

ENGINEERING COMMITTEE

AGENDA

Tuesday, November 1, 2022
2:00 p.m.

Calaveras County Water District
120 Toma Court
San Andreas, California 95249

The following alternatives are available to members of the public to watch these meetings and provide comments to the Board before and during the meeting:

Microsoft Teams meeting

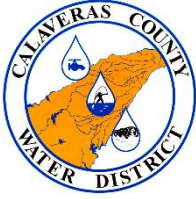
Join on your computer or mobile app [Click here to join the meeting](#)
Or call in (audio only) [+1 689-206-0281,,167550195#](#) United States, Orlando
Phone Conference ID: 167 550 195#

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Administration Office at (209) 754-3028. Notification in advance of the meeting will enable CCWD to make reasonable arrangements to ensure accessibility for this meeting. Any documents that are made available to the Committee before or at the meeting, not privileged or otherwise protected from disclosure, and related to agenda items, will be made available at CCWD for public review.

ORDER OF BUSINESS

CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. **PUBLIC COMMENT:** Comments limited to three minutes per person.
2. **APPROVAL OF MINUTES:** For the meeting of September 6, 2022
3. **OLD BUSINESS**
 - a. Capital Improvement Updates
 - b. Other Project Updates
4. **GENERAL MANAGER COMMENTS**
5. **DIRECTOR COMMENTS**
6. **FUTURE AGENDA ITEMS**
7. **NEXT COMMITTEE MEETING:** Tuesday, January 3, 2023, at 2:00 p.m.
8. **ADJOURNMENT**



CALAVERAS COUNTY WATER DISTRICT ENGINEERING COMMITTEE MEETING

MINUTES
September 6, 2022

Directors/Committee Members present:

Jeff Davidson
Russ Thomas

Staff present:

Michael Minkler	General Manager
Kate Jesus	Engineering Coordinator
Damon Wyckoff	Director of Operations
Charles Palmer	District Engineer
Kevin Williams	Senior Civil Engineer
Sam Singh	Senior Engineering Technician
Jared Gravette	Senior Supervisor Construction & Inspection
Jesse Hampton	Plant Operations Manager
Pat Burkhardt	Construction and Maintenance Manager
Jessica Self	External Affairs Manager

Others present:

Bruce Hudkins	Member of the Public
Cami Jackson	Lumos Associates

CALL TO ORDER / PLEDGE OF ALLEGIANCE

Director Davidson called the meeting to order at 2:02 p.m.

1. PUBLIC COMMENT:

Bruce Hudkins expressed concerns regarding the location of survey markers near his vacant property and inquired if they were related to a CCWD project. Staff will follow up with Mr. Hudkins.

2. APPROVAL OF MINUTES:

The June 16, 2022 minutes were approved by a motion from Director Thomas and seconded by Director Davidson.

3. NEW BUSINESS

a. Potential Bulk Water Program Expansion

Mr. Minkler gave a brief presentation in Brad Arnold's absence, on possible plans to develop and construct Bulk Water Stations (BWSs) around CCWD's water service areas to supplement existing in-County options for small water suppliers, contractors, fire protection and other uses. Mr.

Minkler also discussed the possibility of grants that could fund the proposed project. The Committee discussed the idea and agreed to provide the information to the full Board at a future meeting.

b. Regional Biosolids Composting Facility

A developer had recently approached the District regarding a proposed Regional Biosolids Composting Facility for Calaveras County. Staff met with the developer and discussed possible locations, including CCWD's Copper Cove Wastewater Treatment Plant. Mr. Minkler explained that the proposed project is very early on in the development and gave a brief update on the recent Calaveras County Planning Commission meeting where the proposed project was discussed. The Committee and staff discussed the benefits and concerns of such a project, including the concerns of the Copperopolis community.

