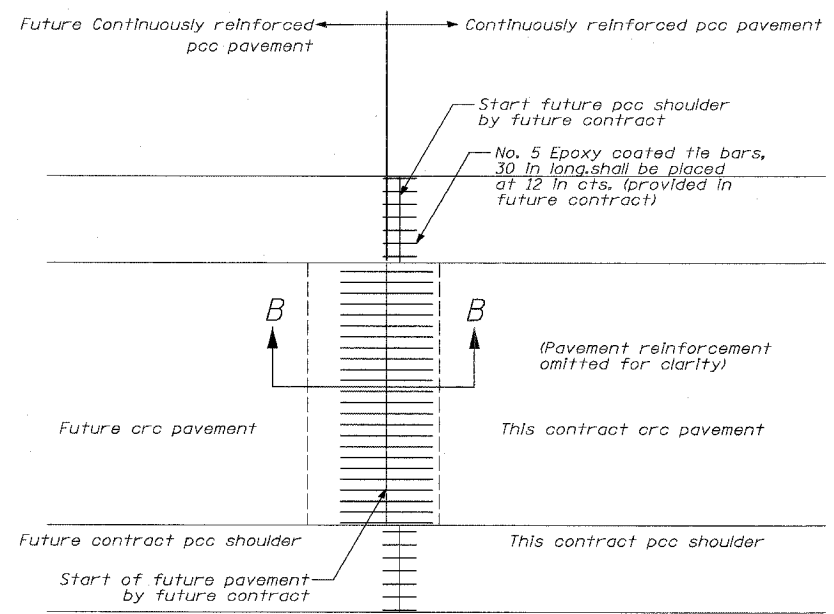


PLAN
(LONG TERM TRANSVERSE CONSTRUCTION JOINT IN THIS CONTRACT)

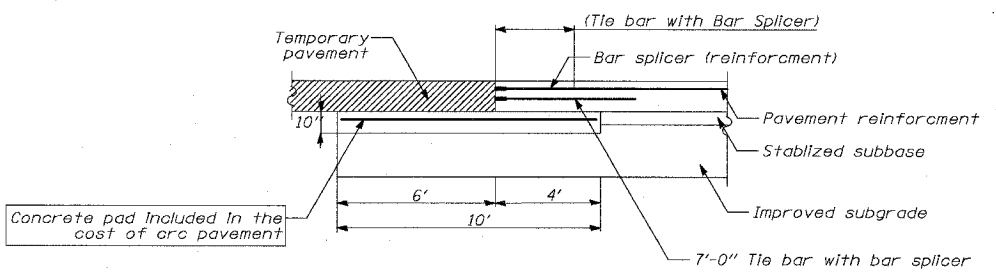


PLAN
(CONNECTION TO LONG TERM TRANSVERSE CONSTRUCTION JOINT BY FUTURE CONTRACT)

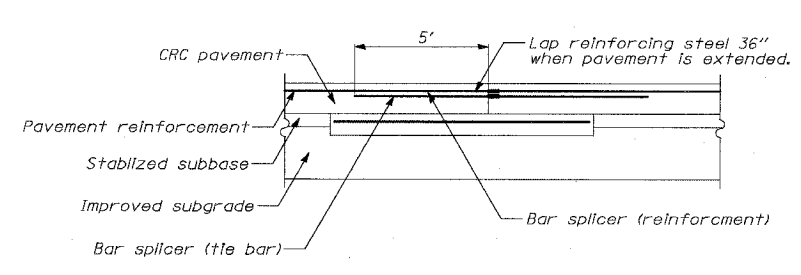
NOTES

- This detail shows the termination of proposed CRC pavement that will be extended by future construction.
- Bar splicer assemblies shall be of an IDOT approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
- Bar splicers shall be of the "coupler" type, and shall not have flanges.
- Splicer rods shall be of minimum 60 ksi yield strength, threaded or colled 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 ksi) = $1.25 \times f_y \times A(t)$
 - Minimum Pull-out Strength (Tension in ksi) = $1.25 \times f_s(\text{allow}) \times A(t)$
 Where:
 f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_s(\text{allow})$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 $A(t)$ = Tensile stress area of lapped reinforcement bars (in²).
 * = 28 day concrete

