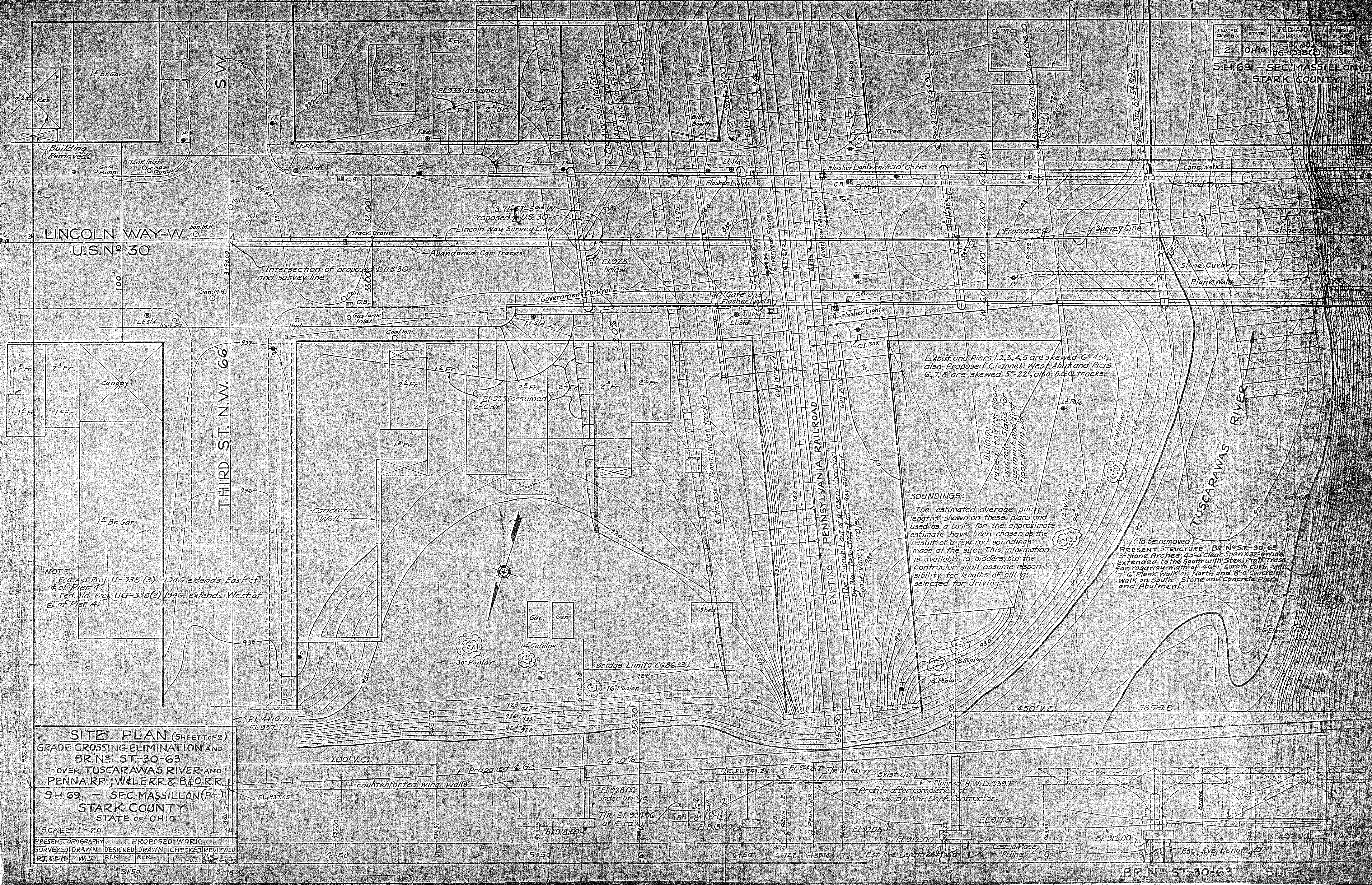


FED. RD. DIV. NO.	STATE	FED. AID PROJECT NO.	DATE
2	OHIO	UG-1338(2)	1946

S.H. 69 - SEC. MASSILLON (P)
STARK COUNTY



NOTE:
Fed. Aid Proj. U-338 (3) 1946 extends East of
2 of Pier 4.
Fed. Aid Proj. UG-338 (2) 1946 extends West of
2 of Pier 4.

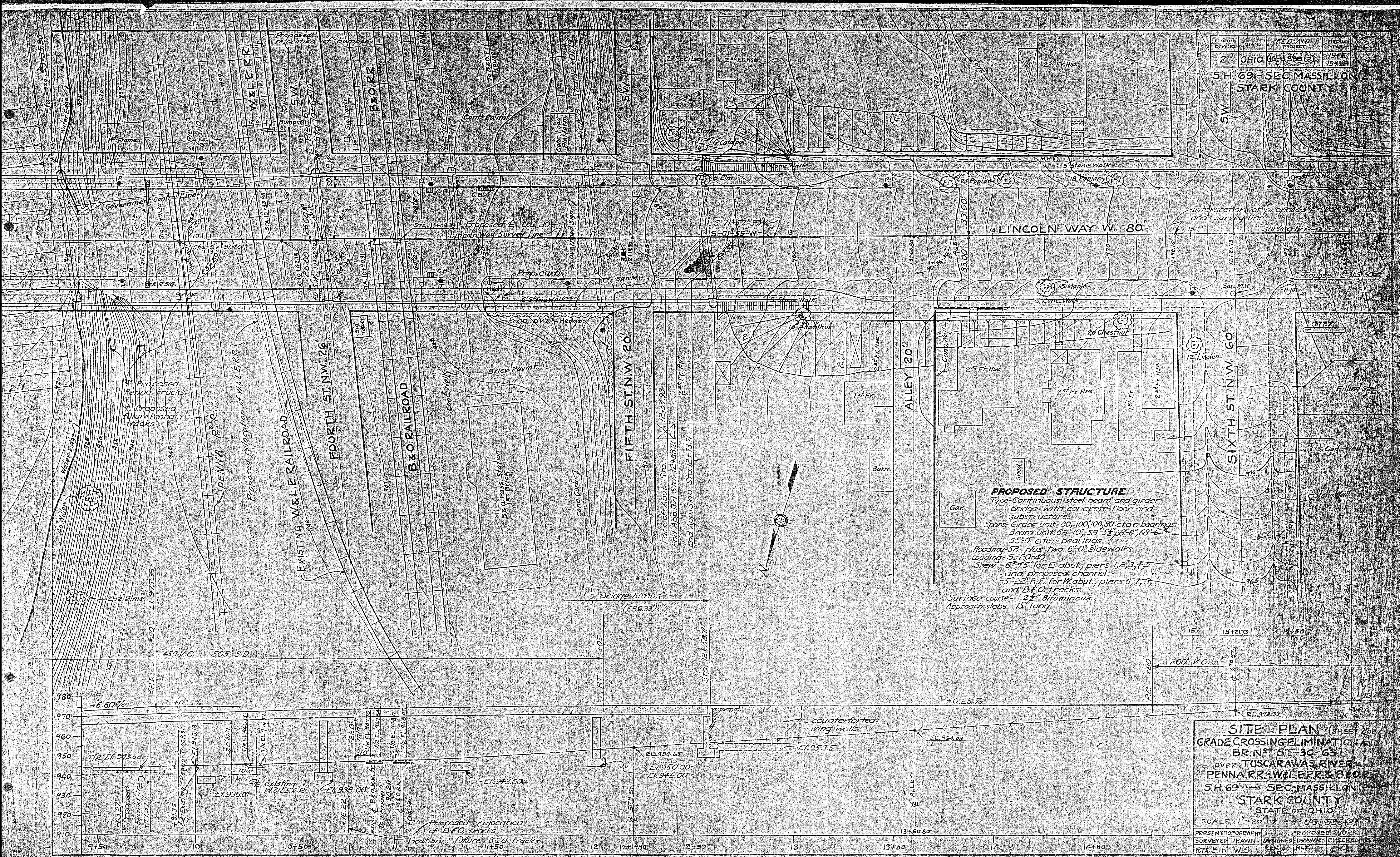
SITE PLAN (SHEET 1 OF 2)
GRADE CROSSING ELIMINATION AND
BR. N° ST-30-63
OVER TUSCARAWAS RIVER AND
PENNA. RR, W4 LERR & B4 O.R.R.
S.H. 69 - SEC. MASSILLON (P)
STARK COUNTY
STATE OF OHIO

PRESENT TOPOGRAPHY	PROPOSED WORK
SURVEYED DRAWN	DESIGNED DRAWN
RT. E.M. W.S.	RLK
3+50	3+78.00

BR. N° ST-30-63 SITE

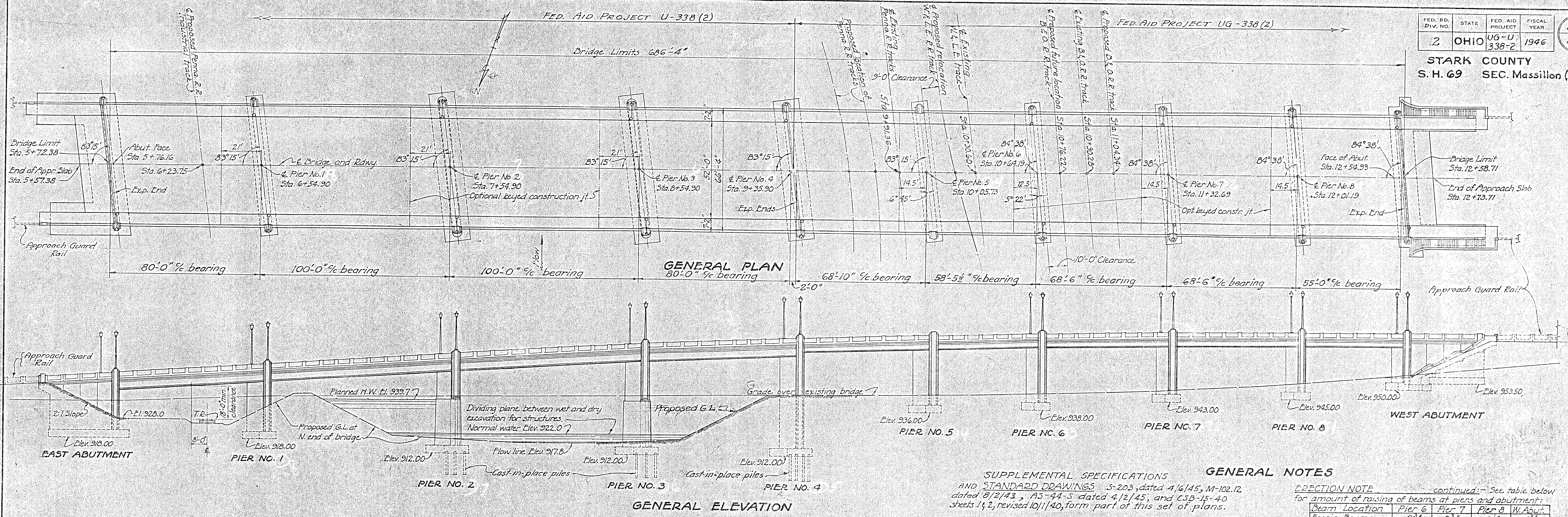
FED. DIVISION	STATE	FED. AID PROJECT NO.	FISCAL YEAR	SHEET NO.
2	OHIO	66-336(2)	1946	23

S.H. 69 - SEC. MASSILLON
STARK COUNTY



PROPOSED STRUCTURE
 Type-Continuous steel beam and girder bridge with concrete floor and substructure.
 Spans- Girder unit- 80'-100'-100'-80' cto c. bearings.
 Beam unit- 68'-10", 58'-5", 68'-6", 68'-6", 55'-0" cto c. bearings.
 floodway- 52' plus two 6'-0" sidewalks
 Loading- 5-20-40
 Slew- 6'-45" for E. abut. piers 1, 2, 3, 4, 5 and proposed channel.
 5'-22" R.F. for W. abut. piers 6, 7, 8, and B. & O. tracks.
 Surface course- 2 1/2" Bituminous.
 Approach slabs- 15' long.

SITE PLAN (SHEET 2 OF 2)
 GRADE CROSSING ELIMINATION AND
 BR. N. ST. 30-63
 OVER TUSCARAWAS RIVER AND
 PENNA. R.R. W&L.E.R.R. & B&O R.R.
 S.H. 69 - SEC. MASSILLON
 STARK COUNTY
 STATE OF OHIO
 SCALE 1" = 20' U.S. 336(2)
 PRESENT TOPOGRAPHY PROPOSED WORK
 SURVEYED DRAWN DESIGNED DRAWN CHECKED
 R.T.E.H. W.S. R.L.K. R.L.K.



SUPPLEMENTAL SPECIFICATIONS
AND STANDARD DRAWINGS S-203, dated 4/6/45, M-102.12, dated 8/2/43, AS-44-S dated 4/2/45, and CSB-15-40, sheets 1 & 2, revised 10/1/40, form part of this set of plans.

REMOVAL OF EXISTING STRUCTURE:
See General Note on Sheet 24A for details of removal.

GENERAL NOTES

ERECTION NOTE continued: See table below for amount of raising of beams at piers and abutment:

Beam Location	Pier 6	Pier 7	Pier 8	W. Abut.
Beam	28"	28"	28"	18"
Fascia Beams	18"	18"	18"	18"
Curb Beams	18"	18"	18"	18"
Roadway Beams	18"	18"	18"	18"

R.R. CONSTRUCTION CLEARANCES: Minimum construction clearances shall be 18'-0" vertically above the top of main tracks of the B. & O. R.R. and W. & L. E. R.R., and 19'-0" above top of main track of the Penna. R.R., and 16'-0" above top of Penna. Co. service track, and 8'-0" horizontally from the center line of all tracks.

STEEL SHEET PILING: Before excavating for pier footings for Piers 4 and 5, steel sheet piling shall be driven as sheeting for this excavation, and as the excavation progresses this sheeting shall be thoroughly braced in a manner satisfactory to the Chief Engineer of the Railroad Company, so as to absolutely guarantee the safety of rail traffic at all times. This sheeting shall be included with "Excavation for Structures" for payment.

UNIT STRESSES for concrete and steel design as per "Specifications for Design of Highway Structures" - July 1940.

PILING (continued)
Because of the possibility of scour at Piers No. 2 and No. 3, the piles should preferably be driven to a minimum penetration of 20 ft. Drive rod tests indicate that the contractor may experience some difficulty in reaching a 20 ft. penetration at the north end of Pier No. 2 and under Pier No. 3. Drive rod tests also indicate that for Pier No. 2 piling lengths may vary from 20 ft. at the north end to 32 ft. at the south.

WELDING: All welding shall be Class "A".

PAINTING OF STRUCTURAL STEEL Paint for shop coat shall meet the provisions of Sec. M-9.9, Sec. M-9.20, or Sec. M-9.21. The first field coat shall be the same as the shop coat. The second and third field coat shall be aluminum paint as per Sec. M-9.12.

FIELD OFFICE: The contractor shall provide a field office for the exclusive use of engineers and inspectors, as described under "Structures (General)" in the Specifications. It shall have a floor area of at least 150 sq. ft. Payment shall be considered to be included in the contract price bid for the various items.

PILING shall be driven to a minimum bearing capacity of 35 tons.

VIBRATION: All concrete shall be mechanically vibrated.

RIVETS shall be 3/4".

SLAB DRAINS: Drains shall be placed through the roadway slabs as per Sec. 5-29.07 and as shown on "Typical Half Cross Sections".

ERECTION NOTE Thoroughly pin, bolt, and rivet bottom flange splice at Pier 5. Next, the end of the beam at Pier 6 shall be raised and supported during the completion of the top flange splice at Pier 5. In like manner the end of the beam at Piers 7 and 8 shall be raised before completing the top flange splice at the preceding pier. Finally, the end of the beam at the West Abutment shall be raised before completing the top flange splice at Pier 8.

The erection procedure outlined above assumes that the contractor will elect to begin erection at Pier 4.

The contractor shall complete the construction of piers numbered 4 and 5 as promptly as possible after removal of necessary parts of the old structure. (See special clauses in the proposal relative to the contractors use of existing grade crossings and his obligations to protect railroad traffic.) It is anticipated that construction of a section of the improvement of the Penna. R.R. main tracks will be deferred pending their removal by the War Department's contractor, following which that section and the entire improvement shall be completed as promptly as possible to restore traffic to Lincoln Way.

