## Call 11 Bridge Preservation on I-55 from Batesville to Hernando, known as Federal Aid Project Nos. NHPP-9999-06(018) / 106720302, 106720303, & 106720304 in Desoto, Panola, & Tate Counties.

- Q1. Where can I find a spec for the concrete mat? I did not see a section 907-832-PP003 in the specs.
- A1. The "PP" designation indicates a "per plans" pay item. All pertinent information regarding this pay item can be found on Working Number BCM-1, Sheet 22 in the plans.
- Q2. Can we get the plans for the existing bridges?
- A2. As-built plans may be downloaded at the following link: <u>https://file-</u> <u>exchange.mdot.state.ms.us/dl/?f=9768ef9cabb1cd1a33d1b48be8869be5d1ff1f91</u>
- Q3. The schedule of items have two pay items for handling the temporary work zone traffic barriers Concrete Median Barrier (Line Item 340) and Remove and Reset Concrete Median Barrier (Line Item 350). The quantities assigned to each item and the summary shown on plan sheet 20 assumes the contractor will install barriers at all bridge locations at the same time (Item 340) and then remove and reset for Phase 2 (Item 350). If the contractor chooses to complete work at a few bridge locations prior to moving to the remaining locations in order to minimize the amount of barrier set in place at one time, will MDOT still pay the quantities for Line Item 340 as shown for initial installation at each location or will the additional remove and reset get paid for under Line Item 350 as an overrun?
- A3. The intent is to pay for Concrete Median Barrier, Precast one time (Phase I) per bridge using pay item 619-F1001. When the Barrier is moved and reset for Phase 2, payment will be made using pay item 619-F2001. It is not anticipated that all barrier will be in place on all bridges at the same time.
- Q4. The time determination schedule included in the proposal shows that MDOT has allotted 99 working days to complete all of the bridge repair items of work in this contract. Even if all 126 working days were used for bridge repairs this equates to only 7 working days per bridge to perform concrete structural repairs, install falsework, raise the structure, remove and replace bearings, install seismic retrofits, install temporary deck shoring, install traffic barriers, perform deck repairs, and tear everything down. Additionally, per note 13 on sheet 6, "Superstructure repairs for load bearing elements, including but not limited to bearing replacements, seismic retrofits, and T-beam repairs, shall be performed prior to hydro-demolition and replacement of bridge deck." This means multiple bridge repair activities cannot take place simultaneously at one location. Even with multiple crews working multiple locations, we do not believe the 126 working days is anywhere near enough time to successfully and safely complete the required scope of work. Will MDOT consider substantially increasing the contract time?

- A4. See addendum.
- Q5. Section 904 on Sheet 46 of the proposal states that the Notice to Proceed/Beginning of Contract Time date will be April 15th, 2019. There is currently a 10-12 week fabrication lead time for the type of bearing assembly required on this project and most fabricators are taking 2-4 weeks to prepare shop drawings. There is also a substantial amount of engineering and field verification that must be performed for each bridge. Given that bridge repair work will require the full amount of contract time to complete and considering that jacking and bearing repairs must be performed prior to deck work, bearing material must be on-hand and support plans must be approved prior to starting work. Will MDOT consider delaying the NTP/Beginning of Contract Time date to allow the contractor enough time to procure the necessary material and prepare the required submittals?
- A5. See addendum.
- Q6. Will MDOT please provide the as-built drawings for each structure so the Contractor has as a reference when preparing its bid?
- A6. See Answer #2.
- Q7. On multiple plan sheets under the scope of work section for each bridge the note associated with removal of debris references SP 907-202-2. This section is not included in the bid package. Can MDOT please provide a copy of this SP?
- A8. See addendum.
- Q9. Notes for the temporary shoring requirements on Sheet 8 state that during hydrodemolition the repair area shall be analyzed as if the bridge deck does not carry load. The contractor's engineer shall also determine the shoring required to support the span's dead load, traffic load, and any deflection that occurs in the girders for the duration of the repairs. Designing a support system as if the structure is unable to support its own weight or traffic loads simply because the top 2" of the existing concrete deck is removed along only half the width of the bridge at any given time is neither practical nor cost effective. Since it is ultimately the contractor's responsibility to design a shoring system capable of protecting the structure for the given scope of work, will MDOT allow the contractor's engineer to use its own realistic assumptions when analyzing the structure in order to determine the most practical temporary shoring system?
- A9. It is the Contractor and his Engineer's responsibility to insure there is no damage of any component at any time during this project. If damage does occur, it will be repaired by the Contactor at no additional cost to the State.
- Q10. If the Contractor elects to perform day and night work, would two 12-hour shifts still be considered 1 working day?

