

City of Keene
New Hampshire

FINANCE, ORGANIZATION AND PERSONNEL COMMITTEE
MEETING MINUTES

Thursday, February 10, 2022

5:30 PM

**Council Chambers,
City Hall**

Members Present:

Thomas F. Powers, Chair
Michael J. Remy, Vice Chair
Bettina A. Chadbourne
Bryan J. Lake
Andrew M. Madison

Members Not Present:

All Present

Staff Present:

Elizabeth A. Dragon, City Manager
Thomas P. Mullins, City Attorney
Assistant Public Works Director/Operations
Manager, Aaron Costa
ACM/Public Works Director, Kurt Blomquist
City Engineer, Don Lussier
Mary Lathe, Lab Manager
Christian Tarr, Utilities Maintenance Manager

Chair Powers called the meeting to order at 5:30 PM.

1) National Pollution Discharge Elimination System - Technical Assistance - Change Order 3 - WWTP Operations Manager

Assistant Public Works Director/Operations Manager was the first to address the committee. Mr. Costa stated the Wastewater Treatment Plant operates 24/7 and 365 days of the year. The City treats about 3 million gallons of water every day for which it has a discharge permit issued through EPA. There are parameters that need to be met for the permit, which is typically valid for five years. The last permit issued to the City was in 2007 and expired in 2012. The City has been operating under that expired permit for the past 10 years.

Mr. Costa noted the City did receive a new permit effective February 1 and is currently negotiating with the EPA on three different parameters. Although the majority of the permit has taken effect, these three parameters are still outstanding. He noted this change order would allow the City to continue to work with its consultants through the negotiation process with EPA. The City's consultant Wesson and Sampson have included a scope of work to include meetings with staff, meetings with legal counsel, assisting the City with the appeals process, etc.

Funds for this work are available in the Wastewater Treatment Plant NPDES Permitting Assistance Project (08012).

Councilor Madison asked what the three parameters the City is still working on. Mr. Costa stated it was aluminum, copper and Ph.

Councilor Lake made the following motion, which was seconded by Councilor Chadbourne.

On a 5-0 vote, the Finance, Organization and Personnel Committee recommends the City Manager be authorized to do all things necessary to execute change order #3 with Weston and Samson engineers to perform technical services for the City's national pollution discharge elimination system permit renewal process for an amount not to exceed \$30,000 for contract 02-16-01.

2) REPORT OUT: Councilors Remy, Bosley and Giacomo - Continued Remote Participation

City Manager Elizabeth Dragon indicated this communication has been discussed as part of the Council's Rules of Order and indicated the suggestion tonight is that this item be reported out and be sent over to PLD so it could be made part of their agenda March.

Councilor Remy stated as one of those who submitted he felt this fits right into what they are doing.

Councilor Madison made the following motion, which was seconded by Councilor Remy.

On a 5-0 vote, the Finance, Organization and Personnel Committee recommends the communication on remote access be reported out of committee and be referred to the Planning, Licenses and Development Committee for their consideration as an amendment to the Rules of Order.

3) REPORT OUT: Councilor Filiault - Rooms and Meals Tax Decrease

The Manager reminded the Committee about the letter Councilor Filiault had submitted a letter to the Council in regards to urging the State to fully fund their meals and rooms tax to municipalities. This item was taken up during a recent legislative delegation meeting held jointly with the County. The Manager stated staff has spoken to Councilor Filiault about reporting this out of Committee

Councilor Remy made the following motion, which was seconded by Councilor Chadbourne.

On a 5-0 vote, the Finance, Organization and Personnel Committee recommends the communication from Councilor Filiault be accepted as informational based on ongoing initiatives being undertaken by the County and the City with respect to increasing the local share of the rooms and meals tax.

4) Proposed Capital Improvement Plan (CIP) for FY 2023-2029

Parking Fund (Page 114):

Economic Development Director Med Kopczynski was the next to address the Committee.

Mr. Kopczynski began by introducing Chelsea North, Parking Services Manager, Don Lussier City Engineer and Kurt Blomquist Public Works Director, Assistant City Manager, Emergency Management Director. Mr. Kopczynski stated consistent with City Council goals and recently discussed, projects proposed for the parking fund are intended to meet those objectives, diversify revenue to increase fiscal stability, implement plans and asset management strategies for parking and sidewalks, develop, adopt and begin implementation of an EV charging strategic plan, and identify areas in Keene to allow additional housing units to be built. Mr. Kopczynski noted the EV Charger issues came out of two separate tables as being important to the City.

Mr. Kopczynski stated there is a lot of interest in the EV Charging Station and the City has one offer of a donation at this time and he felt there could be more offers of donations. The City will need to decide where these stations will go and how they are funded and maintained.

The cost of electricity will have to be built into the rate and fast charges will likely be impacted by demand charges. He added there is no doubt these stations are part of our future and it will be important for these stations be placed in our downtown as part of our economic development strategies and in addition to meeting green and energy goals.