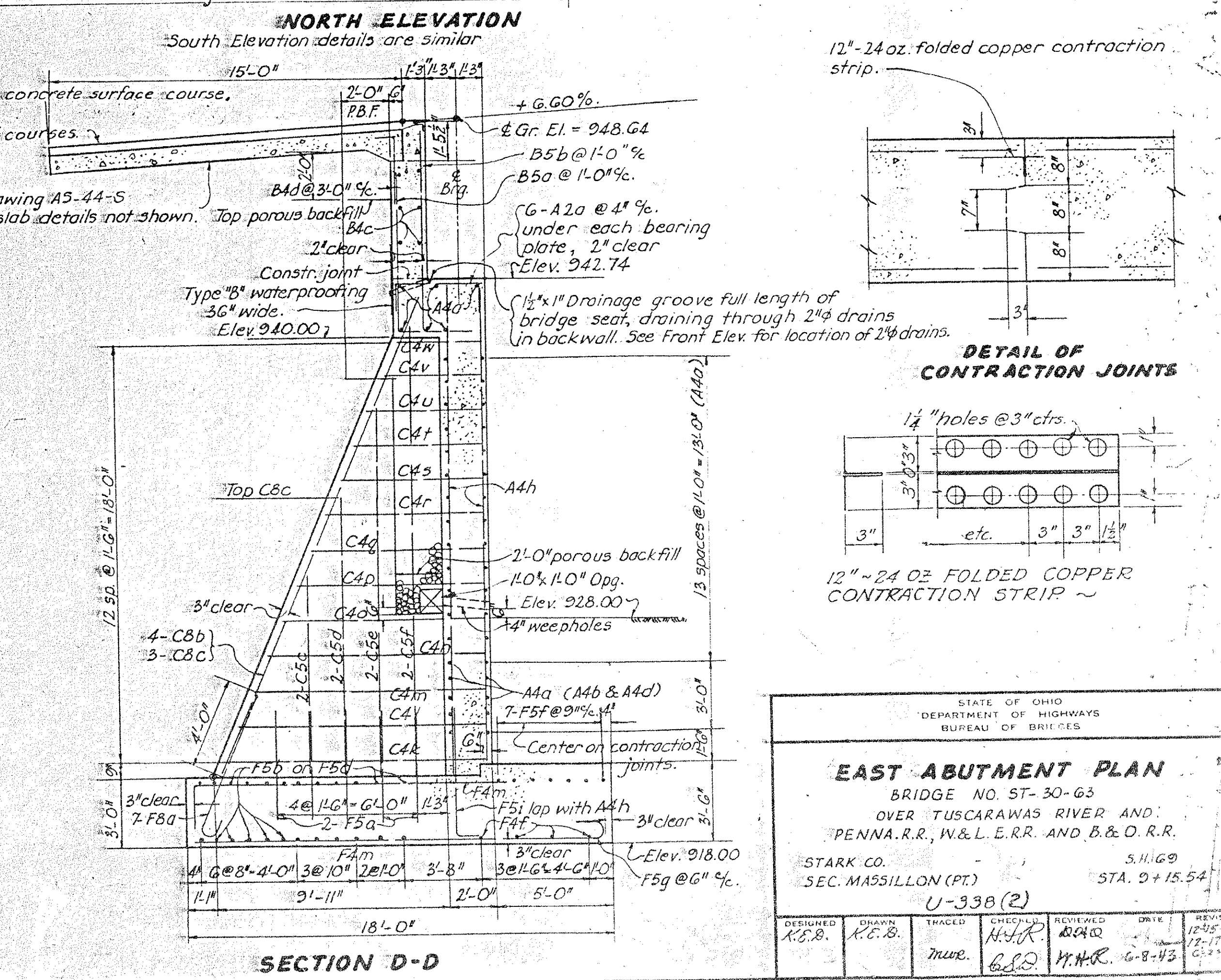
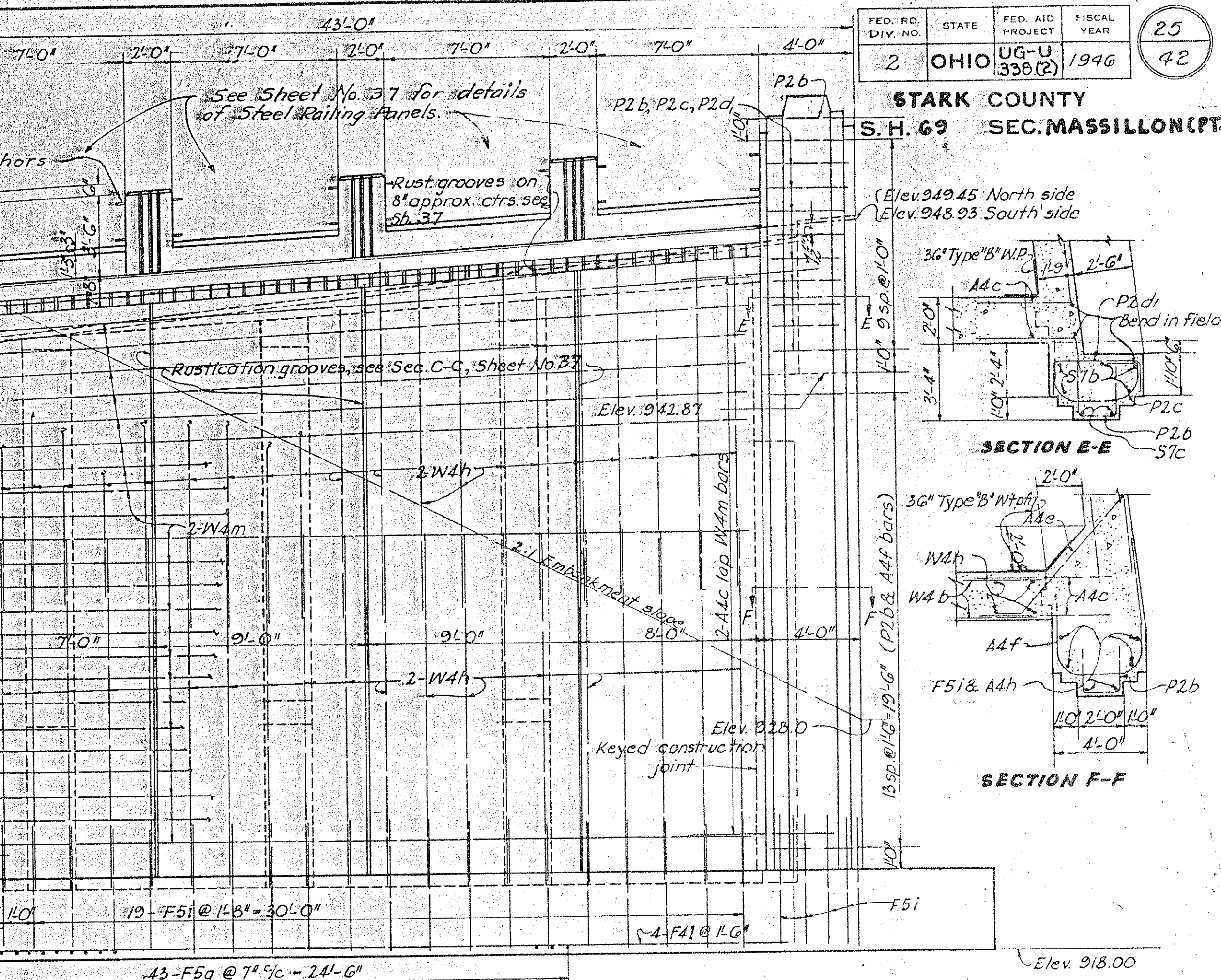
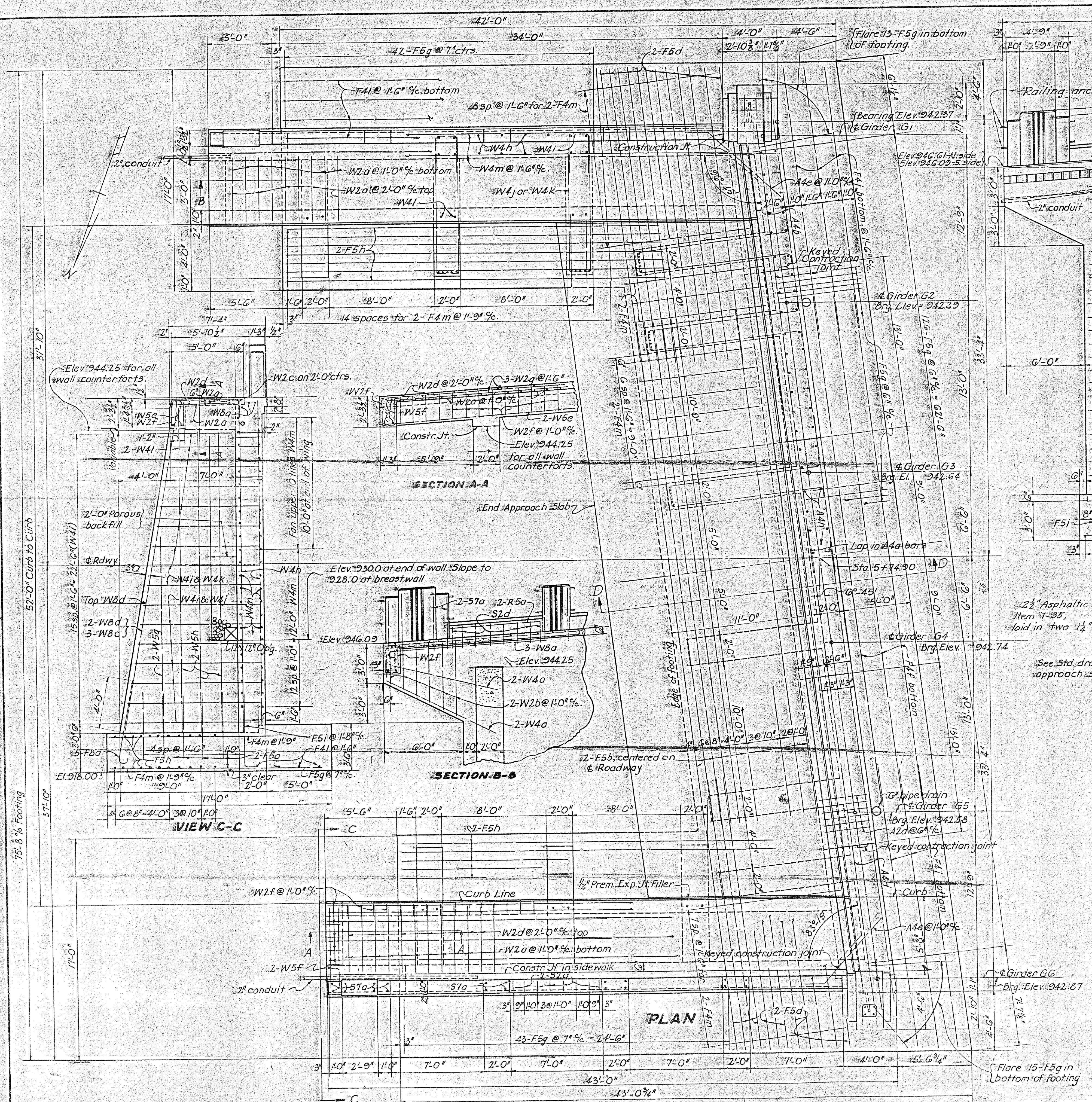
ESTIMATED QUANTITIES (U-338 (2) AND UG-338 (2))

Item	Description	E. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Pier 6	Pier 7	Pier 8	W. Abut.	Superstruc.	General	Total
E-2	Cofferdams and pumping												Lump	Lump Sum
E-2	Excavation for structures, dry	1470	580			850	260	260	170	230	580			4,400 Cu.Yds.
E-2	Excavation for structures, wet	370	120	320	320	430								1,560 Cu.Yds.
S-1	Class "C" concrete, superstructure											1,020		1,020 Cu.Yds.
S-1	Class "E" concrete, walls	451	159	436	460	270	169	167	150	143	415			2,820 Cu.Yds.
S-1	Class "E" concrete, footings	260	95	153	153	143	89	89	89	89	200			1,360 Cu.Yds.
S-3	Type "B" waterproofing	50										50		100 Sq.Yds.
S-203	Waterproofing for bridge deck											3,950		3,950 Sq.Yds.
S-4	Reinforcing steel	44,380	16,640	15,800	16,540	22,880	11,900	11,900	11,000	10,580	37,500	267,700	270	467,040 Lbs.
S-7	Structural steel											1,625,000		1,625,000 Lbs.
S-8	Field painting of structural steel (3 coats)											1,625,000		1,625,000 Lbs.
S-9	Folded copper strip	46									40			86 Lin.Ft.
S-14	Bridge railing (steel panels with concrete posts)	77.5									79.9	1293.6		1457 Lin.Ft.
S-14	Pipe railing on stairways										180			180 Lin.Ft.
S-16	First test pile												Lump	Lump Sum
S-19	First test load												Lump	Lump Sum
S-19	Subsequent test load												Lump	Lump Sum
S-19	Reinforced concrete piling, 12" cast in place			1,800	1,400	4,100							Lump	7,300 Lin.Ft.
S-25	Bridge lighting system												Lump	Lump Sum
S-29	Porous backfill	180									180			360 Cu.Yds.
S-29	6" pipe, including fittings and supports, as per plan											230		230 Lin.Ft.
S-29	Cast iron scuppers (2 piece)											12		12 Units
T-35	Asphaltic concrete, type same as approaches											273		273 Cu.Yds.
S-29	8" Galvanized corrugated metal pipe, Sec. M-6.4(a) b-3, b-4 or b-5											350		350 Lin.Ft.
S-24	Removal of existing structure, as per plan												Lump	Lump Sum

NOTE: See Sheet No. 24A for division of estimated quantities for Federal Aid Projects U-338 (2) and UG-338 (2).

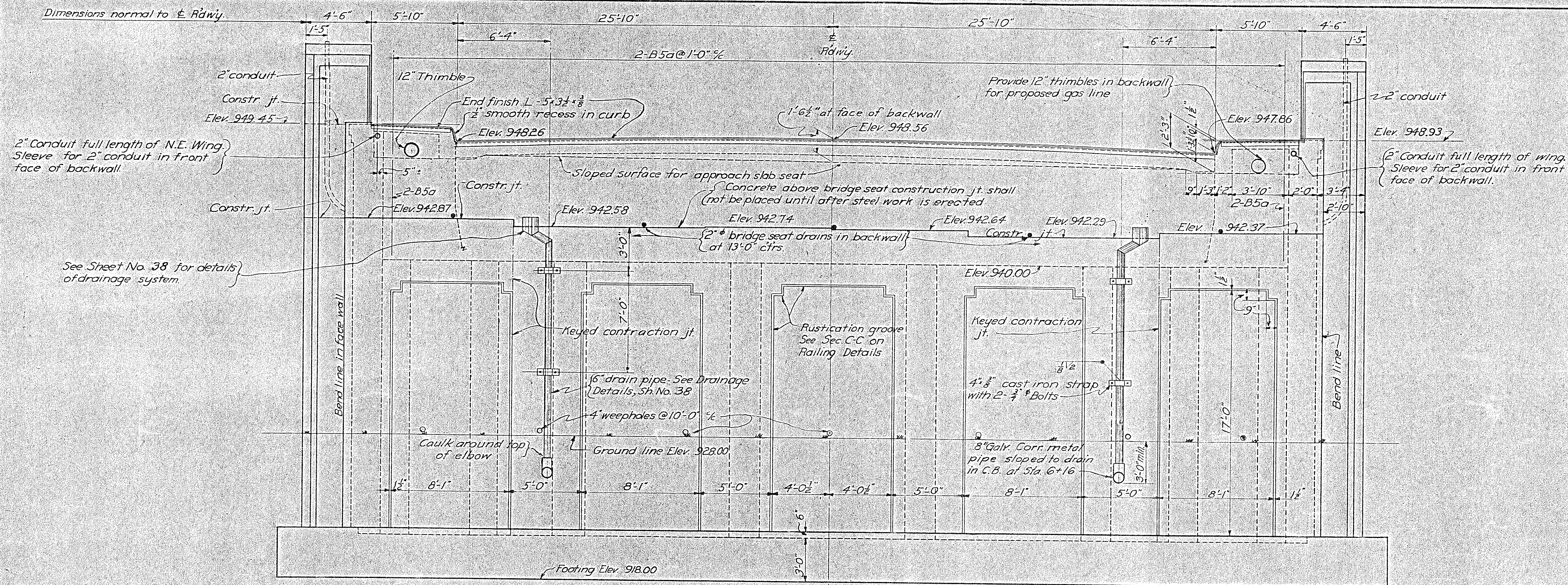
PAINTING OF STEEL RAILING AND LAMP STANDARDS: Paint for shop coat shall meet the provisions of Sec. M-9.9, Sec. M-9.20, or Sec. M-9.21. The first field coat shall be the same as the shop coat. The second and third field coat shall be tinted to match color chart to be furnished by Chief Engineer of Bridges.

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES				
GENERAL PLAN AND ELEVATION NOTES AND ESTIMATED QUANTITIES				
BRIDGE NO. ST-30-63 OVER TUSCARAWAS RIVER AND PENNA. R.R., W. & L. E. R.R., AND B. & O. R.R. STARK COUNTY S. H. 69 SECTION MASSILLON (PT.) STA. 9+15.54 UG-338 (2)				
DESIGNED J.E.S.	DRAWN K.B.D.	TRACED J.E.P.	CHECKED J.E.S.	DATE JUN 11 1946

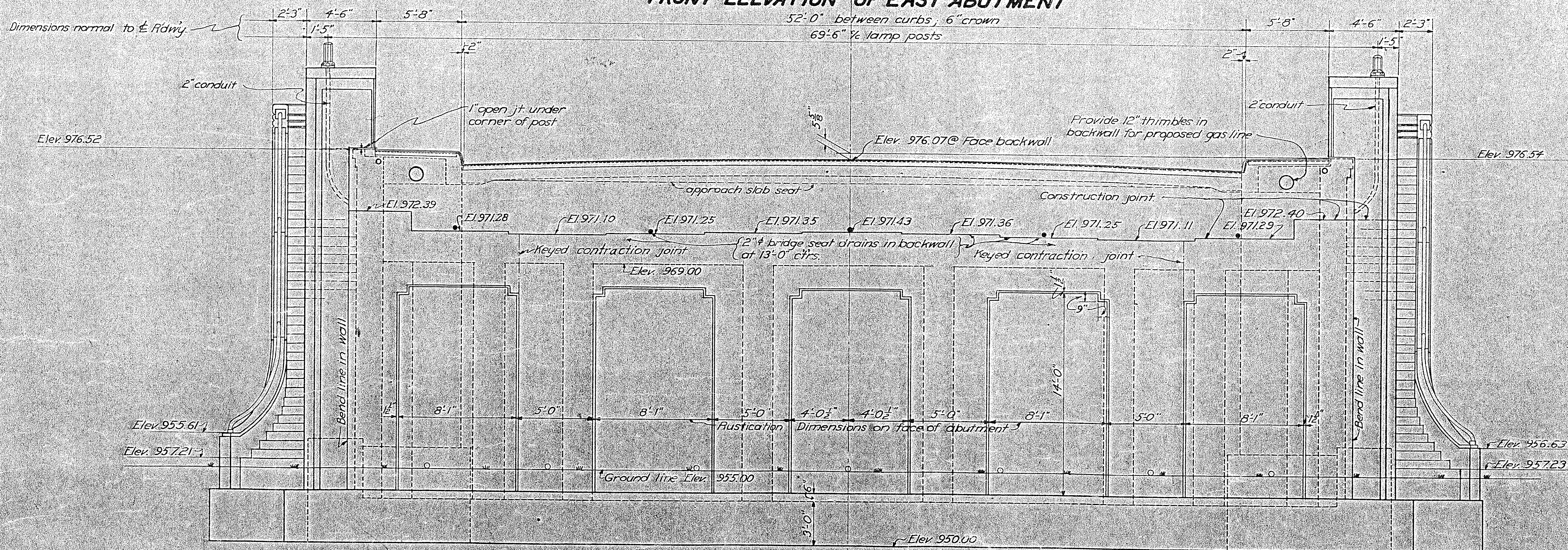


EAST ABUTMENT PLAN
 BRIDGE NO. ST-30-63
 OVER TUSCARAWAS RIVER AND
 PENNA. R.R., W. & L. E.R.R. AND B. & O. R.R.
 STARK CO. S.H. 69
 SEC. MASSILLON (PT.) STA. 9+15.54

