Bridge Inspection Program Administrator (PA) Checklist - Report Review

Refer to the <u>Minnesota Bridge and Structure Inspection Program Manual (BSIPM)</u> Section A.8.4 Role of Inspection Program Administrator for more information.

| Bridge Inspection Report Review Checklist | Verified |
|---|----------|
| General Requirements | |
| Grammar and Spelling | |
| Element Notes (BSIPM B.4.1) | |
| Notes include the following: | |
| o Date (year) | |
| o Location | |
| Quantity and unit | |
| Deficiency description (reason for element condition state quantity) | |
| • Appropriate notes provided for all elements with quantities in Condition States 2 or lower. | |
| Condition state quantities match the documentation provided in the element notes. | |
| Note: Documentation from previous inspections may need to be cleaned up to match | |
| new element rating requirements in order to avoid confusion. | |
| Condition state quantities and element note descriptions match the Bridge | |
| Inspection Field Manual descriptions. | |
| Concrete element deficiencies are properly documented: | |
| Crack width measurements. Cracking is documented according to width, | |
| spacing, location, orientation and structural nature. | |
| Spall dimensions (length, width and depth). | |
| Delamination dimensions (length and width). | |
| Exposed reinforcing steel is noted, if present. | |
| Section loss on reinforcing steel is noted, if present. | |
| • Concrete Cracking and Sealing (Wearing Surface, Approach Slabs, Sidewalks and Median) | |
| Cracking is documented in SF units on the concrete wearing surface (Element | |
| 510) and concrete approach slabs (Element 321). | |
| SF cracking quantities from the concrete wearing surface (Element 510) and | _ |
| concrete approach slabs (Element 321) are converted appropriately to LF cracking | |
| quantities and combined with any additional LF cracking quantities documented | |
| on the sidewalks and median (Element 895) to create a combined LF total in Element | |
| 810 Cracking and Sealing. | |
| Steel element deficiencies are properly documented: | |
| Extent of corrosion is noted, if present. | |
| Section loss is noted, if present. | |
| Section loss is expressed as a percentage of the original cross-sectional area. | |
| Note: It is important that the extent of section loss not be misrepresented. If | |
| the original cross-section has not been determined, it may be better to | |
| describe the area and the dimensions of the area with section loss instead. | |
| Refer to BSIPM B.4.1.2 for guidance. | |
| Crack width and length measurements. | |
| Method of non-destructive testing method is documented, if necessary. | |
| Protective coating (Element 515) is properly documented for all steel elements. | |
| Note: If there is corrosion on a steel element, the protective coating in that | |
| area should be rated a Condition State 4 because the coating has failed and | _ |
| steelis exposed. | |

