

**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.

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.

bar splicer assembly satisfies the following requirements:

- Minimum Capacity = $1.25 \times fy \times A_t$ (Tension in kips) = $1.25 \times fy \times A_t$
- 2

Bar Size to Spi be Spliced Dow #4 #5 #6 #7 #8 #9 #10 #11



Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 128



 F.A.U. ROUTE NO.	SECTION	LAKE		TOTAL SHEETS	SHEET NG.
3602	08-F3000-07-BT			60	22
FED. ROAD C	IST. NO. 1	ILLINOIS	FED. ALD PRI	DJECT-	
Contra	ct #63422				

<u>NOTES</u>

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

(Tension III Kips) Minimum *Pull-out Strength = 0.66 x fy x A_t

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				
olicer Rod or vel Bar Length	Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension			
1'-8''	14.7	7.9			
2'-0''	23.0	12.3			
2'-7" ,	33.1	17.4			
3'-5''	45.1	23.8			
4'-6''	58.9	31.3			
5'-9''	75.0	39.6			
7'-3''	95.0	50.3			
9'-0''	117.4	61.8			

STANDARD

Bar Size	No. Assemblies Required	Location
#5	- 20	Underpass Ftg.
#5	40	Top Slab
#5 68		Underpass Sidewall

		LAKE COUNTY FOREST PRESERVE DISTRICT
REVISIONS		
NAME	DATE	BAR SPLICER ASSEMBLY DETAILS
		GILMER ROAD TRAIL UNDERPASS SEC 08-F3000-07-BT STA. 274+14.15 STRUCTURE NO. 049-N006 DRAWN BY: D. Atkins CHECKED BY: G. Hatlestad DATE: December 17, 2010