## **Montana Department of Transportation**

2701 Prospect PO Box 201001 Helena MT 59620-1001

Greg Gianforte, Governor

Malcolm "Mack" Long, Director

Date: November 17, 2021

zero serious injuries

Subject: **Request for Proposals** 

Bridge Underwater Inspection Term Contracts 2022-2024

To Whom It May Concern:

The Montana Department of Transportation is accepting proposals from consulting firms interested in a term contract for performing diving inspections of underwater bridge components at various locations throughout Montana. At this time, 138 bridges have been identified for underwater inspection.

MDT intends to establish term contract(s) to utilize consultants on an "as-needed" basis for the work described herein. At this time, the intention is to award two (2) agreements that will be approximately \$600,000 each, for an approximate three-year period from January 2022 through December 2024. MDT reserves the right to revise the number of term contracts, the contract values, or contract timeframes, depending on the responses received. Extension(s) of contracts, by mutual agreement of both parties, may be made at one (1) year intervals, or any interval that is advantageous to MDT. Contracts, including any renewals, may not exceed a total of five (5) years.

Teams may be established as necessary; however, it is expected that the prime consultant will be capable of completing the vast majority of the work. As a rule, the prime consultant must complete at least 50% of the work for a specific task assignment unless written exception is given.

Montana professional engineering licensure is required for this work and must be in-hand at the time your proposal is submitted. If this requirement is not met and clearly identified in the proposal, your proposal will be considered non-responsive.

If your firm is interested, please submit a proposal as described herein.

#### **SCOPE OF WORK**

#### 1. General

- A. Provide the necessary personnel, equipment, and expertise to complete underwater diving inspections from the mud line to the water surface for various substructure types.
- B. The inspections will involve:
  - 1) A thorough visual inspection, if possible (tactile if not), of each substructure element.
  - 2) A determination of the amount of scour in the area of the bridge, indicating to what extent, if any, that the footings are exposed or undermined.
  - 3) Noting the existence of any other condition which may adversely affect the structure or require remedial attention. Examples of this would be noting the presence and type of drift present in the stream, estimating the chances of the drift hanging up on substructure units, and noting the existence and location of any underwater foreign or unexpected objects in the vicinity of the bridge.
  - 4) A complete and detailed written report documenting the results of the inspection. The report will include detailed cross-sections and a contour map of the area under the bridge produced using soundings or other approved methods.
  - 5) Data entry and uploading of documentation into Montana's Structure Management System (SMS): Including but not limited to element level defects, photos, notes, and attribute values.

#### 2. Personnel

- A. Provide a Montana licensed professional engineer for oversight and assurance of inspection quality.
- B. Bridge Inspection Team leader. Designate one member of the dive team as the Bridge Inspection Team Leader. The Bridge Inspection Team Leader must meet one of the following qualifications:
  - 1) Be a licensed professional engineer in the state of Montana and have successfully completed an FHWA approved comprehensive bridge inspection training course, and have at least 1 year of inservice bridge inspection experience including both NBI and Element Level inspection.
  - 2) Have a minimum of five years' in-service bridge inspection experience including both NBI and Element Level inspection and have successfully completed an FHWA approved comprehensive bridge inspection course.

- 3) Have a bachelor's degree in engineering from a college or university accredited by or determined as substantially equivalent by the Accreditation Board for Engineering and Technology; have successfully passed the National Council of Examiners for Engineering and Surveying Fundamentals of Engineering examination; and have at least two years of in-service bridge inspection experience including both NBI and Element Level inspection; and have successfully completed an FHWA approved comprehensive bridge inspection training course.
- 4) Have an associate's degree in engineering or engineering technology from a college or university accredited by or determined as substantially equivalent by the Accreditation Board for Engineering and Technology; have four years of in-service bridge inspection experience including both NBI and Element Level inspection; and have successfully completed an FHWA approved comprehensive bridge inspection training course.
- C. The Bridge Inspection Team Leader will be on site at all times during the inspections. The Bridge Inspection Team Leader is responsible for the final evaluation and documentation of each structure.
- D. All members of the dive team will have successfully completed either an FHWA approved comprehensive bridge inspection training course based on FHWA's Bridge Inspector's Reference Manual (BIRM) or an FHWA approved underwater diver bridge inspection training course and be trained in accordance with 29 CFR Part 1910, Subpart T, Commercial Diving Operations; Occupational Safety and Health Administration Standards (OSHA). The consultant will submit copies of the OSHA mandated annual physical examinations for each dive team member.
- E. All inspector certification documentation for an inspection team will be submitted to MDT and approved before inspectors do any field work.

