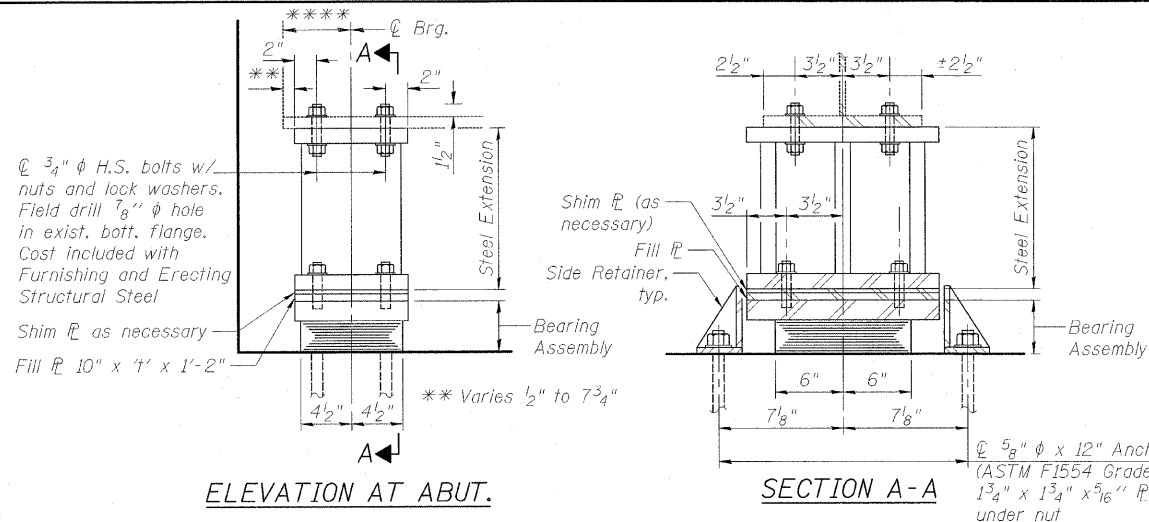
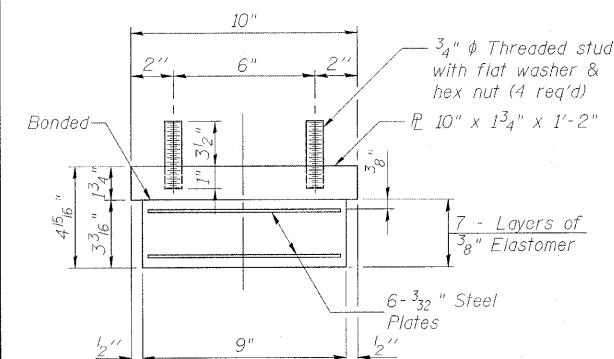


