

ENGINEERING COMMITTEE

AGENDA

Committee Meeting:
Tuesday, May 2, 2017
2:00 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 five (5) minutes per person.

2.* **APPROVAL OF MINUTES**

- February 14, 2017 Minutes

3. * **NEW BUSINESS**

- 3a. Discussion of Possible Access across APN 055-051-008 (Copper Cove Wastewater Treatment Plant) to Properties South of the Plant (Robert Creamer, Engineering Analyst)
- 3b. Presentation / Discussion of Small Wastewater Treatment Facilities of the District including Southworth, Indian Rock and Sequoia Woods/Mountain Retreats (Sam Singh, Engineering Technician)

4. **OLD BUSINESS**

Nothing to report

5. **FUTURE AGENDA ITEMS**

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6. **NEXT MEETING**

To Be Determined

7. **ADJOURNMENT**

*Paperwork included in package

**ENGINEERING COMMITTEE
CALAVERAS COUNTY WATER DISTRICT
February 14, 2017**

The Engineering Committee of CALAVERAS COUNTY WATER DISTRICT met at the CCWD offices in San Andreas, California, at approximately 2:00 p.m.

The following Directors/Committee Members were present:

Jeff Davidson
Terry Strange

Also present:

Dave Eggerton	General Manager
Charles Palmer	District Engineer
Bob Godwin	Senior Civil Engineer
Peter Martin	Water Resource Manager
Teresa Tanaka	Director of Operations
Jesse Hampton	Plant Operations Manager
Jeff Meyer	Director of Administrative Services
Tami Bennett-Kirby	Senior Administrative Technician
Vicky Mills	Ratepayer

1. PUBLIC COMMENT: None

2. APPROVAL OF MINUTES:

The October 4, 2016 Minutes were approved as presented by a motion from Director Strange, seconded by Director Davidson.

3. NEW BUSINESS

3a. Presentation / Discussion FY 2017/18 Calaveras County Water District (CCWD) Five (5) Year Capital Improvement Project (CIP) Program

Charles Palmer provided a PowerPoint presentation to the Committee discussing the 5-year CIP program consisting of both water and wastewater projects including conservation goals, program priorities, lists of projects, estimated costs and proposed schedules.

FY 17/18 Water Project Highlights

- Completion of the Big Trees Tanks project (only punch list items remain; Notice of Completion scheduled for February 22, 2017 Board meeting);
- Reach 3A project will probably continue through next summer;
- Will be completing the Jenny Lind, Copper Cove and the West Point master planning efforts;

- Will also be continuing the tank renovation and replacement program. Director Davidson inquired as to the initiation of the tank R&R projects. Engineering has been working on getting a bid set out for bid. Many of the systems can only be taken out of service for repair/replacement during certain time(s) of the year.
- Largest projects scheduled to be undertaken next are the Reach 1 Pipeline Replacement project (CCW CIP #11085) and the Techite Pipeline Replacement project (CCWD CIP #11084) Both should be presented to the Board at the February 22, 2017 meeting with anticipated design for Reach 1 within the next sixty days and a contract to initiate construction in 2018. Project involves the replacement of 24,000 feet of 10' pipeline, (12) PRV stations along State Route 4 all within the CalTrans right-of-way. Reach 1 project has a component of expansion so would be able to utilize expansion funds.
- Extended discussion took place regarding the White Pines Blagen Mill Pond project; we are in the mode of studying and redefining the project scope due to the potential requirement to dredge out of White Pines Lake. Charles stated he is fairly certain some mitigation property is going to be required; whether the District has some property on hand or will have to purchase some remains to be determined (District does have some mitigation property at the West Point WTP). Currently the California Dept of Fish & Wildlife requires a 2:1 or 3:1 offset ratio of riparian property.
- Road access to maintenance facilities was also discussed; Teresa advised that staff has been putting down gravel at this point, but cannot do much more until the wet season ends.
- Jenny Lind WTP Pre-Treatment Project, is a \$3.75M project and is FEMA-funded as a result of the Butte Fire. Charles anticipates completion of the design phase by end of March 2017. Hopefully FEMA's NEPA review will be complete by the end of late summer 2017 / end of year and we can move forward with the bid process for purchase of equipment and construction and begin construction in 2018. Long lead-time required for equipment to be manufactured and delivered to site; would like to be able to place order for equipment in September-October 2017.
- The final project on the Water Projects list refers to Various Pipeline Replacement Program/ Meters & Mapping. Charles advised the District needs a comprehensive system if it's going to begin replacing meters and it needs to bring the mapping system up to modern standards using the right software as a way to inventory all of the pipelines that are being replaced so that over time we're not duplicating efforts. There has been a suggestion from the Conservation and the Operations Departments for a trial project in the West Point area for the automatic-read meters. Charles did not see that the District is financially constrained to not move forward with that type of program. Director Strange also spoke favorably particularly with regard to employee safety in relation to potential landowner illegal activity. Many customers in the West Point area do not want staff accessing their property in order to read meters. One option may be to have landowners fund this type of meter replacement just as a way to keep staff off of their properties.
- Water Projects list does not include Copper Cove Zone C Transmission Main, adding this expansion-related project would bring total costs up to approximately

\$35M with about \$5M in grant funds. Will require proper pacing of the projects to keep a positive balance of R&R funds

FY 17/18 Wastewater Project Highlights

- Copper Cove and LaContenta Master Planning – community meetings and/or presentations to the Board should occur within the next several months
- Still working on the Copper Cove Discharge Permit; the District has received extensions to allow us to continue using the existing NPDES permit. Charles advised there may be some questions about sufficient storage ability in Pond 6 when we submit our discharge report. This is the last extension on raising the levy and is good through July 2018 (we need to break ground by that time). To add an additional 200 acre-feet of storage would cost about \$5.5M based on prior estimates and would utilize 50% R&R funds, 50% expansion funds. One issue associated with this project is the cost; it would in essence take R&R funds away from our ability to pursue completion of other projects over the next few years that also need to be done but we may be pushed to complete this project in order to avoid a Notice of Violation. Director Davidson inquired about any potential developers in the area who may be involved; Charles responded that Tuscan Hills appears to be quite active in pursuing their development.
- Lift Station Renovations - Another important project involves the renovation of the 'dry can' lift stations in Poker Flat. These are confined spaces requiring two maintenance personnel to check filters on a weekly basis, and they have old electrical controls which are subject to failure. The District's Insurance carrier (JPJA) has performed site inspections on these sites and noted various safety risks. Rebuilding the lift stations would be very expensive; a less costly alternative may be to raise the electrical panels up and out of the cans to reduce the safety hazard to staff. Engineering and Operations staff will meet and review to prioritize.
- Poker Flat Lift Stations 8, 12 & 13 / Force Main Bypass - Previously listed project to eliminate section of line that runs under a finger of the lake and relieve some of the high flows going through the transmission system. If we did the Pond 6 project this project would be shifted out until approximately 2020 for design and 2021 for construction.

4. OLD BUSINESS

None

5. STAFF COMMENTS:

None

6. DIRECTOR COMMENTS:

None

7. FUTURE AGENDA ITEMS:

- Kennedy Jenks presentation regarding LaContenta Master Plan

8. SETTING OF NEXT MEETING

- April 4th, 2017 at 3:00 p.m.

9. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 3:08 p.m.

Respectfully submitted,

Tami Bennett-Kirby
Senior Administrative Technician

Agenda Item

DATE: May 2, 2017

TO: Engineering Committee
Dave Eggerton, General Manager

FROM: Robert Creamer, Engineering Analyst

SUBJECT: Discussion of Possible Access across APN 055-051-008 (Copper Cove Wastewater Treatment Plant) to Properties South of the Plant

SUMMARY:

APN 055-051-008 (Parcel 1) is the larger (252.55 acres) of two parcels owned by the District which together comprise the Copper Cove Wastewater Treatment Plant. CCWD currently utilizes approximately one third of Parcel 1, generally in the southeasterly portion, for various aspects of our treatment plant operations and processes including treatment, storage and disposal facilities. Also, Saddle Creek has a long-term ground lease on 5.5 acres for golf course maintenance facilities per Board Resolution 95-109 along the northerly boundary of Parcel 1. The area potentially impacted by the proposed access road is not substantially utilized except providing a buffer/setback from residential homes.

