

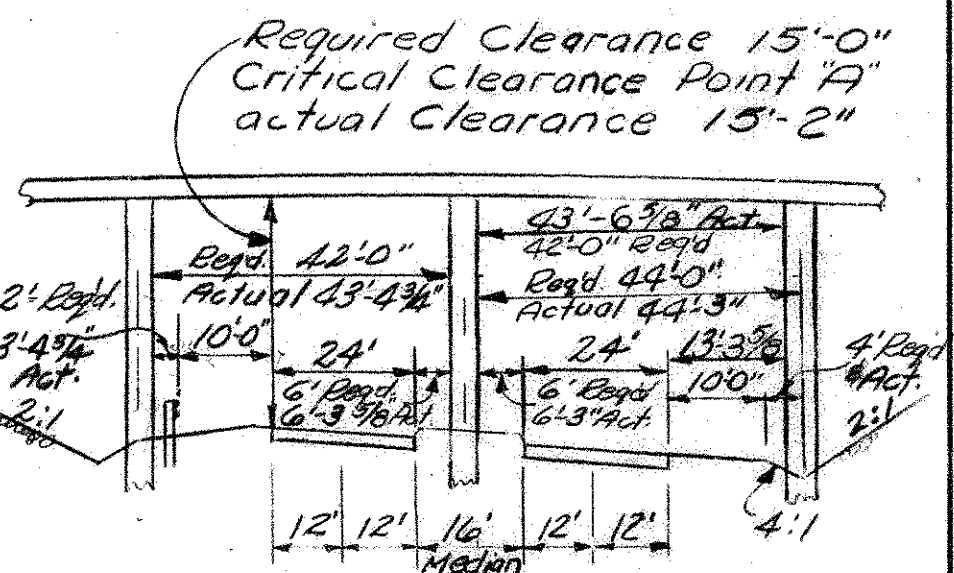
ROSS COUNTY ROS-35-19.93

PROPOSED BRIDGE DATA.

Type: Continuous Concrete Slab
Separate Structures

Span: 38'-0" - 47'-6" - 47'-6" - 38'-0" Brg
Roadway: 40'-0" W of Parapets
Lt. Bridge - 53'-5 1/2" avg. Ht of Parapets
Skew: 7°-07'-30" L.F.
Load: Frequency: C.F. 400 (57)
Wearing Surface: 1" Monolithic Concrete
Approach Slabs: A5-I-54 (25'0" long) Special
Railing: Aluminum Rail and Supports
Alignment: Tangent

CLEARANCE DIAGRAM



SECTION LOOKING NORTH

FOUNDATION SOUNDINGS

Foundation design and foundation quantities are based on a study of rod soundings and soil-sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in the Division office, but the State does not guarantee the accuracy thereof.

EMBANKMENT PROCEDURE
Embankment shall be completed to the elevation of the roadway subgrade for a distance of 200' beyond the bridge limits for a minimum of 30 days before any construction may begin on the abutments.

EXISTING SPIRAL DATA-US.23

$\Delta = 7^\circ - 38' - 30"$ $T_s = 455.2'$
 $D = 1^\circ - 30'$ $L_s = 400'$
 $E = 10.3'$ $L_c = 109.44'$

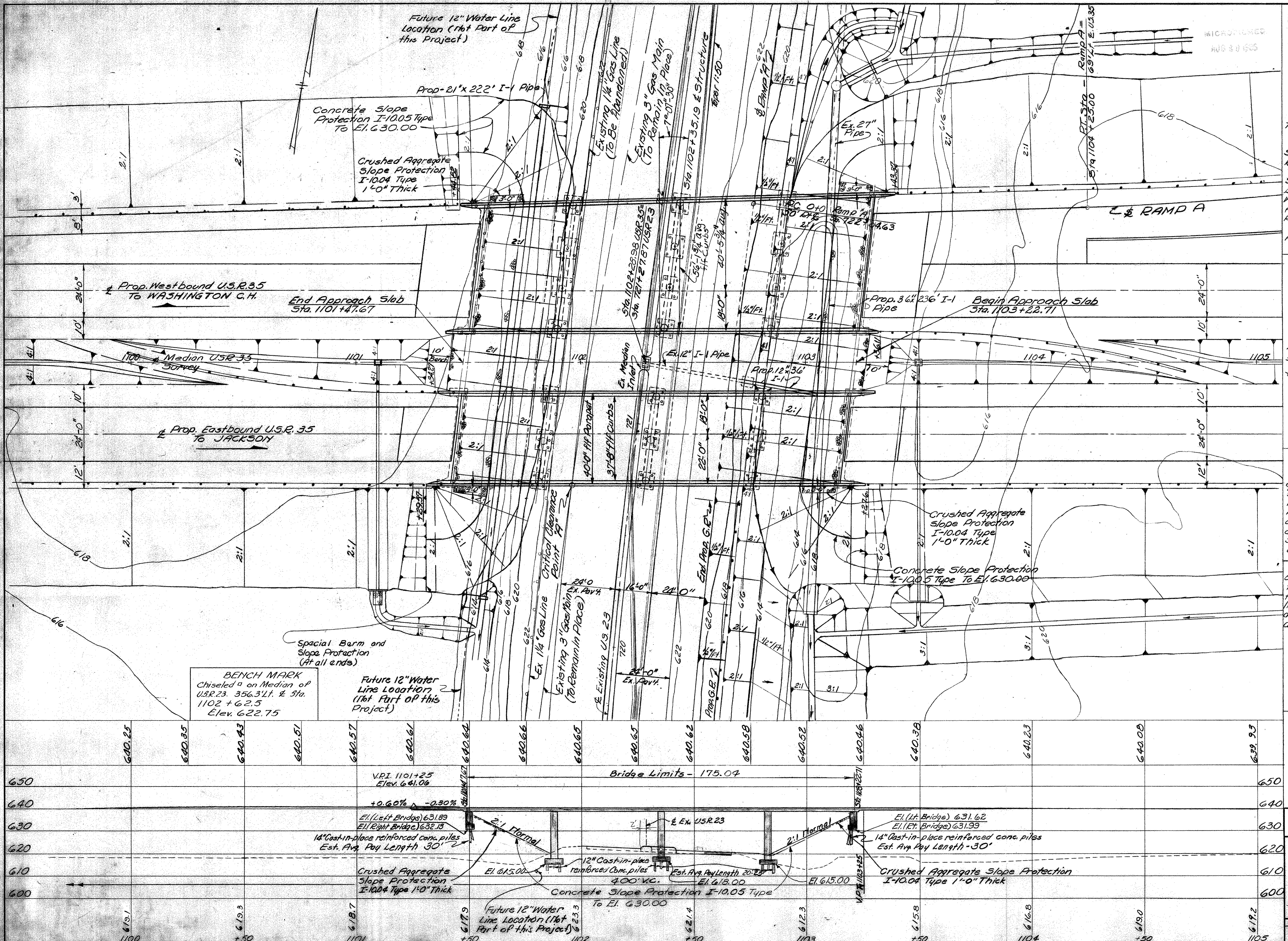
ELMER S. BARRETT ASSOCIATES
Consulting Engineers
245-249 S. Paint Street Chillicothe, Ohio

SITE PLAN

BRIDGE NO. ROS-35-2086 R&L
USR 35 OVER EXISTING USR 23

ROSS COUNTY
STA 1101+47.67 TO STA. 1103+22.71

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
K.D.D.	P.J.M.		D.M.	NK	11/24/62	



ROSS COUNTY
R05-35-19.93

GENERAL NOTES

REFERENCE shall be made to Standard Drawing AS-1-54 revised 7-5-62, and AR-1-57 revised 4-2-62 and 5-10-62 Supplemental Specification dated 7-12-62.
DESIGN SPECIFICATION: This structure conforms to the requirements of Design Specifications for Highway Structures of the State of Ohio, Department of Highways dated 9-1-57 together with the current revisions thereof.

CAMBER of $\frac{1}{800}$ of the span shall be provided in each span (in addition to any required for conformance with the profile of the highway) to allow for dead load deflection. This is the amount of camber required before falsework is released. To obtain this, proper allowance shall be made for the deflection of falsework members.

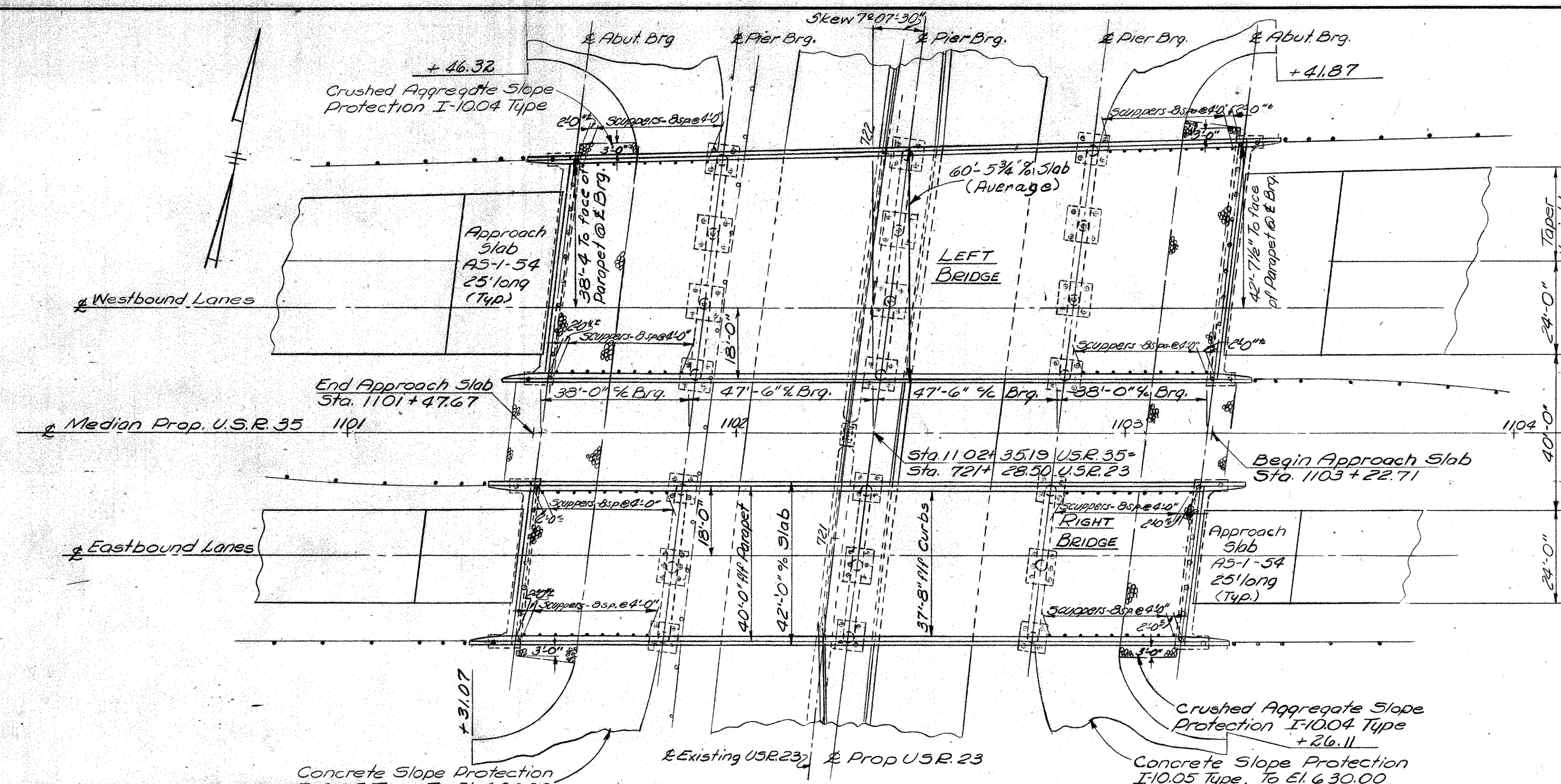
FIRST TEST PILE: Payment will be made for only one first test pile. It may be driven for either the Right or Left bridge.

SURFACE FINISH OF CONCRETE

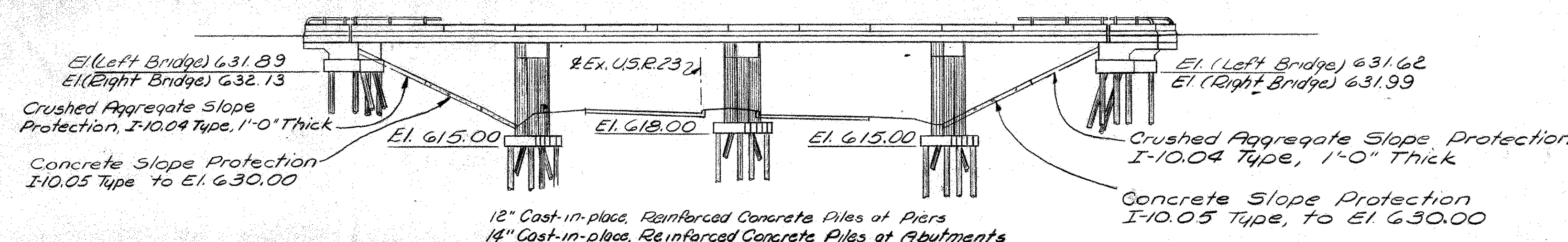
The requirements of Sec. 5-1.22, Rubbed Finish, shall apply to the following exposed concrete surfaces:

- The entire superstructure except the top and bottom surfaces of safety curbs and roadways.
- The entire surface of piers and abutments except bridge seat and the face of spill-through abutments between the limits of the slab.

EXCAVATION QUANTITY includes the removal of fill material required for construction of the abutments.



GENERAL PLAN



GENERAL ELEVATION

ESTIMATED QUANTITIES				RIGHT BRIDGE					LEFT BRIDGE				
ITEM	QUANTITY	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER	GENERAL	AS BUILT	ABUT.	PIERS	SUPER	GENERAL	AS BUILT
E-2	706	Cu.Yds.	Unclassified Excavation	139	159				167	241			
I-10	525	Sq.Yds.	Crushed Aggregate Slope Protection				234					291	
I-10	1364	Sq.Yds.	Concrete Slope Protection				645					719	
S-1	1188	Cu.Yds.	Class "C" Concrete, Superstructure			488					700		
S-1	208	Cu.Yds.	Class "C" Concrete, Pier Caps and Columns		87					121			
S-1	136	Cu.Yds.	Class "E" Concrete, Abutments above Footings	56					80				
S-1	232	Cu.Yds.	Class "E" Concrete, Footings	42	54				57	79			
S-3	9	Lin.Ft.	Waterproofing, premolded sealing strip						9				
S-4	367,062	Lbs.	Reinforcing steel	10,512	25,795	115,560			13,856	38,873	162,466		
S-9	647	Lbs.	1/4" Rolled Bronze Sliding Plates (Sec. M-7.10)	263					384				
S-9	207	Sq.Ft.	1/4" Preformed Expansion Joint Filler	84					123				
S-9	14,480	Lbs.	Structural Steel Expansion Joints, including all painting				5,762					8,718	
S-14	782.61	Lin.Ft.	Railings, Aluminum Rail and supports and Concrete Parapet (Type 'A')				391.06					391.55	
S-16	Lump Sum	Lump	First Test Pile (12" diameter)							Lump			
S-18	2,160	Lin.Ft.	12" Cast-in-place, Reinforced Concrete Piles		945					1,215			
S-18	1,260	Lin.Ft.	14" Cast-in-place, Reinforced Concrete Piles	540					720				
S-29	46	Cu.Yds.	Porous Backfill	20					26				
S-29	72	Each	Scuppers, 4" Diameter Wrought Iron Pipe				36					36	
S-101	1,188	Each	Water Reducing, Set-Retarding Admixture			488					700		

ELMER S. BARRETT ASSOCIATES Consulting Engineers 245-249 S. Paint Street Chillicothe, Ohio							
GENERAL PLAN AND ELEVATION, EST. QUANTITIES AND GEN. NOTES BRIDGE NO. R05-35-2086 R.E.L. U.S.R. 35 OVER EXISTING U.S.R. 23 ROSS COUNTY STA. 1101+47.67 TO STA. 1103+22.71 SCALE: DATE: 11/26/62							
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED	
EER	W.O.J.		D.M.	W.K.	11/26/62		

ROSS COUNTY
ROS-35-19.93

~ NOTES ~

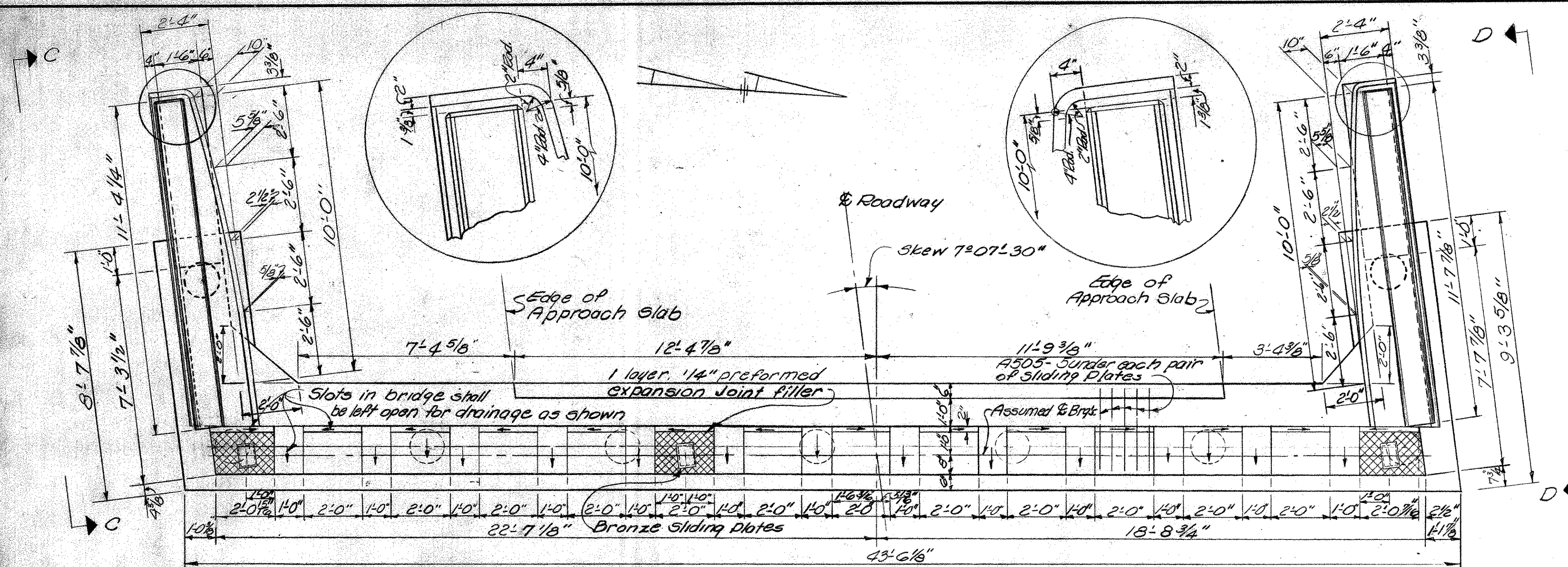
CONCRETE shall be Class "E"

POROUS BACKFILL shall extend upward to the approach slab and paved berms and outward to the abutment wings. Excavation therefor in excess of that required for construction of the abutment, shall be considered as paid for in the bid price per Cu. Yd. paid for Porous Backfill.

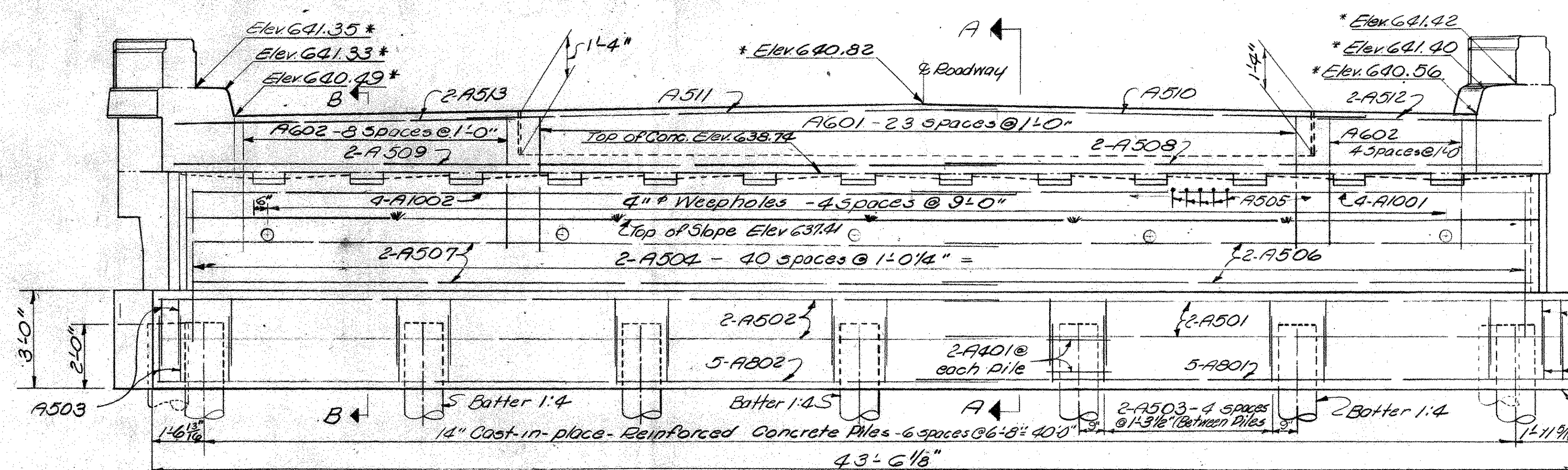
SLIDING PLATES and preformed expansion joint filler shall be at all raised portions of bridge seat

ELEVATIONS * are at face of backwall

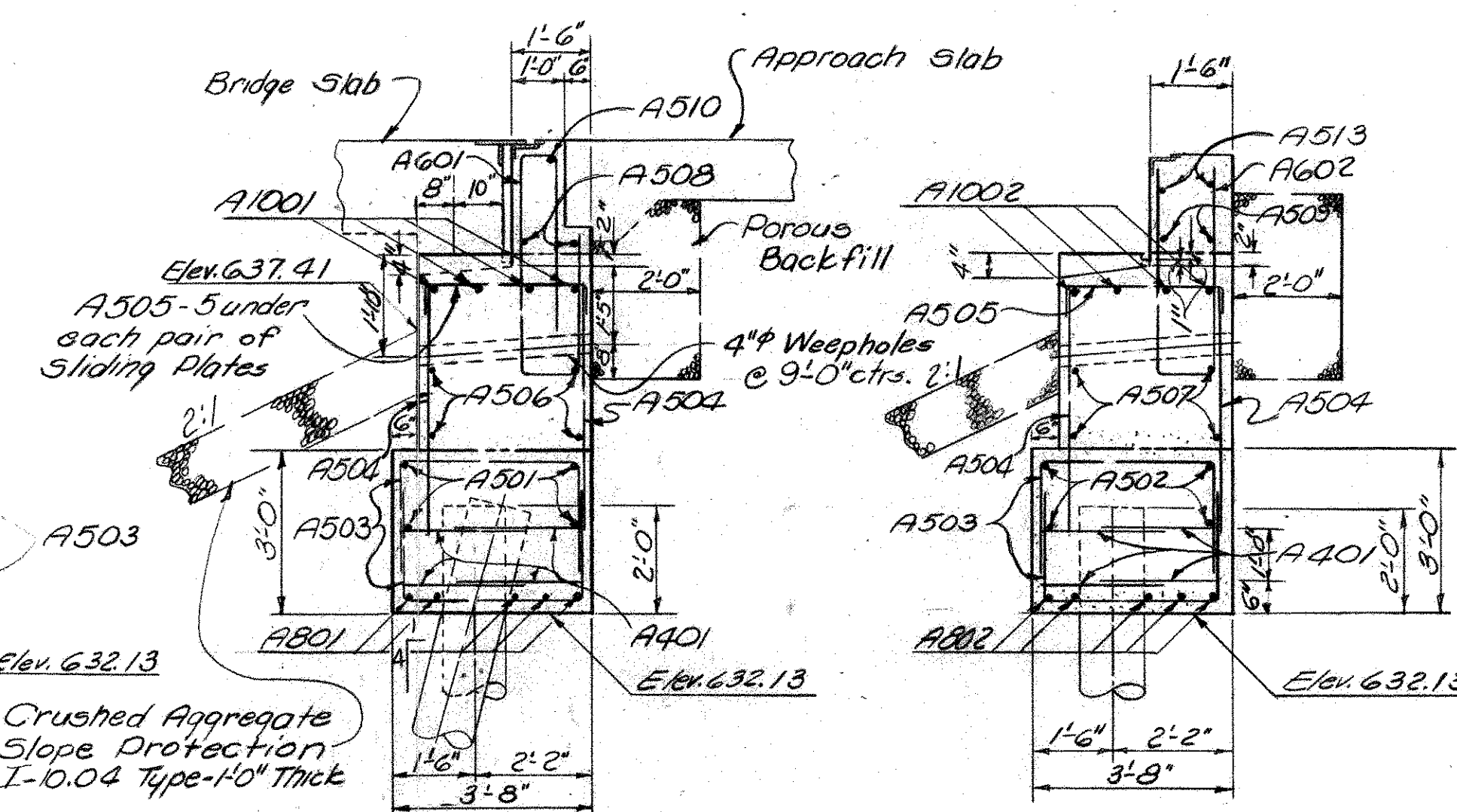
PILES shall be 14" Cast-in-place, reinforced concrete piles. The design load is 29 tons per pile



PLAN - REAR ABUTMENT - RIGHT BRIDGE



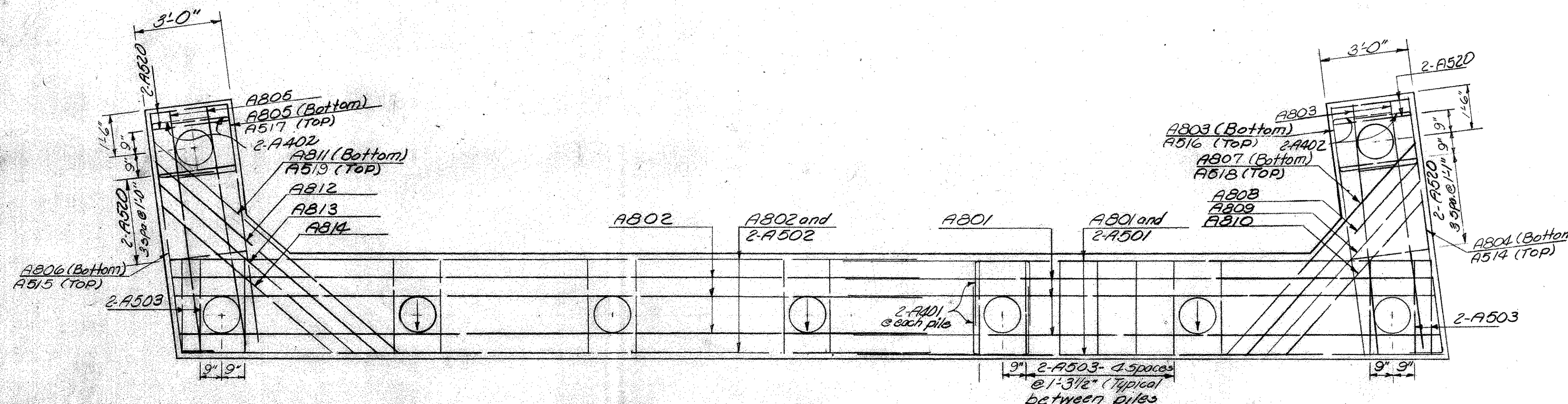
ELEVATION - REAR ABUTMENT - RIGHT BRIDGE



SECTION A-A

SECTION B-B

Denotes battered pile

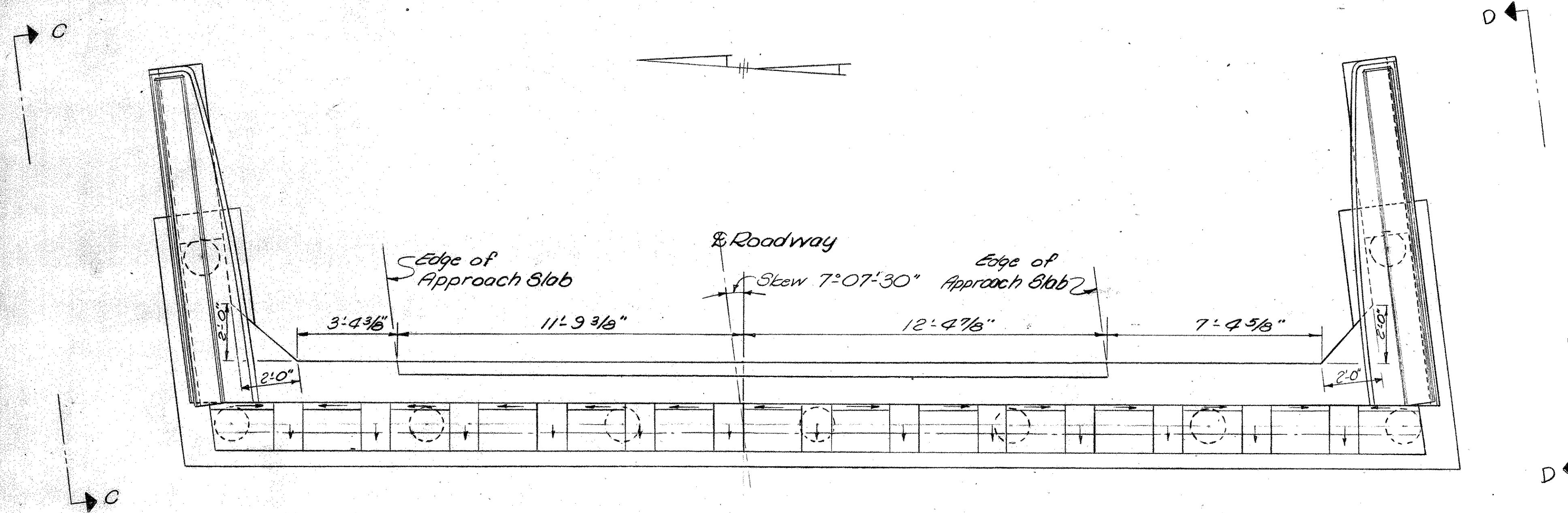


FOOTING PLAN

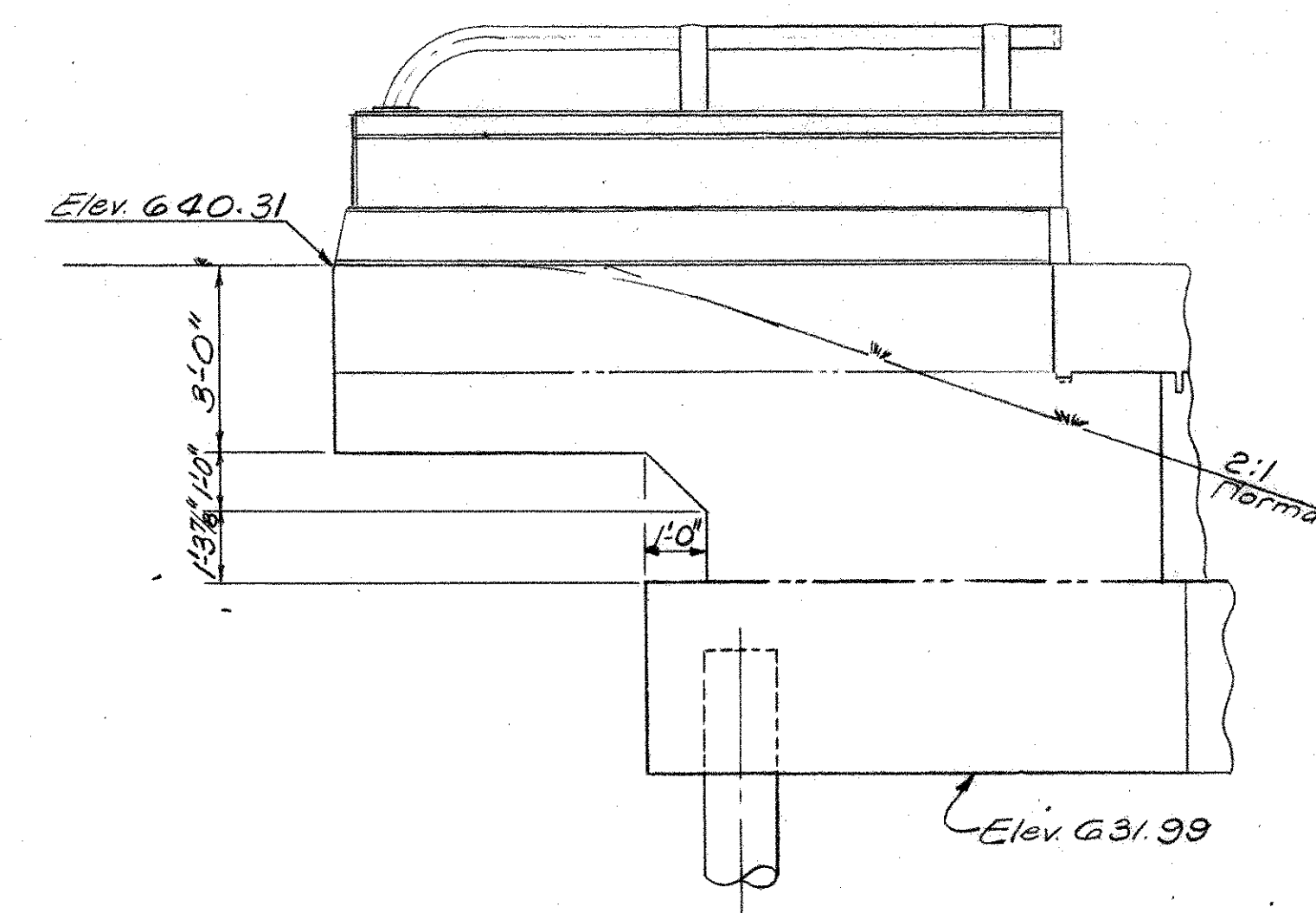
ELMER S. BARRETT ASSOCIATES Consulting Engineers 245-249 S. Paint Street Chillicothe, Ohio					
REAR ABUTMENT DETAILS RIGHT BRIDGE					
BRIDGE NO. ROS-35-2086 R & L.					
U.S.R. 35 OVER EXISTING U.S.R. 23					
ROSS COUNTY U.S.R. 35					
STA. 1101+47.67 TO STA. 1103+22.71					
SCALE	DATE				
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
EER	PJM		D.M.	JK	11/26/62

ROSS COUNTY
ROS-35-19.93

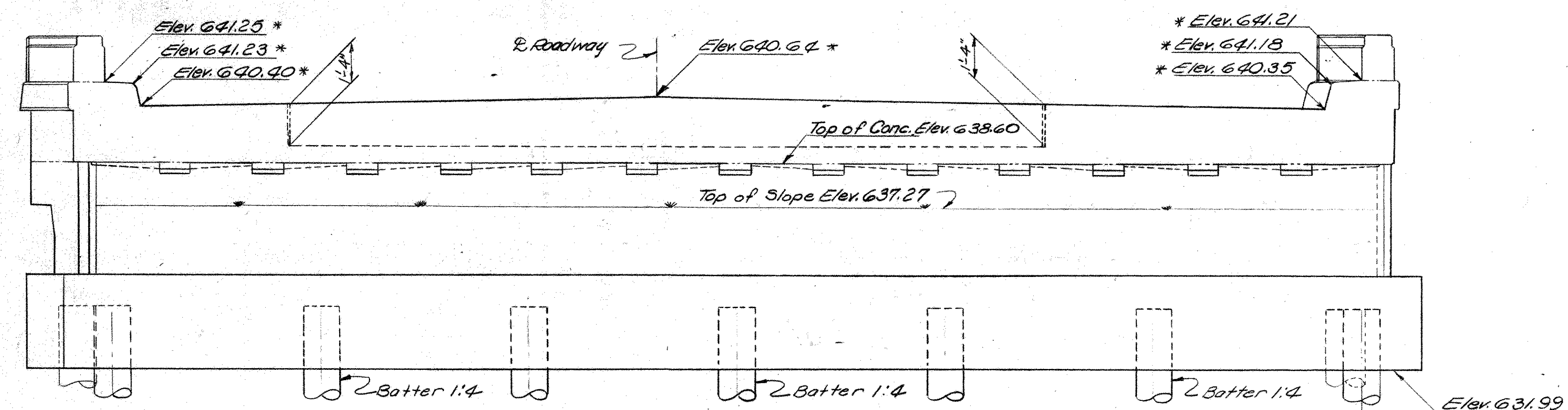
MICROFILMED
AUG 30 1985



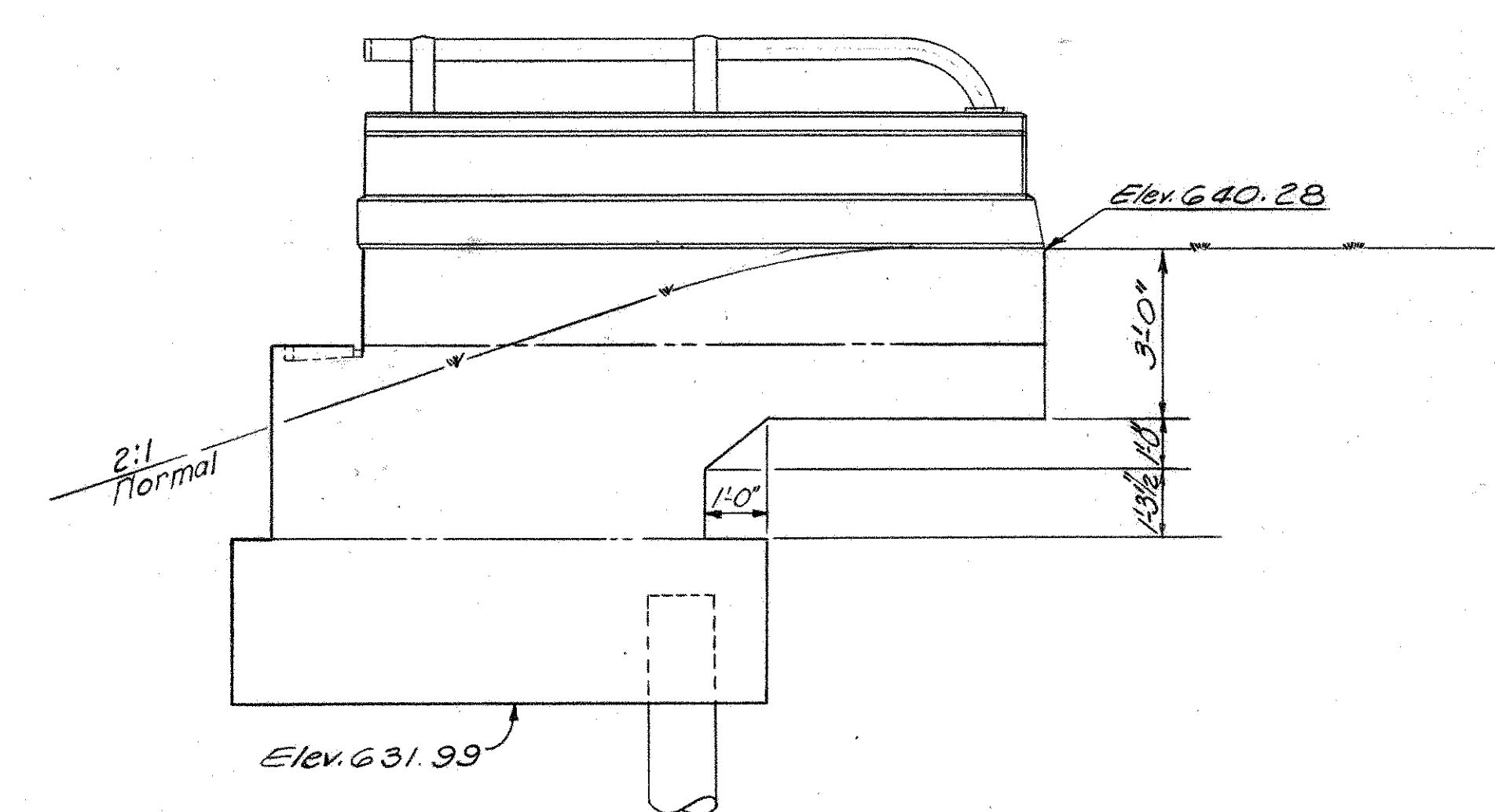
PLAN-FORWARD ABUTMENT-RIGHT BRIDGE



VIEW C-C



ELEVATION-FORWARD ABUTMENT-RIGHT BRIDGE

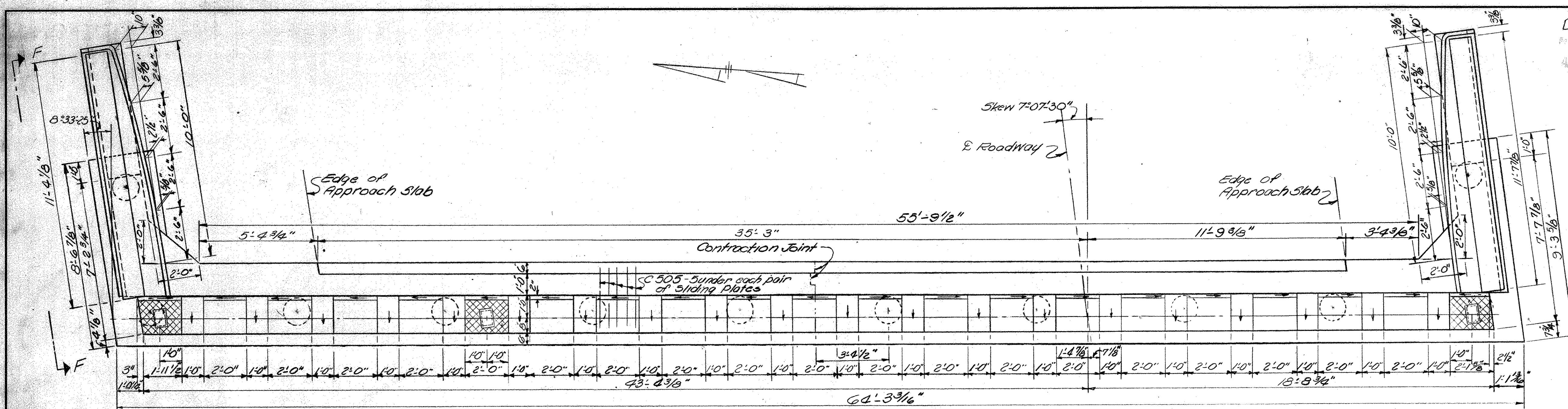


VIEW D-D

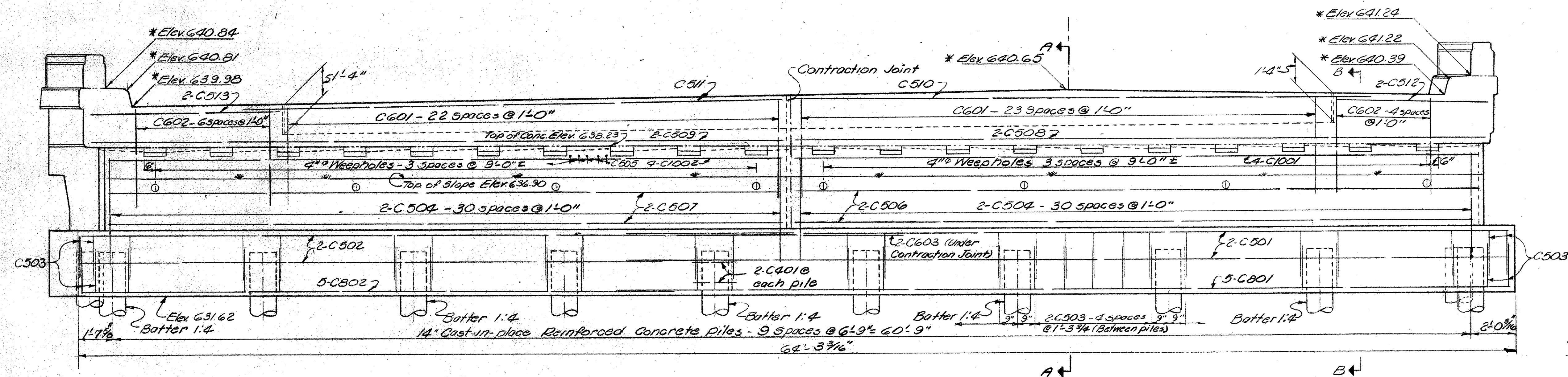
NOTE:
All dimensions, details and reinforcing steel not shown are identical to Rear Abutment Right Bridge.

ELMER S. BARRETT ASSOCIATES Consulting Engineers 245-249 S. Paint Street Chillicothe, Ohio							
FORWARD ABUTMENT DETAILS RIGHT BRIDGE							
BRIDGE NO. ROS-35-2086 R. & L. U.S.R. 35 OVER EXISTING U.S.R. 23 ROSS COUNTY U.S.R. 35 STA. 1101+47.67 TO STA. 1103+22.71							
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED	
E.E.P.	P.J.M.		D.M.	W.L.	11/26/62		

