

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
796	(106-BR-4)	FORD	6	1
ILLINOIS		CONTRACT NO. 66B25		

**INDEX OF SHEETS**

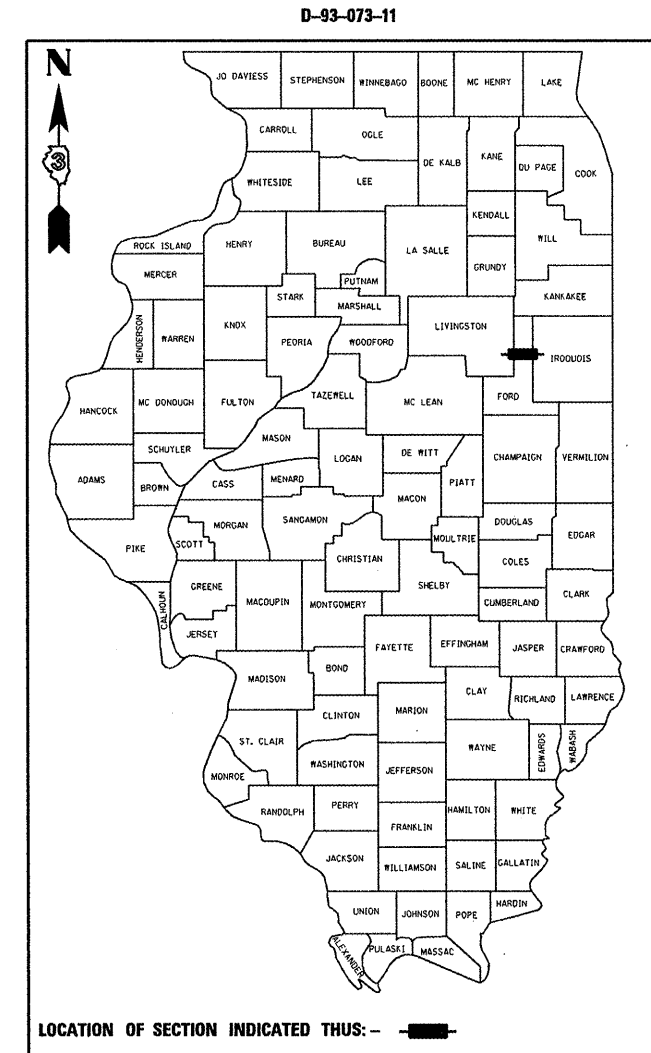
1. COVER SHEET
2. GENERAL NOTES
3. SUMMARY OF QUANTITIES
4. TYPICAL SECTION
5. GENERAL PLAN AND ELEVATION SN 027-0072
6. REPAIR DETAILS SN 027-0072

**STANDARDS**

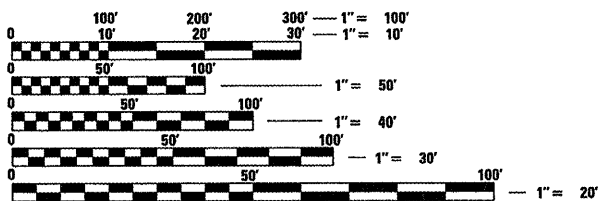
- |           |  |
|-----------|--|
| 000001-06 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                               |
| 001006    | DECIMAL OF AN INCH AND OF A FOOT   |
| 701001-02 | OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY                     |
| 701006-03 | OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE |
| 701201-04 | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS $\geq$ 45 MPH                   |
| 701301-04 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS                                |
| 701901-01 | TRAFFIC CONTROL DEVICES  |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**PROPOSED**  
**HIGHWAY PLANS**  
**FAP ROUTE 796 (IL 115)**  
**SECTION (106-BR-4)**

**BRIDGE REPAIR**  
**S.N. 027-0072**  
**FAP ROUTE 796 (IL 115) OVER**  
**THE NORTH FORK OF THE VERMILION RIVER**  
**5.07 MILES SOUTH OF IL ROUTE 116**  
**FORD COUNTY**  
**C-93-091-11**



