

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
657		Henderson	14	10
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
5 SHEETS

Contract Number: 68774

GENERAL NOTES

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.

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 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.

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

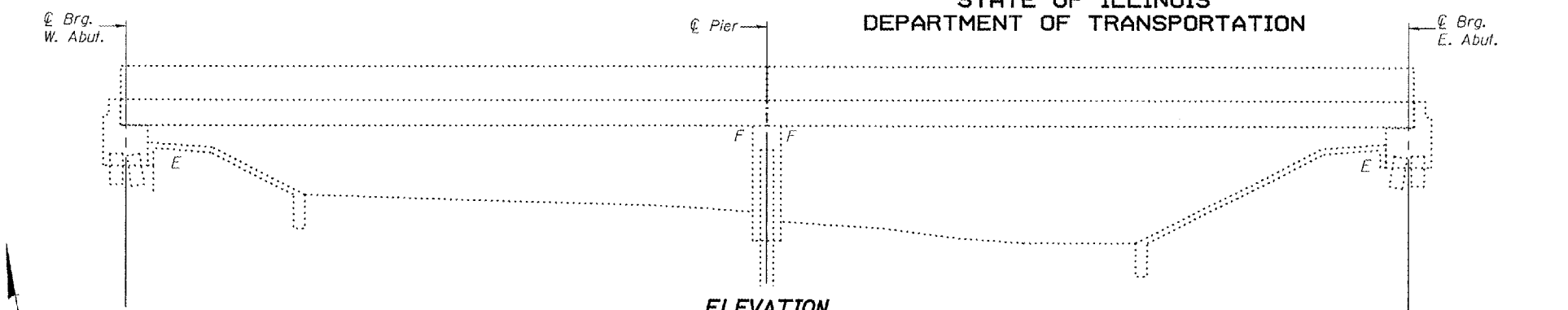
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

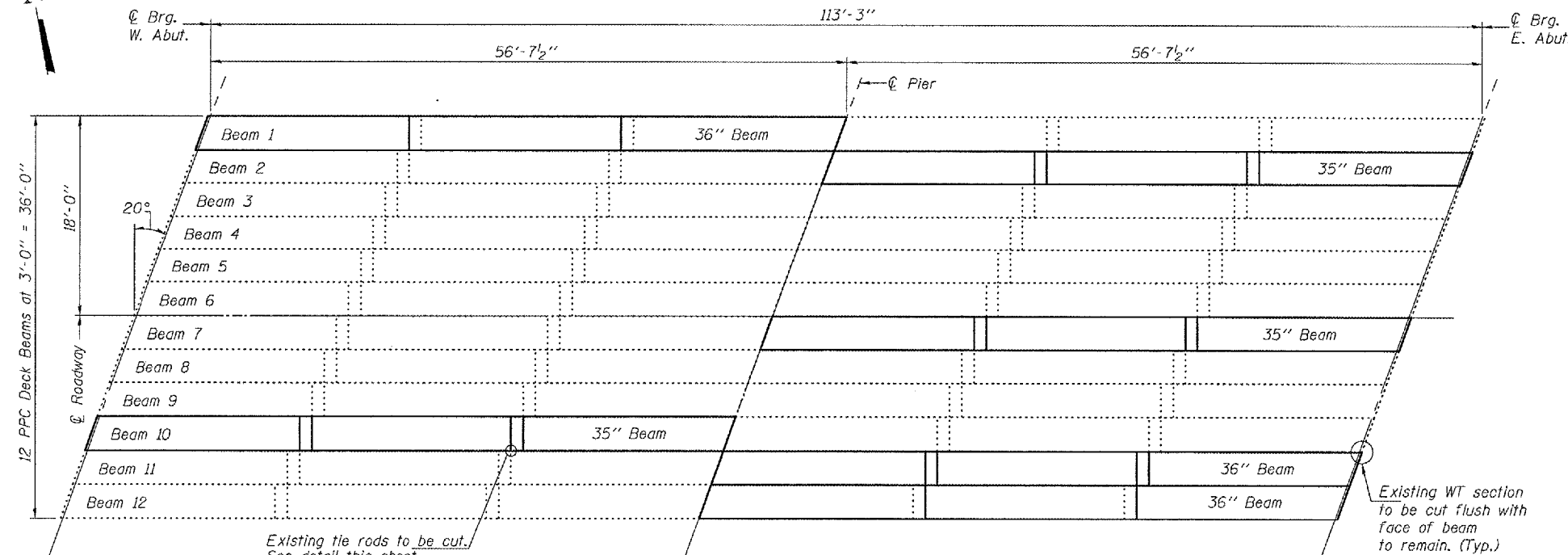
Protective coat shall not be applied to surfaces to which waterproofing membrane system is applied.

