

BAR SPLICER ASSEMBLY ALTERNATIVES

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

Approach Slab

6'-0"

Threaded or Coil Splicer Rods (E)

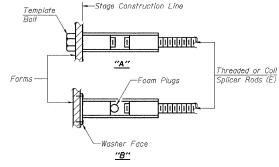
Bridge Deck

Threaded or Coil Loop Couplers (E)

FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

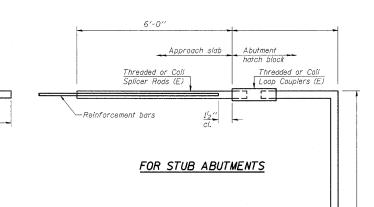
Min. Capacity = 23.0 kips - tension Min. Pull-out Strength = 12.3 kips - tension

lo. Required =



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.



Bar Splicer for #5 bar Min. Capacity = 23.0 kips - tension lin, Pull-out Strength = 12,3 kips - tensio

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.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based an certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

1

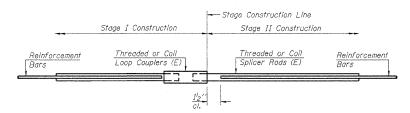
issembly satisties in a following satisties in a following satisties in a following satisties in a following satisfies in kips) = 1.25 x fy x A_t

(Tension in kips) = 0.66 x fy x A_t

(Tension in kips) 2 (Tension in kips) = 0.66 x fy x A,
Where fy = Yield strength of lapped reinforcement bars in ksi.

A_t = Tensile stress area of lapped reinforcement bars. * = 28 day concrete

BAR SPLICER ASSEMBLIES							
Bar Size to be Spliced		Strength Requirements					
	Splicer Rod or Dowel Bar Length		Min. Pull-Out Strength kips - tension				
#4	1'-8''	14.7	7.9				
#5	2'-0"	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				



<u>STANDARD</u>

Bar Size	No. Assemblies Required	Location
#6	18	026-0005
#7	18	026-0005
#6	18	026-0006
#7	18	026-0006

BAR SPLICER ASSEMBLY DETAILS STRUCTURE NO.

BSD-1

5-16-08

Reinforcement Bars

FILE NAME =	USER NAME = swartzrw	DESIGNED	-	REVISED	-	
c:\pw_work\PWIDOT\SWARTZRW\dms36208\th	peledesign_94993.dgn	DRAWN	-	REVISED	-	
	PLOT SCALE = 20.0000 '/ IN.	CHECKED	-	REVISED	-	
	PLOT DATE = 10/17/2008	DATE	-	REVISED	-	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

BAR SPLICER ASSEMBLY DETAILS									
	S	N.	026-	-000	5 AND	026	-0006		
	SHEET NO.	9	OF	10	SHEETS	STA	•	TO	STA.

SCALE: N/A

SHEET NO. S 10 SHEETS COUNTY TOTAL SHEET SHEETS NO. S SHEETS NO. S SHEETS NO. S 32 SECTION 70 D-7 BRIDGE DECK REPAIRS CONTRACT NO. 94993