

Technical Note Notification No. 03 March 2023

Technical Note 03

1. Definitions Changed with National Bridge Inspection Standards (NBIS) 2022

Commentary: To update NBIS definitions the following sections have been updated:

Revised language for Section 1.6.1:

- Bridge Inspection Team Leader (BITL) The individual in charge of an inspection team and responsible for planning, preparing, and performing the field inspection of bridges and is responsible for initiating the critical damage procedures including full bridge closure if deemed necessary. To qualify as a BITL, the individual must meet, at a minimum, the requirements as described in Section 3.1.1.2.
- Load Rating The analysis to determine the safe vehicular live load carrying capacity of a bridge using bridge plans and supplemented by measurements and other information gathered from an inspection.
- Nonredundant Steel Tension Member (NSTM) A primary steel member fully or partially in tension, and without load path redundancy, system redundancy or internal redundancy, whose failure may cause a portion of or the entire bridge to collapse.
- Program Manager The individual in charge of the program, that has been assigned the duties and responsibilities for bridge inspection, reporting, and inventory, and has the overall responsibility to ensure the program conforms with the requirements of this subpart. The program manager provides overall leadership and is available to inspection team leaders to provide guidance. SCDOT refers to this position as the BIPM, see Section 3.1.1.1.
- Quality Assurance (QA) The use of sampling and other measures to assure the adequacy of QC procedures in order to verify or measure the quality level of the entire bridge inspection and load rating program.
- Quality Control (QC) Procedures that are intended to maintain the quality of a bridge inspection and load rating at or above a specified level.
- Scour Erosion of streambed or bank material due to flowing water; often considered as being localized around piers and abutments of bridges.
- Scour Critical Bridge A bridge with a foundation member that is unstable, or may become unstable, as determined by the scour appraisal.
- Scour Plan of Action (POA) A written procedure developed by the bridge owner or the bridge owner's designee outlining the foundation scour monitoring plan to be followed for a specific bridge during flood events. Procedures for bridge inspectors and engineers in managing each bridge determined to be scour critical or that has unknown foundations.
- *Temporary Bridge* A bridge which is constructed to carry *highway* traffic until the permanent *facility* is built, repaired, rehabilitated or replaced.



Technical Note Notification No. 03 March 2023

Technical Note 03

Revised language for Section 1.6.2:

• AASHTO Publications

Manual for Bridge Evaluation (MBE), Current Edition; excluding the 3rd paragraph in Article 6B.7.1

Revised language for Section 3.1.1.2.1, Paragraph 1:

Per FHWA, *Bridge inspection experience is defined as active participation in bridge inspections in either a field inspection, supervisory, or management role. The* predominant amount of required experience for a BITL, or more than fifty percent, should come from NBIS bridge inspection experience. Other experience in bridge design, bridge maintenance or bridge construction may be used to provide the additional required experience. If at least fifty percent of experience comes from NBIS bridge inspection experience, additional approval is not needed from the BIPM or FHWA.

Revised language for Section 4.5, Paragraph 1:

NBIS defines complex features as Bridge component(s) or member(s) with advanced or unique structural members or operational characteristics, construction methods, and/or requiring specific inspection procedures. This includes mechanical and electrical elements of moveable spans and cable-related members of suspension and cable-stayed superstructures. The AASHTO MBE, Section 4.3.6 "Complex Bridge Inspections", provides guidance on bridge inspection requirements for bridges with complex *features* such as movable bridges, suspension bridges, and cablestayed bridges. Bridges with complex *features* are structure types with unusual characteristics. SCDOT has identified the following structures and inspection types as complex. All bridges with complex *features* require BSIPs.

Revised language for Section 4.8.2, Paragraph 1:

A damage inspection is an unscheduled inspection used to assess structural damage *resulting from* environmental factors or human actions. Such inspections may be warranted due to events such as an unexpected overload of the bridge; a vehicle-bridge collision; a bridge being struck by an over-height vehicle; a bridge being struck by a boat or vessel; a reported deficiency by the public or maintenance personnel; or flood-induced damage from floating flood debris, bridge buoyancy conditions, wash-out of a bridge approach, or scour damage/bridge settlement.

Revised language for Section 8.1, Paragraph 2:

A Critical Finding is defined in the NBIS as *"a structural or safety related deficiency that requires immediate action to ensure public safety"*. Critical Findings shall be reported and their *follow-up actions* subsequently tracked using Attachment 5.5, the Critical Findings Form. SCDOT further defines a Critical Finding as a deficiency of a bridge component, visually or by rating evaluation, of such severity that might critically threaten public safety and structural stability leading to partial restriction (load posting or lane closure) or full closure of the structure.



Technical Note Notification No. 03 March 2023

Technical Note 03

2. Qualification Changes with NBIS 2022

Commentary: To update qualifications of personnel the following sections have been updated:

Revised language for Section 3.1.1:

3.1.1.1 Bridge Inspection Program Manager (BIPM) – § 650.309(a)

The BIPM shall be the individual in charge of the unit which has been assigned or delegated the duties and responsibilities for bridge inspection, reporting, or inventory. The BIPM provides overall leadership and is available to BITLs to provide guidance.

A BIPM must possess, at a minimum, the following qualifications:

- 1. Be a registered professional engineer, or have ten years bridge inspection experience; and,
- 2. Successfully completed a FHWA approved comprehensive bridge inspection training course. Previous FHWA approved comprehensive bridge inspection training is also acceptable, however completion of a current FHWA comprehensive bridge inspection training needs to be completed by June 6, 2024.
- 3. Successfully completed a cumulative total of 18 hours of FHWA approved refresher bridge inspection training course over each 60 month period.

As stated in Section 1.3.1.4, the ASBME shall serve as the BIPM for SCDOT.

3.1.1.2 Bridge Inspection Team Leader (BITL) – § 650.309(b)

The BITL shall be present on-site, throughout the duration of the bridge inspection and shall oversee the work of inspectors. There are five ways to qualify as a BITL. A BITL must, at a minimum, perform the following:

- 1. Successfully completed a FHWA approved comprehensive bridge inspection training course. Previous FHWA approved comprehensive bridge inspection training is also acceptable, however completion of a current FHWA comprehensive bridge inspection training needs to be completed by June 6, 2024.
- Successfully completed a cumulative total of 18 hours of FHWA approved refresher bridge inspection training course over each 60 month period.
- 3. Maintain documentation supporting the satisfaction of this section.
- 4. Meet one of the qualifications listed below.
 - o Qualification Type I
 - Be a registered professional engineer;
 - Six (6) months of bridge inspection experience per BIGD 3.1.1.2.1.
 - o Qualification Type II
 - Successfully passed the National Council of Examiners for Engineering and Surveying (NCEES) Fundamentals of Engineering examination;



Technical Note Notification No. 03 March 2023Technical Note 03	
determinea the Accred Two (2) ye O Qualification Type Have an as university o Accreditati (EAC/ABE Four (4) ye O Qualification Type	sociate's degree in engineering or engineering technology from a college or accredited by or determined as substantially equivalent by the Engineering on Committee of the Accreditation Board for Engineering and Technology T); ears of bridge inspection experience per BIGD 3.1.1.2.1.

