**Contractor is to verify beam length prior to ordering material. Other sections meeting the section modulus requirements shown may be allowed subject to approval by the Bureau of Bridges and Structures. Maximum Girder depth Spans 1 & 4 = 27", Spans 5, 7 & 10 = 33". No additional payment will be allowed if the contractor chooses a heavier steel section than the one specified in the plans

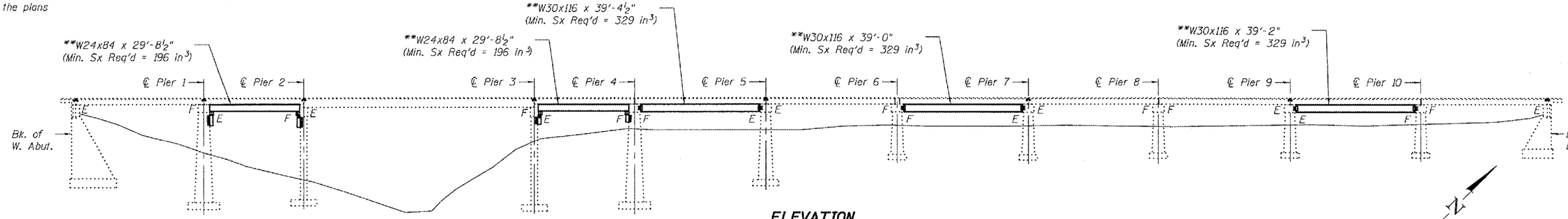
*℄ Transverse tie ℄'s (3 per span). Place additional shims at midpoints between tie ℄'s. Securely weld shims to top flange of support beam. Minimum shim size is 6" x flange width.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

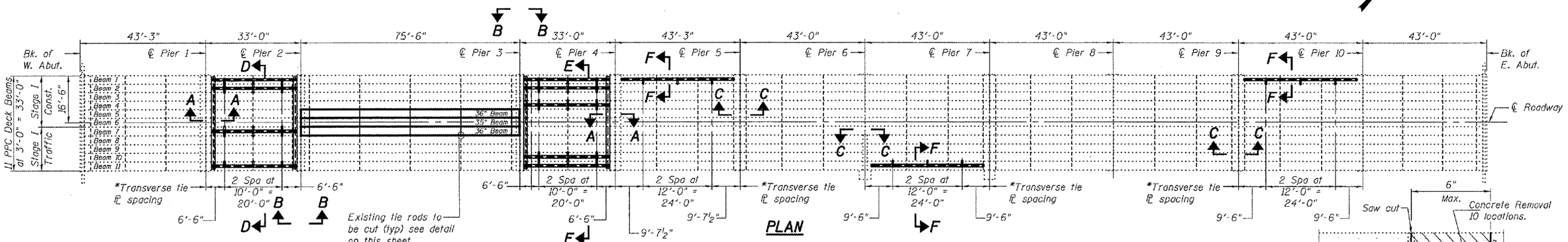
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		Schuyler	12	9
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
4 SHEETS

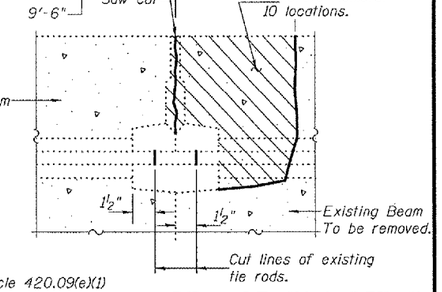
Contract Number: 72B65



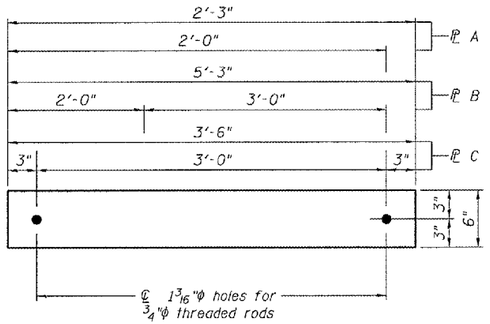
ELEVATION



PLAN



BEAM REMOVAL DETAIL AT TRANSVERSE TIES



TRANSVERSE TIE ℄'S

℄ A ½" x 2'-3" x 6" (12 Req'd)
℄ B ½" x 5'-3" x 6" (9 Req'd)
℄ C ½" x 3'-6" x 6" (6 Req'd)

TOTAL BILL OF MATERIAL

	ITEM	UNIT	QUANTITY
	Concrete Removal	Cu. Yd.	1.3
	Removal of Existing PPC Deck Beams	Sq. Ft.	679
	Concrete Wearing Surface	Sq. Yd.	83.6
	PPC Deck Beams (33" Depth)	Sq. Ft.	673
	Protective Coat	Sq. Yd.	83.6
	Mechanical Splicers	Each	154
*	Asbestos Bearing Pad Removal	Each	3
	Reinforcement Bars, Epoxy Coated	Pound	1860
	Furnishing and Erecting Structural Steel	Pound	56620

*At Pier 2

DESIGN STRESSES

(New Construction)

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 (½"ϕ low relaxation strands)
f'si = 201,960 (½"ϕ low relaxation strands)

GENERAL NOTES

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

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.

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.

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 P.P.C. Deck Beams".

Temporary concrete barrier shall only be anchored into the overlay and not 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 Furnishing and Erecting Structural Steel.

Existing reinforcement 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.

For stage construction details see Roadway Plans.

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Wearing Surface.

The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the contractors 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 oversiress 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.

See Section 584 of the Standard Specifications for epoxy grouting of threaded rods; Minimum embedment 9".

The cost of epoxy grouting threaded rods shall be included with Furnishing and Erecting Structural Steel.

The Contractor has the option of using used steel. See Special Provisions.

DESIGNED	Victor H. Vela	January 8, 2007
CHECKED	Mike Stoffel	EXAMINED: Al Carl Pumphrey, ENGINEER OF STRUCTURAL SERVICES
DRAWN		PASSED: Ralph E. Anderson, ENGINEER OF BRIDGES AND STRUCTURES
CHECKED	VHV	AJB

STATE OF ILLINOIS
RALPH E. ANDERSON
081-004625
SPRINGFIELD
LICENSED STRUCTURAL ENGINEER

Expires: November 30, 2008

PLAN AND ELEVATION
IL 101
SCHUYLER COUNTY
SN 085-0016

SLT-96-001-07