

ENGINEERING COMMITTEE

AGENDA

Committee Meeting:
Tuesday, March 6, 2018
2:30 PM (Board Room)

Calaveras County Water District
120 Toma Court / P.O. Box 846
San Andreas, California 95249

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**

At this time, members of the public may address the Committee on any non-agendized items. The public is encouraged to work through staff to place items on the agenda for consideration by the Committee. Comments are limited to three (3) minutes per person.

2.* **APPROVAL OF MINUTES**

- October 19, 2017 Minutes

3.* **NEW BUSINESS**

3a Presentation / Discussion Regarding Draft FY 2018/19 Capital Improvement Program (Charles Palmer, District Engineer)

3b Presentation / Discussion of Concept Review Applications, Water and Sewer Service for New Hogan Oaks Units 1 & 2 (Robert Creamer, Engineering Analyst)

4. **OLD BUSINESS**

Nothing to report

5. **FUTURE AGENDA ITEMS**

-

6. **NEXT COMMITTEE MEETING**

Tuesday, April 3, 2018 at 2:30 p.m.

7. **ADJOURNMENT**

*Paperwork included in package

CCWD ENGINEERING COMMITTEE
CALAVERAS COUNTY WATER DISTRICT
October 19, 2017

The Engineering Committee of CALAVERAS COUNTY WATER DISTRICT met at the CCWD Offices in San Andreas, California, at approximately 1:55 p.m.

The following Directors/Committee Members were present:

Jeff Davidson
Terry Strange

Also present:

Dave Eggerton	General Manager
Charles Palmer	District Engineer
Mona Walker	Clerk to the Board
Bob Godwin	Senior Civil Engineer
Jesse Hampton	Plant Operations Manager
Teresa Tanaka	Director of Operations
Jeffrey Meyer	Director of Administrative Services

1. PUBLIC COMMENT:
There was no public comment.

2. APPROVAL OF MINUTES:

The May 2, 2017 Minutes were approved as presented by a motion from Director Strange, and seconded by Director Davidson.

3. NEW BUSINESS:

3a Presentation concerning Permits for Operation of the District's Wastewater Collection and Treatment Facilities

Mr. Godwin provided a PowerPoint presentation on the regulatory background of Wastewater Collection and Treatment Permitting. He discussed the wastewater permit application process including: requirements, monitoring and reporting program. The District is under one of three types of permits: Collection System (all the District), Land Application Facilities, and Surface Water Discharge Facilities. The District mostly uses land application in wastewater disposal. He reviewed the District's wastewater permits, area of wastewater service, effluent disposal method, and type of disposal. Mr. Godwin indicated the District has approximately 4,811 wastewater connections and gave a breakdown of service connections by area.

Mr. Godwin described the State Board fee structure that it charges for its annual permit. He discussed the required water quality sampling, testing, and reporting of the wastewater facilities and monitoring wells. The permitting efforts and proposed improvements to wastewater facilities will be included in upcoming District master plans. Staff responded to questions from Committee Members. Directors Strange and Davidson thanked Mr. Godwin for his presentation.

4. OLD BUSINESS:

There was nothing to report.

5. FUTURE AGENDA ITEMS:

Director Strange requested that he would like more information on the water system and pressure problems in the Jenny Lind water service area as a future agenda item.

6. NEXT MEETING

To be determined.

7. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 3:16 p.m.

Respectfully submitted,

Mona Walker
Clerk to the Board

Agenda Item

DATE: March 6, 2018

TO: Engineering Committee
Dave Eggerton, General Manager

FROM: Charles Palmer, P.E., District Engineer

RE: Presentation / Discussion of Calaveras County Water District's (CCWD),
FY18/19 Draft 10-Year Capital Improvement Project (CIP) Program

SUMMARY:

A presentation will be made to the Committee for discussion of the Draft 10-year CIP program, which is reviewed each fiscal year and currently in planning for FY18/19. At the Committee level, it is an opportunity for review and confirmation of CIP program priorities, list of projects, estimated costs and proposed schedules. The CIP program includes both water and wastewater segments and addresses critical priorities as follows:

