'
 T = 279.061'

S/L S.F.R.R. to be removed

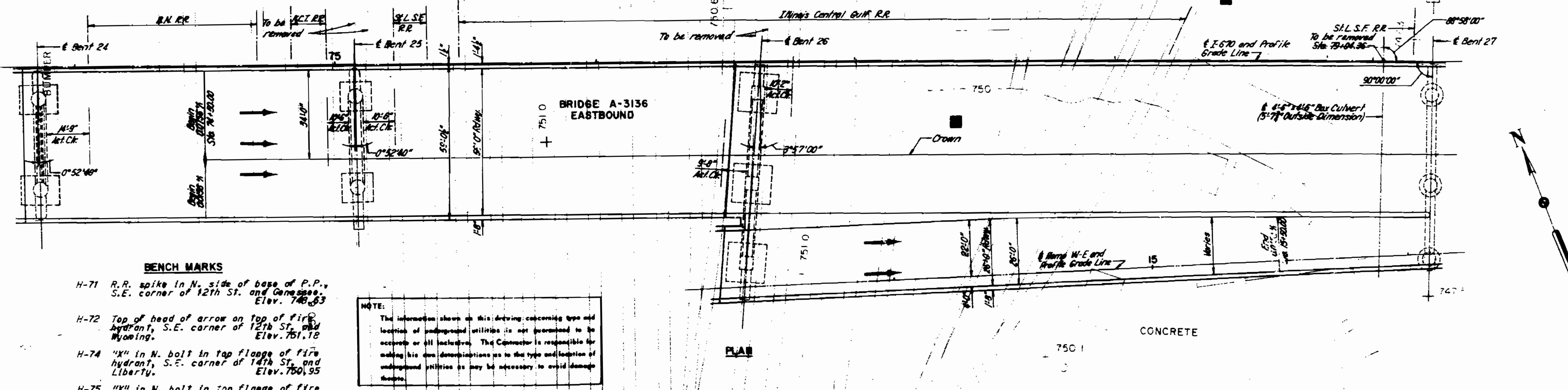
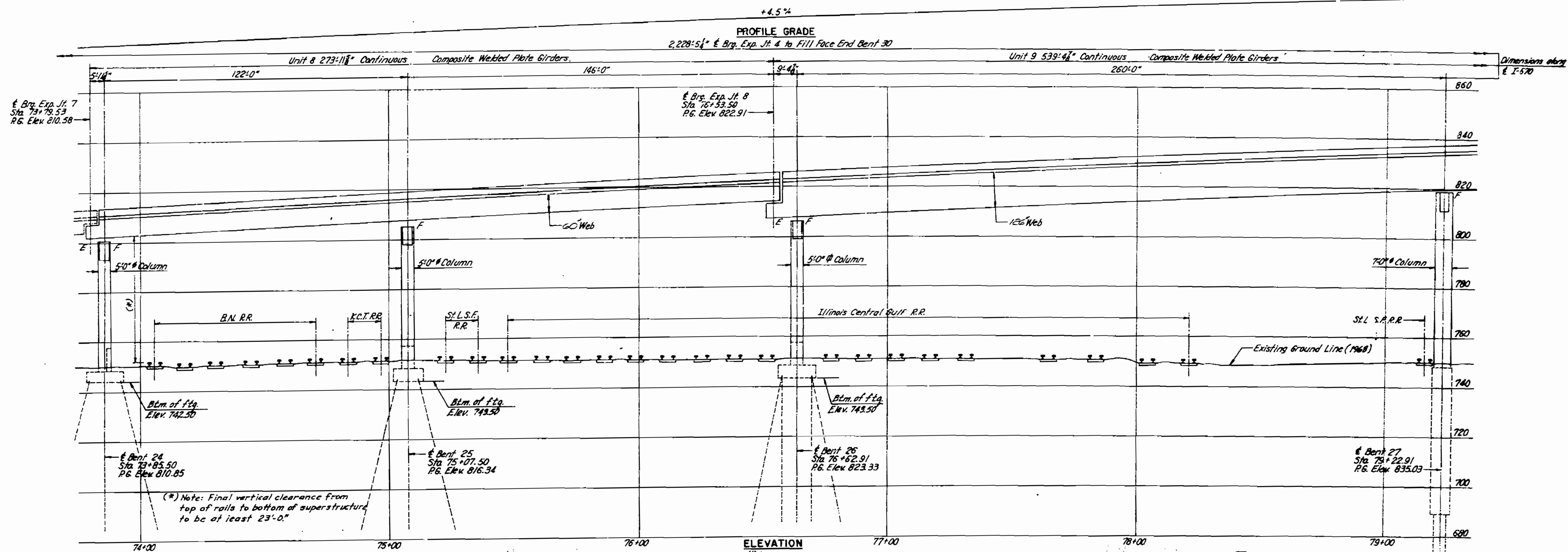
DETAILED 1972
 CHECKED 1:78



Note: This drawing is not to scale. Follow dimensions.

* Dimensions typical from Sta 81+13.30 E-I-670 Eastbound Lane and Sta 31+36.00 of Ramp E-W to Fill Face End Bent 30.

NO.	DATE	BY	CHKD.	APP.
1				
2				



- BENCH MARKS**
- H-71 R.R. spike in N. side of base of P.P., S.E. corner of 12th St. and Genesee. Elev. 746.83
 - H-72 Top of head of arrow on top of fire hydrant, S.E. corner of 12th St. and Wyoming. Elev. 751.18
 - H-74 "X" in N. bolt in top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 750.95
 - H-75 "X" in N. bolt in top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E.F. side of Wyoming. Elev. 752.18

NOTE:
The information shown on this drawing concerning type and location of underground utilities is not guaranteed to be correct 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.

DESIGNED 1077
CHECKED 1078

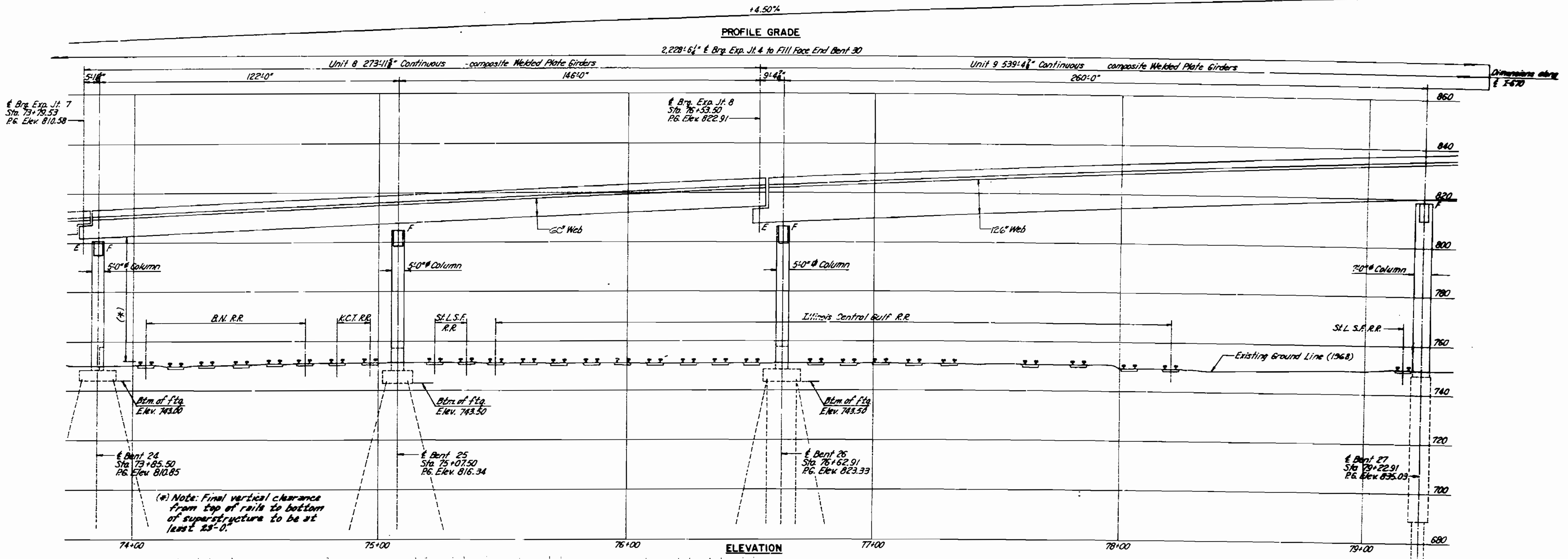
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 5 of 59.

GENERAL PLAN AND ELEVATION

JACKSON COUNTY A-3136

NO.	DATE	BY	CHKD.	APP.



(* Note: Final vertical clearance from top of rails to bottom of superstructure to be at least 23'-0".

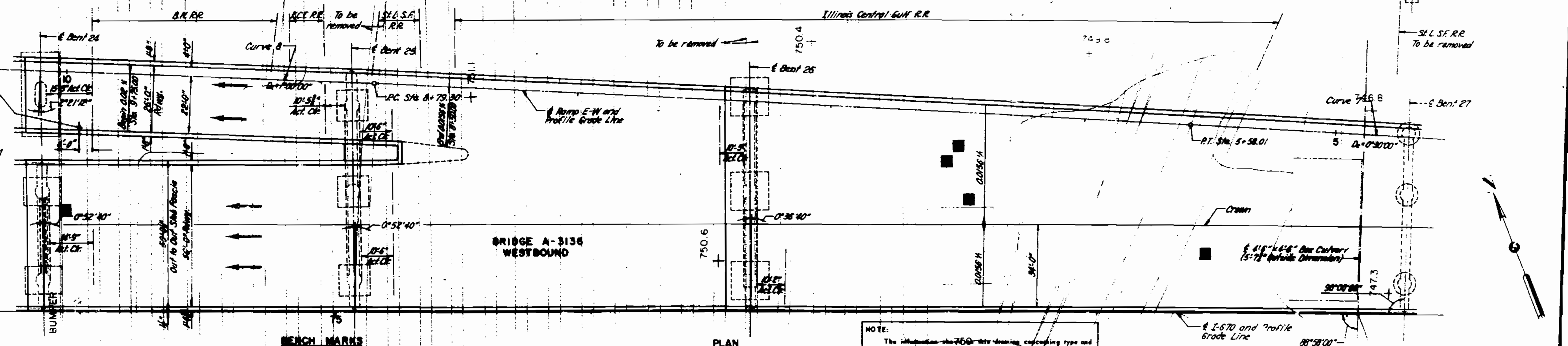
CURVE DATA

CURVE 8

P.I. Sta. 12+75.681
 Δ = 7°54'54.0"
 D = 1°00'00"
 R = 5,729.578'
 L = 791.499'
 T = 396.380'

CURVE 7

P.I. Sta. 2+79.061
 Δ = 2°47'24.2"
 D = 0°30'00"
 R = 11,459.156'
 L = 558.011'
 T = 279.061'



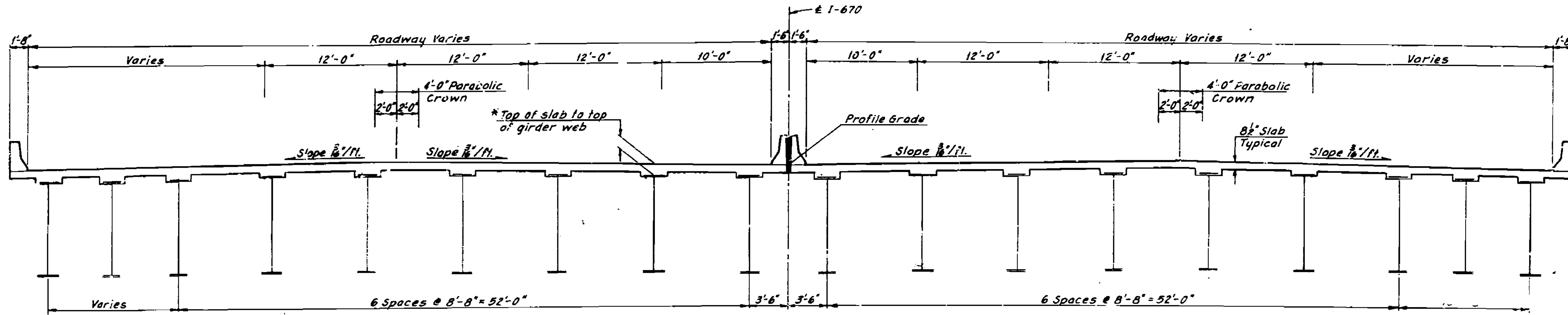
- BENCH MARKS**
- H-71 R.R. spike in N. side of base of P.R., S.E. corner of 12th St. and Wyoming. Elev. 740.63
 - H-72 Top of base of arrow on top of fire hydrant, S.E. corner of 12th St. and Wyoming. Elev. 751.18
 - H-74 " " in N. wall in top flange of fire hydrant, S.E. corner of 14th St. and Liberty. Elev. 750.95
 - H-75 " " in N. wall in top flange of fire hydrant, 1st hydrant S. of 14th St. and Wyoming on E. side of Wyoming. Elev. 752.18

NOTE:
 The information shown on this drawing 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.

DESIGNED 10 78
 CHECKED 10 78

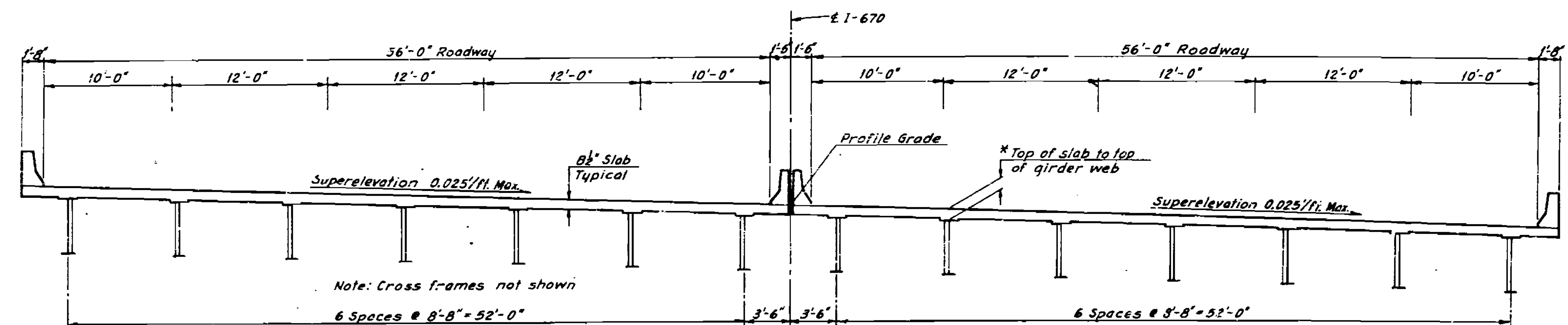
Sheet No. 4 of 59.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		88	14	

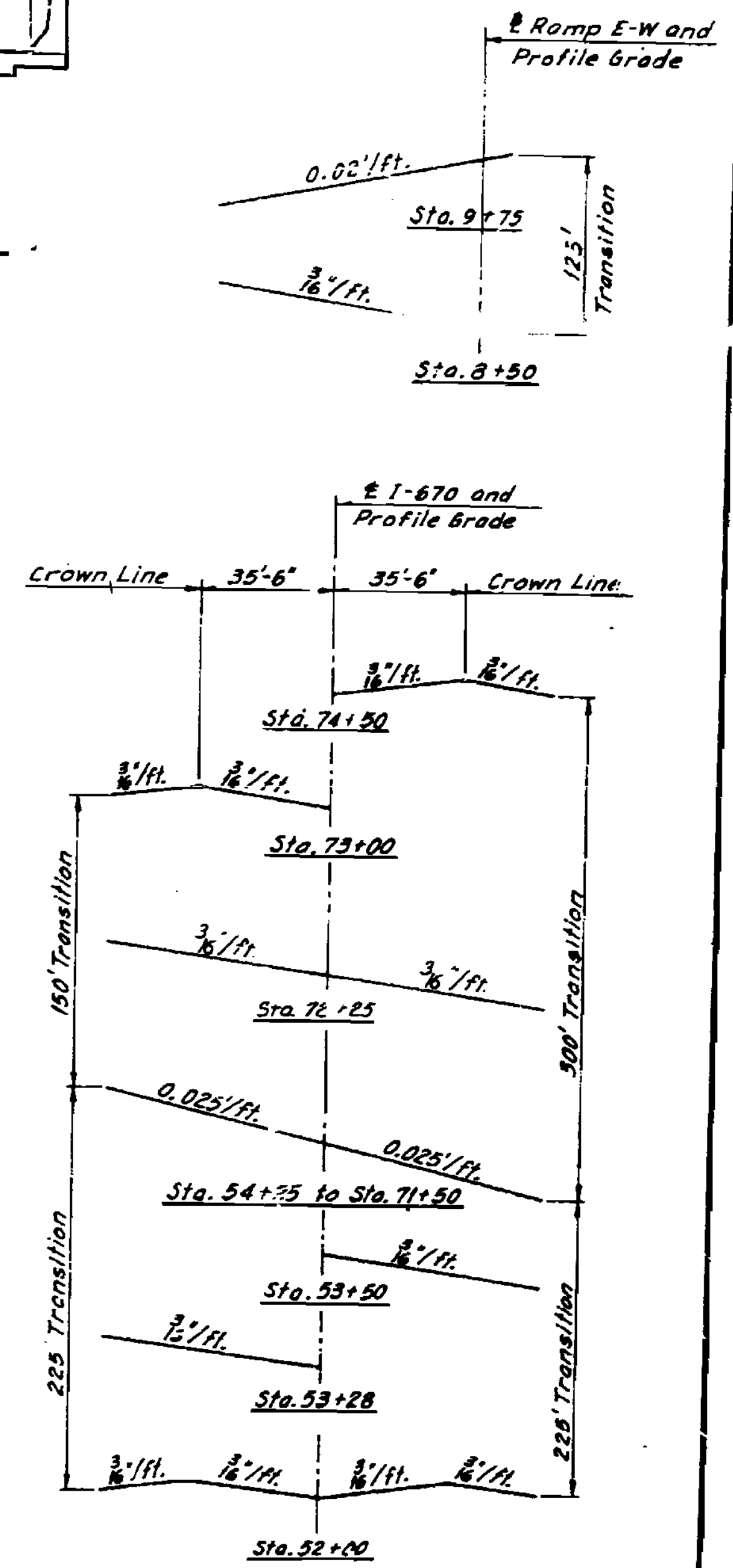


TYPICAL SECTION - UNITS 8-9 & 10

- * Units 5 & 6 - 10 1/2"
- Unit 7 - 11"
- Unit 8 - 11 1/2"
- Unit 9 - 11 1/2"
- Unit 10 - 1 1/2"



TYPICAL SECTION - UNITS 5, 6 AND 7



WESTBOUND EASTBOUND
SUPERELEVATION TRANSITIONS

ITEM	UNIT	ESTIMATED QUANTITIES														
		WESTBOUND LANE SUPERSTRUCTURE							EASTBOUND LANE SUPERSTRUCTURE							TOTAL
		UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10	TOTAL	UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10	TOTAL	
Fabricated Structural Carbon Steel	Pound	352,940	340,300	542,580	878,670	526,200	373,190	3,013,880	353,080	340,700	545,270	536,460	1,321,900	373,190	3,470,600	6,484,420
Fabricated Structural Low Alloy Steel (A-572)	Pound	77,360	88,490	196,710	—	1,932,210	198,980	2,493,750	77,360	88,470	158,330	—	1,417,200	198,980	1,940,340	4,434,090
Fabricated Structural Steel Bearings	Pound	12,910	5,380	15,880	8980	29,400	9,090	81,640	12,910	5,380	15,880	5700	29,980	9,090	78,940	160,580
Fabricated Structural Low Alloy Steel (A-588)	Pound	—	—	—	—	42,130	—	42,130	—	—	—	—	—	—	—	42,130

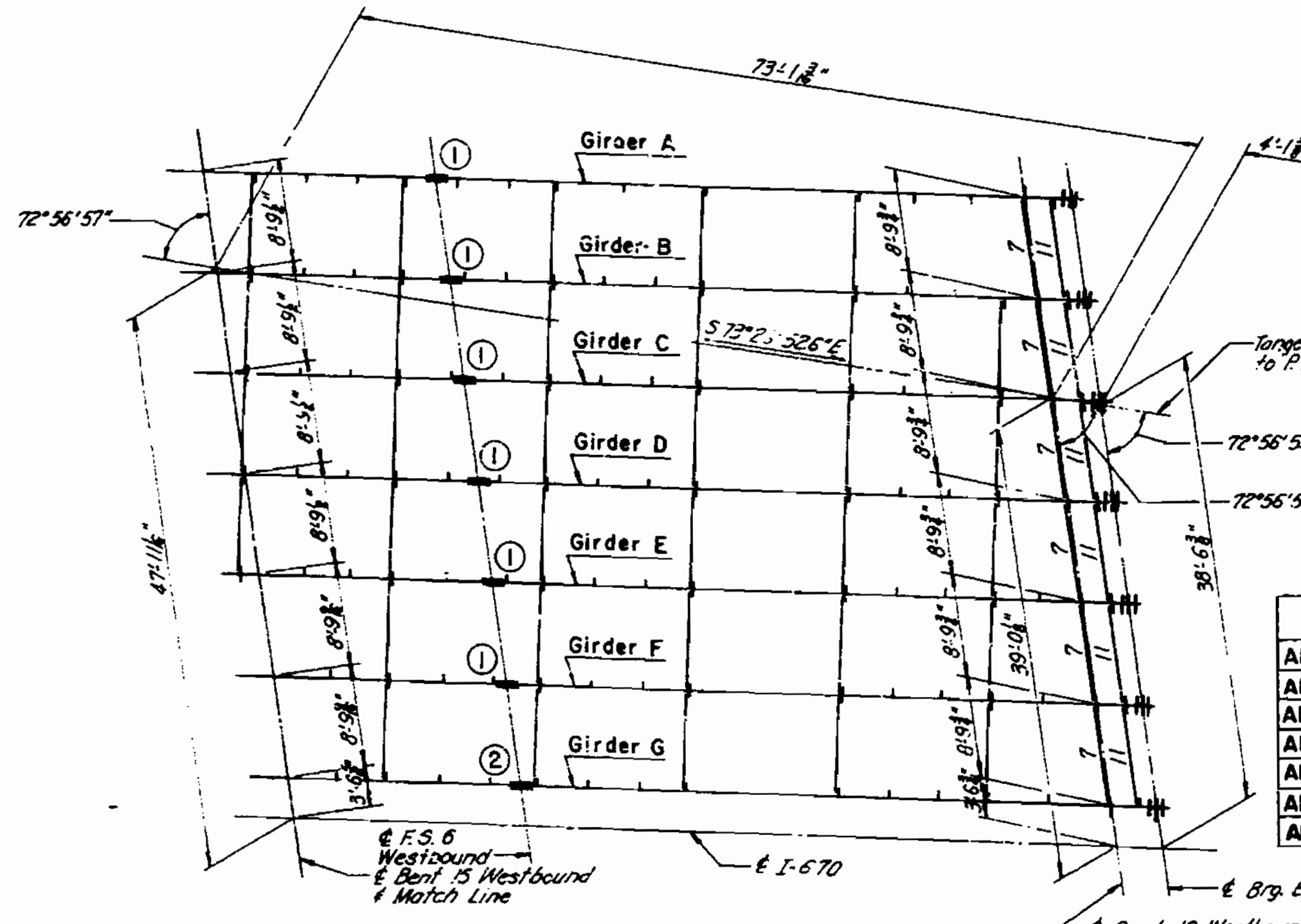
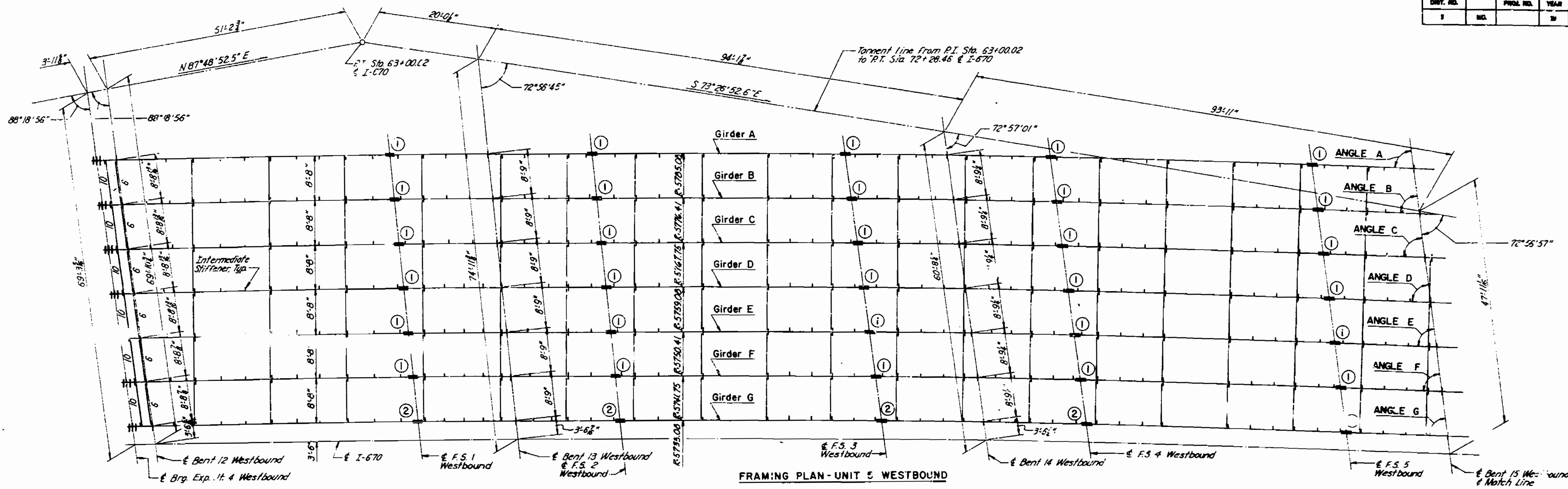
SUMMARY OF QUANTITIES AND TYPICAL SECTIONS

DETAILED 1979
CHECKED 1979

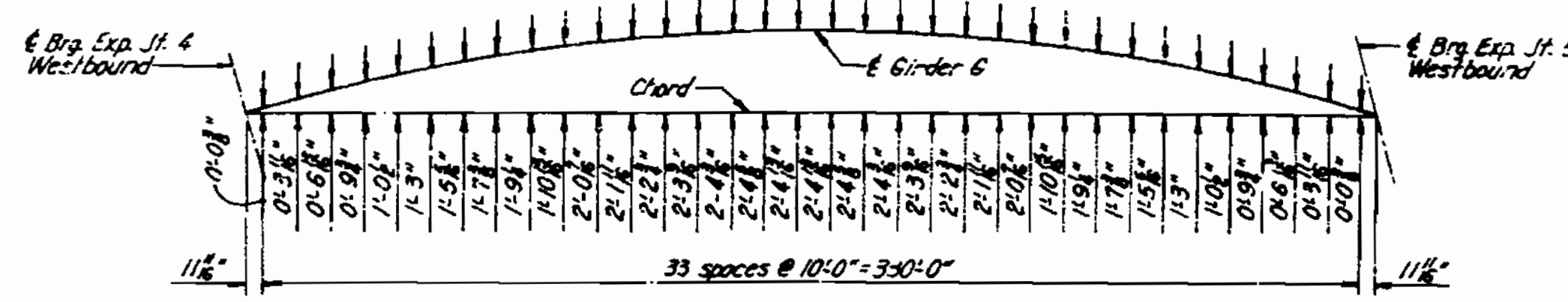
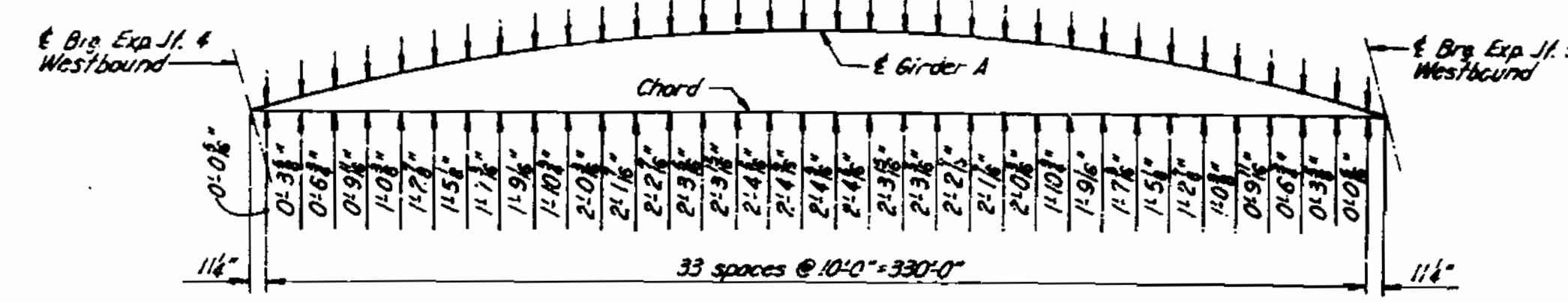
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 7 of 59.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		8	15	



FRAMING PLAN - UNIT 5 WESTBOUND



CHORD OFFSETS TO EXTERIOR GIRDERS

ANGLE	BRGEXPT. 4	BENT 12	BENT 13	BENT 14	BENT 15	BENT 16
ANGLE A	82°50'15"	82°47'53"	82°05'38"	81°11'49"	80°17'42"	79°35'27"
ANGLE B	82°49'36"	82°47'13"	82°04'55"	81°11'02"	80°16'49"	79°34'30"
ANGLE C	82°48'57"	82°46'34"	82°04'12"	81°10'14"	80°15'56"	79°33'33"
ANGLE D	82°48'18"	82°45'55"	82°03'29"	81°09'25"	80°15'03"	79°32'36"
ANGLE E	82°47'39"	82°45'15"	82°02'45"	81°08'37"	80°14'09"	79°31'39"
ANGLE F	82°47'00"	82°44'36"	82°02'01"	81°07'45"	80°13'16"	79°30'41"
ANGLE G	82°46'20"	82°43'55"	82°01'18"	81°07'00"	80°12'22"	79°29'43"

Notes:
 For Field Splice Details see Sheet 48.
 For Diaphragm Details see Sheet 55.
 The angle shown in the Table is the angle between \perp of Bent or \perp of Bearing of Expansion Joint and a local tangent to the girder at the location indicated.
 ① designates type of field splice.
 Dimensions shown are horizontal.
 6, 7, 10 and 11 near diaphragms denotes diaphragm type. The diaphragms with no number by them are Type 1.
 Intermediate stiffener plates are 3x4 and they are equally spaced between diaphragms where shown except in the area of the field splices. In these areas they are to be placed on whichever side of the splice that will make the spacing more nearly equal.
 Diaphragm connection plates are 3x4.

Note: Intermediate stiffener plates shall be placed on the side of the girder web as indicated on the framing plan.

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 8 of 59.

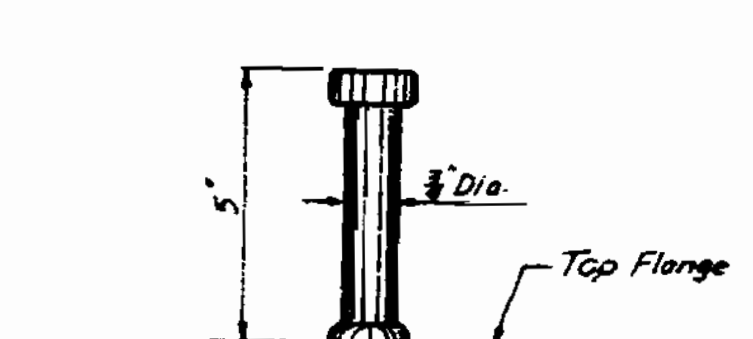
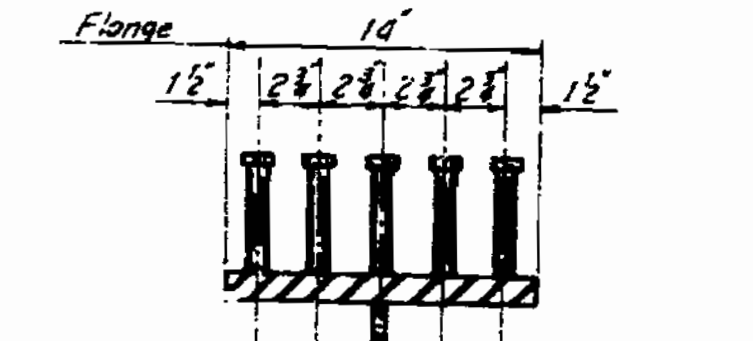
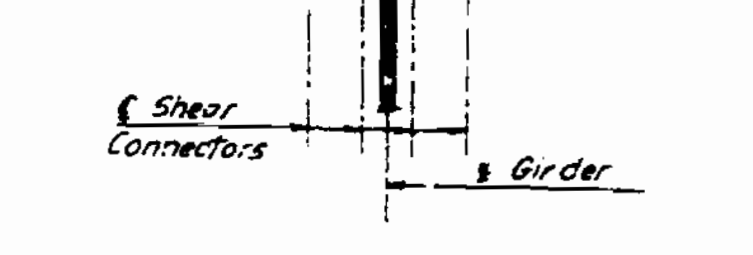
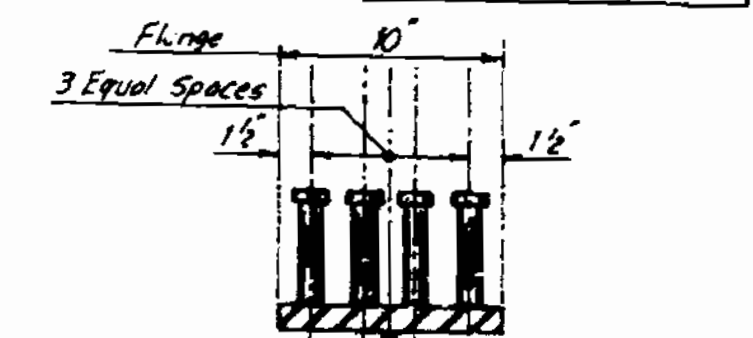
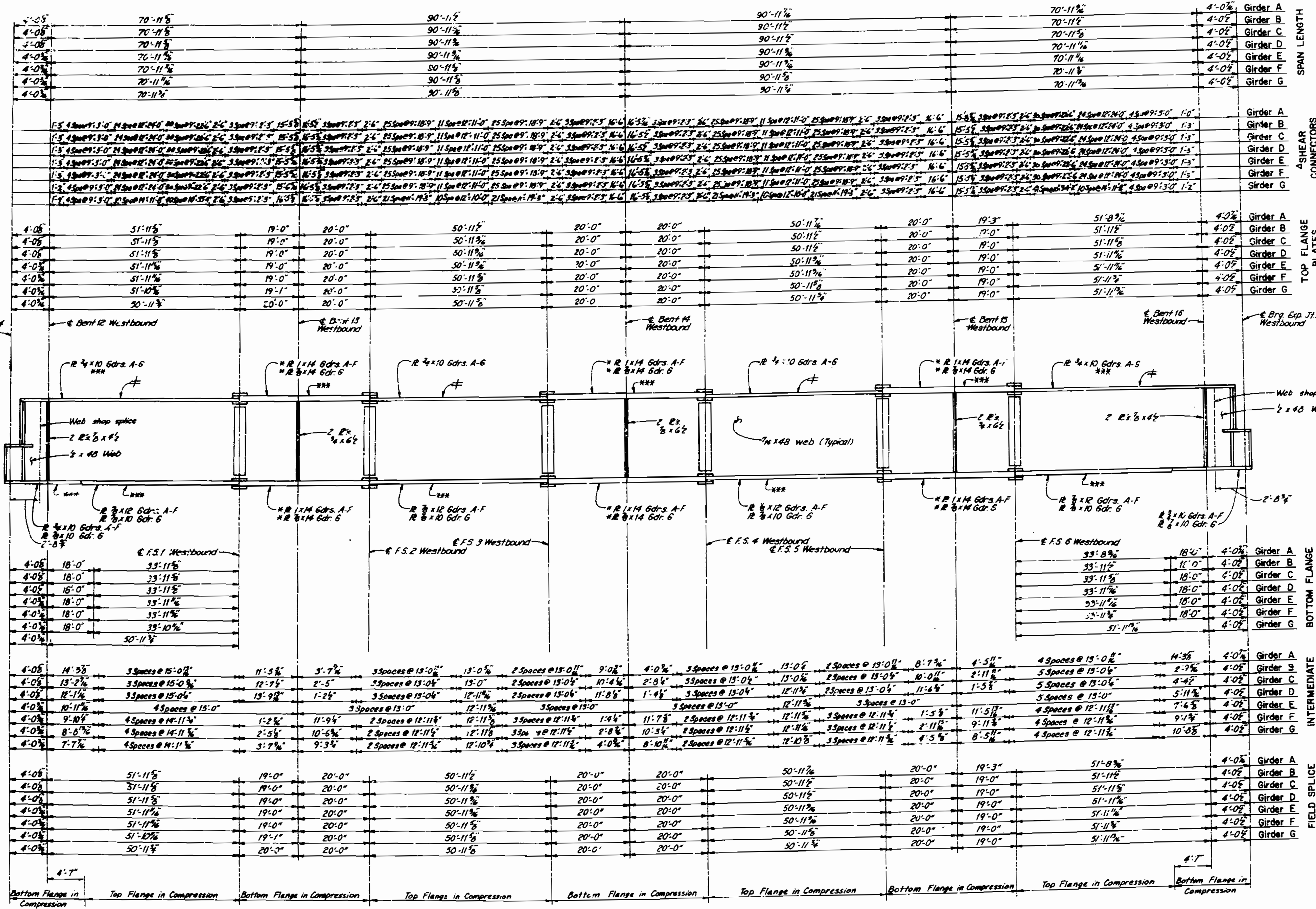
DETAILED 10 78
 CHECKED 10 79

FRAMING PLAN - UNIT 5 WESTBOUND

JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.			16	



Note: Shear connectors are not to be furnished or installed with the Structural Steel Contract.

Notes: All flanges are A-36 Steel unless noted otherwise. * Denotes A-572 Low Alloy Steel. All webs are A-36 Steel. *** Indicates Flange Plates subject to notch toughness requirement.

All web plates shall be subject to notch toughness requirements. Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade. All dimensions are at top of web along grade and at girder. Most curving of girder sections denoted by ± will not be allowed while in the horizontal position.

GIRDER ELEVATION - UNIT 5 WESTBOUND

DETAILED 1878
CHECKED 1879

GIRDER ELEVATION - UNIT 5

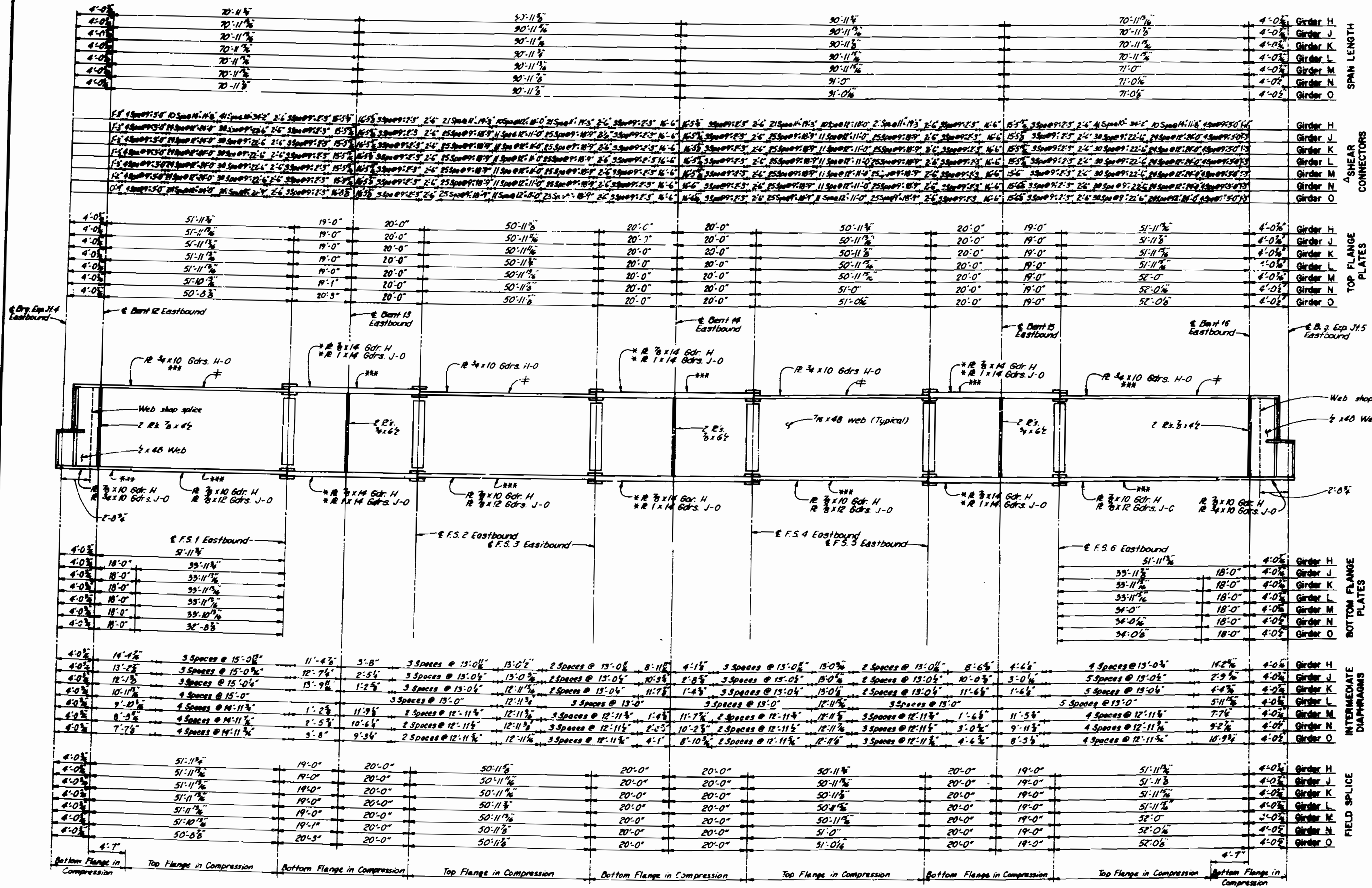
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 9 of 59.

JACKSON COUNTY

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REV.	DATE	BY	CHKD.	APP.
1				



Note: For 'Shear Connector Details' see Sheet 9. Shear connectors are not to be furnished or installed with the Structural Steel Contract.

Notes: All flanges are A-36 Steel unless noted otherwise. * Denotes A-572 Low Alloy Steel. All webs are A-36 Steel. *** indicates Flange Plate subject to notch toughness requirements.

All web plates shall be subject to notch toughness requirements. Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade. All dimensions are at top of web along grade. Head carry of girder sections denoted by ± will not be allowed while in the horizontal position.

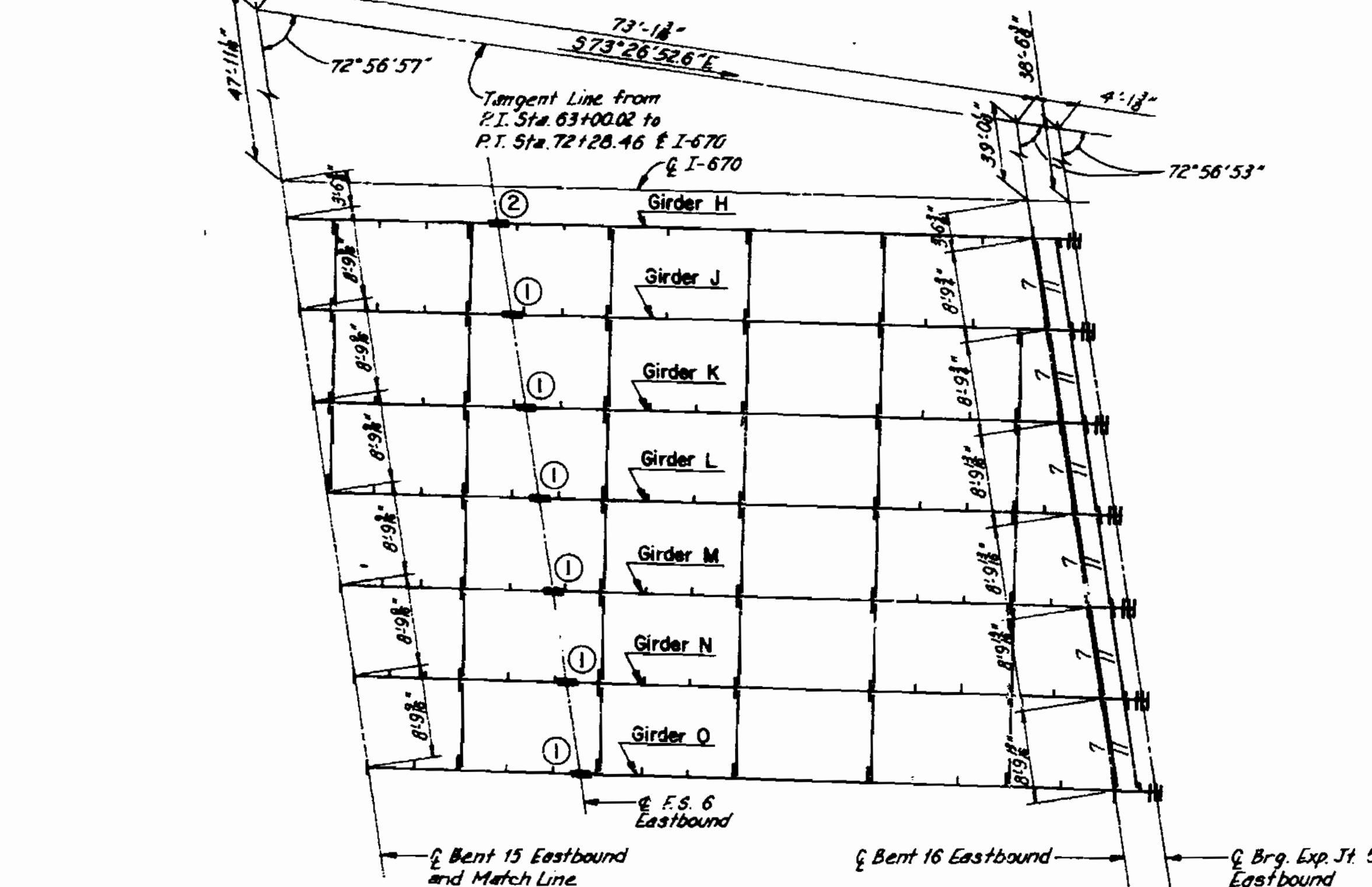
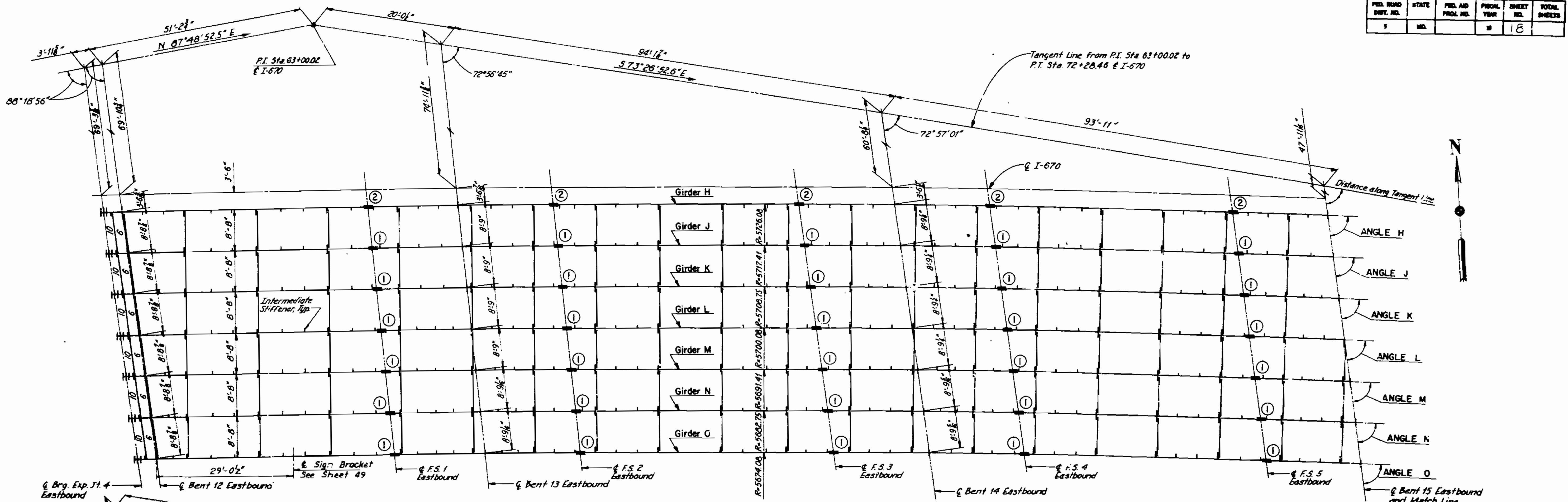
DETAILS 1078
CHECKED 1079

GIRDER ELEVATION - UNIT 5

GIRDER ELEVATION - UNIT 5 EASTBOUND

Note: This drawing is not to scale. Follow dimensions.

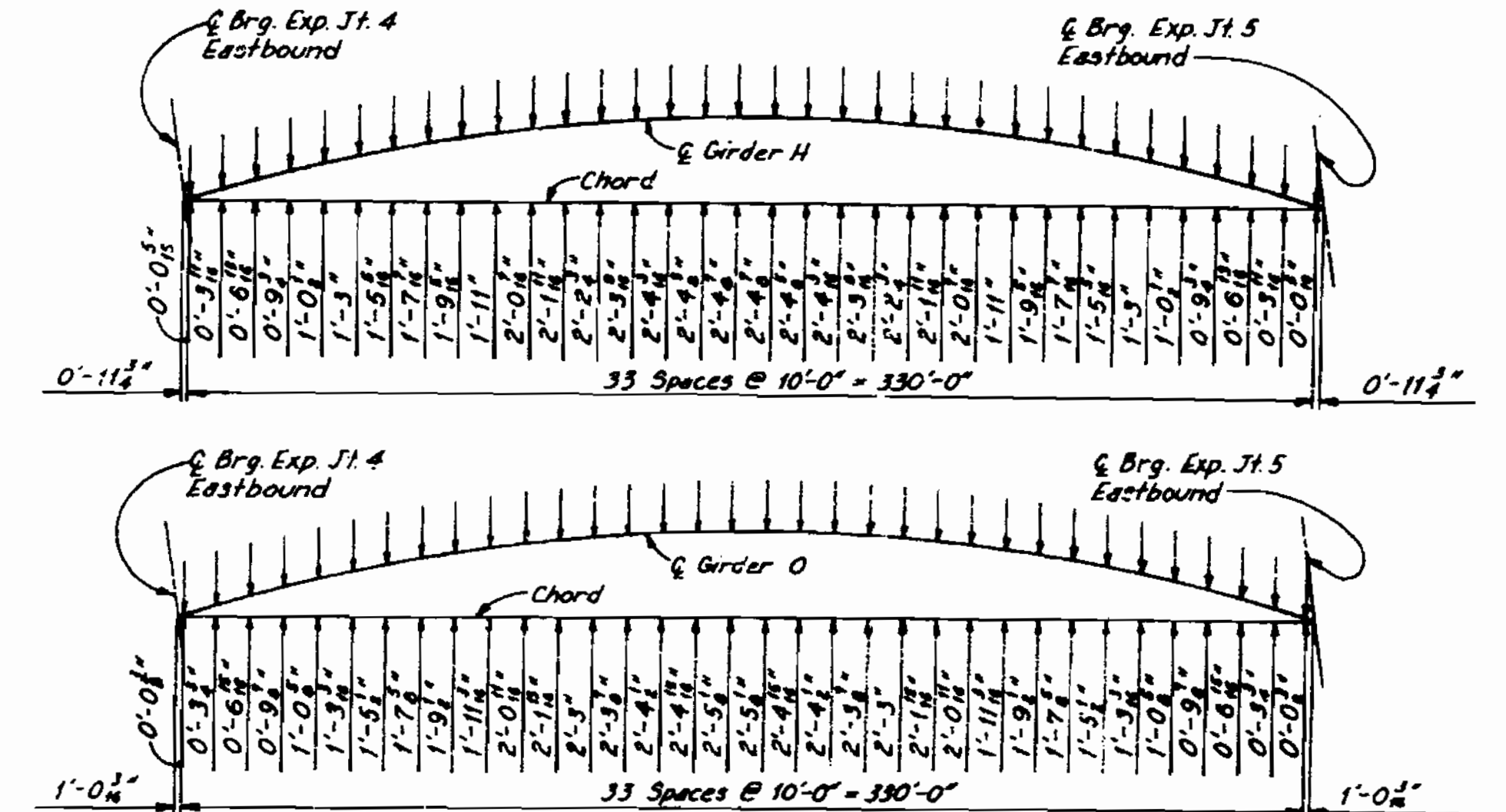
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		8	18	



ANGLE	BRG. EXP. JT. 4	BENT 12	BENT 13	BENT 14	BENT 15	BENT 16
ANGLE H	82°45'48"	82°43'24"	82°00'42"	81°06'20"	80°11'38"	79°28'57"
ANGLE J	82°45'08"	82°42'44"	81°59'58"	81°05'31"	80°10'44"	79°27'59"
ANGLE K	82°44'29"	82°42'04"	81°59'14"	81°04'42"	80°09'50"	79°27'00"
ANGLE L	82°43'49"	82°41'24"	81°58'30"	81°03'53"	80°08'56"	79°26'02"
ANGLE M	82°43'08"	82°40'44"	81°57'46"	81°03'04"	80°08'01"	79°25'03"
ANGLE N	82°42'28"	82°40'03"	81°57'02"	81°02'14"	80°07'06"	79°24'05"
ANGLE O	82°41'48"	82°39'23"	81°56'17"	81°01'24"	80°06'11"	79°23'06"

Notes:

For Field Splice Details see Sheet 48.
 For Diaphragm Details see Sheet 55.
 The angle shown in the table is the angle between Q of Bent or Q of Bearing of Expansion Joint and a local tangent to the girder at the location indicated.
 ① designates type of field splice.
 Dimensions shown are horizontal.
 6, 7, 10 and 11 near diaphragms denotes diaphragm type. The diaphragms with no number by them are type 1.
 Intermediate stiffener plates are 1/4" and they are equally spaced between diaphragms where shown except in the area of the field splices. In these areas they are to be placed on whichever side of the splice that will make the spacing more nearly equal.
 Diaphragm connection plates are 1/4".
 Intermediate stiffener plates shall be placed on the side of the girder web as indicated on the framing plan



CHORD OFFSETS TO EXTERIOR GIRDERS UNIT 5

FRAMING PLAN UNIT 5

FRAMING PLAN - UNIT 5 EASTBOUND

DETAILED 1070
 CHECKED 1077

Note: This drawing is not to scale. Follow dimensions.

