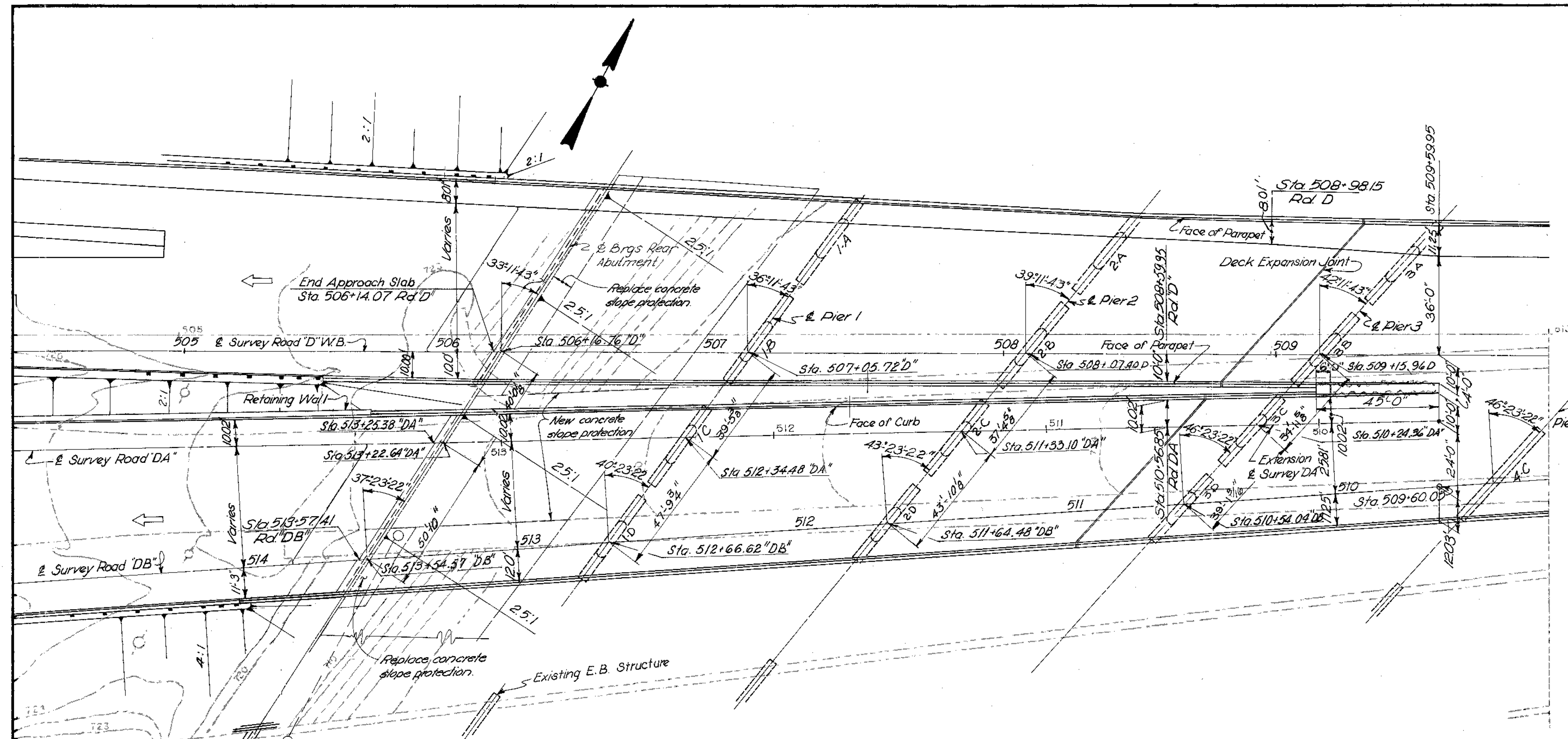


**FRANKLIN COUNTY  
FRA-70-1231S**

**HORIZONTAL CURVE DATA**

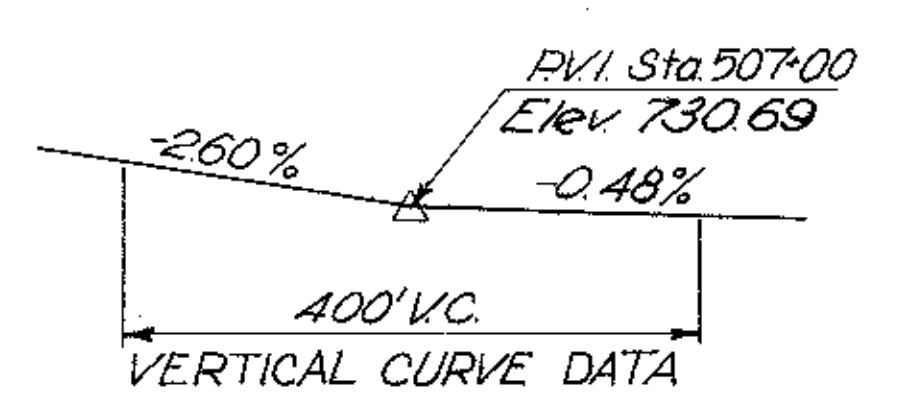
Rd. DB  
Curve 1  
PI Sta. 504+67.89  
Dc = 2°-30'-00"  
Rc = 22918312  
Δ = 4°-11'-39.0"  
Tc = 83.9209  
Lc = 167.7669

1986 DDHV  
8160  
1986 ADT  
82,000

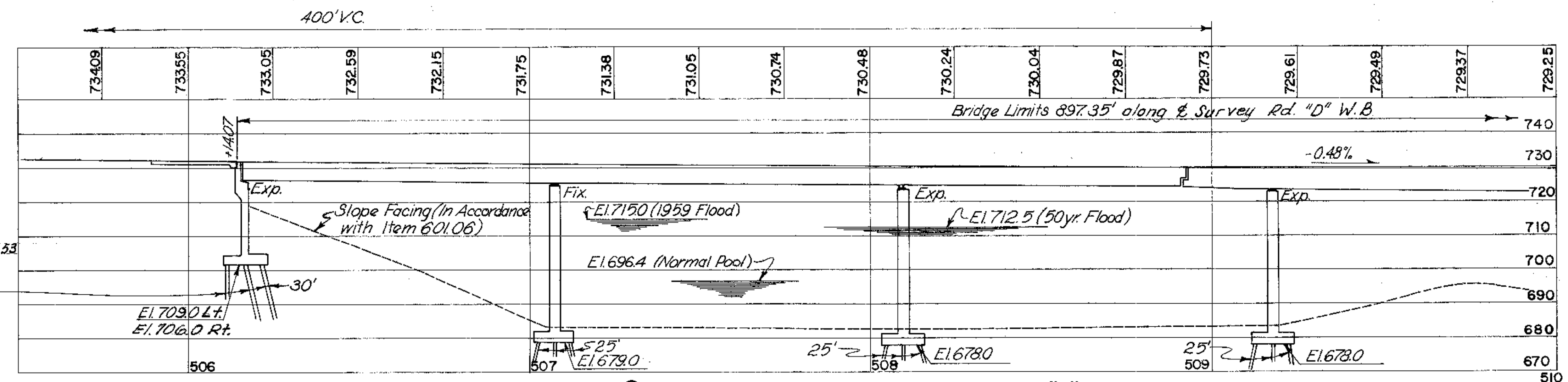


**NOTE:**  
Place new concrete slope protection where existing structure is removed. Salvage existing concrete slope protection and replace portions removed for construction purposes.

**PLAN**



All Piles are HP12x53  
Estimated Average  
Pile Length



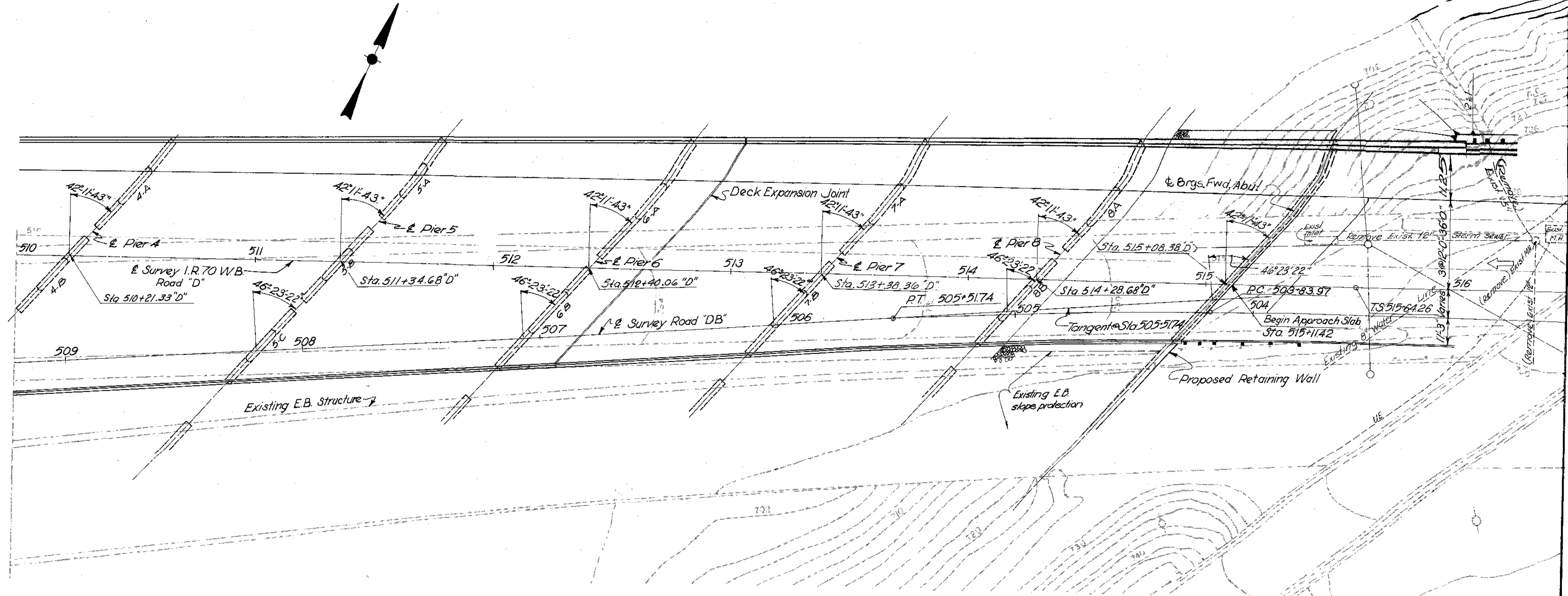
**PROPOSED STRUCTURE**  
TYPE: Continuous Stl. Grdr with Reinforced Concrete Deck and Superstructure  
SPANS: 88.96', 101.67', 108.56', 105.38', 113.35', 105.38', 98.30', 90.32', 79.70' along Survey Road "D" W.B.  
ROADWAY: Varies, Slab width 11'-9" Max. to 7'-6"  
LIVE LOAD: H.S.20-44 & Interstate Alternate  
SKEW: Varies, see plan  
WEARING SURFACE: Monolithic Concrete  
APPROACH SLABS: 25' Long (AS-I-67)  
ALIGNMENT: Tangent, Varies  
SUPERELEVATION: Varies

E. S. PRESTON & ASSOCIATES, LIMITED  
ENGINEERS  
COLUMBUS, OHIO

**SITE PLAN**  
BRIDGE NO. FRA-70-1329S-WB.  
OVER SCIOTO RIVER

FRANKLIN COUNTY  
STA. 506+14.07  
STA. 515+11.42

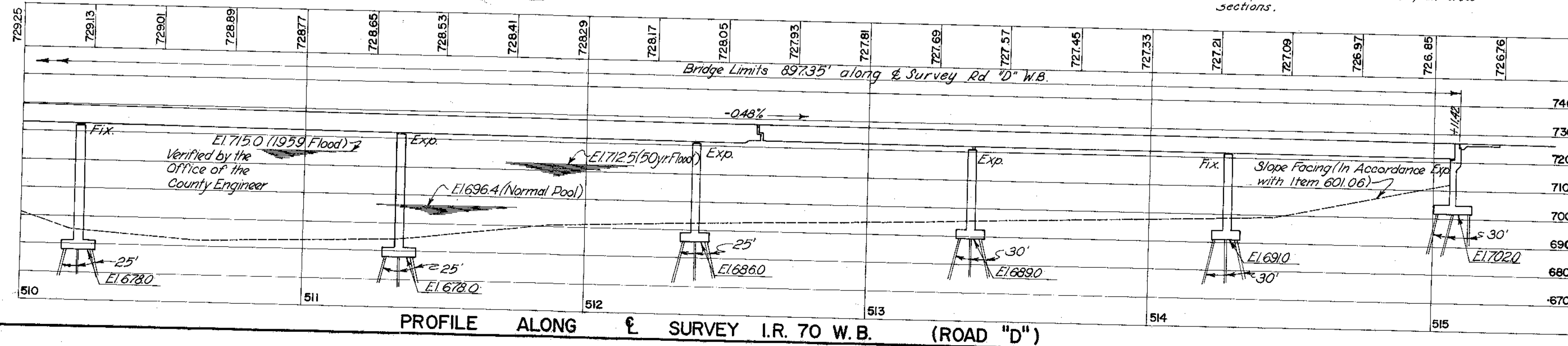
DESIGNED	DRAWN	TRACED	CHECKED	REVISION DATE	REVISION
A.S.B.	R.J.B.	R.J.B.	A.J.M.	6/16/70 N.M.	



PLAN

Drainage Area: 1,615 sq. mi.  
Q(50 yr. frequency): 46,000 cfs.  
1959 Flood Q  
(100 yr. frequency) = 68,200 cfs.

EARTHWORK limits shown are schematic.  
Actual slopes shall conform to plan cross-sections.



PROFILE ALONG & SURVEY I.R. 70 W.B. (ROAD "D")

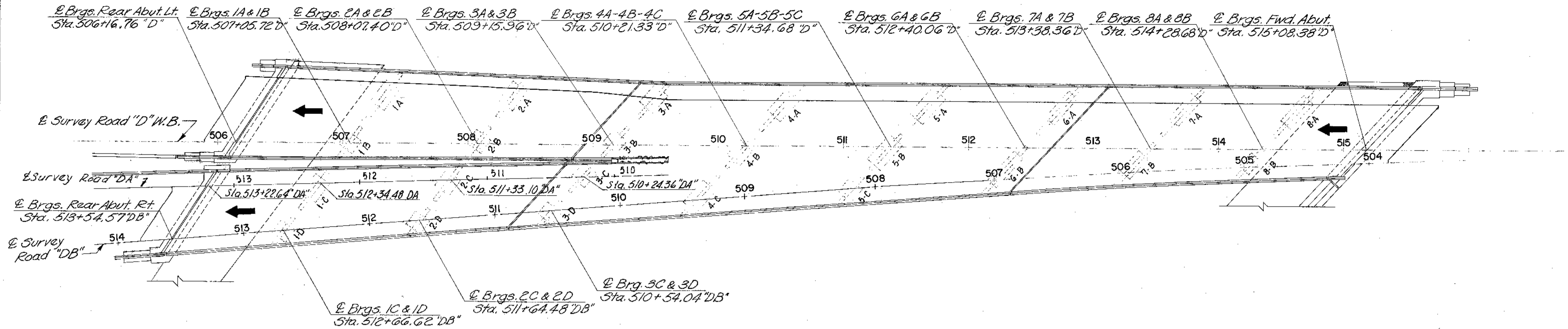
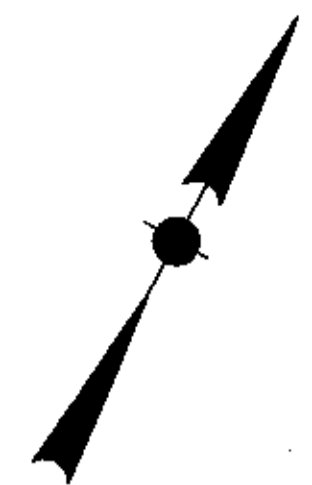
EXISTING STRUCTURE (to be removed)  
TYPE: Filled Spandrel Conc. Arch.  
SPANS: 77'-86'-94'-102'-110'-102'-94'-86'-77'  
ROADWAY: 40' f/f + 2-6'-0" walks  
LOADING:  
SKEW: 45° L.F.  
WEARING SURFACE:  
ALIGNMENT: Tangent

E. S. PRESTON & ASSOCIATES, LIMITED  
ENGINEERS  
COLUMBUS, OHIO 1/4 158

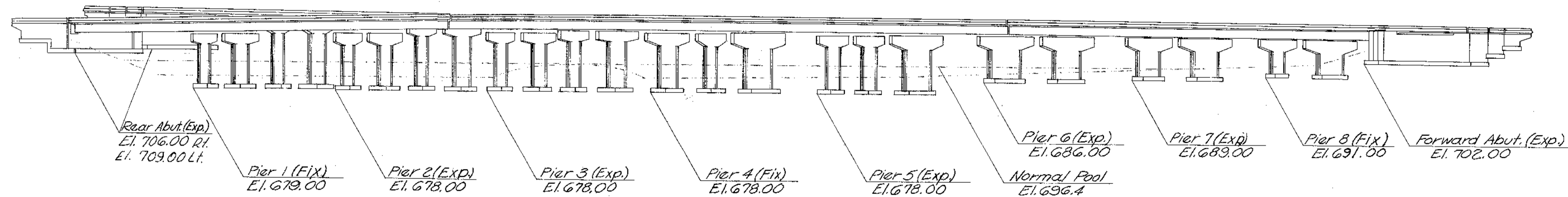
SITE PLAN  
BRIDGE NO. FRA-70-1329S-WB  
OVER SCIOTO RIVER

FRANKLIN COUNTY STA. 506+14.07  
STA. 515+11.42

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
A.S.B.	R.J.B.	R.J.B.	A.J.M.	6/14/70 N.H.	



PLAN



ELEVATION  
(Piles not shown)

E. S. PRESTON ASSOCIATES, INC. ENGINEERS COLUMBUS, OHIO					2/58
<b>GENERAL PLAN</b>					
BRIDGE NO. FRA-70-1329S W.B. OVER SCIOTO RIVER					
FRANKLIN COUNTY					STA. 506+14.07 STA. 515+11.42
Designed	Drawn	Traced	Checked	Reviewed Date	Revised
A.S.B.	R.W.B.	B.V.R.	A.J.M.	6/14/70 N.A.	

# GENERAL NOTES

REFERENCE SHALL BE MADE TO Standard Drawings AS-1-67 revised 6-12-69, RB-1-55 revised 2-2-59, SD 1-69 sheets 1 thru 4 dated 6-12-69, BR-1-67 revised 10-15-71 sheets 1 thru 3, and to Supplementary Specs. No. 808 dated 1-1-71 and No. 836 dated 1-1-71.

DESIGN SPECIFICATION: This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, 1969, including the Ohio "Supplement" to these specifications.

**DESIGN DATA:**

Design Loading - HS20-44 and the Interstate Alternate loading.

Concrete, Class "C" - Unit Stress 1200 p.s.i. for superstructure.  
Unit Stress 1333 p.s.i. for substructure.

Structural Steel - A.S.T.M. A36 - Unit Stress 20,000 p.s.i.

Reinforcing Steel - A.S.T.M. A235 - Class "C" Unit Stress 13,000 p.s.i.  
A.S.T.M. A615, A616 or A617 - Unit Stress 20,000 p.s.i.  
If bars in accordance with ASTM A616 are provided they shall be subject to bend tests as per AAASHO designation M42-70.

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic the existing structure shall be removed completely.

PILES shall be driven to firm contact with bedrock. If the length of penetration is approximately equal to the depth to bedrock, according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in 507.05 is not less than the following value for a pile hammer of not more than 11,000 ft. lbs. per blow.

For the abutment and pier piles:

53 tons per pile using 15,000 ft. lbs. hammer.

60 tons per pile using 11,000 ft. lbs. hammer.

If the energy rating of the hammer is between the ratings as shown above, the required formula capacity shall be determined by interpolation. The design load is 40 tons per pile for the abutment and the pier piles.

EMBANKMENT CONSTRUCTION: Before the backwall is constructed the embankment shall be constructed up to the level of the subgrade with a 1:1 slope from the the bridge seat to the subgrade, for a minimum distance of 200 feet back of the abutment.

UTILITY LINES: All expense involved in relocating and/or installing the affected utilities shall be borne by owners. The contractor and owners are requested to cooperate by arranging their work in such a manner that inconvenience to either would be held to a minimum.

FOOTINGS: Minimum cover for all reinforcing steel in all footings shall be 3".

## ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUTS.	PIER	WALLS	GEN.
*202	LUMP	SUM	EXISTING STRUCTURE REMOVED					LUMP
503	LUMP	SUM	COFFERDAMS, CRIBS AND SHEETING					LUMP
503	4320	CU. YDS.	UNCLASSIFIED EXCAVATION		2194	2126		
505	LUMP	SUM	TEST PILE					LUMP
506	LUMP	SUM	PILE TEST LOAD					LUMP
507	25,570	LIN. FT.	STEEL PILES HPI2x53 **		6,600	18,970		
509	1,344,027	LBS.	REINFORCING STEEL		868,627	869,165	143,473	331,389
511	2,524	CU. YDS.	CLASS "C" CONCRETE - PIER ABOVE FOOTINGS		893,381	136,381	171,034	2,524
511	1031	CU. YDS.	CLASS "C" CONCRETE - PIER FOOTINGS					1,031
511	1233	CU. YDS.	CLASS "C" CONCRETE - ABUTMENTS			1233		
+ 511	3059	CU. YDS.	CLASS "C" CONCRETE - SUPERSTRUCTURE		3,053	3059		
512	223	LIN. FT.	PREMOLDED SEALING STRIP			223		
513	2,903,859	LBS.	STRUCTURAL STEEL		2,903,859			
514	2,903,859	LBS.	FIELD PAINTING OF STRUCTURAL STEEL		2,903,859			
516	243	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER			243		
518	339	CU. YDS.	POROUS BACKFILL			339		
518	78	EACH	SCUPPERS, INCLUDING SUPPORTS		78			
601	488	SQ. YDS.	6" CONCRETE SLOPE PROTECTION (NEW AND REPLACEMENT)			488		
601	611	SQ. YDS.	CRUSHED AGGREGATE SLOPE PROTECTION			611		
808	3,053	UNITS	CHEMICAL ADMIXTURES FOR CONCRETE TYPE A,B, OR D		3,053	3059		
506	2	EACH	SUBSEQUENT PILE TEST LOAD					2
625			SEE SHEET 527 FOR LIGHTING SUMMARY					

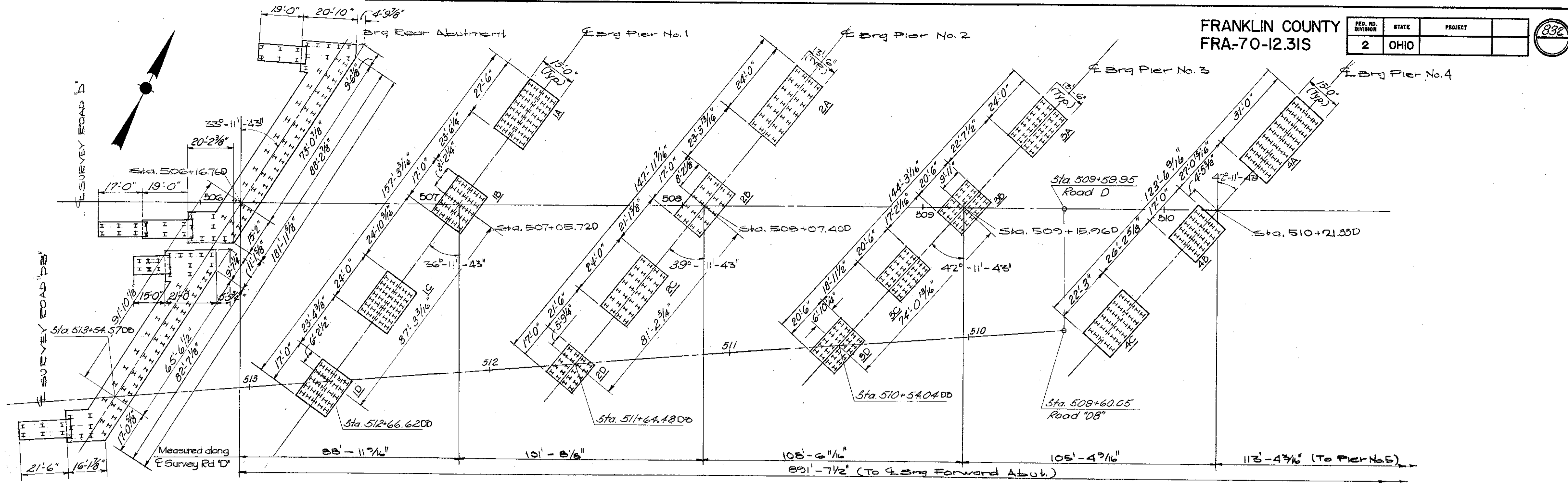
1343,489  
1,394,136  
1,392,295  
1,340,245  
1,364,999  
3,053

- \* INCLUDE PARTIAL REMOVAL OF BR. NO. FRA-70-1328S E.B. FORWARD ABUTMENT.
- + 145 CU. YDS. CLASS "C" CONCRETE, SUPERSTRUCTURE, IS NON-PARTICIPATING FOR FEDERAL FUNDS.
- \*\* FORMERLY DESIGNATED 12 BP53.

E. S. PRESTON & ASSOCIATES, LIMITED 3/78  
ENGINEERS  
COLUMBUS, OHIO

**GENERAL NOTES & QUANTITIES**  
BRIDGE NO. FRA-70-1329S W.B.  
OVER SCIOTO RIVER  
FRANKLIN COUNTY STA. 506+14.07  
STA. 515+11.42

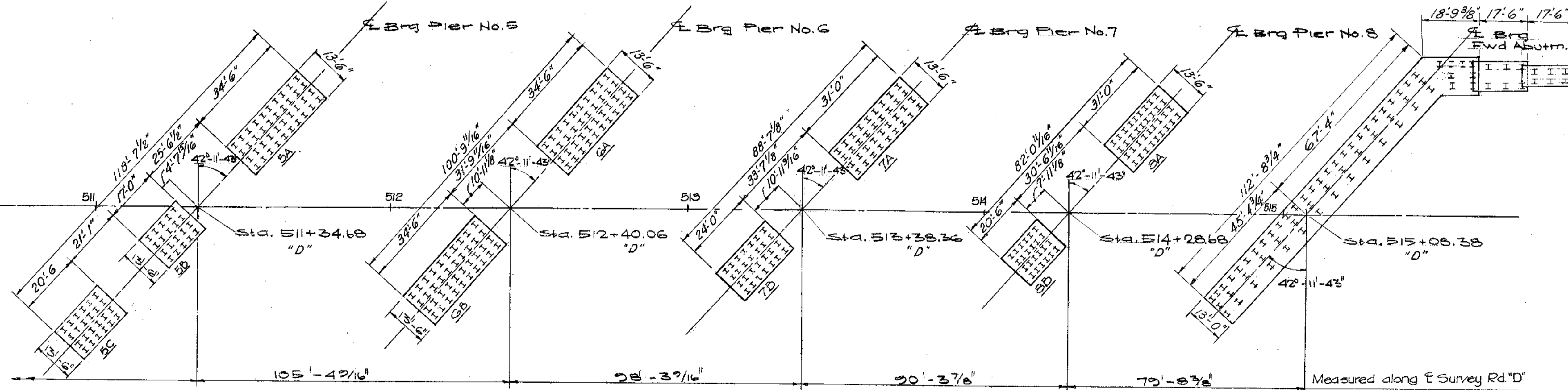
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
A.S.B.	M.L.S.	M.L.S.	E.K.	8-31-78	8-3-78



NOTE:  
All piles are steel H piles  
HP12x53. (Former designation 12BP53)

For abutment foundation  
details not shown see sheets  
15/58 thru 15/58

For pier foundation details  
not shown see sheets  
16/58 thru 27/58



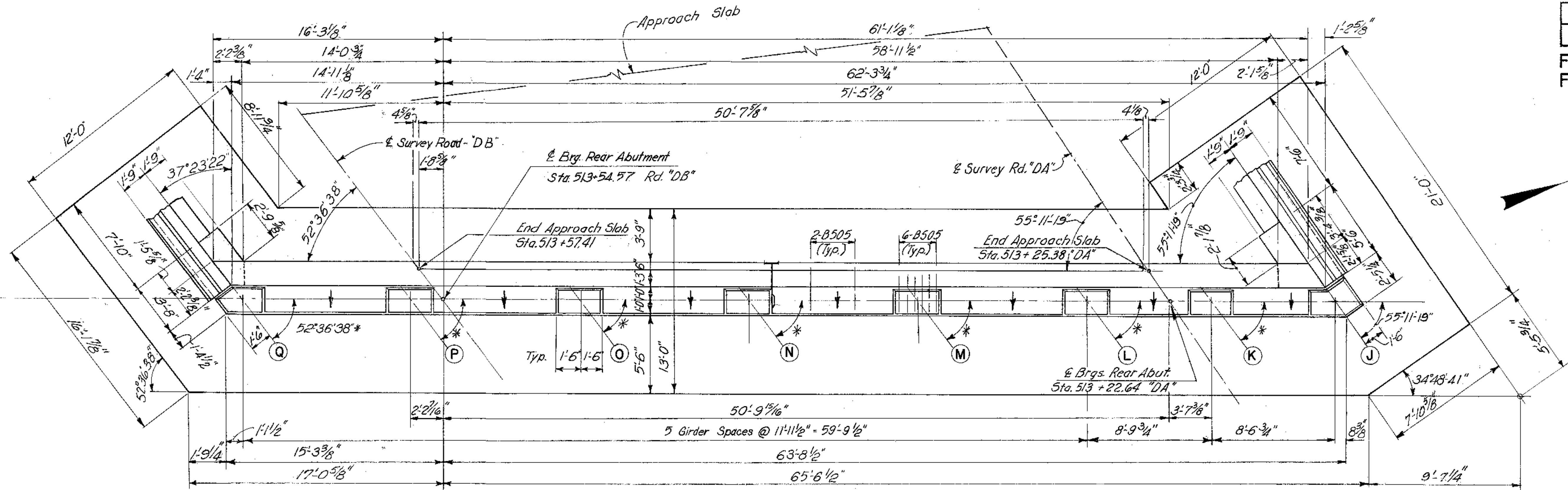
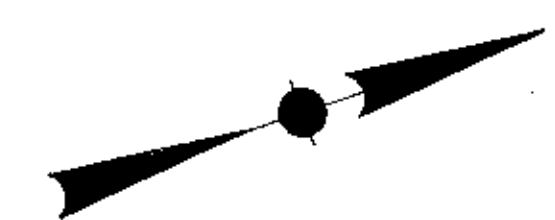
FOUNDATION PLAN

E. S. PRESTON ASSOCIATES, INC. 4/58 ENGINEERS COLUMBUS, OHIO				
<b>FOUNDATION PLAN</b>				
BRIDGE NO. FRA.-70-1329S W.B. OVER SCIOTO RIVER				
FRANKLIN COUNTY			STA. 506+14.07	
			STA. 515+11.42	
Designed	Drawn	Traced	Checked	Reviewed Date
A.S.B.	R.M.	R.M.	E.K.	6/14/70 N.N.
				Revised

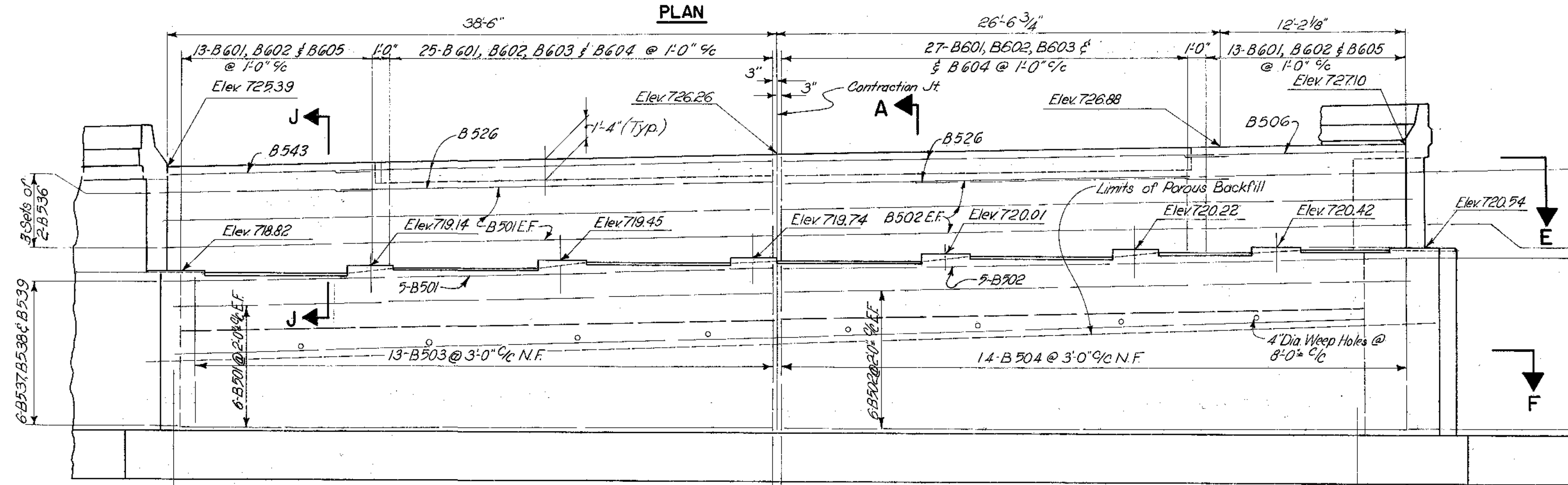
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

833

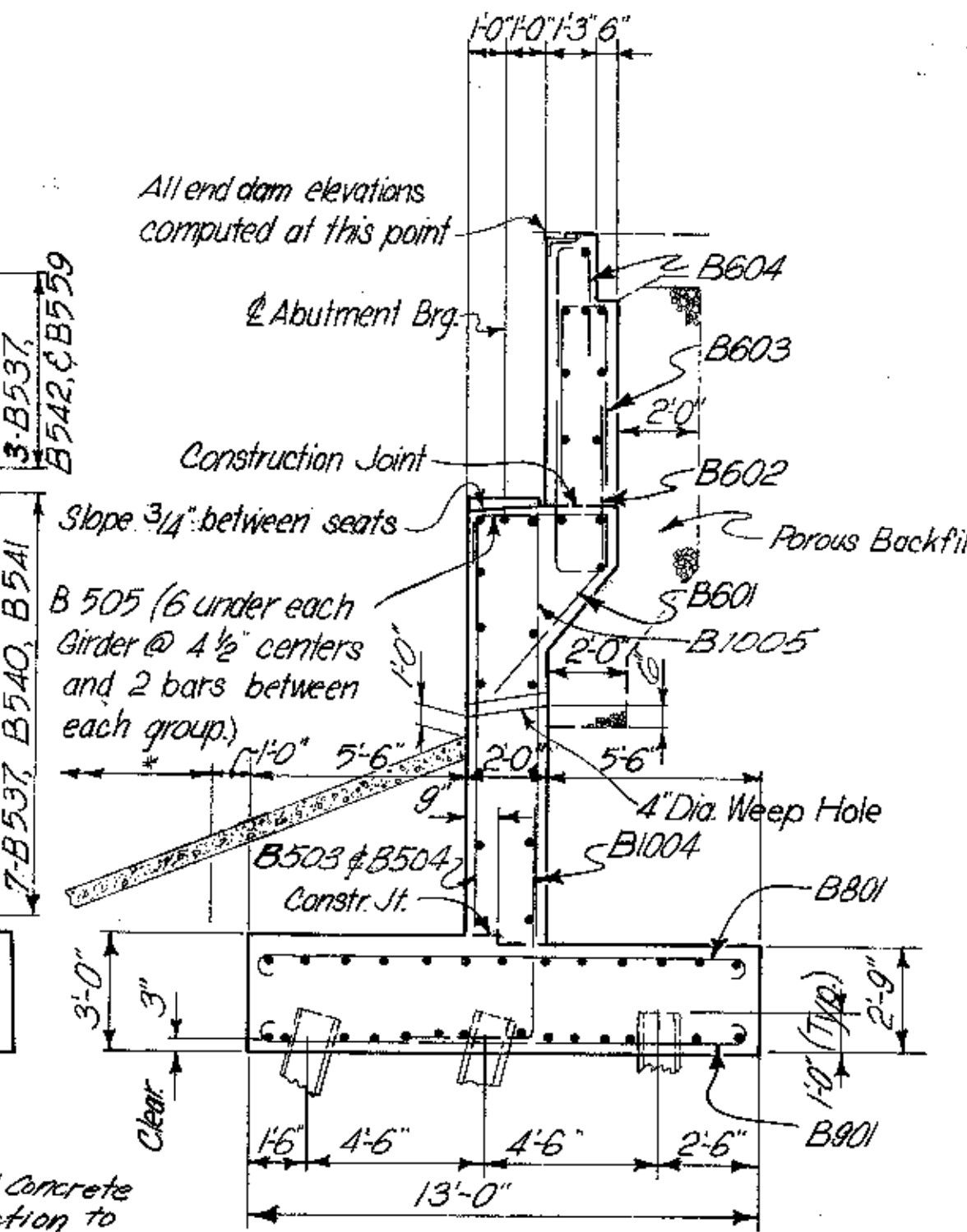
FRANKLIN COUNTY  
FRA-70-12.31S



**PLAN**



**ELEVATION**



**SECTION A-A**

NOTE:  
For Footing Reinforcing Steel  
and piling see sheet 6/58

**LEGEND**  
E.F.=EACH FACE  
N.F.=NEAR FACE  
F.F.=FAR FACE

For Expansion & Contraction Joint  
Details see sheet 15/58

NOTE:  
For additional notes and details  
see sheets 6/58 7/58

8/58

E. S. PRESTON & ASSOCIATES, LIMITED  
ENGINEERS  
COLUMBUS, OHIO

**REAR ABUTMENT DETAILS-R**  
BRIDGE NO. FRA-70-1329-S-W.B.  
OVER SCIOTO RIVER

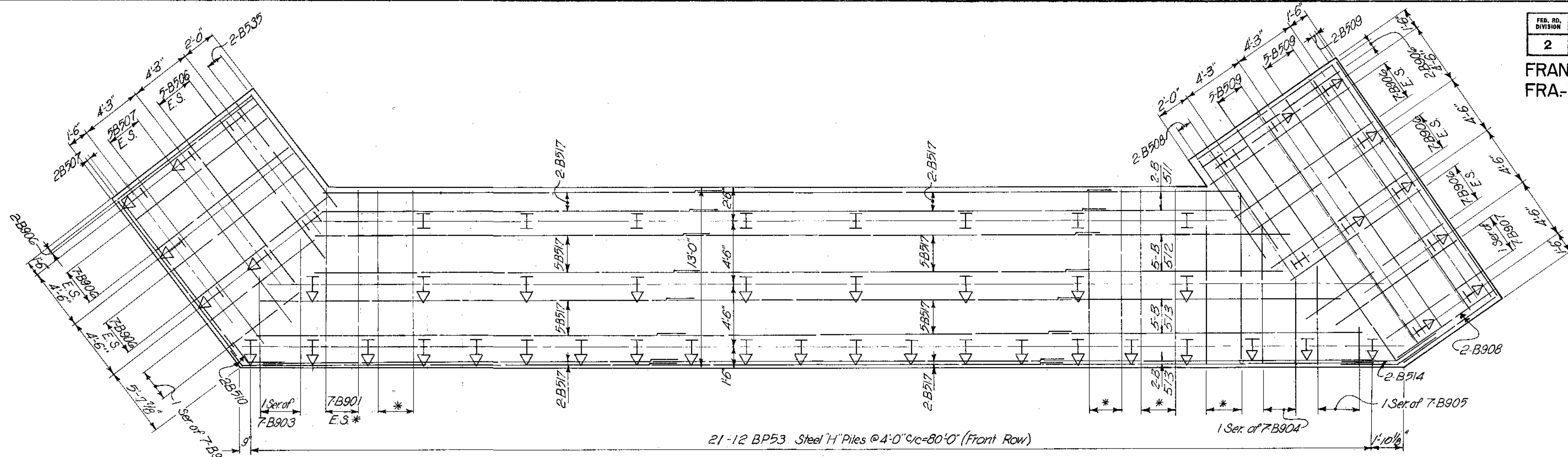
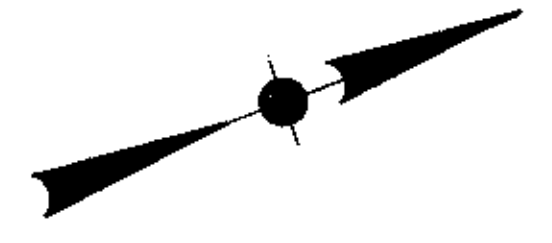
FRANKLIN COUNTY  
STA. 513+57.41  
STA. 515+11.42

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
E.S.	E.K.	R.W.B.	A.J.M.	6/16/70	N.M.

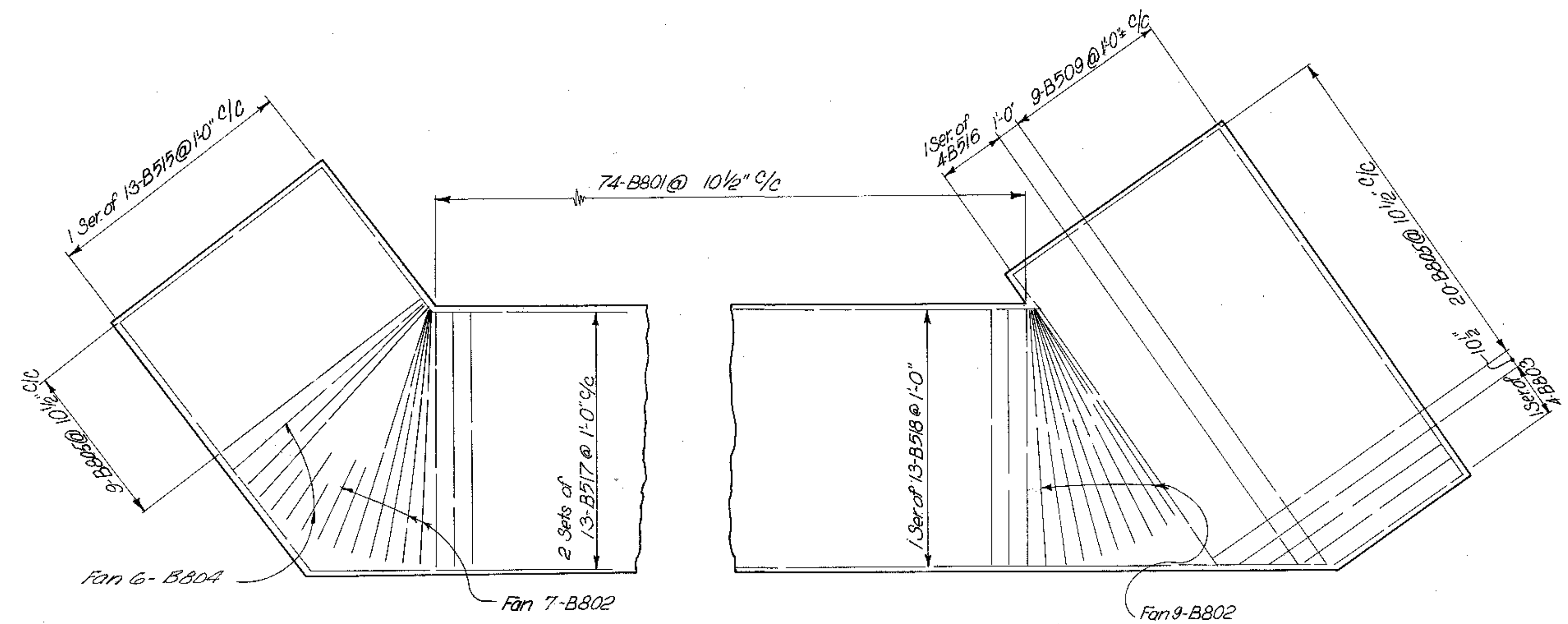
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

834

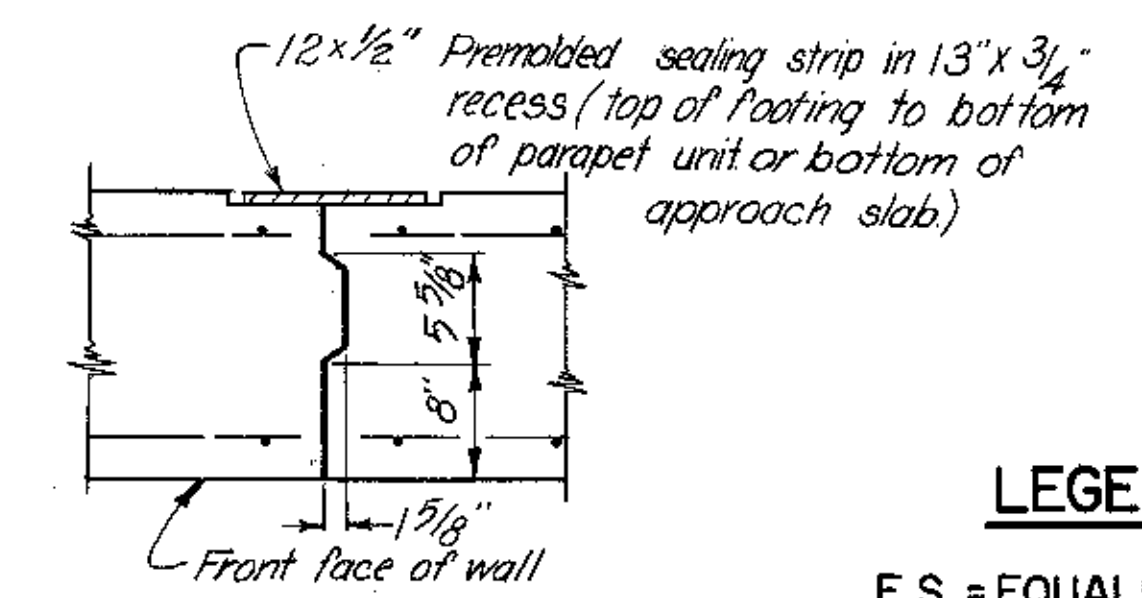
FRANKLIN COUNTY  
FRA-70-12.31S



**FOOTING REINFORCING STEEL - BOTTOM**



**FOOTING REINFORCING STEEL - TOP**



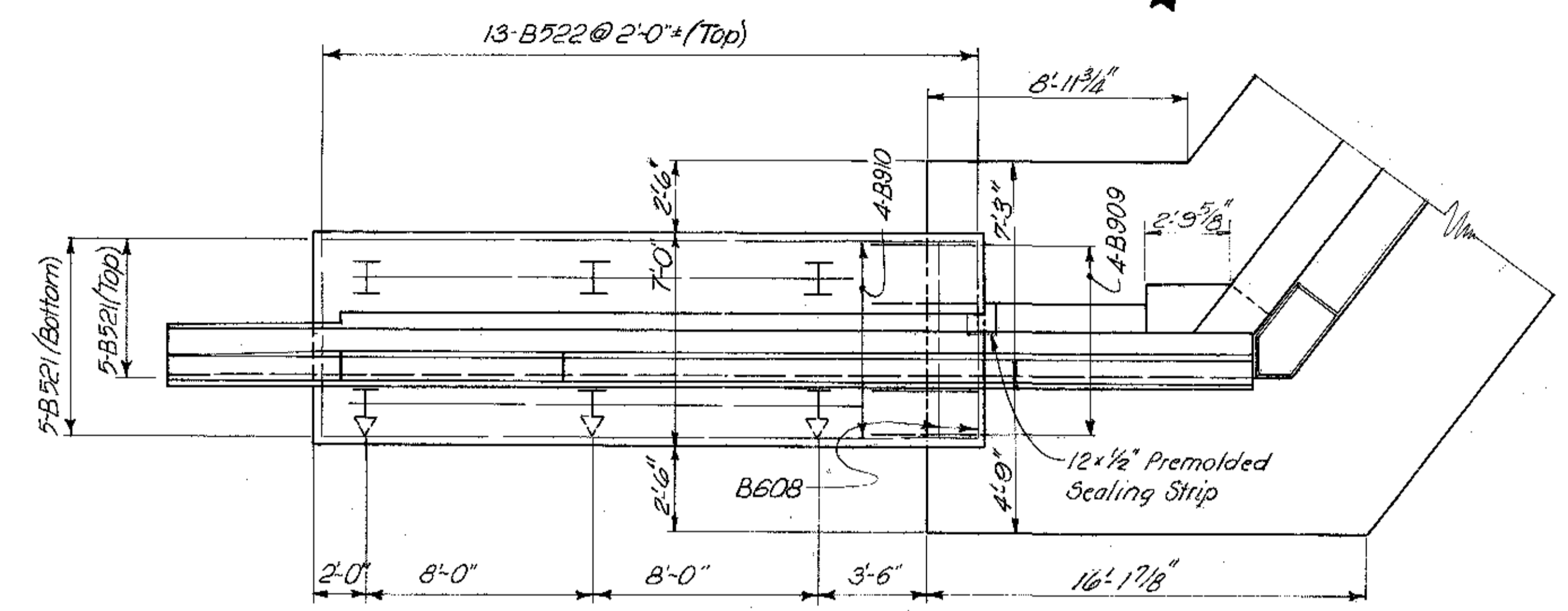
**CONTRACTION JOINT  
DETAIL**

- LEGEND**
- E.S. = EQUALLY SPACED, OR EQUAL SPACES
  - = BATTER PILES 1:4 (and direction of batter)

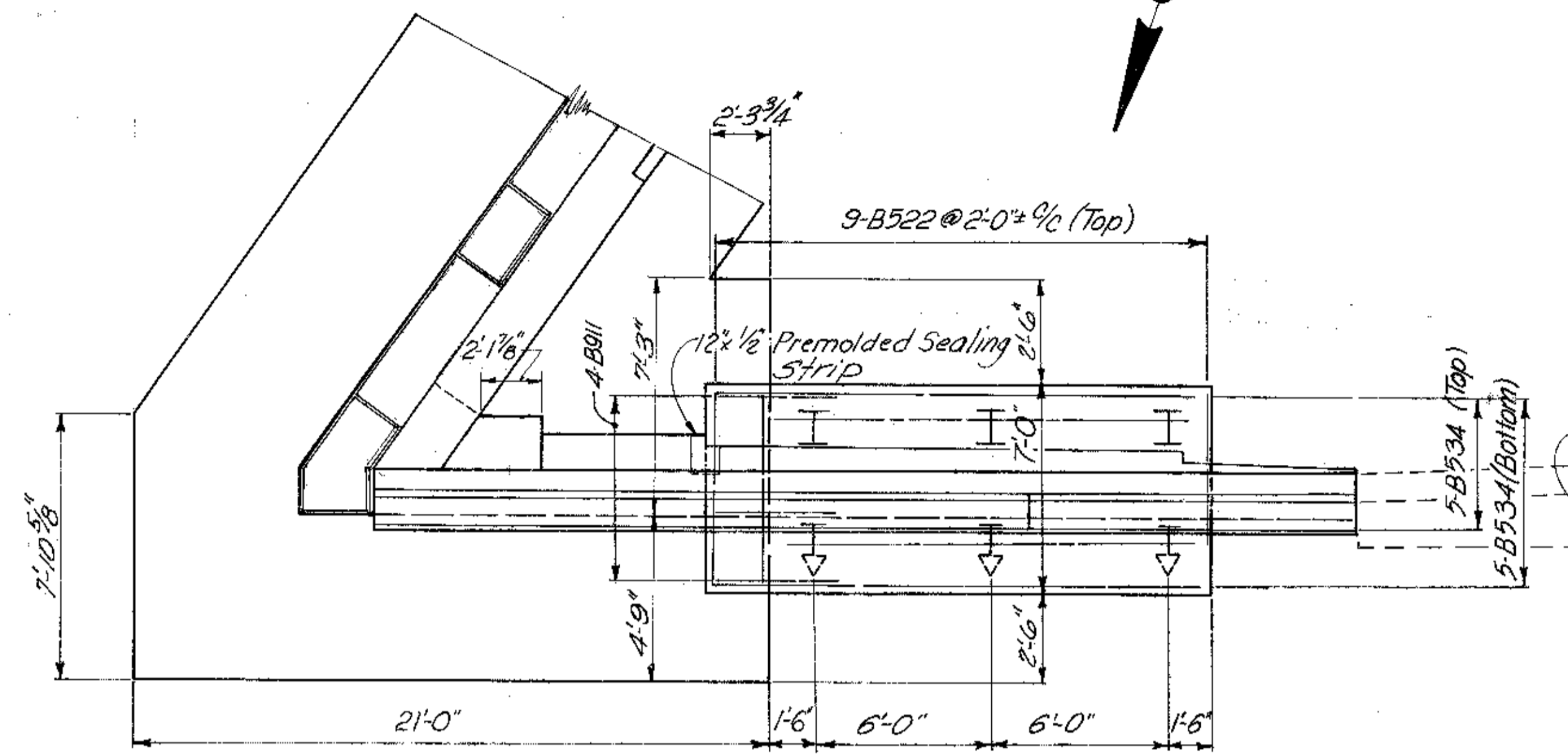
**NOTE:**  
For additional notes or details see sheets 5/58, 7/58, 8/58

E. S. PRESTON & ASSOCIATES, LIMITED		6/58
ENGINEERS COLUMBUS, OHIO		
<b>REAR ABUTMENT DETAILS-R</b>		
BRIDGE NO. FRA-70-1329-S-W.B. OVER SCIOTO RIVER		
FRANKLIN COUNTY		STA. 513+57.41 STA. 515+11.42
DESIGNED	DRAWN	TRACED
E.S.	R.V.B.	R.V.B.
CHECKED	DATE	REVISION
E.K.	6/16/70	N.M.

