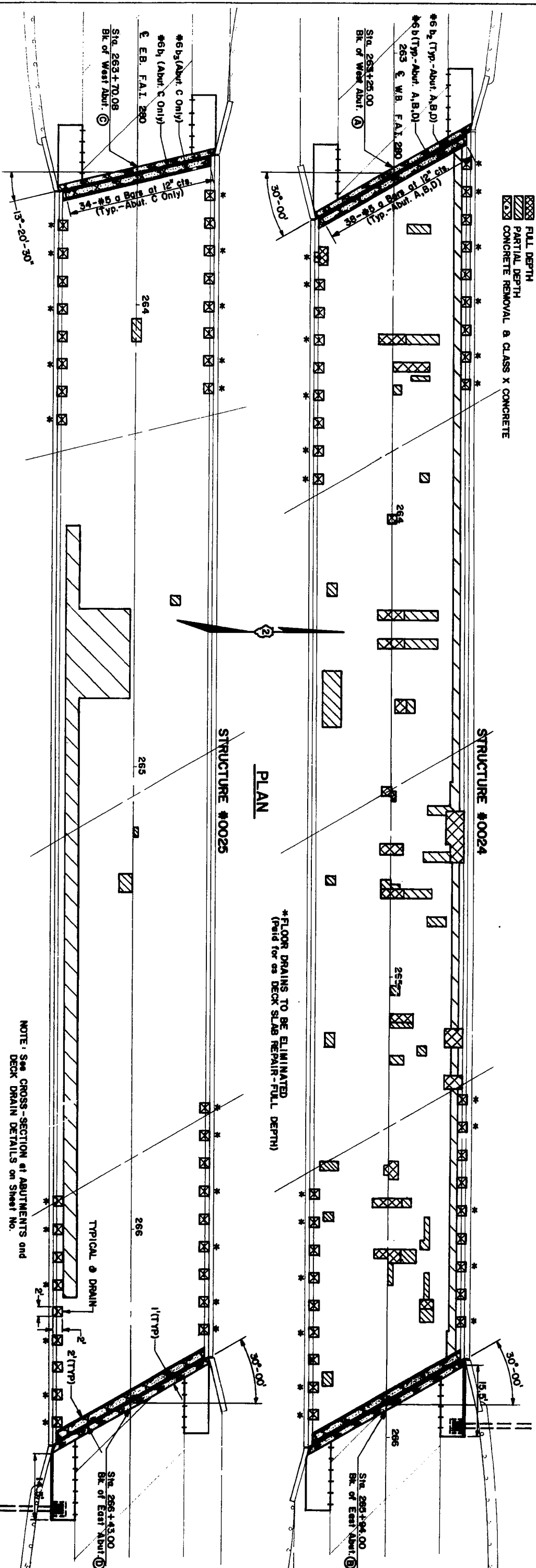


ROUTE NO.	181-181-1-2RS
FAI	280
NOCK	45
ISLAND	35A
NO. 7	
ALUMINUM	
PRODUCT	

081-0024 & 0025



**PLAN**

**STRUCTURE #0025**

**STRUCTURE #0024**

NOTE: See CROSS-SECTION at ABUTMENTS and DECK DRAIN DETAILS on Sheet No.

