



CALAVERAS COUNTY WATER DISTRICT ENGINEERING COMMITTEE MEETING

OUR MISSION

Protect, enhance, and develop Calaveras County's water resources and watersheds to provide safe, reliable, and cost-effective services to our communities.

2021-2026 Strategic Plan, Adopted April 28, 2021, can be viewed at this [link](#)

Engineering Committee
Thursday, November 2, 2023
2:00 p.m.

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

Board Chambers are open to the public and the following alternative is available to members of the public who wish to participate in the meeting virtually:

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 to this meeting. Any documents that are made available to the Board before or at the meeting, not privileged or otherwise protected from disclosure, and related to agenda items, will be made available at CCWD for review by the public.

ORDER OF BUSINESS

CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. ROLL CALL
2. PUBLIC COMMENT
3. APPROVAL OF MINUTES: For the meeting of September 21, 2023
4. NEW BUSINESS
 - 4a. Introduction of New Engineer
(Mark Rincon-Ibarra, District Engineer)

COMMITTEE MEMBERS

Director Davidson, Chair

Russ Thomas, Director

- 4b. Proposed Contract Amendment for PBI, Inc. Engineering Services During Construction for Copper Cove Phase 1 and 2 Tank B & Clearwell Project, CIP # 11083C
(Charles Palmer, Senior Civil Engineer)

5. OLD BUSINESS

- 5a Capital Improvement Updates
(Engineering Department)
- 5b Other Updates
(Engineering Department)

6.* GENERAL MANAGER COMMENTS

7.* DIRECTOR COMMENTS OR FUTURE AGENDA ITEMS

8. NEXT COMMITTEE MEETING: January 2, 2024

9. ADJOURNMENT



CALAVERAS COUNTY WATER DISTRICT ENGINEERING COMMITTEE MEETING

MINUTES
September 21, 2023

Directors/Committee Members present:

Russ Thomas
Jeff Davidson

Staff present:

Michael Minkler	General Manager
Kate Jesus	Engineering Coordinator
Mark Rincon-Ibarra	District Engineer
Kevin Williams	Senior Civil Engineer
Sam Singh	Senior Engineering Technician
Jared Gravette	Senior Supervisor Construction Inspection
Kelly Gerkenmeyer	Water Resources Specialist
Damon Wyckoff	Director of Operations
Pat Burkhardt	Construction and Maintenance Manager
Rebecca Hitchcock	Executive Assistant/Clerk to the Board
Stacey Lollar	Human Resources Manager

Others present:

Ralph Copeland Member of the Public

CALL TO ORDER / PLEDGE OF ALLEGIANCE.

1. ROLL CALL

Director Davidson called the Engineering Committee to order at 2:01 p.m. and led the Pledge of Allegiance.

2. PUBLIC COMMENT

There was no public comment.

3. APPROVAL OF MINUTES

The April 13, 2023 and June 27, 2023 minutes were approved by a motion from Director Thomas and seconded by Director Davidson.

4. NEW BUSINESS

**4a Proposed Award of Copper Cove Tank B & Clearwell Construction Project
(CIP 11111)
(Charles Palmer, Senior Civil Engineer)**

Mr. Palmer gave a brief explanation of the project including the environmental portion and the bid results. Engineering staff recommends approving a construction contract with T&S Construction Co., Inc. in the amount of \$6,929,450, which will be presented to the full Board at the next Board meeting. Director Thomas and Director Davidson agreed. Director Davidson asked for more background information on the State regulation changes throughout the life of the project going forward.

**4b AMI/AMR Project Completion
(Kevin Williams, Senior Civil Engineer)**

Mr. Williams gave an update on the status of the project, including the unforeseen delays and challenges. The final completion should be presented to the full Board in the next few months. The Committee discussed the details of the network and the customer alert capabilities. Director Davidson requested a future agenda item to review the current policies in relation to the new meters.

5. OLD BUSINESS

**5a Capital Improvement Project Updates
(Engineering Department)**

Mark Rincon-Ibarra, District Engineer, presented the agenda item and asked the Committee if they had any questions.

- Jenny Lind Water System A-B Water Transmission Pipeline (CIP 11088) – Mr. Palmer stated that Mazingo Construction has completed the potholing plan and will work with the design engineer, Coleman Engineers, to determine the exact location of the underground utilities. The project should go out to bid before the end of the year. The Committee discussed the coordination with the County regarding the pavement plan and the environmental portion of the project.

**5b Other Updates
(Engineering Department)**

- Copper Valley Town Square – Director Thomas asked for an update on CV Development's request for the removal of fire hydrant meters associated with construction contractors in the Copper Valley Town Square commercial area. Mr. Palmer stated that staff will review the request and have a meeting planned with the developers.
- Gold Creek Subdivision Unit 3 – Director Thomas inquired about the possible disconnection from the CCWD system pending the resolution of the outstanding punchlist items. Mr. Palmer explained the completion process and the current status of the development.

