



City of Norman, OK

Municipal Building
Council Chambers
201 West Gray
Norman, OK 73069

Master

File Number: K-1617-121 CO2

File ID: K-1617-121 CO2

Type: Contract

Status: Consent Item

Version: 1

Reference: Item 12

In Control: City Council

Department: Utilities Department

Cost: \$317,569.30

File Created: 05/28/2019

File Name: Foley CO#2 for WTP Phase II Improvements

Final Action:

Title: CHANGE ORDER NO. TWO TO CONTRACT K-1617-121: BY AND BETWEEN THE NORMAN UTILITIES AUTHORITY AND ENERFAB POWER & INDUSTRIAL (FORMERLY FOLEY COMPANY) INCREASING THE CONTRACT AMOUNT BY \$317,569.30 FOR A REVISED CONTRACT AMOUNT OF \$30,515,462.26 AND ADDING 118 CALENDAR DAYS TO THE CONTRACT FOR THE WATER TREATMENT PLANT PHASE II IMPROVEMENTS.

Notes: ACTION NEEDED: Acting as the Norman Utilities Authority, motion to approve or reject Change Order No. Two to Contract K-1617-121 with Enerfab Power & Industrial (formerly Foley Company) increasing the contract amount by \$317,569.30 for a revised contract amount of \$30,515,462.24 and adding 118 calendar days to the contract; and, if approved, authorize the execution thereof.

ACTION TAKEN: _____

Agenda Date: 06/11/2019

Agenda Number: 12

Attachments: CO#2 Enerfab, Recommendation Letter_signed

Project Manager: Chris Mattingly, Capital Projects Engineer

Entered by: chris.mattingly@normanok.gov

Effective Date:

History of Legislative File

Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
1	City Council	06/11/2019					

Text of Legislative File K-1617-121 CO2

Body

BACKGROUND: On May 22, 2012, the Norman Utilities Authority (NUA) approved Contract K-1112-124 with Carollo Engineers, Inc. to perform final design services for the Phase II Water Treatment Plant (WTP) Improvements. An 8-month pilot project was performed as a part of that contract to determine the final design parameters and arrangement of the treatment system. Three

process alternatives were studied and it was concluded that ozone should be used to address taste and odor concerns and pharmaceutical/algal toxin reduction, while a system employing Ultraviolet Light would function as the primary disinfectant.

On January 13, 2015, Norman citizens approved a water rate increase with 67% voting in favor of the increase. The rate increase was expected to generate capital of approximately \$49 million of which \$31 million was to be used for the WTP Phase II Upgrade.

On February 2, 2015, the NUA approved Amendment No. 1 to complete the design, provide construction administration services, and provide full-time on-site construction observation services for the WTP Phase II Upgrade. The design was completed and plans and specifications were submitted to the Oklahoma Department of Environmental Quality (ODEQ) on October 4, 2016. The ODEQ approved the plans and specifications on January 18, 2017. The Phase II WTP improvements include:

- New 17 million gallons per day (MG/D) ozone system;
- Ultraviolet disinfection system;
- On-site hypochlorite solution generation system;
- Intermediate (low lift) pump station;
- Chemical feed equipment and new chemical feed building;
- New maintenance building;
- New administration building and architectural improvements to the existing filter building;
- Rehabilitation of high pressure zone pump station; and
- Associated electrical and control system improvements.

The project is primarily funded by a State Revolving Fund loan administered by ODEQ and dispersed from the Oklahoma Water Resources Board (OWRB). A loan of up to \$31 million from the OWRB was approved by the NUA on January 17, 2017 and the loan closed on January 31, 2017 at an interest rate of 2.81% for a 15-year term.

Bids for the WTP Phase II Improvements were received from three pre-qualified prime contractors on March 23, 2017. Foley Company was overall low bidder in the amount of \$33,309,665 and also low bidder for selected additive alternate combinations for an anticipated contract amount of \$29,990,165 (base bid less selected alternates). The following bid items were omitted as a cost saving measure:

- Air wash system for filters - \$2,895,000
- Covered parking/PAC Storage at maintenance building (future) - \$56,000
- Door replacement on chemical building (future) - \$42,000
- Replace filter effluent valves #1-4 (future) - \$174,000
- Replace filter effluent valves #5-8 (future) - \$49,000
- Chemical trench covers (future) - \$21,000
- Replace backwash pump (future) - \$62,000
- Operator door with window side lite (omit) -\$5,500
- Brick veneer on south side of new admin building in lieu of metal panels (omit) - \$15,000

TOTAL AMOUNT - \$3,319,500

Foley Company began construction of the improvements on May 29, 2017 and the work was scheduled to be complete within 730 calendar days. On June 5, 2018, Change Order No. 1 was approved by the NUA increasing the contract amount by \$207,727.96 and providing a contract time extension of 87 calendar days. As of May 1, 2019, the contractor has been paid \$21,044,029.83 or 70% of the contract amount while 84% of the contract time has been consumed.

DISCUSSION: As detailed in proposed Change Order No. 2 (CO#2); thirty-one (31) Proposed Change Orders (PCOs) have been submitted and approved by Carollo and staff. The PCOs associated with CO#2 total \$317,569.30 which increases the contract approximately 1.06% from \$30,197,892.96 to \$30,515,462.26. To date, both change orders total \$525,297.26 or 1.75% which is significantly less than the 10% maximum allowed by state statutes.

Each proposed change order is detailed in attached CO#2; time extensions were also granted for several change order items. Changes are generally required due to unforeseen conditions encountered at the site or to improve the quality of the final work project. Several of the larger change order items are discussed briefly below:

- The largest unforeseen change of \$49,187.21 was needed within the high pressure zone (HPZ) vaults. During excavation, substantial groundwater flow was encountered causing unstable soil. Exploratory digging continued until the groundwater intrusion ceased and there was stable soil to construct the vaults. Ultimately, a corbel along the wall of the existing HPZ pump vault was added to support the new, adjacent valve vault.
- The second largest unforeseen change of \$47,154.59 modified the potable water system at the main pressure zone and high-pressure zone pump stations. As part of this work, the existing potable water line between the filter and the lime building was replaced due to significant corrosion and a secondary potable water connection to the distribution system was made improving redundancy.
- The third largest unforeseen change of \$17,833.90 repaired and concrete encased the existing chemical conduit due to corrosion of existing metal piping. Chemical piping runs through this conduit between the chemical trenches and the filter building.
- The largest value added change modified the raw water system at a cost of \$35,915.18. This work relocated chemical feed and sample lines from an existing section of corroded pipe as well as provided new electrical wiring for raw water tank monitoring.

Adequate funds in the amount of \$746,229.14 are available in the Water Treatment Plant Improvement Project, Construction (account 031-9939-462.61-01; project WB0292).

RECOMMENDATION: Recommend the NUA approve Change Order No. 2 in the amount of \$317,569.30 with Foley Company increasing the contract amount from \$30,197,892.96 to \$30,515,462.26 and extending the final completion date by 118 calendar days to December 20, 2019.