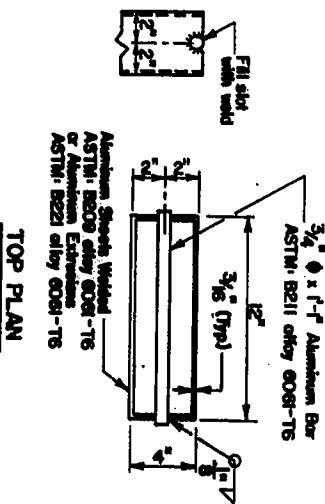
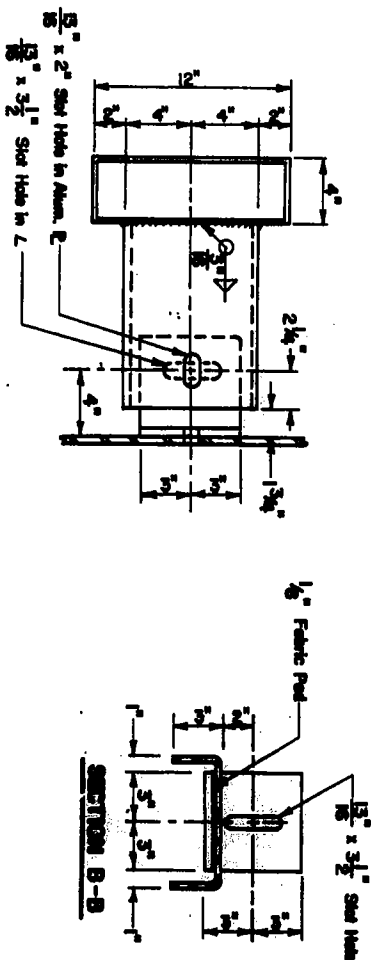
<b>P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT</b>		<b>ELASTOMERIC BEARING ASSEMBLY, TYPE 2</b>		<b>CLEANING AND PAINTING STEEL BRIDGE NO. 1</b>		<b>PIPE DRAINS, 12"</b>		<b>DECK SLAB REPAIR (FULL-DEPTH, TYPE 1)</b>	
LOCATION	SQ YD	LOCATION	EACH	LOCATION	EACH	LOCATION	LIN FT	LOCATION	SQ YD
Structure 0024	8.0	Str. #0024 (6 a each Abut.)	12	Str. #0024	1	18 Lt. Sto. 265+97	78	Str. #0024	51
West Abut., Outside Shld.	6.2	Str. #0025 (6 a each Abut.)	12	EB Rt. Sto. 266+65	1	EB Rt. Sto. 266+65	70	Str. #0025	10
West Abut., Inside Shld.	7.7	TOTAL	24	TOTAL	148	TOTAL	148	TOTAL	41
East Abut., outside Shld.	8.0								
East Abut., Inside Shld.	29.9								
TOTAL	29.9								
<b>CLASS X CONCRETE SUPERSTRUCTURES</b>		<b>CLEANING AND PAINTING STEEL BRIDGE NO. 2</b>		<b>TYPE B INLET 20X (STD 2324)</b>		<b>BITUMINOUS CONCRETE SURFACE REMOVAL</b>		<b>DECK SLAB REPAIR (PARTIAL DEPTH)</b>	
LOCATION	CU YD	LOCATION	EACH	LOCATION	EACH	LOCATION	SQ YD	LOCATION	SQ YD
Structure 0025	6.7	Str. #0024 - West Abut.	4,3	18 Lt. Sto. 265+97	1	Str. #0024	962	Str. #0024	89
West Abut., Outside Shld.	7.5	East Abut.	4,4	EB Rt. Sto. 266+65	1	Str. #0025	977	Str. #0025	103
West Abut., Inside Shld.	9.5	TOTAL	8,7	TOTAL	2	TOTAL	1,929	TOTAL	192
East Abut., Outside Shld.	6.2								
East Abut., Inside Shld.	29.9								
TOTAL	29.9								
<b>CONCRETE REMOVAL</b>		<b>FURNISHING AND ERECTING STRUCTURAL STEEL</b>		<b>REINFORCEMENT BARS (EPOXY COATED)</b>		<b>BRIDGE DECK LATEX CONCRETE OVERLAY</b>		<b>JACK AND REMOVE EXISTING BEARINGS</b>	
LOCATION	CU YD	LOCATION	POUNDS	LOCATION	POUND	LOCATION	SQ YD	LOCATION	EACH
Str. #0024 - West Abut.	4,1	Str. #0024	1,750	Str. #0024 - West Abut.	240	Str. #0024	946	Str. #0024 - West & East Abut.	12
East Abut.	4,2	Str. #0025	1,750	East Abut.	240	Str. #0025	962	Str. #0025 - West & East Abut.	12
TOTAL	8,3	TOTAL	3,500	TOTAL	480	TOTAL	1,908	TOTAL	24
Str. #0025 - West Abut.	3,9								
East Abut.	4,1								
TOTAL	8,0								
<b>PROTECTIVE COAT</b>		<b>STUD SHEAR CONNECTORS</b>		<b>DECK DRAIN REPLACEMENT</b>		<b>NEOPRENE EXPANSION JOINT, 2"</b>			
LOCATION	SQ YD	LOCATION	EACH	LOCATION	POUND	LOCATION	LIN FT		
Str. #0024	54	Str. #0024	96	Str. #0024	240	Str. #0024	40		
Str. #0025	53	Str. #0025	96	Str. #0025	480	Str. #0025	40		
TOTAL	107	TOTAL	192	TOTAL	455	Str. #0025	80		
						Str. #0025 - West Abut.	37		
						East Abut.	40		
						TOTAL	77		