3.1.1.4 Underwater Bridge Inspection Diver – § 650.309(e)

Underwater bridge inspection divers shall have successfully completed a FHWA approved comprehensive bridge inspection training.

Per § 650.309(e), underwater bridge inspection divers who have completed a FHWA approved comprehensive bridge inspection training prior to June 6, 2022 are not required to complete an approved underwater bridge inspection training course to inspect underwater portions until January 1, 2028, see Section 3.1.3.4.

Underwater bridge inspection divers who have not taken a FHWA approved comprehensive bridge inspection training training prior to June 6, 2022, must successful complete a FHWA approved <u>underwater</u> bridge inspection training course. The training course must include topics on the need for and benefits of underwater bridge inspections; typical defects and deterioration in underwater members; inspection equipment needs for various types of bridges and site conditions; inspection planning and hazard analysis; and underwater inspection procedures, evaluations, documentation, data collection, and critical findings.

Underwater bridge inspection divers must be certified divers by having formal diver training meeting the minimum requirements of the Occupational Safety and Health Administration (OSHA) Commercial Diving Operations standard. In addition, at least three underwater bridge inspection divers, including the underwater BITL, shall be certified through the Association of Diving Contractors International (ADCI); see Section 3.1.3.4.

Revised language for Section 3.1.3.4:

The underwater BITL shall be qualified as a Bridge Inspection Team Leader per Section 3.1.1.2 and shall be qualified as an Underwater Bridge Inspection Diver per Section 3.1.1.4. The subject underwater BITL shall inspect at least 25% of underwater elements inspected during underwater inspections.

After January 1, 2028, all underwater bridge inspection divers, including underwater BITLs, shall have completed a FHWA approved <u>underwater</u> bridge inspection training course.



Technical Note Notification No. 03 March 2023

Technical Note 03

Certifications, including professional registrations and appropriate certificates for all team *members (including the underwater BITL)*, shall be provided and updated prior to any field work and included in the dive plan; see Section 5.2.1.7. The dive team shall consist of one air-diving supervisor who shall possess the proper ADCI supervisor certification. Some bridges may have specific requirements for the BITL on UW inspections; these requirements are listed in the BSIP.

Commentary: Changes in NBIS numbering require an update to the following section headers.

3.1.1.3 Individual charged with overall responsibility for Load Rating Bridges – § 650.309(d)

3. Terms Changed with National Bridge Inspection Standards (NBIS) 2022

Commentary: To update NBIS terms the following words have been replaced directly:

New Term (NBIS 2022)	Previously Used Term	BIGD Sections
complex feature	complex component	2.2.1.1; 3.1.3.3; 4.0; 4.5; 4.6; 4.10.2; 5.2.1.6; 5.3.6; Table
		5.7.4; Table 5.8; 9.1.1; 9.2.3.2; 9.2.4; 9.3.3; Appendix C;
		Appendix Q; Attachment 5.4; Attachment 9.5
element level	element-level	5.3.2.1; 5.3.2.2; 5.3.2.3; 5.3.2.4; 5.3.2.13; 5.3.10.4; 5.4.4;
		5.4.4.7; 5.4.4.8; 5.4.4.9; 6.1; 7.1; 7.2; 9.2.2.4; Appendix K;
		Appendix L; Attachment 5.25
Nonredundant Steel	Fracture Critical	Table 1.6.3; 2.1.1.1; 2.2.1.1; 3.1.3.1; 3.2.1; 3.2.2; 4.0; 4.4;
Tension Member	Member (FCM)	4.7; 4.7.1; 4.7.2; 5.1.5.6; 5.2.1.5; 5.2.3; 5.3.2.7; 5.3.2.8;
(NSTM)		5.3.2.10; 5.3.2.14; 5.3.3.2; 5.3.3.2.4; 5.3.6; 5.3.10.2; 5.3.11;
		5.4.4; 5.4.4.2; 5.4.4.2.1; 5.4.4.4; 5.4.4.7; 5.4.4.9.2; 5.4.4.9.3;
		5.4.4.9.4; 5.4.9.1; 5.4.5.1; 5.4.5.2; 5.5; Table 5.7.3; Table 5.8;
		Table 5.9; Table 5.10; 7.2; 9.1.1; 9.2.2.4; 9.2.4; 9.3.3;
		Appendix C; Appendix F; Appendix H; Appendix K;
		Appendix O; Attachment 2.7; Attachment 5.16; Attachment
		9.5
inspection interval	inspection frequency	1.3.1.5; 2.1.1.1; 2.4; 4.0; 4.2; 4.3; 4.5; 4.7; 4.7.1; 4.7.2; 4.8;
		4.10; 4.10.1; 4.10.2; 4.10.3; 4.10.3.1; 5.2.5.2.2; 5.3.2.7; 5.4.4;
		5.4.4.1.1; 5.4.4.8; 5.4.4.9.2; 5.4.4.9.3; 5.4.4.9.4, 5.11, 5.12;
		8.3; Attachment 4.1; Attachment 4.3; Attachment 9.7

4. Data Reporting Requirement for Non-SCDOT Owned Bridges

Commentary: Per the NBIS, the data reporting requirement for all bridges shall be 3 months. The 180 day data reporting requirement for non-State or non-Federal agency bridges has been removed and revised in Section 5.4.5.3 (as noted below) and the following other sections are being revised similarly: 4.1.6, 4.1.6.1, 5.4.9.1, 5.4.9.2 and 5.4.9.3.



Technical Note Notification No. 03 March 2023

Technical Note 03

5.4.5.3 Final Data Entry

The report and applicable data must be entered into the database within *three (3) months* of the date of inspection for *all public bridges*. Within 30 days of receiving bridge reports for QA and following the completion of a QA review, the BMQE will transfer data in the BMS (data from *bridge inspection software platform* into RIMS and BrM). Quality hold notices shall be used if the BMQE is unable to download data within the 30 day requirement because of a quality issue; see Section 5.4.5.4.

5. Bridge Inspection Interval Tolerance

Commentary: Section 4.10.3 Paragraph 2 requires revision regarding FHWA notification, receipt, and/or approval for inspections which occur outside the inspection interval.

For any out-of-*interval* occurrence, Attachment 4.3 shall be used. Attachment 4.3 requires the BIPM (or designee) to sign the attachment noting out-of-*interval* occurrence. The BIPM (or designee) shall provide Attachment 4.3 to FHWA for any inspection performed two (2) months or more outside the inspection interval if the inspection interval is less than 24 months. The BIPM (or designee) shall provide Attachment 4.3 to FHWA for any inspection performed two (2) months or more outside the inspection interval if the inspection performed three (3) months or more outside the inspection interval if the inspection performed three (3) months or more outside the inspection interval if the inspection interval occurrence. In some instances, FHWA may approve an out-of-*interval* occurrence. This approval may be granted depending on circumstances, but advanced notice is required, and sufficient reasoning is needed. An example of a reason for an out-of-*interval* occurrence which gets approval from FHWA would be if the bridge is not accessible due to an unforeseen weather event. Forms shall be provided to the BIPM by the DBIS, Consultant PM or their designee at least four weeks before the end of the allowed tolerance. The forms shall be provided by the BIPM (or their designee) to FHWA at least two weeks before the end of the allowed tolerance. The allowed tolerance, per FHWA, is two (2) months for inspection intervals less than 24 months or within three (3) months for inspection intervals of 24 months or more.