4. OLD BUSINESS

a. Capital Improvement Project Updates

Mr. Palmer gave brief updates on the following projects:

- District Corp Yard (CIP 11101) – Plummerbuilt is working on the site improvements and should be completed by the end of October. The District advertised for the interior tenant improvements on August 19th with bids due September 15th. CCWD Staff are working on the installation of electrical and lighting.
- AMI/AMR Project (CIP 11096) – Mueller has completed the fixed network and there are approximately 100 locations that need follow up. They are also replacing meter lids certain locations and will perform quality checks to ensure all meters are transmitting to the network.
- Jenny Lind Water System A-B Water Transmission Pipeline (CIP 11088) – Coleman Engineering submitted the pre-design report on August 22nd. The project is anticipated to go into construction in July 2023.
- West Point Water Supply Reliability Improvements (CIP 11106) – KW Emerson has mobilized to the project site and started work on the underground piping installation and potholing existing piping. The design consultant, PBI has been working with staff and the contractor to resolve any utility conflicts. The pre-purchased treatment filter should be delivered to the site in January 2023.
- West Point and Wilseyville WWTP Consolidation Project (CIP 15091) – KW Emerson has mobilized to the project site and work will start on September 19th. Staff has reviewed and approved material submittals that have long lead times.
- Copper Cove Lift Stations 6, 8, 15, 16 and Force Main Project (CIP 15076/15080) – A Pre-Construction Kick-Off meeting with Mozingo, County Public Works and CCWD staff was held on August 11th. Mozingo and CCWD staff are working with the County to coordinate the County paving project along with the CCWD project.
- Copper Cove WWTP Tertiary Treatment and UV Improvements and Facilities Plan (CIP 15094) – CCWD continues to work with the U.S. Army Corps of Engineer's staff on the draft letter agreement for the project. The design consultant, Keller Associates, submitted a draft pre-design report of the Phase 1 Tertiary Improvements on August 16th which is currently under review by staff. Due to the significant scope of work and critical deadlines,

staff is considering bringing in an additional consultant, HydroScience, to help expedite work.

- Copper Cove WWTP Pond 6 Dam and Effluent Storage Reservoir Enlargement Project (CIP 15112) – Staff is making further progress on identifying a borrow site, utility relocation plans, acquisitions of additional easements, and aligning funding sources.
- Ebbetts Pass Hunters Raw Water Intake Pumps (CIP 11103) – Cal-OES is reviewing the Phase 1 portion of the design and plans in order to complete the NEPA Environmental Review. Blackwater is working on the 90% design drawings.
- Ebbetts Pass Redwood Tanks Project (CIP 11095) – The steel tank manufacturer has had significant material supply chain issues that have impacted the construction schedule. Heather Tank was completed in July but a leak was recently found. California Aquastore has been on site to investigate and repair. Work continues at the other tank locations.
- Forest Meadows WWTP UV System Replacement (CIP 15106) – The new UV system has been purchased and will be delivered in January 2023. Staff is working on the conceptual design and the Construction Crew has cleared vegetation and some grading of the project site. Construction should start in Summer 2023.
- Arnold Wastewater Secondary Clarifier Improvement Project (CIP 15095) – Staff has had routine meetings with the design consultant, HydroScience. The 90% plans were submitted on July 15th and reviewed by staff.

b. Other Project Updates

Mr. Wyckoff gave brief updates on the following:

- Copper Valley Town Square – Staff has an upcoming meeting scheduled with CV Developers to discuss the sewer force main and pump station projects.
- Jenny Lind Elementary School Force Main Project – Staff continues to work with the project consultant, KASL Engineering, and continue to discuss the progress of the project.
- North Vista Plaza / LGI Homes – Staff will meet with the developer to discuss the submitted design and required improvements to be done by the developer.
- Accessory Dwelling Units – Staff has had ongoing meetings with other utility districts and County agencies to discuss the application process and impacts on water and wastewater systems.

5. GENERAL MANAGER COMMENTS

None.

