

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1 6 SHEETS
FAP 317	*	LIVINGSTON	16	11	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract Number: 66809
* (25-B-1)1-1

GENERAL NOTES

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.

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

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.

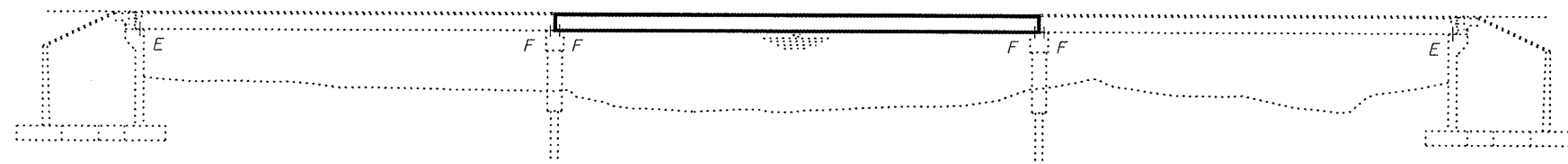
Temporary concrete barrier shall only be anchored into the overlay and not into the PPC deck beams.

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.

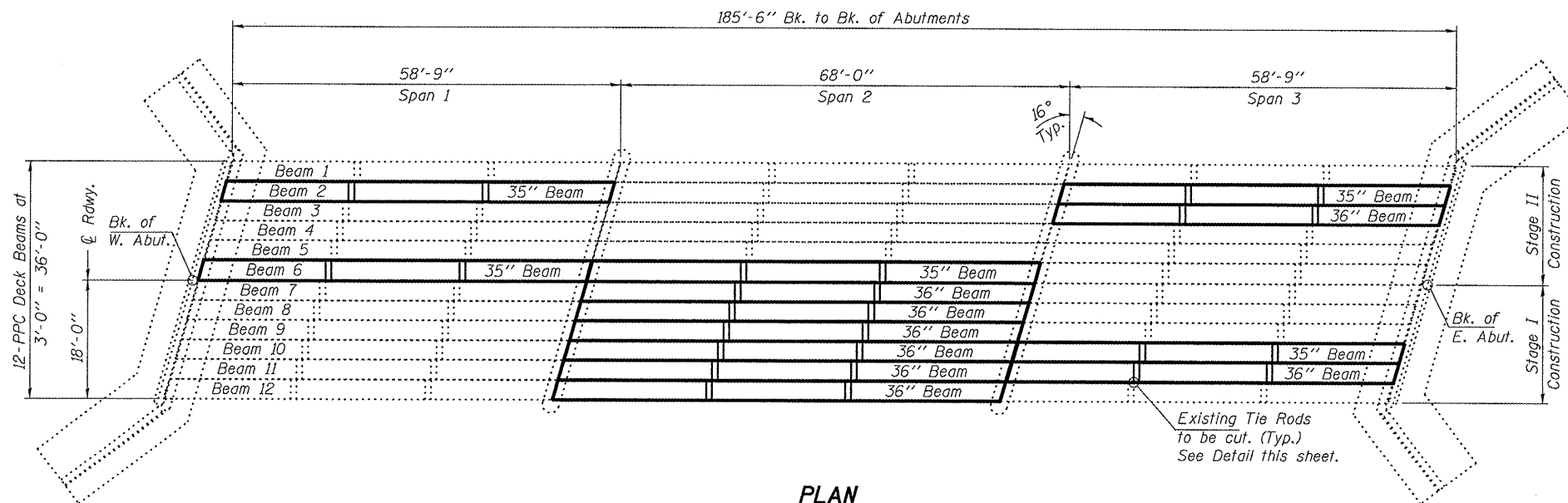
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