**PLAN**

STATION 264+83.02  
BRIDGES #081-0024 & #0025  
FAI ROUTE 280 OVER  
C.R.I. & P. RAILROAD

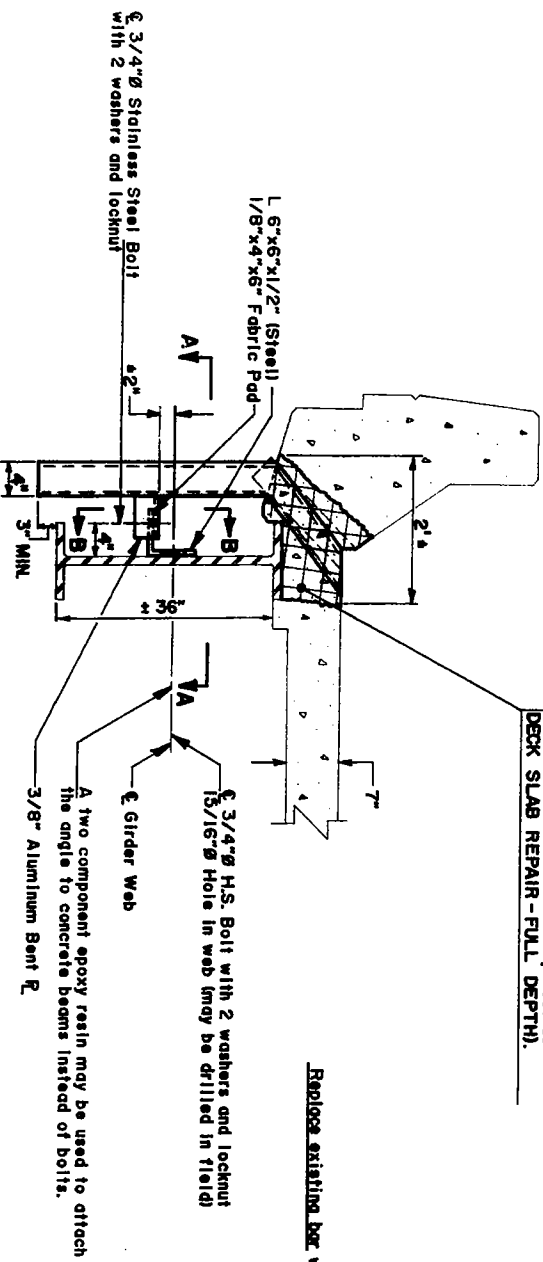
PROJECT NO.	DATE	CHART	SCALE	SHEET NO.	TOTAL SHEETS
* 61-1.81-1-1.81-1-218				45	358
DATE	BY	CHECKED	DESIGNED	APPROVED	
F.A.T. 280	*	ROCK	18/18/80		
REV. NO.	REV. DATE	REV. BY	REV. REASON	REV. PROJECT	

**DECK DRAIN DETAILS**

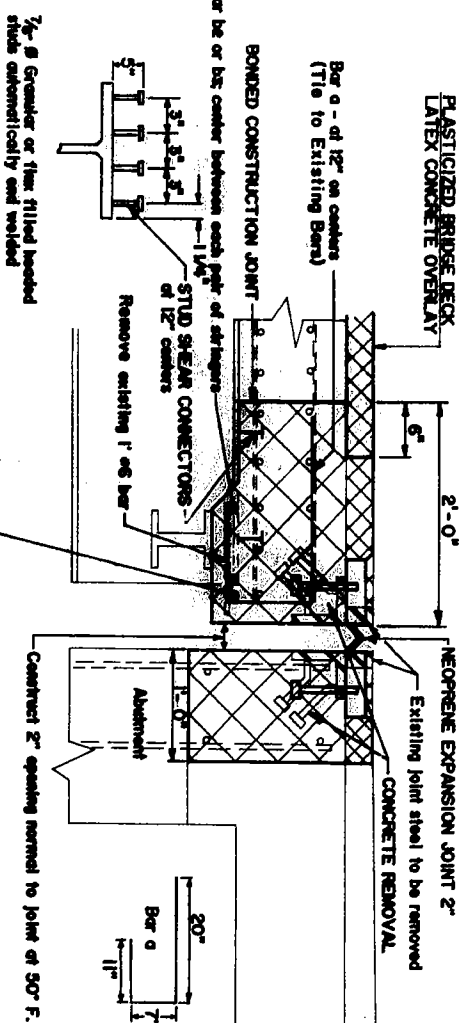


**NOTE:**  
 The exterior surface of the angle and the aluminum drains shall be cleaned and given a washcoat pretreatment in accordance with the Steel Structure Paint Council's Spec. SSPC-SP1 & SSPC-PT3 followed by the Basic Lead Silico Chromate painting specified for Structural Steel. This work shall be considered incidental to DECK DRAIN REPLACEMENT.

