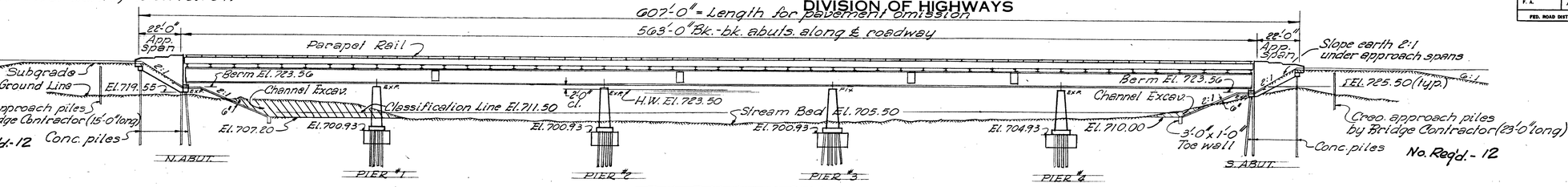
B.M. #10 Railroad spike in underground cable marker- 88 feet right Station 197+51 (South river bank) Elev. 721.64.

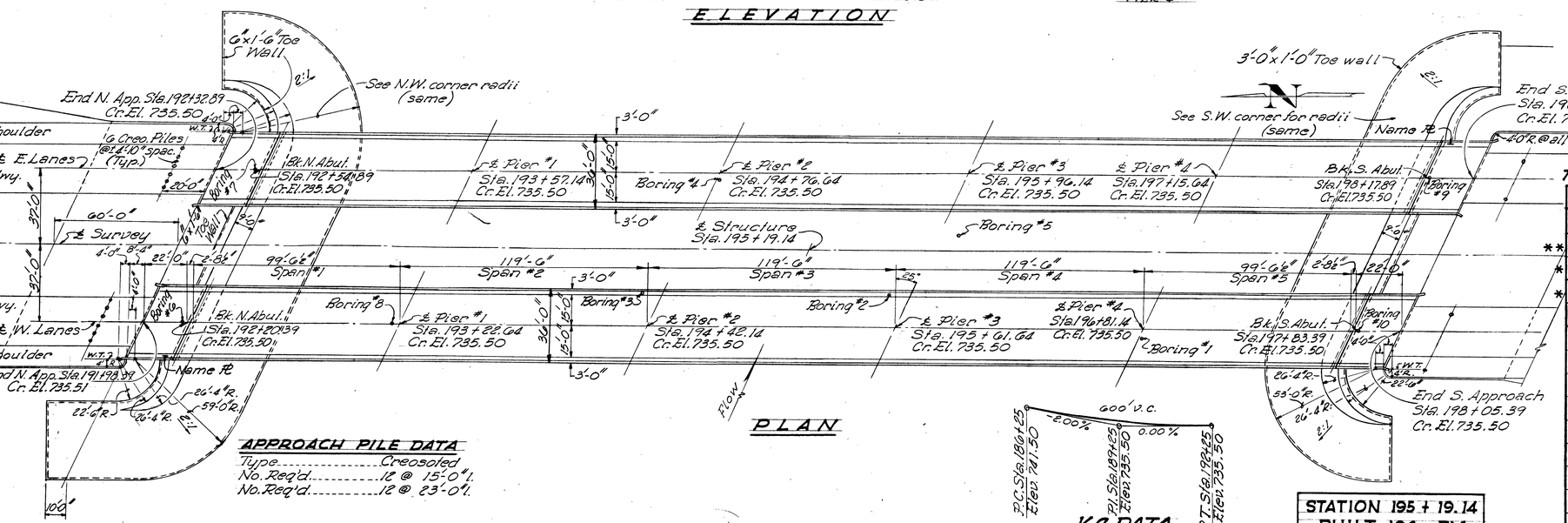
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 2 F.A.	77-1B	WINNEBAGO	29	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT: F-142(45)		

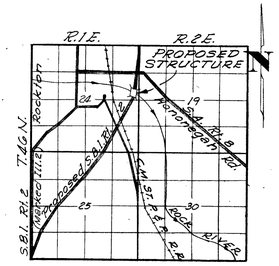
SHEET NO. 1
16 SHEETS



ELEVATION



PLAN



LOCATION PLAN

APPROACH PILE DATA

Type.....Creosoted
No. Req'd.....12 @ 15'-0" ℄
No. Req'd.....12 @ 23'-0" ℄

V.C. DATA

TOTAL BILL OF MATERIALS - SEC. 77-1B - 2 BRIDGES

ITEM	UNIT	SUPER.	SUB	TOTAL
** Bridge Seat Sealant	L.Sum		1	1
* Class "A" Excav. for Str.	Cu.Yds.			910
* Class "B" Excav. for Str.	Cu.Yds.			260
Cofferdam Excavation	Cu.Yds.		2,080	2,080
Cofferdams Pier #1	Each		2	2
Cofferdams Pier #2	Each		2	2
Cofferdams Pier #3	Each		2	2
Cofferdams Pier #4	Each		2	2
Class A Concrete	Cu.Yds.		828.4	828.4
Class X Concrete	Cu.Yds.	1,498.4	271.6	1,770.0
Structural Steel	Lbs.	1,224,360		1,224,360
Aluminum Handrail	Lin.Ft.	2,240		2,240
Reinforcement Bars	Lbs.	508,500	55,180	563,680
Untreated Piles	Lin.Ft.		9,420	9,420
Creosoted Piles	Lin.Ft.		456	456
Test Pile (Timber)	Each		2	2
Concrete Piles	Lin.Ft.		2,090	2090
Test Pile (Concrete)	Each		2	2
Name Plates	Each		2	2
Slope Wall	Sq.Yds.			2,970
Protective Coat	Sq.Yds.			5,410
Seal Coat Concrete	Cu.Yds.		1662.0	1662.0

* Includes Excavation for Slopewall.
** Applies at abutments only.

STATION 195 + 19.14
BUILT 196 BY
STATE OF ILLINOIS
S.B.I. RT. 2 SEC. 77-1B
F.A. PROJ. F-142(45)
LOADING H20-S16

NAME PL. LETTERING

See Std. 2113-1
Locate as shown on sheet #9

WATERWAY INFORMATION

Drainage Area.....1,800,000 Acres
Character.....Hilly
Required Opening (50 yr. Fl.) 7800 sq. ft.
Present Opening (Upstream) 7884 sq. ft.
Proposed Opening.....7800 sq. ft.
Ordinary Water Elev.....710.70

DESIGN STRESSES

f'c = 1,400 psi Super & sub.
νc = 75 psi Footings
fs = 20,000 psi Reinf.
fs = 20,000 psi Struct.
n = 10

LOADING H20-S16-44

GENERAL NOTES

Coarse aggregate to be used in parapet handrails and end posts must be absolutely free of cherl, flint, limonite, lignite and soft sandstone.

The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.

Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 58# per 100 square feet.

Layout of slope walls may be varied to suit ground conditions in the field as directed by the Engineer.

All reinforcement bars shall be lapped 20 diameters unless otherwise shown.

Rivets 7/8"; Open holes 13/16" unless otherwise noted.

Anchor bolts shall be set before riveting cross frames over supports.

Permanent forms will not be permitted in forming the concrete floor.

Roadway expansion guards shall be assembled in the shop in proper position with the ends in place and shall be left assembled for shop inspection.

Plates shall be flame cut as provided in Article 54.5 (1) of the Standard Specifications.

The exposed surfaces of the expansion guard shall be given two shop coats of red lead paint, the contact surfaces shall be given one coat of red lead paint. Anchor studs shall not be painted.

Expansion guards are included in the quantity of Structural Steel. Est. wt. - 17,040 lbs.

Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Article 56.1 to 56.5 inclusive of the Standard Specifications.

The Contractor shall drive one concrete test pile in a permanent location at north and south abutment, west structure and one timber test pile in a permanent location at pier 3, E. structure and pier 2, W. structure as directed by the engineer before ordering the remainder of piles.

Conc. piles at abuts. & appr. bents shall be driven in holes precored thru the embankment in accordance with Art. 60.9 (c) of the Std. Spec's. when the penetration thru the embankment will exceed ten feet.

DESIGNED	J. M. Jgawsh
CHECKED	J. B. Nolan
DRAWN	J. Mullenix J. M. J.
CHECKED	J. B. N.

JAN 8 1963

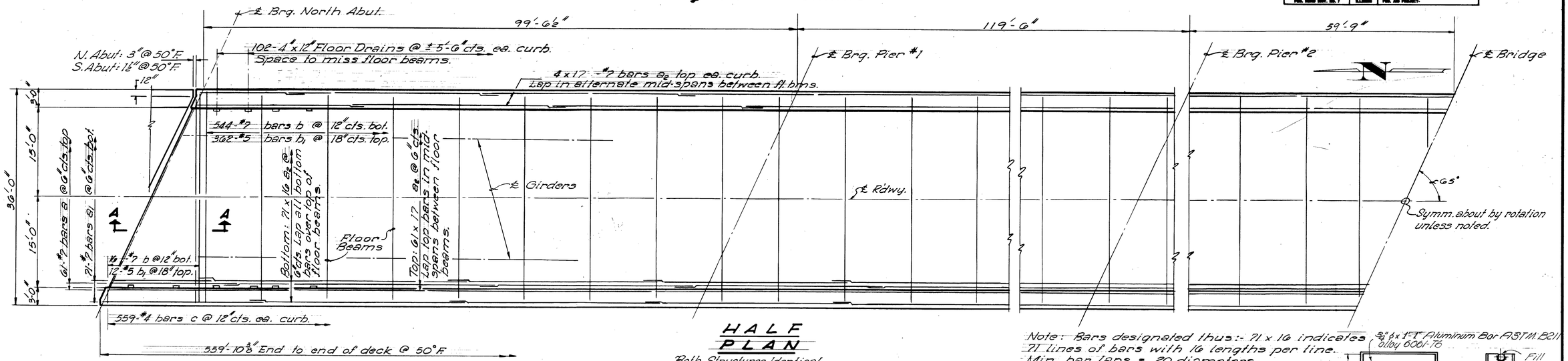
EXAMINED W. C. Baumann — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED E. J. Stewart — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

GENERAL PLAN & ELEVATION
F.A. PROJECT F-142(45)
ROCK RIVER
S.B.I. RT. 2 SEC. 77 - 1B
WINNEBAGO COUNTY
STATION 195 + 19.14

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 2 F.A.	77-1B	WINNEBAGO	29	13
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

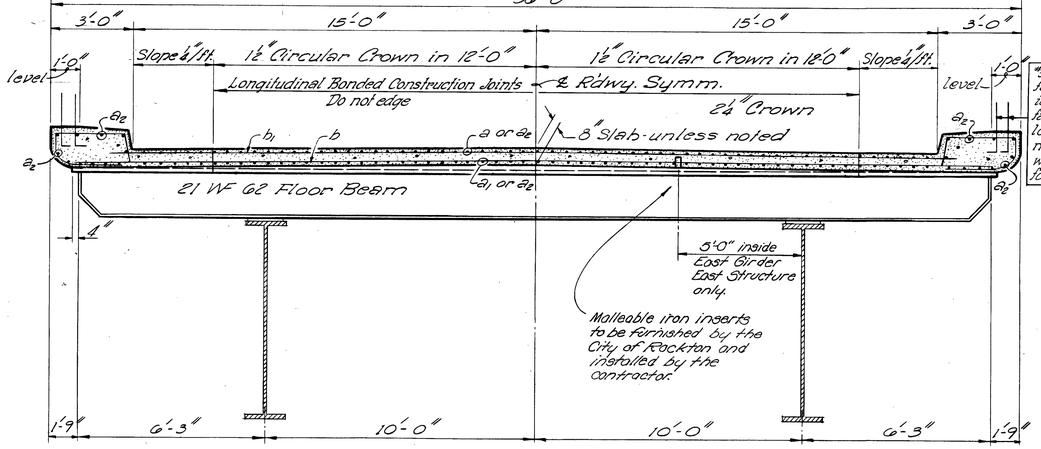
SHEET NO. 2
16 SHEETS



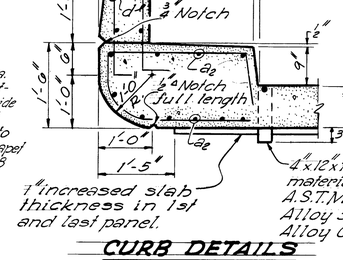
HALF PLAN
Both Structures Identical

Note: Order bars a, a1, a2, b and b1 full length.
Cut in field to fit skew and lapping requirements.
Use remainder of bars in opposite end.
Do not lap adjacent bars at the same location.
For corner details, see sheet #8.

Note: Bars designated thus:- 71 x 16 indicates 71 lines of bars with 16 lengths per line.
Min. bar laps = 20 diameters.



CROSS SECTION

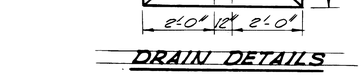


*15-d 560@12" cls. ea. face. Place 2 additional bars in inside face @ each post location. Space to miss joint in parapet wall. See sheet #8 for details.

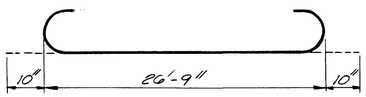
7" increased slab thickness in 1st and last panel.

CURB DETAILS

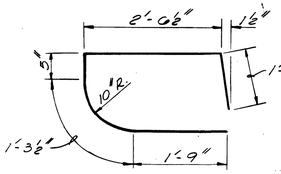
4"x12"x⅛" Welded sheets of material conforming to A.S.T.M. B-209. Alloy 3003-H14 or Alloy 6061-T6.



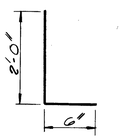
DRAIN DETAILS



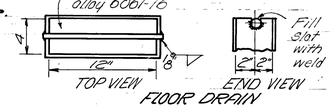
BAR B



BAR C



BAR d

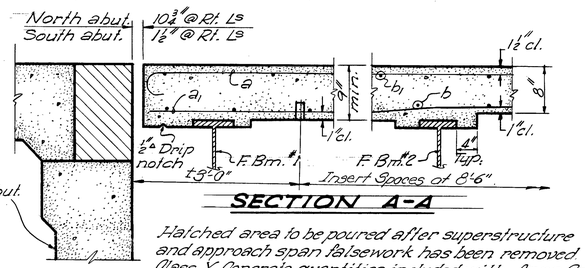


ONE BRIDGE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	61	#7	28'-5"	
a1	71	#7	37'-9"	
a2	2,241	#7	34'-6"	
b	560	#7	33'-0"	
b1	374	#5	32'-0"	
c	1,118	#4	2'-0"	
d	2,510	#5	2'-6"	L
* e9	8	#5	15'-8"	
* e10	368	#5	10'-9"	
* e11	32	#5	9'-0"	
**	Class X Conc.		Cu. Yds.	655.3
**	Reinf. Bars		Lbs.	233,040
●	Struct. Steel		Lbs.	612,180

*Used in parapet - see sheet #8.
**Totals include parapet quantities.

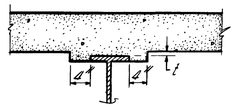
For Expansion Device Detail, see sheet #7.



SECTION A-A

Hatched area to be poured after superstructure and approach span falsework has been removed. Class X Concrete quantities included with Appr. Spans Bill of Material.

● Weights of bearing assemblies (including lead plates, H.S. bolts and anchor bolts) and expansion devices are included as structural steel.
Est. Wt. Bearings.....22,050 lbs.
Est. Wt. Expansion Devices.....8,520 lbs.