6. Attach Inventory Photos to All Routine Inspection Reports

Commentary: Inventory photos are helpful to reference during inspection. Additional requirements are added for inspectors to include both Inventory Photos and Inspection Photos with all Routine Inspection Reports. Attachment 5.20 may be used to produce two separate PDFs, one for Inventory Photos and one for Inspection Photos.

Language will be added to Sections 5.4.4, 5.4.4.2, and 5.4.4.2.1:

Inspectors shall attach a PDF of Inventory Photos to all routine inspection reports, in addition to a PDF of Inspection Photos. Each report will include two PDFs with photos, one for Inventory Photos AND one for Inspection Photos. Attachment 5.20 may be used to create each PDF by using two copies of the form. When two photo forms are present in an inspection report, one shall be labeled "Inventory" and one shall be labeled "Condition/Defect". Previously taken inventory photos should be in the Bridge File according to the BFP. If they are not in the Bridge File, inspectors shall extract the inventory photos from a previously inspection report so long



Technical Note Notification No. 03 March 2023

Technical Note 03

as they are still accurate for the bridge and were taken in the last ten (10) years and attached those inventory photos to the routine inspection report and upload to the Bridge File according to the BFP.

Language will be revised in Sections 2.2.1.1:

The files which relate to bridge inspection and shall be included in the Bridge File are:

• Inventory Photographs, updated every 10 years,

7. Inspection Photos

Commentary: While inventory photos are updated every 10 years, changes at or near the structure may necessitate that inventory photos are updated periodically and before the 10-year limit stated in section 2.2.1.1. This need is not exclusive to repairs, structural, or geometric changes, but can also include inventory items missed during the last inspection cycle.

Language will be added to Sections 5.4.4.2, and 5.4.4.2.1:

Bridge inspectors should review the inventory photos attached to each bridge file for completeness before conducting the inspection. If during the inspection, if a BITL discovers a new or missed inventory photo, then all inventory photos should be retaken and new inventory photos shall be submitted with the report. No photos taken during previous inspections should be included in the new photo form. When two photo forms are present in an inspection report, one shall be labeled "Inventory" and one shall be labeled "Condition/Defect"

8. <u>One-Time Underwater Inspections</u>

Commentary: One-time underwater inspections should be scheduled to evaluate the need for regular underwater inspections before adding bridges to the underwater inspection list. The procedure for removing structures from the UW inspection list is also revised.

Language will be revised in Section 4.3:

See Section 4.1 for the requirement for initial underwater inspection.

An underwater inspection is used to inspect structural members which cannot be inspected visually or by wading during the initial or routine inspection. If members of a bridge cannot be visually evaluated during periods of low flow or examined by feel for condition, integrity and safe load capacity due to excessive water depth or turbidity, then an underwater inspection is required. *In instances, when the depth of water is less than four feet, an underwater inspection will not be required unless the inspector cannot properly examine substructure or channel components. A one-time or off-interval underwater inspection shall be scheduled to determine if on-interval underwater inspections are needed.* These inspections are performed by a certified commercial diver and they often require inspection by



Technical Note Notification No. 03 March 2023

Technical Note 03

tactile probing methods. If it is determined that regular underwater inspections are not needed after the one-time inspection, an inspection procedure for the bridge may be included in the BSIP to ensure that the bridge is inspected properly during future inspections. For example, it may be added to the inspection procedures that inspectors should use a boat to check scour at a particular pile, instead of requiring an underwater inspection.

Additional inspector training and experience is required for underwater inspections as stated in Section 3.1.1.4.

Due to their nature, underwater inspections require more extensive planning and preparation while following the BSIP for the UW inspection for the bridge. See Chapter 5 for applicable inspection procedures. BSIPs for UW inspections may be revised with BMO approval.

There are two ways in which a bridge can be added to the list of bridges for underwater inspection: (1) when a bridge is added to the inventory and it is known that regular underwater inspections are required, or (2) when a one-time or off-interval underwater inspection determines that regular underwater inspections are needed.

The BIPM or designee is responsible for overseeing the inventory of all public bridges which require underwater inspections. *An underwater inspection is generally required when the depth of the water at the bent is greater than 4 feet. If, over the span of at least four years, three consecutive NBI inspections (routine, underwater, fracture critical, or other on-interval inspections) take channel surveys that indicate the water depth is less than four feet at the bents, the bridge may be removed from the underwater inspection list.* The list of bridges requiring underwater inspections is included in Appendix E.

Underwater inspections may be required for scour critical bridges as part of their POAs. Applicable POAs for scour critical bridges shall be included in the Bridge File.

*After a one-time underwater inspection has been performed and on-interval underwater inspections are determined to be necessary, a*n underwater inspection shall be performed at intervals no greater than 60 months. BITLs may recommend shorter durations for bridge underwater inspections. This recommendation is documented on the SCDOT BIRF. NBI Item 93B shall be entered in by the BITL to recommend the date of the next underwater inspection. NBI Item 92B shall be entered in by the BITL to recommend the duration (in months) when the inspection report is submitted until the next underwater inspection. Occurrences which could result in a decision to perform underwater inspections at intervals less than 60 months are known instances of structural damage; scour and erosion due to water movement; streambed load; ice loading; navigation traffic collision; deleterious effects of water movement; and effects of drift or elements in the water. If the BITL changes the *interval* of the next underwater inspection (up or down), this change and a reason for the change shall be noted in the Bridge Element Group Textual Data (BEGTD) on the inspection report under the **Miscellaneous** heading.

9. Clarification on NBI Item 108 (Wearing Surface/Protection System)

Commentary: Revision required to Section 7.3.16.3 (TN 01)

7.3.16.3 Deck Protective System (NBI Item 108C)

Lastly, some decks have built-in systems to protect the deck from deterioration. NBI Item 108C includes options for the various systems that can be employed to protect bridge decks. The type of deck protective systems on bridges shall be coded according to the following codes:

(1) Epoxy Coated Reinforcing



Technical Note Notification No. 03 March 2023

Technical Note 03

- (2) Galvanized Reinforcing
- (3) Other Coated Reinforcing
- (4) Cathodic Protection
- (6) Polymer Impregnated
- (7) Internally Sealed
- (8) Unknown
- <mark>(9) Other</mark>
- (0) None

10. <u>Clearances with Multiple Assets</u>

Commentary: Section requires an update to align with FHWA requirements for coding controlling clearances. Language will be revised in Section 7.3.8.5 and Section 7.3.8.7:

For NBI coding in BIO, the smallest clearance shall be the controlling clearance (including railroads, if present).

