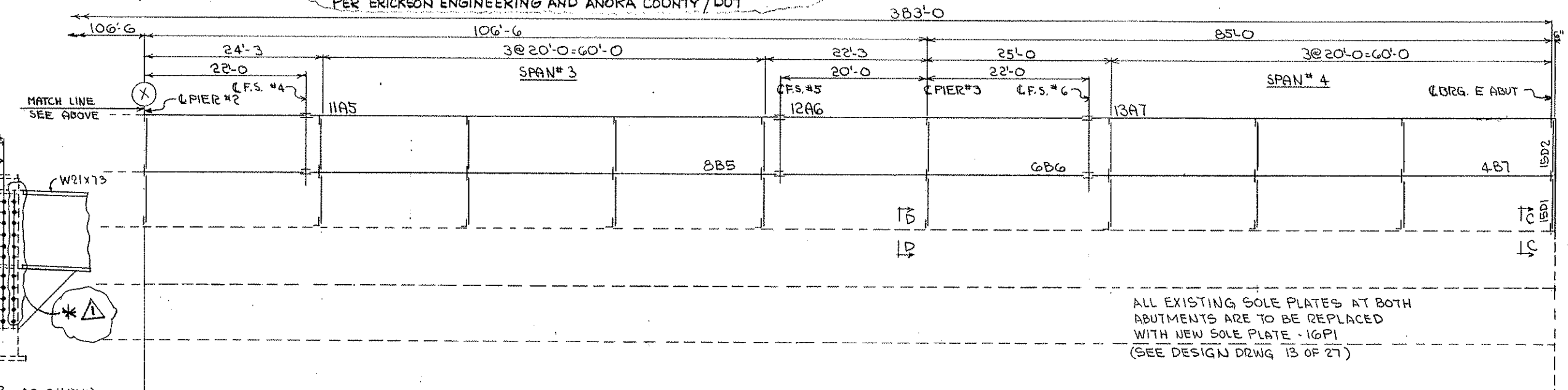


\* BECAUSE OF INSUFFICIENT EDGE DISTANCE, THESE HOLES SHALL NOT BE FIELD DRILLED IN THE EXISTING STIFFENERS. HOLES IN THE DIAPHRAGMS SHALL NOT BE USE AND SHALL REMAIN BLANK. PER ERICKSON ENGINEERING AND ANOKA COUNTY / DOT

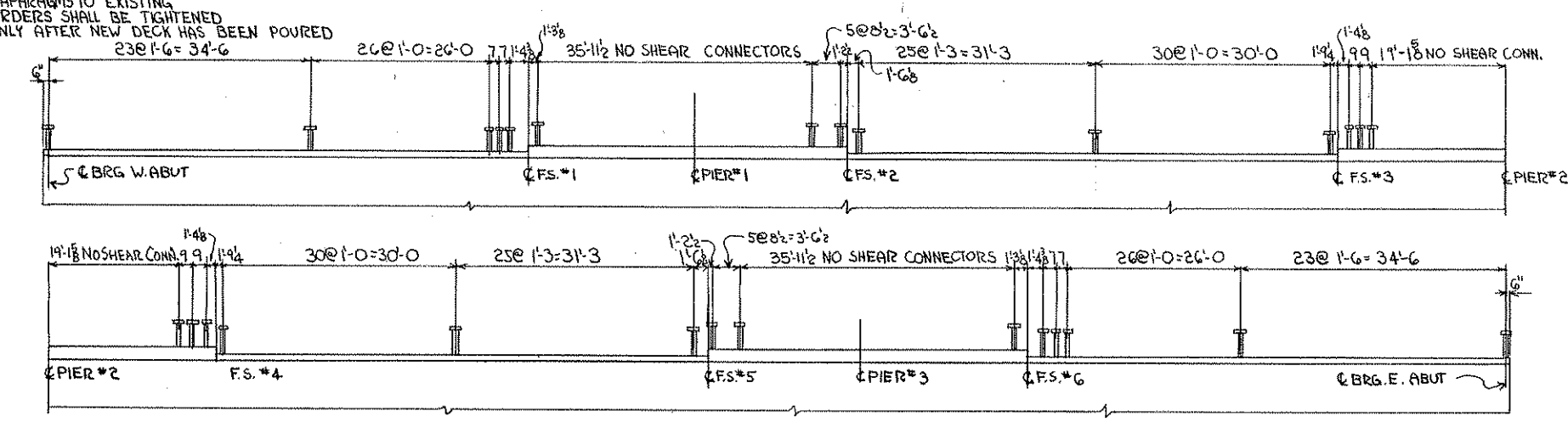


ALL EXISTING SOLE PLATES AT BOTH ABUTMENTS ARE TO BE REPLACED WITH NEW SOLE PLATE - 16P1 (SEE DESIGN DRWG 13 OF 27)

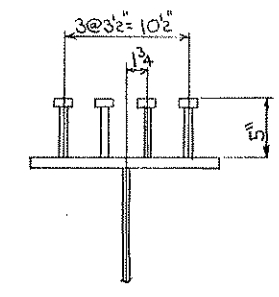
SECT B-B AS SHOWN  
SECT C-C OPP. HAND

NOTE B: BOLTING OF NEW DIAPHRAGMS TO EXISTING GIRDERS SHALL BE TIGHTENED ONLY AFTER NEW DECK HAS BEEN POURED

FRAMING PLAN

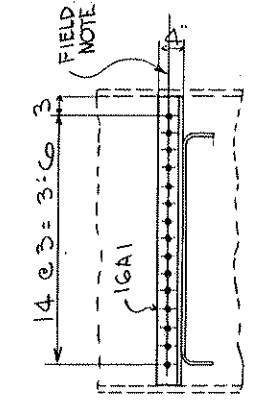


SHEAR CONNECTOR SPACING



SECTION A-A

NOTE: STEEL MUST BE ERECTED WITH MARKS IN SAME POSITION AS SHOWN ON PLAN.



SECT. D-D

SECT E-E  
TYP AT EACH INTERMEDIATE DIAPHRAGM EXCEPT AT PIERS

INDEX OF SHEETS	
DESCRIPTION	SHT#
ERECTION DIAGRAM	E1
BLOCKING DIAGRAM	BD1
BASIC GRD. SHEET	BG1
GENERAL NOTES	GN1
STANDARD SHEET	1
WEB CUTTING	2
GIRDERS	3 THRU 13
ABUT. DIAPHRAGMS	14 & 15
INTERMED. DIAPH.	16

MINN. PROJ. NO. BHRS 6379 (11)  
S.P. No. 02-624-19

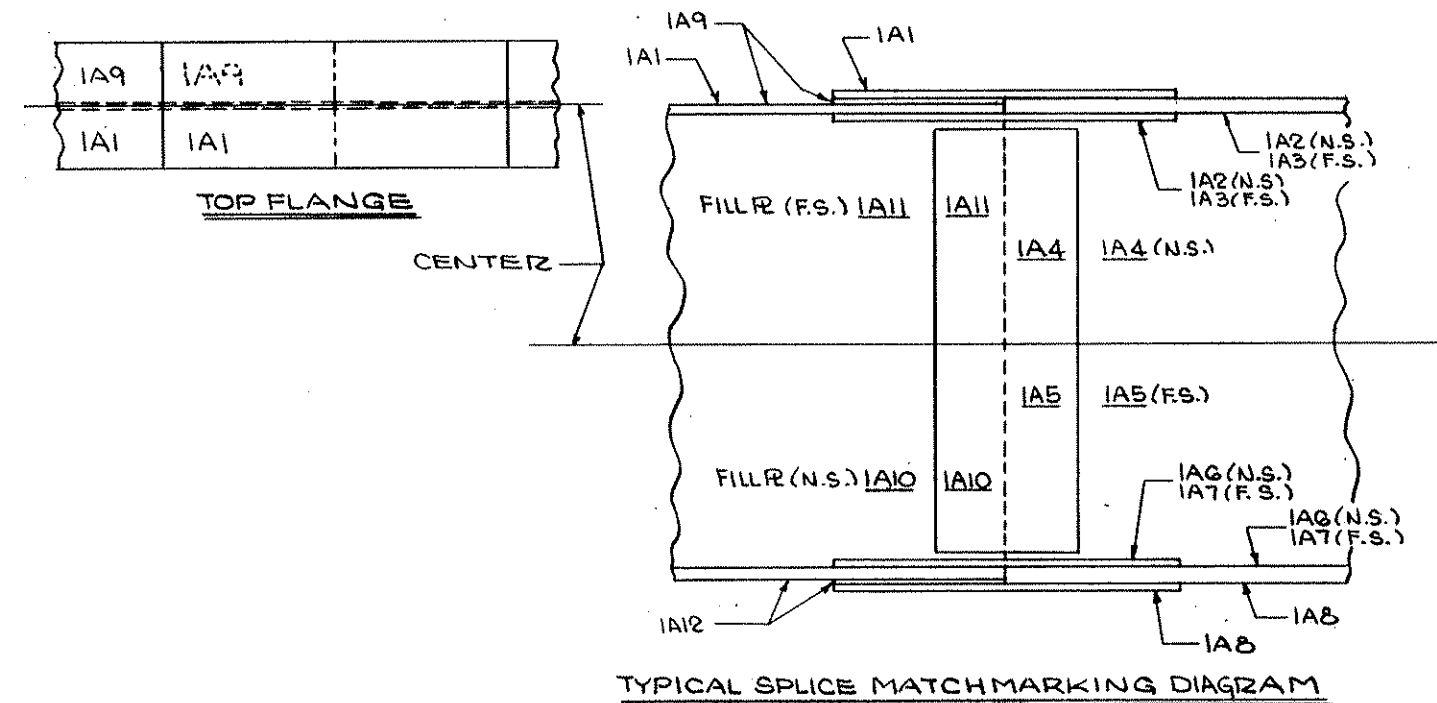
**PHOENIX STEEL INC**  
EAU CLAIRE, WISCONSIN  
- REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRON -  
STRUCTURE BRIDGE NO. 02501  
LOCATION ANOKA COUNTY, MN.  
BETWEEN C.S.A.H. NO. 28 & ST. FRANCIS  
ARCHITECT OR ENGINEER ERICKSON ENGINEERING  
CONTRACTOR LUNDA CONST.

REVISIONS		NO.	DATE	REMARKS	BY
Δ	4-28-86			HOLES FOR ABUT. & PIER DIAPH. CONNECTION	JB

ITEM	ERECTION DIAGRAM	
RIVETS	OPEN HOLES	
PAIN		
APPROVAL	DRAWN RN	SHEET NO. E1
SHOP	CHECKED WLD	ORDER NO. A3349

## GENERAL NOTES

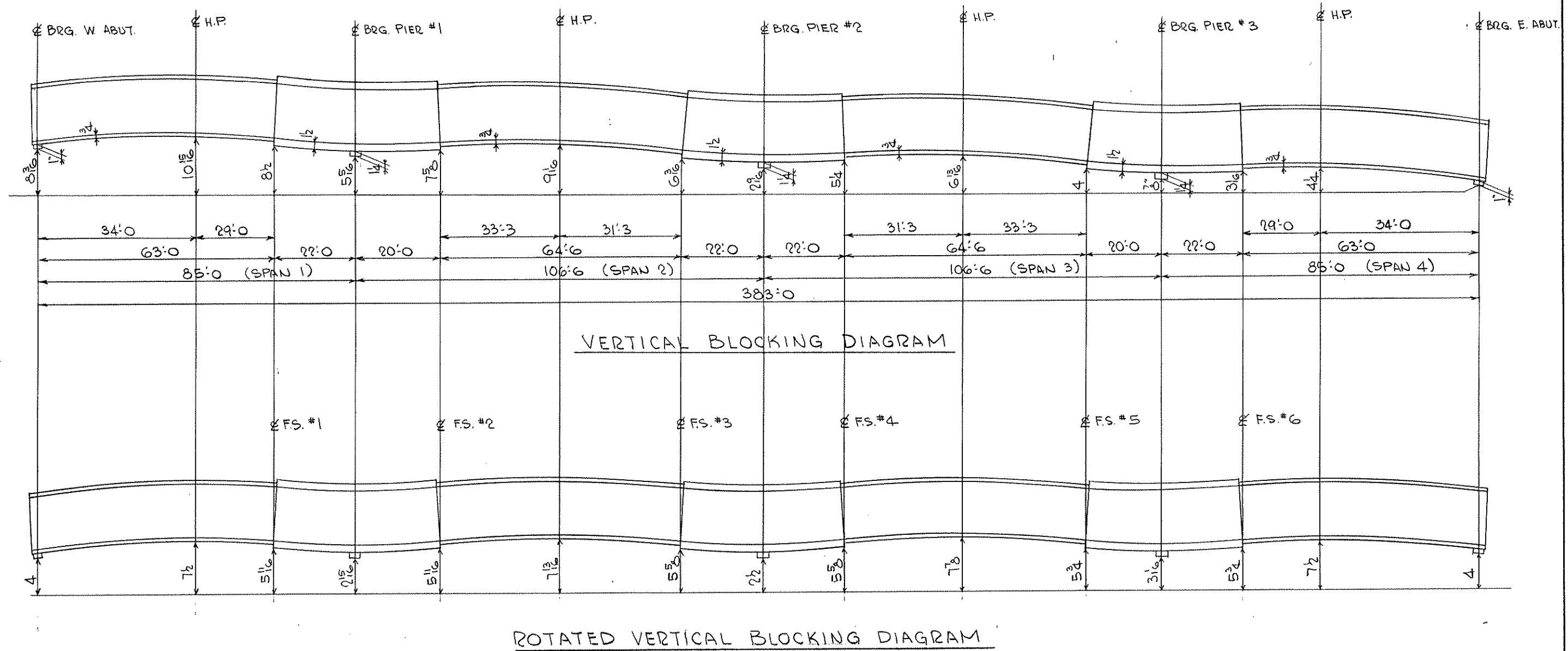
- 1) WORKMANSHIP AND MATERIALS TO BE IN ACCORDANCE WITH MN/DOT SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, DATED JAN. 1, 1983 AND SPECIAL PROVISIONS.
- 2) ALL STEEL FOR STRUCTURAL ITEMS PER MN/DOT 3309 (A.S.T.M. 588).
- 3) ALL HOLES TO BE 15/16" U.N. - BOLTS 7/8", ASTM A325-TYPE 1.
- 4) SPECIAL REAMING PER MN/DOT 2471.3E1D WILL BE REQUIRED. FOR BOLTED GIRDER SPLICES, HOLES SHALL BE DRILLED FULL SIZE FROM THE SOLID WITH ALL PARTS ASSEMBLED. THE SECTION TO BE ASSEMBLED FOR DRILLING SHALL BE FROM WEST ABUTMENT TO EAST ABUTMENT. ALL OTHER HOLES MAY BE FULL PUNCHED PER MN/DOT 2471.3E1A.
- 5) EDGE FINISH PER MN/DOT 2471.3c4 AND MN/DOT 2471.3d4 WILL BE REQUIRED.
- 6) BOLT SHIP ALL SPLICE MATERIAL.
- 7) SHOP INSPECTION BY MN/DOT REQUIRED.
- 8) FIELD SPLICE CONNECTORS TO BE FRICTION TYPE - HIGH STRENGTH BOLTS. CONTACT SURFACES TO BE BLASTED AND PAINTED.
- 9) ALL MATERIAL SHALL MEET A LONGITUDINAL CHARPY V-NOTCH IMPACT STRENGTH OF 15 FOOT POUNDS AT 100 F, EXCEPT SOLE PLATES AND DIAPHRAGMS.
- 10) WELDING PER MN/DOT 2471.3J. WHEN ULTRASONIC TESTING IS REQUIRED TESTING SHALL BE IN ACCORDANCE WITH MN/DOT SPECIFICATION SECTION 2471.3J4D.
- 11) SHEAR STUDS SHALL BE FIELD APPLIED.
- 12) SEE SHEET B01 FOR BLOCKING DIAGRAM.
- 13) NOTE "B" INDICATES "TIGHT FIT" - NO WELD.
- 14) PAINT: ALL CONTACT SURFACES OF DIAPHRAGMS, STIFFNERS AND FIELD SPLICES SHALL RECEIVE ONE SHOP COAT OF ZINC-RICH ORGANIC VEHICLE PRIMER (MN/DOT 3503) 1.5 MIL THICK.  
CONTACT AREAS OF SPLICES ARE AS FOLLOWS:  
A) THE SIDE OF THE SPLICE MATERIAL WHICH BEARS AGAINST THE GIRDER.  
B) THE AREA OF THE GIRDER WHICH BEARS AGAINST THE SPLICE MATERIAL.  
C) FILL PLATES AT SPLICES IN THEIR ENTIRETY.
- 15) AREAS TO BE PAINTED SHALL BE CLEANED PER SSPC-SP10.



