



City of Ketchum

May 23, 2022

Mayor Bradshaw and City Councilors
City of Ketchum
Ketchum, Idaho

Mayor Bradshaw and City Councilors:

Recommendation to approve Purchase Order #22096 with Brown and Caldwell for Professional Services Regarding Geothermal Analysis

Recommendation and Summary

In 2021, the City Council approved a Memorandum of Understanding (MOU) with the private parties (Natural Energy Resources) who own and operate the Guyer Hot Springs in the Warm Springs village area to evaluate future public-private expansion partnerships.

The MOU outlines that any due diligence costs will be split equally between parties. Staff engaged Brown and Caldwell who has a strong track record on working on similar geothermal projects in Idaho. The initial engagement was under the \$5,000 level; now both city staff and the private partners are recommending to proceed with a more in-depth analysis not to exceed \$29,325.

"I move to approve Purchase Order #22096 with Brown and Caldwell"

The reasons for the recommendation are as follows:

- The Council has set a specific timeline to achieve clean energy goals. Geothermal is a renewable and clean energy source.
- The proposed scope of work will analyze the potential for (1) energy creation and (2) a larger heating district for existing and future development within Warm Springs village
- The federal government has recently approved an infrastructure bill which contains a significant focus on clean energy/climate change. Potential public ownership of this asset increase likelihood to receive federal funds.

Introduction and History

Over the last several months, staff has held meetings with the owners of Guyer Hot Springs System. The system is currently serving several private homes along Warm Spring Road. Guyer Hot Springs was originally part of a resort facility which closed in 1929. The water source was later used to heat the Bald Mountain Hot Springs Lodge on Main Street.

Current due diligence activities associated with potential public uses of the hot water build upon previous efforts conducted in 2013 by ERO Resources and in 2007 by Idaho Department of Water Resources.

Sustainability Impact

Geothermal is a proven clean energy resource for many communities. The due diligence period will allow for a greater analysis of direct heating opportunities versus electrical generation.

Financial Requirement/Impact

The MOU outlines that each party will bear their own costs associated with due diligence activities such as consulting resources. The FY22 budget allocated \$50,000 for sustainability infrastructure. To date, only \$6,000 has been utilized.

Attachments

Scope of Work

Purchase Order #22096



CITY OF KETCHUM
 PO BOX 2315 * 191 5TH ST. * KETCHUM, ID 83340
 Administration 208-726-3841 (fax) 208-726-8234

PURCHASE ORDER
 BUDGETED ITEM? ___ Yes ___ No

PURCHASE ORDER - NUMBER: 22096

To: 5779 BROWN AND CALDWELL PO BOX 45208 SAN FRANCISCO CA 94145	Ship to: CITY OF KETCHUM PO BOX 2315 KETCHUM ID 83340
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P. O. Date	Created By	Requested By	Department	Req Number	Terms
05/19/2022	kchoma	kchoma		0	

Quantity	Description	Unit Price	Total
1.00	KETCHUM GUYER GEOTHERMAL EVA 03-4193-7607	29,325.00	29,325.00
	SHIPPING & HANDLING		0.00
	TOTAL PO AMOUNT		29,325.00

 Authorized Signature

1290 W Myrtle St
Suite 340
Boise, ID 83702

T: 208.389.7700

May 5.2022



Letter Amendment

Mr. Jade Riley
City of Ketchum, City Administrator
P.O. Box 2315
480 East Ave. N.
Ketchum, ID 83340

Subject: City of Ketchum – Guyer Hot Springs Geothermal Evaluation Services –
Amendment for Anticipated/If-Authorized Task Approval

Dear: Mr. Riley,

Brown and Caldwell (BC) is pleased to present this amendment to authorize additional preliminary engineering evaluation tasks for the Guyer Hot Springs geothermal heating evaluation. These Anticipated/If-Authorized tasks were identified in the Letter Agreement signed January 20, 2022 and have been updated for this amendment (Amendment 1) based on the initial data gathering and scope exploration tasks and discussion with project stakeholders. For convenience, this proposal is presented in a form that can be accepted and signed as an amendment to the current agreement between Brown and Caldwell and City of Ketchum.

Scope of Services

The following scope of services details the activities associated with the geothermal heating evaluation.

1. **Project Management.** This task includes technical and financial management of the contract and includes budget associated with meetings.
 - a. Bi-weekly progress conference call with City PM, as requested or needed by the City.
 - b. Monthly progress reports and invoices will be provided
2. **Evaluate Hot Water Source Collection System**
 - a. Evaluate the existing hot water collection system and document quantity of hot water that is not captured (that instead discharges directly to Warm Springs Creek).
 - b. Evaluate alternatives to capture the additional hot water and consider the impact of the additional hot water quantity in the geothermal heating concepts evaluation.
 - c. Provide Class 5 cost estimate for the preferred alternative for hot water collection system modification/improvement.

3. Evaluate Geothermal Heating Concepts

- a. Evaluate the amount of usable heat from the existing hot spring collection/capture system, assuming current flow rates and with additional improvements to the hot water collection system.
- b. Evaluate up to three conceptual alternatives for hot water end uses. Assumed alternatives are on-site electrical generation, direct space heating within existing hot water pipe routing, and on-site geothermal spa/pool amenities.
- c. Provide feasibility-level, AACE Class 5 cost estimates for each conceptual alternative.
- d. Provide preliminary operations and maintenance costs and considerations and qualitative discussion of risks and benefits for each alternative.

4. Technical Memorandum

- a. Document the evaluation and findings in a draft technical memorandum

Assumptions

1. BC will not independently verify the existing Guyer water rights, but will rely upon the water rights information supplied in previous reports supplied by the City.
2. City will provide any current data on the collection system flow rate and temperature.
3. BC will not independently verify the existing collection system flow rate or the quantity of hot water that is not captured in the collections system, but will rely upon the data provided in previous reports to develop an assumption for the most likely range of flows.
4. The City will coordinate review of the draft Technical Memorandum from all applicable stakeholders/City departments and provide one set of consolidated comments to BC.
5. BC will not perform any commercial planning of geothermal spa/pool facilities/developments, but will confirm the heating capacity available and heat recovery configuration(s) applicable to such facilities. BC will rely upon information provided by the City for the spa facility concepts and development costs.
6. Funding source evaluation and permitting assessment are not included in the amendment scope but are anticipated to be potential follow-on tasks that would be approved in a subsequent amendment.

Compensation

Compensation for services shall be on a time-and-expense basis. Direct expenses and subcontractor services shall be computed as described in the agreement signed on January 20, 2022. The requested amount for the scope of services described in this Amendment 1 is \$24,330. This brings the total contract value to \$29,325.

Schedule

The work defined herein shall begin not more than 10 calendar days after Brown and Caldwell receives the signed copy of this letter agreement from you. The estimated time for completion is within 12 calendar weeks thereafter.

Terms and Conditions

This amendment will adhere to the terms and conditions in the agreement dated January 20, 2022.

We look forward to the opportunity to perform the work for you. Please call if you have questions.

Very truly yours,

Brown and Caldwell,
a California Corporation



Christopher Cleveland, Sr. Vice President

Donnie Stallman, Project Manager

CJC:cc

The undersigned agrees to the Terms and Conditions of this Letter Agreement attached hereto.

City of Ketchum

Signature _____

Printed Name _____

Title _____

Date _____