The City has one dual station now and there has been an increase in usage. Upgrades and technology over time may direct the City to a different type of charger, depending on the future democratic evaluation. Ms. North added last year the City had about 35 sessions on average per month with the EV Chargers the City has. That number has doubled and it is anticipated that this number is going to continue to increase with the number of electric vehicles on the roads. A dual charging system will not be enough to keep up with the demand.

Pay Stations (Page 116) – This is a change from the prior year’s request. Mr. Kopczynski noted as indicated during the strategic plan presentation, the future of parking management will be with phone and web applications. Metering in many cases will be a thing of the past. As indicated during the strategic plan presentation, the City continues to utilize as much of the original meters it has, slowly transitioning over time. This transition will probably occur over the next decade to have a completely different system.

He went on to say pay stations allow for more free space for sidewalks by replacing existing meters, which allows business owners and visitors to use the space in various ways. During the Covid crisis it was realized how important real estate on the sidewalk for success of businesses actually was.

Pay Stations also offer cash and credit card payments, which adds more options to users than just coin mechanisms alone. Several pay stations have been used for the last few years in several City lots and garages and work with few issues to users. 15 pay stations are needed to cover the downtown core which will replace about 225 meters; assuming one station for approximately 15 spaces. The total one year cost is estimated at approximately \$125,000; this is to purchase them versus \$450,000 for smart meters. The two year ongoing operational costs decreases significantly, and includes hardware warranty, gateway and communication fees, amounting to

about \$70,500 per year versus about 75,000 for the first year and \$35,000 for years afterwards for smart meters.

The pay stations will also run on solar power which is crucial to ongoing environmental efforts to reduce the community's carbon footprints. This concluded Mr. Kopczynski's presentation.

Councilor Chadbourne asked as this is implemented, how will that affect staffing. She inquired whether staff positions will be eliminated in the parking division. Mr. Kopczynski answered in the negative and went on to say as the City begins to utilize its streets more and more for parking to create opportunities for residential use, there will probably be a need for more staff in the future.

Councilor Remy noted in the past there has been pushback from businesses on pay stations and asked if that sentiment has changed or whether this was still a concern. Mr. Kopczynski stated in the past there were some problems with one pay station. There have been very few issues with the ones the City has now. The City is seeing a greater use as people become more familiar. Changing to the touch screen has helped a lot.

Mr. Kopczynski went on explain that there is one installed in front of city hall and another at the library, those will be activated next week to give the public an opportunity to get comfortable with them. He indicated there is likely going to be some pushback from some people, but the alternative would be smart meters, and he wasn't sure why the City would want to buy into old technology.

Councilor Remy went on to say the app only zones has worked pretty well for him, but recalled an instance where he had to pay for somebody and asked what kind of communication is available for these pay stations. Mr. Kopczynski agreed the City has to do better job of educating and communicating and this is something Ms. North has been tasked with to find those mechanisms. There has been direct communications with downtown businesses, training City staff how to both approach and interact with the public, making better use of social media as well as the City's web pages and other sources of information to get people comfortable with using the technology. He added this is however, technology and some people have issues with technology.

Mr. Blomquist was the next to address the Committee. He indicated Public Works provides the facility management for the parking fund. There are six surface parking lots which date back to the early 1960s and 1970s. Two parking structures, the City Hall parking structure and the Wells Street parking structure. The City Hall Parking structure was built in approximately 1988 and Wells Street in 1998.

Surface Parking Lot Maintenance Program (Page 112): City Engineer Don Lussier stated this is a program that the City expects to be ongoing and long term. This is do to routine capital maintenance on the parking surface parking lots.

Page 113 - City Hall Parking Structure Maintenance Program – This will also be an ongoing program. There will always be plans for future maintenance - right now there is a plan advertised for construction this summer for some maintenance work on the City Hall garage ramp.

Page 115 - Analogous program for the Wells Street parking lot. This specific request is a change from previous years. There was money programmed to do relatively minor set of work on the Gilbo Parking Lot; however, last summer there was some structural defects that caused some concrete pieces to fall onto cars causing property damage. A structural engineer did look at the structures and has deemed there is no risk to the structure, but there is work that needs to be done. Hence, what staff has done is pull forward some work that was planned in future years to do a larger project in the current fiscal year.

Page 117 - West Side Downtown Parking Structure – Mr. Blomquist noted the downtown has more restaurants, entertainment spaces and commercial activity as well as the Colonial Theater that is going through some renovation of its main theater and has added an additional theater with 250 seat capacity. Railroad Street has also seen development over the last 10 years, which now has restaurants, the Cheshire Hospital has a clinic area located in it, as well as housing which is causing an increased demand for parking.

Most recently, the Council adopted a new zoning ordinance, the Land Development Code, which has an emphasis on multiple uses within the structures. Those individual uses do not need to provide parking which will fall back on the City to provide. Hence, this project begins the process of taking a look at that need. The first year of the program, which is proposed for FY23 is pre design and to develop some concepts and alternatives for the Council's consideration and ultimately selection.