DESIGNED K.E.B.	DRAWN K.E.B.	TRACED M.W.	CHECKED H.W.	REVIEWED H.W.	DATE 12-15-46
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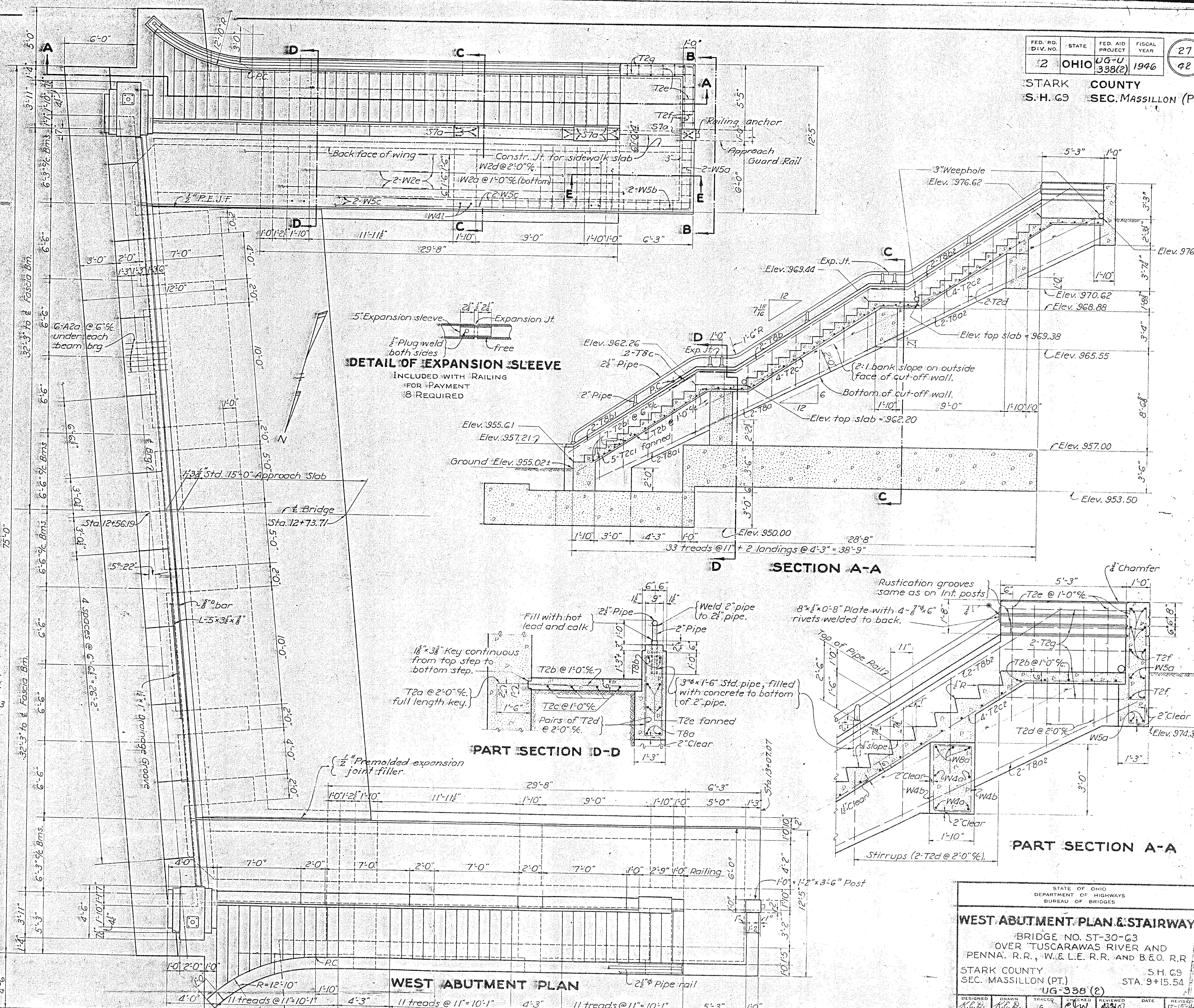
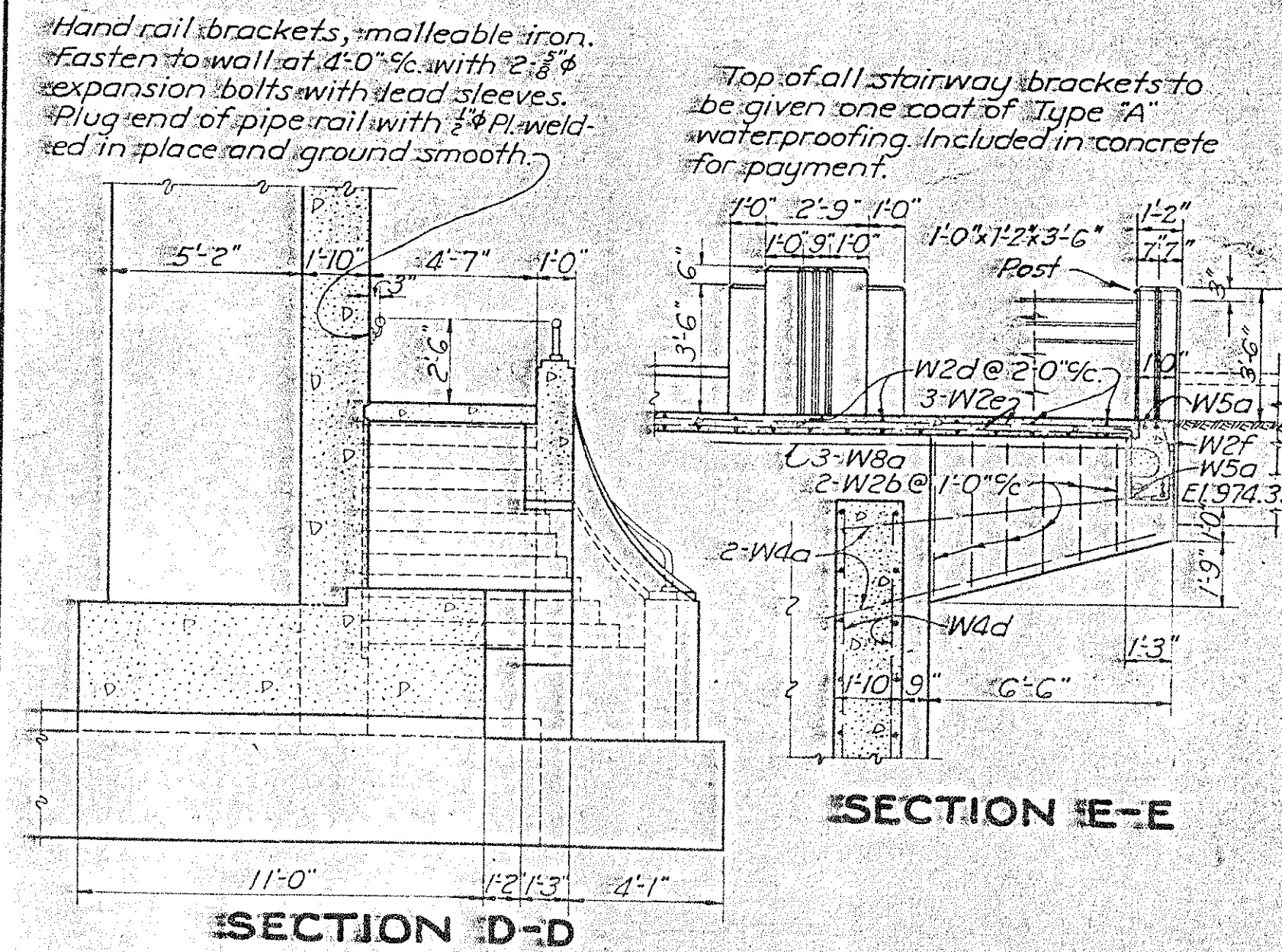
FRONT ELEVATION OF EAST ABUTMENT



FRONT ELEVATION OF WEST ABUTMENT

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES					
ABUTMENT ELEVATIONS					
BRIDGE NO. ST-30-63 OVER TUSCARAWAS RIVER AND PENNA. RR., W. & L. E. RR. AND B. & O. RR.					
STARK COUNTY, OHIO (PT.) UG-338(2)					
DESIGNED K.E.D.	DRAWN K.E.D.	CHECKED H.H.H.	REVIEWED H.H.H.	DATE 12-15-45	APPROVED H.H.H. 12-8-45

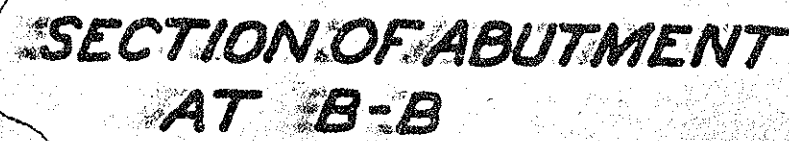
STARK COUNTY
S. H. 69 SEC. MASSILLON (P



WEST ABUTMENT PLAN & STAIRWAY

BRIDGE NO. ST-30-G3
OVER TUSCARAWAS RIVER AND
PENNA. R.R., W.&L.E. R.R. AND B.&O. R.R.
STARK COUNTY S.H. G9
SEC. MASSILLON (PT.) STA. 9+15.54

UG-338 (2)						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
K.C.D.	K.C.D.	G VS	CJW BLO	W.H.R.	6-8-43	12-15-43 12-17-43 6-25-44



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

WEST ABUTMENT ELEVATION

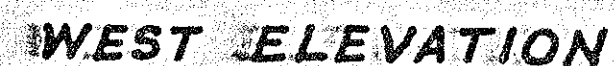
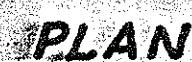
BRIDGE NO. ST-30-63
OVER TUSCARAWAS RIVER AND
PENNA. RR., W.E.L. RAILROAD AND B&O RR.

STARKE COUNTY
SEC. MASSILLON (PT) UG-338 (2)

S.H. 69
STA. 9+15.54

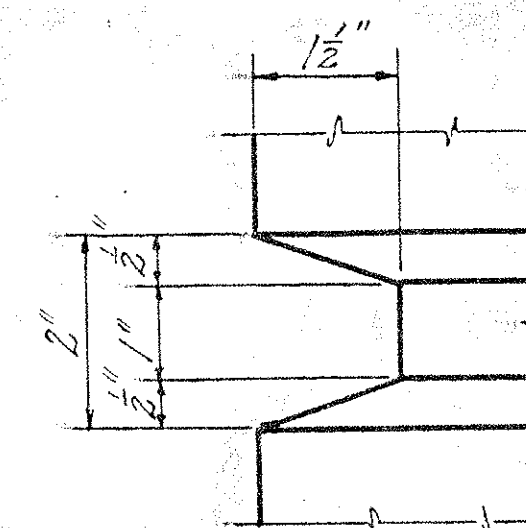
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K.C.B.	K.C.B.	CHW	0400	12-16-44	
		SEA	M.H.C.	4-8-45	6-28-66

STARK COUNTY
S. H. 69 SEC. MASSILLON (PT.)

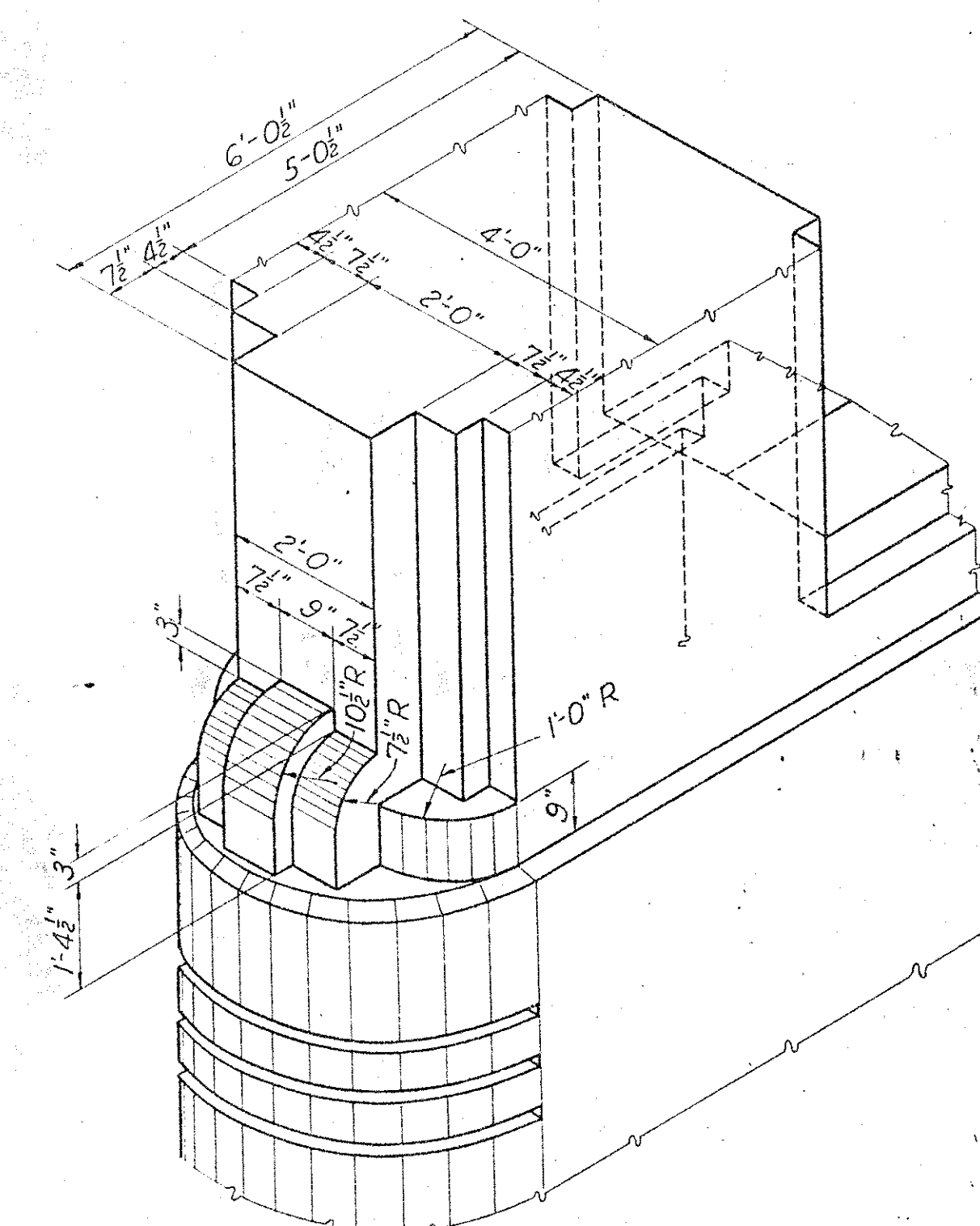


.STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES				
PIER NO. 11 BRIDGE NO. ST-30-G3 OVER TUSCARAWAS RIVER AND PENNA. RR W & L.E.R.R. AND B.O.R.R.				
STARK CO. SEC. MASSILLON (PT.)		S.H. G9 STA. 9+15.54		
U-338 (2)				
DESIGNED K.E.C.	DRAWN K.E.C.	CHECKED m.w.	REVIEWED W.H.C.	DATE 12-25-43
APPROVED W.H.C.			6-8-43 REVISION G-25-43	

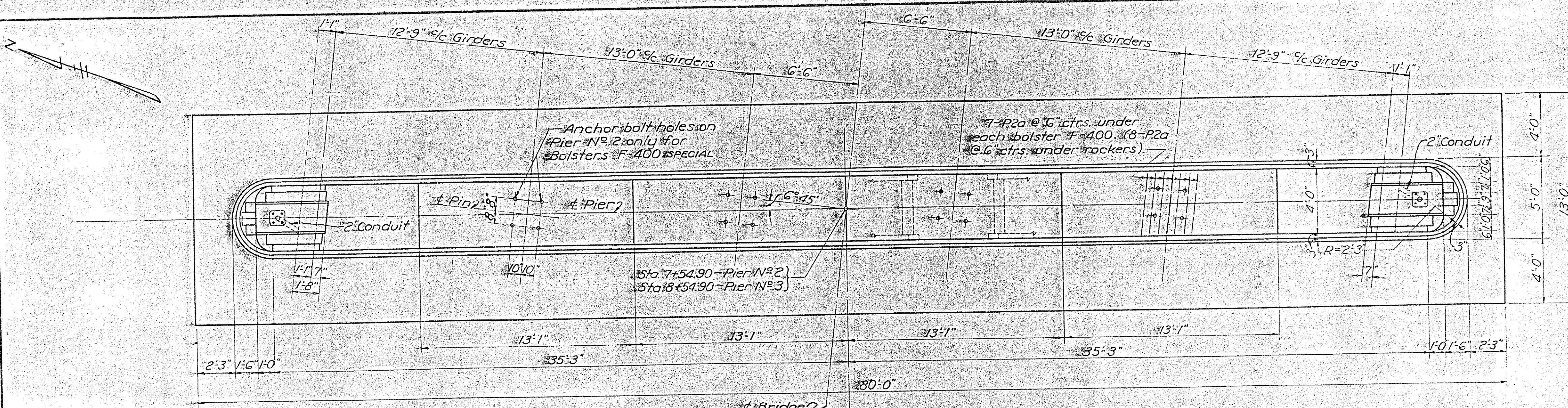
STARK COUNTY
S. H. 69 SEC. MASSILLON (PT)