THE INTERSECTION OF A GIRDER LINE NO. AND JOINT NO. WILL FORM AN IDENTIFICATION MATCHMARK.  
EXAMPLE: - 1A. THIS MARK SHALL BE PLACED AT THE END OF THE GIRDERS AT THE SPLICES.  
ALL SPLICE MATERIAL SHALL BE MARKED WITH THE IDENTIFICATION MATCHMARK PLUS A DIFFERENT SUFFIX NUMERAL FOR EACH INDIVIDUAL PIECE. EXAMPLE: - 1A2. CORRESPONDING MARKS SHALL ALSO BE AFFIXED ON THE GIRDERS.  
THE MARK SHALL BE POSITIONED TO PREVENT INTERCHANGE OR ROTATION OF THE SPLICE MATERIAL.  
MATCHMARK SHALL BE PLACED ON THE OUTSIDE FACE OF THE SPLICE MATERIAL WITH MARKS OPPOSITE EACH OTHER IN AN OFF-CENTER OF PLATE POSITION.  
MARKS SHALL BE CLEARLY MADE WITH A 1/4" STEEL NUMBERING DIE.

MINN. PROJ. No. BHR5 6379 (11)  
S.P. No. 02-624-19

<b>PHOENIX STEEL INC</b>			
EAU CLAIRE, WISCONSIN			
- REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRON -			
STRUCTURE <u>BRIDGE No. 02501</u>			
LOCATION <u>ANOKA COUNTY, MINNESOTA</u>			
LOCATION <u>BETWEEN C.S.A.H. No. 28 AND ST. FRANCIS</u>			
ARCHITECT			
OR ENGINEER <u>ERICKSON ENGINEERING</u>			
CONTRACTOR <u>LUNDA CONST.</u>			
ITEM <u>GENERAL NOTE SHEET</u>			
SURFACE PREP. _____		OPEN HOLES _____	
PAINT _____			
NO.	DATE	REMARKS	BY
REVISIONS			
APPROVAL	DATE	DRAWN	BY
<u>[Signature]</u>	<u>8/9</u>	<u>WKD</u>	<u>[Signature]</u>
SHOP	CHECKED	SHEET NO.	ORDER NO.
<u>[Signature]</u>	<u>[Signature]</u>	<u>GNI</u>	<u>A3349</u>



PROCEDURE FOR DRILLING FIELD SPLICES:

OUTSIDE FLANGE SPlice PLATES ON TOP & BOTTOM FLANGES & BOTH WEB SPlice PLATES ARE TO BE DRILLED WITH A NUMERICALLY CONTROLLED TAPE DRILL ACCORDING TO DETAILS. ALL FIELD SPlice PLATES, INCLUDING FILL PLATES & SHEAR ANGLES, ARE THEN CLAMPED TO THE GIRDERS WHILE ASSEMBLED AND ALL HOLES ARE DRILLED FROM SOLID USING PREDRILLED SPlice PLATES AS A TEMPLATE.

MINN. PROJ. NO. BHR8 6379 (11)  
S.P. NO. 02-624-19

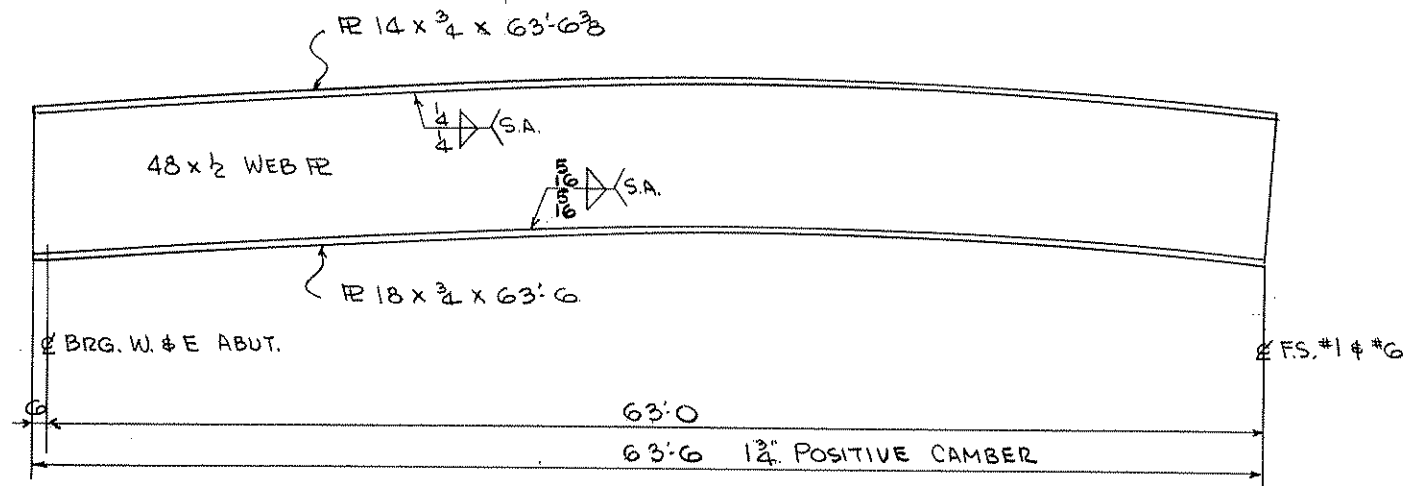
**PHOENIX STEEL INC**  
EAU CLAIRE, WISCONSIN  
-- REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRON --

STRUCTURE BRIDGE NO. 02501  
LOCATION ANOKA COUNTY, MN BETWEEN C.S.A.H. NO 28 & ST. FRANCIS

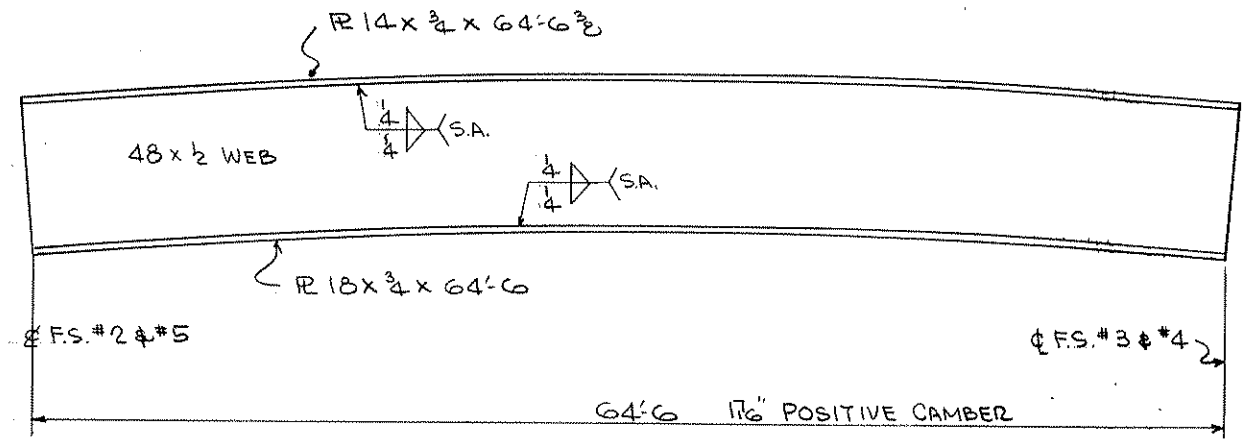
ARCHITECT OR ENGINEER ERICKSON ENGINEERING  
CONTRACTOR LUNDA CONST.

ITEM BLOCKING DIAGRAM  
SURFACE PREP. \_\_\_\_\_ OPEN HOLES \_\_\_\_\_  
PAINT \_\_\_\_\_

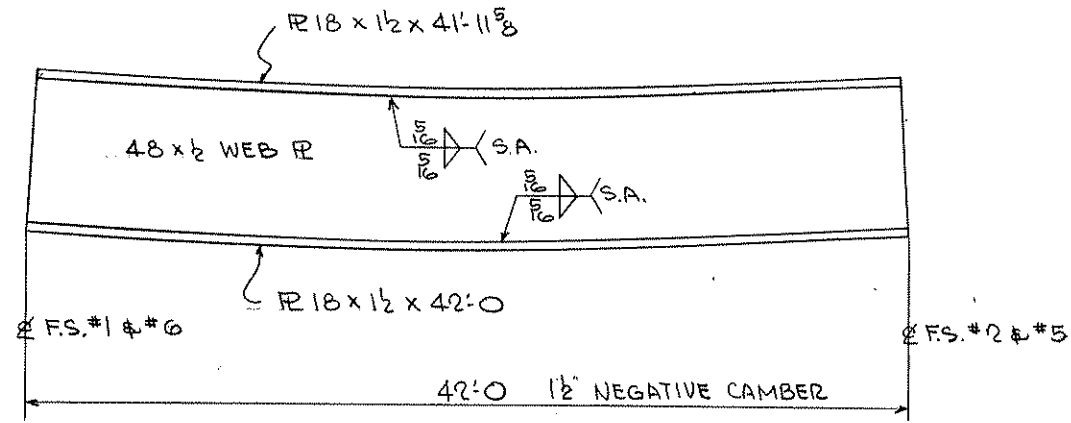
NO.	DATE	REMARKS	BY	APPROVAL	DRAWN	CHECKED	SHEET NO.	ORDER NO.
					HF	WKP	BDI	A3349-8



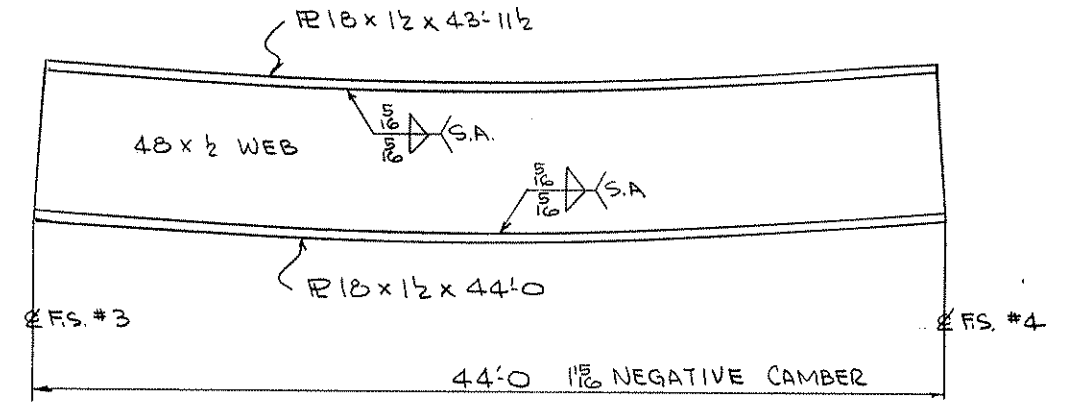
BASIC GIRDER LAYOUT FOR 3A1, 4B1, 4B7 & 13A7



BASIC GIRDER LAYOUT FOR 7A3, 8B3, 8B5 & 11A5



BASIC GIRDER LAYOUT FOR 5A2, 6B2, 6B6 & 12A6



BASIC GIRDER LAYOUT FOR 9A4 & 10B4

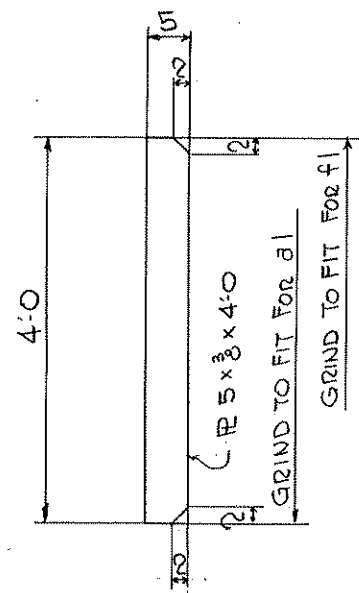
NOTES:  
 1.) SEE SHT. No. GNI FOR FABRICATION NOTES

MINN. PROJ. NO. BHRS 6379 (11)  
 S.P. NO. 02-624-19

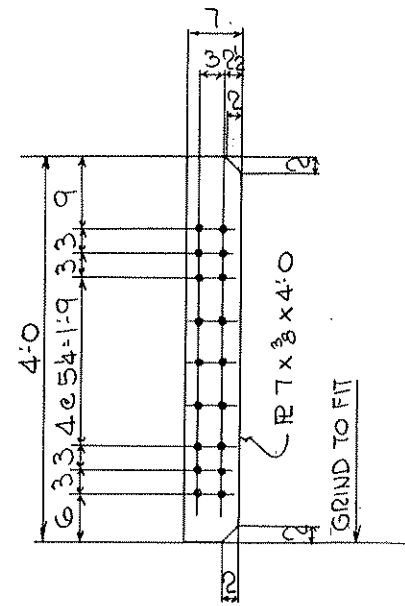
**PHOENIX STEEL INC**  
 EAU CLAIRE, WISCONSIN  
 - REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRON -  
 STRUCTURE BRIDGE NO. 02501  
 LOCATION ANOKA COUNTY, MN. BETWEEN C.S.A.H. No 28 & ST. FRANCIS  
 ARCHITECT OR ENGINEER ERICKSON ENGINEERING  
 CONTRACTOR LUNDA CONST.

ITEM BASIC GIRDER LAYOUT  
 SURFACE PREP. \_\_\_\_\_ OPEN HOLES \_\_\_\_\_  
 PAINT \_\_\_\_\_

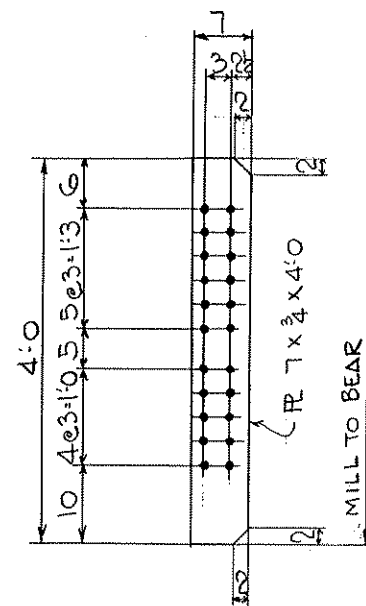
NO.	DATE	REMARKS	BY	APPROVAL	DRAWN	CHECKED	SHEET NO.	ORDER NO.
					HF	WJD	BG1	A3349-8



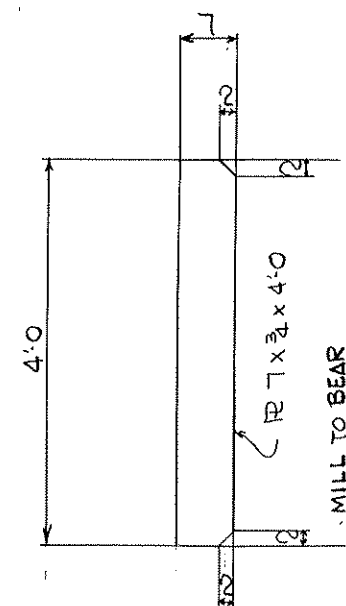
DETAIL OF  $\bar{R}$  b1 (16 REQ'D)  
DETAIL OF  $\bar{R}$  f1 (36 REQ'D)



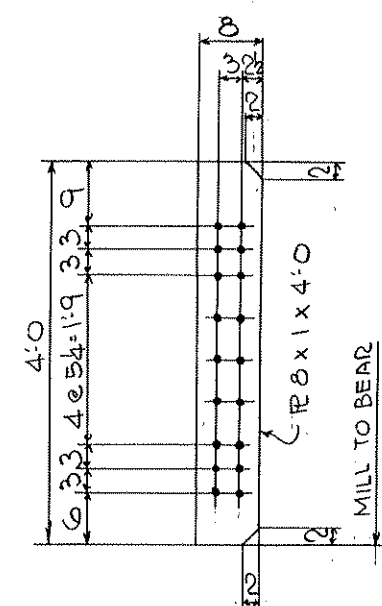
DETAIL OF  $\bar{R}$  b1 (42 REQ'D)



