

RESOLUTION NO. 111416-2

A RESOLUTION APPROVING A PROPOSAL FROM OLSSON ASSOCIATES CONCERNING AN AQUIFER DELINEATION/HYDROGEOLOGIC EVALUATION FOR FUTURE WATER SUPPLY

WHEREAS, the City Commission approved Resolution No. 071315-3 approving a Master Agreement with Olsson Associates for general engineering services; and

WHEREAS, the City Commission desires to conduct an Aquifer Delineation/Hydrogeologic Evaluation ("Study") to obtain a model to guide current and future water supply decisions.

NOW, THEREFORE BE IT RESOLVED, by the City Commission of the City of Abilene, as follows:

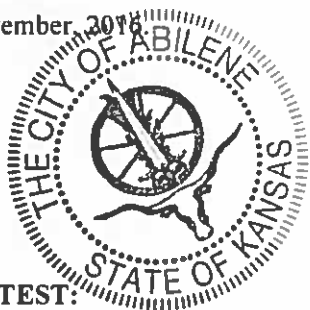
SECTION ONE. Work Order. That a Letter Proposal from Olsson Associates is hereby adopted as attached hereto as **Exhibit A**.

SECTION TWO. Appropriation of Funds. The Study will be funded from the Water Fund.

SECTION THREE. Implementation. The Mayor is hereby authorized to execute the aforementioned Agreement, and the City Manager shall be authorized to enforce the provisions as provided therein and in applicable resolutions, ordinances, and laws.

SECTION FOUR. Effective Date. That the effects of this Resolution shall be in full force after its approval by the City Commission.

PASSED AND APPROVED by the Governing Body of the City of Abilene, Kansas this 14th day of November, 2018.



ATTEST:


Penny Soukup, CMC
City Clerk

CITY OF ABILENE, KANSAS

By: 
Dee Marshall, Mayor

EXHIBIT A

**Letter Proposal for an Aquifer Delineation/Hydrogeologic Evaluation
by
Olsson Associates**

August 31, 2016

Lon Schrader, Public Works Director
601 NW 2nd St.
P.O. Box 519
Abilene, KS 67410

Subject: Letter Proposal for Aquifer Delineation/Hydrogeologic Evaluation

Dear Lon,

A few weeks ago we discussed putting together a letter proposal to perform an Aquifer Delineation/Hydrogeologic Evaluation for the City of Abilene ("City"). We have put together a scope of work for the City based on this discussion and on similar work we've performed for the other clients. That said, this scope is only provided for reference and could be modified to meet the needs of the City.

Proposed Scope of Work:

Olsson Associates will prepare an Aquifer Delineation/Hydrogeologic Evaluation Report for the City. The Aquifer Delineation is intended to provide an analysis of hydrogeologic data to assist the City in future test well drilling to enhance the City's available water supply and to provide the necessary information for a comprehensive Hydrogeologic Evaluation of the aquifer in the vicinity of the City.

The draft scope includes preparing GIS maps with the following information:

1. Map of Permitted Wells by Use Type
2. Delineation of Well Capacity
3. Depth to Bedrock Map
4. Geologic Cross-Sections
5. Aquifer Saturated Thickness
6. Transmissivity of the Principal Aquifer

The maps listed above will be developed based on the geologic information provided in the Kansas Geologic Survey Water Well Completion (WWC5) Database and other published information. No field work is included in this scope of work. Additional information to be provided to Olsson Associates by the City is to include all available hydrogeologic and geologic information from previous studies conducted by the City and not generally available otherwise.

We understand that, for purposes of test well exploration, the City is primarily interested in areas within the alluvial aquifer east of the City. However, these maps will be prepared for a larger area in order to facilitate the Hydrogeologic Evaluation of the entire stream/aquifer system that comprises the source of the City's water supply. Expansion of the Aquifer Delineation from the areas east of the City to the full area needed for the Hydrogeologic Evaluation could be shifted to this later task. However, we feel this approach is more efficient, and the estimated fees reflect the enhanced efficiency of this approach.

The Hydrogeologic Evaluation will involve a comprehensive assessment of this stream/aquifer system that will culminate in the development of a groundwater model that can be used to answer questions regarding the long-term sustainability of the City's water supply. Groundwater model development shall utilize the best available scientific data and information and shall utilize the U.S. Geological Survey modeling software MODFLOW, the industry standard. Following construction of the model with these data sets the model will be calibrated to real-world observed conditions such as water level and/or aquifer discharge to rivers and/or springs. Model calibration shall include a steady state calibration to determine initial steady state conditions and a transient calibration to ensure the model is properly calibrated to changes in aquifer stress over time.

Reports and related maps and other illustrations will be prepared for both the Aquifer Delineation Phase and the Hydrogeologic Phase of this study. After the report and maps are reviewed and approved by the City, they will be provided in hard copy and digital format so that the City can disseminate them as needed.

Estimated Fees

Olsson Associates will complete the proposed scope of work under contract with the City on a time and materials not to exceed contract in the amount of \$24,000 for the Aquifer Delineation and \$45,000 for the Hydrogeologic Evaluation, for a total of \$69,000. The fees will be all inclusive and incorporate our costs to perform the Aquifer Delineation and Hydrogeologic Evaluations, produce the electronic (PDF) and hard copy maps, and attend up to three meetings to present preliminary and final findings of the study. Additionally, we propose that the contract be set up on a time and materials basis so that should the work be completed for less than our estimate, the City would only be required to pay for the time and materials required to complete this scope.

