**STRUCTURE NO.** **RECALL NO.**

(14 digit number)

**STRUCTURE NAME / FEATURE CROSSED**

(Attach the Structure Inventory and Appraisal Form)

**ATTACHMENTS:**

1. **Project Site Map:
Provide a map with the structure number and location shown along with any state route detour information.**
2. **General Plan Sheet:
Provide a copy of the general plan sheet of the existing structure if available.**
3. **Photographs:
Provide photographs showing the following:**
	1. **Structure number**
	2. **Upstream, downstream (or railroad, or feature crossed) both toward the structure and looking away. Include features that may affect hydraulic design and constructability.**
	3. **Up station and down station along bridge centerline (project geometry).**
	4. **Bridge embankment / abutment, visible utility lines or markers.**
	5. **For repair or rehabilitation projects, individual areas of the structure to be addressed in the project along with the deficiency described.**
	6. **Significant features, buildings, residences, businesses, environmental impacts, constructability issues, etc.**

**PROPOSED ACTION:**

**Provide a detailed project scope with additional photographs as needed:**

GENERAL

(Circle the appropriate response and explain as indicated)

**Is there any unusual frequency and / or types of accidents or other safety concerns at this site?**

**Is there a vertical or horizontal clearance problem at this site? (Vehicular/Boat/Train)**

**Are there any bridge structures within 1000 feet of this structure that may be affected by the work being proposed on this structure?**

**Have any significant repairs been done to the structure that will improve the NBI condition rating of the structure?**

**What is the existing roadway pavement type?**

**Are the existing shoulders along the route paved or aggregate? Width of shoulders?**

**Any there any future plans for overlaying or widening the route, paving the shoulders or any other improvements around the existing structure? List type of improvement.**

**Has the bridge been overlaid? Describe overlay material and thickness.**

**Are there any existing pedestrian or bicycle facilities in the vicinity of this bridge site?**

**Are there any existing maintenance problems at this site that need to be addressed under the new project?**

**Is there any significant use of this route for industrial or agriculture purposes that result in high truck volumes?**

MAINTENANCE OF TRAFFIC

**Can the District support closing the road during construction? Is there an alternate State route available?**

(Y or N) If so, please provide a map, an explanation of the alternate State route and the required detour mileage around the bridge site on the State route. This is very important to estimating the cost of the project. Please provide as much information as possible.

**If an on-site diversion is provided, what side of the existing bridge would best facilitate the detour construction, what type of detour structure do you recommend and what obstructions are present? Could the on-site detour be low speed (5 mph) with a stop condition?**

**If phased construction is considered at this site, could the District support a one lane roadway with signals during construction?**

**Are there any navigational requirements at this bridge site? If so, what type of vessels use the waterway?**

**Are there any railroad requirements that will need to be addressed at this bridge site?**

(Overpass, underpass, at grade crossing, parallel track, etc.)

CONSTRUCTABILITY

**Are there any obvious access issues that may affect the contractor's construction of the bridge?**

**Is the water depth at the site of sufficient to float barges? Will barges obstruct navigation?**

**Are there any obvious overhead obstructions that may impede pile driving operations?**

**Are there any residences, businesses, or facilities in the area that may be affected by the noise and vibration from pile driving operations?**

**Are there any driveways or property entrances that will have to be maintained during construction, relocated and / or reconstructed?**

**Are there any other issues that could affect constructability that need to be accounted for in the construction estimate?**

HYDRAULIC

**Are there any water control structures that may be affected by the work being proposed on this structure?**

**Does the roadway have a history of overtopping along the floodplain in the vicinity of this project? If so, what is the frequency?**

**Is there any evidence or history of debris build up at this site?**

**Is there any evidence or history of abutment scour, degradation of the channel or channel migration at this bridge site?**