FY 25 would be the final design for whatever structure is selected with construction beyond that timeframe. Mr. Blomquist explained the reason this project is going to take two years is because of the different processes such as public discussions.

Councilor Madison referred to \$9.72 million in FY27 is listed under design, and asked whether this was for design or the actual construction. Mr. Blomquist stated that should be listed under construction. Councilor Chadbourne asked whether the City has looked into the option of private parking garages. Mr. Blomquist stated the pre design is looking at those sort of options. Mr. Kopczynski stated he has had at least four conversations with individuals and/or companies that have talked about the possibility of building a private garage. He added the large parking facility constructed in Manchester, for example was a public private partnership. He added this is a conversation that will definitely be undertaken.

Public Works

Mr. Blomquist addressed the next item which is Public Works' Capital Improvement Program for FY23 - 29. He noted that the community owns and operates over a half a billion dollars in infrastructure assets. These assets includes water, streets, sewer lines, sewer plants, water plants pump stations, sidewalks, bridges etc. He indicated staff look at projects that are most environmentally friendly, efficient, and affordable.

The department uses asset management planning, which incorporates both the desires of service levels and lifecycle costs to develop the operation and maintenance of the critical infrastructure components. Mr. Blomquist noted there are some large one time projects staff has identified earlier. These one-time projects are looking ahead, looking at how the environment is changing, and what the needs are going to be down the line. These projects include the downtown infrastructure improvements and reconstruction program on page 78, the Lower Winchester Street reconstruction on page 85, and the West Street corridor improvements on page 87 - these are all one time expenditures.

Mr. Lussier noted page 4 provides a brief synopsis of some of these multi fund projects.

General Fund

Page 79 Downtown Infrastructure Improvement and Reconstruction Project - The last time downtown was substantially changed was in 1988. At that time a lot of work was done on the surface areas, but very little work on the underground utilities. There are storm water lines that date back to approximately 1890 and sewer lines that date back to the 1930's. Mr. Blomquist stated this project has actually begun. The City recently received responses from a request for qualifications from design firms and staff is in the process of evaluating the responses to begin the preliminary design process.

Mr. Blomquist stated this work will be done in phase – the first phase will be focusing on Central Square, second phase focusing on Main Street probably down to Gilbo Railroad Street area, and the final phase towards Water Street. This project is currently estimated about 7.4 million dollars using funds from water, sewer and the general fund. Mr. Blomquist stated the City did receive notification from the State recently that storm water component might be receiving ARPA money to fund same.

Councilor Remy stated he would like to emphasize the business continuity plan in the design portion so the downtown does not need to be shut down and so those businesses can continue their operation. The Councilor felt clearing out Central Square from curb to curb is going to have a lot of impact on those businesses. Mr. Blomquist agreed this planning is going to be important and hence the reason for doing this work in phases. He added the work is also going to continue for three years – something else to keep in mind.

Councilor Madison asked whether the City was anticipating any funding from the State Revolving Fund for wastewater or drinking water for any of these projects. Mr. Lussier stated he has been submitting grant applications to also include the State Revolving Fund programs. The City has been notified that Keene has been selected to receive grant funding. He added this is not like the 80/20 program but more about principle forgiveness – for the storm water and wastewater portion. The City was not selected for the drinking water portion.

Pages 80 and 81 – Mr. Lussier stated these are the lists of the road paving program and road rehabilitation work being planned. He indicated one of the tenants of the asset management philosophy is to keep the assets invested in, in as good a condition as possible for as long as possible, by making smaller incremental investments in them and pursuing maintenance level

work. This is so that the City can get a longer life cycle at a lower lifecycle cost. He noted this section talks about the preservation projects and what is referred to as minor rehabilitation.

Page 83 - Bridge Replacement Program - The George Street Bridge replacement is being funded in FY24. The design for this bridge has just started. Beaver Street Bridge is being planned for FY28 with design work starting before that. The City has requested funding for this through the State's 10 year State aid bridge process; however, staff just learned the City was not included for funding on that bridge in the draft 10 year plan that was published in the fall.

The City has petitioned DOT for reconsideration, since the City has been in that program and awaiting funding for that bridge for quite some time. He indicated there is the likelihood the funding scheduled for FY28 may not get the State portion. Mr. Lussier stated he does recommend the bridge be retained in the program and funded, so when opportunities like Federal infrastructure investments arrive, the City is in a position with matching funds and can take advantage of those monies.

Page, 85 - Lower Winchester Street Reconstruction - This is one of the federally funded projects that came in through the State's 10 year plan. It is 80% federal money and 20% local match. Construction funding in the State budget is for FY25-26 and is likely to be done in FY26. There will be some right of way acquisition as part of this work.

Page 87 - West Street Corridor – This project has made it into the State 10 year transportation plan. West Street starting at Route 9/10/12 off ramps and coming all the way into School Street. He noted this is not the most attractive corridor and this project begins looking at all those issues to address some of the sidewalk issues. This is one of the last major commercial areas in the community and would be great to start looking at potentially some redevelopment along that corridor. Preliminary engineering for this project starts in FY27 with construction scheduled for 2032.

