Background and Statement of Work: Hanging Lake is an iconic and historic tourist destination. It is located within the White River National Forest, east of the City of Glenwood Springs, Colorado. The Hanging Lake trail ascends from the banks of the Colorado River up Deadhorse Creek, traveling 1.2 miles as it climbs approximately 1,000 feet above the floor of Glenwood Canyon to a crystal-blue travertine lake with cascading waterfalls and hanging gardens. In late July of 2021, a debris flow originating from the Grizzly Creek Fire burn scar significantly damaged the Deadhorse Creek drainage, including the hiking trail. The debris flow covered major trail sections, swept away bridges, downed trees, and buried the recreation area in mud, boulders, and logs. Following the debris flows, White River National Forest (WRNF) staff, the National Forest Foundation (NFF), and our partners have begun to explore what opportunities exist to reimagine a more sustainable and functional trail to match this world-class experience and plan for the next 100 years.

The NFF is seeking a team of experts to redesign the Hanging Lake Trail to potentially include: avoidance of geohazards; trail realignments; new stream channel crossing locations and creation of new interactive areas and overlooks to enhance flood resiliency, aesthetics, interpretation and overall visitor experience. Work will be conducted in close cooperation with WRNF staff and will include an iterative process to identify desired conditions, project sideboards, user experience, and conceptual preferences prior to the schematic and detailed trail design components. Replacement of the boardwalk around Hanging Lake itself is not currently anticipated to occur in conjunction with the trail reconstruction project but may be considered in the Pre-Design and Schematic Design phases outlined below.

The Hanging Lake Trail

The Hanging Lake trail was originally constructed in the early 20th Century and rebuilt in the late 1930’s by the Civilian Conservation Corps. Deadhorse Creek Canyon is steep, rocky and prone to rockfall, debris flows and floods. It is a unique environment with a travertine lake and creek hydrology that supports rare and sensitive plant and animal species. The trail is co-located along the banks of the stream and is prone to flooding during annual spring runoff. There are seven trail bridges crossing Deadhorse Creek along the route, many of which reduce flood capacity and restrict stream function.

History working in comparable environments will be critical to the successful redesign of the Hanging Lake trail. Two or three detailed examples of previous trail design and construction projects performed in similar settings should be included as part of this proposal. Experience designing trails with the following features and conditions is desired:

- Karst and Travertine topography;
- Complex bridges and walkways;
- Stream restoration;
- Historic values (ex. CCC trail and shelter);
- Sensitive plant and bird species;
- Constructing trail through rock;
- Rockfall and landslide geo-hazards; and
• High use visitation

Information Requested
If interested in this project, please provide a bid for the Description of Work outlined below. Responses should include a project understanding and approach, proposed schedule of work, work experience, and itemized costs. Please also include your capacity for this project and experience in trail design projects on high-use trail systems or federal lands in the past, especially projects that detail experience with trail construction that is relevant to the factors influencing the design of Hanging Lake Trail as described below.

Please also indicate whether you have the construction expertise and interest in submitting a proposal for the trail reconstruction portion of this overall project. Hanging Lake Trail Reconstruction will be a separate RFP anticipated for release in spring of 2023, with construction occurring summer/fall 2023 and into 2024 if necessary. Interest in the Trail Reconstruction RFP is not a requirement for proposals submitted for this Trail Design RFP but will be viewed favorably in the proposal review process.

This is a request for proposals only and quotations furnished are not offers. This request does not commit the NFF to pay any costs incurred in the preparation of submission of the quotation or to contract for supplies or services.

General Specifications
(a) Description of Work- This Request for Proposals is for comprehensive trail design services for the Hanging Lake Trail. Final deliverables will encompass comprehensive designs and plans for the following:

• Overall design narrative;
• The trail itself (e.g. alignment, tread, and constructed features);
• User experience, user group, difficulty, etc.;
• Complex bridges and walkways;
• Riverine restoration areas;
• Interaction with the trail, visitors, water - bridges, drainage, rest areas, waterfalls, springs, resilience to future floods, debris flows, geo-hazards, etc.;
• Trailhead improvements;
• Waypoints along the trail for resting and interpretation;
• Wayfinding and interpretive signage; and
• Fencing, safety barriers, etc.