Mr. Copeland commented on the construction bid from T&S Construction and the cost comparison to the project's engineer's estimate.

6. GENERAL MANAGER COMMENTS

There were no comments.

7. **DIRECTOR COMMENTS OR FUTURE AGENDA ITEMS**

Director Thomas asked that the hydrant meter policy be revisited at a future Engineering Committee meeting. Mr. Wyckoff gave a brief explanation of the current policy and process.

8. **NEXT COMMITTEE MEETING**

To be determined.

9. **ADJOURNMENT**

There being no further business, the meeting adjourned at approximately 2:49 p.m.

Respectfully submitted,

Kate Jesus
Human Resources Technician

Agenda Item

DATE: November 2, 2023

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

FROM: Mark Rincón-Ibarra, District Engineer

RE: Introduction of CCWD's New Engineer

SUMMARY

It is my pleasure to introduce Juan Maya. Juan started with CCWD yesterday, November 1, 2023. Previously he worked for Tuolumne County as a staff engineer where he performed a variety of professional civil engineering field and office work related to the management, planning, design, construction, and maintenance of the County's Capital Improvement Program in the Tuolumne County Public Works Department.

Juan states that he is eager to engage in water resources and capital improvement projects with the CCWD team.

BACKGROUND

Most recently, Juan completed his 8-hour professional engineer's exam in water resources and environmental engineering and will apply for a professional engineer's license next year once he completes the requisite qualifying professional experience. He received his Bachelor of Science in Civil Engineering (*magna cum laude*) in 2022 from the California State University, Sacramento with an emphasis in water resources.

Prior to enrolling in the university to study civil engineering, Juan worked as an HVAC and Biomedical technician for 15 years in Sonora. There he met his wife, Sara. Intrigued by the mechanical systems he was maintaining, he decided to become an engineer. He enrolled in Columbia College and graduated with distinction.

Agenda Item

DATE: November 2, 2023

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

FROM: Charles Palmer, Senior Civil Engineer

RE: Proposed Contract Amendment for PBI, Inc. Engineering Services During Construction for Copper Cove Phase 1 and 2 Tank B & Clearwell Project, CIP # 11083C

SUMMARY

For the Copper Cove Phase 1 and 2 Tank B & Clearwell Project, a construction contract with T&S Construction, Inc. was approved at the Board of Director's meeting on September 19, 2023. A Notice to Proceed was issued to T&S on October 13, 2023. The project construction will occur during the next year and staff needs engineering assistance to assure successful project delivery. Staff is recommending a contract amendment to its Professional Services Agreement with PBI to add engineering services during construction. This scope of work was not in PBI's initial contract. The additional scope of work includes reviewing shop drawings, responding to requests for information, assisting with processing contractor change orders, leading construction progress meetings, preparing as-built drawings, performing materials testing and special inspections, and conducting environmental pre-construction surveys. PBI's estimated fees for the added scope of work is \$257,615.

Also, PBI is proposing other contract adjustments both cost increases and credits as shown in the attached budget reallocation. PBI is proposing another \$120,120 in additional scope of work items bringing the total extra fees to \$377,735. However, PBI is presenting a credit of \$215,947 for eliminating and/or reduced effort on other tasks. After accounting for all added costs and credits, PBI is proposed a contact amendment of \$161,788 incorporating all changes in scope.

FINANCIAL CONSIDERATIONS

The current adopted CIP budget includes \$4.0 million in FY 2023-24 and another \$4.0 million in FY2024-25 for the Copper Cove Phase 1 & 2 Tanks and Clearwell Project. This project is being funded by the Water CIP Loan issued June 1, 2022. The approved T&S construction contract is \$6,929,450. Staff anticipates being able to fund PBI construction phase services within the remaining budget.



October 11, 2023

Charles Palmer, P.E.
Calaveras County Water District
120 Toma Court
San Andreas, CA 95249

Subject: Budget Reallocation for Phase 3 Booster Pump Station Project and Phase 1 and Phase 2 Tank Projects Construction Support Services

Dear Charles,

We are submitting to you our budget reallocation request to support the Copper Cove Water System Improvements Phase 3 Booster Pump Station Project and the Phase 1 and Phase 2 Tank Projects Construction Support Services. Budget reallocation will include the following adjustments:

- Task 3 – Existing Tanks PDR and Condition Assessment. Tank condition assessments were removed for the existing Clearwell and Steel B-Tank. This unused budget will be provided as a credit.
- Task 4 – Phase 2 Design – B Tank BPS – The B Tank BPS was eliminated. The design effort for this task will be provided as a credit.
- Task 6 – Phase 3 Design – C1 and Copper Valley Transmission Main (C-Tank BPS and Transmission Main). The recommended project has changed from the original proposal and now includes the design of the transmission main.
- Task 8 – Land Survey and Geotechnical Report. Available surveys and geotechnical information provided by the District for Phase 1 and Phase 2 Tanks design reduced the level of effort for this task and the remaining budget will be provided as a credit.
- Task 14 (New Task) – Phase 1 and Phase 2 Tank Projects Engineering Services During Construction. This task is a new task added to reallocate the Task 4 B Tank BPS design budget to support the Phase 1 and Phase 2 Tank Projects Engineering Services During Construction.
- Task 15 (New Task) – DDW Permit Amendment and Operations Plan Update
- Task 16 (New Task) – C-Tank BPS and Transmission Main Bid Period Services. This task is added to support the bid services for the C-Tank BPS and T-Main project.

Task 6 – Phase 3 (C-Tank) Booster Pump Station Design Modifications

The original proposal assumed that a new intermediate booster pump station would be built between to the existing booster pump station at the water treatment plant and the C-Tank site and that the transmission main to the C-Tanks would utilize the original design. The recommended alternative from the preliminary design report was to modify the existing pumps at the existing

water treatment plant with high head pumps eliminating the intermediate pump stations and modify the size and pressure class of the previously designed transmission main. The modified design provides for a reduced level of effort (credit) for the elimination of the intermediate booster pump station. The transmission main size and pressure class modifications requires the addition of design plans for the modified transmission main. The original number of design sheets per the original proposal was 10 and the modified number of design sheets to include the transmission main is increased to 25.

Task 16 – Phase 1 and Phase 2 Tank Project Engineering Services During Construction

The original proposal only scoped bid support services and did not include engineering services during construction. The original proposal also included a design budget for replacing the Phase 2 B-Tank Booster Pump Station (BPS) which is currently planned to be abandoned. The District has requested that the remaining B-Tank BPS design budget be reallocated to support the Phase 1 and Phase 2 Tank Projects Engineering Services During Construction.

The additional design services for both the Phase 3 Booster Pump Station project and the Phase 1 and Phase 2 Tanks project are summarized below:

Task 6 – Phase 3 Design C-Tank BPS and Transmission Main

6.3 50% Design Documents – PBI will develop design drawings, specifications, and estimate of probable construction cost to support the selected design alternative for the C-Tank Booster Pump Station and Transmission Main project. This includes the removal of the intermediate booster pump station and addition of 15 civil/mechanical drawings. The attached cost table identifies the additional level of effort above the original proposed budget and includes credit for the removed services.

6.4 90% Design Documents – PBI will incorporate the District’s comments from the 50% design and develop 90% design documents.

6.5 100% Design Documents – PBI will incorporate the District’s comments from the 90% design and develop 100% design documents.

6.6 Bid Set Documents – PBI will incorporate the District’s comments from the 100% design and develop Final design documents.

Deliverables:

- A complete set of plan and profile drawings
- Edited project manual
- Engineer’s probable construction cost estimate
- Response to comments table identifying how each comment was addressed and where each revision is located in the engineering documents

Assumptions:

- PBI understand that the District uses the Engineer’s Joint Contract Document Committee (EJCDC) boilerplate front end contract documents and bid forms
- The format for the construction cost estimates will be consistent with the bid schedule to be utilized

- Lump sum items on the bid schedule will be broken down as would be required for a contractor for their Schedule of Values
- Existing control panel and power service will be modified
- Construction services, SCADA configuration, and PLC Programming are not included in this scope
- SCADA upgrade is not included in this scope of work.
- Project Drawings will be “to scale” and furnished to the District in Portable Document Format (PDF) file format for reproduction as both 11”x17” (ANSI C) and 22”x34” (ANSI D) paper size.
- Final drawings will be furnished in Autodesk AutoCAD format in addition to PDF file format.
- PBI to provide response to comments to District for each deliverable

Task 14 – Engineering Services During Construction (Phase 1 and Phase 2 Tanks)

Task 14.1 Review Shop Drawings and Submittals (Up to 100) – PBI will perform a technical review and return submittal reviews to the District or Construction Manager. Submittals will be reviewed for conformance with the Conformed Contract Documents. Submittal reviews will be completed in conformance with the requirements of the specifications. This task assumes up to 100 submittals will be reviewed and 20% will be resubmitted.

Task 14.2 Respond to RFIs (Up to 50) – PBI will review and provide response to RFIs to the District or Construction Manager. RFIs will be reviewed for conformance with the Conformed Contract Documents. RFI reviews will be completed in conformance with the requirements of the specifications and within the time allotted therein. This task assumes up to 50 RFI’s will be reviewed.