6. DIRECTOR COMMENTS

None.

7. FUTURE AGENDA ITEMS

None.

8. NEXT COMMITTEE MEETING

November 1, 2022 at 2:00 p.m. which will most likely be rescheduled with updates to follow.

9. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 3:20 p.m.

Respectfully submitted,

Kate Jesus
Engineering Coordinator

DRAFT

Agenda Item

DATE: November 1, 2022

TO: Engineering Committee, Calaveras County Water District
Michael Minkler, General Manager

FROM: Engineering Department

RE: Capital Improvement Project Updates

District Corp Yard (CIP 11101)

Plummerbuilt Construction is nearly complete with the Phase 2 Site Improvements for the Maintenance Building. The Phase 2 improvements include finish grading, paving, drainage, and fencing. Staff continues to work on the installation of electrical and lighting. The main electrical gear should be onsite in November and installation of gas and electrical service to the building will be installed. The District advertised the Interior Tenant Improvements portion of the Project for Construction and received one bid; if this Bid is awarded work should be completed within the next 4 months.

AMI / AMR Project (CIP 11096)

Mueller Systems has completed fixed network and meter installations Districtwide and should be nearly complete. Mueller has gone back to meter locations skipped to replace meter lids and complete installations. Staff is going through each meter installation to ensure that installations are up to standards and all work is completed. Staff will provide a Punchlist to Mueller to repair any work that is deficient. Mueller has performed network functional testing and has found some areas that need additional network equipment to be installed. Mueller performed required repairs to the customer side services including direct connects other deficiencies. District staff completed repairs that were required on the water main side of the meter including installation of shutoff valves and leak repairs. Lids replacements are nearly completed, there is one outstanding order of custom sized lids that will be here before the end of the year.

Meter installations have been completed Districtwide except for approximately 100 locations that needed repairs and larger commercial meters on backorder. Some of the meter box lid sizes were not available during the initial meter installation because of shortages in raw polymer materials. Mueller is currently going back to the skipped locations to replace existing meter box lids with new AMI lids. Once the lids are fully installed Mueller will perform quality checks to ensure all meters are transmitting to the network, additional network devices will be added as needed to reach all meters. As part of the Project Mueller will provide training for District Staff on Sentryx online platform. A training session will occur on August 30th. Sentryx online platform allows District Staff to

complete real time meter reads, monitor water usage by area, and provide leak detection. Sentryx is the second-generation platform that Mueller has just recently transitioned to. There have been software bugs that we have experienced as part of this transition and staff and Mueller continued working diligently to correct and reduce errors.

Jenny Lind Water System A-B Water Transmission Pipeline (CIP 11088)

This project includes the design and construction of 20,000-ft of new water transmission pipeline to the Jenny Lind Water System to improve conveyance from the Tank A to Tank B sites. The pipeline will be aligned along Hartvickson, Baldwin, Usher and Wind River Court. It will consist of approximately 13,400-ft of 14-inch diameter pipe and 6,500-ft of 12-inch diameter pipe. The piping material may be either C900 PVC or ductile iron. CCWD retained a consultant, Coleman Engineering, to design the project and ECORP to complete the CEQA document. Coleman will complete the 50% and 100% design deliverables by the end of January 2023. The project is anticipated go to bid in February 2023 and be ready for Award of a construction contract by April 2023. Construction would start in summer of 2023 and be complete by end of 2024.

West Point Water Supply Reliability Improvements (CIP 11106)

CCWD received Prop. 1 Grant funds through UMRWA and DWR to supplement the cost of purchasing and installing a backup water filter at the West Point Water Treatment Plant. K.W. Emerson (KWE) has mobilized to the site during the past months and started work on underground piping installation and potholing existing piping within the foundation subgrade for a new metal building. KWE should complete the underground piping in the next weeks and will then move into excavation of footings and concrete placement for a retaining wall and foundation slab on grade. Peterson Brustad, Inc. has been working with staff and KWE to resolve utility conflicts on the site. Pending completion of the underground piping and placement of the concrete foundation, delivery of the pre-purchased treatment filter unit from WesTech has been re-scheduled from September 2022 to January 2023.

