3176

Plan Set No. [redacted]

ORDINANCE NOS. 157-60 and 287-60
CONTRACT NO. 88-60

REPAIRS AND IMPROVEMENTS TO
ANTHONY WAYNE BRIDGE
CITY OF TOLEDO, OHIO

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF HARBOR & BRIDGES

MARCH 1960

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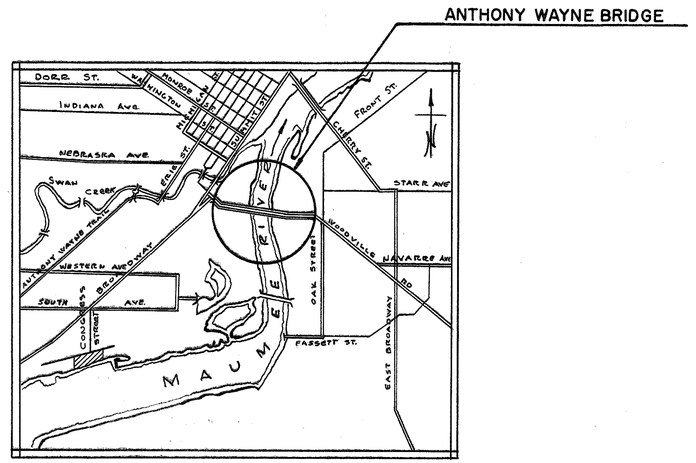


LOCATION MAP

APPROVED

March 16, 1960 Russell W. Rink
CITY MANAGER

March 16, 1960 Leonard E. Leis
DIR. PUBLIC SERVICE

March 16, 1960 John H. Davis
COM'R. HARBOR & BRIDGES

HON. MICHAEL J. DAMAS - MAYOR
RUSSELL W. RINK - CITY MANAGER
LEONARD E. LEIS - DIR. PUBLIC SERVICE
JOHN H. DAVIS - COM'R. HARBOR & BRIDGES

SANZENBACHER, MILLER & BRIGHAM - CONSULTING ENGINEERS

SEAL
FREDERICK C. MILLER
PROFESSIONAL ENGINEER
REG. # 4202

As Built 10-31-62

QUANTITY SUMMARY

Reference Number	Item	Description	Quantity	Unit
		Bridge		
1	S-1	Concrete for superstructure (roadway slab, curbs, and sidewalk)	5,330	cu. yds.
2	S-4	Reinforcing steel	1,486,416	lbs.
3	S-7	Structural steel- including scuppers, roadway lighting brackets, and framing reinforcements	74,512	lbs.
4	S-8	Painting of structural steel	lump sum	lump sum
5	S-9	Structural steel expansion joints	107,795	lbs.
6	S-14	Bridge railing, repair of	lump sum	lump sum
7	S-22	Removal of portions of existing structure-bridge slab, curbs, and sidewalk	lump sum	lump sum
8	S-29	Drainage of structures	lump sum	lump sum
9	Special	Tower lights, repair of	lump sum	lump sum
10	Special	Splash panels	240	lin. ft.
11	Special	Repairs to East and West Abutments	lump sum	lump sum
12	Special	Bridge tenders' building, as per plan	lump sum	lump sum
13	S-25	Conduit for roadway lighting - 2½" diameter	6,989	lin. ft.
14	Special	Non-metallic waterstop	510	sq. ft.
15	Special	Shear connectors	16,282	each
16	Special	Repairs to superstructure at bearing over Pier number 2W	lump sum	lump sum
17	Special	Repair of existing concrete sidewalk - suspended spans	lump sum	lump sum
		Roadway		
18	E-8	Removal of existing concrete pavement and approach slabs	578	sq. yds.
19	E-8	Removal of existing concrete sidewalk	5337	sq. ft.
20	E-8	Removal of existing curb	957	lin. ft.
21	T-71	10" Reinforced Portland cement concrete pavement	241	sq. yds.
22	I-7	Reinforced concrete approach slabs (T = 13")	347	sq. yds.
23	I-12	Concrete curb, as per plan	857	lin. ft.
24	I-13	5" Reinforced concrete sidewalks	5337	sq. ft.
25	I-22	Subbase	252	cu. yds.
26		Maintenance of traffic	lump sum	lump sum

GENERAL NOTES

Repairs and Improvements shall be carried on with maintenance of public traffic. Reference is made to requirements as given in the Special Provisions and Supplemental Conditions under Work Procedure and Maintenance of Traffic, and to the suggested procedure given in the plans for the removal and replacement of the roadway slab.

Description of Reference Number 9, "Repair of Tower Lights", of the proposal is contained in the specifications only. No information is given on the drawings.

Description of Reference Number 17, "Repair of Existing Concrete Sidewalk-Suspended Spans," of the proposal is contained in the specifications only. No information is given on the drawings.

No work required in either West or East Anchorage Pier pits.

The roadway wearing surfaces over the two anchorage piers are integral with the pier concrete. Removal of concrete and bituminous concrete down to firm material is included in the Lump Sum Item S-22. Replacement concrete shall be measured and paid for under Item S-1. Reinforcing steel over these piers shall be placed as directed by the Engineer and shall be measured and paid for under Item S-4.

Existing bridge tender and tool storage buildings near the East and West Anchorage Piers are to be removed by the Contractor and all material disposed of as directed by the Engineer. Payment included in Item S-22, Removal of Portions of Existing Structure.

For general information only, following are the approximate quantities of steel in the structure:

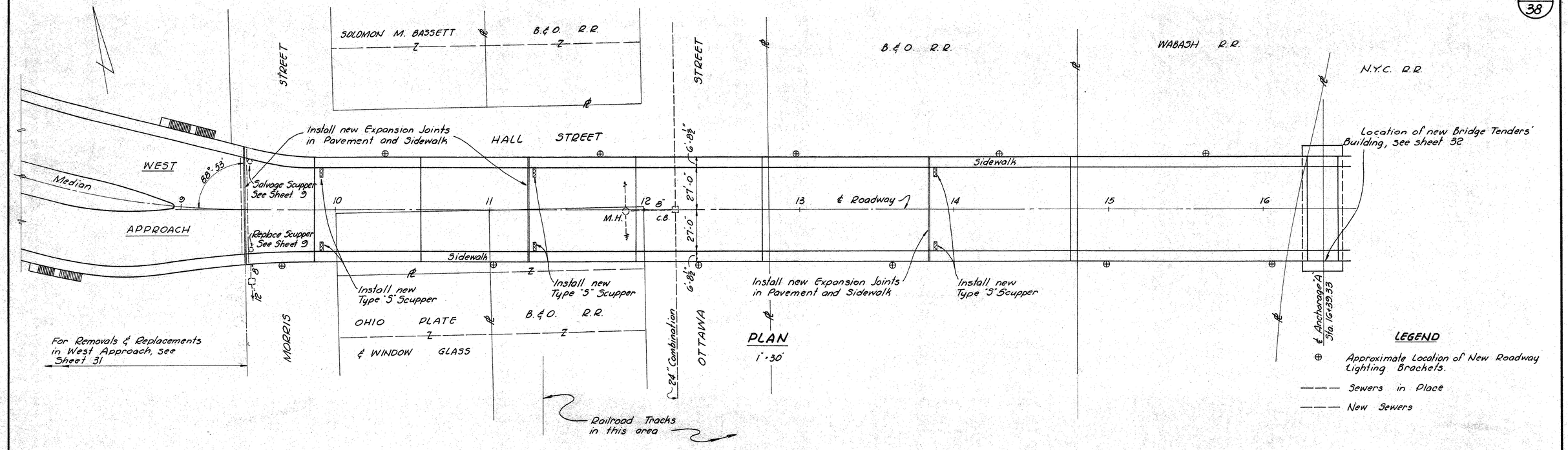
Suspended Structures	2200 tons
Towers	1000 "
Saddles, Shoes, Cable Bands	275 "
Cable and Wrappings	700 "
Suspender and Hand Ropes	15 "
Deck Truss Spans	770 "
Plate Girder Spans	1930 "
Stringer Spans	345 "
Railings	190 "

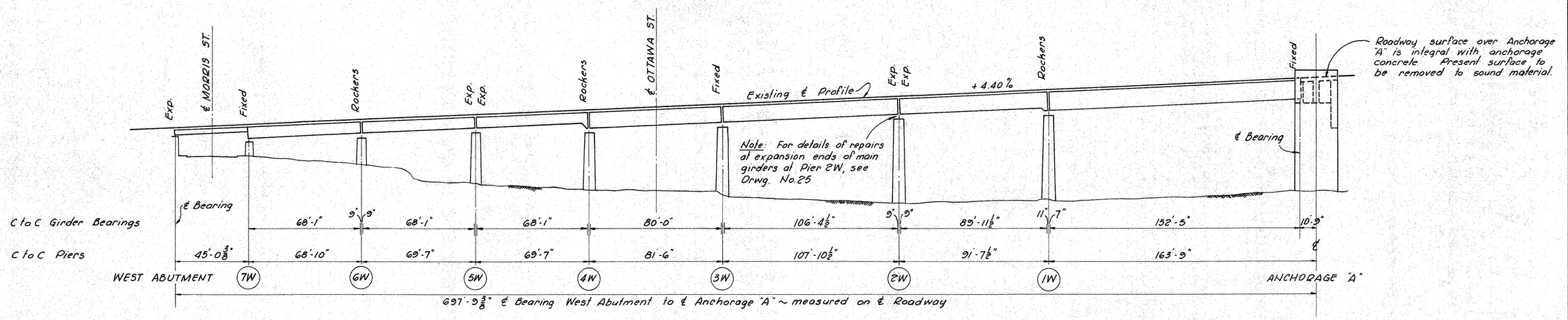
ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	F.C.M.
Preliminary Review	3-12-60	F.C.M.

SANZENBACHER, MILLER, & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
QUANTITY SUMMARY
AND GENERAL NOTES

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
FCM	JCS		C.E.S.		





PROFILE
1" = 30'

ISSUE	DATE	NOTED
As Built	10/31/62	
Bidders	3/19/60	FCM
Preliminary Review	3/18/60	FCM

SANZENBACHER, MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE

REPAIRS & IMPROVEMENTS

PLAN & PROFILE (1)

WEST - ABUTMENT TO ℄ WEST ANCHORAGE PIER

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
F.C.M.	P.F.C.	B.B.	C.E.S.	

N.Y.C. R.R.

TOLEDO - LUCAS COUNTY PORT AUTHORITY (N.Y.C. R.R. TRACKS)

U.S. HARBOR LINE

203'-9" | 233'-6" | 392'-6"

Install new Expansion Joints in Pavement and Sidewalk

Present Expansion Joint to be retained

Ladder Hatch

Ladder Hatch

10'-1½"

27'-0"

6'-8½"

17 | 18 | 19 | 20 | 21 | 22 | 23 | 24

℄ Bridge ℄ Roadway

℄ Span, Sta 24+69.08

Location of new Bridge Tenders Building see Sheet 32.

Install New Type "S" Scuppers

Install New Type "S" Scuppers

Install New Type "S" Scuppers

Ladder Hatch

Salvage Existing Scuppers See Sheet 24 for Details

℄ Anchorage "A" Sta. 16+39.33

PLAN
1" = 30'

Railroad Tracks in this area

LEGEND

⊕ Approximate Location of New Roadway Lighting Brackets.

——— Sewers in Place

——— New Sewers

Roadway surface over Anchorage "A" is integral with anchorage concrete. Present surface to be removed to sound material.

Exp.

Fixed Exp.

+4.40%

Existing ℄ Profile

568.45' V.C.

℄ Span

L.W. Datum 570.5

	ANCHORAGE "A"		PIER "B"		TOWER "C"	
C. to C. Girder Bearings		10'-9½"	191'-10¾"	1'-0¾"	229'-8½"	3'-9½"	3'-9½"	388'-8½"
C. to C. Piers	℄	203'-9"	℄	233'-6"	℄	392'-6"

829'-9" ℄ Anchorage "A" to ℄ Span ~ measured on ℄ Roadway

PROFILE
1" = 30'

ISSUE	DATE	NOTED
As Built	10/31/62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
PLAN & PROFILE (2)
℄ WEST ANCHORAGE PIER TO ℄ CENTER SUSPENDED SPAN

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
F.C.M.	P.F.C.	B.B.	C.E.S	

U.S. HARBOR LINE

N. Y. C. R. R.

392'-6"

233'-6"

203'-9"

Present Expansion Joint to be retained

Ladder Hatch

Ladder Hatch

Ladder Hatch

Install New Type "S" Scuppers

Salvage Existing Scuppers See Sheet E4 for Details

℄ Span, Sta. 24+69.08

10'-1½"

27'-0"

27'-0"

10'-1½"

25 26 27 28 29 30

℄ Bridge & Roadway

℄ PENN. TO LEASED

STREET

ERNEST & RHUA OSBORN

CITY OF TOLEDO

Install new Expansion Joints In Pavement and Sidewalk

6'-8½"

6'-8½"

27'-0"

27'-0"

31 32

M.H.

12"

7'-2"

8"

8"

12"

Rebuild M.H.

Rebuild C.B.

8"

8"

Install New Type "S" Scuppers

Existing M.H. (Inactive)

12"

M.H.

Combination

15"

℄ Anchorage "F" Sta. 32+98.83

STRATTON STREET

M.H.

15"

MIAMI Intercepter

60" Sanitary

Install New Type "S" Scuppers

Railroad Tracks This Area

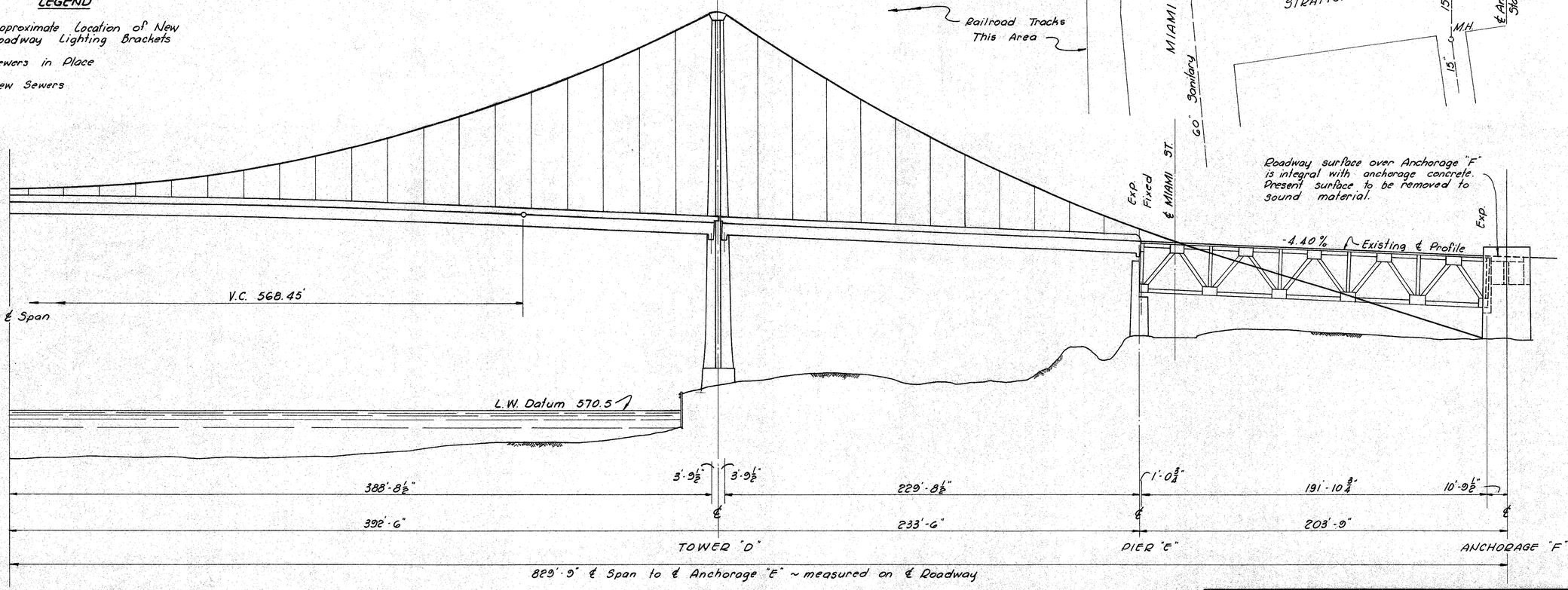
PLAN
1"=30'

LEGEND

⊕ Approximate Location of New Roadway Lighting Brackets

——— Sewers in Place

——— New Sewers



PROFILE
1"=30'

ISSUE	DATE	NOTED
As Built	10/31/62	
Bidders	3/19/60	F.C.M.
Preliminary Review	3/12/60	F.C.M.

SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
PLAN & PROFILE (3)
℄ CENTER SUSPENDED SPAN TO ℄ EAST ANCHORAGE PIER

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
F.C.M.	P.F.C.	B.B.	C.E.S.	

IRISH & PILLIOD'S ADD'N.

BELL & GUNNELLS ADD'N.

EVELYN LAUENDER

MARY TARJANKI

THOMAS & MARION POOL

DANIEL & DORIS COLE

RAYMOND & MARY SEPEDA

MARIE T. LANSKER

IRMA DUSSEAU

CHARLES DEERHAKE

DAISY SCHUTT

HELEN WORLAND

MARION J. CANNADAY

HELEN BLANCHARD

MINNIE B. ROOKS

RALPH LAHNUM

ERMA LAPLANTE

HERBERT WEAGLEY

STRATTON STREET

YONDOTA STREET

UTAH STREET

EAST APPROACH

End Post

Install New Type "S" Scuppers

Install Both new railing splash panels. See Sheet 25

6 Railing Panels

100'±

85'±

Type "S" Scuppers

Install new Expansion Joints in pavement and Sidewalks

6" Drain Pipe

15" Combination

T.C.

P.I.

C.T.

Δ = 7° 57' 15"

℄ Anchorage "F" Sta. 32+98.83

33 34 35 36 37 38 39 40 41

℄ Bridge ℄ Roadway

M.H. C.B.

12" 15" 18" 27'-0" 6'-8½"

PLAN
1" = 30'

LEGEND
⊕ Approximate Location of New Roadway Lighting Brackets.

——— Sewers in Place

——— New Sewers

Roadway surface over Anchorage "F" is integral with anchorage concrete. Present surface to be removed to sound material.

Existing ℄ Profile

Fixed Rockers Exp. Fixed ℄ ALLEY ℄ YONDOTA ST. ℄ UTAH ST. -4.40%

C. to C. Girder Bearings	10'-9"	79'-2 13/16" N. Girder 85'-2 3/16" S. Girder	9" 9"	78'-6"	9" 9"	78'-6"	78'-6"	78'-6"	78'-6"	9" 9"	78'-6"	40'-0"	40'-0"	40'-0"	40'-0"	40'-0"	32'-6 3/16"	32'-0"	20'-0"	℄ Bearing
C. to C. Piers	38'-4 3/16"	55'-6 3/4" (on tangents)		80'-0"		80'-0"	80'-0"	80'-0"	80'-0"		79'-3"									
ANCHORAGE "F"			1E		2E		3E	4E	5E	6E		7E	8E	9E	10E	11E	12E	13E	14E	EAST ABUTMENT

857'-6" ℄ Anchorage "F" to ℄ Bearing East Abutment ~ measured on ℄ Roadway (857'-8½" measured on tangents)

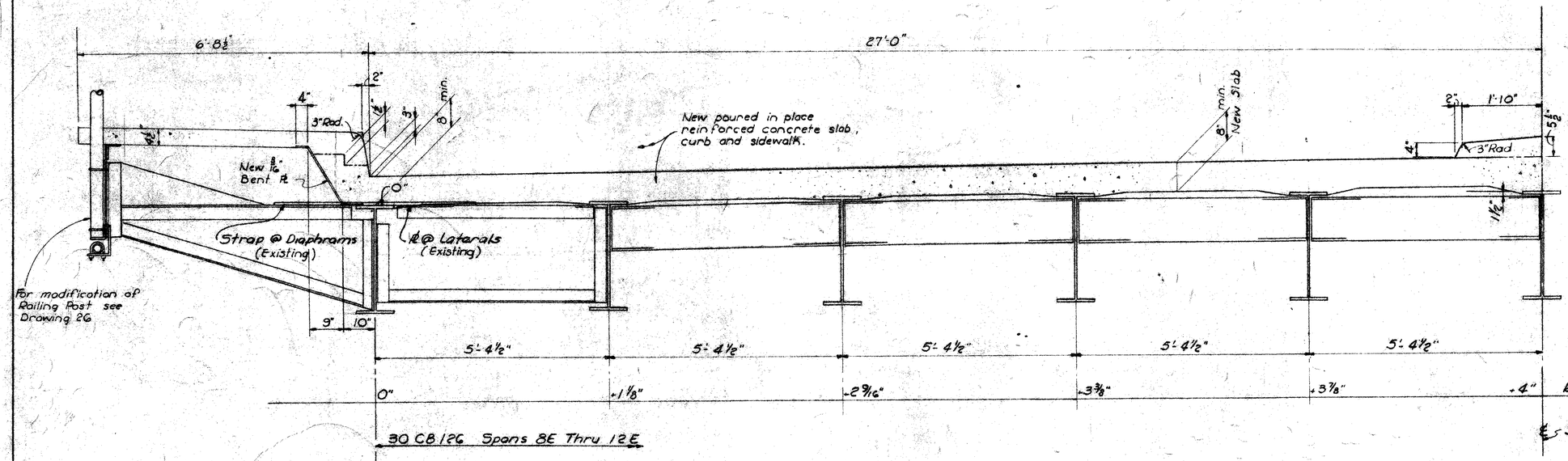
PROFILE
1" = 30'

ISSUE	DATE	NOTED
As Built	10/31/62	
Bidders	3/10/60	FCM
Preliminary Review	3/12/60	FCM

SANZENBACHER, MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
PLAN & PROFILE (4)
℄ EAST ANCHORAGE PIER TO EAST ABUTMENT

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
F.C.M	P.F.C	B.B.	C.E.S.	

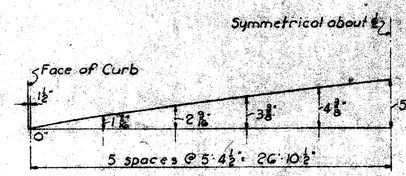


30 CB 126 Spans 8E Thru 12E

24 CB 100 Spans 13E & 14E

21 CB 64 Span 15E

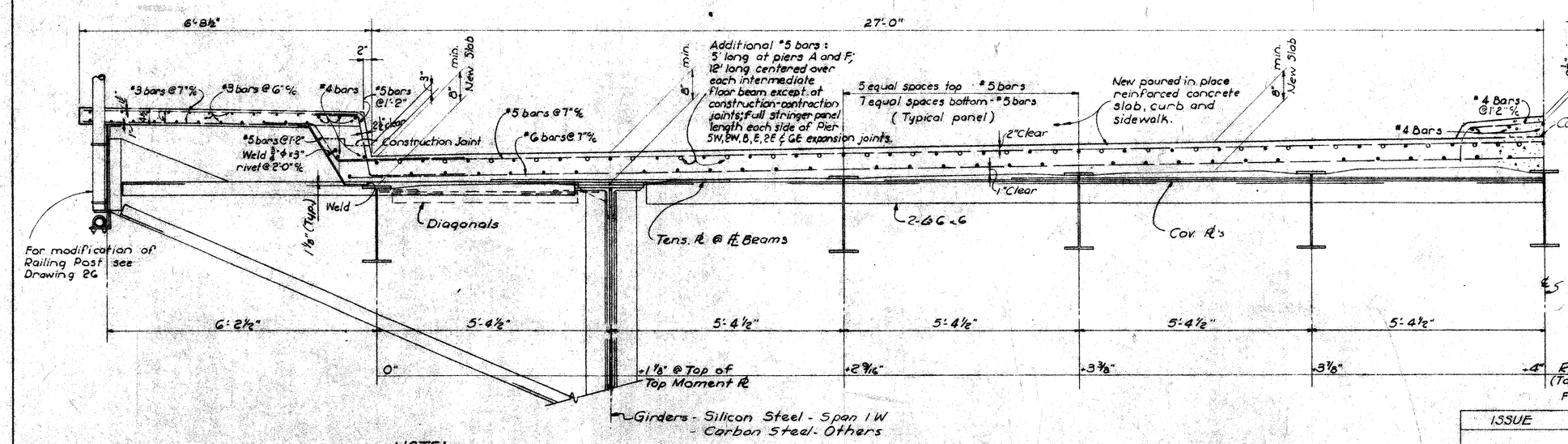
For Stringer Size & Spacing in Span 8W See Floor Framing Plan



NEW REQUIRED CROWN
Measured From Gutter

CROSS SECTION - APPROACH STRINGER SPANS
Applies to Spans 8E Thru 15E
(Reinforcing same as in Girder Span Section.)

NOTE:
See deck cross section on sheet 27 for location of slab longitudinal joints and main transverse reinforcing steel laps.



Girders - Silicon Steel - Span 1W
- Carbon Steel - Others

NOTE:
For Girder identification see Floor Framing Plan & Sheet No. 14
For Stringer size see Floor Framing Plan.

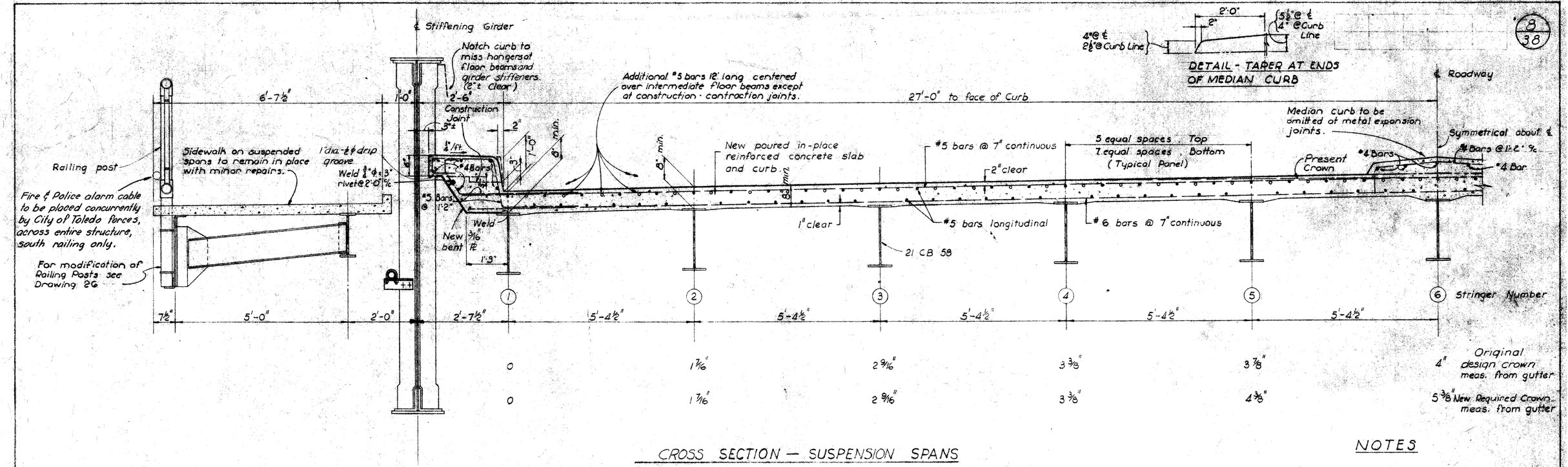
CROSS SECTION - APPROACH GIRDER SPANS
Applies to Spans 1W Thru 7W & Spans 1E Thru 7E

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

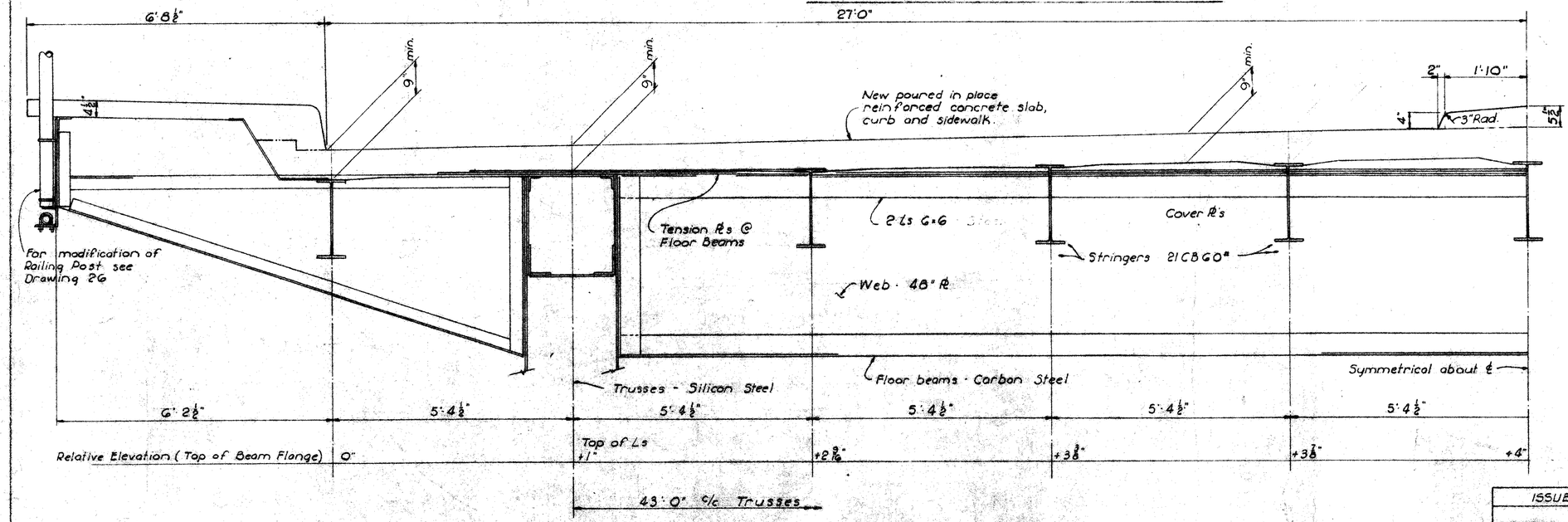
SANZENBACHER, MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
CROSS SECTIONS (1)
STRINGER SPANS
GIRDER SPANS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
BJH	AJB		BJH		



CROSS SECTION — SUSPENSION SPANS



CROSS SECTION - TRUSS SPANS

Applies from Anchorage A to Pier B
& from Pier E to Anchorage F

Reinforcing similar to Girder Spans and Stringer Spans.

NOTES

For required transverse crown see sheet 7.

See deck cross section on sheet 27 for location of slab longitudinal joints and main transverse reinforcing steel laps.

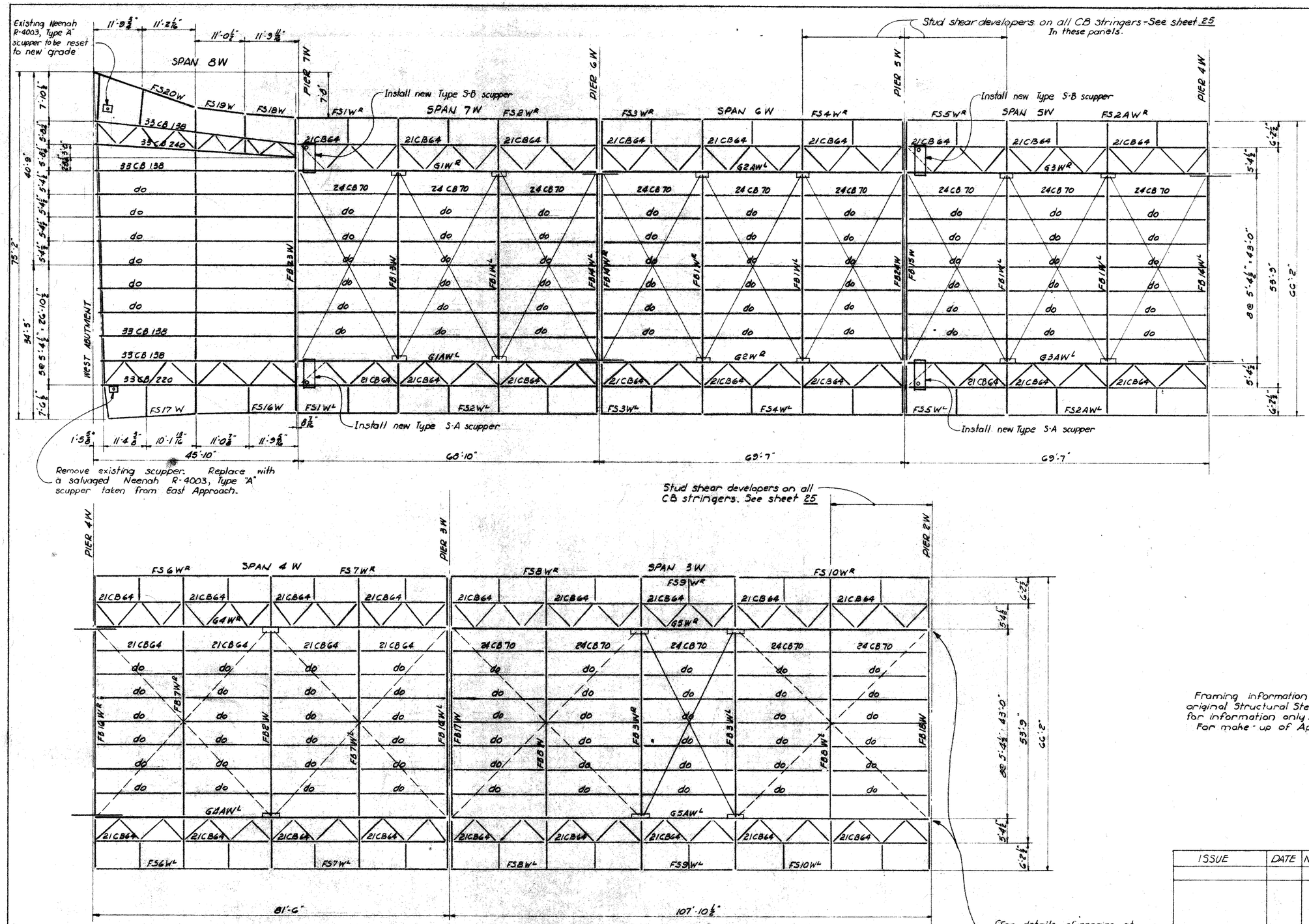
ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE

REPAIRS & IMPROVEMENTS
CROSS SECTIONS (2)
SUSPENSION SPANS
TRUSS SPANS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
F.C.M	P.P.C		B.J.H.	



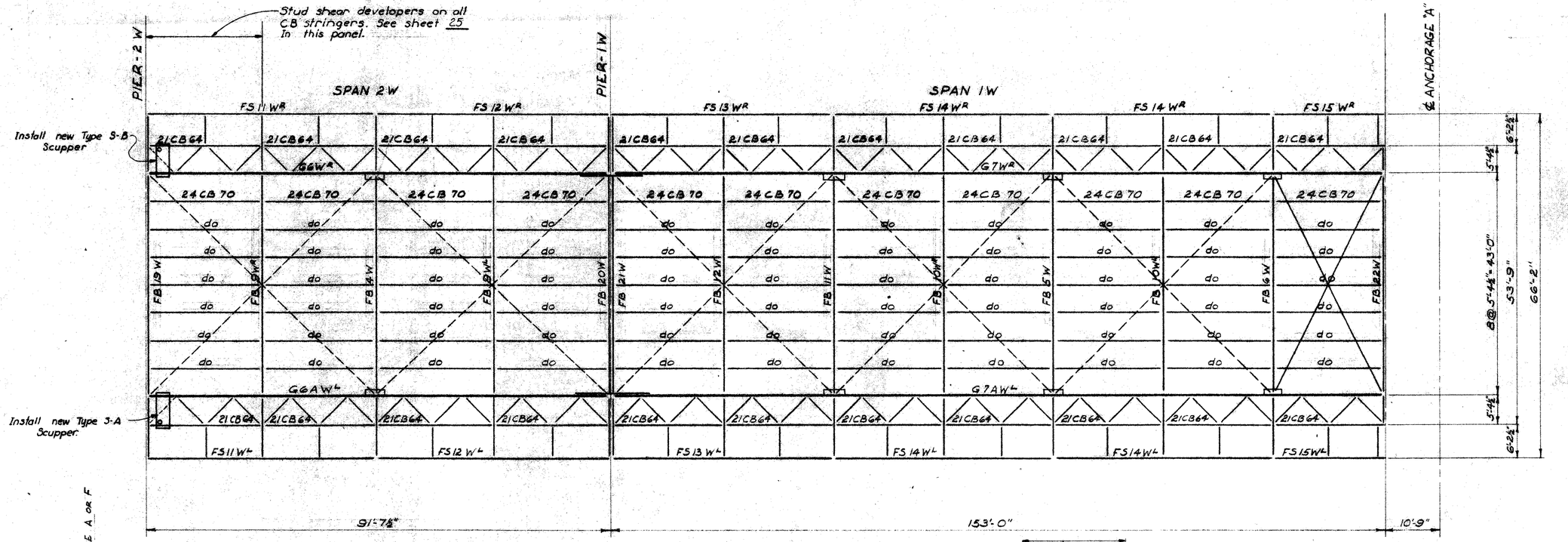
Framing information, marks, sizes etc.. taken from original Structural Steel Shop Drawings and shown for information only.
For make-up of Approach Span Girders see Drawing No. 14

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
FLOOR FRAMING (1)
WEST ABUTMENT TO PIER 2W

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
	B.B		CES		



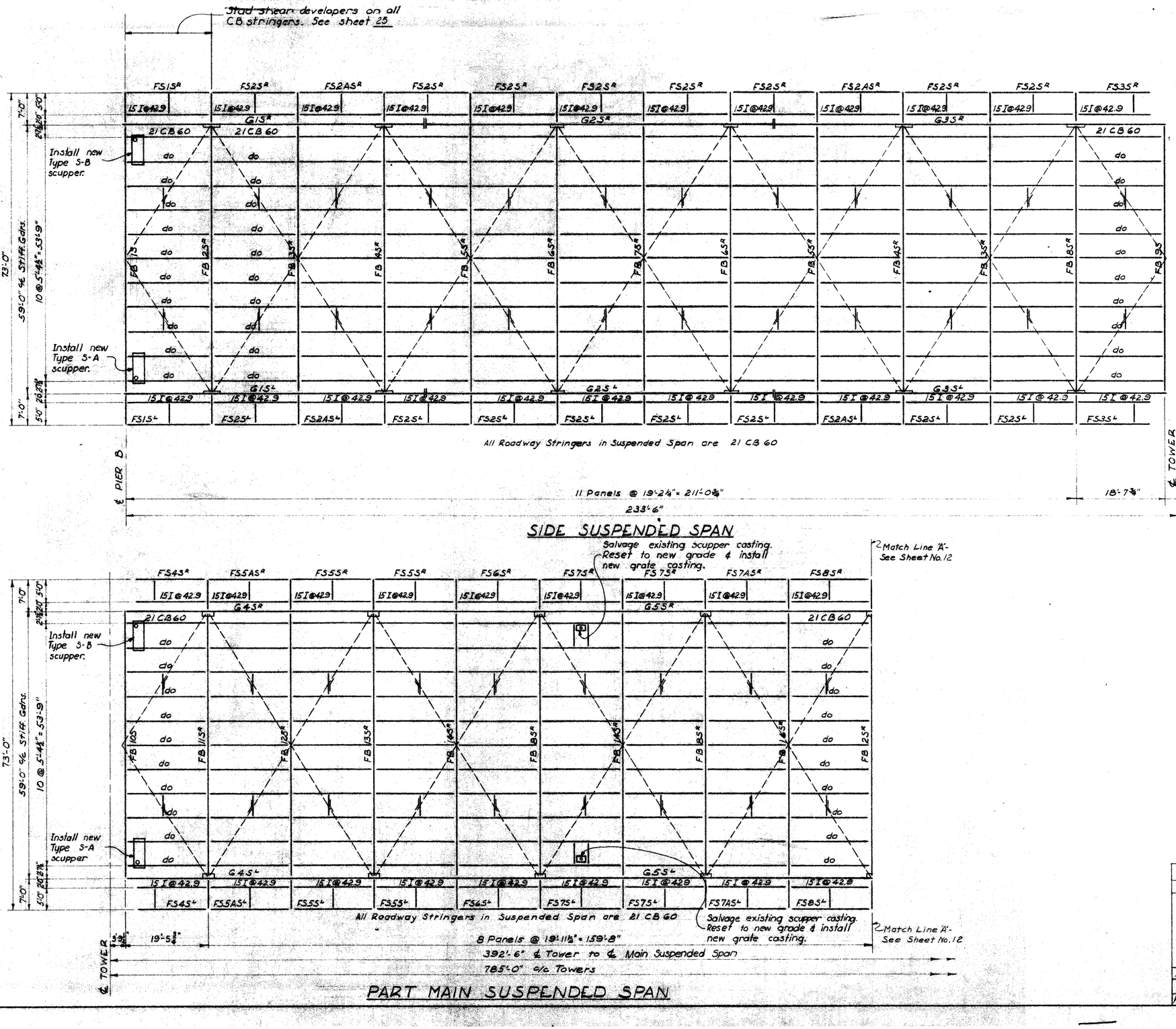
Framing information, marks, sizes etc. taken from original Structural Steel Shop Drawings and shown for information only.
For make-up of Approach Span Girder see Drawing No. 14

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	F.C.M.
Preliminary Review	3-12-60	FCM

SANZENBACHER, MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
FLOOR FRAMING (2)
PIER 2W TO PIER B

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
	JCS		CES		



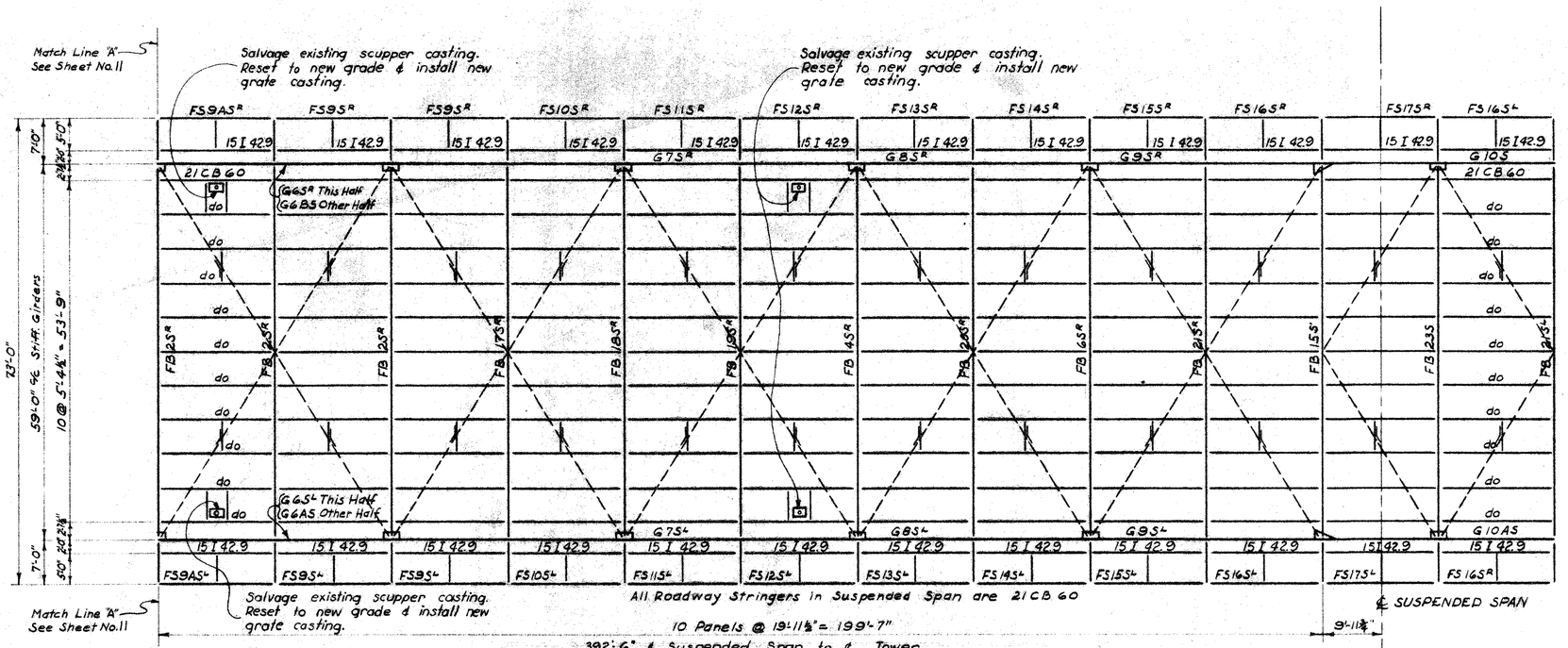
Framing information, marks, sizes etc.. taken from original Structural Steel Shop Drawings and shown for information only.

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

SANZENBACHER, MILLER, & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
FLOOR FRAMING (3)
SUSPENDED SPANS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
	JCS		CES		



PART MAIN SUSPENDED SPAN

Suspended Span Floor Framing same as from ℄ Suspended Span West to Pier B.

Truss Span Floor Framing same as from Pier B to Anchorage A

Framing information, marks, sizes etc. taken from original Structural Steel Shop Drawings and shown for information only.

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

SANZENBACHER, MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
FLOOR FRAMING (4)
SUSPENDED SPANS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
	JCS		CES		

Stud shear developers on all CB stringers. See Sheet 25

First Stringer Panel

PIER-1E PIER-2E PIER-3E PIER-4E PIER-5E PIER-6E

80'-0" | 80'-0" | 80'-0" | 80'-0" | 80'-0"

SPAN-1E SPAN-2E SPAN-3E SPAN-4E SPAN-5E SPAN-6E

Stud shear developers on all CB stringers. See sheet 25

First stringer panel

Install new Type S-A scupper.

Install new Type S-B scupper.

Main Bridge Tangent

7'5 7/8"

℄ East Approach

℄ ANCHORAGE 'F'

38'-4 3/16"

10'-9"

℄ Girder Bearings

55'-6 3/4"

Stringer Size & Spacing, & Interior Floor Beam Size & Spacing, same as Span 2E

5 Spans @ 80'-0" = 400'-0"

Stud Shear Developers on all CB stringers. See Sheet 25 (In these spans)

Stud shear developers on all CB stringers. See sheet 25

PIER-6E PIER-7E PIER-8E PIER-9E PIER-10E PIER-11E PIER-12E PIER-13E PIER-14E EAST ABUTMENT

79'-3" | 40'-0" | 40'-0" | 40'-0" | 40'-0" | 40'-0" | 32'-6 3/16" | 32'-0" | 20'-0"

SPAN-7E SPAN-8E SPAN-9E SPAN-10E SPAN-11E SPAN-12E SPAN-13E SPAN-14E SPAN-15E

Framing information, marks, sizes etc... taken from original Structural Steel Shop Drawings and shown for information only.
For make-up of Approach Span Girders see Drawing No. 14.

Stringer Size & Spacing same as Span 8E

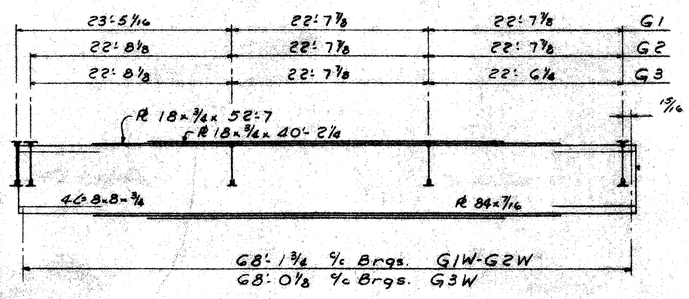
5 Spans @ 40'-0" = 200'-0"

ISSUE	DATE	NOTED
As Built	10-31-42	
Bidders	3-1-42	FCM
Preliminary Review	3-12-42	FCM

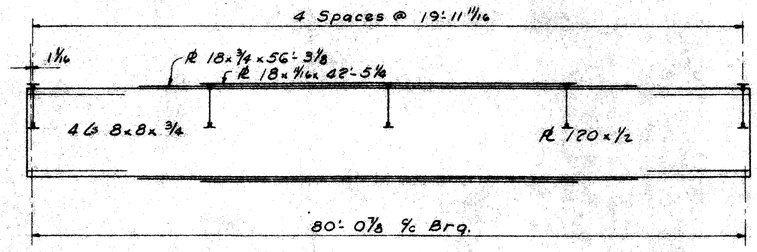
SANZENBACHER, MILLER, & BRIGHAM
CONSULTING ENGINEERS
TOLEDO · OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
FLOOR FRAMING (5)
ANCHORAGE "F"
TO EAST ABUTMENT

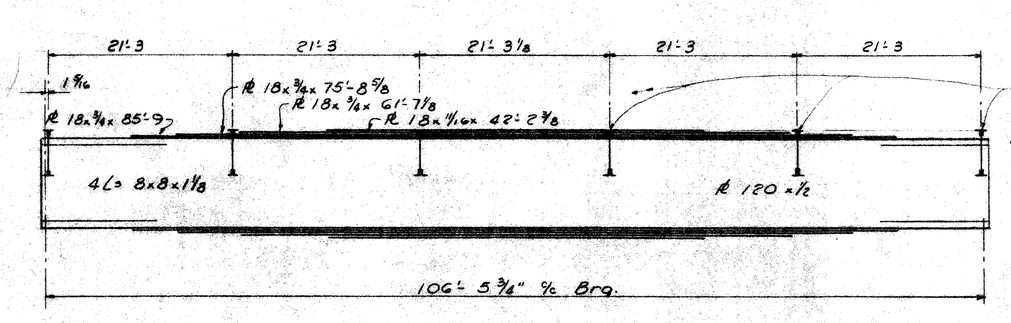
DESIGNED	DRAWN	TRACED	CHECKED	APPROVED	DATE
	JCS		CES		



ELEVATION-MAIN GIRDERS-SPANS 7W, 6W, 5W
(G1W^R, G2W^R, G3W^R)

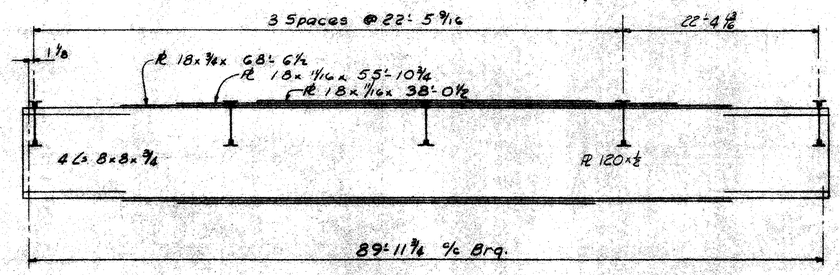


ELEVATION-MAIN GIRDERS -SPAN 4W
(G4W^R)

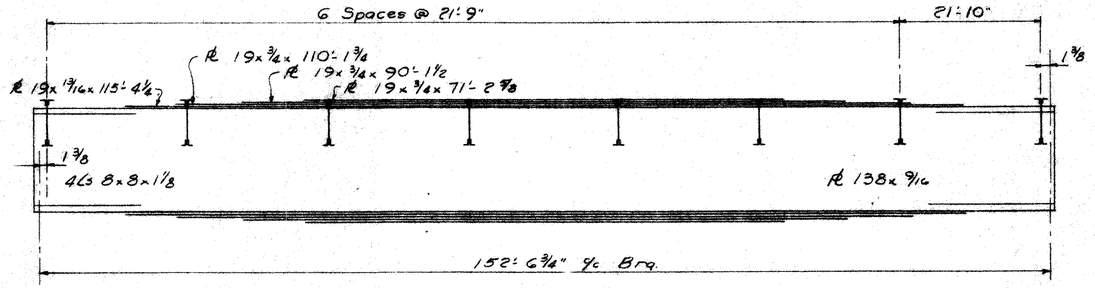


Top of floor beam angles flush with top of top girder plate. (Typical all girders)

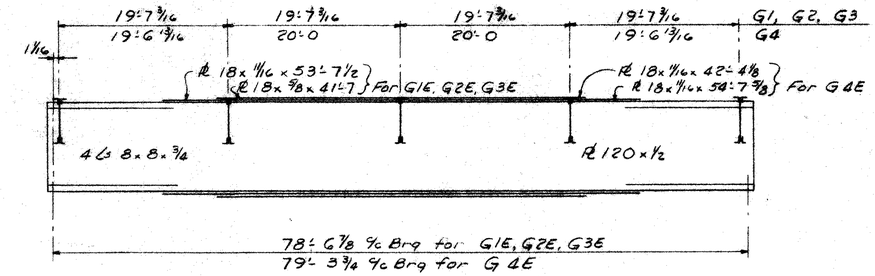
ELEVATION-MAIN GIRDERS - SPAN 3W
(G5W^R)



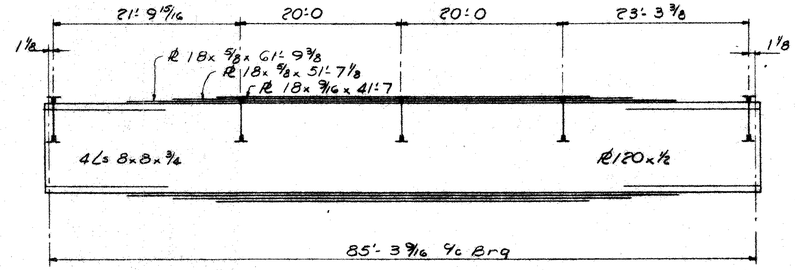
ELEVATION-MAIN GIRDERS - SPAN 2W
(G6W^R)



ELEVATION-MAIN GIRDERS - SPAN 1W
(G7W^R - Silicon Steel)



ELEVATION-MAIN GIRDERS - SPANS 1E, 2E, 3E, 4E, 5E, 6E, 7E
(G1E, G2E, G3E, G4E)



ELEVATION-MAIN GIRDERS - SPAN 1E
(G5E)

NOTE:
This drawing for information only. All data taken from original structural steel shop drawings.

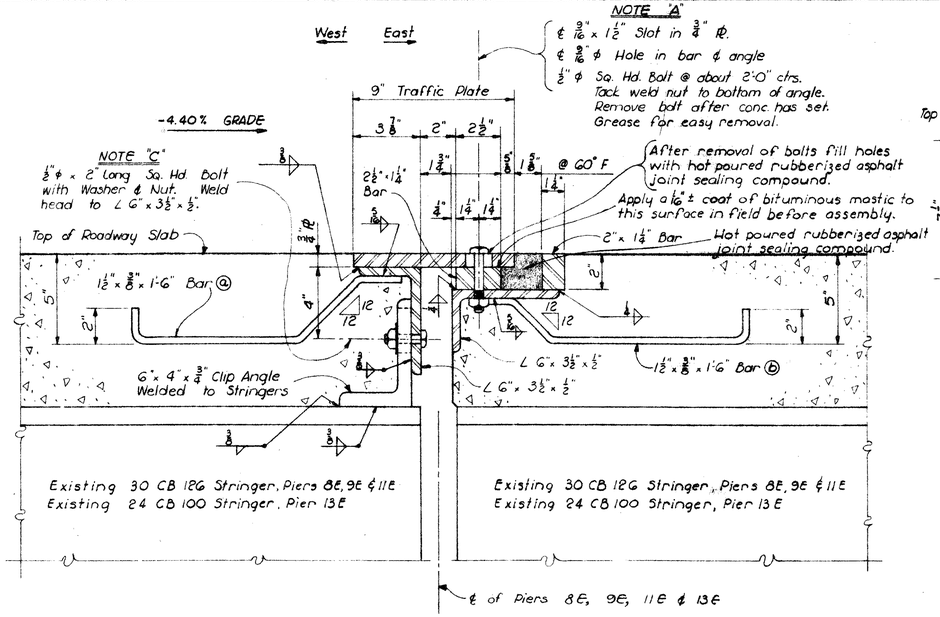
ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

SANZENBACHER, MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS

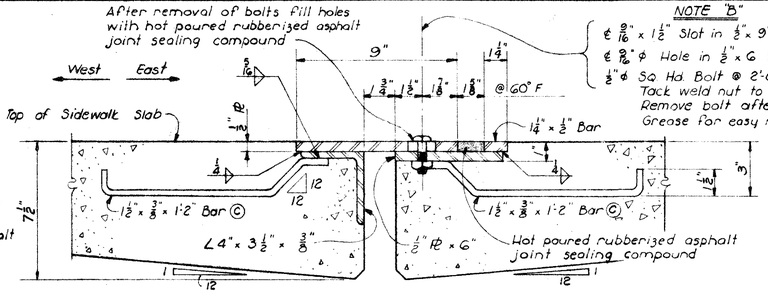
EXISTING APPROACH SPAN
GIRDER DATA

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
	AJB		BJH		



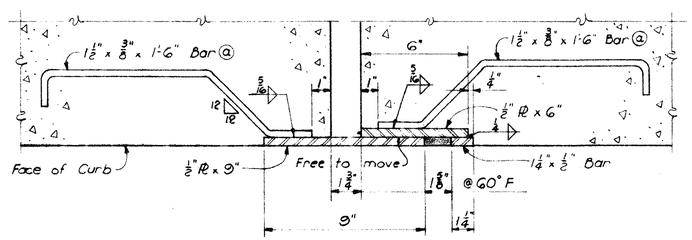
TYPICAL SECTION THRU ROADWAY

Scale 3" = 1'-0"



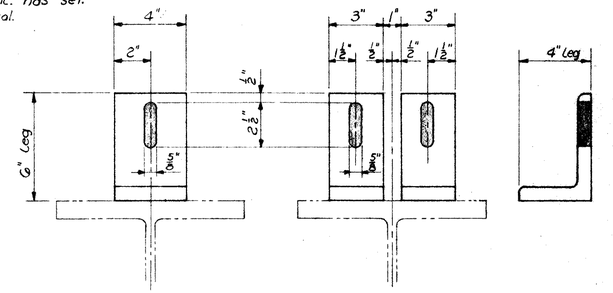
TYPICAL SECTION THRU SIDEWALK

Scale 3" = 1'-0"



SECTION B-B

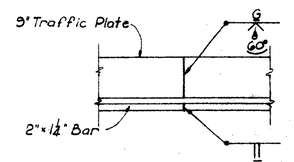
Scale 3" = 1'-0"



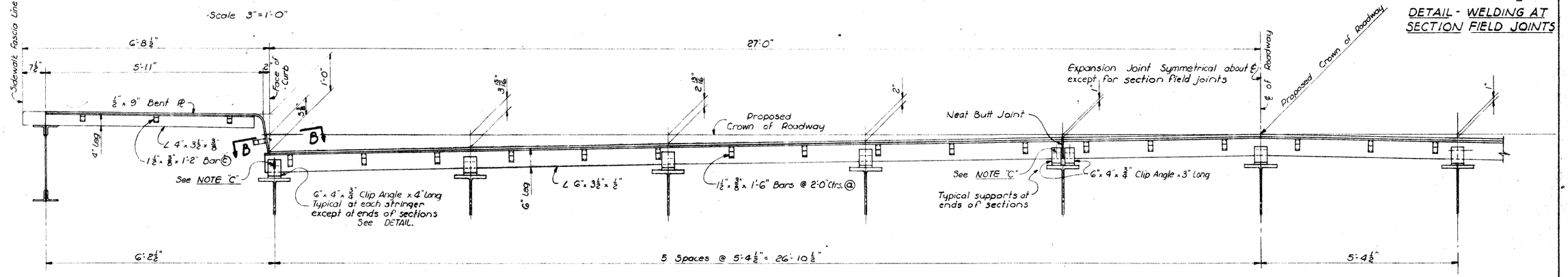
NOTE:
After top of Expansion Joint has been set to conform to transverse crown of roadway with 1/2" ϕ bolts (see NOTE "C") clip angles are welded to ∠ G" x 3 1/2" x 1/2".

CLIP ANGLE DETAILS

Scale 3" = 1'-0"



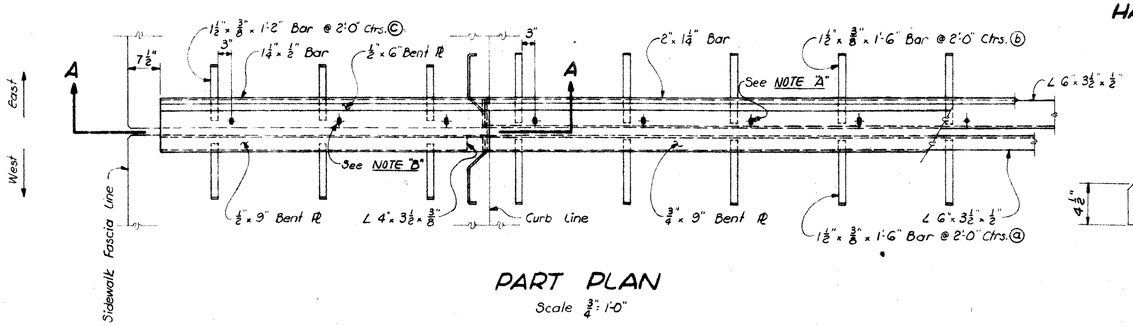
DETAIL - WELDING AT SECTION FIELD JOINTS



HALF ELEVATION

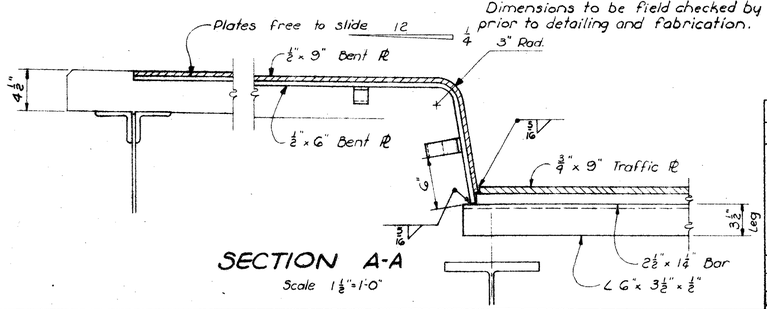
LOOKING EAST

Scale 3/4" = 1'-0"



PART PLAN

Scale 3/4" = 1'-0"



SECTION A-A

Scale 1 1/2" = 1'-0"

NOTES:

Expansion Joint to be bent in the shop to conform to transverse crown of roadway.

Joints shall be fabricated in sections for field placement which will provide for maintenance of traffic and contractors operations. A suggested plan of removal & replacement of superstructure slab is given on the sketch elsewhere in these plans.

Dimensions to be field checked by Fabricator prior to detailing and fabrication.

New expansion joints furnished, installed and paid for under provisions of Item 5-9, Structural Steel Expansion Joints

Particular care shall be taken in placing concrete around expansion joints to avoid trapping air, which could result in voids in concrete.

Omit shop paint on all portions of expansion joints. Surfaces in contact with steel or concrete not to be painted. All other surfaces shall be cleaned and given prime coat and finish coats under Item 5-8.

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

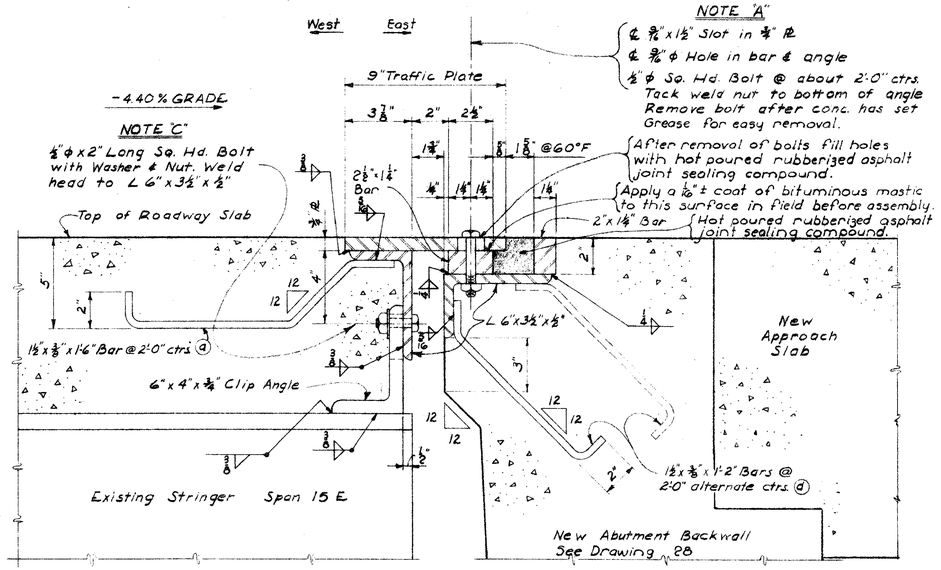
SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE

REPAIRS & IMPROVEMENTS

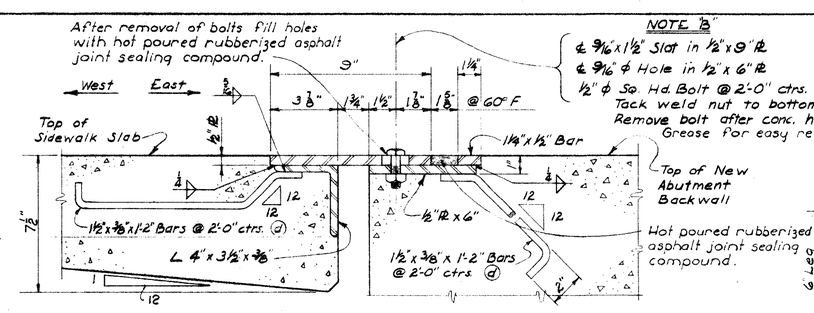
EXPANSION JOINTS PIERS 8E, 9E, 11E, 13E

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
CES	CES		BJH	



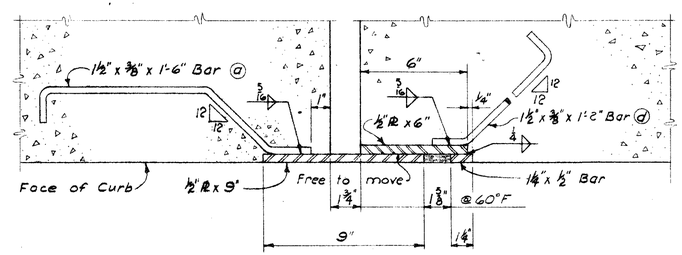
TYPICAL SECTION THRU ROADWAY

Scale 3"=1'-0"



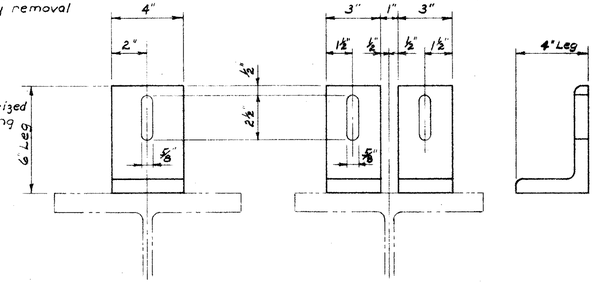
TYPICAL SECTION THRU SIDEWALK

Scale 3"=1'-0"



SECTION B-B

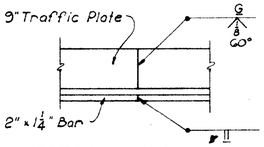
Scale 3"=1'-0"



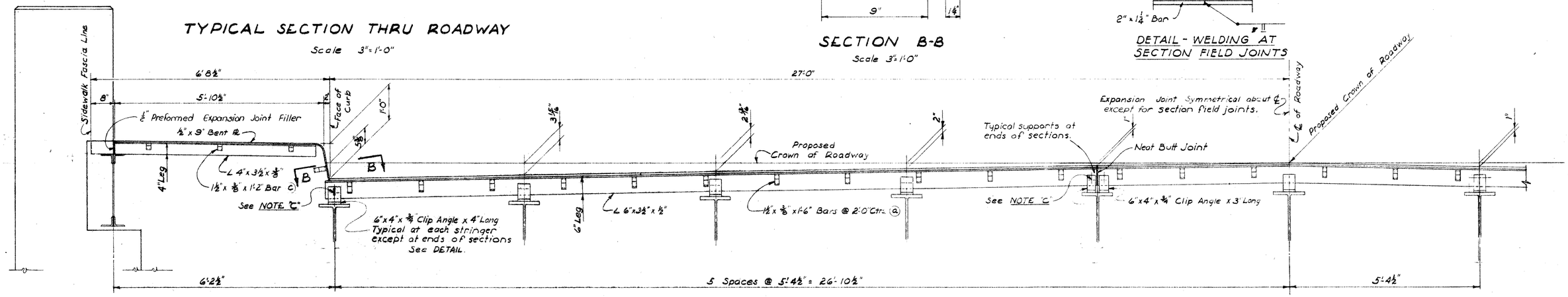
CLIP ANGLE DETAILS

Scale 3"=1'-0"

NOTE:
After top of Expansion Joint has been set to conform to transverse crown of roadway with ¾" ϕ bolts (see Note "C") clip angles are welded to L 6"x3½"x½"

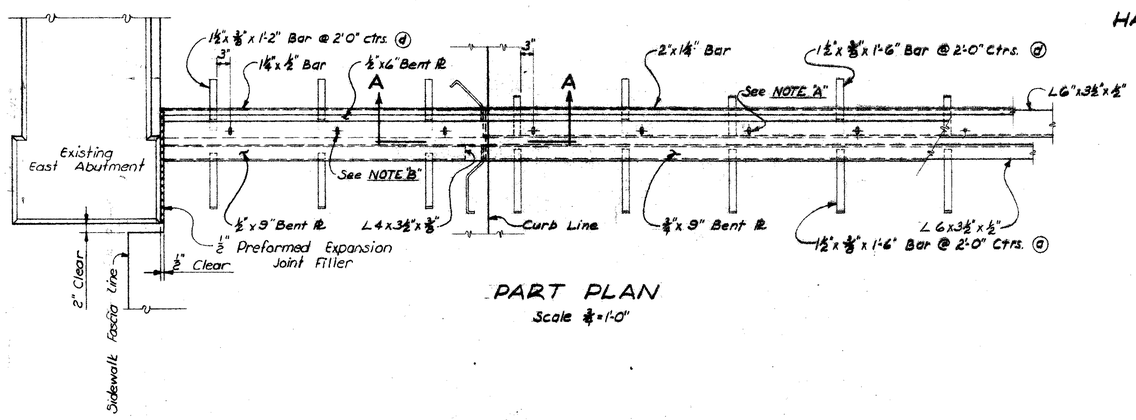


DETAIL - WELDING AT SECTION FIELD JOINTS



HALF ELEVATION LOOKING EAST

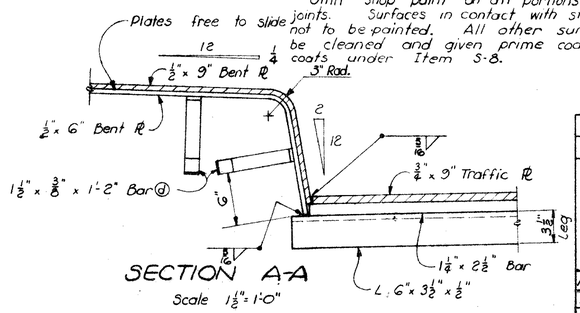
Scale ¾"=1'-0"



PART PLAN

Scale ¾"=1'-0"

NOTE:
Expansion Joint to be bent in the shop to conform to transverse profile of roadway. Particular care shall be taken in placing concrete around expansion joints to avoid trapping air, which could result in voids in concrete.
Omit shop paint on all portions of expansion joints. Surfaces in contact with steel or concrete not to be painted. All other surfaces shall be cleaned and given prime coat and finish coats under Item 5-8.



SECTION A-A

Scale 1½"=1'-0"

NOTE:
Joints shall be fabricated in sections for field placement which will provide for maintenance of traffic and contractors operations. A suggested plan of removal & replacement of superstructure slab is given on the sketch elsewhere on these plans.
Dimensions to be field checked by Fabricator prior to detailing and fabrication.
New expansion joints furnished, installed and paid for under provisions of Item 5-9, Structural Steel Expansion Joints.

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

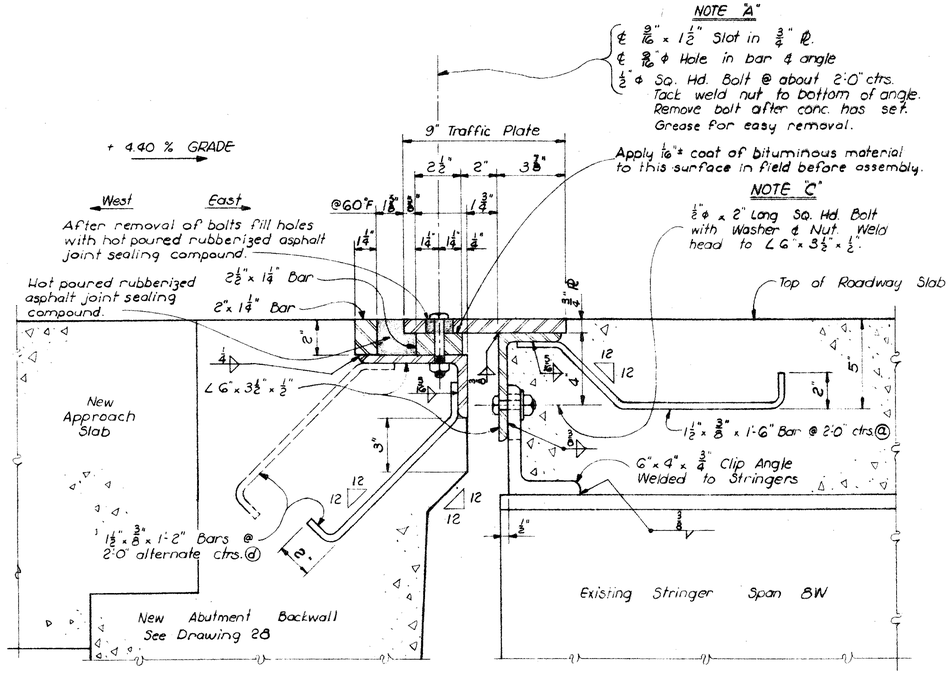
SANZENBACHER MILLER & BRIGHAM CONSULTING ENGINEERS TOLEDO OHIO

ANTHONY WAYNE BRIDGE

REPAIRS & IMPROVEMENTS

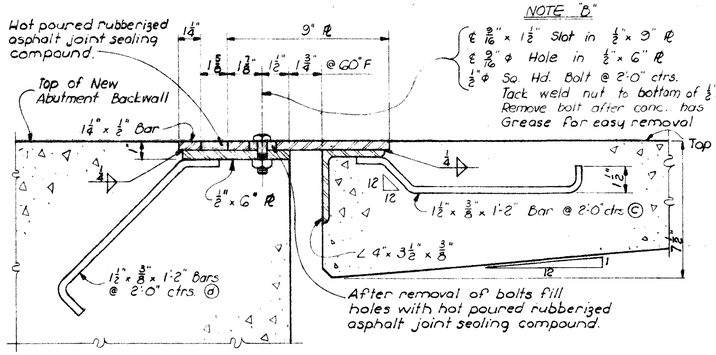
EXPANSION JOINT EAST ABUTMENT

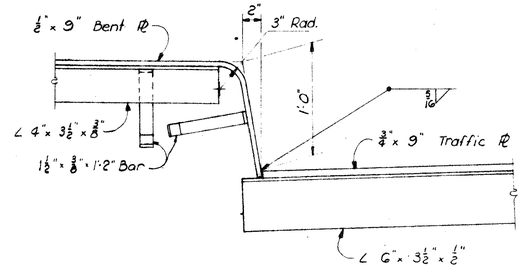
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	
CES	JCS		BJH		"



TYPICAL SECTION THRU SIDEWALK

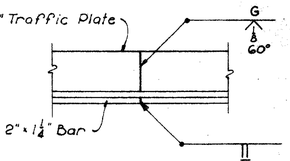
Scale 3"=1'-0"



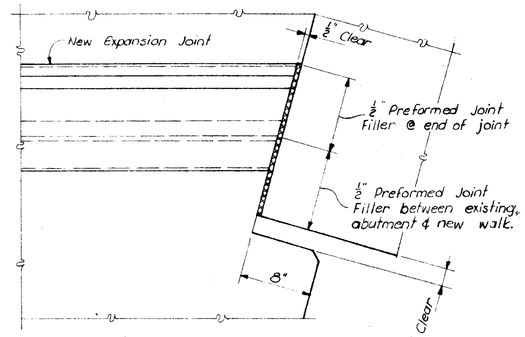


DETAIL "B"

Scale 1 1/2"=1'-0"



DETAIL - WELDING AT SECTION FIELD JOINTS

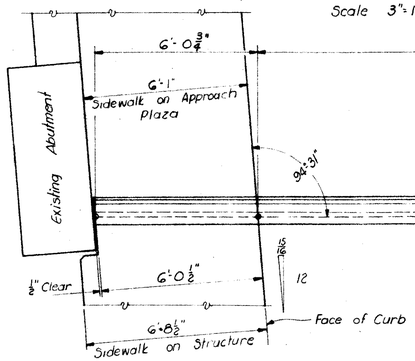


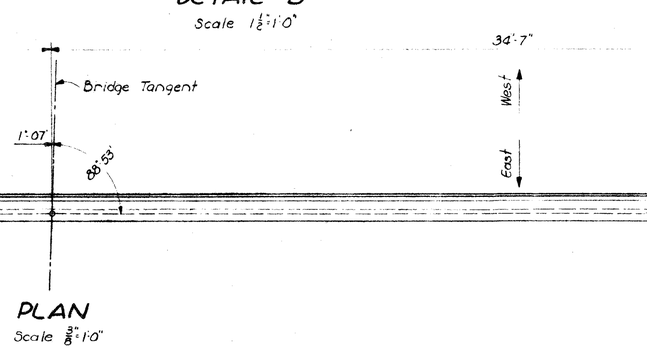
DETAIL "A"

Scale 1 1/2"=1'-0"

TYPICAL SECTION THRU ROADWAY

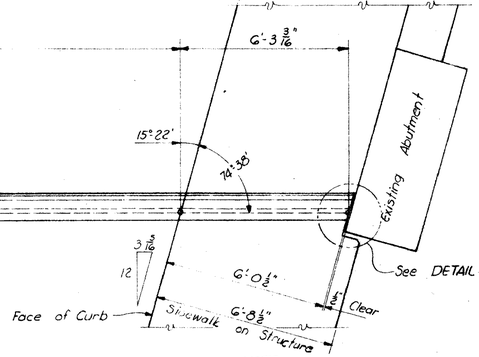
Scale 3"=1'-0"



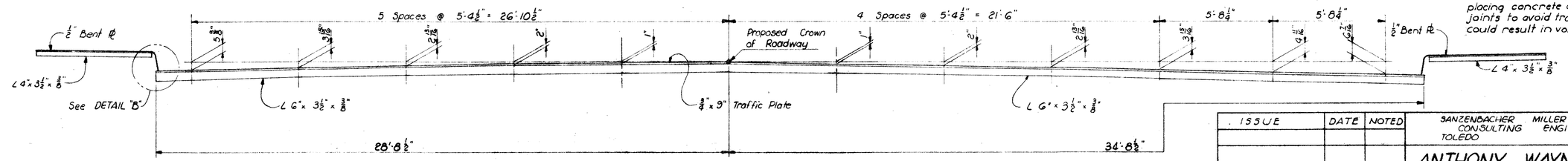


PLAN

Scale 3/8"=1'-0"



NOTE:
Particular care shall be taken in placing concrete around expansion joints to avoid trapping air, which could result in voids in concrete.



ELEVATION

LOOKING WEST

Scale 3/8"=1'-0"

NOTE:
Joints shall be fabricated in sections for field placement which will provide for maintenance of traffic and contractors operations. A suggested plan of removal and replacement of superstructure slab is given on the sketch elsewhere in these plans.

Dimensions to be field checked by Fabricator prior to detailing and fabrication.

New expansion joints furnished, installed and paid for under provisions of Item 5-9, Structural Steel Expansion Joints.

NOTE:
Omit shop paint on all portions of expansion joints. Surfaces in contact with steel or concrete not to be painted. All other surfaces shall be cleaned and given prime coat and finish coats under Item 5-8.

NOTE:
Expansion Joint details for W. Abutment not shown on this sheet are similar to corresponding details for E. Abutment as shown on sheet 16.
Expansion Joint to be bent in the shop to conform to transverse profile of roadway.

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
EXPANSION JOINT
WEST ABUTMENT

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
CES	CES		B/H	

NOTE "E"

℄ 13/16" x 2" Slot in 1¼" x 1'-5" Pl
℄ 13/16" ϕ Hole in Bar ℄ Angle
⅝" ϕ Sq. Hd. Bolt @ 2'-0"± ctrs. Tack weld nut to bottom of angle. Remove bolt after conc. has set. Grease for easy removal. 1¼" x 2½" Bar

Apply a 1/16"± coat of bituminous material to this surface in field before assembly

1'-5" Pl

After removal of bolts fill holes with hot poured rubberized asphalt joint sealing compound.

- 4.40% Grade @ Anchorage Pier F
+ 4.40% Grade @ Anchorage Pier A

Top of Roadway

½ of 10"C 25#x6"

2"x ½"x 1'-8" Bar @ 2'-0"± ctrs @

Clip Angle Assembly, See DETAIL on Sht. No. 19

Hot poured rubberized asphalt joint sealing compound.

1¼"x 3" Bar

L 8"x 6"x ¾"

¾"x 5" Pl

5"@ 60°F

2"x ½"x 1'-8" Bar @ 2'-0"± Alternate ctrs.

12
12

Existing End Floor Beam Deck Truss Span

TYPICAL SECTION THRU ROADWAY

Scale 3" = 1'-0"

Hot poured rubberized asphalt joint sealing compound.

After removal of bolts fill holes with hot poured rubberized asphalt joint sealing compound.

1¼" x ½" Bar
½" x 8" Pl

1'-5" Pl

@ 60°F

1½" x ⅜" x 1'-2" Bar @ 2'-0"± ctrs ©

Top of Sidewalk

1½" x ⅜" x 1'-2" Bars @ 2'-0"± Alternate ctrs @

8" Pl

NOTE "E"

℄ 9/16" x 1½" Slot in ½" x 1'-5" Pl
℄ 9/16" ϕ Hole in ½" x 8" Pl
⅝" ϕ Sq. Hd. Bolt @ 2'-0"± ctrs. Tack weld nut to bottom of ½" x 8" Pl. Remove bolt after conc. has set.

TYPICAL SECTION THRU SIDEWALK

Scale 1½" = 1'-0"

Plates free to slide

Top of Sidewalk

1¼" x ½" Bar

½" x 8" Bent Pl

½" x 1'-5" Bent Pl

Top of Roadway

1¼" x 2½" Bar

1¼" x 3" Bar

1¼" x 1'-5" Traffic Pl

L 8"x 6"x ¾"

¾" x 5" Pl

SECTION @ CURB

Scale 1½" = 1'-0"

NOTE:

Omit shop paint on all portions of expansion joints. Surfaces in contact with steel or concrete not to be painted. All other surfaces shall be cleaned and given prime coat and finish coats under Item 5-8.

9" Traffic Plate

℄ 60°

2"x 1¼" Bar

DETAIL - WELDING AT SECTION FIELD JOINTS

NOTE:

Expansion Joint details are symmetrical about ℄ of Roadway for both Anchorages A ℄ F except for section field joints.

Sidewalk Fascia

6'-8½"

2"

5'-6"

27'-0"

4 Spaces @ 5'-4½" = 21'-6"

℄ of Roadway

Face of Curb

½" x 1'-5" Bent Pl

5½"

1'-0"

3 15/16"

2 13/16"

2"

1"

NOTE:

Expansion Joints to be bent in the shop to conform to the transverse profile of the roadway.

Crown of Roadway

4" Leg

L 4"x 3½"x ⅜"

1½" x ⅜" x 1'-2" Bars @ 2'-0"± ctrs ©

Existing East Face of Anchorage A ℄ West Face of Anchorage F.

Existing Top Flange Angle of Deck Truss Down-Grade End Floor Beam.

Limits of CLIP ANGLE "2

Limits of CLIP ANGLE "1

27'-2"

HALF ELEVATION

Scale ¾" = 1'-0"

1½" x ⅜" x 1'-2" Bar @ 2'-0"± Alternate ctrs. ⓓ

See NOTE "F"

1¼" x ½" Bar

½" x 1'-5" Pl

3"

See NOTE "E"

2"x ½" Bar x 1'-4" @ 2'-0"± Alternate ctrs. ○

1¼" x 2½" Bar

L 8"x 6"x ¾"

A

A

¾" x 5" Pl

L 4"x 3½"x ⅜"

1½" x ⅜" x 1'-2" Bar ©

1¼" x 1'-5" Traffic Pl

2"x ½" x 1'-8" Bar @ 2'-0"± ctrs. ⓐ

Face of Curb

⅛" Preformed Expansion Joint Filler between Sidewalk Fascia ℄ existing Anchorage.

¼" Preformed Expansion Joint Filler between top of Sidewalk ℄ bottom of Anchorage railing past projection.

PART PLAN

Scale ¾" = 1'-0"

½" x 1'-5" Bent Pl

3" Rad.

12

℄

2

12

½" x 8" Bent Pl

1¼" x 3" Bar

1¼" x 1'-5" Traffic Pl

1½" x ⅜" x 1'-2" Bar ⓓ

L 8"x 6"x ¾"

SECTION A-A

Scale 1½" = 1'-0"

NOTE:

CLIP ANGLE positions shown are approximate. Final positions are dependent upon location of existing rivets in top flange of end floor beam.

CLIP ANGLES are to be set at approximate 3'-0" ctrs.

See Sht. No. 19 for CLIP ANGLE ASSEMBLY DETAILS.

Dimensions to be field checked by Fabricator prior to detailing and fabrication.

Particular care shall be taken in placing concrete around expansion joints to avoid trapping air, which could result in voids in concrete.

Joints shall be fabricated in sections for field placement which will provide for maintenance of traffic and contractors operations. A suggested plan of removal and replacement of superstructure slab is given on the sketch elsewhere in these plans.

New expansion joints furnished, installed and paid for under provisions of Item 5-9, Structural Steel Expansion Joints.

