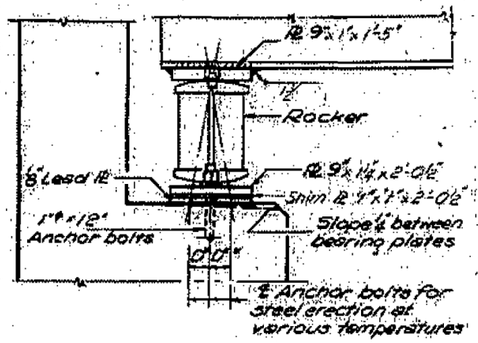
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

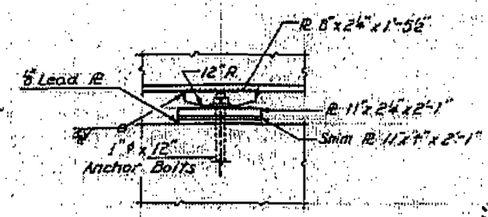
064-0022

24	64-2HB-1	MASSAC	10.5*	64*

SHEET NO. 7
11 SHEETS

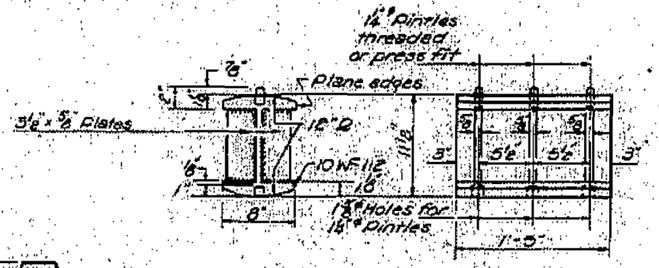


ELEVATION

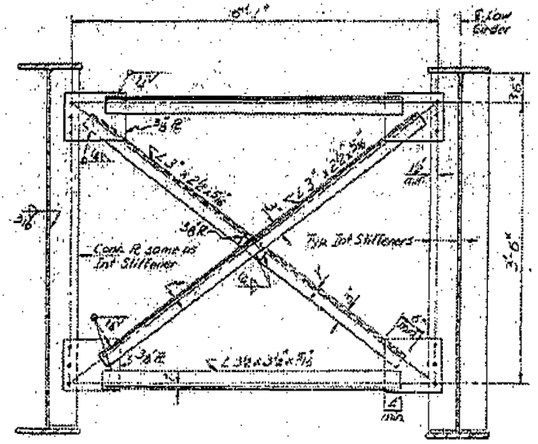


ELEVATION

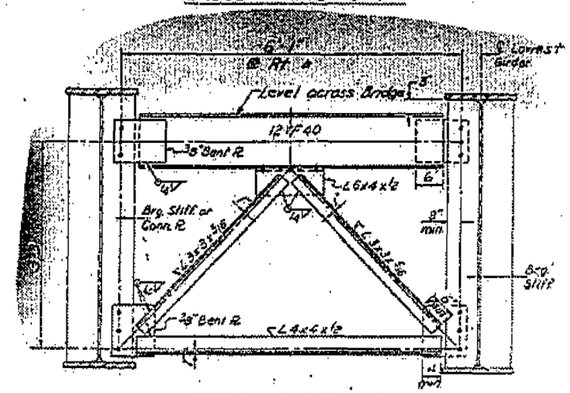
PINTLE



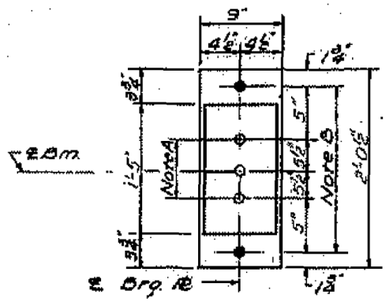
ROCKER



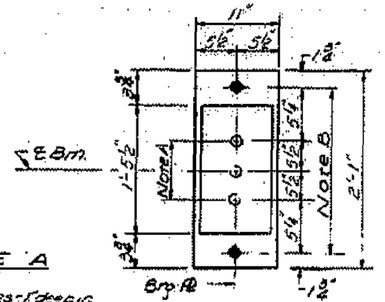
CROSS FRAME - C.F.1



CROSS FRAME - C.F.