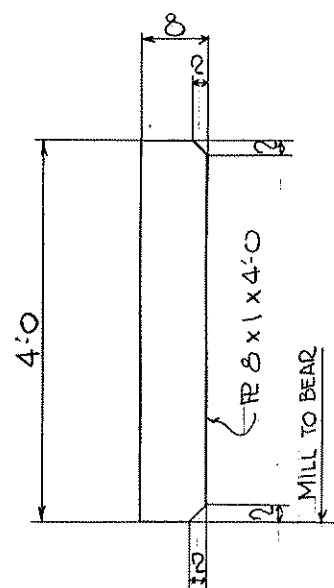
DETAIL OF  $\bar{R}$  c1 (6 REQ'D)



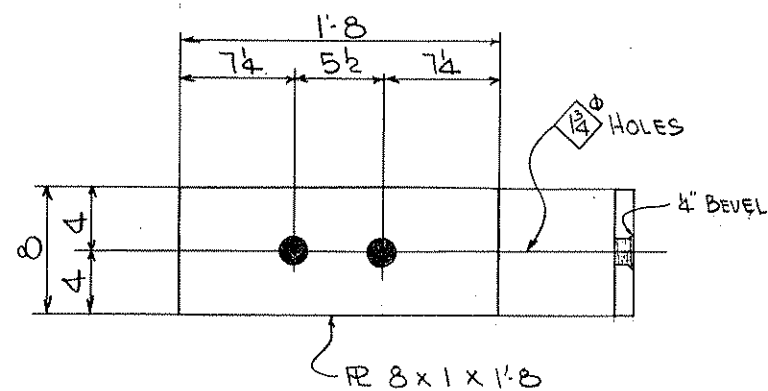
DETAIL OF  $\bar{R}$  d1 (2 REQ'D)



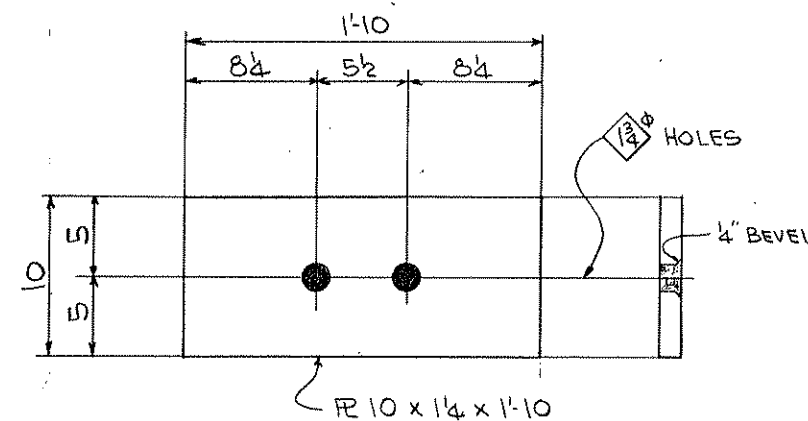
DETAIL OF  $\bar{R}$  k1 (9 REQ'D)



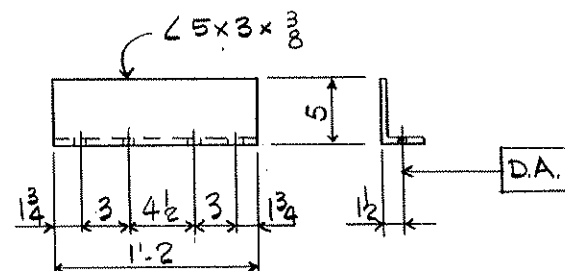
DETAIL OF  $\bar{R}$  m1 (3 REQ'D)



DETAIL OF  $\bar{R}$  p1 (4 REQ'D)



DETAIL OF  $\bar{R}$  t1 (6 REQ'D)



DETAIL OF L "v1" (24 -REQ'D.)

NOTE:  
1) SEE SHT. NO. GNI FOR FABRICATION NOTES.

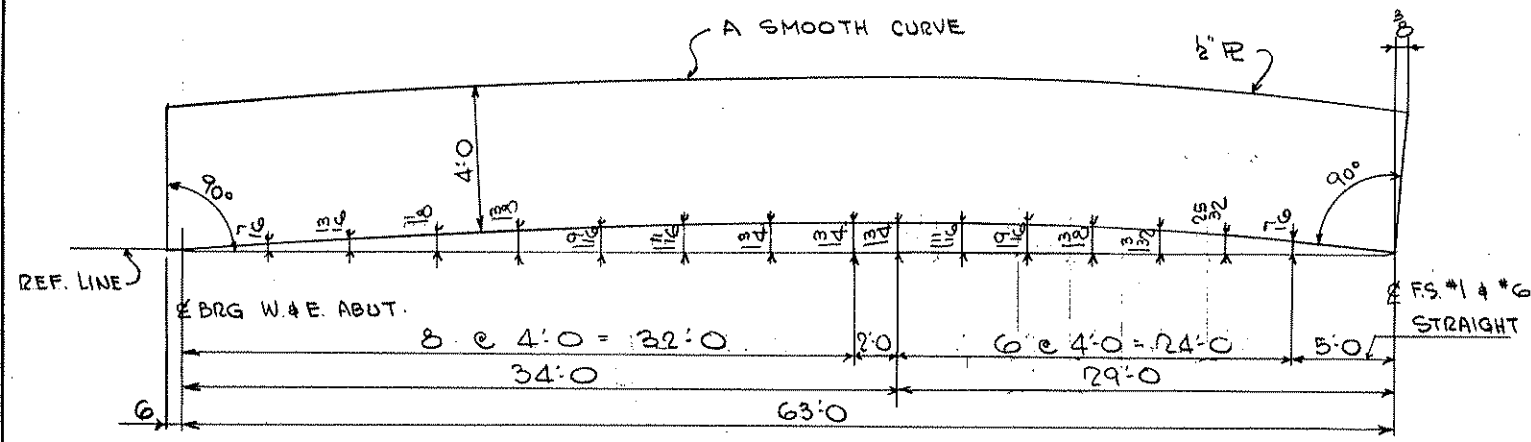
DO NOT SHIP FROM THIS SHEET !

MINN. PROJ. NO. BHR5 6379 (11)  
S.P. NO. 02-624-19

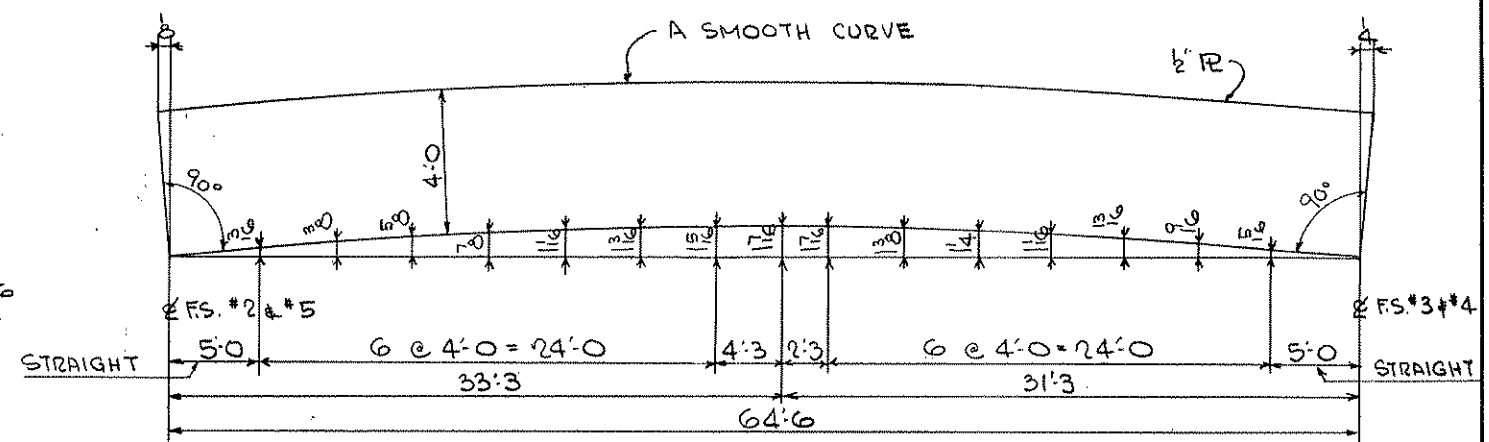
**PHOENIX STEEL INC**  
EAU CLAIRE, WISCONSIN  
- REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRON -  
STRUCTURE BRIDGE No. 02501  
LOCATION ANOKA COUNTY, MN.  
BETWEEN C.S.A.H. NO. 28 & ST. FRANCIS  
ARCHITECT OR ENGINEER ERICKSON ENGINEERING  
CONTRACTOR LUNDA CONST.

ITEM STANDARD DETAILS  
SURFACE PREP. \_\_\_\_\_ OPEN HOLES 1/16" U.N.  
PAINT SEE GIRDER DETAIL

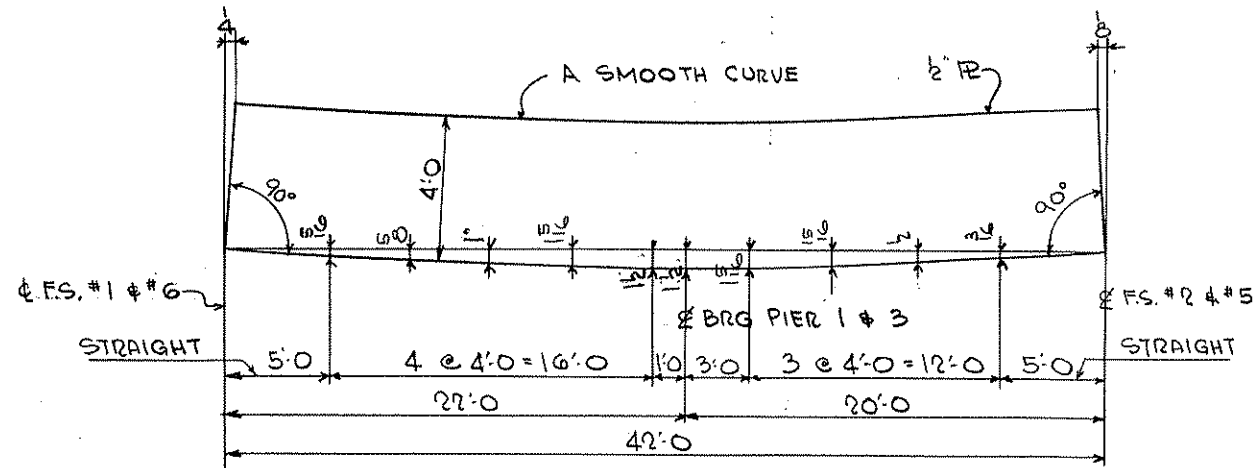
NO.	DATE	REMARKS	BY	APPROVAL	DRAWN	CHECKED	SHEET NO.	ORDER NO.
					HF	WJD	1	A3349-8



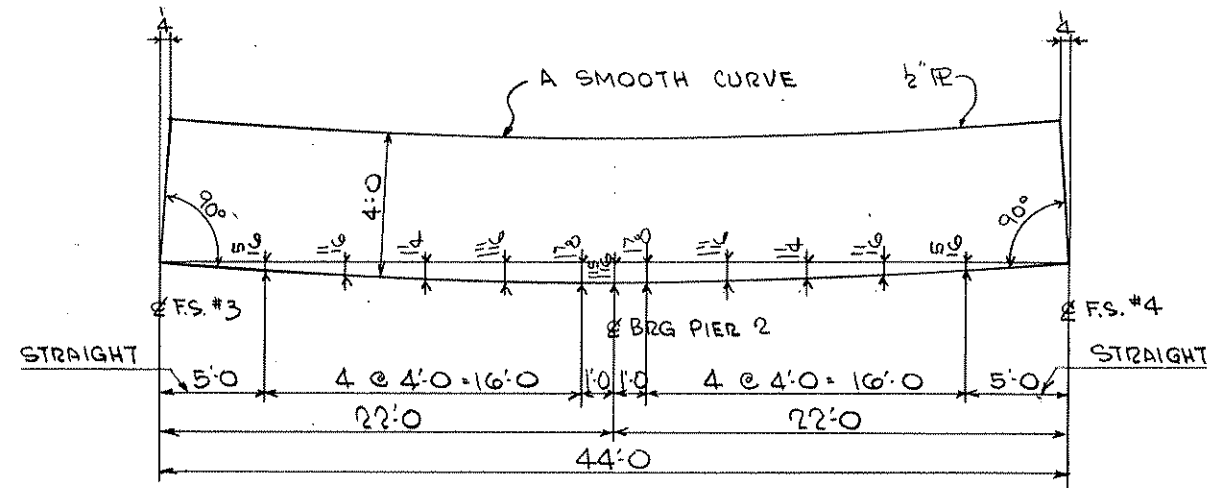
CAMBER DIAGRAM ~ 4 REQ'D  
FOR GIRDERS 3A1, 4B1, 4B7 & 13A7



CAMBER DIAGRAM ~ 4 REQ'D  
FOR GIRDERS 7A3, 8B3, 8B5 & 11A5



CAMBER DIAGRAM ~ 4 REQ'D  
FOR GIRDERS 5A2, 6B2, 6B6 & 12A6



CAMBER DIAGRAM ~ 2 REQ'D  
FOR GIRDERS 9A4 & 10B4

NOTE:  
 1.) SEE SHT NO. GN1 FOR FABRICATION NOTES.

MINN. PROJ. NO. BRS 6379 (11)  
 S.P. No. 02-624-19

**PHOENIX STEEL INC**  
 EAU CLAIRE, WISCONSIN  
 - REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRON -  
 STRUCTURE BRIDGE NO. 02501  
 LOCATION ANOKA COUNTY, MN. BETWEEN C.S.A.H. NO 28 & ST FRANCIS  
 ARCHITECT OR ENGINEER ERICKSON ENGINEERING  
 CONTRACTOR LUNDA CONST.

