

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
828	D7 BEAM REPAIR 2009-1	Cumberland	6	1
ILLINOIS CONTRACT NO. 74384				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

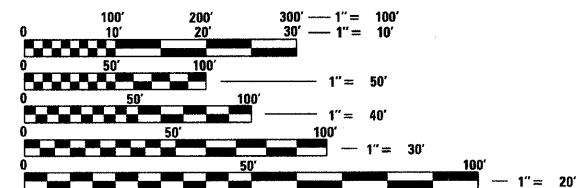
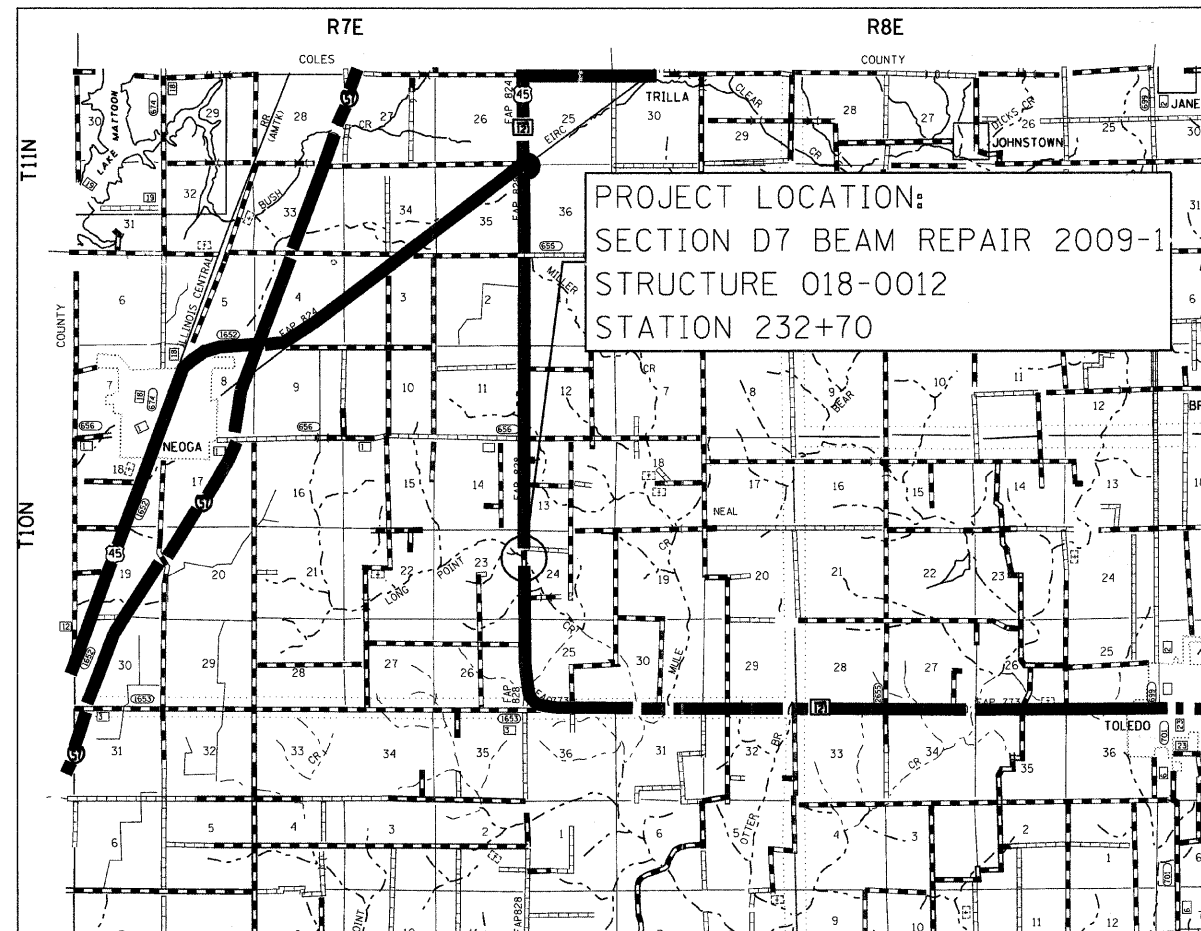
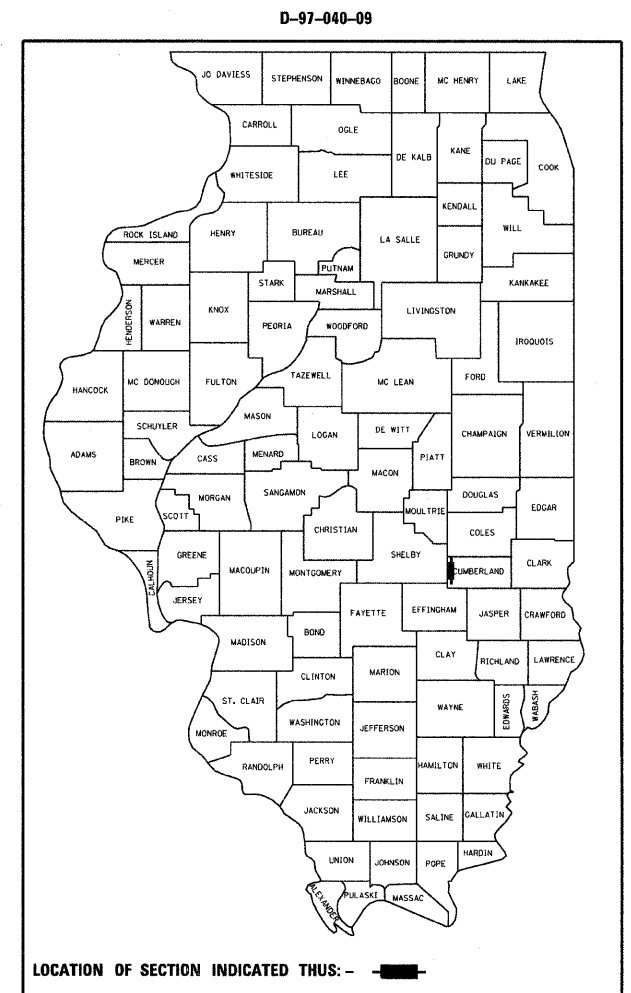
**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 828 (IL 121)
SECTION D7 BEAM REPAIR 2009-1

