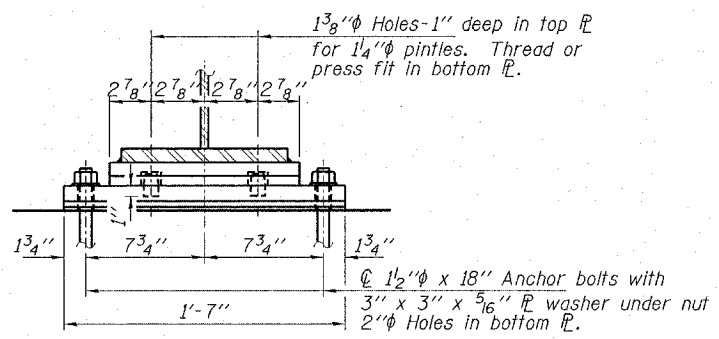
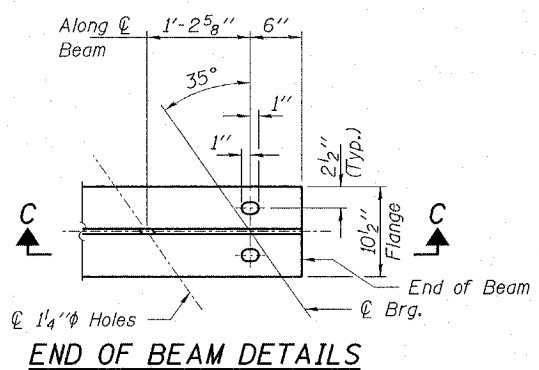


ELEVATION AT PIER



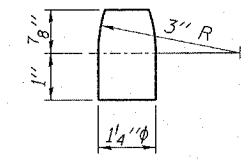
SECTION C-C



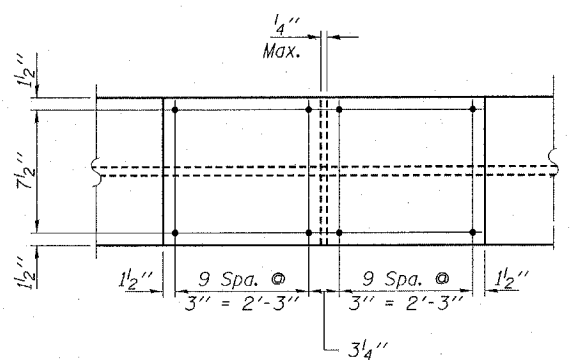
END OF BEAM DETAILS

INTERIOR BEAM MOMENT TABLE						
		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.6 Sp. 3
I_s	(in ⁴)	4,470	4,470	4,470	4,470	4,470
I_c (n)	(in ⁴)	12,987		12,987		12,987
I_c (3n)	(in ⁴)	9,739		9,739		9,739
S_s	(in ³)	299	299	299	299	299
S_c (n)	(in ³)	457		457		457
S_c (3n)	(in ³)	417		417		417
Z	(in ³)					
ϕ	(k/ft.)	0.88	1.23	0.88	1.23	0.88
$M\phi$	(k/ft.)	124	296	113.8	439.3	244.2
$s\phi$	(k/ft.)	0.35		0.35		0.35
$M_s\phi$	(k)	55.5		70.3		109.7
$M\phi$	(k)	255.0	198.0	292	236.8	338.2
M (Imp)	(k)	68.5	55.5	78.8	64.0	91.6
$s_3[M\phi + M(imp)]$	(k)	538.3	422.5	631.0	501.33	716.33
M_a	(k)	933	934	1,060	1,222.8	1,391.3
M_u	(k)	2,170	1,246	2,170	1,246	2,170
$fs\phi$ non-comp	(k.s.i.)	5.0	11.9	4.57	17.6	9.8
$fs\phi$ (comp)	(k.s.i.)	1.6		1.85		2.9
$fs^{5_3}(\phi + Imp)$	(k.s.i.)	14.2	17.0	17.8	14.4	18.8
fs (Overload)	(k.s.i.)	20.8	28.9	24.2	32.0	31.5
fs (Total)	(k.s.i.)	27	37.6	39.8	41.6	41.0
VR	(k)	40.4		42.6		43.8

