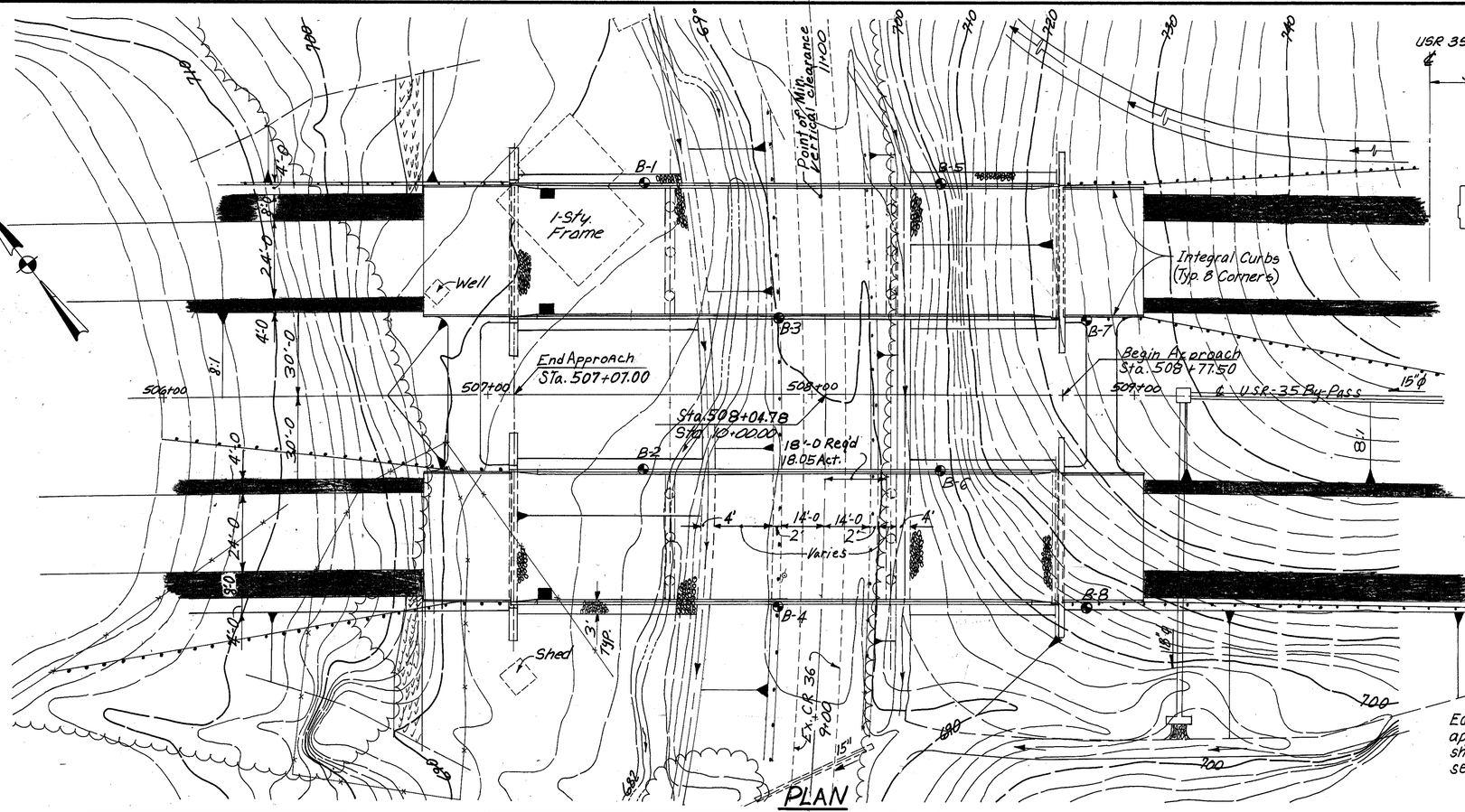
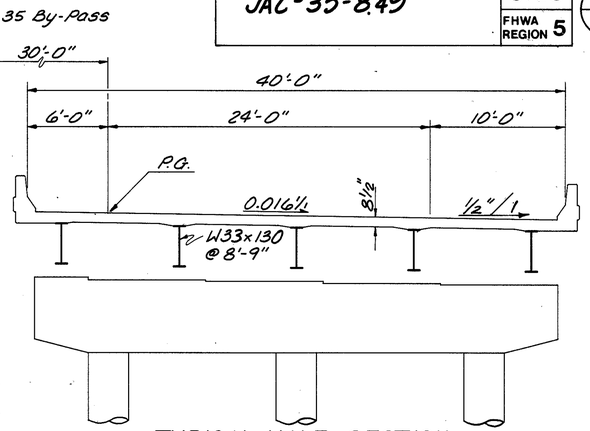
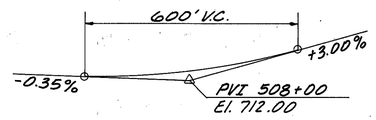
JAC-35-8.49 | OHIO | FHWA REGION 5 | 499/575



PLAN



TYPICAL HALF SECTION
(Right Bridge)

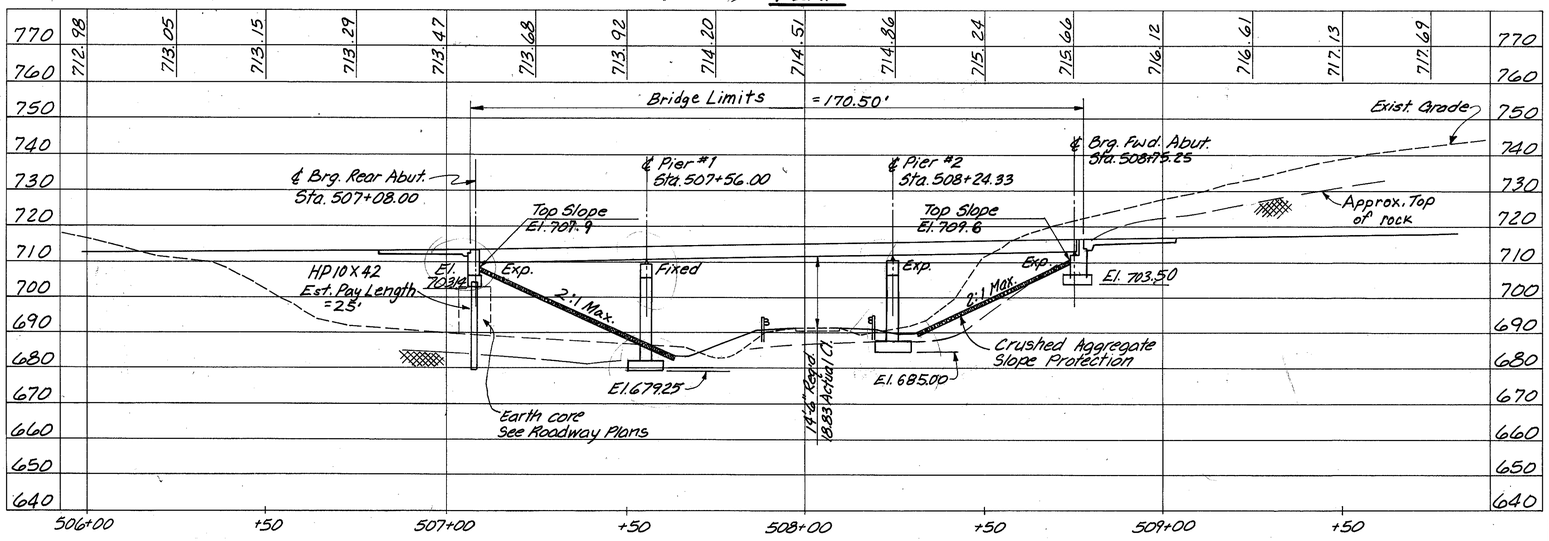


PROFILE GRADE

Earthwork limits shown are approximate. Actual slopes shall conform to plan cross-sections.

TRAFFIC DATA

Average Daily Traffic
Year 2006 = 6,230
28% Trucks = 1,760



SECTION ALONG PROFILE LINE OF LEFT BRIDGE

CURVE DATA

P.I. = 502+31.83
Δ = 16°-31'-50"
D = 0°-28'-00"
R = 12,277.67
L = 3,542.26
T = 1,783.52
E = 128.87
P.C. = 484+48.31
P.T. = 519+90.57
S.E. = 0.016½

DRAINAGE DATA

Drainage Area = 0.49 Sq. Mi.
Q50 = 452 CFS
Velocity (Avg.) = 9.0 FPS
Depth of Flow = 3.8' Ft.
Q25 = 347 CFS
Q100 = 575 CFS

PROPOSED STRUCTURE

TYPE: Continuous Steel Beam with Composite Concrete Deck.

SPANS: 48'-0", 68'-4" & 50'-11"

ROADWAY: 2@40' F/F Concrete Parapet.

LOADING: HS20-44 (Case II) and Alternate Military Loading.

SKEW: 0°-0'-0" to Chord between Abutments.

ALIGNMENT: 0°-28'-00" Curve Rt.

WEARING SURFACE: Monolithic Concrete.

APPROACH SLAB: AS-1-81 (25' Long)

1/17

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SITE PLAN

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
WBS	JEB	—	JET	WBS	4/9/86	

JAC-35-849 | OHIO | FHWA REGION 5 | 500 / 575

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	LEFT BRIDGE						RIGHT BRIDGE					
				ABUT'S	PIERS	SUPER	GENERAL			ABUT'S	PIERS	SUPER	GENERAL		
503	563	Cu.Yds.	Unclassified Excavation	69	115					248	131				
503	305	Cu.Yds.	Rock Excavation	106	70					59	70				
505	L.S.	Lump Sum	Pile Driving Equipment Mobilization	L.S.						L.S.					
507	425	Lin.Ft.	Steel Piles, HP 10x42, as per plan	225						200					
507	17	Each	Steel Points, as per plan	9						8					
509	70,611	Lbs.	Reinforcing Steel, Grade 60	6,191	26,539					11,341	26,540				
511	530	Cu.Yds.	Class S Concrete, Superstructure, See Proposal Note			265						265			
511	140	Cu.Yds.	Class C Concrete, Piers Above Footings		68						72				
511	172	Cu.Yds.	Class C Concrete, Abutments Above Footings	81						91					
511	253	Cu. Yds.	Class C Concrete, Footings	44	70					69	70				
513	253,104	Lbs.	Structurol Steel, A-588, (AISC Category I)			126,552						126,552			
513	3990	Each	Welded Stud Shear Connectors			1,995						1,995			
514	L.S.	Lump Sum	Partial Painting of A588 Steel			L.S.						L.S.			
516	133	Lin.Ft.	PVC Waterstop, as per plan	65						68					
516	114	Sq. Ft.	1" Preformed Expansion Joint Filler	57						57					
516	88	Sq. Ft.	1/2" Preformed Expansion Joint Filler	44						44					
518	127	Cu. Yds.	Porous Backfill	57						70					
518	228	Lin.Ft.	6" Peforated, Helical Corrugated Steel Pipe 707.01	108						120					
518	103	Lin.Ft.	6" Non-Perforated, Helical Corrugated Steel Pipe, including Specials, 707.01	43						60					
518	3	Each	Scuppers, including Supports			2						1			
601	1049	Sq. Yds.	Crushed Aggregate Slope Protection				523						526		
824	116,545	Lbs.	Epoxy Coated Reinforcing Steel, Grade 60	2,542		55,794				2476		55,733			
Special	1,380	Sq. Yds.	Sealing of Concrete Surfaces (Epoxy), See Proposal Note	89	207	398				65	223	398			

FOUNDATION BEARING PRESSURE: FOOTINGS, AS DESIGNED, PRODUCE THE FOLLOWING MAXIMUM BEARING PRESSURE

LEFT FORWARD ABUTMENT 2.2 TONS PER S.F.
RIGHT FORWARD ABUTMENT 3.0 TONS PER S.F.
PIER NO. 1 3.1 TONS PER S.F.
PIER NO. 2 3.5 TONS PER S.F.

FOOTINGS: SHALL EXTEND A MINIMUJM OF 3 INCHES INTO BEDROCK OR TO THE ELEVATION SHOWN, WHICHEVER IS LOWER.

MAINTENANCE OF TRAFFIC: MAINTAIN A MINIMUM VERTICAL CLEARANCE OF 14'-0 ON CR 36 AND A MINIMUM HORIZONTAL CLEARANCE OF 10'-0 FROM CENTER LINE OF EXISTING CR 36 TO PIER NO. 2. SEE ROADWAY PLANS FOR ADDITIONAL TRAFFIC NOTES.

PILE DRIVING CONSTRAINTS: PRIOR TO DRIVING PILES AT EACH ABUTMENT THE SPILL- THRU SLOPE EMBANKMENT SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENT. AFTER THE EMBANKMENT IS COMPLETED WITHIN THE ABOVE REQUIRED LIMITS, THE EXCAVATION FOR THE ABUTMENT FOOTINGS MAY BE MADE AND THE PILES CAN BE DRIVEN.

PILE DESIGN LOADS: THE DESIGN LOAD FOR THE ABUTMENT PILES IS 31 TONS PER PILE.

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNER(S). THE CONTRACTOR AND OWNER(S) ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

GENERAL NOTES:

REFERENCE: SHALL BE MADE TO STANDARD DRAWINGS:
AS-1-81 DATED 11/27/81 SHEETS 1, 2, & 3
BR-1 DATED 5/29/79
SD-1-69 DATED 6/12/69 SHEETS 3 & 4
ICD-1-82 DATED 8/1/84 SHEETS 1, 2, 3, 4, & 5
GR-1 DATED 1/11/85
GR-3 DATED 1/21/85
MC-7 DATED 10/15/76
AND TO SUPPLEMENTAL SPECIFICATION:
836 DATED 1/12/85
824 DATED 10/8/82
* ALSO STD. DWG. BB-1-55 DATED 2/2/59 & FB-1-82 DATED 5/10/82

DESIGN SPECIFICATIONS: THIS STRUCTURE COMFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983, INCLUDING THE 1984, INTERIM SPECIFICATIONS AND THE OHIO SUPPLEMENT TO THESE SPECIFICATIONS.

DESIGN LOADING: HS20-44 CASE II AND THE ALTERNATE MILITARY LOADING.

CONCRETE: CLASS S - COMPRESSIVE STRENGTH 4500 PSI
CLASS C - COMPRESSIVE STRENGTH 4000 PSI

REINFORCING STEEL: ASTM A615, A61C or A617--GRADE 60 MINIMUM YIELD STRENGTH 60,000 P.S.I.
SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615.

STRUCTURAL STEEL: ASTM A588 - YIELD STRENGTH 50,000 P.S.I.

DECK PROTECTION METHOD: EPOXY COATED REINFORCING STEEL, TOP AND BOTTOM MAT.

MONOLITHIC WEARING SURFACE: IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1" THICK.

ABUTMENT PILING: ABUTMENT PILING BENDING STRESS MAY APPROACH , REACH OR EXCEED YIELD STRESS.

PILES: SHALL BE DRIVEN TO REFUSAL ON SANDSTONE BEDROCK. REFUSAL SHALL BE CONSIDERED AS ATTAINED BY PENETRATING SOFT BEDROCK WITH A MINIMUM RESISTANCE OF 20 BLOWS PER INCH, OR REFUSAL SHALL BE CONSIDERED AS ATTAINED AFTER THE PILE HAS CONTACTED HARD BEDROCK AND PILE HAS THEN RECEIVED AT LEAST 20 BLOWS.

PILE POINTS: STEEL PILE POINTS SHALL BE USED TO PROTECT THE TIPS OF THE PROPOSED H PILING. THE STEEL POINTS SHALL BE FURNISHED BY ASSOCIATED PILE AND FITTING CORPORATION, 262 RUTHERFORD BOULEVARD, CLIFTON, NEW JERSEY 07014; INTERNATIONAL CONSTRUCTION EQUIPMENT, INC., 301 WAREHOUSE DRIVE, MATTHEWS, NORTH CAROLINA 28015; DOUGHERTY FOUNDATOIN PRODUCTS, INC., P.O. BOX 688, FRANKLIN LAKES, NEW JERSEY 07417; VERSA STEEL INC., 3601 N.W. YEON AVENUE, P.O. BOX 10559, PORTLAND , OREGON 97210 OR BY A MANUFACTURER THAT CAN FURNISH A STEEL POINT THAT IS ACCEPTABLE TO THE DIRECTOR.