**FLOOR DRAINS TO BE REPLACED or Eliminated** (4'x2' area around existing drain to be removed and replaced as DECK SLAB REPAIR - FULL DEPTH).



**SECTION AT PARAPET**



**Note**  
 All existing reinforcements shall remain in place and be cleaned by sand blasting. Except as noted on the drawing.

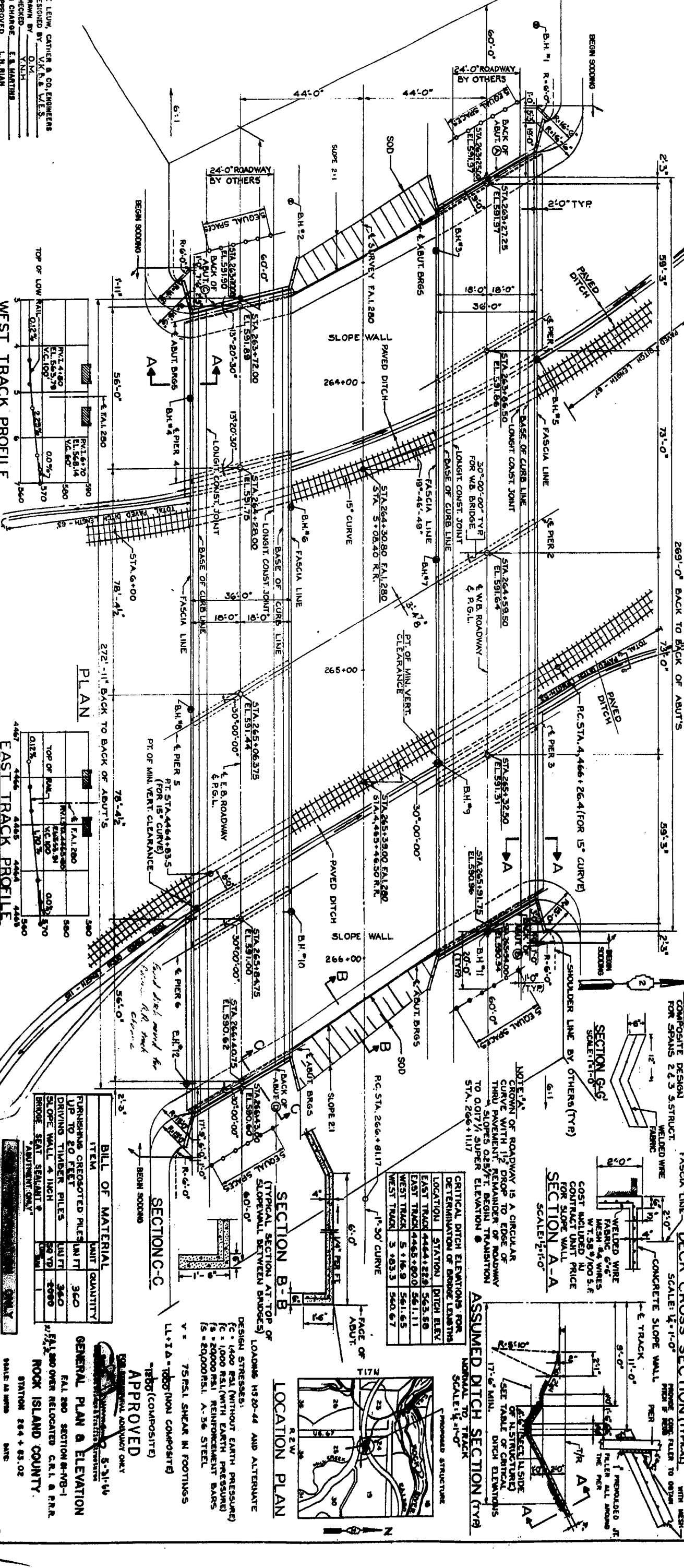
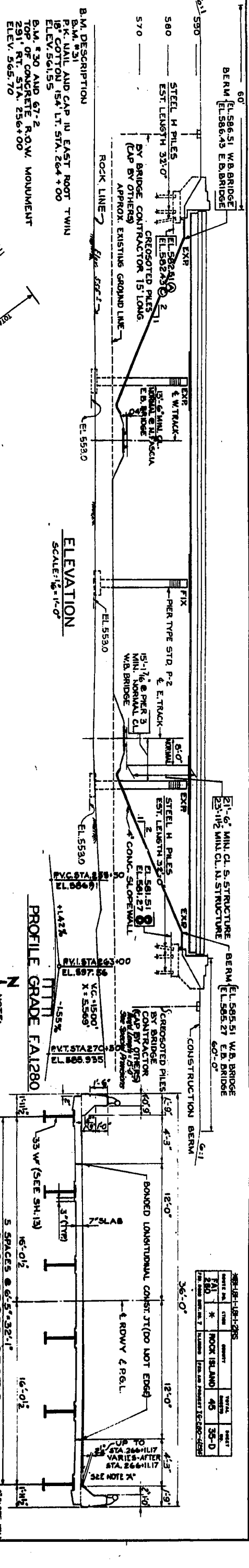
BAR LIST				
ABUTMENTS A,B,D				
Bar	Quantity	Size	Length	Shape
a	36/Abut	#5	3'-2"	□
b	1/Abut	#6	40'-1"	—
b <sub>2</sub>	5/Abut	#6	7'-0"	—
ABUTMENT C				
Bar	Quantity	Size	Length	Shape
a	34	#5	3'-2"	□
b <sub>1</sub>	1	#6	36'-0"	—
b <sub>2</sub>	5	#6	6'-3"	—