STANDARD FILLET DETAIL

After all structural steel has been erected, elevations of the top flanges of the floor beams shall be taken at a point over the main girders. These elevations subtracted from the "Grade Elevation Adjusted for Dead Load Deflection" shown on sheet #10 equals the fillet heights "t."

DESIGNED	J. M. Tyarowski
CHECKED	J. Mullenix
DRAWN	J. M. T
CHECKED	

JAN 8 1963
EXAMINED — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

SUPERSTRUCTURE

ROCK RIVER
S.B.I. RT. 2 SEC. 77-1B
WINNEBAGO COUNTY
STATION 195 + 19.14

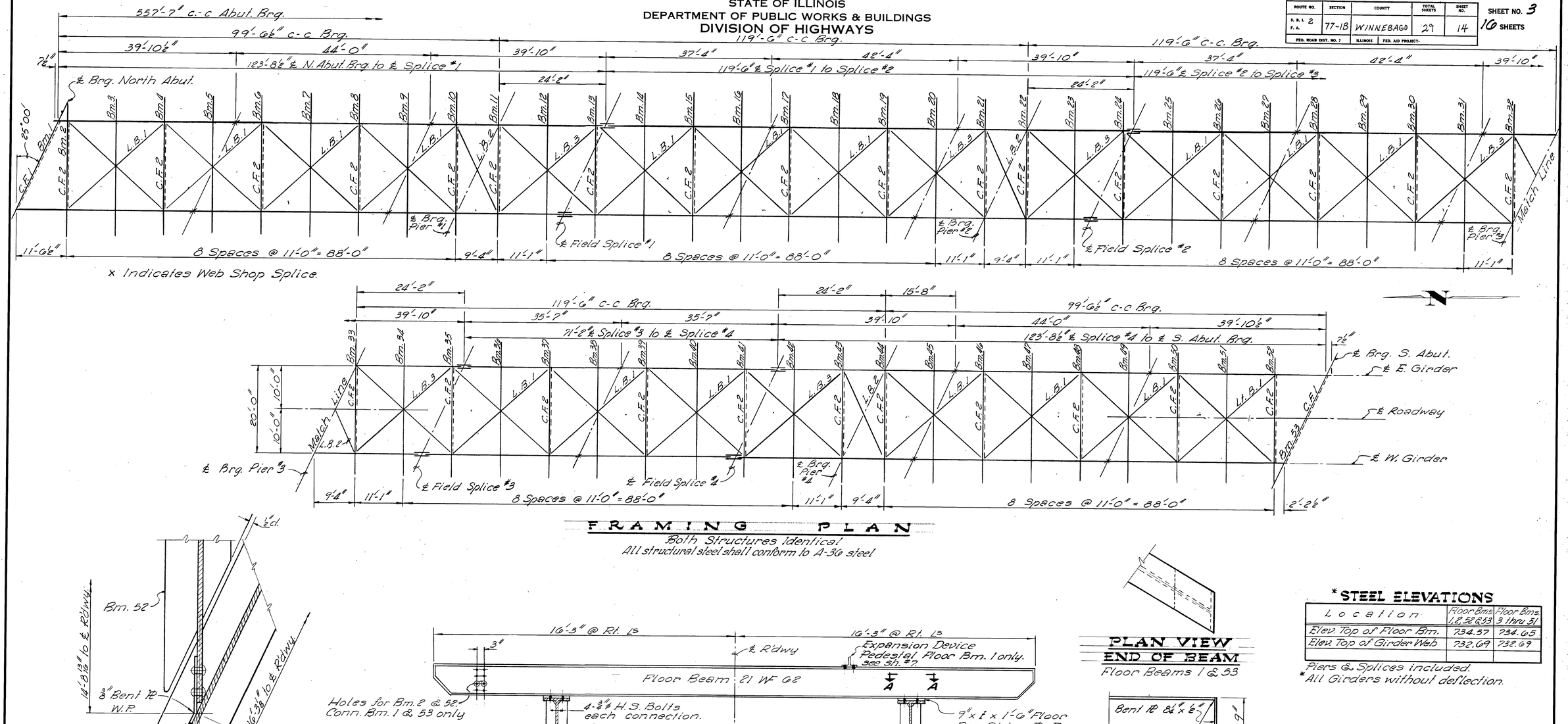
Rev. 3-16-65 JBN: Insert Information Added.

DIETZGEN NO. 130-3 ARCHPROOF

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 2 F.A.	77-1B	WINNEBAGO	29	14
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3
16 SHEETS

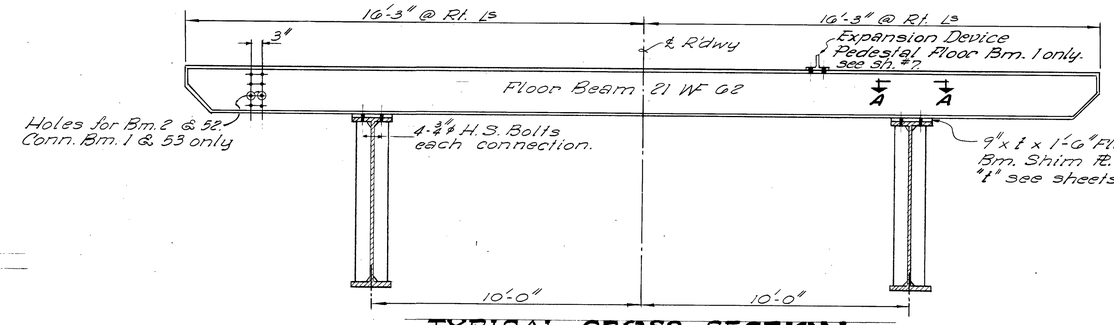


FRAMING PLAN

Both Structures Identical
All structural steel shall conform to A-36 steel

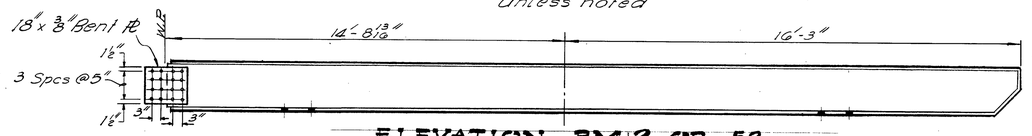
BM. 52 CONNECTION

Bm. 2 similar, but opposite



TYPICAL CROSS SECTION

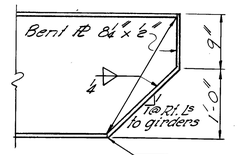
Unless noted



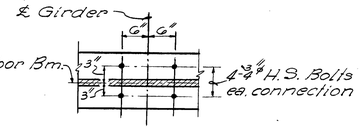
ELEVATION BM. 2 OR 52

PLAN VIEW END OF BEAM

Floor Beams 1 & 53



END OF BMS.



SEC. A-A

*STEEL ELEVATIONS

Location	Floor Bms. 1, 2, 52 & 53	Floor Bms. 3 thru 51
Elev. Top of Floor Bm.	734.57	734.65
Elev. Top of Girder Web	732.09	732.09

Piers & Splices included.
*All Girders without deflection.

DESIGNED	J. M. Tyanooh
CHECKED	J. B. Nelson
DRAWN	J. M. J. Mullenix
CHECKED	J. B. N.

JAN 8 1963

EXAMINED W. E. Baumann — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED E. L. Bluni — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

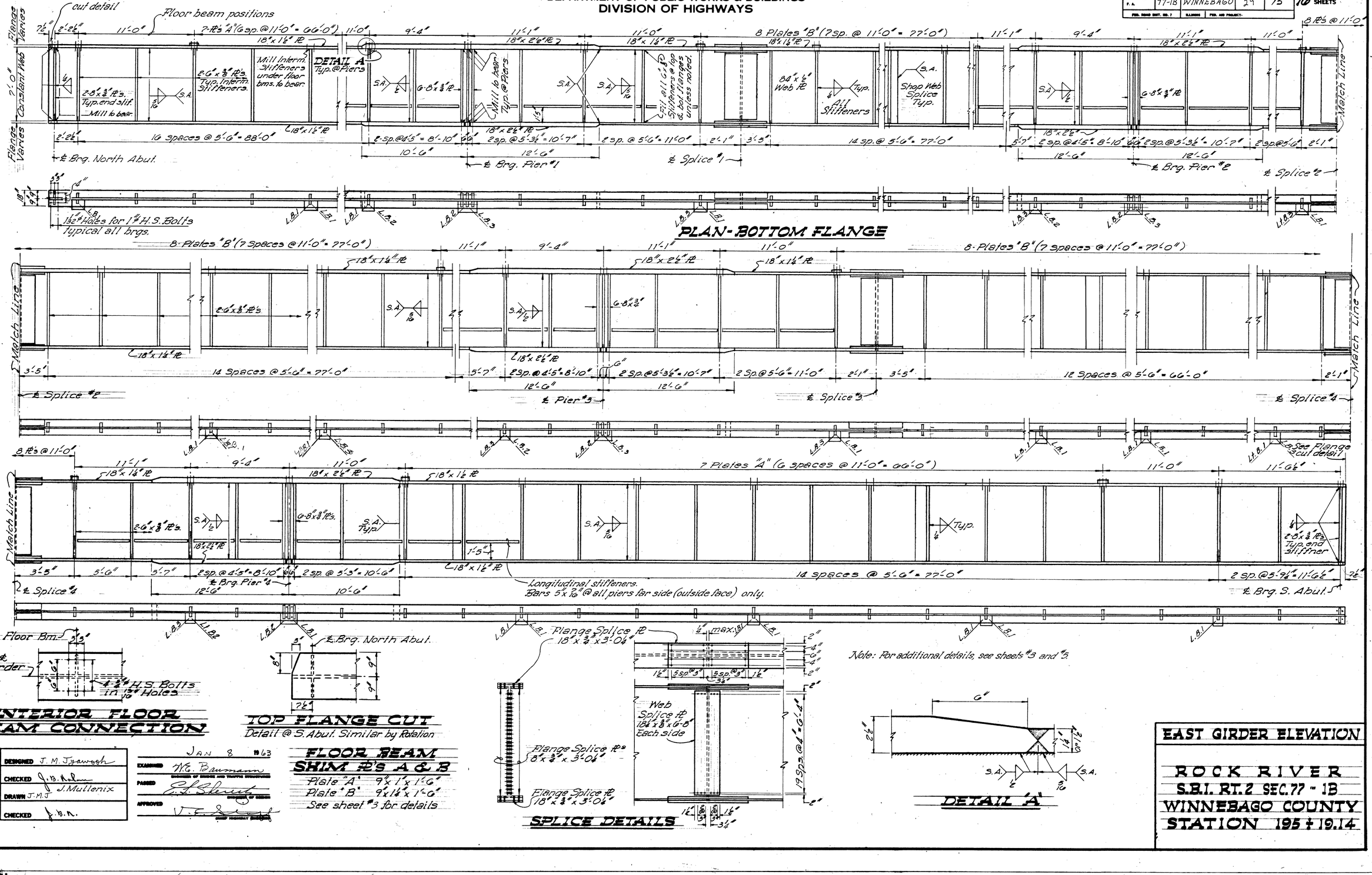
STRUCTURAL STEEL LAYOUT

ROCK RIVER
S.B.I. RT. 2 SEC. 77 - 1B
WINNEBAGO COUNTY
STATION 195 + 19.14

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 2 F.A.	77-1B	WINNEBAGO	29	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 4
16 SHEETS



PLAN - BOTTOM FLANGE

INTERIOR FLOOR BEAM CONNECTION

TOP FLANGE CUT

Detail @ S. Abut. Similar by Rotation

SPLICE DETAILS

Note: For additional details, see sheets #3 and #5

DETAIL 'A'

FLOOR BEAM SHIM PL's A & B

Plate "A" 9"x1'x1'-6"
Plate "B" 9"x1 1/2"x1'-0"
See sheet #3 for details

DESIGNED J. M. Tyanoosh
CHECKED J. B. Nelson
DRAWN J. M. T. J. Mullenix
CHECKED J. B. N.

JAN 8 1963
EXAMINED W. E. Baumann
PASSED E. E. Shrout
APPROVED V. F. Smith

EAST GIRDER ELEVATION

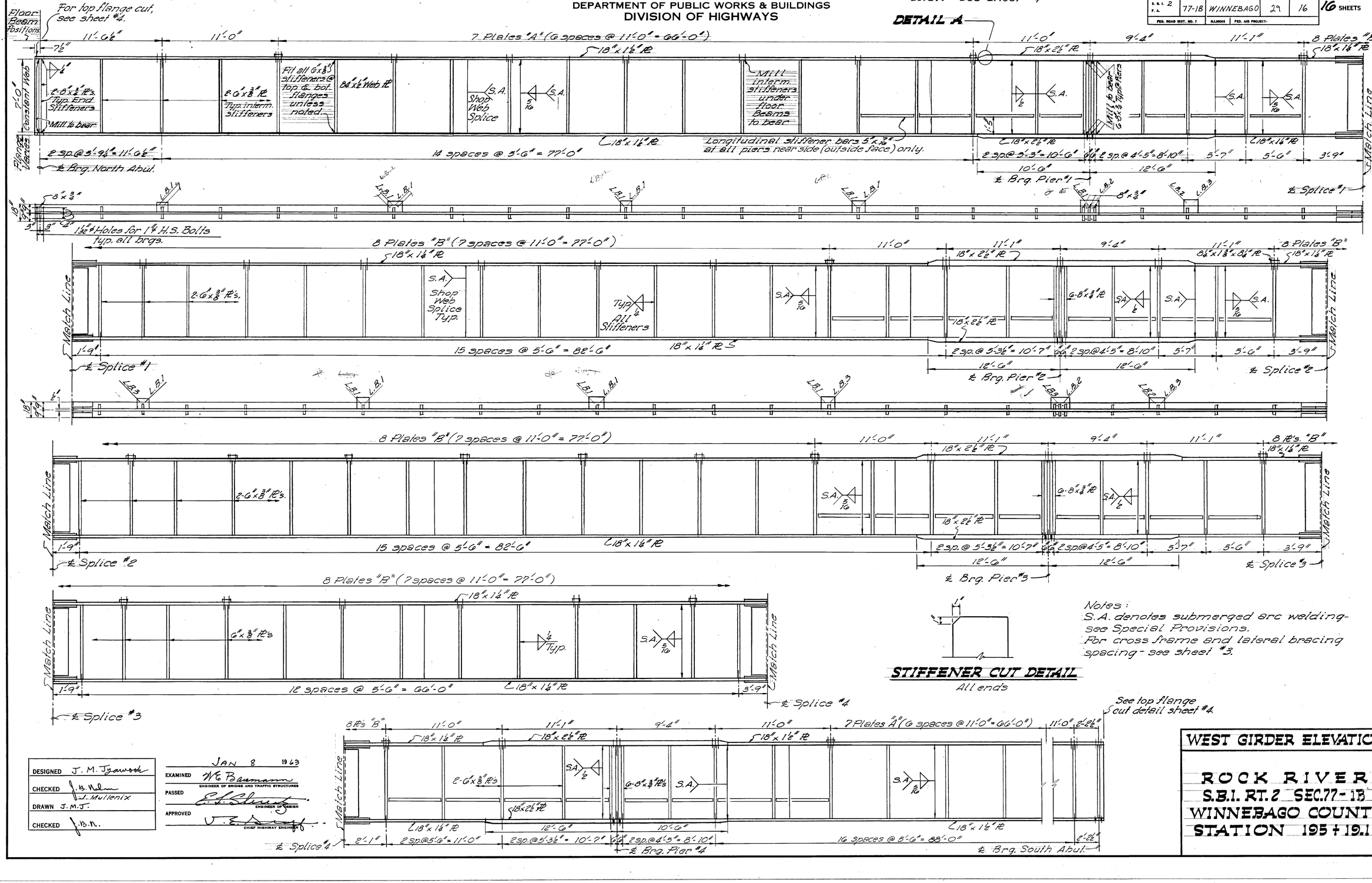
ROCK RIVER
S.B.I. RT. 2 SEC. 77 - 1B
WINNEBAGO COUNTY
STATION 195 + 19.14

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

Note: For detail "A" and Splice detail - see sheet #4

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. 2 F. A.	77-1B	WINNEBAGO	29	16
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 5
16 SHEETS



STIFFENER CUT DETAIL
All ends

Notes:
S.A. denotes submerged arc welding - see Special Provisions.
For cross frame and lateral bracing spacing - see sheet #3.

