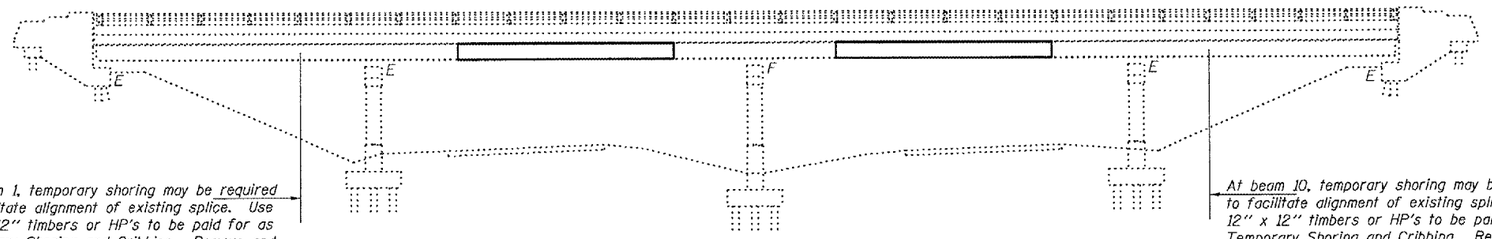
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 29		KNOX	11	8
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
4 SHEETS

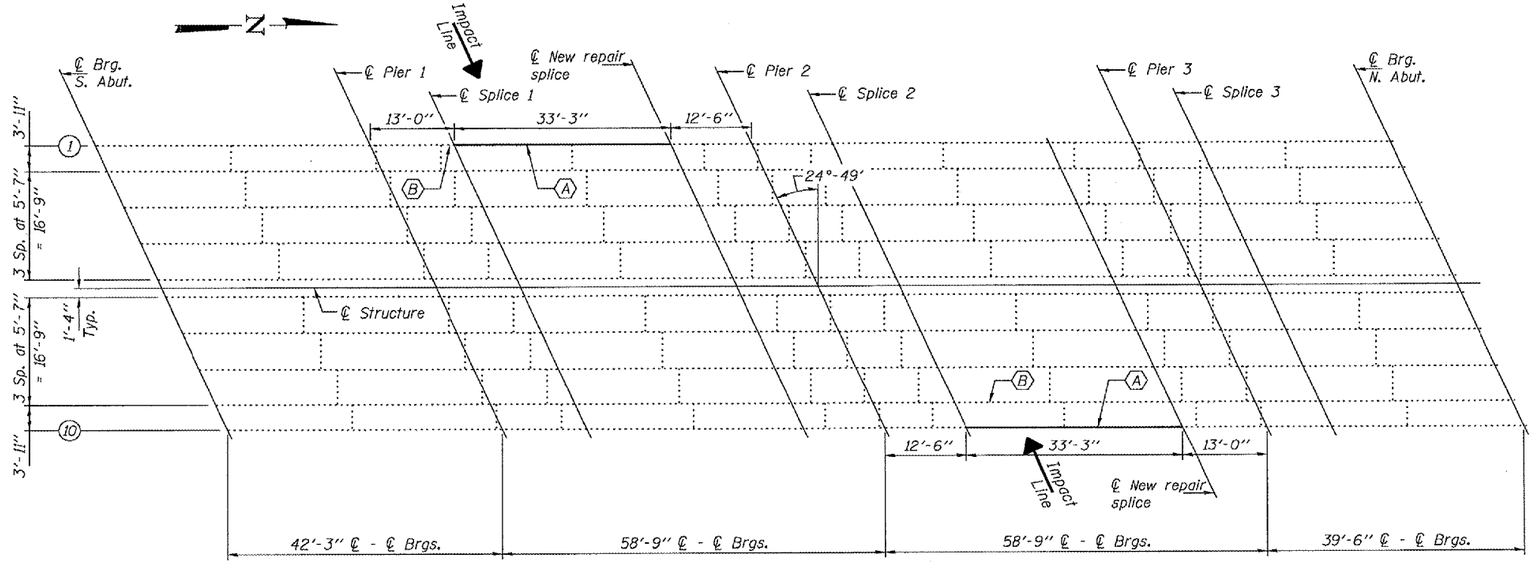
Contract Number:



At beam 1, temporary shoring may be required to facilitate alignment of existing splice. Use 12" x 12" timbers or HP's to be paid for as Temporary Shoring and Cribbing. Remove and replace slopewall, if required. Cost included with Temporary Shoring and Cribbing.

At beam 10, temporary shoring may be required to facilitate alignment of existing splice. Use 12" x 12" timbers or HP's to be paid for as Temporary Shoring and Cribbing. Remove and replace slopewall, if required. Cost included with Temporary Shoring and Cribbing.

ELEVATION



FRAMING PLAN

(A) - Replace beam section.
(B) - Straighten beam.

GENERAL NOTES

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

Fasteners shall be high strength bolts. Flange splice holes shall be $^{15}/_{16}$"ϕ for $^{7}/_{8}$"ϕ bolts. Web splice holes shall be $^{13}/_{16}$"ϕ for $^{3}/_{4}$"ϕ bolts.

The Contractor shall provide support and/or shoring systems for the slab and beam in the area of existing beam removal. See Special Provisions "Temporary Shoring and Cribbing" and "Temporary Slab Support System."

After the new beam is in its final position and/or beam straightening operations have been completed, the Engineer in the field shall check to see that the top flange is tight against the slab. If not, the Contractor shall inject epoxy between the existing concrete deck and the top flange of the beam. See Special Provision "Epoxy Injection".

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.

Cost of removal and/or re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included in the cost of Furnishing and Erecting Structural Steel.

The inorganic zinc rich primer/acrylic/acrylic paint system shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat shall be Interstate Green, Munsell No. 7.5G 4/8. See Special Provision for "Cleaning and Painting New Metal Structures".

The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material except fill plates.

Diaphragm connection holes shall be $^{13}/_{16}$"ϕ for $^{3}/_{4}$"ϕ bolts. Two hardened washers shall be required at diaphragm connections.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	9470
Structural Steel Removal	Pound	8560
Concrete Superstructure	Cu. Yd.	2.0
Concrete Removal	Cu. Yd.	2.0
Temporary Shoring and Cribbing	LS	1
Temporary Slab Support System	LS	1
Beam Straightening	LS	1

DESIGNED	Adrian T. Holloway
CHECKED	Angela Kopp
DRAWN	baliva
CHECKED	ATH AJB

JANUARY 9, 2007
EXAMINED — Carl Kramer, REPAIR PLANS UNIT CHIEF
PASSED — Ralph E. Anderson, ENGINEER OF BRIDGES AND STRUCTURES

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

EXPIRES 11-30-2008

PLAN AND ELEVATION
FA RT. 29
KNOX COUNTY
SN 048-0068