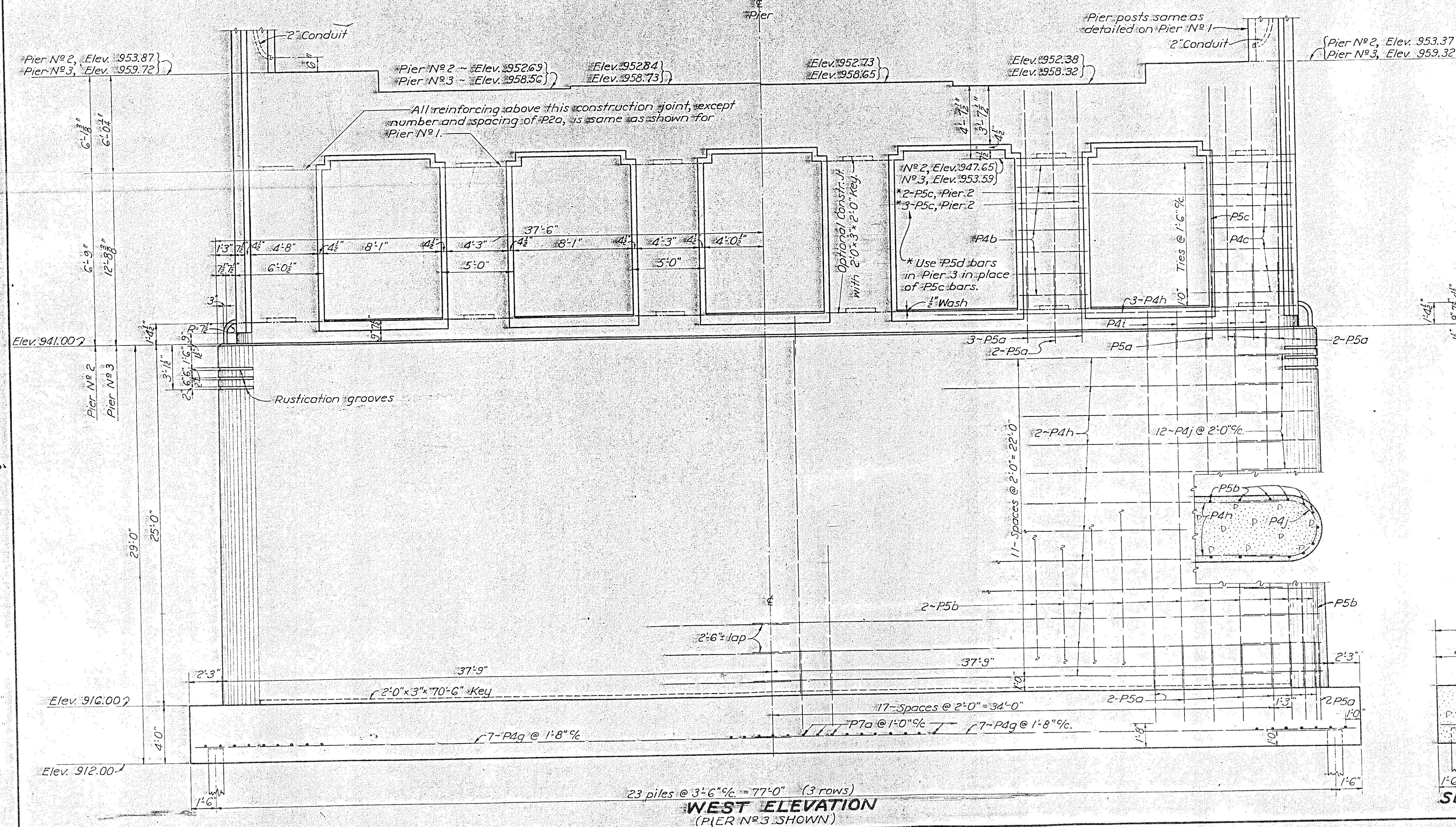
RUSTICATION GROOVE



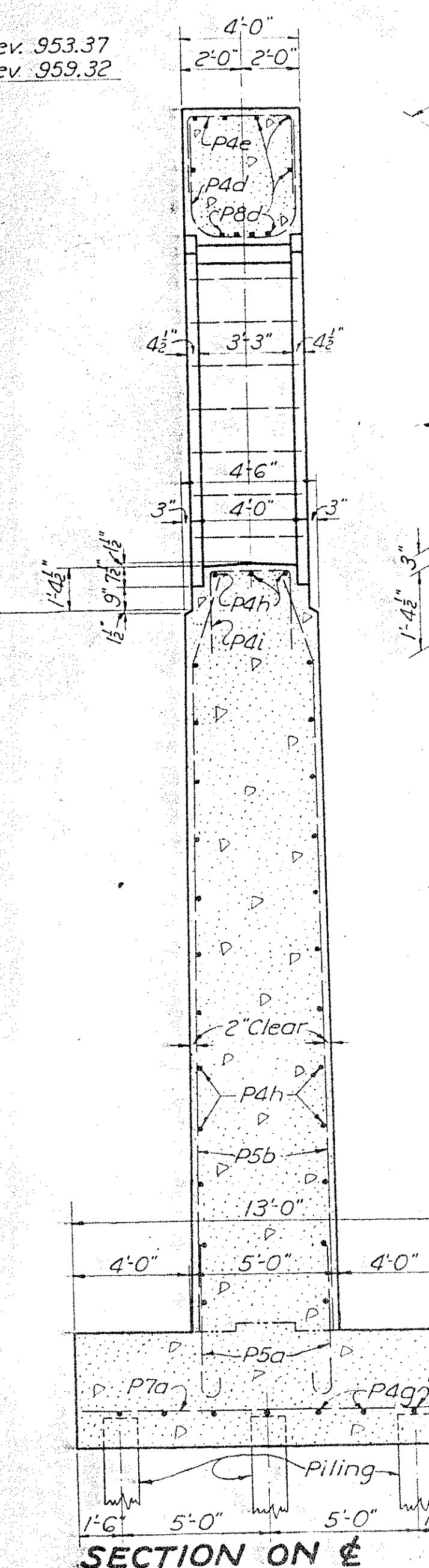
ISOMETRIC VIEW OF PIER NOSE
ON PIERS No 2 AND No 3



PLAN



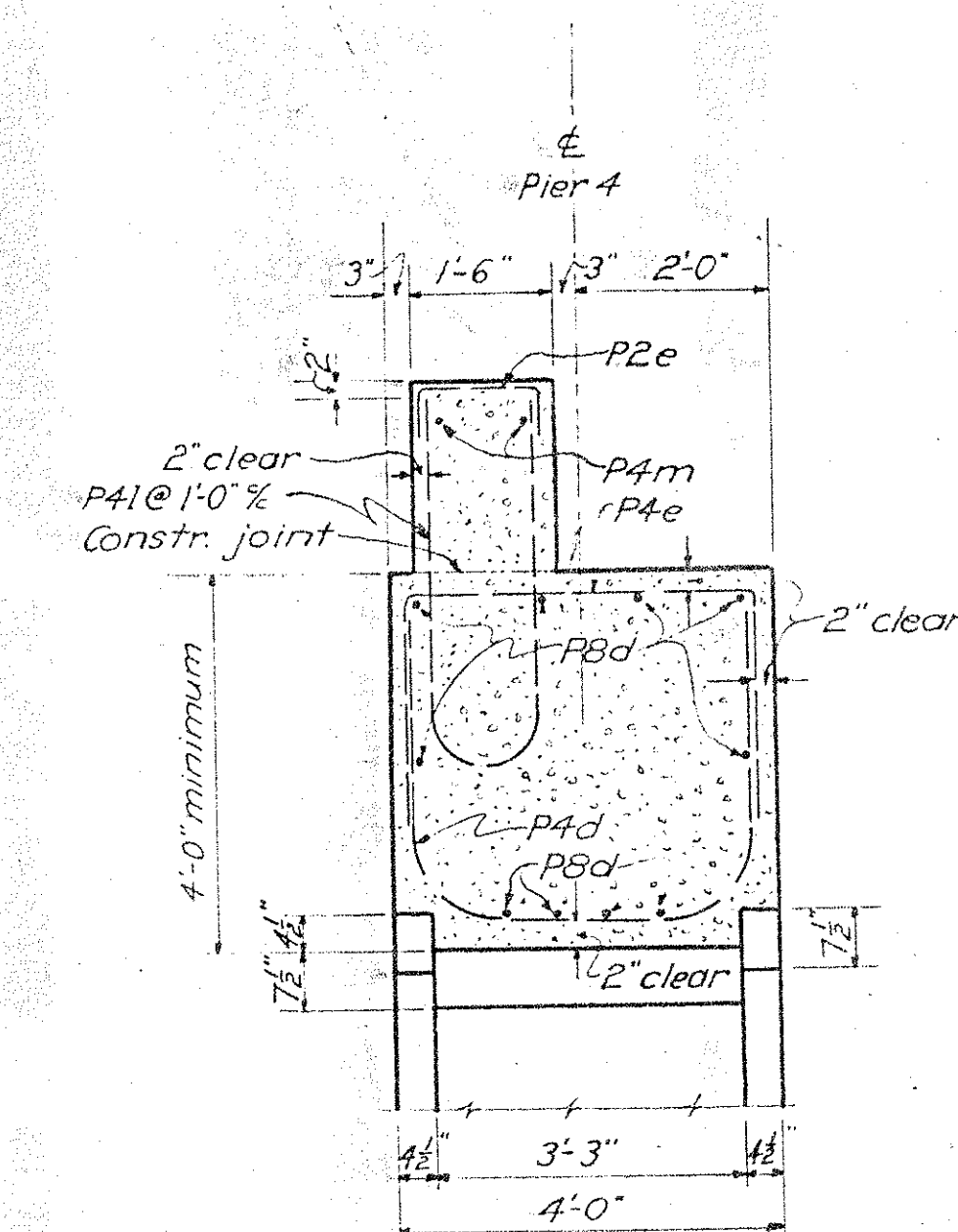
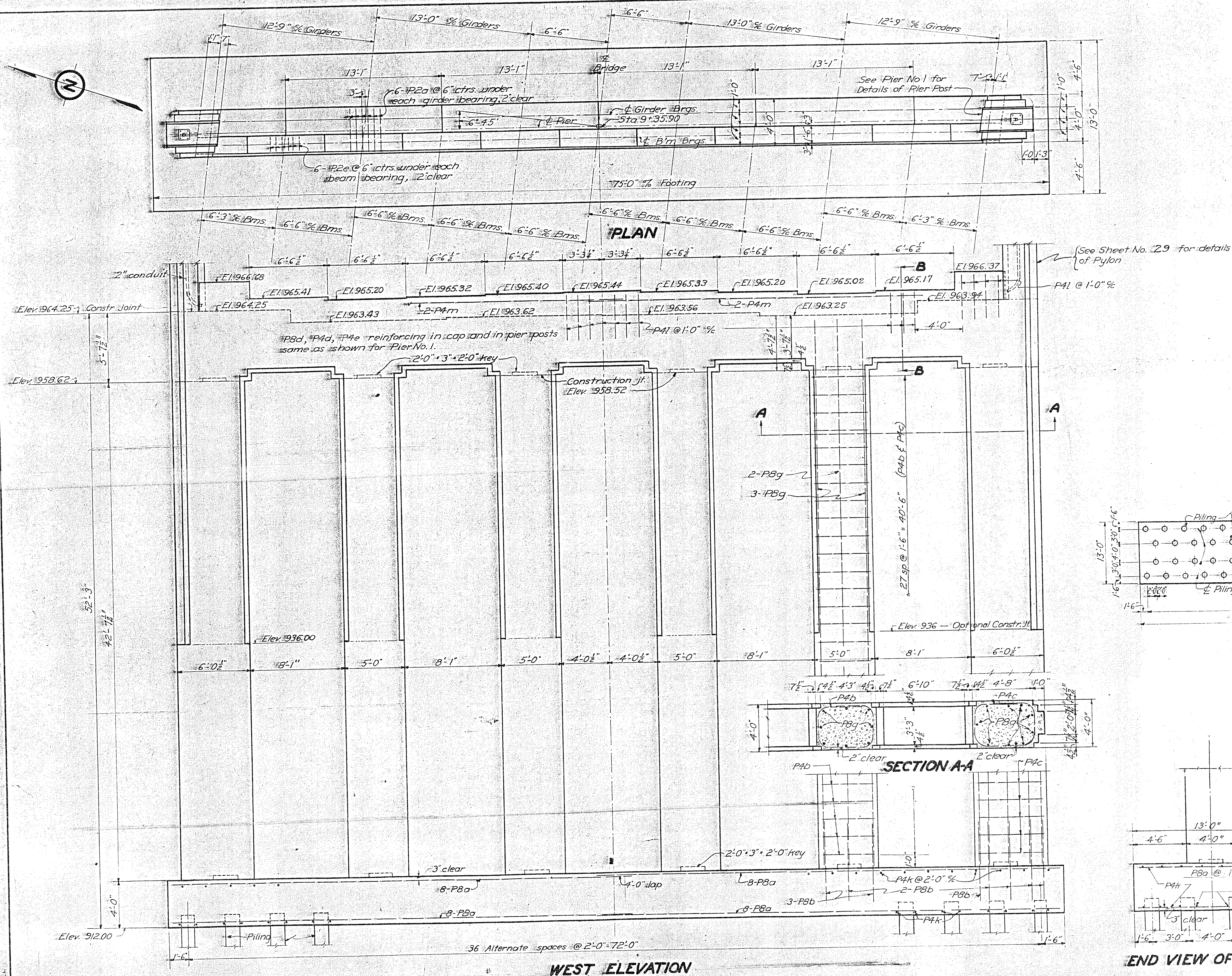
WEST ELEVATION
(PIER No 3 SHOWN)



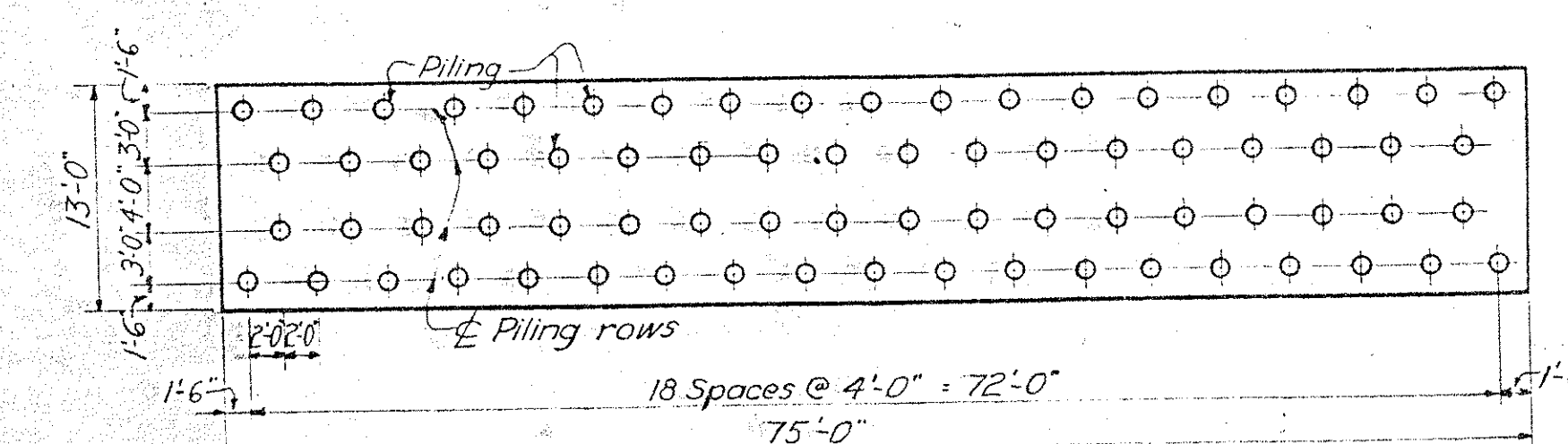
SECTION ON

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES					
PIERS No 2 AND No 3 BRIDGE No ST-30-G3 OVER TUSCARAWAS RIVER AND PENNA. R.R., W.&L.E.R.R. AND B.&O. R.R. STARK COUNTY SEC. MASSILLON (PT.) S.H. 69 STA. 9+15.54 U-338(2)					
DESIGNED	DRAWN	TRACED	CHECKED	REVISED	DATE
A.C.B.	A.C.B.	G.S.	H.H.G. H.H.G.	A.H.Q.	12-15-35
				M.H.A.	6-8-43

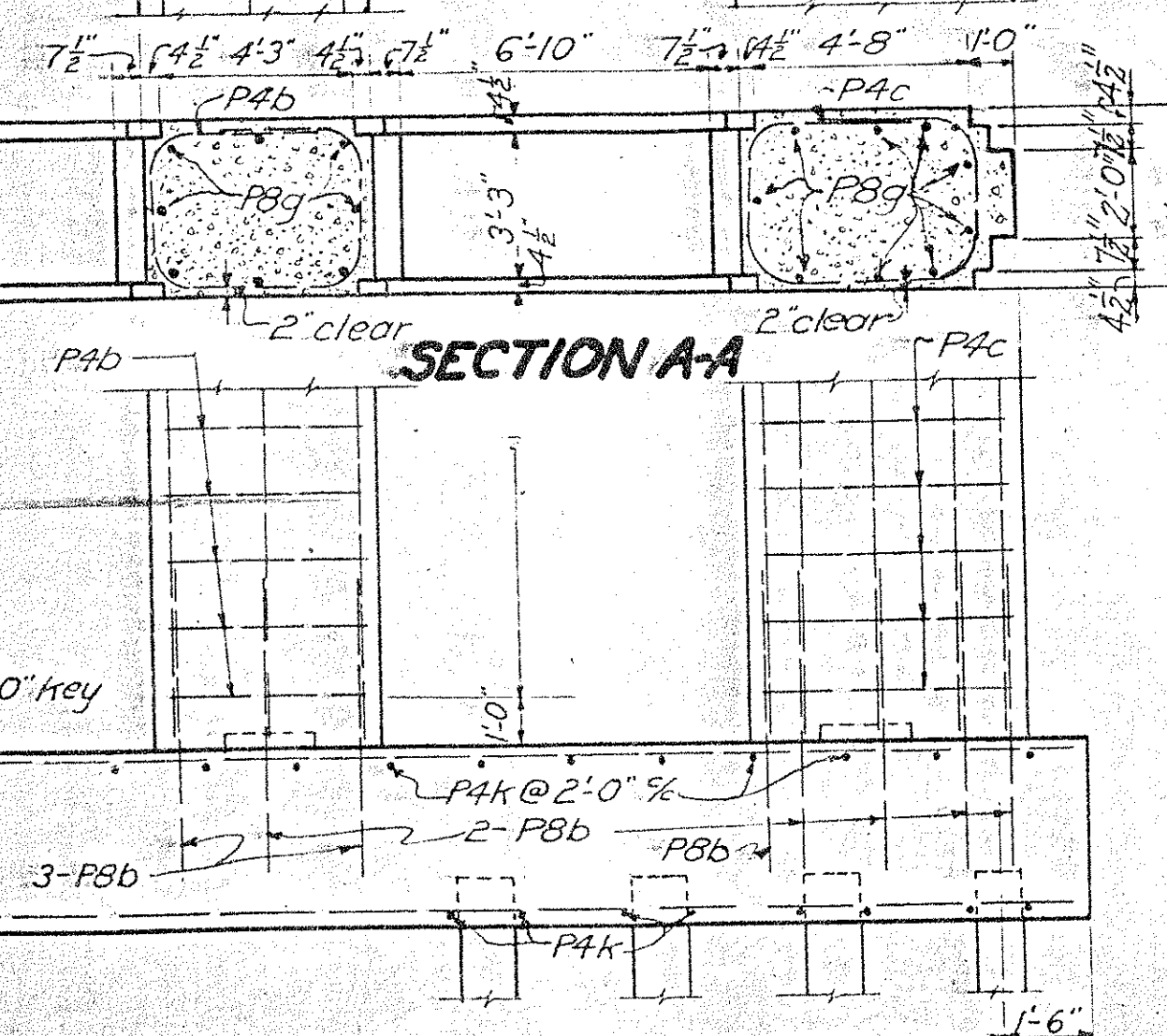
STARK COUNTY
S. H. 69 SEC. MASSILLON (PT.)