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

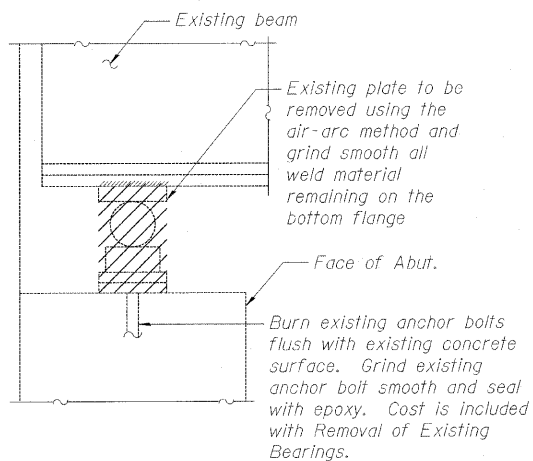


**TYPE I ELASTOMERIC EXP. BRG.  
AT NORTH ABUTMENT**



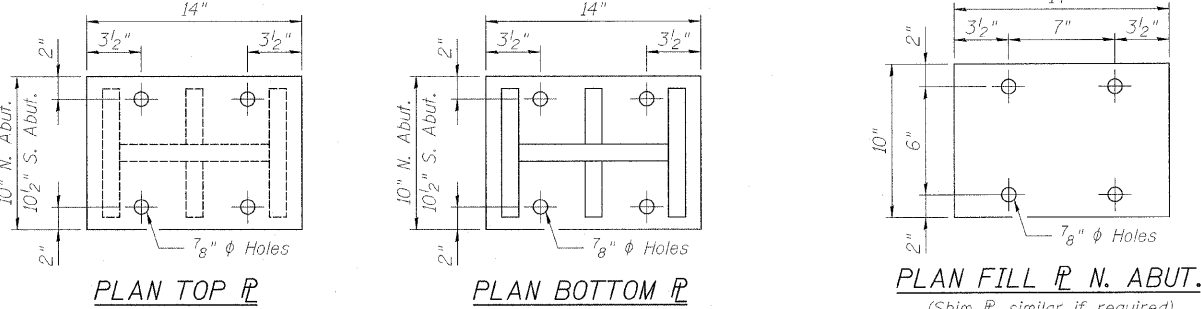
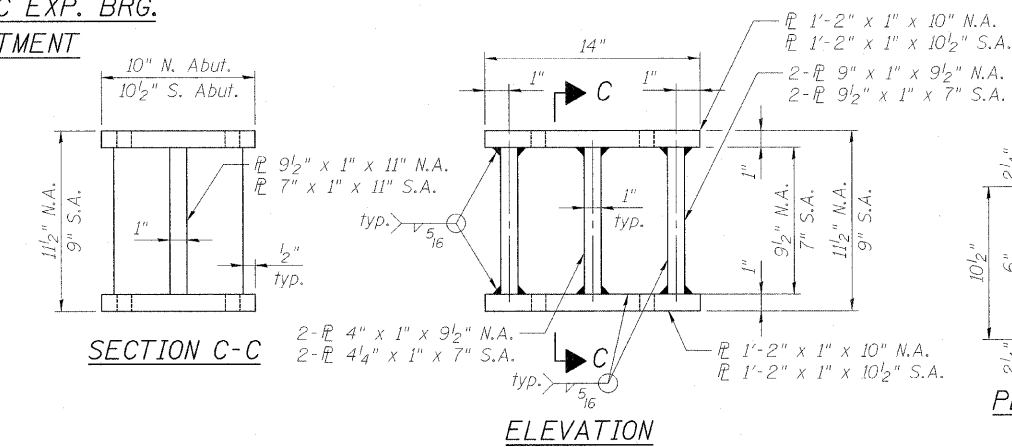
**BEARING ASSEMBLY**

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



**BEARING REMOVAL**

DESIGNED - DF
CHECKED - TL
DRAWN - LAM
CHECKED - DF

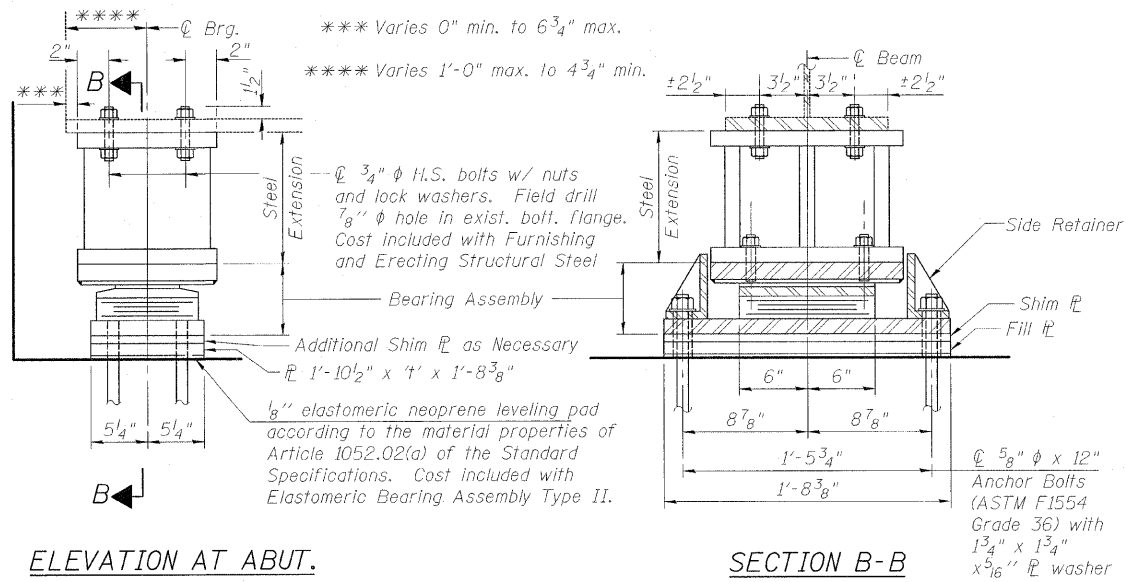
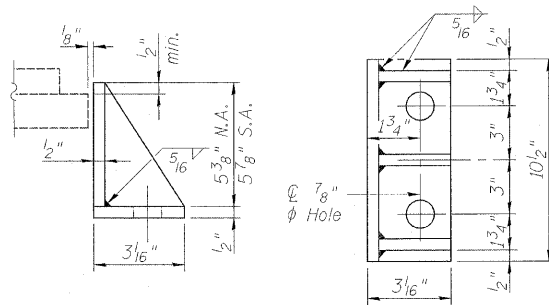


**Notes:**  
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.  
 Anchor bolts for Type I bearing side retainers may be cast in place or installed in holes drilled before or after members are in place.  
 Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.  
 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 or Type II, except as noted otherwise.  
 The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.  
 Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.  
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.  
 Two 1/8" ind. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.  
 See sheet S-24 of S-34 for jacking procedure requirements. The cost for fabricating and installing the steel extensions, fill PL and shim PL will be paid for as Furnishing and Erecting Structural Steel.

**FILL PL THICKNESS "t"**

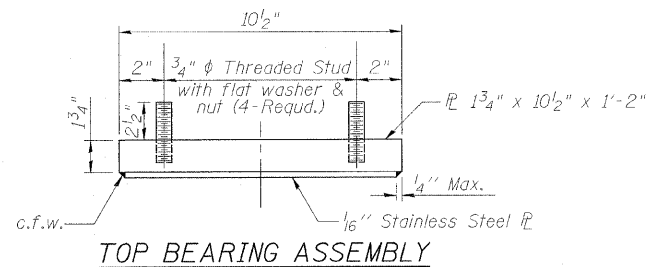
	BM 1	BM 2	BM 3	BM 4	BM 5	BM 6	BM 7	BM 8	BM 9	BM 10	BM 11	BM 12
South Abutment	3/8"	-	-	-	1/4"	-	1/4"	1/4"	-	-	-	1/4"
North Abutment	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"	1/4"	3/8"	1/4"	-	1/4"	1/4"

**MODIFIED SIDE RETAINER**  
 Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



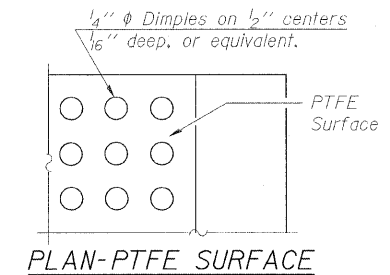
**ELEVATION AT ABUT.**

**TYPE II ELASTOMERIC EXP. BRG.  
AT SOUTH ABUTMENT**

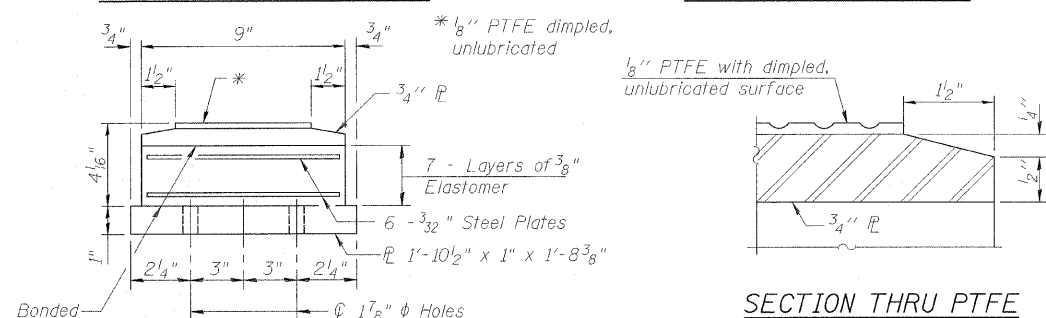


**TOP BEARING ASSEMBLY**

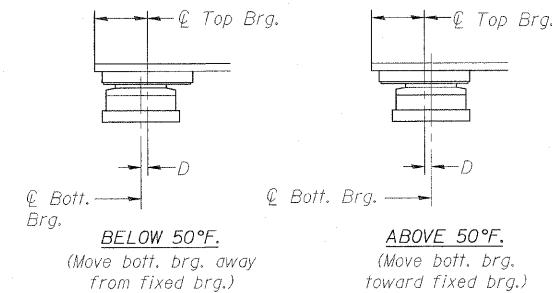
**BOTTOM BEARING ASSEMBLY**



**PLAN-PTFE SURFACE**



**SECTION THRU PTFE**



**SETTING ANCHOR BOLTS AT EXP. BRG.**

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

**BILL OF MATERIAL**

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	12
Elastomeric Bearing Assembly Type II	Each	12
Anchor Bolts, 5/8"	Each	96
Furnishing and Erecting Structural Steel	Pound	4,420
Removal of Existing Bearings	Each	24

**ABUTMENT BEARING DETAILS  
STRUCTURE NO. 045-0016**

**BOWMAN, BARRETT & ASSOCIATES INC.**  
 CONSULTING ENGINEERS  
 Chicago, Illinois  
 312.228.0100  
 www.bbainc.com  
 Job No. 910

SHEET NO. S-23 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 57
	CONTRACT NO. 60C06 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				