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

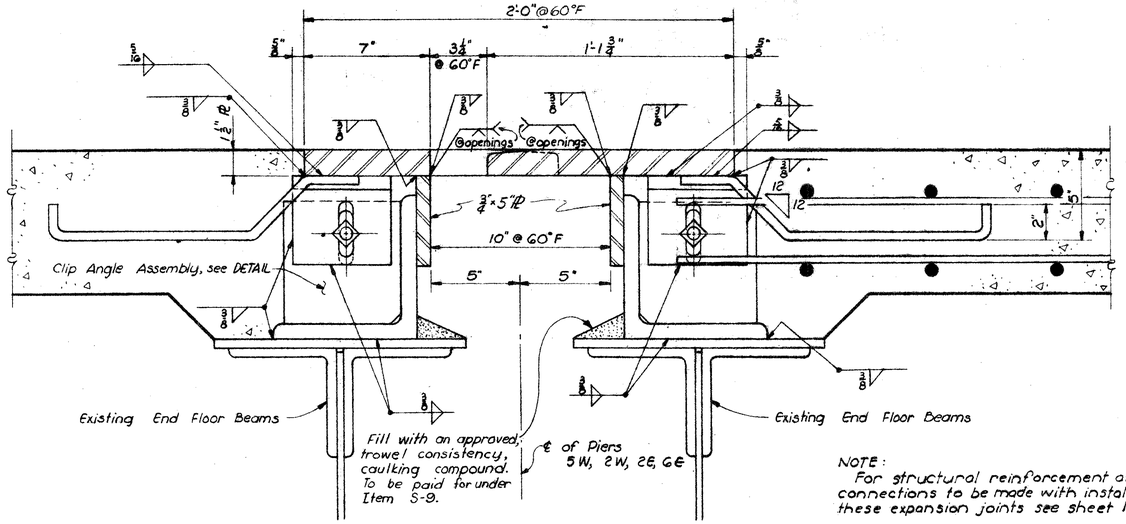
SANZENBACHER MILLER & BRIGHAM CONSULTING ENGINEERS TOLEDO OHIO

ANTHONY WAYNE BRIDGE

REPAIRS ℄ IMPROVEMENTS
EXPANSION JOINTS
ANCHORAGES A ℄ F

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
CES	CES		BJH	

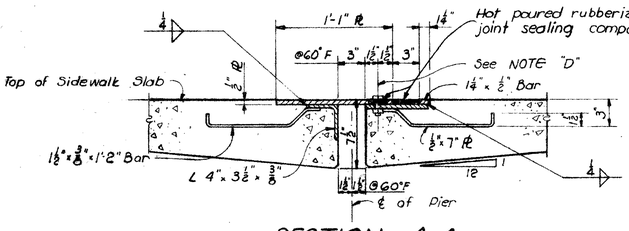
See sheet 21 for TRAFFIC PLATE Details



TYPICAL SECTION THRU ROADWAY

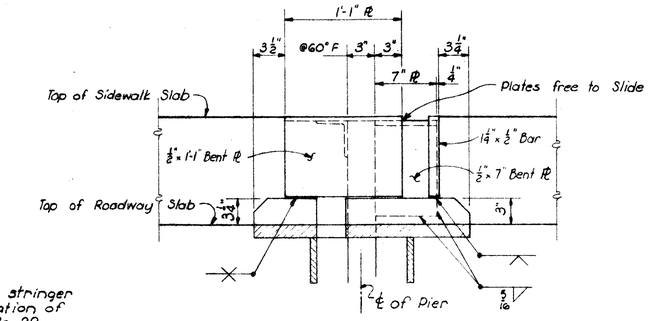
Scale 3" = 1'-0"

NOTE:
For structural reinforcement at stringer connections to be made with installation of these expansion joints see sheet No. 22.



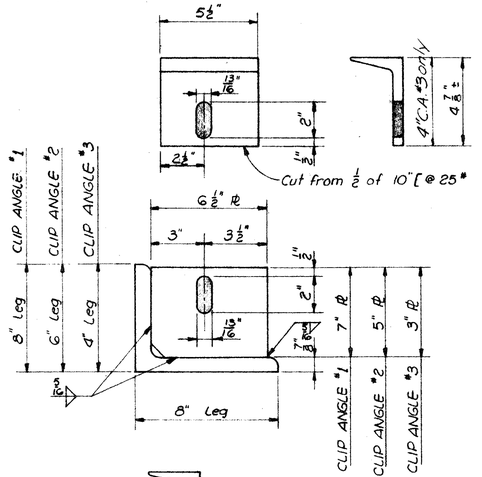
SECTION A-A

Scale 1½" = 1'-0"



SECTION B-B

Scale 1½" = 1'-0"

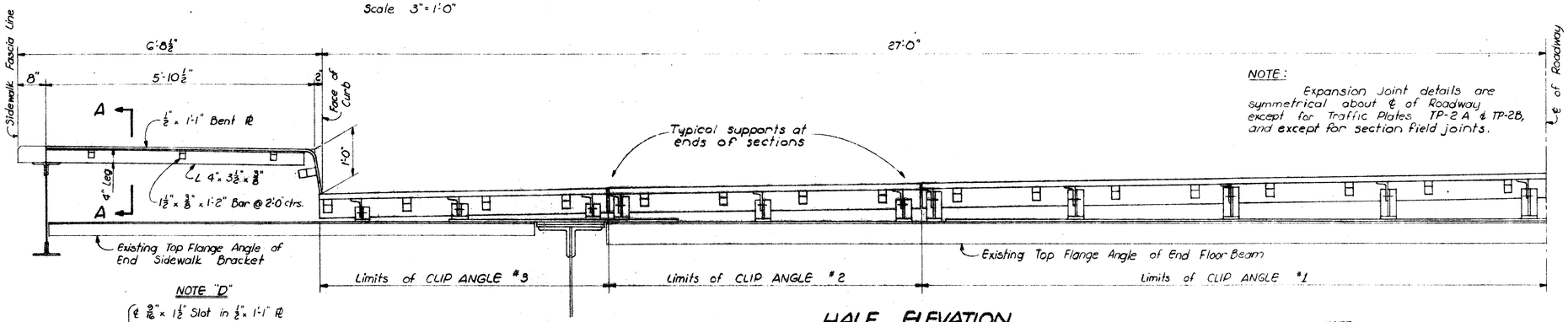


NOTE "E"
⅞" ϕ x 2" Long Sq. Hd. Bolt with Nut.

NOTE:
After top of Expansion Joint has been set to conform to transverse crown of roadway with ⅞" ϕ bolts channel is welded to clip angles ℄ to 1½ Traffic Plate.

CLIP ANGLE ASSEMBLY DETAILS

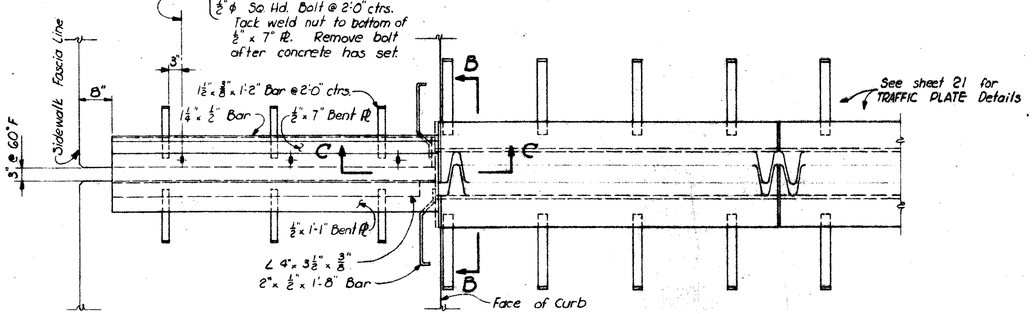
Scale 3" = 1'-0"



NOTE:
Expansion Joint details are symmetrical about ℄ of Roadway except for Traffic Plates TP-2 A & TP-2B, and except for section field joints.

HALF ELEVATION

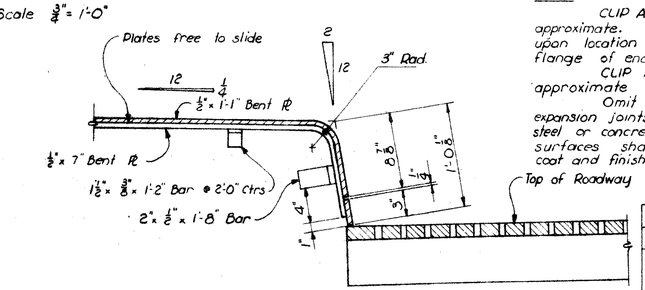
Scale ¾" = 1'-0"



PART PLAN

Scale ¾" = 1'-0"

NOTE "D"
℄ ⅝" x 1½" Slot in ½" x 1'-1" R
℄ ⅝" ϕ Hole in ½" x 7" R
½" ϕ Sq. Hd. Bolt @ 2'-0" ctrs. Tack weld nut to bottom of ½" x 7" R. Remove bolt after concrete has set.



SECTION C-C

Scale 1½" = 1'-0"

NOTE:
CLIP ANGLE positions shown are approximate. Final positions are dependent upon location of existing rivets in top flange of end floor beam.
CLIP ANGLES are to be set at approximate 3'-0" ctrs.
Omit shop paint on all portions of expansion joints. Surfaces in contact with steel or concrete not to be painted. All other surfaces shall be cleaned and given prime coat and finish coats under Item S-8.

NOTES
Joint shall be fabricated in sections for field placement which will provide for maintenance of traffic and contractors operations. A suggested plan of removal and replacement of superstructure slab is given on the sketch elsewhere in these plans.
Dimensions to be field checked by Fabricator prior to detailing and fabrication.
New expansion joints furnished, installed and paid for under provisions of Item 5:9, Structural Steel Expansion Joints.
Particular care shall be taken in placing concrete around expansion joints to avoid trapping air, which could result in voids in concrete.

ISSUE	DATE	NOTED
		•
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

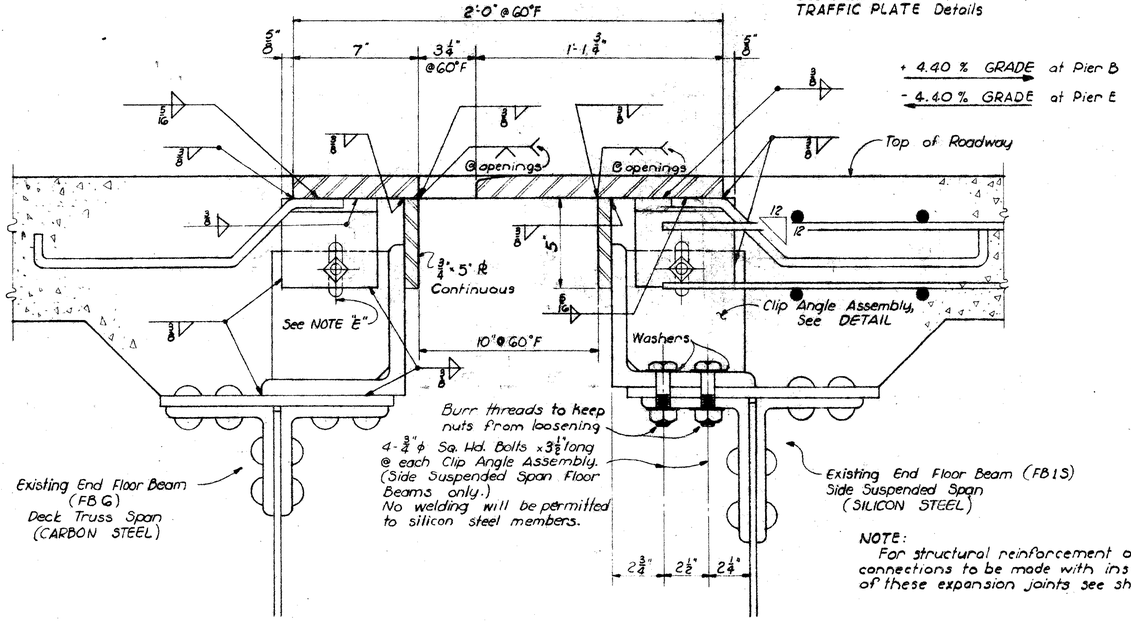
SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE

REPAIRS & IMPROVEMENTS

EXPANSION JOINTS
PIERS 5 W, 2 W, 2 E, 6 E

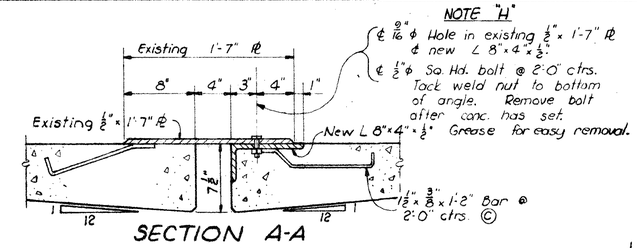
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
CES	CES		BJH	



TYPICAL SECTION THRU ROADWAY

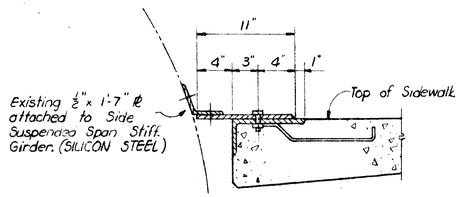
Scale 3" = 1'-0"

NOTE:
For structural reinforcement of stringer connections to be made with installation of these expansion joints see sheet No. 22.



SECTION A-A

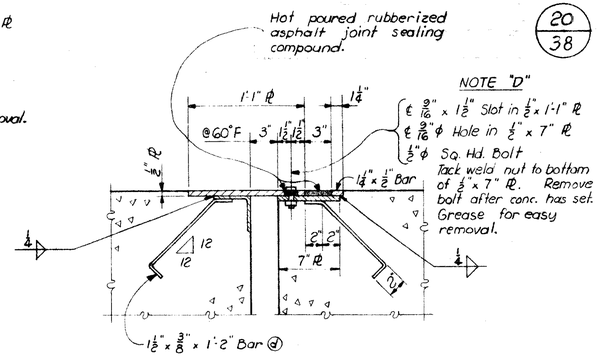
Scale 1½" = 1'-0"



SECTION B-B

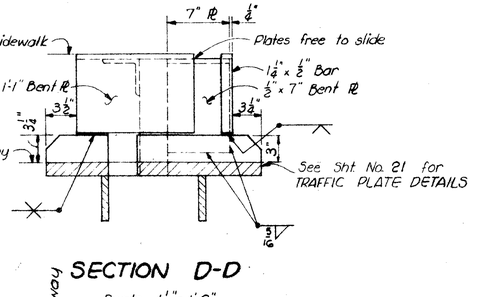
Scale 1½" = 1'-0"

NOTE:
CLIP ANGLE positions shown are approximate. Final positions are dependent upon location of existing rivets in top flange of end floor beams.
CLIP ANGLES are to be set at approximate 3'-0" ctrs.



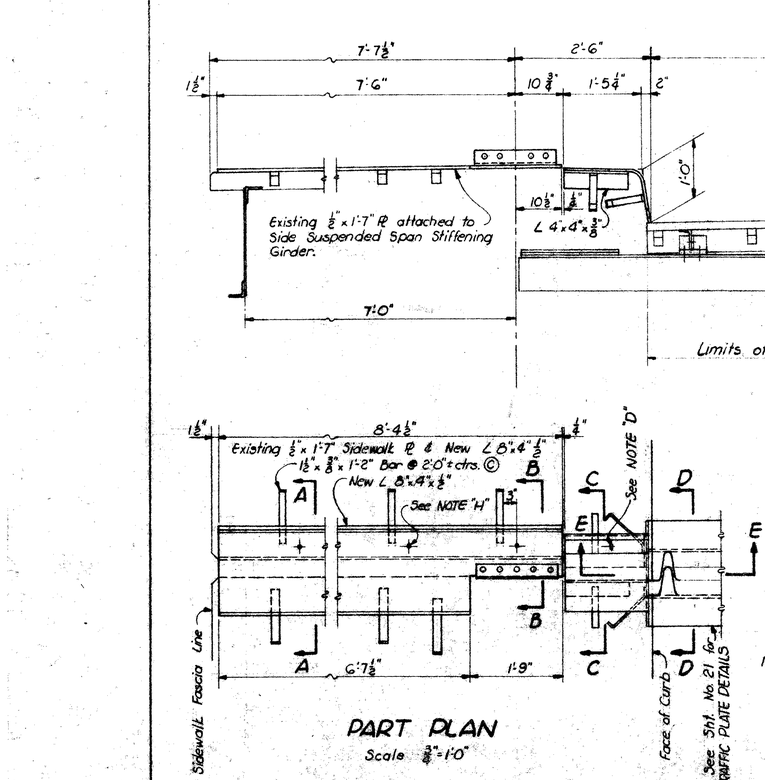
SECTION C-C

Scale 1½" = 1'-0"



SECTION D-D

Scale 1½" = 1'-0"

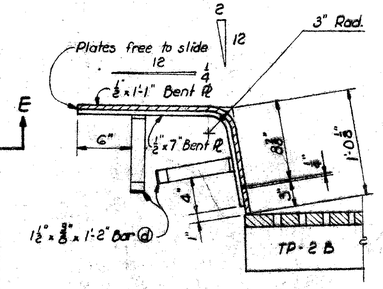


HALF ELEVATION

(LOOKING DOWN GRADE)

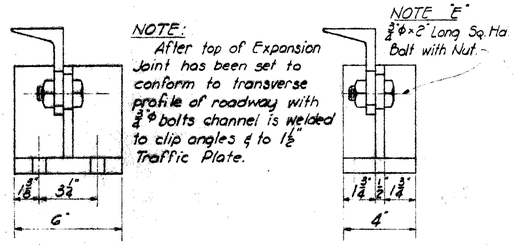
PART PLAN

Scale ¾" = 1'-0"



SECTION E-E

Scale 1½" = 1'-0"

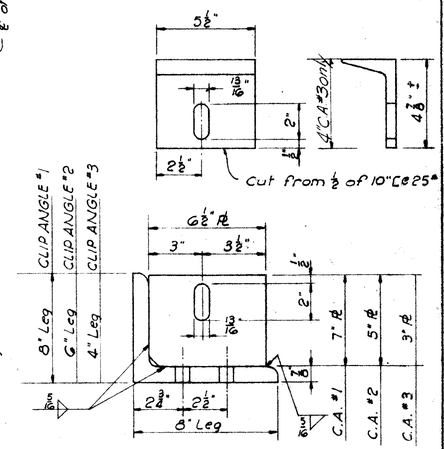


SIDE SUSPENDED SPAN FLOOR BEAMS — DECK TRUSS FLOOR BEAMS

CLIP ANGLE ASSEMBLY DETAILS

Scale 3" = 1'-0"

NOTE:
Dimensions to be field checked by Fabricator prior to detailing and fabrication.
New expansion joints furnished, installed and paid for under provisions of Item 5-9. Structural Steel Expansion Joints.
Particular care shall be taken in placing concrete around expansion joints to avoid trapping air, which could result in voids in concrete.
Omit shop painting on all portions of expansion joints. Surfaces in contact with steel or concrete not to be painted. All other surfaces shall be cleaned and given prime coat and finish coats under Item 5-8.



ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	F.C.M.
Preliminary Review	3-12-60	FCM

SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

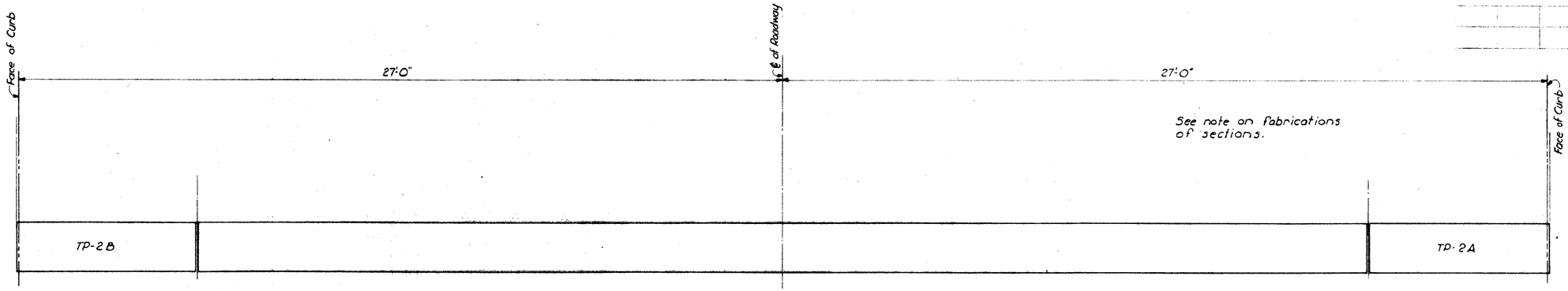
ANTHONY WAYNE BRIDGE

REPAIRS & IMPROVEMENTS

EXPANSION JOINTS

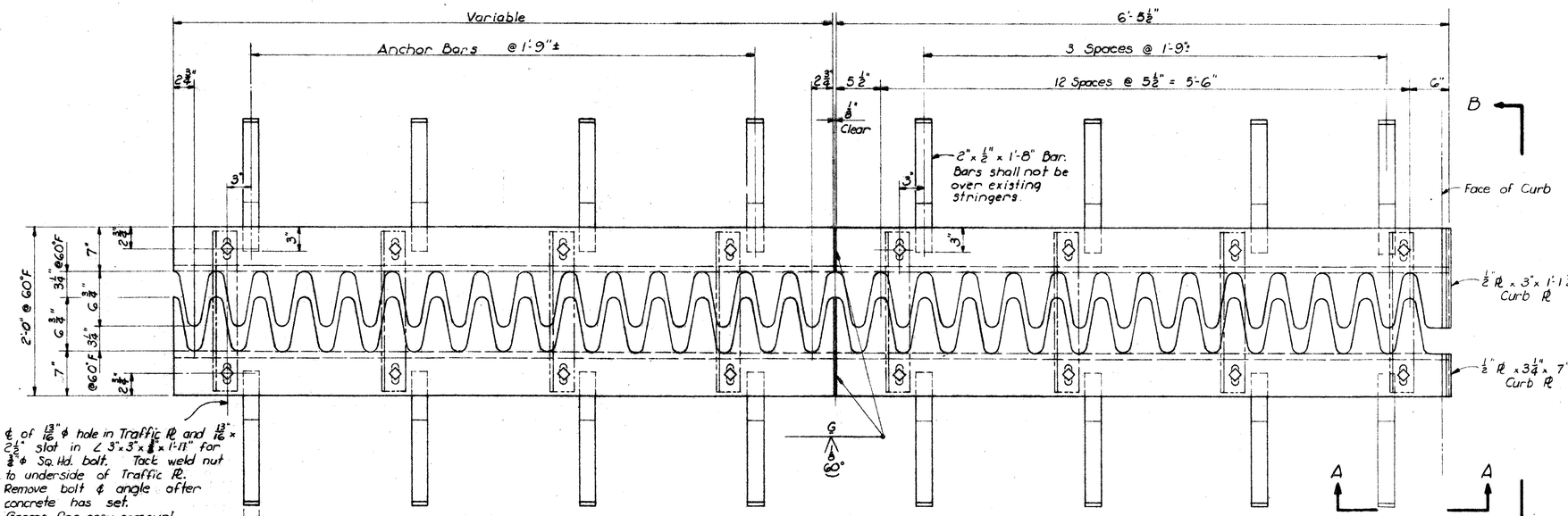
PIERS B & E

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
CES	BB CES		BJH	

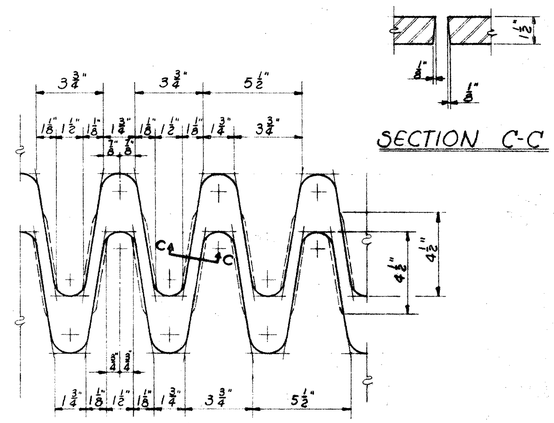


PLAN - TYPICAL @ PIERS 5W, 2W, B, E, 2E, 6E.

Scale $\frac{1}{2}$" = 1'-0"



INTERMEDIATE TRAFFIC ℞ - TYPICAL



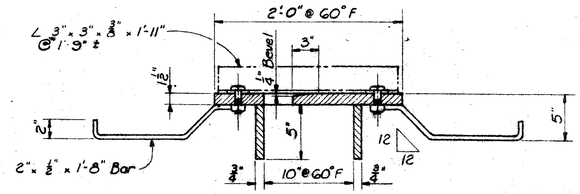
LAYOUT DETAIL

Scale 3" = 1'-0"

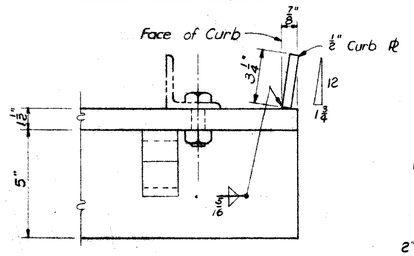
SECTION C-C

NOTE:
Joints shall be fabricated in sections for field placement which will provide for maintenance of traffic and contractors operations. A suggested plan of removal and replacement of superstructure slab is given on the sketch elsewhere in these plans.
Omit shop paint on all portions of expansion joints. Surfaces in contact with steel or concrete not to be painted. All other surfaces shall be cleaned and given prime coat and finish coats under Item 5-8.

TRAFFIC ℞ TP-2A (As Shown)
TRAFFIC ℞ TP-2B (Opposite Hand)

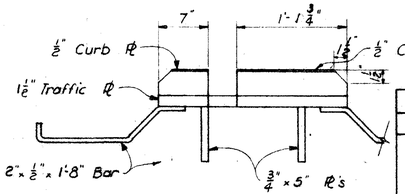


TYPICAL SECTION - TRAFFIC ℞



VIEW A-A

Scale 3" = 1'-0"



VIEW B-B

NOTE:
See Sheets 19 & 20 for EXPANSION JOINT details using this type Traffic Plate.

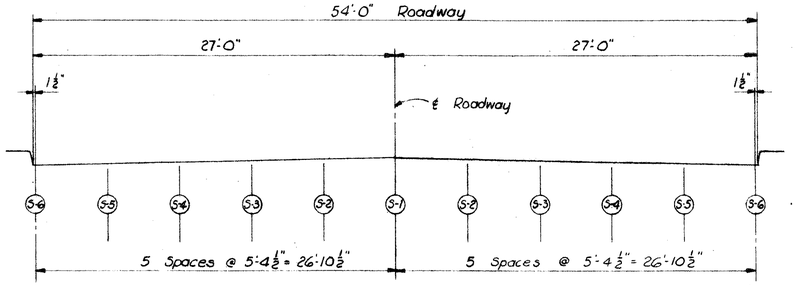
ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	F.C.M.
Prelim. Review	3-18-60	F.C.M.

SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS

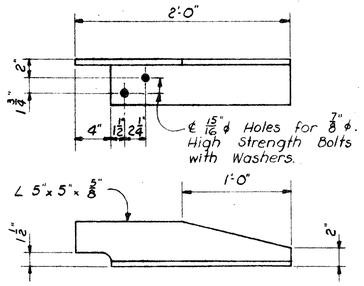
EXPANSION JOINT TRAFFIC PLATE DETAILS
PIERS 5W, 2W, B, E, 2E, 6E

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
CES	CES		B.J.H.	

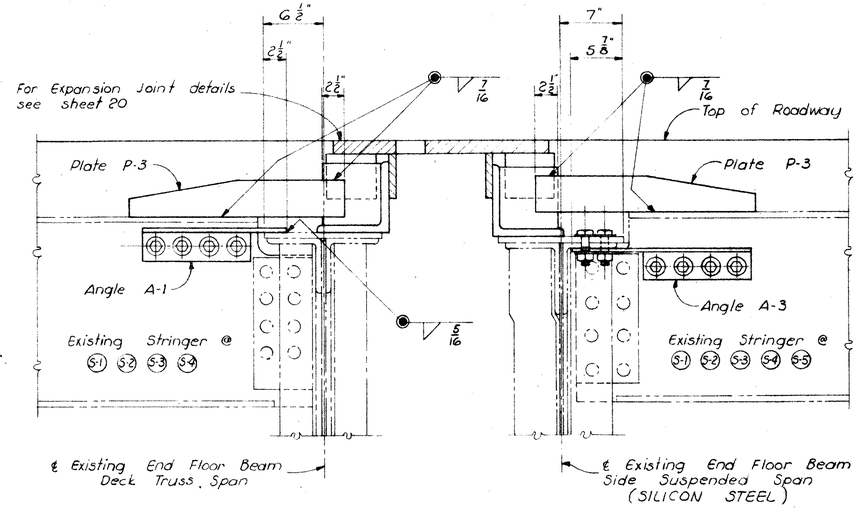


STRINGER LOCATION DIAGRAM

Scale 3/16" = 1'-0"

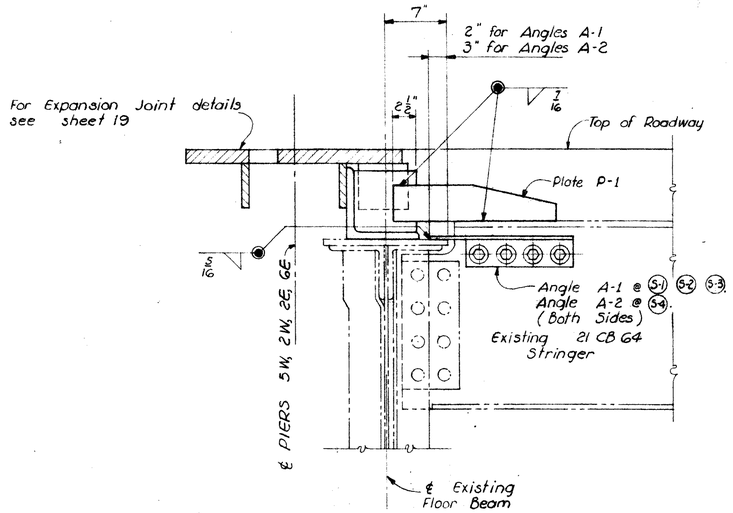


ANGLE A-4



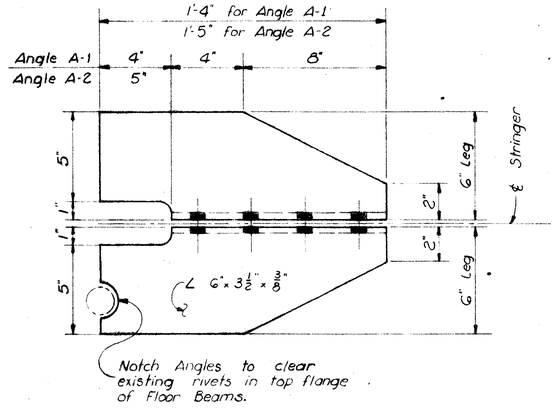
REINFORCEMENT @ PIER B & E

STRINGERS S-1 TO S-5



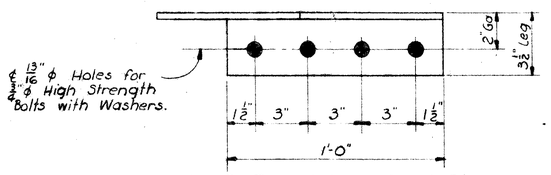
REINFORCEMENT @ PIER 5W, 2W, 2E, GE

STRINGERS S-1 TO S-4

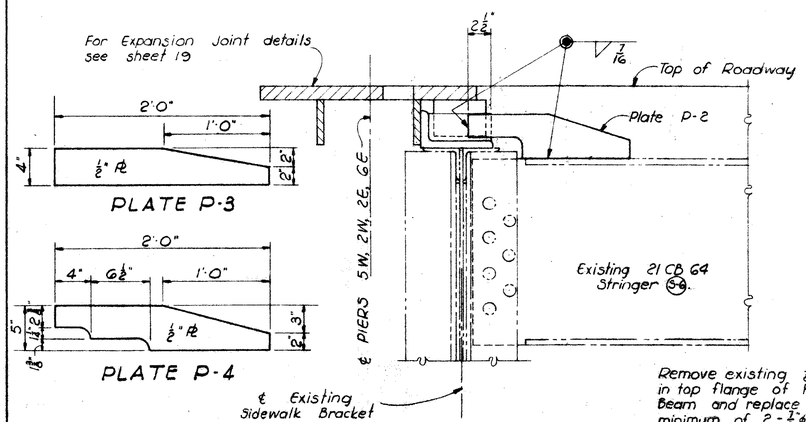


ANGLE A-1, A-2

Scale 3"=1'-0"

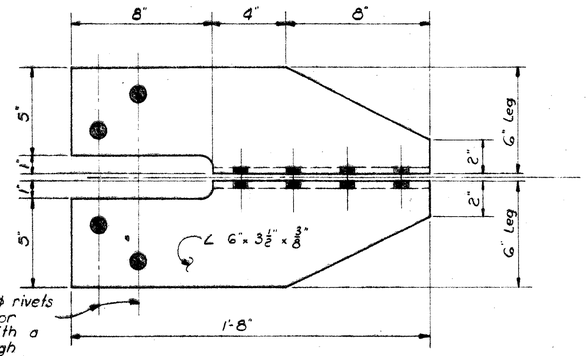


ANGLE A-1, A-2, A-3



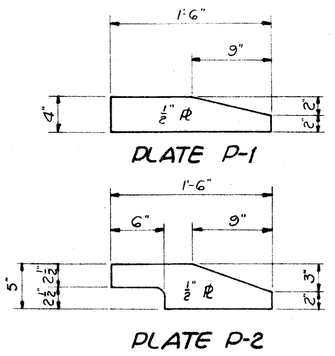
REINFORCEMENT @ PIER 5W, 2W, 2E, GE

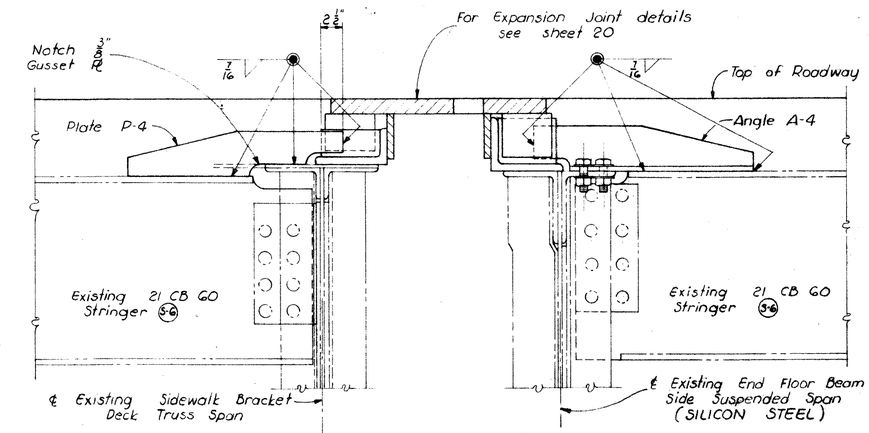
STRINGER S-6



ANGLE A-3

Scale 3"=1'-0"





REINFORCEMENT @ PIER B & E

STRINGER S-6

NOTE:

Dimensions and clearance shown for existing structure shall be carefully field checked prior to detailing and fabrication.

Structural steel reinforcing furnished, installed, measured and paid for under Item S-9, Structural Steel Expansion Joints.

Omit shop paint on all portions of expansion joints. Surfaces in contact with steel or concrete not to be painted. All other surfaces shall be cleaned and given prime coat and finish coats under Item S-8.

NOTE: Scale 1½" = 1'-0" Unless otherwise noted.

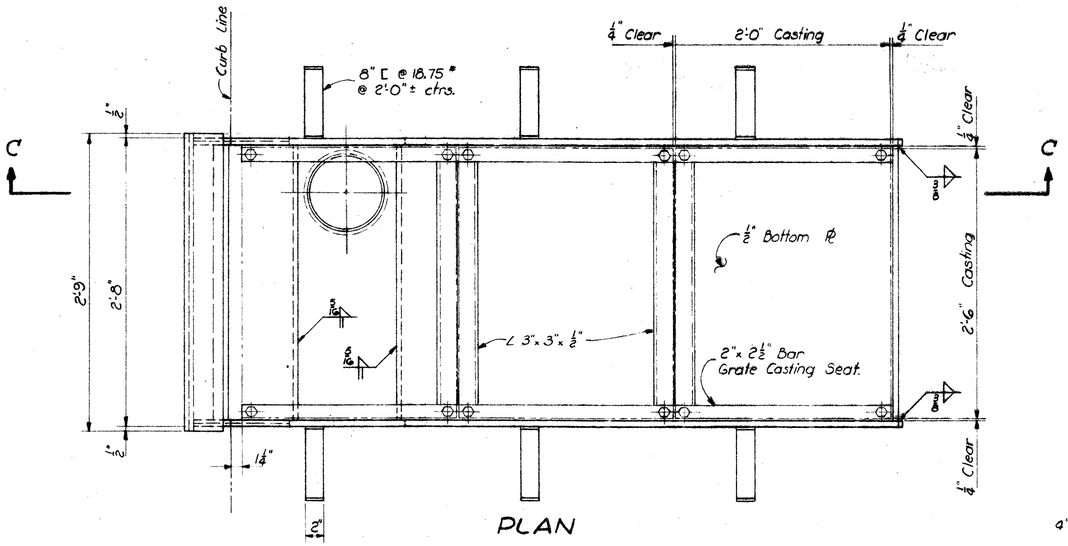
ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	F.C.M.
Preliminary Review	3-12-60	F.C.M.

SANZENBACHER MILLER & BRIGHAM CONSULTING ENGINEERS TOLEDO OHIO

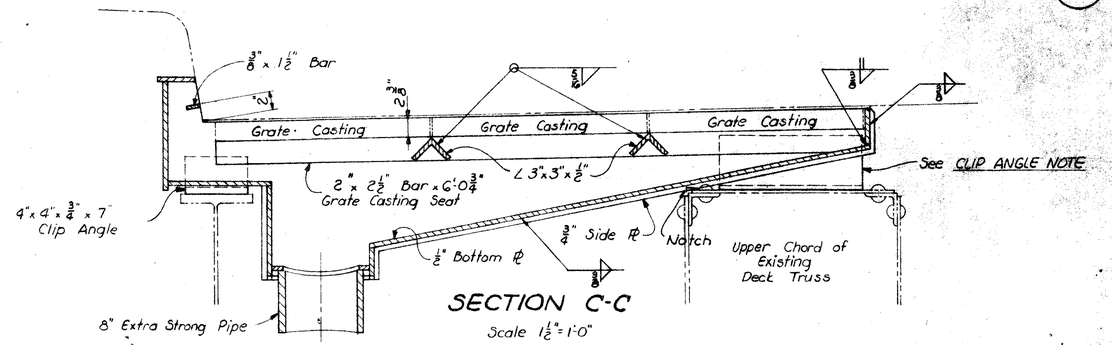
ANTHONY WAYNE BRIDGE

REPAIRS & IMPROVEMENTS
REINFORCEMENT OF STRINGER CONNECTIONS AT EXPANSION JOINTS

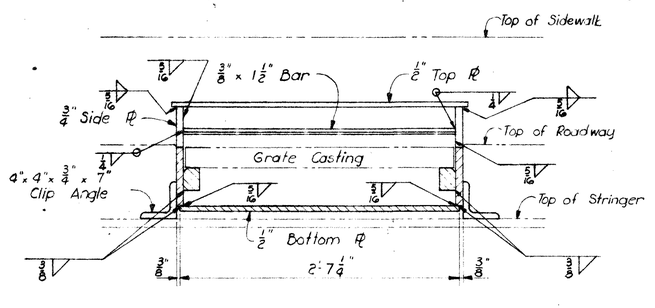
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
FCM	CES		C.E.S.	



PLAN
Scale 1½" = 1'-0"



SECTION C-C
Scale 1½" = 1'-0"



SECTION B-B
Scale 1½" = 1'-0"

CLIP ANGLE NOTE

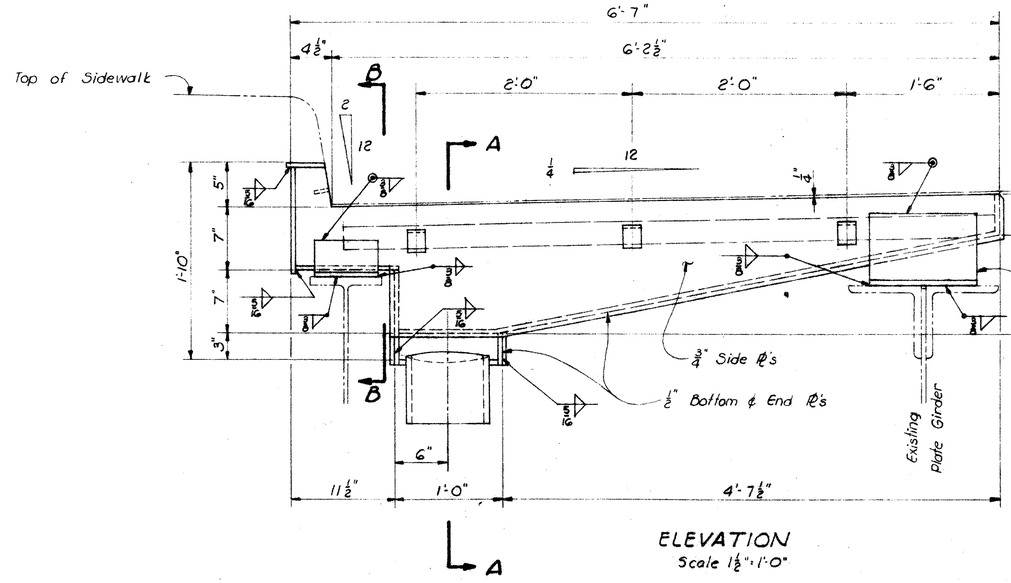
Scuppers are to be attached to the existing structural members by the following clip angles:

DECK TRUSS - L 8"x 6"x 1/2"x 1'-4"

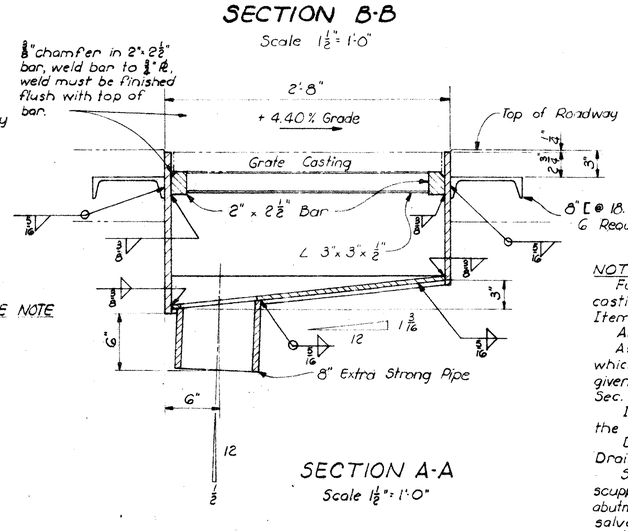
PLATE GIRDER - L 8"x 6"x 1/2"x 1'-0"

ROLLED CB STRINGER - L 6"x 4"x 3/4"x 7"

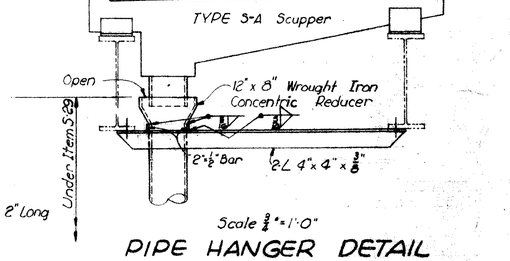
Clip angles are to be welded to side ℄'s of scuppers after scuppers have been set in their proper position.



ELEVATION
Scale 1½" = 1'-0"



SECTION A-A
Scale 1½" = 1'-0"



Scale 3/4" = 1'-0"

PIPE HANGER DETAIL

NOTES:

Furnishing and installation of and payment for scuppers, including castings, fittings, attachments, and incidental material is included in Item S-7, structural steel.

All welding shall be class "A"

After welding has been completed the surfaces of the scuppers which will not be in contact with concrete shall be thoroughly cleaned and given one coat of paint meeting the requirements of Sec. M-9.18 or Sec. M-9.19, O.S.H.D. Specifications.

Installation of each scupper unit to be checked and approved by the Engineer prior to placing adjacent concrete for deck.

Drain pipe and drain pipe supports included in Item S-29, Drainage of structures.

Scuppers at West Abutment: At the west abutment the existing scupper on the North shall be reset to new grade. On the South, at this abutment, the existing scupper shall be replaced with a Neenah R4003 Type "A" salvaged from the East Approach Spans. Resetting including incidental material shall be included for payment in Item S-1. Necessary work including material on the drain pipes included for payment in Item S-29.

TYPE S-A & S-B SCUPPERS

TYPE S-A Scupper (As Shown) - 15 Req.'d
TYPE S-B Scupper (Opposite Hand) - 15 Req.'d

LOOKING DOWN GRADE

(See Framing Plans for Location)

NOTE:

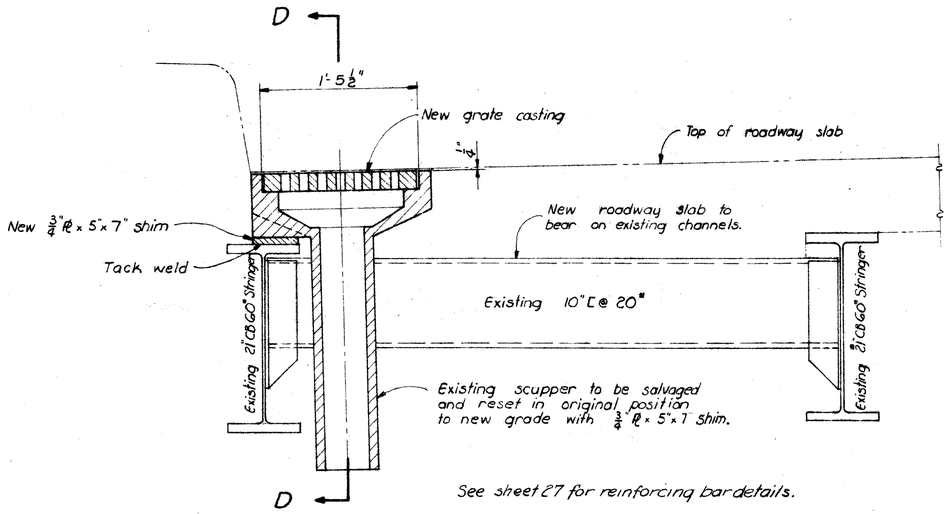
Grating to be cast in 3 pieces - each 2'-0" x 2'-6". Casting to be secured to 2"x 2½" bar seat by 4- 5/16" ϕ bronze cap screws. Top of cap screws to be flush with top of grate. Long dimension of slots in grate to be parallel to longitudinal ℄ of bridge. Grate to bear on ⅛" min. lead gasket.
(Neenah Foundry Co. Type R-4999 or equal.)
See Sheet 24 for details of casting and bolted attachment.

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	F.C.M.
Preliminary Review	3-18-60	FCM

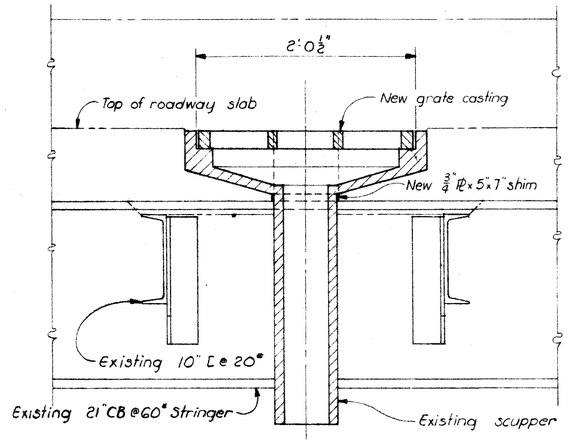
SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO · OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
SCUPPER DETAILS (1)

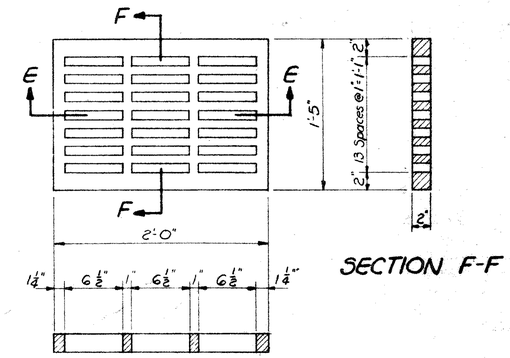
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
FCM	CES		BJH	



TYPICAL SECTION THRU SALVAGED SCUPPER
MAIN SUSPENDED SPAN
(SEE FRAMING PLAN FOR LOCATION)
Scale : 1½"= 1'-0"



SECTION D-D
Scale 1½"= 1'-0"



SECTION F-F

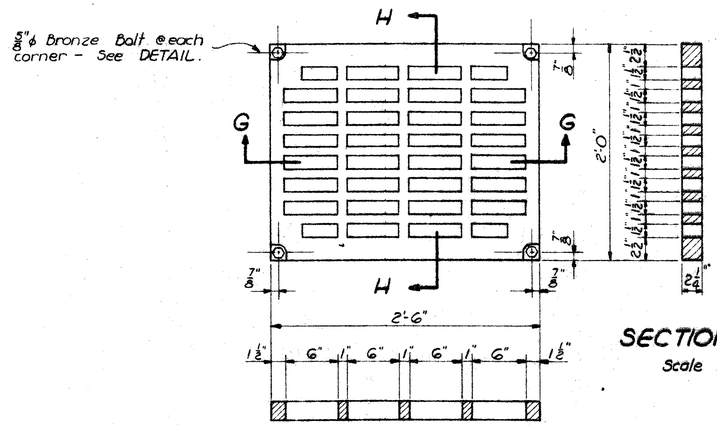
SECTION E-E

GRATE CASTING DETAILS
FOR SALVAGED SCUPPERS
MAIN SUSPENDED SPAN

12 Required

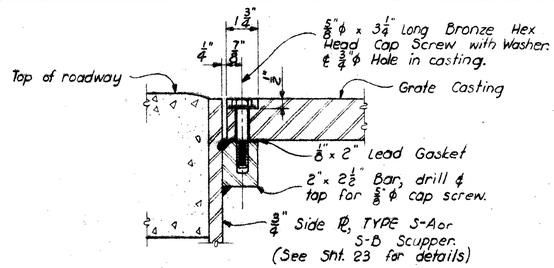
Scale 1½"=1'-0"

Furnishing, installation and payment for these castings included in Item 5-7.
Resetting of scuppers and miscellaneous material included for payment in Item 5-1.



SECTION H-H
Scale 1½"=1'-0"

SECTION G-G
Scale 1½"=1'-0"



DETAIL
SHOWING METHOD OF SECURING GRATE CASTING TO TYPE S-A OR S-B SCUPPER
Scale 3"=1'-0"

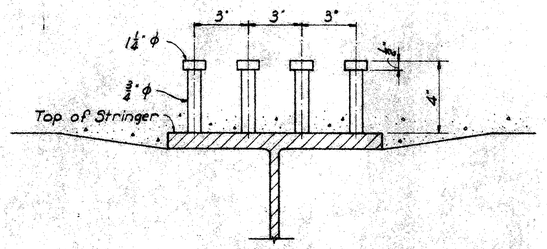
GRATE CASTING DETAILS FOR TYPE S-A, OR S-B SCUPPERS
30 Required

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
SCUPPER DETAILS (2)

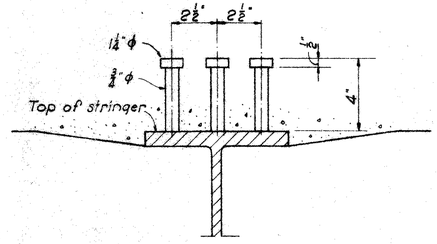
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
CES	CES		B/H	



SECTION

SPAN 8W ONLY

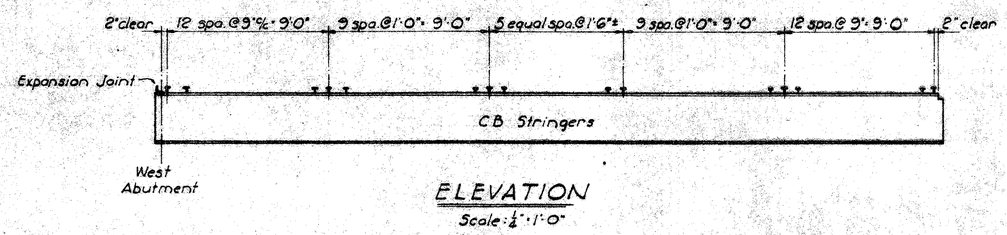
Scale 1½"=1'0"



SECTION

ALL SPANS EXCEPT 8W

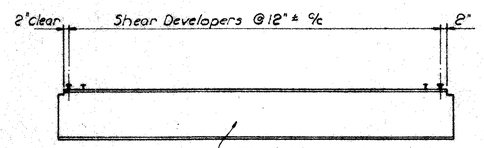
Scale 1½"=1'0"



ELEVATION

Scale: ½"=1'0"

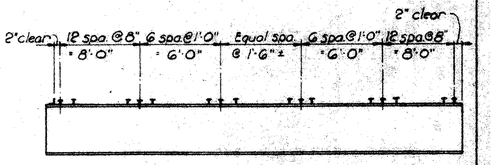
SHEAR DEVELOPERS IN SPAN 8W, 8E, 9E, 10E, 11E & 12E



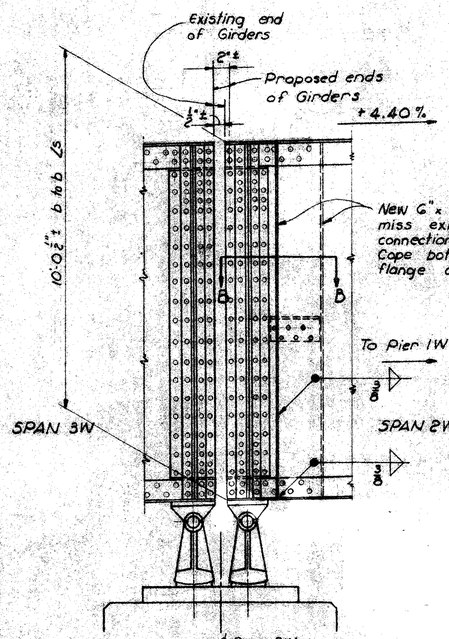
ELEVATION

Scale: ½"=1'0"

SHEAR DEVELOPERS AT PIERS 5W, 2W, B, E, 2E, GE AND SPAN 15E



SHEAR DEVELOPERS SPAN 13E & 14E



NOTE:

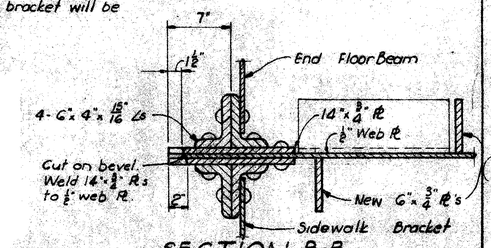
Restricted working clearance between sidewalk brackets.

Removal & replacement of sidewalk bracket will be permitted.

GIRDER REPAIR AT PIER No. 2W

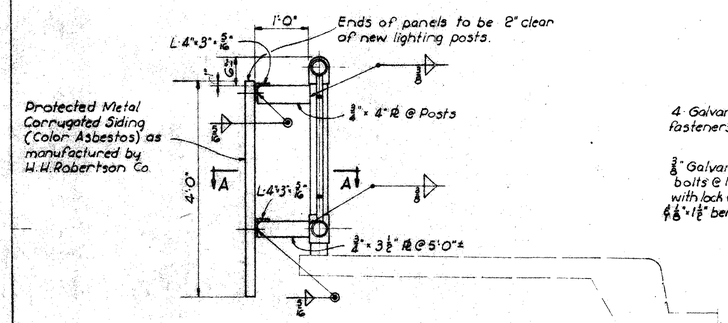
South Girders Shown

Scale: ½"=1'0"



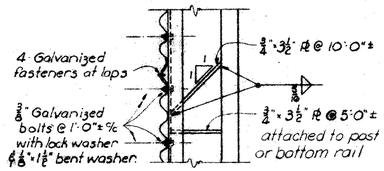
SECTION B-B

Scale: 1½"=1'0"

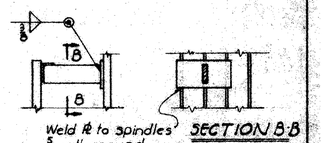


SPLASH PANEL DETAILS

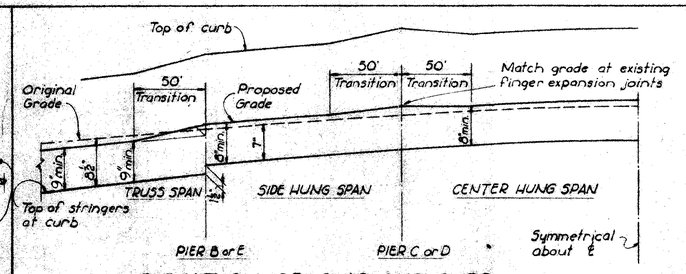
Scale: ¾"=1'0"



SECTION A-A



FASTENINGS FOR ENDS OF PANELS AT NEW LIGHTING POSTS



ELEVATION OF SLAB AND CURB SHOWING TRANSITION AT PIERS B & E & TOWERS C & D

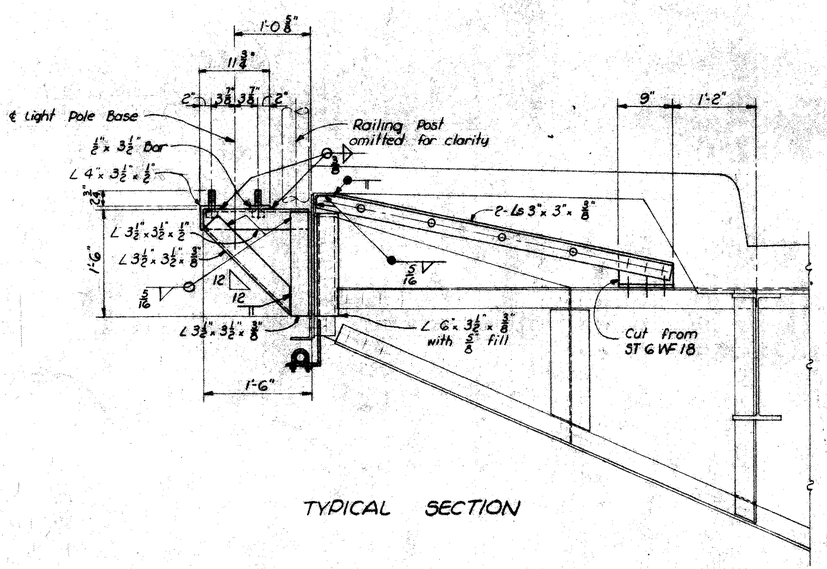
ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

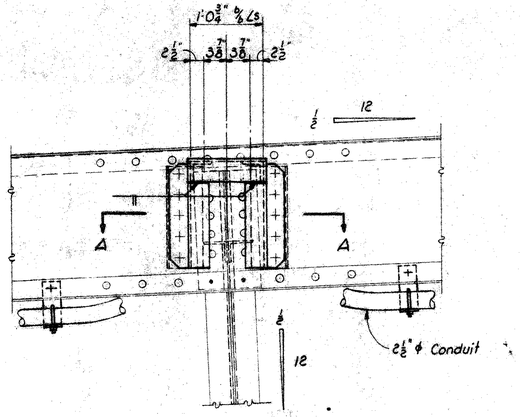
ANTHONY WAYNE BRIDGE

REPAIRS & IMPROVEMENTS
SHEAR DEVELOPERS
GIRDER REPAIR AT PIER 2W
AND SPLASH PANELS

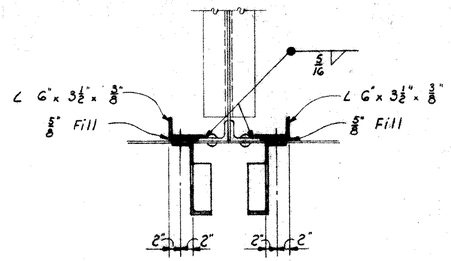
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
BJH	TWD		C.E.S.	



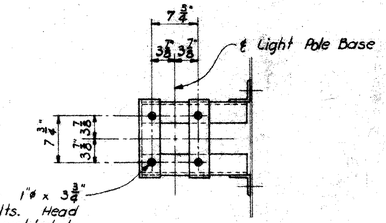
TYPICAL SECTION



ELEVATION



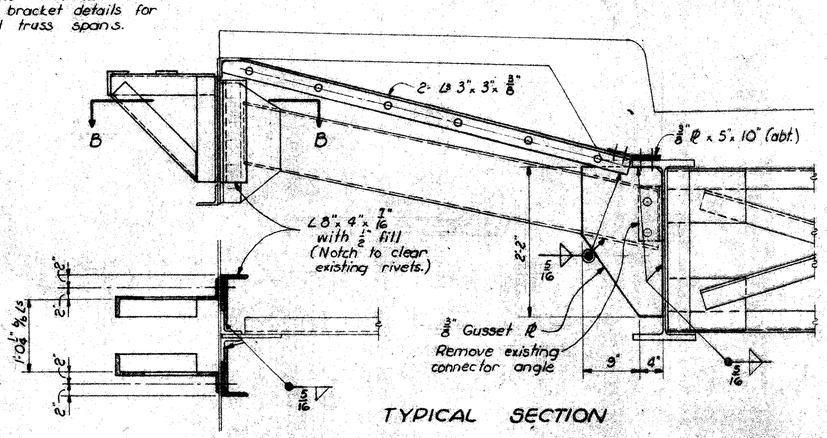
SECTION A-A



PLAN @ TOP OF BRACKET

LIGHT POLE BRACKET DETAILS FOR GIRDER & TRUSS SPANS

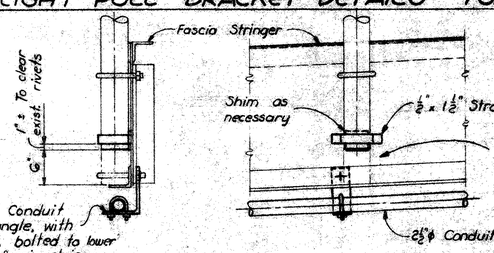
NOTE:
Details not shown are similar to bracket details for girder and truss spans.



SECTION B-B

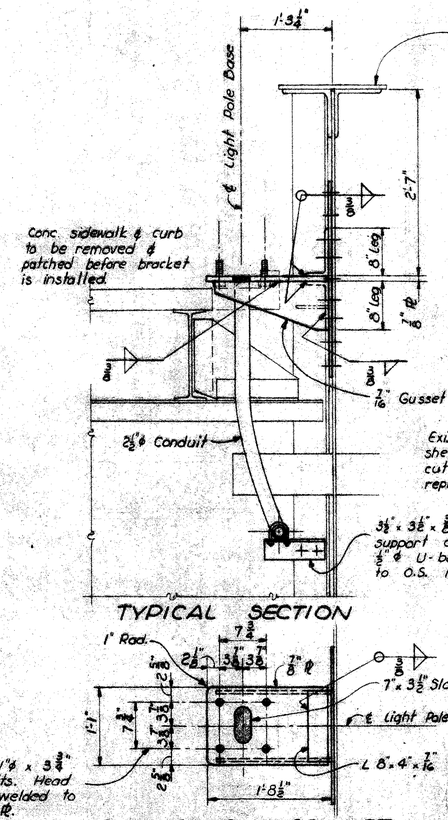
TYPICAL SECTION

LIGHT POLE BRACKET DETAILS FOR STRINGER SPANS

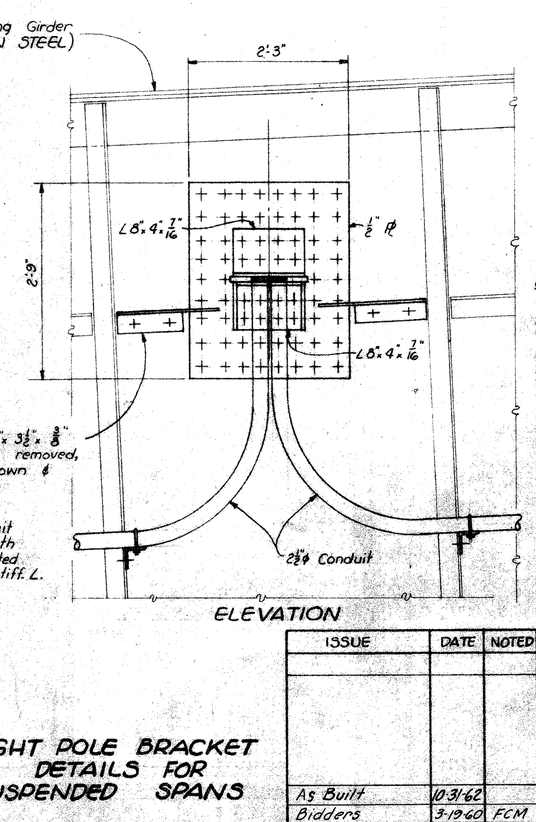


NOTE:
These railing modifications part of Item S-14 Repair of Bridge Railing.
Existing flag pole brackets, which are now held in place on certain railing posts with metal straps, are to be welded in their present location.
Remove 5/8" ϕ U-bolt, cut off lower portion of railing post, shim as necessary & weld 1/2" x 1 1/2" straps to fascia stringer web ℞ & posts.

RAILING POST MODIFICATION DETAILS



TYPICAL SECTION



ELEVATION

NOTE:
Light pole brackets and structural steel reinforcements as shown and indicated on this drawing are part of Item S-7 and shall be measured and paid at the contract unit price bid for that Item.

Conduit and attachments indicated under Item S-25, Conduit for Roadway Lighting.

Welding shall be Class "A".

All bolts shall be 3/4" ϕ High Strength.

For locations of light pole brackets see Plan & Profile, sheets 3 thru 6.

1 1/16" ϕ Holes for 1" ϕ x 3 3/4" long anchor bolts. Head of bolts to be welded to underside of 8" ℞.

PLAN @ TOP OF BRACKET

LIGHT POLE BRACKET DETAILS FOR SUSPENDED SPANS

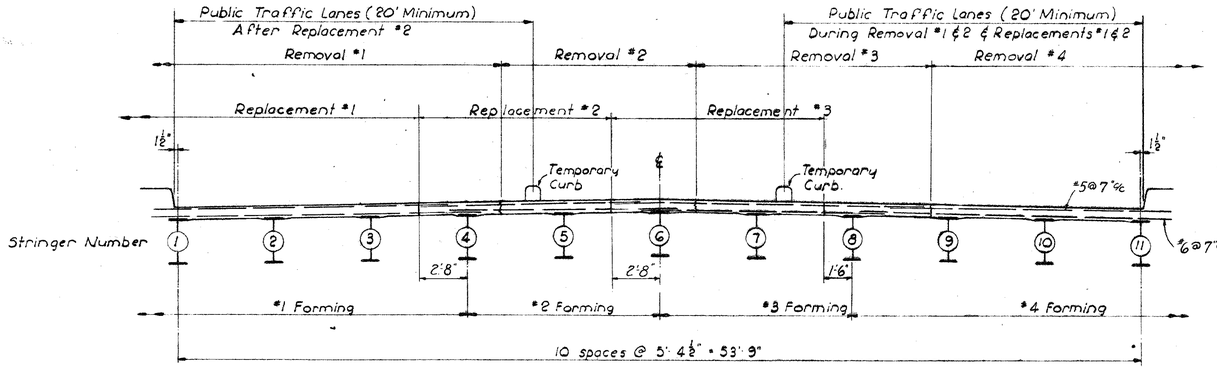
ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

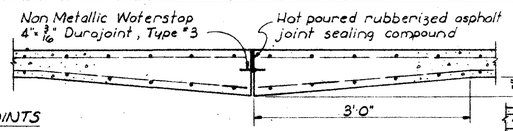
ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
LIGHT POLE BRACKETS, CONDUIT DETAILS AND RAILING POST REPAIRS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	REVISED
FCM	CES		C.E.S.		

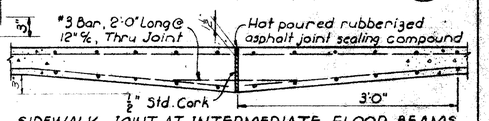
DETAIL - MEDIAN CURB AT JOINTS BETWEEN APPROACH SPANS AND CONSTRUCTION-CONTRACTION JOINTS



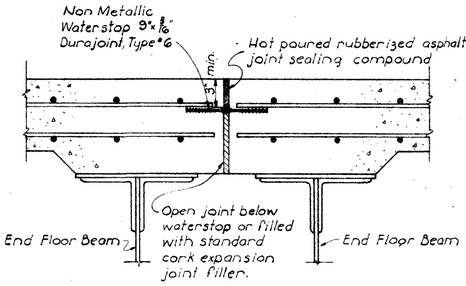
DECK REMOVAL AND REPLACEMENT



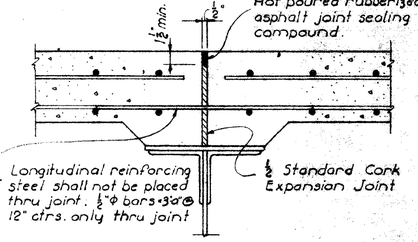
SIDEWALK JOINT BETWEEN APPROACH SPANS AT PIERS AS SHOWN BELOW



SIDEWALK JOINT AT INTERMEDIATE FLOOR BEAMS

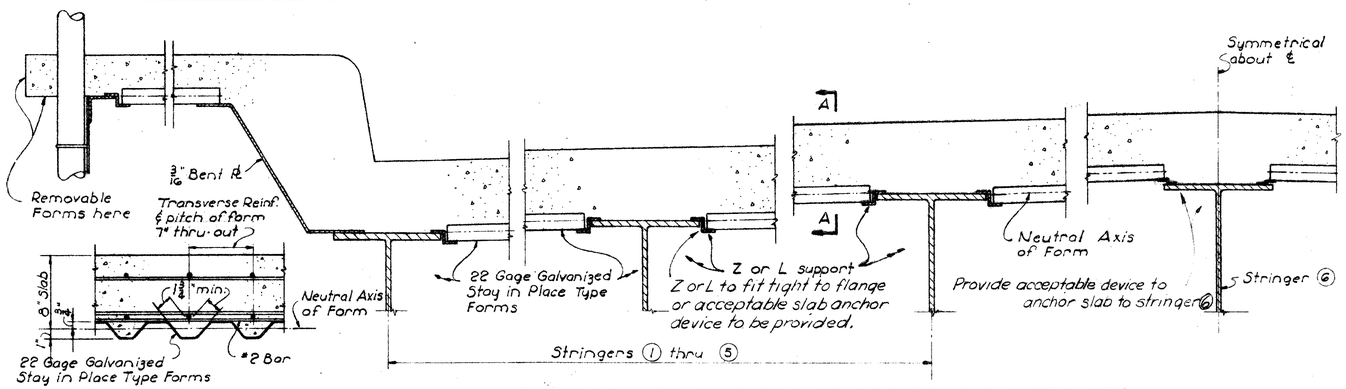


JOINT BETWEEN APPROACH SPANS AT PIERS 6W, 4W, 3W, 1W, 1E, 3E, 4E, 5E, 10E, 12E & 14E



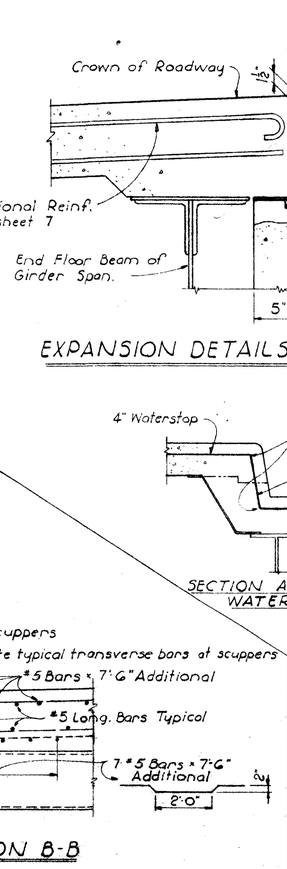
CONSTRUCTION-CONTRACTION JOINT AT INTERMEDIATE FLOOR BEAMS ON APPROACH & SUSPENDED SPANS - PIERS 7W & 7E

Maximum spacing between joints is two panel lengths (about 40 feet).

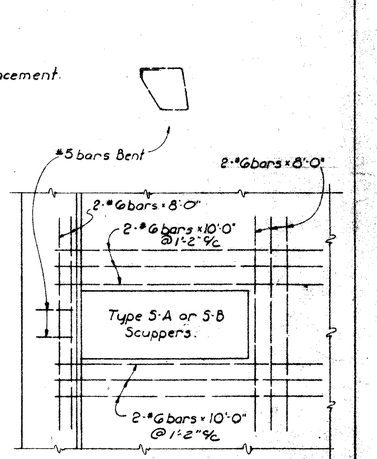


SECTION A-A

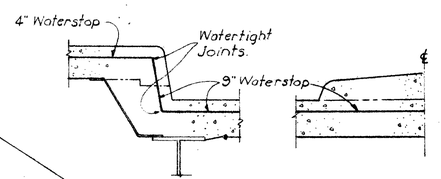
TYPICAL APPLICATION OF ACCEPTABLE ALTERNATE METHOD OF FORMING BRIDGE SLABS (Stringer Span Shown)



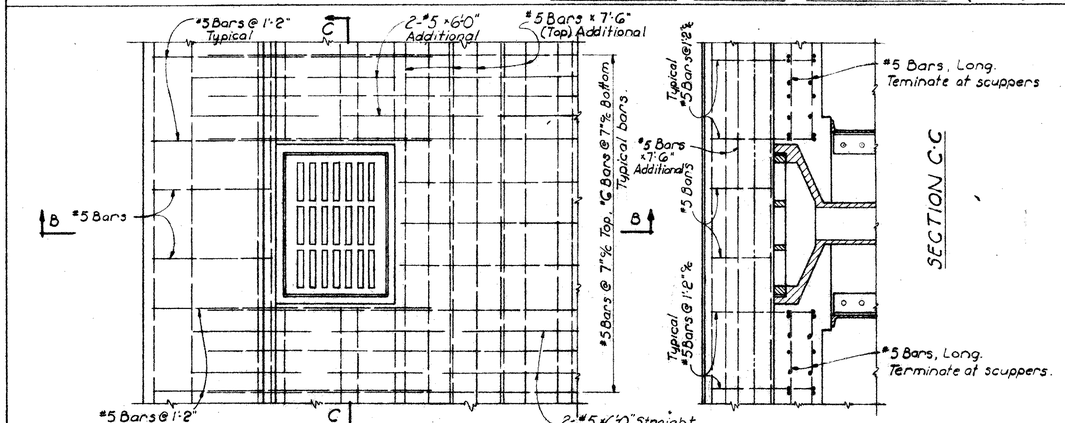
EXPANSION DETAILS AT PIERS A & F



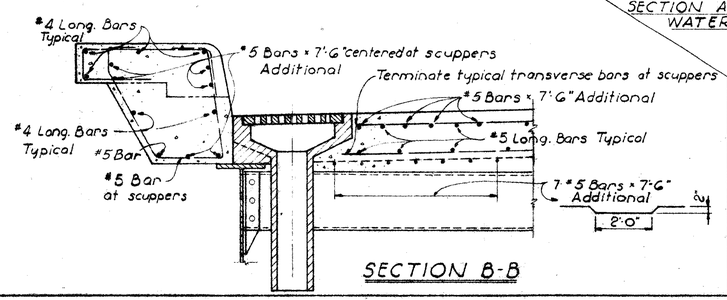
PLAN OF ADDITIONAL REINFORCING AT SCUPPERS S-A & S-B.



SECTION AT JOINT WITH WATERSTOP



PLAN OF SLAB REINFORCEMENT AT SCUPPERS - SUSPENDED SPANS



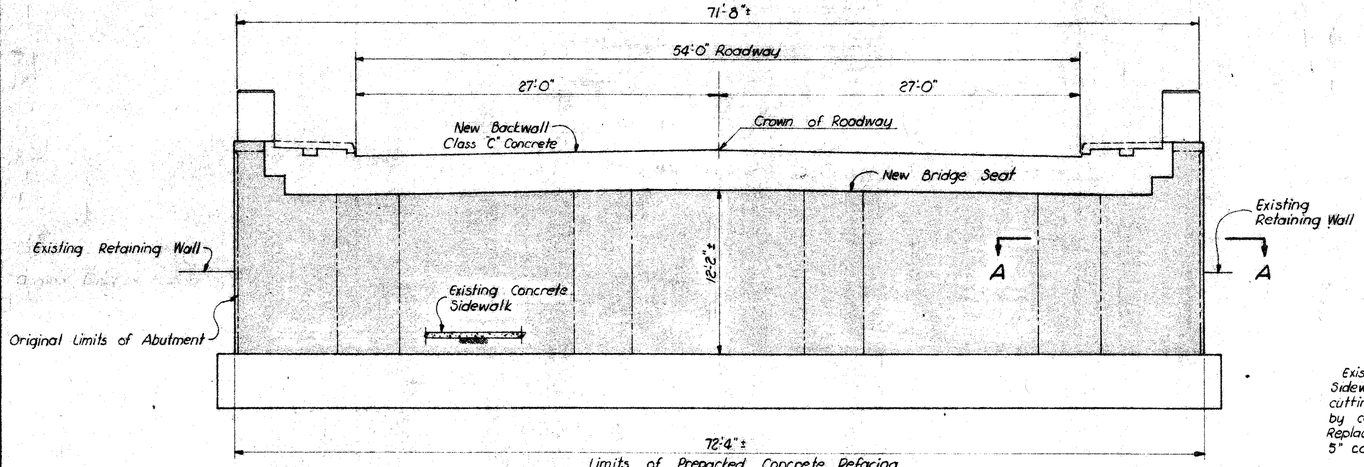
SECTION B-B

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

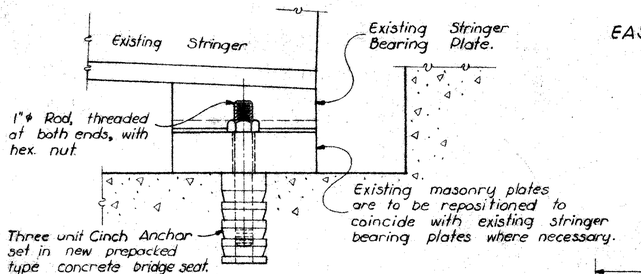
SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
MISCELLANEOUS
SUPERSTRUCTURE DETAILS

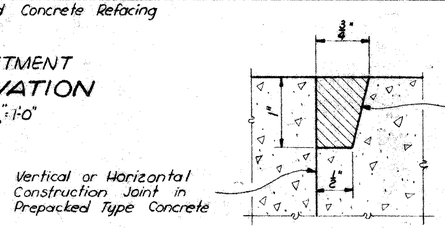
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
F.C.M. B.J.H.	T.W.D.		B.J.H.	



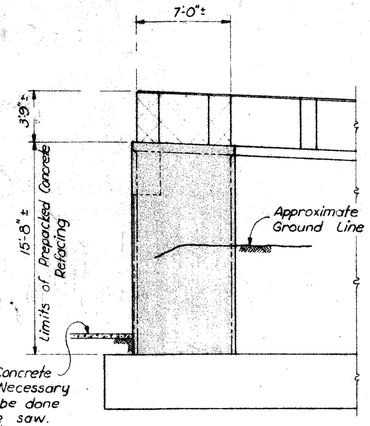
EAST ABUTMENT
ELEVATION
Scale $\frac{3}{16}$" = 1'-0"



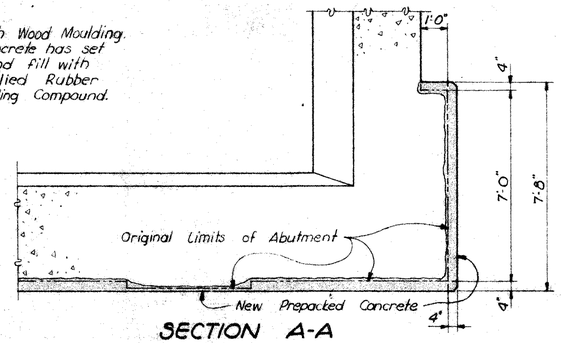
ANCHOR BOLT DETAIL
Scale 3" = 1'-0"



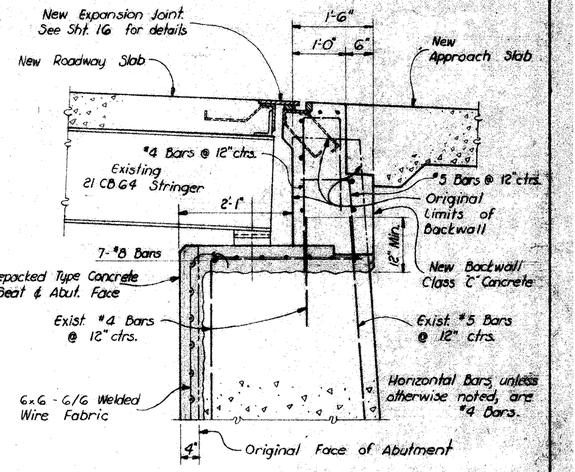
CONSTRUCTION JOINT DETAIL
Scale - Full Size



EAST ABUTMENT
PART SOUTH ELEVATION
NORTH ELEVATION SIMILAR
Scale $\frac{3}{16}$" = 1'-0"



SECTION A-A
Scale $\frac{3}{8}$" = 1'-0"



EAST ABUTMENT
TYPICAL SECTION THRU BACKWALL
Scale $\frac{3}{4}$" = 1'-0"

NOTES

Removal of concrete and placing of new at each abutment shall be carried on in two or more operations to meet maintenance of traffic requirements and the stages of superstructure construction.

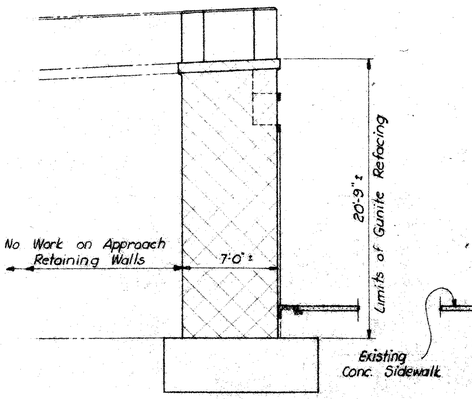
Prepacked type concrete, for each width of construction, shall be placed in one continuous operation from the top of the footing to the bridge seat and thence to the rear face of the abutments. The abutment back wall shall be poured separately after placing of structural steel expansion joint. Construction joints in prepacked type concrete facing and bridge seat shall be continuous from the top of the footing to the rear face of the abutments.

Jacking of the superstructure stringers will be required to permit removal and replacement of bridge seat concrete and the resetting of the masonry plates. Removal and replacement of the bridging and/or diaphragms between the separate portions to be jacked shall be accomplished as directed by the Engineer. Damage to sidewalks, pavement, curbing or any portion of the structure resulting from jacking operations shall be repaired by the Contractor. Removal of sidewalk, where required, shall be to neat lines cut by concrete saw.

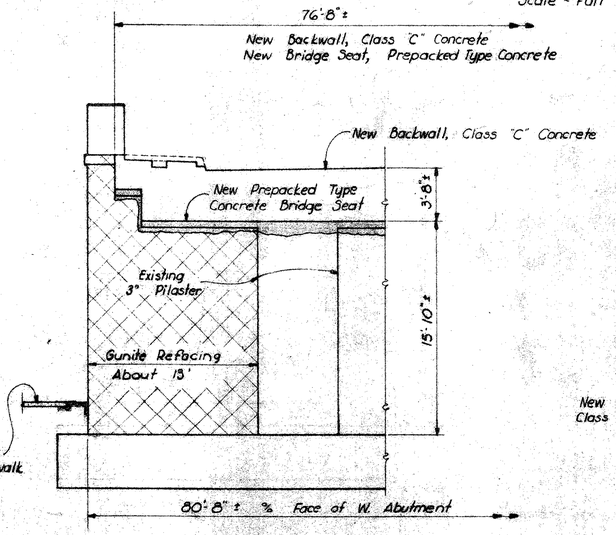
In resetting masonry plates, shims of steel and/or sheet lead shall be employed as necessary.

Approximate areas only of Gunite refacing are shown for the West Abutment. After removal of all deteriorated concrete on vertical surfaces and refilling, the entire abutment faces within the limits shown shall be given a wash coat of Gunite.

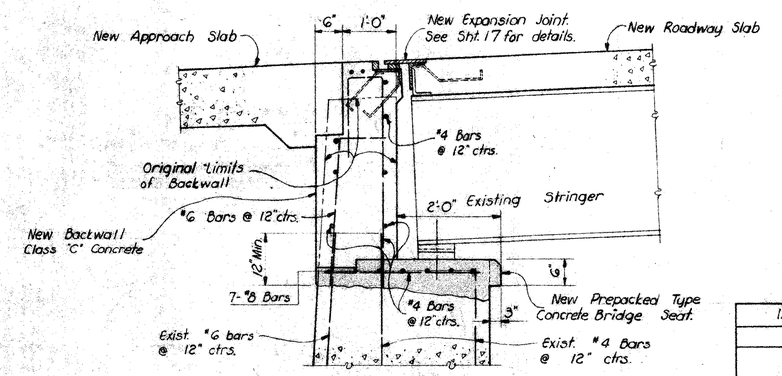
New Bridge Seats to be pitched to drain towards face of abutment between bearings at an approximate slope of $\frac{1}{8}$" per foot.



WEST ABUTMENT
PART SOUTH ELEVATION
NORTH ELEVATION SIMILAR
Scale $\frac{3}{16}$" = 1'-0"



WEST ABUTMENT
PART EAST ELEVATION
SOUTHWEST CORNER SHOWN
NORTHWEST CORNER SIMILAR
Scale $\frac{3}{16}$" = 1'-0"



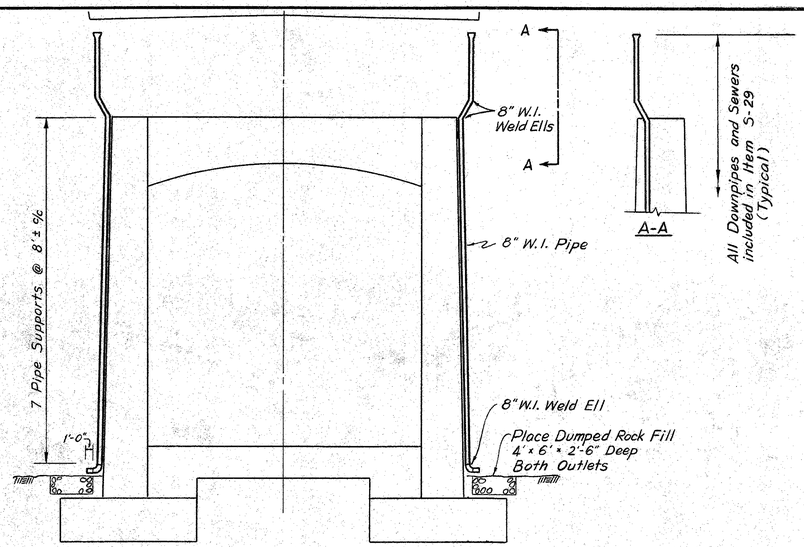
WEST ABUTMENT
TYPICAL SECTION THRU BACKWALL
Scale $\frac{3}{4}$" = 1'-0"

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

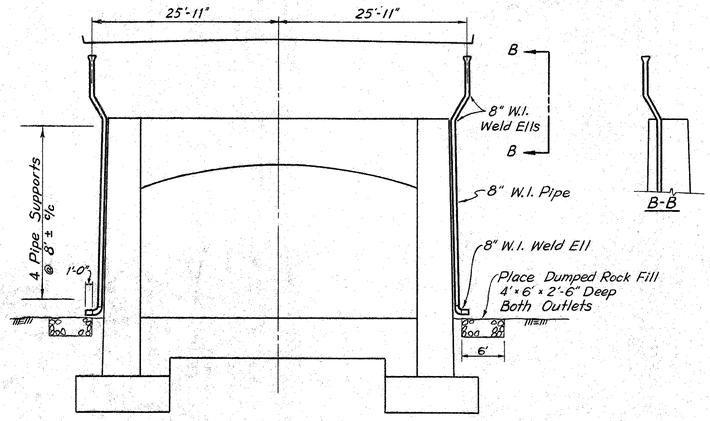
SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
EAST & WEST ABUTMENT
MASONRY REPAIRS

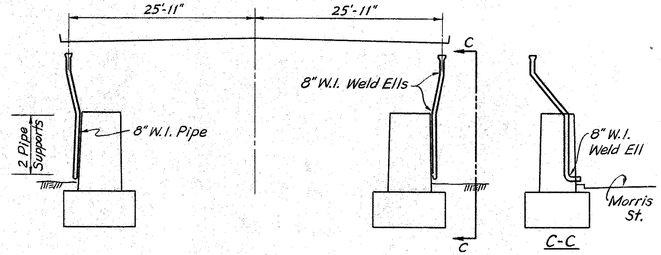
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
FCM	CES		C.E.S.	



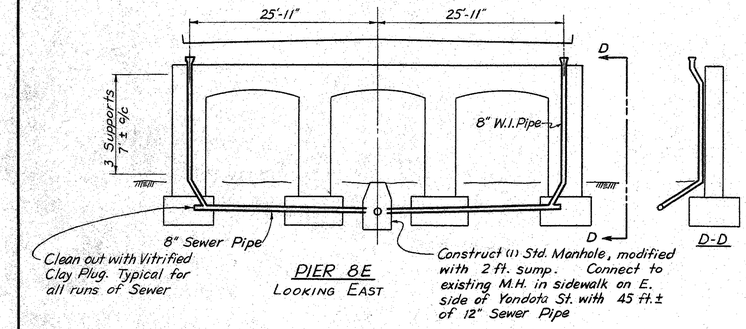
PIER 2W
LOOKING WEST



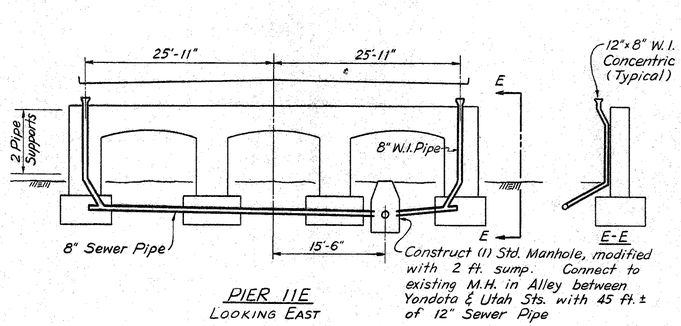
PIER 5W
LOOKING WEST



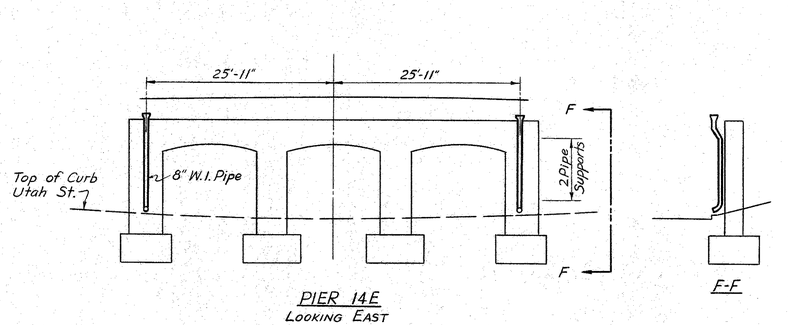
PIER 7W
LOOKING WEST



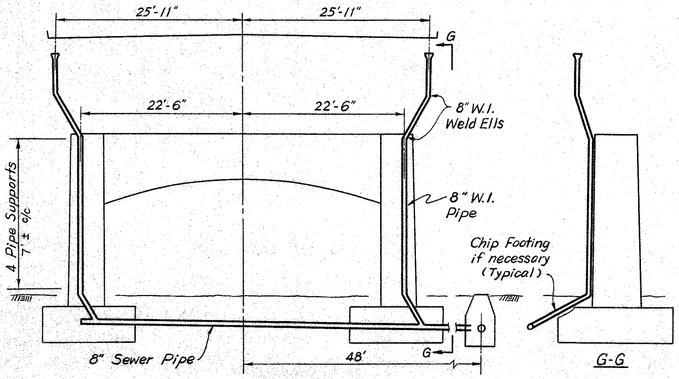
PIER 8E
LOOKING EAST



PIER 11E
LOOKING EAST

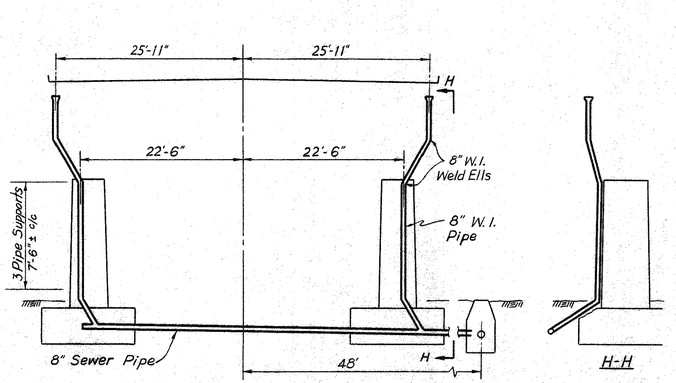


PIER 14E
LOOKING EAST



PIER 2E
LOOKING EAST

Construct (1) Std. Manhole, modified with 2 ft. sump. Connect to new M.H. built @ existing 15" Sewer @ Anchorage "F", with 198 ft.± of 12" Sewer Pipe



PIER 4E
LOOKING EAST

Construct (1) Std. Manhole, modified with 2 ft. sump. Connect to new M.H. @ 2E with 159 ft. of 12" Sewer Pipe

Item S-29, Drainage of Structures, includes all components shown on the plans or required to provide a complete, operable bridge drainage system, including Wrought Iron Pipe, fittings, supports, pipe specials, sewers, manholes, erosion protection, and connections to existing outlets.

Mitering and welding of Wrought Iron Pipe to provide changes in direction will not be permitted. Although the sketches for piping at the piers may indicate a change in direction of downpipes in a plane parallel to the ℄ of the bridge, in certain cases careful positioning of the scupper may make this unnecessary. Downpipe shall be measured and fabricated after installation of scuppers.

Where existing pavement, sidewalk, or other facilities must be removed to permit installation of this work, replacement shall be made in kind, payment included in the lump sum bid for Item S-29.

Included in Item S-29 are drainpipe modifications required in setting the scuppers at the West Abutment, and the cleanout of these downpipes from scuppers to outlets.

NOTES

Pipes below ground shall be set to provide 3'-0" minimum cover unless otherwise approved by the Engineer.

At all direction changes in the sewers, standard manufactured tees, Y-branches, elbows, short radius curves, long radius curves, etc. shall be used as necessary or as directed by the Engineer. All work shall be done by workmen skilled in this trade.

Sewer Pipe shall be laid with a minimum slope of ⅛"/ft., unless otherwise approved by the Engineer. Outlet elevations to be determined prior to setting grade.

Sewer Pipe under pavement shall conform to State of Ohio Sec. M-6.6(b). Sewer Pipe outside of paved areas shall conform to State of Ohio Sec. M-6.5(b), M-6.6(a) or M-6.8(b). Wrought Iron Pipe and fittings for downspouts shall conform to State of Ohio Sec. M-6.10; Welded Wrought Iron Pipe-Standard Weight. Manholes shall be City of Toledo Standard, modified where called for to include a 2'Sump. Dumped Rock Fill shall conform to State of Ohio Sec. I-10.06.

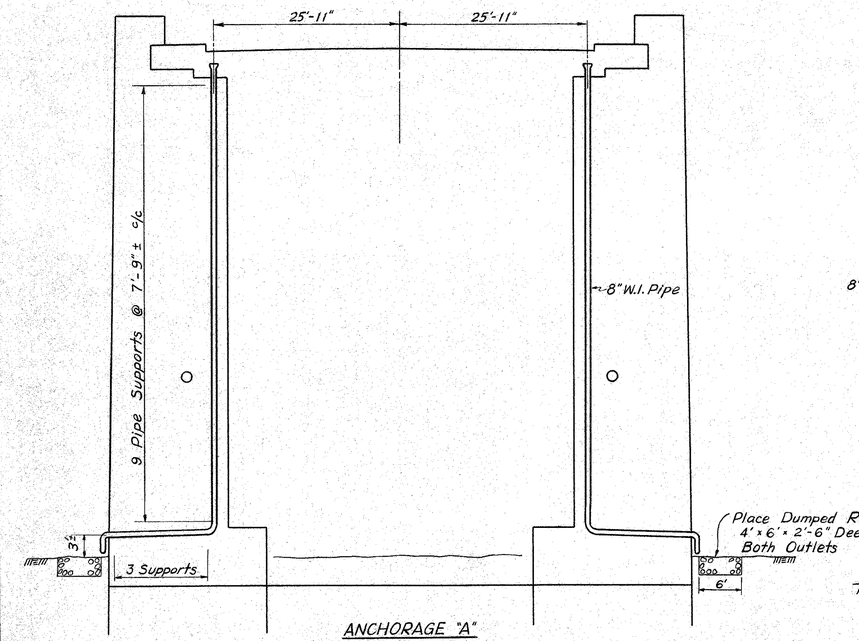
For Scupper Details, See Sheets 23 & 24
For Pipe Support Detail, See Sheet 30
See Plan & Profile of Bridge for location of pipes underground.

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	F.C.M.
Preliminary Review	3-12-60	FCM

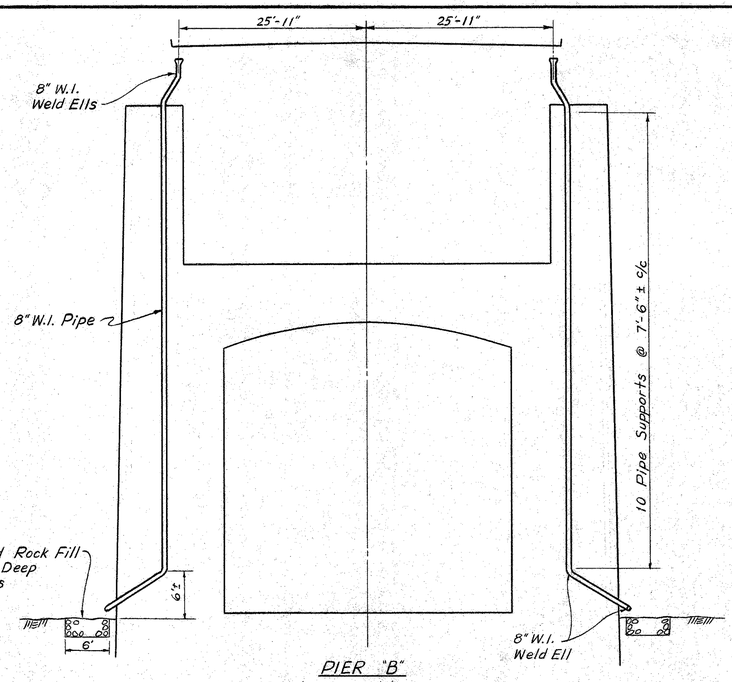
SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
DRAINAGE DETAILS (1)

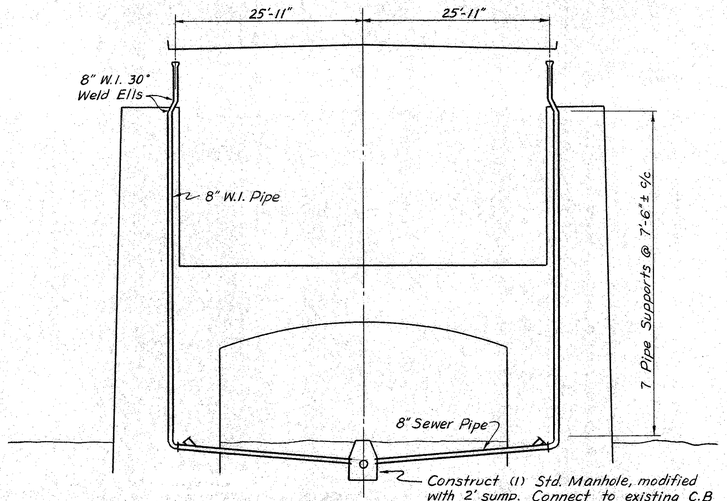
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
B.D.	B.D.	J.H.Y.	FCM	



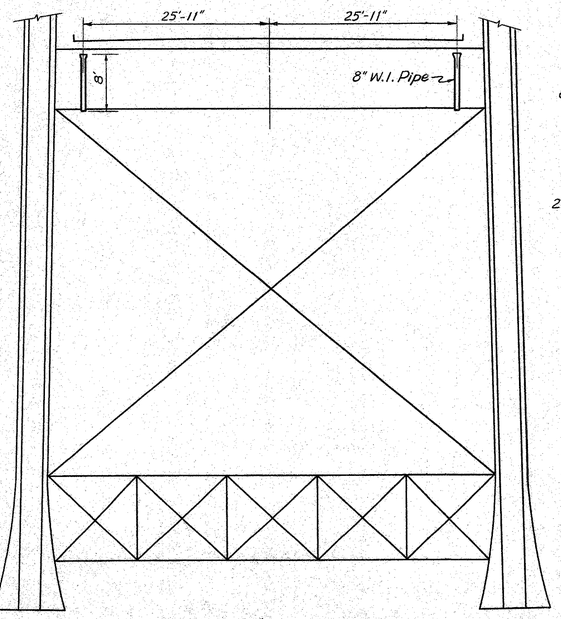
ANCHORAGE "A"
LOOKING WEST



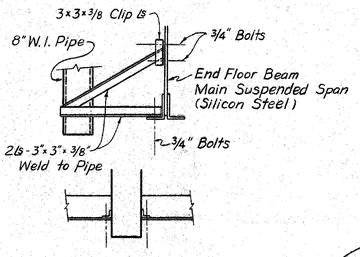
PIER "B"
LOOKING WEST



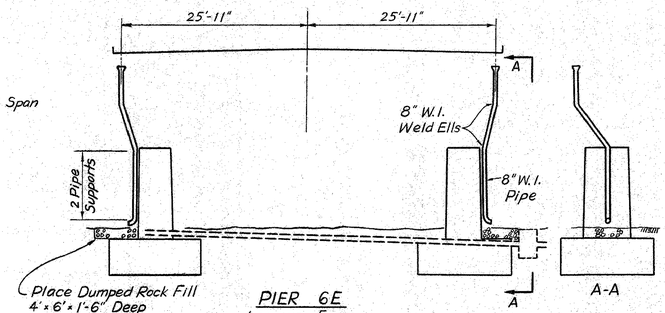
PIER "E"
LOOKING EAST



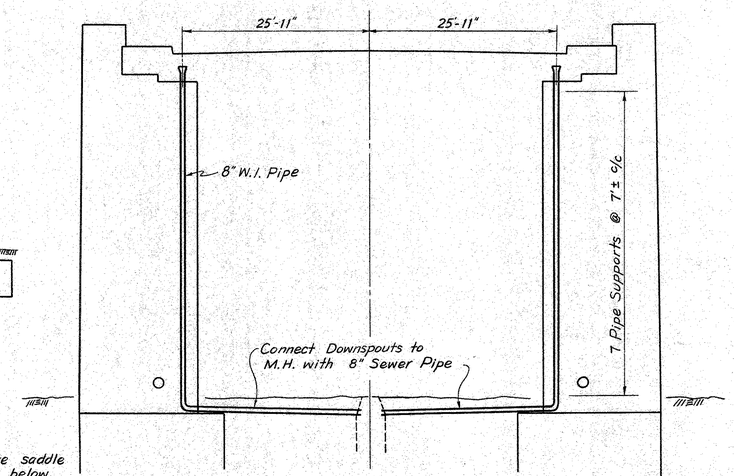
TOWER "C" - LOOKING WEST
TOWER "D" - LOOKING EAST



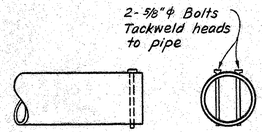
PIPE SUPPORT DETAIL
AT TOWERS "C" & "D"
1/2" = 1'-0"



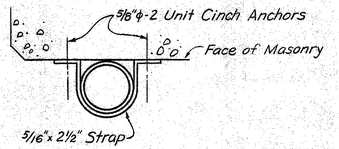
PIER 6E
LOOKING EAST



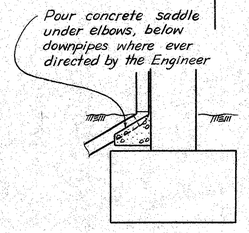
ANCHORAGE "F"
LOOKING EAST



DETAIL - ALL OPEN ENDS
WROUGHT-IRON PIPE



PIPE SUPPORT DETAIL
1"=1'-0"



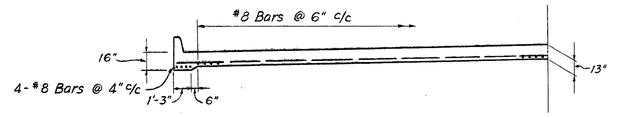
CONCRETE SADDLE DETAIL

ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

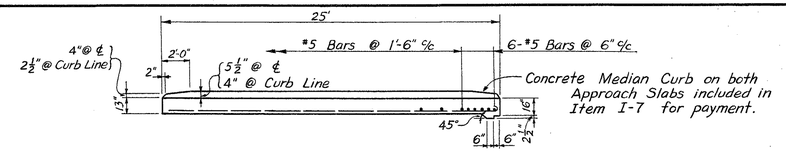
ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
DRAINAGE DETAILS (2)

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
BD	BD	J.H.Y.	FCM	



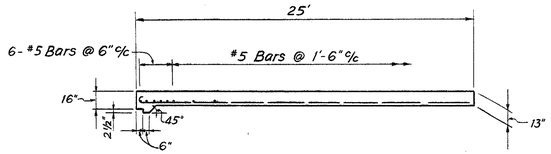
APPROACH SLAB HALF-SECTION A-A

3/16" = 1'-0"



APPROACH SLAB SECTION C-C

3/16" = 1'-0"

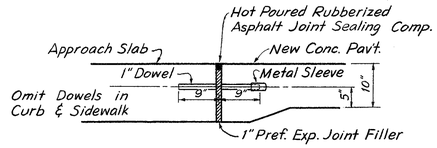


APPROACH SLAB SECTION B-B

3/16" = 1'-0"

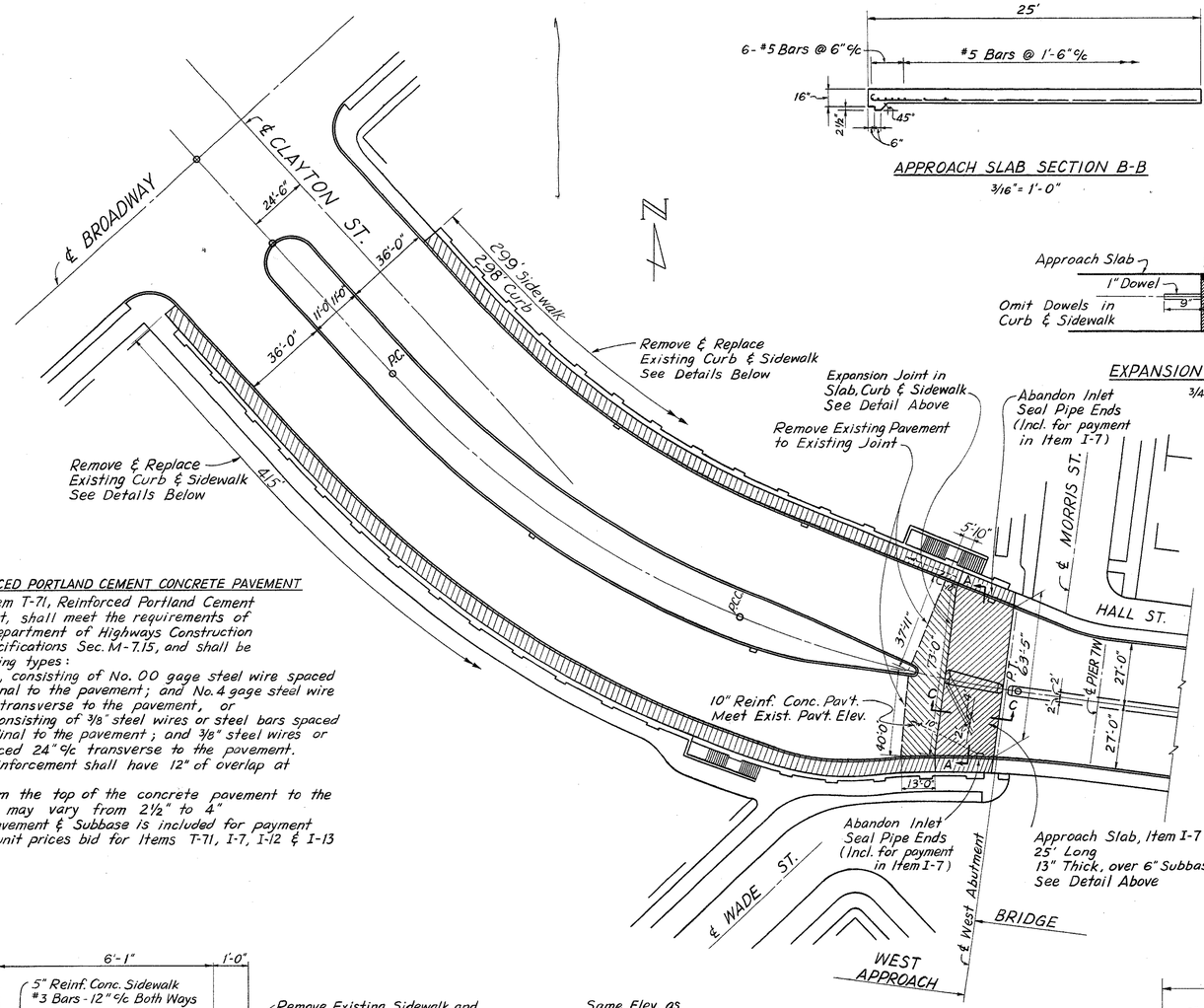
SUMMARY OF QUANTITIES - THIS SHEET

Ref. No.	Item	Description	Quantity	Unit
18	E-8	Removal of Existing Concrete Pavement & Approach Slabs	578	Sq. Yds.
19	E-8	Removal of Existing Concrete Sidewalk	5337	Sq. Ft.
20	E-8	Removal of Existing Curb	957	Lin. Ft.
21	T-71	10" Reinforced Portland Cement Concrete Pavement	241	Sq. Yds.
22	I-7	Reinforced Concrete Approach Slabs (T=13")	347	Sq. Yds.
23	I-12	Concrete Curb, as per plan	857	Lin. Ft.
24	I-13	5" Reinforced Concrete Sidewalks	5337	Sq. Ft.
25	I-22	Subbase	252	Cu. Yds.



EXPANSION JOINT DETAIL

3/4" = 1'-0"



ITEM T-71, REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

Reinforcing for Item T-71, Reinforced Portland Cement Concrete Pavement, shall meet the requirements of State of Ohio, Department of Highways Construction and Material Specifications Sec. M-7.15, and shall be one of the following types:

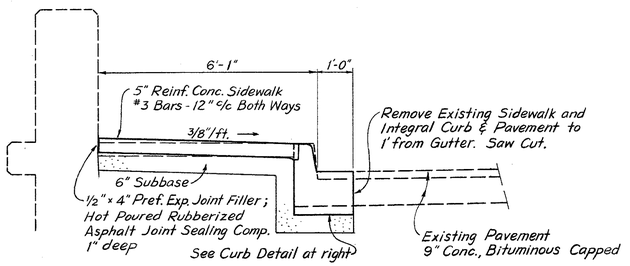
(1) - Mesh Fabric, consisting of No. 00 gage steel wire spaced 6" c/c longitudinal to the pavement; and No. 4 gage steel wire spaced 12" c/c transverse to the pavement, or

(2) - Bar Mats, consisting of 3/8" steel wires or steel bars spaced 7" c/c longitudinal to the pavement; and 3/8" steel wires or steel bars spaced 24" c/c transverse to the pavement.

Either type of reinforcement shall have 12" of overlap at adjoining mats.

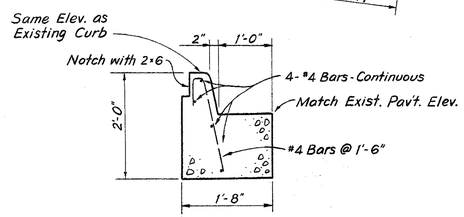
The distance from the top of the concrete pavement to the reinforcing steel may vary from 2½" to 4"

Excavation for Pavement & Subbase is included for payment in the contract unit prices bid for Items T-71, I-7, I-12 & I-13

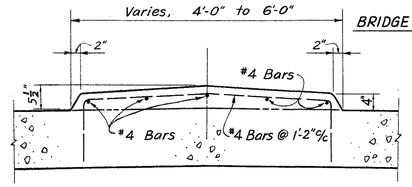


TYPICAL SECTION
SIDEWALK & CURB REPLACEMENT

½" = 1'-0"



CURB DETAIL



MEDIAN CURB DETAIL

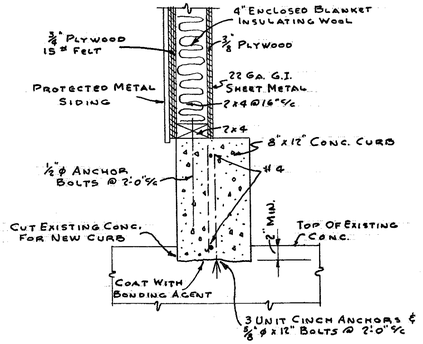
ISSUE	DATE	NOTED
As Built	10-31-62	
Bidders	3-19-60	FCM
Preliminary Review	3-12-60	FCM

SANZENBACHER MILLER & BRIGHAM CONSULTING, ENGINEERS TOLEDO OHIO

ANTHONY WAYNE BRIDGE

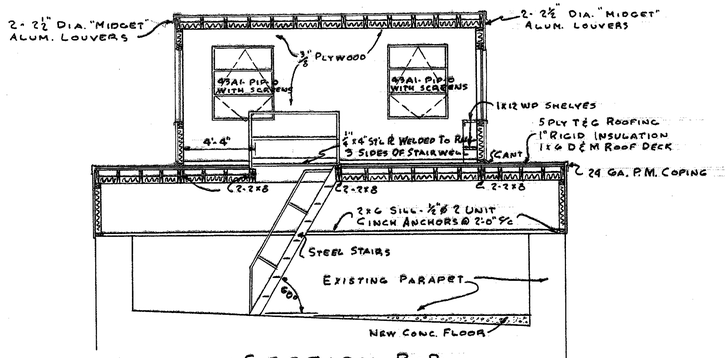
REPAIRS & IMPROVEMENTS EAST & WEST APPROACHES PAVEMENT REPLACEMENT

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
BD	BD	JHY	FCM	



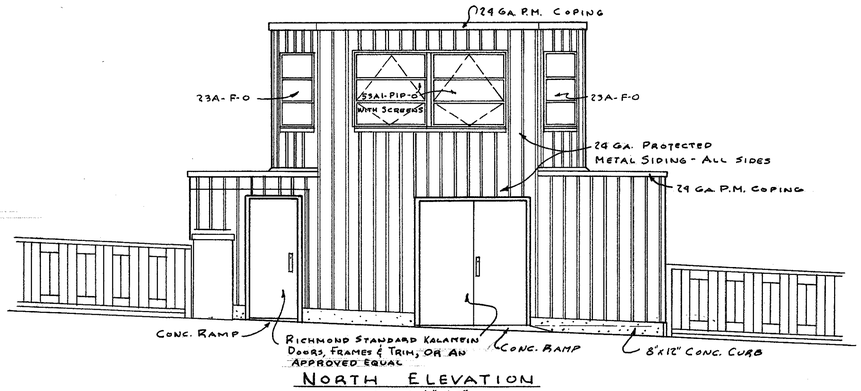
Typical Curb Detail

Scale: 1½" = 1'-0"



Section B-B

Scale: ¼" = 1'-0"



North Elevation

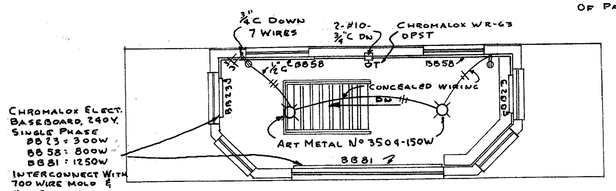
Scale: ¼" = 1'-0"

Specifications

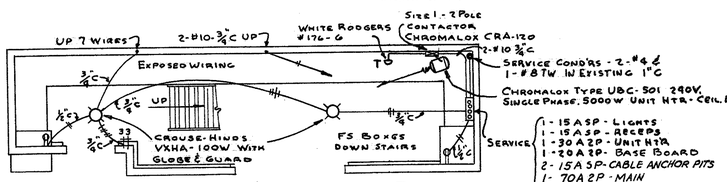
1. Exterior Plywood - Marine Grade B-C
2. Interior Plywood - Marine Grade - A-B
3. Protected Metal Siding & Roofing Shall Be Color Galbestos Manufactured By H. L. Robertson Co., Or An Approved Equal
   - A- High Roof - Corrugated
   - B- Siding - Mansard
4. Aluminum Windows & Screens Manufactured By The Wm. Bayley Co., Or An Approved Equal
5. Glass For Windows - L-O-F ¼" Thermopane
   - A. Exterior Panes - ⅛" Aklo (Polished)
   - B- Interior Panes - ⅛" Pol. Pl.
6. Hardware - Manufactured By Russwin, Or An Approved Equal
   - A - Single Door
     - a. - Lock Set - Mortise Lock Set No. H-1959 & Push Pl #616 US10
     - b. - 1½ Pr Butts - 4½x4½ BB89 US10
     - c. - Stop 153½ US10
   - B- Double Doors
     - a. Lock Set - Mortise Lock Set No. H-1959 & Push Pl #616 US10
     - b. Top & Bottom Bolts, 1 - 9x12" (Inactive Door)
     - c. 3 Pr Butts 4½x4½ BB89 US10
     - d. 2 - Hold Open Arms 520B US10
7. Painting
   - A. Interior Plywood Walls & Ceilings - 2 Coats Pratt & Lambert Lyt-All Double Duty Primer - 1 Coat P&L Vitralite Enamel, Eggshell
   - B- Interior Sheet Metal - Wash With Galvaprep - 1 Coat P&L. Enamel Undercoat - 2 Coats P&L Vitralite Enamel, Eggshell.
   - C- Steel Stairs, Railing, Hatch, Kalamein Door & Frames, Etc. - 1 Coat P&L Enamel Under Coating, 2 Coats P&L Vitralite Enamel, Eggshell

Section A-A

Scale: ½" = 1'-0"

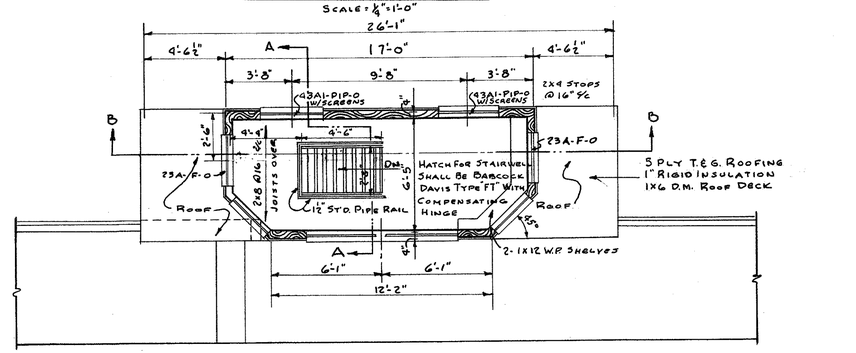


Electrical Plan - Upper Floor



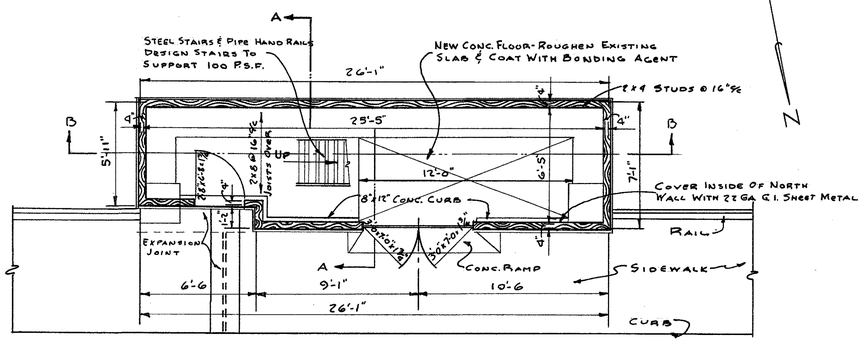
Electrical Plan - Lower Floor

Electric Items Shall Be As Specified, Or An Approved Equal



Upper Floor Plan

Scale: ¼" = 1'-0"



Lower Floor Plan

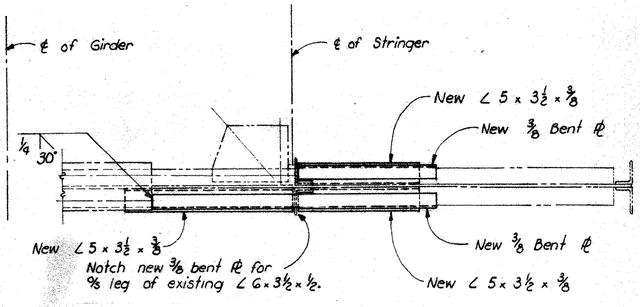
Scale: ¼" = 1'-0"

Issue	Date	Noted
As Built	10-31-62	
Bidders	3-19-60	F.C.M.
Preliminary Review	3-12-60	FCM

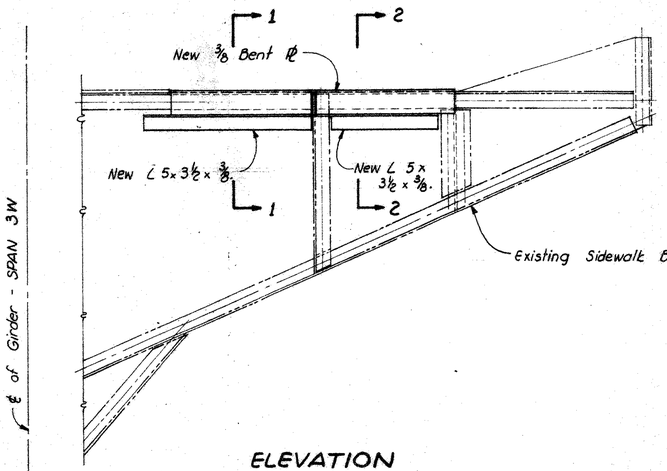
Sanzenbacher Miller & Brigham
Consulting Engineers
Toledo Ohio

Anthony Wayne Bridge Repairs & Improvements
Bridge Tenders' Building

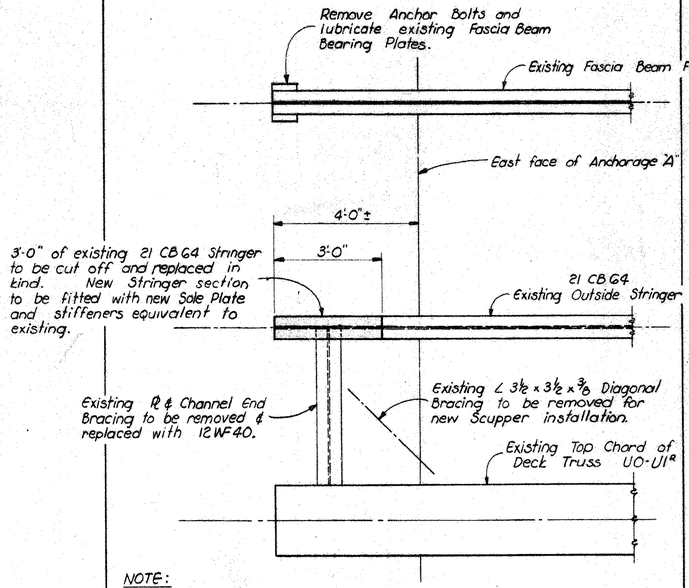
Designed	Drawn	Traced	Checked	Reviewed
CDS ERB	CDS		C.E.S.	



PLAN



ELEVATION
Looking West



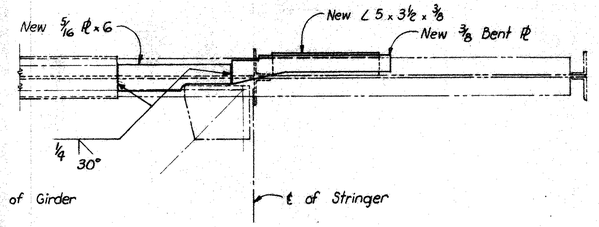
NOTE:
Welded connections may be used throughout.
New anchor bolt extensions required after burning off existing anchor bolts.

PLAN

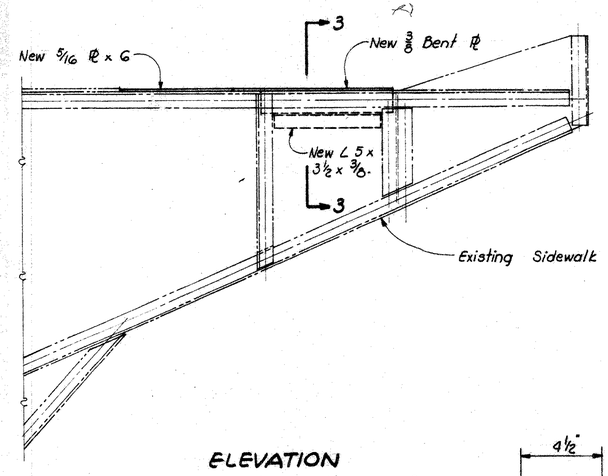
DETAIL OF STRUCTURAL REPAIRS AT NORTH SIDE OF ANCHORAGE "A"

DETAIL OF STRUCTURAL REPAIRS AT NORTH SIDE OF ANCHORAGE F (OPPOSITE HAND TO ANCHORAGE A)

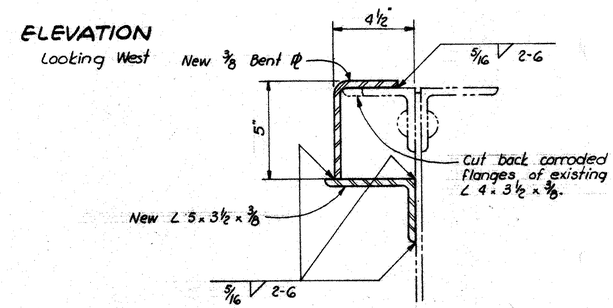
DETAIL OF STRUCTURAL REPAIRS AT SOUTH SIDE OF ANCHORAGE A (OPPOSITE HAND TO NORTH SIDE OF ANCHORAGE A)



PLAN

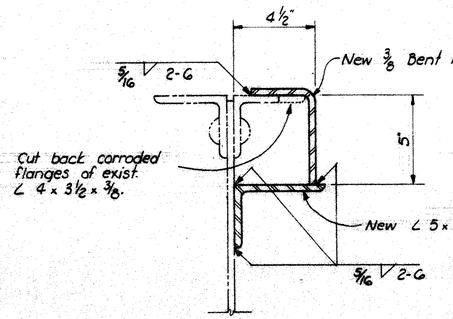


ELEVATION
Looking West

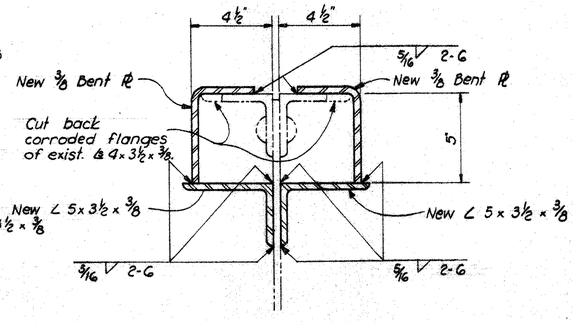


SECTION 3-3

DETAIL OF EAST SIDEWALK BRACKET STRUCT. REPAIRS AT NORTH SIDE OF PIER 2W



SECTION 1-1



SECTION 2-2

DETAIL OF WEST SIDEWALK BRACKET STRUCT. REPAIRS AT NORTH SIDE OF PIER 2W

NOTE:
Fabricator to make or check all field dimensions and shall fabricate only after having received approval of shop drawings.
All exposed welded joints to be given seal weld between structural welds indicated.

	ISSUE	DATE	NOTED
D	AS BUILT CHANGE 1-EX TO SHT. No. 33	10-31-62	
C	ADDED DETAIL FOR ANCHORAGE A NORTH	7-28-61	FCM
B	ADDED DETAIL "F" FOR ANCHORAGE "F"	7-20-60	FCM
A	TO CITY & CONTRACTOR	6-28-60	FCM

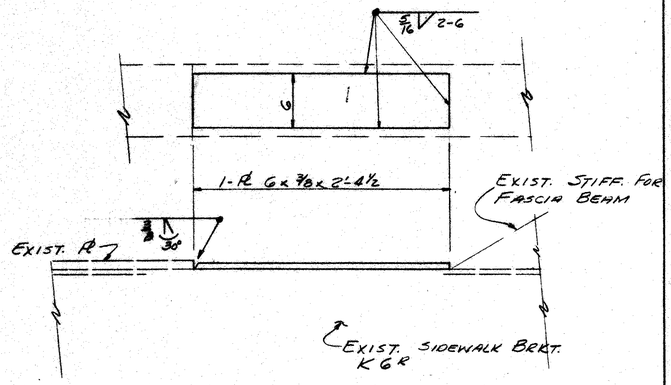
SANZENBACHER MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS

STRUCTURAL REPAIRS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
FCM	CES			

NOTE: PLACE SEAL WELD BETWEEN INDICATED STRUCTURAL WELDS

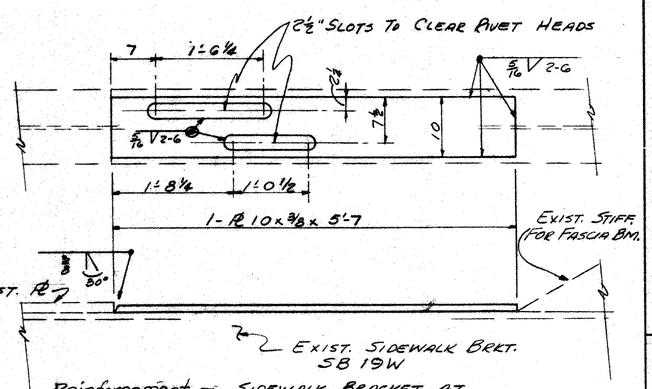


Reinforcement ~ 3d SIDEWALK BRACKET EAST OF ANCHORAGE A - NORTH SIDE
ONE REQ'D

DETAIL 101

7/11/60

NOTE: PLACE SEAL WELD BETWEEN INDICATED STRUCTURAL WELDS

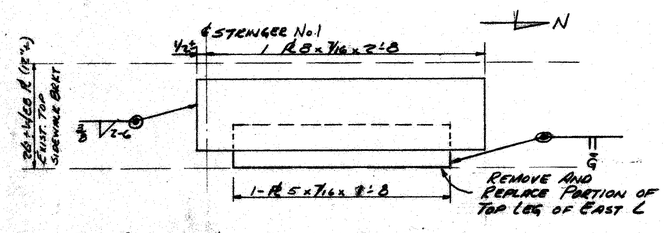


Reinforcement ~ SIDEWALK BRACKET AT PIER 7W - NORTH SIDE
ONE REQ'D

DETAIL 102

7/11/60

NOTE: PLACE SEAL WELDS BETWEEN INDICATED STRUCTURAL WELDS

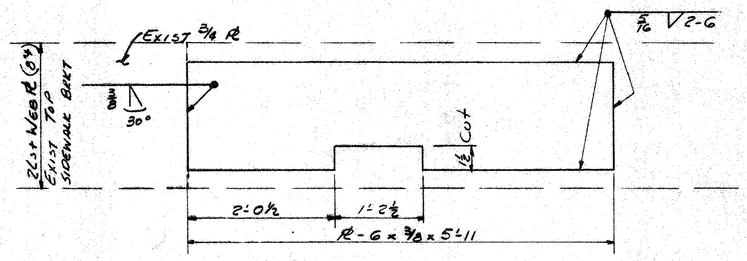


Reinforcement ~ SIDEWALK BRACKET AT PIER 7E ~ NORTH SIDE
ONE EACH REQ'D ~ PLATES AS SHOWN

DETAIL 103

7/13/60

NOTE: PLACE SEAL WELD BETWEEN INDICATED STRUCTURAL WELD

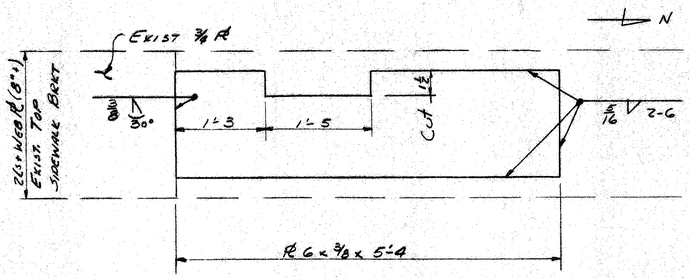


Reinforcement ~ SIDEWALK BRACKETS ~ NORTH SIDE AT
EAST BRKT ~ PIER 3E ONE REQ'D
WEST & EAST BRKTS ~ PIER 4E TWO REQ'D
WEST & EAST BRKTS ~ PIER 5E TWO REQ'D

DETAIL 104

7/13/60

NOTE: PLACE SEAL WELD BETWEEN INDICATED STRUCTURAL WELD

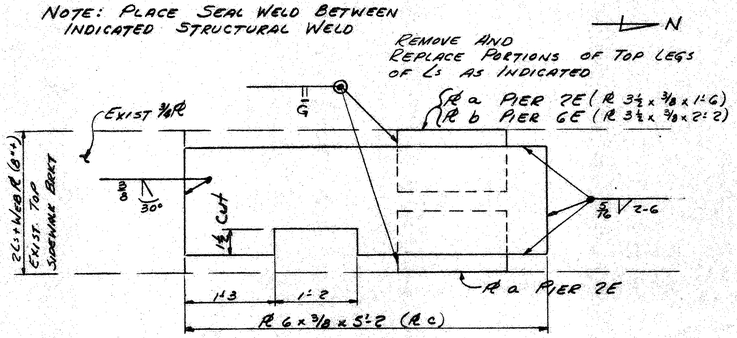


Reinforcement ~ WEST SIDEWALK BRACKETS ~ NORTH SIDE
AT ~ PIER 2E ONE REQ'D
PIER 6E ONE REQ'D

DETAIL 105

7/13/60

NOTE: PLACE SEAL WELD BETWEEN INDICATED STRUCTURAL WELD



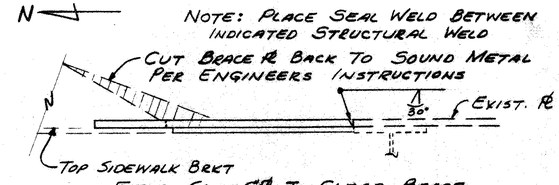
Reinforcement ~ EAST SIDEWALK BRACKETS ~ NORTH SIDE
AT ~ PIER 2E ~ R c ONE REQ'D
R a TWO REQ'D
PIER 6E ~ R a & R b ONE EACH REQ'D

DETAIL 106

7/18/60

N

NOTE: PLACE SEAL WELD BETWEEN INDICATED STRUCTURAL WELD



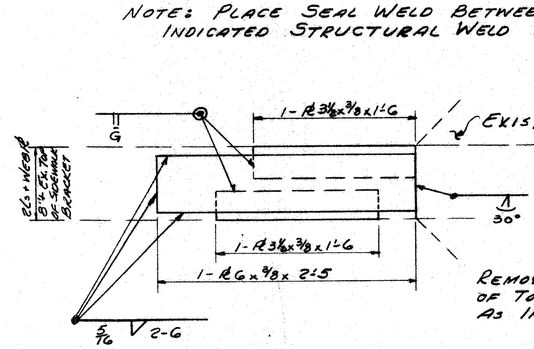
REMOVE & REPLACE PORTIONS OF TOP LEGS OF Cs AS INDICATED

Reinforcement ~ SIDEWALK BRACKET, NORTH SIDE AT FB4 - 4th FLOOR BEAM EAST OF PIER E ONE REQ'D

DETAIL 107

7/21/60

NOTE: PLACE SEAL WELD BETWEEN INDICATED STRUCTURAL WELD



REMOVE & REPLACE PORTIONS OF TOP LEGS OF Cs AS INDICATED

Reinforcement ~ SIDEWALK BRACKET, NORTH SIDE AT FB4 - 4th FLOOR BEAM WEST OF ANCHORAGE F ~ ONE REQ'D

DETAIL 108

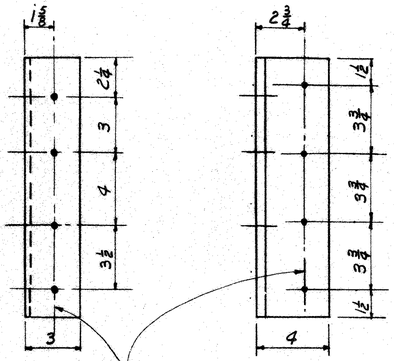
7/21/60

	ISSUE	DATE	NOTED
D	As Built Change 2-EX TO 3HT. No. 3H	10-31-62	
C	ADDED DETAILS 107 & 108	7-21-60	FCM
B	ADDED DETAILS 103-106 INCL.	7-13-60	FCM
A	TO CITY & CONTRACTOR	7-11-60	FCM

SANZENBACHER, MILLER & BRIGHAM CONSULTING ENGINEERS TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
STRUCTURAL REPAIRS

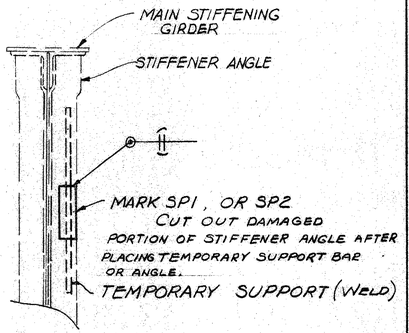
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
RCG	AJB			



2 REQ'D. - L 4×3×⅝ × 1'-2¼ MARK D1R (SHOWN)
2 REQ'D. - D1L OPPOSITE HAND
BOLT LIST – 12 - ⅞ϕ H.S. BOLTS, 1¾ GRIP, W/NUT & WASHER
12 - ⅞ϕ H.S. BOLTS, 1½ GRIP, W/NUT & WASHER

REPLACEMENT L'S MAIN SUSPENDED SPAN STRINGERS AT MAIN TOWERS
DETAIL 109

7-26-60

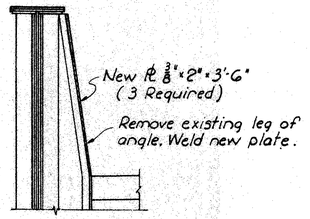


ONE REQ'D, MARK SP1 - 1 BAR 4×⅜×1'-3
FIVE REQ'D, MARK SP2 - 1 BAR 4×⅜×1'-0
ONE REQ'D, 1 BAR 5×⅜×0'-8
FIVE REQ'D, 1 BAR 5×⅜×0'-10
11-8-61

MAIN SPAN GIRDER STIFFENER REPAIR
(AT LOCATIONS AS DIRECTED BY ENGINEER)

DETAIL 111

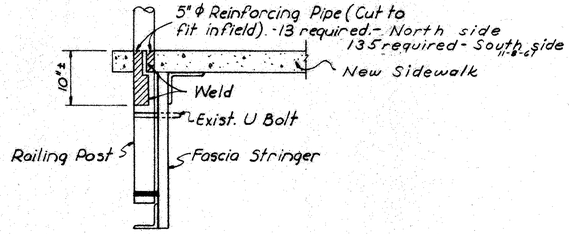
7-26-60



REPAIR MAIN SUSPENSION SPAN FLOOR BEAM HANGERS

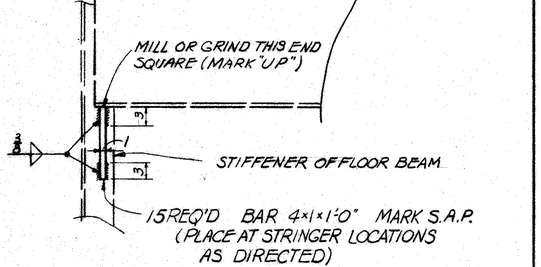
Located at 18th, 20th & 21st Floor Beams East from TOWER C, North side.

DETAIL 113



RAILING POST REPAIR

DETAIL 115

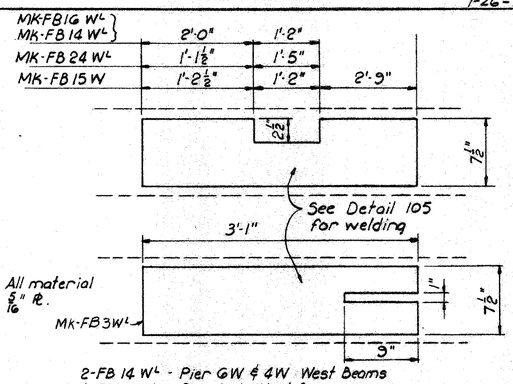


15 REQ'D BAR 4×1×1'-0" MARK S.A.P.
(PLACE AT STRINGER LOCATIONS AS DIRECTED)

SEAT BEARING BARS-MAIN SUSPENSION SPAN STRINGERS-TOWER ENDS

DETAIL 110

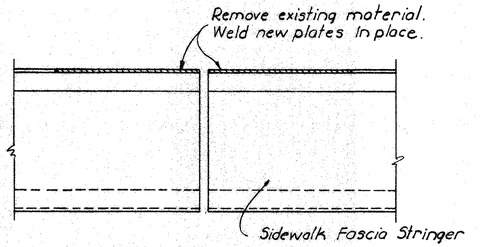
7-26-60



2-FB 14 W L - Pier 6W & 4W West Beams
1-FB 16 W L - Pier 3W West Beam
1-FB 24 W - Pier 5W West Beam
1-FB 15 W - Pier 5W East Beam
1-FB 3 W L - 2nd. Beam West of Pier 2W

SIDEWALK BRACKET REINFORCEMENT NORTH SIDE

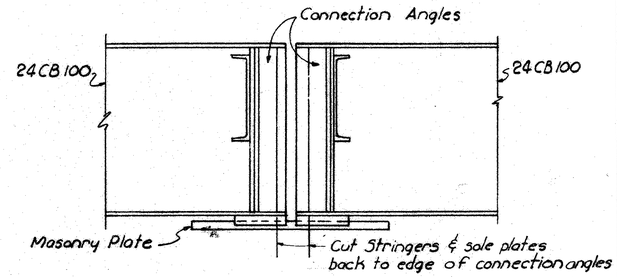
DETAIL 112



2 Bars req'd. - 3×⅜×2'-6" at 20' West of Anchorage Pier F
2 Bars req'd. - 3×⅜×2'-0" at 130' West of Anchorage Pier F
3×⅜×84'-1 - Total Bar Stock req'd for South Fascia

REPAIR OF NORTH FASCIA STRINGER

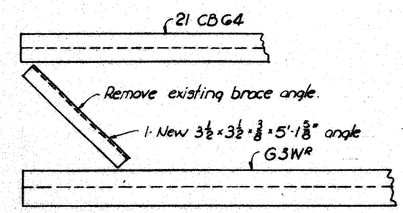
DETAIL 114



Stringers must be jacked so that the sole plates can be burned off without fusing sole plates & masonry plates together.

MODIFICATION TO STRINGERS AT PIER 13E TO PROVIDE ADDITIONAL EXPANSION.

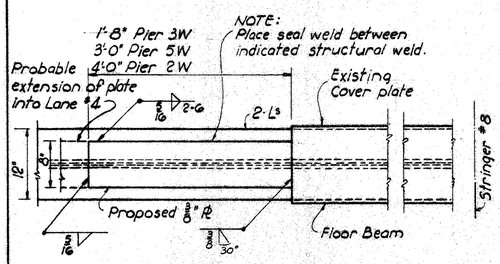
DETAIL 116



REMOVE & REPLACE ANGLE

Location: First Diagonal Brace East of the 1st. F.B. East of Pier 5W. (North Side.)

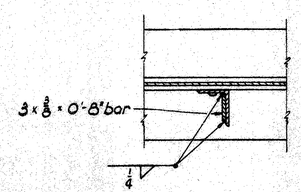
DETAIL 117



1-PL req'd. 8 × ⅜ × 3'-0" at FB 24 W - Pier 5W West Beam
1-PL req'd. 8 × ⅜ × 3'-0" at FB 15 W - Pier 5W East Beam
1-PL req'd 8 × ⅜ × 4'-0" at FB 18 W - Pier 2W West Beam
1-PL req'd 8 × ⅜ × 1'-8" at FB 16 W L - Pier 3W West Beam

FLOOR BEAM REINFORCEMENT

DETAIL 118



4 Bars req'd. - 3 × ⅜ × 0'-8" at Pier 8
1 Bar req'd. - 3 × ⅜ × 0'-8" at Pier 2W
3 Bar req'd - 3 × ⅜ × 0'-8" at Pier 5W

FLOOR BEAM STIFFENER REINFORCEMENT

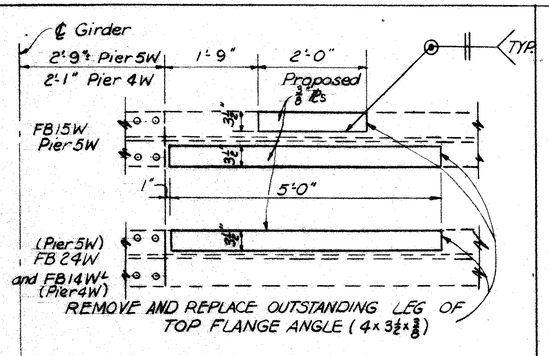
DETAIL 119

ISSUE	DATE	NOTED
As Built Change 3-EX to Sht No 35	10-31-62	
(E) Revised Quantities For Details 111, 114 & 115	11-8-61	F.C.M.
(D) Revised Detail 118 Added Detail 119	5-23-61	F.C.M.
(C) Added Detail 118	4-28-61	F.C.M.
(B) Added Details 112-117	10-5-60	F.C.M.
(A) To City's Comments	7-27-60	F.C.M.

SANZENBACHER, MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
STRUCTURAL REPAIRS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
RCG FCM	BJH TWD			

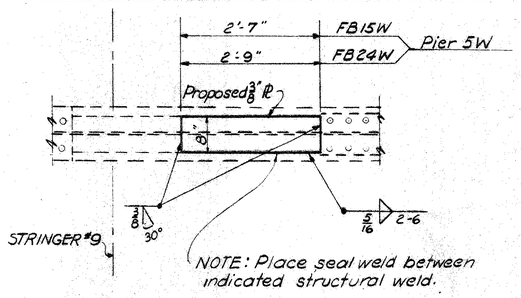


1 Pl req'd 3½" x ⅜" x 5'-0" @ FB 14W4 - Pier 4W West ℄ Beam
1 Pl req'd 3½" x ⅜" x 2'-0" @ FB15W - PIER 5W East ℄ Beam
2 Pls req'd 3½" x ⅜" x 5'-0" @ FB15W, FB 24W. - PIER 5W West and East ℄ Beams

SIDEWALK BRACKET REPAIR

PIER 4W ℄ 5W SOUTH SIDE

DETAIL 120

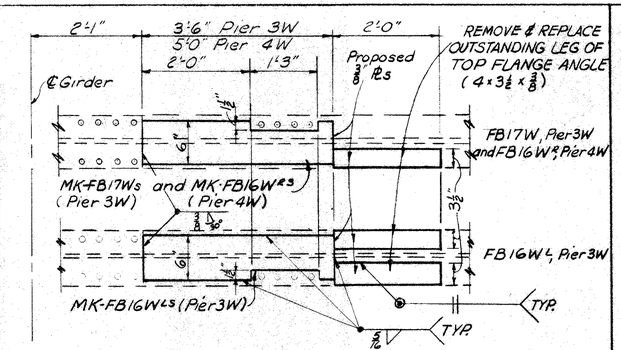


1 Pl req'd 8" x ⅜" x 2'-7" @ FB15W - Pier 5W East ℄ Beam
1 Pl req'd 8" x ⅜" x 2'-9" @ FB 24W - Pier 5W West ℄ Beam

FLOOR BEAM REINFORCEMENT

PIER 5W, LANE 4

DETAIL 121

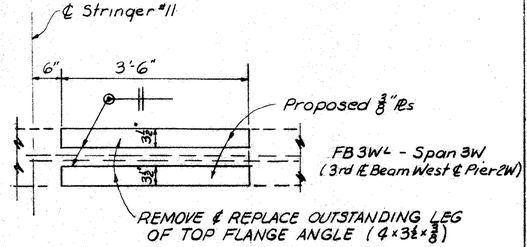


1 req'd MK-FB17Ws - Pier 3W East ℄ Beam
1 req'd - MK-FB16W2S - Pier 4W East ℄ Beam
1 req'd - MK-FB16W4S - Pier 3W West ℄ Beam
3 Pl req'd 3½" x ⅜" x 2'-0" @ FB17W & FB16W4, East & West ℄ Beam, Pier 3W

SIDEWALK BRACKET REINFORCEMENT AND REPAIR

PIER 3W ℄ 4W SOUTH SIDE

DETAIL 122

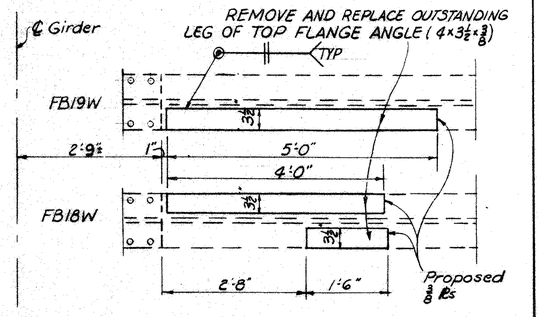


2 Pls req'd 3½" x ⅜" x 3'-6" @ FB 3W4 - Span 3W

SIDEWALK BRACKET REPAIR

SOUTH SIDE

DETAIL 123

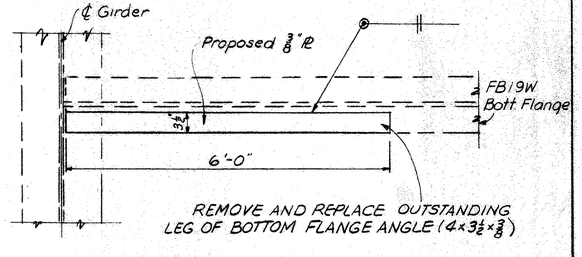


1 Pl req'd 3½" x ⅜" x 5'-0" @ FB19W - Pier 2W East ℄ Beam
1 Pl req'd 3½" x ⅜" x 4'-0" @ FB18W - Pier 2W West ℄ Beam
1 Pl req'd 3½" x ⅜" x 1'-6" @ FB18W - Pier 2W West ℄ Beam

SIDEWALK BRACKET REPAIR

PIER 2W SOUTH SIDE

DETAIL 124

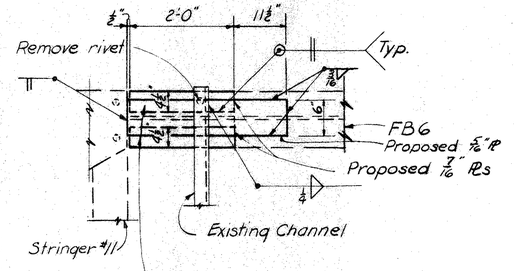


1 Pl req'd 3½" x ⅜" x 6'-0" @ FB19W - Pier 2W East ℄ Beam

SIDEWALK BRACKET REPAIR

PIER 2W SOUTH SIDE

DETAIL 125



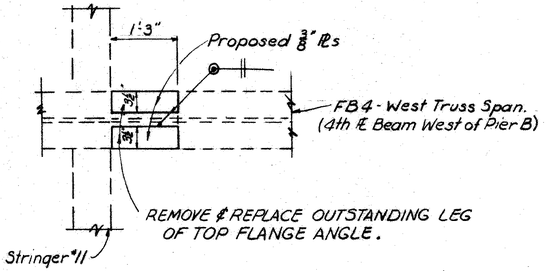
REMOVE ℄ REPLACE OUTSTANDING LEG OF TOP FLANGE ANGLE.

2 Pls req'd 4½" x 7/16" x 2'-0" @ FB6 - Pier B
1 Pl req'd 6" x ½" x 3'-0" @ FB6 - Pier B

SIDEWALK BRACKET REPAIR

PIER B SOUTH SIDE

DETAIL 126

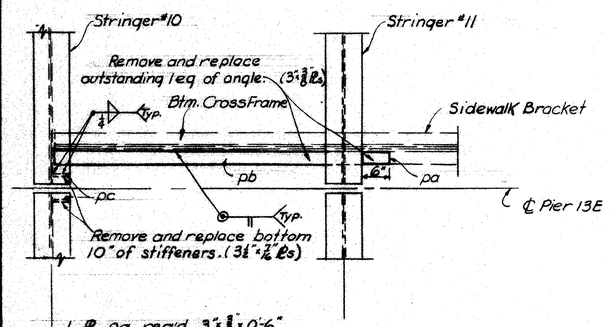


2 Pls req'd. 3½" x ⅜" x 1'-3" @ FB 4 - West Truss Span

SIDEWALK BRACKET REPAIR

SOUTH SIDE

DETAIL 127



1 Pl pa req'd. 3" x ⅜" x 0'-6"
1 Pl pb req'd. 3" x ⅜" x 4'-10"
2 Pl pc req'd. 3½" x 7/16" x 0'-10"

STIFFENER, CROSS FRAME ℄ SIDEWALK BRACKET REPAIR

PIER 13E SOUTH SIDE

DETAIL 128

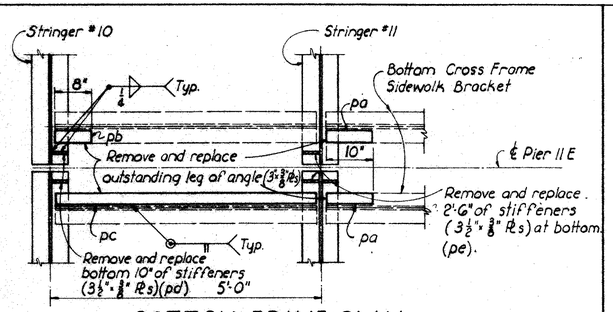
NOTE:
Procedure for removing and replacing outstanding leg of sidewalk bracket flange angles.
1. Place temporary 1" x 1" stress bar across (lengthwise) portion of angle to be removed. Weld bar at both ends with 8 inches of ¼" fillet weld.
2. Remove portion of angle to be replaced.
3. Weld new ⅜" Pl in place.
4. Remove temporary 1" x 1" stress bar.
Where both flange angles of a member are be repaired, work shall be done one angle at a time.

ISSUE	DATE	NOTED
As Built Change 4EX to SHT No. 36	10-31-62	
Add Detail 128	8-18-64	FCM
Add Details 126 & 127	7-28-64	FCM
To City & Contractor	7-13-64	FCM

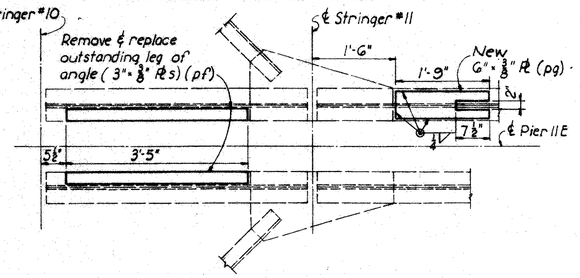
SANZENBACHER, MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS ℄ IMPROVEMENTS
STRUCTURAL REPAIRS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
BJH	BJH			



BOTTOM FRAME PLAN



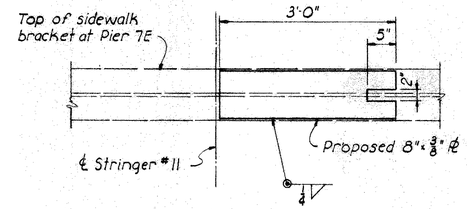
TOP FRAME PLAN

2 ℞ pa req'd. 3"x⅜"x 0'-10".
1 ℞ pb req'd. 3"x⅜"x 0'-8".
1 ℞ pc req'd. 3"x⅜"x 4'-10"
2 ℞ pd req'd. 3½"x⅜"x 0'-10".
3 ℞ pe req'd. 3½"x⅜"x 2'-6".
2 ℞ pf req'd 3"x⅜"x 3'-5".
1 ℞ pg req'd. 6"x⅜"x 1'-9"

STIFFENER, CROSSFRAME AND SIDEWALK BRACKET REPAIR

PIER 11E SOUTH SIDE

DETAIL 129

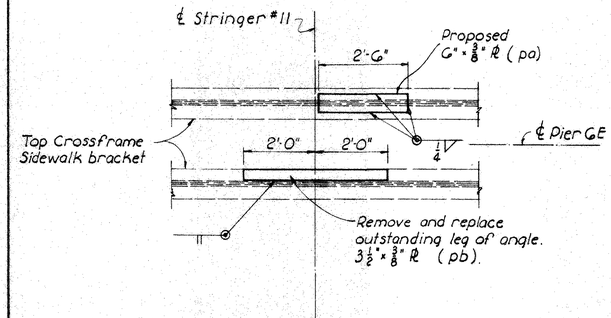


1 ℞ req'd. 8"x⅜"x 3'-0"

SIDEWALK BRACKET REPAIR

PIER 7E SOUTH SIDE

DETAIL 130

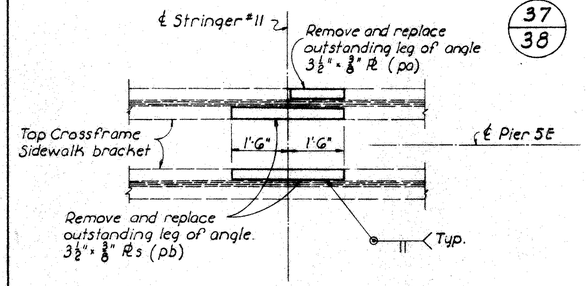


1 ℞ pa reqd. G"x⅜"x 2'-6"
1 ℞ pb reqd. 3½"x⅜"x 4'-0"

SIDEWALK BRACKET REPAIR

PIER 6E SOUTH SIDE

DETAIL 131

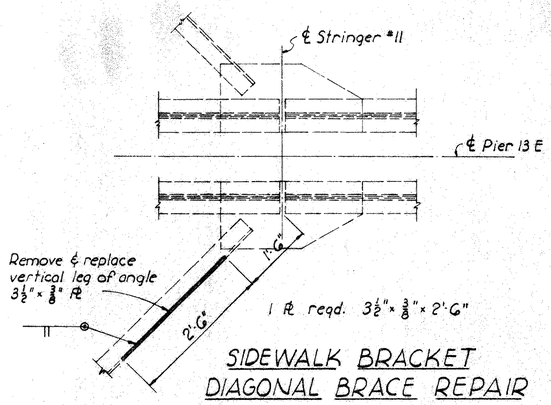


1 ℞ pa req'd. 3½"x⅜"x 1'-6"
2 ℞ pb reqd 3½"x⅜"x 3'-0"

SIDEWALK BRACKET REPAIR

PIER 5E SOUTH SIDE

DETAIL 132

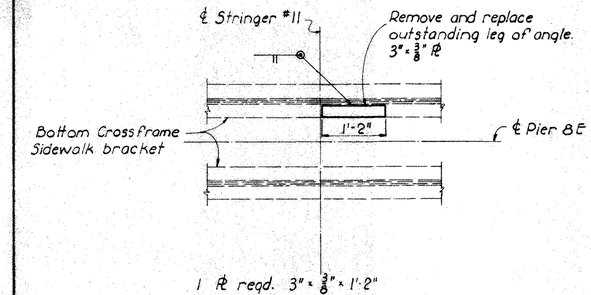


1 ℞ reqd. 3½"x⅜"x 2'-6"

SIDEWALK BRACKET DIAGONAL BRACE REPAIR

PIER 13E SOUTH SIDE

DETAIL 133

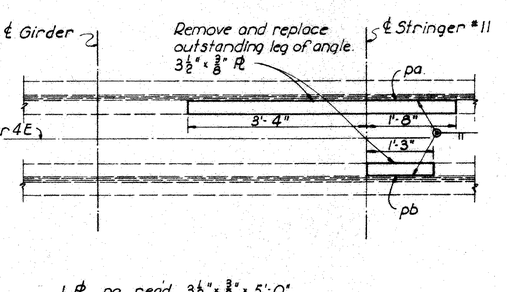


1 ℞ reqd. 3"x⅜"x 1'-2"

SIDEWALK BRACKET REPAIR

PIER 8E SOUTH SIDE

DETAIL 134

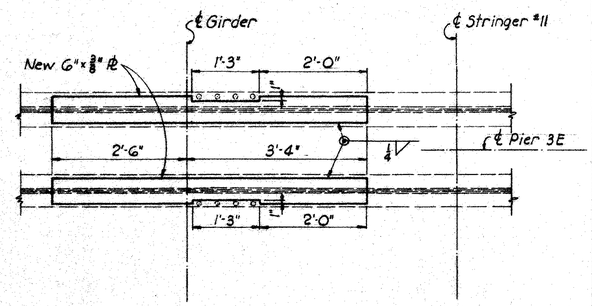


1 ℞ pa reqd. 3½"x⅜"x 5'-0"
1 ℞ pb reqd 3½"x⅜"x 1'-3"

SIDEWALK BRACKET REPAIR

PIER 4E SOUTH SIDE

DETAIL 135

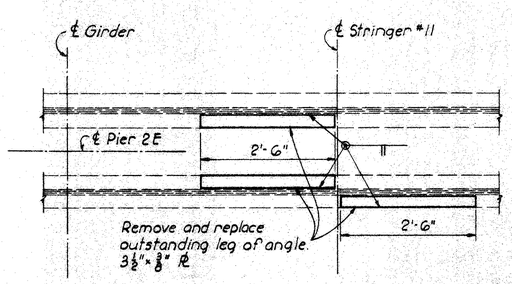


2 ℞ reqd. G"x⅜"x 5'-10"

SIDEWALK BRACKET REPAIR

PIER 3E SOUTH SIDE

DETAIL 136

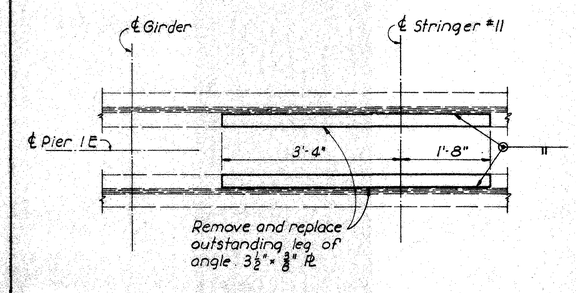


3 ℞ reqd. 3½"x⅜"x 2'-6"

SIDEWALK BRACKET REPAIR

PIER 2E SOUTH SIDE

DETAIL 137



2 ℞ reqd. 3½"x⅜"x 5'-0"

SIDEWALK BRACKET REPAIR

PIER 1E SOUTH SIDE

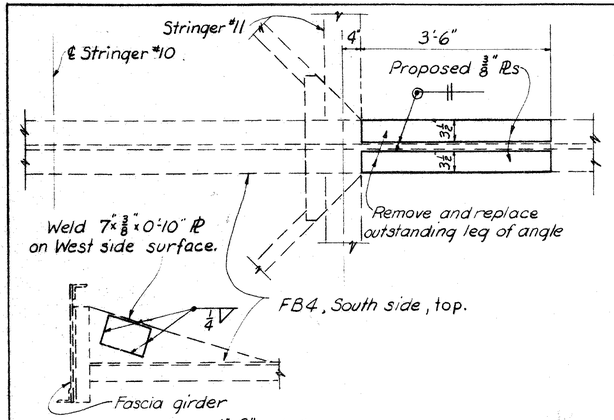
DETAIL 138

ISSUE	DATE	NOTED
AS BUILT	10-31-62	
CHANGE 5-EX TO SHT No 37		
Add Details 135 thru 138	8-31-61	JMM
To City & CONTRACTOR	8-18-61	JMM

SANZENBACHER MILLER & BRIGHAM CONSULTING ENGINEERS TOLEDO OHIO

ANTHONY WAYNE BRIDGE REPAIRS & IMPROVEMENTS STRUCTURAL REPAIRS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
RWR	TND			

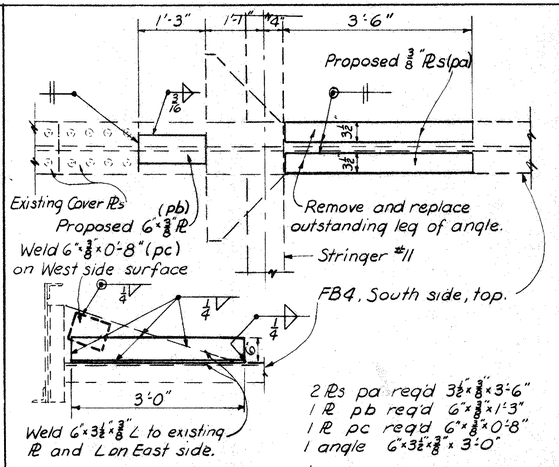


2 ℔s req'd. 3½"x⅜"x 3'-6"
1 ℔ req'd. 7"x⅜"x 0'-10"

SIDEWALK BRACKET REPAIR

FB4. SOUTH SIDE, 60'± WEST ANCHORAGE "F"

DETAIL 139

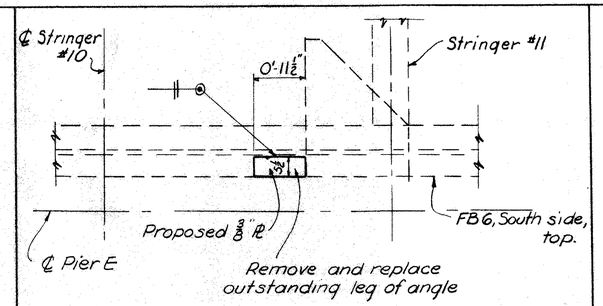


2 ℔s pa req'd 3½"x⅜"x3'-6"
1 ℔ pb req'd 6"x⅜"x1'-3"
1 ℔ pc req'd 6"x⅜"x0'-8"
1 angle 6"x3½"x⅜" x 3'-0"

FLOOR BEAM REINFORCEMENT & SIDEWALK BRACKET REPAIR

FB4, SOUTH SIDE, 60'± EAST OF PIER "E"

DETAIL 140



1 ℔ req'd 5½"x⅜"x 0'-11½"

FLOOR BEAM REPAIR

FB6, SOUTH SIDE, AT PIER E

DETAIL 141

ISSUE	DATE	NOTED
As Built Change G.E.N. to Sht No. 38	10-31-62	
To City & Contractor	9-14-61	F.C.M.