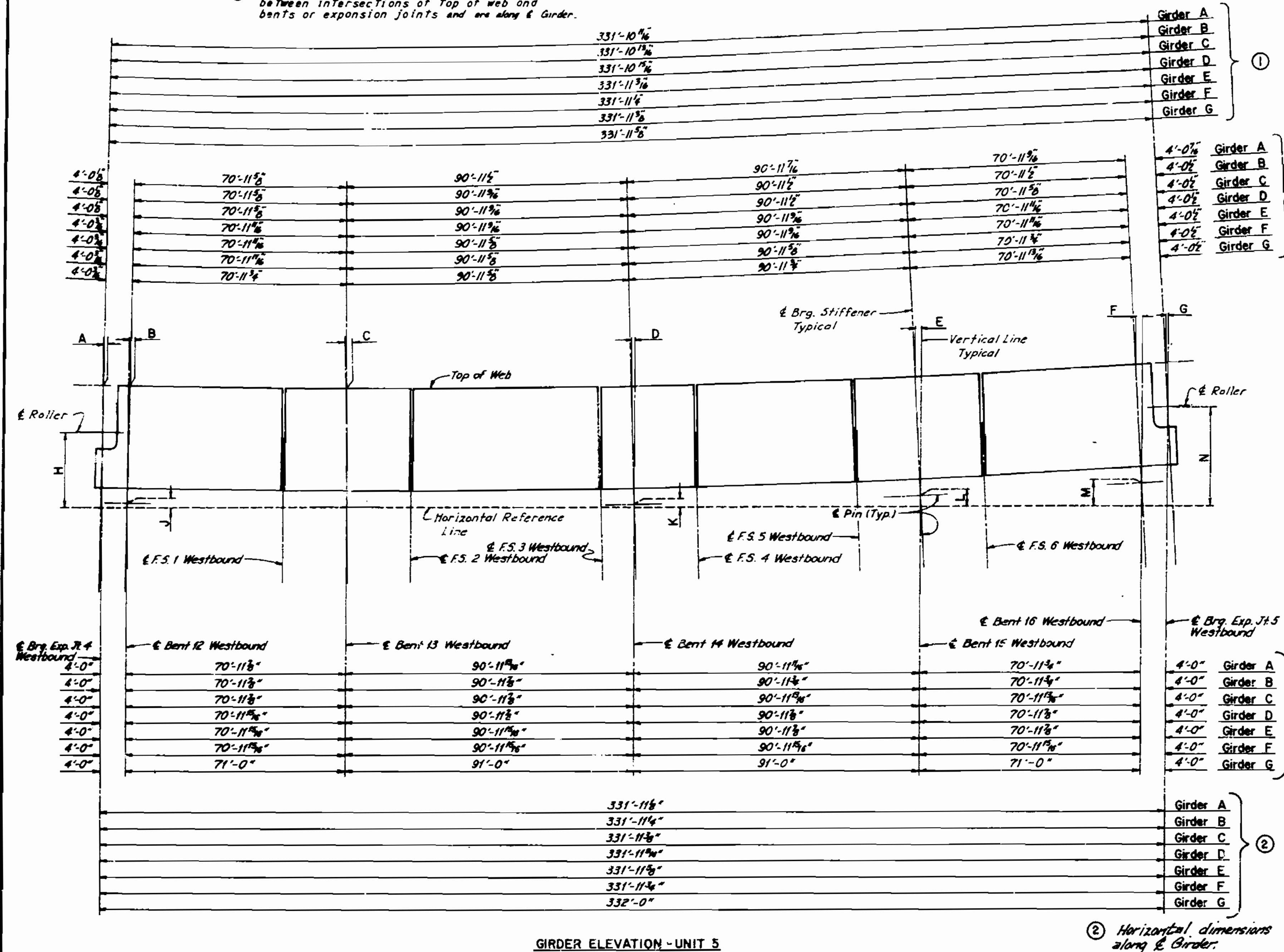
Sheet No. 11 of 59.

JACKSON COUNTY

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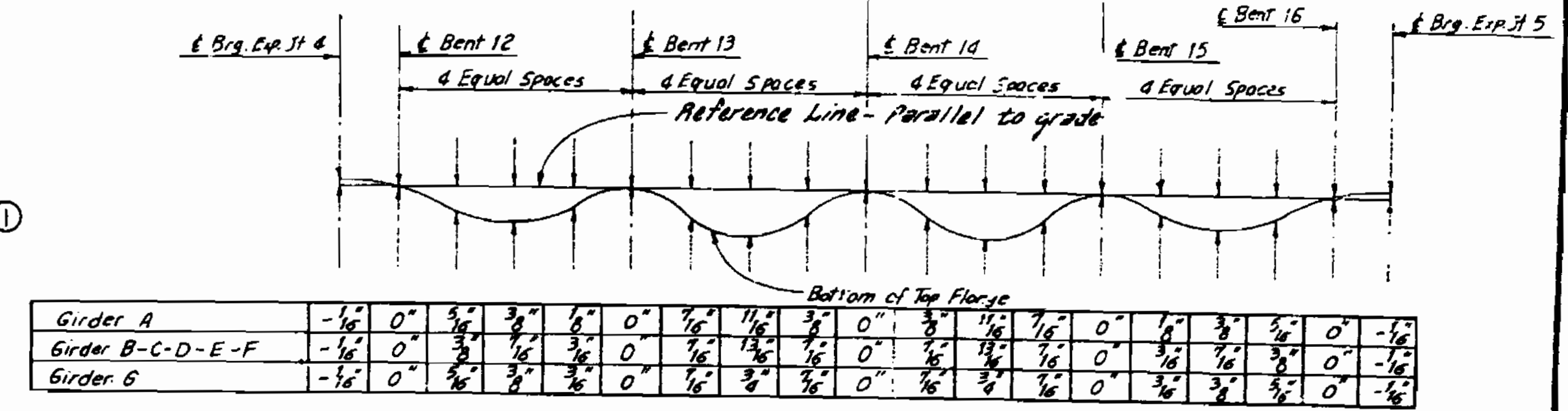
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		53	17	

① Longitudinal dimensions are along chord lines between intersections of top of web and bents or expansion joints and are along G. Girder.

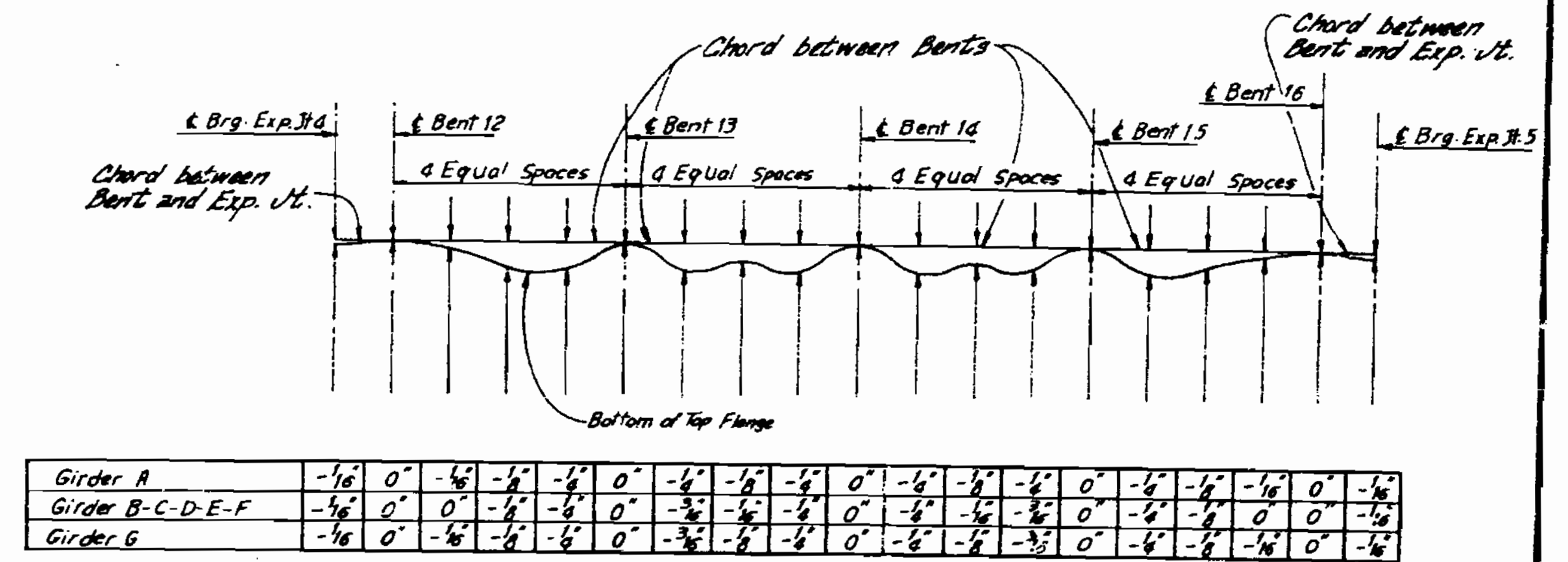


GIRDER ELEVATION - UNIT 5

② Horizontal dimensions along G. Girder.



DEAD LOAD DEFLECTION DIAGRAM - UNIT 5
15% of dead load deflection is due to weight of structural steel.



CAMBER DIAGRAM - UNIT 5

Deflection and Camber Notes:
Negative dead load deflection values are upward deflections.
Negative camber values are cambers below the reference chord.
Reference chords shown for camber are 10% below top of slab at bents and bearing expansion joints.

	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T
Girder A	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	2'-8 3/4"	3 3/4"	1 3/4"	10 3/4"	11'-10 1/4"	4'-3 3/4"						
Girder B	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	2'-8 3/4"	3 3/4"	1 3/4"	10 3/4"	11'-10 3/4"	4'-3 1/4"						
Girder C	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	2'-8 1/4"	3 3/4"	2 1/4"	10 3/4"	11'-10 3/4"	4'-4"						
Girder D	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	2'-8 3/4"	3 3/4"	2 1/4"	11 1/4"	11'-11 1/4"	4'-4 3/4"						
Girder E	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	2'-8 1/4"	3 3/4"	2 3/4"	11 1/4"	11'-11 3/4"	4'-4 1/4"						
Girder F	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	2'-8 1/4"	3 3/4"	2 3/4"	11 1/4"	11'-11 3/4"	4'-5"						
Girder G	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	2'-7 7/8"	2 3/4"	2 1/4"	11 3/4"	11'-11 3/4"	4'-5 1/4"						

TU

DETAILED 10/73
CHECKED 10/73

Note: This drawing is not to scale. Follow dimensions.

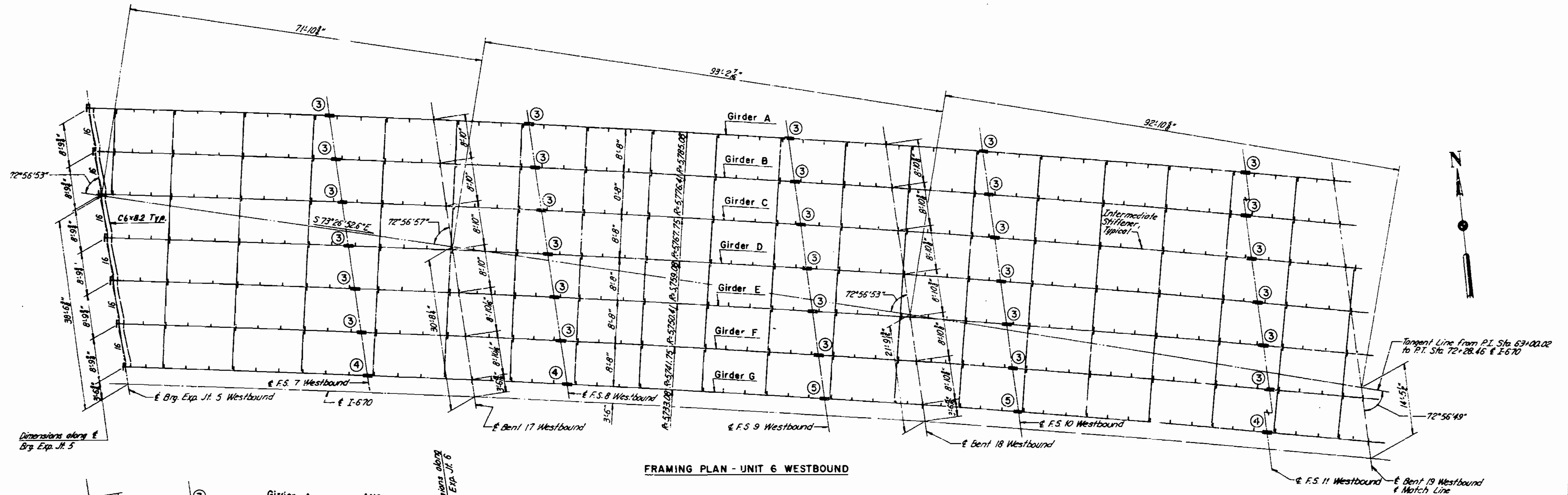
Sheet No. 10 of 59.

GIRDER ELEVATION - UNIT 5 WESTBOUND

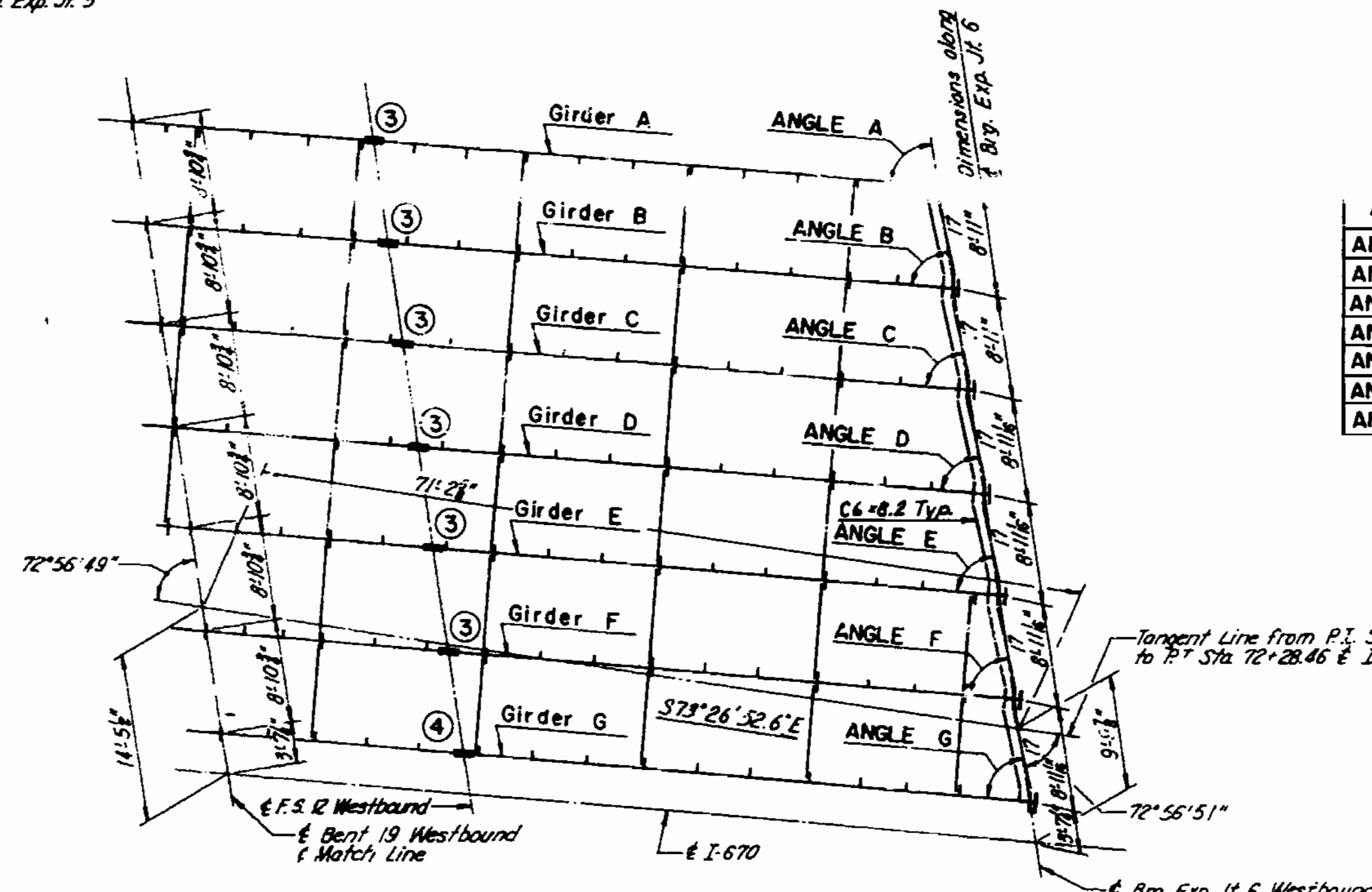
JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	IND.		5	21	

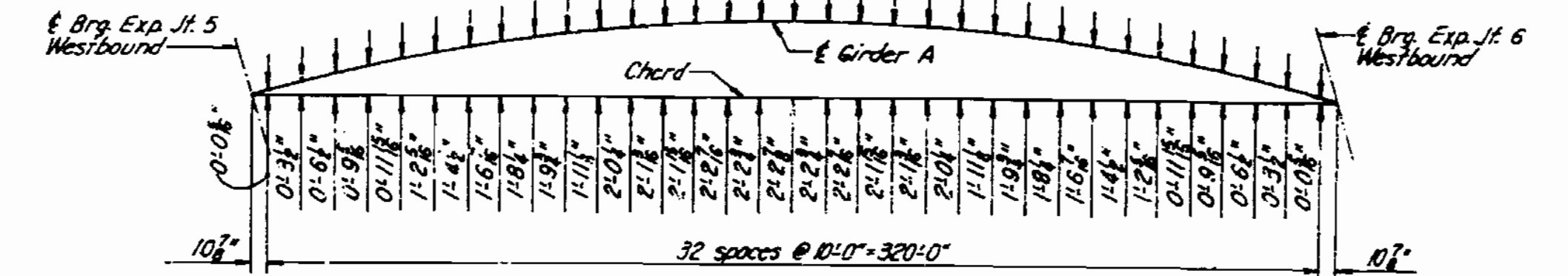


FRAMING PLAN - UNIT 6 WESTBOUND

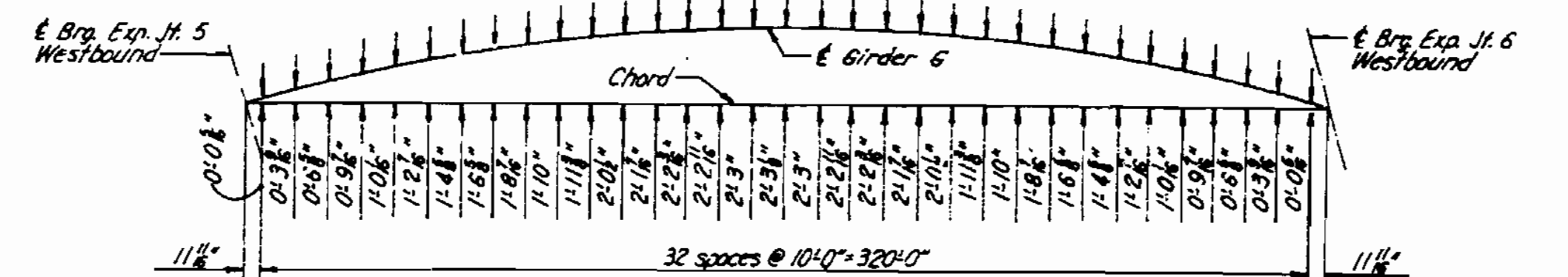


FRAMING PLAN - UNIT 6 WESTBOUND

ANGLE	BRG. EXP. JTS	BENT 17	BENT 18	BENT 19
ANGLE A	79°33'05"	78°51'34"	77°57'26"	77°03'19"
ANGLE B	79°32'07"	78°50'33"	77°56'20"	77°02'03"
ANGLE C	79°31'10"	78°49'32"	77°55'14"	77°00'57"
ANGLE D	79°30'13"	78°48'30"	77°54'08"	76°58'45"
ANGLE E	79°29'15"	78°47'29"	77°53'01"	76°58'34"
ANGLE F	79°28'17"	78°46'27"	77°51'54"	76°57'22"
ANGLE G	79°27'20"	78°45'25"	77°50'47"	76°56'09"



CHORD OFFSETS TO EXTERIOR GIRDERS



Notes:
 For Field Splice Details see Sheet 48.
 For Diaphragm Details see Sheet 55.
 The angle shown is the angle between \bar{L} of Bent or \bar{L} of Bearing of Expansion Joint and a local tangent to the girder at the location indicated.
 (3) designates type of field splice.
 Dimensions shown are horizontal.
 16 and 17 near diaphragms denotes diaphragm type. The diaphragms with no number by them are type 1.
 Intermediate stiffener plates are 3x4 and they are equally spaced between diaphragms where shown except in the area of the field splices. In these areas they are to be placed on whichever side of the splice that will make the spacing more nearly equal.
 Diaphragm connection plates are 3x4.
 Intermediate stiffener plates shall be placed on the side of the girder web as indicated on the framing plan.

FRAMING PLAN - UNIT 6 WESTBOUND

DETAILED 1878
 CHECKED 1879

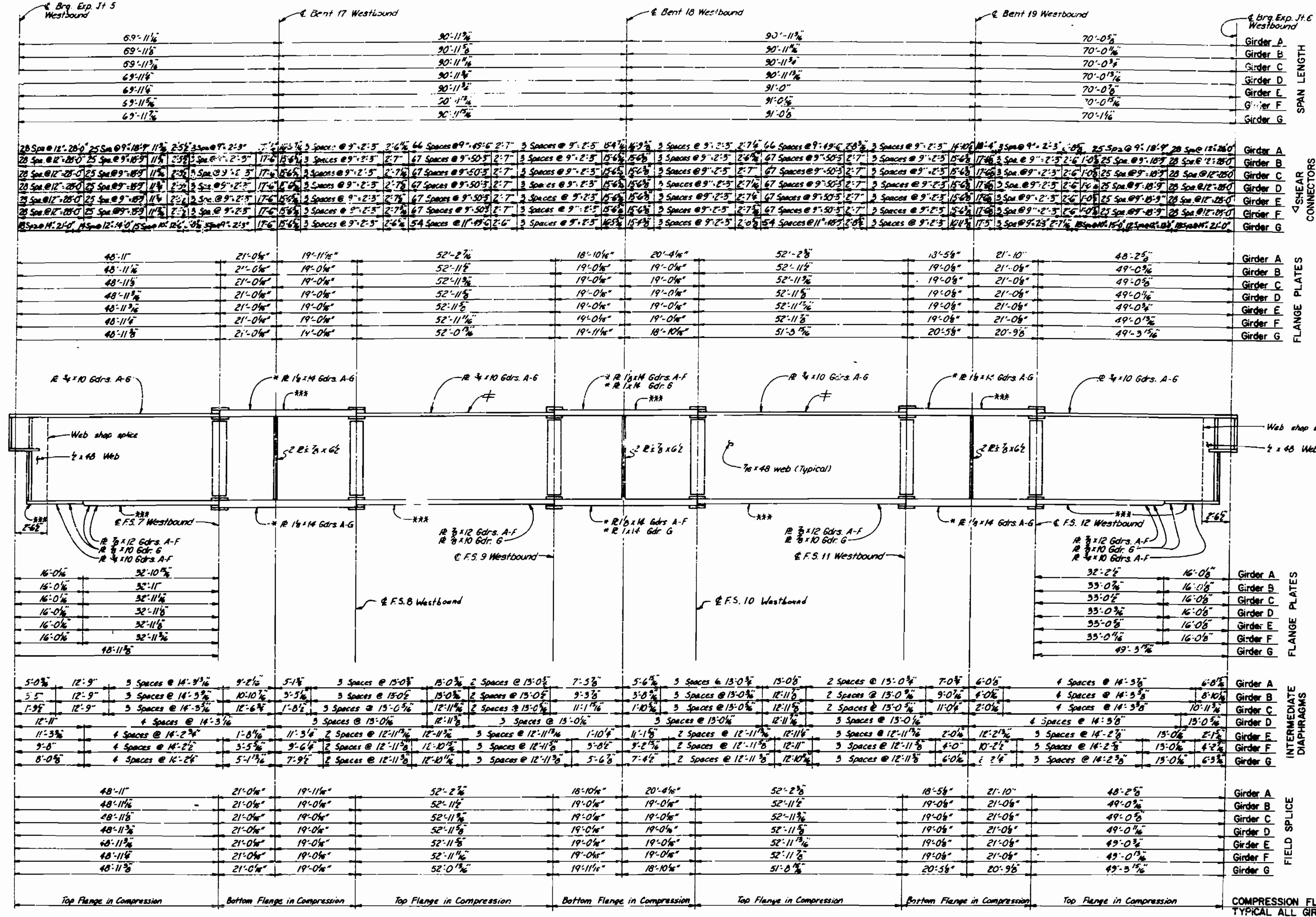
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 14 of 59.

JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		88	22	



Notes:
 For "Shear Connector Details", see Sheet 9.
 Shear connectors are not to be furnished or installed with the Structural Steel Contract.

Notes:
 All flanges are A-36 Steel unless noted otherwise.
 * Denotes A-572 Low Alloy Steel.
 All webs are A 36 Steel.
 *** Indicates Flange Plates subject to notch toughness requirement: fs.

All web plates shall be subject to notch toughness requirements.
 Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade.
 All dimensions are at top of web along grade.
 Heat curving of girder sections denoted by \neq will not be allowed while in the horizontal position.

405

GIRDER ELEVATION - UNIT 6

GIRDER ELEVATION - UNIT 6 WESTBOUND

DETAILED 1075
 CHECKED 1077

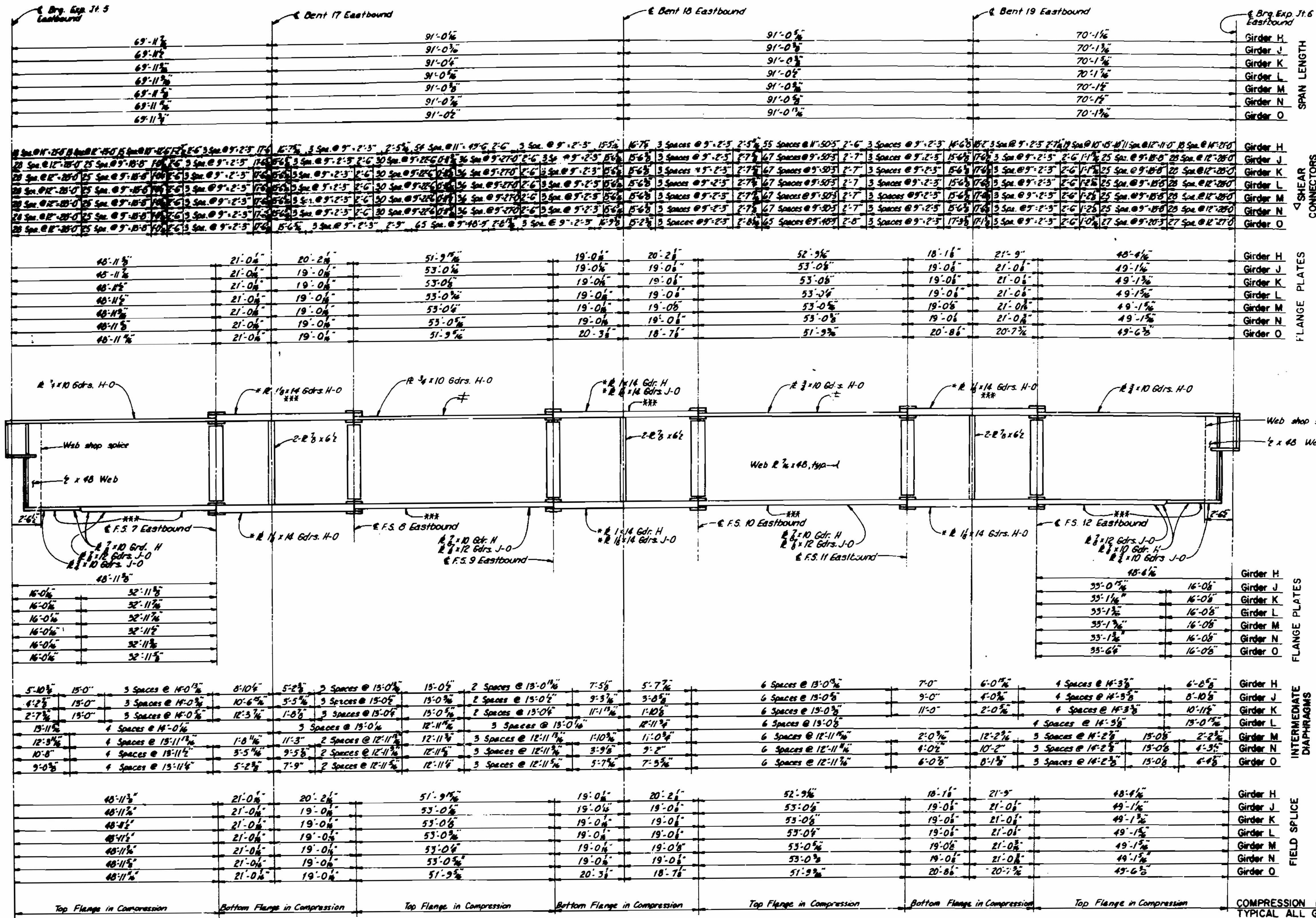
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 15 of 59.

JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
J	MO.	#	#	25	



Note:
For "Shear Connector Details" see Sheet 9.
Shear connectors are not to be furnished or installed with the Structural Steel Contract.

Notes:
All flanges are A36 Steel unless noted otherwise.
* denotes A572 Low Alloy Steel.
All webs are A36 Steel.
*** Indicates Flange Plates subject to notch toughness requirements.
All web plates shall be subject to notch toughness requirements.
Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade.
All dimensions are at top of web along grade.
Heat curving of girder sections denoted by ± will not be allowed while in the horizontal position.

GIRDER ELEVATION - UNIT 6

GIRDER ELEVATION - UNIT 6 EASTBOUND

DETAILED 10 75
CHECKED 10 79

Note: This drawing is not to scale. Follow dimensions.

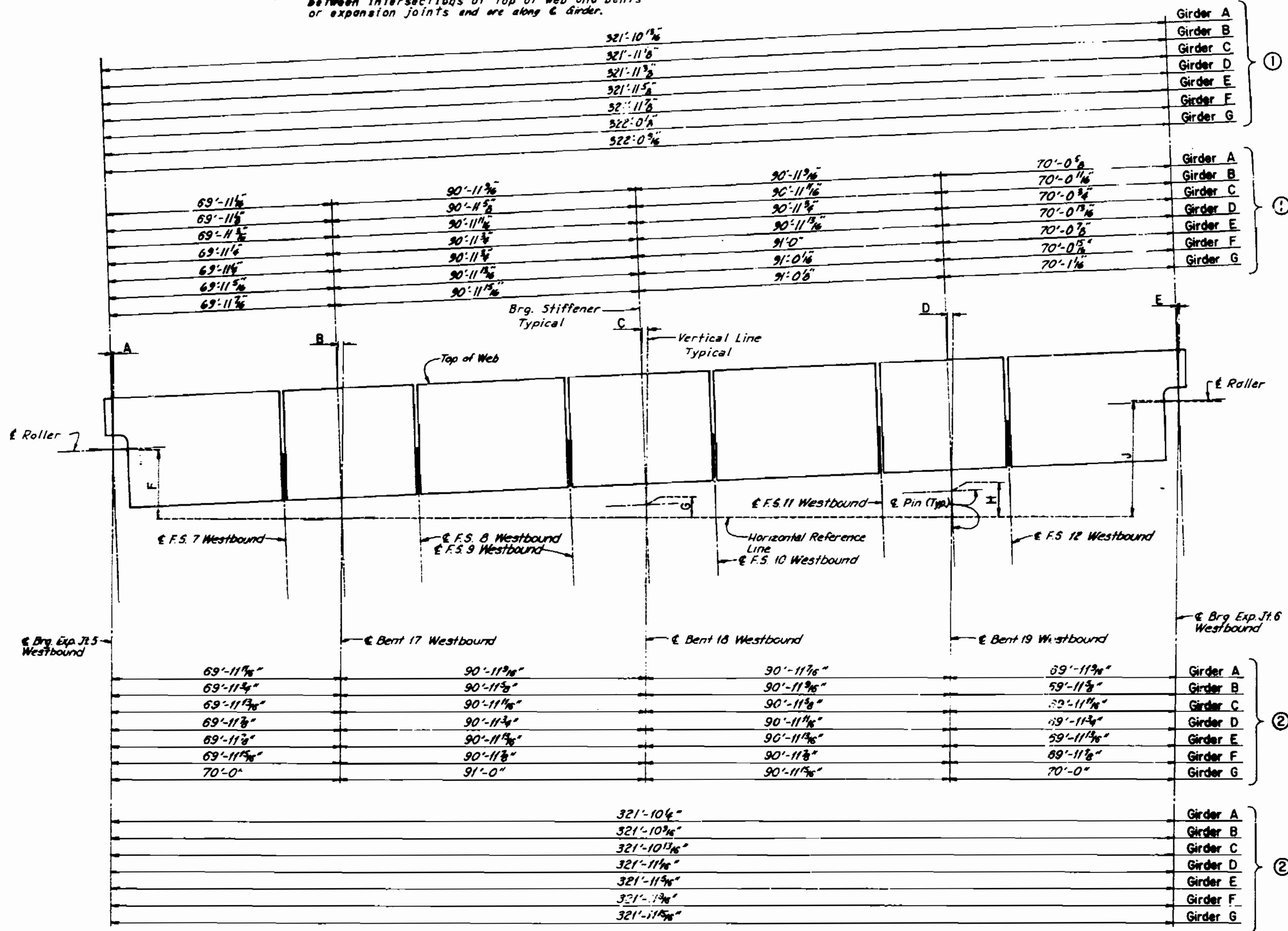
Sheet No. 18 of 59.

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PUB. REV. NO.	DATE	PUB. NO.	FIG. NO.	SHEET NO.	TOTAL SHEETS
1				23	

① Longitudinal dimensions are along chord lines between intersections of top of web and bents or expansion joints and are along E Girder.

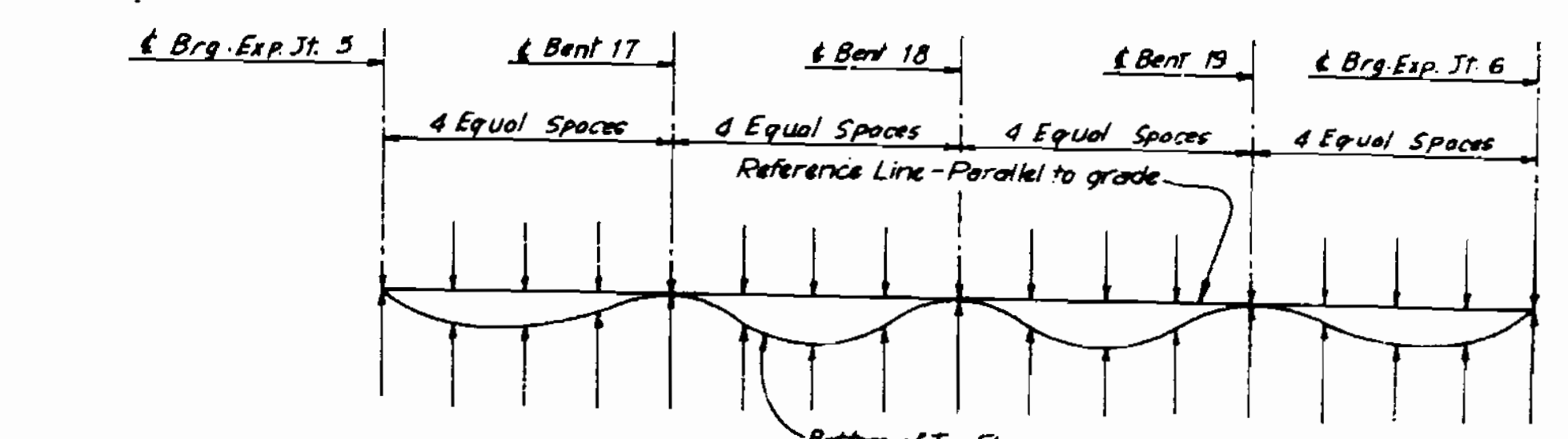


GIRDER ELEVATION - UNIT 6

② Horizontal dimensions along E Girder.

TABLE OF DIMENSIONS

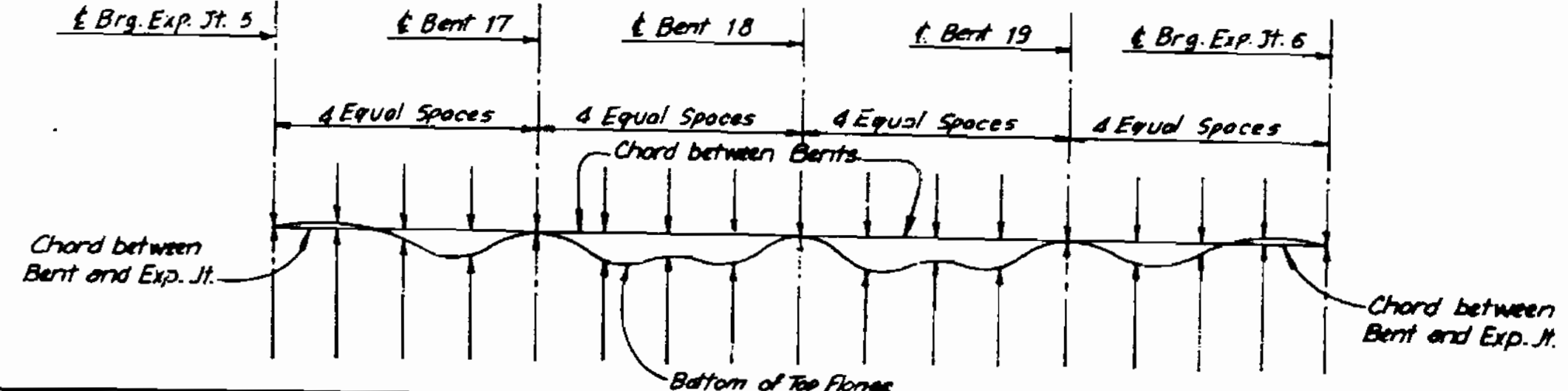
	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T
Girder A	3/4"	1 1/4"	1 3/8"	1 5/8"	1 3/4"	1 1/2"	2 1/4"	4 1/2"	9 1/2"										
Girder B	3/4"	1 1/4"	1 3/8"	1 5/8"	1 3/4"	1 1/2"	2 1/4"	4 1/2"	9 1/2"										
Girder C	3/4"	1 1/4"	1 3/8"	1 5/8"	1 3/4"	1 1/2"	2 1/4"	4 1/2"	9 1/2"										
Girder D	3/4"	1 1/4"	1 3/8"	1 5/8"	1 3/4"	1 1/2"	2 1/4"	4 1/2"	9 1/2"										
Girder E	3/4"	1 1/4"	1 3/8"	1 5/8"	1 3/4"	1 1/2"	2 1/4"	4 1/2"	9 1/2"										
Girder F	3/4"	1 1/4"	1 3/8"	1 5/8"	1 3/4"	1 1/2"	2 1/4"	4 1/2"	9 1/2"										
Girder G	3/4"	1 1/4"	1 3/8"	1 5/8"	1 3/4"	1 1/2"	2 1/4"	4 1/2"	9 1/2"										



Girder A	0"	3/8"	1/2"	3/4"	0"	3/8"	1/2"	3/4"	0"	3/8"	1/2"	3/4"	0"	3/8"	1/2"	3/4"	0"	3/8"	1/2"	3/4"	0"
Girder B-C-D-E-F	0"	1/2"	3/4"	1"	0"	1/2"	3/4"	1"	0"	1/2"	3/4"	1"	0"	1/2"	3/4"	1"	0"	1/2"	3/4"	1"	0"
Girder G	0"	1/2"	3/4"	1"	0"	1/2"	3/4"	1"	0"	1/2"	3/4"	1"	0"	1/2"	3/4"	1"	0"	1/2"	3/4"	1"	0"

DEAD LOAD DEFLECTION DIAGRAM-UNIT 6

15% of dead load deflection is due to weight of structural steel.



Girder A	0"	1/8"	-1/8"	-1/8"	0"	-1/8"	-1/8"	-1/8"	0"	-1/8"	-1/8"	-1/8"	0"	-1/8"	-1/8"	-1/8"	0"	-1/8"	-1/8"	-1/8"	0"
Girder B-C-D-E-F	0"	1/16"	0"	-1/16"	0"	-1/16"	-1/16"	-1/16"	0"	-1/16"	-1/16"	-1/16"	0"	-1/16"	-1/16"	-1/16"	0"	-1/16"	-1/16"	-1/16"	0"
Girder G	0"	0"	-1/16"	-1/16"	0"	-1/16"	-1/16"	-1/16"	0"	-1/16"	-1/16"	-1/16"	0"	-1/16"	-1/16"	-1/16"	0"	-1/16"	-1/16"	-1/16"	0"

CAMBER DIAGRAM-UNIT 6

Deflection and Camber Notes:
 Negative dead load deflection values are upward deflections.
 Negative camber values are cambers below the reference chord.
 Reference chords shown for camber are 10' below top of slab at E Bents and E Bearing Expansion Joints.

GIRDER ELEVATION-UNIT 6 WESTBOUND

JACKSON COUNTY

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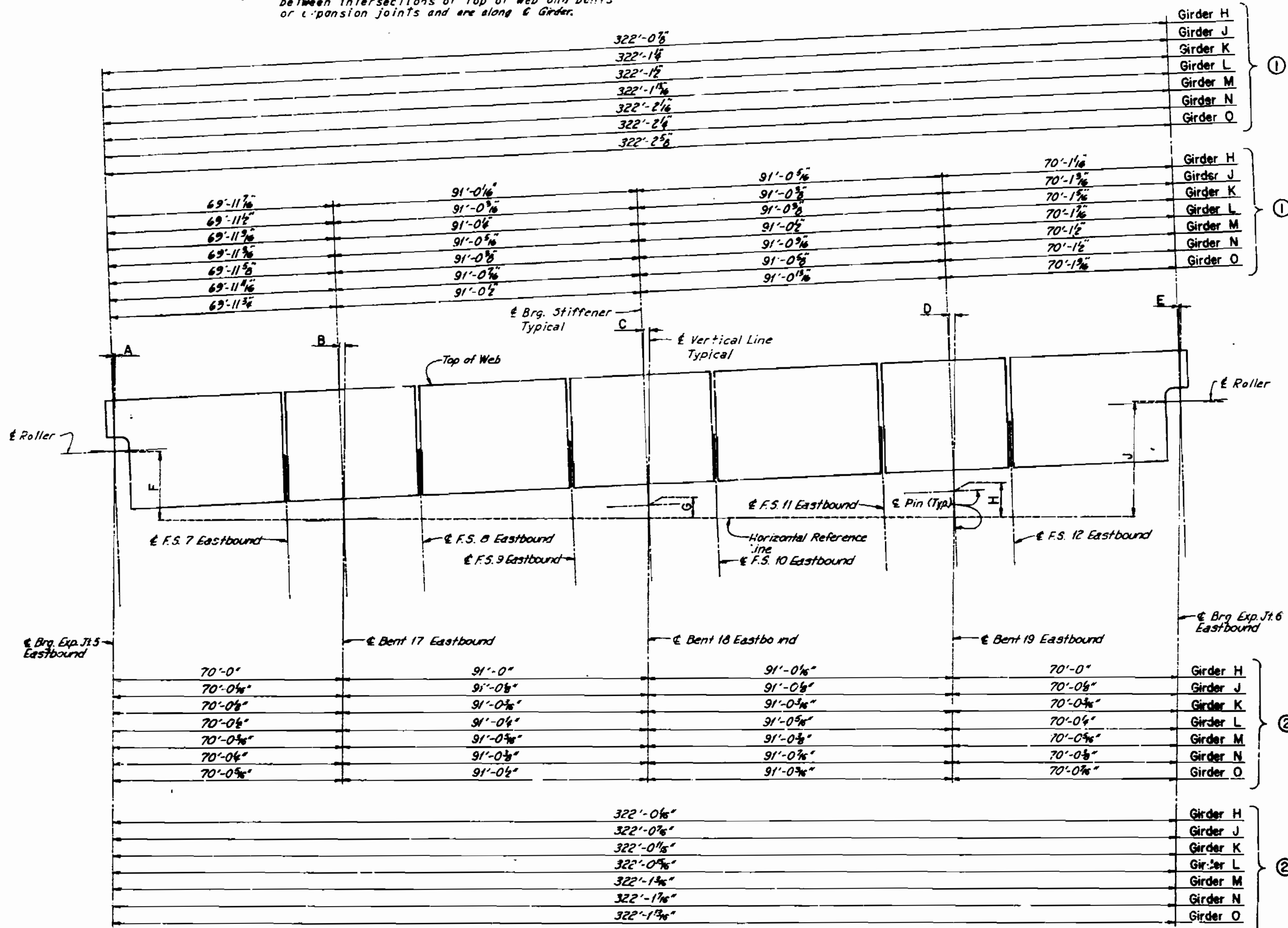
DETAILED 10 79
 CHECKED 10 79

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 16 of 59.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FED. TRAP NO.	SHEET NO.	TOTAL SHEETS
5	MO.		19	26	

① Longitudinal dimensions are along chord lines between intersections of top of web and bents or expansion joints and are along \bar{C} Girder.

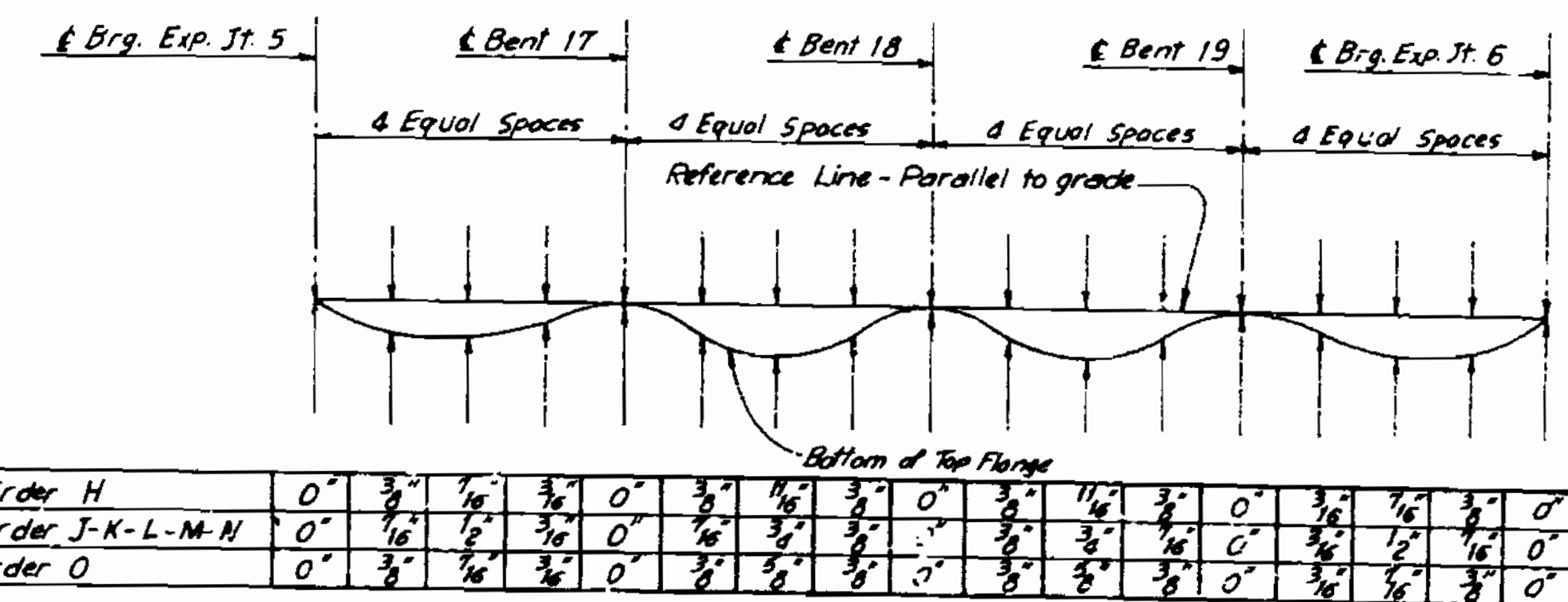


GIRDER ELEVATION - UNIT 6

② Horizontal dimensions along \bar{C} Girder.

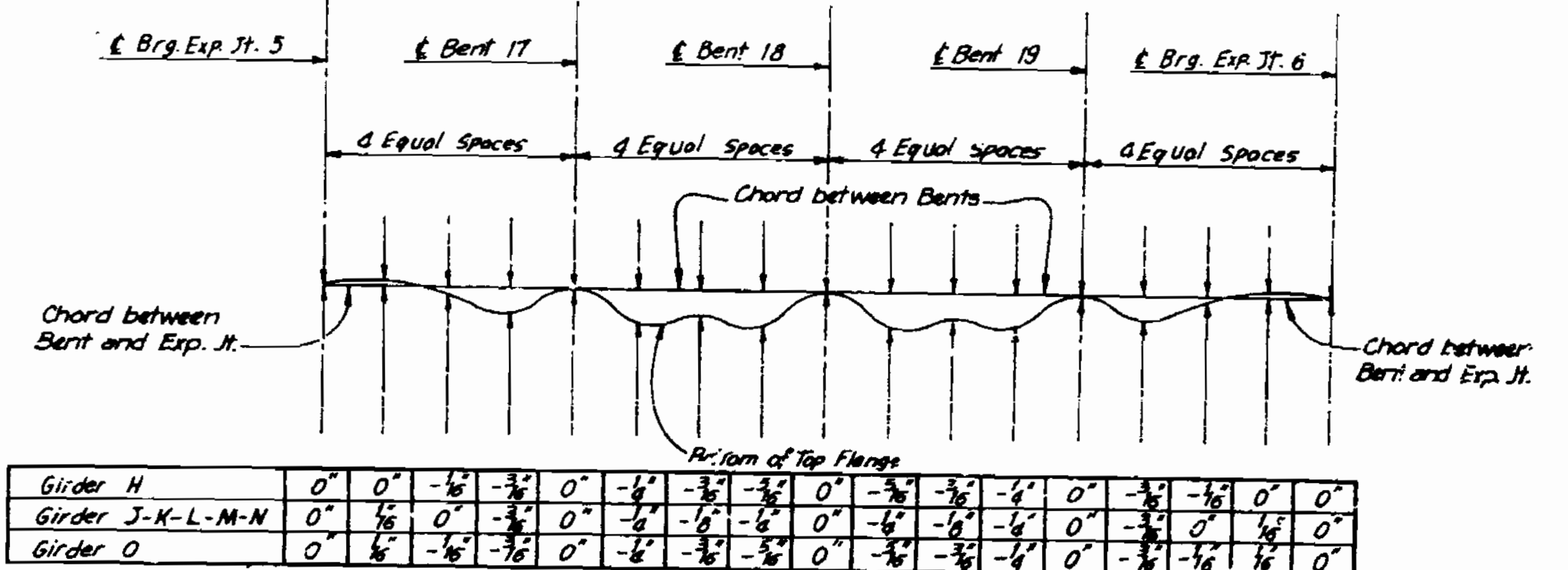
TABLE OF DIMENSIONS

	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T
Girder H	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	11'-0 1/2"	21'-3 3/4"	51'-1 1/2"	91'-4 1/2"										
Girder J	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	11'-0 1/2"	21'-3 3/4"	51'-2 3/4"	91'-4 1/2"										
Girder K	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	11'-0 1/2"	21'-3 3/4"	51'-2 3/4"	91'-5 1/2"										
Girder L	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	11'-0 1/2"	21'-4"	51'-2 3/4"	91'-6"										
Girder M	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	11'-0 1/2"	21'-4 1/4"	51'-3 3/4"	91'-6 1/2"										
Girder N	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	11'-0 1/2"	21'-4 3/4"	51'-3 3/4"	91'-7 1/2"										
Girder O	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	11'-0 1/2"	21'-4 1/2"	51'-4 1/2"	91'-7 1/2"										



DEAD LOAD DEFLECTION DIAGRAM - UNIT 6

15% of dead load deflection is due to weight of structural steel.

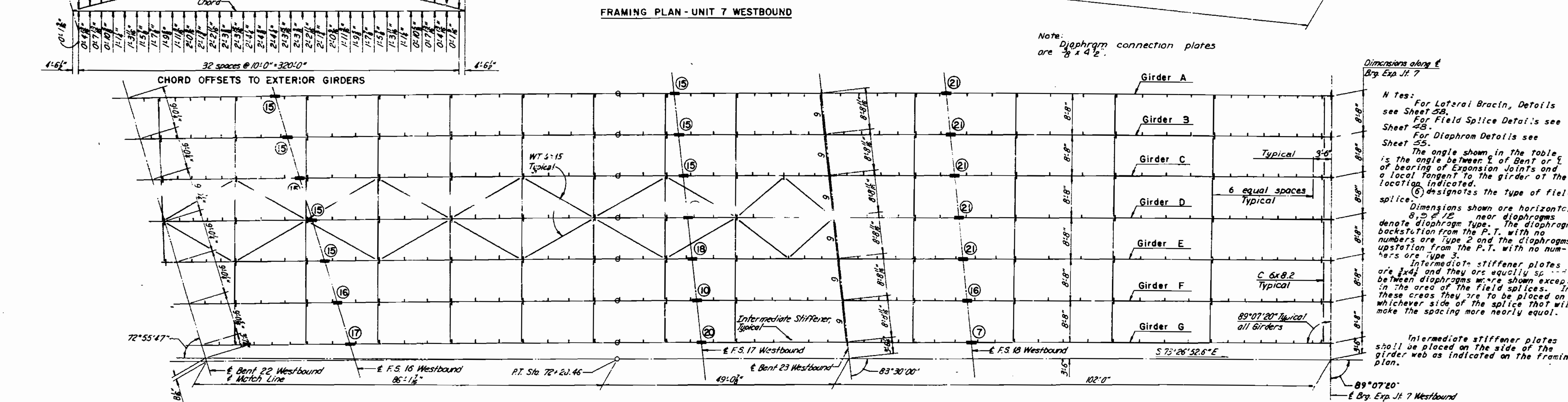
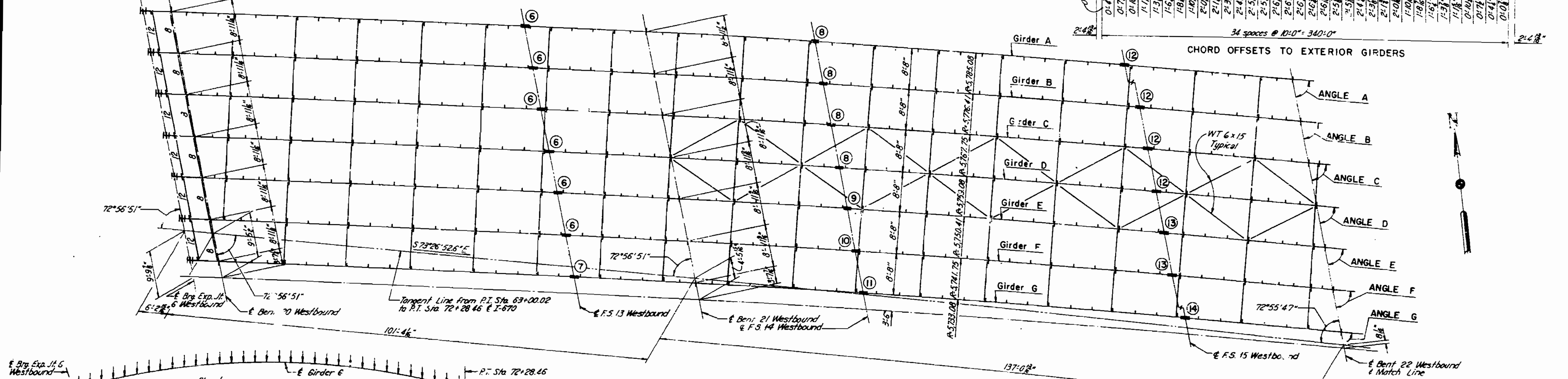


CAMBER DIAGRAM - UNIT 6

Deflection and Camber Notes:
 Negative dead load deflections are upward deflections.
 Negative camber values are cambers below the reference chord.
 Reference chords shown for camber are 10 1/2" below top of slab at \bar{C} Bents and \bar{C} Bearing Expansion Joints.

