

Engineering Manager's Report

January 5, 2022

Alternative Energy - 1.16 MW Solar Photovoltaic

The generation report from November to December is disconnected and a customer ticket was issued to resolve the SunPower Portal reporting with their customer service team. Reporting during this period will be included in the February Manager's report.

The District will register the solar generation with the U.S. Department of Energy, Energy Information Administration (EIA) no later than April 2022. Registration for Renewable Energy Credits (REC's). The district has generated 2,658 MWh (2,657,613 kWh) for the year 2020.

Scheduled services are part of 10-year SunPower Operations and Maintenance contract. The O&M contract includes two (2) module cleanings each year through October 2025. The District is in its 7th year of this contract beginning early November each year. Included are two solar module cleaning, in early Spring and Summer for maximize generation. With the recent series of rain events our next cleaning is scheduled for March of 2022.

Geographic Information System (GIS)

The District now offers its hosted GIS data via its server using Portal with real-time data. This is now available to our field and office staff, and with limited access, to the public. The public link can be found on the District's website under "Contractors" "Water Line Map". Any additional system information will continue to be requested through the Public Records Request process.

Mobile access to the GIS data is secured using Single Sign-on (SSO) and virtual private network (VPN) connections. This is possible with the ESRI small utility agreement with access to all ESRI's software and tools. SEDARU is another component to mobile application with continue to provide system logging, system maintenance, service and work orders processes integrated with Tyler, hydraulic model, and positive response DigAlert. As-builts plans are now mobile accessible, by staff, through Portal providing immediate access to infrastructure information for pipeline. Wells, booster stations and reservoir sites will be included concluding updated imagery and photos. A Capital Improvement Project (CIP) and mainline extension dashboards is now in-place. Staff will develop mobile forms for vehicle logging and backflow management

Reservoir 6A, Pressure Zone 7 Expansion (nothing new to report)

Staff recommends expanding Pressure Zone 7 with the installation of water pipeline at two locations: Mescalero Road, between Quail Road and Snowline Road, with 740 LF of proposed 6-inch water pipeline; and Piñon Hills Road, between Nielson Road and Maria Road, with 1,300 LF of proposed 8-inch water pipeline. Design plans were prepared in-house. The installation is proposed to be constructed by field staff. The hydraulic model validated the Pinon Hills Road water pipeline project will improvement system pressure performance west of Mountain Road on Maria Road. This

project is listed under the priority table of the Water Master Plan CIP table and proposed budgeted for FY 2022-2023. The Water Master Plan has proposed capacity at Reservoir site 6A with an additional 2.2 MG. Preliminary layout proposes a tank between Sheep Creek's tank and the existing District's 0.42 MG.

Civic Center / Community Center and Future Phelan Park expansion

The second comment from County for grading plan/utility plan for the Civic Center and the Sheep Creek Road Street Improvement plan have been addressed and resubmitted and waiting for County comments as well for the Landscape Plan and construction documents for the Civic Center building. Lilburn is near completion for the CEQA study. County requested an updated traffic study for the complete project as part of the environmental report.

Permission was granted by the benefiteres of Sahara Road, SJUSD and Gary Van Dam (property owner of APN 3066-251-05 and -06). Written permission was conditioned to proceed with the abandonment process. The ingress and egress easement, for APN's 3066-251-05 and -06, are currently in preparation, for District legal review, by the engineer.

Future Well No. 15

The purchase of the east 5.0-acre portion of the 40-acre parcel has closed escrow in early October. Dodson and Associates is preparing the Environment Report (CEQA) for future well no. 15 and proposed completion in late November. This project includes approximately 5,900 LF of 12-inch water pipeline from well 15 to reservoir Site 2-2 on Sheep Creek Road.

The CEQA study is near completion. Assembly Bill 52 (AB 52), which became law January 1, 2015, requires that public agencies formally consult with California Native American Tribes that request such consultation in writing. As part of California Environmental Quality Act (CEQA) review process, the consultation seeks to identify potential impacts to a new category of resource called Tribal Cultural Resources (TCRs). The designation of a TCR takes into account tribal cultural values in addition to scientific and archaeological values when determining potential impacts and mitigation. An impact to a TCR may result in a significant impact under CEQA. The district noticed San Manuel Band of Mission Indians in late September. The Mission Band of Indians have not responded given 30-day period to respond.

