Contract Provisions

IDOT

Professional Transportation Bulletin 216 Item 061 Non-IDOT Bridge Inspection Services

This document constitutes the contract provisions accompanying the PTB for Non-IDOT Bridge Inspection Services.

I. PROJECT DESCRIPTION

This contract is to provide qualified personnel to perform Agency Program Manager and Team Leader duties, as defined in the National Bridge Inspection Standards (NBIS), to properly administer a District wide Bridge Inspection program for bridges/culverts maintained by County, Township/Road District, Municipalities, and other agencies. In general, the duties include but are not limited to: Qualifications of Personnel, Inspection Intervals, Inspection Procedures, and Bridge Inventory Data.

II. SCOPE OF WORK

Consultant will be the principle point of contact for all NBIS related inquiries by IDOT.

Consultant will be responsible for all NBIS related duties for the County, Township, Road District, and Municipality maintained bridges/culverts within the District, except for the procurement, installation, and maintenance of load posting and closure signage, which still resides with the agency having maintenance responsibility. NBIS related duties are defined within the Code of Federal Regulations 23 CFR Part 650 Subpart C and the IDOT *Structural Services Manual* Section 3.

- Qualifications of Personnel: Agency Program Managers and Agency Team Leaders must meet the applicable requirements defined in the IDOT *Structural Service Manual* Section 3 and in 23 CFR 650.309.
    - Additional Certification Required for:
        - Nonredundant Steel Tension Member
        - Element Level

- Inspection Intervals: All inspections must meet the applicable requirements defined in the IDOT *Structural Service Manual* Section 3 and in 23 CFR 650.311.
    - Applicable Inspection Types:
        - Initial Inspection
        - Routine Inspection, includes In-Depth Inspection at appropriate interval
        - Underwater (Non-Diving)
        - Nonredundant Steel Tension Member
        - Special
        - Element Level
        - Damage
        - Load Rating
        - Scour Monitoring

- Inspection Procedures: All inspection procedures must meet the applicable requirements defined in the IDOT *Structural Service Manual* Section 3 and 23 CFR 650.313.
  - Quality Inspections
  - Post or Restrict
  - Bridge Files
  - Nonredundant Steel Tension Member
  - Underwater (Non-Diving)
  - Scour
  - Complex Bridge Inspection
  - Quality Control (QC) / Quality Assurance (QA)
  - Critical Findings

- Inventory: All Structure Inventory & Appraisal (SI&A) data must meet the applicable requirements defined in the IDOT *Structural Service Manual* Section 3 and 23 CFR 650.315.
  - Bridge Data Quality
  - Timely Updating of Data

- Incorporated by Reference: Governing documents for the NBIS are defined in 23 CFR 650.317. Use the most recent approved version and any applicable interims.
  - AASHTO *Manual for Bridge Evaluation* MBE
  - AASHTO *Manual for Bridge Element Inspection* MBEI
  - FHWA *Specifications for the National Bridge Inventory* SNBI

Further responsibilities/requirements include but are not limited to:

- Consultant will review inspections due within the District for the specified contract term.
  - Determine if altering the number of inspections in certain months will be required to balance out the number of inspections.
  - Notify IDOT, and County Engineer, of proposed changes in scheduling.
  - IDOT must approve of any changes to the scheduling to ensure there are minimal delinquencies.

- Consultant will provide notification to County Engineer and IDOT a minimum of thirty (30) calendar days prior to inspections being done.

- Consultant will provide the County Engineer, or their designated representative, the opportunity to attend any of the inspections due within the specified time of the contract.

- Schedule annual kickoff meetings with each County Highway Department and IDOT to discuss processes for previous year, process changes for current year, shifting of inspections for scheduling, coordination of traffic control and other topics as necessary.

- Schedule annual close-out meetings with each County Highway Department and IDOT to discuss results for current year, including a summary report of current & previous Component Condition Ratings by agency having maintenance responsibility. For instance, a report may include bridges/culverts by maintenance responsibility, i.e. County, Township/Road District, Municipality, and other agencies. Other topics will be discussed as necessary.

- Coordinating with the County Highway Departments to obtain the official bridge files. This will include digitizing a portion of the existing bridge file contents each inspection cycle for use by the County Highway Department and to be uploaded to the Illinois Structure Information System (ISIS) for use by IDOT and the FHWA.
- Consultant shall coordinate with the appropriate Railroad Representative for all scheduling, permitting, and required safety measures.

