

## STANDARD BAR SPLICER ASSEMBLY

| Minimum Lap Lengths       |         |         |         |         |         |         |
|---------------------------|---------|---------|---------|---------|---------|---------|
| Bar size to<br>be spliced | Table 1 | Table 2 | Table 3 | Table 4 | Table 5 | Table 6 |
| 3, 4                      | 1'-5''  | 1'-11'' | 2'-1''  | 2'-4''  | 2'-7''  | 2'-11'' |
| 5                         | 1'-9''  | 2'-5''  | 2'-7''  | 2'-11'' | 3'-3''  | 3'-8''  |
| 6                         | 2'-1''  | 2'-11'' | 3'-1''  | 3′-6′′  | 3'-10'' | 4'-5''  |
| 7                         | 2'-9''  | 3′-10′′ | 4'-2''  | 4'-8''  | 5'-2''  | 5′-10′′ |
| 8                         | 3′-8′′  | 5′-1′′  | 5′-5′′  | 6'-2''  | 6′-9′′  | 7'-8''  |
| 9                         | 4'-7''  | 6′-5′′  | 6′-10′′ | 7′-9′′  | 8'-7''  | 9'-8''  |

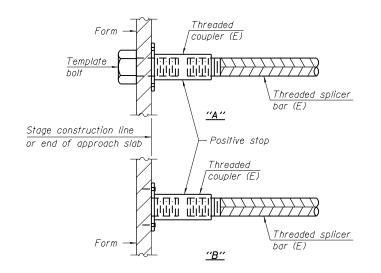
Table 1: Black bar, 0.8 Class C

Table 2:Black bar, Top bar lap. 0.8 Class CTable 3:Epoxy bar, 0.8 Class CTable 4:Epoxy bar, Top bar lap, 0.8 Class CTable 5:Epoxy bar, Class CTable 6:Epoxy bar, Top bar lap, Class C

Threaded splicer bar length = min. lap length +  $1_{2}^{l}$  + thread length

\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

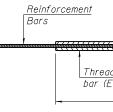
|                  | Bar  | No. assemblies | Table for minimum |
|------------------|------|----------------|-------------------|
| Location         | size | required       | lap length        |
| Deck             | #5   | 2,482          | Table 3           |
| Approach Slab    | #4   | 50             | Table 4           |
| Approach Slab    | #5   | 92             | Table 3           |
| Approach Footing | #5   | 80             | Table 3           |
| South Abutment   | #5   | 8              | Table 4           |
| South Abutment   | #6   | 5              | Table 4           |
| South Abutment   | #7   | 20             | Table 4           |
| North Abutment   | #5   | 10             | Table 4           |
| North Abutment   | #6   | 5              | Table 4           |
| North Abutment   | #7   | 20             | Table 4           |
| Pier 1           | #6   | 24             | Table 4           |
| Pier 1           | #8   | 14             | Table 4           |
| Pier 2           | #5   | 30             | Table 4           |
| Pier 2           | #6   | 22             | Table 4           |
| Pier 2           | #8   | 12             | Table 4           |
| Pier 3           | #6   | 22             | Table 4           |
| Pier 3           | #8   | 14             | Table 4           |
| Pier 4           | #4   | 4              | Table 3           |
| Pier 4           | #5   | 30             | Table 4           |
| Pier 4           | #6   | 16             | Table 4           |
| Pier 4           | #8   | 16             | Table 4           |
| Pier 5           | #5   | 168            | Table 4           |
| Pier 5           | #9   | 18             | Table 4           |
| Pier 6           | #5   | 190            | Table 4           |
| Pier 6           | #9   | 18             | Table 4           |



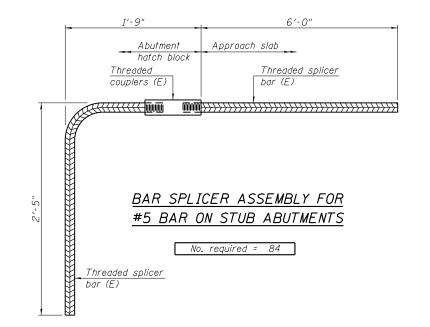
## INSTALLATION AND SETTING METHODS

"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.



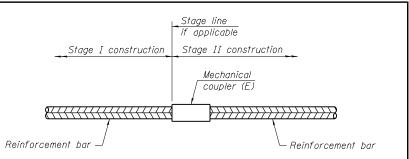
## BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS





1-27-12

|                            | LUNOIS MISSOURI<br>Excitored Business Contex 1 Lockets Con Building                           | USER NAME =  | DESIGNED - | REVISED |                              | BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS |     | SECTION     | COUNTY  | TOTAL SHEET |
|----------------------------|---|--------------|------------|---------|------------------------------|---|-----|-------------|---------|-------------|
|                            | 100 Lanter Court, Suite 1 720 Olive, Suite 1660<br>Collinsville, IL 62234 St. Louis, MO 63101 |              | CHECKED -  | REVISED | STATE OF ILLINOIS            | STRUCTURE NO. 048-0100                              | 626 | (44-B-1)BR  | KNOX    | 122 81      |
| DATES ASSOCIATES           | ter 618,345,2200 ter 314,588,8381<br>fax 618,345,7233 fax 314,588,9605                        | PLOT SCALE = | DRAWN -    | REVISED | DEPARTMENT OF TRANSPORTATION |   |     |             | CONTRAC | T NO. 68759 |
| Engineering + Architecture | www.ostesassoclates.com   | PLOT DATE =  | CHECKED -  | REVISED |                              | SHEET NO. 51 OF 62 SHEETS ILLINOIS FED. AI          |     | AID PROJECT |         |             |



## STANDARD MECHANICAL SPLICER

| Location | Bar<br>size | No. assemblies<br>required |
|----------|-------------|----------------------------|
| Pier 5   | #11         | 64                         |
| Pier 6   | #11         | 64                         |
|          |             |                            |
|          |             |                            |
|          |             |                            |

| Bridge Deck              | Approach Slab               |
|--------------------------|-----------------------------|
| Threaded<br>couplers (E) | Threaded splicer<br>bar (E) |
| <u> </u>                 | MM <u> </u>                 |
| ded splicer              |                             |
| 4'-0''                   | 6'-0''                      |
|                          |                             |

No. required =

<u>NOTES</u>

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications. See approved list of bar splicer assemblies and mechanical splicers for alternatives.