West Point and Wilseyville Wastewater Consolidation Project (CIP 15091)

The Water Board staff is still in-progress on its review of the Final Budget Approval (FBA). K.W. Emerson (KWE) mobilized to the site to start work as of September 19th. CCWD has approved the project's Storm Water Pollution Prevention Plan (SWPPP) and certified/file it with the State. Staff continue to review and approve critical material submittals, but long lead times for ductile iron fittings, precast concrete and other materials are slowing work. KWE implemented BMP's, started clearing and grubbing, and began mass grading/earthwork the week of August 29th. Levees around effluent storage reservoir were cleared and fencing removed in preparation of placement of additional fill to raise levee height. As of October 14th, KWE completed raising the pond levees. Fence sub mobilized on October 25th to replace fencing around ponds and then final rock road section placed to complete the pond, levee raise. KWE has relocated the 8-inch FE line and is working on the mass grading for the sludge basins and sludge drying beds. Crews will be installing hydroseeding and other BMP's for winter stabilization.

Copper Cove Lift Stations 6, 8, 15 & 16 and Lift Stations 12 & 13 Force Main Bypass Project (CIP 15076/15080)

The construction contract was awarded to Mozingo Construction in the amount of \$7,658,400.00 at the July 27th Board meeting. A Pre-Construction Kick-off Meeting with Mozingo, County Public Work and CCWD was held on August 11th. The District, and Mozingo are working to expedite construction of force main and paving on O'Byrnes Ferry Road under a very short timeframe (August 12-17). The County hired George Reed to pave the full length of O'Byrnes Ferry Road at this same time, and everyone is working to coordinate work on the two projects. CCWD expedited approval of critical piping materials to allow Mozingo to immediately ship these materials. Mozingo has installed 1700-feet of 6-inch force main on O'Byrnes Ferry Road. George Reed completed the final paving of this portion on October 21st. Mozingo looks to re-mobilize the end of December at earliest to complete work on the force main

Copper Cove Wastewater Treatment Plant Tertiary Treatment and UV Improvements and Facilities Plan (CIP 15094)

CCWD has continued communication with the U.S. Army Corps of Engineer's staff regarding a Draft Letter Agreement for the project. The design consultant, Keller, submitted a draft of the Pre-Design Report (PDR) of the Phase 1 Tertiary Improvements on August 16th. The assessment includes consideration of solids handling options, facility layout, and selection of tertiary filter units, UV disinfection units, and Dissolved Air Floatation (DAF) units. The PDR emphasizes the priority to add DAF units ahead of the filters to provide pre-treatment for algae. CCWD would like to secure the services of another design firm to build on Keller's PDR for the project's design completion.

Copper Cove Wastewater Treatment Plant – Pond 6 Dam and Effluent Storage Reservoir Enlargement Project (CIP 15112)

This project is to raise the dam by 10 feet and increase the capacity of the Copper Cove Effluent Storage Pond 6 from 205 AF to 442 AF. The estimated construction cost is \$9.6 million including engineering, inspection, and applicable fees. The consultant, Wagner & Bosignore, re-started this project and as of February 25th submitted a draft of updated project drawings, specifications, Division of Safety of Dams (DSOD) Application and estimate of the application fees, and project construction cost estimate. Staff has waited on resubmitting the application and fees to DSOD until making further progress on identifying a suitable borrow site, utility relocation plans, completing the acquisition of additional easements, and aligning funding sources. To facilitate the dam raise, the Board of Directors approved a lot line adjustment on October 12th.

