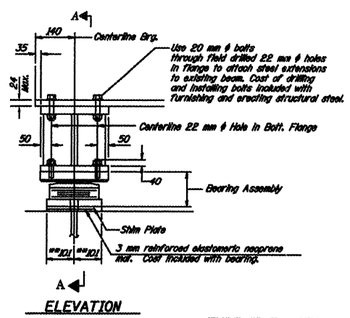
CONTRACT NO. 70661

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 55	*	McLEAN	70	59
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

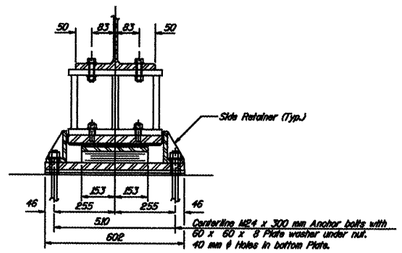
SHEET NO. 8
14 SHEETS

* I(57-4)HBR-5&VBR-1I&57-2HB-1



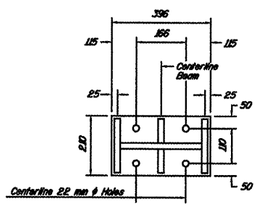
ELEVATION

TYPE II ELASTOMERIC EXP. BRG.
(West Abut. A & C)

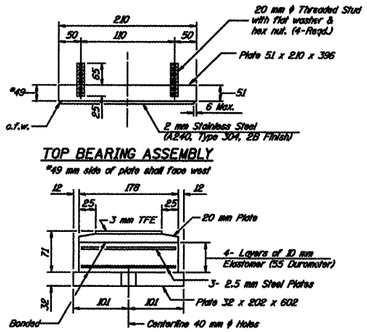


SECTION A-A

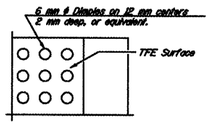
Notes:
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.
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 250. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
Anchor bolts for Type II bearings shall be placed in holes drilled through 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 shall be included in the cost of Elastomeric Bearing Assembly, Type II.
The 3 mm TFE 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 3mm TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.
All dimensions are in millimeters (mm) except as noted.



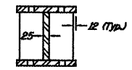
TOP & BOTTOM PLAN STEEL EXTENSION



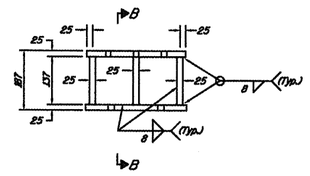
TOP BEARING ASSEMBLY
*49 mm side of plate shall face west



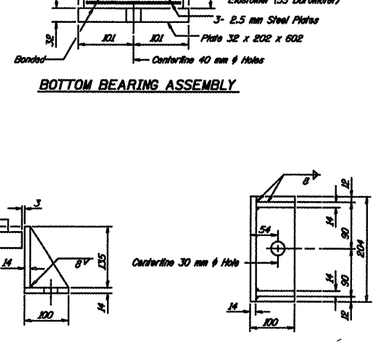
PLAN-TFE SURFACE



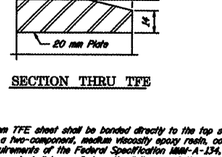
SECTION B-B



ELEVATION STEEL EXTENSION



BOTTOM BEARING ASSEMBLY



SECTION THRU TFE

Notes:
The 3 mm TFE 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 3 mm TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

STEEL EXTENSION DETAILS

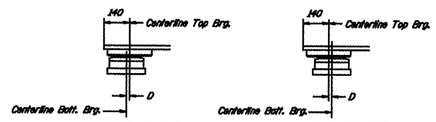
24 Required at Abutments A & C

Note: Contractor shall field measure existing bearings and provide 202 x 602 shims as necessary.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	24
Furnishing and Erecting Structural Steel	kg	1450
Jack and Remove Existing Bearing	Each	24
Anchor Bolts, M24	Each	48

SIDE RETAINER
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. Weight included with Structural Steel (No. Req'd 48 @ Abutments A & C)



BELOW 10 ^C.
(Move bott. brg. away from fixed brg.)

ABOVE 10 ^C.
(Move bott. brg. toward fixed brg.)

** SETTING ANCHOR BOLTS AT EXP. BRG.

D= 1 mm per each 10 in of expansion for every 8 °C temp. change from the normal temp. of 10 °C.

DESIGNED	GAE
CHECKED	JDA
DRAWN	NQ
CHECKED	GAE

BEARING DETAILS ABUTS. A & C
F.A.I. 55 OVER CONSTITUTION TRAIL
McLEAN COUNTY
SN 057-0026 (NB)
SN 057-0027 (SB)
STA. 38+263.167