Task 14.3 Change Order Coordination (Up to 10) – PBI will review change order requests from the Contractor, perform review of merit of request, and provide cost estimate review. PBI will provide a written recommendation regarding the merit and amount of the request to the District for review and approval. This task assumes up to 10 change order requests will be reviewed.

Task 14.4 Bi-Weekly Project Meetings (Up to 24 in person and up to 24 virtual) – PBI will run bi-weekly project meetings and will prepare agendas to discuss status of outstanding submittals, RFIs, change orders as needed. This task assumes that PBI will attend up to 48 bi-weekly meetings; up to 24 meetings will be attended virtually and up to 24 will be in person located at the project site.

Task 14.5 Prepare As-Built Drawings – PBI will develop electronic as-built drawings from redlined drawings from the Contractor, and inspector.

Task 14.6 Materials Testing and Special Inspection – Materials testing and special inspection will be supported by Mid Pacific Engineering. MTSI will include grading and tank subgrade preparation observation/testing as well as soils testing.

Task 15 – DDW Permit Amendment and Operations Plan Update

Task 15.1 DDW Permit Amendment – PBI will support the District in obtaining permit amendment application approval from the DDW for the CCWTP improvements. PBI will prepare a start-up and commissioning plan to support this.

Task 15.2 Operations Plan Update – PBI will provide a draft and final Operations Plan update for the CCWTP that incorporates the following:

- New Clearwell with operational flexibility to operate in parallel or series
- B-Tank Site modifications including the ability to feed from the C-tank considering future improvements are made to the effluent booster pump station

Deliverables:

- Meeting agendas and minutes
- Provide up to 100 submittal reviews and up to 50 RFI responses, and up to 10 change order reviews.
- As-built Drawings submitted electronically
- DDW Permit Amendment
- Draft/final operations plan update

Assumptions:

- PBI will attend up to 48 meetings; up to 24 virtually and 24 in person
- Construction surveying not included
- Full-time construction inspection is not included
- O&M manuals and marked-up As-Built drawings will be provided by Contractor
- Construction completion anticipated within 24 months of NTP

Task 17 – Lake Tulloch Emergency Intertie Bid Support Services

17.1 Pre-Bid Meeting - PBI will attend and develop agenda and sign-in sheet for pre-bid meeting.

17.2 Bid Addenda (Up to 3) – PBI will prepare written responses to answer bidder’s requests for information and to make clarifications and prepare written addenda to address changes and clarifications to the drawings, bid forms, project manual and technical specifications.

17.3 Conformed Documents – PBI will prepare conformed plans and specifications, in response to changes based on addenda prepared for the bid documents.

17.4 Bid Evaluation – PBI will review the bids and make a recommendation for award, addressing any significant discrepancies between the final engineer’s opinion of probable construction costs and the lowest responsive, responsible bidder’s bid.

Deliverables: Addenda, Conformed Plans and Specifications delivered electronically

Assumptions:

- The District will advertise and circulate the bid documents for public bidding of the project for construction.
- Includes up to 3 bid addenda

The remaining fee credits and the additional fees for these services are detailed in the attached budget reallocation spreadsheet. Services will be provided on a time and materials basis. We look forward to providing continued support for this project. If you have any questions or desire any additional information, please do not hesitate to contact me at (916) 608-2212.

Sincerely,

A handwritten signature in blue ink, appearing to read 'K. Brustad', with a long horizontal flourish extending to the right.

Karl Brustad, PE, MBA
Principal

Attachments:
Budget Reallocation Spreadsheet

**Estimated Work Effort and Cost
Calaveras County Water District - Copper Cove Water System Improvements Budget Reallocation**

