

VILLAGE OF MILLBROOK
BOARD OF TRUSTEES
April 22, 2014

1. Call to Order/Pledge of Allegiance
2. Continuation Public Hearing 2014/2015 Budget
3. Water Filtration Project
 - Delaware Engineering
 - Waste Water Plant Update
 - ORF
4. Project Updates
5. Upcoming Dates to Remember
 - April 25th - Arbor Day Tree Planting 10 am
 - May 13th - Regular Meeting
 - NO MEETING May 27th
6. Audit of the Bills
7. Adjourn

**Village of Millbrook
Board of Trustees
Minutes March 22, 2014**

Call to Order by Mayor Hurley at 7:05 p.m.

Pledge of Allegiance led by Mayor Hurley

In Attendance-Mayor Laura Hurley, Trustee Herzog, Trustee Cox, Clerk Linda Wiltse.

Water Filtration Project-Bill Bright from Delaware Engineering and Scott Osborne from VRI will present updates on the proposed water filtration project. Bill stated the Dutchess County Dept. of Health inspected the water plant and requested a filtration system be installed due to the enhanced service water treatment rule. This legislation becomes more stringent each year. This request was stated in a letter dated July 16, 2014 and the Village has 18 months from the date of the letter to install the system. There is a stream close to (within 100 feet) of the water supply. Ground water and surface water had to be tested for influences on the Village water supply.

Bill gave a brief history of giardia and cryptosporidium creating the need for filtration systems. Giardia lives in the intestines of cattle and cryptosporidium lives in the intestine of deer. Ground water and surface water have to be determined if they were under the influence of these bacteria. The Village has a shallow aquifer of only 30 feet deep probably hydraulically connected. All chemical testing revealed we were not under the influence of ground or surface water. Once MPA (microscopic particle analysis) was conducted by using a one micron filter to clear all algae and filtering 1,000 per minute in the clear well and then in the two new bunkers just rebuilt. They found significant hits in both of protozoan and algae that grow in the stream. They are indicator organisms and that indicates our water supply is under the influence of ground and surface water.

This means we have to provide treatment in systems that GWUIDI (Ground Water Under Direct Influence of Surface Water) will approve. Under the new regulations we have to install a log 4 filtration system which means 99.999% removal though stacked treatments will be attained. The current treatment system is solely chlorination. A filter barrier of 1 micron is required to prevent giardia and cryptosporidium from entering the potable water supply. An automated cartridge system with a Harmsco filter will be used. Plans were shown of the existing and proposed water filtration gallery. The history of the water supply area showed that the Village must retain the entire 106 acres first acquired to supply water.

A building will have to be built and include a floor elevation raised up about 3 feet above flood grade. The building will house an electrical and chemical rooms and the filtration systems with the generator outside. The first two filters are called 10 micron bag filters which are not NSF approved but are less expensive and are cleanable and also is expected to last one year. The system will be pressurized and as the pressure increases it will transfer automatically to the standby filter. This could be set to provide an alarm if the Village had to and have the data sent to a smart phone for monitoring purposes. The system would include a 10 micron bag filter, a 5 micron cartridge filter and an absolute 1 micron filter. If the filter gets plugged the flow goes to the second filter to protect the expensive 1 micron filter. Each filter is designed to handle 400 to 450 gallons of water per minute which is adjustable.

The existing pump motors are too big and the Village is looking to downsizing the motors that will be the feed pumps. The water then will be pumped into a ground storage tank and from

there it will go into the water main. The water you are providing with chlorine has to have a 20 minute contact time to kill micro-organisms that may be in the water. The new tank was sized to provide the appropriate contact time. Currently the contact time is taking place in the pump house where the wet well is located. We do not want to chlorinate before the new filters because any leftover soluble iron or manganese will precipitate out of solution and form a block which will actually line the filter. In the building there will be 2 or 3 pumps that will pump potable water from the new storage tank into the system. We are required to have at the far end of the system a chlorine residual of .2.

With the filtration system the Village will have a 3.6 log removal and with the enhanced chlorination you will have a 4.2 log removal. We wanted a system where we did not have to install UV since it is very expensive to run but it would give us another 2 log removal. The look of the new building will mirror the existing building and be constructed of concrete and brick. The building will measure 41'8" X 28'. Budget numbers still need to be gathered for this project. A 150,000 gallon concrete storage tank was selected which will cost \$50,000 to \$60,000 more than a steel tank but will last much longer. Over a 30 year period there is no maintenance on concrete tanks. The question is how are we painting and cleaning an enormous steel tank and taking it offline to accomplish this? A concrete tank is poured and built on site.

Room was left in the plans for the new building so that in the event of a spill that would leave room to treat 99% of the contaminated water with temporary granular activated carbon beds. Volatile organic compounds such as are found in diesel and gasoline could be removed with these carbon beds. The pumps would be shut down to allow the contamination to move through the water shed area while using the 150,000 gallons in the onsite storage tank. A hydrant with a valve would enable a truck to gain direct access and provide potable water into the system in the event of an emergency. This makes the system more bullet proof.

The existing steel storage tank was built in the 1930's, it is 80 to 90 feet tall and is structurally sound. It does have some pit holes and rust and may be coated with lead paint inside and outside. If the tank has lead paint inside and outside then the whole tank must be tented before paint removal can begin. This is very a very expensive process. Delaware Engineering is proposing spraying on an epoxy liner on the inside which is flexible and has a 50 year life. They have to see how the epoxy adheres to the existing paint to determine the cost of this project. The last time the inside of the tank was coated was 30 years ago. Testing of the paint inside and outside must be conducted. The project could cost up to 1 million dollars but the actual costs will be able to be determined after the paint test are conducted. A series of options will be presented. The tank is a 500,000 gallon tank but the Village only gets credit for 250,000 since the other 250,000 gallons is for fire flow. Copies of the two cell company contracts were requested due to the fact that the antenna are located on the tank. The tank was inspected in 2010 on the inside by a diver. They discovered rust spots and suggested painting in the near future. The tank will be out of service for painting inside and outside for 4 to 6 weeks. The drawings for the existing water tank were requested and will be provided by VRI.

Bill asked for permission to take the concept to the Board of Health and request for a 1.5 year extension. This project may require a 30 year loan since the total cost of the project could be 1.5 million. There are no grants available due to the mean income for Village residents being too high. Instantaneous demand is 4 times the average water usage. There are 765 meters and approximately 700 connections in the Village and the Town.

In July of 2013 the Board talked about the east bunker rehabilitation that is required this summer. Precast concrete can be used and the old existing block will be demolished. The bunker will then be backfilled. **This** project will require a temporary bridge to access the bunker since it is located

on the other side of the stream. This project is not included in the 2014-2015 budget. There are no valves to isolate the bunker so the repair will be difficult. A generator is also required since there would be a power interruption.

The Board of Health future focus will be on pharmaceuticals which does have an impact on the fish and fresh water muscles. Harmful rates are to be determined. The Poughkeepsie water supply was discussed and their usage of 15 million gallons per day. Mayor Hurley stated it would make sense to consider extending the service so that all Village properties are on the system. She added that she is interested in pursuing the wells at the former Bennett College to use in the event of an emergency.

Waste Water-The staff at the NYS DEC are very busy. The Village should be able to eliminate all ORF usage that does not occur during wet weather events. Repairs and changes are underway. Valves have been cleaned. A 6 inch line valve is yet to be installed. From the ORF back to the aeration system is the focus of the project to replace the many changes in direction for the piping without any cleanouts existing. Scott Osborne stated he has installed 15 inflow covers that should help to some degree. Bill Bright stated he has arranged for a plug valve to replace the existing butterfly valve to provide more relief.

2014-2015 Budget Public Hearing-Mayor Hurley stated the 2014-2015 budget public hearing remains open. The proposed budget has a 1.65% increase without using any general fund balance which is well below the tax cap requirement. Expenses are down by around \$3,000 and revenues are down slightly as well. The tax exemption impact report, the water, sewer and miscellaneous relevy data will be prepared and included in the final budget.

Project Updates-The Elm Drive easements and storm water project will be underway shortly. The paving of Merritt Avenue will need 2 years savings to have sufficient funds for this project.

Trustee Herzog stated he has completed 45% of the data collection for the entire storm water system using a GPS system. He has been focusing on the section of the Village north of Franklin Avenue. He has completed 200 to 240 catch basin marking. This information will be transferred to a map at the Farm and Home Center and will provide the Village with a narrative of each area in the system.

Town of Washington's Comprehensive Plan-Mayor Hurley attended a workshop to review the Comprehensive Plan draft. She provided the Board with recommendations on the plan's Goal #3 which speaks to the relationship between the Town and the Village. She added the Village is not willing to absorb the majority of the Town's responsibility for providing affordable housing. Howard Schuman stated he does not believe the Village would change much irregardless of the Town's proposal and the Village would certainly not become a less desirable community.

Budget 2014-2015-The Mayor stated the medical plan will change from MVP to CDPHP with a high deductible plan and the ACA requires children up to age 19 to have dental and vision coverage. Delta Dental which equals the pediatric plan and all employees will be added.

General Code has quoted the Village a \$10,000 cost to update and publicize the Village Code. At this time the Mayor suggested the Village staff could locate software and update the code internally. The Mayor tabbed the subject until more information could be acquired. She added that after investigating the extent of this project, she determined that it was a very large undertaking to handle in-house. General Code was contacted a second time and the cost was reduced to \$5,700. The topic was tabled and will be looked at again.

The public hearing for the 2014-2015 budget was closed with a motion made by Trustee Cox and seconded by Trustee Herzog. All were in favor. Trustee Herzog made a motion to approve the 2014-2015 as presented with the relevy information for water, sewer and miscellaneous along with the tax exemption report to follow. Trustee Cox seconded and all were in favor. The Clerk Linda Wiltse was instructed once the above data was made available to post the tax warrant with a motion made by Trustee Cox. Trustee Herzog seconded and all were in favor.

Specifications for the storm water and waste water camera purchase were provided for review by the Board of Trustees. A motion was made by Trustee Herzog to accept proposals for tree care in the Village. Trustee Cox seconded and all were in favor. The Fire Department is working on updating their bylaws. The Board will award the new Public Works Dump Truck bid at the regular business meeting on May 13, 2014. The Board tabled the request from Timothy Capowski to use the Thorne Building band shell on June 20th for a musical performance entitled "Friends of Tim". VFW Post 9008 will be holding their annual Spring Classic Golf Tournament on May 19, 2014 with a noon scrabble start up to 18 teams. This event raises funds for their scholarship fund.

Trustee Comments-April 25th-Arbor Day Tree Planting 10 am
May 13, 2014-Regular Meeting
NO MEETING May 27th

Audit of the Bills

Adjourned at 9:00 p.m. with a motion made by Trustee Cox. The motion was seconded by Trustee Herzog. All were in favor.

Respectfully submitted,

**Linda T. Wiltse
Clerk/Treasurer
Village of Millbrook**