

**RESPONSES TO QUESTIONS FROM CONTRACTORS  
REGARDING THE REQUEST FOR QUALIFICATIONS  
STRUCTURAL HEALTH MONITORING SYSTEM - I-74 OVER THE MISSISSIPPI RIVER**

Questions are numbered in order of receipt, followed by the response in italics.

1. Item 2, personnel qualification - are you looking for a full resume or just the projects these people have worked on?  
*Lead technician qualifications must include project descriptions as described in the RFQ. In addition, any particular qualifications pertinent to the work in this project could be included. A full resume is not required.*
2. Does this submittal go to you by email or do I need to mail it?  
*Email submittals with a pdf attachment of the Qualifications are sufficient.*
3. Please clarify the intended technology of “strain transducers (218)” compared to “vibrating wire surface mounted strain gages (128)” or “Wheatstone bridge load cells (12)”.  
*Strain transducers, which contain electrical strain gages in a steel housing for weather protection are intended for measuring live loads. Vibrating wire surface mounted strain gages are intended for measuring permanent stresses. Wheatstone bridge load cells are intended for measuring forces in the arch superstructure cables.*
4. Will other types of sensors be acceptable if equal to, or better than, what is specified in the final design? For instance, would “fiber optic” strain gages be acceptable instead of “vibrating wire” surface mounted strain gages?  
*Other types of sensors (approved equal) than those specified may be acceptable, if approved by the Engineer. The proposed product must be submitted for review and approval. We cannot comment on any specific substitutions at this time. However, a product which requires changing other elements of the design would have to be submitted as a Value Engineering proposal. For purposes of the prequalification submittal, assume that the redesign will not be part of the work.*
5. Likewise, will other types of monitoring devices/methods be acceptable if equal to, or better than, what is specified in the final design? For instance, fiber optic sensors require different readout devices. Similarly, RFQ language denotes approximate quantities of “multiplexers (42), and data loggers (42)”. Since “42” seems relatively defined, how flexible is the final design come construction time, if more efficient monitoring devices/methods (as well as sensors) are available?  
*See response to question 4.*
6. What will the process be for the qualified SHM contractor to utilize alternate sensors and monitoring devices/methods?  
*Alternate products that meet the specifications shall be submitted for review and approval. Proposed changes that affect multiple elements of the system design shall be submitted as a Value Engineering proposal. Either of these submittals would occur after the project has been awarded.*

7. Primarily regarding the SHM program/design, when will the final design be available to review?  
Can we have access to the most recent preliminary design (or at a minimum, the SHM design)?  
*The final design will be posted when the project is advertised for bidding, January 25, 2017. Preliminary designs will not be available for preview. The qualifications submittal should be based on the information provided in the RFQ.*
  
8. Can the SHM qualified contractor consist of a team from different organizations, with one organization taking the lead/contract? Some sensor technologies/monitoring systems (and potential alternates) may necessitate (or best optimized with) specialized expertise outside of one organization.  
*Yes, the SHM work may be performed by multiple entities working cooperatively, as subcontractors to the River Bridge Arch Span Contractor. The qualifications of the entire team need to be approved. A separate subcontract request and authorization (DOT standard subcontract Form 830231) would need to be submitted for each company after the contract is awarded.*
  
9. We wanted to see if the submitted questions and responses are available for review.  
*Yes, the submitted questions and responses will be available for review on bidx and dot sites.*

Prepared by Sara Davis, Benesch, on behalf of the Iowa DOT, 9/8/16