Page 90 - Sidewalk Asset Management Program – Mr. Lussier stated this program is a complete retooling of what was previously the sidewalk replacement program and the curbing replacement program. In previous editions of the CIP there was two separate project requests for those two separate components. What is being realized is sidewalks and curbing go together and usually the same contractors are doing both pieces of it so it makes sense to try to merge those together. In previous years sidewalk and curbing money was generally used to fix curbing and sidewalk, that was in need of repair, while the City was doing paving in that neighborhood. Most recently, the City wants to do better with the sidewalks. The program has been retooled, it is now a standalone program, separate from the road paving.

This new plan will replace about 2000 linear feet of sidewalk every year. Initially, the program is going to focus almost exclusively on areas that have asphalt sidewalk, asphalt sidewalks don't hold up as well. The first couple of years work will be lower Main Street, School Street and North Lincoln Street. FY24 would be Belmont Street, River Street and Jennison Street.

Pages 91 and 92 – Traffic Signal and Flashing Signal Program - The City has eight traffic signals and four flashing signals. Mr. Blomquist stated these signals are between 25 and 30 years old.

This program does a systematic replacement. During the first couple of years most of the funding will be spent in the Main Street and Central Square area to combine with the downtown reconstruction infrastructure program. Mr. Lussier added if the West Street project eventually gets added to the State's 10 year plan, those signals along West Street would be eligible for funding under that project, but not until 2032.

Councilor Madison asked whether the City has any plans for any new traffic signals particularly pedestrian traffic signals. Mr. Blomquist stated the City does not yet have a program for pedestrian crossings signals – the City uses flashing systems and will continue to use more of those. He noted Island Street where the multi-use trail crosses, is a location the City gets a lot of comments from people having difficulty seeing or pedestrians not crossing there properly; he indicated this is a conversation that will need to continue.

Page 94 – Dam Maintenance Program - Mr. Lussier noted between 2015 and 2021, the City invested over \$6 million in dam reconstruction rehabilitation. Most of that work was done because the design standards for high hazard dams changed and was upgraded. The City had to rebuild these dams to meet that higher factor of safety. At the present time all the high hazard dams are in really good condition. They are being inspected quarterly, but they do require some care into the future. What is being proposed here is to have another long term ongoing program where smaller repairs are done periodically (every two years). Three dams are being proposed for 2030, those dams have not been identified yet.

Page 95 – Beaver Brook Flood Mitigation – Mr. Blomquist stated in December staff met with the Army Corps of Engineers to discuss a grant opportunity (50/50) match to conduct a hydrology study of Beaver Brook. The scope of this work should be coming forward in short order. This study will provide information about potential projects that the City can be looking at along Beaver Brook to help with the funding issue. These projects could be things like creating more storage in the cemetery area, looking at other areas along the brook where temporary storage can be created during high demand periods. He noted the funding in FY 26 and 27 is preliminary. When this work is completed, there are grants through either the hazard mitigation programs or other programs through FEMA where the City might be able to procure some funding

Page 96 - Storm Water Resiliency Program - This is something of a rebranding project, it used to be called the flood management project. The program allows the City to do capacity upgrades and improvements on the drainage system. Because the downtown project was pushed back in the program, the Island Street work has been brought forward in FY24. This summer work with the drainage line that runs across the Pat Russell Park and up Carpenter Street will be done.

Page 98 - Storm Water Channel Maintenance Program – Beginning in FY25 more maintenance on particular areas, many are mandated.

Page 99 - Storm Water Spot Repair Program – This program is to handle those things the highway department might find as they are doing their cleaning program such as a sinkhole in the roadway that needs to be fixed. Things that need to be addressed right away.

Page 100 - Storm Water System Analysis - This program is for a consultant to complete early phase planning, generating orders of magnitude, cost estimates and for example figuring out how big of a pipe to go in the ground in order to alleviate the flooding concerns in a particular neighborhood. In the last couple of years this program has been under spent hence no funding is being requested in FY 23, 24 or 25.

Councilor Chadbourne referred to Page 98 and noted the City has issues with invasive species all over the City and asked if there was a division of labor between the two departments where in the case of the cemetery perhaps Parks and Rec would handle this work or whether all the work would fall under Public Works. Mr. Blomquist agreed and added if invasive species are noticed in Beaver Brook which goes through the cemetery, it becomes more of a joint effort, since Public Works is responsible for the maintenance of the waterway, but they have the actual physical grounds of the cemetery.

Page 101 - Storm Water Main Lining Program – Mr. Lussier stated this is an item that has been in the CIP for a few years. FY23 will begin this project, specifically with lining the Woodbury Street storm water line. He indicated it is a very cost effective, you are not digging up the street and this has little impact to the neighborhood. He felt much of the City’s drainage pipes are not going to be candidates for lining because they are just too far gone. But to the extent they are able to, it will be a successful program to fix some of those corrugated metal pipes.

