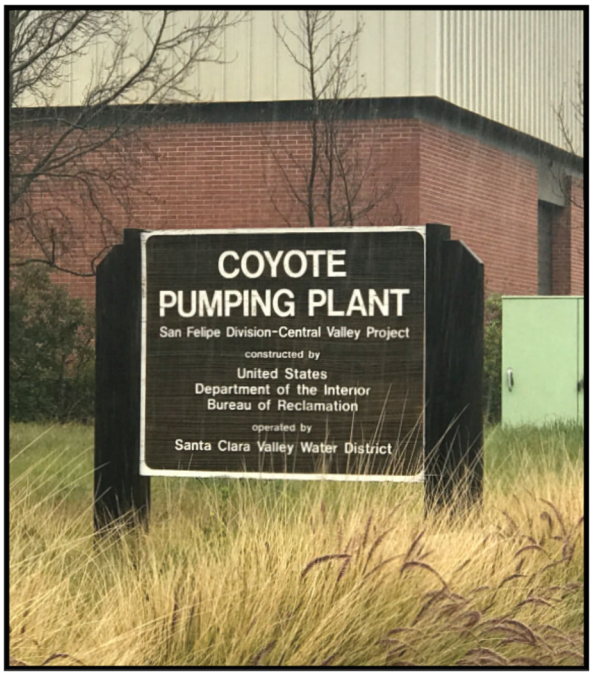
Coyote Pumping Plant
Adjustable Speed Drive Replacement Project
Project No. 91234002

Engineer's Report



October 2022

Water Utility Capital Division

Valley Water

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COYOTE PUMPING PLANT ADJUSTABLE SPEED DRIVE REPLACEMENT PROJECT

PROJECT NO. 91234002

ENGINEER'S REPORT

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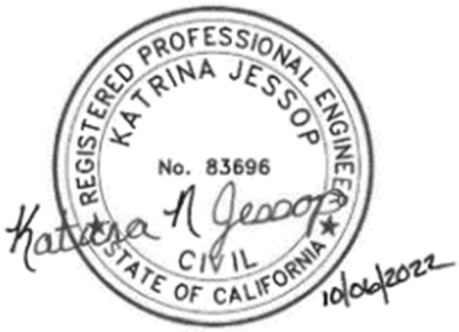
The Engineer's Report has been prepared under the direct supervision of the undersigned, who herby certifies that he is a Registered Civil Engineer in the State of California.



October 2022

DISTRICT BOARD OF DIRECTORS

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1. PROJECT DESCRIPTION

The proposed Coyote Pumping Plant Adjustable Speed Drive Replacement Project (Project) is located at the Coyote Pumping Plant (CPP) in Morgan Hill (District 1), as shown in Figure 1. The CPP is owned by the United States Bureau of Reclamation (USBR) and is operated and maintained by Santa Clara Valley Water District (Valley Water). The CPP is a critical part of Valley Water's water supply system and essential to Valley Water's mission of providing safe, clean water to nearly two million people.

The CPP was constructed in 1986 and its equipment is mostly unchanged since the original construction, except replacement of components due to failure or wear. With 33 years in service, the electrical, mechanical, and heating, ventilation, and air conditioning (HVAC) systems have reached the end of their expected useful life. District staff have found it increasingly difficult to obtain parts and services for some key equipment, as the original equipment manufacturers no longer support these systems.

The purpose of this Project is to modernize major equipment at the CPP that has reached the end of its useful life, and allow for reliable and efficient operation.

The Project will provide for the rehabilitation of existing pump motors and the replacement of associated mechanical, electrical, and instrumentation equipment. This includes, the replacement of existing adjustable speed drives (ASD), pump vibration monitoring equipment, hydraulically operated pump discharge valves, power distribution equipment, and obsolete PLC and RTU hardware and pumps control panels.

2. ZONE BENEFITS

The proposed Project work would benefit customers of Zone W-2 (North County); and Zones W-5 (South County).

3. PROJECT RIGHT OF WAY

Work on the proposed Project will occur within the CPP site, owned by USBR. Access is provided for under an existing Agreement between USBR and Valley Water for the operation and maintenance of the facility. No additional right-of-way will be required.

4. MAPS AND FIGURES

Figure 1 – Project Location and Vicinity Map

5. PROJECT COSTS

The estimated costs to plan, design, and construct the proposed Project is $27.3 million (2022 dollars). The proposed Project would be funded by the Water Utility Enterprise Fund.

6. PROJECT SCHEDULE

- Advertised for design-build proposals: Winter 2021
- Authorize design-build contract: Fall 2022
- Complete construction: Summer 2025

Figure 1 – Project Location and Vicinity Map (Not to Scale)