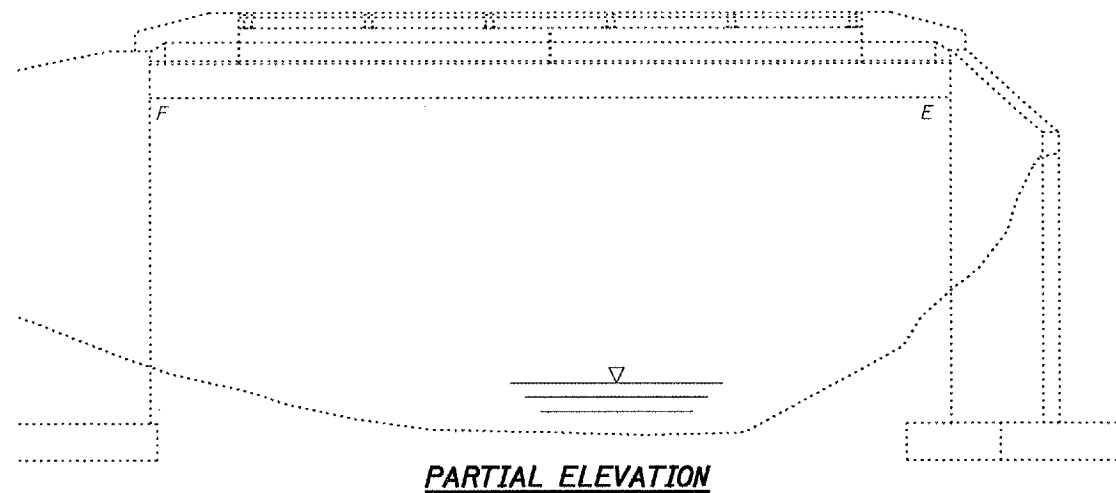


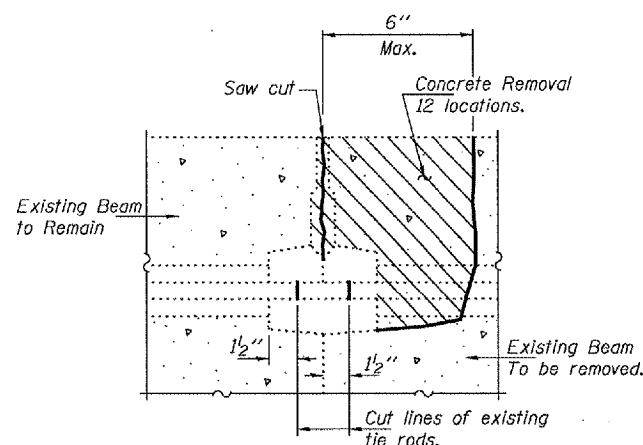
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
SBI 119		CHAMPAIGN	26	16
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1  
3 SHEETS  
Contract Number: 70669



**PARTIAL ELEVATION**



**BEAM REMOVAL DETAIL  
AT TRANSVERSE TIES**

**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.

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 Removal.

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.

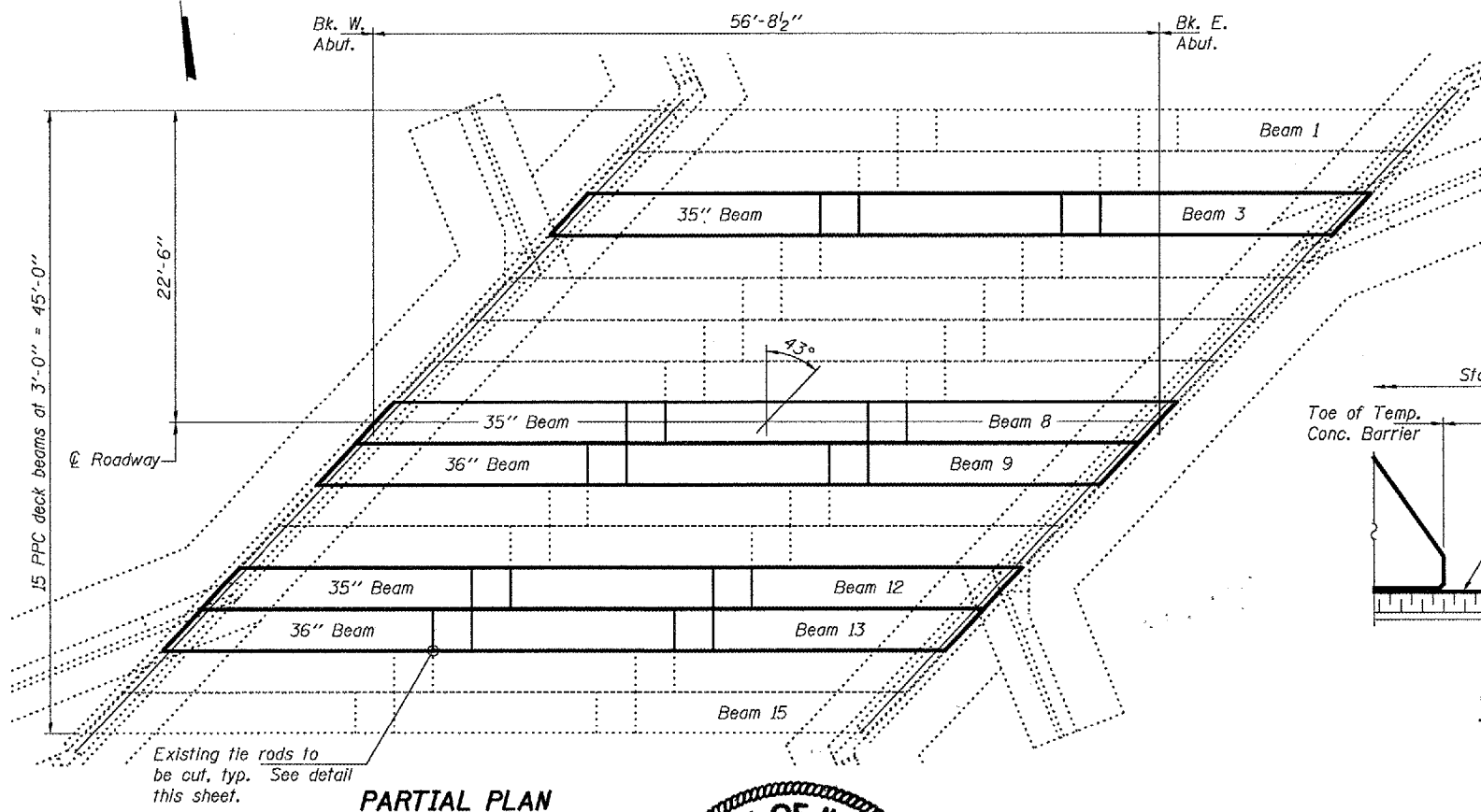
All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

