



**TOWN OF PAGOSA SPRINGS  
PO BOX 1859  
551 HOT SPRINGS BLVD.  
PAGOSA SPRINGS, CO. 81147**

## **REQUEST FOR PROPOSALS**

**STRUCTURAL REHABILITATION for the  
HISTORIC RUMBAUGH CREEK STONE ARCH BRIDGE  
"RFP # TOPS\_11-21-2016"**

### **SUBMITTAL DUE DATE**

**Monday, November 21, 2016, 5:00 P.M.**

## **REQUEST FOR PROPOSALS**

The Town of Pagosa Springs (TOPS), is accepting project proposals and bids from qualified and experienced firms to perform structural masonry restoration services for the stabilization and restoration of a historic stone masonry arch bridge spanning Rumbaugh Creek in the Town of Pagosa Springs, Colorado. The selected contractor will be responsible for: shoring the undermined masonry arch bridge; temporarily stabilizing stone masonry spandrel, wing and retaining walls; reconstructing portions of the masonry arch bridge and spandrel walls; rebuilding portions of the wing walls; deconstructing and rebuilding several masonry retaining walls and completing landscaping and scouring improvements along a portion of Rumbaugh Creek. The higher retaining walls will have mechanically stabilized earth walls constructed behind the walls prior to rebuilding the masonry walls to relieve soil pressure acting on the masonry retaining walls. The project also includes upstream creek scouring mitigation along approximately 80 lineal feet of the upstream creek area.

### **Bid Proposal Timeline:**

RFP Advertisement:	Thursday, October 20, 2016
Mandatory Pre-Proposal Site Visit Meeting:	Friday, November 4, 2016 at 1pm
Deadline for Written Inquiries / Questions:	Thursday, November 17, 2016 at 5pm.
RFP Submittal Deadline:	Monday, November 21, 2016 at 5pm.

### **Mandatory Pre-Proposal Meeting**

A mandatory pre-proposal meeting has been scheduled for 1:00 p.m., Friday, November 04, 2016. The Rumbaugh Creek Bridge is located approximately 300 ft. North of US Highway 160 on North 1<sup>st</sup> Street in Pagosa Springs. All interested parties are to meet at the site. **Due to the unique nature of the project, Proposals from firms not represented at the mandatory, pre-proposal meeting and site visit will not be accepted.**

### **Written Inquiries / Questions**

All inquiries/questions regarding this RFP shall be submitted via e-mail to [rnovak@pagosasprings.co.gov](mailto:rnovak@pagosasprings.co.gov) on or before 5pm, Thursday, November 17, 2016, and shall contain **"RFP # TOPS\_11-21-2016"** in the subject line. A response with the original inquiry(s) / question(s) will be posted and sent via email to all interested parties within 48 hours.

### **RFP Submittal Instructions**

Respondents shall submit two (2) unbound hard copies in 11-point font and one (1) electronic version provided on a flash drive. Proposals shall be submitted in a sealed envelope clearly marked as **"RFP # TOPS\_11-21-2016"**, to either:

"PO Box 1859" or "551 Hot Springs Blvd" "Pagosa Springs, Co. 81147",  
for time and date recording **on or before 5 p.m. Mountain Time on Monday, November 21, 16.**

All RFPs must be received and time and date recorded by authorized Town staff by the above due date and time. **Sole responsibility rests with the offeror to see that their RFP response is received on time at the stated location(s).** Any responses received after due date and time will be returned to the offeror.

The Town reserves the right to reject any and all responses, to waive any informalities or irregularities therein, and to accept the proposal that, in the opinion of TOPS, is in the best interest of the Town of Pagosa Springs, State of Colorado.

Respondents shall, at minimum, include the following information in their response, in the order listed below:

1. Name of your company / organization.
2. Type of organization: (Corporation, Partnership, etc.).
3. Contact Person(s), Address, Telephone, Fax, e-mail.
4. Names, Address and contact information of the Partners and Subcontractors if applicable.
5. Information on the relevant experience of key personnel.
6. Project Construction Methodology and Approach.
7. Detailed project schedule and timeline.
8. Detailed budget, broken out by tasks including total proposed project cost.
9. Method and fees for handling change orders and additional identified work.

