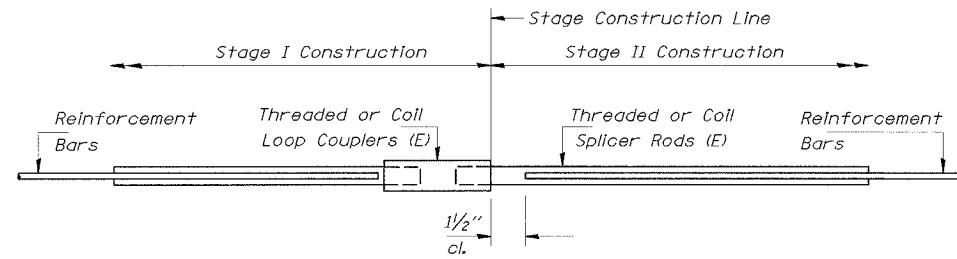


F.A.P. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	2004-088B	COOK	145	77
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

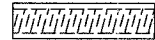


SPLICER DETAIL

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

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

ROLLED THREAD DOWEL BAR



**** ONE PIECE**

Wire Connector



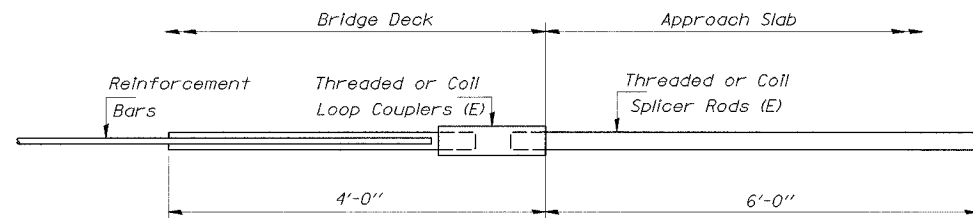
WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

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

Bar Size	No. Assemblies Required	Location
#5	1057	Deck **
#6	2	Deck
#7	2	Deck
#5	164	Diaphragm
#6	16	Diaphragm
#6	8	Abutments
#8	16	Abutments
#5	12	Pier
#7	18	Pier
#8	14	Pier

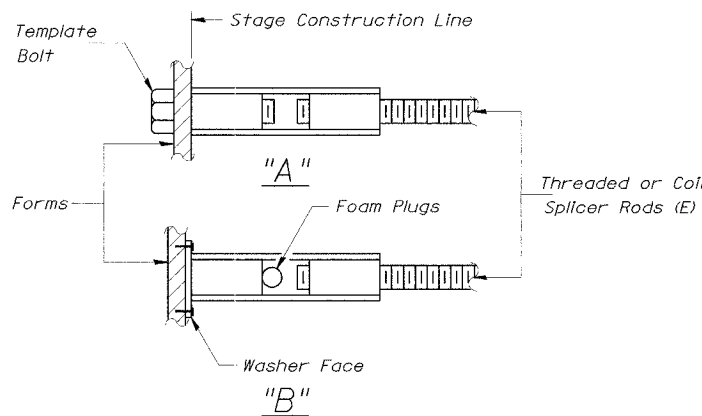
** Includes the Bent Bar Splicers for the Median. See Detail on Sheet SA-10.



**INTEGRAL ABUTMENT
BAR SPLICER ASSEMBLY DETAIL
FOR #5 BAR**

Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 164*

* Included in Bar Splicer Table above detail.



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.

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 (Tension in kips) = $1.25 \times f_y \times A_f$
- Minimum Pull-out Strength (Tension in kips) = $1.25 \times f_{sallow} \times A_f$

Where f_y = Yield strength of lapped reinforcement bars in ksi.

f_{sallow} = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)

A_f = Tensile stress area of lapped reinforcement bars.

* = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

FY000092142024-Advance Contract Add-Structural/MW Flores/mw_24.dwg

DESIGNED	AJN
CHECKED	JAP
DRAWN	ABW
CHECKED	EL

BSD-1 4-30-99

**BAR SPLICER DETAILS
WILLOW ROAD OVER
MILWAUKEE AVENUE
(IL RTE. 21/U.S. 45)
F.A.P. RTE. 305
SECTION 2004-088B
COOK COUNTY
STA. 391+71.02 @ WILLOW RD.
STR. NO. 016-2786**

EDWARDS AND KELCEY