ITEM # <u>22</u> DATE: 06-28-16

COUNCIL ACTION FORM

SUBJECT: ADDITIONAL PROFESSIONAL SERVICES FOR NEW WATER TREATMENT PLANT

BACKGROUND

This action is to approve additional engineering services for construction observation for the new water treatment plant project.

On August 28, 2012, Council approved a professional services agreement with FOX Engineering of Ames for the final detailed design of the new water treatment plant, including bidding and construction phase services.

A portion of the construction phase services is for a resident project representative (RPR) who watches the construction and reports any deviations from the contract documents. The water plant construction project is made up of two contracts: Contract 1 is the pipeline construction and Contract 2 is the water treatment plant construction project. Each contract has separate RPR services being provided by FOX.

Contract 1 RPR services are provided under Task Order 4.3 with the Consultants. The construction of the pipeline took longer than expected and additional RPR services were needed to ensure the project was completed according to contract requirements. The total additional cost for these services is \$35,315. Staff anticipates recouping this additional expense through the Liquidated Damages clause of Contract 1, where the contractor compensates the City at a rate of \$800 per calendar day for failing to meet the contractual construction deadline. As of June 28, the accrued liquidated damages total \$76,800.

Contract 2 RPR services are provided under Task Order 4.1 with the Consultants. The original RPR scope of work was put together and the budget established before final design of the project began. It provided for two RPRs during heavy structural construction and a single RPR for the balance of the project. It was anticipated that the second RPR would be needed for 14 months, and this was what the original agreement with FOX Engineering included.

Once the construction schedule was received from the contractor, the time requirement for RPR services was better understood. Through efficient use of budget, the consultants were able to extend the budget for the second RPR to cover about 16 months. There is still considerable concrete and structural steel work occurring, however, and continuing periodic observation is important. The consultants and City staff worked together to come up with a scope of work for the remaining construction of the plant that is both fiscally responsible and provides the necessary oversight.

Total additional cost for these services is \$72,700, of which \$9,800 is an increase in the fixed fee portion of FOX's construction oversight work and \$62,900 will be billed hourly for only the time actually worked.

The approved FY 16/17 Capital Improvements Plan includes a total project budget of \$71,241,000 as summarized below:

Description	Amount
Contract 1 (actual bid price)	\$3,197,273
Contract 2 (actual bid price)	52,497,000
Engineering	8,900,000
Lime Sludge Removal	1,570,000
Land & Easements	899,000
Special Inspections	350,000
Pre-Design Activities	774,000
Equipment Allowances, Misc.	540,000
Contingency	2,513,727
Total	\$71,241,000

The available balance of the project contingency account is currently \$2,192,115, inclusive of all approved change orders to date. A summary of all change orders to the entire project is attached.

ALTERNATIVES:

- 1. Approve Amendment 9 to Task Order 4.1 and Amendment 2 to Task Order 4.3 under the Master Agreement with FOX Engineering for the design, bidding and construction of the new water treatment plant in the amounts of \$72,700 and \$35,315, respectively.
- 2. Approve only one of the two Amendments to the Master Agreement with FOX Engineering.
- 3. Do not approve an Amendment to either Task Order at this time.

MANAGER'S RECOMMENDED ACTION:

The new water treatment plant project is exceptionally important for the long-term viability of the community, both in terms of increasing the water utility's capability to meet growing demands, as well as to improve the redundancy and reliability of the treatment process. An important part of the construction process is ensuring that the project is completed as designed and in accordance with contract documents. Having dedicated RPR personnel provide this service is extremely valuable.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.

New Water Treatment Plant: Summary of Change Orders and Running Contingency Balance

Description	Net Change	Remaining Contingency
Initial contingency, based on FY 16/17 Cli	P	\$ 2,513,727.00
Contract 2, Change Order #1 Sanitary Sewer Realignment	\$ 127,023.00	\$ 2,386,704.00
Contract 2, Change Order #2 Second water service line; additional gate valve; change in pipe material; manhole waterproofing.	\$ 55,634.00	\$ 2,331,070.00
Contract 1, Change Order #1 Raw water realignment, site work, communication structure	\$ 9,256.45	\$ 2,321,813.55
Contract 1, Change Order #2 Piping changes, bypass structure changes, hydrant valves	\$ 21,687.60	\$ 2,300,125.95
Contract 2, Change Order #3 Minor plumbing changes, tree removal, minor electrical change to elevator, process valve simplification	\$ 5,457.00	\$ 2,294,668,95
Contract 1, Change Order #3 Air relief hydrants, pedestrian ramp, thrust block removal and replacement	\$ 16,974.83	\$ 2,277,694.12
Contract 2, Change Order #4 Clearwell access hatches	\$ 6,192.00	\$ 2,271,502.12
Contract 2, Change Order #5 Debris removal, analyzers, access doors, lime pond gates, structural clarifications	\$ 21,790.00	\$ 2,249,712.12
Contract 1, Change Order #4 Road stone, replace lime sludge line laterals, repaint hydrants	\$ 6,647.12	\$ 2,243,065.00
Contract 2, Change Order #6 Electrical modifications, valve floor stand, tracer wire, loss of work time	\$ 22,624.00	\$ 2,220,441.00
Contract 2, Change order #7 Piping modifications to eliminate maintenance in a confined space	\$ 8,985.00	\$ 2,211,456.00
Contract 2, Change order #8 Flooring changes, plumbing modifications, concrete construction changes, valves, concrete pad	\$ 19,341.00	\$ 2,192,115.00
Professional services contract Additional RPR services	\$ 108,015.00	\$ 2,084,100.00