

# STATE OF OHIO DEPARTMENT OF HIGHWAYS

F-629(12)

PART I OF II  
FOR PART II SEE AUG-29-2.78  
S-SU-497(II)

FED. RD. DIVISION	STATE	PROJECT	1 635
2	OHIO	F-629(12)	

**AUGLAIZE COUNTY**  
AUG-29-1.04  
AUG-33-2.71

**CONVENTIONAL SIGNS**

COUNTY LINE	-----
TOWNSHIP LINE	-----
SECTION LINE	-----
CORPORATION LINE	-----
PROPERTY LINE	-----
FENCE LINE	-----
CENTER LINE	-----
POLE LINE	-----
RAILROAD	-----
HEDGE	-----
DRAIN PIPE (NEW)	-----
DRAIN PIPE (OLD)	-----
GUARD RAIL (NEW)	-----
GUARD RAIL (OLD)	-----
TREES & STUMPS	-----
WORK LIMITS	-----
R/W WITH LIMITED ACCESS	-----
R/W WITHOUT LIMITED ACCESS	-----
EXISTING RIGHT OF WAY	-----
EXISTING & PROPOSED RIGHT-OF-WAY	-----

## AUG-29-1.04 AUG-33-2.71 AUGLAIZE COUNTY NOBLE TOWNSHIP GRADE SEPARATION WITH N&W RY. CITY OF ST. MARYS

~LIMITED ACCESS~

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR OF HIGHWAYS IN ACCORDANCE WITH THE PROVISIONS OF SEC. 5511.02 OF THE REVISED CODE OF OHIO.

~1969 SPECIFICATIONS~  
THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF HIGHWAYS INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

THE RIGHT OF WAY FOR THIS IMPROVEMENT WILL BE PROVIDED BY THE STATE OF OHIO.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY TO TRAFFIC AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED DATE	7-5-69	<u>Oliver M. Leggett</u>	DIVISION DEPUTY DIRECTOR
APPROVED DATE	7-14-70	<u>C.H. Altrater</u>	ENGINEER OF BRIDGES
APPROVED DATE	7-15-70	<u>R.E. Gattlin</u>	ENGINEER OF LOCATION & DESIGN
APPROVED DATE	7-16-70	<u>George J. Shorngw</u>	DEPUTY DIRECTOR OF DESIGN & CONSTRUCTION
APPROVED DATE	7-24-70	<u>T.H. Toward</u>	DEPUTY DIRECTOR OF RIGHT OF WAY
APPROVED DATE	7-27-70	<u>Thomas M. Major</u>	DEPUTY DIRECTOR OF PLANNING & PROGRAMMING
APPROVED DATE	7-27-70	<u>F.W. Wilson</u>	FIRST ASSISTANT DIRECTOR
APPROVED DATE	7-27-70	<u>P.E. Mahan</u>	DIRECTOR OF HIGHWAYS

**LINE DATA**

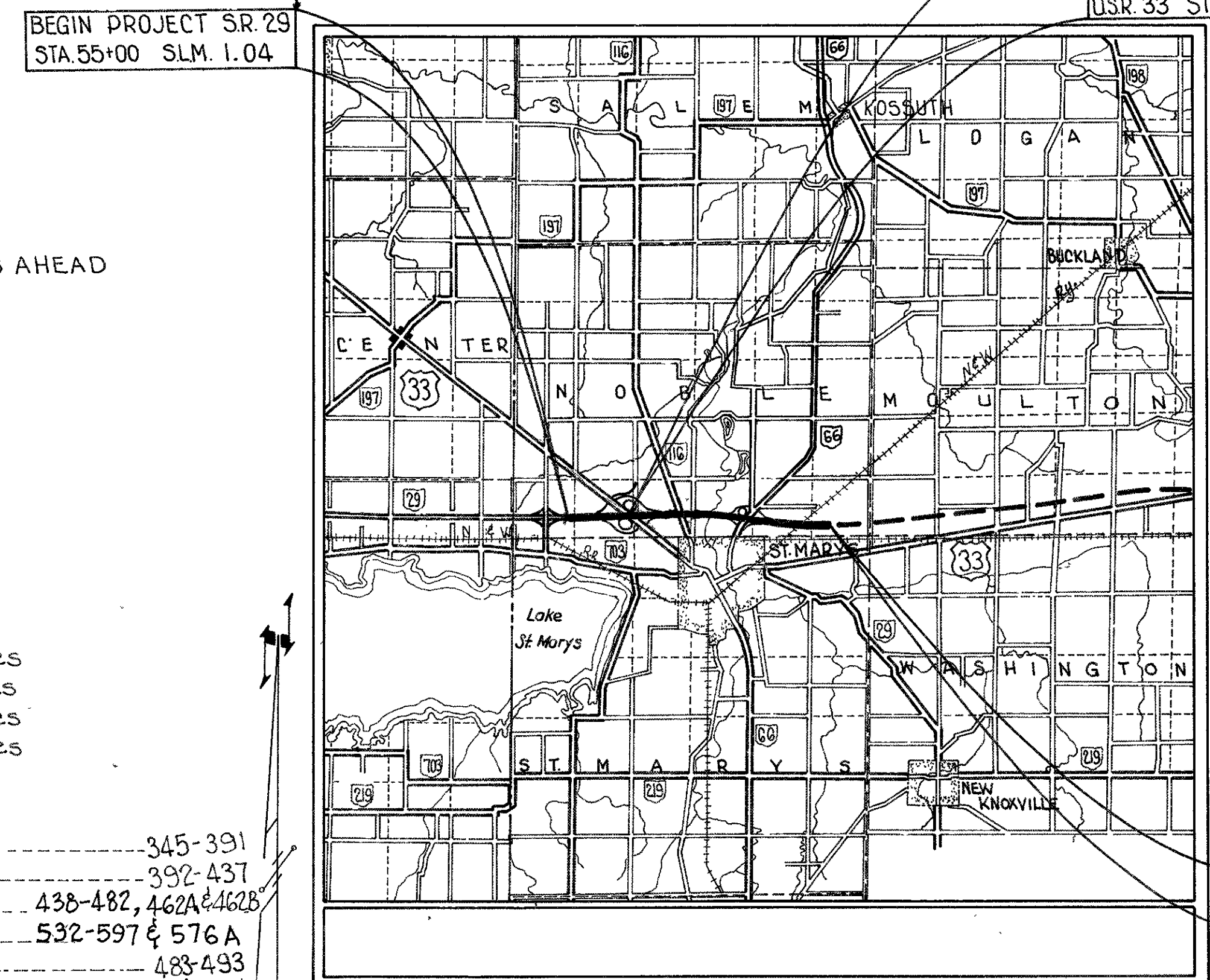
SR. 29  
BEGIN WORK STA. 53+00  
BEGIN PROJECT STA. 55+00  
END PROJECT - END WORK STA. 112+07.71  
NET LENGTH OF PROJECT S.R. 29 5,707.71 Lin. Ft. or 1.081 Miles  
NET LENGTH OF WORK S.R. 29 5,907.71 Lin. Ft. or 1.118 Miles

**USR 33**

BEGIN WORK - BEGIN PROJECT - STA. 112+07.71 S.R. 29 BACK - STA. 143+03.21 USR 33 AHEAD  
END PROJECT STA. 330+00  
END WORK STA. 331+50

Add Exist. USR 33 - Sta. 105+00 to Sta. 178+00 = 7,300.00 Lin. Ft.  
Add Lambert Rd. - Sta. 3+00 to Sta. 25+23.19 = 2,223.19 Lin. Ft.  
Add Lambert Rd. Conn. - Sta. 10+27.38 to Sta. 14+00 = 372.62 Lin. Ft.  
Add S.R. 11G - Sta. 42+35 to Sta. 85+00 = 4,265.00 Lin. Ft.  
Add River Rd. Relocat. - Sta. 7+50 to Sta. 30+02.78 = 2,252.78 Lin. Ft.  
Add River Rd. Connection at Sta. 18+76.65 on Prop. River Rd.  
Sta. 17+78.74 to Sta. 22+00 = 421.26 Lin. Ft.  
Add River Rd. Connection at Sta. 53+49.36 Prop. S.R. 11G  
Sta. 42+50 to Sta. 46+46.20 = 396.20 Lin. Ft.  
Add S.R. 6G Sta. 660+40 to Sta. 688+00 = 2,760.00 Lin. Ft.

NET LENGTH OF PROJECT USR 33 18,696.79 Lin. Ft. or 3.541 Miles  
NET LENGTH OF WORK USR 33 18,846.79 Lin. Ft. or 3.569 Miles  
GRAND TOTAL LENGTH OF PROJECT 24,404.50 Lin. Ft. or 4.622 Miles  
GRAND TOTAL LENGTH OF WORK 44,745.55 Lin. Ft. or 8.474 Miles



**INDEX**

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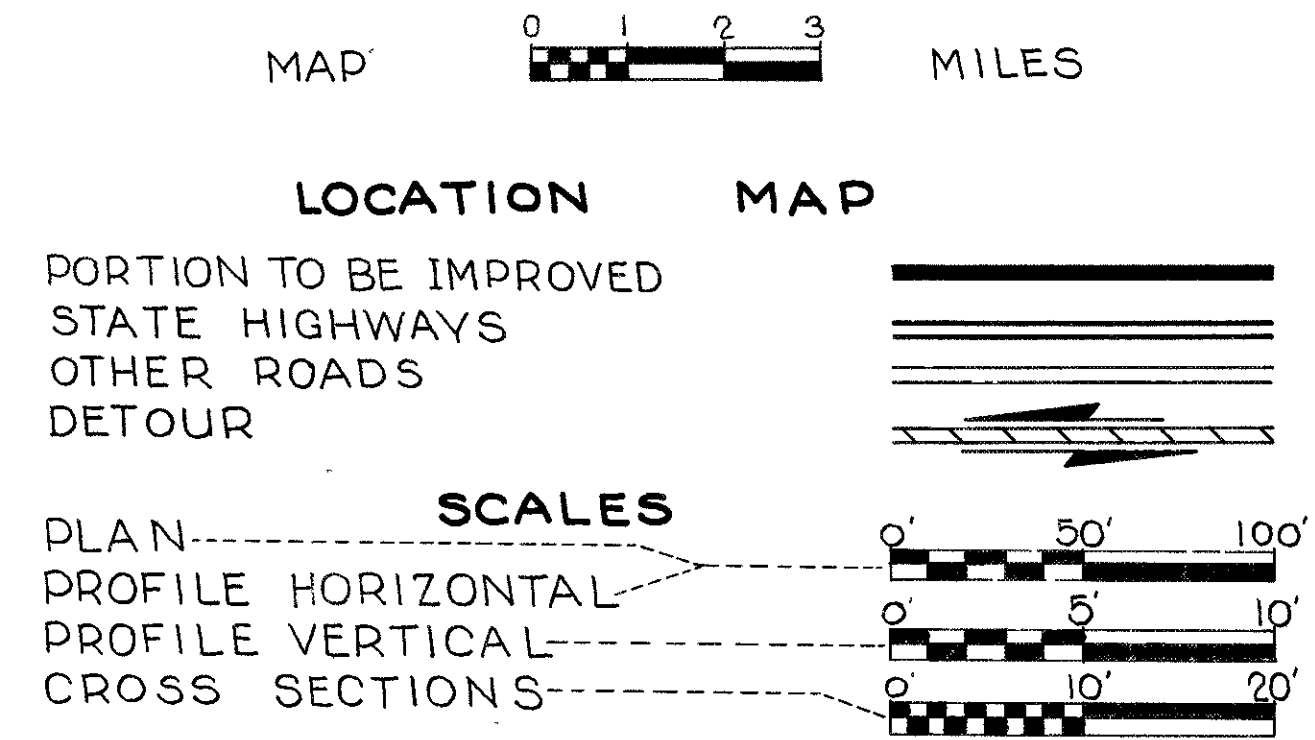
**SUPPLEMENTAL SPECIFICATIONS**

Nº	DATE	Nº	DATE
USR 33/SR 29 INTERCHANGE	345-391		
USR 33/SR 6G INTERCHANGE	392-437		
STRUCTURES 20' SPAN & UNDER	438-482, 462A & 462B		
STRUCTURES OVER 20' SPAN	532-597 & 576 A		
LIGHTING PLANS	483-493		
SIGNING PLANS	494-531 & 500A		
R/W & FENCE PLANS	601-635		

*Sheets No. 608 & 632 revised 10-25-70 A.W.G.*

NOTE: The following sheets have been deleted from these plans: 195-199; 205-206; 237-241; 465-467, 508, 511, 52, 598, 599 & 600

SEE	PART II
-----	---------



END PROJECT  
STA. 330+00 SLM. C.25

**STANDARD DRAWINGS**

Nº	DATE

SEE PART II

MICROFILMED  
JAN 17 1965

DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS

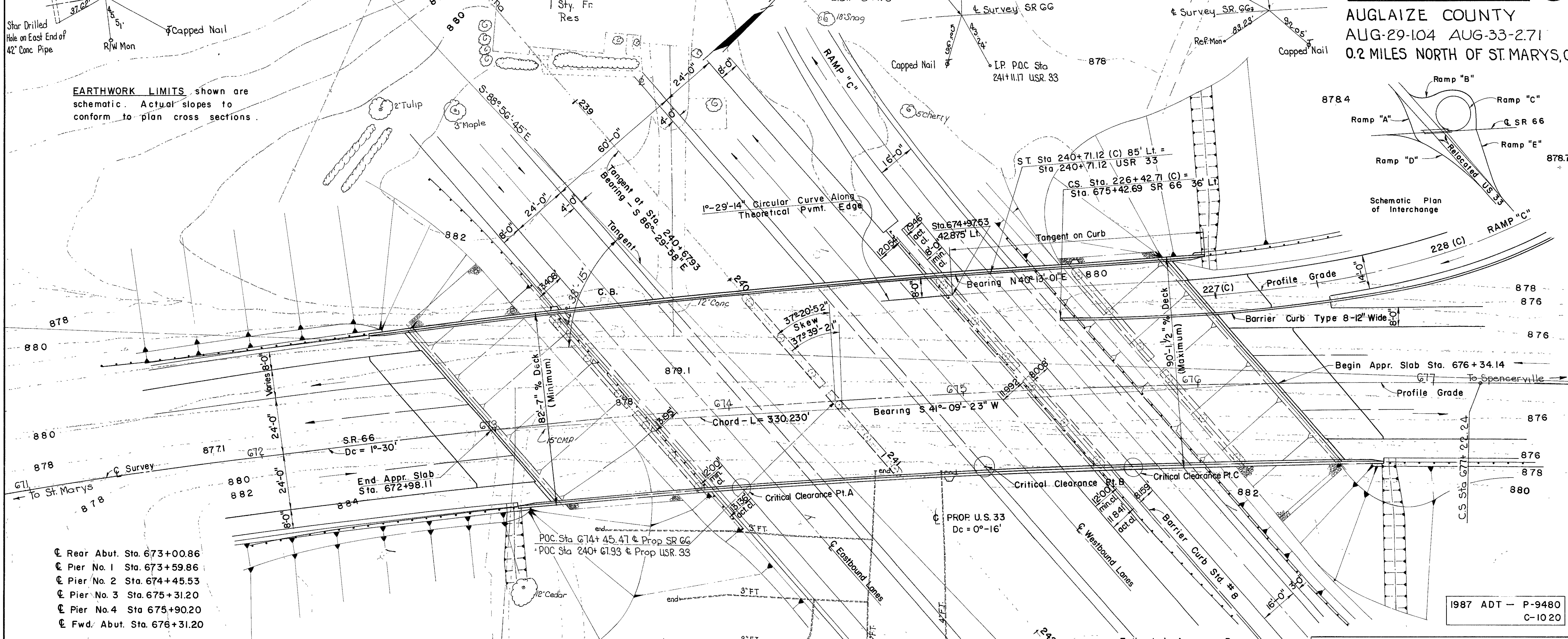
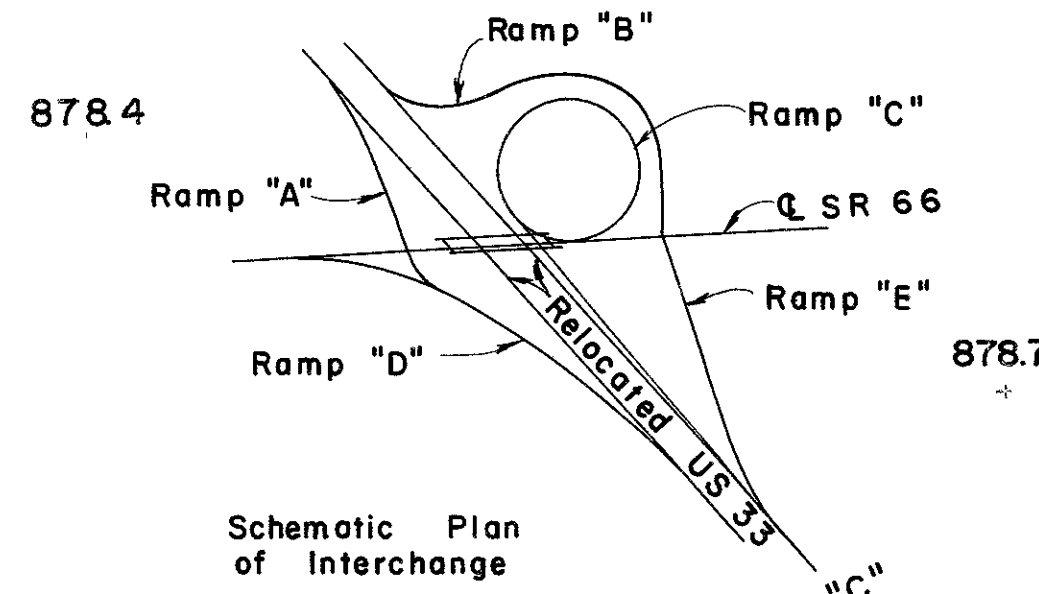
APPROVED:

DIVISION ENGINEER	DATE
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FILE NUMBER	AUGLAIZE COUNTY-29/33-1.04/2.71
DATE OF LETTING	
CONTRACT Nº	

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

EARTHWORK LIMITS shown are schematic. Actual slopes to conform to plan cross sections.

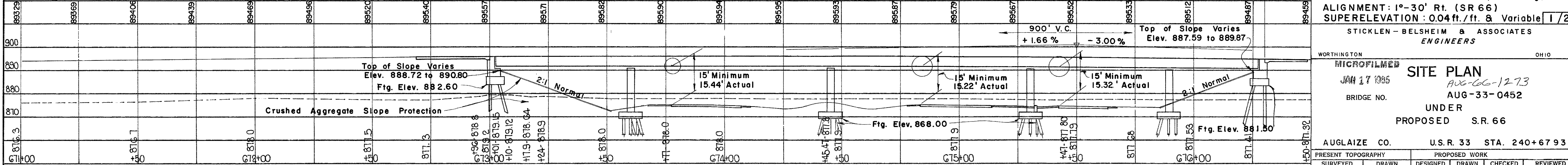


- ☉ Rear Abut. Sta. 673+00.86
- ☉ Pier No. 1 Sta. 673+59.86
- ☉ Pier No. 2 Sta. 674+45.53
- ☉ Pier No. 3 Sta. 675+31.20
- ☉ Pier No. 4 Sta. 675+90.20
- ☉ Fwd. Abut. Sta. 676+31.20

☉ CURVE DATA PROP SR 66  
 P.I. Sta. 670+18.35  
 $\Delta = 24^\circ-30'$  Rt.  
 $D_c = 1^\circ-30'$   
 $L_s = 200'$   
 $R_c = 3819.72'$   
 $T_s = 923.44'$   
 $E_s = 89.45'$   
 $L_c = 1433.33'$   
 $K = 100.00'$   
 $p = 0.44'$   
 $\theta_s = 1^\circ-30'$   
 $\chi_c = 199.99'$   
 $y_c = 1.75'$   
 $\Delta_c = 21^\circ-30'$

☉ CURVE DATA PROP USR 33  
 P.I. Sta. 234+89.60  
 $\Delta = 7^\circ-59'-25"$  Lt.  
 $D = 0^\circ-16'$   
 $R = 21485.93'$   
 $T = 1500.62'$   
 $L = 2996.35'$   
 $E_x = 52.34'$

BENCH MARK # 5-A  
 Boat Spike in  $\phi$  274.9' Left of  
 Sta. 674+44 Elev. 818.06

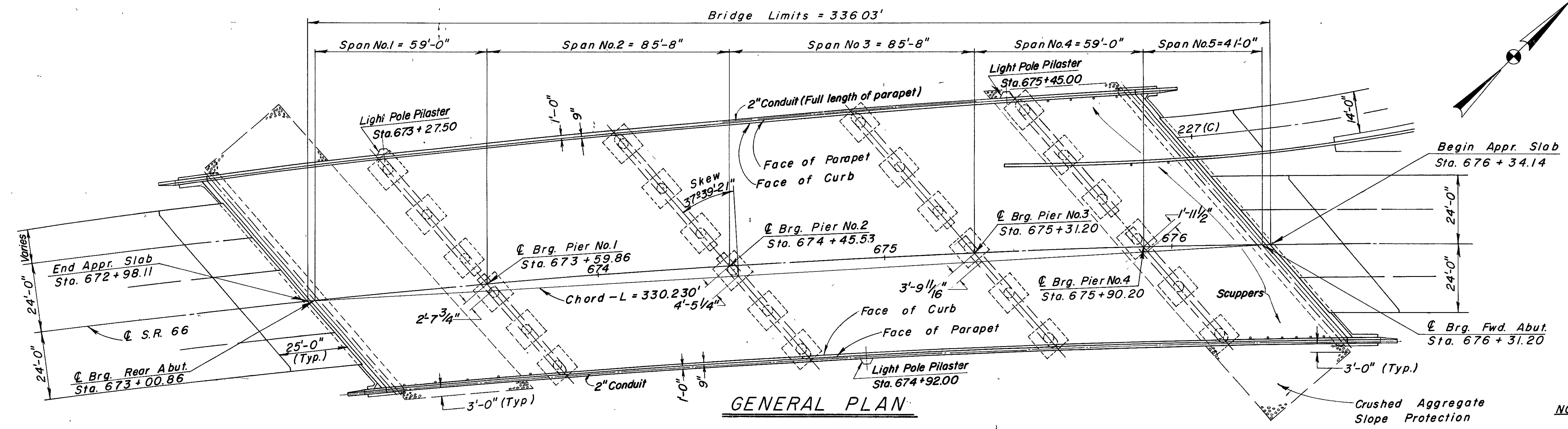


**PROPOSED STRUCTURE**  
 TYPE: Continuous Steel Beam with Reinforced Concrete Deck & Substructure  
 SPANS: 59.0'-85.67'-85.67'-59.0'-41.0' % brg's along  $\phi$  Survey  
 ROADWAY: Variable  
 LOADING: HS 20-44  
 SKEW:  $37^\circ-39'-21"$  (to chord between Abut. Brg's)  
 WEARING SURFACE: 1" Monolithic Concrete  
 APPROACH SLABS: AS-1-67 (25' Long)  
 ALIGNMENT:  $1^\circ-30'$  Rt. (SR 66)  
 SUPERELEVATION: 0.04 ft./ft. & Variable 1/20  
 STICKLEN - BELSHEIM & ASSOCIATES ENGINEERS

WORTHINGTON OHIO  
 MICROFILMED  
 JAN 17 1985  
 BRIDGE NO. AUG-33-0452  
 UNDER PROPOSED S.R. 66  
 AUGLAIZE CO. U.S.R. 33 STA. 240+67.93

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	AERIAL SURVEY	DRAWN	DESIGNED	DRAWN	CHECKED
		OWG	KCC	R.D.Y.	DCB
					REVIEWED
					DCB
					10-15-69

AUGLAIZE COUNTY  
AUG-29-1.04  
AUG-33-2.71



**GENERAL PLAN**

For details of scuppers and parapet deflection joints see sheet 18/20

For lighting details see sheet 13/15  
AUG-29-0212

**NOTE:** Lighting pilaster stations are approximate and shall be shifted if necessary to clear parapet deflection joints.