ITEM WEB PLATE CUTTING SKETCHES

SURFACE PREP. \_\_\_\_\_ OPEN HOLES \_\_\_\_\_

PAINT \_\_\_\_\_

NO.	DATE	REMARKS	BY	APPROVAL	DRAWN	SHEET NO.	ORDER NO.
					HF	2	A3349-B



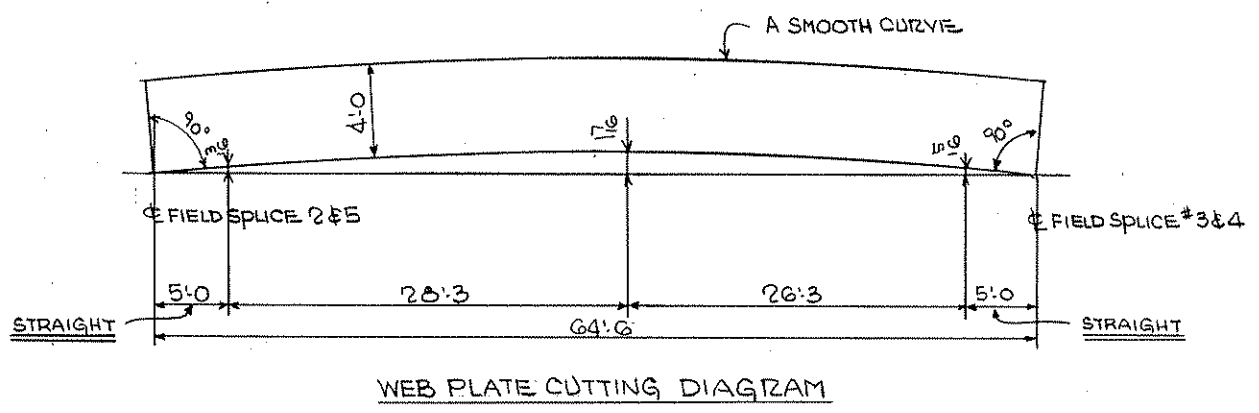
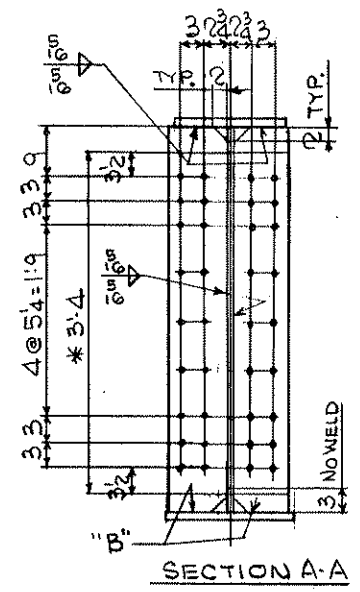
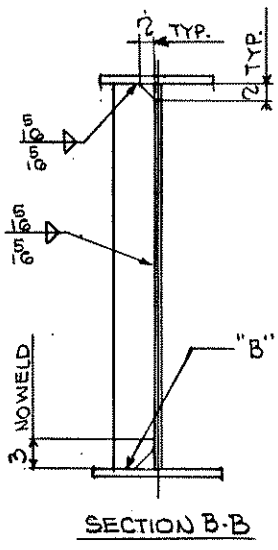
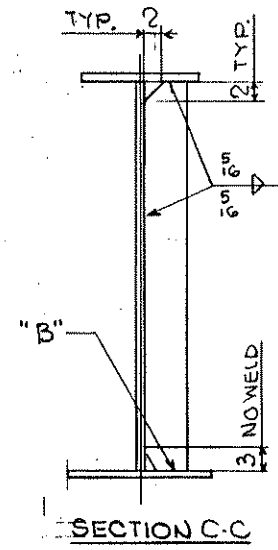
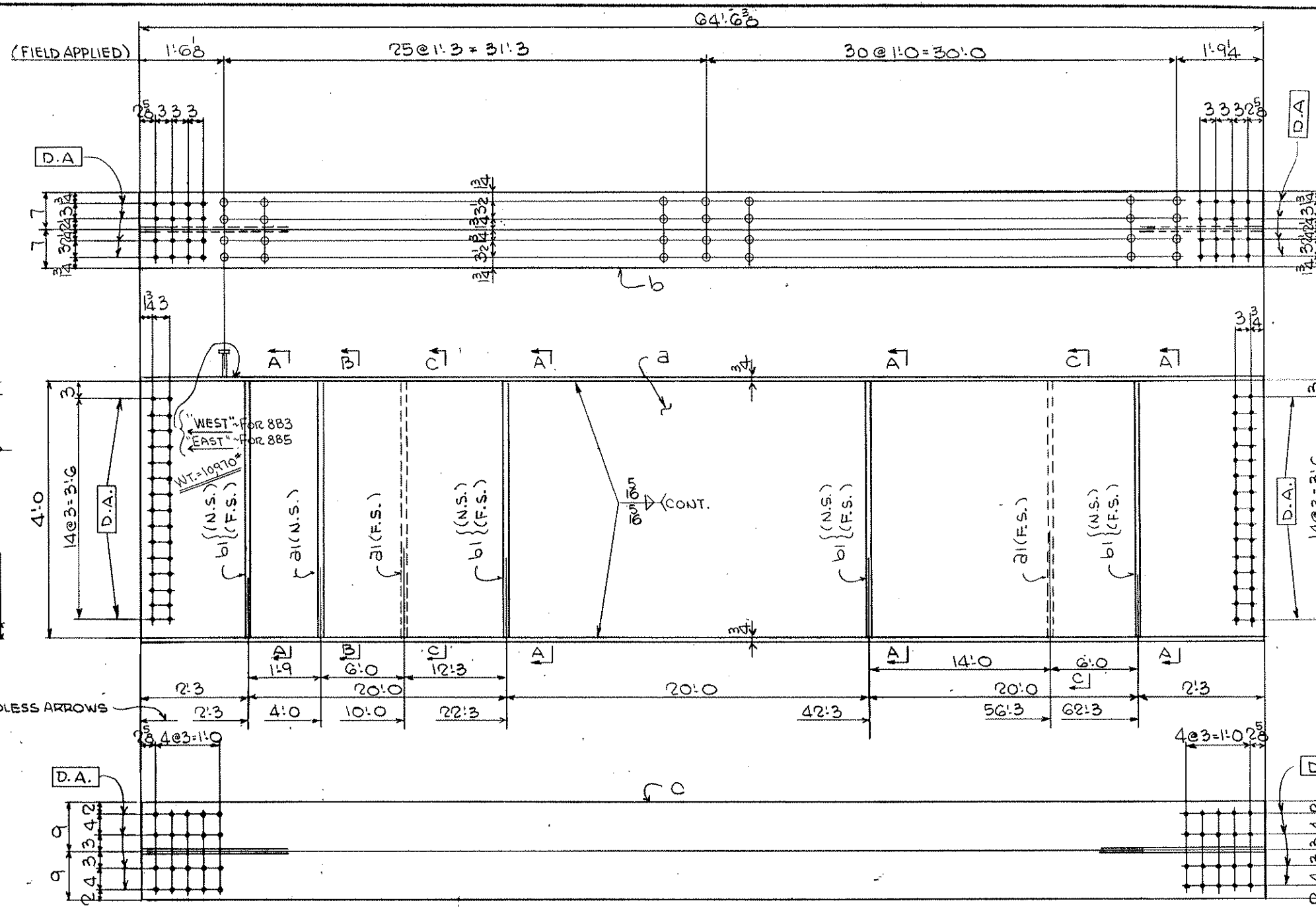












LINE NO.	NO. OF Pcs	SHAPE	LENGTH		ASSEMBLING MARK	MATERIAL SPEC.	ORDER ITEM NO.	REMARKS	MATERIAL NO.	PAY ITEM
			FT.	IN.						
1	ONE	GIRDER	~		8B3					
2	ONE	GIRDER	~		8B5					
3	2	R 48 x 2	64	6 3/8	a			CHARPY	X1	4
4	2	R 14 x 3/4	64	6 3/8	b				X1	5
5	2	R 18 x 3/4	64	6	c				X1	5
6	6	R 5 x 3/8	4	0	81				X2	7
7	16	R 7 x 3/8	4	0	b1			CHARPY	X1	7
8										
9										
10	448	HD STUDS 5/8"	0	5				NEISONS-SHIP LOOSE	X2	8
11										
12										
13										
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33										
34										
35										

ALL MATERIAL TO BE MN/DOT 3309

- NOTES:**
- 1.) SEE SHT. GNI FOR FABRICATION NOTES.
  - 2.) D.A. INDICATES TO DRILL 1/8" HOLES FROM THE SOLID AT ASSEMBLY.
  - 3.) "B" INDICATES GRIND TO FIT, NO WELD
  - 4.) \* INDICATES TO PAINT THIS AREA BOTH SIDES (SEE SHT. GNI FOR SPLICE AREAS)
  - 5.) FOR WEB PLATE CUTTING SEE SHT. #2

ONE GIRDER - 8B3  
ONE GIRDER - 8B5

MINN. PROJ. NO. BHRS 6379 (11)  
S.P. NO. 02-624-19

**PHOENIX STEEL INC**  
EAU CLAIRE, WISCONSIN  
- REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRON -

STRUCTURE **BRIDGE NO. 02501**  
ANOKA COUNTY, MN  
LOCATION BETWEEN C.S.A.H. NO. 20 & ST. FRANCIS

ARCHITECT  
OR ENGINEER **ERICKSON ENGINEERING**

CONTRACTOR **LUNDA CONST.**

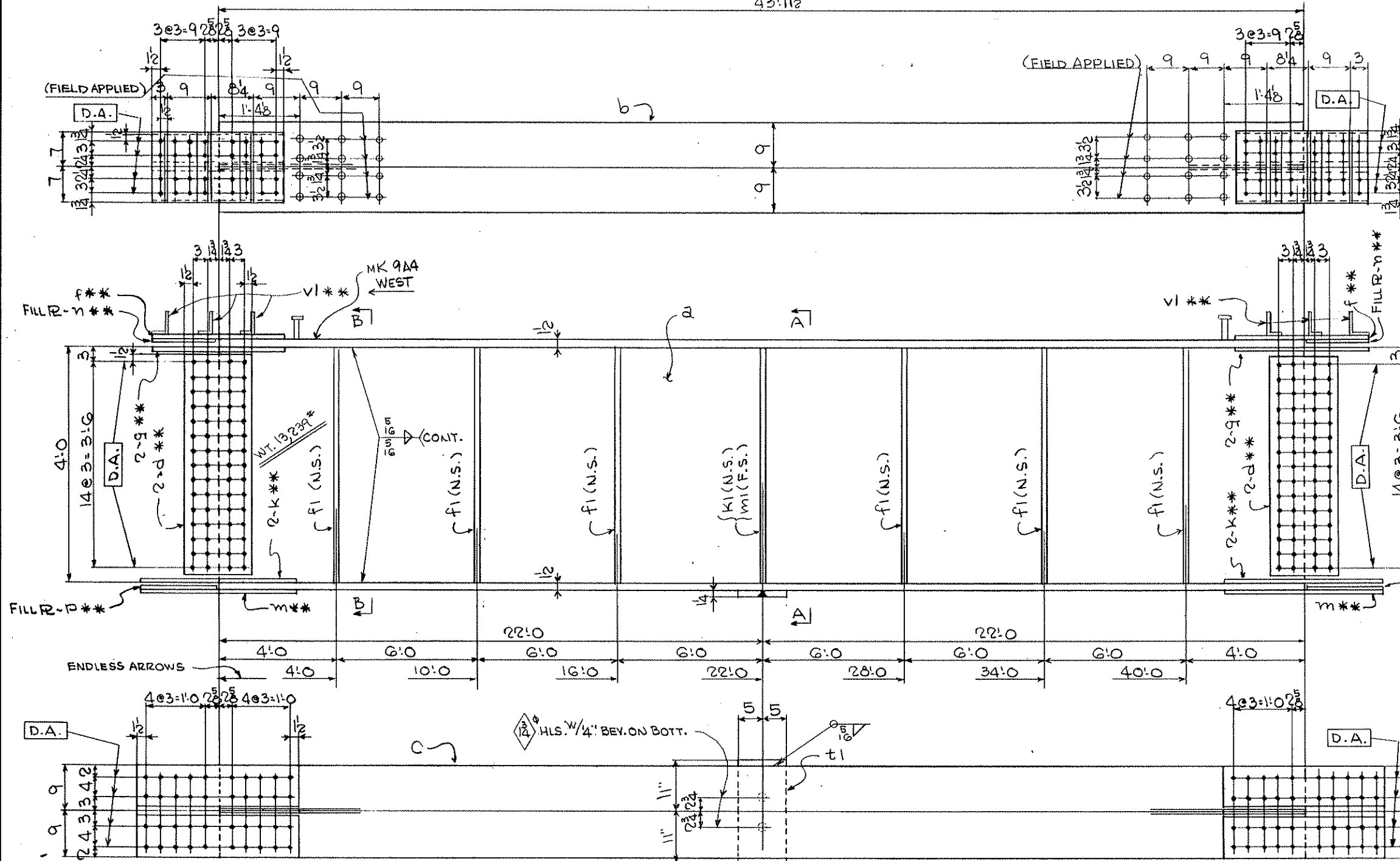
REVISIONS			
NO.	DATE	REMARKS	BY

ITEM **GIRDER 8B3 & 8B5**

SURFACE PREP. **1/8 MILS DRY ON CONTACT SURFACES**  
OPEN HOLES **1/8" O.D.**  
PAINT **SEE SHT. GNI FOR PAINT**

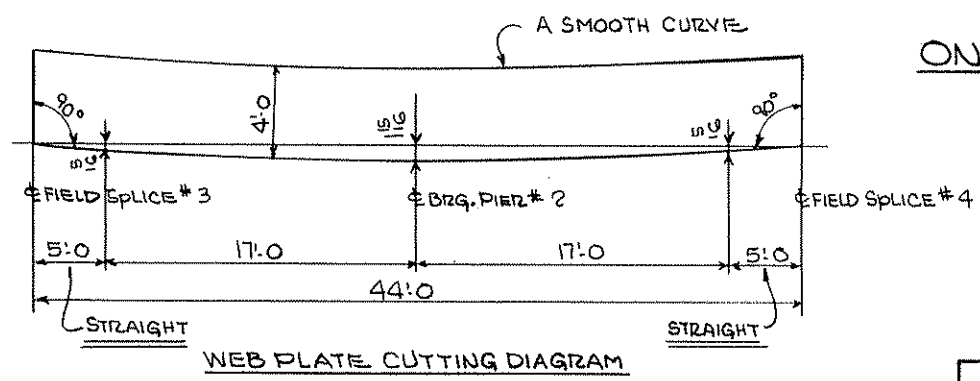
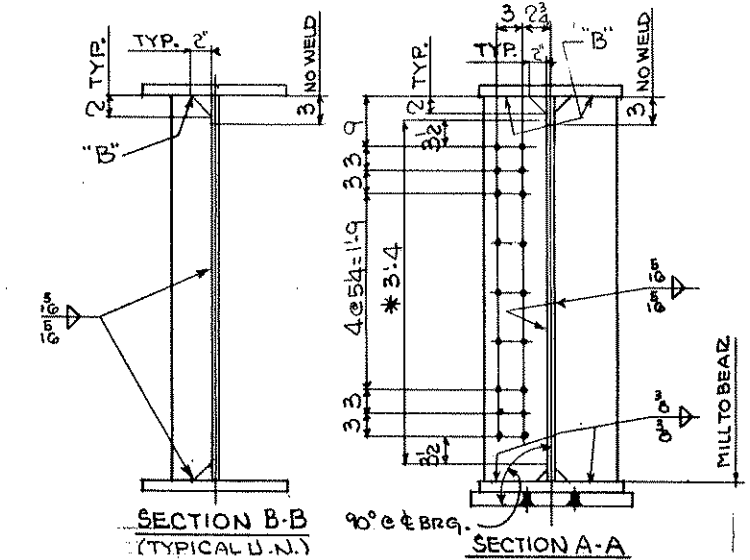
APPROVAL **YIS** DRAWN **C.K** SHEET NO. **8** ORDER NO. **A3349-8**  
INCP **1/16** CHECKED **W.P.D**

43:112



LINE NO.	MATERIAL		ASSEMBLING MARK	MATL. SPEC.	ORDER ITEM NO.	REMARKS	MATERIAL NO.	PAY ITEM
	SHAPE	LENGTH						
1	ONE ~ GIRDER	1	9A4					
2	1 R 48 x 2	44 0	a			CHALPY	X1	4
3	1 R 18 x 12	43 11/2	b				X1	5
4	1 R 18 x 12	44 0	c				X1	5
5	4 R 12 x 25	3 9	d				X1	12
6	2 R 14 x 16	2 24	f				X1	10
7	4 R 6 x 16	2 24	g				X1	31
8	4 R 8 x 34	2 84	k				X1	33
9	2 R 18 x 34	2 84	m				X1	34
10	2 R 14 x 34	1 14	n				X1	35
11	2 R 18 x 34	1 14	p				X1	36
12	6 R 5 x 38	4 0	fl				X1	7
13	1 R 8 x 1"	4 0	kl			MIE CHARPY	X1	6
14	1 R 8 x 1"	4 0	ml			MIE CHARPY	X1	6
15								
16	24 HD. STUDS 3/8"	0 5				NELSON S3-SHIP LOOSE	X2	12
17	1 R 10 x 14	1 10	tl				X2	12
18	6 L 8 x 3 x 3/8	1 2	vl				X2	34
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								

- NOTES:**
- 1.) SEE SHT. GNI FOR FABRICATION NOTES.
  - 2.) D.A. INDICATES TO DRILL 1/2" HOLES FROM THE SOLID AT ASSEMBLY.
  - 3.) "B" INDICATES GRIND TO FIT NO WELD.
  - 4.) \* INDICATES TO PAINT THIS AREA BOTH SIDES (SEE SHT. GNI FOR SPLICE AREAS)
  - 5.) \*\* INDICATES BOLT FOR SHIPMENT.
  - 6.) FOR WEB PLATE CUTTING SEE SHT. #2



ONE ~ GIRDER ~ 9A4

MINN. PROJ. NO. BHRS 6379 (11)  
S.P. No. 02-624-19

**PHOENIX STEEL INC**  
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STRUCTURE BRIDGE NO. 02501  
LOCATION ANOKA COUNTY, MN  
BETWEEN U.S.A.H. NO. 28 & ST. FRANCIS

ARCHITECT OR ENGINEER ERICKSON ENGINEERING  
CONTRACTOR LUNDA CONST.

