

**Beacon Hill Water and Sewer District  
Commissioners' Meeting Minutes  
Wednesday, August 17, 2016**

Commissioner Roden called the meeting to order at 5:25 pm on Wednesday, August 17, 2016 at the District office at 1121 West Side Highway in Kelso, Washington. Those in attendance were:

Commissioners Monte Roden, Bonnie Decius and Keath Huff  
Dell Hillger, General Manager  
Alan Engstrom, Legal Counsel  
Debbie, Finance Administrator  
Audience: Rich Gushman, Gibbs & Olson

It was moved by Commissioner Huff and seconded by Commissioner Roden to approve the minutes as amended of the July 27, 2016 special meeting. Motion carried.

It was moved by Commissioner Huff and seconded by Commissioner Decius to approve the minutes of July 28, 2016 Longview City Council & Beacon Hill Water & Sewer District Board of Commissioners special joint meeting. Motion carried.

**Manager Report** – The Manager Report, which was delivered to the Board prior to the meeting, was the first item of discussion. A copy of said report is attached as a part of this permanent record.

**Item 1) Property Owner Request** – Dell gave an overview of the property owner's request as outlined in the manager's report. After a brief discussion, the Board, by consensus, agreed that the issues and costs associated with moving the fire hydrant be between the property owner and developer. Dell will recommend to the property owner moving the hydrant into the landscape area. If moved to this area, the road would not have to be disturbed and would reduce the cost. The only issue would be if there were other lines running through that area. Dell will call for locates to find out what is in the ground and then work up an estimate.

**Item 2) Project Updates:**

- a. **New District Office** – Dell handed out a larger copy of the revised schematic floor plan and reviewed the changes. Overall, the floor plan was reduced by 641 square feet from the previous version presented at the July Board meeting. Commissioner Roden commented that he would like to see the back wall squared off. No other changes were requested. Dell let the Board know that starting next week a geotech would be doing a couple of soil borings and some test pits.
- b. **Hillside Pump Station** – Dell reviewed the information in the Manager's report with no new updates to report.
- c. **Reservoir Cleaning** – Dell reviewed the information in the Manager's report with no new information to report.

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- d. Ostrander Reservoir and Pump Station** – Dell reviewed the information in the Manager's report regarding the past and present issues at this reservoir and pump station. He recommended replacing the controls with VFDs with a check valve (contractor) and replacing one of the pumps with a new pump (in house). The estimated cost for the VFDs is about \$20,000. Commissioner Roden asked if there is a standard used or do we have to look at each application in order to determine what we need. Dell said that typically you are trying to get your pump to match the elevations and the total dynamic head, which is a combination of the differential elevation, which creates static pressure. Then you have the friction losses through the pipe, valves and fittings. You add all that up and that gives you your total dynamic head (TDH). Based on that you try to get your pump and flow rate to fit a pump curve that fits that TDH. Because it depends on where our pump stations are relative to the reservoir you are pumping to, which varies throughout our whole system, unfortunately we generally cannot standardize them. The efficiency of the pump needs to match the pump curve. For example, if we standardized all 50hp pumps, some pumps would not be working hard enough and others working too hard, or be able to meet the flow requirements.

Since we did not discover the pump leakage until we drained the tank, and new pump purchases can take six weeks or more lead-time, we can run the pump to failure.

Commissioner Roden asked if the VFD's create any radio interference. Dell said they may need a filter.

With no further discussion, it was the consensus of the Board to have Dell move forward with the recommended upgrades.

- e. Lexington Reservoir** – Dell reviewed the information with the Board as presented in the Manager's report and handed out an analog readings report from August 11 to August 17. Dell talked to the geotech engineer, they will do their check on Friday, August 19, and if we ever get to the full level of 24 feet, we can do another check. But for now, we will do the checks on rainfall-triggered events.

One positive thing is that the reservoir levels are also fluctuating down a few feet before refilling, which shows usage in our area. It is feeding Lexington and up to Ostrander. Based on a movement of two and a half feet there has been roughly 100,000 gallons turned over, which is one seventh of the tank and that is reasonable. If we were able to let it run, we would not need the altitude valve. Dell will continue to monitor what the levels are doing and watch for any indication of movement. If we do not get the maximum turn over that we need, we may have to look at putting in an actuated valve to isolate it and let it drain out farther.

