



Wisconsin Department of Transportation

Scott Walker
Governor

Mark Gottlieb, P.E.
Secretary

Division of Transportation System Development
Bureau of Structures
4802 Sheboygan Ave, Rm 601
Madison, WI 53707-7916
Phone: 608-266-8195

DATE: 2/24/2016
TO: WisDOT Certified Bridge Inspectors and Program Managers
FROM: Richard Marz, P.E.
Chief Structures Maintenance Engineer
Bureau of Structures
SUBJECT: Technical Memorandum
Critical Findings
GUIDELINES:

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

Critical Findings

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

- 1) The Definition, Description, and Classification
- 2) Notification Process
- 3) Onset Inspection & Initial Assessment
- 4) Close-out Inspection & Completed Report

1) The Definition, Description, and Classification

Definition: WisDOT defines a critical finding as a bridge or portion thereof, discovered either by bridge inspection or notification by the public, which critically threatens the structural stability of the bridge and/or the public safety, and is of such severity that immediate partial or full closure of the structure may be warranted.

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

Fracture Critical Inspection Findings
Non-Destructive Evaluation Findings
Scour Critical deficiencies
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 – **Urgent** – Structural deficiency of primary structural bridge element which threatens the integrity of the structure as a whole (Bridge closed ASAP; this may require bridge replacement or major rehabilitation)
- 2 – **Severe** – Structural deficiency that affects load postings and/or establishes restrictions (Bridge restricted ASAP; this may include lane or shoulder closures and/or load restrictions; analysis and recommendations done within 3 days)
- 3 – **Significant** – Does not jeopardize the bridge or the traveling public (No restrictions but repairs may be scheduled; planning and programming within 6 months)
[Not a Critical Finding; to be captured using Maintenance Actions]
- 4 – **Follow-up** – is routine in nature; work will be performed on a regular schedule
[Not a Critical Finding; to be captured using Maintenance Actions]

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. Notification only occurs for incidents classified as Critical Findings.

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. Initial communication with Bureau of Structures (BOS) shall be documented on the Critical Findings Report. This Report only needs to be filled out for Critical Findings and can be found on the WisDOT DT Forms Webpage as DT 2026 "Critical Findings Report".

3) Onset Inspection & Initial Assessment

The Onset Inspection is defined as the inspection in which the Critical Finding was discovered. This will often be either a Damage or a Routine Inspection (although it is plausible to occur during Fracture Critical, Underwater Dive, or In-Depth Inspections). Along with this Onset Inspection, there should be an associated Critical Finding Activity. By checking this activity the inspector will be required to upload a Critical Findings Report document. At this stage, only the portion of the report titled "Initial Assessment" is to be filled out.

Typical information required at this point includes the following:

- Basic Bridge Location Information
- Date and Time of Incident (if known)
- Written and thorough narrative documentation – supplemented with pictures
- Incident Duration and any associated Traffic Restrictions
- Classification of Critical Finding
- Inspector Name
- Notification Duration

4) Close-out Inspection & Completed Report

The Close-out Inspection is defined as the inspection performed after Short-Term Follow-up Actions have been taken. This means a plan is in place and sufficient countermeasures have been implemented to restore light service or to fortify closures in order to ensure public safety. A Long-Term Plan of Action for the structure shall also be established at this time. Close-out Inspections will often be Interim Inspections. Along with this Close-out Inspection, there should be an associated Critical Finding Activity. By checking this activity the inspector will be required to upload a Critical Findings Report document. At this stage, the report should be filled out in its entirety. When this inspection is entered into HSIS the incident will be **CLOSED**.

Typical information required at this point includes the following:

- Description of Short-term Follow-up Actions & Long-term Plan of Action
- Photo documentation to confirm Follow-up Actions have been addressed/implemented
- Date Follow-up Actions were completed

QUESTIONS:

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