ITEM GIRDER 9A4

SURFACE PREP 1.5 MILS DRY ON CONTACT SURFACES  
PAINT SEE SHT. GNI FOR PAINT

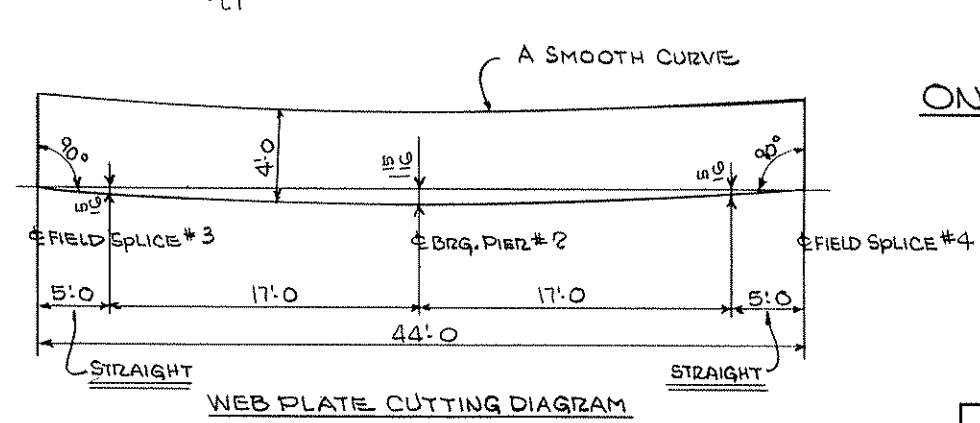
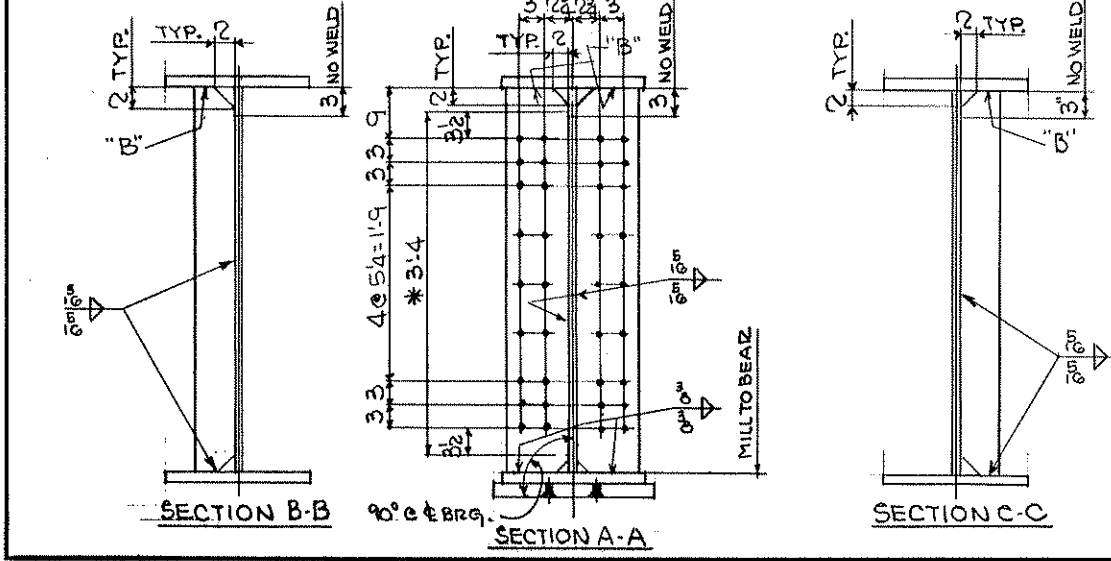
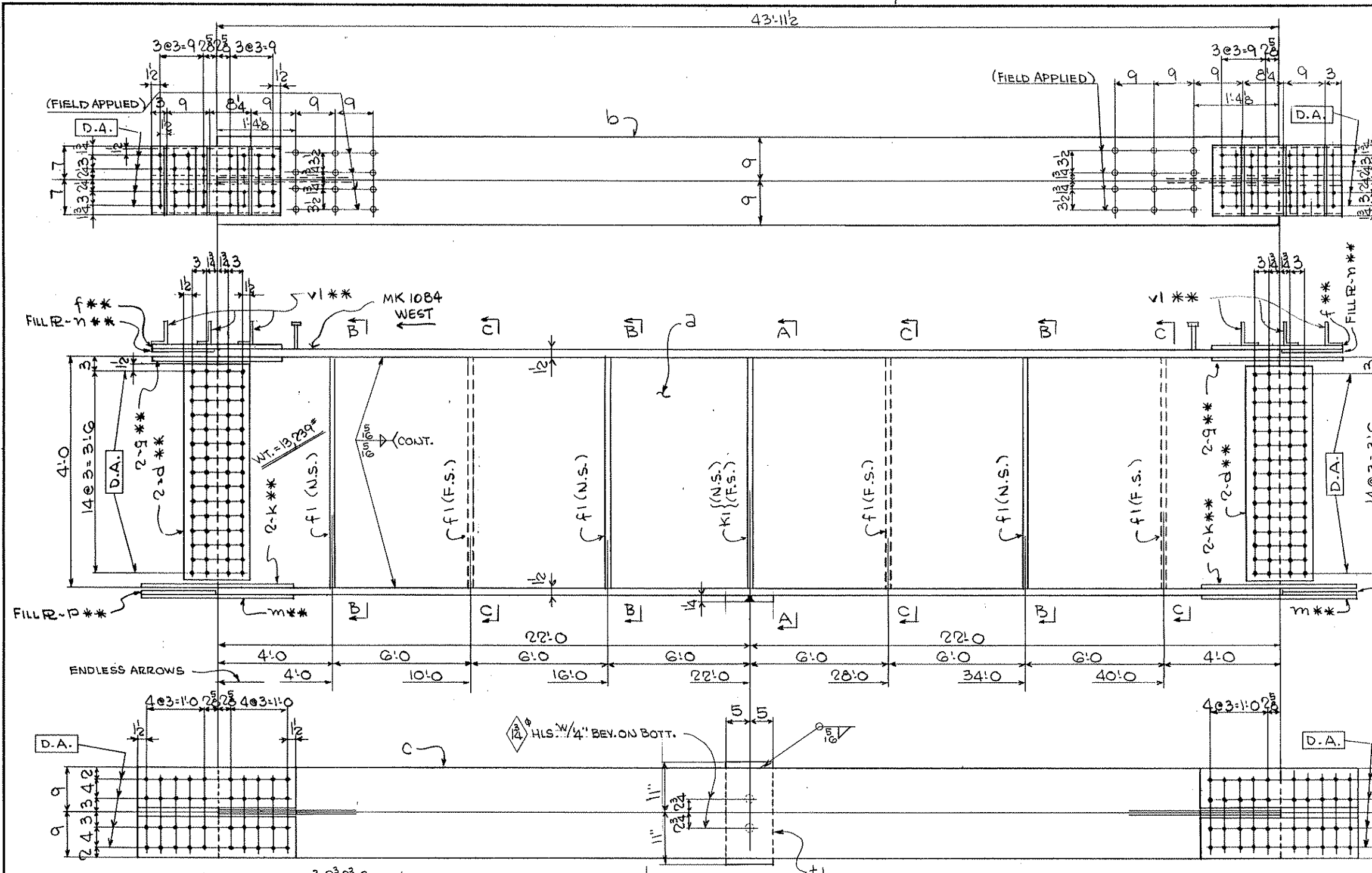
APPROVAL 1/19 DRAWN C.K. SHEET NO. 9 ORDER NO. A3349-8  
SHOP 1/11 CHECKED WKD

REVISIONS			
NO.	DATE	REMARKS	BY

LINE NO.	MATERIAL		ASSEMBLING MARK	MATL. SPEC.	ORDER ITEM NO.	REMARKS	MATERIAL NO.	PAY ITEM
	NO. PCS	SHAPE						
1	ONE	GIRDER	1	10B4				
2	1	R 4B x 2	44	0	a			4
3	1	R 18 x 1/2	43	1 1/2	b			5
4	1	R 18 x 1/2	44	0	c			5
5	4	R 12 x 3/8	3	9	d			12
6	2	R 14 x 1/8	2	24	f			
7	4	R 8 x 1/8	2	24	g			
8	4	R 8 x 3/4	2	8 1/4	k			
9	2	R 18 x 3/4	2	8 1/4	m			
10	2	R 14 x 3/4	1	4	n			
11	2	R 18 x 3/4	1	4	p			
12	6	R 5 x 3/8	4	0	fl			7
13	2	R 8 x 1"	4	0	kl			6
14								
15								
16	24	HD. STUDS 3/8"	0	5				
17	1	R 10 x 1/4	1	10	tl			11
18	6	L 5 x 3 x 3/8	1	2	vl			34
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ALL MATERIAL TO BE MN/DOT 3309

NOTES:  
 1.) SEE SHT. GNI FOR FABRICATION NOTES.  
 2.) D.A. INDICATES TO DRILL 1/8" HOLES FROM THE SOLID AT ASSEMBLY.  
 3.) "B" INDICATES GRIND TO FIT, NO WELD.  
 4.) \* INDICATES TO PAINT THIS AREA BOTH SIDES (SEE SHT. GNI FOR SPICE AREAS)  
 5.) \*\* INDICATES BOLT FOR SHIPMENT.  
 6.) FOR WEB PLATE CUTTING SEE SHT. #2



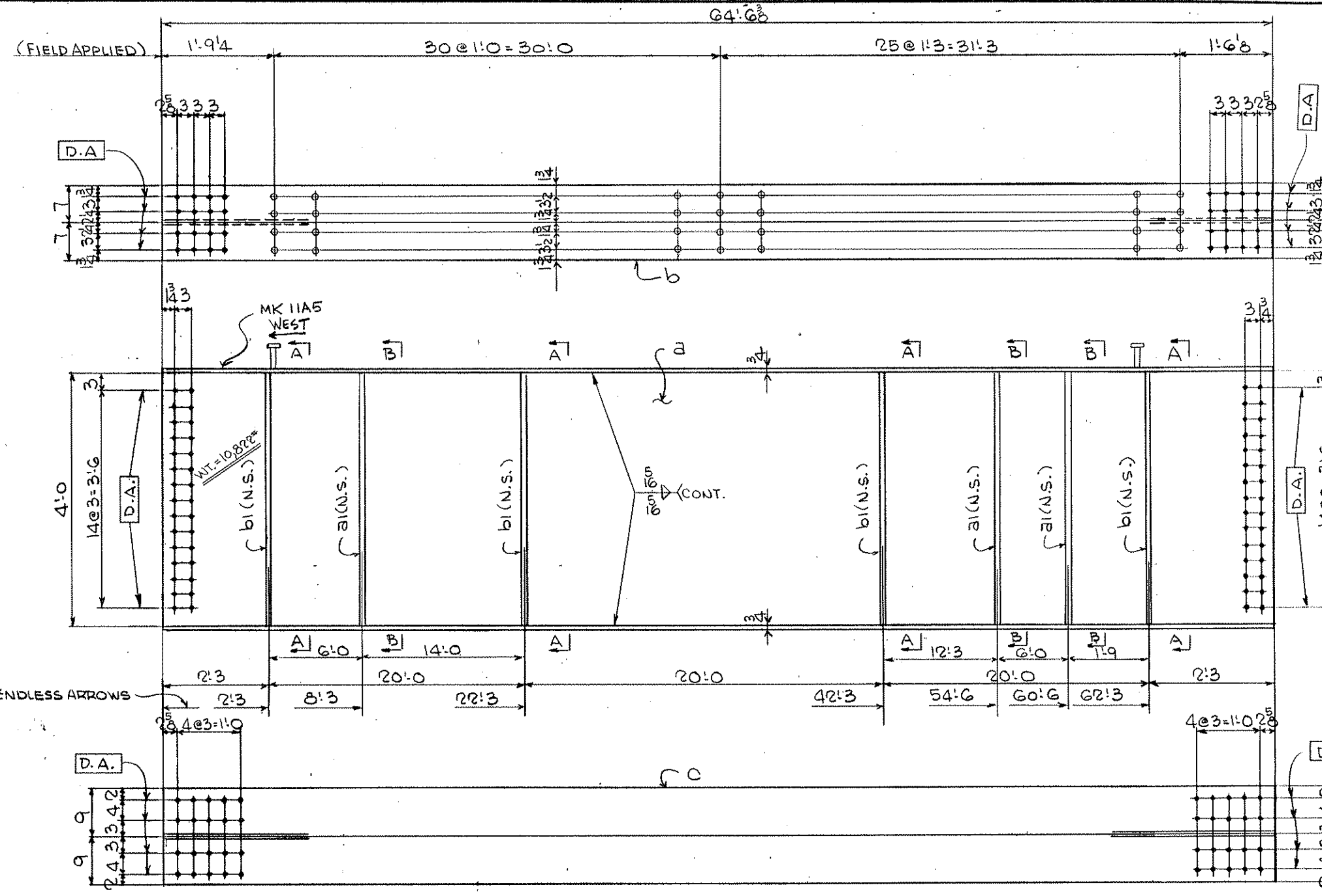
ONE - GIRDER - 10B4

MINN. PROJ. NO. BHRS 6319 (11)  
 S.P. No. 02-624-19

**PHOENIX STEEL INC**  
 EAU CLAIRE, WISCONSIN  
 - REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRDS -  
 STRUCTURE BRIDGE NO. 02501  
 LOCATION ANOKA COUNTY, MN  
 BETWEEN C.S.A.H. NO 28 & ST. FRANCIS  
 ARCHITECT OR ENGINEER ERICKSON ENGINEERING  
 CONTRACTOR LUNDA CONST.

ITEM GIRDER 10B4  
 SURFACE PREP. 1/2 MILS DRY ON CONTACT SURFACES OPEN HOLES 1/16" U.N.  
 PAINT SEE SHT. GNI FOR PAINT  
 APPROVAL [Signature] SHOP 1/16  
 DRAWN C.K. CHECKED W.K.D.  
 SHEET NO. 10 ORDER NO. A3349-B

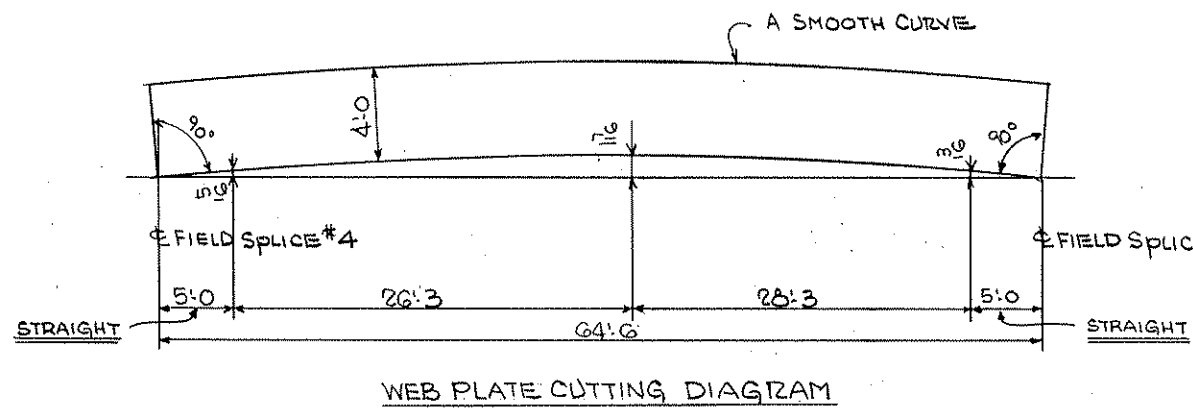
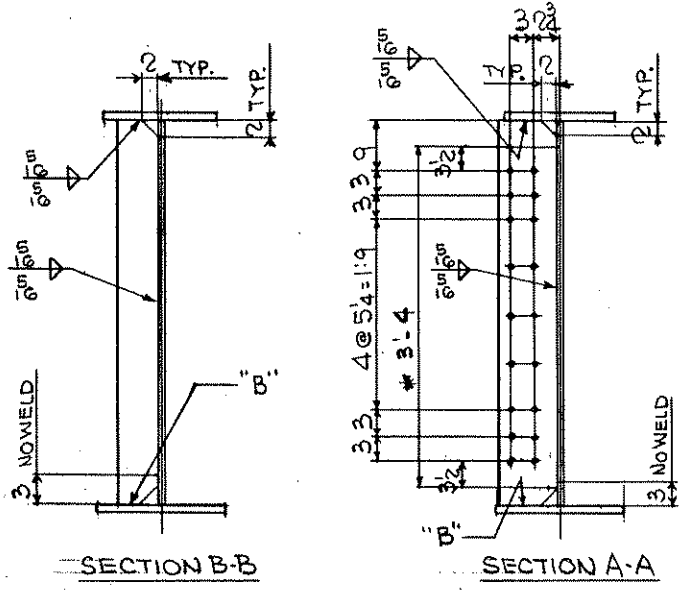
REVISIONS			
NO.	DATE	REMARKS	BY