A10. Yes.

- Q11. Does the site grading item apply to the slopes under the bridges?
- A11. Yes.
- Q12. Is excavation to achieve the correct grade for the new stone on the shoulders to be absorbed into the stone item?
- A12. Yes.
- Q13. At Slocum Road: Can the milling, asphalt, and guardrail work for one lane be performed on a separate weekend than the concrete overlay?
- A13. Yes, it will be allowed if requested.
- Q14. How do the bracket assemblies shown on Sheet 147 and 159 get paid? Are these incidental to the bearing replacement item or should there be a different item for furnishing and installing the new brackets? This appears to be unique to the Belmont Road location.
- A14. The bracket assemblies are incidental to the bearing replacement pay item.
- Q15. Can MDOT provide more details for the bearing replacement work for the abutments at the Tallahatchie Relief bridge locations? The existing bearings appear to be cast into the existing end wall/continuity diaphragm at the abutments and none of the conditions in the provided bearing details seem to match this field condition.
- A15. See addendum.
- Q16. What is the size of bolt and minimum embedment depth for the mechanical anchor associated with the seismic retrofit brackets? There are very specific notes regarding the mechanical anchors and MDOT states the provided design is based on using Hilti HDA-T anchors. Can MDOT provide the size and depth information based on the HDA-T anchor since this is what the repair has been designed around?
- A16. Anchors shall be designed by a Contractor employed Mississippi Professional Engineer.
- Q17. Note 6 under the Seismic Retrofit section of the general notes states: "A complete set of support plans and mechanical anchoring specifications along with design calculations shall be submitted to the director of structures...for review prior to construction and shall bear the design engineer's seal." Can MDOT please confirm that this is only required if the Contractor elects to use a mechanical anchor other than the Hilti HDA-T mechanical anchor system? It appears to read that way in the general notes, but confirmation is requested.

- A17. Design calculations are required regardless of the anchor system selected.
- Q18. Notes for the Seismic Retrofit shown on Sheet 7 states: "Seismic retrofit includes...removal and replacement of bearing assemblies at Bents 2 and 5 on the NB and SB bridges of S.R. 4." This note suggests that the removing and replacing the bearing assemblies are incidental to the seismic retrofit item of work, however, the quantities that are included for the bearing replacement item of work (32 each/bridge) suggests that the bearings are paid for under the bearing replacement item and not the seismic retrofit item. Can MDOT please confirm that the bearings removed and replaced at Bents 2 and 5 at the S.R. 4 bridges will be paid under the bearing replacement item and this is not incidental to the seismic retrofit item?
- A18. See addendum.
- Q19. There is no temporary striping item listed, will there need to be one for swapping traffic during the phasing of work?
- A19. See addendum.
- Q20. How are the brackets shown on Sheet 147 & Sheet 159 to be paid?
- A20. See Answer #14.
- Q21. At Belmont Road, are the W6X25 beams and concrete to be absorbed in the replacement of bearing pad item for those particular bridges?
- A21. Yes.
- Q22. Can you provide a location and/or quantity breakdown for the 276 bearing replacements (type BAI-1 through BAI-6)? Sheet 16 (BL-1) seems to depict the steel bearing extension bid item only.
- A22. See addendum.
- Q23. On page 9 in the plans it shows the typical roadway section from 200 ft from abutment after bridge deck. Only describes the milling operation. Can the department specify whether it is a concrete roadway with an asphalt overlay or a true asphalt roadway? Can the department also specify what thickness the total concrete or asphalt roadway currently has?
- A23. The roadway has full depth asphalt, 8" and variable for the Desoto County bridges. Tate County is concrete overlaid with 5" and variable asphalt. Panola County has both full depth asphalt, 8" and variable and concrete overlaid with asphalt 5" and variable.
- Q24. Joint Prep states on sheet number 18 note 5 that it will be paid for using pay item 808-A001. Is there a pay item with this number available?

