

* 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, 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 = 24", Min. Sx = 291 in³.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
FA 693		FORD	15	11
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract Number: 66819

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.

If the contractor's procedure for existing beam removal or placement of new 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 new or 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. If heavy equipment will be placed on new PPC deck beams, the following shall be done prior to placement of the timber mats: placement and tightening of transverse tie assemblies, grouting and curing the dowel rods 24 hours minimum and grouting and curing the shear keys.

Any damage done to the bridge during beam removal shall be repaired by the Contractor. Cost to be included in the cost of Removal of Existing PPC Deck Beams.

The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.

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.

Temporary concrete barrier shall only be anchored into the overlay and not into the PPC Deck Beams.

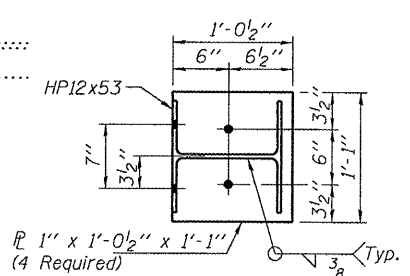
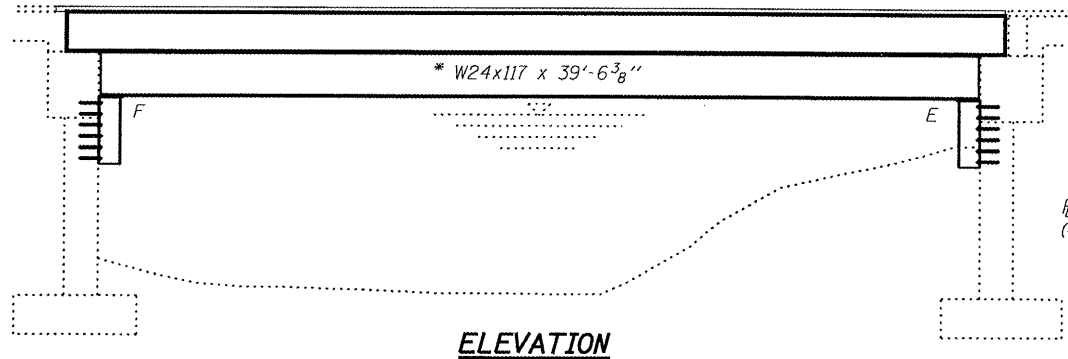
DESIGN STRESSES

PRECAST PRESTRESSED UNITS
 $f'_c = 6,000$ psi
 $f'_{ci} = 5,000$ psi
 $f'_s = 270,000$ psi ($\frac{1}{2}$ " ϕ low lax strands)
 $f'_{si} = 201,960$ psi ($\frac{1}{2}$ " ϕ low lax strands)

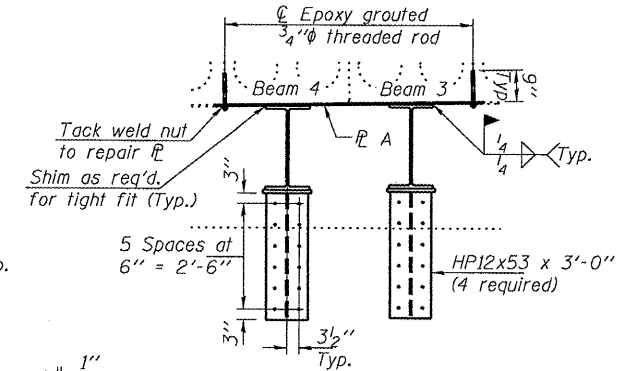
TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal of Existing PPC Deck Beams	Sq. Ft.	337.8
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	337.8
Hot-Mix Asphalt Surface Removal	Sq. Yd.	5.2
HMA Surface Course Mix "C" N50	Tons	4.8
PC Mortar Fairing Course	Foot	85
Waterproofing Membrane System	Sq. Yd.	42.8
Removing and Re-erecting Existing Railing	Foot	85
Furnishing and Erecting Structural Steel	Pound	10,390
Asbestos Bearing Pad Removal	Each	2