11. Incorrect Vertical Clearance (Over 17'-0")

Commentary: Appendix O will be updated to include a 'B Flag' for an instance where an inspector discovers a posted clearance sign which shows an incorrect height which is greater than actual height, but actual height is still over 17'-0". Per previous guidance (TN01 Item 30, included revisions to Section 5.3.8.2) stated that a vertical clearance sign is not required if over 17'-0". Additional guidance is being provided with an example, if the vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance of 16'-8" then a "B Flag" is required to correct the sign. If the vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance signage reads 17'-1" and an inspector measures a vertical clearance of 17'-8" then a "B Flag" is NOT required to correct the sign.

General Bridge – Repair Recommendation Examples

Repair Recommendation – Priority B – "B Flags"

• Missing, incorrect or illegible vertical clearance signs (when the field measured vertical clearance is more than 14'-6) (includes instances of vertical clearance signs with posted clearances larger than actual height, so long as actual height is still measured 17'-0" or under),

12. Bridge Inspection Interval after Non-Interval Inspections

Commentary: Clarification of policy regarding reduction in inspection interval following a noninterval inspection. Language will be added to Section 4.8. Additional commentary on next page. See Technical Note 01 which provides example language when the inspection interval is revised:

Copies of the Bridge Inspection Guidance Document and related Technical Notes can be obtained from the SCDOT Bridge Maintenance Office website at the SCDOT Bridge Inspection Guidance page.



Technical Note Notification No. 03 March 2023

Technical Note 03

"ROUTINE INSPECTION FREQUENCY (NBI 91) CHANGED FROM 24 MONTHS TO 12 MONTHS. NBI CONDITION FOR DECK LOWERED TO 4."

In the event that during a non-interval inspection (i.e. damage) the condition of a bridge changes to warrant an inspector to recommend a reduction in inspection interval, the BITL shall use the bridge inspection software platform to code the inspection intervals so that inspections will occur within allowable tolerance. This may require the inspector to consider the non-interval inspection as a routine inspection. Changes or requested future changes in inspection interval shall be noted in the Bridge Element Group Textual Data (BEGTD) on the inspection report under the **Miscellaneous** heading.

Commentary (Continued): The figure below illustrates possible scenarios.



Collision ≥ 12 Months Since Routine Inspection



Collision < 12 Months Since Routine Inspection

- Schedule A shows an inspection interval of 24 months, without interruption.
- Schedule B shows a non-interval inspection at a time greater than or equal to half of the existing inspection interval. If the inspector recommends a reduction in routine inspection interval to 12 months, they are not required to change the interval in the bridge inspection software platform since there is already a scheduled inspection within 12 months. At the next routine inspection, the interval shall then be changed if the condition of the bridge remains the same and the inspector agrees with this interval. A note under the '**Miscellaneous**' heading SHALL be added during the non-interval inspection to revised the inspection interval at the next inspection.



Technical Note
Notification
No. 03
March 2023

Technical Note 03

- Schedule C and Schedule D both show a non-interval inspection at a time less than half of the existing inspection interval. If the inspector recommends a reduction in the existing inspection interval for the routine inspection, they may:
 - Follow Schedule C and perform a routine inspection at the time of the noninterval inspection and change the inspection interval. This will change the month that the bridge has typically been inspected.
 - Follow Schedule D and schedule a routine inspection in the month that the bridge would typically be inspected. This will not change the month that the bridge has typically been inspected but will require the bridge to be inspected each year.
 - For both Schedule C and Schedule D: A note under the '**Miscellaneous**' heading SHALL be added during the non-interval inspection which summarizes the interval changes.

13. Curb Reveal

Commentary: The purpose of collecting information on curb reveal is to understand the thickness of the overlay to track from inspection to inspection. If additional overlay is added to a bridge, a new load rating may be required. Some bridges have asphalt overlays that do not extend all the way to the curb. In these instances, the curb reveal is not helpful. Language will be added to Section 5.3.1.9.1.

For bridges with asphalt overlays that do not extend all the way to the curb, the reveal does not need to be measured at every inspection. It is required to be included in the inspection report (measured once) to determine if the curb is mountable or not. If the overlays do not extend all the way to the curb, the inspectors shall report the maximum overburden. This value may be estimated. Documentation in the inspection report should be sufficient so that using this overburden information and photographs (if needed) it can be determined if an overlay has been placed when the bridge is inspected again.

14. BrM Cross Section Module and Data Port

Commentary: Bridge inspectors have been requested to upload <u>unflattened</u> (electronic) versions of Attachment 5.7 (A5.7) (Stream/Ground Profile) and Attachment 5.21 (A5.21) (Culvert Profile) to a general ProjectWise folder (and not the individual Bridge Files) to assist with data porting to BrM. Data from correctly completed and uploaded files will be exported from ProjectWise and imported in BrM. Bridges with incorrect or missing data will require effort to complete the Cross Section tab in BrM when the bridge is inspected at a later date. Clarifications have been added to A5.7 and A5.21 that all units shall be reported in <u>feet</u> and not inches. Due to several forms already uploaded with missing data, all data files uploaded after the release of this TN shall have file names starting with a five-digit Asset ID. For example, a file for 06338 would start with "06338......pdf".

Copies of the Bridge Inspection Guidance Document and related Technical Notes can be obtained from the SCDOT Bridge Maintenance Office website at the SCDOT Bridge Inspection Guidance page.



Technical Note Notification No. 03 March 2023

Technical Note 03

15. Field Review / Independent Inspection for SCDOT BITLs

Commentary: Clarification is being provided regarding the "twice per year" requirement included for field reviews and independent inspections. The sections below are updated as reflected.

Section 9.2.2.2:

The DBIS will perform a formal field review of each BITL at least twice per *calendar* year. Each review will occur at a different bridge from *all previous reviews*. The DBIS shall select when the field review shall take place. While the DBIS may be present during many inspections, this formal field review is a structured, quality review.

If a district does not have an additional BITL to support the field review, another qualified BITL shall perform the field review. The DBIS of the subject district is responsible to coordinate this effort. If the DBIS is serving as a BITL throughout the course of the year, another BITL shall perform a field review of the DBIS at least twice *per calendar year* as well.

BITLs subject to a field review are any inspectors who have served as BITLs on at least one NBI reportable inspection in that calendar year. The twice annual requirement for field reviews is applicable for a BITL who is certified for the entire 12 months of the year. If a BITL is certified after April 1, they must have one field review of their work completed. If a BITL is certified after August 1, they are exempt from this field review process for that calendar year. If a BITL retires or leaves the position during the course of the calendar year, they are exempt from the requirement to be subject to a field review. If a BITL had stopped performing inspections in a previous calendar year and they have no field reviews in their inspection history for the following year, the BIPM or their designee may grant temporary BITL status but a field review on the subject BITL must occur within three (3) months of their first completed routine inspection.