Task No.	Task Description	Principal in Charge	Senior Engineer 3 - QA/QC	Project Manager 2	Senior Engineer 1	Staff Engineer 2	Staff Engineer 1	Technician 2	Administrative 4	PBI Labor	Total PBI Labor (\$)	PSOMAS (Survey)	Dewberry (Environmental)	ATEEM (Electrical)	CYS (Structural)	CSJ (Condition Assessment)	Mid Pacific (Geotech)	PBI Expenses (\$)	Total Cost (\$)	
	2023 Rates	\$265.00	\$ 245.00	\$ 225.00	\$ 205.00	\$ 155.00	\$ 135.00	\$ 105.00	\$ 110.00											
Task 3 - Existing Tanks PDR and Condition Assessment - Clearwell and B Tank (steel)																				
	Task 3 Credit									0	\$ (2,534)				\$ (13,200)	\$ (6,545)		\$ (253)	\$ (22,533)	
	Subtotal Task 3	0	0	0	0	0	0	0	0	0	\$ (2,534)	\$ -	\$ -	\$ -	\$ (13,200)	\$ (6,545)	\$ -	\$ (253)	\$ (22,533)	
Task 4 - Phase 2 Design - B Tank BPS																				
	Task 4 Credit									0	\$ (91,777)			\$ (34,496)	\$ (43,560)				\$ (9,178)	\$ (179,011)
	Subtotal Task 4	0	0	0	0	0	0	0	0	0	\$ (91,777)	\$ -	\$ -	\$ (34,496)	\$ (43,560)	\$ -	\$ -	\$ -	\$ (9,178)	\$ (179,011)
Task 6 - Phase 3 Design C1 and Copper Valley Transmission Main																				
	Task 6 Credit									0	\$ -				\$ (74,800)				\$ -	\$ (74,800)
6.3	50% Design Documents	10	7	12	25	40	67	26		187	\$30,165								\$3,017	\$33,182
6.4	90% Design Documents	16	13	24	21	48	58	35		215	\$36,076								\$3,608	\$39,683
6.5	100% Design Documents	10	7	12	17	24	33	6		109	\$19,355								\$1,936	\$21,291
6.6	Bid Set	8	11	16	13	36	45	9		138	\$23,680								\$2,368	\$26,048
	Subtotal Task 6	44	38	64	76	148	203	76	0	649	\$ 109,275	\$ -	\$ -	\$ -	\$ (74,800)	\$ -	\$ -	\$ -	\$ 10,928	\$ 45,403
Task 8 - Land Survey and Geotechnical Report																				
8.1	Topographic Survey - Phase 1 and Phase 2 Design (Credit)									0	\$ -	\$ (4,973)							\$ -	\$ (4,973)
8.2	Geotechnical Report - Phase 1 and Phase 2 Design (Credit)									0	\$ -								\$ (9,430)	\$ (9,430)
	Subtotal Task 8	0	0	0	0	0	0	0	0	0	\$0	-\$4,973	\$0	\$0	\$0	\$0	\$0	\$0	\$ (9,430)	\$ (14,403)
Task 14 - Engineering Services During Construction (Phase 1/2 Tanks)																				
14.1	Review Shop Drawings and Submittals (Up to 100)	30		60		120	60		8	278	\$49,030			\$8,536					\$4,903	\$62,469
14.2	Respond to RFIs (Up to 50)	25		50		50			2	127	\$25,845			\$3,762					\$2,585	\$32,192
14.3	Change Order Coordination (Up to 10)	5		5		10			2	22	\$4,220								\$422	\$4,642
14.4	Bi-Weekly Project Meetings (Up to 24 in person/ 24 virtual)	72		72		90	30		4	268	\$53,720			\$1,320					\$5,372	\$60,412
14.5	Prepare As-Built Drawings	6		12		24	32	32	2	108	\$15,910			\$2,244					\$1,591	\$19,745
14.6	Materials Testing and Special Inspection	1		2		2			2	7	\$1,245						\$43,489		\$125	\$44,858
14.7	Environmental Surveys and Inspection	2			4				2	8	\$1,570		\$31,570						\$157	\$33,297
	Subtotal Task 14	141	0	201	4	296	122	22	818	818	\$151,540	\$0	\$31,570	\$15,862	\$0	\$0	\$43,489	\$15,154	\$257,615	
Task 15 - Lake Tulloch Emergency Intertie Design																				
15.1	DDW Permit Amendment	2		4		16	24		2	48	\$7,370								\$737	\$8,107
15.2	Operations Plan Update	6	6	12	24	24	60		2	134	\$22,720								\$2,272	\$24,992
	Subtotal Task 15	8	6	16	24	40	84		4	182	\$30,090	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,009	\$33,099
Task 17 - C-Tank BPS and T-Main Bid Support Services																				
17.1	Pre-Bid Meeting	4		6					2	12	\$2,630								\$263	\$2,893
17.2	Bid Addenda (Up to 3)	4		6	8	12	16			46	\$8,070								\$807	\$8,877
17.3	Conformed Documents	2	4	6			8	10	2	32	\$5,210								\$521	\$5,731
17.4	Bid Evaluation	4		4		8				16	\$3,200								\$320	\$3,520
	Subtotal Task 17	14	4	22	8	20	24	10	4	106	\$19,110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,911	\$21,021
COLUMN TOTALS		207	48	303	112	504	433	102	30	1,755	\$215,704	-\$4,973	\$31,570	-\$18,634	-\$131,560	-\$6,545	\$34,059	\$21,570	\$141,190	

SUBTOTAL COST	\$357,137
SUBTOTAL CREDIT	\$ (215,947)
TOTAL NET COST	\$141,190

Agenda Item

DATE: November 2, 2023

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

FROM: Engineering Department

RE: Capital Improvement Project Updates

AMI / AMR Project (CIP 11096)

Mueller Systems is complete, and all meter locations have been revisited and checked. Customer Service has been meeting with Mueller to go over outstanding issues they have between Mueller and Tyler Billing. Mueller is completing mitigation, resolving/rerouting meters to optimize network. Engineering is handing over the Project to Operations/Customer Services.