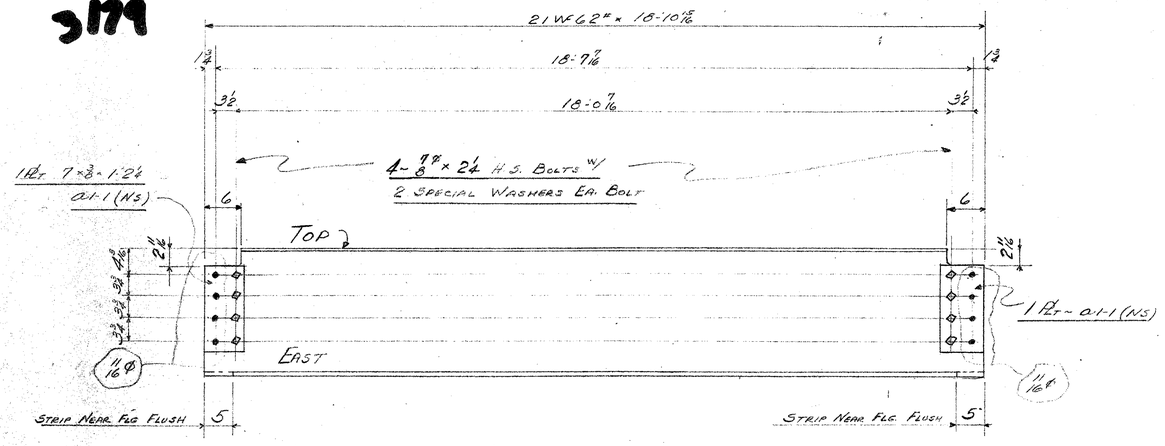
SANZENBACHER, MILLER & BRIGHAM
CONSULTING ENGINEERS
TOLEDO OHIO

ANTHONY WAYNE BRIDGE
REPAIRS & IMPROVEMENTS
STRUCTURAL REPAIRS

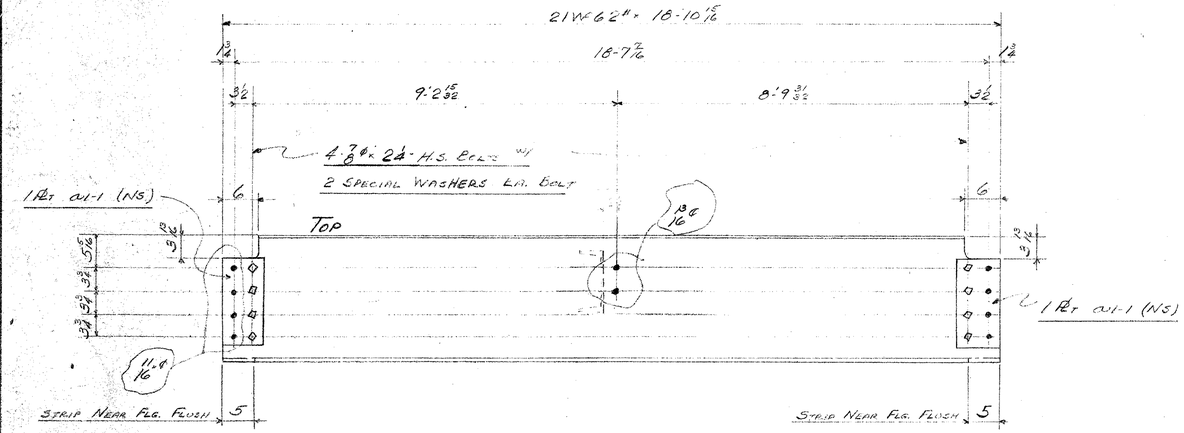
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	
RWR	BJH				

THE TOLEDO BLUE PRINT & PAPER CO. 3000 11-64

3179



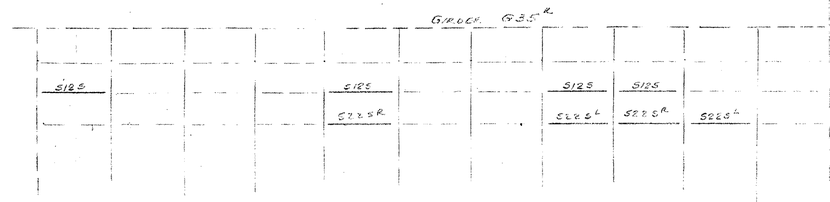
4 ~ BEAMS - "S12S"

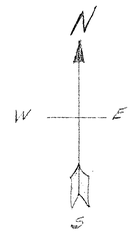


2 ~ BEAMS - "S22S^{R}" (SHOWN)

2 ~ DO ~ "S22S^{L}" (OPP. HAND)

#2 TOWER "C"





PLAN

ERECTOR NOTE:
END CONN. OF BEAMS HAVE BEEN PUNCHED 11/16 Ø ~ BEAM TO 15/8 Ø IN FIELD FOR 7/8" H.S. BOLTS

FIELD LIST

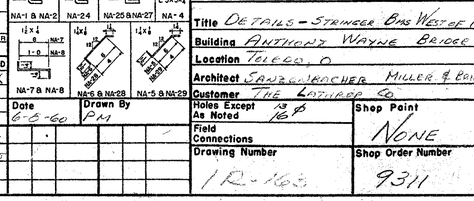
10 - 7/8" Ø H.S. BOLTS W/ 2 SPECIAL WASHERS EA. BOLT

10 - 7/8" Ø - 3 1/4 DO DO

C.S. REL 6-8-66

REVISIONS					
1	6/10/66				
2					
3					
4					
5					
SUB	PL	FL	PD	FD	
9311				X	
3	6/24	Shop			
2	6/13	Const			
5	6/24	Const			
4	6/29	Const			

STANDARD ANCHORS

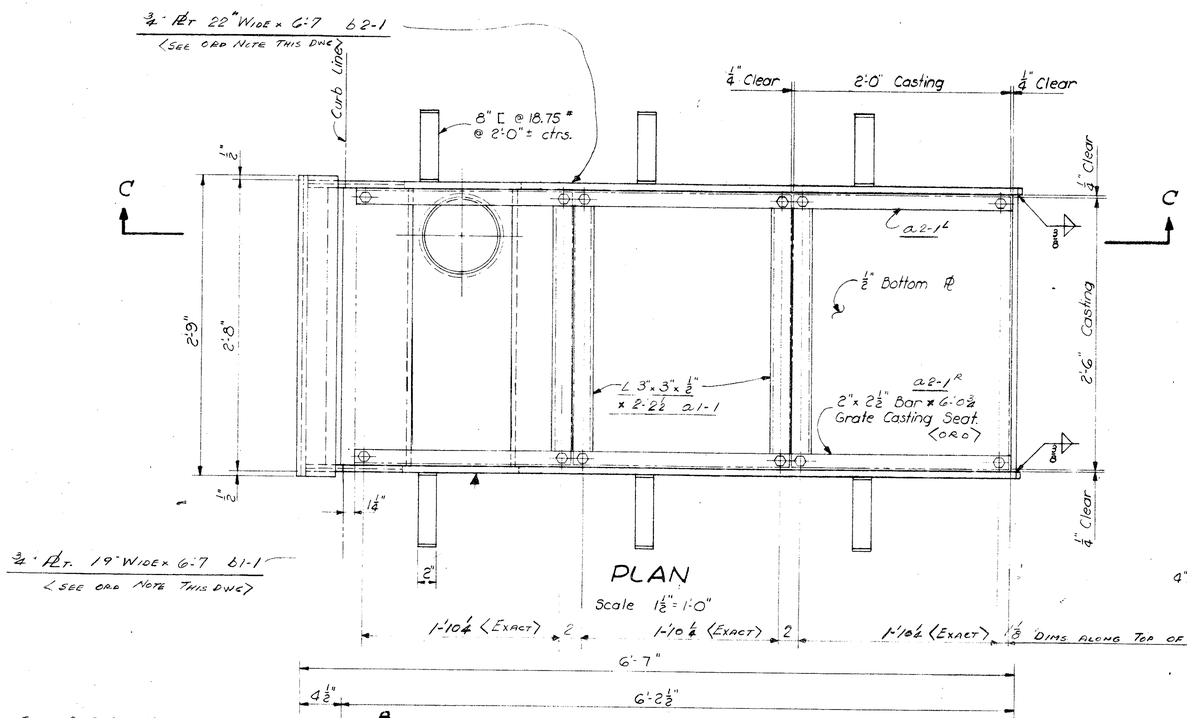


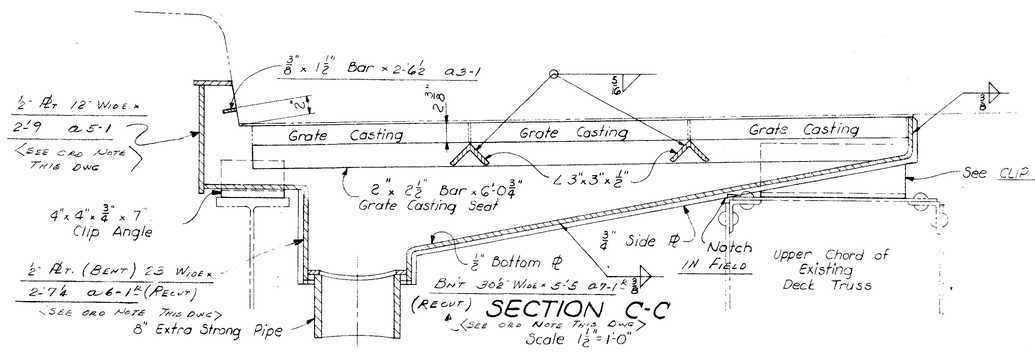
Date 6-8-66 Drawn By PM

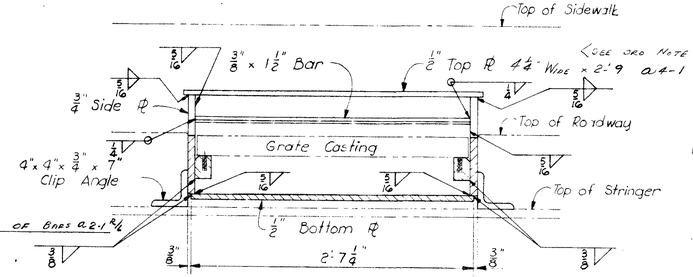
REF. DRAWINGS LAYOUT-DETAILS

ART IRON & WIRE WORKS, INC.
FABRICATED - STEEL - WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

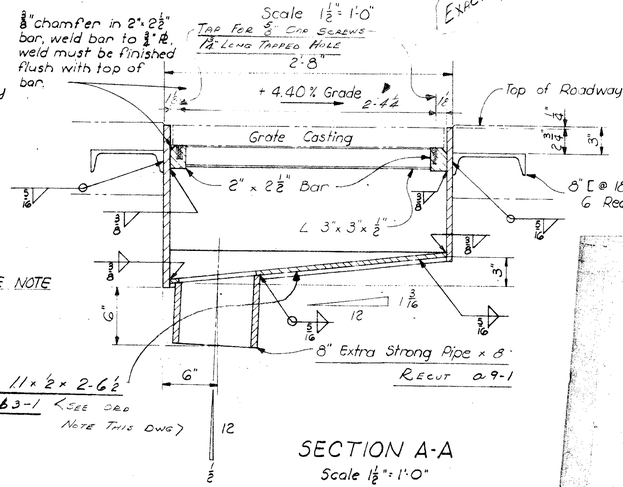
Title DETAILS - STRINGER BAS WEST OF TOWER "C"
Building ANTHONY WAYNE BRIDGE
Location TOLEDO, O.
Architect SANBORNACHER MILLER & BRANHAM
Customer THE LATHROP CO.
Holes Except As Noted 13/16 Ø
Shop Point NONE
Field Connections
Drawing Number 1R-165
Shop Order Number 9311







SECTION B-B
Scale 1½" = 1:0"



SECTION A-A
Scale 1½" = 1:0"

CLIP ANGLE NOTE (Plain Material)

Scuppers are to be attached to the existing structural members by the following clip angles:

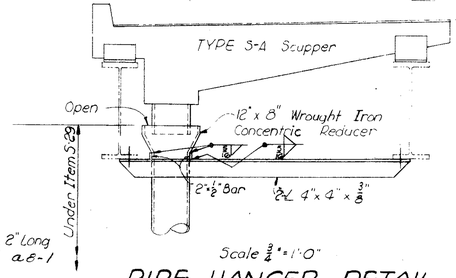
Rel DECK TRUSS - L 8"x6"x½"x 1'-4" 8 Reqd "S-D"
6-6-60 PLATE GIRDER - L 8"x6"x½"x 1'-0" 24 Reqd "S-D"
Rel (8) 5/31/60 → ROLLED CB STRINGER - L 6"x4"x¾"x 7" 28 Reqd "S-E"

Clip angles are to be welded to size ℄'s of (2) 6-6-60 scuppers after scuppers have been set in their proper position.

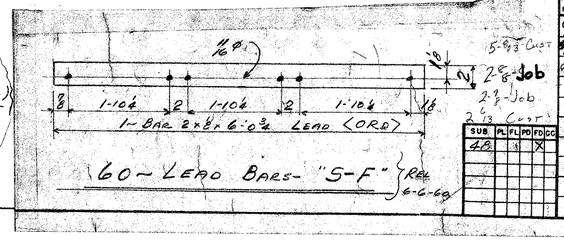
4 Rel 6-6-60 56 Rel 6-6-60 → Rolled CB Stringer - L 4x4x¾x 7' 6 Reqd "S-H"

Plain Material

Rel 6-6-60 12 Brs - 5" x ¾" x 7' "S-G" (See Dwg Existing for Erection)



TYPE S-A & S-B SCUPPERS



General Notes

1. All Welding To Be Class "A"
2. Thoroughly Clean Up Inside of Scuppers After All Welding Has Been Completed.
3. Steel To Be Copper Bearing Except "S-C", "S-D", "S-E", "S-G".

Shop Paint Note

Paint inside of Scuppers only.
One Coat Ohio State Specs. Sec. M 9.18 Asphalt Varnish

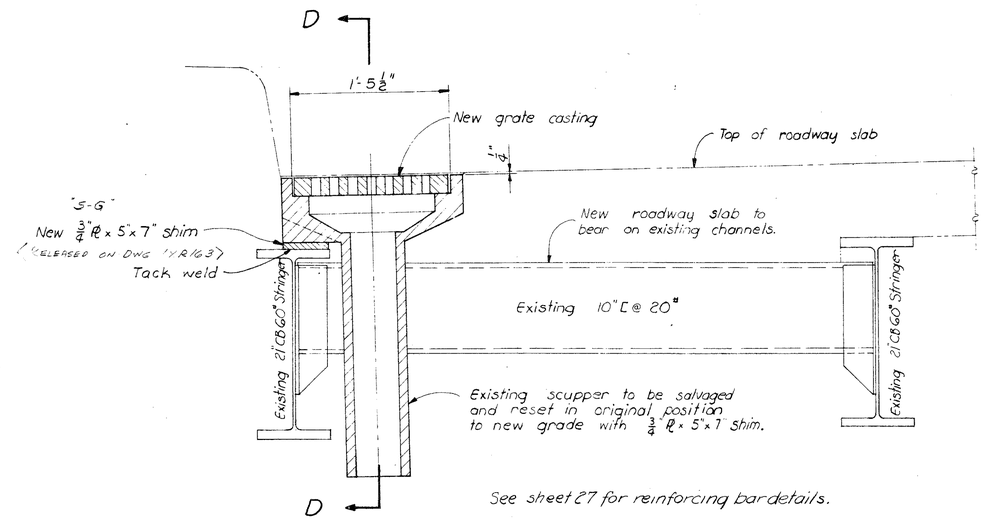
Dates Revised	
6/6	
6/9	
6/16	

ART IRON & WIRE WORKS, INC.
FABRICATED - STEEL - WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

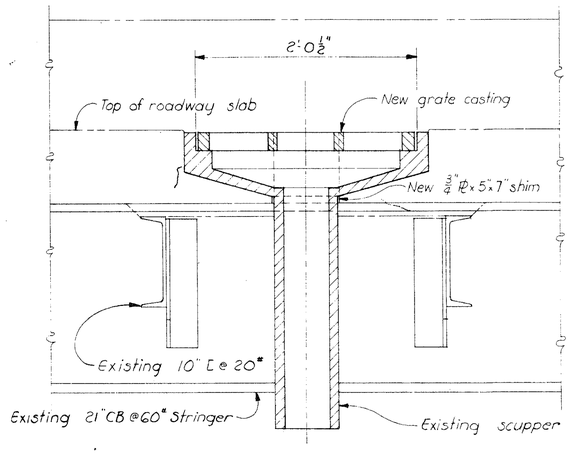
Holes [redacted] As Noted
Field Connections WELD
Shop Paint See Paint Note

Drawn By	Date	Drawing Number	Shop Order Number
	5-17-60	1XR163	16345

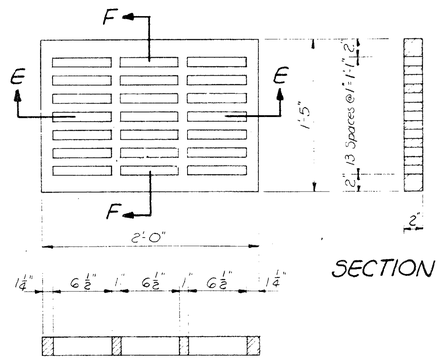
Title Detail (Scuppers)
Building Anthony Wayne Bridge
Location Toledo, O
Architect Sanzenbacher Miller & Brigham
Customer The Lathrop Co



TYPICAL SECTION THRU SALVAGED SCUPPER
MAIN SUSPENDED SPAN
(SEE FRAMING PLAN FOR LOCATION)
Scale : 1½"= 1'-0"



SECTION D-D
Scale 1½"= 1'-0"



SECTION F-F

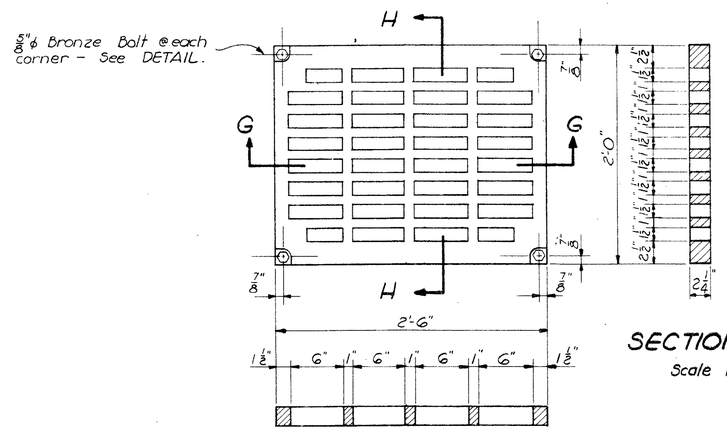
SECTION E-E

GRATE CASTING DETAILS
FOR SALVAGED SCUPPERS
MAIN SUSPENDED SPAN

12 Required

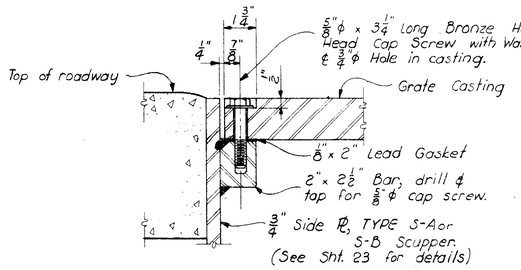
Scale 1½"= 1'-0"

Furnishing, installation and payment for these castings included in Item 5·7.
Resetting of scuppers and miscellaneous material included for payment in Item 5·1.



SECTION G-G
Scale 1½"=1'-0"

SECTION H-H
Scale 1½"=1'-0"



DETAIL
SHOWING METHOD OF SECURING GRATE CASTING TO TYPE S-A OR S-B SCUPPER
Scale 3"=1'-0"

GRATE CASTING DETAILS FOR TYPE S-A, OR S-B SCUPPERS
30 Required

GENERAL NOTES

LONG DIMENSION OF SLOTS IN GRATE TO BE PARALLEL TO LONGITUDINAL ℄ OF BRIDGE. (GRATINGS TO BE NEENAH FOUNDRY CO. TYPE R-4999 OR EQUAL)

Dates Revised	Fillet	Sq. Groove	Bevel Groove	Plug & Slot	Bead	Flush
4/6						

ART IRON & WIRE WORKS, INC.
FABRICATED – STEEL – WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WINDE

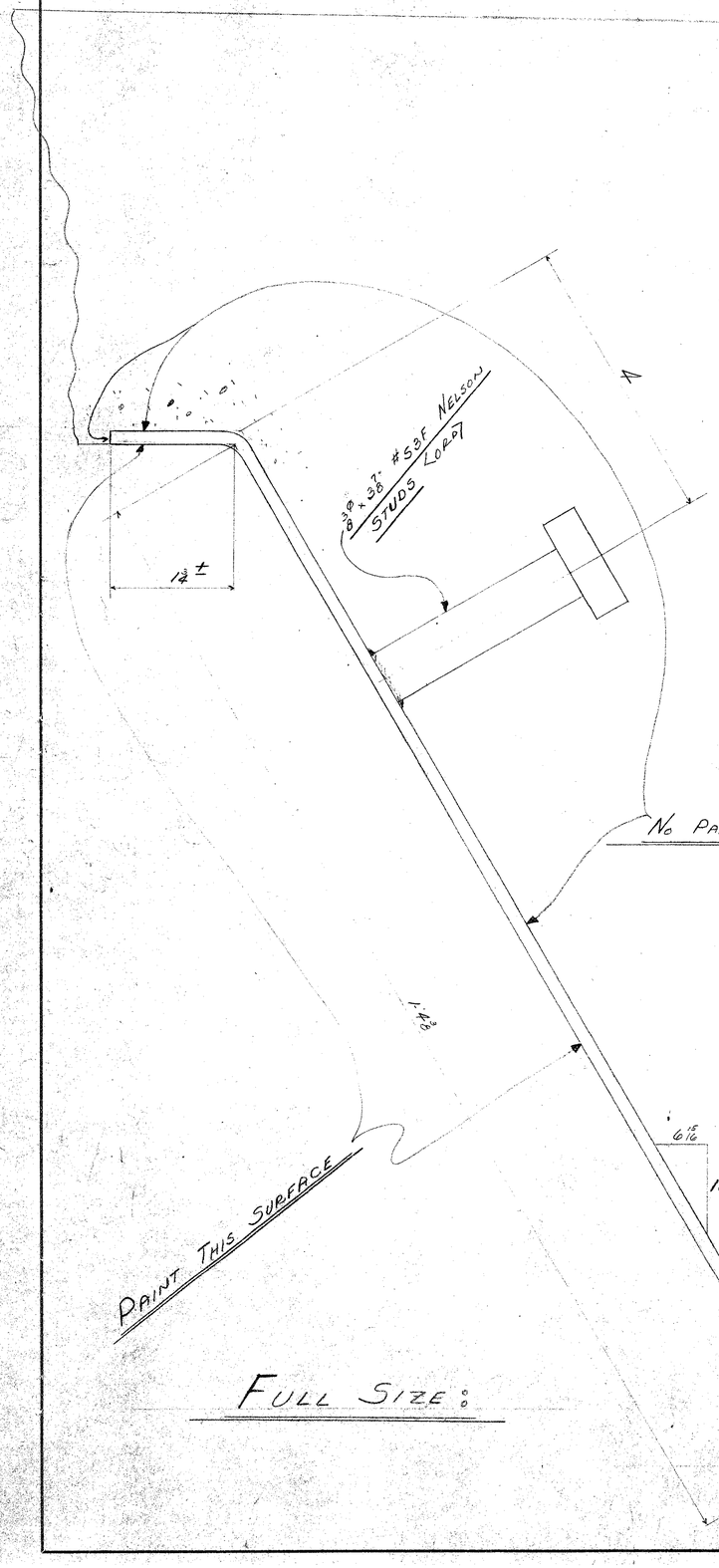
Holes Except As Noted
Field Connections BOLT
Shop Paint OHIO STATE SPECS SEC. M 9.18 ASPHALT VARNISH

Drawn By	Date	Drawing Number	Shop Order Number
	5-19-60	2 x R 163	16399

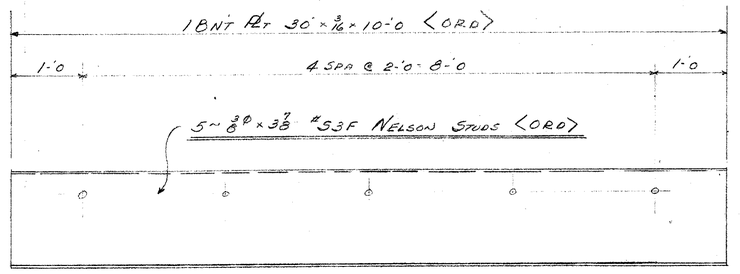
Title C.I. GRATINGS
Building ANTHONY WAYNE BRIDGE
Location TOLEDO, O.
Architect SANZENBACHER MILLER & BRIGHAM
Customer THE LATHROP CO.

a-1-2-3-4-5-6-7-8-9 b-1-2-3-4-5-6-7-8-9 c-1-2-3-4-5-6-7-8-9 d-1-2-3-4-5-6-7-8-9 e-1-2-3-4-5-6-7-8-9 g-1-2-3-4-5-6-7-8-9 h-1-2-3-4-5-6-7-8-9 k-1-2-3-4-5-6-7-8-9

THE TOLEDO BLUE PRINT & PAPER CO. 1000 11-59



FULL SIZE :



1ST SHIPMENT	126 ~ CURB PLATES - "CP1"	REL 26 - 5/1/60 REL 100 - 6/6/60
2ND SHIPMENT	125 ~ DO ~ "CP1"	REL 6-6-60

NOTE :

1ST SHIPMENT IS @ NORTH CURB

2ND SHIPMENT IS @ SOUTH CURB

GENERAL NOTE :

THE 251 CURB ℄'S, ON THIS DWG, ARE FOR THE SUSPENSION SPAN BTWN PIER "B" & PIER "E". BOTH NORTH & SOUTH CURBS. CUT ℄'S AS NECESSARY @ EXP. JOINTS IN FIELD BY OTHERS.

PAINT NOTE : (SHOP)

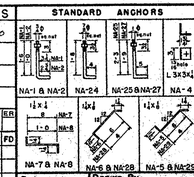
PAINT ONE COAT OF DIXON #201 CHROMATE GRAPHITE PRIMER ON SURFACES NOTED

REF. DRAWINGS LAYOUT DETAILS

REVISIONS	
1	6-6-60
2	
3	
4	
5	

SUB	PL	FL	PD	FD
30			X	

STANDARD ANCHORS



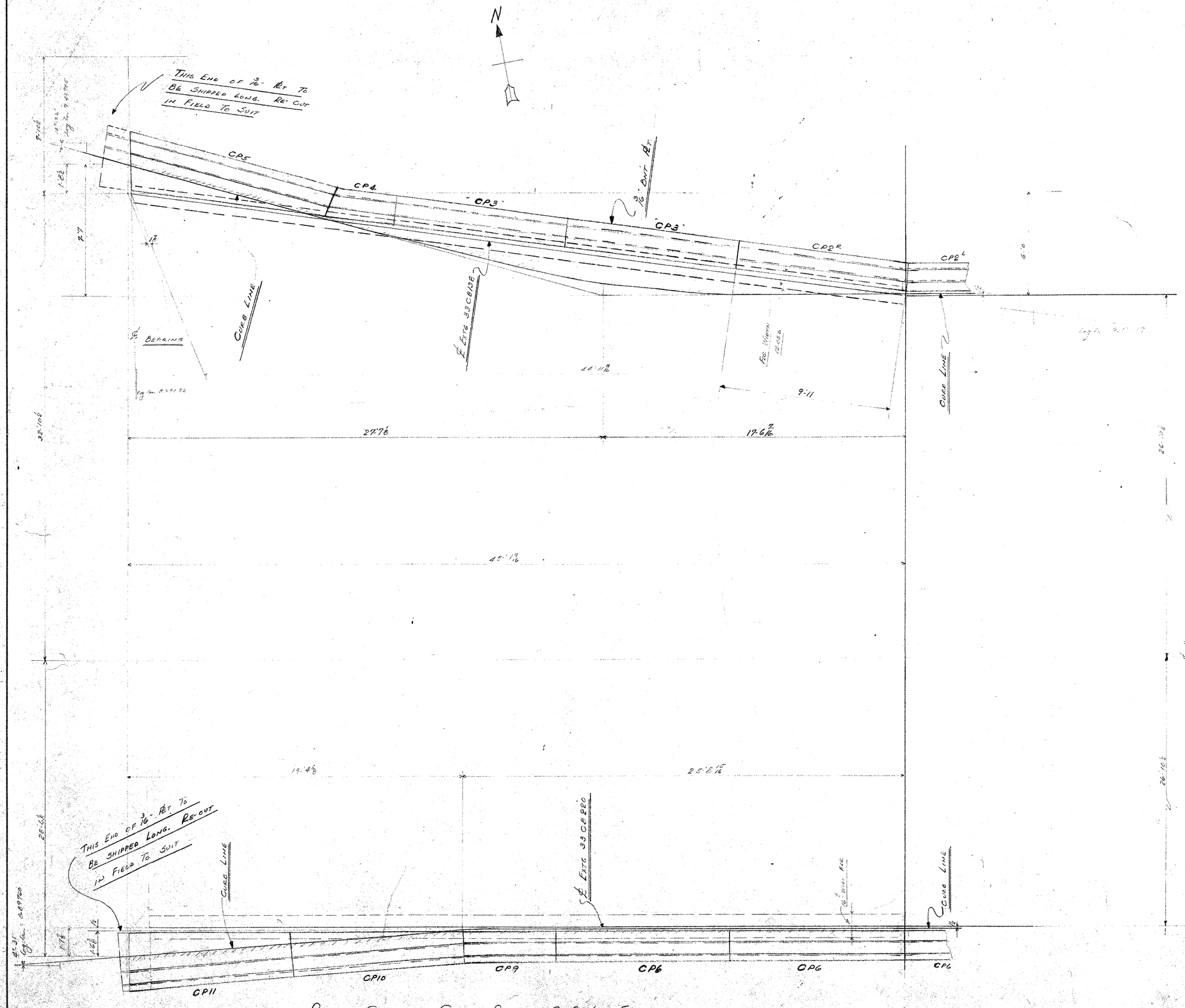
Date 5-19-60 Drawn By PM

2	5/26	B.C.'s	2	2/27	Cust.		
1	5/26	Cust.	3	4/7	Shop		
1	5/27	Assm.	2	4/7	Cust.		
3	6/21	Shop	5	8/25	Cust.		

ART IRON & WIRE WORKS, INC.
FABRICATED - STEEL - WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

Title CURB ℄ DETAILS (SEE NOTE ABOVE)
Building ANTHONY WAYNE BRIDGE
Location TOLEDO, O
Architect SANDENBACHER, MILLER & BRAUNING
Customer THE LATHROP CO
Holes Except As Noted
Field Connections WELD
Shop Point SEE NOTE ABOVE
Drawing Number 3XR163
Shop Order Number 16350

THE TOLEDO BLUE PRINT & PAPER CO. 3-100 11-59



PLAN SHOWING CURB PLATES @ BW SPAN

REVISIONS					
1	7/19				
2					
3					
4					
5					

SUB	PL	FL	PD	FD
50	X			

STANDARD ANCHORS

NA-1 & NA-2 | NA-24 | NA-25 & NA-27 | NA-4

NA-7 & NA-8 | NA-6 & NA-28 | NA-5 & NA-29

Date 5-21-60 | Drawn By PM

Holes Except As Noted

Field Connections WELD

Drawing Number 4XR163

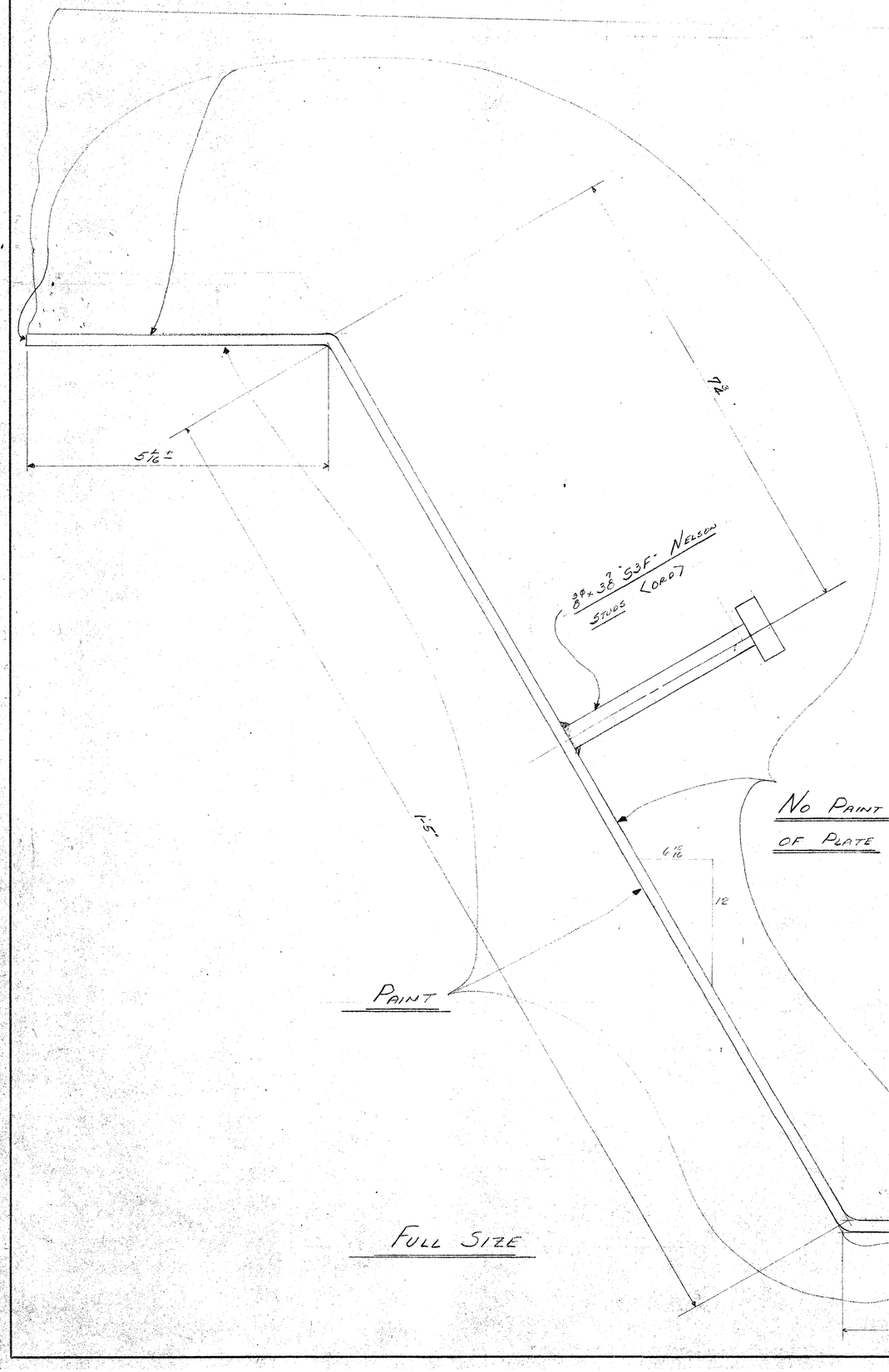
2	5/8	B.U.S.	2	6/7	CUST	5	7/28	CUST	
1	5/8	CUST	5	9/20	ARCH				
1	5/8	BOLT	3	7/28	SHOP				
3	5/8	SHOP	2	7/28	CUST				

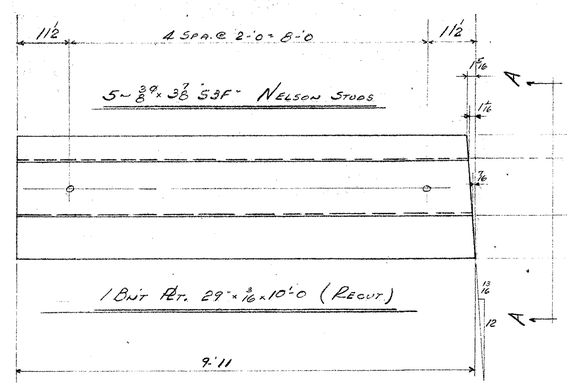
REF. DRAWINGS LAYOUT-DETAILS

ART IRON & WIRE WORKS, INC.
FABRICATED – STEEL – WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

Title LAYOUT - CURB PLTS @ BW SPAN
Building ANTHONY WAYNE BRIDGE
Location TOLEDO, O
Architect SANZENBACHER MILLER & BRIGHAM
Customer THE LATHROP CO

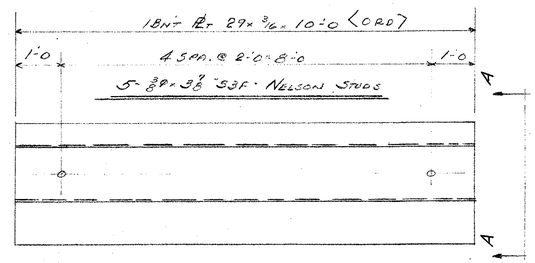
Shop Paint DIXON 201 CARBOLINE GRAPHITE PRIMER
Shop Order Number 16350



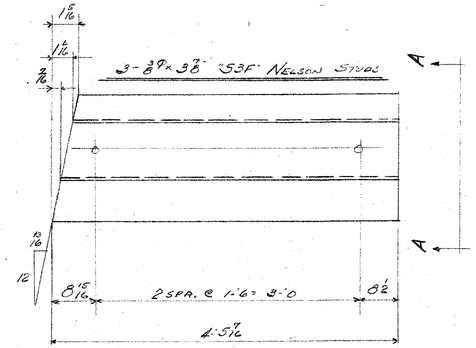


ONE~ CURB PLATE~ "CP2R" (SHOWN)

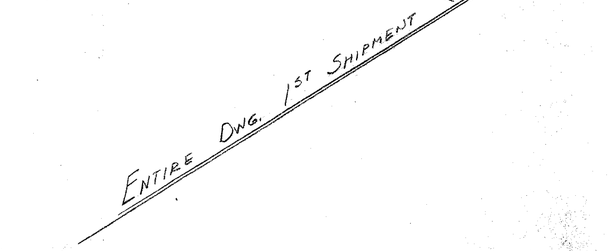
ONE~ DO ~ "CP2L" (OPP. HAND)

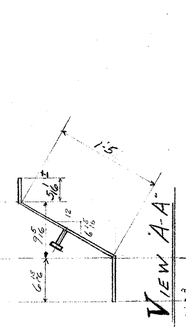


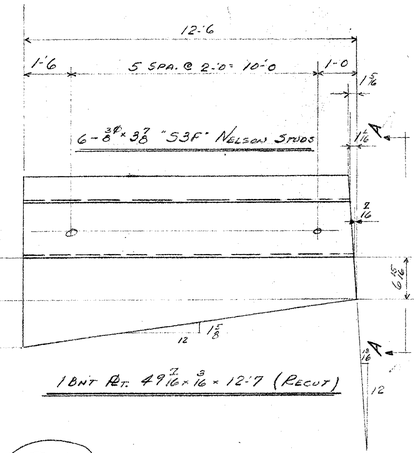
2~ CURB PLATES~ "CP3"



ONE~ CURB PLATE~ "CP4"







2 ONE~ CURB PLATE~ "CP5"

1~ R&L 6/7/60 -

1~ R&L 7/15/60 -

ENTIRE DWG. 1ST SHIPMENT (NORTH CURB)

PAINT NOTE 6 (SHOP)

PAINT ONE COAT OF #201 DIXON CHROMATE GRAPHITE PRIMER ON SURFACES NOTED

4XR163

REF. DRAWINGS LAYOUT-DETAILS

REVISIONS	
1	6/6/60
2	
3	
4	
5	

SUB	PL	FL	PD	FD
50			X	

2	3/8	23	B.G.S.	2	1/4 Cust
1	5/8	25	Cust	3	7/8 Shop
1	5/8	25	Acad	5	7/8 23 Cust
3	1/2	12	Shop		

STANDARD ANCHORS

NA-1 & NA-2 | NA-24 | NA-25 & NA-27 | NA-4 | NA-7 & NA-8 | NA-6 & NA-28 | NA-5 & NA-29

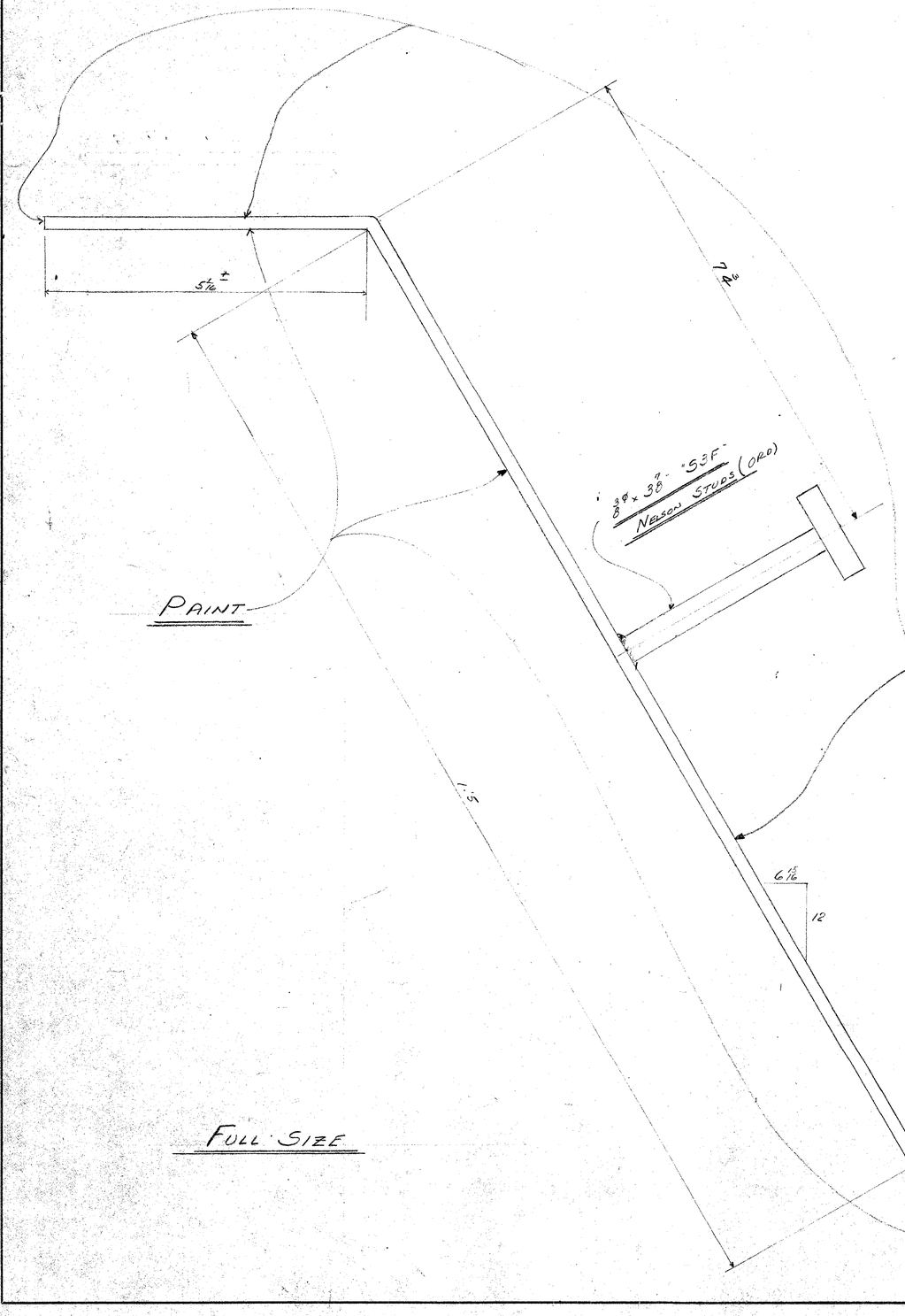
Date	5-23-60
Drawn By	PM

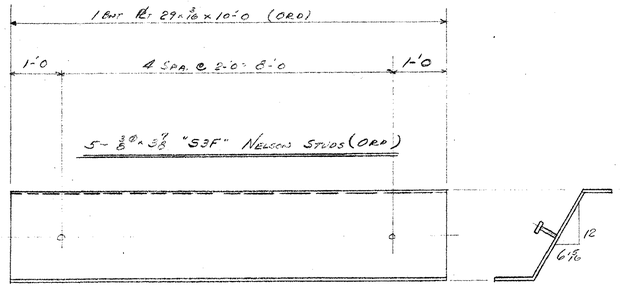
ART IRON & WIRE WORKS, INC.
FABRICATED – STEEL – WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

Title	DETAIL - CURB PLTS & EW SPAN - NORTH
Building	ANTHONY WAYNE BRIDGE
Location	TOLEDO, O.
Architect	SANDENBACHER, MILLER & PRIGUEN
Customer	THE LATHROP CO.
Holes Except As Noted	Shop Point: SEE NOTE ABOVE
Field Connections	WELD
Drawing Number	5XR163
Shop Order Number	16350

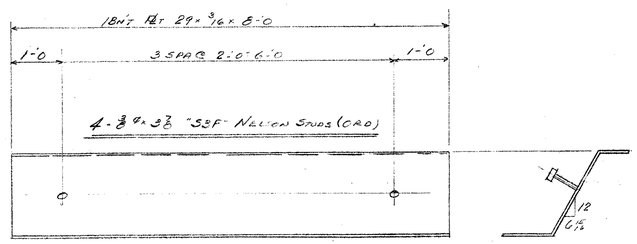
a-1-2-3-4-5-6-7-8-y b-1-2-3-4-5-6-7-8-y c-1-2-3-4-5-6-7-8-y d-1-2-3-4-5-6-7-8-y e-1-2-3-4-5-6-7-8-y g-1-2-3-4-5-6-7-8-y n-1-2-3-4-5-6-7-8-y k-1-2-3-4-5-6-7-8-y

THE TOLEDO BLUE PRINT & PAPER CO. 2009 11-09





(1ST SHIPMENT) 142 ~ CURB PLATES - "CP6"
(2ND SHIPMENT) 143 ~ " " ~ "CP6"
} REL. TO SHIP 6/7/60



(1ST SHIPMENT) 7 ~ CURB PLATES - "CP12"
(2ND SHIPMENT) 7 ~ " " ~ "CP12"
} REL TO SHIP 7-28-60

1ST SHIPMENT ~ NORTH CURB
2ND SHIPMENT ~ SOUTH CURB

CURB RTS @ SPAN "1W" THRU "7W" & SPANS "2E" THRU "15E"

NOTE:
NOTCH & CUT RTS AS NECESSARY IN FIELD BY OTHERS

PAINT NOTE (SHOP)

PAINT ONE COAT OF #201 DIXON CHROMATE GRAPHITE PRIMER ON SURFACES NOTED

"CP12" MARKED

REF. DRAWINGS LAYOUT-DETAILS

REVISIONS	
1	6/6/60
2	7/19/60
3	
4	
5	

STANDARD ANCHORS

NA-1 & NA-2 NA-24 NA-25 & NA-27 NA-4 NA-7 NA-8 NA-7 & NA-8 NA-6 & NA-28 NA-5 & NA-29

SUB	PL	FL	PD	FD
50			X	

Date 5-27-60 Drawn By DPG

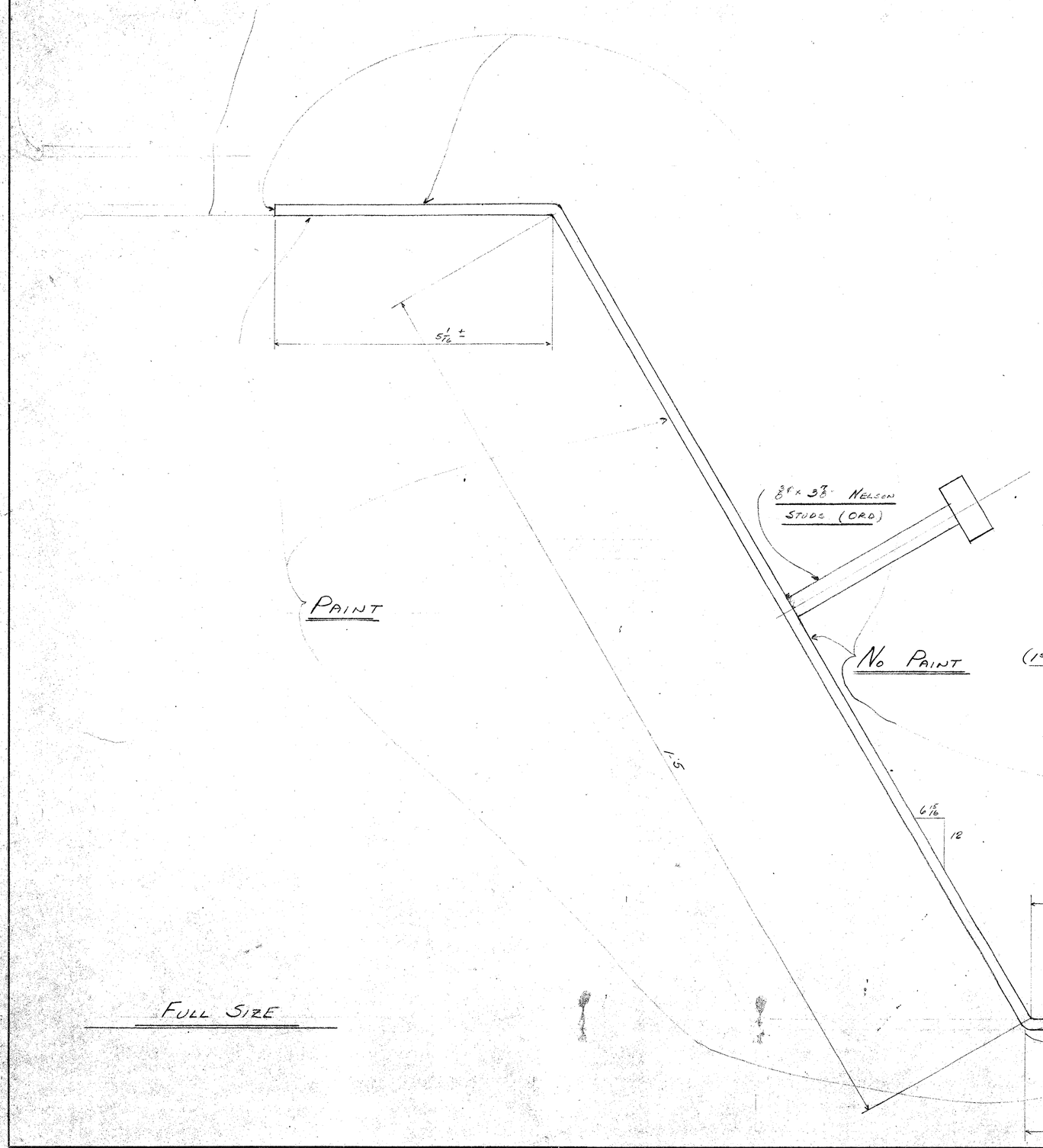
2	1/2	Bar	2	5/8	Cust	5	8	23	Cust
1	3/8	Cust	5	7/8	Arch				
1	3/4	Reed	3	7/8	Shop				
3	1/4	Stair	2	7/8	Cust				

ART IRON & WIRE WORKS, INC.
FABRICATED - STEEL - WAREHOUSE ORNAMENTAL METAL
TOLEDO FORT WAYNE

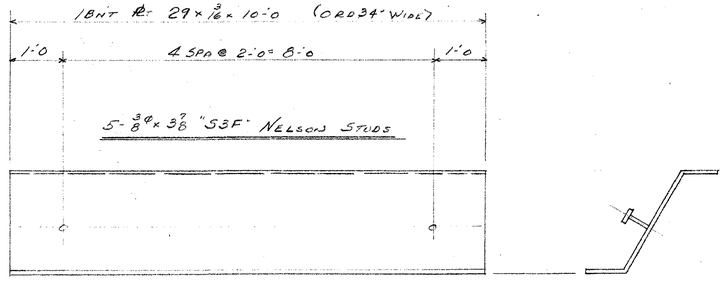
Title DETAIL (CURB RTS) - SPANS "1W" THRU "7W" - SPANS "2E" THRU "15E"
Building ANTHONY WAYNE BRIDGE
Location TOLEDO, O.
Architect SANDENBACHER MILLER & BECHTOL
Customer THE LATHROP CO.
Holes Except As Noted
Field Connections WELD
Shop Paint SEE NOTE ABOVE
Drawing Number 6XR163
Shop Order Number 16350

a-1-2-3-4-5-6-7-8-9 b-1-2-3-4-5-6-7-8-9 c-1-2-3-4-5-6-7-8-9 d-1-2-3-4-5-6-7-8-9 e-1-2-3-4-5-6-7-8-9 g-1-2-3-4-5-6-7-8-9 h-1-2-3-4-5-6-7-8-9 k-1-2-3-4-5-6-7-8-9

THE TOLEDO BLUE PRINT & PAPER CO. 8060 11-59

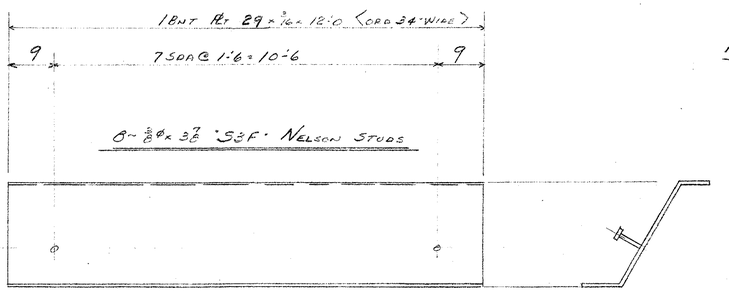


FULL SIZE



(1ST SHIPMENT) 38 ~ CURB PLATES ~ "CP7"

(2ND SHIPMENT) 38 ~ " " ~ "CP7"



CURB PLTS @ TRUSS SPANS BTWN ANCHORAGE "A" & PIER "B" AND ANCHORAGE "F" & PIER "E"

1ST SHIPMENT NORTH CURB

2ND SHIPMENT SOUTH CURB

(1ST SHIPMENT) ONE ~ CURB PLATE ~ "CP8"

NOTE:
NOTCH & CUT PLTS AS NECESSARY IN FIELD BY OTHERS

PAINT NOTE (SHOP)

PAINT ONE COAT OF #201 DIXON CHROMATE GRAPHITE PRIMER ON SURFACES NOTED.

REF. DRAWINGS LAYOUT DETAILS

REVISIONS	
1	6/6/60
2	
3	
4	
5	

SUB	PL	FL	PD	FD
50			X	

STANDARD ANCHORS

NA-1 & NA-2 | NA-24 | NA-25 & NA-27 | NA-4 | NA-7 & NA-8 | NA-6 & NA-28 | NA-5 & NA-29

Date 5-24-60

Drawn By PM

2	1/2"	2	6"	CUST	
1	5/8"	5	3/8	CUST	
1	1/2"			BAR	
3	1/4"			ANGLE	

ART IRON & WIRE WORKS, INC.
FABRICATED – STEEL – WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

Title DETAIL (CURB PLTS) @ TRUSS SPANS
Building ANTHONY WAYNE BRIDGE
Location TOLEDO, O
Architect SANZENBACHER, MILLER & BRIGHAM
Customer THE LATHROP Co

Holes Except As Noted	Shop Point SEE NOTE ABOVE
Field Connections WELD	
Drawing Number 7XR163	Shop Order Number 16350

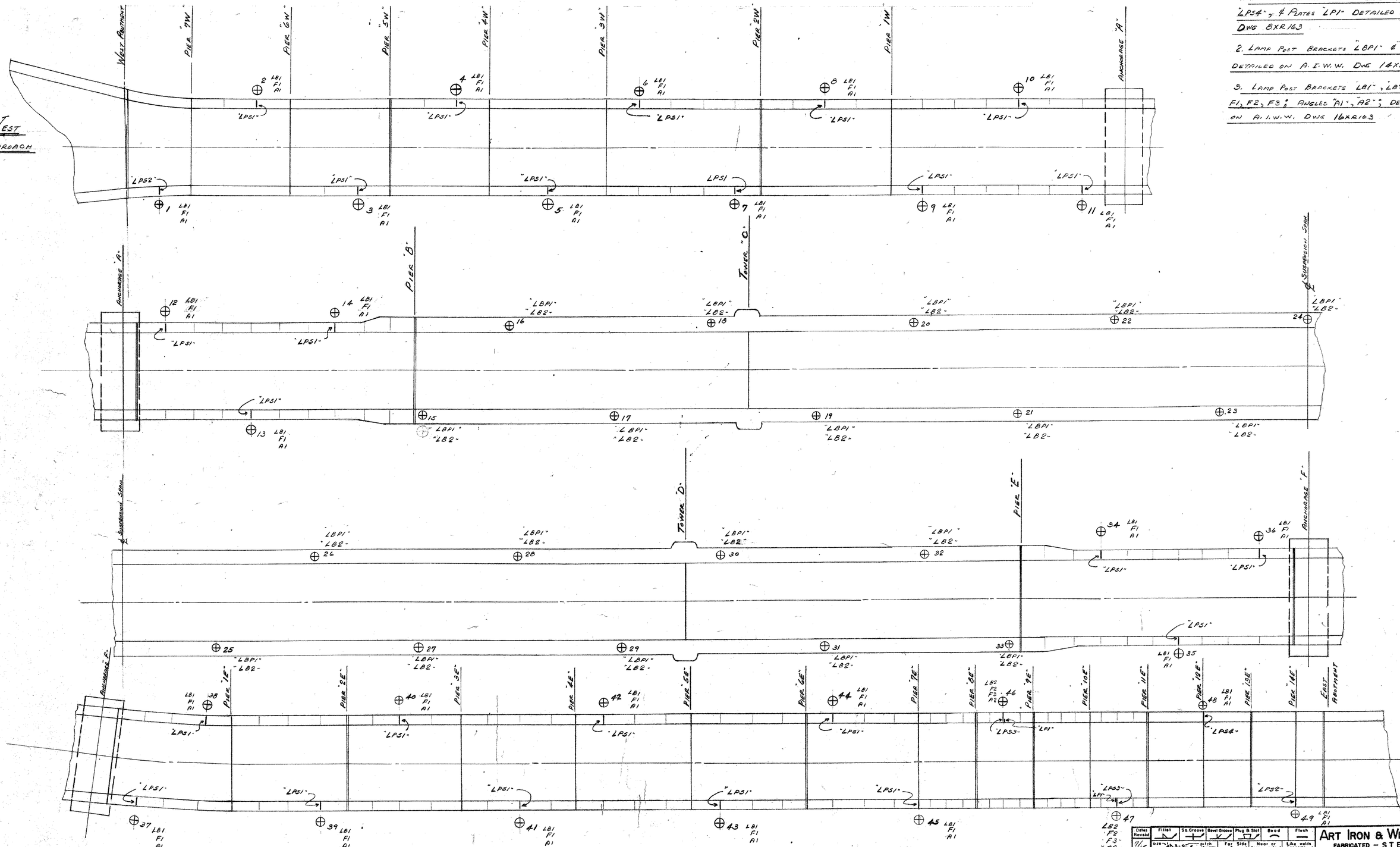
a-1-2-3-4-5-6-7-8-9 b-1-2-3-4-5-6-7-8-9 c-1-2-3-4-5-6-7-8-9 d-1-2-3-4-5-6-7-8-9 e-1-2-3-4-5-6-7-8-9 g-1-2-3-4-5-6-7-8-9 h-1-2-3-4-5-6-7-8-9 k-1-2-3-4-5-6-7-8-9
THE TOLEDO BLUE PRINT & PAPER CO. 3000 11-59
No Paint 6" This End
2Ls~ a1-8 R/L × 4'-11" <R - Near Side, L - Far Side>
4 Spa @ 1'-0" = 4'-0
No Paint
Field Weld~ Refer To Archts Dwg 26
4-¾Φ × 2½ H.S. Bolts w/2 Hardened Washers Per Bolt. 3-¾" Plain Washers Per Bolt For Fills.
ST 6WF18" × 9" 1-¾Φ × 2¼" M. Bolt (No Paint)
Field Weld To Top of Sidewalk Bracket
℄ Extg Bm.
(2nd. Shipment) One~ Stiffner~ "LPS2" (Lamp #1)
(2nd. Shipment) One~ Do ~ "LPS2" (Lamp #49)
2Ls~ 3×3×⅜ × 6'-3⅛ a2-8 R/L
5 Spa. @ 1'-0" = 5'-0
1 Bnt Pl 6½ × ⅜ × 11 <4-¾Φ × 2" H.S. Bolts w/2 Hardened Washers Per Bolt
(6~¾Φ × 2½" H.S. Bolts w/2 Hardened Washers Per Bolt. 3-¾" Plain Washers Per Bolt As Fills.
℄ Extg 30WF 108# (Joist)
(1st. Shipment) One~ Stiffner- "LPS3" (Lamp #46)
(2nd. Shipment) One~ Do - "LPS3" (Lamp #47)
1L~ a1-8½ (FS) × 4'-11
1L~ 3×3×⅜ × 4'-11 a6-8 (NS)
4 Spa @ 1'-0" = 4'-0
Detail "A"
Balance of Detail Not Shown To Right Same As "LPS2"
(1st Shipment) One~ Stiffner "LPS4" (Lamp #48)
Detail "A" (Coping For Angle a6-8)
Field List
1st Shipment
5-¾Φ × 3" H.S. Bolts w/2 Hardened Washers Per Bolt
2nd Shipment
5-¾Φ × 3" H.S. Bolts w/2 Hardened Washers Per Bolt
2Ls~ 3×3×⅜ × 4'-11 a1-8 R/L
(1st Shipment) 13~ Stiffner~ "LPS1" (Lamps #2, #4, #6, #8, #10, #12, #14, #34, #36, #38, #40, #42, #44)
(2nd Shipment) 12~ Do ~ "LPS1" (Lamps #3, #5, #7, #9, #11, #13, #35, #37, #39, #41, #43, #45)
Clip ¾" @ 45°
1 Pl 13 × ⅜ × 2'-2
(1st Shipment) One~ Plate~ "LP1" (Lamp #46)
(2nd Shipment) One~ Do ~ "LP1" (Lamp #47)
Note:
1st. Shipment North Curb
2nd. Shipment South Curb
For Location Refer To A.I.W.W. Layout Dwg 9×R163
Ref. Drawings Layout-Details
Revisions 1 6/16/60 2 7/15/60
Standard Anchors
Art Iron & Wire Works, Inc.
Fabricated - Steel - Warehouse
Ornamental Metal
Toledo Fort Wayne
Title Stiffners @ Light Pole Brkts
Building Anthony Wayne Bridge
Location Toledo, O
Architect Samborn, Steketee, Miller & Brigham
Customer The Lathrop Co
Date 5-24-60
Drawn By PM
Holes Except As Noted 13/16 Φ
Field Connections ¾Φ H.S. Bolts & Weld
Shop Paint Dixon #201 Chromate Graphite Primer
Drawing Number 8XR163
Shop Order Number 16356

NOTE

1. LAMP POST STIFFNERS "LPS1", "LPS2", "LPS3", "LPS4", & PLATES "LP1" DETAILED ON A.I.W.W. DWG 8XR163

2. LAMP POST BRACKETS "LBP1" & "LB2" DETAILED ON A.I.W.W. DWG 14XR163

3. LAMP POST BRACKETS "LB1", "LB2"; FILLS F1, F2, F3; ANGLES "A1", "A2"; DETAILED ON A.I.W.W. DWG 16XR163



PLAN SHOWING LOCATION OF LIGHTPOLE SUPPORTS

SUB	PL	FL	PD	FD	CC
56		X			

Dates Revised	
7/15	
7/21	

Fillet | Sq. Groove | Bevel Groove | Plug & Slot | Bead | Flush

Size — pitch of welds — length of welds — For Sides — Near or Arrow side — Like welds opposite

Type — Indicates from which side welds are made — Like welds staggered — Weld all around — Field weld

Side of joint to which arrow points is arrow (or near) side and opposite side is other (or far) side

Symbols apply between abrupt changes in direction of weld, or as dimensioned.

For bevel welds connect arrow to beveled plate

STANDARD ANCHORS

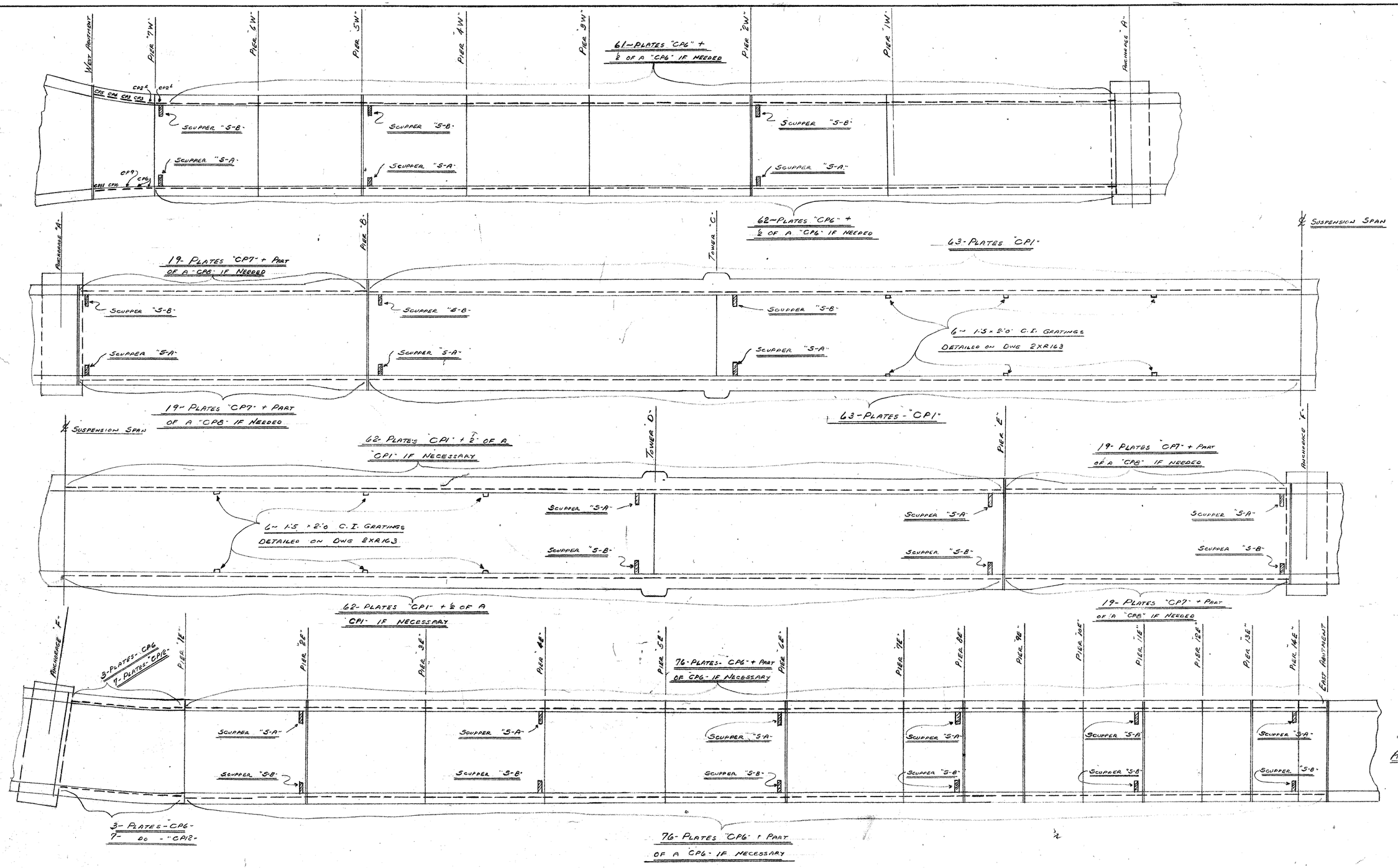
N-A1 & N-A2 | N-A3 | N-A4 | N-A5 | N-A6 | N-A7 & N-A8

ART IRON & WIRE WORKS, INC.
FABRICATED – STEEL – WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

Holes Except As Noted
Field Connections
Shop Paint: DIXON #201 CHROMATE GRAY PRIMER

Drawn By	Date	Drawing Number	Shop Order No.
PM	6-16-60	9XR163	16356

Title LAYOUT OF LIGHT POLE SUPPORT
Building ANTHONY WAYNE BRIDGE
Location TOLEDO O
Architect SANDENBACHER MILLER & BRIGHA
Customer THE LATHROP CO.



Note:

1. Scuppers "S-A", & "S-B" Detailed on Dwg. 1XR163
2. Grating For Scuppers Detailed on Dwg 2XR163
3. Curb Plates "CP1" Detailed on Dwg 3XR163
4. Curb Plates "CP2 R/L", "CP3-", "CP4", & "CP5" Detailed on Dwg 4XR163 & 5XR163
5. Curb Plates "CP6" Detailed on Dwg 6XR163
6. Curb Plates "CP7", & "CP8" Detailed on Dwg 7XR163
7. Curb Plates "CP9", "CP10", & "CP11" Detailed on Dwg 13XR163
8. Curb Plates "CP12" Detailed on Dwg 6XR163

Plan Showing Location of Bent Curb Plates & Scuppers

Dates Revised	
11/19	

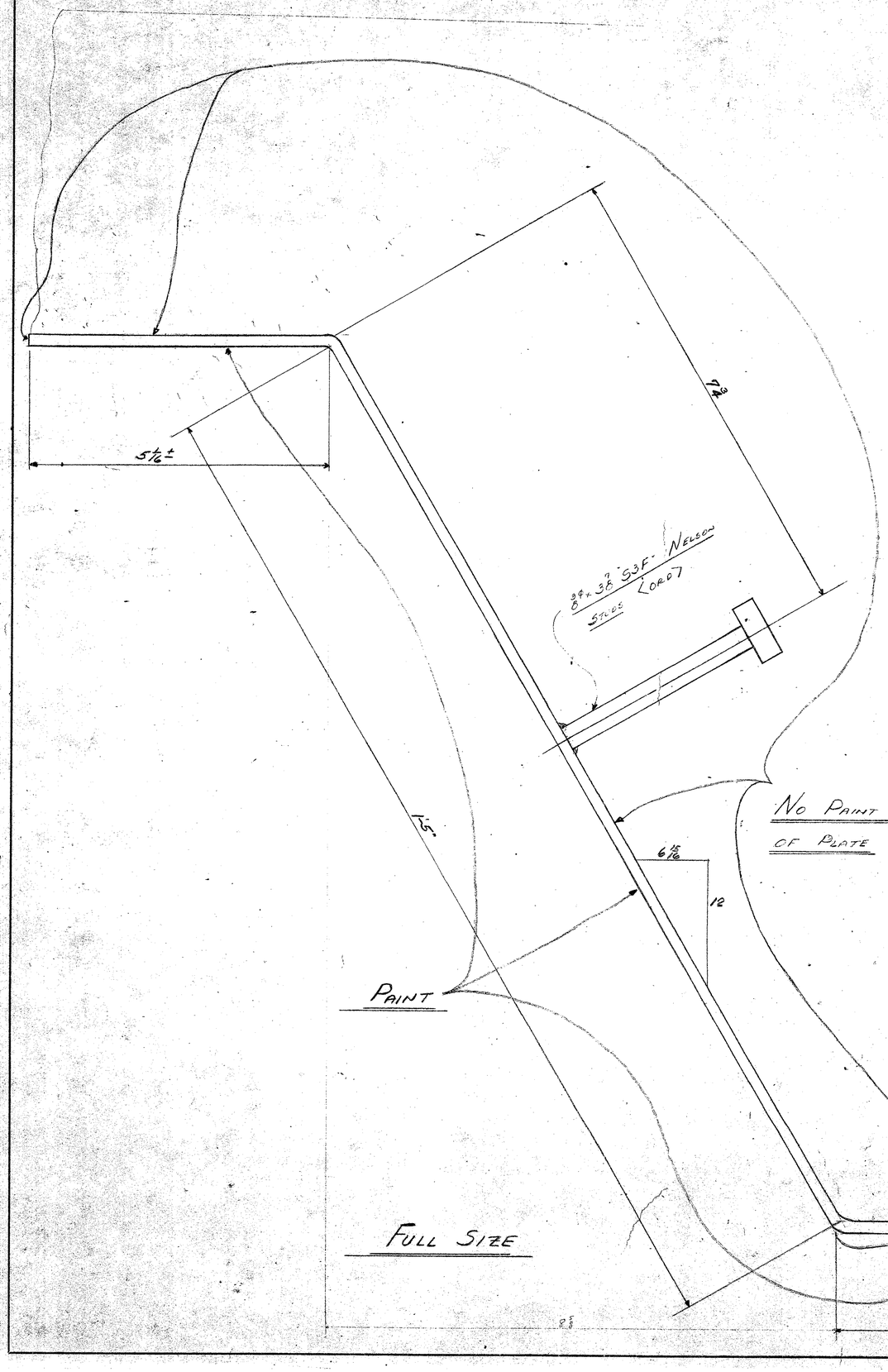
ART IRON & WIRE WORKS, INC
FABRICATED – STEEL – WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

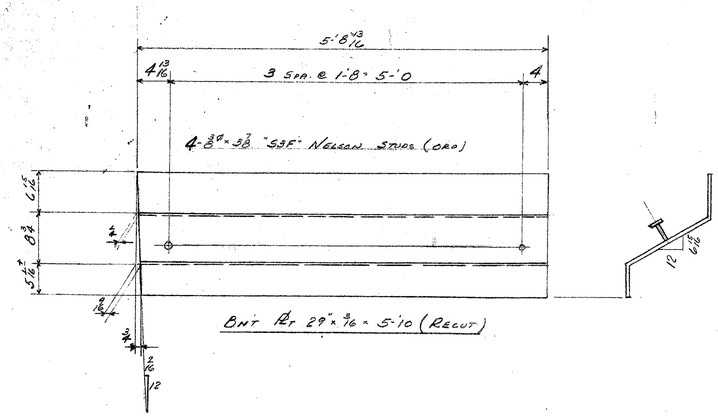
Holes Except As Noted — Shop Paint
Field Connections WELD

Drawn By	Date	Drawing Number	Shop Order Number
PM	6-16-60	11XR163	16348 - S

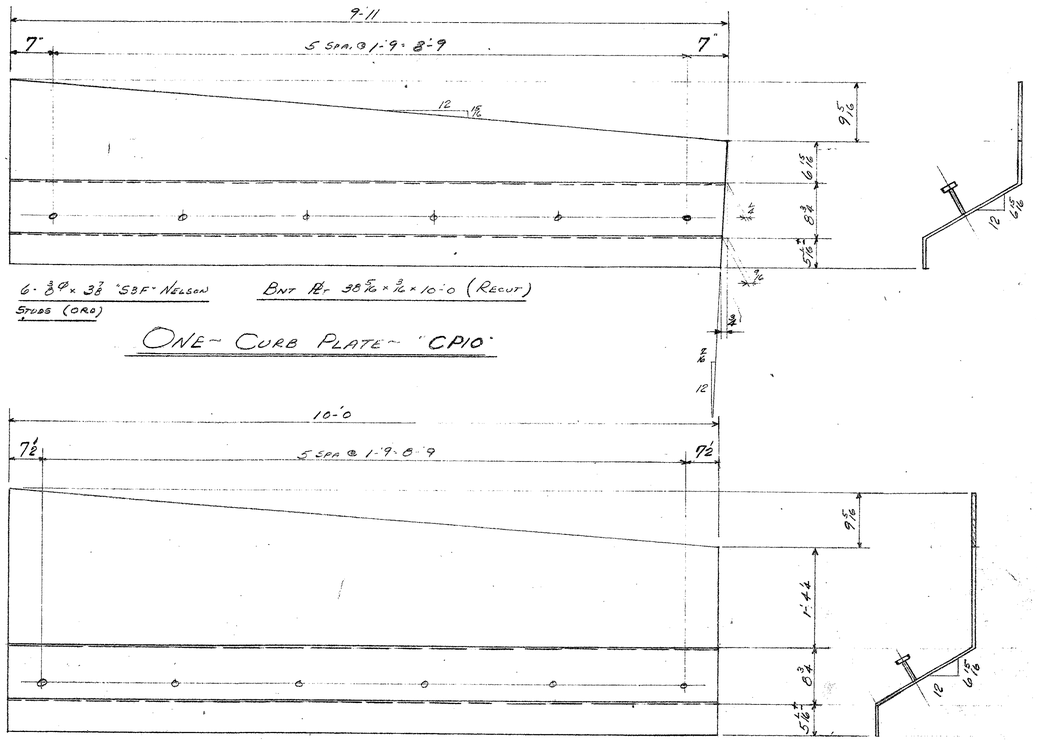
Title Layout – Scuppers & Curb Plates
Building Anthony Wayne Bridge
Location Toledo, O
Architect Sanbenbacher, Miller & Brigham
Customer The Lathrop Co.

SUB	PL	FL	PD	FD	CC
48		X			
50	X				





ONE ~ CURB PLATE ~ "CP9"



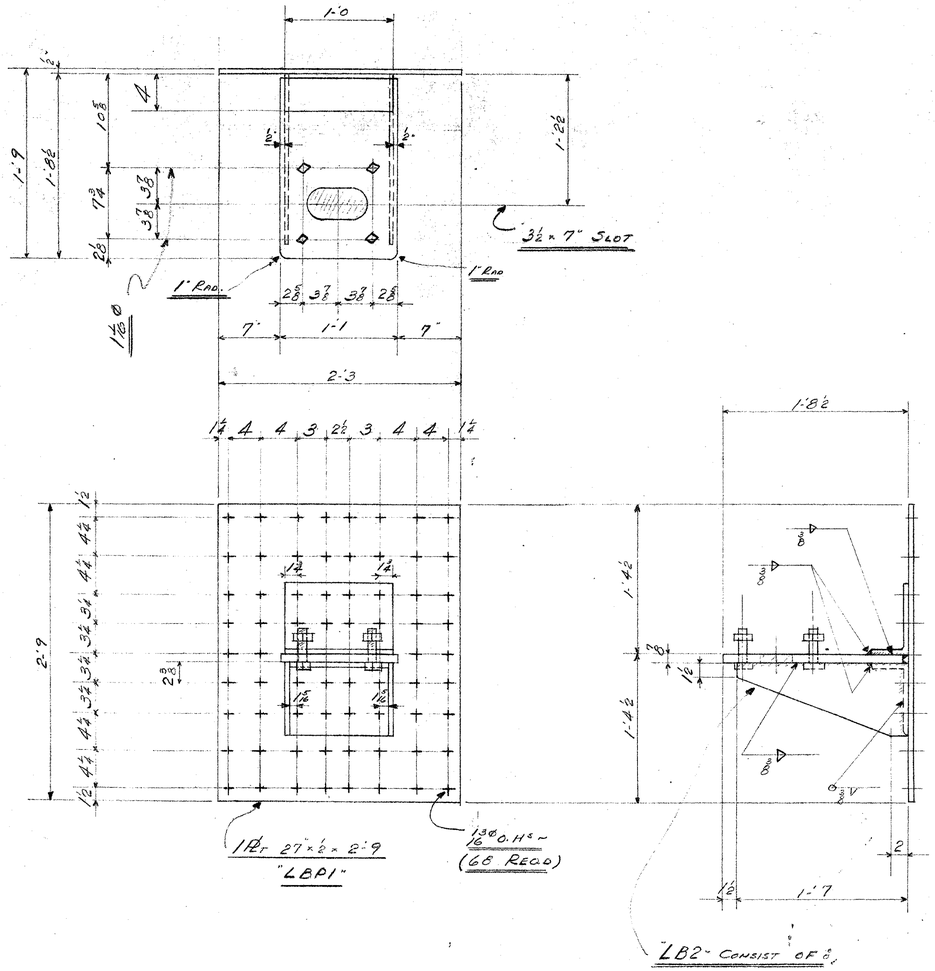
ONE ~ CURB PLATE ~ "CP10"

2ND. SHIPMENT

ONE ~ CURB PLATE ~ "CP11"

PAINT AS NOTED

HOLES EXCEPT AS NOTED	ART IRON & WIRE WORKS, INC.
FIELD CONNECTIONS	FABRICATED – STEEL – WAREHOUSE ORNAMENTAL IRON
SHOP PAINT Ditzler 201 CHROMATE GRAPHITE PRIMER	TOLEDO FORT WAYNE
DATE 7-19	DRAWN BY PM
SUB. PL. / FL / FD / FD / REV	BUILDING ANTHONY WAYNE BRIDGE
50 . . X	LOCATION TOLEDO, O
5 11/20 Angle	ARCHITECT SANZENBACHER, MILLER & BRIGHAM
3 7/20 Shop	CUSTOMER THE LATHROP CO
2 7/20 Grat	DRAWING NUMBER 13XR163
5 3/20 Web	SHOP ORDER NUMBER 16350



"LB2" CONSIST OF:

1 PL - 13" x ⅞" x 1'-8½"

1 L - 8" x 4" x 7/16" x 1'-0" @ 1-14

1 L - 8" x 4" x 7/16" x 11⅛" @ 2-14

2 PLS - 8" x 7/16" x 1'-7" @ 3-14

4 - 1"Ø x 3¾ MACH. BOLTS (WELD HD. OF BOLT TO UNDERSIDE OF PL "LB2")

1ST SHIPMENT - NORTH

2ND SHIPMENT - SOUTH

FIELD LIST

1000 - ¾Ø x 2¼ H.S. BOLTS W/2 HARDENED WASHERS/BOLT

315 - ¾Ø x 2¾ DO DO

(1ST SHIPMENT) 9 - LAMP POLE SUPPORT BRACKET PLATE - "LBP1" (LOCATED @ LAMP POLE 16, 18, 20, 22, 24, 26, 28, 30, 32)

(2ND SHIPMENT) 10 - DO - "LBP1" (LOCATED @ LAMP POLE 15, 17, 19, 21, 23, 25, 27, 29, 31, 33)

(1ST SHIPMENT) 9 - LAMP POLE BRACKETS - "LB2" (LOCATED @ LAMP POLE 16, 18, 20, 22, 24, 26, 28, 30, 32)

(2ND SHIPMENT) 10 - DO - "LB2" (LOCATED @ LAMP POLE 15, 17, 19, 21, 23, 25, 27, 29, 31, 33)

REF. DRAWINGS LAYOUT-DETAILS

REVISIONS		
1	9/28	
2		
3		
4		
5		ER
5	9/21	ARCH
3	8/25	SHOP
2	8/16	PAINT
4	8/23	PAINT

SUB	PL	FL	PD	FD
56			X	

STANDARD ANCHORS

NA-1 & NA-2 | NA-24 | NA-25 & NA-27 | NA-4

NA-7 & NA-8 | NA-6 & NA-28 | NA-5 & NA-29

Date 7-21-60

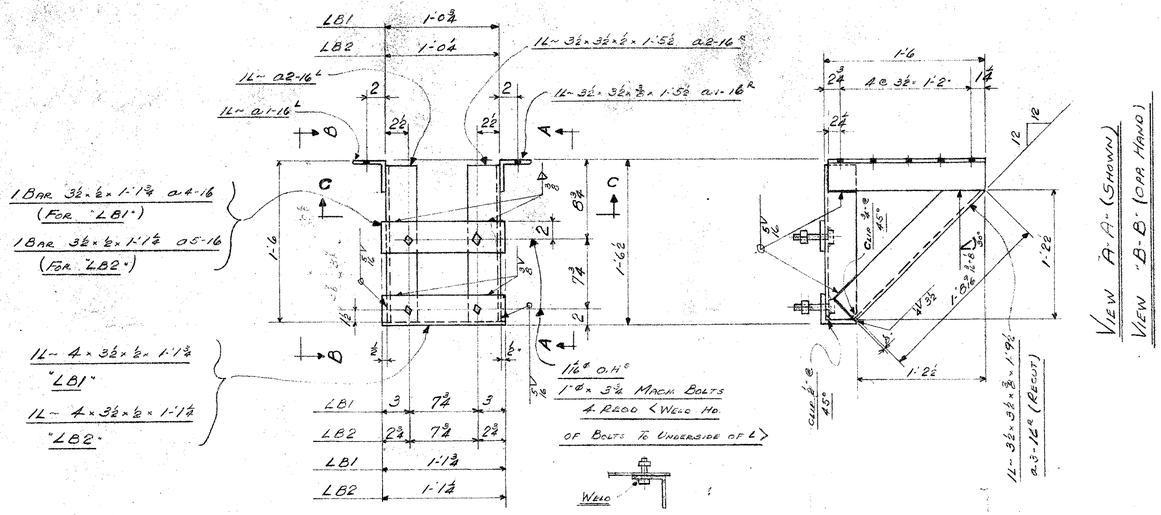
Drawn By PM

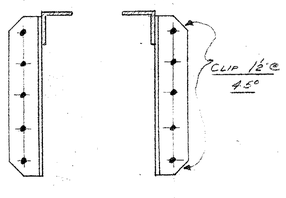
ART IRON & WIRE WORKS, INC.
FABRICATED - STEEL - WAREHOUSE ORNAMENTAL METAL
TOLEDO FORT WAYNE

Title DETAIL - LAMP POLE BRACKETS
Building ANTHONY WAYNE BRIDGE
Location TOLEDO, O.
Architect SANZENBACKER, MILLER & BRICKHAM
Customer THE LATHROP CO.
Holes Except As Noted 13/16Ø
Shop Paint ONE COAT DIRON #201 CHROMATE GRAPHITE PRIMER
Field Connections BOLT
Drawing Number 14XR163
Shop Order Number 16356

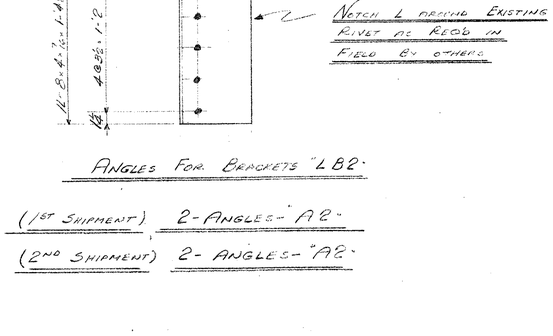
a-1-2-3-4-5-6-7-8-9 b-1-2-3-4-5-6-7-8-9 c-1-2-3-4-5-6-7-8-9 d-1-2-3-4-5-6-7-8-9 e-1-2-3-4-5-6-7-8-9 g-1-2-3-4-5-6-7-8-9 h-1-2-3-4-5-6-7-8-9 k-1-2-3-4-5-6-7-8-9

THE TOLEDO BLUE PRINT & PAPER CO. 3100 11-59





SECTION~"C-C"



ANGLES FOR BRACKETS "LB2"

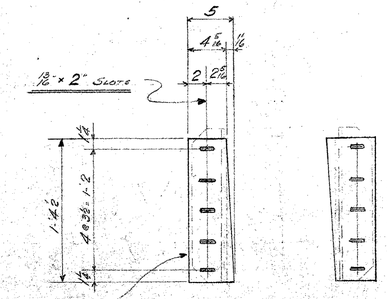
REL 8-5-60 { (1ST SHIPMENT) 2-ANGLES~"A2" / (2ND SHIPMENT) 2-ANGLES~"A2"

1ST SHIPMENT ~ NORTH

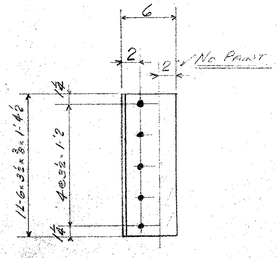
2ND SHIPMENT ~ SOUTH

REL (1) 7-21-60
REL (13) 8-5-60 → (1ST SHIPMENT) 14~ BRACKETS~"LB1" <LAMP POLES 2, 4, 6, 8, 10, 12, 14, 34, 36, 38, 40, 42, 44, 46>

REL 8-5-60
- (2ND SHIPMENT) 14~ DO ~"LB1" <LAMP POLES 1, 3, 5, 7, 9, 11, 13, 35, 37, 39, 41, 43, 45, 47>
- (1ST SHIPMENT) ONE~ DO ~"LB2" <LAMP POLE 46>
- (2ND SHIPMENT) ONE~ DO ~"LB2" <LAMP POLE 47>



FILLS FOR BRACKETS "LB1"



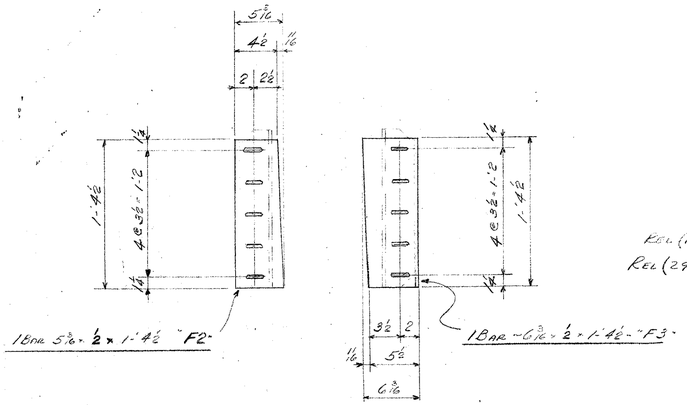
ANGLES FOR BRACKETS "LB1"

REL (2) 7-21-60
REL (26) 8-5-60 → (1ST SHIPMENT) 28~ FILLS~"F1"

REL 8-5-60 { (2ND SHIPMENT) 28~ DO ~"F1"

REL (2) 7-21-60
REL (24) 8-5-60 → (1ST SHIPMENT) 28~ ANGLES~"A1"

REL 8-5-60 (2ND SHIPMENT) 28~ DO ~"A1"



FILLS FOR BRACKETS "LB2"

REL 8-5-60 { (1ST SHIPMENT) ONE~FILL~"F2" / (1ST SHIPMENT) ONE~DO~"F3" / (2ND SHIPMENT) ONE~DO~"F2" / (2ND SHIPMENT) ONE~DO~"F3"

FIELD BOLTS

REL (10) 7-21-60
REL (295) 8-5-60 → 305~⅝"Ø x 3" H.S. BOLTS W/ 2 HARDENED WASHERS PER BOLT

ERECTOR NOTE

REFER TO ARCHTS DWG 26 FOR FIELD WELDING

PAINT NOTES

PAINT (ONE) COAT OF DIXON #201 CHROMATE GRAPHITE PRIMER EXCEPT WHERE NOTED NO PAINT.