A BITL's field review history shall be documented on Attachment A9.1, Inspection Team Qualification Tracking Log. The BITL is responsible for the upkeep of his or her quality records as part of the Inspection Team Qualification Tracking Log. As stated in Section 9.2.1, the log shall be submitted annually to the BMO for review..

Section 9.2.2.3:

For every SCDOT BITL actively performing inspections, his or her work shall be reviewed twice *per calendar year*, at two different bridges, by the use of an independent inspection. For BITLs working under a DBIS, the DBIS shall select an inspection report which has been completed in the last three months for review. For the DBISs who are serving as BITLs, another DBIS from another district shall perform his/her independent inspection review. The independent review will require the reviewer to visit the bridge site to compare conditions. The DBIS shall select which two bridges each *calendar* year are to be the subject of the independent inspection.

BITLs subject to an independent inspection are any inspectors who have served as BITLs on at least one NBI reportable inspection in that calendar year. The twice annual requirement for independent inspection is applicable for a BITL who is certified for the entire 12 months of the year. If a BITL is certified after April 1, they must have independent inspection of their work completed. If a BITL is certified after August 1, they are exempt from this



Technical Note Notification No. 03 March 2023

Technical Note 03

independent inspection process for that calendar year. If a BITL retires or leaves the position during the course of the calendar year, they are exempt from the requirement to be subject to an independent inspection. If a BITL had stopped performing inspections in a previous calendar year and they have no independent inspection in their inspection history for the following year, the BIPM or their designee may grant temporary BITL status but an independent inspection on the subject BITL must occur within three (3) months of their first completed routine inspection.

A BITL's independent inspection history shall be documented on Attachment A9.1, Inspection Team Qualification Tracking Log. The BITL is responsible for the upkeep of his or her quality records as part of the Inspection Team Qualification Tracking Log. As stated in Section 9.2.1, the log shall be submitted annually to the BMO for review.

Section 9.2.1:

For SCDOT inspection staff, this log must be updated by the DBIS. The log must be submitted by the DBIS to the BMO (including the BIPM and BMQE) twice per year by *June 1 and* December 1 each year. For consultant inspection staff, this log must be updated as more inspections are performed with new personnel throughout the contract. The consultant PM shall submit the log to the BMO (including the BIPM and BMQE) upon receiving their Notice to Proceed and whenever additional staff are added to perform inspections.

16. Field Review / Independent Inspection for Consultant BITLs

Commentary: The Bridge Maintenance Quality Engineer (BMQE) or their designee shall perform an independent inspection of each consultant. This requirement will replace the field review requirement. Section 9.2.3.3 is revised as noted below. Attachment 9.3 has been updated to allow for a consultant to be reviewed.

9.2.3.3 Required Field Observation of Consultants

While staff from SCDOT may visit consultant field inspections, a *structured* field observation of the consultant is not required. Every consultant firm shall be evaluated with an independent inspection once a calendar year by the BMQE or designee. The BMQE may designate another consultant to perform the independent inspection. The procedure outlined in Section 9.2.2.3 shall be followed, including the use of Attachment A9.3. In the event that a modified procedure for the independent inspection of consultants is needed, the BMQE or designee shall provide the modified procedure to the BIPM prior to the independent inspection for the BIPM review and approval but Attachment A9.3 shall still be used. The BMQE shall share the results of the independent inspection with the BIPM and the Consultant PM. Independent inspections performed shall be included in the Consultant Quality Control (QC) Plan and summarized in a table in the QC Plan. An updated QC Plan shall be submitted by the Consultant on June 30 and December 31 of each calendar year the consultant is performing inspections.

17. Section 8.9.4 – Flagged Bridge Status Updates

Commentary: The BITL shall make efforts to clear "Flagged Bridge" status when possible. Section 8.9.4 is being updated as noted below.



Technical Note Notification No. 03 March 2023

Technical Note 03

When re-visiting the bridge, the BITL shall perform a maintenance inspection (see Section 4.8.1) to check the status of the repair performed. The "Flagged Bridge" status shall only be removed by a BITL. Unless there was a Critical Finding or an urgent maintenance inspection was requested by the DME, an <u>immediate</u> maintenance inspection is not required *but the guidelines below should be followed by district inspection forces:*

- Priority A or "A Flags" should be cleared within 30 days of the work being completed.
- Priority B or "B Flags" should be cleared within 90 days of the work being completed.
- Priority C or "C Flags" should be cleared whenever convenient or within 365 days of the work being completed.

18. Submitting a Load Rating Request within 5 Days

Commentary: In accordance with updated guidance in the NBIS, a BITL shall submit a load rating request within five (5) calendar days of the discovery of the condition warranting a rating. Language will be revised in Section 5.5:

If a load rating is requested by the BITL or if a load rating is required based on the above criteria, the BITL shall complete the Load Rating Request Form (which is available in Attachment 3.1), and it shall be submitted via email and placed in the Bridge File. *The Load Rating Request Form shall be submitted to the BIPM or designee within five (5) calendar days of the last day of the inspection or five (5) calendar days from the discovery of the condition warranting a rating if discovered outside of an inspection.*

Commentary: Section 8.3.1 shall be updated:

If a load rating is recommended, the completion of the Load Rating Request Form (which is available in Attachment 3.1) shall be submitted. *The Load Rating Request Form shall be submitted to the BIPM or designee within five (5) calendar days of the last day of the inspection or five (5) calendar days from the discovery of the condition warranting a rating if discovered outside of an inspection.*

Commentary: Section 8.5 shall be updated:

Section 5.5 details procedures for how a bridge inspection can lead to a bridge load rating. If a load rating is requested by the BITL, the BITL shall complete the Load Rating Request Form (which is available in Attachment 3.1), and it shall be transmitted according to the form. *The Load Rating Request Form shall be submitted to the BIPM or designee within five (5) calendar days of the last day of the inspection or five (5) calendar days from the discovery of the condition warranting a rating if discovered outside of an inspection.*

Commentary: In preparation for all inspections, all BITLs should be reviewing the current As-Built load rating documentation. If a As-built rating is not available, a load rating request form should be completed and submitted. The following revisions to Section 5.2.1.3 will be made:

The load rating summary form(s) *(LRSF), posting form(s) and/or posting recession form(s)* shall be reviewed for information on a posting requirement or other considerations which need to be taken into account from the load



Technical Note Notification No. 03 March 2023

Technical Note 03

rating. The BITL shall note what plans, and condition were used for the development of the most current rating. Important information is included in the load rating assumptions section of the LRSF. The review of the full load rating is not required by the inspection team. The first load rating shall be performed during the design phase of a project through the Preconstruction Office. Typically, the design phase ratings are developed using the As-Let plans. Once a structure is opened to traffic and receives its initial inspection the load rating shall be updated to the As-Built condition.