Page 103 - Salt Shed Replacement – This work is underway as part of prior CIP programs. Some of the geotechnical evaluations have been done, the designs have been prepared and staff is looking forward to building the shed this summer. The shed will be put into service for the upcoming snow season. The site is located at 580 Main Street and will move about 1,000 feet east from where it is currently located.

Sewer Fund:

Asst. Public Works Director and Operations Manager Treatment Facilities, Aaron Costa addressed the committee again. Mr. Costa indicated that the City has approximately 95 miles of sewer pipe. There are five wastewater pumping stations and one wastewater treatment plant. The plant was constructed in 1985 and is designed to treat 6 million gallons a day with peak flows up to 21 million.

Mr. Costa stated some of the master plan goals that fall into the sewer fund are for a quality built environment. He added the majority of the work they do is maintaining the infrastructure and when improvements and made they try to take the most energy efficient improvements as possible, especially when older equipment is replaced. The City has invested about \$12 million in the treatment facility and the Martell Court pump station over the past decade, but continued funding is required to maintain this infrastructure.

Page 143 - Sewer Improvement Program –Mr. Lussier stated as with the storm drains there is the stormwater resiliency program, the sewer has the sewer improvements program. Mr. Lussier stated these are the larger complex multi fund projects and with some of these larger projects, the driver is storm water. He used the Roxbury Street project from last summer as an example where

it started as a need to upgrade the storm drain from a 36 inch pipe to a 60 inch pipe – the water and sewer portion were done at the same time.

Mr. Lussier stated the Island Street project has been moved forward because downtown infrastructure is expected later than first planned. With Church Street the sequencing has changed a bit, but otherwise this program will continue replacing pipes.

Chair Powers asked when these types of projects are approached and there are private utilities in the ground, how does the City address that. Mr. Lussier stated staff enjoys a good working relationship with utility vendors. Staff meets with them at least once a year to coordinate upcoming City projects. Information in this book is also shared with them years in advance. During the February/March timeframe staff will meet with them again and talk very specifically about schedules for the upcoming season and the different construction projects being planned for the summer.

Page 145 - Sewer Main Lining Program – This is a very cost effective program and is used where the sewer mains in a particular area have adequate capacity, they are right sized, and are in relatively good condition but begin to show some signs of age. Most of these are clay pipes 100 years plus in age. With these pipes joints start getting infiltration and roots start coming through. By lining them you can get perhaps another 100 years out of them

Page 146 - Sewer Manhole Lining Program – This is a new program and will start in FY23. Just like the sewer mains, the City gets a lot of mileage out of them but they start to show their age. This program is aimed at sewer manholes that are constructed with brick. The bricks hold up well but the mortar that that is used to put those bricks together tends to get degraded by the highly acidic environment that occurs in the sewer system. While it is in good condition, addressing the issue and lining it with an epoxy coating will give it a longer life. It is a known fact that some of those brick manholes could not be fixed and the cost for that is realized in the budget (20% would need to be replaced).

Page 147 - Lower Winchester Street Reconstruct - Sewer Infrastructure Support – With the DOT funded projects, 80% is funded by the State, but what is not funded is upgrades or replacements of utilities. This program allows the City to do any maintenance work and replacements of the sewer system as part of the Lower Winchester Street project.

Councilor Madison asked how far down Lower Winchester does the sewer extend. Mr. Lussier stated he believes it goes up to Market Basket.

Page 148 – WWTP Access Road Repaving – This plant was built in 1985, the road is original to the plant and the road is showing some age. Repaving is scheduled for FY24 and funding is coming out of the sewer fund and the sewer fund is going to pay from the gate at the airport terminal to the plant. Chair Powers clarified the City is responsible for that road. Mr. Lussier agreed and added it is referred to as the Airport Road, but it is essentially a driveway a couple miles long.

Page 149 – WWTP Sludge Dryer Project – Mr. Costa explained the clean water is sent back to the river and then there is the waste product which is we call bio solids or dewatered sludge. This material currently gets hauled away to a landfill in Rochester, New Hampshire. The City has a five year contract with Waste Management. The current contract which terminated in October was \$85 a ton, under the new contract the price will be \$121 a ton.

Mr. Costa noted the City produces about 4,500 tons of bio solids every year, which is an improvement. Pre 2016 when the City had the original dewatering equipment, the City produced anywhere from 6,000 to 6,500 tons. With the new equipment we get a much drier product. Mr. Costa stated, however, if the City continues down this road by calendar year 2025, the cost per ton is going to go up to around \$138 which will cost the City roughly \$625,000 in the operating budget just for hauling and disposal of that material.

This project is a feasibility study funded in FY22 for \$100,000, design in FY25 and construction in FY28. Mr. Costa explained this project funds a sledge dryer which is basically going to dry this material to 95% solids. Therefore, we would reduce our overall tonnage around 1,500 tons a year. 1500 tons at \$138 = \$208,000 a year which could potentially have an impact of savings around \$400,000.

Councilor Madison commended staff for being proactive and dealing with the issues related to sludge and PFast. He added he is aware of surrounding states are starting to pass legislation prohibiting the use of biosolids as fertilizer and the spreading of biosolids on land and he felt this was going to be a growing issue for the City and is glad to see it included in the CIP.

