Roofing felt (30 lbs) 1'-11" B◀ı Place to top of web. 1 (Typ.) -Side Retainer 1-#8 m<sub>3</sub>(E) bar \_\_\_ cut to fit, (Typ.) Bolts (F1554 Grade 55) with  $2^{3}4'' \times 2^{3}4'' \times {}^{5}16''$ └ #8 m<sub>3</sub>(E) #6  $m_4(E)$  bar— each face, typ. #8 v<sub>1</sub>(E) bars, (Typ.) --- $B^{\blacktriangleleft}$ 5-#4 m<sub>2</sub>(E) bars ©-R washer under nut. 5-#4 m;(E) bars @ between beams 1'-3" cts. each face Holes in cap to be drilled #6  $m_6(E)$  — +46 m<sub>5</sub>(E) 1'-3" cts. each face after beams are in place, 5-#4 m(E) bars @ each face each face 1'-3" cts. each face, 5-Mechanical Splicers —

> $m_6(E)$  bar each face ELEVATION DIAPHRAGM AT PIER

for #4  $m_I(E)$  bars and

 $m_2(E)$  bars each face

(Westbound looking East)

slab. Concrete in slab above this line Roofing felt (30 lbs) shall shall be placed not less than 45 min. be bonded to side of beam nor more than 90 min. after diaphragm embedded into diaphragm. has been poured. #4m(E) thru- $\#4m_2(E)$ 6" (Typ.) #4 s(E) #8 m<sub>3</sub>(E) -

- ½" P.J.F.

SECTION B-B

AT PIER

typ. between beams.

Pour diaphragm flush with bott, of

#6 m<sub>4</sub>(E), #6 m<sub>5</sub>(E), or #6 m<sub>6</sub>(E)

-Top of Pier Сар

P.J.F. -

PLAN DIAPHRAGM AT PIER

BAR s(E)

1-Mechanical Splicer

for #6  $m_5(E)$  bar and

-⊈ Beam Vertical face

1" P.J.F. on  $\triangle$ 

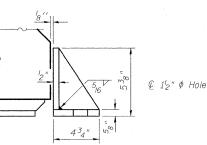
BAR V1(E)

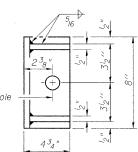
Reinforcement bars in diaphragm are billed with superstructure on sheet 25 of 58.

Concrete in diaphragm is included with Concrete Superstructure on sheet 25 of 58.

Cost of 30 Lb. roofing felt is included with Concrete Superstructure. The Anchor Bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade Anchor Bolts will not be allowed.

For  $v_1(E)$  bars see sheet 44 of 58.





## SIDE RETAINER AT PIER DIAPHRAGM

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

The side retainer shall be galvanized after shop fabrication according to AASHTO M111 and ASTM A 385. Cost of side retainers and anchor bolts shall be included with Concrete Structures.

> PIER DIAPHRAGM DETAILS (W.B.) STRUCTURE NO. 025-0108





-6"x ½" x 2'-0"

,— € Brg.

Fabric Brg. Pad (Typ.)

--Side Retainer (Typ.)

4.5					
SHEET NO.32	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
	70	(25-3)B	EFFINGHAM	1416	64
58 SHEETS	SN 025-0108		CONTRACT	NO. 74296	
	FED. RO	DAD DIST. NO. 7   ILLINOIS   FED. A	AID PROJECT 70		

DESIGNED B.B. CHECKED A.C.S.

DRAWN

W. J. S.

CHECKED C.J.F. & B.B.