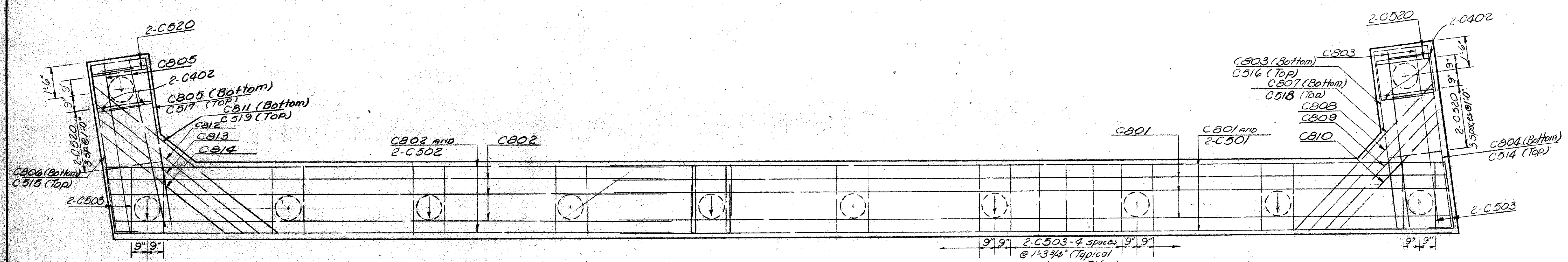
ROSS COUNTY
R05-35-19.93



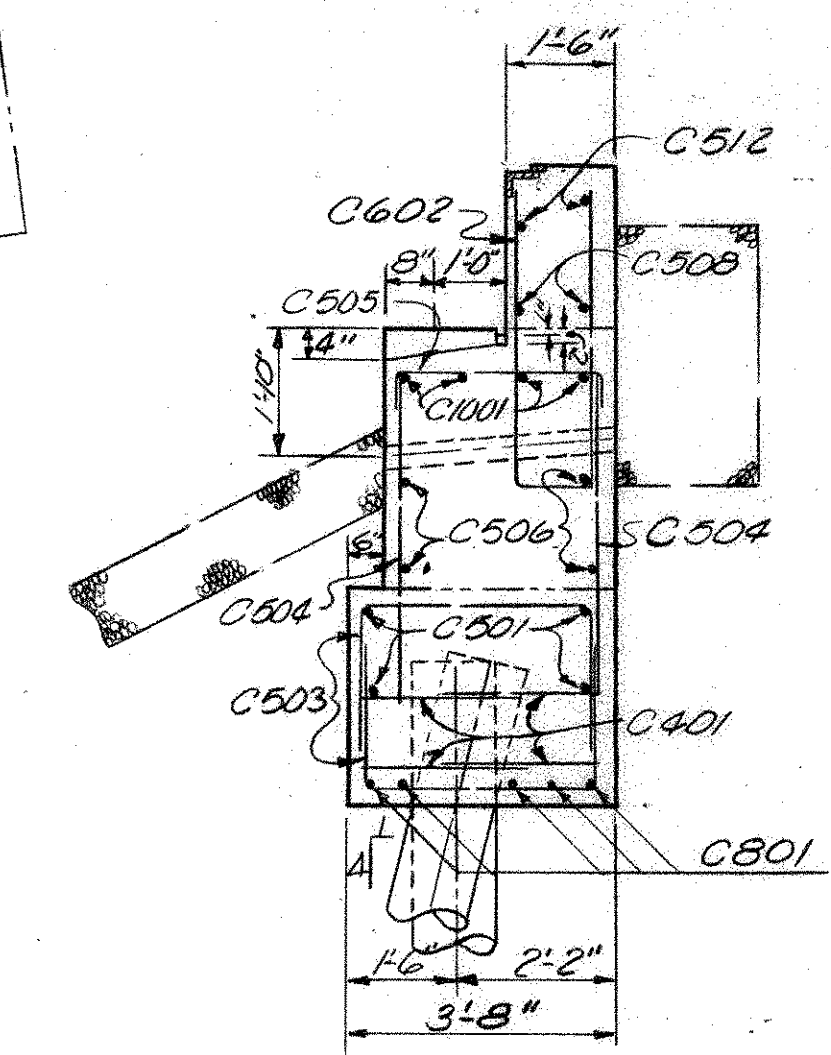
PLAN-FORWARD ABUTMENT-LEFT BRIDGE



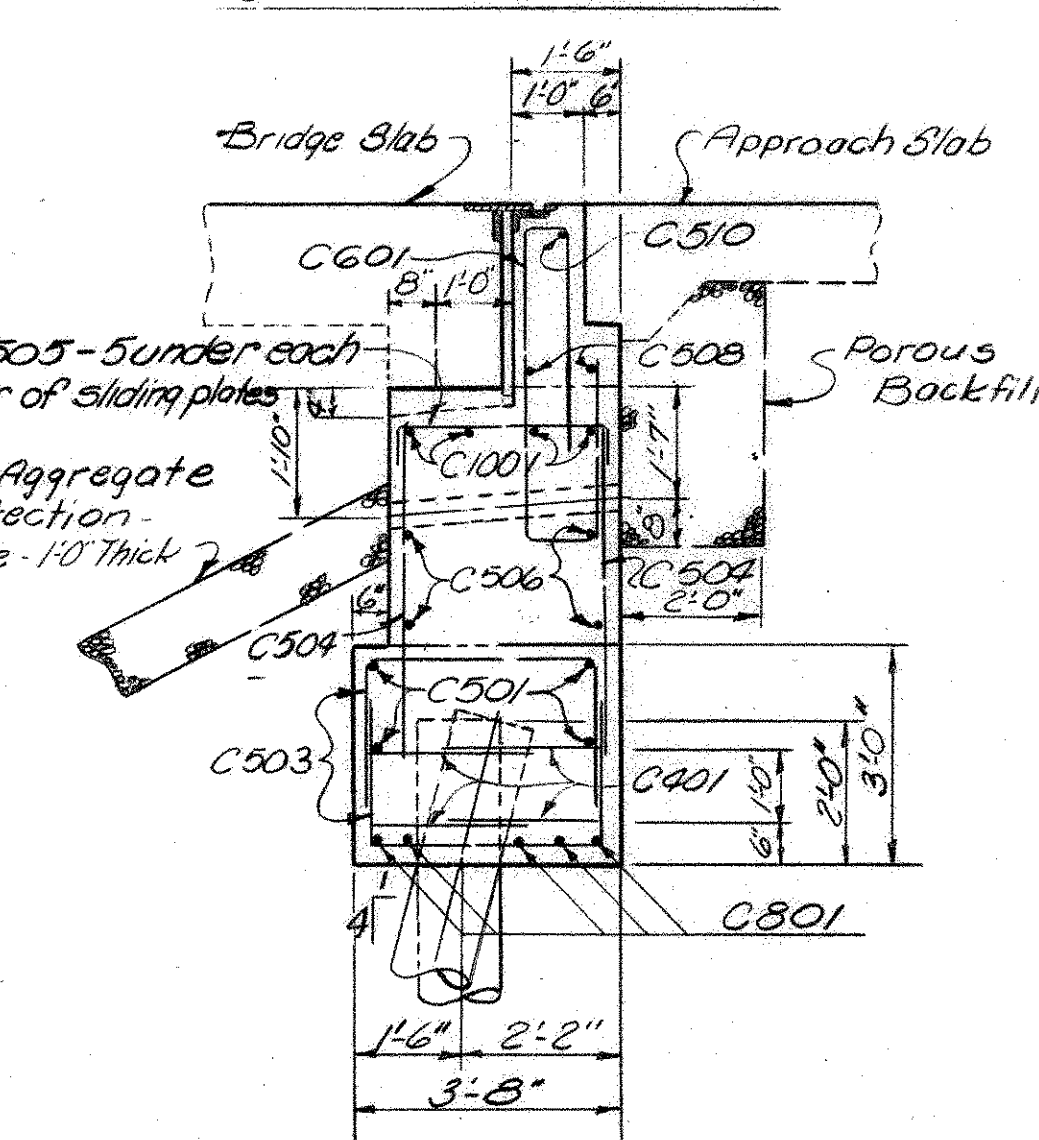
ELEVATION-FORWARD ABUTMENT-LEFT BRIDGE



FOOTING PLAN



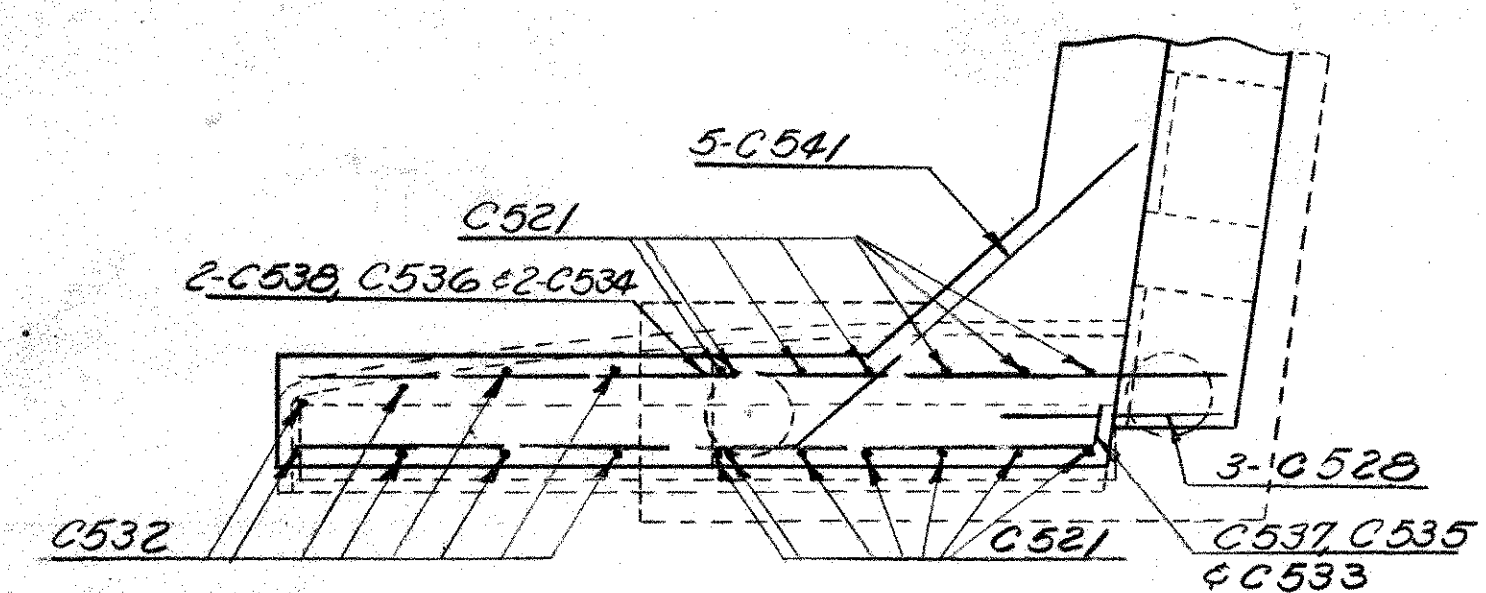
SECTION-B-B



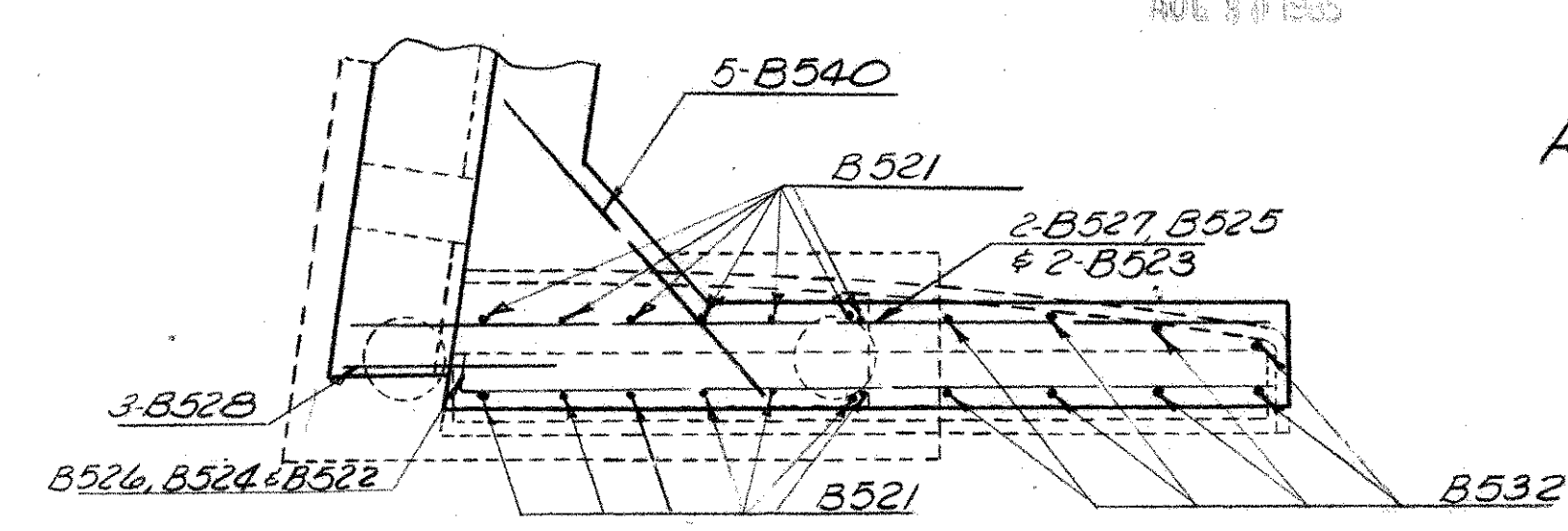
SECTION A-A

ELMER S. BARRETT ASSOCIATES Consulting Engineers 245-249 S. Paint Street Chillicothe, Ohio					
FORWARD ABUTMENT DETAILS LEFT BRIDGE					
BRIDGE NO R05-35-2086 R&L U.S.R.35 OVER EXISTING U.S.R.23 ROSS COUNTY STA 1101+47.67 TO STA 1103+22.71					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
E.E.R.	R.J.M.		D.M.	W.K.	11/24/62

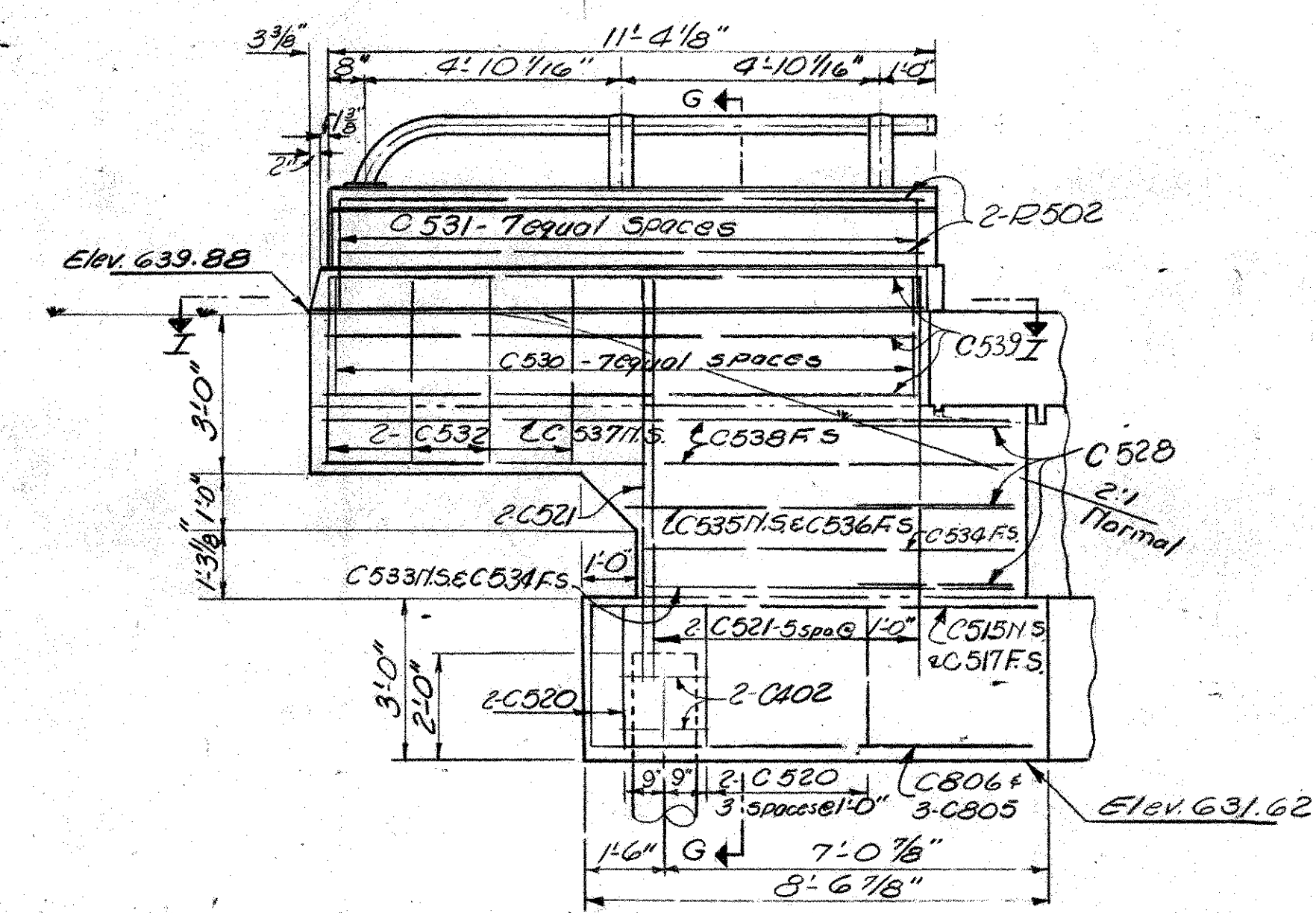
ROSS COUNTY
ROS-35-19.93



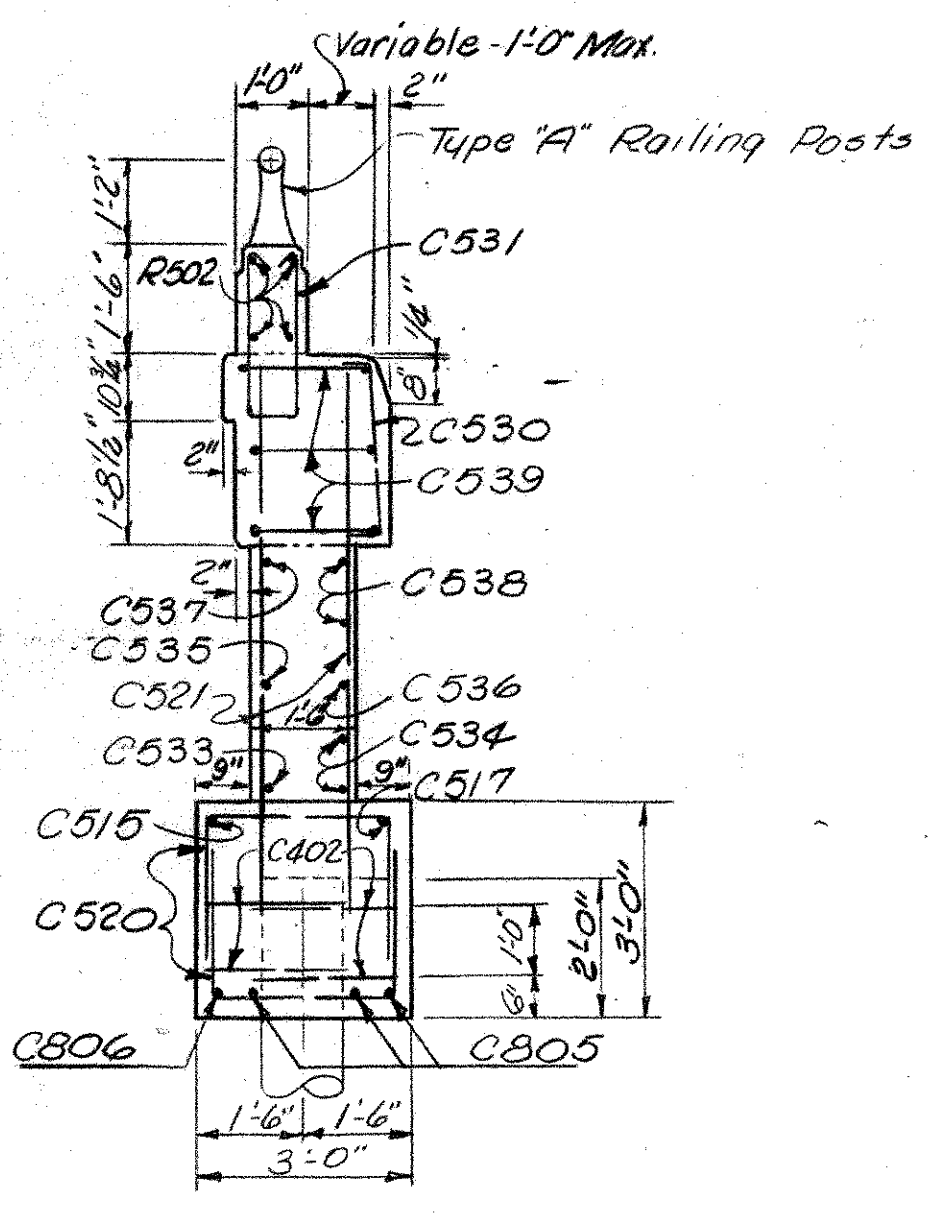
SECTION I-I



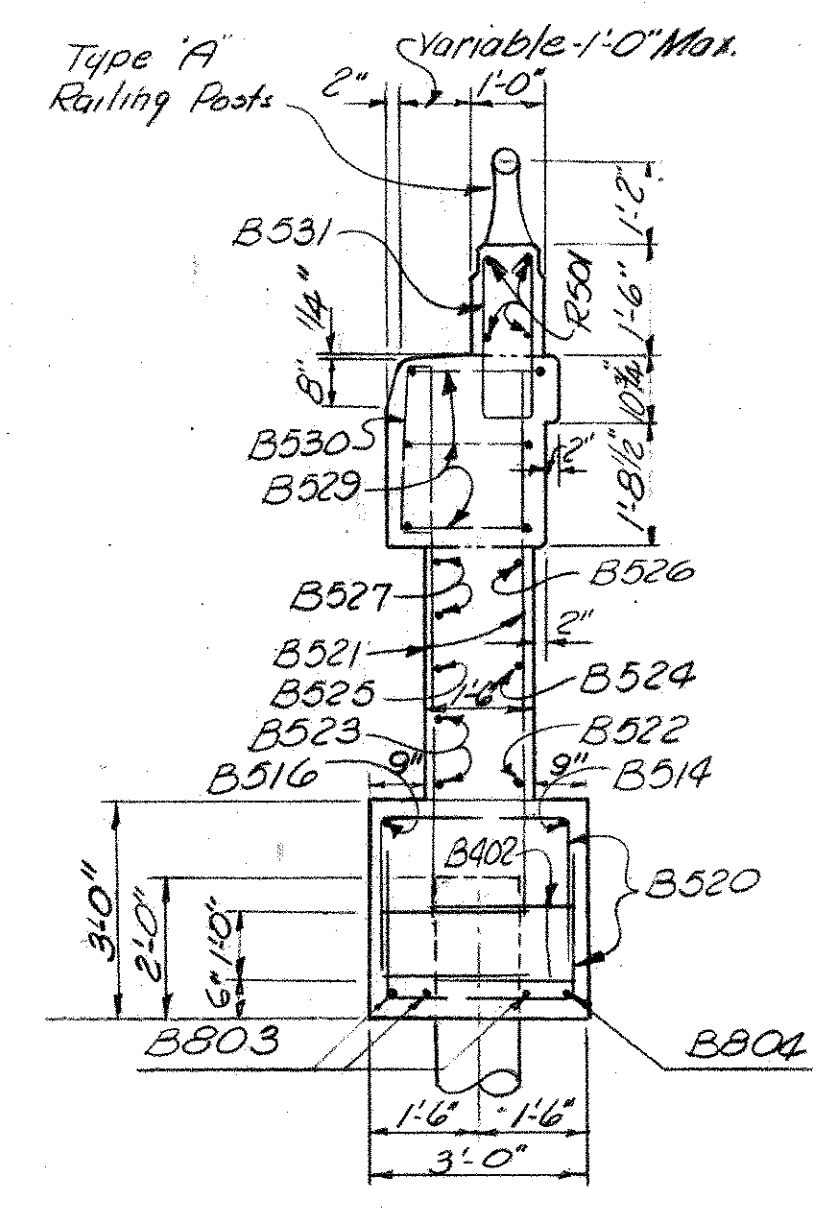
SECTION J-J



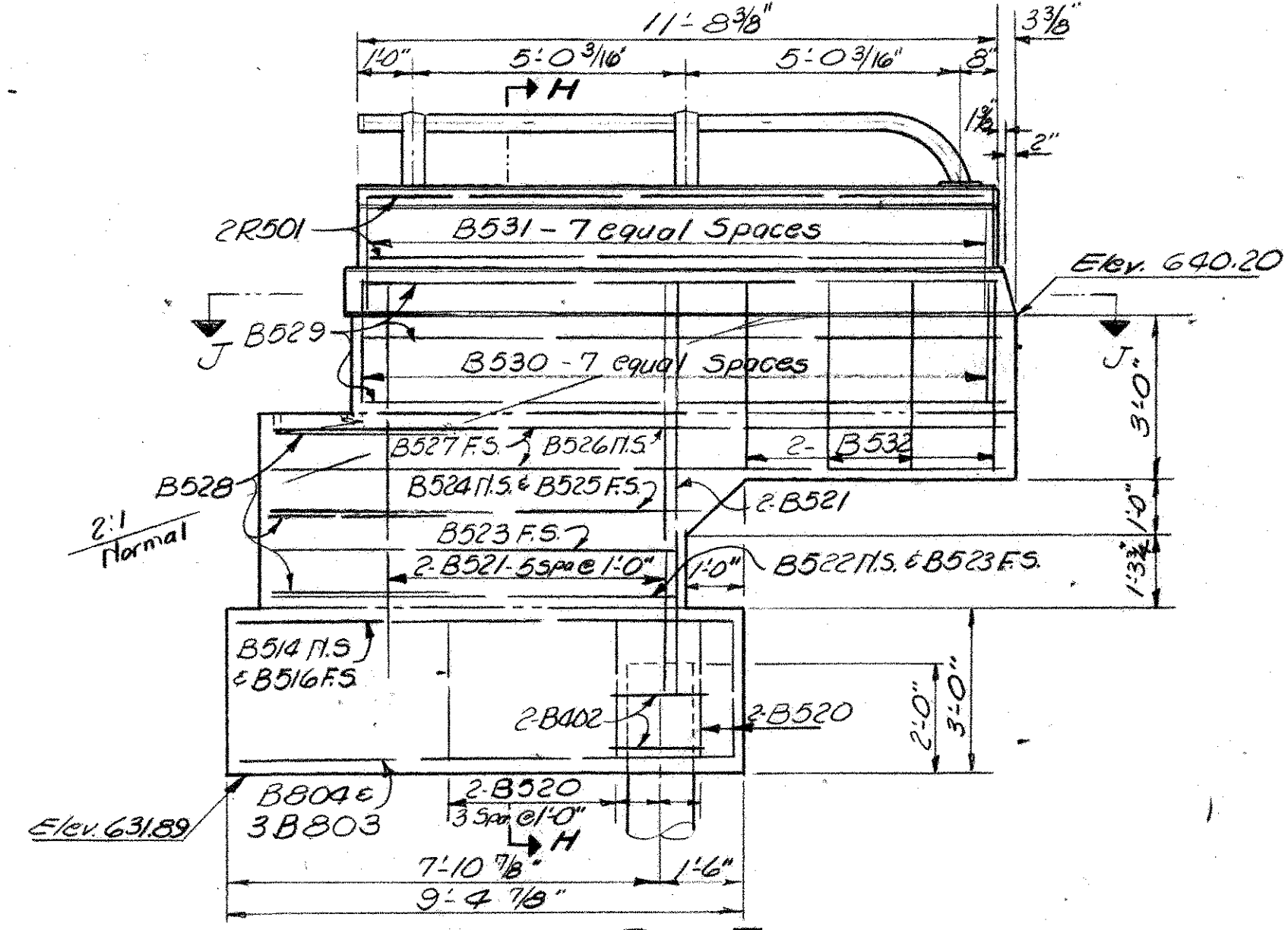
VIEW F-F



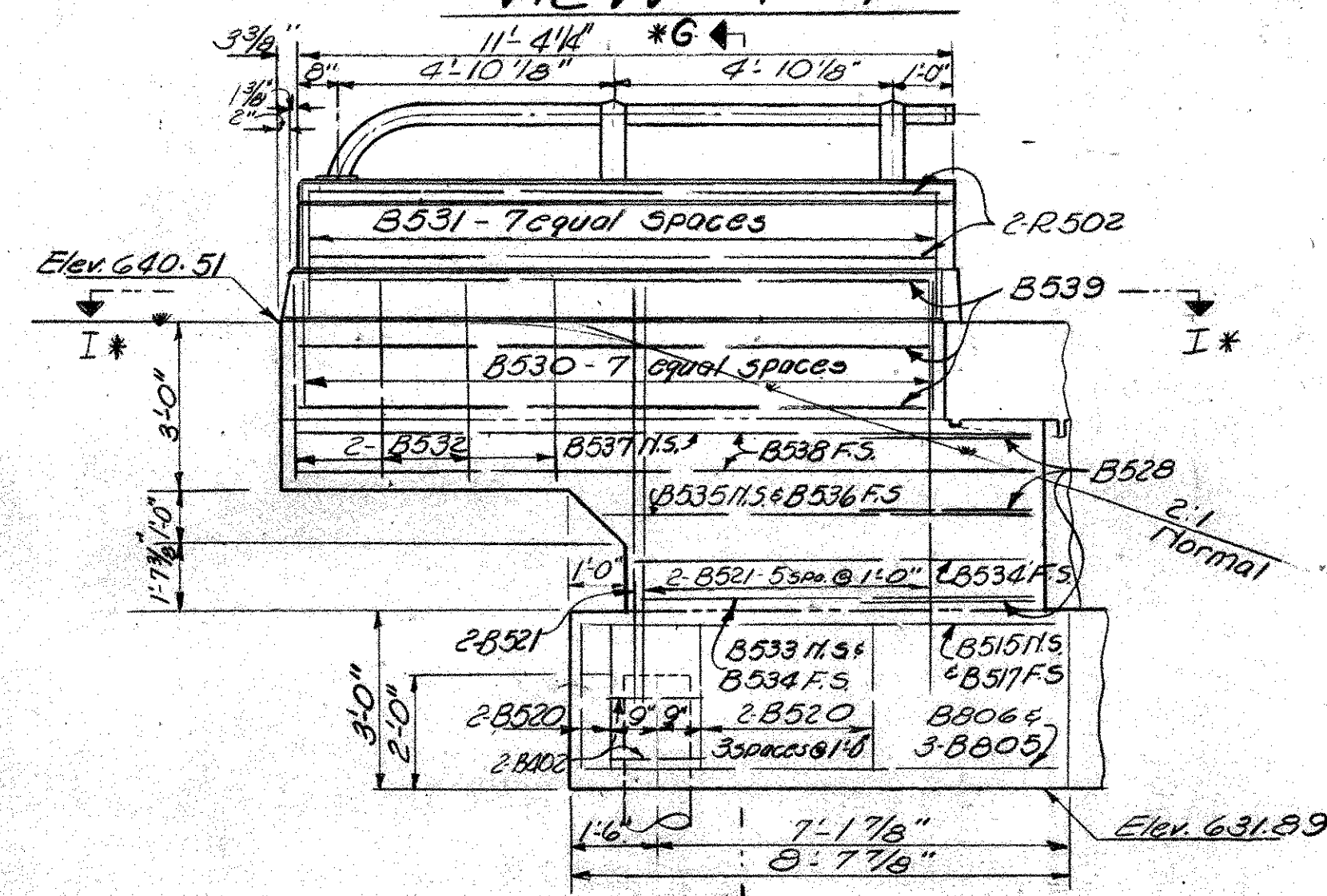
SECTION G-G



SECTION H-H



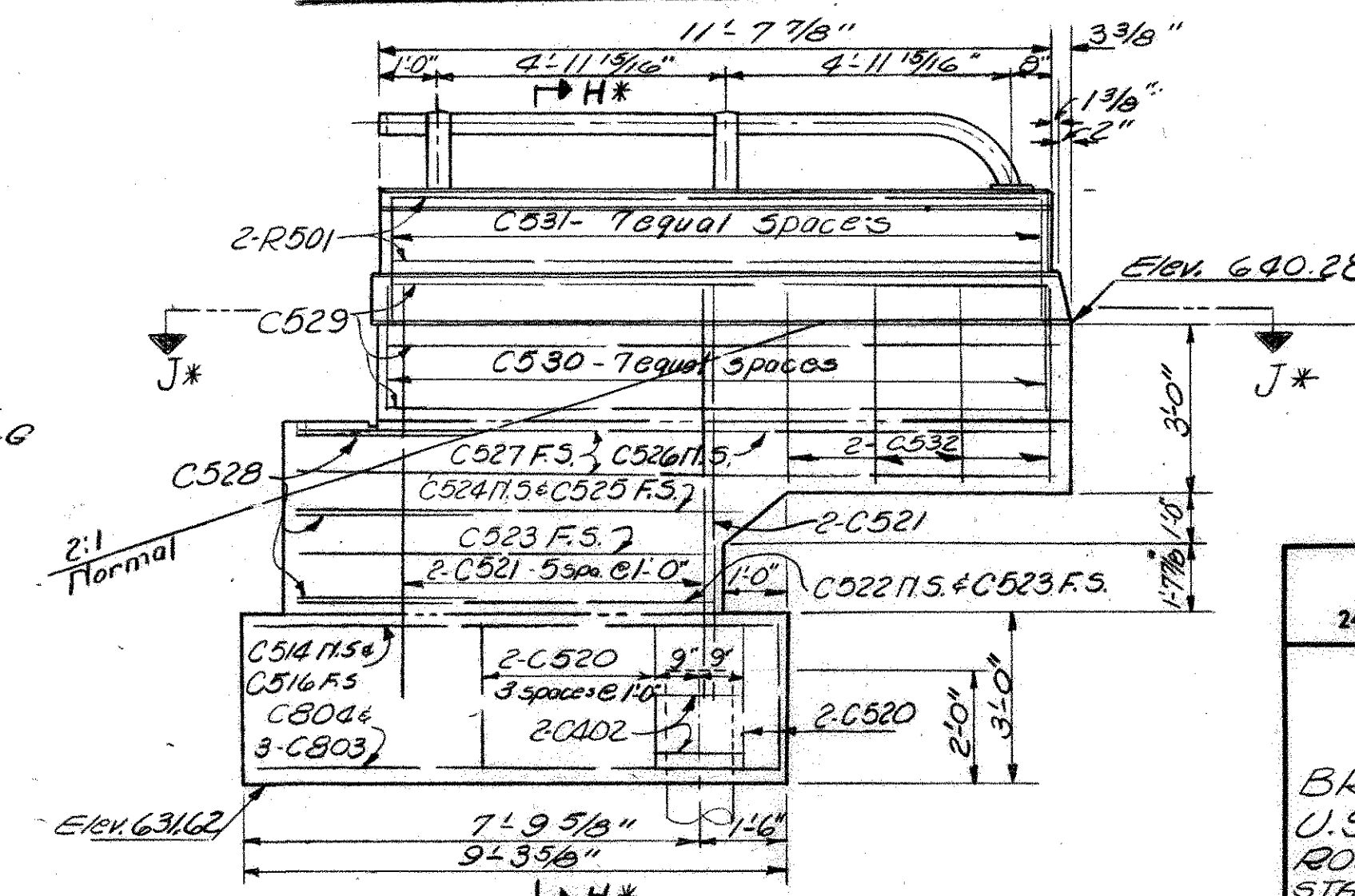
VIEW E-E



VIEW C-C

LEGEND
F.S. indicates Far Side
N.S. indicates Near Side

*NOTE:
For placement of "C" bars, "View D-D" and "B" bars, "View C-C," see Sections J-J, H-H, I-I and G-G of this sheet. For example "B" bars as shown in Sections J-J and H-H are "C" bars in Sections J-J and H-H for View D-D. "C" bars in Sections I-I and G-G are "B" bars in Sections I-I and G-G for View C-C.