10. Describe your firm's experience with similar projects.
11. Submit three references for similar projects your company has completed within the last three years and contact information.

## HISTORY / BACKGROUND

The Rumbaugh Creek Stone Arched Bridge is believed to date from the late 1800s or early 1900s. The bridge is a semicircular arch bridge with a span of 7 ft. 10 in. and a width of 23 ft. 8 in. at the stream level. The voussoirs are 14 to 16 in. deep and are typically between 8 and 12 inches in width. The barrel vault appears to be the same depth of approximately 16 in. The spandrel walls are 10 ft. 8 in. wide and are 2 ft. 5 in. above the extrados at the arch crown on the west elevation and 3 ft. 3 in. above the arch crown on the east elevation (Figures 1 and 2).



Figure 1. Bridge as viewed from the West.

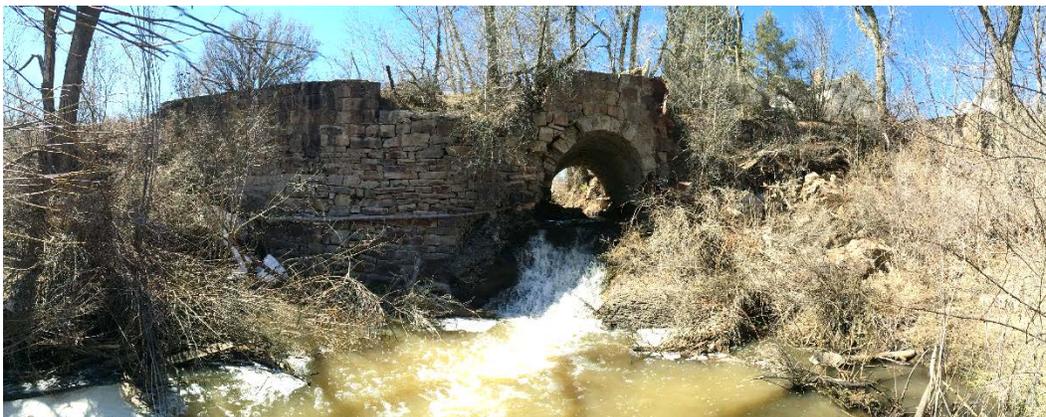


Figure 2. Bridge and adjacent retaining wall (image left) as viewed from the East. The spandrel wall is partially collapsed at the south abutment and has collapsed beyond the north abutment. The north wing wall and retaining walls have also collapsed and masonry fragments are visible in the bushes (image right).

In March 2015, a Historic Structure Assessment (HSA) was conducted by "The Collaborative, Inc." who documented the following conditions (Full Report attached):

*"Both the north and south bridge abutments have been undermined, resulting in complete loss of vertical support for the barrel vault (Figures 3 and 4). This is the most serious threat to the bridge and will likely*

*lead to total collapse if not mitigated in the near future (1 to 6 months). Without support, the barrel vault is not in compression and hangs from the remaining masonry by the weak tensile strength of the mortar, perhaps an occasional bond stone between the vault and the abutments and some friction produced by the arch thrust. Stabilization is required to save what is left of the barrel vault and prevent collapse.*

*The ring and spandrel wall on the east elevation are separating from the vault. The separation is minor at the north spring line and propagates over the crown to a width of 2 to 3 in. in width. The voussoirs on the south spring line are missing as is the remainder of the spandrel wall at this location. A crack has developed between the voussoirs and the spandrel wall on the west elevation which reportedly was not present last summer.*

