

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

**November 14, 2018**

**Conceptual Cost Opinion for Herb Johnson Reservoir Expansion**

**Synopsis**

The Board of Directors is requested to authorize utilizing Carollo Engineers to perform professional engineering services via the Arizona Department of Administration State Procurement Office annual professional services list. Work will include providing a high-level cost estimate for expansion of the Herb Johnson Reservoir.

**Background**

The Northwest Recharge, Recovery & Delivery System (NWRRDS) will use wells to recover the District's CAP water that has been recharged in Avra Valley and then move the water through approximately 13 miles of transmission mains to be blended with groundwater at the Herb Johnson Reservoir. Additional storage capacity at the Herb Johnson Reservoir site would facilitate maintenance and would add resiliency to the potable water system.

**Issues**

The existing Herb Johnson Reservoir was constructed with a single cell, which precludes the ability to take the reservoir out of service for maintenance. As such, the facility has not been taken offline since it was constructed in approximately 1996. Additional storage volume in a separate tank would allow each reservoir to be taken offline for maintenance and would add resiliency to the potable water system. The initial phase of the expansion is anticipated to consist of a 2.5-million gallon (MG) tank constructed on the parcel to the west of the existing Herb Johnson Reservoir. In the future, an additional 2.5-MG tank may be constructed. All tanks would be interconnected and function as cells of a single reservoir.

Land acquisition for the proposed storage addition was contemplated Fiscal Year 2020 per the District's 5-year Capital Improvement Program. Future design and construction activities for the initial phase of the expansion is anticipated to be bond funded. Staff proposes obtaining a conceptual cost opinion for a reservoir expansion at the site of the existing Herb Johnson Reservoir to support the District's bond planning.

**Recommendation**

Staff recommends the Board approve utilizing Carollo Engineers to perform professional engineering services related to developing a conceptual cost opinion for the Herb Johnson Reservoir Expansion in the amount of \$17,980.00 using the Arizona Department of Administration State Procurement Office annual professional services list.

**Suggested Motion**

I move to utilize Carollo Engineers to develop a conceptual cost opinion for the Herb Johnson Reservoir Expansion in the amount of \$17,980.00 using the Arizona Department of Administration State Procurement Office annual professional services list.

Respectfully submitted,

Sheila M. Bowen, P.E.  
District Engineer

I concur with the above-noted recommendation.

Respectfully submitted,

Joseph Olsen, P.E.  
General Manager