LINE NO.	MATERIAL		ASSEMBLING MARK	MATERIAL SPEC.	ORDER ITEM NO.	REMARKS	MATERIAL NO.	PAY ITEM
	SHAPE	LENGTH FT. IN.						
1								
2	ONE GIRDER		11A5					
3	1 R 48 x 2	64'6"	a			CHARPY	X12	4
4	1 R 14 x 34	64'6"	b				X11	5
5	1 R 18 x 34	64'6"	c				X13	5
6	3 R 5 x 3/8	4'0"	a1				X12	7
7	4 R 7 x 3/8	4'0"	b1			CHARPY	X11	7
8								
9								
10	224 HD STUDS 5/8"	0	5			NEILSON SA-SHIP LOOSE	X2	6
11								
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ALL MATERIAL TO BE MN/DOT 3309

- NOTES:**
- 1.) SEE SHT. GNI FOR FABRICATION NOTES.
  - 2.) D.A. INDICATES TO DRILL 1/8" HOLES FROM THE SOLID AT ASSEMBLY.
  - 3.) "B" INDICATES GRIND TO FIT, NO WELD
  - 4.) \* INDICATES TO PAINT THIS AREA BOTH SIDES (SEE SHT. GNI FOR SPLICE AREAS)
  - 5.) FOR WEB PLATE CUTTING SEE SHT. #2



ONE-GIRDER-11A5

MINN. PROJ. NO. BHR2 6379 (11)  
S.P. No. 02-024-19

**PHOENIX STEEL INC**  
EAU CLAIRE, WISCONSIN  
- REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRON -  
STRUCTURE BRIDGE NO. 02501  
ANOKA COUNTY, MN  
LOCATION BETWEEN C.S.A.H. NO. 20 & ST. FRANCIS  
ARCHITECT OR ENGINEER ERICKSON ENGINEERING  
CONTRACTOR LUNDA CONST.

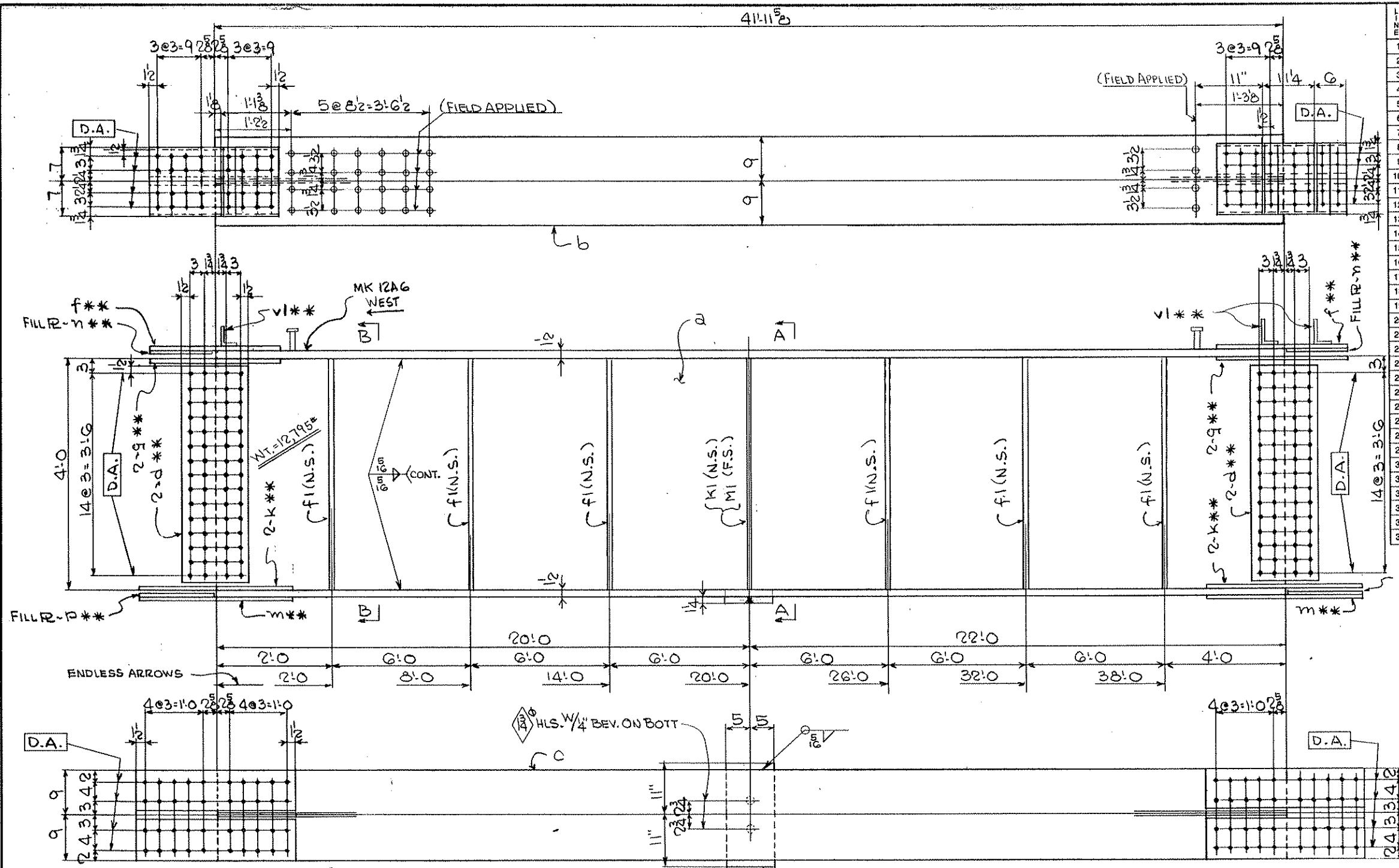
REVISIONS			
NO.	DATE	REMARKS	BY

ITEM GIRDER 11A5

SURFACE PREP. 1.8 MILS DRY ON CONTACT SURFACES OPEN HOLES 1/16" D.N.  
PAINT SEE SHT. GNI FOR PAINT

APPROVAL 10/13/11 BY G.K. CHECKED W.K.D. SHOP 10/11

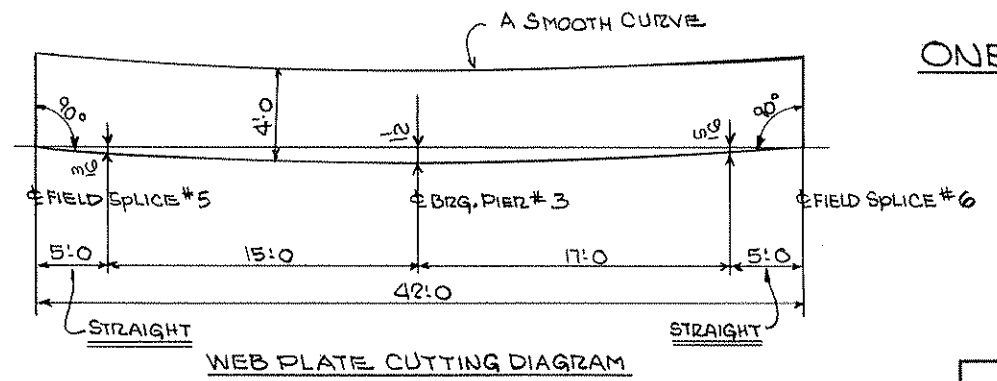
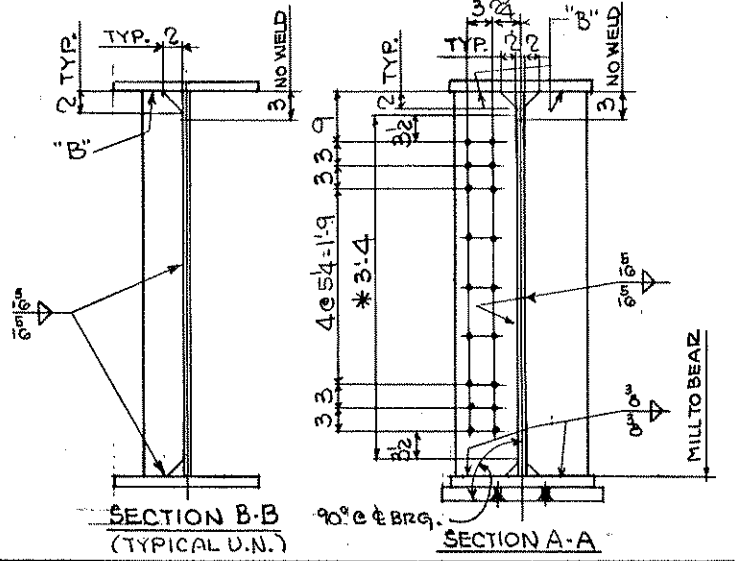
SHEET NO. 11 ORDER NO. A2249-8



LINE NO.	NO. POS.	MATERIAL	LENGTH		ASSEMBLING MARK	MATERIAL SPEC.	ORDER ITEM NO.	REMARKS	MATERIAL NO.	PAY ITEM
			FT.	IN.						
1		ONE GIRDER			12AG					
2	1	R 48 x 12	42	0	a			CHARPY	X1	4
3	1	R 18 x 12	41	11 3/8	b				X1	5
4	1	R 18 x 12	42	0	c				X1	5
5	4	R 12 x 20	3	9	d				X1	12
6	2	R 14 x 16	2	24	f				X1	1
7	4	R 6 x 16	2	24	g				X1	1
8	4	R 8 x 34	2	84	k				X1	23
9	2	R 18 x 34	2	84	m				X1	24
10	2	R 14 x 34	1	1	n				X1	15
11	2	R 18 x 34	1	4	p				X1	26
12	6	R 5 x 38	4	0	fl				X1	32
13	1	R 8 x 1"	4	0	kl			MIE CHARPY	X1	6
14	1	R 8 x 1"	4	0	ml			MIE CHARPY	X1	6
15										
16	28	HD. STUDS 3/8"	0	5				NELSON SHIP LOOSE	X2	3
17	1	R 10 x 14	1	10	tl				X2	11
18	3	L 5 x 3 x 3/8	1	2	vl				X2	34
19										
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ALL MATERIAL TO BE MN/DOT 3309

- NOTES:**
- SEE SHT. GNI FOR FABRICATION NOTES.
  - D.A. INDICATES TO DRILL 1/8" HOLES FROM THE SOLID AT ASSEMBLY.
  - "B" INDICATES GRIND TO FIT, NO WELD.
  - \* INDICATES TO PAINT THIS AREA BOTH SIDES (SEE SHT. GNI FOR SPLICE AREAS)
  - \*\* INDICATES BOLT FOR SHIPMENT.
  - FOR WEB PLATE CUTTING SEE SHT. #2



ONE GIRDER 12AG

MINN. PROJ. NO. BHRS 6379 (11)  
S.P. No. 02-624-19

**PHOENIX STEEL INC**  
EAU CLAIRE, WISCONSIN  
REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRON

STRUCTURE BRIDGE NO. 02501  
LOCATION ANOKA COUNTY, MN BETWEEN C.S.A.H. NO. 28 & ST. FRANCIS

ARCHITECT OR ENGINEER ERICKSON ENGINEERING  
CONTRACTOR LUNDA CONST.

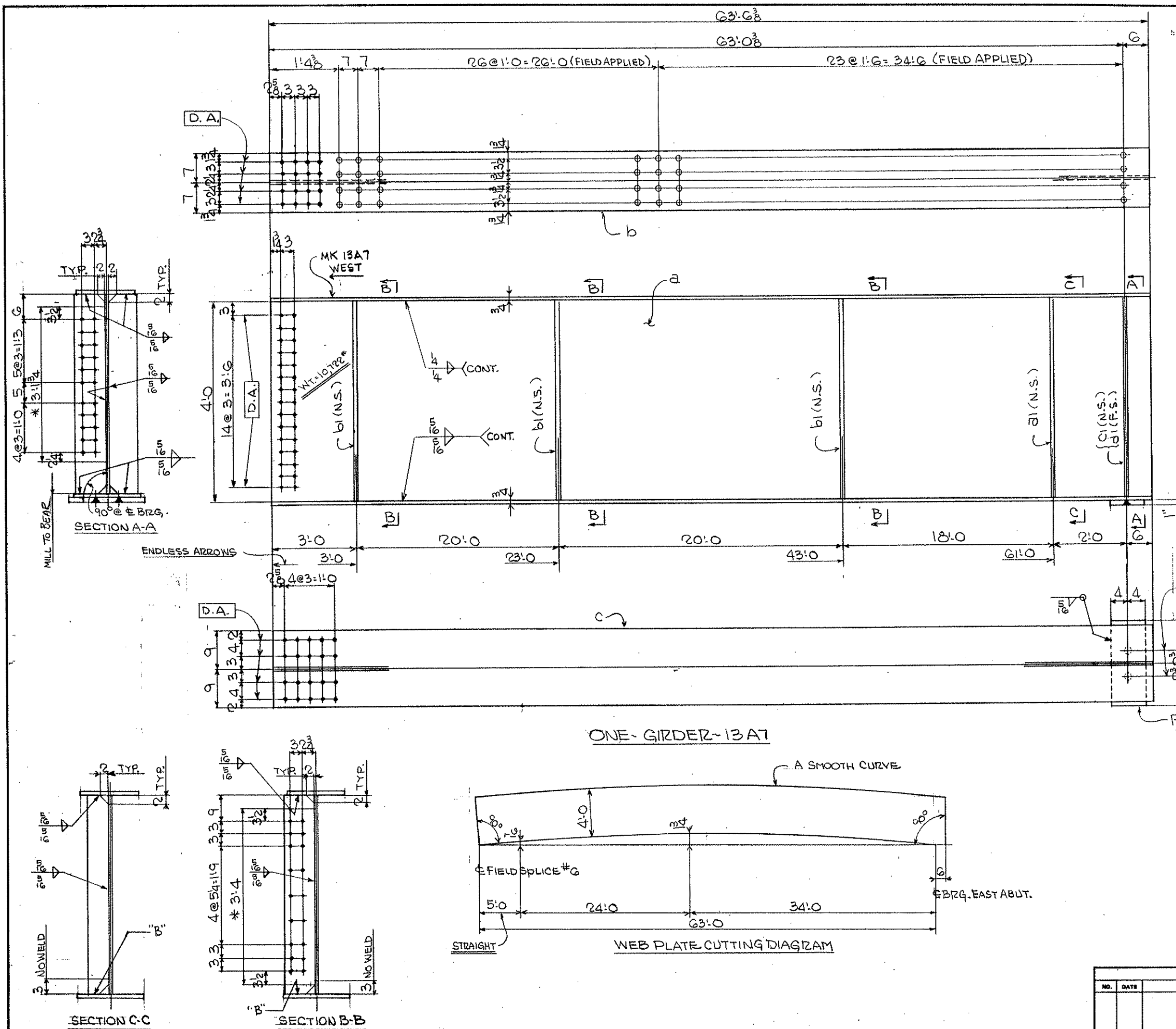
ITEM GIRDER 12AG

SURFACE PREP. 1/2 MILS. DRY ON CONTACT SURFACES OPEN HOLES 1/8" U.N.  
PAINT SEE SHT. GNI FOR PAINT

APPROVAL: [Signature] DRAWN C.K. SHEET NO. 12 ORDER NO. A3349-B  
SHOP [Signature] CHECKED WJK