The following Design Objectives will be utilized throughout all stages of the design process:

• Design solutions that match Forest Service maintenance capabilities;
• Constructability Strategies;
• Integration of facilities into the surrounding environment;
• Public safety;
• Value based decision making and budget consistency;
• Sustainability;
• Universal Design Principles;
• Meet Appropriate Regulatory Requirements (Laws, Regulations, Codes, etc.); and
• Involvement of Stakeholders in the Design Process.
The trail design process will employ a collaborative, integrated process in all stages of the project’s planning and delivery, and will follow an iterative 10/30/60/90 percent phased approach with check-ins at the following milestones:

1. Phase I: Pre-Design (0%)
   The Contractor will facilitate at minimum two project coordination/kickoff meetings (one in an office setting and one in the field at the project site) with NFF and WRNF staff to identify overall project goals and desired outcomes, including trail conditions, environmental and social constraints (archaeology, trail difficulty, etc.), user groups, desired experiences, themes, and conceptual preferences. The Contractor will utilize the input provided in those meetings to produce an Integrated Design Narrative documenting the overarching design process used during the Pre-Design phase.

   Pre-Design Deliverables include:
   ● Integrated Design Narrative; and
   ● Written Responses to NFF and WRNF staff comments on the Integrated Design Narrative.

2. Phase II: Schematic Design (10%)
   The Contractor will produce and share Schematic Design Alternatives (including illustrative plan, elevation, and trail cross section drawings) with NFF and WRNF staff and other stakeholders to determine the general concept of the new trail, including rough alignments based on control points (e.g., creek crossings, archaeology, experience factors like waterfalls, etc.) and general feature design (trail material, bridge types, sign style).

   The Contractor will produce, at minimum, three high level Schematic Design Alternatives. For each conceptual Alternative the Contractor will provide budgetary construction cost estimates, with at least one alternative significantly below net available funds (75% +/- 5% net available construction funds).

   The Contractor will facilitate, at minimum, two meetings (one in an office setting and one in the field at the project site) with WRNF staff and other stakeholders to review the Schematic Design Alternatives and determine the Schematic Design Preferred Alternative.

   Schematic Design Deliverables will include:
   ● Schematic Design Alternatives;
   ● Construction Cost Estimates for each Schematic Design Alternative; and
   ● Written Responses to NFF and WRNF staff comments on the Schematic Design Alternatives;

3. Phase III: Round 1 Design Development (30%)
   The Contractor will produce and share the first round of fully developed designs developed from the Schematic Design Preferred Alternative for the trail with NFF and WRNF staff, including alignment, stops along the trail for resting and interpretation, areas for restoration, trailhead improvements, and destination improvements.

   The Contractor may need to conduct additional field surveys as necessary to accurately inform the design of the new trail and/or biological resource surveys to inform the NEPA process. Cultural surveys and geo-hazard risk assessments are underway, and the results of those surveys will be made available to the selected contractor. Existing LiDAR data, obtained in 2021 following the debris flow event, is
available for review here:

Host  ftps://ftp.sanborn.com
Login   BGC_Engineering
Password   y+XdhF4S_aHdyVzw

Prior to undertaking design production, the Contractor will walk the existing alignment with NFF and WRNF staff in the field to iterate on the design, including but not limited to trail alignment, interaction with the creek (alignment and creek crossings), potential problem areas, restoration and aesthetics/design themes.

The Contractor will facilitate, at minimum, two meetings (one in an office setting and one in the field) with NFF and WRNF staff to review and solicit feedback on the Round 1 Designs.

This phase must be complete by fall 2022 as deliverables for this phase will be utilized in the NEPA scoping process during winter 2022-23.

Round 1 Design Deliverables will include:
- 30% Designs for the Preferred Design Alternative, including site plans, details, notes, and associated illustrations;
- Revised Construction Cost Estimates for the Round 1 Design; and
- Written Responses to NFF and WRNF staff comments on the Round 1 Design.

4. Phase IV: Round 2 Design Development (60%)
The Contractor will produce and share the second round of fully developed designs for the Schematic Design Preferred Alternative for the trail (including alignment, stops along the trail for resting and interpretation, areas for restoration, trailhead improvements, and destination improvements). This Round will address feedback and concerns resulting from the Round 1 review with NFF and WRNF staff.

The Contractor will facilitate, at minimum, one meeting with NFF and WRNF staff to review and solicit feedback on the Round 2 Designs.