FRANKLIN COUNTY  
FRA-70-12.31S

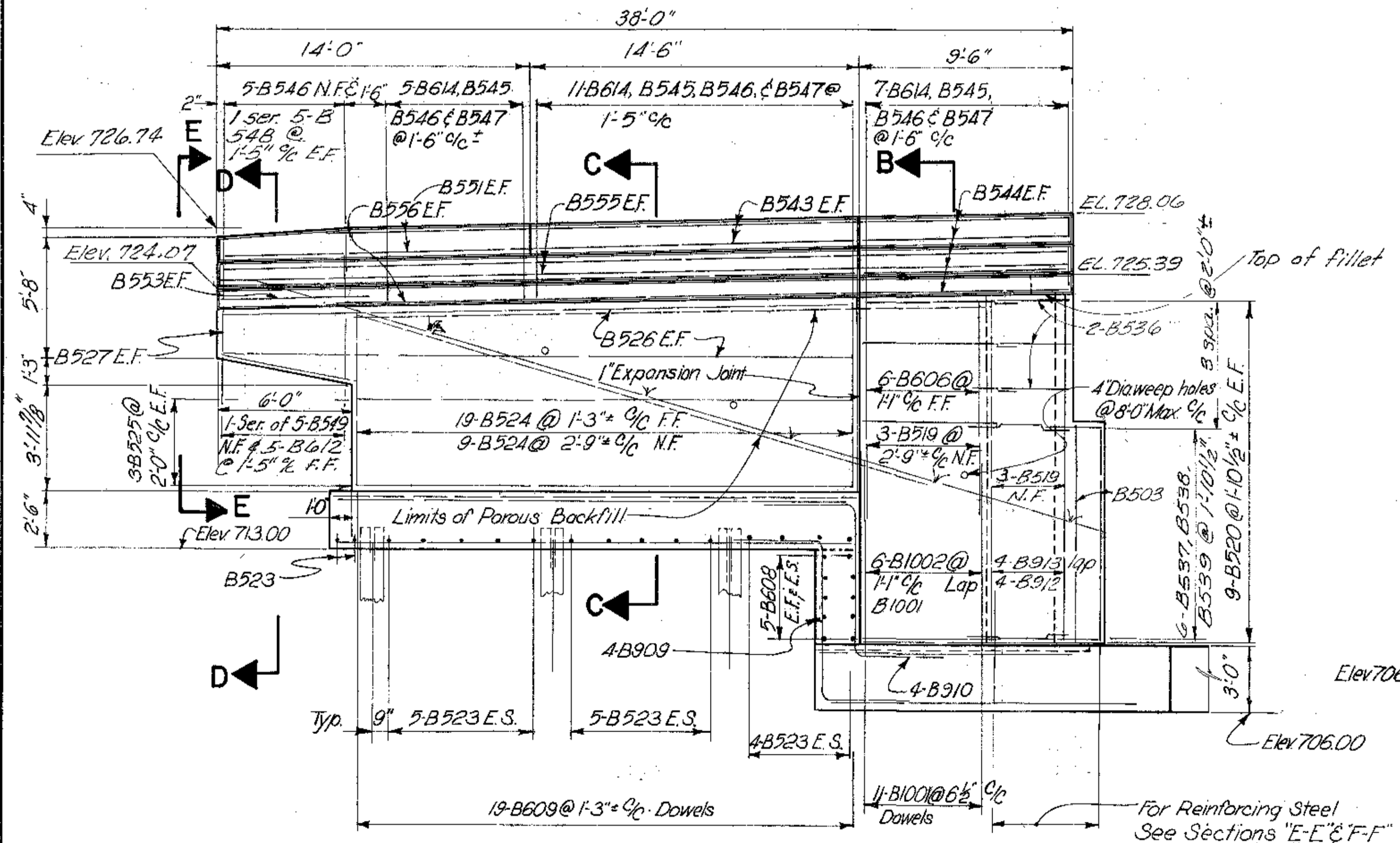


PLAN

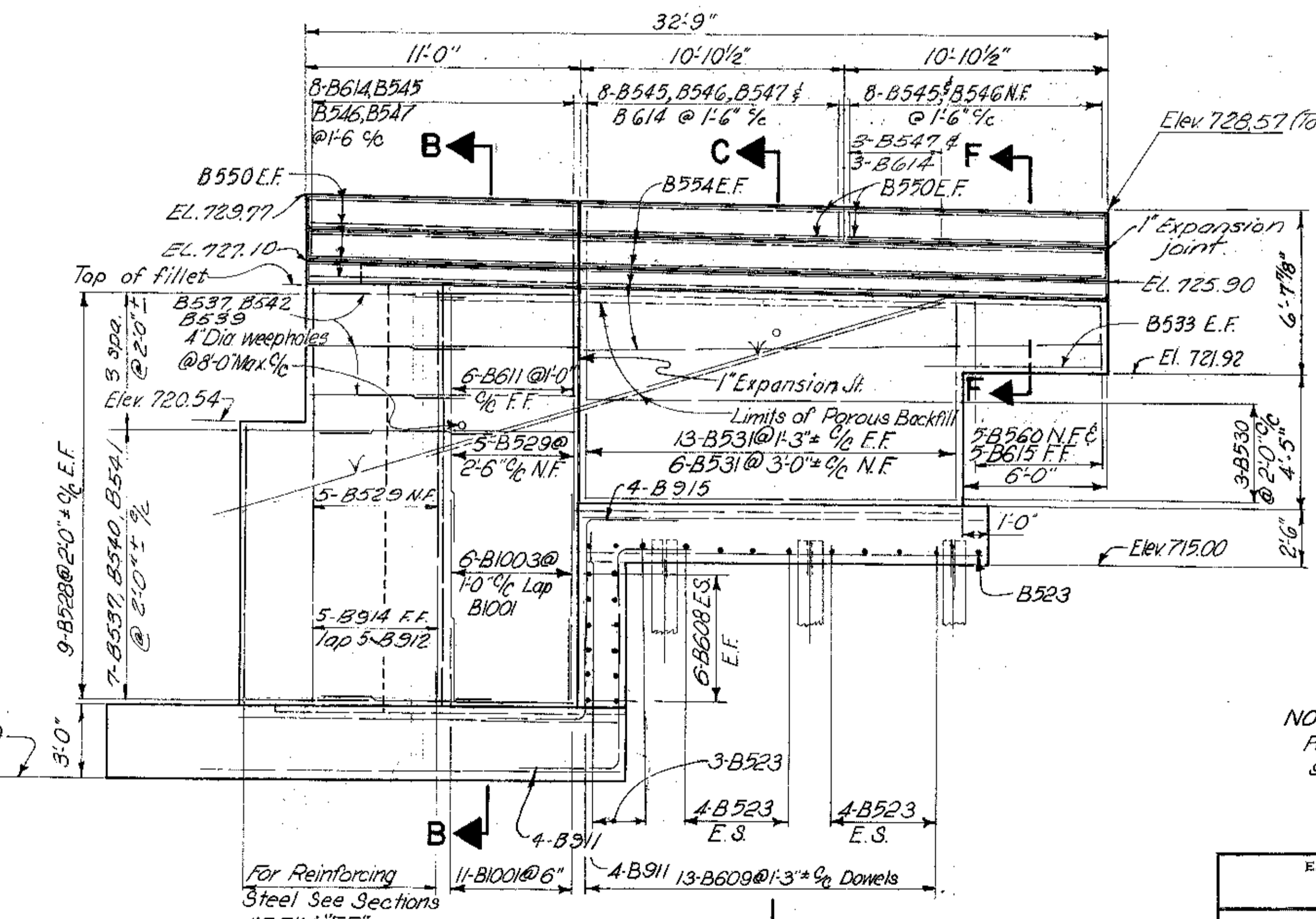


PLAN

Proposed Retaining Wall  
between Roads "D" & "DA"



ELEVATION



ELEVATION

LEGEND

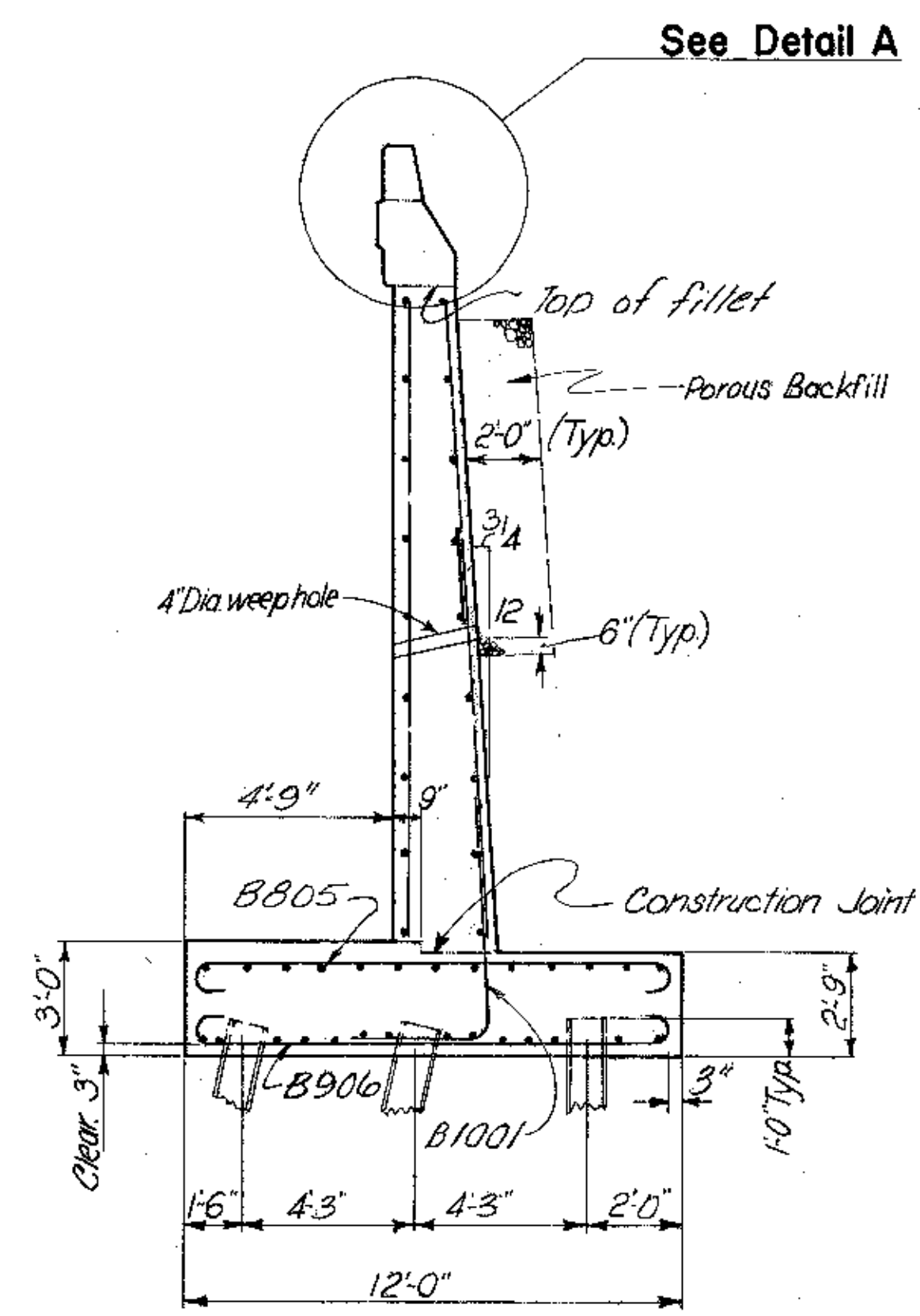
- E.F. = EACH FACE
- N.F. = NEAR FACE
- F.F. = FAR FACE
- E.S. = EQUALLY SPACED, OR EQUAL SPACES
- ▽ = BATTER PILES 1:4 (and direction of batter)

NOTE:  
For additional details or notes see sheets 5/58, 6/58, 8/58

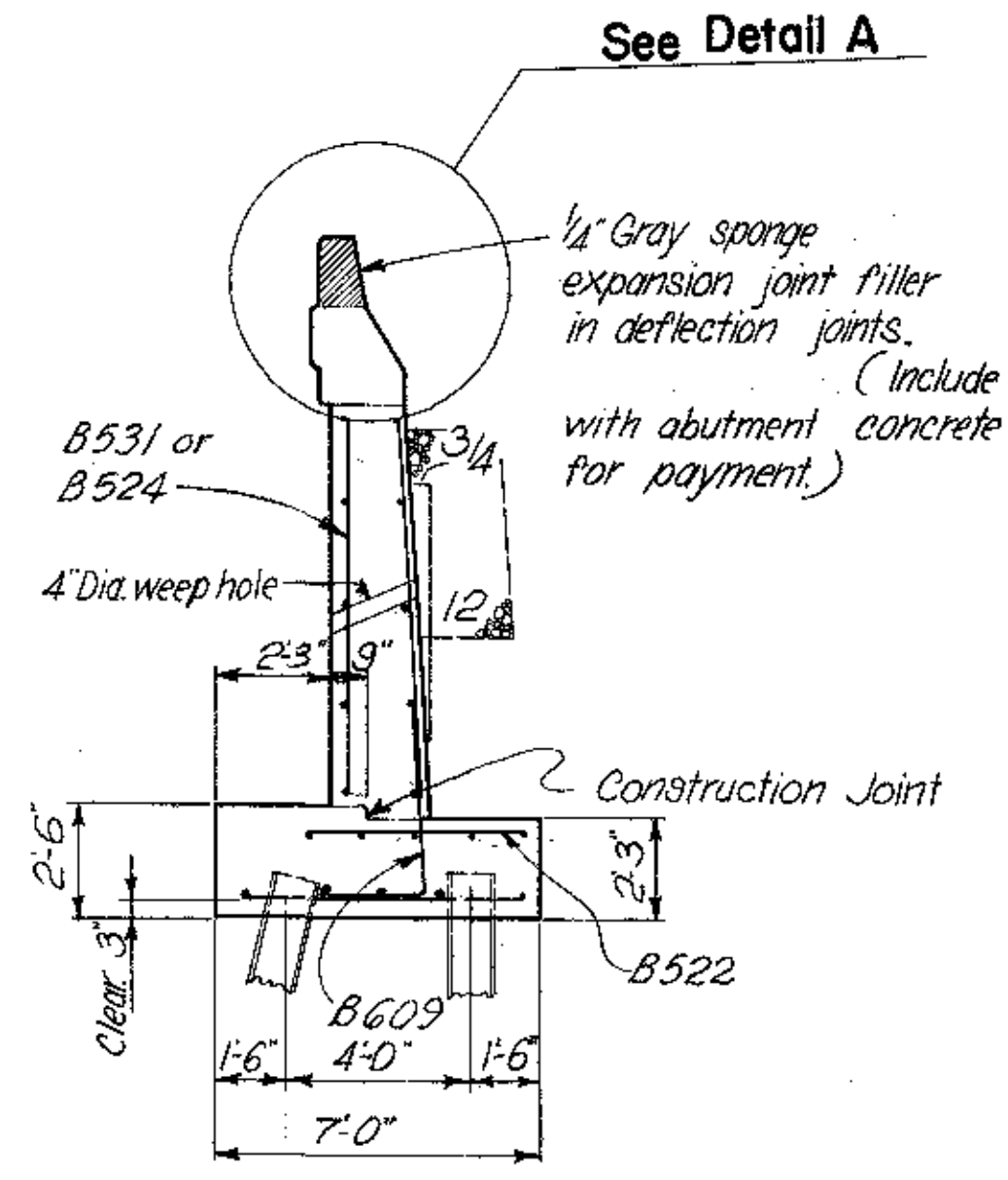
E. S. PRESTON & ASSOCIATES, LIMITED ENGINEERS COLUMBUS, OHIO					1/58
<b>REAR ABUTMENT DETAILS-R</b>					
BRIDGE NO. FRA-70-1329-S-W.B. OVER SCIOTO RIVER					
FRANKLIN COUNTY					STA. 513+57.41 STA. 515+11.42
DESIGNED E.S.	DRAWN E.K.	TRACED R.S.B.	CHECKED G.E.H.	REVIEWED DATE 6/16/70 W.M.	REVISIONS



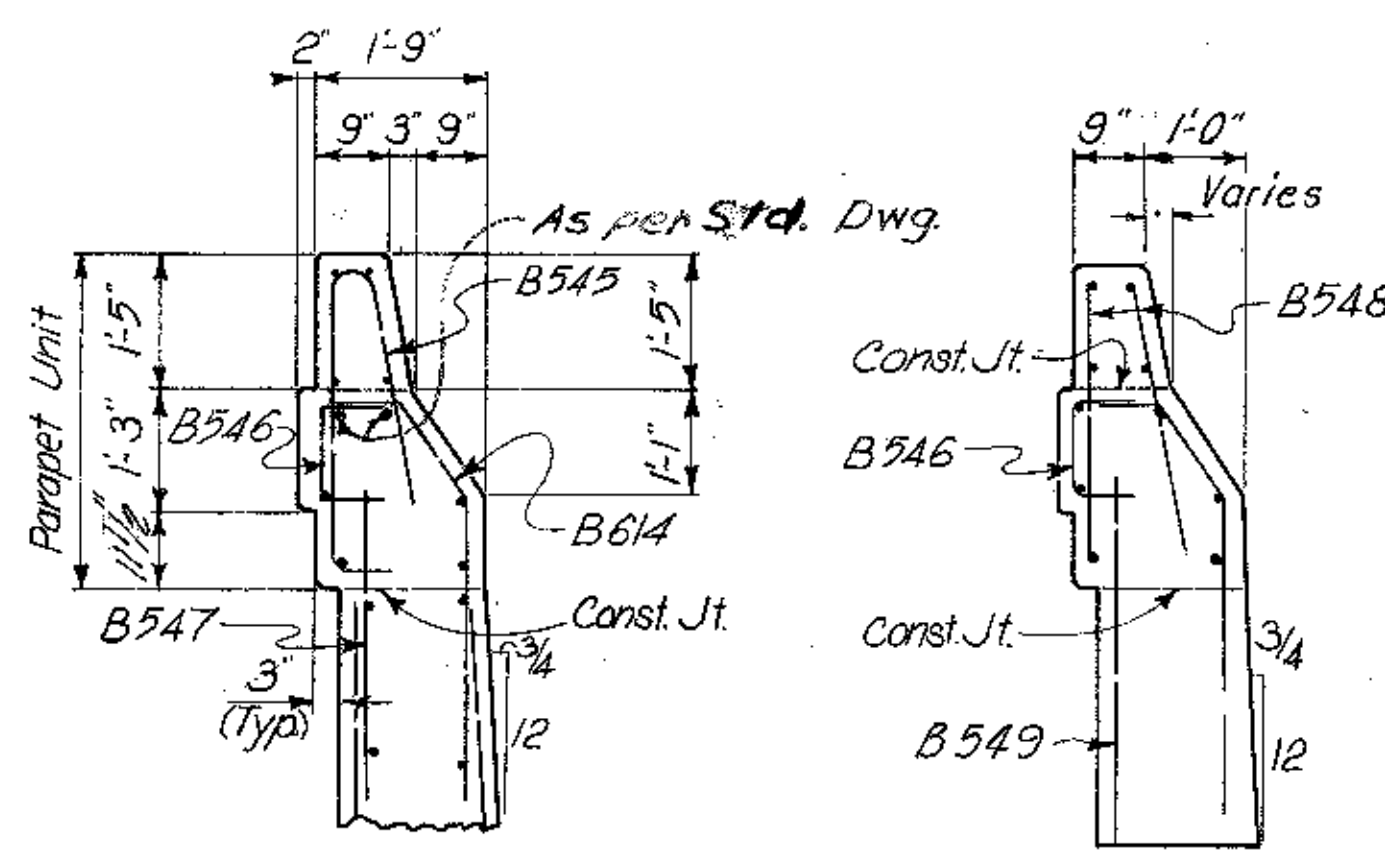
FRANKLIN COUNTY  
FRA-70-12.3IS



SECTION B-B

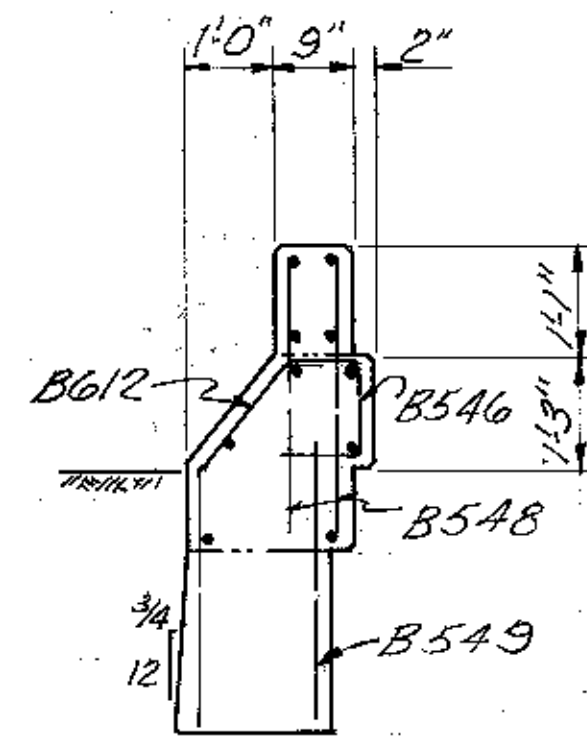


SECTION C-C

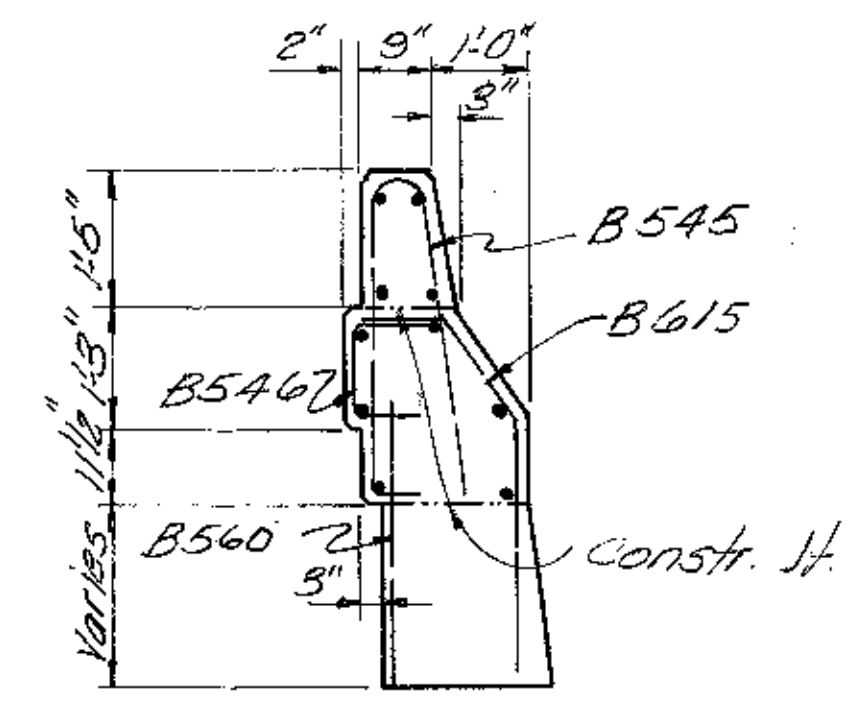


DETAIL A

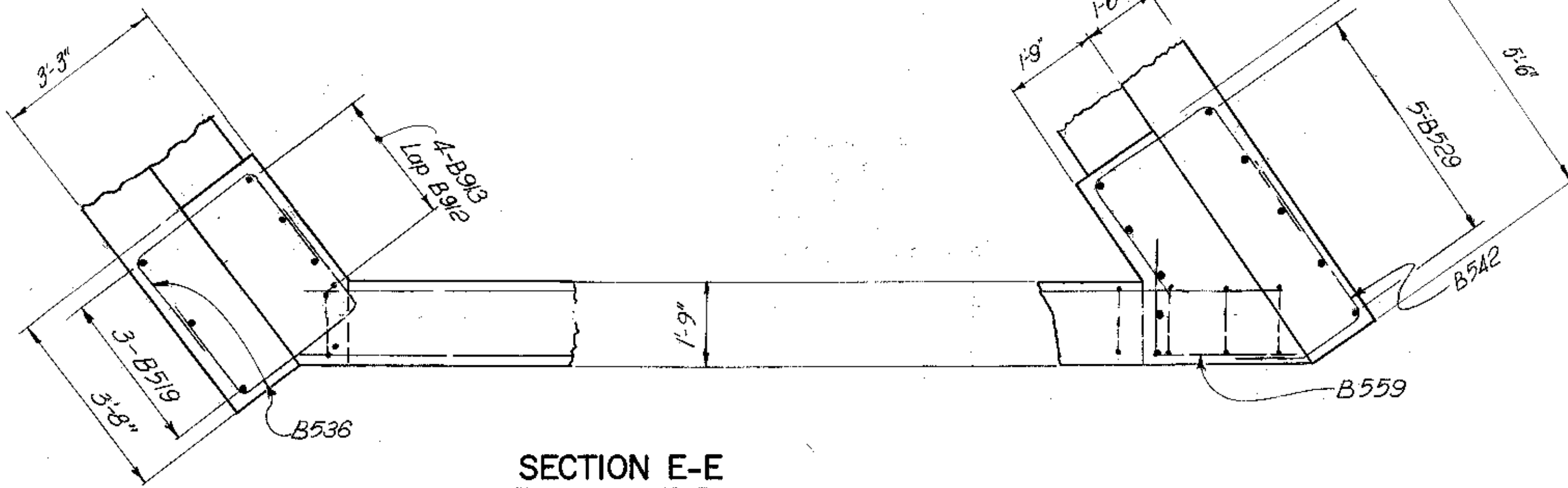
SECTION D-D



VIEW E-E

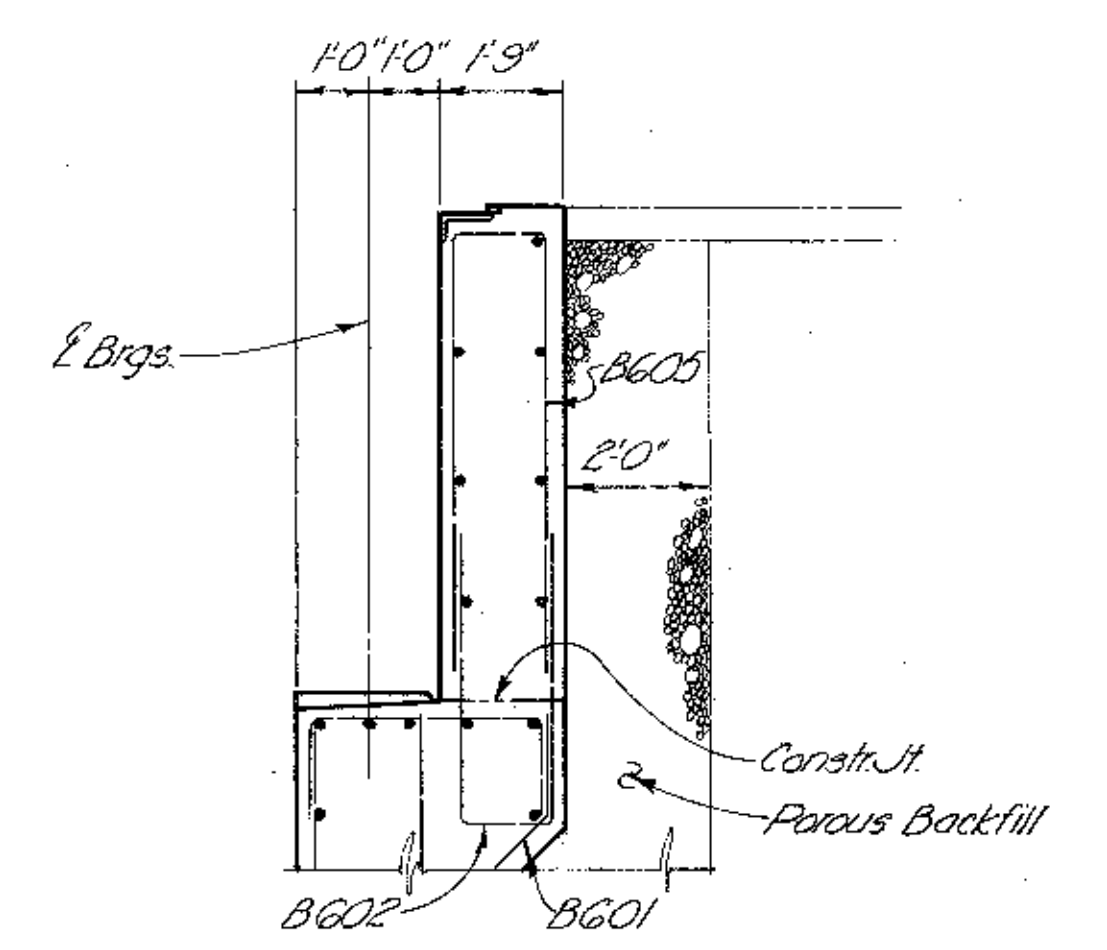


SECTION F-F



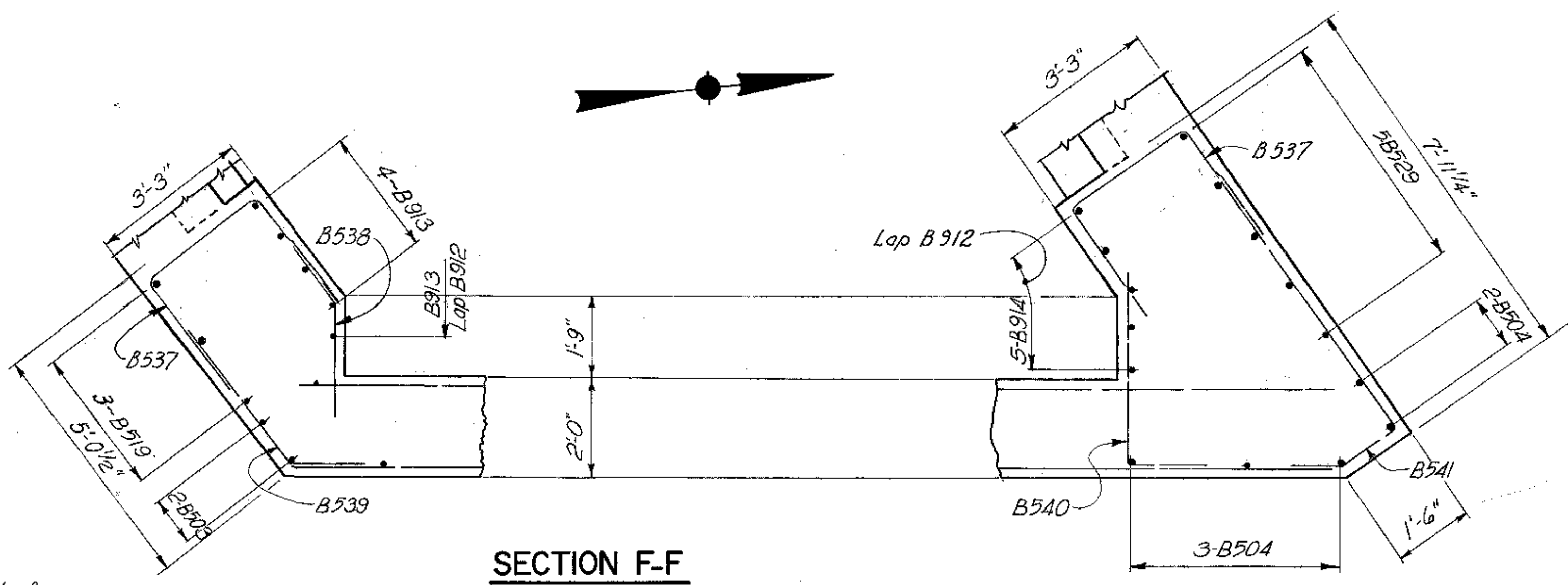
SECTION E-E

For Section Cuts E-E & F-F See Sheet 5/58



SECTION J-J

For Section Cut J-J see sheet 5/58



SECTION F-F

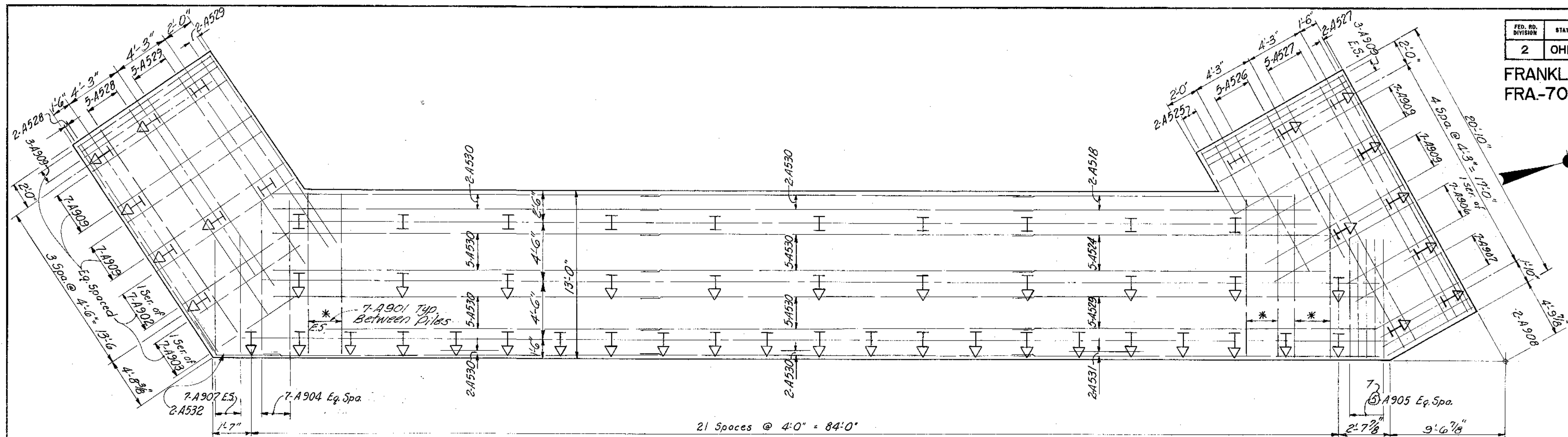
POROUS BACKFILL, 2 Ft thick, full length of abutment, shall extend up to the subgrade or to the finished ground surface.

NOTE:  
For additional details or notes see sheets 5/58 6/58 7/58

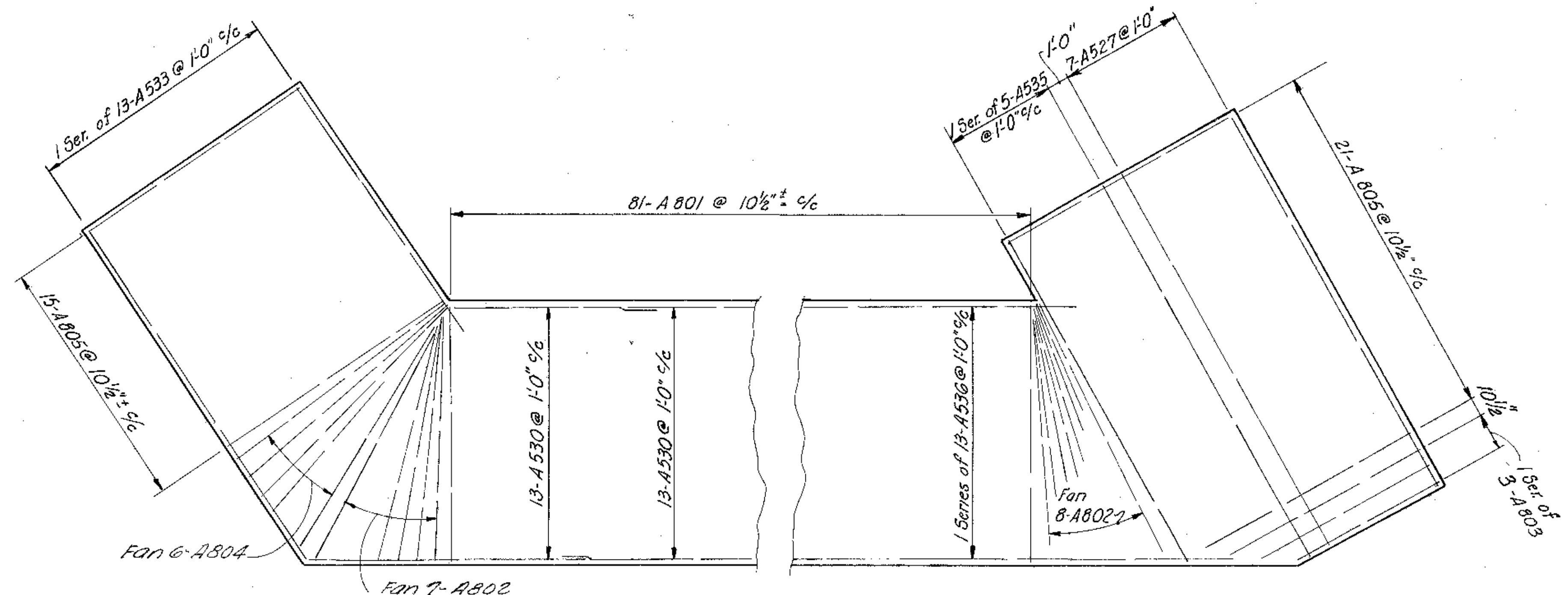
E. S. PRESTON & ASSOCIATES, LIMITED				8/58
ENGINEERS				
COLUMBUS, OHIO				
<b>REAR ABUTMENT DETAILS-R</b>				
BRIDGE NO. FRA-70-1329-S-W.B.				
OVER SCIOTO RIVER				
FRANKLIN COUNTY		STA. 513+57.41		
		STA. 515+11.42		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE
E.S.	E.K.	R.J.B.	G.E.W.	6/14/70 A.D.
				8-31-73



FRANKLIN COUNTY  
FRA-70-12.31 S



**FOOTING REINFORCING STEEL- BOTTOM**



**FOOTING REINFORCING STEEL- TOP**

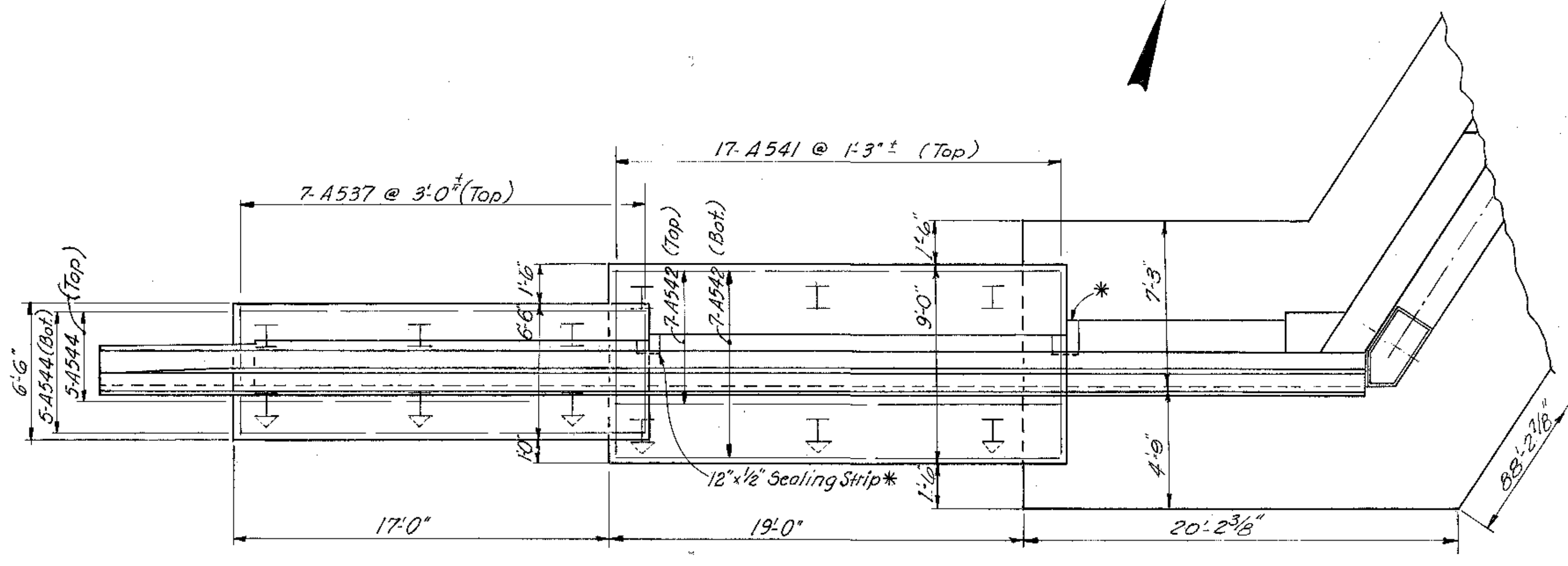
**LEGEND**

⊥ = BATTER PILES 1:4  
(and direction of batter)

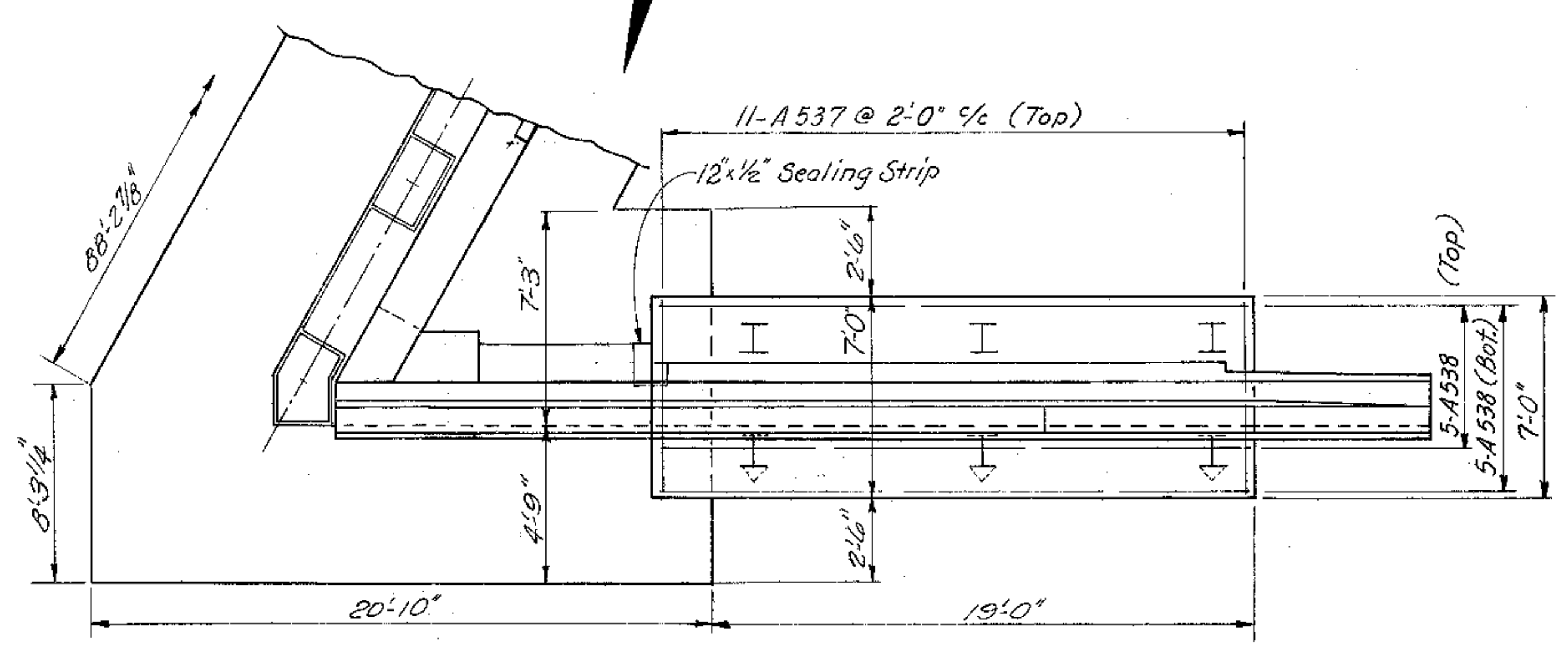
NOTE:  
For additional notes and details  
see sheets 9/58, 11/58, 12/58

E. S. PRESTON & ASSOCIATES, LIMITED		10/58
ENGINEERS		
COLUMBUS, OHIO		
<b>REAR ABUTMENT DETAILS-L</b>		
BRIDGE NO. FRA-70-1329-S.-W.B.		
OVER SCIOTO RIVER		
FRANKLIN COUNTY	STA. 506+14.07	
	STA. 515+11.42	
DESIGNED	DRAWN	TRACED
E.S.	E.K.	R.S.B.
CHECKED	REVIEWED DATE	REVISED
G.E.W.	6/14/70 N.A.	8-31-7

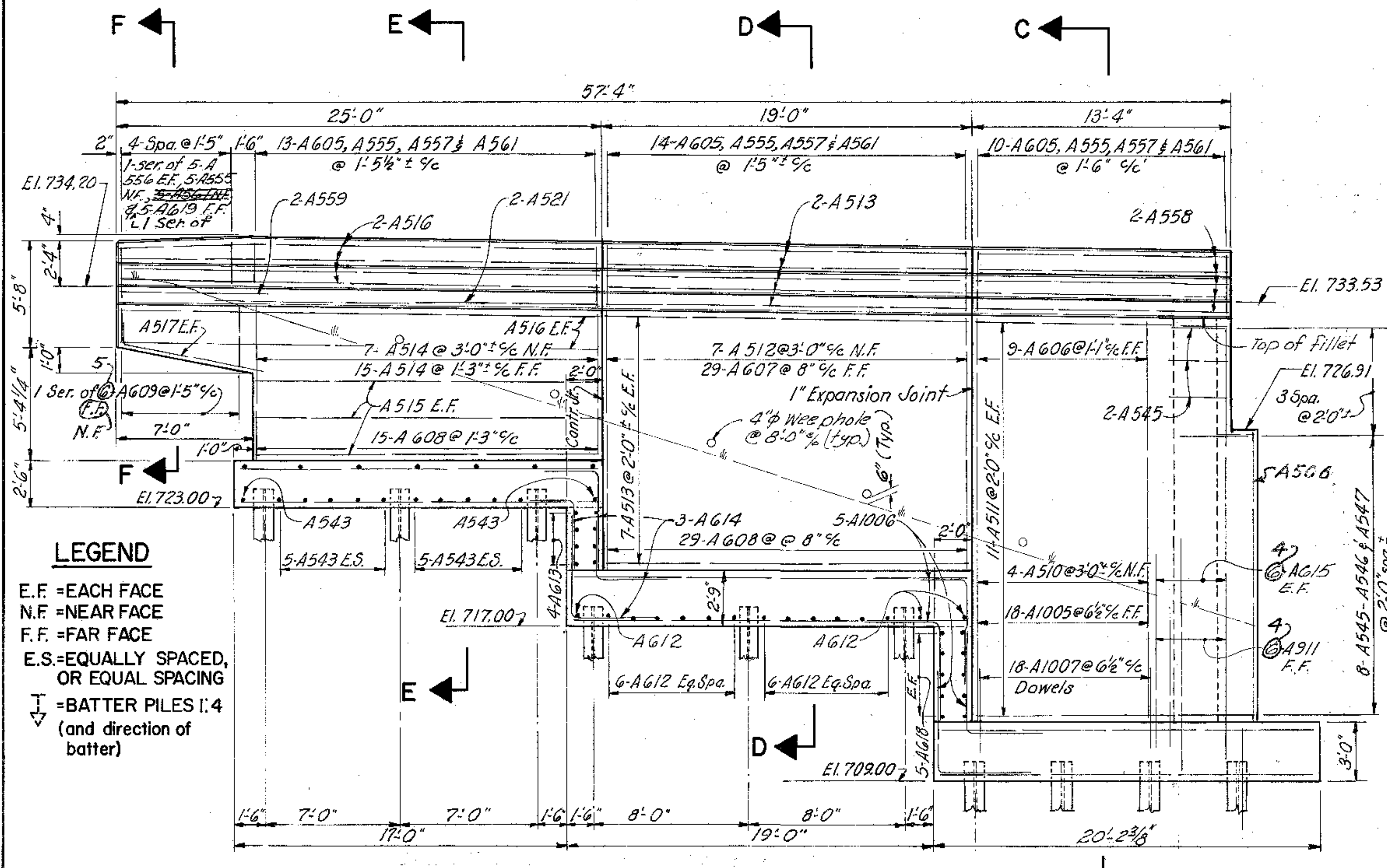
FRANKLIN COUNTY  
FRA-70-12.31 S



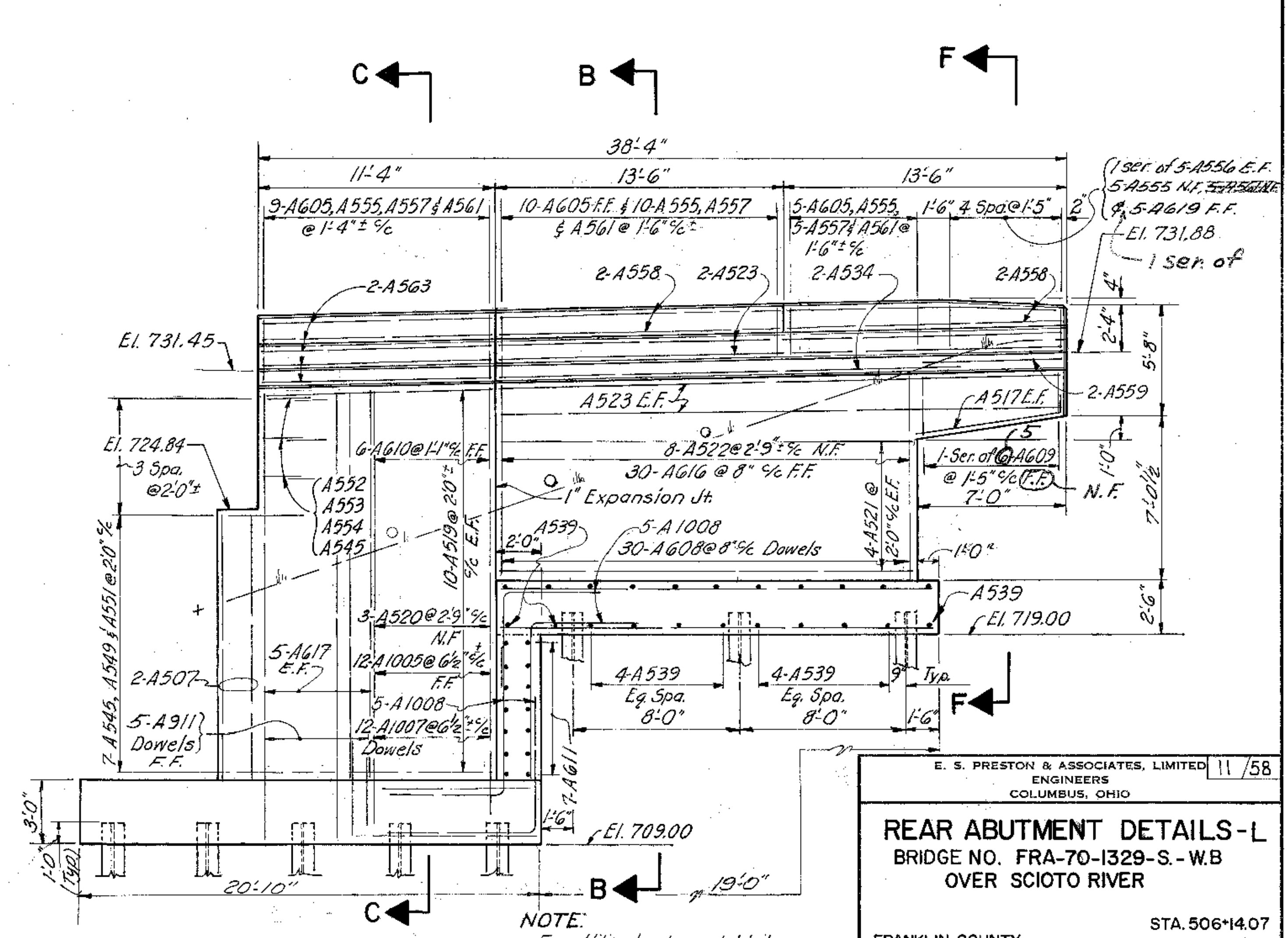
PLAN



PLAN



ELEVATION



ELEVATION

NOTE:  
For additional notes and details see sheets 9/58 10/58 12/58

**LEGEND**  
E.F. = EACH FACE  
N.F. = NEAR FACE  
F.F. = FAR FACE  
E.S. = EQUALLY SPACED, OR EQUAL SPACING  
↓ = BATTER PILES 1:4 (and direction of batter)

E. S. PRESTON & ASSOCIATES, LIMITED 11/58  
ENGINEERS  
COLUMBUS, OHIO

**REAR ABUTMENT DETAILS-L**  
BRIDGE NO. FRA-70-1329-S-W.B  
OVER SCIOTO RIVER

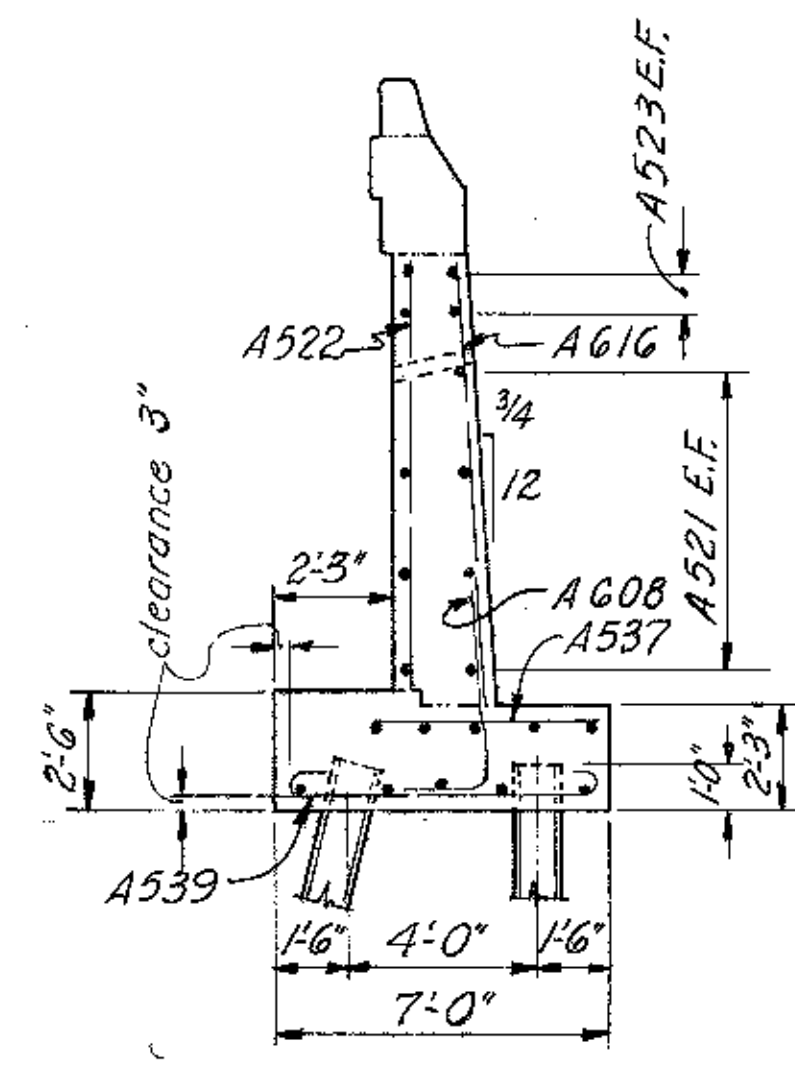
FRANKLIN COUNTY  
STA. 506+14.07  
STA. 515+11.42

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
E.S. EK.	R.J.B.	A.V.M.	G/14/70	N.O.	8-31-73

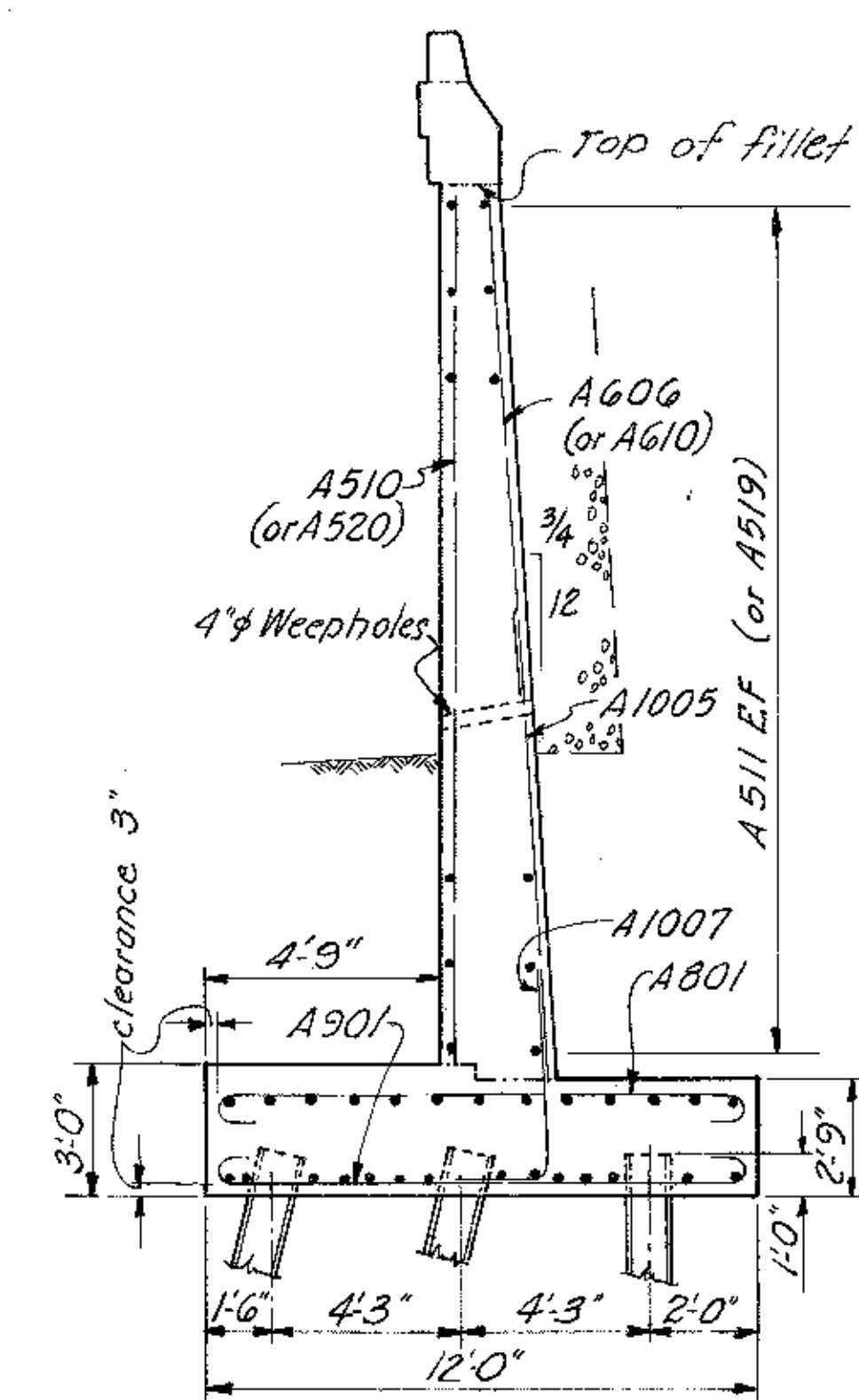
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

