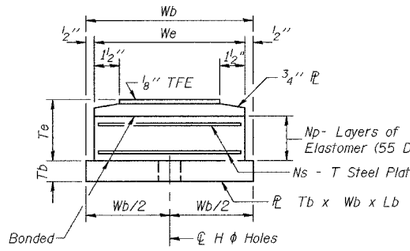
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2005-008F	COOK	93	13
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

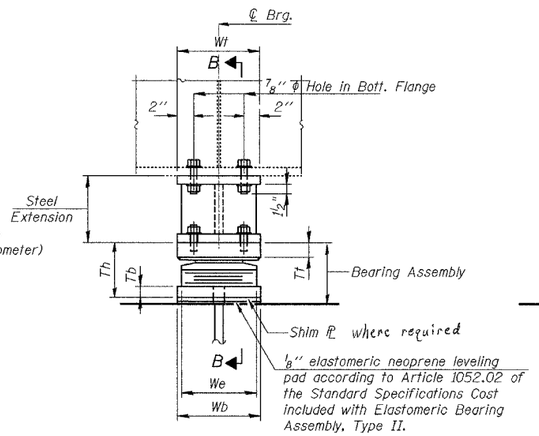
62919

ELASTOMERIC BEARING SCHEDULE (TYPE I AND II)

