COUNCIL ACTION FORM

SUBJECT: CHANGE ORDER No. 6 - TO PROVIDE ENGINEERING AND RELATED SERVICES NECESSARY TO COMPLY WITH U.S. EPA’S COAL COMBUSTION RESIDUALS (CCR) STANDARD [40 CFR PART 257]

BACKGROUND:

On April 17, 2015, the Final Rule entitled “Hazardous and Solid Waste Management System; Disposal of Coal Combustion (CCR) Residuals From Electric Utilities” was published in the Federal Register, which regulated the disposal of ash in surface impoundments and landfills resulting from the burning of coal in electric utility boilers. Subsequent to that action, there have been two significant amendments to the final rule, where in the first case EPA corrected a key compliance date, and in the second case EPA extended the original compliance deadlines for certain CCR rule requirements by 547 days.

In response to a greater focus by the EPA on coal ash sites, the City of Ames Electric Services began looking for, and building a long-term relationship with a consulting firm that specializes in coal ash site activities, with deep understanding of current and pending EPA rules.

In 2017, the City needed to comply with several near-term requirements of the CCR rule adopted by the EPA. For this scope of work the City issued a request for proposals (RFP) that resulted in the City receiving nine (9) proposals ranging in price from $30,710 to $124,350, with an average price of $76,555.33.

SCS Engineers of Clive, Iowa, was selected as the preferred engineering consultant from the nine proposals for this initial project based upon the combination of technical expertise and price (SCS’s proposal was the lowest priced). On December 19, 2017, SCS Engineers was issued a Purchase Order to complete nine (9) studies/reports to comply (by April 17, 2018) with the CCR rule. This initial scope of work included:

1) documenting the liner type  
2) compiling the history of construction of the site  
3) classifying the initial hazard potential  
4) assessing the initial structural stability  
5) assessing the initial safety factor  
6) preparing the initial inflow design flood control system plan  
7) preparing the initial written closure plan  
8) preparing the initial written post-closure plan  
9) preparing an emergency action plan (compliance date of October 16, 2018)
It needs to be emphasized that the working relationship between Electric Services and the consulting firm for this work is not like most contractual relationships, with a defined scope with clear start and end points. The CCR rule has many milestones to comply with stretching out over many years. Further, the rules keep changing due to court challenges and actions. Therefore, it is imperative that we continue to work with a strong consulting firm with these critical skills. As Electric Services continues to respond to existing and new EPA rules, it is anticipated that additional change orders will be required to meet these ongoing and new requirements.

**CHANGE ORDER HISTORY:**

**Change Order No. 1,** in the amount of $4,415 was to satisfy the CCR rule’s requirement for a qualified professional engineer to perform an annual inspection (with a report) of the ash site.

**Change Order No. 2,** in the amount of $122,780 was to satisfy the requirements of the CCR rule to install a groundwater well system around the ash site and to subsequently monitor the site by sampling and analyzing water from the wells in accordance with the CCR rule.

**Change Order No. 3,** in the amount of $10,280 was to: 1) update the Fugitive Dust Control Plan, 2) to conduct a site visit and investigation and prepare the Annual CCR Fugitive Dust Control Report, 3) to conduct a site visit and investigation to prepare the Annual Inspection Report by a qualified professional engineer, and 4) to prepare the Annual Inspection Report by a qualified professional engineer.

**Change Order No. 4,** in the amount of $39,880 was to provide the City of Ames with feasible alternatives to transition the ash site in its current arrangement into a site that is useful for the future and in compliance with U.S. EPA’s CCR rule.

**Change Order No. 5,** in an estimated amount of $196,180 was to provide design and engineering services along with permit acquisition and bidding support necessary to comply with U.S. EPA’s Coal Combustion Residuals (CCR) rule by closing-in-place a portion of the City’s Steam Electric Plant’s ash impoundment, and by reconstructing the remainder of the impoundment to support the power plant’s future ash handling needs.

**THIS ACTION:**

This change order, Change Order No. 6, for an estimated price of $57,025 to SCS Engineers of Clive, Iowa, is for them to provide engineering and related services necessary to comply with the U.S. EPA’s CCR regulation’s requirements pertaining to groundwater monitoring, fugitive dust control, annual inspection, and the location restrictions of the code for the City of Ames Steam Electric Plant’s ash impoundment. The scope of work of this change order is listed and described below:

1) Perform semi-annual groundwater sampling of the ash impoundment’s monitoring wells (2 events),
2) Perform additional groundwater sampling if needed and as required by code (the change order assumes 4 additional sampling events),

3) Develop and prepare the required annual groundwater monitoring and corrective action report,

4) Reimburse the consulting firm for the licensing fee for the software used to perform the required statistical analysis of the groundwater monitoring results. (The software company charges a fee for each site the software is used for),

5) Develop and prepare the required annual CCR fugitive dust control report,

6) Inspect the site and prepare the required annual inspection report by a qualified professional engineer,

7) Perform the necessary research to develop and prepare the required report to describe the site relative to (5) specific “location restrictions” in the CCR code. The location restrictions are:

   a. location of the site in relation to placement above the uppermost aquifer
   b. location of the site in relation to wetlands,
   c. location of the site in relation to fault areas,
   d. location of the site in relation to seismic impact zones, and
   e. location of the site in relation to unstable areas.

8) An allowance is included in this change order for additional engineering and related services, however, at this time, such additional services are unknown and uncommitted. (If additional services are required, they will be charged on a time and material basis).

The above scope of services is described in a proposal from SCS Engineers dated November 19, 2019.

The approved FY 2019/20 Capital Improvements Plan includes the following funding for the Ash Pond Modification project.

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
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<tbody>
<tr>
<td>2017/18 Engineering</td>
<td>$300,000</td>
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<tr>
<td>2019/20 Engineering</td>
<td>$200,000</td>
</tr>
<tr>
<td>2019/20 Excavation &amp; Re-lining</td>
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<td>TOTAL</td>
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Contracts awarded to date on this project are:

<table>
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<tr>
<th>Description</th>
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<tr>
<td>SCS Engineering (Engineering)</td>
<td>$404,785</td>
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<tr>
<td>Change Order #6</td>
<td>$57,025</td>
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<td>Total</td>
<td>$461,810</td>
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ALTERNATIVES:

1. Issue Change Order No. 6 in the amount of $57,025 to SCS Engineers of Clive, Iowa, to provide engineering and related services necessary to comply with U.S. EPA’s CCR regulation’s requirements pertaining to groundwater monitoring, fugitive dust control, annual inspection, and the location restrictions of the code for the City of Ames Steam Electric Plant’s ash impoundment.

2. Reject the proposal and solicit equivalent engineering services from another engineering firm.

MANAGER’S RECOMMENDED ACTION:

This scope of work is necessary for the City of Ames Steam Electric Plant to continue to functionally operate and be in compliance with U.S. EPA’s CCR rule. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.