REVISIONS		
NO.	DATE	REMARKS





LINE NO.	MATERIAL			ASSEMBLING MARK	MATL. SPEC.	ORDER ITEM NO.	REMARKS	MATERIAL NO.	PAY ITEM
	NO. PCS.	SHAPE	LENGTH FT. IN.						
1									
2	ONE	GIRDER		13A7					
3	1	R4B x 2	63	6 3/8	a		CHARPY	X13	4
4	1	R14 x 24	63	6 3/8	b			X13	5
5	1	R18 x 24	63	6	c			X13	5
6	1	R5 x 28	4	0	31			X13	7
7	3	R7 x 28	4	0	31			X13	7
8	1	R7 x 24	4	0	31			X13	6
9	1	R7 x 24	4	0	31		CHARPY	X13	6
10									
11									
12	208	HD STUDS 2"	0	5			NEILON 53-SHIP LOOSE	X13	
13	1	R 8 x 1"	1	0	pl			X13	11
14									
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ALL MATERIAL TO BE MN/DOT 2309

- NOTES:
- 1.) SEE SHT. GNI FOR FABRICATION NOTES.
  - 2.) D.A. INDICATES TO DRILL 1/8" HOLES FROM THE SOLID AT ASSEMBLY.
  - 3.) "B" INDICATES GRIND TO FIT, NO WELD
  - 4.) \* INDICATES TO PAINT THIS AREA BOTH SIDES (SEE SHT. GNI FOR SPLICE AREAS)
  - 5.) FOR WEB PLATE CUTTING SEE SHT. #2

MINN. PROJ. NO. BHR5 6379 (11)  
S.P. No. 02-624-19

**PHOENIX STEEL INC**  
EAU CLAIRE, WISCONSIN  
- REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRON -

STRUCTURE **BRIDGE NO. 02501**  
ANOKA COUNTY, MN  
LOCATION **BETWEEN C.S.A.H. NO. 20 & ST. FRANCIS**

ARCHITECT OR ENGINEER **EDICKSON ENGINEERING**  
CONTRACTOR **LUNDA CONST.**

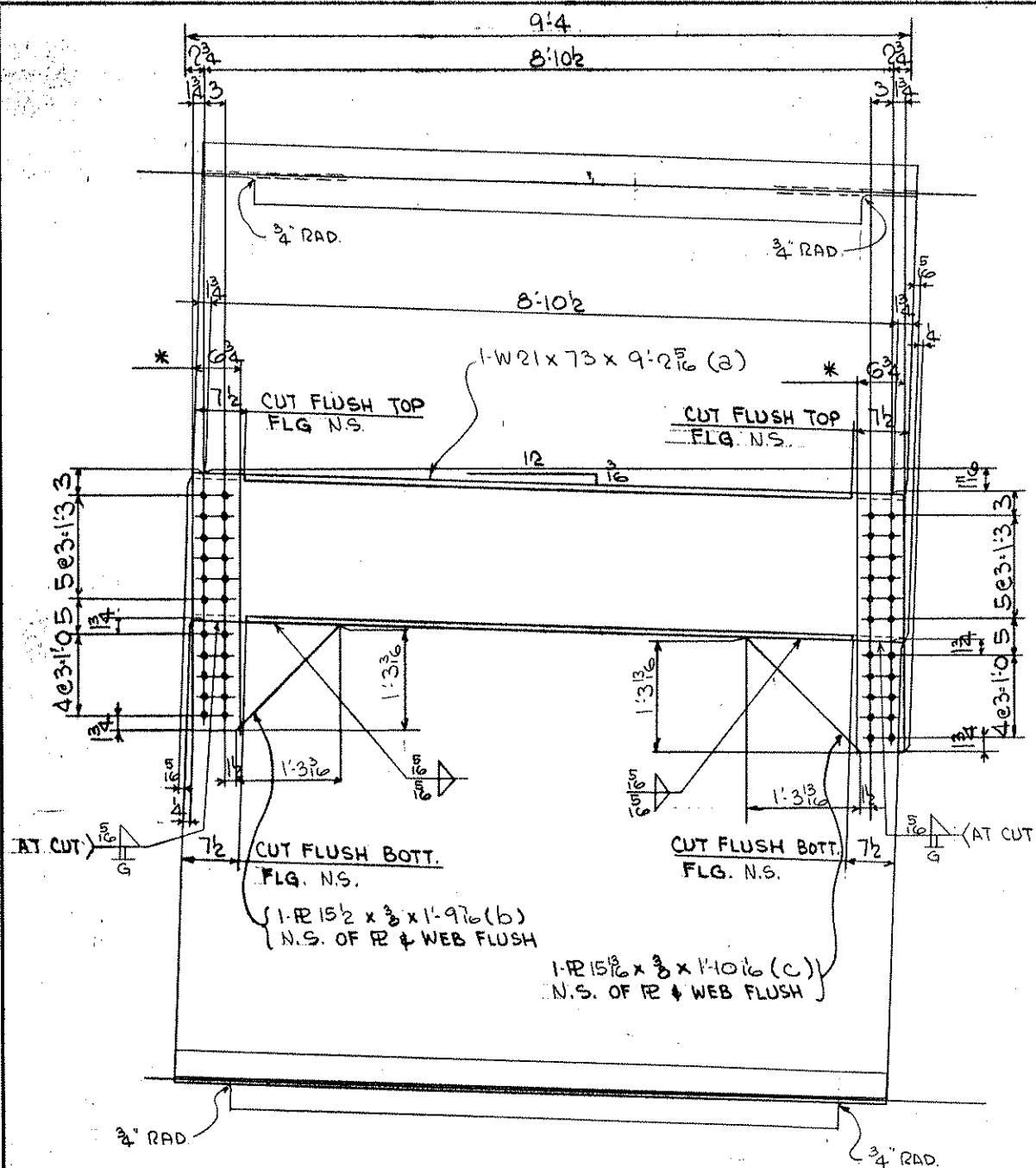
ITEM **GIRDER 13A7**

SURFACE PREP. 1.5 MILS DRY ON CONTACT SURFACES OPEN HOLES 1/16" D.N.  
PAINT SEE SHT. GNI FOR PAINT

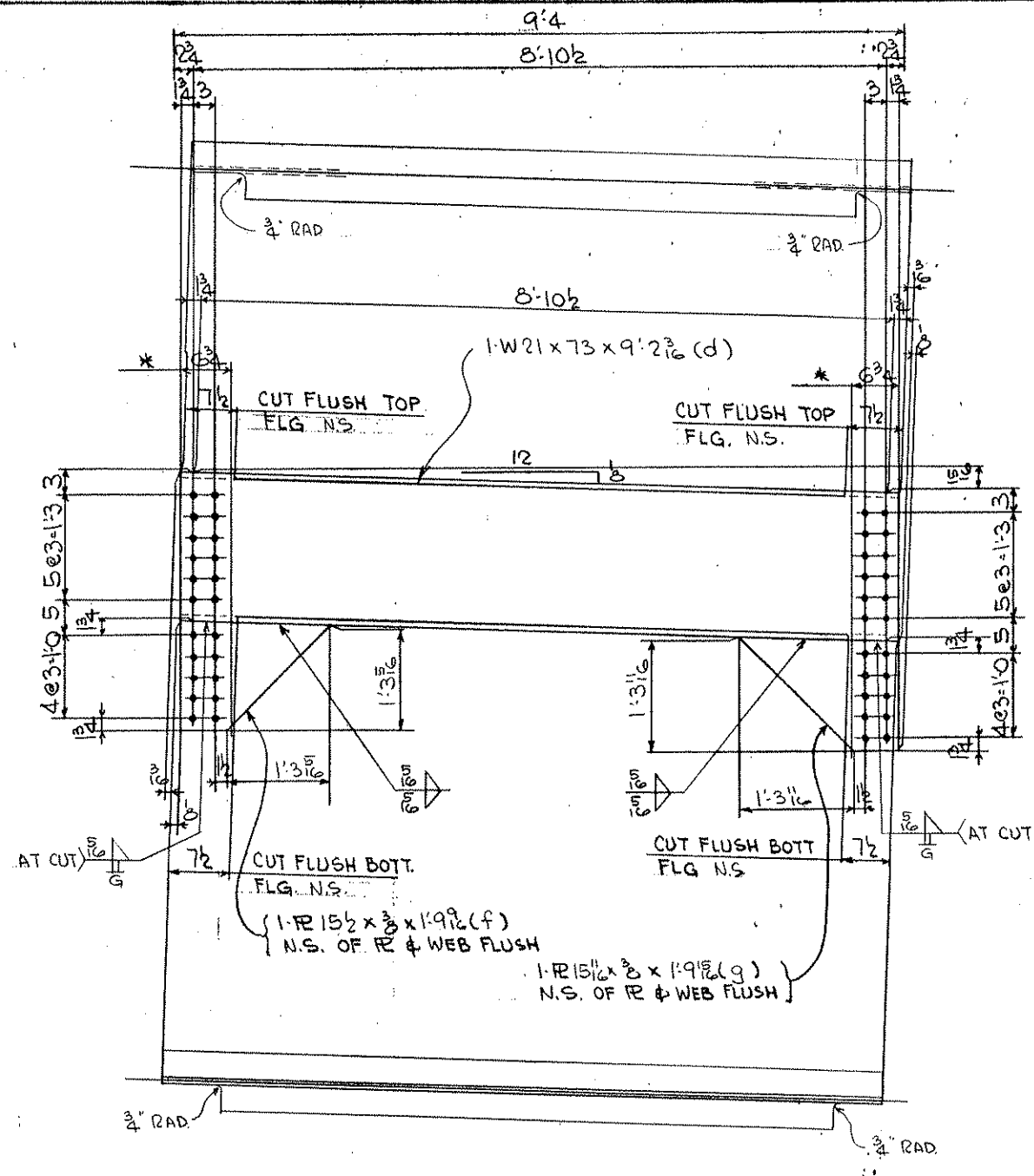
APPROVAL *[Signature]* DATE *[Date]* DRAWN **C.K.** SHEET NO. **13** ORDER NO. **A3349-8**  
SHOP *[Signature]* CHECKED **W.K.D.**

REVISIONS			
NO.	DATE	REMARKS	BY

a  
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ONE - DIAPHRAGM - 14D1



ONE - DIAPHRAGM - 14D2

NOTES:

- 1) SEE SHT. NO. G01 FOR FABRICATION NOTES.
- 2) \* INDICATES TO PAINT THE WEB OF THIS AREA BOTH SIDES.

LINE NO.	MATERIAL			ASSEMBLY MARK	REMARKS
	NO.	SHAPE	LENGTH FT. IN.		
1		ONE - DIAPHRAGM	14D1		719.6796 P
2	1/2	1 W 21x73	9 2 1/2	a	
3	1/2	1 #15 1/2	1 9 1/16	b	2-#15 1/2 x 3/8
4	1/2	1 #15 1/2	1 10 1/16	c	2-#15 1/2 x 3/8 CUTS 2
5					
6					
7		ONE - DIAPHRAGM	14D2		717.3358 P
8	1/2	1 W 21x73	9 2 1/2	d	
9	1/2	1 #15 1/2	1 9 1/16	e	2-#15 1/2 x 3/8
10	1/2	1 #15 1/2	1 10 1/16	f	2-#15 1/2 x 3/8 CUTS 2
11	1/2	1 #15 1/2	1 9 1/16	g	2-#15 1/2 x 3/8 CUTS 2
12					
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14					1-1436
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ALL MATERIAL TO BE MIN/DOT 3809

MINN. PROJ. NO. BHR5 6379 (11)  
S.P. No. 02-624-19

REVISIONS			
NO.	DATE	REMARKS	BY

**PHOENIX STEEL INC**  
EAU CLAIRE, WISCONSIN  
- REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRON -

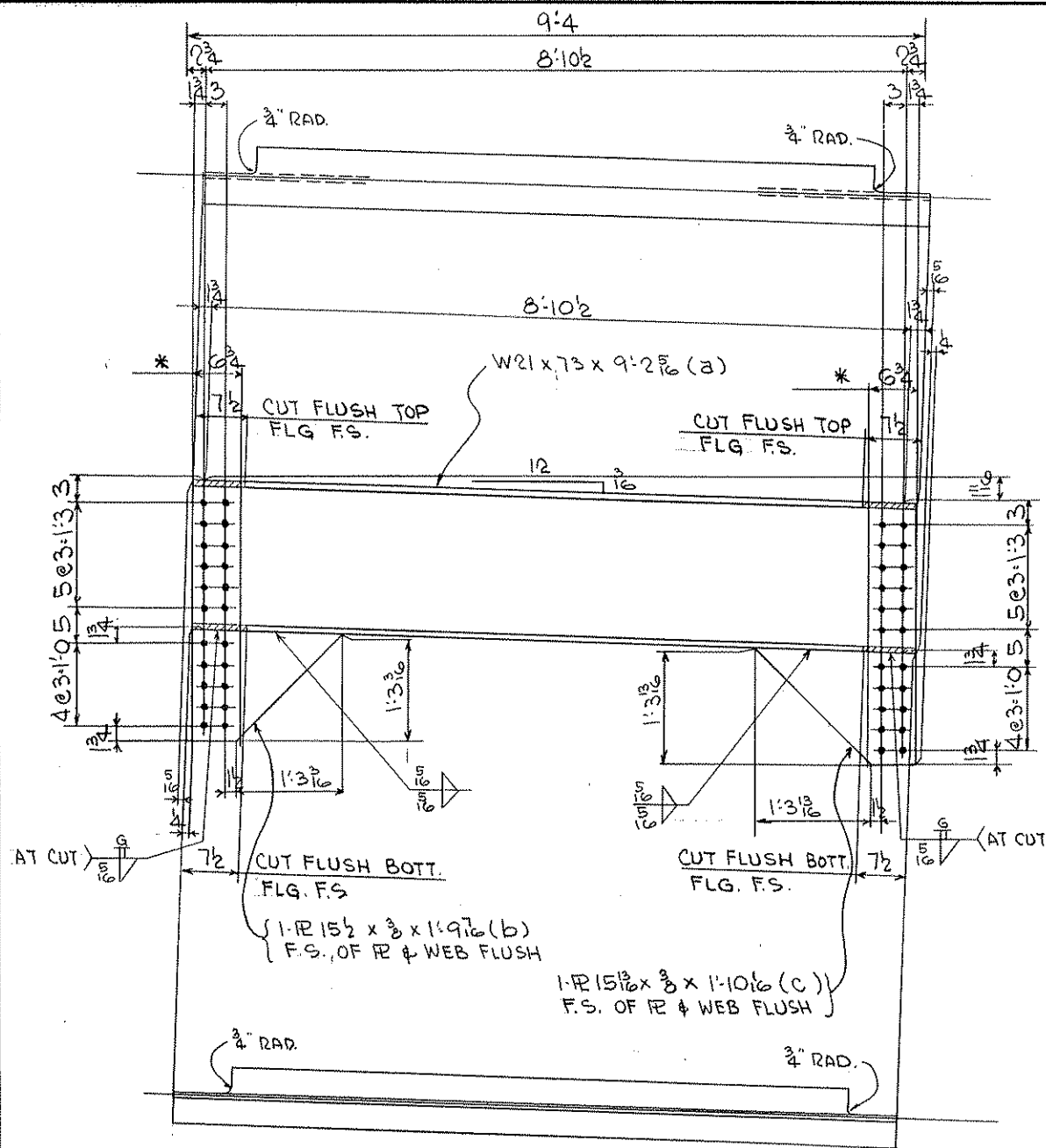
STRUCTURE BRIDGE NO. 02501  
ANOKA COUNTY, MN  
LOCATION BETWEEN CSAH. NO 28 & ST. FRANCIS

ARCHITECT OR ENGINEER ERICKSON ENGINEERING  
CONTRACTOR LUNDA CONST.