VIEW D-D

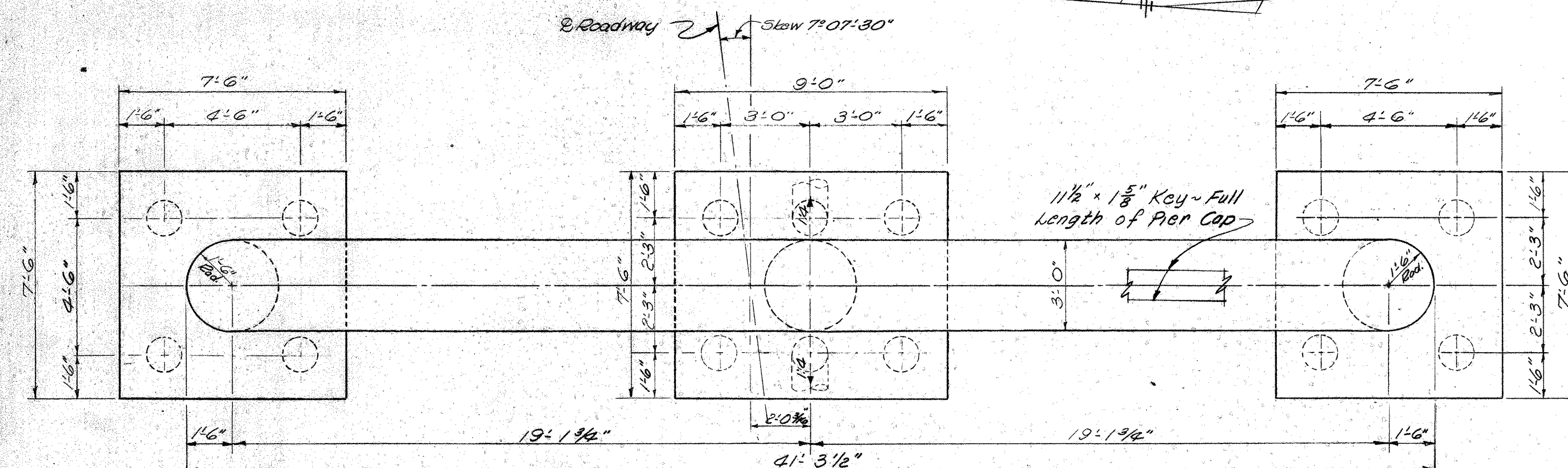
ELMER S. BARRETT ASSOCIATES
Consulting Engineers
245-249 S. Paint Street Chillicothe, Ohio

ABUTMENT DETAILS
LEFT BRIDGE

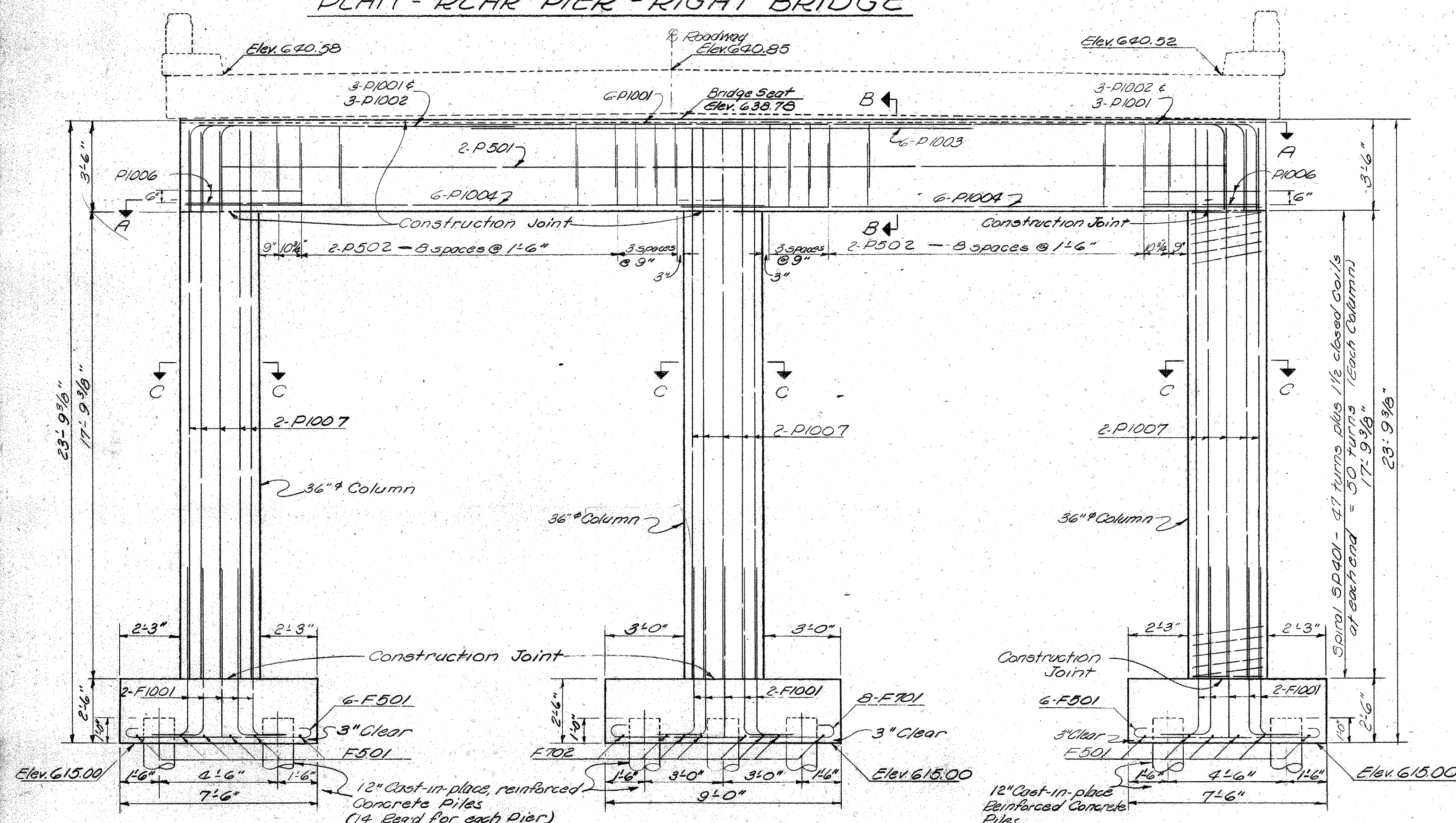
BRIDGE NO ROS-35-2086 R&L
U.S.R. 35 OVER EXISTING U.S.R. 23
ROSS COUNTY U.S.R. 35
STR. 1101+47.67 TO STR. 1103+22.71

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
E.E.R.	R.D.M.		D.M.	J.K.	11/26/62	

ROSS COUNTY
ROS-35-19.93



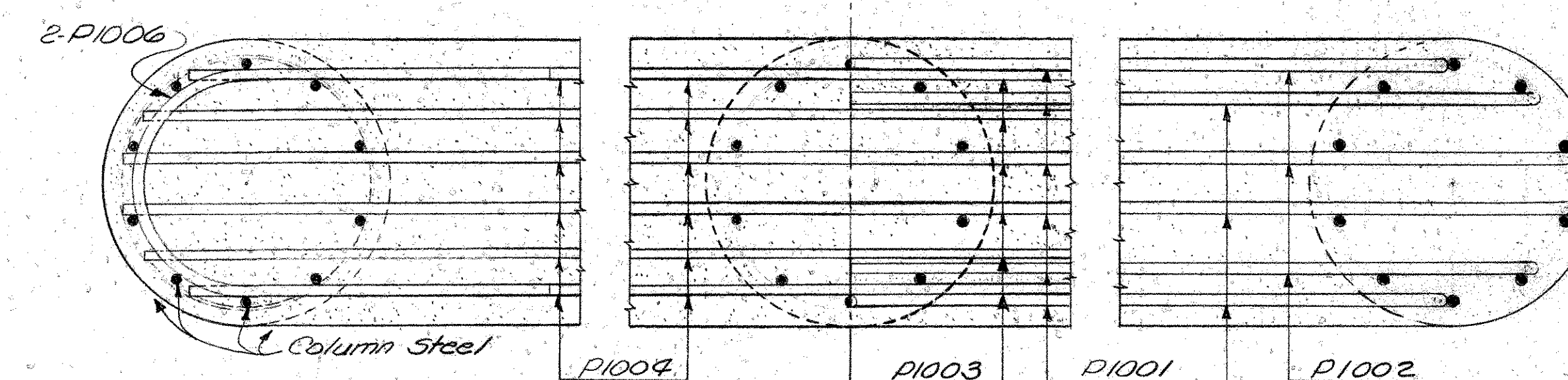
PLAN - REAR PIER - RIGHT BRIDGE



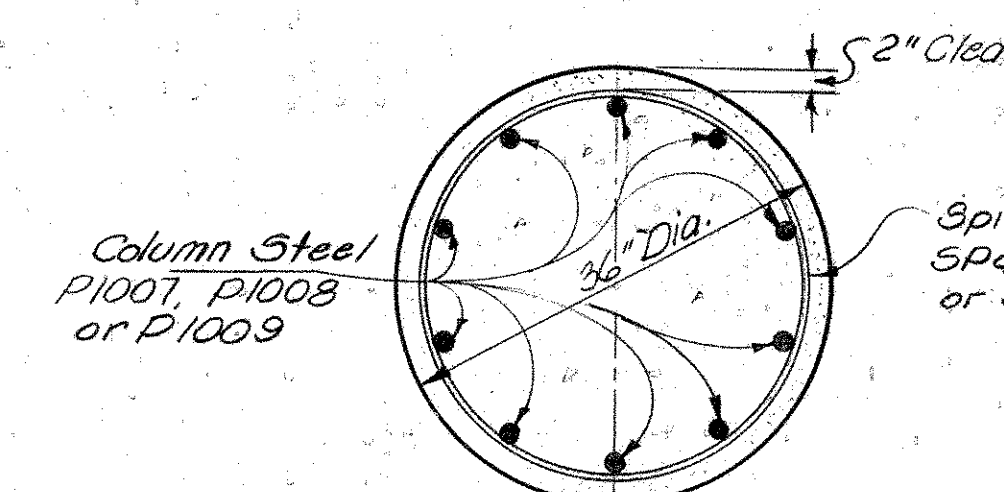
ELEVATION - REAR PIER - RIGHT BRIDGE



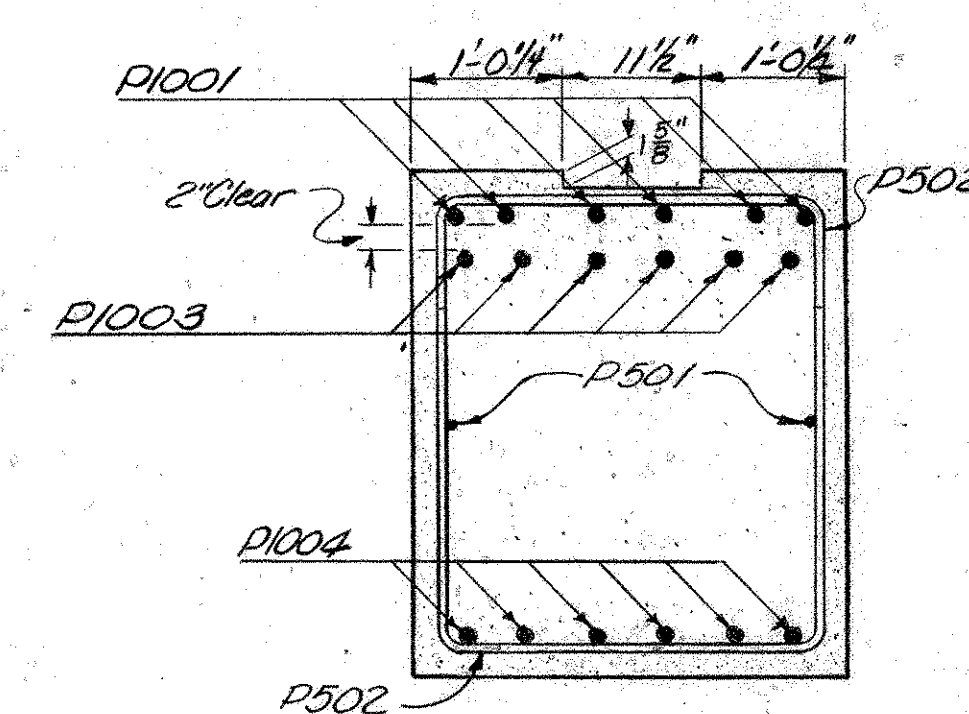
PLACEMENT DIAGRAM FOR P1001 AND P1002 IN TOP OF CAP



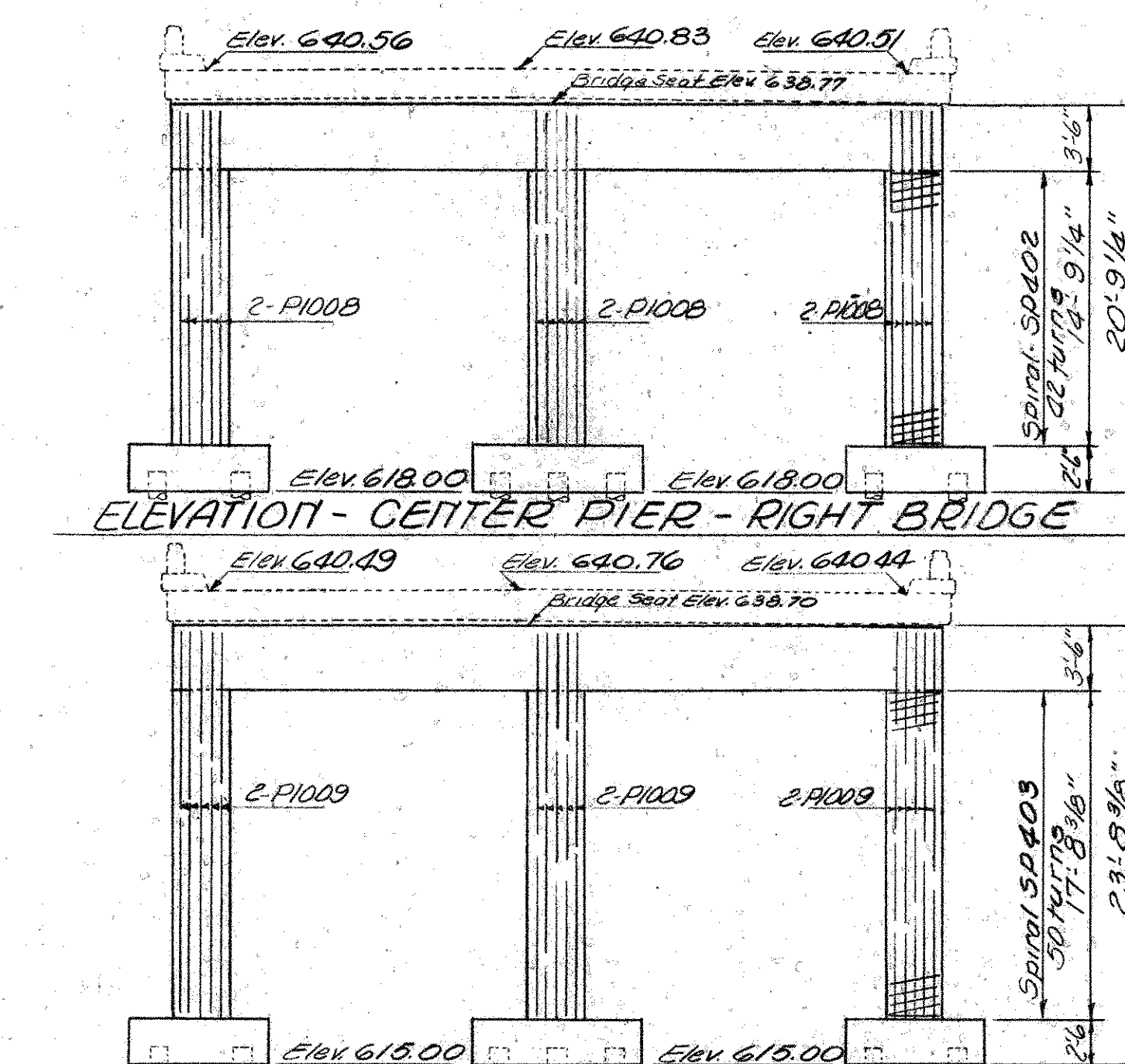
SECTION A-A



SECTION C-C



SECTION B-B



ELEVATION - FORWARD PIER - RIGHT BRIDGE

~ NOTES ~

CONCRETE shall be Class "C" in Caps and Columns and Class "E" in Footings.
ALL DIMENSIONS, Details and Reinforcing Steel not shown are identical to Rear Pier Right Bridge.
REINFORCING STEEL in Cap (P1001, P1002 & P1004) must be lapped vertically so that it will clear Column Steel.
PILES shall be 12" Cast-in-Place Reinforced Concrete Piles. The design load is 40 tons per pile.

ELMER S. BARRETT ASSOCIATES Consulting Engineers 245-249 S. Paint Street Chillicothe, Ohio					
PIER DETAILS - RIGHT BRIDGE BRIDGE NO. ROS-35-2086 L&R U.S.R. 35 OVER EXISTING U.S.R. 23 ROSS COUNTY U.S.R. 23 STA. 1101+47.67 TO STA. 1103+22.71					
SCALE	DATE	DESIGNED	DRAWN	TRACED	CHECKED
E.E.R.	P.U.M.		D.M.	J.W.	11/24/62

ROSS COUNTY
R05-35-19.93

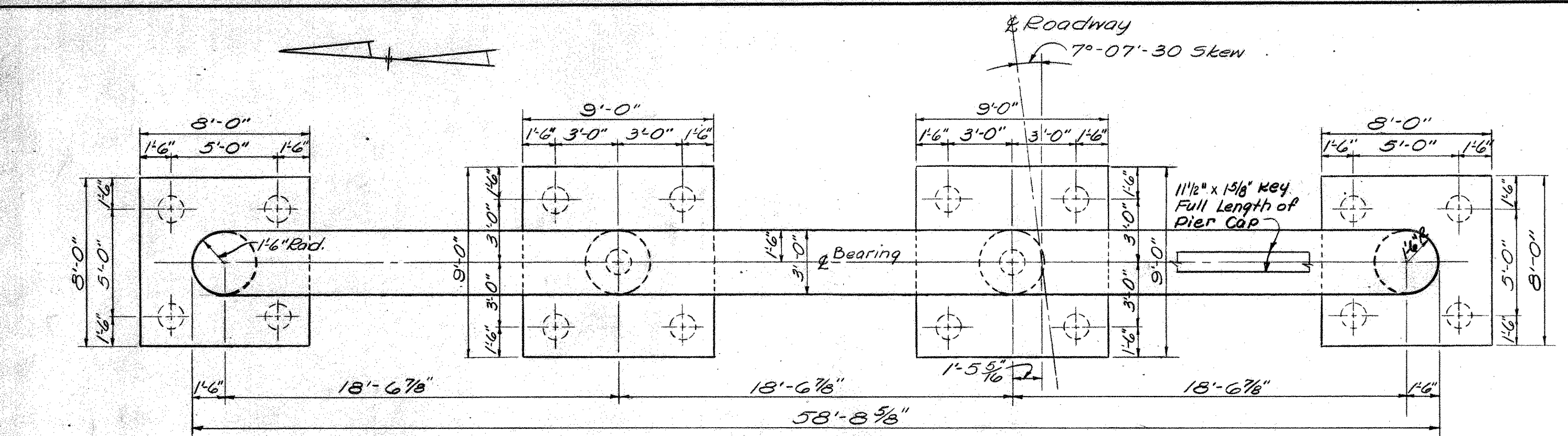
~NOTES~

CONCRETE shall be Class "C" in Caps and Columns and Class "E" in Footings.

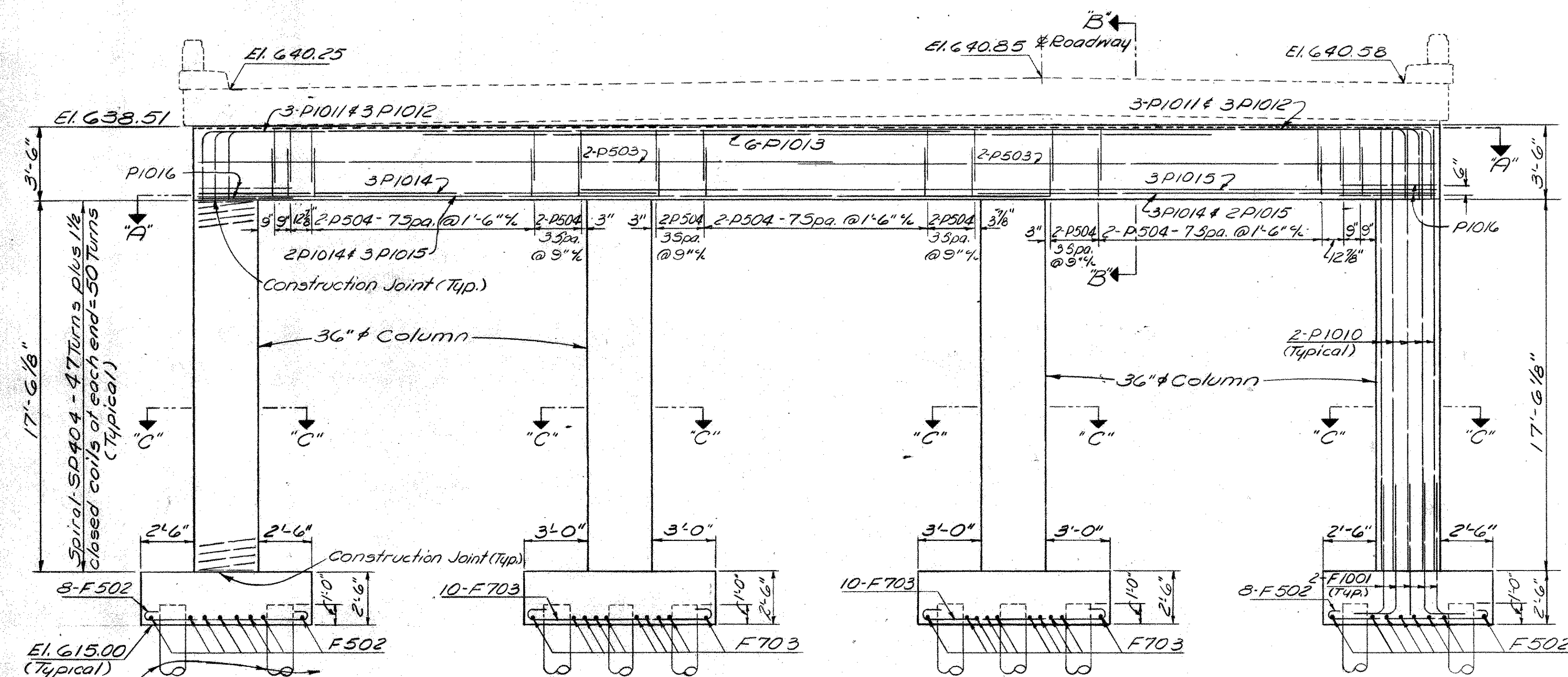
PILES shall be 12" Cast-in-Place Reinforced Concrete Piles.

DESIGN LOAD is 40 tons per pile.

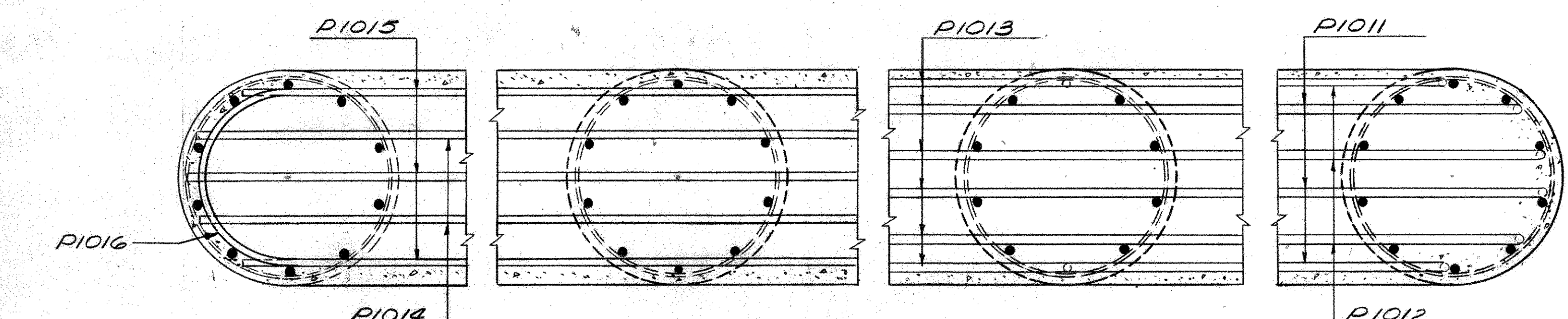
REINFORCING Steel in Cap (P1011, P1012, and P1013) must be lapped vertically so that it will clear Column Steel.



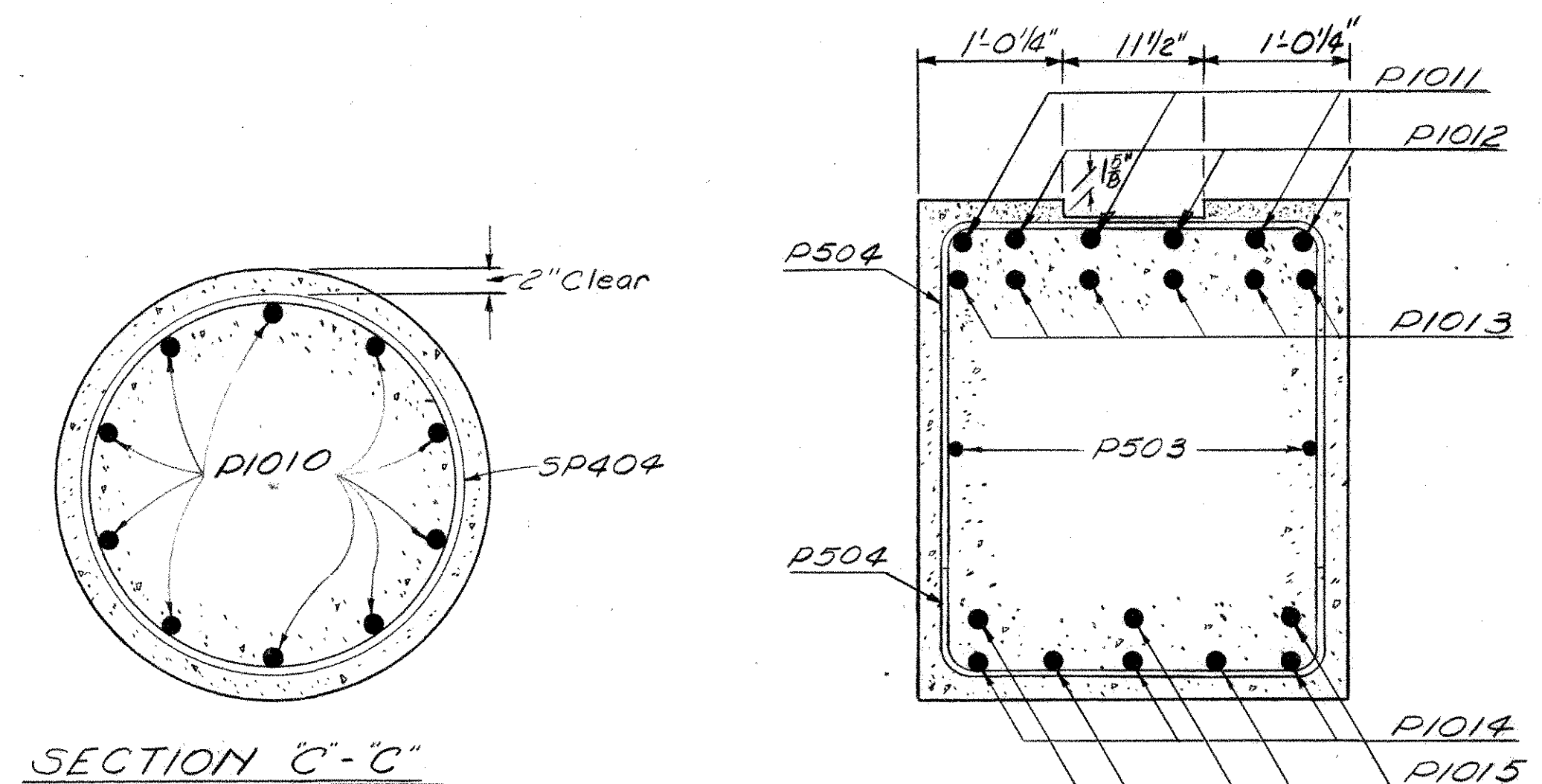
PIER PLAN
REAR PIER ~ LEFT BRIDGE



PIER ELEVATION
REAR PIER ~ LEFT BRIDGE

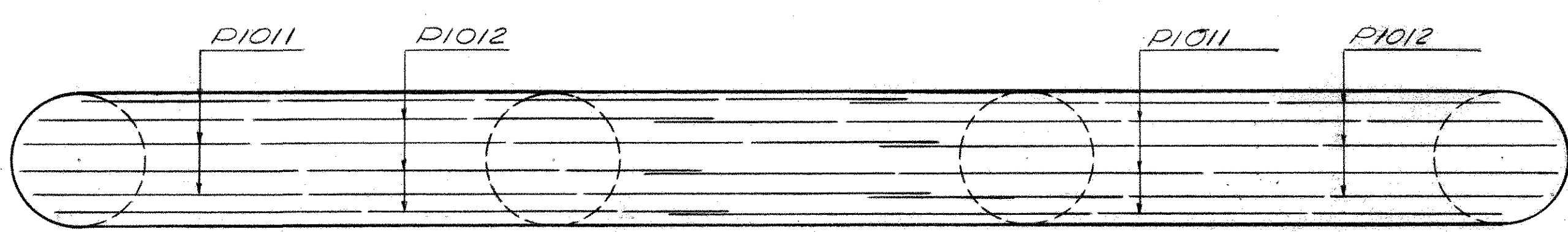


SECTION "A"-A"

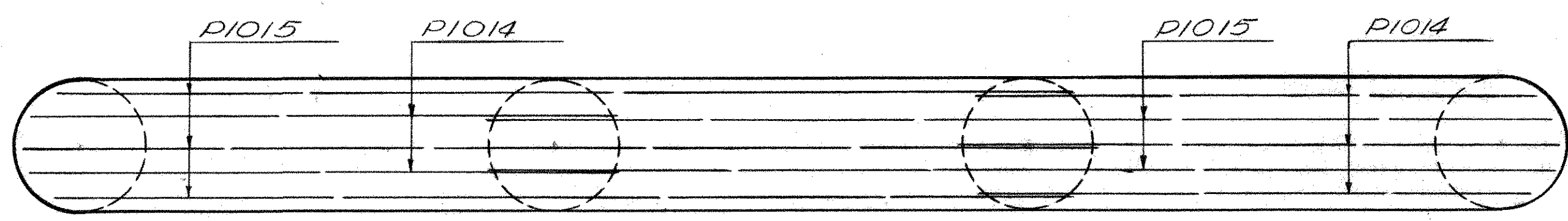


SECTION "C"-C"

SECTION "B"-B"



PLACEMENT DIAGRAM FOR P1011 AND P1012
IN TOP OF PIER CAP



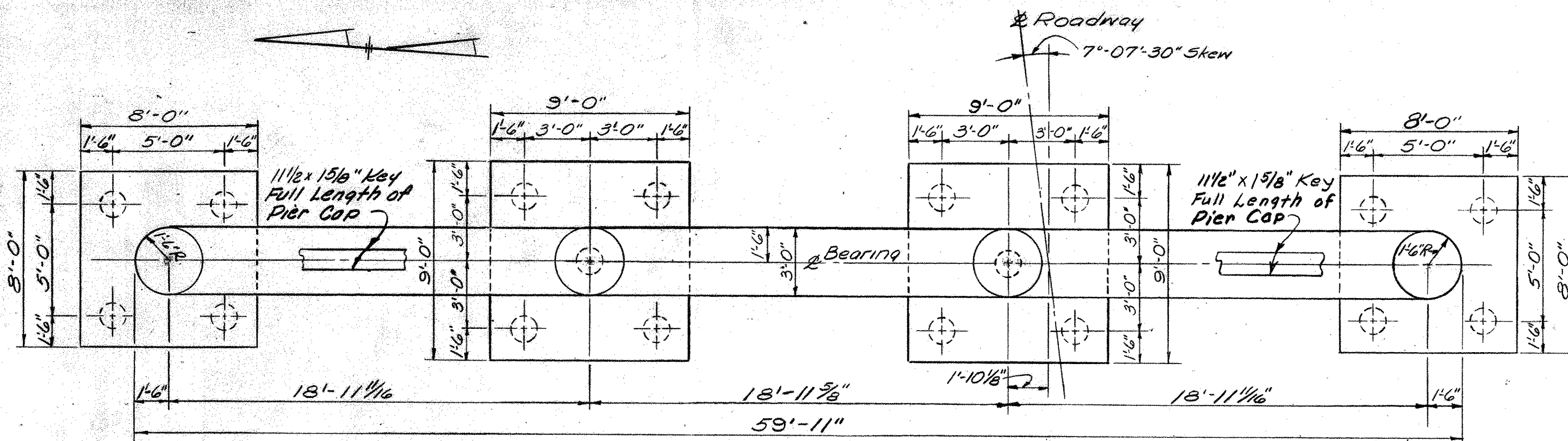
PLACEMENT DIAGRAM FOR P1014 AND P1015
IN BOTTOM OF PIER CAP

ELMER S. BARRETT ASSOCIATES Consulting Engineers 245-249 S. Paint Street Chillicothe, Ohio					
PIER DETAILS-LEFT BRIDGE					
BRIDGE NO. R05-35-2086 L&R					
U.S.R. 35 OVER EXISTING U.S.R. 23					
ROSS COUNTY U.S.R. 23					
STA. 1101+47.67 TO STA. 1103+22.71					
SCALE	DATE				
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
EER	WOU		D.M.	NK	11/24/62

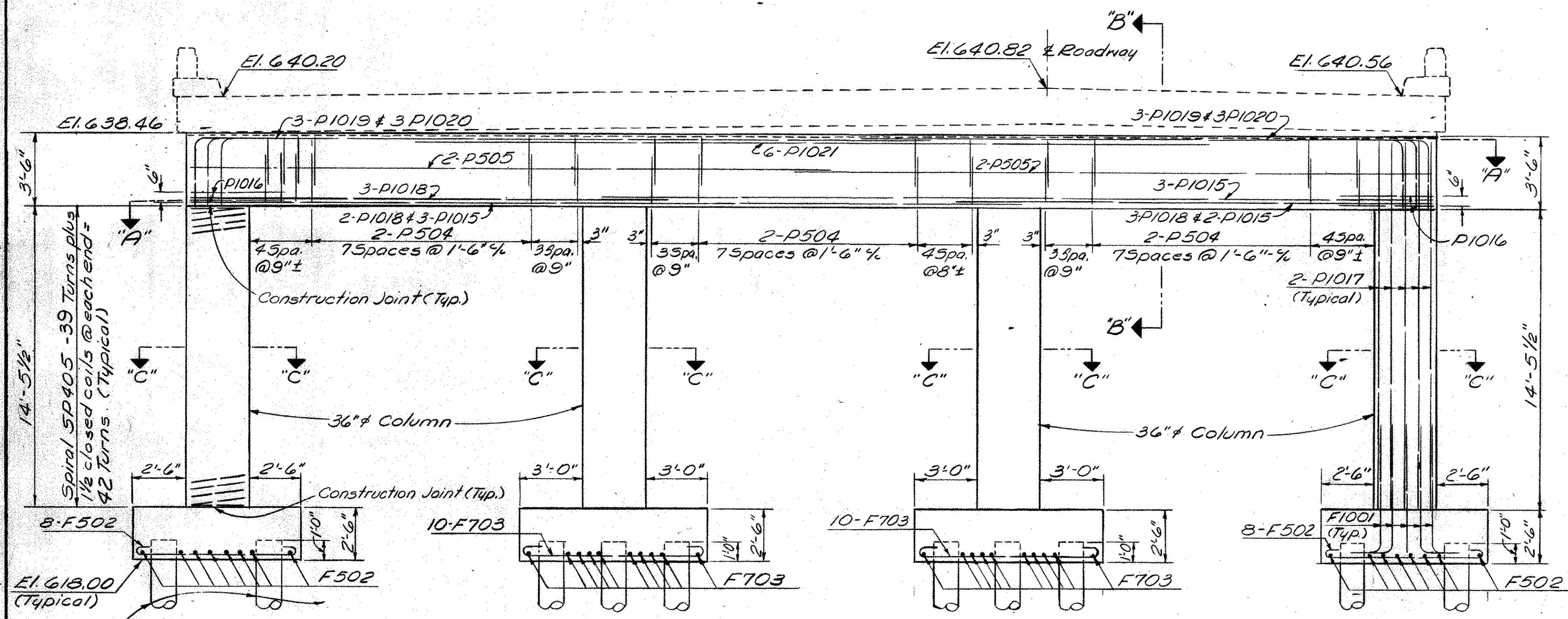
ROSS COUNTY
R05-35-19.93

~NOTES~

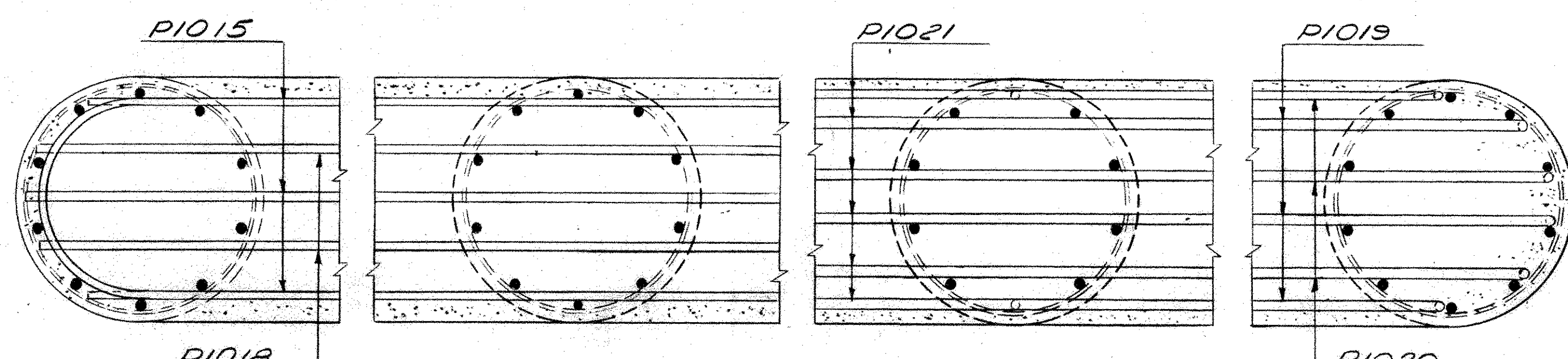
CONCRETE shall be Class "C" in Caps and Columns and Class "E" in Footings.
PILES shall be 12" Cast-in-Place Reinforced Concrete Piles.
DESIGN LOAD is 40 tons per pile.
REINFORCING Steel in Cap (P1019, P1020, and P1021) must be lapped vertically so that it will clear Column Steel.



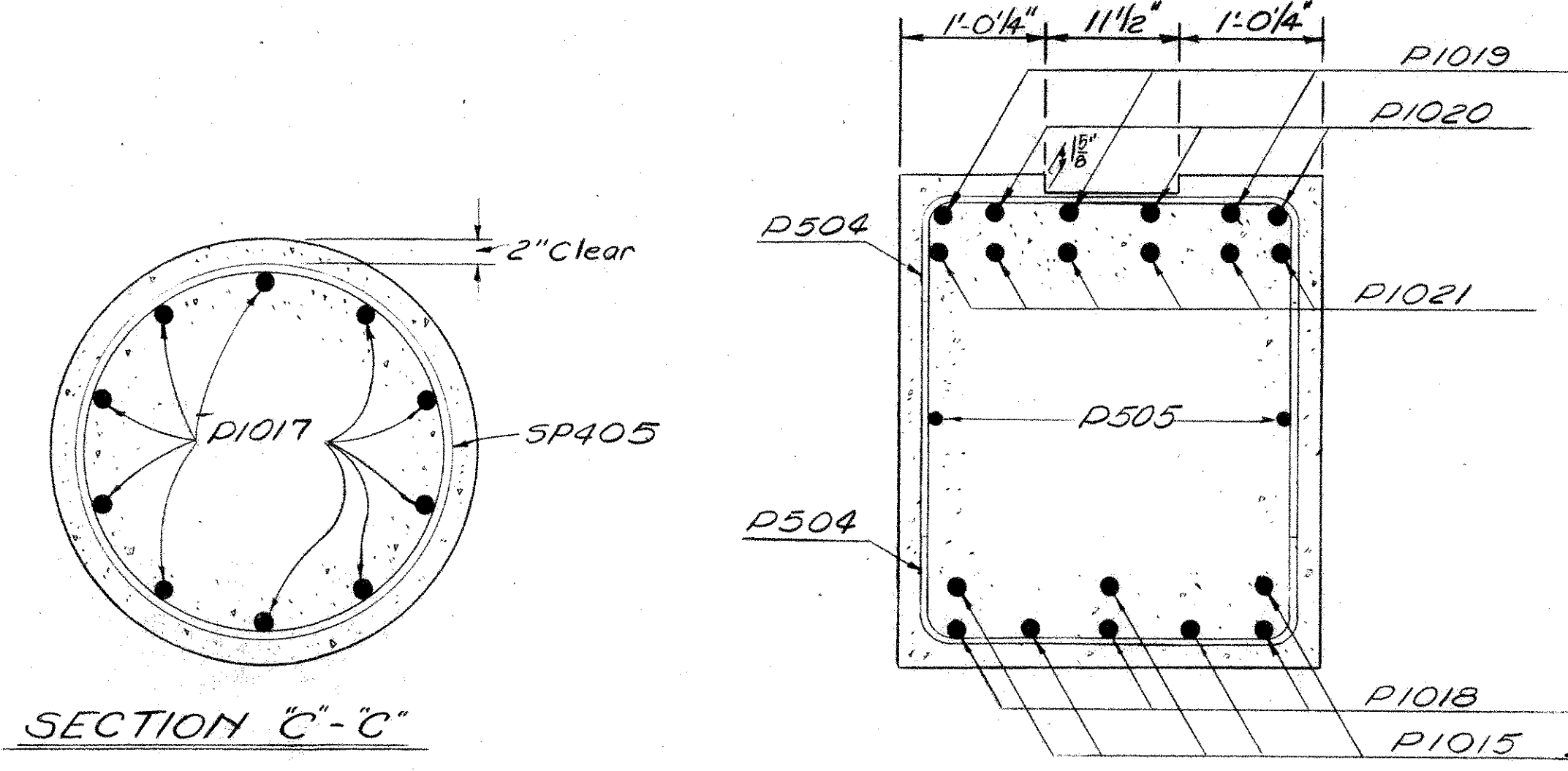
PIER PLAN
CENTER PIER ~ LEFT BRIDGE



PIER ELEVATION
CENTER PIER ~ LEFT BRIDGE

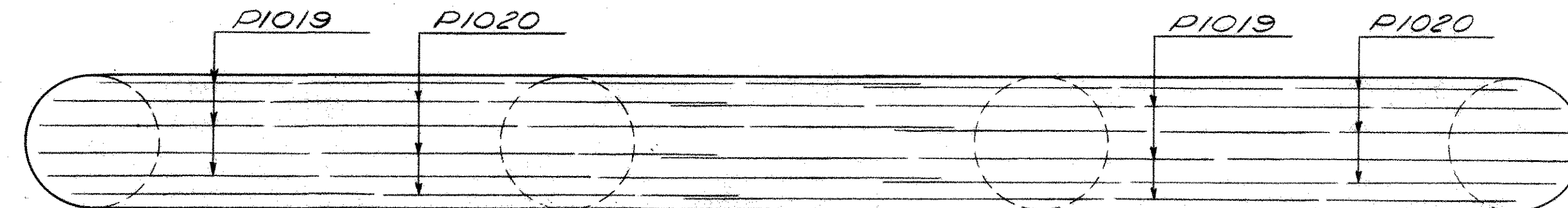


SECTION A-A

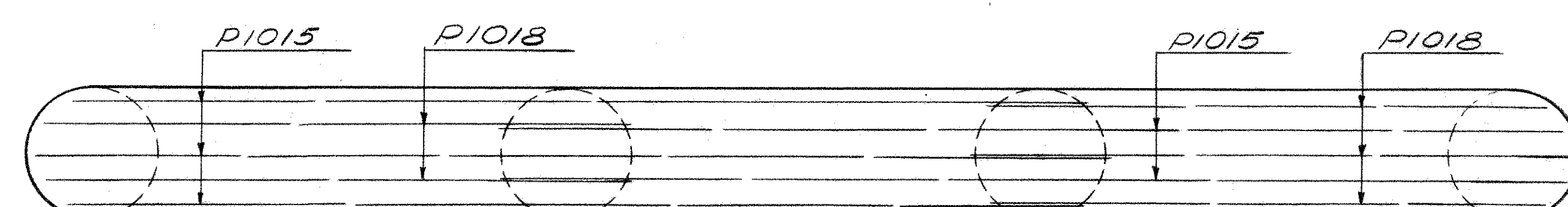


SECTION C-C

SECTION B-B



PLACEMENT DIAGRAM FOR P1019 AND P1020
IN TOP OF PIER CAP



PLACEMENT DIAGRAM FOR P1015 AND P1018
IN BOTTOM OF PIER CAP

ROSS COUNTY
R05-35-19.93

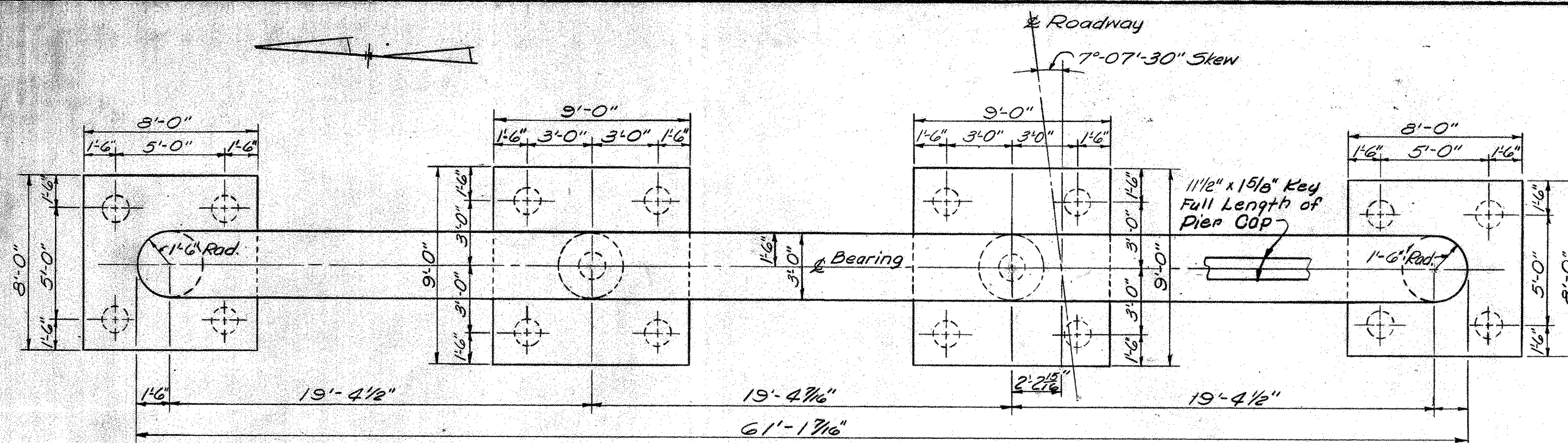
~NOTES~

CONCRETE shall be Class "C" in Caps and Columns and Class "E" in Footings.

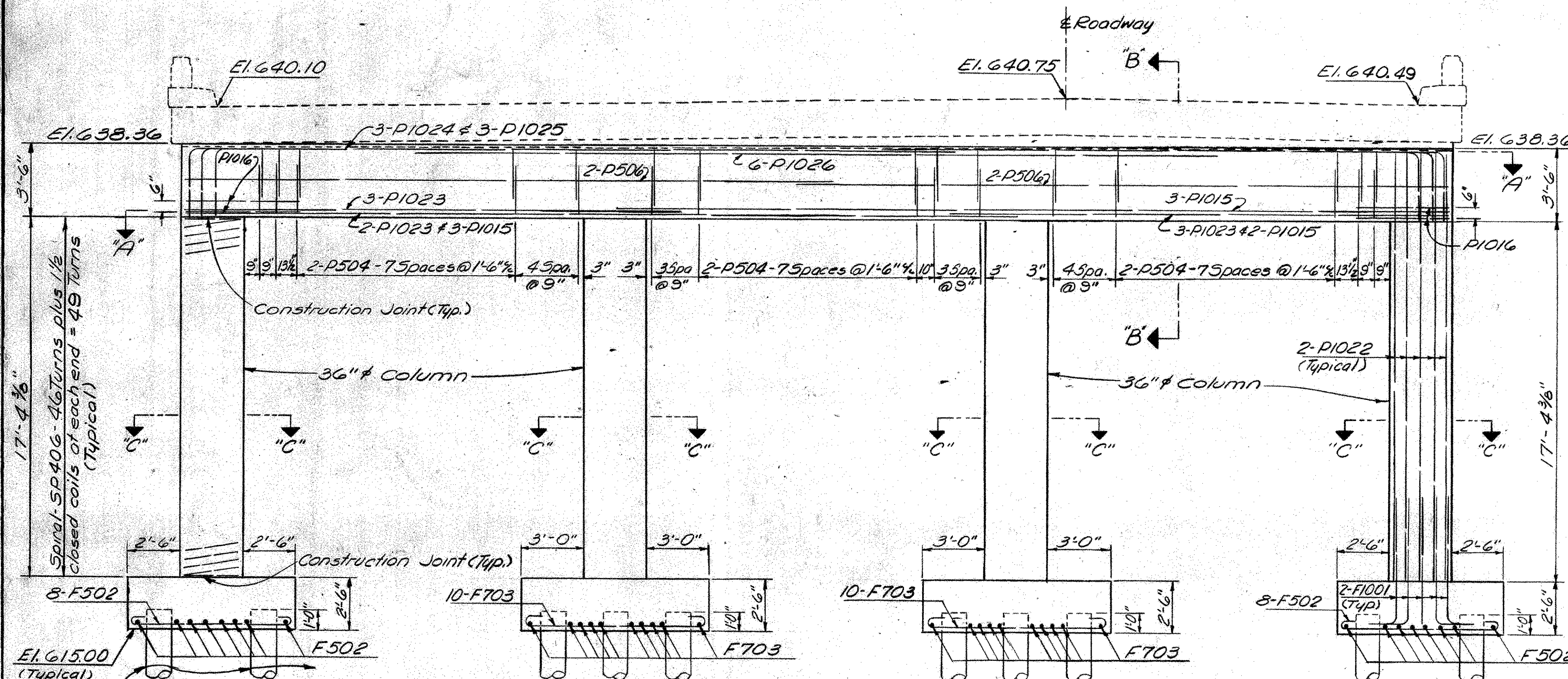
PILES shall be 12" Cast-in-Place Reinforced Concrete Piles.

