

**ROLLED THREAD DOWEL BAR**



**\*\* ONE PIECE**

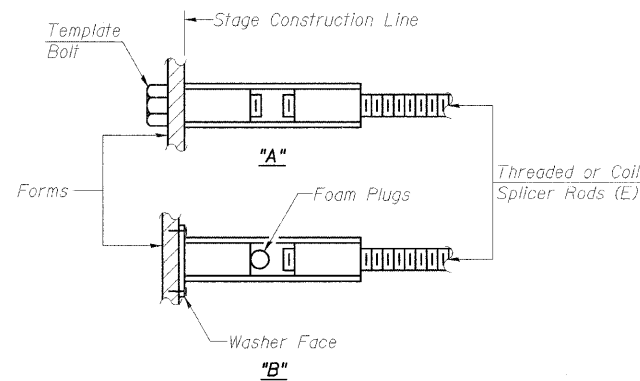
Wire Connector



**WELDED SECTIONS**

**BAR SPLICER ASSEMBLY ALTERNATIVES**

\*\*Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.  
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
 (E) : Indicates epoxy coating.

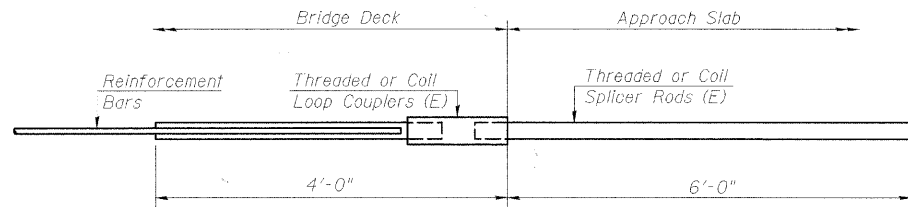
**NOTES**

1. Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
2. Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
3. All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
4. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
5. Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) =  $1.25 \times f_y \times A_1$

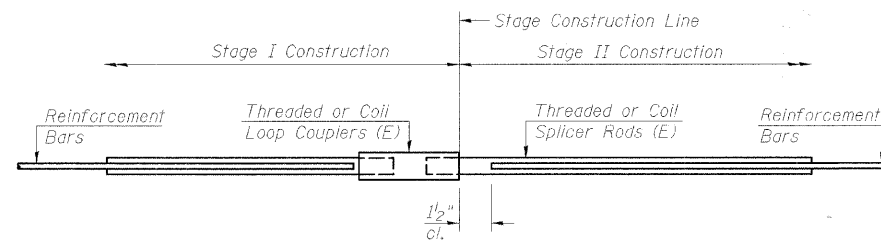
② Minimum \*Pull-out Strength (Tension in kips) =  $0.66 \times f_y \times A_1$

Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $A_1$  = Tensile stress area of lapped reinforcement bars.  
 \* = 28 day concrete



**FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

Bar Splicer for #5 bar	
Min. Capacity = 23.0 kips - tension	
Min. Pull-out Strength = 12.3 kips - tension	
No. Required = 76	



**STANDARD**

Bar Size	No. Assemblies Required	Location

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-2"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8

DESIGNED	PJL
CHECKED	LLV
DRAWN	MGM
CHECKED	PJL

**BAR SPLICER ASSEMBLY DETAILS  
 ELMORE ROAD BRIDGE  
 OVER FRENCH CREEK**

	111 NE Jefferson Ave. Peoria, Illinois 61602 Ph: 309.676.8464 Fax: 309.676.5445 IL Design Firm Reg. No. 184-001518 www.aecom.com	HWY	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	R-15	08-00092-00-BR	PEORIA	32	22	
	STRUCTURE NO. 072-3147		STATION 7+27		FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT BROS-0143(049)	