



BRIDGE ADVISORY
Construction & Technology Division
Bridge Operations Section

BRIDGE ADVISORY NUMBER: BA-2007-03

DATE: March 29, 2007

Note: This Bridge Advisory was originally issued as **BITA-4**. It is being reissued as a Bridge Advisory for cataloging purposes.

SUBJECT: Deck Bottom Surface Rating

ISSUED BY: Richard Smith, Bridge Inspection Program Manager

REVIEWED BY: David Juntunen, Bridge Operations Engineer

Contact Information: Richard Smith, Bridge Inspection Program Manager, 517-322-5715 or smithr@michigan.gov

New for this season is an added item to the Bridge Safety Inspection Report, (BSIR, Form #2502) which is termed "Deck Bottom Surface Rating" SIA-58B. The new item is being added to aid in the final determination of the overall deck rating (SIA-58) and because the condition of a bridge deck's bottom surface along with the deck's top surface are important need indicators when determining the maintenance, rehabilitation, and replacement needs of a bridge deck, as demonstrated by MDOT's Bridge Deck Preservation Matrix.

Like the other fields on the BSIR, MDOT inspectors are required to evaluate the decks bottom surface and give a rating based on their judgment of the condition. Guidance is provided to assist in the evaluation process but the inspector has the authority to deviate from this guidance when there are conditions not covered by the guidance or there is an over-riding safety concern. When this happens, the inspector is expected to document the situation in the comment field.

Similar to other Michigan specific rating items, the deck bottom surface rating will not be reported to the FHWA in the yearly submittal. The deck bottom surface rating is part of the MDOT process to determine the overall condition of the bridge deck which is the National Bridge Inventory (NBI) required item "Deck (SIA-58)." Inspectors are cautioned to not use a mechanical or averaging process to determine the overall deck rating from the other rating fields. The situation at each bridge will be different and the relative weight given to each of the components will be dependent on the safety impact of that component.

Local agency bridge owners and inspectors are also encouraged to use the new field. The old BSIR (2502) will no longer be accepted.