

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	QUANTITY	SHEETS	SHEET NO.
639		Mercer	15	13
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		3 SHEETS

Contract Number: 68772

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.

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.

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

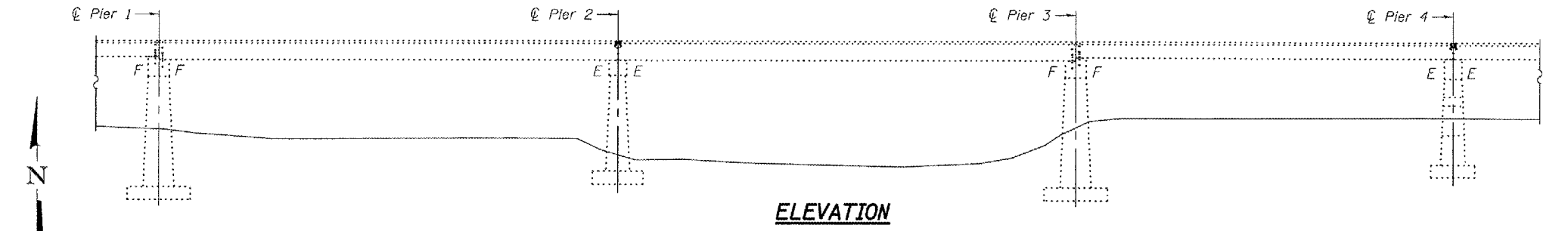
Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Wearing Surface Removal.

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.

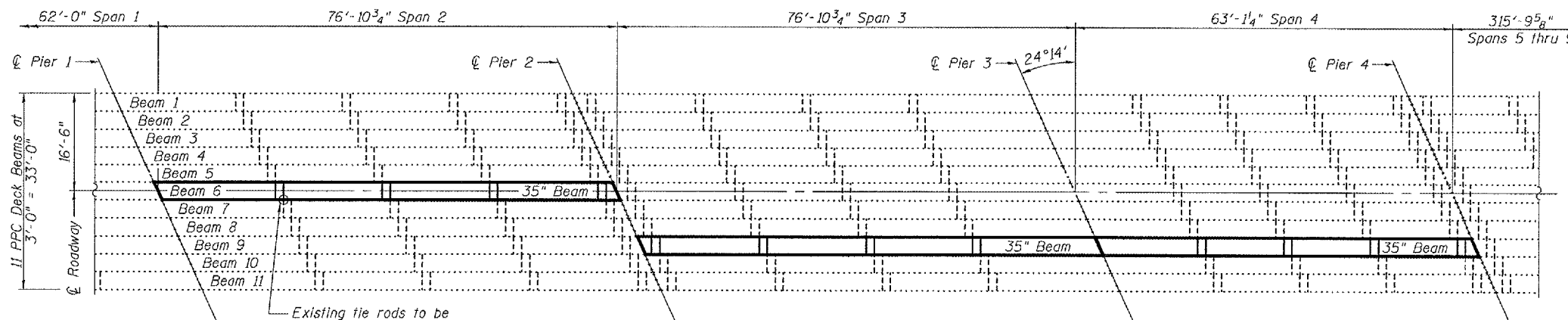
Temporary concrete barrier shall only be anchored into the overlay and not into the PPC Deck Beams.

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.



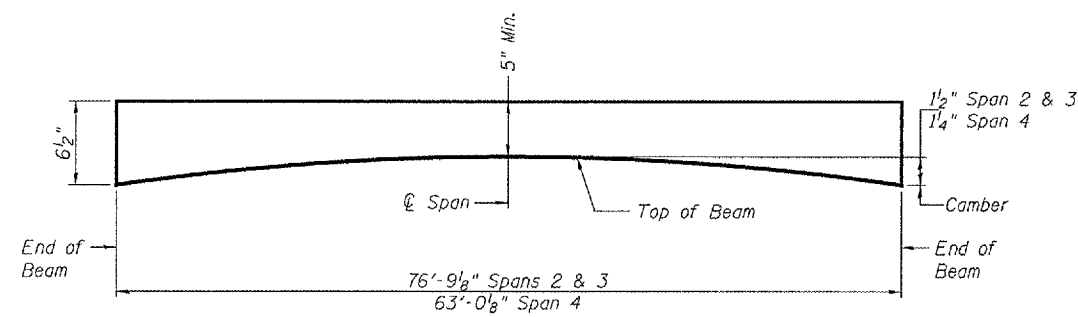
ELEVATION



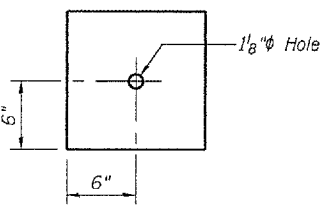
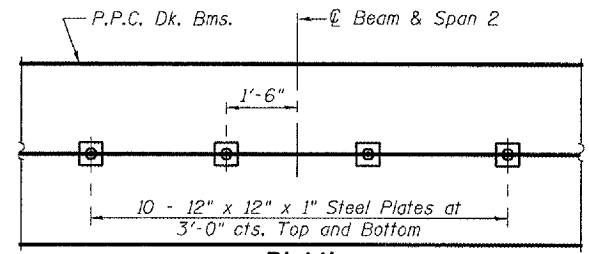
PLAN