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

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with PPC Deck Beams (27" Depth).



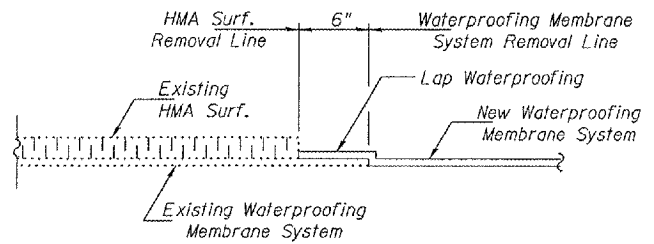
ELEVATION



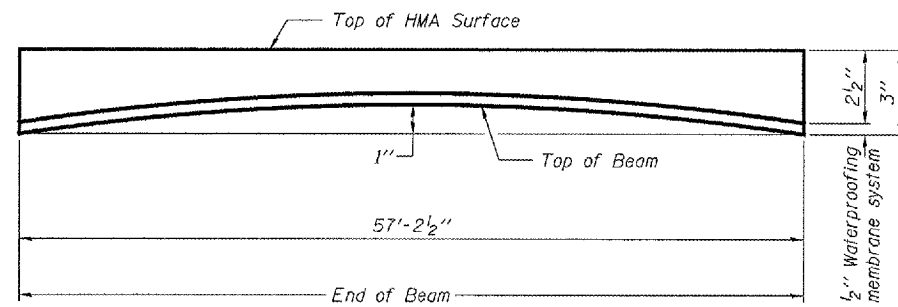
PLAN

Existing WT section to be cut flush with face of beam to remain. (Typ.)

Existing tie rods to be cut. See detail this sheet.



WATERPROOFING TREATMENT



ANTICIPATED INITIAL CAMBER DIAGRAM

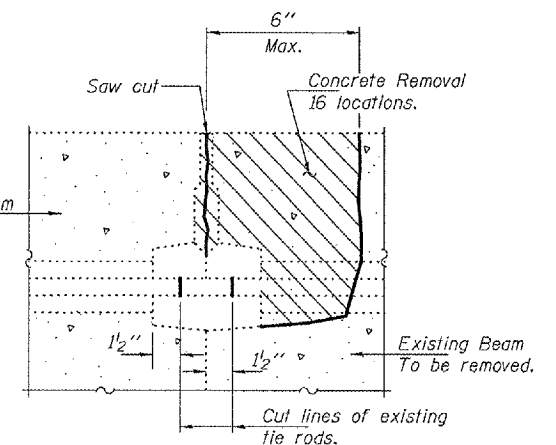
DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

PRECAST PRESTRESSED UNITS
 $f'_c = 5,000$ psi
 $f'_{cl} = 4,000$ 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.	1030
PPC Deck Beams (27" Depth)	Sq. Ft.	1015
Concrete Removal	Cu. Yd.	13.0
Asbestos Bearing Pad Removal	Each	6
Concrete Superstructures	Cu. Yd.	13.0
Reinforcement Bars, Epoxy Coated	Pound	1350
HMA Surface Removal	Sq. Yd.	26.3
HMA Surface Course Mix "D" N50	Tons	13.6
PC Mortar Fairing Course	Foot	515
Waterproofing Membrane System	Sq. Yd.	121
Protective Coat	Sq. Yd.	49



BEAM REMOVAL DETAIL AT TRANSVERSE TIES

**PLAN AND ELEVATION
 FA RT. 657 OVER SMITH CREEK
 HENDERSON COUNTY
 SN 036-0038**

DESIGNED *Alvin T. Holloway*
 CHECKED *[Signature]*
 DRAWN *Steffen*
 CHECKED *AT4 AJB*

FEBRUARY 26, 2008
 EXAMINED *[Signature]*
 PASSED *[Signature]*
 ENGINEER OF BRIDGES AND STRUCTURES



Expires: November 30, 2008