BAR SPLICER ASSEMBLIES			
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
#9	5'-9"	75.0	30.0

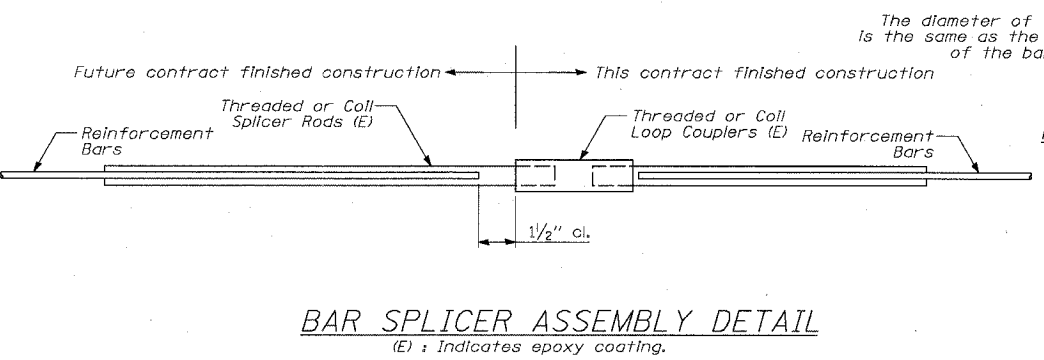


LONG TERM TRANSVERSE CONSTRUCTION JOINT SECTION A-A

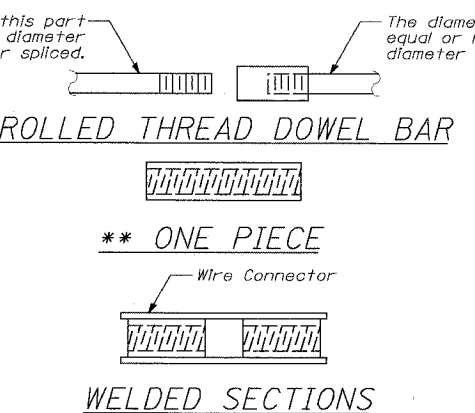


LONG TERM TRANSVERSE CONSTRUCTION JOINT SECTION B-B

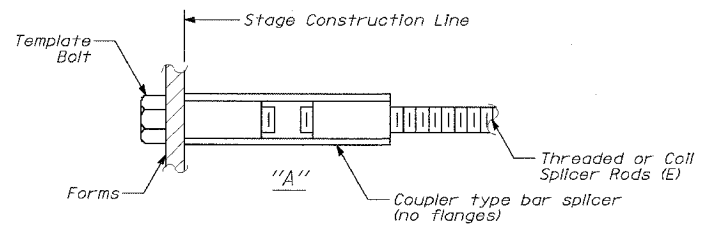
- Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted.
- Reinforcement shall not be paid for separately but included in the cost of CONTINUOUSLY REINFORCED PORTLAND CEMENT PAVEMENT, of the thickness specified.
- Connection to long term transverse construction joint work includes the installation of the bar splicers, payment for this work will be included in the cost of CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT of the thickness specified. Tie bars to be drilled and grouted shall not be paid for separately but included in the cost of PORTLAND CEMENT CONCRETE SHOULDERS, of the thickness specified.



BAR SPLICER ASSEMBLY DETAIL
(E) : Indicates epoxy coating.



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



INSTALLATION AND SETTING METHODS
"A" : Set bar splicer assembly by means of a template bolt.
(E) : Indicates epoxy coating.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
CIVIL DETAILS
LONG TERM TRANSVERSE CONSTRUCTION JOINT
(SHEET 2 OF 2)
SCALE: NONE
DATE: 7/1/05
DRAWN BY:
CHECKED BY: