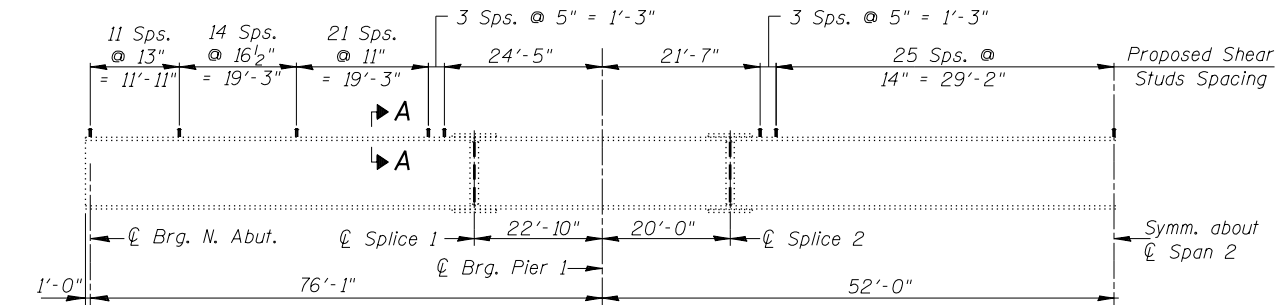


INTERIOR BEAM MOMENT TABLE			
	0.4 Sp. 1 or 0.6 Sp. 2	Pier	0.5 Sp. 2
$I_s$	(in <sup>4</sup> ) 15,000	21,254	15,000
$I_c(n)$	(in <sup>4</sup> ) 37,066		39,669
$I_c(3n)$	(in <sup>4</sup> ) 25,801		27,080
$S_s$	(in <sup>3</sup> ) 836	1,184	836
$S_c(n)$	(in <sup>3</sup> ) 1,266		1,274
$S_c(3n)$	(in <sup>3</sup> ) 1,097		1,108
$Z$	(in <sup>3</sup> )	701	
$\rho$	(k/ft)	0.98	0.98
$M\phi$	(k)	318	466
$s\phi$	(k/ft)	0.50	0.50
$M_s\phi$	(k)	191	284
$M_L$	(k)	522	654
$M_I$	(k)	130	152
$S_3 [M_L + I]$	(k)	1,087	1,343
$M_a$	(k)	2,074	2,721
$M_u$	(k)	3,996	4,076
$f_s \rho$ non-comp	(ksi)	4.6	6.7
$f_s \rho$ (comp)	(ksi)	2.1	3.1
$f_s S_3 [M_L + M_I]$	(ksi)	10.3	12.7
$f_s$ (Overload)	(ksi)	17.0	22.4
$f_s$ (Total)	(ksi)		
VR	(k)	54.6	56.6

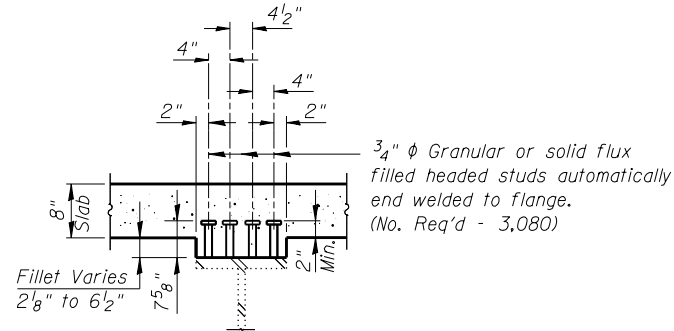
\* Compact section  
 \*\* Braced non-compact and partially braced section

INTERIOR BEAM REACTION TABLE		
	Abut.	Pier
$R\phi$	(k) 39.7	150.7
$R_L$	(k) 39.7	50.3
$R_I$	(k) 9.8	11.6
$R_{Total}$	(k) 89.2	212.6



TOP OF EXISTING BEAM ELEVATION (UNDEFLECTED) ***					
Beam	1	2	3	4	5
Brig. N. Abut.	729.04	729.09	729.07	728.99	728.84
Splice No. 1	729.21	729.28	729.28	729.21	729.08
Pier No. 1	729.24	729.32	729.33	729.27	729.15
Splice No. 2	729.27	729.35	729.37	729.32	729.21
Splice No. 3	729.25	729.36	729.40	729.37	729.28
Pier No. 2	729.21	729.32	729.37	729.35	729.27
Splice No. 4	729.16	729.28	729.34	729.33	729.25
Brig. S. Abut.	728.96	729.11	729.18	729.19	729.13

\*\*\* Elevations have been converted from the NGVD 29 datum on the Existing Plans dated May 15, 1956 to the current NAVD 88 datum by subtracting 0.322 ft.



