# INDEX OF SHEETS

1. Cover Sheet, Summary of Quantities

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## STANDARDS

701101 701400 701406-03 702001-04

Off-Road Operations, Multilane, Less Than 4.5 m (15') Away, For Speeds > or = 45 MPH Approach to Lane Closure, Freeway/Expressway Lane Closure, Freeway/Expressway, Day Operations Only Traffic Control Devices

# SUMMARY OF QUANTITIES

Code Number	Pay Item		Unit	Quantity
				SFTY-2A
50501130	STRUCTURAL STEEL REPAIR		POUND	500
67000400	ENGINEER'S FIELD OFFICE, TYPE A		CAL MO	1
67100100	MOBILIZATION		L SUM	1
70100305	TRAFFIC CONTROL AND PROTECTION,	STANDARD 701400	L SUM	1
70100700	TRAFFIC CONTROL AND PROTECTION,	STANDARD 701406	L SUM	1

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS** 

# PROPOSED **HIGHWAY PLANS**

FAP ROUTE 318 (ILLINOIS ROUTE 29 [NB]) SECTION (06-2HB-5)M **BUREAU COUNTY** 

C-92-055-05



J.U.L.I.E.





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ROUTE NO.	SECTION	COUNTY		SHEETS	SHEET	SHE
		BUREAU		3	З	2
FED. ROAD DIST, NO. 7		ILLINOIS	FED. ALD PR			

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	500

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION Disconnect & reattach Disconnect & reattach ST5WF10.5 lateral bracing, Typ./ ST5WF10.5 lateral bracing. Typ. 12 12 12 84 Existing\ (typ.) Existing <sup>3</sup><sub>R</sub>" x 9<sup>3</sup><sub>4</sub>" x 2'-1<sup>1</sup><sub>2</sub>" 3" x 9<sup>3</sup>4" x 2'-1<sup>1</sup>4" (typ.) Gusset R to be removed. Gusset P to be removed. 1'-4'' 10<sup>3</sup>4′′ ′ 10<sup>3</sup>4′′ 4'2' ? <u>Sp.</u> at 3½'' ''', typ. <u>Sp.</u> at 4" Typ. . . . \* Use holes in WT section WT10.5X41.5-- | | | | | . . . WT10.5X41.5 as a template for drilling holes in web. 2″ ELEVATION ELEVATION 12 -Note A. Typ. Note A. Typ. 71 Clip corner of existing 44" Note A: ST5WF10.5 section, Use holes in exist. ST5WF10.5 PLAN <sup>if necessary. Typ.</sup> PLAN as a template for drilling holes in WT section. REPAIR DETAIL A REPAIR DETAIL B (1 Location) (4 Locations) € Stiffener → | - 2'4' r 🕨 / C Web W/ — Exist. stiffener. Exist. 716" web--WT10.5X41.5 5° VHV MARCH 7. 2005 DESIGNED Varies from EXAMINE a. Morris DAB CHECKED L A PASSED baliva Exist. 16" flange plate DRAWN TYPICAL CONNECTION BRACKET DIMENSIONS VHV DAB SECTION A-A CHECKED

	ROUTE NO.	SECTION	BUREAU		TOTAL SHEETS	SHEAT NO.	
					3	3	
	FED. ROAD DIST. NO. 7		ILLINOIS	FED. ALD PRO			
1	CONTRACT NO CANOR						

SHEET NO. 2

2 SHEETS

CONTRACT NO. 64A92

### Procedure for Repair Detail

- 1. Remove existing horizontal gusset plates as shown. The minimum distance from cut to face of web shall be the larger of  $l_4$ " or web to gusset R weld size, with removal of remaining material by grinding as described below. The cut shall be made vertically through the gusset without angling the cut towards the web. Equipment and method of cutting shall be approved by the Engineer. Any method of removal to be used shall ensure that no damage is done to the existing web, vertical stiffener or welds connecting these elements. Cutting shall be done in a manner such that the paint on the opposite face of the web is not damaged. If damage occurs, the damaged area shall be repainted at the contractor's expense and procedures shall be modified to prevent damage at subsequent removal locations.
- 2. Remove material between cut and web by grinding and grind smooth at web surface. Web plate surfaces shall have a roughness average (Ra) of 250 µ in. or less. Grinding equipment shall be approved by the Engineer. The grinding operation should not gouge the girder web R.
- 3. The web surface at the modification shall be inspected using dye penetrant or magnetic particle methods. Any cracks found shall be identified and reported to the Bureau of Bridges and Structures for further disposition.
- 4. 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".

Notes: All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted. Fasteners shall be high strength bolts. Bolts  ${}^{3}_{4}$ ' $\phi$ , open holes 1316 ", unless otherwise noted.

REPAIR DETAILS FAI RT. 180 BUREAU COUNTY SN 006-0085