The adjacent private landowner desires to develop residential subdivision on property directly to the south of the treatment plant property and has approached Staff regarding the possibility of construction of a new main access road crossing through Parcel 1. Graphics in attachment "A" more completely delineate their proposal and preliminary alignment for the subject access road. The private property owner has contacted Calaveras County Planning and Public Works departments who are supportive of this proposal, which is needed because of the anticipated traffic volumes and difficulties in making improvements to widen the south end of Little John Road. If the project moves forward, the County planning department has advised that CCWD would likely act in a lead agency capacity for adoption of an environmental document to be prepared by consultants retained by the proponent, adjacent property owner.

We are taking this opportunity to obtain input from Committee Members prior to taking the proposal to the Board of Directors for approval to move forward with further planning and discussing possible terms of an agreement.

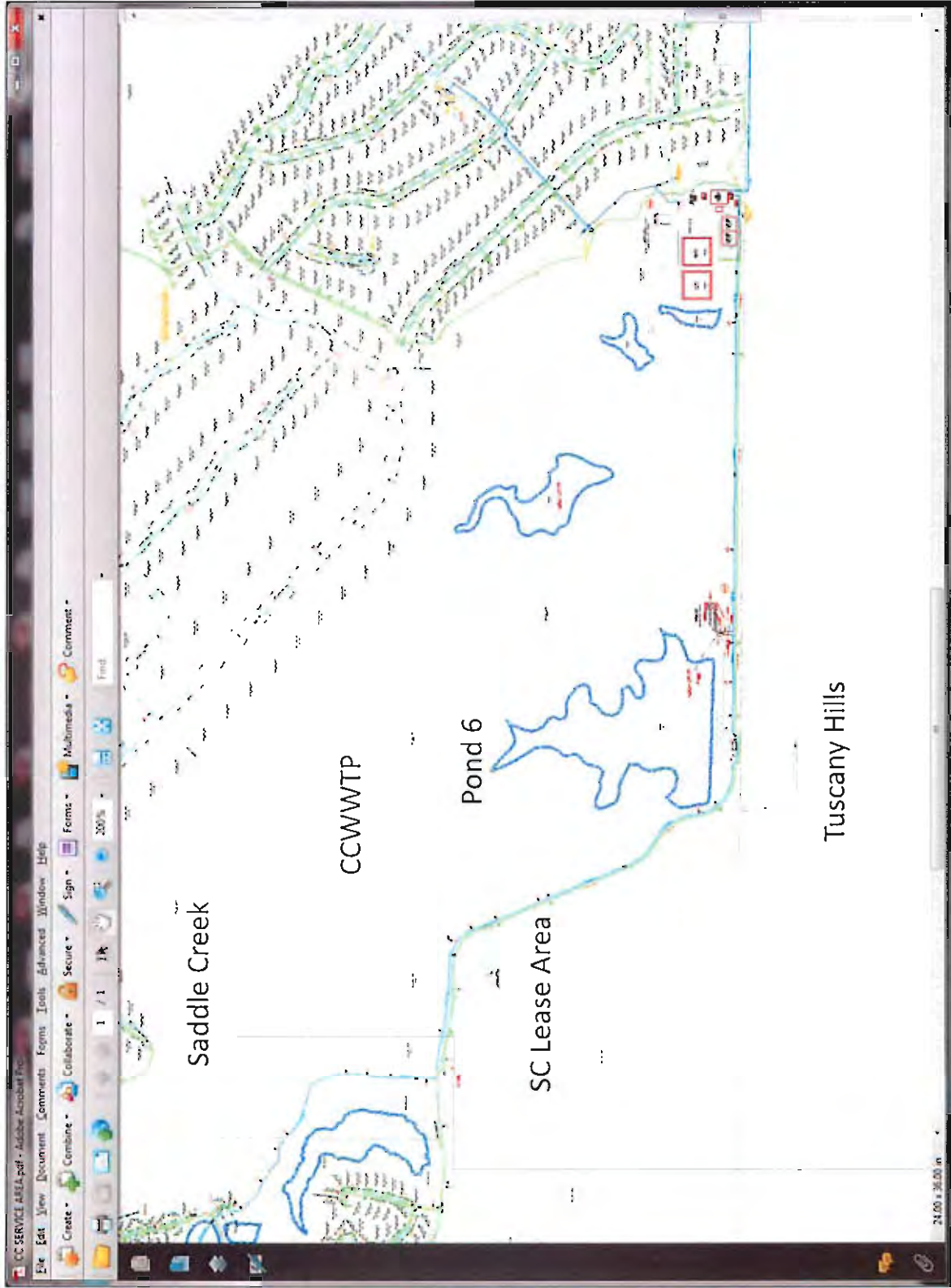
FINANCIAL CONSIDERATIONS:

None at this time. Possible future sale of property or long term lease to private landowner or dedication of easement.

Attachments: Attachment A – Graphics describing Proposal

Discussion of Possible Access Road Across Copper Cove Wastewater Treatment Plant Property

Engineering Committee
May 2, 2017



Saddle Creek

CCWWTP

Pond 6

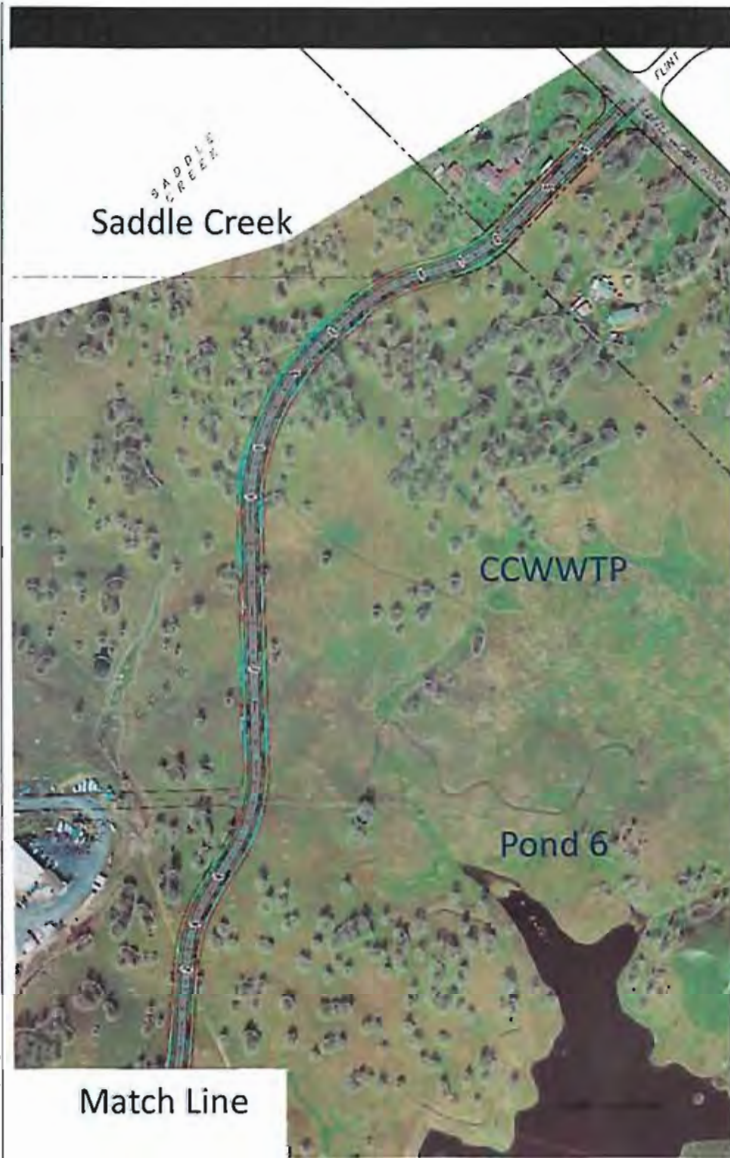
SC Lease Area

Tuscany Hills

24.00 x 36.00 m







Agenda Item

DATE: May 2, 2017

TO: Engineering Committee
Dave Eggerton, General Manager

FROM: Sam Singh, Engineering Technician
Charles Palmer, District Engineer

SUBJECT: Discussion / Presentation of Small Wastewater Treatment Facilities of the District including Southworth, Indian Rock Vineyards and Sequoia Woods/ Mountain Retreats

SUMMARY:

A presentation will made to the Engineering Committee regarding three (3) septic tank effluent treatment systems serving small communities in various parts of the County. The District routinely visits each of these facilities and is responsible for the on-going operations, maintenance and necessary sampling, reporting and regulatory compliance. Consideration should be given to on-going operations and maintenance challenges and long term issues that may justify future capital renovations. Basic information about each facility is tabulated below.

<u>Facility Name</u>	<u>Southworth</u>	<u>Indian Rock</u>	<u>Sequoia Woods & Mountain Retreats</u>
Location	Burson, CA	Murphys, CA	Arnold, CA
Connections	56	21	23
Clarification	Septic Tanks (56)	Septic Tanks (21)	Septic Tanks (4)
Treatment	Sand Filters (2)	Sand Filters (2)	N/A
Disinfection	Chlorine	N/A	N/A
Storage	10.7 AF	N/A	N/A
Disposal	Sprayfield (6.7 acres)	Leach Field (2.0 acres)	Leach Field (0.5 acres)

Southworth Wastewater Treatment Facility

The Southworth wastewater system and treatment and disposal facilities were built to serve the community of Southworth Estates Ranch in 1991. Each residence has a septic tank that provides some initial clarification and solids removal. The septic tank effluent is conveyed via a low pressure sewer system to the wastewater treatment plant. The treatment process consists of two (2) recirculating sand filters each approximately 3-ft deep x 35-ft