In addition, Dodson and Associates will include future well no. 16. Well no. 15 is located on Sheep Creek Road, on the District's water fill station property APN 3098-071-05. Merrell-Johnson Engineering has completed the topography survey. The District will begin design of Well 15 and the pipeline. The utility investigation and parcel base will be completed before delivery. Well and pipeline design will be completed in-house.

Water Mainline Extension Projects

Joshua Street Water Pipeline extension to serve APN 3038-131-08

Proposed 665 Linear Feet of 8-inch PVC water pipeline, located on Joshua Street east of Caughlin Road. First plan check was completed on March 3, 2021, for Donovan Development. Second plan

check completed on April 27th. Pending County Fire Department approval. The owner has misplaced the corrections and requested a copy of the plan check. The owner is moving forward with County Fire approval.

Salerno Road Water Pipeline extension to serve APN 3101-431-08

Proposed 950 Linear Feet of 8-inch PVC water pipeline, located on Salerno Road from Bambi Court west to 350 west of Johnson Road. Plans were prepared by Merrell Johnson Companies. First plan check was returned on March 30, 2021.

Acanthus Street Water Pipeline extension to serve APN 3066-681-13

Proposed 300 Linear Feet of 8-inch PVC water pipeline, located on Acanthus Street south from McAllister Road for Arturo Mata. Plans were prepared by Ludwig Engineering and approved in July of 2018. 2nd plan check completed on April 14, 2021.

Sequoia Road Water Pipeline extension to serve APN 3069-331-10

Proposed 340 Linear Feet of 8-inch PVC water pipeline, located on Sequoia Road east of Johnson Road. Plans were prepared by Capstone Engineering Incorporated. Approved design plans are pending pre-construction meeting.

***Cayucos Road Water Pipeline extension to serve APN 3068-431-05
(Completed)***

Proposed 680 Linear Feet of 8-inch PVC water pipeline, located on Cayucos Road between Schlitz Road and Anderson Ranch Road. Plans were prepared by TRLS Engineering. Construction was completed in early September.

Lager Road Water Pipeline extension to serve APN 3066-471-22, -23, -24, & -25

Proposed 939 Linear Feet of 8-inch PVC water pipeline, located on Lager Road between White Fox Trail and Yucca Terrace Drive. Design plans are approved, and a pre-construction was held on the 21st of December. Contractor to begin work the first part of January

Beekley Road Water Pipeline extension to serve APN 3100-551-13

Proposed 300 Linear Feet of 8-inch PVC water pipeline, located on Beekley Road north from Begonia Road. Plans prepared by TRLS Engineering. Final check complete on June 6, 2018. Pending County Fire Department approval.

Solano Road Water Pipeline extension to serve APN 3068-171-19 and -20

Proposed 660 Linear Feet of 8-inch PVC water pipeline, located on Solano Road, west of Crystal Aire Road. Plans prepared by TRLS Engineering for Rashidian. First plan check submitted November 17th, 2021.

***San Bernardino County Public Works Projects
(nothing new to report)***

Phelan Road Intersection Improvements

The San Bernardino County Public Works Department is set to begin work on early October 2021. The intersection widening for left and right turn lanes along Phelan Road areas are as listed:

Sonora Road
Tumbleweed Road
Sunny Vista Road
& Arrowhead Road

Potholing was completed. No District facilities were impacted. Frontier Communications are set to relocate concrete encased conduits at Sonora Road in the next few months. Southwest Gas unable to confirm depth of lines along Phelan Road.

Baldy Mesa Road and Caughlin Road guardrail replacements

Guardrail replacement at the California Aqueduct.
Work begins in early 2022.

Phelan Road Intersection Improvements

The County awarded an environmental clearance and design services consultant contract to EXP in June 2021. The scope of the project includes widening to five lanes with one center continuous left turn lane; pavement rehab or reconstruction; drainage improvements at Sheep Creek and Horse Canyon Channel, along with 25+/- other drainage structures; and, install traffic signal at Clovis Road.

The tentative schedule is as follows:

- Project Approval/Environmental Document: Spring 2024
- Final Plans & Right of Ways Acquisitions: Fall 2025
- Construction: Spring 2026

The consultant, EXP, has requested as-builts, from the District, for the project in late August.