

	RC	OUTE SECTION COUNTY TOTAL SHEET NO. 9
4	N F. 80 FED.	A. I. 0/94 COOK 90 66 21 SHEETS ROAD DIST, NO. 1 ILLINGIS FREE AID PROJECT-
Þ	Shear Studs of Girder	n Top of Deck
	Place Non-Shrink Grout between underside of	Modular Joint Shear Studs See Note "A"
	Girder Flange and Block prior to placing concret Blockout. Cost included Furnishing Modular Exp Joint-160 mm.	ate in Joint manufacturer shall design joint with shear stud location to miss the airder's
No	tes:	<u>DETAIL 1</u>
t.	Modular Expansion Joint shall be designed in accordance with the latest AASHTO Specifications for MS-18 truck loading with impact.	
2.	The expansion joint device shall be prefabricated modular assembly with multiple support bars and separator beams, providing a continuous seal across the deck.	
3.	Joint shall be fabricated and installed according to the manufacturer's recommendations and as shown in Special Provisions for Modular Expansion Joint and as approved by the Engineer.	
	Joint shall be fabricated to conform to the roadway profile and cross-slope.	
All exposed structural steel elements such as separator and edge beams support bars and cover plate shall be fabricated with AASHTO M270M Grade 345 Steel unless specified otherwise by the manufacturer.		
	The Cost of Furnishing the Barrier Plates, the Countersunk bolts, and the Stud Anchors, and installing of the sliding plate assembly at the parapets, shall be included with Furnishing Modular Expansion Joint - 160mm. The Sliding Plate Assembly shall be galvanized.	
	Modular expansion joint shall be shipped in one piece unless noted.	
	No aluminum components shall be allowed.	
	All splices of center beams and edge beams shall be full penetration welds (Upturn splices may be partial penetration welds).	
).	See Deck Cross Section & Details drawing for section thru joint.	
	All dimension are in millimeters (mm) except as noted.	
•	Countersunk bolts and Concrete inserts to be Hot-Dipped Galvanized according to AASHTO M232.	
•	Stud anchors shall be according to Article 1006.32 of the Standard Specifications.	
4. 5.	Cost of all stud anchors shall be included with Furnishing Modular Expansion Joint-160 mm (unless noted otherwise).	
	Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the blockout is cast at an ambient temperature other than 10°C.	
5.	The modular expansion joint system shall be either the Steefflex system by the D.S. Brown Company, the WABO system by the Watson Bowman Acme Corporation or the LG System by TechStar Incorporated. The joint shall provide the following	
	movement: <u>Location</u> West Abutment	Longitudinal Movement (mm) <u>Size (mm)</u> 130 160
•••		ILLINOIS DEPARTMENT OF TRANSPORTATION I-94 EAST BOUND / IL 394 SOUTH BOUND
		MODULAR EXPANSION JOINT DETAILS
<u>1</u> A	TERIAL	EB I-94 OVER THORN CREEK F.A.I. 94 SECTION 2004-133F COOK COUNTY
	Unit Total	STA. 20+509.000 STRUCTURE NO. 016-2807 DATE 05/16/05
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