840

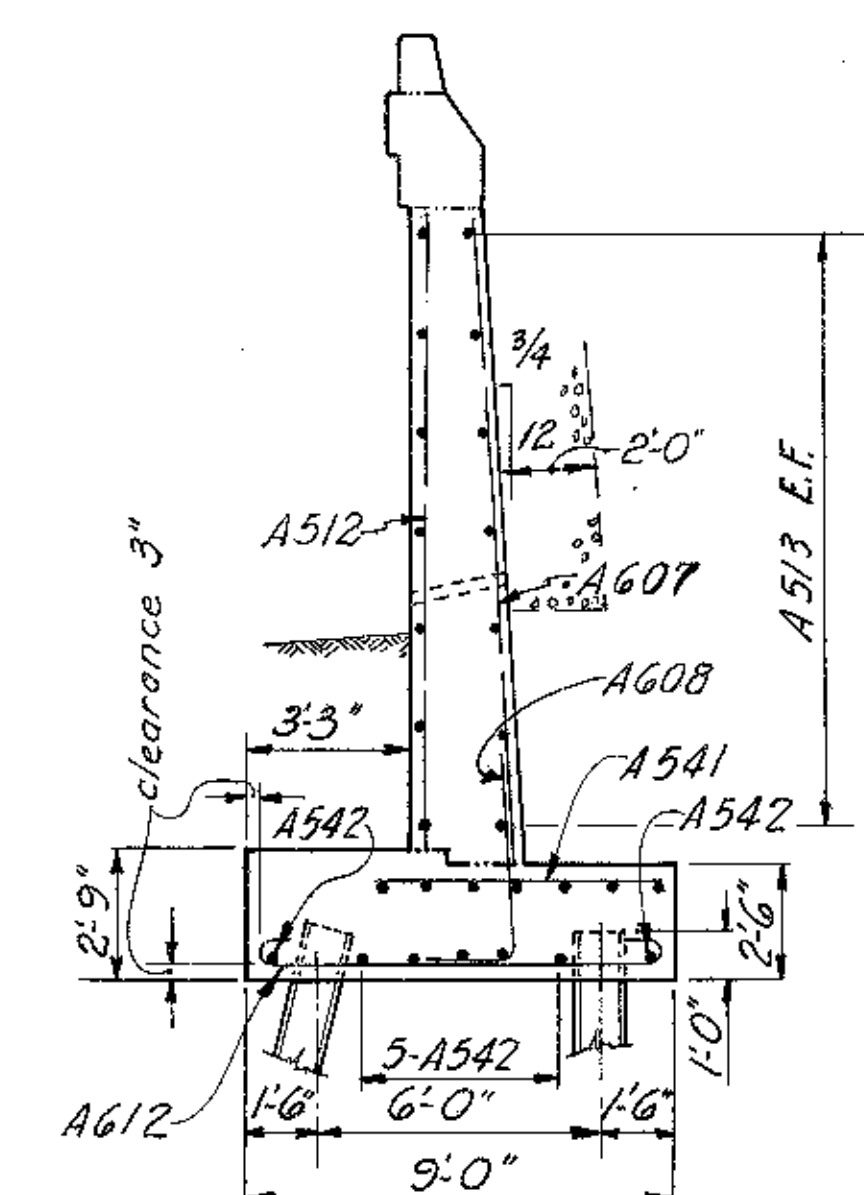
FRANKLIN COUNTY  
FRA-70-12.31S



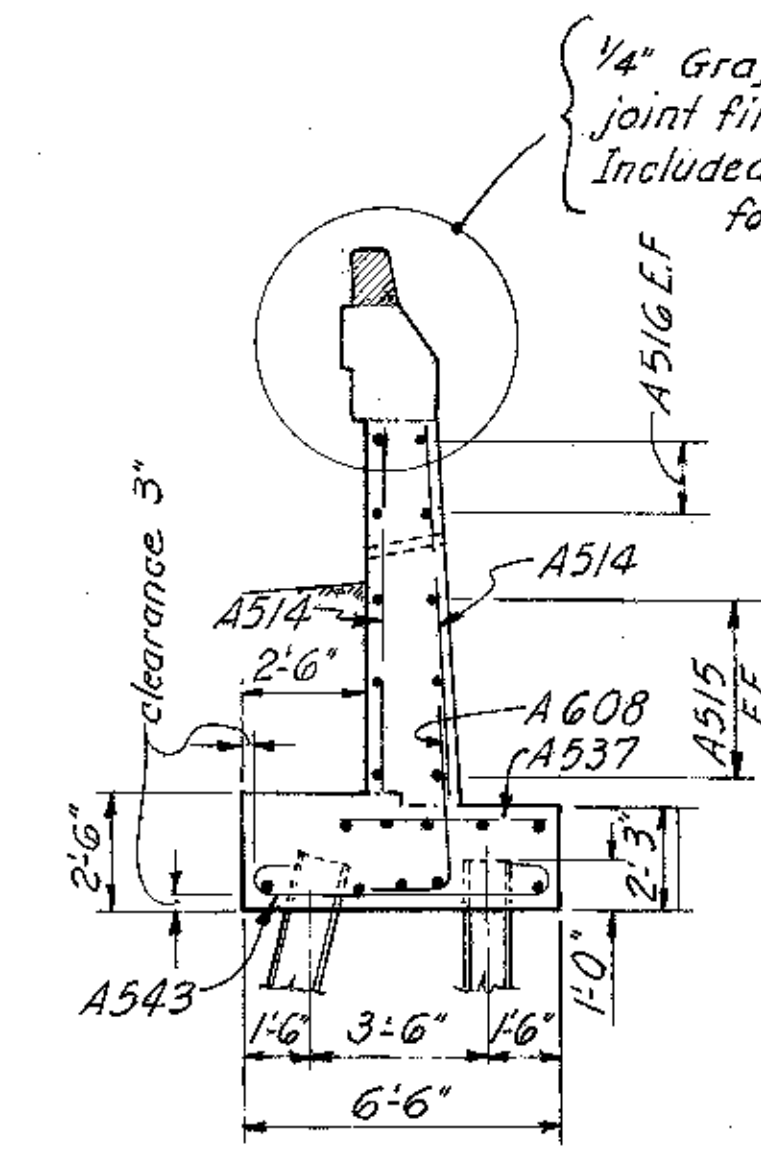
SECTION B-B



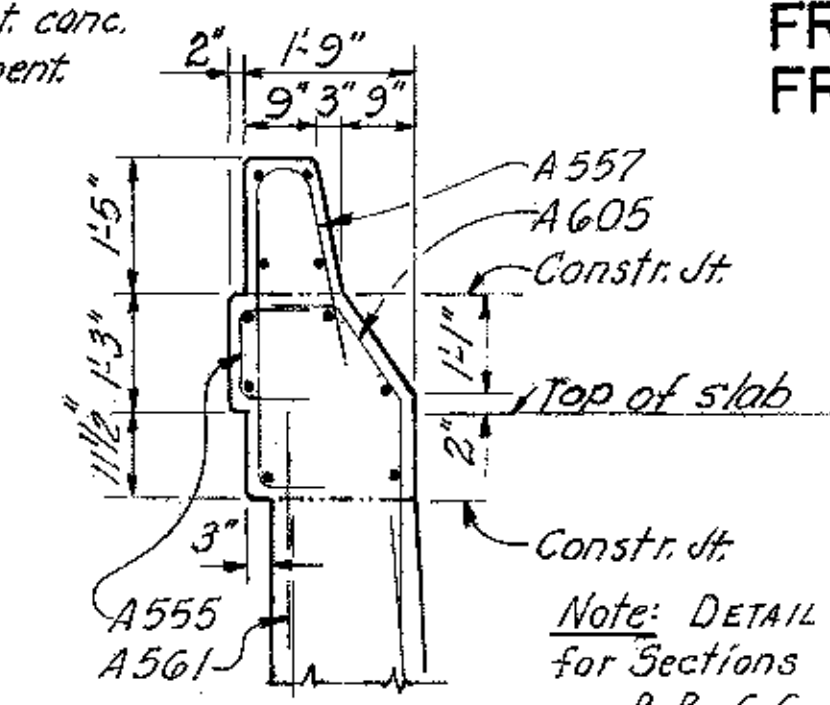
SECTION C-C



SECTION D-D

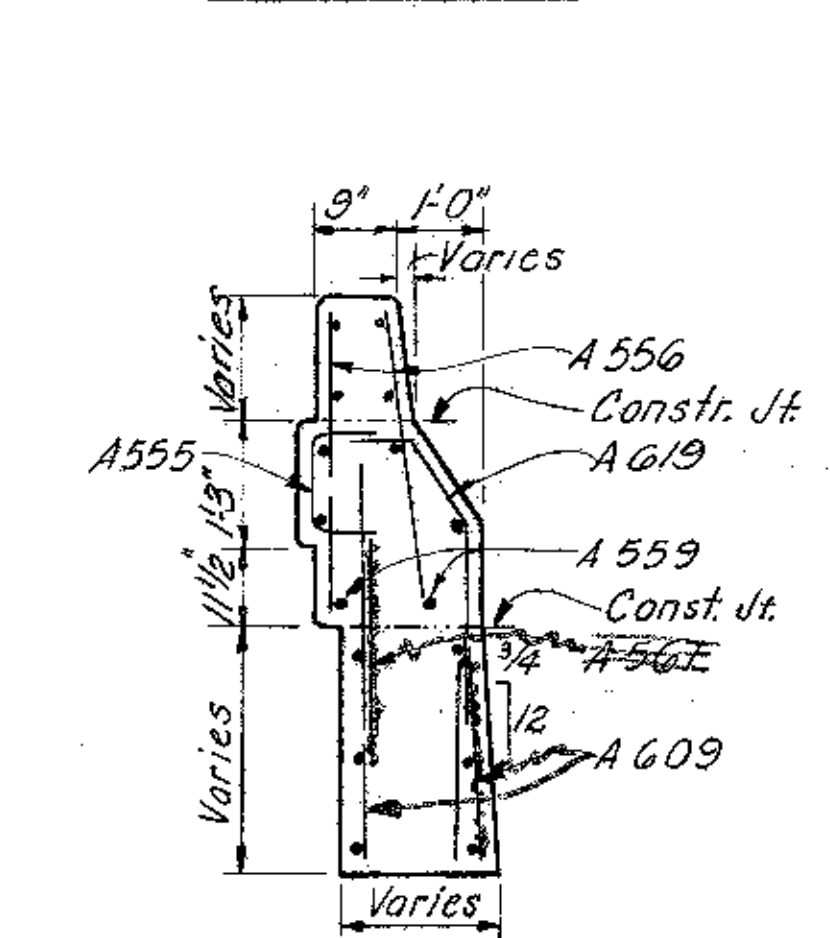


SECTION E-E

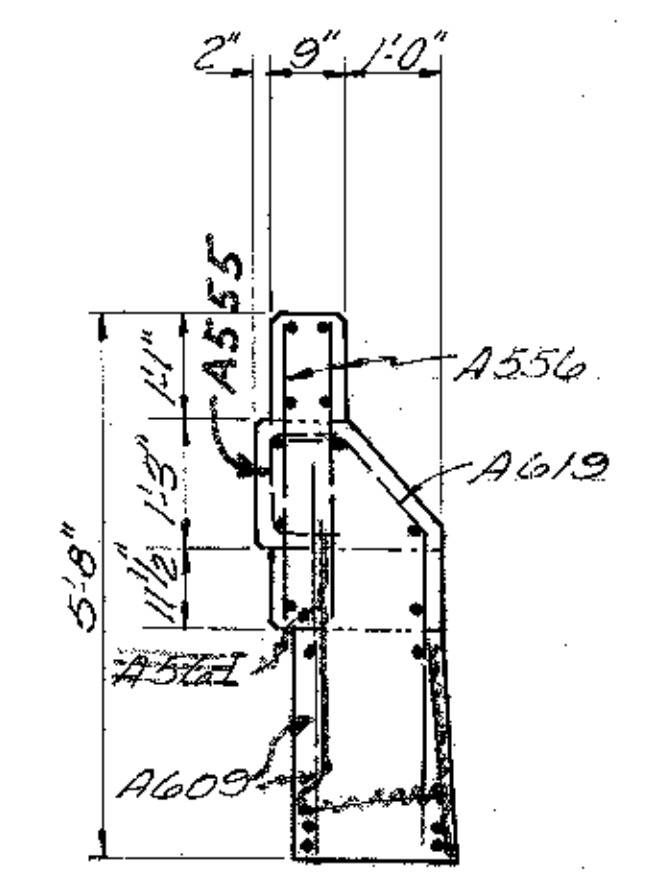


DETAIL B

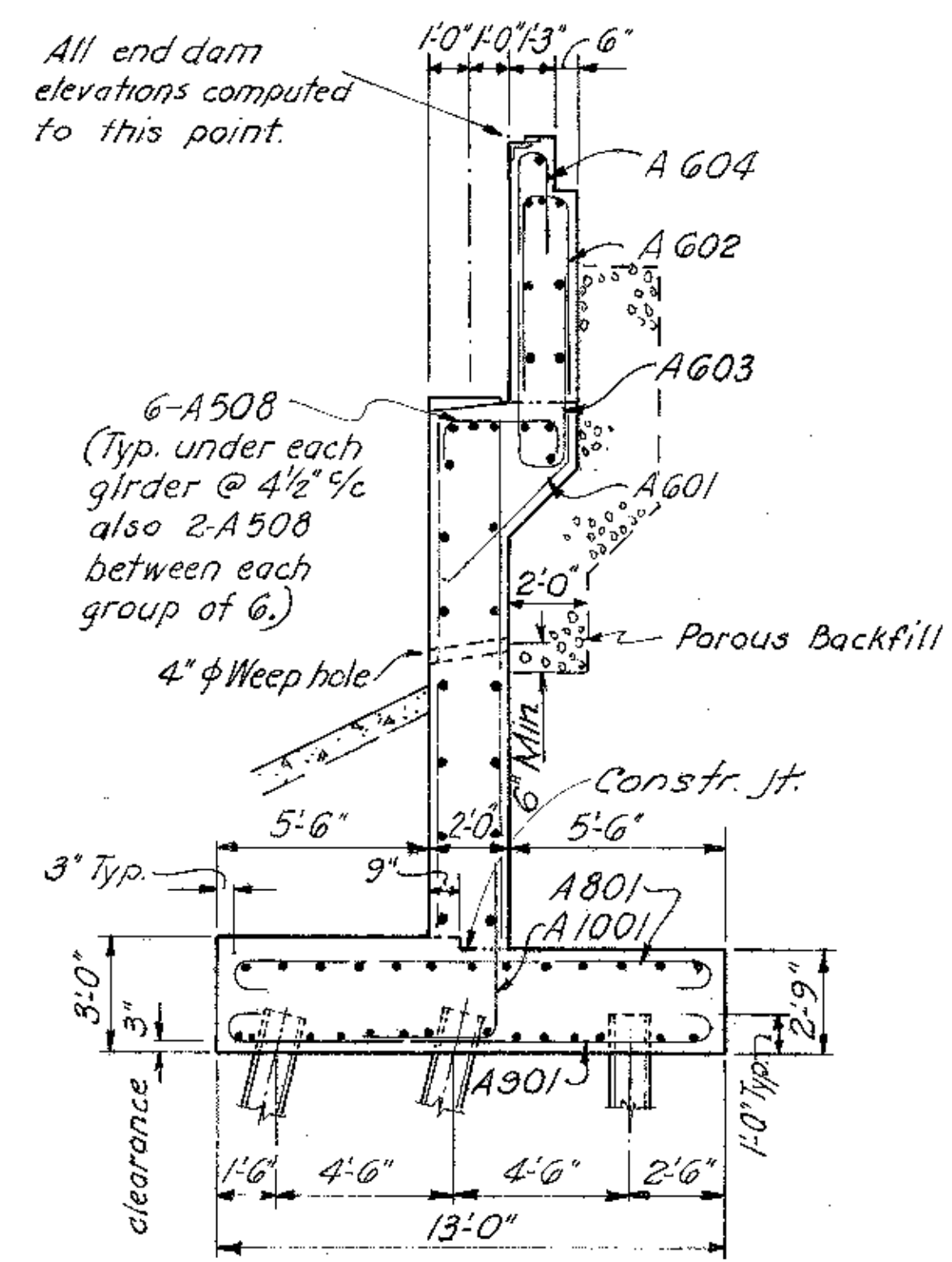
Note: DETAIL B Typical for Sections B-B, C-C, D-D, & E-E.



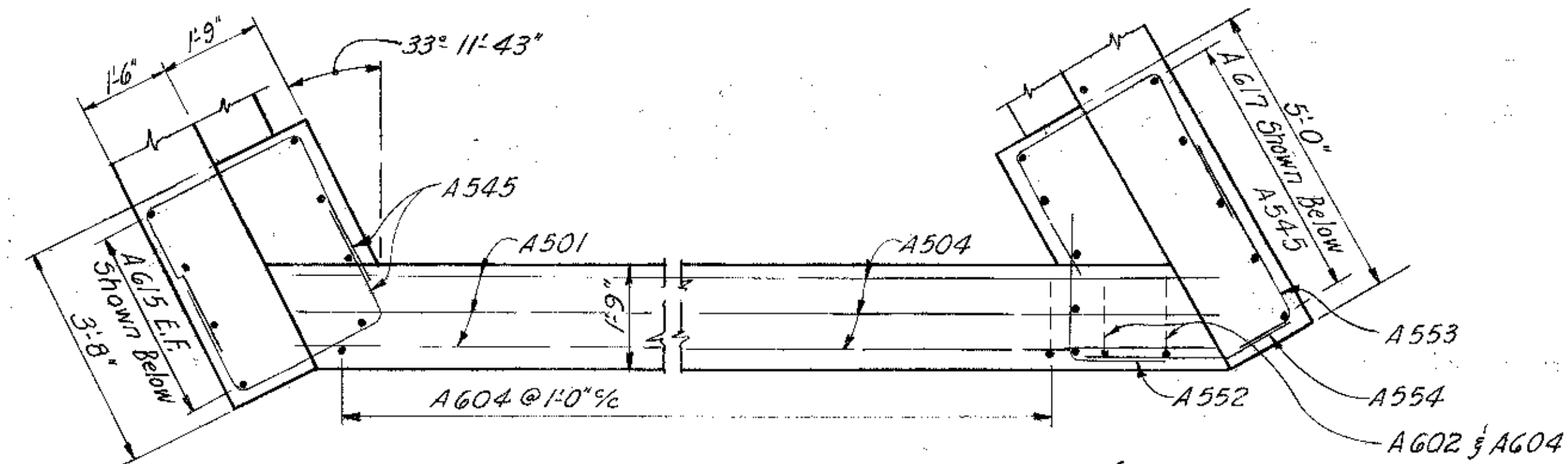
SECTION F-F



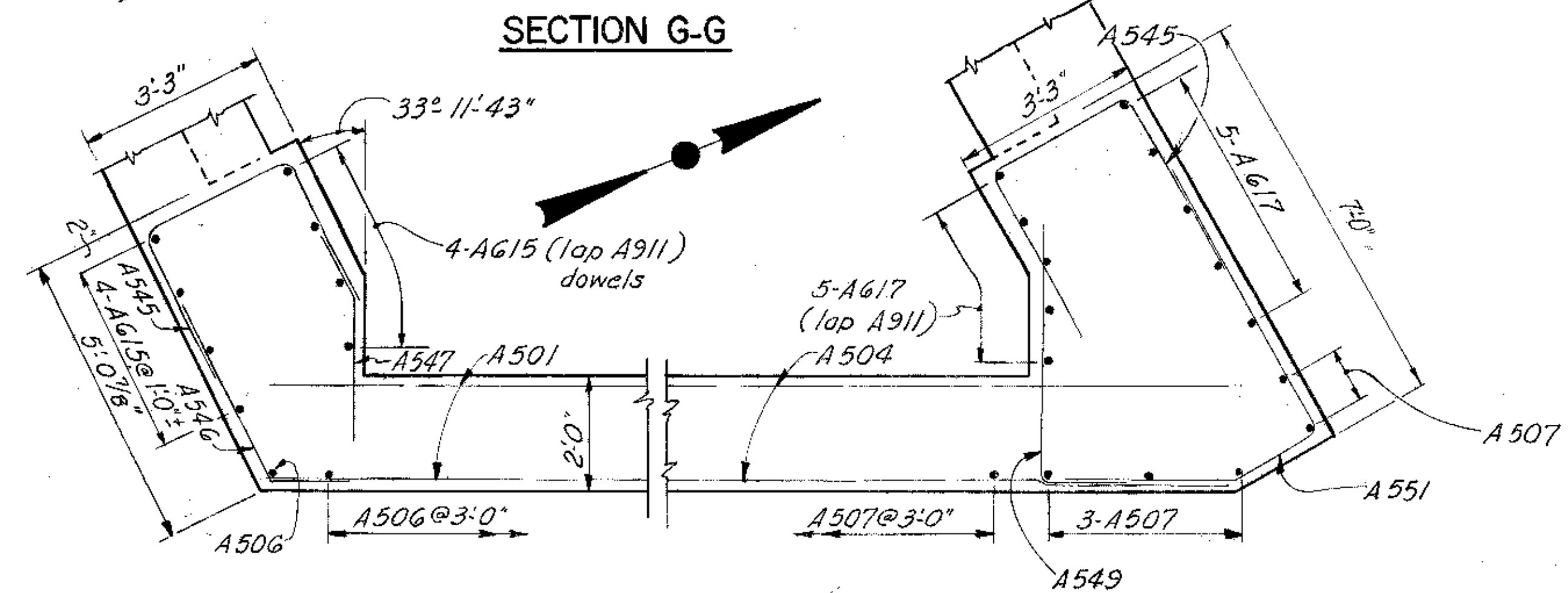
END VIEW



SECTION A-A



SECTION G-G



SECTION H-H

**LEGEND**

E.F. = EACH FACE  
All Piles to be HP12 x 53

NOTE:  
For additional notes and details see sheets 9/58, 10/58, 11/58

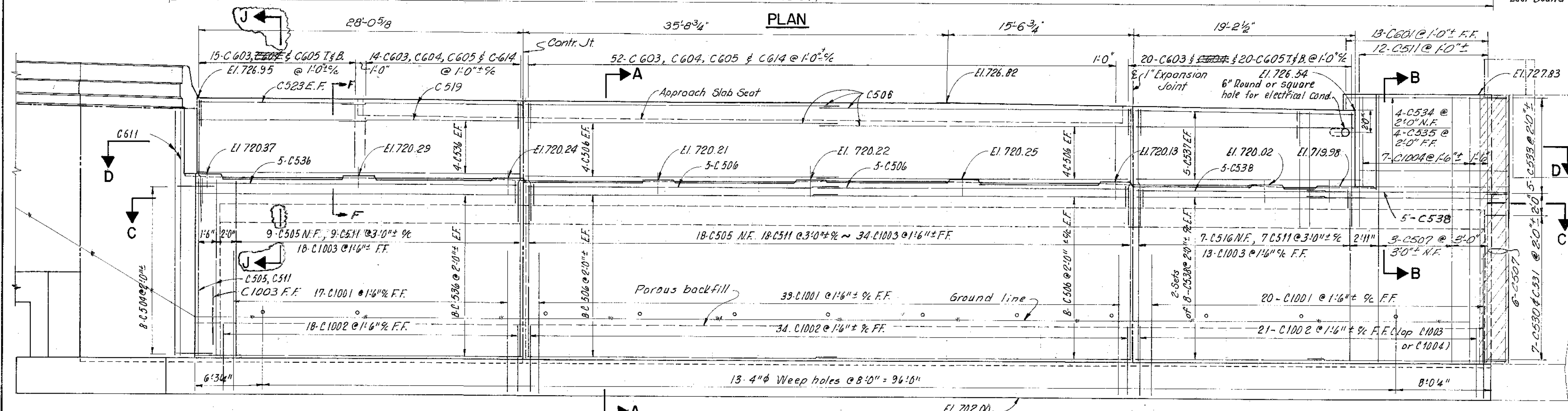
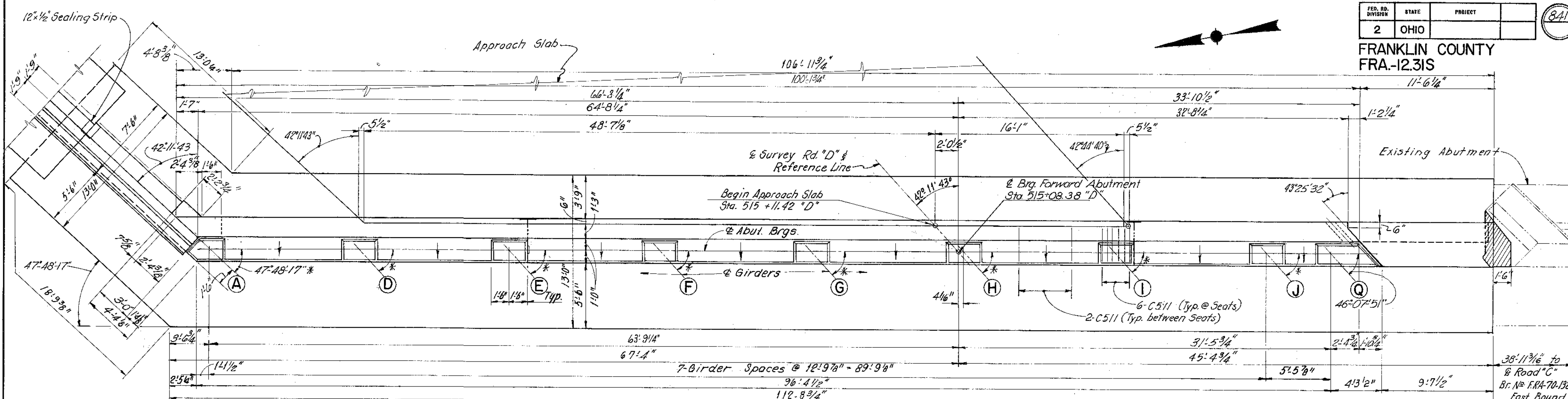
E. S. PRESTON & ASSOCIATES, LIMITED 12/58  
ENGINEERS  
COLUMBUS, OHIO

**REAR ABUTMENT DETAILS-L**  
BRIDGE NO. FRA-70-1329-S-W.B.  
OVER SCIOTO RIVER

STA. 506+14.07  
STA. 515+11.42

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	DATE
E.S.	E.K.	R.J.B.	A.U.M.	6/16/70	N.N.

FRANKLIN COUNTY  
FRA-12.31S

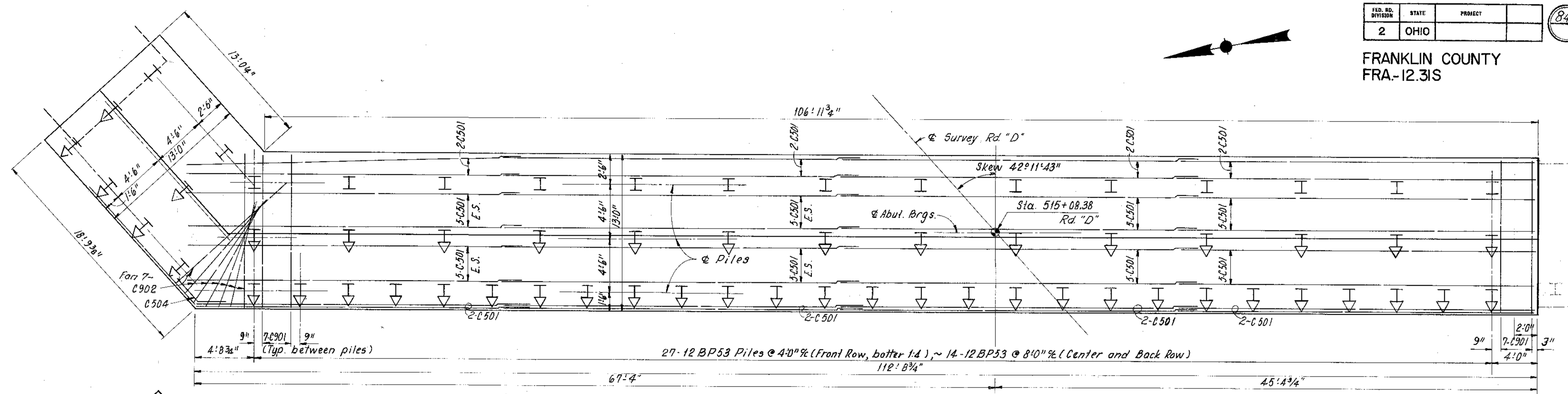


**LEGEND**  
 E.F. = EACH FACE  
 N.F. = NEAR FACE  
 F.F. = FAR FACE  
 T.&B. = TOP & BOTTOM

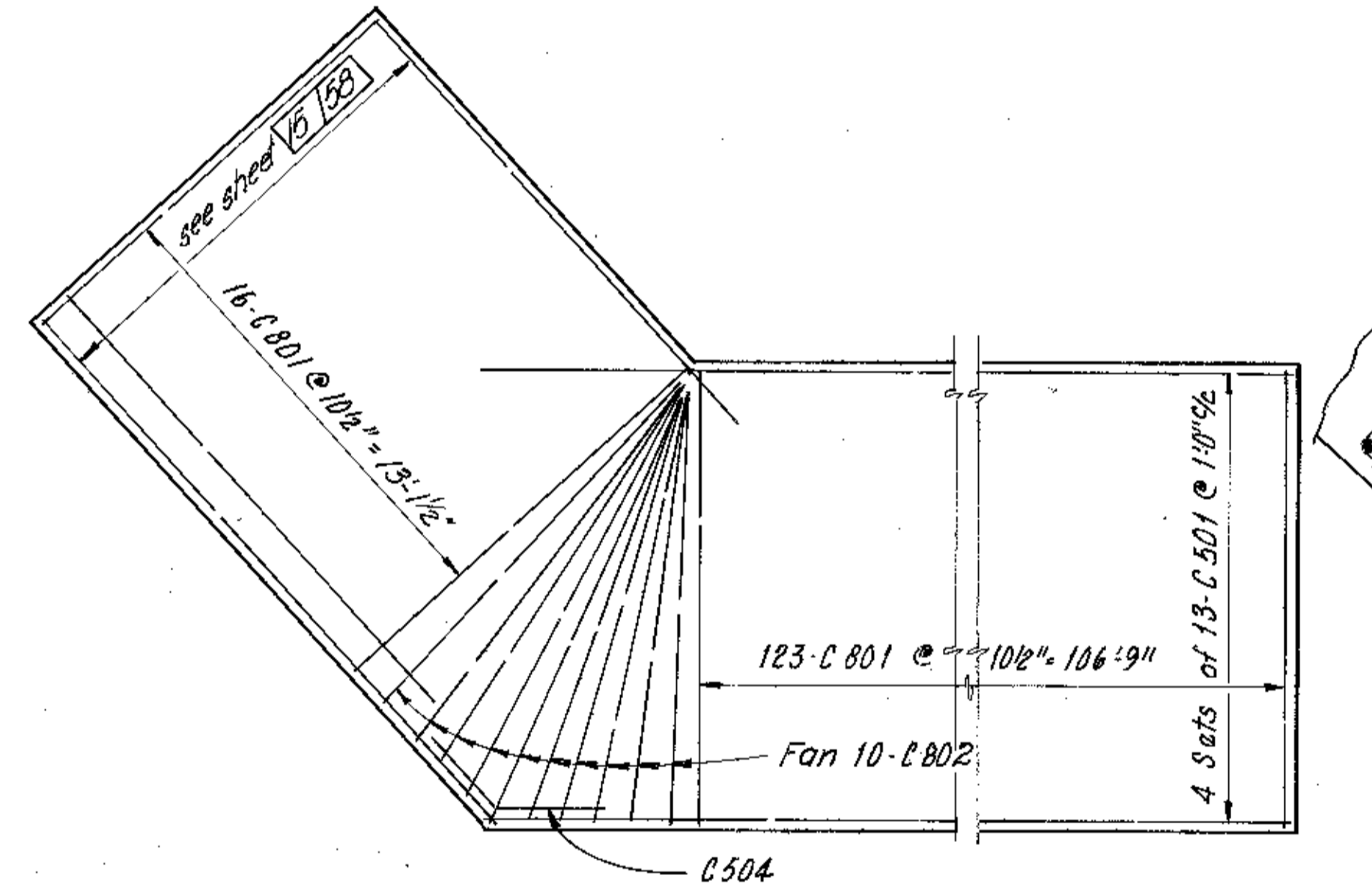
**ELEVATION**  
 For footing steel and piles see  
 Footing Plan, Abut. Detail sheet 14/58

**NOTES:**  
 For sections & Details see sheet 14/58  
 For Contr. Jt. & Retaining Details see sheet 15/58  
 Cross Hatched area indicates the area of existing abutment to be removed. The existing reinforcing steel shall be cut off flush.

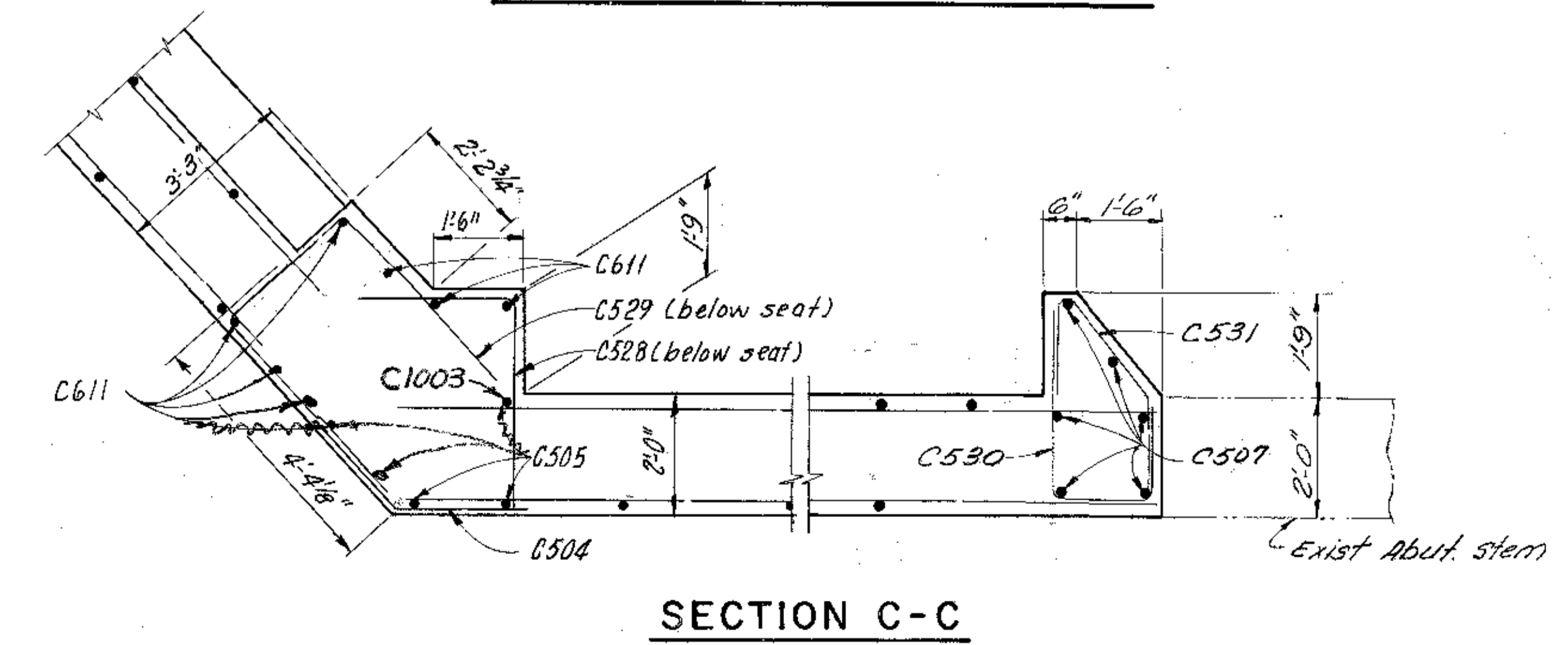
E. S. PRESTON & ASSOCIATES, LIMITED					13/58
ENGINEERS					
COLUMBUS, OHIO					
<b>FORWARD ABUTMENT DETAILS</b>					
BRIDGE NO. FRA-70-1329S WB					
OVER SCIOTO RIVER					
FRANKLIN COUNTY				STA. 506+14.07	
				STA. 515+11.42	
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	BY
E. S.	R.W.	R.W.	R.L.	6/14/70	N.N.
					8-3-73



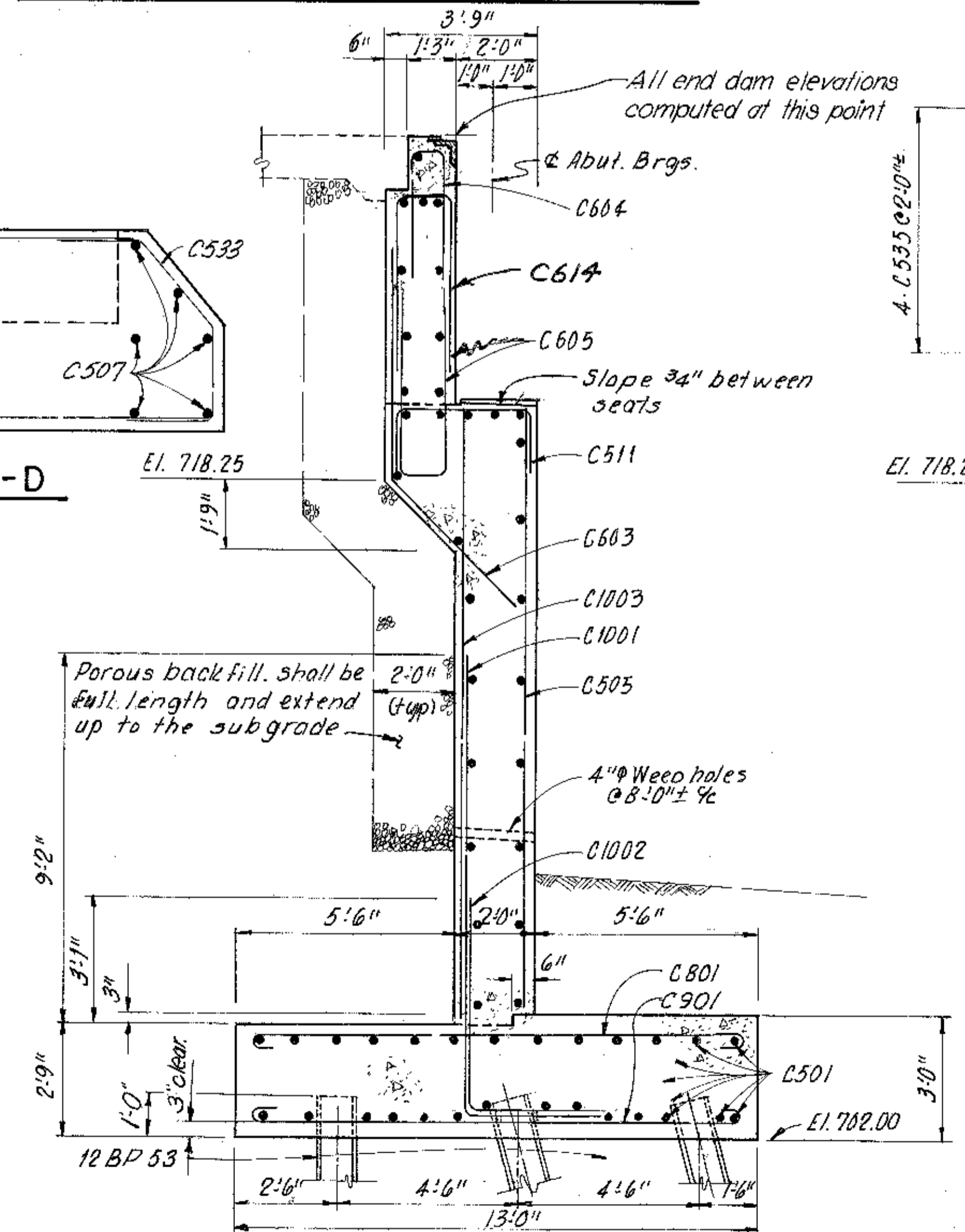
**FOOTING REINFORCING-BOTTOM STEEL**



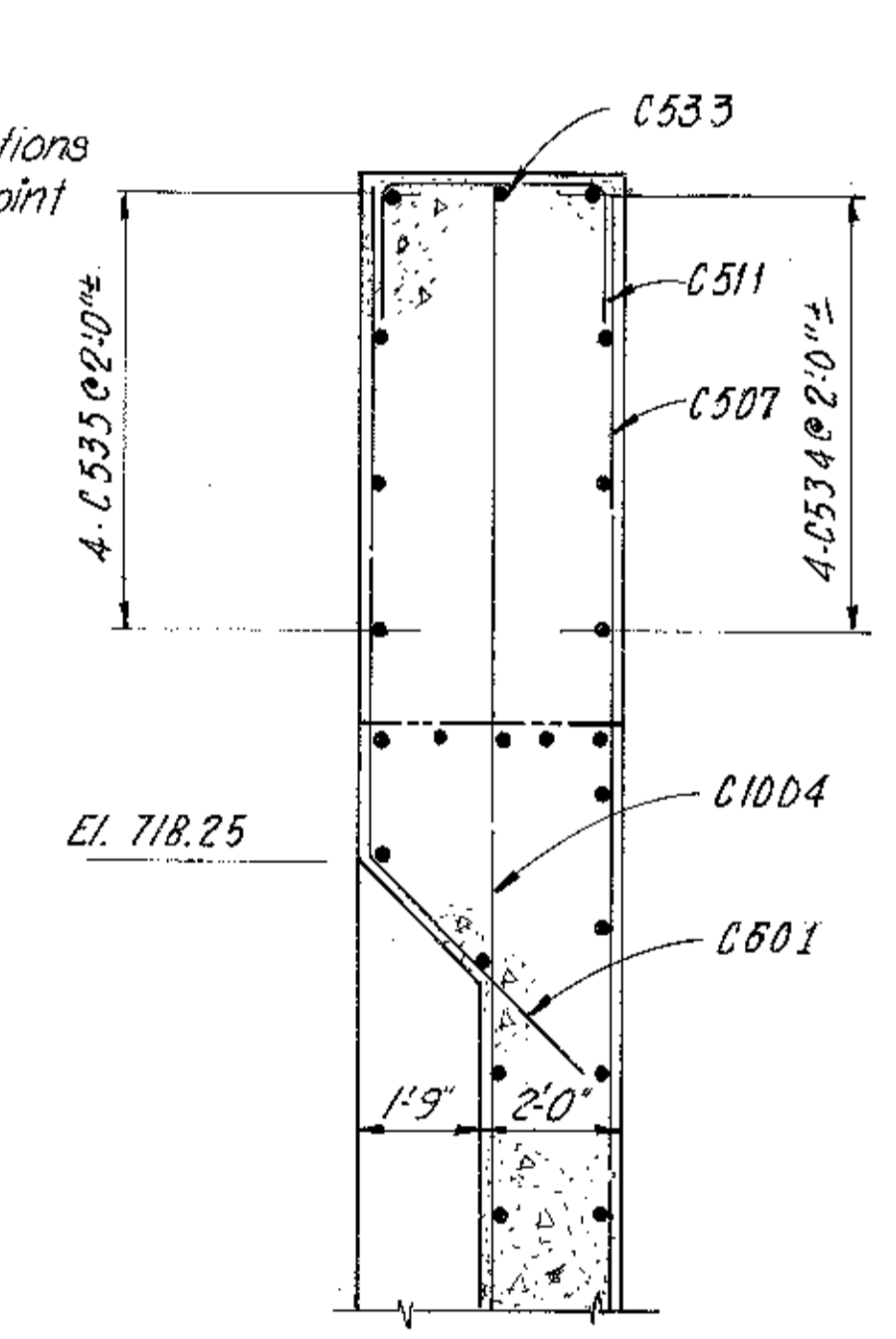
**FOOTING REINFORCING-TOP STEEL**



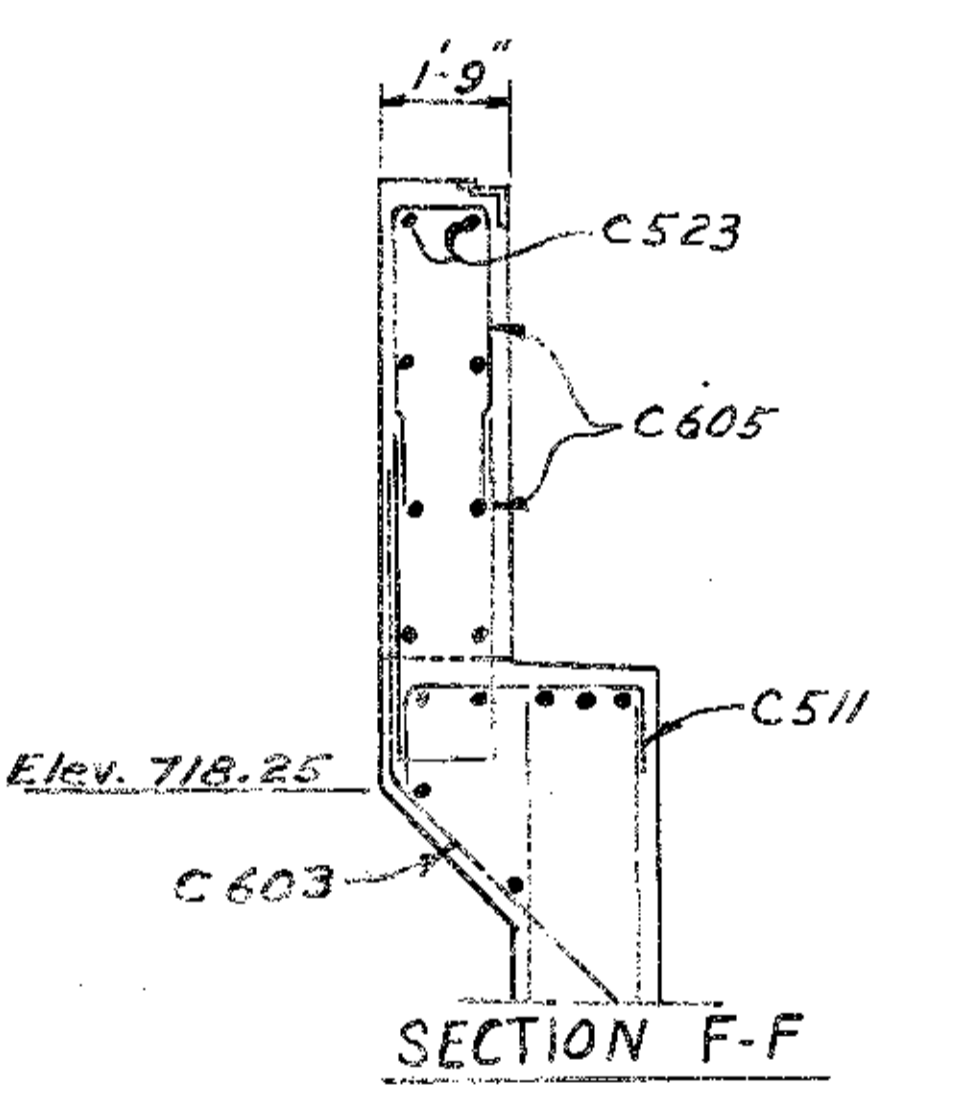
**SECTION C-C**



**SECTION "A-A"**



**SECTION "B-B"**



**SECTION F-F**

**LEGEND**

- E.S. = EQUALLY SPACED, OR EQUAL SPACING
- T = BATTER PILES 1:4
- V (and direction of batter)

E. S. PRESTON & ASSOCIATES, LIMITED 14/58  
ENGINEERS  
COLUMBUS, OHIO

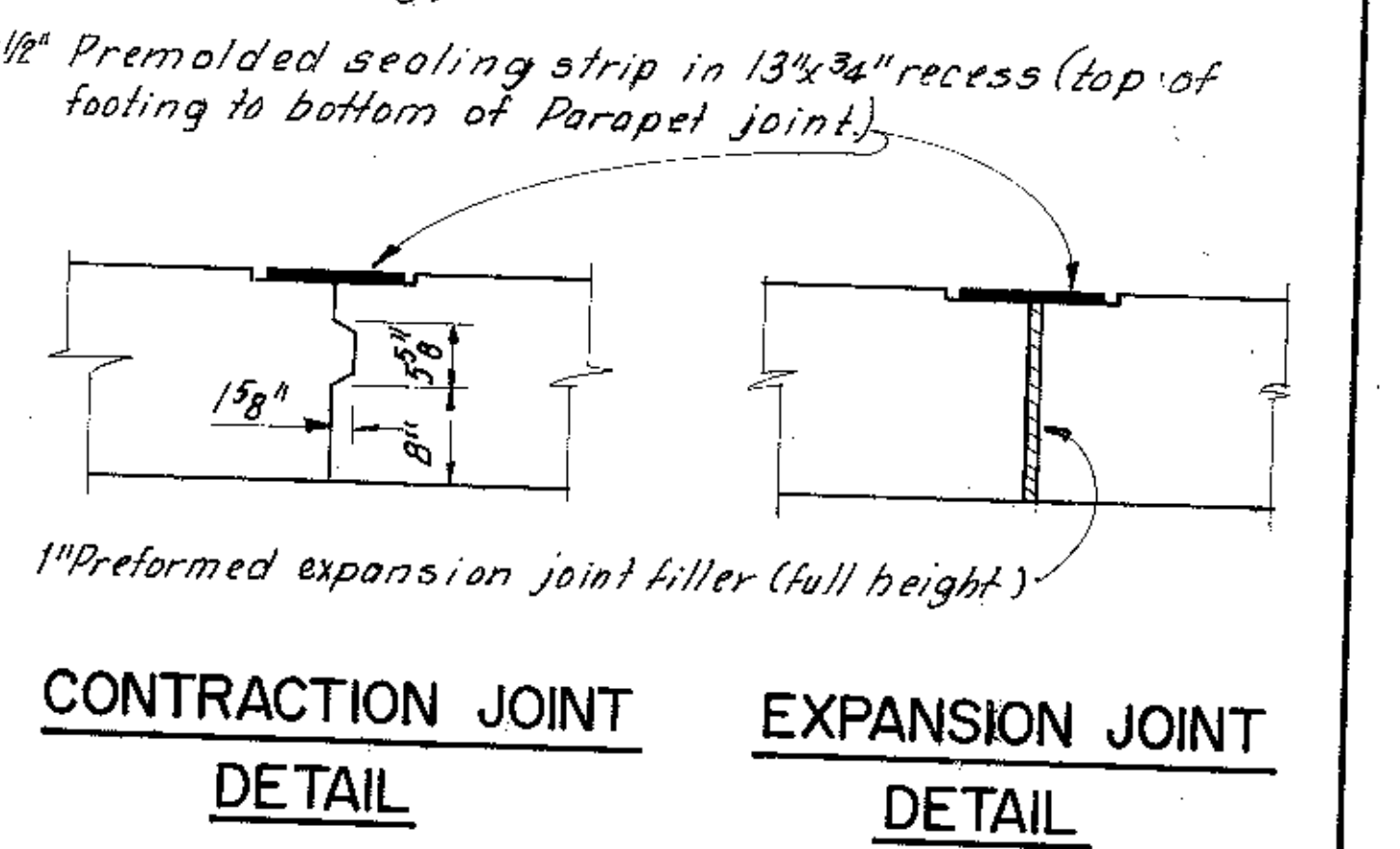
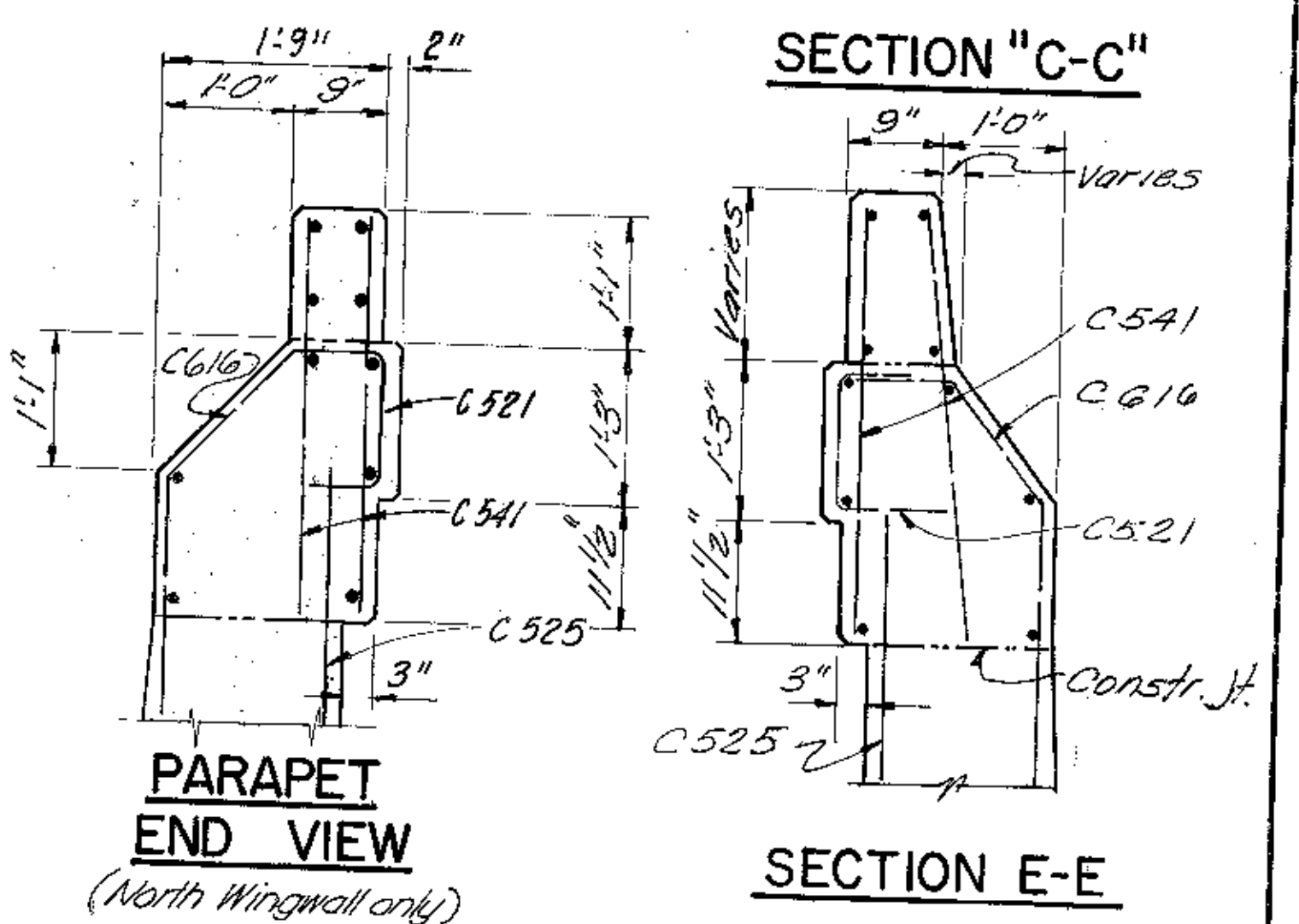
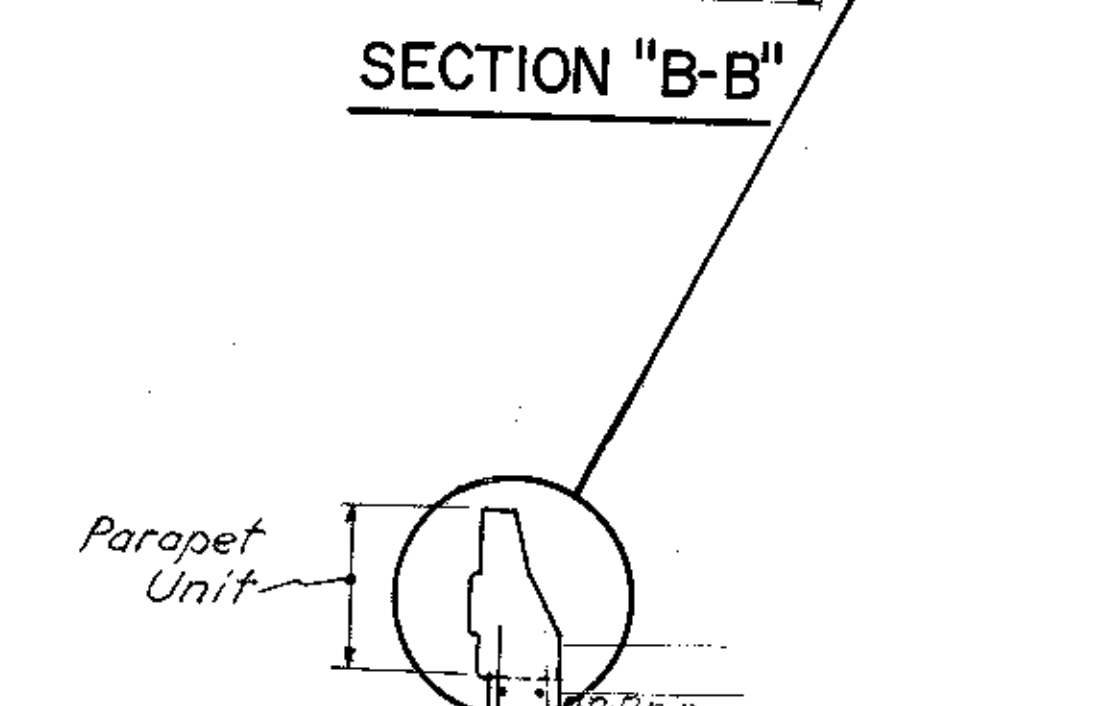
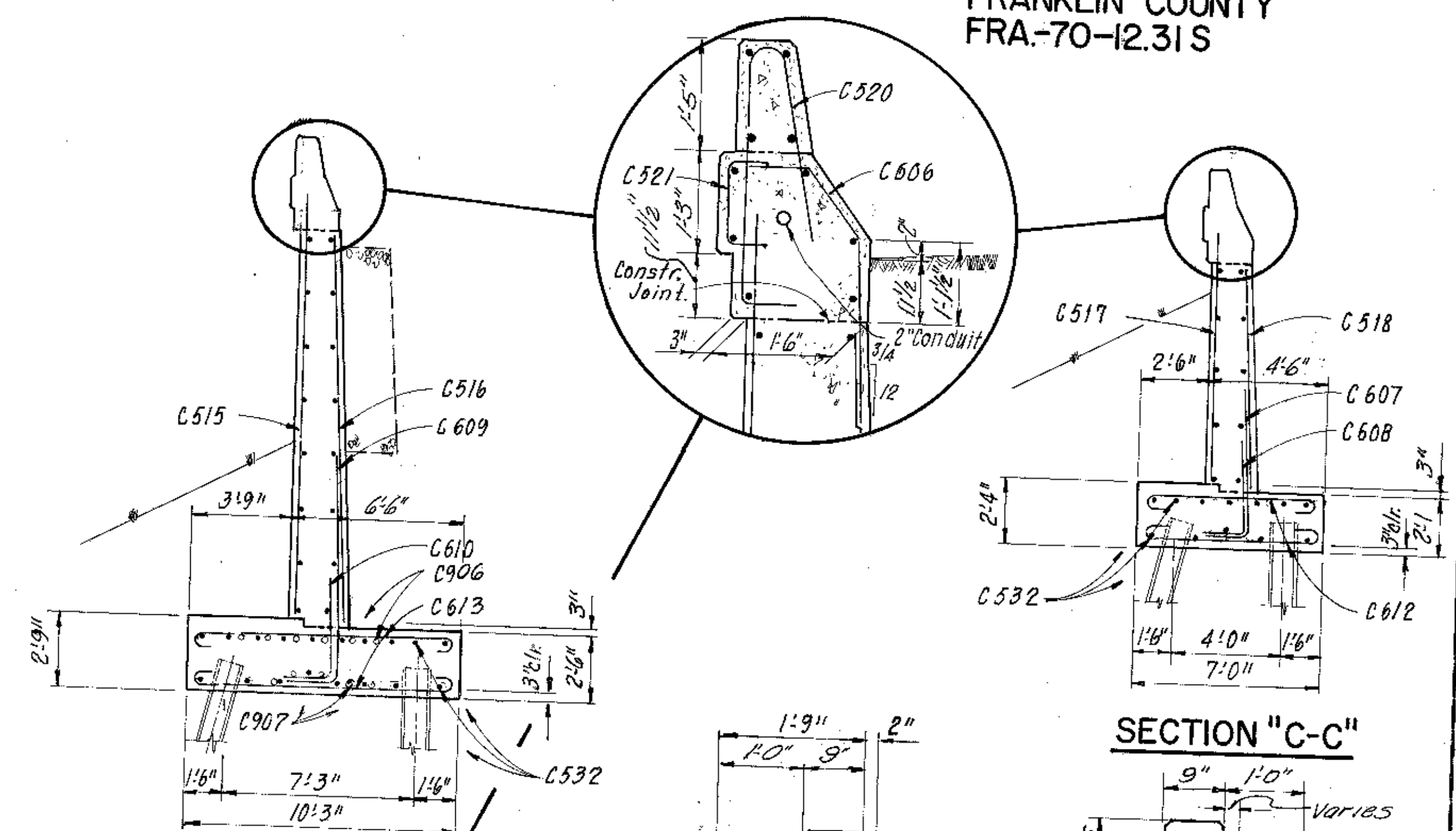
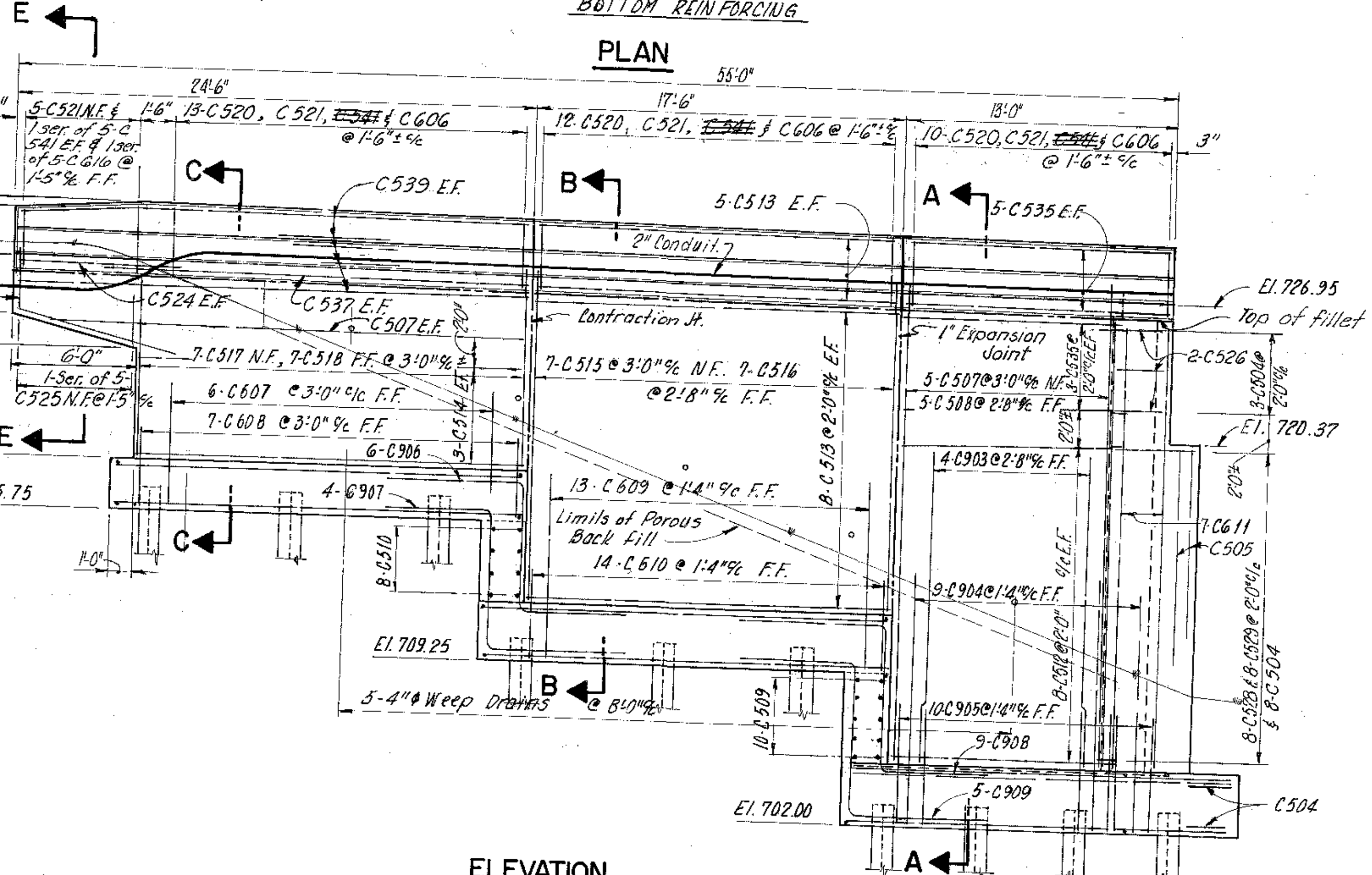
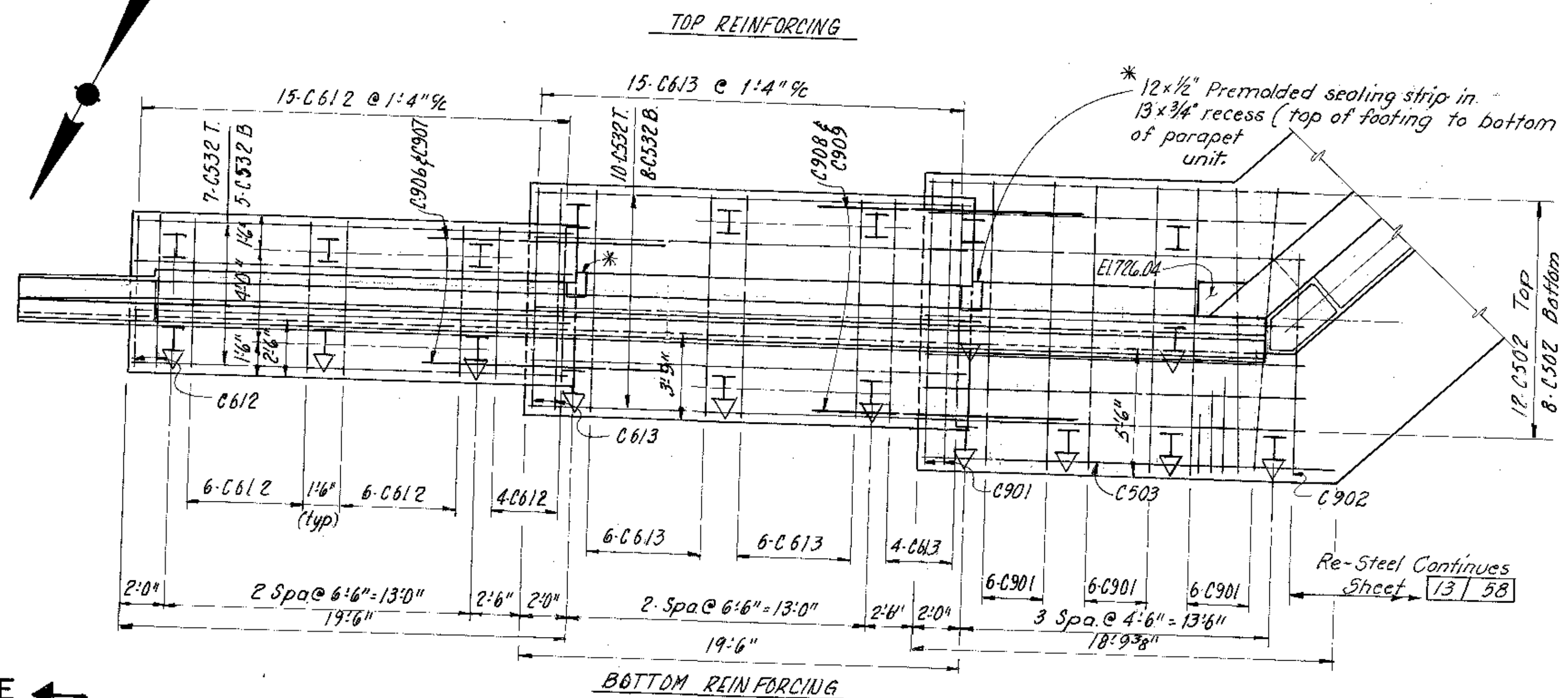
**FORWARD ABUTMENT DETAILS  
FOOTING PLAN & SECTIONS**

