Meeting Date: April 17, 2017

Report No. SUA-17-08 **Agenda Item No.** 2b

Purpose: Authorization of a Professional Services Agreement (PSA) with Freese and Nichols, Inc. for Project 16SG01 – WWTP Miscellaneous Improvements Project

Budget Impact: No additional appropriation is necessary for this item. Sufficient funds are available in the project budget.

Prior Trustee Action or Part of an Approved Project: Yes

Related Items: The project was included in the FY16 budget approved by the Trustees.

Alternatives: The following alternatives are available to the Trustees:

- Approve the proposed PSA.
- Reject the PSA. Based on guidance from the Trustees, staff will renegotiate the scope and fee with Freese and Nichols, or begin negotiations with the next most qualified consultant.
- Cancel the project. Cancelling the project will delay needed improvements at the WWTP.

Recommendation: Staff recommends that the Trustees authorize expenditures in the amount of $172,252, which includes a 10% contingency, for evaluation and conceptual design of the WWTP Miscellaneous Improvements Project.

Prepared by: David Barth, WR Senior Project Manager

Reviewed by: William Millis, WR Director **Reviewed by:** Dan Blankenship, Deputy City Manager

Submitted by: Norman McNickle, City Manager

Background Information:

This Project includes evaluation of and potential improvements to multiple facilities at the Waste Water Treatment Plant (WWTP). These facilities include two digesters, an automatic transfer switch,gas collection system used for fueling the heat generation system, grease handling system, basin drains, fencing and roofing.

The WWTP has three anaerobic digesters that work together to process sludge. Digester A, constructed in 1962, has a fixed lid. Digesters B and C have floating lids that were both replaced in 2003. Sludge digestion produces corrosive gases that have led to the deterioration of Digester A and B lids. The lid on Digester A is in poor condition and in need of full replacement. The lid on Digester B is showing signs of deterioration and will be evaluated for rehabilitation or possible replacement.

The WWTP has two separate electric services (both provided by Stillwater Electric Utility) that can provide power for plant operations. The Automatic Transfer Switch (ATS) is connected to these two services and provides switching capability in the event that one of the services is disrupted. The ATS was struck by lightning and automatic switching is no longer operational. Restoring this capability to the WWTP is a critical need and should be accomplished as soon as possible to meet the requirements for a back-up power supply.

The biogas produced in the digesters can be used to fuel the sludge heating equipment. However, biogas flow from the digesters is currently inhibited due to issues with the piping. Therefore, the sludge heating equipment has had to be fueled by natural gas for the last five years. Additional needs at the WWTP include installation of a grease handling system, replacement of the aeration basin drains, replacement of the fencing surrounding the plant and sludge injection fields, and replacement of the roofing on several buildings.

Water Resources (WR) staff reviewed the summary of qualifications submitted to the WR Department by design consultants and three firms were invited to submit proposals for the project. After reviewing and ranking the proposals, WR staff selected and negotiated an agreement with Freese and Nichols. The initial scope, Phase 1, of the agreement includes replacement of the ATS and evaluation of the digester lids and several other components of the WWTP as described above. The scope and fee for the final design, bidding and construction oversight services will be negotiated and agreed upon after the initial evaluation is complete.

WR staff is requesting a total authorization, including a 10% contingency, of $172,252 for design of the ATS replacement and the Phase 1 study of the WWTP Misc. Improvements Project.