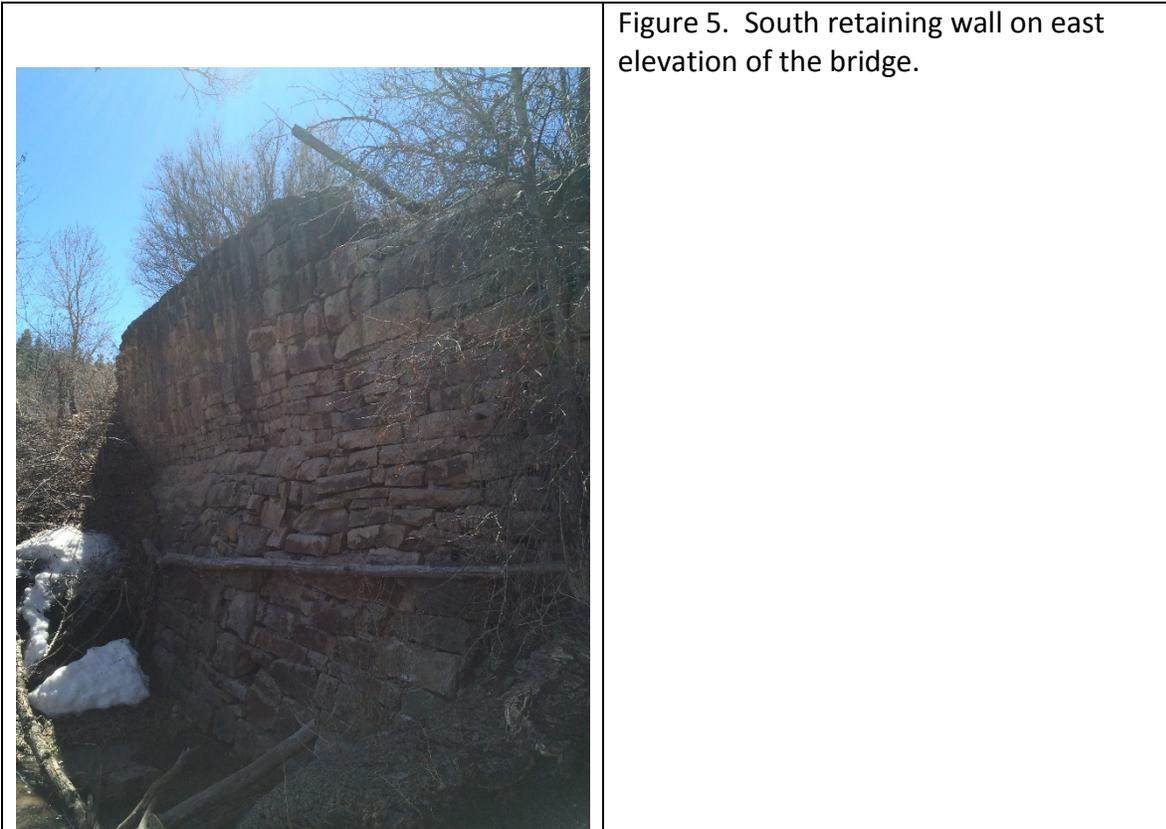


Figure 3. South abutment is completely undermined and lower portion of the vault has fallen into the streambed.



Figure 4. Undermined South and North abutments.

*The retaining walls on the east elevation of the bridge have either failed or are in danger of failing. The South retaining wall is founded on a battered stone wall below but from the bearing on the lower wall to the top of the wall, the upper wall is out of plumb by as much as 2 ft. over the 8 ft. height of the wall (Figure 5). As a result, the center of gravity of the retaining wall is outside the exterior face of the wall – a condition that is highly unstable.*



## **PURPOSE**

The purpose of this project is to stabilize and reconstruct the historic stone masonry arch bridge and adjacent stone masonry spandrel, wing and retaining walls to ensure the long term preservation & stabilization of this historic structure and to provide a usable structure for a future non-motorized multi-use path project that will be directed over the structure. Scour mitigation improvements in Rumbaugh Creek and landscaping upstream of the bridge will be necessary to prevent future erosion of the creek banks and bridge abutments.

## **SUMMARY OF WORK AND SERVICES**

Project work and services shall comply with the Engineers Stamped set of Construction Plans, Project Specifications and Creek Scouring Plan (all attached), which generally includes the following:

1. **Emergency shoring of the barrel vault to prevent collapse:** It is required to first place protection under the bridge to allow for workers' safety. A shoring system has been designed for installation under the bridge, however the contractor can propose an alternate shoring for

approval by the Town's engineering consultant. An Arch bridge shoring design plan is provided and attached. It is the Town's preference that the arch shoring is provided prior to spring run off season which can begin in late February.