Considerations for load rating including dead load assumptions and the level of deterioration on primary structural members should be reviewed. Additional information on the requirements for bridge load rating is included in the LRGD. At a minimum, the BITL shall review the following items prior to conducting an inspection:

- The Load Rating Summary Form (LRSF),
- The Posting Form/Posting Recession Form (if required) and
- The labeling diagram included with the load rating; see Section 5.2.1.3.1, located in the Bridge File

The BMO shall be notified via email when no load rating documentation exists in the Bridge File. *If As-Let, or incorrect plans were used during the current rating, the BITL shall submit a Load Rating Request Form (Attachment 3.1) as soon as possible, but no later than five (5) days after initiating the inspection.*

19. Other Inspection Form Option

Commentary: The routing and review process for BIO can delay reporting time. Non-BIO/Non-Scheduled (NBNS) Inspection Form is created to document inspection condition and inspection photographs when BIO is not available for use. **The NBNS Inspection Form can be used when <u>NBI/SBI data is not changing</u>, and an inspector only needs to identify inspection condition and take inspection photographs. Attachment 5.29 can also be used in conjunction with repair recommendations or critical findings. Language will be added to Section 5.4.4.9:**

If needed, the BITL may use the Non-BIO/Non-Scheduled (NBNS) Inspection Form (Attachment A5.29) to document inspection condition if an inspection takes place and NBI data and SBI data does not need to be updated. Attachment A5.29 must be uploaded to ProjectWise when completed.

Commentary: Language is added in Section 8.3 regarding the procedure to follow-up on Critical Finding. Should there be a change in condition that affects the severity critical finding, a new critical finding form should be submitted.

As a result of a Critical Finding, the SBME, the DME or its designee may approve a structure to remain open with temporary posting or lane restrictions. In these instances, additional monitoring of the structure's condition may be required. The DBIS can document the inspection interval and procedure to monitor the bridge in the Critical Finding Form (A5.5) "Plan of Action" section. If NBI data and SBI data does not need to be updated, follow-up inspections can be performed using the Non-BIO/Non-Scheduled (NBNS) Inspection Form (Attachment A5.29) to report structure condition. Attachment A5.29 must be uploaded to ProjectWise when completed.



Technical Note Notification No. 03 March 2023

Technical Note 03

20. Missing, Incorrect or Illegible Posting Signs

Commentary: In accordance with updated guidance in the NBIS, a missing or an illegible posting sign (at the bridge) shall be considered a Critical Finding. In accordance with updated guidance in the NBIS, an incorrect posting sign (at the bridge) that displays a posting higher than the posting on the Posting Form shall be considered a Critical Finding. incorrect posting sign (at the bridge) that displays a posting lower than the posting on the Posting Form shall be considered an "A Flag". Language will be revised in Section 5.3.8.4.

The BITL shall review the current load rating documentation of the structure to be inspected so as to obtain any recommended posting for the structure. The BITL shall verify the actual weight posting for the structure in the field and compare it to the recommended weight posting contained in the load rating documentation. The actual and recommended weight posting values shall be stated in the Posting Form.

If the at-bridge posting sign is missing or illegible, then the BITL shall issue a Critical Finding. If a discrepancy exists between the actual posting and recommended weight posting AND the actual posting on the at-bridge sign is **HIGHER** than the recommended weight posting, then the BITL shall issue a Critical Finding. If a discrepancy exists between the actual posting and recommended weight posting AND the actual posting on the at-bridge sign is **LOWER** than the recommended weight posting, then the BITL shall recommend the correct posting sign is placed in HMMS or on the Repair Recommendations Form (Priority A (or "A Flag")).

A photograph of existing posting signs shall be taken and included in the inspection report per Section 5.4.4.2. Chapter 19 of the LRGD contains requirements for posting bridges and includes images of the signs for R12-6-48, R12-7-60 and R12-9-36.

Commentary: Language will be revised in Appendix O:

Critical Finding Examples

- Missing or illegible at-bridge weight limit signs,
- Incorrect at-bridge weight limit signs if the posted weight is HIGHER than the value in the signed Posting Form,

General Bridge – Repair Recommendation Examples

Repair Recommendation – Priority A – "A Flags"

• Incorrect at-bridge weight limit signs if the posted weight is LOWER than the value in the signed Posting Form,

21. Attached Documents for QC/QA Reviews

Commentary: If quality reviews require additional pages of comments and/or comment responses, the additional pages shall be attached to the QC/QA forms.



Technical Note Notification No. 03

March 2023

Technical Note 03

22. <u>Required Inspection and Photographs of Posting Signs</u>

Commentary: Bridge inspectors shall include pictures of both at bridge and advance warning posting signs at every routine inspection. Language will be revised in Section 5.4.4.2 at noted below.

Photographs of at bridge *and advance (if present)* posting or weight limit signs are required to be taken during all routine inspections, in addition, photographs shall be taken:

- During a bridge's inventory inspection
- Following the installation of new sign(s), including photographs during a maintenance inspection

The above requirements are applicable to the posting or weight limit signs at the bridge *and in advance of the bridge* which could require *many signs* to be photographed. These signs include R-12-6-48 and R-12-7-48 (legal loads), and R-12-9-36 (EV weight limit) at both ends of the bridge.

Commentary: Language will be revised in Section 5.9:

 Photograph	Notes	BIGD Ref.
Posting/Weight Limit Sign	Photo of at-bridge and advance signage	5.4.4.2



Technical Note Notification No. 03

March 2023

Technical Note 03

23. Updated List of Appendices

List of Appendices		
Appendix Letter	Name of Appendix	
<u>A</u>	Code of Federal Regulations (CFR), 23 CFR 650, Subpart C	
<u>B</u>	SCDOT District Map	
C C	Bridges with Complex Features	
<u>D</u>	Border Bridges	
<mark>E</mark>	Bridges with Underwater Inspections	
<u>F</u>	Bridges with Nonredundant Steel Tension Members (NSTMs)	
<mark>G</mark>	Scour Critical Bridges	
<u>H</u>	AASHTO Detail Categories for Fatigue	
Ī	South Carolina Railroad Map and List	
<u>J</u>	Supplemental Guide for Structure Inventory & Appraisal Data	
<u>K</u>	Supplement Guide for NBI Condition Ratings	
<u>L</u>	Supplement Guide for Element-Level Condition States	
<u>M</u>	Coding Guide for NBI Items 06 and 07	
<u>N</u>	Average Daily Traffic Count Formulas & Example Calculations	
<u>O</u>	Example Critical Findings and Repair Recommendations	
<u>P</u>	Common Inspection Shorthand and Abbreviations	
Q	Critical Security Bridges	
<u>R</u>	Underwater Inspection Guidance Document	
<u>S</u>	Memorandum Regarding Maintenance of Guardrail on H10 and H15 Bridges	



Technical Note Notification No. 03 March 2023

Technical Note 03

24. Updated List of Attachments

Commentary: Bridge inspectors shall include pictures of both at bridge and advance warning posting signs at every routine inspection. Language will be revised in Section 5.4.4.2 at noted below.