Copper Cove Water System Improvements Project (CIP 11111)

Peterson Brustad Inc. (PBI) was awarded a contract at the May 11th Board meeting and a project kickoff meeting was held on site on May 24th. Since that time PBI has worked to complete multiple preliminary design plans for District Staff to review and provide commentary. The Phase 1 and 2 improvements include rehabilitating the existing clearwell and existing steel Tank-B, adding a new second clearwell, and replacing the existing redwood Tank-B. Construction of the Phase 1 and 2 improvements will start in May 2023.

Ebbetts Pass Hunters Raw Water Intake Pumps (CIP 11103)

This proposed project is a Hazard Mitigation Grant Project (HMGP) partly grant funded by Cal-OES/FEMA. CCWD with its consultant, Blackwater, has completed the Phase 1 portion of the design which included the 60% Design and the initial Environmental Studies. Cal-OES/FEMA is working on completing their evaluations of the Phase 1 plans in order to complete its NEPA Environmental Review. After competing Phase 1 approval, Phase 2 will authorize funding for implementation and construction of the project. CCWD plans to pre-purchase the pumps and electrical equipment once Cal-OES/FEMA authorizes Phase 2. Blackwater has been working on completing the 90% design drawings which includes the structural improvements to the pump house and mechanical buildings to support the new pumps and relocate the electrical control to top side of the Reservoir.

Ebbetts Pass Redwood Tanks Hardening (CIP 11095)

This project is receiving significant hazard mitigation grant program (HMGP) funding from Cal-OES/FEMA. The project is in construction. However, the steel tank manufacturer has had significant raw material (aluminum, steel, sealer and glass coating) supply chain issues that have significantly impacted the construction schedule. There are several other tanks in progress. Larkspur Tank in Forest Meadows cannot be constructed until Heather Tank is fixed and placed into service. Heather Tank will be put into service first week of November. Construction of Big Trees #4 tank will be completed October 28th and the filling and disinfection process will begin the first week of November. Aqua Store will be moving over to Arnold Tank #13 on Flume Court and begin the construction of this tank. KWE will be working at multiple sites and begin the piping installation at Larkspur tank.

Forest Meadows Wastewater Plant / U.V. System Replacement (CIP 15106)

The new U.V. system has been purchased, is being manufactured and will be delivered in January 2023. Staff have worked together to develop a conceptual design for the new installation. The Construction crew has cleared vegetation from the site and performed some rough grading of the project area. The existing UV System stainless-steel channel must be demolished and removed to make room for the new one. A new concrete channel must be constructed to house the new UV system. The construction of this new channel will be completed by a contractor. Staff will develop design plans for construction of the UV channel and installation of the new UV system components. The project will go into construction next summer of 2023.

Arnold Wastewater Secondary Clarifier Improvements Project (CIP 15095)

The project will provide upgrades to the Arnold Wastewater Treatment Plant. The project will add a new secondary clarifier, RAS/WAS pump station, two additional aerobic digesters, and replace the plant's electrical motor controls, PLC and SCADA systems. The project will be advertised for bids at the end of this year, and construction to begin May 2024. The construction cost estimate is \$5.6 million. Staff has progress meeting with the design consultant, HydroScience, on a bi-weekly basis. On July 15th, HydroScience provided 90% plans. Staff requested to add air blowers and extend air piping for the new aerobic digesters (versus mechanical aerators).

Agenda Item

DATE: November 1, 2022

TO: Engineering Committee, Calaveras County Water District
Michael Minkler, General Manager

FROM: Engineering Department

RE: Other Updates

Copper Valley Town Square

Staff have met with representatives of CV Development Partners LLC to continue on-going discussions on key issues. These include capacity fees, change of use applications, planned redevelopment of the Copper Valley Square complex, and future development of the Sawmill subdivision. The discussion includes requirements for facility improvements including a permanent sewer force main and new lift station on Little John Road to serve Copper Valley Square (convey sewer to the wastewater plant) as well as rehabilitation of the existing lift station within Town Square. Also, a new Reeds Turnpike Water Booster Pump Station is needed to increase potable water delivery to Copperopolis and Copper Valley Square. Staff has reviewed a pre-design report for a sewer force main and lift station to serve the project and provided comments back to the owner. CV Development Partners has retained Weber Ghio to provide final design for the lift station and water booster pump station.