2/17

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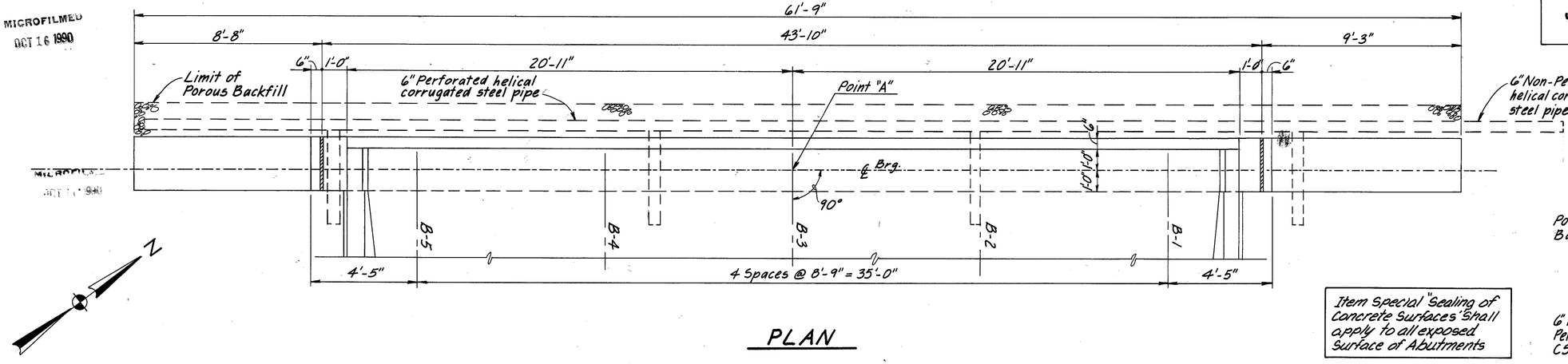
ESTIMATED QUANTITIES & GENERAL NOTES

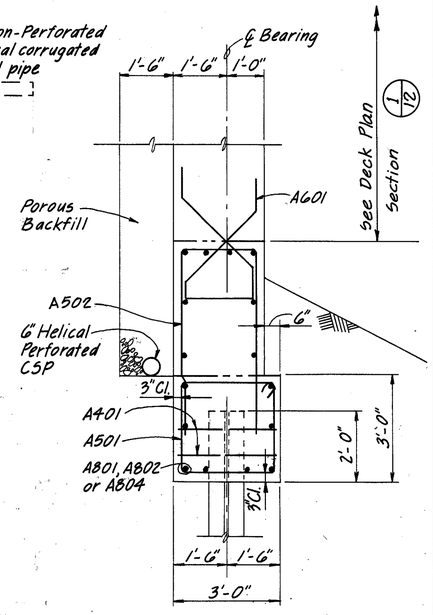
BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JET	KJO	—	WBS	MP	4/3/86	

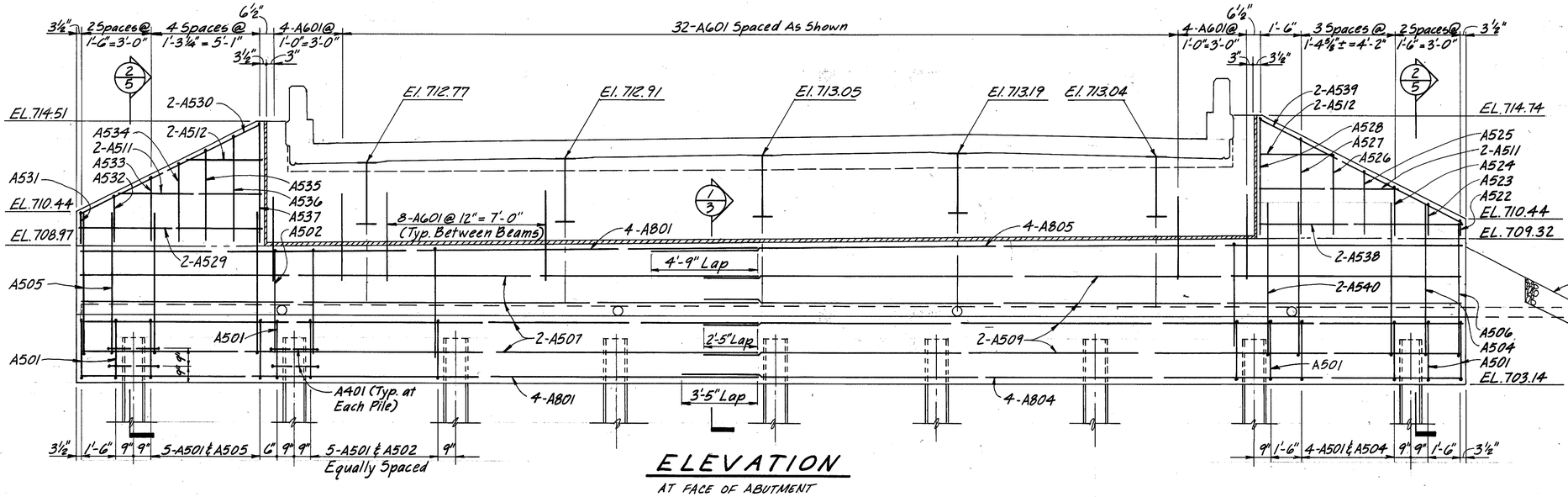


PLAN

Item Special "Sealing of Concrete Surfaces" shall apply to all exposed surface of Abutments



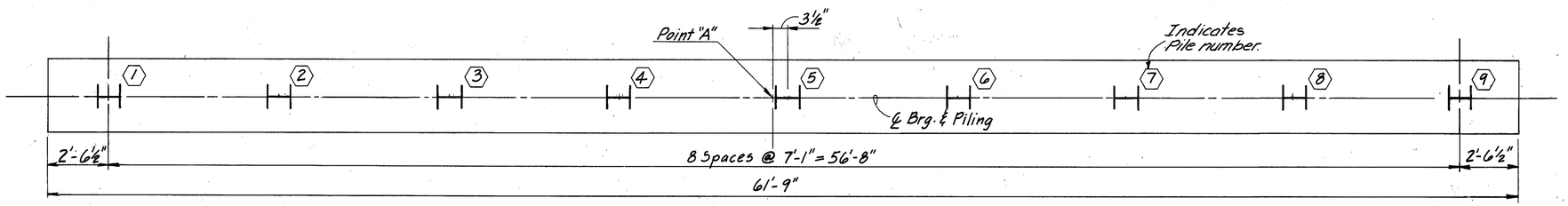
SECTION 1/3 - 1/5



ELEVATION

AT FACE OF ABUTMENT

Crushed aggregate slope protection at end of 6" CSP. Include in Item 601 for payment.



PILE PLAN

NOTES:

1. See Sheet 2/17 for General Notes & Quantities.
2. See Sheets 14/17 & 16/17 for Reinforcings Steel Details.
3. See Sheet 11/17 for Layout Diagram.
4. See Std. Drwg. ICD-1-82 for additional details.
5. Porous Backfill shall extend upward to the plane of the subgrade & laterally to the surface of the embankment slopes.

3/17

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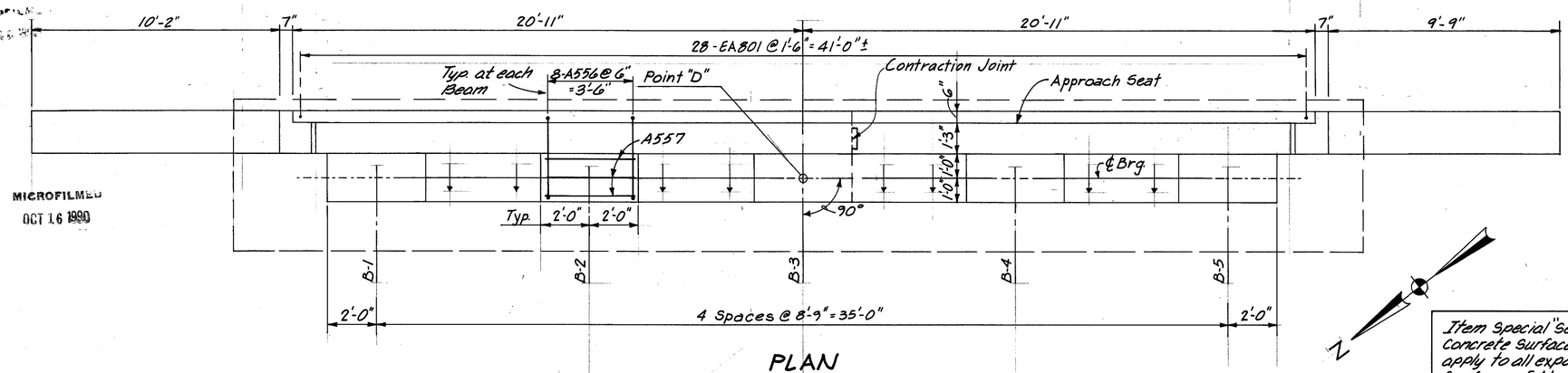
REAR ABUTMENT
LEFT BRIDGE

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
WBS	MHW	—	JET	WBS	4/3/86	

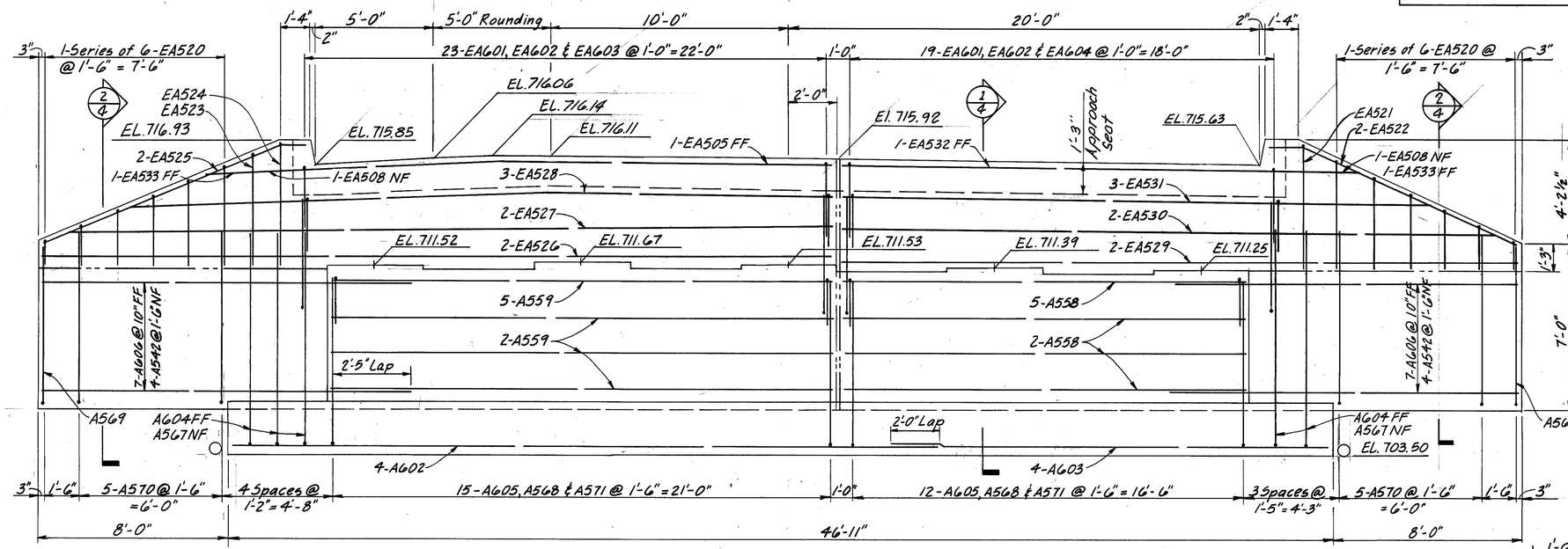
JAC-35-8.49 | OHIO | FHWA REGION 5 | 502 / 575

MICROFILMED
OCT 16 1990



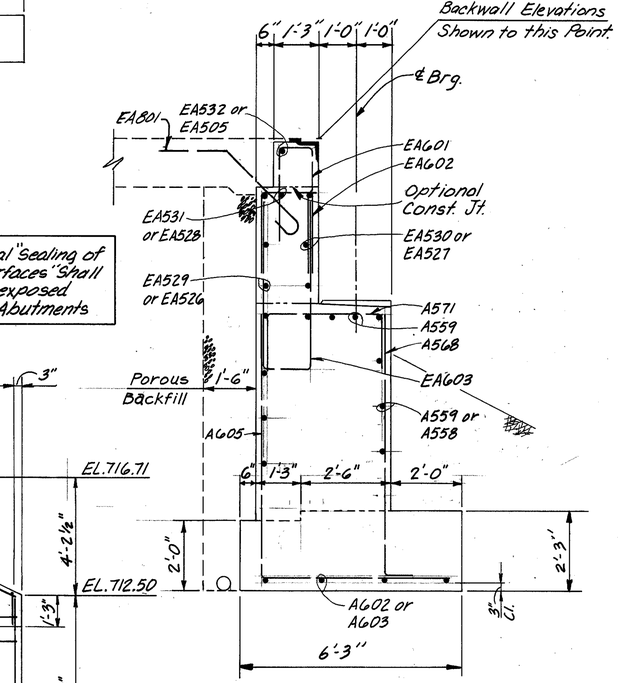
PLAN

Item Special "Sealing of Concrete Surfaces" shall apply to all exposed surfaces of Abutments



ELEVATION

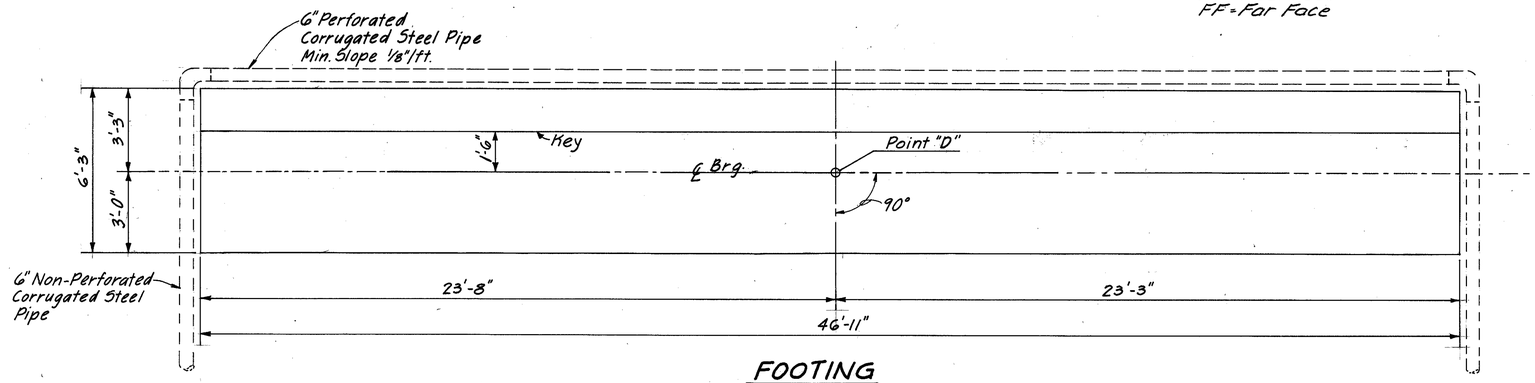
NF = Near Face
FF = Far Face



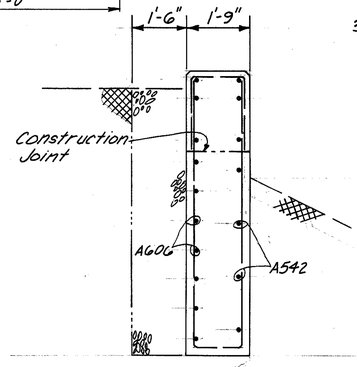
SECTION 1/4

NOTES:

1. See Sheet 3/17 for Abutment Notes.
2. In addition to the provisions of 511.08, backwall concrete above the optional construction joint at the approach slab seat shall not be placed until after the deck concrete in the span adjacent to the abutment has been placed.
3. During installation of the support for the superstructure side of the expansion joint, the seating of beams on bearings shall be carefully observed to assure that positive bearing is maintained. Proper vertical fit of the support on the beams shall be achieved by positioning of the bevel fill plates rather than by clamping force.



