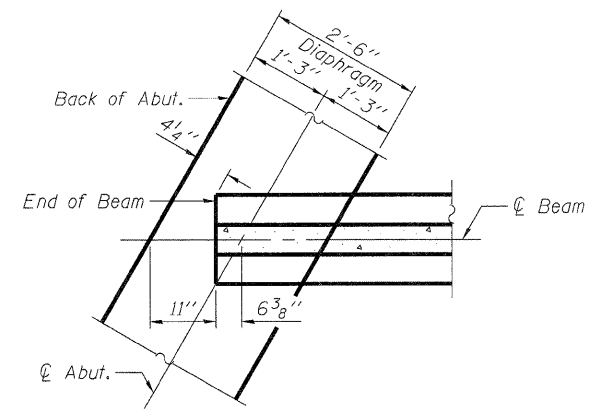
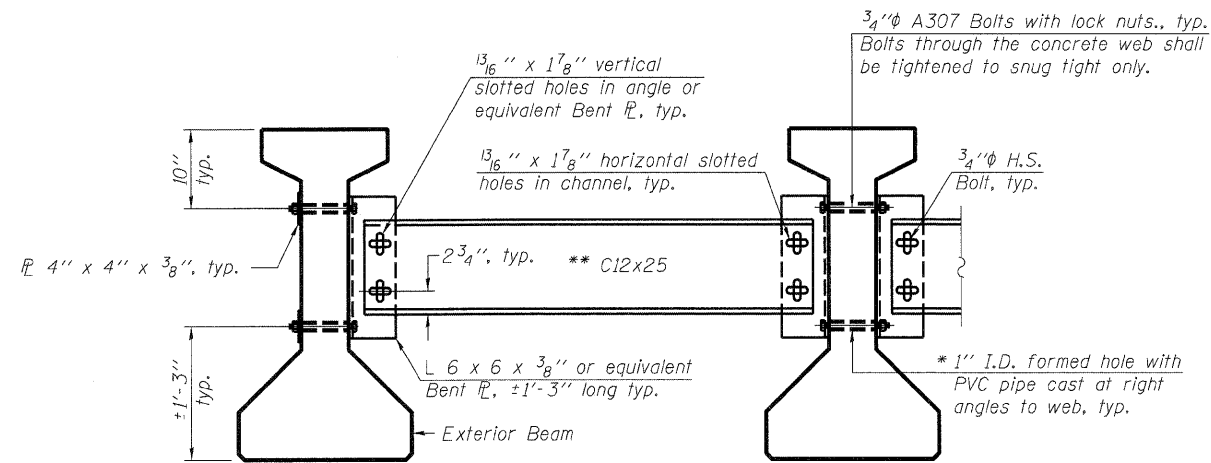


FRAMING PLAN



DETAIL A



INTERIOR DIAPHRAGM (D)

	0.4 Sp. 1 0.6 Sp. 3	Pier 1 or 2	0.5 Sp. 2
I	(in ⁴) 48,648		48,648
I'	(in ⁴) 169,781		169,781
S_b	(in ³) 3,165.1		3,165.1
S_b'	(in ³) 5,879		5,879
S_t	(in ³) 2,358.1		2,358.1
S_t'	(in ³) 23,846		23,846
$DC1$	(k/ft) 0.980		0.980
M_{DC1}	(k) 253.1		453.3
$DC2$	(k/ft) 0.150	0.150	0.150
M_{DC2}	(k) 21.0	44.3	25.1
DW	(k/ft) 0.296	0.296	0.296
M_{DW}	(k) 41.5	87.3	49.6
M_{L+IM}	(k) 464.6	409.3	488.6

	Abut.	Pier 1 Span 1 Pier 2 Span 3	Pier 1 Span 2 Pier 2 Span 2
R_{DC1}	(k) 22.7	22.7	29.8
R_{DC2}	(k) 2.5	4.5	4.5
R_{DW}	(k) 5.0	8.9	8.9
R_{L+IM}	(k) 64.0	43.7	43.7
R_{Total}	(k) 94.2	79.8	86.9

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).
 $DC1$: Un-factored non-composite dead load (kips/ft.).
 M_{DC1} : Un-factored moment due to non-composite dead load (kip-ft.).
 $DC2$: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
 M_{DC2} : Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
 DW : Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
 M_{DW} : Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
 M_{L+IM} : Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

Notes:
 All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted. Two hardened washers are required for each set of oversized holes.
 All holes shall be 15/16" φ unless otherwise noted. 5/16" x 3" x 3" plate washers are required over all slotted holes.
 All bolts shall be galvanized according to AASHTO M232. Bracing shall be installed as beams are erected and tightened as soon as possible during erection.
 Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete I-Beams.

* Fabricator shall locate to miss strands within permissible tolerances.
 ** Alternate C12x30 channels are permitted to facilitate material acquisition.

PRINTED DATE: 12/15/2011
 FILE NAME: E:\Projects\148\148.dwg
 PLOT DATE: 12/15/2011
 PLOT TIME: 10:00:00 AM
 PLOT SCALE: 1.0000
 PLOT SHEET: 14 OF 24

DESIGNED	SMA
CHECKED	DF
DRAWN	ADG
CHECKED	DF

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 096-0073

SHEET NO. 14 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET
823	(22,B2A)B-1 & (22,B2B)B-1	Wayne	85	69
CONTRACT NO. 74216			ILLINOIS FEDERAL AID PROJECT	