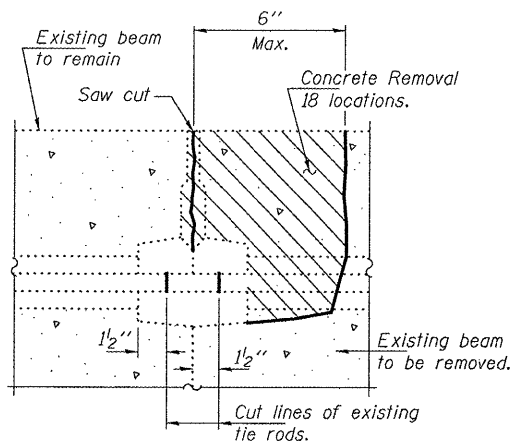
Reinforcement bars designated (E) shall be epoxy coated.



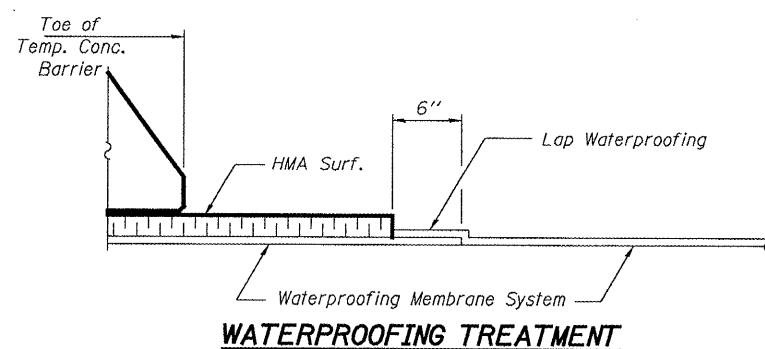
ELEVATION



PLAN



BEAM REMOVAL DETAIL AT TRANSVERSE TIES



WATERPROOFING TREATMENT

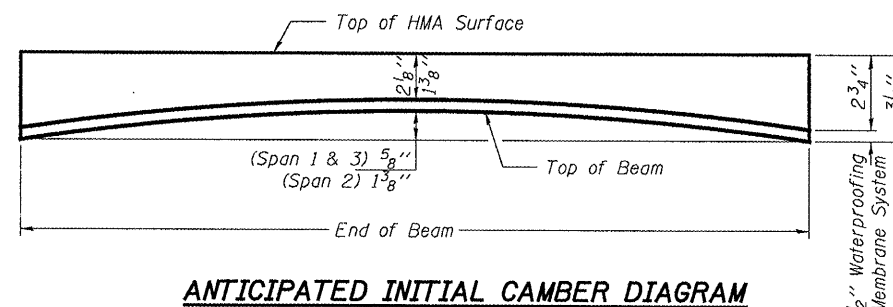
DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS
f'c = 6,000 psi
f'ci = 5,000 psi
f's = 270,000 psi (1/2" φ low lax strands)
f'si = 201,960 psi (1/2" φ low lax strands)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal of Existing PPC Deck Beams	Sq. Ft.	2483
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	2458
Hot-Mix Asphalt Surface Removal	Sq. Yd.	31.9
HMA Surface Course Mix "C" N70	Tons	38.0
PC Mortar Fairing Course	Foot	1062
Asbestos Bearing Pad Removal	Each	6
Removing & Re-erecting Existing Railing	Foot	68
Waterproofing Membrane System	Sq. Yd.	298.4
Concrete Superstructure	Cu. Yd.	2.3
Reinforcement Bars, Epoxy Coated	Pound	70
Polymer Concrete	Cu. Ft.	1.8
Silicone Joint Sealer	Foot	2.3
Protective Coat	Sq. Yd.	13



ANTICIPATED INITIAL CAMBER DIAGRAM



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

EXAMINED: [Signature] MAY 12, 2008
PASSED: [Signature]
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

Expires: November 30, 2008

**PLAN AND ELEVATION
FAP 317 OVER SOUTH FORK
VERMILION RIVER
LIVINGSTON COUNTY
SN 053-0152**