

INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier 1 or 2	0.5 Sp. 2
I_s	(in ⁴)	2100	2100	2100
$I_c(n)$	(in ⁴)	6993	-	6993
$I_c(3n)$	(in ⁴)	5237	-	5237
S_s	(in ³)	175	175	175
$S_c(n)$	(in ³)	288	-	288
$S_c(3n)$	(in ³)	260	-	260
Z	(in ³)	-	200	-
DC1	(k/')	0.70	0.70	0.70
M _{DC1}	('k)	70	132	70
DC2	(k/')	0.15	0.15	0.15
M _{DC2}	('k)	18	23	21
DW	(k/')	0.30	0.30	0.30
M _{DW}	('k)	35	45	42
$M_L + 1M$	('k)	365	204	402
M_u (Strength I)	('k)	801	618	880
$\phi_f M_n$, $\phi_f M_{nc}$	('k)	1478	661	1477
f_s DC1	(ksi)	4.8	9.1	4.8
f_s DC2	(ksi)	0.8	1.6	1.0
f_s DW	(ksi)	1.6	3.1	1.9
f_s 1.3(L+IM)	(ksi)	19.8	18.2	21.8
f_s (Service II)	(ksi)	27.0	32.0	29.5
V_f	(k)	36.2	-	36.2

* Compact sections

INTERIOR GIRDER REACTION TABLE		
	Abut.	Pier 1 or 2
R_{DC1}	(k)	33.5
R_{DC2}	(k)	7.1
R_{DW}	(k)	13.9
$R_L + 1M$	(k)	78.3
R_{Total}	(k)	132.8

I_s , S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.4 and in.3).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in.4 and in.3).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in.4 and in.3).

Z : Plastic Section Modulus of the steel section in non-composite areas.

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.).

$M_L + 1M$: Un-factored live load moment plus dynamic load allowance (Impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L + 1M$

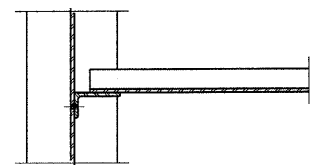
$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).

$\phi_f M_{nc}$: Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).

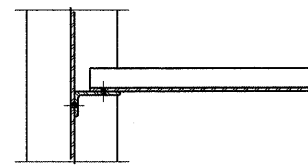
f_s (Service II): Sum of stresses as computed from the moments below (ksi).
 $M_{DC1} + M_{DC2} + M_{DW} + 1.3 M_L + 1M$

f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L + 1M$

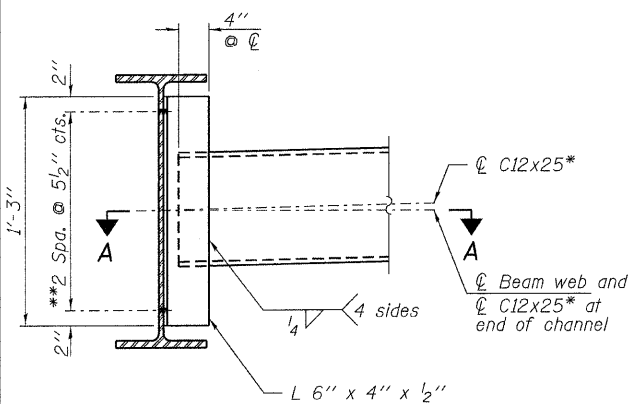
V_f : Maximum factored shear range in composite portion of span computed according to Article 6.10.10.