BRIDGE NO. FRA-70-1329S W.B.  
OVER SCIOTO RIVER

FRANKLIN COUNTY STA. 506+14.07  
STA. 515+11.42

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISION
E.S.	R.W.	R.W.	R.E.L.	6/16/70 N.N.	3-73

FRANKLIN COUNTY  
FRA-70-12.31 S



**LEGEND**  
NF=NEAR FACE  
FF=FAIR FACE  
EF=EACH FACE  
T=TOP  
B=BOTTOM

E. S. PRESTON & ASSOCIATES, LIMITED 15/58  
ENGINEERS  
COLUMBUS, OHIO

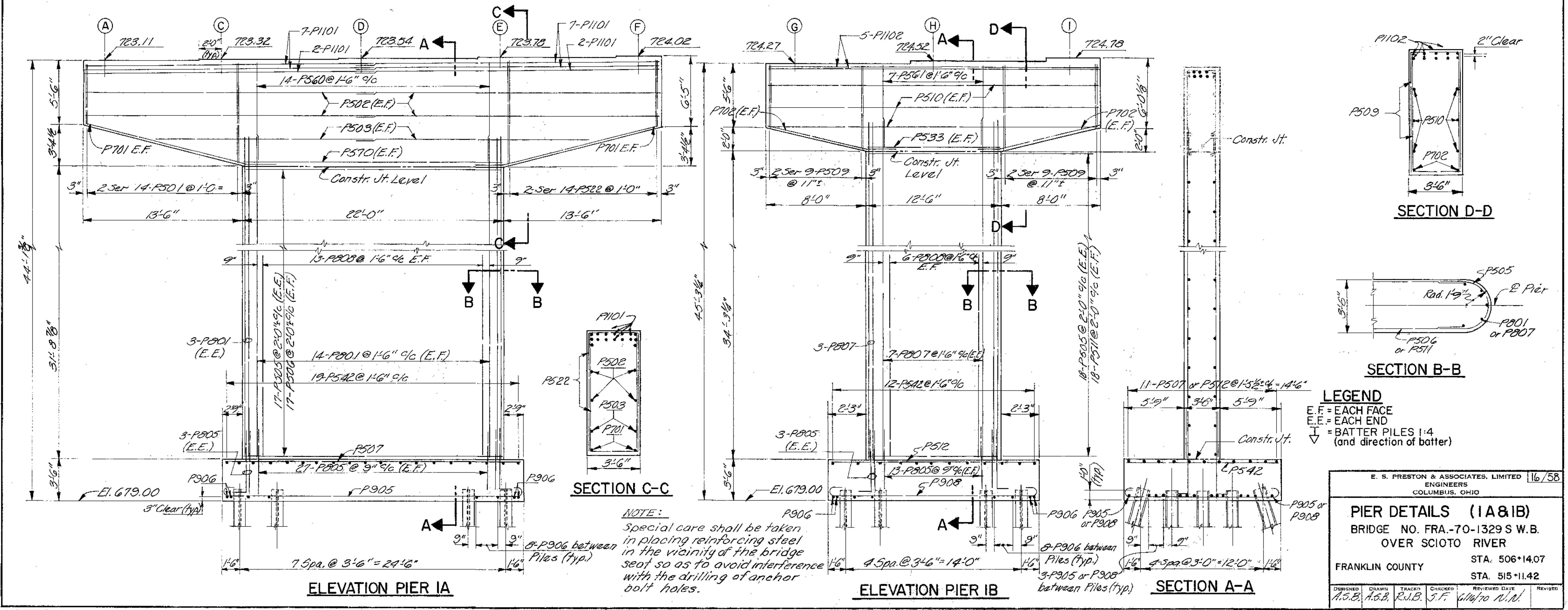
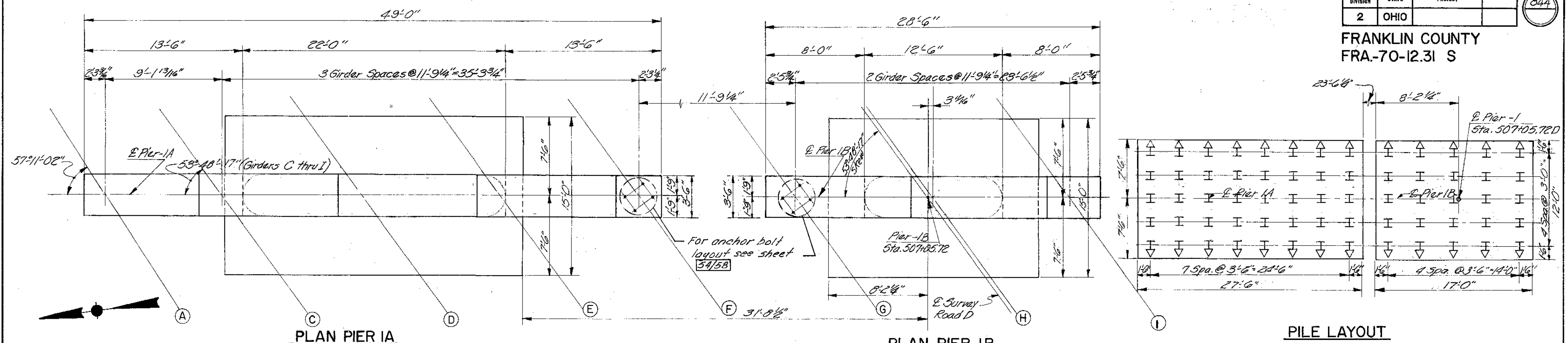
**FORWARD ABUTMENT DETAILS  
WINGWALL**

BRIDGE NO. FRA.-70-1329S W.B.  
FRANKLIN COUNTY STA. 506+14.07  
DESIGNED STA. 515+11.42

DESIGNED: E.S. RW TRACED: R.W. CHECKED: R.E.L. REVISION DATE: 8-3-73  
APPENDIX A2, Page 16 of 35



FRANKLIN COUNTY  
FRA-70-12.31 S



E. S. PRESTON & ASSOCIATES, LIMITED 16/58  
 ENGINEERS  
 COLUMBUS, OHIO

**PIER DETAILS (IA&IB)**  
 BRIDGE NO. FRA-70-1329 S.W.B.  
 OVER SCIOTO RIVER

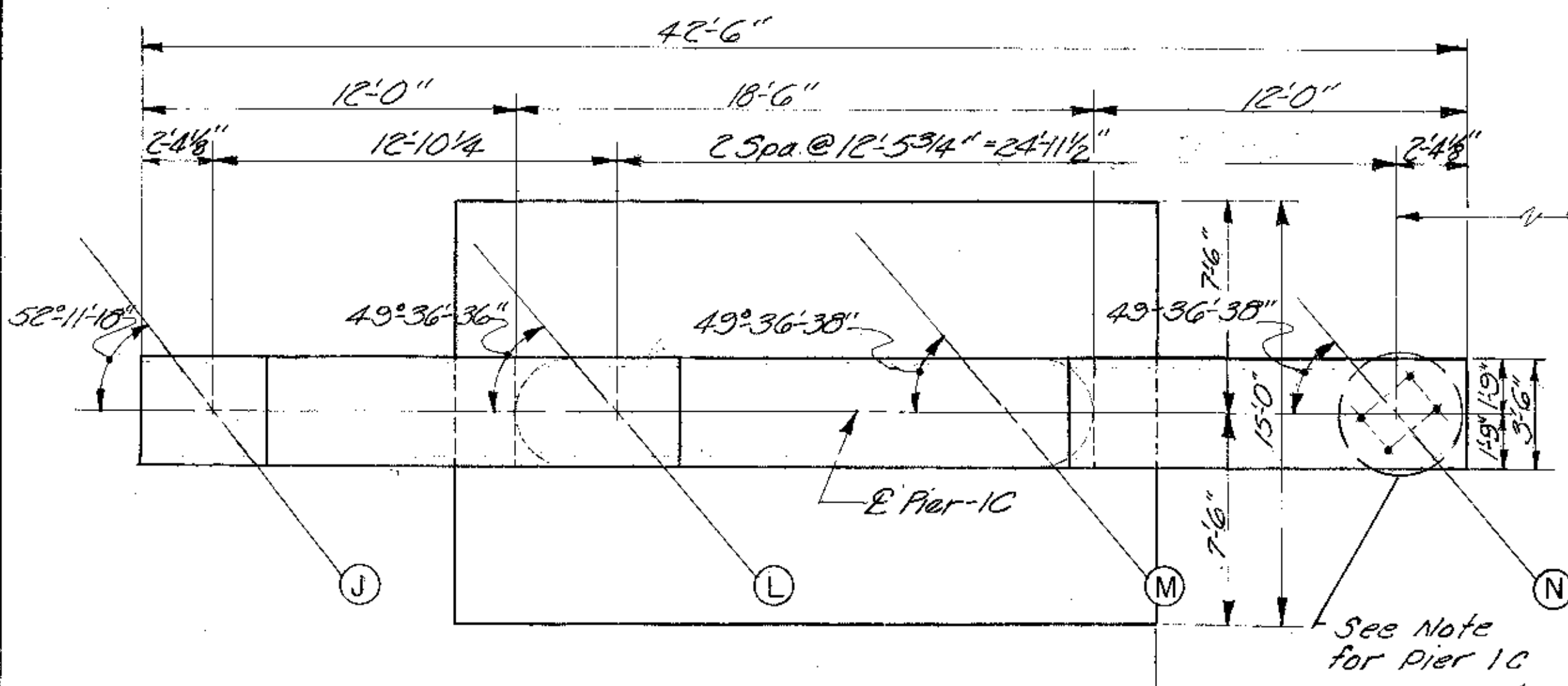
FRANKLIN COUNTY STA. 506+14.07  
 STA. 515+11.42

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
A.S.B.	A.S.B.	R.S.B.	J.F.	6/16/70 N.A.	

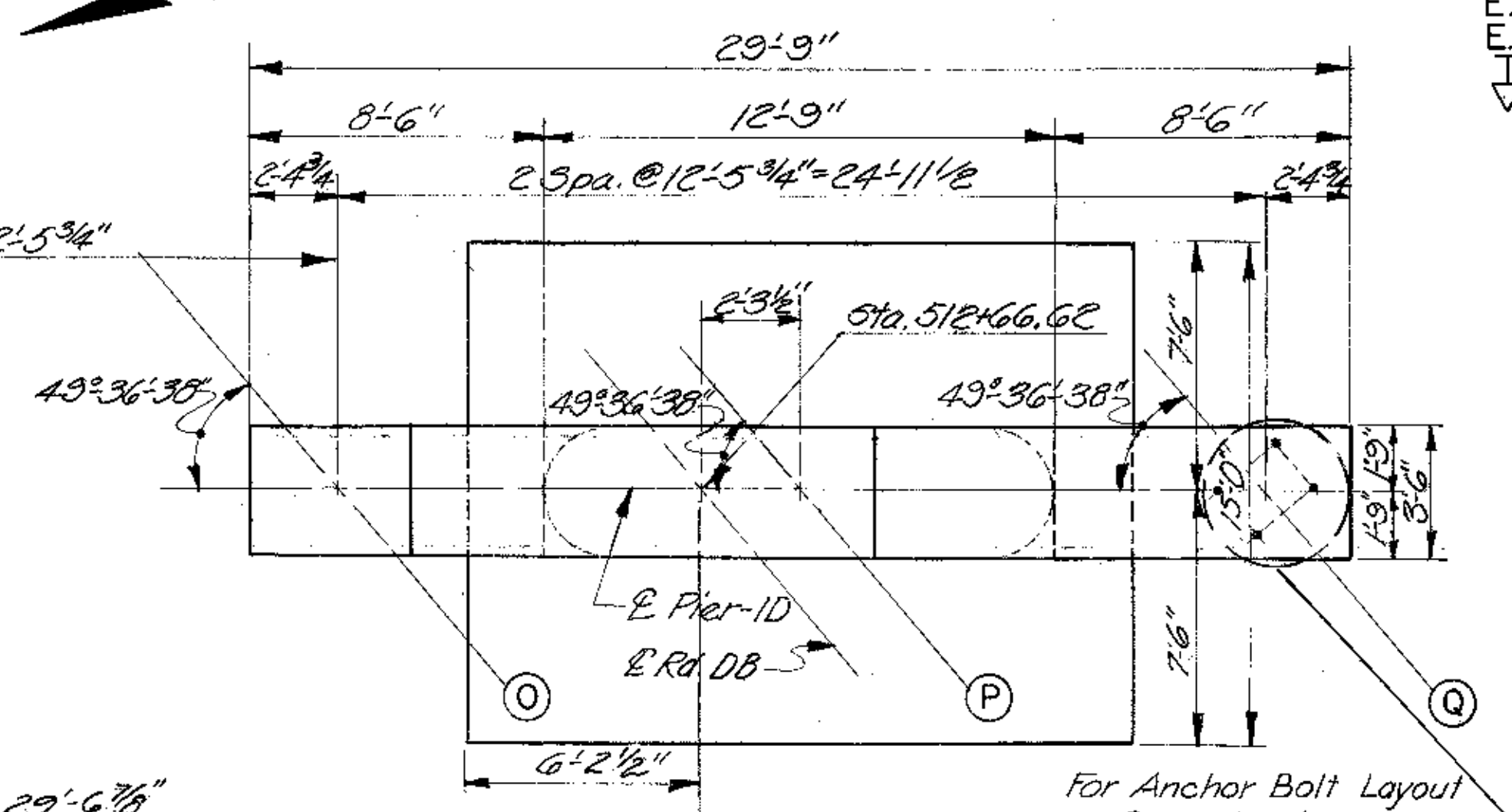
**FRANKLIN COUNTY**  
**FRA-70-1231 S**

**LEGEND**

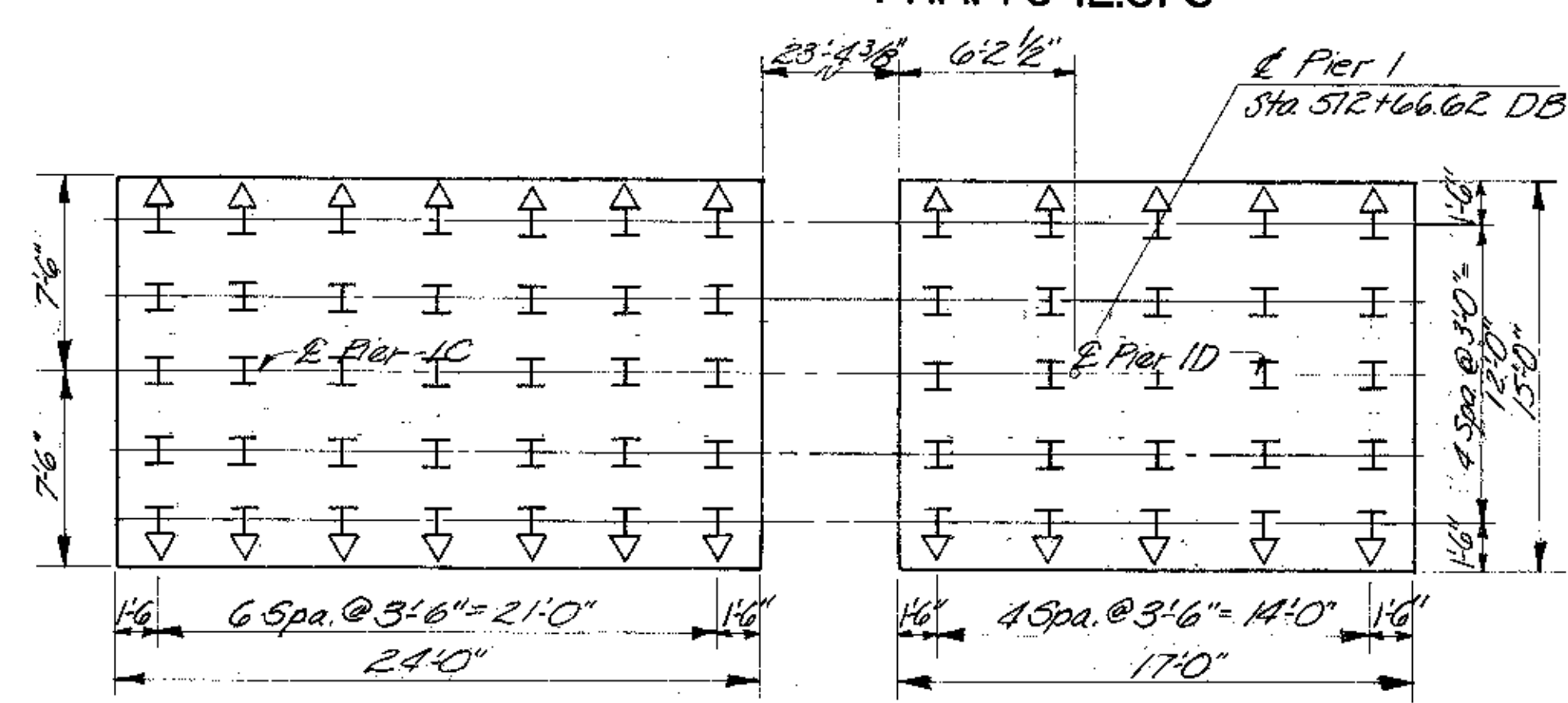
E.F.=EACH FACE  
E.E.=EACH END  
▽=BATTER PILES 1:4  
(and direction of batter)



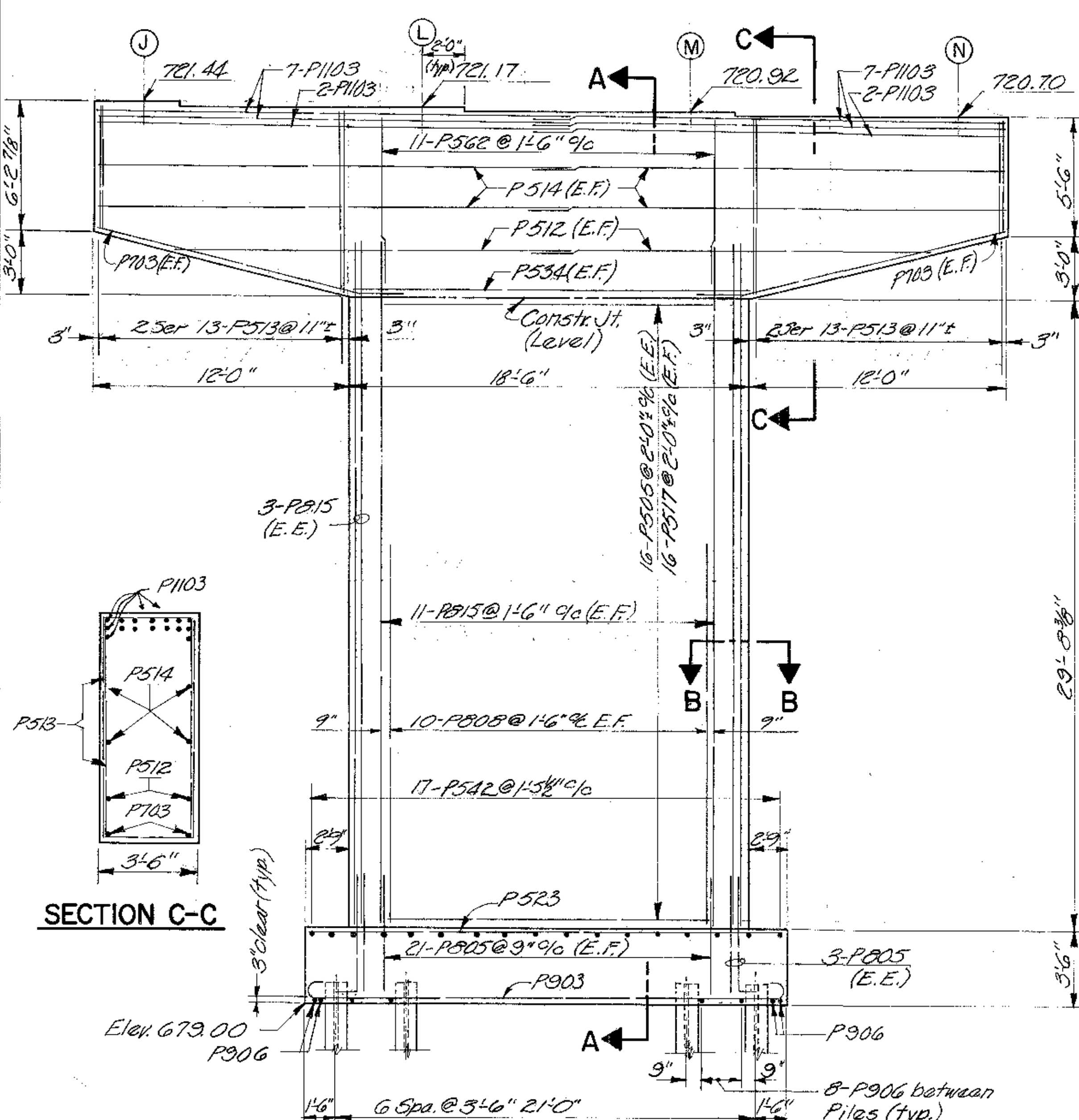
**PLAN PIER IC**



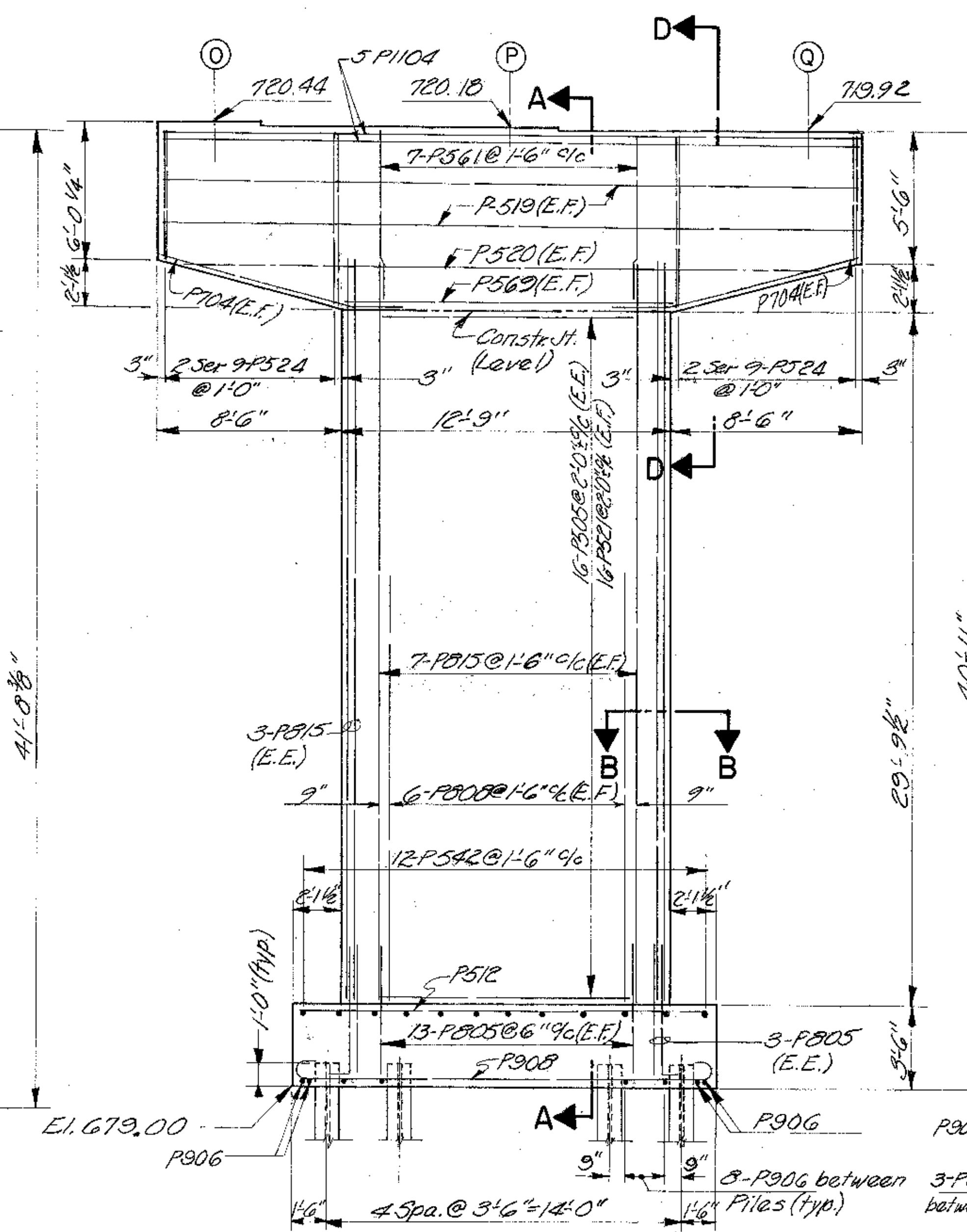
**PLAN PIER ID**



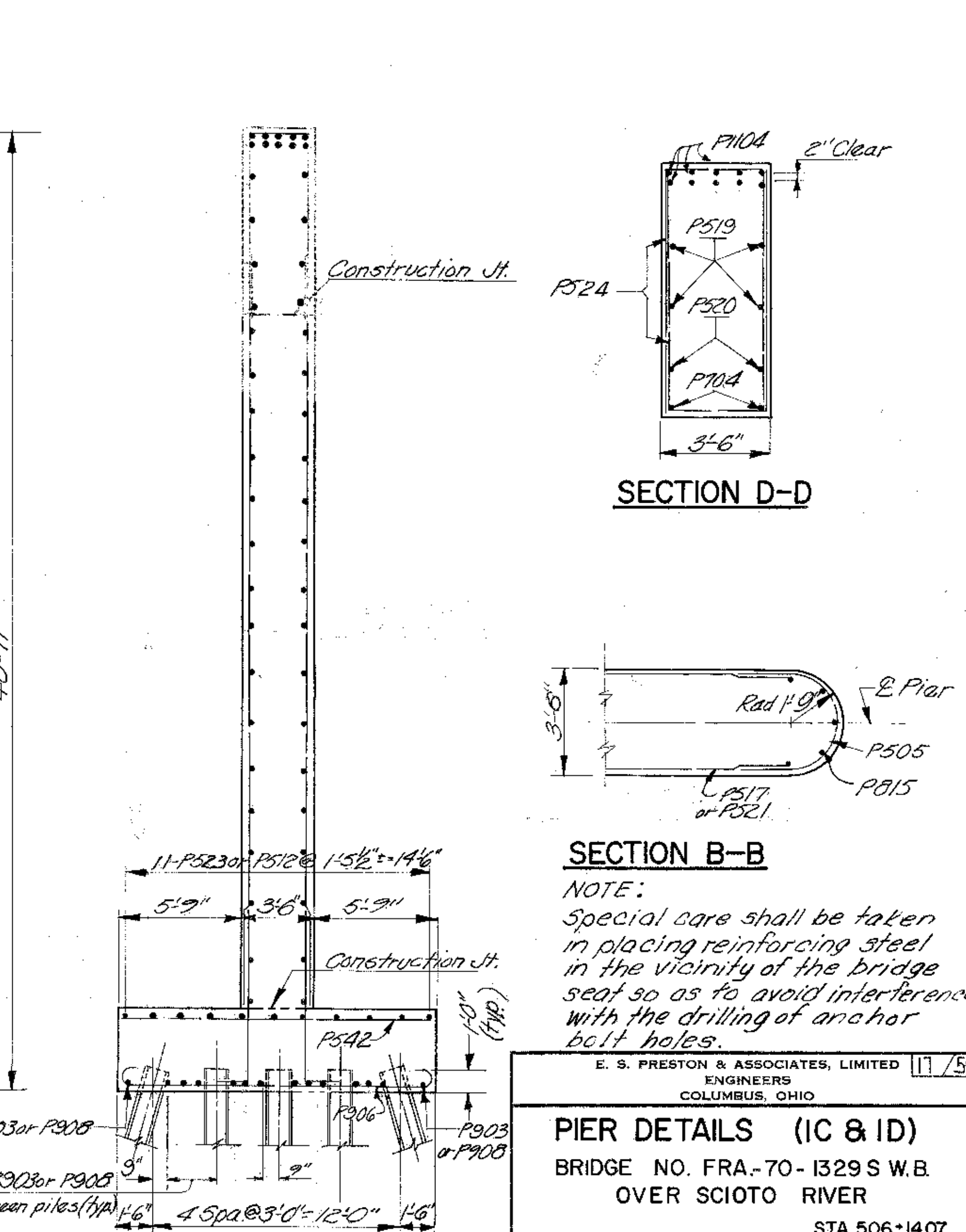
**PILE LAYOUT**



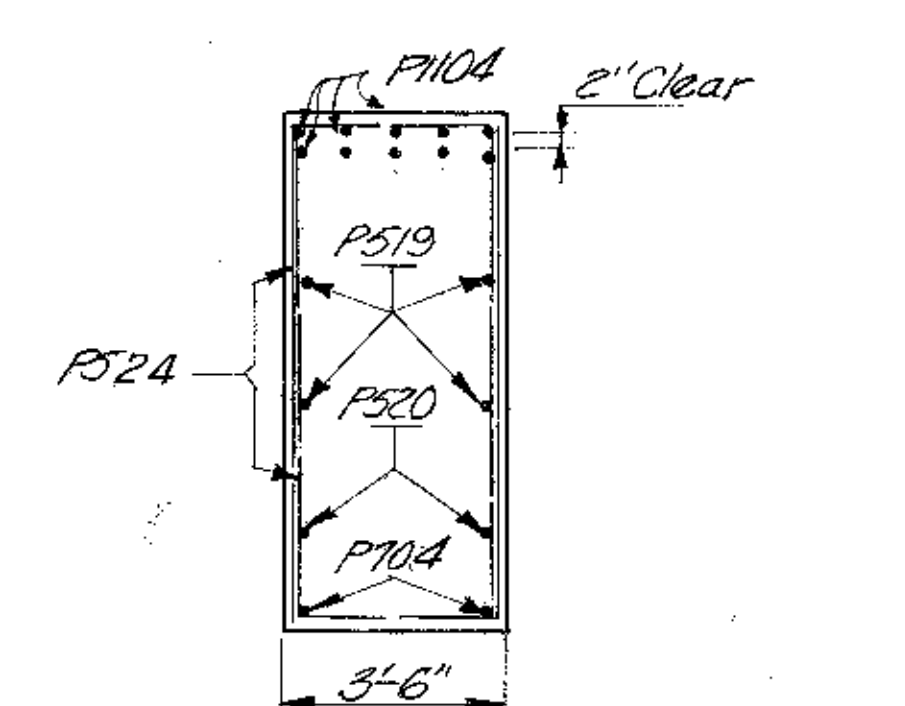
**ELEVATION PIER IC**



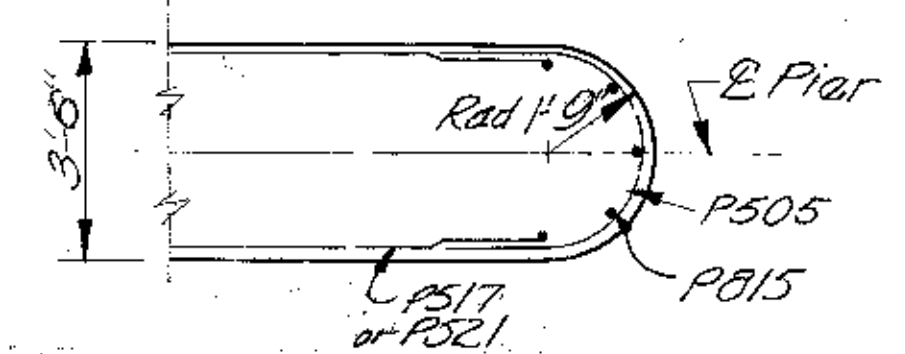
**ELEVATION PIER ID**



**SECTION A-A**



**SECTION D-D**



**SECTION B-B**

**NOTE:**  
Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bolt holes.

E. S. PRESTON & ASSOCIATES, LIMITED  
ENGINEERS  
COLUMBUS, OHIO

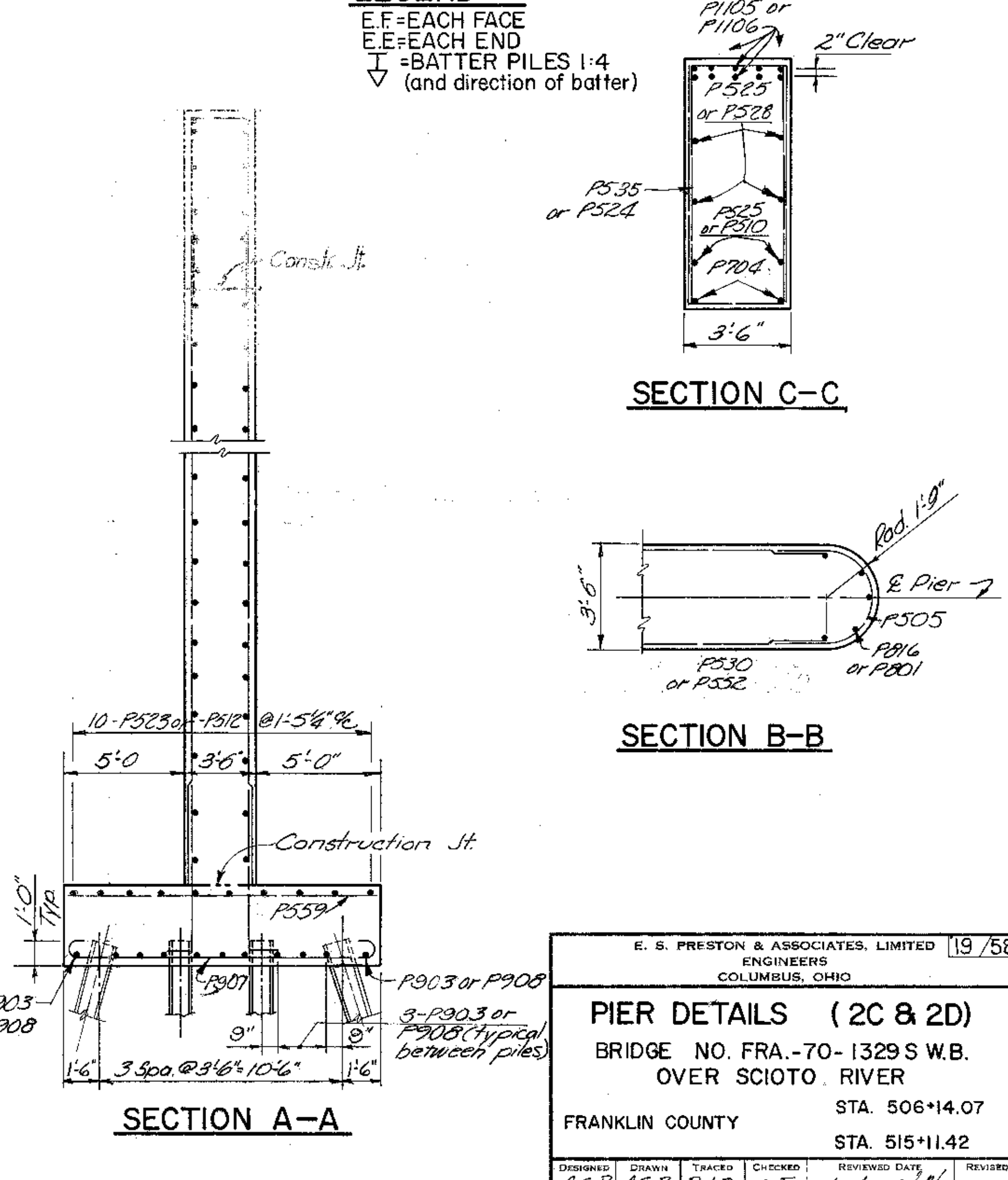
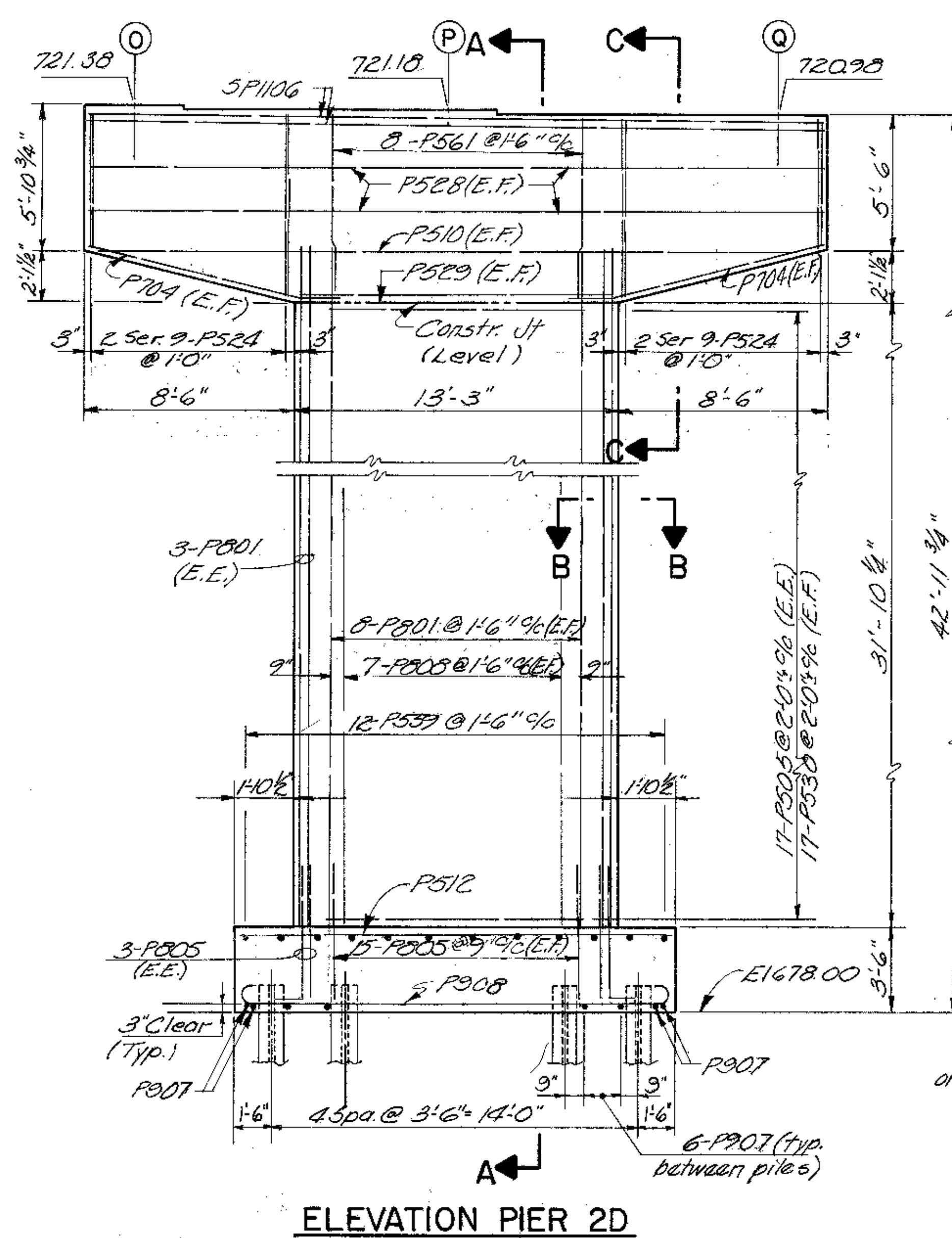
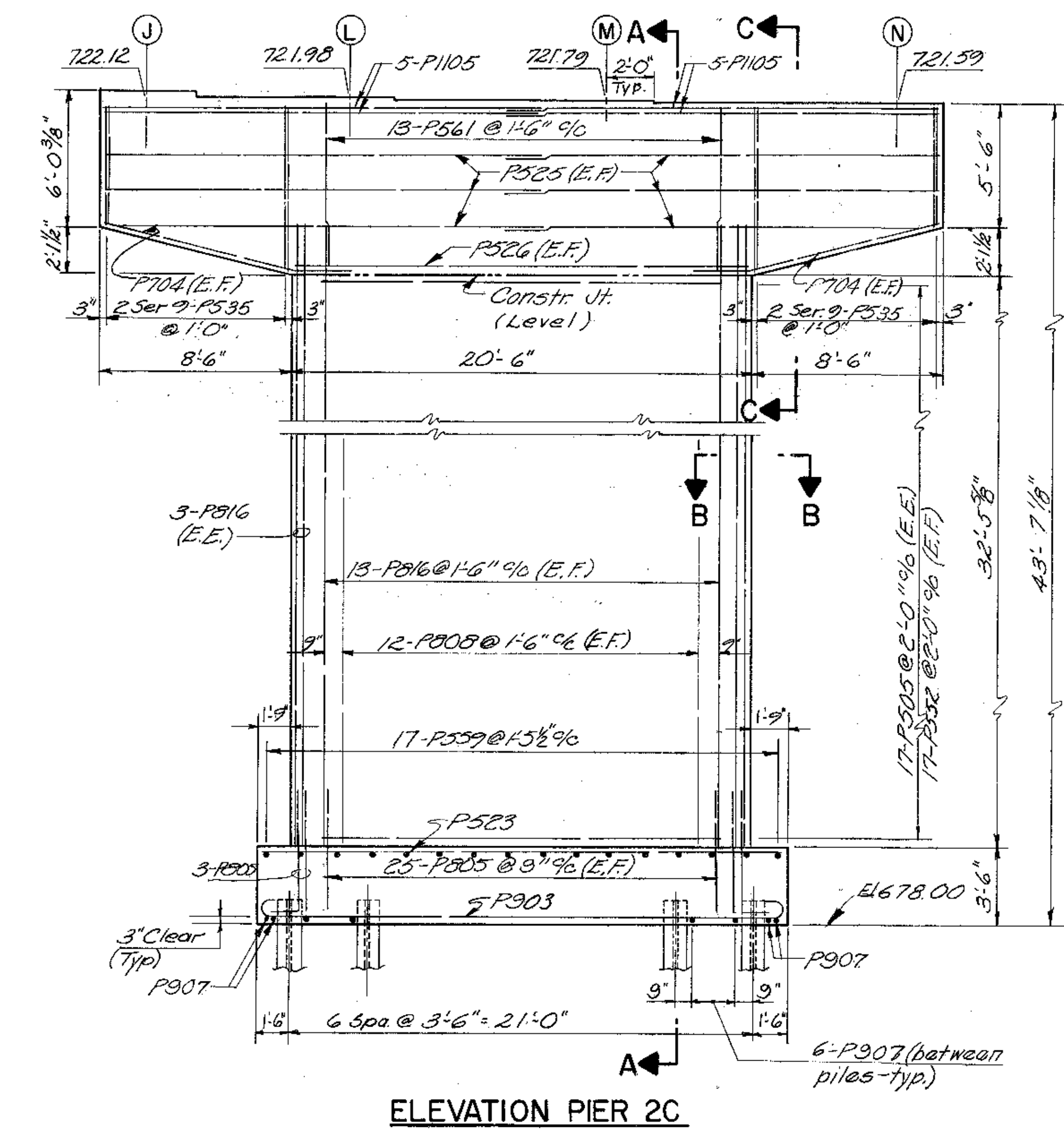
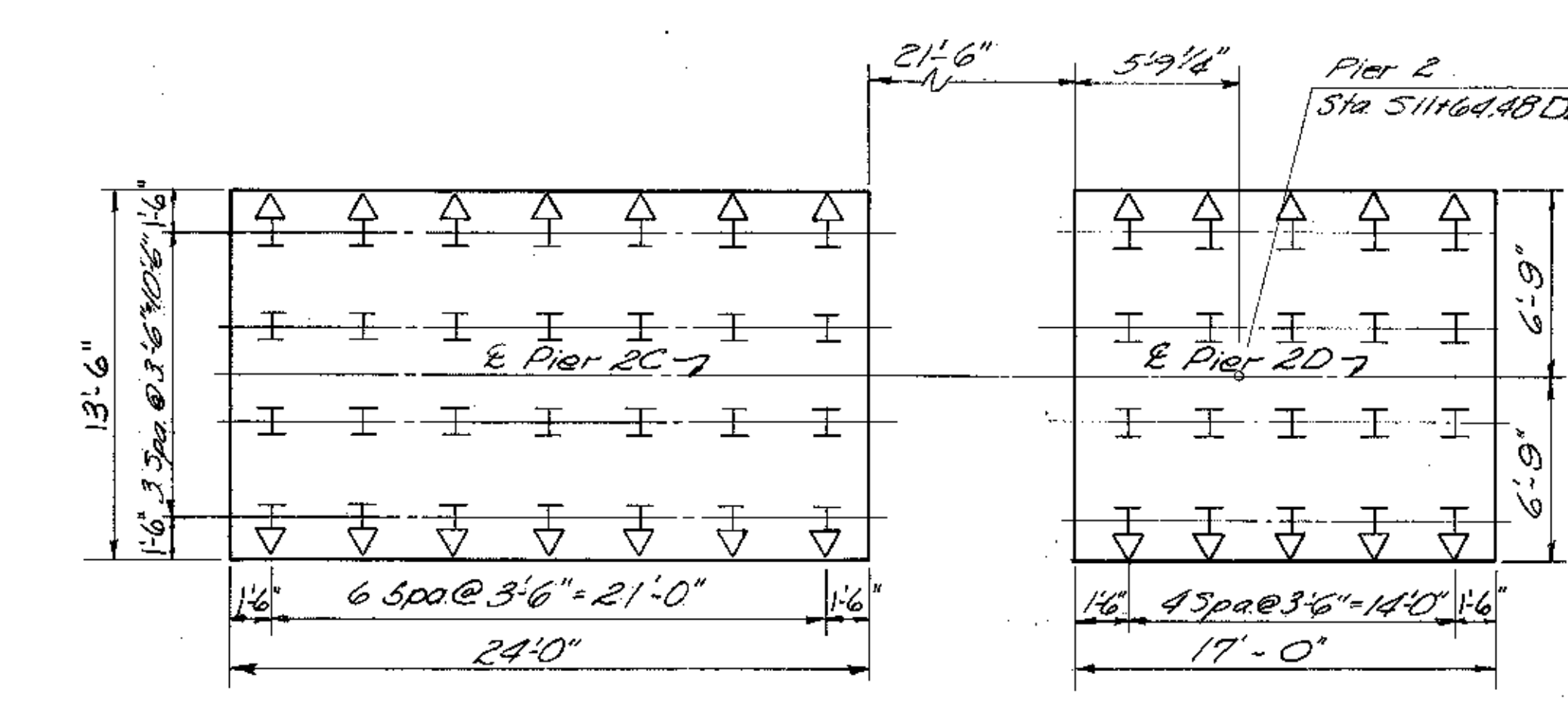
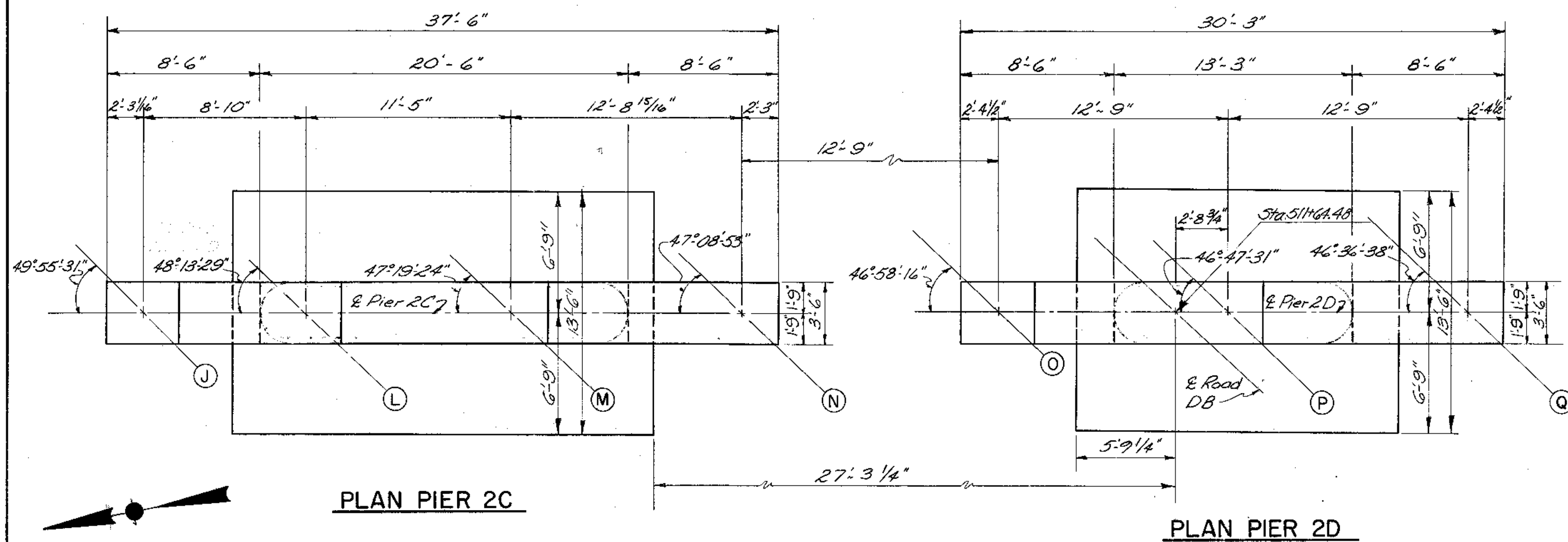
**PIER DETAILS (IC & ID)**  
BRIDGE NO. FRA-70-1329 S.W.B.  
OVER SCIOTO RIVER  
FRANKLIN COUNTY STA. 506+14.07  
STA. 515+11.42

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
A.S.B.	A.S.B.	R.J.B.	J.F.	6/14/70	



FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

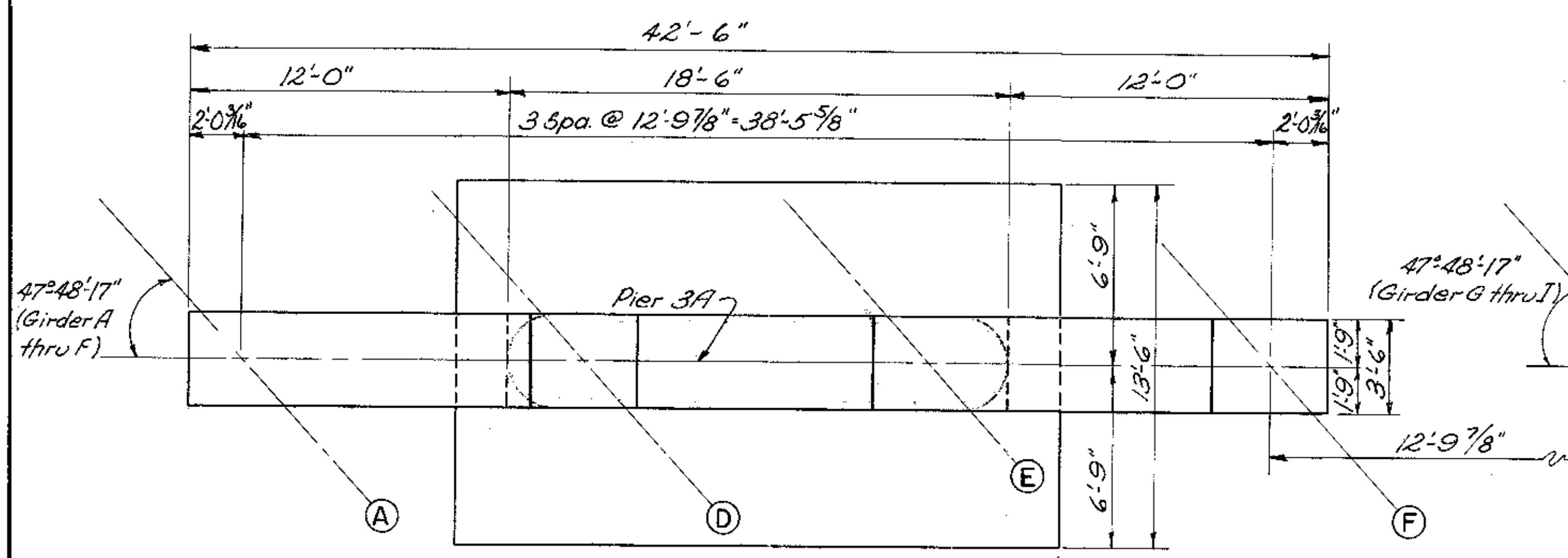
847



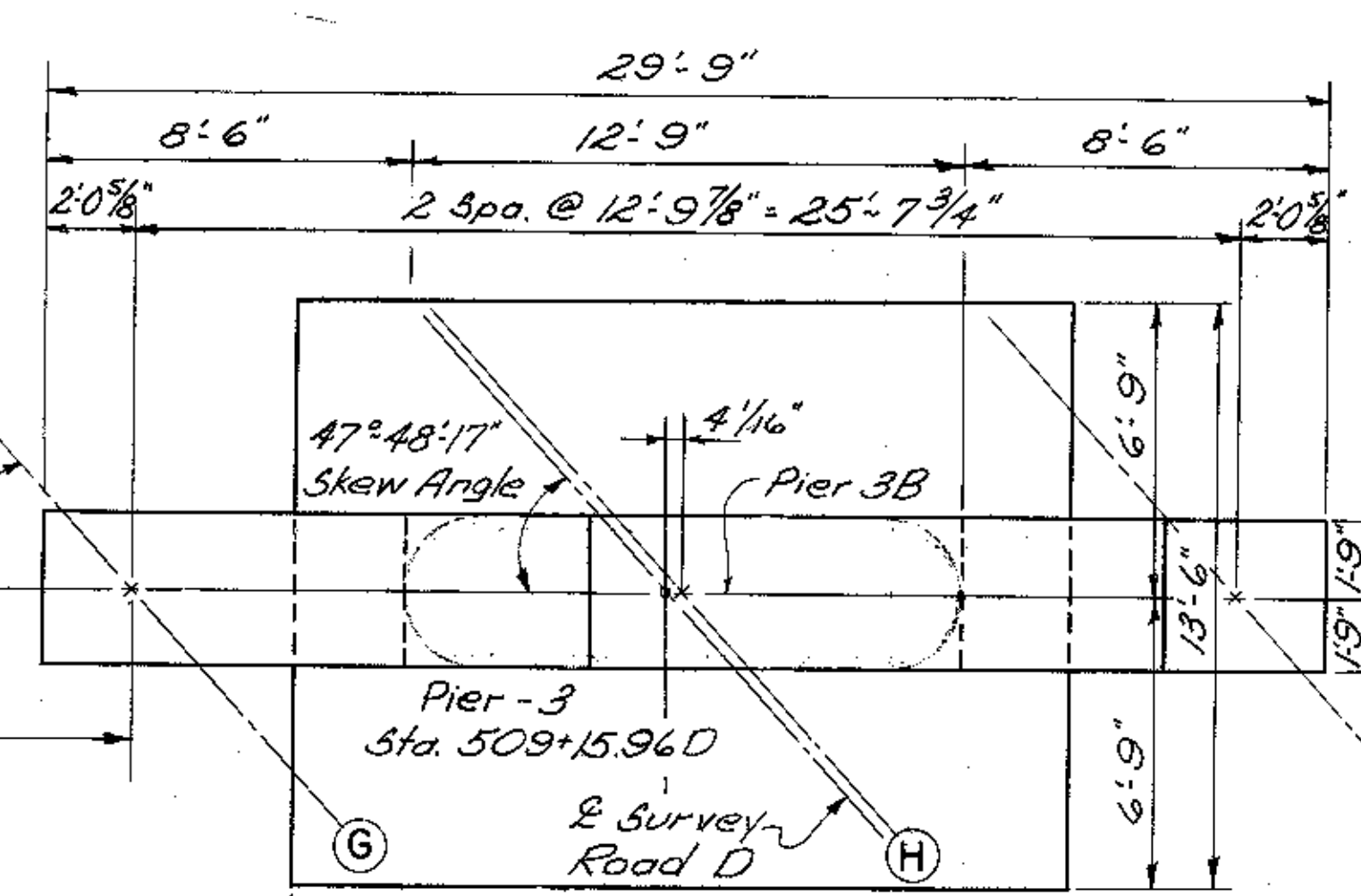
**LEGEND**  
E.F.=EACH FACE  
E.E.=EACH END  
▽=BATTER PILES 1:4 (and direction of batter)

E. S. PRESTON & ASSOCIATES, LIMITED 19/58 ENGINEERS COLUMBUS, OHIO					
<b>PIER DETAILS (2C &amp; 2D)</b>					
BRIDGE NO. FRA-70-1329 S.W.B. OVER SCIOTO RIVER					
FRANKLIN COUNTY			STA. 506+14.07 STA. 515+11.42		
DESIGNED A.S.B.	DRAWN A.S.B.	TRACED R.V.B.	CHECKED S.F.	REVIEWED DATE 6/16/70 R.M.	REVISIONS

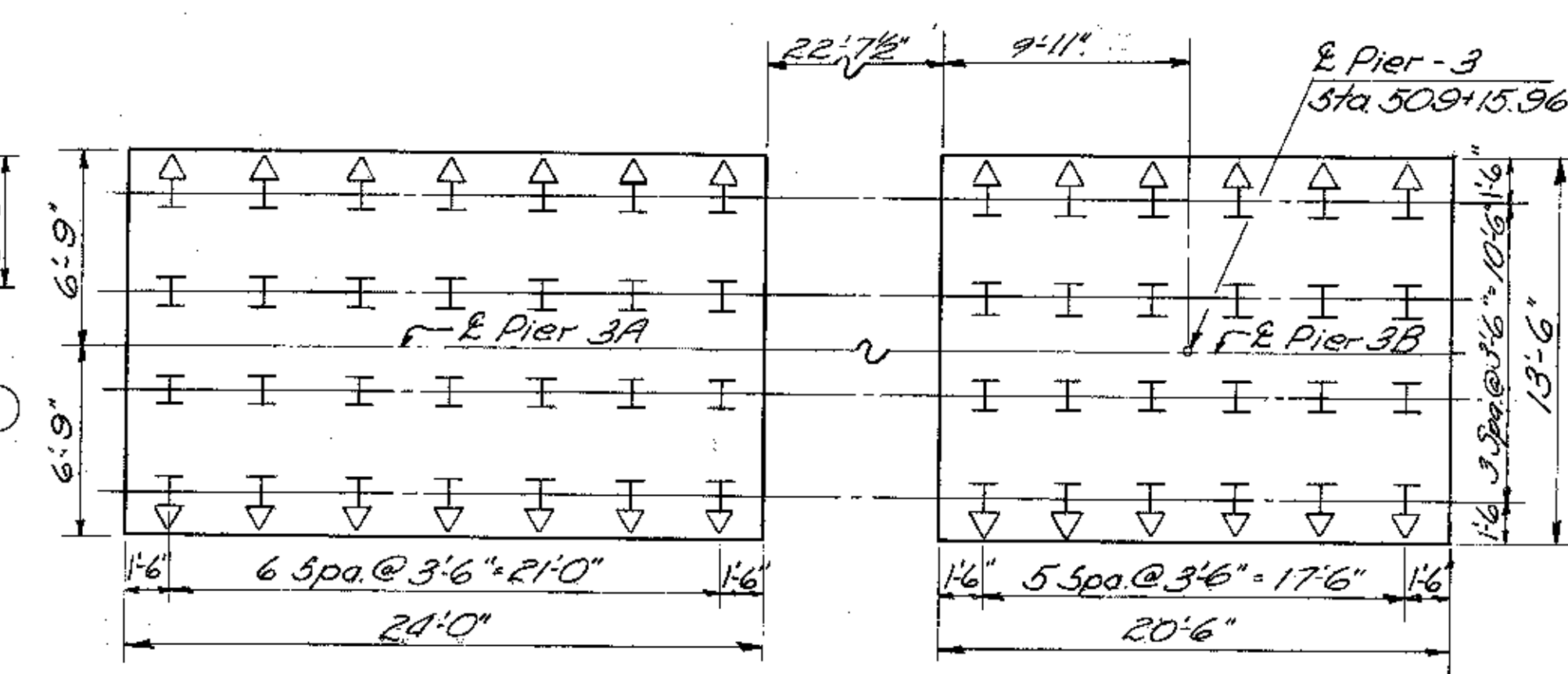
FRANKLIN COUNTY  
FRA.-70-1231S



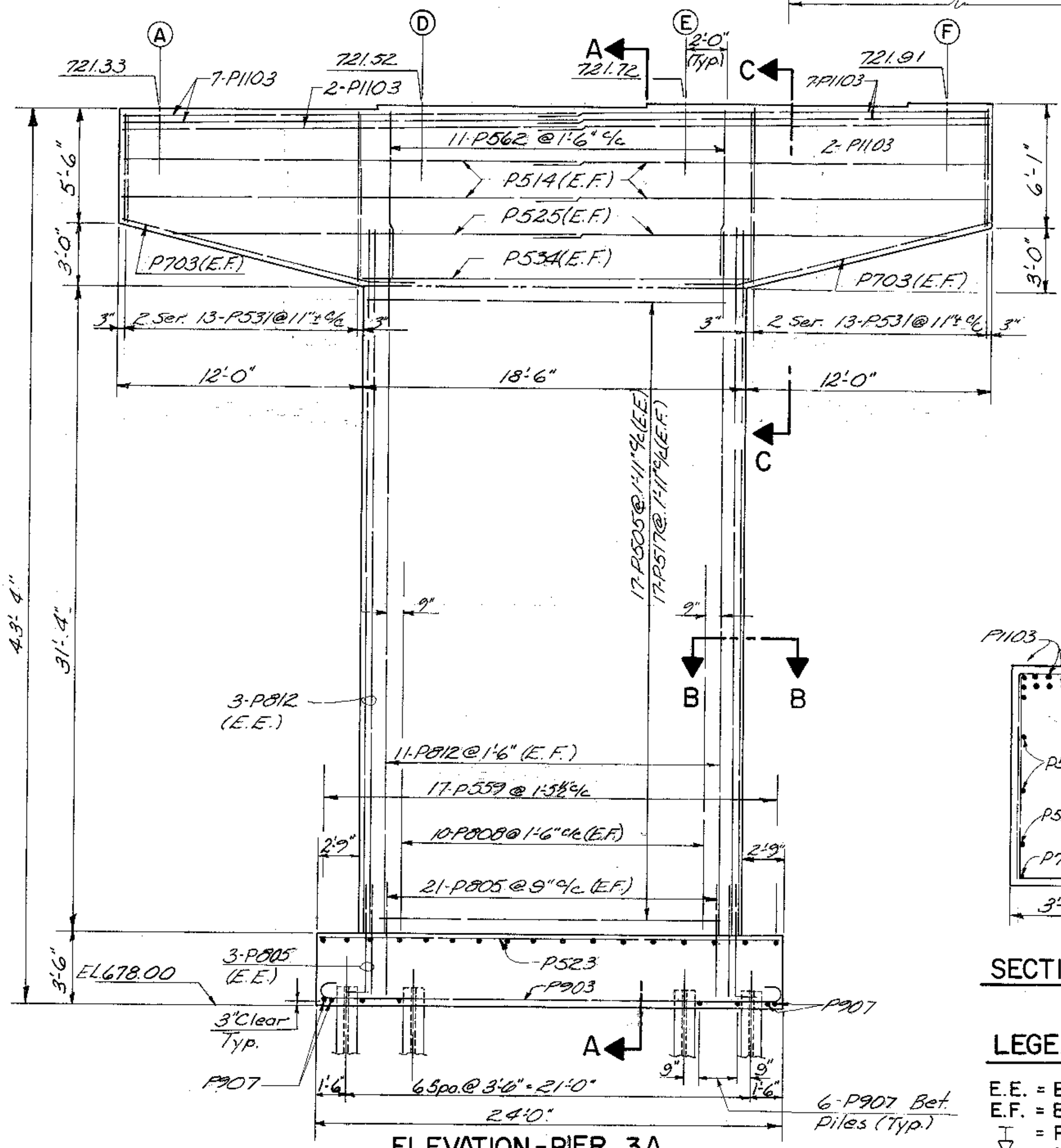
PLAN-PIER 3A



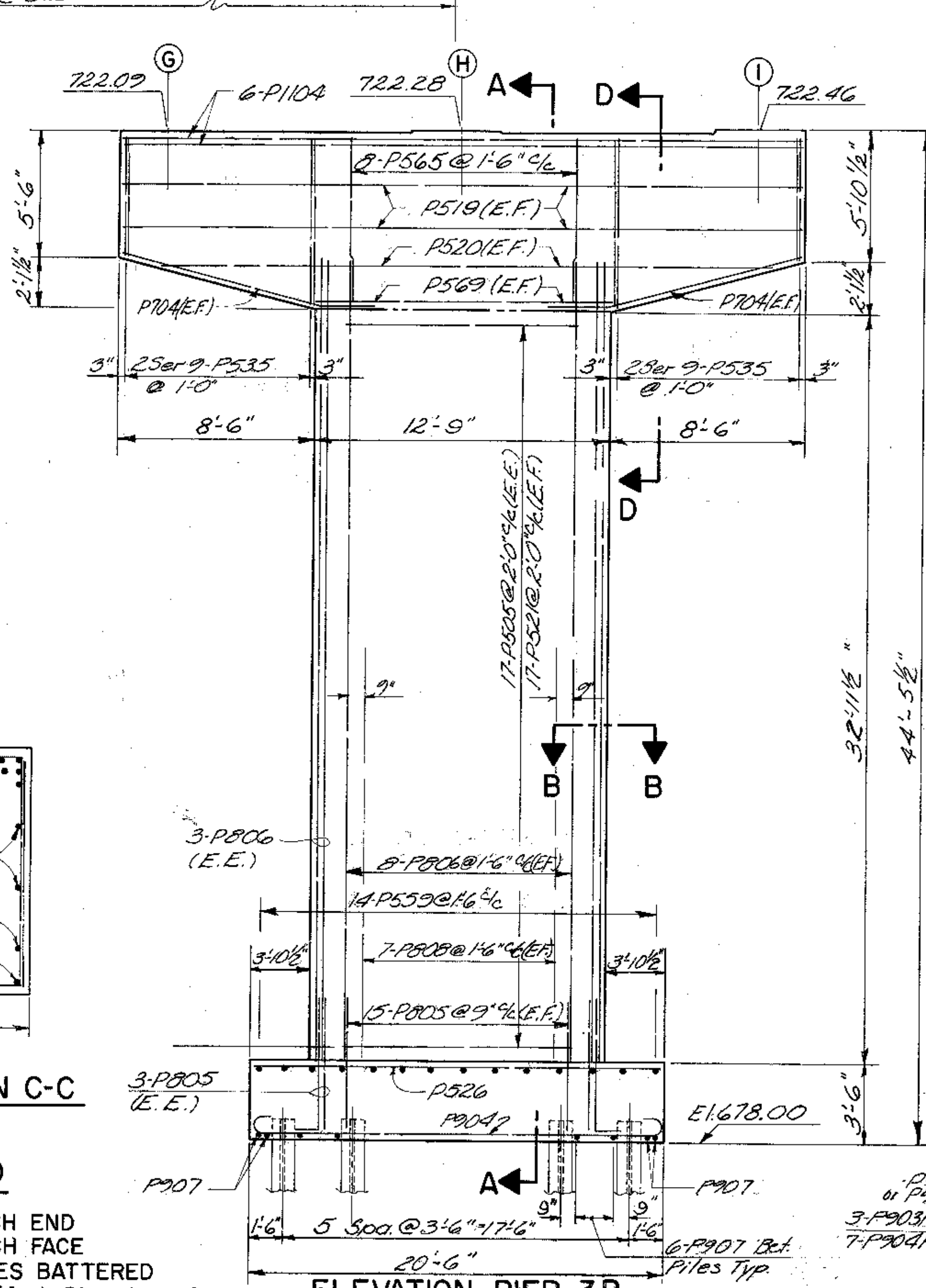
PLAN-PIER 3B



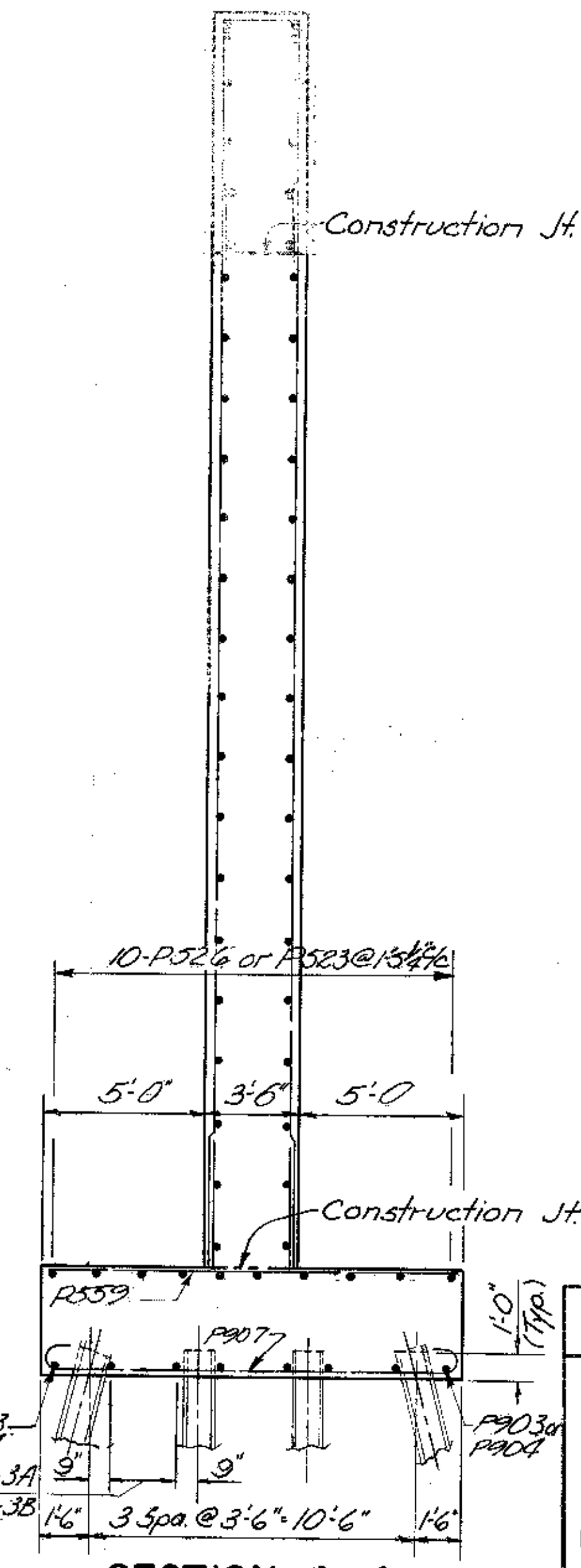
PILE LAYOUT



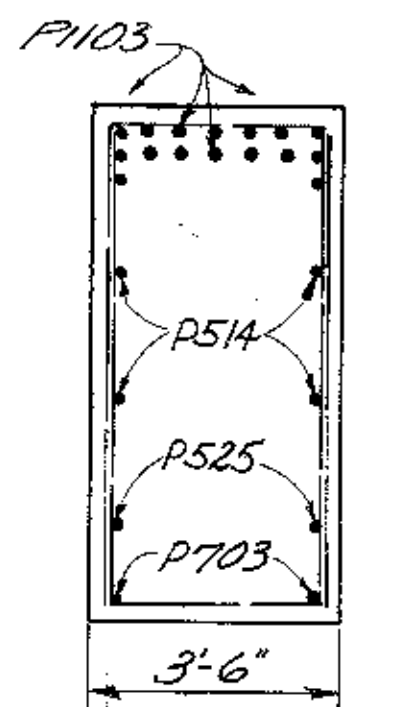
ELEVATION-PIER 3A



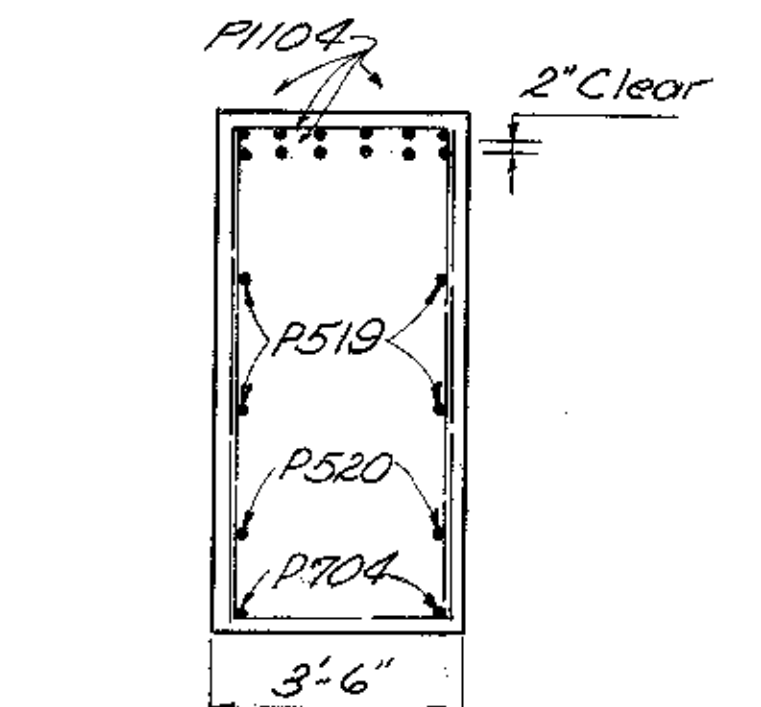
ELEVATION-PIER 3B



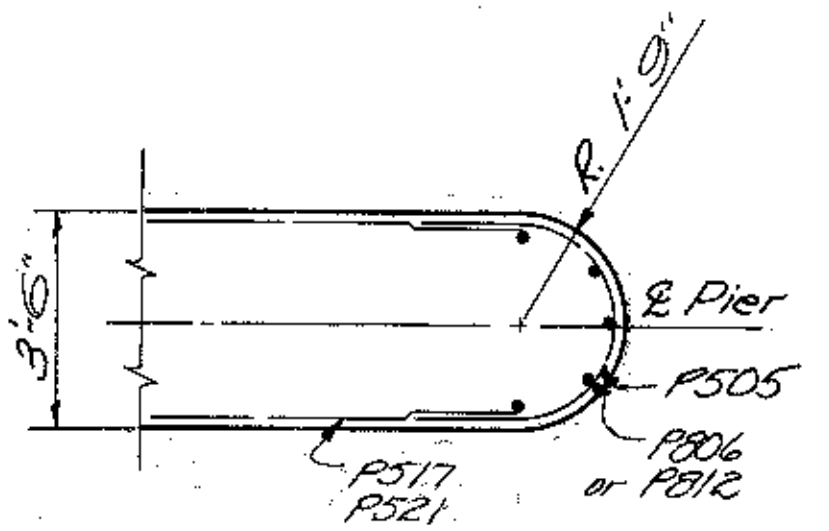
SECTION A-A



SECTION C-C



SECTION D-D



SECTION B-B

LEGEND

- E.E. = EACH END
- E.F. = EACH FACE
- ▽ = PILES BATTERED
- 1:4 (And Direction of Batter.)

E. S. PRESTON & ASSOCIATES, LIMITED 20/58  
ENGINEERS  
COLUMBUS, OHIO

**PIER DETAILS (3A & 3B)**  
BRIDGE NO. FRA.-70-1329 S.W.B.  
OVER SCIOTO RIVER  
FRANKLIN COUNTY STA. 506+14.07  
STA. 515+11.42

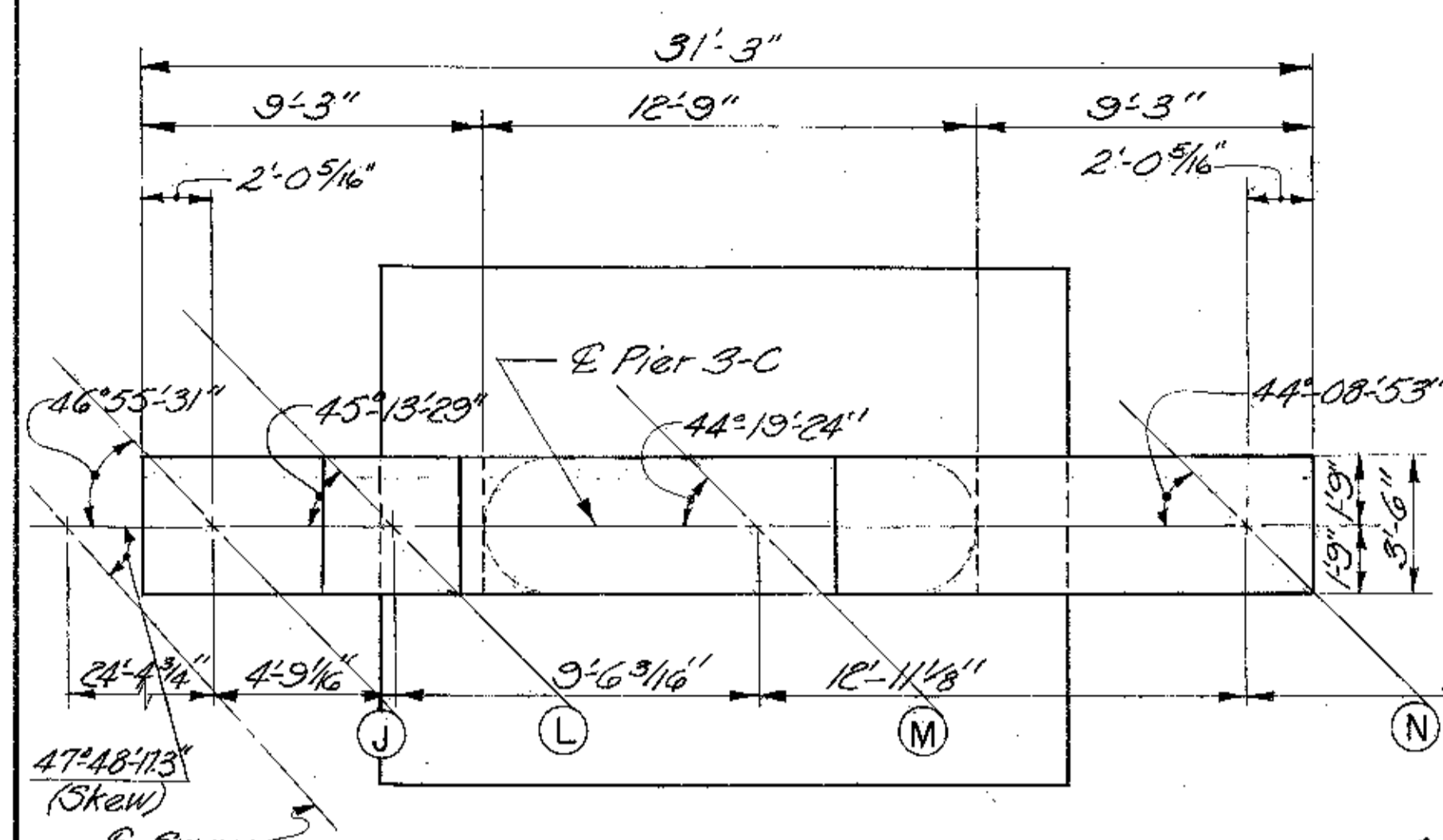
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
A.S.B.	A.S.B.	R.V.B.	S.F.	6/16/70 N.N.	

W. K. BLUETT CO., Cleveland

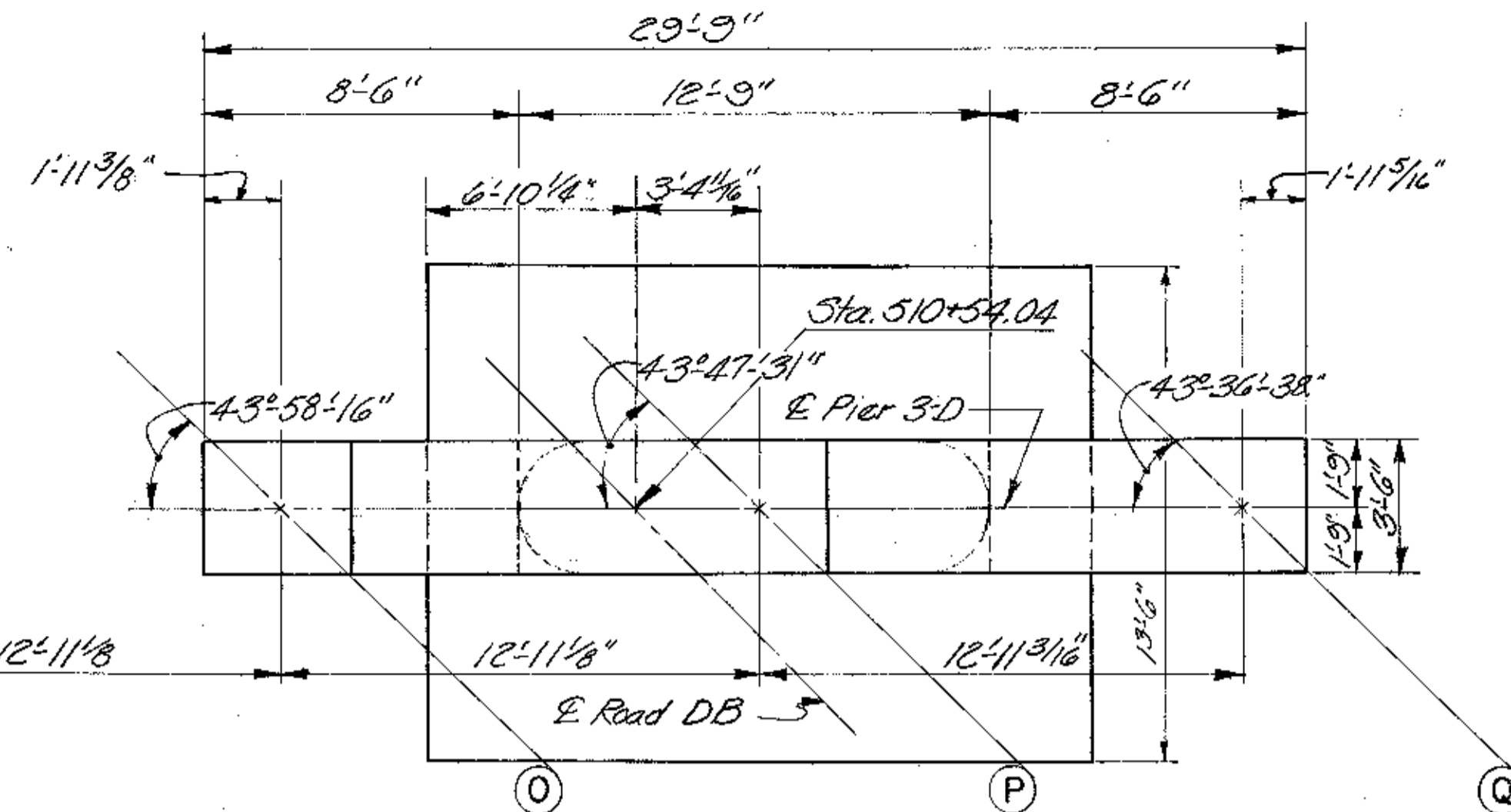
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

849

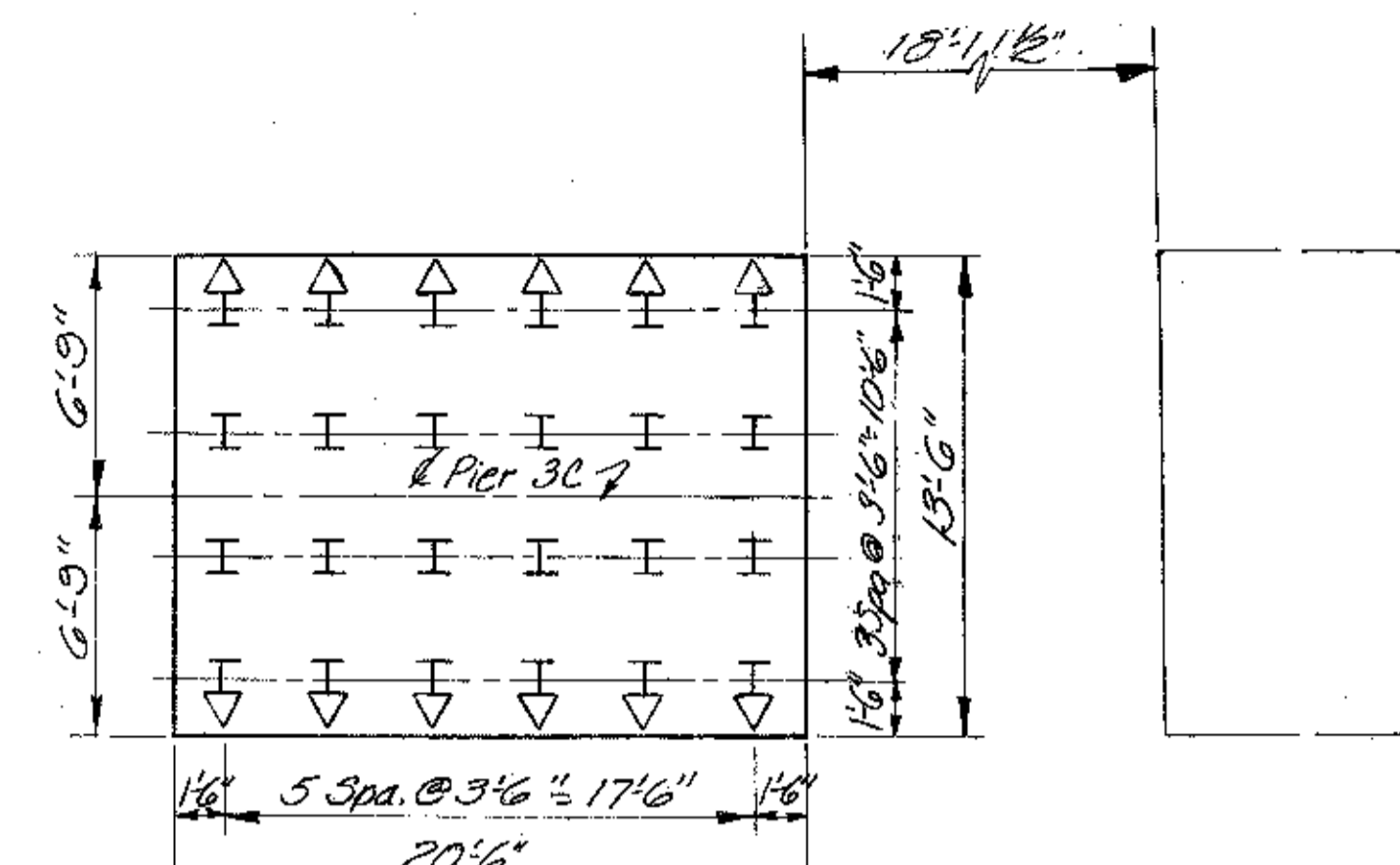
FRANKLIN COUNTY  
FRA-70-1231 S



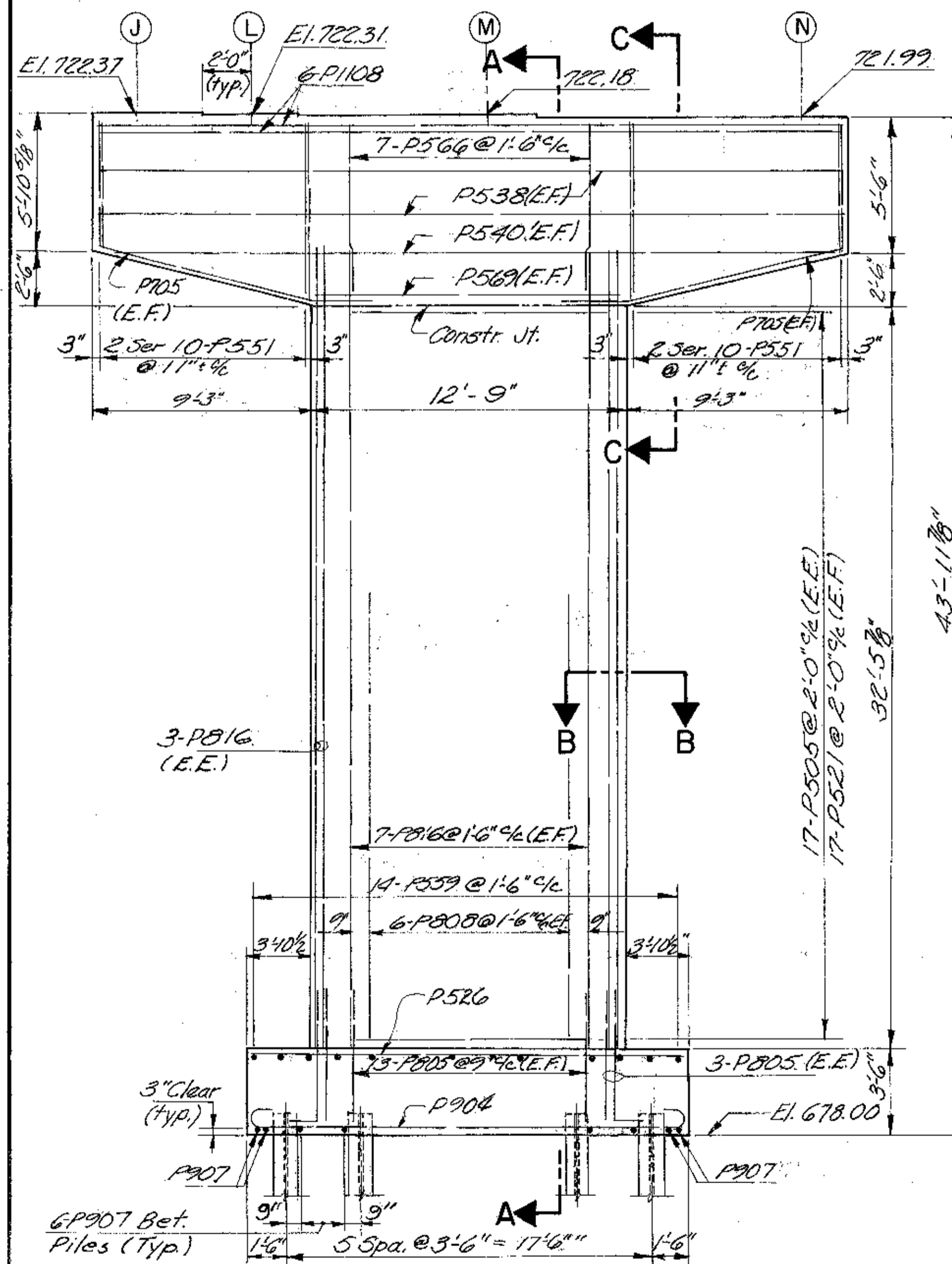
PLAN-PIER 3C



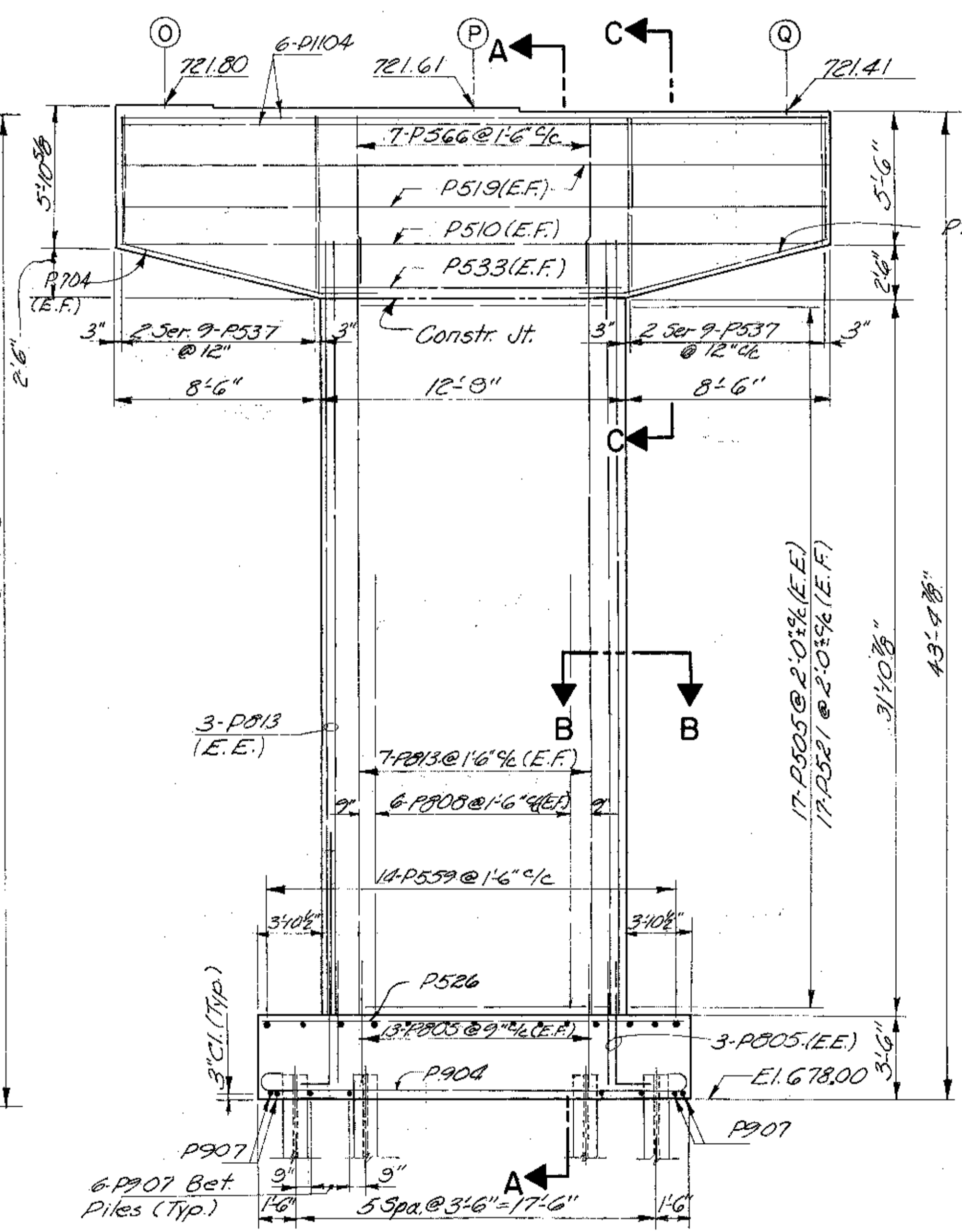
PLAN-PIER 3D



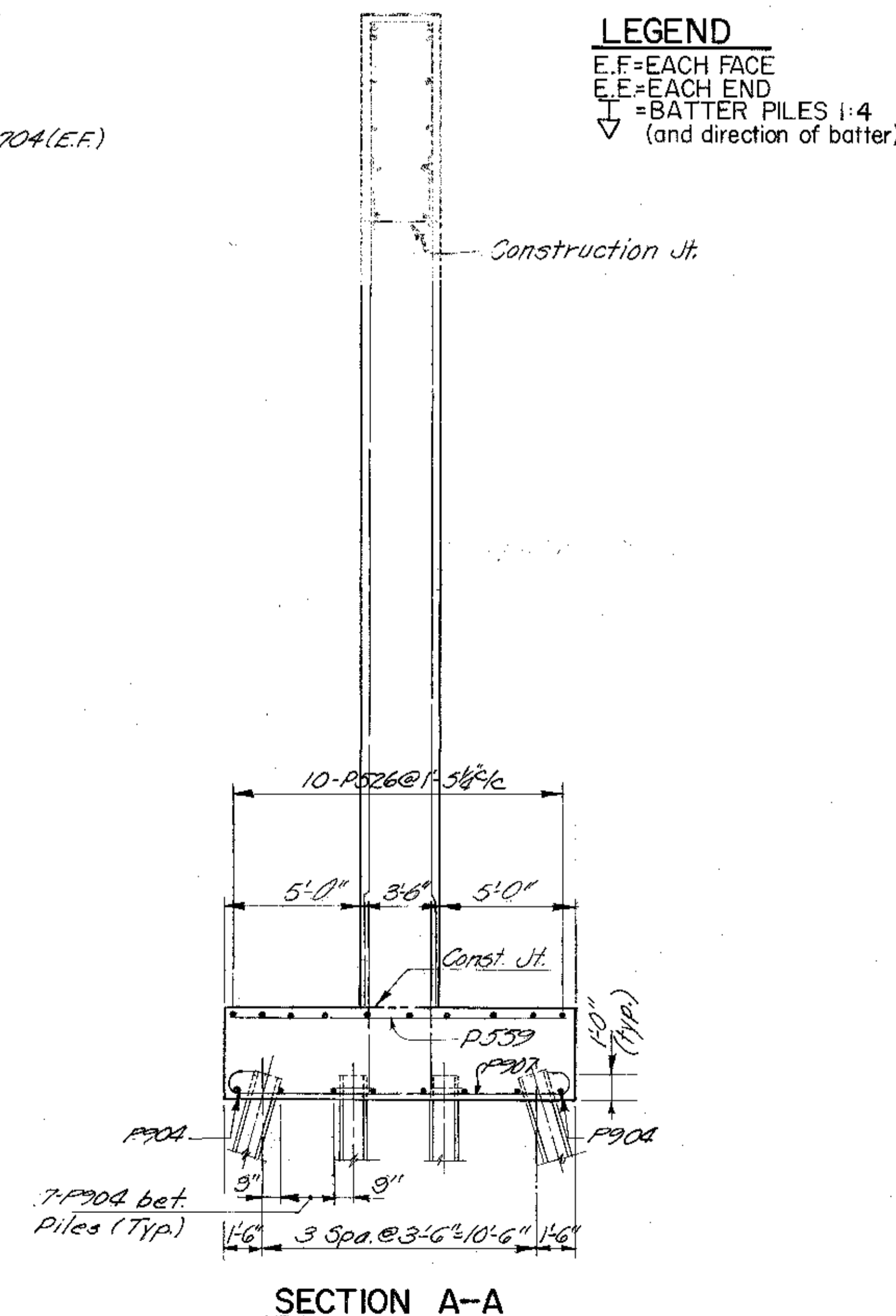
PILE LAYOUT



ELEVATION-PIER 3C

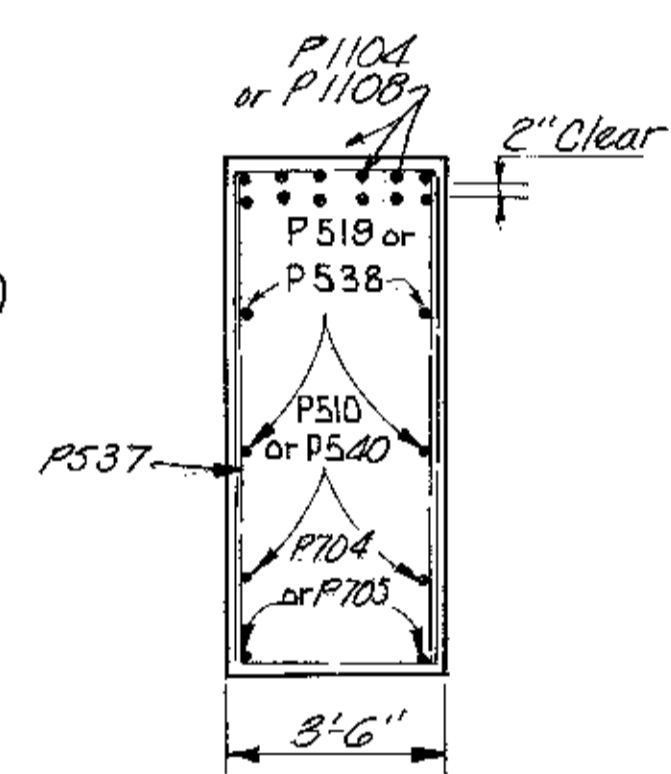


ELEVATION-PIER 3D

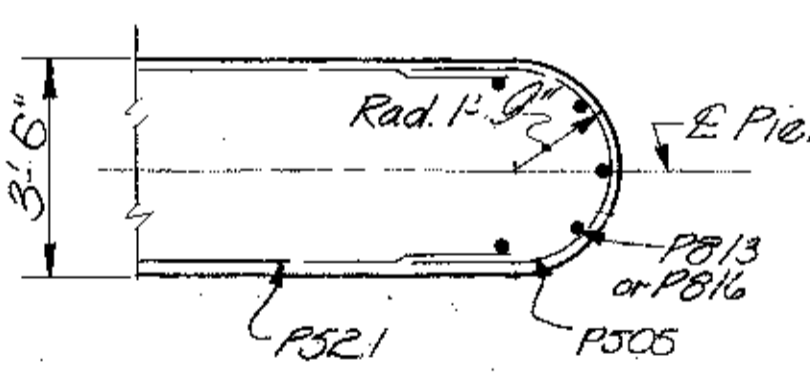


SECTION A-A

**LEGEND**  
 E.F.=EACH FACE  
 E.E.=EACH END  
 ▽=BATTER PILES 1:4  
 (and direction of batter)



SECTION C-C

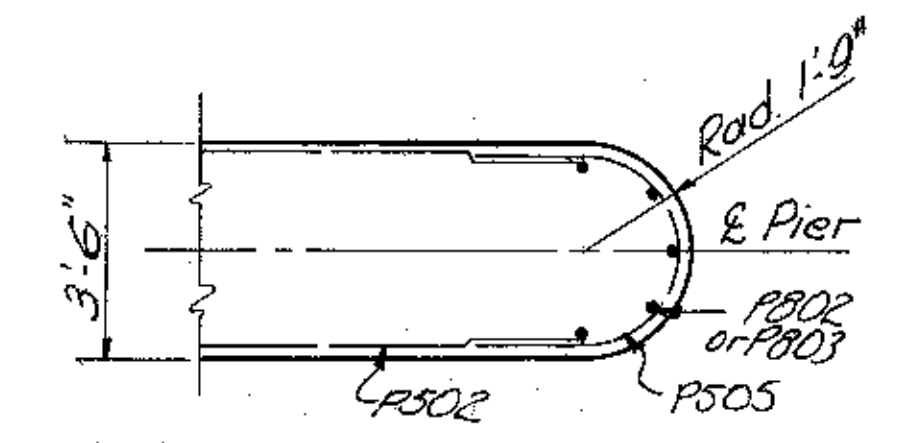
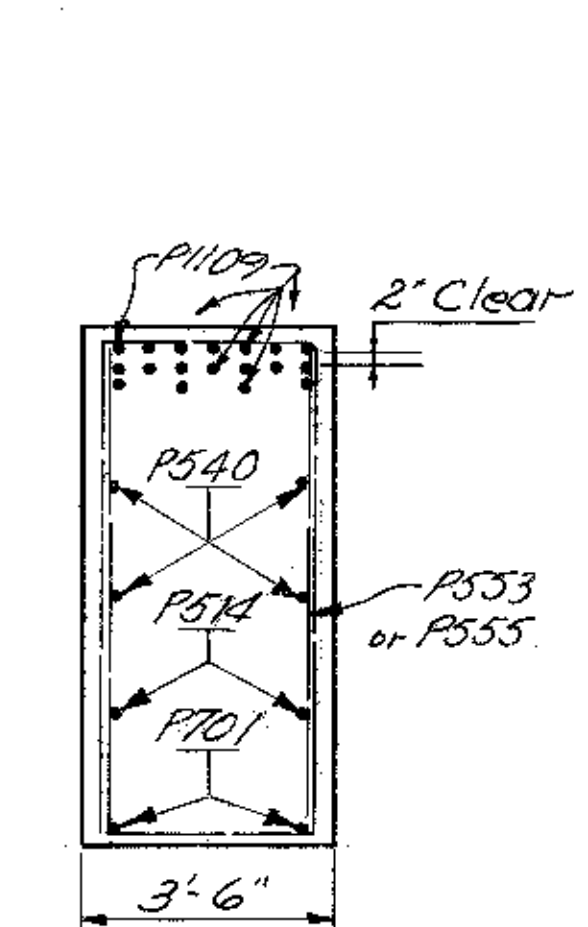
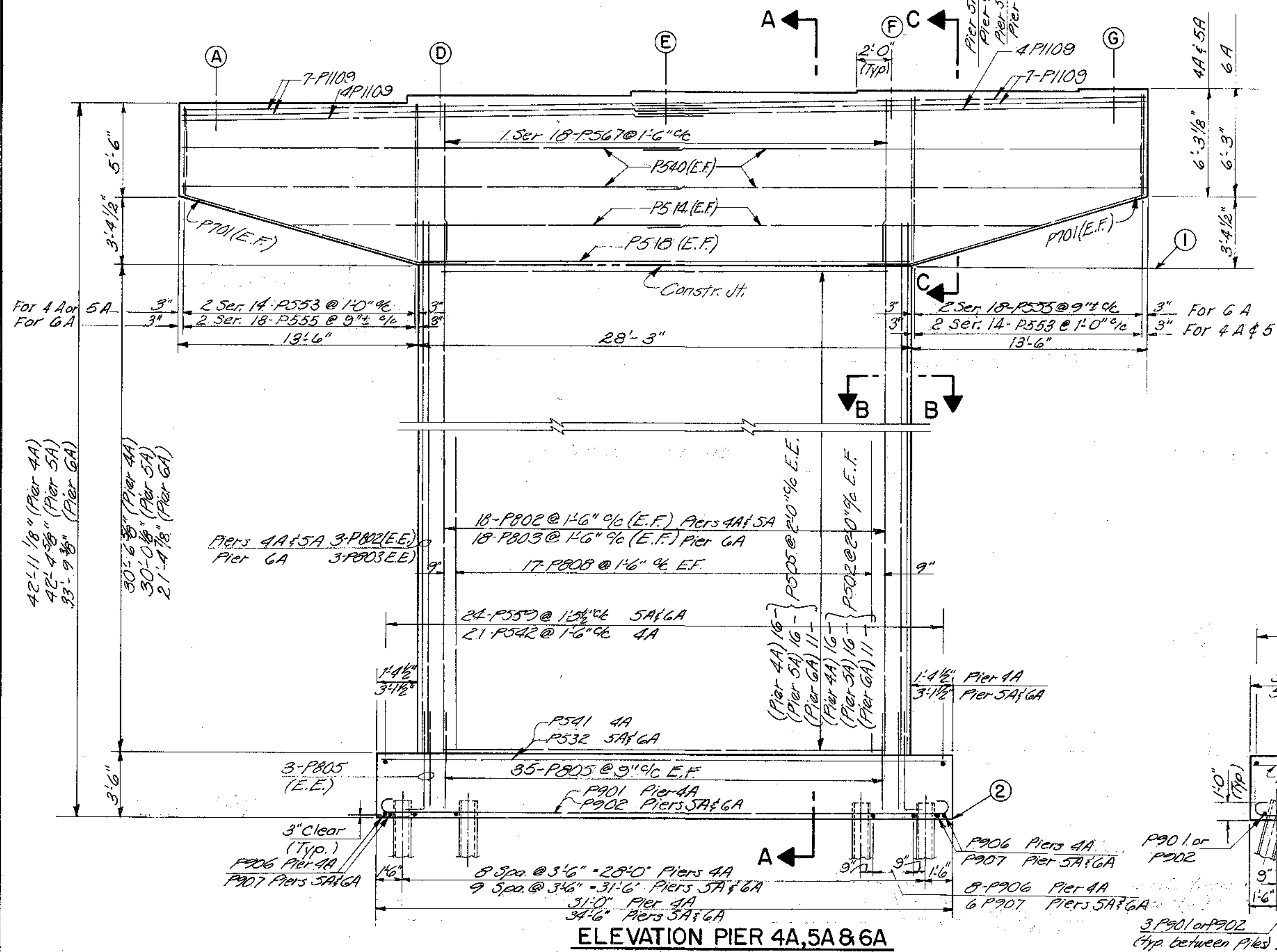
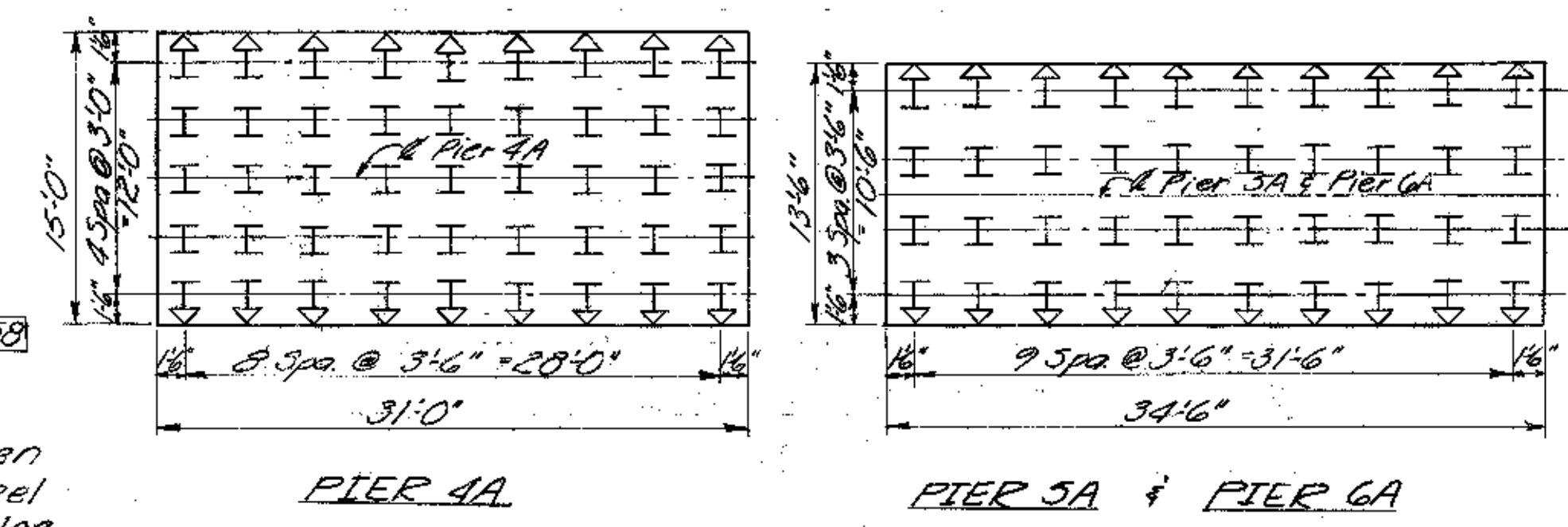
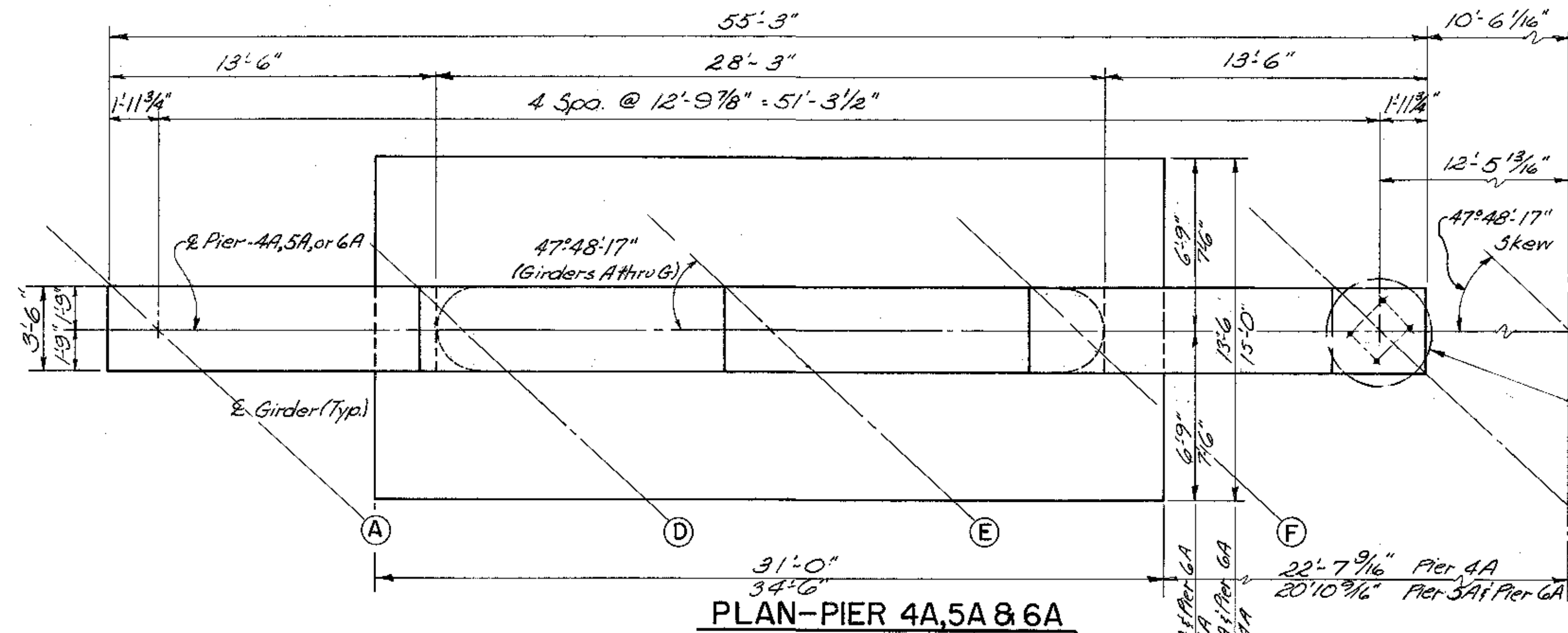


SECTION B-B

E. S. PRESTON & ASSOCIATES, LIMITED						21	58
ENGINEERS							
COLUMBUS, OHIO							
<b>PIER DETAILS (3C &amp; 3D)</b>							
BRIDGE NO. FRA-70-1329 S.W.B.							
OVER SCIOTO RIVER							
FRANKLIN COUNTY				STA. 506+14.07			
				STA. 515+11.42			
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	BY	REVISION	
A.S.B.	A.S.B.	R.U.	B.S.F.	4/16/70	A.M.		