REVISIONS				
1	7/22			
2	7/24			
3				
4				
5				
SUB	PL	FL	PD	FD
56				
3	9/21	Shop		
5	9/30	Arch		
2	9/21	Job		
3	8/6	Shop		

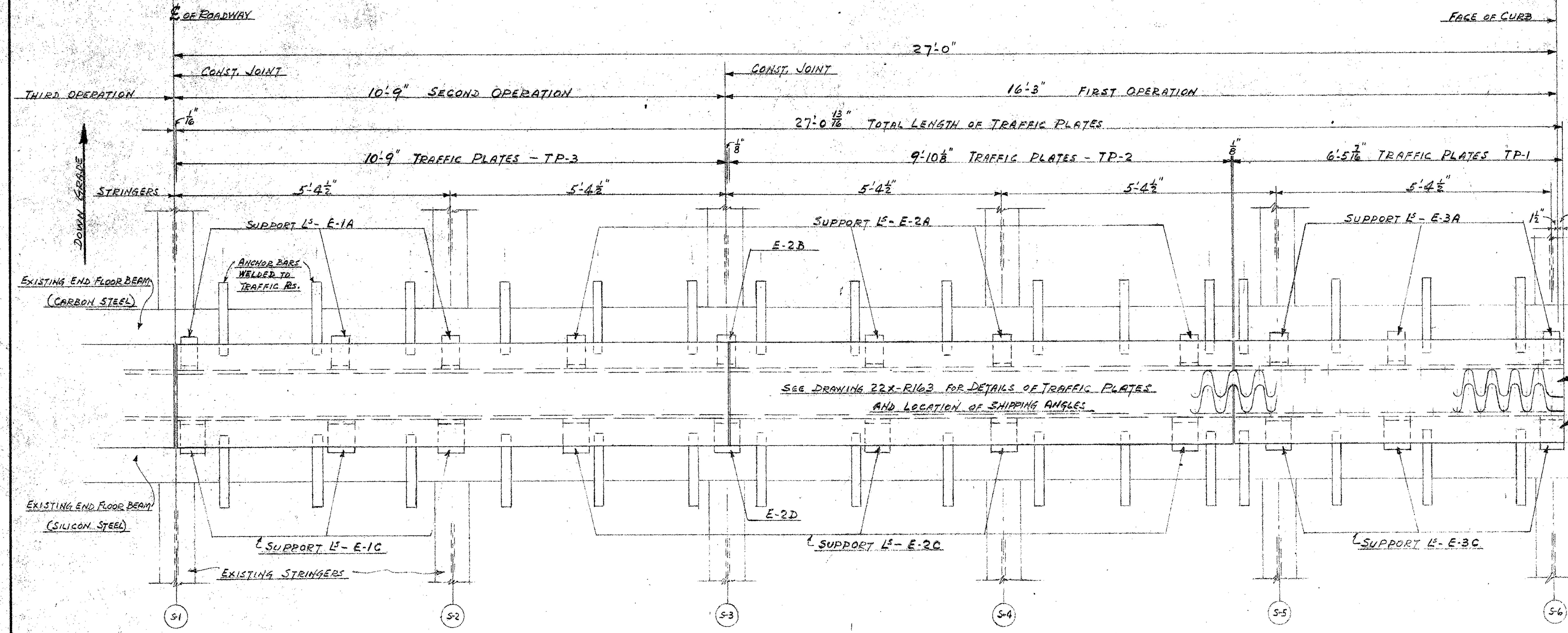
STANDARD ANCHORS: NA-1 & NA-2, NA-24, NA-25 & NA-27, NA-4, NA-7 & NA-8, NA-8 & NA-28, NA-5 & NA-29

Date 7-20-60 | Drawn By PM | 4 9/23 Cust

ART IRON & WIRE WORKS, INC.
FABRICATED – STEEL – WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

REF. DRAWINGS LAYOUT DETAILS

Title DETAILS~LIGHT POLE BRACKETS
Building ANTHONY WAYNE BRIDGE
Location TOLEDO, O
Architect SANZENBACHER MILLER & BRIGHAM
Customer THE LATHROP CO
Holes Except 13/16 As Noted
Field Connections BOLT~WELD
Drawing Number 16XP163
Shop Point SEE PAINT NOTE
Shop Order Number 16356



LAYOUT OF EXPANSION JOINT TRAFFIC PLATES AND SUPPORT CLIP ANGLES FOR NORTH HALF OF PIER "B" AS SHOWN

DO DO DO PIER "E" OPPOSITE HAND

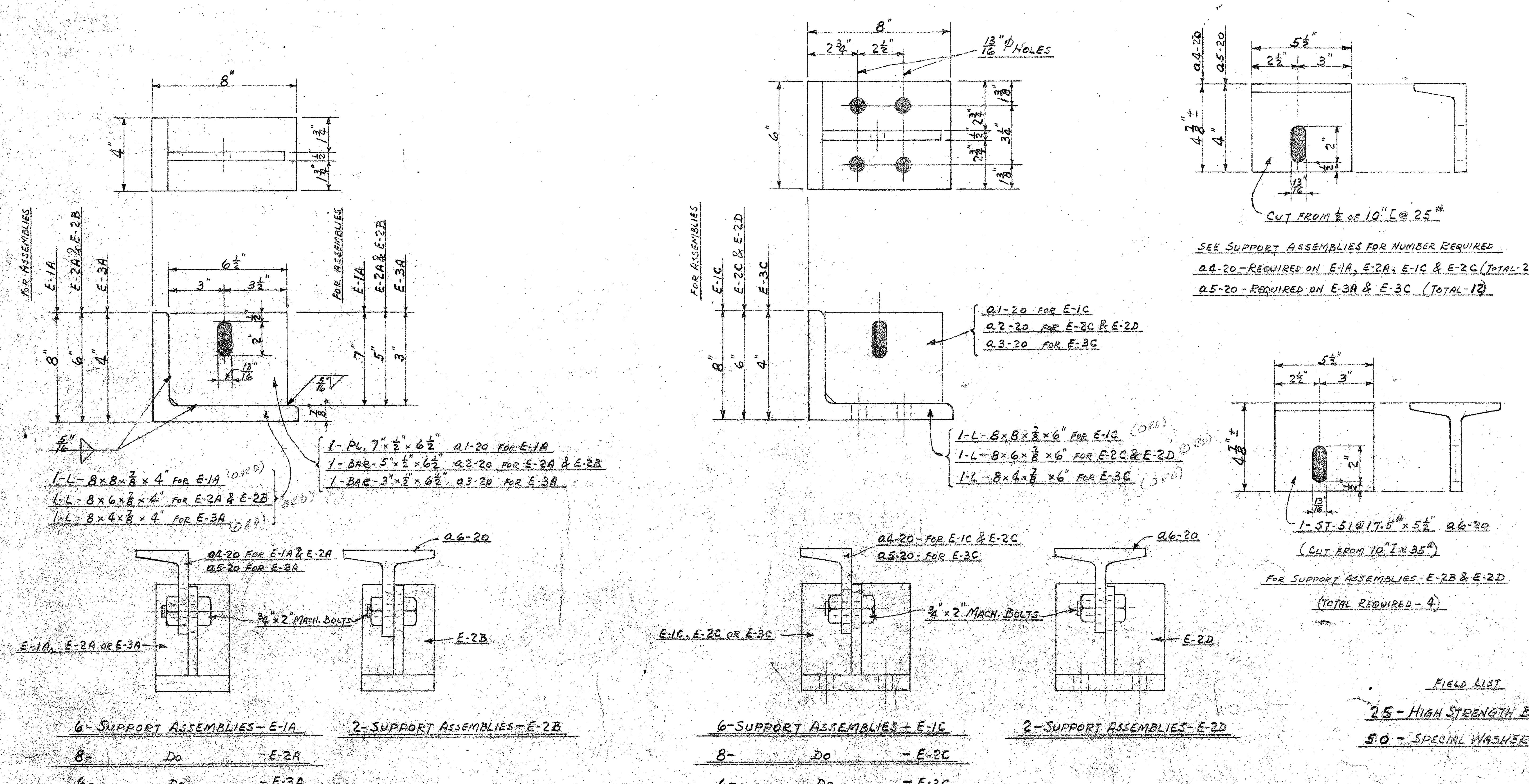
EXPANSION JOINT FOR CURB AND SIDEWALK NOT SHOWN SEE DRAWING - 21X-R163

1 1/2" TRAFFIC PLATES (MATCHED MARKED IN PAIRS)
NOTE POSITION OF PLATES AT CURB END SO THEY WILL JOIN WITH PROPER PLATES OF EXPANSION JOINT OF CURB AND SIDEWALK

TRAFFIC PLATES DETAILED ON DRAWING - 22X-R163

REINFORCEMENT PLATES AND ANGLES DETAILED ON DRAWING - 23X-R163

ERECTOR NOTE - SEE GENERAL DRAWINGS - SHEET #20 FOR PLACEMENT DATA AND FIELD WELDING.



SEE SUPPORT ASSEMBLIES FOR NUMBER REQUIRED
a4-20 - REQUIRED ON E-1A, E-2A, E-1C & E-2C (TOTAL-28)
a5-20 - REQUIRED ON E-3A & E-3C (TOTAL-12)

FOR SUPPORT ASSEMBLIES - E-2B & E-2D (TOTAL REQUIRED - 4)

FIELD LIST
25 - HIGH STRENGTH BOLTS - 3/4" × 3 1/2"
50 - SPECIAL WASHERS - 3/4"

REF. DRAWINGS LAYOUT DETAILS

REVISIONS					
1					
2					
3					
4					
5					ER
SUB	PL	FL	PD	FD	
19			X		

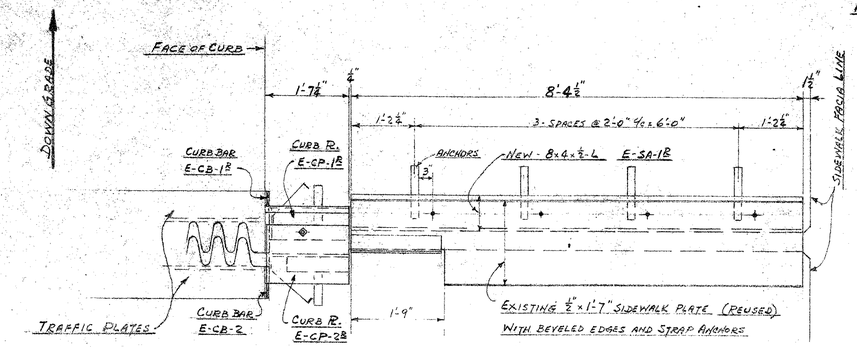
STANDARD ANCHORS: NA-1 & NA-2 | NA-24 | NA-25 & NA-27 | NA-4 | NA-7 & NA-8 | NA-6 & NA-28 | NA-5 & NA-29

2	5/23	B.G.S.	2	5/31	Cust
1	5/25	Cust	3	6/16	Cust
1	5/-	Accd	5	8/23	Cust
3	5/31	Shop			

ART IRON & WIRE WORKS, INC.
FABRICATED - STEEL - WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

Title	NORTH HALF SUPPORTS FOR TRAFFIC PLATES - PIERS B&E
Building	ANTHONY WAYNE BRIDGE REPAIRS
Location	
Architect	SANZENBACHER, MILLER & BRIGHAM
Customer	THE LATHROP CO.
Date	5-23-60
Drawn By	S.E.M.
Holes As Noted	
Shop Paint	NONE
Field Connections	
Drawing Number	20X-R163
Shop Order Number	16319

THE TOLEDO BLUE PRINT & PAPER CO. 3000 11-59

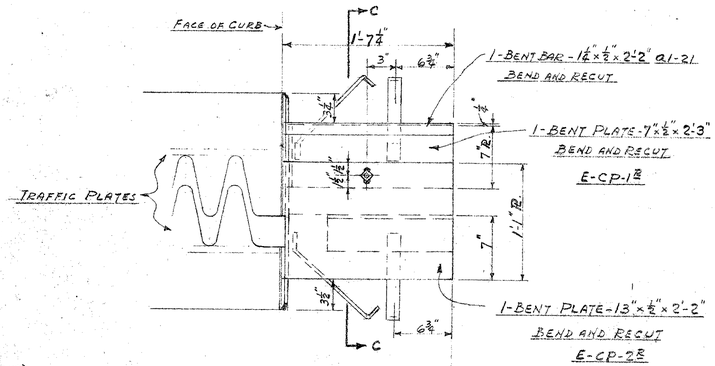


PLAN OF CURB AND SIDEWALK EXPANSION JOINTS AT NORTH SIDE OF PIER "B" AS SHOWN

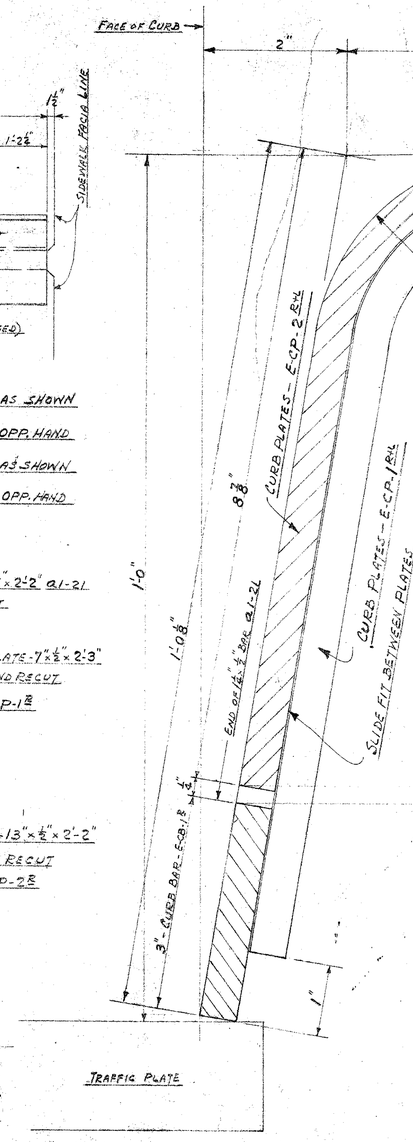
Do Do Do PIER "E" OPP. HAND

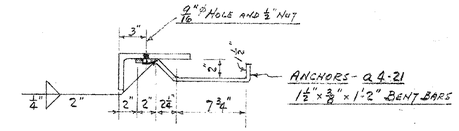
Do Do SOUTH SIDE OF PIER "E" AS SHOWN

Do Do Do PIER "B" OPP. HAND



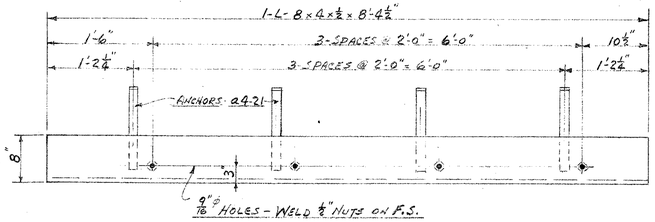
PLAN OF CURB PLATES AT EXPANSION JOINTS





FULL SIZE SECTION THRU CURB PLATES

ANCHOR DETAILS FOR E-SA-1 REQ'D



REL. 5/31 — 1- EXPANSION JOINT SIDEWALK ANGLE - E-SA-1R AS SHOWN - NORTH SIDE OF PIER "B"

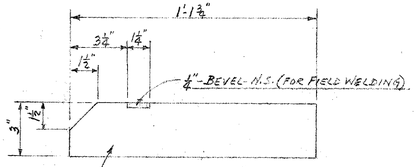
1- Do - E-SA-1L OPP. HAND NORTH SIDE OF PIER "E"

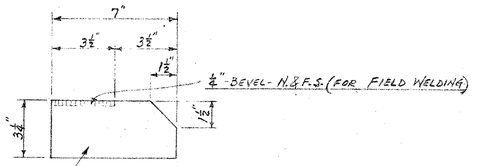
REL. 6/28 — 1- Do - E-SA-1R AS SHOWN SOUTH SIDE OF PIER "E"

1- Do - E-SA-1L OPP. HAND SOUTH SIDE OF PIER "B"

BEVELS FOR FIELD WELDING

SEE CURB SIDE ELEVATION FOR LENGTHS OF BEVELS





REL. 5/31 — 1- EXPANSION JOINT CURB BAR - E-CB-1R AS SHOWN - NORTH "B" → 2- EXPANSION JOINT CURB BARS - E-CB-2 - FOR NORTH SIDE OF PIERS "B" AND "E"

1- Do - E-CB-1L OPP. HAND - NORTH "E"

REL. 6/28 — 1- Do - E-CB-1R AS SHOWN - SOUTH "E"

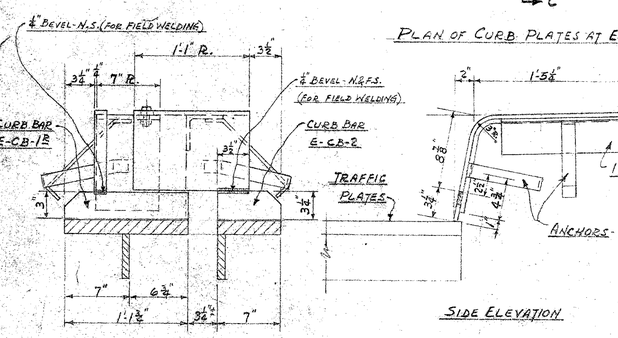
1- Do - E-CB-1L OPP. HAND - SOUTH "B"

2- Do - E-CB-2 FOR SOUTH SIDE OF PIERS "B" AND "E"

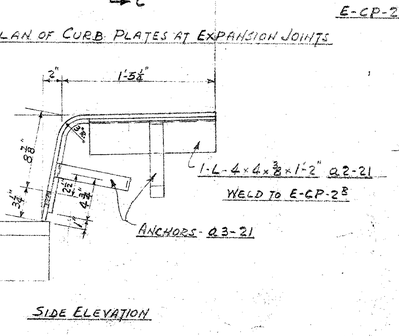
FIELD LIST

REL. 5/31 → 8 - ½" x 1¾" MACH. BOLTS (NO NUTS) NORTH SIDE

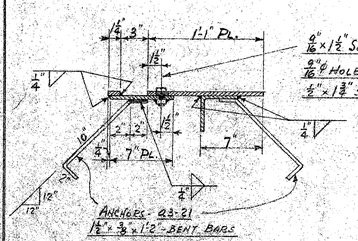
REL. 6-28 → 8 - ½" x 1¾" MACH. BOLTS (NO NUTS) SOUTH SIDE



CURB-SIDE ELEVATION



SIDE ELEVATION



SECTION - C-C.

REL. 5/31 — 1- EXPANSION JOINT CURB PLATE - E-CP-1R AS SHOWN FOR NORTH SIDE OF PIER "B"

1- Do E-CP-1L OPP. HAND FOR NORTH SIDE OF PIER "E"

1- Do E-CP-2R AS SHOWN FOR NORTH SIDE OF PIER "B"

1- Do E-CP-2L OPP. HAND FOR NORTH SIDE OF PIER "E"

REL. 6/28 — 1- Do E-CP-1R AS SHOWN - FOR SOUTH SIDE OF PIER "E"

1- Do E-CP-1L OPP. HAND - FOR SOUTH SIDE OF PIER "B"

1- Do E-CP-2R AS SHOWN - FOR SOUTH SIDE OF PIER "E"

1- Do E-CP-2L OPP. HAND FOR SOUTH SIDE OF PIER "B"

- ERECTOR NOTE -

SEE GENERAL DRAWINGS - SHEET #20 FOR PLACEMENT DATA AND FIELD WELDING.

REF. DRAWINGS LAYOUT-DETAILS

REVISIONS				
1	South Side Road 6-28-60			
2				
3				
4				
5				

SUB	PL	FL	PD	FD
19			X	

STANDARD ANCHORS: NA-1 & NA-2 · NA-24 · NA-25 & NA-27 · NA-4 · NA-7 & NA-8 · NA-5 & NA-28 · NA-5 & NA-29

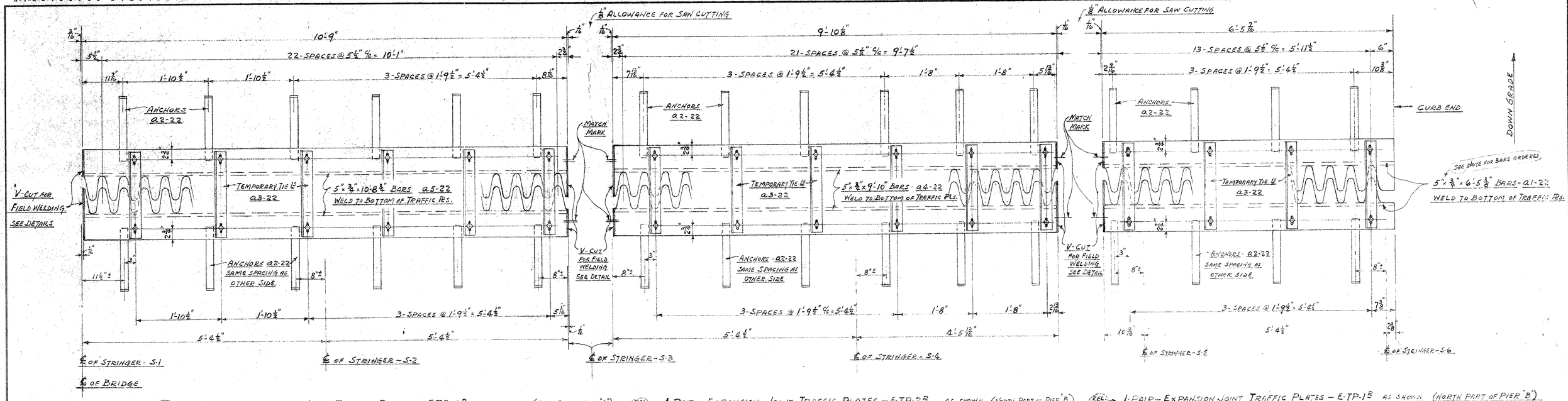
Date 5-25-60 Drawn By S.E.M.

3	7/25	Cust	1	7/29	Cust		
1	7/25	Detail	3	6/29	Shop		
3	8/31	Shop	2	6/30	Cust		
2	8/31	Cust	5	8/29	Cust		

ART IRON & WIRE WORKS, INC.
FABRICATED — STEEL — WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

Title EXPANSION JOINTS AT CURB AND SIDEWALK PIERS "B" AND "E"
Building ANTHONY WAYNE BRIDGE
Location
Architect SANZENBACHER, MILLER & BRIGHAM
Customer THE LATHROP CO.
Holes Except As Noted
Shop Paint NONE
Field Connections
Drawing Number 21X-R163
Shop Order Number 16319

THE TOLEDO BLUE PRINT & PAPER CO. 2000 11-59



REL 5/31 → 1-PAIR – EXPANSION JOINT TRAFFIC PLATES – E-TP-3B AS SHOWN (NORTH PART OF PIER "B")

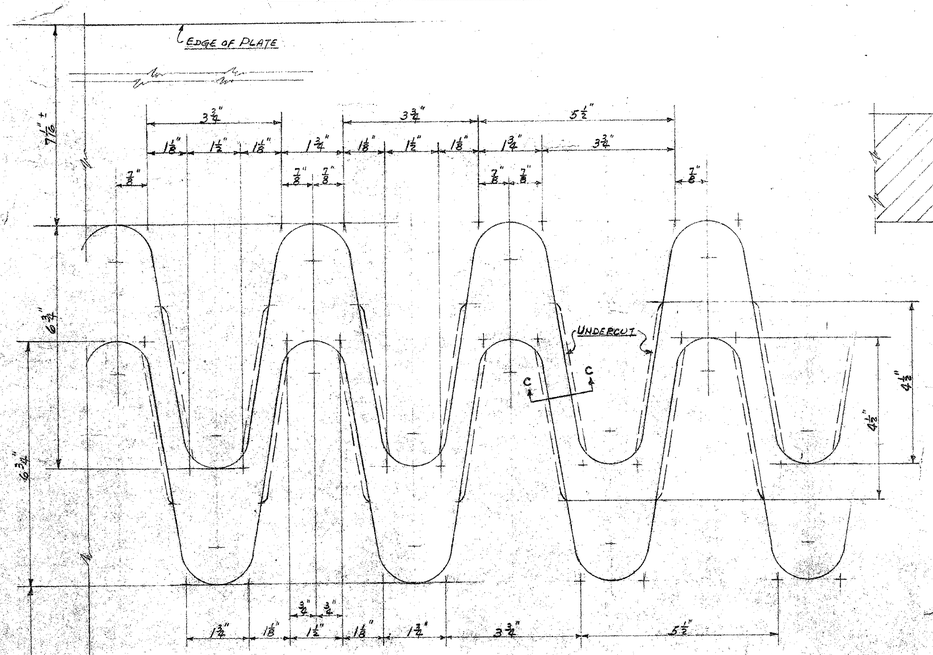
REL 6/22 →
- 1-PAIR – Do – E-TP-3½ OPP. HAND (NORTH PART OF PIER "E")
- 2-PAIR – Do – E-TP-3B AS SHOWN (NORTH PART OF PIERS 5W & 2W)
- 2-PAIR – Do – E-TP-3½ OPP. HAND (NORTH PART OF PIERS 2E & 6E)

REL 5/31 → 1-PAIR – EXPANSION JOINT TRAFFIC PLATES – E-TP-2B AS SHOWN (NORTH PART OF PIER "B")

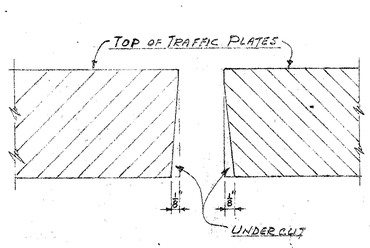
REL 6/22 →
- 1-PAIR – Do – E-TP-2½ OPP. HAND (NORTH PART OF PIER "E")
- 2-PAIR – Do – E-TP-2B AS SHOWN (NORTH PART OF PIERS 5W & 2W)
- 2-PAIR – Do – E-TP-2½ OPP. HAND (NORTH PART OF PIERS 2E & 6E)

REL 5/31 → 1-PAIR – EXPANSION JOINT TRAFFIC PLATES – E-TP-1B AS SHOWN (NORTH PART OF PIER "B")

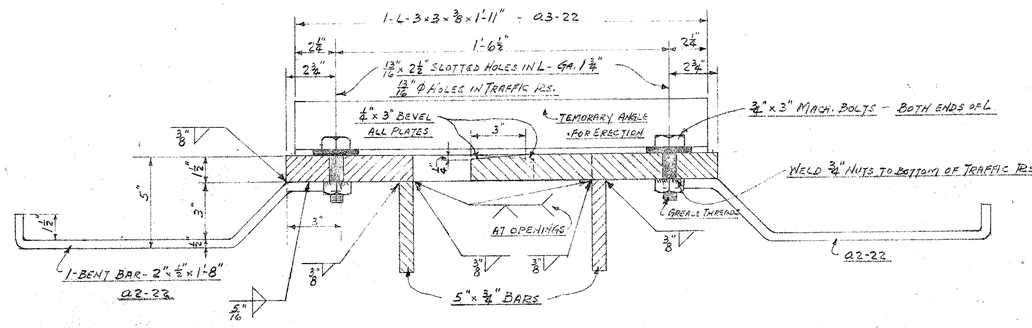
REL 6/22 →
- 1-PAIR – Do – E-TP-1½ OPP. HAND (NORTH PART OF PIER "E")
- 2-PAIR – Do – E-TP-1B AS SHOWN (NORTH PART OF PIERS 5W & 2W)
- 2-PAIR – Do – E-TP-1½ OPP. HAND (NORTH PART OF PIERS 2E & 6E)



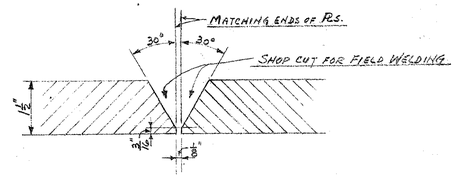
TYPICAL CUTS FOR TRAFFIC PLATES



SECTION C-C



TYPICAL SECTION THRU TRAFFIC PLATES



CUTS FOR FIELD WELDING MATCHING ENDS OF TRAFFIC PLATES

SHOP NOTE.

THE THREE PAIRS OF TRAFFIC PLATES FROM CURB END TO ℄ OF BRIDGE ARE TO BE CONTINUOUS CUT TO TEMPLATE FROM ONE PLATE 21"x1½"x27'-2" (FIRST SET FROM STOCK) (ALL OTHERS ORDERED 27'-6")

STRAIGHTEN AND RECUT TO LENGTHS SHOWN AND MATCH MARK IN PAIRS AND MATCHING ENDS.

V-CUT MATCHING ENDS FOR FIELD WELDING, UNDERCUT AND BEVEL AS SHOWN.

FABRICATE AND SHIP BOLTED TOGETHER IN PAIRS.

THE 5"x¾" BARS - a1-22, a4-22 AND a5-22 ARE FROM STOCK FOR THE FIRST SET RELEASED MAY 31. ALL OTHERS ARE ORDERED 27'-9" TO BE RECUT AS DETAILED.

ERECTOR NOTE

SEE GENERAL DRAWINGS - SHEETS #20 & #21 FOR PLACEMENT DATA AND FIELD WELDING

REF. DRAWINGS LAYOUT-DETAILS

REVISIONS	
1	6-13-60
2	6/22/60
3	
4	
5	

SUB	PL	FL	PD	FD
19			X	

STANDARD ANCHORS: NA-1 & NA-2 · NA-24 · NA-25 & NA-27 · NA-4 · NA-7 & NA-8 · NA-6 & NA-28 · NA-5 & NA-29

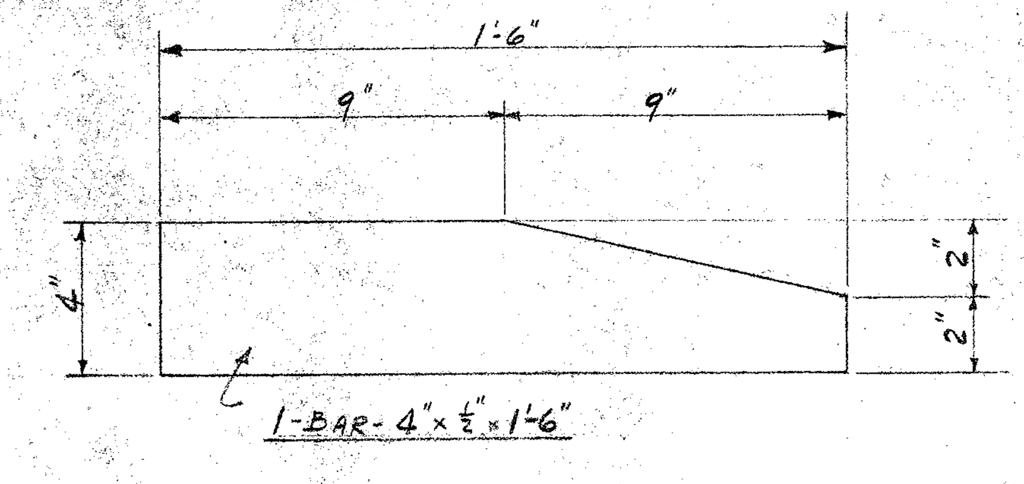
Date	5-31-60	Drawn By	S.E.M.

3	5/31	Shop	3	6/29	Cust		
3	5/31	Cust	1	7/16	Job		
3	6/6	Cust	1	8/29	Cust		
3	6/22	Shop					

ART IRON & WIRE WORKS, INC.
FABRICATED – STEEL – WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

North Part. Piers - 5W, 2W, 2E and 6E
Title TRAFFIC PLATES FOR NORTH PART OF PIERS "B" & "E"
Building ANTHONY WAYNE BRIDGE REPAIRS
Location
Architect SANZENBACHER, MILLER & BRIGHAM
Customer THE LATHROP CO.
Holes ~~Drilled~~ As Noted
Field Connections
Drawing Number 22X-R163
Shop Point NONE
Shop Order Number 16319

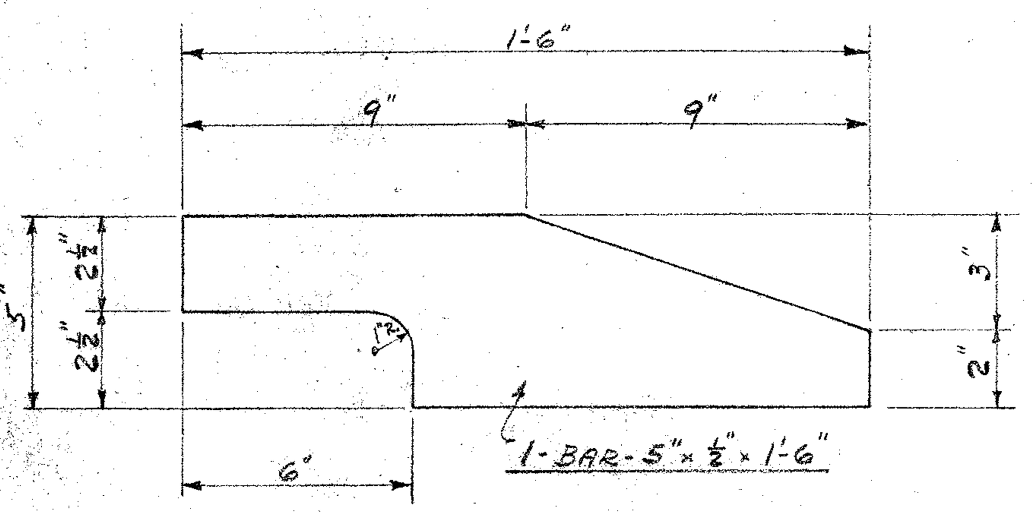
THE TOLEDO BLUE PRINT & PAPER CO. 3000 11-59



(REL. 6/28) 64 - EXPANSION JOINT REINFORCEMENT PLATES - E-P1 — 32 - FOR NORTH SIDE; 32 - FOR SOUTH SIDE

(SHOWN AS P-1 ON SHEET #22)

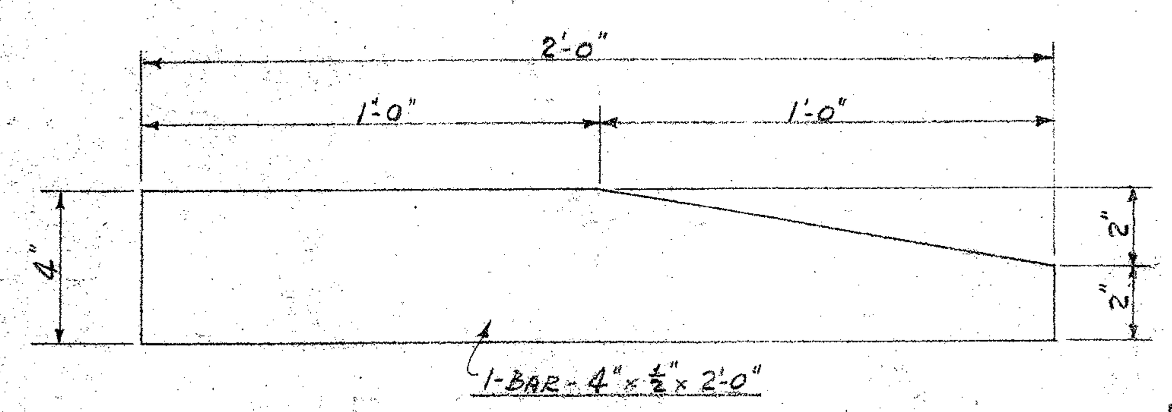
FOR PIERS 5W, 2W, 2E & 6E — STRINGERS S-1 TO S-4 - NORTH AND SOUTH SIDES



(REL. 6/28) 16 - EXPANSION JOINT REINFORCEMENT PLATES - E-P2. — 8 - FOR NORTH SIDE; 8 - FOR SOUTH SIDE

(SHOWN AS P-2 ON SHEET #22)

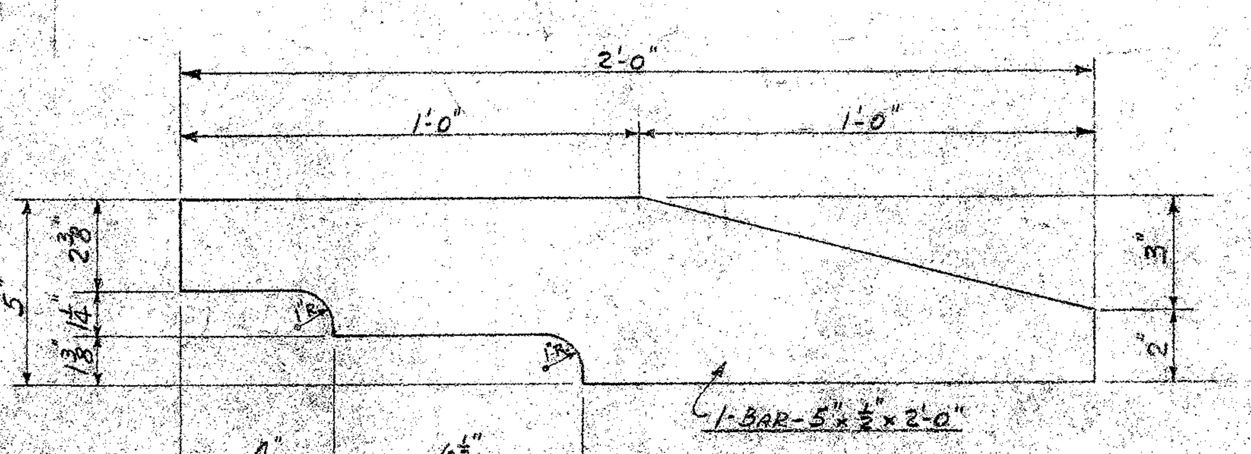
FOR PIERS 5W, 2W, 2E, 6E - STRINGERS S-6 - NORTH AND SOUTH SIDES



(REL. 10 6-2-60) (REL. 26 6/28) 36 - EXPANSION JOINT REINFORCEMENT PLATES - E-P3. — 18 - FOR NORTH SIDE; 18 - FOR SOUTH SIDE

(SHOWN AS P-3 ON SHEET #22)

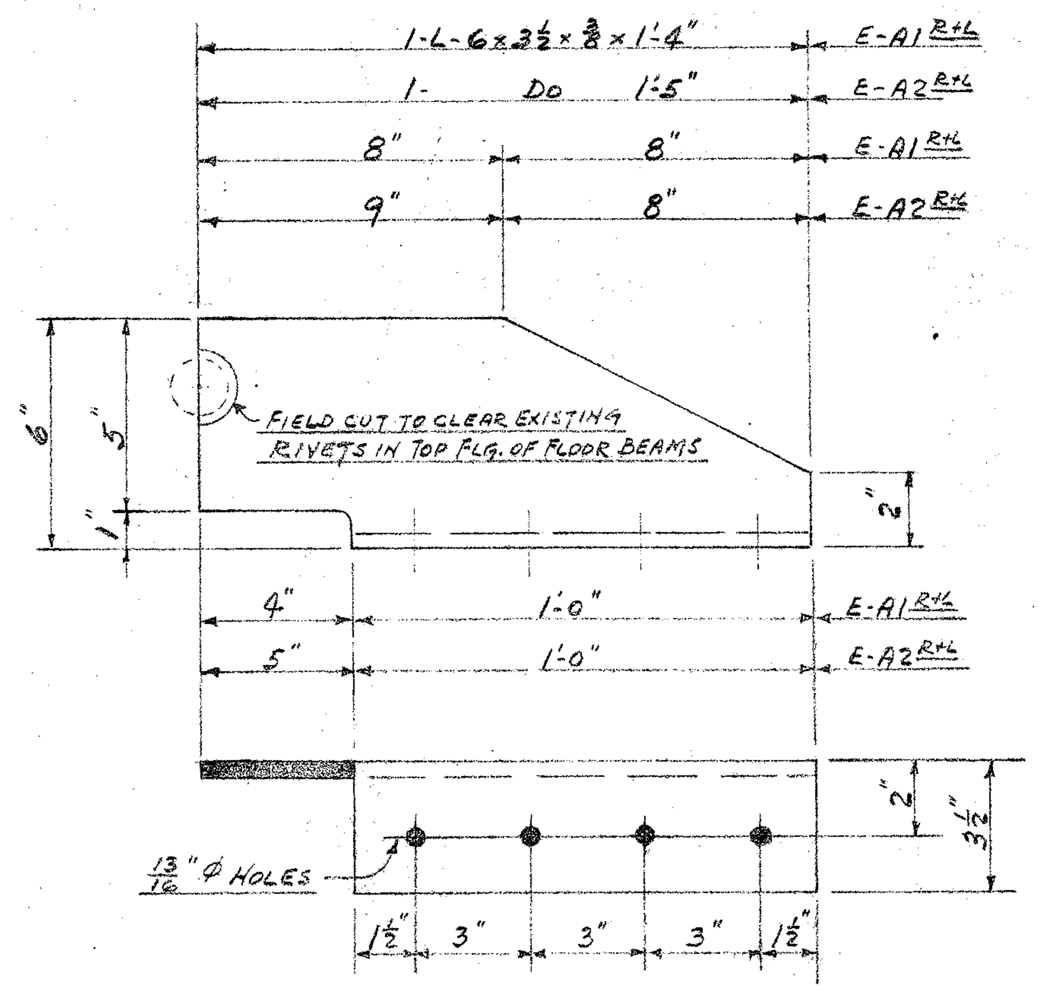
FOR PIERS "B" AND "E" - STRINGERS - S-1 TO S-5 - NORTH AND SOUTH SIDES



(REL. 1 6-2-60) (REL. -3 6/28) 4 - EXPANSION JOINT REINFORCEMENT PLATES - E-P4. — 2 - FOR NORTH SIDE; 2 - FOR SOUTH SIDE

(SHOWN AS P-4 ON SHEET #22)

FOR PIERS "B" AND "E" - STRINGERS - S-6 - NORTH AND SOUTH SIDES



(REL. 4 6-2-60) (REL. -50 6/28) 54 - EXPANSION JOINT REINFORCEMENT ANGLES - E-A1 R AS SHOWN — 32 - NORTH AND CENTER; 22 - SOUTH SIDE

(REL. 4 6-2-60) (REL. 50 6/28) 54 - DO - E-A1 L OPP. HAND — 32 - NORTH AND CENTER; 22 - SOUTH SIDE

(SHOWN AS A-1 ON SHEET #22)

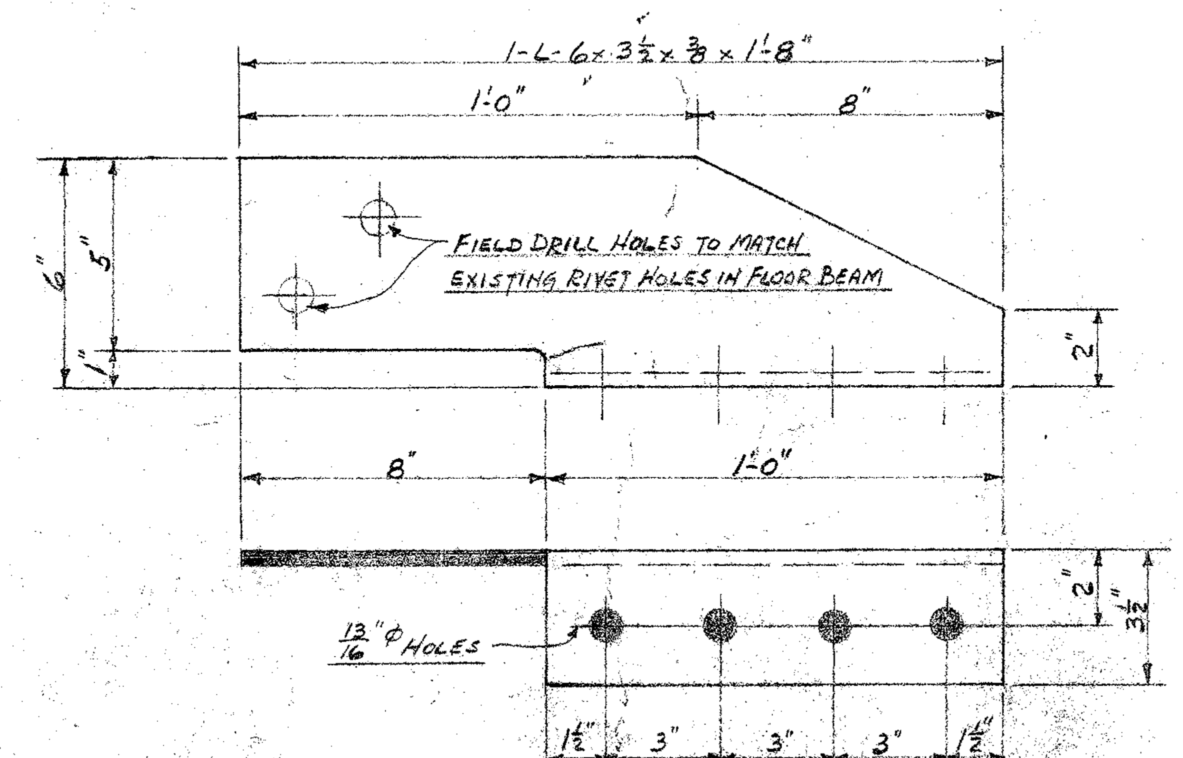
FOR PIERS "B" AND "E" - STRINGERS - S-1 TO S-4 - NORTH AND SOUTH SIDES
AND PIERS 5W, 2W, 2E, 6E - STRINGERS - S-1 TO S-3 - NORTH AND SOUTH SIDES

(REL. 6/28) 16 - EXPANSION JOINT REINFORCEMENT ANGLES - E-A2 R AS SHOWN — 8 - NORTH SIDE; 8 - SOUTH SIDE

16 - DO - E-A2 L OPP. HAND. — 8 - NORTH SIDE; 8 - SOUTH SIDE

(SHOWN AS A-2 ON SHEET #22)

FOR PIERS 5W, 2W, 2E, 6E - STRINGERS - S-4 - NORTH AND SOUTH SIDES



(REL. -5 6-2-60) (REL. 13 6/28) 18 - EXPANSION JOINT REINFORCEMENT ANGLES - E-A3 R AS SHOWN — 10 - NORTH AND CENTER; 8 - SOUTH SIDE

(REL. 5 6-2-60) (REL. 13 6/28) 18 - DO - E-A3 L OPP. HAND — 10 - NORTH AND CENTER; 8 - SOUTH SIDE

(SHOWN AS A-3 ON SHEET #22)

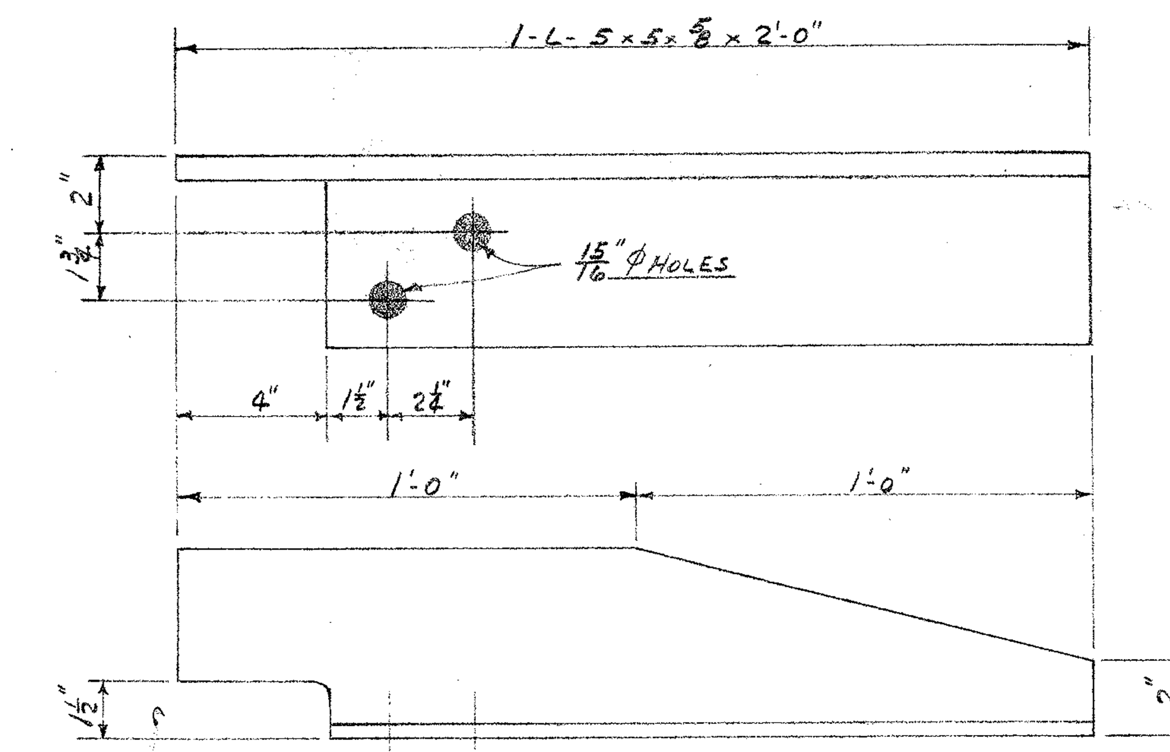
FOR PIERS "B" AND "E" - STRINGERS S-1 TO S-5 - NORTH AND SOUTH SIDES

FIELD LIST - FOR BOLTING THE FOLLOWING ANGLES TO END FLOOR BEAMS - E-A3 R+L, E-A4 R+L

- HIGH STRENGTH BOLTS - ⅞" ×
- DO - ⅞" ×
- DO - ⅞" ×
- DO - ⅞" ×

(HOLD) FIELD CHECK FOR LENGTH OF BOLTS AND NUMBER OF EACH REQ'D.

(HOLD) → 170 - SPECIAL WASHERS - ⅞"



(REL. -1 6-2-60) (REL. 1 6/28) 2 - EXPANSION JOINT REINFORCEMENT ANGLES - E-A4 R AS SHOWN — 1 - NORTH SIDE; 1 - SOUTH SIDE

(REL. 1 6-2-60) (REL. 1 6/28) 2 - DO - E-A4 L OPP. HAND — 1 - NORTH SIDE; 1 - SOUTH SIDE

(SHOWN AS A-4 ON SHEET #22)

FOR PIERS "B" AND "E" - STRINGERS S-6 - NORTH AND SOUTH SIDES

SCHEDULE OF ITEMS RELEASED TO SHOP

ITEM	REL. 6-2-60	REL. 6-28-60
E-P1	—	64
E-P2	—	16
E-P3	10	26
E-P4	1	3
E-A1 R	4	50
E-A1 L	4	50
E-A2 R	—	16
E-A2 L	—	16
E-A3 R	5	13
E-A3 L	5	13
E-A4 R	1	1
E-A4 L	1	1
H.S. BOLTS ¾"×2½"	40	335
SPECIAL WASHERS ¾"	80	670

FIELD NOTE

SEE GENERAL DRAWINGS - SHEET #22 FOR PLACEMENT DATA AND FIELD WELDING.

FIELD CUT HOLES THRU PLATES FOR SLAB REINFORCING STEEL.

FIELD LIST - FOR BOLTING THE FOLLOWING ANGLES TO STRINGERS - E-A1 RH, E-A2 RH, E-A3 R+L

(REL. 40 6-2-60) (REL. 335 6-28-60) 375 - HIGH STRENGTH BOLTS - ¾"×2½" — 215 -40 175 - NORTH AND CENTER; 160 - SOUTH

(REL. 80 6-2-60) (REL. 670 6-28-60) 750 - SPECIAL WASHERS ¾" — 430 -80 350 - NORTH AND CENTER; 320 - SOUTH

REF. DRAWINGS LAYOUT-DETAILS

REVISIONS	
1	6-21-60
2	6-28-60
3	
4	
5	

SUB 17 | PL | FL | PD | FD

STANDARD ANCHORS: NA-1 & NA-2, NA-24, NA-25 & NA-27, NA-4, NA-7 & NA-8, NA-6 & NA-28, NA-5 & NA-29

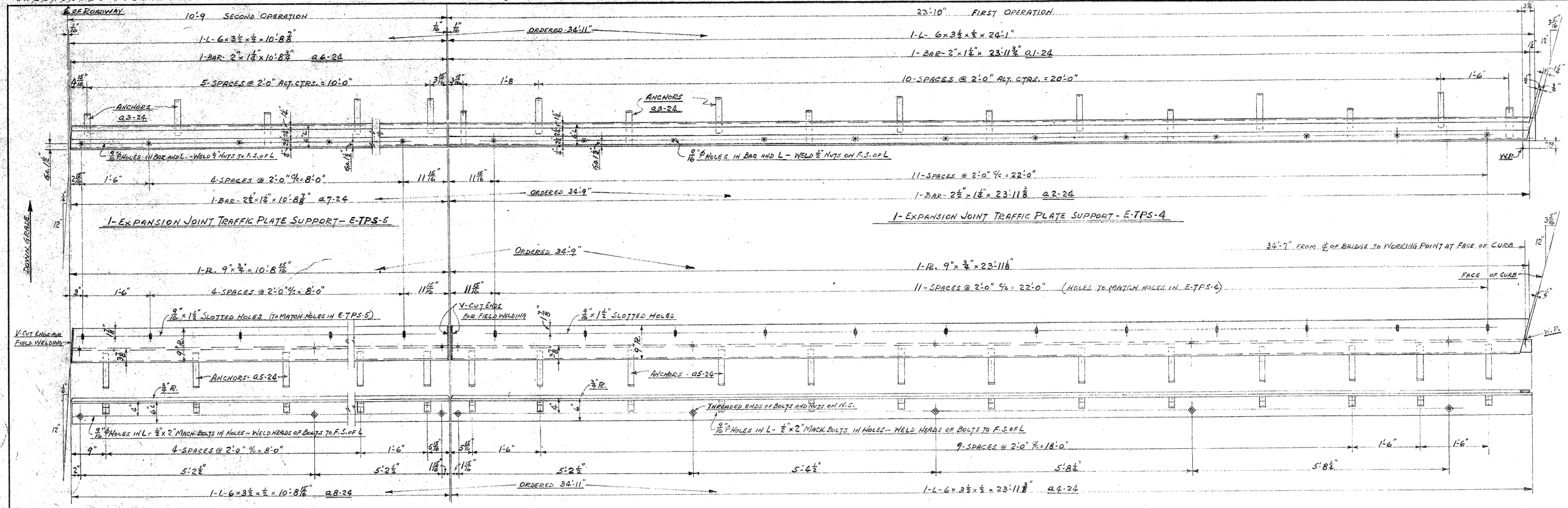
3	6/2	Cust	2	5/24	Cust
3	6/2	Shop	3	6/29	Shop
2	6/2	Cust	2	6/29	Cust
1	6/16	Cust	5	8/23	Cust

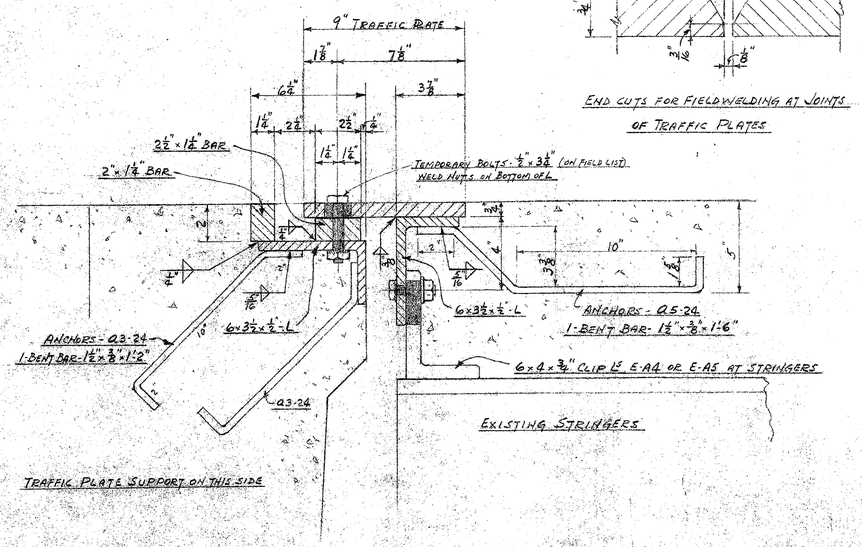
Date 6-1-60 — Drawn By S.E.M.

ART IRON & WIRE WORKS, INC.
FABRICATED - STEEL - WAREHOUSE
ORNAMENTAL METAL
TOLEDO — FORT WAYNE

Title REINFORCEMENT OF STRINGER CONNECTIONS AT EXPANSION JOINTS
Building ANTHONY WAYNE BRIDGE REPAIRS
Location
Architect SANZENBACHER, MILLER & BRIGHAM
Customer THE LATHROP CO.
Holes Except As Noted
Field Connections
Shop Paint NONE
Drawing Number 23X-R163
Shop Order Number 16317

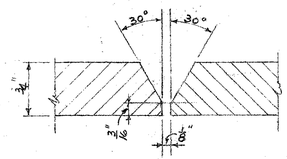
THE TOLEDO BLUE PRINT & PAPER CO. TOLEDO 11-59



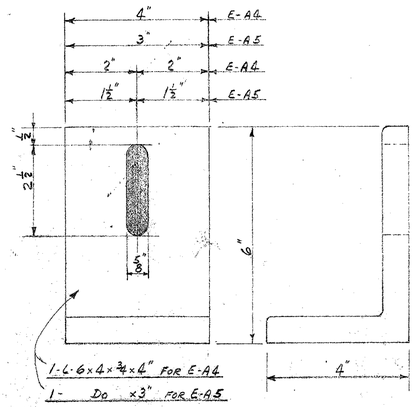


TRAFFIC PLATE SUPPORT ON THIS SIDE

DETAILED SECTION THRU TRAFFIC PLATE SUPPORTS AND TRAFFIC PLATES AT WEST ABUTMENT



END CUTS FOR FIELDWELDING AT JOINTS OF TRAFFIC PLATES



5-EXPANSION JOINT CLIP ANGLES - E-A4
3 Do - E-A5

TRAFFIC PLATES AND SUPPORTS SHOWN ON THIS DRAWING ARE FOR NORTH HALF OF WEST ABUTMENT.

SEE DRAWING 25X-R163 FOR CURB AND SIDEWALK PART OF THIS EXPANSION JOINT.

ERECTOR NOTE - SEE GENERAL DRAWINGS - SHEET #17 - FOR PLACEMENT DATA AND FIELD WELDING.

FIELD LIST
20 - MACH. BOLTS - ½" x 3½" (NO NUTS)
10 - STD. ½" WASHERS

REF. DRAWINGS LAYOUT-DETAILS

REVISIONS	
1	6-23-60
2	
3	
4	
5	

STANDARD ANCHORS: NA-1 & NA-2 | NA-24 | NA-25 & NA-27 | NA-4 | NA-7 & NA-8 | NA-6 & NA-28 | NA-5 & NA-29

SUB	PL	FL	PD	FD
19		X		

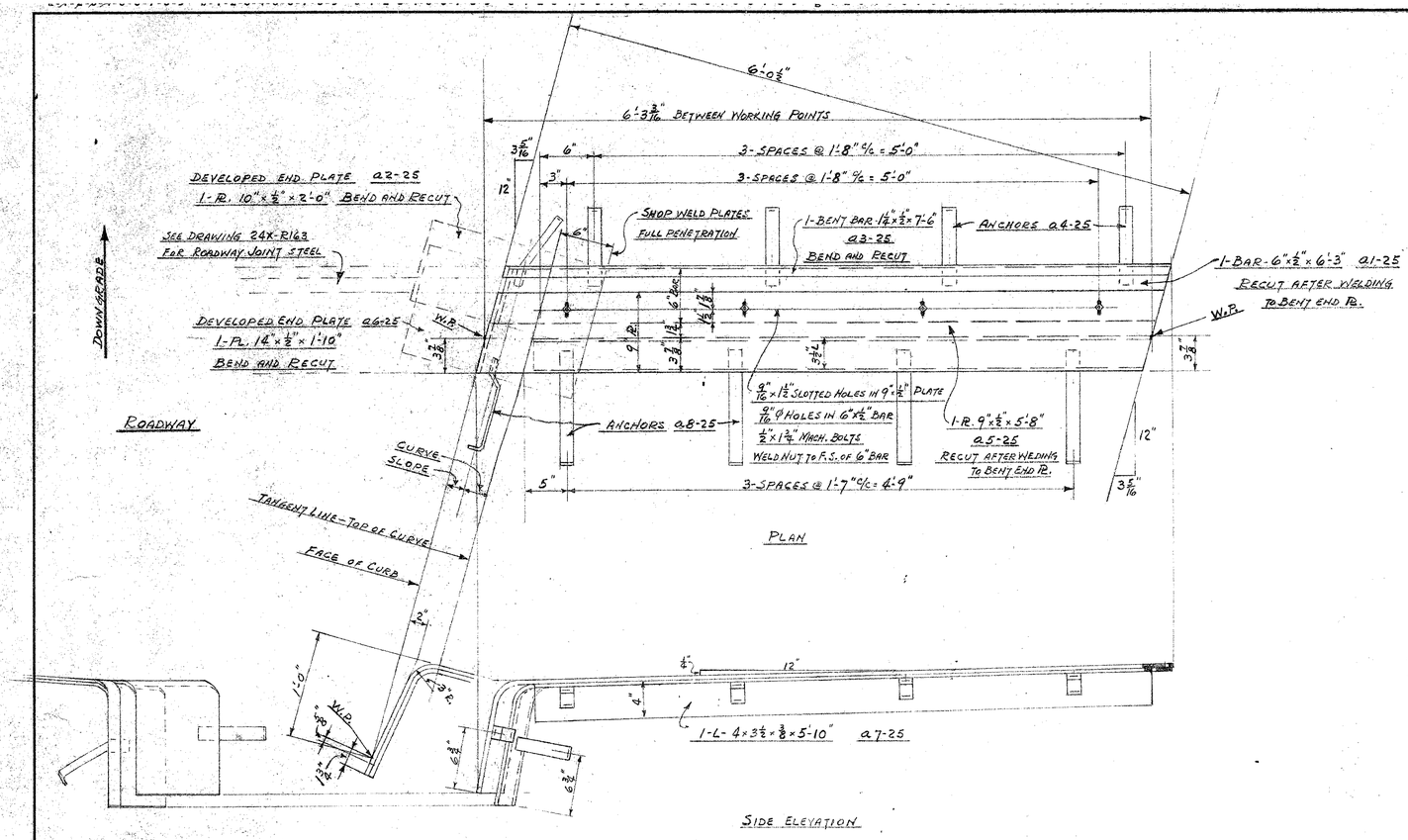
Date 6-16-60 Drawn By S.E.M.

4	9/10	Insp	5	8/9	Insp				
3	6/17	Shop							
1	6/21	Shop							
2	6/28	Corr							

ART IRON & WIRE WORKS, INC.
FABRICATED - STEEL - WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

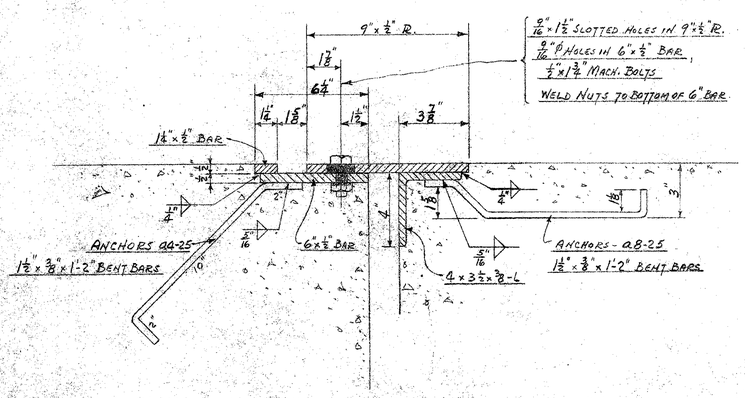
NORTH HALF OF WEST ABUTMENT

Title EXPANSION JOINT TRAFFIC PLATES AND SUPPORTS
Building ANTHONY WAYNE BRIDGE REPAIRS
Location
Architect SANZENBACHER, MILLER & BRIGHAM
Customer THE LATHROP CO.
Holes Except As Noted
Shop Point NONE
Field Connections
Drawing Number 24X-R163
Shop Order Number 16319

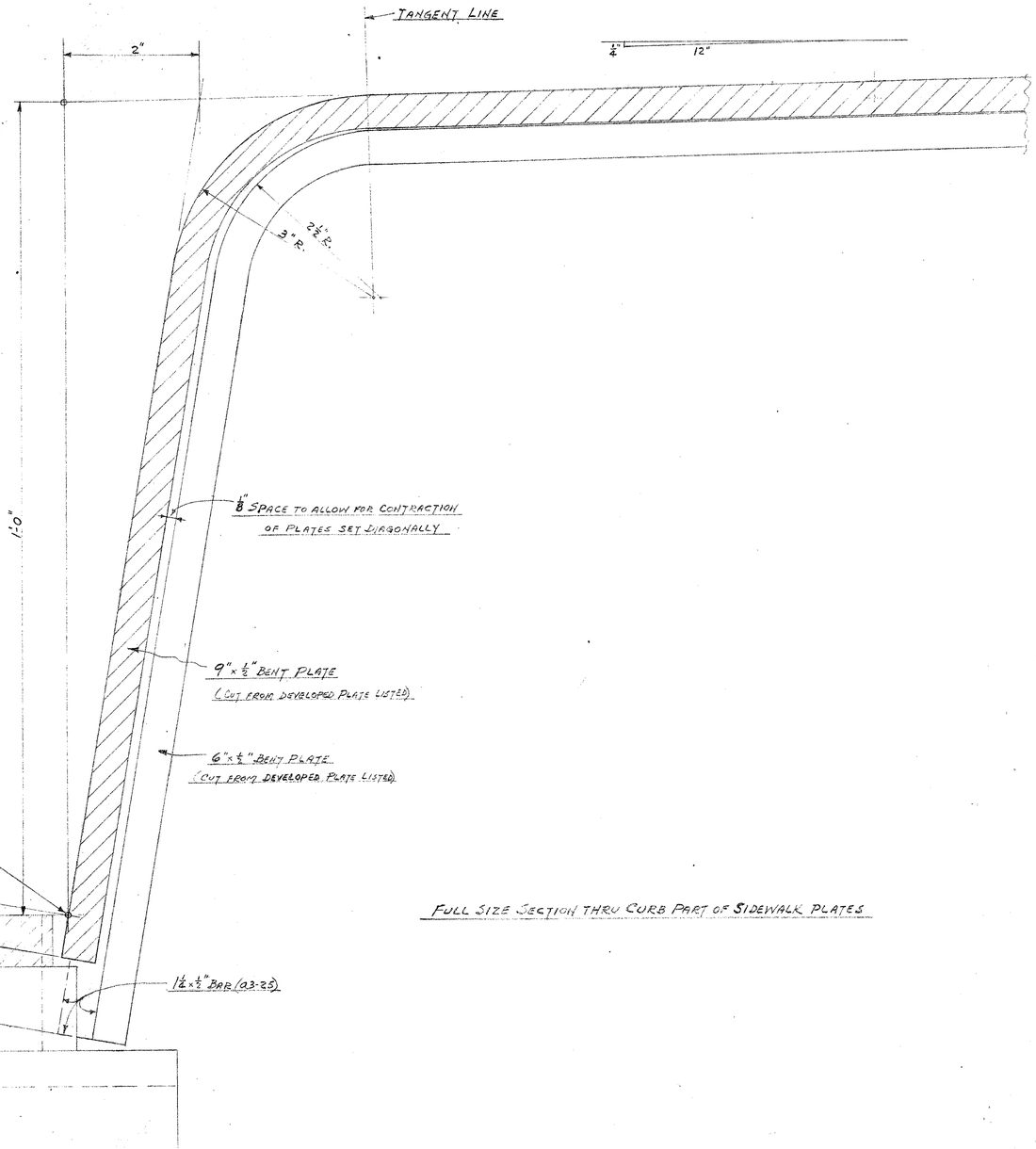


1-PAIR-EXPANSION JOINT SIDEWALK PLATES — E-SP-1

FOR WEST ABUTMENT - NORTH SIDE



SECTION THRU EXPANSION JOINT SIDEWALK PLATES



FULL SIZE SECTION THRU CURB PART OF SIDEWALK PLATES

REF. DRAWINGS LAYOUT-DETAILS

REVISIONS		
1		
2		
3		
4		
5		

SUB	PL	FL	PD	FD
19			X	

4	9/16	Final
3	6/19	Shop
2	6/24	Check
1	6/23	Final

STANDARD ANCHORS

NA-1 & NA-2 | NA-24 | NA-25 & NA-27 | NA-4

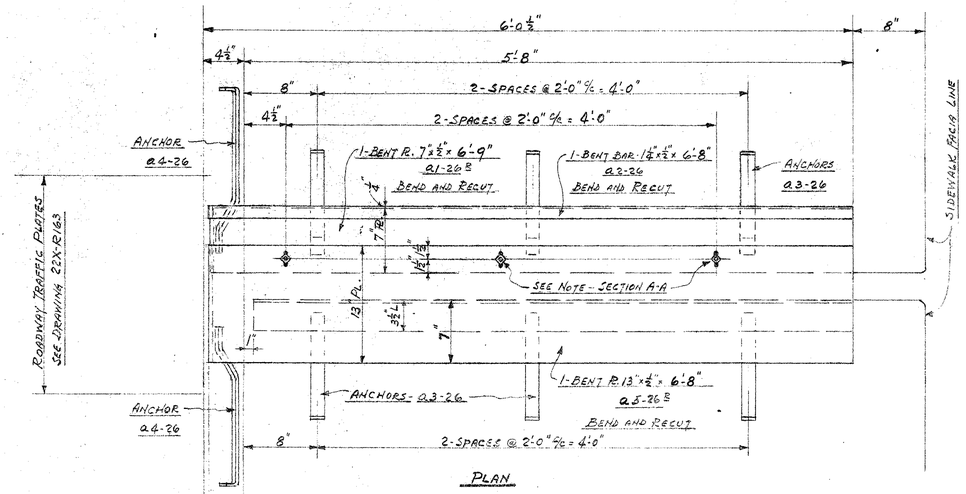
NA-7 & NA-8 | NA-6 & NA-28 | NA-5 & NA-29

Date 6-16-60 | Drawn By S.E.M.

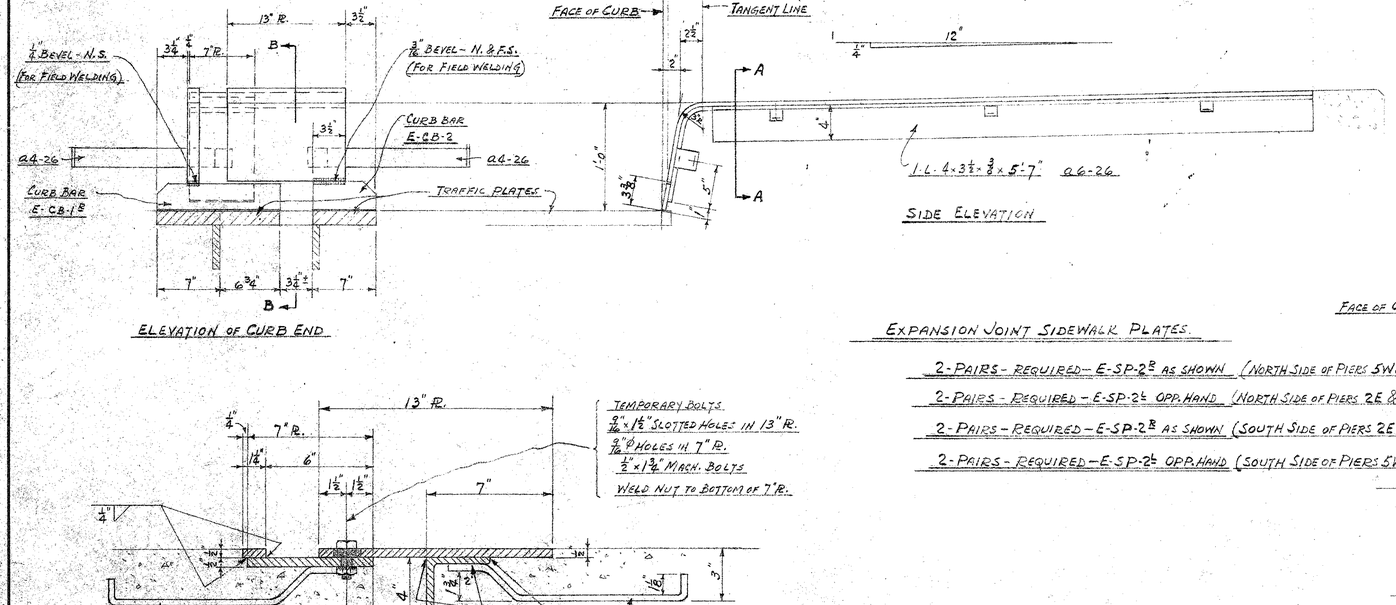
ART IRON & WIRE WORKS, INC.
FABRICATED — STEEL — WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

Title EXPANSION JOINT SIDEWALK PLATES — NORTH SIDE OF WEST ABUTMENT
Building ANTHONY WAYNE BRIDGE REPAIRS
Location
Architect SANZENBACHER, MILLER & BRIGHAM
Customer THE LATHROP CO.
Holes ~~Comp~~ As Noted
Field Connections
Shop Point NONE
Drawing Number 25X-R163
Shop Order Number 16319

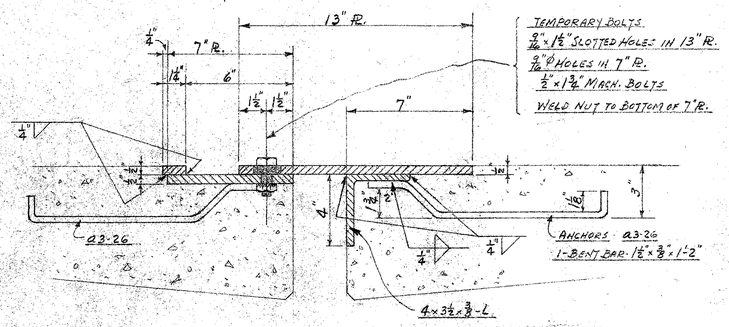
THE TOLEDO BLUE PRINT & PAPER CO. 3000 11-59



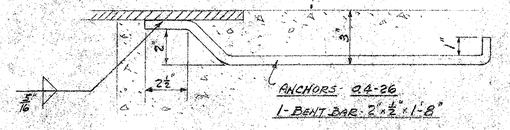
PLAN



ELEVATION OF CURB END



SECTION A-A



ANCHORS AT CURB END

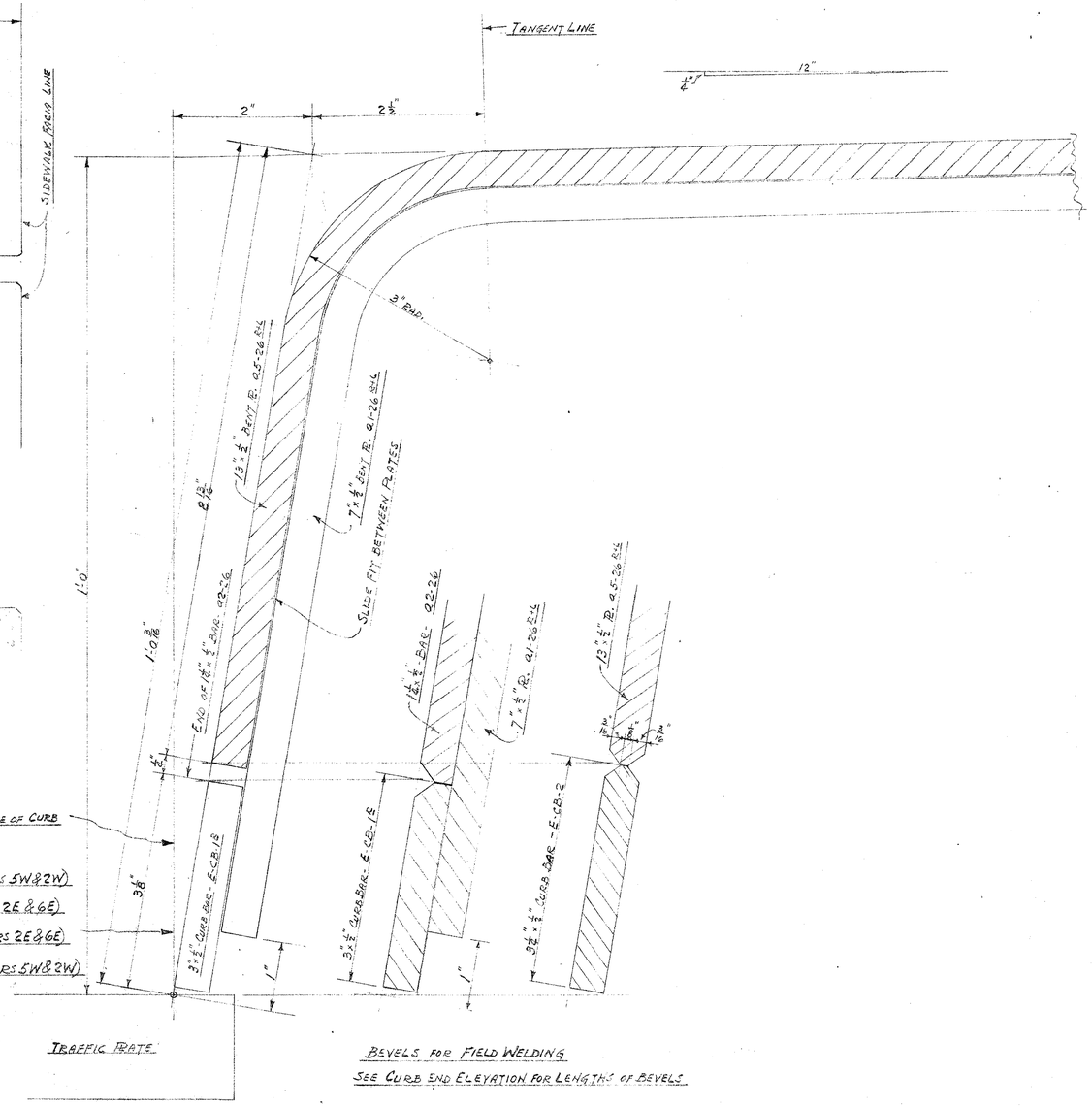
EXPANSION JOINT SIDEWALK PLATES.

2-PAIRS - REQUIRED - E-SP-2 B AS SHOWN (NORTH SIDE OF PIERS 5W & 2W)

2-PAIRS - REQUIRED - E-SP-2 L OPP. HAND (NORTH SIDE OF PIERS 2E & 6E)

2-PAIRS - REQUIRED - E-SP-2 B AS SHOWN (SOUTH SIDE OF PIERS 2E & 6E)

2-PAIRS - REQUIRED - E-SP-2 L OPP. HAND (SOUTH SIDE OF PIERS 5W & 2W)

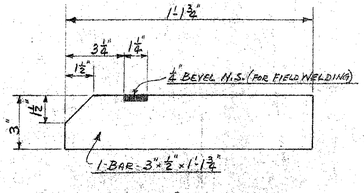


BEVELS FOR FIELD WELDING

SEE CURB END ELEVATION FOR LENGTHS OF BEVELS

FULL SIZE SECTION THRU SIDEWALK PLATES AT CURB END

SECTION B-B



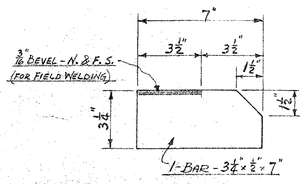
EXPANSION JOINT CURB BARS

2-REQUIRED - E-CB-1 B AS SHOWN - (NORTH SIDE OF PIERS 5W & 2W)

2-REQUIRED - E-CB-1 L OPP. HAND (NORTH SIDE OF PIERS 2E & 6E)

2-REQUIRED - E-CB-1 B AS SHOWN (SOUTH SIDE OF PIERS 2E & 6E)

2-REQUIRED - E-CB-1 L OPP. HAND (SOUTH SIDE OF PIERS 5W & 2W)



EXPANSION JOINT CURB BARS

2- REQ'D. - E-CB-2 (NORTH SIDE OF PIERS 5W & 2W)

2- " - E-CB-2 (NORTH SIDE OF PIERS 2E & 6E)

2- " - E-CB-2 (SOUTH SIDE OF PIERS 2E & 6E)

2- " - E-CB-2 (SOUTH SIDE OF PIERS 5W & 2W)

ERECTOR NOTE - SEE GENERAL DRAWINGS - SHEET #19 FOR PLACEMENT DATA AND FIELD WELDING.

REVISIONS
1
2
3
4
5
ER

SUB	PL	FL	PD	FD
19			X	

STANDARD ANCHORS

NA-1 & NA-2 | NA-24 | NA-25 & NA-27 | NA-4

NA-7 & NA-8 | NA-6 & NA-28 | NA-5 & NA-29

Date 6-17-60 | Drawn By S.E.M.

4	6/15	List
3	4/28	Shop
2	7/8	List
1	12/13	List

REF. DRAWINGS LAYOUT-DETAILS

ART IRON & WIRE WORKS, INC.
FABRICATED - STEEL - WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

North and South Sides of Piers 5W, 2W, 2E, 6E

Title EXPANSION JOINT - SIDEWALK PLATES

Building ANTHONY WAYNE BRIDGE PIERS

Location

Architect SAN'ENBACHER, MILLER & BRIGHAM

Customer THE LATHROP CO.

Holes Except As Noted

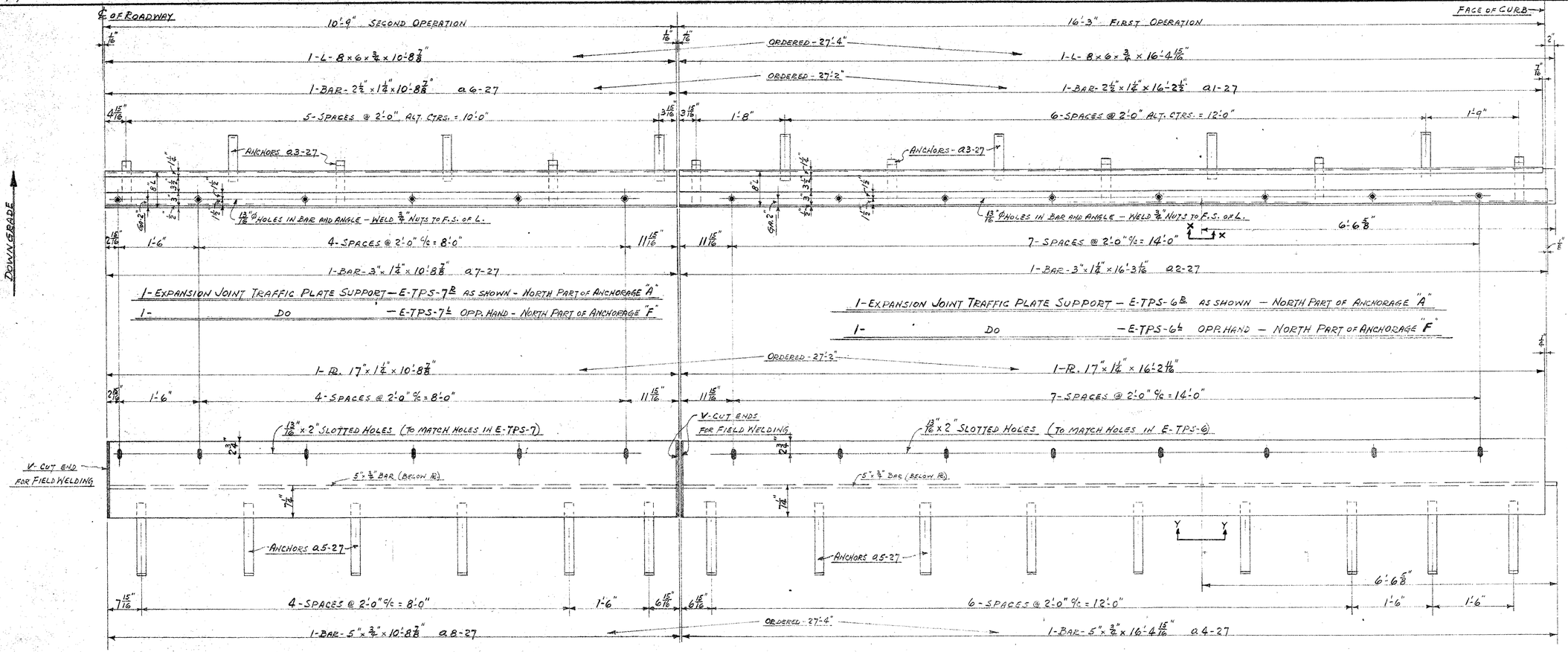
Field Connections

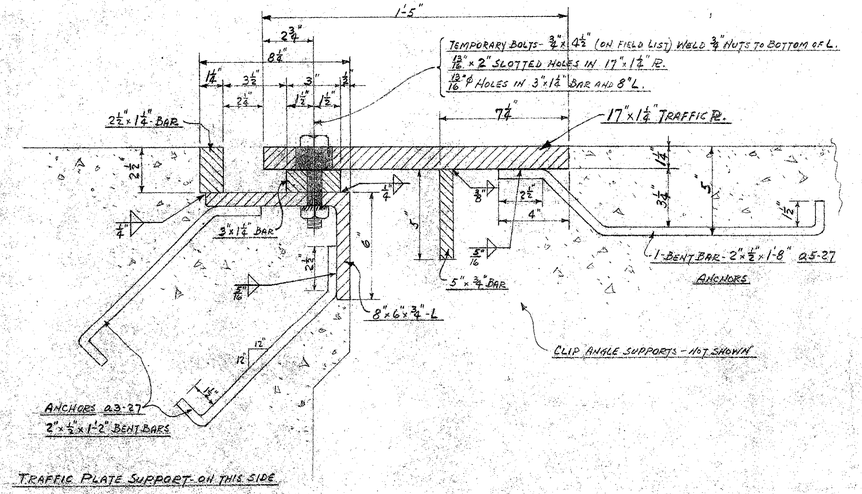
Drawing Number 26X-R163

Shop Paint NONE

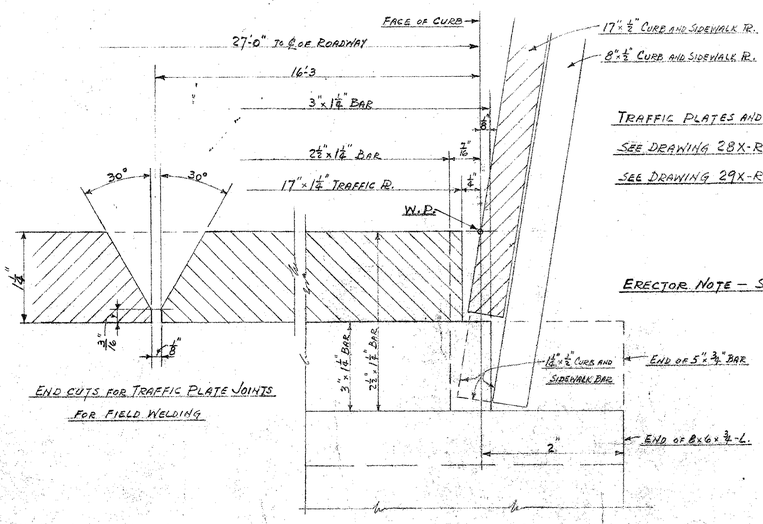
Shop Order Number 16319

THE TOLEDO BLUE PRINT & PAPER CO. 3000 11-59





DETAILED SECTION THRU TRAFFIC PLATE SUPPORTS AND TRAFFIC PLATES AT EXPANSION JOINTS OF ANCHORAGES "A" AND "F"



END CUTS FOR TRAFFIC PLATE JOINTS FOR FIELD WELDING

CURB END OF TRAFFIC PLATES AND SUPPORTS

TRAFFIC PLATES AND SUPPORTS SHOWN ON THIS DRAWING ARE FOR NORTH HALF OF ANCHORAGES "A" AND "F"

SEE DRAWING 28X-R163 FOR CURB AND SIDEWALK PART OF THIS EXPANSION JOINT.