UTILITIES

**Are there any utilities located within 100 feet from the roadway centerline and within 1000 feet of the bridge ends?**

**List all apparent utilities at the site. Are there any utilities supported by the structure?**

RIGHT OF WAY

**Are there any obvious right of way impacts, relocations or business displacements required because of the proposed construction?**

**Are there any building structures or improvements that may be affected by the work being proposed on this structure?**

REHABILITATION

**STRUCTURAL:**

**GENERAL**

**Are there any structural components of the bridge that exhibit deterioration or in need of repair or replacement?**

**Is the structure clean enough to make a good assessment of the scope of work for the project?**

**Is the bridge deck in need of repair, preventive maintenance, or replacement?**

**Do the approach slabs require repair or replacement?**

**For concrete roadways, is the pavement relief joint between the concrete roadway and approach slab in place and functional? Does it need to be recut and sealed?**

**Is the bridge abutment experiencing erosion, loss of material under approach slab, or failure of the revetment?**

**Is the bridge experiencing bent settlement? (Provide location and pictures)**

**Is there excessive spalling of concrete on the structure? Are there any areas with exposed reinforcing steel?**

**Is the deck or any other area of the structure exhibiting delaminating concrete?**

**Does the fender system require repair or replacement?**

**STRUCTURAL STEEL**

**Is the protective coating on the steel structure in satisfactory condition? Are there areas of excessive corrosion? (Provide location and Pictures)**

**Are there any fatigue cracks or details that need repair?**

**MOVABLE BRIDGE:**

**MECHANICAL SYSTEMS**

**Has a significant mechanical rehabilitation of this structure been performed in the last 20 years?**

**Is there significant corrosion of mechanical shafts, anchor bolts, brackets, couplings, or any other mechanical equipment?**

**Is there unexpected or excessive lubricant leaking from shaft couplings, bearings, gearboxes, or motors?**

**Is there unexpected noise or vibrations coming from shaft couplings, bearings, gear boxes, pumps, or motors during operation of the span?**

**Is there radial or axial movement of shafts in couplings, bearings gear boxes, pumps, or motors during operation of the span?**

**Is there excessive wear on open gear teeth?**

**Are the brakes worn, slipping, or unreliable?**

**Are the span locks operating? Are they reliable?**

**Is the span showing signs of being imbalanced? (Is a balance wheel riding the track? Are the motors drawing excessive current? Is the span seating too hard/too soft?)**

**Are the movable barriers functioning reliably? Do they get impacted regularly by vehicular traffic? Are the counterweight ropes for the barriers rusted, frayed, or flattened?**

**(Hydraulic Systems) Are there frequent leaks in the hard piping or failures of the flexible hydraulic hoses?**

**(Vertical Lift Bridges) When was the last time the counterweight ropes were changed? Are the outer strands rusted, frayed, or flattened?**

**(Swing Span Bridges) Does the center pivot bearing leak lubricant or is there any noise or vibration coming from the center pivot bearing during operation of the span?**

**(Swing Span Bridges) Do the wedges get stuck periodically?**

**(Pontoon Span Bridges) Is the ballast system operating reliably?**

**(Pontoon Span Bridges) Are the apron spans operating reliably?**

**ELECTRICAL SYSTEMS**

**Are any components of electrical equipment in need of repair or replacement? List.**

**Are any by-pass switches required to operate the bridge? Explain.**

**Have any electrical systems or equipment been replaced or rehabilitated? Explain and indicate when.**

**Have any conductors required splicing? Explain.**

**Have any modifications to the electrical system or controls been added that were not in the original design? Explain.**

**Are there any reoccurring electrical maintenance issues? Explain.**

**Does the bridge operate correctly on generator?**

**Do any circuit breakers trip? Which ones and under what conditions?**

**Are any portions of the electrical or control systems not in use or not operational? Explain.**

**Does the control sequence ever contain abnormal or unwanted events? Explain.**

**Has any electrical equipment been effected by flood waters? Explain and provide pictures.**

**Prepared by: Date:**

**Phone Number:**

**Approved By: ADA – Operations**