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**Item 3) N. Lexington PUD: Pump Station Evaluation** – The Board welcomed Mr. Rich Gushman to the meeting. Dell invited Mr. Gushman to the meeting because he had been doing some calculations on the N. Lexington PUD development. The development is for 80 multifamily units and 50 single-family dwellings. The developers are paying the District to evaluate our pump stations to determine if we can handle the additional sewer flow.

Mr. Gushman handed out the memorandum with the results of this evaluation for increasing pumping capacity of Lexington and Louise Street pump stations. In summary, they looked at the capacity of the eastside because it feeds into Lexington along with Louise Street Pump Station. They looked at the interceptor that comes from Louise Pump Station down to Lexington and then the interceptor that this lift station's force main discharges in to the Beacon Hill West Side Highway interceptor that feeds in to the Nevada Drive Pump Station. The proposed subdivision, based on what the numbers they told us they would be and using the numbers from the District's general sewer plan, the peak day flow is about 32,300 gallons a day. When we look at a pump station capacity, we want to have enough capacity for the peak hours. Currently Louise Street Pump Station capacity is 385 gallons per minute (gpm). The numbers show that currently we are at around 360 gpm from the existing contribution of the pump station and goes up to about 377 gpm with the new development which is right on the cusp for that pump station hitting capacity for the peak hour. With it being a duplex pump station, if we lost the pump we would have problems. They are recommending upsizing this pump station's capacity to 500 gpm. The same pumps can be used but we will need to change the impellers out with an impeller kit that can be purchased from the pump manufacturer. This would not require any power changes or anything else. The cost for this is \$5,000 and Mr. Gushman feels it is reasonable to have the developer pay for this cost in its entirety for this upgrade. In Dell's correspondence with Andrew Gunther at PLS, they were happy with these results.

The pumps that are in the Lexington Pump Station have a rated design capacity of 1,500 gpm at 55 feet of head. These two pumps were installed in 2001 that replaced the original pumps that were installed in the 1970's. This pump station was designed for three pumps with only two installed. Firm capacity is what the pump station can pump with your largest pump out of service and that is what the Department of Ecology wants your pump station designed to for peak hour. Mr. Gushman developed a system curve for the force main, plotted the pump curve, and found that when one pump is pumping we are getting 1,040 gpm because there is more head in the system than the original design had estimated years ago. It is about 63 feet of head where we intersect the system curve and the pump curve. With both pumps pumping, which give us no redundant capacity, we were getting about 1,650 gpm. It is recommended to put in a third pump that can match the existing pumps as close as possible because the original pumps are no longer made. This would give more than enough to handle the peak hour flow we would have once the development is in, which is 1,400 gpm. Right now, it is about 1,335 gpm for the peak hour. The cost to add a third pump and replace the check valves on the two existing pumps is \$144,000 for the pump, piping, fittings, electrical and labor. Dell and Rick had asked about putting in VFDs. The cost would add an additional \$68,000 to the project cost. Mr. Gushman said that the benefit of putting in the VFDs compared to the additional capital cost is not justified. During the peak hour flow it is determined that it would increase about six percent when the development was added. Mr. Gushman felt that six to ten percent of the improvement costs could be passed on to the developer based on the additional flow in the peak hour. He also stated that with the upgrades

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made and based on the peak hour flow and the capacity of the interceptors the District could handle two or possibly three more subdivisions like this before it would bump up against this capacity. Dell said that in terms of the development's contribution, it had been discussed and recommended at a previous Board meeting that the developer pay for their additional impact to the system. This is in addition to the normal system development charges and hookup fees. Dell also mentioned that there are enough Sewer funds to move forward on this project.

Based on this evaluation and the fact that the Lexington Pump Station is under performing, the Board agreed that we needed to move forward with the recommended upgrades. It could go out to bid in 2017 due to the longer lead-time on pumps and the design. We could do a pre-procurement agreement for the pumps to get the ball rolling so there is no delay to the contractor when it is ready for installation.

The Board discussed the cost of the Lexington Pump Station upgrades, the fact that we currently do not have the capacity or redundancy needed and that the project will need to be done whether the development goes in or not. The system development charges the developer will be paying now do not include this project. Commissioner Roden asked Dell if we would change our SDC charge to include this project. Dell said the SDC's will be evaluated in the next rate study but did not think this project on its own would have any impact on them.

It was the Board's consensus to move forward with these projects. The Board will continue the discussion on what to charge the Developer for the Lexington Pump Station upgrades at the September Board meeting.

The Board thanked Mr. Gushman for attending the meeting and he left.

**Item 4) Rate Study** – Dell asked the Board if we should move ahead with the rate study now or wait until 2017 and incorporate it with the water system plan update. It was the consensus of the Board to incorporate both in 2017. A proposal in the amount of \$53,035 was included in the manager's report for the rate study. Seven or eight thousand dollars of that was to evaluate consumption based sewer rates. Commissioner Roden had a back of the napkin calculation to arrive at the consumption based sewer rates and would like to look at that before spending the money on this in the rate study.

Dell said that the 2014 rate study includes increasing the water rates but on the sewer side, we have plenty of funds and was wondering if the Board would consider reducing the rate from \$50.50 to \$50. Commissioner Roden said this could be looked at as a strategic decision based on replacement costs in the future. By reducing the rate, it would reduce the sewer revenue by \$18,000 annually. The Board will continue this discussion as we work through our 2017/2018 budget process.

**Item 5) Cross Connection Policy** – Last year we had a discussion on the cross connection policy and since then Dell has been working with BMI to update our Cross Connection Control Resolution. One of the main reasons was to get away from everyone being required to have a backflow device and moving to a hazard evaluation based policy. Resolution No. 488 defines the parameters for our cross connection control policy and program. We would start by sending out surveys to our customers to fill out. In the beginning, the focus would be on the customers that have backflow devices already installed to determine if they need them. The rest of the customers will be evaluated over time. Dell spoke with Mary from BMI to discuss the use of non-testable

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double checks that are installed after the meter. They would be something the District would own and maintain. It would help during flushing in certain areas to prevent a backflow event.

After a brief discussion, Commissioner Huff made a motion to adopt Resolution No. 488, a policy for protection of the public water system from cross connection contamination, repealing Resolution No. 444, seconded by Commissioner Decius. Motion carried.

**Item 6) Surplus Equipment** – After a brief review and discussion, Commissioner Huff made a motion to declare the 1981 Utility Trailer and 2002 O'Brien Sewer Cleaner as surplus, seconded by Commissioner Decius. Motion carried.

**Item 7) Fisher's Lane WTP: Cost/Revenue Sharing** – Dell reviewed with the Board the information presented in the Manager's report regarding the District's interest in the Fisher's Lane WTP. Commissioner Roden recommended Dell pull out the original contract and review it in detail and Dell agreed. It was the consensus of the Board that the City of Longview includes the District in any decisions that will be made on the future of this facility.

**Confirmation of Lien Filings** - The Board reviewed the monthly lien synopsis. It was moved by Commissioner Huff, seconded by Commissioner Decius, to approve the filing of July liens 1635-1639. Motion carried.

**Financial Report** – The Board reviewed the financial report.

**Expenditures** - Vouchers audited and ratified by the auditing officers as required by RCW 42.24.080, and those reimbursement claims ratified by auditing officers as required by RCW 42.24.90, have been made available to the Board.

As of this date, August 17, 2016, the Board, by unanimous vote, does approve those vouchers in the lists provided and further described as follows: 2016 claims submitted after July 27, 2016 for \$13,656.66; and August 2016 claims to date in the amount of \$175,599.94 and payroll for July and August 2016. The July 2016 Visa statements were provided to the Board electronically prior to the August 2016 meeting.

**Other Business** – Dell received the silica results on the other water tests and they ranged from 51 to 57 ppm. Mint Farm is 58 ppm, Cedar Gates 51 ppm, Woodbrook (Deer Park) 53 ppm, Ostrander 54 ppm, Lone Oak 55 ppm, and Skyline 57 ppm.

Commissioner Roden asked if we had done any more lead testing and Dell said we had not yet. He did talk to the maintenance person at Beacon Hill Elementary and encouraged them to flush all the lines. They said they were replacing a main line going through the school that they had many breaks on. He explained to them about the water that sits there and that it may be a good idea each morning to run the drinking fountains for a few minutes before the students get there. Commissioner Roden recommended that we send that same information to the Facilities Manager of the School District as well and Dell agreed to do that. Dell did not contact Columbia Heights, as their test results were not bad. Commissioner Roden recommended we contact them as well and Dell agreed to do that.

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The next Board meeting for September 2016 is scheduled for September 21, 2016 at 5:15 p.m. There being no further business, the Board adjourned at 7:25 p.m.

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Monte J. Roden, President

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Bonnie L. Decius, Secretary

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Keath B. Huff, Commissioner