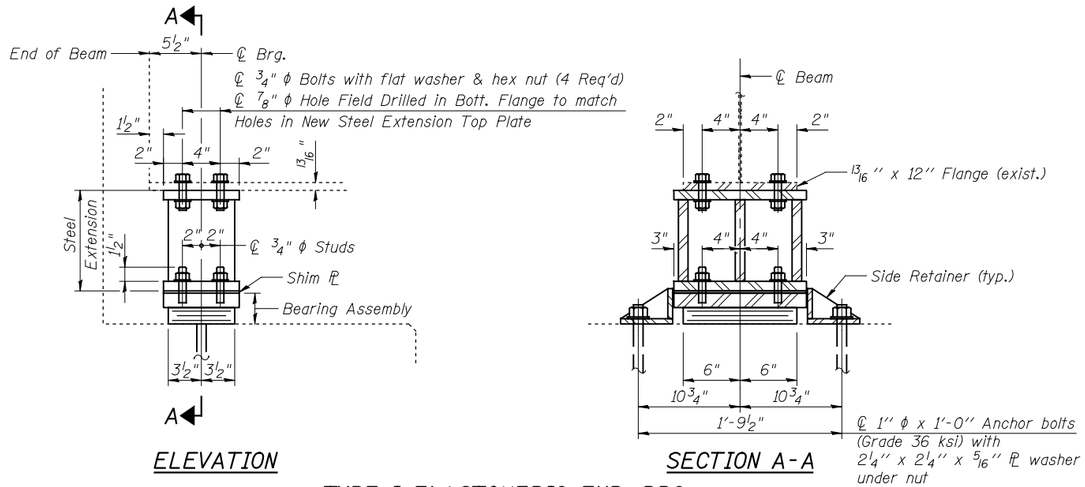
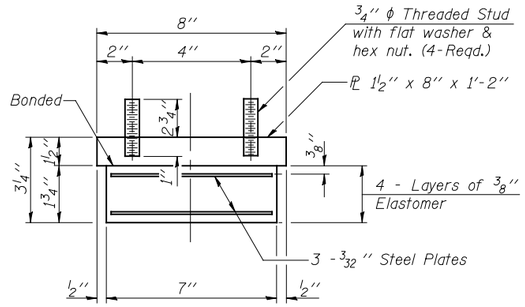


TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

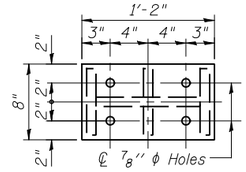
Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

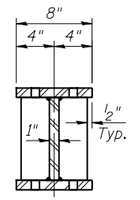
Anchor bolts for side retainers shall be installed in holes drilled after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

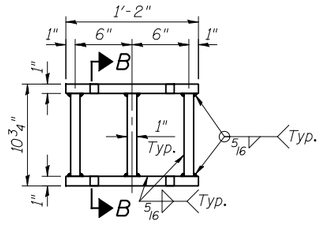
Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.



PLAN - TOP & BOTTOM



SECTION B-B



ELEVATION

STEEL EXTENSION

Notes:

Existing expansion bearings shall be removed and replaced according to the plans. Jacking shall be according to the Special Provisions for "JACK AND REMOVE EXISTING BEARINGS".

If the analysis submitted to the Contractor for the jacking/temporary support system to be used shows temporary stiffeners are required to prevent web crippling or buckling, the stiffeners shall be steel and bolted to the web. If stiffeners are not required, hardwood timbers shall be installed tightly between the top and bottom flange to prevent flange rotation.

The abutment bearings shall be in place and the jacks lowered before the new concrete deck is poured at the abutments.

Diaphragm removal and replacement may be required to facilitate drilling holes. Cost shall be included with Furnishing and Erecting Structural Steel.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Existing bearing dimensions shown are copied from the original plans.

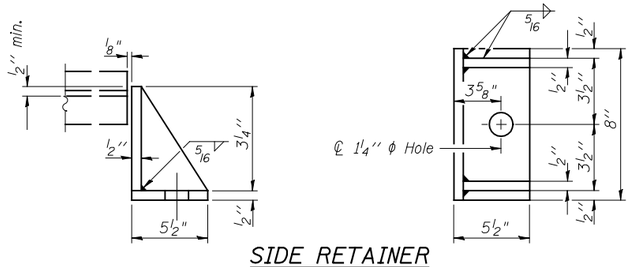
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

New steel extensions and connection bolts are included with Furnishing and Erecting Structural Steel.

The structural steel bearing plates for the expansion bearings shall conform to the requirements of AASHTO M 270 Grade 36 (min.).

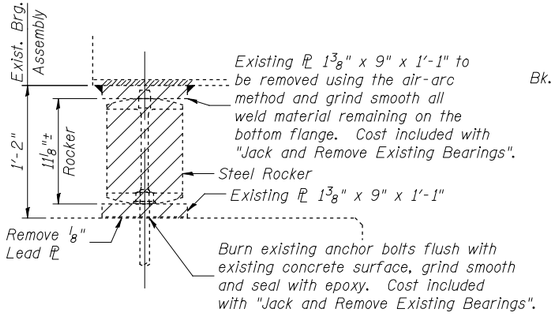
Note:

Shim plates shall not be placed under Bearing Assembly.

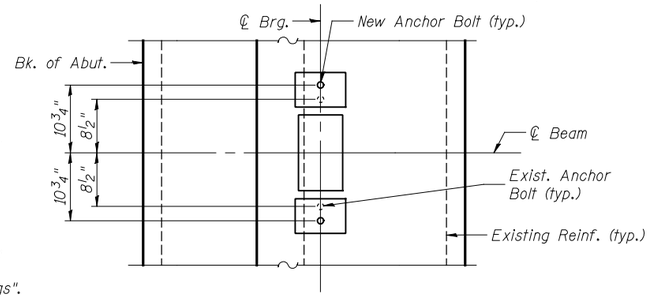


SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



EXISTING BEARING REMOVAL



ANCHOR BOLT LAYOUT

BEAM REACTION TABLE		
		W. Abut.
R (DL)	(K)	25.0
R (LL)	(K)	36.4
R (Imp)	(K)	10.5
R (Total)	(K)	71.9
Minimum Jack Capacity	(Tons)	40

BILL OF MATERIAL

Item	Unit	EB	WB
Jack and Remove Existing Bearings	Each	6	6
Elastomeric Bearing Assembly Type I	Each	6	6
Furnishing and Erecting Structural Steel	Pound	876	876
Anchor Bolts, 1"	Each	12	12

I-2E-1

7-1-10 (Modified)

FILE NAME = ...\0840163-72C88-008-bearingsl.dgn	USER NAME = DCD	DESIGNED - CMV	REVISED -
		CHECKED - DCD	REVISED -
Johnson, Depp & Quisenberry CONSULTING ENGINEERS Springfield, Illinois	PLOT SCALE =	DRAWN - P. Ray	REVISED -
	PLOT DATE = 04/02/2013 15:18:57	CHECKED - CMV/DCD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS - WEST ABUTMENT
STRUCTURE NO. 084-0163(EB) & 084-0164(WB)
SHEET NO. 8 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-10-3)RS-5	SANGAMON	95	85
	STA. 799+18.00	CONTRACT NO. 72C88		
	ILLINOIS FED. AID PROJECT			

FILE: dk\JOD\100204 IL-06VV*7 I-72 Illopolis\3-LongPoint\Slough\0840163-72C88-008-bearingsl.dgn
SAVE DATE: 3/29/2013