



City Council Report

Date: July 1, 2014
To: City Council
Through: Kari Kent, Deputy City Manager
From: Beth Huning, City Engineer
Rob Kidder, Assistant City Engineer
Subject: SEWRP Miscellaneous Improvements Project
City Project C05010
District 6

**Strategic
Initiatives**



Purpose and Recommendation

The purpose of this report is to provide information to the Council on the bids received for the Southeast Water Reclamation Plant Facility Miscellaneous Improvements project. (See attached Exhibit "A" for location.) It is recommended that Council award this project to the lowest responsible bidder, Hunter Contracting, for a total award amount of \$3,508,351.00.

Background

This project will upgrade the Southeast Water Reclamation Plant (SEWRP) to address operational issues, add needed redundancy, rehabilitate or replace deteriorating or outdated equipment, and improve the reliability and efficiency of plant operations.

Discussion

The project scope includes upgrades to the following critical plant components: new gated influent bypass structure, pump replacement and upgrades to the return activated sludge (RAS) and tank drain pumping systems, rehabilitate secondary clarifiers, site bank stabilization and erosion control, and electrical and control system upgrades. The detail for the scope items are as follows:

- The SEWRP has three sewer lines that flow into the plant (i.e. influent) for treatment. Periodically, the influent flows need to be bypassed to facilitate plant maintenance, during construction, or in the event of a plant upset. The current bypassing operation has been problematic due to the location of the control structure that could cause flooding if the control system fails. The modified bypass scheme will relocate the diversion structure to eliminate the potential for flooding and provide a more direct diversion of incoming flow.

- The RAS and tank drain pumps have reached their design life and will be replaced.
- Several areas along the plant fence will receive embankment stabilization to repair existing erosion damage, reduce the potential for future erosion, and reduce silt flows into the plant storm drain system during rain events.
- Corrosion in the secondary clarifiers will be repaired and the equipment will be recoated to extend its useful life.
- Modifications will be made to both the plant influent and effluent flow meters to improve the accuracy of the flow measurements.
- Installation of a camera in the north portion of the plant to improve plant security
- Installation of a new prefabricated building in the north portion of the plant to house SCADA (supervisory control and data acquisition) equipment currently located in an electrical building, which does not conform to current electrical codes.
- Installation of electrical and instrumentation upgrades for the above items.

Other minor improvements include the installation of cleanouts on the plant sludge piping to facilitate cleaning in the event of clogging, and the installation of a flow meter for the residual solids pump station.

Alternatives

Council may choose not to award the contract. This is not recommended since the upgrades are needed to maintain the continued efficient operation of the plant.

Fiscal Impact

The total award for this project is \$3,508,351.00, comprised of the low bid of \$3,189,410.00 plus \$318,941.00 (10% change order allowance). Funding is available from 2010 Authorized Wastewater Bonds.

Coordinated With

The Water Resources Department concurs with this recommendation.

CITY OF MESA
MESA, ARIZONA

SEWRP Miscellaneous Improvements Project

PROJECT NO. C05010

Tabulation of Bids Received, Thursday, May 29 2014, at 2:30 P.M.

ENGINEER'S ESTIMATE	\$3,956,232.00
1. Hunter Contracting	\$3,189,410.00
2. MGC Contractors, Inc	\$3,496,500.00
3. PCL Contractors	\$3,586,474.00
4. Felix Construction	\$3,647,043.00