2. **Confine the flow to the center of the channel:** Remove failed masonry pieces from the creek bed. One large masonry element is currently directing water flow toward the north abutment. In addition, use sandbags to protect the north and south abutments from further scour and confine the flow to the center of the creek bed and prevent debris from impacting the shoring. It is the Town's preference that this work is completed prior to spring run off season which can begin in late February.
3. **Temporarily shore the large retaining wall South of the east spandrel wall of the bridge:** A series of diagonal steel braces attached to a steel whaler that is placed horizontally against the wall is recommended. The whaler would shall be shimmed with wood wedges to ensure even bearing over the irregular surface of the wall. The diagonal braces will require pilings, small caissons or some other means of anchorage to provide sufficient reaction to resist the horizontal loads. The contractor can propose an alternate temporary shoring for approval by the Town's engineering consultant. It is the Town's preference that this work is conducted as soon as possible to ensure potential for collapse is mitigated.
4. **Rebuild failed portions of the bridge:** Rebuild the masonry abutments to support the barrel vault and restore the original appearance of the bridge. Rebuild the failed portion of the west spandrel wall. Rebuild the east spandrel wall and voussoirs.
5. **Deconstruct and rebuild stone retaining wall emanating from the southeast corner of bridge and the wing wall and retaining wall beyond the northeast corner of the bridge:** The top eight feet of the south wall is severely out of plumb and should be documented, photographed and stones numbered prior to deconstruction to the level of the battered wall below. Excavation of the soil behind the wall is required and a retaining structure such as a mechanically stabilized earth (MSE) wall should be built to retain the soil. The masonry retaining wall shall then be rebuilt, essentially facing the MSE wall. The remnants of the northeast wing and retaining walls should be used to rebuild the walls at this location. Photographs or other documentation should be consulted to determine the configuration of these walls.
6. **Permanent scour mitigation, bank stabilization and landscaping:** Per the creek scouring mitigation plans and specifications construct the remedial scour mitigation in the upstream creek for approximately 80 lineal feet. TOPS has applied for and will provide the U.S. Army Corps of Engineers 404 nationwide permit.

#### **GENERAL ITEMS**

- 1) An Archeologist shall be provided and present during any and all excavation work.
- 2) Selected contractor shall submit detailed payment requests that include detailed receipts, in accordance with specific portions of the scope of work and services.

#### **DELIVERABLES**

- a. Building/Construction permit. TOPS will provide the engineers stamped construction plans and project specifications and will pay the fee for such permitting. The awarded Contractor shall be the party issued the permit.
- b. All general contractors and sub-contractors are required to obtain a Town of Pagosa Springs contractors work permit.
- c. Contractor shall provide and perform the entire body of work as outlined in this RFP and as agreed to in the Project Contract agreement.

### **FEE and BID PROPOSAL**

Provide an itemized and detailed proposed project budget for your proposal, according to the entire scope of work and services section of this RFP.

### **ADDITIONAL INFORMATION**

#### **Interviews**

The Town of Pagosa Springs reserves the right to hold interviews with as many as five of the respondents as part of the selection process.

#### **Project Timeline**

TOPS wishes to see the project begin with the installation of the emergency shoring of the stone arch and confinement of the creek flow under the bridge, AND the Temporary shoring of the large retaining wall South of the east spandrel wall of the bridge, as early as possible. The actual restoration project may begin in early spring 2017 with full project completion prior to September 1, 2017.

#### **TOPS to provide**

- 1) Engineers Stamped set of construction plans.
- 2) Project specifications.
- 3) Creek Scouring Plan and U.S. Army Corps of Engineers 404 nationwide permit.
- 4) Historic Structure Assessment.
- 5) Background information that it is aware of and has access to either digitally or in hard copy. If in hard copy and the Contractor wishes to make copies, information will be provided on loan for the Contractor to make electronic or hard copies as is desired at contractor's cost.
- 6) Arch Bridge Shoring Plan.
- 7) Mortar evaluation.

#### **Insurance Requirements**

The selected contractor will be required to enter into a contract for services agreement with the Town of Pagosa Springs and must meet the insurance requirements as specified:

General Liability – \$1,000,000 Each Occurrence, \$2,000,000 General Aggregate

Automobile Liability –\$1,000,000 each Accident

Workers' Compensation and Employer's Liability – Statutory Limits

Professional Liability – \$1,000,000

Please Note: The above insurance amounts are the minimum required for this project. Proof of current insurance will be required upon selection, however, a contract will not be awarded to consultants that do not meet the minimum insurance requirements for this project.