PLAN
AT ABUTMENT



PLAN
AT PIER

NOTE A
1⅜" Holes - 1" deep in top PL for pintles Threads or press fit pintles in bottom PL

NOTE B
1⅝" Holes for 1" anchor bolts 2'6"x2'6"x⅝" PL washers under nut

NOTES ON SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

a) D* (Side of brg. away from fixed brg.)
D* = 6" per each 100° of expansion for every 15° fall below the normal temperature of 50° F

D** (Side of brg. toward fixed brg.)
D** = 6" per each 100° of expansion for every 15° rise above the normal temperature of 50° F

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

TOP OF WEB ELEVATIONS

	G-1	G-2	G-3	G-4	G-5
℄ Brg. W. Abut.	420.06	420.20	420.26	420.26	420.20
℄ Splice #1	420.81	420.93	420.98	420.96	420.87
℄ Brg. Pier	420.91	421.03	421.08	421.06	420.97
℄ Splice #2	421.01	421.13	421.18	421.16	421.07
℄ Brg. E. Abut	421.11	421.20	421.22	421.18	421.07

BEAM PROPERTIES

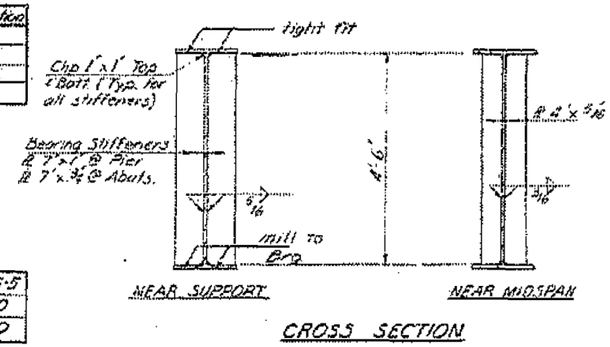
Steel Section		Composite Section
	Pier	Span
I	51,751 in⁴	50,594 in⁴
S1	1792 in³	4317 in³
S6	1792 in³	1152 in³

TABLE OF MOMENTS & REACTIONS

Moments (ft-kip)			Reactions (kip)	
	Span	Pier	Abut.	Pier
Initial Dead Load	+650'k	-1573'k	32.5 k	119.6 k
Composite Dead Load	+303'k	-489'k	13.8 k	44.5 k
Live Load	+660'k	-610'k	28.8 k	52.0 k
Impact	+137'k	-128'k	6.0 k	11.0 k
Total	+1750'k	-2800'k	81.1 k	227.1 k

TABLE OF "t" DIMENSIONS

Location	G-1	G-2	G-3	G-4	G-5
East Abut	½	¼	½	0	0
Pier	0	0	⅝	⅝	0



CROSS SECTION

DESIGNED	J. W. Smith
CHECKED	Emil J. Tomsa
DRAWN	R.P.S. C.E.W.
CHECKED	E.J.T.

EXAMINED
PASSED
APPROVED

BEARING DETAILS
F.A.I. RT. 24 SEC. 64-2HB-1
MASSAC COUNTY
STATION 417+88.45

FOR INFORMATION ONLY

* VARIOUS COUNTIES

FILE NAME = c:\pw_work\pwidot\dahmerja\d0384974\78419-sht-plan.dgn	USER NAME = Dahmerja	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 2.7647 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 3/20/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

064-0022
ROSEBUD OVER I-24

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D9 BRIDGE PAINT 2014-2	*	22	11
		CONTRACT NO. 78419		
	ILLINOIS FED. AID PROJECT			