Councilor Remy asked whether there is a change there could be rate reduction if there was a Class A. Mr. Costa felt this technology could be a Class A which means a certain pathogenic reduction but that certainly wouldn't destroy the PFast which requires extremely hot temperatures. Mr. Costa added the City at that time would go out for bid; this is going to change the overall product classification to see who is interested in in this product. He stressed the overall goal for this project is reduction in tonnage.

The Manager added, the City is in the process of installing solar for the wastewater treatment plant and if the City uses more energy behind the meter that is actually an additional benefit for the City.

Page 150 - Sledge Pump Replacement Project – There are numerous pumps at the wastewater treatment plant, these are six original pumps that are used to pump primary sludge, scum, and RV discharge waste around different parts of the facility. The City has received almost 40 years of life out of them and staff does a great job and maintaining these pumps, but they are at the end of their useful life and it is time to replace them. FY22 funds the replacement of three of those pumps. FY 23 funds the replacement of the other three, but the City plans on getting this out as one construction project and replace them all at the same time.

Utilities Manager Christian Tarr stated that his staff is made of up himself and three others that maintain all this equipment. He indicated they have a very regimental preventative maintenance plan along with the ability to make repairs. However, after 40 years of life expectancy some of

this equipment is reaching its serviceable life. The difficulty is coming - not from being able to maintain the equipment - but being able to find the materials from manufacturers to continue to maintain the equipment.

Page 151 - WWTP Service Water System Upgrade Project – He indicated the City has good quality water that goes into the Ashuelot River, which is not potable water, but water that could be retained and utilized throughout the wastewater plant for certain criteria that doesn't require potable water. For example, cooling equipment on pumps, flushing down processes. This helps the City eliminate the use of drinking water. The current system is original to the plant dating back to 1985 and operates on a large 5,000 gallon tank that holds water and utilizes compressed air to pressurize the system. Mr. Tarr stated they are looking to replace this with a smaller skid system that would just be by maintained pressure while water is being used, through the use of smaller pumps with variable frequency drives. This will limit the amount of energy consumed and only ramp up or go to full speed when demand of water is used.

Page 152 - WWTP Service Water System Upgrade Project - Mr. Tarr stated the City last year received a record gallons of septic which was 7 million gallons, which is revenue for the City. How this is conveyed is through air operated diaphragm pumps. One of the most energy consuming aspects we have in any area is compressed air. The plant currently operates with two, again original pieces of equipment which are Positive Displacement Air Compressors. The department is looking at replacing this with a Rotary Screw Compressor System. This system is more efficient and will provide for compressed air only when it is a necessity or when it is used in operation.

Page 153 - Grit Chamber Duct Insulation – This again is equipment that is original to the plant. The insulation does two things; keeps the heating system efficient by retaining the heat, but it also protects all of the metal workings within that area.

Page 154 - WWTP HVAC Replacement Project – This system that was put in place around 2004. Average life expectancy for light commercial is 15 to 25 years. The wastewater plant is by no means considered light commercial; the environment is caustic to most metal materials, the leverage of hydrogen sulfide are quite sufficient, and it breaks down things quicker than normal. When the system was installed it didn't necessarily follow the standards for operation. It needs to meet a certain amount of air quality or level of air quality which is based off the cubic feet of occupied space. Currently, it operates on a fully occupied state. Which means it runs as if the facility is occupied constantly.

The newer system would allow us to run with the variable frequency drive technologies and different programming to operate the system at full efficiency when it is occupied, but cut down the standards or the amount of air turnover when the facility is not occupied. Again, creating a significant amount of energy saving source.

Page 155 - Tank Repair Program - This is a new multi-year program that was put in this year. Mr. Costa called the committee's attention to the picture in the book of a primary clarifier (two in all). They are 95 feet in diameter and approximately 14 feet deep. The last time they were coated was 2000. They are metal pieces of infrastructure inside of a concrete tank and because of

the aggressive nature of wastewater those structures should be coated. One structure per year is being funded for coating. There are also two secondary clarifiers and an aeration basin which has never been coated and needs some attention and critical to maintain these pieces of infrastructure.

Page 156 - WWTP Building Renovation and Demolition Program – Mr. Tarr noted this work will be done in three phases. First in FY24 – he referred to the Chip Building, which serves as a cold storage for chemical usage, excess equipment, vehicles in the winter. To maintain the integrity of that asset, they are looking to do media blasting and an epoxy coating on the structural steel to make sure that it continues to be a value to the department.

In FY26, they would look at installing a new building. The wastewater facility used to utilize chlorine for its disinfection process. When that was in place there was a large foundation like structure, measuring 21' x 21'. The foundation right now has no useful purpose, but could be utilized as a storage building for miscellaneous equipment that can put in cold storage but still need to keep out of the elements.