### **Construction Security (Bonding)**

The contractor shall post Construction Security in the amount of one hundred percent (100%) of the contractor's contracted project cost. The construction security bond total shall be adjusted as needed, taking into consideration the existence of a stipulated sum or guaranteed maximum contract for the Required Improvements, the progress of construction, market conditions, costs of materials and labor and other relevant factors. Partial release of the construction security bond may occur at 50% completion. Construction security bond shall be released after 100% of the required improvements have been completed, finally accepted by TOPS, and conveyed to TOPS free of any contractor and material liens.

### **RFP SELECTION CRITERIA**

Firm selection will not be based solely on the lowest cost, but on the proposal that provides the best project value to the Town of Pagosa Springs. Selection criteria will include, but is not limited to:

- 1) Experience, qualifications and ability of the contractor, partners and sub-contractors to successfully complete the project.
- 2) Technical project proposal, construction methodology and approach to complete entire scope of work and services.
- 3) Proposed project timeline.
- 4) Itemized project budget and total proposed project cost.
- 5) Experience with similar projects.
- 6) References from similar past projects.
- 7) Results of an interview with project manager and subcontractors.

### **ATTACHMENTS**

- 1) Rumbaugh Creek Arch Bridge Rehabilitation Construction Plans set, E-Stamped, dated 06.23.2016, 5 sheets total.
- 2) Rumbaugh Creek Arch Bridge Rehabilitation project specifications, dated 06.23.2016
- 3) Mortar evaluation, dated 06.13.2016.
- 4) Arch bridge shoring design plan, dated 06.24.2015.
- 5) Up-Stream Creek scouring and landscaping Plan, dated 10.13.2016.
- 6) Schedule of Values Bid Form.
- 7) Historic Structure Assessment (HAS) provide by the Collaborative, Inc. This HSA contains both the Rumbaugh Creek Bridge and the adjacent Water Works facility. The water works facility was recently awarded a SHF grant, however, this Water Works facility portion of the site will be a separate construction project, which is fully funded and anticipated to be advertised for construction bids in early 2017.

### **TERMS AND CONDITIONS**

1. Proposers are expected to examine the construction drawings, specifications, scope of work and services, schedule of delivery, and all instructions. Failure to do so will be at the bidder's risk.
2. Each bidder shall furnish the information required in the Request for Proposals.

3. A Construction Contract will be awarded to the selected bidder whose submittal, conforming to the Request for Proposals, will be most advantageous to the Town of Pagosa Springs, price and all other factors considered.
4. The Town of Pagosa Springs reserves the right to reject any or all proposals and to waive informalities and minor irregularities in bids received, and to accept any portion of or all items proposed if deemed in the best interest of the Town of Pagosa Springs to do so.
5. No submittal shall be withdrawn for a period of sixty (60) days subsequent to the opening of bids without the consent of the Town Planning Director or delegated representative.
6. A signed construction contract agreement furnished to the successful bidder results in a binding contract without further action by either party.
7. Late or unsigned proposals will not be accepted or considered. It is the responsibility of proposers to ensure that the proposal arrives at the TOPS Town Hall or appropriate PO Box prior to the time indicated in the "Request for Proposals."
8. The proposed price shall be exclusive of any Federal or State taxes from which the Town of Pagosa Springs is exempt by law.
9. Any interpretation, correction or change of the RFP documents will be made by Addendum. Interpretations, corrections and changes of the RFP documents made in any other manner will not be binding, and proposer shall not rely upon such interpretations, corrections and changes. The Town's Representative will not be responsible for oral clarification.
10. Confidential/Proprietary Information: Proposals submitted in response to this "Request for Proposals" and any resulting contract are subject to the provisions of the Colorado Public (Open) Records Act, 24-72-201 et.seq., C.R.S., as amended. Any restrictions on the use or inspection of material contained within the proposal and any resulting contract shall be clearly stated in the proposal itself. Confidential/proprietary information must be readily identified, marked and separated/packaged from the rest of the proposal. **Co-mingling of confidential/proprietary and other information is NOT acceptable. Neither a proposal, in its entirety, nor bid price information will be considered confidential/proprietary. Any information that will be included in any resulting contract cannot be considered confidential.**