INTEROFFICE MEMORANDUM

TO: Mr. Veral Pinkerton, Bridge Engineer

FROM: A. L. Holmes, Construction and Maintenance Engineer

SUBJECT: Failing Closed Cell Joint Filler

Pursuant to your April 13, 1992 memorandum we have completed an investigation into the subject. With one exception, we have determined that the joints that have failed were sized using the requirements of the original Special Provision. In the exception, the joint was constructed wider than planned and the closed cell joint filler was not sized to fit the as-built conditions.

All failing joints will be corrected using the current sizing procedures and installation requirements.

Some bridge plans have a note requiring channel surfaces to be sand blasted to A SSPC-PC10 finish. We recommend this note be included on all plans requiring closed cell joint filler. We also recommend adding a note requiring the joint filler to be sized to fit the asbuilt conditions if the joint is not built to plan dimensions.

A proposed Construction Memorandum is attached for your review. If you have any comments or recommendations regarding this draft memorandum, please advise.

ALH:JLH

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

LITTLE ROCK, ARKANSAS

May 28, 1992

CONSTRUCTION MEMORANDUM NO. DRAFT

TO: DISTRICT ENGINEERS AND RESIDENT ENGINEERS

SUBJECT: CLOSED CELL JOINT FILLER

Prior to the installation of closed cell joint filler, Subsection 810.06 of the 1992 Standard Specifications requires that the joint surfaces be prepared according to the manufacturer's recommendations. The manufacturer of most of the material supplied recommends that structural steel surfaces be cleaned to an SSPC-SP10, near white surface. This is an important factor in obtaining a good bond between the steel and the closed cell joint filler material. Therefore, you should carefully monitor this work to assure compliance.

Using the correct size of joint filler material is equally important. It is currently sized to work in compression for the entire design temperature range. If the joint width is not constructed according to plan, it may be necessary to adjust the material width for the joint to function properly. Contact this office for further instructions if this occurs.

A. L. HolmesState Construction and Maintenance Engineer

ALH:JLH

Attachment

cc: Director Assistant Director Chief Engineer Assistant Chief Engineers Materials and Research FHWA