

Charter Township of Lyon
Board of Trustees
Special Meeting Minutes
April 20, 2017

Approved: **JUNE 5, 2017**

The meeting was called to order by Supervisor Dolan at 7:00 p.m.

Roll Call: Lise Blades
Patricia Carcone
Michele Cash
John Dolan
Kristofer Enlow
John Hicks
Sean O'Neil

Guests: 4

Also Present: Chris Doozan, McKenna Associates
Leslie Zawada, Civil Engineering Solutions, Inc.

CALL TO THE PUBLIC - None

APPROVAL OF AGENDA

**Motion by Hicks, second by Cash
To approve the agenda as presented.**

**Voice Vote: Ayes: Unanimous
Nays: None**

MOTION APPROVED

NEW BUSINESS

A. Artesian Of Pioneer – Water Presentation

Supervisor Dolan explained he met Mr. Kidston at a water meeting. He explained Mr. Kidston is very knowledgeable and he offered to analyze the Township's water system for free. He has been doing that for the last month or so and he has compiled the information and has put together a plan that will bring the Township's water up to the best quality water they can have.

Mr. Kidston explained if they still decide to do nothing that he presents he can still recycle the backwash water. He explained they have been in this business for 53 years, he was born in South Lyon and then his family moved to Ohio which is where they are located. They are a family company. In his mind the Township should not give up their water resource to a third party like Great Lakes Water Authority. There is plenty of water here, it just needs to be treated so it matches or is better than Great Lakes Water. It can be done, and it is easily done.

Mr. Kidston provided a power point presentation. He explained they only deal in water; they build water treatment plants 24/7, that's all they do.

He explained they were asked to look at the entire system improvement so their proposal includes three distinct areas of improvement as follows:

1. Aeration, detention, filtration and recapture of backwash water to reduce and/or eliminate waste water surcharges.
2. Ion exchange softening on a Township wide basis. With this addition the finish hardness and water quality would simulate Great Lakes Water.
3. 2 million gallons in overhead storage.

He explained that all three components do not need to be completed. But he recommended items 1 and 3 need to be completed and item 2 will provide the residents with a much higher water quality but also will cost more both in capital and ongoing operational charges. A full five year warranty applies as well on all parts and labor.

He explained the Township really needs to do the iron filter; the bio filter that is there now is not working 100% of the time.

Trustee Hicks questioned 4 filters and wondered if it is per plant. Mr. Kidston explained they need to decide how many plants they are going to build. The most economical way to do this is to do it all at one time if they can afford it, including 2 one million gallon tanks. Mr. Kidston confirmed there will be four filter tanks per plant and most likely 3 filters for the softening at each plant.

Mr. Hicks questioned dehumidification in the plants and he wondered if that was included. Mr. Kidston stated yes, he has never built a plant without dehumidification. The key to maintaining a good looking system is dehumidification. Mr. Hicks asked if they needed more land for the plant. Mr. Kidston stated Woodward is fine. Most of the tanks will be underground and there is a possibility at looking at doing it all in that one building. They would still have to build underground concrete tanks at Woodward and South Hill. From the neighbors point of view, if they can't do it all inside the existing building the only thing that changes is an aluminum tank sitting outside and that does have to be outside and above ground, so there is no way around that. He suggested putting the water tower on John's Road by the high school. The Township is short on fire protection for that school and that would provide a solution since it would also be in the school's benefit, they only need 100' x 100' area to put the tower. The type of tower he is proposing never has to be painted. He suggested building the other million gallon tower on Eight Mile.

Mr. Kidston also suggested getting approval from the MDEQ all at once, even if they want to stage the project.

The Nano softening system is more expensive but maintaining it is about the same from an Ion softening system since the Nano system does not use salt, there would not be the corrosive component.

Supervisor Dolan asked if the aeration tank is loud that will need to be outside at Woodwind. Mr. Kidston stated that there is a blower on it but it won't be heard, they will set it on the far side of the building away from the homes. If there was a complaint on the blower they can build a natural draft aerator and turn the blower off. This blower won't be heard, it will run every time the pumps run and the sound won't go far.

Mr. Kidston explained reverse osmosis is a finer mesh and takes everything out of the water. Nano is like the sister which allows the remaining elements to go through and just remove the hardness.

Clerk Cash questioned if the school location didn't work out then would the South Hill location work. Mr. Kidston explained the topography at South Hill would not work. If the school didn't work out and nowhere else on Ten Mile would work then he would go back to putting two towers side by side on Eight Mile Road. He explained there is good height at Eight Mile Road.

Mr. Kidston explained they are the only one in the business that offers a 5 year warranty on everything including parts and labor. They build high quality equipment. The filters will go 15-20 years before replacements are needed. Once they decide what kind of project the Township wants to do, the final quote is final, there won't be change orders unless it's something the Township wanted, the project wouldn't cost a dime more than quoted. The project is turnkey after the land is supplied and the wells.

Trustee Blades confirmed this plan does not have any requirements of well owners to tie in. Mr. Kidston agreed.

Mr. Doozan asked how long it takes to build the facility. Mr. Kidston stated he thought by this time next year they would be wrapped up. If they would need additional wells at South Hill there would be an additional cost and that was not included in the price. Mr. Kidston explained they need some money up front to start work and do the preliminary investigations. They need to decide the master plan of what they are going to do and accomplish.

Trustee Enlow asked Mr. Kidston to touch on the electrical costs vs. chemical costs and how does it compare. Mr. Kidston explained the electrical cost will go up slightly, he commented he would look at those costs and get back to him. Trustee Enlow commented his feeling would be to stage it and add on as the Township grows. Treasurer Carcone reminded everyone how reasonable it is to borrow money right now. Mr. Kidston explained it's cost prohibitive to do things in the second phase, the wells are already here, the tank needs to be sized for the full 5 MGD, it's too cost prohibitive to

add onto. Up front they may just put in 3 filters instead of 4 filters; the floor space needs to be built. On the softener side they may start out with 2 Nano filters and add a 3rd one down the road. They may only want to build 1 water tower now instead of 2. By just building one water tower it would save 2 million dollars. By leaving off a filter or softener tank, he would guess taking off another 1.5 million. Trustee O'Neil felt that doing one tower would be the place to start. Mr. Kidston stated the reason he likes to divide the flow into several tanks is because there are mechanical items and something will go wrong eventually, if he produces all of the flow with two tanks he has lost half of the capacity. If it's divided up into several tanks and one goes down then they would only be down 25%. They want to create a very redundant system that doesn't fail them. He will look at last year's flows and give them the operating costs of ION and Nano so that will give them idea and a base line from last year.

Supervisor Dolan confirmed if the Board so chose to move in this direction then Mr. Kidston would need \$100,000 to get started.

The Board continued to discuss items such as financing, staging the project, and concerns about overbuilding the system.

Supervisor Dolan thanked Mr. Kidston and his son for the presentation and explained the Board will continue to discuss and do their homework in order to come to a decision.

ADJOURNMENT

**Motion by O'Neil, second by Carcone
To adjourn the meeting at 9:04 p.m.**

**Voice Vote: Ayes: Unanimous
Nays: None**

MOTION APPROVED

The Board of Trustees open meeting was adjourned at 9:04 p.m. due to no further business.

Respectfully Submitted,

Kellie Angelosanto

Kellie Angelosanto
Recording Secretary

Michele Cash

Michele Cash
Township Clerk