| Bridge Inspection Report Review Checklist | Verified |
|---|----------|
| Joint width measurements and temperature are documented, if necessary, especially | |
| if joint gap is at or near design limits. | |
| Bearing measurements and temperature are documented. | |
| Access constraints or requirements are documented in appropriate elements (i.e. | |
| beams, bearings, fatigue details). | |
| PA comment is included for all structural elements in a condition state of 4. | |
| PA comment is included for any recommendations included in the report. | |
| Defect Elements (BSIPM B.3.11) | |
| Impact Damage (Element 880) is added and rated for any impact damage noted in | |
| the elements. | |
| Steel Section Loss (Element 881) is added and rated for any primary steel | |
| elements (typically steel superstructure members or piling) with section loss. | |
| Note: the presence of flaking rust or pack rust indicates that at least some section loss is | |
| present. | |
| Steel Cracking (Element 882) is added and rated for any of the following conditions: | |
| Steel superstructure with fatigue prone details of AASHTO Category C or higher | |
| (even if no cracks are present). Note: Fatigue details are listed in SIMS under the | |
| SIA - One Column, Steel Fatigue Prone Details. Refer to BSIPM D.7.10 for more | |
| information. | |
| o Primary steel structural elements (typically superstructure) with cracking. | |
| Concrete Shear Cracking (Element 883) is added and rated if shear cracking is present | |
| on the pier caps or prestressed beams. | _ |
| Substructure Settlement (Element 884) is added and rated for substructure elements | |
| (piers, abutments or wingwalls) that show evidence of settlement, movement or rotation. | |
| Scour (Element 885) is added and rated if the bridge is experiencing any scour. | Ш |
| Photos (BSIPM A.7.3 and B.4.1.1) | |
| General photos are included. | |
| o Profile of bridge (cover photo) | |
| o Top of roadway | |
| Underside of bridge | Ш |
| Element deficiency photos are included. | |
| Photos accurately represent the deficiencies noted. | |
| Close up views are provided of any significant damage or deterioration. | |
| Scale reference is included, if necessary. | Ш |
| Load posting restriction photos are included (if present). | |
| Photos of important features are included (if present). | |
| Recommended photos are included, if necessary. | |
| o General or close up views of primary structural elements (even if there is little or | |
| no deterioration) to provide a baseline. | |
| Structural repairs or modifications | |
| Upstream and downstream views of the channel or water way. | |
| Bearing orientation | |
| Deck expansion joint gaps Cafety factoring | |
| Safety features Hilliting or other ancillary items that have been added to the bridge | |
| Utilities or other ancillary items that have been added to the bridge. Applicable signs on the bridge (Element 891). | |
| 1 S Applicable signs on the bridge (Element OS 1). | _ |

| Bridge Inspection Report Review Checklist | Verified |
|---|----------|
| Photos are labeled correctly: | |
| Major words are capitalized. | |
| Element number and/or description is included. | |
| Deficiency description is included. | |
| Direction and/or orientation of photo is included. | |
| Load Posting Signs (Element 890) | |
| Load posting signs (if required) are in place, correct and readable. | |
| NBI Condition Ratings (BSIPM B2.1.1) | |
| NBI ratings are consistent with the element condition state ratings. | |
| NBI note describing the condition of the component is provided for all NBI ratings of 5 or lower. Note: it is a good practice to include an NBI note for all NBI ratings (even if they are higher than a 5). This will help to track the deterioration of the component and be useful when planning repair. | |
| NBI note is provided when an NBI rating is changed. The note describes the condition or reason that led to the decision to change the NBI rating. | |
| PA comment is included for all NBI ratings of 4 or lower. | |
| NBI condition history <u>Bridge Condition History Report</u> | |
| NBI Appraisal Ratings (BSIPM B2.2) | |
| Waterway Adequacy Appraisal Rating (NBI 71) | |
| Appropriate rating and comment is included (BSIPM B.2.2.2). | |
| Approach Roadway Alignment Rating (NBI 72) | |
| Appropriate rating and comment is included (BSIPM B.2.2.1). Note: Approach | |
| Roadway Alignment should never equal 9 after an inspection; this rating is ONLY | |
| for brand new structures entered into the inventory prior to an inspection. | |
| Traffic Safety Features – NBI Item 36 (BSIPM D.7.5.1) | |
| Bridge Railing, Guardrail Transition, Approach Guardrail and Guardrail Termini are rated | |
| as either 1 – Meets Standards, 0 – Substandard or N – Not Required | |
| Note: For pedestrian and railroad bridges, all four NBI 36 items should be coded as N – Not Required. | <u> </u> |
| Safety Feature ratings are consistent. For example, if the Approach Guardrail is not required, then the Guardrail Transition and Guardrail Termini must also be coded as not required. | |
| Note is included for safety features rated as 0 – Substandard. | |
| Review and Approval (BSIPM D.6) | |
| Sufficient documentation and supporting information is provided in the inspection report to assess the change in condition of the bridge. | |
| Inspection report is reviewed and approved within 90 days of the inspection for state and federal bridges and within 180 days for all other bridges. | |