



# City Council Report

**Date:** May 18, 2015  
**To:** City Council  
**Through:** Kari Kent, Deputy City Manager  
**From:** Beth Huning, City Engineer  
Rob Kidder, Assistant City Engineer  
**Subject:** City Wells 7 and 8, Desert Wells 19 and 20  
City Project Nos. C10474, CP0031, C05032, & C05033  
Districts 4 and 6

## Strategic Initiatives



## Purpose and Recommendation

The purpose of this report is to provide information to the Council concerning the bids received for the Re-Drilling of City Well Nos. 7 and 8, and new drilling of Desert Wells 19 and 20, located at 212 N. Mesa Drive, 604 N. Pasadena, 4731 S. Signal Butte Road, and 5217 S. Signal Butte Road, respectively. (See Exhibit "A" and "B" for project locations). It is recommended that Council award this project to the lowest responsible bidder, Arizona Beeman Drilling, in the amount of \$5,311,364.30.

## Background

The City of Mesa maintains and operates numerous groundwater wells throughout the City to provide drinking water for Mesa citizens. These projects will replace two existing wells located in downtown Mesa which have deteriorated and become unusable. Wells in the "City Zone" help to meet peak demands during normal operation and are the only source of water supply when the Val Vista Water Treatment Plant is shut down for maintenance. This project will also drill two new wells near Signal Butte Road and Elliot Road that will contribute water to meet increasing water demands due to growth in the Phoenix-Mesa Gateway Airport area.

## Discussion

City Well No. 7 was originally drilled in 1951. The well had air and traces of sand in the discharge. The well was capped in March 2011. This well was able to pump directly to the distribution system, which benefitted system redundancy and provided an additional water source during Val Vista Plant outages and dry-ups.

City Well No. 8 was originally drilled in 1953. This well has the option of pumping to the reservoir or directly into the distribution system. Recent video inspection indicates that

the well casing is in poor condition, which is confirmed by the amount of sand the well produces. Due to age and poor well casing condition, staff recommends re-drilling the well. Additionally, the location of the well site has been encroached upon and the current site is not desirable.

This project will properly abandon the existing City Wells 7 and 8 and drill new wells within the required 660' of the original sites. This project will also drill new wells on City-owned property on the east side of Signal Butte Road. Equipping of the well sites for pumping into the water system will be completed with future projects.

The cost of the well sites came in above the engineer's estimate an average of \$212,000 per well site. This cost increase is primarily due to the amount of work well drillers have back logged. Drillers who have previously bid on City of Mesa wells are currently committed to customers in California and are scheduling one to two years in the future. They indicated they cannot meet the demand California currently has due to the drought. As a result of the current demand for well sites, the cost increased beyond the engineer's estimate.

Community Impact – Short term impacts to the area will include construction noise, dust, temporary sidewalk restrictions, and temporary traffic restrictions. Each well site is anticipated to be completed within ninety (90) calendar days and the wells will be worked on sequentially.

## **Alternatives**

One alternative to the project is to cancel this bid and re-bid the project with only three of the highest priority wells. In addition to delaying the project, there is a risk the individual well cost could increase. In discussing this option with Water Resources, they prefer not to re-bid this project.

An alternative to the project would be to not replace and drill the wells. This is not recommended because it would decrease the reliability of the City's potable water system and water from Desert Wells 19 and 20 is needed to meet increased demands in the Gateway Airport area.

## **Fiscal Impact**

The recommended total award of this project is \$5,311,364.30, which consists of a low bid of \$4,828,513.00 plus an additional \$482,851.30 (10% allowance for change orders). This project will be funded from the 2010 and 2014 Water Bond Capital Program.

## **Coordinated With**

The Water Resources Department concurs with this recommendation.

CITY OF MESA  
MESA, ARIZONA

Well Drilling for City Well 7, City Well 8, Desert Well 19, and Desert Wells 20

**PROJECT NO. C10474, CP0031, C05032, & C05033**

Tabulation of Bids Received, Thursday, April 16, 2015, at 1:30 P.M.

|                            |                        |
|----------------------------|------------------------|
| <b>ENGINEER'S ESTIMATE</b> | <b>\$ 3,981,870.00</b> |
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|----------------------------|----------------|
| 1. Arizona Beeman Drilling | \$4,828,513.00 |
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| 2. Stewart Brothers Drilling Company | \$5,627,490.00 |
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