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

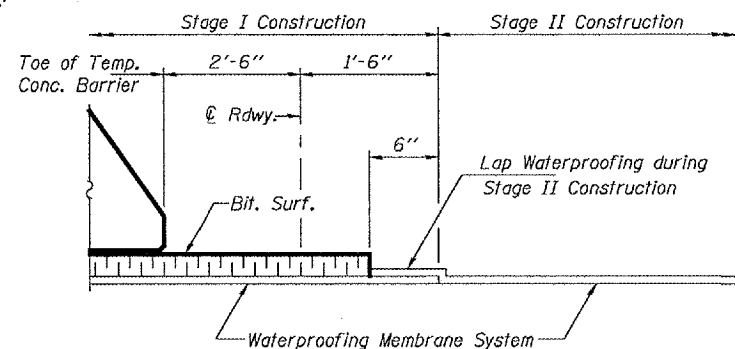
Any damage done to the bridge during beam removal shall be repaired by the Contractor. Cost to be included in the cost of Removal of Existing PPC Deck Beams.

**DESIGN STRESSES  
PRECAST UNITS**

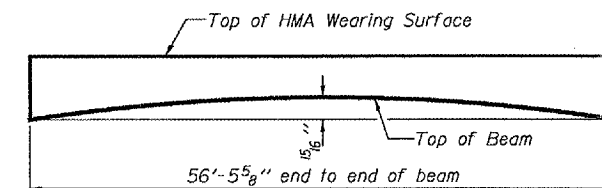
$f'_c = 5,000$  psi  
 $f'_{ci} = 4,000$  psi  
 $f'_s = 270,000$  psi ( $\frac{1}{2}$ "  $\phi$  low lax strands)  
 $f'_{si} = 201,960$  psi ( $\frac{1}{2}$ "  $\phi$  low lax strands)



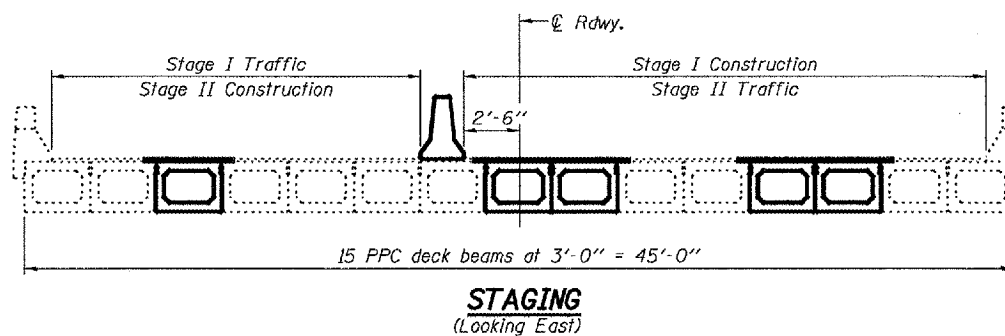
**PARTIAL PLAN**



**WATERPROOFING TREATMENT  
AT STAGE CONSTRUCTION**



**ANTICIPATED INITIAL CAMBER DIAGRAM**



**STAGING  
(Looking East)**

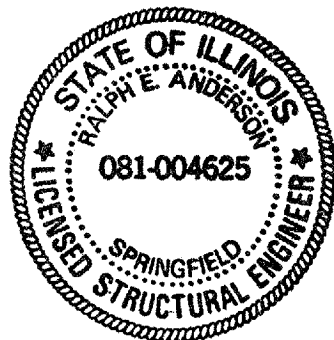
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Removal of Existing PPC Deck Beams	Sq. Ft.	847
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	833
Hot-Mix Asphalt Surface Removal	Sq. Yd.	20.8
HMA Surface Course Mix "D" N50	Tons	12.9
PC Mortar Fairing Course	Foot	451.8
Asbestos Bearing Pad Removal	Each	16
Waterproofing Membrane System	Sq. Yd.	114.9

**PLAN AND ELEVATION  
SBI 119  
CHAMPAIGN COUNTY  
SN 010-0062**

DESIGNED	V. H. V. H.
CHECKED	SJB
DRAWN	ballva
CHECKED	V. H. V. H. SJB

NOVEMBER 5, 2007  
EXAMINED *Carl Pomy*  
PASSED *Ralph E. Anderson*  
ENGINEER OF STRUCTURAL SERVICES  
ENGINEER OF BRIDGES AND STRUCTURES



Expires: November 30, 2008