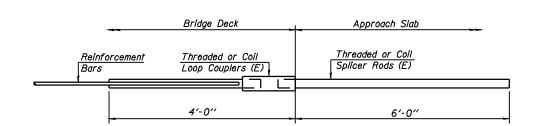


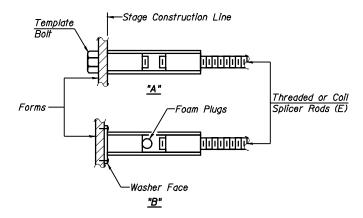
BAR SPLICER ASSEMBLY ALTERNATIVES

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



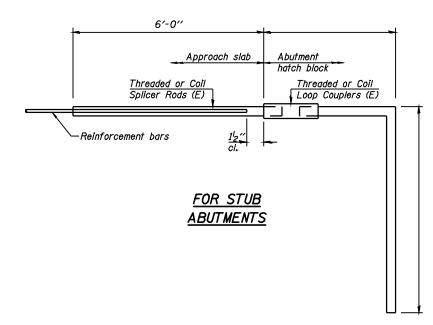
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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

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.

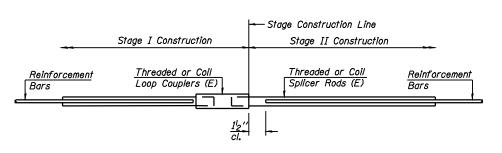
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- Minimum Capacity (Tension in kips) = 1.25 x fy x A_t
- (Tension III Kips)
 Minimum *Pull-out Strength = 0.66 x fy x A; (Tension in kips)

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							
	Splicer Rod or Dowel Bar Length	Strength Requirements					
Bar Size to be Spliced		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″	<i>58.</i> 9	31.3				
#9	5′-9″	75.0	39.6				
#10	7′-3′′	95.0	50.3				
#11	9′-0′′	117.4	<i>61.8</i>				



STANDARD

Bar Size	No. Assemblies Required	Location
#5	80	Top & Bott. Slat
#6	21	Walls

BAR SPLICER DETAILS STRUCTURE NO. 059-7101



Allen Henderson & Associates, Inc. Civil and Structural Engineers Springfield, IL. 62703 Phone: (217)544-8033 IL. Design Firm No. 184-001907

SECTION SHEET NO. 8 662 D(W-3.RS-11.CR) 9 SHEETS

TOTAL SHEET NO. COUNTY MACOUPIN 102 CONTRACT NO. 72765 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT