

ITEM #: 11
DATE: 07-23-24
DEPT: ELEC

COUNCIL ACTION FORM

SUBJECT: ASH POND CLOSURE AND RDF ASH POND RECONSTRUCTION - CHANGE ORDER NO. 1

BACKGROUND:

The City's Power Plant operated for over a century by combusting coal to generate electricity. The combustion of coal generated ash as a byproduct which was conveyed from the boilers to an ash impoundment pond several hundred yards to the East of the Power Plant. Although the Power Plant no longer burns coal, the existing coal ash still sits at the ash pond.

On April 17, 2015, a Final Rule entitled "Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals (CCR) 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. **Compliance with the CCR rule requires a major project at the City's ash pond to reconfigure the existing ash site, where one-half of the site will become a closed-in-place impoundment.** Ahead of the CCR pond closure, in April 2021, the Power Plant stopped discharging ash and water into the area of the pond that contained CCR. This allowed the pond to dry for closer inspection. Soil samples suggested favorable conditions to work with the ash.

On March 12, 2024, a contract in the amount of \$2,606,093.15 was awarded to JB Holland Construction Inc, of Decorah, IA, to perform the closure project. **At the start of construction, the surface of the ash was dry. However, as the contractor dug into the ash it was discovered that there are pockets of very wet ash.** The moisture is likely a result of the clay liner at the bottom of the pond holding water as it was designed to do. The ash itself also retains water differently than soil. **Wet ash is very slippery and cannot be compacted into a stable mound, which is fundamental to the project.**

JB Holland has been excavating and spreading out the wet ash to dry it. The larger quantity of wet ash and limited space available to spread it to dry has slowed down construction progress. JB Holland is very familiar with working with wet ash, but the volume of wet ash has proven to require more than just the mechanical means currently being used to dry it.

City staff with their consultants and JB Holland have discussed options to reduce the moisture in the ash and continue the construction progress. In addition to spreading out the ash and "air drying," there are additives that can be incorporated into the ash to absorb moisture, such as cement or hydrated lime. The contractor and consultant suggest incorporating an additive into the extremely wet ash. The contractor will continue to spread out and work the ash while also incorporating additive where necessary. As the ash reaches the appropriate dryness, it can be placed in the closure area and compacted.

Staff is requesting Council approval of a change order to add \$400,000 to the contract for drying additive. The contractor will incorporate the additive into the wettest ash and will not need to treat drier material. Staff, the consultants, and the contractor believes using additive will allow construction to start on the mound and thus create more space for drying. **The exact quantity of extremely wet ash is unknown. Staff believes the requested funds will be sufficient to dry the ash, but it is possible that**

more wet ash will be encountered and further funds will need to be added to the contract. Staff will monitor the progress of the drying process in the next several weeks and will return to the City Council if more funds are necessary.

In addition, this change order also includes some small additional items that have been modified from the original scope which staff and the consultant believe better accomplish the overall design of the project. These items are shown below:

Action	Description	Cost
Add	Drying additive	\$400,000
Deduct	Change from SDR 17 to N12 in 24-inch pipe material	(\$2,416.41)
Add	Change in 24-inch concrete flared end section	\$7,700.00
Add	Erosion stone at rock chutes	\$1,621.20
Add	Insulation over forcemain piping	\$1,200.00
Add	Additional pipe boots	\$7,560.00
Add	Increase bond amount	\$1,680.00
TOTAL		\$417,344.79

The budget for this project contains \$5,457,484 in funding. The original contract amount was \$2,606,093.15, leaving \$2,851,390.85 available to finance this change order.

ALTERNATIVES:

1. Approve Change Order No. 1 in the amount of \$417,344.79 to JB Holland Construction Inc, of Decorah, IA, bringing the contract total to \$3,023,437.94 (inclusive of sales tax).
2. Do not approve the requested change order.

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. It is essential that the ash be handled, mounded, compacted, and encapsulated using appropriate techniques to ensure integrity of the material and compliance with the U.S. EPA. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as described above.