

ITEM #: 27
DATE: 03-12-24
DEPT: ELEC

COUNCIL ACTION FORM

SUBJECT: **ASH POND CLOSURE AND RDF ASH POND CONSTRUCTION**

BACKGROUND:

The City's Power Plant operated for over a century by combusting coal to generate electricity. The combustion of coal (and since the mid-1970s refuse-derived fuel, or RDF) generated ash as a byproduct. Although the Power Plant no longer burns coal, the combustion of RDF still results in ash being generated. The ash from the Power Plant is conveyed from the boilers to an ash impoundment pond several hundred yards to the east of the Power Plant.

On April 17, 2015, a Final Rule from the Environmental Protection Agency entitled "Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals (CCR) From Electric Utilities" was published in the Federal Register. This Rule regulated the disposal of ash in surface impoundments and landfills resulting from the burning of coal in electric utility boilers.

Compliance with the CCR rule requires a major project to reconfigure the existing ash site in which approximately one-half of the site will become a closed-in-place impoundment for all the coal ash that is currently at the ash pond. The remaining half will be used to continue to receive RDF ash from the Power Plant. Compliance with the rule is required prior to April 2026.

On November 28, 2023, City Council approved preliminary plans and specifications for Ash Pond Closure and RDF Ash Pond Construction. Bid documents were issued to 28 firms and three plan rooms. The bid was advertised on the Current Bid Opportunities section of the Purchasing webpage and a Legal Notice was published on the websites of a contractor plan room service with statewide circulation. The bid contained a base bid item and an add alternate bid item. **The base bid includes the work necessary to comply with the Environmental Protection Agency (EPA) regulations by constructing the close-in-place impoundment. The add alternate bid item is to reconstruct the lagoon, which would be necessary if RDF burning is to continue for the long term.**

On January 24, 2024, eight bids were received as shown in the table below.

BIDDER	BASE BID	ADD ALTERNATE
ELDER CORPORATION Des Moines, IA	\$2,198,995.00	\$1,862,980.00
ON TRACK CONSTRUCTION LLC Nevada, IA	\$2,486,549.00	\$2,612,872.00
JB HOLLAND CONSTRUCTION INC Decorah, IA	\$2,606,093.15	\$2,527,699.00
RACHEL CONTRACTING LLC St Michael, MN	\$3,439,269.00	\$2,923,705.25
RYAN INCORPORATED CENTRAL Janesville, WI	\$4,605,956.75	\$2,614,381.00

VEIT & COMPANY INC Rogers, MN	\$4,505,704.99	\$2,956,128.51
TETRA TECH EC, INC Parsippany, NJ	\$5,127,723.00	\$3,508,104.00
CJ MOYNA & SONS LLC Elkader, IA	\$5,692,085.40	\$3,082,358.60

The Engineer's estimate for this project is \$5,100,000 for the base bid and \$2,100,000 for the add-alternate bid. The current FY 2023/24 budget includes \$6,957,484 for this project.

SCOPE OF PROJECT:

The first question analyzed by staff is whether to award the base bid only, or to award the larger scope that includes the base bid plus the add-alternate. **Since the City is still evaluating the long-term future of waste to energy and burning RDF at the Power Plant, staff is not recommending awarding the add-alternate to reconstruct the RDF ash pond, at this time.**

If the add-alternate is not awarded, the Power Plant can continue to burn RDF for the near future. However, the capacity to combust RDF in the long-term will be more limited, which will make ash handling and maintenance of equipment more challenging and costlier. Therefore, if a decision is made to support RDF combustion in the long-term, it will require revisiting the question of reconstructing the RDF ash pond in the future.

BID ANALYSIS:

Experience working with coal ash is important with this project. Coal ash contains characteristics that are different than working with conventional soils on typical earthwork projects. It is important that the appropriate moisture is achieved through dewatering, decanting, and moisture conditioning. The material will need to be stacked and compacted according to carefully developed specifications to ensure a stable closure area. If the material is not stable it can collapse or have significant slope failure. **Both types of failures are prohibited by regulations. Such a failure could result in serious injury, fines from the EPA, and contamination of adjacent waterways and land.** Once the ash closure mound is completed for this project, it will be approximately 50 feet tall, stressing the importance to be compacted and constructed properly.

The required experience was described in the contract documents in the construction quality assurance plan stating "the Construction Contractor will be experienced in surface impoundment closure, geomembrane liner installation, pipeline installation and final cover construction." Descriptions of the construction and required experience was also discussed in the pre-bid meeting held on December 11, 2023.

Normally, a public improvement contract must be awarded to the lowest responsive, responsible bidder. However, Iowa Code allows contracts relating to public utilities to be awarded by the city as it deems to be in the best interests of the utility. As part of the preparation of the bid documents, staff included five critical elements to ensure the project would be awarded in the best interests of the utility. These five critical experience areas were:

1. Digging out ash
2. Moving and Handling ash

3. Piping Installation
4. Mounding and Compacting ash
5. Encapsulating the ash

A qualified contractor needs to have experience in all five areas. The bid documents required all bidders to provide reference projects of similar nature and scope.

References for the apparent low bidder showed experience in three of the five critical areas. Staff was not able to find adequate experience in moving and handling ash (#2) and mounding and compacting ash (#4). **Therefore, staff believes awarding the contract to the apparent low bidder would not be in the best interests of the utility.**

When staff requested references from the next lowest bidder, the bidder stated it had no experience with CCR material (requested in criteria #1, #2, #4, & #5). **Therefore, staff believes awarding the contract to the second lowest bidder would not be in the best interests of the utility.**

Staff then requested references from the third lowest bidder, JB Holland. This contractor's references described experience in all five necessary areas. Therefore, staff recommends awarding the base bid to JB Holland Construction, in the amount of \$2,606,093.15.

ALTERNATIVES:

1. Approve final plans and specifications and awarding a contract to JB Holland Construction, Inc., of Decorah, IA, in the amount of \$2,606,093.15 (inclusive of sales tax) for the base bid only.
2. Approve final plans and specifications and awarding a contract to JB Holland Construction, Inc., of Decorah, IA, in the amount of \$5,133,792.15 (inclusive of sales tax) for the base bid plus the add-alternate.
3. Award a contract to one of the other bidders.
4. Reject all bids and direct staff to rebid.

CITY MANAGER'S RECOMMENDED ACTION:

This work is necessary for the Power Plant to comply with the U.S. EPA's Coal Combustion Residuals rule. The project has been planned for the past several years and funding has been included in the Capital Improvements Plan to carry out the construction.

Staff has consulted with the apparent lowest and second-lowest bidders to review their experience with the requirements outlined in the bid documents. **Neither of these bidders has all the experience staff believes is critically necessary for the project. Ash handling differs greatly from handling other materials. It is essential that the ash be handled, mounded, compacted, and encapsulated using appropriate techniques. Failure to do so could risk serious injury, environmental damage, and regulatory fines. The third lowest bidder was evaluated using the same criteria as the first two bidders, and staff believes this bidder has the experience outlined in the bid documents as necessary to successfully complete the project.**

Therefore, the City Manager believes it is in the best interest of the electric utility for the City Council to adopt Alternative No. 1, and thereby approve final plans and specifications and award

a contract to JB Holland Construction, Inc., of Decorah, IA, in the amount of \$2,606,093.15 (inclusive of sales tax) for the base bid only.