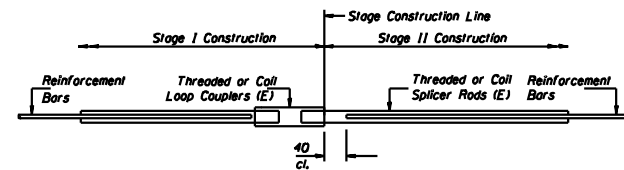


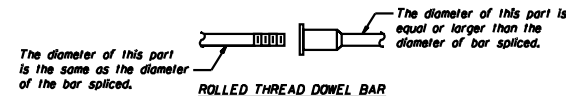
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
FAJ 55	•	MCLEAN	87	80
FED. ROAD DIST. NO. 7		ILL. PROJ.	FED. AID PROJECT	

• (57-4)RS-3 & 1



BAR SPLICER ASSEMBLY DETAIL

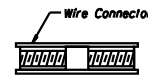
Bar Size	No. Assemblies Required	Location
#15	170	Slab
#20	16	Backwall



ROLLED THREAD DOWEL BAR



ONE PIECE



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

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

NOTES

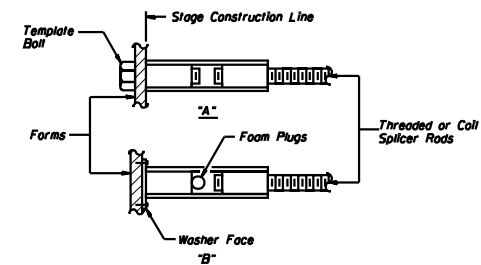
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 420 MPa yield strength, threaded or colled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel 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 = $1.25 \times 10^{-3} \times f_y \times A_s$
 (Tension in kN)
- Minimum "Pull-out" Strength = $1.25 \times 10^{-3} \times f_{s,allow} \times A_s$
 (Tension in kN)

Where f_y = Yield strength of lapped reinforcement bars in MPa.
 $f_{s,allow}$ = Allowable tensile stress in lapped reinforcement bars in MPa (Service Load)
 A_s = Tensile stress area of lapped reinforcement bars (mm²).
 * = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kN - tension	Min. Pull-Out Strength kN - tension
#13	510 mm	68	27
#16	610 mm	102	41
#19	790 mm	147	59
#22	1,04 m	201	80
#25	1,37 m	262	105

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."
 All dimensions are in millimeters (mm) except as noted.



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.

DESIGNED	GAE
CHECKED	JDA
DRAWN	NO
CHECKED	GAE

BSD-1 (M) 4-30-97

BAR SPLICER ASSEMBLY DETAILS
F.A.I. 55 OVER CONSTITUTION TRAIL
SECTION (57-4)RS-3 & 1
MCLEAN COUNTY
SN 057-0026 (NB)
SN 057-0027 (SB)
STA. 38+263.167