DESIGNED	J. M. Tyaurosh
CHECKED	J. B. Nelson, J. Mullenix
DRAWN	J. M. J.
CHECKED	J. B. N.

JAN 8 1963

EXAMINED — W. C. Baumann, ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

PASSED — E. E. Schaft, ENGINEER OF DESIGN

APPROVED — U. E. Dorsey, CHIEF HIGHWAY ENGINEER

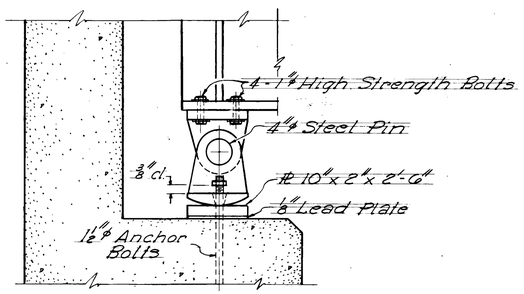
WEST GIRDER ELEVATION

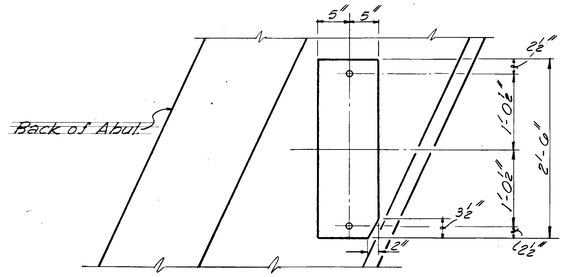
ROCK RIVER
S.B.I. RT. 2 SEC. 77-1B
WINNEBAGO COUNTY
STATION 195+19.14

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 2	77-1B	WINNEBAGO	29	17
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

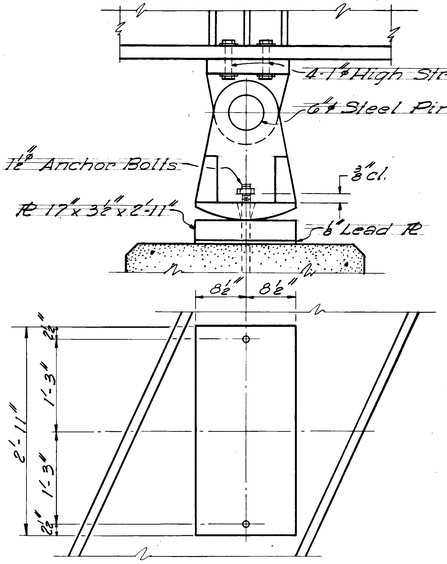
SHEET NO. 6
16 SHEETS





Note:
All pins are Standard Steel Pins with Hexagon recessed Pin Nuts.

PLAN & ELEV. @ ABUTS.



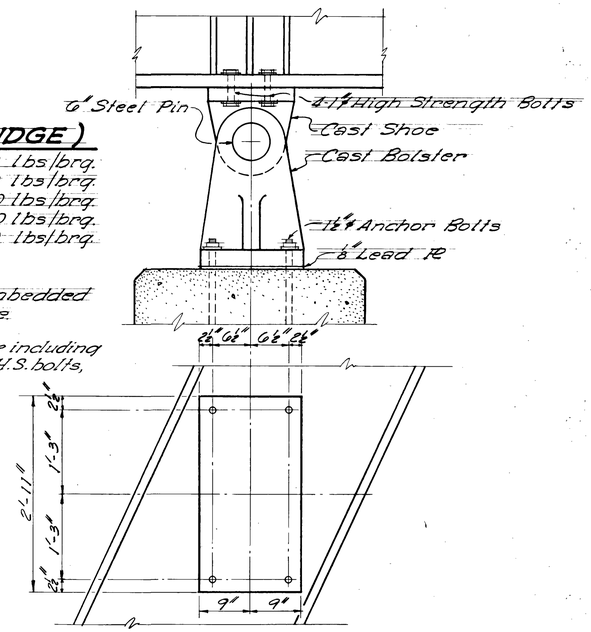
PLAN & ELEV. @ PIERS 1,2 & 4

BEARING LIST (ONE BRIDGE)

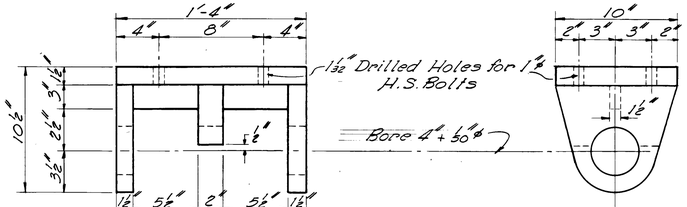
Abutment Shoes	4 Req'd. 160 lbs/brg.
Abutment Rockers	4 Req'd. 320 lbs/brg.
Pier 1, 2 & 4 Rockers	6 Req'd. 1,120 lbs/brg.
Pier 3 Bolsters	2 Req'd. 1,460 lbs/brg.
Pier Shoes	8 Req'd. 400 lbs/brg.

Note: Anchor bolts shall be imbedded a minimum of 1'-3" in concrete.

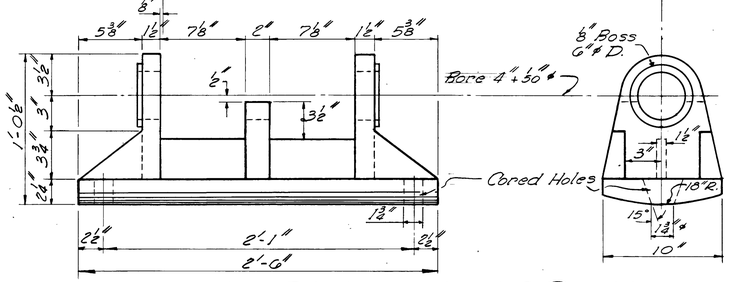
Total quantity of bearings for one bridge including castings, lead plates, bottom plates, H.S. bolts, pins and anchor bolts = 22,050 lbs.



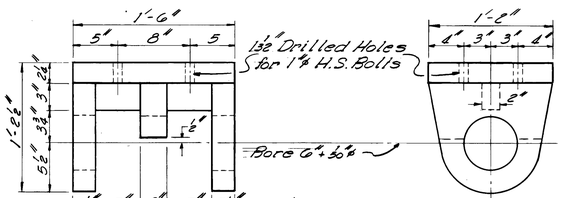
PLAN & ELEV. @ PIER 3



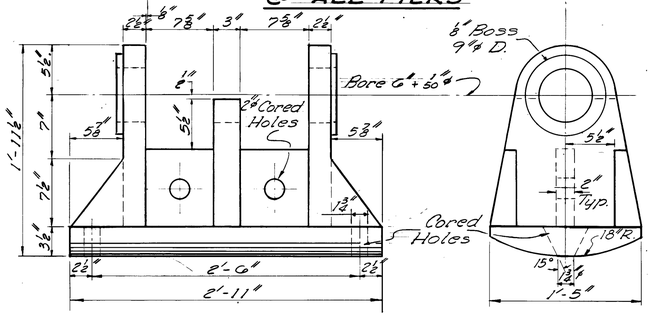
CAST SHOE DETAILS @ ABUTS.



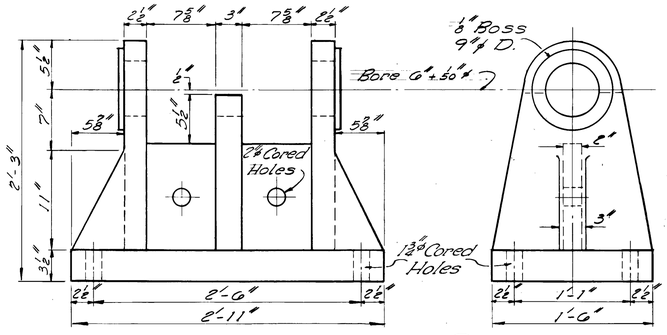
CAST ROCKER DETAILS @ ABUTS.



CAST SHOE DETAILS @ ALL PIERS



CAST ROCKER DETAILS @ PIERS 1,2&4



CAST BOLSTER DETAILS @ PIER 3

DESIGNED	J. M. Tyaworski
CHECKED	J. B. Nolan
DRAWN	J. M. T. J. Mullenix
CHECKED	J. B. N.

JAN 8 1963

EXAMINED W. E. Baumann
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

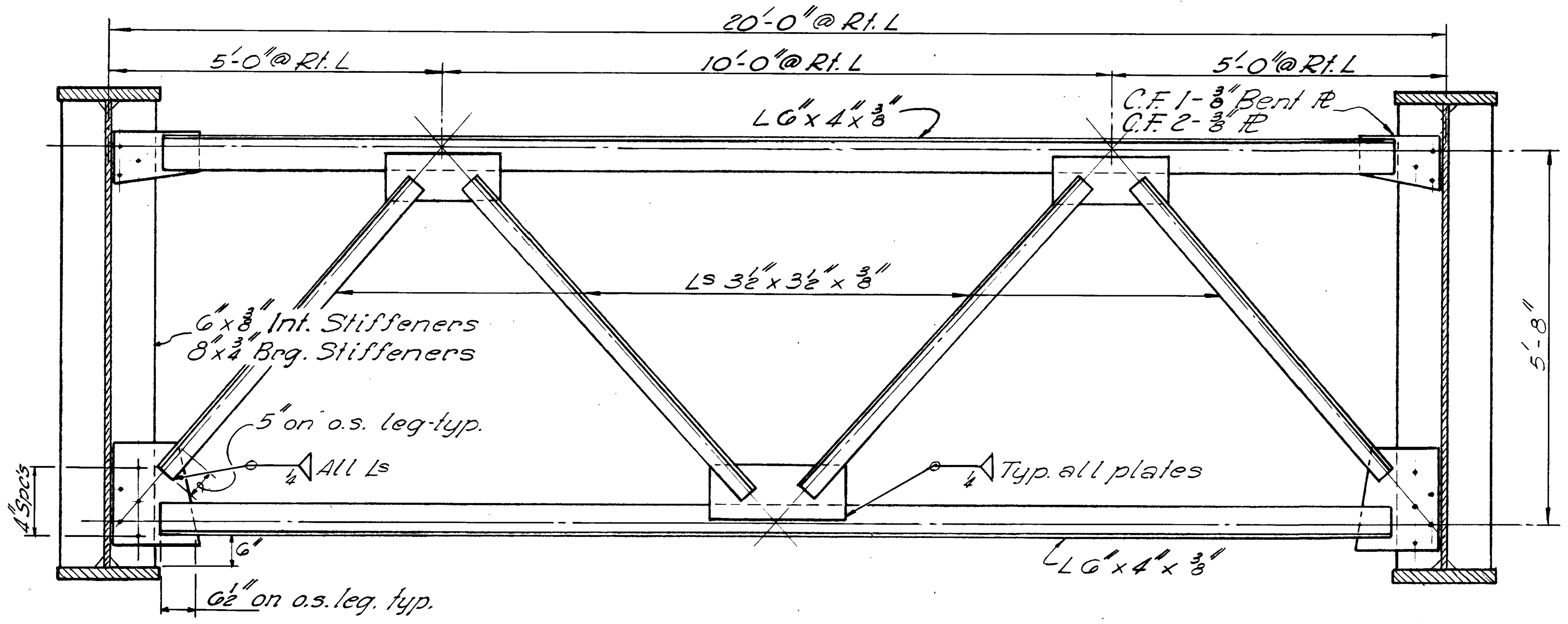
PASSED
ENGINEER OF DESIGN

APPROVED
CHIEF HIGHWAY ENGINEER

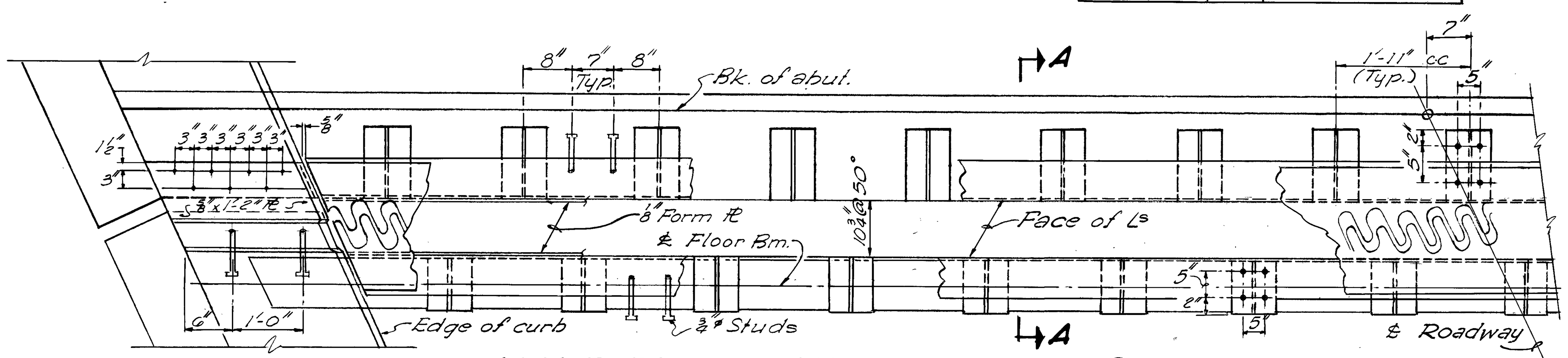
BEARING DETAILS

ROCK RIVER
S.B.I. RT. 2 SEC. 77-1B
WINNEBAGO COUNTY
STATION 195 + 19.14

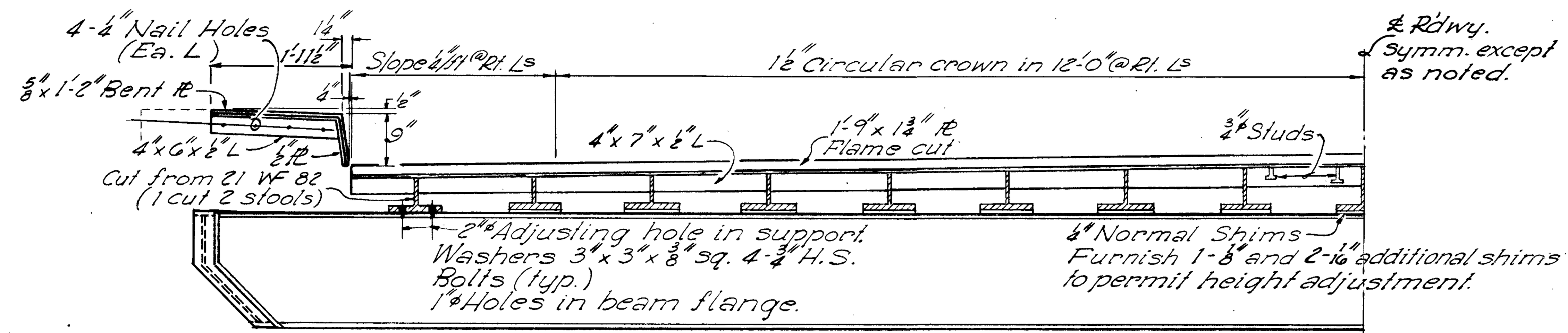
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 2 F.A.	77-1B	WINNEBAGO	29	18
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		



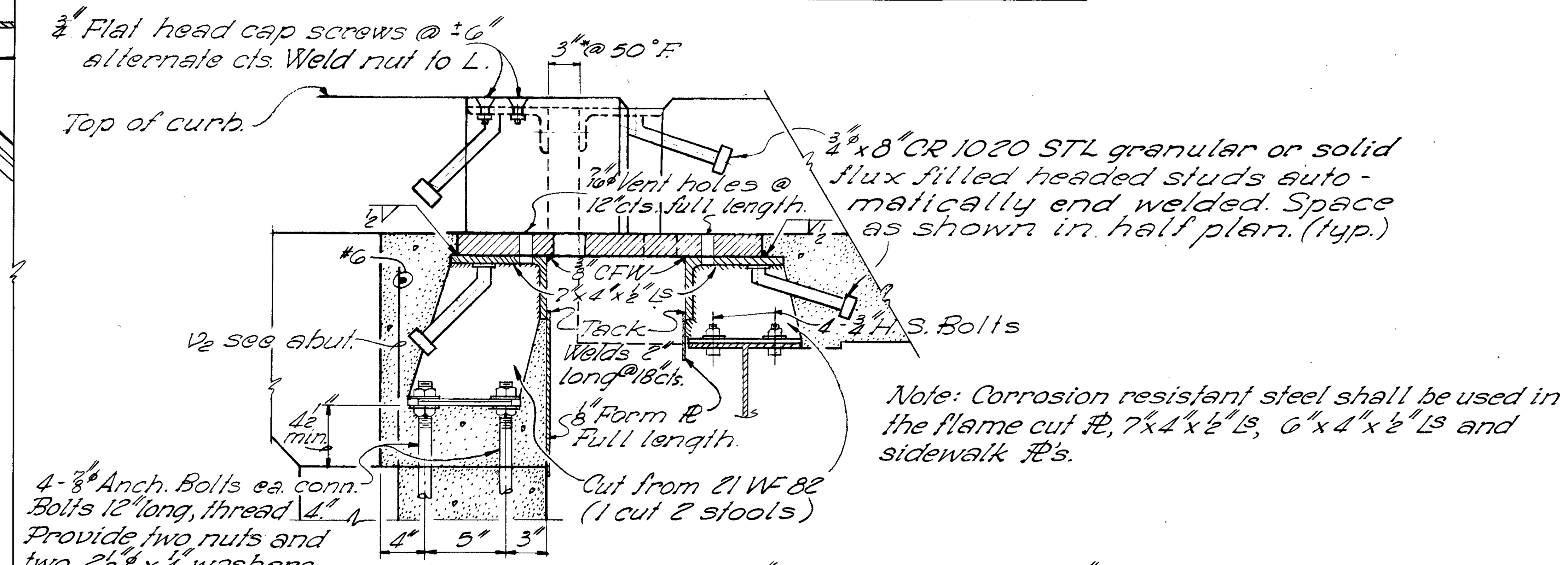
CROSS FRAME DETAILS
(C.F. 1 and C.F. 2)



HALF PLAN - EXPAN. DEVICE @ N. ABUT.



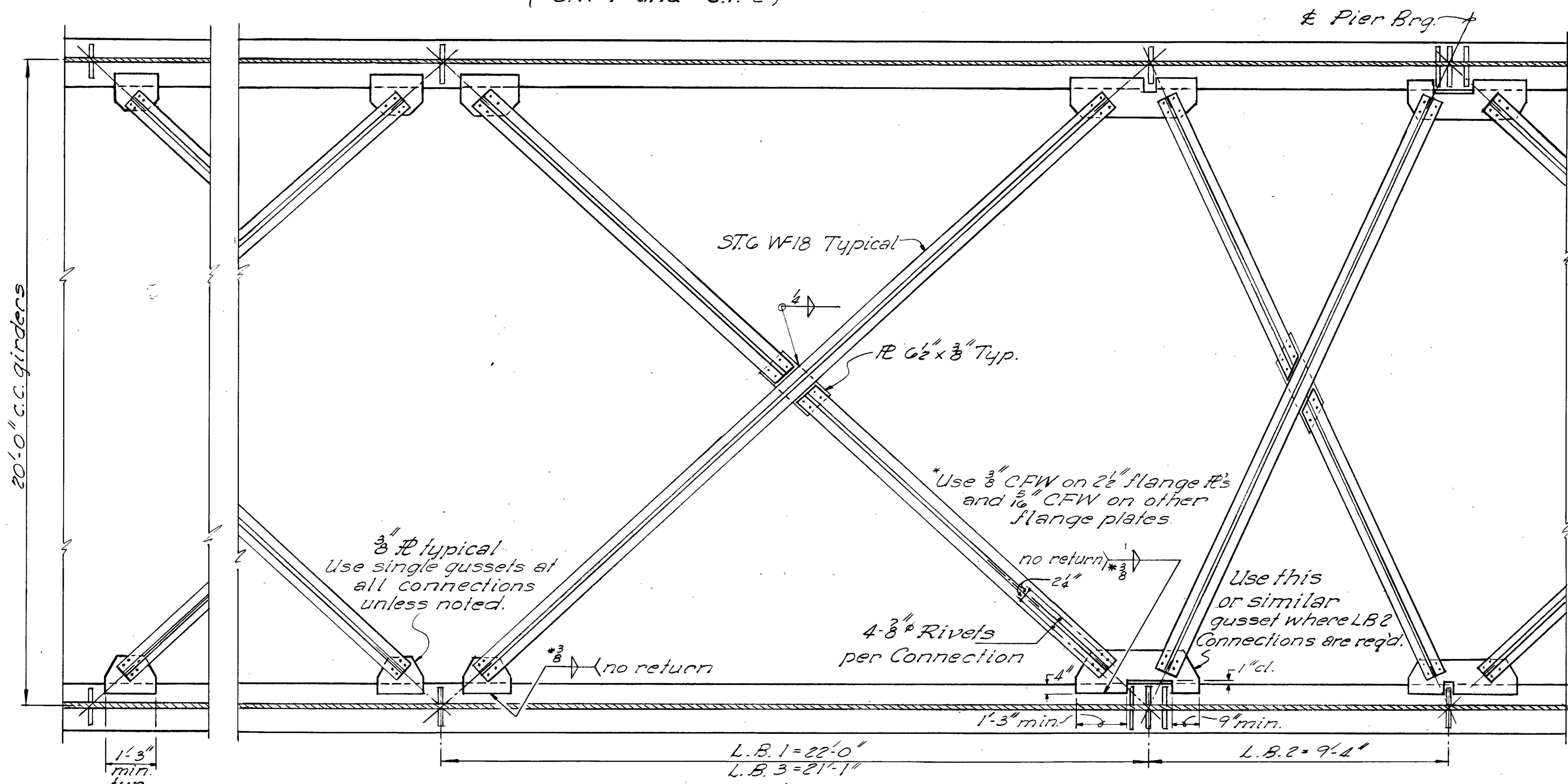
HALF ELEVATION @ RT. L



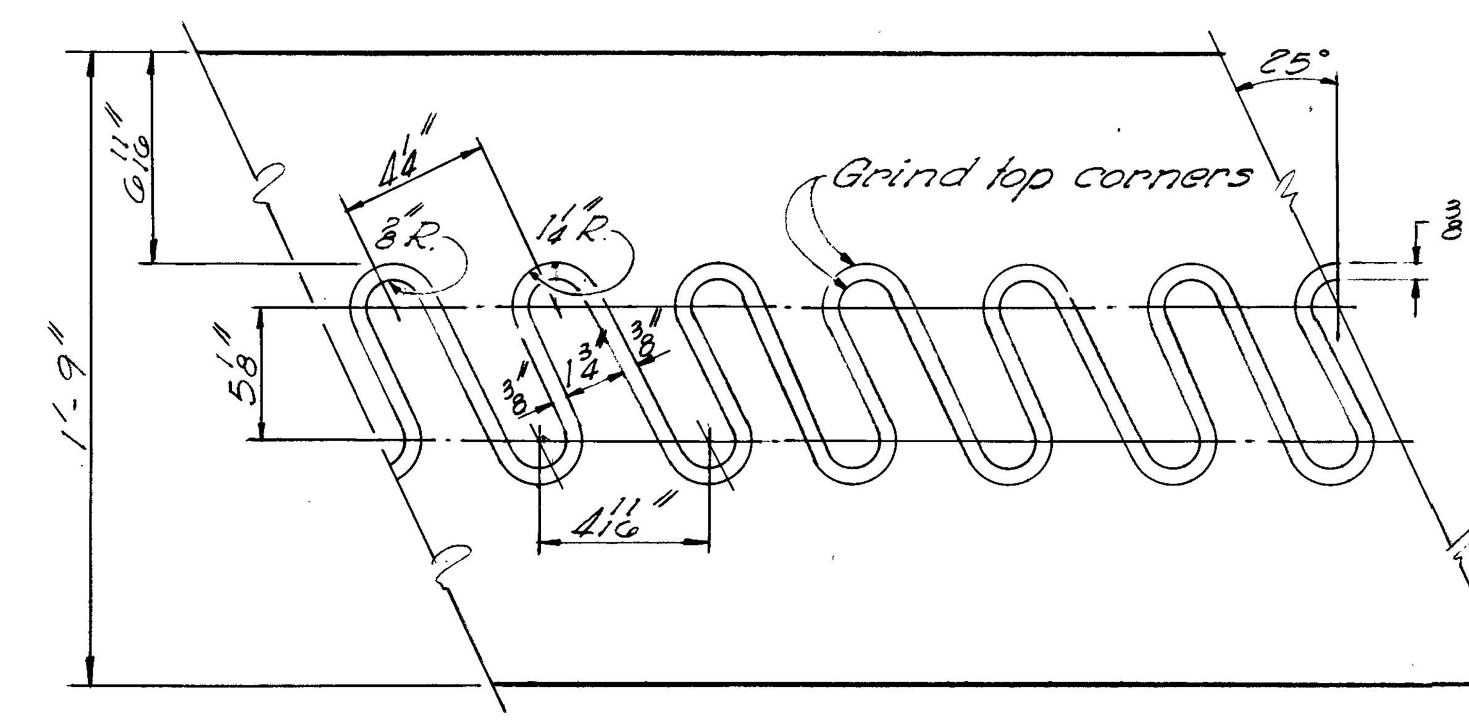
SECTION A-A

Note: Corrosion resistant steel shall be used in the flame cut ℔, 7"x4"x½" Ls, 6"x4"x½" Ls and sidewalk ℔'s.

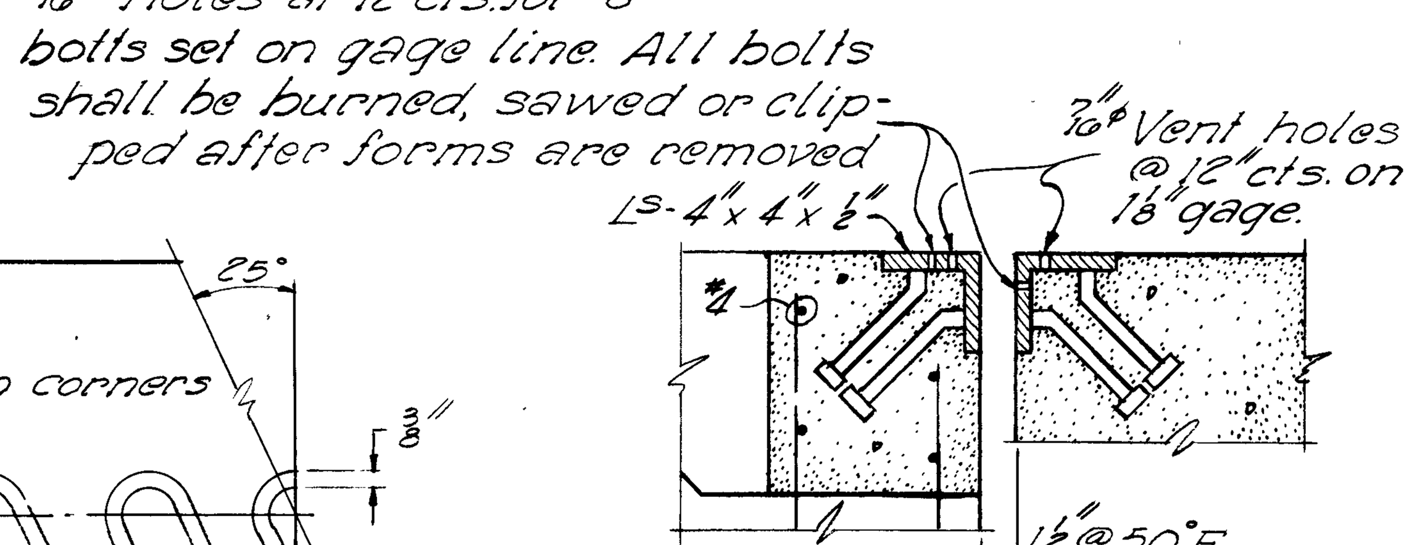
7/16" Holes at 12" cts. for 3/8" bolts set on gage line. All bolts shall be burned, sawed or clipped after forms are removed.



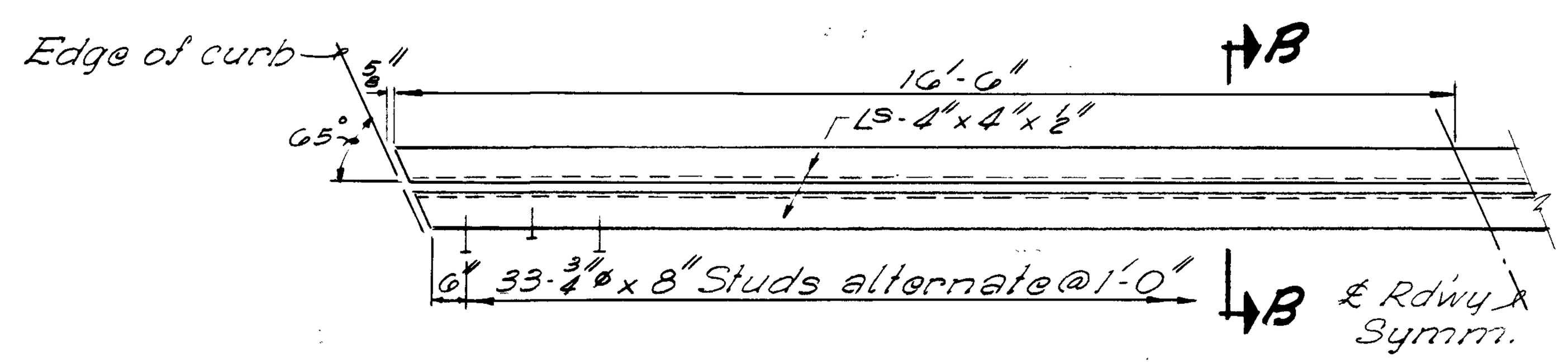
LATERAL BRACING DETAILS



FLAME CUT ℔ DETAILS



SECTION B-B



HALF PLAN - EXPAN. DEVICE @ S. ABUT.