DESIGN LOAD is 40 tons per pile.

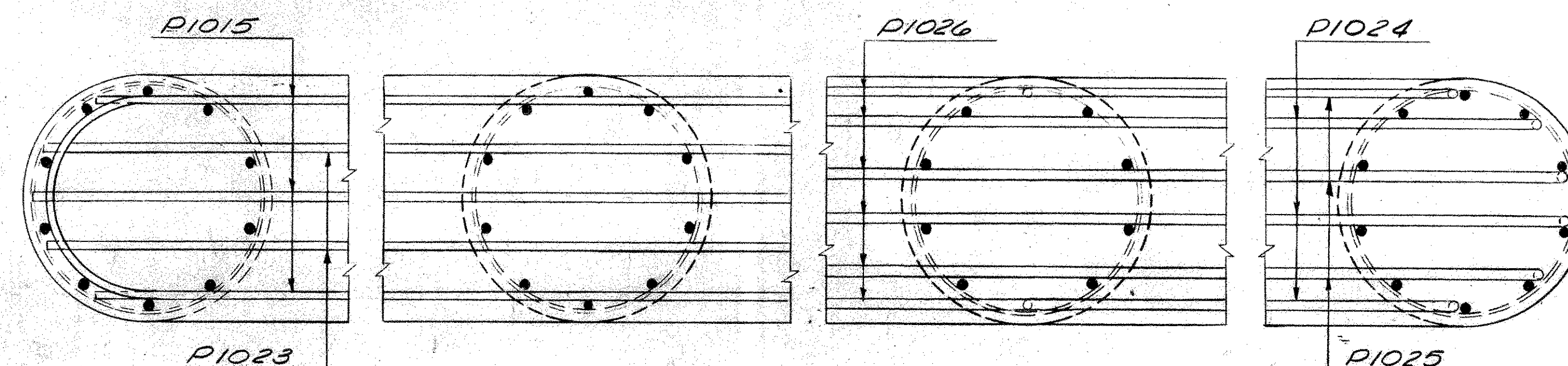
REINFORCING Steel in Cap (P1024, P1025, and P1026) must be lapped vertically so that it will clear Column Steel.



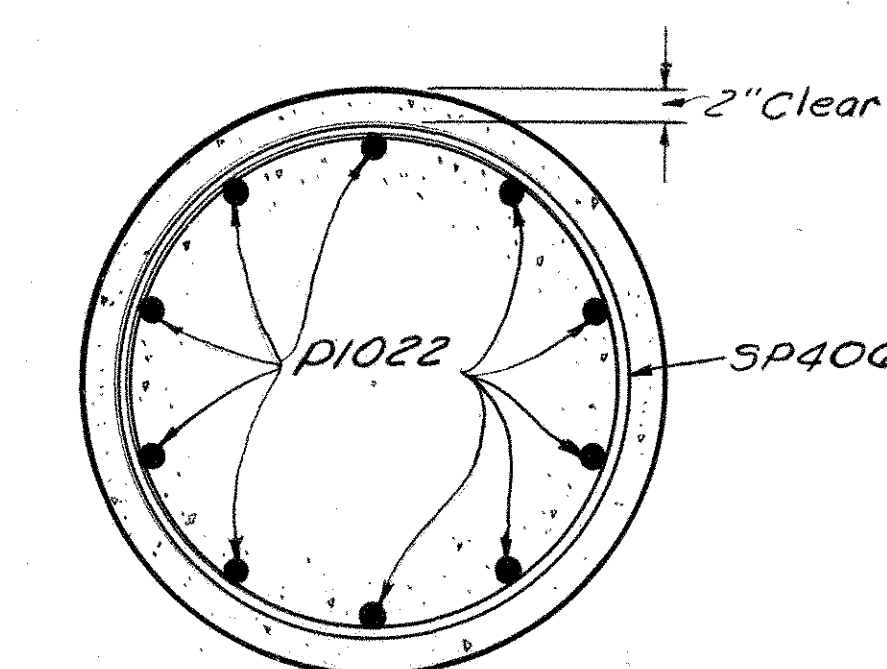
PIER PLAN
FORWARD PIER - LEFT BRIDGE



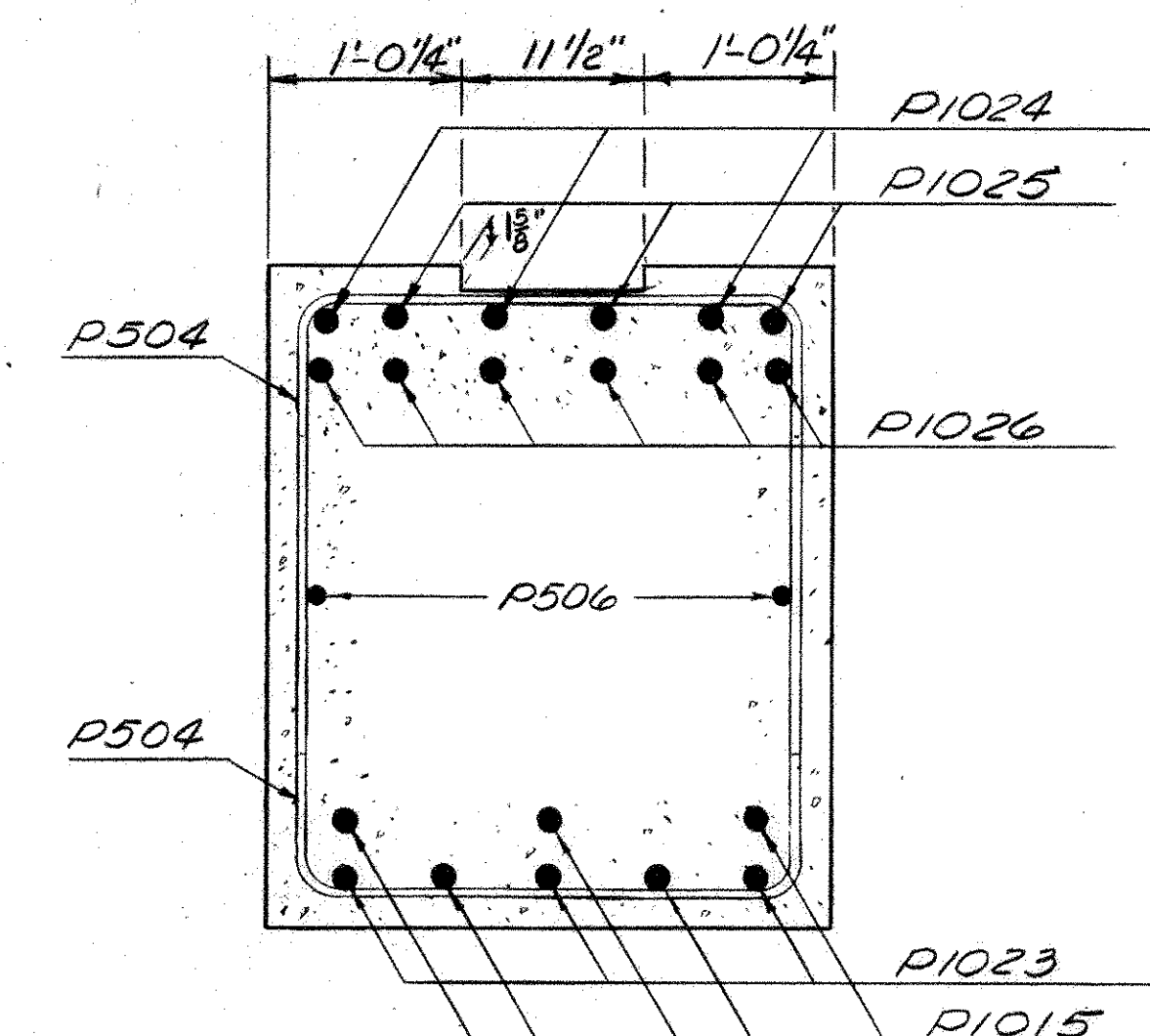
PIER ELEVATION
FORWARD PIER - LEFT BRIDGE



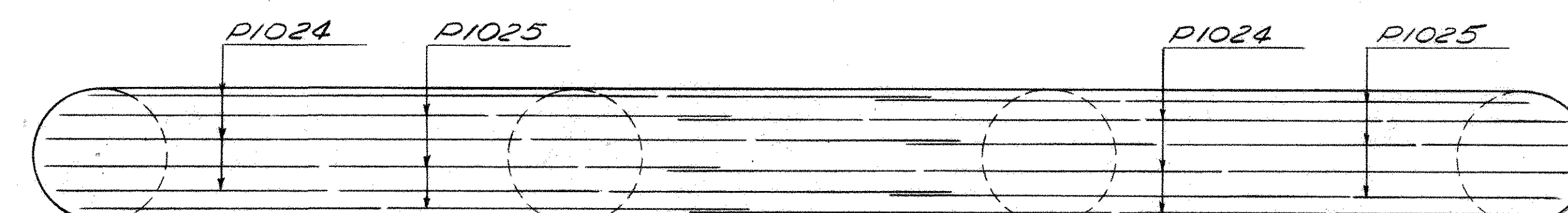
SECTION "A"-A"



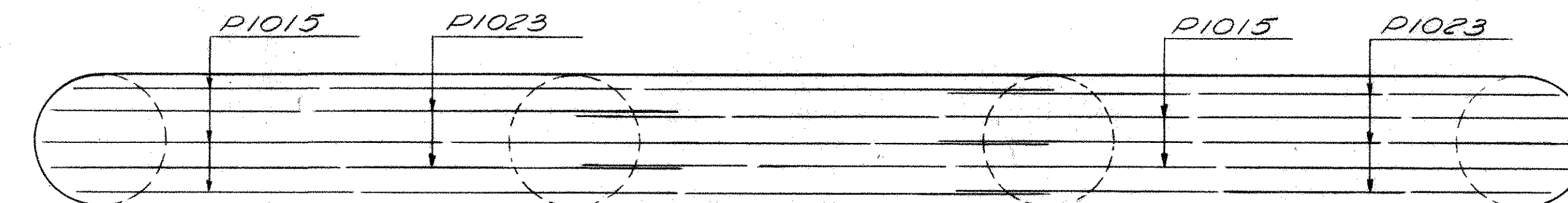
SECTION "C"-C"



SECTION "B"-B"

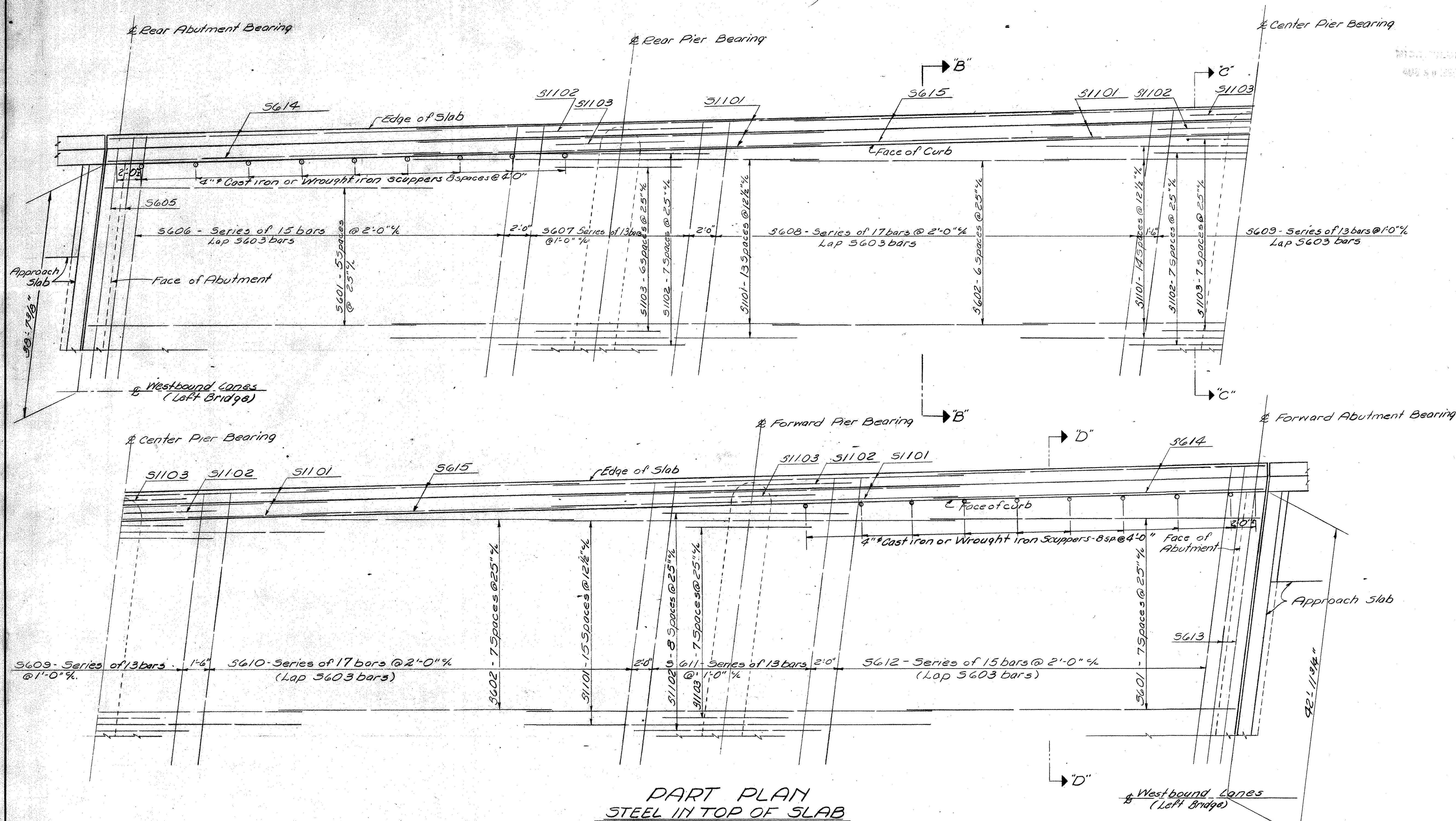


PLACEMENT DIAGRAM FOR P1024 AND P1025
IN TOP OF PIER CAP

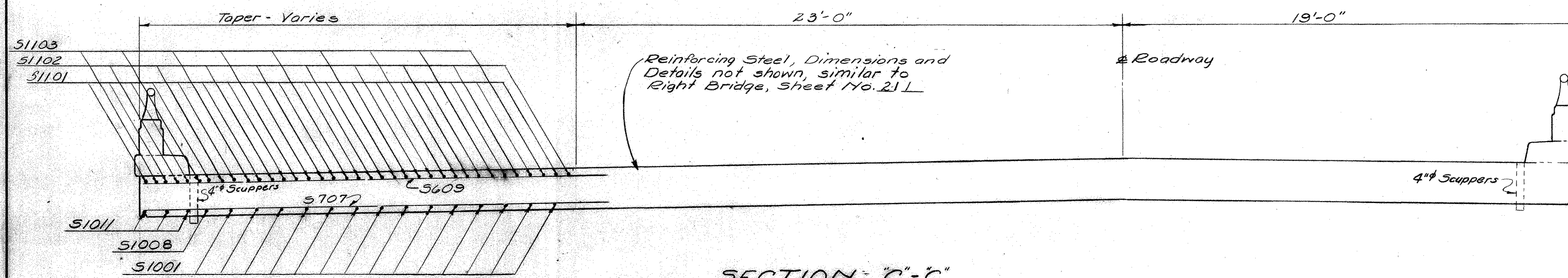


PLACEMENT DIAGRAM FOR P1015 AND P1023
IN BOTTOM OF PIER CAP

ROSS COUNTY
R05-35-19.93



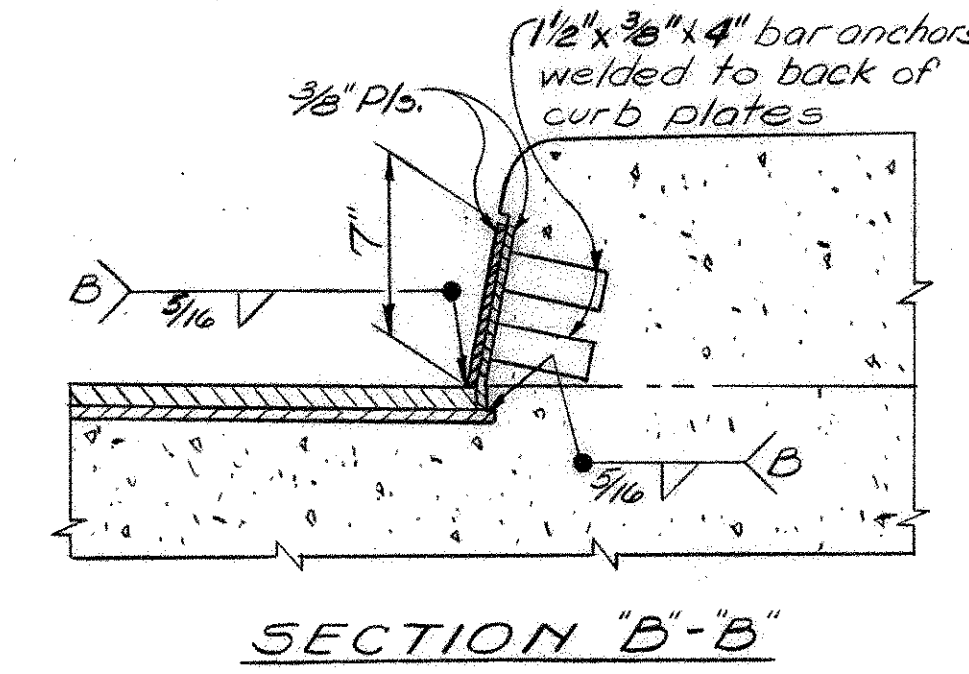
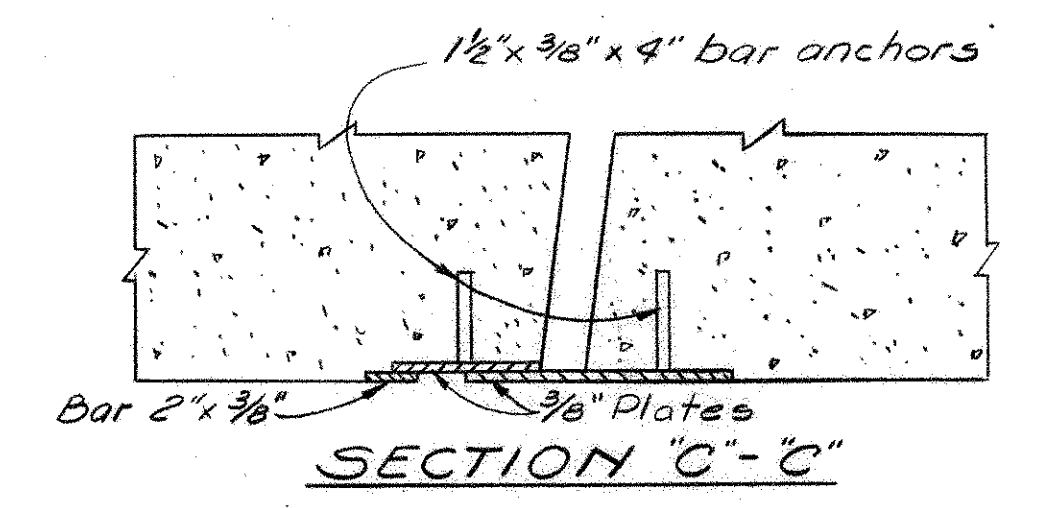
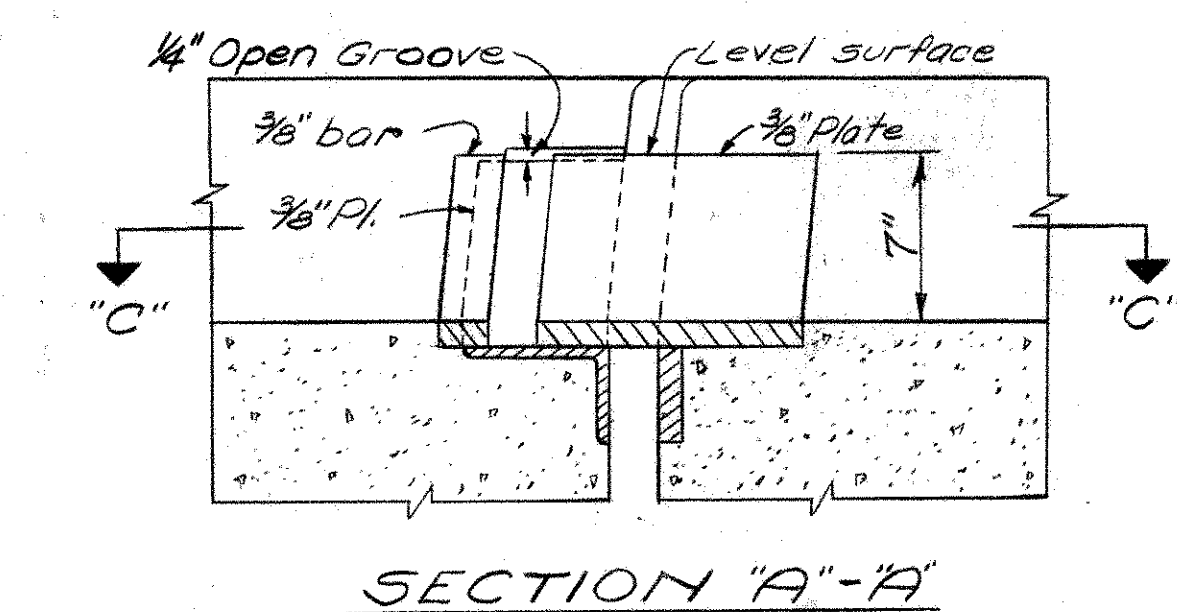
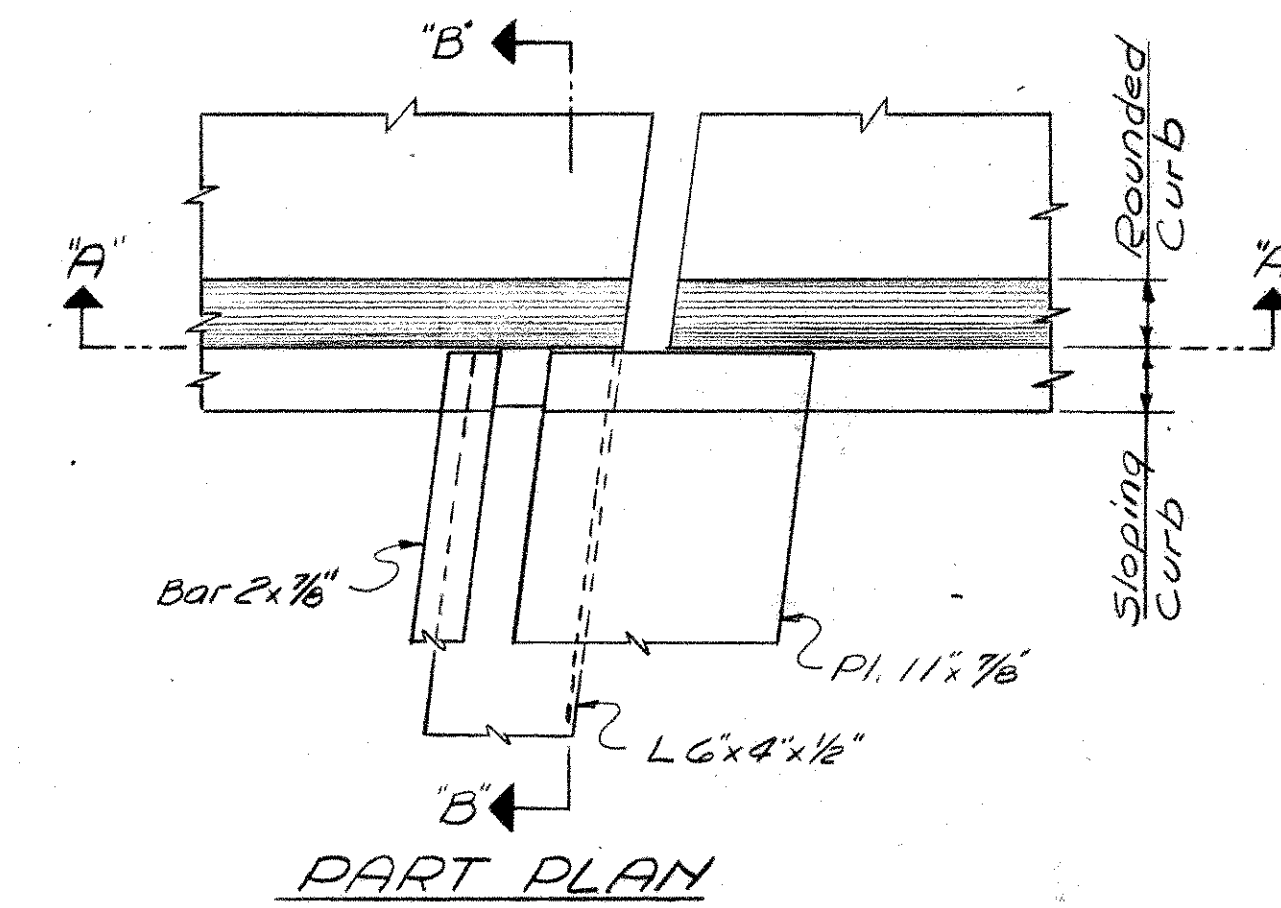
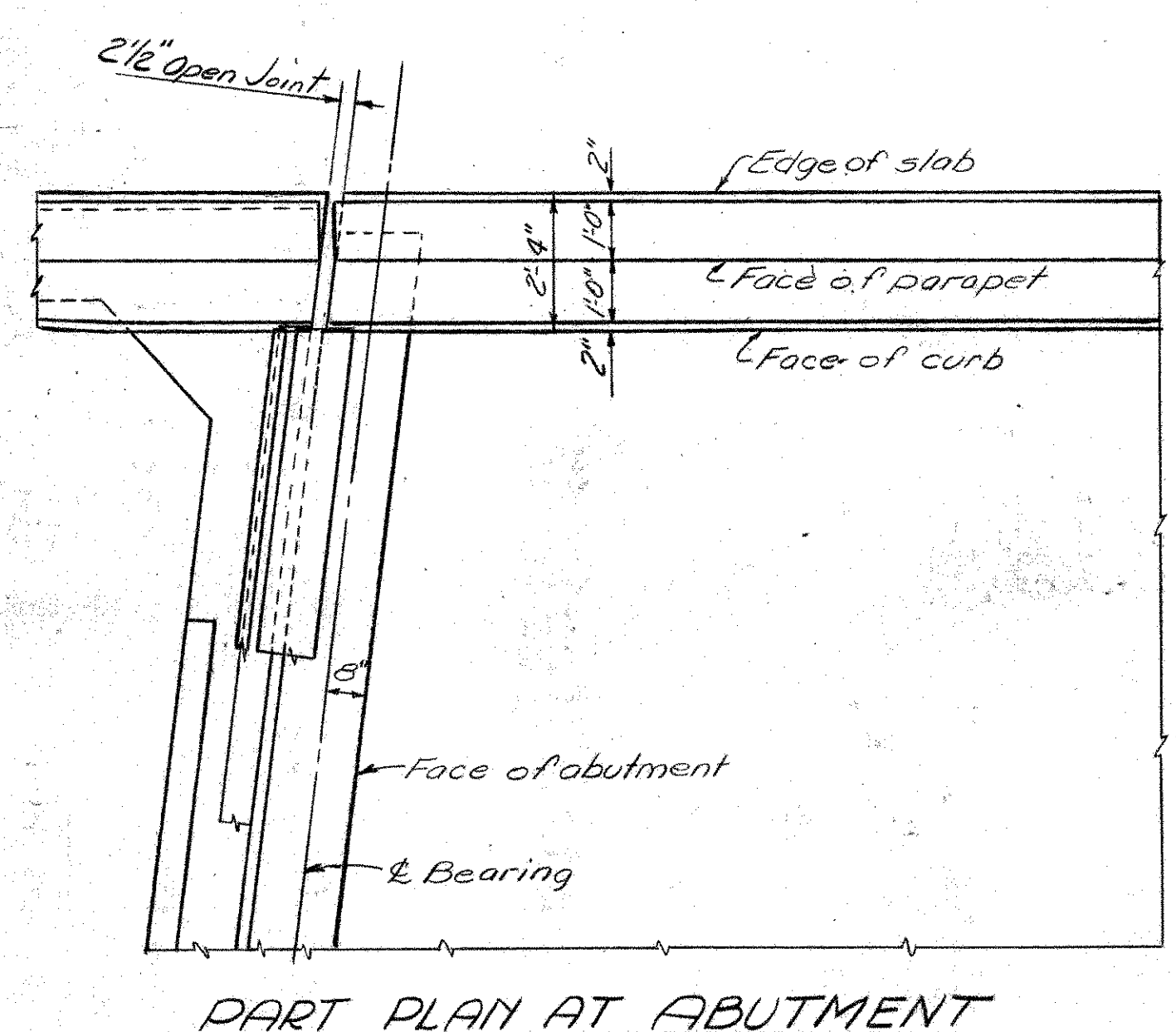
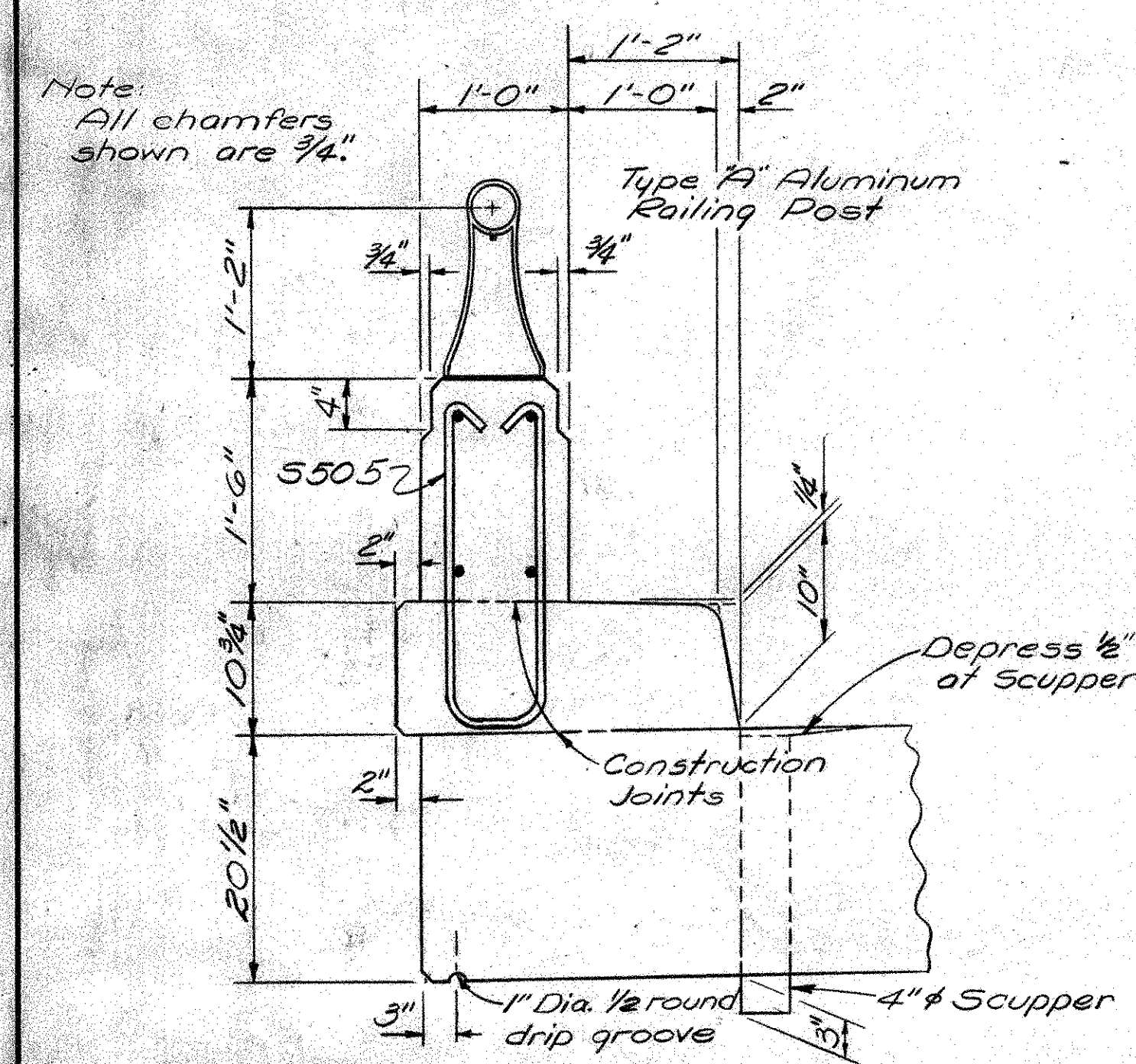
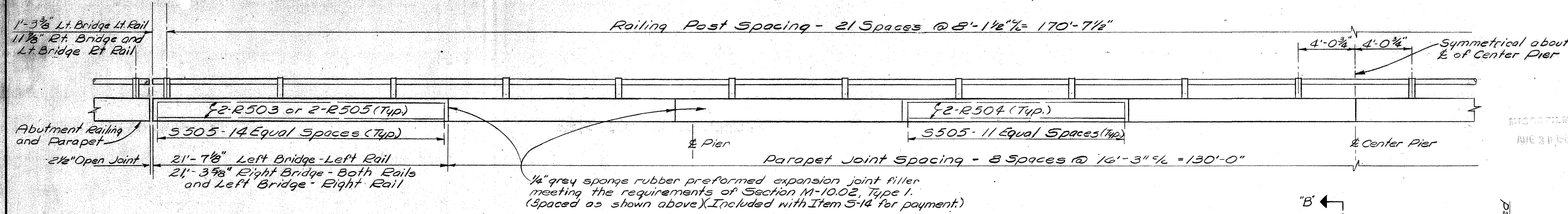
PART PLAN
STEEL IN TOP OF SLAB



