

## **STAFF REPORT**

**Meeting Type:** Planning Committee/Board of Directors

Title: Bon Tempe Water Treatment Plant - Backwash Valves Replacement Project

(D23008)

From: Alex Anaya, Director of Engineering

**Through:** Ben Horenstein, General Manager

Meeting Date: September 23, 2025

**TYPE OF ITEM:** Approve X Review and Comment

**RECOMMENDATION:** Review and comment on the proposed contract award for the Bon Tempe Treatment Plant - Backwash Valves Replacement Project

**SUMMARY:** The Bon Tempe Treatment Plant - Backwash Valves Replacement Project will include furnishing labor, materials and equipment for the installation of 24-inch and 8-inch welded steel pipe, valves, associated electrical components, and appurtenances at the Bon Tempe Treatment Plant. District staff will make a recommendation for the contract award at a future regularly scheduled Board meeting.

**DISCUSSION:** The Bon Tempe Treatment Plant, with the capacity of 20 million gallons per day was constructed in 1959. The backwash system is a vital component in the treatment process as it allows water to flow by gravity from the wash water storage tank through the plant's four filter beds in order to clean the filters. The backwash process agitates dirt and debris particles that have accumulated onto the filter media during the water treatment process. Once the backwash is complete, the backwash water is drained from the system into the holding pond. An uncleaned filter bed results in restricted flow through the filter media and through the plant, reducing the overall capacity of the plant. The backwash process cleans the filters which allows for optimized flow of water through the plant filter beds.

The existing five 24-inch backwash control valves, which control the flow of water from the wash water storage tank into the filters for backwashing, are at the end of their useful life and are due for replacement.

This proposed project will address the deteriorating condition of the existing backwash system by replacing existing backwash valves, select pipe, and associated appurtenances. The primary backwash control valve will be relocated into a new vault on the exterior of the plant for ease of maintenance. A new 24-inch isolation valve and 8-inch bypass pipeline will be installed upstream of the new primary

backwash control valve for redundancy and to allow filter maintenance without a complete plant shutdown.

The replacement and installation of the new backwash valves and bypass will ensure proper functionality of the Bon Tempe Treatment Plant backwash system while enhancing the operational reliability of the water treatment infrastructure.

Estimated costs and schedule for this proposed project are shown below.

## Estimated Budget:

 Engineer's Estimate:
 \$530,000

 Contingency (20%):
 \$110,000

 Professional Services:
 \$42,460

 Materials:
 \$175,000

 District Labor/Inspection:
 \$325,000

 Total Budget:
 \$1,182,460

 Budget Category:
 A1A04

## <u>Estimated Project Implementation:</u>

Project Advertisement

Bid Opening:

Project Award:

Project Award:

Estimated Completion Date:

Duration:

September 16, 2025

October 9, 2025

April 30, 2026

191 days

**ENVIRONMENTAL REVIEW:** The Director of Engineering has found that the Project is Categorically Exempt pursuant to California Environmental Quality Act (CEQA) Guideline Section 15302 (c), Replacement or Reconstruction. The project qualifies for exemption pursuant of to Section 15302 (c) inasmuch as it includes the replacement of existing valves and water pipeline involving negligible or no expansion of capacity.

**FISCAL IMPACT:** The total cost to complete the Bon Tempe Treatment Plant - Backwash Valves Replacement Project is estimated at \$1,182,460, inclusive of District Labor and contingencies. Funding for this proposed project is included in the Capital Improvement Budget (FY 2026).

## ATTACHMENT(S):

1. Site Map