

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
587	(22BR)I	BUREAU	6	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 66830		

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

**PROPOSED  
HIGHWAY PLANS**

**FAP ROUTE 587 (US 34)  
SECTION (22BR)I**

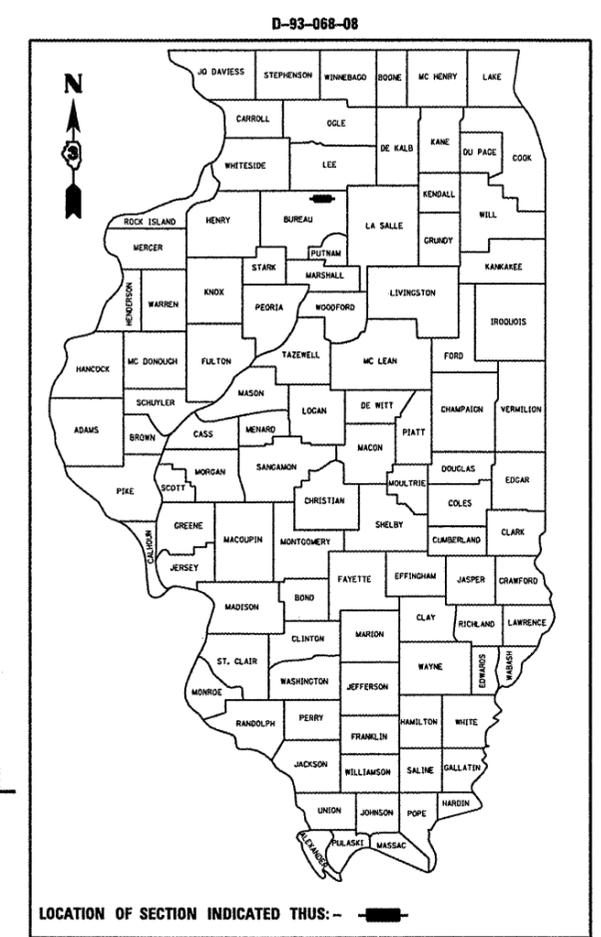
**BUREAU COUNTY  
C-93-101-08  
DECK SLAB SUPPORT**

INDEX OF SHEETS

1. COVER SHEET
2. GENERAL NOTES
3. SUMMARY OF QUANTITIES
4. TYPICAL SECTION
5. PLAN AND ELEVATION - SN 053-0050
6. REPAIR DETAILS

STANDARDS

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



**FUNCTIONAL CLASSIFICATION**  
RURAL - MINOR ARTERIAL  
F.A.P. ROUTE 587 (US 34)  
2007 ADT = 1850  
P.V = 89.2%    M.U. = 5.4%    S.U. = 5.4%

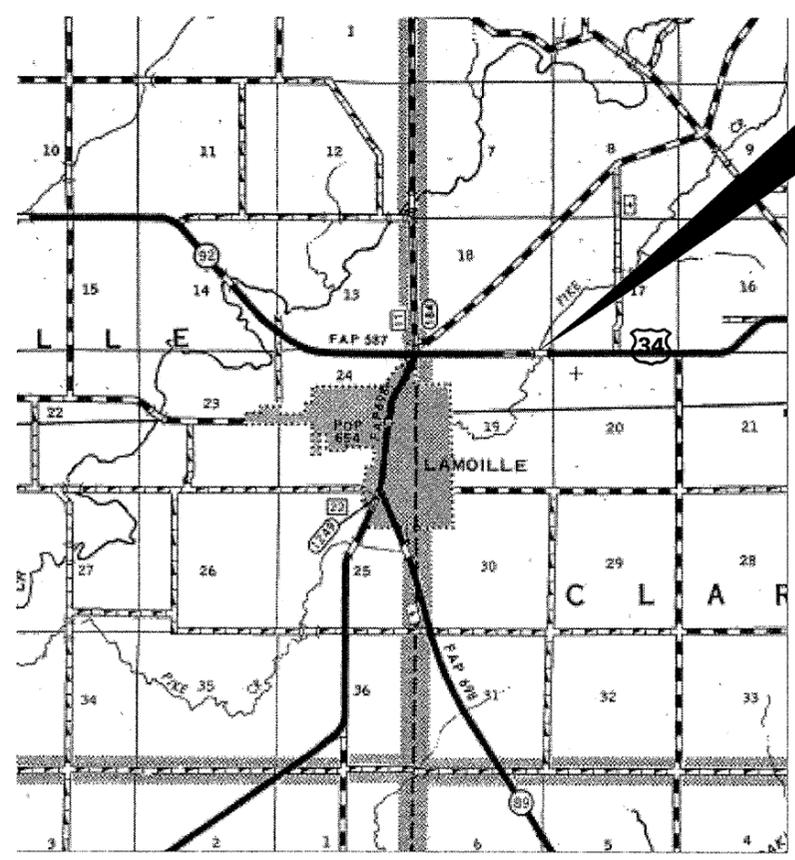
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED 3/27 2008