Some years ago the City developed a composting program that didn't continue to be successful and that Out of Service Building was built and designed solely for that process. The exterior of the building is about 140 feet long and 10 feet wide. The interior of the building, just based off the thickness of the concrete walls measures about 130 feet long, and only five and a half to six feet on the interior. The worst part of that is there is only half a concrete floor, the rest is open channel and not usable for any type of storage. In FY28, the City would look to demolish that building and utilize that footprint in the future.

Page 157 - Martell Court Roof Replacement – Mr. Tarr stated Martel Court is currently undergoing an upgrade for its screening system and in the recent years had a major upgrade to the pumps and the electrical components. The building is original as is the roof; it is an old asphalt roof dating back to 1985 and is in need of replacement. It is currently sound, but staff is looking to replace that with a rubber membrane and EPDM material which will give a longer life to protect the assets that the City is investing into the building.

Page 158 - Laboratory Instrumentation and Equipment Replacement Program – Laboratory Manager Mary Lathe addressed the Committee next and stated the lab analyzes samples for drinking water, waste water and groundwater and utilizes a variety of sophisticated instrumentation wear out. The proposal is to replace items on an ongoing basis. The first instrument listed FY 26 is an Atomic Absorption Spectrometer which can analyze low levels of metals and because the City's permit has low levels for metals, it is important for the City to be able to analyze in house and get results quickly. The cost to replace this instrument would be replaced between the water and wastewater funds.

Water Fund:

Mr. Costa stated the City owns and operates a water system. There are six water storage tanks, six booster stations (4 are dedicated to filling water storage tanks) and the other two are to provide pressure and some higher elevated areas that have low pressure. The City also has four groundwater wells and there are two corrosion control facilities that serve those groundwater

wells. There are also two surface water reservoirs and one water treatment facility that came online in 1993. The City has about 102 miles of water main and approximately 800 hydrants and hundreds of gate valves.

Page 170 - 3 MG Water Storage Tank Repair Project – Mr. Costa stated this tank is located behind Robin Hood Park and was constructed in 1962 – it is welded steel. Welded steel needs to also be coated and the last time this particular tank was coated was the late 90s. The work will entail blasting off the existing coating inside and out and applying a new coating, as well as a mixing system for water quality purposes. A detailed evaluation of this tank done in FY18 by consultant who recommended the tank is in good structural condition and it would be okay to continue with repairs and refurbishment. This is a costly project because it is a lot of labor to do this work. The hope is the new coating system will last 20-25 years.

Councilor Chadbourne asked how this work is done – does the tank need to be emptied out. Mr. Costa answered in the affirmative and stated crew will access the tank through a portal on the side of the tank, bring in all the staging through the portal. The tank is then sandblasted and that material is taken out by hand, and then the coat applied. This work has to be done in warmer weather. It is a multi-month project and a lot of labor goes into it. Mr. Blomquist added the 300 gallon tank provides capacity for emergencies and also pressure within the City. The last time this work done in 1998 and during those time managing emergencies can get challenging.

Mr. Costs stated the City has invested a lot of money in its water storage tanks over the past few years. Work on Drummer Hill storage tank was just completed. The 400,000 gallon Black Brook tank was completely refurbished in 2018. He added taking care of these tanks will hopefully give the City quite a few more years of useful life. He added staff is just working on 1.5 million gallon tank which was constructed in 1924 which will get a new and impermeable membrane cap.

Page 171 - Chapman Road Water Storage Tank Repair Project -

This is a 200,000 gallon tank constructed in 1993. This project includes taking the tank offline and giving a new interior coating and some other safety functions (railings, cabling).

Page 172 - Water Distribution Program - Mr. Lussier stated just like the sewer improvements, the storm water resiliency is the third leg of that stool. It is usually done in combination with larger more complicated projects. FY24 is an example of a project that is being driven by the need for the water project. Today Island Street has a six inch water main that feeds it, which comes off the cross town transmission line which is a large 16 inch pipe that connects to the 3 million gallon tank. Because the water main that crosses the Ashuelot River at Island Street is out of service (it started leaking some years ago and had to be turned off) the section will be replaced with the Island Street Bridge, as part of the Winchester Street project, but the other end of that pipe on Island Street is a very old six inch cast iron universal pipe in relatively poor condition. As part of this project on Island Street in FY 24 the City is going to be replacing that pipe with a 12 inch pipe.

Page 174 - Water Main Cleaning and Lining Program - This project has been, in flux for the last few years. Originally it was a project to do cement lining in areas where there was water quality

concerns. The issues that exist now is not related to water quality, they are more related to water main breaks. Staff has been looking for technology that would address that structural defect; Similar to a process that was done with stormwater and wastewater, but designed specifically for pressure pipe situations and potable water use. In FY 23 this work will be done on Meadow Road which has been a source of a couple breaks in the last few years.

Page 175 - Lower Winchester Street Reconstruct - Water Infrastructure Support - Water fund contribution to that overall larger project which will be done as part of the DOT.

