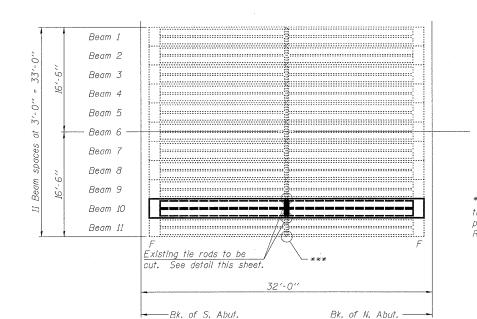
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



<u>PLAN</u>

Concrete removal

Existing beam

to be removed

1 locatior

Cut lines of existing

Existing P.P.C. → Ç Beam & Span ∖ Dk. Bm. New P.P.C. Dk. Bm. x 12" x 1" Steel Plates at

*** Contractor shall remove existing grout plug and transverse rod in the existing exterior beam prior to the placement of the replacement beam. Cost included with Removal of Existing P.P.C. Deck Beam.

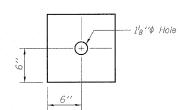
New HMA wearing

* 1" \$ x 2'-6" Dowel rod in $1_2''$ ϕ hole drilled in cap at both ends of beam

surface.

3'-0" cts. Top and Bott. PLAN

12'' x 12'' x 1'' Steel Plate (M-270 Grade 36) Top & Bottom 3" x 3" x ½" P Washer Top and Bottom Steel Shims, Top and Bottom (If required) Grouted Key # Stud Bolt threaded 6" Fach End with washers and nuts. Drilled hole (Min. Fv=50 ksi) Coat with a water soluble Existing P.P.C. New P.P.C. SECTION Deck Beam



CLAMPING PLATE

BEAM REMOVAL DETAIL AT TRANSVERSE TIES

Saw cut

Existing beam

to remain

SECTION THRU ABUTMENTS

Exist. dowel rods shall be cut off and ground flush with cap. New dowel rods to be grouted after beam is in place and allowed to cure (24 hrs. min.) prior to grouting the shear key.

** Limit of Bituminous

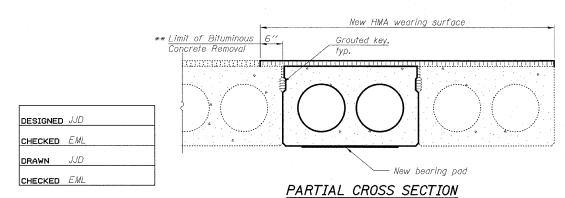
Concrete Removal

1" PJF

Approach slab

Full width of new beam

** The cost of bituminous concrete removal shall be included with Removal of Existing PPC Deck Beams.



SHEAR KEY CLAMPING DETAILS AT REPLACEMENT BEAM. JTS.

Cost included with Precast Prestressed Concrete Deck Beams (17" Depth) Special. See Stage Construction Details for traffic lanes.

BILL OF MATERIALS

Item	Unit	Total
Removal of Existing P.P.C. Deck Beams	Sg. Ft.	99
Hot Mix Asphalt Surface Course,	Ton	7
Mix'''C'', N70		

DESIGN STRESSES

PRECAST PRESTRESSED UNITS

f'_c = 5,000 psi

 $f'_{ci} = 4,000 psi$

 $f'_s = 270,000 \text{ psi } (\frac{1}{2})'' \text{ low lax. strands})$

 $f_{si} = 201,960 \text{ psi } (\frac{1}{2})'' \text{ low lax. strands})$

HORNER & SHIFRIN, INC. ENGINEERS

PRE-STAGE I DETAILS I F.A.P ROUTE 328 - SECTION (10BR-3)B-1 WAYNE COUNTY STATION 410+21.00 STRUCTURE NO. 096-2010

ROUTE NO. SECTION TOTAL SHEETS 140 SHEET NO. 77 SHEET NO. 9 F.A.P. (10BR-3) 328 B-1 10 SHEETS WAYNE FED. ROAD DIST, NO. 7 ILLINOIS FED. AID PROJECT

Contract #74040

GENERAL NOTES

The thickness of Bituminous overlay shall match the existing thickness and shall be adjusted for the new expected beam camber.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. This work shall be performed by the producer and included with the cost of the beam.

The contractor is advised that the existing Precast Prestressed Concrete Deck Beams are in a deteriated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the

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