

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, March 10, 2021. This meeting has been properly noticed with the Town Clerk and has been recorded.

PRESENT:

Commissioners:

James Terry
Andrew Boardman
David DeLong
Jef Fasser
K.C. Winslow

Staff:

Alan H. Cathcart, Director
Aaron I. Miklosko, MSFM, Highway and Grounds Superintendent
Steve Dookran, Town Engineer
Stephane Cherduville, Public Works Engineer
John Rogers, Water & Sewer Superintendent
Bob Hill, Management Analyst
Paul Reinhardt, Management Analyst
Melissa Simoncini, Environmental Services Program Administrator
Anna R. Trout, Administrative & Special Projects Coordinator

Other:

Stephen Crane (Town Manager)
Terri Ackerman (Select Board Observer)
Robert Hilsinger (League of Women Voters Observer)
Phillip Swain (Finance Committee Observer)
Rod Riedel, 324 Main Street (Council on Aging Observer)
John Althouse, 645 Lexington Road
Karlen Reed, 83 Whit's End Road

A: ACTION ITEMS

A-1 through A-3 - The meeting was convened at 4:00 PM. by Commissioner Terry. Attendance roll call of commissioners was made as follows: James Terry, Aye, Andrew Boardman, Aye, K.C. Winslow, Aye, David DeLong, Aye and Jef Fasser, Aye.

The meeting minutes from February 10, 2021 were approved by roll call: James Terry, Aye, Andrew Boardman, Aye, David DeLong, Aye, Jef Fasser, Aye and K.C. Winslow, Aye.

A review of the calendar including future proposed meeting dates occurred. The next meeting is on April 14, which will include the Roads Program Public Meeting. On May 12, the Water/Sewer Rate Public Hearing will be held along with Town Meeting Preparation.

D: DISCUSSION/ACTION ITEMS

D-1: Roads Program Briefing

Director Cathcart introduced Stephane Cherduville, Public Works Engineer, who provided a presentation on the Roads Program for 2020/2021.

Mr. Cherduville explained that the goal is to repair and maintain the Town's 108 mile roadway network consisting of local, collector and arterial roads at a high condition level. Roadway projects are planned and coordinated with utility work such as; CMLP, CPW Water and Sewer, National Grid, etc. When applicable, implementation of drainage and safety improvements along with sidewalk ramps and street signs are included.

A condition survey and evaluation of all of Concord's roads was performed in 2018 by StreetScan to determine the road networks Pavement Condition Index (PCI). The average PCI at that time was 78, on a scale of 1 – 100, with 100 being the best condition. After the PCI is performed, a visual inspection is done to determine the method of treatment needed. If oxidation and raveling is at a 75% or more level of aggregate loss, Cape Seal treatment is required. If rutting is present at over 3/4 of an inch, Micro Surfacing is needed. Full depth reclamation is required when there is fatigue cracking or longitudinal cracks higher than 3/4 of an inch.

A Road Deterioration Curve is completed to display the PCI, which indicates what type of treatment may be needed. It is important to perform maintenance to increase the life of the road early on, rather than waiting until it has significantly deteriorated, at which point more costly repairs are necessary. A five year plan was put together in 2019. As a result of COVID-19, the 2020 roads program was delayed. This coming season will cover the 2020 and 2021 roads program. Some of the roads originally planned for work in 2021, unfortunately will not be completed due to budget constraints and that work will be pushed off to future years.

Phase I of the program to be performed by Newport Construction, includes Warner Street, Park Lane, Lewis Road, Bedford Court and Partridge Lane. All these roads will receive a full reclaim, except for Partridge Lane, which will receive a mill and fill treatment. Phase II will include 2.3 miles of roadway repairs with a combination of reclamation and mill and overlay treatments in the Prescott Neighborhood. The Prescott neighborhood includes Prescott Road, Cranefield Road, Arrowhead Road, Peter Spring Road and Minuteman Drive.

Phase II will also include the Hubbard Street and Stow Street parking lot reconstruction. Additional construction will include mill and fill repairs on arterials roads and 5-6 miles of crack seal Town wide for road preservation.

Funding for the program will be received from the FY21 Debt Authorization, FY 17-20 encumbrances, State Aid, Chapter 90, Drainage and Sidewalk Accounts.

