

# Engineering and Operations Committee Meeting

## Minutes

September 28, 2017

The E&O meeting convened at 1:32 P.M., Thursday, September 28, 2017, at the Lakeway Municipal Utility District's office located at 1097 Lohman's Crossing, Lakeway, Texas 78734-4459.

The following Engineering and Operations (E&O) Committee Members, General Manager (GM), and Board Liaison were in attendance:

Phil Lanier, *Committee Member (Chairperson)*,  
Earl Foster, *General Manager, Lakeway M.U.D.*,  
Jerry Hietpas, *Board Member and Board Liaison to Committee*,  
Bob Rives, *Committee Member (Secretary)*.  
John Sayre, *awaiting Board approval as Committee Member*,

Not in attendance:

Beverly Carter, *Committee Member*,  
Wayne Seime, *Committee Member (Vice Chairperson)*.

The meeting's agenda had been distributed by e-mail to all committee members on September 26, 2017. The designated agenda for the meeting was:

1. Review CRU pay Application #7 from CRU,
2. Discuss Out-of-District Wastewater Expansion,
3. Discuss Serving the Highlands with Potable Water and the possibility of billing and maintenance,
4. Serving the Highlands Boulevard with Reuse Water,
5. Other Business.

Mr. Lanier called the meeting to order and Mr. Foster began with the introduction of agenda item number one. Mr. Foster said that the Contractor's Application and Certificate for Payment #7 is being recommended to the Board for approved payment to CRU, Ltd., for \$120,987. There is a, however, a balance due of \$372,361 (including 10% retainage) waiting on completion of paving, pumps, and some landscaping work.

In beginning the discussion on the out-of-district wastewater expansion Mr. Foster gave a detailed presentation as to why the approximate two-horse-power grinder centrifugal pump (OGP) versus a positive displacement pump (PC) would outperform the PC pump within our engineering specifications. An EPA recognized formula design for a low-pressure sewer system

(using the  $Q=AN+B$  formula) was modelled for the Phase I pipeline proposed for the Live Oak Golf course. These flow-pump performances showed that the Barnes Centrifugal pump was obviously superior to the PC pump. Mr. Foster showed a memo from James Glaser regarding an opinion of construction costs for the S-5 collection system expansion. The primary increase in each of the two estimates presented is due to Contractor's input on the cost of conversion at each Living Unit Equivalent (LUE), assuming 265 houses in Phase I (Live Oak Golf Course area). The previous estimate was \$12,000 (including pumping equipment); however, the Contractor estimated \$12,000 to \$15,000 (not including pumping equipment, and that is estimated in the range of \$4,000 per LUE). The Contractor's opinion of the estimated total cost for Phase I is \$8,001,132 which includes a contingency of 24%. The committee agreed that the implementation of Phase I would be the easiest and quickest. It was noted that because of new conservation methods because of less house whole usage of low-flow toilets, more efficient washing machines, and shower heads, the sewer system would use less water but more solids. Again the Barnes centrifugal pumps within a low-pressure pipe system would best accommodate this considering total dynamic head distance (of about 125 feet) and with the estimated average daily flow within the domestic units tied to the system. The Contractor's opinion of the Phase II estimated total cost would run about \$22 million. This extra cost is due to the complexity of the area outside of the golf course area. Mr. Foster felt that he could take the Phase I work to the Board as early as January 2018. He speculated that LMUD should have the necessary money in-hand to begin the project. He further indicated that the cost of the purple irrigation pipeline to those houses juxtaposed to the golf course would be supported by the individual homeowners should they elect this particular option. Considering the cheaper cost of using reuse water over a period of time for irrigation would makes this a desirable option for the homeowner. There would be no upfront costs to connect to the sewer system albeit there would be debt service fee of about \$720 per year or \$60 per month, which Mr. Foster said is about the prevailing cost to in-district users. It was felt by the committee that some kind of contract-of-intent to connect to the system would be needed from each homeowner before LMUD could commence work on the Phase I system. Basically no money would be required but the committee felt that some kind of penalty should be imposed if a homeowner were to back out.

Regarding agenda item three Mr. Foster said that the serving of Highlands potable water along with the possibility of billing and maintenance is moving forward. Mr. Foster said he has reduced the price of Highlands' Boulevard service with reuse water. Basically we will supply water and they will pay for pump costs along with necessary construction. Engineers will have to model for size of pumps and pipeline size. Eventually the Board will have to decide this matter. In other business Mr. Foster indicated the sale of the Cedar Tract land for the police station should take place around the end of October. There is a minor technical problem with the sale but the involved group and their lawyers are figuring out a solution. He also mentioned that the engineers are fully occupied with work involving Out-of-District pumps and such, and the survey of the S-4 capacity, and the reports billing system, and other projects.

The next meeting was called for October 19, 2017 at 1:30 P.M. With no further business Mr. Lanier adjourned the meeting at 2:55 P.M.

The minutes have been read and approved by e-mail:

The minutes approved this 4th day of October, 2017.

Yeas   2  , Nays   0  , Abstain   2  .

Robert Rives, Secretary, E&O Committee, Lakeway MUD