Estimated Schedule

As illustrated in the following Estimated Timeline, we anticipate that the entire scope of work will take approximately 1 year to complete. The final report and electronic maps would be provided after comments are received on the Draft report. This schedule is only an estimate and can be modified to meet your internal deadlines and publication requirements.

Description of Phases and Tasks	Estimated Timeline							
	Calendar Year 2016				Calendar Year 2017			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Phase 1: Aquifer Delineation								
Data Compilation								
Map and Cross-section Development								
Prepare Report								
Meeting with City to Present Maps and Launch Phase 2								
Phase 2: Hydrogeologic Evaluation								
Hydrologic Data Compilation								
Model Construction and Calibration								
Final Report Preparation/Submittal								
Intermediate and Final Project Meeting								

We hope that this information is useful in deciding whether the City would like to move forward with this study. We would like to reiterate that this is a proposed scope and schedule based on similar projects. The scope and schedule may be altered to meet your needs. If you have questions or would like to see an estimate with other information included, please do not hesitate to call.

Sincerely,



James Schneider, Ph.D.
 Senior Scientist

LETTER AGREEMENT FOR PROFESSIONAL SERVICES

January 12, 2017

City of Abilene
David Dillner, City Manager
City Hall
419 N Broadway
Abilene, Kansas 67410

Re: LETTER AGREEMENT FOR PROFESSIONAL SERVICES
Aquifer Delineation/Hydrogeological Evaluation (the "Project")
Abilene, Kansas

Dear David:

It is our understanding that the City of Abilene ("Client") requests Olsson Associates, Inc. ("Olsson") to perform the services described herein pursuant to the terms of this Letter Agreement for Professional Services, Olsson's General Provisions and any exhibits attached hereto (all documents constitute and are referred to herein as the "Agreement") for the Project. Those services are more fully described in the "Letter Proposal for Aquifer Delineation/Hydrological Evaluation" that is also attached and part of the Agreement.

Olsson has acquainted itself with the information provided by Client relative to the Project and based upon such information offers to provide the services described below for the Project. Client warrants that it is either the legal owner of the property to be improved by this Project or that Client is acting as the duly authorized agent of the legal owner of such property. Client acknowledges that it has reviewed the General Provisions and any exhibits attached hereto, which are expressly made a part of and incorporated into the Agreement by this reference. In the event of any conflict or inconsistency between this Letter Agreement, and the General Provisions regarding the services to be performed by Olsson, the terms of the General Provisions shall take precedence.

Olsson shall provide services to Client for the Project as more specifically described in "Scope of Services" attached hereto. Should Client request work in addition to the Scope of Services, Olsson shall invoice Client for such additional services at the standard hourly billing labor rate charged for those employees actually performing the work, plus reimbursable expenses if any. Olsson shall not commence work on Optional Additional Services without Client's prior written approval.

Olsson agrees to provide all of its services in a timely, competent and professional manner, in accordance with applicable standards of care, for projects of similar geographic location, quality and scope.

SCHEDULE FOR OLSSON'S SERVICES

Unless otherwise agreed, Olsson expects to perform its services under the Agreement as follows:

Start Date: 12/16
Anticipated Completion Date: 12/17

Olsson will begin its services upon approval of the "Letter Proposal for Aquifer Delineation/Hydrogeologic Evaluation" by the Abilene City Commission, and complete its services on the Anticipated Completion Date. However, the Anticipated Completion Date, and any milestone dates are approximate only, and Olsson reserves the right to adjust its schedule and any or all of those dates at its sole discretion, for any reason, including, but not limited to, delays caused by Client or delays caused by third parties.

COMPENSATION

Client shall pay to Olsson for the performance of the Scope of Services, the actual time of personnel performing such services, and all actual reimbursable expenses in accordance with the Labor Rate Schedule and the Reimbursable Expense Schedule attached to this Agreement. Olsson shall submit invoices on a monthly basis and payment is due within 30 calendar days of invoice date.

TERMS AND CONDITIONS OF SERVICE

We have discussed with you the risks, rewards and benefits of the Project, the Scope of Services, and our fees for such services and the Agreement represents the entire understanding between Client and Olsson with respect to the Project. The Agreement may only be modified in writing signed by both parties.

Client's designated Project Representative shall be Lon Schrader, Public Works Director for the City of Abilene:

If this Agreement satisfactorily sets forth your understanding of our agreement, please sign in the space provided below. Retain one original for your files and return an executed original to Olsson. This proposal will be open for acceptance for a period of 30 days from the date set forth above, unless changed by us in writing.

OLSSON ASSOCIATES, INC.

By _____
Stan F. Meyers, P.E. LEED AP

By _____
James Schneider, Ph.D.
Senior Scientist

By signing below, you acknowledge that you have full authority to bind Client to the terms of the Agreement. If you accept the terms set forth herein, please sign:

City of Abilene

By David B. Dillner
Signature

Print Name David B. Dillner

Title City Manager

Dated 1/19/17

Attachments

Scope of Services (Letter Proposal)

General Provisions

Labor Rate Schedule