Common Water/Wastewater:

- Address Operational Issues/Assist Operational Staff
- Improving Worker Safety Conditions / OSHA Compliance
- Maintain Electrical, Standby Power, and SCADA Systems.
- Master Planning for Growth / Future Expansion Projects
- Pursue Grant Funding Consistent with District's Goals

Water Facilities

- Address Water Resources Issues, Supply Shortfalls and Conservation Goals
- Provide Reliability and Redundancy
- Implement Hazard Mitigation Projects (Drought, Fire, Flood, etc.)
- Renovate / Replace Pipelines, Pumps, PRV's and Other Aging / Failing Facilities
- Paint & Repair Steel Water Storage Tanks and Other Corrosion

Wastewater Facilities:

- Maintain Treatment, Storage and Disposal Facilities / Correct Deficiencies
- Regulatory Compliance / Permit Updates
- Prevent Sewer Spills and Overflows
- Reduce Infiltration and Inflow of Storm and Ground Water into Collection System
- Renovate / Replace Sewer Collection System, Force Mains, Lift Stations/Pumps, and Other Aging / Failing Facilities

A list of proposed capital projects and estimated costs for the FY18/19, Draft 10-year CIP program are shown in attached Tables A and B for the water and wastewater segments, respectively. During planning each fiscal year, the program is reviewed and amended to update the list of projects, revise costs, confirm funding sources, and adjust schedules. For FY18/19 through FY27/28, over \$50 million dollars in water projects and \$34 million dollars in wastewater projects which have been identified based on the professional analysis and expert opinion of the District's engineering and operations staff and which are intended to capture a full picture and order of magnitude of the District's infrastructure needs and challenges. Also, as experience has shown with the effects of drought, wildfires, and winter storms, the list of projects may be amended by the Board over the course of the year to address emergencies as they arise.

The CIP program is funded by renovation and replacement (R&R) funds, expansion fees, grants and other funding sources. The R&R program is the largest component of the CIP program, which annually generates about \$3.2 million for water projects and \$1.2 million per year for sewer projects. Through the R&R program, CCWD is making a commitment to the systematic reinvestment in pipes, pumps and other water and wastewater facilities to maintain service reliability and preserve the functionality of the District's infrastructure. CCWD staff will continue to make efforts to obtain State and Federal grants whenever possible, which are vital in moving projects forward that may be constrained by financial resources and otherwise limit the number and scale of projects in the CIP program.

FINANCIAL CONSIDERATIONS:

None at this time. The estimated costs and implementation schedule for the proposed 10-year CIP program for both water and wastewater segments will be first presented at the Committee level. Next, the 10-year CIP program will be presented to the full Board for discussion in March prior to adopting a final program for the next fiscal year FY18/19. The District's engineering and operations staff will further prioritize the list of projects considering funding constraints and provide a schedule of the District's highest priority and most critical projects to be adopted by the Board and funded with the FY18/19 budget.

Attachments:

Table A – Water Projects / Draft 10-Year CIP Program & Budgetary Costs

Table B – Wastewater Projects / Draft 10-Year CIP Program & Budgetary Costs

TABLE 'A' - WATER PROJECTS / DRAFT 10-YEAR CIP PROGRAM & BUDGETARY COSTS
(For FY2018/2019 through FY2027/2028)