DESIGNED	J. M. Jgawosh
CHECKED	J. B. N. / J. Mullenix
DRAWN	J.M.J.
CHECKED	J.B.N.

JAN 8 1963
EXAMINED — W. E. Baumann — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED — C. L. Shook — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

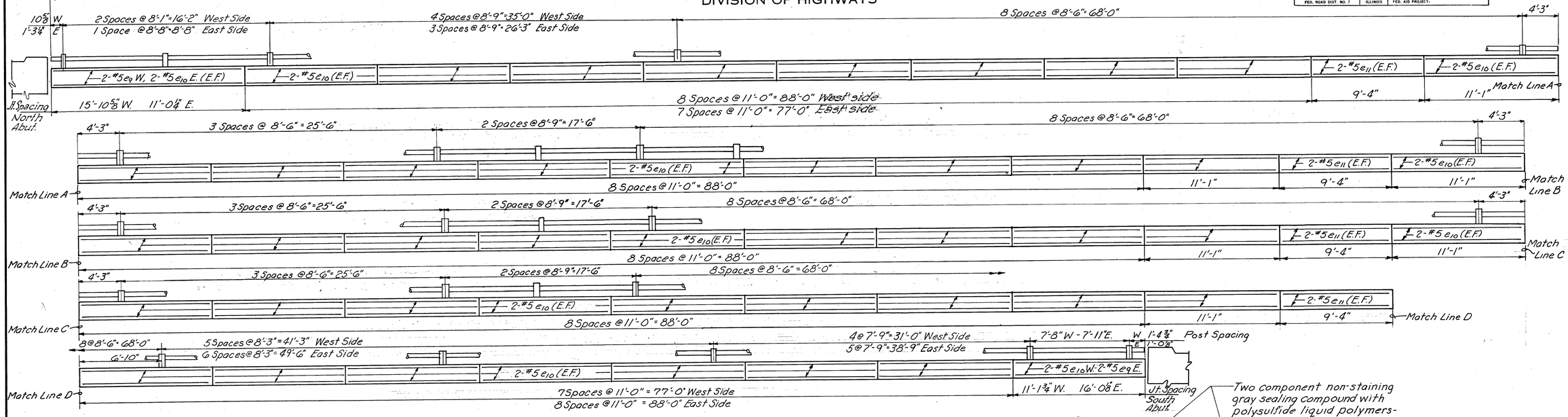
STRUCTURAL STEEL

ROCK RIVER
S.B.I. RT. 2 SEC. 77-1B
WINNEBAGO COUNTY
STATION 195 + 19.14

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

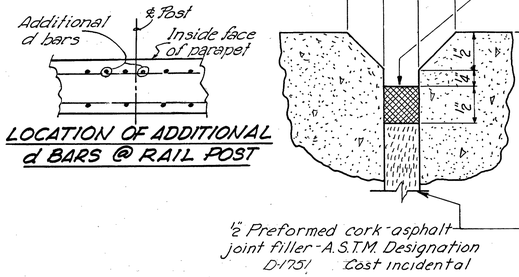
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. 2 F. A.	77-1B	WINNEBAGO	29	19
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 8
16 SHEETS

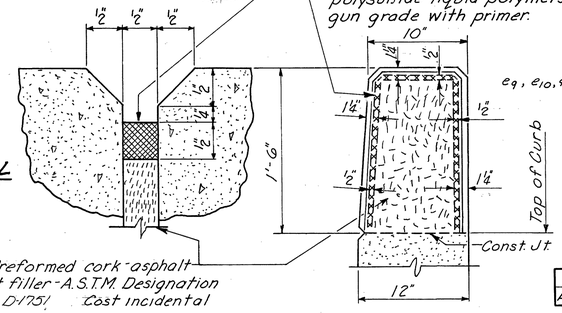


ELEVATION
Showing Post & Parapet Joint Spacing

For Aluminum Handrail details see sheet-8A



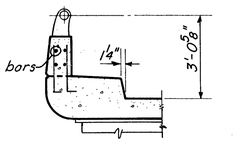
LOCATION OF ADDITIONAL d BARS @ RAIL POST



½" Preformed cork-asphalt Joint filler-A.S.T.M. Designation D-1751 Cost incidental

DETAIL OF JOINT IN PARAPET WALL

Two component non-staining gray sealing compound with polysulfide liquid polymers-gun grade with primer.

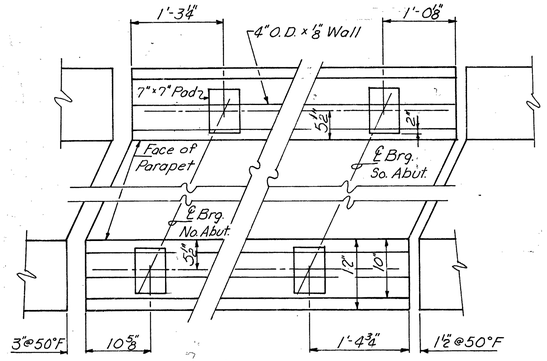


SEC. THRU CURB

ONE BRIDGE BILL OF MATERIAL *

Item	Unit	Quantity
Aluminum Handrail	Lin. Ft.	1120

* Quantities of Class X concrete and reinforcement bars for Parapet Wall are included with Superstructure Bill of Material Sheet #2.



CORNER DETAILS

DESIGNED	J. M. Tyrwoon	
CHECKED	J. B. Nelson	
DRAWN	J.M.J W.E. Dickerson W. A. Sausaman	
CHECKED	J.B.N.	

JAN 8 1963

EXAMINED W. E. Baumann, ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED E. A. Shurtz, ENGINEER OF DESIGN
APPROVED J. E. Skoog, CHIEF HIGHWAY ENGINEER

R-10 Drawn 2-16-60
Rev. 1-29-65 J.B.N. Railing details voided.

HANDRAIL & PARAPET DETAILS

ROCK RIVER
S.B.I.RT.2 SEC.77-1B
WINNEBAGO COUNTY
STATION 195+19.14

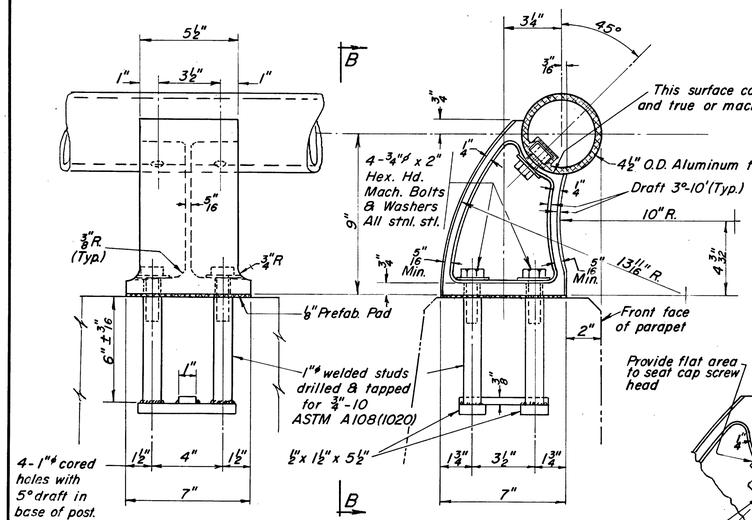
DIETZGEN NO. 135 IMPERIAL

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. 2 F. A.	77-1B	WINNEBAGO	29	19A
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 8A
16. SHEETS

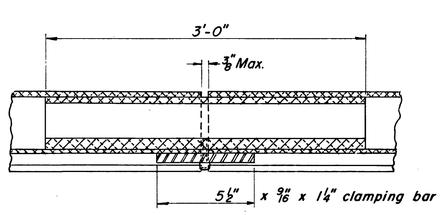
For Parapet & Rail Post Spacings see Sheet-8



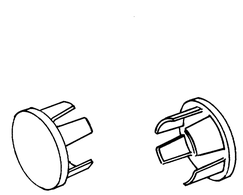
VIEW B-B

SECTION A-A

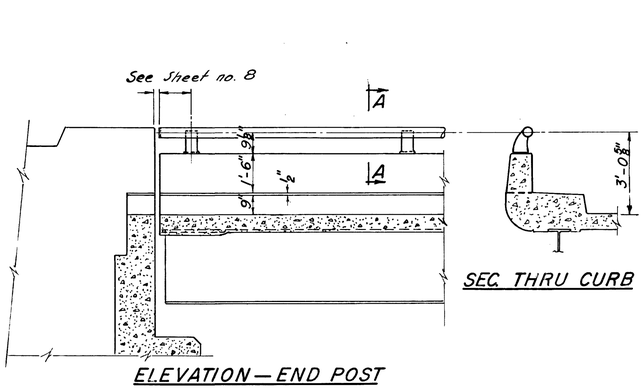
RAIL POST DETAILS



SECTION C-C

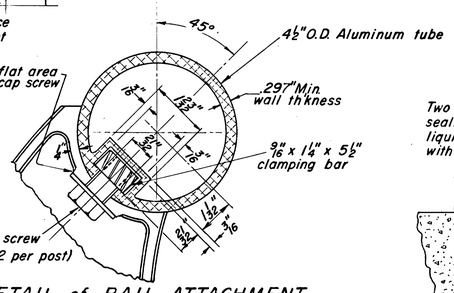


CAST END CAP
DRIVE FIT TYPE
8 Required

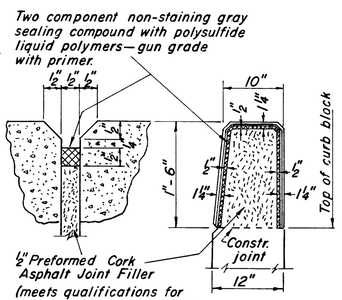


SEC. THRU CURB

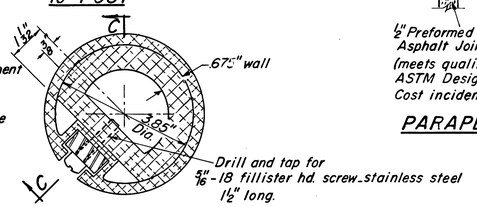
ELEVATION — END POST



DETAIL of RAIL ATTACHMENT to POST



PARAPET JOINT DETAIL



RAILING SPLICE DETAIL

Note!
Seal base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers — gun grade with primer.

NOTES:

All Posts shall be normal to parapet.

All Aluminum Alloy Extruded Rail shall conform to ASTM specification B-235 alloy 6061-T6, or 6062-T6, and shall extend a minimum of 2 panel lengths (attached to a minimum of 3 posts) except at ends or at open joints where a minimum of 1 panel length is required. All joints in railing must be spliced per detail.

See Special Provisions for following Material Specifications:

Cast Aluminum Alloy Bridge Post Alloy 344-T4.
Stainless Steel Machine Bolts, Washers, and Bars.

For material composition of Prefabricated Pad, see Article 54.9(f), (Bearing and Anchorage), of the Standard Specifications.

METHOD of MEASUREMENT: Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.

BASIS of PAYMENT: Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation, and erection.

Cost of rail splice, end caps, and hardware to be incidental to item ALUMINUM HANDRAIL.

Provide 1 - 1/8" and 2 - 1/16" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade — high spots shall be ground and low spots shimmed.

BILL of MATERIAL

Item	Unit	Quantity
ALUMINUM HANDRAIL	Lin. Ft.	

ALUMINUM HANDRAIL
ROCK RIVER
S.B.I. RT. 2 SEC. 77-1B
WINNEBAGO COUNTY
STATION 195+19.14

DESIGNED	
CHECKED	
DRAWN Wm. M. Best	
CHECKED	

Feb 25 1965
EXAMINED — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

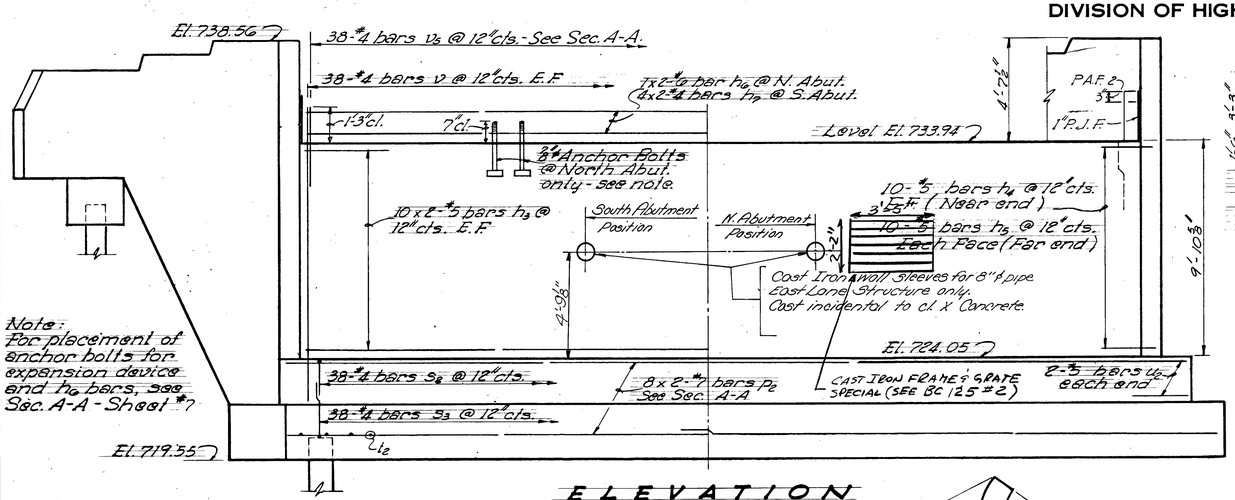
R-19 Dwn. 6-26-64 Rev. 8-26-64 9-2-64

B4369 750 12B 8-62 Rev. 1-29-65 J.B.N. Sheet 8A added to replace railing details voided on Sheet 8

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

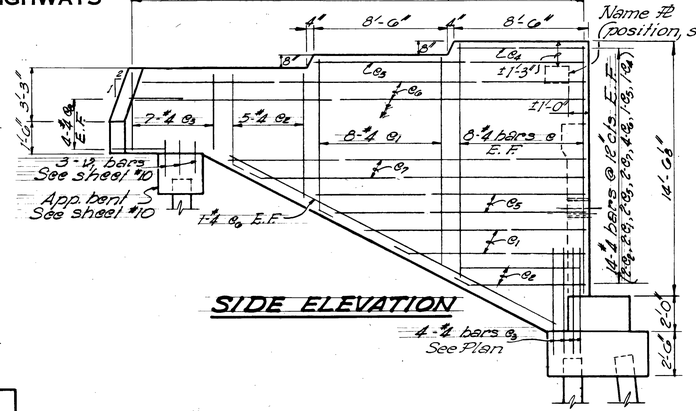
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 2, F.A.	77-1B	WINNEBAGO	29	20
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 9
16 SHEETS