SEE DRAWING 29X-R163 FOR CLIP ANGLE SUPPORTS FOR THESE TRAFFIC PLATES AND ALSO AT NORTH HALF OF PIERS 5W, 2W, 2E AND 6E

ERECTOR NOTE - SEE GENERAL DRAWINGS - SHEET #18 FOR PLACEMENT DATA AND FIELD WELDING

30 FIELD LIST
15 - MACHINE BOLTS - 3/8" x 4 1/2" (NO NUTS)

REF. DRAWINGS LAYOUT-DETAILS

ELEV. X-X
ELEV. Y-Y

REVISIONS	
1	7-28-60
2	
3	
4	
5	

SUB	PL	FL	PD	FD
19			X	

STANDARD ANCHORS

NA-1 & NA-2 | NA-24 | NA-25 & NA-27 | NA-4 | NA-7 & NA-8 | NA-6 & NA-28 | NA-5 & NA-29

Date 6-23-60
Drawn By S.E.M.

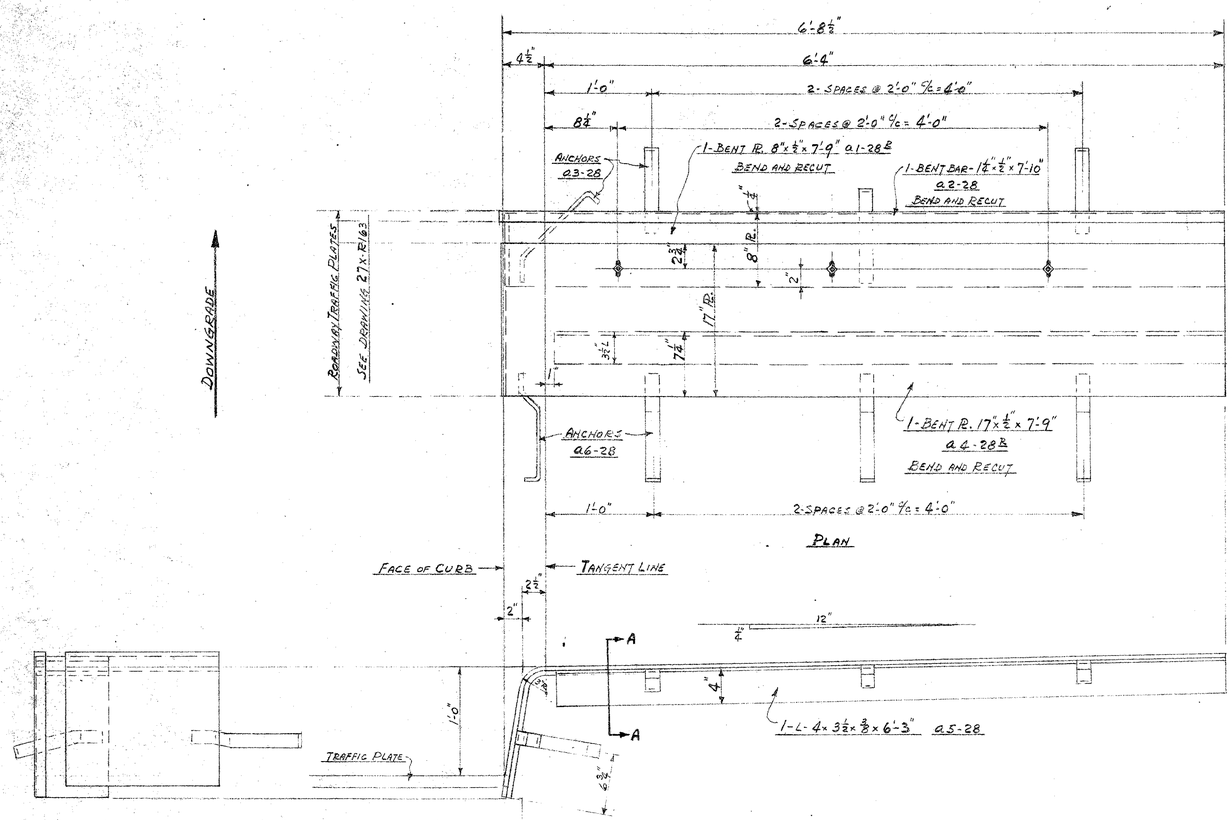
5	3/4	Cast
3	7/8	Shop
2	7/8	Cast
2	1 1/8	Field

ART IRON & WIRE WORKS, INC.

FABRICATED - STEEL - WAREHOUSE ORNAMENTAL METAL

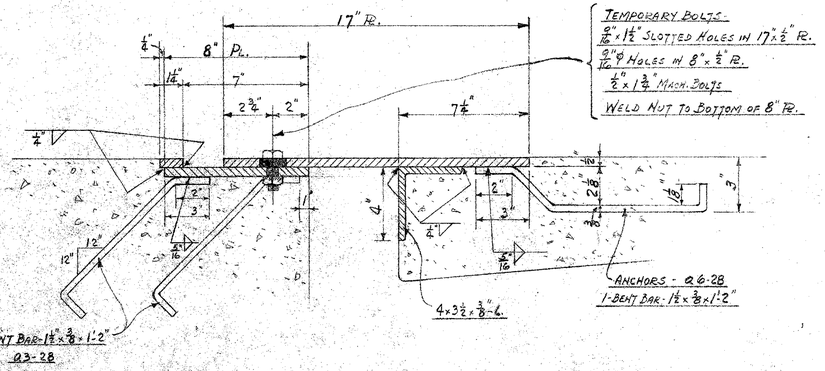
TOLEDO FORT WAYNE

Title	NORTH HALF OF ANCHORAGES "A" AND "F" EXPANSION JOINT TRAFFIC PLATES AND SUPPORTS
Building	ANTHONY WAYNE BRIDGE REPAIRS
Location	
Architect	SANZENBACHER, MILLER & BRIGHAM
Customer	THE LATHROP CO.
Holes Shop As Noted	Shop Paint NONE
Field Connections	
Drawing Number	27X-R163
Shop Order Number	16319

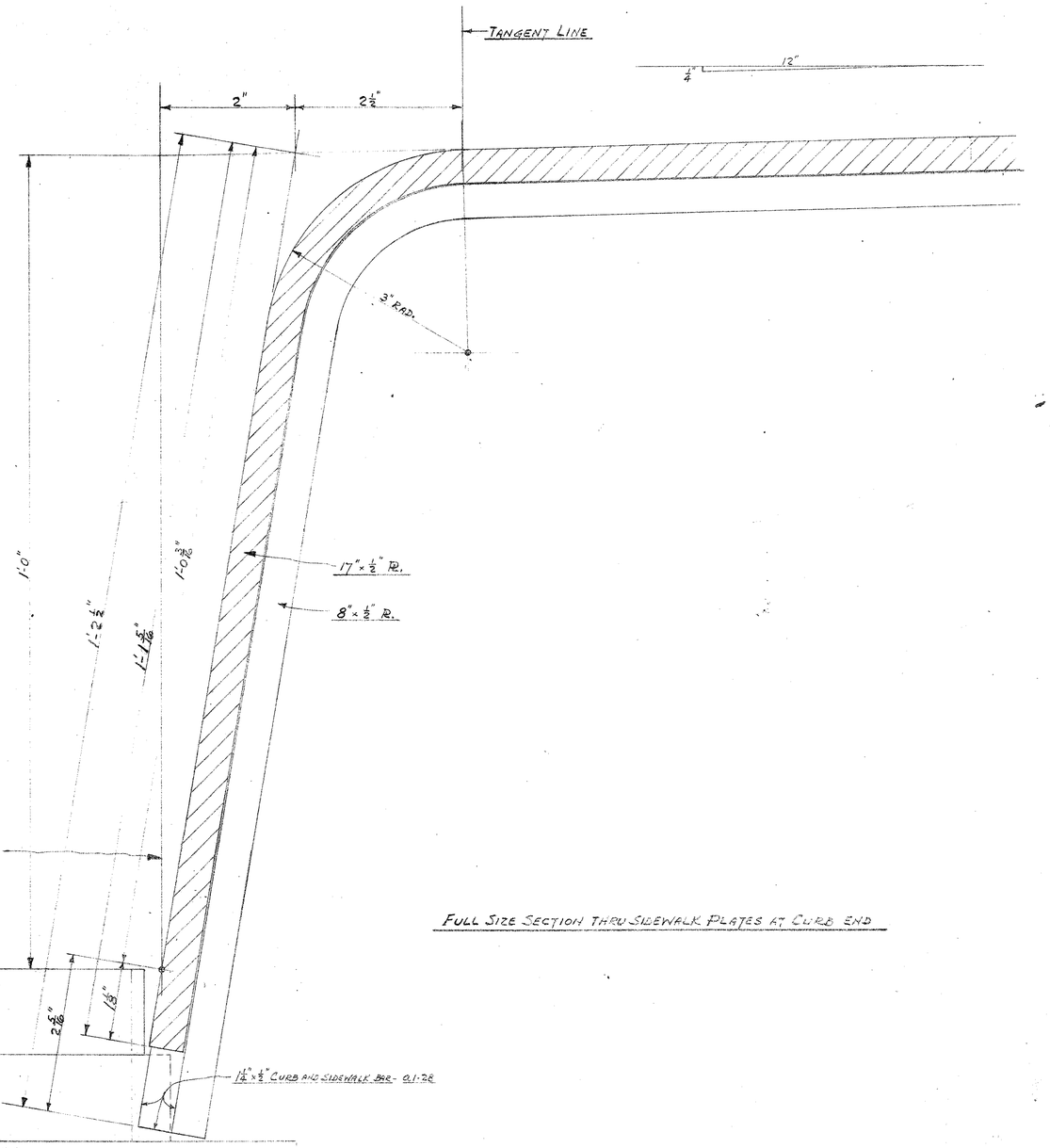


ELEVATION OF CURB END

SIDE ELEVATION



SECTION A-A



FULL SIZE SECTION THRU SIDEWALK PLATES AT CURB END

ERECTOR NOTE — SEE GENERAL DRAWINGS — SHEET #18 FOR PLACEMENT DATA AND FIELD WELDING.

EXPANSION JOINT SIDEWALK PLATES

1 - PAIR - REQUIRED - E-SP-3 B - AS SHOWN — NORTH PART OF ANCHORAGE "A"

1 - PAIR - REQUIRED — E-SP-3 A - OPP. HAND — NORTH PART OF ANCHORAGE "F"

1 - PAIR - REQUIRED — E-SP-3 B - AS SHOWN — SOUTH PART OF ANCHORAGE "F"

1 - PAIR - REQUIRED — E-SP-3 A - OPP. HAND — SOUTH PART OF ANCHORAGE "A"

REF. DRAWINGS LAYOUT-DETAILS

REVISIONS			
1			
2			
3			
4			
5			ER

SUB	PL	FL	PD	FD
19			X	

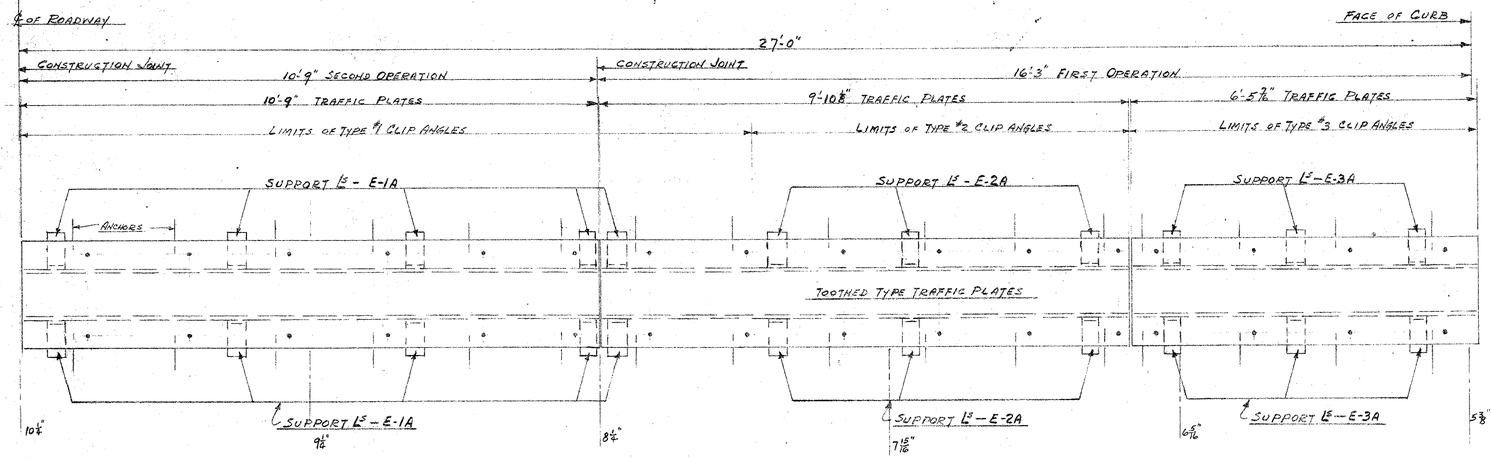
3	6/28	Shop
2	6/28	Cust
1	5/28	Cust
0	4/28	Cust

STANDARD ANCHORS

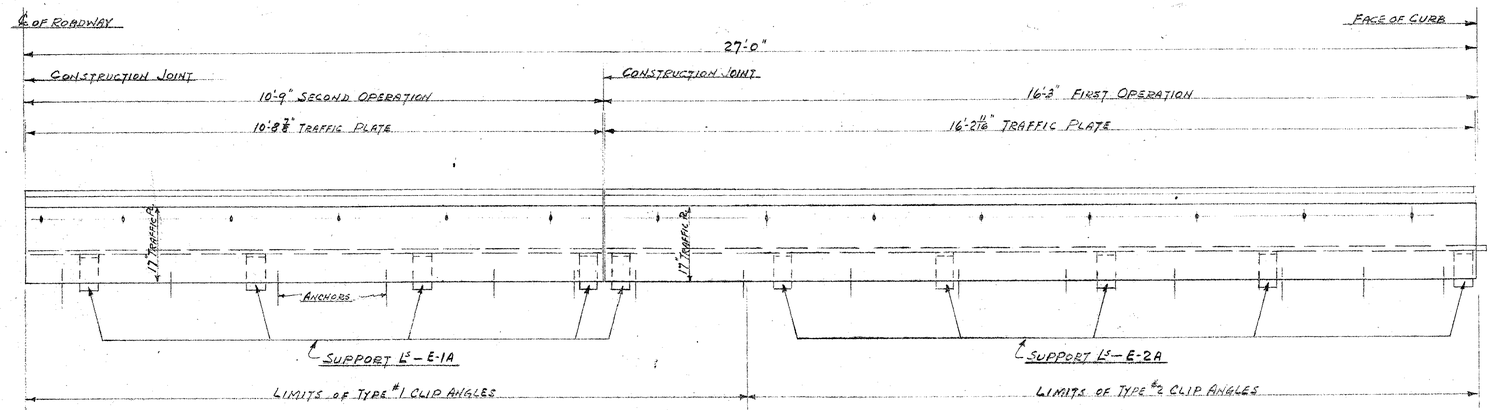
ART IRON & WIRE WORKS, INC.
FABRICATED — STEEL — WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

Title EXPANSION JOINT - SIDEWALK AND CURB PLATES
ANCHORAGES "A" AND "F"
Building ANTHONY WAYNE BRIDGE REPAIRS
Location
Architect SANZENBACHER, MILLER & BRIGHAM
Customer THE LATHROP CO.
Holes Except As Noted
Field Connections
Date 6-27-60
Drawn By S.E.M.
Shop Paint NONE
Drawing Number 28X-R163
Shop Order Number 16319

a-1-2-3-4-5-6-7-8-9 b-1-2-3-4-5-6-7-8-9 c-1-2-3-4-5-6-7-8-9 d-1-2-3-4-5-6-7-8-9 e-1-2-3-4-5-6-7-8-9 f-1-2-3-4-5-6-7-8-9 h-1-2-3-4-5-6-7-8-9 k-1-2-3-4-5-6-7-8-9
THE TOLEDO BLUE PRINT & PAPER CO. 9/66 11-8



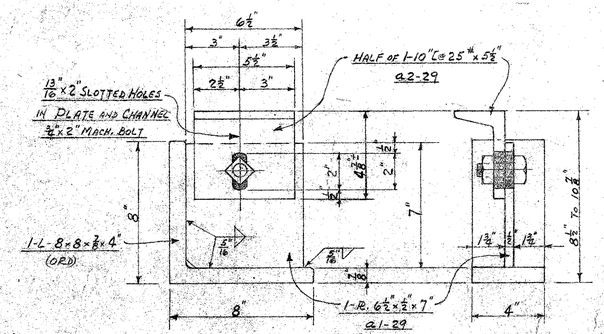
LAYOUT FOR SUPPORTING CLIP ANGLES FOR EXPANSION JOINT TRAFFIC PLATES — FOR NORTH HALF OF PIERS 5W, 2W, 2E AND 6E



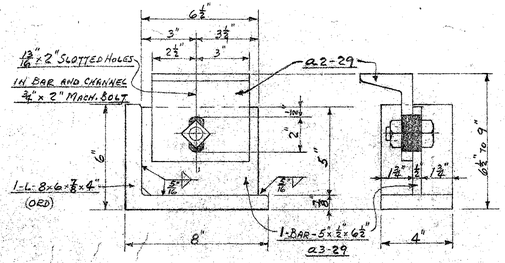
LAYOUT FOR SUPPORTING CLIP ANGLES FOR EXPANSION JOINT TRAFFIC PLATES — FOR NORTH HALF OF ANCHORAGE "A" AS SHOWN

DO DO — FOR NORTH HALF OF ANCHORAGE "F" OPP. HAND

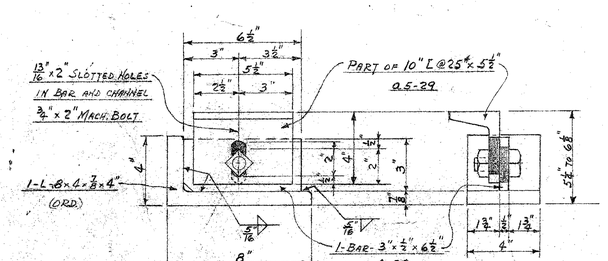
ERECTOR NOTE— SEE GENERAL DRAWINGS - SHEETS #18 AND #19 FOR PLACEMENT DATA AND FIELD WELDING.



50 - SUPPORT ASSEMBLIES — E-1A



34 — SUPPORT ASSEMBLIES — E-2A



24 - SUPPORT ASSEMBLIES — E-3A

REF. DRAWINGS LAYOUT-DETAILS

REVISIONS					
1					
2					
3					
4					
5					ER
SUB	PL	FL	PD	FD	
19			X		
5	9/24	Cust	5	8/20	Cust
3	9/28	Shop			
2	9/15	Job			
2	9/21	Cust			

STANDARD ANCHORS

NA-1 & NA-2 NA-24 NA-25 & NA-27 NA-4

NA-7 & NA-8 NA-6 & NA-28 NA-5 & NA-29

Date 6-25-60 Drawn By S.E.M.

ART IRON & WIRE WORKS, INC.
FABRICATED — STEEL — WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

Title ANCHORAGE A AND F AND PIERS 5W, 2W, 2E, & 6E CLIP ANGLE ASSEMBLY FOR SUPPORTING TRAFFIC PLATES
Building ANTHONY WAYNE BRIDGE REPAIRS
Location
Architect SANZENBACHER, MILLER & BRIGHAM
Customer THE LATHROP CO.
Holes ~~Except~~ As Noted
Shop Paint NONE
Field Connections
Drawing Number 29X-R163
Shop Order Number 16319

8-7-6-5-4-3-2-1-8-9 D-7-6-5-4-3-2-1-8-9 C-7-6-5-4-3-2-1-8-9 B-7-6-5-4-3-2-1-8-9 A-7-6-5-4-3-2-1-8-9 H-7-6-5-4-3-2-1-8-9 K-7-6-5-4-3-2-1-8-9
THE TOLEDO BLUE PRINT & PAPER CO. 3-00 11-98

FACE OF CURB — ℄ OF ROADWAY

16'-3" FIRST OPERATION — ORDERED 27'-4" — 10'-9" SECOND OPERATION

1-L-6×3½×½×16'-4 15/16" — 1-L-6×3½×½×10'-8 7/8"

1-BAR-2"×1¼"×16'-2 9/16" a1-30 — 1-BAR-2"×1¼"×10'-8 7/8" a5-30

ANCHORS FOR E-TPS-8 — 11" — 1'-6" — 6-SPACES @ 2'-0" ℄ = 12'-0" — 1'-6" — 4-SPACES @ 2'-0" ℄ = 8'-0" — ANCHORS FOR E-TPS-9

ANCHORS FOR E-TPS-10 — 11" — 1'-6" — 6-SPACES @ 2'-0" ALT. CTRS. = 12'-0" — 1'-6" — 4-SPACES @ 2'-0" ALT. CTRS. = 8'-0" — ANCHORS FOR E-TPS-11

ANCHORS a3-30 FOR E-TPS-8 — ANCHORS a4-30 FOR E-TPS-10 — ANCHORS a3-30 FOR E-TPS-9 — ANCHORS a4-30 FOR E-TPS-11

9/16"ø HOLES IN BAR AND ANGLE — WELD ½" NUTS TO F.S. OF L

SIDEWALK AND CURB PLATES FOR THESE EXPANSION JOINTS ARE DETAILED ON DRAWING 31X-R163

7-SPACES @ 2'-0" ℄ = 14'-0" — 4-SPACES @ 2'-0" ℄ = 8'-0" — 1'-6"

ORDERED 27'-2"

1-BAR-2½"×1½"×16'-3 13/16" a2-30 — 1-BAR-2½"×1½"×10'-8 7/8" a6-30

6'-6 5/8"

4-EXPANSION JOINT TRAFFIC PLATE SUPPORTS — E-TPS-8 FOR NORTH PART OF PIERS 8E, 9E, 11E, 13E

1- DO — E-TPS-10 FOR NORTH PART OF EAST ABUTMENT

(SUPPORTS ARE ALIKE EXCEPT FOR ANCHORS)

4-EXPANSION JOINT TRAFFIC PLATE SUPPORTS — E-TPS-9 FOR NORTH PART OF PIERS 8E, 9E, 11E, 13E

1- DO — E-TPS-11 FOR NORTH PART OF EAST ABUTMENT

(SUPPORTS ARE ALIKE EXCEPT FOR ANCHORS)

2½"×1½" BAR — 6×3½×½-L — NOTCH-L FIELD WELD TOGETHER AFTER SETTING TO PROPER ELEVATION

ELEVATION X-X

ORDERED 27'-2"

1-PL. 9"×¾"×16'-2 11/16" — 1-PL. 9"×¾"×10'-8 7/8"

7-SPACES @ 2'-0" ℄ = 14'-0" (HOLES TO MATCH HOLES IN E-TPS-8 AND E-TPS-10) — 4-SPACES @ 2'-0" ℄ = 8'-0" — 1'-6"

V-CUT ENDS OF PLS. FOR FIELD WELDING

9/16"×1½" SLOTTED HOLES — 9/16"×1½" SLOTTED HOLES - TO MATCH HOLES IN E-TPS 9 & E-TPS-11

V-CUT END OF PL. FOR FIELD WELDING

ANCHORS a8-30 — ANCHORS a8-30

¾" PL. — THREADED END OF BOLTS AND NUTS ON N.S. — NOTCH L: FIELD WELD TOGETHER

9/16"ø HOLES IN L - ½"×2" MACH. BOLTS IN HOLES - WELD HEADS OF BOLTS TO F.S. OF L

6-SPACES @ 2'-0" ℄ = 12'-0" — 4-SPACES @ 2'-0" ℄ = 8'-0"

5'-4½" — 5'-4½" — 5'-2½" — 5'-2½"

1-L-6×3½×½×16'-4 15/16" a7-30 — ORDERED 27'-0" — 1-L-6×3½×½×10'-8 7/8" a9-30

CURB PL.

5-EXPANSION JOINT TRAFFIC PLATES — E-TP-8 FOR NORTH PART OF PIERS 8E, 9E, 11E, 13E AND EAST ABUTMENT

5-EXPANSION JOINT TRAFFIC PLATES — E-TP-9 FOR NORTH PART OF PIERS 8E, 9E, 11E, 13E AND EAST ABUTMENT

ERECTOR NOTE — SEE GENERAL DRAWINGS - SHEETS #15 AND #16 FOR PLACEMENT DATA AND FIELD WELDING.

FACE OF CURB — 27'-0" TO ℄ OF ROADWAY — 2½"×1½" BAR — 2"×1½" BAR — 9"×¾" TRAFFIC PL. — W.P. — 30° — 2" — 1½" — END OF 6×3½×½-L

END CUTS FOR TRAFFIC PLATE JOINTS FOR FIELD WELDING

EAST — 9" TRAFFIC PLATE — TEMPORARY BOLTS - ¾"×3¾" (ON FIELD LIST) WELD ½" NUTS TO BOTTOM OF L — 2½"×1½" BAR — 2"×1½" BAR — 1-BENT BAR-1½"×⅜"×1'-6" ANCHORS a8-30 — 6×3½×½-L — 1-BENT BAR-1½"×⅜"×1'-6" ANCHORS a3-30 ON E-TPS-8 & E-TPS-9 — 6×4×⅜" CLIP ANGLES E-A4 OR E-A5 AT STRINGERS — EXISTING STRINGERS

SECTION THRU TRAFFIC PLATES WITH SUPPORTS - E-TPS-8 AND E-TPS-9 AT NORTH PART OF PIERS 8E, 9E, 11E, 13E

TRAFFIC PLATES - SAME AS OTHER DETAILS
TRAFFIC PLATE SUPPORTS - SAME AS OTHER DETAILS - EXCEPT ANCHORS

1-BENT BAR-1½"×⅜"×1'-2 — ANCHORS a4-30 ALT. CTRS. ON E-TPS-10 AND E-TPS-11 — NOTCH AT E.S. FOR BOLT HEADS

TRAFFIC PLATE SUPPORTS - E-TPS-10 AND E-TPS-11 AT NORTH PART OF EAST ABUTMENT

4" E-A4 — 3" E-A5 — 2" E-A4 — 1½" E-A5 — 1-L-6×4×⅜×4" FOR E-A4 — 1- DO ×3" E-A5 — ⅝"×2½" SLOTTED HOLE

FIELD LIST
75-MACH. BOLTS - ⅝"×3¼" (NO NUTS)
40-STD. ½" WASHERS

20-EXPANSION JOINT CLIP ANGLES - E-A4
15- DO - E-A5

REF. DRAWINGS LAYOUT-DETAILS

REVISIONS					
1	7-28-60				
2					
3					
4					
5					ER

SUB	PL	FL	PD	FD
19			X	

5	9/6	Area	
3	9/6	Shop	
2	9/21	Cust	
3	9/29	Shop	
2	10/3	Cust	
4	10/4	Cust	

STANDARD ANCHORS

NA-1 & NA-2 — NA-24 — NA-25 & NA-27 — NA-4 — NA-7 & NA-8 — NA-6 & NA-28 — NA-5 & NA-29

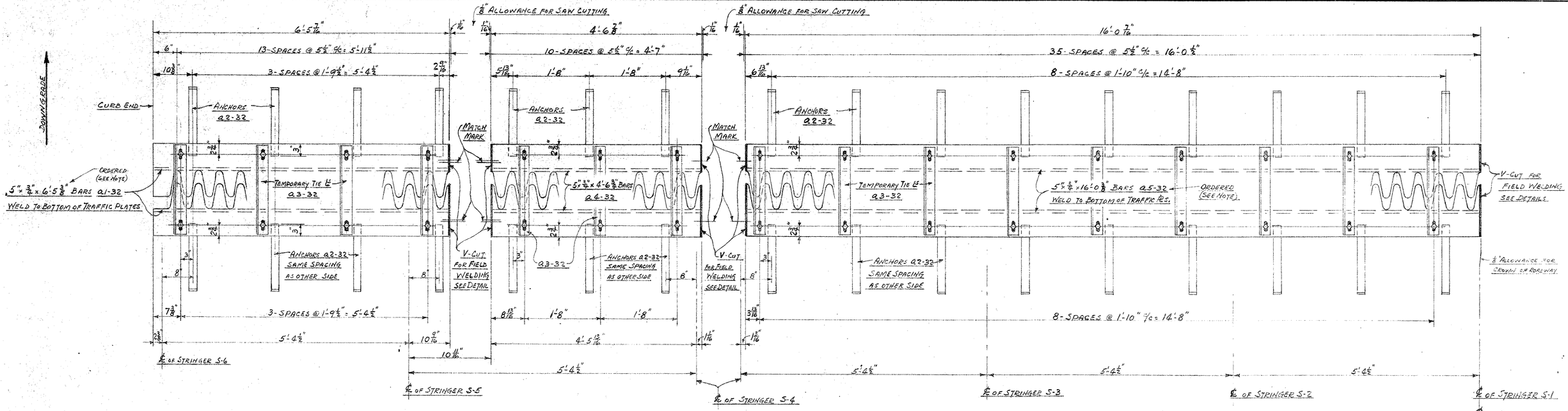
Date 7-6-60 — Drawn By S.E.M.

ART IRON & WIRE WORKS, INC.
FABRICATED — STEEL — WAREHOUSE
ORNAMENTAL METAL
TOLEDO — FORT WAYNE

Title: NORTH HALF OF PIERS 8E, 9E, 11E, 13E & EAST ABUTMENT — EXPANSION JOINT TRAFFIC PLATES AND SUPPORTS
Building: ANTHONY WAYNE BRIDGE REPAIRS
Location:
Architect: SANZENBACHER, MILLER & BRIGHAM
Customer: THE LATHROP CO.
Holes Punched As Noted
Field Connections
Drawing Number: 30X-R163
Shop Paint: NONE
Shop Order Number: 16319

a-1-2-3-4-5-6-7-8-9 b-1-2-3-4-5-6-7-8-9 c-1-2-3-4-5-6-7-8-9 d-1-2-3-4-5-6-7-8-9 e-1-2-3-4-5-6-7-8-9 g-1-2-3-4-5-6-7-8-9 h-1-2-3-4-5-6-7-8-9 k-1-2-3-4-5-6-7-8-9

THE TOLEDO BLUE PRINT & PAPER CO. 3000 11-64



EXPANSION JOINT TRAFFIC PLATES FOR SOUTH PART OF BRIDGE ROADWAY

3 - PAIR — E-TP-12 ℄ AS SHOWN — PIERS "B" AND SW, 2W

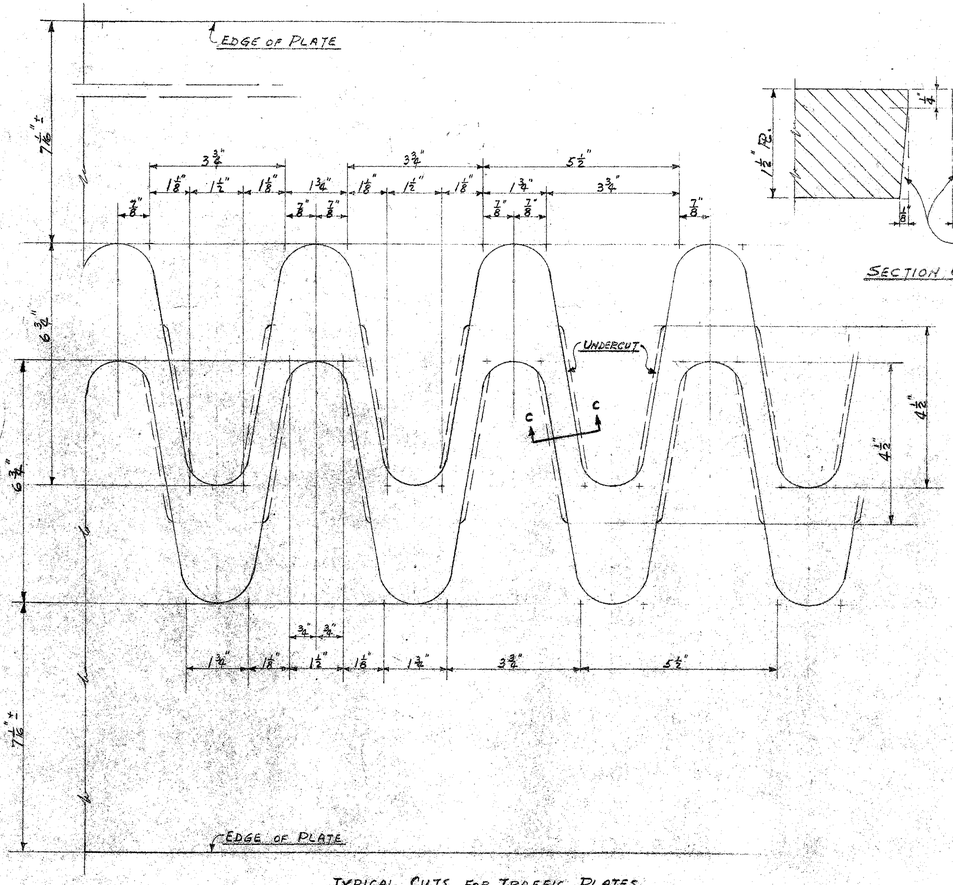
3 - PAIR — E-TP-12 ℄ - OPP. HAND — PIERS "E" AND 2E, 6E

3 - PAIR — E-TP-11 ℄ AS SHOWN — PIERS "B" AND SW, 2W

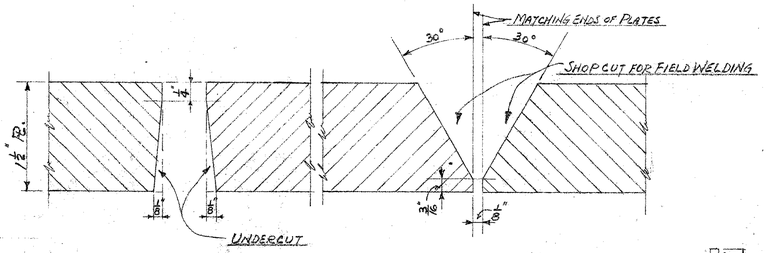
3 - PAIR — E-TP-11 ℄ OPP. HAND — PIERS "E" AND 2E, 6E

3 - PAIR — E-TP-10 ℄ AS SHOWN - PIERS "B" AND SW, 2W

3 - PAIR — E-TP-10 ℄ OPP. HAND - PIERS "E" AND 2E, 6E

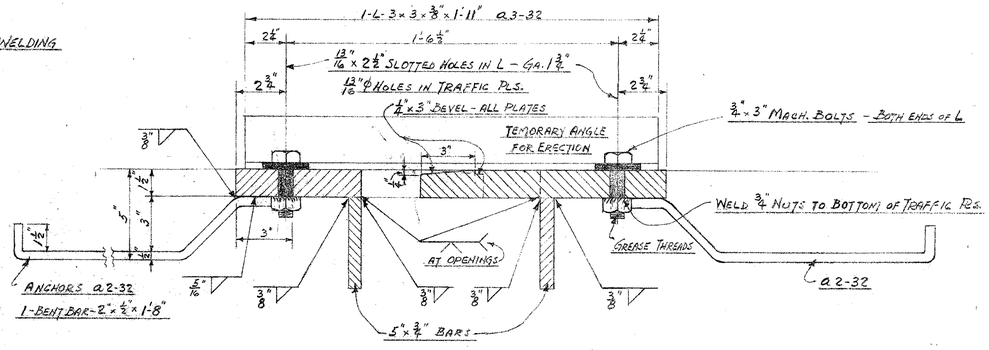


TYPICAL CUTS FOR TRAFFIC PLATES.



SECTION C-C.

CUTS FOR FIELD WELDING MATCHING ENDS OF TRAFFIC PLATES



TYPICAL SECTION THRU TRAFFIC PLATES

SHOP NOTE

THE THREE PAIRS OF TRAFFIC PLATES FROM CURB END TO ℄ OF BRIDGE ARE TO BE CONTINUOUS CUT TO TEMPLATE FROM ONE PLATE 21" x 1½" x 27'-2". (ORDERED 27'-4")

STRAIGHTEN AND RECUT TO LENGTHS SHOWN AND MATCH MARK IN PAIRS AND MATCHING ENDS.

V-CUT MATCHING ENDS FOR FIELD WELDING, UNDERCUT AND BEVEL AS SHOWN.

FABRICATE AND SHIP BOLTED TOGETHER IN PAIRS.

THE 5" x ¾" BARS a1-32, a4-32 AND a5-32 ARE TO BE CUT FROM BARS ORDERED 27'-4"

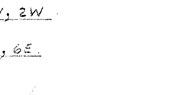
ERECTOR NOTE

SEE GENERAL DRAWINGS — SHEETS #20 AND #21 FOR PLACEMENT DATA AND FIELD WELDING.

REF. DRAWINGS LAYOUT-DETAILS

REVISIONS					
1					
2					
3					
4					
5					ER
SUB	PL	FL	PD	FD	
19				X	
2	9/16	Shop			
5	9/16	Arch.			
2	9/29	Cust.			
4	9/29	Cust.			

STANDARD ANCHORS



Date 7-15-60 Drawn By S.E.M.

ART IRON & WIRE WORKS, INC.

FABRICATED — STEEL — WAREHOUSE ORNAMENTAL METAL

TOLEDO FORT WAYNE

Title EXPANSION JOINT TRAFFIC PLATES — SOUTH PART OF PIERS B, E, SW, 2W, 2E, 6E

Building ANTHONY WAYNE BRIDGE REPAIRS

Location

Architect SANZENBACHER, MILLER & BRIGHAM.

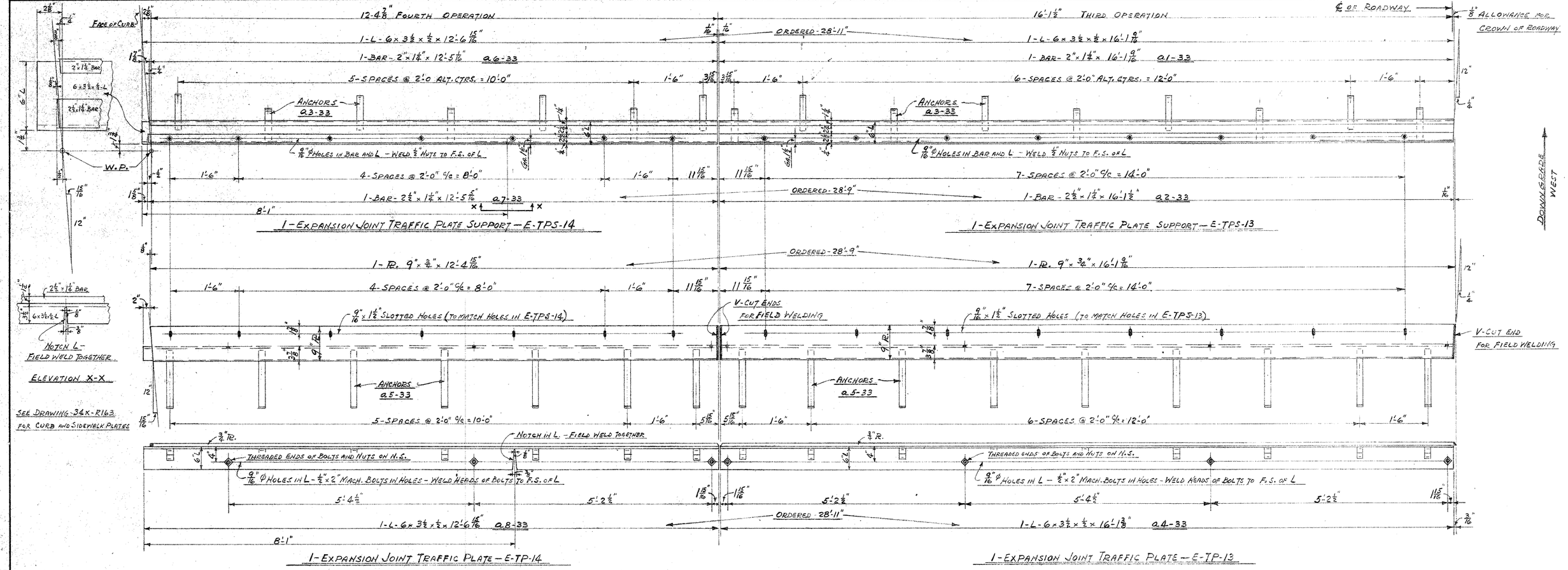
Customer THE LATHROP CO.

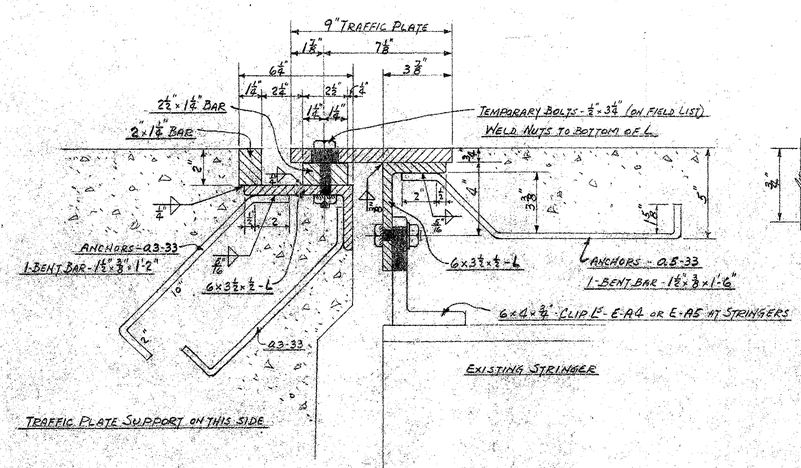
Holes ~~Except~~ As Noted — Shop Point: NONE

Field Connections

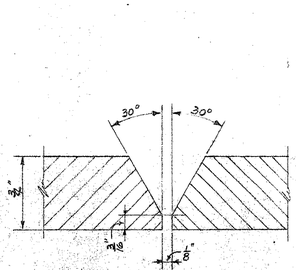
Drawing Number: 32X-R163 — Shop Order Number: 16319

THE TOLEDO BLUE PRINT & PAPER CO. 3000 12

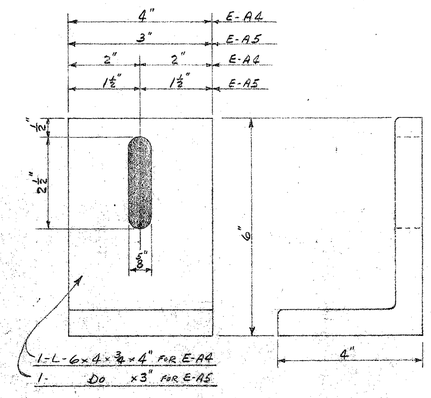




DETAILED SECTION THRU TRAFFIC PLATE SUPPORTS AND TRAFFIC PLATES AT WEST ABUTMENT



END CUTS FOR FIELD WELDING AT JOINTS OF TRAFFIC PLATES



4 - EXPANSION JOINT CLIP ANGLES - E-A4

3 - Do - E-A5

FIELD LIST

16 - MACH. BOLTS - ½"x3¼" (NO NUTS)

8 - STD. ½" WASHERS

TRAFFIC PLATES AND SUPPORTS SHOWN ON THIS DRAWING ARE FOR SOUTH PART OF WEST ABUTMENT.

SEE DRAWING 34X-R163 FOR CURB AND SIDEWALK PART OF THIS EXPANSION JOINT.

ERECTOR NOTE - SEE GENERAL DRAWINGS - SHEET #17 FOR PLACEMENT DATA AND FIELD WELDING.

NOTCH - X-X
NOTCH - M a8-33

REVISIONS	
1	7-28-60
2	
3	
4	
5	

SUB	PL	FL	PD	FD
19			X	

STANDARD ANCHORS

NA-1 & NA-2 | NA-24 | NA-25 & NA-27 | NA-4 | NA-7 & NA-8 | NA-6 & NA-28 | NA-5 & NA-29

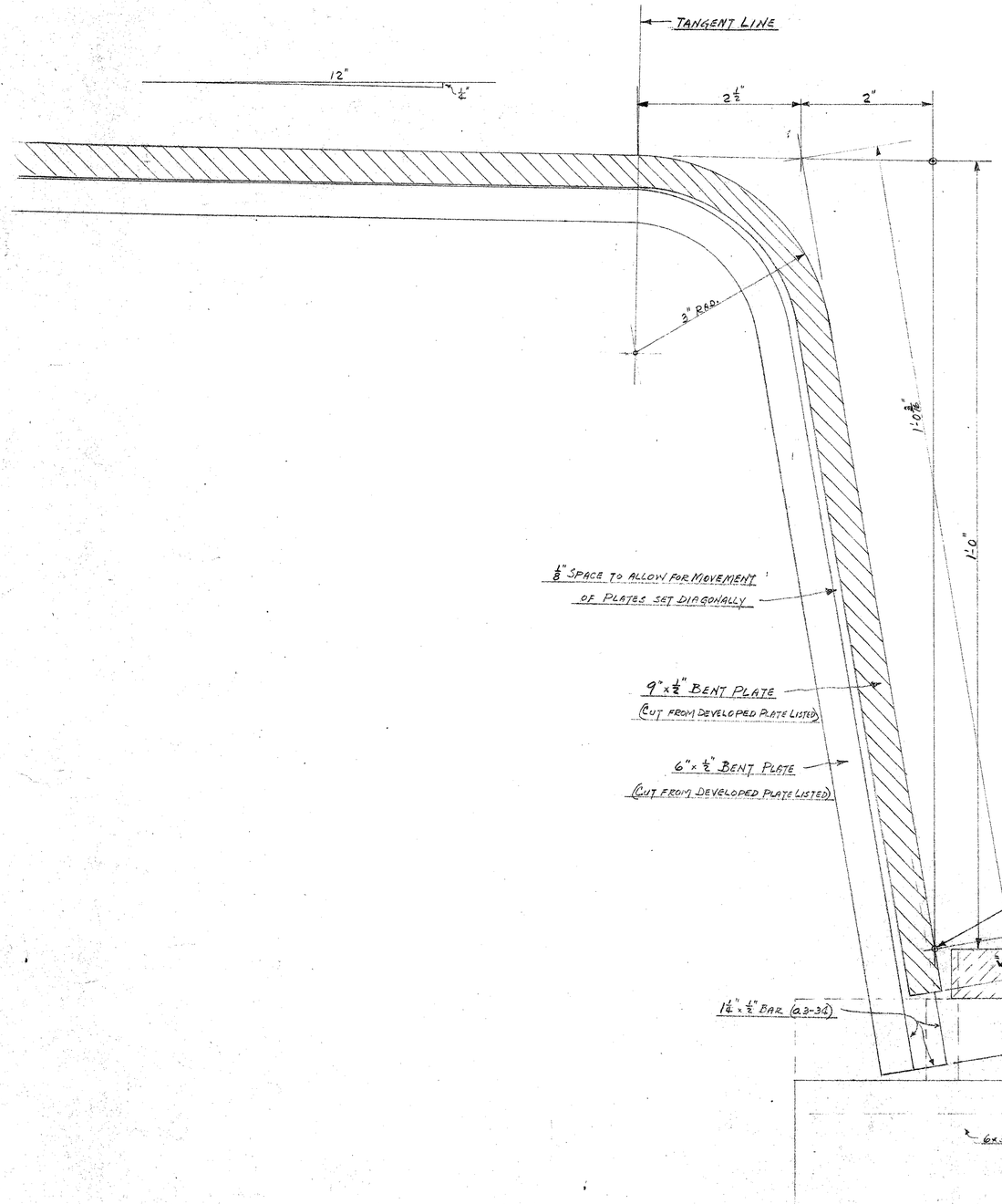
Date 7-15-60 Drawn By S.E.M.

3	9/16	Shop
5	9/16	Letter
3	1/23	Shop
2	1/23	Cust

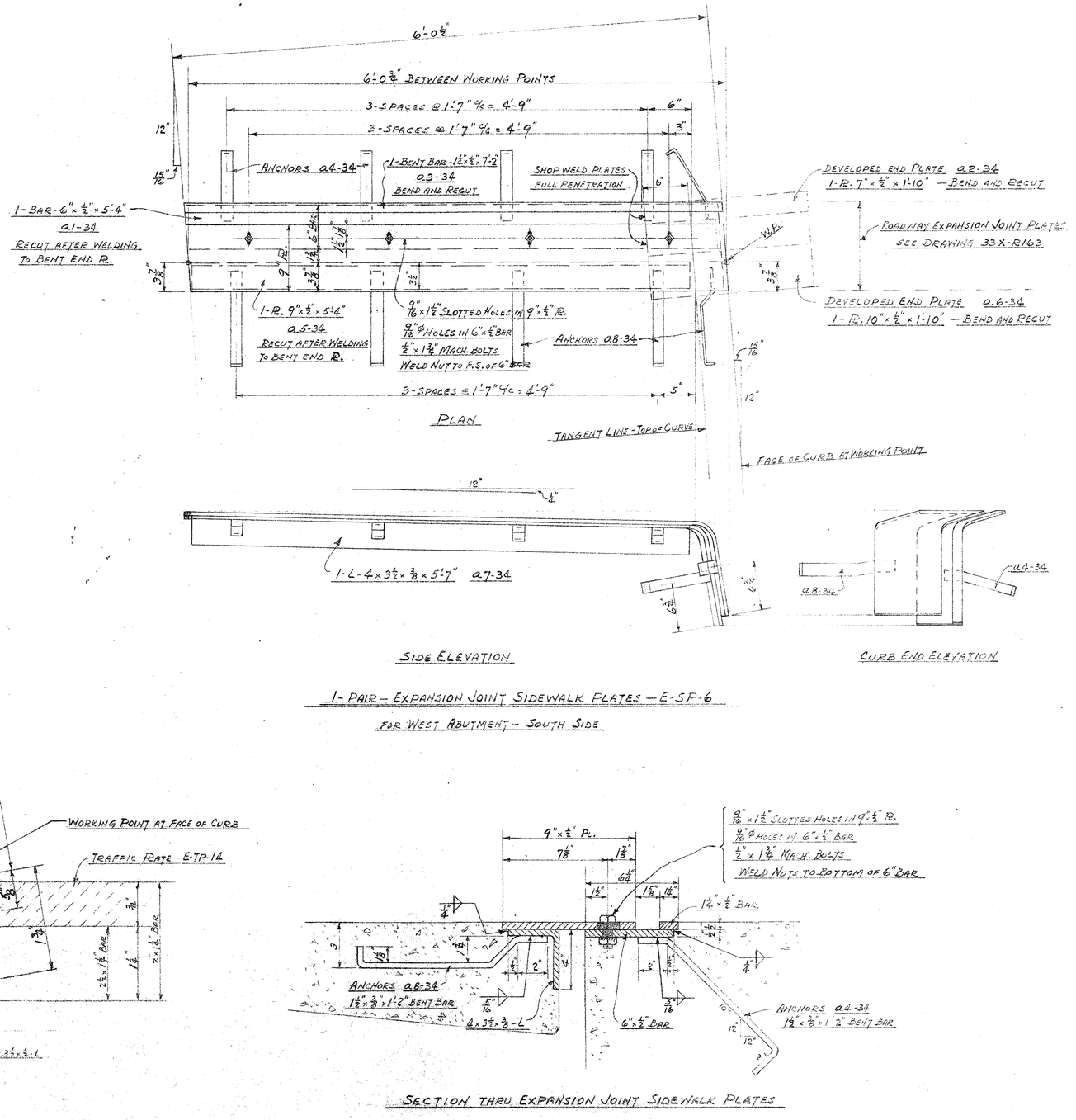
REF. DRAWINGS LAYOUT-DETAILS

ART IRON & WIRE WORKS, INC.
FABRICATED - STEEL - WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYN

Title EXPANSION JOINT TRAFFIC PLATES AND SUPPORTS - SOUTH HALF OF WEST ABUTMENT
Building ANTHONY WAYNE BRIDGE REPAI
Location
Architect SANZENBACHER, MILLER & BRIGHAM
Customer THE LATHROP CO.
Holes ~~Except~~ As Noted
Field Connections
Shop Paint NONE
Drawing Number 33X-R163
Shop Order Number 16319



FULL SIZE SECTION THRU CURB PART OF SIDEWALK PLATES



1 - PAIR - EXPANSION JOINT SIDEWALK PLATES - E-SP-6

FOR WEST ABUTMENT - SOUTH SIDE

SECTION THRU EXPANSION JOINT SIDEWALK PLATES

ERECTOR NOTE - SEE GENERAL DRAWINGS - SHEET #17 FOR PLACEMENT DATA AND FIELD WELDING.

REF. DRAWINGS LAYOUT DETAILS

REVISIONS
1
2
3
4
5

SUB	PL	FL	PD	FD
19			X	

3 9/16	Shop
5 9/16	Area
2 7/8	Cast
4	Weld

STANDARD ANCHORS

NA-1 & NA-2 | NA-24 | NA-25 & NA-27 | NA-4

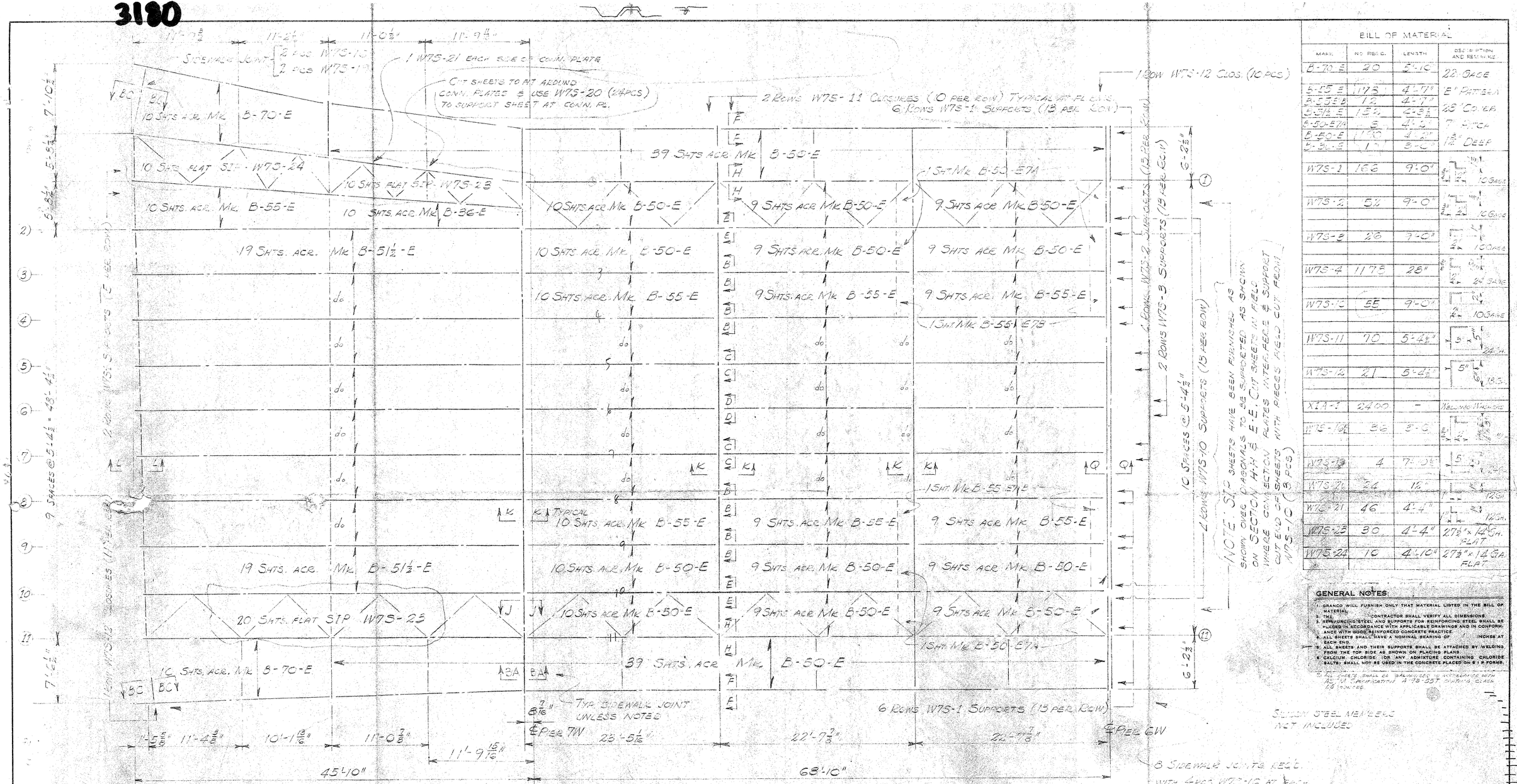
NA-7 & NA-8 | NA-6 & NA-28 | NA-5 & NA-29

Date 7-15-66 | Drawn By S.E.M.

ART IRON & WIRE WORKS, INC.
FABRICATED - STEEL - WAREHOUSE
ORNAMENTAL METAL
TOLEDO FORT WAYNE

Title EXPANSION JOINT SIDEWALK PLATES - SOUTH SIDE OF WEST ABUTMENT
Building ANTHONY WAYNE BRIDGE REPAIRS
Location
Architect SANZENBACHER, MILLER & BRINKMAN
Customer THE LATHROP CO.
Holes Except As Noted
Field Connections
Shop Paint NONE
Drawing Number 34X-R163
Shop Order Number 16319

3180



SPAN 8W

SIDEWALK JOINT — 2 PCS W75-16, 2 PCS W75-19

SPAN 7W

SIP PLACING PLAN

NOTE

ALL SHEETS SHALL BE PLACED WITH THEIR CORRUGATIONS PARALLEL TO THE MAIN FLOOR BMS. THE CORE JUNCTIONS SHALL BE ALIGNED ACROSS THE BRIDGE SO THAT THE MAIN REINFORCING CAN BE PLACED OVER THE VALLEYS AS SHOWN ON SECTION AA SHEET NO 45.

IN AREAS WHERE BEAMS ARE SKEW TO NEAT SHEETS MAY BE SKEW CUT IN THE FIELD TO FIT

NOTE:

USE CLOSURE W75-4 ON BOTH ENDS OF ALL SHEETS

SEE SHEET Nº A5 & A13 FOR SECTS INDICATED ON PLAN.

SEE SHEET Nº A8 FOR SCUPPER DETAILS

SEE SHEET Nº A14 FOR LAP DETAILS

SEE SHEET Nº A15 FOR DETAILS WHERE FLAT SIP IS USED

NOTE: SIP SHEETS HAVE BEEN FURNISHED AS DIAGONALS TO BE SUPPORTED AS SHOWN ON SECTION A-A. CUT SHEETS IN FIELD WHERE CONNECTION PLATES INTERFERE & SUPPORT CUT ENDS OF SHEETS WITH PIECES FIELD CUT FROM W75-10 (3 PCS)

SHOWN OVER

8 SIDEWALK JOINTS REQ'D. WITH 4 PCS W75-16 AT EACH JOINT

SPANS 8W & 7W

BILL OF MATERIAL

MARK	NO REQ'D.	LENGTH	DESCRIPTION AND REMARKS
B-70-E	20	5'-1C	22 GAGE
B-55-E	1178	4'-7"	E" PATTERN
B-55-EB	12	4'-7"	28" COVER
B-36-E	154	2'-8 1/2"	7" DITCH
B-50-E7A	5	4'-2"	1 1/2" DEEP
B-50-E	190	4'-2"	
B-36-E	1	3'-2"	
W75-1	166	9'-0"	10 GAGE
W75-2	52	9'-0"	10 GAGE
W75-3	26	9'-0"	10 GAGE
W75-4	1178	28"	22 GAGE
W75-10	55	9'-0"	10 GAGE
W75-11	70	5'-4 1/2"	24 GA.
W75-12	21	5'-4 1/2"	18 GA.
X14-7	2400	-	WELDING WASHERS
W75-16	36	3'-0	
W75-19	4	7'-10	
W75-20	24	1'-6"	
W75-21	46	4'-4"	
W75-23	30	4'-4"	27 1/2" x 14 GA. FLAT
W75-24	10	4'-10"	27 1/2" x 14 GA. FLAT

GENERAL NOTES:

1. GRANCO WILL FURNISH ONLY THAT MATERIAL LISTED IN THE BILL OF MATERIAL.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. REINFORCING STEEL AND SUPPORTS FOR REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH APPLICABLE DRAWINGS AND IN CONFORMANCE WITH GOOD REINFORCED CONCRETE PRACTICE.
4. ALL SHEETS SHALL HAVE A NOMINAL BEARING OF INCHES AT EACH END.
5. ALL SHEETS AND THEIR SUPPORTS SHALL BE ATTACHED BY WELDING FROM THE TOP SIDE AS SHOWN ON PLACING PLANS.
6. CALCIUM CHLORIDE OR ANY ADMIXTURE CONTAINING CHLORIDE SALTS SHALL NOT BE USED IN THE CONCRETE PLACED ON S I P FORMS.

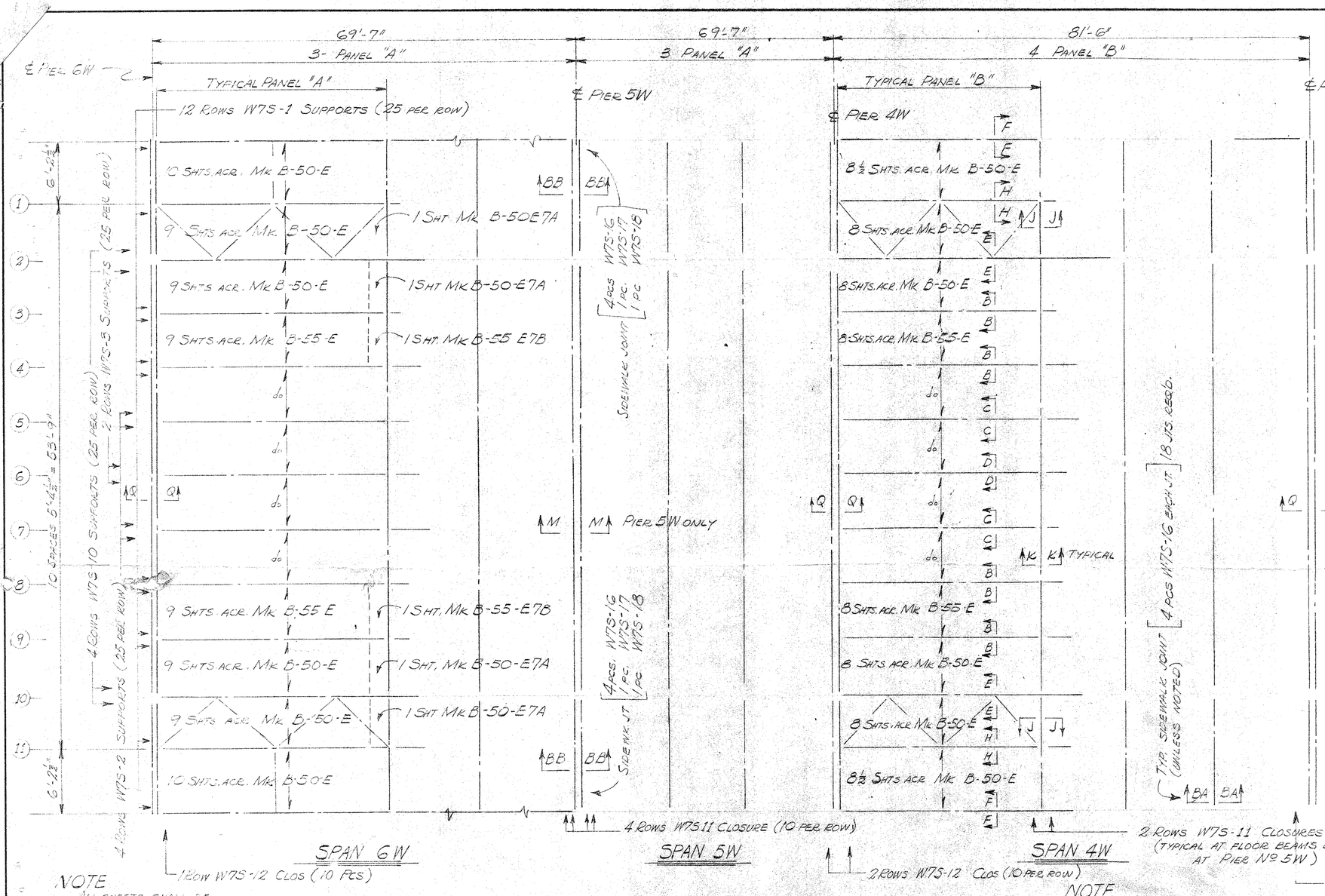
ALL STEEL SHALL BE FABRICATED IN ACCORDANCE WITH AASHTO SPECIFICATION A 16-55T GRADE A 36 (250 MPa)

SLOPE STEEL NEEDED NOT INCLUDED

1-64	3		GEN. GRADING NOTES	DRAWN	FILE NO. 021-35?
1-64	2	EDB	ADD NOTES	DATE 5-11	SHEET NO. 9
DATE	BY	APP.	REVISIONS	APPROVED	OF 15

PROJECT: Authority Name Bridge Replace
LOCATION: Toledo, Ohio
ARCHITECT-ENGINEER: Steel Engineering, Mueller & Associates
CUSTOMER: Jones & McKinnon Inc. CUSTOMER ORDER NO.

GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6506 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.



BILL OF MATERIAL

MARK	NO. REQ'D	LENGTH	DESCRIPTION AND REMARKS
B-55-E	516	4'-7"	22 GAGE
B-55-E7B	36	4'-7"	"E" PATTERN
B-50-E	532	4'-2"	28" COVER
B-50-E7A	24	4'-2"	7" PITCH
			1¾" DEEP
W7S-1	300	9'-0"	10 GAGE
W7S-2	100	9'-0"	10 GAGE
W7S-3	50	9'-0"	10 GAGE
W7S-4	2136	28"	24 GAGE
W7S-10	104	9'-0"	10 GAGE
W7S-11	220	5'-4½"	24 GAGE
W7S-12	40	5'-4½"	10 GA
X1A-1	4300	—	WELDING WASHERS
W10-16	80	5'-0"	10 GA
W7S-17	2	6'-2½"	24 GA
W7S-18	2	6'-2½"	24 GA

GENERAL NOTES:

1. GRANCO WILL FURNISH ONLY THAT MATERIAL LISTED IN THE BILL OF MATERIAL.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. REINFORCING STEEL AND SUPPORTS FOR REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH APPLICABLE DRAWINGS AND IN CONFORMANCE WITH GOOD REINFORCED CONCRETE PRACTICE.
4. ALL SHEETS SHALL HAVE A NOMINAL BEARING OF 7 INCHES AT EACH END.
5. ALL SHEETS AND THEIR SUPPORTS SHALL BE ATTACHED BY WELDING FROM THE TOP SIDE AS SHOWN ON PLACING PLANS.
6. CALCIUM CHLORIDE (OR ANY ADMIXTURE CONTAINING CHLORIDE SALTS) SHALL NOT BE USED IN THE CONCRETE PLACED ON S.I.P. FORMS.
7. ALL METAL SHALL BE GALVANIZED ACCORDING TO THE A.S.T.M. SPECIFICATION A 123-55T COATING GRADE 1.8 OUNCES

NOTE

ALL SHEETS SHALL BE PLACED WITH THEIR CORRUGATIONS PARALLEL TO THE MAIN FLOOR BEAMS. THE CORRUGATIONS SHALL BE ALIGNED ACROSS THE BRIDGE SO THAT THE MAIN REINFORCING CAN BE PLACED OVER THE VALLEYS AS SHOWN ON SECTION AA SHEET Nº A5

SIP PLACING PLAN

NOTE

USE CLOSURE W7S-4 ON BOTH ENDS OF ALL SHEETS.

SEE SHEET Nº A5 & A13 FOR SECS. INDICATED ON PLAN.

SEE SHEET Nº A8 FOR SCUPPER DETAILS.

SEE SHEET Nº A14 FOR LAP DETAILS.

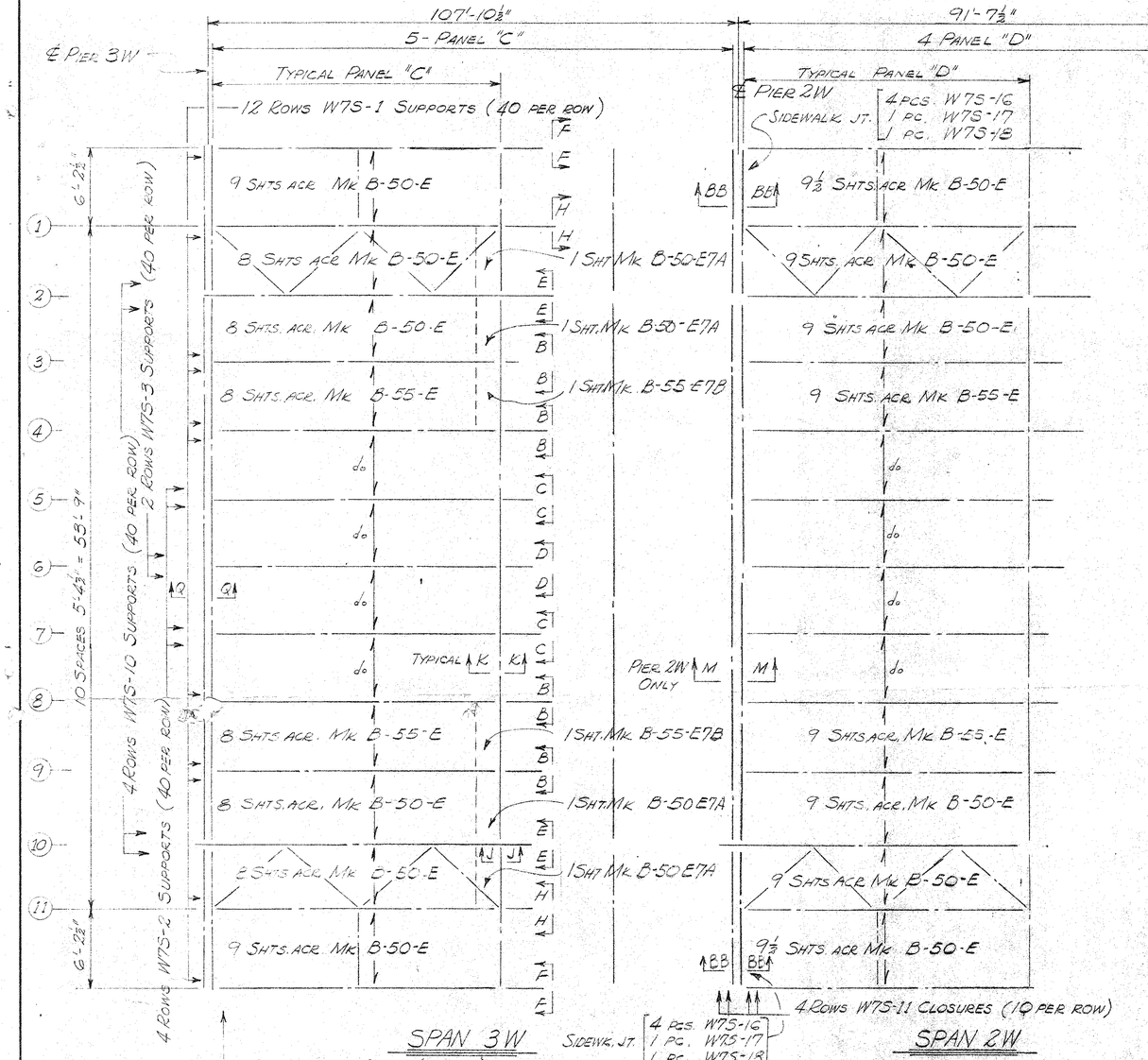
SPANS 6W, 5W, & 4W.

PROJECT ANTHONY WAYNE BRIDGE EXPANSION
LOCATION TOLEDO OHIO
ARCHITECT-ENGINEER THE DEPARTMENT OF PUBLIC SERVICE
CUSTOMER JONES & McKNIGHT INC. CUSTOMER ORDER NO.

GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6506 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.

DATE	BY	APP.	REVISIONS
7-14-60			CROSS CRACKED AREAS
6-16-60		EDB	PER APPROVAL

DRAWN
DATE 5-12-60
APPROVED EDB
FILE NO. OGN-0859
SHEET NO. A2
OF 15



BILL OF MATERIAL

MARK	NO. REQ'D	LENGTH	DESCRIPTION AND REMARKS
B-55-E	534	4'-7"	22 GAGE
B-55-E12	30	4'-7"	"E" PATTERN
B-50-E	855	4'-2"	28" COVER
B-50-E7A	20	4'-2"	7" PITCH
			1¾" DEEP
W7S-1	480	9'-0"	10 GAGE
W7S-2	160	9'-0"	10 GAGE
W7S-3	80	9'-0"	10 GAGE
W7S-4	3450	28"	24 GAGE
W7S-10	173	9'-0"	10 GAGE
W7S-11	350	5'-4½"	24 GAGE
W7S-13	160	—	1" WIDE 10 GAGE
W7S-15	320	1"	WELDED TO CLOSURE
XIA-1	6800	—	WELDING WASHERS
W7S-12	30	5'-4½"	
W7S-16	124	3'-0"	FOR DETAILS SEE SHEET A12
W7S-17	2	2'-2½"	
W7S-18	4	2'-2½"	

GENERAL NOTES:

1. GRANCO WILL FURNISH ONLY THAT MATERIAL LISTED IN THE BILL OF MATERIAL.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. REINFORCING STEEL AND SUPPORTS FOR REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH APPLICABLE DRAWINGS AND IN CONFORMANCE WITH GOOD REINFORCED CONCRETE PRACTICE.
4. ALL SHEETS SHALL HAVE A NOMINAL BEARING OF 4 INCHES AT EACH END.
5. ALL SHEETS AND THEIR SUPPORTS SHALL BE ATTACHED BY WELDING FROM THE TOP SIDE AS SHOWN ON PLACING PLANS.
6. CALCIUM CHLORIDE (OR ANY ADMIXTURE CONTAINING CHLORIDE SALTS) SHALL NOT BE USED IN THE CONCRETE PLACED ON S.I.P. FORMS.
7. ALL STEEL TO BE GALVANIZED PER ASSOCIATION'S W75 A.S.T.M. SPECIFICATION A 123-58 COATING CLASS 1.5 OUNCES.

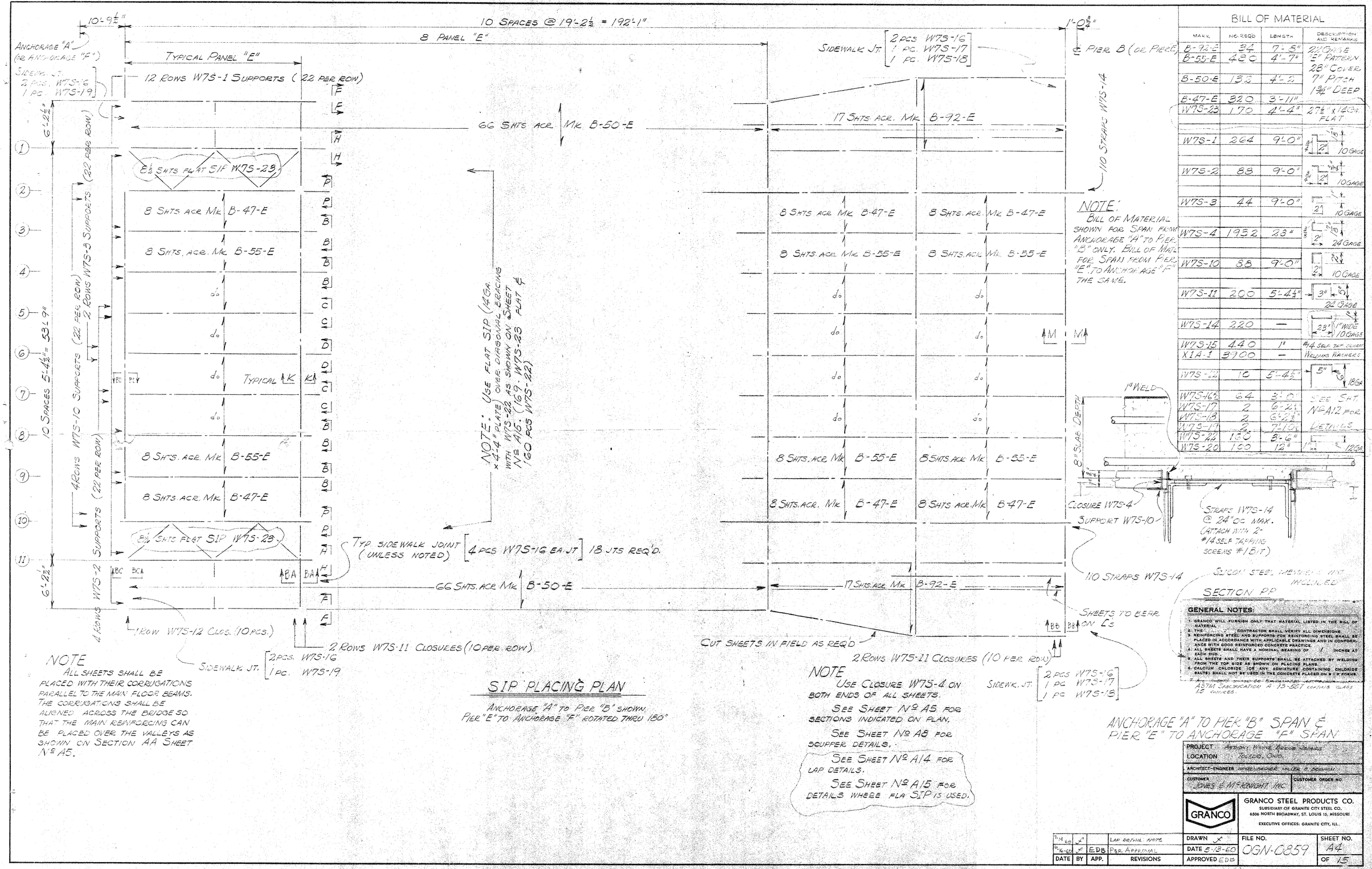
SPANS 3W, 2W, & 1W.

PROJECT	ANTHONY WAYNE BRIDGE REPAIRS
LOCATION	TOLEDO OHIO.
ARCHITECT-ENGINEER	SANTENBACHER, MILLER & BERMAN
CUSTOMER	JONES & McKNIGHT INC.
CUSTOMER ORDER NO.	

GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6506 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.

DATE	BY	APP.	REVISIONS
7-14-60	JK		ADDED MACHINE DETAILS
9-16-60	JK	EDB	PEL APPROVAL

DRAWN JK | DATE 3-12-60 | APPROVED EDB
FILE NO. OGN-0859
SHEET NO. A3 OF 15



BILL OF MATERIAL

MARK	NO. REQD	LENGTH	DESCRIPTION AND REMARKS
B-92-E	34	7'-5"	2½" RISE "E" PATTERN 28" COVER, 7" PITCH 1¾" DEEP
B-55-E	480	4'-7"	
B-50-E	132	4'-2	
B-47-E	320	3'-11"	
W7S-23	170	4'-4"	27½" x 14GA. FLAT
W7S-1	264	9'-0"	10 GAGE
W7S-2	88	9'-0"	10 GAGE
W7S-3	44	9'-0"	10 GAGE
W7S-4	1952	23"	24 GAGE
W7S-10	88	9'-0"	10 GAGE
W7S-11	200	5'-4½"	24 GAGE
W7S-14	220	—	23" 1" WIDE 10 GAGE
W7S-15	440	1"	#14 SELF TAP SCREW
X1A-1	3700	—	WELDING WASHERS
W7S-12	10	5'-4½"	5" 18GA
W7S-16½	64	3'-0	SEE SHT. Nº A12 FOR DETAILS
W7S-17	2	6'-2½"	
W7S-18	2	6'-2½"	
W7S-17	2	7'-10"	
W7S-22	130	3'-6"	12GA
W7S-20	100	12"	12GA

NOTE:
BILL OF MATERIAL SHOWN FOR SPAN FROM ANCHORAGE "A" TO PIER "B" ONLY. BILL OF MATL. FOR SPAN FROM PIER "E" TO ANCHORAGE "F" THE SAME.

GENERAL NOTES:

1. GRANCO WILL FURNISH ONLY THAT MATERIAL LISTED IN THE BILL OF MATERIAL.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. REINFORCING STEEL AND SUPPORTS FOR REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH APPLICABLE DRAWINGS AND IN CONFORMANCE WITH GOOD REINFORCED CONCRETE PRACTICE.
4. ALL SHEETS SHALL HAVE A NOMINAL BEARING OF / INCHES AT EACH END.
5. ALL SHEETS AND THEIR SUPPORTS SHALL BE ATTACHED BY WELDING FROM THE TOP SIDE AS SHOWN ON PLACING PLANS.
6. CALCIUM CHLORIDE (OR ANY ADMIXTURE CONTAINING CHLORIDE SALTS) SHALL NOT BE USED IN THE CONCRETE PLACED ON S I P FORMS.
7. ALL CONCRETE MUST BE ENTRAINED AIR TYPE CONFORMING TO ASTM SPECIFICATION A 15-58T CURING CLASS 1B CURVES.

NOTE
ALL SHEETS SHALL BE PLACED WITH THEIR CORRUGATIONS PARALLEL TO THE MAIN FLOOR BEAMS. THE CORRUGATIONS SHALL BE ALIGNED ACROSS THE BRIDGE SO THAT THE MAIN REINFORCING CAN BE PLACED OVER THE VALLEYS AS SHOWN ON SECTION AA SHEET Nº A5.

SIP PLACING PLAN

ANCHORAGE "A" TO PIER "B" SHOWN. PIER "E" TO ANCHORAGE "F" ROTATED THRU 180°

NOTE
USE CLOSURE W7S-4 ON BOTH ENDS OF ALL SHEETS.
SEE SHEET Nº A5 FOR SECTIONS INDICATED ON PLAN.
SEE SHEET Nº A8 FOR SCUPPER DETAILS.
SEE SHEET Nº A14 FOR LAP DETAILS.
SEE SHEET Nº A15 FOR DETAILS WHERE FLA SIP IS USED.

ANCHORAGE "A" TO PIER "B" SPAN & PIER "E" TO ANCHORAGE "F" SPAN

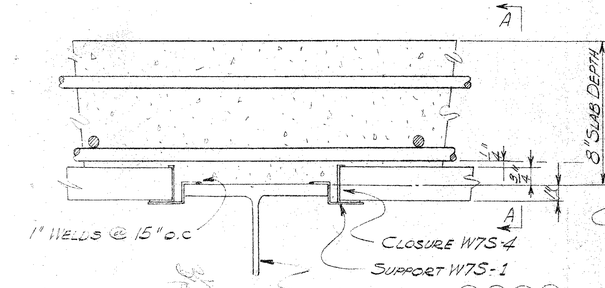
PROJECT	ANTHONY WAYNE BRIDGE REPAIRS
LOCATION	TOLEDO, OHIO.
ARCHITECT-ENGINEER	SHREEVE, MACHER, MILLER & ASSOCIATES
CUSTOMER	JONES & McKNIGHT INC.
CUSTOMER ORDER NO.	

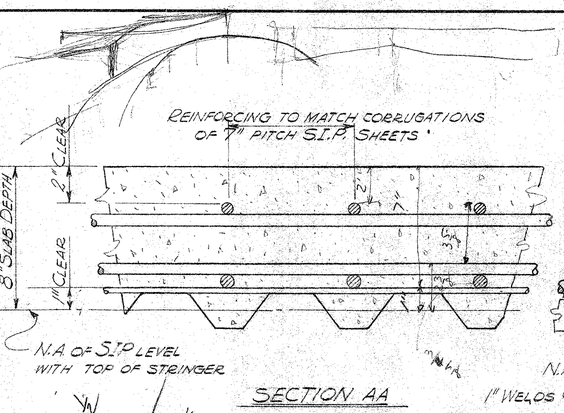
GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6300 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.

DATE	BY	APP.	REVISIONS
7-14-60	JF		LAP DETAIL NOTE
12-16-60	JF	EDB	PER APPROVAL

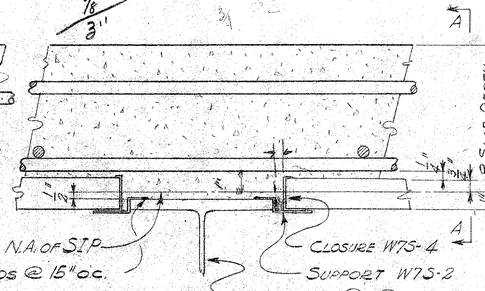
DRAWN	JF
DATE	5-13-60
APPROVED	EDB
FILE NO.	OGN-0859
SHEET NO.	A4
OF	15

NOTE:
PLUG WELD ALL SHEETS & CLOSURES TOGETHER TO SUPPORTS WITH PLUG WELDS THRU GRANCO WELDING WASHERS AT 15" O.C. MAXIMUM.