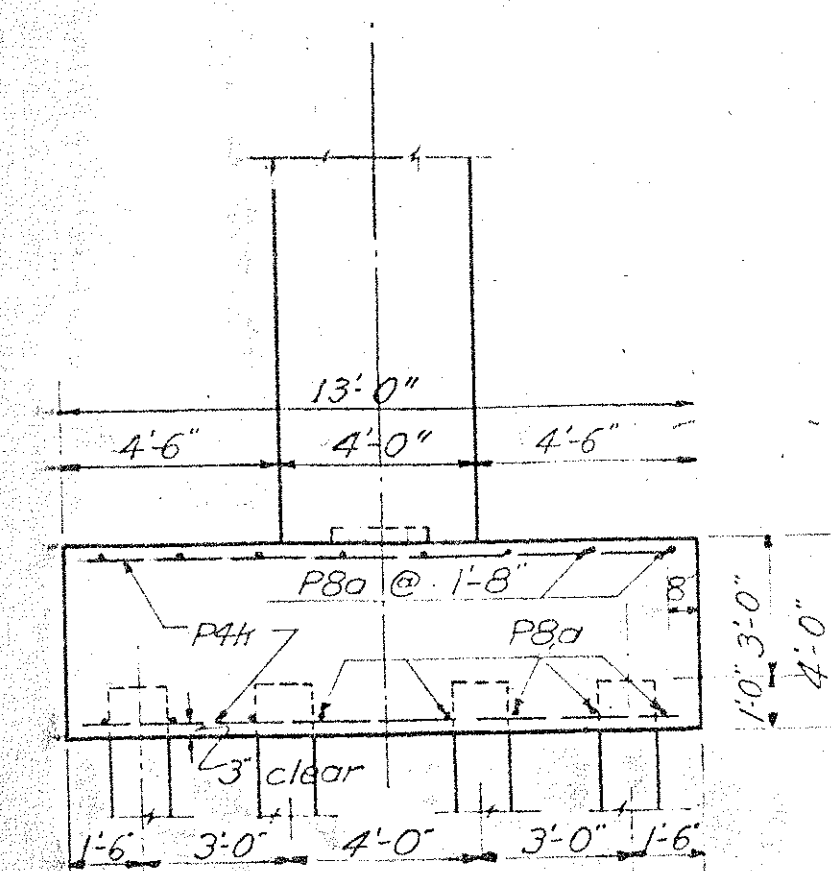
SECTION B-B



PILING PLAN



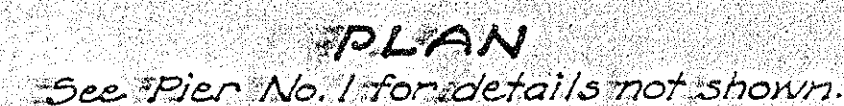
SECTION A-7



END VIEW OF FOOTING

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES					
<h1>PIER NO. 4</h1>					
BRIDGE NO. ST-30-63 OVER TUSCARAWAS RIVER & PENNA. R.R., W&LE. R.R. AND B.&O. R.R.					
U-338 (2) UG-338 (2)				STA. 69 STA. 9+15.51	
STARK COUNTY SEC. MASSILLON (PT.)					
DESIGNED A.E.S.	DRAWN A.E.S.	TRACKED JAS.	CHECKED H.A.C.	RECHECKED H.A.C.	DATE 6-8-43
				REVISION 12-18-60 G-25-60	

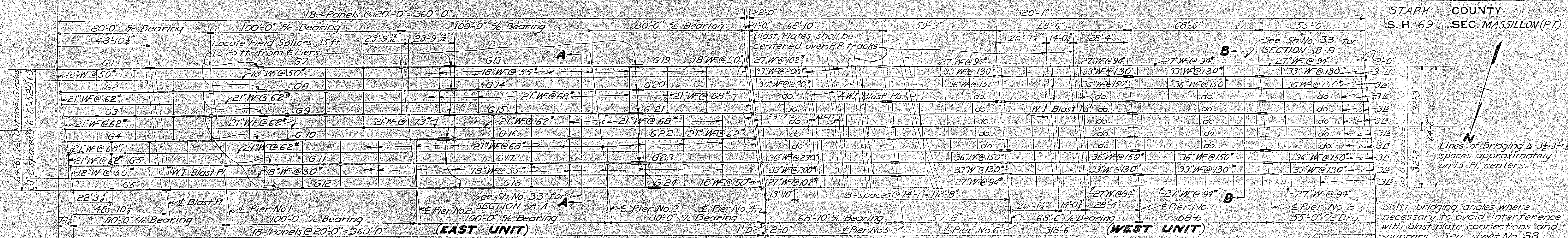
STARK COUNTY
S. H. 69 SEC. Massillon (Pt.)



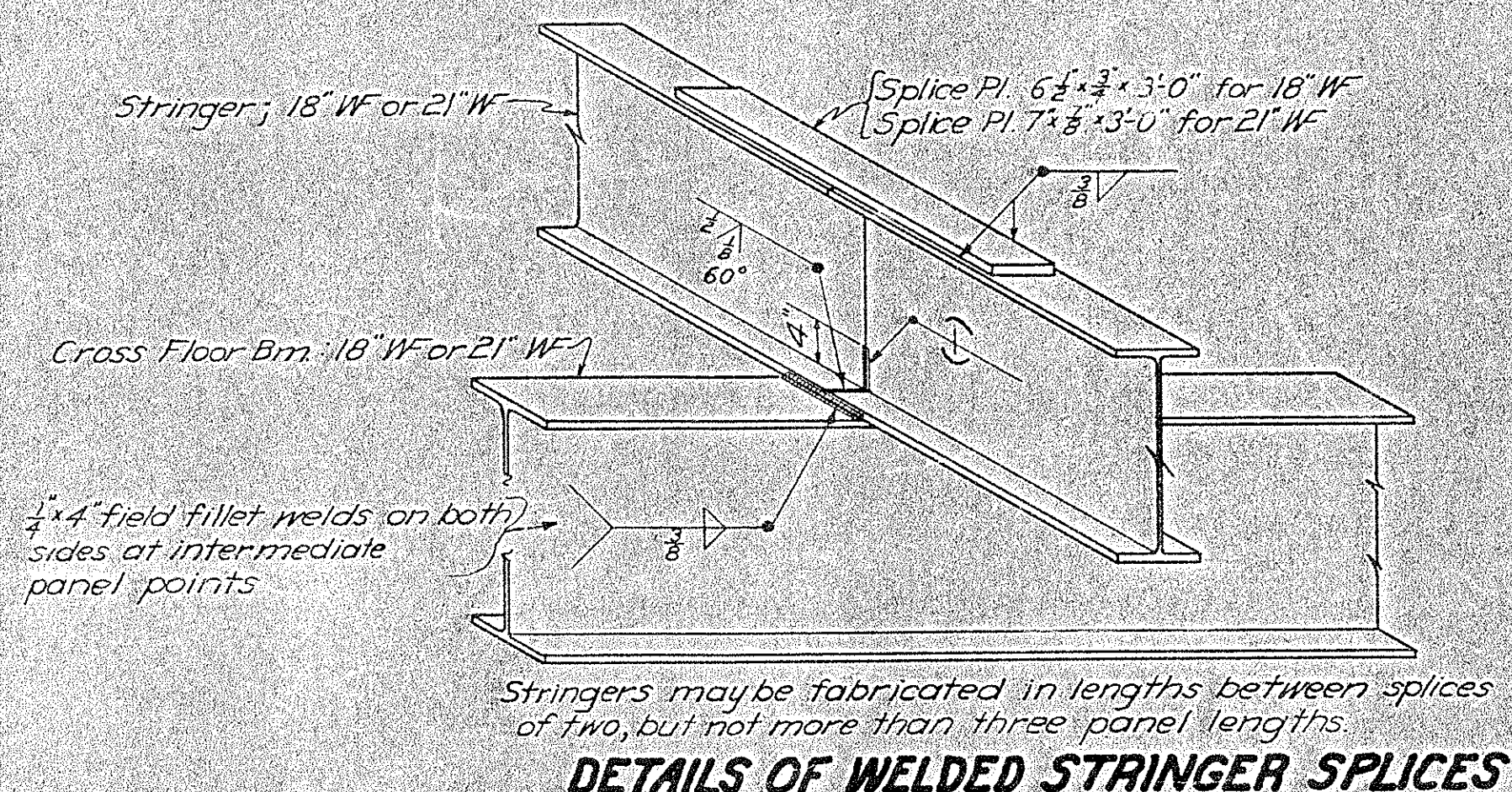
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

PIERS NO. 5, 6, 7, AND 8
BRIDGE NO. ST-30-63
OVER TUSCARAWAS RIVER AND
PENNA. R.R., W. & L.E. R.R., AND B. & O. R.R.
STARK COUNTY S. H. 63
SEC. MASSILLON (PT.) STA. 9 + 15.54
UG-338 (2)

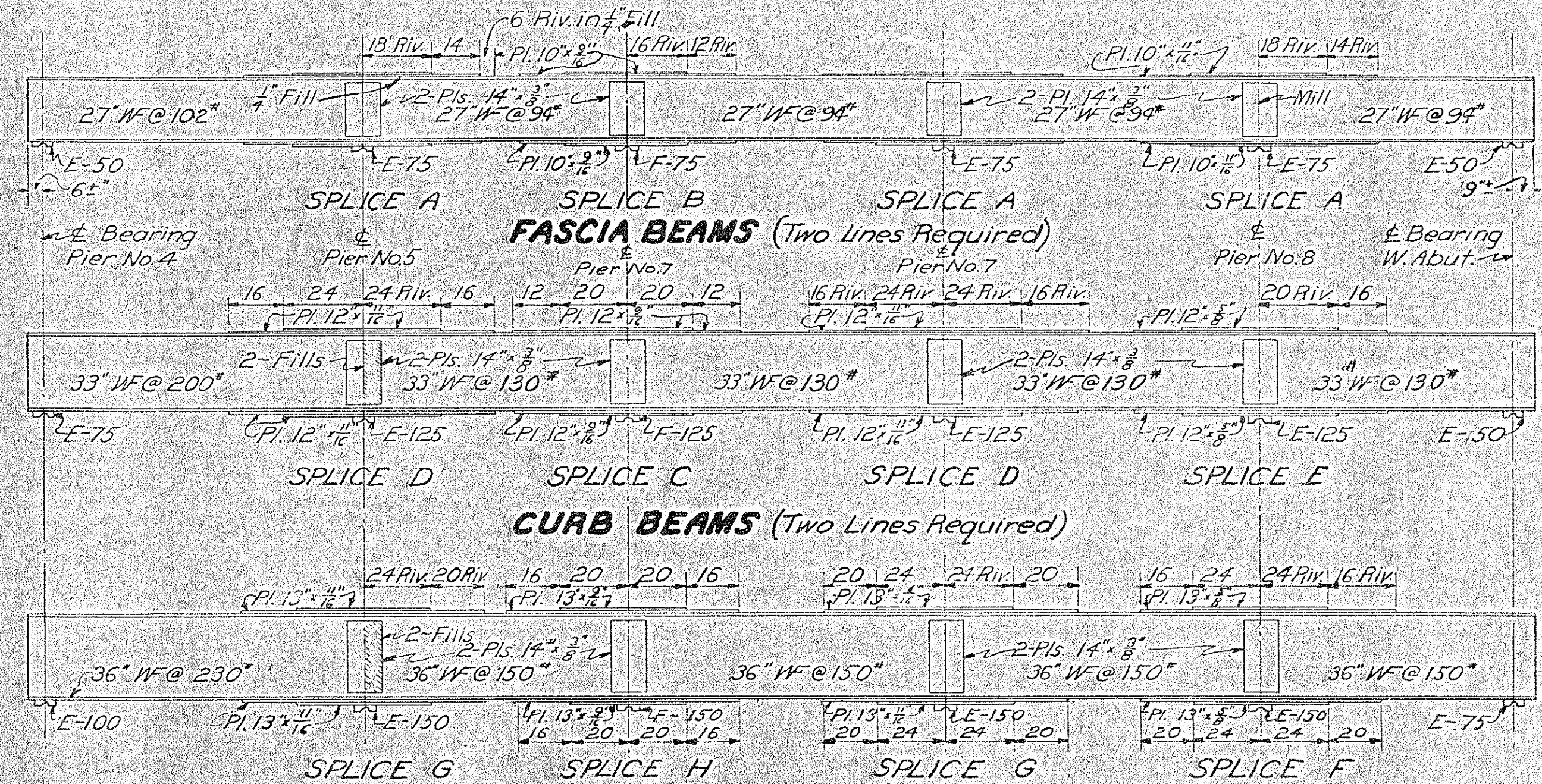
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVIEWED
A.C.B.	K.C.B.			W.H.C.	12-15-40	G-25-40
		J.P.	B.D.	W.H.C.	6-8-43	



STRUCTURAL LAYOUT (All dimensions are horizontal)



LOCATION		DEFLECTION & CAMBER (in inches)											
		OUTSIDE G.	INSIDE GIRD.	FASCIA BMS.	CURB BMS.	RDWY BMS.	OUTSIDE G.	INSIDE GIRD.	FASCIA BMS.	CURB BMS.	RDWY BMS.	OUTSIDE G.	INSIDE GIRD.
Deflection due to Weight of Steel	SPAN	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13
Deflection due to Remain. D.L.	SPAN	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13
Camber Required for V.C.	SPAN	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13
Total Req'd Camber	SPAN	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13



ROADWAY BEAMS (Seven Lines Required)
See Drawing No. CSB-15-40 for details of splicing not shown on this drawing

SPlicing DETAILS FOR WEST UNIT

LOCATION		ROADWAY BEAMS			CURB BEAMS			FASCIA BEAMS		
		SIZE	DIMENSIONS	No. Req'd	SIZE	DIMENSIONS	No. Req'd	SIZE	DIMENSIONS	No. Req'd
Pier No. 4	E-100	17"	20"	7	E-75	16"	19"	E-50	10"	17"
Pier No. 5	E-150	12"	22"	7	E-125	12"	21"	E-75	10"	19"
Pier No. 6	F-150	12"	21"	7	F-125	12"	21"	F-75	10"	19"
Pier No. 7	E-150	12"	22"	7	E-125	12"	21"	E-75	10"	19"
Pier No. 8	E-150	12"	22"	7	E-125	12"	21"	E-75	10"	19"
West Abut.	E-75	12"	19"	7	E-50	12"	17"	E-50	10"	17"

LOCATION		OUTSIDE GIRDERS			INSIDE GIRDERS		
		SIZE	DIMENSIONS	No. Req'd	SIZE	DIMENSIONS	No. Req'd
East Abut.	E-75	12"	19"	2	E-150	12"	23"
Pier No. 1	E-220sp			2	E-400sp		4
Pier No. 2	E-220sp			2	F-400sp		4
Pier No. 3	E-220sp			2	E-400sp		4
Pier No. 4	E-75	12"	19"	2	E-150	12"	23"

Additional details of E&F series of rockers and bolsters are as shown on drawing CSB-15-40, revised 10-1-40, except that the dimension M-2 on the drawing shall be changed to M-2.

Rivets shall be 7/8"

FOR ADDITIONAL NOTES, SEE SHEETS NO. 24, 33, 35, 36

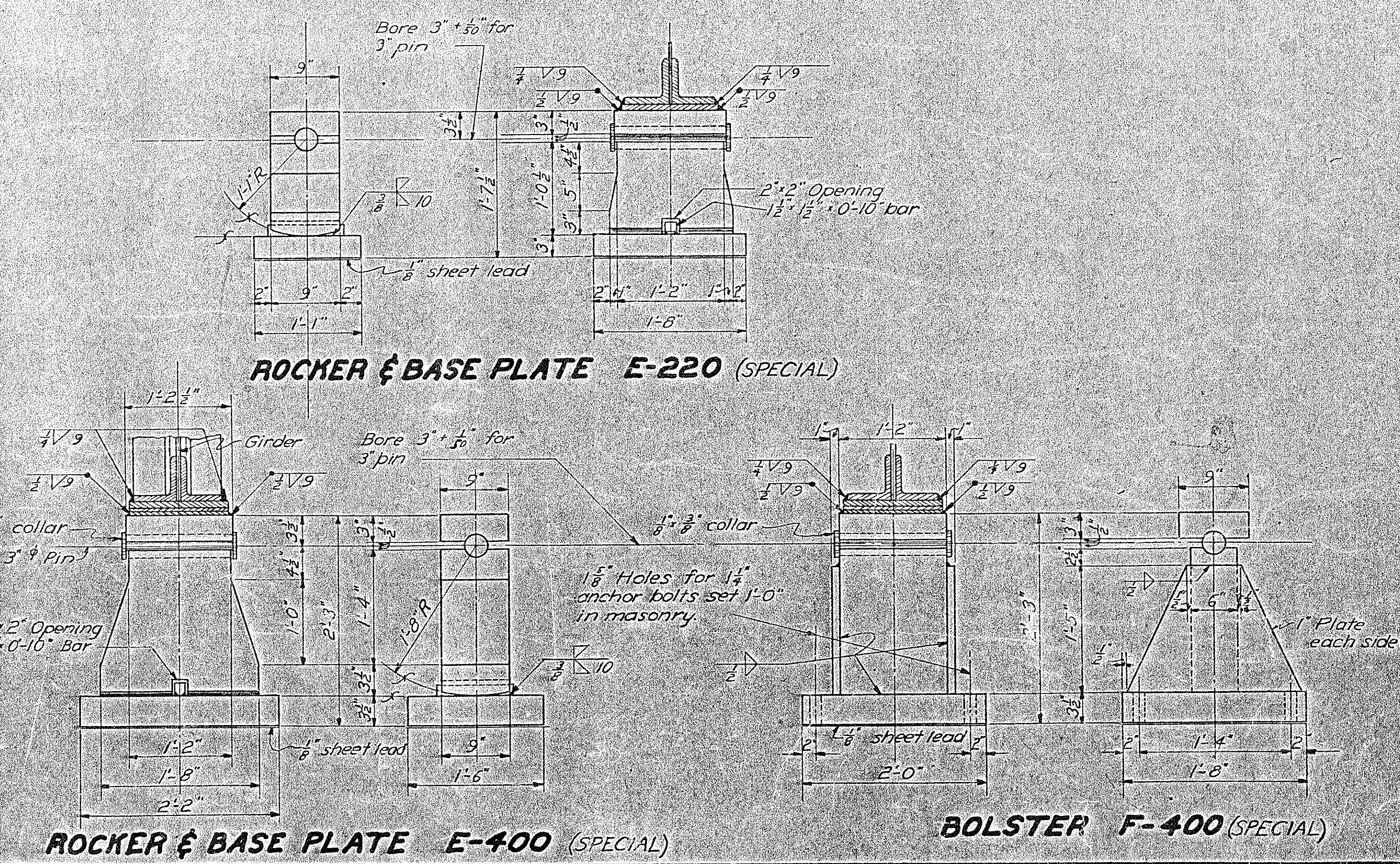
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SUPERSTRUCTURE DETAILS

