

# **Village of Bellaire**

## **PUBLIC WORKS COMMITTEE**

**Eldon McPherson, Chairman**

**Patricia Drollinger**

**Dave Ciganick**

### **MEETING SYNOPSIS**

The Village of Public Works Committee was scheduled to attend the Antrim County Human Services Board meeting on Thursday, December 17, 2015 at 9:00 a.m. The meeting was held at Meadow Brook Meguzee Hall, 4543 South M-88 Highway, Bellaire, Michigan. Trustee McPherson and Trustee Drollinger were in attendance. Chris Thompson and Lori Lockett were also present. The village council voted December 2, 2015 to install a permanent sewer meter to measure facility wastewater and to request that Meadow Brook pay for the engineering costs. Trustee McPherson made the following prepared remarks in support of this request.

This spring Meadowbrook completed the remodel and expansion project, overcoming many challenges along the way. One of these challenges was repair of a failing sanitary sewer system under the facility once the problem was discovered. Fortunately this issue was discovered prior to completion of the facility improvements and the repairs could be performed during the project. Meadowbrook and the village worked together teaming with contractors and engineers to determine flow problems, repair leaks and establish temporary effective metering. This was no small task with many hours contributed by DPW and Meadowbrook staff assisting in the resolution of the facilities sewer infiltration issue.

As you know a problem was initially noted about 3 years ago when our sewage pond was rapidly nearing capacity and flow records indicated rates in excess of what typical flows would be. Our Village DPW monitored and metered sewer flows and over time identified Meadowbrook as a source of high flow. After comparison between the water meter and the temporary sewer meter which was in place it was determined that, the sewer flow was greatly exceeding the Meadowbrook metered well water readings. Village Council recognized the perils of remodeling an aging water system and worked with Meadowbrook to temporarily meter the sewer flow and bill based on this reading.

When did Meadowbrook's sanitary system initially fail? We will never know! The system was most likely failing and contributing excess loading long before being noticeable in the combined sewer flows of the whole village! Therefore metering of the sewer loading on the villages system from this facility has been inaccurate since it was based on water meter readings. This being the likely scenario the village can only conclude that it has not receive proper fees for the sewer service provided during an extended period.

We are now at the point where to complete the best engineering practice we will be replacing the temporary sewer meter with a metering system engineered and designed for this application.

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There are several reasons why a new permanent sewer meter is prudent.

First, our goal is to accurately meter usage of the municipalities' services for all customers. Meadowbrook is a high volume contributor of sewage to the villages' treatment works, and currently we continue to record differences in metering based on comparison between the facilities water meter and the village's temporary sewer meter. The records show for the last nine months that an average difference of water/sewer readings is slightly over 9,000 gallons per month, with the sewer meter consistently reading higher than the water meter. Range of difference ran this period from 2000 to 25,000 gallons.

Second, it takes 1 hour every week for maintenance on the sewer meter which includes pulling the meter out of the structure, cleaning it with degreaser and scrubbing it, removing any debris and grit that has it obstructed and putting it back into the structure. When the meter is read which occurs monthly, it takes another hour to gather a reading since the unit needs to be taken back to a computer so the data can be downloaded and cleaning and servicing is required including changing the batteries at the time of the reading. The cost in materials and manpower for the weekly maintenance and extra maintenance during the monthly readings are estimated at \$1650.00 per year. The temporary meter is prone to problems. We continue to experience issues caused from debris - even with the grinder in Meadowbrook's system. We have knowledge of at least one total failure of the grinder as well as other problems.

Third, we need the new meter for our DPW to work more efficiently. The metering of this facilities sewer is logical since sewer treatment is the service which is utilized. Let's accurately meter the service which is actually being utilized!

This is a big job and costs a lot of money. The new Cast in Place Flume engineered by Fleis & Vandenbrink has a quoted construction cost of \$20,000. This was option 2 of an estimate, the first option was \$40,000. At the recommendation of our DPW we selected Option 2. The engineering cost will be \$4500. The estimated payback in time and material savings for Option 2 @ \$20,000 is around 12 years. The new flume will be installed at the location of the existing utility access point that has been used for many years.

In good faith and cooperation we ask Meadowbrook to share the cost with the Village of Bellaire by paying the \$4500 engineering cost. When completed, we will have a meter designed for this application that will accurately meter the sewage outflow with labor savings, accurate billing and one less headache for everyone.

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Village Public Works Goals

Serve the needs of our water & sewer customers fairly

Follow Best Engineering Practices

Follow Regulatory Standards

Work effectively and efficiently

At the close of his prepared remarks, Trustee McPherson answered questions from ACHS board members. Rick Teague requested an explanation of the billing; are they billed on the water meter or the sewer meter? Chairman Harris asked about the continued discrepancy between the water and sewer meter readings. Vice-chairman Teague asked about the life span of a meter. Thompson explained that with proper maintenance the temporary meter and proposed meter would last a long time. When asked by Fred Harris for his input, David Schulz referenced Public Works Committee minutes from March 3, 2014 and January 21, 2015. The March minutes addressed the installation of a temporary meter, the January indicated that the flow difference was very close. He noted that Meadow Brook is the only customer currently billed in such a manner. He stated that there is nothing in the Village of Bellaire protocol indicating that the village would pursue the same strategy if a home had this issue. Finally, he noted that as Meadow Brook is outside the village limits, it pays 2 times the rate of Village customers. Meadow Brook has paid over \$550,000.

Chris Thompson explained that the purpose of purchasing the temporary meter was to detect the location of the high flow; once detected it was moved to the sewer to determine proper usage.

Vice-chairman Teague asked if the water meter read lower than the sewer meter? Thompson explained that the sewer meter is reading higher and that it is not against industry standards to bill based on sewer meter. Meadow Brook has its own well. Thompson wondered, “the village is treating the sewage, why not meter the sewage?”

Trustee McPherson reiterated that the goal behind installing a permanent meter was to get true and accurate readings, to save time and to save money.

Chairman Harris asked Marna Robertson for her opinion. She indicated that this was the first she had heard about the permanent meter. She requested time to speak with John McClees. Fred Harris requested one month to provide a response to the village.

Board member Mike Ballard asked whether the Village would be willing to negotiate the rates Meadow Brook pays if it paid for the engineering costs?

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Trustee Drollinger pointed out that in addition to paying water and sewer rates, Village residents pay a special assessment for the waste water treatment plant. Those customers outside of the Village do not pay the assessment.

Board members said they understood the request. Chairman Harris thought that the request was reasonable and stated that Meadow Brook has a vested interest in accurate readings

The request was tabled to allow Marna Robertson and John McClees to provide input to the board. Chairman Harris expressed appreciation to the Village for help with the issue and stated that he hoped to have an answer for the Village within a month.

Prepared by Lori Lockett  
December 18, 2015