- A24. See addendum.
- Q25. Pay Item 907-687-A001---Traffic Recorder Classification Permanent System Are there 4 different sites to be installed? If so where are their locations?
- A25. See addendum.
- Q26. We are unable to fit this project into a 128 work day schedule. Can the contract time be extended to 200 work days?
- A26. See addendum.
- Q27. The specified bridges associated with the project all have no approach slabs but each bridge has 10,800 lbs for undersealing deep injection and 6500 lbs for undersealing concrete pavement. Can the department explain in detail what will be done at each location with those quantities? Example: Is the contractor supposed to work 100-200 feet on either side of the bridge deck and perform the injections for those quantities in those areas? 2nd question: What depth or depths is the contractor supposed to inject at for the "deep injection" pay item?
- A27. Refer to Plan Sheet 22, Note 7 for details.
- Q28. For "undersealing deep injection" and "undersealing concrete pavement" items can you please explain where the material is going to be injected? Is there a standard plan or drawing? Should the contractor expect to work 100 ft back on pavement going towards the bridge deck? Please give details as to where the polyurethane material is going to be placed.
- A28. See Answer #27.
- Q29. For "Undersealing deep injection" item, is there a specific depth or depths the material should be injected at, and will Dynamic Cone Penetrometer testing be required before and after injections?
- A29. See Answer #27 and refer to Special Provisions 907-420-2 and 907-420-4.
- Q30. For "undersealing deep injection" and "undersealing concrete pavement" items the quantities are specified as 10,800 LBS for "undersealing deep injection" and 6,500 LBS for "undersealing concrete pavement" at each location. Is the location classified as both sides of the bridge or just one side of the bridge? Please explain if the contractor should expect there being 18 locations or 36 locations if you are to work both sides of the bridge.
- A30. Each location refers to both sides of the bridge.
- Q31. A note in the plans regarding a Waterproofing Admixture refers to Special Provision 907-713, however the proposal does not contain this SP. Please clarify.

- A31. As stated in Special Provision 907-804-1, "A waterproofing admixture meeting the requirements of Subsection 713.02.4 shall be used in the concrete mixture". The note is to be disregarded.
- Q32. Can Zone Guard Steel Barrier be used in place of the concrete median barrier?
- A32. No.
- Q33. Could you provide clarification regarding site grading and placement of concrete mat? Such as, will borrow excavation be required for the slopes that are severely eroded? Will the contractor be required to grade the embankment slope between the bridges? Will contractor be allowed to excavate under the bridge at the end bents to allow enough head room to place mats?
- A33. It is the intent that any borrow required is absorbed in the site grading item. The Contractor is responsible with bringing the slopes under the bridges to grade prior to placement of concrete mat.
- Q34. As a follow-up to Question #5, MDOT has extended the NTP/Beginning of Contract Time date to May 13, 2019, however, the project is now bidding a month later so there has been no additional time given to make construction preparations for items that will be on the critical path (i.e. engineered lift plans, field measurements, fabrication). Anticipated lead times have been detailed in Question #5. **1**.) Is it MDOT's intent to have the contractor factor fabrication lead time and construction preparation activities into the 'C' time? This is typically designated for construction time. Please advise because this could have a significant impact on how 'C' time is calculated. **2**.) Will MDOT please consider pushing the NTP/Beginning of Contract Time date back to allow the contractor enough time to procure the necessary materials and perform the required field measurements and engineering associated with time sensitive items?
- A34. **1.**) Submittals, field measurements, and fabrication of items may begin at Notice of Award. It is up to the Contractor as to how this time is calculated and included in Part C of the bid. **2.**) No.
- Q35. Traffic Counters Sheet 40 and 47 states "Traffic counters will be removed and replaced at locations to be determined by MDOT State Planning Engineer." Will the contractor need to establish electric power service accounts with Entergy or will the existing power service be used?
- A35. The existing power service will be utilized.
- Q36. 1.) After reviewing the work sites, it appears there is more footage of chain link than stated on the bid packet. Will some of the chain link fence be replaced with the woven wire fence? 2.) The areas with the woven wire fence is not detailed on the location, will most of this type of fence be on the ROW? If so are we to expect to clear the excessive vegetation to install new fence?

- A36. 1.) Yes. 2.) The woven wire fence will tie to the chain link fence at the bridge abutments and go to the ROW line and may be adjusted by the Engineer. Refer to Subsection 607.03.1 for clearing requirements for fence installation.
- Q37. On the hydrodemolition, is the minimum cut 2" or will there be an allowance like a 2" cut plus or minus an inch? The allowance allows for large aggregate still standing up while the cement is blown away from all the sides but the bottom.
- A37. The minimum cut will be 2" or to sound concrete. If sound concrete is reached prior to reaching a depth of 2", further removal to achieve the 2" will not be required.
- Q38. Traffic Counters Sheet 40 and 47 states "Traffic counters will be removed and replaced at locations to be determined by MDOT State Planning Engineer." Will the existing cellular service be utilized or will the contractor need to establish a new cell account?
- A38. The existing cellular service will be utilized.