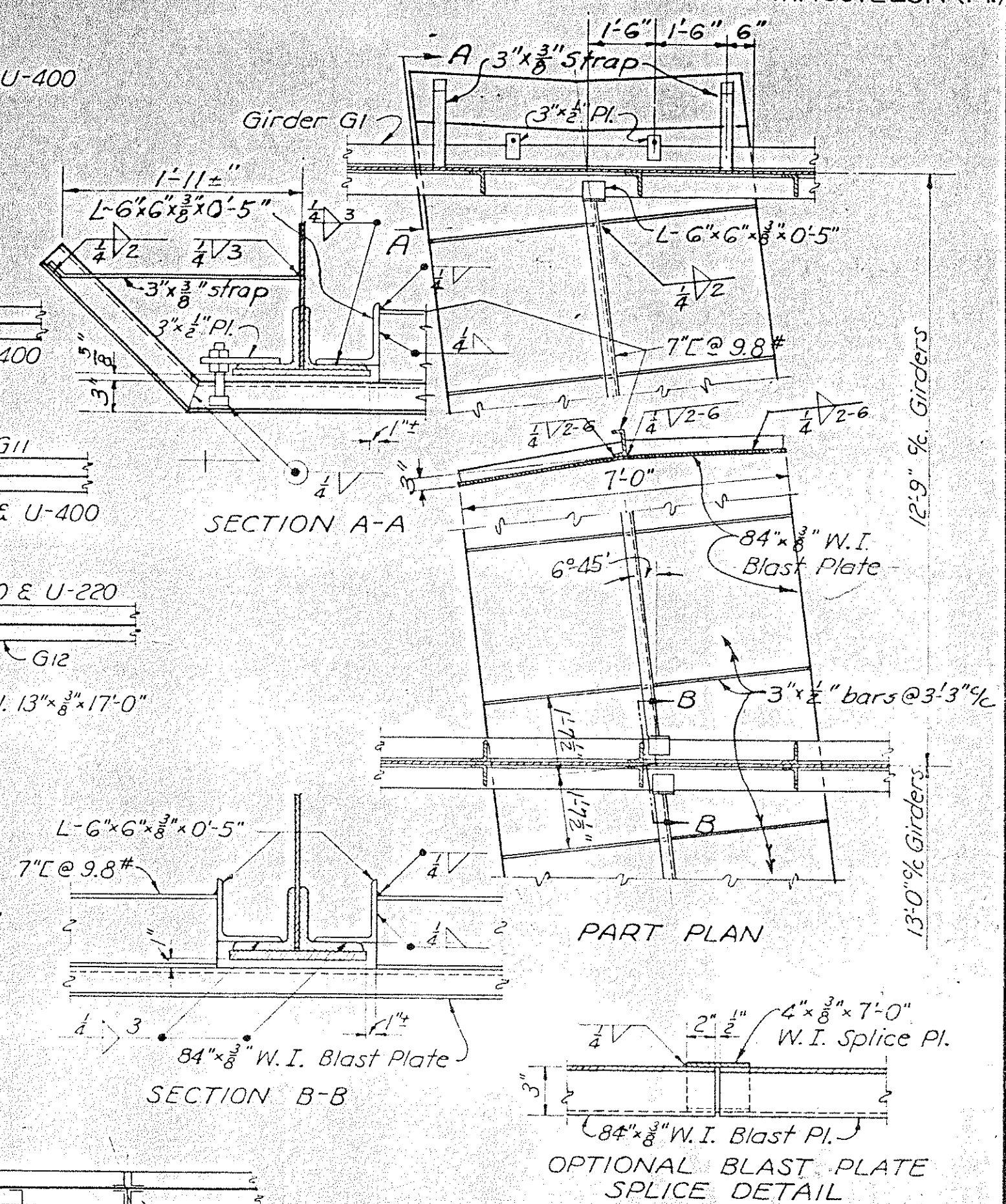
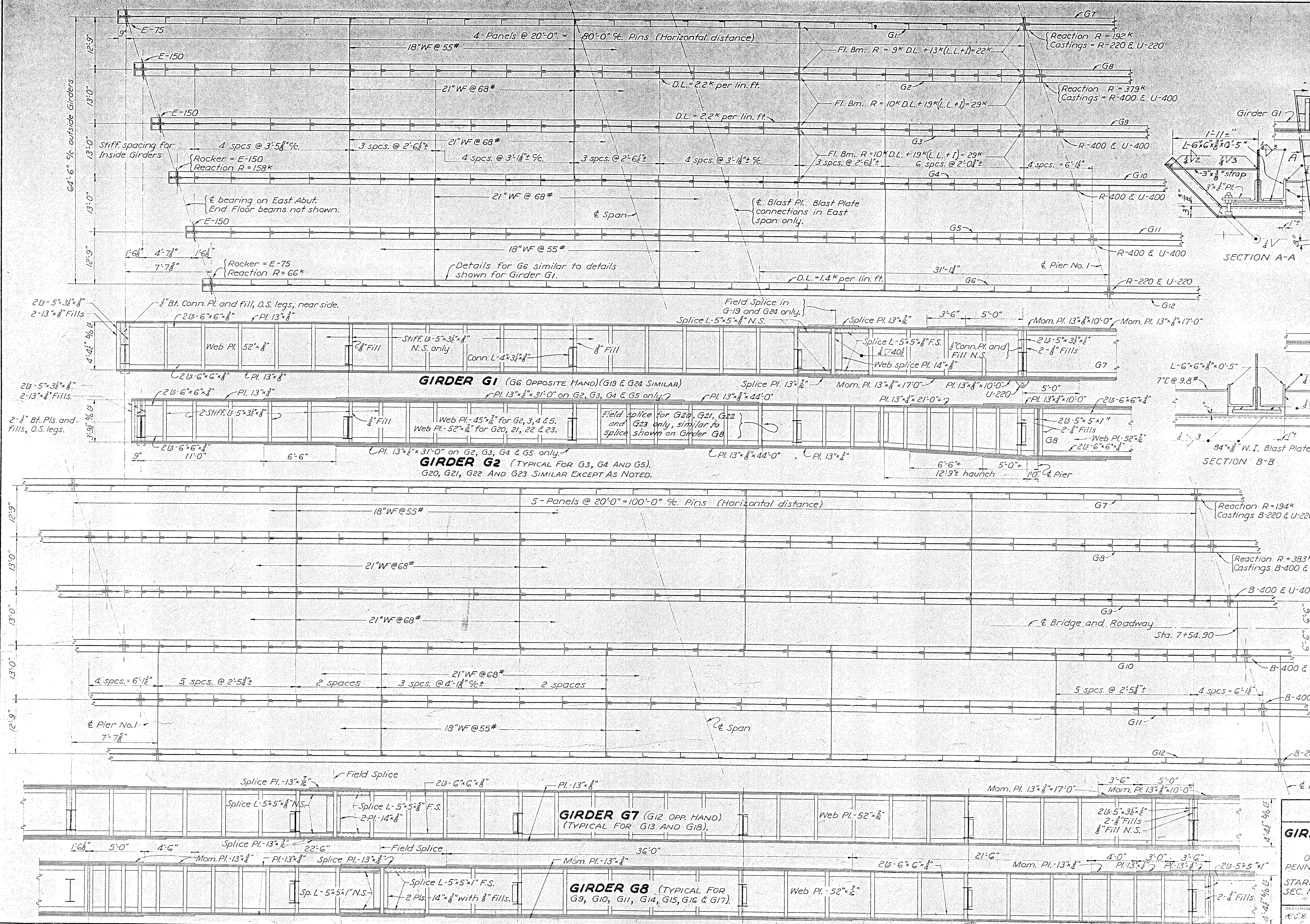
BRIDGE NO. ST-30-63
OVER TUSCARAWAS RIVER AND
PENNA. RR, W. & L. RR. AND B&O RR.

STARK COUNTY UG-338(2) S.H. 69
SEC. MASSILLON (PT.) UG-338(2) STA. 9+15.54

DESIGNED: K.E.D. DRAWN: K.E.S. TRACED: H. CHECKED: M.D. REVIEWED: M.D. DATE: 2-7-45

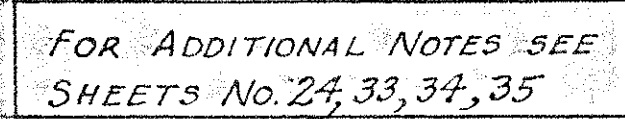


STARK COUNTY
S. H. 69
SEC. MASSILLON (PT.)

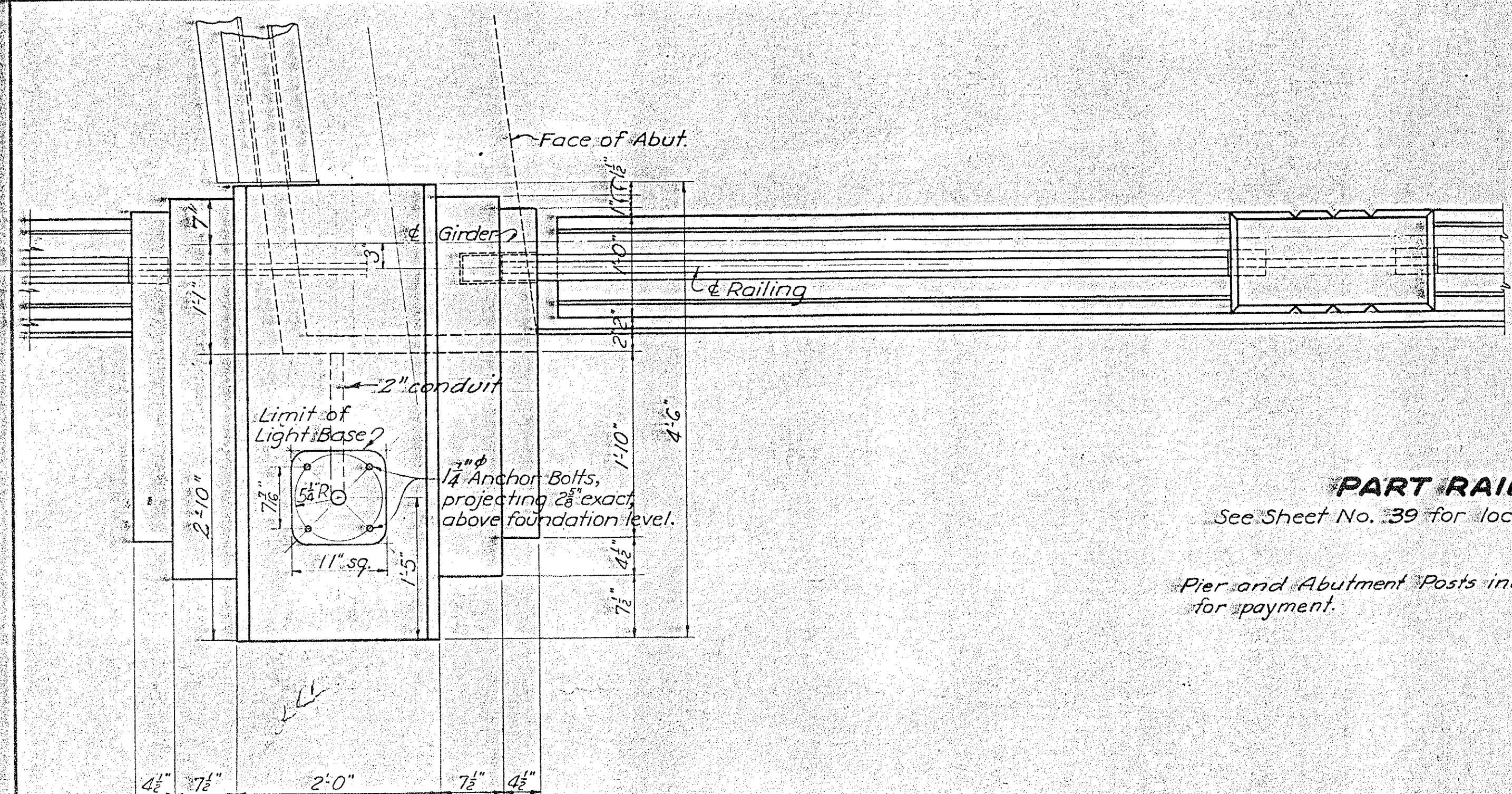


Rivets shall be $\frac{3}{4}$ " ϕ .
Shop splices in web plates as needed.
Stiffener Ls and Splice Ls-5x5x1" to be cut from Ls-6x6x1".

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES					
GIRDER AND BLAST PLATE DETAILS					
BRIDGE NO. ST-30-63 OVER TUSCARAWAS RIVER AND PENNA. R.R., W. & L.E. R.R. AND B. & O. R.R.					
STARK COUNTY SEC. MASSILLON (PT.)			S. H. 69 UG-338(2)		
DESIGNED A.C.B.	DRAWN A.C.B.	CHECKED G.S.	REVIEWED J.S.	DATE 4-8-43	REVISED 4-25-46



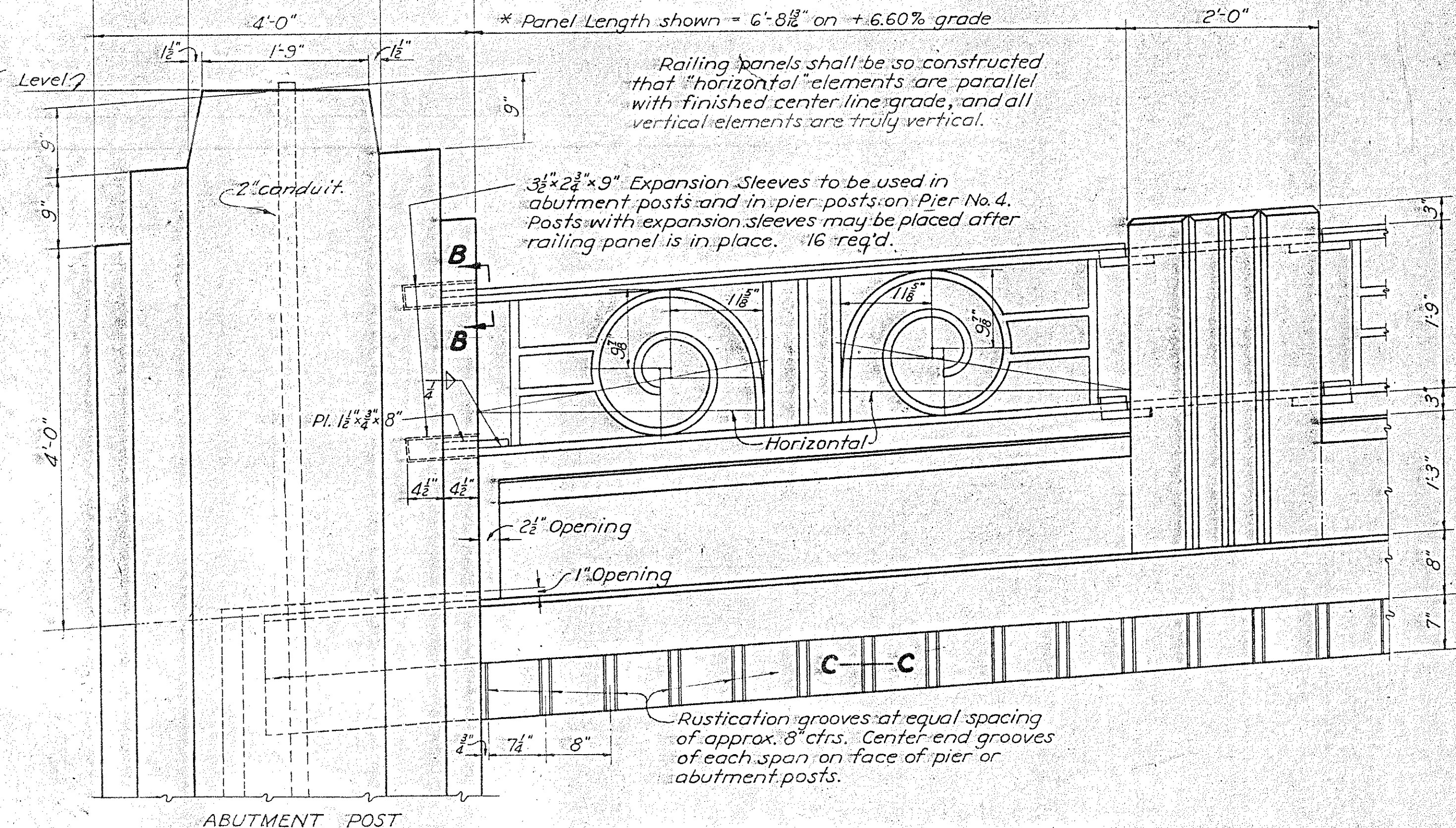
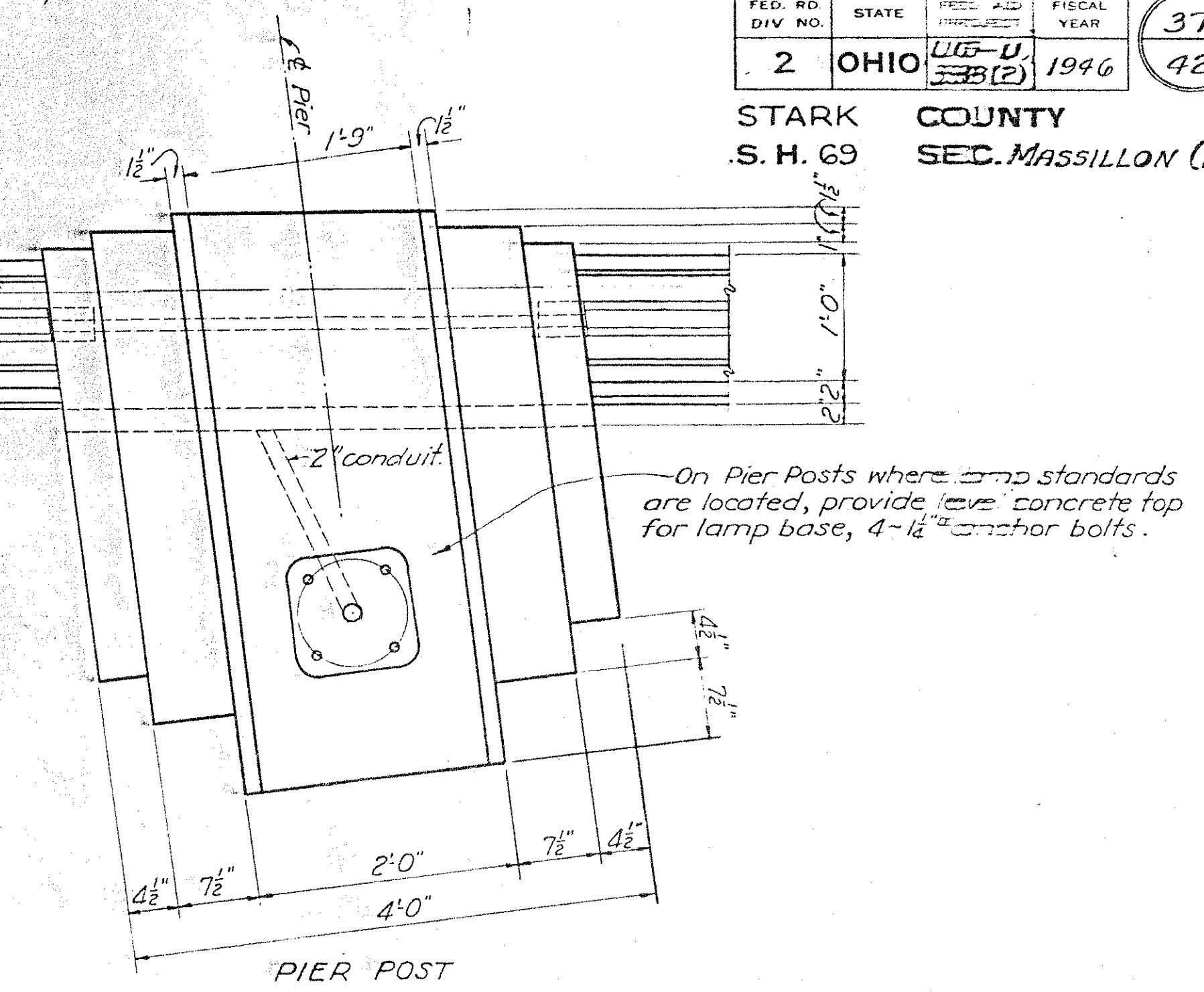
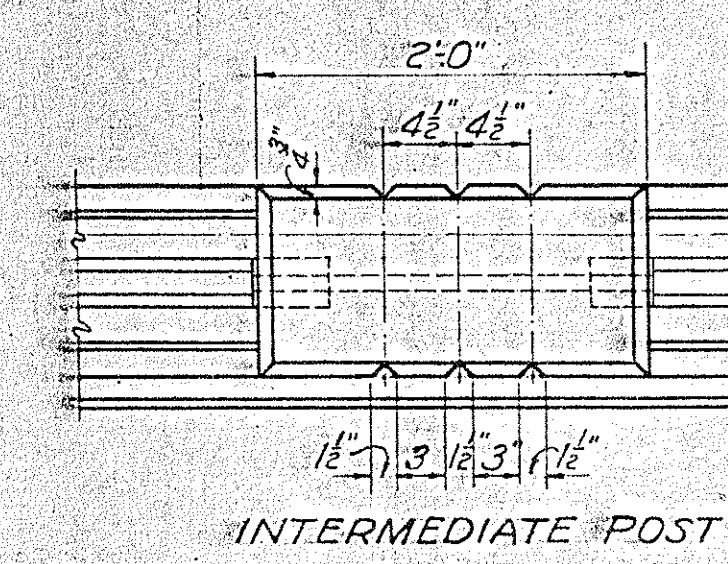
STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES					
<h2 style="text-align: center;">END FINISH DETAILS</h2> <p style="text-align: center;">BRIDGE NO. 5T-30-63 OVER TUSCARAWAS RIVER AND PENNA. R.R. W.&L.E. R.R. AND B&O R.R. STARK COUNTY S.H. 69 SEC. 3 MASSILLON (PT.) STA. 9+15.54</p> <p style="text-align: center;">U-338 (2) 46-338 (2)</p>					
DESIGNED <i>K.E.D.</i>	DRAWN <i>K.E.D.</i>	TRACED <i>W.W.C.</i>	CHECKED <i>E.D.D.</i>	FIELD <i>W.W.C.</i>	DATE <i>6-8-43</i>
					REVISED <i>12-17-45</i> <i>4-25-46</i>