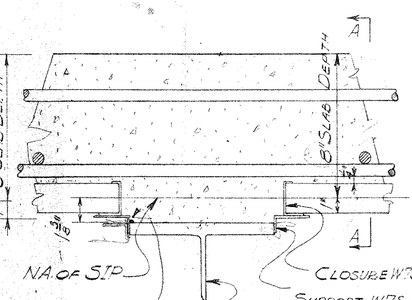




SECTION AA

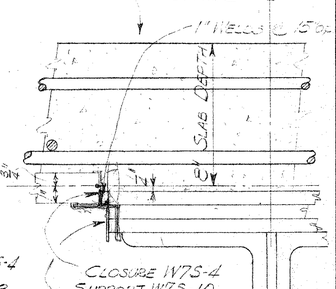


SECTION CC



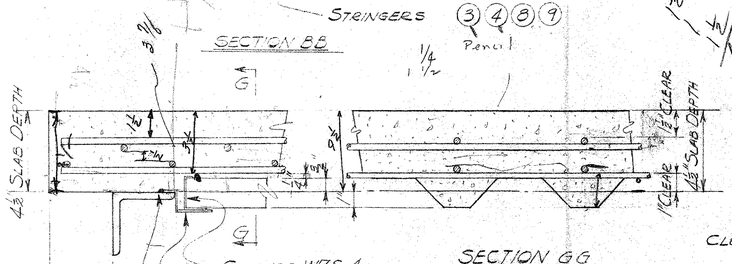
SECTION DD

NOTE: ON GIRDER STRINGERS N.A. OF S.I.P IS ALWAYS $\frac{3}{4}$" ABOVE TOP OF TOP MOMENT PLATE



NOTE: SEE SEC E'E' BELOW FOR SEC. WHERE THERE ARE NO COVER PLS.

SECTION EE

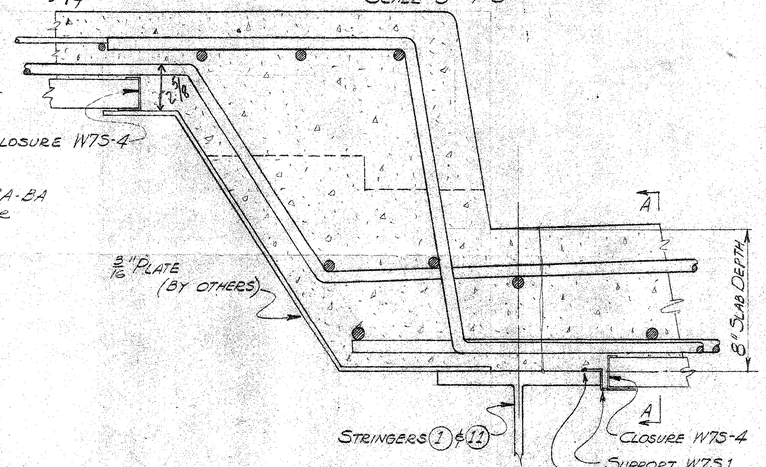


SECTION GG

NOTE: SEE SECTION BA-BA BB-BB & BC-BC SHT. NO. A13 FOR SECS. AT SIDEWALK JOINTS

TYPICAL SUPPORT DETAILS AT STRINGERS (2) THRU (10)

SCALE 3" = 1'-0"

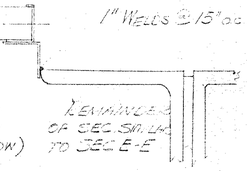


SECTION HH

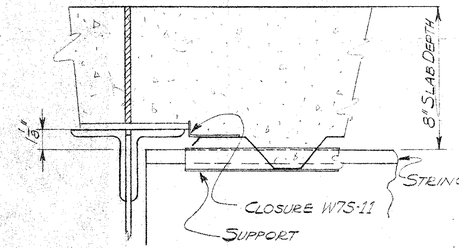
TYPICAL SUPPORT DETAILS AT STRINGERS (1) & (11)

SCALE 3" = 1'-0"

CLOSURE W7S-11 (CUT VERTICAL LEG AS DESIRED IN THE FIELD) AS THE TOP OF SHEET RAISES ABOVE TOP OF FLOOR BEAM THE CLOSURE MAY BE INVERTED SO THAT THE VERTICAL LEG WILL REACH DOWN TO THE FLOOR BEAM. (SEE BELOW)



SECTION E'E'



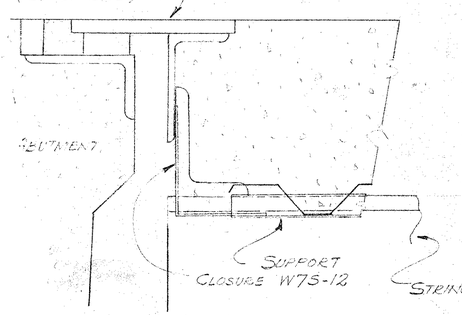
SECTION JJ

DETAIL OF BRACKET AT STRINGER (1) & (11)

6 - 9 3/8 + 0 = 9 3/8
7 - 8-1/2 + 1 = 9 1/2
8 - 8 + 2 = 10
9 - 8 + 2 13/16 = 10 13/16

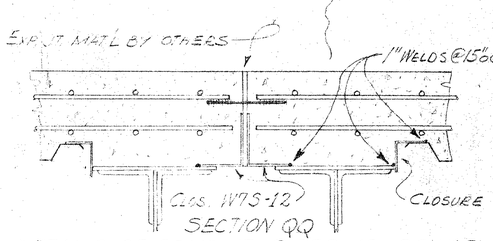
SIDEWALK DETAILS

SCALE 3" = 1'-0"



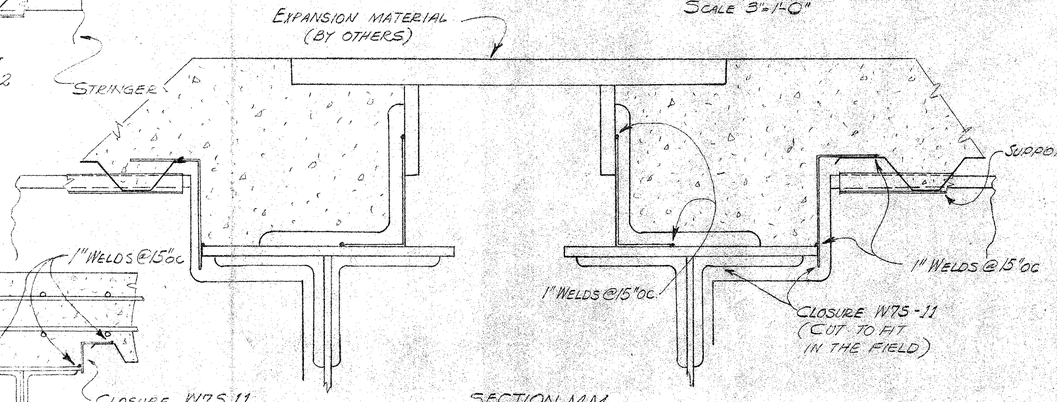
SECTION LL

DETAIL AT ABUTMENTS



SECTION QQ

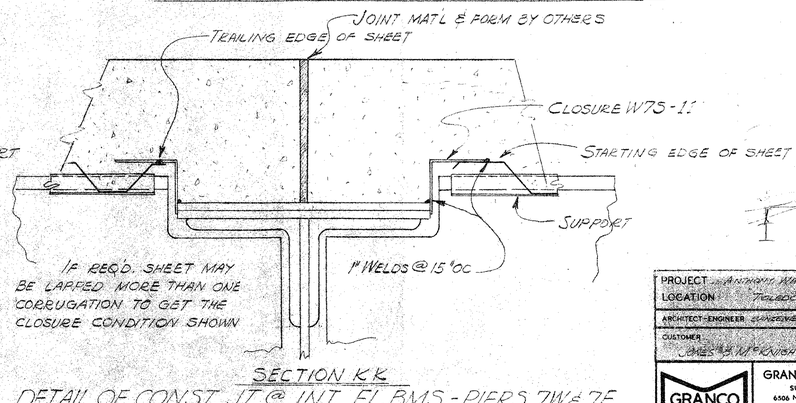
DETAILS OF CONS. JT. PIERS 1E, 3E, 4E 5E, 10E, 1W, 3W, 4W, & 6W.



SECTION MM

DETAIL AT EXPANSION JOINTS

PIERS B-E - 2N-5W- 2E & 6E



SECTION KK

DETAIL OF CONST. JT @ INT. FL. BMS. - PIERS 7W & 7E

DETAILS FOR APPROACH SPANS

PROJECT	ANTHONY WAYNE BRIDGE (SERIES)
LOCATION	TOLEDO, OHIO
ARCHITECT-ENGINEER	CLINE-BRICKER, KELLER & SECHLER
CUSTOMER	JAMES H. McKNIGHT INC.
CUSTOMER ORDER NO.	

GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6506 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.

DRAWN	FILE NO.	SHEET NO.
DATE 5-10-60	OGN-0859	A5
APPROVED EDB		OF 15

DATE	BY	APP.	REVISIONS
6-16-60		EDB	PER APPROVAL

℄ PIER "B" (OR ℄ PIER "E")

233'-6"

11 PANELS @ 19'-2½" = 211'-0⅝"

12 PANEL "E"

18'-7⅝"

3'-9½"

℄ TOWER "C" (OR TOWER "D")

TYPICAL PANEL "F"

SEE "SCUPPER DETAILS" SHEET A8

7 ROWS W7S-1 SUPPORTS (24 PER ROW)

8 SHTS. ACROSS MK. B-55-E

10 @ 5'-4⅝" = 55'-7"

2 ROWS W7S-3 SUPPORTS (24 PER ROW)

2 ROWS W7S-2 SUPPORTS (24 PER ROW)

1	W7S-5	do	W7S-5
2	W7S-6	do	W7S-6
3	W7S-7	do	W7S-7
4	W7S-8	do	W7S-8
5	W7S-7	do	W7S-7
6	W7S-6	do	W7S-6
7	W7S-5	do	W7S-5

8 SHTS. ACROSS MK. B-55-E

2 ROWS W7S-2 SUPPORTS (24 PER ROW)

7 ROWS W7S-1 SUPPORTS (24 PER ROW)

20 ROWS W7S-4 CLOSURES (96 PER ROW)

V W

AA AB AC AD AC AB AA W V

S.I.P. PLACING PLAN

PIER "B" TO TOWER "C" SHOWN
PIER "E" TO TOWER "D" ROTATED THRU 180°

NOTE:
SEE SHEET Nº A8 FOR TYPICAL DETAILS AT STRINGERS ℄ FLOOR BEAMS.

NOTE:
FIT IN THE FIELD 40 PCS. W7S-11 CLOSURES AS REQ'D TO CLOSE EXISTING EXPANSION JOINT WHICH IS TO REMAIN IN PLACE. (NO WELDING PERMITTED ON SILICON STEEL MEMBERS.)
SEE SHEET Nº A14 FOR LAP CONDITIONS.

NOTE
BILL OF MATERIAL SHOWN FOR SPAN FROM PIER "B" TO TOWER "C" ONLY. BILL OF MATERIAL FOR SPAN FROM TOWER "D" TO PIER "E" SAME.

SEE SKETCH BELOW

BILL OF MATERIAL

MARK	NO. REQ'D	LENGTH	DESCRIPTION AND REMARKS
			22 GAGE
			"E" PATTERN
B-55-E	960	4'-7"	23" COVER
			7" DITCH
			1¾" DEEP
W7S-1	336	9'-0"	10 GAGE
W7S-2	96	9'-0"	10 GAGE
W7S-3	48	9'-0"	10 GAGE
W7S-4	1920	28"	24 GAGE
W7S-5[5]	48	4'-8"	DIM "A" FROM ¾" TO 1½"
W7S-6[6]	48	4'-8"	DIM "A" FROM 1½" TO 2½"
W7S-7[7]	48	4'-8"	DIM "A" FROM 2½" TO 3⅞"
W7S-8[8]	48	4'-8"	DIM "A" FROM 3⅞" TO 5¼"
W7S-9	240	—	24 GAGE
X1A-1	3800	—	WELDING WASHERS
W7S-11	40	5'-4½"	24 GAGE

VARIABLE DIM "A"

45°

20 GAGE

1½"

5"

W7S-5 THRU W7S-8

SILICON STEEL MEMBERS NOT INCLUDED

GENERAL NOTES:

1. GRANCO WILL FURNISH ONLY THAT MATERIAL LISTED IN THE BILL OF MATERIAL.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. REINFORCING STEEL AND SUPPORTS FOR REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH APPLICABLE DRAWINGS AND IN CONFORMANCE WITH GOOD REINFORCED CONCRETE PRACTICE.
4. ALL SHEETS SHALL HAVE A NOMINAL BEARING OF 7 INCHES AT EACH END.
5. ALL SHEETS AND THEIR SUPPORTS SHALL BE ATTACHED BY WELDING FROM THE TOP SIDE AS SHOWN ON PLACING PLANS.
6. CALCIUM CHLORIDE OR ANY ADMIXTURE CONTAINING CHLORIDE SALTS SHALL NOT BE USED IN THE CONCRETE PLACED ON S.I.P. FORMS.

ALL SHEETS SHALL BE GALVANIZED IN ACCORDANCE WITH A.S.T.M. SPECIFICATION A 93-55T FOR ZINC COATING CLASS 1.5 OUNCES.

SIDE SUSPENSION SPANS TOWER "C" TO PIER "B" ℄ TOWER "D" TO PIER "E"

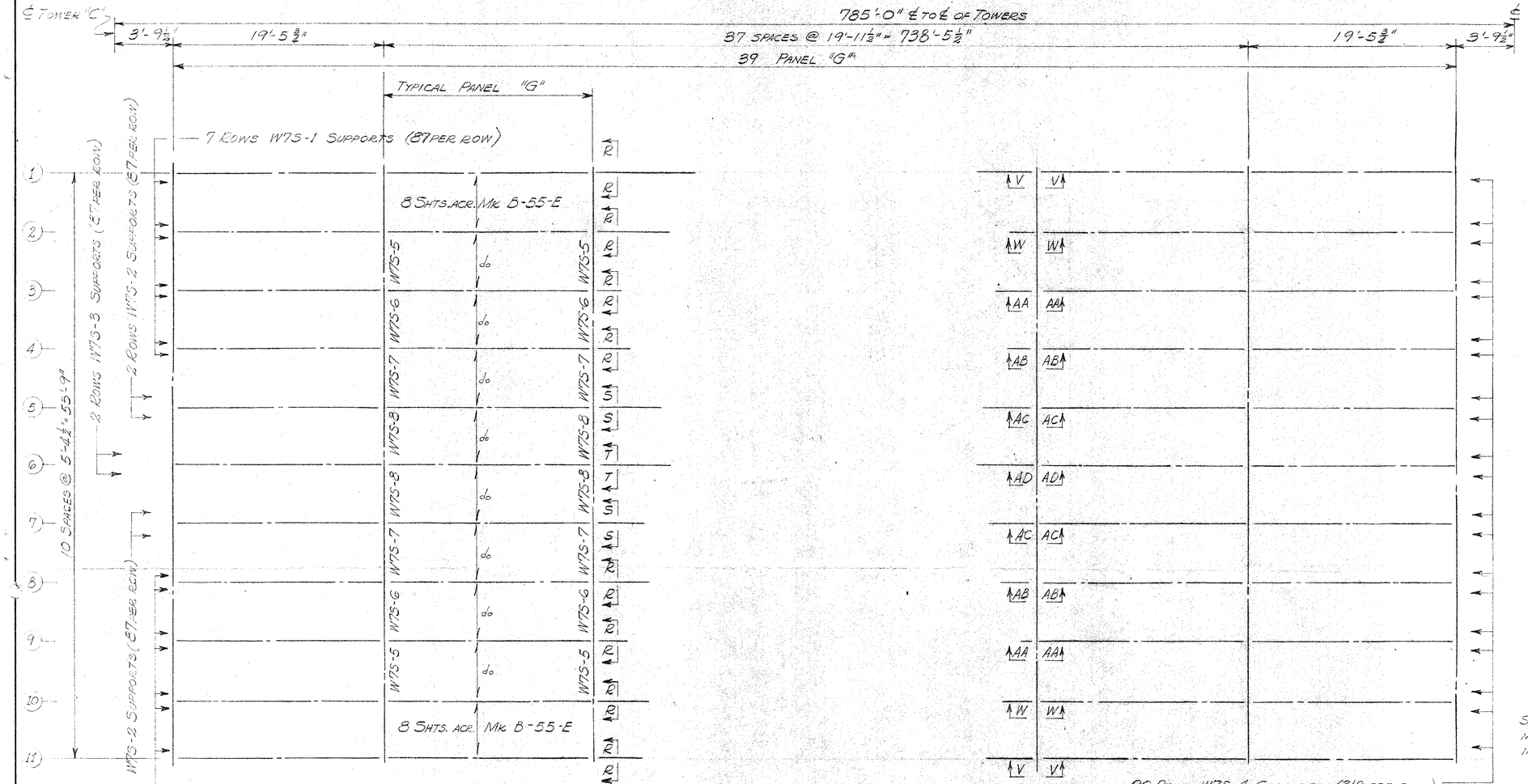
7-14-60	JV		LAP DETAIL NOTE
6-16-60	JV	EDB	REV. DIM. "A"
5-25-60	JV	EDB	ADD SEC MM EACH END
5-18-60	JV	EDB	SHT NO. BUILDING NOTE
DATE	BY	APP.	REVISIONS

PROJECT Missouri-Illinois Bridge Crossing
LOCATION Alton, Ill.
ARCHITECT-ENGINEER Sverdrup & Parcel, Mueller & Brown
CUSTOMER Illinois State Highway Dept. CUSTOMER ORDER NO.

GRANCO

GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6506 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.

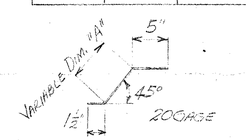
DRAWN JV	FILE NO.	SHEET NO.	
DATE 5-9-60	OGN-0859	A6	
APPROVED EDB		OF 15	



BILL OF MATERIAL

MARK	NO REQ'D	LENGTH	DESCRIPTION AND REMARKS
			22 GAGE
			"E" PATTERN
S-55-E	3120	4'-7"	28" COVER
			7" PITCH
			1¾" DEEP
W7S-1	1218	9'-0"	10 GAGE
W7S-2	348	9'-0"	10 GAGE
W7S-3	174	9'-0"	10 GAGE
W7S-4	6240	28"	24 GAGE
W7S-5	156	4'-8"	DIM "A" FROM ¾" TO 1¾"
W7S-6	156	4'-8"	DIM "A" FROM 1½" TO 2½"
W7S-7	156	4'-8"	DIM "A" FROM 2½" TO 3¾"
W7S-8	156	4'-8"	DIM "A" FROM 3¾" TO 5¼"
W7S-9	700	–	24 GAGE
X1A-1	12,500	–	WELDING WASHERS
W7S-11	40	5'-4½"	24 GAGE

SEE SKETCH BELOW



W7S-5 THRU W7S-8

SILICON STEEL MEMBERS NOT INCLUDED

GENERAL NOTES:

1. GRANCO WILL FURNISH ONLY THAT MATERIAL LISTED IN THE BILL OF MATERIAL.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. REINFORCING STEEL AND SUPPORTS FOR REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH APPLICABLE DRAWINGS AND IN CONFORMANCE WITH GOOD REINFORCED CONCRETE PRACTICE.
4. ALL SHEETS SHALL HAVE A NOMINAL BEARING OF 7 INCHES AT EACH END.
5. ALL SHEETS AND THEIR SUPPORTS SHALL BE ATTACHED BY WELDING FROM THE TOP SIDE AS SHOWN ON PLACING PLANS.
6. CALCIUM CHLORIDE (OR ANY ADMIXTURE CONTAINING CHLORIDE SALTS) SHALL NOT BE USED IN THE CONCRETE PLACED ON S I P FORMS.
7. ALL SHEETS SHALL BE GALVANIZED BY HOT DIPPED METHOD ASTM SPECIFICATION A 93 SERIES WITH A CLASS 1.5 OUNCES.

SIP PLACING PLAN

NOTE:
ALL SHEETS SHALL BE PLACED WITH THEIR CORUGATIONS PARALLEL TO THE MAIN FLOOR BEAMS. THE CORRUGATIONS SHALL BE ALIGNED ACROSS THE BRIDGE SO THAT THE MAIN REINFORCING CAN BE PLACED OVER THE VALLEYS AS SHOWN ON SECTION UU SHEET Nº A8

NOTE:
USE CLOSURE W7S-4 ON BOTH ENDS OF ALL SHEETS.

SEE SHEET Nº A8 FOR SECTIONS INDICATED ON PLAN ℄ FOR SCUPPER DETAILS.

SEE SHT. Nº A14 FOR LAP CONDITIONS

NOTE:
FIT IN THE FIELD 40 PCS. W7S-11 CLOSURES AS REQ'D TO CLOSE EXISTING EXPANSION JOINT WHICH IS TO REMAIN IN PLACE. (NO WELDING PERMITTED ON SILICON STEEL MEMBERS)

MAIN SUSPENDED SPAN

PROJECT: ANTHONY WAYNE BRIDGE REPAIRS
LOCATION: TOLEDO, OHIO.
ARCHITECT-ENGINEER: SPEECEBACHER, HALEY & BOTSFORD
CUSTOMER: JONES & McKNIGHT
CUSTOMER ORDER NO.:

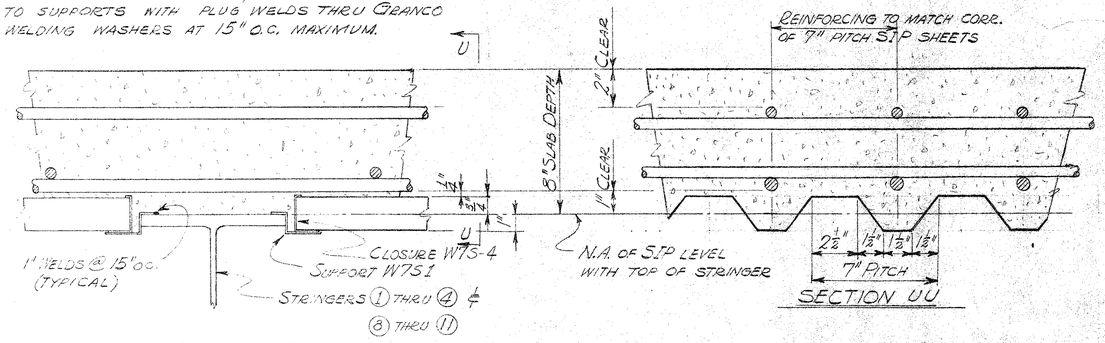
GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6500 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.

DATE	BY	APP.	REVISIONS
7-14-60	J°		LAP DETAIL NOTE
8-16-60	J°	EDB	FOR APPROVAL

DRAWN J°
DATE 5-16-60
APPROVED EDB
FILE NO. OGN 0859
SHEET NO. A7
OF 15

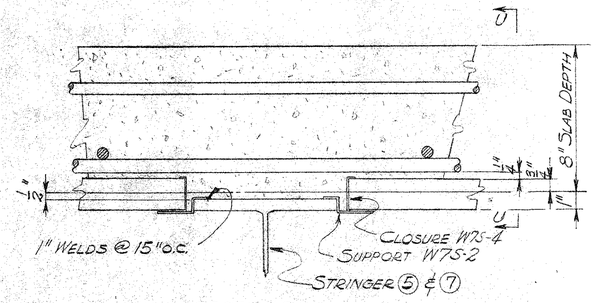
NOTE:

PLUG WELD ALL SHEETS & CLOSURES TOGETHER TO SUPPORTS WITH PLUG WELDS THRU GRANCO WELDING WASHERS AT 15" O.C. MAXIMUM.

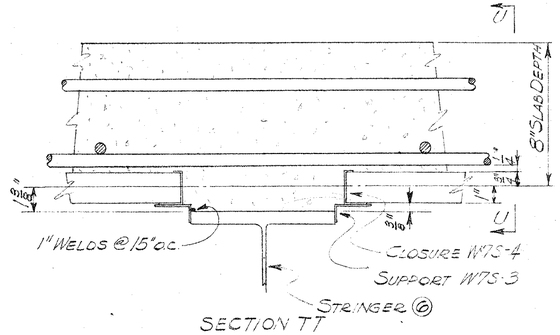


SECTION RR

SECTION UU



SECTION SS



SECTION TT

NOTE:

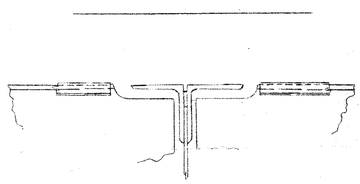
ATTACH CLOSURE TO SILICON FLOOR BEAM BY FIELD DRILLING HOLE IN CLOSURE & FLOOR BEAM & USING A SELF TAPPING SCREW (BY OTHERS)

6 - 9 3/8
7 - 8 1/2
8 - 8"
9 - 8"

TYPICAL SUPPORT DETAILS AT STRINGERS ① THRU ⑪

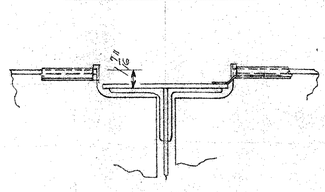
SCALE 3" = 1'-0"

SEE SHEET Nº A14 FOR SIDE CONDITIONS OF SHEETS



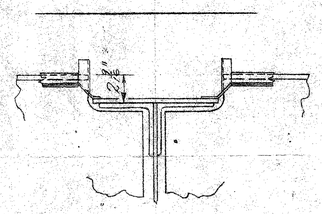
AT STRINGERS ① & ⑪

SECTION VV



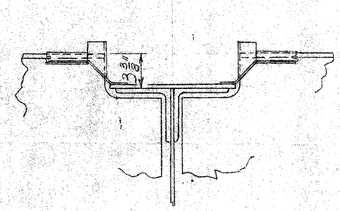
AT STRINGERS ② & ⑩

SECTION WW



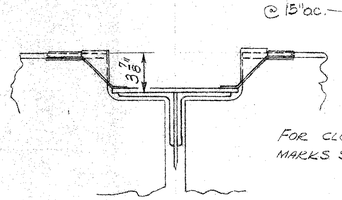
AT STRINGER ③ & ⑨

SECTION AA AA



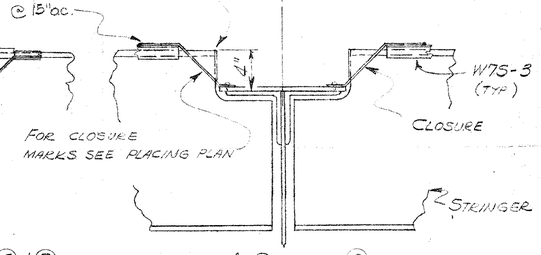
AT STRINGER ④ & ⑧

SECTION AB AB



AT STRINGER ⑤ & ⑦

SECTION AC AC



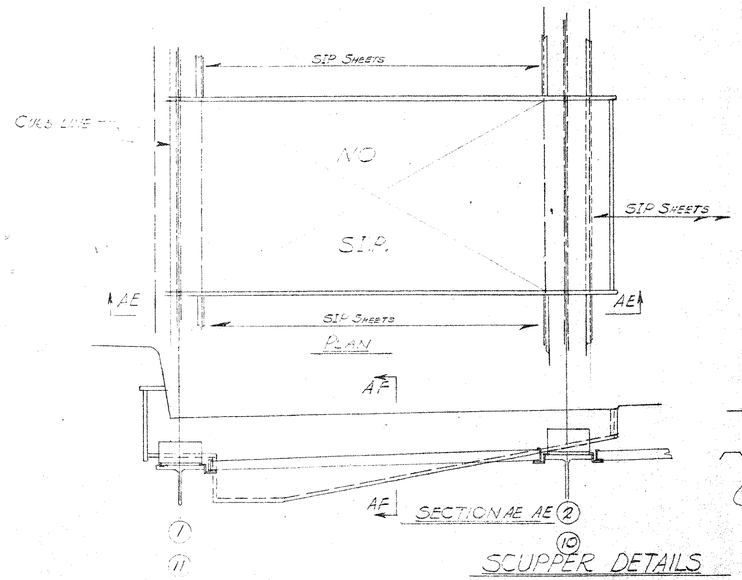
AT STRINGER ⑥

NOTE: MATERIAL NOT SHOWN IN OTHER SECTIONS SIMILAR TO THAT SHOWN ABOVE.

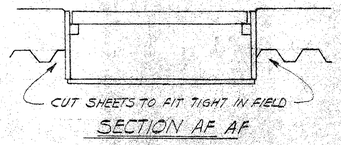
SECTION AD AD

TYPICAL CLOSURE DETAILS AT FLOOR BEAMS

SCALE 1½" = 1'-0"



SCUPPER DETAILS



SECTION AF AF

DETAILS FOR SUSPENDED SPANS

PROJECT: [illegible]
LOCATION: TOLEDO, OHIO
ARCHITECT-ENGINEER: [illegible]
CUSTOMER: WOMER & MT. KEMMET, INC. CUSTOMER ORDER NO.

GRANCO

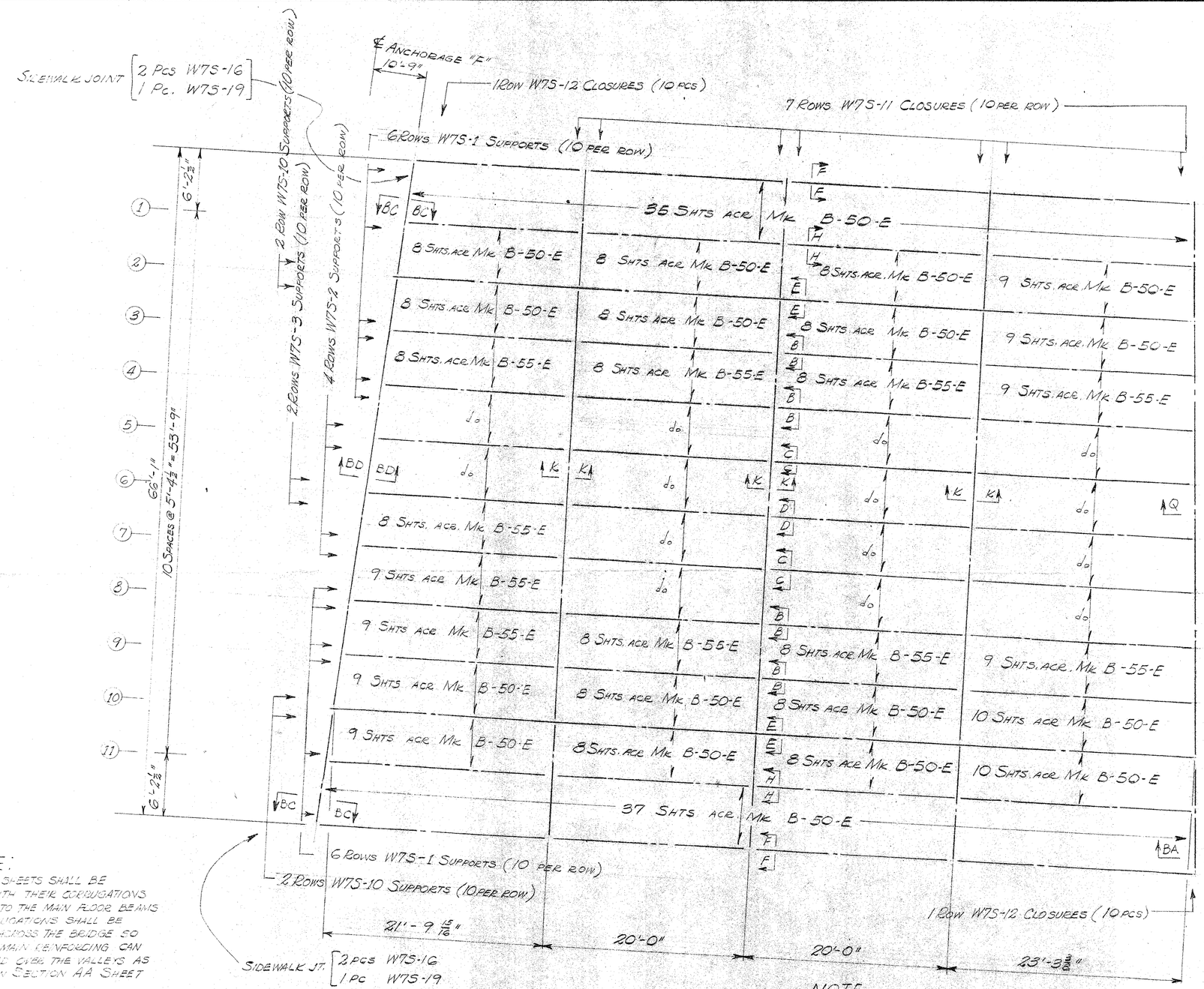
GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6506 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.

DATE	BY	APP.	REVISIONS
5-14-60	J.F.		SIDE CONDITION NOTE
5-18-60	J.F.	EDB	ANGL. & SHT. NOS.

DRAWN J.F. | DATE 5-9-60 | APPROVED EDB

FILE NO. OGN-0859

SHEET NO. A8 OF 15



NOTE:
ALL SHEETS SHALL BE PLACED WITH THEIR CORRUGATIONS PARALLEL TO THE MAIN FLOOR BEAMS. THE CORRUGATIONS SHALL BE ALIGNED ACROSS THE BRIDGE SO THAT THE MAIN REINFORCING CAN BE PLACED OVER THE VALLEYS AS SHOWN ON SECTION AA SHEET Nº A5
IN AREAS WHERE BEAMS ARE SKEWED TO SHEETS - SHEETS MAY BE SLEN CUT IN THE FIELD TO FIT.

SPAN 1E

SIP PLACING PLAN

NOTE
USE CLOSURE W7S-4 ON BOTH ENDS OF ALL SHEETS.
SEE SHEET Nº A5 & A13 FOR SECS. INDICATED ON PLAN.
SEE SHEET Nº A8 FOR SCUPPER DETAILS.
SEE SHEET N2 A15 FOR LAP CONDITIONS.

NOTE: SIP SHEETS HAVE BEEN FURNISHED AS SHOWN OVER DIAGONALS TO BE SUPPORTED AS SHOWN ON SECTION A-A & E-E. IN DIAGONALS INTERFERE WITH SHEETS THE AREA MAY BE FORMED WITH WOOD (WOOD FORMS BY OTHERS) IN THE ENGINEER WILL APPROVE.

SILICON STEEL MEMBERS NOT INCLUDED

TYPICAL SIDEWALK JOINT (UNLESS NOTED) [4 PCS W7S-16 EA JT] 9 JTS REQ'D.

BA

SPAN 1E

BILL OF MATERIAL

MARK	NO. REQ'D.	LENGTH	DESCRIPTION AND REMARKS
			22 GAGE
B-55-E	200	4'-7"	"E" PATTERN
B-50-E	208	4'-3"	2½" COVER
			7" DEPTH
			1½" DEEP
W7S-1	120	9'-0"	10 GAGE
W7S-2	40	9'-0"	10 GAGE
W7S-3	20	9'-0"	10 GAGE
W7S-4	816	28"	24 GAGE
W7S-10	40	9'-0"	10 GAGE
W7S-11	70	5'-4½"	24 GAGE
W7S-12	20	5'-4½"	18 GA.
X1A-1	1700	–	WELDING WASHERS
W7S-16	36	3'-0"	VARIES 0 TO 3" 10 GA.
W7S-19	2	7'-10½"	22 GA.

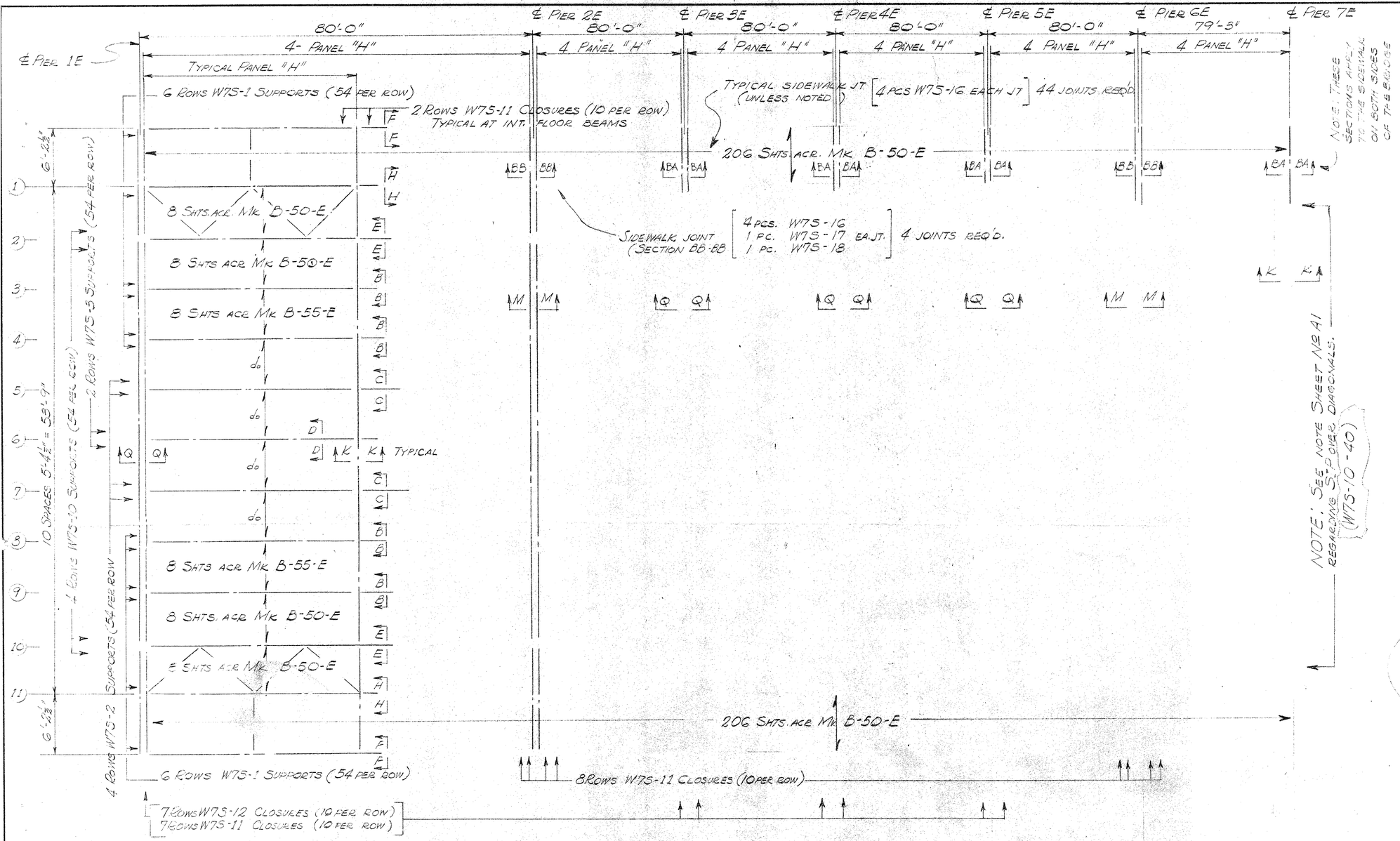
GENERAL NOTES:
1. GRANCO WILL FURNISH ONLY THAT MATERIAL LISTED IN THE BILL OF MATERIAL.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. REINFORCING STEEL AND SUPPORTS FOR REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH APPLICABLE DRAWINGS AND IN CONFORMANCE WITH GOOD REINFORCED CONCRETE PRACTICE.
4. ALL SHEETS SHALL HAVE A NOMINAL BEARING OF [illegible] INCHES AT EACH END.
5. ALL SHEETS AND THEIR SUPPORTS SHALL BE ATTACHED BY WELDING FROM THE TOP SIDE AS SHOWN ON PLACING PLANS.
6. CALCIUM CHLORIDE OR ANY ADMIXTURE CONTAINING CHLORIDE SALTS SHALL NOT BE USED IN THE CONCRETE PLACED ON S I P FORMS.
7. ALL SHEETS SHALL BE GALVANIZED IN ACCORDANCE WITH A.S.T.M. SPECIFICATION A 93-58T GRADING [illegible] 1.5 OUNCES.

PROJECT: ANTHONY WAYNE BRIDGE APPROACH
LOCATION: TOLEDO, OHIO
ARCHITECT-ENGINEER: DANIEL MCCALL WILBUR & BRENNAN
CUSTOMER: JONES & MCKENNAN INC.
CUSTOMER ORDER NO.

GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6306 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.

DATE	BY	APP.	REVISIONS
9-14-60	JF		LAP DETAIL NOTE
9-16-60	JF	EDB	PER APPROVAL

DRAWN JF
DATE 5-17-60
APPROVED EDB
FILE NO. CGN-0859
SHEET NO. A9
OF 15



BILL OF MATERIAL

MARK	NO. REQ'D.	LENGTH	DESCRIPTION AND REMARKS
			22 GAGE
B-55-E	1152	4'-7"	"E" PATTERN
B-50-E	1180	4'-2"	2⅜" COVER
			7" PITCH
			½" DEEP
W7S-1	648	9'-0"	10 GAGE
W7S-2	216	9'-0"	10 GAGE
W7S-3	108	9'-0"	10 GAGE
W7S-4	4637	28"	24 GAGE
W7S-10	258	9'-0"	10 GAGE
W7S-11	520	5'-4½"	24 GAGE
W7S-12	70	5'-4½"	18 GA.
X1A-1	9300	-	WELDING WASHERS
W7S-13	192	3'-0"	
W7S-17	4	6'-2½"	24 GA.
W7S-18	4	6'-2½"	24 GA.

GENERAL NOTES:

1. GRANCO WILL FURNISH ONLY THAT MATERIAL LISTED IN THE BILL OF MATERIAL.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. REINFORCING STEEL AND SUPPORTS FOR REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH APPLICABLE DRAWINGS AND IN CONFORMANCE WITH GOOD REINFORCED CONCRETE PRACTICE.
4. ALL SHEETS SHALL HAVE A NOMINAL BEARING OF 7 INCHES AT EACH END.
5. ALL SHEETS AND THEIR SUPPORTS SHALL BE ATTACHED BY WELDING FROM THE TOP SIDE AS SHOWN ON PLACING PLANS.
6. CALCIUM CHLORIDE (OR ANY ADMIXTURE CONTAINING CHLORIDE SALTS) SHALL NOT BE USED IN THE CONCRETE PLACED ON S.I.P. FORMS.
7. ALL SHEETS ARE FABRICATED IN ACCORDANCE WITH AISI SPECIFICATION A93-57 CRITERIA CLASS 1B GUIDES.

NOTE

ALL SHEETS SHALL BE PLACED WITH THEIR CORRUGATIONS PARALLEL TO THE MAIN FLOOR BEAMS THE CORRUGATIONS SHALL BE ALIGNED ACROSS THE BRIDGE SO THAT THE MAIN REINFORCING CAN BE PLACED OVER THE VALLEYS AS SHOWN ON SECTION A-A SHEET NO A5.

SIP PLACING PLAN

NOTE

USE CLOSURE W7S-4 ON BOTH ENDS OF ALL SHEETS
SEE SHEET NO A5 FOR SECTIONS INDICATED ON PLAN.
SEE SHEET NO A8 FOR SCUPPER DETAILS.
SEE SHEET NO A15 FOR LAP DETAILS.

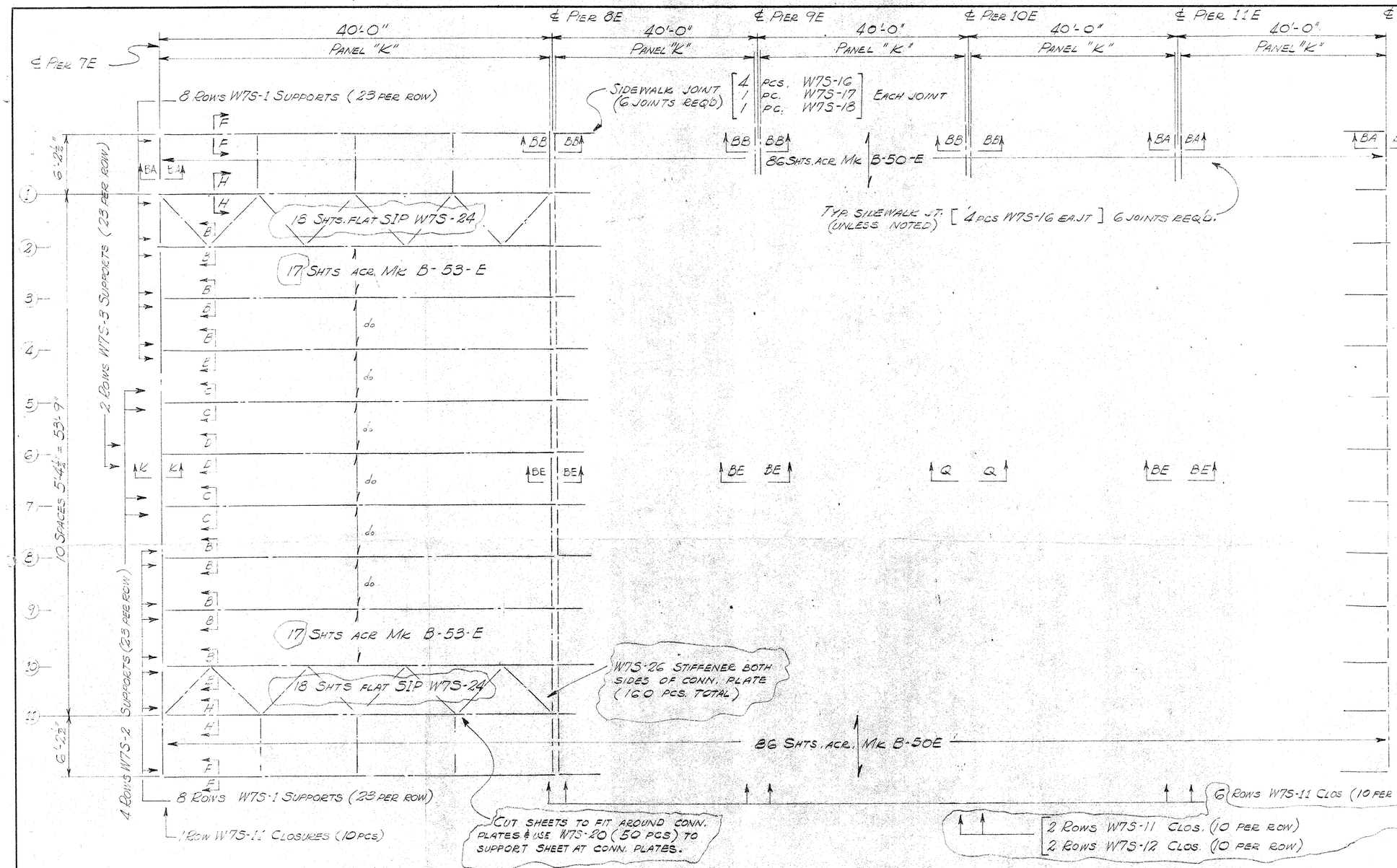
SPANS 2E, 3E, 4E, 5E, 6E & 7E.

PROJECT: ANTHONY WAYNE BRIDGE REPAIRS
LOCATION: TOLEDO, OHIO
ARCHITECT-ENGINEER: SANDERS & BAUER, WALKER & BERMAN
CUSTOMER: JONES & McKNIGHT INC. CUSTOMER ORDER NO.

GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6506 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.

DATE	BY	APP.	REVISIONS
7-14-60			CROSS BRACING AREAS
6-14-60		EDB	PER APPROVAL

DRAWN | DATE 5-17-60 | APPROVED EDB | FILE NO. OGN-0859 | SHEET NO. A10 OF 15



SPAN 8E SPAN 9E SPAN 10E SPAN 11E SPAN 12E

SIP PLACING PLAN

SPANS 8E, 9E, 10E, 11E, & 12E

NOTE
ALL SHEETS SHALL BE PLACED WITH THEIR CORRUGATIONS PARALLEL TO THE MAIN FLOOR BEAMS. THE CORRUGATIONS SHALL BE ALIGNED ACROSS THE BRIDGE SO THAT THE MAIN REINFORCING CAN BE PLACED OVER THE VALLEYS AS SHOWN ON SECTION AA SHEET Nº A5.

NOTE
USE CLOSURE W7S-4 ON BOTH ENDS OF ALL SHEETS
SEE SHEET Nº A5 & A13 FOR SECS. INDICATED ON PLAN.
SEE SHEET Nº A8 FOR SCUPPER DETAILS.
SEE SHEET Nº A15 FOR LAP DETAILS.
SEE SHEET Nº A15 FOR DETAILS WHERE FLAT SIP IS USED.

BILL OF MATERIAL

MARK	NO. REQ'D	LENGTH	DESCRIPTION AND SKETCH
			22 GAGE
B-53 E	680	4'-5"	1½" PATTERN
B-50-E	172	4'-2"	23 COVER
			7" PITCH
			1 9/16" DEEP
W7S-1	368	9'-0"	10 GA
W7S-2	92	9'-0"	10 GA
W7S-3	175	9'-0"	10 GA
W7S-4	1944	25"	24 GA
W7S-11	90	5'-4½"	3" 24 GA
W7S-12	20	5'-4½"	5" 6" 18 GA
W7S-20	50	12"	1" 12 GA.
W7S-24	180	4'-10"	14 GA x 27½" FLAT
XIA-1	3900	–	WELDING WASHERS
W7S-16½	40	3'-0"	10 GA
W7S-17	6	6'-2½"	24 GA
W7S-18	6	6'-2⅓"	24 GA
W7S-26	160	4'-6"	1" 12 GA

GENERAL NOTES:
1. GRANCO WILL FURNISH ONLY THAT MATERIAL LISTED IN THE BILL OF MATERIAL.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. REINFORCING STEEL AND SUPPORTS FOR REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH APPLICABLE DRAWINGS AND IN CONFORMANCE WITH GOOD REINFORCED CONCRETE PRACTICE.
4. ALL SHEETS SHALL HAVE A NOMINAL BEARING OF 4 INCHES AT EACH END.
5. ALL SHEETS AND THEIR SUPPORTS SHALL BE ATTACHED BY WELDING FROM THE TOP SIDE AS SHOWN ON PLACING PLANS.
6. CALCIUM CHLORIDE (OR ANY ADMIXTURE CONTAINING CHLORIDE SALTS) SHALL NOT BE USED IN THE CONCRETE PLACED ON S.I.P. FORMS.
7. ALL SHEETS SHALL BE SECURELY WIRED TOGETHER WITH 12 GAUGE WIRE.

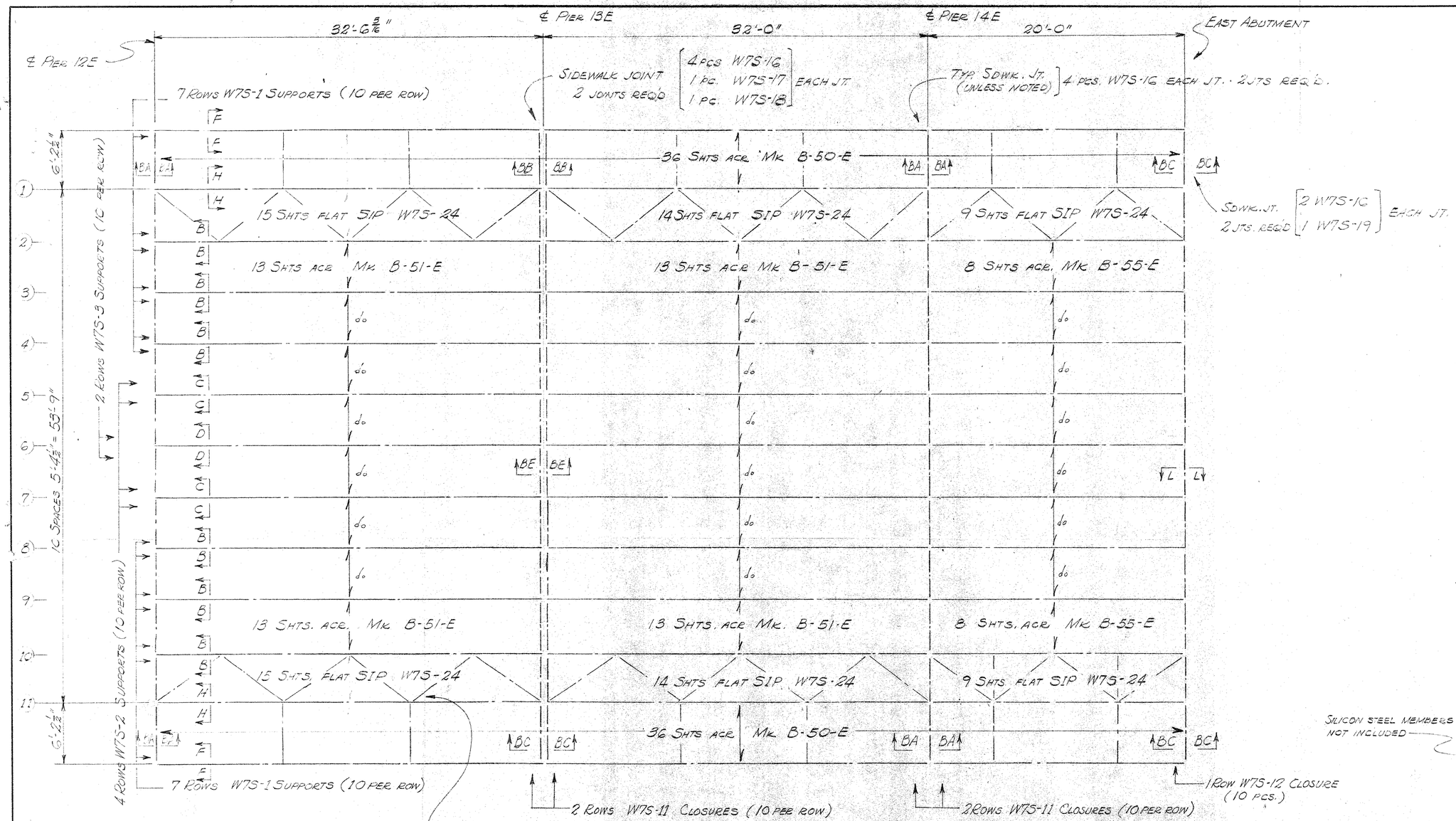
SILICON STEEL MEMBERS NOT INCLUDED

9-14-60	JS		CROSS BEARING AREAS	
8-16-60	JS	EDB	PER APPROVAL	
DATE	BY	APP.	REVISIONS	

PROJECT: ANTHONY WAYNE BRIDGE SECTIONS
LOCATION: TOLEDO, OHIO
ARCHITECT-ENGINEER: DANIEL E. MCCLURE, WILLIAM S. BELKNAP JR.
CUSTOMER: JOHNES & MONTGOMERY INC. CUSTOMER ORDER NO.

GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6506 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.

DRAWN JS	FILE NO. OGN 0859	SHEET NO. A17
DATE 5-13-60		OF 15
APPROVED EDB		



BILL OF MATERIAL

MARK	NO. REQ'D A	LENGTH	DESCRIPTION AND REMARKS
B-55-E	64	4'-7"	22 GAGE "E" PATTERN 28" COVER 7" PITCH 1 3/4" DEEP
B-51-E	208	4'-3"	
B-50-E	72	4'-2"	
W7S-1	140	9'-0"	10 GAGE
W7S-2	40	9'-0"	10 GAGE
W7S-3	50	9'-0"	10 GAGE
W7S-4	324	43"	24 GAGE
W7S-11	50	5'-4 1/2"	12 GA
W7S-12	10	5'-4 1/2"	18 GA
W7S-20	38	12"	12 GA
W7S-26	64	4'-0	12 GA.
XIA-1	1700	-	WELDING WASHERS
W7S-16	20	3'-0"	18 GA
W7S-17	2	6'-2 1/2"	24 GA
W7S-18	2	6'-2 1/2"	24 GA
W7S-19	2	7'-10 1/4"	21 GA.
W7S-24	76	4'-10"	14 GA x 27 1/2" FLAT

GENERAL NOTES:

1. GRANCO WILL FURNISH ONLY THAT MATERIAL LISTED IN THE BILL OF MATERIAL.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. REINFORCING STEEL AND SUPPORTS FOR REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH APPLICABLE DRAWINGS AND IN CONFORMANCE WITH GOOD REINFORCED CONCRETE PRACTICE.
4. ALL SHEETS SHALL HAVE A NOMINAL BEARING OF INCHES AT EACH END.
5. ALL SHEETS AND THEIR SUPPORTS SHALL BE ATTACHED BY WELDING FROM THE TOP SIDE AS SHOWN ON PLACING PLANS.
6. CALCIUM CHLORIDE, OR ANY ADMIXTURE CONTAINING CHLORIDE SALTS SHALL NOT BE USED IN THE CONCRETE PLACED ON G.I.P. FORMS.
7. ALL CONCRETE SHALL BE DEPOSITED BY MEANS OF METHODS OUTLINED IN A.C.I. 614, CHAPTER 6, UNLESS OTHERWISE NOTED.

SILICON STEEL MEMBERS NOT INCLUDED

SPAN 13E

NOTE

ALL SHEETS SHALL BE PLACED WITH THEIR CORRUGATIONS PARALLEL TO THE MAIN FLOOR BEAMS. THE CORRUGATIONS SHALL BE ALIGNED ACROSS THE BRIDGE SO THAT THE MAIN REINFORCING CAN BE PLACED OVER THE VALLEYS AS SHOWN ON SECTION AA SHEET Nº A5.

SPAN 14E

SIP PLACING PLAN

NOTE:

FIT IN THE FIELD 40 PCS W7S-11 CLOSURES AS REQ'D. TO CLOSE EXPANSION JOINTS.

SPAN 15E

NOTE

USE CLOSURE W7S-4 ON BOTH ENDS OF ALL SHEETS

SEE SHEET Nº A5 & A13 FOR SECS. INDICATED ON PLAN.

SEE SHEET Nº A8 FOR SCUPPER DETAILS.

SEE SHEET Nº A15 FOR LAP CONDITIONS.

SEE SHEET Nº A15 FOR DETAILS WHERE FLAT SIP IS USED.

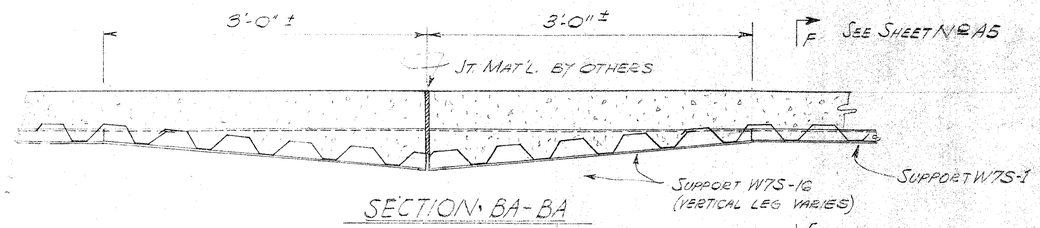
SPANS 13E, 14E & 15E

PROJECT: Arizona Inside Beltline, Section 3
LOCATION: Tempe, Ariz.
ARCHITECT-ENGINEER: Lyle Cochran & Associates, Engineers, Scottsdale
CUSTOMER: Jones & McKnight Co. | CUSTOMER ORDER NO.

GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6506 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.

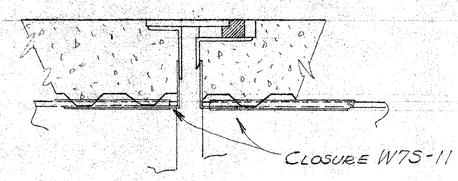
DATE	BY	APP.	REVISIONS
7-19-60	F		CROSS BRACING AREAS
4-18-60	JK	EDB	PER APPROVAL

DRAWN JK | DATE 3-19-60 | APPROVED EDB
FILE NO. OGN-0559
SHEET NO. A12 OF 15



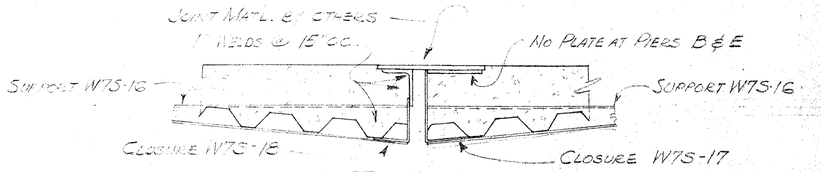
SECTION BA-BA

SIDEWALK JOINT AT INT. DIAP. & PIERS 7W, 6W, 4W, 3W 1W, 1E, 3E, 4E, 5E, 7E, 10E, 12E, & 14E.



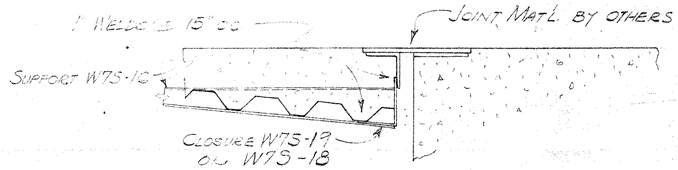
SECTION BE-BE

DETAILS OF CONST. JT. AT PIERS 8E, 9E, 11E & 13E.



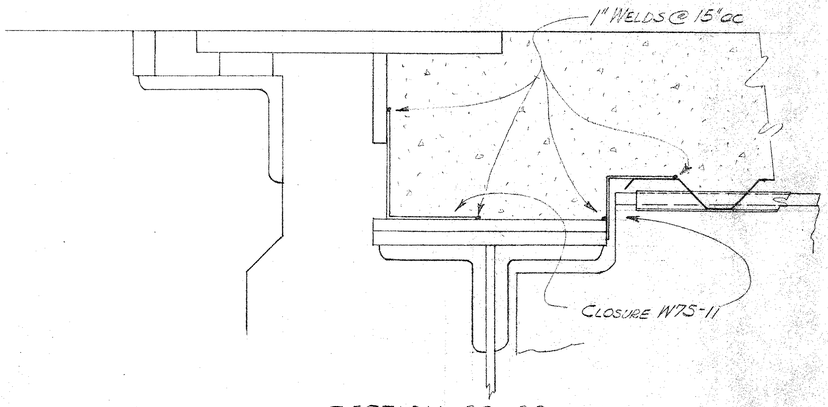
SECTION BB-BB

SIDEWALK JOINT AT PIERS 5W, 2W, 2E, 6E, 8E, 9E, 11E, 13E, B & E.



SECTION BC-BC

SIDEWALK JOINT AT ABUTMENTS & ANCHORAGES A & F



SECTION BD-BD

DETAIL AT ANCHORAGE A & F

SILICON STEEL MEMBERS NOT INCLUDED

GENERAL NOTES:

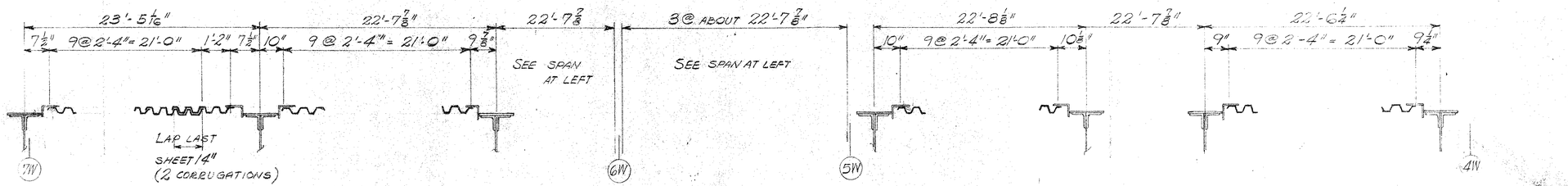
1. GRANCO WILL FURNISH ONLY THAT MATERIAL LISTED IN THE BILL OF MATERIAL.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. REINFORCING STEEL AND SUPPORTS FOR REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH APPLICABLE DRAWINGS AND IN CONFORMANCE WITH GOOD REINFORCED CONCRETE PRACTICE.
4. ALL SHEETS SHALL HAVE A NOMINAL BEARING OF 1 INCHES AT EACH END.
5. ALL SHEETS AND THEIR SUPPORTS SHALL BE ATTACHED BY WELDING FROM THE TOP SIDE AS SHOWN ON PLACING PLANS.
6. CALCIUM CHLORIDE OR ANY ADMIXTURE CONTAINING CHLORIDE SALTS SHALL NOT BE USED IN THE CONCRETE PLACED ON B I P FORMS.
7. ALL SHEETS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM SPECIFICATION A93-55T COATING CLASS 1.5 OUNCES.

PROJECT	ANTHONY WAYNE BRIDGE CROSSING
LOCATION	TOLEDO, OHIO
ARCHITECT-ENGINEER	STRAUBMUELLER, MILLER & BELGARDEN
CUSTOMER	JONES & McKNIGHT INC.
CUSTOMER'S ORDER NO.	

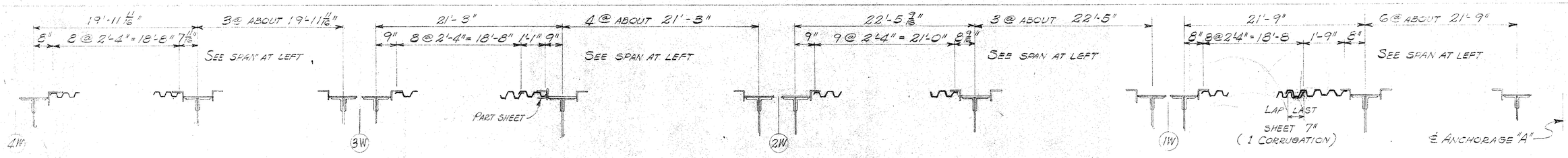
GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6506 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.

DRAWN JP	FILE NO. OGN-0859	SHEET NO. A13
DATE 6-15-60		OF 15
APPROVED EDB		

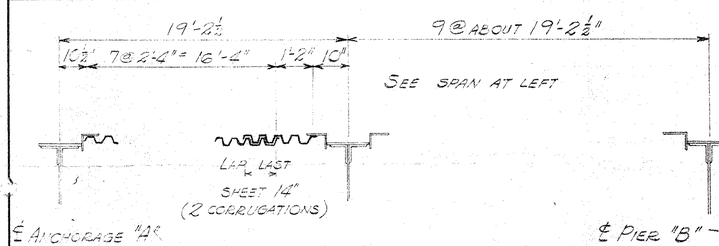
DATE	BY	APP.	REVISIONS



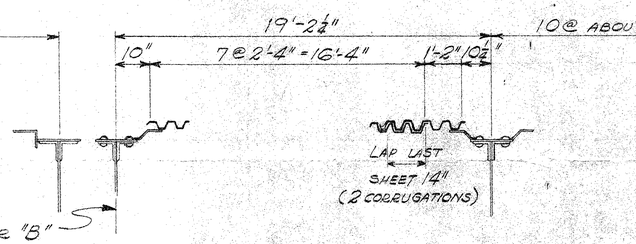
SPAN 7W — SPAN 6W — SPAN 5W



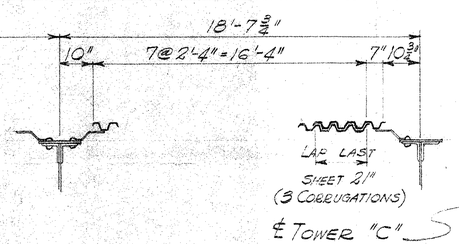
SPAN 4W — SPAN 3W — SPAN 2W — SPAN 1W

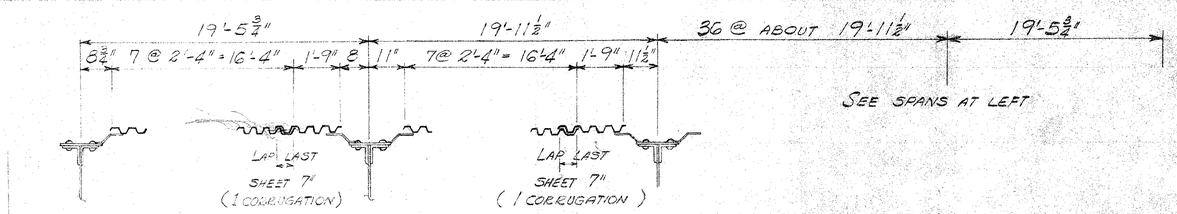


ANCHORAGE "A" TO PIER "B"



SIDE SUSPENDED SPAN





MAIN SUSPENDED SPAN

OPPOSITE HAND OF SIDE SUSPENDED SPAN SHOWN ABOVE.

℄ TOWER "D"

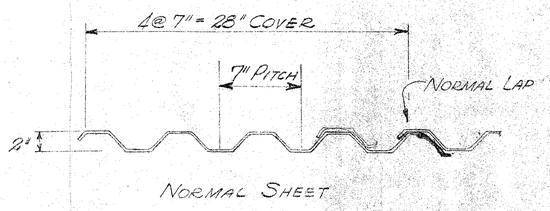
℄ PIER "E"

SIDE SUSPENDED SPAN

OPPOSITE HAND OF ANCHORAGE "A" TO PIER "B" SPAN SHOWN ABOVE

℄ ANCHORAGE "F"

PIER "E" TO ANCHORAGE "F"



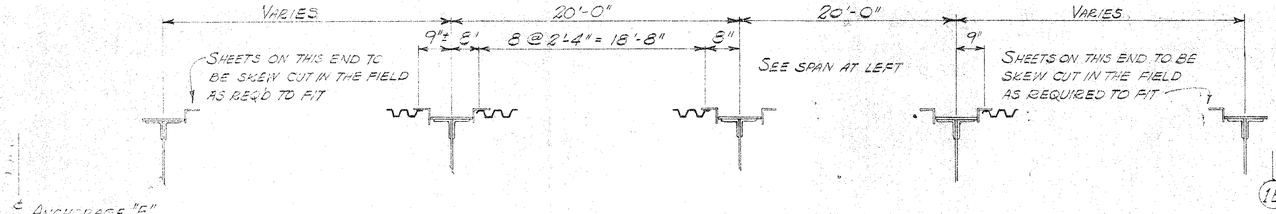
NORMAL SHEET

PROJECT ANTHONY WAYNE BRIDGE REPAIRS
LOCATION TOLEDO, OHIO.
ARCHITECT-ENGINEER SAVENDACHER, MILLER & BERGMAN.
CUSTOMER JONES & McKNIGHT INC. CUSTOMER ORDER NO.

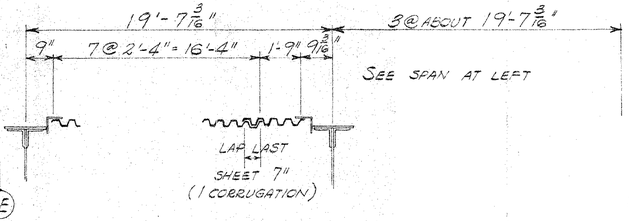
GRANCO STEEL PRODUCTS CO.
SUBSIDIARY OF GRANITE CITY STEEL CO.
6506 NORTH BROADWAY, ST. LOUIS 15, MISSOURI
EXECUTIVE OFFICES: GRANITE CITY, ILL.

DRAWN
DATE 7-12-60
FILE NO. OGN-0859
SHEET NO. A14
OF 15
APPROVED

DATE	BY	APP.	REVISIONS

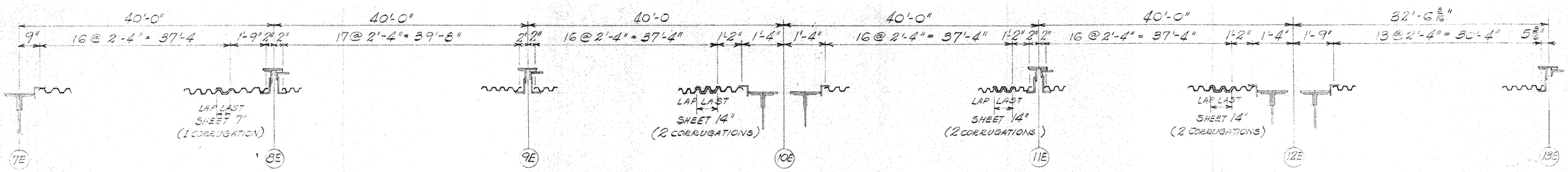


SPAN 1E



SPAN 2E

SPANS 3E THRU 7E
(SIMILAR TO SPAN 2E)



SPAN 8E

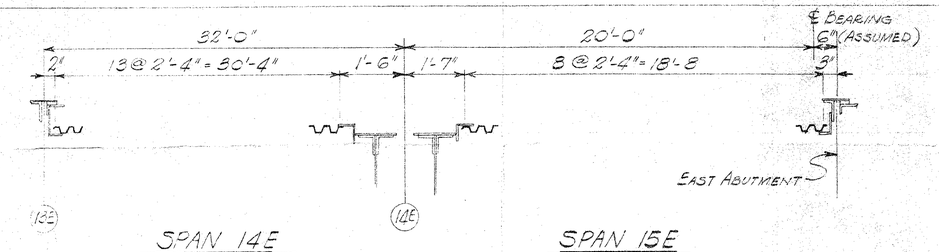
SPAN 9E

SPAN 10E

SPAN 11E

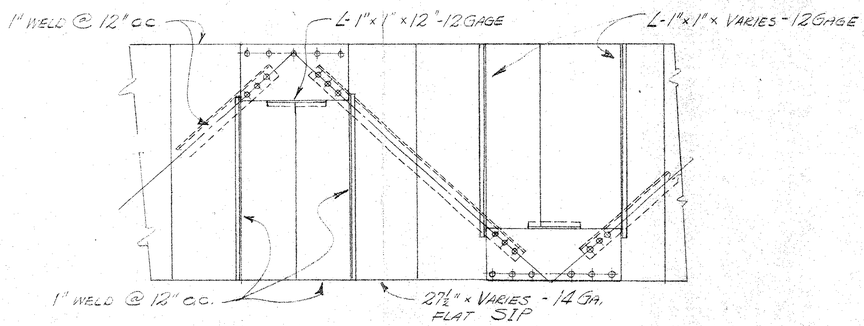
SPAN 12E

SPAN 13E



SPAN 14E

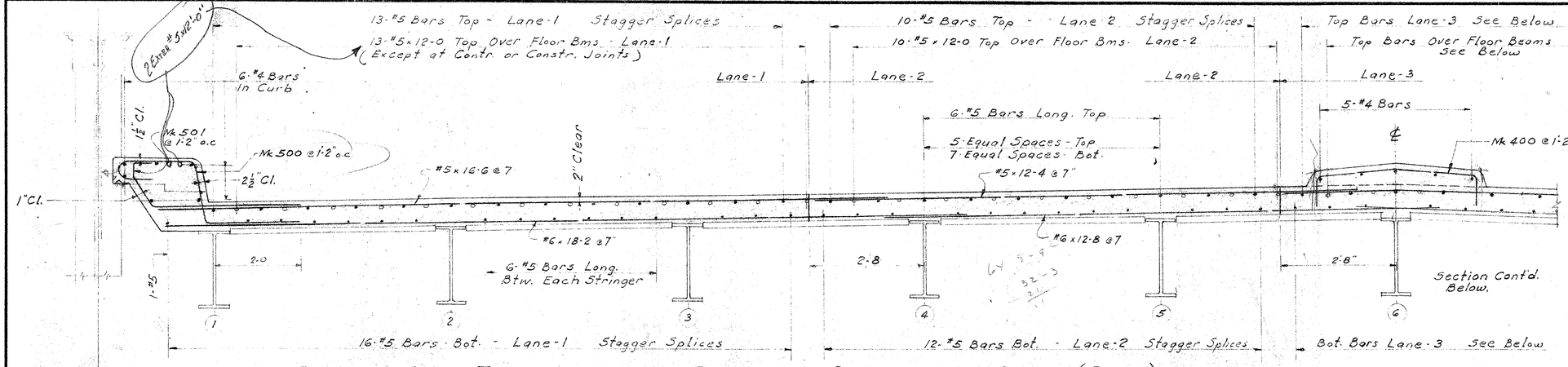
SPAN 15E



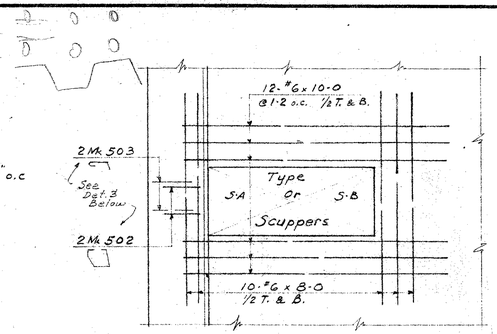
DETAILS WHERE FLAT SIP IS USED

PROJECT ANTHONY WAYNE BRIDGE REPAIRS			
LOCATION TOLEDO, OHIO.			
ARCHITECT-ENGINEER SANDERBACHER, MILLER & BRIGHAM			
CUSTOMER JONES & McKNIGHT INC.		CUSTOMER ORDER NO.	
GRANCO	GRANCO STEEL PRODUCTS CO. SUBSIDIARY OF GRANITE CITY STEEL CO. 6506 NORTH BROADWAY, ST. LOUIS 15, MISSOURI EXECUTIVE OFFICES: GRANITE CITY, ILL.		
DRAWN		FILE NO.	SHEET NO.
DATE			OF
APPROVED			

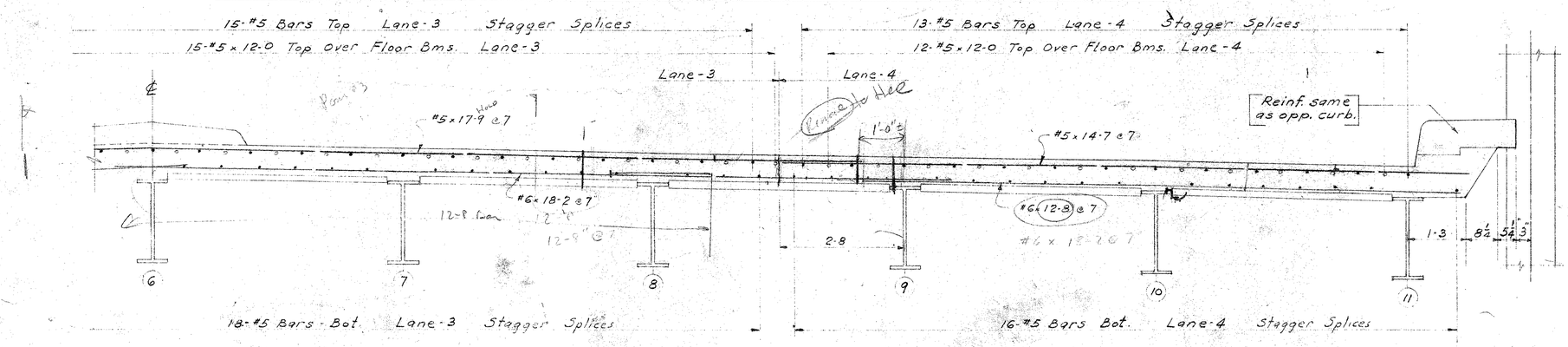
DATE	BY	APP.	REVISIONS

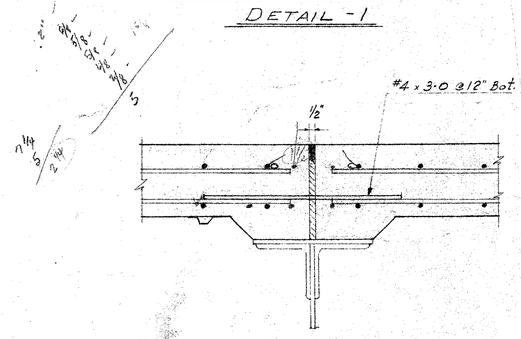


SECTION A-A TYPICAL CROSS SECTION - SUSPENSION SPAN - (PART.)



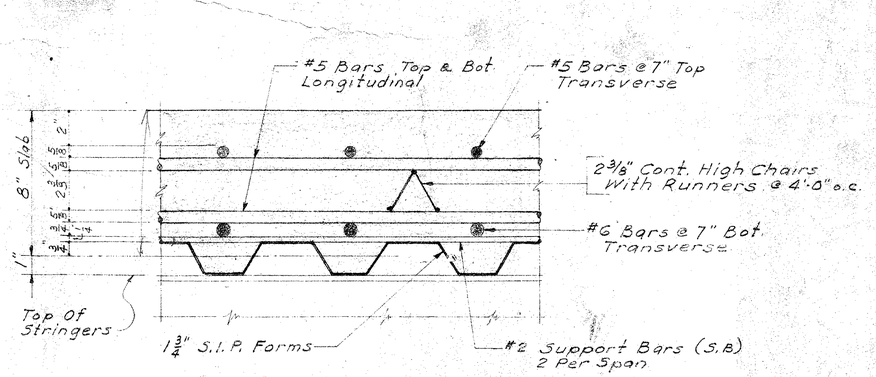
PLAN OF ADDITIONAL REINF. AT SCUPPERS S-A & S-B
DETAIL - 1



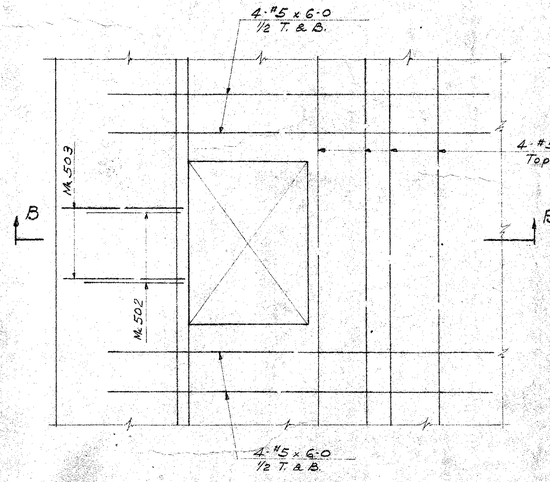


SECTION AT CONSTRUCTION-CONTRACTION JOINT AT INTERMEDIATE FLOOR BEAMS
DETAIL - 2

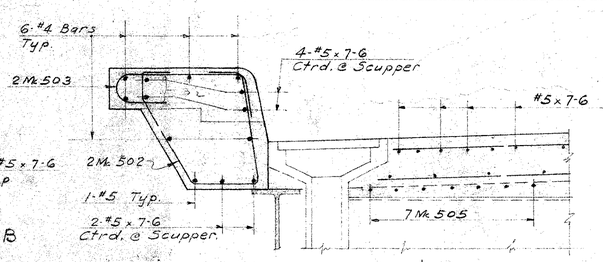
SECTION A-A TYPICAL CROSS SECTION - SUSPENSION SPAN - (PART)



TYPICAL SLAB SECTION SHOWING BAR SUPPORTS



PLAN



SECTION B-B

DETAILS SHOWING ADDITIONAL REINF. AT SCUPPERS - SUSPENDED SPANS
DETAIL - 3

NOTE:
Bars at scuppers to be cut in field where necessary.

RECEIVED
SANZENBACHER, MILLER & BRISHAM
CHAS. D. SCOTT
TOLEDO OFFICE
JUL 22 1960
WPS CDS
FCM
ERB

GENERAL NOTES

BARS: GRADE OF STEEL RAIL STEEL
ALL REINFORCING BARS ARE MULTI-RIB TYPE CONFORMING TO ASTM SPECIFICATION A 305 OF LATEST DESIGNATION FOR DEFORMED REINFORCING BARS. ALL MULTI-RIB BARS ARE FURNISHED IN ROUND SECTIONS.

SPECIFICATIONS OHIO STATE HWY.
BENDING DIMENSIONS
SPLICES #5-1-7; #6-1-11, #4-1-3
REFERENCE DRAWINGS

REINFORCING STEEL DETAILS

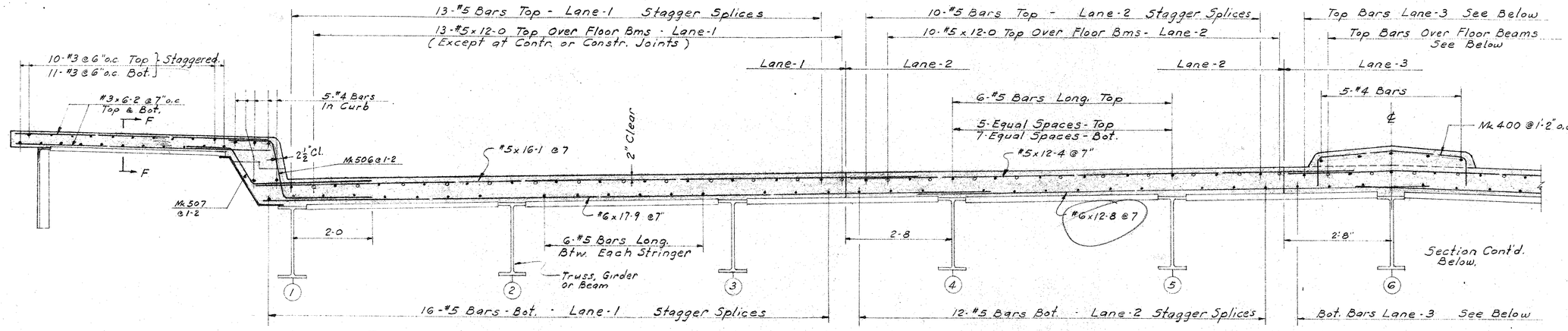
STRUCT. TYPICAL SECTIONS & DETAILS
FOR ANTHONY WAYNE BRIDGE
LOCATION TOLEDO, OHIO
ARCHT'S SANZENBACHER, MILLER & BRISHAM
CONTR'S THE LATHROP CO.