## 3. Coordination and Scheduling

- A. Inspections must be completed within the month that they are listed in the Term Assignment RFP. Unless otherwise indicated by MDT, all inspections will be completed within the month they are due based on their inspection frequency.
- B. Before the inspections begin, a tentative schedule of diving operations will be provided to the Bridge Management Section so that the District Offices may be informed ahead of time when the divers will be in their district. Periodically, during the course of the project, updates to the schedule will be provided as adjustments are made. The lines of communication between the diving contractor and the department will remain open at all times.

C. Contact the Fisheries Division with Montana Fish, Wildlife & Parks (FWP) at (406) 444-5383 prior to transportation of a boat or marine equipment including but not limited to barges, dredges, docks, piers, backhoes, etc. into Montana. Montana FWP will inspect all vessels and equipment before they are allowed in or near the water. Provide adequate notice prior to equipment coming on-site so FWP can arrange for this inspection. Contact FWP to request how much prior notice is needed. It is illegal to transport aquatic invasive species into Montana. Wash all equipment thoroughly with high-pressure hot water, and ensure the equipment is drained and dried prior to entrance into Montana to avoid delays.

## 4. <u>Underwater Inspection</u>

- A. Conduct all diving operations in accordance with the applicable OSHA safety standards. Submit a copy of your firm's OSHA mandated Safe Diving Practices Manual.
- B. Provide all the equipment necessary to complete the inspection.
- C. Inspect all underwater elements visually where possible. Perform a tactile inspection when low visibility prevents a visual inspection.
- D. Provide a description of the streambed in general terms (mud, sand, gravel, rock, or a combination thereof).
- E. Inspect all substructure elements and document observations in accordance with the FHWA Bridge Inspection Reference Manual and the MDT Bridge Inspection and Load Rating Manual.
- F. Clean off all concrete surfaces and sound all concrete with a hammer for incipient spalls. Document location and dimension of all observed spalls. Note unusual cracking; the location, number and size of exposed reinforcement; and the conditions of exposed footing piles.
- G. Locate and dimension all section loss in steel piles or shells. A representative sampling of approximately 10 percent of the steel pipe piles will be measured for wall thickness of the steel pipe. An ultrasonic thickness-measuring device will be required for this operation. The diver will clean the steel of all marine growth and any loose protective coating before placing the transducer against the pile.
- H. Similarly, a representative sampling of timber piles will be bored or drilled to determine the extent of rot present. The holes left by this operation shall be plugged with creosote-dipped hardwood dowels.

#### 5. Scour

- A. Sounding will be taken in the areas under and adjacent to the structure, using either lead lines or ultrasonic depth sounding equipment. The soundings will be made along the circumference of all substructure components and along lines directly under the upstream and downstream edge of the bridge deck and parallel lines 50 and 100 feet upstream and downstream of the bridge. The soundings will be taken continuously if a recording depth sounder is used or at 10 to 20 foot intervals if spot sounding is used. Additional soundings will be made as necessary to identify change in slope locations. A contour map and a set of cross sections will be developed from the recorded data.
- B. Soundings will be referenced to the water surface, which shall be referenced to a point of known elevation on the bridge.
- C. If a footing is found to be exposed or undermined, the volume of the void must be dimensioned within an accuracy of ½ foot in each direction.

#### 6. Photography

- A. For identification purposes, photographs of the portal and profile views of each bridge inspected will be taken.
- B. Underwater photography will be used to document the findings of the inspection. Photographs will be required to illustrate the typical condition of substructure components as well as areas of substructure component distress. Where severe deterioration exists, a sufficient number of photographs will be taken to fully document the condition.
- C. Existing scour problems or conditions that show a potential for scour shall also be included in the photography. This would include photographs of undermined footings, adjacent scour holes and debris that may be on or near the bridge.
- D. A clear water box will be used in the event that turbidity makes normal photography impossible.

#### 7. Report

- A. For each bridge inspected, a report will be prepared which will include the following:
  - 1) An evaluation of the overall condition of the underwater components including photographs, sketches, and diagrams used to substantiate the findings.

- 2) Recommendations for any short-term or long-term repairs or maintenance.
- 3) Review most recent routine inspection notes and defects for substructure elements and comment on NBI Item (60) condition rating for bridge.
- 4) Conclusions as to the condition of the streambed (amount of scour, need for riprap, etc.). Included will be the contour map and cross sections mentioned above.
- B. The final report will be uploaded to SMS under Inspection Documents within 60 days of completion of the fieldwork. All inspection data including but not limited to element level defects, notes, photos, and attribute data changes will be recorded in SMS, and the inspection report will be submitted to the MDT contract manager in QC review status within 60 days of inspection. All inspection reports and data will be final within 90 days of completion of fieldwork.

