

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	FORM SHEETS	SHEET NO.	SHEET NO. 1
FAP 29	ΔΔ	KNOX	16	9	8 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract Number: 68856 ΔΔ (21-HB-2)1-4

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 $\frac{15}{16}$ " ϕ for $\frac{7}{8}$ " ϕ bolts. Web splice holes shall be $\frac{13}{16}$ " ϕ for $\frac{3}{4}$ " ϕ bolts.

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 nominal construction 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 at the unit price bid for the work.

Cost of removal and 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 with Furnishing and Erecting Structural Steel.

The existing structural steel coating contains lead. The Contractor shall 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", and "Cleaning and Painting New Metal Structures".

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 for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Blue, Munsell No. 10B 3/6. See Special Provision "Cleaning and Painting New Metal Structures".

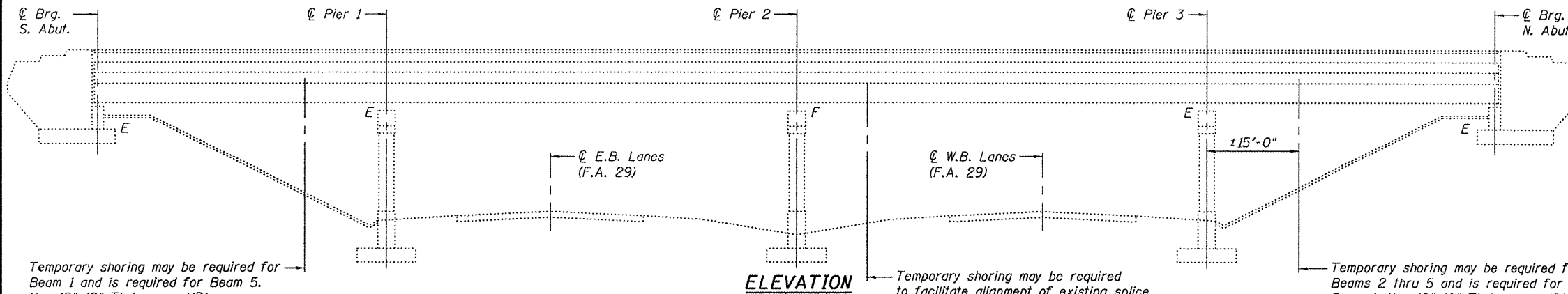
The Contractor shall provide support and/or shoring systems for the slab and beam in the area of existing beam removal. See Special Provisions "Temporary Shoring and Cribbing" and "Temporary Slab Support System."

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.

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

Diaphragm connection holes shall be $\frac{15}{16}$ " ϕ for $\frac{3}{4}$ " ϕ bolts. Two hardened washers shall be required at diaphragm connections.

Removal and replacement of beam sections on Spans 2 and 3 are not to be done simultaneously.

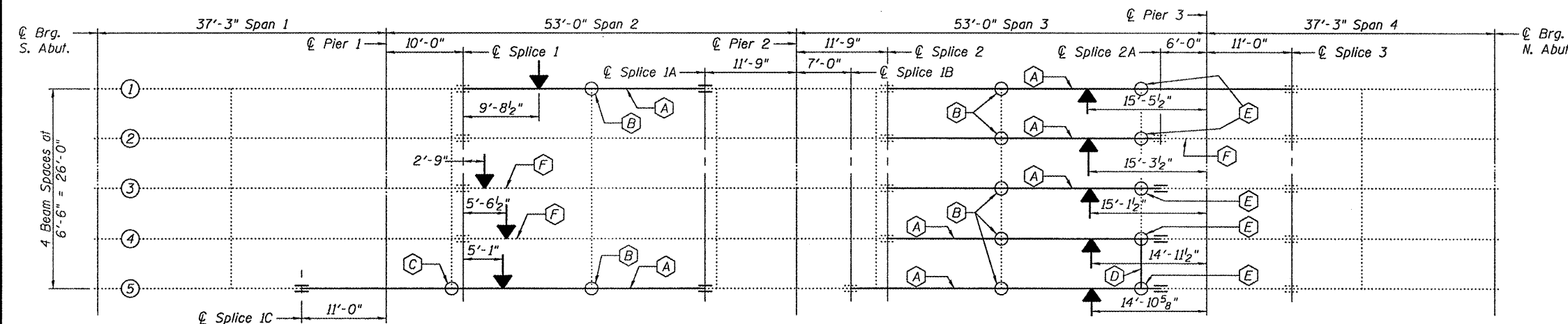


Temporary shoring may be required for Beam 1 and is required for Beam 5. Use 12"x12" Timbers or HP's, remove and replace slopewall if required. Cost included with Temporary Shoring and Cribbing.

Temporary shoring may be required to facilitate alignment of existing splice. Use 12"x12" Timbers or HP's to be paid for as Temporary Shoring and Cribbing. The shoring shall be removed as soon as possible after the splice is completed to minimize Traffic Control.

Temporary shoring may be required for Beams 2 thru 5 and is required for Beam 1. Use 12"x12" Timbers or HP's, remove and replace slopewall if required. Cost included with Temporary Shoring and Cribbing.

ELEVATION



PLAN

- (A) Remove and Replace Beam Segment
 - (B) Remove and Replace Clip Angles
 - (C) Remove and Replace Bottom Clip Angle
 - (D) Remove and Replace Diaphragm
 - (E) Remove and Replace Clip Angles
 - (F) Straighten Beam
- Impact Line →

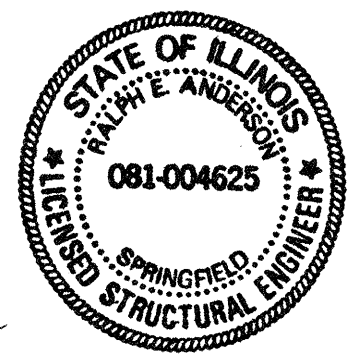
TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	29,440
Structural Steel Removal	Pound	27,740
Beam Straightening	L.S.	1
Temporary Slab Support System	L.S.	1
Concrete Removal	Cu. Yd.	4.3
Concrete Superstructure	Cu. Yd.	4.3
Temporary Shoring and Cribbing	L.S.	1

PLAN AND ELEVATION
F.A. ROUTE 29
KNOX COUNTY
S.N. 048-0065

DESIGNED *Virebo H. Velez*
CHECKED *Annie Bryant*
DRAWN *[Signature]*
CHECKED *VHV ASB*

EXAMINED *[Signature]*
PASSED *Ralph E. Anderson*
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES



Expires: November 30, 2010