ANGLE	BRG. EXP. JT. 6	BENT 20	BENT 21	BENT 22	BENT 23
ANGLE A	76°21'46"	76°18'07"	75°18'44"	73°56'55"	83°30'00"
ANGLE B	76°20'31"	76°16'52"	75°17'23"	73°55'23"	83°30'00"
ANGLE C	76°19'16"	76°15'36"	75°16'01"	73°53'57"	83°30'00"
ANGLE D	76°18'00"	76°14'20"	75°14'40"	73°52'27"	83°30'00"
ANGLE E	76°16'45"	76°13'04"	75°13'18"	73°50'57"	83°30'00"
ANGLE F	76°15'29"	76°11'48"	75°11'56"	73°49'27"	83°30'00"
ANGLE G	76°14'12"	76°10'31"	75°10'33"	73°47'57"	83°30'00"

FED. ROAD DIST. NO.	DATE	FED. AID PROJ. N°	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MD.			27	



Dimensions along ϵ Brg. Exp. Jt. 7

N.Tes: For Lateral Bracin, Details see Sheet 58.
 For Field Splice Details see Sheet 43.
 For Diaphragm Details see Sheet 55.
 The angle shown in the table is the angle between ϵ of Bent or ϵ of bearing of Exonston Joints and a local tangent to the girder at the location indicated.
 (6) designates the type of field splice.
 Dimensions shown are horizontal.
 8, 9, 12 near diaphragms denote diaphragm type. The diaphragms backstition from the P.T. with no numbers are type 2 and the diaphragms upstition from the P.T. with no numbers are type 3.
 Intermediate stiffener plates are 3x4 and they are equally spaced between diaphragms where shown except in the area of the field splices. In these areas they are to be placed on whichever side of the splice that will make the spacing more nearly equal.
 Intermediate stiffener plates shall be placed on the side of the girder web as indicated on the framing plan.

FRAMING PLAN - UNIT 7 WESTBOUND

FRAMING PLAN - UNIT 7 WESTBOUND

FRAMING PLAN - UNIT 7 WESTBOUND

DETAILED 10 78
 CHECKED 10 79

Note: This drawing is not to scale. Follow dimensions.

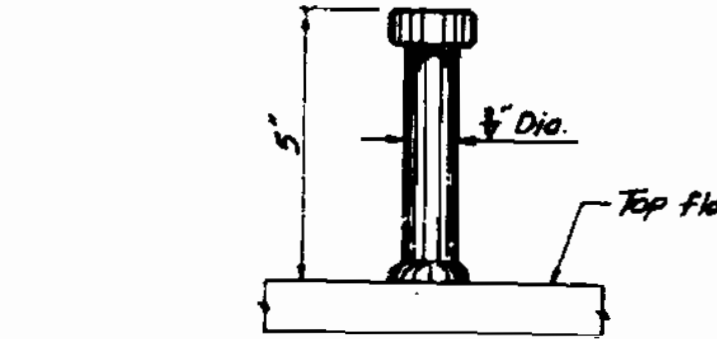
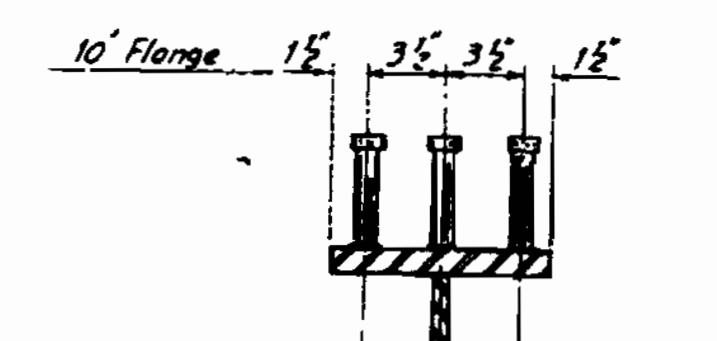
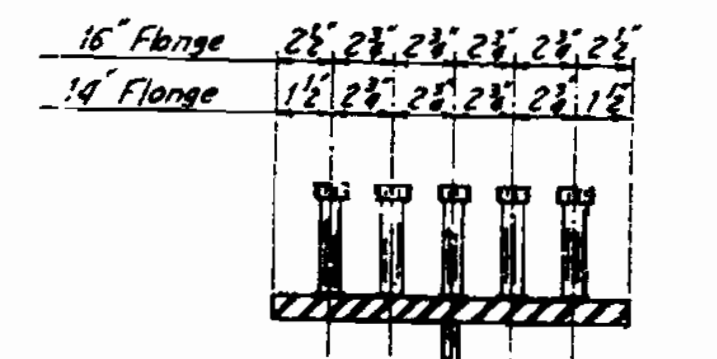
Sheet No. 20 of 59.

JACKSON COUNTY

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PED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MD.		88	28	

Bent 20 Westbound		Bent 21 Westbound		Bent 22 Westbound		Bent 23 Westbound		Bent 24 Westbound	
6'-0"	99'-11 1/8"	136'-0 1/8"	136'-0 1/8"	145'-0 1/8"	145'-0 1/8"	107'-0 1/8"	107'-0 1/8"		
6'-0"	100'-0"	136'-0 1/8"	136'-0 1/8"	144'-1 1/8"	144'-1 1/8"	106'-9 1/8"	106'-9 1/8"		
6'-0"	100'-0 1/8"	136'-0 1/8"	136'-0 1/8"	142'-5 1/8"	142'-5 1/8"	105'-1 1/8"	105'-1 1/8"		
6'-0"	100'-0 1/8"	136'-0 1/8"	136'-0 1/8"	140'-9 1/8"	140'-9 1/8"	103'-1 1/8"	103'-1 1/8"		
6'-0"	100'-0 1/8"	136'-1 1/8"	136'-1 1/8"	139'-1 1/8"	139'-1 1/8"	104'-2 1/8"	104'-2 1/8"		
6'-0"	100'-0 1/8"	136'-1 1/8"	136'-1 1/8"	137'-5 1/8"	137'-5 1/8"	103'-0 1/8"	103'-0 1/8"		
6'-0"	100'-0 1/8"	136'-1 1/8"	136'-1 1/8"	135'-9 1/8"	135'-9 1/8"	102'-6 1/8"	102'-6 1/8"		



Note: Shear connectors are not to be furnished or installed with the Structural Steel Contract.

Notes: All flanges are A36 Steel unless noted otherwise. * denotes A572 Low Alloy Steel. All webs are A36 Steel.

*** Indicates Flange Plates subject to notch toughness requirements. All web plates shall be subject to notch toughness requirements. Unless otherwise shown connection plates and bearing stiffeners are to be set no. 1 to grade. All dimensions are at top of web along grade. Web curving of girder sections denoted by \neq will not be allowed while in the horizontal position.

GIRDER ELEVATION UNIT 7

GIRDER ELEVATION - UNIT 7 WESTBOUND

DATE: 10/28
CHECKED: 10/77

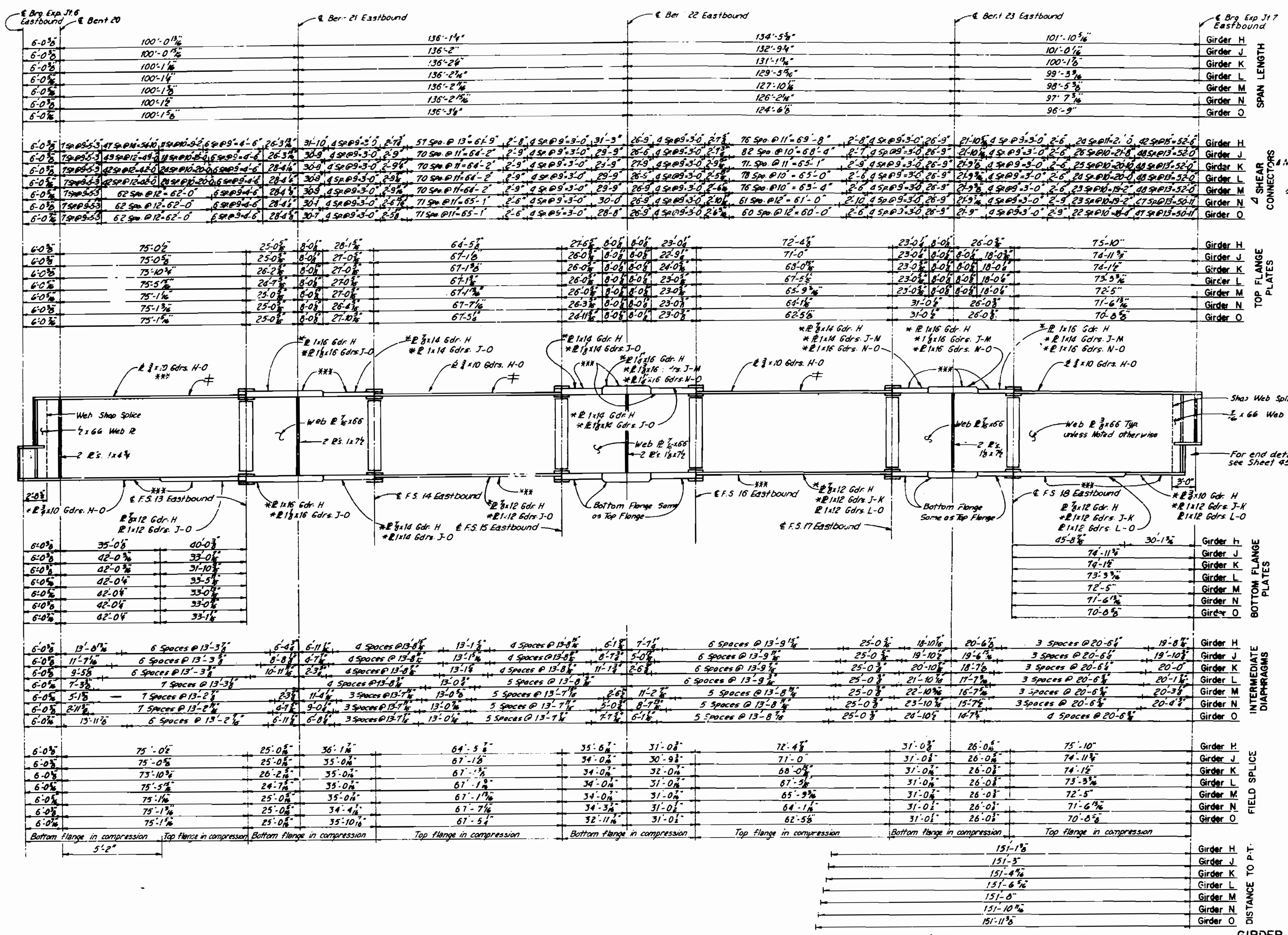
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 21 of 59.

JACKSON COUNTY

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PROJ. NO.	STATE	PROJ. NO.	PROJ. YEAR	SHEET NO.	TOTAL SHEETS
1	MO.			31	



Note: For "Shear Connector Details" see Sheet 21. Shear connectors are not to be furnished or installed with the Structural Steel Contract.

Notes: All flange plates are A36 Steel unless noted otherwise. * denotes A572 Low Alloy Steel. All webs are A36 Steel.

Dimensions not shown for Bottom Flange Plates same as Top Flange Plates. *** Indicates Flange Plates subject to notch toughness requirements.

All web plates shall be subject to notch toughness requirements. Unless otherwise shown connection plates and bearing stiffeners are to be set normal to grade.

All dimensions are at top of web along grade. Heat curving of girder sections denoted by \neq will not be allowed while in the horizontal position.

GIRDER ELEVATION UNIT 7

GIRDER ELEVATION - UNIT 7 EASTBOUND.

DETAILED 1979
CHECKED 1979

Note: This drawing is not to scale. Follow dimensions.

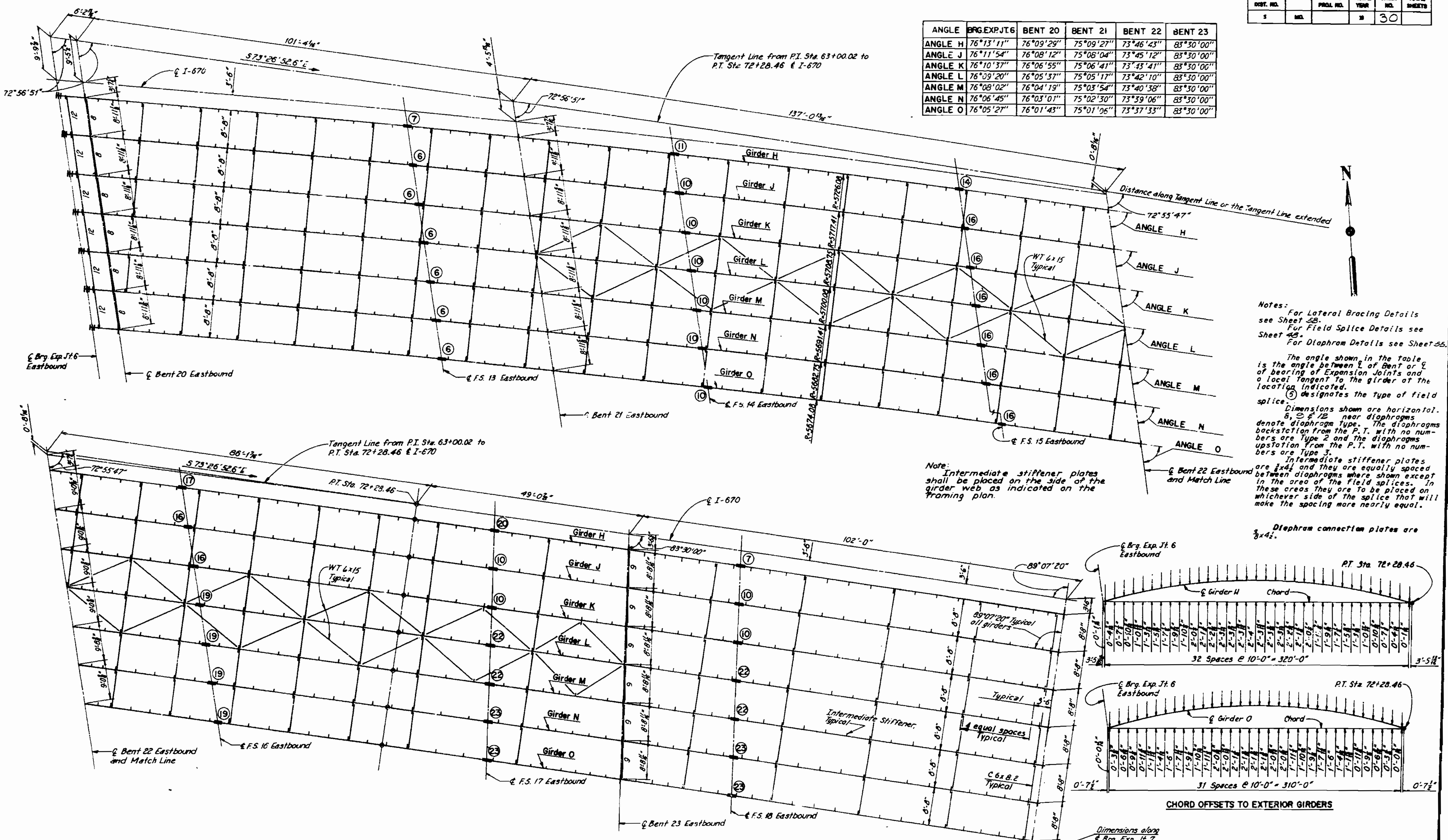
Sheet No. 24 of 59.

JACKSON COUNTY

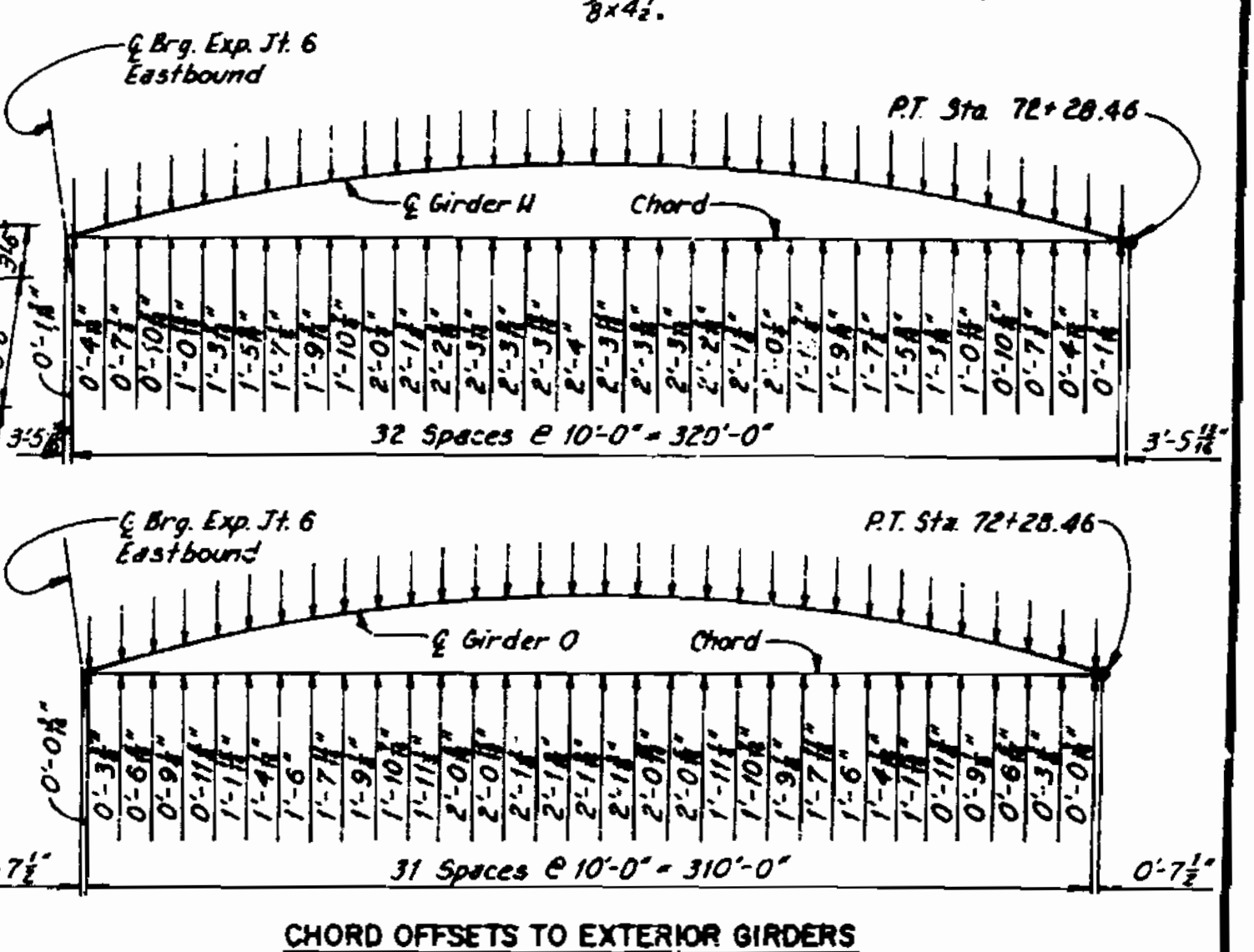
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		8	30	

ANGLE	BRG. EXP. JT. 6	BENT 20	BENT 21	BENT 22	BENT 23
ANGLE H	76°13'11"	76°09'29"	75°09'27"	73°46'43"	83°30'00"
ANGLE J	76°11'54"	76°08'12"	75°08'04"	73°45'12"	83°30'00"
ANGLE K	76°10'37"	76°06'55"	75°06'41"	73°43'41"	83°30'00"
ANGLE L	76°09'20"	76°05'37"	75°05'17"	73°42'10"	83°30'00"
ANGLE M	76°08'02"	76°04'19"	75°03'54"	73°40'38"	83°30'00"
ANGLE N	76°06'45"	76°03'01"	75°02'30"	73°39'06"	83°30'00"
ANGLE O	76°05'27"	76°01'43"	75°01'06"	73°37'33"	83°30'00"



Notes:
 For Lateral Bracing Details see Sheet 28.
 For Field Splice Details see Sheet 45.
 For Diaphragm Details see Sheet 55.
 The angle shown in the Table is the angle between ℓ of Bent or ℓ of bearing of Expansion Joints and a local Tangent to the girder at the location indicated.
 (6) Designates the Type of field splice.
 Dimensions shown are horizontal.
 8, 12, 16 near diaphragms denote diaphragm type. The diaphragms backstation from the P.T. with no numbers are Type 2 and the diaphragms upstation from the P.T. with no numbers are Type 3.
 Intermediate stiffener plates are 3/8" and they are equally spaced between diaphragms where shown except in the area of the field splices. In these areas they are to be placed on whichever side of the splice that will make the spacing more nearly equal.



FRAMING PLAN - UNIT 7 EASTBOUND

FRAMING PLAN - UNIT 7 EASTBOUND

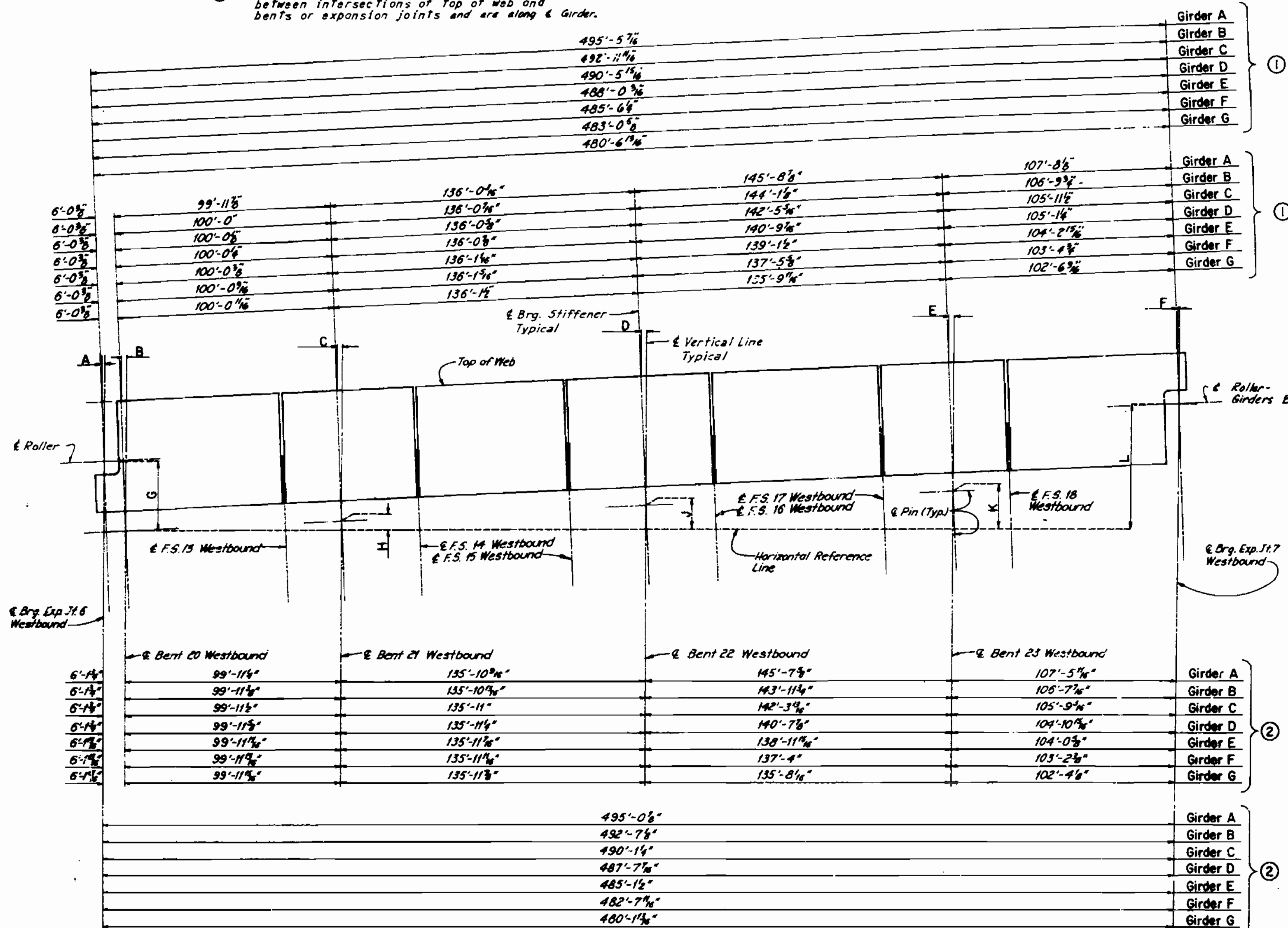
DETAILED 1978
 CHECKED 1979

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 23 of 59.

FED. PROJ. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		70	29	

① Longitudinal dimensions are along chord lines between intersections of Top of web and bents or expansion joints and are along G. Girder.

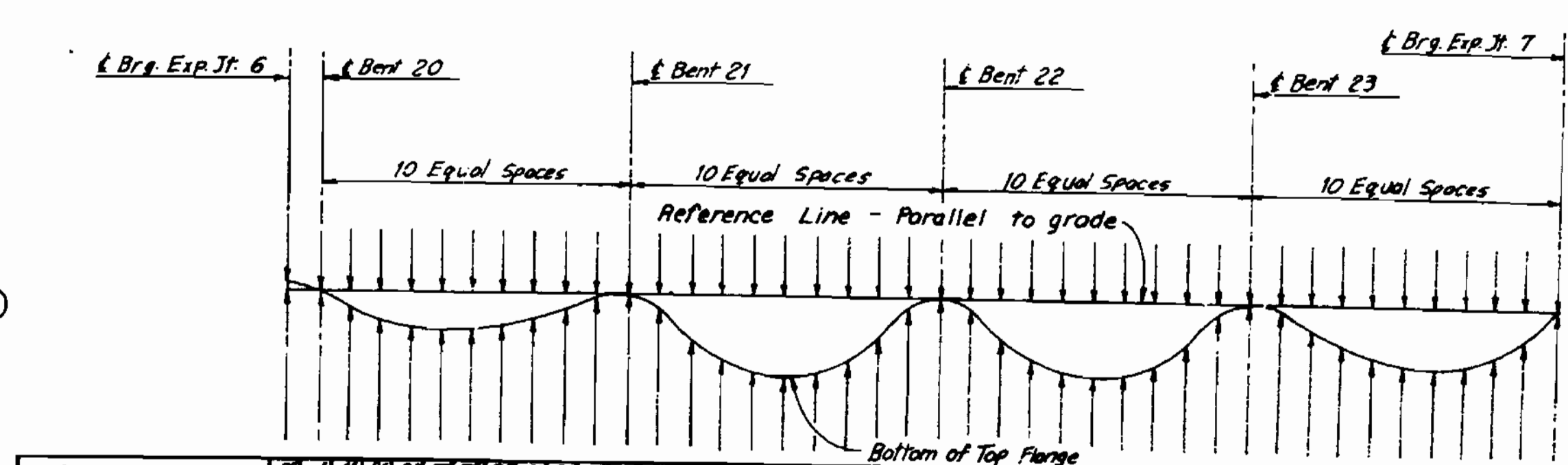


GIRDER ELEVATION UNIT 7

② Horizontal dimensions along G. Girder.

	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
Girder A	1 3/4"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	1 1/2"	2'-10 1/2"	4'-1 1/2"	10'-2 3/4"	5'-9 3/4"	22'-0 3/4"											
Girder B	1 3/4"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	2 1/2"	2'-10 1/2"	4'-2 1/2"	10'-2 3/4"	16'-0 1/2"	22'-9 3/4"											
Girder C	1 3/4"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	2 1/2"	2'-10 1/2"	4'-2 3/4"	10'-2 3/4"	16'-3 3/4"	22'-10 3/4"											
Girder D	1 3/4"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	2 1/2"	2'-10 1/2"	4'-2 3/4"	10'-3 1/2"	16'-4 1/2"	22'-11 1/2"											
Girder E	1 3/4"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	2 1/2"	2'-10 1/2"	4'-2 3/4"	10'-3 3/4"	16'-4 3/4"	23'-1"											
Girder F	1 3/4"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	2 1/2"	2'-10 1/2"	4'-3 1/4"	10'-3 1/4"	16'-5 1/4"	23'-2 1/4"											
Girder G	1 3/4"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	2"	2'-10 1/2"	4'-3 3/4"	10'-4 3/4"	16'-5 3/4"	23'-3 3/4"											

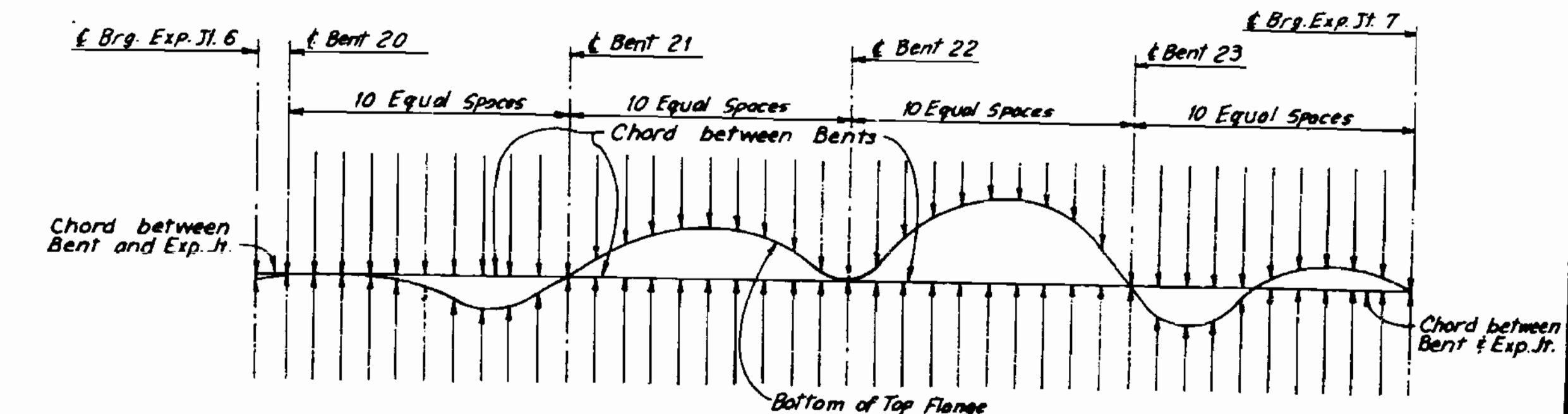
⚠ Delete



Girder A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Girder B-C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Girder D-E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Girder F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Girder G	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DEAD LOAD DEFLECTION DIAGRAM - UNIT 7

17% of dead load deflection is due to weight of structural steel.



Girder A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Girder B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Girder C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Girder D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Girder E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Girder F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Girder G	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CAMBER DIAGRAM UNIT 7

Deflection and Camber Notes:
 Negative dead load deflection values are upward deflections.
 Negative camber values are cambers below the reference chord.
 Reference chords shown for cambers are 1" below top of slab at Bents and Bearing Expansion Joints.

⚠ Add

GIRDER ELEVATION, DEFLECTIONS AND CAMBER - UNIT 7 WESTBOUND

DETAILED 1070
 CHECKED 1074

Note: This drawing is not to scale. Follow dimensions.

⚠ Revised 1/11/84

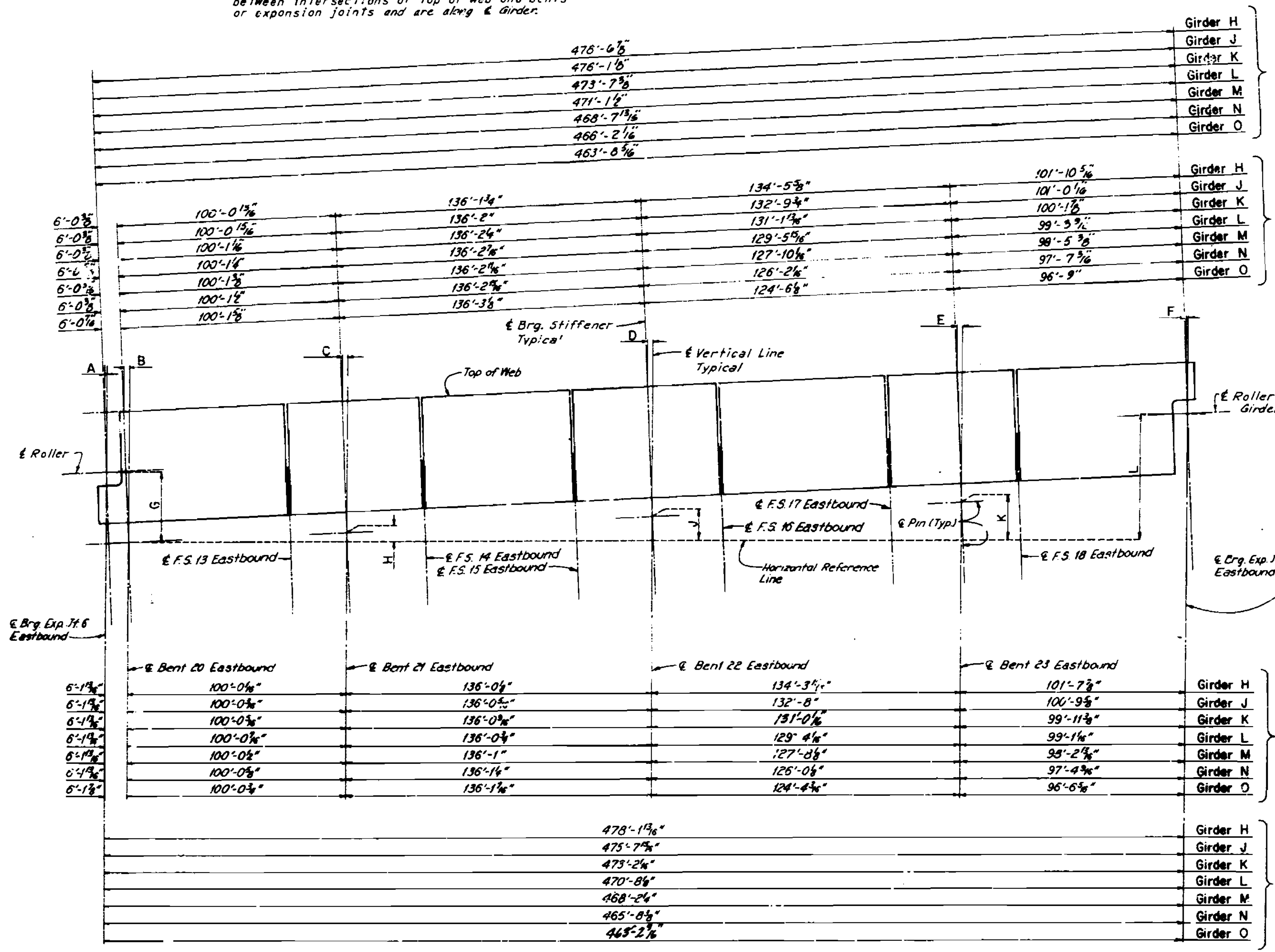
Sheet No. 22 of 59.

JACKSON COUNTY

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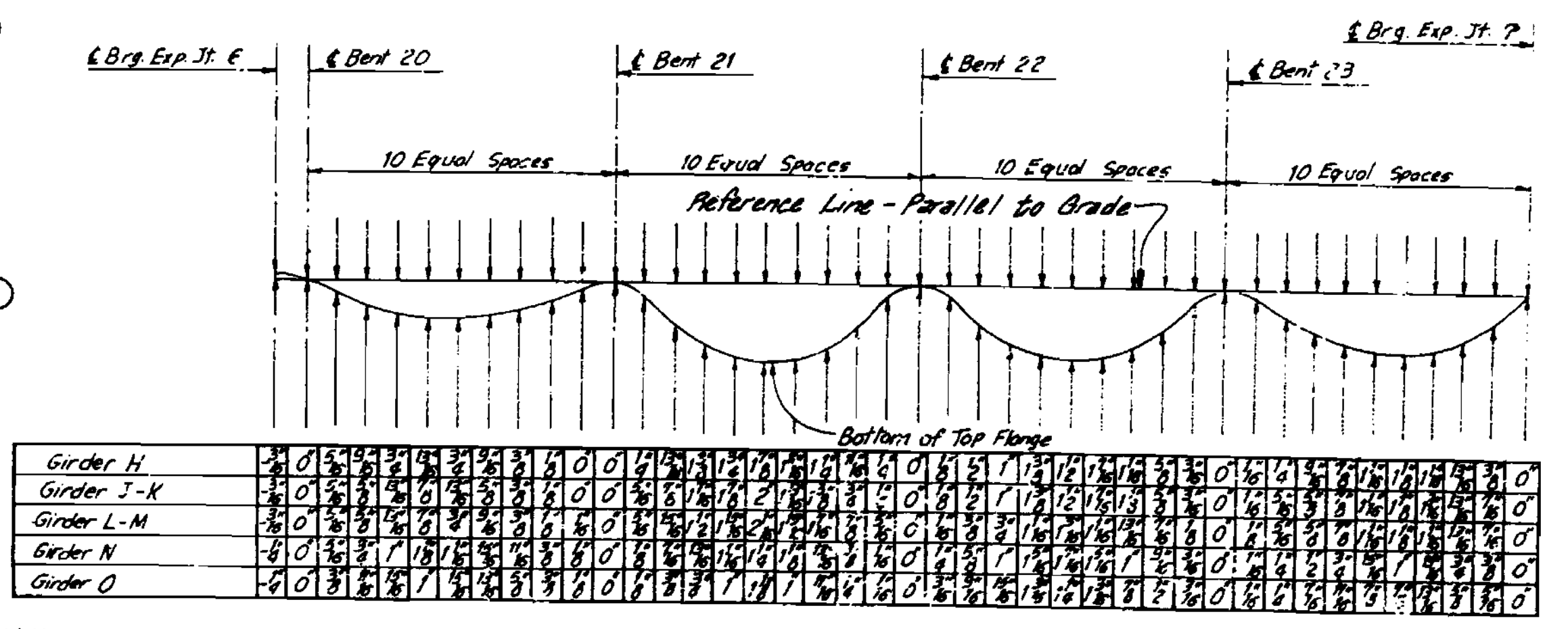
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.			22	

① Longitudinal dimensions are along chord lines between intersections of top of web and bents or expansion joints and are along & girder.

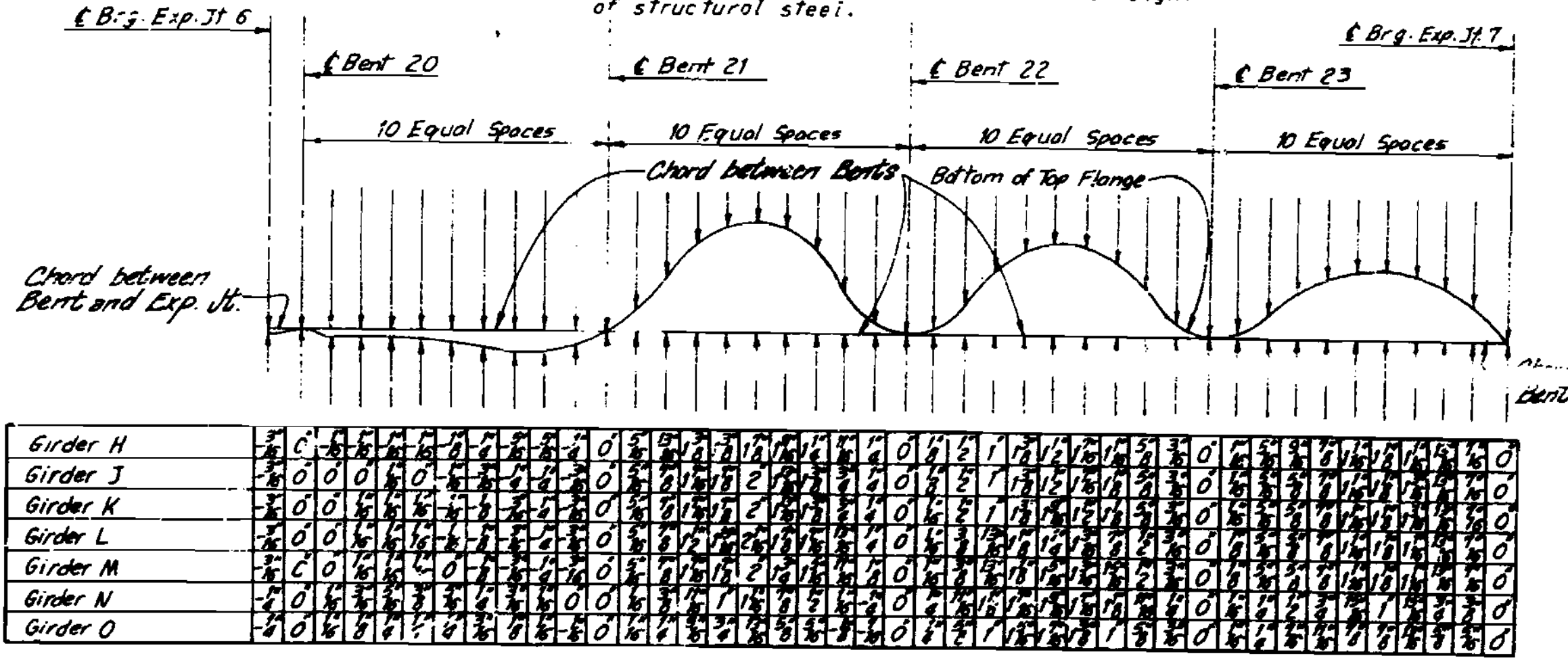


GIRDER ELEVATION UNIT 7

② Horizontal dimensions along & girder



DEAD LOAD DEFLECTION DIAGRAM - UNIT 7
17% of dead load deflection is due to weight of structural steel.



CAMBER DIAGRAM - UNIT 7

Deflection and Camber Notes:
Negative dead load deflection values are upward deflections.
Negative camber values are cambers below the reference chord.
Reference chords shown for cambers and 11" below top of slab at & bents and & bearing expansion joints.

	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
Girder H	1 1/2"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	2"	2'-10 1/2"	4'-3 3/4"	10'-4 1/2"	16'-6 3/4"	23'-3 3/4"											
Girder J	1 1/2"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	2 1/2"	2'-10 1/2"	4'-3 3/4"	10'-5 1/2"	16'-7 3/4"	23'-5 3/4"											
Girder K	1 1/2"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	2 1/2"	2'-10 1/2"	4'-3 3/4"	10'-5 1/2"	16'-8 1/4"	23'-6 1/4"											
Girder L	1 1/2"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	2 6/8"	2'-10 1/2"	4'-4 1/4"	10'-5 1/2"	16'-10 1/2"	23'-8 1/4"											
Girder M	1 1/2"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	2 6/8"	2'-10 1/2"	4'-4 3/4"	10'-6 1/2"	16'-11 1/4"	23'-9 3/4"											
Girder N	1 1/2"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	2 1/2"	2'-10 1/2"	4'-4 1/2"	10'-6 1/2"	16'-1 3/4"	23'-11 3/4"											
Girder O	1 1/2"	2 3/4"	3 3/4"	3 3/4"	3 3/4"	2"	2'-10 1/2"	4'-4 1/2"	10'-7 3/4"	16'-11 3/4"	24'-0 3/4"											

H	J	K	L
4'-4 1/2"	10'-5 3/4"	16'-6 3/4"	24'-4 1/2"
4'-4 3/8"	10'-5 3/8"	16'-7 3/8"	24'-5 3/8"
4'-4 3/8"	10'-5 3/8"	16'-8 3/8"	24'-7 1/8"
4'-4 3/8"	10'-6 1/4"	16'-10 3/8"	24'-8 3/8"
4'-4 3/8"	10'-6 3/8"	16'-11 1/4"	24'-10"
4'-5"	10'-7 3/8"	16'-11 1/2"	24'-11 1/2"
4'-5 1/8"	10'-7 3/8"	16'-10 3/8"	25'-0 3/8"

△ Delete

△ Add

GIRDER ELEVATION, DEFLECTIONS AND CAMBER - UNIT 7 EASTBOUND

DETAILED 1070
CHECKED 1079

Note: This drawing is not to scale. Follow dimensions.

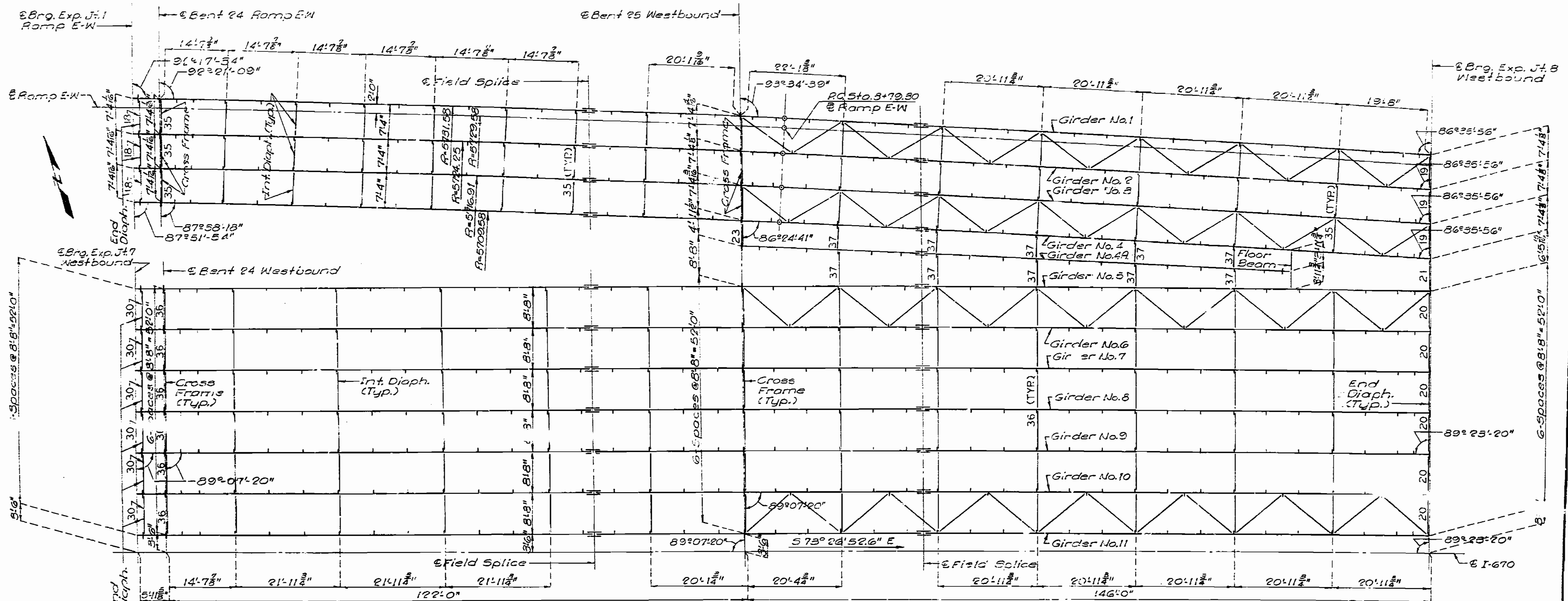
△ Revised 1/11/84

Sheet No. 25 of 59.

JACKSON COUNTY

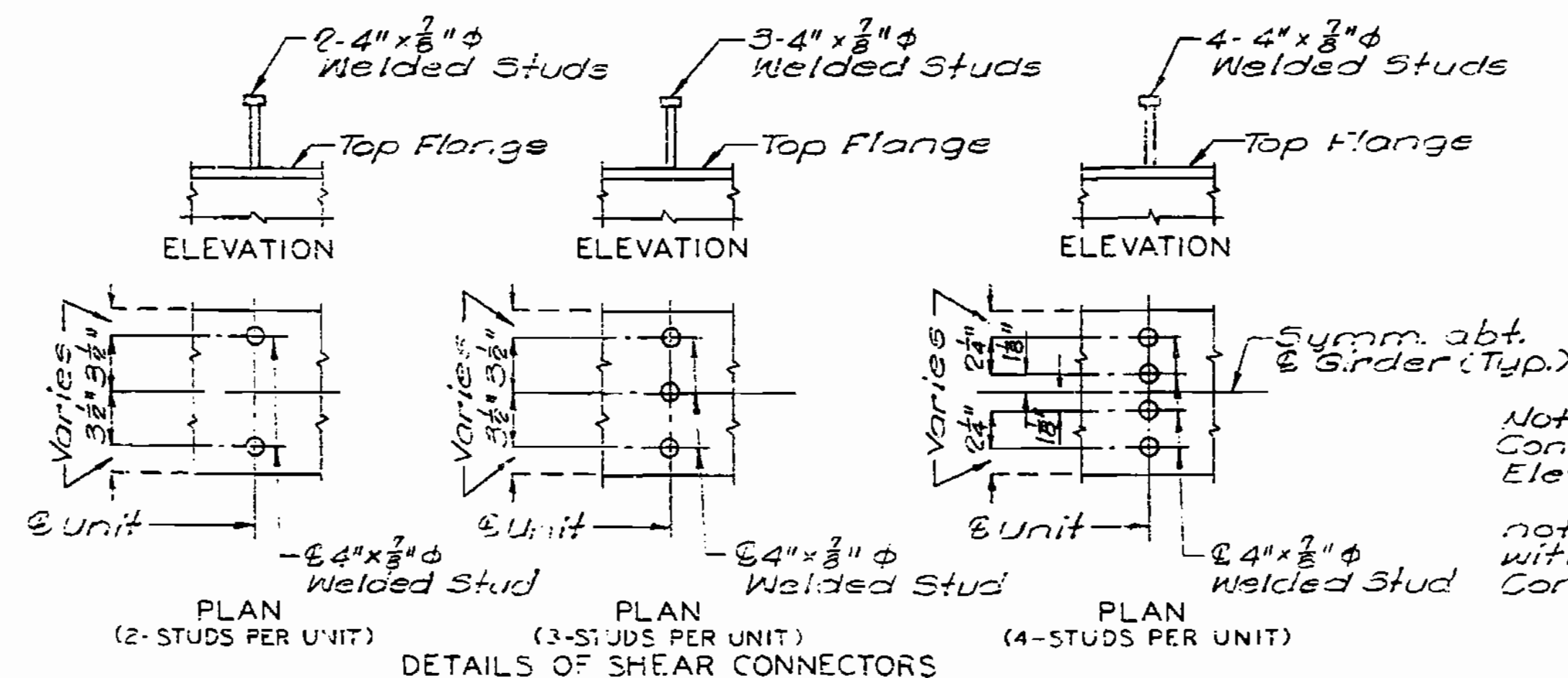
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		19	33	



Note: Dimensions shown are horizontal.
 The angles shown on the curved part of girders No. 1 & 4 is the angle between \bar{c} of Bent or \bar{c} of Bearing or expansion joint and a local tangent to the girder at the location indicated.
 Transverse web stiffener plates shall be oriented as shown in Framing Plan.
 Spacing for transverse web stiffener plates may be adjusted a maximum of 6" in either direction to match the spacing for the intermediate diaphragms.
 For lateral bracing details see sheet No. 58.
 Number near diaphragms and cross frames indicates type to be used at that location. See sheet No. 55 for diaphragm details.

Size of additional connection plates for diaphragms shall be the same size as the adjacent transverse web stiffener plates.



Note: For spacing of Shear Connector Units see Girder Elevation sheets.
 Shear connectors are not to be furnished or installed with the Structural Steel Contract.

417

DETAILED 1982
 CHECKED 1982

Note: This drawing is not to scale. Follow dimensions.

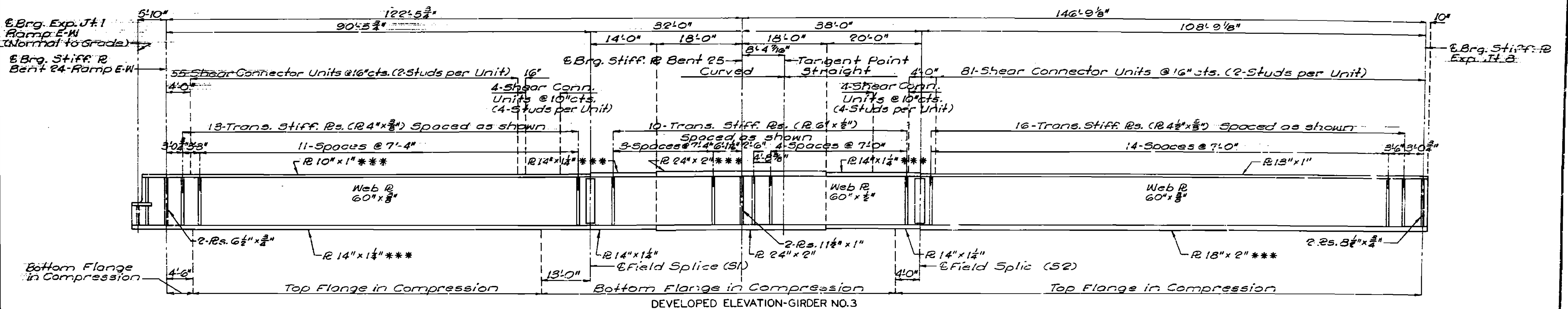
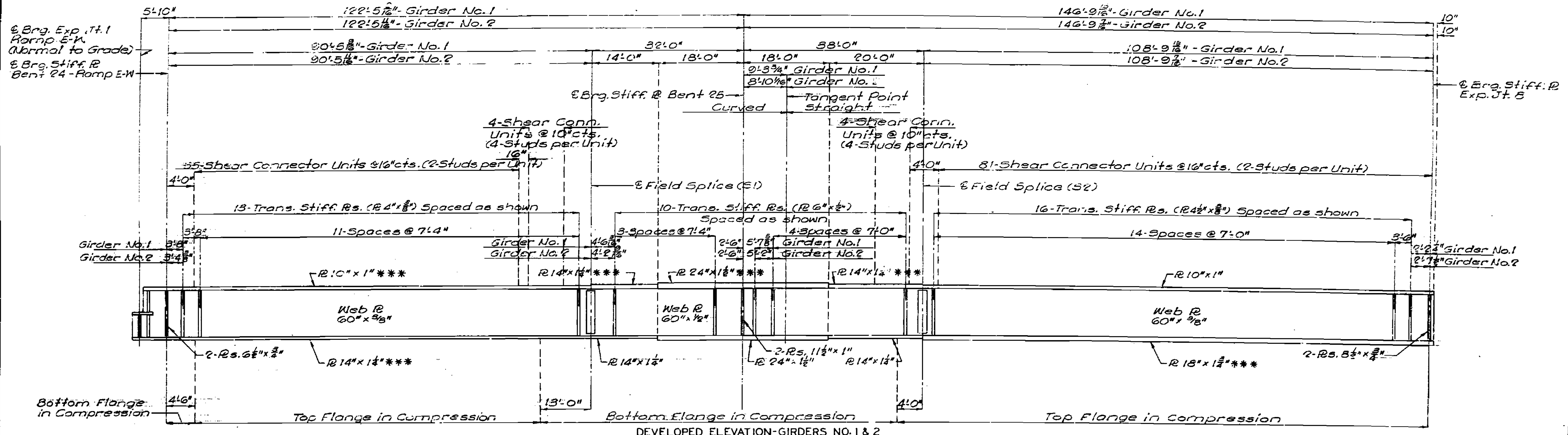
Sheet No. 22 of 52.