## **LOCATION**

Various – Statewide

#### PROJECT/TASK SCHEDULE AND DELIVERABLES

The schedule will be developed and negotiated separately for each individual term/task assignment. At this time, it is anticipated that deliverables will generally follow those described in MDT's Consultant Activity Descriptions (as applicable):

<a href="http://www.mdt.mt.gov/other/webdata/external/cdb/ACTIVITY\_DESCRIPTIONS/CONSULTA">http://www.mdt.mt.gov/other/webdata/external/cdb/ACTIVITY\_DESCRIPTIONS/CONSULTA</a>

NT DESIGN 2500 MU.PDF

## STANDARDS, SPECIFICATIONS, AND POLICIES

Work is expected to follow MDT's various Manuals, Guides, and Policies. These items may be found on MDT's Design Consulting web page at: http://www.mdt.mt.gov/business/consulting/.

## PROPOSAL SUBMITTAL

Submit one (1) electronic version (Adobe© PDF format) of the proposal. Hard copy proposals will not be accepted.

Submit the electronic version by uploading to the State of Montana File Transfer Service (ePass) site, which can be accessed at this link: <a href="https://transfer.mt.gov">https://transfer.mt.gov</a>. To upload to ePass, an account must be created unless the person who is uploading already has an account. Uploading instructions can be accessed at <a href="https://transfer.mt.gov/Home/Instructions">https://transfer.mt.gov/Home/Instructions</a>. When your proposal has been uploaded, the ePass system will prompt you for an email. Please send this email of your uploaded proposal to the following individuals:

Sheryl Tangen: <a href="mailto:stangen@mt.gov">stangen@mt.gov</a>
David Holien: <a href="mailto:dholien@mt.gov">dholien@mt.gov</a>
Shannon Gilskey: <a href="mailto:sgilskey@mt.gov">sgilskey@mt.gov</a>

# The Department must receive the proposals for this RFP no later than 3:00 PM MST, December 13, 2021.

Regardless of cause, late proposals will not be accepted and will automatically be disqualified from further consideration. It shall be solely the vendor's responsibility to assure delivery at the specified office by the specified time. Offeror may request the State return late proposals at vendor's expense or the State will dispose of late proposals if requested by the offeror. (See Administrative Rules of Montana (ARM) 2.5.509.). If no request is made, late proposals become the property of the Department. All proposals submitted on time become the property of the Department.

The costs for developing and delivering responses to this solicitation are entirely the responsibility of the offeror. The State is not liable for any expense incurred by the offeror in the preparation and presentation of this submittal.

## TENTATIVE RFP/SELECTION SCHEDULE

The anticipated schedule for consultant solicitation and selection for this contract is as follows (subject to change):

November 17, 2021: RFP released

December 13, 2021: Proposals due to be submitted to MDT Consultant Design

December 22, 2021: Proposals reviewed, rated, and ranked by the evaluation committee

January 5, 2022: Consultant Selection Board meeting to select consultant

There are three (3) members on the evaluation committee for this RFP (subject to change):

1. MDT Bridge Inspection Engineer

2. MDT Bridge Structural Engineer

3. MDT Bridge Structural Engineer

#### **PROPOSAL CONTENTS**

The proposal must contain the information listed in this section. The proposal is **limited to ten** (10) pages, not including the required Appendices. A single cover jacket/title page is allowed if desired and will not count in the page limit. Each page is defined as one side of a letter size sheet (no larger than 8 ½" x 11"), minimum font size of 10. Evaluation of information will begin with the first page immediately following the cover jacket/title page, and every page will be counted, in order, from that point forward, including any table of contents or divider pages the firm wishes to include. Once the page limit is reached, any information included thereafter will be removed and not considered or scored. Please organize your proposal in the same order and numbering format as shown below, which will assist MDT in reviewing your proposal:

#### **Ouestions**

# 1) Team Qualifications

Provide a discussion on how the team you propose to use for this contract (including subconsultants, if used) is best qualified to respond to the requirements of this contract. Discussion should focus on the requirements for this specific contract, particularly your team's expertise and experience, as it relates to the work described in the "Scope of Work" section above. Provide examples of previous related experience as it relates to these services. Identify professional licensure of staff that satisfy the requirements for this contract. Include an organization chart that indicates the staff identified for this contract, their area of expertise, registration, and office location(s). Also briefly discuss your compatibility of systems, software, and equipment (i.e. CADD software, word processing software, etc.), and experience with these systems, software, and equipment. The Department's standard design software is Autodesk® technology included in the Architecture, Engineering & Construction (AEC) Collection. Describe any special equipment or software you intend to use. Resumes may be considered as supplemental information for scoring this question.

