

Review of Local Agency Bridge Inspection Program

Agency _____

Date _____

Agency HQ Location _____

Team _____

BIOH - Bridge Inspection Organizational Head
 BITL - Bridge Inspection Team Leader
 BITM - Bridge Inspection Team Member

A. Qualifications of Inspection Personnel

☞ Who is the head of the bridge inspection organization?

A _____

Title: _____

☞ Who inspects bridges for the agency?

B _____

BITL / BITM Title: _____

C _____

BITL / BITM Title: _____

D _____

BITL / BITM Title: _____

E _____

BITL / BITM Title: _____

☞ How many years of bridge inspection experience?

Years of Experience				
	0-1	2-5	6-9	10 or more
A				
B				
C				
D				
E				

☞ Is the BIOH/BITL a Registered Professional Engineer?

a. BIOH - Yes ___ No ___ PE # ___ State ___

b. BITL - Yes ___ No ___ PE # ___ State ___

☞ OR, is the BIOH/BITL qualified for registration as a professional engineer under the laws of this State?

a. BIOH - Yes ___ No ___

b. BITL - Yes ___ No ___

☞ Is the BITL currently certified as a Level III or Level IV Bridge Safety Inspector under the National Society of Professional Engineers' program for National Certification in Engineering Technologies (NICET).

Yes ___

No ___

☞ What training have bridge inspectors received in bridge inspection?

BRIDGE INSPECTOR TRAINING (Dates)							
	2-week BITC	Br. Insp'n Refresher	Fracture Critical	Underwater Inspection	Stream Stability & Scour	BMS Inspection	Other
A							
B							
C							
D							
E							

✍ Please indicate the bridge inspection assignments (experience) for the BITL.

Assignments (Experience)		
No. of Months	Job Title	Brief Description of Duties

✍ How often is the BITL at the bridge site during inspection?

Always _____
 Most of the time _____
 Occasionally _____
 Never _____

B. Available Resources

✍ How many bridges is the agency responsible for inspecting?

	Total	Fracture Critical	Underwater	Other Special Inspections
NBI Bridges				
Bridges < 20 ft				
TOTAL				

✍ How many inspections were performed during the last calendar year?

✍ How many inspections are scheduled for the upcoming calendar year?

✍ Indicate the percentage of time spent on the listed duties in the last calendar year:

	Bridge Inspection and Rating	Bridge Design	Bridge Construction	Bridge Maintenance	Other	
A						100%
B						100%
C						100%
D						100%
E						100%

✍ How long does it normally take to reinspect the following structure?
 (exclude travel time and bridge load capacity rating time)

Three simple spans with total length of 200 feet, multi girder or beam, reinforced concrete deck, over local street. Structure is about 20 years old.

✍ Does the BIT inspect the following structures:

	Yes	No	N/A	If yes, how many?
Major Bridges				
Fracture Critical Bridges				
Underwater Components of Bridges				

✍ Are other sections (personnel) called for assistance when inspecting the following structures?

	Yes	No	Comments
Major Bridges			
Fracture Critical Bridges			
Underwater Components of Bridges			

✍ What is the status of, and who conducts, evaluations of the following?

	No. Required	No. Complete	Who Performs?	No. Posted or Scour Critical
Load Ratings				
Scour Evaluations				

✍ How many bridges require posting, but have not yet been posted? If so, why not?

✍ Have action plans been developed for those bridges determined to be scour critical? (Please attach a copy of one.)

C. Inspection Records

✍ What type of information is recorded about each inspection?

		Yes	No
a.	Time spent on inspection		
b.	Temperature		
c.	Weather		
d.	Inspectors' signatures		
e.	Other (Please specify)		

✍ Are previous inspection reports available at the site for review?

- a. Yes ___
- b. No ___

✍ Are the bridge plans carried to the bridge site for review if necessary, or are they readily available for review in the bridge office?

