

UTILITIES COMMISSION
October 2, 2013

The regular meeting of the Baxter Utilities Commission was called to order at 4:00 p.m. by Chairman Rock Yliniemi.

MEMBERS PRESENT: Chairman Rock Yliniemi, Commissioners Shawn Crochet, Bruce Klopfleisch, and Council Liaison Rob Moser.

MEMBERS ABSENT: Commissioner Dave Franzen and Steve Houle.

STAFF PRESENT: Public Works Director/City Engineer Trevor Walter and Engineering Technician Doug Schultz.

OTHERS PRESENT: WSN Consulting Engineers Aric Welch, Justin Schultz and Brian Ross.

APPROVAL OF MINUTES

MOTION by Commissioner Crochet, seconded by Commissioner Klopfleisch to approve the Utilities Commission minutes of September 17, 2013. Motion carried unanimously.

WATER ANALYSIS SAMPLES OF WELL NO. 1, 2, 3, 4 AND FORESTVIEW MIDDLE SCHOOL SAMPLES

The following memo was presented and entered into the record by WSN Consulting Engineer Brian Ross:

WSN sampled the four city wells and the Forestview irrigation well on August 22, 2013 for laboratory analysis of total organic carbon, ammonia, iron, and manganese. A tap water sample was also obtained from WSN's office tap. The results are attached and summarized in the attached table, which also lists analytical results from previous analyses for the City of Baxter. Be aware that the accuracy of the results could vary either way up to 10%.

The current sampling results show very consistent water quality coming from the four Baxter municipal wells, with TOC around 3.0 ppm, ammonia around 1.1 ppm, iron at 4.1 ppm, and manganese just over 0.4 ppm. The current results also show the water from the Forestview irrigation well is lower in all these constituents, except for manganese. Based on the single August 22, 2013 sample, the irrigation well has about 66% of the TOC, 45% of the ammonia, and 66% of the iron, but 50% more manganese compared to the City well amounts. The irrigation well concentrations are comparable to the original test completed before Forestview was constructed, with the test well sample having somewhat high TOC and ammonia.

The results show that mixing water from the irrigation well area with the city well water at a one to one ratio would decrease the concentration of ammonia going to the treatment plant by 28%. The decrease would be even less for iron and TOC concentrations and these could be partially offset by a rise in manganese levels, with respect to chemical addition required.

WSN also did a review of area wells from our previous hydrogeologic study and the MDH County Well Index. There are several wells within one-half mile of the City wells that are 60 to 70 feet

deep, but none comparable to 130 foot depth of the City wells or even the 104 depth of the school irrigation well. To get water samples from additional areas, a test well would need to be installed, most likely to the east or south of the current municipal wells.

**Municipal Well Exploration
BAXTER, MINNESOTA
WSN PROJECT NO. 0102B0357.000**

Well ID	Sample Date	Total Organic Carbon (TOC)	Ammonia (NH4)	Nitrate + Nitrite (NO2+NO3)	Iron (Fe)	Manganese (Mn)
Forestview Test Well	12/12/2002	2.9	0.68	<0.20	2.40	0.590
City Well #1	2/9/2006	<2.0	1.3	<0.10	4.54	0.505
	8/22/2013	3.0	1.1	NA	4.04	0.425
City Well #2	2/21/2006	2.5	1.5	0.12	4.00	0.466
	8/22/2013	2.8	1.1	NA	3.89	0.403
City Well #3	3/1/2006	3.4	1.1	<0.10	4.86	0.402
	8/22/2013	2.8	1.2	NA	4.10	0.413
City Well #4	3/20/2006	<2.0	2.4	<0.10	3.91	0.572
	8/22/2013	3.2	1.0	NA	3.47	0.407
Forestview Irrigation Well	8/22/2013	1.9	0.49	NA	2.71	0.609
Field Blank (Office Tap)	8/22/2013	2.1	0.11	NA	<0.05	<0.005

Notes: City Well #3 Sample was taken from inside the water treatment plant (raw water line) because sample port on well was plugged. Only well #3 was running during sample.
All table samples values are mg/L.
NA = Not Analyzed

A long discussion ensued regarding location of drilling a new test well. WSN Consulting Engineer Ross indicated that there was a deep drilled residential well located in the Paris Road area. The decision was made to contact the individual to see if the City could sample their well for water quality. The cost to sample and test the well is approximately \$1,200.00.

MOTION by Commissioner Klopfleisch, seconded by Commissioner Crochet to recommend to City Council to approve contacting the homeowner on Paris Road to see if the City could sample their well for water quality as part of the City’s evaluation of sites for a future municipal well. Motion carried unanimously.

MADDEN AGREEMENT

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Public Works Director/City Engineer Walter reviewed the draft Madden Agreement with the commission. Public Works Director/City Engineer Walter informed the Commission that Madden's had no issue with the agreement and have already signed the agreement and it should be returned to the City in the next few days.

MOTION by Commissioner Crochet, seconded by Commissioner Klopfleisch to recommend City Council approve the Madden Agreement for Sanitary Sewer and Water. Motion carried unanimously.

