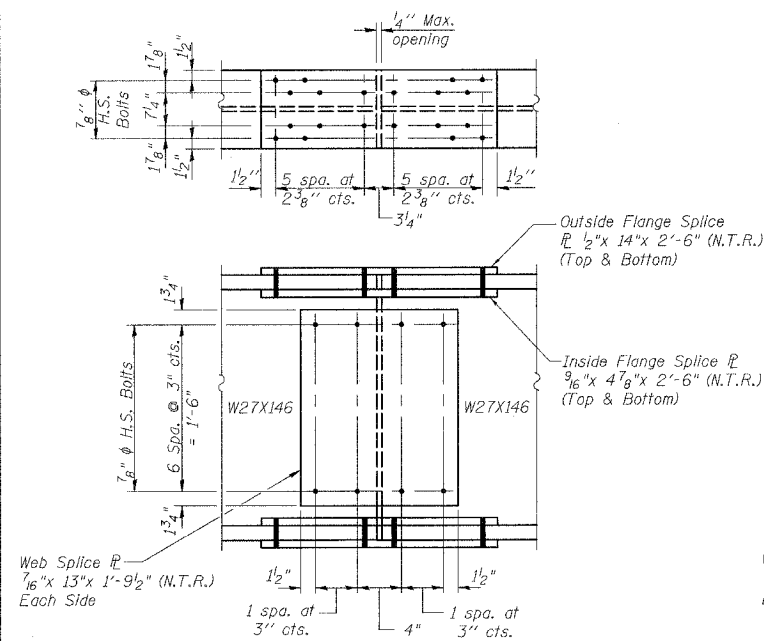


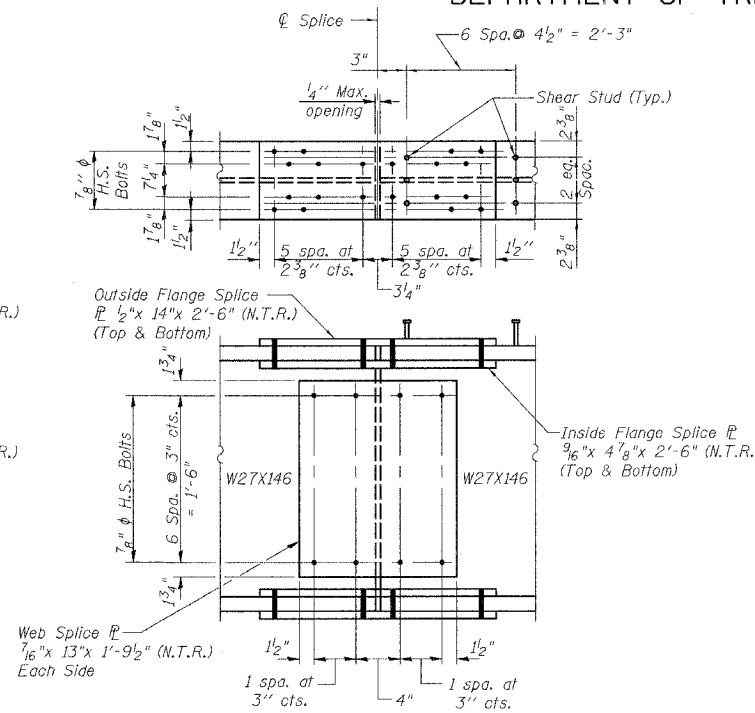
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	LEGAL SHEETS	SHEET NO.
FAI-55	**	WILL	505	316
PRO. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

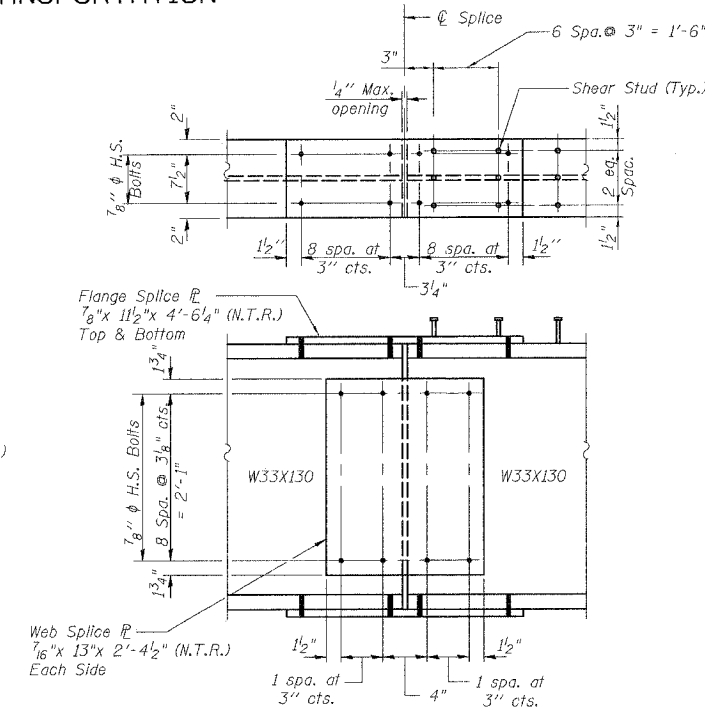
** SECTION 2006-032 BY
CONTRACT NO. 60B06



SPLICE
Splice 1 shown, Splice 2 similar.
(For NB W27X146, Non-Composite)
(6 Locations)



SPLICE
Splice 1 shown, Splice 2 similar.
(For SB W27X146, Composite)
(6 Locations)



SPLICE
Splice 1 shown, Splice 2 similar.
(For W33X130, Composite)
(4 Locations SB)

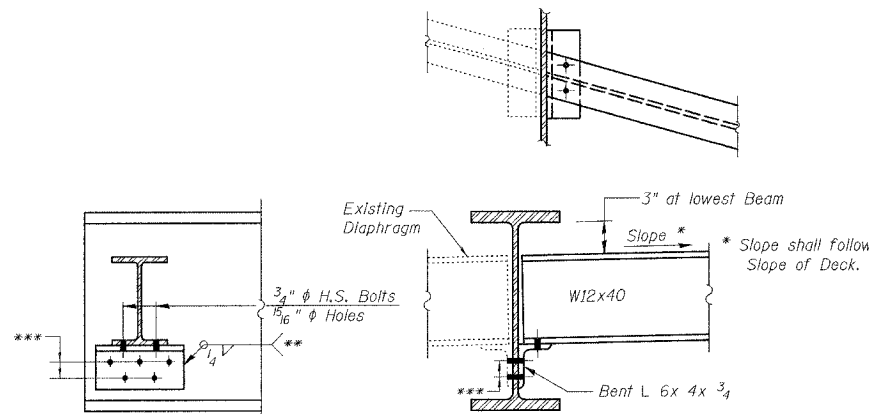
Note:
All bolts in splices are AASHTO M 164 (ASTM 325)
7/8" φ with Class A Contact Surfaces and Standard Holes.

INTERIOR GIRDER MOMENT TABLE
(NB PROPOSED BEAMS 9A & 9B, NON-COMPOSITE)

	0.4 Sp. 1 or 0.6 Sp. 3	Pier 1 or Pier 2	0.5 Sp. 2
I (in) ⁴	5630	5630	5630
S (in) ³	411	411	411
D (k/ft.)	1.020	1.020	1.020
M _p (k)	183	293	137
M _t (k)	217	168	209
M (Imp) (k)	62	47	57
M _p [M _t +M(Imp)] (k)	465	359	444
M _a (k)	842	849	757
f _s (k.s.i.)	5.3	8.6	4.0
f _s (k+Imp) (k.s.i.)	13.6	10.5	13.0
f _s (Overload) (k.s.i.)	18.9	19.1	17.0
f _s (Total) (k.s.i.)	24.6	24.8	22.1

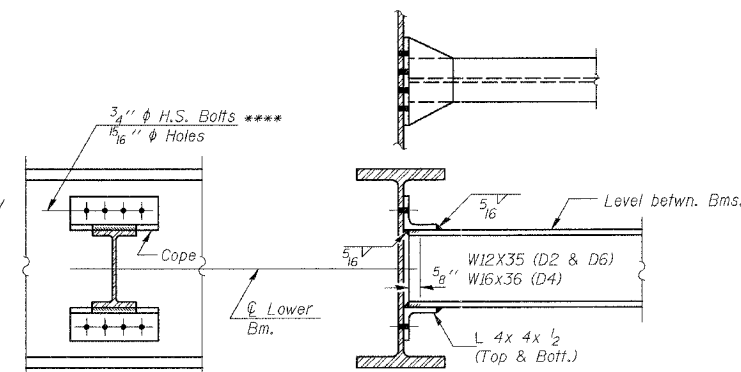
INTERIOR GIRDER REACTION TABLE
(NB PROPOSED BEAMS 9A & 9B)

	Abut.	Pier
R _p (k)	19.4	61.0
R _t (k)	29.1	34.6
Imp. (k)	8.4	9.6
R (Total) (k)	56.8	105.2



END DIAPHRAGMS D1, D3 & D5

(6 D1 Required SB)
(4 D3 Required SB)
(6 D5 Required NB)



INTERIOR DIAPHRAGMS D2, D4 & D6

(18 D2 Required SB)
(12 D4 Required SB)
(18 D6 Required NB)

Note:
Two hardened washers shall be required
over all oversize holes for diaphragms.

** Field weld angle to existing Beam 1.

*** Weld the existing angle to the beam prior to removing the existing bolts.
At existing Beams 7 and 9, remove existing bolts. Drill 1 5/16" φ holes in
new seat angle L 6x4x3/4" and reconnect with new 3/4" φ H.S. bolts.

**** Drill 1 5/16" φ holes for 3/4" φ H.S. bolts in existing Beams 1, 7 and 9.
Use new seat angle as template.

Notes:

1. N.T.R. denotes members subject to the supplemental
requirements for notch toughness (Zone 2).

2. Work this Sheet with Sheet Nos. 17 & 18.



STRUCTURAL STEEL DETAILS II
I-55 OVER EJ&E R.R.
FAI ROUTE 55-SEC. 2006-032 BY
WILL COUNTY
STA. 609+29.37
STRUCTURE NO. 009-0018 (NB)
STRUCTURE NO. 009-0019 (SB)

DESIGNED	J. ZUO
CHECKED	A. HAMMAD
DRAWN	J. ZUO
CHECKED	J. GRAINAWI

Date: 6/30/2006