*George J. Reed*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 9, 2008  
*Eric E. Hawn*  
ENGINEER OF DESIGN AND ENVIRONMENT

May 9, 2008  
*Christine M. Reed*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER



**PROJECT LOCATION**  
SN 006-0147  
1.0 MILE NORTHEAST  
OF LAMOILLE

**LOCATION MAP**

NOT TO SCALE  
POINT LOCATION

MICROFILMED \_\_\_\_\_  
REEL NUMBER \_\_\_\_\_  
AWARDED \_\_\_\_\_  
RESIDENT ENGINEER \_\_\_\_\_  
AS BUILT CHANGES WERE MADE  
ON THE FOLLOWING SHEETS \_\_\_\_\_

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

**PROJECT ENGINEER : JOE KANNEL  
UNIT CHIEF : RON WOODSHANK**

**CONTRACT NO. 66830**

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE 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 THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY FURNISHED BASED UPON THE UNIT BID PRICE FOR THE WORK.

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

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE "JULIE" NUMBER IS 1-800-892-0123. A MINIMUM OF FORTY-EIGHT (48) HOURS ADVANCE NOTICE IS REQUIRED.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

THE EXISTING SHOULDERS ARE LOW. IN THE EVENT THAT CONSTRUCTION OPERATIONS RESULT IN A DROP OFF GREATER THAN 3" BETWEEN THE EDGE OF PAVEMENT OR EDGE OF SHOULDER WITHIN 3' OF THE EDGE OF PAVEMENT AND THE EARTH OR AGGREGATE SHOULDERS, THEN THE DROP OFF SHALL BE PROTECTED ACCORDING TO ARTICLE 701.04(B)(1) OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES FOR TRAFFIC CONTROL.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION WIDENING.

DATE: 3-25-08  
 PREPARED BY: [Signature]  
 DISTRICT STUDIES & PLANS ENGINEER  
 EXAMINED BY: [Signature]  
 DISTRICT CONSTRUCTION ENGINEER  
[Signature]  
 DISTRICT MATERIALS ENGINEER  
[Signature]  
 DISTRICT OPERATIONS ENGINEER

FILE NAME =	USER NAME = woodshankr1	DESIGNED - RON WOODSHANK	REVISED -
c:\projects\deck beam repl 006-01	7.dgn	DRAWN - RON WOODSHANK	REVISED -
	PLOT SCALE = 103.4029' / IN.	CHECKED -	REVISED -
	PLOT DATE = Mar 24, 2008 - 07:49:14 AM	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES**

SCALE: \_\_\_\_\_ SHEET NO. 1 OF 1 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
587	(22BR1)	BUREAU	6	2
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 66830	

# SUMMARY OF QUANTITIES

CONSTRUCTION CODE TYPE: SFTY-2A

RURAL  
100% STATE  
TOTAL  
QUANTITY

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	30,100
67100100	MOBILIZATION	L SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1

