

COUNCIL ACTION FORM

SUBJECT: ENGINEERING SERVICES FOR THE WATER TREATMENT PLANT DEHUMIDIFICATION PROJECT

BACKGROUND:

The new water treatment plant started operation in 2017. After the facility start up, staff identified three areas where dehumidification is necessary but was not installed in the initial construction. Dehumidification is important to extend the useful life of electrical and mechanical equipment installed in areas that would otherwise have extremely high humidity.

In March 2019, a request for proposals (RFP) was issued for design engineering services for the WTP dehumidification project. A total of four proposals were received. One was determined to be an incomplete and unresponsive proposal.

The three other proposals were reviewed utilizing a “two-envelope” selection process for professional services, where the firm’s qualifications and proposed scope of work are submitted in one envelope, and their proposed fee is submitted in a second envelope. This process allows staff to first review the submitted proposals in order to identify the firm whose qualifications and proposed scope of work are most appropriate. Then, after selecting the preferred firm, staff opens the proposed fee envelopes to confirm that the selected firm is proposing a fee that is in line with what other firms would propose for a similar scope of work. In all cases, the final scope of work and fee is negotiated with the firm identified as having submitted the most appropriate proposal.

Firm Name	Fee Proposal
HDR, Inc.	\$62,853
KFI Engineers	\$115,750
Strand Associates, Inc.	\$119,400

The qualifications of the three firms who submitted responsive proposals were found to be very similar. HDR was the original HVAC design engineer for the new treatment plant, so it is easy to identify why their proposed fee would be so much lower than the other firms. **Unfortunately, there are issues with the newly constructed HVAC system that seem to staff to be taking an inordinately long time for the engineer to resolve. Staff believes that these issues need be resolved before additional design work is awarded to HDR.** These issues include giving direction to the mechanical contractor on how to address a problem with freezing lines in the cooling tower, and multiple warranty

problems where staff needs support and direction from the consultants to push the contractor to resolve the problems.

KFI Engineers was selected as the recommended firm. While not the design engineer, KFI was involved in the construction of the new water plant as the City's independent LEED commissioning agent. **KFI's proposed scope and fee as submitted included design, bidding, and construction phase services. Staff has asked KFI to remove the bidding and construction phase services from the scope for now. After a design has been finalized, staff will negotiate an amendment to include bidding and construction related services.**

Staff believes that delaying the inclusion of the construction phase services could be beneficial in this instance. Since the scope of the improvements is not entirely known at this point, it is likely that any proposal would include some measure of contingency on the part of the consultant. Waiting until the design is completed would eliminate the need for including a "buffer" in their pricing. It is also possible that, once the design is done, it may be possible for City staff to manage much of the on-site inspection services without the need to pay a consultant. **As a result, the recommended contract for design related services is for a lump sum amount of \$66,500.**

The FY 2018/19 CIP budget includes \$400,000 for design and construction of dehumidification as a part of the Water Plant Facility Improvements Project.

ALTERNATIVES:

1. Award a contract for engineering services to KFI Engineers of St. Paul, MN, for design of the WTP Dehumidification Project in an amount not to exceed \$66,500.

Under this alternative, once the design services are completed, the staff will negotiate a change order with this firm to perform some, or all, of the construction related services.

2. Award the contract for engineering services to another proposing firm.
3. Do not award a contract to KFI Engineers and do not complete the project at this time.

MANAGER'S RECOMMENDED ACTION:

Several areas of the water treatment facility are in need of dehumidification. Lack of dehumidification results in excessive condensation, which in turn creates a maintenance issue for electrical equipment, communication and control equipment, and pipe coatings. It can also pose an employee safety concern as a result of an increased risk of electrical

shock and slip hazards due to wet floors. The project is budgeted in the FY 2018/19 CIP as one of several components of the Water Plant Facility Improvements Project.

Staff has performed a thorough review of the engineering firms' qualifications and has determined KFI Engineers of St. Paul, MN, to be the most appropriate firm for this project. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as stated above.