FOOTING



SECTION 2/4

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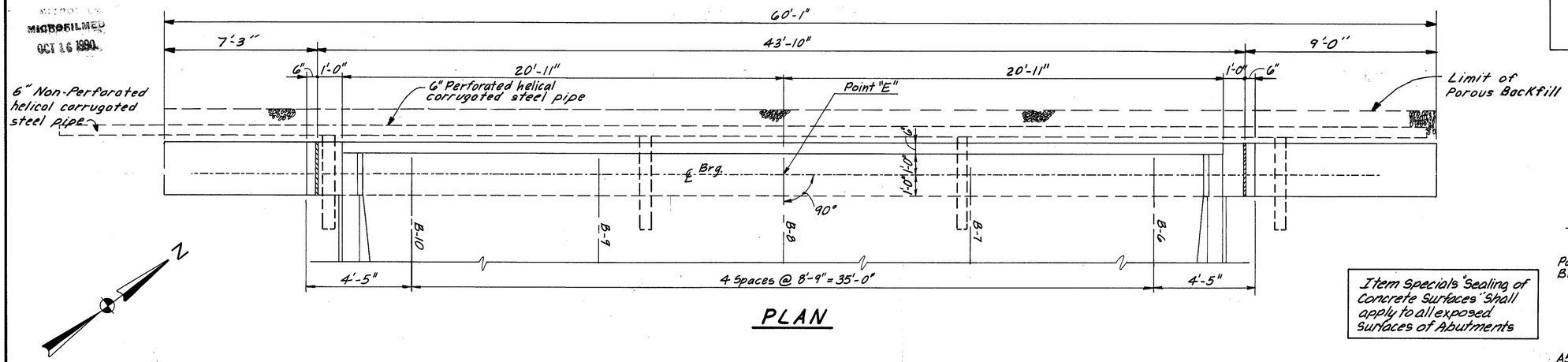
4/17

FORWARD ABUTMENT
LEFT BRIDGE

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

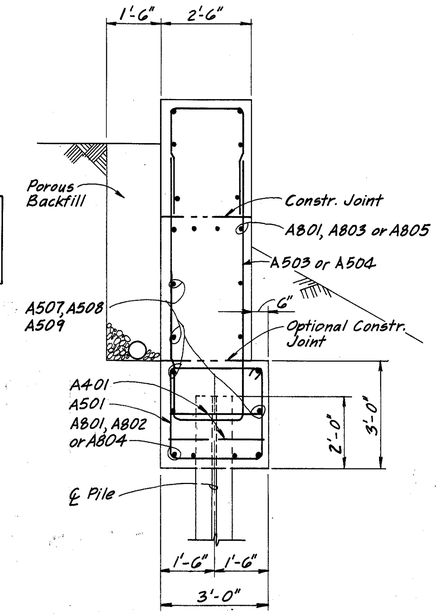
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
WBS	MHW	—	JET	WBS	4/3/86	

JAC-35-849 | OHIO | FHWA REGION 5 | 503 575

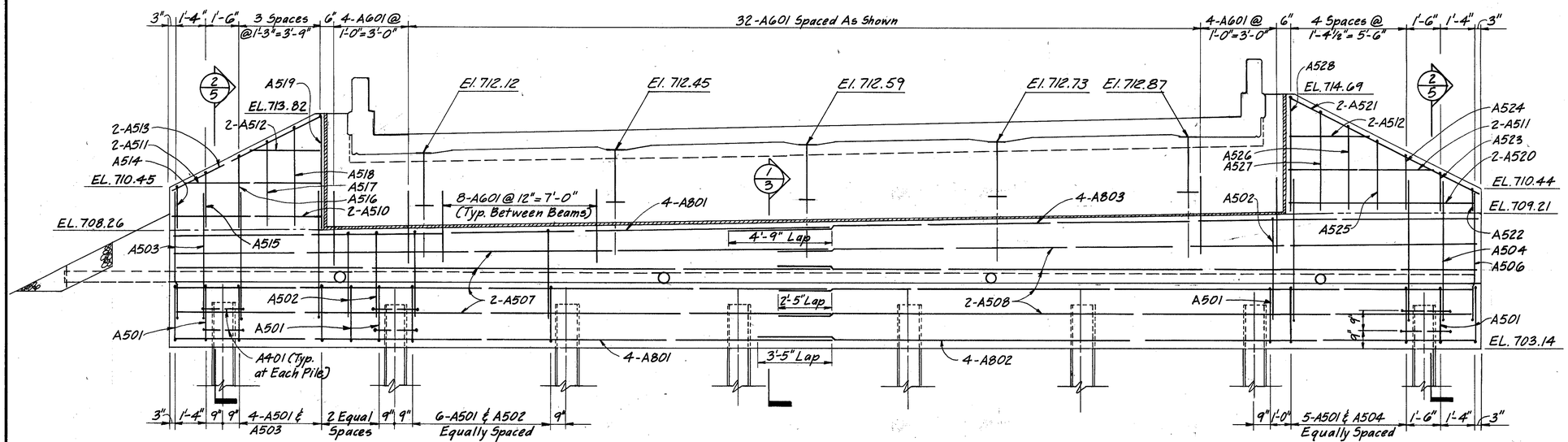


PLAN

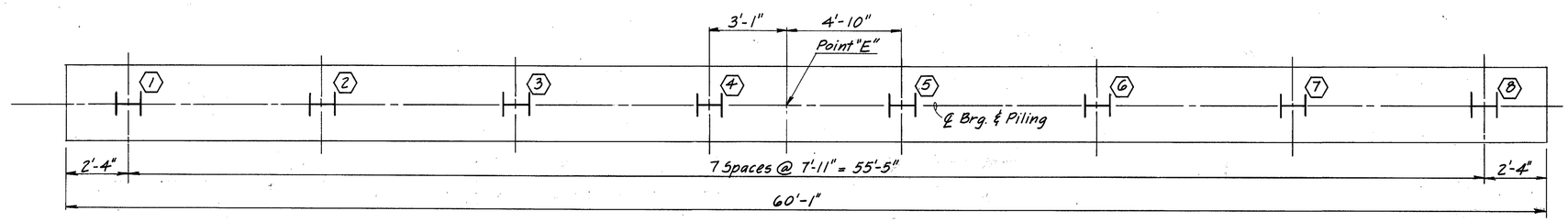
Item Special "Sealing of Concrete Surfaces" Shall apply to all exposed surfaces of Abutments



SECTION 2/3 2/5



ELEVATION
AT FACE OF ABUTMENT



PILE PLAN

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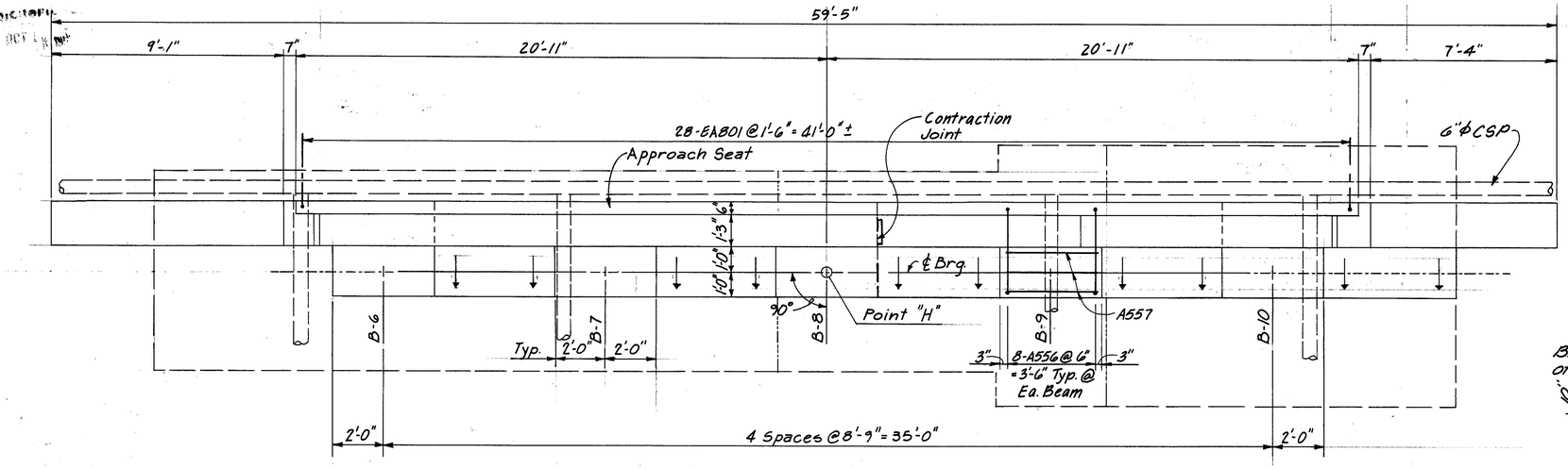
111 Merchant Street, Cincinnati, Ohio 45246 513/772-1117

5/17

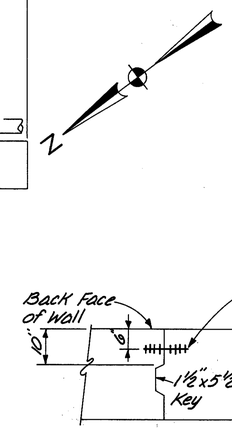
REAR ABUTMENT
RIGHT BRIDGE

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
WBS	MHW	—	JET	WBS	4/3/86	

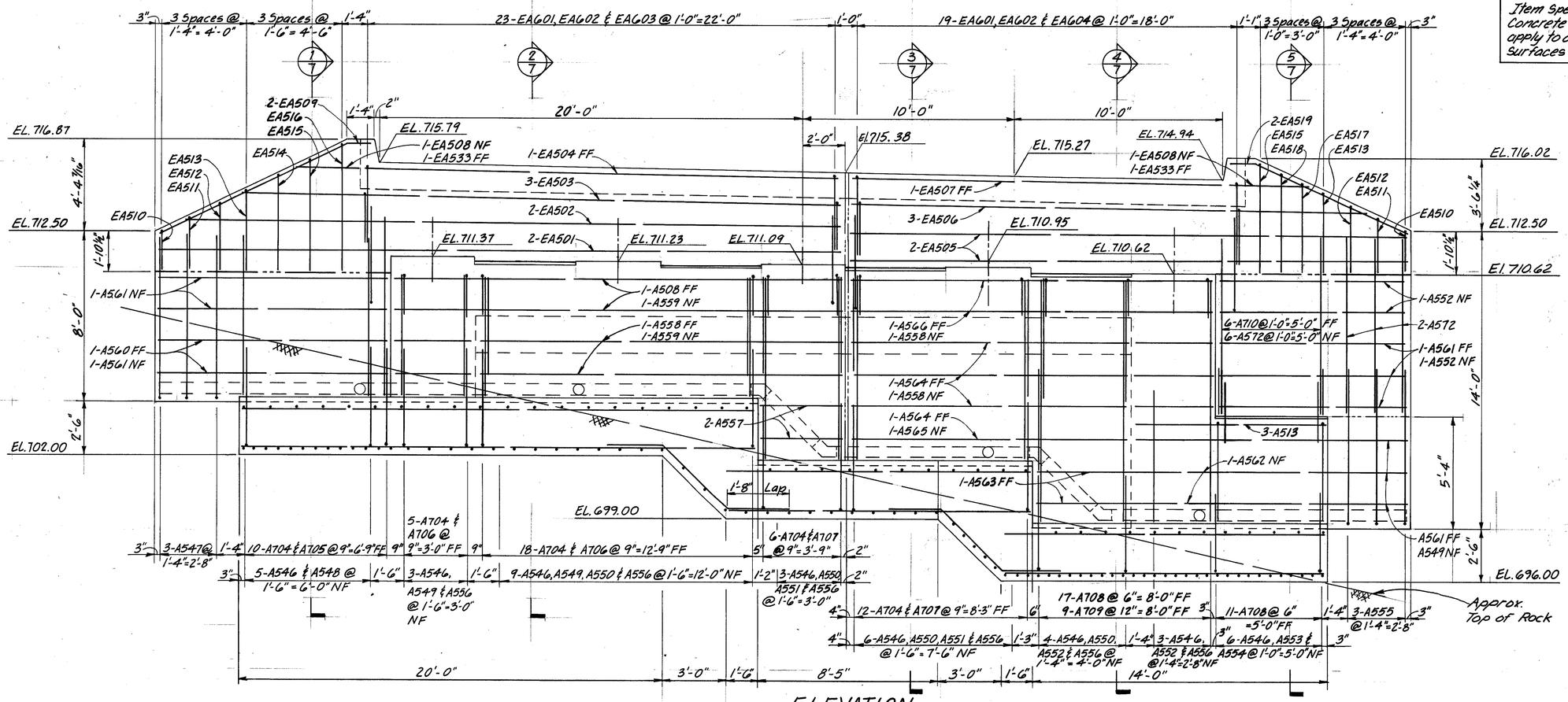


PLAN



CONTRACTION J.T. DETAIL

Item Special "Sealing of Concrete Surfaces" Shall apply to all exposed surfaces of Abutments



ELEVATION

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6/17

FORWARD ABUTMENT
RIGHT BRIDGE

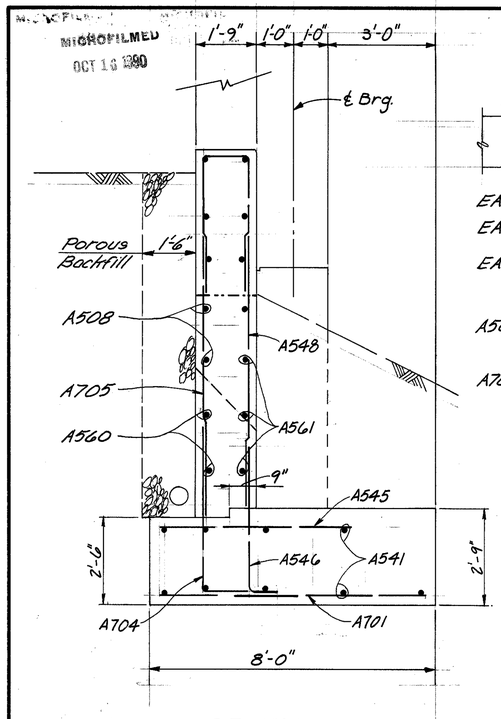
BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
WBS	MHW	—	JET	WBS	4/3/86	