	Yes	No
Bridge site		

Bridge office		
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What forms are used to record the inspection data? (Choose all that apply)

- (STA) BIS Inventory Data Coding Form _____
- Bridge Inspection Report Form _____
- Laptop program _____
- Other (specify) _____

List the bridges and files evaluated during this review:

	Bridge Name	Structure ID	Bridge No.
Bridge A			
Bridge B			
Bridge C			
Bridge D			
Bridge E			
Bridge F			

Please summarize the results of reviewing individual bridge inspection reports and files for a sampling of bridges:

	Bridge A	Bridge B	Bridge C	Bridge D	Bridge E	Bridge F
Coding Accuracy						
Inv. Data Accuracy						
Narrative						
Sketches						
Photographs						
Maint. Needs Ident'd						
Load Ratings						
Posting Docum.						
Scour Calcs						

G- Good; F- Fair; P- Poor; DNA- Does Not Apply; CNE- Could Not Evaluate

Comments

D. Inspection Procedures

Are written inspection procedures prepared for the BIT?

- Yes ___
- No ___

What written procedures are available at the bridge site or bridge office?

	Yes	No	Describe
a. General			
b. Special Feature Inspection			
c. Fracture Critical Inspection			
d. Underwater Inspection			
e. Major Bridge Inspection			

f. Other _____

☞ Do you have any special procedures for any specific bridges that your team inspects?

Yes (Please specify) ____

No ____

(Whenever it is determined that the BIT uses specific written procedures for a bridge, the review team should obtain a copy and attach it to this questionnaire)

☞ Who determines the depth of inspection if there are no written procedures?

a. BITL ____

b. Head of bridge inspection unit ____

c. Other (specify) ____

☞ How are new written procedures distributed?

a. Training session ____

b. Mail ____

c. General Meetings ____

d. Other (Please specify) ____

☞ Do BITMs have specific duties conveyed to them by the BITL?

a. Yes ____

b. No ____

Comments

E. Inspection Equipment

☞ What equipment does your team have available for "hands on" access to bridge members?

	Yes	No
a. Ladder		
b. Aerial Lift Platform ("manlift")		
c. Underbridge Inspection Unit (Snooper, UBIT)		
d. Boat		
e. Scaffolding		
f. Climbing Gear		
g. Other		

☞ How accessible is the equipment?

(A) How many bridges need a UBIT?				
(B) How many bridges is it used on? _				
(C)	Readily	Must be	Must be Rented	Always

	Accessible	Scheduled	or billed to Others	Difficult to Obtain
a. Ladder				
b. Aerial Lift Platform ("manlift")				
c. Underbridge Inspection Unit (UBIT)				
d. Boat				
e. Scaffolding				
f. Other:				

✎ Does the Agency ever use NDT (excluding visual)? If yes, complete 4 and 5 below; if no, skip 4 and 5.

Yes ____

No ____

✎ If your answer to question (3) is yes, please indicate who is responsible for NDT?

- a. Bridge Unit _____
- b. Maintenance Unit _____
- c. Materials Testing Unit _____
- d. Other _____
- e. Don't know _____

✎ Who determines the frequency of NDT?

- a. Bridge Unit _____
- b. Maintenance Unit _____
- c. Materials Testing Unit _____
- d. Other _____
- e. Don't know _____

✎ What equipment does the BIT normally carry with them to the inspection site?

	Yes	No
Extension ladder	___	___
Measuring tape	___	___
6' folding rule	___	___
100' fiberglass tape	___	___
Geologist hammer	___	___
Inspection mirror	___	___
Flashlight	___	___
Thermometer	___	___
Plumb bob	___	___
Camera	___	___
2'-0" level (carpenter)	___	___
Brush hook/machete	___	___
First Aid kit	___	___
Wire brush	___	___
Calipers	___	___
Shovel	___	___
Screw driver	___	___
Pliers	___	___

Wrenches	___	___
Incremental borer	___	___
Deck sounding chains	___	___
Hip boots & waders	___	___
Paint stick/keel	___	___
Scraper	___	___
Feeler gauge	___	___
Probing rod	___	___
Vertical clearance measuring rod	___	___

List additional items below

F. Follow-up Procedures

☒ Do Agency maintenance personnel accompany the BIT on inspections?

