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TO: WisDOT Certified Bridge Inspectors and Program Managers

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SUBJECT: Technical Memorandum
Critical Findings

GUIDELINES:

This memorandum describes the requirements for the critical findings procedure for bridge structures.

Critical Findings

There are three key components that comprise the critical findings procedure which are as follows:

- 1) Initial Discovery
- 2) Notification Process
- 3) Documentation and Close-Out

1) Initial Discovery

Definition: WisDOT defines a Critical Finding as a defect on a bridge which threatens public safety and/or the structural stability of the bridge and is of such severity that immediate partial or full closure of the structure is required.

Description: Structural or Safety related deficiency that requires immediate follow-up action(s). Potential events/incidents which may warrant a critical finding designation are as follows:

Fracture Critical Inspection Findings
Non-Destructive Evaluation Findings
Scour Critical Deficiencies
Structural Review Findings
Extreme Deterioration which threatens the integrity of primary structural element(s)
Other Safety deficiencies (Movement, Natural Disaster, Bridge Hits, etc.)

Classification: Events/Incidents are classified based on varying levels of severity, as follows:

1 – Unsafe – Structural deficiency of primary structural element(s) which threatens the overall integrity of the structure (Bridge closed ASAP; this may require bridge replacement or major rehabilitation)

2 – Serious – Structural deficiency of primary structural element(s) that requires a partial lane and or shoulder closures for an extended duration (Partial closure ASAP; partial closure shall remain until repairs, rehabilitation, or replacement can occur)

2) Notification Process

The inspector will immediately begin the notification process, upon determination of critical finding, by first contacting the Program Manager (PM) who has jurisdiction over the structure. From there, it is the PM's responsibility to contact the owner of the structure, the Regional Program Manager, and the WisDOT Statewide Program Manager (SPM). The SPM will assume the lead role in the notification process once he/she has been notified. The primary method of contact will be phone notification and a required, follow-up Email to properly document discussion.

The following table summarizes the notification process, emphasizing the notification responsibilities:

Involved Party	Contacted By
Program Manager	Inspector
Bridge Owner	Program Manager
Regional Program Manager	Program Manager
Statewide Program Manager [Lead]	Program Manager
Regional Operations Manager	Regional Program Manager
State Bridge Rating Engineer	Statewide Program Manager
FHWA Division Bridge Engineer	Statewide Program Manager

During the notification process, discussion shall include: description of incident, Plan of Action (regarding any immediate actions), and communication plan going forward.

Contact information for program managers can be found on the WisDOT inspection website located here: <https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/strct/inspection-pm.aspx>

3) Documentation Required

The Critical Finding must be documented in the Highway Structures Information (HSI) system using the Critical Finding activity under the Inspection Tab within 24 hours of the determination of a Critical Finding. The documentation should include:

- Date and time of incident (if Known)
- Written and thorough narrative documentation
- Photographs and/or sketches
- Traffic restrictions and short-term plan of action
- **Photographs of the traffic control/restrictions**

The Critical Finding may require traffic on the bridge to be restricted. The traffic control and signage for full closures, partial lane closure, or shoulder closures shall be in compliance with the [Manual on Uniform Traffic Control Devices \(MUTCD\)](#) and the [Wisconsin MUTCD](#). These manuals combine to provide guidance on the installation and proper use of traffic control devices. Local municipalities should contact the county highway department for assistance if acceptable barriers or signs are not immediately available. Photographs of the traffic control for the restriction/closure must be included in the Critical Findings documentation.

Properly installed traffic control improves the safety of the travelling public and reduces the liability of the bridge owner. Example traffic control layouts for different roadways and situations are shown in the [Work Zone Field Manual](#). The layouts shown may need to be modified depending on field conditions and available traffic control devices. Traffic channelizing devices must be installed the length of the bridge. Traffic barriers and channelizing devices that may be easily moved or driven around, may result in a non-compliance determination by FHWA's National Bridge Inspection Program, as well as the risk to the traveling public.

Once the long-term plan of action has been established, document in HSI:

- Long-term action(s)
- Anticipated date long-term action(s) will be completed

All Critical Findings must have the Inspection Program Manager who has jurisdiction over the structure sign-off on the Short-Term and Long-Term actions in HSI in the same inspection that documents the finding(s). A time-stamp with the PM's credentials will be saved to the file.

QUESTIONS:

For information on the technical contents of this memorandum, please contact **David Bohnsack** at **(608) 792-6084**.