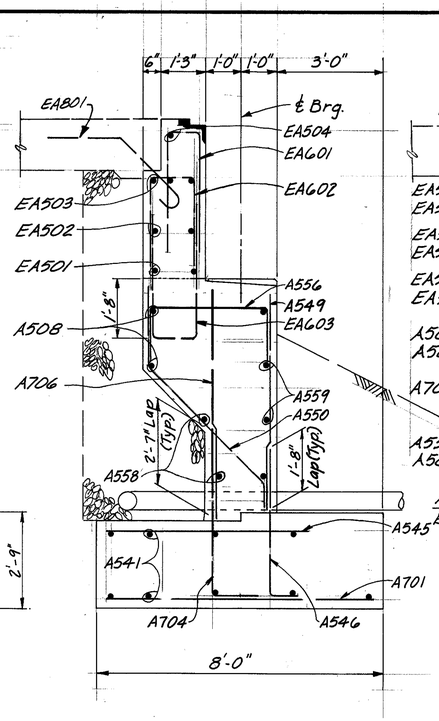
JAC-35-8.49

OHIO
FHWA REGION 5

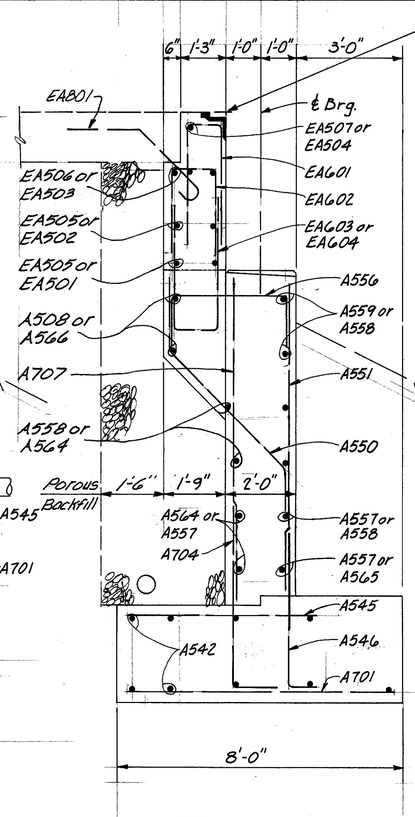
505
575



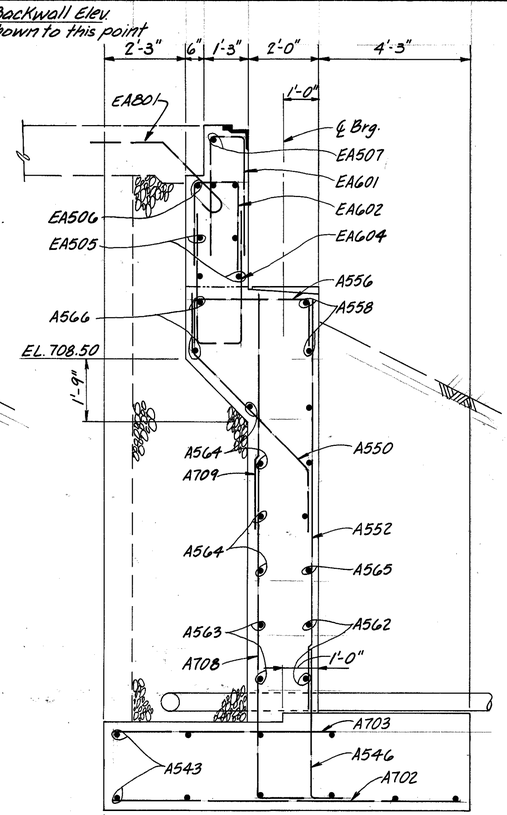
SECTION 1/6



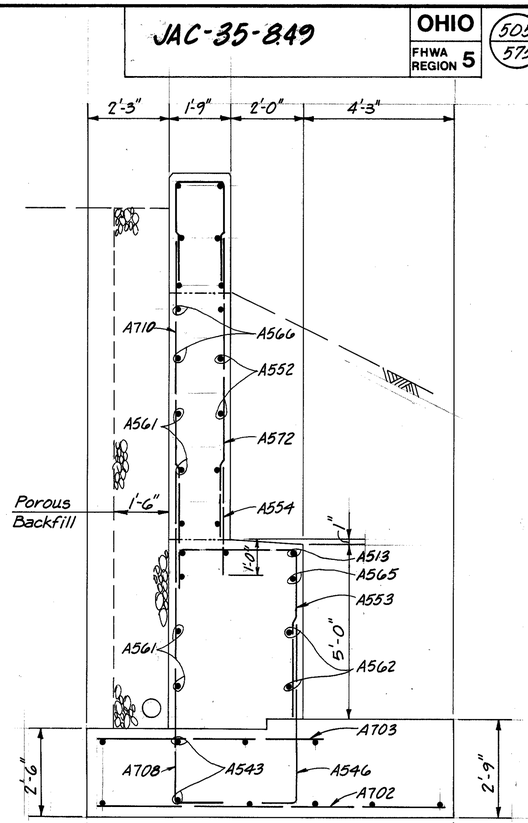
SECTION 2/6



SECTION 3/6

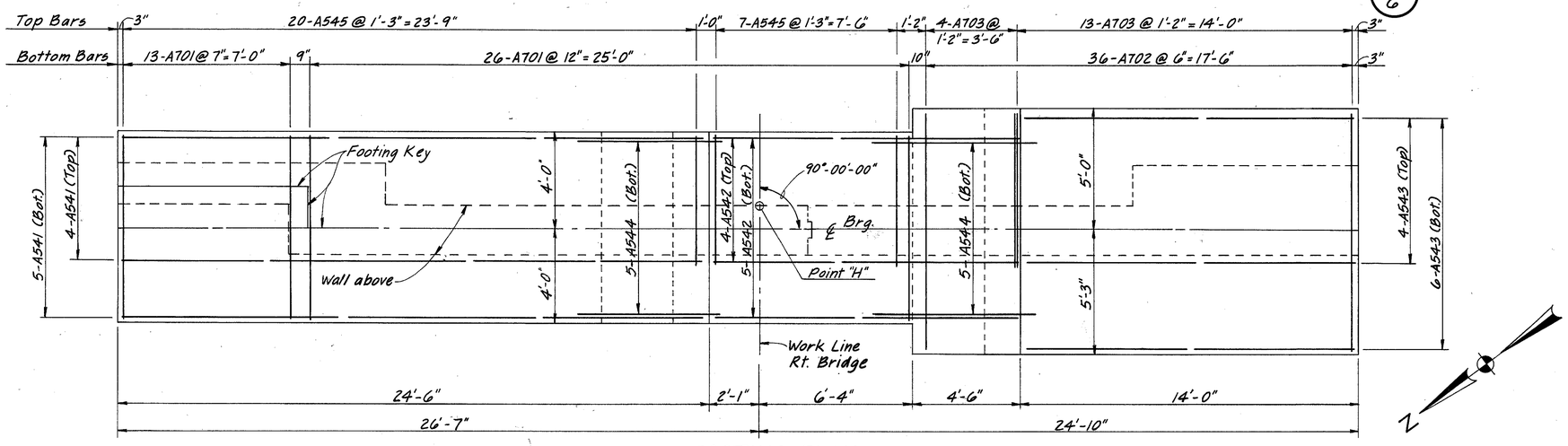


SECTION 4/6



SECTION 5/6

SECTION 6/6



FOOTING PLAN

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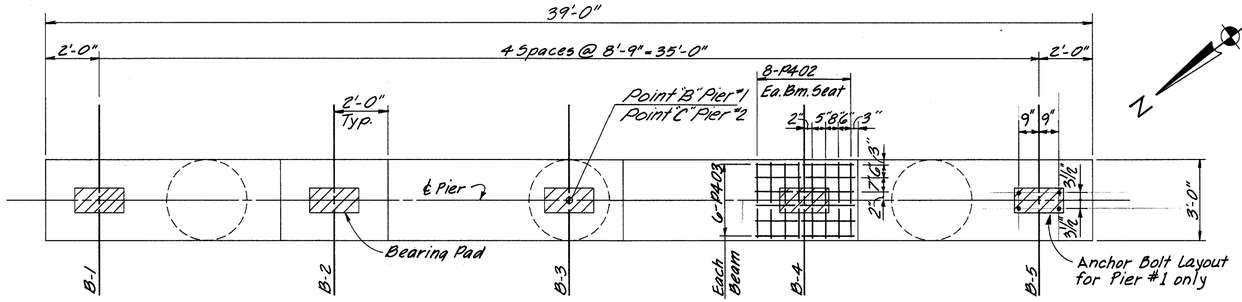
7/17

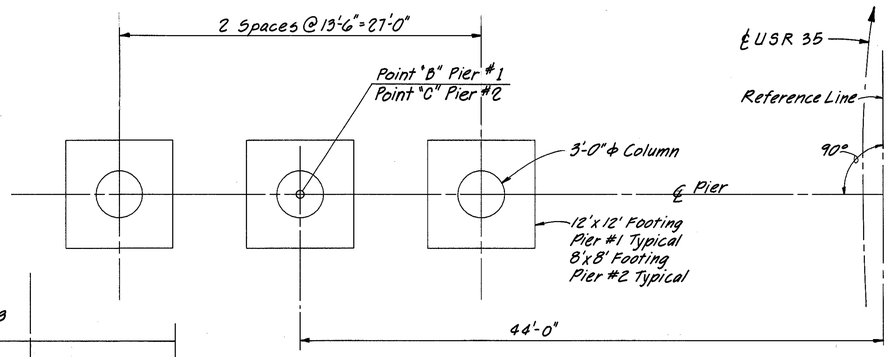
SECTIONS & FOOTING PLAN
FORWARD ABUTMENT RIGHT BRIDGE

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

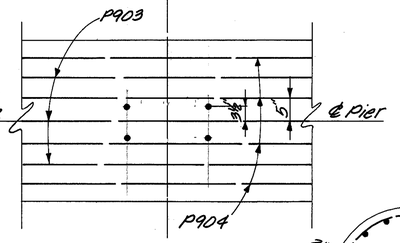
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
WBS	MHW	—	JET	WBS	4/8/86	



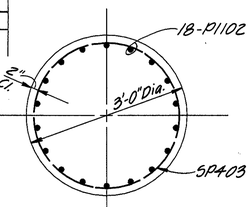
CAP PLAN



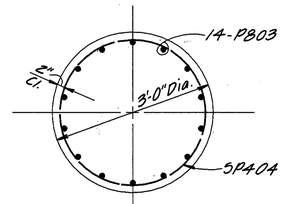
FOOTING LAYOUT PLAN



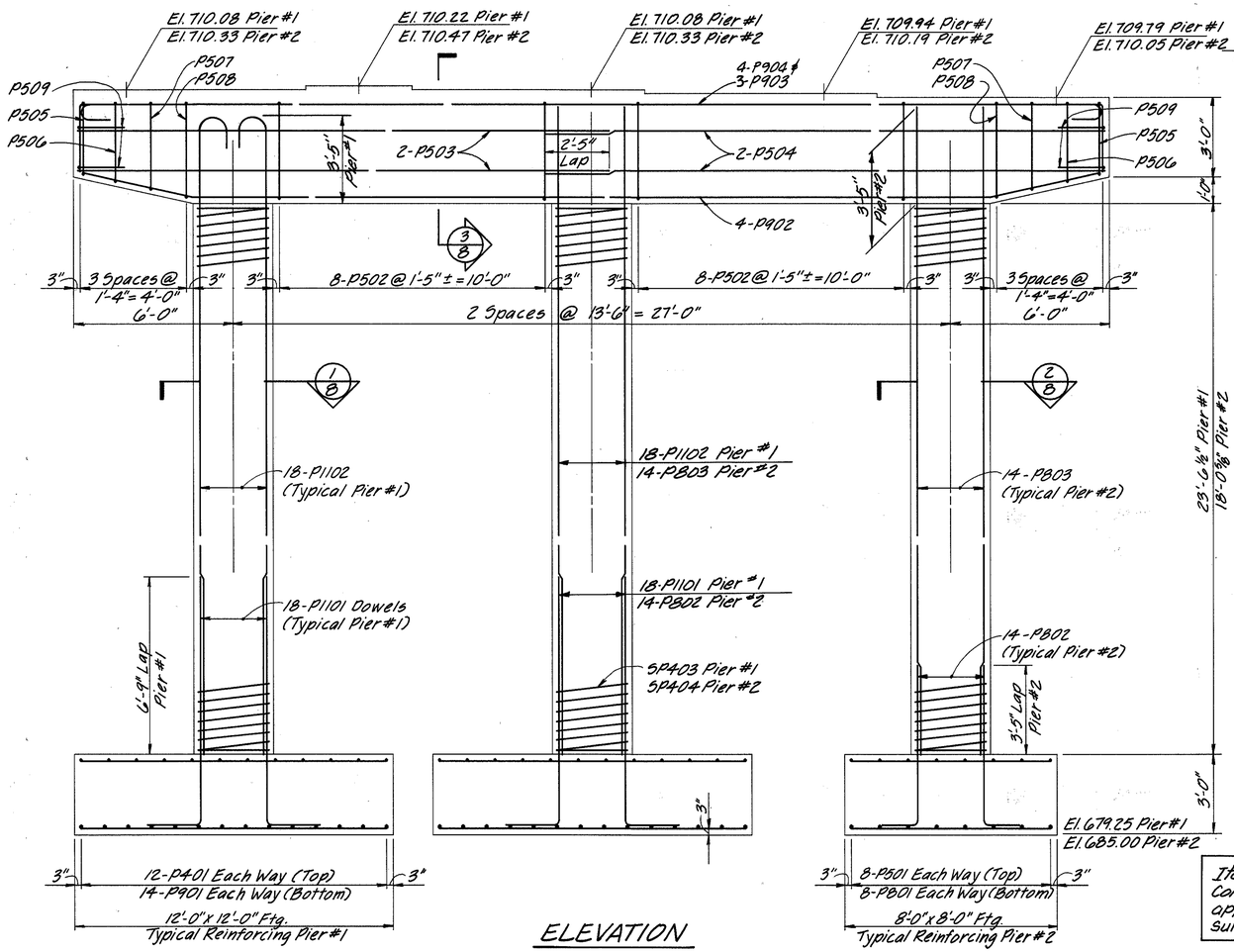
BEARING ANCHOR PLAN



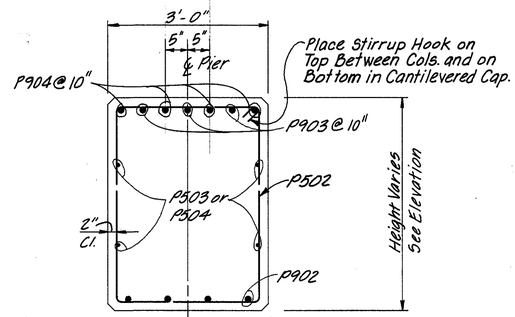
SECTION (Typ. Pier #1) 1/8



SECTION (Typ. Pier #2) 2/8



ELEVATION



SECTION 3/8

Item Special "Sealing of Concrete Surfaces" Shall apply to all exposed Surfaces of Piers

NOTES:

1. See Sheet 2/17 for General Notes & Quantities.
2. See Sheets 15/17 & 17/17 for Reinforcing Steel Details.
3. See Sheet 11/17 for Layout Diagram
4. Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of bearing anchor holes or the pre-setting of bearing anchors.
5. At the option of the Contractor, bearing anchors (or formed holes), located & supported by templates, may be cast in place.

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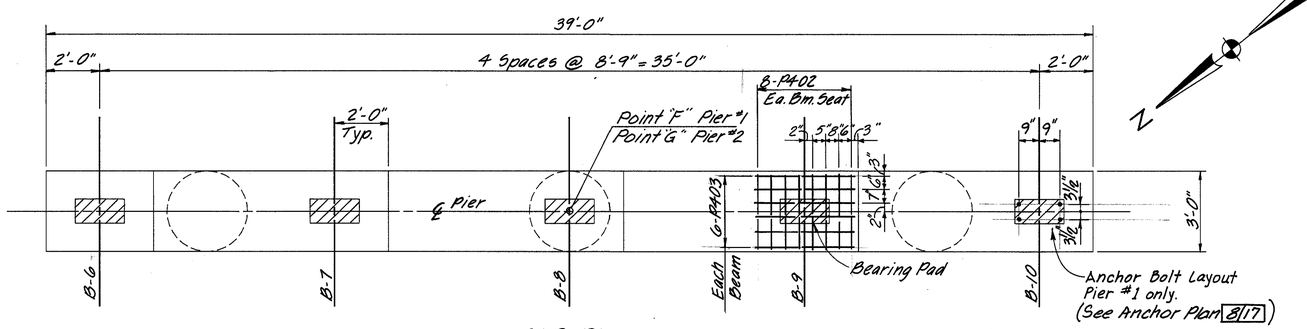
8/17