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

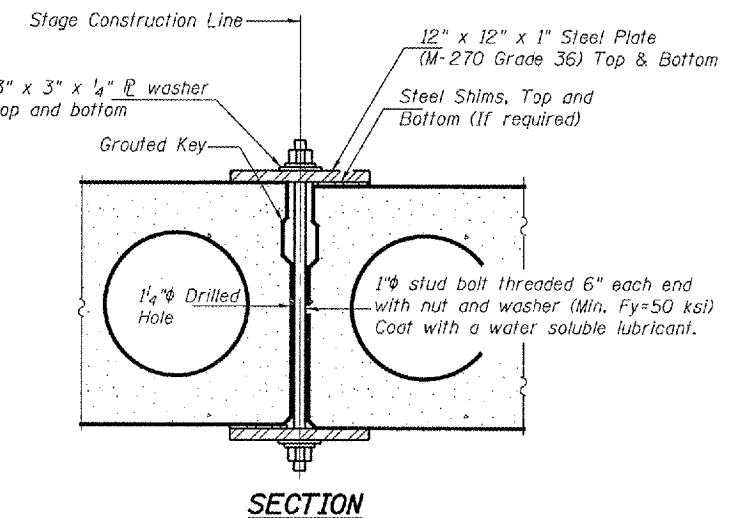
Notes:
See Special Provisions for Stage Construction Precast Prestressed Concrete Deck Beams.
See Stage Construction Detail for traffic lane.
Cost is included with Precast Prestressed Concrete Deck Beams.



CONCRETE WEARING SURFACE PROFILE



CLAMPING PLATE

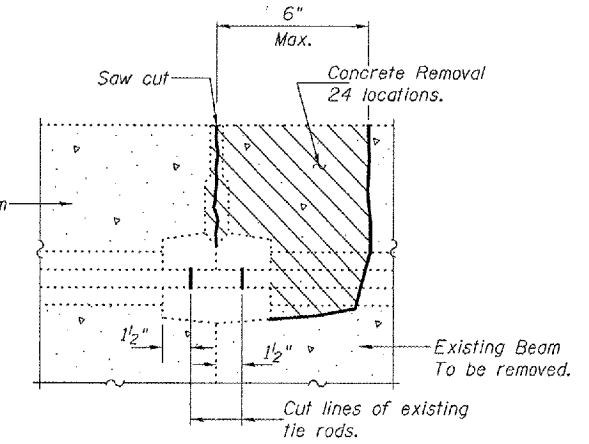


SECTION

DESIGN STRESSES

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

PRECAST PRESTRESSED UNITS
f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (1/2" low lax strands)
f'si = 201,960 psi (1/2" low lax strands)



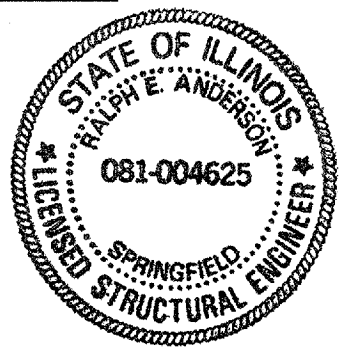
BEAM REMOVAL DETAIL AT TRANSVERSE TIES

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Wearing Surface Removal	Sq. Yd.	24.1
Concrete Wearing Surface	Sq. Yd.	96.2
Removal of Existing PPC Deck Beams	Sq. Ft.	650
PPC Deck Beams (33" Depth)	Sq. Ft.	448
PPC Deck Beams (27" Depth)	Sq. Ft.	184
Polymer Concrete	Sq. Ft.	4.2
Reinforcement Bars Epoxy Coated	Pound	1,650
Silicone Joint Sealer	Foot	10
Mechanical Splice	Each	440
Asbestos Bearing Pad Removal	Each	3

DESIGNED: Victor H. Vela
CHECKED: Adrian T. Holloway
DRAWN: [Signature]
CHECKED: VHV ATIT

February 26, 2008
EXAMINED: [Signature]
PASSED: Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



Expires: November 30, 2008

PLAN AND ELEVATION
F.A.P. RT. 639
MERCER COUNTY
SN 066-0006