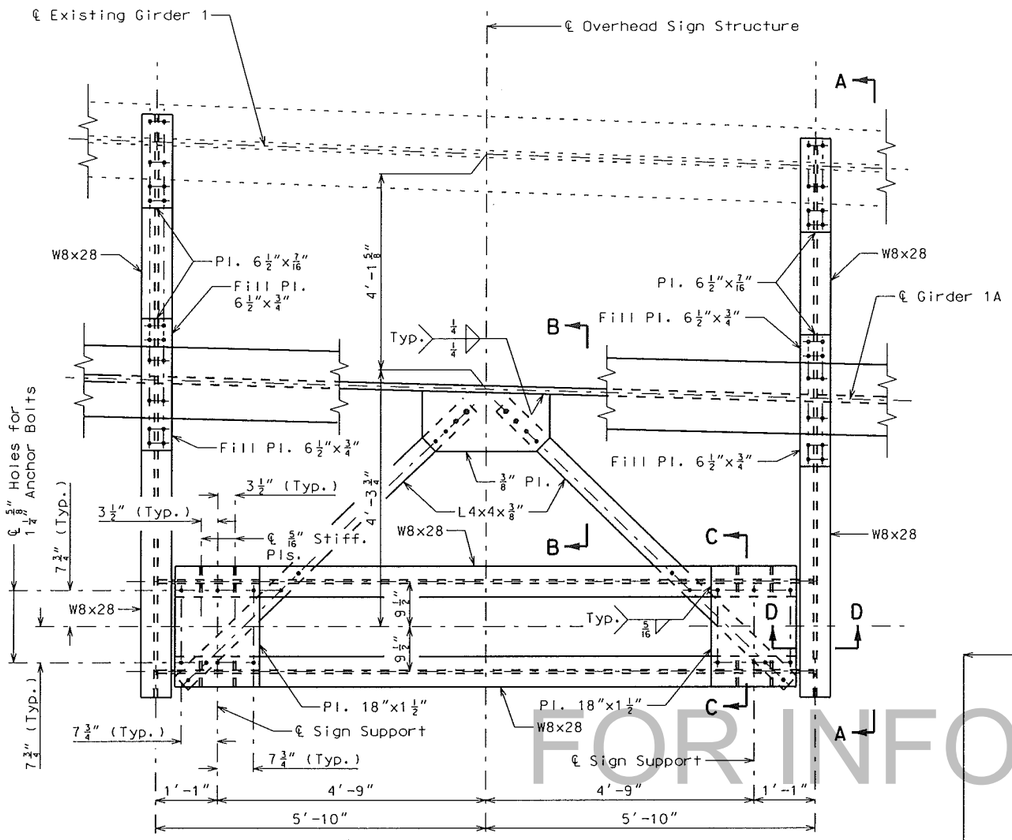
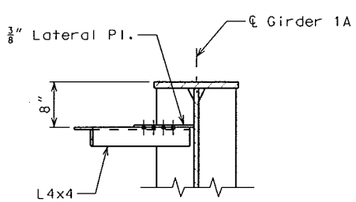
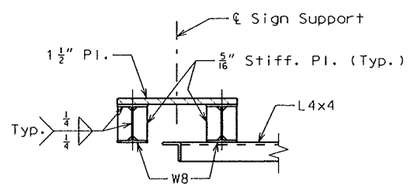