FRAMING PLAN - UNIT 8 WESTBOUND

JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	MO.		88	34	



Note: Longitudinal dimensions are along \bar{c} girder at top of web. (See Elevation of Longitudinal Steel on sheet No. 30).
 Fabricated structural steel shall be A36.
 Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 33.
 Transverse web stiffeners shall be oriented as shown in Framing Plan.
 ***Indicates Flange Plates subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements.
 Shear connectors are not to be furnished or installed with Structural Steel Contract.

DETAILED 10 82
 CHECKED 10 82

Note: This drawing is not to scale. Follow dimensions.

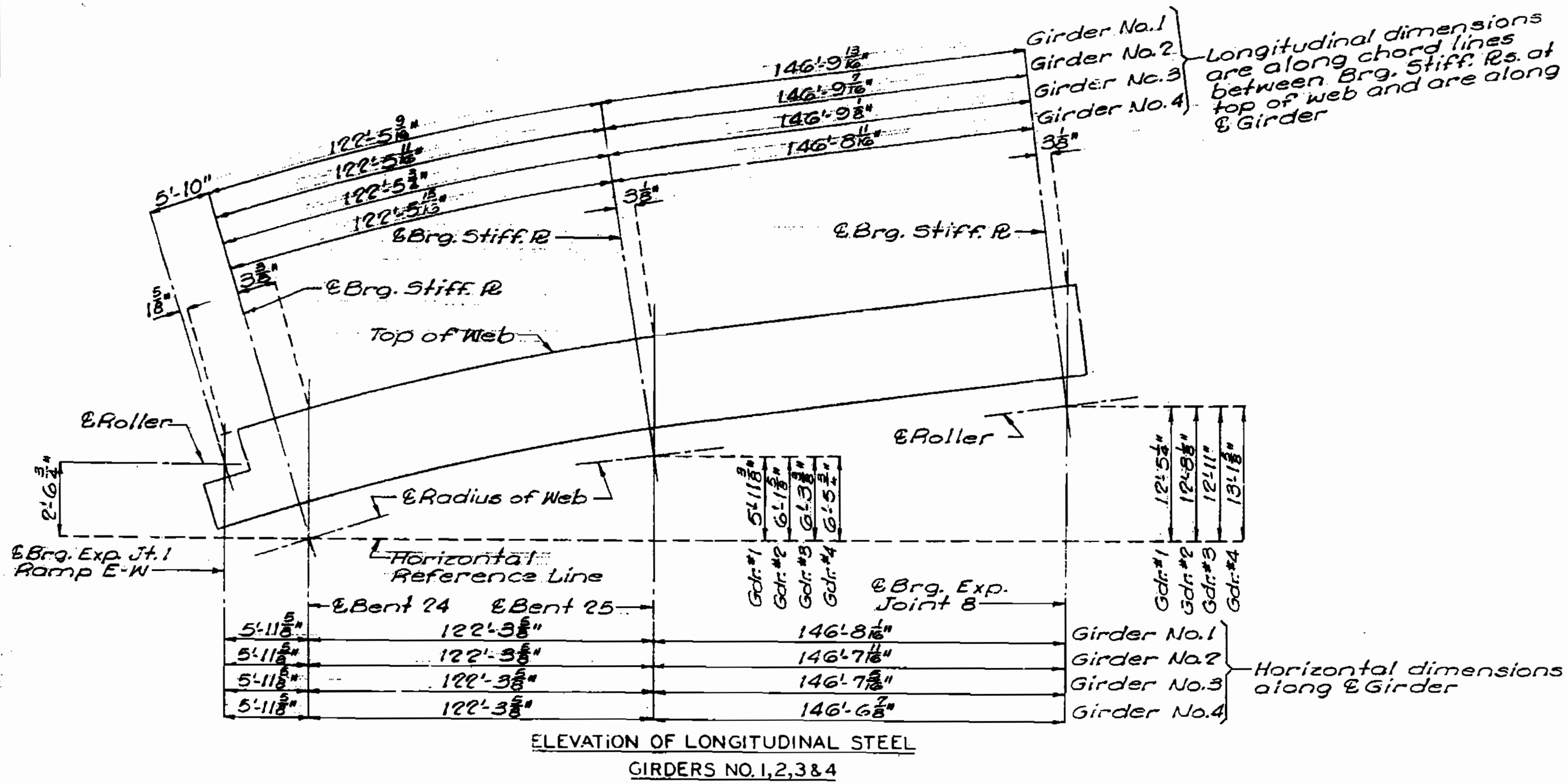
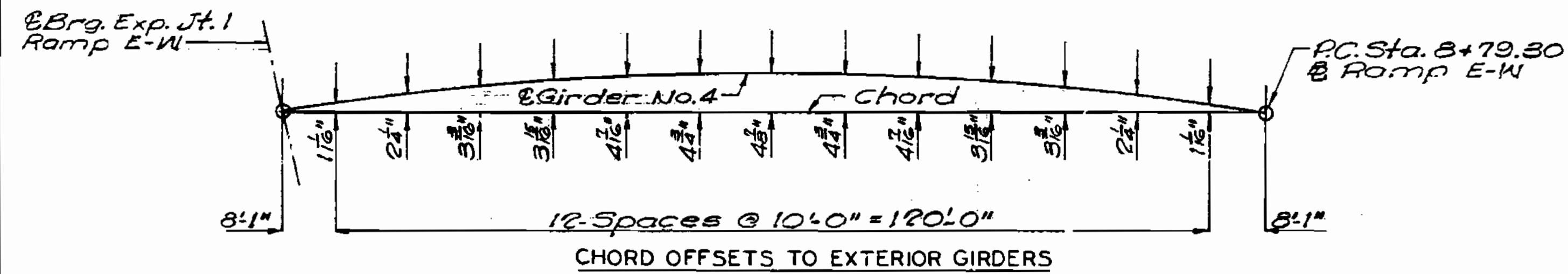
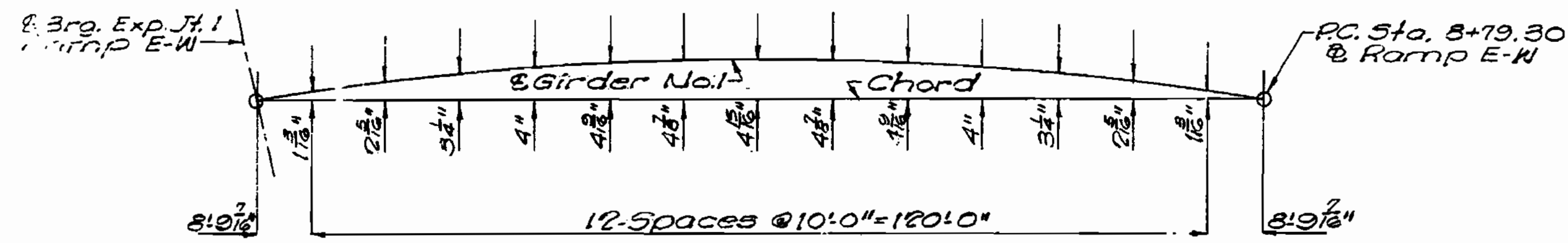
Sheet No. 27 of 59.

GIRDER ELEVATION-UNIT 8 WESTBOUND
 GIRDERS NO. 1, 2 & 3

JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		79	37	



ELEVATION OF LONGITUDINAL STEEL
GIRDERS NO. 1, 2, 3 & 4

DETAILED 10 82
CHECKED 10 82

Note: This drawing is not to scale. Follow dimensions.

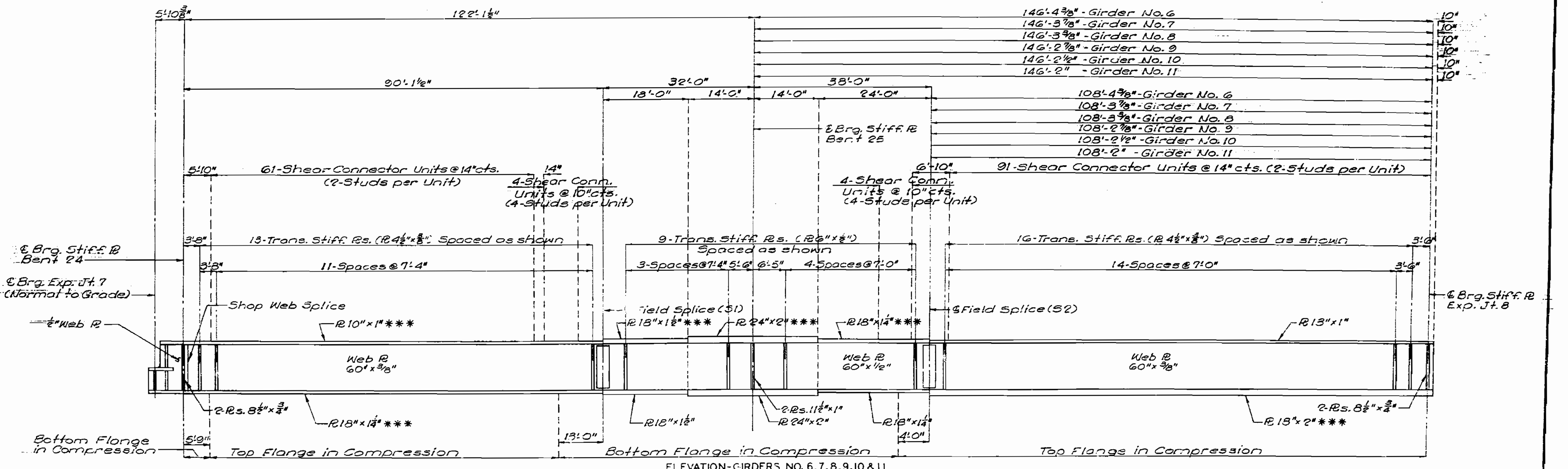
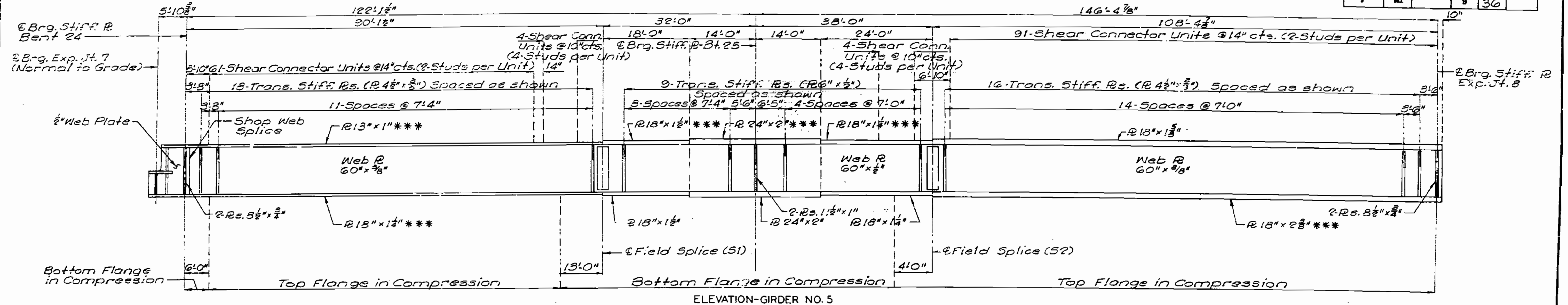
Sheet No. 30 of 59.

GIRDER DETAILS - UNIT 3 WESTBOUND

JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.			36	



Note: Longitudinal dimensions are parallel to grade.
 Fabricated structural steel shall be A36.
 Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 33.
 Transverse web stiffeners shall be oriented as shown in Framing Plan.
 *** Indicates Flange Plates subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements.

Note: Shear connectors are not to be furnished or installed with the Structural Steel Contract.

GIRDER ELEVATION - UNIT 8 WESTBOUND
 GIRDERS NO. 5 THRU 11

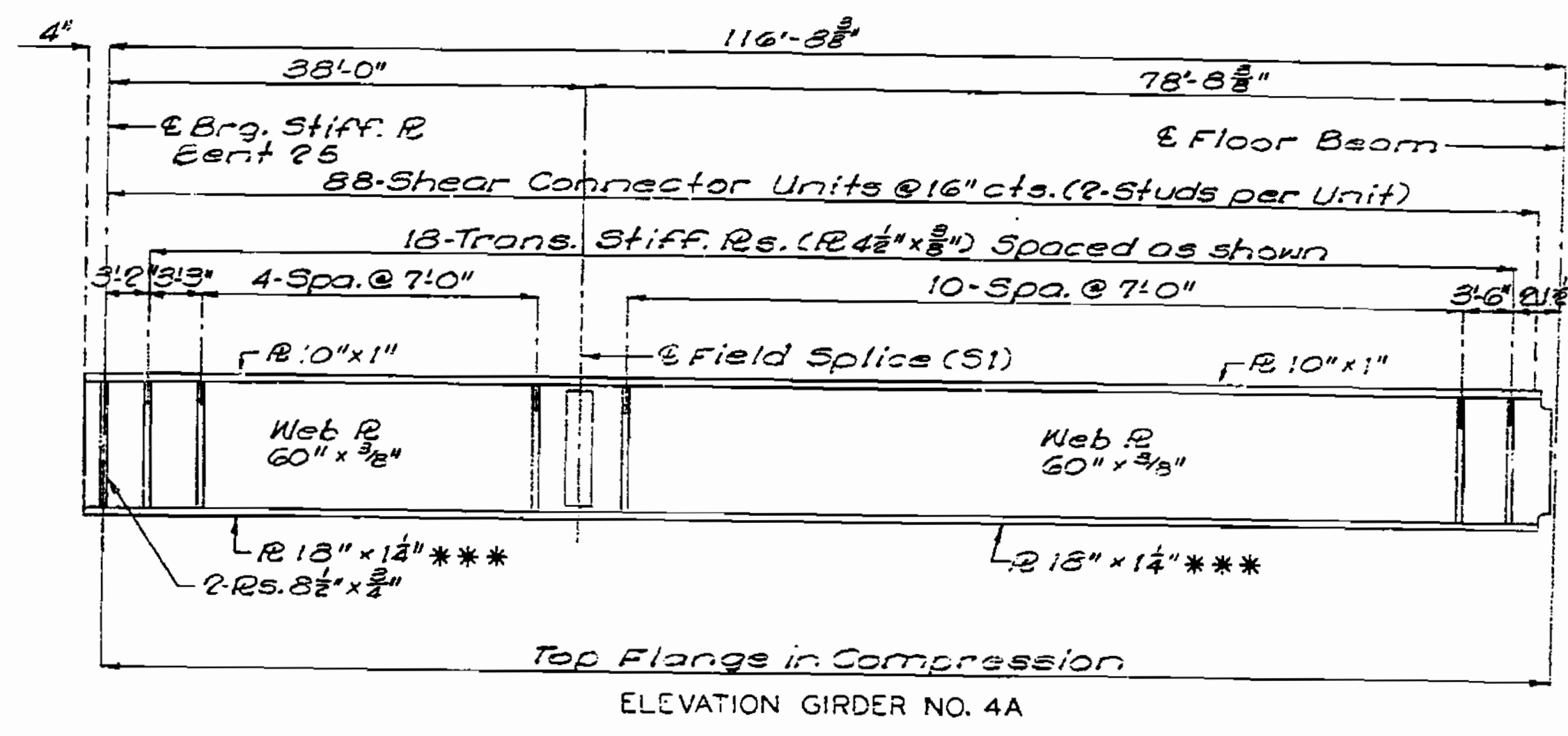
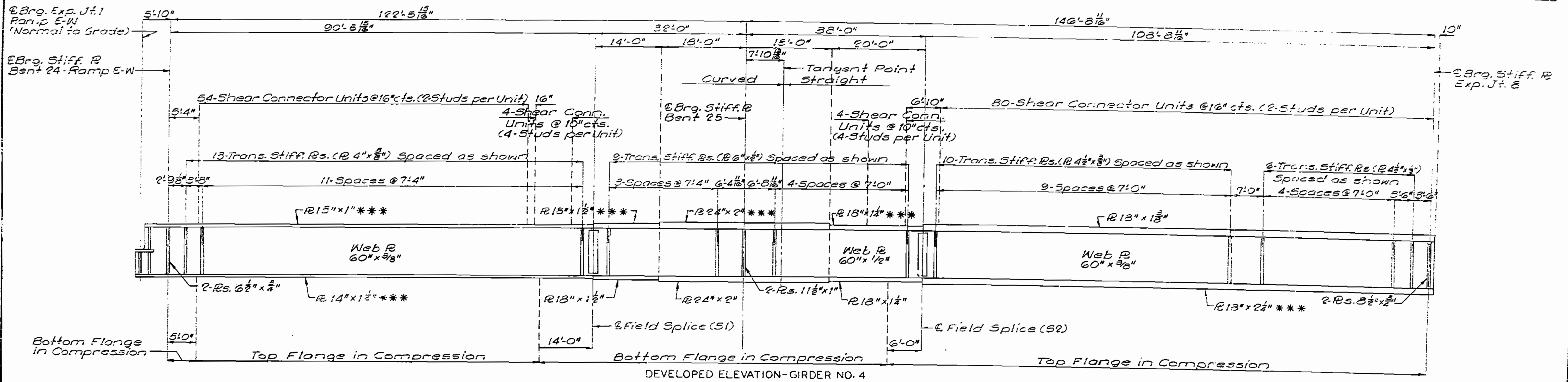
DETAILED 1952
 CHECKED 1952

Sheet No. 29 of 29.

JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		13	35	



Note: Longitudinal dimensions are along \bar{C} Girder at top of web. (See Elevation of Longitudinal Steel on sheet No. 30).
 Fabricated structural steel shall be A36.
 Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 33.
 Transverse web stiffeners shall be oriented as shown in Framing Plan.
 ***Indicates Flange Plates subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements.
 Shear connectors are not to be furnished or installed with Structural Steel Contract.

101

DETAILED 10/22
 CHECKED 10/22

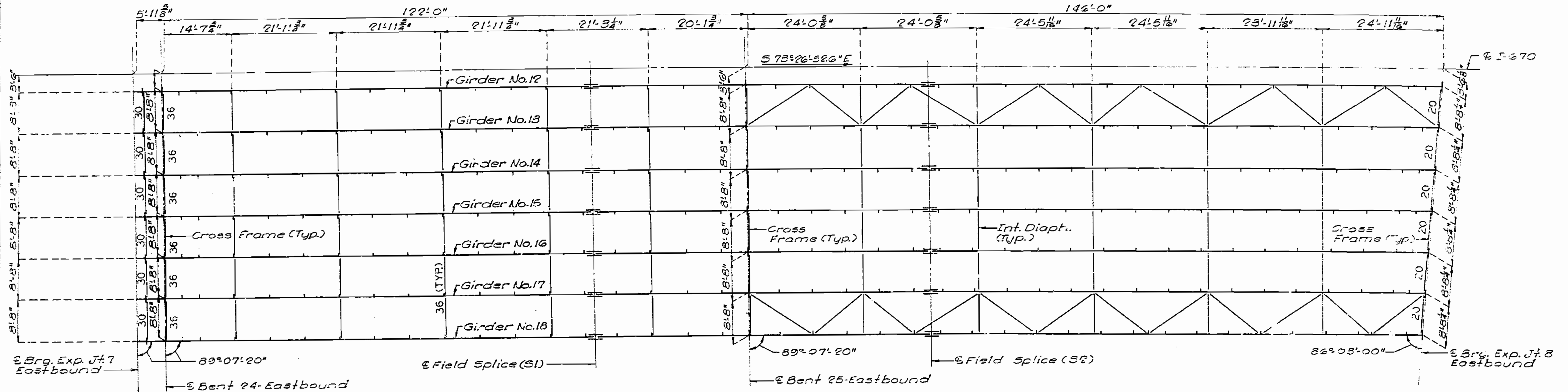
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 28 of 57.

JACKSON COUNTY A-3136

GIRDER ELEVATION-UNIT 8 WESTBOUND
 GIRDERS NO. 4 & 4A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		U	35	



Note: Dimensions shown are horizontal.
 Transverse web stiffener plates shall be oriented as shown in Framing Plan.
 Spacing for transverse web stiffener plates may be adjusted a maximum of 3" in either direction to match the spacing for the intermediate diaphragms.
 Intermediate diaphragms are to be placed parallel to Bent 25-Eastbound.
 Number near diaphragms and cross frames indicates type to be used at that location. See sheet No. 55 for diaphragm details.
 For lateral bracing details see sheet No. 58.
 Size of additional connection plates for diaphragms shall be the same size as the adjacent transverse web stiffener plates.

101

FRAMING PLAN - UNIT 8 EASTBOUND

DETAILED 10 82
 CHECKED 10 82

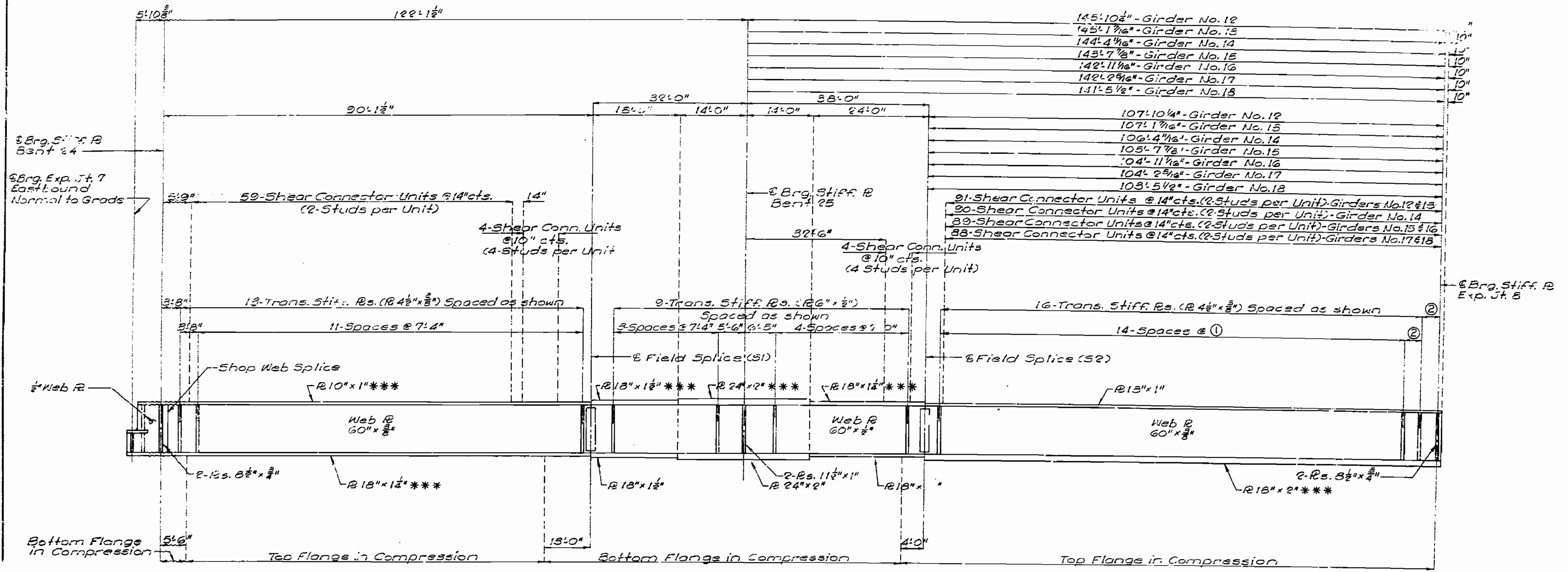
Note: T. drawing is not to scale. Follow dimensions.

Sheet No. 31 of 59.

JACKSON COUNTY

A-3136

REV.	BY	DATE	TOTAL SHEETS



Note: Longitudinal dimensions are parallel to grade at top of web.
 Fabricated structural steel shall be A36.
 Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 33.
 Transverse web stiffeners shall be oriented as shown in Forming Plan.
 *** Indicates Flange Plates subject to notch toughness requirements.
 Shear connectors are not to be furnished or installed with Structural Steel Contract.

- ① 7'-0" - Girders No. 12 & 13
 6'-11" - Girders No. 14 & 15
 6'-10" - Girder No. 16
 6'-9" - Girders No. 17 & 18
- ② 3'-6" - Girders No. 12 & 13
 3'-5 1/2" - Girders No. 14 & 15
 3'-5" - Girder No. 16
 3'-4 1/2" - Girders No. 17 & 18

DETAILED 10 82
 CHECKED 10 82

Note: This drawing is not to scale. Follow dimensions.

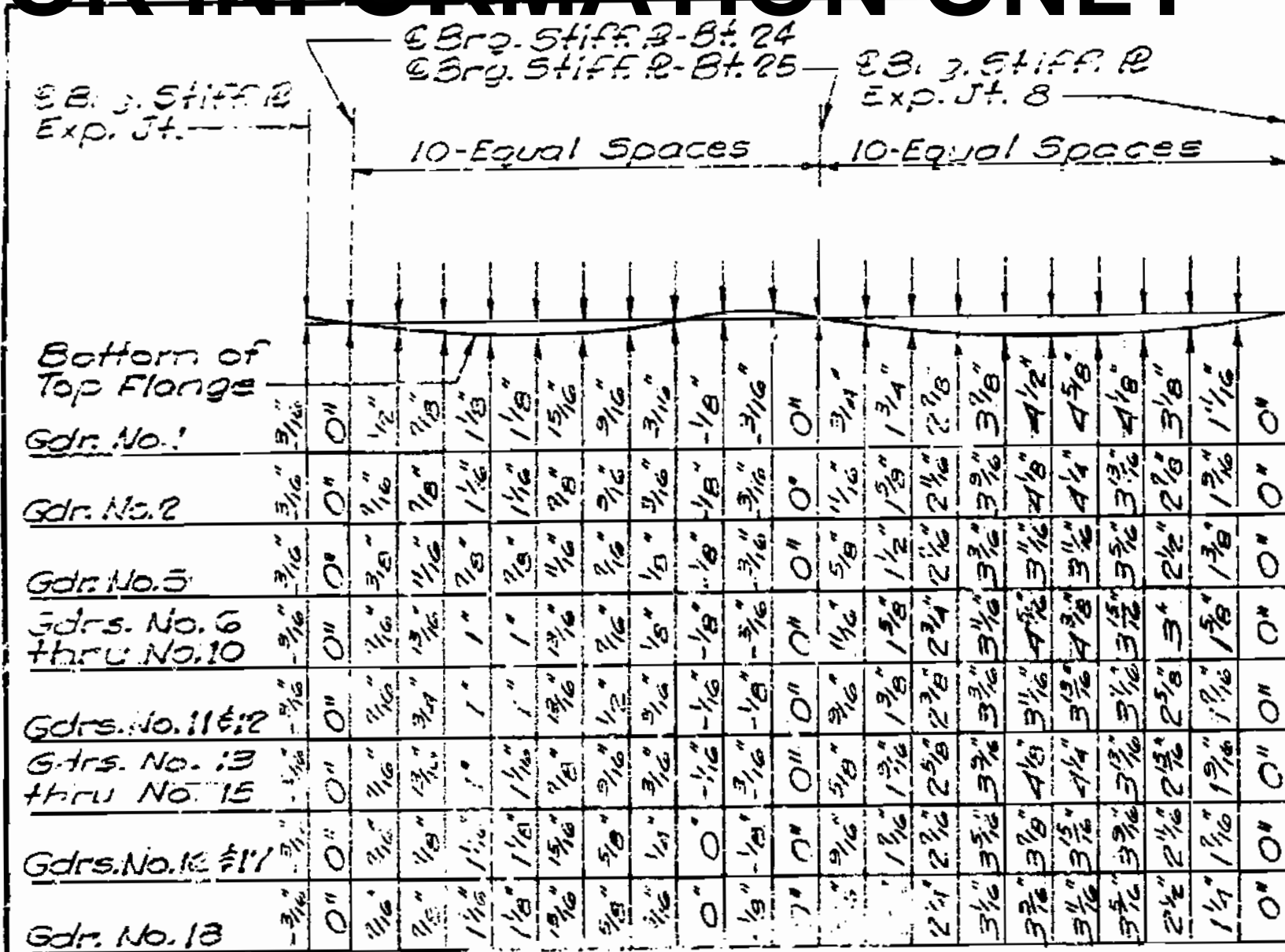
Sheet No. 32 of 59.

GIRDER ELEVATION-UNIT 8 EASTBOUND
 GIRDERS NO 12 THRU 18

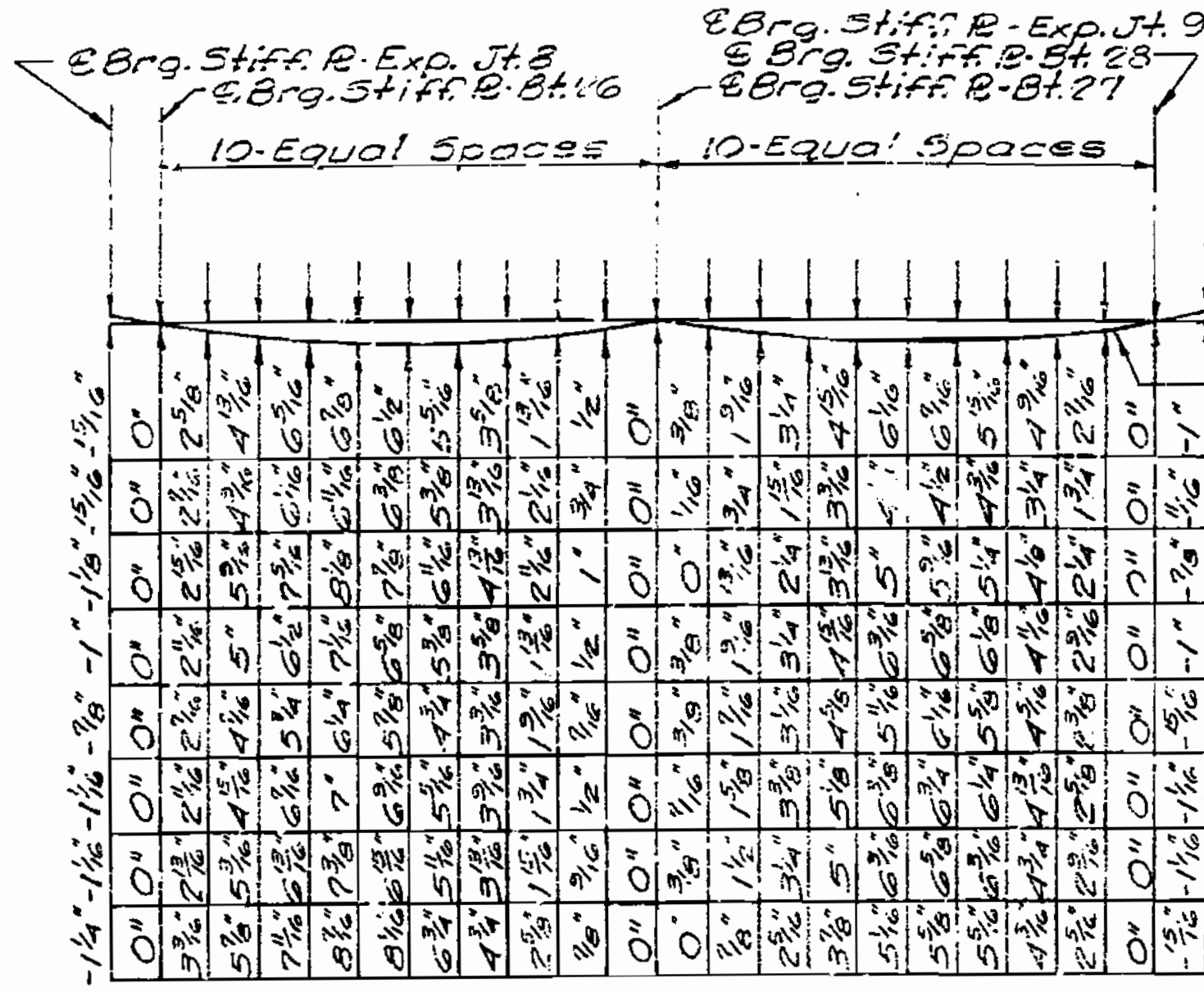
JACKSON COUNTY

A-3136

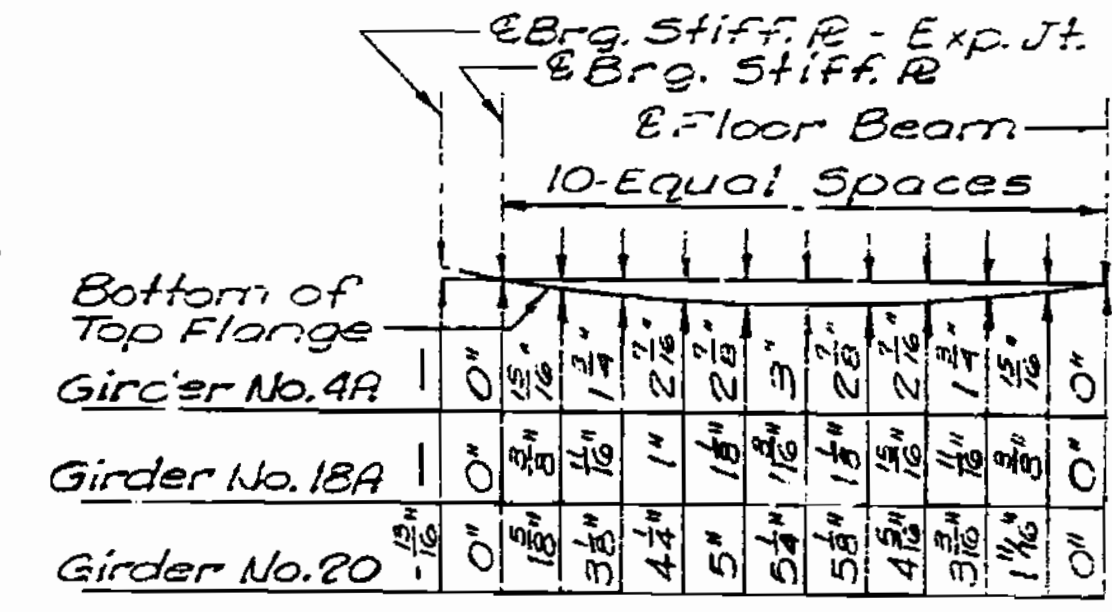
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		19	40	



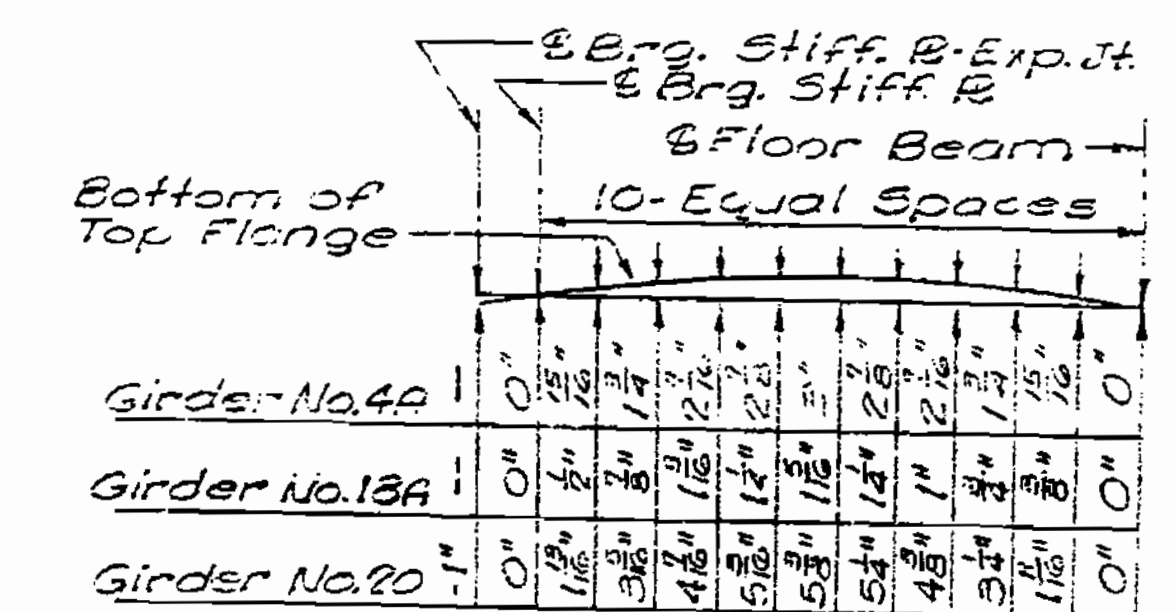
UNIT 3
DEAD LOAD DEFLECTION DIAGRAM



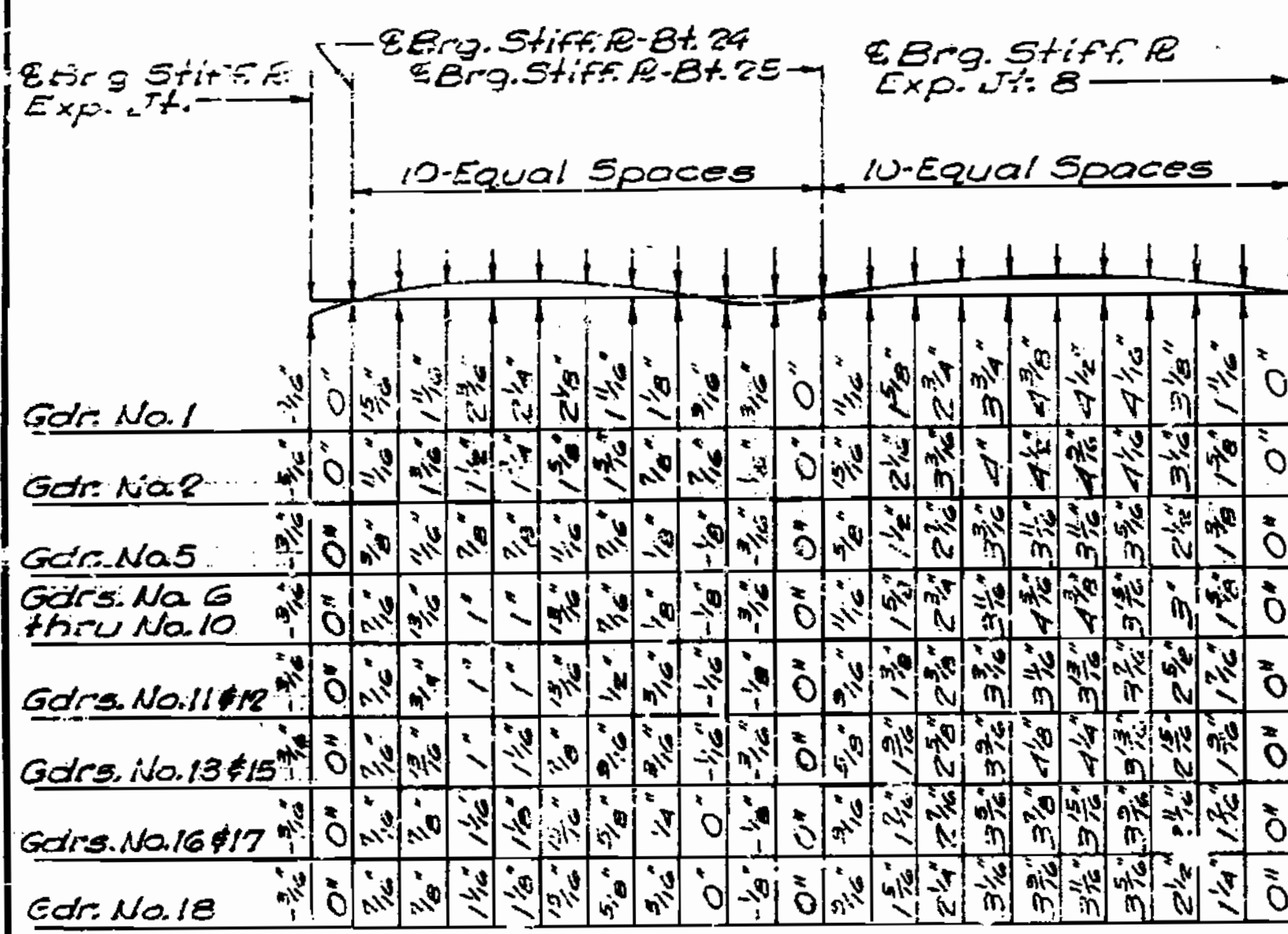
UNIT 9
DEAD LOAD DEFLECTION DIAGRAM



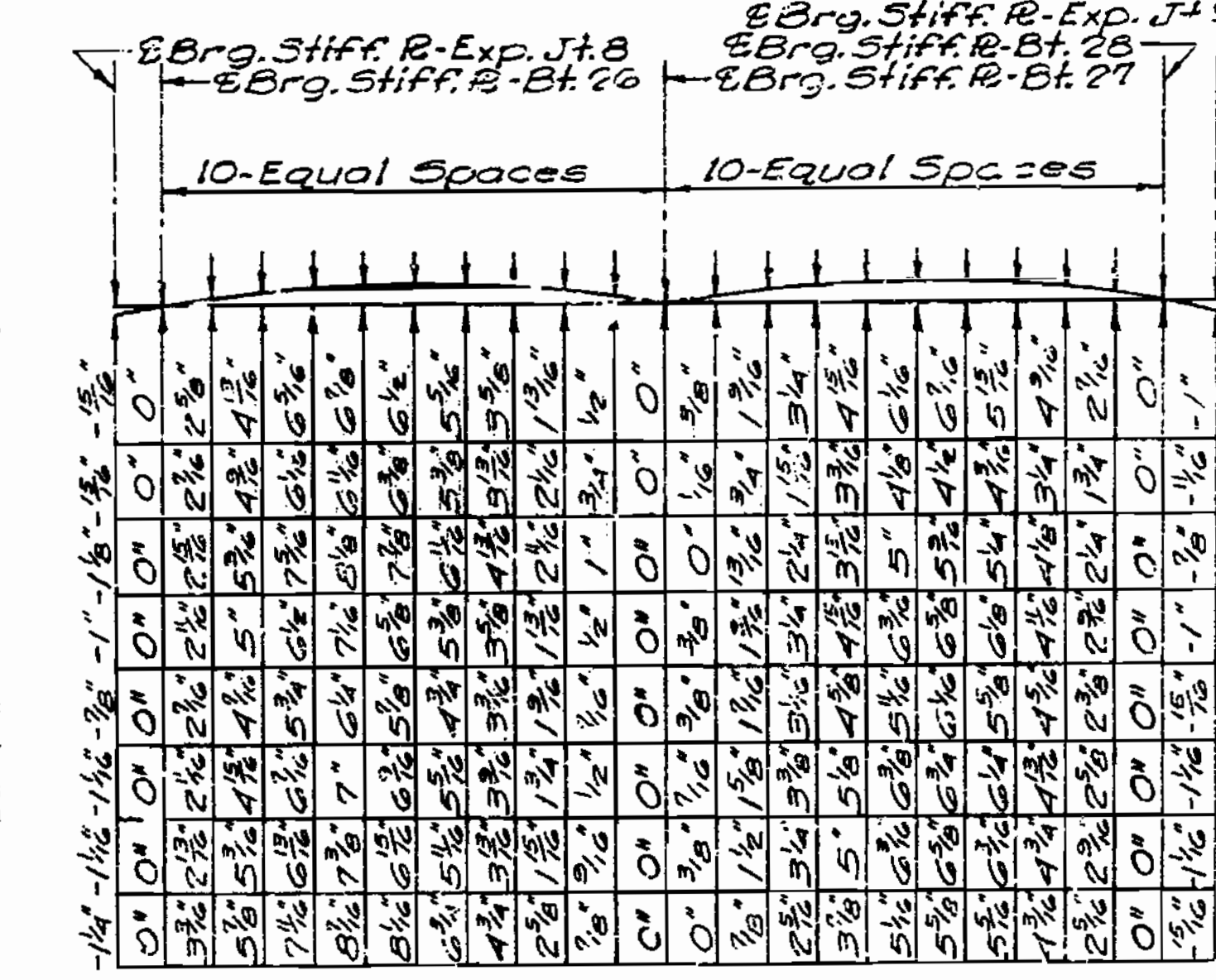
UNIT 8-GIRDER NO. 4A
UNIT 9-GIRDERS NO. 18A & 20
DEAD LOAD DEFLECTION DIAGRAM



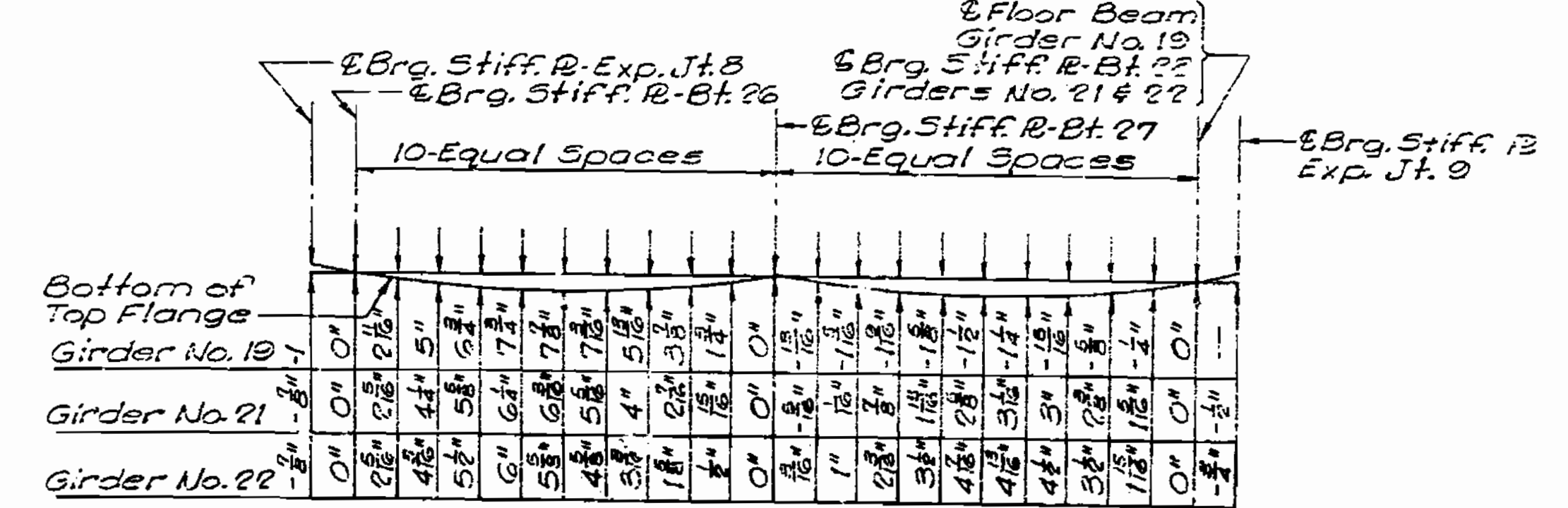
UNIT 8-GIRDER NO. 4A
UNIT 9-GIRDERS NO. 18A & 20
CAMBER DIAGRAM



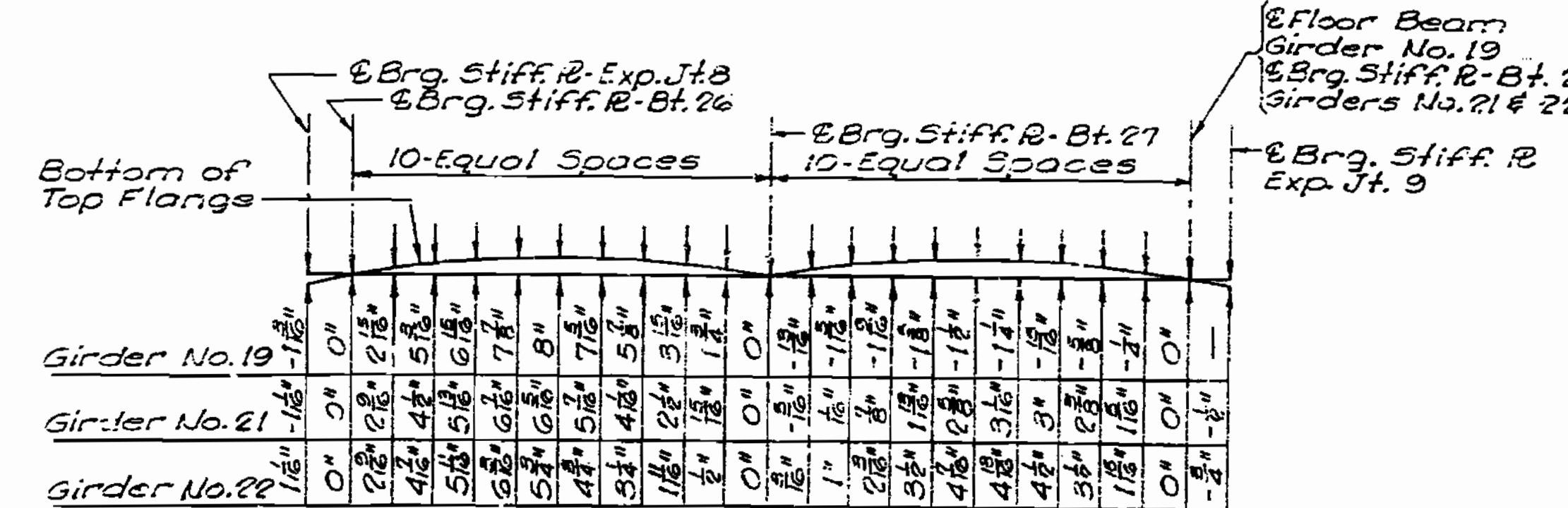
UNIT 8
CAMBER DIAGRAM



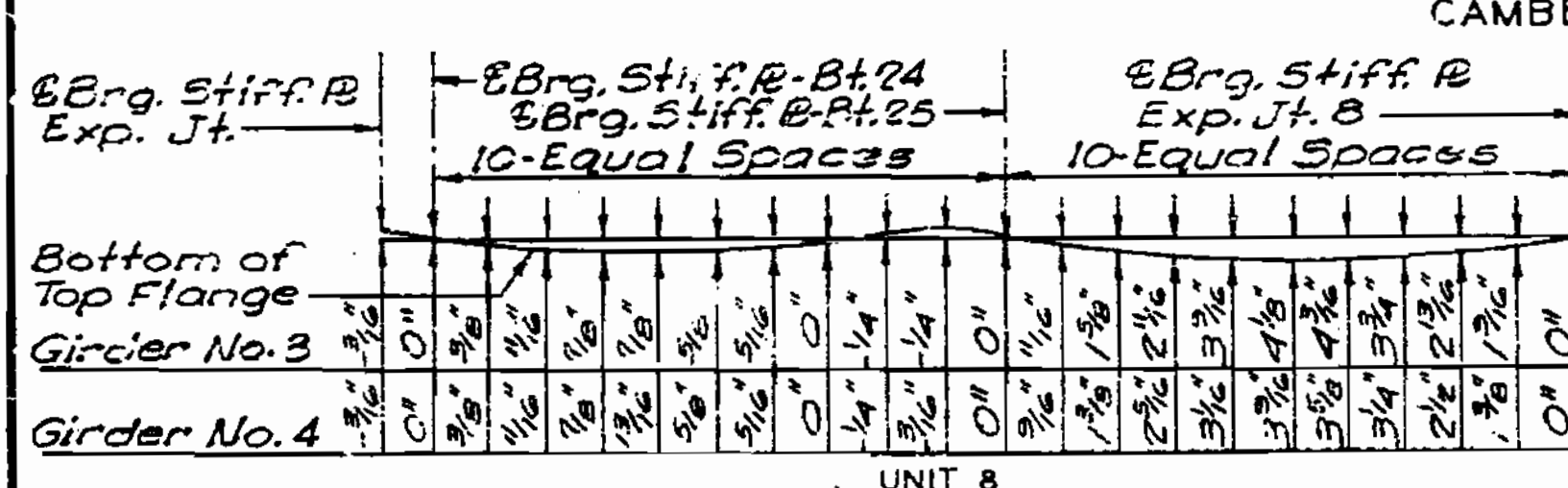
UNIT 9
CAMBER DIAGRAM



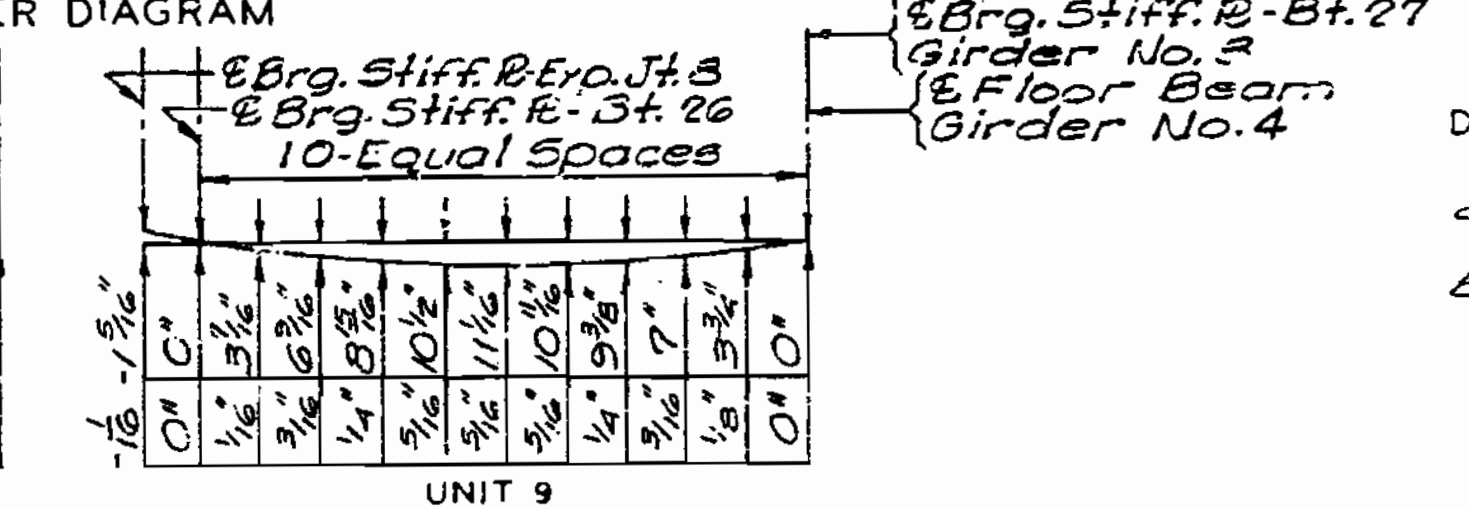
UNIT 9
DEAD LOAD DEFLECTION DIAGRAM



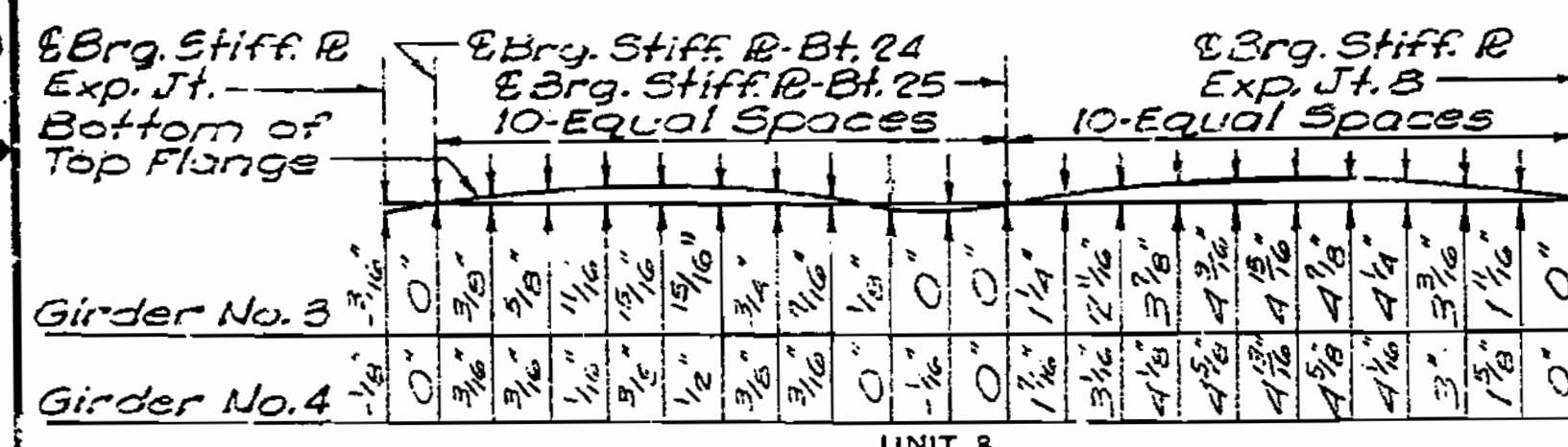
UNIT 9
CAMBER DIAGRAM



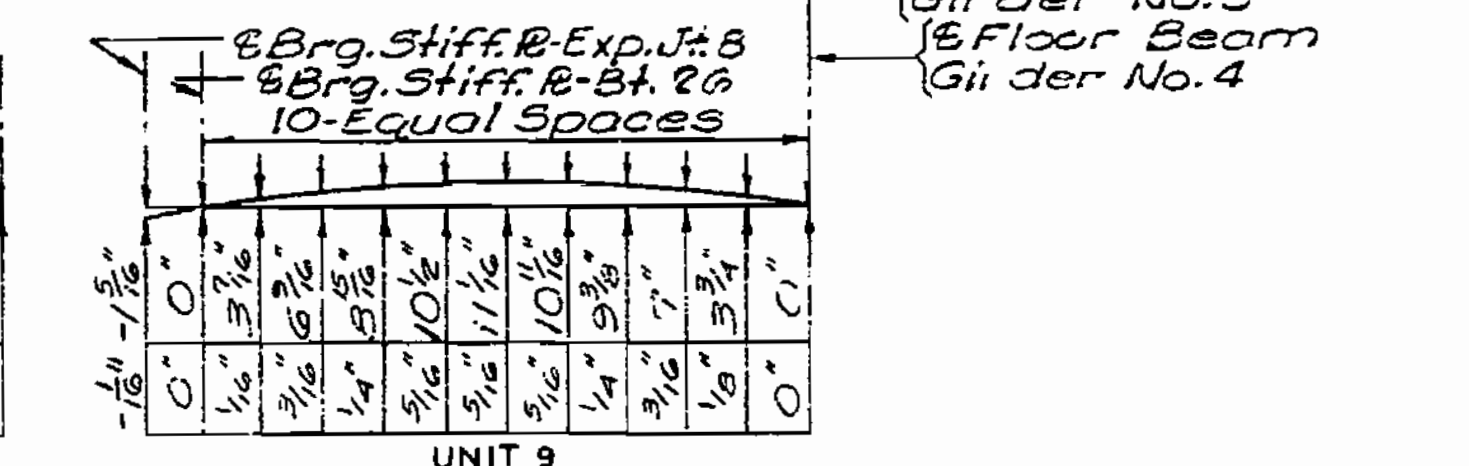
UNIT 8
DEAD LOAD DEFLECTION DIAGRAM



UNIT 9
CAMBER DIAGRAM



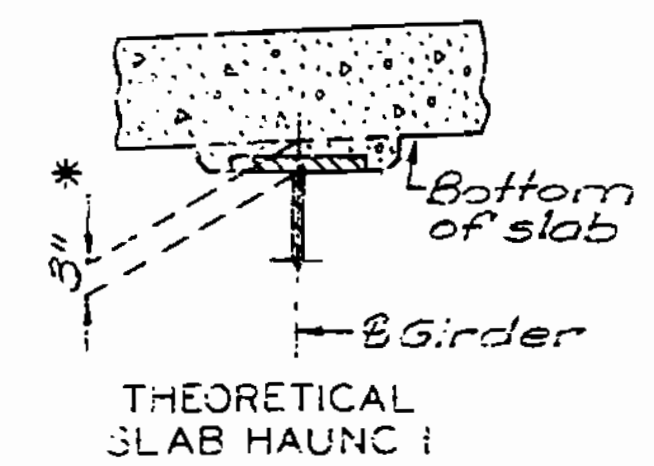
UNIT 8
CAMBER DIAGRAM



UNIT 9
CAMBER DIAGRAM

DEFLECTION AND CAMBER NOTES:
 Negative dead load deflection values are upward deflections.
 Negative camber values are cambers below the reference chord.

