INTERIOR BM. MOMENT TABLE		
		0.5 Span
Is	(in⁴)	6280
Ic (n)	(in⁴)	15082
Ic (3n)	(in⁴)	10881
Ss	(in³)	455
Sc (n)	(in³)	634
Sc (3n)	(in³)	570
Q	(K/ft.)	0.747
M_Q	('K)	504
s_Q	(K/ft.)	0.352
M_{sQ}	('K)	238
M_L	('K)	553
M (Imp)	('K)	139
$\frac{5}{3}[M_L+M(Imp)]$	('K)	1153
Ma	('K)	2464
Mu	('K)	2851
f_s Q non-comp	(k.s.i.)	13.3
f_s Q (comp)	(k.s.i.)	5.0
$f_s\frac{5}{3}(L+Imp)$	(k.s.i.)	21.8
f_s (Overload)	(k.s.i.)	40.1
VR	(K)	41.7

INTERIOR BM. REACTION TABLE		
		Abut's.
R_Q	(K)	40.4
R_L	(K)	33.3
Imp.	(K)	10.0
R (Total)	(K)	83.7

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads (in.⁴ and in.³).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads (in.⁴ and in.³).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

Q: Un-factored non-composite dead load (kips/ft.).

M_Q: Un-factored moment due to non-composite dead load (kip-ft.).

s_Q: Un-factored long-term composite (superimposed) dead load (kips/ft.)

M_{sQ}: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

M_L: Un-factored live load moment (kip-ft.).

M_{Imp}: Un-factored moment due to impact (kip-ft.).

M_a: Factored design moment (kip-ft.).
$1.3\ [\ M_Q + M_{sQ} + \frac{5}{3}\ (M_L + M_{Imp})\ ]$

M_u: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

f_s (Overload): Sum of stresses as computed from the moments below (ksi).
$M_Q + M_{sQ} + \frac{5}{3}\ (M_L + M_{Imp})$

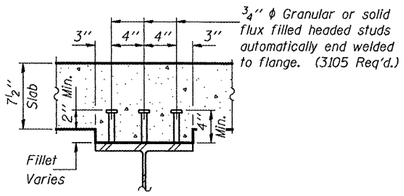
VR: Maximum L + impact horizontal shear range within the composite portion of the span for stud shear connector design (kips).

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

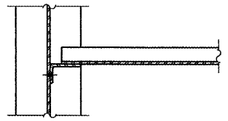
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 64	(10B)BR	PEORIA	186	58
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 13
22 SHEETS