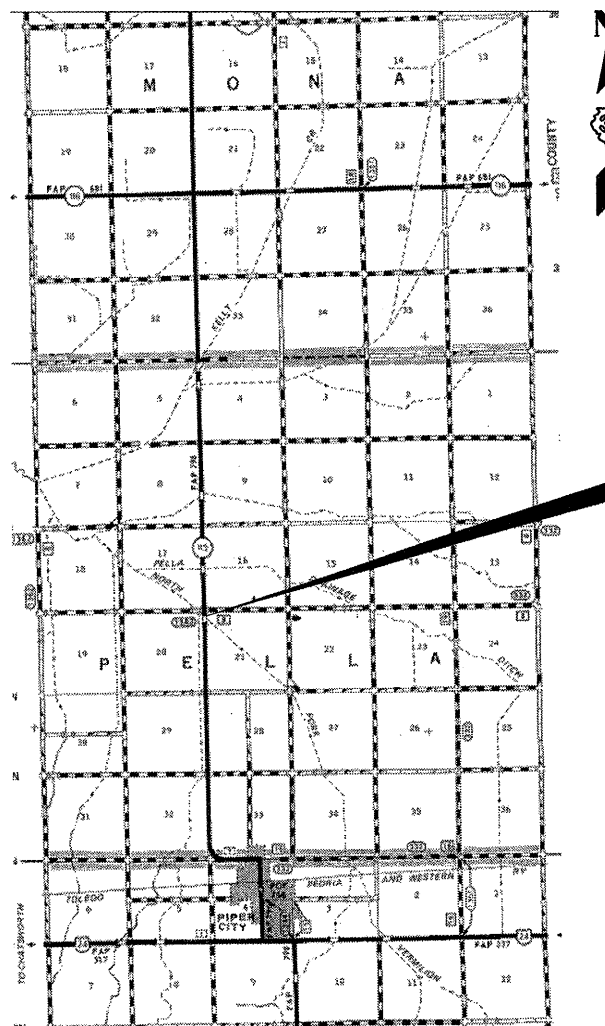
**FUNCTIONAL CLASSIFICATION**  
RURAL - MINOR ARTERIAL  
FAP RTE. 796 (IL 115)  
2009 ADT 600  
P.V. 83.33%  
S.U. 10.00%  
M.U. 6.67%



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

**PROJECT ENGINEER: JOE KANNEL P.E.**  
**UNIT CHIEF: RON WOODSHANK**  
**TOWNSHIP: PELLA**  
**CONTRACT NO. 66B25**



LOCATION MAP - NOT TO SCALE  
POINT LOCATION

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**

SUBMITTED 02/25 20 11  
Eric S. Therkelsen  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 25 20 11  
Scott E. Stett P.E.  
Acting ENGINEER OF DESIGN AND ENVIRONMENT

March 25 20 11  
Christine M. Reed  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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**OF THE STATE OF ILLINOIS**

**GENERAL NOTES**

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

COST OF REMOVAL AND RE-INSTALLATION OF ALL MEMBERS NECESSARY TO COMPLETE THE WORK AS DETAILED ON THE PLANS AND AS SPECIFIED IN THE SPECIAL PROVISIONS SHALL BE INCLUDED WITH FURNISHING AND ERECTING STRUCTURAL STEEL.

FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE CONTRACTOR SHALL CONTACT JULIE AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