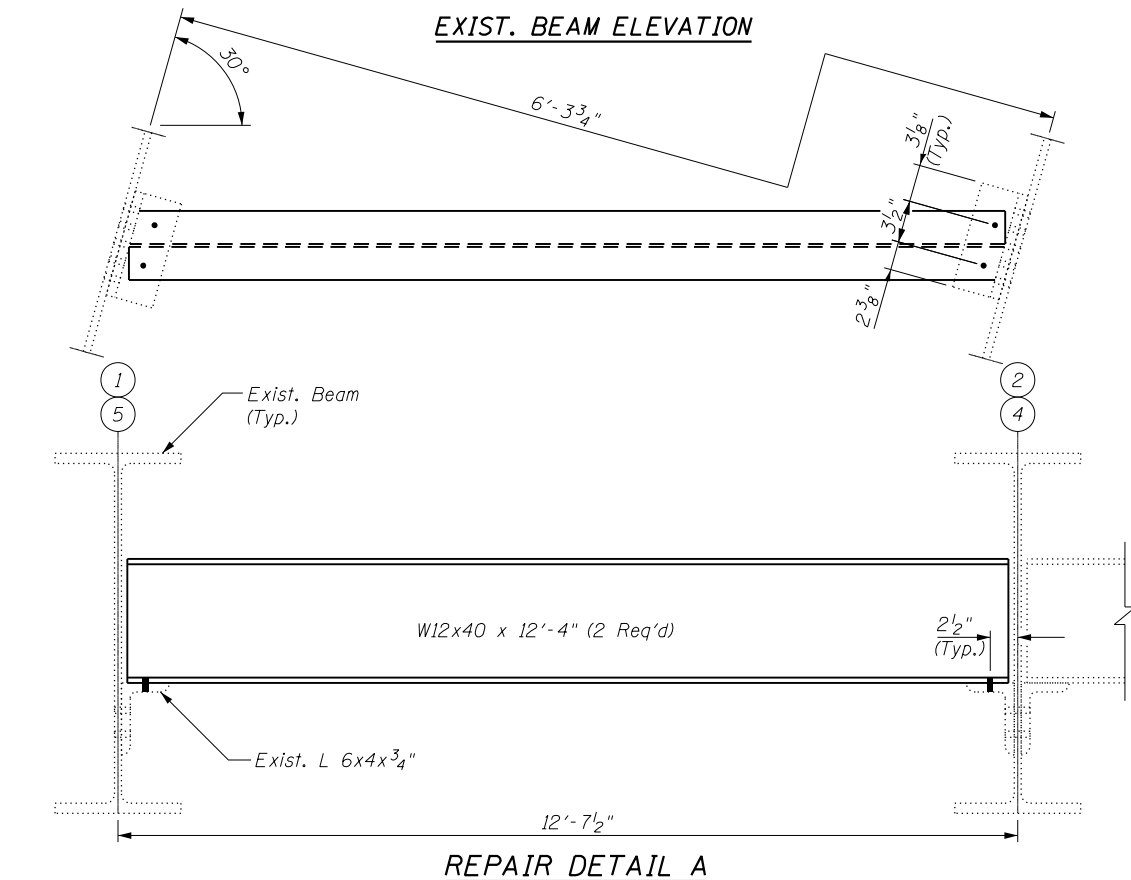
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	990
Stud Shear Connectors	Unit	3,080

Notes:

Field drill holes in new diaphragms.

Cost of removal and disposal of existing diaphragms shall be included with Structural Steel Repair.



$I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total and Overload) due to non-composite dead loads (in<sup>4</sup> and in<sup>3</sup>).  
 $I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total and Overload) due to short-term composite live loads (in<sup>4</sup> and in<sup>3</sup>).  
 $I_c(3n), S_c(3n)$ : 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 and Overload) due to long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).  
 $Z$ : Plastic Section Modulus of the steel section in non-composite areas (in<sup>3</sup>).  
 $\rho$ : Un-factored non-composite dead load (kips/ft.).  
 $M\phi$ : Un-factored moment due to non-composite dead load (kip-ft.).  
 $s\phi$ : Un-factored long-term composite (superimposed) dead load (kips/ft.).  
 $M_s\phi$ : Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).  
 $M_L$ : Un-factored live load moment (kip-ft.).  
 $M_I$ : Un-factored moment due to impact (kip-ft.).  
 $M_a$ : Factored design moment (kip-ft.).  
 $1.3 [M\phi + M_s\phi + \frac{5}{3} (M_L + M_I)]$   
 $M_u$ : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).  
 $f_s$  (Overload): Sum of stresses as computed from the moments below (ksi).  
 $M\phi + M_s\phi + \frac{5}{3} (M_L + M_I)$   
 $f_s$  (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).  
 $1.3 [M\phi + M_s\phi + \frac{5}{3} (M_L + M_I)]$   
 $VR$ : Maximum  $L_t$  + impact shear range within the composite portion of the span for stud shear connector design (kips).