CUMBERLAND COUNTY

C-97-070-09

FOR INDEX OF SHEETS, SEE SHEET NO. 2



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: MARK DAUGHERTY
PROJECT MANAGER: BRIAN J. BIERMAN

CONTRACT NO. 74384

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED February 9, 2009

Robert L. Dunkel
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 27, 2009
Charles J. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT

March 27, 2009
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO THE CONSTRUCTION OR ORDERING OF MATERIAL. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION OR A CHANGE IN THE SCOPE OF THE WORK. THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

INDEX OF SHEETS

SHEET NO.	ITEM
1	COVER SHEET
2	GENERAL NOTES AND INDEX OF SHEETS
3	SUMMARY OF QUANTITIES
4	TYPICAL SECTION AND PLAN VIEW
5-6	BRIDGE PLANS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 6:

STD. NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-03	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701901-01	TRAFFIC CONTROL DEVICES

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES & INDEX OF SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*FILE#		DRAWN -	REVISED -			828	D7 BEAM REPAIR 2009-1	Cumberland	6	2
		CHECKED -	REVISED -			CONTRACT NO. 74384				
		DATE -	REVISED -			SCALE:	SHEET NO.	OF	SHEETS	STA.

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT		SFTY-2A 100% STATE	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5450	5450	
67100100	MOBILIZATION	L SUM	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.P. RTE. 828	SECTION D7 BEAM REPAIR 2009-1	COUNTY Cumberland	TOTAL SHEETS 6	SHEET NO. 3
		DRAWN -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	
		CHECKED -	REVISED -		CONTRACT NO. 74384							
		DATE -	REVISED -									

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* Contractor is to verify beam length prior to ordering material. (See Detail A). Other sections meeting the section modulus requirements shown may be allowed subject to approval by the Bureau of Bridges and Structures, however, no additional payment will be allowed if the contractor chooses a heavier steel section than the one specified in the plans.
Maximum girder depth = 33", Min. Sx = 304 in³.

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.