**GENERAL NOTES**

**REFERENCE** shall be made to Standard Drawings SD-1-69 sheets 1, 2, 3 & 4 dated 6-12-69, RB-1-55 revised 2-2-59, BR-1-67 sheet 1 dated 2-1-68, HL-4 dated 1-1-66 and to Supplemental Specifications 808 dated 11-14-69, 811 dated 1-1-69, and 836 dated 6-17-69, and 838 dated 3-18-70

**PROCEDURE.** The embankments shall be constructed to the level of the subgrade for a minimum distance of 200 feet back of the abutments. Excavation may then be made for the abutments and Pier No. 4 and piles driven.

**DESIGN SPECIFICATIONS.** This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, 1965, including the Ohio "Supplement" to these specifications.

**PILES** shall be driven to a minimum bearing capacity of 35 tons per pile for the abutments and 44 tons per pile for the piers

**DESIGN DATA.**

Design Loading - HS20-44  
Concrete Class "C" - unit stress 1,200 p.s.i. for superstructure  
- unit stress 1,333 p.s.i. for substructure  
Structural Steel - ASTM A36 - unit stress 20,000 p.s.i.  
Reinforcing Steel - ASTM A615, A616, or A617 - unit stress 20,000 p.s.i. Spiral reinforcement shall be plain bars ASTM A306 or A499.

**UTILITY LINES:** All expense involved in relocating the affected utility lines shall be borne by the Owner. The Contractor and Owner are requested to cooperate by arranging their work in such a manner that inconvenience to either would be held to a minimum.

**ESTIMATED QUANTITIES**

ITEM	TOTAL	UNIT	DESCRIPTION	Abut's.	Piers	Superst.	General
503	Lump	Sum	Cofferdams, cribs and sheeting				Lump
503	1198	Cu. Yds.	Unclassified excavation	577	621		
505	Lump	Sum	First test pile				Lump
507	4370	Lin. Ft.	12" Cast-in-place reinforced concrete piles	1230	3140		
509	408,865	Lbs.	Reinforcing Steel	26,551	110,086	272,228	
511	839	Cu. Yds.	Class "C" concrete, superstructure			839	
511	427	Cu. Yds.	Class "C" concrete, abutments	427			
511	303	Cu. Yds.	Class "C" concrete, piers above footings		303		
511	209	Cu. Yds.	Class "C" concrete, pier footings		209		
512	28	Lin. Ft.	Premolded sealing strip	28			
513	882,300	Lbs.	Structural Steel			882,300	
514	882,300	Lbs.	Field painting of structural steel			882,300	
518	112	Cu. Yds.	Porous Backfill	112			
518	228	Lin. Ft.	6" perforated, helical corrugated metal pipe including specials, 707.01	228			
518	158	Lin. Ft.	6" non-perforated, helical corrugated metal pipe, 707.01	158			
518	17	Each	Scuppers including supports (as per plan)			17	
625			See Sheet 493 for Lighting Summary				
601	1173	Sq. Yds.	Crushed aggregate slope protection				1173
808	839	Units	Chemical admixture for concrete, Type A, B, or D			839	
838	3	Hours	Special Pile Tests				3

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JAN 17 1965

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ENGINEERS  
WORthington OHIO

**GENERAL PLAN, GENERAL NOTES & ESTIMATED QUANTITIES**  
BRIDGE No. AUG-33-0452  
UNDER  
S. R. 66

AUGLAIZE COUNTY  
USR. 33 STA. 240+67.93

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SP	R.D.Y.	T.E.O.	D.C.S.		10/15/69	

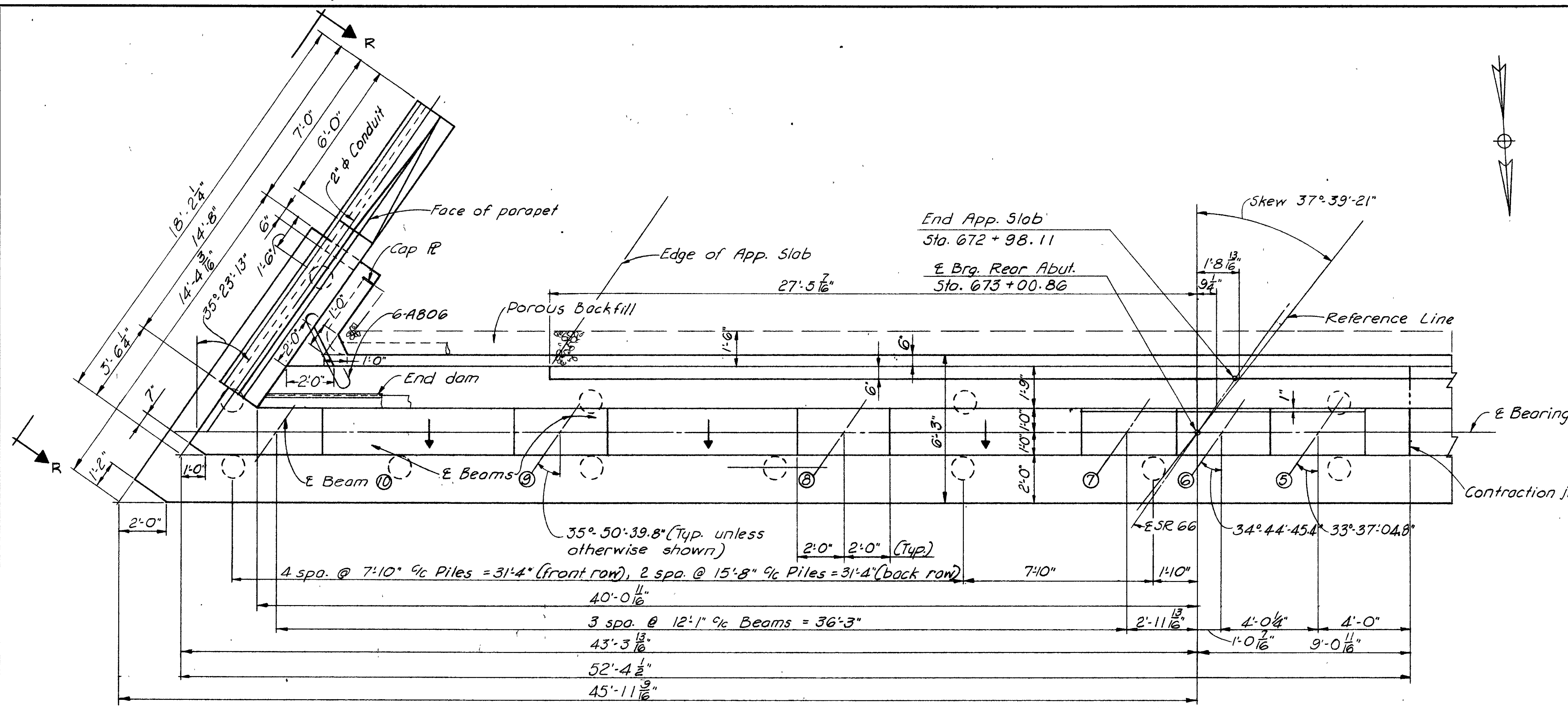
AUGLAIZE COUNTY  
AUG-29-1.04  
AUG-33-2.71

POROUS BACKFILL - 1'-0" thick, full length of abutment and wings (as per plan) shall extend up to the subgrade or bottom of approach slab.

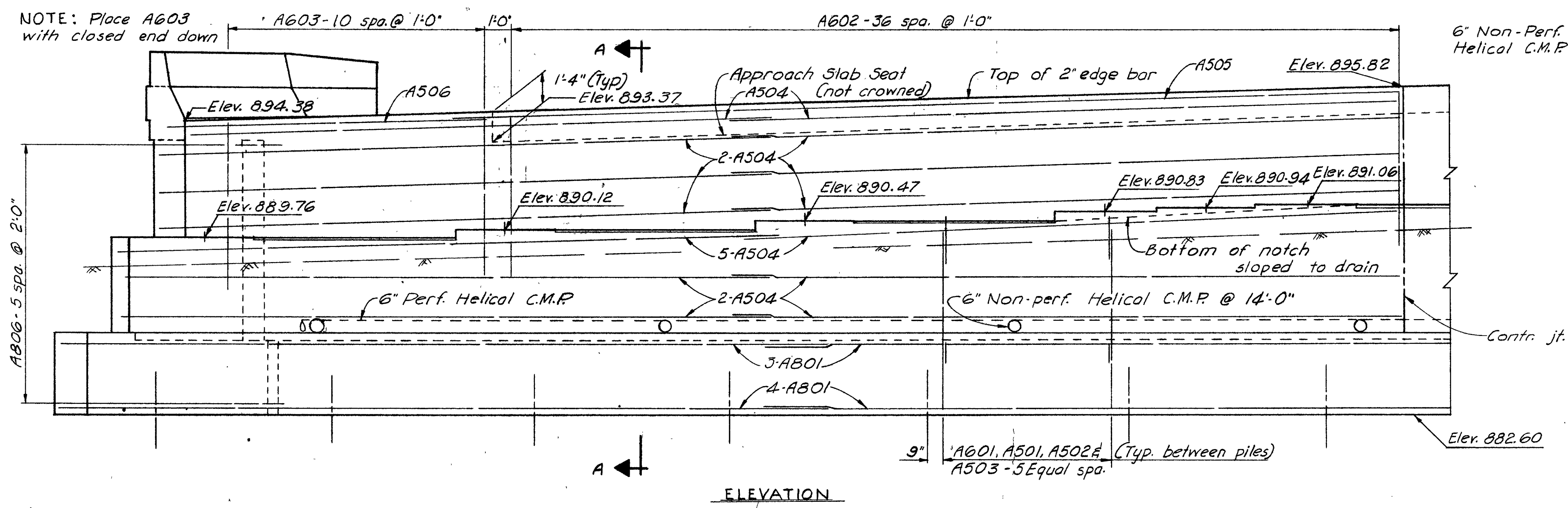
ADJUSTABLE TYPE ELBOWS meeting specification requirements for gage and coating are acceptable for making bends in perforated corrugated metal pipe. Elbows and the stem of tees need not be perforated.

For contraction joint details, see sht. 4/20  
For view R-R see sht. 7/20

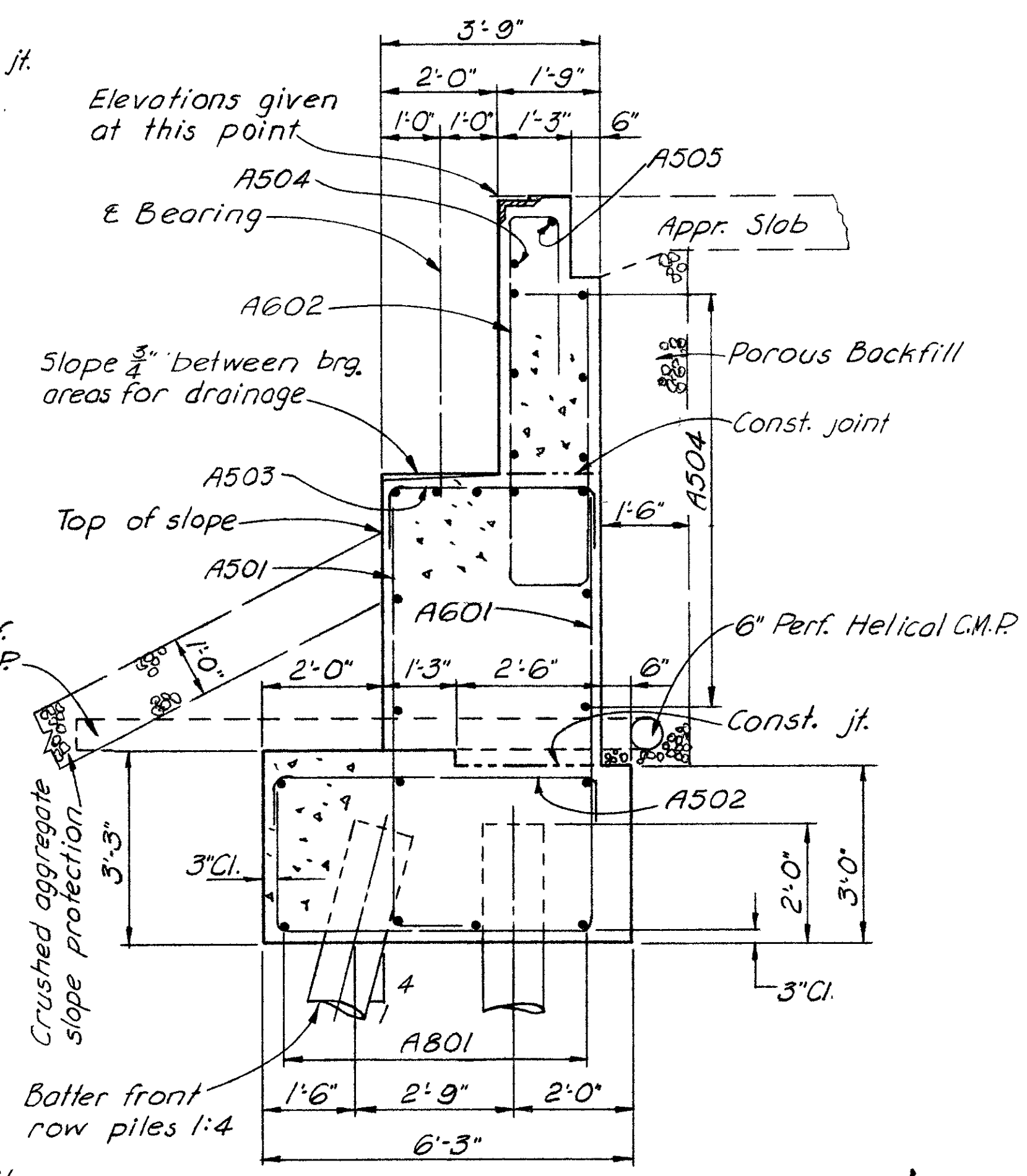
All piling shall be 12" Cast-in-place.



PLAN



ELEVATION



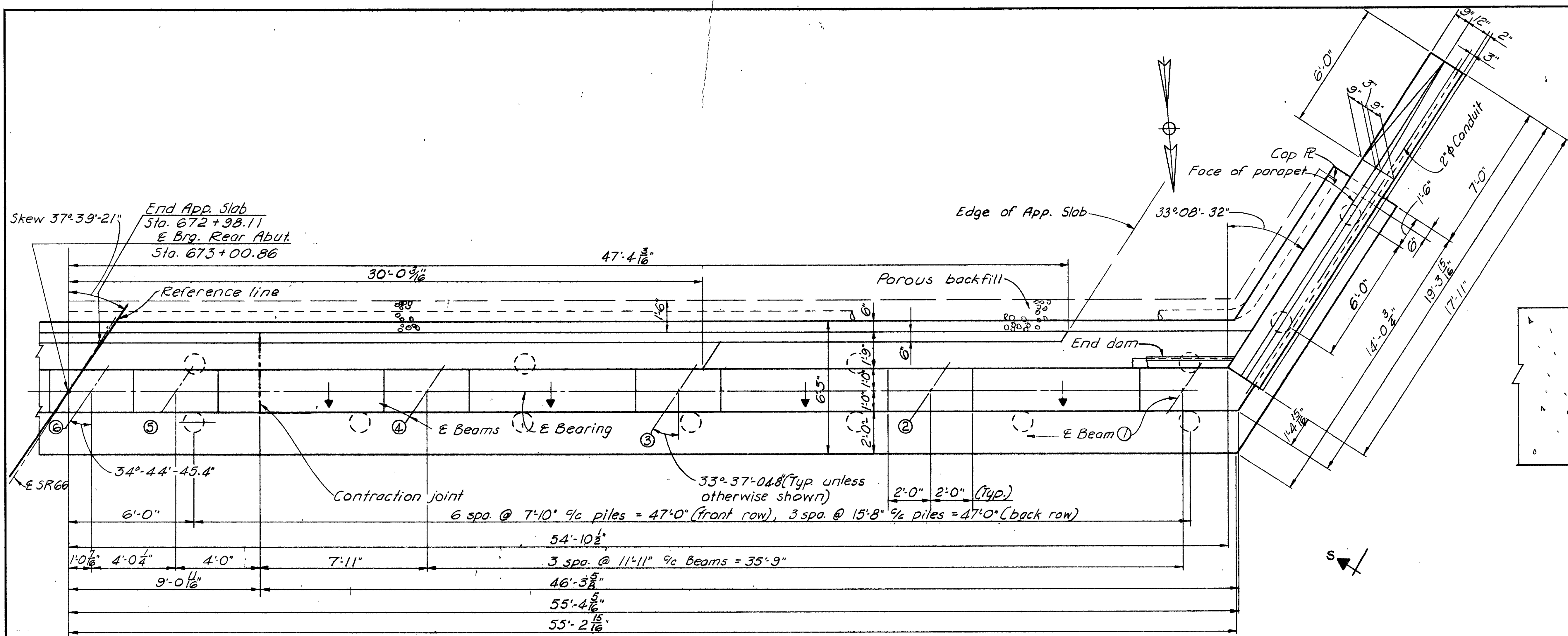
SECTION A-A

STICKLEN - BELSHEIM & ASSOCIATES  
ENGINEERS  
WORTHINGTON OHIO

**REAR ABUTMENT DETAILS**  
BRIDGE No AUG-33-0452  
UNDER  
S.R. 66  
AUGLAIZE COUNTY USR 33 STA. 240+67.93

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SP	SP		TRO	BGX	11/15/69	

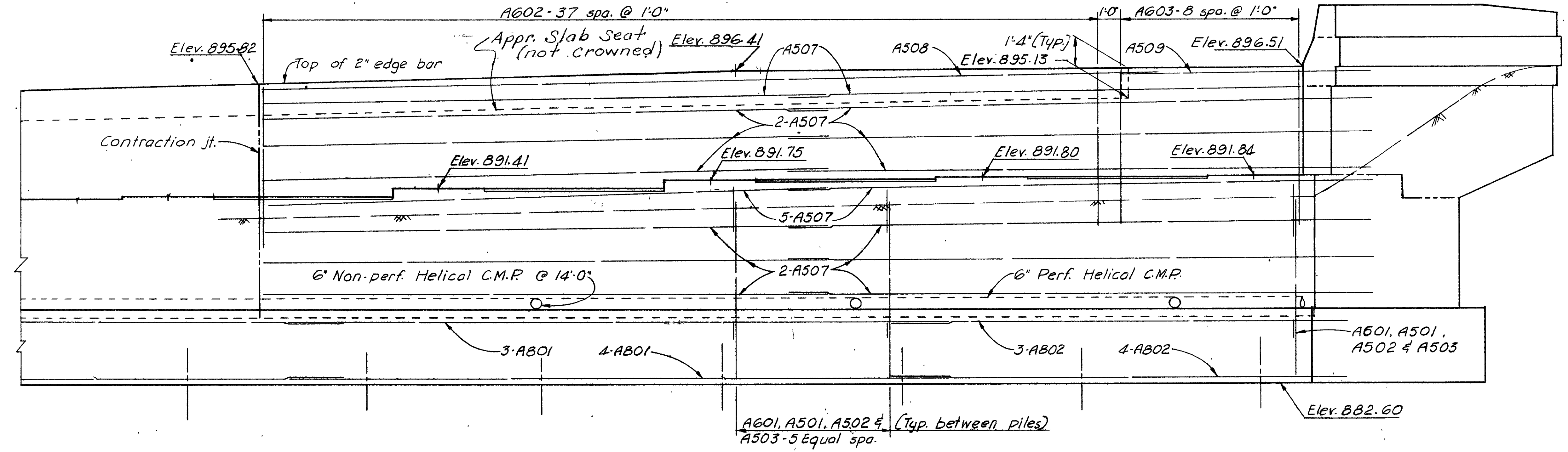
AUGLAIZE COUNTY  
 AUG-29-1.04  
 AUG-33-2.71



PLAN

NOTE: Place A603 bars with closed end down.