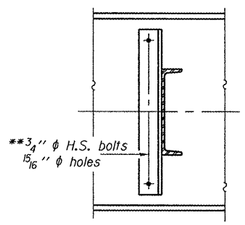
Contract #88803

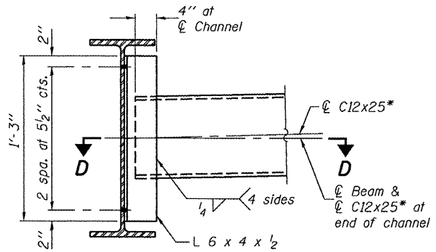


SECTION A-A



SECTION D-D



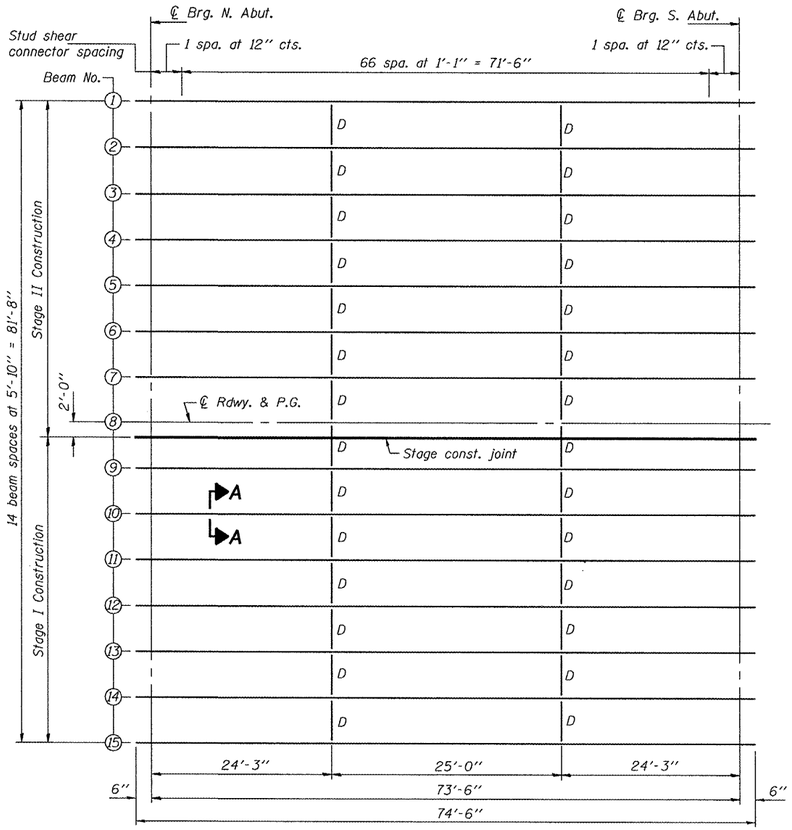


DIAPHRAGM D

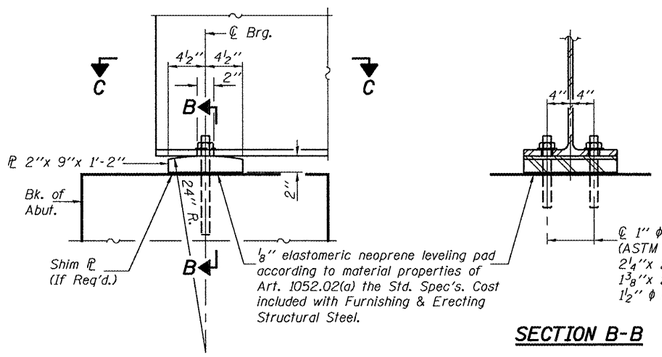
(28 Required)

* Alternate channel C12x30 is permitted to facilitate material acquisition. The calculated weight of structural steel is based on the lighter section, C12x25. The alternate, if utilized, will be provided at no extra cost to the department.

** Use 15/16" x 2¾" vertical slotted holes in connection angles at the west side of Beam 8 only. Between Beams 8 & 9, provide 15/16" plate washers for slotted holes. The bolts for slotted holes in angles at Beam 8 shall be finger tightened prior to the deck pour for Stage II construction and then be fully tightened after completion of the Stage II pour.



FRAMING PLAN

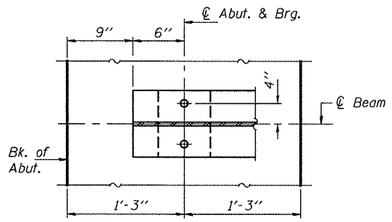


ELEVATION AT ABUTMENTS

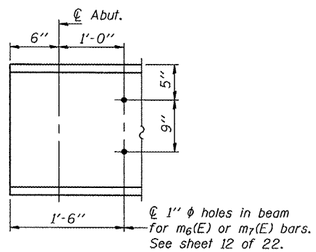
SECTION B-B

ABUTMENT BEARING

(30 Required)



SECTION C-C



END OF BEAM ELEVATION

Notes: All beams shall be W27x161 M 270, Grade 50. Load carrying components designated "NTR" shall conform to the supplemental requirements for Notch Toughness, Zone 2.

All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

DESIGNED	D.P.C.
CHECKED	D.F.Z.
DRAWN	h.t. duong F.L.L. r.b. carbonell
CHECKED	D.P.C./D.F.Z.

November 13, 2008
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

***TOP OF BEAM ELEVATIONS

	Bm. 1	Bm. 2	Bm. 3	Bm. 4	Bm. 5	Bm. 6	Bm. 7	Bm. 8	Bm. 9	Bm. 10	Bm. 11	Bm. 12	Bm. 13	Bm. 14	Bm. 15
℄ S. Abut.	470.30	470.43	470.55	470.67	470.77	470.86	470.95	471.04	470.95	470.86	470.77	470.67	470.55	470.43	470.30
℄ N. Abut.	470.08	470.20	470.32	470.45	470.54	470.63	470.73	470.82	470.73	470.63	470.54	470.45	470.32	470.20	470.08

***For fabrication only.

STRUCTURAL STEEL
F.A.P. RTE. 64 - SECTION (10B)BR
PEORIA COUNTY
STATION 80+69.5
STRUCTURE NO. 072-0198