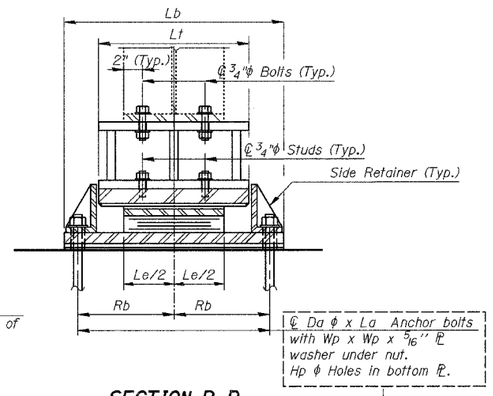
Bearing Location	Pier	Type	Bearing Designation	No. Req.'d	Th	Elastomeric Bearing							Top Plate					Bottom Plate			Anchor Bolts					Side Retainer				
						We	Le	Te	Tp	Np	Ts	Ns	Wt	Lt	Ttn	Tts	Rt	Wb	Lb	Tb	Da	La	Rb	H	Wp	y	z	t	Hp	v
016-0137	8	I	12-b	11	$5\frac{13}{16}$	12	18	$2\frac{13}{16}$	$\frac{9}{16}$	4	$\frac{3}{16}$	3	13	20	3	3	9	-	-	-	$1\frac{1}{2}$	18	$12\frac{7}{8}$	-	3	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{5}{8}$	$1\frac{3}{4}$	$5\frac{3}{4}$
	10	I	11-a	11	5	11	16	$2\frac{3}{8}$	$\frac{1}{2}$	4	$\frac{1}{8}$	3	12	18	$2\frac{7}{16}$	$2\frac{13}{16}$	8	-	-	-	$1\frac{1}{4}$	15	$11\frac{1}{2}$	-	$2\frac{3}{4}$	$2\frac{3}{8}$	$4\frac{3}{4}$	$\frac{1}{2}$	$1\frac{1}{2}$	$5\frac{1}{4}$
	12	I	12-b	10	$5\frac{7}{16}$	12	18	$2\frac{13}{16}$	$\frac{9}{16}$	4	$\frac{3}{16}$	3	13	20	$2\frac{7}{16}$	$2\frac{13}{16}$	9	-	-	-	$1\frac{1}{2}$	18	$12\frac{7}{8}$	-	3	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{5}{8}$	$1\frac{3}{4}$	$5\frac{3}{4}$
	14	I	12-b	10	$5\frac{7}{16}$	12	18	$2\frac{13}{16}$	$\frac{9}{16}$	4	$\frac{3}{16}$	3	13	20	$2\frac{7}{16}$	$2\frac{13}{16}$	9	-	-	-	$1\frac{1}{2}$	18	$12\frac{7}{8}$	-	3	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{5}{8}$	$1\frac{3}{4}$	$5\frac{3}{4}$
	16	I	12-b	10	$5\frac{7}{16}$	12	18	$2\frac{13}{16}$	$\frac{9}{16}$	4	$\frac{3}{16}$	3	13	20	$2\frac{7}{16}$	$2\frac{13}{16}$	9	-	-	-	$1\frac{1}{2}$	18	$12\frac{7}{8}$	-	3	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{5}{8}$	$1\frac{3}{4}$	$5\frac{3}{4}$
	20	I	11-a	11	5	11	16	$2\frac{3}{8}$	$\frac{1}{2}$	4	$\frac{1}{8}$	3	12	18	$2\frac{7}{16}$	$2\frac{13}{16}$	8	-	-	-	$1\frac{1}{4}$	15	$11\frac{1}{2}$	-	$2\frac{3}{4}$	$2\frac{3}{8}$	$4\frac{3}{4}$	$\frac{1}{2}$	$1\frac{1}{2}$	$5\frac{1}{4}$
	22	I	12-b	11	$5\frac{7}{16}$	12	18	$2\frac{13}{16}$	$\frac{9}{16}$	4	$\frac{3}{16}$	3	13	20	$2\frac{7}{16}$	$2\frac{13}{16}$	9				$1\frac{1}{2}$	18	$12\frac{7}{8}$	-	3	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{5}{8}$	$1\frac{3}{4}$	$5\frac{3}{4}$
016-1110	2	I	15-c	8	$7\frac{1}{2}$	15	24	$4\frac{1}{2}$	$\frac{3}{4}$	5	$\frac{3}{16}$	4	16	26	3	3	12	-	-	-	$1\frac{1}{2}$	18	$15\frac{7}{8}$	-	3	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{5}{8}$	$1\frac{3}{4}$	$7\frac{3}{8}$
	5	I	14-c	13	$7\frac{5}{16}$	14	22	$4\frac{3}{16}$	$\frac{11}{16}$	5	$\frac{3}{16}$	4	15	24	3	3	11	-	-	-	$1\frac{1}{2}$	18	$14\frac{7}{8}$	-	3	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{5}{8}$	$1\frac{3}{4}$	$7\frac{1}{4}$
016-1111	3	II	13-b	8	$8\frac{1}{2}$	13	20	$3\frac{15}{16}$	$\frac{5}{8}$	4	$\frac{3}{16}$	3	14	22	3	3	10	14	$33\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{1}{2}$	18	$13\frac{7}{8}$	2	3	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{5}{8}$	$1\frac{3}{4}$	$6\frac{7}{8}$
	4	I	13-b	8	$6\frac{1}{8}$	13	20	$3\frac{1}{16}$	$\frac{5}{8}$	4	$\frac{3}{16}$	3	14	22	3	3	10	-	-	-	$1\frac{1}{2}$	18	$13\frac{7}{8}$	-	3	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{5}{8}$	$1\frac{3}{4}$	6
	6	I	13-b	8	$6\frac{1}{8}$	13	20	$3\frac{1}{16}$	$\frac{5}{8}$	4	$\frac{3}{16}$	3	14	22	3	3	10	-	-	-	$1\frac{1}{2}$	18	$13\frac{7}{8}$	-	3	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{5}{8}$	$1\frac{3}{4}$	6
	8	II	13-b	8	$8\frac{1}{2}$	13	20	$3\frac{15}{16}$	$\frac{5}{8}$	4	$\frac{3}{16}$	3	14	22	3	3	10	14	$33\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{1}{2}$	18	$13\frac{7}{8}$	2	3	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{5}{8}$	$1\frac{3}{4}$	$6\frac{7}{8}$
	9	I	13-b	8	$6\frac{1}{8}$	13	20	$3\frac{1}{16}$	$\frac{5}{8}$	4	$\frac{3}{16}$	3	14	22	3	3	10	-	-	-	$1\frac{1}{2}$	18	$13\frac{7}{8}$	-	3	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{5}{8}$	$1\frac{3}{4}$	6
	11	I	13-b	8	$6\frac{1}{8}$	13	20	$3\frac{1}{16}$	$\frac{5}{8}$	4	$\frac{3}{16}$	3	14	22	3	3	10	-	-	-	$1\frac{1}{2}$	18	$13\frac{7}{8}$	-	3	$2\frac{3}{4}$	$5\frac{1}{2}$	$\frac{5}{8}$	$1\frac{3}{4}$	6



