

## **PUBLIC WORKS COMMISSION                      MEETING MINUTES**

Pursuant to the notice filed with the Town Clerk, a virtual public meeting of the Public Works Commission in accordance with the Commonwealth of Massachusetts Executive Order of March 12, 2020 suspending certain provisions of the Open Meeting Law was held at 4:00 p.m. on Wednesday, February 9, 2022. This meeting has been properly noticed with the Town Clerk and has been recorded.

### **PRESENT:**

#### *Commissioners:*

Jef Fassler (joined the meeting at 5 PM)  
David DeLong  
Andrea Solomon  
James Terry

#### *Absent:*

K.C. Winslow

#### *Staff:*

Alan H. Cathcart, Director  
Aaron I. Miklosko, MSFM, Highway and Grounds Superintendent  
Steve Dookran, Town Engineer  
Jeffrey A. Murawski, Water and Sewer Superintendent  
Nelson Mui, Management Analyst  
Bob Hill, Management Analyst  
Melissa Simoncini, Environmental Services Program Administrator  
Anna R. Trout, Administrative & Special Projects Coordinator

#### *Other:*

Robert Hilsinger (League of Women Voters Observer)  
Rod Riedel, 324 Main Street (Council on Aging Observer)  
Melissa Saalfield, 77 Concord Greene (Historical Commission)  
Nancy Nelson, 1695 Lowell Road

### **A: ACTION ITEMS**

**A-1 through A-3** - The meeting was convened at 4:00 PM. by Commissioner DeLong. Attendance roll call of Commissioners was made as follows: David DeLong, Aye, Andrea Solomon, Aye, and James Terry, Aye.

The meeting minutes from January 12, 2022 were approved with corrections provided by Commissioner Terry by roll call: David DeLong, Aye, Andrea Solomon, Aye, and James Terry, Aye.

Commissioner Solomon suggested that the next Public Works Commission meeting currently scheduled on March 9, be moved up so that comments can be provided relative to the Scenic Roads Bylaw at a Planning Board meeting scheduled on March 8. Commissioners will be contacted to set the date for the March Public Works Commission meeting.

Director Cathcart mentioned that the Solid Waste and Recycling Subscription Rate Hearing Meeting was moved from February to June.

## **D: DISCUSSION/ACTION ITEMS**

### **D-1: Enterprise Fund Capital Plan**

Director Cathcart reminded the Commission that general fund budgets (those supported by taxes) had been reviewed at previous meetings. The budget discussion today was to focus on CPW enterprise funds (Water/Sewer) – those supported by user fees or special service charges. Whereas planning decisions can be made independently of competing tax supported programs, the Water and Sewer budget preview can and has historically allowed for a ten year planning horizon and includes consideration of both capital and operating expenses which are balanced against revenue projections.

The program budgets are developed with consideration of regulatory compliance and customer service interests. These goals require understanding and anticipation of future regulatory and statutory requirements. Additional considerations include running well maintained and operated facilities and related infrastructure at reasonable and competitive rates through sound investments and planning. We also invest considerable resources towards the hiring, retaining and training of a professional workforce.

Current regulatory challenges that remain on our immediate radar relate to emerging contaminants such as Polyfluoroalkyl Substances (PFAS). Our water supplies have recently been tested for PFAS. While we have detected traces at all of our supplies, they are well below current drinking water standards and have not triggered a need for immediate/significant investment – at least not at this time. We also continue to invest in security and resiliency measures, also in keeping with evolving regulatory drivers. The revised lead and copper rule (LCRR) is also something we are preparing to address within the next few years.

Customer surveys indicate that a large majority of our water customers are “very satisfied” with the overall quality of water services. Overall system demand has remained fairly constant over the past five years with ongoing efforts made in the area of seasonal conservation. As shown in annual water consumption trend data, the water system demand fluctuates seasonally with an average of 1.5 million gallons per day. There was a notable drop in system demand during the summer of 2021, attributed to a mandatory water use

restriction imposed early in the summer followed by an abundance of rain mid-summer - which reduced the volume of outdoor watering.

Water supply is provided through our infrastructure which includes surface water, ground water, pumping stations, advanced treatment facilities, reservoirs, distribution mains and hydrants. Maintenance of wells is required along with pump and treatment facilities.

Last year a portion of the intake at Nagog Pond was replaced – identified as the deep section of the intake - with the balance of work to be completed this coming year. The cost was just over 2.5 million dollars for the work already done, with the remaining work projected to have a similar cost.

The water distribution system includes 135 miles of pipe of varying age and material. Water main replacement is generally scheduled and coordinated with the Engineering Division’s paving program. The current plan for water main replacement work has been targeted for the Butternut Circle neighborhood. Additional plans include ongoing replacement of aging and compromised hydrants at an estimated cost of \$7,500 to \$9,000 for each hydrant alone.