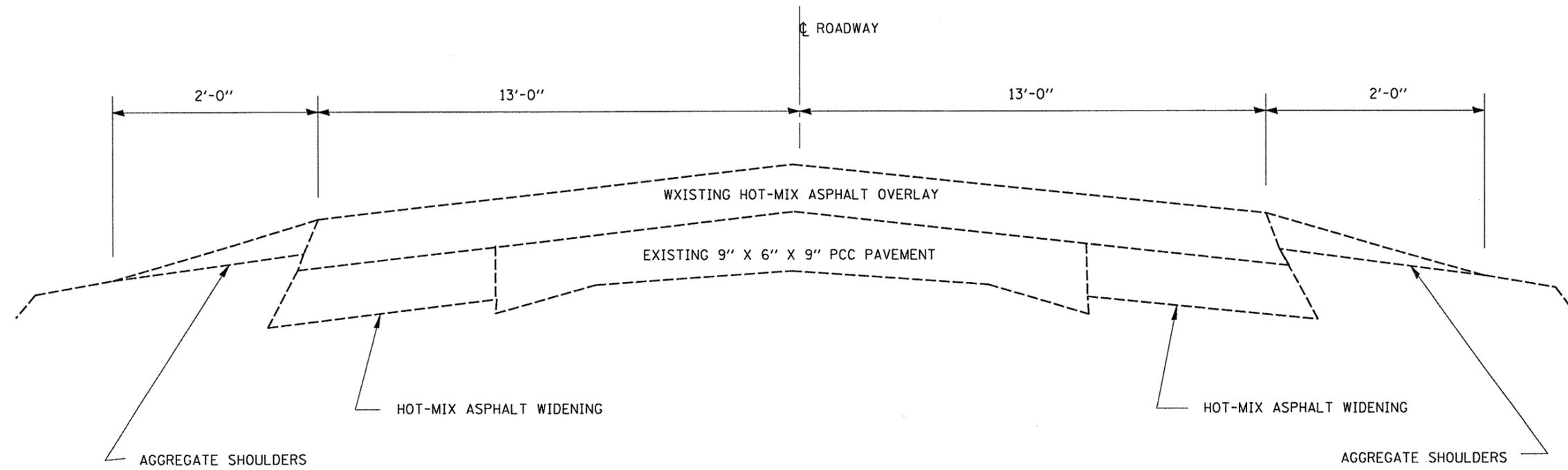
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	PLOT DATE = Mar 27, 2000 - 11:52:03 AM	DATE - ---	REVISED - ---

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

## SUMMARY OF QUANTITIES

SCALE: \_\_\_\_\_ SHEET NO. 1 OF 1 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
587	(22BR)I	BUREAU	6	3
CONTRACT NO. 66830				
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT				



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	PLOT DATE = Mar 24, 2008 - 07:49:25 AM	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TYPICAL SECTION</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		587	(22BR1)	BUREAU	6	4
SCALE: _____	SHEET NO. 1 OF 1 SHEETS	STA. _____	TO STA. _____	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
587	(22BR1)	BUREAU	6	4
CONTRACT NO. 66830				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 587		BUREAU	6	5
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

Contract Number: 66830

\* 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 = 27" for Spans 1 & 2 and 27" for Span 3. No additional payment will be allowed if the contractor chooses a heavier steel section than the one specified in the plans. (Min  $S_x = 214 \text{ in}^3$  for Spans 1 & 2 and  $111 \text{ in}^3$  for Span 3)

**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 routine 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 based upon the unit price bid for the work.

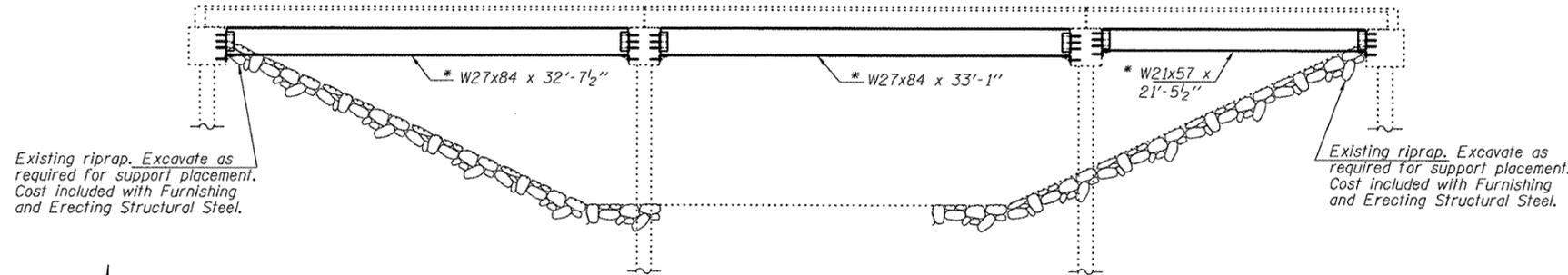
The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures.

