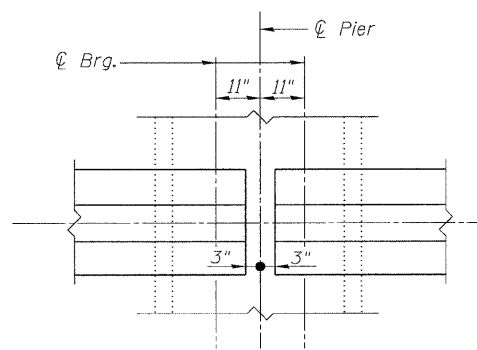
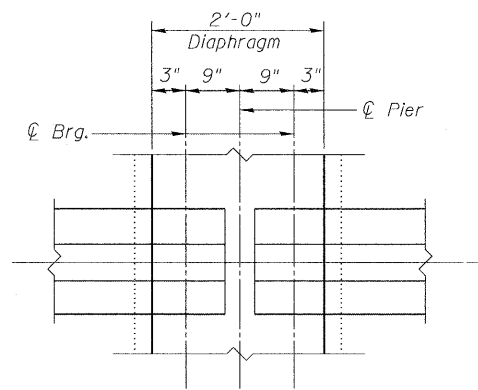


DETAIL A



DETAIL B



DETAIL C

	0.5 Sp. 1 0.5 Sp. 4	0.4 Sp. 2 0.6 Span 3	Pier 2
I	(in ⁴) 144,118	144,118	144,118
I'	(in ⁴) 401,562	401,562	401,562
S_b	(in ³) 6,834	6,834	6,834
S_b'	(in ³) 11,296	11,296	11,296
S_t	(in ³) 5,355	5,355	5,355
S_t'	(in ³) 32,255	32,255	32,255
Q	(k/ft) 1.30	1.30	1.30
M_Q	(k) 338.7	964.0	204.6
s_Q	(k/ft) 0.316	0.316	0.316
M_s	(k) 66.4	116.6	204.6
M_L	(k) 286.7	512.7	436.2
M_{Imp}	(k) 86.3	129.9	80.9

	N. or S. Abut.	Pier 1 Span 1 Pier 3 Span 4	Pier 1 Span 2 Pier 3 Span 3	Pier 2 Span 2 Pier 2 Span 3
R_Q	(k) 26.6	26.6	46.9	46.9
R_s	(k) 6.5	6.5	8.6	14.3
R_L	(k) 34.5	34.5	37.6	26.0
$Imp.$	(k) 10.4	10.4	9.5	4.8
R_{Total}	(k) 78.0	78.0	102.6	92.0

* The total R_Q , R_L , and impact reactions are assumed to be distributed evenly to each bearing line at a pier regardless of the span ratios. The bearing design at a pier is based on the maximum reactions of either span.

- I : Non-composite moment of inertia of beam section (in⁴).
- I' : Composite moment of inertia of beam section (in⁴).
- S_b : Non-composite section modulus for the bottom fiber of the prestressed beam (in³).
- S_b' : Composite section modulus for the bottom fiber of the prestressed beam (in³).
- S_t : Non-composite section modulus for the top fiber of the prestressed beam (in³).
- S_t' : Composite section modulus for the top fiber of the prestressed beam (in³).
- Q : Un-factored non-composite dead load (kips/ft.).
- M_Q : Un-factored moment due to non-composite dead load conservatively taken at 0.5 of the span (kip-ft.).
- s_Q : Un-factored long-term composite (superimposed) dead load (kips/ft.).
- M_s : Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
- M_L : Un-factored live load moment on the composite section (kip-ft.).
- M_{Imp} : Un-factored moment due to impact on the composite section (kip-ft.).



FILE NAME = 0160199-62099-19-FRAMING.dgn

USER NAME =	DESIGNED - JPMILLA	REVISED -
PLOT SCALE =	CHECKED - RALEE	REVISED -
PLOT DATE = 07/01/2011	DRAWN - RMKANE	REVISED -
	CHECKED - RALEE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RT 1 - HALSTED ST. OVER I-80/294
FRAMING PLAN

SHEET NO. 19 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
876	2001-001BR	COOK	62	38
STRUCTURE NO. 016-0199		CONTRACT NO. 62099		
ILLINOIS FED. AID PROJECT				