___ Always ___ Occasionally
 ___ Most of the time ___ Never

☒ Are recommendations for maintenance or repairs identified on the bridge inspection form?

___ Yes ___ No

☒ Does the BIT assess whether previous maintenance problems have been corrected?

___ Yes ___ No

☒ How do you call the attention of maintenance personnel to routine bridge maintenance problems?

___ Written procedure ___ Verbally ___ Regularly scheduled meetings

☒ How is the BIOH notified of needed repairs, and how and to whom are completed repairs communicated?

☒ Who does the BITL notify when emergency repairs are necessary?

___ Bridge Section ___ Other
 ___ Maintenance Section ___ Not required to notify anyone

☒ If a bridge requires emergency repairs, is this noted as part of the inspection report or as a separate document?

___ BIR ___ Separate document ___ Not documented

☒ What procedures and documentation are in place to insure timely correction of emergency needs?

☒ Who checks proper placement of signs (load posting, clearance, speed restriction, narrow bridge etc.)?

___ BIT ___ Other
 ___ Bridge Section ___ Don't know
 ___ Maintenance Section

☒ What is the annual bridge maintenance budget?

Review Summary

Category	Adequate	Minor Inadequacies (Corrective Action Desirable)	Not Adequate (Corrective Action Imperative)
A. Qualification of Inspection Personnel			
B. Available Resources			
C. Inspection Records			
D. Inspection Procedures			
E. Inspection Equipment			
F. Follow-up Procedures			
G. Condition/Appraisal Ratings			

Summary Comments

Inspection Report Evaluation Form

Bridge Name:
Structure ID No.:

Evaluated by:
Date:

⚡ Please indicate whether the following information is included in the most recent inspection report:

	Yes	No	Not applicable
a. Narrative Section			
b. Sketches of cracks, spalls exposed rebar, etc.			
c. Bridge Photographs			
d. Maintenance needs identified			
e. Emergency repairs required			
f. Posting signs documented			

⚡ Are the sketches identified in (1b) of sufficient detail to track changes in the bridge (joint opening measurements, widths of cracks etc.)?

a. Yes ___
b. No ___

⚡ Do the condition and appraisal ratings from the current inspection report agree with the condition and appraisal ratings on the Agency's most recent SI&A sheet? (This question evaluates if the inspection data is reliably captured into the State's bridge inventory database.)

Yes ___
No ___

⚡ Does the inspection form list the members of the BIT?

e. Yes ___
f. No ___

⚡ Is the inspection form signed and dated?

e. Yes ____

f. No ____

☞ What are the dates of the previous 5 routine inspections?

Inspection File Evaluation

☞ Written Procedures

a. Are written inspection procedures required for this bridge? If no, skip the rest of this section

☞ Evaluate the following:

Critical inspection locations identified

Inspection frequencies identified

Inspection methods identified

Discussion of deficiencies to look for

Special equipment needs identified

☞ Load Rating Calculations

What is the method used for calculating the load rating?

Is the HS truck used with the Load Factor method to determine Inventory & Operating Ratings?

What are the calculated ratings:

	Inventory	Operating	
Type 3	_____	_____	(25.0 Tons)
Type 3-S2	_____	_____	(36.7 Tons)
Type 3-3	_____	_____	(43.2 Tons)
HS Truck	_____	_____	

What is the recommended load posting? Is it physically posted?

Is the load rating signed and stamped by a registered P.E.?

☞ Scour Evaluation

Has scour been evaluated in accordance with acceptable practice?

If the bridge is scour critical, has a written action plan been developed addressing:

- ☞ Monitoring
- ☞ Installation of temporary countermeasures
- ☞ Permanent countermeasures