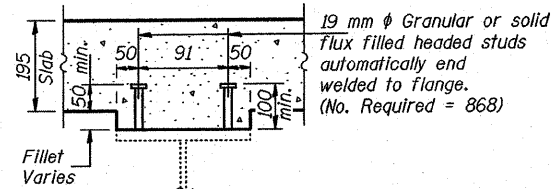


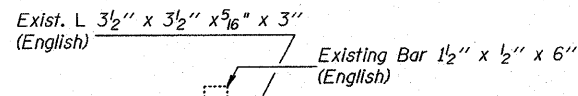
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO. 9
FAS 204	*	ROCK ISLAND	31	17	14 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

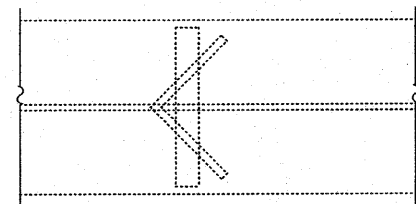
\* 92-00297-00-BR



SECTION A-A

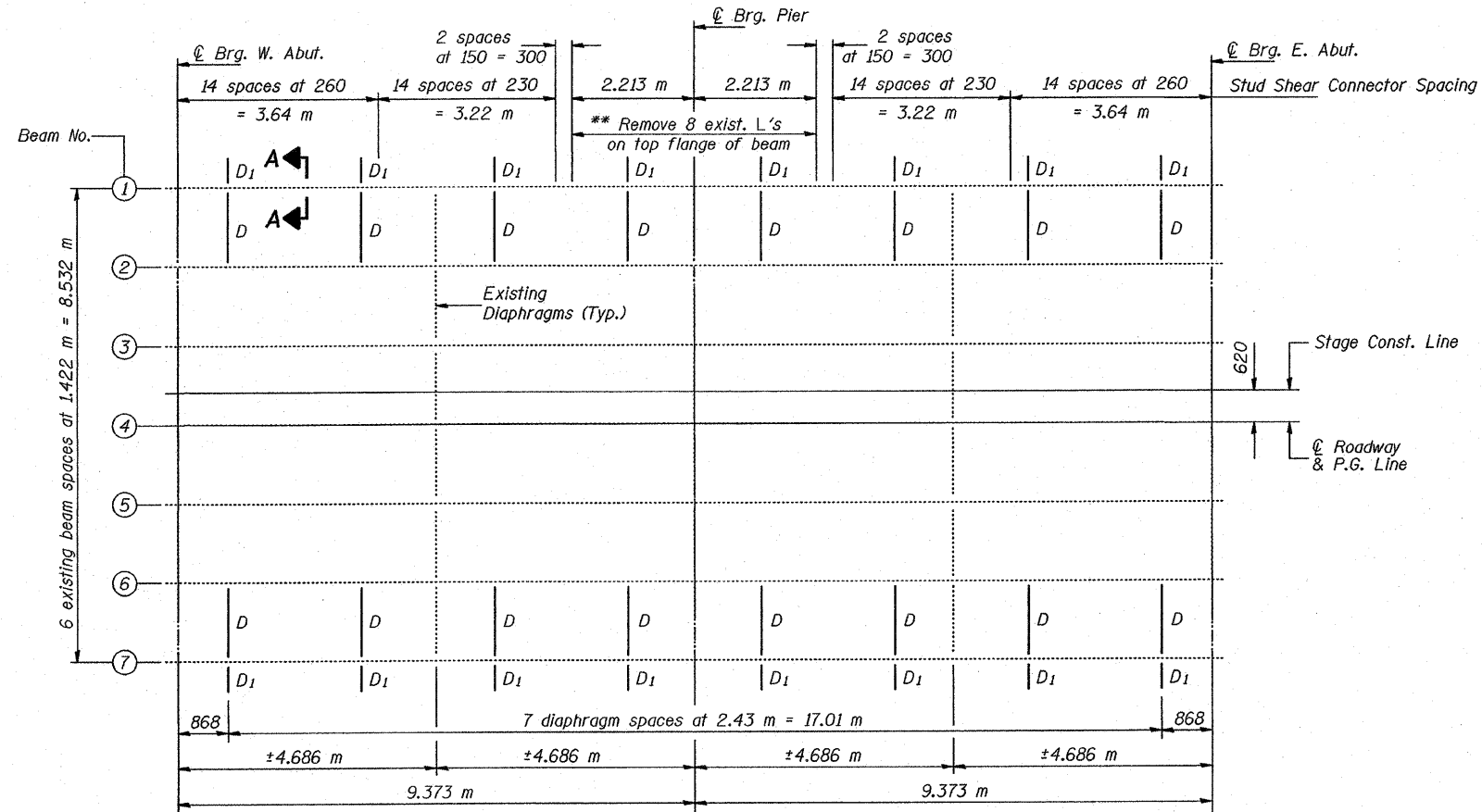


ELEVATION



PLAN

\*\* EXISTING ANGLE



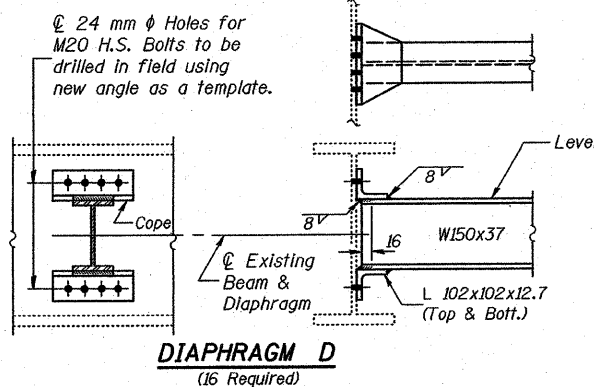
FRAMING PLAN

\*\* Remove existing angles using air-arc method, grind smooth and check for cracks with dye penetrant. Cost included with Removal of Existing Concrete Deck.