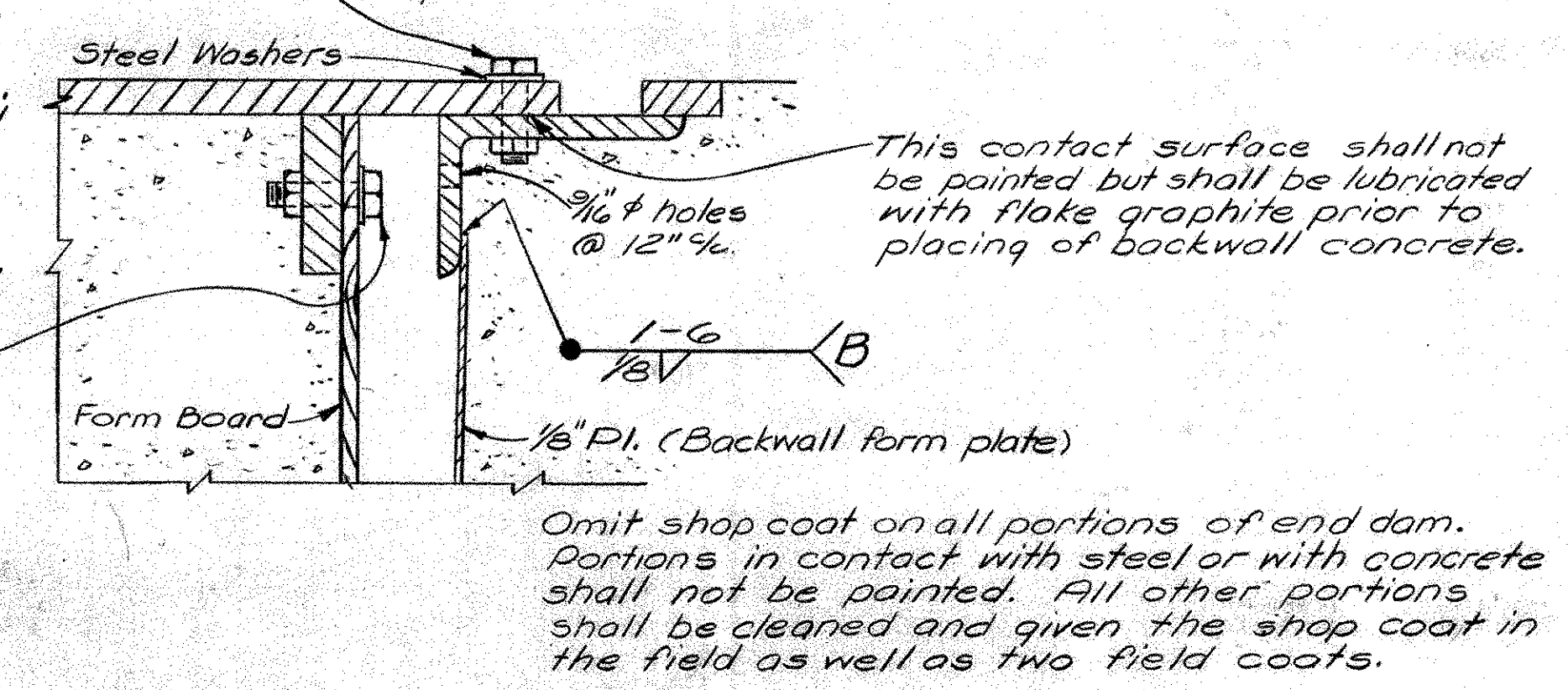
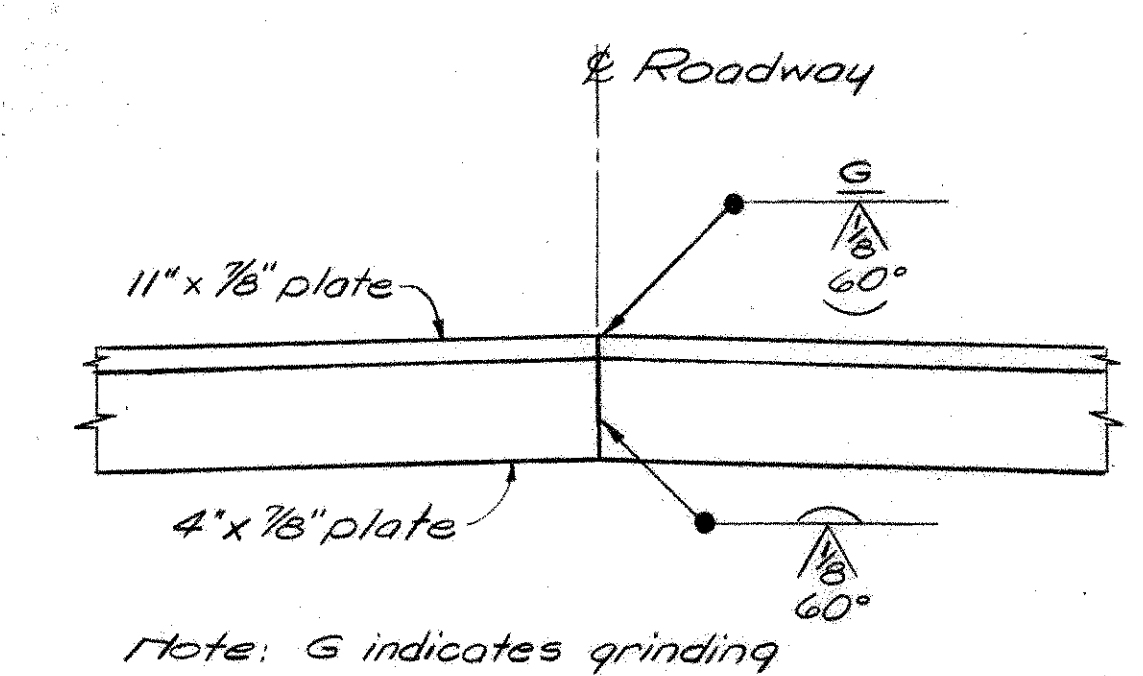
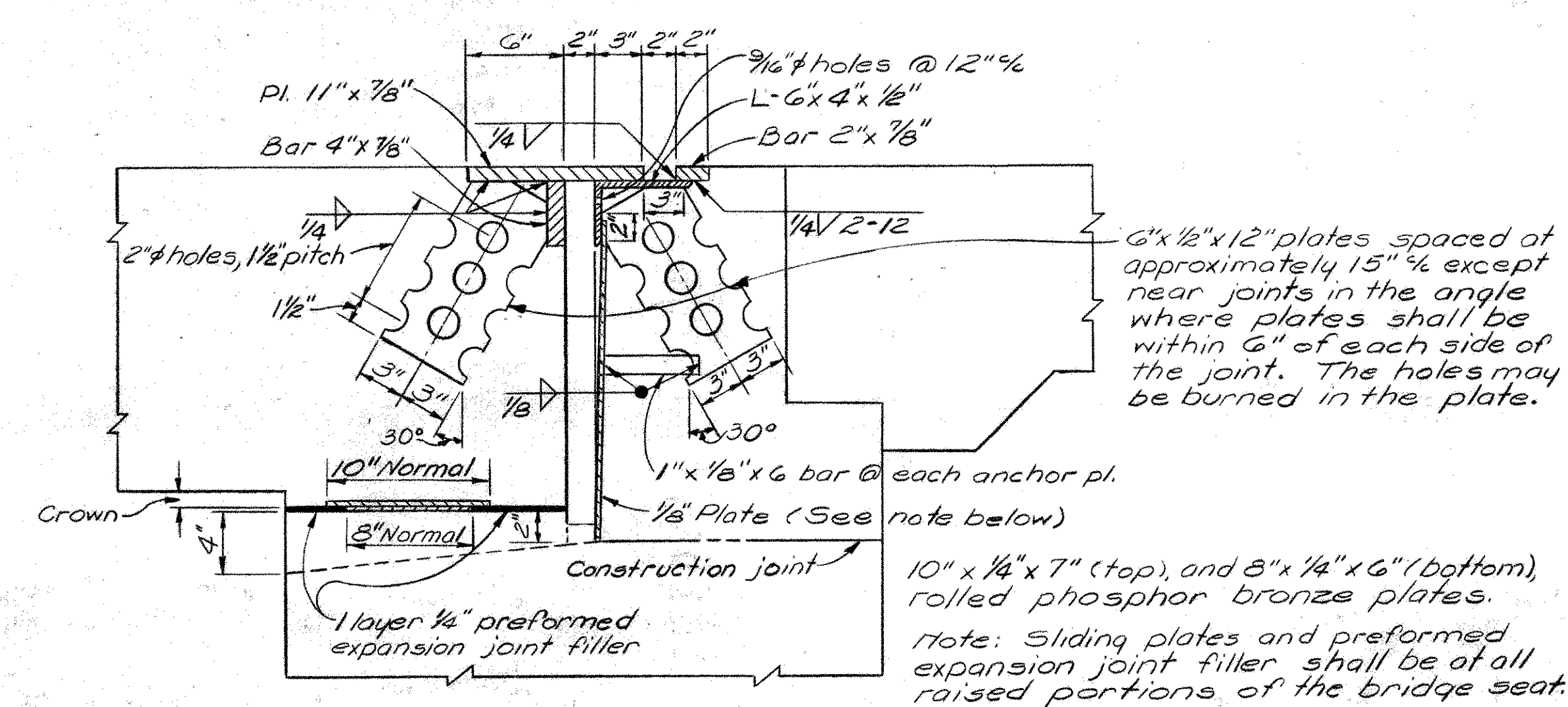
SECTION 'C'-'C''

ELMER S. BARRETT ASSOCIATES Consulting Engineers 245-249 S. Paint Street Chillicothe, Ohio							
SUPERSTRUCTURE DETAILS LEFT BRIDGE							
BRIDGE NO. R05-35-2086 R&L. U.S.R. 35 OVER EXISTING U.S.R. 23							
ROSS COUNTY U.S.R. 35							
STA. 1101+47.67 TO STA. 1103+22.71							
SCALE DATE							
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISOR	REVISION
E.E.R.	W.D.J.		D.M.	W.K.	11/26/62		

ROSS COUNTY
ROS-35-19.93



CURB PLATE DETAILS



ELMER S. BARRETT ASSOCIATES Consulting Engineers 245-249 S. Paint Street Chillicothe, Ohio							
SUPERSTRUCTURE DETAILS							
BRIDGE NO. ROS-35-2086 R&L U.S.R. 35 OVER EXISTING U.S.R. 23							
ROSS COUNTY STA 1101+47.67 TO STA 1103+22.71							
SCALE DATE							
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED	
EER	W.D.J.		D.M.	JK	11/26/62		

ROSS COUNTY
ROS-35-19.93

REINFORCING STEEL LIST

Bar Number	Number Required	Length	Shape	Weight	Bending Diagrams
ABUTMENTS-RIGHT BRIDGE					
A1001	4	19'-1"		328	
A1002	4	25'-1"		432	
A801	5	20'-1"		268	
A802	5	25'-7"		342	
A803	3	8'-8"		69	
A804	1	9'-10"		26	
A805	3	8'-4"		67	
A806	1	9'-3"		25	
A807	1	9'-11"		26	
A808	1	9'-0"		24	
A809	1	8'-0"		21	
A810	1	7'-2"		19	
A811	1	11'-6"		31	
A812	1	10'-3"		27	
A813	1	9'-2"		24	
A814	1	8'-0"		21	
A601	24	11'-9"		424	
A602	14	9'-0"		189	
A501	4	19'-2"		80	
A502	4	25'-7"		107	
A503	68	7'-3"		514	
A504	82	4'-7"		392	
A505	70	3'-10"		280	
A506	4	18'-0"		75	
A507	4	24'-7"		103	
A508	2	18'-6"		39	
A509	2	25'-1"		52	
A510	1	12'-9"		13	
A511	1	16'-3"		17	
A512	2	6'-9"		14	
A513	2	10'-4"		22	
A514	1	9'-5"		10	
A515	1	8'-10"		9	
A516	1	8'-8"		9	
A517	1	8'-4"		9	
A518	1	9'-11"		10	
A519	1	11'-6"		12	
A520	24	6'-7"		165	
A521	28	7'-8"		224	
A522	1	6'-2"		6	
A523	2	7'-3"		15	
A524	1	6'-10"		7	
A525	1	7'-8"		8	
A526	1	12'-1"		13	
A527	2	13'-1"		27	
A528	6	3'-1"		19	
A529	3	23'-10"		75	
A530	16	3'-3"		54	
A531	16	5'-7"		93	
A532	16	3'-6"		58	
A533	1	5'-8"		6	
A534	2	7'-0"		15	
A535	1	6'-2"		6	
A536	1	7'-6"		8	
A537	1	11'-10"		12	
A538	2	13'-0"		27	
A539	3	23'-5"		73	
A540	5	5'-8"		30	
A541	5	6'-7"		34	
A401	28	6'-5"		120	
A402	8	5'-9"		31	
TOTAL ONE ABUTMENT				5256	
TOTAL TWO ABUTMENTS				10,512	

Bar Number	Number Required	Length	Shape	Weight	Bending Diagrams
REAR ABUTMENT- LEFT BRIDGE					
B1001	4	28'-3"		486	
B1002	4	28'-5"		489	
B801	5	25'-3"		337	
B802	5	36'-11"		493	
B803	3	8'-7"		69	
B804	1	9'-11"		26	
B805	3	8'-4"		67	
B806	1	9'-3"		25	
B807	1	9'-8"		26	
B808	1	8'-10"		24	
B809	1	8'-0"		21	
B810	1	7'-2"		19	
B811	1	11'-5"		30	
B812	1	10'-3"		27	
B813	1	9'-1"		24	
B814	1	7'-11"		21	
B601	43	11'-9"		759	
B602	12	9'-0"		162	
B603	2	10'-0"		30	
B501	4	24'-10"		104	
B502	4	36'-6"		152	
B503	98	7'-3"		741	
B504	116	4'-8"		565	
B505	100	3'-10"		400	
B506	4	28'-3"		118	
B507	4	28'-5"		119	
B508	2	28'-8"		60	
B509	2	28'-11"		60	
B510	1	21'-7"		23	
B511	1	24'-0"		25	
B512	2	8'-6"		18	
B513	2	6'-5"		13	
B514	1	9'-6"		10	
B515	1	8'-10"		9	
B516	1	8'-7"		9	
B517	1	8'-4"		9	
B518	1	9'-8"		10	
B519	1	11'-5"		12	
B520	24	6'-7"		165	
B521	28	7'-10"		229	
B522	1	6'-1"		6	
B523	2	7'-3"		15	
B524	1	7'-5"		8	
B525	1	7'-9"		8	
B526	1	12'-1"		13	
B527	2	13'-2"		27	
B528	6	3'-1"		19	
B529	3	23'-10"		75	
B530	16	3'-3"		54	
B531	16	5'-7"		93	
B532	16	3'-6"		58	
B533	1	5'-8"		6	
B534	2	7'-0"		15	
B535	1	6'-2"		6	
B536	1	7'-6"		8	
B537	1	11'-10"		12	
B538	2	13'-0"		27	
B539	3	23'-5"		73	
B540	5	5'-8"		30	
B541	5	6'-7"		34	
B401	40	6'-5"		171	
B402	8	5'-9"		31	
TOTAL				6775	

Bar Number	Number Required	Length	Shape	Weight	Bending Diagrams
FORWARD ABUTMENT- LEFT BRIDGE					
C1001	4	30'-8"		528	
C1002	4	30'-6"		525	
C801	5	40'-0"		534	
C802	5	26'-6"		354	
C803	3	8'-8"		69	
C804	1	9'-11"		26	
C805	3	8'-5"		67	
C806	1	9'-2"		24	
C807	1	10'-0"		27	
C808	1	9'-1"		24	
C809	1	8'-2"		22	
C810	1	7'-3"		19	
C811	1	11'-7"		31	
C812	1	10'-4"		28	
C813	1	9'-2"		24	
C814	1	8'-0"		21	
C601	47	11'-9"		829	
C602	12	9'-0"		162	
C603	2	10'-0"		30	
C501	4	39'-7"		165	
C502	4	26'-0"		108	
C503	98	7'-3"		741	
C504	124	4'-7"		593	
C505	105	3'-10"		420	
C506	4	30'-8"		128	
C507	4	30'-6"		127	
C508	2	30'-11"		64	
C509	2	30'-9"		64	
C510	1	25'-7"		27	
C511	1	24'-2"		25	
C512	2	6'-7"		14	
C513	2	8'-9"		18	
C514	1	9'-6"		10	
C515	1	8'-9"		9	
C516	1	8'-8"		9	
C517	1	8'-5"		9	
C518	1	10'-0"		10	
C519	1	11'-7"		12	
C520	24	6'-7"		165	
C521	28	7'-10"		229	
C522	1	6'-1"		6	
C523	2	7'-3"		15	
C524	1	6'-10"		7	
C525	1	7'-8"		8	
C526	1	12'-1"		13	
C527	2	13'-1"		27	
C528	6	3'-1"		19	
C529	3	23'-10"		75	
C530	16	3'-3"		54	
C531	16	5'-7"		93	
C532	16	3'-6"		58	
C533	1	5'-9"		6	
C534	2	7'-1"		15	
C535	1	6'-3"		7	
C536	1	7'-7"		8	
C537	1	11'-11"		12	
C538	2	13'-1"		27	
C539	3	23'-7"		74	
C540	5	5'-8"		30	
C541	5	6'-7"		34	
C401	40	6'-5"		171	
C402	8	5'-9"		31	
TOTAL				7081	
TOTAL LEFT BRIDGE				13,856	

ROSS COUNTY
ROS-35-19.93

MITCHELL & ASSOCIATES
AUG 30 1965

REINFORCING STEEL LIST

Bar Number	Number Required	Length	Shape	Weight
RIGHT BRIDGE THREE PIERS				
P1001	18	34'-6"		2672
P1002	18	15'-5"		1194
P1003	18	19'-2"		1485
P1004	36	22'-1"		3421
P1006	12	10'-6"		542
P1007	30	20'-11"		2700
P1008	30	17'-11"		2313
P1009	30	20'-10"		2689
P501	6	38'-4"		240
P502	156	7'-3"		1180
F1001	90	7'-10"	L	3034
F701	24	10'-4"	C	507
F702	24	8'-10"	C	433
F501	72	8'-4"	C	626

SUB-TOTAL THREE PIERS 23,036

SPIRAL REINFORCING STEEL						
Bar Number	Number Required	Core Dia.	Length	Pitch	Number of Turns	Weight
SP401	3	32"	17'-9 3/8"	4 1/2"	50	972
SP402	3	32"	14'-9 1/4"	4 1/2"	42	815
SP403	3	32"	17'-8 3/8"	4 1/2"	50	972
TOTAL SPIRAL						2759

