



City Council Report

Date: February 17, 2009
To: City Council
Through: Jack Friedline, Deputy City Manager
From: Elizabeth Huning, City Engineer
Subject: C.A.P. Water Treatment Plant Noise Mitigation Walls
Project No. 07-011-002
Council District No. 5

Purpose and Recommendation

The purpose of this report is to provide information to the Council on the results of the bids received for Project No. 07-011-002, C.A.P. Water Treatment Plant Noise Mitigation Walls (See Exhibit "A" for project location).

It is recommended that the Council award this project to the low bidder, Pure Construction LLC, for a total award of \$48,620.00.

Background

The Central Arizona Project (CAP) Water Treatment Plant (WTP) located at 7750 E. Brown was originally constructed in 1982 as a 24 million gallons per day (MGD) facility. Since the original construction, numerous plant improvements and expansions have been made culminating with the 2004 expansion to a capacity of 72 million gallons per day. The plant currently treats raw water from the CAP, stores the treated water in two 20 million gallon reservoirs, and then transfers treated water to the distribution system through two pump stations.

There are nine large pumps that are not enclosed within a building at the two pump stations. Future plans to expand the stations include the addition of three new pumps. The existing pumps generate significant noise levels that impact the neighboring homes located approximately 600 feet to the west. Staff has addressed the noise issue with temporary rented sound barriers. However, permanent enclosures are needed to further reduce the noise levels.

Community Impact –The construction will be contained on the City's WTP site. Temporary impacts to the area will include construction noise and dust. Once work is started, project completion is anticipated within thirty (30) calendar days.

Discussion

In June 2008, the City of Mesa contracted with Noise and Air Solutions to perform a noise assessment for the pump stations. Noise and Air Solutions determined that the noise levels produced by the existing pump stations complied with the current City of Mesa Noise Ordinance, however, the City's ordinance does not differentiate between daytime and nighttime noise. Residential communities are normally more sensitive to noise at nighttime than during the daytime hours. To account for nighttime sensitivity, the United States Department of Housing and Urban Development (HUD) has developed noise standards which have established both day and night noise level criterion. Based upon the HUD standards, noise mitigation is required in order to lower the noise to acceptable levels for the pump stations.

Several options were evaluated to mitigate the noise levels produced by the pump stations. Based on estimated cost and constructability constraints, staff selected an option to construct a 15-foot high, masonry block wall encompassing the pump stations on the north, west and south sides. After construction, Noise and Air Solutions will reevaluate noise measurements to confirm the effectiveness of the noise mitigation.

Alternatives

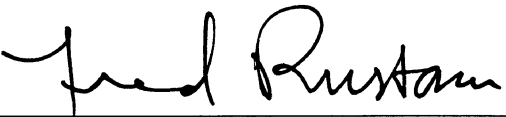
An alternative would be to not proceed with this project. This is not recommended since the existing pump stations along with the future pump station expansion will produce noise levels that exceed HUD standards.

Fiscal Impact

The recommended total award of this project is \$48,620.00 which consists of a low bid of \$44,200.00 plus an additional \$4,420.00 (10% allowance for change orders). This project is funded from the Adopted FY 08/09 Water Bond Capital program.

Coordinated With

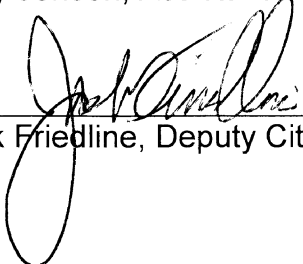
The Utilities Department concurs with this recommendation.

for 

Kelly Jensen, Assistant City Engineer



Elizabeth Huning, City Engineer



Jack Friedline, Deputy City Manager

Budget Information:
FY 08/09 Water Bond Capital Program

CITY OF MESA
MESA, ARIZONA

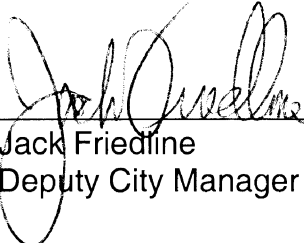
C.A.P. WATER TREATMENT PLANT NOISE MITIGATION WALLS
7750 EAST BROWN ROAD

PROJECT NO. 07-011-002

Tabulation of Bids Received, Thursday, January 8, 2009, at 1:00 P.M.

ENGINEER'S ESTIMATE	\$92,000.00
1. Pure Construction LLC	\$44,200.00
2. 442 Construction Inc.	\$47,844.00
3. Lone Bear Construction Inc.	\$77,777.00
4. Klondyke Construction LLC	\$91,260.00
5. Woods Construction Company	\$96,200.00
6. Concast Corporation	Rejected*

Recommend award to low bidder, Pure Construction LLC, in the amount of \$44,200.00 plus an additional \$4,420.00 (10% allowance for change orders) for a total award of \$48,620.00.



Jack Friedline
Deputy City Manager

*Rejected – Insufficient Bond Rating