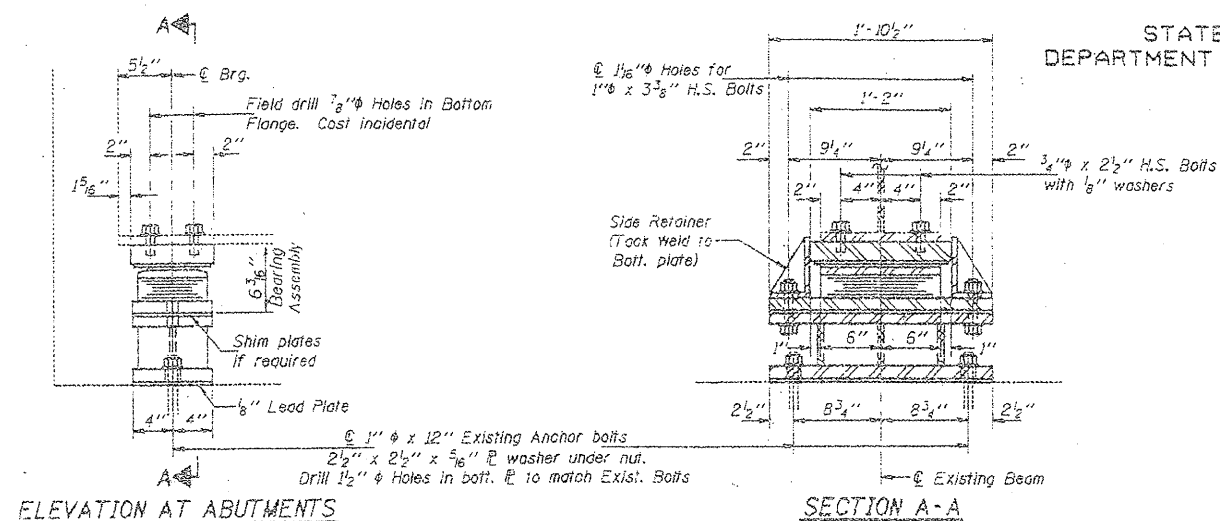


# Location 3 S.N. 090-0077 Bearings Information only

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

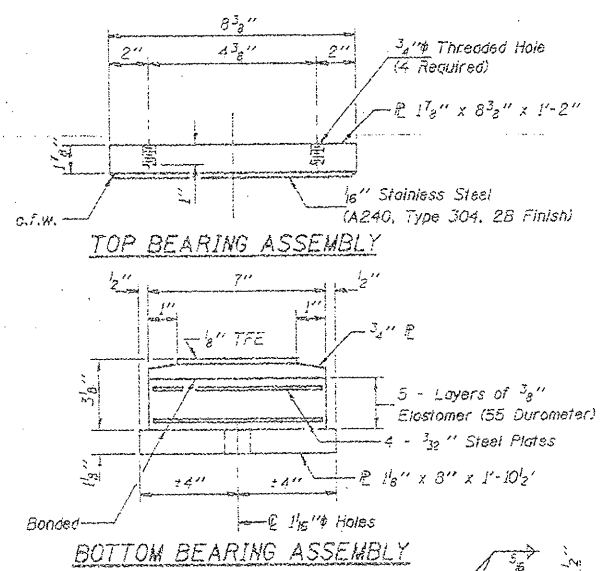
PROJECT NO.	SECTION	COUNTY	DATE	SHEET NO.
F.A.I. 74	(90-15HB-4)	TAZEVELL	13	13
SHEET NO. 9				
13 SHEETS				



ELEVATION AT ABUTMENTS

South Abutment Looking West  
North Abutment Looking East

TYPE II TFE ELASTOMERIC EXPANSION BEARING

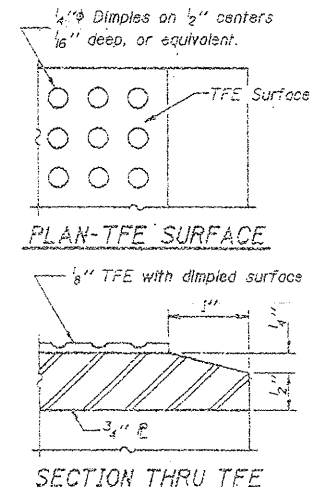


TOP BEARING ASSEMBLY

BOTTOM BEARING ASSEMBLY

SIDE RETAINER

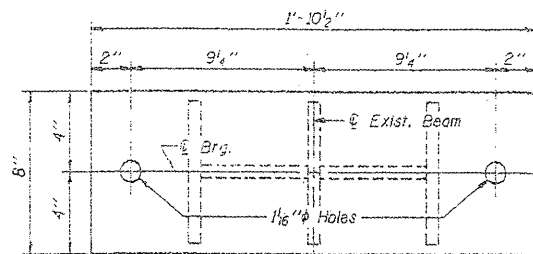
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