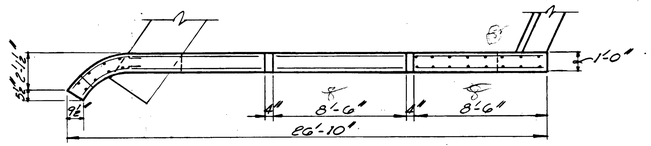


Note:
For placement of anchor bolts for expansion device and h6 bars, see Sec. A-A - Sheet #7

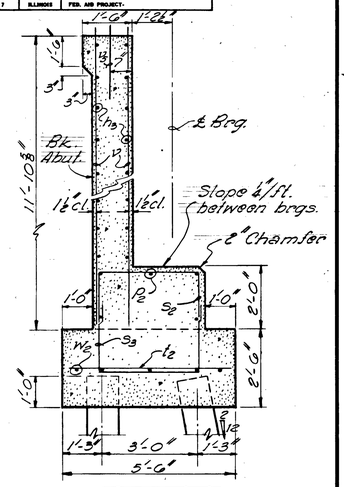
ELEVATION



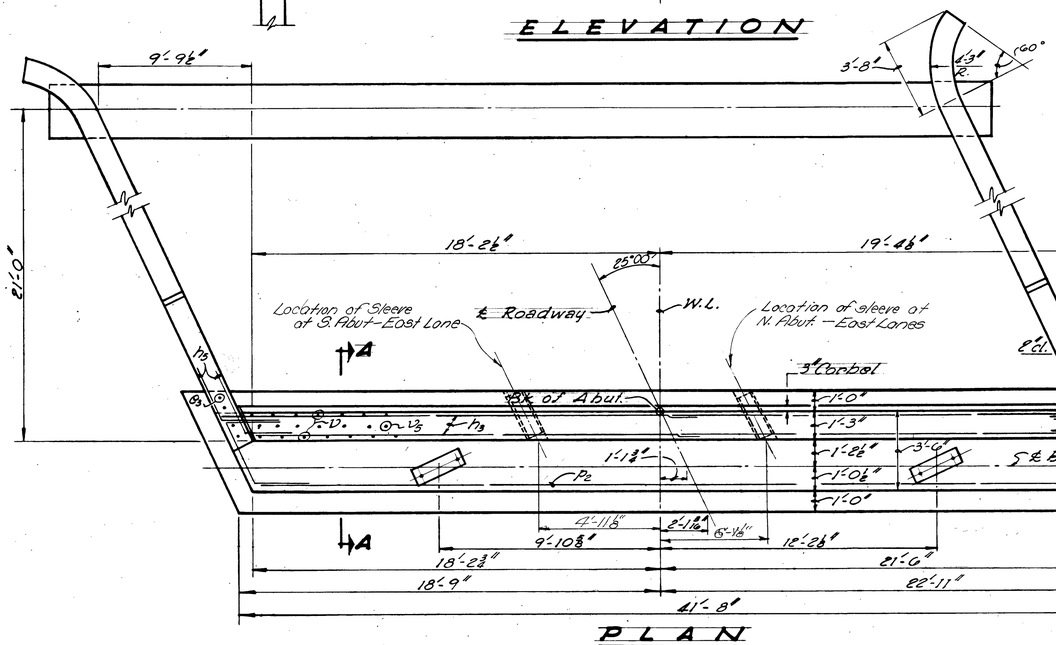
SIDE ELEVATION



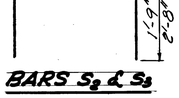
PLAN



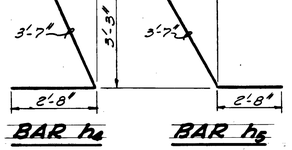
SEC. A-A



PLAN

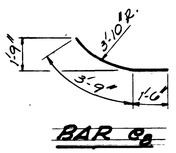


BARS S_2 & S_3

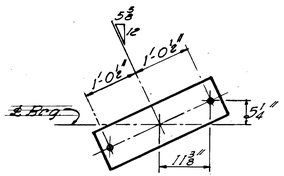


BAR h_4 BAR h_5

BAR U_2



BAR e_8



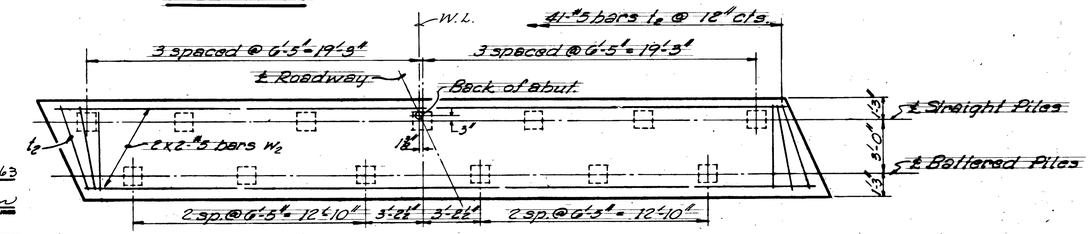
BOTTOM BRG. & DETAIL

PILE DATA

Type.....Concrete
Capacity.....45 Tons
Est. Length N. Abut. = 30'-0"
Est. Length S. Abut. = 20'-0"
No. Req'd. (two abuts.)
24+2 Test Pile.....West Struct.
26.....East Struct.

BILL OF MATERIAL One Bridge

Bar	No.	Size	Length	Shape
e	64	#4	14'-0"	—
e1	80	#4	10'-0"	—
e2	56	#4	6'-3"	—
e3	72	#4	4'-6"	—
e4	8	#4	7'-3"	—
e5	24	#4	15'-0"	—
e6	40	#4	23'-0"	—
e7	16	#4	19'-0"	—
e8	32	#4	5'-3"	⌐
h3	80	#5	19'-6"	—
h4	40	#5	6'-3"	⌐
h5	40	#5	6'-3"	⌐
h6	2	#6	19'-6"	—
h7	8	#4	19'-0"	—
P2	32	#7	20'-9"	—
s2	76	#4	6'-8"	⊏
s3	76	#4	8'-6"	⊏
l2	82	#5	5'-3"	—
u2	8	#5	8'-5"	⌐
v	152	#4	13'-0"	—
v3	76	#4	2'-6"	—
w2	8	#5	21'-3"	—
Class X Conc.	Cu. Yds.			135.8
Reinf. Bars	Lbs.			9,370
Conc. Piles	Lin. Ft.			600/660 *
Test Pile (Conc.)	Each			2/0 *
Name Plates	Each			1



FOOTING DETAIL

*West Struct / East Struct.

DESIGNED	J. M. Tyaworth
CHECKED	J. B. Mullenix
DRAWN	J. M. T.
CHECKED	J. B. M.

EXAMINED JAN 8 1963 — Engineer of Bridge and Traffic Structures
PASSED — Engineer of Design
APPROVED — Chief Highway Engineer

ABUTMENTS

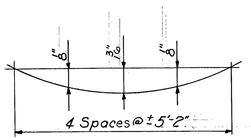
ROCK RIVER
S.B.I. RT. 2 SEC. 77-1B
WINNEBAGO COUNTY
STATION 195+19.14

Rev: 3-15-63 JBM. CI Sleeves Added.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

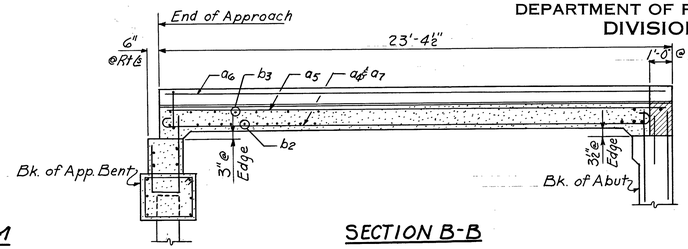
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. 2 F. A.	77-1B	WINNEBAGO	29	21
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 10
16 SHEETS



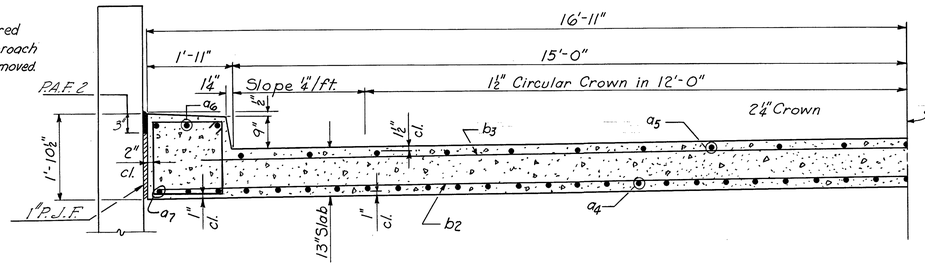
D.L. DEFLECTION DIAGRAM

See note sheet #16

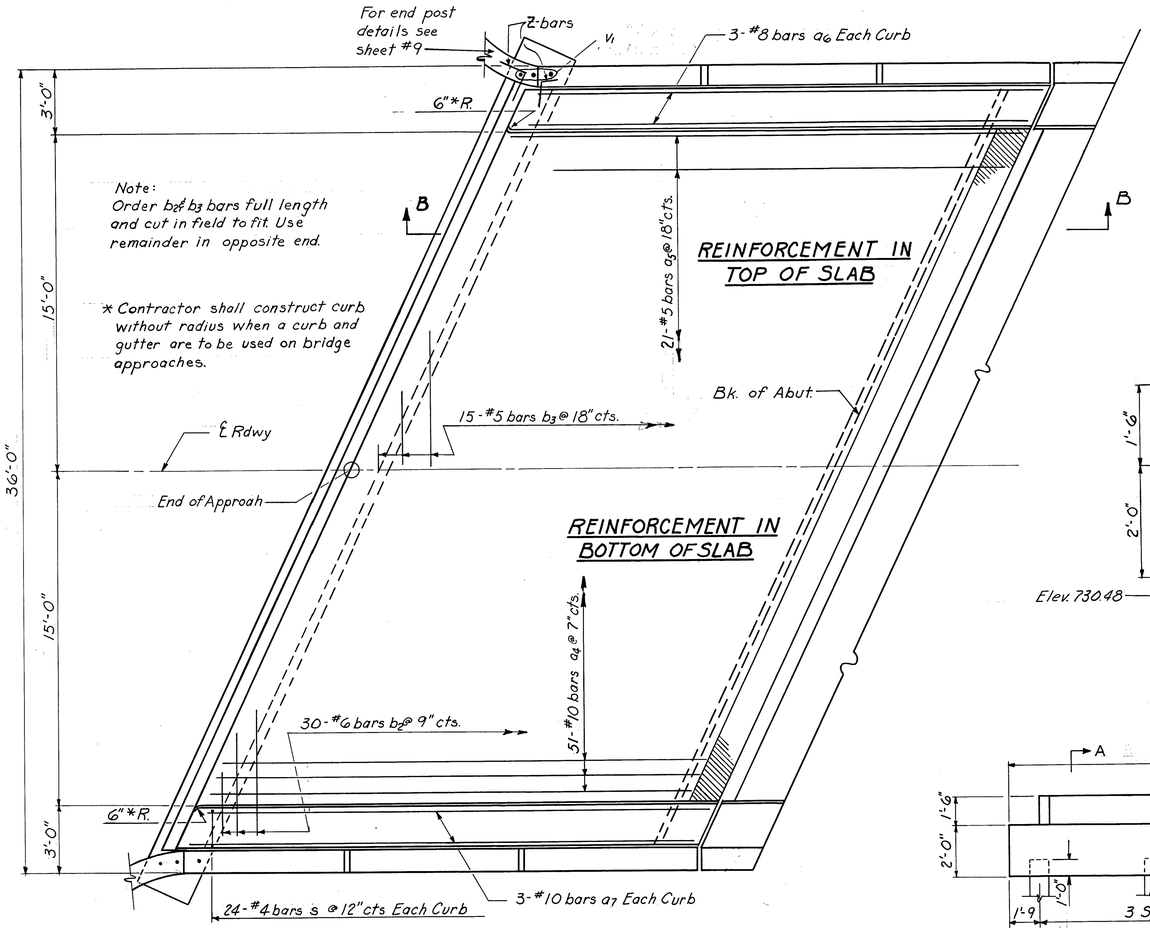


SECTION B-B

Hatched area to be poured after superstructure & approach span falsework has been removed.

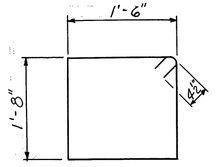


HALF CROSS SECTION

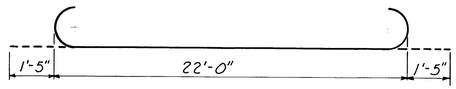


PLAN OF NORTH APPROACH

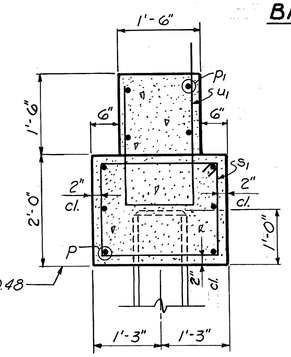
South Similar By Rotation Unless Noted



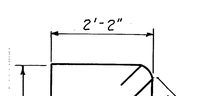
BAR s



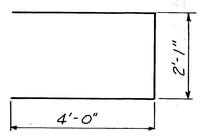
BAR a4



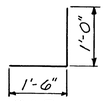
SECTION A-A



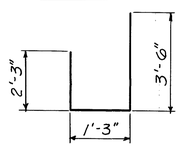
BAR s1



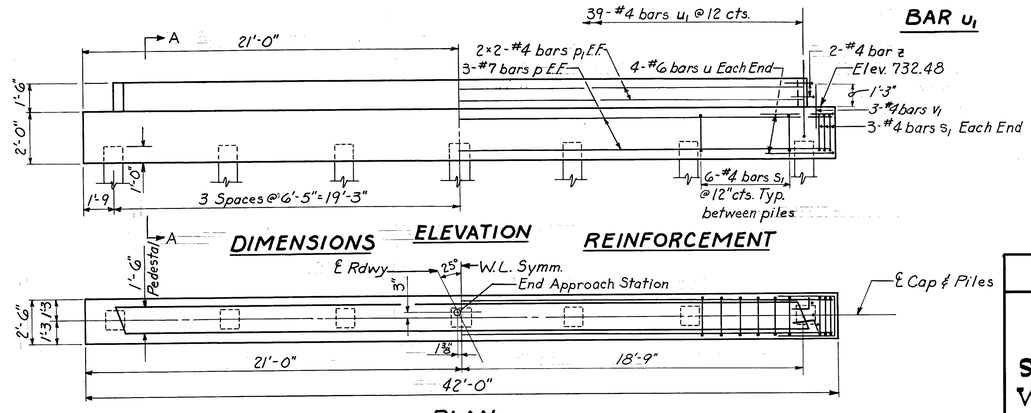
BAR u



BAR z



BAR u1



DIMENSIONS — ELEVATION — REINFORCEMENT

PLAN APPROACH BENT

TWO APPROACH SPANS ONE BRIDGE BILL OF MATERIALS

Bar	No.	Size	Length	Shape
a_4	402	#10	24'-10	⊂
a_5	42	#5	22'-0"	—
a_6	12	#8	23'-0"	—
a_7	12	#10	23'-0"	—
b_2	60	#6	33'-6"	—
b_3	30	#5	32'-0"	—
p	12	#7	41'-10"	—
p_1	16	#4	20'-0"	—
s	96	#4	7'-1"	⊐
s_1	84	#4	8'-5"	⊐
u	16	#6	10'-1"	⊐
u_1	78	#4	7'-0"	⊐
v_1	12	#4	2'-3"	—
z	8	#4	2'-6"	⌋
* Class "X" Concrete			Cu. Yds.	93.9
* Reinforcement Bars			Lbs.	20610
Concrete Piles			Lin. Ft.	420

*Included with total bill of material superstructure.