**ABUTMENT CROSS-SECTION & DECK DRAIN DETAILS**

**CROSS-SECTION AT ABUTMENT**

STATION 264+83.02  
 BRIDGES #081-0024 & 0025  
 F.A.I. ROUTE 280 OVER  
 C.R.T. & P. RAILROAD





NOTE: COMPOSITE DESIGN FOR SPANS 2 & 3 STRUCT. WELDED WIRE FABRIC

NOTE: CROWN OF ROADWAY IS A CIRCULAR CURVE WITH 1/2" DROP TO EDGE OF CURVE PAVEMENT REMAINDER OF ROADWAY THRU SLOPES 0.25%/FT. BEGIN TRANSITION TO 0.017% SUPER ELEVATION @ STA. 266+117

NOTE: 'A' SECTION OF ROADWAY IS A CIRCULAR CURVE WITH 1/2" DROP TO EDGE OF CURVE PAVEMENT REMAINDER OF ROADWAY THRU SLOPES 0.25%/FT. BEGIN TRANSITION TO 0.017% SUPER ELEVATION @ STA. 266+117

CRITICAL DITCH ELEVATIONS FOR DETERMINATION OF BRIDGE LENGTHS

LOCATION	STATION	DITCH ELEV	563.50	561.11	561.11	561.65	560.67
EAST TRACK	4444+22.0						
EAST TRACK	4445+00.0						
WEST TRACK	5+16.9						
WEST TRACK	5+03.3						

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
FURNISHING CROSSTIED PILES	LN FT	360
UP TO 20 FEET	LN FT	360
DRIVING TIMBER PILES	LN FT	360
SLOPE WALL 4 INCH	SQ YD	1000
BRIDGE SEAT SEALANT & ADHESIVE ONLY	LN	1000

DESIGN STRESSES:  
 FC = 1400 PSI (WITHOUT EARTH PRESSURE)  
 FC = 1000 PSI (WITH EARTH PRESSURE)  
 FS = 20000 PSI REINFORCEMENT BARS  
 FS = 20000 PSI. A-36 STEEL

V = 75 PSI SHEAR IN FOOTINGS

LL + TD = TDS (NON COMPOSITE)

APPROVED

GENERAL PLAN & ELEVATION  
 FALL 200 SECTION B-B-1  
 FALL 200 OVER RELOCATED C.R.I. & P.R.R.  
 ROCK ISLAND COUNTY

STATION 264 + 00.02

DE LEUK, CATHERS & CO. ENGINEERS  
 DESIGNED BY: V.K.P. & W.E.S.  
 DRAWN BY: D.M.  
 CHECKED BY: Y.N.H.  
 IN CHARGE: E.A. HASTING  
 APPROVED: L.N. MIAN