Page 176 - Water Utility Work – This is also a component of other projects. This is paying for the water utilities that are not covered by the State Aid bridge funding. For a bridge replacement when there is water infrastructure associated with it, this program allows the City to have funds to replace the water infrastructure as part of the bridge replacement. In FY 24 water mains that travel under the George Street bridge will be replaced and in FY28 will be replacement of the water mains associated with Beaver Street bridge, assuming Beaver Street moves forward at that time schedule.

Page 177 – Valve Replacement - Replacement of individual valves that are either failing, leak during operation or no longer able to operate properly. This program covers the cost of about 10 to 12 valves per year. The City has about 1500 valves altogether and most of them are 80 years or older.

Page 178 - Water Treatment Facility Pavement Replacement Project – This pavement was installed in 1993 – this is an asphalt pavement and this is as much life you can ask from an asphalt pavement.

Page 179 - Water Treatment Facility Filter Media and Under Drain Replacement – The City’s water is treated by filtering. Once filtered it is sent to the 3 million gallon tank and then to the distribution system. The plant has three filter units and there are different media layers in those filter units. Over time those filters need to be cleaned and back washed years of air scouring wears that media down and now is the time to replace them.

Page 180 - Emergency Generator Replacement Program – Mr. Tarr noted next to the 3 million gallon tank is the Chapman Road pump station. The driveway is extremely steep and hard to navigate in good weather. In poor weather or during an emergency, it would be nearly impossible to get. In FY24, the proposal is to install 100 KW generator on site, on its own pad and would be propane operated which would allow the Chapman Road Pump Station and the tank to be fully operable if there was ever a power loss.

FY24 will also be a cost to replace another original piece of equipment which dates back 1985 which is a 30 KW portable generator. The City still has three or four stations, including, including Chapman Road that do not have permanent standby power. Hence, there is equipment that needs to be trailered out to these stations and operated in an emergency. The current caterpillar generator’s radiator had to be sent out to be privately repaired because it cannot be replaced with original manufacturer equipment. This is a cost to replace a 1985 piece of equipment.

In 2028, staff is looking to replace the water treatment facility generator again. By that time this would have reached nearly its serviceable age.

Page 181 - Water Treatment Infrastructure Instrumentation Replacement Upgrade Program - Water treatment facility, groundwater wells, storage tank pump stations are all equipped with online monitoring instrumentation to measure different things. There is 24/7 monitoring of the different water quality parameters. This equipment usually has a usable life about 10 years. This program replaces an organic carbon analyzer in FY25, eight online turbidity analyzers in FY26, and an online alkalinity analyzer in FY27.

Page 182 - Water Valve and Actuator Replacement/Upgrade Program - These valves are solely for the operation of the water treatment facility. In FY13 a water facilities evaluation was completed and the consultant found that these units lose 50% of their energy that is applied beginning with the compressed air function of making that compressor to operate them. In FY26 and then in FY 28 and then moving forward to FY30, staff would look at replacing the pneumatic actuated valves with electronic actuated valves, that would be 120 volt electrically operated, eliminating the use of any compressed air to function, allowing for finer details ability for water quality.

Page 183 - Water Treatment Facility Blower Replacement Project – In the 2013 study it was determined these particular blowers needed replacement in 10 years. Some restorations have been done to the equipment. But at the point of this project they will be 32 years old. In this project also included is soft start equipment, which means the equipment will ramp up slowly to decrease rush energy costs and give longevity to the equipment.

Page 184 - Well Field Upgrade Program - The City has three different water supplies, two surface water reservoirs, and two different water supplies from groundwater. There is a groundwater well located on West Street at the Dusty Dog Farm area and three wells on Court Street behind Green Wagon Farm. The West Street and Court Street facilities were constructed in the 60s and 70s and their two corrosion control buildings were constructed in 1988. During the 2013 study, the consultant also performed an evaluation of these facilities and noted some deficiencies, including replacement of the chemical storage tanks. Chemical feed pump work, electrical work, panel boards would all need to be replaced as well some structural improvements. FY20 funded an in depth study and a detailed evaluation of these well facilities, as well as a Water Supply Master Plan. At the present time, the City is working with GZA and Underwood on that master plan. What is being looked at is either rehabilitating the current assets or funding construction of a new well facility.

Page 185 - Laboratory Instrumentation and Equipment Replacement Program
Ms. Lathe stated this would be the water side of the instrumentation - specialized instruments used for drinking water. In FY 25, the TTHM analyzer is due for replacement and in FY26, the Atomic Absorption Spectrometer. Chair Powers clarified all lab testing is centralized at the plant, Ms. Lathe answered in the affirmative.

In closing, Mr. Blomquist thanked the Finance Department staff for their help with the CIP as well as his staff for all their effort. He also extended his appreciation to the City Manager.

Chair Powers stated at the next meeting the Committee will be reviewing Community Development, Airport, Solid Waste, Fleet, and Parks, Recreation, Cemeteries and Facilities.

There being no further business, Chair Powers adjourned the meeting at 7:47 PM.

Respectfully submitted by,
Krishni Pahl, Minute Taker

Edits submitted by,
Terri M. Hood, Assistant City Clerk