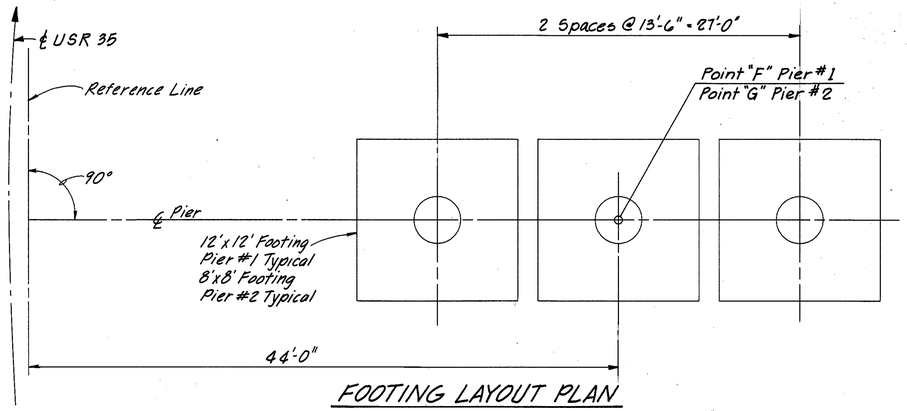
PIERS LEFT BRIDGE

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

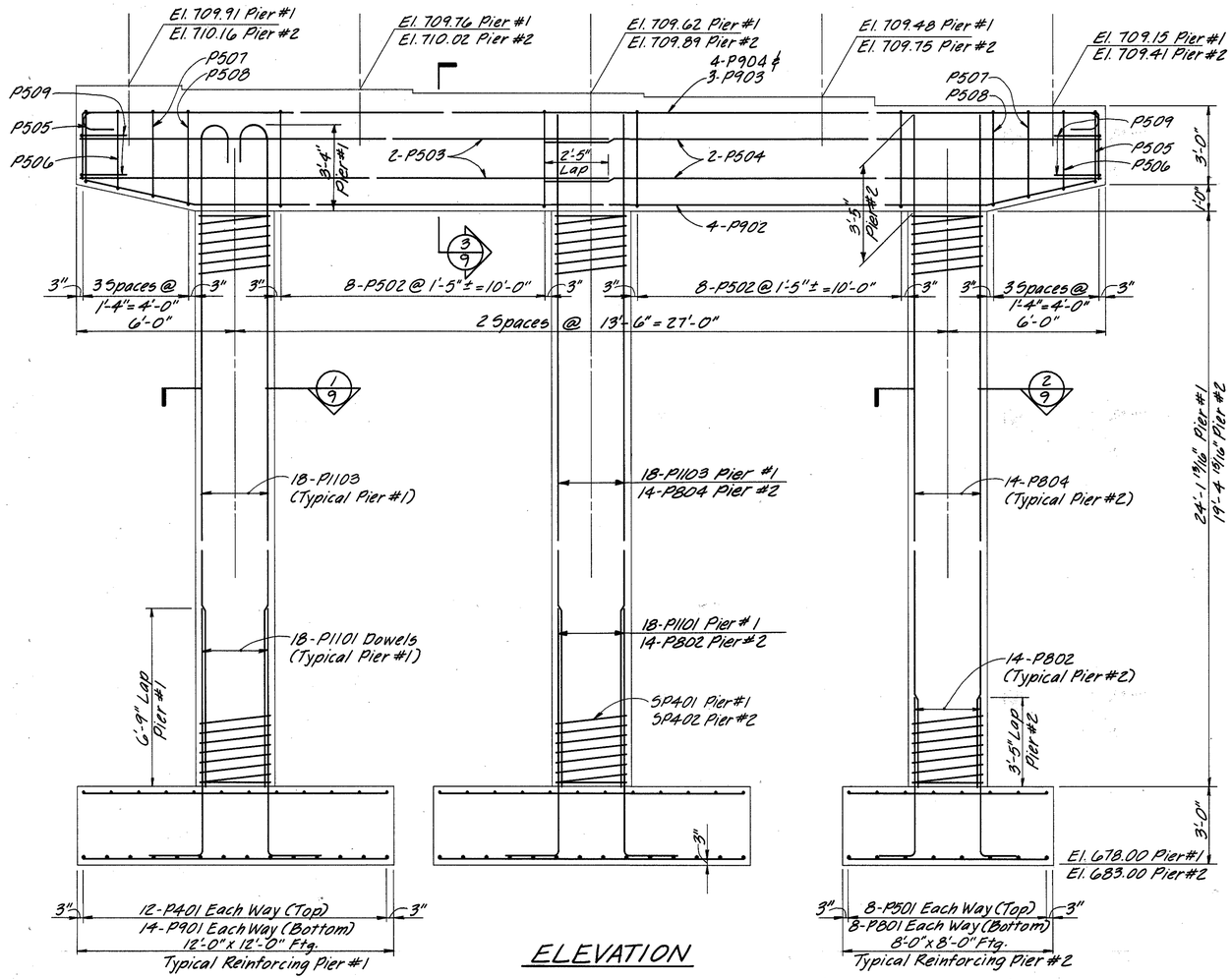
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
MP	LEP	—	WBS	GTW	4/9/86	



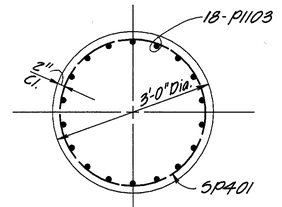
CAP PLAN



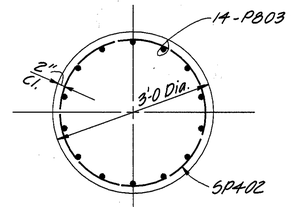
FOOTING LAYOUT PLAN



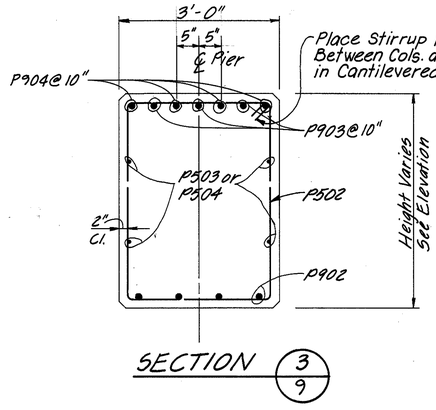
ELEVATION



SECTION (1/9) (Typ. Pier #1)



SECTION (2/9) (Typ. Pier #2)



SECTION (3/9)

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9/17

PIERS
RIGHT BRIDGE

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
MP	LEP	–	WBS	GTM	4/3/86	

75581

JAC-35-8.49 | OHIO | FHWA REGION 5 | 508 / 575

48'-0" | 68'-3 15/16" | 50'-11 1/16"

3 Spaces @ 12'-6" = 37'-6" | 10'-6" | 10'-5" | 3 Spaces @ 15'-10" = 47'-6" | 10'-4 15/16" | 10'-5 1/16" | 3 Spaces @ 13'-6" = 40'-6"

Intermediate Crossframe Spacing

B-1
B-2
B-3
B-4
B-5
B-6
B-7
B-8
B-9
B-10

Point "A" | Point "B" | Point "C" | Point "D"
Point "E" | Point "F" | Point "G" | Point "H"

4 Spaces @ 8'-9" = 35'-0"

Point 5'-0" See Note 8

End Cross Frame

44'-0"

90°00'00"

Sta. 507+08.00 ℄ Brg. Rear Abut.
Sta. 507+56.00 ℄ Pier #1
℄ U.S.R. 35 By-Pass
Sta. 508+24.33 ℄ Pier #2
Sta. 508+75.25 ℄ Brg. Fwd. Abut.

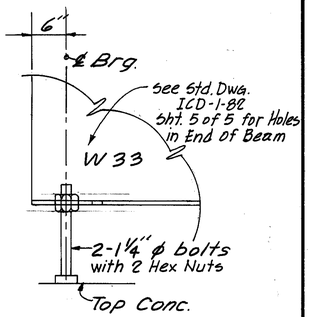
Work Line Between Abut. Bearings (Reference Line)

90°-00'-00" (Typ)

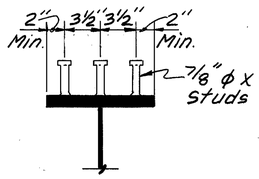
End Cross Frame

4 Spaces @ 8'-9" = 35'-0"

N



SECTION 1/10



SHEAR CONNECTOR DETAIL

PLAN

Top Flange Stress
T = Tension
C = Compression

31'-2" C | 16'-10" T | 13'-8" T | 43'-3 15/16" C | 13'-8" T | 15'-4" T | 35'-7 1/16" C

Shear Connector Spacing

36 Spaces @ 12" = 36'-0" | 5 Spaces @ 6" | No Shear Connectors | 4 Spaces @ 6" | 5 Spaces @ 5" | 36 Spaces @ 12" = 36'-0" | No Shear Connectors | 5 Spaces @ 6" | 38 Spaces @ 12" = 38'-0"

1'-4" | 6 15/16" | 1'-4"

W33 x 130 (CVN) | (CVN) | W33 x 130 (CVN) | (CVN) | W33 x 130 (CVN)

℄ Field Splice | ℄ Field Splice 2

48'-0" | 12'-6" | 12'-6" | 50'-11 1/16"
60'-6" | 43'-3 15/16" | 63'-5 1/16"

℄ Brg. Reor Abut. Integral | ℄ Pier F-200 | ℄ Pier #2 R-175 | ℄ Brg Fwd. Abut. R-100

BEAM ELEVATION

NOTES:

1. See Std. Dwg. RB-1-55 for rocker details.
2. See Std. Dwg. FB-1-82 for details of fixed bearings.
3. See Sheet 12/17 for Intermediate Crossframes.
4. See Std. Drwg. SD-1-69 for additional Splice, Scupper, Crossframe, & End Dam Details.
5. When a shape or plate is designated (CVN) the material shall meet specified minimun notch toughness requirement as specified in 711.01 of CMS.
6. In lieu of A588 steel, A36 steel galvanized, may be furnished for bearings, except for upper plate element of bearings. This A36 steel shall be included with the A588 steel quantity for payment.
7. High Strength Bolts shall be 1" diameter A325, type 3
8. A588 Steel is to be left unpainted, except as noted. See CMS 513.221 for cleaning Requirement. A 5 foot length of the ends of beams at the fwd. Abuts. & the end crossframes & other A588 steel within these limits shall be painted. Paint shall be 514, System A. The prime coat shall be 708.17. The top coat shall be 708.18, except that the color shall closely approach (Color of A588 steel) → Federal Std. No. 595a-20045 or 20059

10/17

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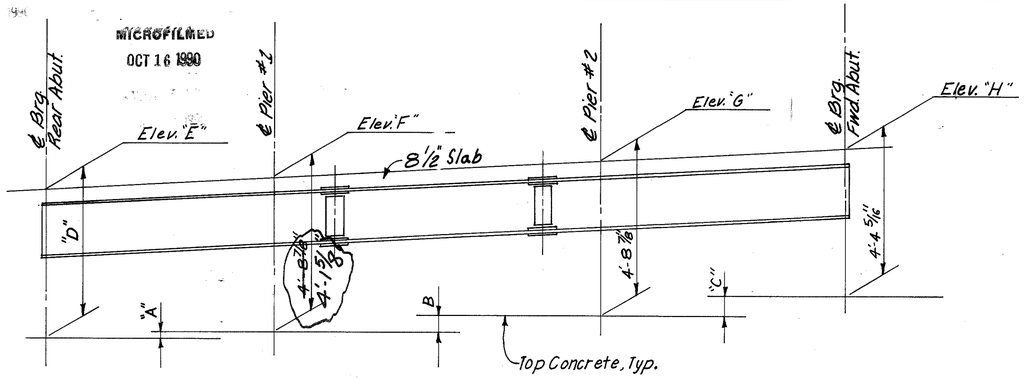
FRAMING PLAN

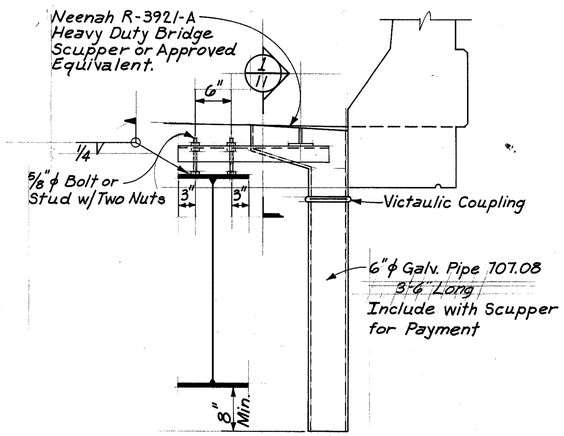
BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
WBS	KJO	—	JET	WBS	4/3/86	

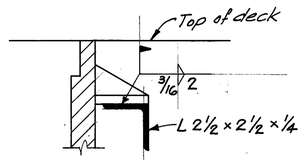


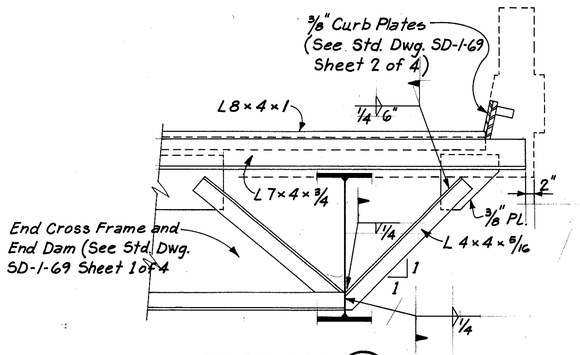
ELEVATION LAYOUT

	BEAM	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	EL. "E"	EL. "F"	EL. "G"	EL. "H"	X	Y
Left Bridge	B-1	0'-9 5/8"	0'-3"	1'-2 1/4"	4'-5 5/8"	713.75	714.21	715.07	715.88	1 3/16"	1 5/16"
	B-2	1'-0 1/8"	0'-3"	1'-2 3/8"	4'-8 1/4"	713.90	714.35	715.21	716.03	1 5/16"	2 1/16"
	B-3	0'-11 3/16"	0'-3"	1'-2 3/8"	4'-7 5/16"	713.76	714.21	715.07	715.89	1 5/16"	2 1/16"
	B-4	0'-10 5/16"	0'-3"	1'-2 3/8"	4'-6 1/2"	713.62	714.07	714.93	715.75	1 5/16"	2 1/16"
	B-5	0'-9 3/8"	0'-3 1/8"	1'-2 3/8"	4'-5 5/8"	713.48	713.92	714.79	715.61	2 1/16"	2 1/16"
Right Bridge	B-6	0'-9 3/16"	0'-3"	1'-2 1/2"	4'-5 5/8"	713.58	714.04	714.90	715.73	1 5/16"	2 3/16"
	B-7	0'-10 1/16"	0'-3 1/8"	1'-2 1/2"	4'-6 1/4"	713.44	713.89	714.76	715.59	2 1/16"	2 3/16"
	B-8	0'-10 9/16"	0'-3 1/4"	1'-2 3/8"	4'-6 3/4"	713.30	713.75	714.63	715.45	2 1/16"	2 1/16"
	B-9	0'-11 3/16"	0'-3 1/4"	1'-2 3/8"	4'-7 5/16"	713.16	713.61	714.49	715.31	2 1/16"	2 1/16"
	B-10	0'-9 1/2"	0'-3 1/8"	1'-2 1/2"	4'-5 5/8"	712.83	713.28	714.15	714.98	2 1/16"	2 3/16"

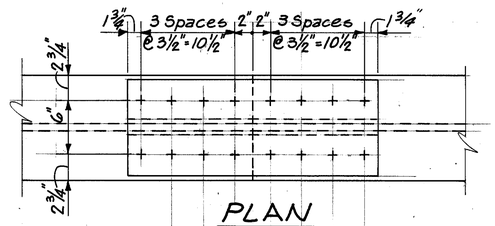


SCUPPER DETAIL

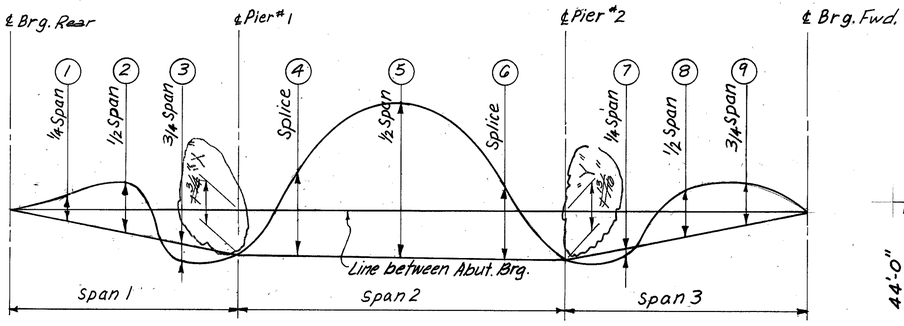




SECTION (2/10)