SERVICE AREA	PROJECT DESCRIPTION	ESTIMATED COST
Ebbetts Pass **	Reach 1 Pipeline	\$ 4,000,000
Ebbetts Pass **	Techite Pipeline	\$ 1,250,000
Ebbetts Pass	AMR/AMI Meter Program (Phase 2)	\$ 2,400,000
Ebbetts Pass **	Larspur Tank (150,000 GAL) / Repair & Paint	\$ 250,000
Ebbetts Pass **	Samill Tank (3-MGAL) / Repair & Paint	\$ 800,000
Ebbetts Pass **	Hunters Clearwell (1-MGAL) / Repair & Paint	\$ 500,000
Ebbetts Pass	Pinebrook Tank (1-MGAL) / Repair & Paint	\$ 500,000
Ebbetts Pass	Replace Remaining Redwood Tanks	\$ 3,000,000
Ebbetts Pass	WTP Filter Rehab. & Painting	\$ 500,000
Ebbetts Pass	Hunters Raw Water Pumps / Replacement	\$ 1,500,000
Ebbetts Pass	Forest Meadows Pump Station / Replacement	\$ 500,000
Ebbetts Pass	Big Trees Pump Stations 1, 4 & 5 / Replacement	\$ 700,000
Ebbetts Pass	Sawmill Pump Station Replacement	\$ 1,250,000
Ebbetts Pass	Doorington Pump Station Replacement	\$ 500,000
Ebbetts Pass	Arc Flash Assessment	\$ -
Jenny Lind **	Pretreatment (Cal-OES/FEMA)	\$ 5,000,000
Jenny Lind **	A-B Transmission Main	\$ 5,000,000
Jenny Lind	New Pressure Regulating Stations (6)	\$ 350,000
Jenny Lind	AMR/AMI Radio Meters (Phase ___)	\$ 1,500,000
Jenny Lind	Clearwell 2 / Repair & Paint	\$ 200,000
Jenny Lind	Tank A (2-MGAL) / Repair & Paint	\$ 700,000
Jenny Lind	Tank B (1-MGAL) / Repair & Paint	\$ 500,000
Jenny Lind	Tank E (0.5-MGAL) / Repair & Paint	\$ 350,000
Jenny Lind	Tank F (1-MGAL) / Repair & Paint	\$ 500,000
Jenny Lind	Arc Flash Assessment	\$ -
Copper Cove	Zone C Transmission Pipeline	\$ 2,000,000
Copper Cove	North Tulloch Loop/Submerged Pipeline Crossing	\$ 2,250,000
Copper Cove	AMR/AMI Radio Meters (Phase ___)	\$ 1,026,000
Copper Cove **	Clearwell Rehab. / Replacement	\$ 500,000
Copper Cove **	Tank B (Steel 0.75-MGAL) / Repair & Paint	\$ 500,000
Copper Cove	Tank B (Redwood 0.3-MGAL) / Replace	\$ 500,000
Copper Cove	Tank B Pump Station Replacement	\$ 1,250,000
Copper Cove	Reeds Turnpike Pump Station / Replacement	\$ 400,000
Copper Cove	Raw Water Pumps (1st Stage, 3rd Pump)	\$ 100,000
Copper Cove	Arc Flash Assessment	\$ -
West Point **	AMR/AMI Radio Meters (Phase 1)	\$ 350,000
West Point	SCADA Improvements	\$ 250,000
West Point **	Backup Water Filter	\$ 1,250,000
West Point	Moke River Raw Water Pipeline Replacement	\$ 1,500,000
West Point	Wilseyville Pump Station Rehabilitation	\$ 400,000
West Point	Arc Flash Assessment	\$ -
Wallace **	Wallace Elevated Tank / Repair & Paint	\$ 175,000
Wallace **	Wallace Ground Tank / Repair & Paint	\$ 175,000
Wallace	PLC/SCADA Improvements	\$ 250,000
Wallace	AMR/AMI Radio Meters (Phase ___)	\$ 75,000
Sheep Ranch **	New Water Plant & Clearwell	\$ 1,000,000
Sheep Ranch **	San Antonio Creek Water Storage Restoration	\$ 4,000,000
Sheep Ranch	Distribution System Replacement	\$ 1,000,000
TOTALS		\$ 50,701,000

** From Previously Adopted 5-Yr CIP for FY 17/18

TABLE 'B' - WASTEWATER PROJECTS / DRAFT 10-YEAR CIP PROGRAM & BUDGETARY COSTS
(For FY2018/2019 through FY2027/2028)