REV. 5-16-01 U.M. Revised Curve Configuration

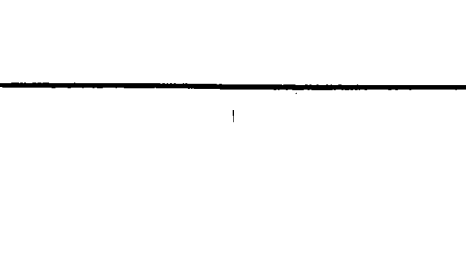
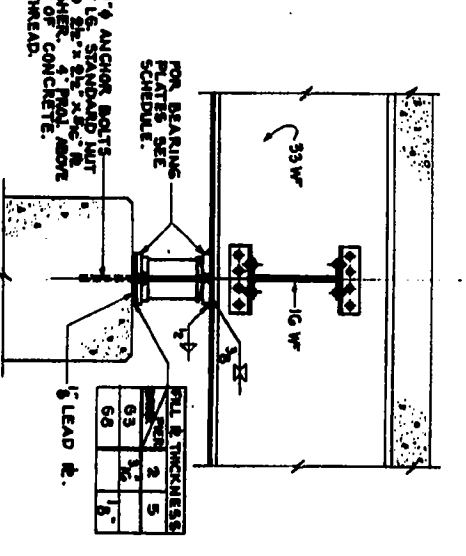
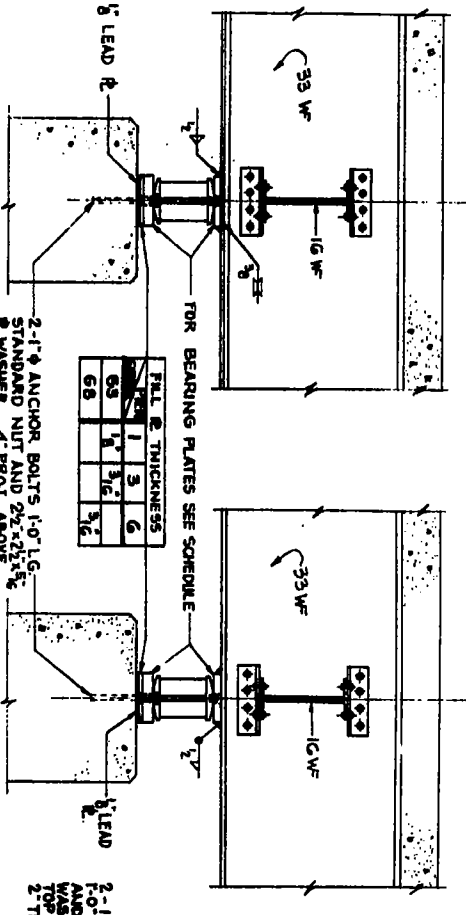
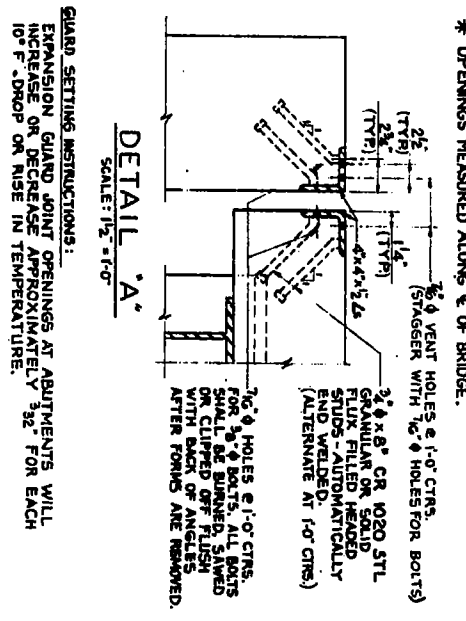
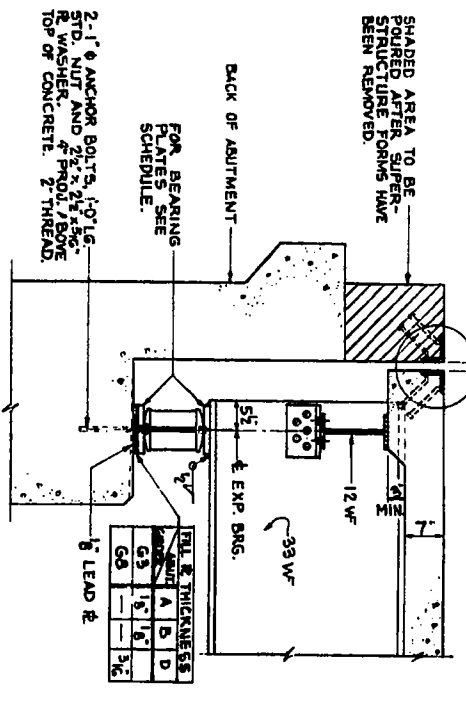




**EXPANSION GUARD ADJUSTMENT SCHEDULE**

TEMPERATURE °F	110°	90°	70°	50°	30°	10°
OPENING AT ABUT. A & D	1 1/2"	1 3/4"	1 1/2"	1 1/4"	1 1/8"	1 1/8"
OPENING AT ABUT. C	1 1/2"	1 3/4"	1 1/2"	1 1/4"	1 1/8"	1 1/8"