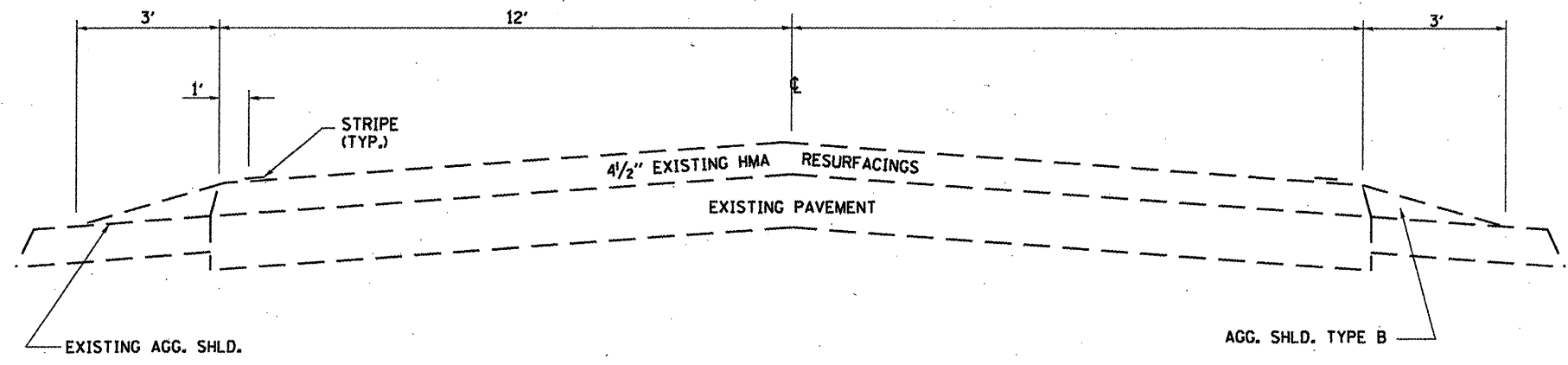
**COMMITMENTS**

1. SN 027-0072 IS RESTRICTED TO 15 TON LOAD LIMIT

DATE: 02/25/2011  
 PREPARED BY: Dave Brunker  
 DISTRICT STUDIES & PLANS ENGINEER  
 EXAMINED BY: Harbert K. Jung, Jr.  
 DISTRICT CONSTRUCTION ENGINEER  
Wayne Phillips  
 DISTRICT MATERIALS ENGINEER  
Bruce A. Huchler  
 DISTRICT OPERATIONS ENGINEER

FILE NAME =	USER NAME = woodshankr1	DESIGNED - RON. WOODSHANK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca\pwwork\pwwork\woodshankr1\02257689\66825-sh-detailed.dgn	DRAWN - RON. WOODSHANK	REVISED -	796			(106-BR-4)1	FORD	6	2	
PLOT SCALE = 100.0000' / IN.	CHECKED -	REVISED -	CONTRACT NO. 66825							
PLOT DATE = Feb 15, 2011 - 06:37:51 AM	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
				SCALE: _____ SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____						

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				100% STATE ROADWAY	0014 RURAL
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	13840	13840	
67100100	MOBILIZATION	L SUM	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	