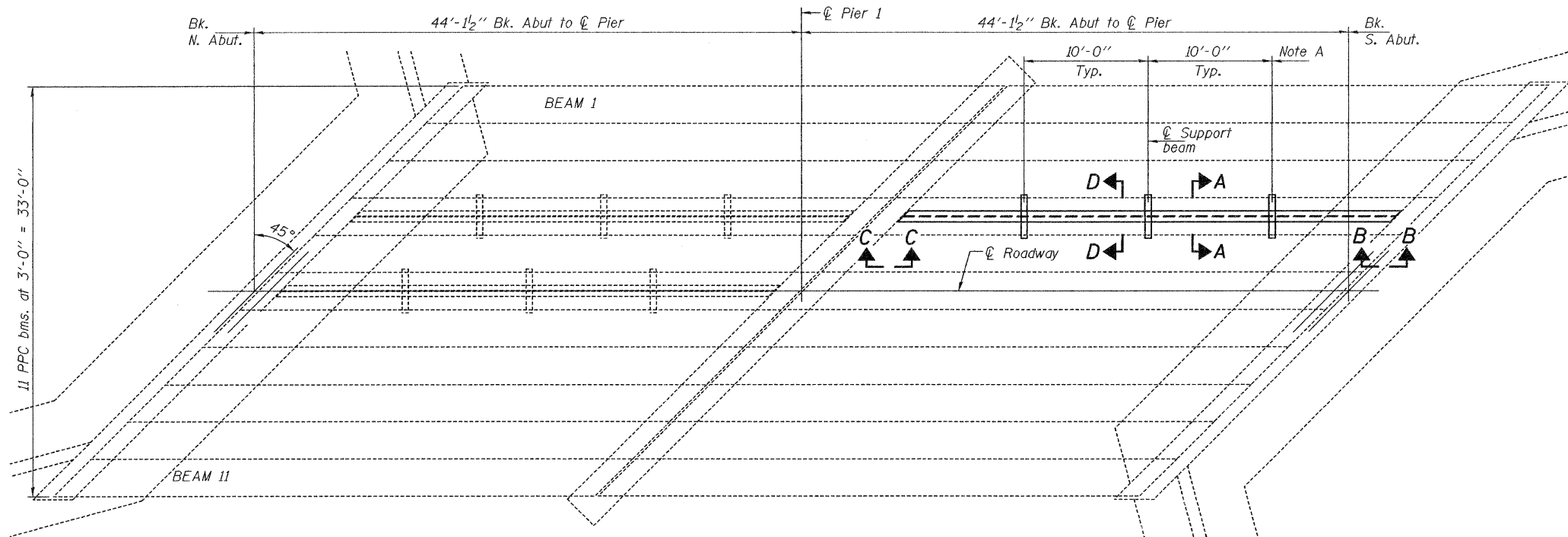
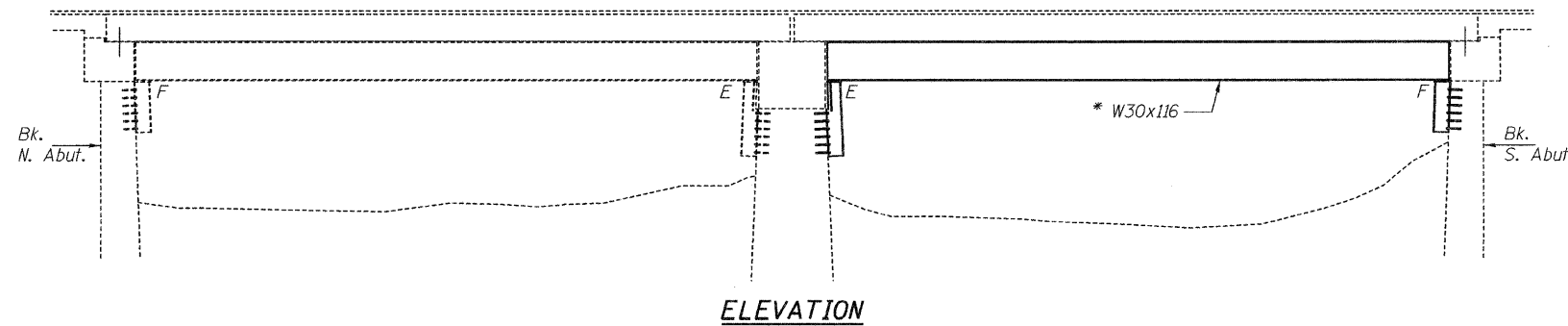
See Section 584 of the Standard Specifications for Epoxy Grouting of Threaded Rods.

The cost of epoxy grouting threaded rods shall be included with Furnishing and Erecting Structural Steel.

The Contractor has the option of using used steel. See special provisions.

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.

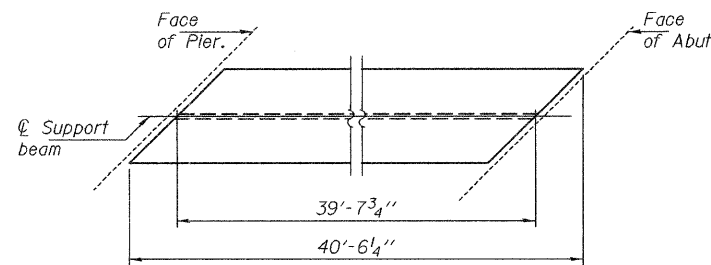
If the contractor's procedure for placement of beams involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying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



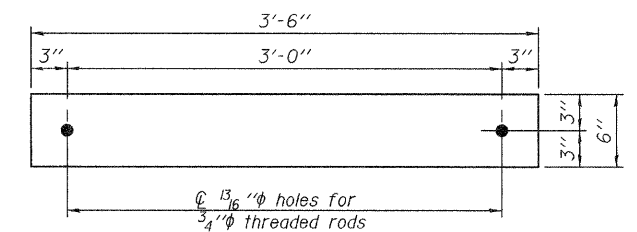
PLAN

See sheet 2 of 2 for Sections.

