

Call 03 Bridge Repair on I-10 over the Pascagoula River, Bridge No. 65.4B, known as Federal Aid Project No. STBG-0010-01(165) / 108043301 in Jackson County.

Q1. Please provide the as-built drawings for the existing bridge structure.

A1. The as-built drawings may be downloaded at the following link:

<https://file-exchange.mdot.state.ms.us/dl/?f=da5bc2681bc8d6133d6b5910a6f853aa48184438>

Q2. A couple of our applicators are looking at submitting a proposal to install the carbon fiber for the cap repairs on the above mentioned project. The specifications state “One of the following FRP composite systems, or an approved equal, shall be used to repair the bent cap...” however, there are no instructions or direction on how to submit for an approved equal. I am reaching out to gain clarification on the following: **1.)** What documents are required to submit in order to be considered “approved equal”? **2.)** This application appears to be a bond critical application. In order to supply the correct amount of material and appropriate amount of layers to achieve the desired repair, we ask that the department provide as-builts of the repair location and what capacity the FRP is to achieve? **3.)** If the above request is unavailable, can the Department at minimum provide strength of concrete and reinforcement in concrete? **4.)** What design guide is the Department requiring to be used for this project, AASHTO or ACI 440?

A2. **1.)** Material properties and testing information documentation for the proposed FRP system should be submitted to the Director of Structures, State Bridge Engineer for approval. **2.)** Please refer to the FRP notes on Page 59 of the proposal for FRP strength requirements. The as-built drawings can be downloaded from the link provided in Answer #1. **3.)** The concrete strength is 3.5 ksi and the steel is 60 ksi. **4.)** Both AASHTO and ACI 440 are required.

Q3. General Notes for the FRP and Epoxy Repairs state that concrete spalled areas on the bent cap shall be repaired prior to applying the FRP wrap and that this work will be absorbed under Pay Item 907-824-PP003, Bridge Repair FRP Wrap. The Contractor is unable to access the bent cap prior to bid to determine the extent of the incidental patching. Can MDOT please provide an estimated square footage of the anticipated spalled areas so the Contractor can bid accordingly?

A3. For bidding purposes, 2 to 3 square feet may be assumed.

Q4. Details for the FRP application only show one face of Bent 185 (15'-6" x 3'-6"). Will the Contractor be required to wrap the all faces of the cap within these limits (top, bottom, and both vertical faces) or is it only limited to one vertical face with multiple layers?

A4. All faces of the cap shall be wrapped.