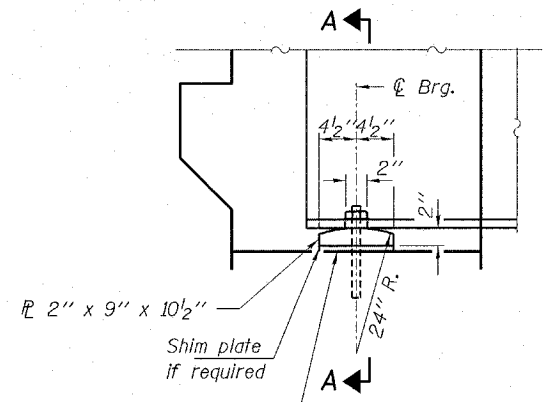
FIXED BEARING



PINTLE

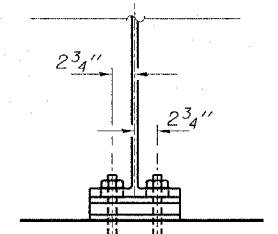


SECTION B-B
(Typ. Top & Bottom Flange)



ELEVATION AT ABUTMENT

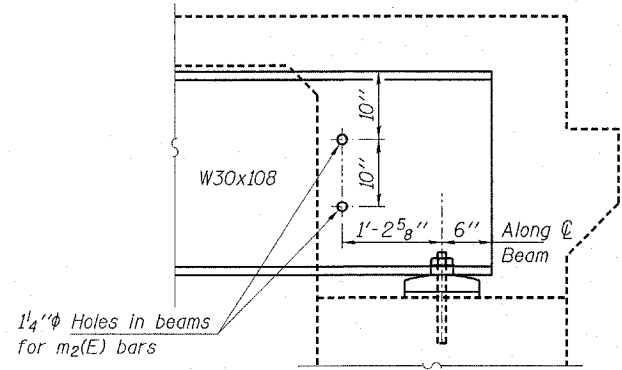
1" ϕ x 12" anchor bolts with 2 1/4" x 2 1/4" x 5/16" washer under nut. 1 3/8" x 2" slotted hole in flange. 1 1/2" ϕ holes in bearing plate.



SECTION A-A

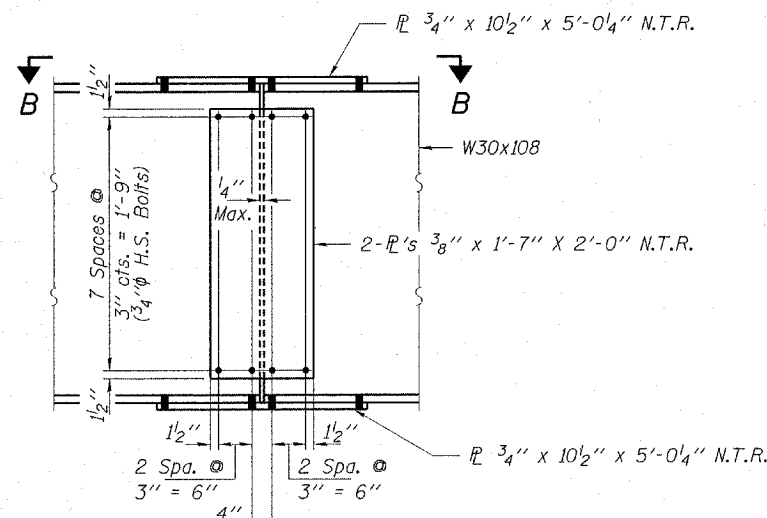
BEARING AT ABUTMENT
(12 Required)

Notes:
Anchor bolts at bearings may be built into the masonry.
See sheet 26 for Anchor Bolt installation.



