

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		Madison	4	3
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

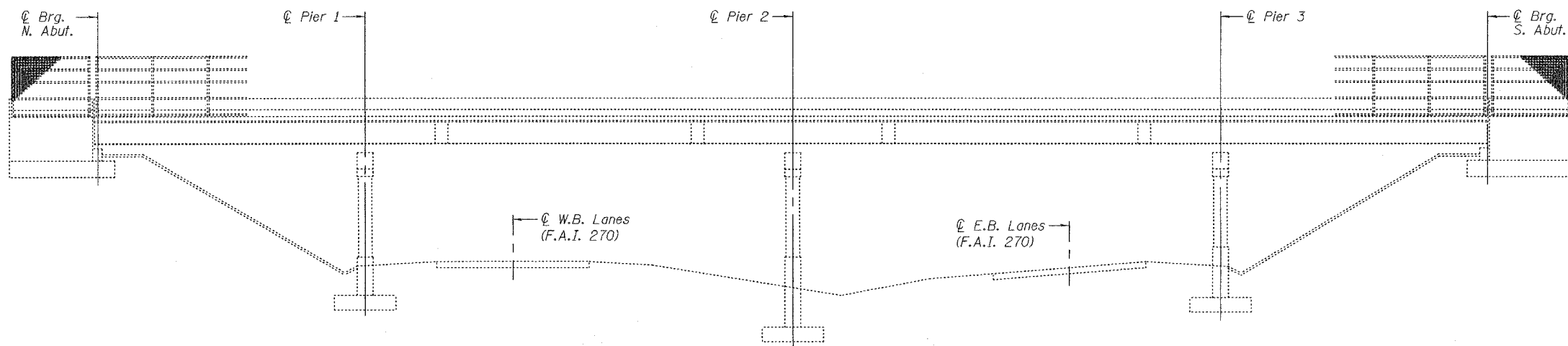
SHEET NO. 1

2 SHEETS

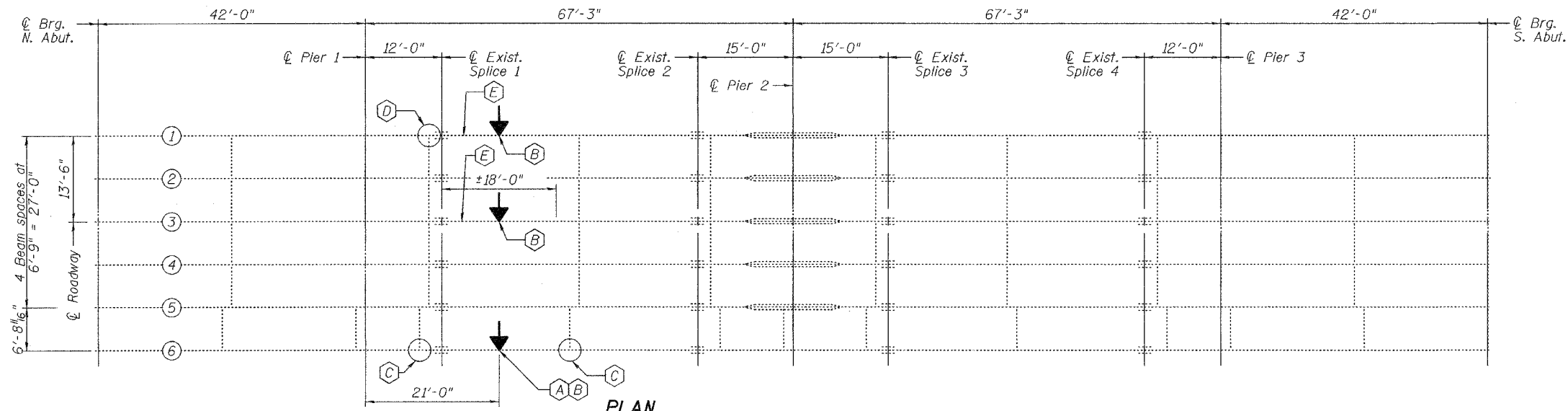
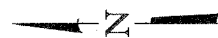
Contract Number: 76A40

**GENERAL NOTES**

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.  
Fasteners shall be high strength bolts. Bolts  $7/8"$   $\phi$ , open holes  $5/16"$   $\phi$ , unless otherwise noted.  
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 Structural Steel Repair.  
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 Gray, Munsell No. 5B 7/1. See Special Provision "Cleaning and Painting New Metal Structures".  
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2. These components are the strengthening plates.  
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".  
Diaphragm connection holes shall be  $5/16"$   $\phi$  for  $3/4"$   $\phi$  bolts. Two hardened washers shall be required at diaphragm connections.

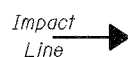


**ELEVATION**

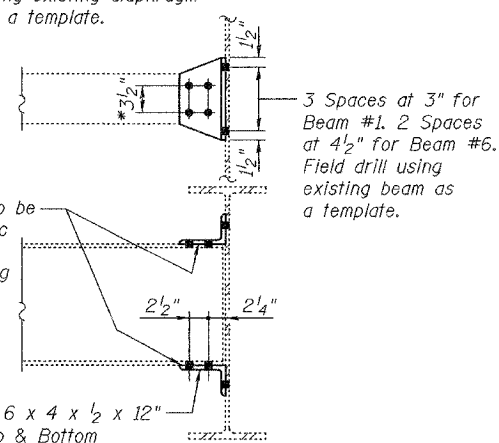


**PLAN**

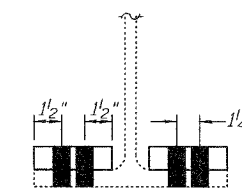
- (A) Beam Strengthening see detail on this sheet.
- (B) Beam Straightening see details sheet 2 of 2.
- (C) Replace Top and Bottom clip L's see detail on this sheet.
- (D) Replace bottom clip L see detail on this sheet.
- (E) Repaint areas of cracked and peeled paint.



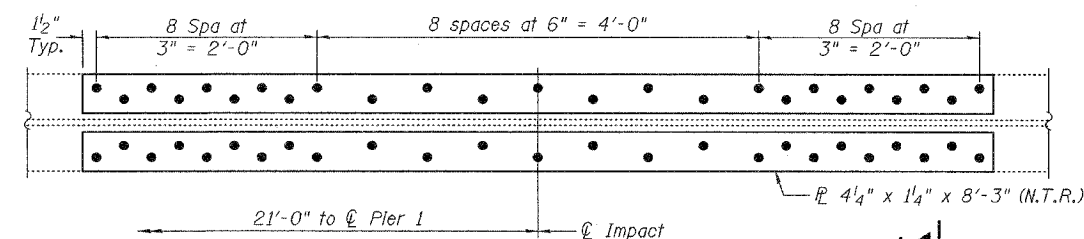
\*Beam #1 Field drill holes using existing diaphragm as a template.



**CLIP L REPLACEMENT DETAIL**



**SECTION A-A**



**STRENGTHENING P'S**

(N.T.R. = Notch Toughness Requirements)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Beam Straightening	L.S.	1
Structural Steel Repair	Pound	440

**PLAN AND ELEVATION**  
**MERIDIAN ROAD**  
**MADISON COUNTY**  
**SN 060-0185**

DESIGNED	<i>[Signature]</i>
CHECKED	<i>[Signature]</i>
DRAWN	<i>[Signature]</i>
CHECKED	S.J.B. H.B.

EXAMINED	February 28, 2007
PASSED	<i>[Signature]</i>



Expires: November 30, 2008