

ENGINEERING COMMITTEE

AGENDA

Committee Meeting: Monday, September 30, 2019 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 three (3) minutes per person.

2.* APPROVAL OF MINUTES

Date of Prior Minutes August 6, 2019

3.* NEW BUSINESS

- 3a Presentation / Discussion Regarding Copper Cove Above Ground Pipeline Reeds Turnpike (Kevin Williams, Civil Engineer)
- 3b Presentation / Discussion Regarding Design and Contracting Requirements for District's New Operations Maintenance Facility (Kevin Williams, Civil Engineer)
- 3c Presentation / Discussion Regarding Forest Meadows Wastewater Treatment Plant, Storage and Disposal Capacity (Charles Palmer, District Engineer)

4. OLD BUSINESS

Nothing to report

5. FUTURE AGENDA ITEM

6. **NEXT COMMITTEE MEETING**

Tuesday, November 5, 2019 at 2:00 p.m.

7. ADJOURNMENT

^{*}Paperwork included in package

CCWD ENGINEERING COMMITTEE CALAVERAS COUNTY WATER DISTRICT August 6, 2019

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 Russ Thomas

Also present:

Michael Minkler Charles Palmer Alesia Danner Sam Singh Robert Creamer John Gomes General Manager
District Engineer
Administrative Technician
Engineering Technician
Engineering Analyst

Information Technology

1. PUBLIC COMMENT: There was no public comment.

2. APPROVAL OF MINUTES:

The July 9, 2019 Minutes were approved as presented by a motion from Director Thomas, and seconded by Director Davidson.

3. NEW BUSINESS:

3a Presentation/ Discussion regarding Geographic Information System (GIS)
Updates
(Sam Singh, Engineering Technician)

Mr. Singh presented a slideshow and discussion on the current status of the Geographic Information System (GIS) database. Updates include adding CAD information and Quality Control levels. Information is cloud based and will be shared via office terminals, smart phones, internet, etc. The GIS database will need to be constantly monitored or managed. Updates will be loaded to the system daily from information received from the field. GIS will also be the fundamental building block for

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implementation of the CMMS (Computerized Maintenance Management System) asset. Fire hydrants will be marked on the GIS map along with fire flow information. CCWD is currently working with the Calaveras County GIS department to provide them with the hydrant locations that are on our systems. CCWD will be able to pull data using GIS and CMMS together to generate reports to send to the regulating agencies when required. The current GIS database also provided beneficial data to identify high leak areas on service laterals in the Jenny Lind area resulting in a project to correct these issues.

4. OLD BUSINESS:

There was nothing to report.

- 5. FUTURE AGENDA ITEMS:
- 6. NEXT MEETING

Tentatively Scheduled: Tuesday, September 3, 2019 @ 2:00 p.m.

ADJOURNMENT

There being no further business, the meeting adjourned at approximately 2:50 p.m.

Respectfully submitted,

Alesia Danner Administrative Technician

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Agenda Item

DATE:

September 30, 2019

TO:

Engineering Committee

Michael Minkler, General Manager

FROM:

Kevin Williams, Civil Engineer

RE:

Presentation / Discussion Regarding Copper Cove Above Ground

Pipeline – Reeds Turnpike

SUMMARY

A presentation will be made concerning the Copper Cove Above Ground Pipeline along Reeds Turnpike.

A 12-inch Transmission Pipeline was construction above ground on concrete pedestals adjacent to Reeds Turnpike in Copperopolis. There is currently 135-feet of pipeline with no protections from vehicular traffic. This section of roadway adjacent to pipeline is an elevated curved section increasing likelihood of vehicle incident with the pipeline.

This presentation will identify possible solutions to minimize damage due to vehicle traffic. We will examine installing guardrail along shoulder of roadway, placing concrete encasement around pipeline, constructing of earth berm lessen vehicle impact, and lowering the level of pipeline to the ground surface.

There are potential challenges which may limit improvement options including existing drainage under elevated pipeline, grade of existing pipeline/roadway grade, requirements due to county-maintained roadway, easements and right-of-way ownership.

FINANCIAL CONSIDERATIONS

None at this time.

Agenda Item

DATE:

September 30, 2019

TO:

Engineering Committee

Michael Minkler, General Manager

FROM:

Kevin Williams, Civil Engineer

RE:

Presentation / Discussion Regarding Design and Contracting

Requirements for District's New Operations Maintenance Facility

SUMMARY

A presentation will be made concerning the Expansion of Main Campus to include a new Operations and Maintenance Facility. This facility will be located adjacent to existing Calaveras County Water District Office on George Reed Drive in San Andreas. The new facility will provide a centralize location for the District's operations, shop and warehouse facilities.

The presentation will include a discussion of several different configurations for the new facility including number of buildings and their location within the site. We will be examining the benefits of each proposed configuration for available parking, material storage, and service areas.

We will explore the different design delivery options including complete engineered design, partial design build and complete design build. The benefits of each option including: required engineering, potential design-build savings, and schedule considerations.

The District recently purchased the lot adjacent to the existing headquarters. This lot that the facility will be built on has a number of existing conditions that will affect the design. These include the sloping topography, site drainage/seasonal creeks, and site utilities.

Finally, we will look at the many uses of the facility. This facility provides shop for equipment maintenance, fabrication shop, operations office, materials warehouse, equipment parking, flexible space and training area.

FINANCIAL CONSIDERATIONS None at this time.

Agenda Item

DATE: S

September 30, 2019

TO:

Engineering Committee

Michael Minkler, General Manager

FROM:

Charles Palmer, District Engineer

RE:

Presentation / Discussion Regarding Forest Meadows Wastewater

Treatment Plant, Storage and Disposal Capacity

SUMMARY

A presentation will be made discussing the remaining wastewater capacity available to the community of Forest Meadows. Its wastewater master plan was last update and adopted by the Board on September 8, 2004. Given concerns identifying capacity limitations, the Board on June 8, 2005 and March 14, 2007 adopted various moratoriums limiting the number of new sewer connections. These moratoriums were lifted as of May 21, 2008, contingent upon a new discharge via NPDES permit of Title 22 reclaimed water into the tunnel for the North Fork Stanislaus River Hydroelectric Development Project. A new pump station and force main were previously designed to achieve this objective, but more than a decade later these facilities have yet to be constructed and the NPDES permit has not been put to use.

Staff will take an updated look at the current capacity of the Forest Meadows wastewater system. This capacity is estimated base on an annual water balance considering monthly wastewater flows, infiltration and inflow, rainfall, evaporation, storage, and disposal. The Title 22 reclaimed effluent is stored through the winter months and then used for irrigating the golf course during the summer. Also, the District can dispose of effluent via a leach field. Typically in wet years with heavy rainfall, storage and disposal facility capacities are stressed and pushed to limits, which is why these conditions are used for a capacity analysis.

The proper operation of the golf course storage pond is critical complying with our permit. Typically this pond is drawn down to minimum pool by the end of the irrigation season in order to maximize the storage volume through the winter months. Extra capacity can be obtained by lowering the pumps and operating level in the pond, but some homeowners prefer the pond to remain full for aesthetics.

FINANCIAL CONSIDERATIONS

None at this time.