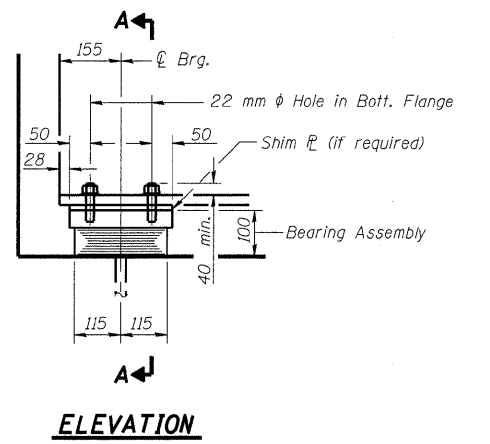
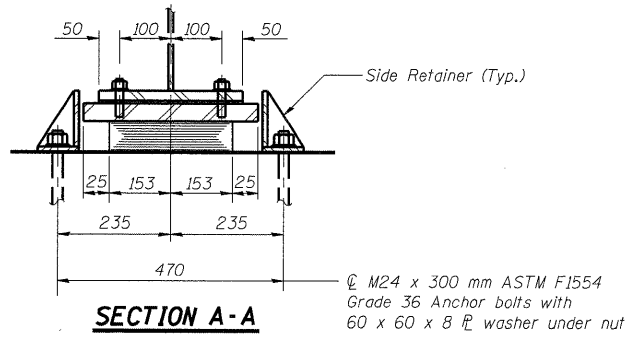


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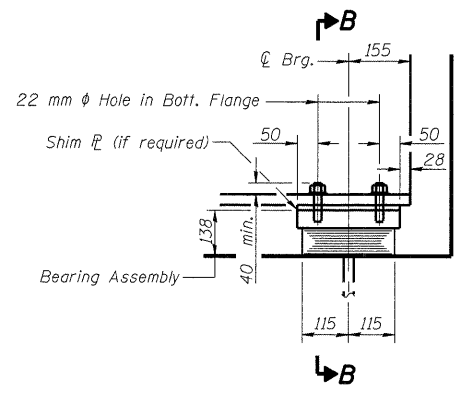