DESIGNED	J. M. Tyanovich
CHECKED	J. B. Nolan
J. M. J	
DRAWN	W. E. Dickerson
CHECKED	J. B. N.

JAN 8 1963

EXAMINED W. E. Baumann — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

PASSED E. A. Bleuer — ENGINEER OF DESIGN

APPROVED V. E. Scott — CHIEF HIGHWAY ENGINEER

PILE DATA

Type Concrete
Capacity 25 Tons
Est. Length 35'-0" N. Bent, 25'-0" S. Bent
No. Read 14 (2 Bents)

APPROACH SPANS

ROCK RIVER
S.B.I. RT. 2 SEC. 77-1B
WINNEBAGO COUNTY
STATION 195 + 19.14

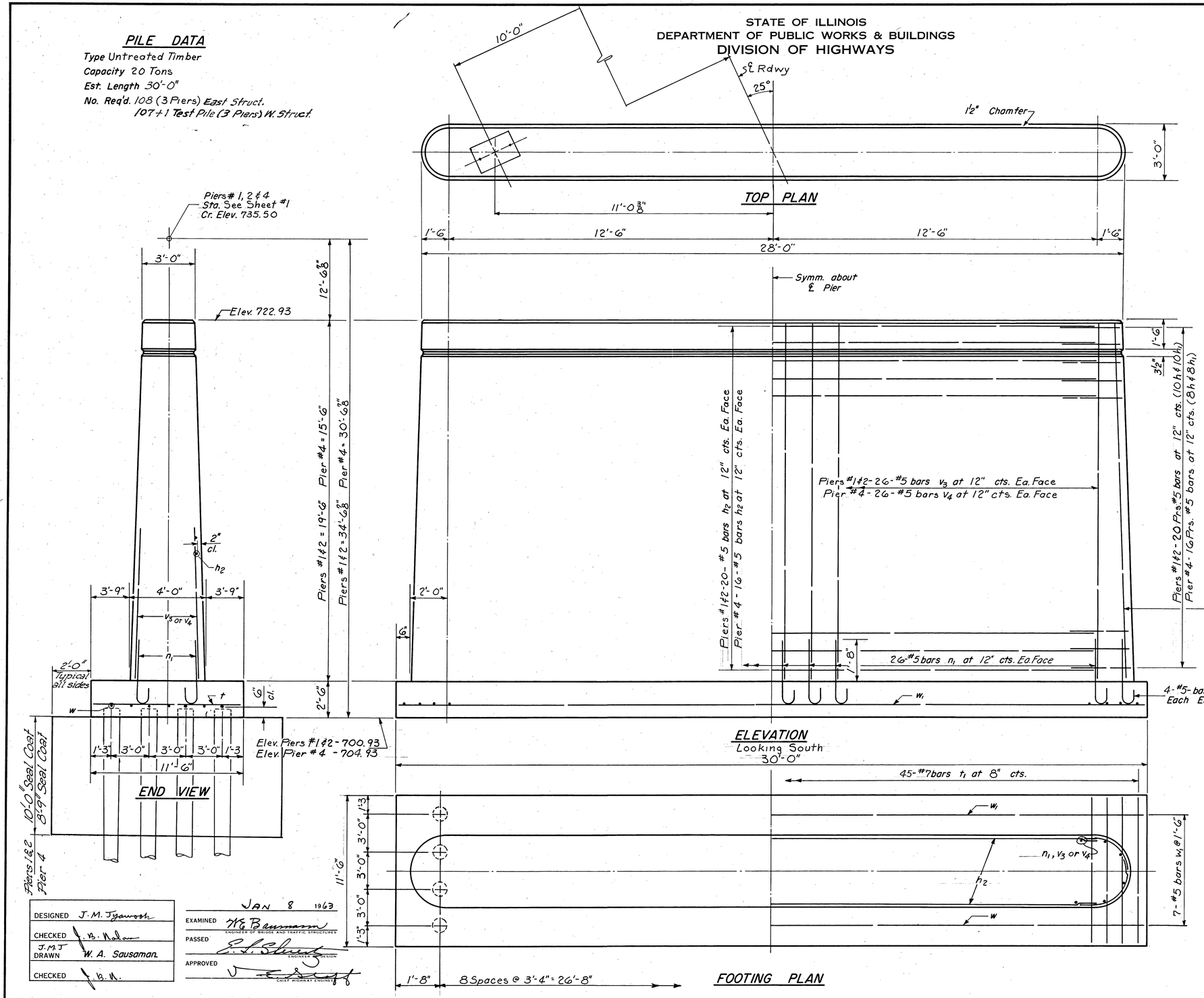
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

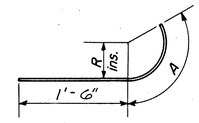
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 2 F.A.	77-1B	WINNEBAGO	29	22
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 11
16 SHEETS

PILE DATA

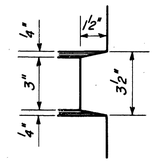
Type Untreated Timber
Capacity 20 Tons
Est. Length 30'-0"
No. Req'd. 108 (3 Piers) East Struct.
107+1 Test Pile (3 Piers) W. Struct.



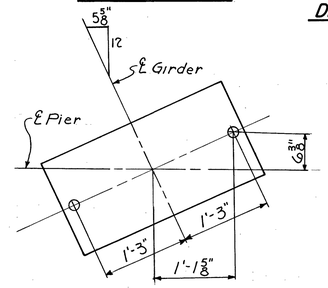


Bar	R	A
h	1'-7"	3'-6"
h1	1'-4"	3'-2"

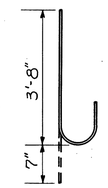
DETAIL OF BARS
h & h1



NOTCH DETAIL



Bott. Brg. Pt. Detail



BAR n

PIERS 1, 2 & 4
ONE BRIDGE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	112	#5	5'-1"	⌒
h1	112	#5	4'-6"	⌒
h2	112	#5	25'-0"	—
n1	180	#5	4'-3"	⊂
t1	135	#7	11'-0"	—
v3	120	#5	19'-3"	—
v4	60	#5	15'-3"	—
w1	21	#5	29'-6"	—
Test Pile Timber			Each	1/0 *
Class A Concrete			Cu. Yds.	288.7
Reinforcement Bars			Lbs.	11880
Untreated Piles			Lin. Ft.	32'0" Each *
Cofferdam Excav.			Cu. Yds	920
Cofferdam (Piers 1,2,4)			Ea.	3
Seal Coat Conc.			Cu. Yds	561.0

* West Struct / East Struct.

DESIGNED	J. M. Tyanoosh
CHECKED	A. B. Nalon
J.M.T DRAWN	W. A. Sausaman
CHECKED	A. B. N.

JAN 8 1963
EXAMINED H. G. Baumann, ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED E. L. Shurtz, ENGINEER OF DESIGN
APPROVED V. E. Scott, CHIEF HIGHWAY ENGINEER

P-1 Re-drawn 7-21-59 Rev. 11-25-59

PIERS 1, 2 & 4
ROCK RIVER
S.B.I. RT. 2 SEC. 77-1B
WINNEBAGO COUNTY
STATION 195 + 19.14

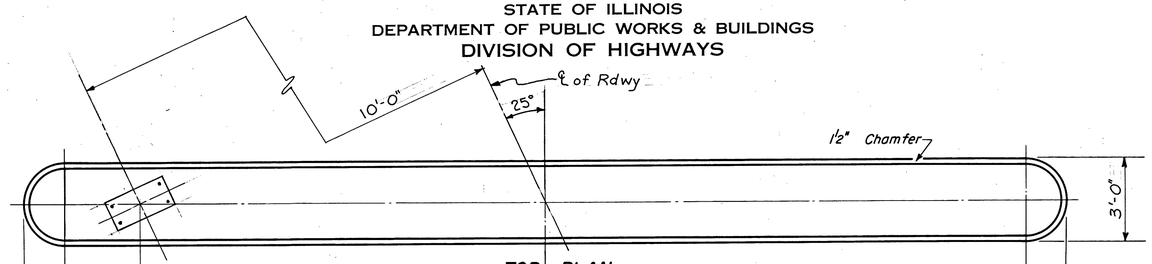
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 2 F.A.	77-1B	WINNEBAGO	29	23
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

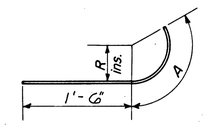
SHEET NO. 12 16 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

PILE DATA

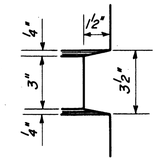
Type Untreated Timber
Capacity 20 Tons
Est. Length 30'-0"
No. Req'd. 49 + 1 Test pile - Pier 3 - East
50 Pier 3 - West



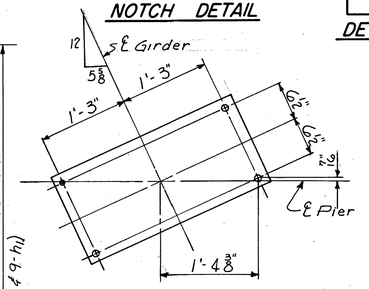


Bar	R	A
h	1'-7"	3'-6"
h_1	1'-4"	3'-2"

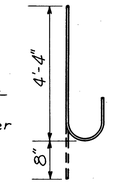
DETAIL OF BARS
h & h_1



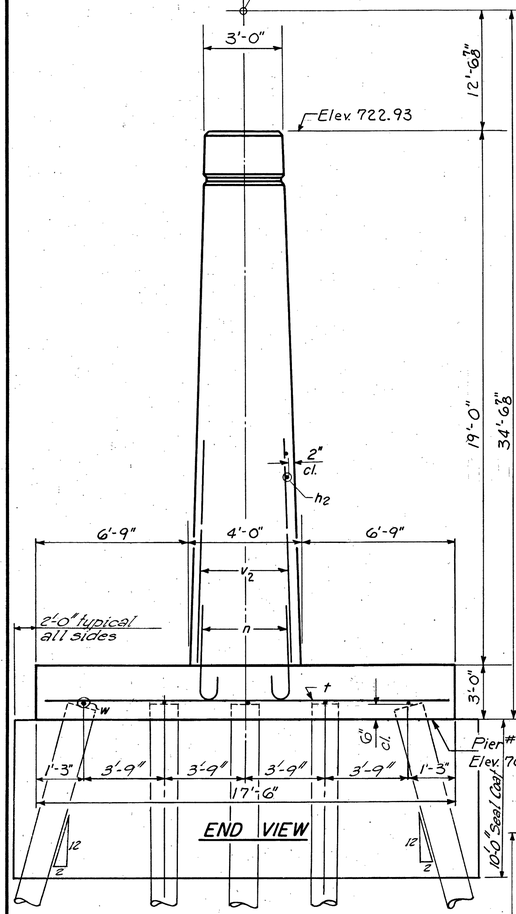
NOTCH DETAIL

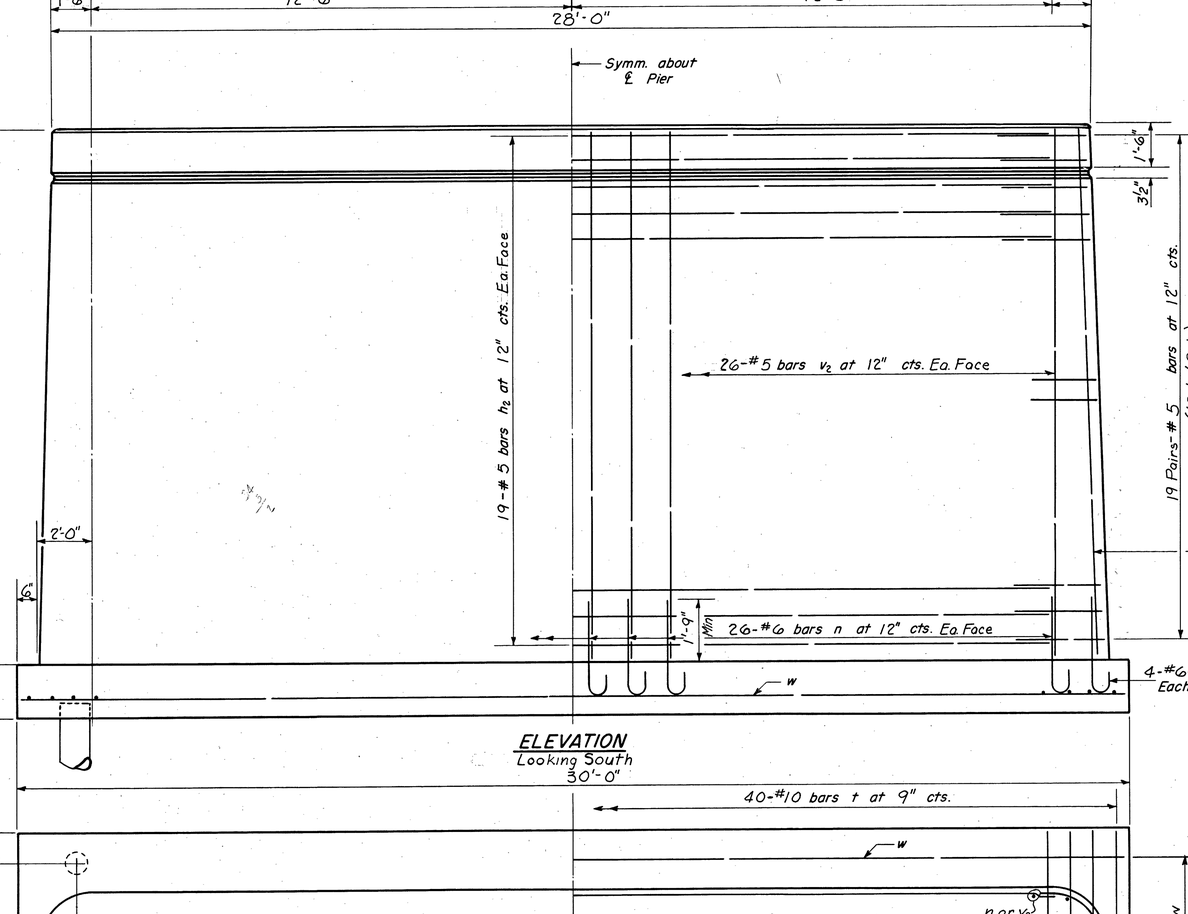


Bott. Brg. Pl.



BAR n





PIER #3
ONE BRIDGE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	40	#5	5'-1"	⌣
h_1	36	#5	4'-6"	⌣
h_2	38	#5	25'-0"	—
n	60	#6	5'-0"	⊂
t	40	#10	17'-0"	—
v_2	60	#5	18'-9"	—
w	5	#8	29'-6"	—
Seal Coat Conc.			Cu.Yds.	27.00
Class A Concrete			Cu. Yds.	12.55
Reinforcement Bars			Lbs.	6340
Untreated Piles			Lin. Ft.	1470 / 1500 3E 3W
Test Pile (Timber)			Ea.	1 / 0 3E 3W
Cofferdam Excav.			Cu. Yds.	420
Cofferdam (Pier 3)			Ea.	1

DESIGNED	J. M. Tyaworth	
CHECKED	B. Nolan	
DRAWN	J.M.J. W.A. Sausaman	W.E.D
CHECKED	J. B. N.	