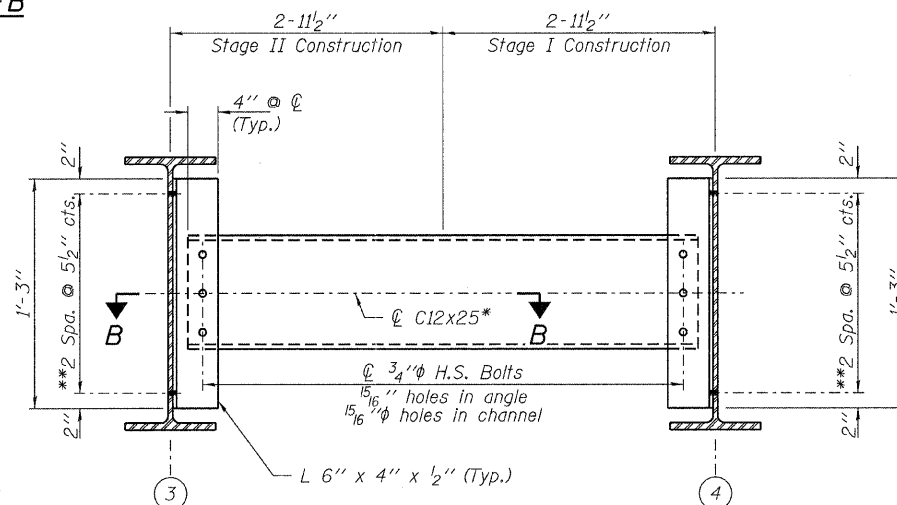
SECTION A-A



SECTION B-B

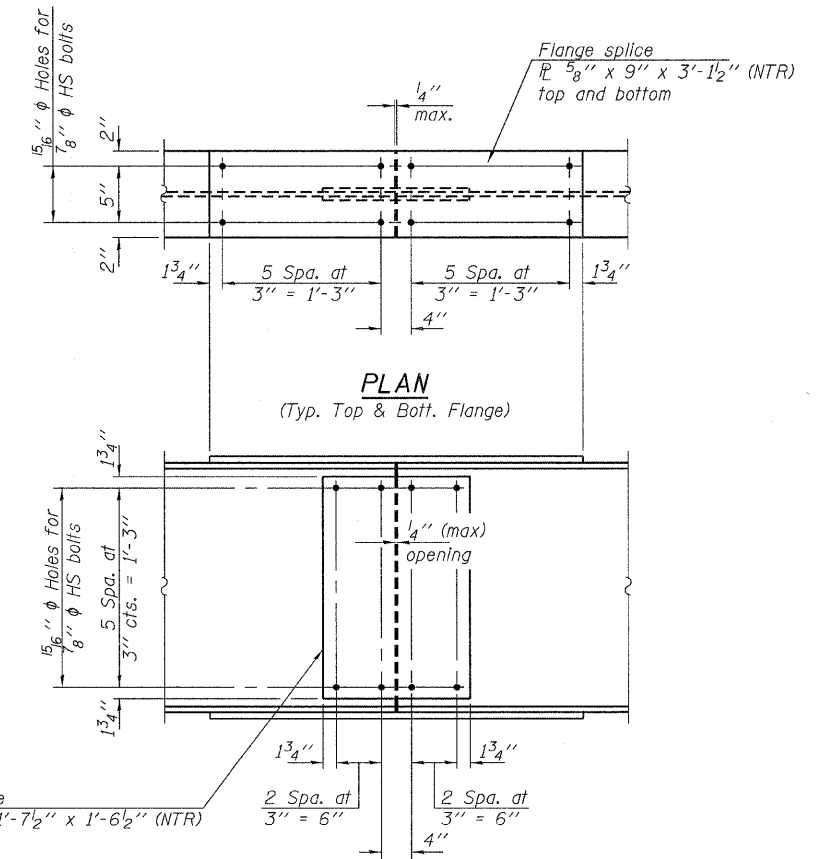


INTERIOR DIAPHRAGM D
(20 Required)



INTERIOR DIAPHRAGM D1
(5 Required)

Notes:
 Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
 All beams and splices shall be M270 Grade 50.
 *Alternate channels (C12X30) are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.
 **3/4" ϕ HS bolts, 15/16" ϕ holes.



SPLICE 1 & 2 DETAIL
(12 Required)