Moving forward we feel it would be best to have the Roads Program briefing and public hearing in the fall, so that feedback can be incorporated into the design before the program goes out to bid in the winter.

Communication to residents with details of upcoming road reparations are made by neighborhood flyers and the Town's website.

The 2020-2021 Roads Program engineering work was done in house by staff. The Peter Spring Neighborhood engineering work was completed by an outside source.

Director Cathcart and Town Engineer, Steve Dookran explained that Concord uses the technology provided through StreetScan to determine which roads are in most critical need of attention versus determining priority based upon phone calls from residents. Mr. Dookran also explained that more stringent guidelines for the quality of pavement materials and work performance by contractors will be initiated.

D-2: Water System Overview

Director Cathcart went over the Water Division organization chart, and then went on to explain the sources of Concord's water. Key points made include Concord is not part of a larger intercommunity water supply system and we rely on local sources of supply. Concord's original source of supply was from Sandy Pond in Lincoln. Over the years, as system demands increased we expanded our supply to include six groundwater wells and one surface water source, which is Nagog Pond (rights to Sandy Pond were transferred to Lincoln in the 1970's). There are two covered storage reservoirs, one located on Annursnac Hill and the other located on Pine Hill in Lincoln. These reservoirs provide a total storage capacity of 7.5 million gallons. Brewster well site, purchased by the Water Division in the early 2000's, located off of Ball's Hill Road, is available for future development when needed.

The infrastructure that carries water from each source throughout the community are large diameter pipes called water mains. Some of Concord's water pipes are over a hundred years old. The anticipated life cycle of water mains are generally 75 – 125 years. This infrastructure is important to maintain and replace as it ages, but it is expensive to do so. Other important assets which make up the water system include seven pumping stations, two advanced water

treatment facilities, 134 miles of distribution mains and 1,328 fire hydrants. The present worth of all this infrastructure is 23.9 million dollars.

Considerable resources are invested into the inspection, maintenance and replacement of infrastructure. This includes the operation of valves used to control the flow of water.

Water quality is regularly monitored with consideration of customer satisfaction with regard to visual/aesthetic point of view (flushing to keep water clear) as well as regulatory compliance. The Safe Drinking Water Act is a Federal Act which establishes standards for drinking water quality. Concord's water is tested at each source for over 130 compounds every year. As water quality needs and interests evolve over time, the U.S. EPA has established an Unregulated Contaminant Monitoring Rule to evaluate emerging contaminants that could pose previously unidentified health risks. EPA has recently identified a class of chemicals that were manufactured decades ago that are believed to pose significant health risks at very low levels. These chemicals, identified as "forever" chemicals are generally referred to as PFAS (Per- and Polyfluoroalkyl substances) and have been linked to common waterproofing materials, non-stick products used in the food industry, industrial fire retardants, etc. We have been tracking the development of regulations which will likely impact Concord.

All of our water pumping stations are equipped with very basic water conditioning and disinfection processes. The Deaconess Water station includes more advanced and complex treatment. All facilities are continuously monitored and controlled using advanced technology that allows these stations to run without having a full-time treatment operator present.

We have worked for many years to educate residents regarding sustainability and water saving methods. The average daily demand for water in Concord is approximately two million gallons. One of the more significant water conservation programs managed through the Water Division is the Water Use Restriction Bylaw, which provides for mechanical and operational controls on outdoor water use. Public works has also put programs in place to incentivize the reduction of indoor water use, providing rebates for low flow toilets and clothes washers and assisting with water saving showerheads and faucets. The water system capacity is regulated through MassDEP's Water Management Act. Within the past few years, MassDEP has started to impose water use restrictions based upon regional drought conditions using stream flow data as a primary "trigger". In keeping with this increasing regulatory trend, Concord has developed a comprehensive seasonal demand management water management plan. Over the years, in an attempt to improve customer awareness and compliance with this program, the one day per week outdoor watering allowance coincides with the day curbside collection occurs.

Over the past several years, a considerable amount of effort has gone into securing our rights and permitting improvements needed at Nagog Pond. .