JAN 8 1963
EXAMINED W. G. Bauermann — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

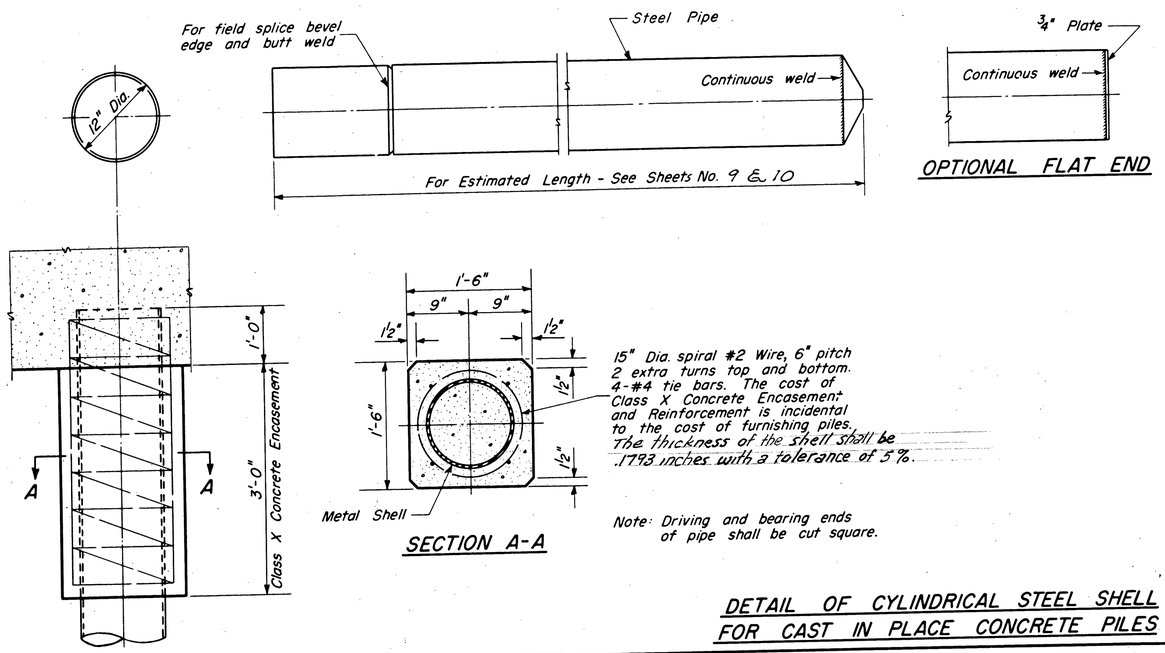
P-1 Re-drawn 7-21-59 Rev. 11-25-59

PIER 3
ROCK RIVER
S.B.I. RT. 2 SEC. 77-1B
WINNEBAGO COUNTY
STATION 195 + 19.14

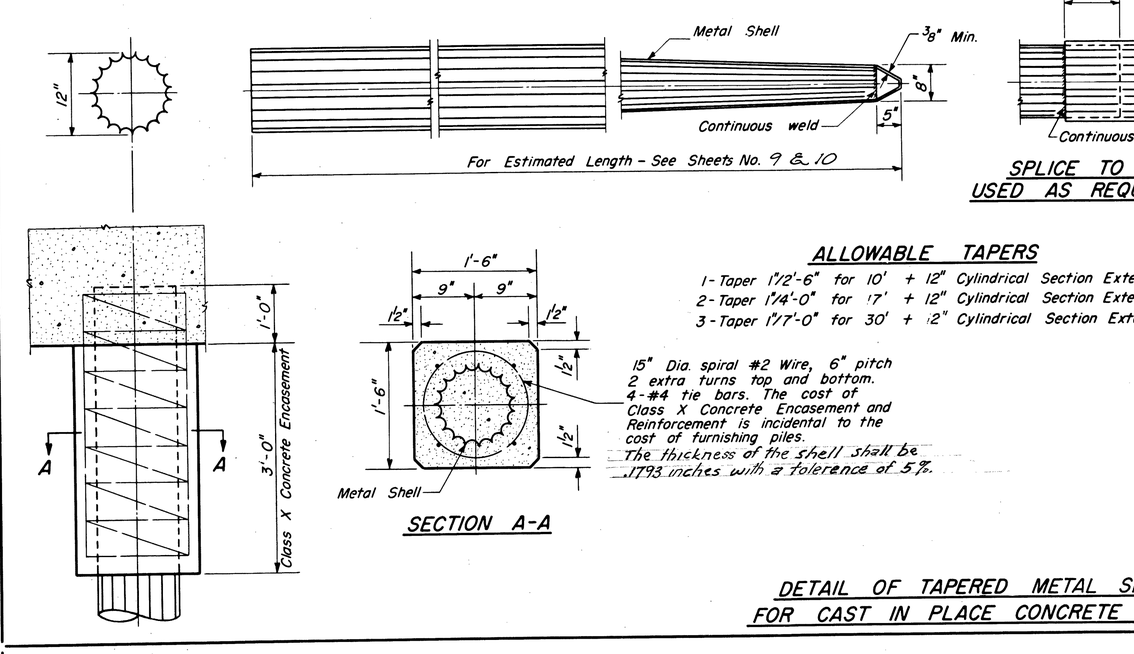
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. R. I. 2 F. A.	77-18	WINNEBAGO	29	24
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 13
16 SHEETS



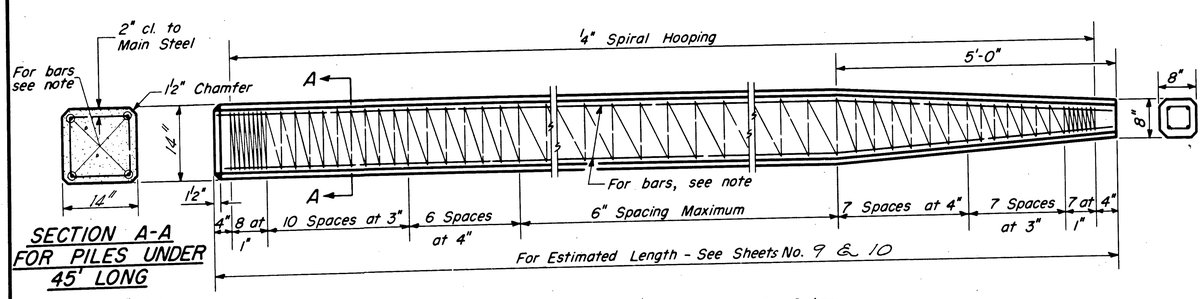
DETAIL OF CYLINDRICAL STEEL SHELL
FOR CAST IN PLACE CONCRETE PILES

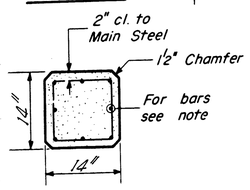


ALLOWABLE TAPERS

1 - Taper 1"/12'-6" for 10' + 12" Cylindrical Section Extension
2 - Taper 1"/4'-0" for 17' + 12" Cylindrical Section Extension
3 - Taper 1"/7'-0" for 30' + 12" Cylindrical Section Extension

DETAIL OF TAPERED METAL SHELL
FOR CAST IN PLACE CONCRETE PILES





Note: For 14" Piles 45' long or more use 8-#8 bars
4 for the full length and 4 to the point of bevel.
For 14" Piles under 45' long use 4-#9 bars the
full length.

Handling: For Pile lengths up to 45', use two slings placed
at a distance of 0.21 L* from each end.
For Piles longer than 45', use three slings placed
at a distance of 0.12 L* from each end and
at mid-point of pile.

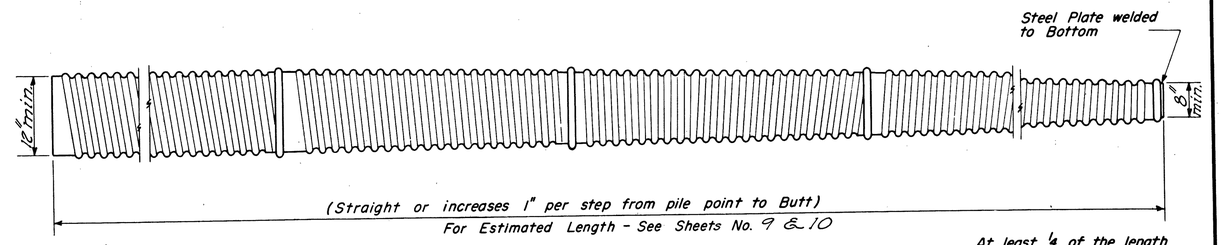
*L = Over all length of pile to be handled.

DESIGNED	J. M. Tyarooh
CHECKED	J. M. J.
DRAWN	W. A. Sausaman
CHECKED	J. B. Nolan

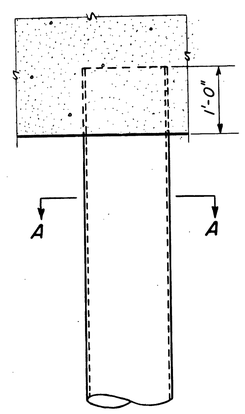
JAN 8 1963

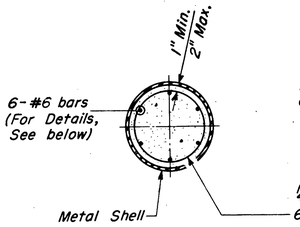
EXAMINED H E Baumann — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED E. L. Shurtz — ENGINEER OF DESIGN
APPROVED V. E. Shoaff — CHIEF HIGHWAY ENGINEER

DETAIL OF PRECAST CONCRETE PILES

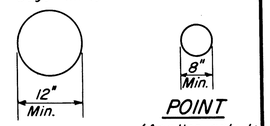


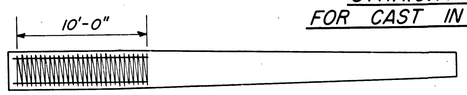
At least 1/4 of the length of pile shall have a Butt diameter equal to or greater than 12".
Gages are furnished to suit soil conditions (14 Gage Min.)





Reinforcement is incidental to the cost of furnishing piles.





DETAIL OF MANDREL DRIVEN
STRAIGHT OR STEP-TAPER PILES
FOR CAST IN PLACE CONCRETE PILES

PILE DETAILS

ROCK RIVER
S.B.I. RT. 2 SEC. 77-1B
WINNEBAGO COUNTY
STATION 195 + 19.14

X-1 Rev. 5-12-61 9-27-62

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2303-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2305-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2305-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
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PROJECT ENGINEER-F. JERT WAGNER SQUAD LEADER-DAN TOBIN

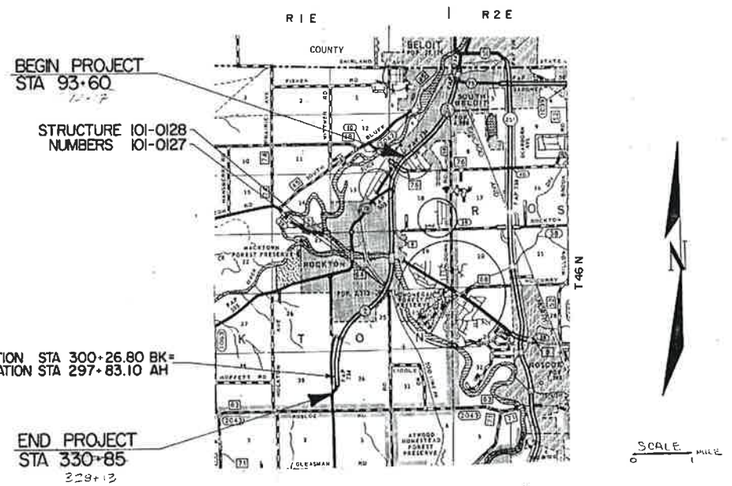
"CALL J.U.L.I.E.
BEFORE YOU DIG"
800-892-0123
TWP: ROCKTON SECS: 7,18,19,24,25&36

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FA 734(IL 2)
SECTION (77-1)RS & 77-1HVB-D
PROJECT F-734-(25)
WINNEBAGO COUNTY

C-92-177-90



NET LENGTH OF SECTION = 23,968.70 LIN. FT. = 4.54 MILES

* (77-1)RS
77-1HVB-D

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 734	*	WINNEBAGO	126	1
FEDERAL ROUTE	ILLINOIS	PROJECT F-734(25)		

D-92-044-89

LOCATION OF SECTION INDICATED THUS:—

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED — January 15, 19 91 — William R. Kibbe, DISTRICT ENGINEER
EXAMINED 3-29, 19 91 — Gary D. Gould, ENGINEER OF PLANS AND CONTRACTS
PASSED 3-29, 19 91 — [illegible], ENGINEER OF DESIGN
APPROVED 3-29, 19 91 — Lucas C. Weber, DIRECTOR, DIVISION OF HIGHWAYS

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ADMINISTRATOR DATE

DISTRICT 2
DIXON

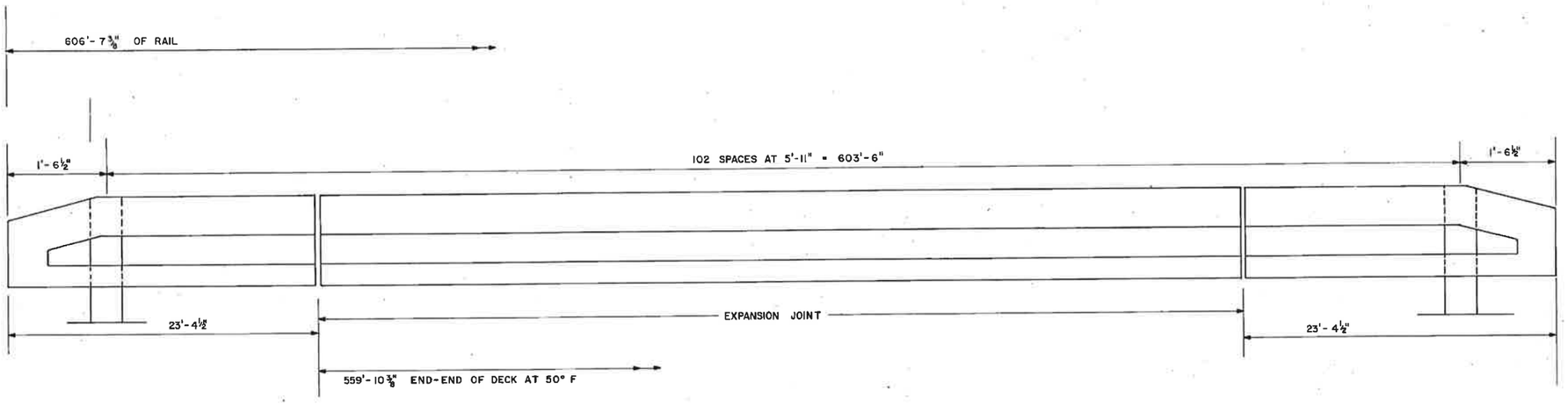
CONTRACT NO. 84316

Rev. 4-23-91

STEEL BRIDGE RAIL

*(77-1)RS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA734	*	WINNEBAGO	126	66
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



STEEL BRIDGE RAIL

LOCATION	LIN FT
BR 125 LT	607
BR 125 RT	607
BR 126 LT	607
BR 126 RT	607
TOTAL	2428

STRUCTURES NO'S 101-0125 & 101-0126

DISTRICT NO. 2 DIXON

DESIGNED K OUDYN

DRAWN M SPIELMAN DATE 1-91

CHECKED SCALE

REFER TO STANDARD 2399