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

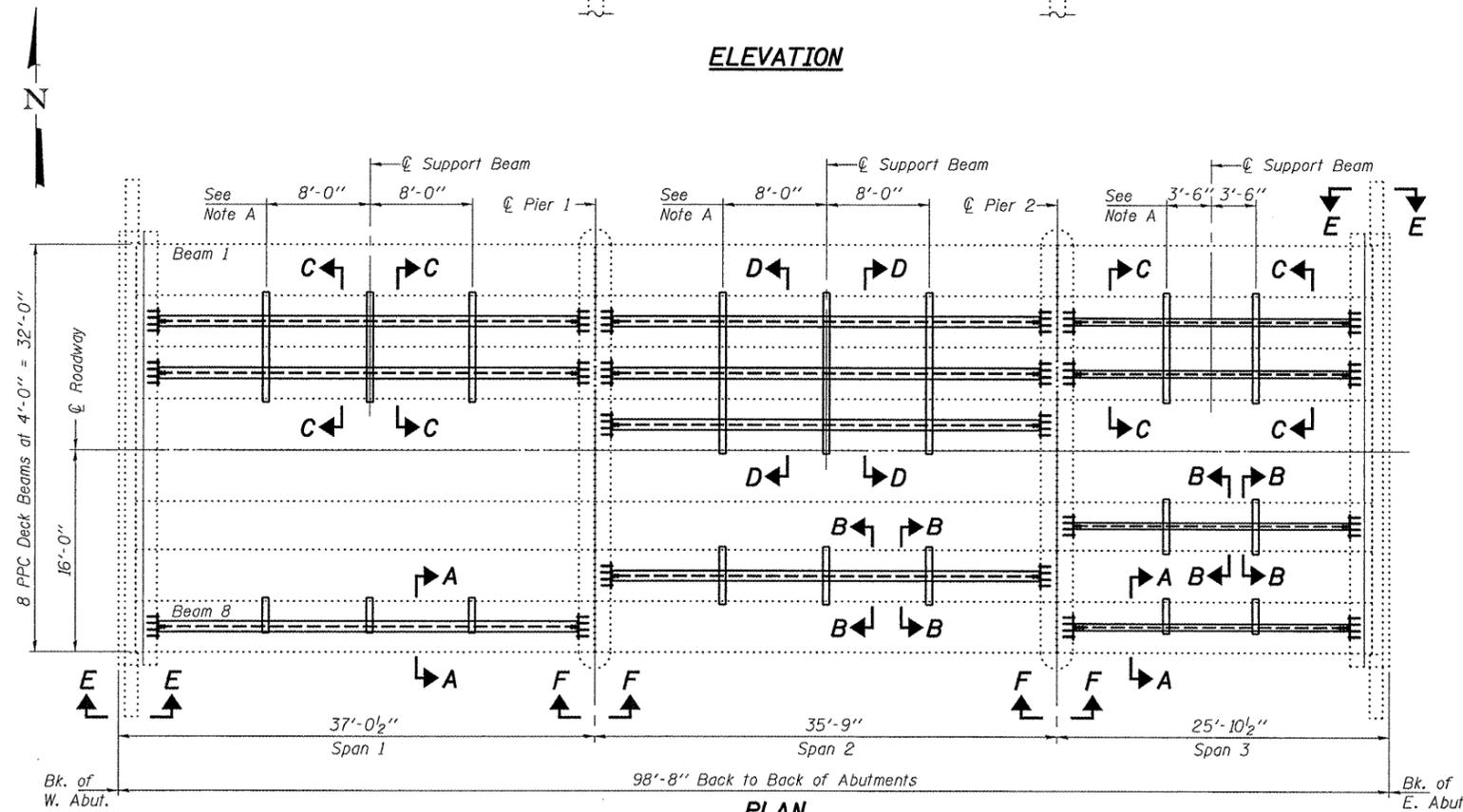
If the contractor's procedure for placement of beams involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying 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.

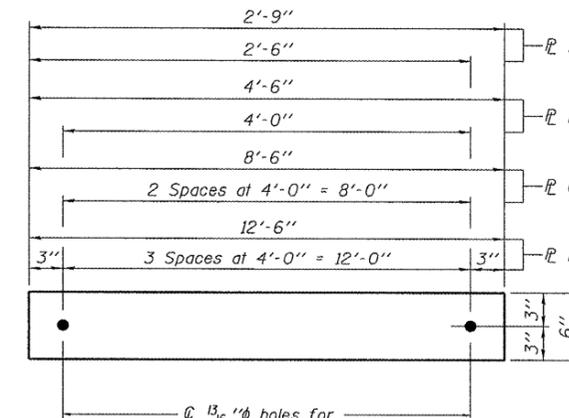
The Contractor has the option of using used steel. See Special Provisions.