Concord has been using this source since 1909. Concord had taken steps to preserve its right to use this when it submitted a Water Management Act registration request back in the 1980's. In 1996 an Ozone Facility was installed for enhanced disinfection. Over the past few years, we have been dealing with permitting and water rights issues and challenges while attempting to advance our needs with respect to water treatment. We are now actively involved in replacing a portion of the intake.

Over the next five years, we anticipate the water system will require major investments in the area of water treatment at Nagog Pond and potentially other sources impacted by emerging contaminants. We will also need to maintain a program for replacing or rehabilitating our water distribution system. The next phase of regional water management challenges are also being developed to deal with drought mitigation to protect and preserve the waters of the Commonwealth for drinking purposes and environmental protection. All of these aspects must be evaluated and managed to enhance reliability and sustainability principals.

Water quality also must be addressed with water management constraints that may impose limitations on different sources of supply. Over the next five years, we anticipate that water quality and regulatory developments will require we make significant investments into our water system, in the order of tens of millions of dollars.

To this end, Concord Public Works is also looking to develop a program where we begin to integrate drinking water, stormwater, and wastewater management needs and interests in a financially and environmentally responsible way – meeting the needs of ever evolving regulatory and community drivers.

Rod Riedel, 324 Main Street (Council on Aging Observer), commented that there is an increasing trend not to include blending as a quality standard.

D-3: Director's Report

- **Solid Waste and Recycling Program (Presented by Melissa Simoncini, Environmental Services Program Administrator) –**
 - **Compost Site** – The compost site will reopen for the season on Saturday, April 3. Saturday hours are 9 to 3 and Wednesday hours are 3 to 6.
 - **Curbside Renewal Notices** – Curbside invoices for April 1 through Sept. 30 have been delivered to subscribers.
 - **Upcoming Recycling Events:**
 - May 15 – DropOff
 - Tuesdays in April – Bulb, Battery & Styrofoam Dropoff
 - April 2 – Business Recycling

- **League of Women Voters Presentation** – On March 5th Melissa Simoncini gave a presentation regarding the history of Solid Waste Management in Concord, including opportunities for future waste reduction.
- **Engineering (Presented by Steve Dookran, Town Engineer) –**
 - **National Grid Construction** – Gas line upgrades continue on Main Street Bridge, Walden Street, Bedford Court, 50 Barnes Hill Road and Hubbard Street.
 - **Complete Streets Grant Project** – Plans for reconstruction of Hubbard Street are being finalized.
 - **Culvert Replacement Municipal Assistance Grant Program** – Engineering has selected the Walden Street culvert in its application for a grant.
- **Highway, Grounds and Cemetery (Presented by Aaron Miklosko, Highway and Grounds Superintendent) –**
 - **Winter Maintenance Update** – CPW crews have responded to eighteen winter weather events in the 2020/2021 winter season. Removal of snow from the two synthetic playing fields was accomplished to provide access for the football season.
 - **Compost Site** – Wood debris and brush collected from cleanup in Town is stored at the compost site. All of these materials were chipped and removed.
 - **New Equipment** – Four new vehicles were added to our fleet in February to allow Concord Public Works to meet its mission to keep Concord’s roads, sidewalks and parks in good condition.
- **Water/Sewer (Presented by John Rogers, Water/Sewer Superintendent)-**
 - **Lowell Road Pump Station** – Fiber reinforced grading has been installed along with electrical equipment.
 - **Assabet Pump Station** – Work on this facility is close to completion.
 - **Nagog Pond Intake** – Construction on this project will begin soon.
 - **Confined Space Training** – This is one of the important safety training courses being provided to employees.

D-4: Commissioner’s Comments

Winter Maintenance – If damage occurs during winter maintenance, staff reaches out to the resident to assist with repair of mailboxes. Residents are invited to contact the Highway Division should this mishap occur.

D-5: Public Comments

John Althouse, 645 Lexington Road, expressed concern about snowplow damage during snow removal, specifically related to sidewalks.

Commissioner Fasser **MOVED** to adjourn the meeting at 5:52 PM, Commissioner Winslow **SECONDED**, and it was **VOTED** by roll call vote as follows: James Terry, Aye, Andrew Boardman, Aye, David DeLong, Aye, Jef Fasser, Aye and KC Winslow, Aye.

ADJOURNED: 5:52 PM

Respectfully submitted,

Approved,

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

James Terry
Public Works Commission