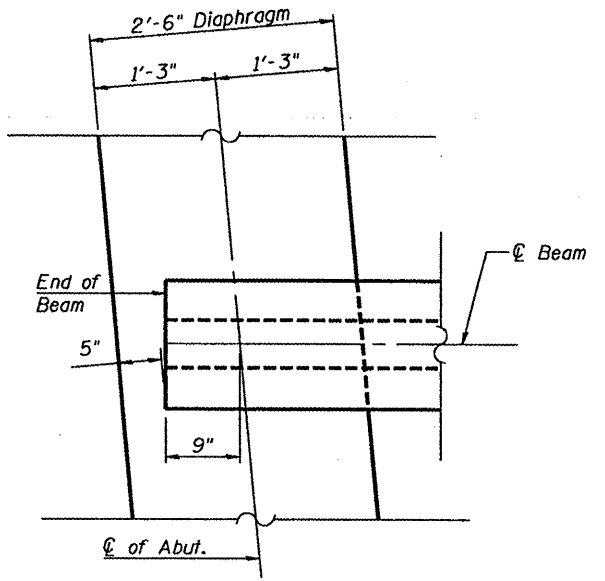
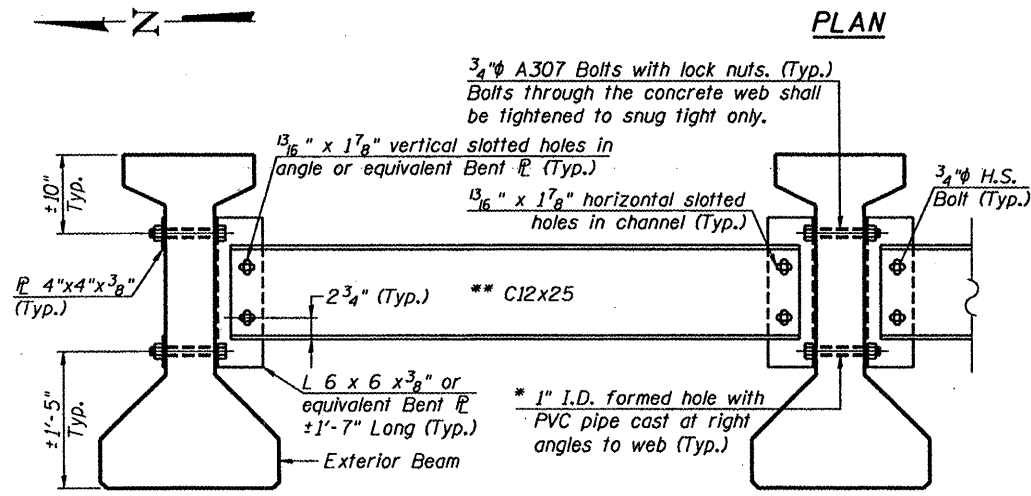


INTERIOR BEAM REACTION TABLE

		N. Abut.	S. Abut.
R_{DC1}	(k)	41.1	41.1
R_{DC2}	(k)	5.6	5.6
R_{DW}	(k)	11.0	11.0
$R_{\frac{1}{2} \cdot Imp}$	(k)	72.2	72.2
R_{Total}	(k)	129.9	129.9

INTERIOR BEAM MOMENT TABLE

		0.5 Sp. 1
I	(in ⁴)	90,956
I'	(in ⁴)	265,256
S_b	(in ³)	5,152.7
S_b'	(in ³)	8633
S_1	(in ³)	3,735.6
S_1'	(in ³)	23,526
$DC1$	(k/')	1.089
M_{DC1}	(k)	776
$DC2$	(k/')	0.150
M_{DC2}	(k)	107
DW	(k/')	0.292
M_{DW}	(k)	208
$M_{\frac{1}{2} \cdot Imp}$	(k)	1,076



NOTES:
 All materials 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 1/16" 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 prestressed beams.
 Calculated weight of structural steel = 1920 lbs

* Fabricator shall locate to miss strands within permissible tolerances.
 ** Alternate C12x30 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on lighter section. The alternate, if utilized, shall be provided at no extra cost to the Department.

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_1 : Non-composite section modulus for the top fiber of the prestressed beam (in³).
 S_1' : 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.).
 $M_{\frac{1}{2} \cdot Imp}$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

DESIGNED	MJJ
CHECKED	ALN
DRAWN	MJJ
CHECKED	ALN

THOUVENOT, WADE & MOERCHEN, INC.
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SHEET NO. 9
 SHEETS 17

FRAMING PLAN
STRUCTURE NO. 036-0069

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-2	HENDERSON	490	436
CONTRACT NO. 88773				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				