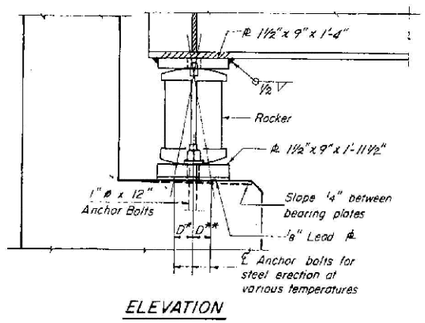
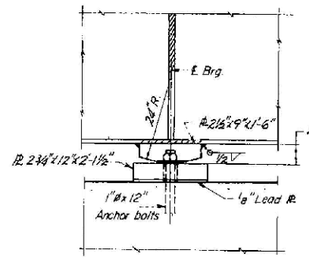
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

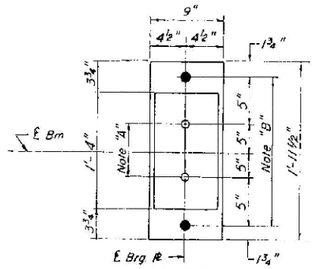
				SHEET NO. 16
FA. 412	141-1A	OGLE	628	211 28 SHEETS



ELEVATION



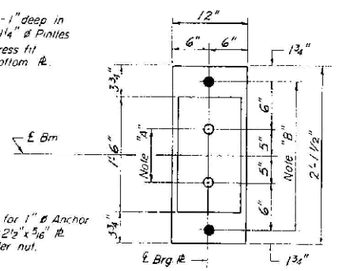
ELEVATION



PLAN
AT ABUTMENT

Note "A"
1⅜" ø Holes - 1" deep in top PL for 1¼" ø Pintles
Thread or press fit pintles in bottom PL.

Note "B"
1½" ø Holes for 1" ø Anchor Bolts - 2½" x 2½" x ⅝" PL Washers under nut.

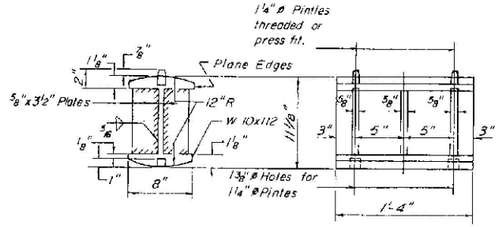


PLAN
AT PIER

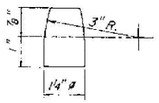
NOTES FOR SETTING OF ANCHOR BOLTS
AT EXPANSION BEARINGS

a.) D* (Side of brg. away from fixed brg.)
D* = ⅛" per each 100' of expansion for every 15° fall below the normal temp of 50° F.
D** (Side of brg. toward fixed brg.)
D** = ⅛" per each 100' of expansion for every 15° rise above the normal temp. of 50° F.

b.) After beams have been erected and dimensions D* & D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.



ROCKER



PINTLE

Is and Ss are the moment of inertia and section modulus of the steel section. Ic and Sc are the moment of inertia and the section modulus of the composite section used in computing fs.

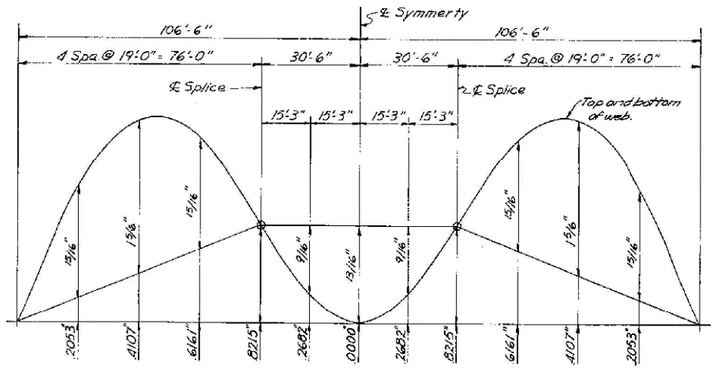
VR is the maximum LL + impact shear range in a span.

MOMENT & SHEAR TABLE

		0.4 Span 1	Pier	0.6 Span 2
Is	(in.⁴)	18,884.2	42,514.3	18,884.2
Ss	(in.³)	870.68	1643.06	870.68
DL	(k/ft.)	1015.9	1146.0	1015.9
MDL	(ft-k.)	687.0	1767.8	687.0
fsDL	(ksi.)	9.47	12.91	9.47
Ic (n=30)(in.⁴)		37,478.6	/	37,478.6
Sc	(in.³)	1129.52	/	1129.52
Scdl	(k/ft.)	531.5	531.5	531.5
Mcdl	(ft-k.)	423.0	751.16	423.0
fs cdl	(ksi.)	4.49	5.49	4.49
Ic (n=10)(in.⁴)		51,908.8	/	51,908.8
Sc	(in.³)	1236.0	/	1236.0
MLL	(ft-k.)	1011.6	854.0	1011.6
MIMP	(ft-k.)	218.5	184.4	218.5
M TOTAL	(ft-k.)	1230.1	1038.4	1230.1
fsLL	(ksi.)	11.94	7.58	11.94
fs TOTAL	(ksi.)	25.90	25.98	25.90
VR		73.5	/	73.5

REACTION TABLE

		Abutment	Pier
RDL	(k.)	59.0	216.5
RLL	(k.)	52.5	86.6
IMP	(k.)	11.3	18.5
R TOTAL	(k.)	122.8	320.6



CAMBER DIAGRAM

TOP OF WEB ELEVATIONS *

	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9	Girder 10	Girder 11	Girder 12	Girder 13	Girder 14
℄ Brg. S. Abut.	832.328	832.194	832.011	831.828	831.645	831.462	831.279	831.506	831.326	831.146	830.966	830.785	830.605	830.423
℄ Splice #1	832.173	832.024	831.842	831.662	831.480	831.299	831.117	831.363	831.184	831.006	830.827	830.649	830.471	830.311
℄ Brg. Pier	832.022	831.867	831.686	831.506	831.325	831.145	830.964	831.216	831.038	830.861	830.683	830.505	830.328	830.177
℄ Splice #2	832.008	831.847	831.667	831.488	831.308	831.128	830.948	831.207	831.030	830.853	830.676	830.499	830.323	830.180
℄ Brg. N. Abut.	831.755	831.578	831.400	831.222	831.043	830.865	830.687	830.962	830.787	830.612	830.437	830.261	830.086	829.966

* For Girder Fabrication Only.

DESIGNED	MVM
CHECKED	HMW
DRAWN	BSB
CHECKED	HMW

I-2-G 3-29-71

BEARING DETAILS
F.A. RTE. 412 SEC. 141-1HB-1
OGLE COUNTY
STA. 1408 + 92.95 (F.A. RTE. 412)

FINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TRIANGULATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TRIANGULATE — AREAS — AREAS CHECKED

FILE NAME = D264J27-sht-BearingDetails.dgn	CHRISTIAN-ROGE & ASSOCIATES, INC. ENGINEERS-PLANNERS-SURVEYORS 211 WEST WACKER DRIVE CHICAGO, ILLINOIS 60606 PHONE: (312)372-2023 FAX: (312)372-5274	DESIGNED - G.F.L.	REVISED -
PLOT DATE = 9/6/2012		DRAWN - K.R.K.	REVISED -
PLOT SCALE = 100.0000 ' / IN.		CHECKED - E.J.M.	REVISED -
		DATE - JULY 2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2013-2	OGLE	26	22
		CONTRACT NO. 64J27		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		