AGREEMENT FOR ENGINEERING SERVICES

This Agreement is made on the _____ day of _____, 2019, between the City of Ames, a municipal corporation ("City"), and KFI Engineers, 670 County B Rd W, St Paul, MN 55113 ("Engineer"). The parties agree as follows:

Article I Description of Project

Prepare plans and specifications for the appropriate method of dehumidification and associated HVAC improvements for three areas at the City of Ames Water Treatment Plant: lime slaking area, chemical feed corridor, and high service pump room. Design will be based on ease of operation and maintenance as well as life cycle costs and incorporate City feedback.

Article II Engineer's Scope of Services

The Engineer shall perform professional engineering services relevant to the Project in accordance with the terms and conditions set forth here, and as provided in Exhibit I, which is attached to this agreement and by this reference made a part of it.

Article III Changes in Scope

If changes occur either in the Engineer's Scope of Services or the Description of the Project, a supplemental agreement may be negotiated at the request of either party.

Article IV Engineer's Fee

A. Basic Fee.

1. As compensation for services as described in Paragraph A of Exhibit I of this Agreement, and for services required in the fulfillment of Article II, the Engineer shall be paid a "Basic Fee," which shall constitute full and complete payment for those services and all expenditures that may be made and expenses incurred, except as otherwise expressly provided in this Agreement. The Basic Fee shall be the lump sum amount \$66,500.

2. The parties agree that the Basic Fee is based upon the Scope of Services to be provided by the Engineer. The Engineer's compensation will not be adjusted unless the Scope of Services to be provided by the Engineer is changed by written agreement of the parties to this Agreement.

B. Payment shall be made by City to Engineer as follows: Monthly payments as documented by invoices and summary of work completed. Invoices should be sent to:

Kristin Evans
Environmental Engineer
Ames Water and Pollution Control
1800 East 13th Street
Ames, Iowa 50010

Article V
Ownership of Plans and Documents: Records

- A. The field notes, design notes, original drawings of the construction plans, and logs of any wells drilled, as instruments of service, are and shall remain, the property of the Engineer; however, the City shall be furnished, at no additional cost, one set of reproducible original drawings of the work.
- B. The City shall make copies, for the use of the Engineer, of all of its maps, records, laboratory tests, or other data pertinent to the work to be performed by the Engineer under this Agreement, and also make available any other maps, records, or other materials available to the City from any other public agency or body.
- C. The Engineer shall furnish to the City, copies of all maps, records, field notes, and soil tests that were developed in the course of work for the City and for which compensation has been received by the Engineer.

Article VI
Termination

- A. This Agreement may be terminated by either party upon thirty (30) days' prior written notice to the other party in the event of substantial failure by the other party to fulfill its obligations under this Agreement through no fault of the terminating party.
- B. This Agreement may be terminated by the City for its convenience upon thirty (30) days' prior written notice to the Engineer.
- C. In the event of termination, as provided in this Article, the Engineer shall be paid as compensation in full for services performed to the date of that termination, an amount calculated in accordance with the payment schedule in Article IV of this Agreement. Such amount shall be paid by the City upon the Engineer's delivering or otherwise making available to the City, all data, drawings, specifications, reports, estimates, summaries, and that other information and materials as may have been accumulated by the Engineer in performing the services included in this Agreement, whether completed or in progress.

Article VII
Assignment

This Agreement shall not be assignable except at the written consent of the parties, and if so assigned, shall be binding upon the successors and assigns of the parties.

Article VIII
Disclosure

The Engineer affirms that it has not made or agreed to make any valuable gift whether in the form of service, loan, thing, or promise to any person or any of the person's immediate family, having the duty to recommend, the right to vote upon, or any other direct influence on the selection of consultants to provide professional design services to the City.

Article IX
Indemnity

The Engineer agrees to indemnify the City and its officers, agents, and employees against all actions of any character brought because of any injury or damage sustained by any person, persons, or property resulting from any asserted negligent act, error, or omission of the Engineer or its agents or employees. The Engineer is not required under this agreement to defend the City, its officers, agents, or employees, or any of them from assertions that they were negligent, or indemnify them from liability based on their negligence. The indemnity required here shall not be limited by reason of the specification of any particular insurance coverage in this Agreement.