Copper Valley (Saddle Creek 7B)

Finish work and punchlist items remain to be addressed and a 2-year warranty bond needs to be secured before taking this to the Board of Directors for completion and acceptance.

Gold Creek Subdivision Unit 3

The owner was notified on October 19th by letter with a list of outstanding punchlist items prior to project acceptance by CCWD. Punchlist items include furnishing of a 2-year warranty bond and resolution of a cost share for offsite improvements to increase the capacity of the Huckleberry Lift Station. Staff has estimated \$1,123,000 in necessary improvements to Huckleberry Lift Station with a cost share to Gold Creek Unit 3 of \$140,474. Once all punchlist items are corrected, staff can bring the project before the Board for final transfer and acceptance by CCWD.

Hogan Oaks I and II

Staff had an onsite meeting with the representative of Hogan Oaks I & II to discuss the proposed developments. The District has significant concerns about the proximity of proposed Hogan Oaks I subdivision in relation to the La Contenta Wastewater Treatment Plant Staff anticipates costly facility upgrades would be necessary to mitigate odor and

noise complaints from nearby residents. The current zoning density is not consistent with the proposed development.

Jenny Lind Elementary School Force Main Project

This project includes a 20,000-ft sewer force main from the Jenny Lind Elementary School to a connection point with CCWD existing sewer system near Vista Del Lago. The project is being funded by the Clean Water State Revolving Fund (CWSRF) and CCWD has entered into a prior Letter Agreement with the School Board. Staff and KASL continue to discuss the design of the sewer force main, primary lift station at the Jenny Lind Elementary School and possible locations for a secondary/intermediate lift station near Berkesey Drive and Silver Rapids Road. Property acquisition for the secondary lift station will also be a key consideration. The School District's representative, Hugh Logan, KASL and CCWD continue to coordinate to ensure an effective project. The new facilities will provide a future ability to provide sewer service to some lots along Berkesey Lane.

North Vista Plaza / LGI Homes

LGI Homes completed a sewer shed analysis as requested by the District. CCWD provided comments on design elements of LGI's plans and LGI completed amendments to those plans. Staff is reviewing the resubmitted plans and will be returning final comments. LGI Homes has retained Coleman Engineering to provide final design of the sewer lift stations. Staff discussed CCWD's design requirements with Coleman Engineering. Also, District Staff reviewed the applicability of the Bond Opportunities for Land Development (BOLD Program) as a financing mechanism for fees associated with the Project.

Tri-Dam Lake Tulloch Day Use Area

The District is working with Tri-Dam to approve service connections (W&WW) to their newly constructed day-use area in Copperopolis. Concurrently, the District is working to secure an easement from the neighboring property owner to improve the water main in their parking lot to secure water service to all the customers in proximity.

Wallace Ridge Estates

District staff met up with Calaveras County Planning Department and Delta Engineering (owner representative) to coordinate work effort to get TSTM approval for the development. Owner to provide the District with a memorandum from hydrogeologist confirming underground well water capacity to meet the demand brought on by proposed development. No substantive update since this effort occurred.

Big Trees Verizon Cell Tower Lease

Greg Brown with Epic Wireless Group contacted staff about the Verizon Wireless Lease at the Big Trees Tank site. The current lease is due to expire on 9/30/25. Mr. Brown would like direction if CCWD anticipates terminating the lease, so they can plan accordingly. Upon terminating the lease, Verizon has only 180-days to vacate the site. Mr. Brown says it actually takes 2-3 years to design and move the cell tower to a new site. Mr. Brown asks if CCWD will renew the lease by 9/30/23 or earlier date.