

MODULAR EXPANSION JOINT STRUCTURE NO. 045-6024 RED GATE ROA SHEET NO. S18 OF 556 SHI

## NOTES:

- 1. Modular Expansion Joints shall be designed according to the Special Provisions and to the latest AASHTO LRFD Bridge Design Specifications for HL-93 loading with impact.
- 2. Joints shall be fabricated and installed according to the manufacturer's recommendations and as shown in the Special Provisions for Modular Joint System and as approved by the Engineer, Joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.
- 3. Joints shall be fabricated to match the roadway profile and cross-slopes.
- 4. All structural steel elements such as separator beams, edge beams, and support bars shall be fabricated with AASHTO M270 Grade 50 steel unless specified otherwise by the manufacturer.
- 5. Modular Expansion Joints shall be the Steelflex system by the D.S. Brown Company, WABO system by the Watson Bowman Acme Corporation, or the LG System by TechStar Incorporated. The joint shall provide the following movements at each location:  $6^{l}_{B}$ " at the W. Abut., 8" at the E. Abut.
- Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the blockout is cast at an ambient temperature other than 50°F.
- 7. Cover plates to be AASHTO M183 steel and hot-dipped galvanized according to AASHTO M111 after fabrication.
- 8. Countersunk Cap Screws and Concrete Inserts to be hot-dipped galvanized according to AASHTO M232.
- 9. The cost of furnishing and installing the Cover Plates, Countersunk Cap Screws, and the Stud Anchors is included with Modular Expansion Joint 9".
- 10. Modular Expansion Joints shall be shipped in one piece unless noted.
- 11. Concrete Anchor Studs shall be according to Article 1006.32 of the Standard Specifications.
- 12. All splices of center beams and edge beams located in the roadway shall be full penetration welds (Upturn splices may be partial penetration welds).
- 13. Cover Plates shall be mounted towards oncoming traffic.
- 14. Cost of cover plates shall be included in the cost of Modular Expansion Joint 9".
- 15. For abutment hatchblock reinforcement see Sheets S37 through S40.
- 16. Hatched area to be poured after superstructure false work has been removed and Modular Joint is fixed in position. Quantity of concrete included with Concrete Superstructure.
- 17. For Cross Frame Details see Sheet S29.

T DETAILS 2	F.A.I. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.	2011
AD OVER THE FOX RIVER		04-00092-00-BR	KANE	440	240	
			CONTRACT	NO. 6	3650	Ľ
HEETS	ILLINOIS FED. AID PROJECT					