Sheet 29 of 31

## **NOTES**

Bar Splicer assembles 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 400 MPa yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel rods.

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 \*Pull-out Strength = 0.66 x fy x A<sub>1</sub> x 10<sup>-3</sup>

Where fy = Yield strength of lapped reinforcement bars in MPa.

A, = Tensile stress area of lapped reinforcement bars (mm<sup>2</sup>).

\* = 28 day concrete.

BAR SPLICER ASSEMBLIES				
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements		
		Min. Capacity kN - tension	Min. Pull-Out Strength kN - tension	
#15	660 mm	100	53	
#20	790 mm	150	79	
#25	1.04 m	250	137	
#30	1.37 m	350	185	

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.

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

\*\*ROLLED THREAD DOWEL BAR\*\*

\*\*ONE PIECE\*\*

BAR SPLICER ASSEMBLY DETAIL

40

Stage I Construction

Reinforcement

Bars

Threaded or Coil

Loop Couplers (E)

Bar Size	No. Assemblies Required	Location	
#15	986	Bridge Deck (Stage Construction Line)	
#15	24	Pier Caps (Stage Construction Line)	
# <i>1</i> 5	32	Pier Stems (Stage Construction Line)	
#20	32	Abutment Diaphragms (Stage Construction Line)	
<i>#2</i> 5	36	Pier Footings (Stage Construction Line)	
#25	40	Abutment Caps (Stage Construction Line)	
#30	32	Pier Caps (Stage Construction Line)	
#30	16	Pier Stems (Stage Construction Line)	

- Stage Construction Line

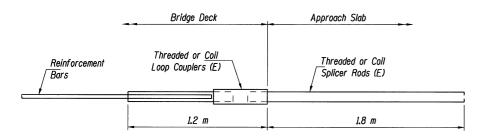
Stage II Construction

Threaded or Coil

Splicer Rods (E)

Reinforcement

Bars



INTEGRAL ABUTMENT
BAR SPLICER ASSEMBLY DETAIL
FOR #15 BAR

Minimum Capacity = 100 kN-tension
Minimum Pull-out Strength = 53 kN-tension
No. Required = 244

## "B" INSTALLATION & SETTING METHODS

Washer Face

- Wire Connector

WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

\*\* Heavy Hex Nuts conforming to ASTM

Template

Forms

A 563M, Grade C, D or DH may be used.

- Stage Construction Line

"A": Set bar splicer assembly by means of template bolt.

- Foam Plugs

"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms. (E): Indicates epoxy coating.

Threaded or Coil

Splicer Rods (E)

\$/IME\$ 8/16/2009 \$F!! F\$

LAYOUT G.L.C. 11/5/97

DRAWN D.A.N. 11/5/97

REVIEWED \* \*\*,/\*\*,/\*\*

BAR SPILCER ASSEMBLY DETAILS
F.A.I. 55 OVER LINDEN STREET
SECTION (57-4HB-3)BR
STRUCTURE NO. 057-0235 (N.B.) & 057-0236 (S.B.)
MCLEAN COUNTY
STATION 38+544.044

C Copyright Hanson Professional Services Inc. 2003



