

**Metropolitan Domestic Water Improvement District
Board of Directors Meeting**

June 13, 2022

**Authorizing the General Manager to Allocate Additional Funding for the
Phase I Avra Valley Recharge Project (AVRP) Improvements**

Synopsis

The Board of Directors is requested to authorize the General Manager to increase funding for Phase 1 Avra Valley Recharge Project (AVRP) improvements.

Background

As part of the specific performance objectives for 2021, the Board of Directors included improvements at AVRP to include new metering infrastructure in order to eliminate Central Arizona Project (CAP) storage and billing discrepancies.

In January 2021, staff solicited a bid from Borderland Construction Company, Inc., (Borderland) for construction of improvements to AVRP. Those improvements included new metering infrastructure, as well as additional basin improvements that included consolidation of the existing four basins into two, grading the basins to improve the hydraulics, and reconfiguration of a portion of the perimeter road and fencing. The bid exceeded the District's anticipated budget.

In order to complete the critical components of the metering infrastructure, the design was phased. The Phase 1 improvements also included a revision to the energy dissipation structures at the outlets of the discharge pipes to the basins, utilizing rock riprap in lieu of the originally planned concrete. This change was based on the original assumption that the project would include subsequent phases that would require reconstruction of the energy dissipation structures.

At the February 8, 2021 meeting, the Board of Directors authorized the General Manager to execute an agreement to complete the Phase 1 improvements with Borderland in the amount of \$516,815.41 and authorized the General Manager to allocate funding in a cumulative amount not to exceed \$10,000. Additional efforts related to this work were estimated at \$3,000. The combined total, including the work by Borderland and the associated General Manager authorization, was \$529,815.41.

On May 10, 2021, the Board of Directors authorized an extension to the project to June 30, 2022 due to material shortages.

On January 10, 2022, as part of their review of the Fiscal Year 2022 adopted budget, the Board of Directors authorized an increase in the Capital Improvement Program budget by \$330,000 utilizing the District's fund balance for the AVRP Recharge Improvements project. The overall anticipated

expenditure for AVR P was anticipated to be \$530,000.

Issues

During construction, staff determined additional infrastructure improvements were needed, including increasing the height of the concrete walls at the metering vault, adding pipe supports that were inadvertently eliminated with the revision to the energy dissipation structures, additional grading to remove an existing pipe between two of the basins, relocation of the meter display to provide a more accessible alternative for staff, and the addition of sample ports to facilitate water quality testing.

Upon testing of the new infrastructure, the energy dissipation structures were determined to be insufficient to withstand the high volume flows from the discharge pipes. Borderland submitted a proposal to reconstruct the energy dissipation structures with concrete. Testing of the concrete is also necessary and would be completed by the District’s Miscellaneous Geotechnical and Material Testing consultant.

Together, these infrastructure improvements exceed the existing General Manager authority by \$42,000.

Recommendation

Staff recommends the Board of Directors authorize the General Manager to allocate additional funding in an amount not to exceed \$42,000 for the Phase 1 AVR P improvements. The completion date of June 30, 2022 remains unchanged.

Suggested Motion

I move to authorize the General Manager to authorize the General Manager to allocate additional funding in an amount not to exceed \$42,000 for the construction of the Phase 1 Avra Valley Recharge Project Improvements.

Respectfully submitted,

Sheila M. Bowen, P.E.
District Engineer

I concur with the above-noted recommendation.
Respectfully submitted,

Joseph Olsen, P.E.
General Manager