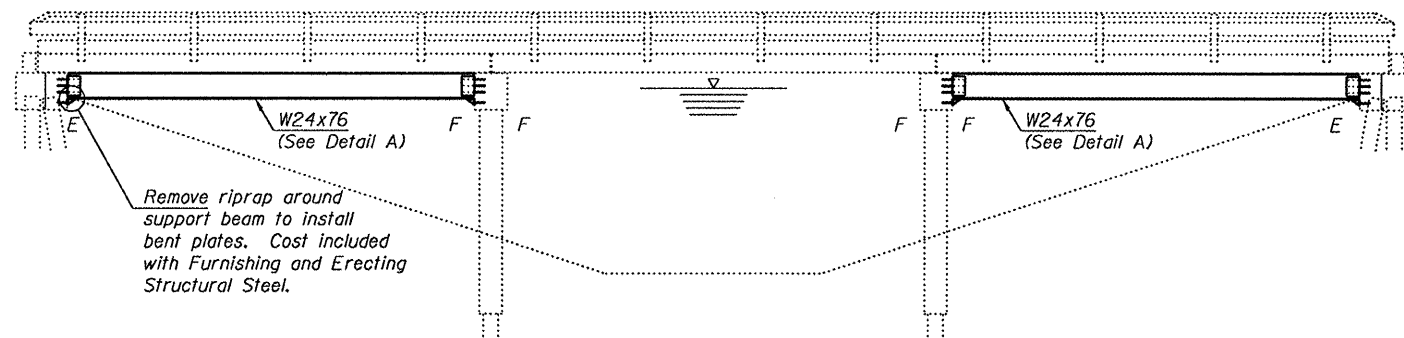


**TYPICAL SECTION**

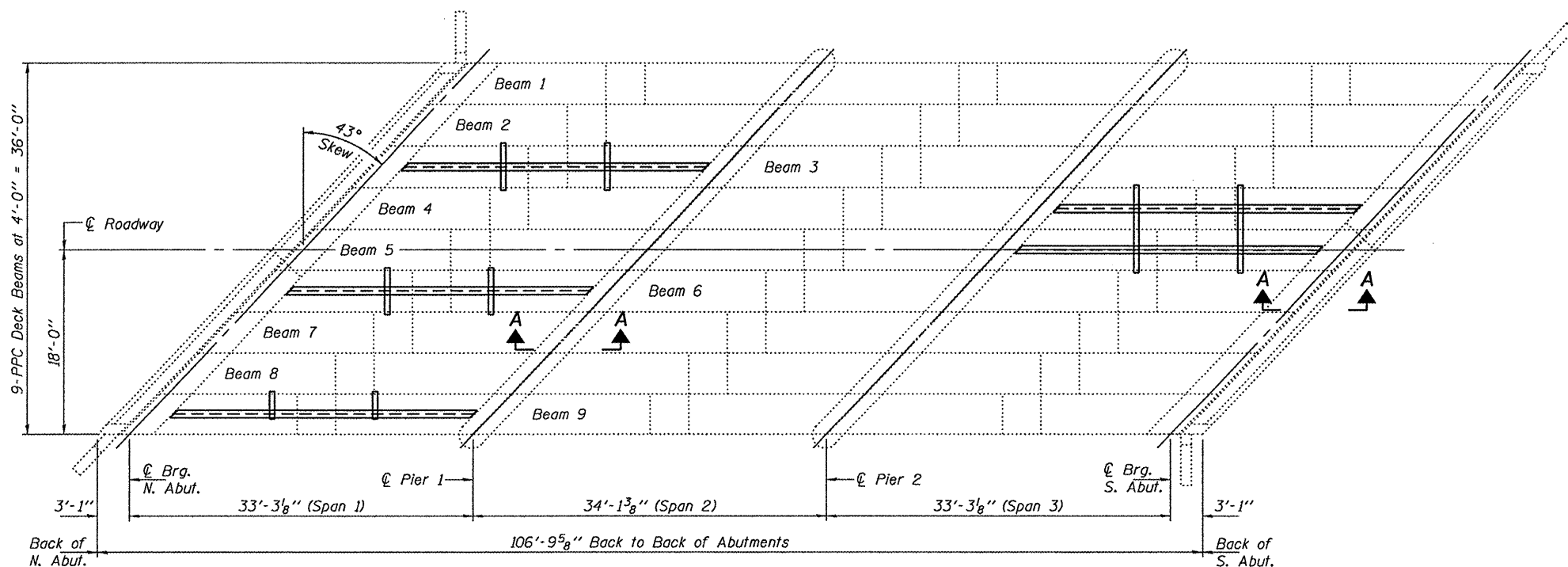
FILE NAME =	USER NAME = woodshankr1	DESIGNED - RQN_WOODSHANK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL ROADWAY SECTION	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
of:\pwork\pwork\woodshankr1\d0257809\068825-shk-detail.dgn	DRAWN - RQN_WOODSHANK	REVISED -	796			{06-BR-4}	FORD	6	4	
PLOT SCALE = 1/8" = 1'-0"	CHECKED -	REVISED -	CONTRACT NO. 66B25							
PLOT DATE = Feb 15, 2011 - 09:39:21 AM	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
				SCALE: _____	SHEET NO. 1 OF 1 SHEETS	STA. _____ TO STA. _____				

\* Contractor is to verify beam length prior to ordering material. Other sections meeting the section modulus requirements shown may be allowed subject to approval by the Bureau of Bridges and Structures. Maximum Girder depth = 36". No additional payment will be allowed if the contractor chooses a heavier steel section than the one specified in the plans. (Min.  $S_x = 176 \text{ in}^3$ )

Note A:  
 ☉ Transverse tie  $\bar{r}$ 's (2 per span). Place additional shims at midpoints between tie  $\bar{r}$ 's. Securely weld shims to top flange of support beam. Minimum shim size is 6" x flange width.