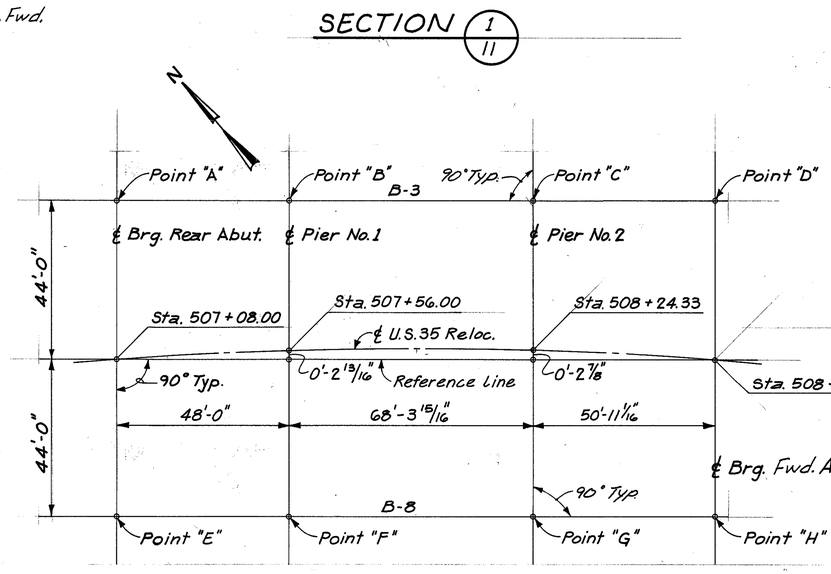
PLAN



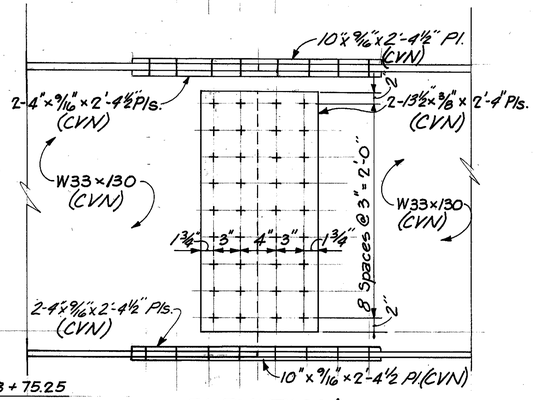
LAYOUT DIAGRAM

DEFLECTION & CAMBER TABLE										
Beams B-1 thru B-10	DESCRIPTION	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	D.L. Steel Beam	1/32	1/32	0	1/32	3/32	1/32	0	1/32	1/32
	Remaining D.L.	3/16	3/16	1/16	5/16	13/16	9/32	1/8	9/32	1/4
	Superelevation Correction	0	0	0	0	0	0	0	0	0
	Vertical Curve Correction	-5/32	-3/16	-3/32	-3/16	-13/32	-3/16	-3/32	-7/32	-5/32
	Total Camber	1/16	1/32	-3/32	5/32	1/2	1/8	-1/32	3/32	1/8

SECTION (1/11)



LAYOUT DIAGRAM



ELEVATION

See notes on sht. 10/17

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11/17

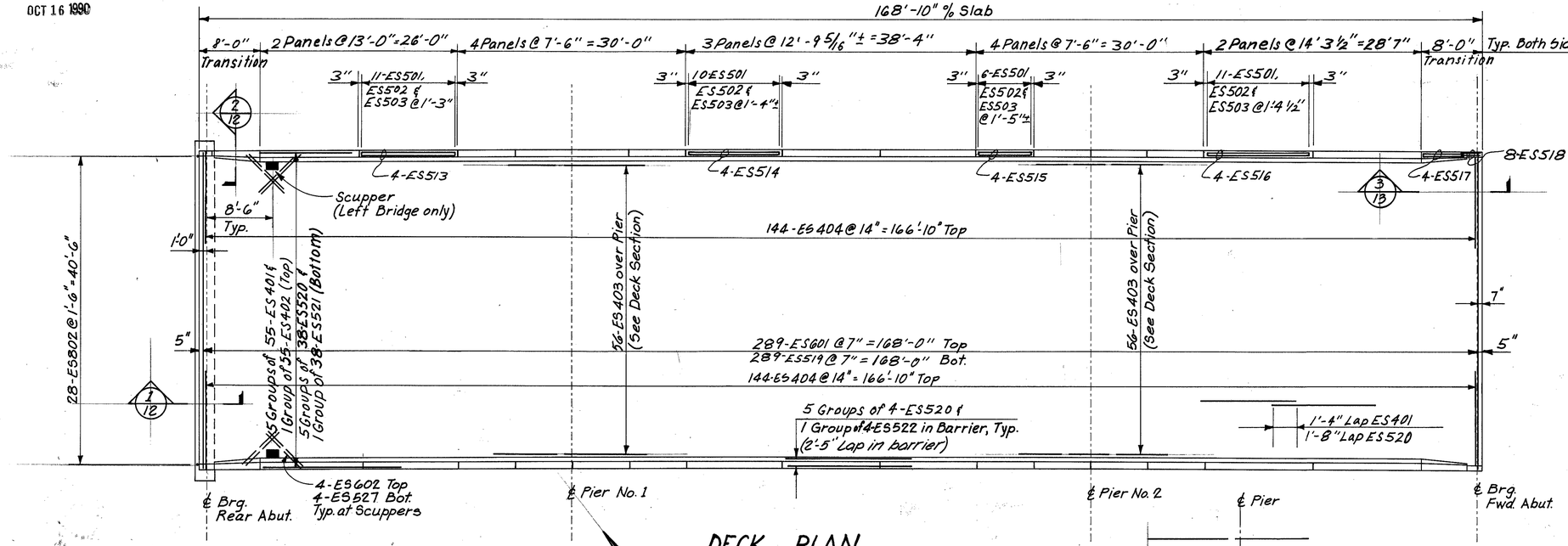
FRAMING DETAILS

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

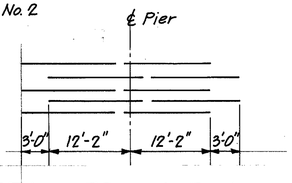
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
GTW	MHW	—	JET	WBS	4/3/86	

REVISED 12/10/86

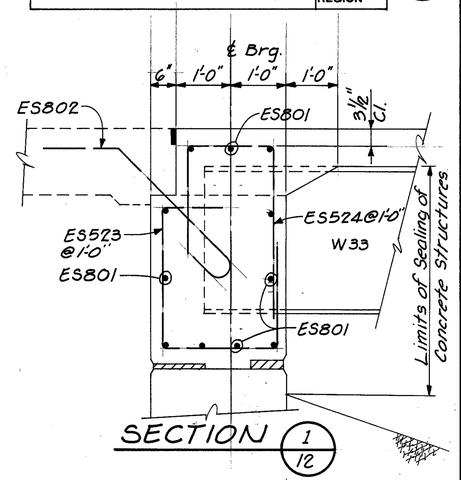
JAC-35-849 | OHIO | FHWA REGION 5 | 510 / 575



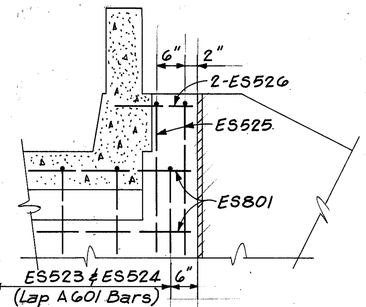
DECK PLAN



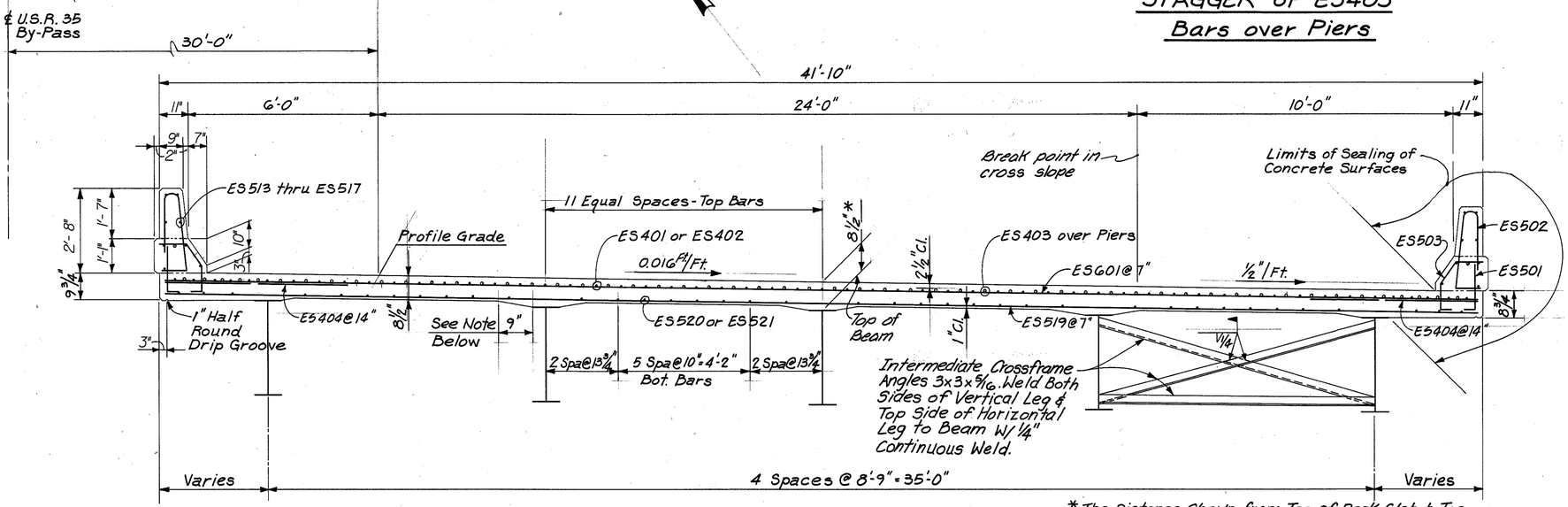
STAGGER of ES403 Bars over Piers



SECTION 1/12



SECTION 2/12



TRANSVERSE DECK SECTION

(Right Bridge Shown)
(See next Sheet for Left Bridge)

A Haunch Width of 9" Shall be used for Computing Quantity of Conc. However, the Haunch Width May Vary Between 6" & 12".

*The Distance Shown from Top of Deck Slab to Top of Steel Beam is the Design Dim. The Quantity of Deck Conc. to be Paid for Shall be Based on this Dim, Even Though Deviation from it May be Necessary Because the Top Flange of the Beam May Not Have the Exact Camber or Conformation Req'd. to Place it Parallel to the Finish Grade.

NOTES:

1. See Sheet 2/17 for General Notes & Quantities.
2. See Sheets 15/17 & 17/17 for Reinf. Steel Details.
3. See Std. Dwg. BR-1 for Additional Bridge Railing Details.
4. See Sheet 13/17 for Additional Deck Details.
5. See Std. Dwg. ICD-1-82 for Additional Rear Abutment Details.
6. Welded Attachment of Supports for Conc. Deck Finishing Machine May be Made to Areas of the Fascia Stringer Flanges Designated "Compression". Attachments Shall Not be Made to Areas Designated "Tension". Fillet Welds to Compression Flanges Shall be Not Closer than 1" From Edge of Flange, be Not More than 2" long, & be Not Smaller than the Min. Size Req'd. by AASHTO.

12/17

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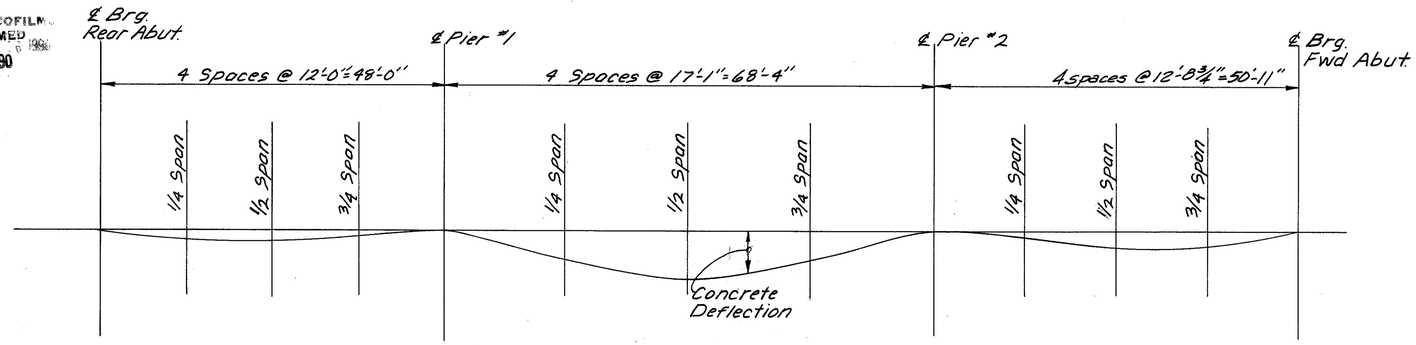
DECK PLAN

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

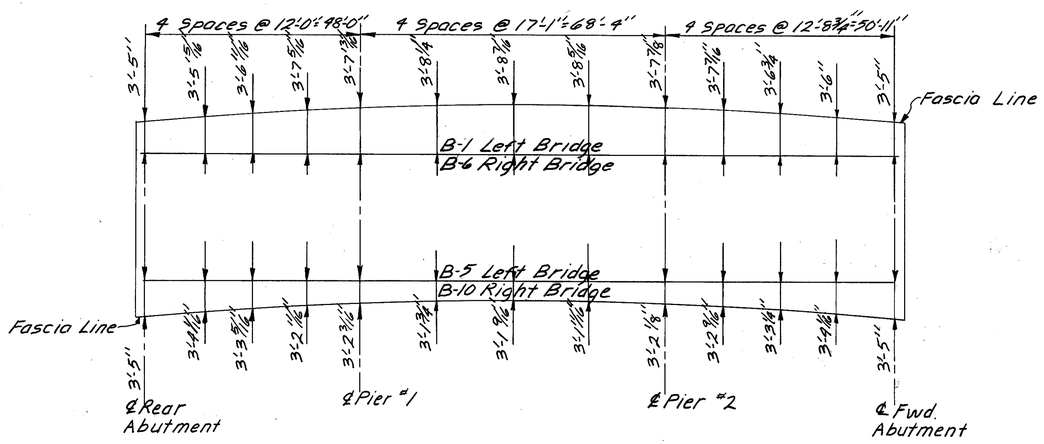
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
GTW	MHW	—	JET	WBS	4/8/80	