**ELEVATION**

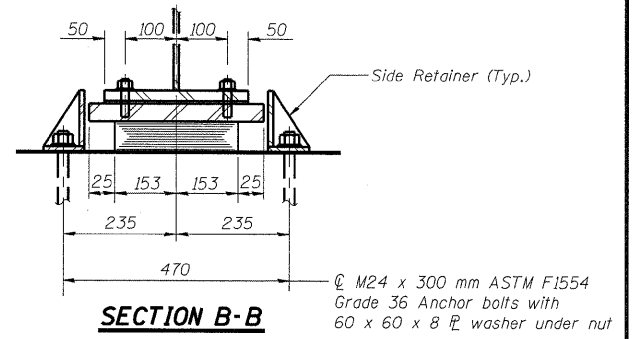


**SECTION A-A**

**TYPE I ELASTOMERIC EXP. BRG.- EAST ABUT.**



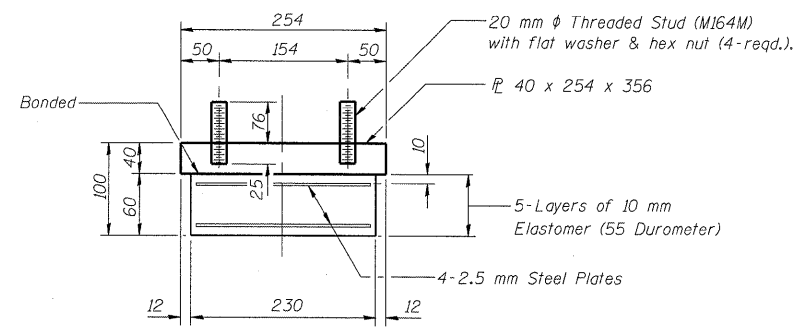
**ELEVATION**



**SECTION B-B**

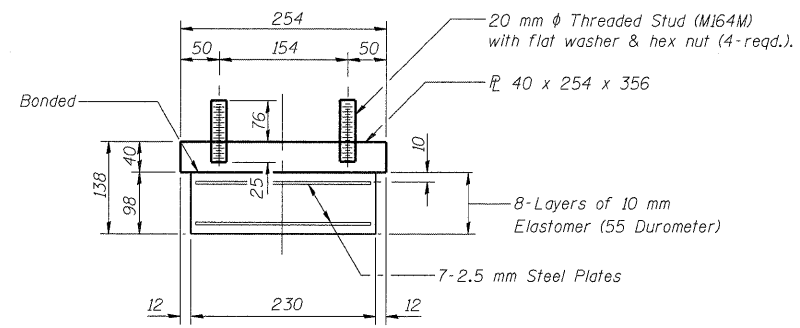
**TYPE I ELASTOMERIC EXP. BRG.- WEST ABUT.**

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
F.A.P. 310	*	MADISON	149	49
SHEET NO. 18				
36 SHEETS				
Contract #76634 * 60-15VB-1 & 2				



**BEARING ASSEMBLY - EAST ABUT.**  
(9-Req'd)

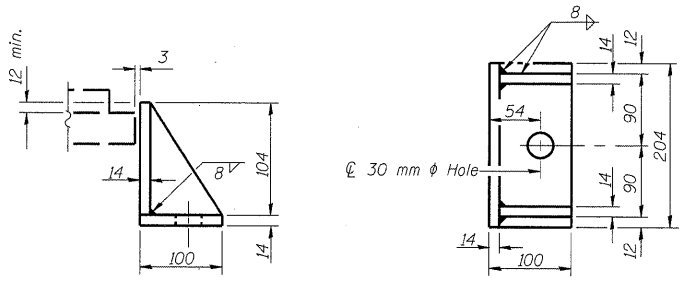
Note: Shim plates shall not be placed under Bearing Assembly.



**BEARING ASSEMBLY - WEST ABUT.**  
(9-Req'd)

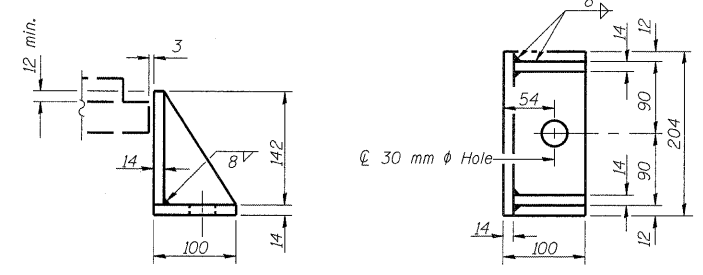
Note: Shim plates shall not be placed under Bearing Assembly.

**Notes:**  
 See Sheet #19 of 36 for Bearings at Pier #1 & Pier #2.  
 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. Since there is no metric specification for ASTM F1554 the anchor bolt requirements are given in English units.  
 Anchor bolts of fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.  
 Anchor bolts for side retainers may be cast in place or installed in holes drilled before or 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.  
 The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270M Grade 345.



**SIDE RETAINER - EAST ABUT.**

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.  
(18-Req'd)



**SIDE RETAINER - WEST ABUT.**

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.  
(18-Req'd)

**BILL OF MATERIAL**

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	27
Anchor Bolts 24 mm φ	Each	36
Anchor Bolts 36 mm φ	Each	36

DESIGNED	ADL
CHECKED	WLW
DRAWN	ADL/DGM
CHECKED	WLW

**I-2-E1 (M)** 4-30-99

**BEARING DETAILS**  
**FAP RTE. 310 (IL RTE. 255) NB & RAMP C OVER**  
**UNION PACIFIC & KANSAS CITY SOUTHERN R.R.**  
**SECTION 60-15VB-1 & 2**  
**MADISON COUNTY**  
**STATION 39+160.297**  
**STRUCTURE NUMBER 060-0310**

Klingner & Assoc., P.C.