Round 2 Design Deliverables will include:
- 60% Designs for the Schematic Design Preferred Alternative, including site plans, details, notes, and associated illustrations;
- Revised Construction Cost Estimates for the Round 2 Design;
- Written Responses to NFF and WRNF staff comments on the Round 2 Design.

5. Phase V: Final Design Review (90%)
The Contractor will produce and share the final Round of detailed designs for the trail (including alignment, stops along the trail for resting and interpretation, areas for restoration, trailhead improvements, and destination improvements). This Round will
address feedback and concerns resulting from the Round 2 review with NFF and WRNF staff.

The Contractor will facilitate, at minimum, one meeting with NFF and WRNF staff to review the final Designs.

Final Design Deliverables will include:
- 90% Designs for the Schematic Design Preferred Alternative, including site plans, details, notes, associated illustrations, and construction specifications;
- Revised Construction Cost Estimates for the final Design;
- Written Responses to NFF and WRNF staff comments on the Round 2 Design

6. Phase VI: Construction Documents (100%)
The Contractor will produce and share final Construction Documents which establish the detailed requirements for construction of the project. The drawings shall be complete and free of ambiguities, fully dimensioned, survey control and layout information provided; and all required details shall be shown and clearly cross-referenced. All required specification sections shall be provided and shall be fully edited. Drawings, specifications, and attachments have been coordinated within, and between, all disciplines. The design team’s internal Quality Control reviews shall have been completed and all comments reconciled within the final Construction Documents prior to submission to NFF and WRNF staff.

Final Construction Deliverables will include:
- Fully developed trail construction plans details, notes, and associated illustrations and construction specifications;
- Site plan with all improvements such as signs, fences, etc.;
- Construction implementation plan that includes staging and access;
- Restoration means and methods (seed mixes, amendments, transplants, etc); and
- Site specific, engineered plans for structures such as bridges to be stamped by a licensed Engineer in the state of Colorado.

7. Phase VII: Construction Project Oversight (not required)
This RFP is for trail design services only, but if the Contractor is interested in and has the capacity to provide project oversight during the Construction phase of this project, please provide the Contractor’s hourly rate for those services in the Pricing Schedule.

Interest in project oversight is not a requirement for proposals submitted for this Trail Design RFP but will be viewed favorably in the proposal review process. Please note that project oversight does not include construction management.

(b) Project Location- The Hanging Lake Trail is located on the White River National Forest. The current trail is accessed via the Glenwood Canyon Recreation Path. Vehicle parking is available at the Colorado Department of Transportation’s (CDOT) Hanging Lake Rest Area off exit 125 from Interstate 70 (approximately 9 miles east of Glenwood Springs, CO). The trailhead itself is .2 miles down the Recreation Path from the rest area. From the Recreation Path, the current alignment of the Hanging Lake Trail turns up a side canyon and gains over 1,000 feet in 1.2 miles.

See APPENDIX A for a map of the project location.
(c) **Work Schedule** - The final work schedule will be determined in partnership with the selected Contractor, the NFF, and the WRNF. Trail design work is anticipated to commence in August 2022 and be complete by August 2023. Construction of the new trail is anticipated to commence on September 1, 2023 and must be completed no later than March 1, 2025. The WRNF will be conducting NEPA scoping during winter 2022-23 and will require plans at that time sufficient for public scoping. All proposals must include a detailed schedule of work based on the described project milestones.

Potential future debris flows will also be taken into consideration in determining the work schedule.

(d) **Safety and Communication** - The NFF point of contact and White River National Forest, in partnership with CDOT, will provide timely weather and highway closure updates related to flash flood and debris flow hazard potential. Contractor will follow CDOT’s trigger points for ceasing work and evacuating the area when in the field.

(e) **Wildlife Considerations** - This work will require that measures be taken to minimize impacts to wildlife. The WRNF will advise the contractor on specific recommendations depending on the specific nature of the disturbance.

### Pricing Schedule

Contractor shall price work according to the schedule below. Prevailing wages are required per conditions of funding sources.

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Quantity</th>
<th>Total Cost</th>
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<tbody>
<tr>
<td>Phase I: Pre Design</td>
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<tr>
<td>Phase II: Schematic Design</td>
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<td>Phase III: Round 1 Design Development</td>
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<td>Phase IV: Round 2 Design Development</td>
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<td>Phase V: Final Design Review</td>
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<td>Phase VI: 100% Construction Documents</td>
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<tr>
<td>Phase VII: Project Oversight (not required)</td>
<td>Hourly rate</td>
<td>N/A</td>
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### Other Project Requirements and Specifications

(a) **Utilities** – In many locations there will be no or limited sanitation, water, electrical or housing services available. The Contractor shall make its own arrangements for temporary facilities if needed.

(b) **Specifications** – Project work shall be accomplished in accordance with the following:

- Pending the outcomes of Phase 1: Pre-Design, WRNF staff will determine the Trail Class of the new trail. Designs will follow the standards described in Forest Service Handbook 2309.18 (Trails Management Handbook) for the Class of trail determined.
• Trail bridges and structures shall comply with all applicable U.S. Forest Service design standards.
• The Contractor shall identify which efforts and materials they can supply in terms of materials, labor, equipment, supplies, supervision, quality control, and incidentals required to complete the work described. The Contractor shall perform all work in a safe and conscientious manner.
• See the following appendices for additional information:
  o APPENDIX A - Project area maps

Contractor Qualifications

(a) References – Please provide three references.

(b) Past Experience – Please provide an explanation of past experience in trail design projects on high-use trail systems or federal lands in the past, if any. Please include two or three detailed examples of previous trail design and construction projects performed in similar settings with your proposal.

Insurance Requirements

Upon selection of the winning bid, the chosen contractor will be asked to affirm that it has and shall maintain State minimum workers’ compensation insurance coverage for its employees, if any. The selected contractor shall also maintain broad form general liability, property damage, and automotive liability insurance in the minimum amount of $1,000,000 for bodily injury, death, or damage to property of any person and $2,000,000 for bodily injury, death, or damage to property of more than one person. The Contractor shall name NFF an Additional Named Insured and provide NFF with documentation evidencing such coverages.

Pre-Bid Meeting and Site Tour

There will be an opportunity for contractors to join a pre-bid meeting and site visit to ask questions and discuss the project with NFF and WRNF staff. Please RSVP to Jamie Werner (jwerner@nationalforests.org) if you can attend. The pre-bid meeting and site visit is scheduled for Wednesday, June 15, 2022 at 11:00am MDT.

Bid Submission

Submit bids via email to jwerner@nationalforests.org by Monday, June 27, 2022 at 5:00pm MDT.

Contractor Selection Process

The NFF will use the Evaluation Factors below to review each submitted bid. Based on the outcomes of that selection process, the NFF will notify successful and unsuccessful bidders by Friday, July 15, 2022 and will prepare a separate contract document.
**Point of Contact**
For questions about the details of producing the bid, please contact:

Jamie Werner  
National Forest Foundation – White River National Forest Stewardship Coordinator  
720.245.0112  
jwerner@nationalforests.org

**Evaluation Factors and Relative Importance**

<table>
<thead>
<tr>
<th>Level 3 Criteria</th>
<th>Level 2 Criteria</th>
<th>Level 1 Criteria</th>
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<tbody>
<tr>
<td>● Price / cost</td>
<td>● Interest in/ capability to implement Hanging Lake Trail Reconstruction project</td>
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<tr>
<td>● Contractor capability</td>
<td>● Overall strategic benefits to meeting NFF goals and grant needs, requirements, and timelines</td>
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<td>● Technical proposal / proposed approach to project</td>
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<td>● Proposed work schedule</td>
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<td>● Past performance, references, and USFS feedback</td>
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**Equal Opportunity Provider**
In accordance with Federal law and U.S. Department of Agriculture policy, the National Forest Foundation is prohibited from discriminating on the basis of race, color, national origin, sex, age, religion, political beliefs, or disability.
Appendix A

Hanging Lake Trail
Reconstruction Project

- Hanging Lake Trailhead
- Hanging Lake Trail #1850

Note: Hanging Lake Trail & Hanging Lake Trailhead are both currently closed due to significant damage from a 2021 mudslide.

Maps are for graphical purposes only. They do not represent a legal survey. NFF makes no warranty, expressed or implied, nor does the fact of distribution constitute such a warranty. This information was produced on 10/3/2021 by Zach Goodwin.