For view S-5 see sht. 7/20



ELEVATION

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 ENGINEERS  
 WORTHINGTON OHIO

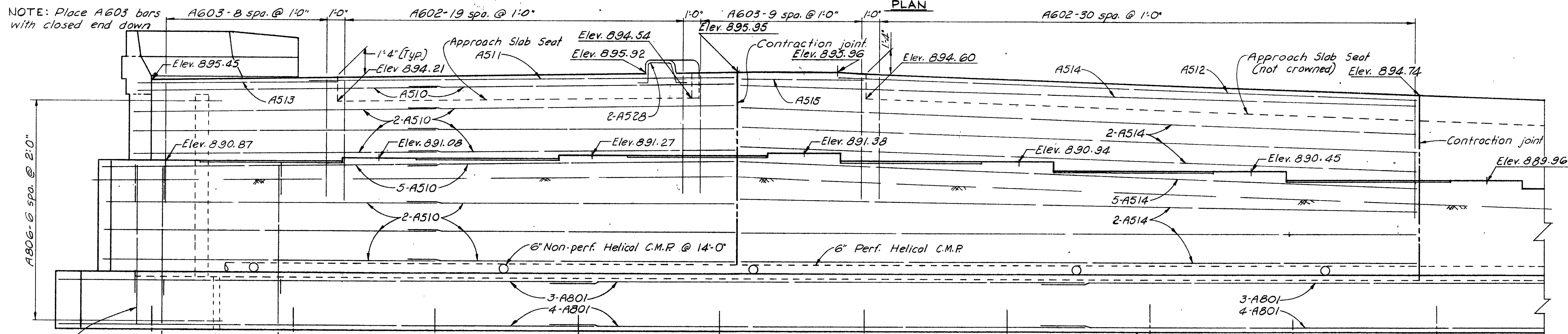
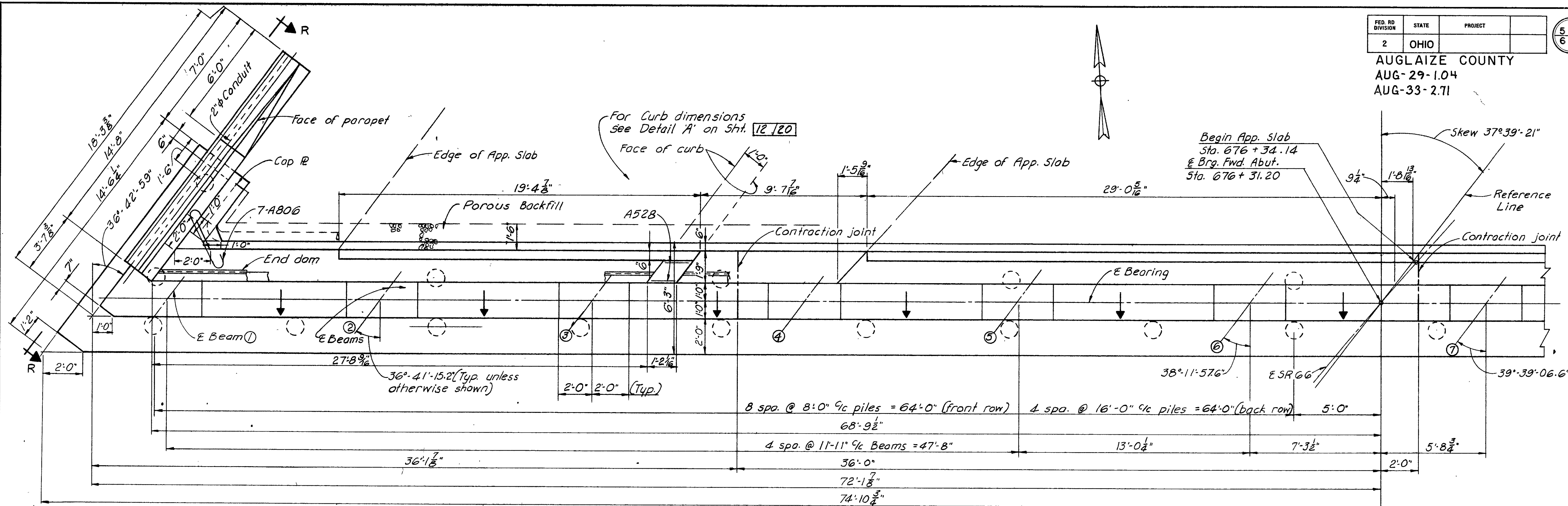
REAR ABUTMENT DETAILS  
 BRIDGE N<sup>o</sup> AUG- 33-0452  
 UNDER  
 SR. 66  
 AUGLAIZE COUNTY USR 33 STA. 240+6793

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SP	SP		TRO	DGT	10/15/09	

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

572  
635

AUGLAIZE COUNTY  
AUG-29-1.04  
AUG-33-2.71



NOTE: Place A603 bars with closed end down

ELEVATION

For view R-R see sht. 7/20  
For contraction joint details see sht. 4/20

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ENGINEERS  
WORTHINGTON OHIO

**FWD. ABUTMENT DETAILS**  
BRIDGE N<sup>o</sup> AUG- 33-0452  
UNDER  
S.R. 66

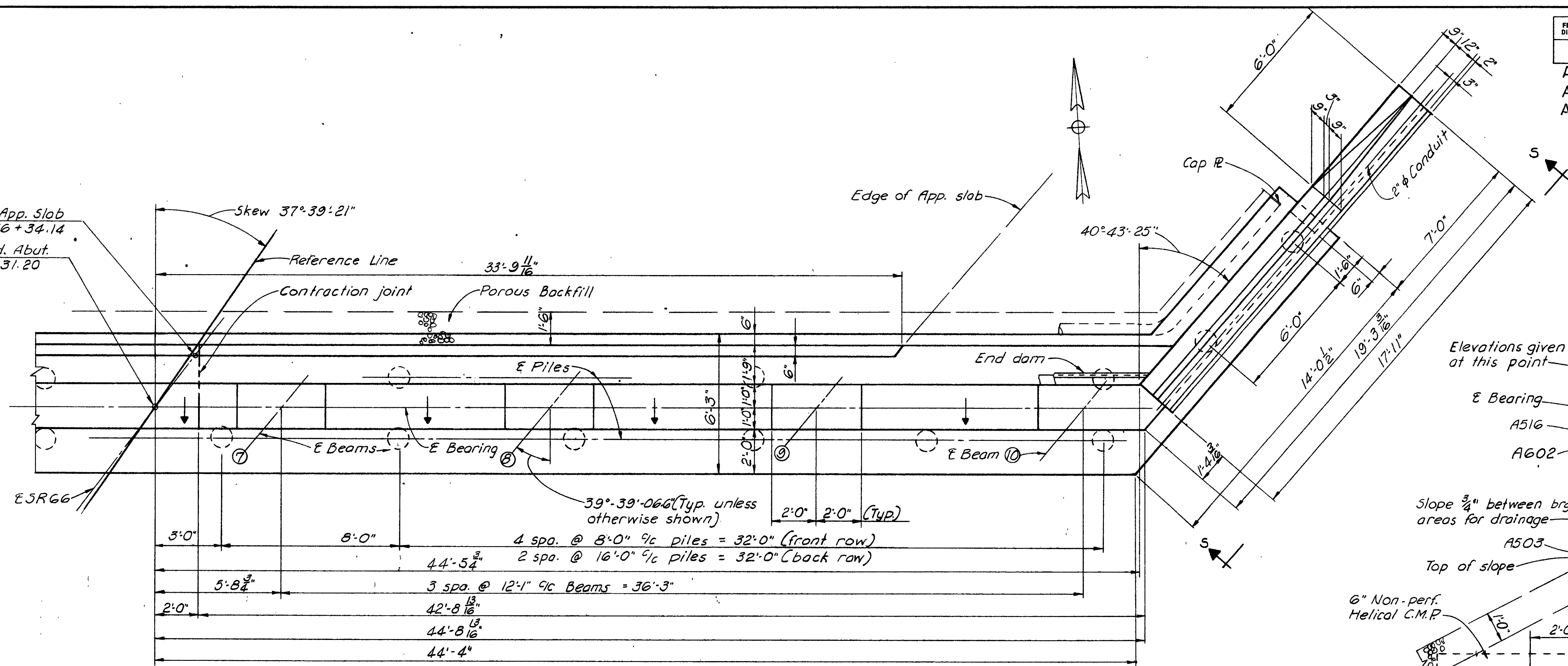
AUGLAIZE COUNTY USR 33 STA. 240+6793

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SP	SP		TRO	DEW	10/16/69	

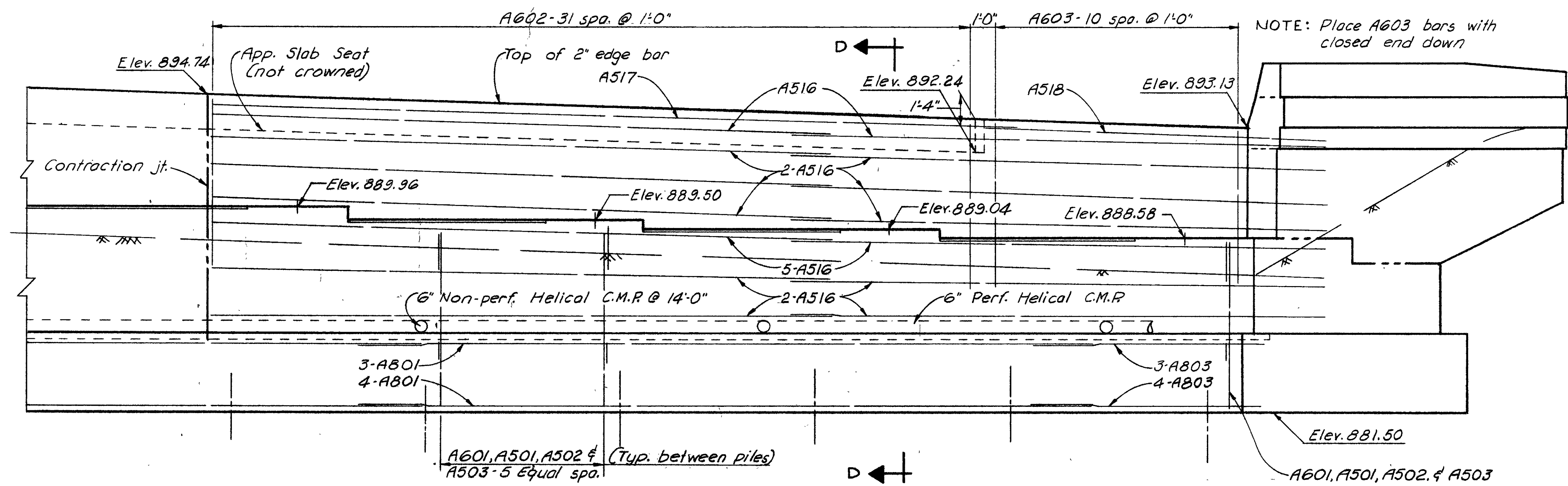
MICROFILMED  
JAN 17 1985

AUGLAIZE COUNTY  
AUG-29-1.04  
AUG-33-2.71

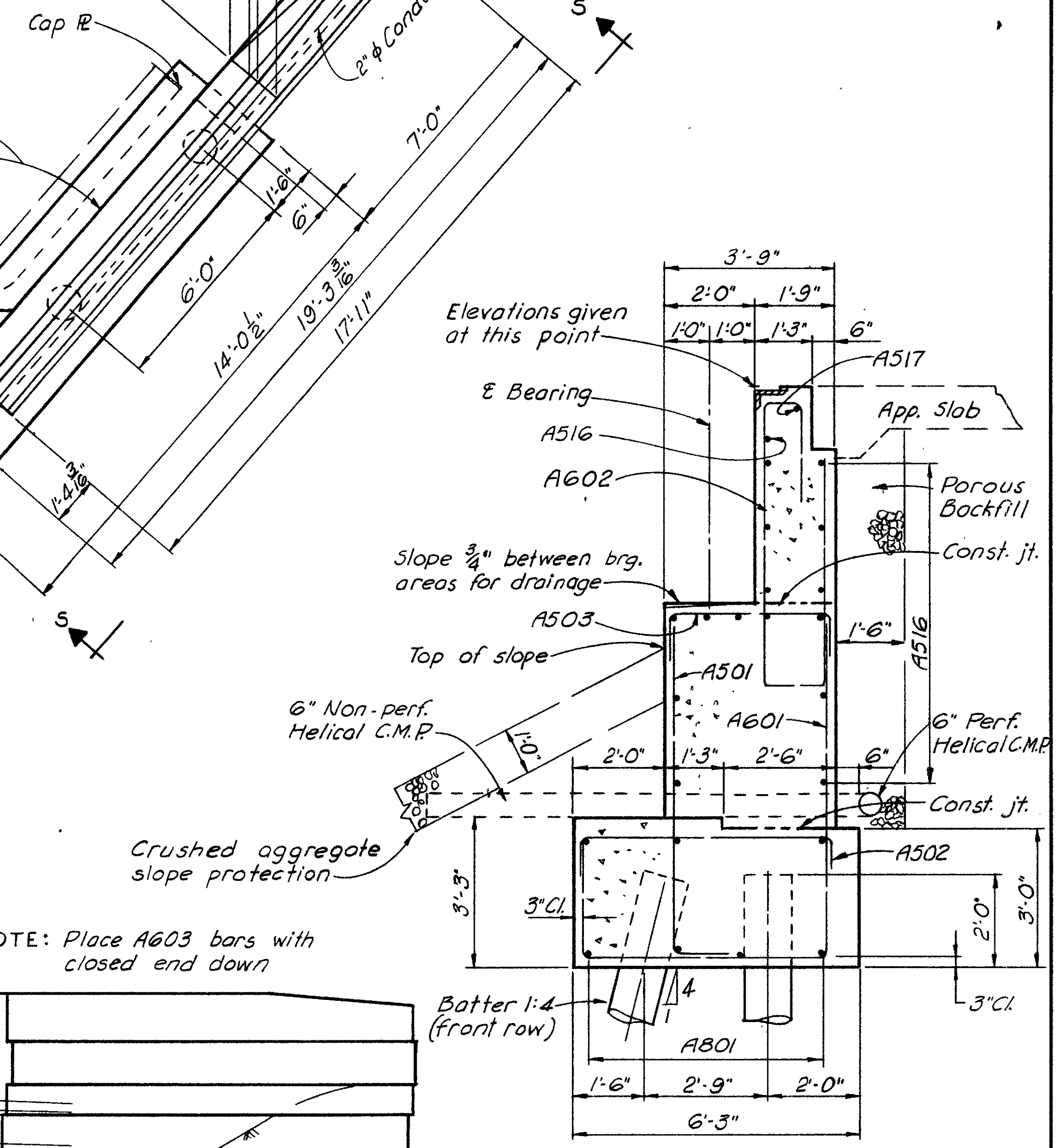
Begin App. Slab  
Sta. 676+34.14  
E Brg. Fwd. Abut.  
Sta. 676+31.20



PLAN



ELEVATION



SECTION D-D

For contraction joint details see sht. 4/20  
For view 5-5 see sht. 7/20

STICKLEN - BELSHEIM & ASSOCIATES ENGINEERS WORTHINGTON OHIO						
FWD. ABUTMENT DETAILS						
BRIDGE No AUG-33-0452						
UNDER						
SR. 66						
AUGLAIZE COUNTY USR 33 STA 24046793						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SP	SP		TRO	AGW	10/15/69	