ELEVATION



PLAN

**GENERAL NOTES**

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

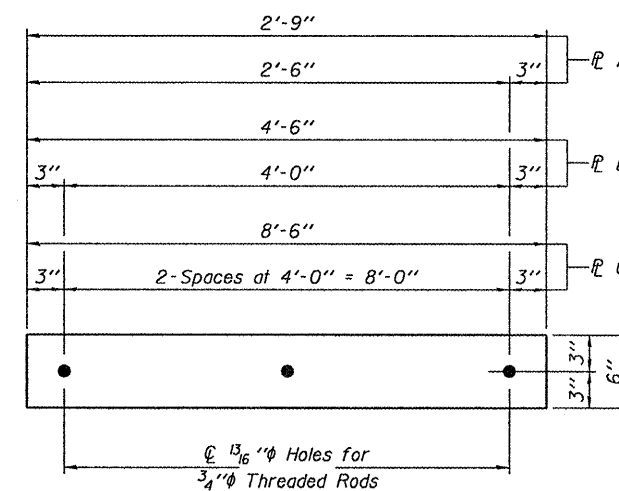
The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures.

See Section 584 of the Standard Specifications for Epoxy Grouting of Threaded Rods; Minimum embedment 9".

If the contractor's procedure for placement of beams involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the existing beams. To distribute load to multiple beams and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams.

The cost of epoxy grouting threaded rods on the pier cap, abutments and beams shall be included with Furnishing and Erecting Structural Steel.

The Contractor has the option of using used steel. See Special Provisions.

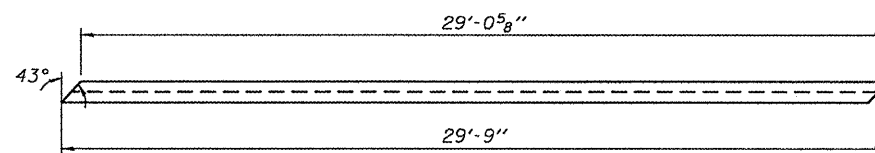


**TRANSVERSE TIE  $\bar{r}$ 'S**

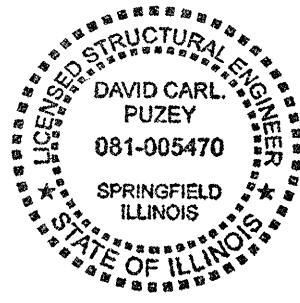
- $\bar{r}$  A  $\frac{1}{2}$ " x 2'-9" x 6" (2 Req'd)
- $\bar{r}$  B  $\frac{1}{2}$ " x 4'-6" x 6" (4 Req'd)
- $\bar{r}$  C  $\frac{1}{2}$ " x 8'-6" x 6" (2 Req'd)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	13840