UNIT	% OF DEAD LOAD DEFLECTION DUE TO WEIGHT OF STRUCTURAL STEEL				
	GDR. / SPAN	1	2	1	2
1		16%	21%	23%	23%
2		16%	23%	33%	36%
3		16%	23%	50%	—
4		17%	26%	40%	—
4A		—	23%	—	—
5		18%	25%	28%	25%
6 Thru 10		17%	20%	27%	27%
11 & 12		18%	23%	30%	30%
13 Thru 17		17%	21%	27%	27%
18		15%	22%	36%	29%
18A		—	—	35%	—
19		—	—	33%	41%
20		—	—	33%	—
21		—	—	35%	40%
22		—	—	32%	33%



*Dimension may vary if girder camber after erection differs from plan camber by more than the % of Dead Load deflection due to weight of structural steel. No payment will be made for additional forming or concrete for variable haunching.

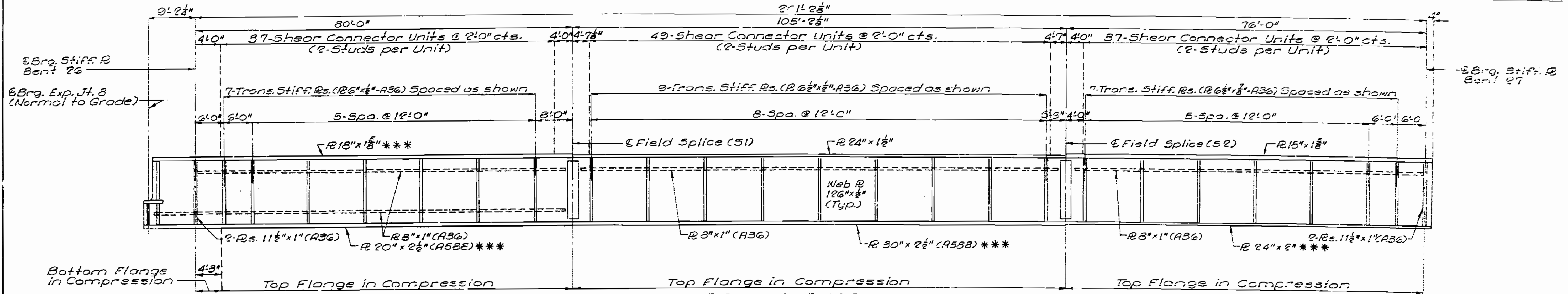
DEAD LOAD DEFLECTION AND CAMBER DIAGRAMS
 UNITS 8 & 9

DETAILED 1982
 CHECKED 1982

Note: This drawing is not to scale. Follow dimensions.

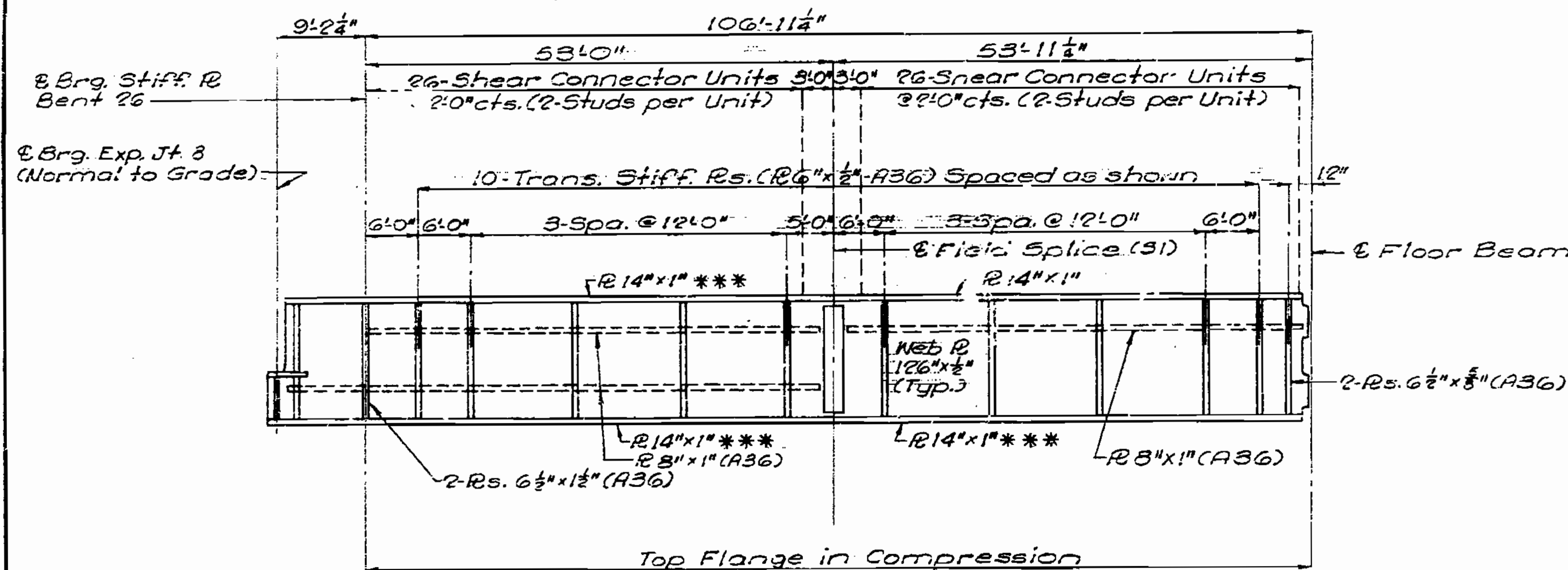
Sheet No. 33 of 59.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.			43	



ELEVATION-GIRDER NO. 3

Note: Fabricated structural steel for Girder No. 3 shall be A572 except as shown.



ELEVATION GIRDER NO. 4

Note: Fabricated structural steel for Girder No. 4 shall be A572 except as shown.

Note: Longitudinal dimensions are parallel to grade. Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 33. *** Indicates Flange Plates subject to notch toughness requirements. All web plates shall be subject to notch toughness requirements. Whenever longitudinal stiffeners (R 8" x 1") interfere with bolting the diaphragms in place, clip stiffeners. Longitudinal web stiffeners shall be placed on the outside of exterior girders and on the side opposite to transverse web stiffener plates for interior girders. Transverse web stiffeners shall be oriented as shown in Framing Plan. Shear connectors are not to be furnished or installed with Structural Steel Contract.

441

GIRDER ELEVATION-UNIT 9 WESTBOUND GIRDERS NO. 3 & 4

DETAILED 1982
CHECKED 1982

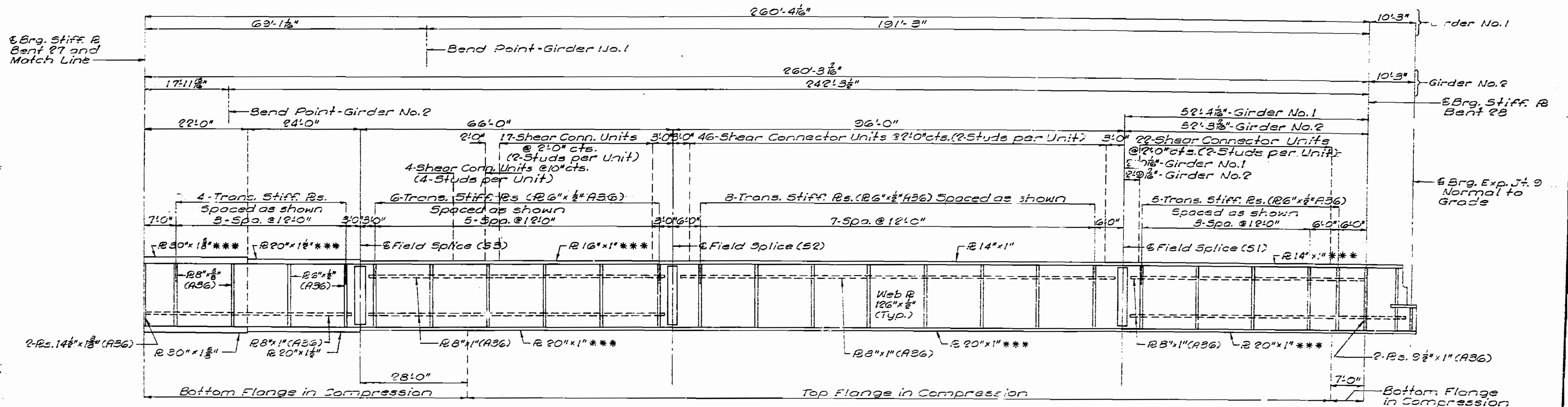
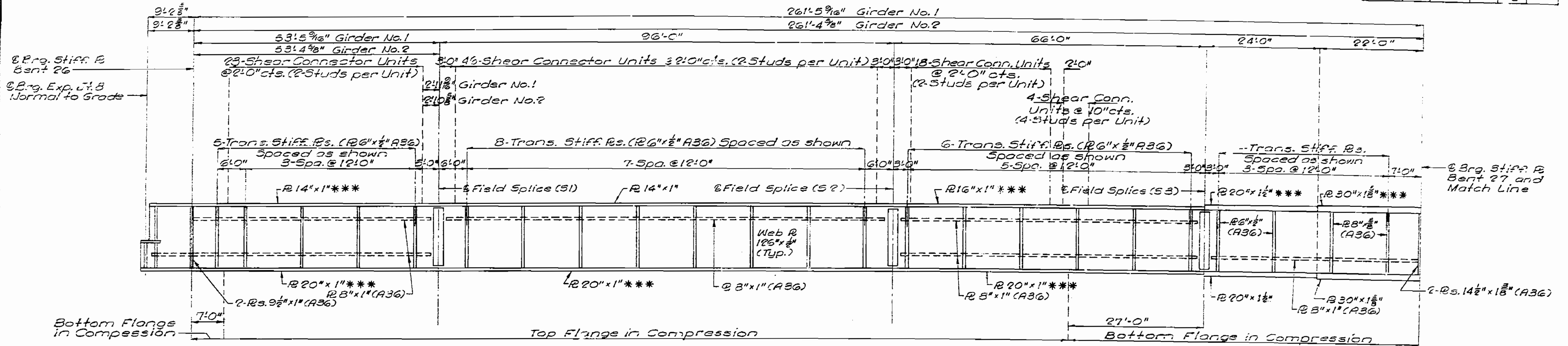
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 36 of 59.

JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		13	42	



Note: Longitudinal dimensions are parallel to grade.
Fabricated structural steel shall be A572 except as shown.
***Indicates Flange Plates subject to notch toughness requirements.
All web plates shall be subject to notch toughness requirements.
Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 33

Note: Whenever longitudinal stiffeners (R8"x1") interfere with bolting the diaphragms in place, clip stiffeners.
Longitudinal web stiffeners shall be placed on the outside of exterior girders and on the side opposite to transverse web stiffener plates for interior girders.
Transverse web stiffeners shall be oriented as shown in Framing Plan.
Shear connectors are not to be furnished or installed with Structural Steel Contract.

GIRDER ELEVATION-UNIT 9 WESTBOUND
GIRDERS NO. 1 & 2

T.O.

DETAILED 10 82
CHECKED 10 82

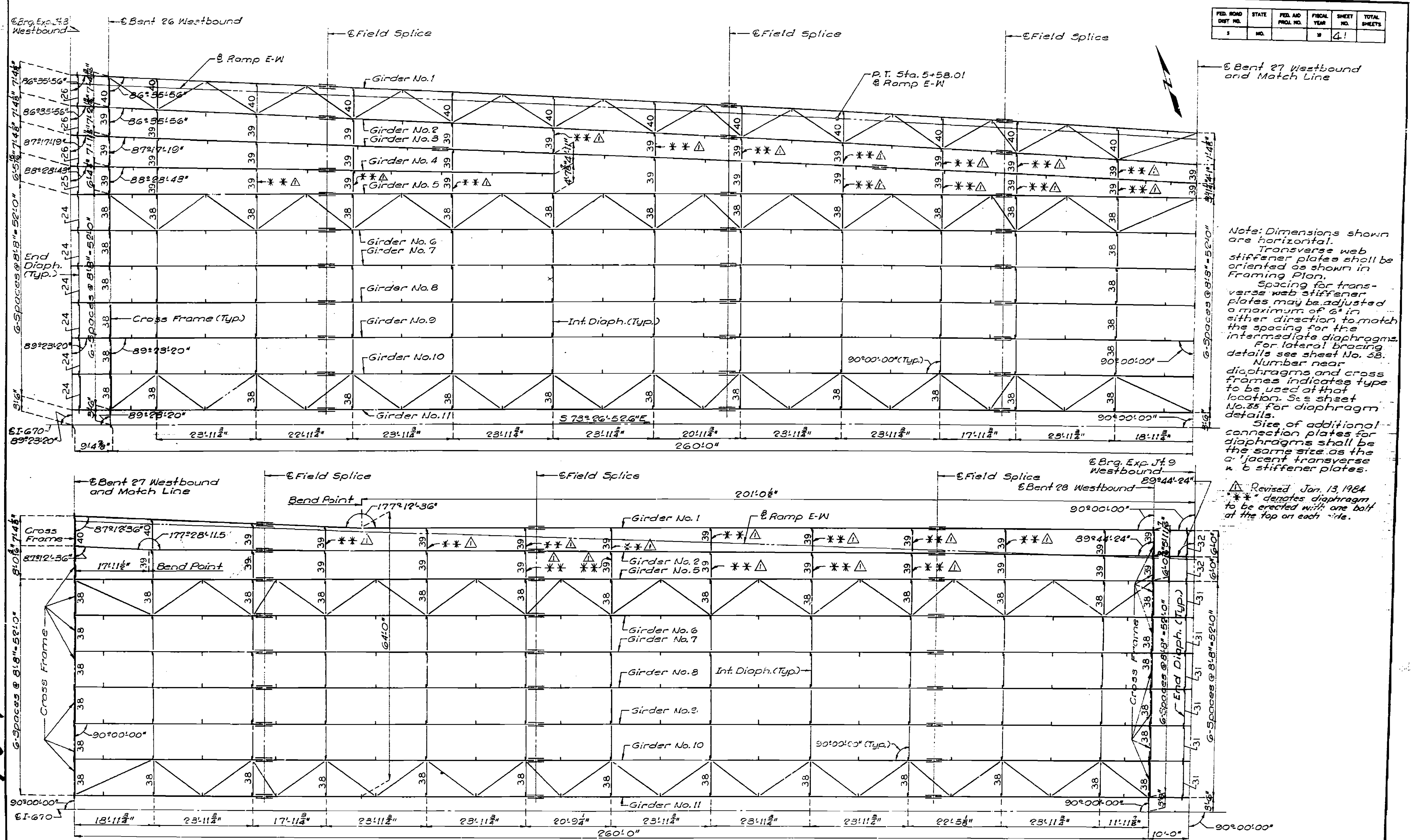
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 55 of 59.

JACKSON

COUNTY

A-3136



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		19	41	

Note: Dimensions shown are horizontal.
 Transverse web stiffener plates shall be oriented as shown in Framing Plan.
 Spacing for transverse web stiffener plates may be adjusted a maximum of 6" in either direction to match the spacing for the intermediate diaphragms.
 For lateral bracing details see sheet No. 58.
 Number near diaphragms and cross frames indicates type to be used at that location. See sheet No. 35 for diaphragm details.
 Size of additional connection plates for diaphragms shall be the same size as the adjacent transverse w. b stiffener plates.

Revised Jan. 13, 1984
 *** denotes diaphragm to be erected with one bolt at the top on each side.

DETAILED 1052
 CHECKED 1050

Note: This drawing is not to scale. Follow dimensions.

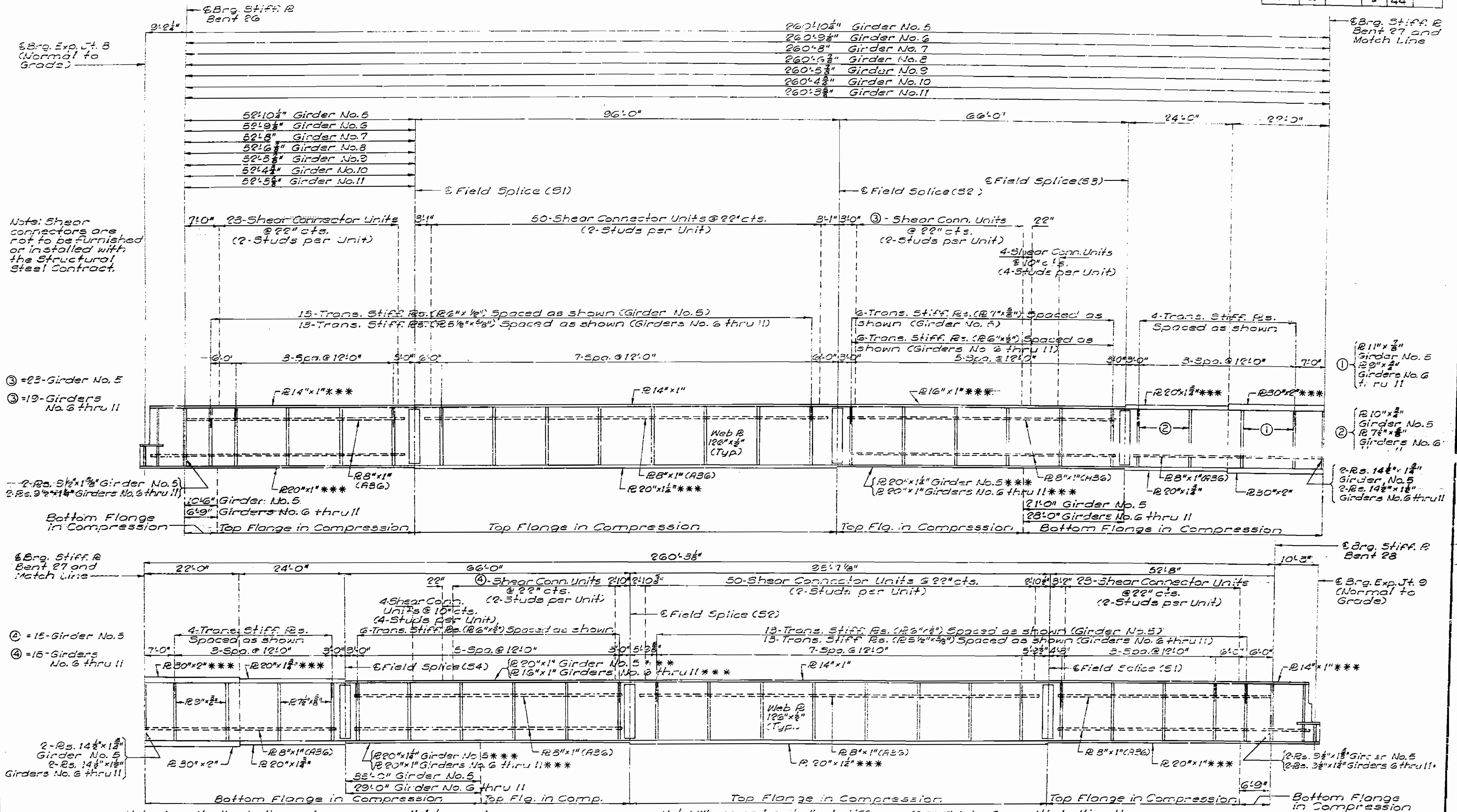
Revised Jan. 13, 1984

Sheet No. 34 of 39.

JACKSON COUNTY A-3136

FRAMING PLAN-UNIT 9 WESTBOUND

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO			44	



Note: Shear connectors are not to be furnished or installed with the Structural Steel Contract.

③ = 23-Girder No. 5
 ③ = 19-Girders No. 6 thru 11

② = 15-Girder No. 5
 ④ = 15-Girders No. 6 thru 11

Note: Longitudinal dimensions are parallel to grade.
 Fabricated structural steel shall be A572 except as shown.
 *** Indicates Flange Plates subject to notch toughness requirements.
 All web plates shall be subject to notch toughness requirements.
 Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 33.

Note: Whenever longitudinal stiffeners (R8"x1") interfere with bolting the diaphragms in place, clip stiffeners.
 Longitudinal web stiffeners shall be placed on the outside of exterior girders and on the side opposite to transverse web stiffener plates for interior girders.
 Transverse web stiffeners shall be oriented as shown in Framing Plan.

GIRDER ELEVATION-UNIT 9 WESTBOUND
 GIRDERS NO. 5 THRU 11

DETAILED 1/82
 CHECKED 10/82

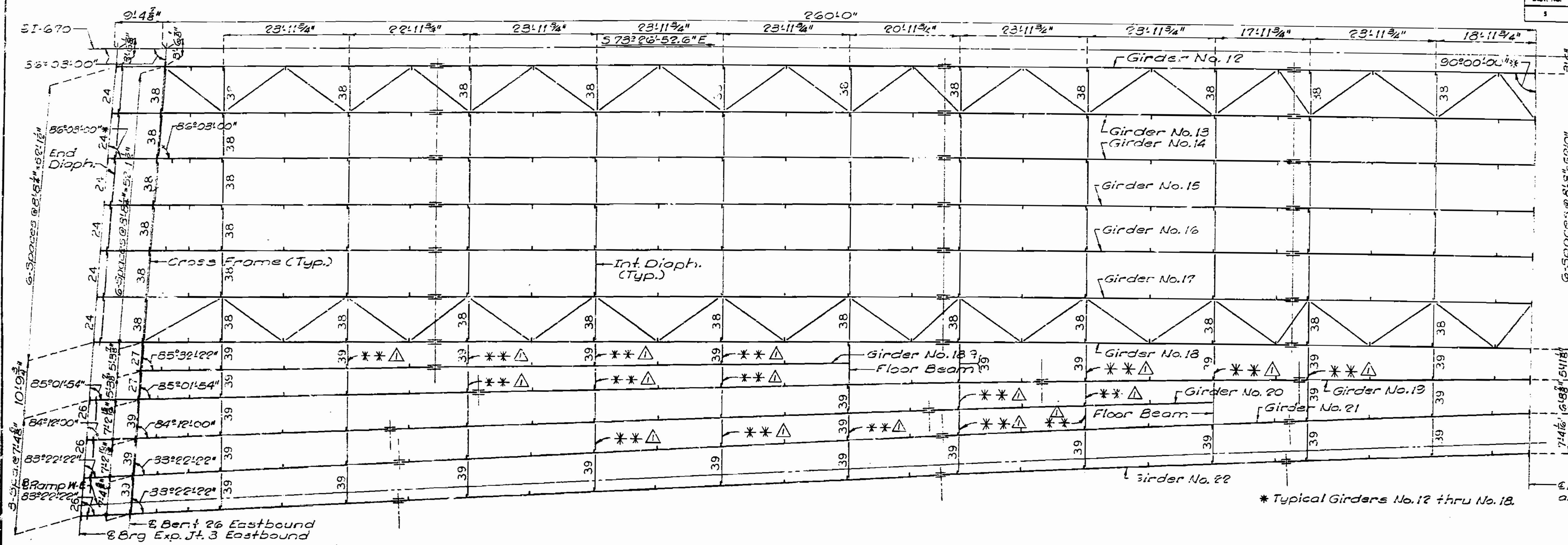
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 37 of 39.

JACKSON COUNTY

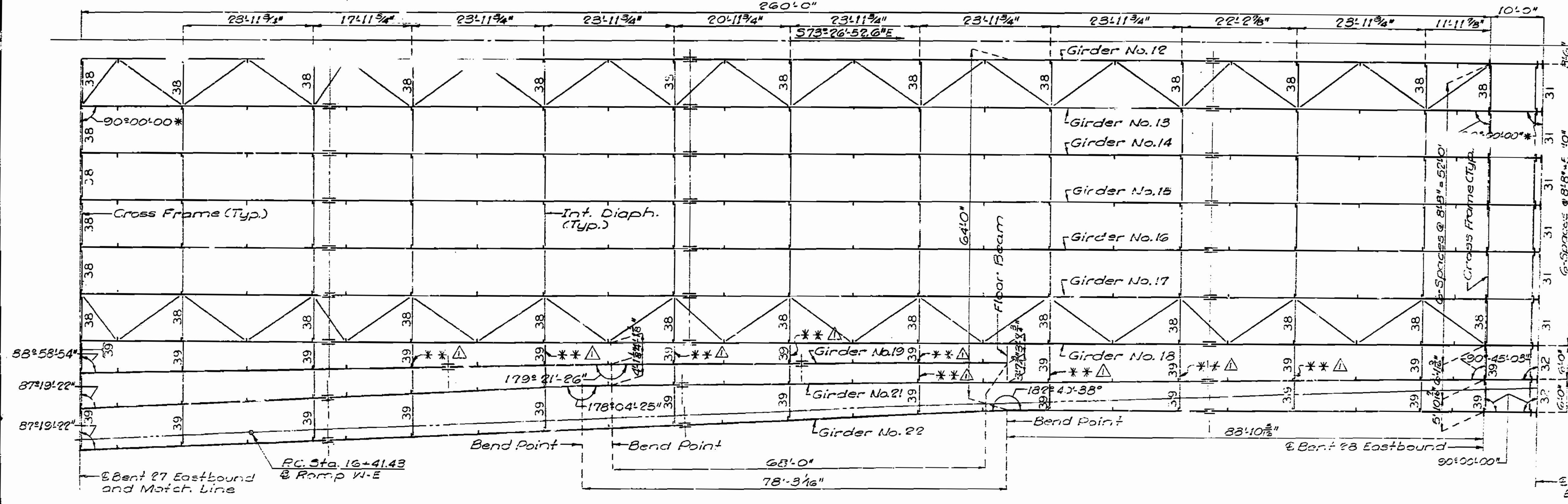
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.			45	



* Typical Girders No. 12 thru No. 18

Bent 27 Eastbound and Match Line



Note: Dimensions shown are horizontal.
 Transverse web stiffener plates shall be oriented as shown in Framing Plan.
 Spacing for transverse web stiffener plates may be adjusted a maximum of 3" in either direction to match the spacing for the "normal" te diaphragms.
 All intermediate diaphragms shown on this sheet are to be placed perpendicular to E-I-670.
 For lateral bracing details see sheet No. 28.
 Number near diaphragms and cross frames indicates type to be used at that location. See sheet No. 25 for diaphragm details.
 Size of additional connection plates for diaphragms shall be the same size as the adjacent transverse web stiffener plates.
 Revised Jan. 13, 1964
 *** denotes diaphragm to be erected with one bolt at the top on each side.

DETAILED 1082
 CHECKED 1082

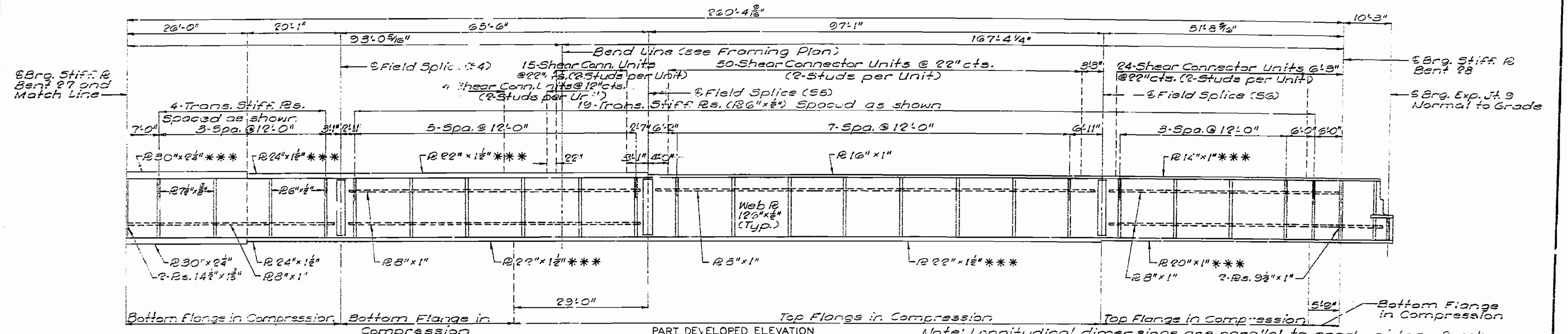
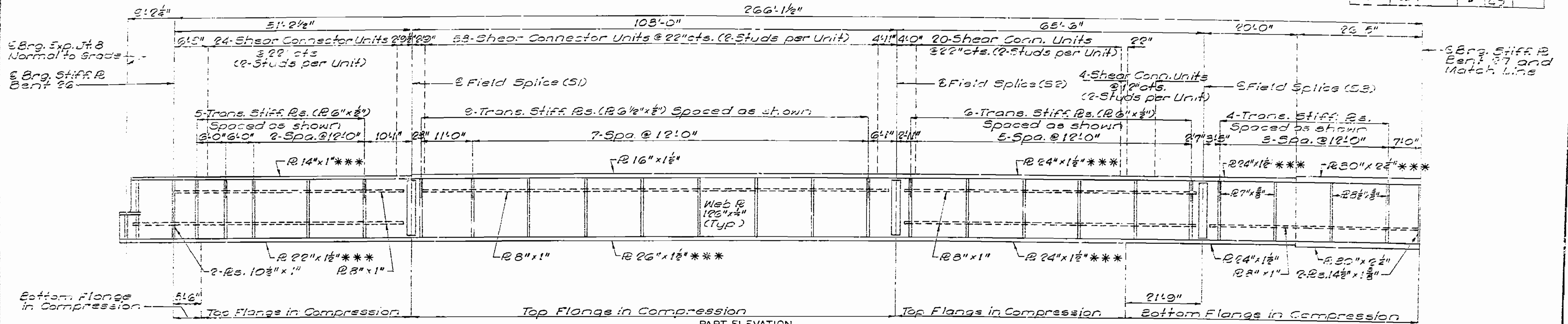
Note: This drawing is not to scale. Follow dimensions.

Revised Jan. 13, 1964

Sheet No. 25 of 59.

FRAMING PLAN-UNIT 9 EASTBOUND

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISC. YEAR	SHEET NO.	TOTAL SHEETS
5	22		13	49	



Note: Longitudinal dimensions are parallel to grade at top of web. Fabricated structural steel shall be A36. *** Indicates Flange Plates subject to notch toughness requirements. All flange plates shall be subject to notch toughness requirements. Plate girders shall be fabricated to conform with Camber Diagram shown on sheet No. 33. Where longitudinal stiffeners (R 8" x 1") interfere with bolting the diaphragms in place, clip stiffeners. Longitudinal web stiffeners shall be placed on the outside of exterior girders and on the side opposite to transverse web stiffener plates for interior girders. Transverse web stiffeners shall be oriented as shown in Framing Plan. Shear connectors are not to be furnished or installed with Structural Steel Contract.

457

DETAILED 1932
CHECKED 1922

Note: This drawing is not to scale. Follow dimensions.

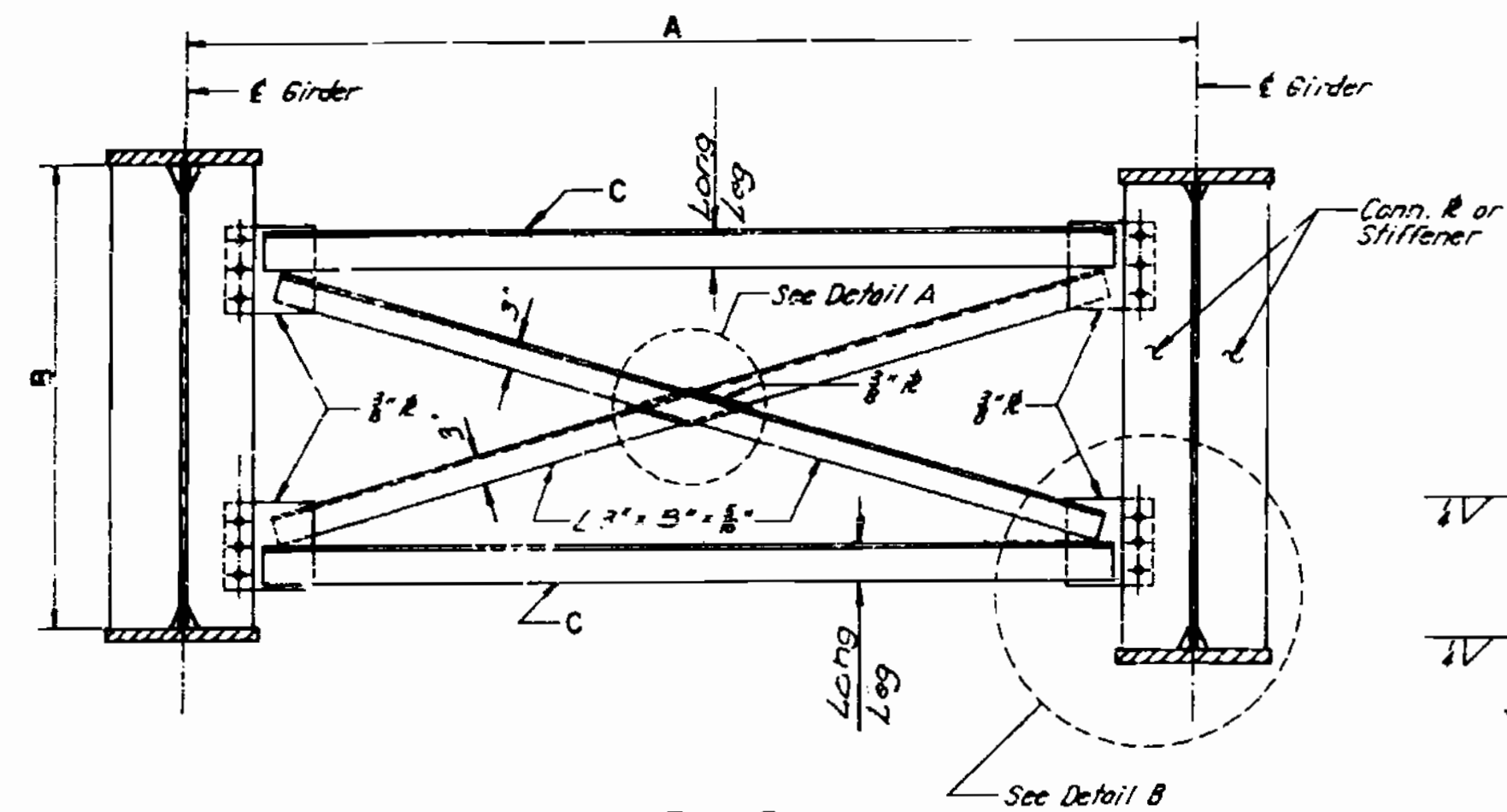
Sheet No. 42 of 59.

GIRDER ELEVATION - UNIT 9 EASTBOUND
GIRDER NO. 21

JACKSON COUNTY

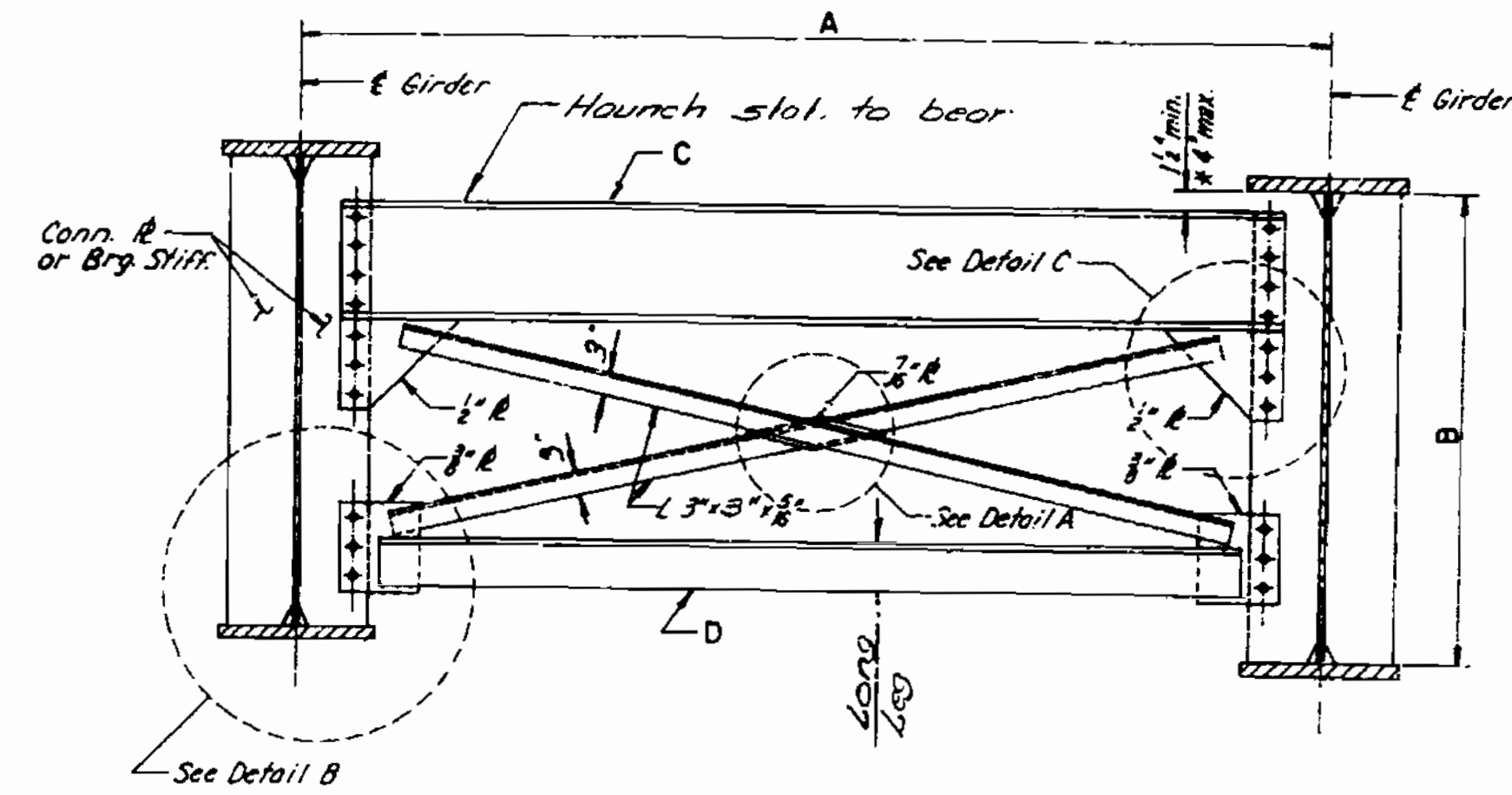
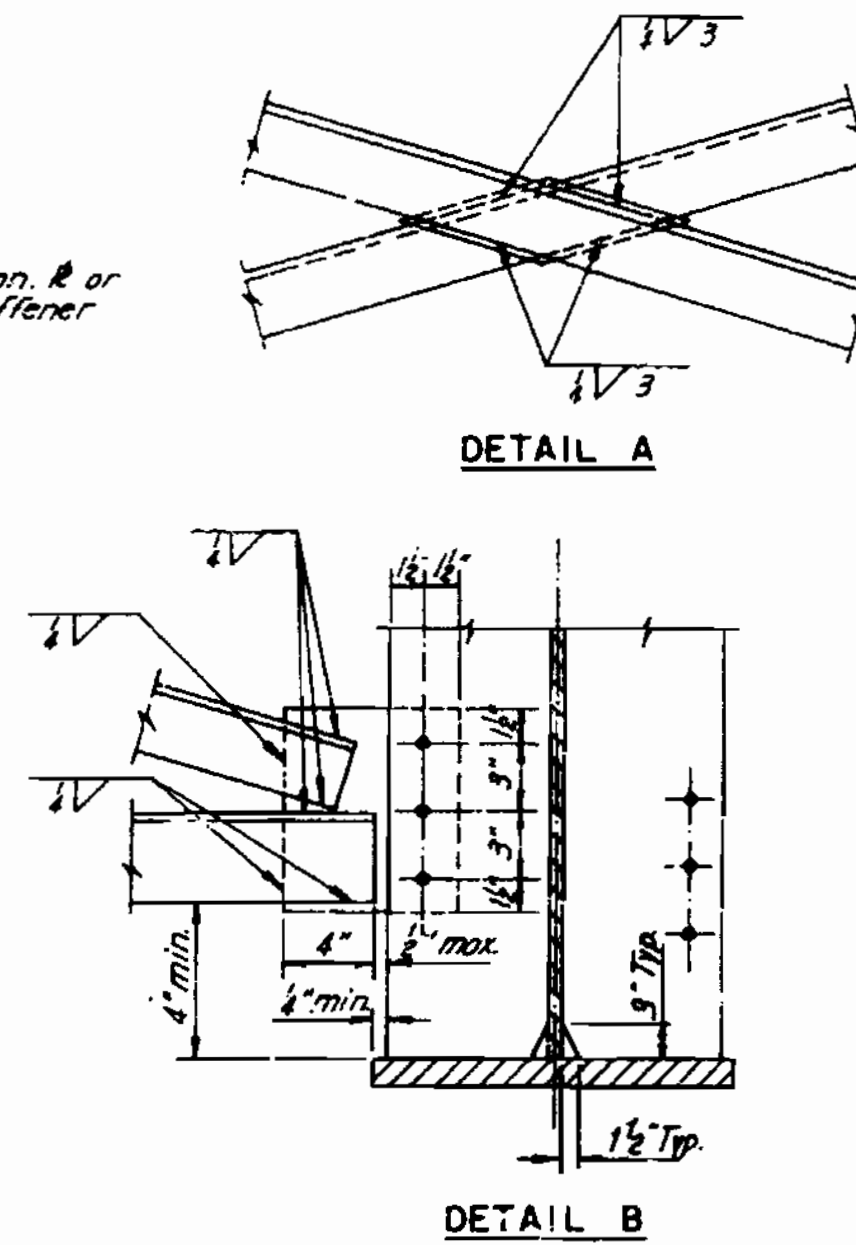
A-3136

PBL. NO.	STATE	PBL. NO.	PBL. YEAR	SHEET NO.	TOTAL SHEETS
1	MO.	10	19	62	



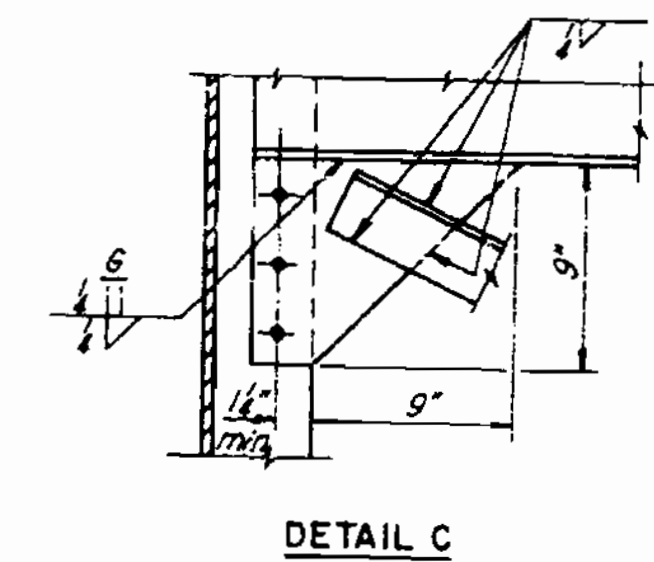
CROSS FRAME OR INTERMEDIATE DIAPHRAGM

Types 1 thru 9
35 thru 40



END DIAPHRAGM

Types 10 thru 14
12 thru 27

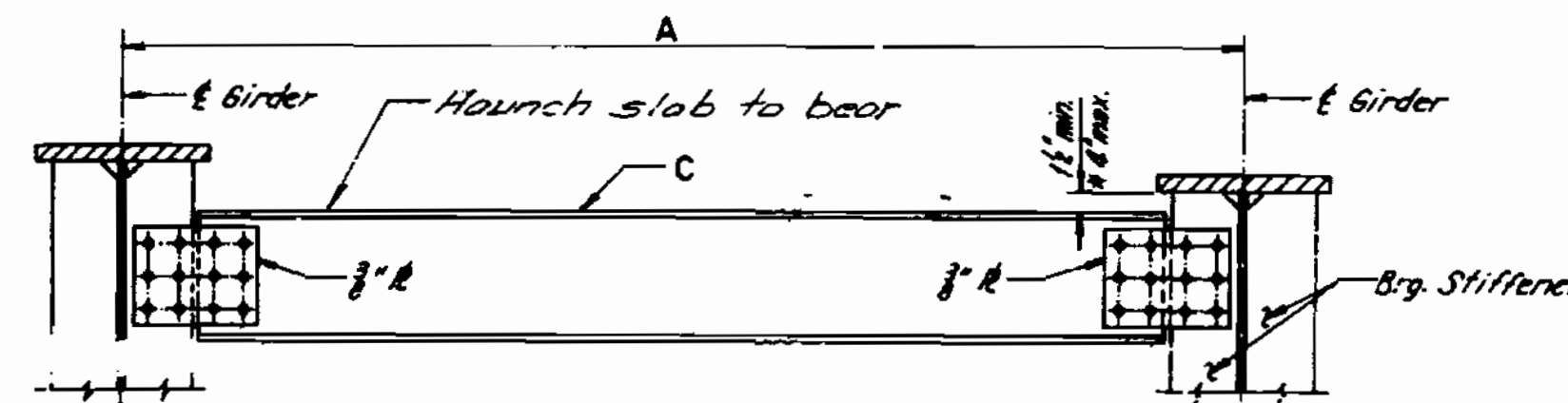


DETAIL C

TYPE	A	B	C	D
1	8'-8"	48"	15x5x1/2"	—
2	8'-8"	66"	15x5x1/2"	—
3	8'-8"	66"	14x3 1/2 x 1/2"	—
4	8'-8"	60"	14x3 1/2 x 1/2"	—
5	6'-0"	60"	13 1/2 x 3 x 1/2"	—
6	8'-8 1/2"	48"	15x5x1/2"	—
7	8'-8 1/2"	48"	15x5x1/2"	—
8	8'-11 1/2"	66"	15x5x1/2"	—
9	8'-8 1/2"	66"	14x3 1/2 x 1/2"	—
10	12'-0"	60"	15x5x1/2"	15x5x1/2"
11	8'-9 1/2"	48"	C12x25	15x5x1/2"
12	8'-11 1/2"	66"	C12x25	15x5x1/2"
13	8'-8"	60"	C12x20.7	14x3 1/2 x 1/2"
14	6'-0"	60"	C12x20.7	13 1/2 x 3 x 1/2"
15	8'-9 1/2"	—	C12x25	—
16	8'-11 1/2"	—	C12x25	—
17	8'-11 1/2"	—	C12x25	—
18	7'-4 1/2"	60"	C12x20.7	13 1/2 x 3 x 1/2"
19	7'-4 1/2"	60"	C12x20.7	13x3x1/2"
20	8'-8 1/2"	60"	C12x20.7	14x3 1/2 x 1/2"
21	6'-5 1/2"	60"	C12x20.7	13x3x1/2"
22	8'-8 1/2"	60"	C12x20.7	13x3x1/2"
23	4'-11 1/2"	60"	C12x20.7	13x3x1/2"
24	8'-8 1/2"	126"	C12x20.7	14x3 1/2 x 1/2"
25	6'-5 1/2"	126"	C12x20.7	13x3x1/2"
26	7'-4 1/2"	126"	C12x20.7	13x3x1/2"
27	5'-3 1/2"	126"	C12x20.7	13x3x1/2"
28	8'-8"	60"	14x3 1/2 x 1/2"	—
29	8'-8"	126"	14x3 1/2 x 1/2"	—
30	6'-0"	126"	13 1/2 x 3 x 1/2"	—
31	8'-8"	60"	15x5x1/2"	—
32	6'-0"	60"	15x5x1/2"	—
33	6'-0"	60"	15x5x1/2"	—
34	6'-0"	60"	15x5x1/2"	—

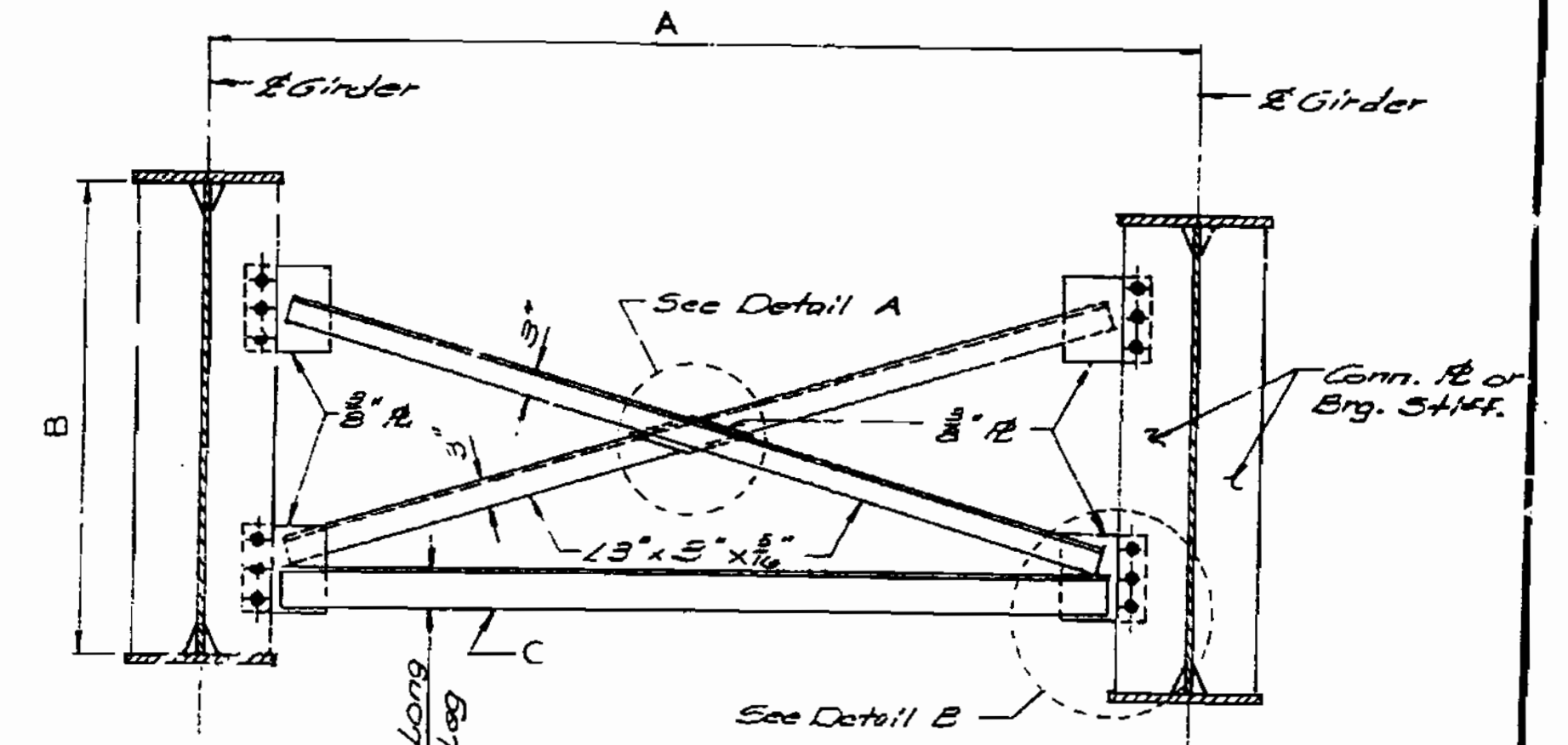
TYPE	A	B	C	D
35	7'-4 1/2"	60"	13x3x1/2"	—
36	8'-8"	60"	13 1/2 x 3 x 1/2"	—
37	Varies	60"	23x3x1/2"	—
38	8'-8"	126"	23x3x1/2"	—
39	Varies	126"	23x3x1/2"	—
40	7'-4 1/2"	126"	13x3x1/2"	—

* If distance exceeds 4", slope diaphragm



END DIAPHRAGM

Types (16 & 17)



END DIAPHRAGM

TYPES (30 THRU 34)

Note: Diaphragms are 1.36 Steel.