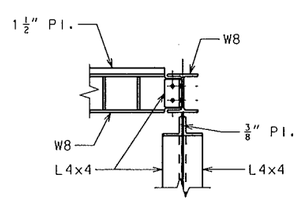
FRAMING PLAN AT OVERHEAD SIGN SUPPORT



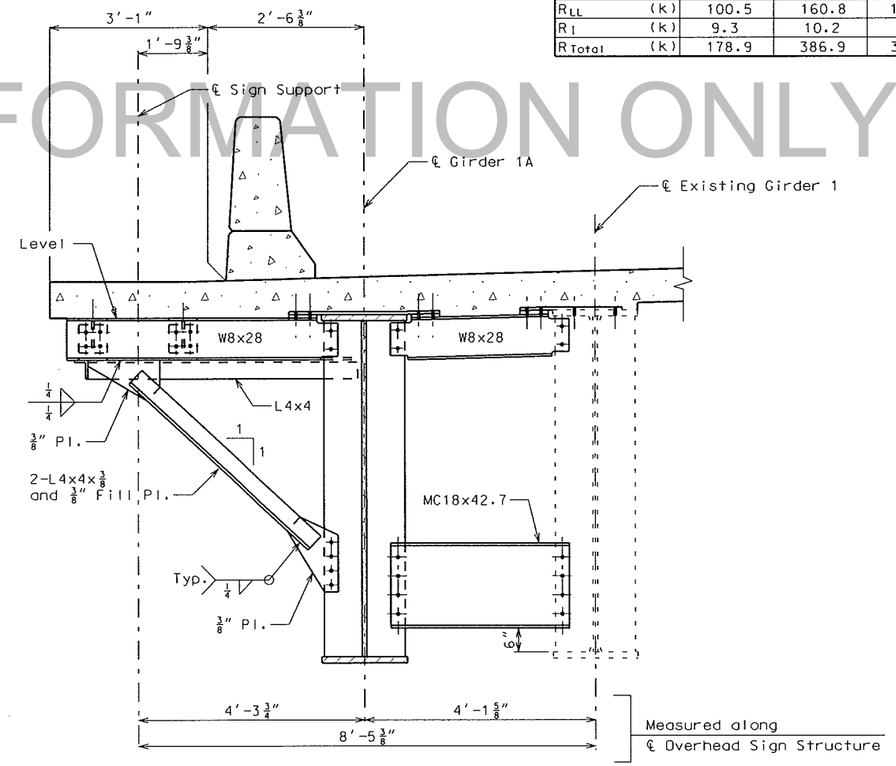
SECTION B-B



SECTION C-C



SECTION D-D



SECTION A-A

STEEL DETAILS

GIRDER 1A MOMENT TABLE

		0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.5 Span 3	Pier 3	0.5 Span 4	Pier 4	0.6 Span 5
I_s	(in^4)	64672	86073	61798	86073	61798	86073	61798	86073	64672
I_c (n)	(in^4)	131657		129460		123957		115203		109898
I_c (3n)	(in^4)	97636		94939		91129		85610		83955
S_s	(in^3)	1793	2303	1760	2303	1760	2303	1760	2303	1793
S_c (n)	(in^3)	2338		2328		2298		2246		2209
S_c (3n)	(in^3)	2120		2102		2071		2022		2003
DL	(k/ft)	1.09	1.09	1.05	1.05	0.92	0.92	0.79	0.79	0.70
M_{DL}	(ft-k)	1486	2579	904	2195	976	1788	539	1671	1007
S_{DL}	(k/ft)	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
M_{SDL}	(ft-k)	383	503	294	470	291	381	175	372	289
M_{LL}	(k/ft)	1438	1391	1255	1231	1014	949	702	692	577
M_I	(ft-k)	269	252	220	215	177	168	126	127	108
$5/3\ M_{LL} + IM$	(ft-k)	2845	2738	2458	2410	1985	1862	1380	1365	1142
M_a	(ft-k)	6128	7566	4753	6598	4228	5240	2722	4430	3169
f_s (DL) (nc)	(ksi)	9.95	13.44	6.16	11.44	6.65	9.32	3.68	8.71	6.74
f_s (DL) (c)	(ksi)	2.17	2.62	1.68	2.45	1.69	1.99	1.04	1.94	1.73
f_s $5/3\ M_{LL} + M_I$	(ksi)	14.60	14.27	12.67	12.56	10.37	9.70	7.37	7.11	6.20
f_s (Overload)	(ksi)	26.72	30.33	20.51	26.45	18.71	21.01	12.09	17.76	14.67
f_s (Total)	(ksi)	34.74	39.43	26.66	34.39	24.32	27.31	15.72	23.09	19.07
V_f (Range)	(k)	66.7		52.8		42.8		32.9		28.0

GIRDER 1A REACTION TABLE

		River P6	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5
R_{DL}	(k)	69.1	215.9	192.8	163.0	149.4	47.5
R_{LL}	(k)	100.5	160.8	146.6	111.8	83.9	39.9
R_I	(k)	9.3	10.2	9.1	7.0	5.4	3.6
R_{Total}	(k)	178.9	386.9	348.5	281.8	238.7	91.0

FOR INFORMATION ONLY

LICENSED STRUCTURAL ENGINEER STEPHEN E. ALSBURY 081-3281 STATE OF ILLINOIS
EXPIRES 11-30-16

DATE 12/1/2015
DATE PREPARED

ROUTE I-64 | STATE IL
DISTRICT STL | SHEET NO. 27
COUNTY ST. CLAIR
JOB NO. J6123770/J6123770
CONTRACT ID. –
PROJECT NO. –
BRIDGE NO. 082-0005

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

ABNA
4140 Lindell Boulevard
St. Louis, MO 63104
314-454-0222
Certificate of Authority: 001507

Detailed Nov 2015
Checked Nov 2015

Note: This drawing is not to scale. Follow dimensions.

REV.

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