\* OPENINGS MEASURED ALONG E & OF BRIDGE.  
 \* VENT HOLES & 1-0" CRTS. (STAGGER WITH 1/2" Ø HOLES FOR BOLTS)



**SECTION AT ABUTMENTS**  
 BRG. TYPE E-1 24 REQ'D.  
 WT. PER BRG. 269 LBS.  
 SCALE: 3/4" = 1'-0"

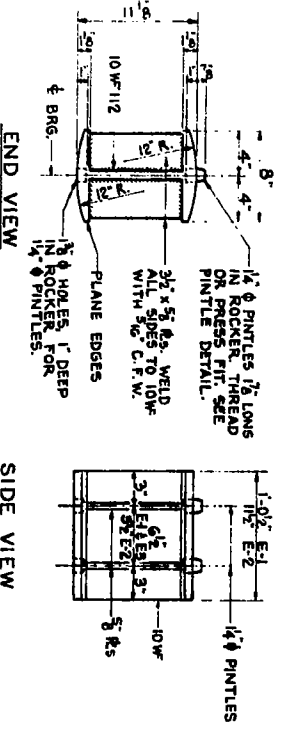
**EXPANSION GUARD NOTES:**  
 SEE GENERAL NOTES FOR STRUCTURAL STEEL SHEET NO. 2.  
 EXPANSION GUARD ASSEMBLIES SHALL BE FABRICATED AND ERECTED TO CONFORM TO THE ROADWAY CROWN AND SLOPE OF GRADE AT THE GUARD. THEY SHALL BE ASSEMBLED IN THE SHOP FOR INSPECTION. INCLUDING STUDS SHALL BE INCLUDED IN THE STRUCTURAL STEEL FOR PAYMENT. TOTAL WEIGHT OF EXPANSION GUARDS = 3,902 LBS.

**SECTION AT PIERS 1 & 3**  
 BRG. TYPE E-2 12 REQ'D.  
 WT. PER BRG. 283 LBS.  
 SCALE: 3/4" = 1'-0"

**SECTION AT PIERS 4 & 6**  
 BRG. TYPE E-3 12 REQ'D.  
 WT. PER BRG. 299 LBS.  
 SCALE: 3/4" = 1'-0"

**SECTION AT PIERS 2 & 5**  
 BRG. TYPE F-1 12 REQ'D.  
 WT. PER BRG. 240 LBS.  
 SCALE: 3/4" = 1'-0"

**Beatings and Anchor Bolts**  
 The location of the anchor bolts and vertical alignment of the expansion bearings shall be adjusted to the temperature of the time of erection. See 41.54.91(7)