Notes:
Lengths shown for Type 20 & 34 diaphragms are ± 1/2".
Lengths shown for Type 10 thru Type 31 diaphragms are along L Bearing Expansion Joint.
Lengths shown for Types 6, 7, 8, 10, 11, 12, 16 and 17 diaphragms are ± 1/4".
Lengths shown for Type 26 diaphragm are ± 1/2".

DIAPHRAGM DETAILS

DETAILED 1079
CHECKED 1079

Note: This drawing is not to scale. Follow dimensions.

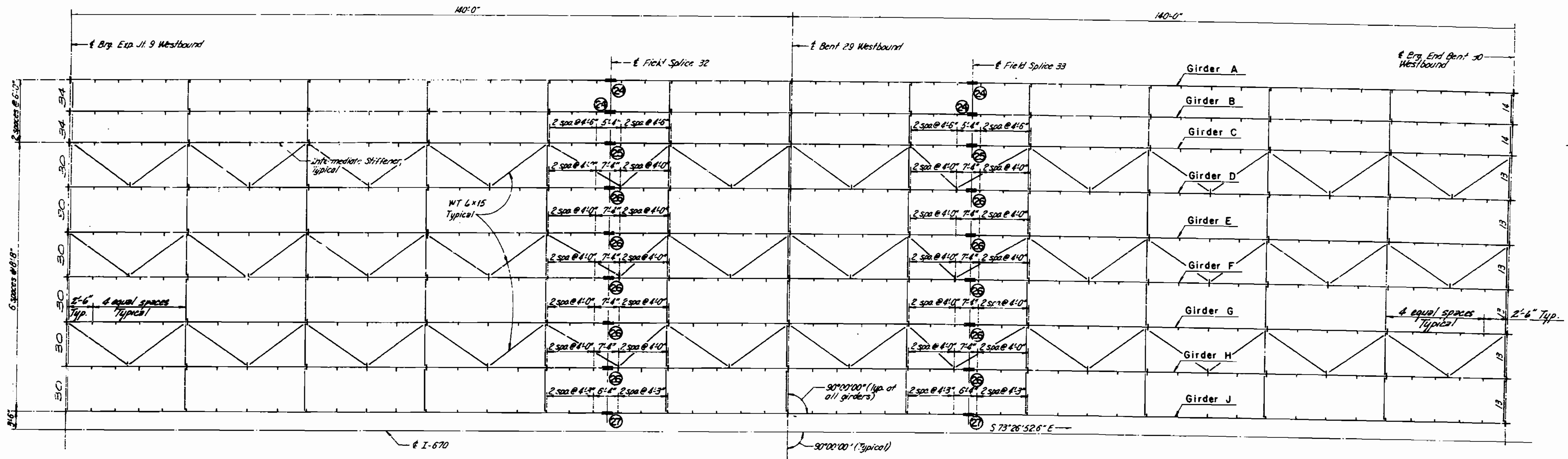
Sheet No. 55 of 59.

JACKSON COUNTY

A-3136

451

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		88	51	



FRAMING PLAN - UNIT 10 WESTBOUND

Notes:

For Field Splice Details see Sheet 48.
 For Diaphragm Details see Sheet 55.
 E designates type of field splice.
 Dimensions shown are horizontal.
 Intermediate stiffener plates are 2x4 and they are equally spaced between diaphragms unless noted otherwise.

The diaphragms between Girders C thru J with no numbers on them are Type 4 and the diaphragms between Girders A thru C with no numbers on them are Type 5. The numbers 13 and 14 at End Bent 30 are the type of diaphragms to be used at these locations. Diaphragm numbers 30 and 31 are to be used at Exp. Jt. 9.

Diaphragm connection plates are 2x4.
 Intermediate stiffener plates shall be placed on the side of the girder web as indicated on the framing plan.
 For Lateral Bracing Details see Sheet 58.

DETAILED 10 78
 CHECKED 10 79

Note: This drawing is not to scale. Follow dimensions.

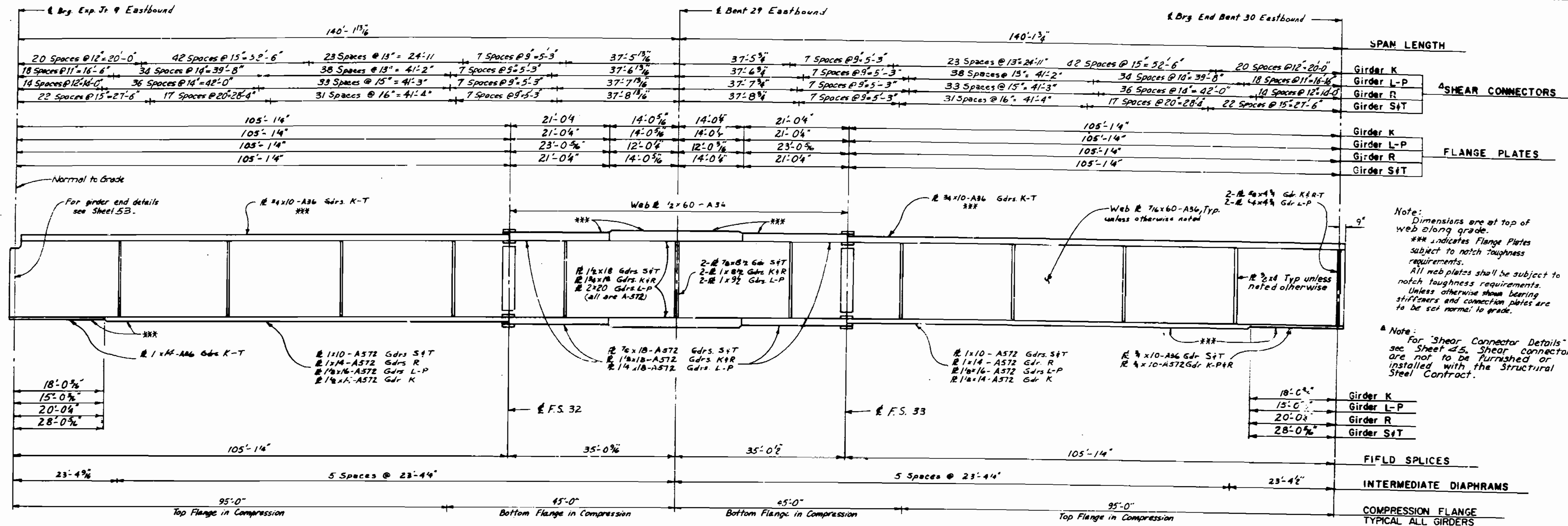
Sheet No. 44 of 59.

FRAMING PLAN - UNIT 10 WESTBOUND

JACKSON COUNTY

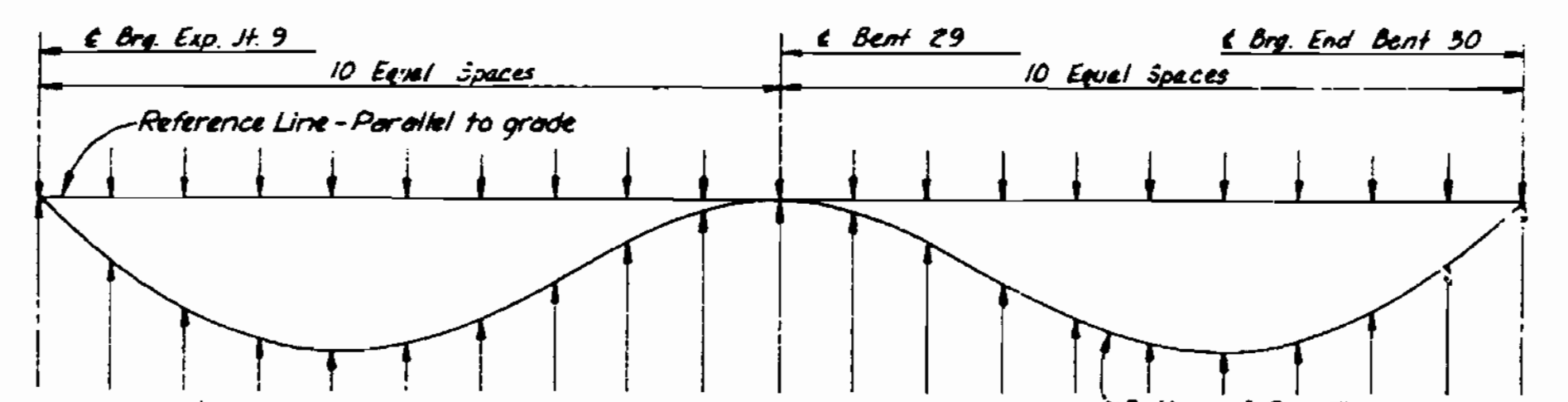
A-3136

PROJ. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO		0	54	



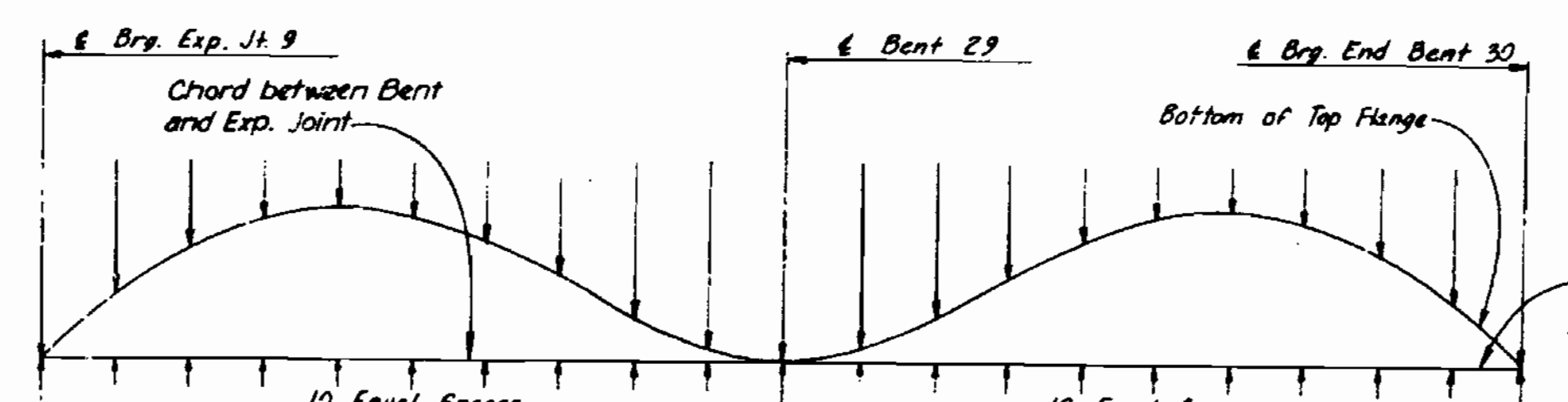
Note: Dimensions are at top of web along grade. *** indicates Flange Plates subject to notch toughness requirements. All web plates shall be subject to notch toughness requirements. Unless otherwise shown bearing stiffeners and connection plates are to be set normal to grade.

Note: For "Shear Connector Details" see Sheet 45. Shear connectors are not to be furnished or installed with the Structural Steel Contract.



Girder S&T	0"	1 1/8"	3 1/8"	3 3/8"	4 1/8"	4"	3 3/8"	2 3/8"	1 3/8"	5/8"	0"	5/8"	1 1/8"	2 3/8"	3 1/8"	4 1/8"	3 3/8"	3 1/8"	1 3/8"	0"
Girder R	0"	1 5/8"	2 3/8"	3 3/8"	4 1/8"	3 3/8"	2 3/8"	1 3/8"	5/8"	0"	5/8"	1 1/8"	2 3/8"	3 1/8"	3 3/8"	4 1/8"	3 3/8"	2 3/8"	1 3/8"	0"
Girder L-P	0"	1 1/8"	3 1/8"	3 3/8"	4 1/8"	3 3/8"	2 3/8"	1 3/8"	5/8"	0"	5/8"	1 1/8"	2 3/8"	3 1/8"	3 3/8"	4 1/8"	3 3/8"	2 3/8"	1 3/8"	0"
Girder K	0"	1 1/8"	2 3/8"	3 3/8"	3 3/8"	3 3/8"	2 3/8"	1 3/8"	5/8"	0"	5/8"	1 1/8"	2 3/8"	3 1/8"	3 3/8"	3 3/8"	2 3/8"	1 3/8"	0"	0"

DEAD LOAD DEFLECTION DIAGRAM



Girder S&T	0"	1 1/8"	3 1/8"	3 3/8"	4 1/8"	4"	3 3/8"	2 3/8"	1 3/8"	5/8"	0"	5/8"	1 1/8"	2 3/8"	3 1/8"	4 1/8"	3 3/8"	2 3/8"	1 3/8"	0"
Girder R	0"	1 5/8"	2 3/8"	3 3/8"	4 1/8"	3 3/8"	2 3/8"	1 3/8"	5/8"	0"	5/8"	1 1/8"	2 3/8"	3 1/8"	3 3/8"	4 1/8"	3 3/8"	2 3/8"	1 3/8"	0"
Girder L-P	0"	1 1/8"	3 1/8"	3 3/8"	4 1/8"	3 3/8"	2 3/8"	1 3/8"	5/8"	0"	5/8"	1 1/8"	2 3/8"	3 1/8"	3 3/8"	4 1/8"	3 3/8"	2 3/8"	1 3/8"	0"
Girder K	0"	1 1/8"	2 3/8"	3 3/8"	3 3/8"	3 3/8"	2 3/8"	1 3/8"	5/8"	0"	5/8"	1 1/8"	2 3/8"	3 1/8"	3 3/8"	3 3/8"	2 3/8"	1 3/8"	0"	0"

CAMBER DIAGRAM

Deflection and Camber Notes:
 20% of dead load deflection is due to weight of structural steel.
 Reference chords shown for camber are 11 1/2" below top of slab at E Bents and E Bearing Expansion Joints.

DETAILED 1079
 CHECKED 1079

Note: This drawing is not to scale. Follow dimensions.

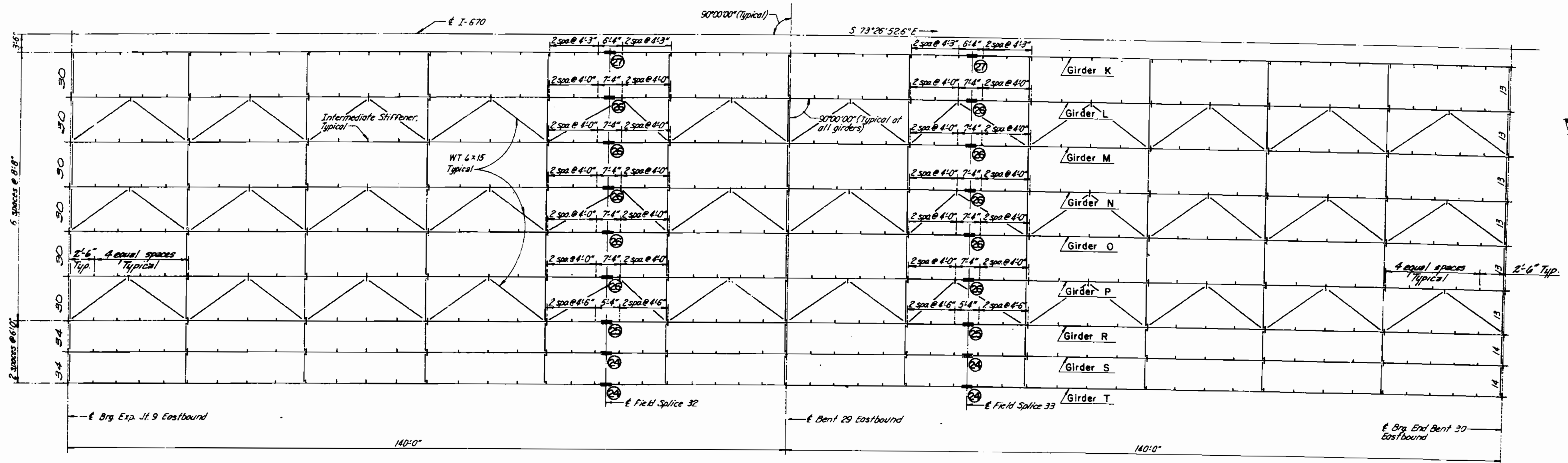
Sheet No. 47 of 59.

GIRDER ELEVATION - UNIT 10 EASTBOUND

JACKSON COUNTY

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	MO.		8	53	



FRAMING PLAN - UNIT 10 EASTBOUND

Note:
 For Field Splice Details see Sheet 45.
 For Diaphragm Details see Sheet 55.
 24 designates type of field splice.
 Dimensions shown are horizontal.
 Intermediate stiffener plates are 1/2"x4" and they are equally spaced between diaphragms unless noted otherwise.
 The diaphragms between Girders K thru R with no numbers on them are Type 4 and the diaphragms between Girders R thru T with no numbers on them are Type 5. The numbers 13 and 14 at End Bent 30 are the type of diaphragm to be used at these locations. Diaphragm numbers 30 & 34 are to be used at Exp. Jt. 9.
 Diaphragm connection plates are 1/2"x4".
 Intermediate stiffener plates shall be placed on the side of the girder web as indicated on the framing plan.
 For Lateral Bracing Details see Sheet 58.

DETAILED 1078
 CHECKED 1079

Note: This drawing is not to scale. Follow dimensions.

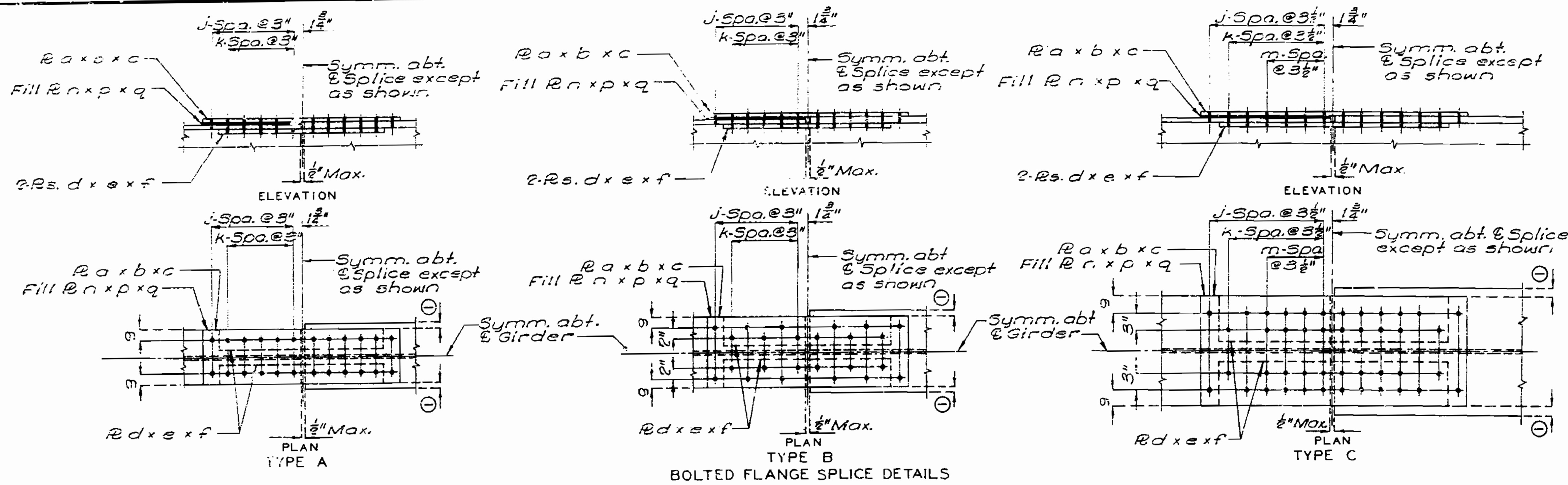
Sheet No. 46 of 59.

FRAMING PLAN - UNIT 10 EASTBOUND

JACKSON COUNTY

A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		88	56	



Note: Use 7/8" High Strength Bolts with 1/2" reamed holes.
All Flange Splice Plates shall be A56.

① When dimension exceeds 1" see Detail "D".
② Clip girder flange as shown when dimension exceeds 1".
All web and flange splice plates (except fill plates) in Unit B, Gdr. 2a, F.S.1 Gdrs. 12 thru 18 and all splices in Unit 9 are subject to notch toughness requirements.

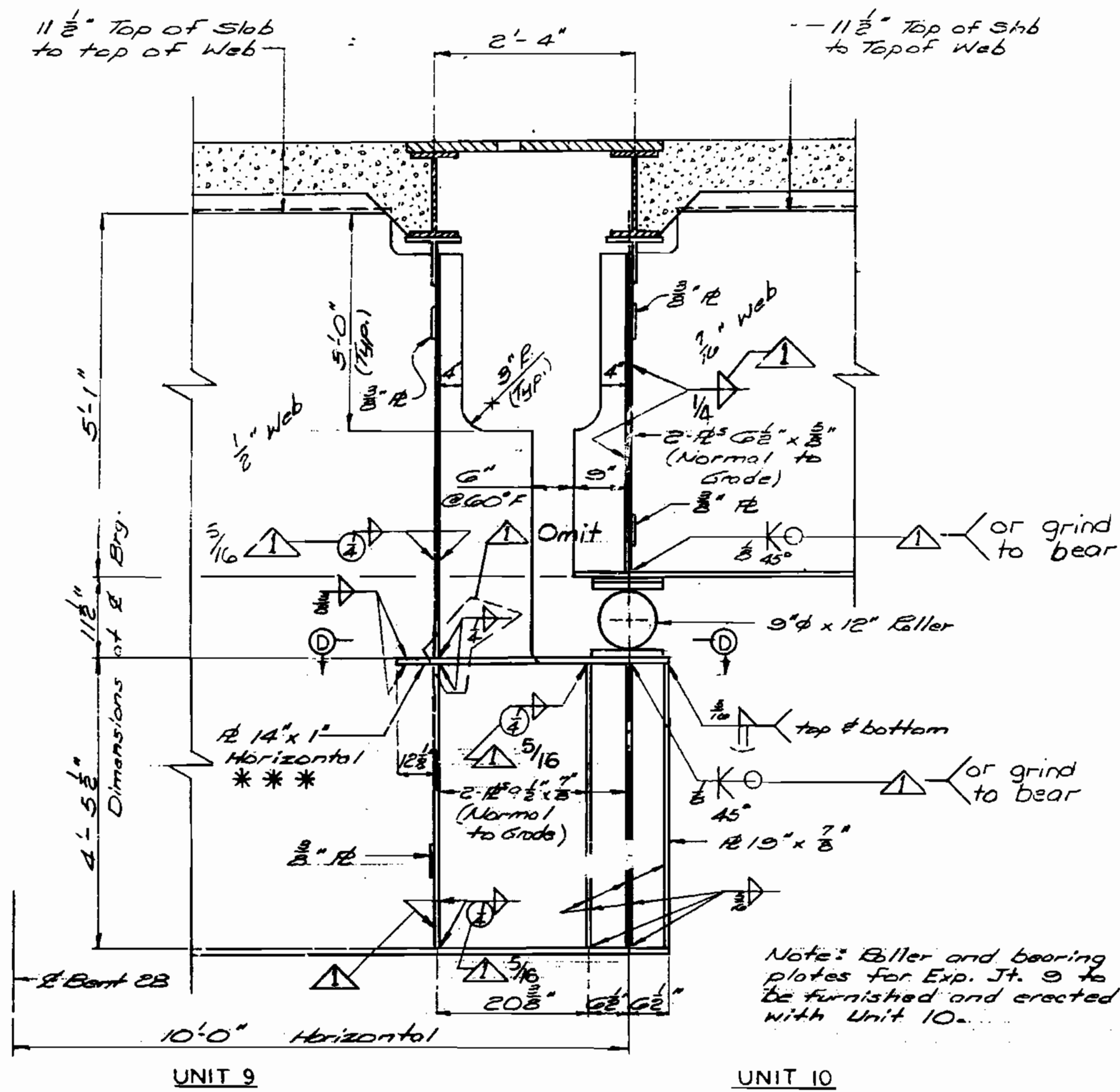
BOLTED FIELD FLANGE SPLICES - TABLE OF DIMENSIONS

	a	b	c	d	e	f	g	j	k	m	n	p	q	
UNIT 8 WESTBOUND														
Girders No. 1 & 2 (S1 & S2) Top - Type A	3'0 1/2"	5/8"	10"	2'6 1/2"	5/8"	4"	2"	5	4		18"	1/4"	10"	
Girders No. 1 & 2 (S1) Bottom - Type B	5'0 1/2"	5/8"	14"	4'6 1/2"	3/4"	6"	2"	9	8					
Girders No. 1 & 2 (S2) Bottom - Type B	5'0 1/2"	5/8"	14"	4'6 1/2"	3/4"	6"	2"	9	8		2'6"	1/2"	14"	
Girder No. 3 (S1) Top - Type A														
Girder No. 3 (S2) Top - Type B	3'6 1/2"	1/2"	13"	3'6 1/2"	5/8"	5 1/2"	1 3/4"	6	6		21"	1/4"	13"	
Girder No. 3 (S1) Bottom - Type B	5'0 1/2"	5/8"	14"	4'6 1/2"	3/4"	6"	2"	9	8					
Girder No. 3 (S2) Bottom - Type B	5'0 1/2"	5/8"	14"	4'6 1/2"	3/4"	6"	2"	9	8		2'6"	3/4"	14"	
Girder No. 4 (S1) Top - Type B														
Girder No. 4 (S2) Top - Type B	6'6 1/2"	5/8"	18"	6'0 1/2"	3/4"	8"	3"	12	11		3'3"	1/8"	18"	
Girder No. 4 (S1) Bottom - Type B	5'0 1/2"	5/8"	14"	4'6 1/2"	3/4"	6"	2"	9	8		2'6"	1/4"	14"	
Girder No. 4 (S2) Bottom - Type B	6'6 1/2"	5/8"	18"	6'0 1/2"	3/4"	8"	3"	12	11		3'3"	1"	18"	
Girder No. 4A (S1) Top - Type A														
Girder No. 4A (S1) Bottom - Type B	3'0 1/2"	5/8"	10"	2'6 1/2"	5/8"	4"	2"	5	4					
Girder No. 5 (S1) Top - Type B														
Girder No. 5 (S2) Top - Type B	3'6 1/2"	1/2"	13"	3'6 1/2"	5/8"	5 1/2"	1 3/4"	6	6		21"	1/8"	13"	
Girder No. 5 (S1) Bottom - Type B	6'6 1/2"	5/8"	18"	6'0 1/2"	3/4"	8"	3"	12	11		3'3"	1/4"	18"	
Girder No. 5 (S2) Bottom - Type B	6'6 1/2"	5/8"	18"	6'0 1/2"	3/4"	8"	3"	12	11		3'3"	1 1/2"	18"	
Girders No. 6 thru 11 (S1) Top - Type A														
Girders No. 6 thru 11 (S2) Top - Type B	3'6 1/2"	1/2"	13"	3'6 1/2"	5/8"	5 1/2"	1 3/4"	6	6		21"	1/4"	13"	
Girders No. 6 thru 11 (S1) Bottom - Type B	6'6 1/2"	5/8"	18"	6'0 1/2"	3/4"	8"	3"	12	11		3'3"	1/4"	18"	
Girders No. 6 thru 11 (S2) Bottom - Type B	6'6 1/2"	5/8"	18"	6'0 1/2"	3/4"	8"	3"	12	11		3'3"	3/4"	18"	
UNIT 8 EASTBOUND														
Girders No. 12 thru 18 (S1) Top - Type A														
Girders No. 12 thru 18 (S2) Top - Type B	3'6 1/2"	1/2"	13"	3'6 1/2"	5/8"	5 1/2"	1 3/4"	6	6		21"	1/4"	13"	
Girders No. 12 thru 18 (S1) Bottom - Type B	6'6 1/2"	5/8"	18"	6'0 1/2"	3/4"	8"	3"	12	11		3'3"	1/4"	18"	
Girders No. 12 thru 18 (S2) Bottom - Type B	6'6 1/2"	5/8"	18"	6'0 1/2"	3/4"	8"	3"	12	11		3'3"	3/4"	18"	
UNIT 9 EASTBOUND														
Girders No. 12 thru 17 (S1 & S2) Top - Type B														
Girders No. 12 thru 17 (S2) Top - Type B	5'0 1/2"	5/8"	14"	5'0 1/2"	3/4"	6"	2"	9	9					
Girders No. 12 thru 17 (S1 & S2) Bottom - Type C	6'0 1/2"	3/4"	16"	6'0 1/2"	3/4"	7"	2 1/2"	11	11		3'0"	3/4"	16"	
Girders No. 12 thru 17 (S3) Bottom - Type C	5'2 1/2"	7/8"	20"	5'2 1/2"	3/4"	9"	3"	8	8	5	2'7"	1/4"	20"	
Girders No. 12 thru 17 (S3) Bottom - Type C	5'2 1/2"	7/8"	20"	5'2 1/2"	3/4"	9"	3"	8	8	5	2'7"	3/4"	20"	
Girder No. 18 (S1, S2 & S3) Top - Type B														
Girder No. 18 (S3) Top - Type B	5'0 1/2"	3/4"	14"	5'0 1/2"	3/4"	6"	2"	9	9					
Girder No. 18 (S1) Bottom - Type C	6'0 1/2"	3/4"	16"	6'0 1/2"	3/4"	7"	2 1/2"	11	11		3'0"	3/4"	16"	
Girder No. 18 (S2 & S3) Bottom - Type C	5'2 1/2"	7/8"	20"	5'2 1/2"	3/4"	9"	3"	8	8	5	2'7"	1/2"	20"	
Girder No. 18 (S3 & S4) Bottom - Type C	6'4 1/2"	1"	20"	6'4 1/2"	1 1/8"	9"	3"	10	10	7	3'2"	1/4"	20"	
Girder No. 18 (S3 & S4) Bottom - Type C	6'4 1/2"	1"	20"	6'4 1/2"	1 1/8"	9"	3"	10	10	7	3'2"	1/2"	20"	
Girder No. 18 (S4) Top - Type B	5'2 1/2"	7/8"	20"	5'2 1/2"	3/4"	9"	3"	8	8	5	2'7"	3/4"	20"	
Girder No. 18A (S1) Top & Bottom - Type B	5'0 1/2"	3/4"	14"	5'0 1/2"	3/4"	6"	2"	9	9					
Girder No. 19 (S1) Top - Type B														
Girder No. 19 (S2) Top - Type C	6'0 1/2"	3/4"	16"	6'0 1/2"	3/4"	7"	2 1/2"	11	11		3'0"	1/8"	16"	
Girder No. 19 (S3) Top & Bottom - Type C	5'9 1/2"	7/8"	20"	5'9 1/2"	1"	9"	3"	9	9	6				
Girder No. 19 (S3) Top & Bottom - Type C	6'11 1/2"	7/8"	24"	6'4 1/2"	7/8"	11"	4"	11	10	8				
Girder No. 19 (S4) Top & Bottom - Type B	4'0 1/2"	1/2"	14"	3'6 1/2"	5/8"	6"	2"	7	6					
Girder No. 19 (S1) Bottom - Type C	8'1 1/2"	1 1/8"	22"	8'1 1/2"	1 1/8"	10"	3 1/2"	13	13	10				
Girder No. 19 (S2) Bottom - Type C	6'11 1/2"	7/8"	24"	6'4 1/2"	7/8"	11"	4"	11	10	8	3'5 1/2"	1/2"	24"	
Girder No. 20 (S1 & S2) Top - Type B														
Girder No. 20 (S1) Bottom - Type B	4'0 1/2"	1/2"	14"	3'6 1/2"	5/8"	6"	2"	7	6					
Girder No. 20 (S2) Bottom - Type C	4'0 1/2"	1/2"	14"	3'6 1/2"	5/8"	6"	2"	7	6					
Girder No. 21 (S1) Top - Type B														
Girder No. 21 (S2) Top - Type B	4'0 1/2"	1/2"	14"	3'6 1/2"	5/8"	6"	2"	7	6					
Girder No. 21 (S2) Bottom - (S3) Top & Bottom - Type C	6'11 1/2"	7/8"	24"	6'4 1/2"	7/8"	11"	4"	11	10	8				
Girder No. 21 (S4) Top & Bottom - Type C														
Girder No. 21 (S5) Top - Type B	4'6 1/2"	1/2"	16"	4'6 1/2"	5/8"	7"	2 1/2"	8	8		2'3"	1/2"	16"	
Girder No. 21 (S6) Top - Type B	4'0 1/2"	1/2"	14"	3'6 1/2"	5/8"	6"	2"	7	6					
Girder No. 21 (S6) Bottom - Type C														
Girder No. 21 (S6) Bottom - Type C	6'4 1/2"	1 1/8"	22"	6'4 1/2"	1 1/8"	10"	3 1/2"	13	13	10				
Girder No. 22 (S1) & (S5) Top - Type B														
Girder No. 22 (S2) Top - Type B	4'0 1/2"	1/2"	14"	3'6 1/2"	5/8"	6"	2"	7	6					
Girder No. 22 (S3) Top - Type C	5'0 1/2"	5/8"	14"	4'6 1/2"	3/4"	6"	2"	9	8		2'6"	1/8"	14"	
Girder No. 22 (S4) Top - Type C	4'7 1/2"	3/4"	20"	4'7 1/2"	3/4"	10"	3 1/2"	7	7	5	2'3 1/2"	1/8"	20"	
Girder No. 22 (S4) Top - Type C	4'7 1/2"	3/4"	20"	4'7 1/2"	3/4"	9"	3"	7	7	5	2'3 1/2"	3/4"	20"	
Girder No. 22 (S6) Top - Type B														
Girder No. 22 (S6) Bottom - Type C	4'0 1/2"	1/2"	14"	3'6 1/2"	5/8"	6"	2"	7	6					
Girder No. 22 (S2) Bottom - Type C	5'2 1/2"	7/8"	20"	5'2 1/2"	3/4"	10"	3 1/2"	8	8	6	2'7"	3/8"	22"	
Girder No. 22 (S2) Bottom - Type C	4'7 1/2"	3/4"	20"	4'7 1/2"	3/4"	10"	3 1/2"	7	7	5	2'3 1/2"	1/2"	22"	
Girder No. 22 (S3) Bottom - Type C	4'7 1/2"	3/4"	20"	4'7 1/2"	3/4"	10"	3 1/2"	7	7	5	2'3 1/2"	1/8"	22"	
Girder No. 22 (S4) Bottom - Type C	4'7 1/2"	3/4"	20"	4'7 1/2"	3/4"	9"	3"	7	7	5	2'3 1/2"	3/4"	20"	
Girder No. 22 (S5) Bottom - Type C	4'7 1/2"	3/4"	20"	4'7 1/2"	3/4"	9"	3"	7	7	5	2'3 1/2"	1/2"	20"	
Girder No. 22 (S6) Bottom - Type C	4'0 1/2"	1/2"	14"	3'6 1/2"	5/8"	6"	2"	7	6	5	4	2'0"	3/4"	20"

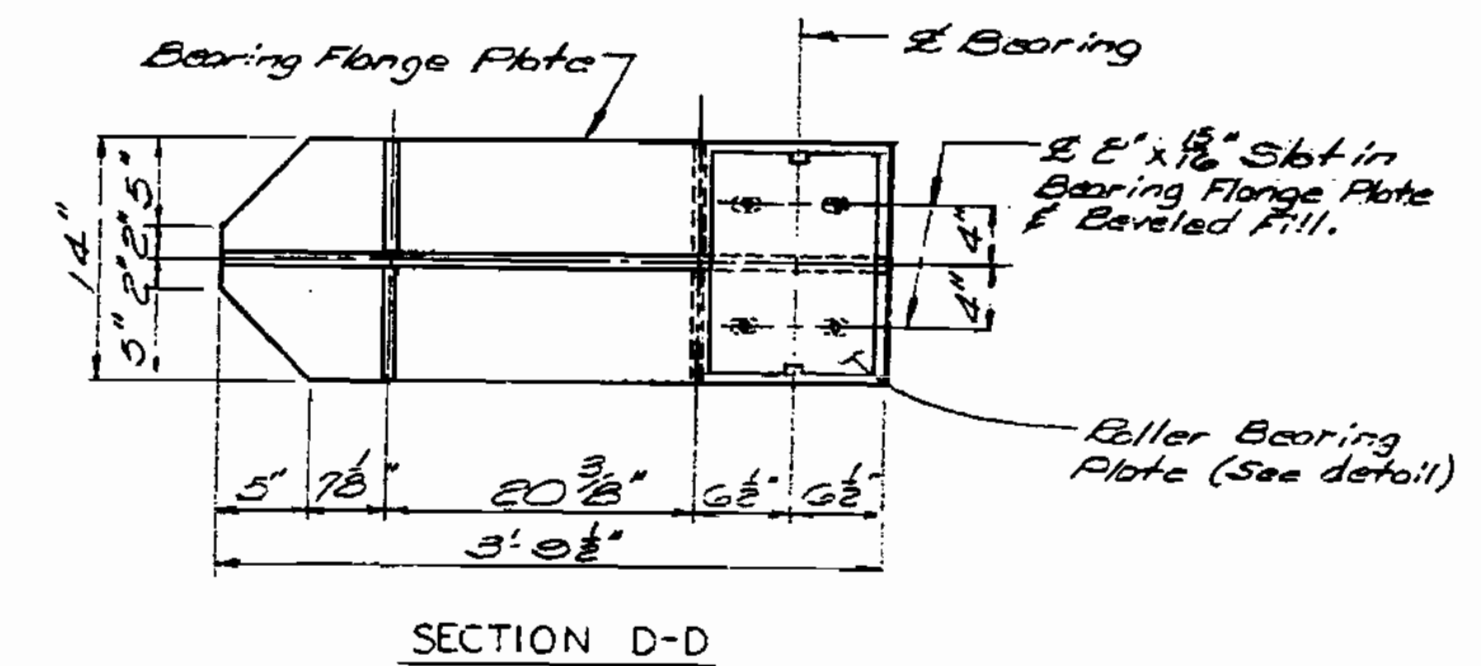
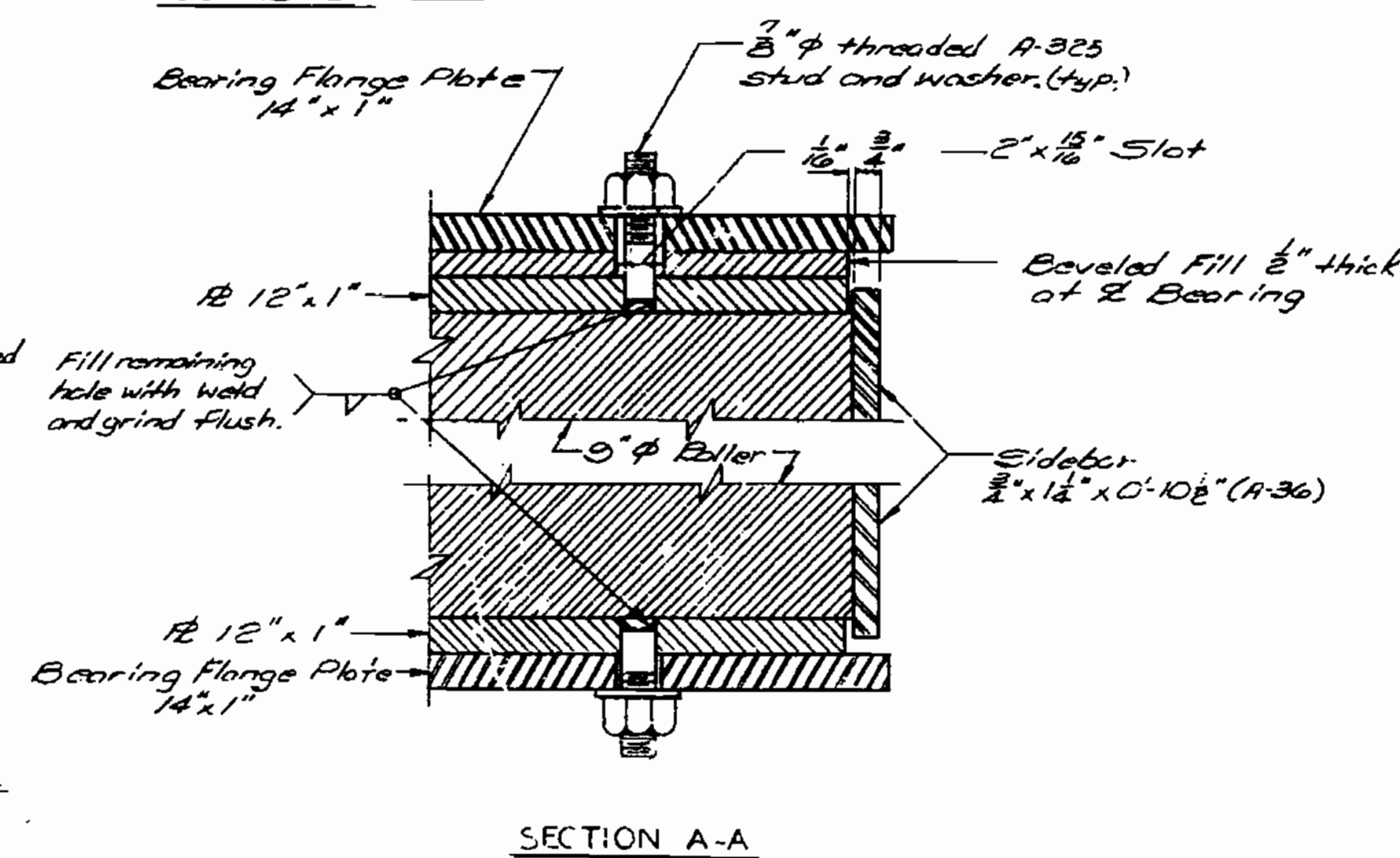
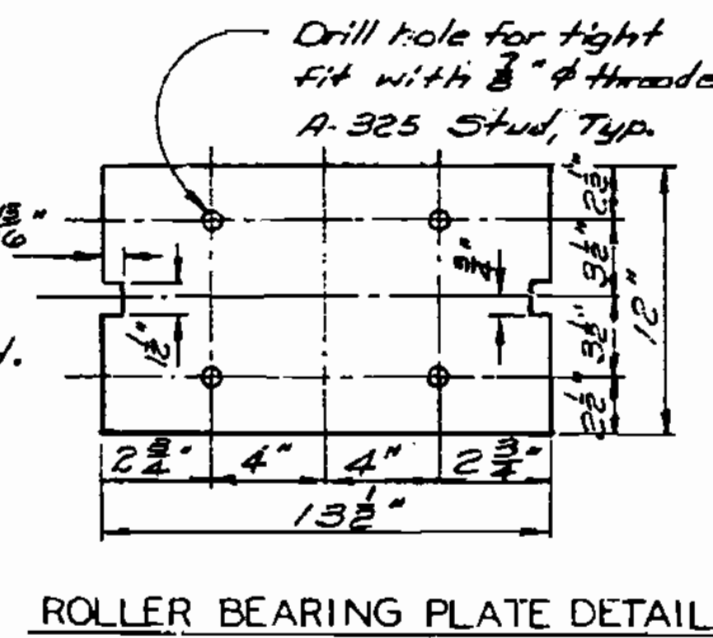
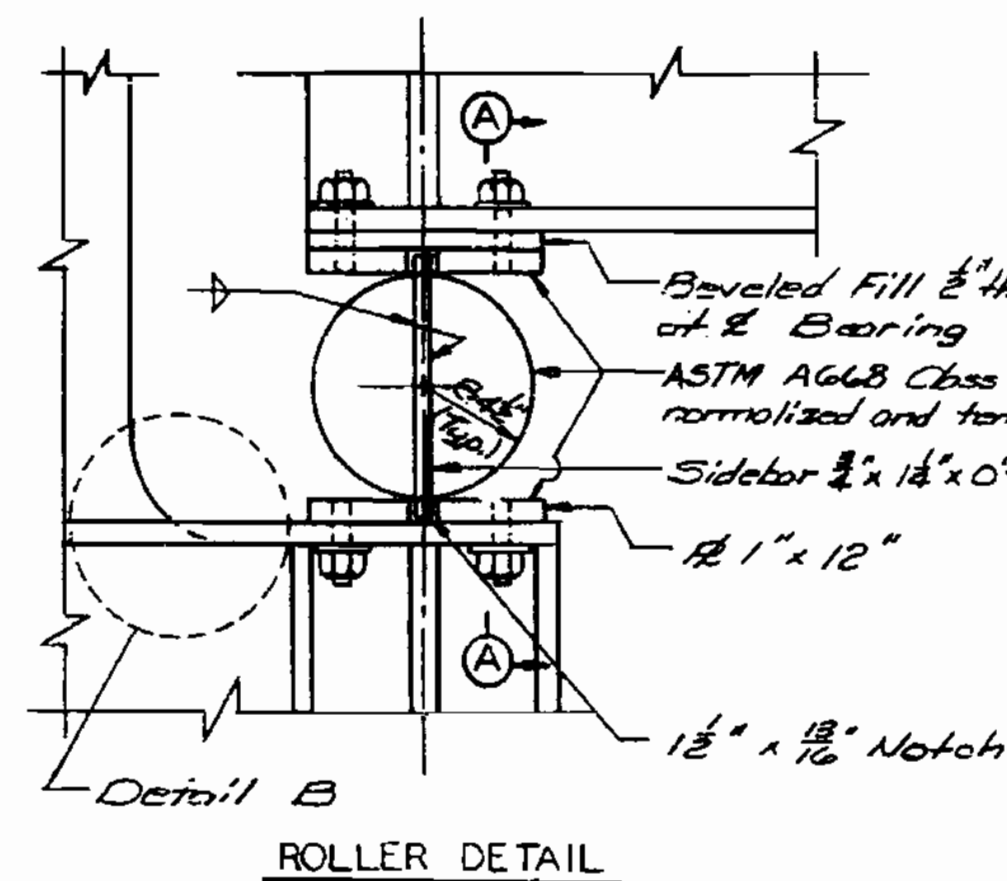
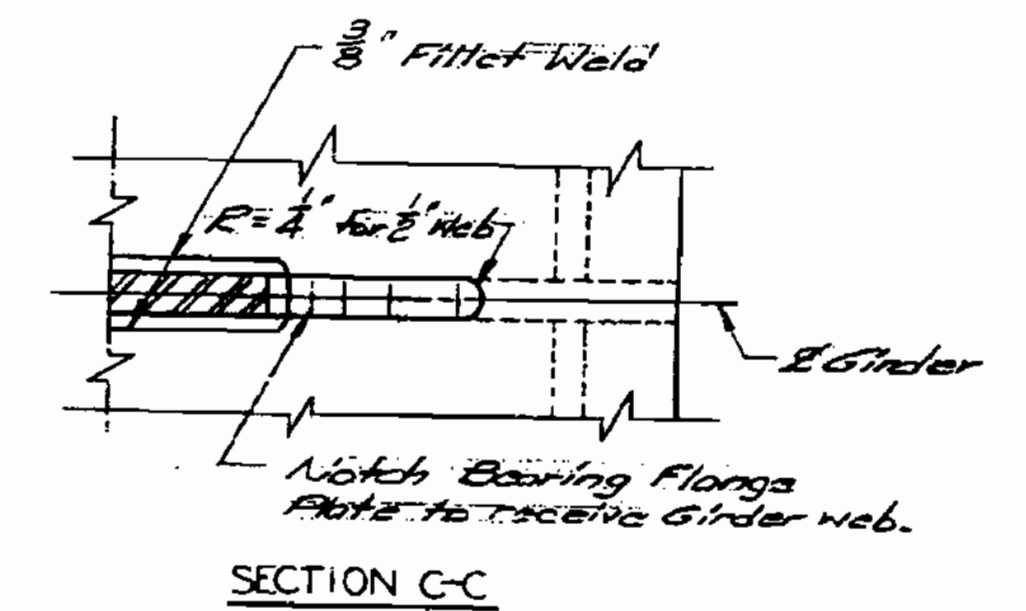
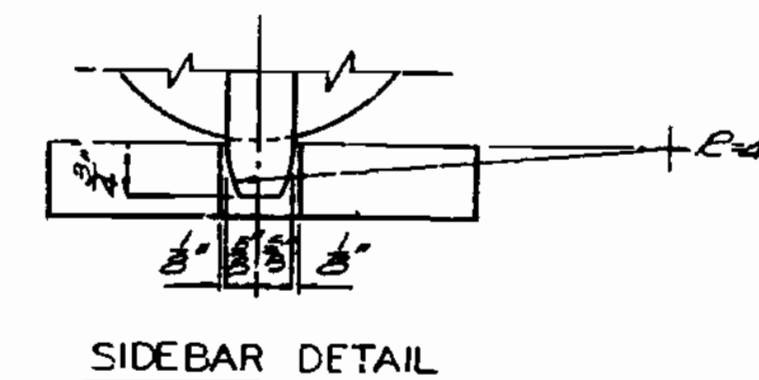
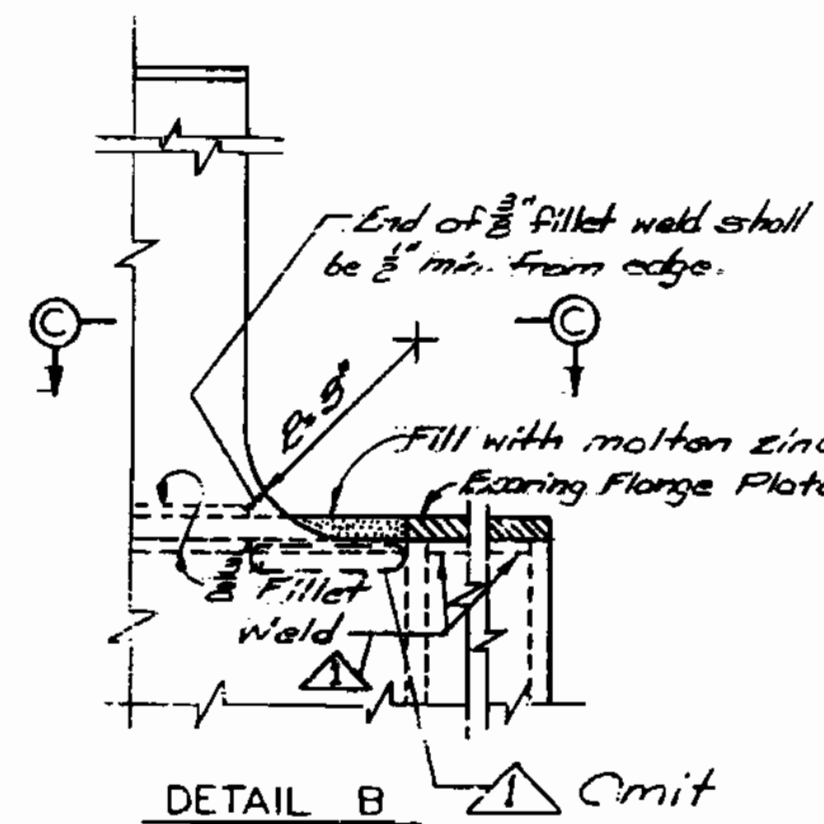
BOLTED FIELD FLANGE SPLICES - TABLE OF DIMENSIONS

	a	b	c	d	e	f	g	j	k	m	n	p	q
UNIT 8 EASTBOUND													
Girders No. 12 thru 18 (S1) Top - Type A													
Girders No. 12 thru 18 (S2) Top - Type B	3'6 1/2"	1/2"	13"	3'6 1/2"	5/8"	5 1/2"	1 3/4"	6	6		21"	1/4"	13"
Girders No. 12 thru 18 (S1) Bottom - Type B	6'6 1/2"	5/8"	18"	6'0 1/2"	3/4"	8"	3"	12	11		3'3"	1/4"	18"
Girders No. 12 thru 18 (S2) Bottom - Type B	6'6 1/2"	5/8"	18"	6'0 1/2"	3/4"	8"	3"	12	11		3'3"	3/4"	18"
UNIT 9 EASTBOUND													
Girders No. 12 thru 17 (S1 & S2) Top - Type B													
Girders No. 12 thru 17 (S2) Top - Type B	5'0 1/2"	5/8"	14"	5'0 1/2"	3/4"	6"	2"	9	9				
Girders No. 12 thru 17 (S1 & S2) Bottom - Type C	6'0 1/2"	3/4"	16"	6'0 1/2"	3/4"	7"	2 1/2"	11	11		3'0"	3/4"	16"
Girders No. 12 thru 17 (S3) Bottom - Type C	5'2 1/2"	7/8"	20"	5'2 1/2"	3/4"	9"	3"	8	8	5	2'7"	1/4"	20"
Girders No. 12 thru 17 (S3) Bottom - Type C	5'2 1/2"	7/8"	20"	5'2 1/2"	3/4"	9"	3"	8	8	5	2'7"	3/4"	20"
Girder No. 18 (S1, S2 & S3) Top - Type B													
Girder No. 18 (S3) Top - Type B	5'0 1/2"	3/4"	14"	5'0 1/2"	3/4"	6"	2"	9	9				
Girder No. 18 (S1) Bottom - Type C	6'0 1/2"	3/4"	16"	6'0 1/2"	3/4"	7"	2 1/2"	11	11		3'0"	3/4"	16"
Girder No. 18 (S2 & S3) Bottom - Type C	5'2 1/2"	7/8"	20"	5'2 1/2"	3/4"	9"	3"	8	8	5	2'7"	1/2"	20"
Girder No. 18 (S3 & S4) Bottom - Type C	6'4 1/2"	1"	20"	6'4 1/2"	1 1/8"	9"	3"	10	10	7	3'2"	1/4"	20"
Girder No. 18 (S3 & S4) Bottom - Type C	6'4 1/2"	1"	20"	6'4 1/2"	1 1/8"	9"	3"	10	10	7	3'2"	1/2"	20"
Girder No. 18 (S4) Top - Type B	5'2 1/2"	7/8"	20"	5'2 1/2"	3/4"	9"	3"	8	8	5	2'7"	3/4"	20"
Girder No. 18A (S1) Top & Bottom - Type B	5'0 1/2"	3/4"	14"	5'0 1/2"	3/4"	6"	2"	9	9				
Girder No. 19 (S1) Top - Type B													
Girder No. 19 (S2) Top - Type C	6'0 1/2"	3/4"	16"	6'0 1/2"	3/4"	7"	2 1/2"	11	11		3'0"	1/8"	16"
Girder No. 19 (S3) Top & Bottom - Type C	5'9 1/2"	7/8"	20"	5'9 1/2"	1"	9"	3"	9	9	6			
Girder No. 19 (S3) Top & Bottom - Type C	6'11 1/2"	7/8"	24"	6'4 1/2"	7/8"	11"	4"	11	10	8			
Girder No. 19 (S4) Top & Bottom - Type B	4'0 1/2"	1/2"	14"	3'6 1/2"	5/8"	6"	2"	7	6				
Girder No. 19 (S1) Bottom - Type C	8'1 1/2"	1 1/8"	22"	8'1 1/2"	1 1/8"	10"	3 1/2"	13	13	10			
Girder No. 19 (S2) Bottom - Type C	6'11 1/2"	7/8"	24"	6'4 1/2"	7/8"	11"	4"	11	10	8	3'5 1/2"	1/2"	24"
Girder No. 20 (S1 & S2) Top - Type B													
Girder No. 20 (S1) Bottom - Type B	4'0 1/2"	1/2"	14"	3'6 1/2"	5/8"	6"	2"	7	6				
Girder No. 20 (S2) Bottom - Type C	4'0 1/2"	1/2"	14"										

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		83	60	



*** Denotes plates subject to notch toughness requirements.



GIRDER EXPANSION JOINT

DETAILED 1082
CHECKED 1082

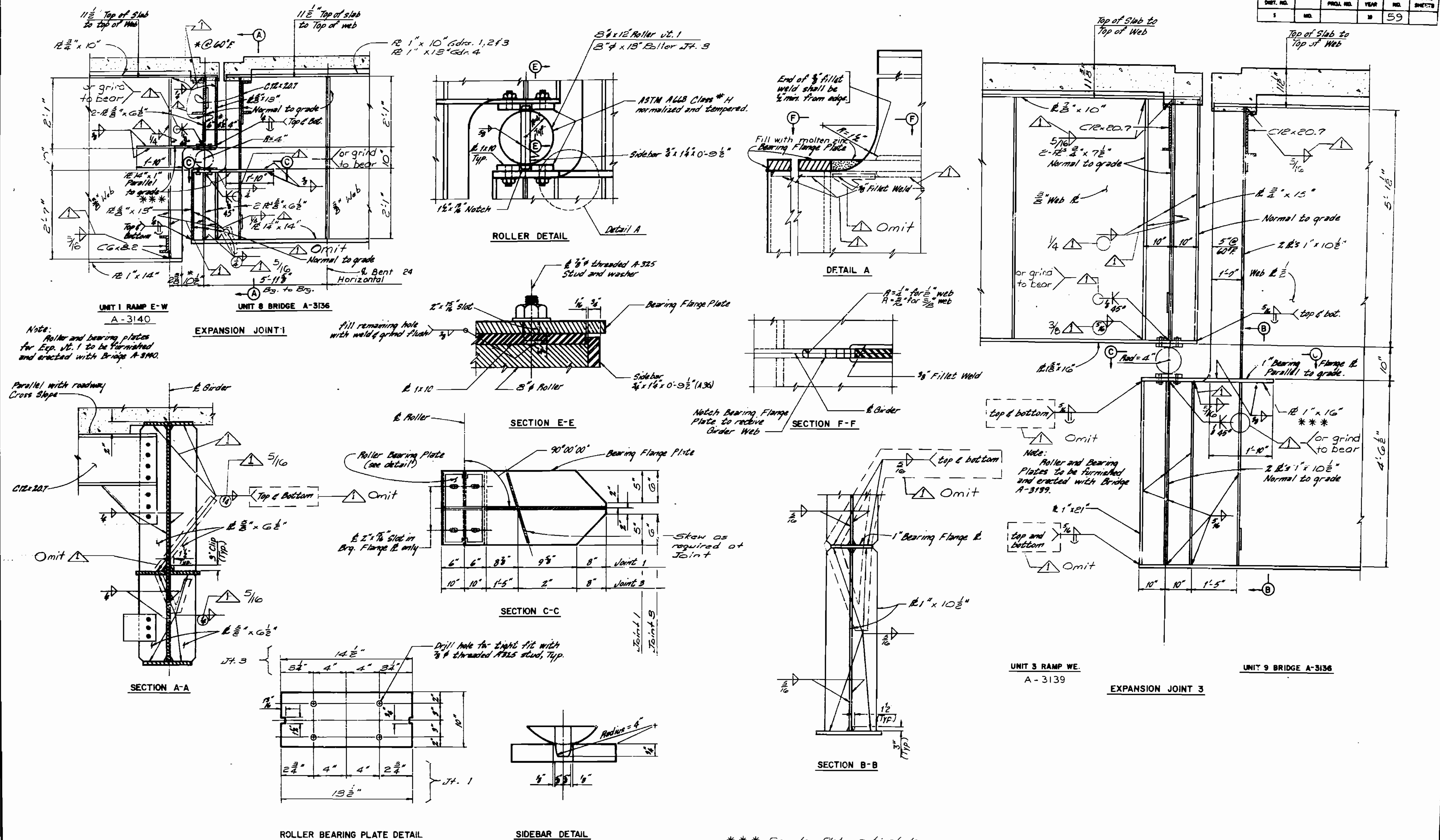
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 53 of 59. Revised 8/16/83 JACKSON COUNTY

A-3136

447

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.			59	



DETAILED 1082
 CHECKED 1082

Note: This drawing is not to scale. Follow dimensions.

