



MINUTES OF ENGINEERING COMMITTEE MEETING

Covering Design, Construction, Capital Improvement,
Master Plan and other Engineering, Operational and
Planning Related Matters

Monday, March 18, 2019 at 9:00 am at the Operations Building, 13057 Highway 9, Boulder Creek, California.

AGENDA

1. Convene Meeting 9:00 a.m.
Roll Call: L. Farris, M. Smolley, Dir. Bruce, Dir. Swan (J. Busa was not available for this meeting)
Staff: R. Rogers-Dist. Manager, J. Furtado-Director of Operations, H. Hossack-Dist. Secretary
 - A. ELECTION OF COMMITTEE CHAIR
 - S. Swan nominated M. Bruce.
 - M. Smolley seconded the nomination.
 - C. Baughman said that he agreed.
 - All present voted in favor the M. Bruce for committee chair.
2. Oral Communications: None
3. New Business:
Members of the public will be given the opportunity to address each scheduled item prior to Committee action. The Chairperson of the Committee may establish a time limit for members of the public to address the Committee on agendized items.
 - B. SET DAY AND TIME FOR COMMITTEE REGULARLY SCHEDULED MEETINGS
 - M. Bruce introduced this item.
 - S. Swan proposed either the 1st or the 3rd Thursday of the month to coincide with the BoD meetings. Either 2:00 or 3:00.
 - R. Rogers said he prefers 2:00.
 - M. Bruce would like to try to keep the meetings to an hour. She is available 1st or 3rd Thursday.
 - K. Plonka-Eng. With WSC, suggested that the meeting be on the 1st Thursday so that if something needed to go to the Board it could be the next agenda, 3rd Thursday is the working meeting.
 - M. Bruce said if all are agreed, the regular meeting will be the 1st Thursday of the month at 2:00 p.m.
 - T. Norton liked the date and time.
 - M. Bruce questioned if this is the preferred location.
 - C. PROJECT UPDATES
 - M. Bruce introduced the item.
 1. Lompico Tanks
 - R. Rogers said that we have a draft memo regarding tanks in the Lompico area. The plan is to maximize storage matching what was there. We are moving

ahead with scenarios to have 2 tanks at each location. For maintenance it's much better to have 2 tanks. We can get by with one tank but then maintenance is a much bigger deal and is often deferred. The 100,000 gal. tanks to be bid either welded or bolted steel. There has been a substantial increase in price. The Assessment District engineering report had estimated replace of \$682,500 for all tanks and our latest engineering report has \$1.9 million. Lompico's remoteness adds to the cost of construction. We will have to pick and choose projects to be performed with the Assessment District funds. Projects not able to complete through the Assessment District will roll over to the CIP. LADOC will be consulted for priority of Assessment District projects. We're about a year out on construction.

L. Farris questioned the geotechnical report. He submitted a list of questions to Rick.

M. Smolley questioned who was the original Assessment District engineer.

R. Rogers said that the engineer used at Lompico comes in low.

M. Smolley questioned if the low estimate caused the District to do anything different as far as planning.

R. Rogers said that it has changed. All Districts and agencies have seen engineering estimates far less than construction bids.

M. Bruce questioned if the Assessment District's funding stream is supposed to cover the capital costs. Is there a way for the entire District to show the rate payers the difference between the engineer's estimates and the actual bids that are coming in?

K. Plonka thinks the most streamlined way to show that is the master plan. It will have new cost estimates.

R. Rogers said to keep in mind that the cost estimates were to construct a tank and it didn't look at everything that needed to be done on that parcel.

M. Bruce questioned what is the basis for prioritization in Lompico.

R. Rogers said that fire is a very high priority. We look at operations, it's very expensive to send staff up there to turn on a pump or read levels. That's where the surcharge came in, we immediately went in and put in a temporary SCADA system. That cut man hours. They had been a standalone system, that cut man hours. The PRVs are a high priority because the higher pressure is causing line breaks. The meters weren't reading so it was important that they be replaced. Next come the leaky tanks. There are things we can do to prolong the maintenance.

T. Norton questioned reasons why the cost is so much higher. During merger talks there was a committee of Lompico residents and the former Dist. Mgr. attended the meetings and he assured the committee that the cost estimates were high. We understood that we needed to pay our way. I believe the costs are so high because of the storm. Construction costs became high all across California.

M. Bruce has been hearing the same thing; the fires, flooding issues, coastal erosion has been a strain on the construction industry.

M. Smolley thinks it is a good idea to do a cost comparison with the Master Plan.

T. Norton forgot to mention that at the point of the merger the interest for a low interest loan was built into the agreement.

C. Baughman questioned if temporary SCADA was charged to LADOC. What is the sum of truly necessary costs and how does that compare to the actual costs?

R. Rogers said he can't answer that right now.

S. Swan asked if engineer that worked on the Assessment District is still used by the District.

R. Rogers said no, but we have a few projects that he worked on.

K. Plonka even if your firm is located someplace else you check a local data base for cost estimating.

2. Lyon Tank Access Road

R. Rogers introduced this item. The District is still obtaining geotechnical info and starting the environmental work for repair. By mid-summer we hope to have an actual plan, It's a \$2 million with 50% coming from FEMA, It's the only access to the Lyon Treatment Plant.

L. Farris questioned the stability of the land. Are there any other options to get up to the Lyon Treatment Plant?

R. Rogers explained that the area around the site has seismic issues caused by springs. The site itself is geotechnically sound. The District has looked at the possibility of another access but there isn't another option.

J. Furtado said that the way the site sits there is just no other way to bring supplies in. He has walked the entire property with consultants trying to find another access.