CEDAR SCENIC SEWER LINE REPAIR QUOTES

The following memo was presented and entered into the record by Public Works Director/City Engineer Walter:

The sanitary sewer backup on Cedar Scenic Road was discussed at the Utilities Commission meeting on September 4th, 2013. I have researched all questions and concerns and have the following information hopefully answering all Utilities commission questions:

The sanitary sewer service line has not been flushed on an annual basis because it was on Engineering Technician Mark Matthews's calendar to do in the spring of each year. When Mr. Matthews was laid off on June 17th, 2011, it was missed and never put on anybody's yearly schedule starting in 2012. But even if it was on a yearly, bi-yearly, or quarterly schedule there is no way to guarantee it still will not plug and backup and cause significant monetary damages to the home. Last time Mr. Matthews ran the City camera down the sanitary sewer service line was in the spring of 2011 and it was not plugged therefore the line was not cleaned. Note that the sag is full of sewage all the time, it never cleans out.

Erin Contracting out of Coon Rapids, MN installed the pipe on Cedar Scenic Road in 2002. By contract the warranty is only for one year therefore the warranty run out by the end of 2003. Construction Inspection was conducted by WSN, but there is no way in 2002 because of the way sanitary sewer service lines are installed to inspect the service lines after they are fully back filled with dirt on the project. That is why as the City Engineer I recommended in the winter of 2006-2007 that all projects be required to have sanitary sewer clean outs installed at the right of way line and that all sanitary sewer service lines are cleaned and televised as part of the total project. This is to make sure there are no sags in the sanitary sewer service lines at the completion of construction. City Council agreed and the additional cost of the clean out installation and cleaning/televising has been implemented on all projects since 2007.

The home on Cedar Scenic Road was not built until 2009 and connected to water and sanitary sewer in the fall of 2009, seven years after the Cedar Scenic Project in 2002. The first backup occurred in 2010 at which time the City discovered that the sanitary sewer service line has a significant sag in the pipe about 7 feet from the centerline of Cedar Scenic Road. The sag has been there in Cedar Scenic Road since it was constructed in 2002. Staff took the issue to Utilities Commission in 2010 and discussed options. Commission recommended cleaning and televising yearly in the spring of each year knowing that this would not guarantee that another sewage backup would not occur in the home. There are many sags in the sanitary sewer service lines that

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the City is not even aware of but most are not significant and usually clean themselves. This sag is significant meaning it is over 4 inches which is the full depth of the sanitary sewer pipe.

The sanitary sewer service line has not been flushed for a little over two years and now caused another backup into the home the second time since it was installed to the new home in 2009.

At the last Utilities Commission meeting the following reasons were discussed that would lean towards recommending to City Council to permanently fixing the sanitary sewer service line, but the Commission wanted to see actual cost estimates to repair from at least two contractors before making any recommendation to City Council:

1. It takes away future changes in staff and thus eliminating any human error in the future and even with inspection and cleaning on a schedule still doesn't guarantee a sanitary sewer backup will not occur.
2. Takes away future City liability of a sanitary sewer back occurring. Approximately \$10,000 (Engineers Estimate) to permanently fix versus an insurance claim for what dollar amount?
3. It would eliminate the City responsibility from cleaning the sanitary sewer service line at a yearly cost for the next 100-years, which still would not guarantee that there still will not be a sanitary sewer backup into the home causing significant financial damages to the home.

To date there has been no damages to the home only clean up with a wet/dry shop vacuum of about ten gallons each incident because the current homeowner has caught the backup in time. The current homeowner has not charged the City for any cleanup and has been very understanding of the situation and willing to work with the City.

The current homeowner has the home up for sale and because of the sanitary sewer backups (2 to date) they have to disclose this issue to the new buyer.

Two quotes were submitted by Public Works Director/City Engineer Walter for permanently fixing the sanitary sewer service sag in Cedar Scenic Road. One quote was received from Pratt's Affordable Excavating in the lump sum amount of \$15,620.00 and one quote received from Anderson Brothers Construction in the lump sum amount of \$9,950.00.

A detailed discussion ensued and the conclusion of the Commission is the problem will never go away for the homeowner or the City if the City does not permanently fix the problem. Therefore, the Commission felt recommending awarding Anderson Brothers low quote to repair the sanitary sewer service line was the right way for the City to proceed.

MOTION by Commissioner Klopfleisch, seconded by Commissioner Crochet to recommend City Council award the Anderson Brothers Construction quote in the amount of \$9,950.00 for the Cedar Scenic Road Sewer Service Line Repair Project. Motion carried unanimously.

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MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

The commissioners reviewed the MS4 Audit conducted by WSN of the current permit and reviewed new requirements for new MS4 permit. The new MS4 Permit is required to be submitted to the MPCA by December 1st, 2013. The Commission consensus was for WSN to return to the next meeting with a draft permit and estimate allocated hours to complete all the MCM requirements with the new 2013 permit. The 2013 permit will good for another 5 years.

WASTEWATER TREATMENT PLANT CHARGES FOR AUGUST 2013

The Wastewater Treatment Plant Charges for August was provided to the commission as information only.

CROW WING COUNTY SWCD WHISKEY CREEK INFORMATION

The Cow Wing County SWCD Whiskey Creek Study update was provided to the commission as information only.

OTHER BUSINESS

Public Works Director/City Engineer Walter informed the Commission that the lights on the east water tower had been replaced and all lights are operating again. The replacement was done under warranty at no cost to the City of Baxter.

ADJOURNMENT

MOTION by Commissioner Klopfleisch, seconded by Commissioner Crochet to adjourn the meeting at 5:28 p.m. Motion carried unanimously.

Approved by:

Submitted by,

Rock Yliniemi
Chairman

Mary Haugen
Administrative Assistant