AGENDA ITEM #: _____ DATE: July 10, 2017 CAR #: 17-6076

CITY OF GOODYEAR COUNCIL ACTION REPORT (CAR)

SUBJECT: Authorize an expenditure for the Corgett Water Reclamation Headworks Upgrades Project **STAFF PRESENTER:** Todd Carpenter,

Wastewater Superintendent

CASE NUMBER: None

OTHER PRESENTER: None

PROPOSED ACTION:

Authorize the expenditure of \$971,645 to perform the construction services for the Corgett WRF Headworks Upgrades Project. This expenditure would allow the City to enter into a contract with J.R. Filanc Construction Company, Inc. for these services.

BACKGROUND AND PREVIOUS ACTIONS:

The Corgett Water Reclamation Facility (WRF) has been in operation since 1997. The original wet wells, headworks concrete structure, piping, screening and grit removal equipment are still in use today. Rehabilitation of this structure and equipment replacement were identified as a project in the Integrated Water Master Plan (IWMP). The funding for the project is part of the 5-year rate funded CIP.

Wilson Engineering was hired as the design engineer for this project. Part of their work was to evaluate the headworks structure, equipment and processes. Based on their recommendation and with plant staff support, this project will add an auger screen to function as the primary screen at the headworks, while keeping the older original screen in use as the back-up screening process. The original coatings will be removed from the wet wells and channels, and new coatings will be applied to those areas.

Challenges of the project stem from potential unknown electrical issues, and the complex coordination of construction services. In order to complete the project, the entire headworks structure will need to be bypassed with temporary pumping. This project needs tight control of the sub-contractors and schedule, as well as flexibility in construction, which may be obtained through a contract (cooperative agreement) with J.R. Filanc Construction Company

STAFF ANALYSIS:

The headworks concrete structure, which forms the wet wells, influent channels, and support for the screen(s) and grit removal processes, is in relative good condition given the age of that structure. This is mostly due to the coating that was applied to the structure originally. However, due to age of the coating, and in order to extend the life of this concrete structure, replacing the original application with a new coating is required.

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The existing rake-arm screen is still operational, but the design and functionality of that particular screen type is becoming obsolete and ineffective. Adding a new auger screen which has smaller openings to run as the primary screening removal process ensures effective and efficient removal of rags and debris, while protecting downstream equipment and processes. As there is only one screen in operation currently, adding this new auger screen also adds redundancy and reliability to the headworks screening process.

The current influent piping design has check valves located deep within the wet wells. When these get stuck or need to be replaced, a confined space entry must be coordinated and performed by plant operators and maintenance staff. This project will move those check valves above grade, eliminating the confined space entry required for repairs or replacements. Making such a design change to that influent piping reduces the staff manpower required to perform such maintenance tasks.

FISCAL ANALYSIS:

The construction portion of the project (WW1713) has been budgeted in the Enterprise-Wastewater fund for the FY18 Capital Improvement Plan for an amount of \$1,100,000. The quote from J.R. Filanc Construction Company for construction services is \$971,645.

RECOMMENDATION:

Authorize an expenditure for construction services for the Corgett Water Reclamation Facility Headworks Upgrade Project which includes structural rehabilitation and equipment replacement.

ATTACHMENTS:

None

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