S. Swan questioned how frequently do drums have to go up there and how much storage space is available to store the drums.

J. Furtado explained the that 3 55 gallon drums a week are brought to the plant. There is space for 15+ drums but the chlorine has a shelf life.

S. Swan suggested a helicopter could deliver the drums.

J. Furtado questioned the environmental hazard aspect of bringing a helicopter in.

M. Smolley questioned if staff could put together a memo with all of the different options that have been investigated for this site, so that the committee can be up to speed.

3. Glen Arbor Bridge Pipeline

R. Rogers explained that the south Glen Arbor Bridge has a leak of about 3 gpm. It's a 6" main in an 8" sleeve, there's hardly any room to slide the old pipe out and slide a new pipe in. The District is planning to reattach the main on the outboard.

4. Engineering Department staffing

R. Rogers said the new engineer will be starting in April.

D. USDA LOAN PROJECT UPDATES

K. Plonka gave a presentation on the USDA Loan Project.

M. Bruce requested that the total budget amount for each project be included in the presentation.

S. Swan questioned if we are likely to run into construction cost over runs like with the Lompico projects.

K. Plonka said that is unlikely because these are more detailed plans.

S. Swan questioned if the District ever offers an incentive for early completion of projects.

R. Rogers said the we haven't. It never came up before.

K. Plonka said the Swim Tank has already been designed. Lyon is environmentally sensitive. However, USDA wanted that one prioritized so that's why it went first. Lyon is a mile of pipe, the other projects added together to be about a mile of pipe. There are cost savings by lumping the 4 projects together.

M. Bruce said putting that context to the Board would be helpful.

S. Swan questioned the staggering of the projects.

K. Plonka explained that is for District staff so that they have the resources to run the projects.

J. Furtado said that we don't have the staff to do that many projects at once.

M. Smolley questioned if the USDA engineering and construction guidelines have been considered. CalTrans and the County of Santa Cruz will have more stringent requirements.

R. Rogers their guidelines are very close to the CA Dept. of Water Resources requirements.

S. Wilbur questioned if the loan interest rate is determined and fixed.

K. Plonka responded the rate is 4% for 40 years.

T. Norton questioned the location of Sequoia.

E. WATER MASTER PLAN

RR the District is moving forward with an RFP for a Water Master Plan. It will develop a calibrated hydrology model to simulate local water supply and conjunctive use. The plan will include CIP projects, fire flow, sizing, etc. It is estimated to be \$200,000. We have a \$75,000 grant for the Water Master Plan.

M. Bruce said she is very satisfied to get this master plan underway and thanked R. Rogers for his leadership.

R. Rogers said that until now, the District didn't have the money or staff for this undertaking.

L. Farris questioned the process for developing a Master Plan. How far do you go in challenging current assumptions & current conditions? How far do you bring in best practices from other Districts?

K. Plonka explained that she will only speak for WSC and her experience. She made it clear that WSC plans to propose on this RFP. Everyone brings in that knowledge. Everyone looks at what you currently have and what AWWA standards are.

M. Bruce questioned climate change adaptation risk assessment. Will the master plan include identifiable risks and hazards and mitigating alternatives?

K. Plonka responded that it is up to the District to include that information in the RFP. There are basic criteria in most master plans, you can add District specific issues to address.

C. Baughman said the groundwater sustainability should be included as well the Loch Lomond water rights. Where is the discussion of how the groundwater agency interacts with the District, is it the Engineering Committee?

R. Rogers said that is the water supply master plan. This is the water master plan.

M. Bruce said the Board might like to see how the water plan fits into all of the other subsequent plans.

L. Farris said he agrees with Chuck and we should consider other agencies.

T. Norton agreed that climate change should be included in every master plan.

R. Rogers said he would like comments by end of day 3/19/19.

K. Plonka added that part of the GSA has an infrastructure component of the Master Plan

F. BEAR CREEK ESTATES WASTEWATER TREATMENT FACILITY REQUEST FOR PROPOSAL AND PUBLIC MEETING DATE

R. Rogers explained that the District operates a small wastewater collection/treatment for 56 homes in Bear Creek Estates. They are their own Enterprise District, which means they are self-supporting. It has been a struggle over the years to maintain the infrastructure

of the wastewater system. The treatment requirements for the County have changed over the years. They require additional treatment. Since 2005 they have required a 50% reduction in nitrate in the effluent. In 2016 we received a notice of violation. The District is moving ahead with an RFP to review the treatment options to come into compliance. The rates were increased through a Prop 218 process effective January 1, 2018. The additional funds will be used to bring the Enterprise into self-funding and to hire a consultant for an engineering review of technologies available to modify or replace the existing treatment system and upgrade the collection system.

M. Bruce asked about the timing for the RFP.

R. Rogers said that he would like to take the RFP to the wastewater customers in Bear Creek Estates within the month and then release the RFP.

S. Swan questioned if we have spoken to any of the wastewater people with the city of Santa Cruz.

R. Rogers said the he has spoken to the County. They have different systems.

K. Plonka clarified that WSC is not proposing on this project. The project is to fix the treatment system however; it's broken up into 2 phases. Phase one is the RFP to figure out the alternatives. Once an alternative is selected there will be a second RFP for design.

C. Baughman questioned where is the document. At one time there was talk of sewerage the town of Boulder Creek and adding Bear Creek Estates to that sewer system.

R. Rogers said that is still a possibility. The County is looking at the feasibility.

M. Smolley questioned if this is self-supporting financially at this point.

R. Rogers said yes.

S. Wilbur said that he pays \$200 per month for wastewater right now. It's going to \$250.

4. Old Business: None
5. Informational Material: None
6. Adjournment 10:53