	List of Attachment Files		
Attachment No.	Name of Attachment File	Version	Page Count
	ROUTINE INSPECTION (NO WATERWAY)		
A5.20	Photograph Form Instructions	MAR2023, V1	2
A3.20	Photograph Form	MAK2025, VI	1
	Bridge Inspection QC Form Instructions		1
A5.25	Bridge Inspection QC Form (SCDOT Inspection)	MAR2023, V1	1
	Bridge Inspection QC Form (Consultant Inspection)		1
	ROUTINE INSPECTION OF BRIDGE (OVER WATERV	WAY)	
A5.7	Scour Stream Ground Profile Instructions	MAR2023, V1	2
A3./	Scour Stream Ground Profile	MAK2025, VI	2
	ROUTINE INSPECTION OF CULVERT	·	
A5.21	Culvert Profile Sketch Sheet Instructions	MAR2023, V1	2
A3.21	Culvert Profile Sketch Sheet	MAK2025, VI	1
	INSPECTION FOR DECK	·	
	Deck Sketch Sheet Instructions		1
	Deck Sketch Sheet (Panel Deck by Panel Number)	MAR2022, V1	1
A5.11	Deck Sketch Sheet (Panel Deck by Panel Number, non-visual)	MAR2022, V1	1
	Deck Sketch Sheet (Panel Deck by Bay Number)		1
	Deck Sketch Sheet (Flat Slab)		1
	INSPECTION FOR SUPERSTRUCTURE		
A5.26	Blank Inspection Sketch Sheet Instructions	MAD2022 VI	1
A3.20	Blank Inspection Sketch Sheet	MAR2022, V1	1
	Prestressed Concrete Member Deterioration Sketch Sheet Instructions		1
A5.12	Prestressed Concrete Member Deterioration Sketch Sheet (Cored Slab)	MAR2022, V1	1
	Prestressed Concrete Member Deterioration Sketch Sheet (Beam)		1
	Reinforced Concrete Member Deterioration Sketch Sheet Instructions		1
A5.13	Reinforced Concrete Member Deterioration Sketch Sheet (Tee Beam)	MAR2022, V1	1
	Reinforced Concrete Member Deterioration Sketch Sheet (Slab)		1
45.14	Steel Member Deterioration Sketch Sheet Instructions	MAD2022 M1	1
A5.14	Steel Member Deterioration Sketch Sheet	— MAR2022, V1	1
	Rigid Frame Deterioration Sketch Sheet Instructions		1
A5.15	Rigid Frame Deterioration Sketch Sheet (Concrete)	MAR2022, V1	1
	Rigid Frame Deterioration Sketch Sheet (Steel)		1
	INSPECTION FOR SUBSTRUCTURE (WITH PILES	S)	
	Pile Section Sketch Sheet Instructions		1
A5.18	Pile Section Sketch Sheet (Vertical Orientation)	APR2022, V1	1
	Pile Section Sketch Sheet (Horizontal Orientation)		1



Technical Note Notification

No. 03 March 2023

I

Technical Note 03

ttachment No.	List of Attachment Files Name of Attachment File	Version	Page Coun
	INSPECTION FOR SUBSTRUCTURE		- ngr o o ni
	Bent Cap and Bearing Sketch Sheet Instructions		1
	Bent Cap and Bearing Sketch Sheet (Single Bent Cap)		1
	Bent Cap and Bearing Sketch Sheet (Plan View (Bents/Caps))		1
	Bent Cap and Bearing Sketch Sheet (Plan View (Caps/Saddles))		1
A5.17	Bent Cap and Bearing Sketch Sheet (Eight Pile Bent Sketch)	MAR2022, V1	1
110117	Bent Cap and Bearing Sketch Sheet (Seven Pile Bent Sketch)		1
	Bent Cap and Bearing Sketch Sheet (Six Pile Bent Sketch)		1
	Bent Cap and Bearing Sketch Sheet (Five Pile Bent Sketch)		1
	Bent Cap and Bearing Sketch Sheet (Four Pile Bent Sketch)	-	1
	OTHER ATTACHMENTS		1
	Exemption for BITL Status Form Instructions		1
A3.2	Exemption for BITL Status Form	MAR2022, V1	1
	Closed Bridge Re-opening Form Instructions		1
A5.24	Closed Bridge Re-opening Form	MAR2022, V1	1
	OTHER INSPECTION FORMS		
	Scour Inspection (Post Storm Inspection) Form Instructions		1
A4.5	Scour Inspection (Post Storm Inspection) Form	MAR2022, V1	1
	Damage Inspection Form Instructions		1
A5.8	Damage Inspection Form	MAR2022, V1	2
	Steel Superstructure Damage Inspection Form Instructions		3
A5.9	Steel Superstructure Damage Inspection Form	MAR2022, V1	2
	Concrete Superstructure Damage Inspection Form Instructions		2
A5.10		MAR2022, V1	2
	Concrete Superstructure Damage Inspection Form		
A5.16	Nonredundant Steel Tension Member (NSTM) Inspection Form Instructions	MAR2023, V1	1
	Nonredundant Steel Tension Member (NSTM) Inspection Form		1
A5.19	Textual Data – Written Description Form Instructions	MAR2022, V1	1
	Textual Data – Written Description Form		-
A5.22	Bridge Joint Sketch Sheet Instructions	MAR2022, V1	2
	Bridge Joint Sketch Sheet		1
A5.23	AASHTO Element Table Worksheet Instructions	MAR2022, V1	1
	AASHTO Element Table Worksheet	,	1
A5.29	Non-BIO Non-Scheduled (NBNS) Inspection Form Instructions	MAR2023, V1	<u> </u>
	Non-BIO Non-Scheduled (NBNS) Inspection Form		<mark>2</mark>
	INSPECTION PREPARATION AND PROCEDURES		
A5.1	Bridge Data Form for SCDOT Road Data Services (RDS) Instructions	MAR2022, V2	1
	Bridge Data Form for SCDOT Road Data Services (RDS)		1
	Request for Bridge Preparation Prior to Inspection Instructions	MAR2023, V1	1
A5.2	Request for Bridge Preparation Prior to Inspection (Word Document)		2
	Request for Bridge Preparation Prior to Inspection (PDF)		2
A5.3	Railroad Flagging Service Form Instructions	MAR2023, V1	1
110.0	Railroad Flagging Service Form		1
A5.4	Inspection Access, Procedures and Equipment Form Instructions	MAR2023, V1	1
	Inspection Access, Procedures and Equipment Form	101711(2025, v1)	2