AUGLAIZE COUNTY  
AUG-29-1.04  
AUG-33-2.71

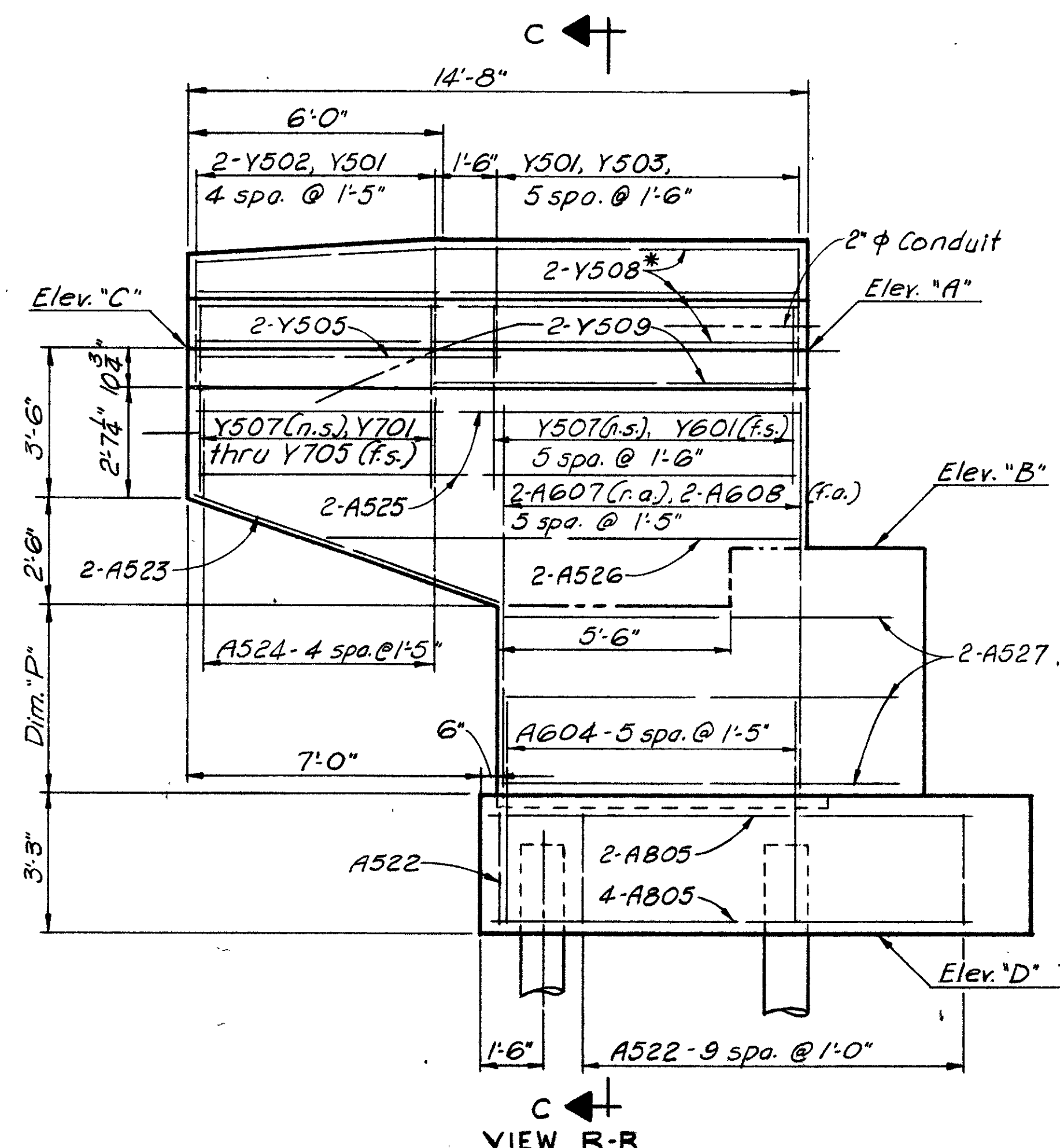
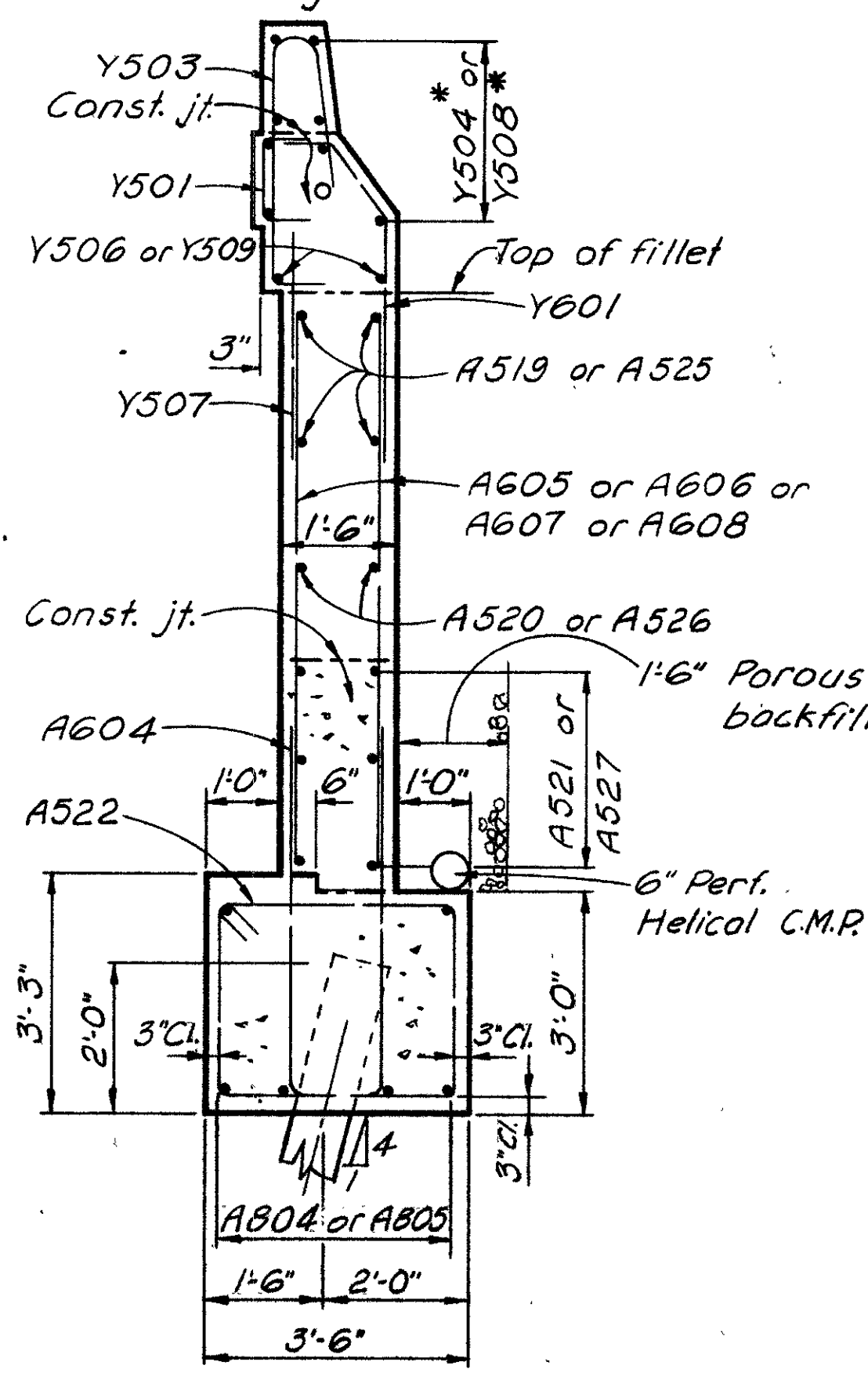
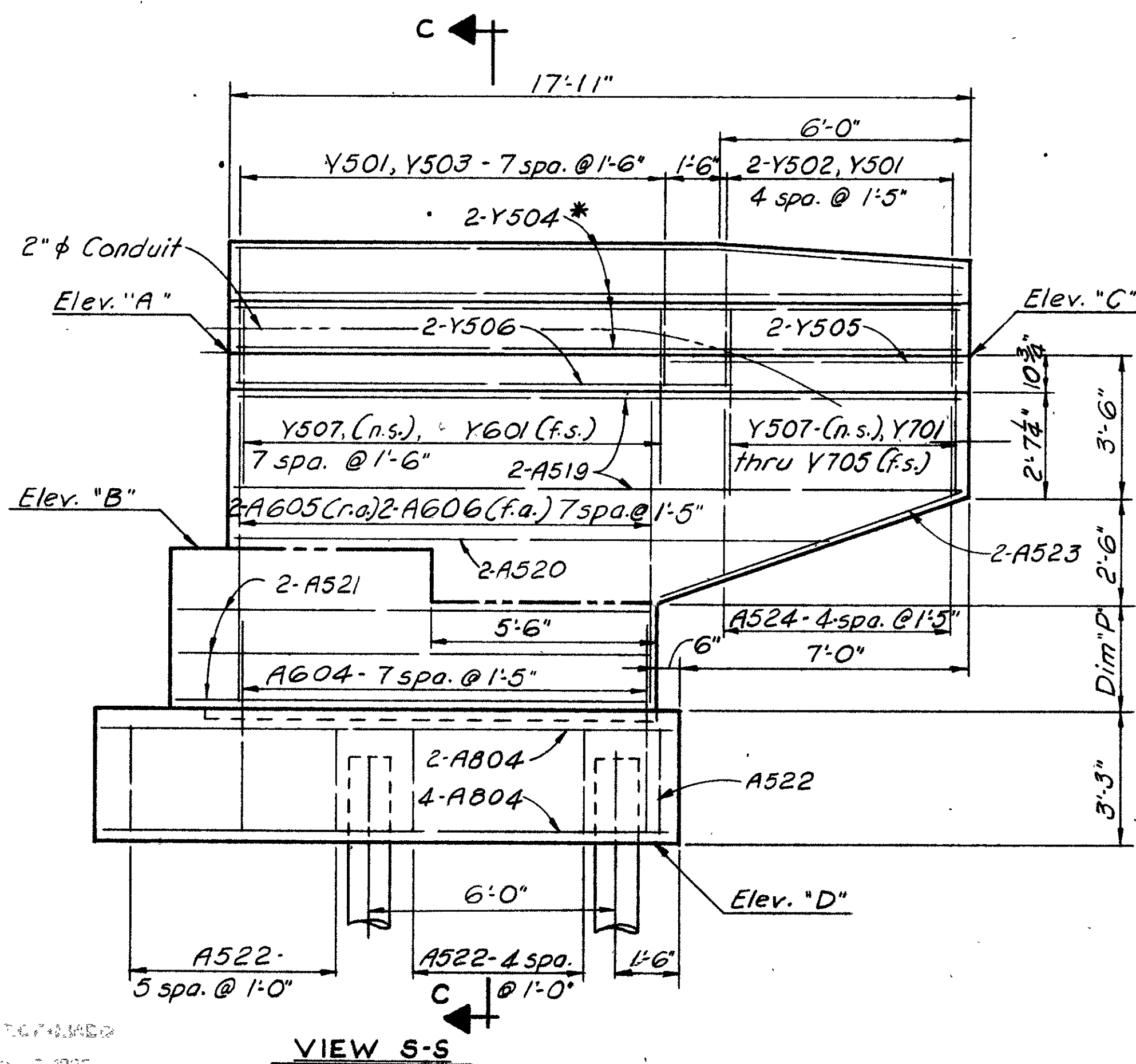
	Rear Abutment		Forward Abutment	
	View R-R	View S-S	View R-R	View S-S
Elev. "A"	894.38	896.51	895.45	893.13
Elev. "B"	889.76	891.84	890.87	888.58
Elev. "C"	894.30	896.38	895.20	892.90
Elev. "D"	882.60	882.60	881.50	881.50
Dim. "P"	2'-5 <sup>3</sup> / <sub>8</sub> "	4'-6 <sup>3</sup> / <sub>8</sub> "	4'-5 <sup>3</sup> / <sub>8</sub> "	2'-1 <sup>3</sup> / <sub>4</sub> "

\* Bend in field where necessary.

For additional details on conduit expansion fittings etc. see STD HL-4.

For additional railing details see Std. Dwg. BR-1-67.

Guard Rail anchors shall be provided at end of all wings.



LEGEND:  
f.s.: far side  
n.s.: near side  
r.a.: rear abutment  
f.a.: forward abutment

7 / 20

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ENGINEERS  
WORthington OHIO

**WING WALL DETAILS**  
BRIDGE No AUG-33-0452  
UNDER  
S.R. 66

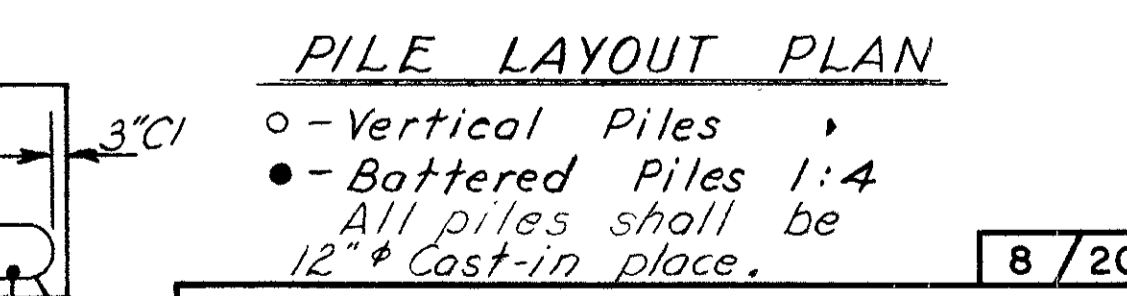
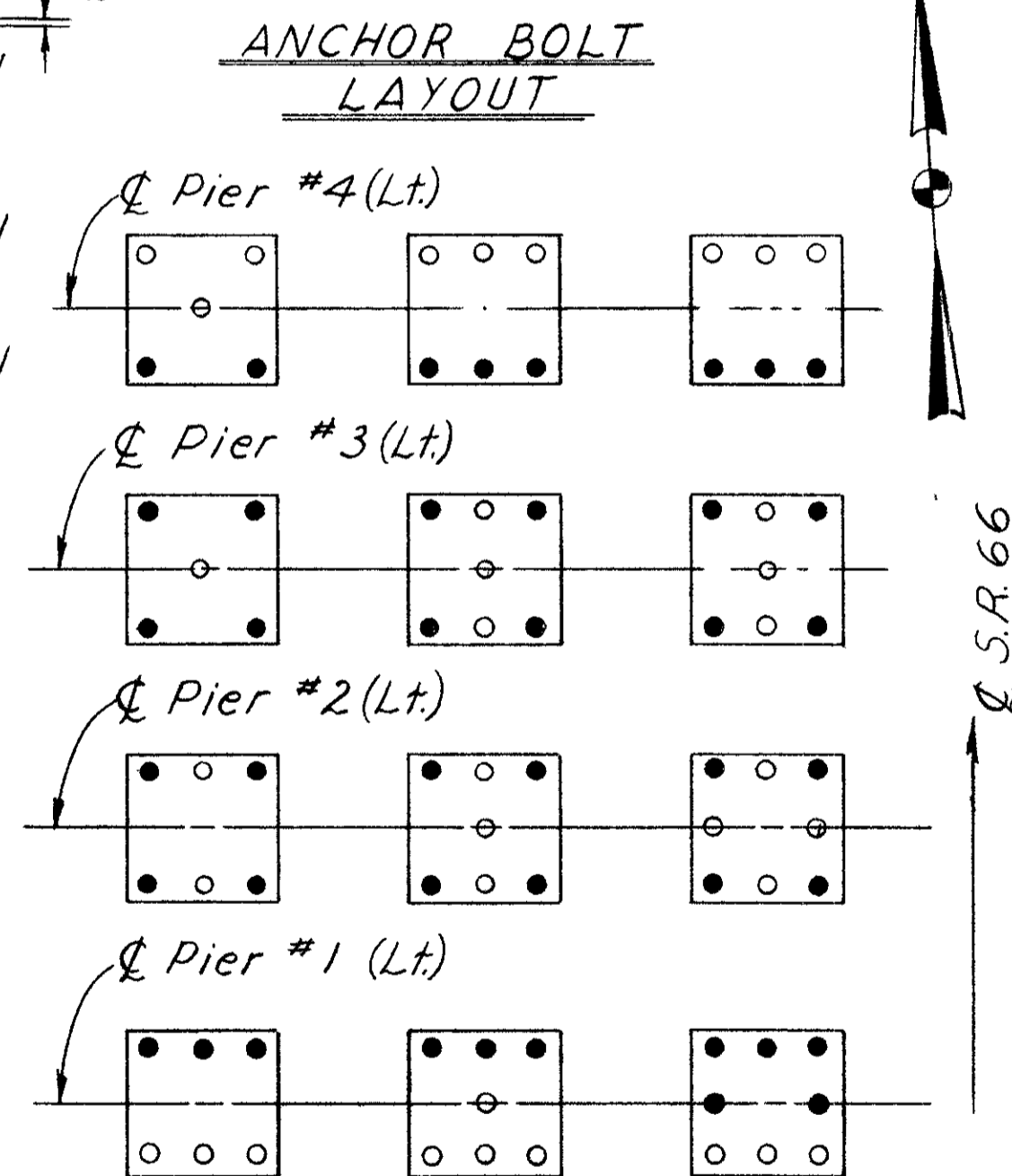
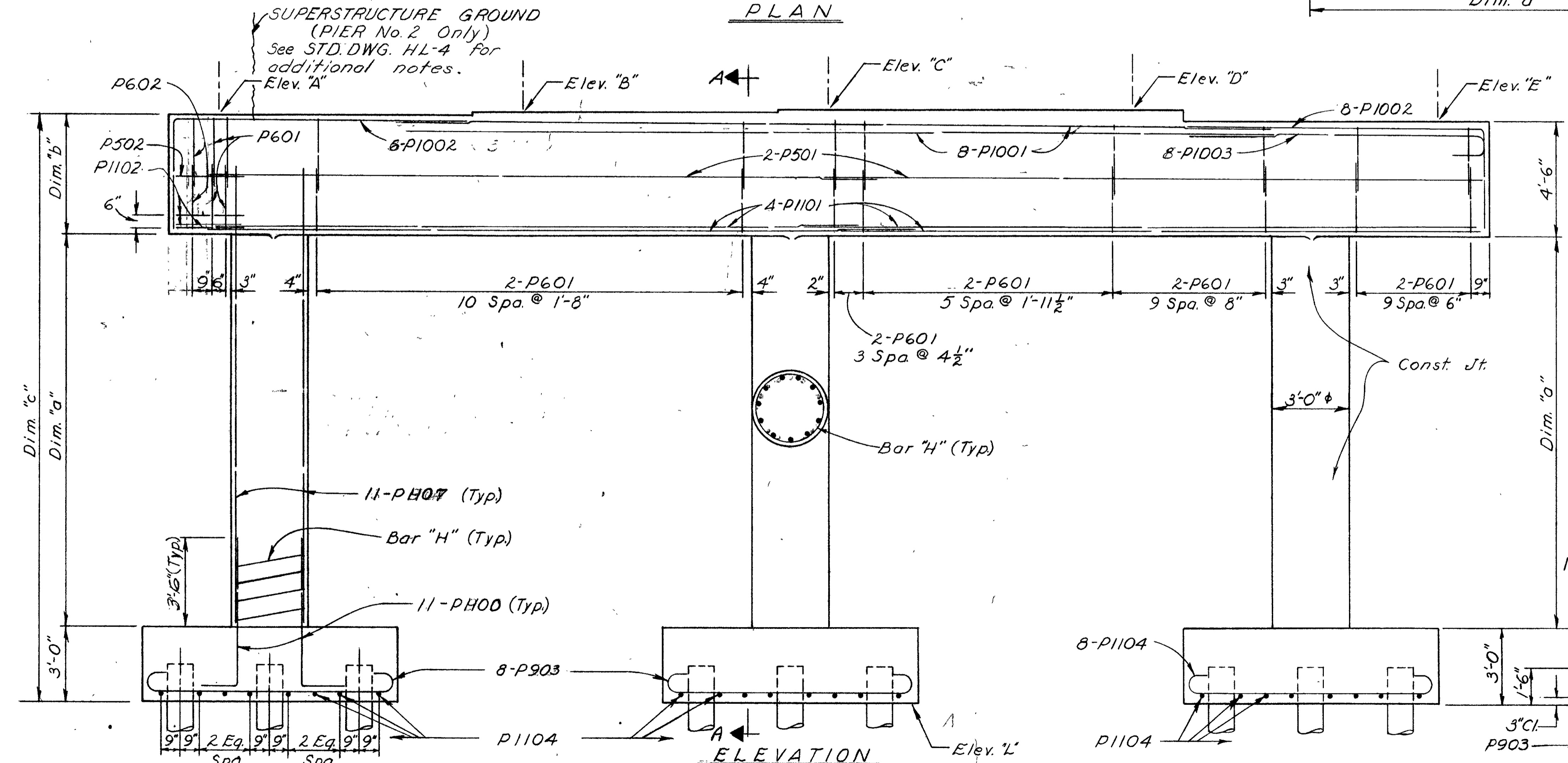
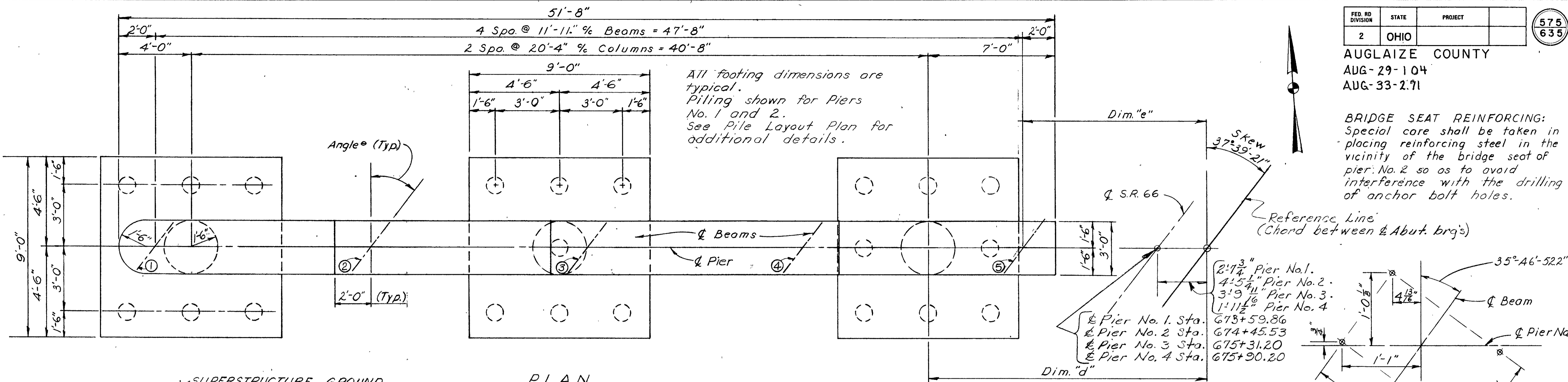
AUGLAIZE COUNTY USR.33 STA. 240+6793

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SP	SP		TRO	AGW	10/15/69	



AUGLAIZE COUNTY  
AUG-29-104  
AUG-33-2.71

BRIDGE SEAT REINFORCING:  
Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat of pier No. 2 so as to avoid interference with the drilling of anchor bolt holes.



