

* 128BR-1

CONTRACT NO. 72A89

NOTES

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:

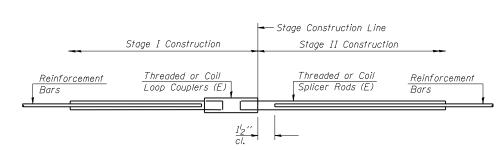
Minimum Capacity = $1.25 \times fy \times A_t$

Minimum *Pull-out Strength = 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						
		Strength Requirements				
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Min. Capacity kips - tension	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			

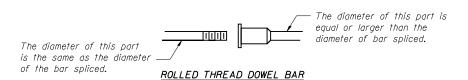


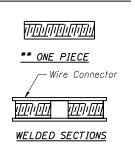
STANDARD

Bar Size	No. Assemblies Required	Location
#4	167	Conc. wear. Surf.
#6	6	E. Abut

BAR SPLICER ASSEMBLY DETAILS F.A.P. 753 (ILL 104) OVER **WOODS CREEK** SECTION 128BR-1 MORGAN COUNTY <u>STATION 726+50.29</u> STR. NO. 069-0022

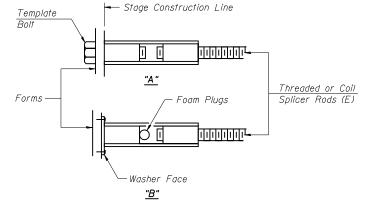
> HUTCHISON ENGINEERING, INC. JACKSONVILLE, ILLINOIS





BAR SPLICER ASSEMBLY ALTERNATIVES

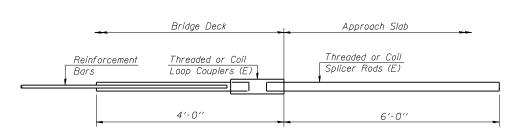
** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



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.

6'-0"



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	=	

DESIGNED	BAN
CHECKED	ЈОН
DRAWN	TC
	BAN
CHECKED	U-111

Approach slab **Abutment** hatch block Threaded or Coil Threaded or Coil , Loop Couplers (E) Splicer Rods (E) Reinforcement bars FOR STUB **ABUTMENTS** Bar Splicer for #5 bar Min. Capacity = 23.0 kips - tension

Min. Pull-out Strength = 12.3 kips - tension No. Required =

BSD-1 11-1-06