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

This project includes replacing 20,000-ft of water transmission pipeline to improve conveyance from Tank A to Tank B sites. The pipeline will be aligned along Hartvickson, Baldwin, Usher and Wind River Court. It consists of approximately 13,400-ft of 14-inch diameter pipe and 6,500-ft of 12-inch diameter pipe. The piping material will be ductile iron. The consultant, Coleman Engineering, is designing the project. Coleman Engineering submitted 90% of the design incorporating information from potholing efforts. Also, ECORP consulting has completed a draft environmental document (IS/MND) for CEQA compliance, which is ready for Board adoption. The project is anticipated to go to bid this November, and construction to start early 2024 and finish in FY 2024-2025.

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. KW Emerson has achieved substantial completion on the project, punchlist items will be addressed in the coming weeks. Westech will visit the water treatment facility at the end of November to commence start up. Operations and PBI are simultaneously working on Operations manual submission to the Division of Drinking Water.

West Point and Wilseyville Wastewater Consolidation Project (CIP 15091)

The Water Board staff completed the Final Budget Approval (FBA), which was then executed by the General Manager. Staff continue to review and approve material submittals. K.W. Emerson (KWE) completed the sludge drying beds, installation of wet well between sludge basins along with all the site piping. Electrical crews are on site running conduit banks and pulling wire for new equipment. The site is being prepared for

winterization, Construction will continue through the summer of 2024 and be completed by fall of 2024.

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

Mozingo Construction has completed installation of Wet Wells and Valve Vaults at Lift Station 15 and Lift Station 18. Additionally, Mozingo completed the excavation and installation of the retaining wall at Lift Station 15 to provide space for the new electrical controls/standby generator to be installed on the roadside shoulder. PG&E (Pacific Gas & Electric) will be onsite with a boom truck to support the existing power poles while Mozingo/Fusion Electric install new underground conduits. There have been a lot of issues discovered in the field that have required design changes. Quality of the Project Plans has been an ongoing problem; Engineering staff has kept up redesign to minimize the impact to Project Schedule.

Mozingo Construction has submitted an updated CPM Schedule based on the equipment deliveries, work at Lift Station 6 and 8 is scheduled to start once the MCC arrives in January and Project should be complete by May 2024.

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

CCWD continues to wait for USACE acceptance of the Section 219 Letter Report (LR) and Project Partnership Agreement (PPA). CCWD has retained HydroScience Engineers for engineering and design services and Dewberry for environmental services for CEQA and NEPA compliance. The project includes adding Dissolved Air Flootation (DAF) units and making tertiary filter improvements. CCWD's is working with USACE to sign-off an initial increment of \$2 million to complete design, environmental and pre-purchase of the DAF equipment. Funds are not authorized until after USACE signs the LR and PPA, which is expected to occur in November 2023; until then the project design is on-hold.

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

This project is being coordinated with the tertiary treatment plant improvements through the Letter Report (LR) and the Project Partnership Agreement (PPA) between CCWD and USACE. As of October 30, 2023, the LR and PPA are being finalized by USACE. Thereafter, the documents will be forwarded to CCWD for Board approval and adoption. The estimated total construction cost is \$17 million. An initial funding increment of \$2.0 million Federal funding and \$0.67 million CCWD (non-Federal) cost share is anticipated for Increment #1. The continuation of work on the project is pending approval of the Letter Report and Agreement. The project will raise the dam by 10 feet and increase the capacity of the effluent storage reservoir (Pond 6) from 205 AF to 442 AF. Also, the project includes relocating a 10-inch raw water line, 8-inch sewer force main, pumps and other existing facilities in conflict with raising the dam. The consultant, Wagner & Bonsignore, is designing the dam and has resubmitted a project application to the Division of Safety of Dams (DSOD). DSOD is starting its review. HydroScience Engineers is

providing the design for relocating the existing pipelines, pumps and other facilities. Dewberry is providing environmental services for CEQA and NEPA. An updated version of the 2009 Environmental Impact Report (EIR) will likely be relied upon for the project. In May, staff met with an adjacent property owner regarding a prospective borrow site for material (earth) to raise the dam.

Copper Cove Water System Improvements Project (CIP 11083C)

On September 13, 2023, T&S Construction was awarded a contract for construction of the Copper Cove Phase 1 & 2 Tanks and Clearwell project. Staff issued a Notice to Proceed with construction to T&S Construction Company on October 13, 2023. A construction kickoff meeting occurred with T&S, PBI and CCWD staff on October 31, 2023. Staff recommends retaining PBI to provide engineering services during construction for the Phase 1 & 2 Tanks and Clearwell project. Further details are provided herein in Agenda Item 4a. including a proposed scope of work and fee.

Copper Cove B-C Transmission Pipeline & Pump Station (CIP 11122)

Also, as of October 23, 2023, PBI submitted a 50% deliverable for design of upgrades to the main treated water pump station at the Copper Cove Water Treatment Plant (WTP) and a transmission pipeline conveying treated water from the WTP to Tank C. This is a substantial project including construction of 12,000-ft of new 20-inch transmission pipeline, new high horsepower pumps and electrical upgrades. The project will resolve and correct a significant bottleneck in the conveyance of treated water from the WTP and transmission further out into the water system. The existing booster pump station at Tank B on Signal Hill Trail and 10-inch transmission/distribution pipeline on Arrowhead Street, constructed in the 1970's, have reached the end of their lifecycle, are inadequately sized and must be replaced for safety, reliability and to increase capacity to serve current and future water demands.

Ebbetts Pass Hunters Raw Water Intake Pumps (CIP 11103)

This 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. We have received comments on NEPA review, recently discovered habitats for Spotted Owl which does not like construction noise and according to the USFS biologist work cannot start until after August 15, but work cannot happen on the Project during the Tunnel Outage in October. This leaves a Project Work window between October-March which will not work in Avery because of winter weather and hazardous access to the existing pump station. The District with help from our Biologist proposed a 0.25-mile buffer with additional surveillance for Owls, for use of helicopters is required to remove existing pumps and re-install modern pumps. Helicopter access is really the only option as the area surrounding site cannot be disturbed because of cultural and historic artifacts.

Ebbetts Pass Redwood Tanks Hardening (CIP 11095)

This project is receiving significant hazard mitigation grant program (HMGP) funding from Cal-OES/FEMA. Construction is complete and all the new tanks are online. Staff plans to bring Project to the November 15th Board Meeting for approval. The District was

recently notified by Cal-OES that additional funds requested in the amount of \$990,000 are available to be issued by FEMA for this Hazard Declaration. Revisions were made by Cal-OES to FEMA in the original Project Benefit-Cost-Analysis (BCA) without CCWD involvement, this BCA cannot absorb the additional cost requested. CCWD is working with Cal-OES to amend the BCA to qualify for additional funding. District Staff would like to schedule a ribbon cutting ceremony to celebrate this Project.

Forest Meadows Wastewater Plant / UV System Replacement (CIP 15106)

Cole Tiscornia Construction has completed construction of the UV channel and installation of the new Lamps. District electrical staff is now working on electrical and control wiring for the UV Lamps and Sensors. New backup batteries are being installed. Startup and testing of the new UV disinfection system is scheduled for November.

Arnold Wastewater Secondary Clarifier Improvements Project (CIP 15095)

The project will provide upgrades to the Arnold Wastewater Treatment Plant. It will add a new secondary clarifier, RAS/WAS pump station, two additional aerobic digesters, and replace the plant's electrical motor controls, backup generator, PLC and SCADA systems. Staff requested to add air blowers and extend air piping for the new aerobic digesters (versus mechanical aerators). The estimated construction cost is \$6.5 million. Staff have progress meetings with the design consultant, HydroScience, on a bi-weekly basis. HydroScience has completed the 100% design plans. Staff has submitted a pre-application to the State Water Board for possible grant funding and was notified that the project is initially eligible for funding and advised to submit either a construction or planning grant application for further consideration. Staff decided to proceed with a construction application and had a planning meeting with HydroScience on October 13, 2023 to scope its work effort for preparing the necessary Engineering Report. The scope and fee from Hydroscience are pending as of October 24, 2023.

La Contenta Biolac, Clarifier, and UV Improvements (CIP 15097)

District Operations and Engineering Staff met to discuss the Pre-Planning for the La Contenta Wastewater Treatment Plant Project. Staff are working on updating the Water Balance and estimating future flows into the Wastewater Treatment Plant. We plan to bring this topic to the Engineering Committee for discussion on the level of expansion and operational redundancy for maintainability.

CALAVERAS COUNTY WATER DISTRICT CAPITAL IMPROVEMENT PROGRAM (CIP) SCHEDULE FOR FY23/24

LEGEND

Scoping	Project Delay
Planning/Funding	Construction Complete and/or Notice of Completion
Design/Permit/Environmental	Goes into next Fiscal Year
Bid	Completed Project
Construction/Procurement	Gantt Chart Revision Date
Shovel Ready/Awaiting Funds	

							FY 23/24 CIP SCHEDULE																									
							JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE			
							1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
WATER PROJECTS																																
1	11106	West Point Water Supply Reliability Improvements	\$2.38M	22%	SS/JG/JK	Construct											X															
2	11103	Ebbetts Pass Hunters Raw Water Intake Pumps (Hazard Mitigation)	\$2.4M	83%	KW	Construct	Project Delay																									
3	11083C	Copper Cove Water System Improvements Project	\$8.6M	58%	CP	Construct	Bid						Construction/Procurement																		>	
4	11122	Copper Cove B-C Transmission Pipeline & Pump Station	\$9M	33%	CP	Design & Construct	Design/Permit/Environmental																									
5	11088	Jenny Lind Water System A-B Water Transmission Pipeline	\$13.5M	59%	CP/SS	Design & Construct	Design/Permit/Environmental																									
6	11083J	Jenny Lind Clearwell #2	\$350k	100%	KW	Design & Construct	Design/Permit/Environmental						Construction/Procurement												Bid						X	
WASTEWATER PROJECTS																																
7	15091	West Point/Wilseyville Consolidation Project	\$10M	50%	CP/JG/JK	Construct											X															
8	15095	Arnold Wastewater Secondary Clarifier Improvements Project	\$8M	28%	CP	Construct	Shovel Ready/Awaiting Funds																									
9	15106	Forest Meadows Wastewater Plant UV System Replacement	\$500K	60%	KW/JG/JK	Construct											X															
10	15076	Copper Cove Lift Stations 6, 8 & Force Main Bypass	\$5.5M	45%	KW/JG/JK	Construct	Construction/Procurement																									
11	15080	Copper Cove Lift Stations 15 & 16 Rehab/Replacement	\$3.6M	72%	KW/JG/JK	Construct	Construction/Procurement																									
12	15094	Copper Cove Wastewater Treatment Plant Tertiary Treatment Improvements and Facilities Plan	\$1.8M	39%	CP	Design	Project Delay																									
13	15112	Copper Cove Wastewater Treatment Plant - Pond 6 Dam and Effluent Storage Reservoir Enlargement Project	\$4.38M	8%	CP	Design	Project Delay																									
14	15097	La Contenta Biolac, Clarifier, and UV Improvements			KW	Scope	Scoping																									

Agenda Item

DATE: November 2, 2023

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

FROM: Engineering Department

RE: Other Updates

Copper Valley Town Square

Staff continue to work with CV Development Partners LLC on key issues and proposed development. These include planned redevelopment of the Copper Valley Square complex. The discussion includes requirements for off-site 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, the pre-existing water booster pump station serving the Copperopolis Zone has never been upgraded and is limited to 100-gpm. A new water booster pump station is needed to increase potable water delivery to Copper Town Square. These required off-site improvements are part of the original facilities agreement approved for Copper Town Square.

CCWD issued a letter on July 20, 2023 approving the “Copper Town Square Condominium Project, Preliminary Design Report for Wastewater Permanent Collection System.” A facilities agreement is to be developed to address the offsite improvements needed to serve the Project.

CCWD Engineering staff and operations staff has had internal meeting to discuss design plans submitted by Weber Ghio & Associates for Force main and Lift Station. CV and the District agreed to redesign the connection point for force main and not strain the existing gravity sewer main across the golf course in Saddle Creek Subdivision. CV will be petitioning CCWD to obtain financing through the Bond Opportunities for Land Development (BOLD) program to help finance the infrastructure.

An application for retail Building 11/12 was submitted by CV on May 2023. After asking for various clarifications, CCWD issued a concept approval on September 12, 2023. The concept review was accepted by the Developer. Further changes in the design were proposed by the developer, which may result in further review and facilities agreement will be developed.

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. Since no activity has occurred to resolve outstanding punchlist items and bring the project to final completion and acceptance, CCWD will need to notify the Owner that the water and sewer system will be disconnected from CCWD's system.

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. Properly locating the secondary lift station along the alignment is a key issue. The School District's representative, Hugh Logan, KASL and CCWD will 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. CCWD has reviewed and returned comments on the 100% drawings to KASL. CCWD is currently reviewing the project specifications.

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 are 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. At the March 22nd meeting, the Board authorized the District to participate in the Bond Opportunities for Land Development (BOLD) program, which will help facilitate new development including this project. LGI Homes had provided the District with three options to bypass the bottleneck in gravity sewer along the creek. After internal discussion with engineering and operations staff, decision was made to choose an option that has a regional lift station and force main that bypasses the smaller gravity line and breaks head at sewer manhole along Vista Del Lago.