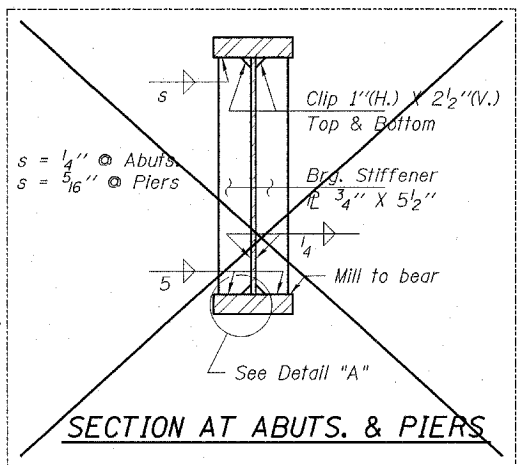
INTERIOR BEAM REACTION TABLE					
	N. Abutment	Pier 1	Pier 2	N. Abutment	
$R\phi$	(K)	21.0	68.6	83.3	29.5
$R\phi$	(K)	28.3	45.8	49.5	31.0
R Imp.	(K)	8.2	12.8	13.4	8.4
R (Total)	(K)	57.6	127.2	146.2	68.9

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).
 $I_c(n)$ and $S_c(3n)$ 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 ASSHTO 10.38).
 VR is the maximum Live Load + Impact shear range within the composite portion of the span.
 Z is the plastic section modulus used to determine the Fully Plastic Moments in the non-composite area.
The Plastic Moment capacity (M_u) is computed according to AASHTO 10.48.1 & 10.50.1.1.
 fs (Total) is the sum of the stresses due to $1.3[M\phi + Ms\phi + s_3(M\phi + M(imp))]$.
 fs (Overload) is the sum of the stresses due to $M\phi + Ms\phi + s_3(M\phi + M(imp))$.
 $M\phi$ - Moment due to dead loads on non-composite section.
 $M_s\phi$ - Moment due to dead loads on composite section.
 $M\phi$ - Moment due to live load on non-composite or composite section.
 $M(imp)$ - Moment due to live load impact on non-composite or composite section.
 M_a (Applied Moment) = $1.3[M\phi + Ms\phi + s_3(M\phi + M(imp))]$.

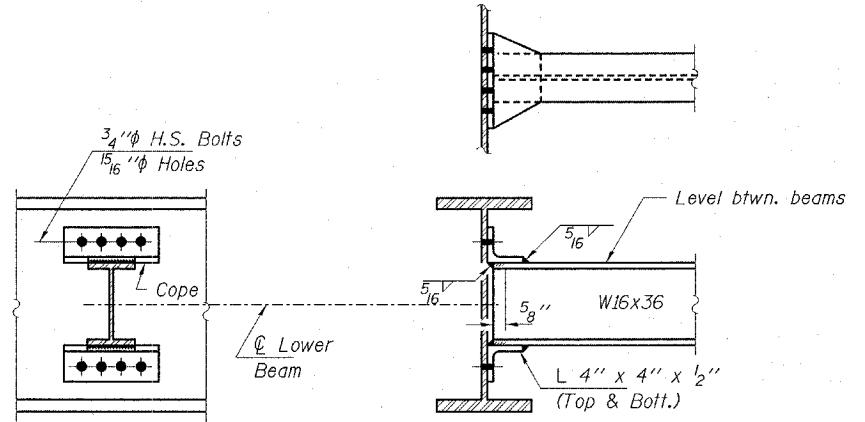


SPLICE

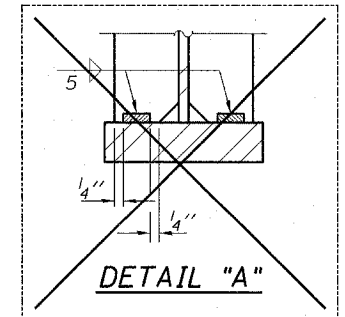
7/8" ϕ H.S. Bolts (Flanges)
3/4" ϕ H.S. bolts (Web)



SECTION AT ABUTS. & PIERS



DIAPHRAGM D
(45 Required)



DETAIL "A"

HLR
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P.O. Box 1036
DuQuoin, Illinois 62832
618-790-4637
Account Number 12-59-0033-1
Date: 11/15/05
DESIGNED: P.S.L. CHECKED: S.W.M. DRAWN: D.B.

STRUCTURAL STEEL
F.A.U. 6385 / C.H. 70 OVER SUGAR CREEK
SECTION 00-00182-01-BR
McLEAN COUNTY
STRUCTURE 057-5306 / STATION 820+21

Addendum 1 - 01/09/06