PART RAILING PLAN

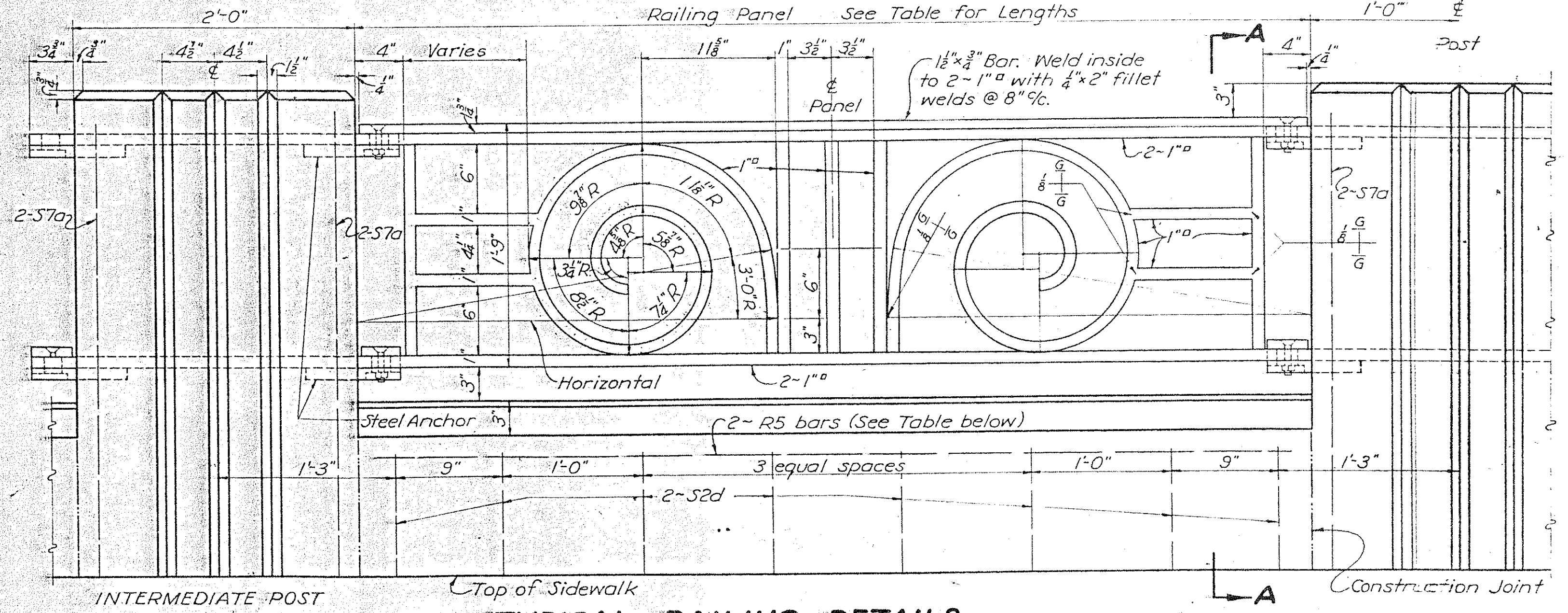
See Sheet No. 39 for location of conduits.

Pier and Abutment Posts included with wall concrete for payment.



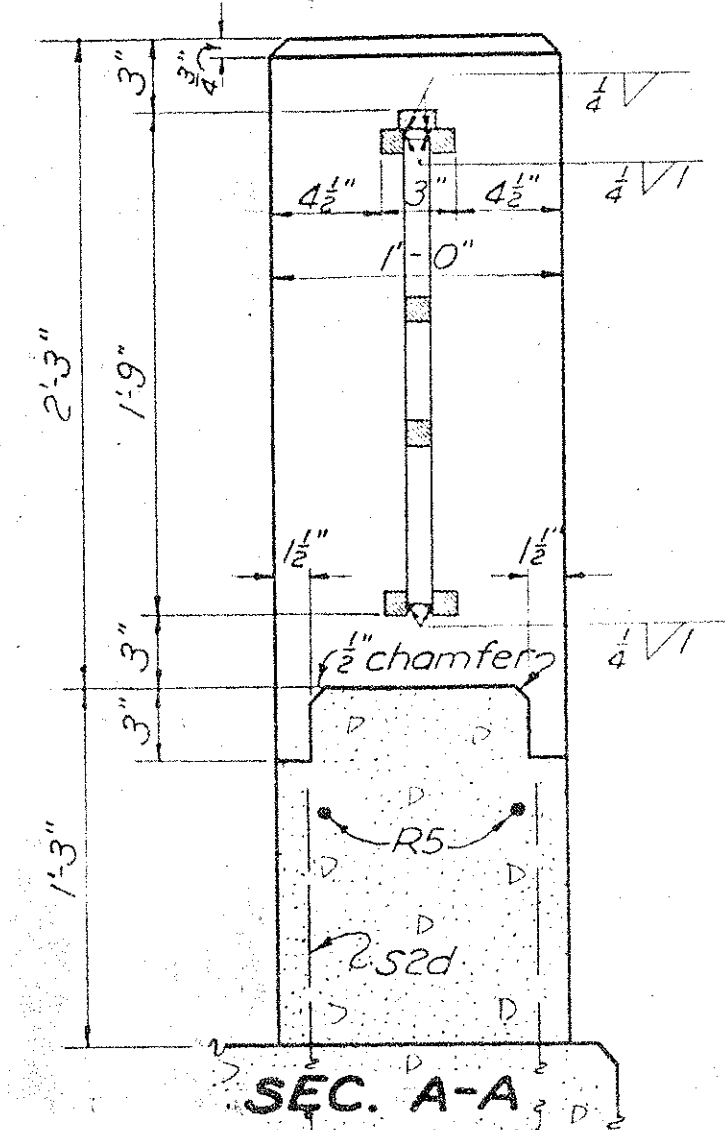
RAILING PANEL ELEVATION

* Railing panel lengths given are horizontal measurements.



TYPICAL RAILING DETAILS

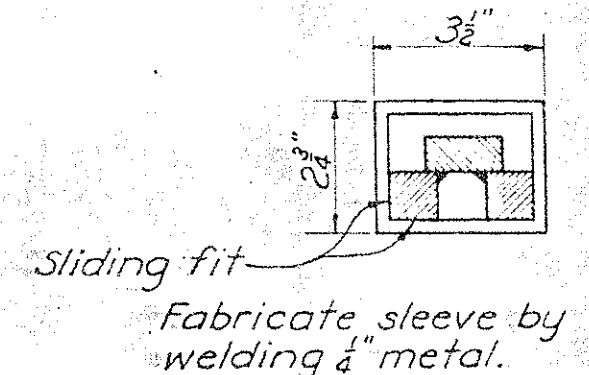
SPAN	NORTH SIDE		SOUTH SIDE		RS Bars
	Panel Length	No.	Panel Length	No.	
East Abut. - Pier No. 1	6'-8 1/2"	9	6'-9 3/8"	9	R5a
Pier No. 1 - Pier No. 2	6'-10 3/8"	11	6'-10 3/8"	11	R5a
Pier No. 2 - Pier No. 3	6'-10 3/8"	11	6'-10 3/8"	11	R5a
Pier No. 3 - Pier No. 4	6'-9 1/4"	9	6'-9 1/4"	9	R5a
Pier No. 4 - Pier No. 5	6'-5 1/2"	8	6'-5 3/8"	8	R5b
Pier No. 5 - Pier No. 6	5'-11 1/8"	7	6'-2 1/2"	7	R5c
Pier No. 6 - Pier No. 7	6'-3 1/2"	8	6'-3 1/2"	8	R5b
Pier No. 7 - Pier No. 8	6'-3 1/2"	8	6'-3 1/2"	8	R5b
Pier No. 8 - West Abut.	6'-11 1/8"	6	6'-11 1/8"	6	R5a
West Abutment	7'-0"	4	7'-0"	4	R5a
East Abutment	7'-0"	4	7'-0"	4	R5a



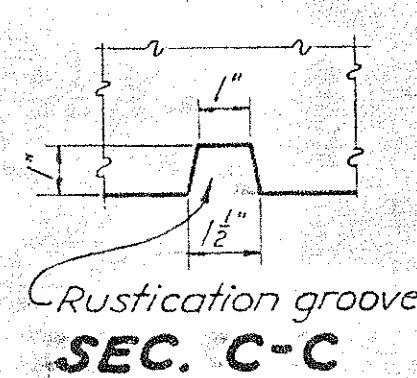
Railing expansion sleeves, anchors and bolts shall be hot-dip galvanized.

Construction Joint, at each end of all panels, shall be painted with hot paraffine to insure complete separation.

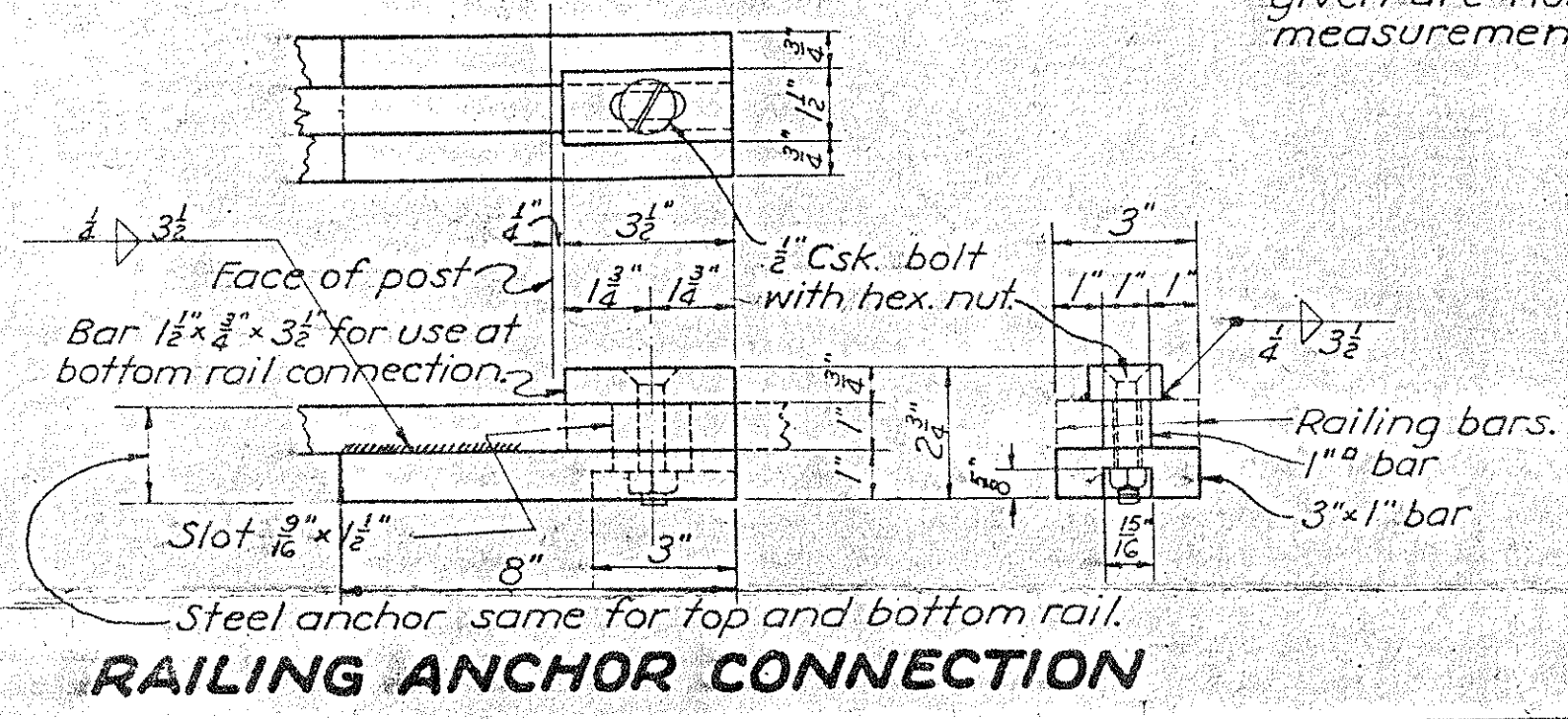
Do not chamfer corners unless shown.



SEC. B-B



SEC. C-C



RAILING ANCHOR CONNECTION

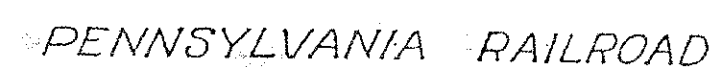
STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES						
RAILING DETAILS						
BRIDGE NO. ST-30-63 OVER TUSCARAWAS RIVER AND PENNA. R.R., W.&L.E. R.R. AND B.&O. R.R.						
STARK COUNTY				S. H. 69		
SEC. MASSILLON (PT.)				STA. 9+15.54		
UG-33(2) UG-33(2)						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVIEWED
A. C. D.	A. C. D.	W. S.	W. S.	W. S.	6-8-43	6-25-43



Pipe, fittings and supports shall be galvanized.



Pipe Specials and Pipe Supports
included with pipe for payment.



CENTRAL REGION EASTERN DIVISION

MASSILLON, O.

TEMPORARY T & S LINES AT LINCOLN WAY

SCALE - 1" = 100'

AUG. 12, 1943

OFFICE OF CHIEF ENGINEER

CENTRAL REGION

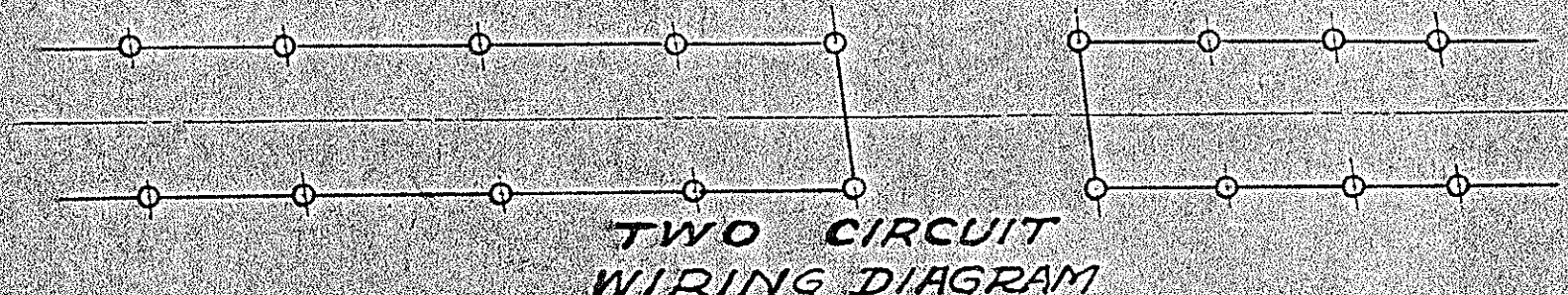
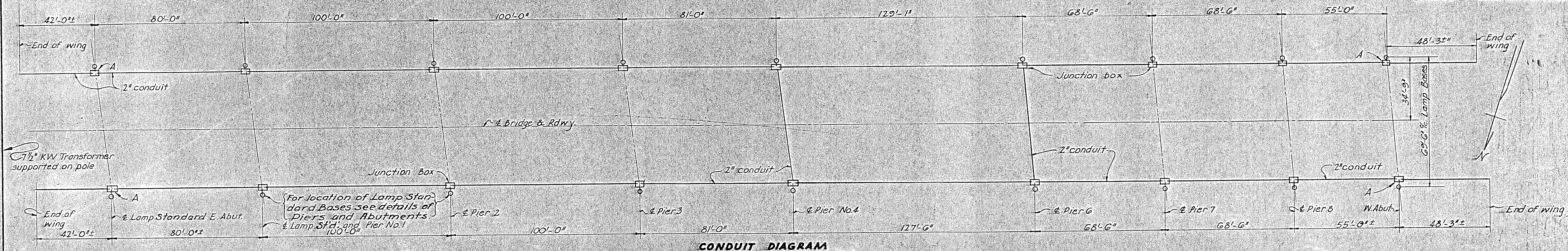
PITTSBURGH, PA. REVISED FEB. 21, 1946

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

DRAINAGE

BRIDGE NO. ST-30-63
OVER TUSCARAWAS RIVER AND
PENNA. R.R., W. & L. E. R.R. & B. & O. R.R.
STARK COUNTY S.H. 69
SEC. MASSILLON (PT.) STA. 9+15.4
U-338(2) FUG-338(2)

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVIEWED
<i>A.E.D.</i>	<i>K.C.B.</i>	<i>G.S.</i>	<i>BBB</i>	<i>AKB</i>	<i>6-8-45</i>	<i>12-15-45</i> <i>12-15-45</i> <i>6-25-46</i>



SYSTEM 60 cycle, 20 Amp. Primary 20 Amp. Secondary constant current series circuit (Two circuits)

CONDUIT Two inch (2") diameter, full weight, (including pull boxes and expansion joints corresponding to all expansion joints in the structure).

CABLE No. 6 single conductor Telurium Parkway cable for 1500 Volts, 90% Versatol insulation.

TRANSFORMER One 7 1/2 KW Type S.L. transformer with 20 amp. primary and 20 amp. secondary No. 6E 72 x 31 1/2 including protective device and G.E. Type S.L. transformer cutout.

LIGHTING UNITS Union Metal lamp standard as shown on drawings with G.E. suspension luminaires, Form 101D Cat. No. AGG4 with 2" heat insulated slip fitter hood and film cutout series receptacles.

LAMPS 10,000 lumen Mazda 20 amps series type.

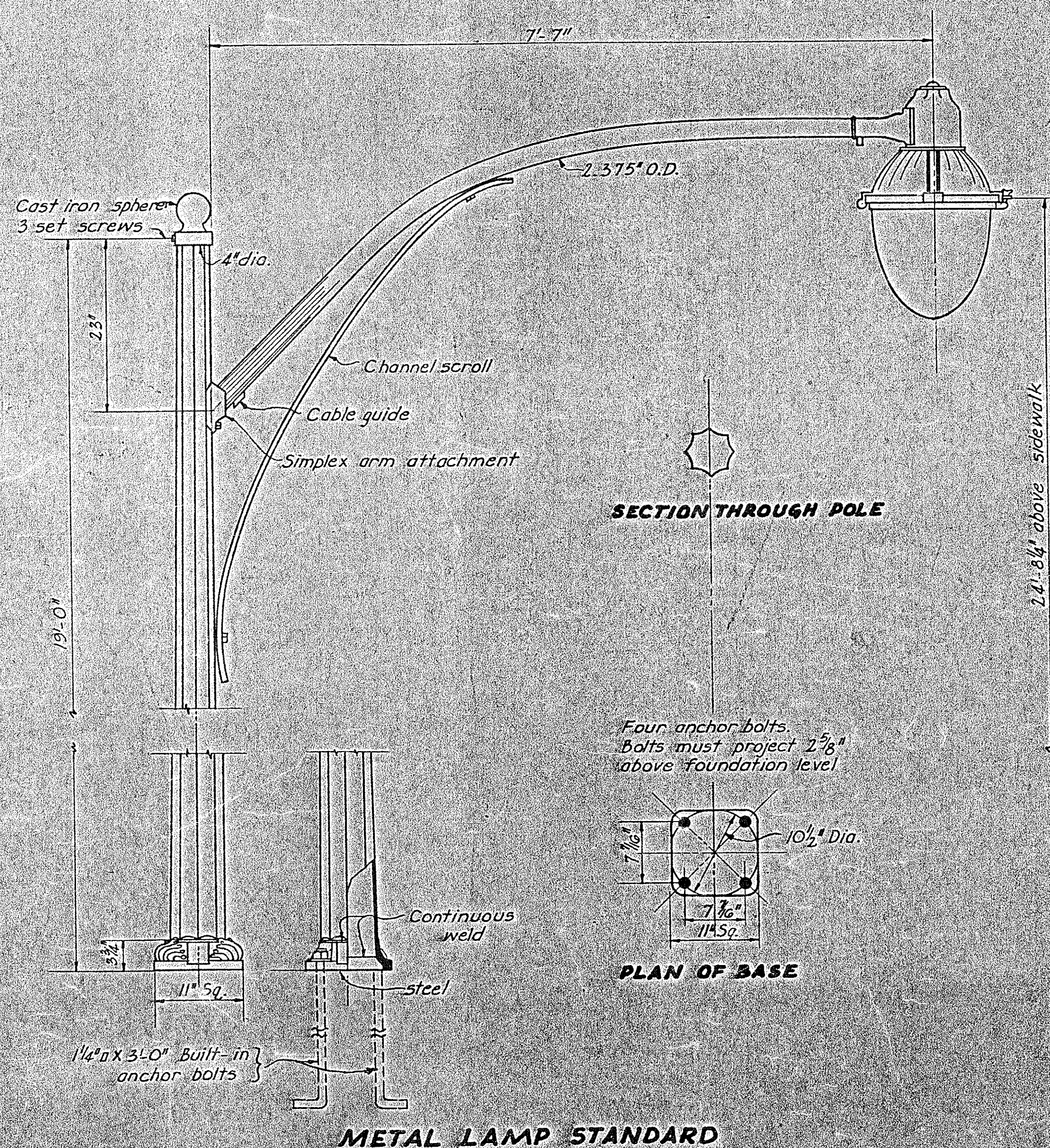
PAINTING same as railing.

POWER AND MAINTENANCE by City of Massillon, Ohio.

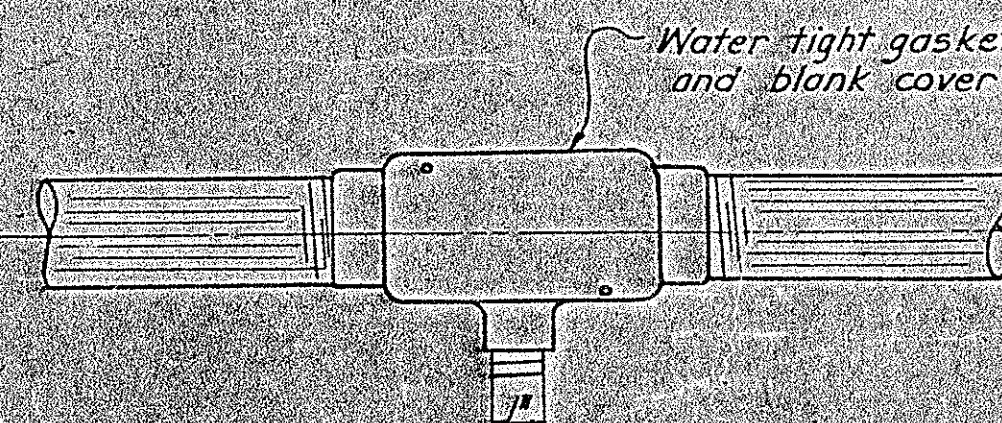
All exposed cable outside of junction boxes shall be protected by flexible conduit.

Where specific manufactures are specified, their equivalent will be acceptable.

City to furnish and connect their cables to points A and furnish and connect their conduit to bridge conduit at ends of wings.



METAL LAMP STANDARD



If conduit does not drain naturally, insert tee fitting with reduced side outlet at low point of each run and provide suitable drain.

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES					
LIGHTING SYSTEM					
BRIDGE NO. 57-30-G3 OVER TUSCARAWAS RIVER AND PENNA. R.R. W. & L.E. R.R. AND B. & O. R.R.					
STARK CO. S.H. 69 SEC. MASSILLON (PT.) STA. 2+15.54					
DESIGNED K.E.D.	DRAWN K.E.D.	TRACED H.W.E.	CHECKED L.S.D.	REVIEWED H.W.E.	DATE 6-3-43
				DATE 1/7/45	REVISION 2-26-46

Mark Size No. Length Weight Shape
SUPERSTRUCTURE

S7a	1"φ	544	44'-6"	16,540	B
b	3/4"	1258	29'-9"	56,210	B
c	3/4"	1258	27'-9"	52,430	S
d	3/4"	118	40'-0"	1,080	S
e	3/4"	418	30'-0"	810	S

S4a	3/4"	1258	27'-9"	56,410	S
b	3/4"	1110	38'-0"	43,990	S
c	3/4"	1120	40'-0"	50,010	S
d	3/4"	399	37'-6"	59,070	S
e	3/4"	160	27'-6"	4,590	S

S2a	3/4"	12500	6'-6"	10,850	S
b	3/4"	1820	35'-3"	22,880	B
c	3/4"	1820	33'-0"	11,640	B
d	3/4"	1232	44'-0"	3,290	B

PIER NO. 1

P8a	1"φ	36	39'-0"	4,770	S
b	3/4"	150	38'-0"	1,360	B
c	3/4"	150	23'-3"	3,960	S
d	3/4"	120	36'-9"	2,500	B
e	3/4"	110	15'-0"	510	S
f	1"φ	4	16'-6"	220	S

P4a	3/4"	774	18'-0"	620	S
b	3/4"	152	17'-0"	920	B
c	3/4"	126	19'-0"	520	B
d	3/4"	152	19'-6"	520	B
e	3/4"	152	16'-0"	330	B
f	3/4"	16	33'-6"	20	S

P2a	3/4"	48	25'-9"	180	B
b	3/4"	24	25'-9"	90	B
c	3/4"	18	7'-9"	440	B
d	3/4"	22	25'-3"	80	B

PIERS NO. 2 & 3

P8d	1"φ	40	36'-9"	5,000	S
e	1"φ	120	15'-0"	1,020	S
f	1"φ	18	16'-6"	450	S

P7a	1"φ	158	12'-6"	5,280	S
-----	-----	-----	--------	-------	---

P5a	3/4"	268	16'-0"	2,420	B
b	3/4"	168	24'-9"	6,250	B
c	3/4"	150	19'-6"	710	S
d	3/4"	150	15'-0"	1,130	S

P4b	3/4"	1284	17'-0"	2,830	B
c	3/4"	114	19'-0"	280	B
d	3/4"	104	19'-6"	1,030	B
e	3/4"	104	16'-0"	650	B
f	3/4"	12	13'-6"	40	S

P4g	3/4"	28	41'-0"	1,200	S
h	3/4"	108	35'-6"	4,000	S
i	3/4"	70	18'-0"	590	B
j	3/4"	48	12'-3"	610	B

P2a	3/4"	184	25'-9"	320	B
b	3/4"	48	25'-9"	190	B
c	3/4"	16	7'-9"	180	B
d	3/4"	44	25'-3"	150	B

PIER NO. 4

P8a	1"φ	32	39'-0"	4,240	S
b	3/4"	50	38'-0"	1,360	B
c	3/4"	20	36'-9"	2,500	S
d	3/4"	10	15'-0"	510	S
e	3/4"	4	16'-6"	220	S
f	1"φ	50	46'-6"	7,920	S

(Concl. next column.)

Mark Size No. Length Weight Shape
PIER NO. 4 (CONCLUDED)

P4b	3/4"	112	17'-0"	1,990	B
c	3/4"	156	19'-0"	1,110	B
d	3/4"	152	19'-6"	1,520	B
e	3/4"	152	16'-0"	1,330	B
f	3/4"	16	33'-6"	20	S
g	3/4"	176	12'-6"	1,000	S
h	3/4"	161	18'-3"	530	B
i	3/4"	152	15'-0"	1,150	S

P2a	3/4"	156	15'-9"	1,40	B
b	3/4"	124	15'-9"	90	B
c	3/4"	18	7'-9"	440	B
d	3/4"	22	25'-3"	80	B
e	3/4"	16	16'-0"	1,30	B

PIERS NO. 5 & 6

P8b	1"φ	100	38'-0"	2,720	B
d	3/4"	440	36'-9"	25,000	S
h	3/4"	20	12'-0"	3820	S
i	3/4"	18	13'-6"	3,770	S
j	1"φ	100	26'-6"	29,010	S

P4b	3/4"	120	17'-0"	2,130	B
c	3/4"	160	19'-0"	1,190	B
d	3/4"	104	19'-6"	1,040	B
e	3/4"	104	16'-0"	650	B
f	3/4"	12	13'-6"	40	S

P2a	3/4"	132	15'-9"	1,510	B
b	3/4"	136	15'-9"	1,440	B
c	3/4"	116	17'-9"	1,000	B
d	3/4"	132	15'-3"	1,000	B

PIER NO. 7

P8b	1"φ	150	38'-0"	1,360	B
d	3/4"	20	36'-9"	2,500	S
h	3/4"	10	12'-0"	410	S
i	3/4"	14	13'-6"	1,180	S
k	1"φ	150	22'-6"	3,820	S

P4b	3/4"	152	17'-0"	1,920	B
c	3/4"	126	19'-0"	1,520	B
d	3/4"	152	19'-6"	1,520	B
e	3/4"	152	16'-0"	1,330	B
f	3/4"	16	33'-6"	20	S

P2a	3/4"	166	15'-9"	2,250	B
b	3/4"	118	15'-9"	970	B
c	3/4"	18	7'-9"	440	B
d	3/4"	116	15'-3"	1,60	B

PIER NO. 8

P8b	1"φ	150	38'-0"	1,360	B
d	3/4"	20	36'-9"	2,500	S
h	3/4"	10	12'-0"	410	S
i	3/4"	14	13'-6"	1,180	S
L	1"φ	150	22'-0"	3,570	S

P4b	3/4"	144	17'-0"	1,780	B
c	3/4"	22	19'-0"	440	B
d	3/4"	152	19'-6"	1,520	B
e	3/4"	152	16'-0"	1,330	B
f	3/4"	16	33'-6"	20	S

P2a	3/4"	166	15'-9"	2,250	B
b	3/4"	118	15'-9"	970	B
c	3/4"	18	7'-9"	440	B
d	3/4"	116	15'-3"	1,60	B

WEST ABUTMENT

A4a	3/4"	166	22'-3"	1,580	S
b	3/4"	33	12'-0"	410	S
c	3/4"	188	16'-0"	550	S
d	3/4"	33	11'-0"	380	S
e	3/4"	36	18'-6"	320	B
f	3/4"	26	12'-0"	330	B
g	3/4"	100	17'-0"	1,770	S

(Contd. next column.)

Mark Size No. Length Weight Shape
WEST ABUT. (CONCLUDED)

A2a	3/4"	166	16'-0"	2,260	B
b	3/4"	170	16'-3"	4,460	S
c	3/4"	170	18'-0"	5,880	B
d	3/4"	172	24'-0"	13,000	S
e	3/4"	22	14'-0"	190	B
f	3/4"	176	12'-6"	1,000	S
g	3/4"	161	18'-3"	530	B
h	3/4"	152	15'-0"	1,150	S

C8a	1"φ	24	18'-0"	1,470	S
b	3/4"	24	13'-0"	4,770	S
c	3/4"	112	17'-6"	3,320	S
d	3/4"	24	13'-0"	4,770	S
e	3/4"	116	16'-9"	1,100	B
f	3/4"	116	16'-0"	1,100	B
g	3/4"	116	15'-3"	1,100	B
h	3/4"	116	14'-6"	990	B
i	3/4"	116	13'-9"	990	B
j	3/4"	116	10'-0"	660	B

C4a	3/4"	116	16'-9"	1,100	B
b	3/4"	116	16'-0"	1,100	B
c	3/4"	116	15'-3"	1,100	B
d	3/4"	116	14'-6"	990	B
e	3/4"	116	13'-9"	990	B
f	3/4"	116	10'-0"	660	B
g	3/4"	116	13'-0"	880	B
h	3/4"	116	12'-3"	880	B
i	3/4"	116	11'-6"	770	B
j	3/4"	116	10'-9"	770	B
k	3/4"	116	10'-0"	660	B

P8e	1"φ	110	15'-0"	2,510	S
f	1"φ	14	16'-6"	2,220	S
g	3/4"	116	13'-0"	880	B
h	3/4"	116	12'-3"	880	B
i	3/4"	116	11'-6"	770	B
j	3/4"	116	10'-9"	770	B
k	3/4"	116	10'-0"	660	B

P4f	3/4"	116	13'-6"	320	S
g	3/4"	116	13'-0"	880	B
h	3/4"	116	12'-3"	880	B
i	3/4"	116	11'-6"	770	B
j	3/4"	116	10'-9"	770	B
k	3/4"	116	10'-0"	660	B

PIER NO. 9

P8a	1"φ	154	38'-0"	1,470	B
f	1"φ	24	29'-0"	1,860	S
g	3/4"	172	16'-0"	1,650	B
h	3/4"	174	19'-0"	1,410	S
i	3/4"	174	19'-0"	1,410	S
j	3/4"	174	19'-0"	1,410	S
k	3/4"	174	19'-0"	1,410	S
l	3/4"	174	19'-0"	1,410	S
m	3/4"	174	19'-0"	1,410	S
n	3/4"	174	19'-0"	1,410	S
o	3/4"	174	19'-0"	1,410	S
p	3/4"	174	19'-0"	1,410	S
q	3/4"	174	19'-0"	1,410	S
r	3/4"	174	19'-0"	1,410	S
s	3/4"	174	19'-0"	1,410	S
t	3/4"	174	19'-0"	1,410	S
u	3/4"	174	19'-0"	1,410	S
v	3/4"	174	19'-0"	1,410	S
w	3/4"	174	19'-0"	1,410	S
x	3/4"	174	19'-0"	1,410	S
y	3/4"	174	19'-0"	1,410	S
z	3/4"	174	19'-0"	1,410	S

F4a	3/4"	186	10'-6"	940	S
b	3/4"	112	29'-0"	13,600	S
c	3/4"	112	29'-0"	13,600	S
d	3/4"	112	29'-0"	13,600	S
e	3/4"	112	29'-0"	13,600	S
f	3/4"	112	29'-0"	13,600	S
g	3/4"	112	29'-0"	13,600	S
h	3/4"	112	29'-0"	13,600	S
i	3/4"	112	29'-0"	13,600	S
j	3/4"	112	29'-0"	13,600	S
k	3/4"	112	29'-0"	13,600	S
l	3/4"	112	29'-0"	13,600	S
m	3/4"	112	29'-0"	13,600	S
n	3/4"	112	29'-0"	13,600	S
o	3/4"	112	29'-0"	13,600	S
p	3/4"	112	29'-0"	13,600	S
q	3/4"	112	29'-0"	13,600	S
r	3/4"	112	29'-0"	13,600	S
s	3/4"	112	29'-0"	13,600	S
t	3/4"	112	29'-0"	13,600	S
u	3/4"	112	29'-0"	13,600	S
v	3/4"	112	29'-0"	13,600	S
w	3/4"	112	29'-0"	13,600	S
x	3/4"	112	29'-0"	13,600	S
y	3/4"	112	29'-0"	13,600	S
z	3/4"	112	29'-0"	13,600	S

f	6	38'-6"	240	S
g	28	16'-0"	470	S
h	16	7'-6"	730	S
i	6	5'-0"	330	S
k 58'φ	6	26'-0"	440	S

ERROR: syntaxerror
OFFENDING COMMAND: --nostringval--

STACK:

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(michael.chung)  
/Author  
-mark-
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