Technical Note Notification

No. 03 March 2023

I

I

Technical Note 03

Attachment No.	List of Attachment Files Name of Attachment File	Version	Page Coun
Attachment 100.	INSPECTION PREPARATION AND PROCEDURES (CONTINUED)	ver sion	l'age coun
	Bridge-Specific Inspection Procedure (BSIP) Template Instructions		1
	BSIP Template Fracture Critical Member (Blank) (Word Document)		2
	BSIP Template Fracture Critical (w/ Instructions) (Word Document)		3
A5.28	BSIP Template Underwater (Blank) (Word Document)	MAR2023, V1	2
	BSIP Template Underwater (w/ Instructions) (Word Document)		2
	BSIP Template Complex Components (Blank) (Word Document)		2
	BSIP Template Complex Components (w/ Instructions) (Word Document)		2
BRI	DGE ASSESSMENT FOLLOWING INSPECTION (NON-CRITICAL FINE	DINGS)	_
	Load Rating Request Form Instructions		1
A3.1	Load Rating Request Form	MAR2023, V1	1
	Consultant Inspection Request Form (CIRF) Instructions		1
A4.1	Consultant Inspection Request Form (CIRF)	MAR2022, V1	1
	Bridge Scour – Item 113 Re-evaluation Form Instructions		1
A4.2	Bridge Scour – Item 113 Re-evaluation Form	MAR2022, V1	1
	Inspection Out-of-Interval Form Instructions		1
A4.3	Inspection Out-of-Interval Form	- MAR2023, V1	1
	NDT Request Form Instructions		1
A4.4	NDT Request Form	MAR2022, V1	1
	CRITICAL FINDINGS AND REPAIR RECOMMENDATIONS		
A 5 5	Critical Findings Form Instructions	MAD2022 VI	2
A5.5	Critical Findings Form	MAR2023, V1	2
	Repair Recommendations Form Instructions		2
A5.6	Repair Recommendations Form (PDF)	MAR2022, V3	2
	Repair Recommendations Form (Spreadsheet)		N/A
45.27	Stud-up Pile Repair Planning Form Instructions	MAD2022 V1	1
A5.27	Stud-up Pile Repair Planning Form	MAR2022, V1	1
	MUNICIPALITY-COUNTY BRIDGES – CORRESPONDEN	NCES	
	Municipality-County Bridge Inspection Report Release Letter	MAR2023, V1	1
	(No Repair Recommendations and No Critical Findings) Instructions		1
A2.1	Municipality-County Bridge Inspection Report Release Letter		1
A2.1	(No Repair Recommendations and No Critical Findings) (Word Doc)		1
	Municipality-County Bridge Inspection Report Release Letter		1
	(No Repair Recommendations and No Critical Findings) (PDF)		1
	Municipality-County Bridge Inspection Report Release Letter	MAR2023, V1	1
	(Repair Recommendations) Instructions		1
A2.2	Municipality-County Bridge Inspection Report Release Letter		1
72.2	(Repair Recommendations) (Word Document)		·
	Municipality-County Bridge Inspection Report Release Letter		1
	(Repair Recommendations) (PDF)	1	1



Technical Note Notification

No. 03 March 2023

Technical Note 03

	List of Attachment Files		_
Attachment No.	Name of Attachment File	Version	Page Coun
	MUNICIPALITY-COUNTY BRIDGES – CORRESPONDENCES (CC	ONTINUED)	I
A2.3	Municipality-County Bridge Receiving Closed Bridge Inspection Letter		1
	Instructions		-
	Municipality-County Bridge Receiving Closed Bridge Inspection Letter	MAR2023, V1	1
112.00	(Word Document)	<u>1011 11(2025, 101</u>	
	Municipality-County Bridge Receiving Closed Bridge Inspection Letter		1
	(Repair Recommendations) (PDF)		
	Municipality-County Bridge Critical Finding Memorandum Instructions		1
A2.4	Municipality-County Bridge Critical Finding Memorandum (Word Doc)	MAR2023, V1	1
	Municipality-County Bridge Critical Finding Memorandum (PDF)		1
	Municipality-County Bridge Critical Finding Reminder Memorandum		1
	Instructions		
A2.5	Municipality-County Bridge Critical Finding Reminder Memorandum (Word	MAR2023, V1	1
	Document)		
	Municipality-County Bridge Critical Finding Reminder Memorandum (PDF)		1
	Municipality-County Bridge Critical Finding Action Taken by SCDOT		1
12(Instructions Municipality-County Bridge Critical Finding Action Taken by SCDOT	MAD2022 3/1	
A2.6		MAR2023, V1	1
	(Word Document)	-	1
	Municipality-County Bridge Critical Finding Action Taken by SCDOT (PDF)		_
A2.7	Municipality-County Bridge Inventory List and Status Instructions Municipality-County Bridge Inventory List and Status (Word Document)	MAR2023, V1	1 2
A2.7	Municipality-County Bridge Inventory List and Status (word Document) Municipality-County Bridge Inventory List and Status (PDF)		2
	Municipality-County Bridge Removed from Inventory Letter Instructions		1
A2.8	Municipality-County Bridge Removed from Inventory Letter (Word Doc)	MAR2023, V1	1
A2.0	Municipality-County Bridge Removed from Inventory Letter (Word Doc) Municipality-County Bridge Removed from Inventory Letter (PDF)	MAK2025, VI	1
	OUALITY		1
	Inspection Team Qualification Tracking Log Instructions		1
A9.1	Inspection Team Qualification Tracking Log Instructions	MAR2023, V1	N/A
	Field Review Quality Form Instructions		IN/A
A9.2	Field Review Quality Form	MAR2023, V1	2
	Independent Inspection Check Form Instructions		1
A9.3	Independent Inspection Check Form Instructions	MAR2023, V1 MAR2022, V1	5
A9.5	Independent Inspection Check Form (SCDOT)		<u>5</u>
			1 1
A9.4	District Quality Meeting Form Instructions		1
	District Quality Meeting Form Quality Control Tracking Spreadsheet Instructions	MAR2023, V1	1
A9.5	Quality Control Tracking Spreadsheet (Spreadsheet)		N/A
	Quality Assurance Tracking Spreadsheet Instructions	MAR2023, V1	1N/A
A9.6	Quality Assurance Tracking Spreadsheet Instructions Quality Assurance Tracking Spreadsheet (Spreadsheet)		1
	Bridge Inspection QA Form Instructions		N/A 2
40.7	Bridge Inspection QA Form Instructions Bridge Inspection QA Form (SCDOT Inspection)	MAR2023, V1	3
A9.7	Bridge Inspection QA Form (SCDOT Inspection) Bridge Inspection QA Form (Consultant Inspection) (Spreadsheet)		I N/A
			IN/A
	Consultant QC Plan Review Checklist Instructions		1



Technical Note Notification No. 03 March 2023

Technical Note 03

Commentary: As part of continuing efforts to improve the bridge inspection practices, Technical Note 04 (TN04) is currently being drafted and may include updates related to:

- 1. Reduced Inspection Intervals (per NBIS)
- 2. Extended Inspection Intervals (per NBIS)
- 3. Updates to Priority A and Priority B Flags
- 4. Required Collection Inspector Contact Information (for use with BrM Implementation)
- 5. In-Depth Inspection Type (for use with BrM Implementation)
- 6. Service Inspection Type (for use with BrM Implementation)
- 7. Clarification on Use of Top Flange, Concrete Beam and Slab Elements
- 8. Timber Pile Inspection and Load Rating Recommendation
- 9. Verification of Installed Posting Signs

Please direct any questions concerning the above to the Bridge Inspection Program Manager or other representatives at the Bridge Maintenance Office.

Approved: _

March 27, 2023

Date

Chief Engineers for Bridges

BIGD Technical Note 01, June 14, 2022 BIGD Technical Note 02, October 28, 2022