JONES & McKNIGHT, INC.
228 N. LA SALLE ST. CHICAGO

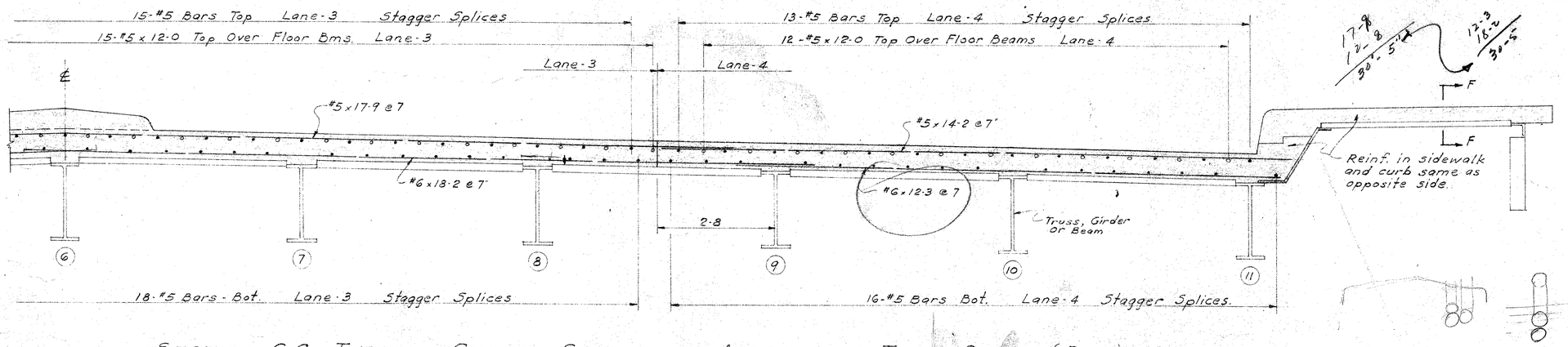
DR. BY CAZZEO CK'D
DATE 5-10-60 REVISED 5-16-60
CONT. NO CY-1927

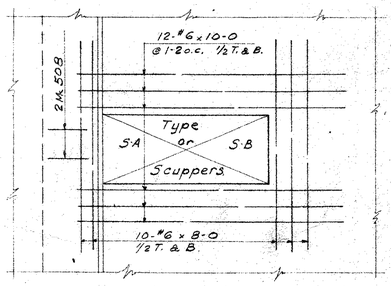
SHEET NO. 1927-A

800 175M 2-60

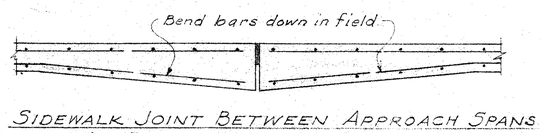


SECTION C-C TYPICAL CROSS SECTION - APPROACH & TRUSS SPANS - (PART)

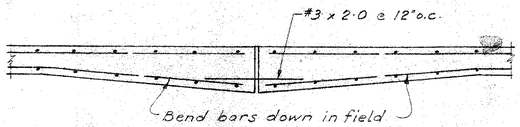




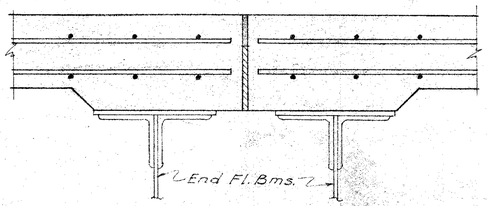
PLAN OF ADDITIONAL REINF AT SCUPPERS 5-A & 5-B AT APPROACH SPANS
DETAIL - 7



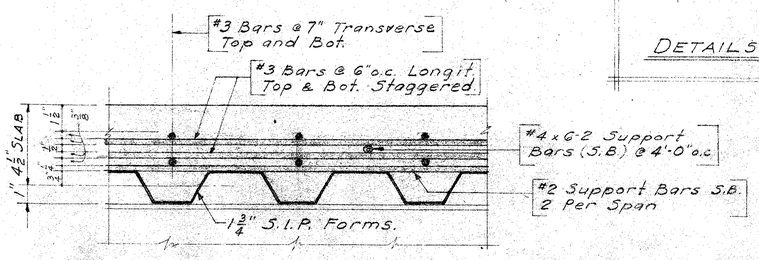
SIDEWALK JOINT BETWEEN APPROACH SPANS AT PIERS AS SHOWN BELOW
DETAIL - 5



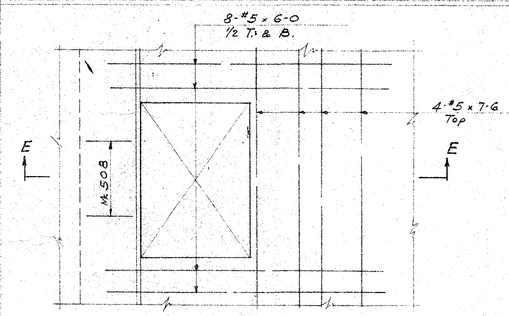
SIDEWALK JOINT AT INTERMEDIATE FLOOR BEAMS
DETAIL - 6



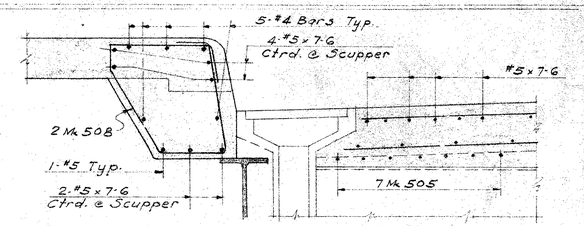
JOINT BETWEEN APPROACH SPANS AT PIERS 6W - 4W - 3W - 1W - 1E - 3E - 4E - 5E - 10E - 12E & 14E
DETAIL - 4



SECTION F-F
TYPICAL SECTION THROUGH SIDEWALK SLAB SHOWING BAR SUPPORTS



PLAN



SECTION E-E

DETAIL - 8

DETAILS SHOWING ADDITIONAL REINFORCING AT SCUPPERS - APPROACH SPANS

Note:
Bars at scuppers to be cut in field where necessary.

RECEIVED
SANZENBACHER, MILLER & BRIGHAM
CHAS. B. SCOTT
TOLEDO, OHIO
JUL 22 1960
WPS CD
ERB

REINFORCING STEEL DETAILS

GENERAL NOTES

BARS, GRADE OF STEEL RAIL STEEL
ALL REINFORCING BARS ARE MULTI-RIB TYPE CONFORMING TO ASTM SPECIFICATION A 305 OF LATEST DESIGNATION FOR DEFORMED REINFORCING BARS. ALL MULTI-RIB BARS ARE FURNISHED IN ROUND SECTIONS.

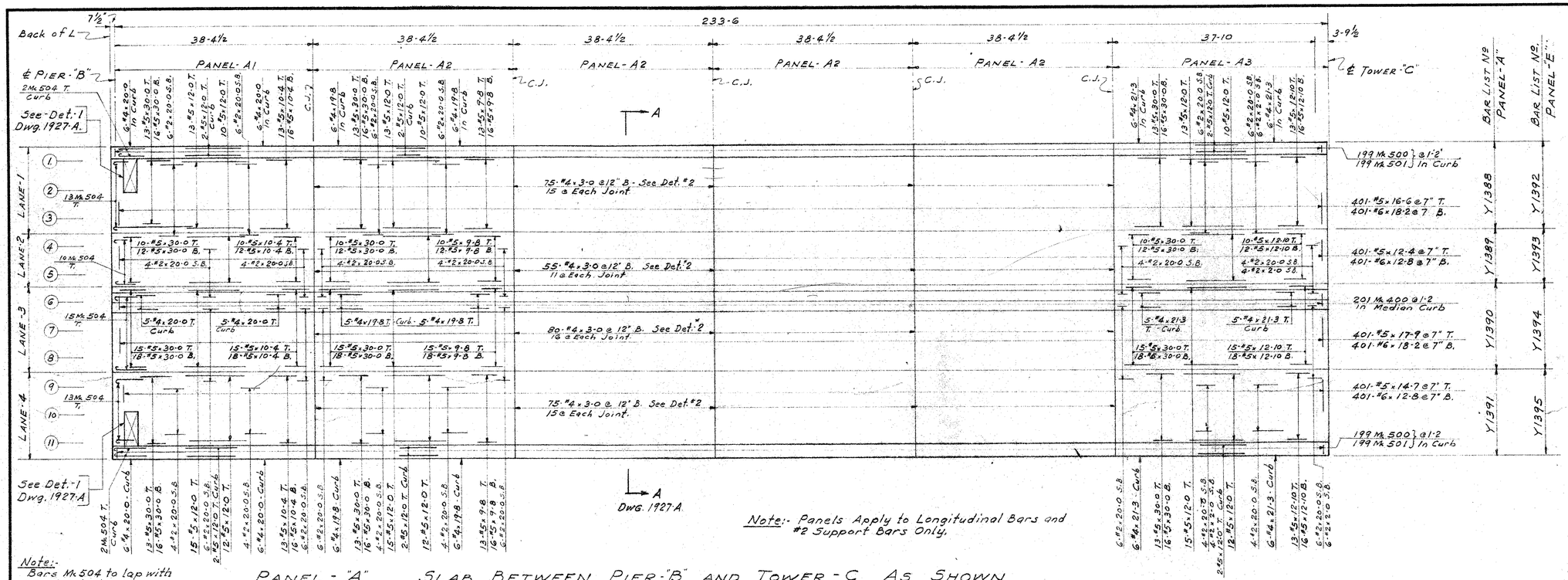
SPECIFICATIONS OHIO STATE HWY.
BENDING DIMENSIONS
SPLICES #3-1-0 ; #4-1-3 #5-1-7" #6-1-11
REFERENCE DRAWINGS

STRUCT. TYPICAL SECTIONS & DETAILS
FOR ANTHONY WAYNE BRIDGE
LOCATION TOLEDO, OHIO
ARCHT'S SANZENBACHER MILLER & BRIGHAM
CONTR'S THE LATHROP CO.

JONES & McKNIGHT, INC.
228 N. LA SALLE ST. CHICAGO

DR. BY CAIZZO OK'D
DATE 5-20-60 REVISED
CONT. NO. CY-1927
SHEET NO. 1927-A1

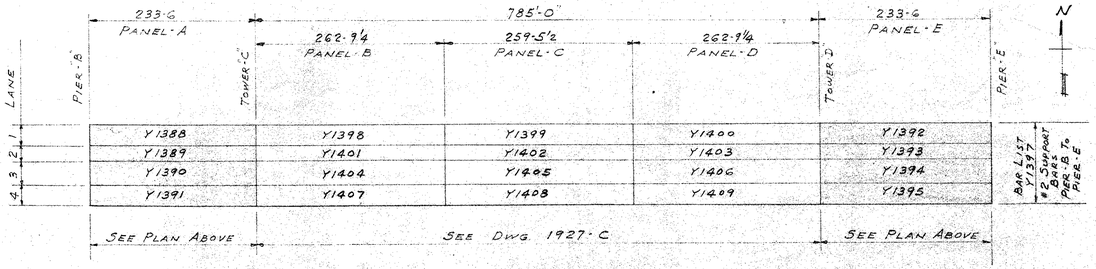
BRD 800-178H 2-60



Note:- Panels Apply to Longitudinal Bars and #2 Support Bars Only.

Note:- Bars Mk 504 to lap with #5 x 12-0 in top.

PANEL - "A" SLAB BETWEEN PIER-"B" AND TOWER-C AS SHOWN
PANEL - "E" SLAB BETWEEN PIER-"E" AND TOWER-D SAME EXCEPT OPPOSITE HAND.



PART KEY PLAN

NOTES

Refer to Dwg. 1927-A for the following:-
Section A-A; Detail-1; Detail-2; and
Typical Slab Section Showing Bar Supports.
T - Denotes Top Bars
B. " Bottom Bars
S.B. " #2 Support Bars.
Splices for #5 longitudinal bars to be staggered.

RECEIVED
SANZENBACHER, MILLER & BRIGHAM
CHAS. B. SCOTT
TOLEDO OFFICE
JUL 22 1960
WPS CDS
FCM
ERB

BAR SUPPORTS

3350 Lin. Ft. 2-3/16" Cont. High Chairs With Runners - (Panel-A)
3350 Lin. Ft. 2-3/16" " " " " " - (Panel-E)

GENERAL NOTES

BARS: GRADE OF STEEL RAIL STEEL
ALL REINFORCING BARS ARE MULTI-RIB TYPE CONFORMING TO ASTM SPECIFICATION A 305 OF LATEST DESIGNATION FOR DEFORMED REINFORCING BARS. ALL MULTI-RIB BARS ARE FURNISHED IN ROUND SECTIONS.

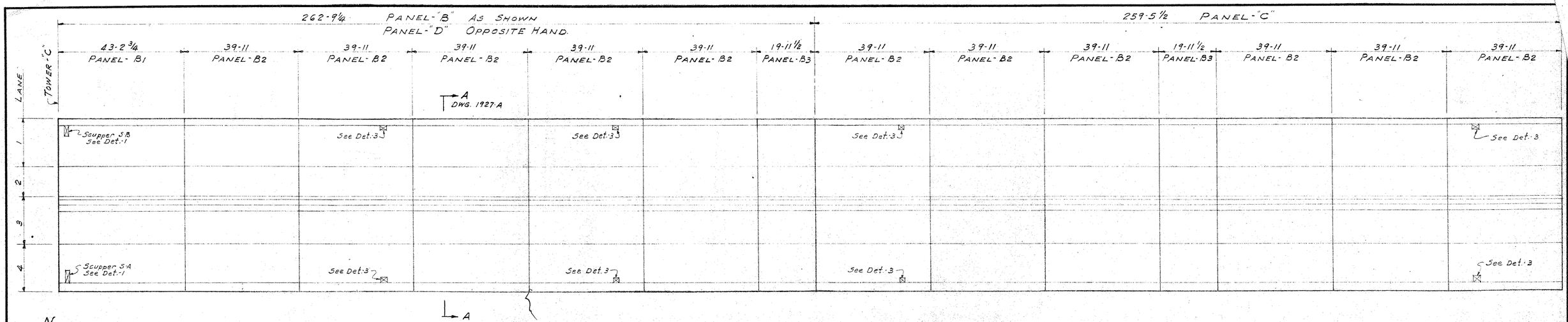
SPECIFICATIONS OHIO STATE HWY.
BENDING DIMENSIONS
SPLICES #5-1-7, #6-1-11, #4-1-3
REFERENCE DRAWINGS:

PANELS "A" AND "E"
REINFORCING STEEL DETAILS

SLAB BTW. PIER-"B" AND TOWER-"C" AND
STRUCT. BTW. PIER-"E" AND TOWER-"D"
FOR ANTHONY WAYNE BRIDGE
LOCATION TOLEDO, OHIO
ARCHT'S SANZENBACHER, MILLER & BRIGHAM
CONTR'S THE LATHROP CO.

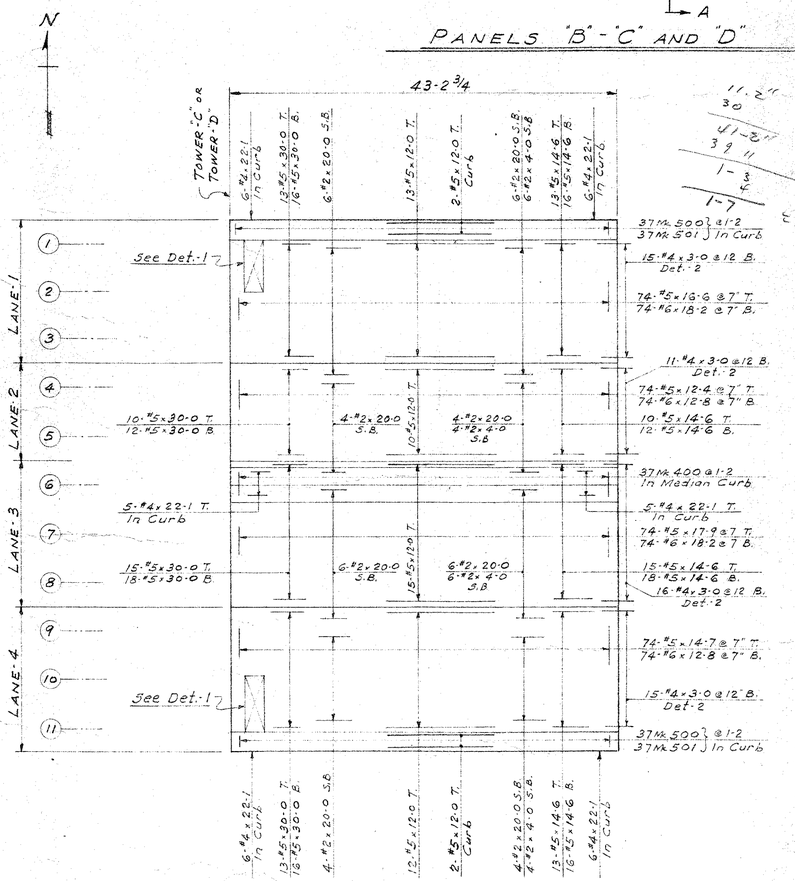
JONES & McKNIGHT, INC.
228 N. LA SALLE ST. CHICAGO

DR. BY CAIZZO OK'D 6-30-60
DATE 5-10-60 REVISED 5-16-60
CONT. NO. CY-1927
SHEET NO. 1927-B

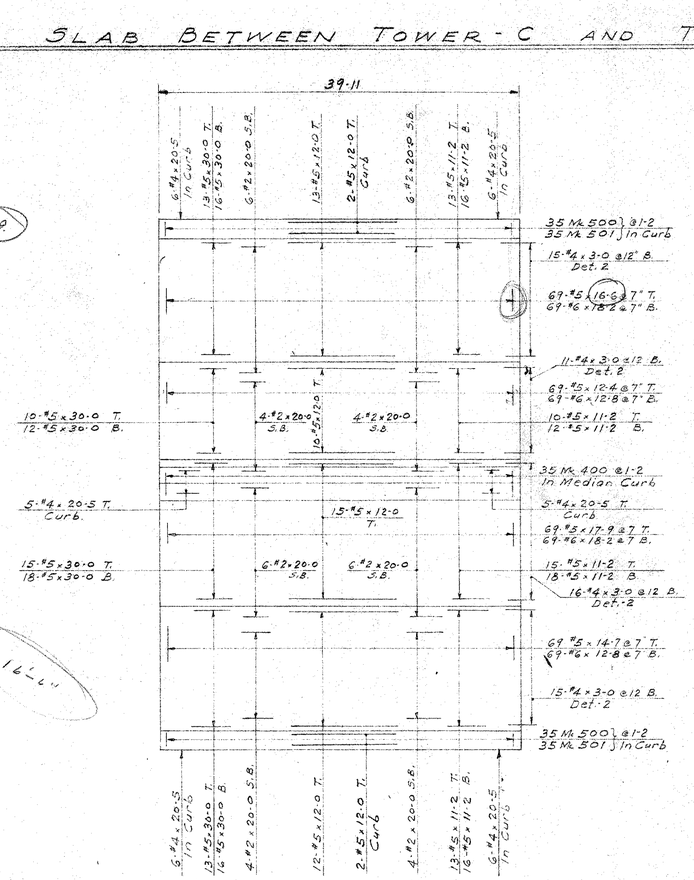


A

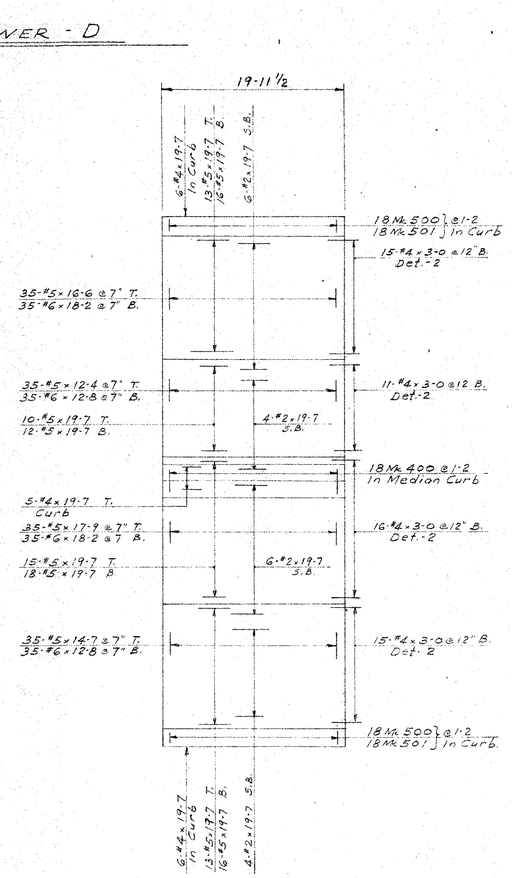
PANELS "B"-"C" AND "D" SLAB BETWEEN TOWER-C AND TOWER-D



PANEL - B1



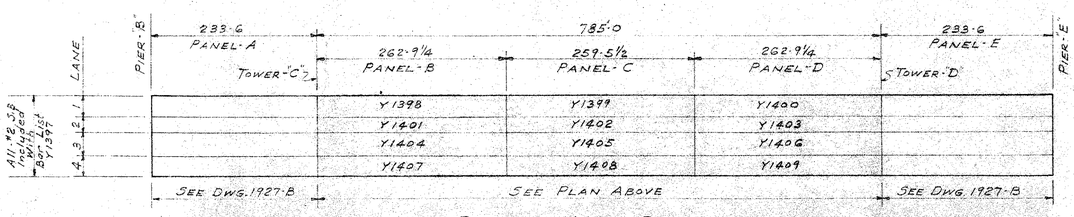
PANEL - B2



PANEL - B3

NOTES:
Refer to Dwg. 1927-A for following:-
Section A-A, Details 1, 2, & 3 and Typ. Slab Section showing Bar Supports.
T. denotes Top Bars
B " Bottom Bars
S.B. " #2 Support Bars
Splices for #5 longitudinal bars to be staggered.

BAR SUPPORTS
11,100 Lin. Ft. 2 3/8" Cont. High Chairs With Runners
(Total For Panels "B-C & D")



PART KEY PLAN

GENERAL NOTES

BARS: GRADE OF STEEL HARD STEEL.
ALL REINFORCING BARS ARE MULTI-RIB TYPE CONFORMING TO ASTM SPECIFICATION A 305 OF LATEST DESIGNATION FOR DEFORMED REINFORCING BARS. ALL MULTI-RIB BARS ARE FURNISHED IN ROUND SECTIONS.

SPECIFICATIONS OHIO STATE HWY
BENDING DIMENSIONS
SPLICES #4 = 1-3 ; #5 = 1-7; #6 = 1-11
REFERENCE DRAWINGS:

REINFORCING STEEL DETAILS

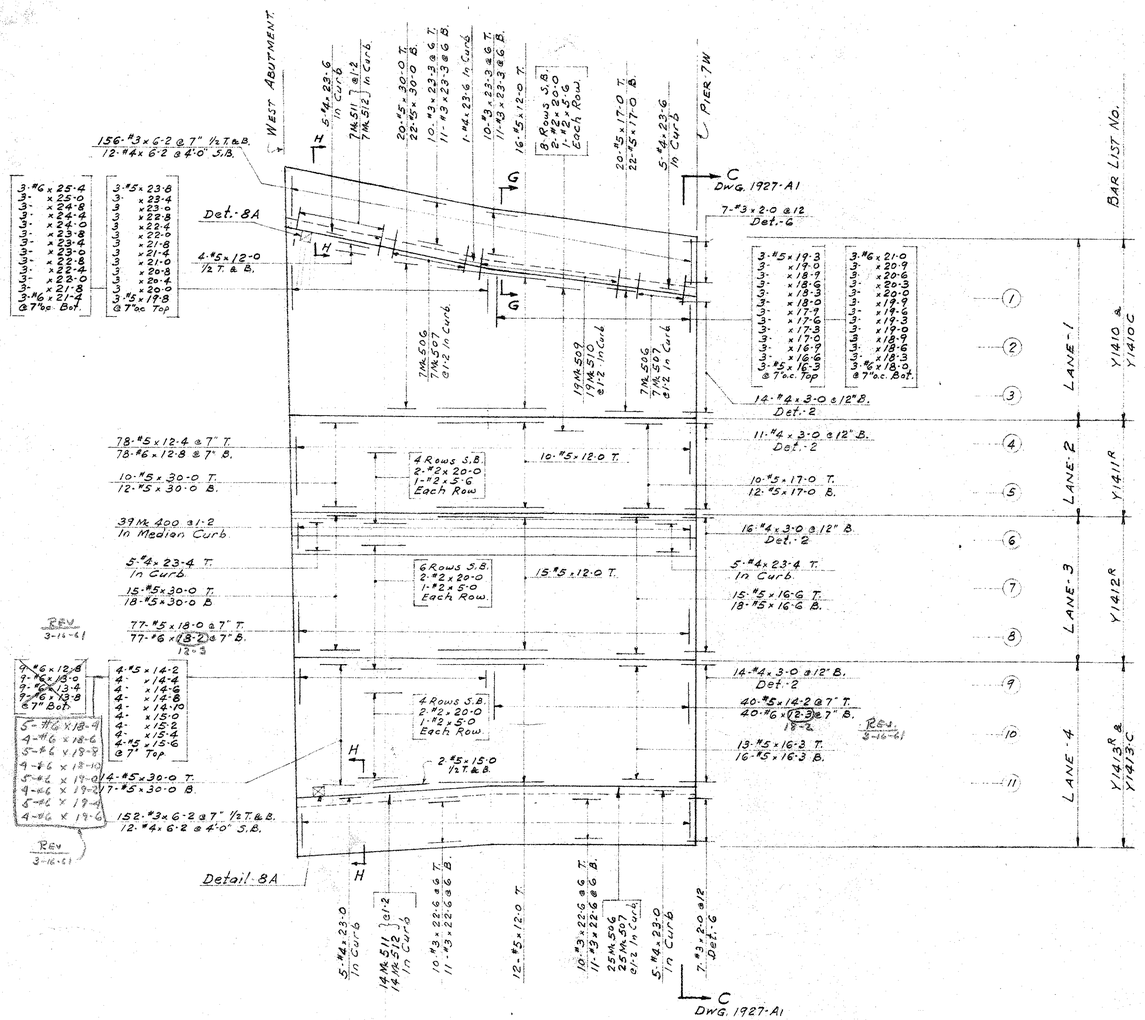
PANELS B-C & D

STRUCT. SLAB BTW. TOWER-C & TOWER-D
FOR ANTHONY WAYNE BRIDGE
LOCATION TOLEDO, OHIO
ARCHT'S SANZENBACHER, MILLER & BRIGHAM
CONTR'S THE LATHROP CO.

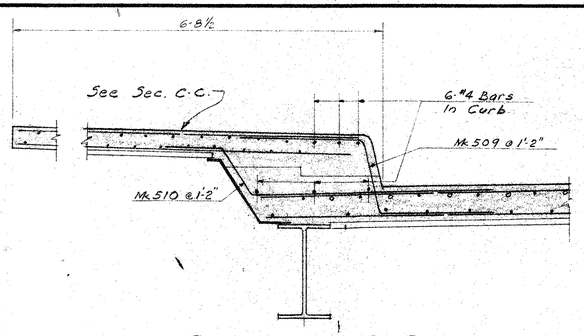
JONES & McKNIGHT, INC.
228 N. LASALLE ST. CHICAGO

DR. BY CAIZZO DATE 5-11-60
CK'D 5-30-60 REVISED 5-23-60
CONT. NO. CY-1927
SHEET NO. 1927-C

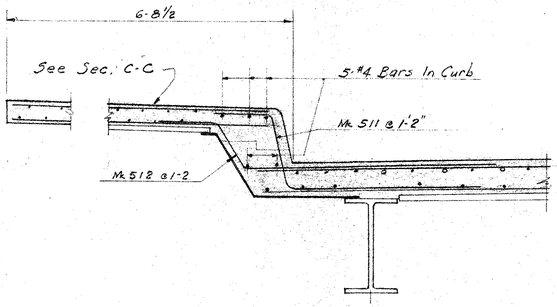
JMC 800 12th 2-60



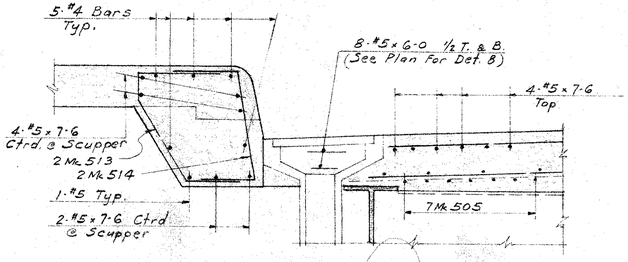
PLAN OF SPAN 8-W



SECTION G-G



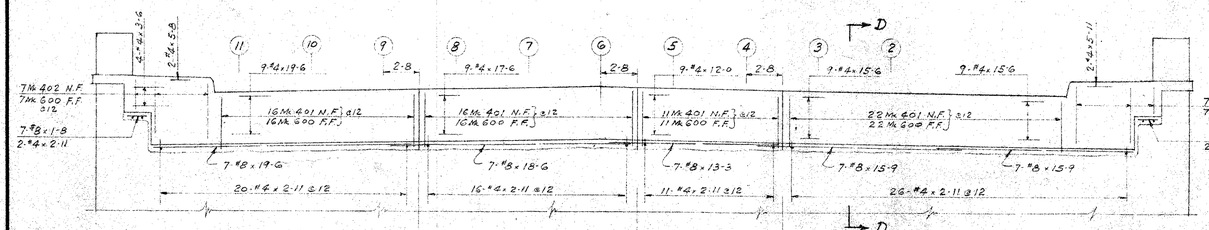
SECTION H-H



DETAIL - 8A

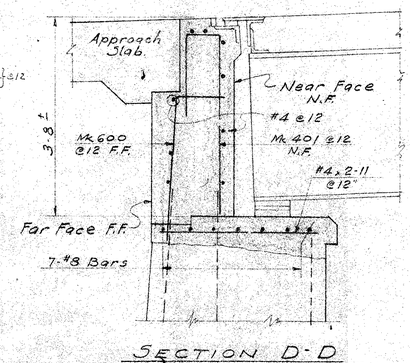
NOTES

Refer to dwg. 1927-A for Detail-2 and Typical Slab Section Showing Bar Supports.
Refer to dwg. 1927-A1 for Section C-C, Detail-6, Detail-8 and Section F-F.
Splices for #5 longitudinal bars are to be staggered.
T.-Denotes Top Bars
B.- " Bottom Bars.
S.B. Denotes #2 Support Bars or #4



ELEVATION OF WEST ABUTMENT (LOOKING WEST)

OMIT



SECTION D-D

BAR SUPPORTS

720 Lin. Ft. 2⅜" Cont. High Chairs With Runners.

GENERAL NOTES

BARS, GRADE OF STEEL: RAIL STEEL
ALL REINFORCING BARS ARE MULTI-RIB TYPE CONFORMING TO ASTM SPECIFICATION A 305 OF LATEST DESIGNATION FOR DEFORMED REINFORCING BARS. ALL MULTI-RIB BARS ARE FURNISHED IN ROUND SECTIONS.

SPECIFICATIONS: OHIO STATE HWY.
BENDING DIMENSIONS:
SPLICES: #3-1-0; #4-1-3 #5-1-7 #6-1-11 #8-2-6
REFERENCE DRAWINGS:

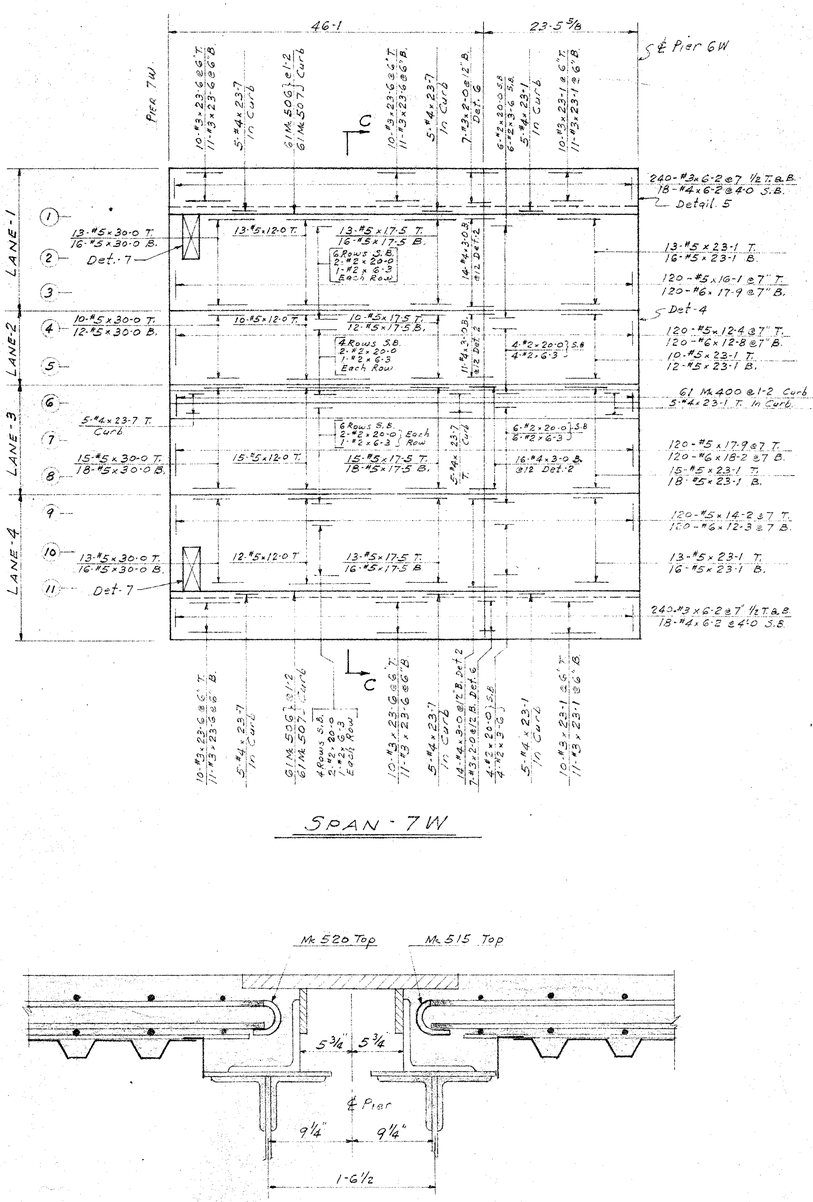
REINFORCING STEEL DETAILS

STRUCT. [redacted] SPAN 8-W
FOR ANTHONY WAYNE BRIDGE
LOCATION TOLEDO, OHIO
ARCHT'S SANZENBACHER, MILLER & BRIGHAM
CONTR'S THE LATHROP CO.

JONES & McKNIGHT, INC.
228 N. LA SALLE ST. CHICAGO

DR. BY C.A.R.S.* CK'D
DATE 5-20-60 REVISED 6-2-60 7-5-60
CONT. NO. CY-1927

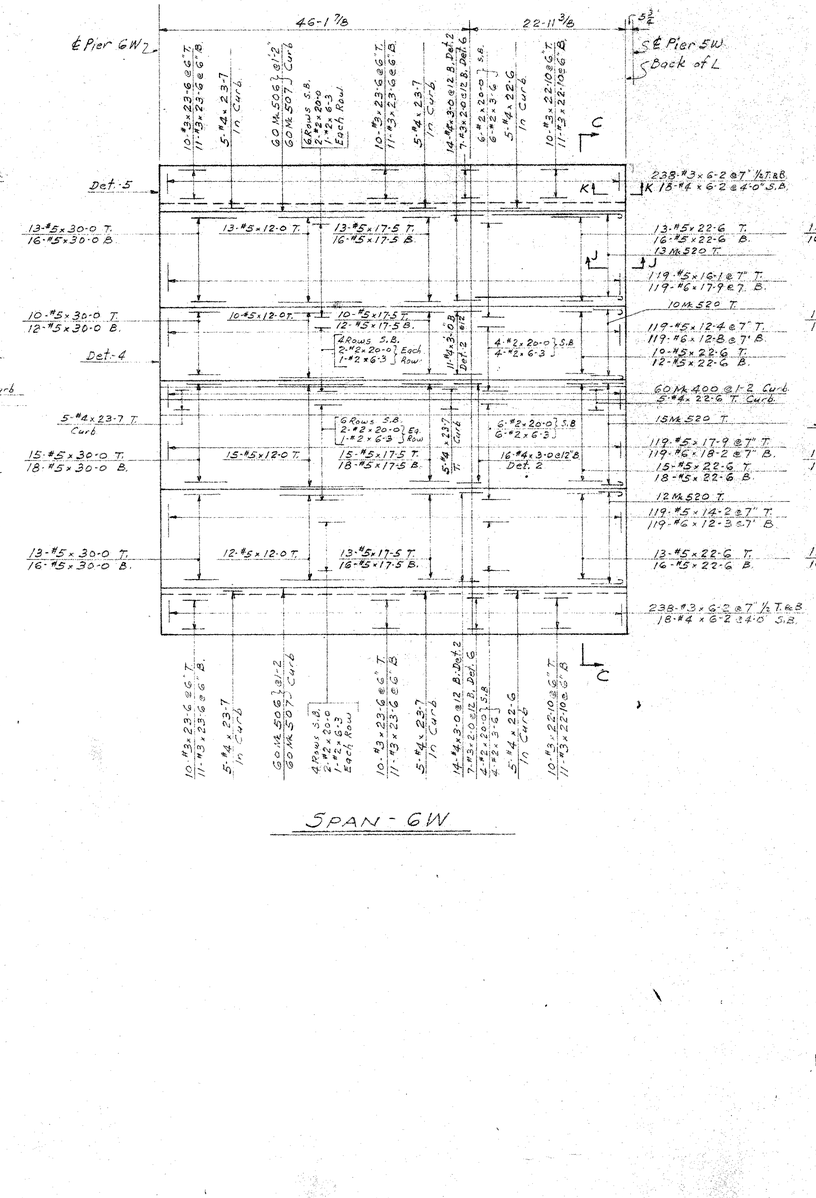
SHEET NO. 1927-D



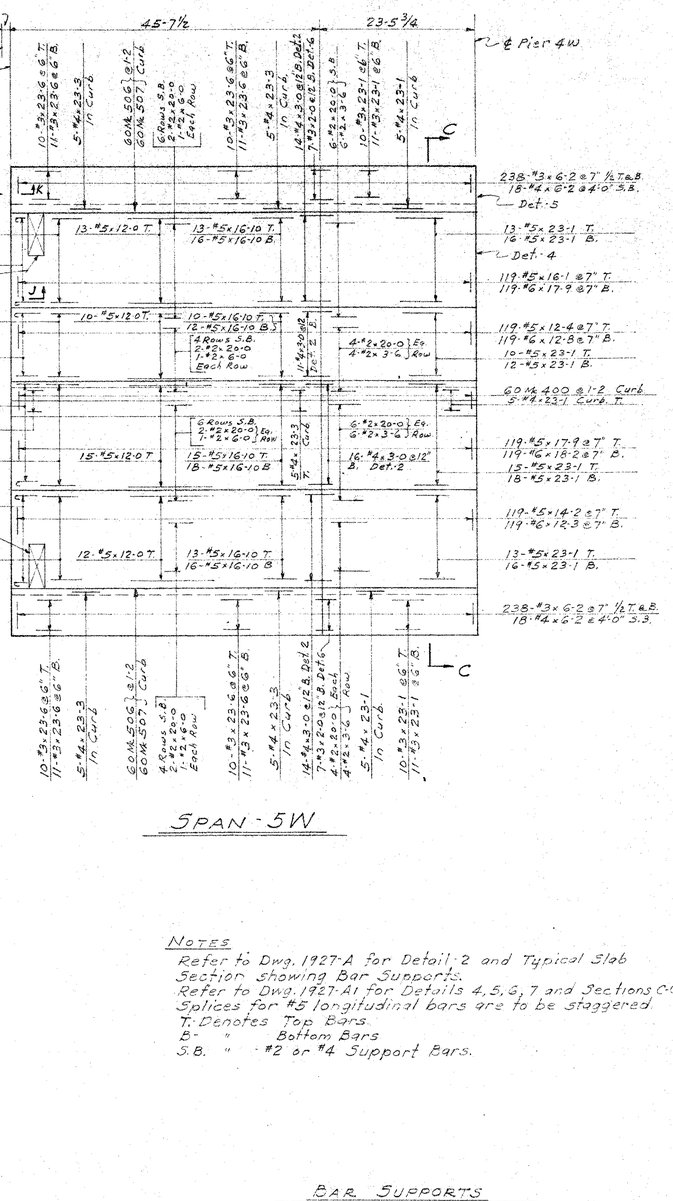
SPAN - 7W

SECTION J-J

SECTION K-K

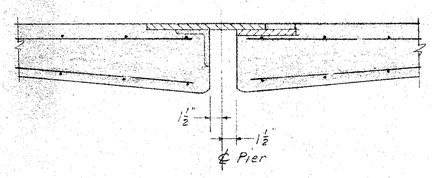


SPAN - 6W

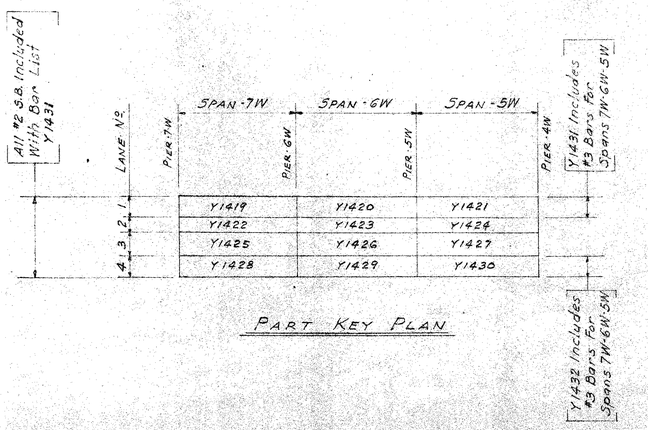


SPAN - 5W

SECTION J-J



SECTION K-K



PART KEY PLAN

NOTES

Refer to Dwg. 1927-A for Detail-2 and Typical Slab Section showing Bar Supports.
Refer to Dwg. 1927-A1 for Details 4, 5, 6, 7 and Sections C-C & F-F
Splices for #5 longitudinal bars are to be staggered.
T. Denotes Top Bars.
B- " Bottom Bars
S.B. " #2 or #4 Support Bars.

BAR SUPPORTS

26,580 Lin. Ft. 2 3/8" Cont. High Chairs With Runners.
(Total For Balance of Job)

GENERAL NOTES

BARS: GRADE OF STEEL RAIL STEEL
ALL REINFORCING BARS ARE MULTI-RIB TYPE CONFORMING TO ASTM SPECIFICATION A 305 OF LATEST DESIGNATION FOR DEFORMED REINFORCING BARS. ALL MULTI-RIB BARS ARE FURNISHED IN ROUND SECTIONS.

SPECIFICATIONS OHIO STATE HWY.
BENDING DIMENSIONS
SPLICES #3-1-0"; #4-1-3"; #5-1-7"; #6-1-11
REFERENCE DRAWINGS:

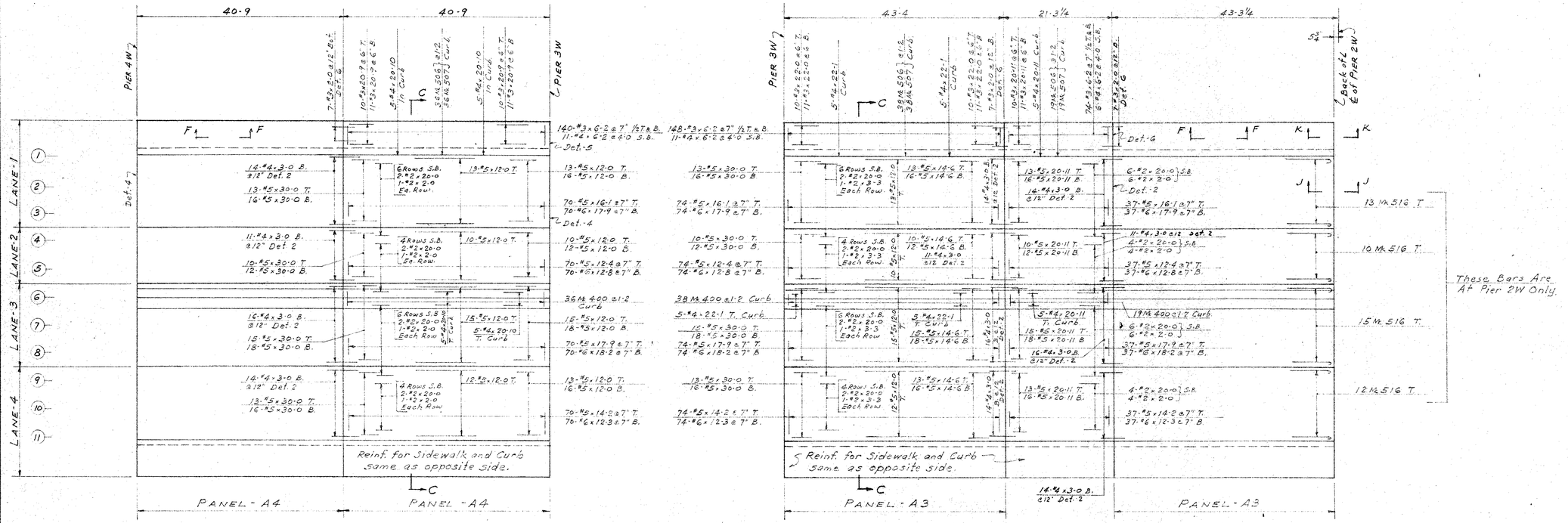
REINFORCING STEEL DETAILS

STRUCT. SLAB: SPANS 7W-6W-5W
FOR ANTHONY WAYNE BRIDGE
LOCATION TOLEDO, OHIO
ARCHT'S SANZENBACHER, MILLER & BRIGHAM
CONTR'S THE LATHROP CO.

JONES & McKNIGHT, INC.
228 N. LA SALLE ST. CHICAGO

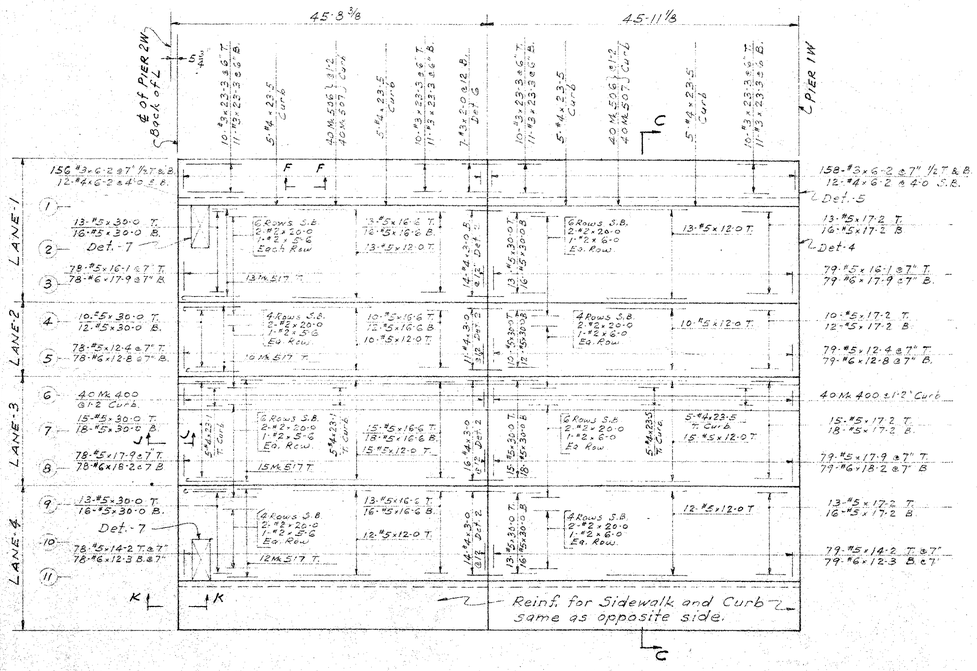
DR. BY CAIZZO
DATE 6-9-60
CK'D
REVISED 6-17-60
CONT. NO. CY-1927
SHEET NO. 1927-E

BNI 800 175M 2-60

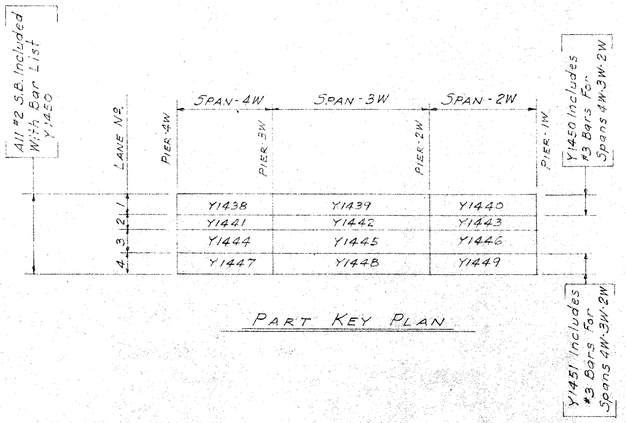


SPAN 4W

SPAN 3W



SPAN 2W



PART KEY PLAN

NOTES.

Refer to Dwg. 1927-A for Typical Slab Section Showing Bar Supports and for Detail-2.
Refer to Dwg. 1927-A1 for Sections C-C and F-F; and for Details 4-5-6 and 7.
Refer to Dwg. 1927-E for Sections J-J and K-K.
Splices for #5 longitudinal bars are to be staggered
"T." Denotes Top Bars.
"B." " Bottom Bars
"S.B." " #2 or #4 Support Bars.

GENERAL NOTES

BARS, GRADE OF STEEL ALL REINFORCING BARS ARE MULTI-RIB TYPE CONFORMING TO ASTM SPECIFICATION A 305 OF LATEST DESIGNATION FOR DEFORMED REINFORCING BARS. ALL MULTI-RIB BARS ARE FURNISHED IN ROUND SECTIONS.

SPECIFICATIONS OHIO STATE HWY.
BENDING DIMENSIONS
SPLICES #3-1'0", #4-1-3; #5-1-7, #6-1-11
REFERENCE DRAWINGS:

REINFORCING STEEL DETAILS

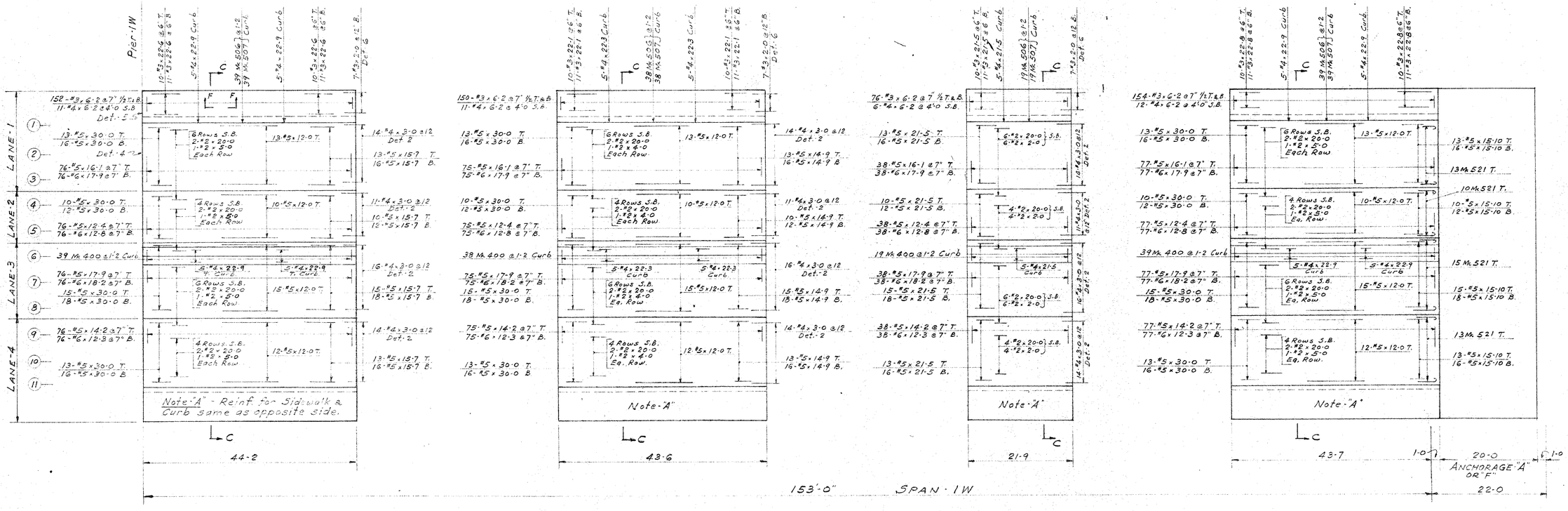
STRUCT. SLAB - SPANS 4W-3W-2W
FOR ANTHONY WAYNE BRIDGE
LOCATION TOLEDO, OHIO
ARCHT'S SANZENBACHER, MILLER & BRIGHAM
CONTR'S THE LATHROP CO.

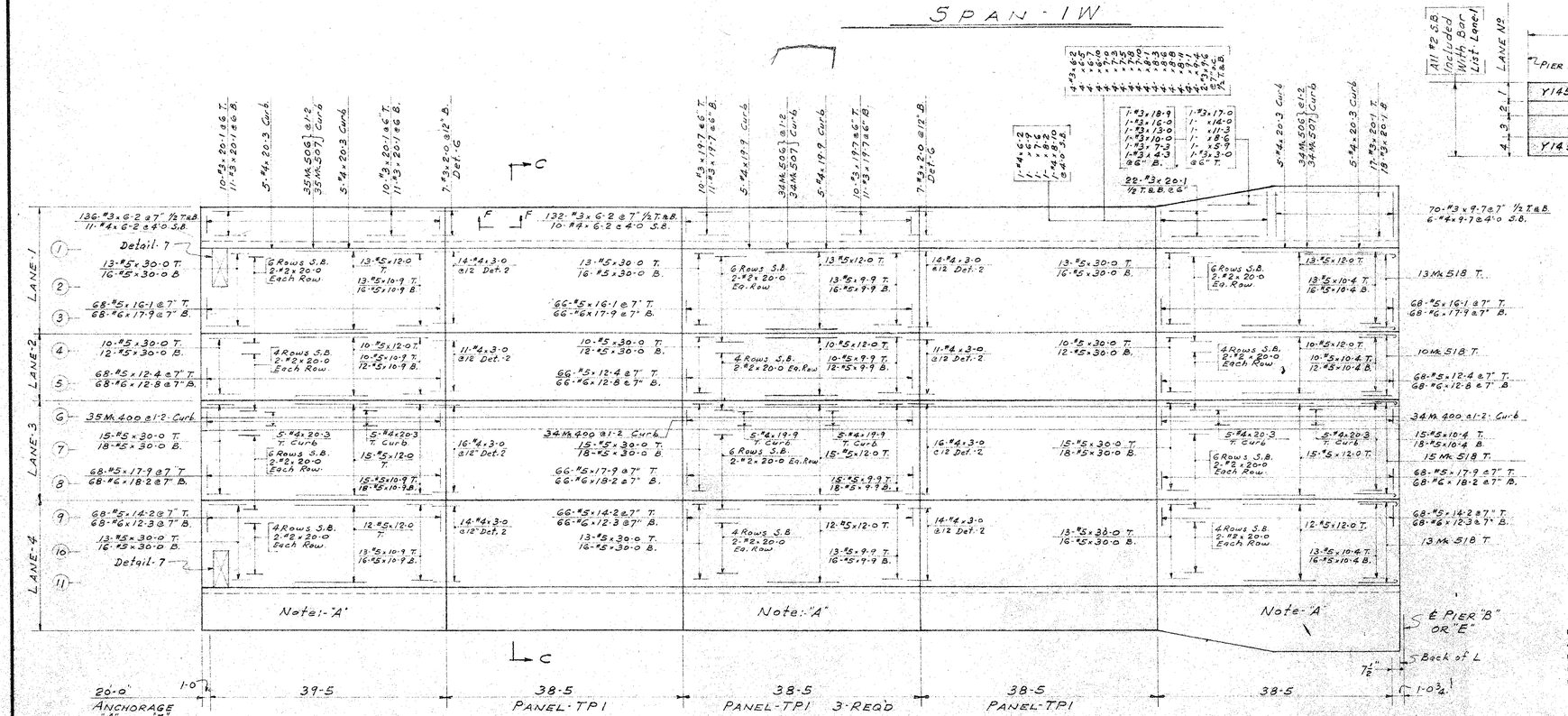
JONES & McKNIGHT, INC.
228 N. LA SALLE ST. CHICAGO

DR. BY CAIZZO OK'D
DATE 6-19-60 REVISED 6-23-60
CONT. NO. CY-1927

SHEET NO. 1927-F

RING BOD 175M 2-60





TRUSS SPAN - ANCHORAGE-"A" TO PIER-"B" AS SHOWN
TRUSS SPAN - ANCHORAGE "F" TO PIER-"E" SAME EXCEPT OPPOSITE HAND

All #2 S.B. Included With Bar List Level

LANE No	SPAN-1W Anchorage-A to Pier 1W	TRUSS SPAN Pier-B to Pier-B	SUSPENSION SPANS SEE DWGS 1927-B&C	TRUSS SPAN Pier-E to Anchorage-F
4	Y1452 (Y1460 #2 & #3 Bars)	Y1453 (Y1466 #2 & #3 Bars)		Y1462 (Y1468 #2 & #3 Bars)
3	Y1454	Y1455		Y1463
2	Y1456	Y1457		Y1464
1	Y1458 (Y1461 #3 Bars)	Y1459 (Y1467 #3 Bars)		Y1465 (Y1469 #3 Bars)

PART KEY PLAN

NOTES

Refer to Dwg. 1927-A for "Typical Slab Section Showing Bar Supports" and for Detail-2
Refer to Dwg. 1927-A1 for Sections C-C & F-F and for Details 4-5-6 & 7
Splices for #5 longitudinal bars are to be staggered.
"T"-Denotes Top Bars
"B" " Bottom Bars
S.B. " #2 or #4 Support Bars

GENERAL NOTES

BARS, GRADE OF STEEL RAIL STEEL
ALL REINFORCING BARS ARE MULTI-RIB TYPE CONFORMING TO ASTM SPECIFICATION A 305 OF LATEST DESIGNATION FOR DEFORMED REINFORCING BARS. ALL MULTI-RIB BARS ARE FURNISHED IN ROUND SECTIONS.

SPECIFICATIONS OHIO STATE HWY.
BENDING DIMENSIONS
SPLICES #3-1-0, #4-1-3, #5-1-7, #6-1-11
REFERENCE DRAWINGS:

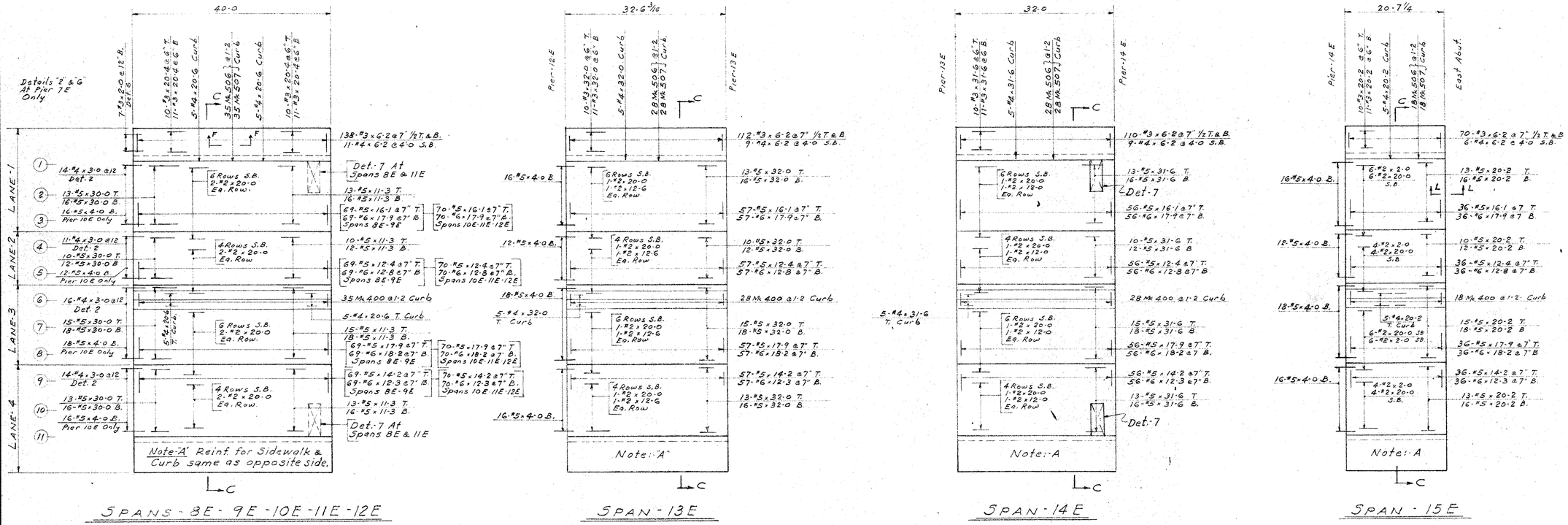
REINFORCING STEEL DETAILS

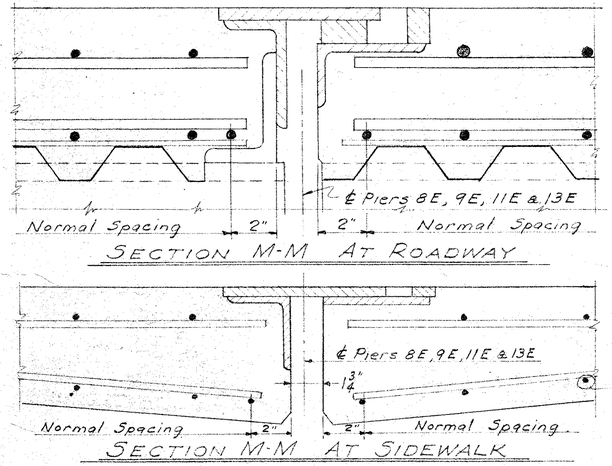
STRUCT. SLAB-SPAN-1W & TRUSS SPANS
FOR ANTHONY WAYNE BRIDGE
LOCATION TOLEDO, OHIO
ARCHT'S SANZENBACHER, MILLER & BRIGHAM
CONTR'S THE LATHROP CO.

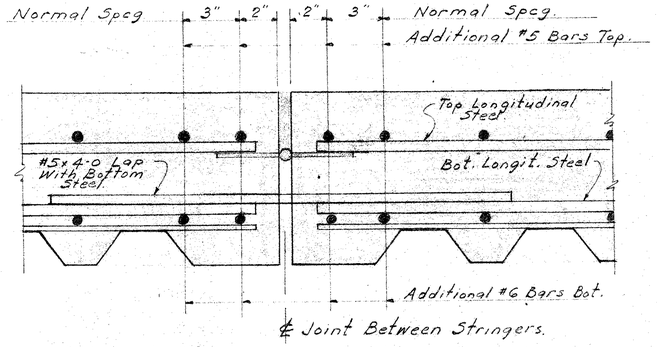
JONES & McKNIGHT, INC.
228 N. LA SALLE ST. CHICAGO

DR. BY CAIZZO DATE 6-17-60 CK'D REVISED 7-11-60 CONT. NO. CY-1927
SHEET NO. 1927-G

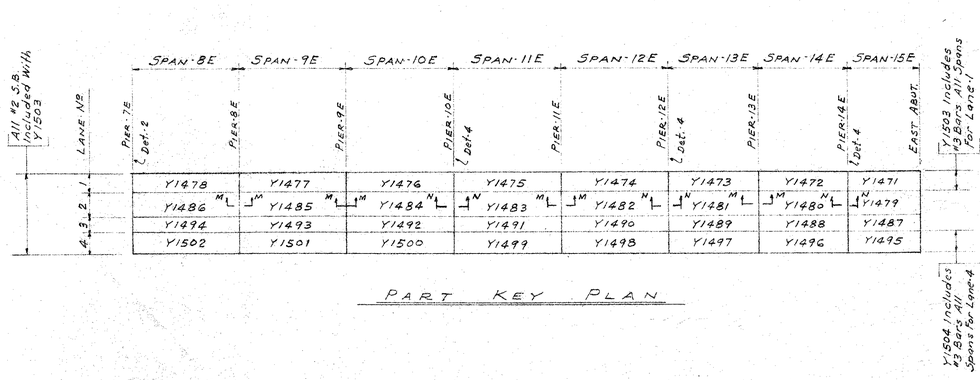
BNO 800 17BH 2-60

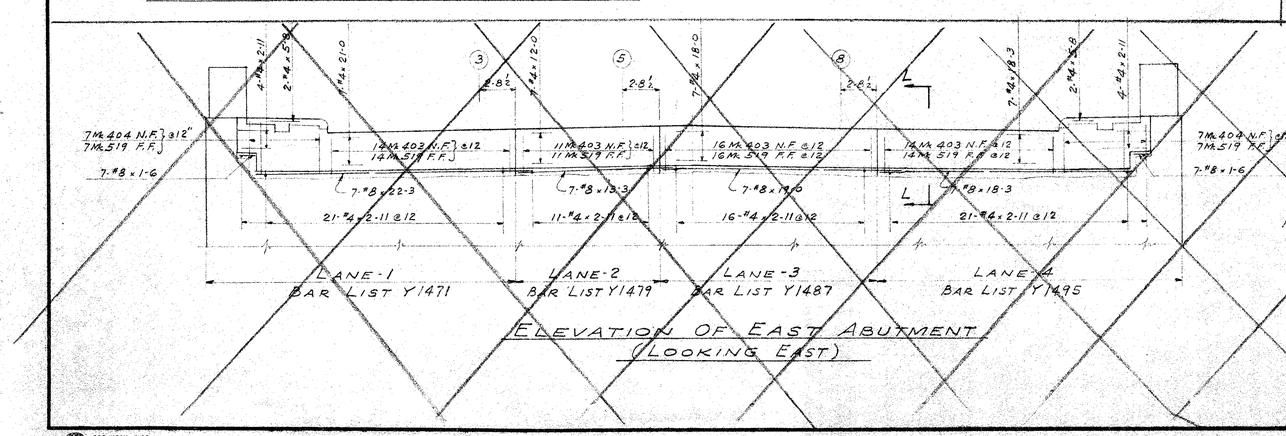


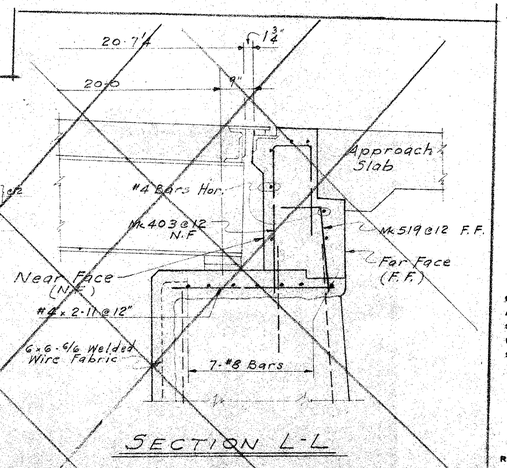




Field bend:
Form truss bars where slab thickens.
Bars thus:







NOTES.
Refer to Dwg. 1927-A for Typical Slab Section Showing Bar Supports and for Detail-2
Refer to Dwg. 1927-A1 for Sections C-C & F-F and for Det. 4-5-6-7
Splices for #5 longitudinal bars are to be staggered.
"T" - Denotes Top Bars.
"B" - " Bottom Bars
S.B. " #2 or #4 Support Bars

GENERAL NOTES

BARS: GRADE OF STEEL
ALL REINFORCING BARS ARE MULTI-RIB TYPE CONFORMING TO ASTM SPECIFICATION A 305 OF LATEST DESIGNATION FOR DEFORMED REINFORCING BARS. ALL MULTI-RIB BARS ARE FURNISHED IN ROUND SECTIONS.

SPECIFICATIONS: OHIO STATE HWY.
BENDING DIMENSIONS:
SPLICES: #3 - 1-0 ; #4 - 1-3 ; #5 - 1-7 ; #6 - 1-11 ; #8 - 2-6
REFERENCE DRAWINGS:

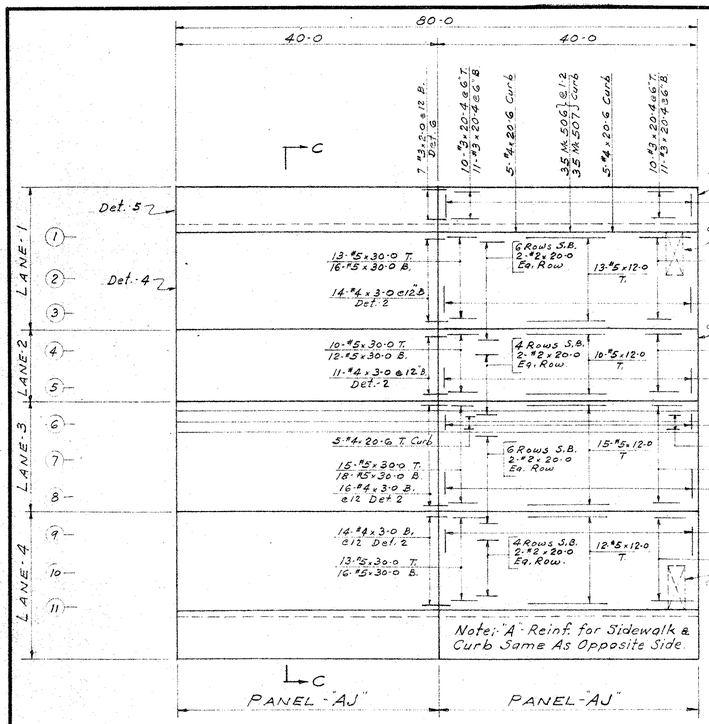
REINFORCING STEEL DETAILS

STRUCT. SLAB - SPANS 8E TO 15E INCL
FOR ANTHONY WAYNE BRIDGE
LOCATION TOLEDO, OHIO
ARCHT'S SANZENBACHER, MILLER & BRIGHAM
CONTR'S THE LATHROP CO.

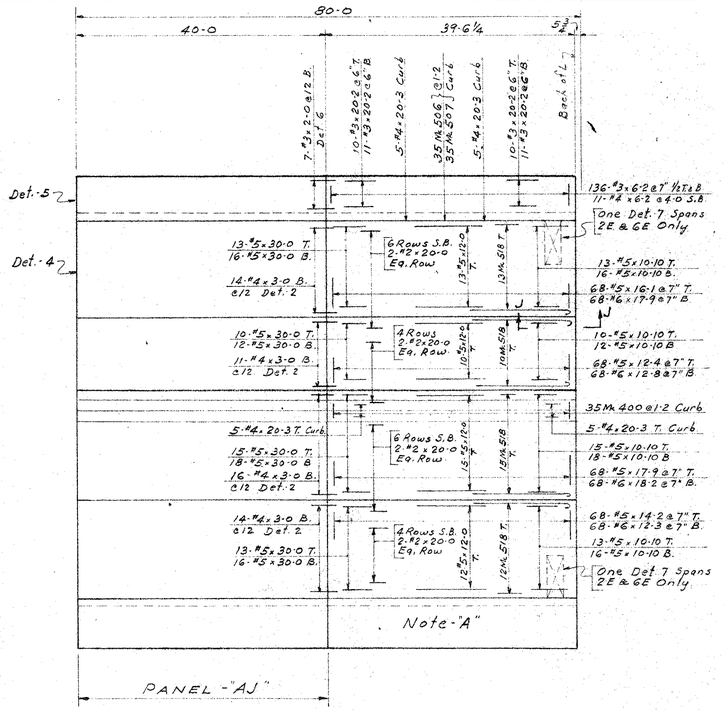
JONES & McKNIGHT, INC.
228 N. LA SALLE ST. CHICAGO

DR. BY CAIZZO | CK'D | DATE 6-20-60 | REVISED 7-11-60 | CONT. NO. CY-1927 | SHEET NO. 1927-H

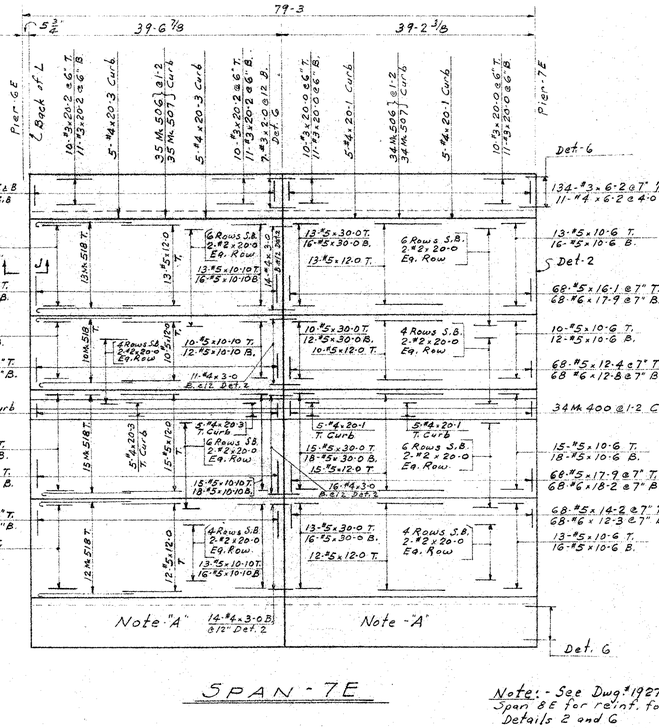
800 1784 2-60



SPANS - 4E AND 5E

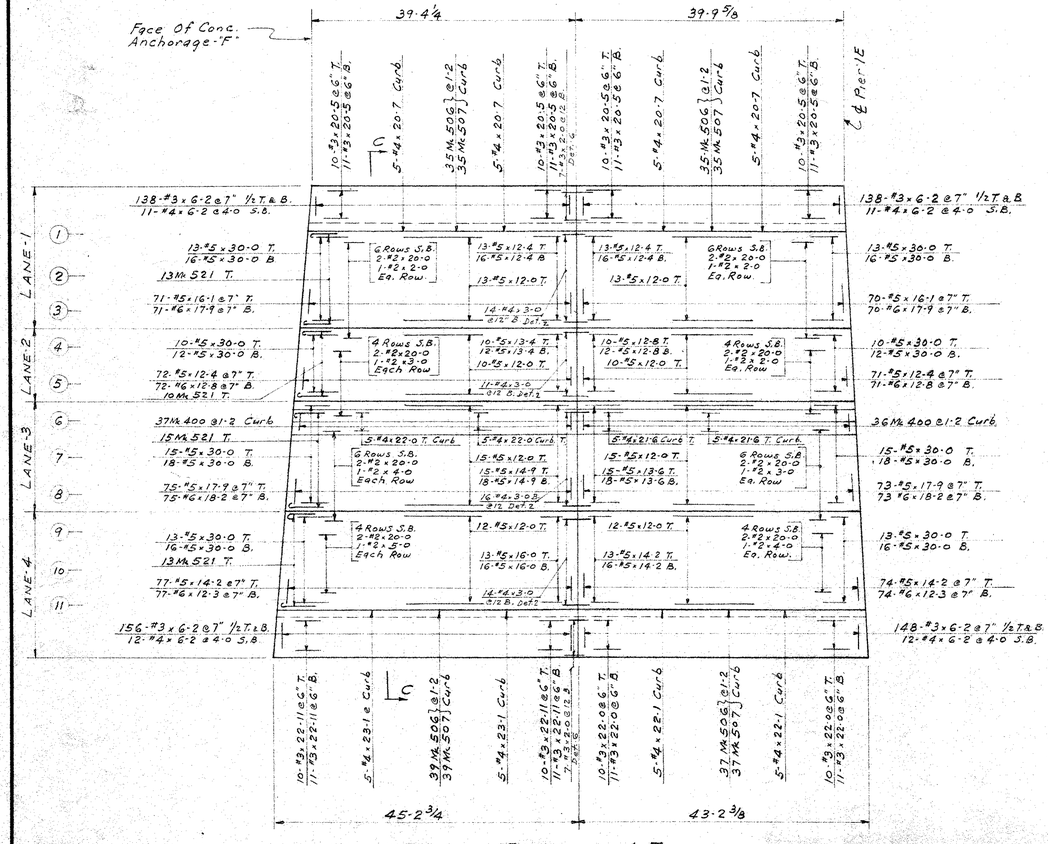


SPANS - 2E AND 6E
SPAN - 3E OPPOSITE HAND

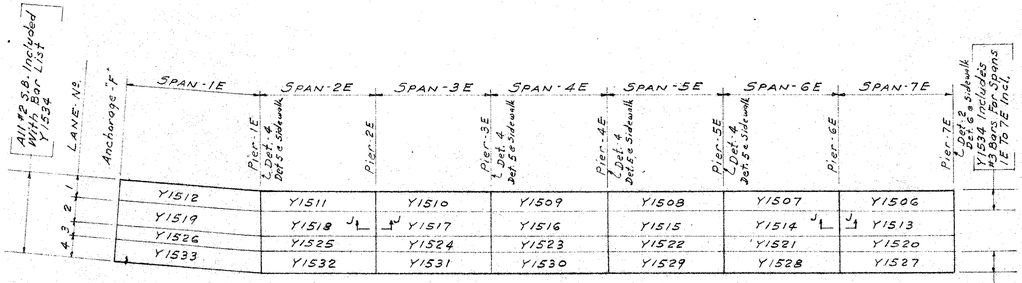


SPAN - 7E

Note: - See Dwg. # 1927-H Span - 8E for reinf. for Details 2 and 6



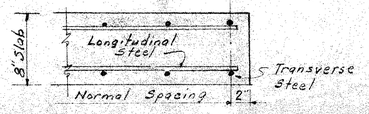
SPAN - 1E



PART KEY PLAN

NOTES

Refer to Dwg. 1927-A for Typical Slab Section Showing Bar Supports and for Detail-2.
Refer to Dwg. 1927-A1 for Sections C-C & F-F and for Details 4-5-6-7
Splices for #5 longitudinal bars are to be staggered.
"T" Denotes Top Bars
"B" " Bottom Bars.
"S.B." " #2 or #4 Support Bars.
Place transverse bars so that there will be one bottom bar no greater than 2" from each joint. See Det. 9 below.



DETAIL - 9

GENERAL NOTES

RAIL STEEL

BARS; GRADE OF STEEL ALL REINFORCING BARS ARE MULTI-RIB TYPE CONFORMING TO ASTM SPECIFICATION A 305 OF LATEST DESIGNATION FOR DEFORMED REINFORCING BARS. ALL MULTI-RIB BARS ARE FURNISHED IN ROUND SECTIONS.

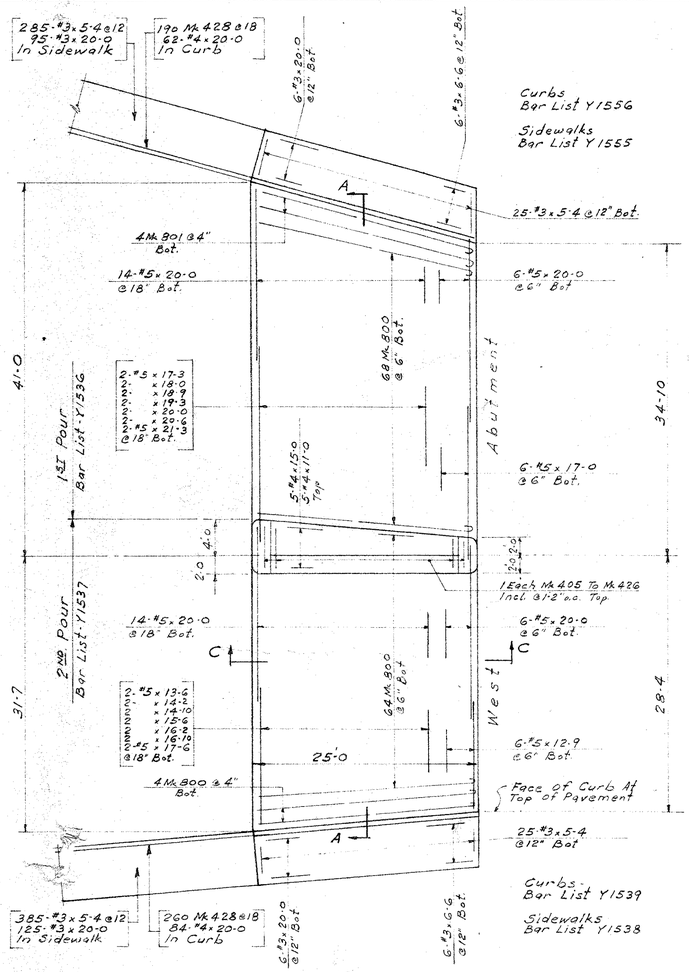
SPECIFICATIONS OHIO STATE HWY.
BENDING DIMENSIONS
SPLICES #3 x 1-0 ; #4 x 1-3 ; #5 = 1-7 ; #6 = 1-11
REFERENCE DRAWINGS

REINFORCING STEEL DETAILS

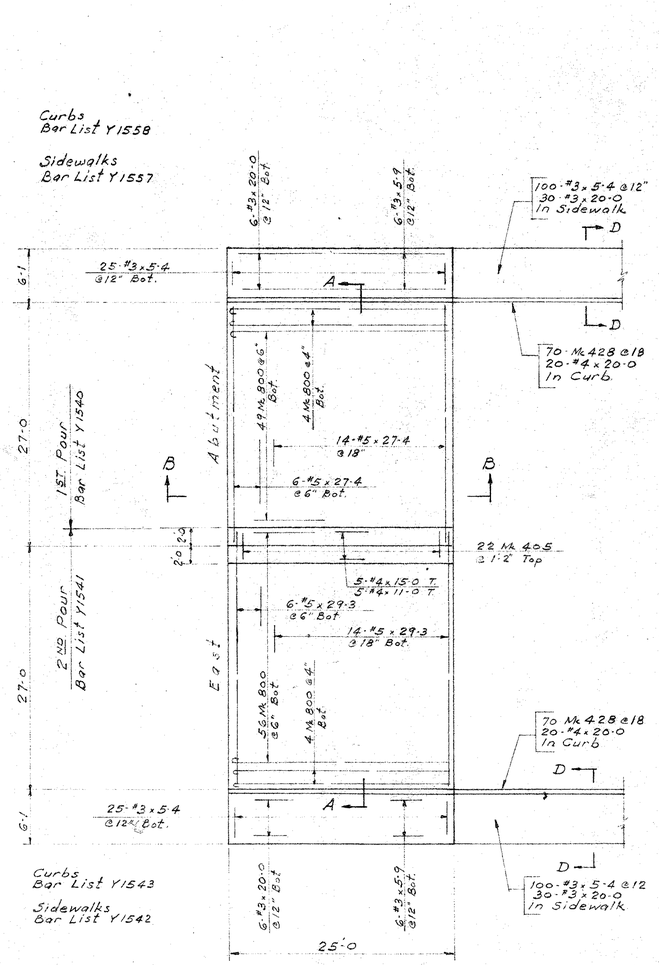
STRUCT. SLAB - SPANS - 1E TO 7E INCL.
FOR ANTHONY WAYNE BRIDGE
LOCATION TOLEDO, OHIO
ARCHT'S SANZENBACHER, MILLER & BRIGHAM
CONTR'S THE LATHROP CO.

JONES & McKNIGHT, INC.
228 N. LA SALLE ST. CHICAGO

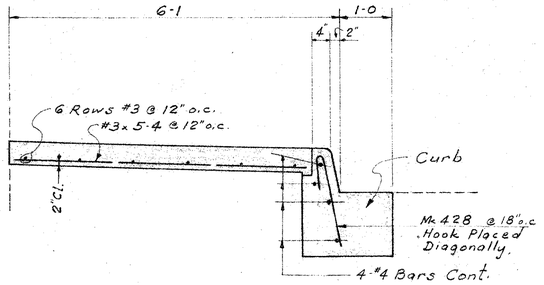
DR. BY CAIZZO CK'D
DATE 6-23-60 REVISED 7-18-60
CONT. NO. CY1927
SHEET NO. 1927-J



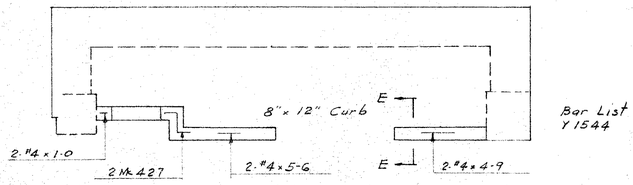
WEST APPROACH SLAB



EAST APPROACH SLAB

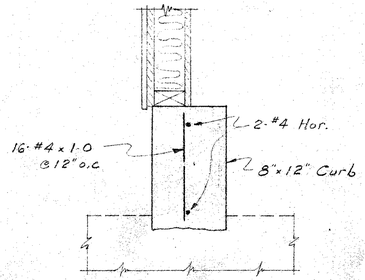


SECTION D-D
TYPICAL SECTION THRU SIDEWALK & CURB



Bar List Y1544

PLAN OF BRIDGE TENDERS BLDG



SECTION E-E

NOTES
Refer to Engrs. Dwg #31 for Sections A-A, B-B, C-C and for Median Curb Detail.

GENERAL NOTES

BARS: GRADE OF STEEL
ALL REINFORCING BARS ARE MULTI-RIB TYPE CONFORMING TO ASTM SPECIFICATION A 305 OF LATEST DESIGNATION FOR DEFORMED REINFORCING BARS. ALL MULTI-RIB BARS ARE FURNISHED IN ROUND SECTIONS.

SPECIFICATIONS: OHIO STATE HWY.
BENDING DIMENSIONS:
SPLICES: #3 = 1-0" ; #4 = 1-3 ; #5 = 1-7
REFERENCE DRAWINGS:

REINFORCING STEEL DETAILS
EAST & WEST APPROACH SLABS

STRUCT. BRIDGE TENDERS BLDG.
FOR ANTHONY WAYNE BRIDGE
LOCATION TOLEDO, OHIO
ARCHT'S SANZENBACHER, MILLER & BRIGHAM
CONTR'S THE LATHROP CO.

JONES & McKNIGHT, INC.
228 N. LASALLE ST. CHICAGO

DR. BY CAZZO CK'D
DATE 6-27-60 REVISED 7-11-60
CONT. NO. CY-1927

SHEET NO. 1927-K

(BSM) - 800 175M. 2-60.