

COUNCIL ACTION FORM

SUBJECT: ENGINEERING SERVICES FOR NEW WATER TREATMENT PLANT

BACKGROUND:

On August 28, 2012, Council approved a professional services agreement with FOX Engineering of Ames, Iowa for the final, detailed design of the new water treatment plant, including bidding and construction phase services. As the design process has evolved, the estimated cost of the project has increased.

The design process for the project includes a “value engineering” (VE) session that was to be conducted at the 80% complete stage. After receiving the most recent cost estimate at the 40% stage, however, staff determined that it was necessary to begin a comprehensive re-evaluation of the design immediately, looking for ways to reduce costs without sacrificing the fundamental mission of the facility.

That VE review is still in progress. But there are two changes that staff has already decided to adopt into the new facility to reduce the construction costs.

- **Reducing the size of the clearwell and backwash recovery basin.**
 - Estimated construction cost reduction: \$460,000
 - Estimated redesign fee: \$26,900
 - **Estimated net cost reduction: \$433,100**
- **Eliminating the at-grade vehicle entrance into the west end of the pipe gallery.**
 - Estimated construction cost reduction: \$443,500
 - Estimated redesign fee: \$44,400
 - **Estimated net cost reduction: \$399,100**

Staff anticipates bringing the results of the completed evaluation along with the revised cost estimate to the City Council on August 27. While the ultimate cost savings and associated redesign expense is not yet finalized, staff is anticipating a total construction cost savings in excess of \$3,000,000, and anticipates that the total redesign cost will be approximately \$500,000 (including what Council is being asked to approve now).

To keep the design process on schedule, staff is recommending that Council authorize an additional \$71,300 in design fees to FOX Engineering for redesign of the two specific elements of the facility described above. Additional redesign fees will be presented to Council for approval when the VE process is completed.

ALTERNATIVES:

1. Authorize a partial increase of \$71,300 in additional design fees as described above with FOX Engineering for the new Water Treatment Plant. The balance of the redesign fees will be presented for Council consideration at a subsequent meeting.
2. Do not authorize the increase at this time and wait for the completion of the value engineering process before authorizing additional fees. The design process will be slowed during this period of time.
3. Do not authorize any change in design fees. Engineering efforts will proceed using the current design.

MANAGER'S RECOMMENDED ACTION:

City staff and the design consultants are working diligently to contain the cost of the new water treatment plant. When it was determined that the cost was growing beyond the level adopted by Council, an internal value engineering process was initiated. While the VE effort is not yet complete, there are some cost-saving ideas that staff would like to direct the design team to begin incorporating immediately.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby authorizing a partial increase of \$71,300 in additional design fees for FOX Engineering for the new Water Treatment Plant. Additional redesign fees will be proposed to Council at a future meeting.