LOCATION	Elev. "A"	Elev. "B"	Elev. "C"	Elev. "D"	Elev. "E"	Elev. "L"	Dim. "a"	Dim. "b"	Dim. "c"	Dim. "d"	Dim. "e"	Bar "H"	Angle °
Pier No. 1	891.57	891.51	891.45	891.14	890.76	868.00	15'-3 1/8"	5'-3 3/4"	23'-6 7/8"	14'-10 3/8"	9'-10 3/8"	PA01	34°-32'-41.2"
Pier No. 2	891.79	891.76	891.63	891.37	890.99	868.00	15'-5 1/2"	5'-3 5/8"	23'-9 1/2"	20'-1 1/16"	15'-1 1/16"	PA02	35°-46'-52.2"
Pier No. 3	891.44	891.44	891.45	891.31	890.90	868.00	15'-4 3/4"	5'-0 1/2"	23'-5 1/4"	23'-3 1/16"	18'-3 1/16"	PA02	36°-41'-15.2"
Pier No. 4	891.04	891.15	891.25	891.26	890.83	868.00	15'-4"	4'-8 1/2"	23'-0 1/2"	24'-5 1/16"	19'-5 1/16"	PA01	36°-41'-15.2"

MICROFILMED  
JAN 7 1955

SECTION A-A

STICKLEN - BELSHEIM & ASSOCIATES  
ENGINEERS  
WORthington OHIO

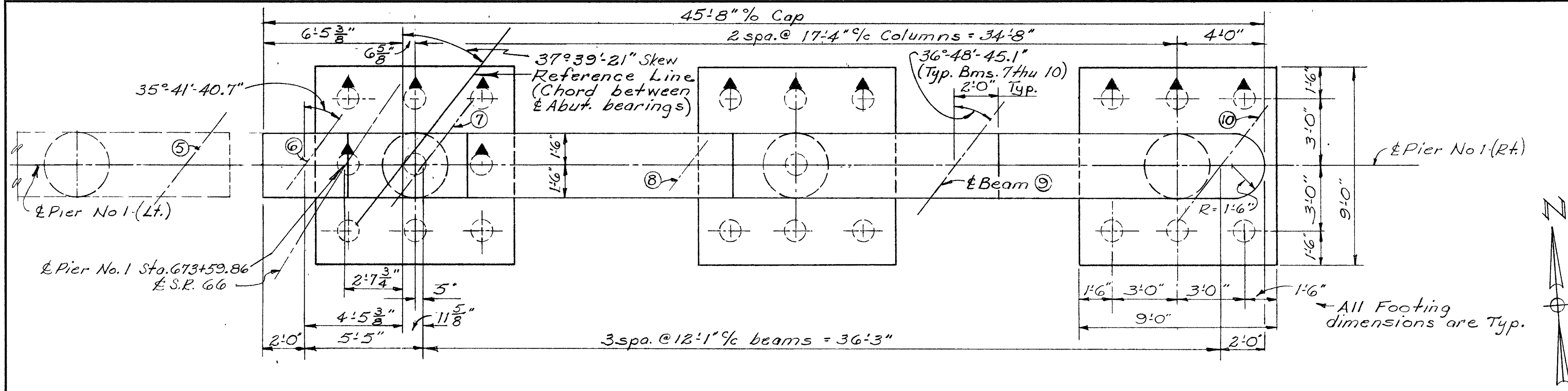
PIER No. 1 (Lt.), PIER No. 2 (Lt.),  
PIER No. 3 (Lt.) & PIER No. 4 (Lt.)  
BRIDGE No. AUG-33-0452  
UNDER S.R. 66  
AUGLAIZE COUNTY USR 33 STA. 240+6793

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G5B	R.D.Y.	R.D.Y.	TRO	10/14/69		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

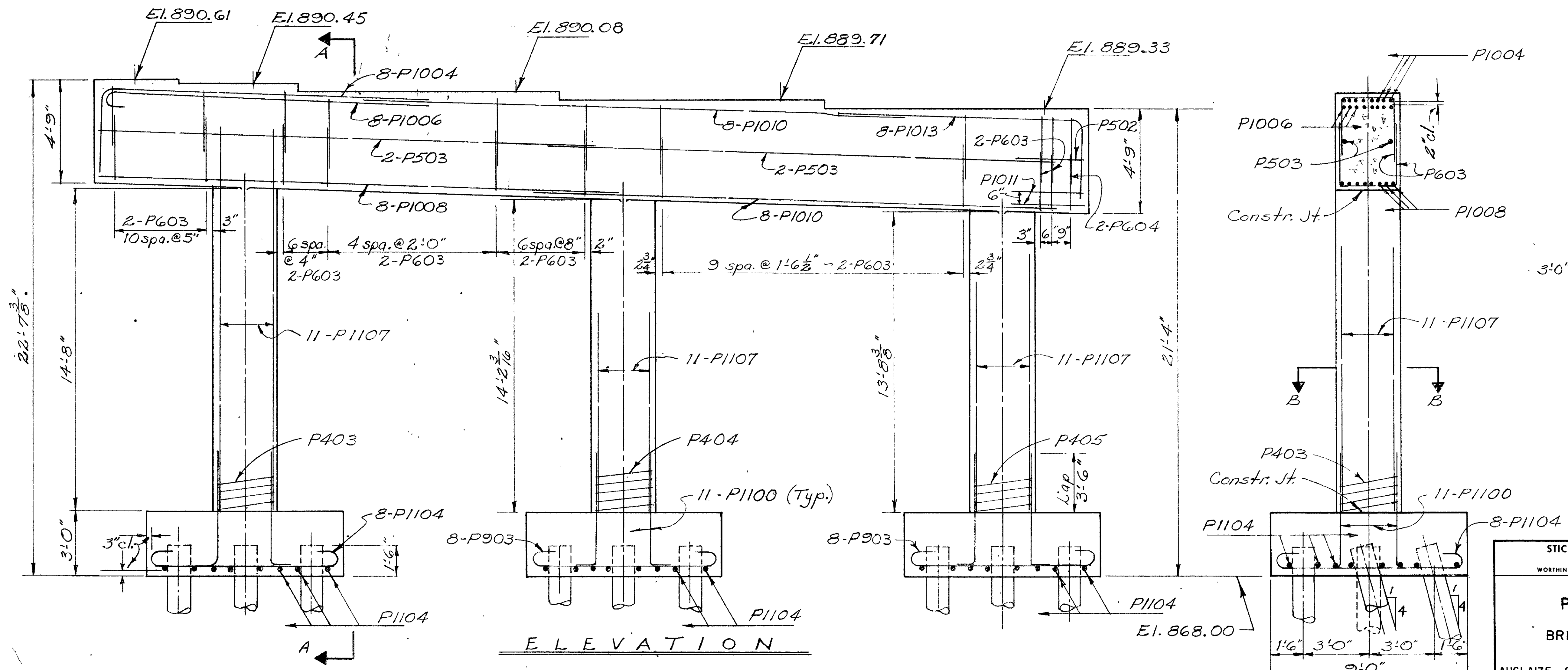
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AUGLAIZE COUNTY  
AUG-29-1.04  
AUG-33-2.71

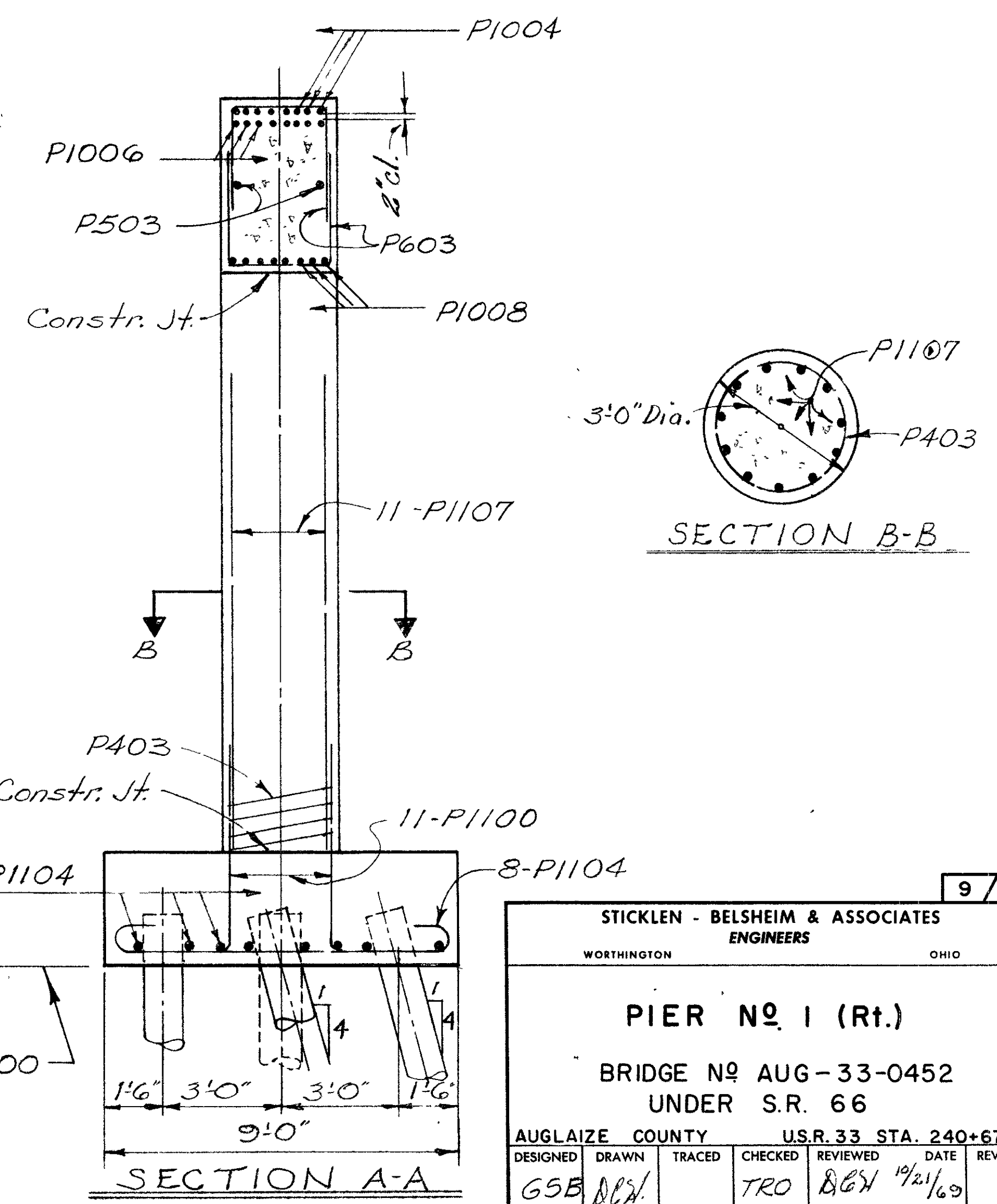


P L A N

⊕ Indicates Piles Battered 1:4  
⊙ Indicates Vertical Piles



E L E V A T I O N

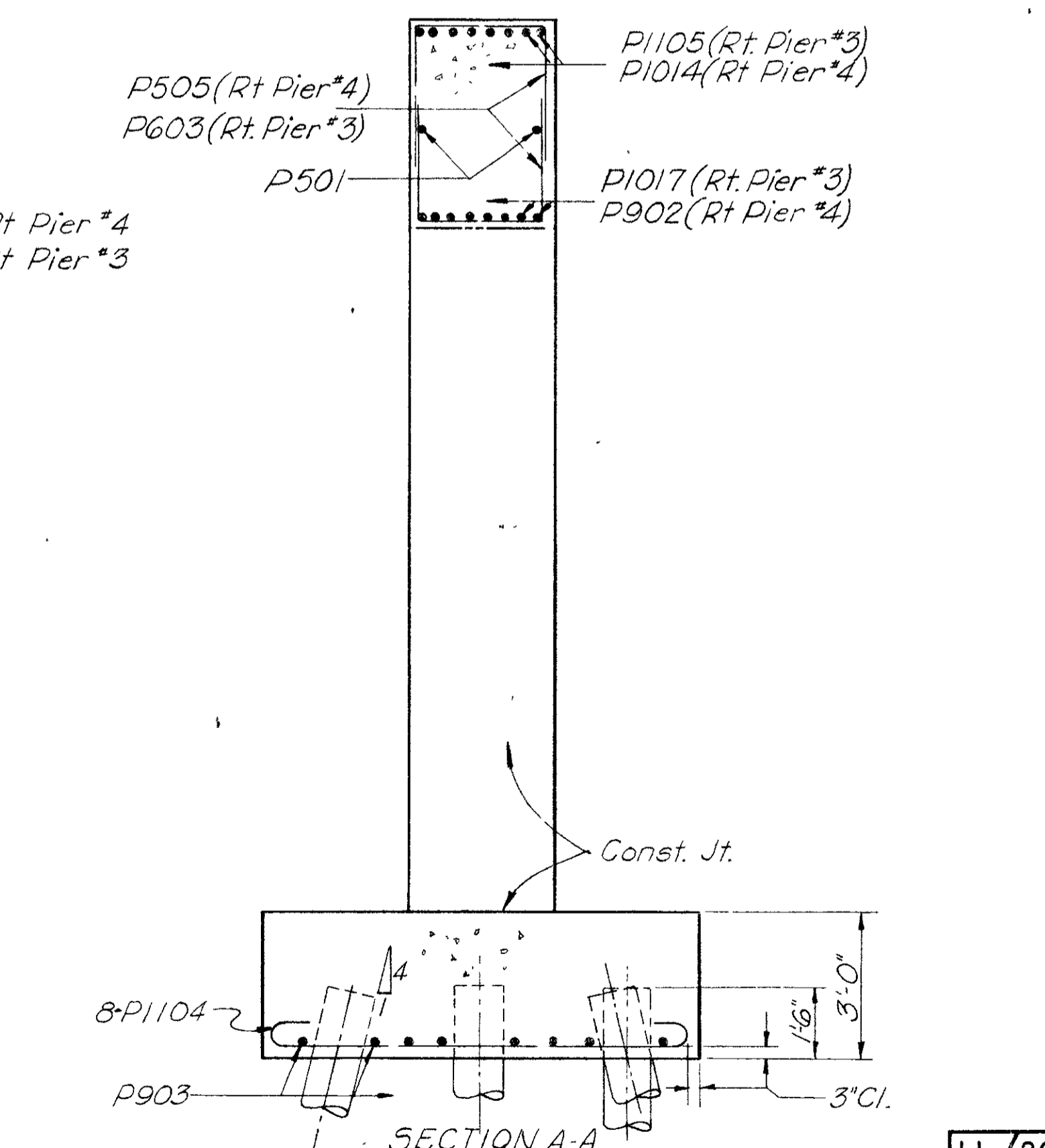
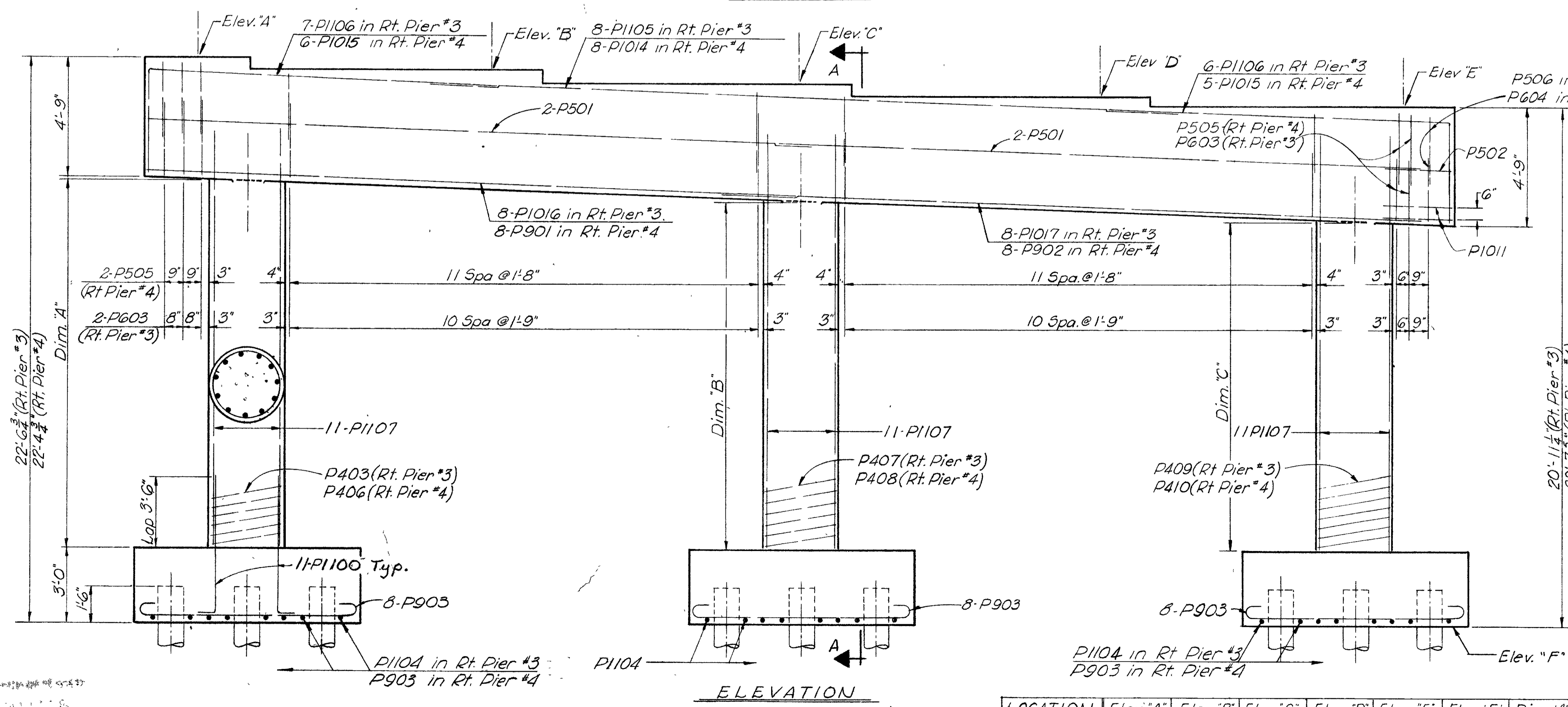
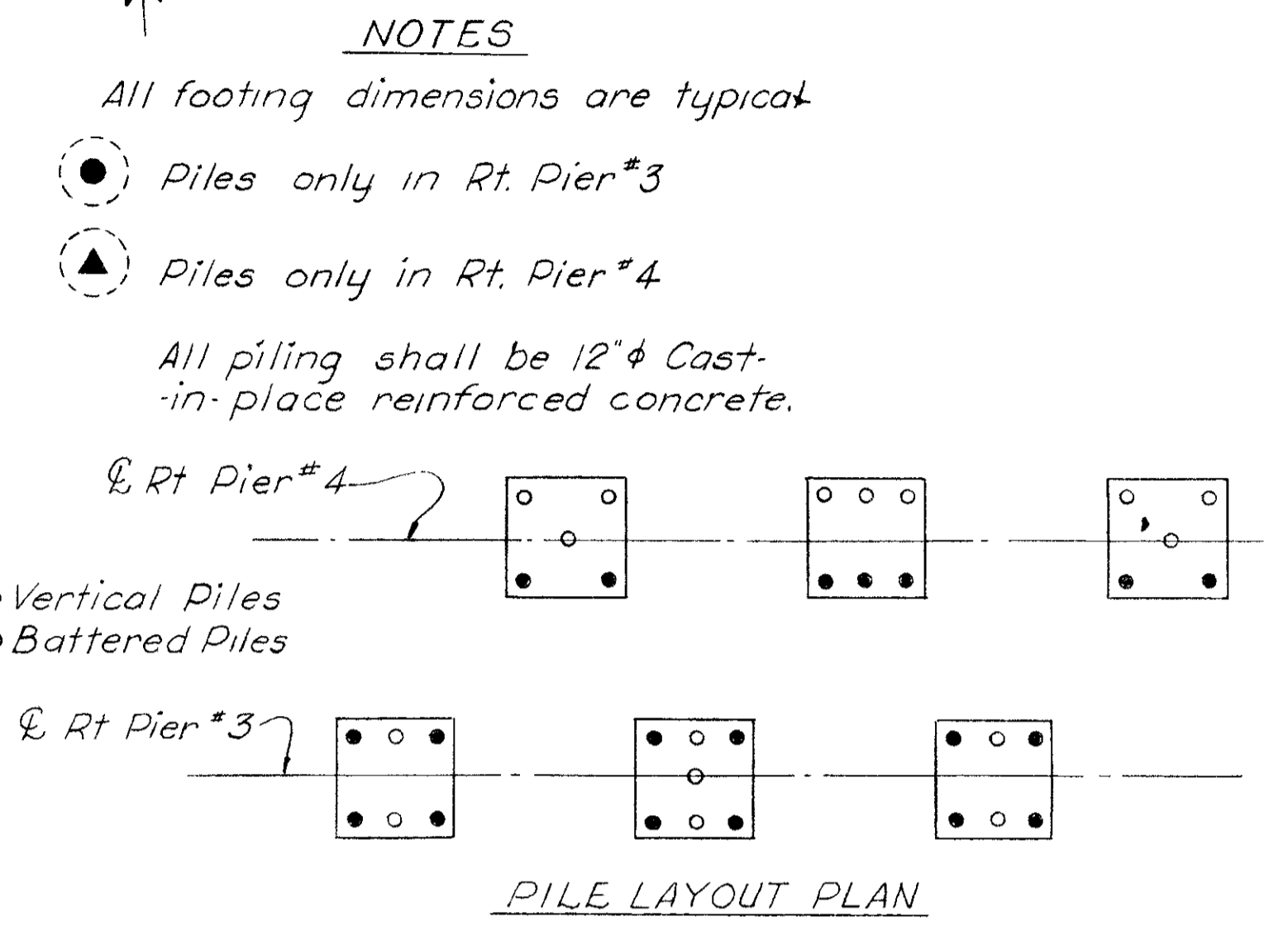
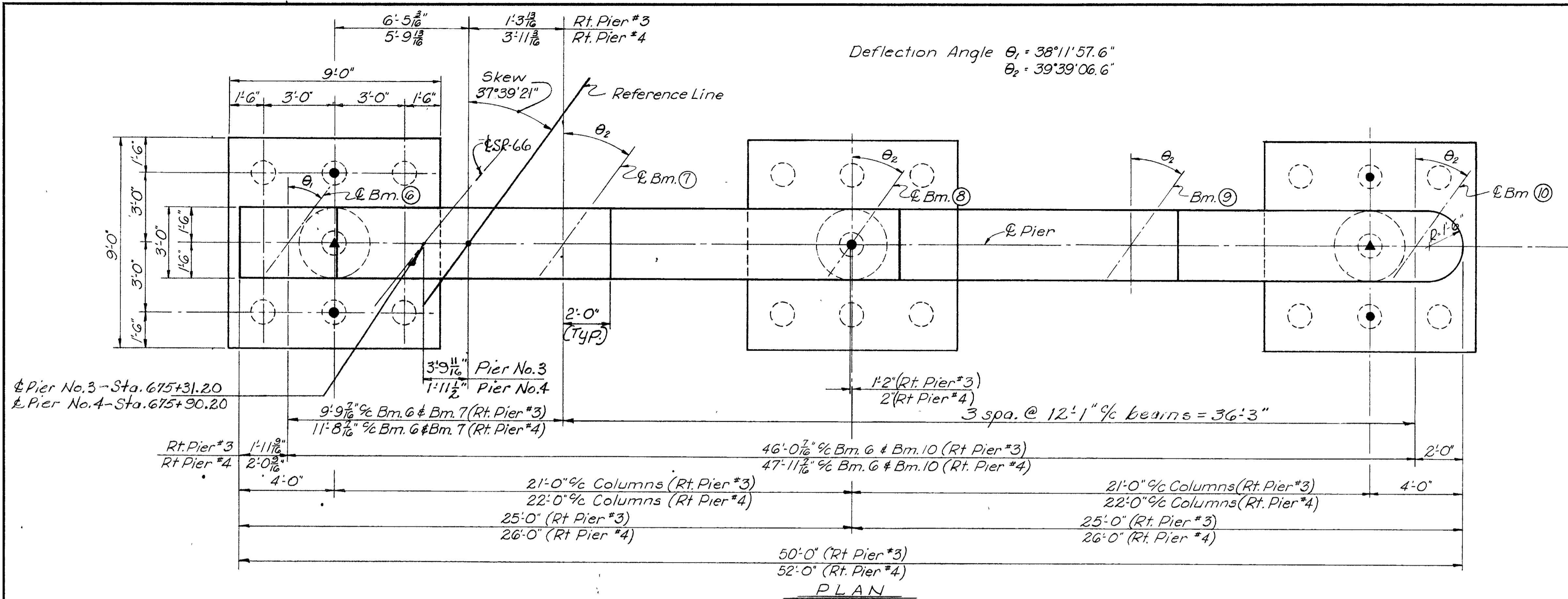