BOTTOM BEARING ASSEMBLY

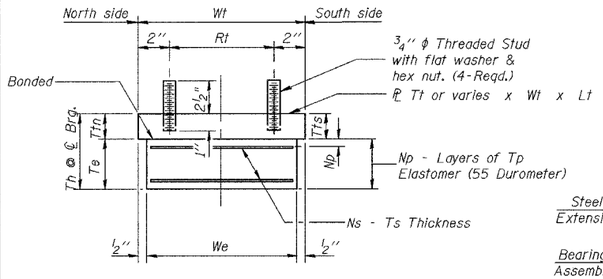


ELEVATION AT PIER



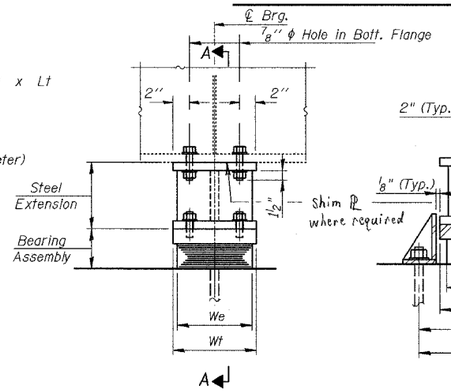
SECTION B-B

TYPE II ELASTOMERIC EXP. BRG.

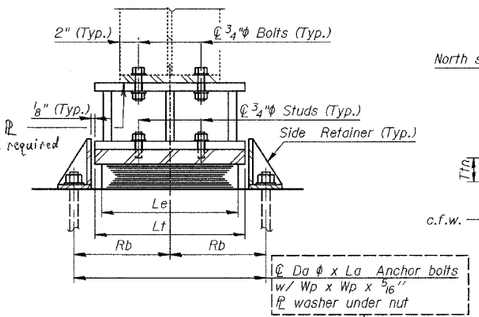


BEARING ASSEMBLY

Note: Shim plates shall not be placed under Bearing Assembly.

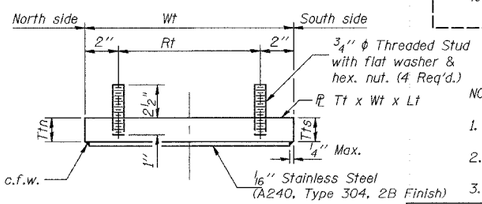


ELEVATION AT PIER



SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



TOP BEARING ASSEMBLY FOR TYPE II BEARINGS

SUPPORTING REACTIONS AND MINIMUM JACKING CAPACITY

S/N	Pier	DL + ½(LL+I)	Min. Jack. Capacity (k)
016-0137	8	130	195
	10	113	170
	12	126	190
	14	126	190
	16	113	170
	20	130	195
	22	136	205
016-1110	2	231	350
	5	173	260
016-1111	3	161	245
	4	161	245
	6	161	245
	8	161	245
	9	161	245
	11	161	245
016-1116	1 (GN2-4)	480	720
		365	550

PROCEDURE TO JACK AND REMOVE EXISTING BEARINGS

1. See Special Provision "Jack and Remove Existing Bearings"
2. Jacking and removing existing bearings, including top and bottom plates and lead plates, shall be done after deck scarification is completed and before the new overlay is poured.
3. See table for support reactions and min. jacking capacities.
4. For jacking capacity see table above.
5. Burn existing anchor bolts flush with the top of existing concrete surface. Grind existing anchor bolts smooth and seal with epoxy. Cost is included with " Jack and Remove Existing Bearings".
6. Top plates welded to the bottom flange of beams shall be removed using air arc-method. Grind smooth all weld material remaining the bottom flange.
7. The new bearings shall be in place and jacks shall be lowered before the overlay is poured.

NOTES:

1. For side retainer detail see Sht.14 .
2. All values in Elastomeric Bearing Table are inches.
3. For Steel Extension details and dimensions see Sht.14 .

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
140 EAST RANDOLPH STREET SUITE 2400 CHICAGO, ILLINOIS 60601
JOB NO. 668

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
FABRICATION CONTRACT
NB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
ELASTOMERIC BEARING DETAILS

SCALE: NTS — DRAWN BY: LM
DATE: 5/23/2005 — CHECKED BY: BLU

5/23/2005 11:45:12 AM

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