E. K. ELLIOTT CO., Cleveland

FRANKLIN COUNTY  
FRA-70-1231 S



ELEVATION TABLE

Pier	A	D	E	F	G	1	2
4 A	720.93	721.12	721.31	721.50	721.69	712.11	678.00
5 A	720.39	720.58	720.77	720.96	721.15	711.56	678.00
6 A	719.78	719.96	720.15	720.34	720.53	710.96	686.00

LEGEND  
E.F.=EACH FACE  
E.E.=EACH END  
▽ =BATTER PILES 1:4  
(and direction of batter)

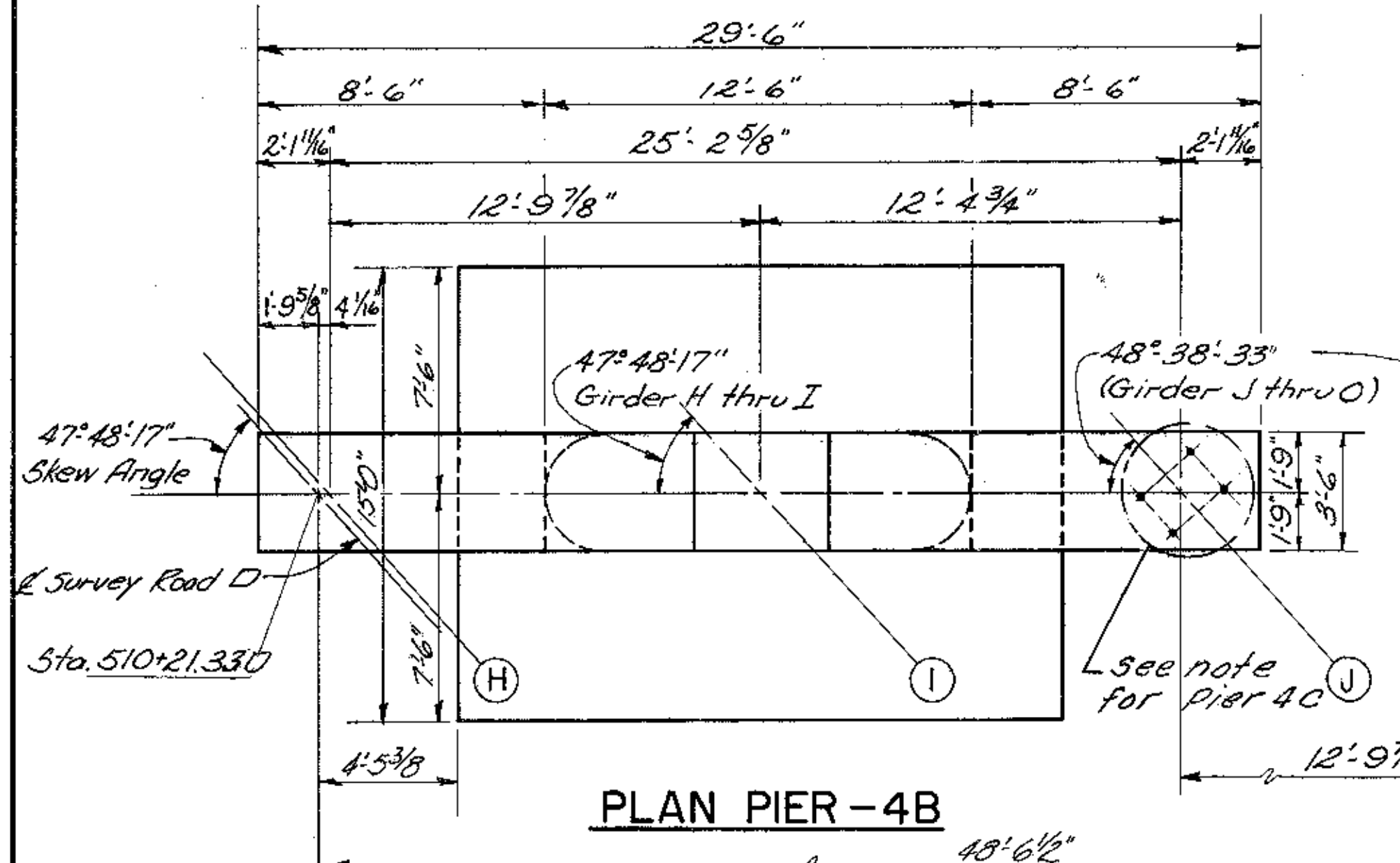
E. S. PRESTON & ASSOCIATES, LIMITED 2/2/58  
ENGINEERS  
COLUMBUS, OHIO

PIER DETAILS (4A, 5A, & 6A)  
BRIDGE NO. FRA.-70-1329S W.B.  
OVER SCIOTO RIVER  
FRANKLIN COUNTY STA. 506+14.07  
STA. 515+14.2

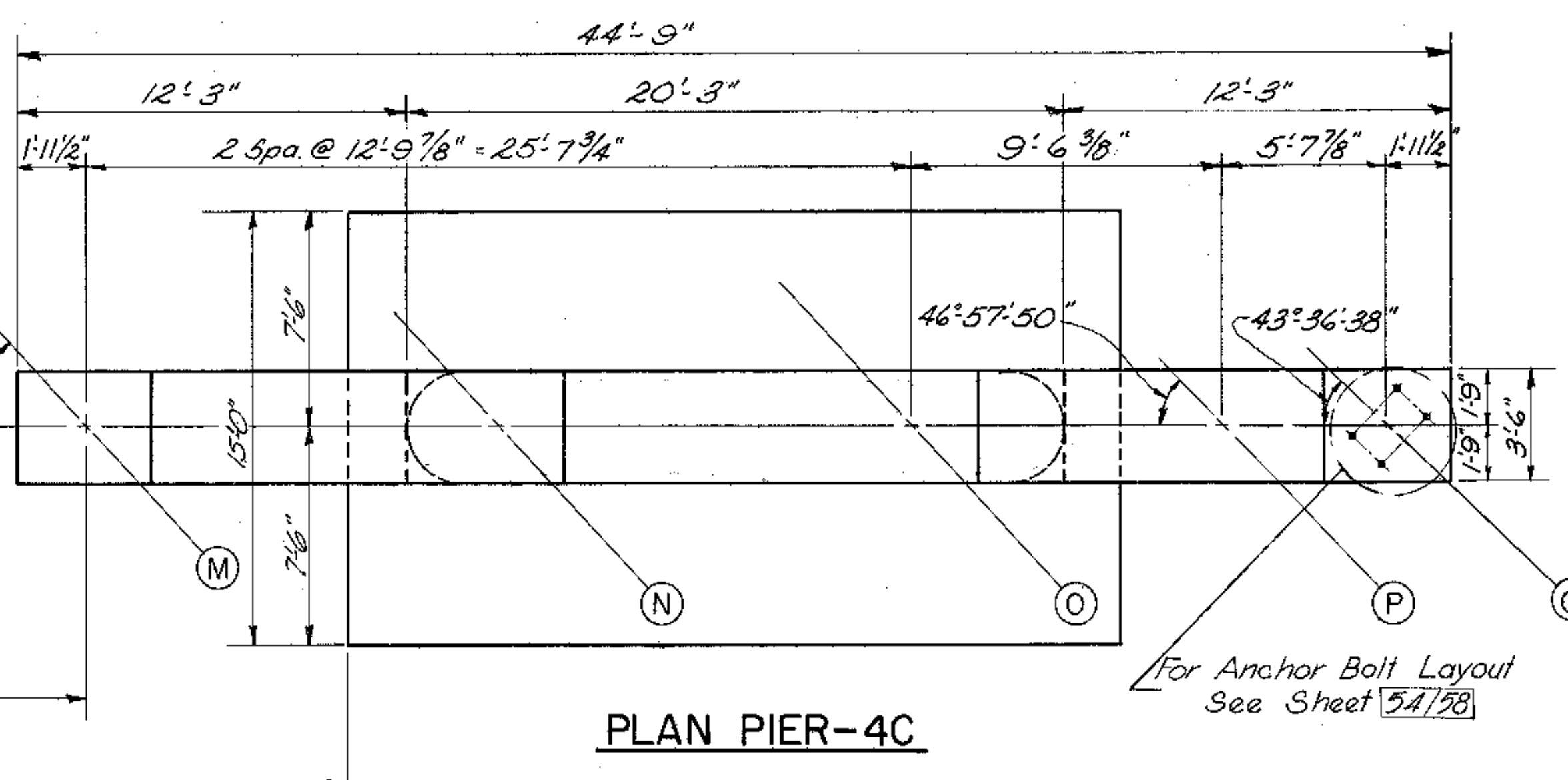
DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
A.S.B.	A.S.B.	M.L.S.	S.F.	6/16/78 A.L.N.

FRANKLIN COUNTY  
FRA.-70-1231 S

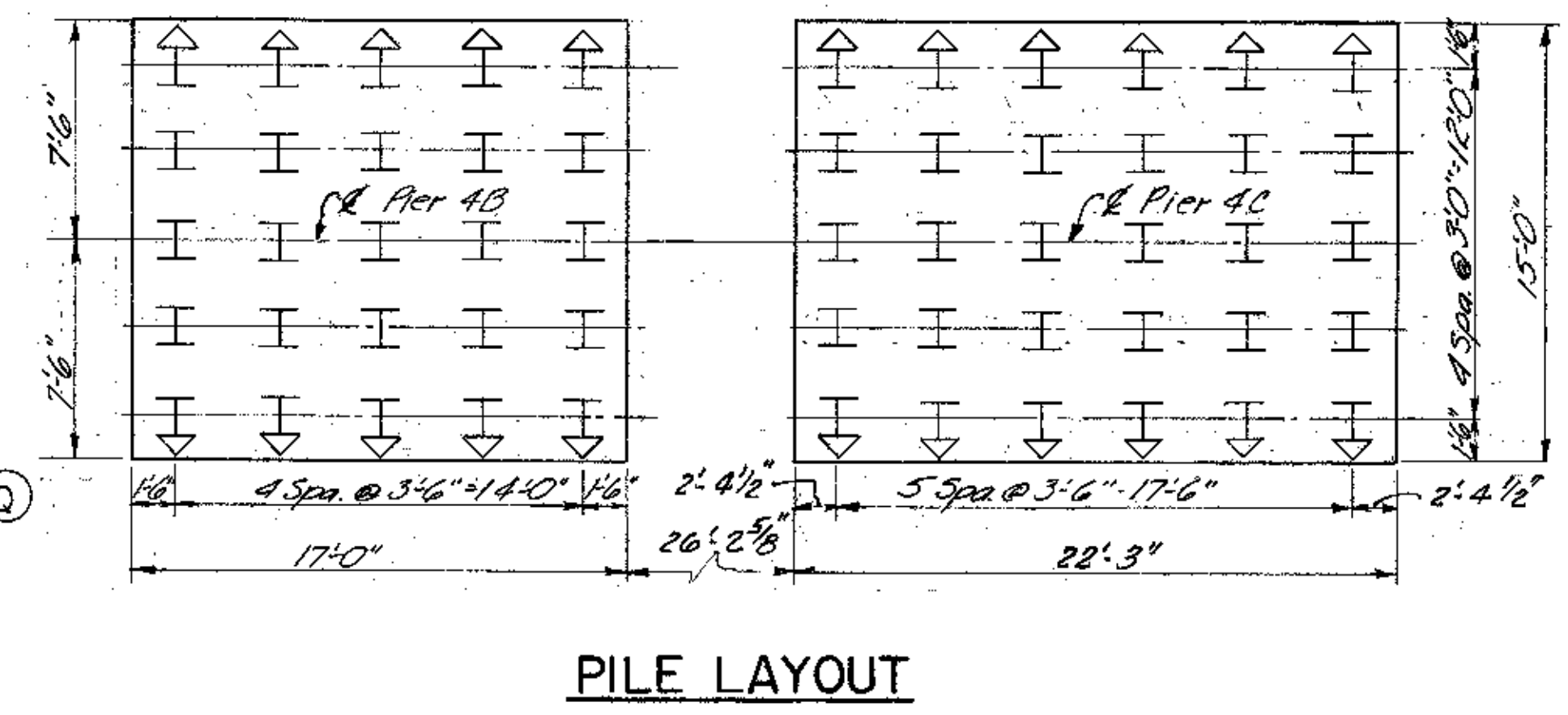
NOTE:  
Special core shall be taken  
in placing reinforcing steel  
seat so as to avoid interference  
with the drilling of anchor  
bolt holes.



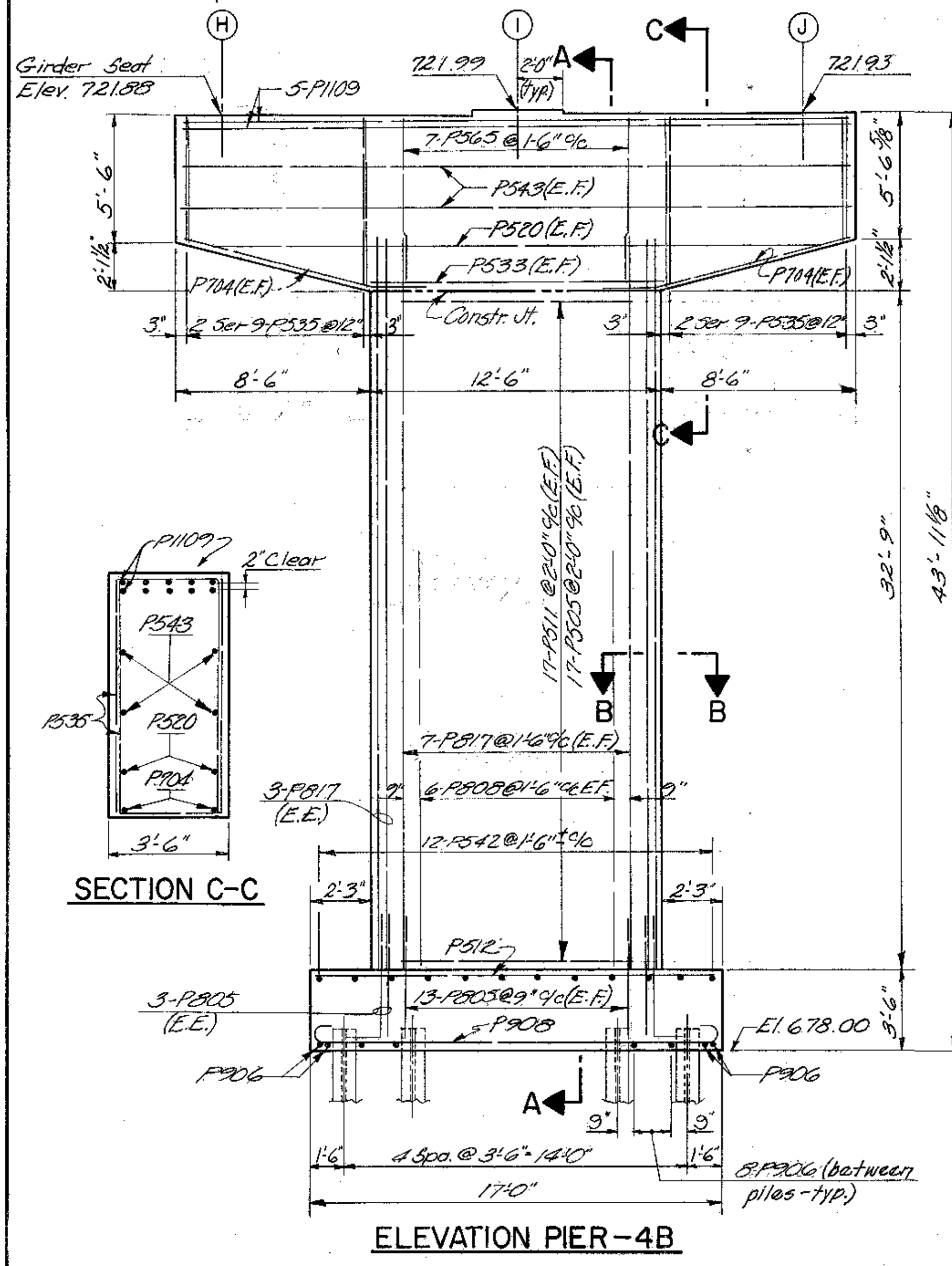
PLAN PIER-4B



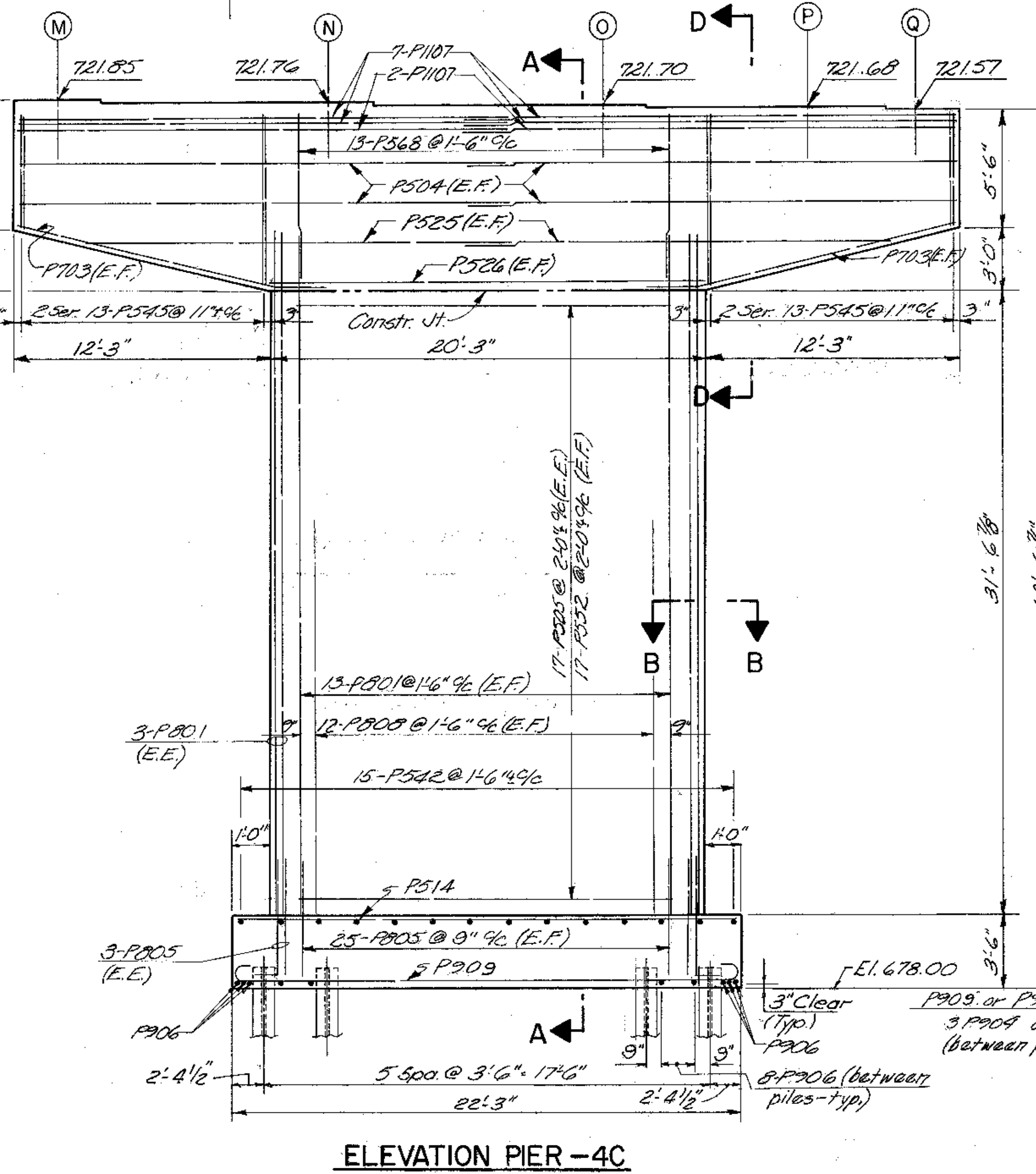
PLAN PIER-4C



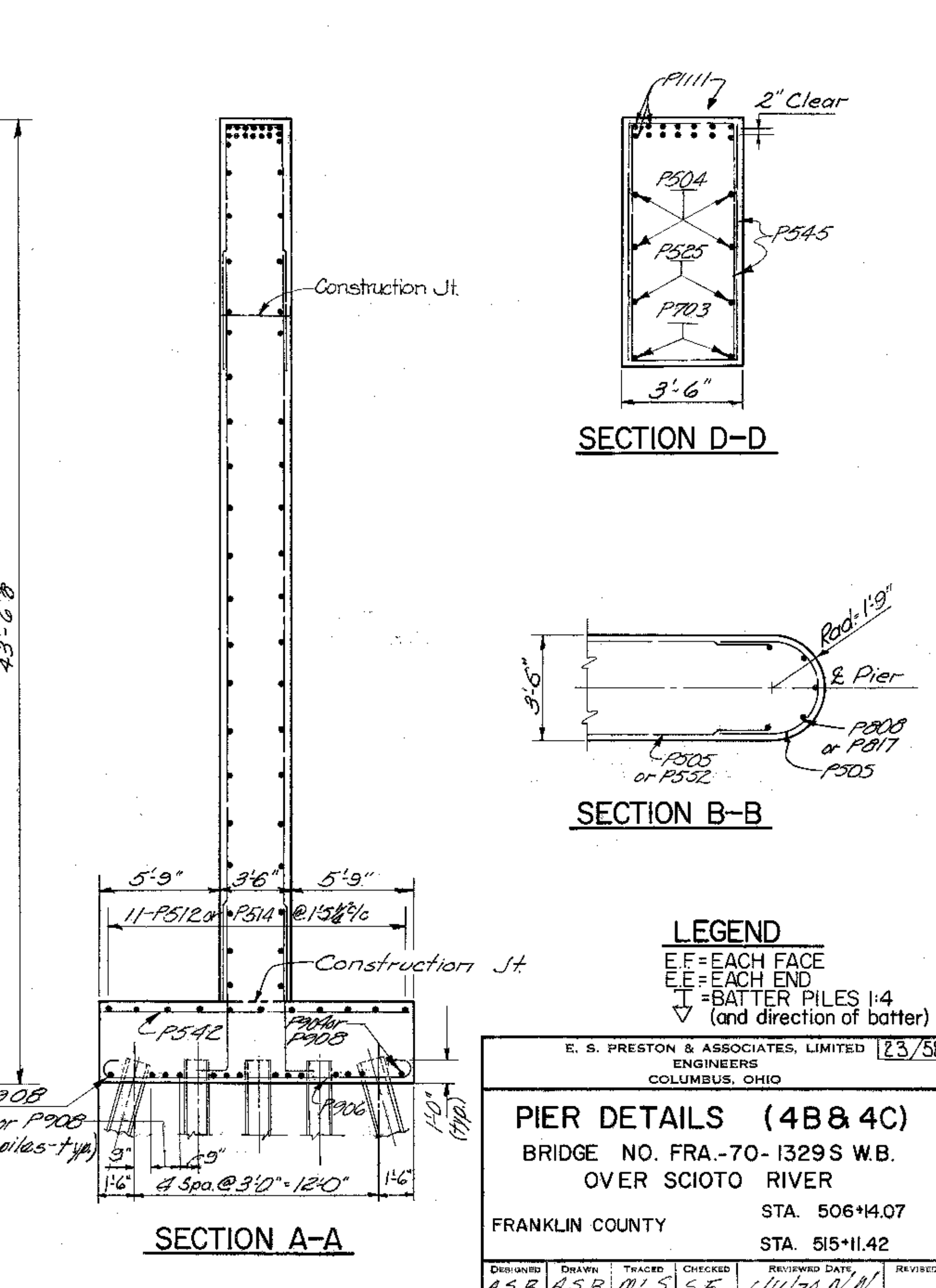
PILE LAYOUT



ELEVATION PIER-4B



ELEVATION PIER-4C



SECTION D-D

SECTION B-B

SECTION C-C

SECTION A-A

LEGEND

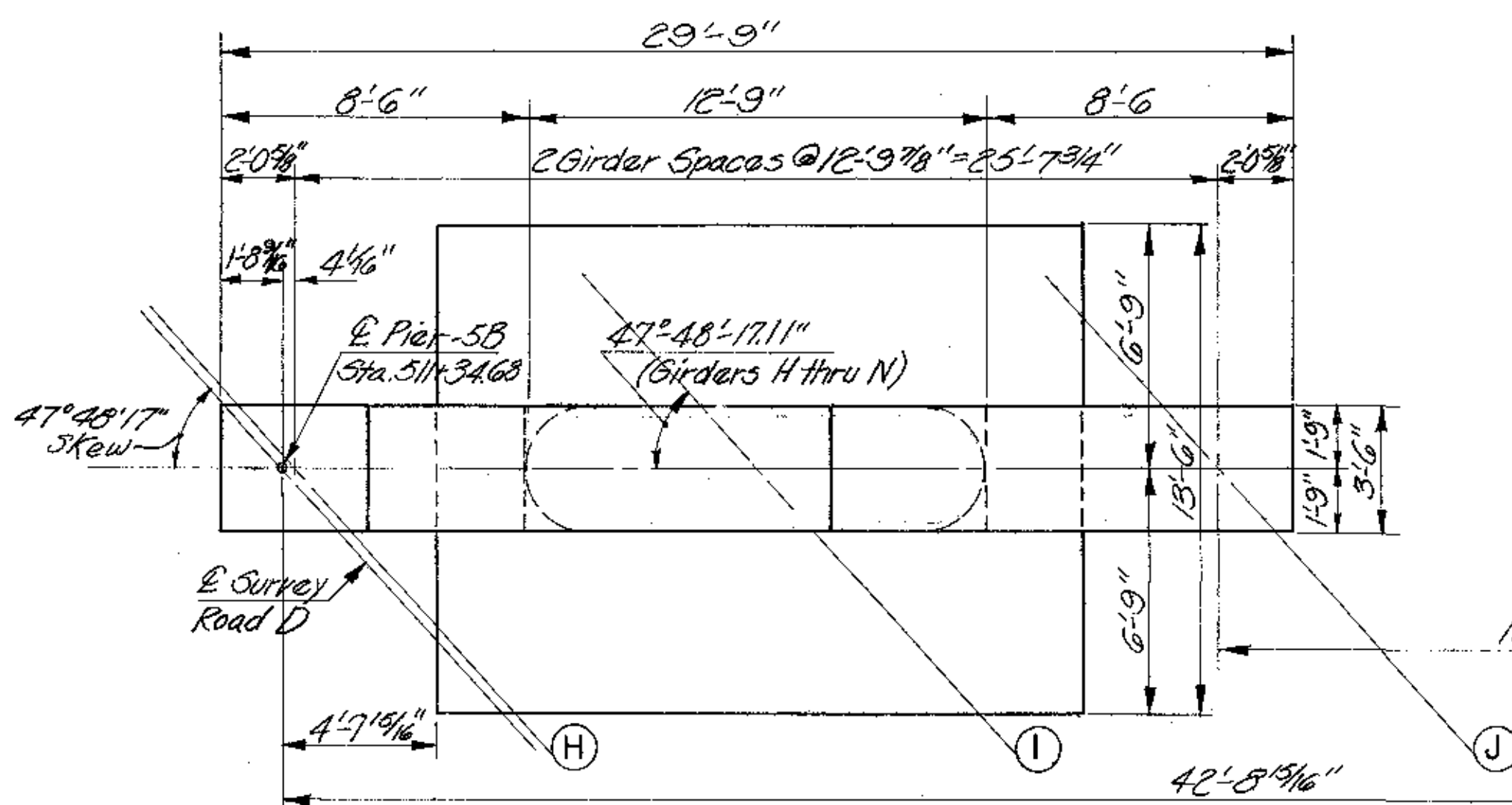
- E.F. = EACH FACE
- E.E. = EACH END
- ∇ = BATTER PILES 1:4 (and direction of batter)

E. S. PRESTON & ASSOCIATES, LIMITED				23/58
ENGINEERS				
COLUMBUS, OHIO				
<b>PIER DETAILS (4B &amp; 4C)</b>				
BRIDGE NO. FRA.-70-1329 S W.B.				
OVER SCIOTO RIVER				
FRANKLIN COUNTY		STA. 506+14.07		
		STA. 515+11.42		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE
A.S.B.	A.S.B.	M.L.S.	S.F.	6/16/70 W.W.

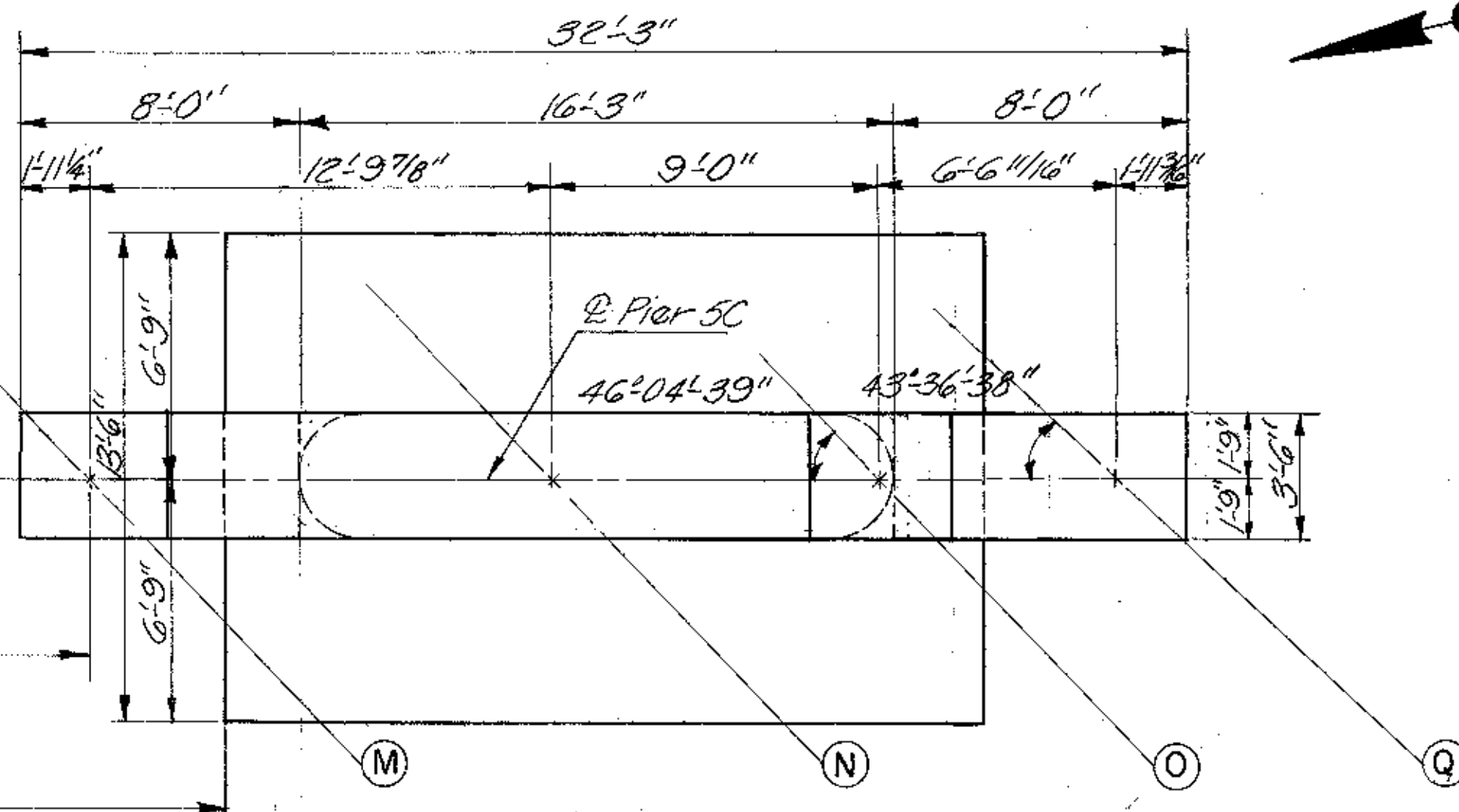
B. K. HILLOTT CO., Cleveland



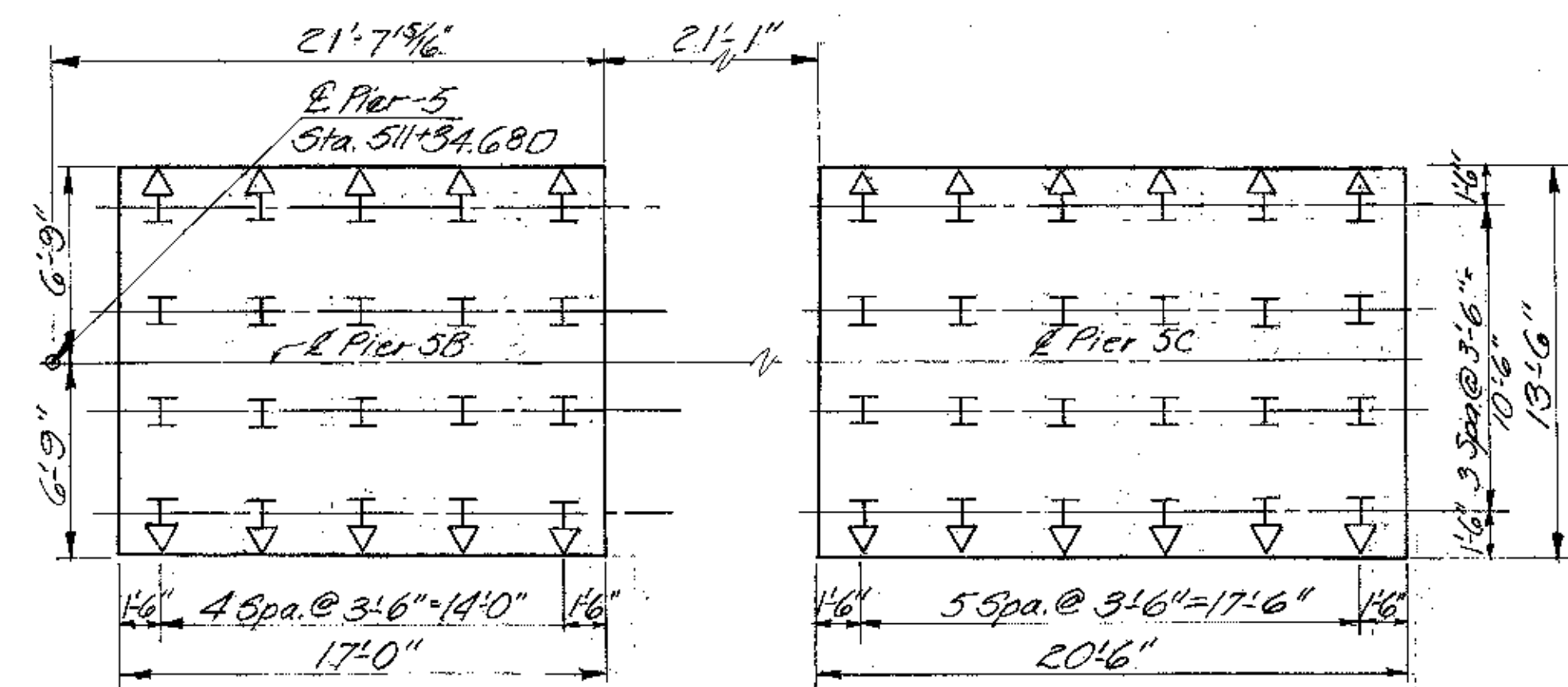
FRANKLIN COUNTY  
FRA.-70-12.31S



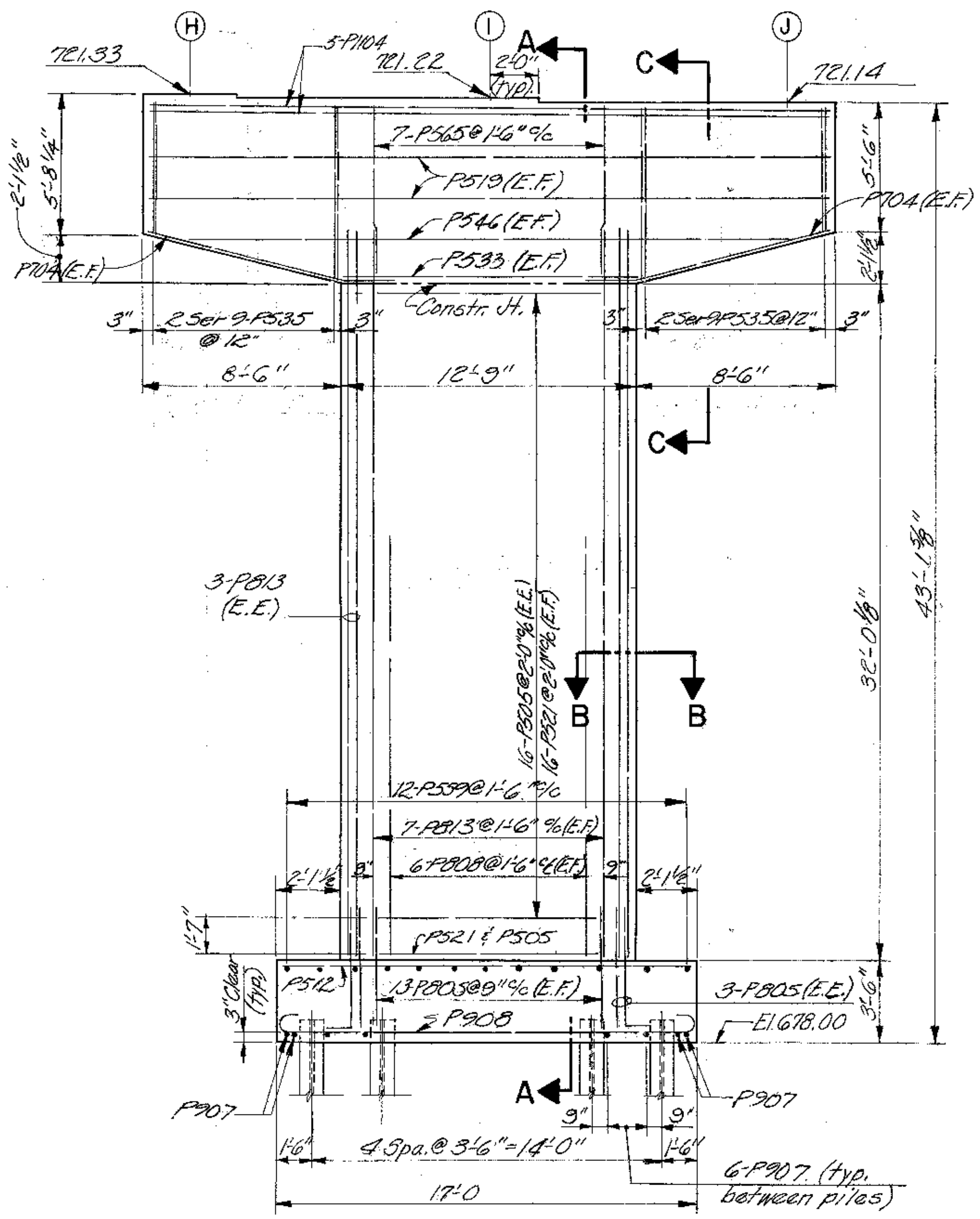
PLAN PIER 5B



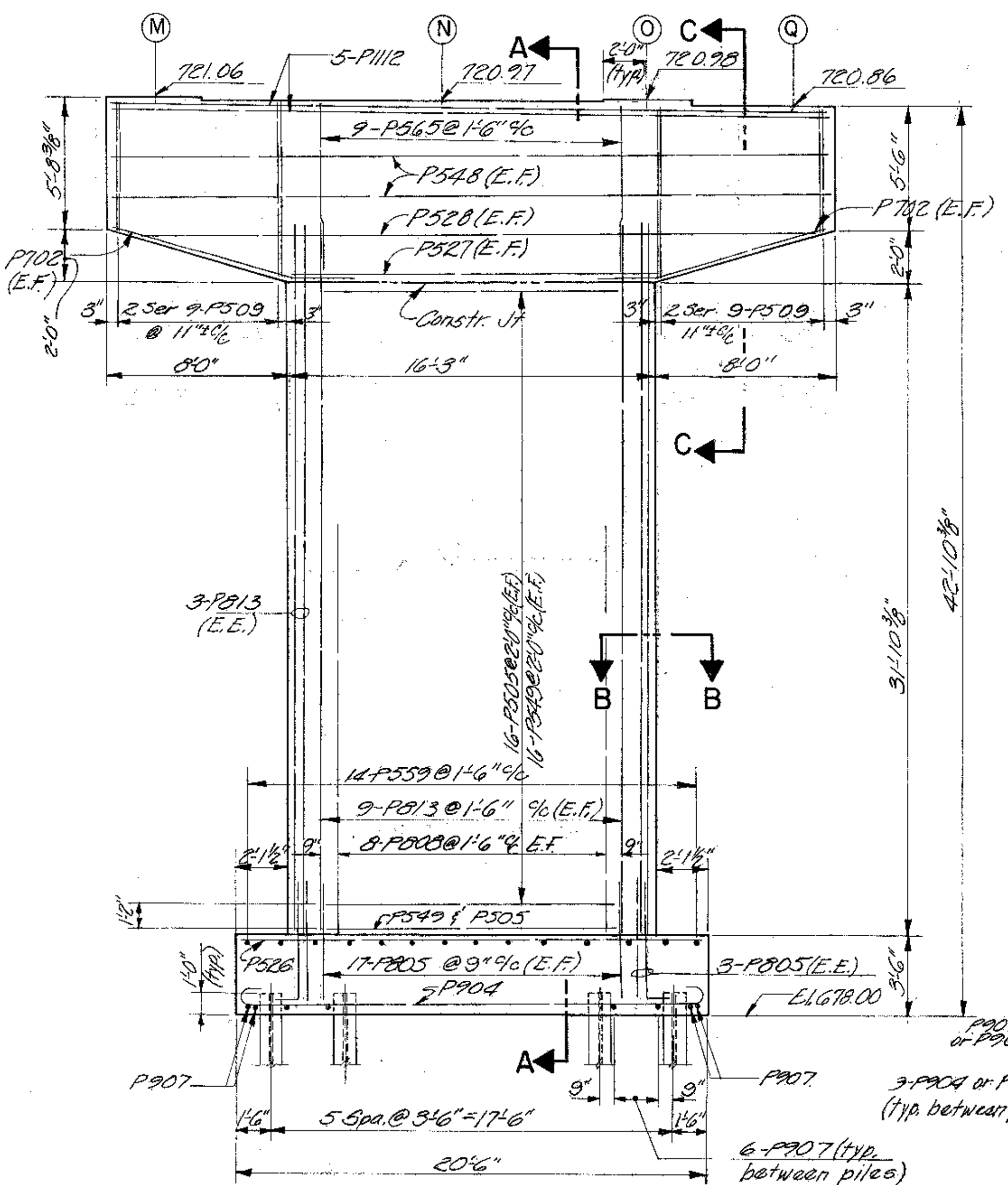
PLAN PIER 5C



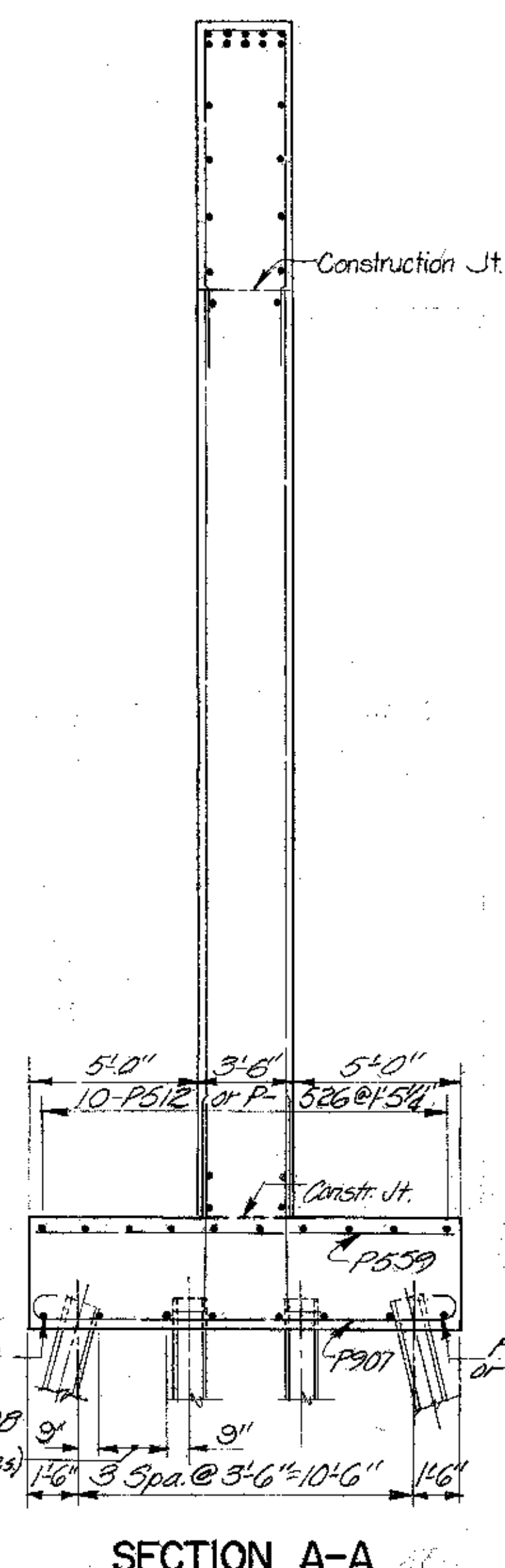
PILE LAYOUT



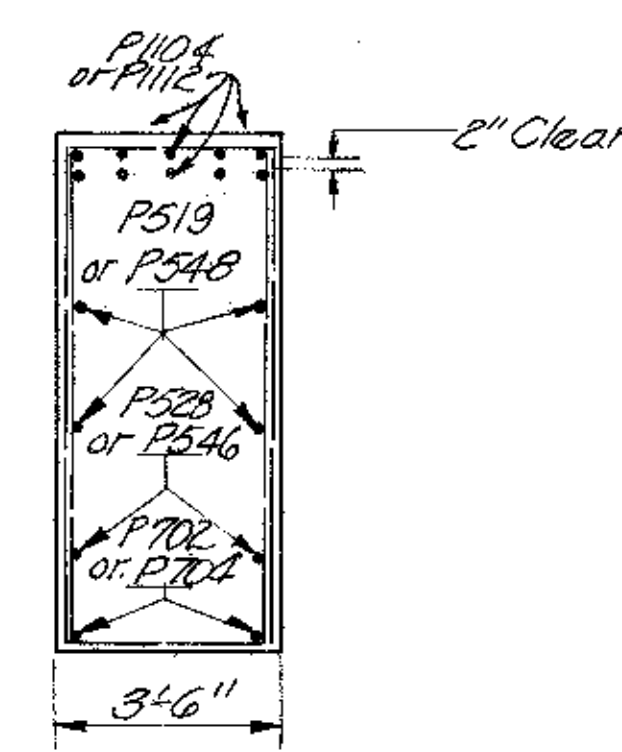
ELEVATION PIER 5B



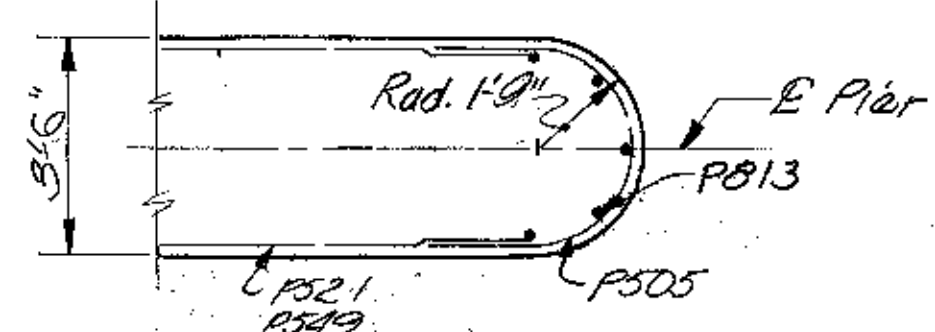
ELEVATION PIER 5C



SECTION A-A



SECTION C-C

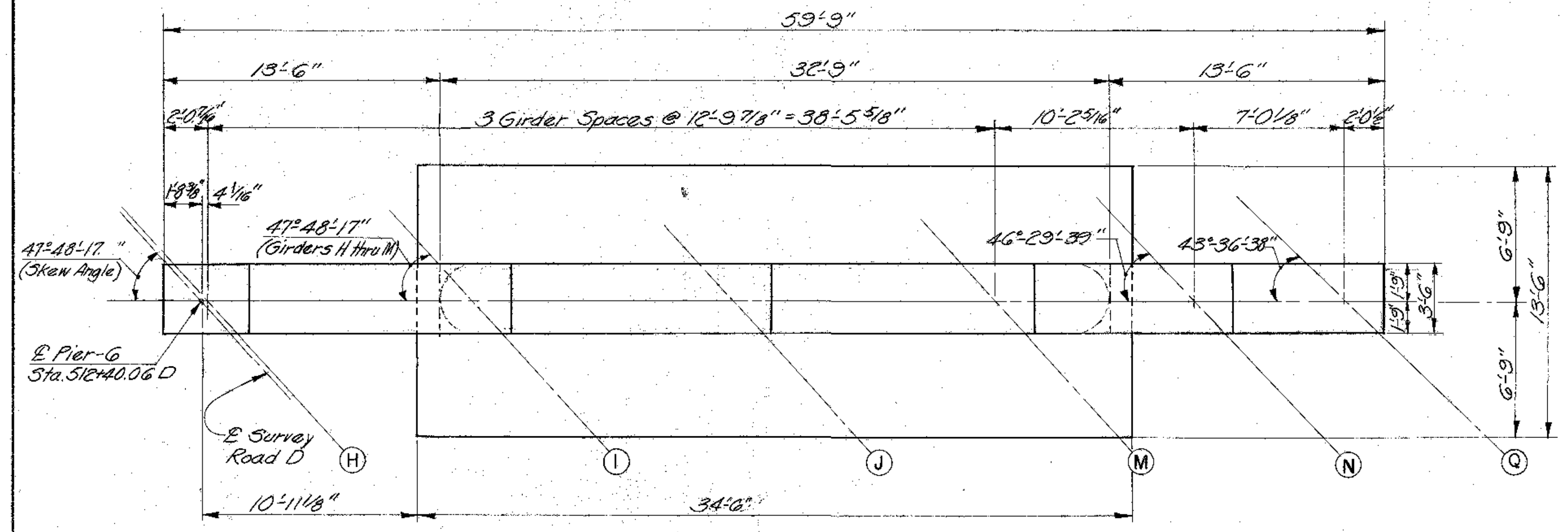


SECTION B-B

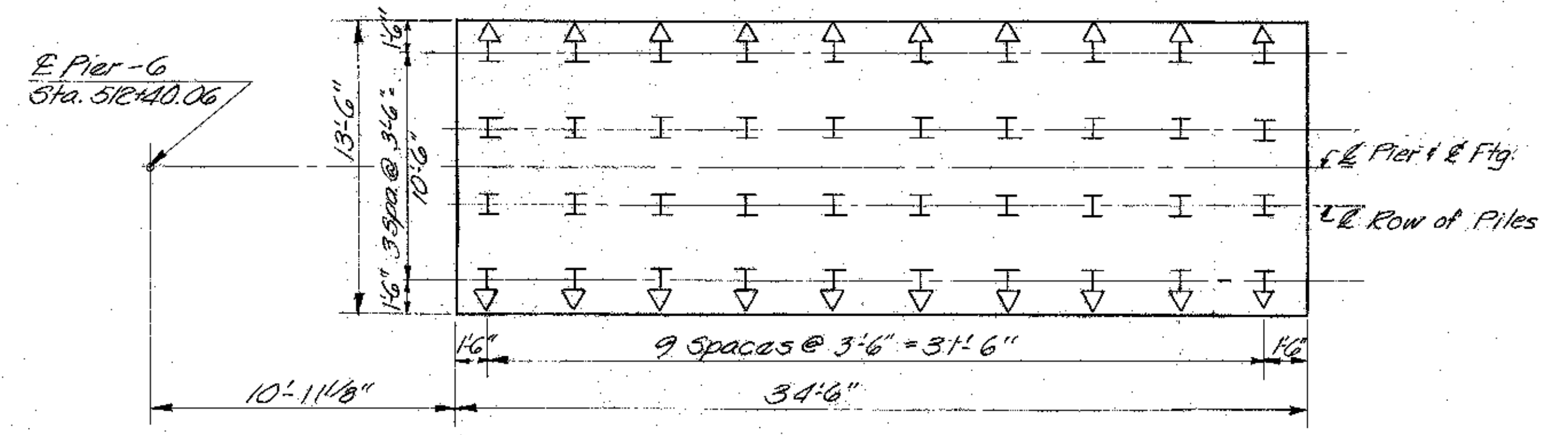
**LEGEND**  
 E.F.=EACH FACE  
 E.E.=EACH END  
 J =BATTER PILES 1:4  
 ∇ (and direction of batter)

E. S. PRESTON & ASSOCIATES, LIMITED				24/58
ENGINEERS				
COLUMBUS, OHIO				
<b>PIER DETAILS (5B &amp; 5C)</b>				
BRIDGE NO. FRA.-70-1329S W.B.				
OVER SCIOTO RIVER				
FRANKLIN COUNTY		STA. 506 + 14.07		
		STA. 515 + 11.42		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE
A.S.B.	A.S.B.	M.L.S.	S.F.F.	6/16/70 R.L.W.
				REVISED