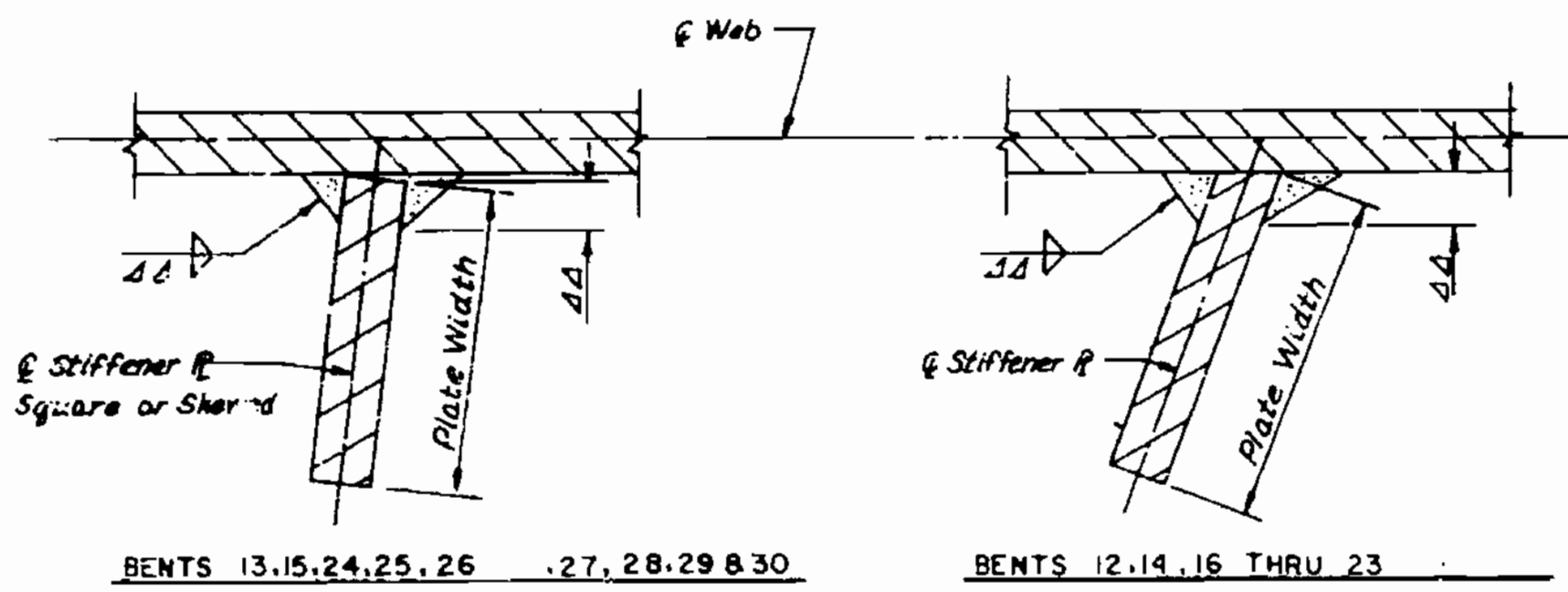
Sheet No. 52 of 59. Revised 8/16/93

JACKSON COUNTY

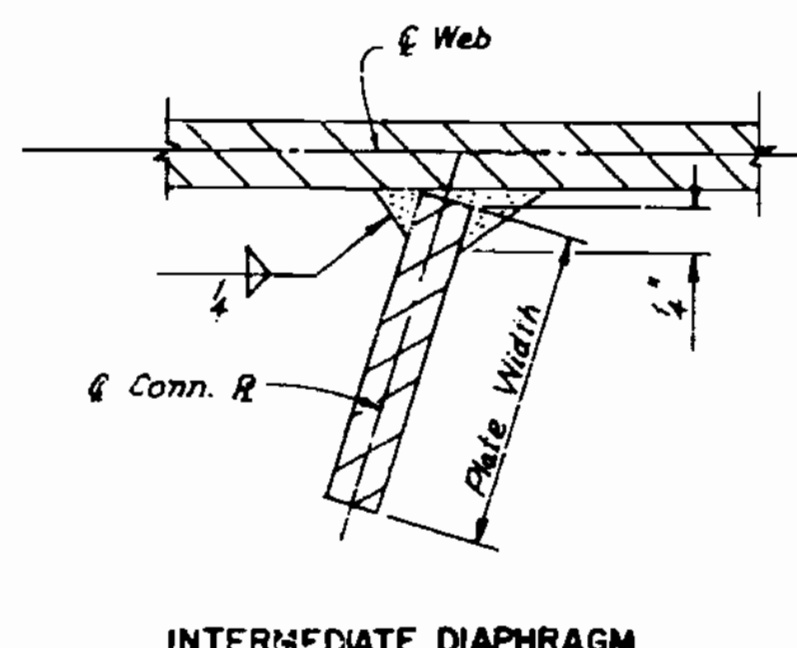
GIRDER EXPANSION JOINTS

A-3136

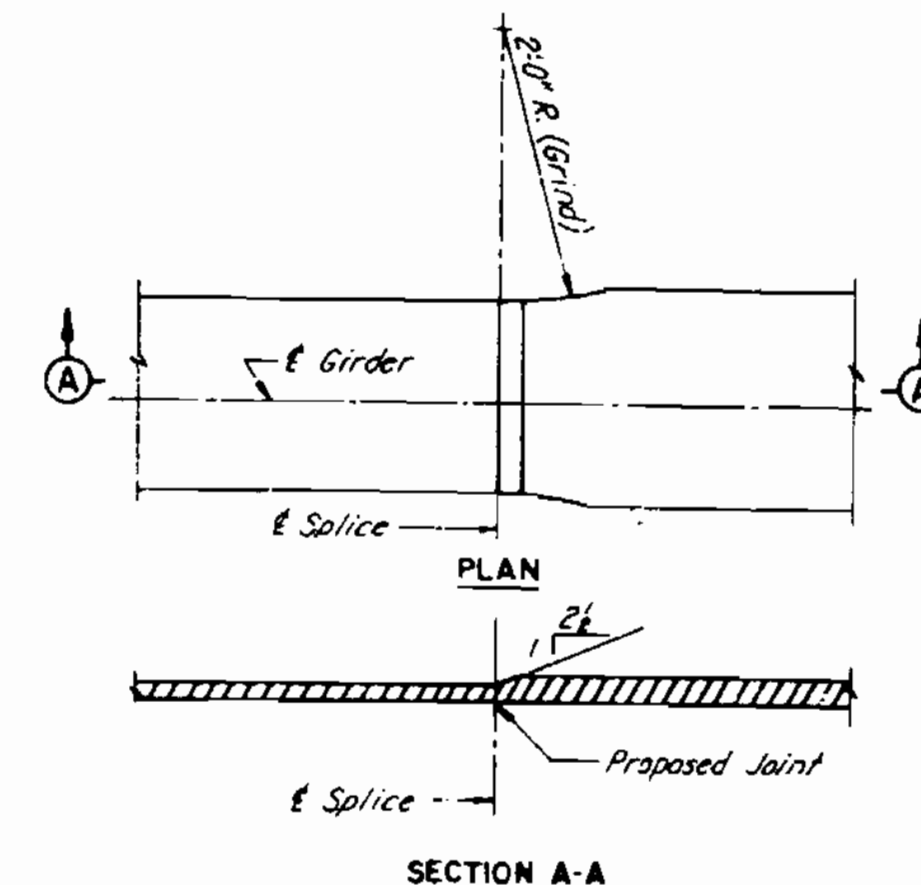
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MD.		53	61	



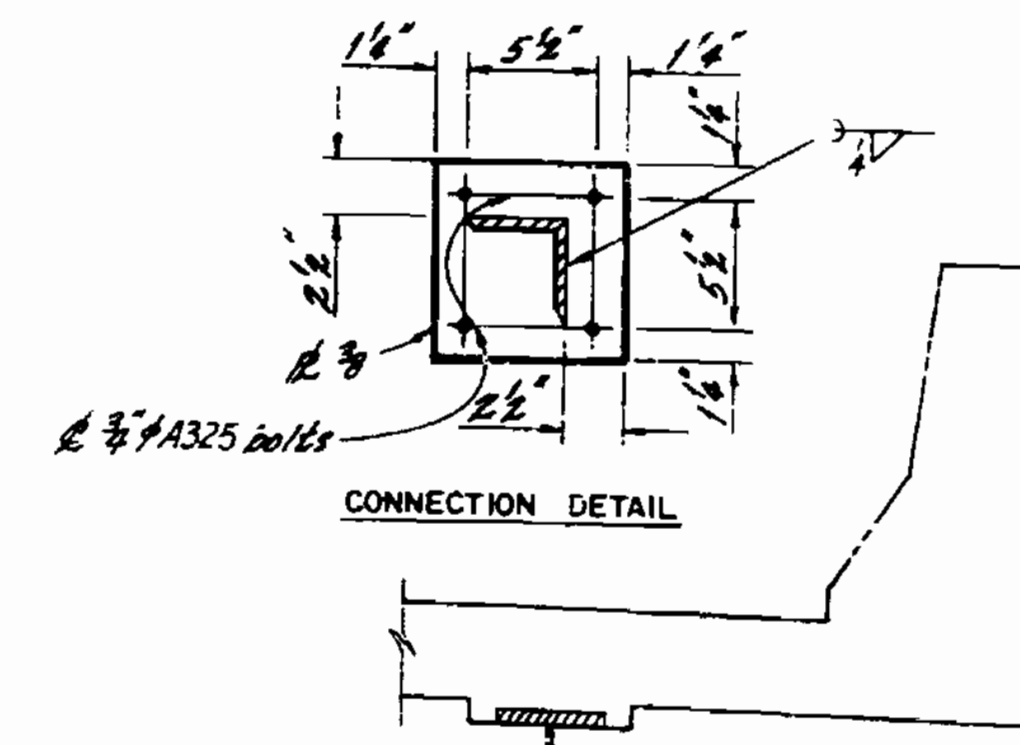
BEARING STIFFENERS-WELDING DETAILS



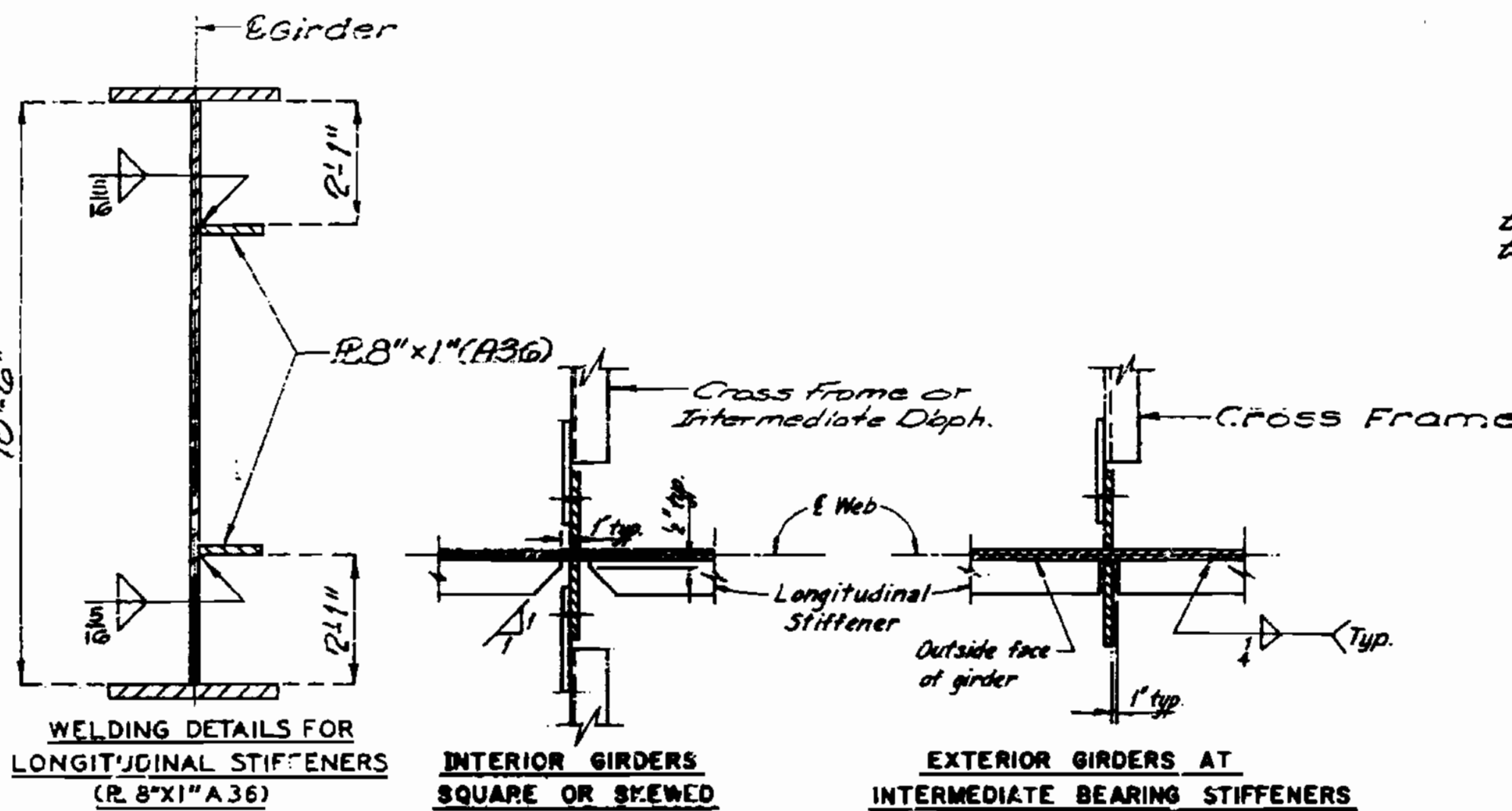
INTERMEDIATE DIAPHRAGM CONNECTION PLATE WELDING DETAILS



WELDED SHOP FLANGE SPLICE

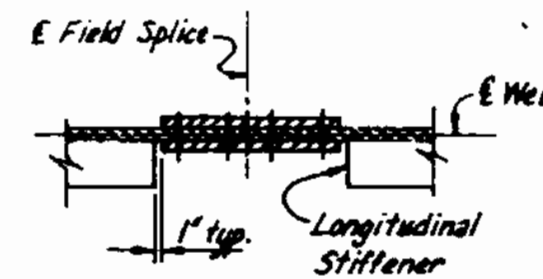


CONNECTION DETAIL

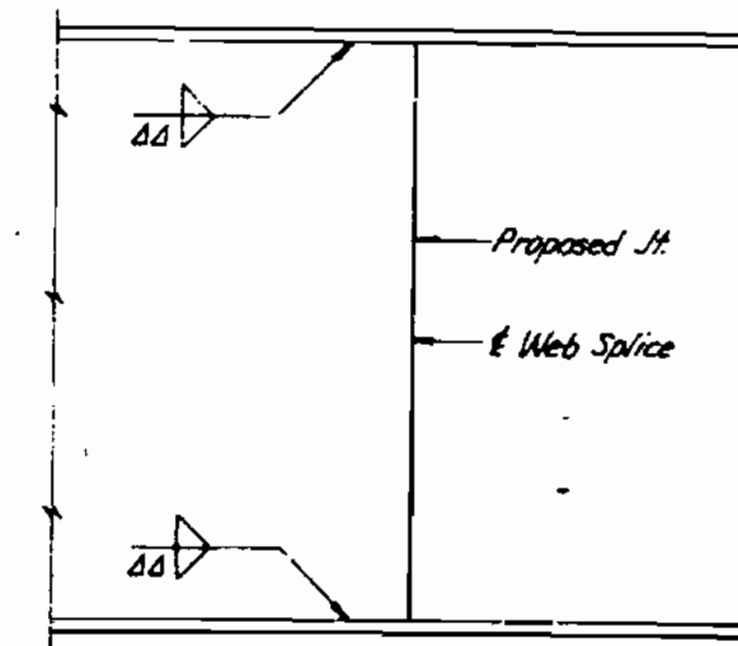


WELDING DETAILS FOR LONGITUDINAL STIFFENERS (R. 8"x1" A36) INTERIOR GIRDERS SQUARE OR SKEWED EXTERIOR GIRDERS AT INTERMEDIATE BEARING STIFFENERS

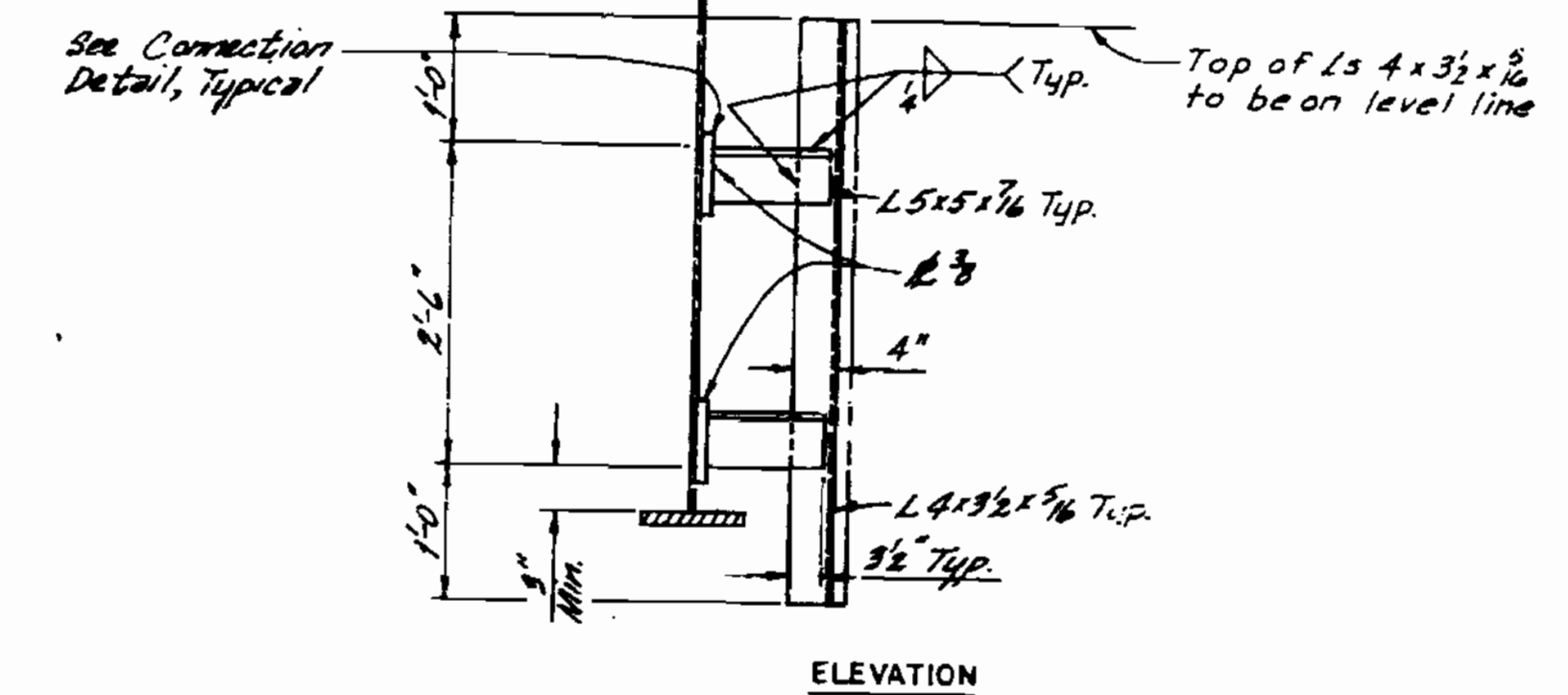
Notes:
Longitudinal web stiffeners shall be placed on the outside of exterior girders and on the side opposite to transverse web stiffener plates for interior girders.



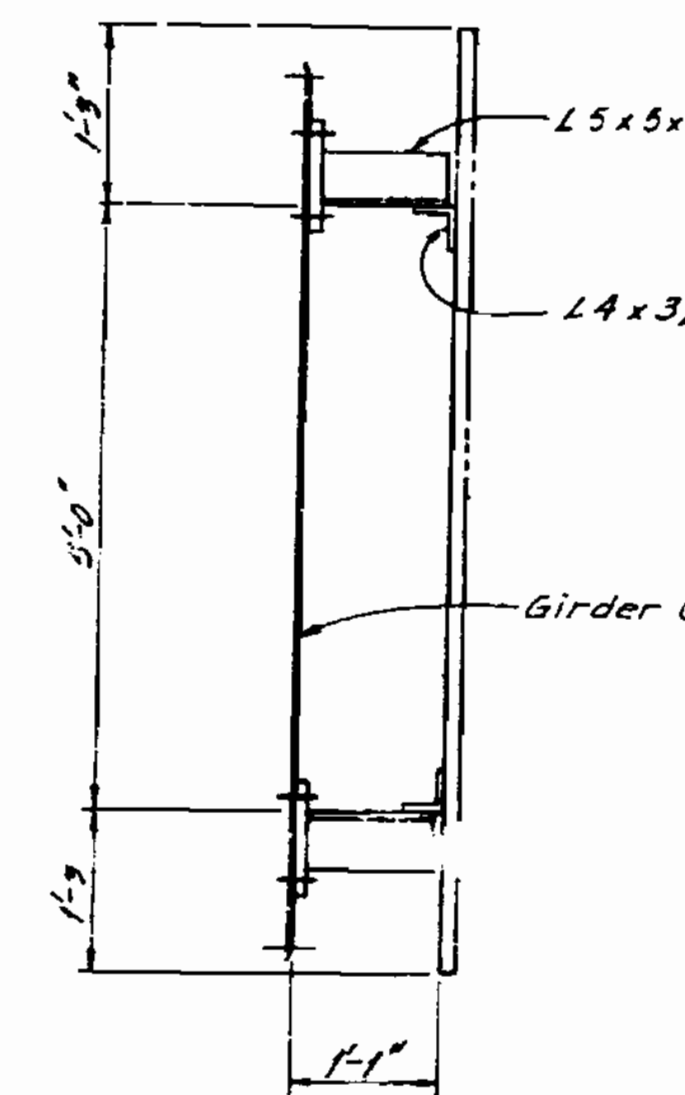
TYPICAL SECTION AT BOLTED FIELD SPLICE



WELDED SHOP WEB SPLICE

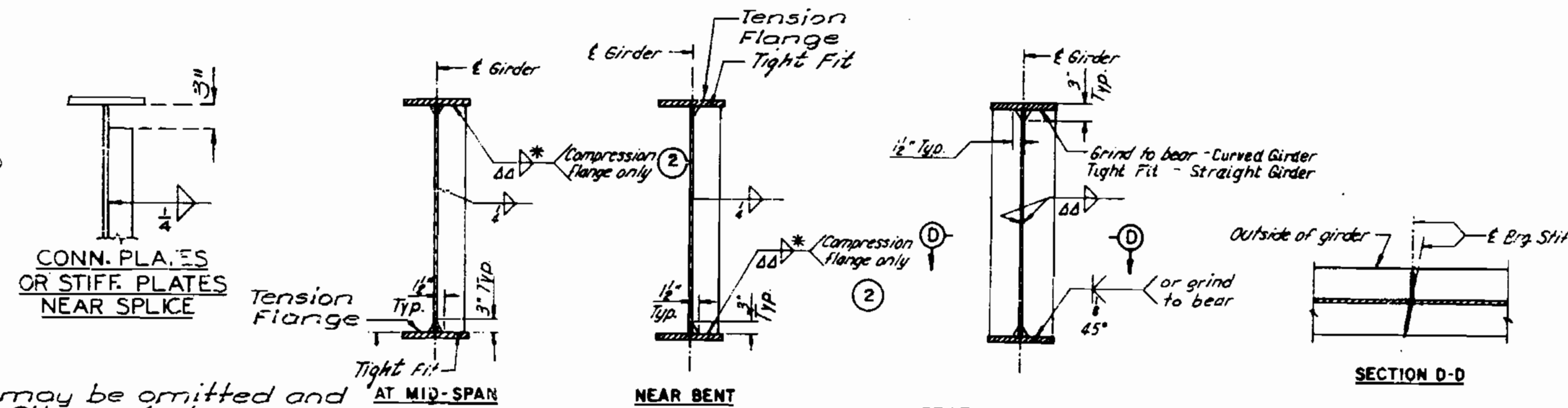


ELEVATION



PLAN

SIGN BRACKET AT WYOMING STREET



INTERMEDIATE DIAPHRAGM CONNECTION PLATES AND INTERMEDIATE STIFFENER DETAILS

*Weld may be omitted and tight fit used when Conn. Plate does not serve as an Int. Web Stiffener.

(2) Weld may be omitted on interior girder and tight fit used when connection plate is required on both sides of girder.

ΔΔ 1/4" for stiffener or flange plates 3/8" to 1/2"
3/8" for stiffener or flange plates 1/2" to 1 1/4"
1/2" for stiffener or flange plates 1 1/4" to 2 1/4"
3/4" for stiffener or flange plates over 2 1/4"

470

DETAILED 10 79
CHECKED 10 79

Note: This drawing is not to scale. Follow dimensions.

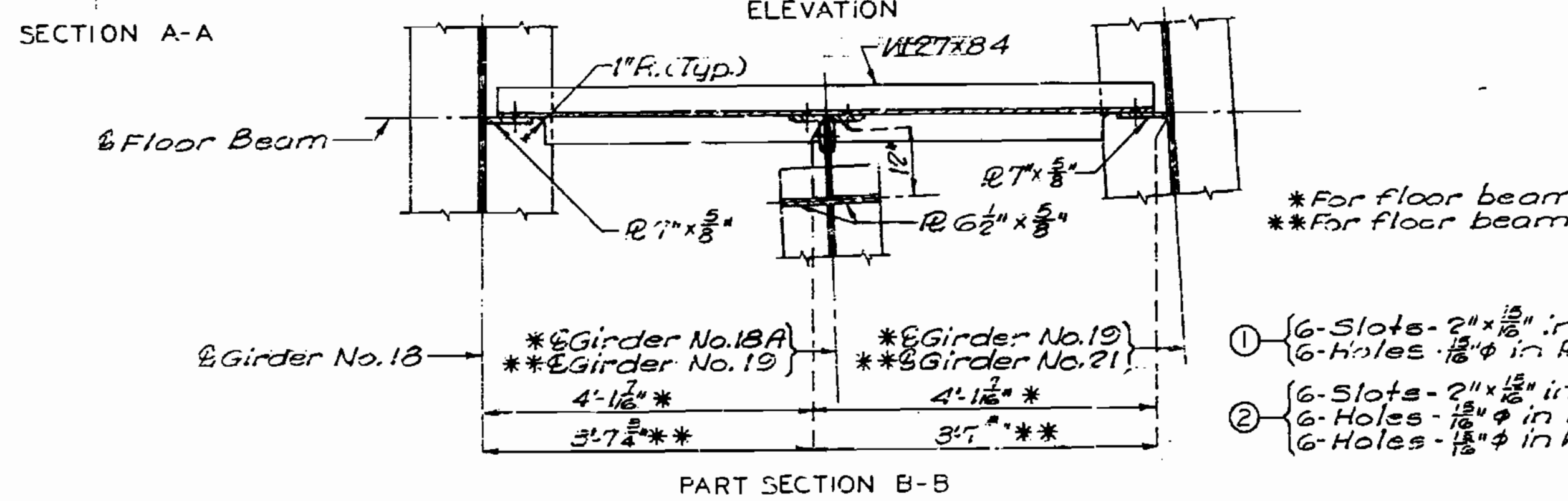
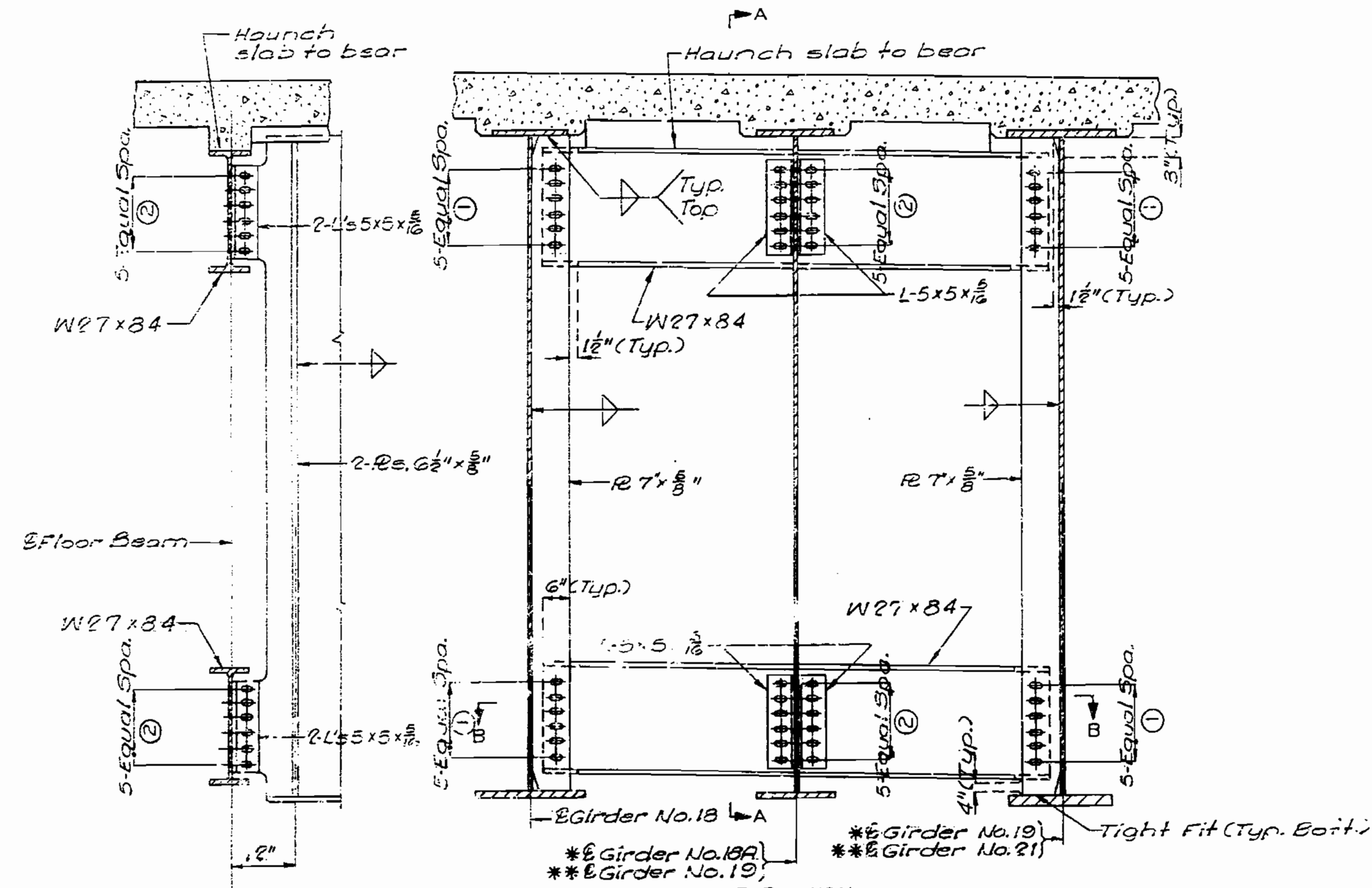
Sheet No. 54 of 59.

MISCELLANEOUS DETAILS

JACKSON COUNTY

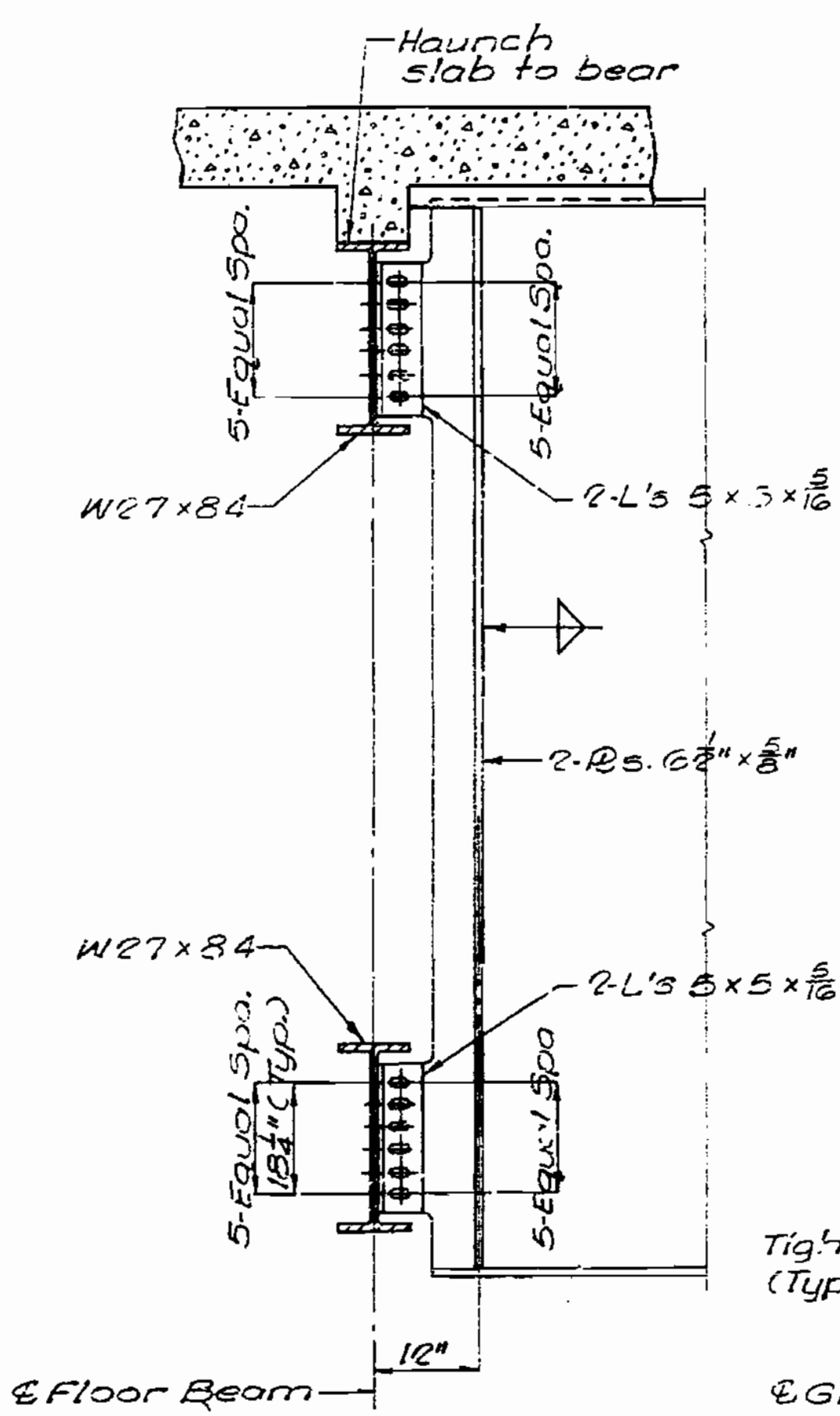
A-3136

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		64	64	



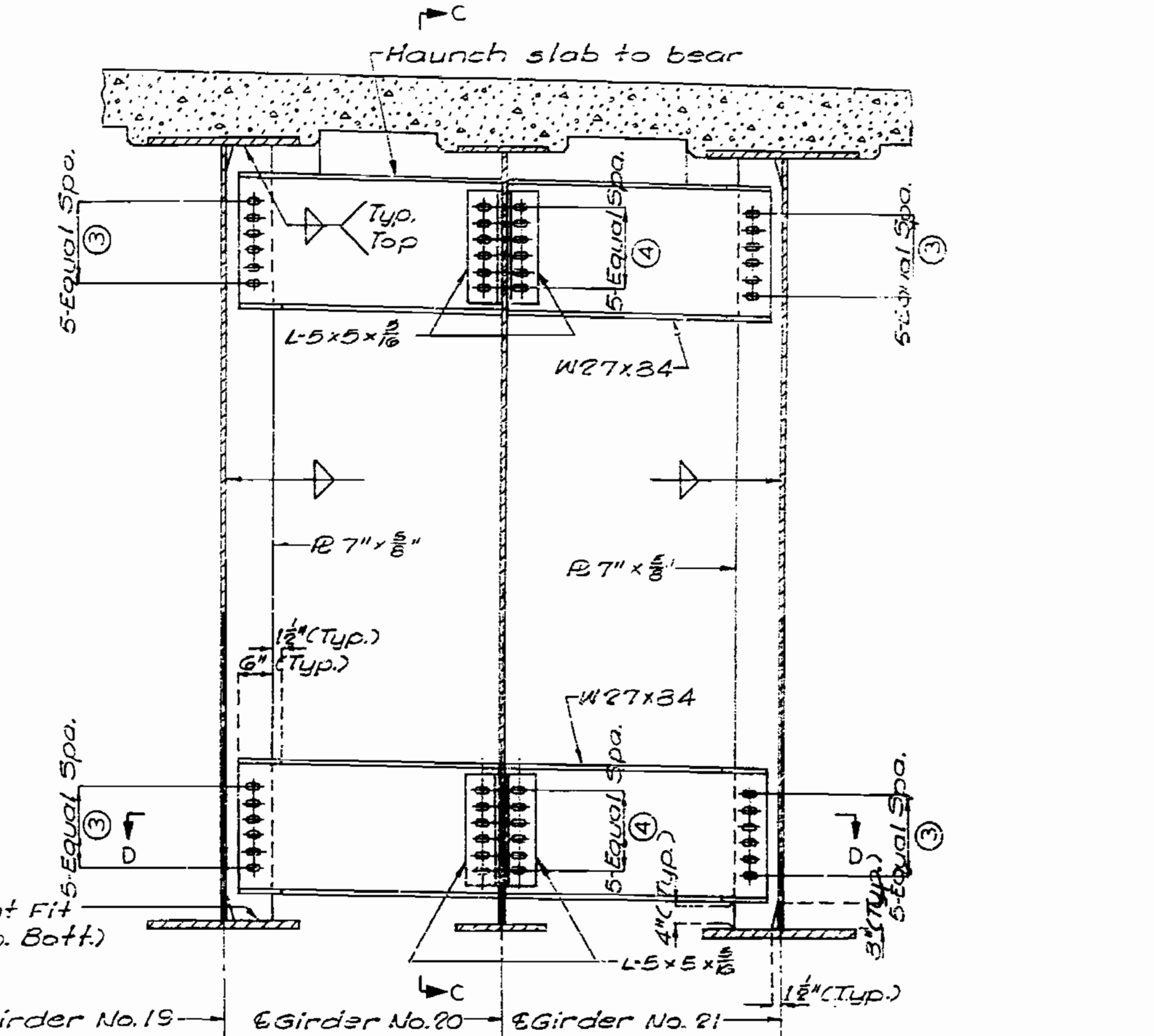
DETAILS OF FLOOR BEAMS FOR GIRDERS NO. 18A & 19

Note: Use 7/8" φ High Strength Bolts complete with Hex. nuts and hardened washers on slotted side for all connections for floor beams for girders No. 18A & 19.

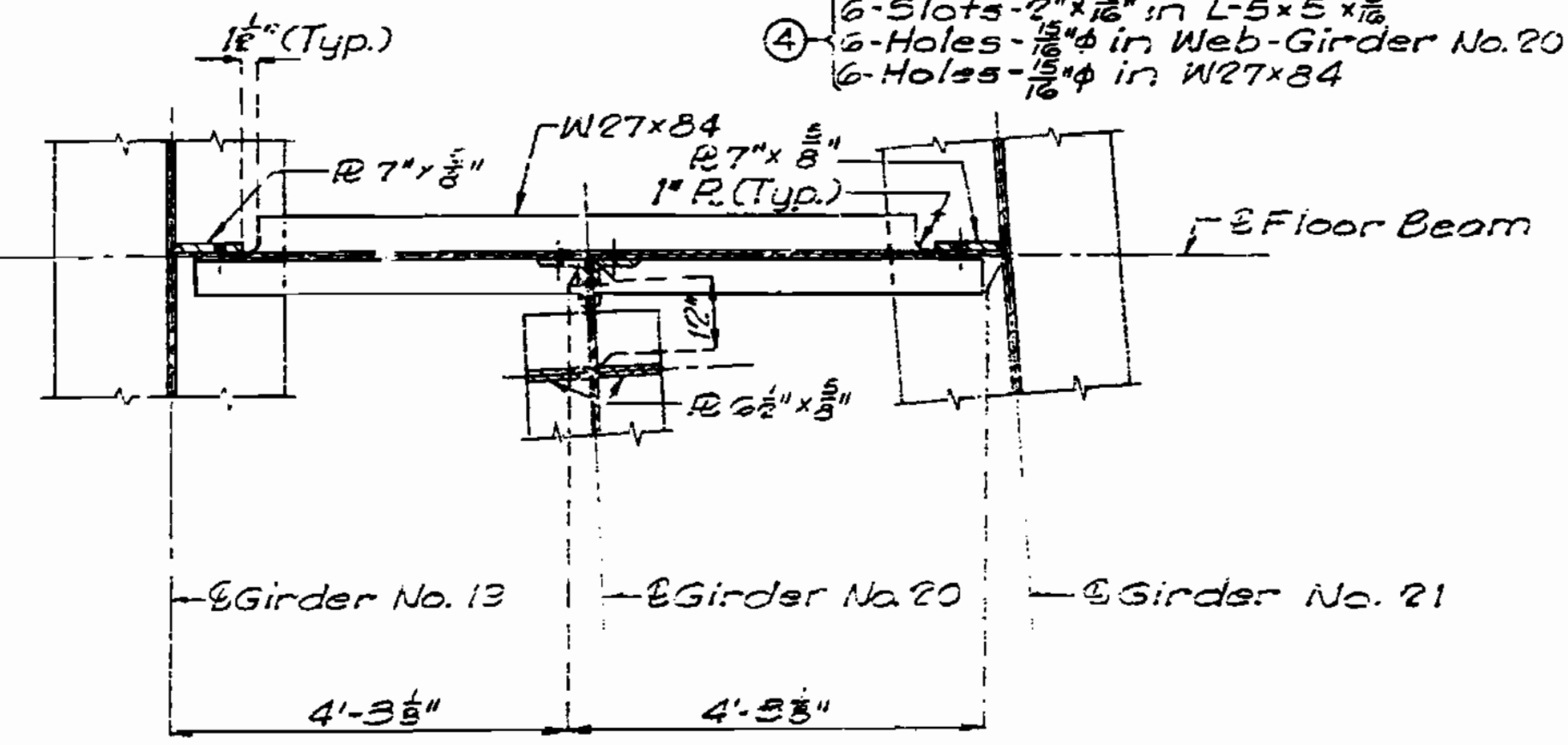


SECTION C-C

- * For floor beam for Girder No. 18A
- ** For floor beam for Girder No. 19.
- ① { 6-Slots-2"x15/16" in W27x84
6-Holes-15/16" φ in R 7"x5/8"
- ② { 6-Slots-2"x15/16" in L-5x5x1/2
6-Holes-15/16" φ in Web-Girders No. 18A & 19
6-Holes-15/16" φ in W27x84



ELEVATION



DETAILS OF FLOOR BEAM FOR GIRDER NO. 20

Note: Use 7/8" φ high Strength Bolts complete with Hex. nuts and hardened washers on slotted side for all connections for floor beam for girder No. 20.

FLOOR BEAMS-UNIT 9 EASTBOUND

DETAILED 10 52
CHECKED 10 82

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 57 of 59.

JACKSON COUNTY

A-3136

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION
STRUCTURAL STEEL BENTS 12 THRU 30

FINAL PLANS

PUB. ROAD DIST. NO.	STATE	PRI. NO.	PRJ. NO.	SHEET NO.	TOTAL SHEETS
1	MO.			8	

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- 2 GENERAL PLAN AND ELEVATION
- 3 GENERAL PLAN AND ELEVATION
- 4 GENERAL PLAN AND ELEVATION
- 5 GENERAL PLAN AND ELEVATION
- 6 GENERAL PLAN AND ELEVATION
- 7 SUMMARY OF QUANTITIES
- 8 FRAMING PLAN - UNIT 5 WESTBOUND
- 9 GIRDER ELEVATION - UNIT 5 WESTBOUND
- 10 GIRDER ELEVATION - UNIT 5 WESTBOUND
- 11 FRAMING PLAN - UNIT 5 EASTBOUND
- 12 GIRDER ELEVATION - UNIT 5 EASTBOUND
- 13 GIRDER ELEVATION - UNIT 5 EASTBOUND
- 14 FRAMING PLAN - UNIT 6 WESTBOUND
- 15 GIRDER ELEVATION - UNIT 6 WESTBOUND
- 16 GIRDER ELEVATION - UNIT 6 WESTBOUND
- 17 FRAMING PLAN - UNIT 6 EASTBOUND
- 18 GIRDER ELEVATION - UNIT 6 EASTBOUND
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- 20 FRAMING PLAN - UNIT 7 WESTBOUND
- 21 GIRDER ELEVATION - UNIT 7 WESTBOUND
- 22 GIRDER ELEVATION - UNIT 7 WESTBOUND
- 23 FRAMING PLAN - UNIT 7 EASTBOUND
- 24 GIRDER ELEVATION - UNIT 7 EASTBOUND
- 25 GIRDER ELEVATION - UNIT 7 EASTBOUND
- 26 FRAMING PLAN - UNIT 8 WESTBOUND
- 27 GIRDER ELEVATION - UNIT 8 WESTBOUND
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- 29 GIRDER ELEVATION - UNIT 8 WESTBOUND
- 30 GIRDER DETAILS - UNIT 8 WESTBOUND
- 31 FRAMING PLAN - UNIT 8 EASTBOUND
- 32 GIRDER ELEVATION - UNIT 8 EASTBOUND
- 33 DEAD LOAD DEFLECTION AND CAMBER DIAGRAM UNIT 8 & 9
- 34 FRAMING - UNIT 9 WESTBOUND
- 35 GIRDER ELEVATION - UNIT 9 WESTBOUND
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- 37 GIRDER ELEVATION - UNIT 9 WESTBOUND
- 38 FRAMING PLAN - UNIT 9 EASTBOUND
- 39 GIRDER ELEVATION - UNIT 9 EASTBOUND
- 40 GIRDER ELEVATION - UNIT 9 EASTBOUND
- 41 GIRDER ELEVATION - UNIT 9 EASTBOUND
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- 44 FRAMING PLAN - UNIT 10 WESTBOUND
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- 48 FIELD SPLICES - UNITS 5, 6, 7 AND 10
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- 51 GIRDER EXPANSION JOINTS
- 52 GIRDER EXPANSION JOINTS
- 53 GIRDER EXPANSION JOINTS
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- 55 DIAPHRAGM DETAILS
- 56 FLOOR BEAMS - UNITS 8 AND 9 WESTBOUND
- 57 FLOOR BEAMS - UNIT 9 EASTBOUND
- 58 LATERAL DETAILS
- 59 BEARING DEVICES

GENERAL NOTES

DESIGN SPECIFICATIONS: AASHTO, 1977 and Interim Specifications, 1978. Load Factor Design.

DESIGN LOADING: HS20-44 and Alternate Military Loading with 15' / sq. ft. for future wearing surfacing. Fatigue Stress: Case 1.

CONSTRUCTION SPECIFICATIONS: Missouri Standard Specifications for Highway Construction, 1981

DESIGN UNIT STRESSES:
 ASTM A36 $f_y = 36,000$ psi
 ASTM A572 $f_y = 50,000$ psi
 ASTM A588 $f_y = 50,000$ psi

UTILITIES: All utilities, unless shown otherwise, were removed or relocated by others. The Contractor did notify the owner of the utilities of his work schedule sufficiently in advance to allow time for disposition of utilities.

CONSTRUCTION CLEARANCES: A minimum vertical clearance of 22'-9" from top of rails and a minimum lateral clearance of 8'-6" from the centerline of track to nearest temporary construction falsework was maintained during construction for railroads. The Contractor must maintain a 13'-6" vertical by 28'-0" horizontal opening for city streets during construction.

ANCHOR BOLTS: Anchor bolts of the diameters shown were drilled and grouted at the locations shown.

PLATE GIRDERS: Bolts were ASTM A325 1/2" with 5/8" holes, unless otherwise shown or noted.
 By approval of the Engineer, the Contractor did omit any shop splice, if desired, by extending the heavier plate and providing approved modifications of details of field splices and elsewhere as required. All costs of any required design, plan revisions or rechecking of shop drawings were borne by the Contractor. Payweight in any case was based on material shown on design plans.

WELDING: Shop welded web splices were fabricated by the Contractor when detailed on the drawings and approved by the Engineer. No additional payment was made for optional shop welded web splices.
 All shop web splices were located at least 1'-0" from shop flange splices.
 By approval of the Engineer, the Contractor did, if desired, substitute a shop welded splice for field bolted splices by providing approved modifications of details required. All cost was borne by the Contractor. Payweight in any case was based on materials shown on the design plans.

