

Specifications

Reference Standards:

The inspection shall be performed in accordance to the current versions of the following:

National Bridge Inspection Standards, Federal Highway Administration

Bridge Inspector's Reference Manual, Federal Highway Administration

Specifications for the National Bridge Inventory, Federal Highway Administration

The Manual for Bridge Evaluation, AASHTO

Manual for Bridge Element Inspection, AASHTO

Bridge Element Inspection Guide, Iowa Department of Transportation

Bridge Inspection Manual, Iowa Department of Transportation

Standard Specifications for Highway and Bridge Construction, Iowa Department of Transportation

Standard Road Plans, Iowa Department of Transportation

Level of inspection:

The inspection shall consist of an in-depth inspection and fracture critical inspection (where appropriate) in accordance with the referenced standards. This will include accessing all non-fracture critical members as necessary to provide a good visual examination and hands-on inspection of non-fracture critical members where warranted by visual examination findings.

Report submittal:

The Consultant shall submit one copy of a draft report in pdf format. The Consultant shall submit one copy in pdf format of the final report. The report shall contain at least the following:

- 1) A narrative describing the bridge condition
- 2) Sufficient photographs and sketches to clearly document the bridge condition
- 3) SNBI component condition ratings
- 4) Identification of any elements where an observed change in condition could warrant load rating of the bridge
- 5) Sketches and photographs identifying areas of deterioration with sufficient detail to monitor changes in during subsequent inspections
- 6) Repair and maintenance recommendations

The Consultant shall provide a copy of all photographs taken during the inspection in jpg format and a copy of all field notes in pdf format.

The consultant shall complete the entry of appropriate inspection data into the Iowa DOT SIIMS database in accordance with the Specifications for the National Bridge Inventory and Bridge Element Inspection Manual.

Component identification:

Substructure elements and bridge spans shall be identified consistent with the previous inspection reports. Sides and faces of bridge elements shall be identified as right/left/near/far from the perspective of a person facing east. Longitudinal members such as girders, beams and stringers shall be numbered from

left to right beginning with one. Transverse members such as floor beams and diaphragms shall be numbered from near to far beginning with one in each span. The numbering of panel points shall be consistent with previous inspections.

Traffic control:

The Consultant is responsible for all traffic control. All traffic control shall conform to the requirements of the current versions of the Iowa Department of Transportation *Standard Specifications for Highway and Bridge Construction* and Iowa Department of Transportation *Standard Road Plans – TC Series* (Traffic Control). All vehicles parked in the right-of-way shall have an amber revolving light or amber strobe mounted on top of the vehicle that is visible in all directions.

Access equipment:

The Consultant is responsible for all means of access.

Notification:

The Consultant shall submit proposed inspection dates and a traffic control plan to the Engineer two weeks prior to the inspection. The Consultant shall notify the Engineer by e-mail at the completion of the inspection. The Consultant shall immediately notify the Engineer of any findings affecting the safety of the traveling public.

Confidential records:

The information on the bridge and bridge inspection used by the Consultant as part of this work may contain records classified as confidential by the State including plans, past inspection reports and the work product of this agreement. The consultant shall share these records only with those that need access to perform the work covered by this agreement. Sharing information with other entities is prohibited without prior approval from the State.