wide x 77-ft long in dimension. The sand filters are a physical and biological treatment process intended to increase the oxygen content promoting microbial growth, stabilizing organics and reducing suspended solids from the wastewater. Upon exiting the sand filters, the treated effluent is disinfected with Sodium Hypochlorite and then flows by gravity into a storage pond and subsequently land applied to an adjacent spray field for disposal.

Indian Rock Vineyard Wastewater Treatment Facility

This is a septic tank effluent system constructed in 1991 and serving Indian Rock Vineyards and a few neighboring lots. All lots have individual septic tanks providing initial clarification with a common low pressure sewer collection system. The treatment plant is split into East and West sides. The East side has a 35-ft x 67-ft sand filter and 1.1-acre leach field, and West side has a 32-ft x 67-ft sand filter and 0.8 acre leach field.

Sequoia Woods & Mountain Retreats Wastewater Treatment Facility

The Sequoia Woods condominiums were initially constructed from 1970-74 and neighboring Mountain Retreats condominiums were added in 1982. Each condominium complex has two (2) dedicated common community septic tanks that provide for initial clarification. The Mountain Retreats septic tanks are operated in series with the first tank being 3,740 gallons and second tank 7,480 gallons. The Sequoia Woods septic tanks are also operated in series with first tank being 3,200 gallons and second tank 4,900 gallons. The septic tank effluent is subsequently pumped to a leach field for subsurface disposal. Originally, both Sequoia Woods and Mountain Retreats had two separate leach fields but the Sequoia Woods leach field has failed to operate correctly and only the 0.5-acre Mountain Retreats leach field is operational.

FINANCIAL CONSIDERATIONS:

None at this time. A formal review of these facilities with operations and maintenance staff and a condition/needs assessment should be made to identify specific maintenance items that can be addressed through routine maintenance and when necessary to justify larger future capital renovations needed to assure the continued successful long-term operations of these facilities.