

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

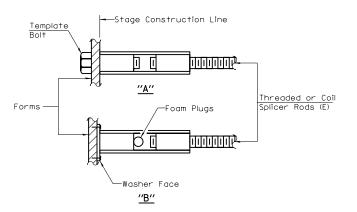
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- Minimum Capacity (Tension in kips) = 1.25 × fy × A_t
- Minimum *Pull-out Strength = 0.66 x fy x A_†

Where fy = Yield strength of lapped reinforcement bars in ksi. ${\rm A_{\dagger}}\text{=}$ Tensile stress area of lapped reinforcement bars.

* = 28 day concrete

	BAR SPLICER ASSEMBLIES					
Bar Size to be Spliced		Strength Requirements				
	Dowel Bar Lenath		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			



BAR SPLICER ASSEMBLY ALTERNATIVES

WELDED SECTIONS

ROLLED THREAD DOWEL BAR

** ONE PIECE

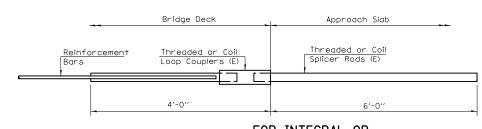
— Wire Connector

The diameter of this part is the same as the diameter of the bar spliced.

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

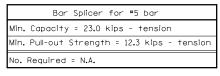
INSTALLATION AND SETTING METHODS

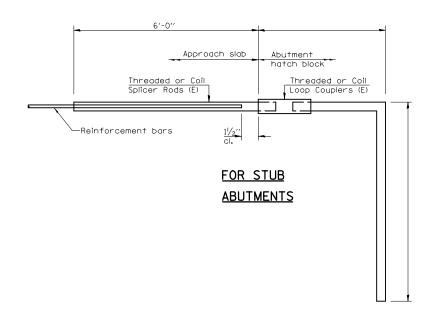
"A": Set bar splicer assembly by means of a template bolt. "B": Set bar splicer assembly by nalling to wood forms or cementing to steel forms. (E): Indicates epoxy coating.



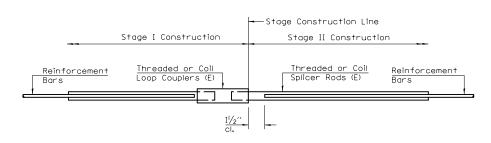
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

The diameter of this part is equal or larger than the diameter of bar spliced.





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



STANDARD

Bar Size	No. Assemblies Required	Location			
#6	16	HATCH BLOCKS			

BAR SPLICER ASSEMBLY DETAILS STRUCTURE NO. 057-0064

10-1-08 BSD-1

FILE NAME =	USER NAME = dodgems	DESIGNED - GMS	REVISED -	27.77 27 11.1112	BAR SPLICER ASSEMBLY DETAILS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
c:\pw_work\pwidot\dodgems\d0267571\D570	838-sht-Hyd.dgn	DRAWN - GMS	REVISED -	STATE OF ILLINOIS			704	(57-7)RS-1 & 1RS-3	McLean	273 123
	PLOT SCALE = 40.0001'/ in.	CHECKED - BJM	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT	T NO. 70838
	PLOT DATE = 6/11/2014	DATE - 10-29-12	REVISED -				FED. RO	AD DIST. NO. ILLINOIS FED. A	. ILLINOIS FED. AID PROJECT	