JAC-35-8.49 | OHIO | FHWA REGION 5 | 511/575

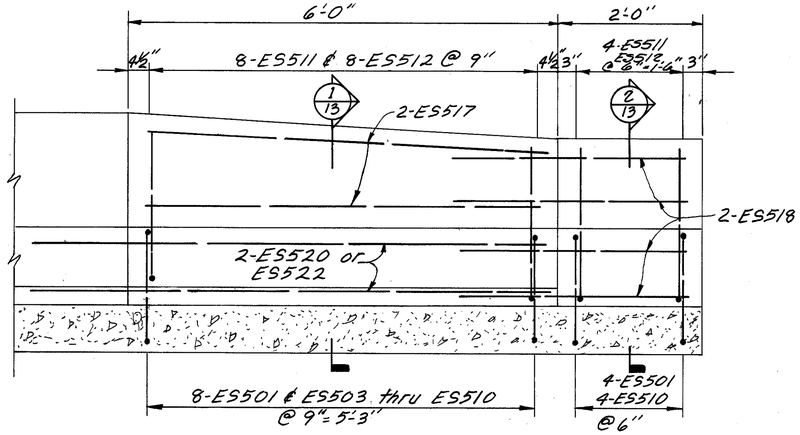


SCREED DIAGRAM AND TABLE

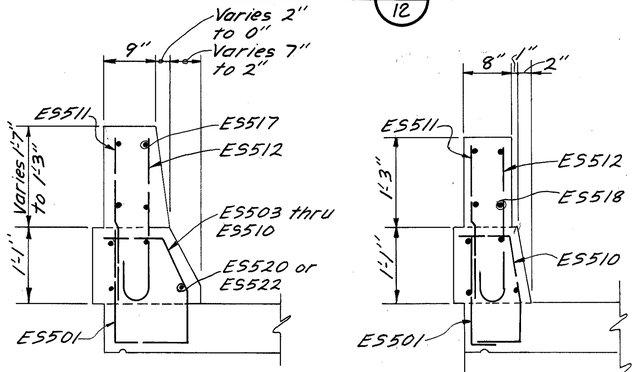
	Locotion	℄ Brg.	1/4	1/2	3/4	℄ Pier	1/4	1/2	3/4	℄ Pier	1/4	1/2	3/4	℄ Brg.
LEFT BRIDGE Lt. Fascia	Station	507+08.44	507+20.38	507+32.31	507+44.25	507+56.19	507+73.18	507+90.17	508+07.17	508+24.16	508+36.82	508+49.48	508+62.15	508+74.81
	Profile Grade	713.534	713.635	713.744	713.861	713.986	714.177	714.385	714.609	714.849	715.038	715.237	715.444	715.660
	Fascia Elevation (64'-11" Lt)	713.669	713.770	713.879	713.997	714.121	714.313	714.521	714.745	714.985	715.174	715.372	715.580	715.796
	Cost-in-Place Conc. Deflection	0	.015	.016	.005	0	.041	.067	.049	0	.009	.024	.021	0
	Screed Elevation	713.67	713.79	713.90	714.00	714.12	714.35	714.59	714.79	714.99	715.18	715.40	715.60	715.80
LEFT BRIDGE Rt. Fascia	Station	507+08.16	507+20.13	507+32.11	507+44.09	507+56.07	507+73.12	507+90.17	508+07.22	508+24.27	508+36.97	508+49.68	508+62.39	508+75.09
	Profile Grade	713.531	713.632	713.742	713.859	713.984	714.177	714.385	714.610	714.851	715.041	715.240	715.448	715.665
	Fascia Elevation (23'-1" Lt)	713.494	713.596	713.655	713.772	713.898	714.090	714.298	714.523	714.764	714.954	715.153	715.361	715.578
	Cost-in-Place Conc. Deflection	0	.015	.016	.005	0	.041	.067	.040	0	.009	.024	.021	0
	Screed Elevation	713.44	713.56	713.67	713.78	713.90	714.13	714.37	714.56	714.76	714.96	715.18	715.38	715.58
RIGHT BRIDGE Lt. Fascia	Station	507+07.89	507+19.87	507+31.89	507+43.91	507+55.93	507+73.05	507+90.16	508+07.28	508+24.39	508+37.15	508+49.90	508+62.65	508+75.41
	Profile Grade	713.529	713.630	713.740	713.857	713.983	714.176	714.385	714.610	714.852	715.043	715.243	715.452	715.670
	Fascia Elevation (23'-1" Rt)	713.615	713.717	713.826	713.944	714.070	714.262	714.472	714.697	714.939	715.130	715.330	715.539	715.757
	Cost-in-Place Conc. Deflection	0	.015	.016	.005	0	.041	.067	.040	0	.009	.024	.021	0
	Screed Elevation	713.62	713.73	713.84	713.95	714.07	714.30	714.54	714.74	714.94	715.14	715.35	715.56	715.76
RIGHT BRIDGE Rt. Fascia	Station	507+07.56	507+19.62	507+31.68	507+43.75	507+55.81	507+72.98	507+90.16	508+07.33	508+24.50	508+37.30	508+50.10	508+62.90	508+75.69
	Profile Grade	713.526	713.628	713.738	713.856	713.982	714.175	714.385	714.611	714.854	715.046	715.246	715.456	715.675
	Fascia Elevation (69'-11" Rt)	712.750	712.851	712.961	713.079	713.205	713.398	713.608	713.835	714.077	714.269	714.470	714.680	714.900
	Cost-in-Place Conc. Deflection	0	.015	.016	.005	0	.041	.067	.040	0	.009	.024	.021	0
	Screed Elevation	712.75	712.87	712.98	713.08	713.21	713.44	713.68	713.88	714.08	714.28	714.49	714.70	714.90



FASCIA OFFSETS

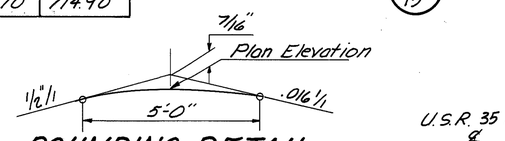


SECTION 3/12

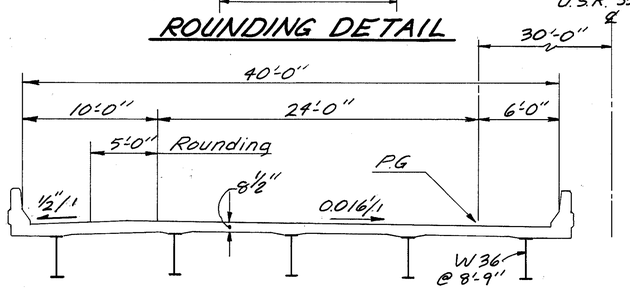


SECTION 1/13

SECTION 2/13



ROUNDING DETAIL



TYPICAL HALF SECTION
(Left Bridge)

NOTES:

1. See Std. Dwg. GR-3 for Concrete Insert Anchor Assembly Required to Attach Guardrail to Ends of Bridge Railing.
2. Holes for Bolts Attaching Guardrail to the Terminal Connector at Ends of Parapets shall Slotted 29/32" x 3" and all Bolts shall be Tightened as Specified for Expansion Joints as per CMS 606.05 to Allow for Bridge Movement.

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ARCHITECTS ENGINEERS PLANNERS
111 Merchant Street, Cincinnati, Ohio 45246 513/772-1117

DECK DETAILS

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
WBS	KJO	—	JET	WBS	4/3/86	

7658B1

Mark	Number	Length	Weight	Shape	Left Bridge		Right Bridge	
Abutments					Rear	Forward	Rear	Forward
EA801	56	5'-1"	760	Bt.		28		28
EA601	84	7'-1"	893	Bt.		42		42
EA602	84	6'-11"	873	Bt.		42		42
EA603	46	10'-1"	696	Bt.		23		23
EA604	38	9'-3"	528	Bt.		19		19
EA501	2	32'-3"	67	Str.				2
EA502	2	31'-0"	65	Str.				2
EA503	3	28'-0"	88	Str.				3
EA504	1	25'-0"	26	Str.				1
EA505	5	26'-6"	138	Str.		1		4
EA506	3	24'-2"	76	Str.				3
EA507	1	21'-10"	23	Str.				1
EA508	4	3'-8"	15	Str.		2		2
EA509	2	10'-11"	23	Bt.				2
EA510	2	4'-10"	10	Bt.				2
EA511	2	6'-2"	13	Bt.				2
EA512	2	7'-6"	16	Bt.				2
EA513	2	8'-10"	18	Bt.				2
EA514	1	10'-4"	11	Bt.				1
EA515	2	11'-10"	25	Bt.				2
EA516	1	13'-4"	14	Bt.				1
EA517	1	9'-10"	10	Bt.				1
EA518	1	10'-10"	11	Bt.				1
EA519	2	9'-0"	19	Bt.				2
EA520	2 Series of 6	Varies 3'-8" to 11'-1"	93	Bt.		2 Series of 6		
EA521	1	10'-4"	11	Bt.		1		
EA522	2	11'-5"	24	Bt.		2		
EA523	1	11'-0"	11	Bt.		1		
EA524	1	12'-2"	13	Bt.		1		
EA525	2	11'-11"	25	Bt.		2		
EA526	2	33'-4"	70	Str.		2		
EA527	2	32'-0"	67	Str.		2		
EA528	3	29'-6"	92	Str.		3		
EA529	2	28'-11"	60	Str.		2		
EA530	2	27'-9"	58	Str.		2		
EA531	3	25'-3"	79	Str.		3		
EA532	1	22'-3"	23	Str.		1		
EA533	4	2'-10"	12	Str.		2		2
A801	16	30'-0"	1282	Str.	8		8	
A802	4	33'-0"	352	Str.			4	
A803	4	34'-6"	368	Str.			4	
A804	4	34'-8"	370	Str.	4			
A805	4	36'-2"	386	Str.	4			
A701	39	7'-6"	598	Str.				39
A702	36	9'-9"	717	Str.				36
A703	17	6'-6"	226	Str.				17
A704	51	5'-10"	608	Bt.				51
A705	10	8'-9"	179	Str.				10
A706	23	6'-2"	290	Str.				23
A707	18	8'-10"	325	Str.				18
A708	28	11'-2"	639	Bt.				28
A709	9	6'-4"	116	Str.				9
A710	6	8'-5"	103	Str.				6
A601	80	10'-5"	1252	Bt.	40		40	
A602	4	30'-0"	180	Str.		4		
A603	4	18'-5"	111	Str.		4		
A604	5	14'-4"	108	Bt.		5		

Mark	Number	Length	Weight	Shape	Left Bridge		Right Bridge	
Abutments					Rear	Forward	Rear	Forward
A605	27	12'-4"	500	Bt.		27		
A606	14	15'-0"	315	Str.		14		
A501	91	10'-10"	1028	Bt.	45		46	
A502	64	11'-0"	734	Bt.	31		33	
A503	6	12'-10"	80	Bt.			6	
A504	11	14'-10"	170	Bt.	5		6	
A505	7	14'-2"	103	Bt.	7			
A506	2	13'-8"	29	Bt.	1		1	
A507	16	30'-0"	501	Str.	8		8	
A508	10	32'-2"	336	Str.			8	2
A509	8	33'-10"	282	Str.	8			
A510	2	6'-11"	14	Str.			2	
A511	8	6'-4"	53	Str.	4		4	
A512	8	3'-4	28	Str.	4		4	
A513	5	7'-6"	39	Str.			2	3
A514	1	6'-1"	6	Bt.			1	
A515	1	7'-5"	8	Bt.			1	
A516	1	8'-11"	9	Bt.			1	
A517	1	10'-2"	11	Bt.			1	
A518	1	11'-5"	12	Bt.			1	
A519	1	12'-8"	13	Bt.			1	
A520	2	8'-8"	18	Str.			2	
A521	2	9'-6"	20	Str.			2	
A522	2	4'-0"	8	Bt.	1		1	
A523	2	5'-6"	11	Bt.	1		1	
A524	2	7'-0"	15	Bt.	1		1	
A525	2	8'-5"	18	Bt.	1		1	
A526	2	9'-9"	20	Bt.	1		1	
A527	2	11'-2"	23	Bt.	1		1	
A528	2	12'-4"	26	Bt.	1		1	
A529	2	8'-4"	17	Str.	2			
A530	2	9'-3"	19	Str.	2			
A531	1	4'-8"	5	Bt.	1			
A532	1	6'-2"	6	Bt.	1			
A533	1	7'-8"	8	Bt.	1			
A534	1	9'-0"	9	Bt.	1			
A535	1	10'-4"	11	Bt.	1			
A536	1	11'-8"	12	Bt.	1			
A537	1	12'-6"	13	Bt.	1			
A538	2	8'-11"	19	Str.	2			
A539	2	9'-10"	21	Str.	2			
A540	2	7'-3"	15	Bt.	2			
A541	9	24'-0"	225	Str.				9
A542	17	14'-3"	253	Str.		8		9
A543	10	15'-3"	159	Str.				10
A544	10	7'-5"	77	Bt.				10
A545	27	5'-6"	155	Str.				27
A546	39	5'-2"	210	Bt.				39
A547	3	16'-3"	51	Bt.				3
A548	5	7'-7"	40	Str.				5
A549	15	5'-11"	93	Str.				15
A550	22	7'-6"	172	Bt.				22
A551	9	8'-7"	81	Str.				9
A552	12	11'-5"	143	Str.				12
A553	6	8'-9"	55	Bt.				6
A554	6	2'-8"	17	Str.				6
A555	3	14'-10"	46	Bt.				3
A556	128	6'-6"	868	Bt		40		68
A557	34	3'-8"	130	Str.		15		19
A558	18	16'-8"	313	Str.		11		7
A559	15	21'-2"	332	Str.		11		4

Mark	Number	Length	Weight	Shape	Left Bridge		Right Bridge	
Abutments					Rear	Forward	Rear	Forward
A560	2	14'-9"	31	Str.				2
A561	10	13'-0"	136	Str.				10
A562	2	13'-8"	29	Str.				2
A563	2	4'-4"	9	Str.				2
A564	4	13'-2"	55	Str.				4
A565	1	22'-6"	23	Str.				1
A566	2	26'-6"	55	Str.				2
A567	5	9'-11"	52	Bt.		5		
A568	27	7'-11"	223	Bt.		27		
A569	2	14'-8"	31	Bt.		2		
A570	10	15'-6"	162	Bt.		10		
A571	27	7'-2"	202	Bt.		27		
A572	12	8'-5"	105	Str.				12
A401	34	9'-0"	204	Bt	18		16	

NOTES:

1. For Bar Bending Details-See Sheet 15/17
2. Refer to CMS Sections 106.03, 700, 709.01 through 709.05 & 709.08. Sufficient Additional Reinforcing Steel Shall be Provided for Sampling. Random Samples Shall be Replaced in the Structures by the Additional Steel, Spliced in Accordance with 509.08
3. EA Bars are Epoxy Coated

14/17

KZF INCORPORATED
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111 Merchant Street, Cincinnati, Ohio 45246 513/772-1117

REINFORCING STEEL LIST

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	MHW	—	JET	WBS	4/9/86	

JAC-35-8.49 | OHIO | FHWA REGION 5 | 513/575

Mark	Number	Length	Weight	Shape	Left Bridge		Right Bridge	
Abutments					Rear	Forward	Rear	Forward

Mark	Number	Length	Weight	Shape	Left Bridge		Right Bridge	
Piers					No. 1	No. 2	No. 1	No. 2
P1101	108	11'-0"	6312	Bt.	54		54	
P1102	54	28'-5"	8153	Bt.	54			
P1103	54	29'-0"	8320	Bt.			54	
P901	168	11'-6"	6569	Str.	84		84	
P902	16	38'-7"	2099	Bt.	4	4	4	4
P903	12	43'-1"	1758	Bt.	3	3	3	3
P904	16	41'-0"	2230	Bt.	4	4	4	4
P801	96	7'-6"	1922	Str.		48		48
P802	84	7'-1"	1589	Bt.		42		42
P803	42	21'-5"	2402	Str.		42		
P804	42	22'-9"	2551	Str.				42
P501	96	7'-6"	751	Str.		48		48
P502	64	13'-2"	879	Bt.	16	16	16	16
P503	16	20'-0"	334	Str.	4	4	4	4
P504	16	21'-1"	352	Str.	4	4	4	4
P505	8	11'-4"	95	Bt.	2	2	2	2
P506	8	11'-11"	99	Bt.	2	2	2	2
P507	8	12'-6"	104	Bt.	2	2	2	2
P508	8	13'-1"	109	Bt.	2	2	2	2
P509	16	5'-7"	93	Bt.	4	4	4	4
P401	144	11'-6"	1106	Str.	72		72	
P402	160	2'-6"	267	Str.	40	40	40	40
P403	120	3'-6"	281	Str.	30	30	30	30
SP401	3	23'-10"	1329	Bt.			3	
SP402	3	19'-1"	1074	Bt.				3
SP403	3	23'-3"	1298	Bt.	3			
SP404	3	17'-9"	1003	Bt.		3		

Mark	Number	Length	Weight	Shape		
Superstructure					Left	Right
ES801	22	43'-4"	2545	Str.	11	11
ES802	56	5'-1"	760	Bt.	28	28
ES601	578	41'-6"	36,029	Str.	289	289
ES602	12	10'-0"	180	Str.	8	4
ES501	584	2'-5"	1478	Bt.	292	292
ES502	488	5'-3"	2672	Bt.	244	244
ES503	496	3'-0"	1552	Bt.	248	248
ES504	8	2'-11½"	24	Bt.	4	4
ES505	8	2'-10½"	24	Bt.	4	4
ES506	8	2'-9½"	23	Bt.	4	4
ES507	8	2'-9"	23	Bt.	4	4
ES508	8	2'-8"	22	Bt.	4	4
ES509	8	2'-7½"	22	Bt.	4	4
ES510	40	2'-6"	104	Bt.	20	20
ES513	32	12'-6"	417	Str.	16	16
ES514	48	12'-3"	613	Str.	24	24
ES515	128	7'-0"	935	Str.	64	64
ES516	32	13'-9"	459	Str.	16	16
ES517	32	5'-6"	184	Str.	16	16
ES518	64	4'-4"	289	Str.	32	32
ES519	578	41'-6"	25,018	Str.	289	289
ES520	460	30'-0"	14,393	Str.	230	230
ES521	76	26'-9"	2120	Str.	38	38
ES522	16	30'-6"	509	Str.	8	8
ES523	80	7'-4"	612	Bt.	40	40
ES524	80	6'-5"	536	Bt.	40	40
ES525	8	12'-4"	102	Bt.	4	4
ES526	8	1'-0"	8	Str.	4	4
ES527	12	10'-0"	125	Str.	8	4
ES511	96	2'-0"	200	Str.	48	48
ES512	96	2'-7"	259	Bt.	48	48
ES401	550	30'-0"	11,022	Str.	275	275
ES402	110	25'-1"	1843	Str.	55	55
ES403	224	27'-4"	4,089	Str.	112	112
ES404	576	6'-1"	2341	Str.	288	288

NOTES:

1. ES Bars are Epoxy Coated.
2. SP Bars are Spirol Bars. The Weight of these Bars include 4-1x1x⅛ Spacer Angles.

15/17

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111 Merchant Street, Cincinnati, Ohio 45246 513/772-1117

