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DATE: 1/17/2017

TO: Wisconsin Bridge Inspection Team Leaders and Program Managers

FROM: Richard Marz, P.E.
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SUBJECT: Technical Memorandum
Fracture Critical Member Inspections

GUIDELINES: This memorandum describes the frequency requirements for Fracture Critical members and Gusset Plate inspections. Effective for 2017 and forward.

Fracture Critical Members

Notice to all bridge owners that Fracture Critical Member (FCM) diagrams for trusses have been revised. **Structures with newly identified FCM's must have an arms-length inspection of these members during the fracture critical inspection.** For FCM inspections due in 2017, affected bridge owners will be notified by April 1, 2017. For FCM inspections due in 2018, affected bridge owners will be notified by April 1, 2018.

When any portion of a FCM is in condition state 4, the Fracture Critical inspection frequency shall not exceed 12 months.

Gusset Plates

Notice to all bridge owners of the following clarification for Gusset Plate inspections:

- 1) Primary gusset plates connecting FCM's shall be considered an FCM and shall be noted as such on the inspection procedures.
- 2) *Primary gusset plates, regardless of connecting FCM or compression elements, with **continuing** deterioration (active corrosion, distortion) are risk factors. The locations of these elements, as well as the amount of deterioration shall be measured and documented in the bridge inspection report. The frequency and methods of measurement shall be recorded in the inspection procedures* The BOS rating unit is available for support.

QUESTIONS:

For information on the technical contents of this memorandum, please contact Richard Marz at (608)-266-8195 or David Genson at (608)-266-3722.