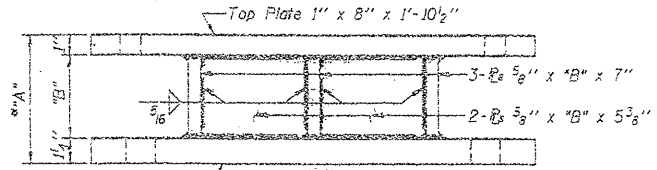
PLAN-TFE SURFACE

SECTION THRU TFE

Note: The 3/8" 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 WMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces. Bonding of 3/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

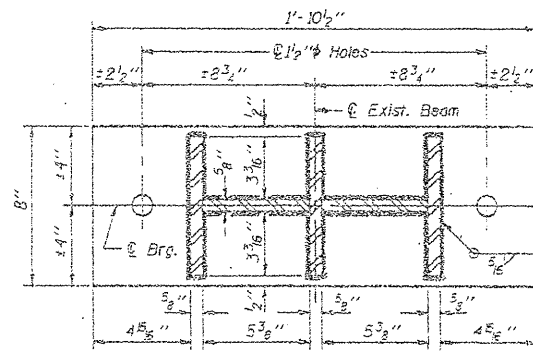


PLAN OF TOP PLATE



ELEVATION

For "A" and "B" dimensions see table below.



PLAN OF BOTTOM PLATE

ABUTMENT BOLSTER DETAILS

Typ. for both abutments.

TABLE FOR "A" AND "B" DIMENSIONS

Location	South Abutment		North Abutment	
	"A"	"B"	"A"	"B"
Beam 1	7 5/8"	5 1/8"	6 3/4"	4 1/2"
Beam 2	7 3/8"	4 9/8"	5 7/8"	4 9/8"
Beam 3	7 3/8"	4 5/8"	6 1/2"	4 1/2"
Beam 4	7 3/8"	4 1/8"	5 3/8"	4 1/2"
Beam 5	7 3/8"	4 5/8"	5 1/2"	4 1/2"

\* The contractor shall verify this dimension in the field before jacking the beams for bearing removal.

INTERIOR GIRDER MOMENT TABLE

	Mid Span of Span 1 or 4
$I_s$ (in <sup>4</sup> )	9040
$I_c$ (in <sup>4</sup> )	---
$S_s$ (in <sup>3</sup> )	504
$S_c$ (in <sup>3</sup> )	---
$Z$ (in <sup>3</sup> )	581
$W$ (K/ft.)	1.115
$M^0$ (K)	2.18
$s^0$ (K/ft.)	---
$M_s^0$ (K)	---
$H_L$ (K)	250
$M$ (Imp) (K)	75
$S_3(M+I)$ (K)	541
$M_a$ (K)	986
$M_u$ (K)	1598
$f_s^0$ non-comp. (k.s.i.)	4.5
$f_s^0$ (comp) (k.s.i.)	---
$f_s^0$ (k+I) (k.s.i.)	11.2
$f_s$ (Overload) (k.s.i.)	15.7
$f_s$ (Total) (k.s.i.)	---
$VR$ (K)	---

INTERIOR GIRDER REACTION TABLE

	Abutments or at Pins
$R^0$ (K)	22.1
$R^1$ (K)	32.1
$Imp$ (K)	9.6
$R$ (Total) (K)	63.8

$I_s$  and  $S_s$  are the moment of inertia and section modulus of the steel section used in computing  $f_s$  (Total & Overload).  
 $I_c$  and  $S_c$  are the moment of inertia and section modulus of the composite section used in computing  $f_s$  (Total & Overload).  
 $VR$  is the maximum Live Load - Impact - shear range in span.  
 $Z$  is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.  
 $M^0$  (Applied Moment) =  $1.3(M^0 + M_s^0 + S_3(M+I))$ .  
 $M_u$  is the Full Plastic Moment Capacity for Compact, Braced section.  
 $f_s$  (Overload) is the sum of the stresses due to  $M^0 + M_s^0 + S_3(M+I)$ .  
 $f_s$  (Total) (Non-compact section) is the sum of the stresses due to  $1.3(M^0 + M_s^0 + S_3(M+I))$ .

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	10

ABUTMENT BEARING DETAILS  
F.A.I. RT. 74 SEC. (90-15HB-4)  
TAZEVELL COUNTY  
STATION 922+60.73

DESIGNED	EXAMINED
CHECKED	PASSED
DRAWN Joe Sutherland	APPROVED
CHECKED	

Add SHEET 13A