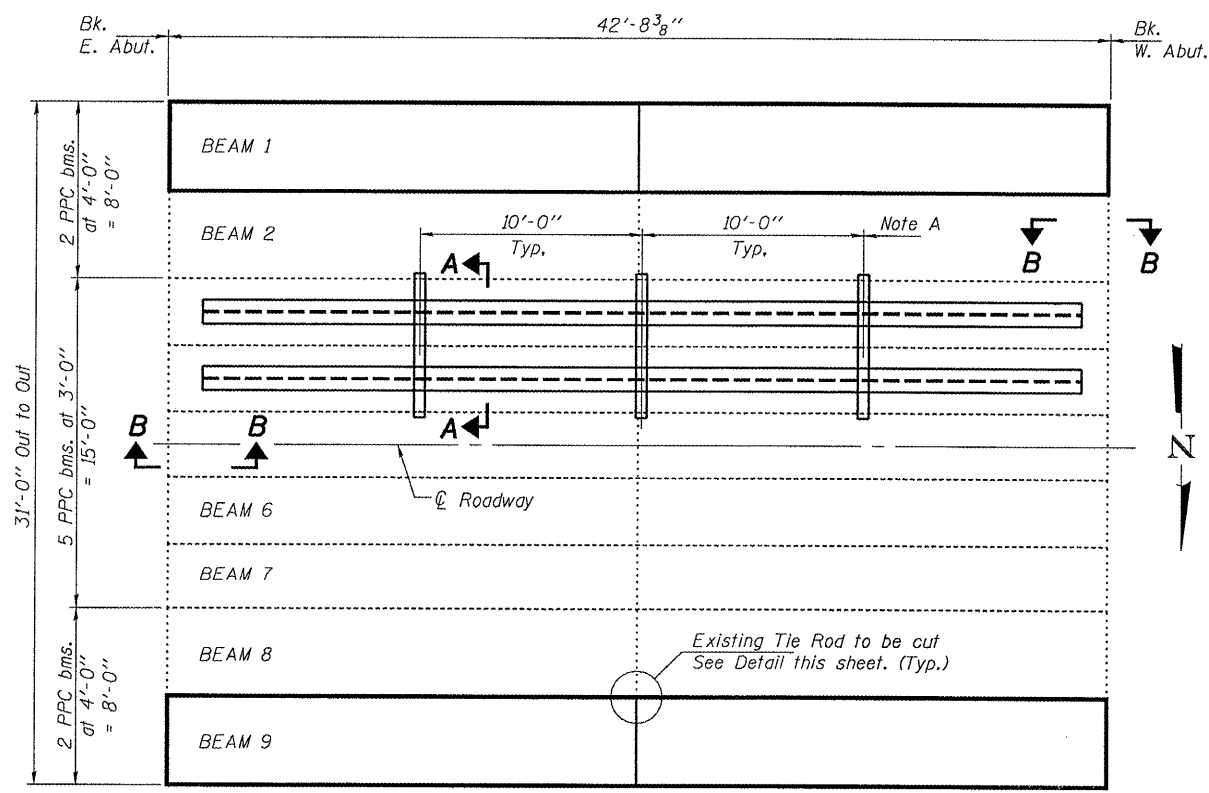
PLAN AND ELEVATION
 FA 693 OVER W. BR. DRUMMER CREEK
 FORD COUNTY
 SN 027-0005



SECTION C-C



SECTION A-A

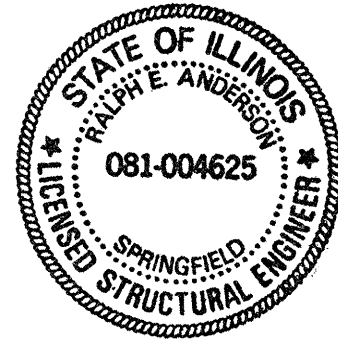


PLAN

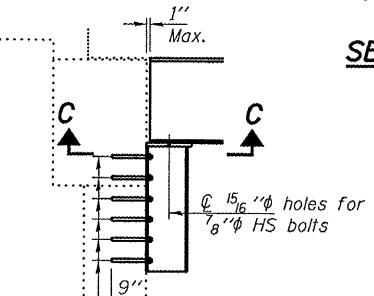
Note A:
 @ Transverse tie @'s (3 per span). Place additional shims at midpoints between tie @'s. Securely weld shims to top flange of support beam. Minimum shim size is 6" x flange width.

DESIGNED: [Signature]
 CHECKED: Adrian T. Holloway
 DRAWN: Steffen
 CHECKED: ASB ATH

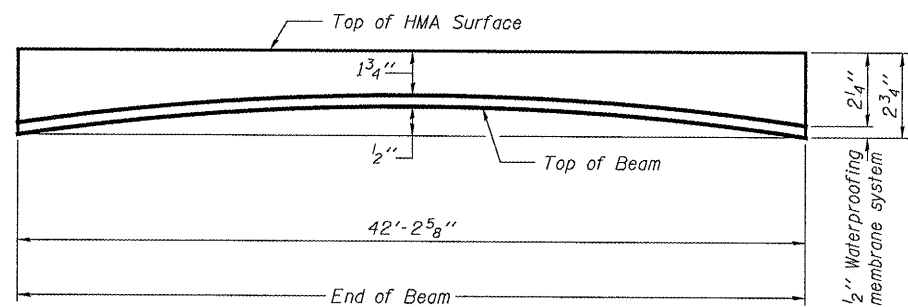
EXAMINED: [Signature] MAY 2, 2008
 PASSED: [Signature]
 ENGINEER OF BRIDGES AND STRUCTURES



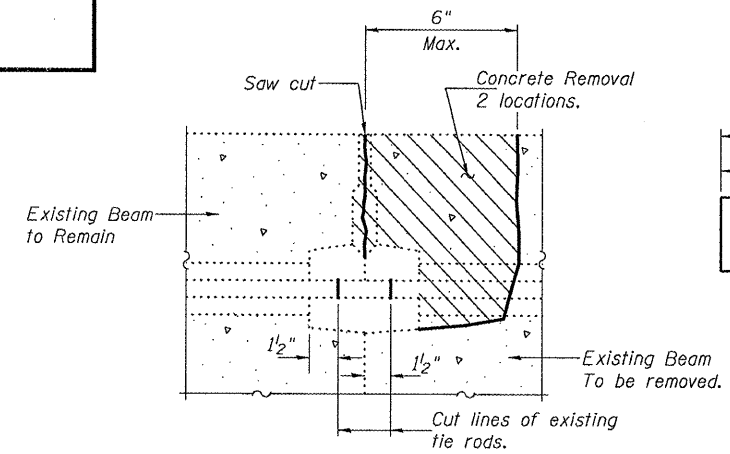
Expires: November 30, 2008



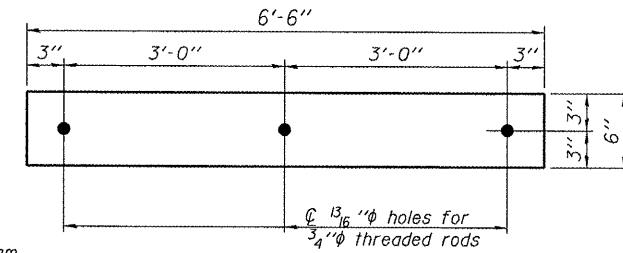
SECTION B-B



ANTICIPATED INITIAL CAMBER DIAGRAM



BEAM REMOVAL DETAIL AT TRANSVERSE TIES



TRANSVERSE TIE @ A
 1/2" x 6'-6" x 6" (3 req'd.)