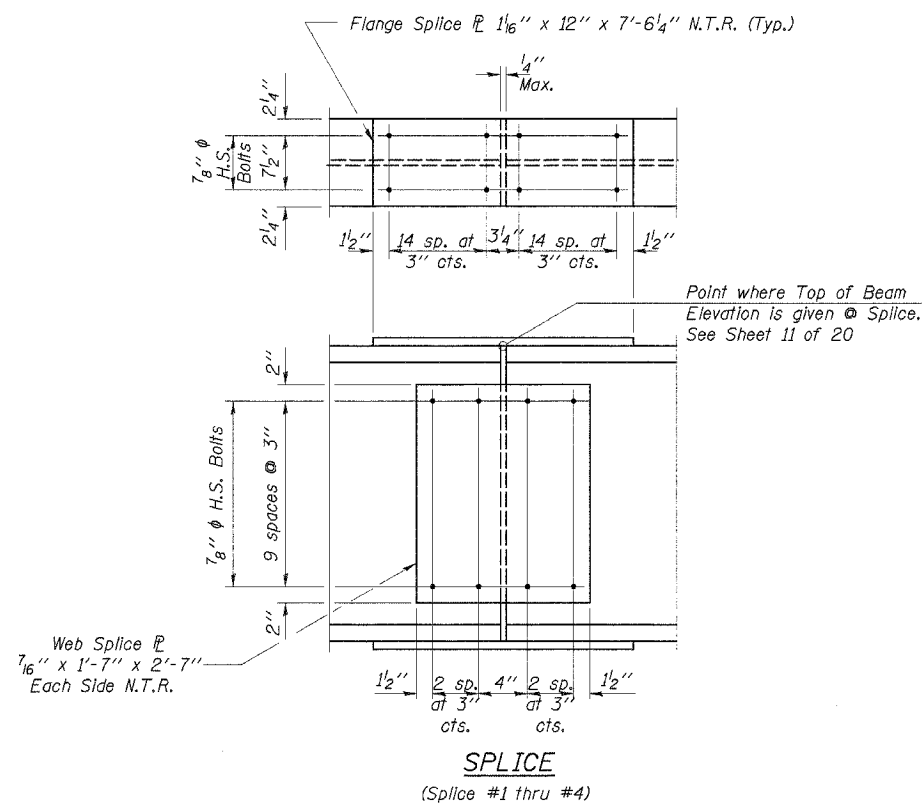


Note:  
Two hardened washers shall be required over all oversize holes for diaphragms.

	0.4 Span 1 or 0.6 Span 5	Pier 1 or Pier 4	0.5 Span 2 or Span 4	Pier 2 or Pier 3	0.5 Span 3
$I_s$	(in <sup>4</sup> ) 9,750	9,750	9,750	9,750	9,750
$I_c$ (n)	(in <sup>4</sup> ) 23,350	—	23,350	—	23,350
$I_c$ (sn)	(in <sup>4</sup> ) 17,026	—	17,026	—	17,026
$S_s$	(in <sup>3</sup> ) 542	542	542	542	542
$S_c$ (n)	(in <sup>3</sup> ) 760	—	760	—	760
$S_c$ (sn)	(in <sup>3</sup> ) 684	—	684	—	684
$D$	(k/ft.) 1,025	1,265	1,025	1,265	1,025
$M_R$	(k) 366	817	351	841	343
$s_R$	(k/ft.) 0.240	—	0.240	—	0.240
$M_s R$	(k) 94	—	101	—	97
$M_t$	(k) 527	353	577	389	583
$M$ (Imp)	(k) 134	86	134	90	135
$S_3[M_t + M(\text{Imp})]$	(k) 1,102	732	1,185	798	1,197
$M_a$	(k) 2,031	2,014	2,128	2,131	2,128
$M_u$	(k) 3,165	—	3,165	—	3,165
$f_s R$ non-comp (k.s.i.)	8.1	18.1	7.8	18.6	7.6
$f_s R$ (comp) (k.s.i.)	1.6	—	1.8	—	1.7
$f_s S_3$ (k+Imp) (k.s.i.)	17.4	16.2	18.7	17.7	18.9
$f_s$ (Overload) (k.s.i.)	27.1	34.3	28.3	36.3	28.2
$f_s$ (Total) (k.s.i.)	—	44.6	—	47.2	—
$VR$	(k) 51.4	—	41.0	—	40.9

	Abut.	Pier 1 or 4	Pier 2 or 3
$R_R$	(k) 34.2	113.6	114.1
$R_t$	(k) 37.3	51.6	53.8
Imp.	(k) 9.5	12.5	12.5
$R$ (Total)	(k) 81.0	177.6	180.4

$I_s$  and  $S_s$  are the moment of inertia and section modulus of the steel section used in computing  $f_s$  (Total & Overload).  
 $I_c(n)$  and  $S_c(n)$  are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.  
 $I_c(sn)$  and  $S_c(sn)$  are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads.  
 $VR$  is the maximum Live Load + Impact shear range in the composite portion of the span.  
 $M_a$  (Applied Moment) =  $1.3[M_R + M_s R + S_3(M_t + M_{\text{Imp}})]$ .  
The plastic moment capacity ( $M_u$ ) is computed according to AASHTO 10.48.1 and 10.50.1.1  
 $f_s$  (Overload) is the sum of the stresses due to  $M_R + M_s R + S_3(M_t + M_{\text{Imp}})$ .  
 $f_s$  (Total) (Non-compact section) is the sum of the stresses due to  $1.3[M_R + M_s R + S_3(M_t + M_{\text{Imp}})]$ .



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CHECKED	S.F.M., F.J.S.
DRAWN	S.A.P.
CHECKED	A.R.K., F.J.S.

**STRUCTURAL STEEL**

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