

**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 inch unless otherwise noted.  
 5/16 inch x 3 inch x 3 inch 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.

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

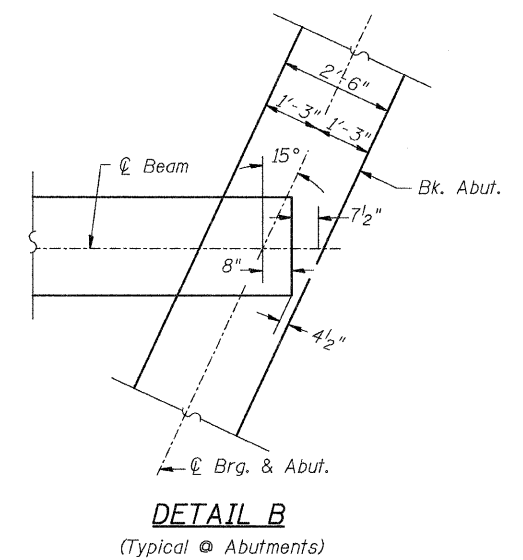
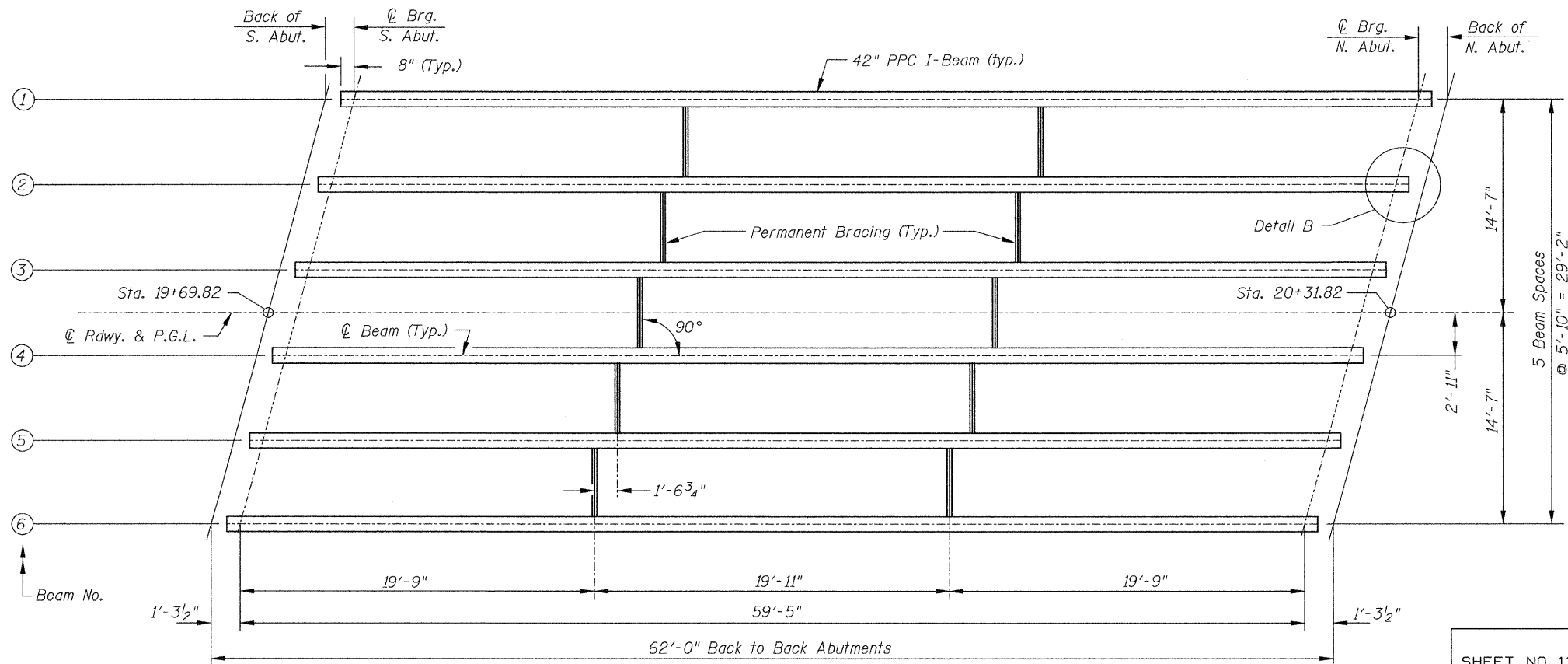
$I$ : Non-composite moment of inertia of beam section ( $in^4$ ).  
 $I'$ : Composite moment of inertia of beam section ( $in^4$ ).  
 $S_b$ : Non-composite section modulus for the bottom fiber of the prestressed beam ( $in^3$ ).  
 $S_b'$ : Composite section modulus for the bottom fiber of the prestressed beam ( $in^3$ ).  
 $S_t$ : Non-composite section modulus for the top fiber of the prestressed beam ( $in^3$ ).  
 $S_t'$ : Composite section modulus for the top fiber of the prestressed beam ( $in^3$ ).  
 $DC1$ : 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.).  
 $M_L + Imp$ : Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

INTERIOR BEAM MOMENT TABLE		
		0.5 Sp. 1
$I$	( $in^4$ )	90,956
$I'$	( $in^4$ )	356,217
$S_b$	( $in^3$ )	5,153
$S_b'$	( $in^3$ )	9,977
$S_t$	( $in^3$ )	3,736
$S_t'$	( $in^3$ )	56,572
$DC1$	( $k/ft$ )	1.45
$M_{DC1}$	( $'k$ )	638
$DC2$	( $k/ft$ )	0.03
$M_{DC2}$	( $'k$ )	15
$DW$	( $k/ft$ )	0.29
$M_{DW}$	( $'k$ )	129
$M_L + Imp$	( $'k$ )	1,209

INTERIOR BEAM REACTION TABLE		
		Abut.
$R_{DC1}$	( $k$ )	44.8
$R_{DC2}$	( $k$ )	1.0
$R_{DW}$	( $k$ )	9.1
$R_L + Imp$	( $k$ )	106.3
$R_{Total}$	( $k$ )	161.2

**PERMANENT BRACING DETAILS**

Permanent bracing shall not be paid for separately but shall be included with Furnishing and Erecting Precast Prestressed I-Beams, 42".



**FRAMING PLAN**

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SHEET NO. 11 22 SHEETS	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 25	09-00658-00-BR	LASALLE	39	18
	SN 050-3598		CONTRACT NO. 87451		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BRS-0271(103)		