SERVICE AREA	PROJECT DESCRIPTION	ESTIMATED COST
Arnold	Secondary Clarifier	\$ 1,000,000
Arnold	Spray/Leach Field Evaluation & Improvements	\$ 500,000
Arnold	Tertiary Filter Rehab. / Improvements	\$ 500,000
Arnold	Treated Effluent Tank Rehab. / Replacement	\$ 250,000
Arnold	Lift Station 2 Rehab./Replacement	\$ 750,000
Arnold	Lift Station 3 Rehab./ Replacement	\$ 250,000
Arnold	Septage Handling Facilities / Dump Station	\$ -
Arnold	Arc Flash Assessment	\$ -
La Contenta	Huckleberry Lift Station Rehab./ Improvements	\$ 500,000
La Contenta	WWTP Improvements (Biolac, Clarifier, Screen) / Design	\$ 400,000
La Contenta	WWTP Improvements (Biolac, Clarifier, Screen) / Construction	\$ 3,600,000
La Contenta	Additional Disposal Area	\$ 650,000
La Contenta	Arc Flash Assessment	\$ -
Copper Cove	WWTP Improvements Pre-Design Evaluation / Phase A & B	\$ 300,000
Copper Cove	WWTP Improvements / Final Design / Phase A & B	\$ 700,000
Copper Cove	WWTP Improvements / Construction / Phase A	\$ 5,000,000
Copper Cove	WWTP Improvements / Construction / Phase B	\$ 6,000,000
Copper Cove	Lower Cross Country Pump & Electrical Upgrades	\$ 400,000
Copper Cove **	Lift Stations 6, 8, 12, 13 & Force Main Bypass	\$ 1,500,000
Copper Cove **	Lift Station 15 & 18 Rehab./ Replacement	\$ 1,250,000
Copper Cove	Biosolids Removal / Disposal	\$ -
West Point **	West Point / Wilseyville Consolidation	\$ 4,750,000
West Point	Lift Station / Pump & Electrical Improvements	\$ 250,000
West Point	Arc Flash Assessment	\$ -
Forest Meadows **	UV System Replacement	\$ 300,000
Forest Meadows	DAF Rehab./Sludge Tank & Belt Press Improvements	\$ 200,000
Forest Meadows	Arc Flash Assessment	\$ -
Vallecito/D.F. **	Recycled Water Distribution Project / TSTAN	\$ 280,000
Vallecito/D.F. **	Equalization Improvements / I&I Mitigation	\$ 400,000
Vallecito/D.F.	UV System Rehab./Replacement	\$ 300,000
Wallace **	WWTP Renovations / SCADA, PLC & Electrical	\$ 250,000
Southworth	Collection System Rehab./I&I Mitigation	\$ 400,000
Indian Rock	East Sand Filter Rehab./ Replacement	\$ 150,000
Squioa Woods	Leach Field Rehab./ Replacement	\$ 250,000
Six Mile Village	Sewer Force Main to Angels Camp	\$ 750,000
Various **	Pipeline/Forcemain Replacements	\$ 250,000
Various	Regional Biosolids/Sludge Handling	\$ 2,000,000
TOTALS		\$ 34,080,000

** From Previously Adopted 5-Yr CIP for FY 17/18

Agenda Item

DATE: March 06, 2018

TO: Engineering Committee
Dave Eggerton, General Manager

FROM: Charles Palmer, District Engineer
Robert Creamer, Engineering Analyst

SUBJECT: Presentation / Discussion of Hogan Oaks I & II Concept Applications

SUMMARY:

Hogan Oaks I and Hogan Oaks II are proposed subdivisions owned by Old Golden Oaks, LLC and located in the Valley Springs area, close to the District's La Contenta Wastewater Treatment Plant (LCWWTP). Both subdivisions are before staff for concept review. After review of the data and maps submitted with each application, staff decided to bring the information to the Engineering Committee for discussion and input.

Hogan Oaks I subdivision consists of 33.6± acres subdivided into 51 residential lots located directly south of LCWWTP. Both water and sewer services are requested.

Hogan Oaks II consists of 49.6± acres subdivided into 49 residential lots and 94 multi-family attached lots southwest of LCWWTP. Both water and sewer services are requested.

Considerations include possible impacts to existing infrastructure, access to LCWWTP by District personnel and current capacity of the Huckleberry sewer lift station.

FINANCIAL CONSIDERATIONS:

Possible development of property.