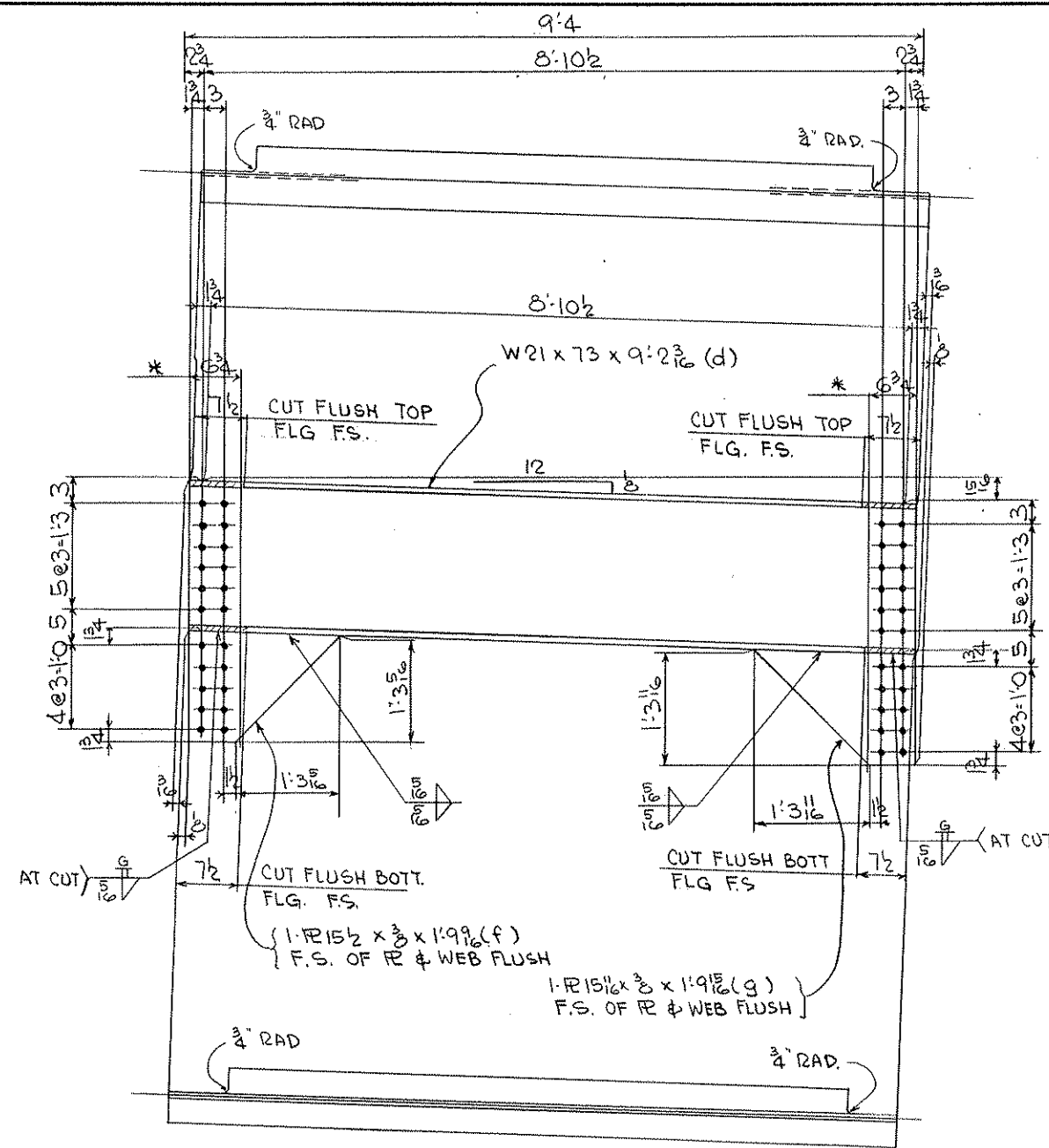
ITEM DIAPHRAGMS

RIVETS 1/2" MIN. DRY ON CONTACT SURFACES OPEN HOLES 1/2" MIN. DRY ON CONTACT SURFACES  
PAINT SEE G01 FOR PAINT

APPROVAL [Signature] DRAWN HF SHEET NO. 14 ORDER NO. A3349-17  
SHOP 1/18/86 CHECKED WKD



ONE - DIAPHRAGM - 15D1



ONE - DIAPHRAGM - 15D2

NOTES:

1) SEE SHT. NO. G01 FOR FABRICATION NOTES.

2) \* INDICATES TO PAINT THE WEB OF THIS AREA BOTH SIDES.

LINE NO.	MATERIAL			ASSEMBLING MARK	REMARKS
	NO. OF PCS	SHAPE	LENGTH FT. IN.		
1	ONE	DIAPHRAGM	15D1		718.6796 P
2	1	W 21 x 73	9'-2 3/8"	a	
3	1	R 15 1/2 x 3/8	1'-9 1/2"	b	21-R 15 1/2 x 3/8
4	1	R 15 1/2 x 3/8	1'-10 1/2"	c	x 2'-4 1/2 CUTS 2
5					
6					
7					
8	ONE	DIAPHRAGM	15D2		717.3358 P
9	1	W 21 x 73	9'-2 3/8"	d	
10	1	R 15 1/2 x 3/8	1'-9 9/16"	f	21-R 15 1/2 x 3/8
11	1	R 15 1/2 x 3/8	1'-9 1/2"	g	x 2'-4 1/2 CUTS 2
12					
13					
14					T = 1436"
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ALL MATERIAL TO BE MIN/DOT 3309

MINN. PROJ. NO. BHRS 6379 (11)  
S.P. No. 02-624.19

REVISIONS			
NO.	DATE	REMARKS	BY

**PHOENIX STEEL INC**  
EAU CLAIRE, WISCONSIN  
- REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRON -

STRUCTURE BRIDGE NO. 02501  
LOCATION ANOKA COUNTY, MN BETWEEN C.S.A.H. NO 28 & ST. FRANCIS

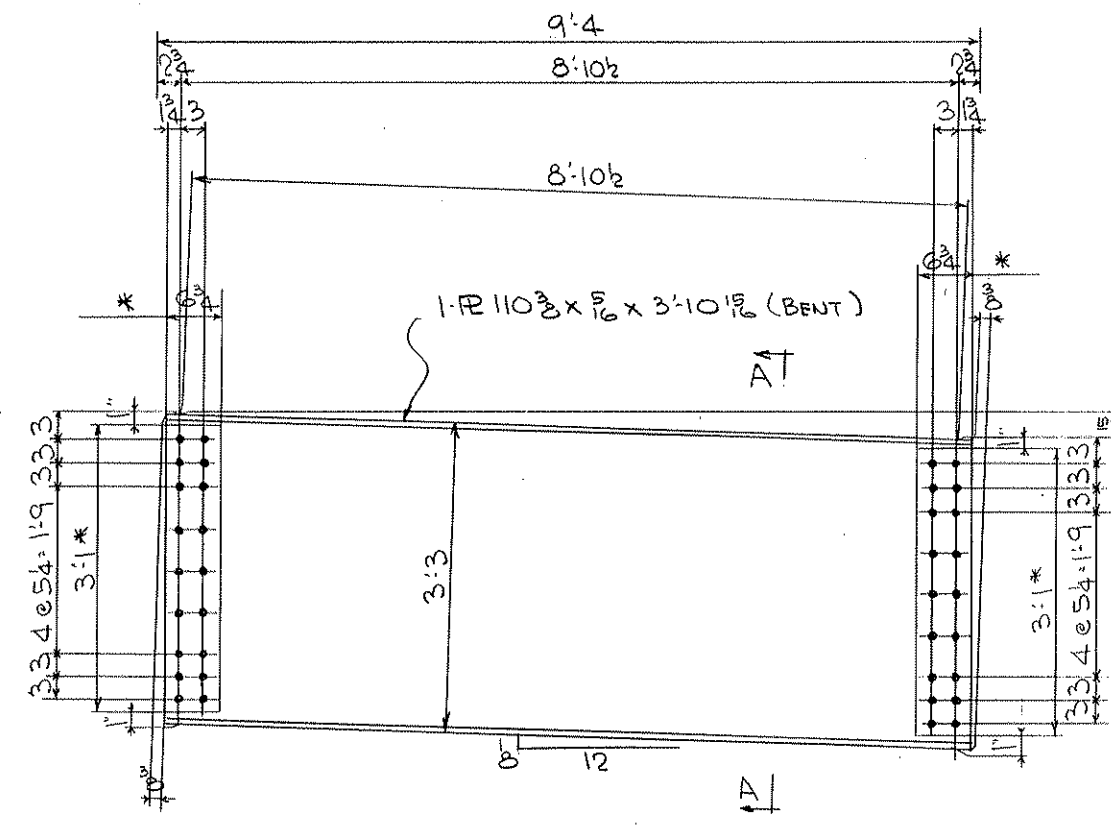
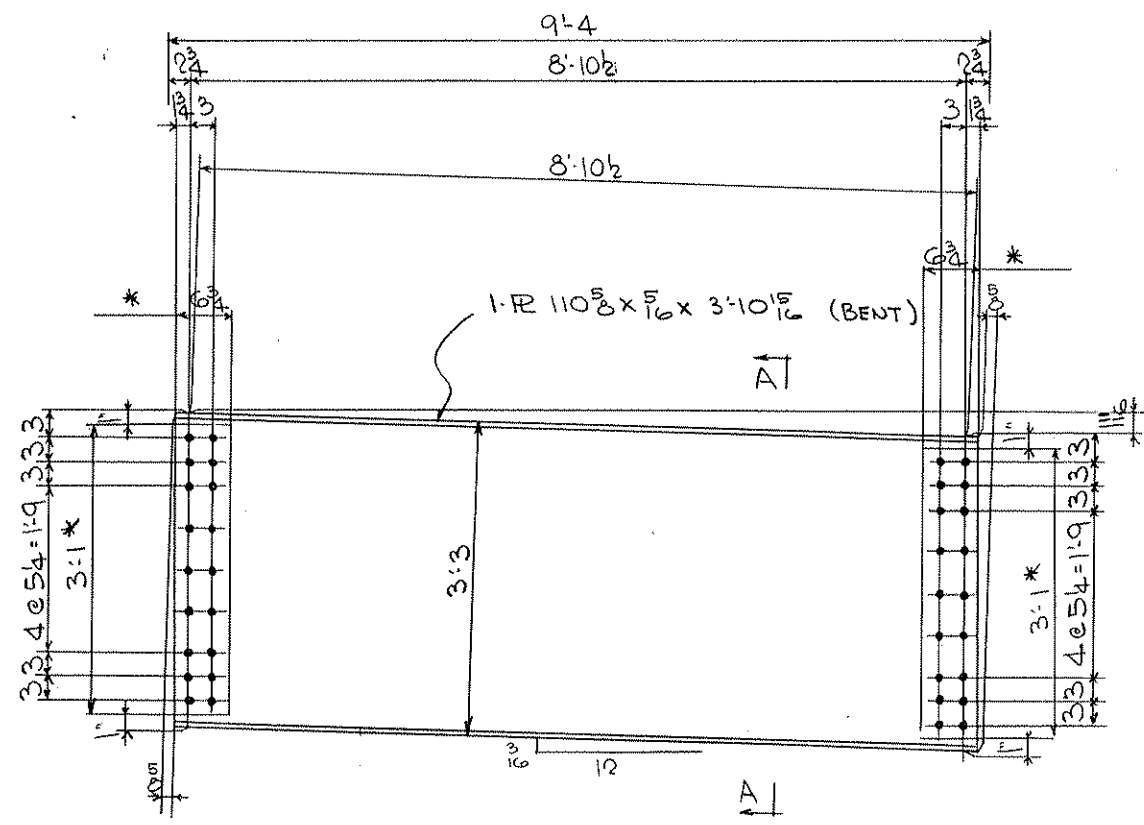
ARCHITECT OR ENGINEER ERICKSON ENGINEERING  
CONTRACTOR LUNDA CONST.

ITEM DIAPHRAGMS

RIVETS 15 MILS DRY ON CONTACT SURFACES OPEN HOLES 1/16" Φ  
PAINT SEE G01 FOR PAINT

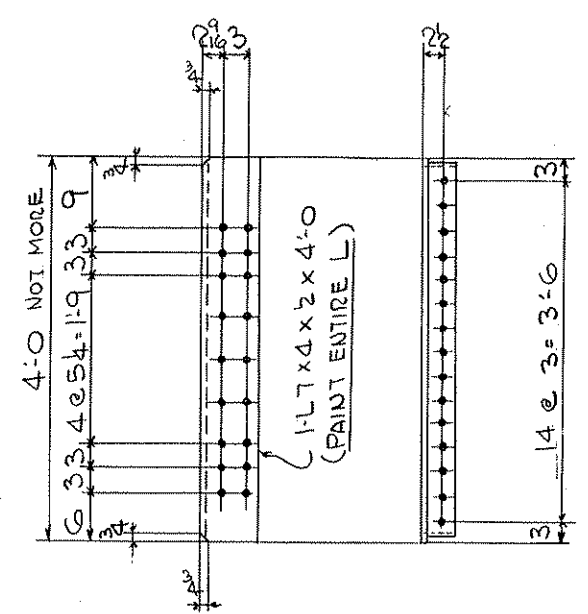
APPROVAL [Signature] DRAWN HF SHEET NO. 15 ORDER NO. A3349-17  
SHOP [Signature] CHECKED WJK

LINE NO.	NO. OF Pcs	MATERIAL		ASSEMBLING MARK	MATERIAL SPEC.	ORDER ITEM NO.	REMARKS	MATERIAL NO.	PAY ITEM
		SHAPE	LENGTH FT. IN.						
1	17	DIAPHRAGM	~ 10 1/2	16D1			460.1868 P		
2	17	R 110 3/8 x 5/16	3	10 1/2			BENT		2 24
3									
4									
5									
6	17	DIAPHRAGM	~ 10 1/2	16D2			459.1468 P		
7	17	R 110 3/8 x 5/16	3	10 1/2			BENT		2 24
8									
9									
10									
11	14	ANGLE	~ 10 1/2	16A1			71.60 P		
12	14	L 7 x 4 x 2	4	0			PAY WT. L 7 x 4 x 2		2 34
13									
14									
15	8	SOLE PLATE	~ 10 1/2	16P1			27.2249 P		
16	8	R 6 x 1	1	4					2 11
17									
18							1-16849		
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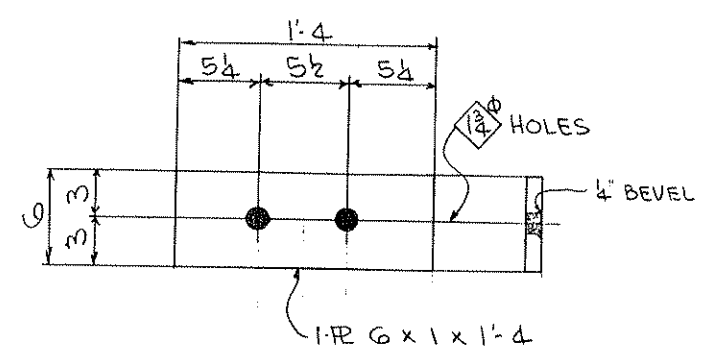
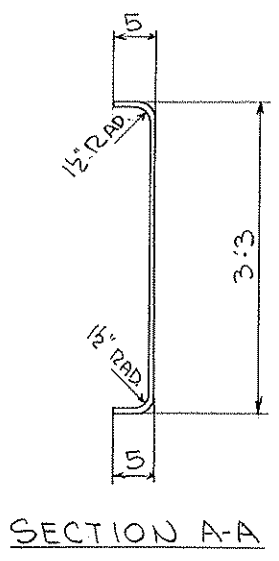


17 - DIAPHRAGMS - 16D1

17 - DIAPHRAGMS - 16D2



14 - ANGLES - 16A1



8 - SOLE PLATES - 16P1

- NOTES:
- 1) SEE SHT. NO. GNI FOR FABRICATION NOTES.
  - 2) \* INDICATES TO PAINT THIS AREA BOTH SIDES.

MINN. PROJ. NO. BHR5 6379 (11)  
S.P. No. 02-624-19

**PHOENIX STEEL INC**  
EAU CLAIRE, WISCONSIN  
- REINFORCING STEEL - STRUCTURAL STEEL - MISCELLANEOUS AND ORNAMENTAL IRON -  
STRUCTURE BRIDGE NO. 02501  
ANOKA COUNTY, MN  
LOCATION BETWEEN C.S.A.H. NO 28 & ST. FRANCIS  
ARCHITECT OR ENGINEER ERICKSON ENGINEERING  
CONTRACTOR LUNDA CONST.

REVISIONS			
NO.	DATE	REMARKS	BY

ITEM	DIAPHRAGMS
SURFACE PREP.	1/8 MILS DRY OIL CONTACT SURFACES
PAINT	SEE GNI FOR PAINT
APPROVAL	1/22/16
SHOP	1/18/16
DRAWN	HF
CHECKED	WKD
SHEET NO.	10
ORDER NO.	A3349-22