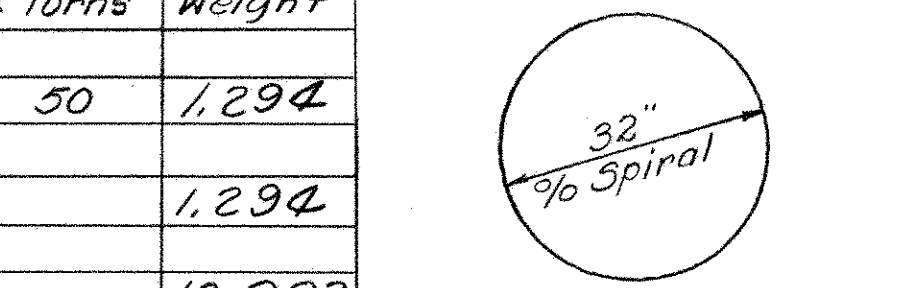
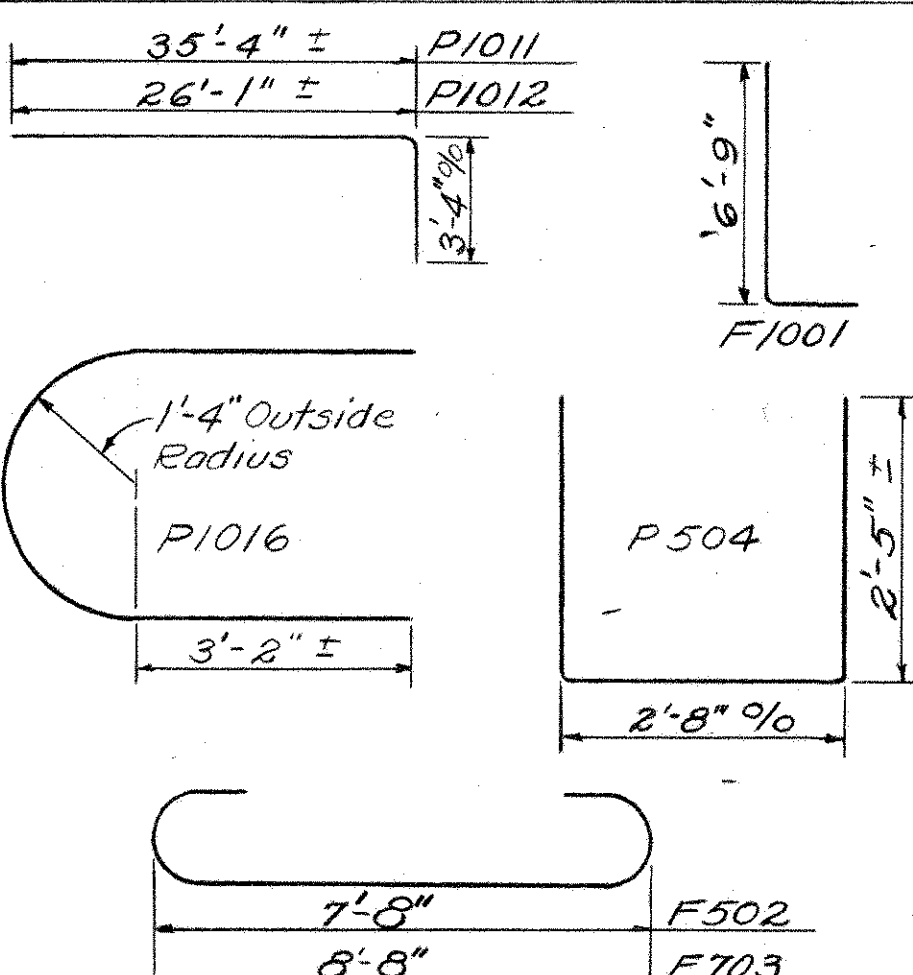
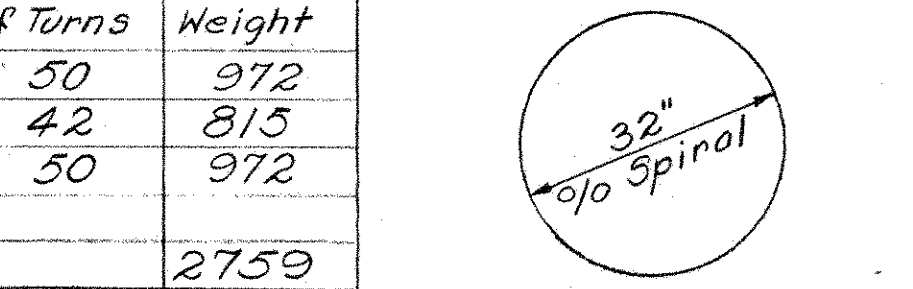
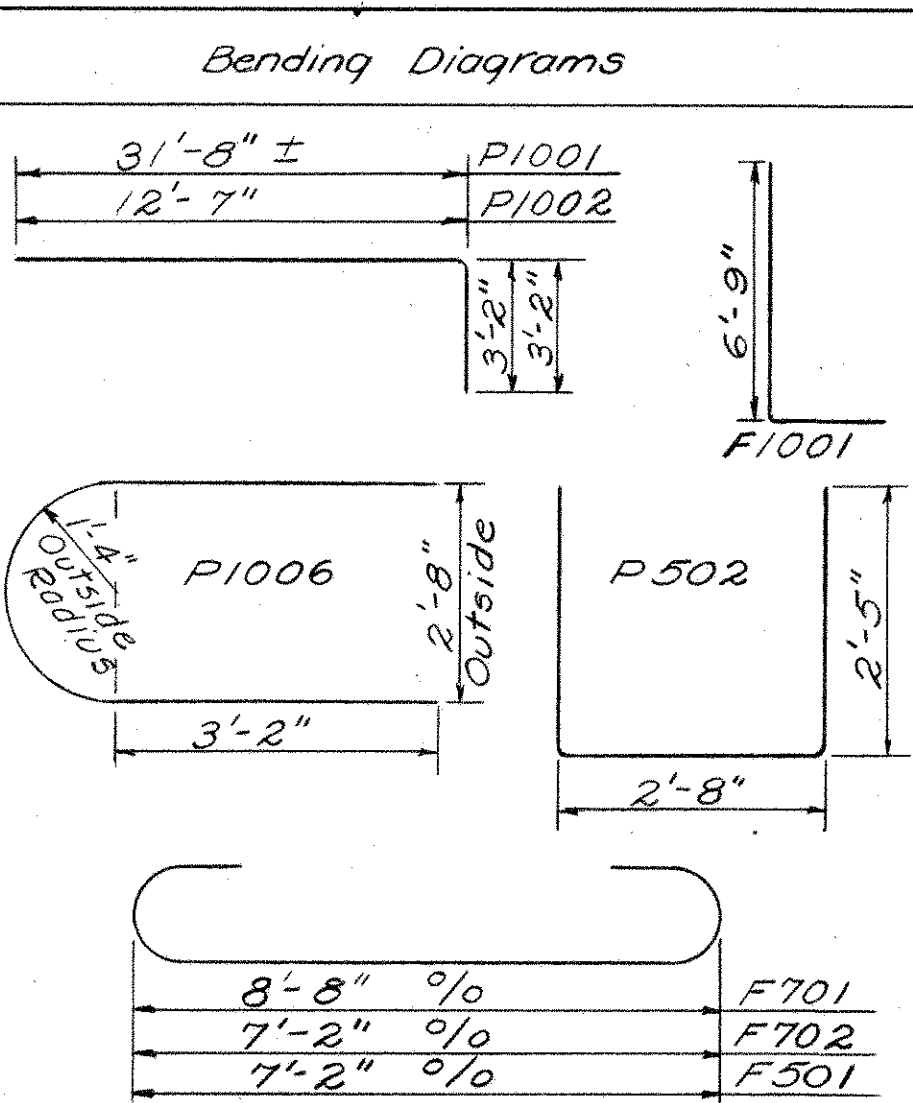
TOTAL THREE PIERS (RIGHT BRIDGE) 25,795

REAR PIER - LEFT BRIDGE

P503	4	28'-7"		119
P504	80	7'-3"		605
P1010	40	20'-9"		3,571
P1011	6	38'-4"		990
P1012	6	29'-1"		751
P1013	6	37'-2"		960
P1014	8	21'-8"		746
P1015	8	40'-0"		1,377
P1016	4	10'-6"		181
F502	32	8'-10"	C	295
F703	40	10'-4"	C	845
F1001	40	7'-10"	L	1,348

SUB-TOTAL REAR PIER 11,788

SPIRAL REINFORCING STEEL						
Bar Number	Number Required	Core Dia.	Length	Pitch	Number of Turns	Weight
SP404	4	32"	17'-6 1/8"	4 1/2"	50	1,294
TOTAL SPIRAL						1,294
TOTAL PIER						13,082



Bar Number	Number Required	Length	Shape	Weight
CENTER PIER				
P504	90	7'-3"		681
P505	4	29'-3"		122
P1015	8	40'-0"		1,377
P1016	4	10'-6"		181
P1017	40	17'-8"		3,041
P1018	8	22'-10"		786
P1019	6	39'-2"		1,011
P1020	6	29'-8"		766
P1021	6	38'-0"		981
F502	32	8'-10"	C	295
F703	40	10'-4"	C	845
F1001	40	7'-10"	L	1,348

SUB-TOTAL CENTER PIER 11,434

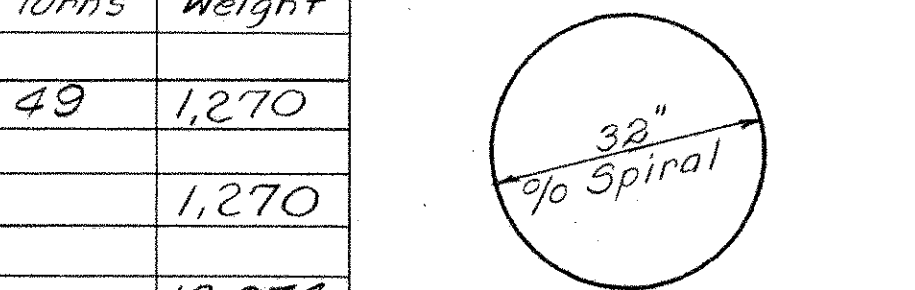
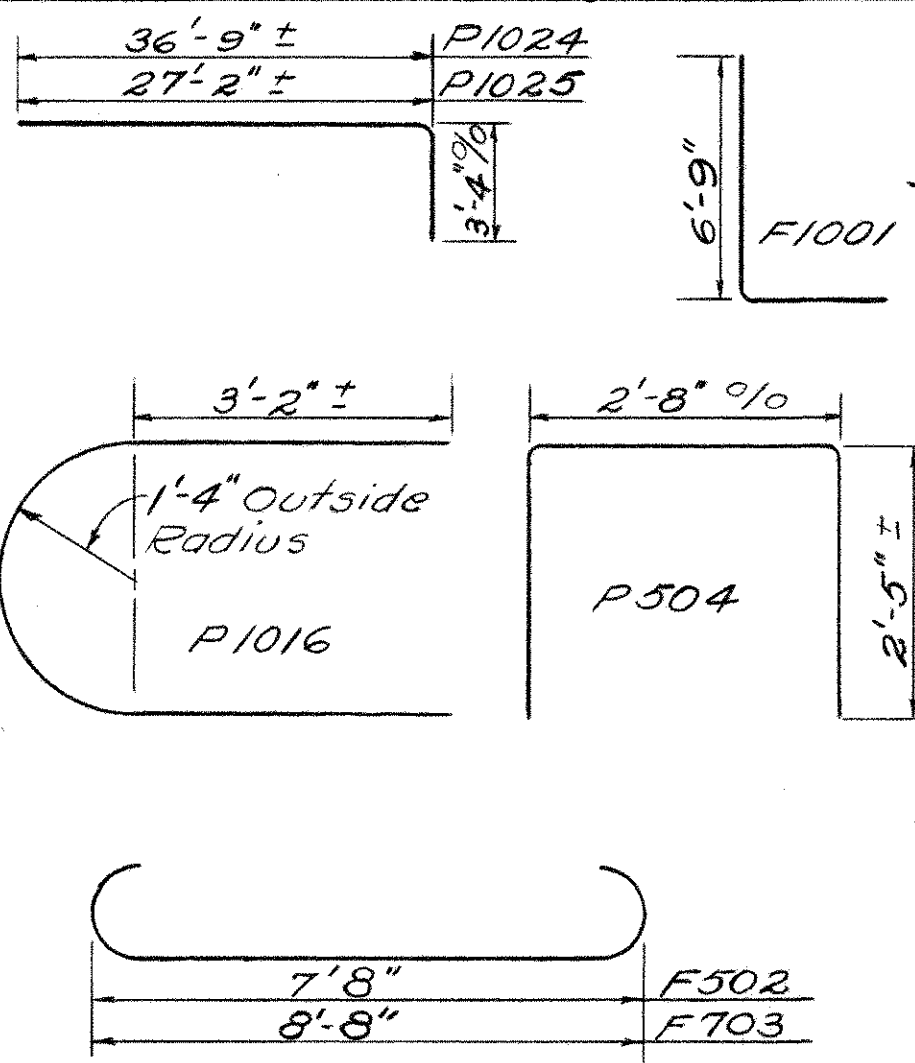
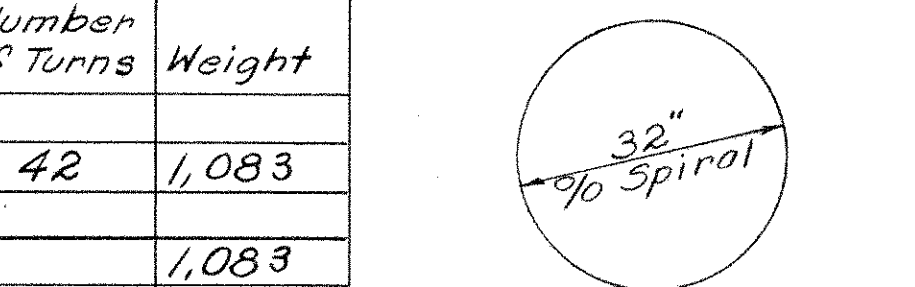
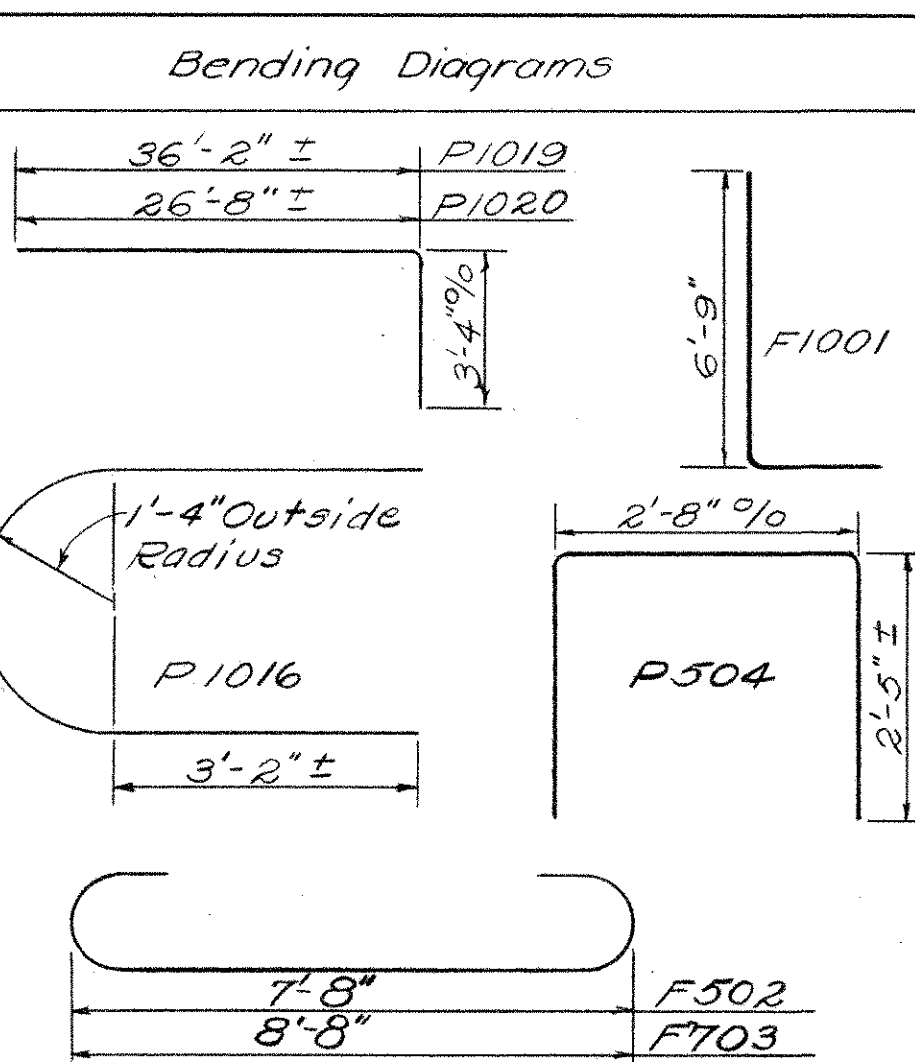
SPIRAL REINFORCING STEEL						
Bar Number	Number Required	Core Dia.	Length	Pitch	Number of Turns	Weight
SP405	4	32"	14'-5 1/2"	4 1/2"	42	1,083
TOTAL SPIRAL						1,083
TOTAL PIER						12,517

FORWARD PIER

P504	86	7'-3"		650
P506	4	29'-11"		125
P1015	8	40'-0"		1,377
P1016	4	10'-6"		181
P1022	40	20'-7"		3,543
P1023	8	24'-3"		835
P1024	6	39'-9"		1,026
P1025	6	30'-2"		779
P1026	6	38'-9"		1,000
F502	32	8'-10"	C	295
F703	40	10'-4"	C	845
F1001	40	7'-10"	L	1,348

SUB-TOTAL FORWARD PIER 12,004

SPIRAL REINFORCING STEEL						
Bar Number	Number Required	Core Dia.	Length	Pitch	Number of Turns	Weight
SP406	4	32"	17'-4 3/8"	4 1/2"	49	1,270
TOTAL SPIRAL						1,270
TOTAL PIER						13,274
TOTAL THREE PIERS (LEFT BRIDGE)						33,873



- NOTES -

BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four digits are used, indicate the bar size. For example, A501 is a No. 5 size bar and P1001 is a No. 10 size bar.

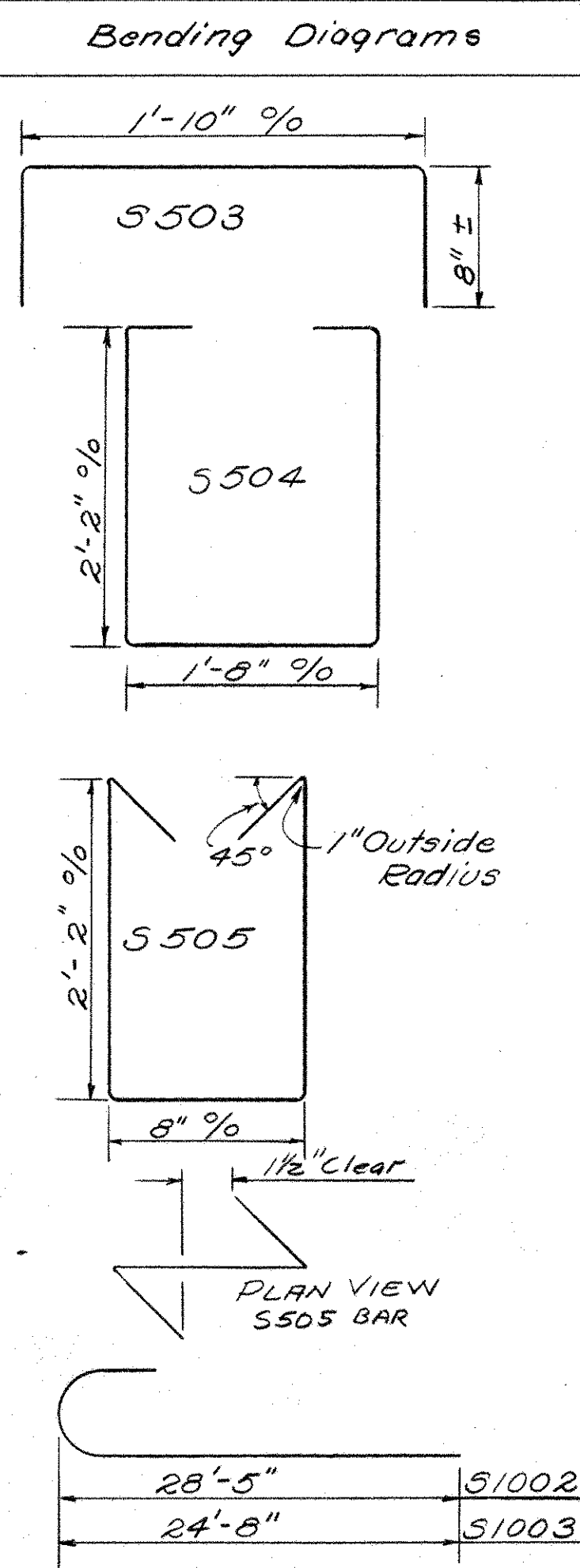
RAILING STEEL in the parapet wall is included with Item S-14 Railing for payment.

SPIRAL REINFORCING BARS: The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap. The "Number of Turns" shown is the "Length" divided by the pitch plus three turns (total number of closed coils), expressed as the nearest whole number. Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item S-4. 1 1/2 closed coils shall be provided at the ends of each spiral unit. Four steel channel, tee or angle spacers weighing approximately 0.68 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers based on 0.68 lb. per lin. ft. will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

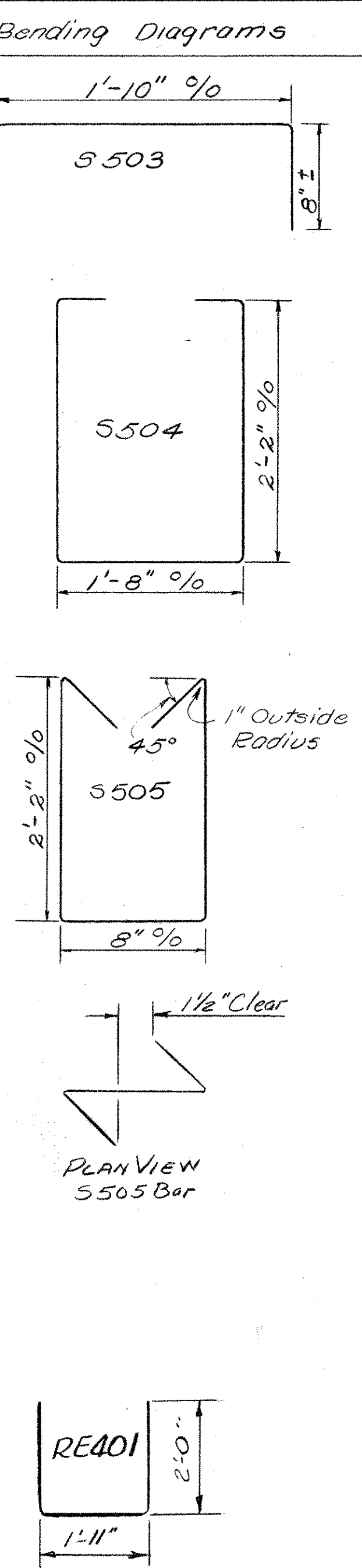
ROSS COUNTY
ROS-35-19.93

REINFORCING STEEL LIST

Bar Number	Number Required	Length	Shape	Weight
SUPERSTRUCTURE RIGHT BRIDGE				
S1101	123	30'-10"		20,150
S1102	60	14'-2"		4,516
S1103	60	9'-6"		3,028
S1001	180	45'-5"		35,177
S1002	40	29'-10"	C	5,135
S1003	40	26'-1"	C	4,439
S1004	40	28'-6"		4,905
S1005	40	20'-10"		3,586
S1006	30	26'-2"		3,378
S701	169	22'-10"		7,887
S702	169	21'-0"		7,254
S601	42	24'-11"		1,572
S602	42	20'-9"		1,309
S603	107	22'-10"		3,670
S604	107	21'-0"		3,375
S501	12	27'-3"		341
S502	12	24'-8"		309
S503	398	2'-11"		1,211
S504	398	6'-9"		2,802
S505	252	5'-7"	M	1,466
TOTAL RIGHT BRIDGE				113,560
Inc.				
SUPERSTRUCTURE LEFT BRIDGE				
S1101	177	30'-10"		28,996
S1102	88	14'-2"		6,624
S1103	86	9'-6"		4,341
S1001	238	45'-5"		46,512
S1002	58	29'-10"	C	7,446
S1003	58	26'-1"	C	6,510
S1004	58	28'-6"		7,113
S1005	57	20'-10"		5,110
S1006	30	26'-2"		3,378
S1007	1	28'-6"		123
S1008	1	31'-1"		134
S1009	1	35'-0"		151
S1010	1	32'-0"		138
S1011	12	45'-8"		2,358
S701	169	22'-10"		7,887
S702	169	21'-0"		7,254
S703	5	19'-9"		202
S704	Series of 31	19'-10" to 20'-7 3/4"		1,282 9/16"
S705	5	20'-9"		212
S706	Series of 41	20'-9 1/4" to 21'-10"		1,785 9/16"
S707	5	21'-11"		224
S708	Series of 41	21'-11 1/4" to 23'-0"		1,883 9/16"
S709	5	23'-1"		236
S710	Series of 31	23'-1 1/4" to 23'-11"		1,490 9/16"
S711	5	24'-0"		245



Bar Number	Number Required	Length	Shape	Weight	Inc.
SUPERSTRUCTURE LEFT BRIDGE CONT.					
S601	56	24'-11"		2,096	
S602	57	20'-9"		1,776	
S603	107	22'-10"		3,670	
S604	107	21'-0"		3,375	
S605	2	19'-6"		59	
S606	Series of 15	19'-7" to 20'-3 3/4"		449 5/8"	
S607	Series of 13	20'-4 1/2" to 20'-9"		402 9/16"	
S608	Series of 17	20'-9 1/2" to 21'-7 1/2"		542 7/8"	
S609	Series of 13	21'-8" to 22'-0 1/2"		427 9/16"	
S610	Series of 17	22'-1" to 22'-11"		575 5/8"	
S611	Series of 13	22'-1 1/2" to 23'-4"		452 9/16"	
S612	Series of 15	23'-4 1/4" to 23'-9"		531 5/8"	
S613	2	23'-10"		72	
S614	4	25'-1"		151	
S615	4	20'-11"		126	
S501	12	27'-3"		341	
S502	12	24'-8"		309	
S503	398	2'-11"		1,211	
S504	398	6'-9"		2,802	
S505	252	5'-7"	M	1,466	
TOTAL LEFT BRIDGE					162,466
RAILING STEEL					
R501	16	11'-4"			
R502	16	11'-0"			
R503	8	21'-3"			
R504	128	15'-11"			
R505	24	20'-11"			
REPLACEMENT STEEL					
RE101	4	7'-6"			
RE1001	10	7'-2"			
RE801	1	6'-6"			
RE701	3	6'-2"			
RE601	2	5'-11"			
RE501	2	5'-7"			
RE401	1	5'-9"	U		



MICROFILMED
AUG 30 1985