Note A:
☉ Transverse tie plates. Place additional shims at midpoints between tie plates. Securely weld shims to top flange of support beam. Minimum shim size is 6" x flange width.



DETAIL A



TRANSVERSE TIE P'S

P A 1/2" x 3'-6" x 6" (3 Req'd)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	5450

**PLAN AND ELEVATION
FAP 828 OVER LONG POINT CREEK
SN 018-0012**

DESIGNED	Victor H. Volitz
CHECKED	Raimundo Baliva
DRAWN	baliva
CHECKED	VHV

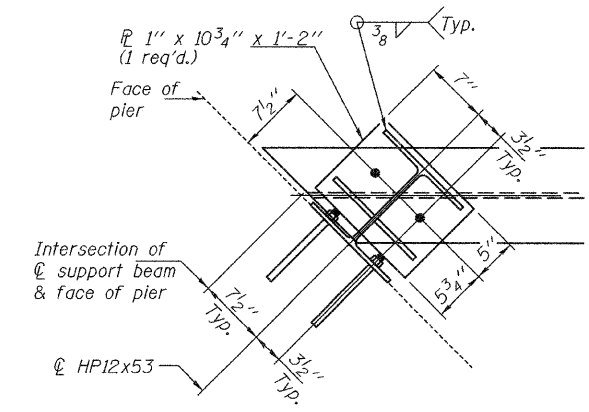
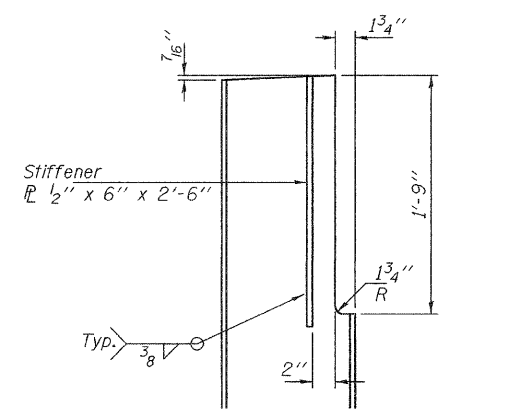
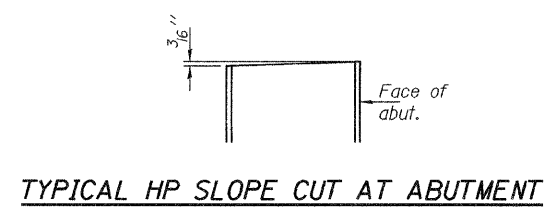
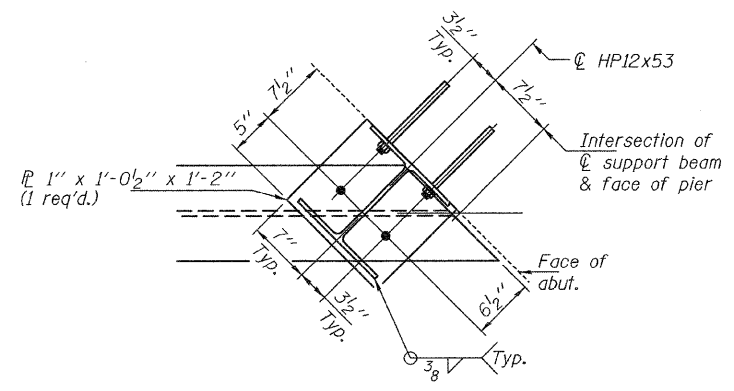
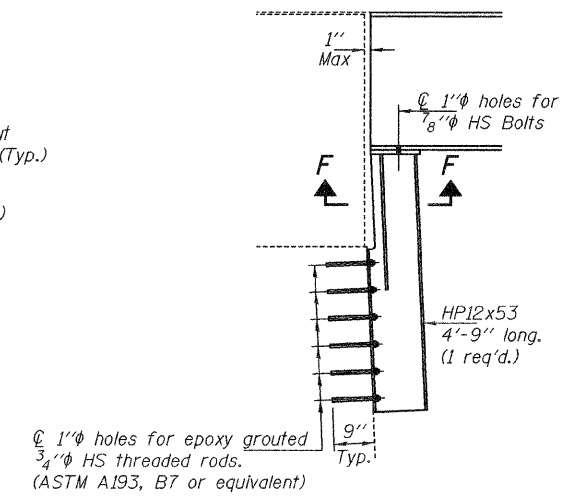
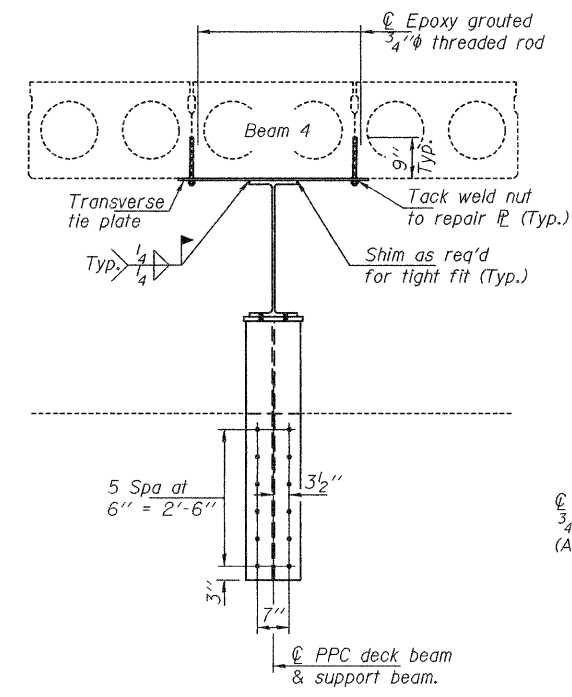
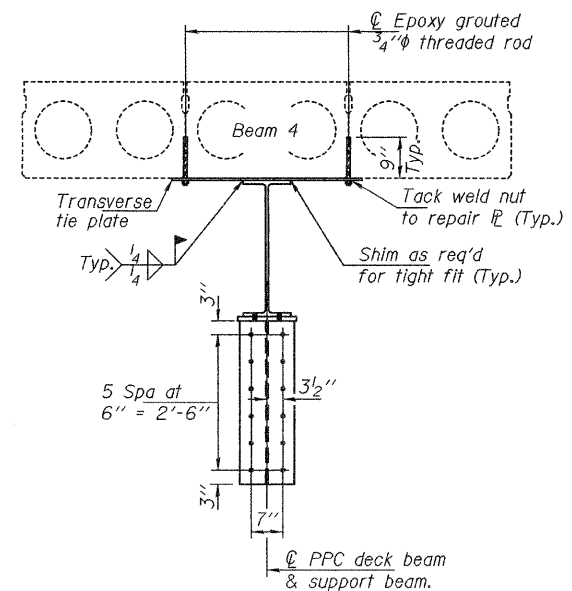
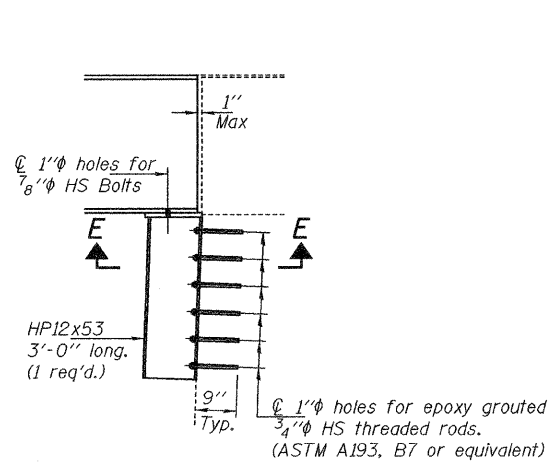
EXAMINED	MARCH 9, 2009
PASSED	Ralph E. Adams



Expires: November 30, 2010

SHEET NO. 1 2 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	828	D7 BEAM REPAIR 2009-1	CUMBERLAND	6	5
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 74384					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



DESIGNED	VHV
CHECKED	DAB
DRAWN	ballva
CHECKED	VHV DAB

MARCH 9, 2009
 EXAMINED *Carl Perry*
 ENGINEER OF STRUCTURAL SERVICES
 PASSED *Ralph E. Anderson*
 ENGINEER OF BRIDGES AND STRUCTURES

REPAIR DETAILS
 FAP 828 OVER LONG POINT CREEK
 SN 018-0012

SHEET NO. 2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2 SHEETS	828	D7 BEAM REPAIR 2009-1	CUMBERLAND	6	6
			CONTRACT NO. 74384		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			