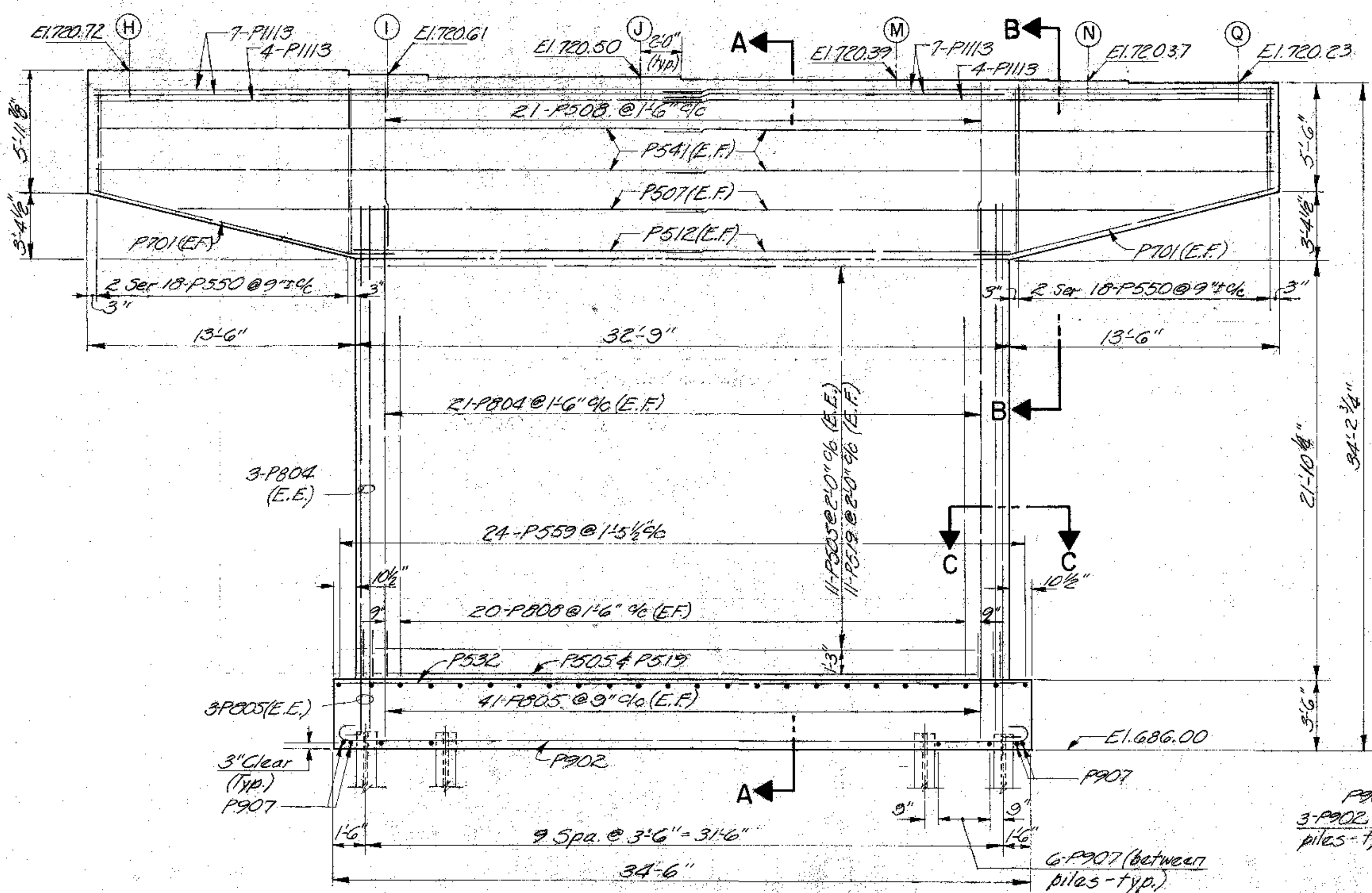
8. X. ELLIOTT CO., Cleveland



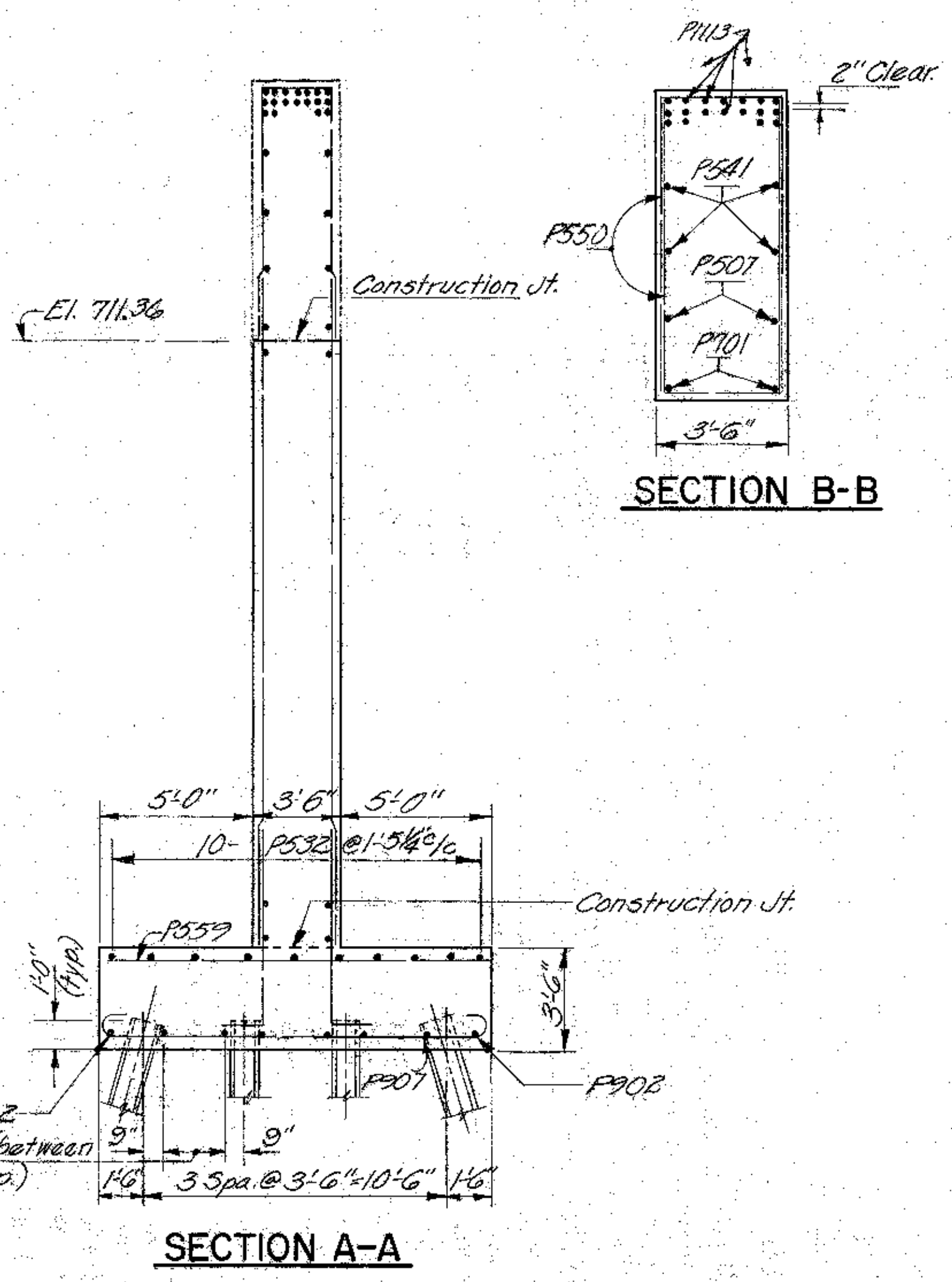
PLAN PIER 6B



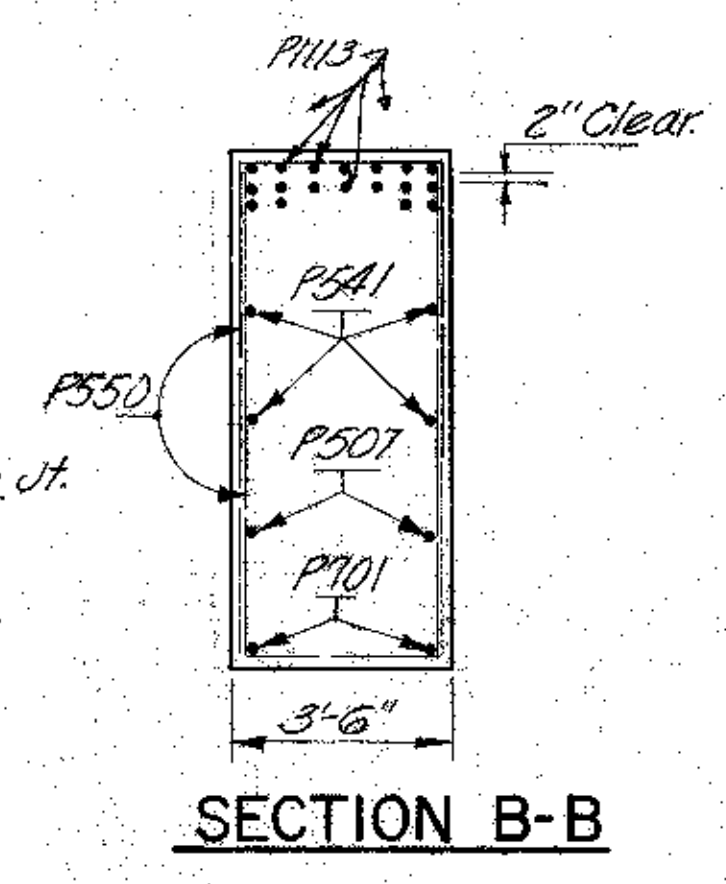
PILE LAYOUT



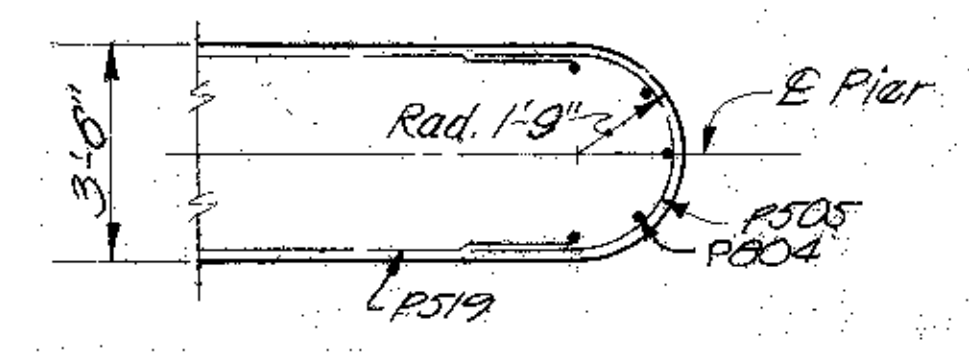
ELEVATION PIER 6B



SECTION A-A



SECTION B-B



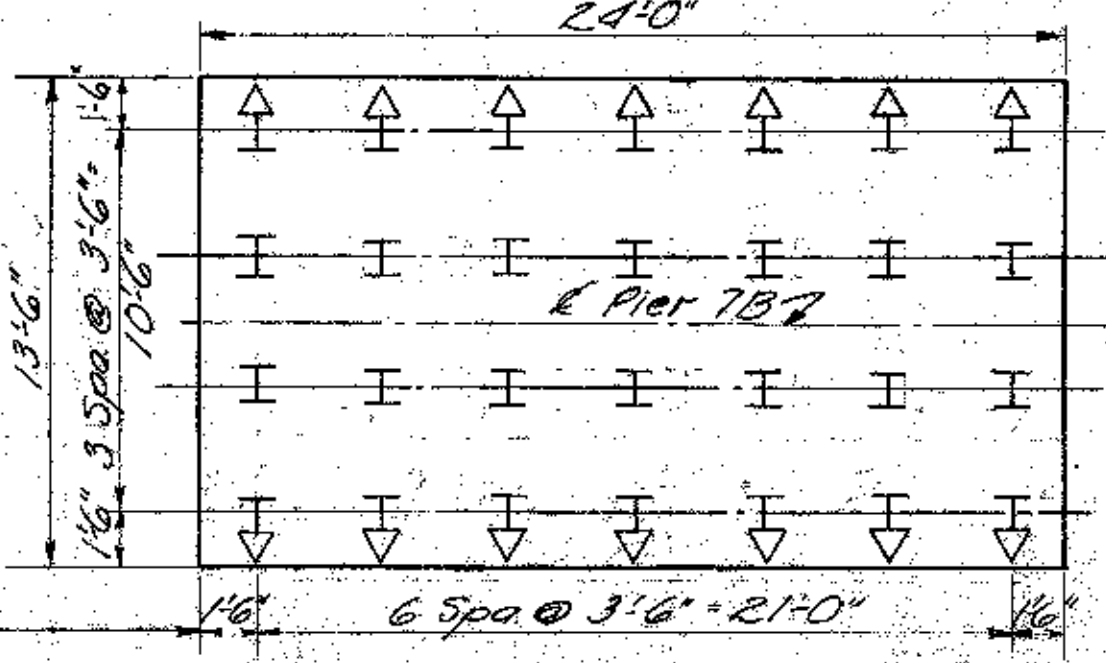
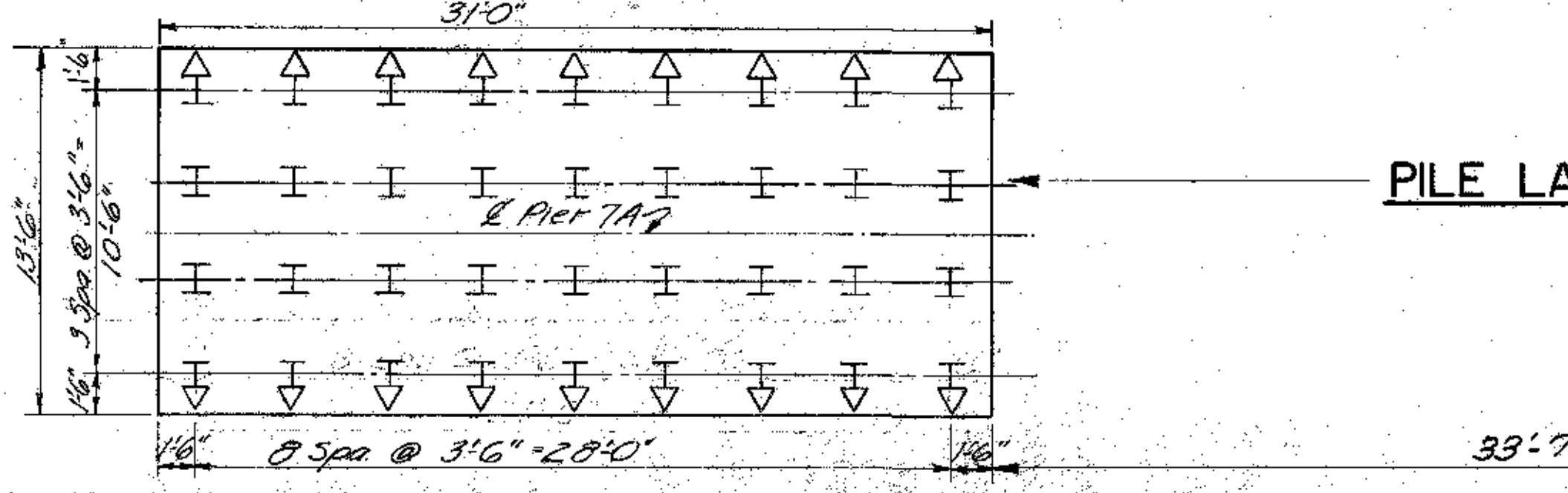
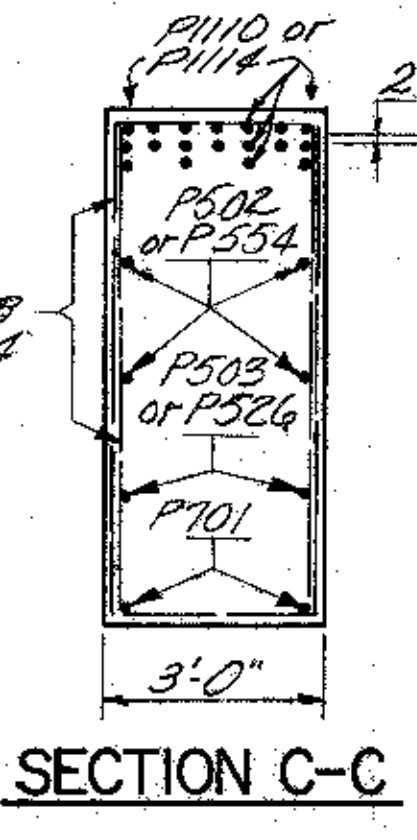
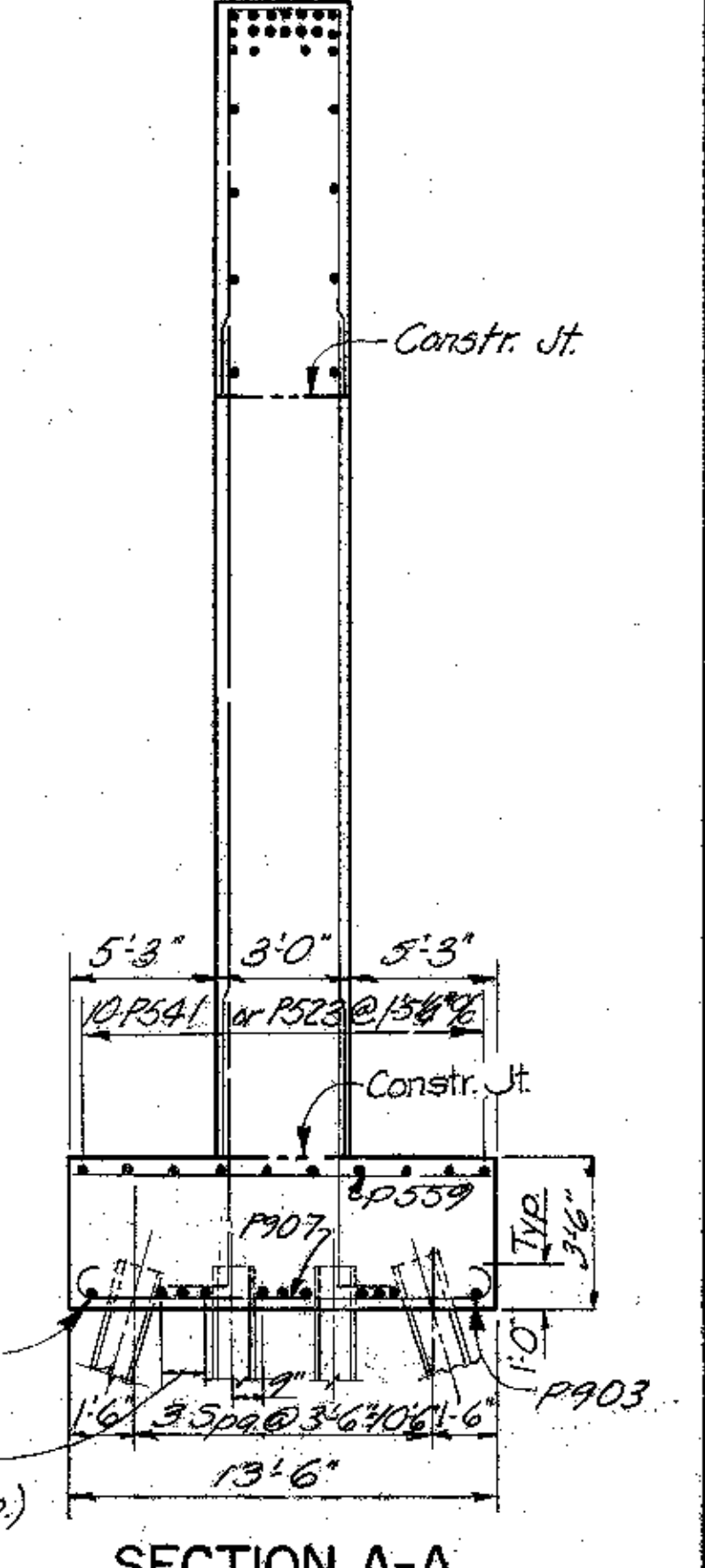
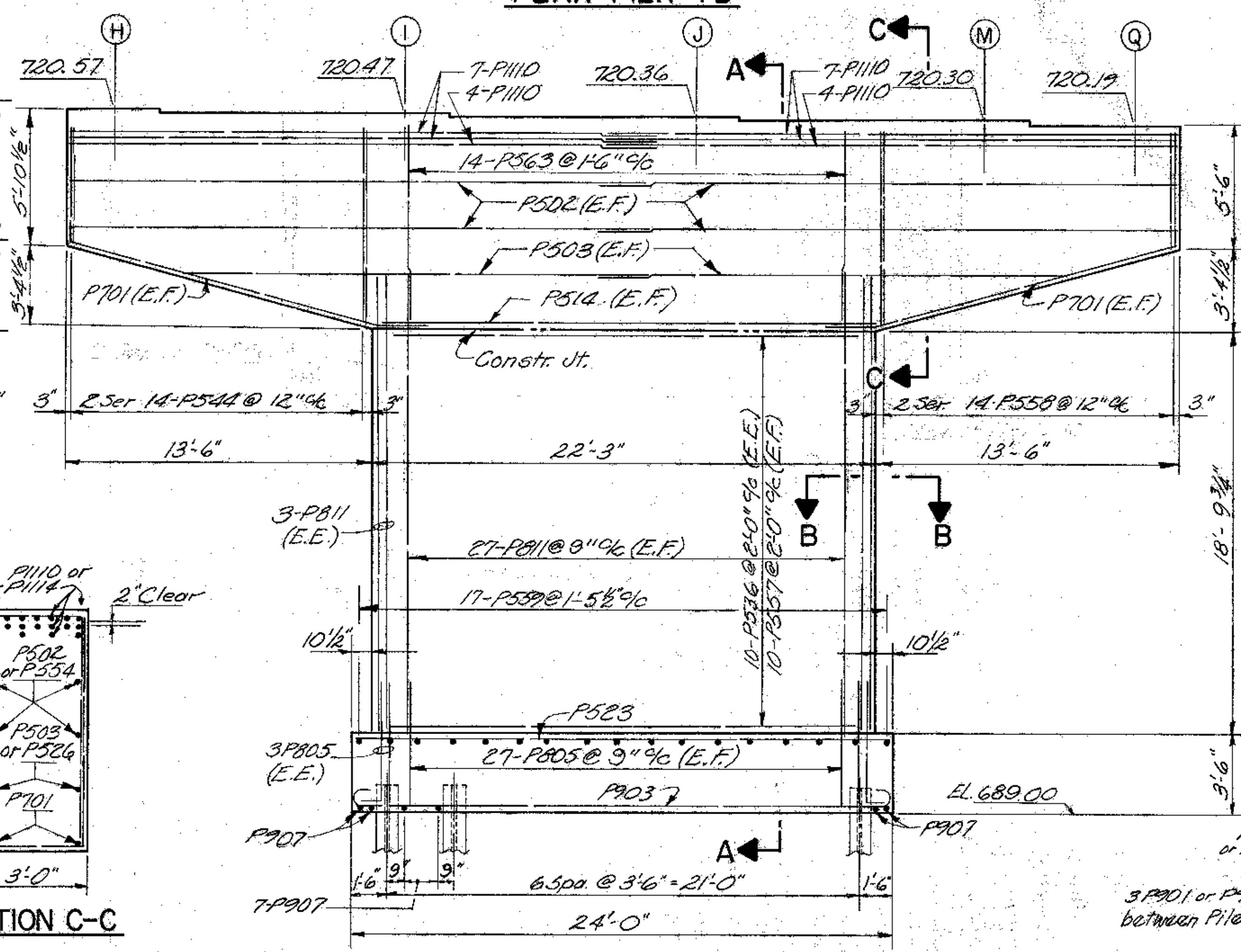
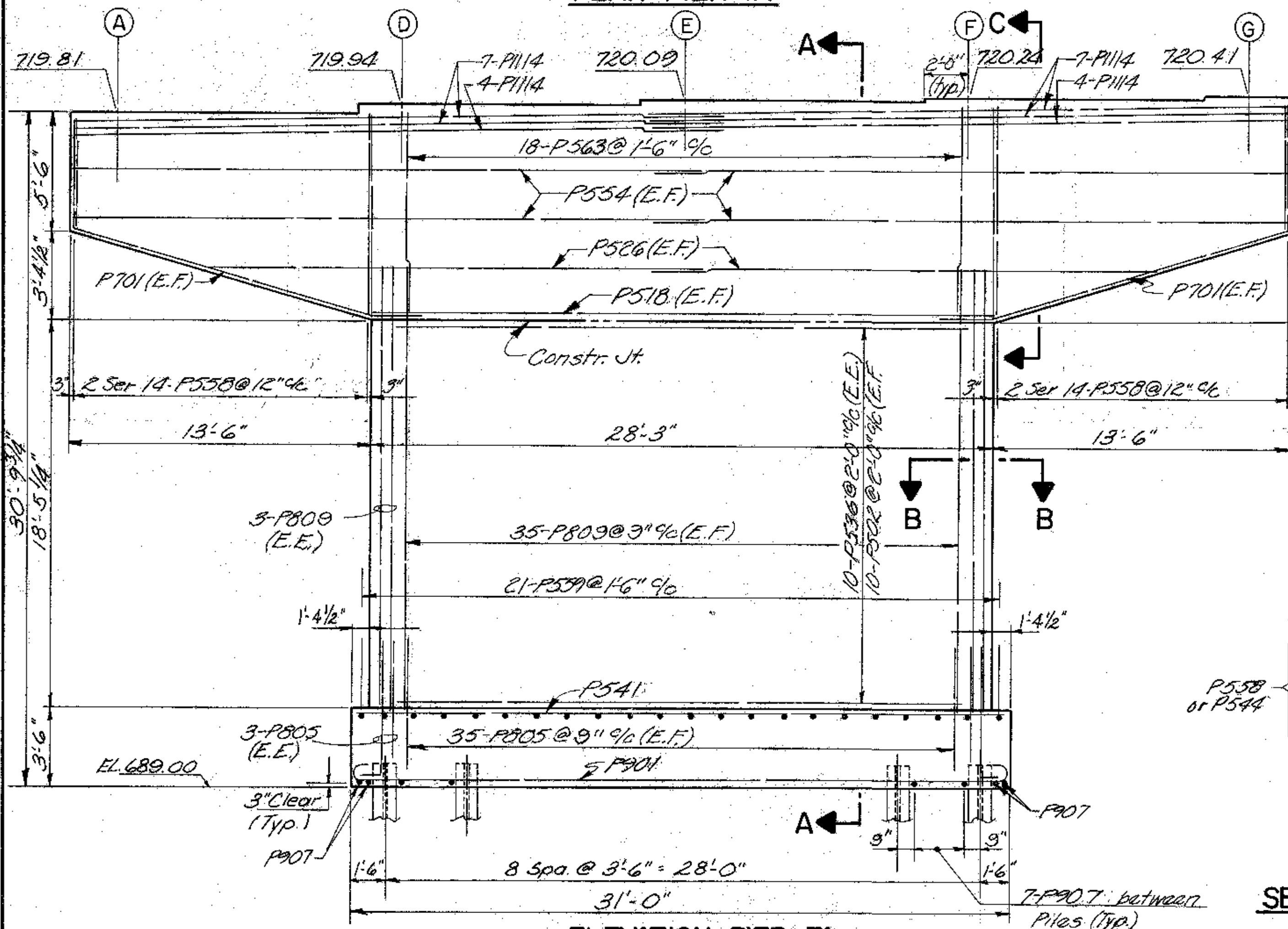
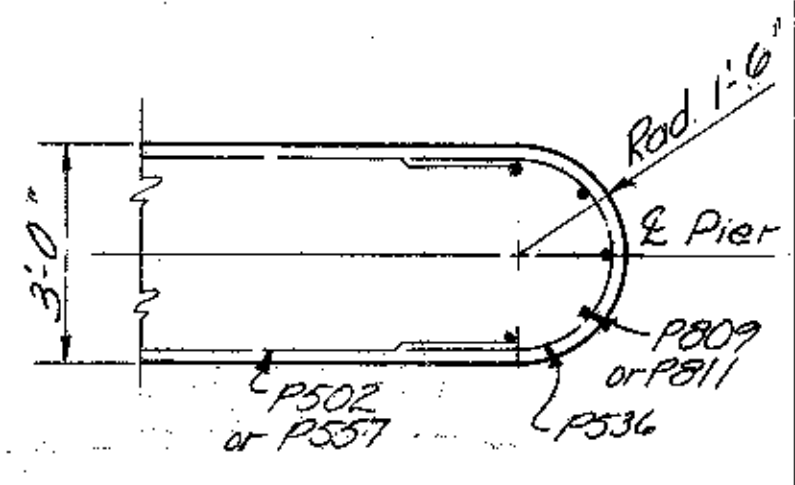
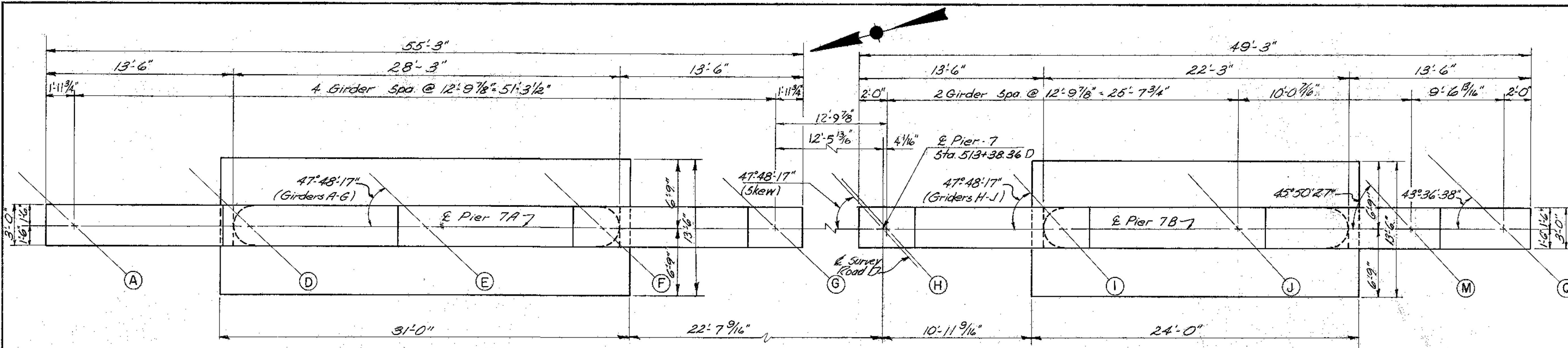
SECTION C-C

**LEGEND**  
 E.F.=EACH FACE  
 E.E.=EACH END  
 ▽=BATTER PILES 1:4  
 (and direction of batter)

E. S. PRESTON & ASSOCIATES, LIMITED 12/5/58 ENGINEERS COLUMBUS, OHIO					
<b>PIER DETAILS (6B)</b>					
BRIDGE NO. FRA.-70-1329S W.B. OVER SCIOTO RIVER					
FRANKLIN COUNTY			STA. 506+44.07 STA. 515+11.42		
DESIGNED A.S.B.	DRAWN A.S.B.	TRACED M.L.S.	CHECKED S.F.	REVIEWED DATE 6/16/70	REVISOR N.D.

8. K. ELLIOTT CO., Cleveland

FRANKLIN COUNTY  
FRA-70-1231 S

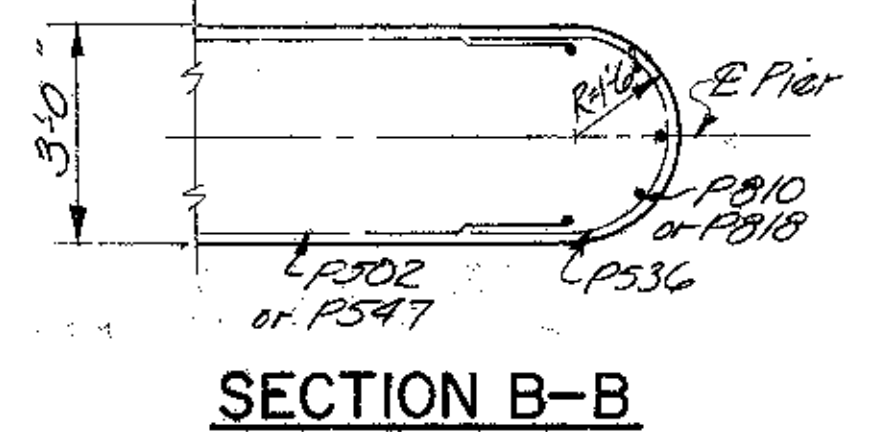
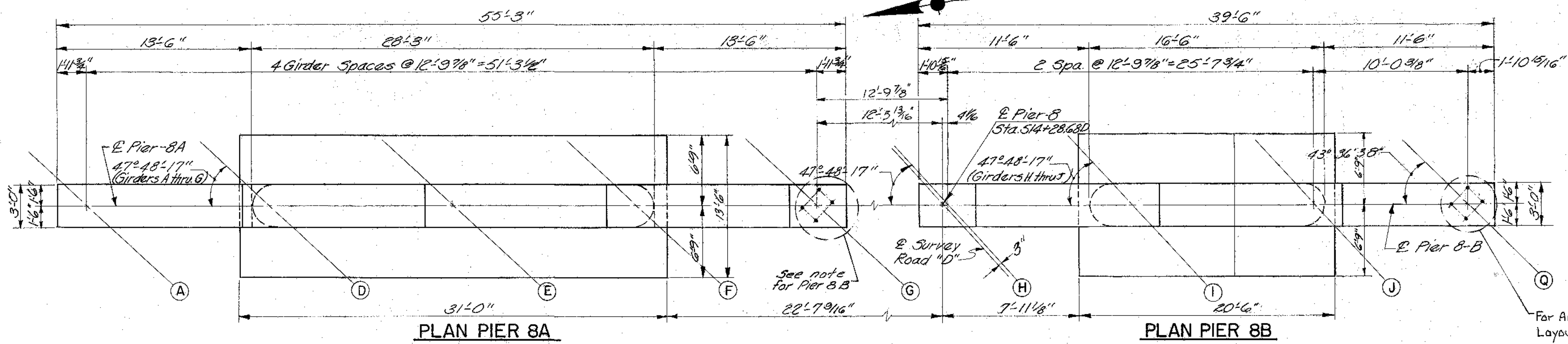


**LEGEND**  
 E.F.=EACH FACE  
 E.E.=EACH END  
 ▽ =BATTER PILES 1:4 (and direction of batter)

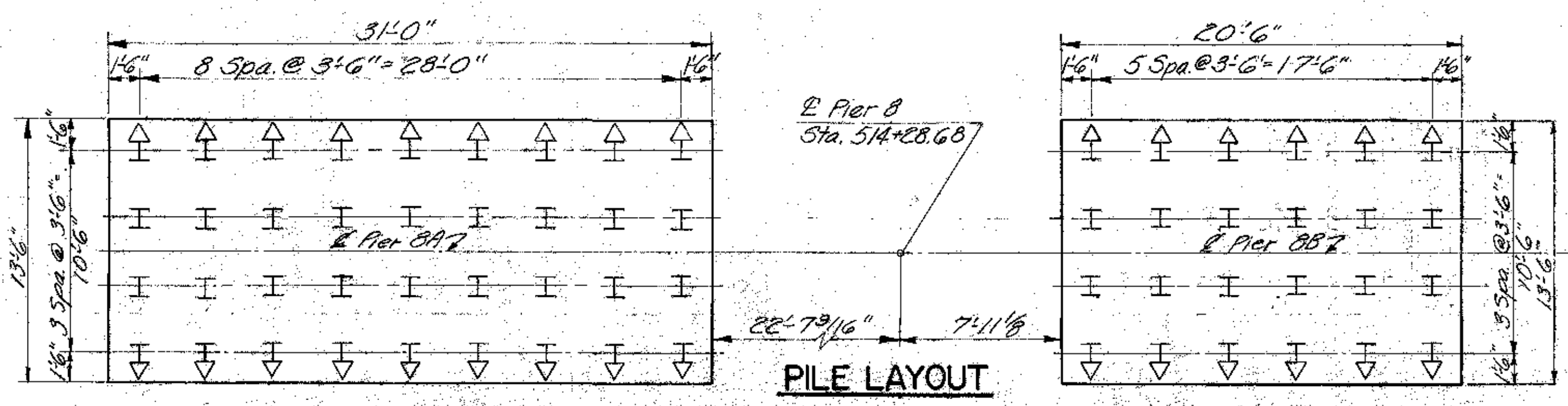
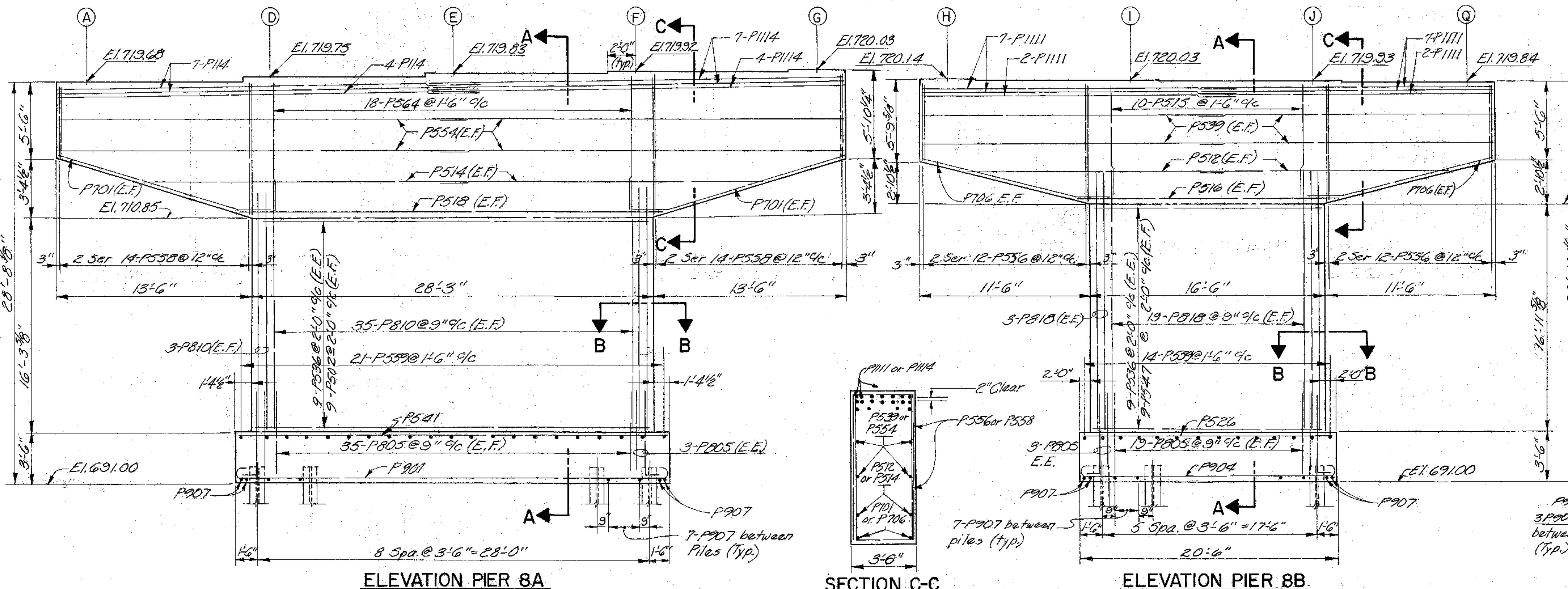
E. S. PRESTON & ASSOCIATES, LIMITED ENGINEERS COLUMBUS, OHIO					26/58
<b>PIER DETAILS (7A &amp; 7B)</b>					
BRIDGE NO. FRA-70-1329 S W.B. OVER SCIOTO RIVER					
FRANKLIN COUNTY				STA. 506+14.07 STA. 515+11.42	
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISION
A.S.B.	A.S.B.	M.L.S.	S.F.	6/16/70 M.L.U.	

S. K. ELLIOTT CO., Cleveland

FRANKLIN COUNTY  
FRA-70-1231 S



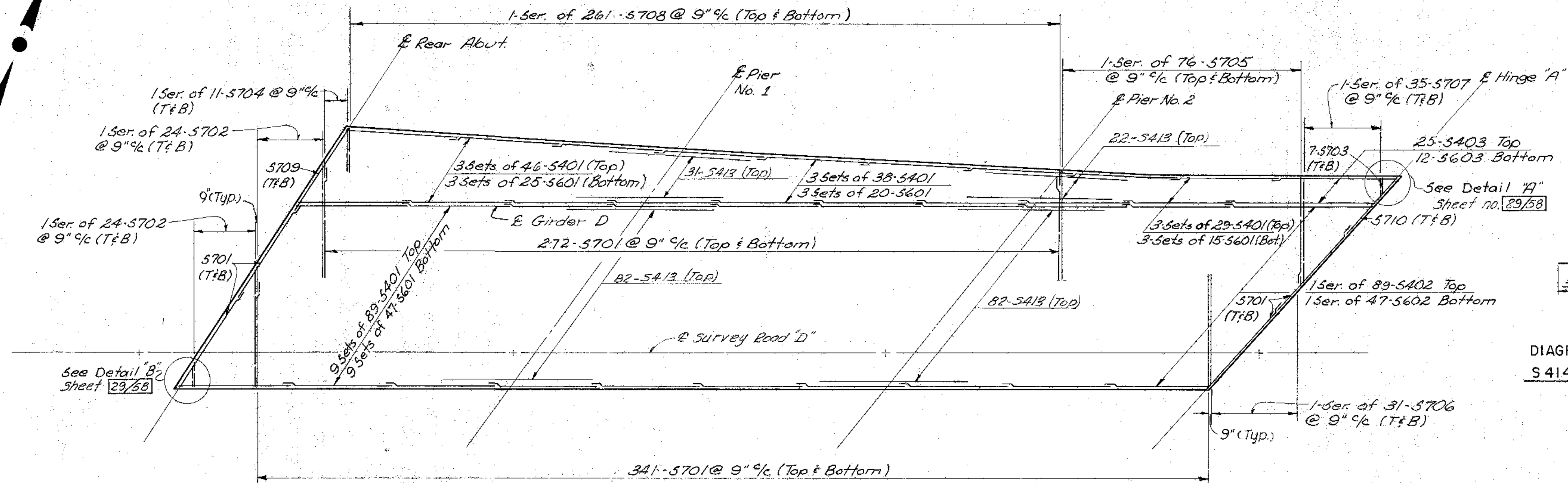
For Anchor Bolt Layout See Sheet 54/58



**LEGEND**  
 E.F. = EACH FACE  
 E.E. = EACH END  
 ▽ = PILES BATTERED 1:4 (and direction of batter)

**NOTE:**  
 Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bolt holes.

E. S. PRESTON & ASSOCIATES, LIMITED						27/58
ENGINEERS						
COLUMBUS, OHIO						
<b>PIER DETAILS (8A &amp; 8B)</b>						
BRIDGE NO. FRA-70-1329 S.W.B.						
OVER SCIOTO RIVER						
FRANKLIN COUNTY				STA. 506+14.07		
				STA. 515+11.42		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISION	
A.S.B.	A.S.B.	M.S.	S.F.	6/16/70, N.W.		



**SLAB REINFORCING PLAN**  
**UNIT I**

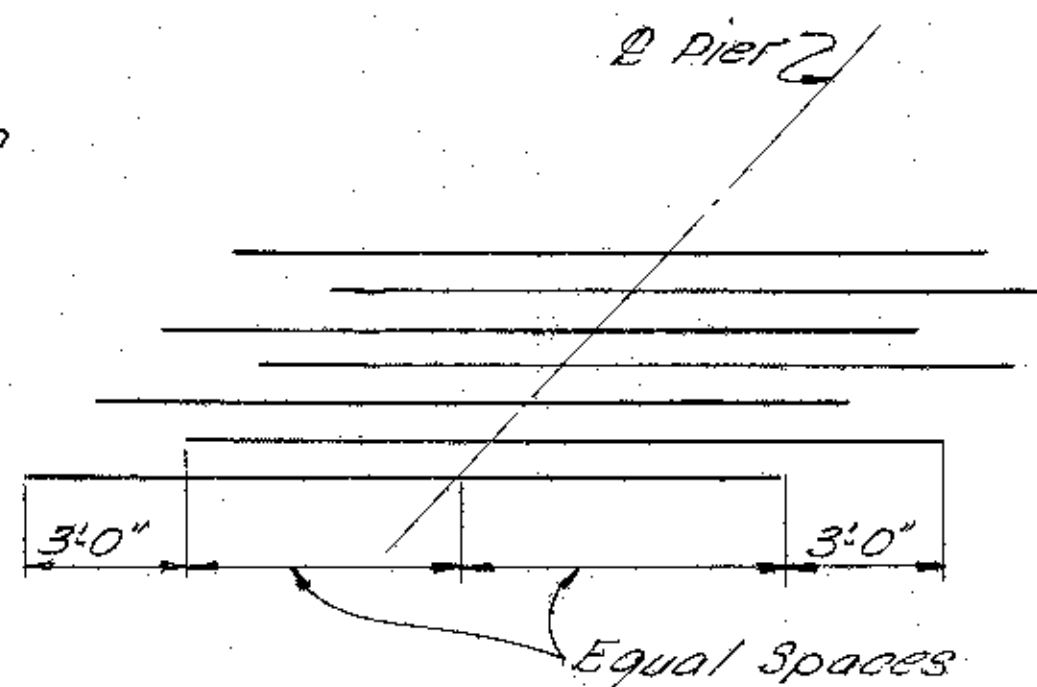


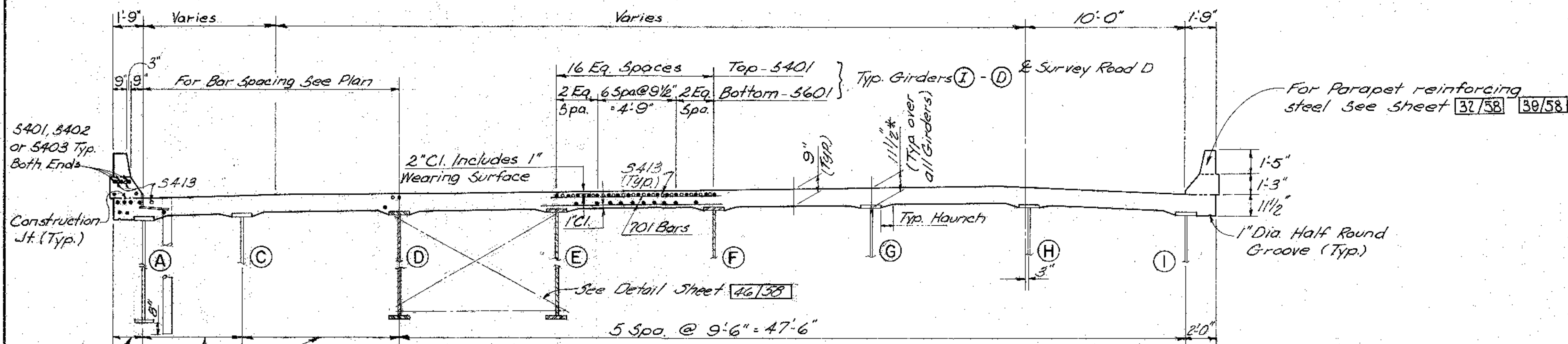
DIAGRAM SHOWING STAGGER OF S413, S414, S415 BARS OVER PIERS.

**NOTES:**

\* This is a design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deductions shall be made for volume of encased steel plates as per 511.18.

A typical haunch width of 9" shall be used for computing quantity of concrete. However the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

For Crossframes See Sheet 46/58



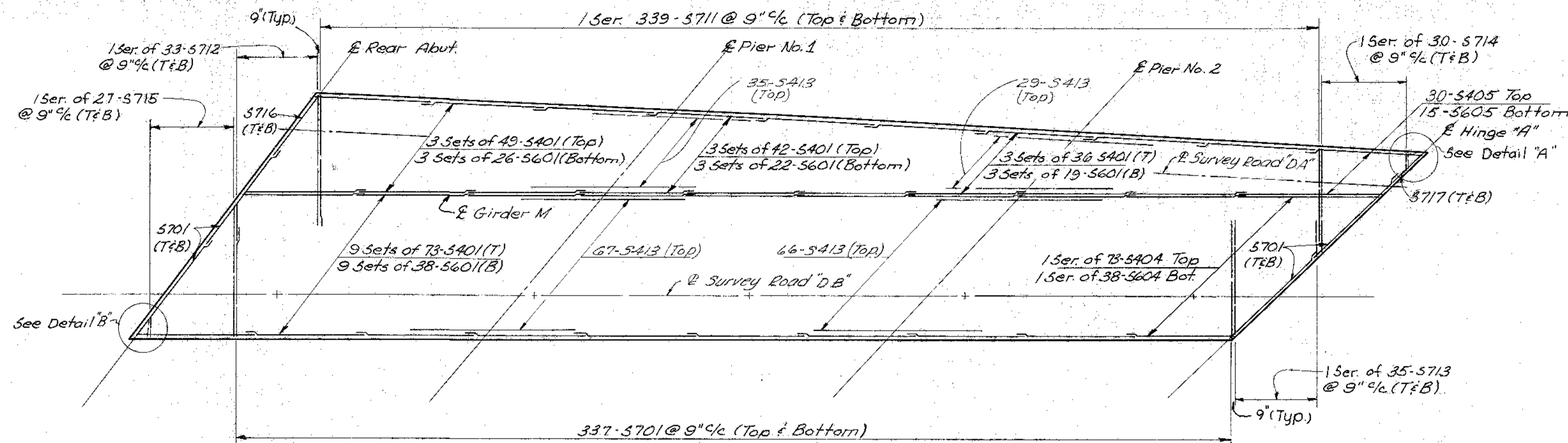
**TRANSVERSE SECTION**

**SUPERSTRUCTURE DETAILS**

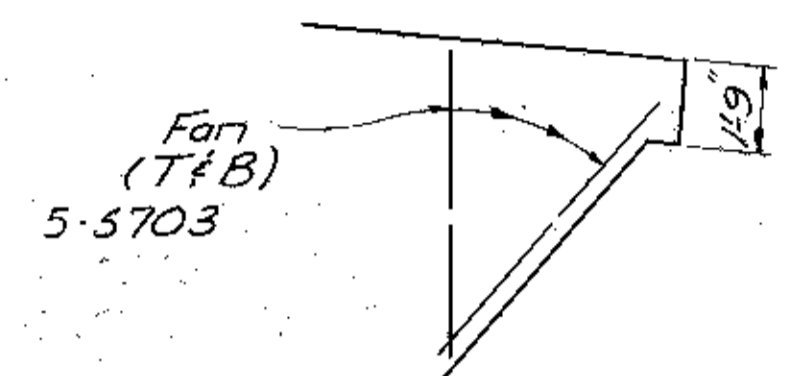
BRIDGE NO. FRA-70-1329 W.B.  
OVER SCIOTO RIVER

STA. 506+14.07  
FRANKLIN COUNTY STA. 515+11.42

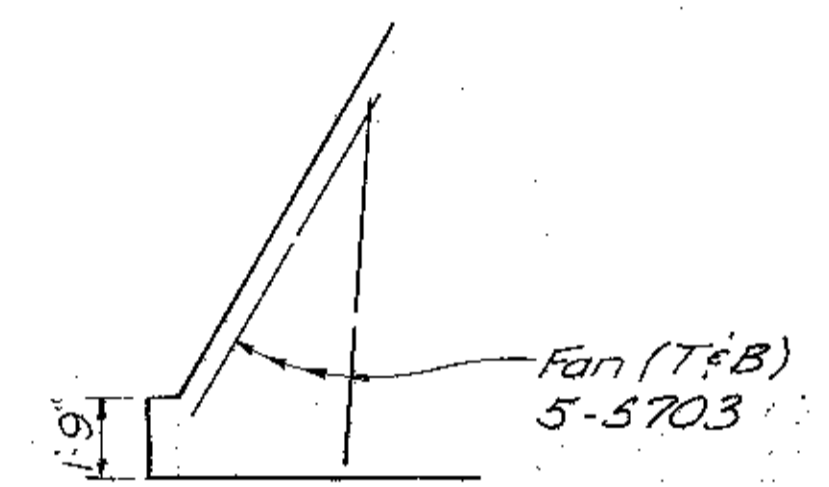
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
E.S.	REL	R.V.B.	A.U.M.	6/16/70 W.M.	



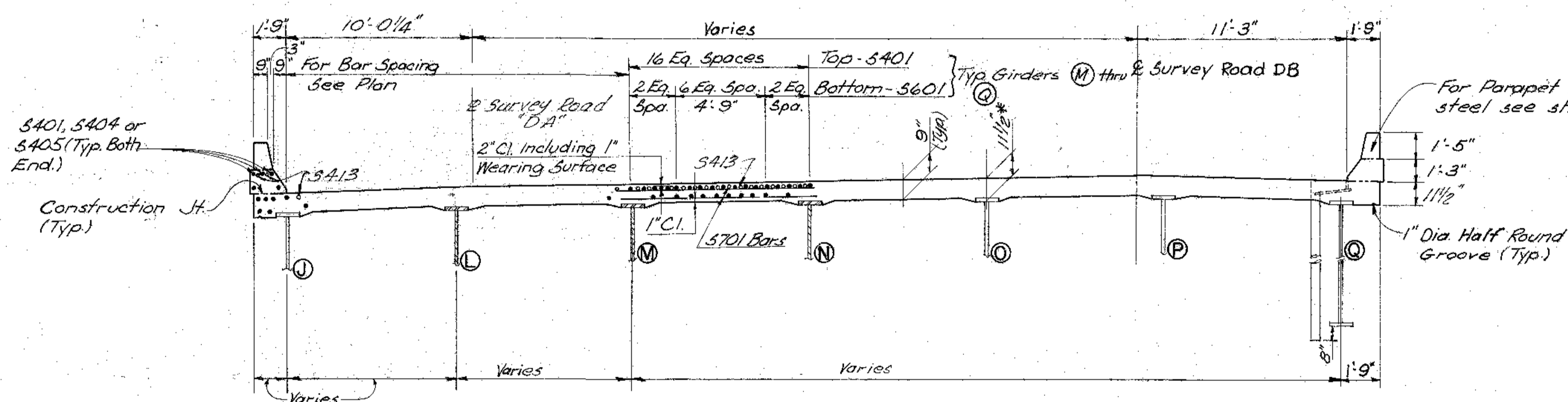
**SLAB REINFORCING PLAN**  
UNIT 2



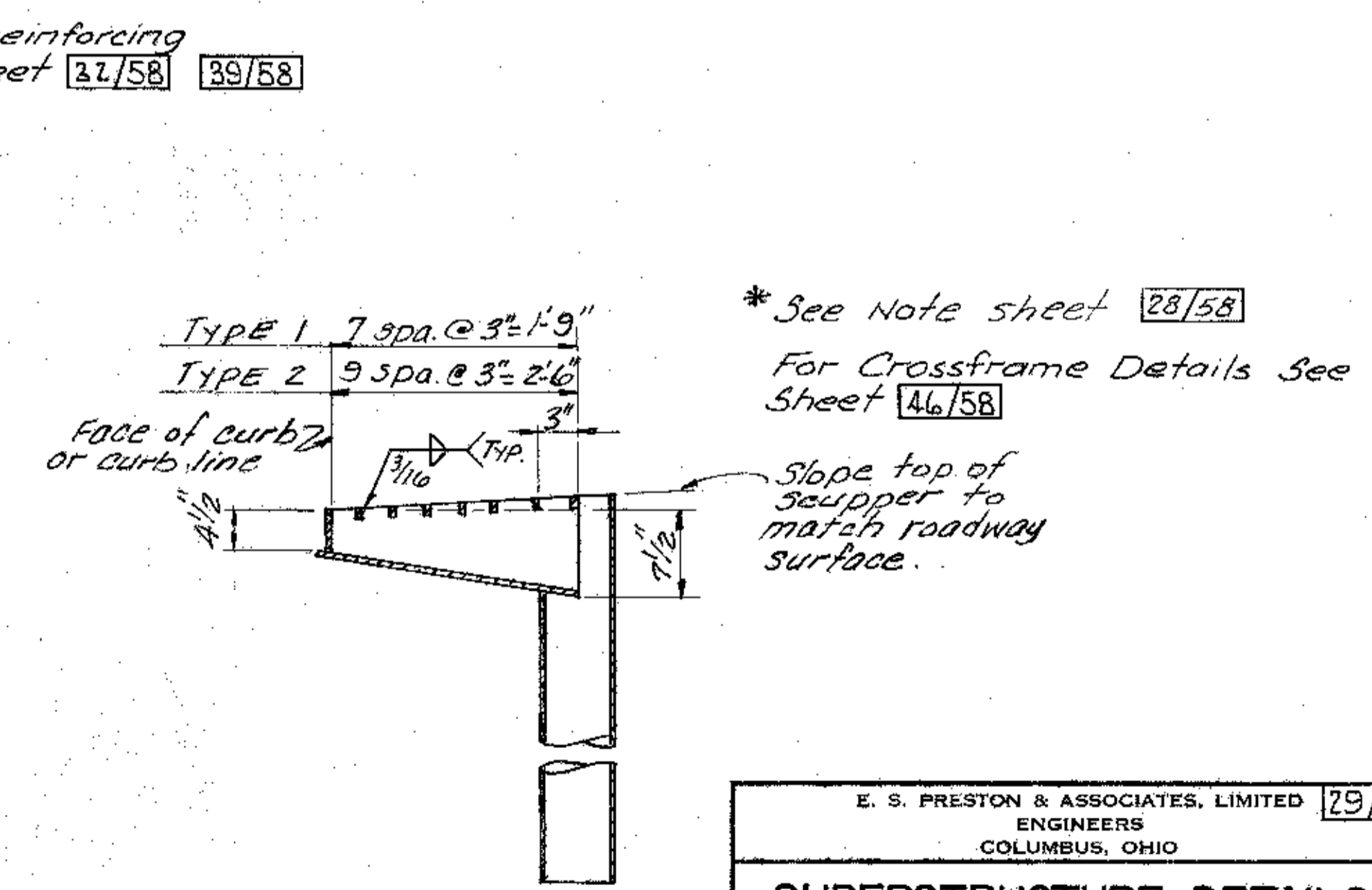
**DETAIL "A"**



**DETAIL "B"**

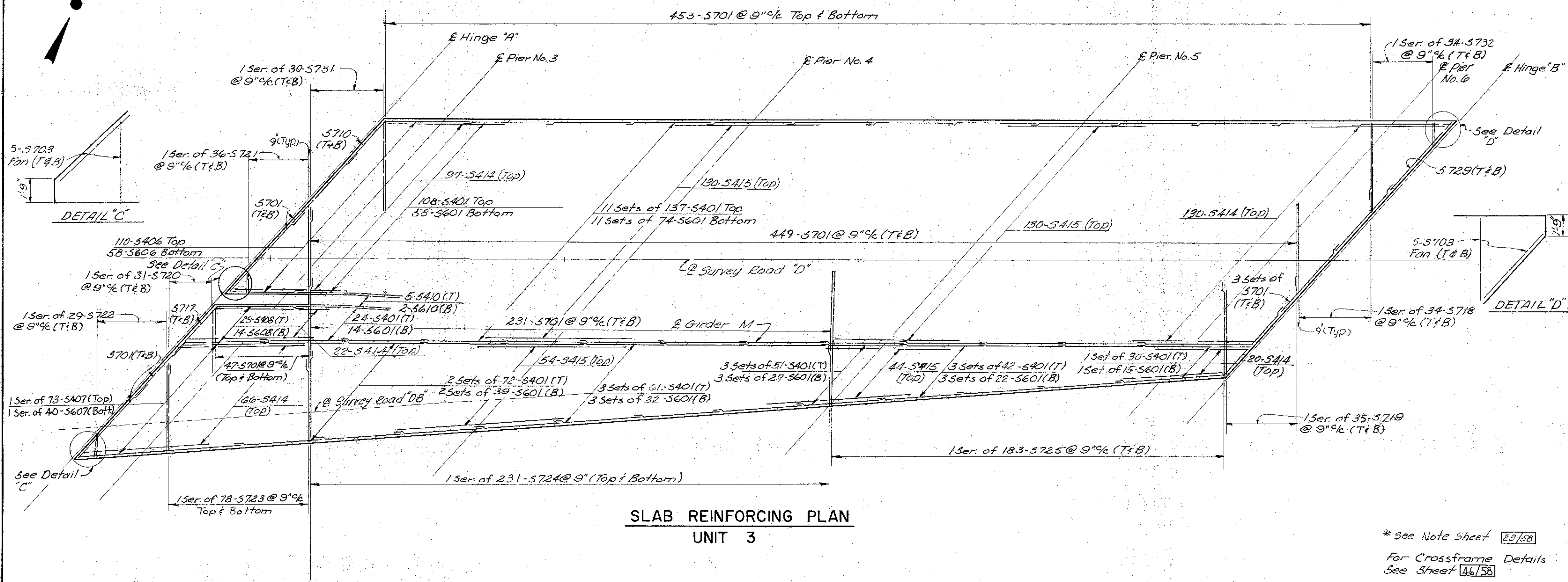


**TRANSVERSE SECTION**

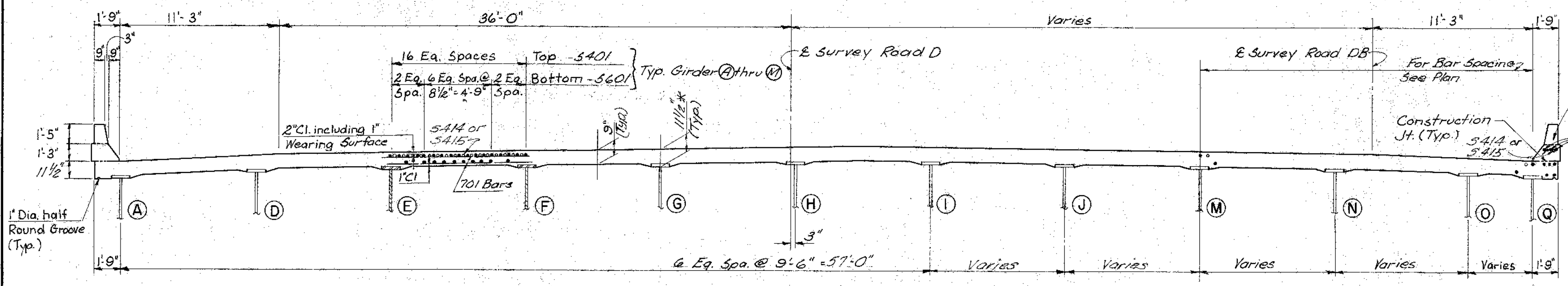


**SPECIAL SCUPPER  
DETAILS**

E. S. PRESTON & ASSOCIATES, LIMITED						29/58
ENGINEERS						
COLUMBUS, OHIO						
<b>SUPERSTRUCTURE DETAILS</b>						
BRIDGE NO. FRA.-70-1329 W.B.						
OVER SCIOTO RIVER						
FRANKLIN COUNTY						
STA. 506+14.07						
STA. 515+11.42						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISION	
E.S.	REL	R.V.B.	A.N.M.	6/16/70 N.V.		