**ELEVATION**



**PLAN**



**TRANSVERSE TIE R'S**

- R A 1/2" x 2'-9" x 6" (5 Req'd)
- R B 1/2" x 4'-6" x 6" (5 Req'd)
- R C 1/2" x 8'-6" x 6" (5 Req'd)
- R D 1/2" x 12'-6" x 6" (3 Req'd)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	30100

**PLAN & ELEVATION**  
**F.A. RT. 587 OVER**  
**PIKE CREEK**  
**BUREAU COUNTY**  
**SN 006-0147**

NOTE A:  
① Transverse tie R's (3 per spans 1 & 2, and 2 per span 3). Place additional shims at midpoints between tie R's. Securely weld shims to top flange of support beam. Minimum shim size is 6" x flange width.

DESIGNED	<i>Victor H. Vojta</i>	APRIL 15, 2008
CHECKED	<i>Steffen</i>	EXAMINED <i>Ralph E. Anderson</i>
DRAWN	Steffen	PASSED <i>Ralph E. Anderson</i>
CHECKED	VKV DAB	ENGINEER OF BRIDGES AND STRUCTURES



Expires: November 30, 2008

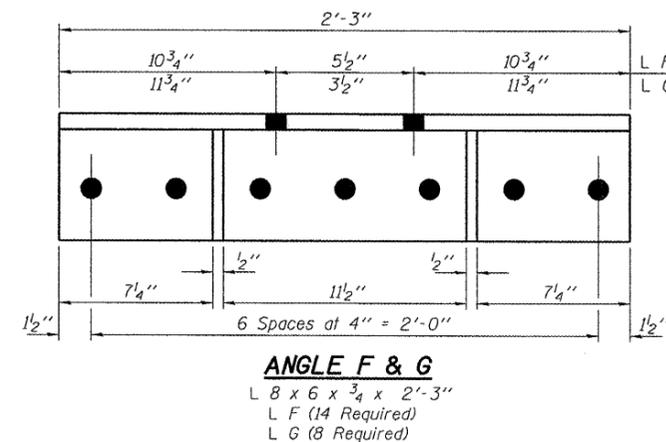
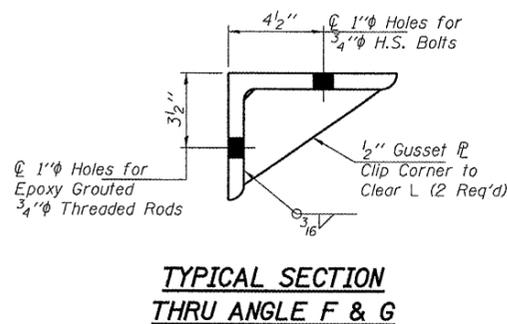
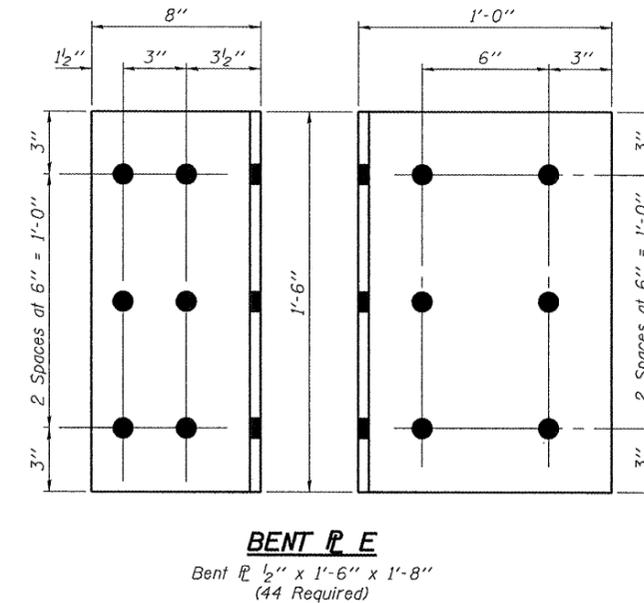
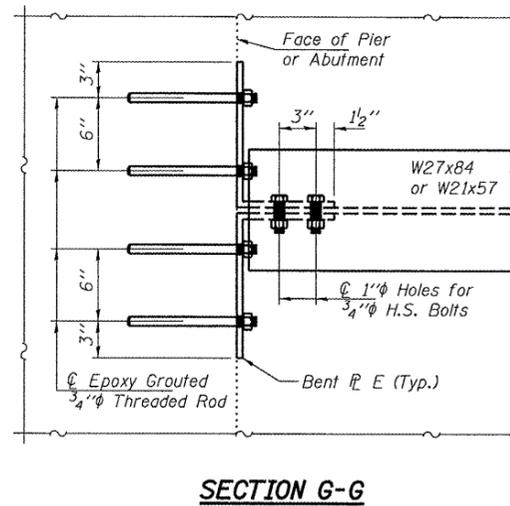
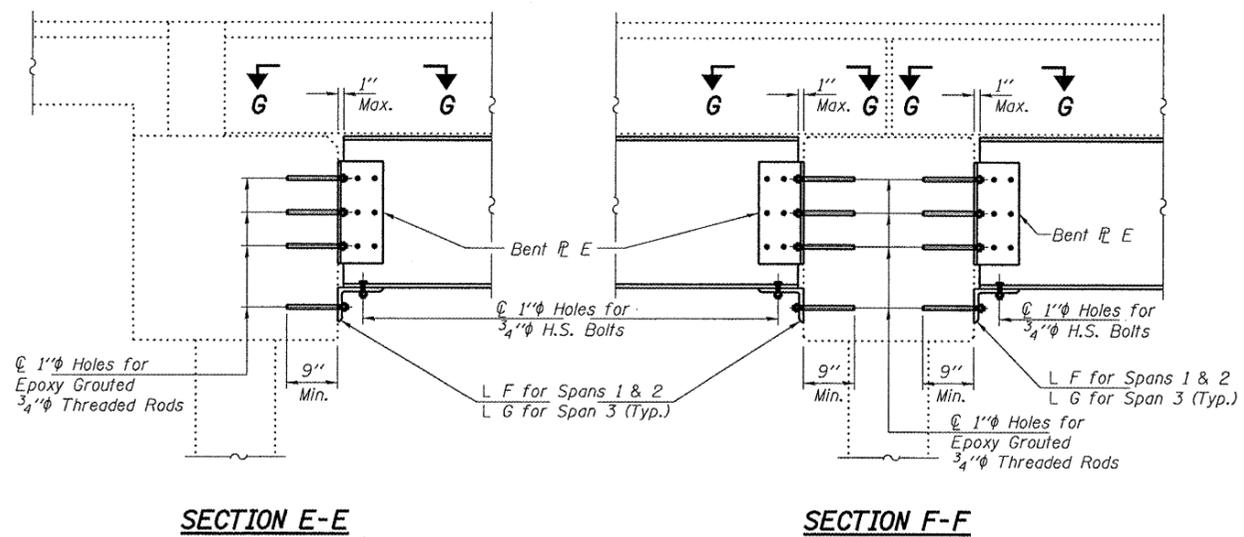
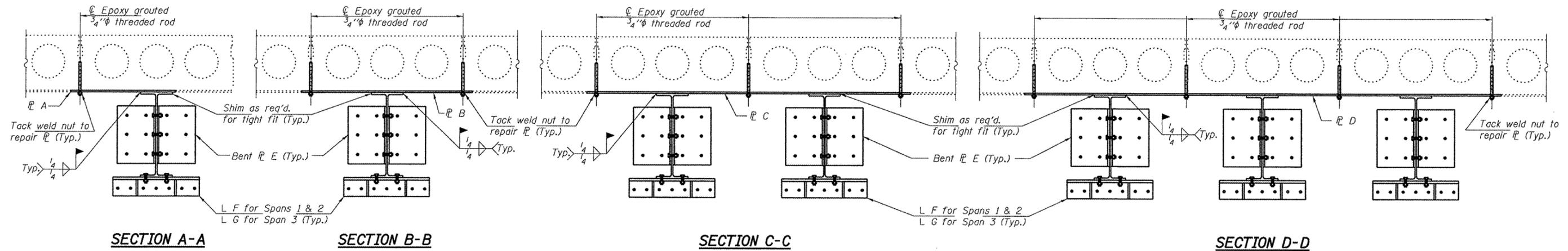
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 587		BUREAU	6	6
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 2

2 SHEETS

Contract Number: 66830



DESIGNED	VHV
CHECKED	DAB
DRAWN	Steffen
CHECKED	VHV DAB

APRIL 15, 2008  
EXAMINED *Carl Provey*  
ENGINEER OF STRUCTURAL SERVICES  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

REPAIR DETAILS  
F.A. RT. 587 OVER  
PIKE CREEK  
BUREAU COUNTY  
SN 006-0147