STICKLEN - BELSHEIM & ASSOCIATES ENGINEERS WORTHINGTON OHIO					
PIER NO. 1 (Rt.)					
BRIDGE NO. AUG-33-0452 UNDER S.R. 66					
AUGLAIZE COUNTY			U.S.R. 33 STA. 240+679.3		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
GSE	DCW		TRO	BGM	12/21/69



AUGLAIZE COUNTY  
AUG-29-1.04  
AUG-33-2.71

Deflection Angle  $\theta_1 = 38^\circ 11' 57.6''$   
 $\theta_2 = 39^\circ 39' 06.6''$



LOCATION	Elev. "A"	Elev. "B"	Elev. "C"	Elev. "D"	Elev. "E"	Elev. "F"	Dim. "A"	Dim. "B"	Dim. "C"
Rt. Pier #3	890.56	890.22	889.80	889.37	888.94	868.00	14'-8 1/2"	14'-0"	13'-3 3/4"
Rt. Pier #4	890.40	889.98	889.53	889.09	888.64	868.00	14'-6 3/8"	13'-9 3/16"	13'-0 1/4"

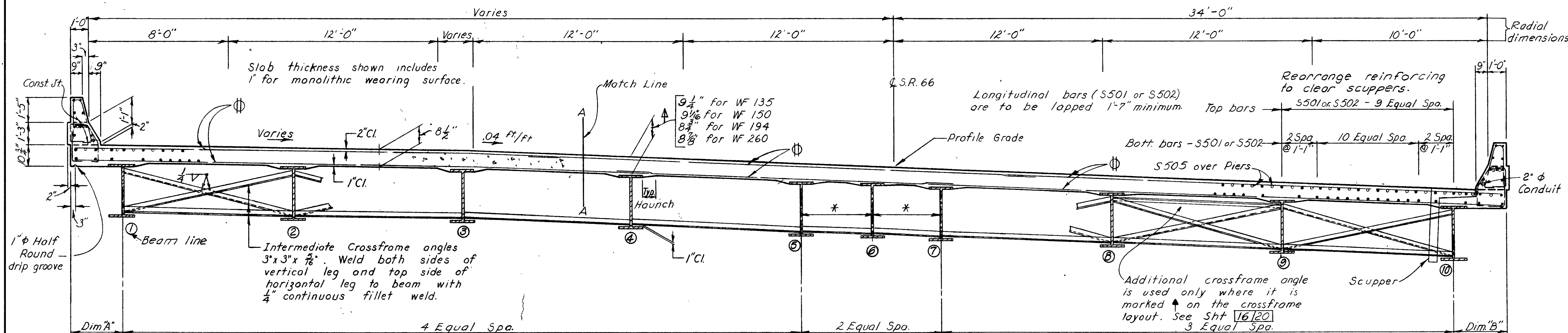
STICKLEN - BELSHEIM & ASSOCIATES  
ENGINEERS  
WORthington OHIO

**PIER No. 3 (Rt.)  
& PIER No. 4 (Rt.)**  
BRIDGE No. AUG-33-0452  
UNDER S.R. 66

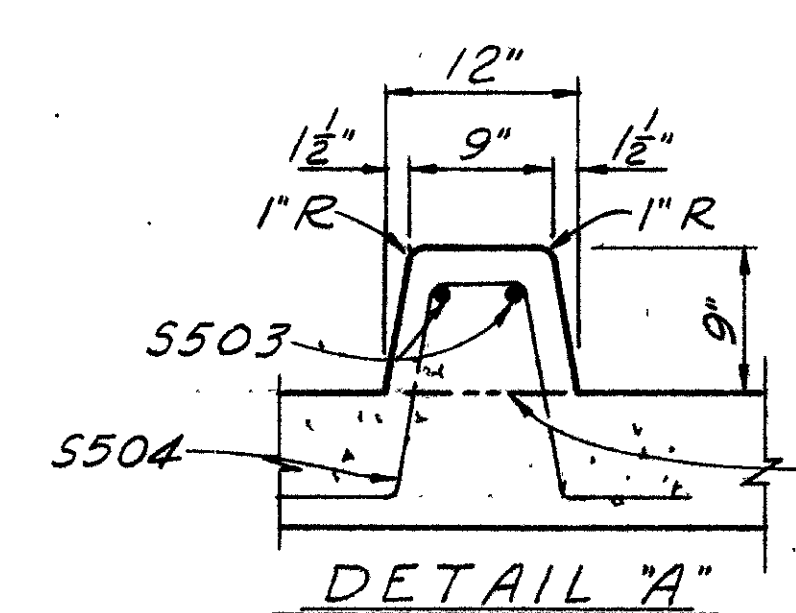
AUGLAIZE COUNTY USR. 33 STA. 240 + 67.93

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G5B	DMK	DMK	TRO	BBW	10/15/63	

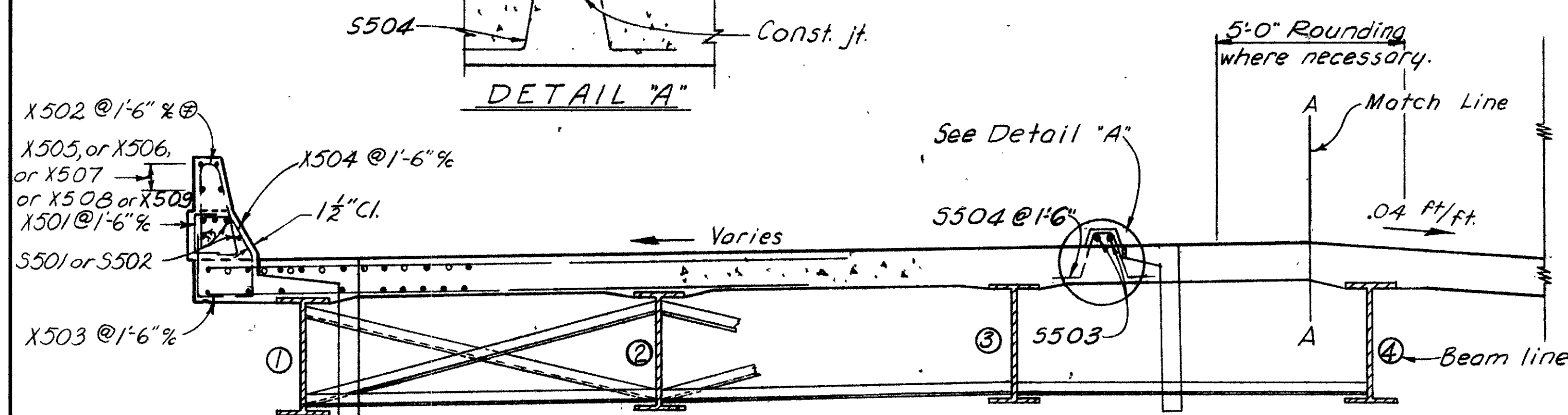
AUGLAIZE COUNTY  
AUG-29-1.04  
AUG-33-2.71



**TRANSVERSE SECTION**  
(Looking Forward)



⊕ For reinforcement details see Sht. 13/20 & 14/20  
\* For reinforcement details between beams see Sht. 13/20 & 14/20



LOCATION	North Curb		South Curb	
	Station	Elevation	Station	Elevation
⊕ R. Abut. Brg.	672+69.98	896.52	673+24.56	894.38
1/4 Pt.	+84.18	896.65	+3944	894.48
1/2 Pt.	+98.40	896.75	+5437	894.53
Splice	673+10.92	896.80	+6750	894.56
⊕ Brg. Pier No. 1	+26.96	896.88	+8434	894.59
1/4 Pt.	+47.49	897.02	674+05.92	894.65
1/2 Pt.	+68.10	897.10	+2758	894.68
Splice	+93.26	897.12	+5405	894.61
⊕ Brg. Pier No. 2	674+09.53	897.10	+71.19	894.55
1/4 Pt.	+30.02	897.10	+92.77	894.52
1/2 Pt.	+50.57	897.04	675+44.44	894.47
Splice	+75.40	896.84	+4064	894.28
⊕ Brg. Pier No. 3	+91.93	896.67	+5809	894.13
Splice	675+08.49	896.52	+7560	894.00
1/2 Pt.	+20.11	896.41	+8792	893.91
3/4 Pt.	+34.20	896.23	676+02.91	893.77
⊕ Brg. Pier No. 4	+48.28	896.05	+17.95	893.61
Splice	+58.02	895.92	+28.38	893.51
1/2 Pt.	+67.64	895.79	+38.71	893.41
3/4 Pt.	+77.32	895.64	+49.13	893.28
⊕ Fwd. Abut. Brg.	675+87.00	895.47	676+59.57	893.14

FOR DETAILS OF	SEE STD. DRNG.
End Dam	
End Crossframes	SD-1-69 Sheet No. 1
Welded butt joint in superstructure end dam	⊕
Scupper Details	SD-1-69 Sheet No. 3
Moment Plates	
Curb Plate Details	SD-1-69 Sheet No. 2
Bolted Beam Splice Details	SD-1-69 Sheet No. 4
Rocker and Bolster Bearings	RB-1-55

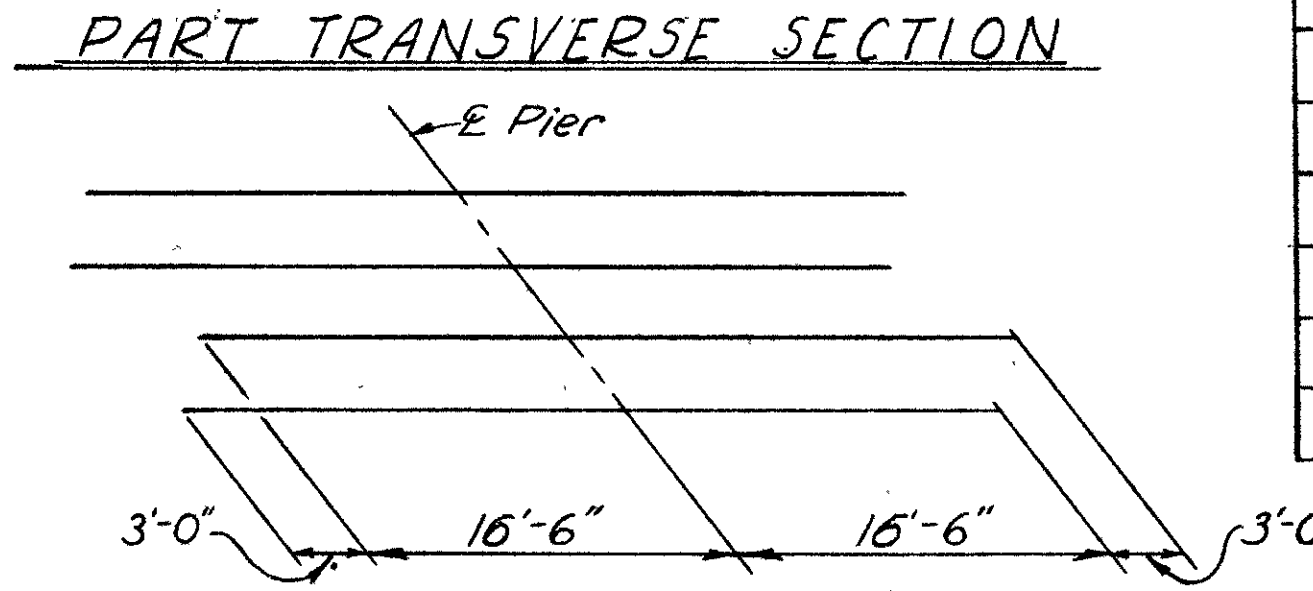
⊕ **DECK SLAB DEPTH:**  
The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

**HAUNCH:**  
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.

⊕ Space to clear deflection joints by 2"

Dim. "A" & Dim. "B" measured along ⊕ Bearings

LOCATION	⊕ Brg. R. Abut.	1/4 Pt. Span No. 1	1/2 Pt. Span No. 1	Splice Span No. 1	⊕ Brg. Pier No. 1	1/4 Pt. Span No. 2	1/2 Pt. Span No. 2
Dim. "A"	3'-7 1/8"	3'-7 7/8"	3'-7 15/16"	3'-7 3/8"	3'-9 2/8"	3'-10 2/8"	3'-10 5/8"
Dim. "B"	3'-8 1/4"	3'-7 9/16"	3'-7 3/4"	3'-8 5/8"	3'-6 7/16"	3'-5 3/8"	3'-6"
LOCATION	Splice Span No. 2	⊕ Brg. Pier No. 2	1/4 Pt. Span No. 3	1/2 Pt. Span No. 3	Splice Span No. 3	⊕ Brg. Pier No. 3	Splice Span No. 4
Dim. "A"	3'-8"	3'-10 1/4"	3'-11 1/16"	3'-11 1/4"	3'-8 1/16"	3'-9 1/2"	3'-9 3/8"
Dim. "B"	3'-9 3/8"	3'-7 3/8"	3'-6 1/8"	3'-6 13/16"	3'-10 3/16"	3'-6 3/4"	3'-4 5/8"
LOCATION	1/2 Pt. Span No. 4	3/4 Pt. Span No. 4	⊕ Brg. Pier No. 4	Splice Span No. 5	1/4 Pt. Span No. 5	1/2 Pt. Span No. 5	⊕ Brg. F. Abut.
Dim. "A"	3'-9 3/8"	3'-9 1/4"	3'-9 3/8"	3'-9 1/2"	3'-9"	3'-8 1/16"	3'-8 15/16"
Dim. "B"	3'-3 3/8"	3'-3 1/2"	3'-4 1/16"	3'-5 9/16"	3'-7 1/16"	3'-9"	3'-11 3/8"



**DIAGRAM SHOWING STAGGER OF S505 BARS OVER PIERS**

NOTE: The elevations shown at face of curbs are those which are required before the concrete deck is placed. Proper allowance has been made for the dead load deflections caused by the weight of the concrete.

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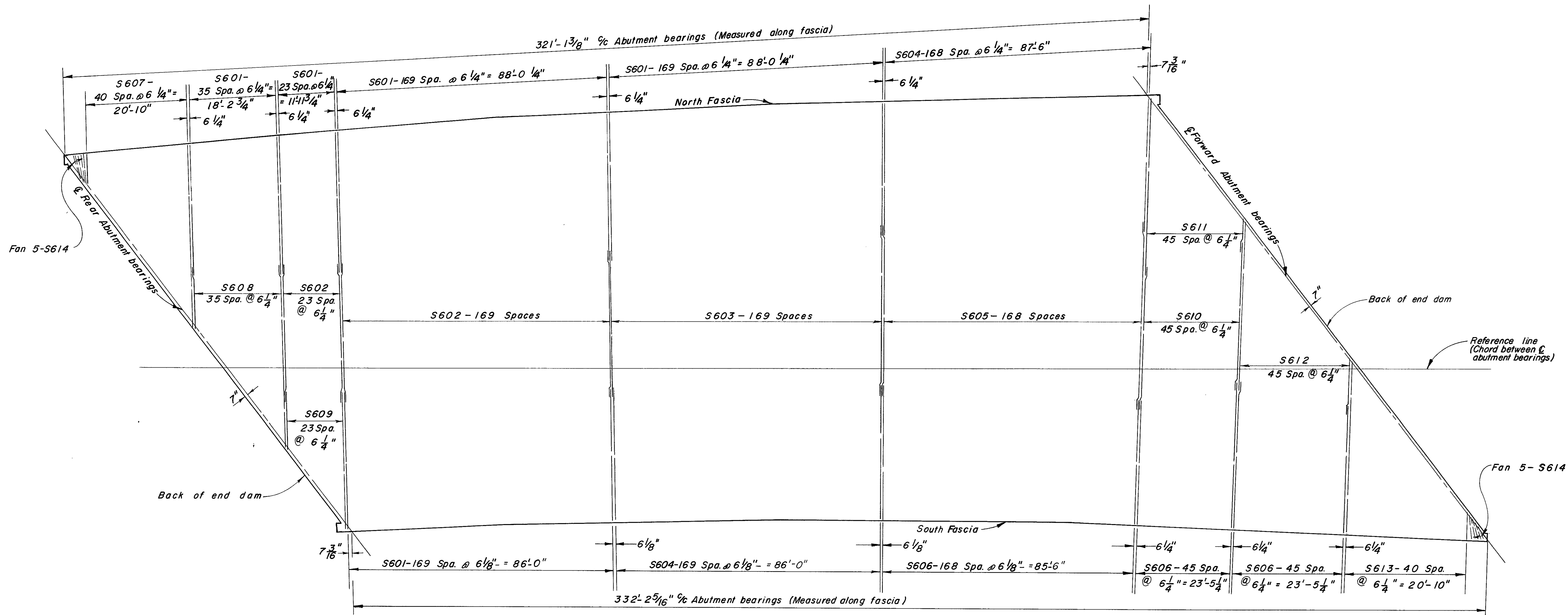
WORTHINGTON OHIO

**SUPERSTRUCTURE DETAILS**  
BRIDGE No. AUG-33-0452  
UNDER  
SR. 66

AUGLAIZE COUNTY U.S.R. 33 STA. 240+67.93

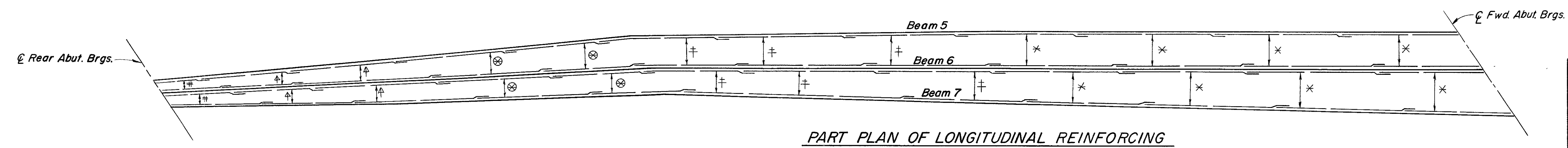
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SP	R.D.V.		TRO	10/15/69		

AUGLAIZE COUNTY  
AUG - 29 - 1.04  
AUG - 33 - 2.71



- \* - S501 - 9 equal spaces between Beams.
- † - S501 - 7 equal spaces between Beams.
- ⊗ - S501 - 5 equal spaces between Beams.
- ‡ - S501 - 4 equal spaces between Beams.
- # - S502 - 3 equal spaces between Beams.