DETAIL A



Expires: November 30, 2012

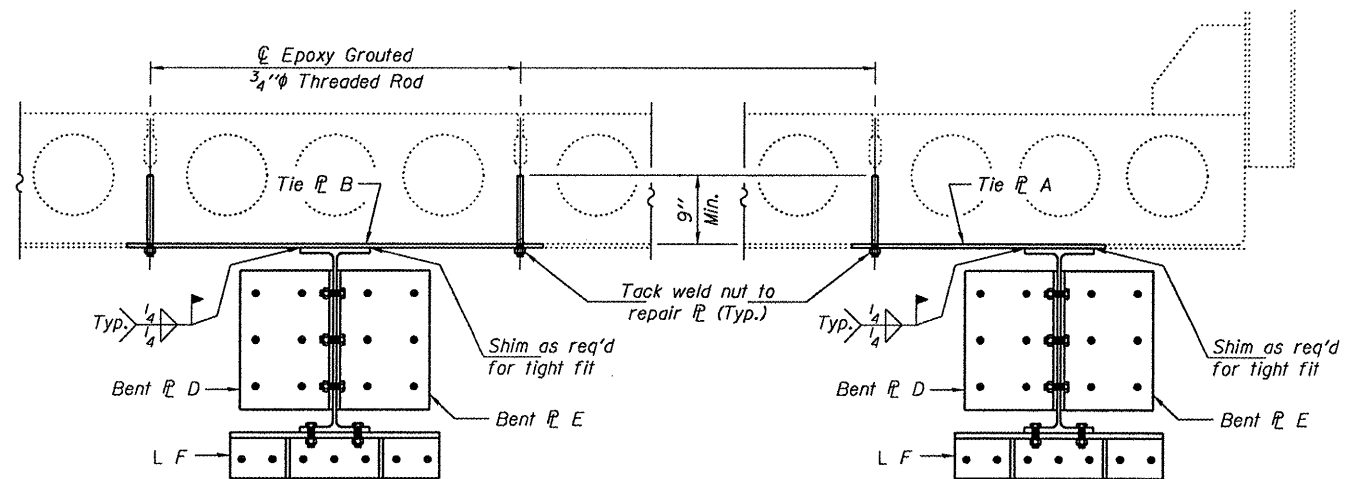
DESIGNED - Adrian T. Holloway	EXAMINED - Jay F. Hoff	DATE - MARCH 15, 2011
CHECKED - Victor H. Valitz	PASSED - David Carl Puzey	
DRAWN - Kyle M. Steffen		
CHECKED - ATH		

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

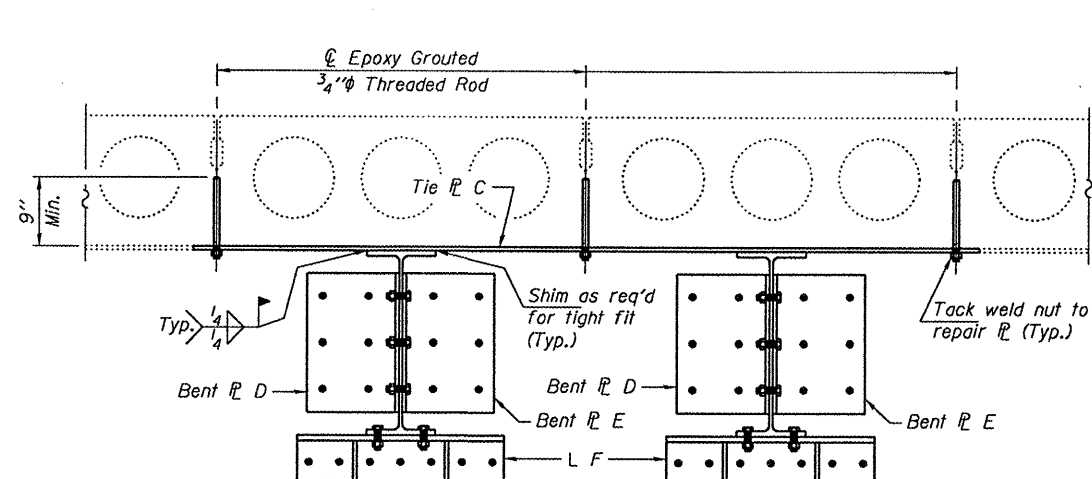
GENERAL PLAN & ELEVATION  
 SN 027-0072

SHEET NO. 1 OF 2 SHEETS

F.A. RTE. 796	SECTION 1106-BR-411	COUNTY FORD	TOTAL SHEETS 6	SHEET NO. 5
			CONTRACT NO. 66B25	
ILLINOIS FED. AID PROJECT				