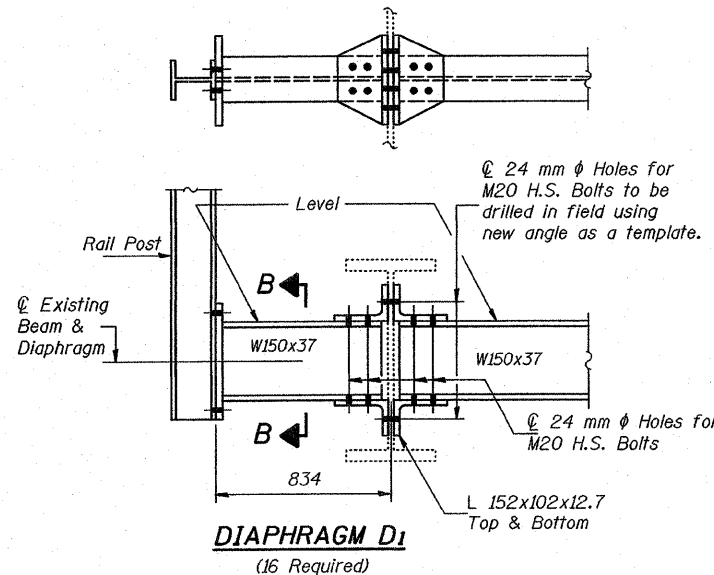
	0.4 Sp. 1	Pier #1	0.6 Sp. 2
$I_s$ ( $10^6 \text{ mm}^4$ )	370	370	370
$I_c$ (n) ( $10^6 \text{ mm}^4$ )	1300		1300
$I_c$ (3n) ( $10^6 \text{ mm}^4$ )	957		957
$S_s$ ( $10^3 \text{ mm}^3$ )	1610	1610	1610
$S_c$ (n) ( $10^3 \text{ mm}^3$ )	2740		2740
$S_c$ (3n) ( $10^3 \text{ mm}^3$ )	2440		2440
$Z$ ( $10^3 \text{ mm}^3$ )		1830	
$D$ (kN/m)	7.64	9.69	7.64
$M_D$ (kN-m)	47	99	47
$s_D$ (kN/m)	2.05		2.05
$M_{sD}$ (kN-m)	16		16
$M_L$ (kN-m)	148	74	148
$M$ (Imp) (kN-m)	44	22	44
$S_3[M_L + M(\text{Imp})]$ (kN-m)	320	160	320
$M_a$ (kN-m)	498	337	498
$M_u$ (kN-m)	719	458	719
$f_{sD}$ non-comp (MPa)	29	61	29
$f_{sD}$ (comp) (MPa)	7		7
$f_{sS_3}(L + \text{Imp})$ (MPa)	117	99	117
$f_s$ (Overload) (MPa)	153	161	153
$f_s$ (Total) (MPa)	198	209	198
$VR$ (kN)	129		129

	Abuts.	Piers
$R_D$ (kN)	35	112
$R_L$ (kN)	91	114
$Imp.$ (kN)	27	34
$R$ (Total) (kN)	153	260

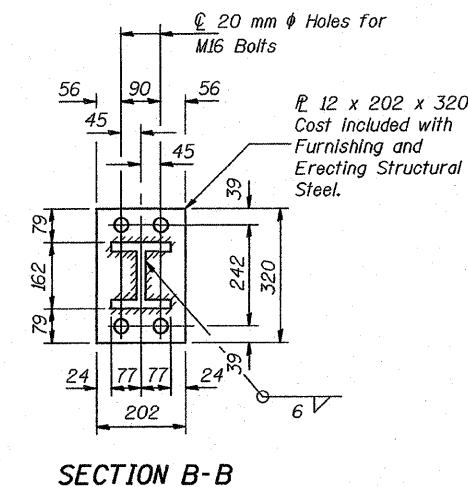
$I_s$  and  $S_s$  are the moment of inertia and section modulus of the steel section used in computing  $f_s$  (Total & Overload).  
 $I_c(n)$  and  $S_c(n)$  are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.  
 $I_c(3n)$  and  $S_c(3n)$  are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (see AASHTO 10.38)  
 $VR$  is the maximum Live Load + Impact shear range in span.  
 $Z$  is the plastic section modulus used to determine the Fully Plastic Moments in the non-composite areas.  
 $M_a$  (Applied Moment) =  $1.3[M_D + M_{sD} + S_3(M_L + M_{Imp})]$ .  
 The Plastic Moment Capacity for compact, braced section ( $M_u$ ) is computed according to AASHTO 10.48.1 & 10.50.1.1.  
 $f_s$  (Overload) is the sum of the stresses due to  $M_D + M_{sD} + S_3(M_L + M_{Imp})$ .



DIAPHRAGM D  
(16 Required)



DIAPHRAGM D1  
(16 Required)



SECTION B-B

DESIGNED	SPN
CHECKED	TWH
DRAWN	R. Doty
CHECKED	SPN/TWH

Aug. 24, 2007  
 EXAMINED *Thomas J. Romagallo*  
 ENGINEER OF BRIDGE DESIGN  
 PASSED *Ronald E. Anderson*  
 ENGINEER OF BRIDGES AND STRUCTURES

Note: Two hardened washers shall be required over all oversized holes. Cost of field drilling holes is included with Furnishing and Erecting Structural Steel.

STRUCTURAL STEEL  
 F.A.S. RT. 204 SEC. 92-00297-00-BR  
 ROCK ISLAND COUNTY  
 STA. 0+304.801