

STAFF REPORT 4/23/2025

To: Honorable Mayor and City Council Members

FROM: Cástulo R. Estrada, Utilities Director

SUBJECT: Authorize Contract Amendment No. 2 for Engineering Services Task Order for

Well #16 Rehabilitation W-54 in an Amount not to Exceed \$93,748.50.

STAFF RECOMMENDATION:

Authorize the City Manager to Execute Contract Amendment No. 2 for Engineering Services Task Order for Well #16 Rehabilitation W-54 in an Amount not to Exceed \$93,748.50.

BACKGROUND:

The City of Coachella and its Coachella Water Authority (CWA) is responsible for the water service to its residents and customers within its service boundary. The water division of the Utilities Department serves a population of approximately 45,000. Existing land uses consists primarily of single and multi-family homes, but also includes commercial and industrial zones.

CWA has one principal source of water supply, local groundwater pumped from the CWA-owned wells. There are currently six wells within the City's distribution system. The total pumping capacity of active wells is approximately 11,759 gallons per minute (gpm) or 16.5 million gallons per day (MGD).

DISCUSSION/ANALYSIS

Well # 16 was drilled in January 1991, when it was first completed; it had a capacity of approximately 2,650 gallons per minute. The well has a total depth of 730 ft. Since then the capacity has dropped to approximately 1,848 gallons per minute. Recently the well's performance has been concerning. On September 2023 staff worked with South West Pump and Drilling to perform a down-hole video inspection of the well casing.

The video inspection confirmed severe bacteriological growth on the well casing due to the age of the well. Staff recommends the rehabilitation of the well to remove the bacterial growth, scale and debris to unclog the water pathways through the gravel filter pack into the well. The rehabilitation of the well will help improve the efficiency and help reduce excessive velocities in areas that are currently clogged.

On June 2024, Council awarded a professional services contract to Dudek to work with staff to rehabilitate Well #16. City Staff and Dudek reviewed data and performed preliminary rehab to clear off enough scale to conduct a follow up video to determine if the casing retains enough integrity to withstand re-development stress and if further rehabilitation efforts and expenditures are reasonable.

At the end of 2024 a follow up video was performed and a summary of the preliminary rehab results was complete. It was determined that the poly brushing unplugged some of the perforations and removed some scale material, but there are also concerns that the brushing also removed some amount of metal from the casing material. Based on these casing/water quality characteristics and the results of that initial rehab, there is some risk in going with a more aggressive rehabilitation to try to remove more scale, and may not be necessary depending on the results of the pump testing.

On February 12, 2025, City Council approved additional rehabilitation work to establish the pumping capacity of Well 16. During the step test, Well 16 was pumped at increasing flow rates with the last step reaching 838 gallons per minute. Based on well performance and observed drawdown staff concludes that without further chemical and mechanical rehabilitation as proposed by Amendment No. 2 Well 16 will pump 850 – 900 gallons per minute. Staff is aiming to restore Well 16 closer to the capacity recorded in 2008 of 1,850 gallons per minute.

FISCAL IMPACT:

On 06/12/2024, City Council approved City Project W-54 Rehabilitation of Well #16; and appropriated \$300,000.00 for FY 24/25. There are enough funds in this FY to cover this request.

ATTACHMENTS:

1. Proposal to Perform Chemical and Mechanical Rehabilitation to Increase Production Rate at Well 16