

# Minutes

## NEW BERLIN UTILITY COMMITTEE

May 9, 2000

Members Present: Alderman Bullermann (Chairman), Alderman Wysocki, Alderman Patzer, Mike Holzinger (Director of Finance & Utilities), and Tim Murphy.

Others Present: Tom Krumplitsch (Utility Operations Manager), Steven Schultz (Ruekert & Mielke), John Jansen (Ruekert & Mielke).

Alderman Bullermann called the meeting to order at 8:03 a.m.

ITEM 1A-00 Approval of Minutes, May 1, 2000

Motion by Alderman Wysocki to approve the minutes for the May 1, 2000 meeting. Second by Tim Murphy. Motion carried unanimously.

ITEM 11-00 Update on Tower #3 Antenna Placement

- Tom Krumplitsch stated that he is trying to get a standard document.
- He is getting information from other communities to use for our document and wants to make sure that we have protection in our document.
- Mike Holzinger stated that we want a standard acceptable to us, not necessarily the standard the prevailer would want.
- Alderman Wysocki questioned whether we have a separate revenue account for this. Mike Holzinger stated that it would go into rents, with a breakout of these items.
- Tom Krumplitsch discussed penetrations, either at the base of the tower or to the structural steel of the tower. We need to have a consulting firm to review from the planning stage through the process, and final review to be sure we got what we wanted.
- Alderman Bullermann questioned if this would impact the County's plan negatively. Tom Krumplitsch stated he would keep that in mind.

ITEM 17-00 Milwaukee Water Study Proposal

- Tom Krumplitsch introduced Steve Schultz and John Jansen from Ruekert & Mielke.
- Steve Schultz gave background information from the last study which was done in 1990. The study identified the need for an additional two wells. The new wells are shallow wells, in the upper dolomite, about 350 ft. deep. The other type of well we have are deep sandstone wells, about 2,000 ft. deep. Valley View and Westridge wells were constructed. Also the Westridge water tower was started in 1998. In 1999, a new study was completed.
- The 1999 study shows need to continue planning and move ahead. The needs of the City are growing with an increase in customers.
- There are water quality concerns for the sandstone aquifer wells, including radium, salinity, iron, and quantity of water.
- Linear growth since 1975. We are now using 1,2 billion gallons a year. Under the adopted growth plan, it will be 1,6 billion gallons in the next 10 years. Under the high growth plan, it will be over 2 billion gallons a year in the next 10 years.
- Source capacity-need enough water with your largest well out of service to satisfy your maximum daily requirement. Under the adopted growth plan, sometime this year we will exceed the source capacity. Under the high growth plan, it happened sometime last year.

- We need to look for water somewhere. Some choices are Lake Michigan water or a groundwater source.
- John Jansen stated that our 6 largest wells are all from the sandstone aquifer. There is a salinity problem in the sandstone aquifers. He stated that salinity is any dissolved material matter in the water. Because of decades of heavy pumping there is a decline of about 500 feet in the sandstone layer. In the last 20 years, the rate of decline has been between 5 to 10 feet a year. The large drop has changed the direction of groundwater flow from western Waukesha County towards Lake Michigan.
- Our radium levels have stayed stable. Gross alpha will be treated as a compliant standard. We will have to be below 15 picocuries/liter. Gross alpha has increased dramatically in Waukesha County in the last 20 years.
- Several of our wells have high iron with some of them being close to 2 parts per million.
- Arsenic levels will meet the new standard which they think will be 5 parts per billion.
- The sandstone aquifer has been worked to hard for too many years.
- We need to look at the sand and gravel aquifer as well as the dolomite aquifer for a water source.
- Alderman Wysocki asked about treating the water. John Jansen stated that it is very expensive to treat the water. Blended water will be the better way to go.
- Alderman Wysocki questioned whether we would endanger citizens individual wells. John Jansen stated that there should be enough recharge for all wells.
- Alderman Wysocki questioned that in conjunction with our storm water management issues, as we develop detention areas is there a possibility of using that surface water directly to our recharge area. John Jansen stated that it was coming but there are issues of water quality.
- There are site identifiers in the storm water management plan.
- In New Berlin the sand and gravel layer is about 300 feet deep, the dolomite is 300 to 400 feet, the shale layer is 200 feet thick and the sandstone goes down to 3,000 feet plus.
- In the executive summary, Ruekert & Mielke recommended a two prong course of action. The first prong is to look at Lake Michigan as a water source for the city. We might be able to get water either from Milwaukee or Oak Creek. The second prong is by blending with shallow wells.
- Lake Michigan water is at least 2 to 3 years away at a minimum on an aggressive schedule. There are several steps to be taken. First, you need to authorize a study to be done which should take about 6 months. Next, negotiations with the water provider will take another 6 months. Design will take 6 to 9 months. Finally, construction will take 12 to 18 months.
- It was asked if negotiations should be started with Franklin. Steve Schultz said it would be a good idea but to start negotiations with Oak Creek because they are the provider of Franklin's water.
- Alderman Bullermann suggested that the planning commission and joint GDMP ad hoc committee should be aware of this information.

Motion by Alderman Wysocki to recommend to the Common Council authorization to have Ruekert & Mielke provide study services for Lake Michigan water to the City of New Berlin, with the amount not to exceed \$50,000 with the funding coming from the Water Utility account 923.42, Outside Services Engineering. Second by Tim Murphy. Motion carried unanimously.

#### ITEM 18-00 Well Siting Study for a Municipal Well in the Sand and Gravel Aquifer

- John Jansen will provide updated maps that will show where the good sand and gravel potential is as well as the good dolomite potential is.
- Ruekert & Mielke will do on site geophysical investigation using remote sensing methods to make sure the sand and gravel is there and find the best places for drilling. They will do the same for the dolomite, making sure the fractures are there and find the best place to be drilling. Next they will do some test drilling. The information collected will be used again for the well head protection.
- Discussion of land just north of National Ave. on Sunny Slope Rd. to be purchased for a park, and that it would be favorable for well placement.
- Steve Schultz stated that park land is excellent because of well head protection issues.

- John Jansen discussed the costs of this study. They hope that it will be on the lower side of the costs shown. The cost shown does not include the actual well drilling.

Motion by Alderman Wysocki to recommend to the Common Council authorization to have Ruekert & Mielke provide a well siting study for a municipal well or wells in the sand and gravel aquifer for the City of New Berlin with the amount not to exceed \$157,000 with the funding to come from Water Utility RCA Funds. Second by Alderman Bullermann. Motion carried unanimously.

Motion to adjourn the meeting at 9:33 a.m. by Alderman Bullermann. Second by Mike Holzinger. Motion carried unanimously.