

Engineering and Operations Committee Meeting

Minutes

August 21, 2015

The meeting was convened at 1:40 P.M., Thursday, August 21, 2015, 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:

Don Walden, *Chairman*,
Beverly Carter, *Committee Member*,
Earl Foster, *General Manager, Lakeway M.U.D.*,
Jerry Hietpas, *Board Member and Board Liaison to Committee*,
Bob Rives, *Committee Member (Secretary)*,
Pat Rossmiller, *Committee Member*,
Wayne Seime, *Committee Member*.

The meeting's agenda had been distributed by e-mail to all committee members on August 19, 2015. The designated agenda for the meeting was:

1. Review Excel Pay Application #5,
2. Review DN Tanks Pay Application #7,
3. Progress Report on W-3 Construction,
4. Review Draft Report from HDR on Under-drain Pump Station and S-5 Reuse,
5. Update on Proposed Groundwater District.

Mr. Foster reviewed the Excel Pay Application Number Five saying that the project is on schedule with a slight delay at the end. The project is about 37 per cent complete and completion should be in November, 2015.

The DN Tanks project on the W-3 WTP HSPS, Transmission Lines and Miscellaneous Site Improvements is now 100 per cent complete. After review of Contractor's Application for Payment it was motioned that the Board amend the Retainage on the Contract to 3% or \$40,000. The motion was seconded and then approved by all committee members.

Mr. Foster handed out a paper on the Lakeway M.U.D. cedar tract (82.5 acres) located adjacent to Lohman's Crossing Road. A plat showed the layout of the WCID #17's potential re-use water service to the acreage. It is noted that there is no current service to the western most portion. As it stands both Lakeway M.U.D. and District 17 have the ability to extend their service area, and if required can provide future water and wastewater service at sufficient capacity to the western portion of the tract. District 17 would be able to provide re-use for

landscape irrigation through a wholesale agreement that they have with Lakeway M.U.D. on the area that is within their service area. Lakeway M.U.D. would provide re-use for landscape irrigation on the western portion of the subject tract which would reduce water requirements and would satisfy the requirements of LCRA's Highland Lakes Watershed Ordinance. Mr. Foster is continuing in talks with the District Manager of WCID #17 in these regards.

The next item on the agenda was a progress report on W-3 Construction. A Construction Progress Report by Christianne Castleberry, P.E., was handed out to the Committee and it indicated several areas of progress including the installation of the 16-inch transmission line from Lakeway Blvd. to the tie-in with the 8-inch water line on the east side is now complete. She stated that as of August 18th the project spending was at 35% of the total contracted amount. It was noted in the report that the overall project schedule is postponed about one month due to delay in pump cans which are now scheduled to arrive in early October. The report also showed pictures of the construction regarding the 16-inch transmission line within the bore beneath Lakeway Blvd. and more pictures of the line going down the driveway to the water tank along with the electrical piping conduits.

Mr. Foster continued on with the HDR's Technical Memorandum and analyses of July 28, 2015, on the reclaimed water-system improvements, which is divided into two parts: Firstly, the I-4 reclaimed storage pond underdrain collection system and, secondly, the pumping improvements at the I-5 pump station. The present I-4 storage pond is under a grandfathered arrangement that presently has an underground drain system underneath the pond; however, should the pond incur a leak it could conceivably drain re-used water back into the lake and, therefore, needs to be up dated with a pump system that would return such water back to the Pond. HDR analysis indicates the best method is to install a pump within a retaining wall which would be connected to the existing pond's discharge system such that the automatic pump could re-route any re-use water along a 3-inch pipe along the top of the ground back to the pond. This is the simplest solution and most economical method in that it minimizes the length of pipe and protects the existing embankment from construction. This cost would be \$213,000. After a discussion it was moved that the Committee recommend and approve this procedure to the Board, and for Lakeway M.U.D. Board to go forward with construction engineering on the underdrain system as outlined in the technical memorandum of HDR dated July 28th. The recommendation was seconded and unanimously approved.

Mr. Foster then moved on to a discussion of the second item in the memorandum regarding the I-5 pump station. Basically, this procedure is to tie the existing system on the west side of Lakeway to the east side whereby we would have only one operating system to supply all of our reclaimed water. The west I-5 pond currently sends its reclaimed water to the Live Oak Golf Course. The east retail system is a completely separate system and is currently fed from the Yaupon Pump Station. The District desires to be able to feed the retail reclaimed-water system from the I-5 pond as well. It is noted that one problem is that the two systems operate at different pressures such that the existing pumps and pipeline will not be useful in serving the full retail system. In order to analyze the best system several model studies were run by the District. Based on the results of these studies it is recommended that the I-5 pump station be expanded to add at least two new VFD controlled pumps plus approximately 2,200 feet of new 8-inch pipe which will supply sufficient pressure throughout the system. The total estimated construction

cost is approximately \$674,000. Following the review of this report the Committee was immersed in a long discussion on how to obtain new customers for the additional reclaimed water that will result from the just signed agreement for S-5 to process all of the Hinglands sewage. Part of the discussion was about using a “purple pipe” system to supply re-use water to individual home owners for lawn watering. This would require a two-meter procedure along with specific contracts for the re-use water. It was questioned how this system would be applicable to our community especially during droughts. Although there are other communities using such a system it is not without qualifying legal liabilities. Mr. Foster said there are possible larger commercial customers that could qualify for five-year contracts using the water but he would like to take a couple of weeks to fully research the possibility of any new customers. The Chairman asked that Mr. Foster gather more information on potential new commercial customers and that Mr. Seime and Ms. Carter be part of a subcommittee to look into the HDR memo and the potential uses of additioned water to both further justify and provide a better foundation for the tie-in project; furthermore, do we rely on purple pipelines to the backyard or are there better commercial usages available. The Chairman asked the committee to spend a couple of weeks to study the issue, and when they are ready call for the next Committee meeting date.

The last item on the agenda was an update by Mr. Foster on a new proposed groundwater district. Mr. Foster had spoken to Texas House Representative Paul Workman and Precinct Three Commissioner Gerald Daugherty. The proposal was for Lakeway, Bee Cave, Briarcliff and such, to form a separate groundwater district or otherwise possibly merge into the Barton Springs Groundwater District. It was mentioned that this new District would have no tax.

At 2:50 PM and with no other business the meeting adjourned.

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

These minutes approved this 25st day of August, 2015.

Yeas 5, Nays 0, Abstain .

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