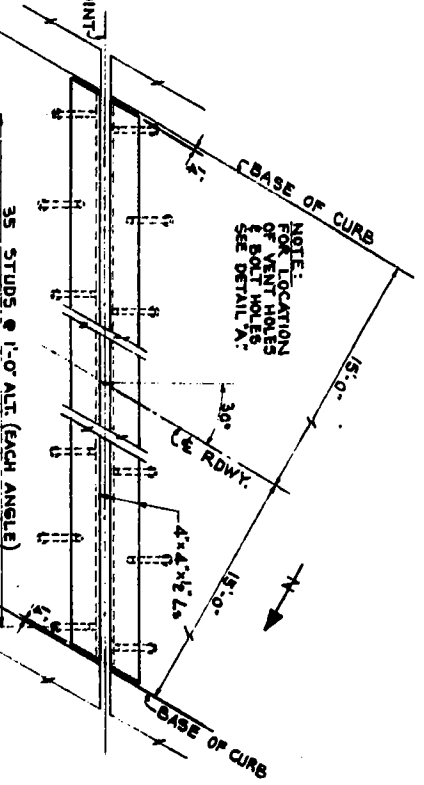
**ROCKER DETAIL OF EXPANSION BRGS.**  
 TYPES E-1, E-2 & E-3  
 NOT TO SCALE

**BEARING PLATE DETAILS**  
 NOT TO SCALE

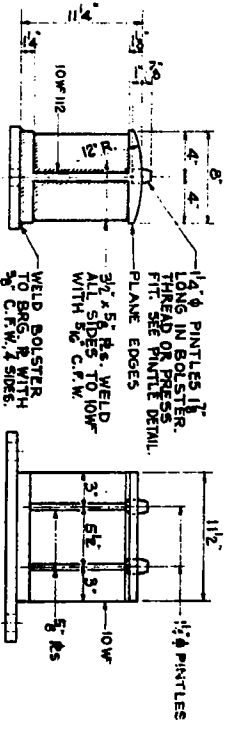
**BEARING PLATE SCHEDULE**

DIMENSION	TOP PLATE			BOTTOM PLATE		
	E-1	E-2	E-3	E-1	E-2	E-3
A	1'-0"	11 1/2"	1'-0 1/2"	1'-8"	1'-7"	1'-8"
B	6 1/2"	5 1/2"	6 1/2"	5 1/2"	5 1/2"	6 1/2"
C	3"	3"	3"	3"	3"	3"
D	9"	9"	9"	9"	9"	9"
E	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"
PLATE THICKNESS	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"

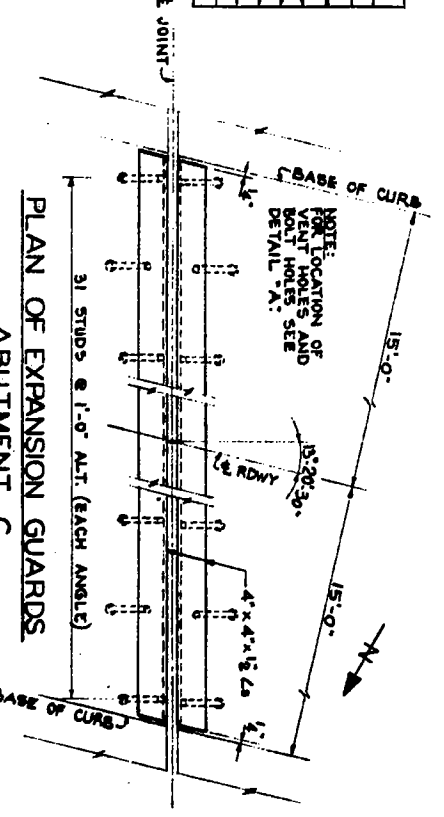
**PLAN OF EXPANSION GUARDS ABUTMENTS A, B & D**  
 SCALE: 1" = 1'-0"



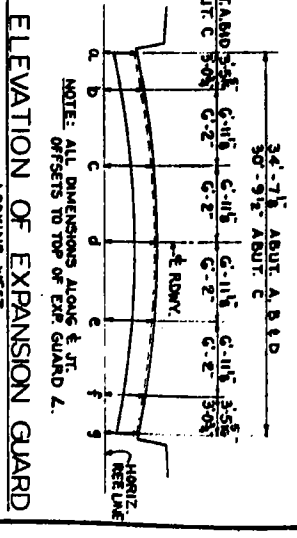
**BOLSTER DETAIL OF FIXED BRGS.**  
 TYPE F-1  
 SCALE: 1/2" = 1'-0"



**PINACLE DETAIL**  
 SCALE: 1/2" = 1'-0"



**PLAN OF EXPANSION GUARDS ABUTMENT C**  
 SCALE: 1" = 1'-0"



**ELEVATION OF EXPANSION GUARD**  
 LOOKING WEST  
 NOT TO SCALE

**TABLE OF VERTICAL OFFSETS**

ABUTMENT	a	b	c	d	e	f	g
A	0	3'	1 1/2"	2 1/2"	2 1/2"	1'	1/4"
B	0	3'	2 1/2"	2 1/2"	2 1/2"	1'	1/4"
C	0	3'	1 1/2"	2 1/2"	2 1/2"	1'	1/4"
D	0	3'	1 1/2"	1 1/2"	1 1/2"	1'	0

**BILL OF MATERIAL - TWO BRIDGES**

ITEM	UNIT	QUANTITY
FURNISHING AND ERECTING	POUND	20,160
STRUCTURAL STEEL		

**FOR INFORMATION ONLY**  
 SUPERSTRUCTURE - BEARINGS AND EXPANSION GUARD DETAILS  
 FALL 200 - SEC. 81-100-1  
 FALL 200 OVER RELOCATED C.R.T. & RR  
 ROCK ISLAND COUNTY  
 STATION 204 + 05.02  
 SCALE: AS NOTED  
 DATE:

DE LEW, CATHER & CO. ENGINEERS  
 DESIGNED BY V. K. BUNKREY  
 DRAWN BY B. L. SPURTH  
 CHECKED BY J. J. KASAKA  
 IN CHARGE E. S. MARTIN  
 APPROVED L. H. BIAN

418-108-118-205

ITEM	COUNTY	TOTAL SHEET NO.	SHEET NO.
418-108-118-205	ROCK ISLAND	46	36-6