#### 2) Approach to Task Assignments

Transportation work has many challenging aspects, and the development and delivery of a successful work product that addresses and mitigates specific challenges is of utmost interest to MDT. Discuss the challenges you foresee as they relate to this type of work, your strategy for addressing these challenges, and your specific experience in implementing the strategies identified. Describe your quality assurance/quality control process. Include a discussion on the current and projected workload of key personnel and the effects that workload would have on your ability to successfully complete work under this contract. Provide a discussion on your overall strategy for delivering work in a timely manner, including fast-tracked or emergency tasks and changing priorities.

#### **Appendix A: Resumes**

Include brief resumes for the key personnel to be assigned to the contract. Resumes are limited to one (1) page per person.

#### **Appendix B: Cover Page Form**

Include a completed version of MDT's standard cover page form, available at the following location:

 $\underline{http://www.mdt.mt.gov/other/webdata/external/cdb/MDT\_CDB\_002\_Proposal\_SOQ\_Cover\_Sheet.pdf}$ 

Information presented in the cover page form will not be considered in proposal scoring.

#### **Appendix C: References**

Submit references that includes a minimum of five (5) separate contracts from the past three (3) years. If applicable, you may submit multiple contracts for a single client. Each contract must pertain to work similar to the proposed scope of services. Include client name, a currently employed primary contact person, an alternative contact person, corresponding valid phone numbers and emails for both contacts, a range of contract value, and a brief description of the work performed. If MDT needs to use these references for the

Past Performance Score (as described in the "Evaluation of Proposals" section below) and is unable to contact the required number of references after a reasonable effort, the firm will receive a zero for the missing reference(s).

## **EVALUATION OF PROPOSALS**

All proposals will be evaluated in accordance with the following factors:

- 1) Team Qualifications (100 points possible)
- 2) Approach to Task Assignments (50 points possible)
- 3) Record of past performance (30 points possible)
  - a) If two (2) or more MDT evaluations specific to the discipline for this contract are available for the consultant, the average score of these evaluations will be used. Evaluations for Project Management & Overall Performance will also be included.
  - b) If fewer than two (2) MDT evaluations specific to the discipline for this contract are available for the consultant, but there are two (2) or more MDT evaluations are available for other work disciplines, the consultant's current overall past performance score from MDT evaluations will be used.
  - c) If there is only one (1) MDT evaluation available for the consultant, the record of past performance score will be an average of the MDT evaluation and one (1) reference check from the references provided in the unbound attachment.
  - d) If no MDT evaluations are available, the average score of two (2) reference checks from the references provided in the unbound attachment will be used for this score.

Regardless of partnership/teaming relationships, the past performance of the prime consultant will be the past performance scored that will be used for this score.

All Proposals will be evaluated using the following basic scoring methodology:

- Outstanding/Exceptional response: 90-100% of the available points
- o Good response: 70-90% of the available points
- o Average response: 50-70% of the available points
- o Poor response: 30-50% of the available points
- o Qualifications not clearly met: 0-30% of the available points

Following the review, evaluation, and rating of all proposals, the final results will be presented to the Consultant Selection Board at the MDT Headquarters Building. At this time, the Consultant Selection Board will select the most qualified firm(s) for TERM CONTRACT(S). The Board may consider any proposal scoring within 2% of another proposal as equally qualified and take into account its knowledge of the firms' workload, past performance, and familiarity with the specific work to be performed in selecting the most-qualified consultant(s).

## SELECTION OF CONSULTANTS FOR TASK ASSIGNMENTS

If multiple consultants are selected and multiple term contracts are awarded, task or work orders (term assignments) will be awarded through an additional qualifications-based selection procedure. This selection procedure will be comprised of selecting a firm in accordance with the following weighted factors:

## 1) Qualifications for specific Task Assignment (60 points possible)

- a) Using the proposals submitted in response to this RFP and work performed with MDT since the submittal of this proposal: an evaluation of the consultant's qualifications as related to the specific knowledge, skills, and abilities required for the individual task assignment, including familiarity with the region in which the task assignment is located. Firm office location is not the determining factor for this score. (50 points possible)
- b) As relating to this type of work, the firm's current workload and amount of recent work with MDT. (10 points possible)