Integrated water resource planning represents another program of interest and includes balancing environmental impacts of drinking water, stormwater and waste water services. This planning effort is not yet a common practice in the industry, it is essential when looking at long-range impacts and considerations relating to system resiliency. The budget plan allows for an appropriate level of financial investment required to develop this important management framework.

Within the next five years, the Water Division will add new debt relating to the Nagog Pond Water Treatment Plant construction. Despite a very robust “reserve” fund balance, this new debt will result in a few years where “net income” will be negative. However, when projecting capital and operating expenses against user fee projections over the next ten years, the long-term financial plan for the Water Fund is healthy. In FY23 the proposed capital plan for the Water Fund totals \$3,062,500. This includes an allowance for Nagog Pond intake improvements, as well as misc. station structures and equipment, main replacement, reservoir improvements, meter reading upgrade, source protection and other miscellaneous equipment and improvements.

Commissioner Terry asked if there was any opinion about why some older water mains are lasting longer than newer ones. Director Cathcart explained that water main failure is dependent on a number of factors including manufacturing quality, installation conditions, soil/environmental factors, to name a few. Some of the older pipes in Concord have been refurbished (lined) to extend their respective service life.

Commissioner DeLong asked what the process is for keeping the water system funded. Director Cathcart explained that staff develops a budget plan, the Public Works Commission reviews these plans with consideration to policy implications and rate setting factors – which falls under their direct authority. This is why the Commission is informed of the budget plan, before it gets vetted by the Town Manager and Finance Committee. Ultimately, Town meeting vote is required to authorize the Town Manager to expend dedicated funds collected through user fees and special service charges. Again, noting that the Enterprise budgets are not funded through the tax base.

Nancy Nelson, 1695 Lowell Road, commended the Director for this detailed explanation of the complexity of the water process.

Rod Riedel, 324 Main Street (Council on Aging Observer), asked about the source of the funds that will provide the debt, and if this is outside the scope of the 2 ½ budget. Director Cathcart explained that no new debt is being requested at the upcoming Town Meeting. Should the plan for Nagog Pond develop in accordance with the existing plan, the Director will work with the Town Manager's office on determining how the debt schedule would be managed with consideration of all other Town needs.

Director Cathcart went on to provide an overview of sewer system expenditures. Like the water fund, these expenditures are funded through user fees and special service fees and are used to maintain and improve the sewer system. The sewer improvement fund is a separate dedicated fund (set up through Town Meeting) that allows for money to be set aside for future expense to increase capacity. One third of the Town is on the municipal sewer system. The sewer system is made up of treatment facilities, pump stations, lift stations, collector mains and manholes. A lot of time and energy is focused on maintaining this infrastructure including inspections and improvements.

The wastewater treatment facility may be fairly small but is complex. Director Cathcart presented a variety of examples of capital improvement projects to demonstrate the scale and complexity of investments including chemical feed system improvements, clarifier rehabilitation efforts and large pump system replacements. One particularly notable capital investment which remains on the five-year planning horizon relates to the interest in increasing the capacity of the existing wastewater treatment plant. Concord continues to be constrained by operating conditions detailed within its Federal National Pollutant Discharge Elimination System (NPDES) permit. This permit regulates the quality and capacity of flow that can be put through this facility. A request has been made on behalf of the Town to increase the capacity of this facility by 10%. EPA has failed to acknowledge this request – to date.

The projected FY23 operating expense for the municipal wastewater program is just over three million dollars. This is comprised of depreciation, treatment plant expenses, pumping and collection system and general fund services. The

operating projection over ten years does not show an appreciable drop in net income in FY27-30 and there are no capital projects that would suggest debt will need to be incurred, at this point. There is a healthy balance in the reserve fund, which will cover all anticipated capital expenses. It was noted that the wastewater treatment plant was refurbished back in 2007. As equipment and related infrastructure tends to have a useful life of 10-25 years, we are beginning to plan for replacement expenses that may be significant. Again, based on the existing health of the fund, this will likely be managed without requiring new debt.

Proposed FY23 capital expenditures in wastewater total \$1,397,700. This will allow for needed repair and replacement of station structures and equipment, inflow/infiltration & sewer lateral work, meter reading system upgrade, station structures & plant equipment, wastewater treatment plant improvements and vehicle & miscellaneous equipment replacement.

Director Cathcart recognized Nelson Mui, Management Analyst, Bob Hill, Management Analyst and Jeff Murawski, Water and Sewer Superintendent for their contributions putting together this capital plan.

Commissioner Terry expressed appreciation for this comprehensive report and looks forward to having this kind of information every year.

## **D-2: Director's Report**

Director Cathcart recognized the retirement of Paul Reinhardt, Management Analyst who worked for Concord Public Works for over 25 years; Ken Sherman, Water/Sewer System Maintainer having contributed as a valued member of Concord Public Works for over 14 years; and Alexandra Wahlstrom, Senior Environmental and Regulatory Coordinator who had served as a valued member of Concord Public Works for over ten years.