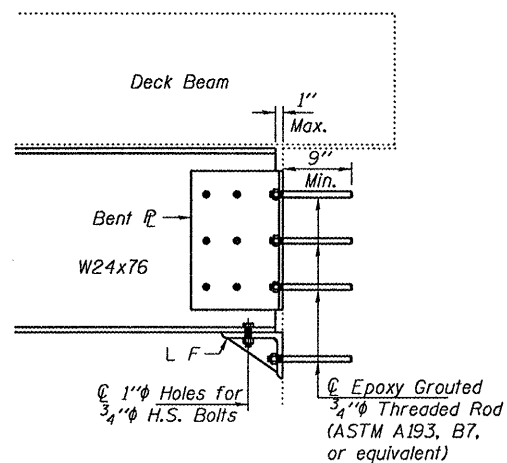


**TYPICAL SECTION THRU SPAN 1, BEAMS 3 & 6**

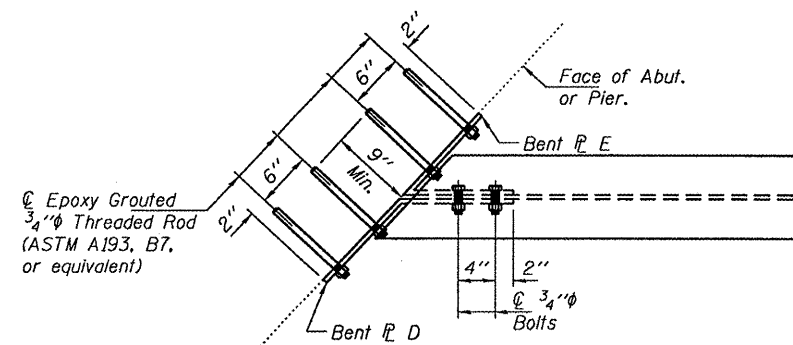


**SECTION THRU SPAN 1, BEAM 9**

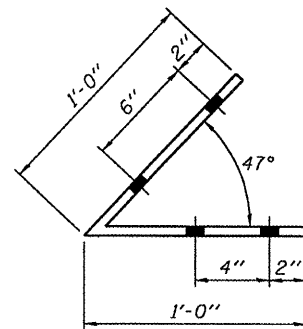
**SECTION THRU SPAN 3, BEAMS 4 & 5**



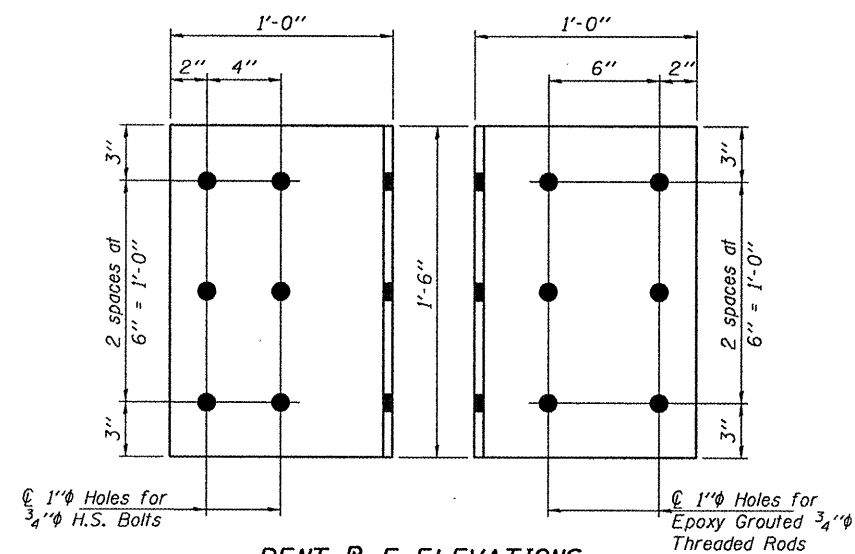
**SECTION A-A**



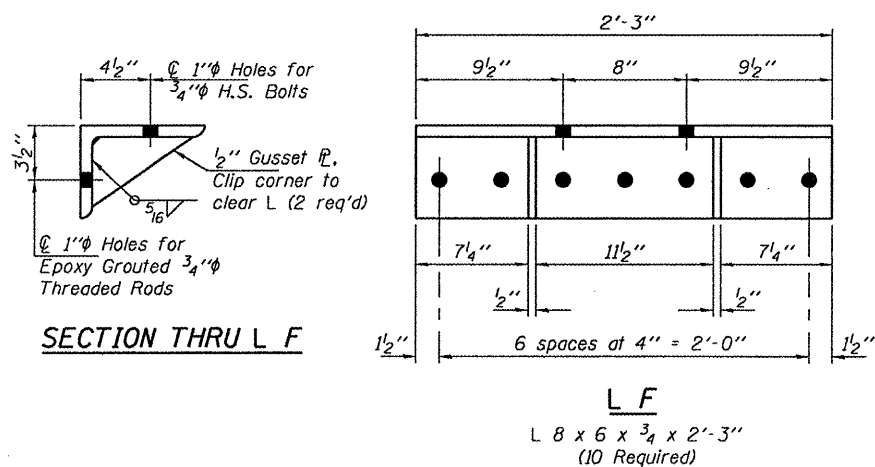
**TYPICAL SECTION AT END OF SUPPORT BEAMS**



**BENT P E**  
1/2" x 1'-6" x 2'-0" (10 Required)

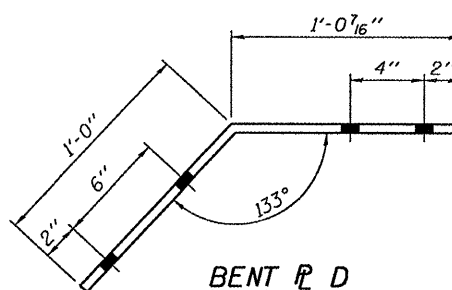


**BENT P E ELEVATIONS**

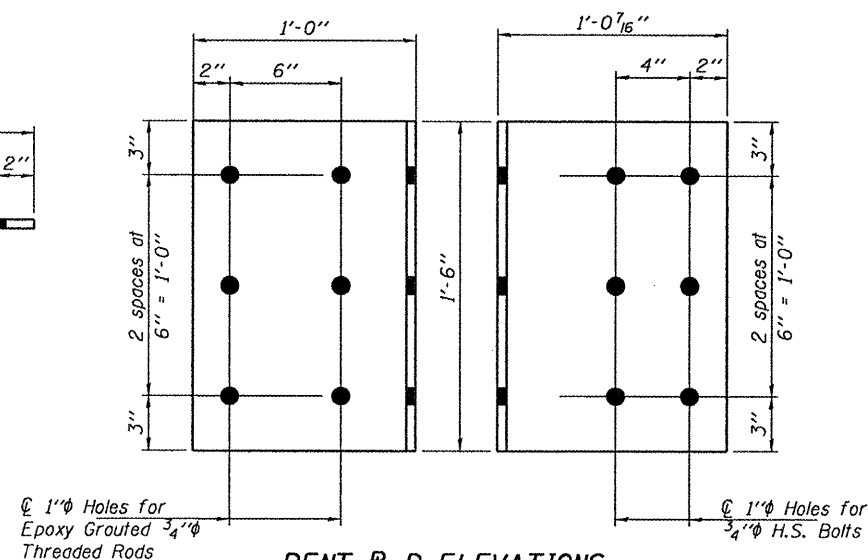


**SECTION THRU L F**

**L F**  
L 8 x 6 x 3/4 x 2'-3" (10 Required)



**BENT P D**  
1/2" x 1'-6" x 2'-0 7/16" (10 Required)



**BENT P D ELEVATIONS**

DESIGNED - ATH	EXAMINED - <i>James F. J. [Signature]</i>	DATE - MARCH 15, 2011
CHECKED - VHV	ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN - Kyle M. Steffen	PASSED - <i>[Signature]</i>	
CHECKED - ATH VHV	ACTING ENGINEER OF BRIDGES AND STRUCTURES	

DESIGNED - ATH	EXAMINED - <i>James F. J. [Signature]</i>	DATE - MARCH 15, 2011
CHECKED - VHV	ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN - Kyle M. Steffen	PASSED - <i>[Signature]</i>	
CHECKED - ATH VHV	ACTING ENGINEER OF BRIDGES AND STRUCTURES	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REPAIR DETAILS  
SN 027-0072**

SHEET NO. 1 OF 2 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
796	(106-BR-41)	FORD	6	6
			CONTRACT NO. 66B25	
ILLINOIS FED. AID PROJECT				