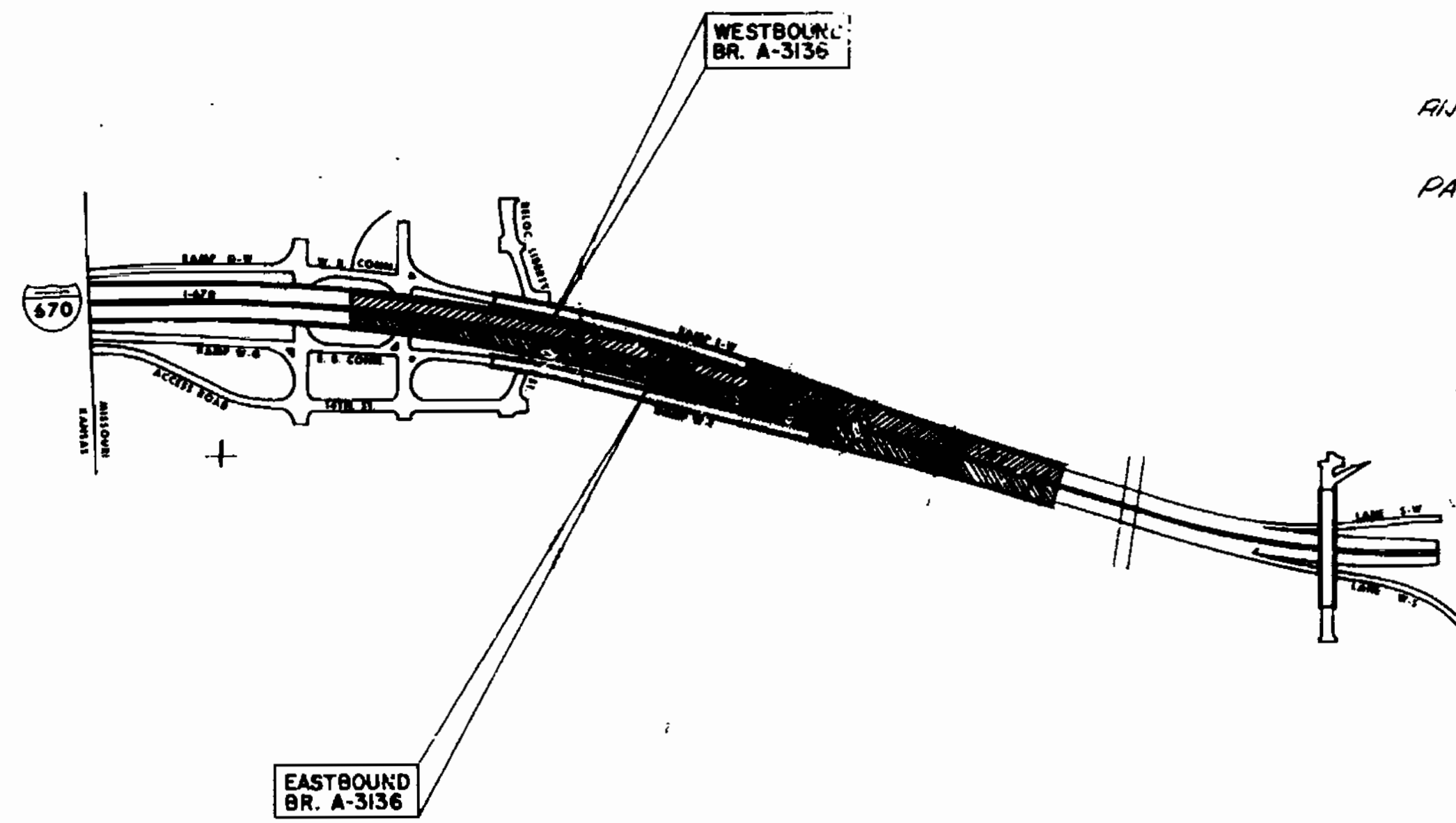
ERECTION: Dimensions between $\frac{1}{2}$ of bearing were checked in field before fabrication of girders. Contractor was responsible for proper fit.

GIRDER CAMBER: Plate girders were fabricated to conform with the camber diagrams. Camber includes allowance for vertical curvature, superelevation transition and dead load deflection due to slab and structural steel.

ELECTRICAL GROUNDS: Electrical grounds have been provided at the following locations:
 Bents 14WB, 18WB, 22WB - South side of Girder B
 Bents 25WB, 27WB, 29WB - South side of Girder S
 Bents 14EB, 18EB, 22EB - North side of Girder N
 Bents 25EB, 27EB - North side of Girder S
 Bent 29EB - North side of Girder S
 Each grounding conductor which protrudes above the cap beam or column was exothermically welded to the nearest girder web. Cost was included in the unit price bid for other items in the Contract.

ANCHOR BOLTS: Anchor Bolts for bearings were furnished and installed with Fabricated Structural Steel.

PAINTING: See Special Provisions



LOCATION SKETCH

BRIDGE I-670 VIADUCT
 STATE ROAD - INTERSTATE ROUTE 670
 IN KANSAS CITY
 PROJECT NO. IDG-670-1(124) STA. 52+79.857 KANSAS STATE LINE
 JOB NO. 4 I-670 4SD RTE. I-670
 JACKSON COUNTY
 DATE 2/3/83

STD.
STD.
A-3136

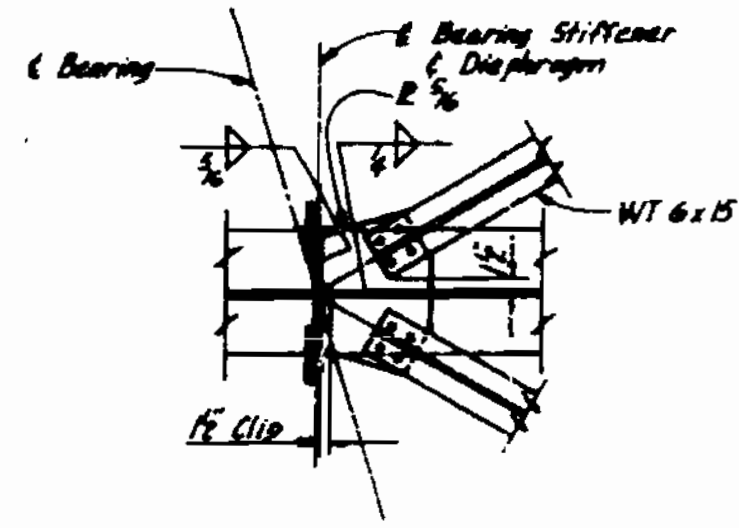
5453-21-04

DESIGNED 1079
 DETAILED 1079
 CHECKED 1079

Note: This drawing is not to scale. Follow dimensions.

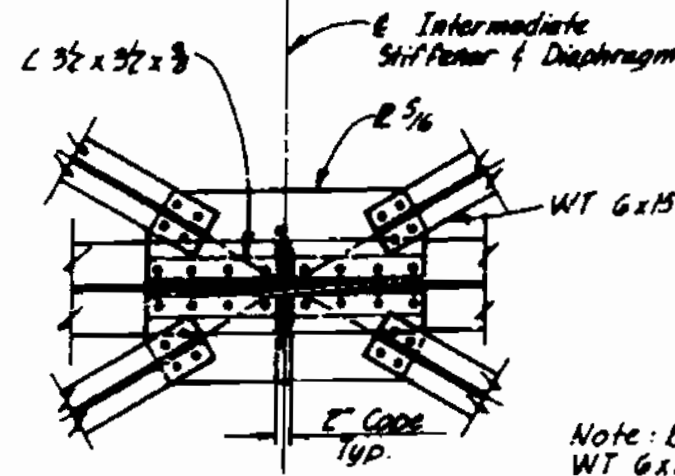
Sheet No. 1A of 59.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		57	65	



BENT 21 CONNECTION

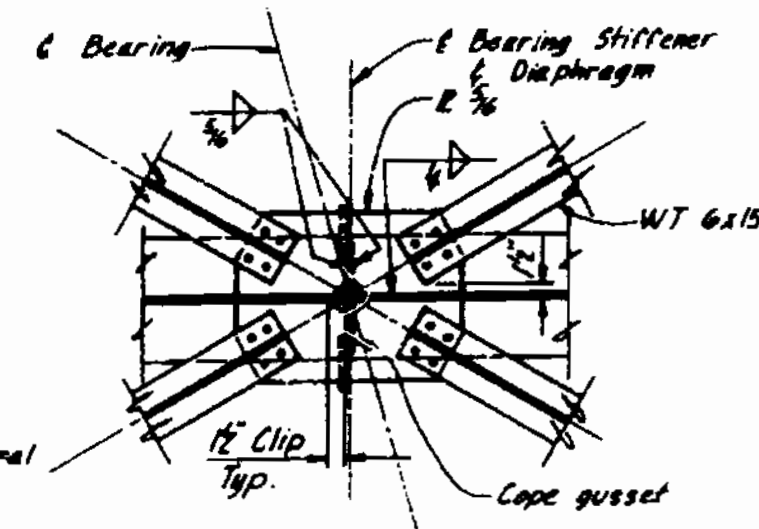
Bent 23 similar except for skew to diaphragm.



TYPICAL INTERMEDIATE CONNECTION

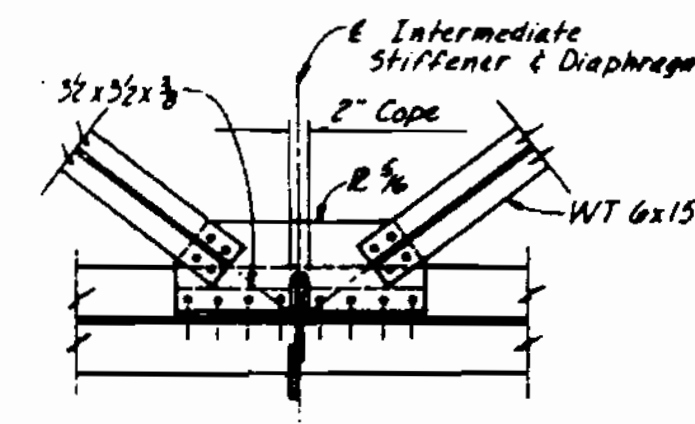
UNIT 7

Note: Bottom of Unit 7 lateral WT 6x15 to be 1'-3" above bottom of girder web.

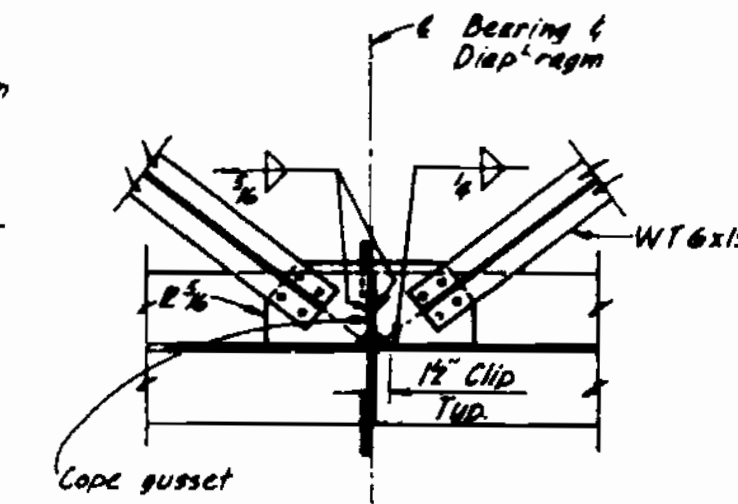


BENT 22 CONNECTION

Note: Lateral WT 6x15 and connections shall be A-56.

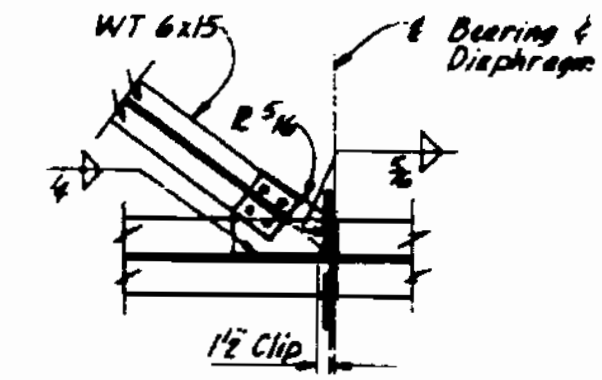


TYPICAL INTERMEDIATE CONNECTION



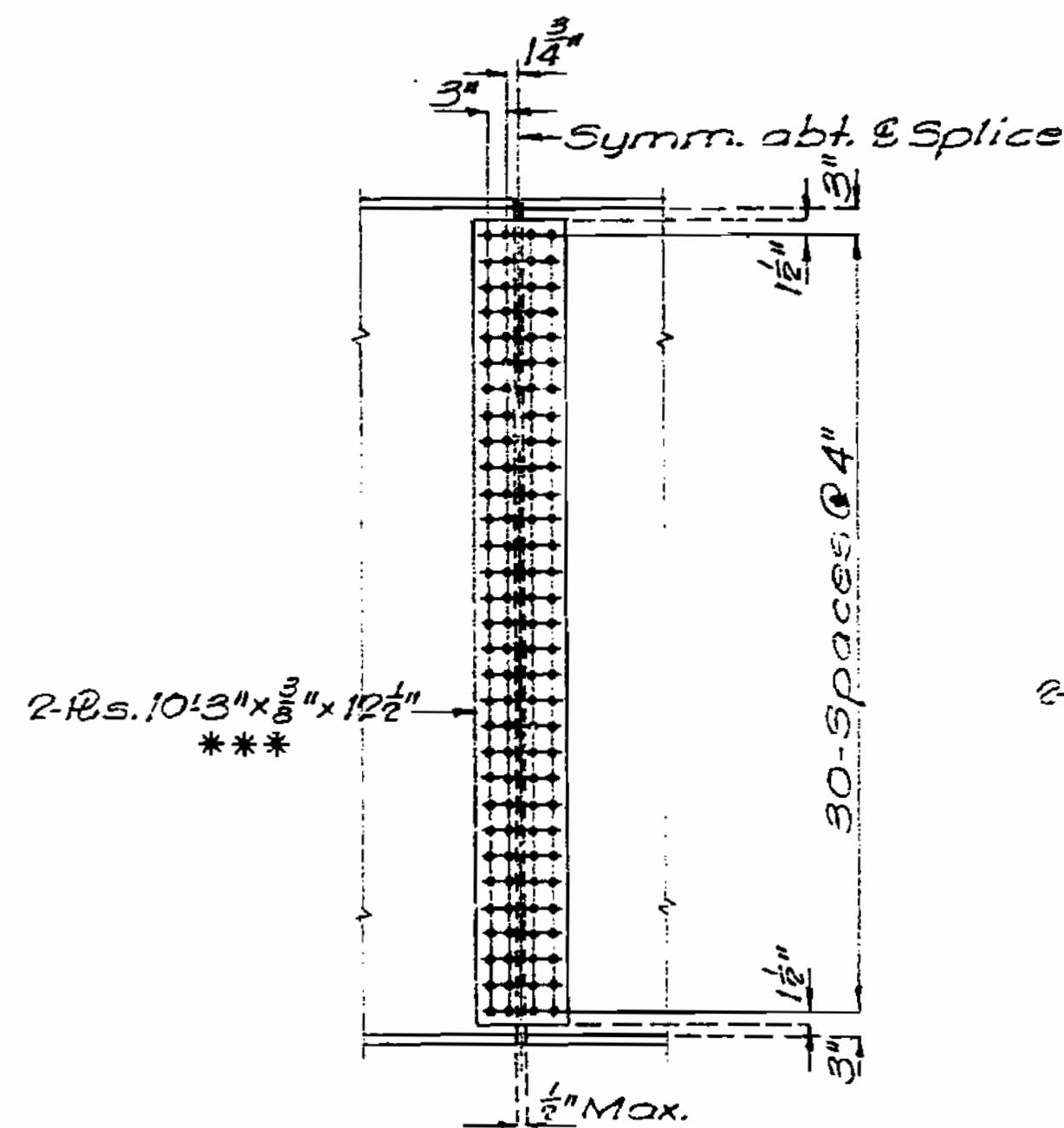
BENTS 27 & 29 CONNECTION

UNITS 8-9 & 10

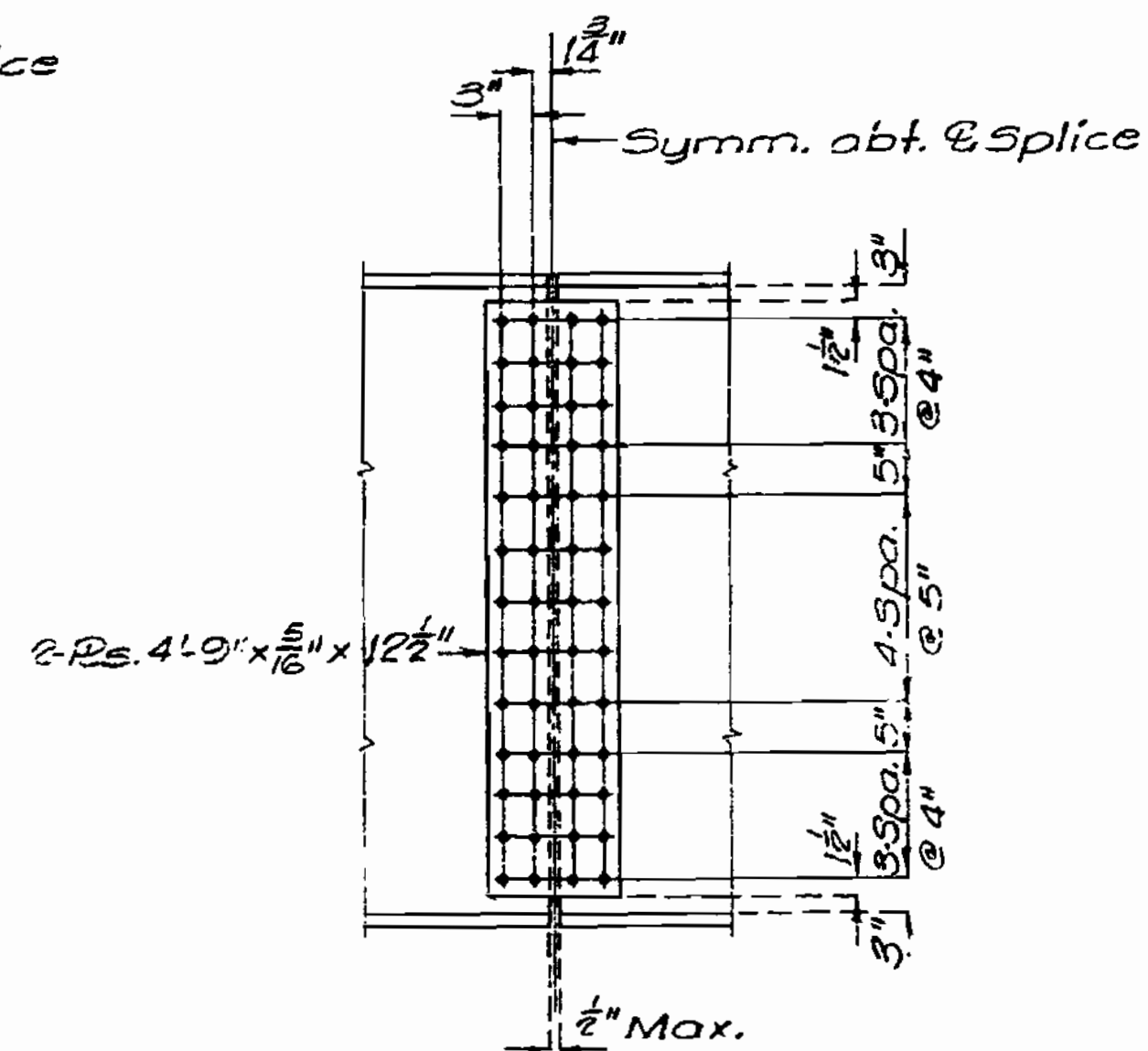


BENTS 25-26-28 & 30 JOINTS 8 & 9 CONNECTION

Note: Bottom of Units 8, 9 & 10 lateral WT 6x15 to be 1'-3" above bottom of girder web.



126" GIRDER WEB



60" GIRDER WEB

DETAILS OF BOLTED FIELD WEB SPLICE
 Note: Use 3/8" φ High strength bolts with 1 1/8" φ reamed holes.
 All Splice Plates are A36 steel.

***Indicates Splice Plates subject to notch toughness requirements.
 Web Splice Plates at Field Splice (S1) Girder No. 4A-Unit 8 Westbound shall be subject to notch toughness requirements.

Note: This drawing is not to scale. Follow dimensions.

LATERAL DETAILS-UNITS 7-8-9 & 10
 BOLTED FIELD WEB SPLICES-UNITS 8 & 9

DETAILED 1079
 CHECKED 1079

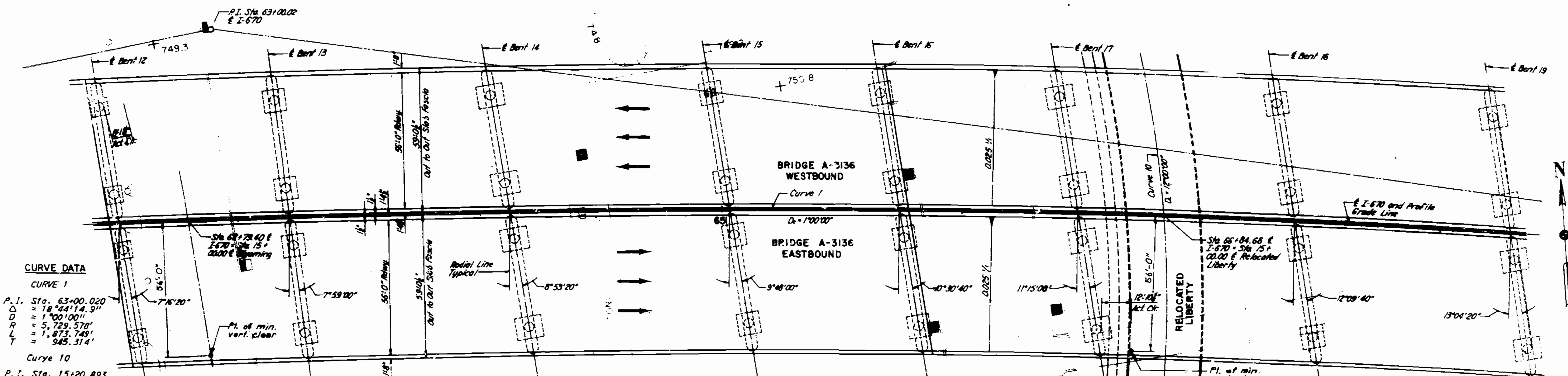
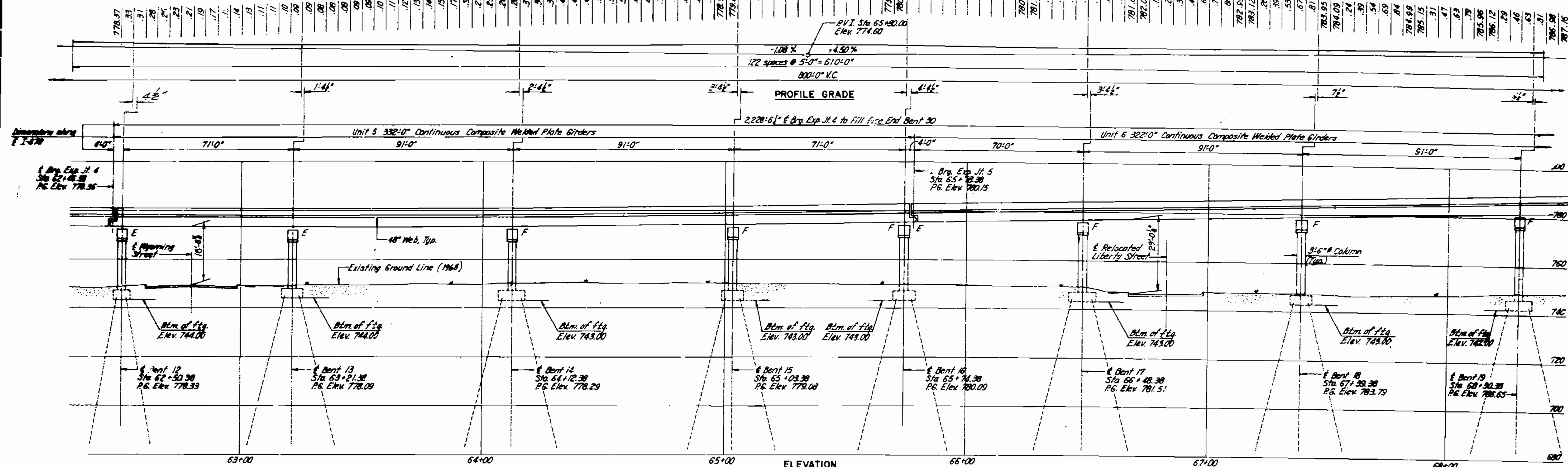
Sheet No. 58 of 59.

JACKSON COUNTY

A-3136

FINAL PLANS

DATE	BY	CHKD	APP'D



CURVE DATA

CURVE 1
 P.I. Sta. 63+00.020
 Δ = 18°44'14.9"
 D = 1000'-00"
 R = 5,729.578'
 L = 1,873.749'
 T = 945.314'

Curve 10
 P.I. Sta. 15+20.893
 Δ = 48°24'12.5"
 D = 1200'-00"
 R = 477.465'
 L = 403.362'
 T = 214.599'

BENCH MARKS

Elev. 748.34
 17' on N.W. corner
 57' Lt. Sta. 19+74 E.W.
 Elev. 751.42
 11' on S.E. corner
 95' Lt. Sta. 80+16

Elev. 860.03
 11' on hand mkt. S. 59'
 Truss post. 13+70 A-3136

NOTE:
 The information shown on this drawing 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.

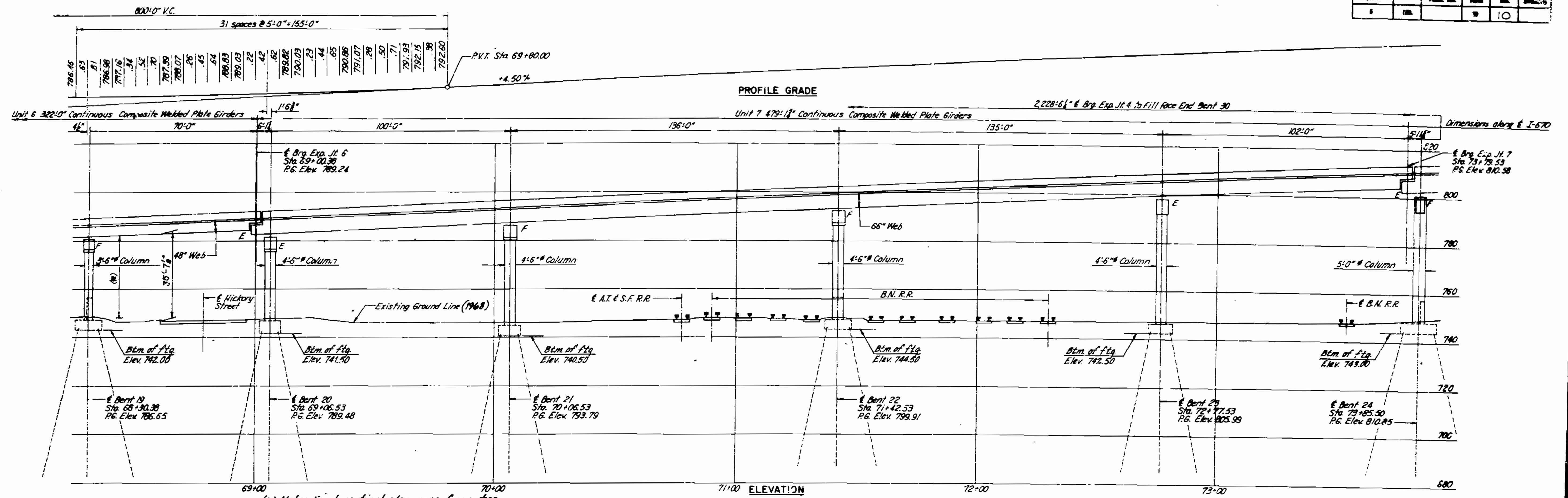
DETAILED 1978
 CHECKED 1978

Note: This drawing is not to scale. Follow dimensions.

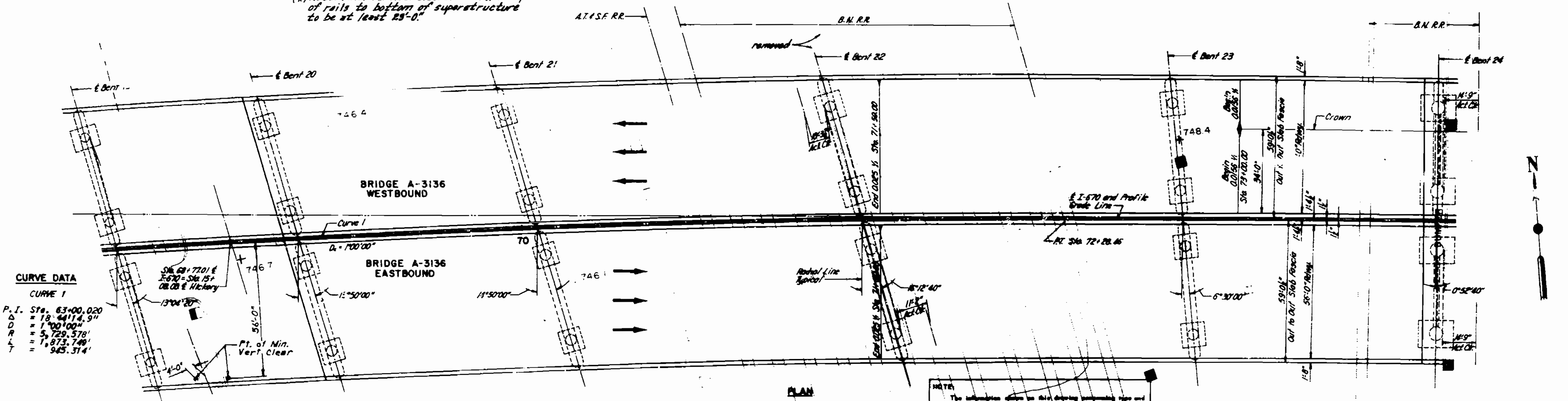
Sheet No. 2A of 59.

GENERAL PLANS

NO.	DATE	BY	CHKD.	APP'D.
1				



(*Note: Final vertical clearance from top of rails to bottom of superstructure to be at least 25'-0".



NOTE:
The information shown on this drawing represents type and location of proposed utilities is not guaranteed to be correct by all instances. The Contractor is responsible for verifying the exact dimensions, sizes, types and locations of underground utilities. It may be necessary to avoid damage to same.

DETAILED 10 78
CHECKED 10 78

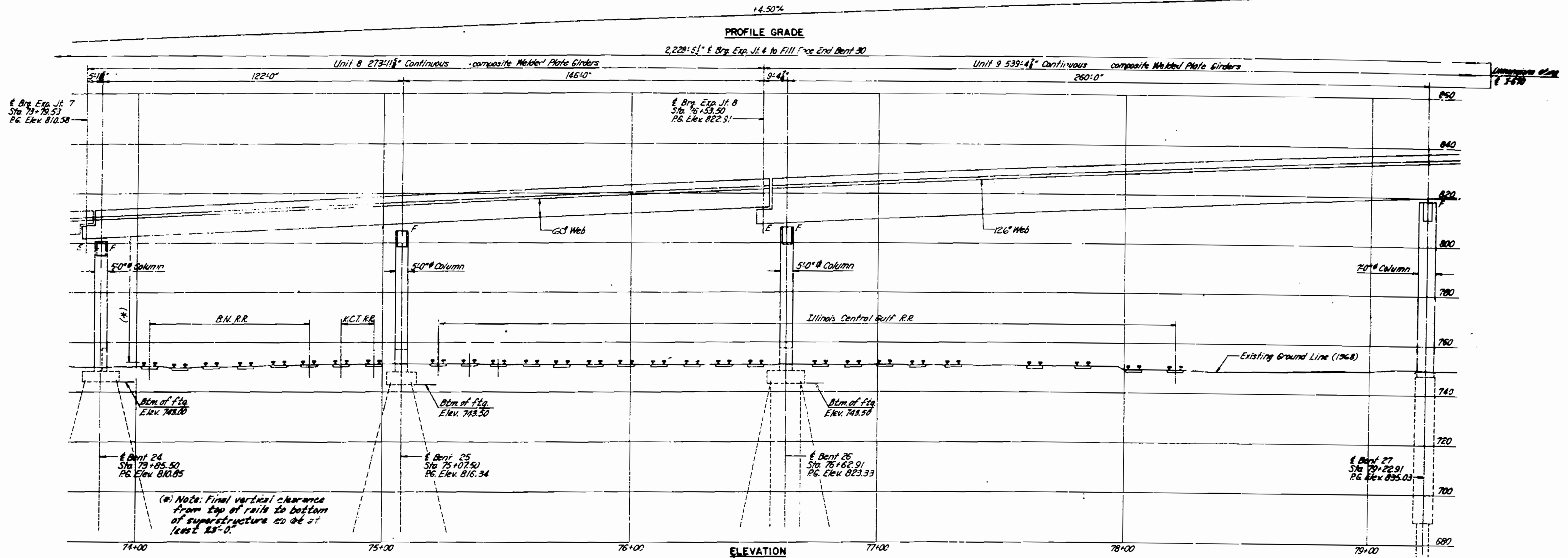
GENERAL PLAN AND ELEVATION

JACKSON COUNTY A-3136

Sheet No. 31 of 59.

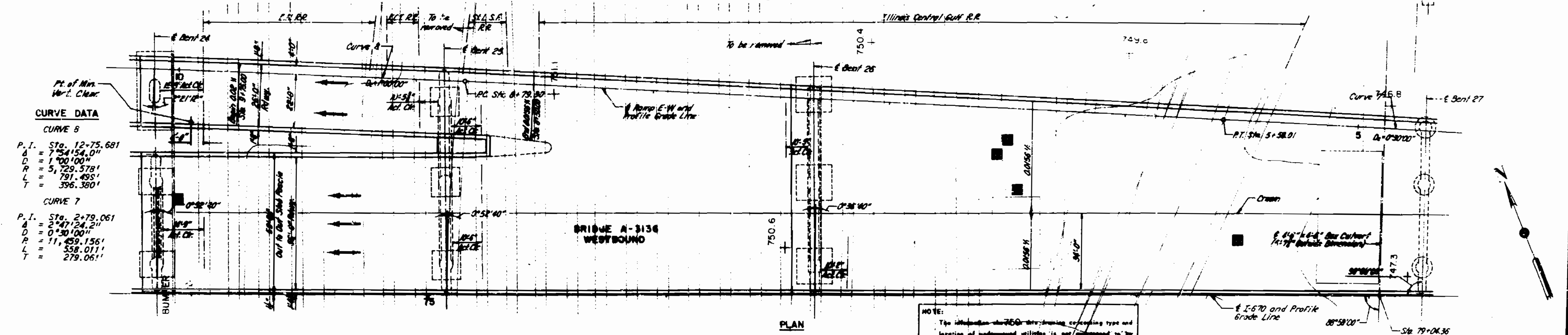
FINAL PLANS

1	2	3	4	5	6	7	8	9	10	11	12



(*) Note: Final vertical clearance from top of rails to bottom of superstructure 150' at least 23'-0"

ELEVATION



CURVE DATA

CURVE 6

P.I. Sta. 12+75.681
 Δ = 7°54'54.0"
 D = 1°00'00"
 R = 5,729.578'
 L = 791.495'
 T = 396.380'

CURVE 7

P.I. Sta. 2+79.061
 Δ = 2°47'24.2"
 D = 0°30'00"
 R = 11,459.156'
 L = 558.011'
 T = 279.061'

NOTE:
 The information shown on this drawing 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.

GENERAL PLAN AND ELEVATION

4726

DESIGNED 10 78
 CHECKED 10 78

Note: This drawing is not to scale. Follow dimensions.

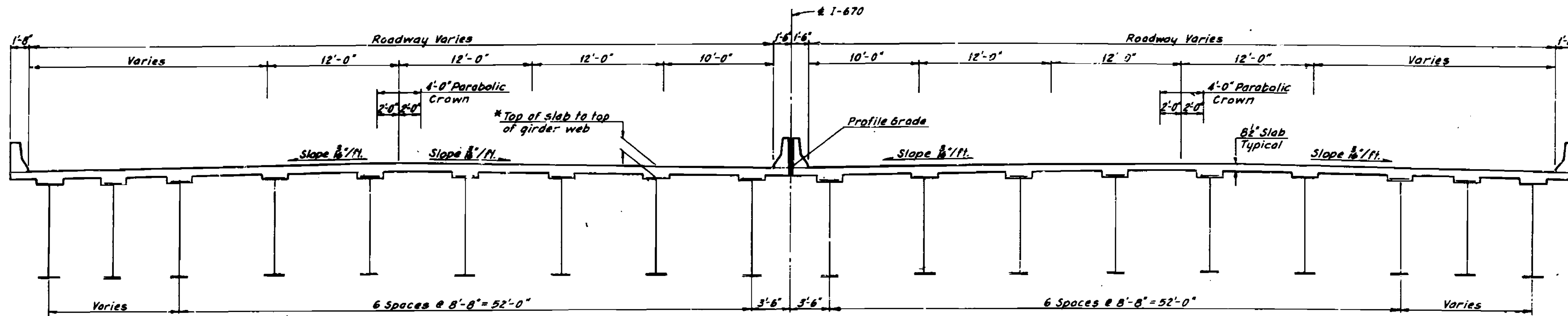
Sheet No. 4A of 59.

JACKSON COUNTY

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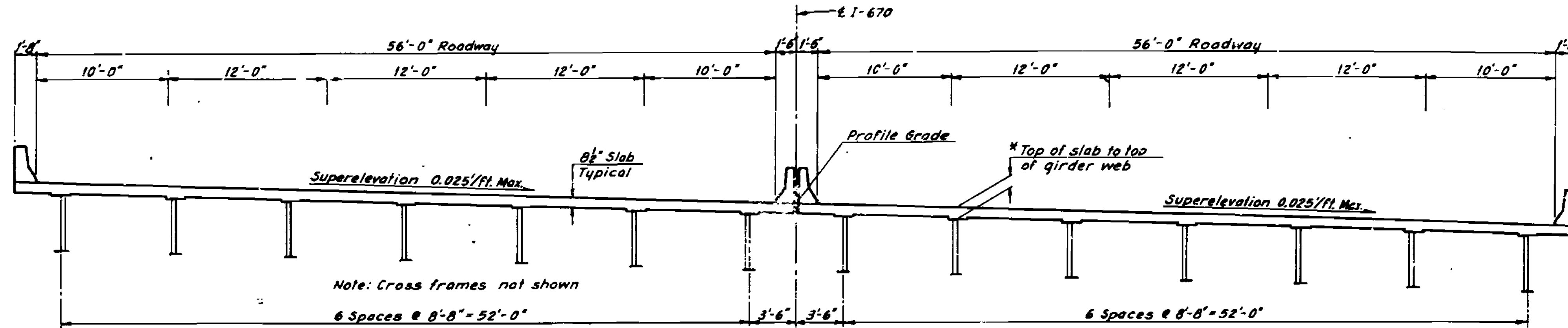
TYPICAL FRAMES

PUB. ROAD DIST. NO.	STAGE	PUB. AC. PROJ. NO.	FED. PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	REL.			14	

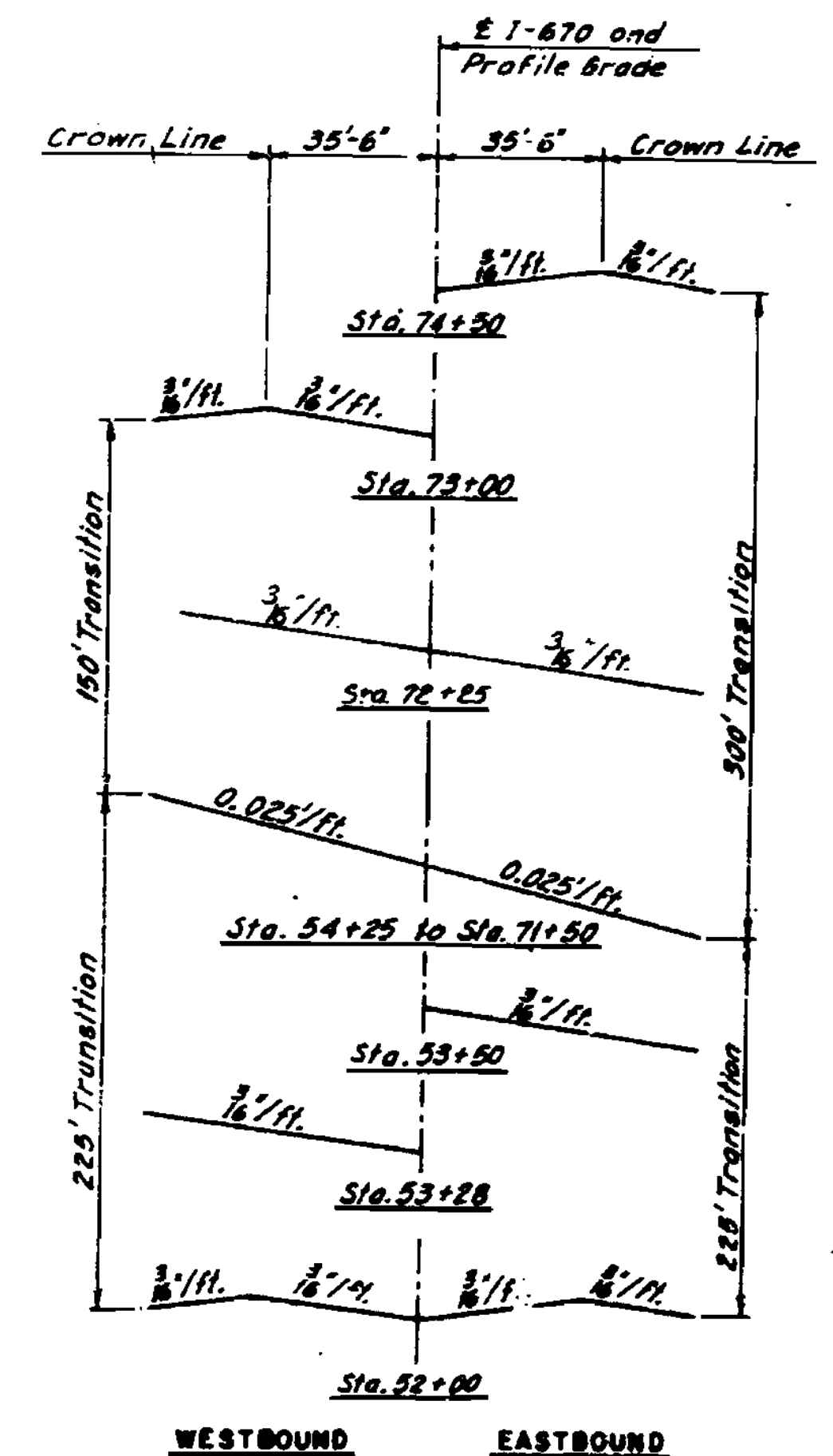
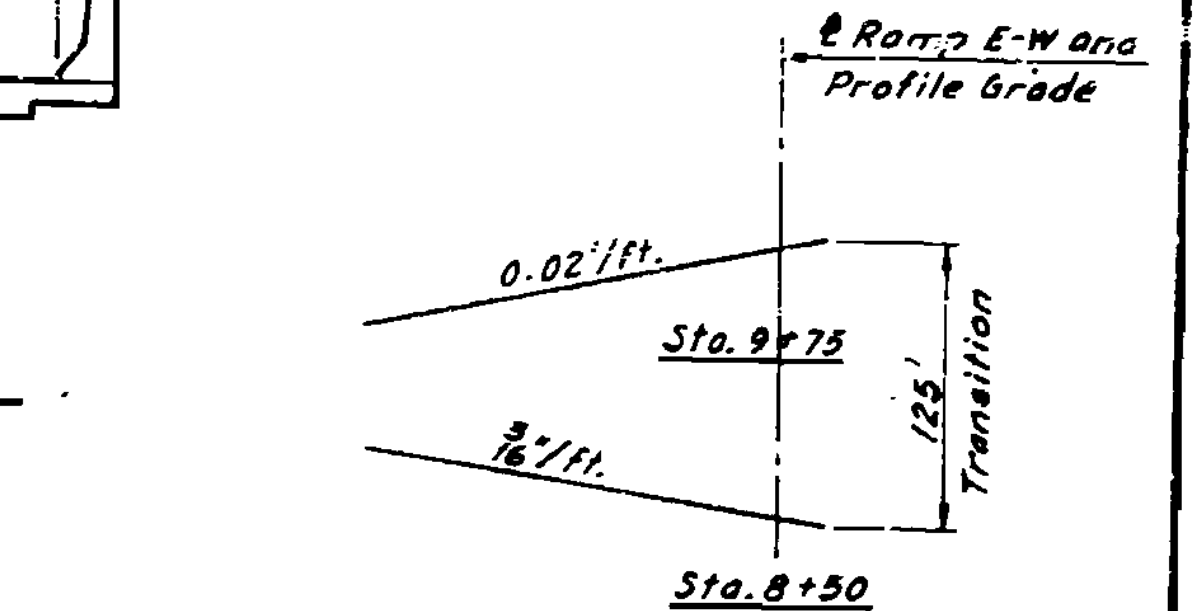


TYPICAL SECTION - UNITS 8-9 & 10

- * Units 5 & 6 - 10 1/2"
- Unit 7 - 11"
- Unit 8 - 11 1/2"
- Unit 9 - 11 1/2"
- Unit 10 - 11 1/2"



TYPICAL SECTION - UNITS 5, 6 AND 7



WESTBOUND EASTBOUND
SUPERELEVATION TRANSITIONS

ESTIMATED QUANTITIES

ITEM	UNIT	WESTBOUND LANE SUPERSTRUCTURE							EASTBOUND LANE SUPERSTRUCTURE							TOTAL
		UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10	TOTAL	UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10	TOTAL	
Fabricated Structural Carbon Steel	Pound															6,522,680
Fabricated Structural Low Alloy Steel (A572)	Pound															8,057,760
Fabricated Structural Steel Bearings	Pound															191,030
Fabricated Structural Low Alloy Steel (A588)	Pound															46,070
Mobilization B970	>1															1
502.01 Shop Dwg. Revisions	\$945.40															1
502.02 Shop Dwg. Revisions	\$12,184.40															1

SUMMARY OF QUANTITIES AND TYPICAL SECTIONS

DETAILED 10 79
CHECKED 10 79

Note: This drawing is not to scale. Follow dimensions.

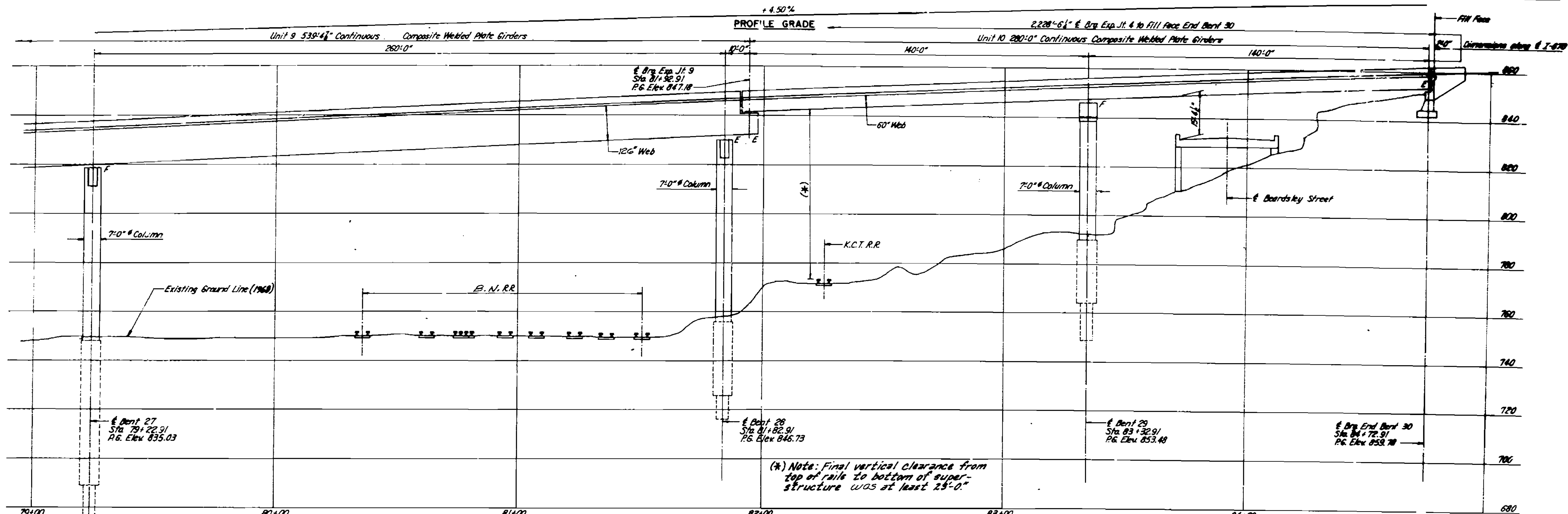
Sheet No. 7 of 59.

JACKSON COUNTY

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FINAL PLANS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

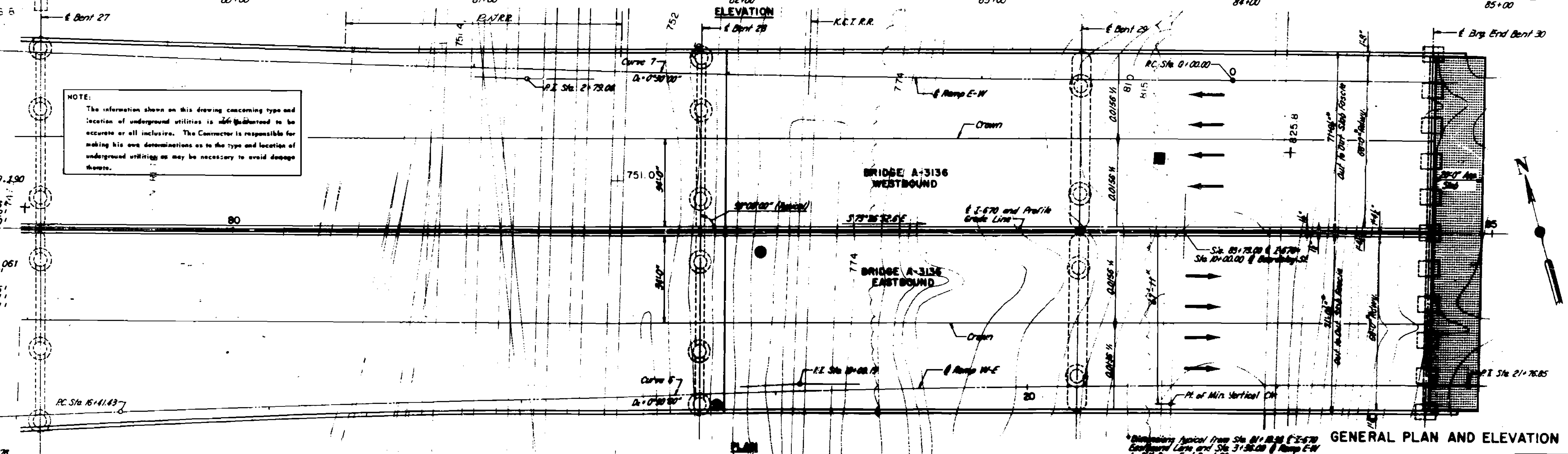


(*) Note: Final vertical clearance from top of rails to bottom of superstructure was at least 25'-0"

NOTE:
The information shown on this drawing concerning type and location of underground utilities is not intended 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.

CURVE DATA
CURVE 6
 P.I. Sta. 19+09.190
 Δ = 2°40'37.8"
 O = 0°30'00"
 R = 11,459.156'
 L = 535.432'
 T = 267.760'
 PC Sta. 16+41.437

CURVE 7
 P.I. Sta. 2+79.061
 Δ = 2°47'24.21"
 O = 0°30'00"
 R = 11,459.156'
 L = 558.011'
 T = 279.061'



GENERAL PLAN AND ELEVATION
 Jackson County
 A-3136

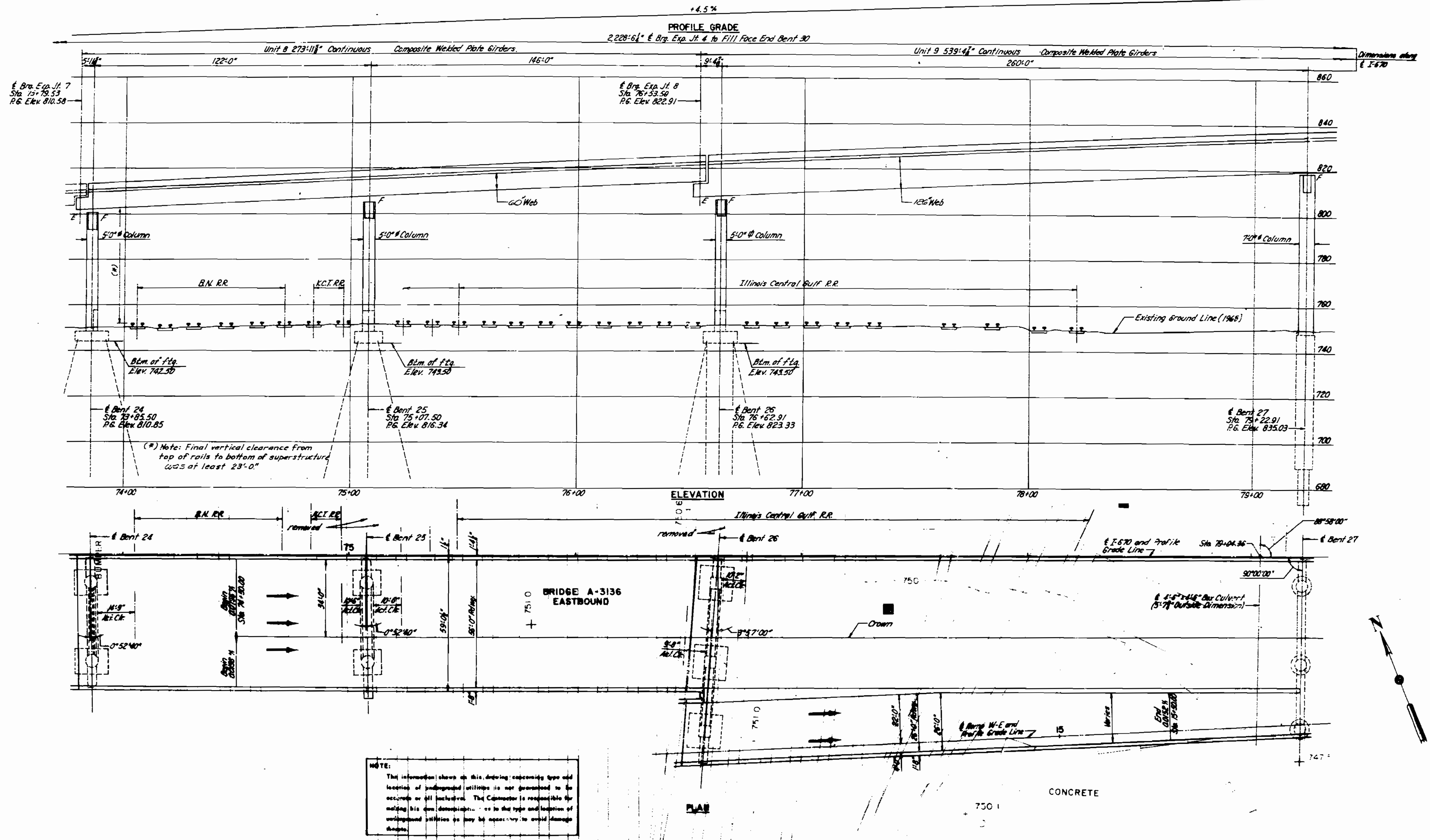
DETAILED 10/78
 CHECKED 10/78

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 6 of 59.

FINAL PLANS

1	2	3	4	5	6	7	8	9	10	11	12
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DESIGNED 1078
CHECKED 1078

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 5A of 59.

GENERAL PLAN AND ELEVATION
JACKSON COUNTY
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