As a result of some personnel vacancies and infusion of several new personnel, Melissa Simoncini has been asked to step-in and provide regulatory and water quality compliance support to the Water/Sewer Division. Her direct responsibilities for the solid waste and recycling programs have been absorbed by the Highway & Grounds Division, under the leadership of Aaron Miklosko with support from Erik Shaw and Justine St. John.

It was noted that over the past twenty years, services relating to solid waste and recycling has been expanding. Regrettably, these services have expanded to the point where the impact on the Keyes Road campus has become problematic. One particular challenging management issue relates to the increased demand for cardboard storage and recycling. Staff has been charged to evaluate alternative management opportunities with a goal of improving Keyes Road campus operations (notably to improve safety and site security issues). There is also a need for improved storage/housing of valuable equipment.

- **Highway, Grounds and Cemetery (Presented by Aaron Miklosko, Highway and Grounds Superintendent) –**
  - **Compost Site** – The site is closed for the season for brush and yard waste, but has been open for Christmas Tree Collection, Styrofoam and holiday lights for two weekends after the holidays. Highway and Grounds crew have chipped the Christmas trees on site. The compost site is also used for snow that is hauled from Concord’s centers. An additional snow dump is in West Concord.
  - **Snow Removal** – There have been some significant snow events requiring roadway treatment, snow plowing and one snow removal operation. A total of 28.5” of snow has been recorded in Concord thus far this season.
  - **Cemetery Operations** – Interments are performed during the winter season, which requires thawing the ground and preparation of grave lots.
  
- **Engineering (Presented by Steve Dookran, Town Engineer) –**
  - **Planning and Design** – Engineering is busy focusing on planning and design work, while being short staffed without one engineer, while recruitment takes place.
  - **School Zone Signage** – Old Marlboro Road – This project began in the fall, which has now been completed with School Zone Signs and Speed Signs now installed. Funding was provided by a Shared Street Grant.
  - **Commonwealth Ave** – Beharrell Street – Improvements are planned to begin in the spring. Crosswalks and sidewalks will be improved in this area. There is also a crosswalk that will be added on Church Street.
  - **Roads Program** – Four contracts are being put together for bid before spring.
  - **Communication** – Director Cathcart pointed out that Mr. Dookran and his staff have been doing a good job communicating information about the roads program, including providing a presentation to the League of Women Voters.
  
- **Water/Sewer (Presented by Jeffrey Murawski, Water/Sewer Superintendent)-**
  - **White Pond Well Redevelopment** – Repairs need to be performed to increase well capacity with scheduled well redevelopments.
  - **Hubbard Street Sewer Repair** – In December a partial collapse of the sewer liner occurred necessitating an emergency repair. Additional excavation and repair, including paving was also performed.

### **D-3: Commissioner's Comments**

Commissioner DeLong commented on the photos of Styrofoam being left at the Keyes Road site and how a change of behavior is needed to alleviate this problem.

Commissioner Terry asked about the failure of EPA to respond to the request for additional wastewater capacity. Director Cathcart explained that EPA has had challenges getting permits processed. They recently announced a program for a general permit that will require careful review and a possible response. A draft permit was just received yesterday, with ninety days to respond. He expressed that he hopes to advance this issue with the PWC and Select Board support.

### **D-4: Public Comments**

Robert Hilsinger (League of Women Voters Observer), asked if the issue of wastewater capacity might be addressed in the proposed zoning dimensional requirements at Thoreau Street. Director Cathcart responded that there has been a philosophy of not allowing unintended connections to the sewer system outside of the comprehensive wastewater master plan. There is an allowance with the plan to have some infill. If we are to expand the infill, it is unlikely that we will be able to serve commitments or identify needs beyond the existing service area. We have a four phased plan. The first phase was completed, but given the economy and demand no additional extensions have occurred, but there has been some infill with two unit housing, supported at Town Meeting. If our permit gives us a 1.2 million gallon per day average limit and the Town exceeds it, the next step is to talk to DEP and EPA for a consent order. We have always tried to manage our wastewater in a proactive manner, to avoid a compliance excursion. We are trying to make the case ahead of time, but not getting approval. There is also a plan for a potential discharge site at the Grace Property in West Concord. We hope to get a 10% increase on the permit with community interest.

Commissioner DeLong asked if the sewer capacity limitation would prevent the Thoreau District plan from happening. Director Cathcart explained that we have maintained compliance with a permit for close to twenty years knowing we are close to that capacity. Through use of I/I we have tightened up the system. If the Thoreau District is to be realized, the amount of capacity would have to be determined and prioritized over other expansion requests.

Commissioner Terry **MOVED** to adjourn the meeting at 5:35 PM, Commissioner DeLong **SECONDED**, and it was **VOTED** by roll call vote as follows: David DeLong, Aye, Andrea Solomon, Aye, James Terry, Aye, and Jef Fasser, Aye.

**ADJOURNED: 5:35 PM**

Respectfully submitted,

Approved,

Anna R. Trout  
Administrative & Special Projects Coordinator  
Concord Public Works

Jef Fasser  
Public Works Commission