ACTION: Award a professional services contract to Carollo Engineers, Inc. for the Water Treatment Plant Assessment – South Tempe and Johnny G. Martinez Water Treatment Plants project located at 6600 South Price Road and 255 East Mangold Lane, respectively.

FISCAL IMPACT: The professional services contract is $998,324. Funds to cover this contract and related costs are appropriated for fiscal year 2018/19 in the Capital Improvement Project No. 3208019A, Water Treatment Plant Asset Maintenance + Upgrades.

RECOMMENDATION: Award the professional services contract to Carollo Engineers, Inc.

BACKGROUND INFORMATION:

Project History:
The City of Tempe (City) operates and maintains two surface water treatment plants, the Johnny G. Martinez Water Treatment Plant (JGMWTP) and the South Tempe Water Treatment Plant (STWTP). As the plants continue to age there have been numerous expansions, upgrades, and maintenance projects, each adding efficiency and reliability to the production of water for the residents of Tempe.

For many years there has not been an increase in water demand, and many components of the water production process have remained functionally untouched, though well-maintained. The intent of this project is to perform a detailed asset inventory and condition assessment of JGMWTP and STWTP processes, systems, and components; to attain an analytics baseline that incorporates appropriate dynamic market and life cycle costs, energy efficiency and management, process optimization, water quality, and risk assessment. Once a baseline assessment report is established, a review of currently available water treatment processes, technologies, and methodologies will be evaluated and considered for each WTP system aligning them with the Council Priorities and purpose statements of the Municipal Utilities Department and the Water Utilities Division. A subsequent final report will be produced outlining the results of the evaluations considering life cycle costs, water quality, and criticality, with a prioritized and phased approach for improvements.

Scope of Work:
The scope of work on this project is to:

- Verify and update current inventory of assets at each WTP and provide a current condition assessment documented within the City’s Kona software.
- Review WTP processes and identify future regulatory and water quality challenges and goals, and develop phased approaches to address and implement process solutions to these challenges and goals. Elements of these reviews will include energy optimization, risk mitigation, operability, reliability, staff safety, and other criteria.
- Review and propose appropriate optimization of existing processes to address varying raw water qualities from SRP and CAP water.
- Review baseline energy usage at the WTPs and propose energy optimization strategies and energy conservation measures (ECMs) including process efficiency related ECMs, lighting, and pumps. This will result in a list of
recommended energy efficiency projects that are coordinated with end of useful life and/or energy savings considerations.

- Develop O&M and capital costs for alternatives for comparison, and a phased capital outlay for the project planning time of ten years. The phased capital outlay list for projects will include recommended projects that provide measurable results for sustainable practices within industry accepted programs like Envision.

**Contract Type:** Professional Services Contract.

**Procurement Method:**
Request for Qualifications:
Carollo Engineers, Inc. was selected by a review committee as the most qualified firm for these services using a process pursuant to Arizona Revised Statutes § 34-603. The qualifications based selection process includes evaluation of each firm's statement of qualifications in response to the City's request for qualifications (RFQ); holding selection panel interviews with the firms based on selection criteria and relative weight of selection criteria as outlined in the RFQ, including evaluation of the consultant's expertise, qualifications of key personnel and project experience; and selecting the final list of consultant's in order of preference. Staff has negotiated the professional services fee with Carollo Engineers, Inc. and considers it reasonable for the scope of services.

**ATTACHMENTS:** Professional Services Contract

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