

INTERIOR BEAM MOMENT TABLE (COMPOSITE IN POSITIVE MOMENT AREA ONLY)

	0.4 SPAN 1 or 3	PIER 1 or 2	0.5 SPAN 2
I_s (in ⁴)	2850	2850	2850
I_c (in ⁴)(n)	9367		9367
I_c (in ⁴)(3n)	6705		6705
S_s (in ³)	213	213	213
S_c (in ³)(n)	348		348
S_c (in ³)(3n)	310		310
Q (k/ft.)	0.682	0.682	0.682
M_Q (ft.-k)	72	148	83
s_Q (k/ft.)	0.28	0.28	0.28
$M_s Q$ (ft.-k)	30	61	34
M_{LL} (ft.-k)	214	179	234
M_{IMP} (ft.-k)	64	52	66
$\frac{5}{3}(M_{LL} + M_{IMP})$ (k)	463	385	500
M_a (ft.-k)	735	772	802
M_u (ft.-k)			
$f_s Q$ (non-comp)(ksi)	4.0	8.3	4.7
$f_s Q$ (comp)(ksi)	1.0		1.2
$f_s \frac{5}{3} (LL + I)$ (ksi)	16.0	21.7	17.2
f_s (overload)(ksi)	21.0	30.0	23.1
f_s (total)(ksi)	27.3	39.0	30.0
VR (k)			

INTERIOR BEAM REACTION TABLE

	ABUTMENTS	PIERS
R_Q (k)	12.8	50.7
R_{LL} (k)	28.5	43.3
R_{IMP} (k)	15.1	22.8
R_{TOTAL} (k)	56.4	116.8

M_u = FULL PLASTIC MOMENT CAPACITY FOR COMPACT, BRACED SECTION.

M_a = (APPLIED MOMENT) = $1.3 [M_Q + M_s Q + \frac{5}{3} (M_{LL} + I)]$

I_s AND S_s ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE STEEL SECTION USED IN COMPUTING f_s (TOTAL AND OVERLOAD).

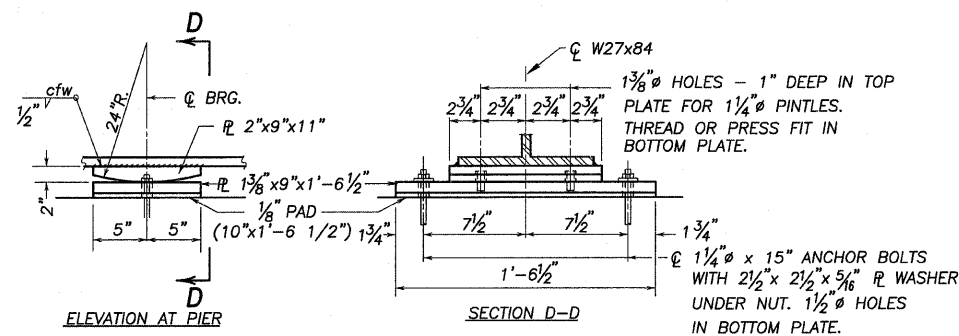
I_c AND S_c ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE COMPOSITE SECTION USED IN COMPUTING f_s (TOTAL AND OVERLOAD).

VR IS THE MAXIMUM Q + IMPACT SHEAR RANGE IN SPAN.

THE FULLY PLASTIC MOMENT CAPACITY (M_u) IS COMPUTED ACCORDING TO AASHTO 10.48.1 & 10.50.1.1.

f_s (TOTAL) IS THE SUM OF THE STRESSES DUE TO $1.3 [M_Q + M_s Q + \frac{5}{3} (M_{LL} + I)]$.

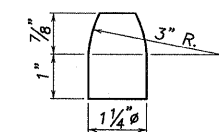
f (OVERLOAD) IS THE SUM OF THE STRESSES DUE TO $M_Q + M_s Q + \frac{5}{3} (M_{LL} + I)$.



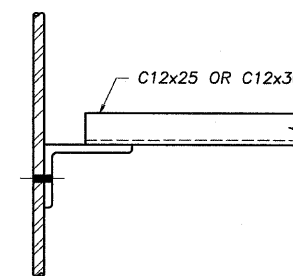
FIXED BEARING - PIERS NO. 1 & 2

(10 REQUIRED.)

* 1/8" REINFORCED ELASTOMERIC NEOPRENE PAD COST INCLUDED WITH STRUCTURAL STEEL.

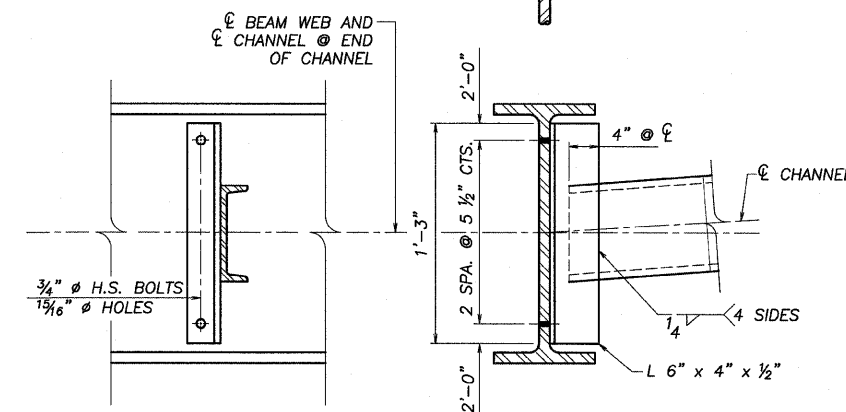


DETAIL OF PINTLE



PROPOSED TOP OF BEAM ELEVATIONS

BEAM No.	1	2	3	4	5
LOCATION					
Q BRG. W. ABUT.	821.544	821.641	821.739	821.837	821.934
Q BRG. PIER #1	821.544	821.641	821.739	821.837	821.934
Q BRG. PIER #2	821.544	821.641	821.739	821.837	821.934
Q BRG. E. ABUT.	821.544	821.641	821.739	821.837	821.934



NOTE: TWO HARDENED WASHERS REQUIRED FOR EACH SET OF OVERIZED HOLES.

INTERIOR DIAPHRAGM