

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

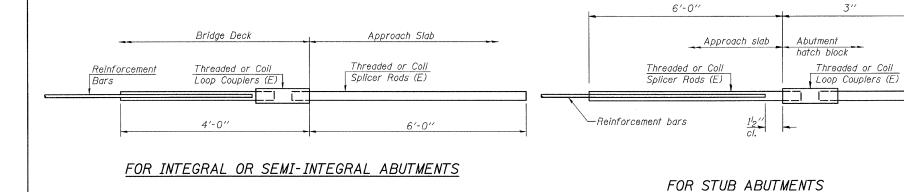
reinforcement bars. Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

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

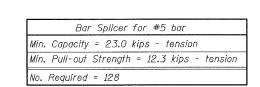
(Tension III NIPS)
Minimum *Pull-out Strength = 0.66 x fy x A_t (Tension in kips)

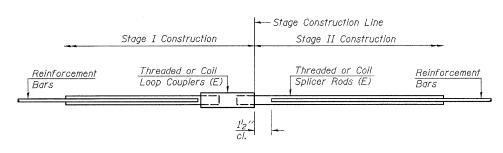
Where fy = Yield strength of lapped reinforcement bars in ksi. A_t = Tensile stress area of lapped reinforcement bars. * = 28 day concrete

BAR SPLICER ASSEMBLIES							
0. 0. /	0 "	Strength Requirements					
Bar Size to be Spliced	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	#7 3′-5″		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 for #5 bar
Min.	Capacity = 23.0 kips - tension
Min.	Pull-out Strength = 12.3 kips - tension





STANDARD

Bar Size	No. Assemblies Required	Location
#6	24	Transverse Joint Reconstruction, Type A
#6	48	Transverse Joint Reconstruction, Type B
#5	44	Transverse Joint Reconstruction, Type C
#5	6	North Abutment Backwall
#5	6	South Abutment Backwall
#5	266	Approach Slabs, Median & Approach Footing
Total	<i>394</i>	

BSD-1 5-16-08

FILE NAME = bar_splicer.dgn PLOT DATE = 7/8/2009

	CHRISTIAN-ROGE &	ASSOCIATES, INC	
-	ENGINEERS-PLANN		
	211 WEST WA	ACKER DRIVE	
	CHICAGO, ILLI	NOIS 60606	
	PHONE: (312)372-2023	FAX: (312)372-52	i

ASSOCIATES, INC.	DESIGNED	-	B.N.S./J.C.N.	REVISED	-
RS-SURVEYORS KER DRIVE	DRAWN	-	D.L./R.E.S./F.M.	REVISED	-
DIS 60606	CHECKED	-	B.N.S./J.C.N.	REVISED	est .
FAX: (312)372-5274	DATE		JULY 8, 2009	REVISED	-

STATE	0F	ILLINOIS
DEPARTMENT ()F	TRANSPORTATION

SCALE:

BAR SPLICER ASSEMBLY DETAILS	F.A.U. RTE.
WEDDIE AVENUE AVED AND AND AUGUST	2831
KEDZIE AVENUE OVER CAL-SAG CHANNEL S.N. 016-076	12
CHEET NO 527 OF 520 CHEETS STA TO STA	

A.U. FE.		SI	EC.	ΓΙΟΝ			COUNTY	TOTAL SHEETS	SHEE NO.
831		131	3.	1-I-2		Т	COOK	41	36
						Т	CONTRACT	NO.	60D75
D. R	DAD DIST.	NO.	1	ILLINOIS	FED.	AID	PROJECT		