TRANSVERSE REINFORCING LAYOUT  
TOP BARS SHOWN

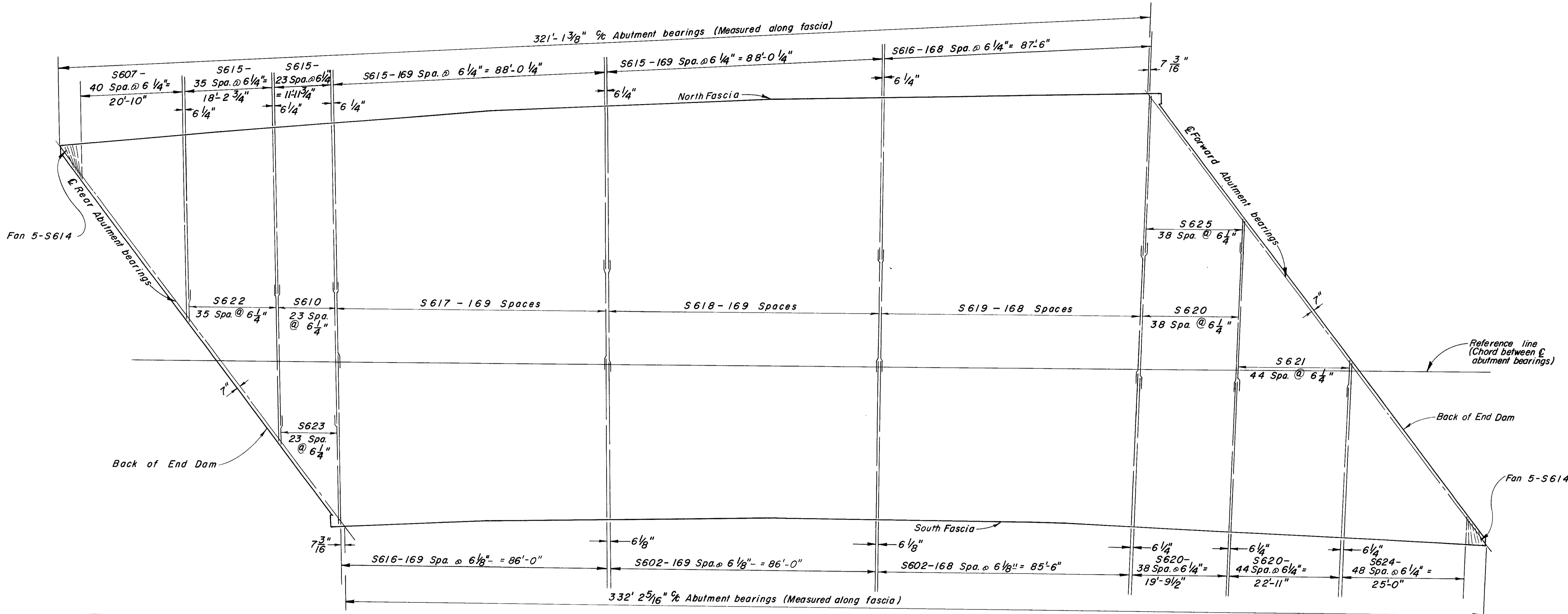


PART PLAN OF LONGITUDINAL REINFORCING

STICKLEN - BELSHEIM & ASSOCIATES ENGINEERS WORTHINGTON OHIO						
SUPERSTRUCTURE DETAILS						
BRIDGE N <sup>o</sup> AUG - 33 - 0452 UNDER SR. 66						
AUGLAIZE COUNTY			USR.33 STA. 240+67.93			
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SP	G.T.W	G.T.W.	TRO	D.G.S.T	11/5/69	

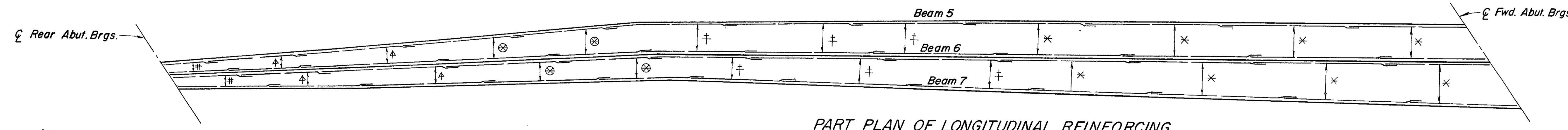
microfilmed  
JUN 17 1969

AUGLAIZE COUNTY  
AUG-29-1.04  
AUG-33-2.71



- \* - 13-S501
  - ± - 11-S501
  - ⊗ - 9-S501
  - ↑ - 8-S501
  - # - 6-S502
- Place 2/3 of this reinforcement in middle half and remaining in outer quarters.

TRANSVERSE REINFORCING LAYOUT  
BOTTOM BARS SHOWN



PART PLAN OF LONGITUDINAL REINFORCING

14/20

STICKLEN - BELSHEIM & ASSOCIATES  
ENGINEERS  
WORTHINGTON OHIO

**SUPERSTRUCTURE DETAILS**  
BRIDGE No AUG-33-0452  
UNDER  
SR. 66

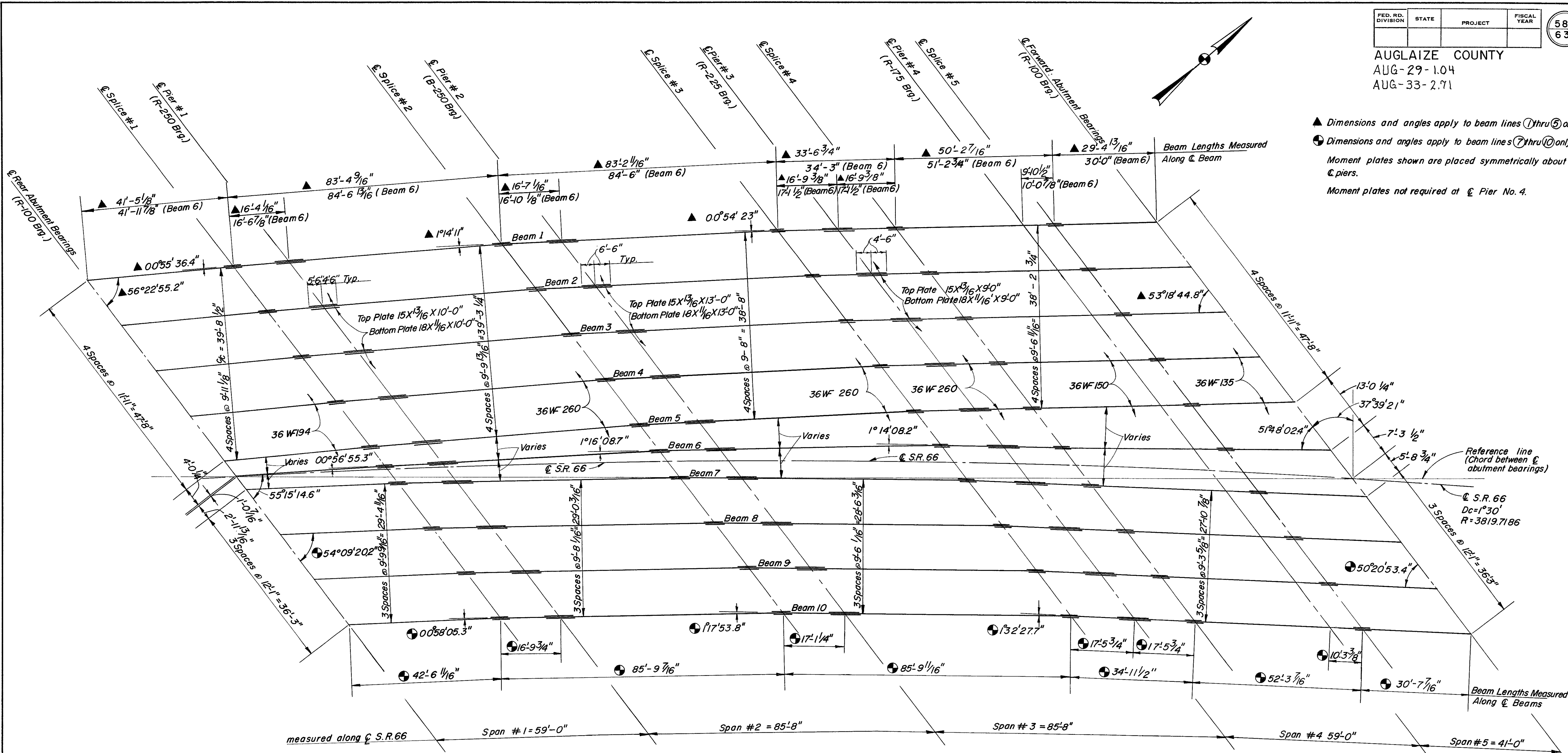
AUGLAIZE COUNTY      USR.33 STA. 240+67.93

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SP	A.T.W	GTW	TRO	DGH	11/17/69	

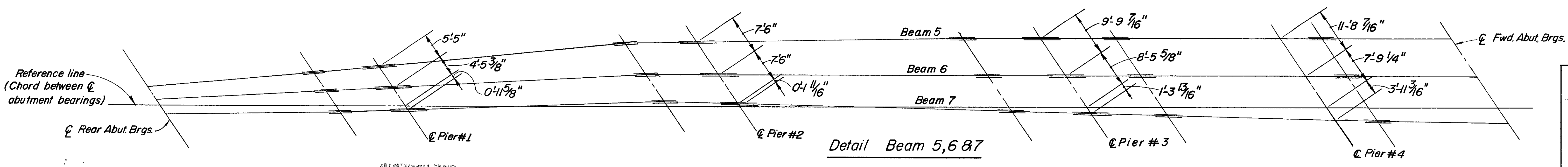
ENCLOSURE  
17 1965

AUGLAIZE COUNTY  
 AUG-29-1.04  
 AUG-33-2.71

- ▲ Dimensions and angles apply to beam lines ① thru ⑤ only
- Dimensions and angles apply to beam lines ⑦ thru ⑩ only
- Moment plates shown are placed symmetrically about C. piers.
- Moment plates not required at C. Pier No. 4.



STEEL FRAMING PLAN



Detail Beam 5, 6 & 7

MICROFILMED  
 JAN 17 1985

15/20

STICKLEN - BELSHEIM & ASSOCIATES  
 ENGINEERS  
 WORTHINGTON OHIO

**SUPERSTRUCTURE DETAILS**  
 BRIDGE No AUG-33-0452  
 UNDER  
 SR. 66

AUGLAIZE COUNTY      USR 33 STA. 240+67.93

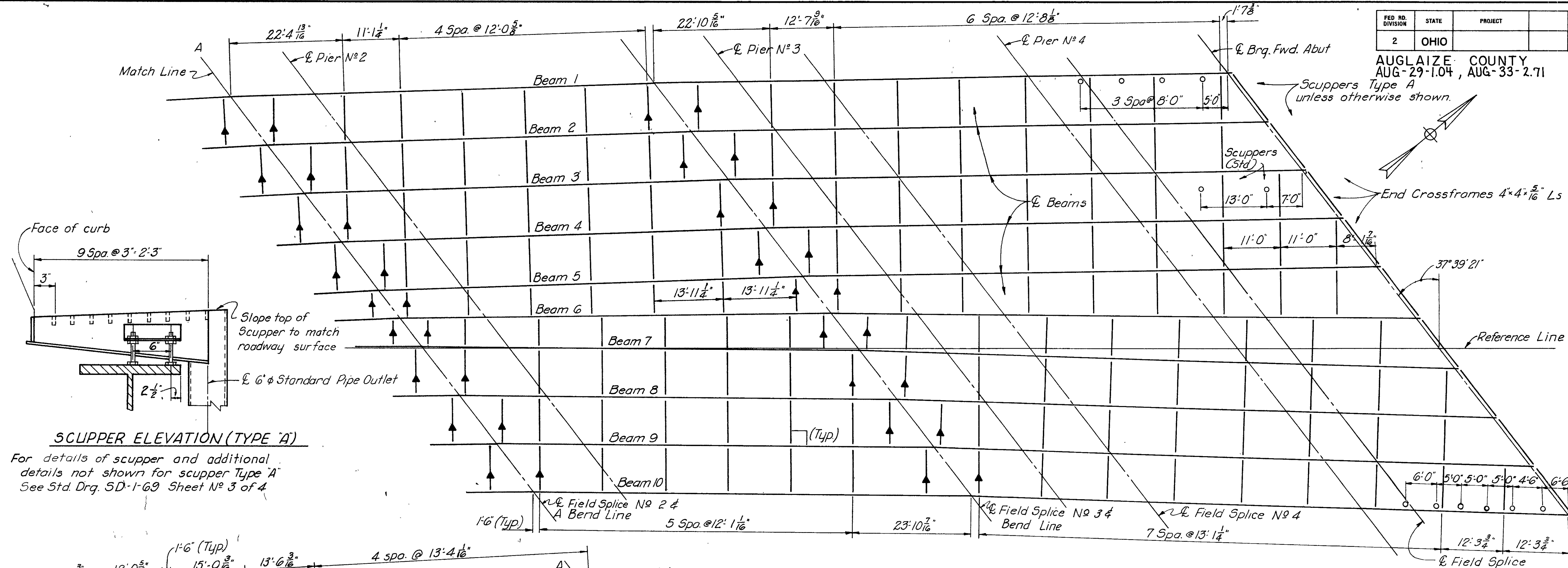
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SP K.C.C.	G.T.W.	G.T.W.	TRO	D.L.S.	11/5/69	



FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

582  
635

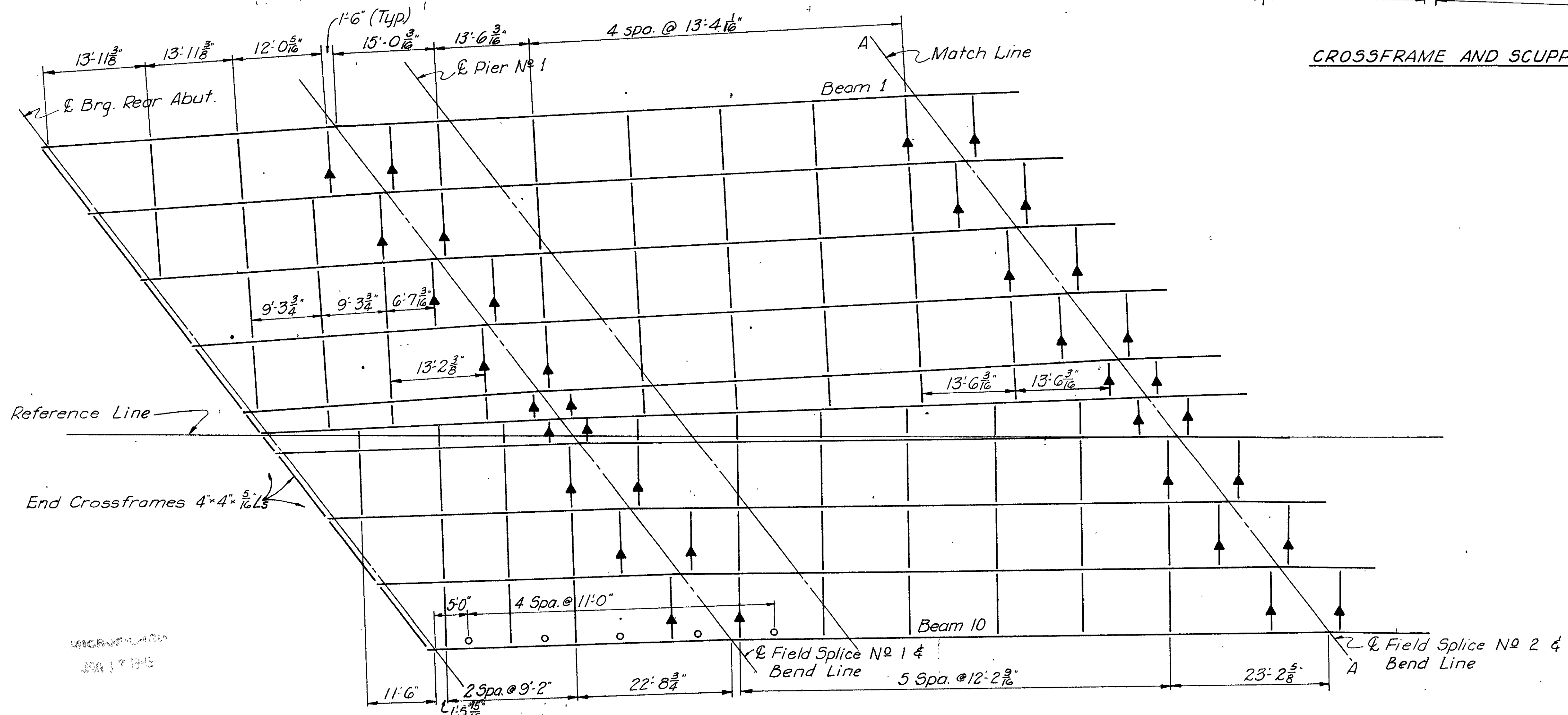
AUGLAIZE COUNTY  
AUG-29-1.04, AUG-33-2.71



**SCUPPER ELEVATION (TYPE "A")**

For details of scupper and additional details not shown for scupper Type "A" See Std. Drg. SD-1-69 Sheet No 3 of 4

**CROSSFRAME AND SCUPPER LAYOUT**



**NOTES**

All intermediate crossframes are 3/4 3x3 5/16 except those marked ▲, which are 4x3 3x5/16. See transverse section on Sht 12/20 for further details.

Crossframes may be shifted to avoid interference with beam splice.

Intermediate crossframes between Beam Lines 1 to 6 shall be laid perpendicular to Beam Line 1 and those crossframes between Beam Lines 6 to 10 shall be laid perpendicular to Beam Line 10

16/20

STICKLEN - BELSHEIM & ASSOCIATES ENGINEERS WORTHINGTON OHIO						
<b>SUPERSTRUCTURE DETAILS</b>						
BRIDGE No AUG-33-0452 UNDER S.R. 66						
AUGLAIZE COUNTY				U.S.R. 33 STA. 240+6793		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SP	SP	JMK	TRO	DGH	12/15/69	

DEFLECTION AND CAMBER TABLE (Dimensions shown in inches)

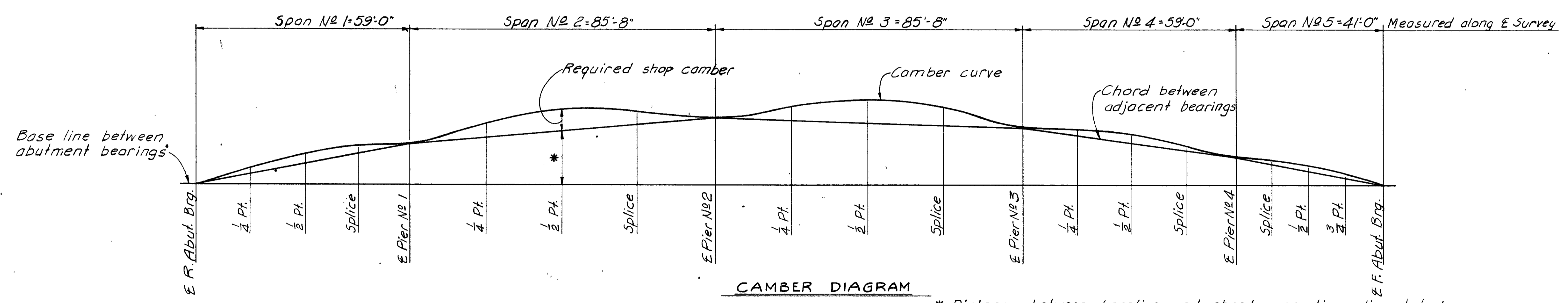
Location	Span No 1			Span No 2			Span No 3			Span No 4			Span No 5			Beam										
	1/4 Pt.	1/2 Pt.	Splice	1/4 Pt.	1/2 Pt.	Splice	1/4 Pt.	1/2 Pt.	Splice	Splice	1/2 Pt.	3/4 Pt.	1/4 Pt.	1/2 Pt.	Splice		Splice	1/2 Pt.	3/4 Pt.	Splice	1/2 Pt.	3/4 Pt.				
Deflection due to weight of steel	1/16	1/16	-	1/16	1/8	1/16	1/16	1/8	1/16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Beam 1 thru Beam 5		
Deflection due to remaining D. Load	5/16	5/16	1/8	7/16	3/4	1/4	7/16	7/8	7/16	-	1/8	1/16	1/16	1/16	1/8	-	1/8	1/8	1/16	5/16	1/8	-	-	Beam 6 thru 10		
Deflection due to remaining D. Load	3/16	3/16	1/8	3/8	9/16	3/16	7/16	3/4	3/8	-	1/8	1/16	1/16	1/16	1/8	-	1/8	1/16	1/16	3/16	1/8	-	-	Beam 6		
Adjustment req. for Vert. curve & Horiz. curve	1/4	5/16	1/8	9/16	11/16	9/16	3/4	7/8	7/16	1/4	3/8	1/4	-	3/16	1/4	-	1/4	3/16	1/16	1/8	1/16	1/16	-	Beams 8, 9 & 10		
Required shop camber	5/8	11/16	1/4	11/16	11/16	7/8	1/4	1/8	15/16	1/4	1/2	5/16	1/16	1/8	3/8	1/4	3/8	1/16	1/8	5/16	1/8	5/16	3/16	Beam 6		
Adjustment req. for Vert. curve & Horiz. curve	3/16	1/4	1/4	9/16	3/4	1/2	7/16	9/16	3/8	1/16	1/4	3/16	-3/16	-1/8	1/16	-	1/4	3/16	1/16	1/8	1/16	1/8	-	Beam 7		
Required shop camber	10/16	5/8	5/8	11/16	15/8	11/16	15/16	11/8	7/8	1/16	3/8	1/4	-1/8	1/16	3/16	-	7/16	1/2	13/16	-5/16	3/8	1/4	5/16	1/4	Beam 7	
Adjustment req. for Vert. curve & Horiz. curve	-	5/16	1/4	7/16	5/8	7/16	5/16	5/16	-	-5/16	-1/16	5/16	-3/16	-1/16	-	-	-1/16	-1/16	1/8	1/16	7/16	-1/4	-	Beam 8		
Required shop camber	3/8	11/16	5/8	15/16	1/2	3/4	13/16	11/8	1/2	-5/16	1/16	3/8	-1/8	1/8	1/8	-	5/8	1	13/16	7/8	-5/16	-1/16	1/16	1/8	-1/8	Beam 8
Adjustment req. for Vert. curve & Horiz. curve	3/16	5/16	1/4	1/2	9/16	5/16	1/4	5/8	7/16	3/16	1/4	3/16	-7/16	1/8	1/8	-	1/16	11/16	3/8	-5/16	-1/16	-1/2	1/16	-1/16	-5/16	Beam 9
Required shop camber	9/16	11/16	3/8	1	11/16	5/8	3/4	15/16	15/16	3/16	3/8	1/4	-3/8	5/16	1/4	-	11/16	7/8	-5/16	-1/16	-1/16	1/8	-1	-3/16	Beam 9	
Adjustment req. for Vert. curve & Horiz. curve	3/16	5/16	1/4	9/16	7/8	5/16	3/8	9/16	5/8	7/16	1/4	3/16	1/16	1/2	1/16	-	5/8	5/8	5/16	-1/16	-1/16	1/8	-1/4	-1/8	Beam 10	
Required shop camber	7/16	9/16	5/8	1	11/16	9/16	7/8	17/16	13/16	7/16	3/8	1/4	1/8	11/16	3/16	-	5/16	5/8	5/16	-1/16	-1/16	3/16	-1/16	-1/4	Beam 10	

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

583  
635

AUGLAIZE COUNTY

AUG-29-1.04  
AUG-33-2.71



LOCATION	LAYOUT TABLE																							
	Span No 1					Span No 2					Span No 3					Span No 4					Span No 5			
	E Rear Abut. brg.	1/4 Pt.	1/2 Pt.	Splice	E Pier No 1	1/4 Pt.	1/2 Pt.	Splice	E Pier No 2	1/4 Pt.	1/2 Pt.	Splice	E Pier No 3	Splice	1/2 Pt.	3/4 Pt.	E Pier No 4	Splice	1/2 Pt.	3/4 Pt.	E Fwd. Abut. brg.			
* Offset dimensions Beam 1	0	.136	.291	.405	.545	.667	.788	.935	1.032	.995	.958	.911	.882	.760	.668	.561	.454	.344	.227	.113	0			
* Offset dimensions Beam 2	0	.121	.241	.312	.479	.576	.679	.789	.916	.831	.796	.753	.726	.617	.535	.439	.344	.255	.159	.067	0			
* Offset dimensions Beam 3	0	.107	.214	.305	.429	.506	.585	.680	.743	.726	.708	.686	.673	.568	.490	.399	.308	.233	.154	.077	0			
* Offset dimensions Beam 4	0	.094	.188	.267	.376	.438	.500	.576	.625	.600	.573	.541	.521	.445	.389	.324	.276	.193	.129	.071	0			
* Offset dimensions Beam 5	0	.090	.180	.256	.360	.427	.494	.574	.628	.602	.576	.544	.524	.448	.391	.325	.259	.196	.129	.065	0			
* Offset dimensions Beam 6	0	.099	.197	.282	.395	.462	.529	.609	.662	.636	.610	.578	.557	.510	.416	.345	.274	.208	.137	.069	0			
* Offset dimensions Beam 7	0	.103	.207	.295	.414	.484	.555	.641	.697	.671	.645	.613	.593	.547	.442	.366	.290	.220	.145	.073	0			
* Offset dimensions Beam 8	0	.104	.208	.297	.415	.487	.558	.644	.700	.674	.648	.616	.595	.551	.443	.367	.291	.221	.146	.073	0			
* Offset dimensions Beam 9	0	.104	.208	.298	.417	.488	.560	.649	.703	.677	.650	.620	.598	.555	.445	.369	.293	.222	.146	.073	0			
* Offset dimensions Beam 10	0	.105	.209	.299	.419	.491	.563	.638	.706	.680	.653	.621	.600	.513	.447	.370	.294	.223	.147	.073	0			

17/20

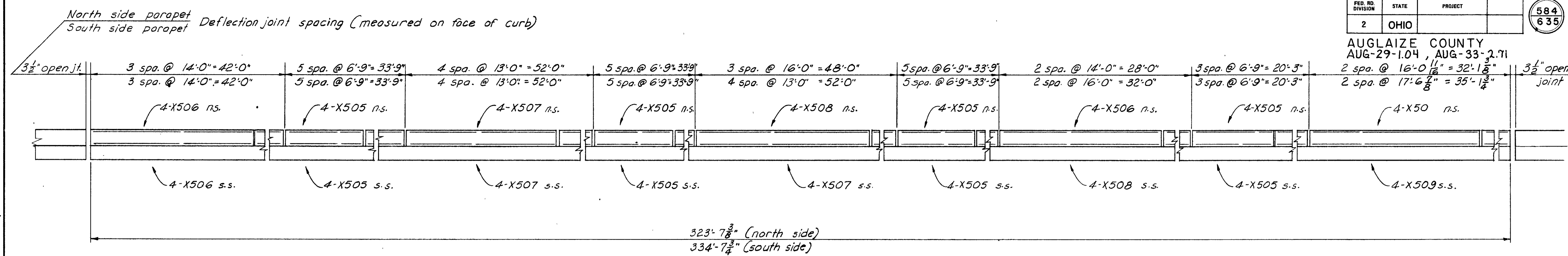
STICKLEN - BELSHEIM & ASSOCIATES  
ENGINEERS  
WORTHINGTON OHIO

**SUPERSTRUCTURE DETAILS**  
BRIDGE No AUG-33-0452  
UNDER  
S.R. 66

AUGLAIZE COUNTY      USR.33 STA. 240+6793

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SP	SP		TRO	BGX	10/15/19	

AUGLAIZE COUNTY  
AUG-29-1.04, AUG-33-2.71

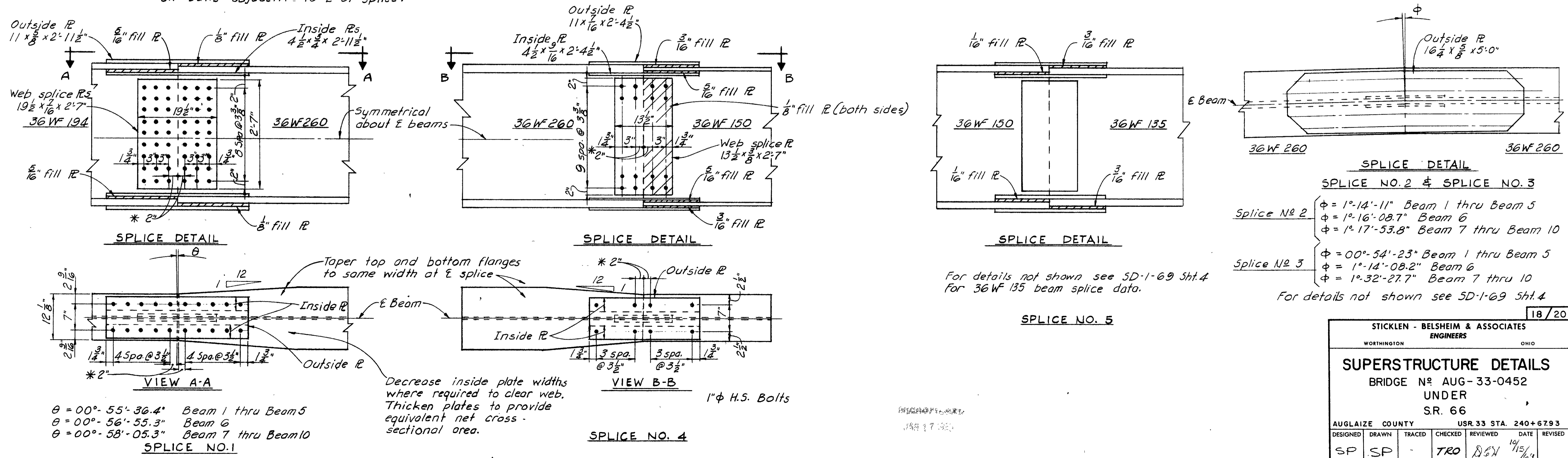


**RAILING ELEVATION**

**LEGEND:**  
n.s.: North side parapet  
s.s.: South side parapet

For parapet reinforcement see sht. 12/20

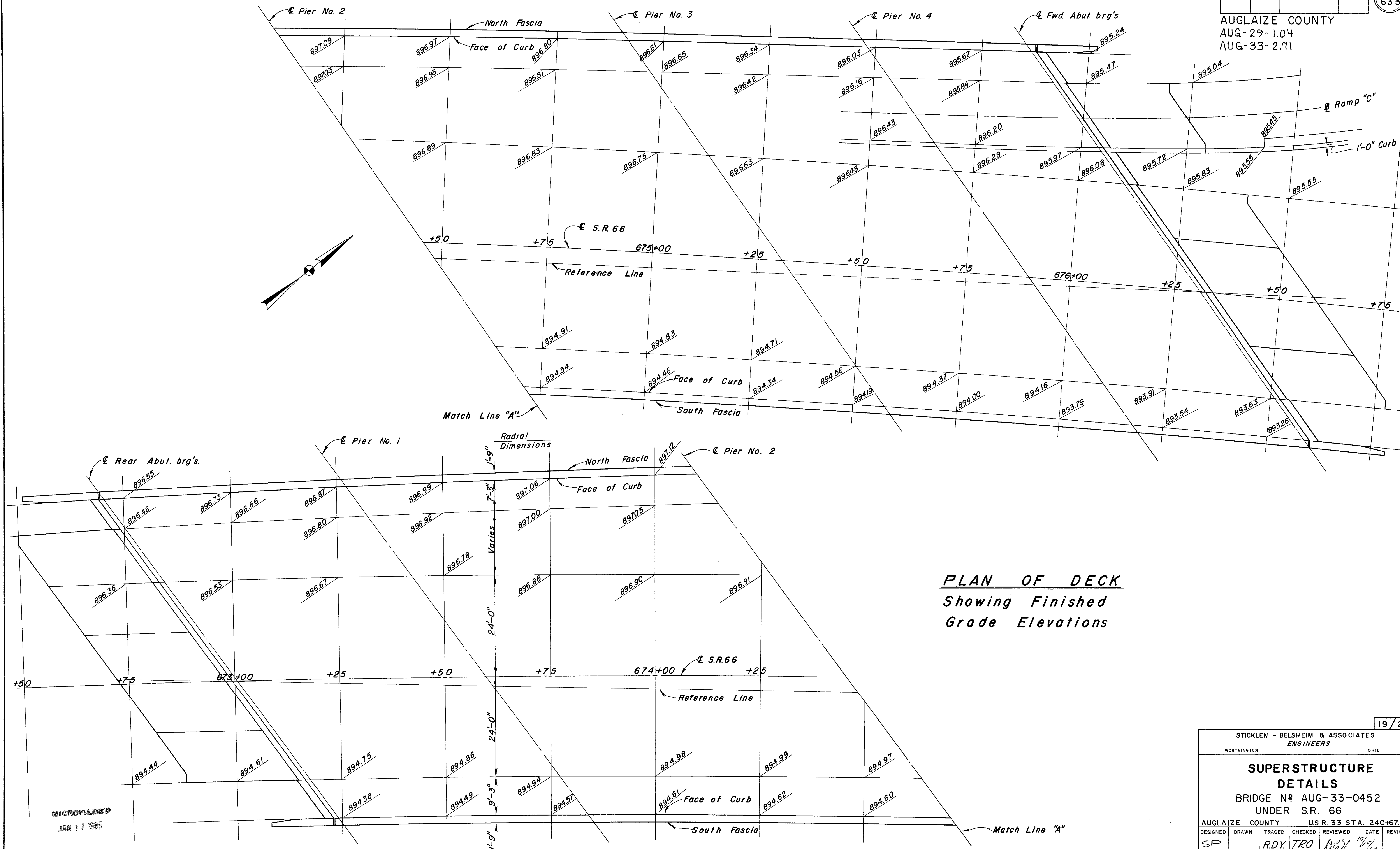
\* 2" minimum edge distance required for all bolts adjacent to E of splice.



STICKLEN - BELSHEIM & ASSOCIATES ENGINEERS WORTHINGTON OHIO						
<b>SUPERSTRUCTURE DETAILS</b>						
BRIDGE N° AUG-33-0452 UNDER SR. 66						
AUGLAIZE COUNTY USR. 33 STA. 240+67.93						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SP	SP		TRO	DGW	10/15/69	

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
			585 635

AUGLAIZE COUNTY  
AUG-29-1.04  
AUG-33-2.71



**PLAN OF DECK**  
Showing Finished  
Grade Elevations

MICROFILMED  
JAN 17 1985

19/20					
STICKLEN - BELSHEIM & ASSOCIATES ENGINEERS WORTHINGTON OHIO					
<b>SUPERSTRUCTURE DETAILS</b>					
BRIDGE N <sup>o</sup> AUG-33-0452 UNDER S.R. 66					
AUGLAIZE COUNTY			U.S.R. 33 STA. 240+67.93		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
SP		R.D.Y.	TRO	DGH	10/25/69
					REVISED

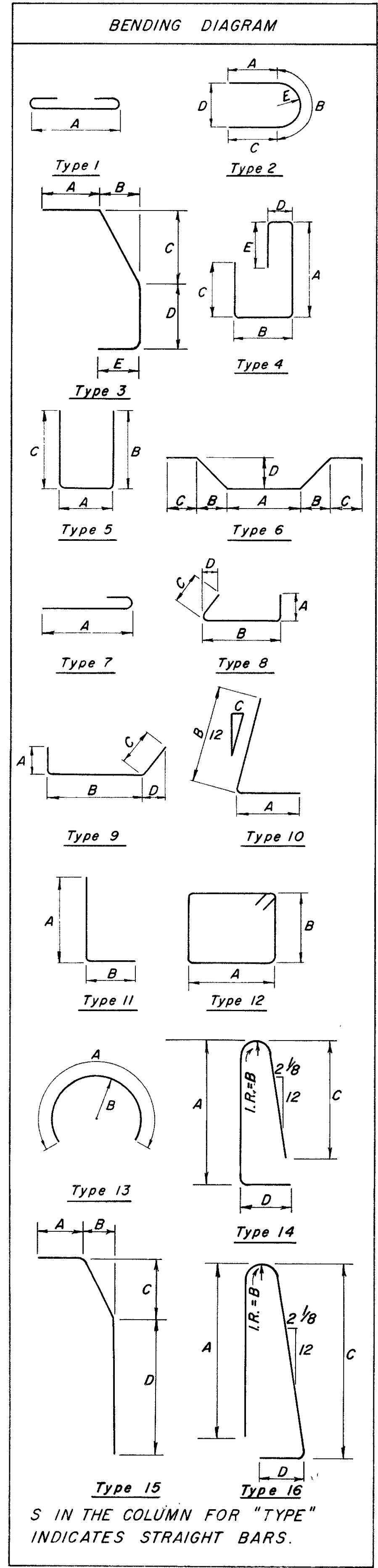
# REINFORCING STEEL LIST

FED. RD. DIVISION 2	STATE OHIO	PROJECT AUGLAIZE COUNTY AUG-29-104, AUG-33-2.71
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586  
635

AUGLAIZE COUNTY  
AUG-29-104, AUG-33-2.71

BAR SIZE is indicated in the bar mark.  
The first digit where three digits are used and the first two digits where four are used, indicate the bar size number. For example, A700 is a number 7 size bar and A1014 is a number 10 size



S IN THE COLUMN FOR "TYPE" INDICATES STRAIGHT BARS.

ABUTMENTS						SUPERSTRUCTURE						SUPERSTRUCTURE (Cont.)					
MARK	NO.	LENGTH	WEIGHT	TYPE		MARK	NO.	LENGTH	WEIGHT	TYPE		MARK	NO.	LENGTH	WEIGHT	TYPE	
A801	49	30'-0"	3,925	S		S601	570	28'-6"	24,400	S		S503	4	33'-9"	141	S	
A802	7	18'-4"	343	S		S602	533	32'-0"	25,618	S		S504	45	3'-4"	156	6	0'-5" 0'-1 1/2" 0'-7 1/2" 1'-1"
A803	7	9'-0"	168	S		S603	170	35'-0"	8,937	S		S505	350	36'-0"	13,142	S	
A804	12	13'-8"	438	S		S604	339	27'-9"	14,130	S							
A805	12	11'-4"	363	S		S605	169	39'-6"	10,027	S							
A806	13	6'-8"	231	1	4'-6"	S606	261	27'-0"	10,585	S							
A601	159	14'-1"	3,363	5	5'-4" 2'-7" 6'-6"							X501	441	2'-0"	920	5	1'-0" 0'-7 1/2" 0'-7 1/2"
A602	158	16'-2"	3,837	4	6'-6" 1'-5" 5'-0" 0'-11" 3'-0"							X502	441	5'-4"	2,453	16	2'-2" 0'-2 1/4" 2'-5" 0'-7 1/2"
A603	51	14'-1"	1,079	5	1'-5" 6'-6" 6'-6"							X503	441	2'-0"	920	11	1'-6" 0'-7 1/2"
A604	28	11'-4"	472	5	1'-2" 5'-3" 5'-3"							X504	441	3'-1"	1,418	3	0'-9" 0'-9" 0'-11 1/2" 0'-9" 0'-7 1/2"
A605	16	9'-5"	226	S								X505	144	6'-5"	964	S	
A606	16	7'-2"	172	S								X506	32	13'-8"	456	S	
A607	12	7'-3"	131	S								X507	48	12'-8"	634	S	
A608	12	9'-3"	167	S								X508	28	15'-8"	458	S	
												X509	8	17'-2"	143	S	
A501	159	5'-11"	981	11	5'-5" 0'-7 1/2"												
A502	159	8'-3"	1,368	5	5'-4" 1'-7" 1'-7"												
A503	159	11'-10"	1,962	5	3'-5" 3'-6" 3'-6"												
A504	32	26'-4"	879	S													
A505	1	38'-0"	40	S													
A506	1	13'-0"	14	S													
A507	36	25'-3"	948	S													
A508	1	40'-0"	42	S													
A509	1	10'-0"	10	S													
A510	36	18'-9"	704	S													
A511	1	24'-0"	25	S													
A512	1	32'-2"	34	S													
A513	1	10'-6"	11	S													
A514	18	37'-8"	707	S													
A515	1	6'-10"	7	S													
A516	32	23'-6"	784	S													
A517	1	33'-3"	35	S													
A518	1	13'-6"	14	S													
A519	8	17'-7"	147	S													
A520	4	14'-2"	59	S													
A521	12	11'-6"	144	S													
A522	46	11'-10"	568	12	3'-0" 2'-6"												
A523	8	7'-9"	65	S													
A524	Series of 5	5'-7" 10 9'-7"	158	5	1'-2" 2'-4" 4'-4"	2'-4" 2'-4" Vary by 6" increments	S620	123	31'-0"	5,727	S						
A525	8	14'-4"	120	S													
A526	4	11'-3"	47	S													
A527	12	9'-3"	116	S													
A528	2	3'-7"	7	6	0'-8" 0'-1 1/2" 0'-7 1/2" 1'-1"												
Y701	4	4'-4"	35	S													
Y702	4	4'-9"	39	15	0'-9" 0'-2 1/4" 0'-11 1/2" 3'-2"												
Y703	4	4'-10"	40	15	0'-9" 0'-4" 0'-11 1/2" 3'-2"												
Y704	4	4'-11"	40	15	0'-9" 0'-6" 0'-11 1/2" 3'-2"												
Y705	4	5'-0"	41	15	0'-9" 0'-9" 0'-11 1/2" 3'-2"												
Y601	28	5'-0"	210	15	0'-9" 0'-9" 0'-11 1/2" 3'-2"												
Y501	48	2'-0"	100	5	1'-0" 0'-7 1/2" 0'-7 1/2"												
Y502	40	3'-0"	125	S													
Y503	28	6'-4"	185	14	3'-2" 0'-2 1/4" 2'-5" 0'-7 1/2"												
Y504	16	17'-7"	293	S													
Y505	8	7'-3"	60	S													
Y506	4	11'-11"	50	S													
Y507	48	2'-10"	142	S													
Y508	16	14'-4"	239	S													
Y509	4	8'-8"	36	S													
S501	2335	30'-0"	73,062	S													
S502	195	19'-3"	3,915	S													

**SPIRAL REINFORCING**

MARK	NO.	LENGTH	WEIGHT	SHP.

Spirals - Core Diam. 32" %  
- Pitch 4 1/2" %  
- Other details in accordance with C.R.S.I. standard practice.

P401	6	15'-3"	1,737	Bt.
P402	6	15'-5"	1,755	Bt.
P403	2	14'-8"	558	Bt.
P404	2	14'-2"	540	Bt.
P405	2	13'-8"	522	Bt.
P406	1	14'-6"	276	Bt.
P407	1	14'-0"	267	Bt.
P408	1	13'-9"	263	Bt.
P409	1	13'-3"	254	Bt.
P410	1	13'-0"	249	Bt.
P411	1	14'-9"	281	Bt.

**REPLACEMENT BARS**

R101	4	8'-6"	S
R1001	2	8'-2"	S
R901	1	7'-10"	S
R801	1	7'-6"	S
R701	1	7'-2"	S
R601	10	6'-11"	S
R501	6	6'-7"	S
R401	1	6'-3"	13

20/20

STICKLEN-BELSHAM & ASSOCIATES  
ENGINEERS  
WORthingTON OHIO

**REINFORCING  
STEEL LIST**  
BRIDGE NO. AUG-33-0452  
UNDER S.R. 66

AUGLAIZE COUNTY U.S.R.33 STA. 240+6793

DESIGNED SP	DRAWN RDY.	TRACED TRO	CHECKED TRO	REVIEWED DGT	DATE 10/21/69	REVISED
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