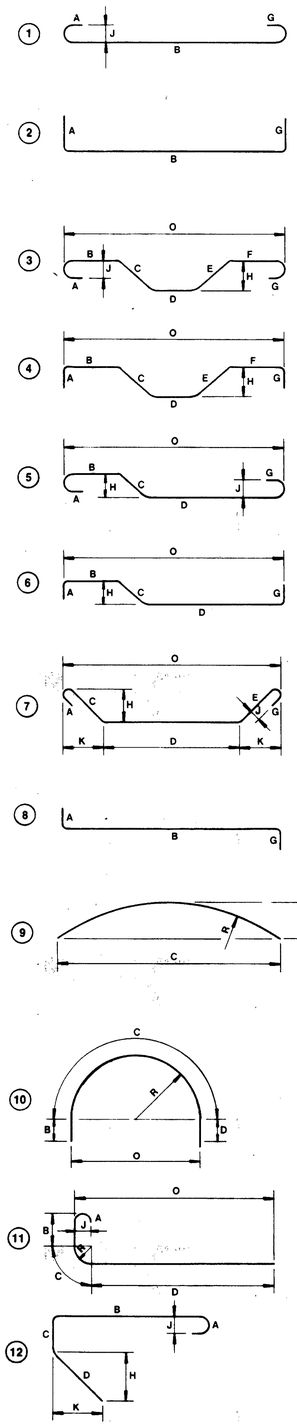
REINFORCING STEEL LIST

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	MHW	—	JET	WBS	4/3/86	

Dimensions For Bending

Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
EA801	3	1'-1"	2'-0"	2'-0"	0"				1'-5"	0'-8"			3'-5
EA601	S10		3'-3"	11"	3'-3"								
EA602	S10		2'-11"	1'-5"	2'-11"								
EA603	S10		4'-6"	1'-5"	4'-6"								
EA604	S10		4'-1"	1'-5"	4'-1"								
EA509	19		1'-2"	9'-10"	0"	0"	0"		6¼"		1'-0½"		11'-0"
EA510	S10		1'-10"	1'-5"	1'-10"								
EA511	S10		2'-6"	1'-5"	2'-6"								
EA512	S10		3'-2"	1'-5"	3'-2"								
EA513	S10		3'-10"	1'-5"	3'-10"								
EA514	S10		4'-7"	1'-5"	4'-7"								
EA515	S10		5'-4"	1'-5"	5'-4"								
EA516	S10		6'-1"	1'-5"	6'-1"								
EA517	S10		4'-4"	1'-5"	4'-4"								
EA518	S10		4'-10"	1'-5"	4'-10"								
EA519	19		1'-2"	7'-11"	0"	0"	0"		6¼"		1'-0½"		9'-1"
EA520	S10		⟨1⟩	1'-5"	⟨1⟩								
EA521	S10		4'-7"	1'-5"	4'-7"								
EA522	19		1'-2"	10'-5"	0"	0"	0"		6¼"		1'-0½"		11'-7"
EA523	S10		4'-11"	1'-5"	4'-11"								
EA524	S10		5'-6"	1'-5"	5'-6"								
EA525	19		1'-2"	10'-10"	0"	0"	0"		6¼"		1'-0½"		12'-0"
A704	2	1'-2"	4'-10"					0"					
A708	2	1'-2"	10'-2"					0"					
A601	15												
A604	2	5'-4"	9'-2"					0"					
A605	2	5'-4"	7'-2"					0"					
A501	T1	0'-5½"	2'-7"	2'-7"	2'-7"	2'-7"		0'-5½"					
A502	S10		4'-7"	2'-1"	4'-7"								
A503	S10		5'-6"	2'-1"	5'-6"								
A504	S10		6'-6"	2'-1"	6'-6"								
A505	S10		6'-2"	2'-1"	6'-2"								
A506	S10		5'-11"	2'-1"	5'-11"								
A514	S10		2'-1½"	2'-1"	2'-1½"								
A515	S10		2'-9½"	2'-1"	2'-9½"								
A516	S10		3'-6½"	2'-1"	3'-6½"								
A517	S10		4'-2"	2'-1"	4'-2"								
A518	S10		4'-9½"	2'-1"	4'-9½"								
A519	S10		5'-5"	2'-1"	5'-5"								
A522	S10		1'-1"	2'-1"	1'-1"								
A523	S10		1'-10"	2'-1"	1'-10"								
A524	S10		2'-7"	2'-1"	2'-7"								
A525	S10		3'-3½"	2'-1"	3'-3½"								
A526	S10		3'-11½"	2'-1"	3'-11½"								
A527	S10		4'-8"	2'-1"	4'-8"								
A528	S10		5'-3"	2'-1"	5'-3"								
A531	S10		1'-5"	2'-1"	1'-5"								
A532	S10		2'-2"	2'-1"	2'-2"								



NOTES:

1. FIGURES IN CIRCLES SHOW BAR TYPES.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT A & G ON STD. 180° & 135° HOOKS.
3. "J" DIMENSION ON HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
4. WHERE "J" IS NOT SHOW "J" WILL BE KEPT EQUAL TO OR LESS THAN "H". WHERE "J" CAN EXCEED "H" IT SHOULD BE SHOWN.
5. "H" DIMENSION ON STIRRUPS TO BE SHOWN WHERE NECESSARY TO RESTRICT HOOKS.
6. ALL BENDS SHOWN ARE BENT AROUND A STANDARD MANDREL, EXCEPT STIRRUP S11, TIES T3, SPIRALS SP1 AND WHERE RADIUS "R" IS INDICATED.
7. RADIUS DIMENSION "R" IS TO OUTSIDE OF BAR.
8. THE LENGTH OF BENT BARS IS MEASURED ALONG THE CENTERLINE.
9. HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE LATEST ACI SPECIFICATIONS.
10. FOR BAR TYPE SP1, THE NO. OF TURNS "D" IS THE LENGTH "C" DIVIDED BY THE PITCH "B", PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER. 1½ CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT.

ENLARGED VIEW SHOWING BAR BENDING DETAILS

JAC-35-8.49

OHIO
FHWA REGION 5

514
575

16/17

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111 Merchant Street, Cincinnati, Ohio 45246 513/721-1???

BAR BENDING DETAILS

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY RD. 36

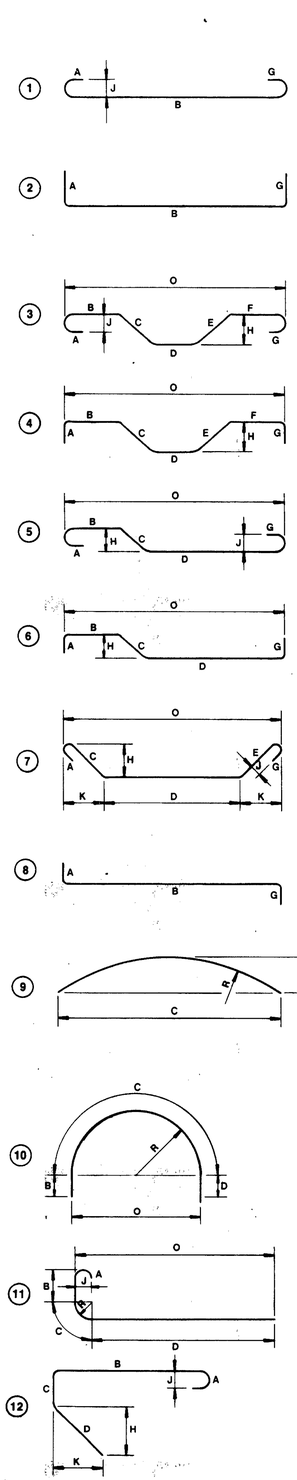
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
–	MHW	–	JET	WBS	4/3/86	

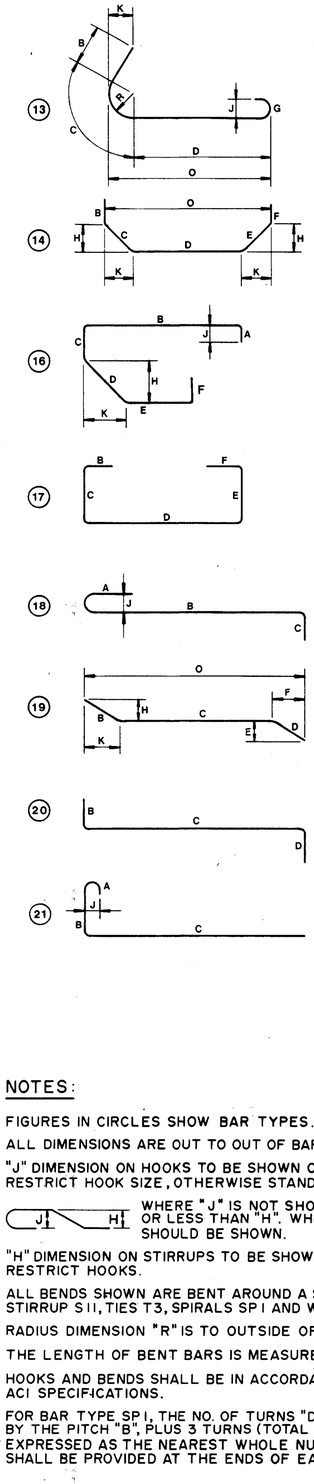
JAC-35-8.49 | OHIO | FHWA REGION 5 | 515 / 575

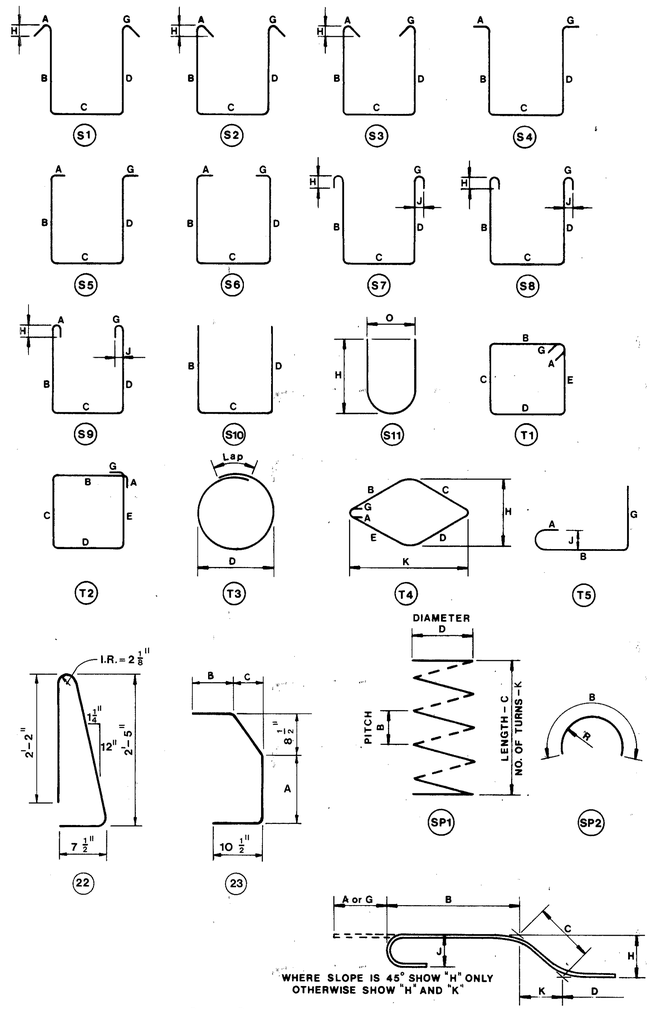
Dimensions For Bending

Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
A533	S10		2'-11"	2'-1"	2'-11"								
A534	S10		3'-7"	2'-1"	3'-7"								
A535	S10		4'-3"	2'-1"	4'-3"								
A536	S10		4'-11"	2'-1"	4'-11"								
A537	S10		5'-4"	2'-1"	5'-4"								
A540	2	0'-10"	6'-6"					0"					
A544	4	0"	1'-8"	4'-3"	1'-8"								
A546	2	0'-10"	4'-5"					0"					
A547	S10		7'-6½"	1'-5"	7'-6½"								
A550	19		2'-0"	4'-8"	0'-10"	0'-8"	0'-8"		1'-5"		1'-5"		6'-9"
A553	S10		0'-10"	3'-5"	4'-9"								
A555	S10		6'-10"	1'-5"	6'-10"								
A556	2		1'-8"	3'-5"	1'-8"								
A567	2	10"	9'-2"					0"					
A568	2	10"	7'-2"					0"					
A569	S10		6'-9"	1'-5"	6'-9"								
A570	S10		7'-2	1'-5"	7'-2"								
A571	S10		2'-0"	3'-5"	2'-0"								
A401	T1	6½"	2'-6¾"	1'-9"	2'-6¾"	1'-9"		0'-6½"					
P1101	2	2'-0"	9'-4"					0"					
P902	14		0"	4'-5"	30'-0"	4'-5"	0"		1'-0"		4'-4"		38'-8"
P903	2	2'-6"	38'-8"					2'-6"					
P904	1	1'-3"	38'-6"					1'-3"		0'-11¼"			
P802	2	1'-4"	6'-0"					0"					
P1102	1	1'-7"	26'-10"					0"		1'-2¼"			
P1103	1	1'-7"	27'-5"					0"		1'-2¼"			
P502	T1	0'-5½"	2'-8"	3'-8"	2'-8"	3'-8"		0'-5½"					
P505	T1	0'-5½"	2'-8"	2'-8½"	2'-8"	2'-8½"		0'-5½"					
P506	T1	0'-5½"	2'-8"	3'-0"	2'-8"	3'-0"		0'-5½"					
P507	T1	0'-5½"	2'-8"	3'-3½"	2'-8"	3'-3½"		0'-5½"					
P508	T1	0'-5½"	2'-8"	3'-7"	2'-8"	3'-7"		0'-5½"					
P509	S10		1'-8"	2'-6"	1'-8"								
SP401	SP1		0'-4½"	23'-10"	2'-8"						67		
SP402	SP1		0'-4½"	19'-1"	2'-8"						54		
SP403	SP1		0'-4½"	23'-3"	2'-8"						65		
SP404	SP1		0'-4½"	17'-9"	2'-8"						50		
ES501	2	0'-10½"	1'-8"					0"					
ES502	22												
ES503	23	0'-9"	0'-9"	0'-6"									
ES504	23	0'-9"	0'-9"	0'-5½"									
ES505	23	0'-9"	0'-8½"	0'-5"									
ES506	23	0'-9"	0'-8"	0'-4½"									
ES507	23	0'-9"	0'-8"	0'-4"									
ES508	23	0'-9"	0'-7½"	0'-3½"									
ES509	23	0'-9"	0'-7½"	0'-3"									
ES510	23	0'-9"	0'-7"	0'-2"									
ES512	1	0'-7"	2'-0"					0"		0'-5"			
ES523	56	1'-0"	2'-6"	2'-2"	2'-0"			0"					
ES524	510		3'-0"	1'-8"	2'-0"								
ES525	510		5'-3"	2'-1"	5'-3"								
ES802	5	1'-1"	2'-0"	2'-0"	0"			0"	1'-5"	0'-8"			3'-5"

(1) Height Varies from 1'-3" to 5'-0" at 9" Increments







ENLARGED VIEW SHOWING BAR BENDING DETAILS

NOTES:

1. FIGURES IN CIRCLES SHOW BAR TYPES.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT A & G ON STD. 180° & 135° HOOKS.
3. "J" DIMENSION ON HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
4. WHERE "J" IS NOT SHOW "J" WILL BE KEPT EQUAL TO OR LESS THAN "H". WHERE "J" CAN EXCEED "H" IT SHOULD BE SHOWN.
5. "H" DIMENSION ON STIRRUPS TO BE SHOWN WHERE NECESSARY TO RESTRICT HOOKS.
6. ALL BENDS SHOWN ARE BENT AROUND A STANDARD MANDREL, EXCEPT STIRRUP S11, TIES T3, SPIRALS SP1 AND WHERE RADIUS "R" IS INDICATED.
7. RADIUS DIMENSION "R" IS TO OUTSIDE OF BAR.
8. THE LENGTH OF BENT BARS IS MEASURED ALONG THE CENTERLINE.
9. HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE LATEST ACI SPECIFICATIONS.
10. FOR BAR TYPE SP1, THE NO. OF TURNS "D" IS THE LENGTH "C" DIVIDED BY THE PITCH "B", PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER. 1½ CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT.

17/17

KZF INCORPORATED
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BAR BENDING DETAILS

BRIDGE NO. JAC-35-0963 L/R
OVER COUNTY R.D. 36

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	MHW	—	JET	WBS	4/3/86	