## INDIRECT COST RATE REQUIREMENTS

Proof of the firm's Indirect Cost Rate (overhead rate) is *not required* with this proposal submittal. However, an Indirect Cost Rate may be required prior to executing a contract according to MDT's Indirect Cost Rate Requirements:

All submitted indirect cost rates must be calculated in accordance with 23 CFR 172 for the cost principles of 48 CFR part 31 and include the required items identified in the MDT Indirect Cost Rate Policy located in Appendix A of the Consultant Services Manual on the MDT Internet website.

http://www.mdt.mt.gov/other/webdata/external/cdb/consultant\_manual/consultant-designmanual combined.pdf

Do <u>not</u> show any actual numerical financial information such as the overhead rate or personnel rates within your proposal. Specific cost information of the firm or team should not be part of the proposal.

## AGREEMENT REQUIREMENTS

Contract agreements will generally be administered on a cost plus fixed fee basis. The contracts will have negotiated cost ceilings. If a consulting firm is selected for a specific contract and a contract agreement is successfully negotiated, certain financial information will be required as part of the contract agreement. As described in the <a href="Indirect Cost Rate Requirements">Indirect Cost Rate Requirements</a> section above, all Consultants and subconsultants must provide the Department with an Indirect Cost Rate (as applicable) audited (when applicable) in accordance with 23 CFR 172 for the cost principles of 48 CFR Part 31 and based on the firm's latest completed fiscal year's costs. Personnel rates, profit, and direct expenses must be clearly outlined and provided to the Department. The standard MDT agreement can be found at the following address: <a href="http://www.mdt.mt.gov/other/webdata/external/cdb/forms/pdf/General-Terms-and-Conditions.pdf">http://www.mdt.mt.gov/other/webdata/external/cdb/forms/pdf/General-Terms-and-Conditions.pdf</a>

Do not submit actual numerical financial information within this proposal.

#### **STATE OPTION TO AWARD**

While the State has every intention to award a contract resulting from this RFP, issuance of the RFP in no way constitutes a commitment by the State to award and execute a contract. Upon a determination such actions would be in its best interest, the State, in its sole discretion, reserves the right to:

- Cancel or terminate this RFP (18-4-307, MCA);
- Reject any or all proposals received in response to this RFP (ARM 2.5.602);
- Waive any undesirable, inconsequential, or inconsistent provisions of this RFP that would not have significant impact on any proposal (ARM 2.5.505);
- Not award a contract, if it is in the State's best interest not to proceed with contract execution (ARM 2.5.602); or
- If awarded, terminate any contract if the State determines adequate funds are not available (18-4-313, MCA).

## **SINGLE POINT OF CONTACT**

From the date this solicitation is issued until the consultant selection is finalized by MDT at the Consultant Selection Board meeting, offerors are not allowed to communicate with any state staff or officials regarding this solicitation, except at the direction of the Consultant Design Engineer. If unauthorized contact is made and the Consultant Design Engineer determines the context of the contact gives the firm an unfair advantage, the firm will be disqualified from the solicitation. Contact information for the single point of contact is as follows:

# **David Holien**

Acting Consultant Design Engineer
Montana Department of Transportation
(406) 444-6118 (Direct Line)
<a href="mailto:dholien@mt.gov">dholien@mt.gov</a>

#### DBE GOALS

There are no DBE goals for this work, but firms are strongly encouraged to utilize DBE firms if applicable. A Montana certified DBE list is available and can be found on the MDT web page, <a href="http://www.mdt.mt.gov/business/contracting/civil/dbe.shtml">http://www.mdt.mt.gov/business/contracting/civil/dbe.shtml</a>.

## **NONDISCRIMINATION COMPLIANCE**

Consultants will be subject to Federal and Montana nondiscrimination laws and regulations (see attached notice titled "MDT NONDISCRIMINATION AND DISABILITY ACCOMMODATION NOTICE").

If you have any questions, please contact me at (406) 444-6118, or by email at <a href="mailto:dholien@mt.gov">dholien@mt.gov</a>. I look forward to receiving your proposal.

Sincerely,

David Holien, P.E. Acting Consultant Design Engineer

#### Attachment

#### e-copies:

Jay Skoog, ACEC Executive Director-Montana Chapter Dwane Kailey, MDT Chief Engineer Dustin Rouse, MDT Preconstruction Engineer Damian Krings, MDT Highways Engineer Megan Handl, Acting MDT Civil Rights Bureau Chief Kelly Williams, MDT Consultant Plans Engineer Ryan Dahlke, Consultant Design Engineer MDT Consultant Design Bureau file Stephanie Brandenberger, MDT Bridge Engineer Amanda Jackson, MDT Bridge Management Engineer