Article X
Insurance

The Engineer agrees to procure and maintain at its expense until final payment by the City for services covered by this Agreement, insurance in the kinds and amounts provided below with insurance companies authorized to do business in the State of Iowa, covering all operations under this Agreement, whether performed by it or its agents. Before commencing the work, the Engineer shall furnish to the City a certificate or certificates in form satisfactory to the City, showing that it has complied with this paragraph. All certificates shall provide that the policy shall not be changed or canceled until at least thirty (30) days' prior written notice shall have been given to the City.

Kinds and amounts of insurance required are as follows:

Minimum Scope of Insurance: Coverage shall be at least as broad as:

Insurance Services Office form number CG 00 01 covering Commercial General Liability.

Insurance Services Office form number CA 00 01 covering Automobile Liability, comprehensive form.

Worker's Compensation insurance as required by the Laws of the State of Iowa and Employers Liability insurance.

Professional Liability insurance.

Minimum Limits of Insurance: Contractor shall maintain limits no less than:

General Liability: \$1M combined single limit per occurrence for bodily injury, personal injury and property damage.

Automobile Liability: \$1M combined single limit per accident for bodily injury and property damage.

Workers' Compensation and Employers Liability: Statutory Workers' Compensation limits as required by the laws of the State of Iowa.

Professional Liability insurance shall be in an amount not less \$1M each claim and annual aggregate.

Article XI
Governing Law

This contract is governed by the law of the State of Iowa with venue in the appropriate state and/or federal courts for Story County, Iowa.

Article XI
Notices

All notices under this Contract shall be in writing and shall be deemed to have been given: (i) upon hand delivery; (ii) if sent by Regular Mail, within seventy-two (72) hours after the notice has been deposited in the United States Post Office, postage paid; or (iii) if sent by email, when the recipient acknowledges having received the email. Notices shall be sent to the other party at the addresses set forth below. Either party may change its address by giving notice in writing thereof to the other party.

IF TO CITY:

Kristin Evans
Environmental Engineer
Ames Water and Pollution Control
1800 East 13th Street
Ames, Iowa 50010

E-mail Address: kevens@city.ames.ia.us

IF TO ENGINEER:

Randy Christenson
Principal, Director of Commercial, Institutional, Architects
KFI Engineers
670 County B Rd W, St Paul, MN 55113


E-mail Address: rpchristenson@kfi-eng.com

In Witness, the parties have executed this Agreement as of the day and year written first above.

City of Ames, Iowa:

KFI Engineers:

John A. Haila
Mayor



Randy Christensen
Director of Commercial, Institutional, Architects

Attest:

Diane Voss, City Clerk

Exhibit I
Duty of Engineer

The Engineer shall render professional engineering services as described below:

- A. Basic Services.
- Mechanical system dehumidification systems design for the noted spaces described in Article I of the Agreement for Engineering Services. These dehumidification systems will be determined after the loads are finalized.
 - Dehumidification methods will be determined after discussing options with City Staff.
 - Plumbing systems will generally consist of gas piping and condensate drains as dictated by the type of dehumidification system incorporated.
 - Interface of any new central system will include interfacing with the main WTP electronic building automation system (BAS) and specification of devices and instruments is included.
- B. Preliminary design
- Conduct an onsite visit to observe the three spaces existing conditions and current mechanical systems operation of the three (3) areas of concern.
 - Develop preliminary (MEP) dehumidification loads to establish equipment sizes and options.
 - Develop preliminary engineering report (PER) summarizing observations, equipment options and recommendations.
 - KFI will include MEP “Opinion of Probably Cost” effort, based on options and recommendations.
 - After submitting PER to Ames WTP staff for review, attend a review meeting to discuss PER, answer staff questions, and reach an understanding for the agreed basis of design for implementation in the final design.
- C. Construction documents
- MEP design and construction documents for systems as noted below: (plans, specifications, sections, details, equipment schedules, and MP diagrams as required).
 - Develop mechanical, electrical and plumbing construction documents (plans and specifications, sections, details and equipment schedules).
 - Three (3) separate submittals of the plans at various stages of the project (60%, 95%, and 100% complete) are included.
 - Coordination of MEP drawings with other engineering consultants as required.
 - KFI will generate technical specifications for MEP constructed to be included in the project manual published by the City of Ames.
 - Attendance at two (2) design review and coordination meetings with City of Ames staff
 - KFI will provide a MEP “Opinion of Probable Cost” effort on a unit and equipment take-off basis.