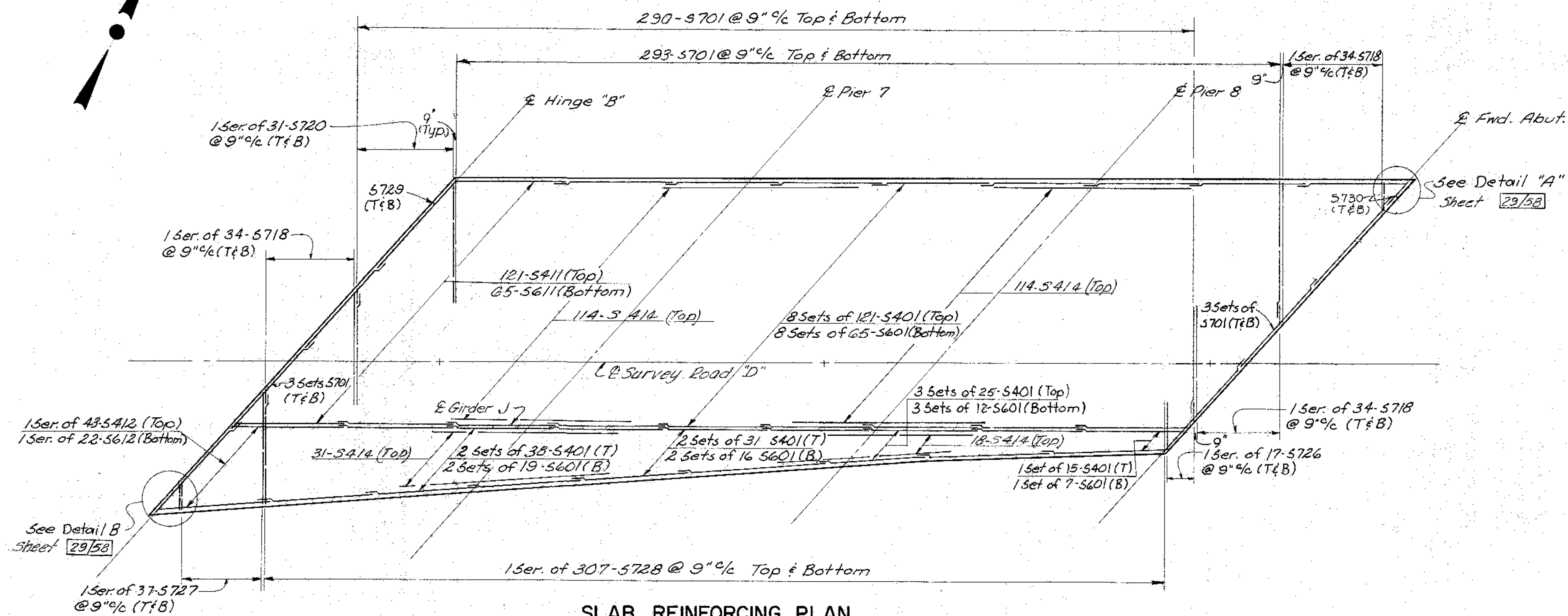


\* See Note Sheet 28/58  
For Crossframe Details See Sheet 46/58

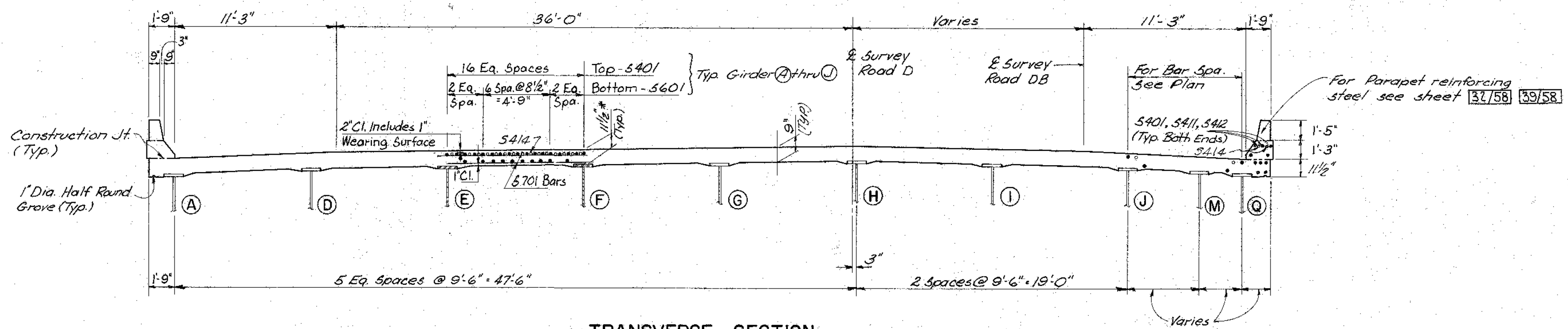


For Parapet reinforcing steel see sheet 32/58 39/58  
5401, 5406, 5407 or 5408 (Typ. both Ends)

E. S. PRESTON & ASSOCIATES, LIMITED				30/58
ENGINEERS COLUMBUS, OHIO				
<b>SUPERSTRUCTURE DETAILS</b>				
BRIDGE NO. FRA.-70-1329 W.B. OVER SCIOTO RIVER				
FRANKLIN COUNTY			STA. 506+14.07	
			STA. 515+11.42	
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE
E.S.	R.E.L.	R.W.B.	A.J.M.	6/16/70 N.V.



**SLAB REINFORCING PLAN**  
**UNIT 4**

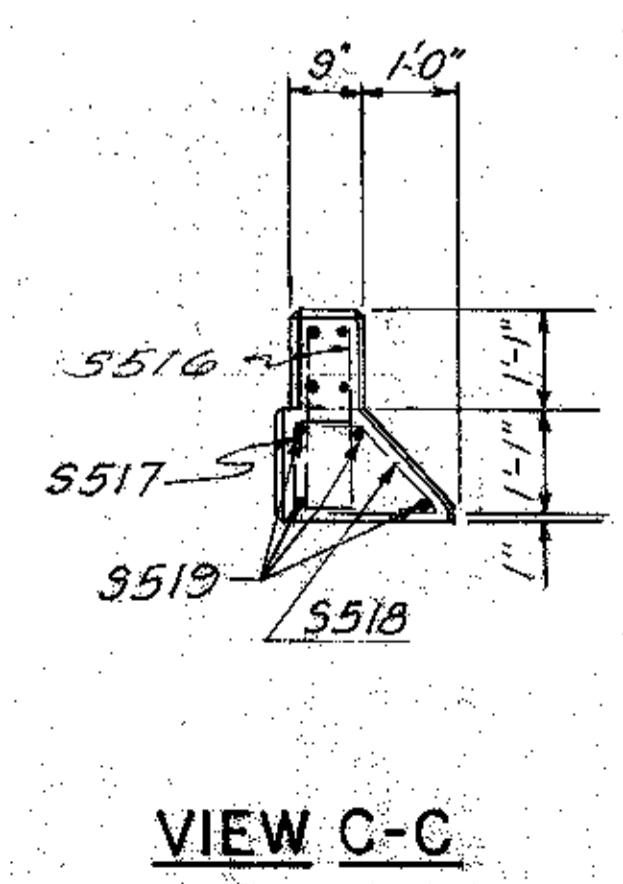
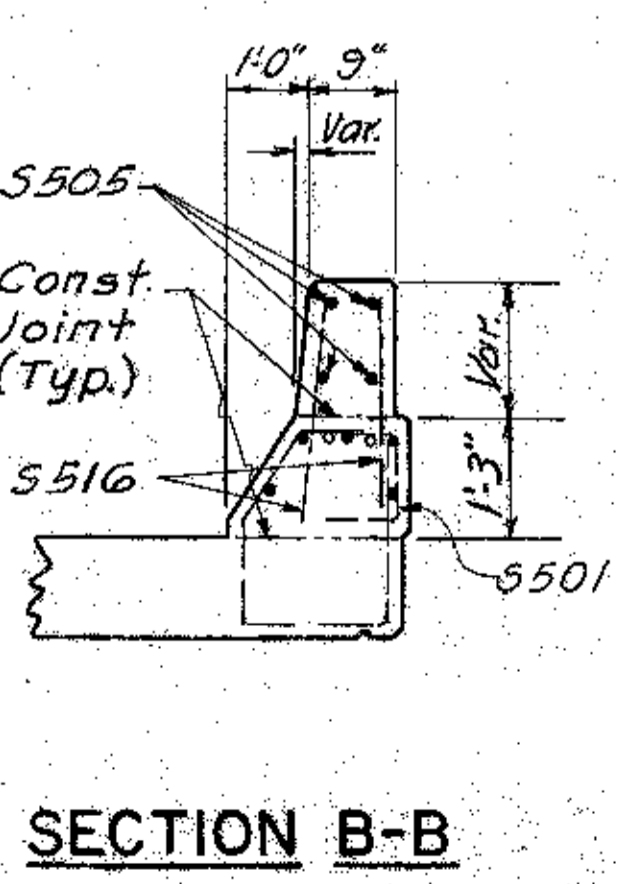
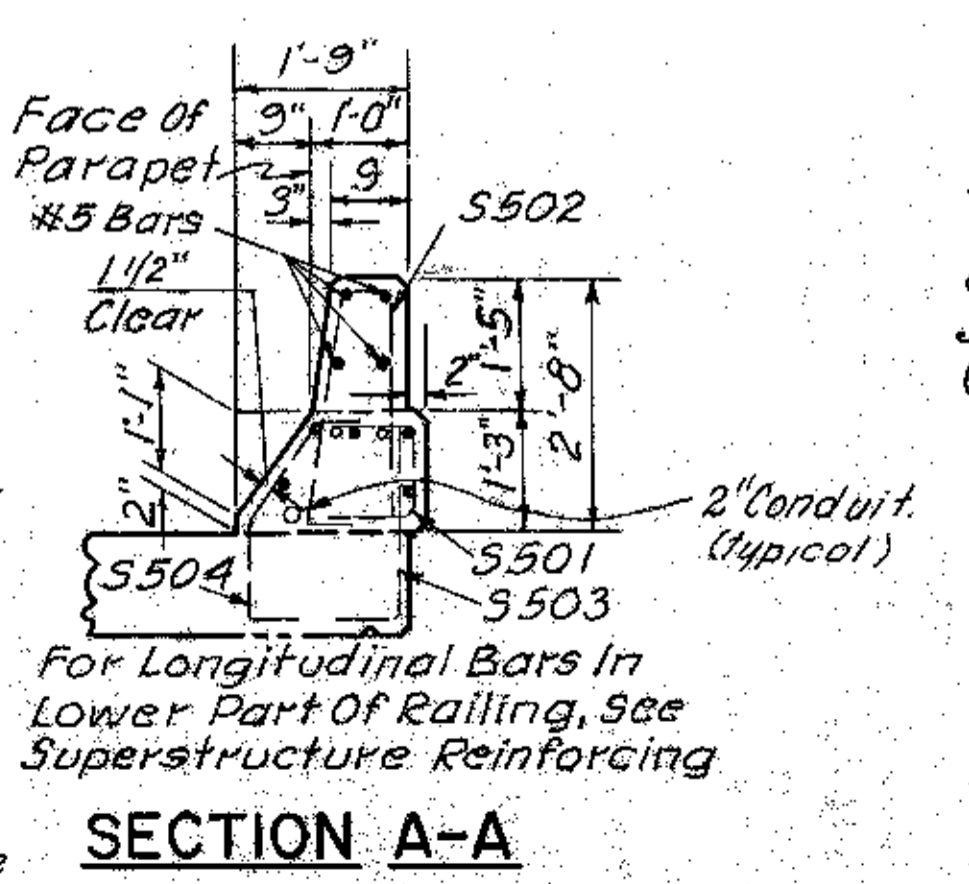
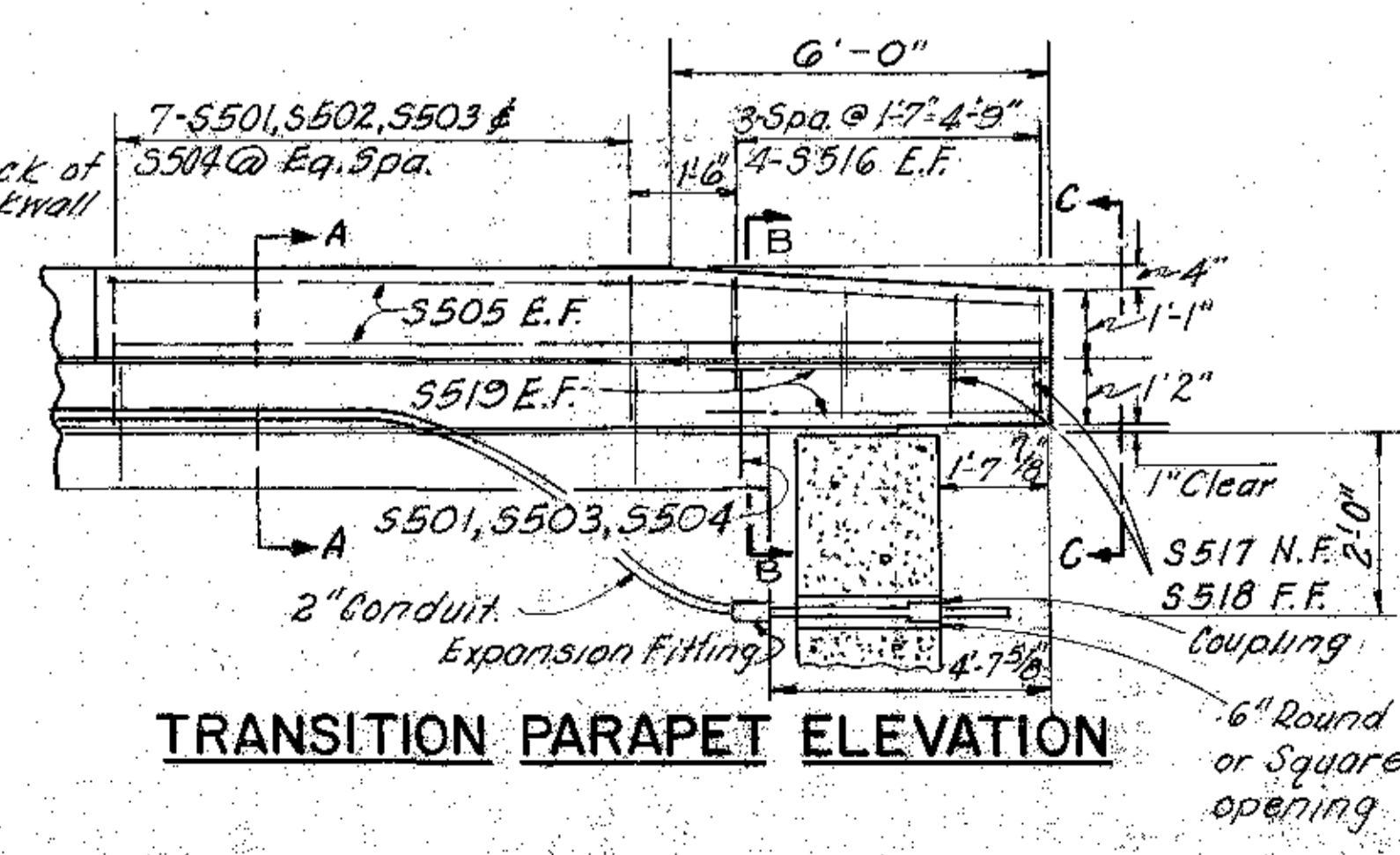
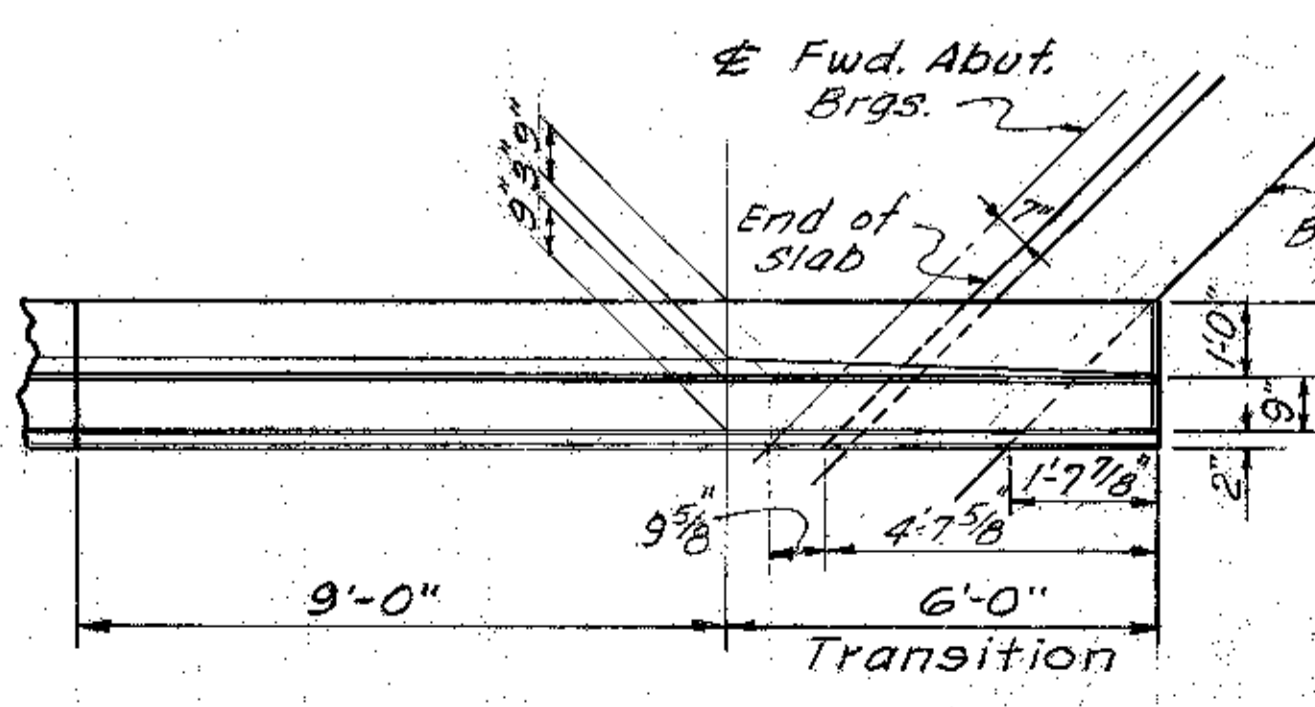
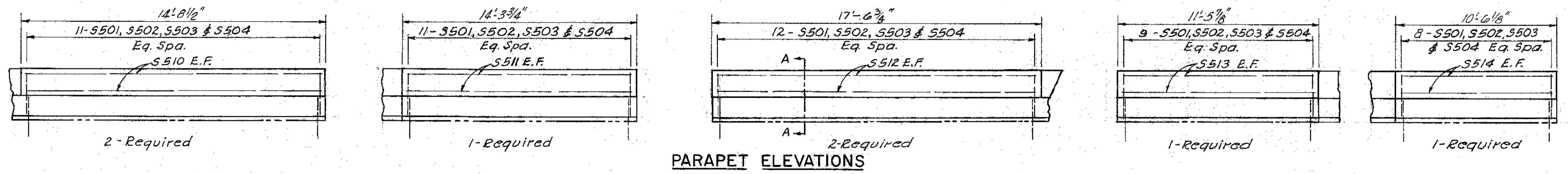
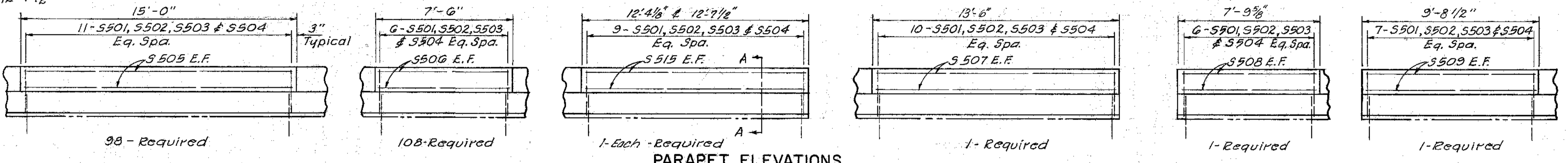
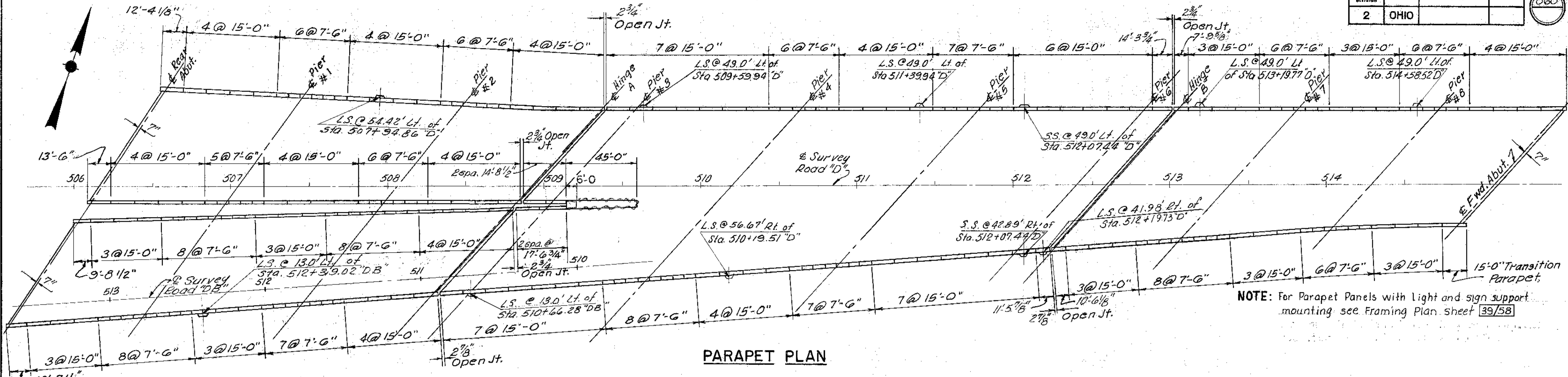


**TRANSVERSE SECTION**

\* See Note sheet 28/58  
For Crossframe Details See Sheet 46/58

E. S. PRESTON & ASSOCIATES, LIMITED						31/58
ENGINEERS						
COLUMBUS, OHIO						
<b>SUPERSTRUCTURE DETAILS</b>						
BRIDGE NO. FRA-70-1329 W.B.						
OVER SCIOTO RIVER						
FRANKLIN COUNTY				STA. 506+14.07		
				STA. 515+11.42		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED	
E.S.	REL.	R.V.B.	A.J.M.	6/14/70	N.P.	





**LEGEND**

E.F. = Each Face  
 F.F. = Far Face  
 N.F. = Near Face  
 L.S. = Light Support  
 S.S. = Sign Support

E. S. PRESTON & ASSOCIATES, LIMITED  
 ENGINEERS  
 COLUMBUS, OHIO

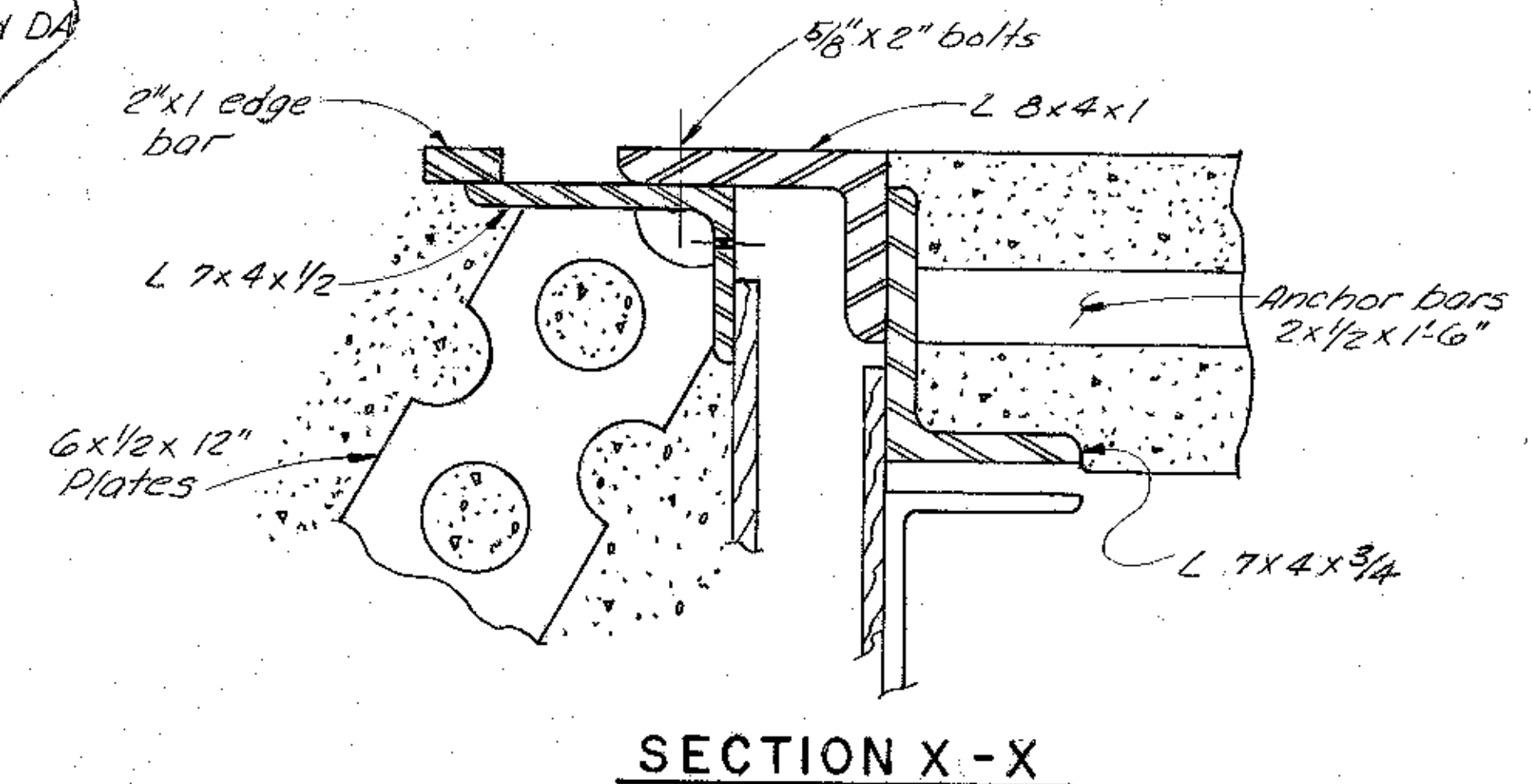
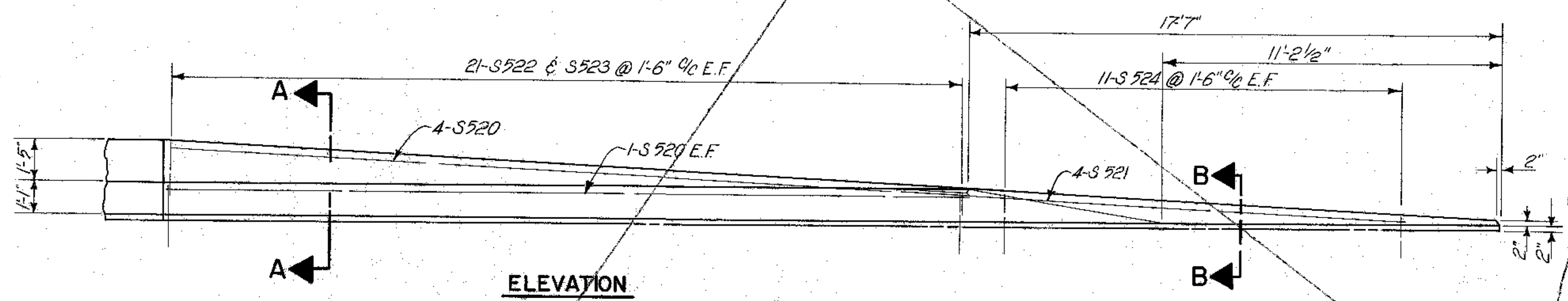
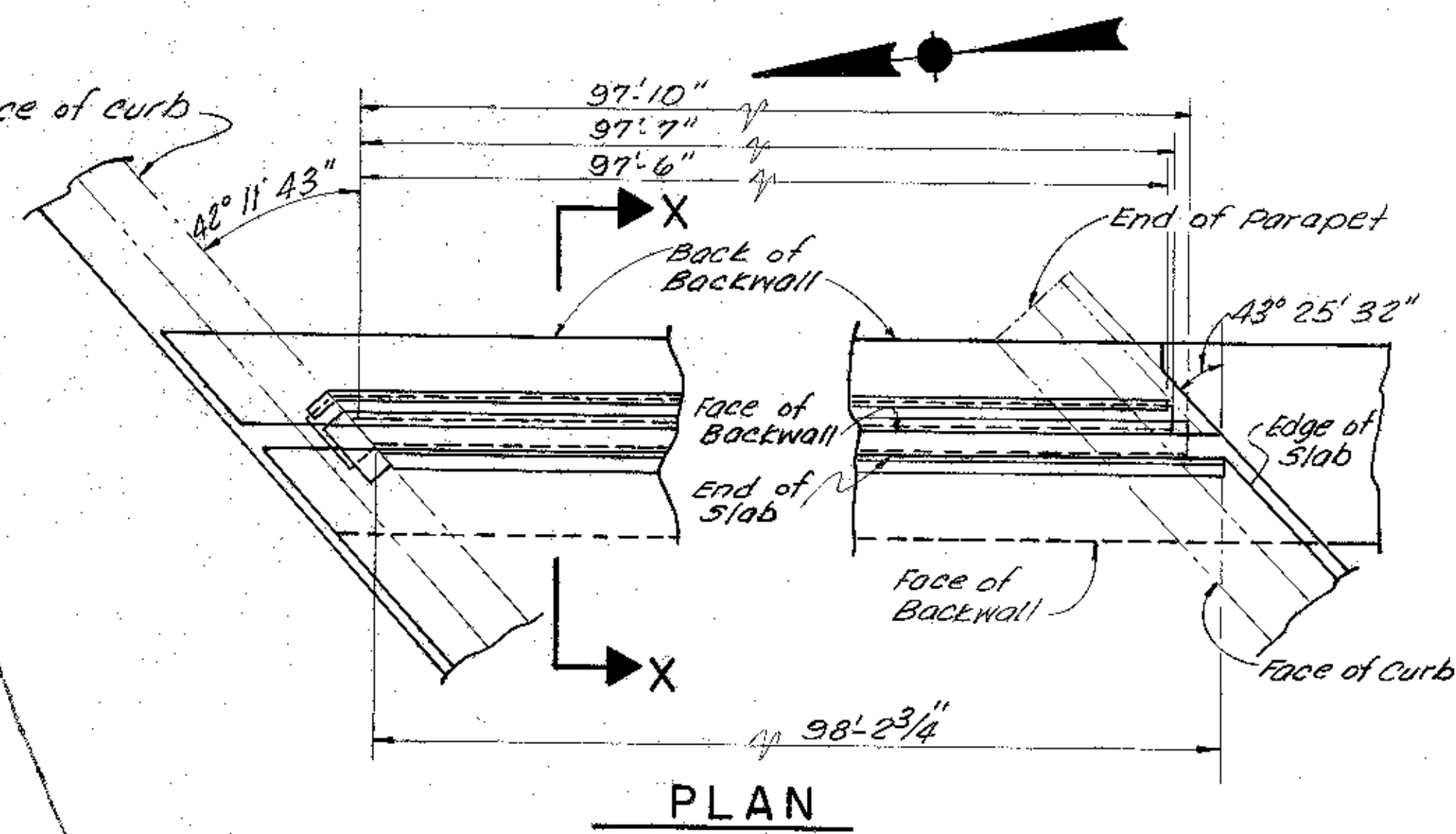
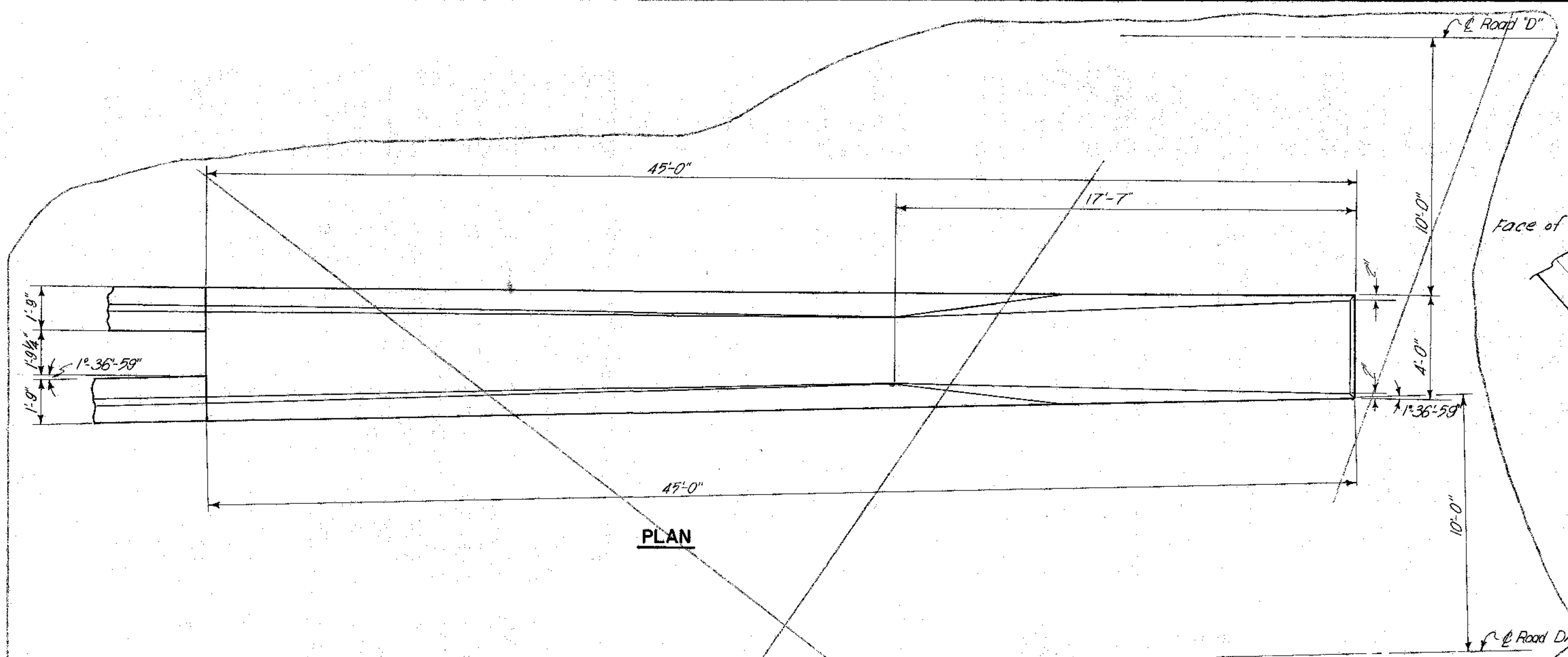
**SUPERSTRUCTURE DETAILS**  
 BRIDGE NO. FRA. 70-1329S  
 OVER SCIOTO RIVER

FRANKLIN COUNTY STA. 506+14.07  
 STA. 515+11.42

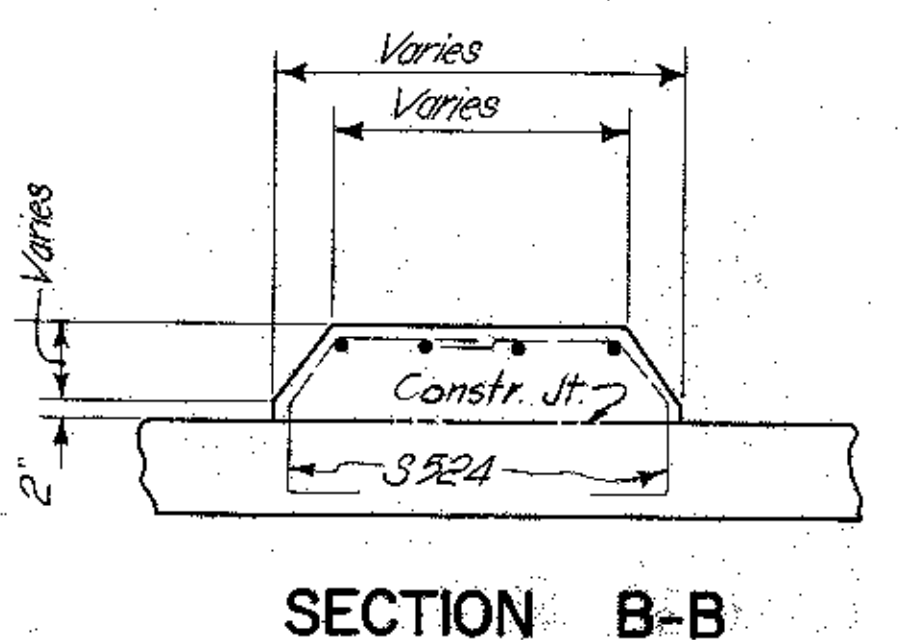
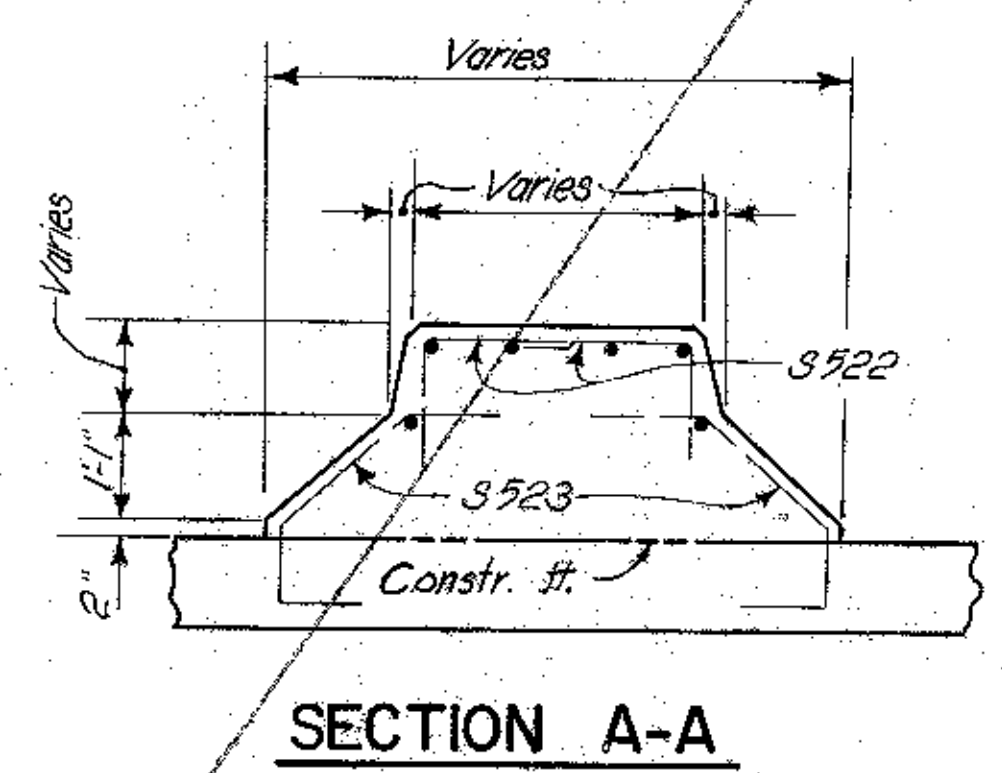
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
E.S.	REL	R.V.B.	P.W.M.	6/16/70	P.W.M.

FED. RD. DIVISION	STATE	PROJECT	361
2	OHIO		

FRANKLIN COUNTY  
FRA-70-12.31 S



**TREATMENT OF SPLIT IN STRUCTURE**

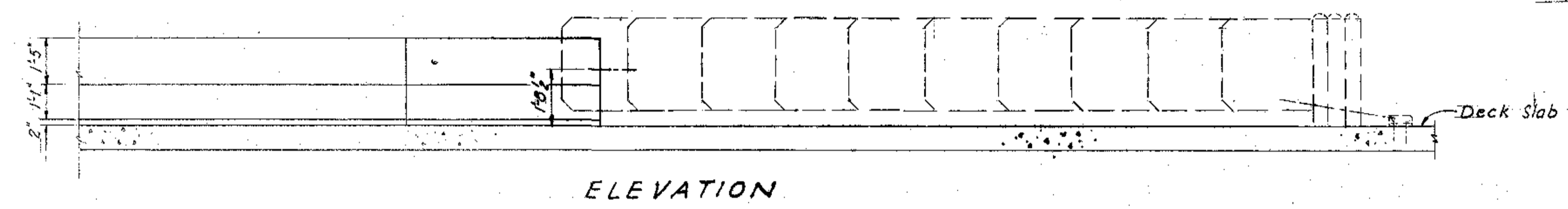
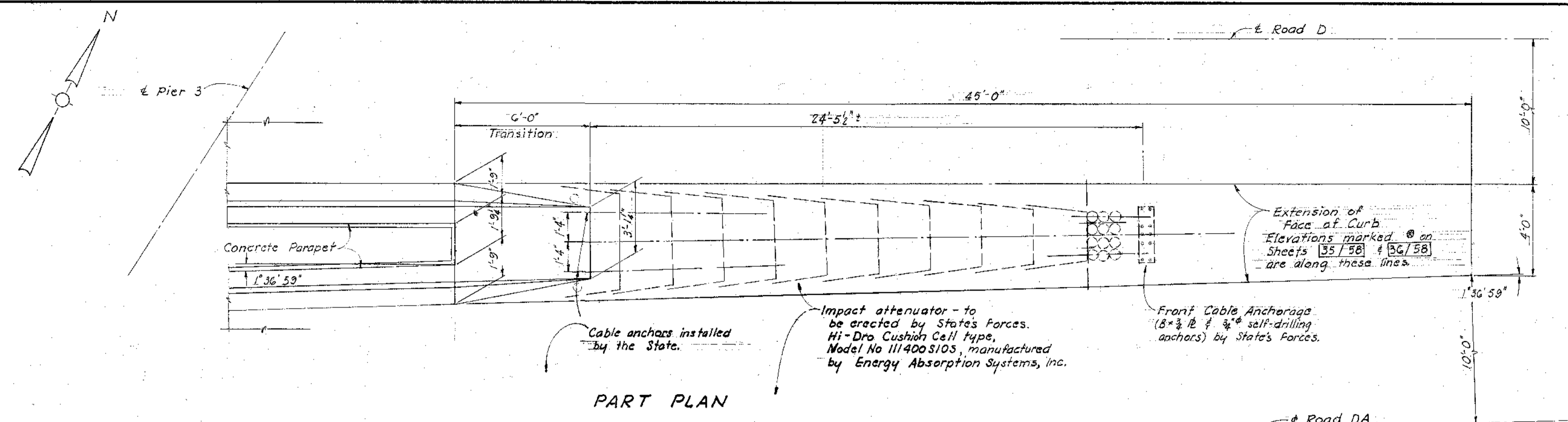


**END DAM DETAIL AT FORWARD ABUTMENT**

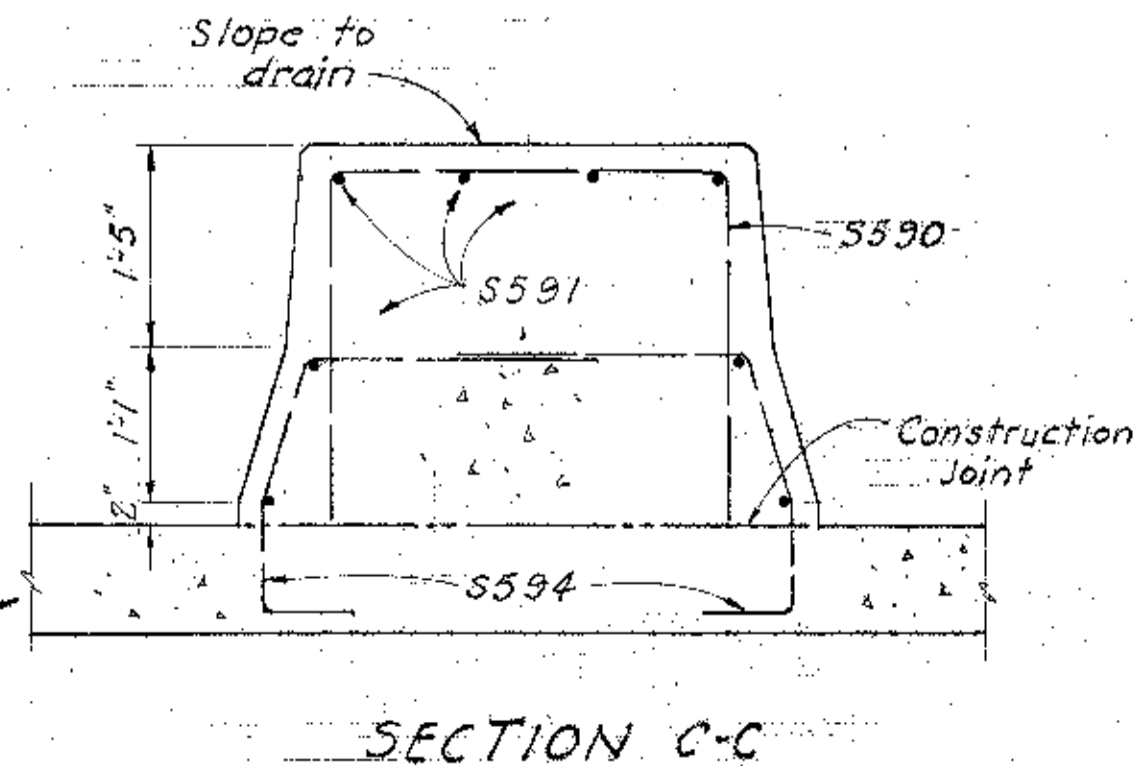
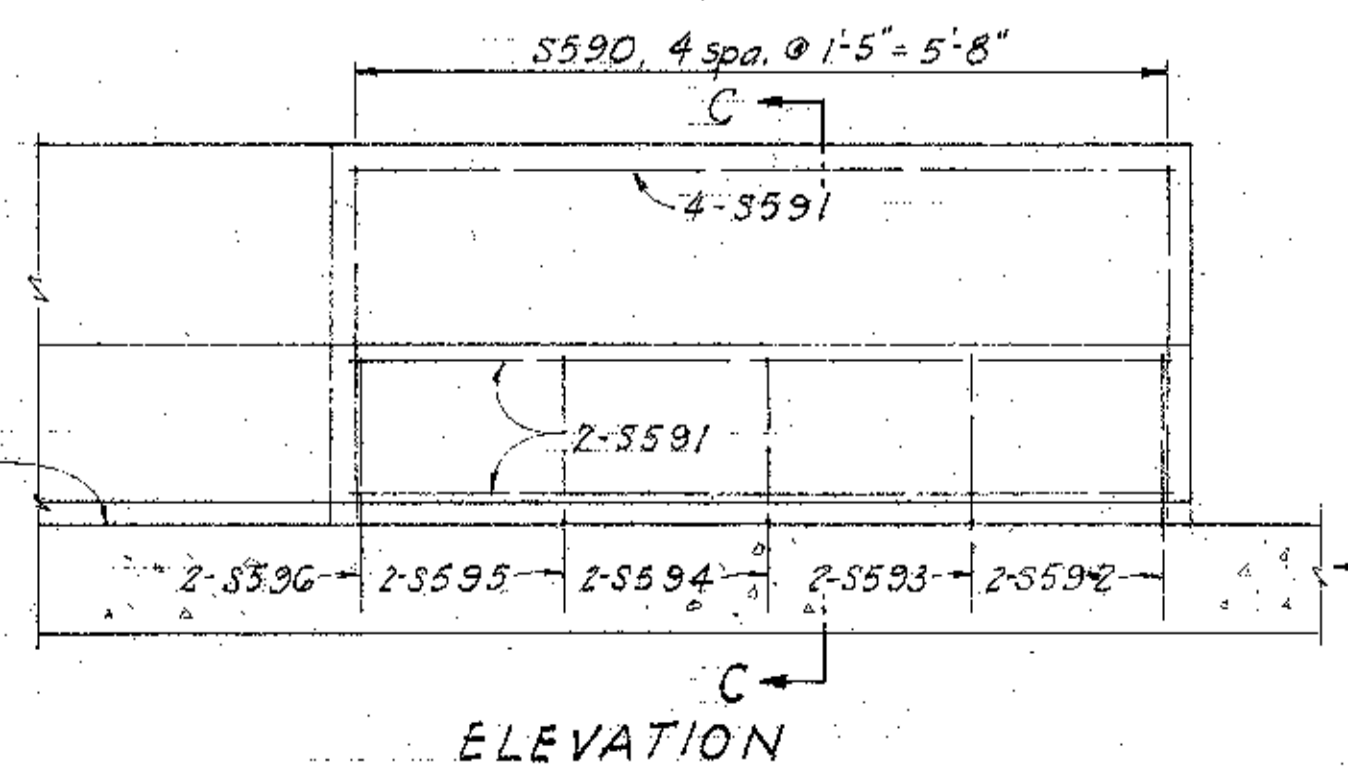
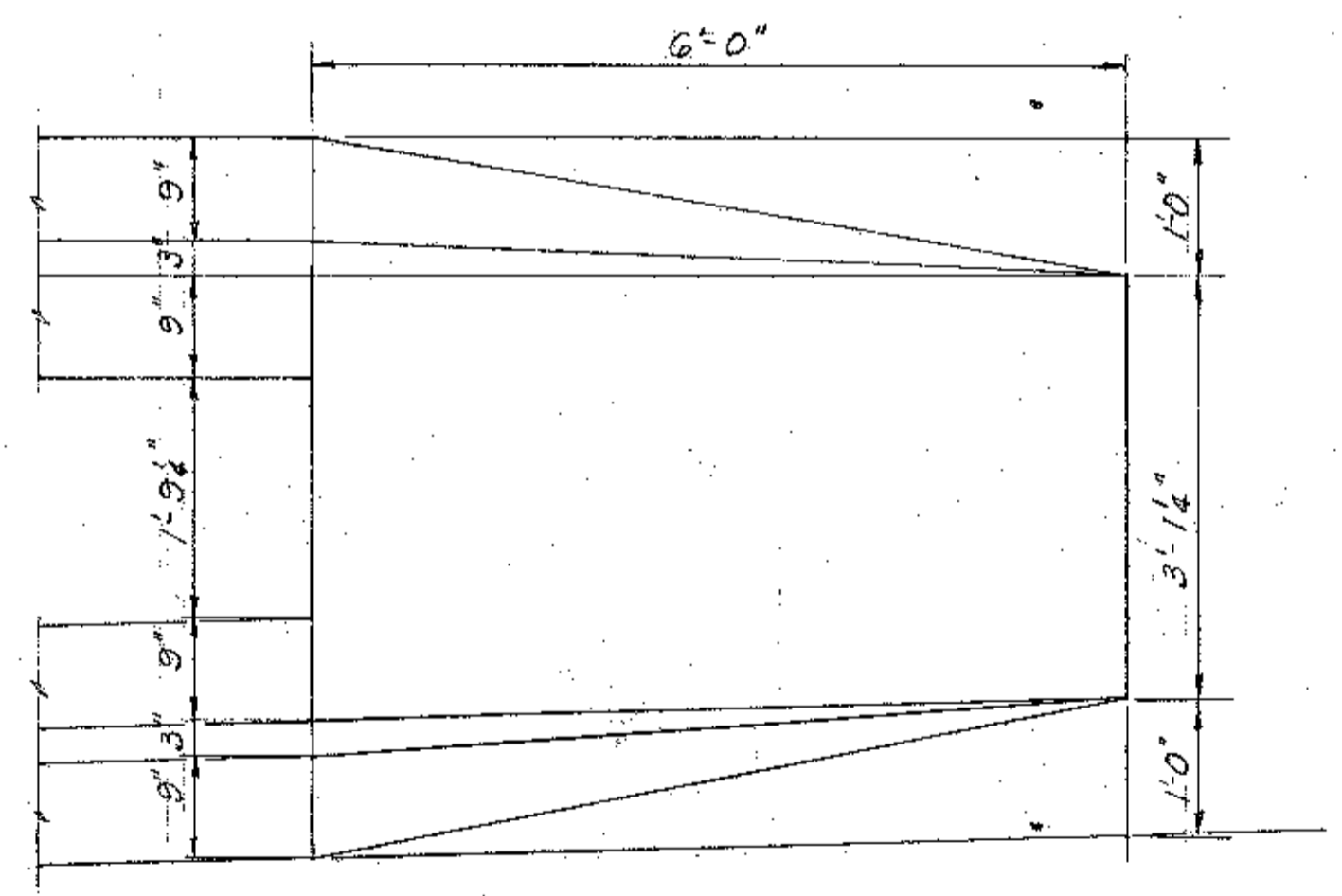
NOTE: End dam details at south end of forward abutment as shown.  
For curb plate and end dam details at North end of forward abutment see Std. Drg. No. SD-1-69.

E. S. PRESTON & ASSOCIATES, LIMITED						33/58
ENGINEERS						
COLUMBUS, OHIO						
<b>SUPERSTRUCTURE DETAILS</b>						
BRIDGE NO. FRA-70-1329 S.W.B.						
OVER SCIOTO RIVER						
FRANKLIN COUNTY						
STA. 506+14.07						
STA. 515+11.42						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISION	
A.S.B.	R.L.	J.L.	A.J.M.	6-16-70		

REV. 12-7-72



TREATMENT OF SPLIT IN STRUCTURE



PARAPET TRANSITION

STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES						33A/58
SUPERSTRUCTURE DETAILS						
BRIDGE NO. FRA-70-132.9 S.W.B. OVER SCIOTO RIVER						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	CPD		DLM			

Sheet added 12-7-72