- All applicable consultant personnel are required to have access to the ISIS utilizing the company's email address. Consultants with access need to request the applicable agencies from the menu in the top right corner of ISIS by selecting the Username. Further information will be provided for new users.

- IDOT must be notified immediately of changes in consultant personnel to ensure proper offboarding for the ISIS.

- Standard Personal Protective Equipment and Bridge Inspection Tools defined in the FHWA *Bridge Inspection Reference Manual* Sections 2.2.3 and 2.4.3 shall not be invoiced to IDOT for reimbursement.

- Specialized Bridge Inspection Tools as defined in FHWA *Bridge Inspection Reference Manual* Sections 2.4.4, if required for the type of inspection being done, can be invoiced at a unit rate of use or direct rental cost to IDOT for reimbursement. Written approval by IDOT must be obtained prior to the inspection.

- Consultant may be required to provide specialized bridge inspection equipment, such as under bridge inspection cranes, inspection platforms, manlifts, etc.

- Consultant may be required to provide traffic control, such as lane restrictions, flaggers, bridge closure, etc. as part of the inspection. Consultant must coordinate traffic control with the governing agency.

- All bridge inspections must be completed on or before the Inspection Interval Date.
  - Delinquencies are permitted for legitimate reasons, such as flooding or accessibility of inspection equipment. Written justification in ISIS is required.
  - If the Delinquency is > thirty (30) calendar days, submittal to and approval by the IDOT is required. This correspondence must be included in the inspection report.

- All bridge inspection data entry into the ISIS must be done by the consultant. The 'Submit' action within the ISIS must be completed by the on-site NBIS Team Leader and the 'Approve' action must be done by the Designated NBIS Program Manager.
  - Final approval must be done within thirty (30) calendar days of completing the inspection.

- Bridge Inspection Report must be prepared for each bridge/culvert utilizing the following format:
  - Cover page
  - Table of Contents
  - Location Map (Either County or Township/Road District/Municipality)
  - Report Index with check boxes

- Bridge Inspection Documentation and Maintenance
- IDOT BBS Bridge Inspection Forms (include all applicable forms)
- Plan View sketch of bridge showing location/direction of photographs and all notable deficiencies. Some bridges require one span per page.
  - Hand drawn sketches are not allowed. IDOT prefers Bentley Microstation, however, other computer aided drafting software can be used.
  - Layout of sketches and numbering of elements (beams, spans, piers, etc.) must be consistent with existing plans.
  - Steel members with section loss must have specific details drawn displaying the thickness remaining from measuring in the field.
  - Concrete member deficiencies must have dimensions provided.
  - Deficiencies must be accurately located.
  - Do not estimate % section loss for any member that can be measured.
- Additional deterioration sketches for steel section loss details, substructure, foundation, etc. as necessary.
- Photograph sheets with location and descriptions.
  - Minimum photographs for each inspection: roadway, upstream channel, downstream channel, elevation view, general deck, superstructure, and substructure in each span, channel (underneath), channel protection for each substructure unit (underneath), and embankment at each abutment.
  - Additional photographs to document all notable deficiencies.

- Draft Bridge Inspection Report must be submitted to the applicable County Engineer for review within sixty (60) calendar days of completing the inspection.
  - This is a courtesy to the County Engineer, and their response is not necessary.
  - Review by County Engineer is intended to be cursory in nature to ensure the report is clear and complete.
  - Difference of opinions on the major component Condition Rating(s) are to be referred to IDOT for resolution.

- Final Bridge Inspection Report must be completed, uploaded to the ISIS, and notification given to IDOT and the County Engineer within ninety (90) calendar days of completing the inspection.

- Summary Report must be prepared for each County Highway Department annually utilizing the following format:
  - Cover Page
  - Table of Contents
  - Summary Page for County and each Township/Road District/Municipality detailing each Structure Number. Color coded based on Condition ('Good' = Green, 'Fair = Yellow', & 'Poor' = Red).
  - Location Map (Either County or Township/Road District/Municipality)
  - Bridge Inspection Report for each bridge/culvert within their jurisdiction.

- Consultant NBIS Program Manager must perform Quality Assurance (QA) Reviews of each Consultant NBIS Team Leader in accordance with the IDOT *Structural Services Manual* Section 3.11.2.3. IDOT Form BBS 2790 must be used and submitted to IDOT.