

# Concord Public Works



## Public Works Commission

**Sven Weber, Chair**

**Jef Fasser, Vice Chair**

**David DeLong**

**Andrea Solomon**

**Gretchen Roorbach**

The Public Works Commission acts as the Town's Road, Water and Sewer Commissioners, and advises the Public Works Director in the Department's efforts to maintain and protect the Town's public works, utility, and solid waste/recycling services. The Commission also advises Town Meeting, the Town Manager, Planning Board and other Town officials and boards on matters that concern Town water and sewer service, drainage, and roads. The Commission is also responsible for setting policy and rate schedules for water, sewer, and solid waste services; for acting as an appeals board for right of way permits and water and sewer regulations and account matters; and for approving minimum standards for the final layout of Town roads.

The Public Works Commission also provides a forum for review of water, sewer and solid waste rates, the annual roads and sidewalk program, public street layout, and water and sewer extensions.

The ongoing activities of the Commission can be found throughout the year on the web at [www.concordma.gov](http://www.concordma.gov)

Highlights of the Commission's activities for 2024 included (in chronological order):

- > Reviewed and discussed the draft Scenic Roads regulations developed by the Planning Board and subsequently reviewed by Town Counsel, suggesting revisions on certain sections of the proposed regulations.
- > Received an overview of a long-standing Solid Waste & Recycling Program and discussed

possible changes required to address escalating costs and better align with community sustainability goals.

- > Reviewed draft 2025 Annual Town Meeting Articles. Discussed budgeting and allocation of resources identified by CPW within the final proposed draft of the FY25 Town Budget.
- > Received an overview and update of the Roads Program -2024 Pavement Improvement Plan.
- > Reviewed a draft Stormwater Enterprise Fund Bylaw. Discussed the Commission's interest in ensuring the establishment of a new stormwater utility would be done with appropriate consideration of equity and regulatory compliance.
- > Discussed Town Meeting Articles relevant to public works related matters including a Citizens Petition advocating for a new cell tower to be located at the former landfill, 755 Walden Street, and the existing Public Works site located on Keyes Road.
- > Conducted a Public Rate Hearing and approved FY25 Water & Sewer rates.
- > Elected Sven Weber as Chair and Jef Fasser as Vice Chair of the Public Works Commission.
- > Reviewed and discussed a citizen's "Petition for Temporary Repairs of Private Way" for roadway and stormwater improvements near the intersection of Dover & Darton Street.
- > Conducted a Public Rate Hearing and approved a new automated Solid Waste & Recycling curbside collection program including revised rates for implementation in the Fall of 2024.
- > Discussed Commissions FY25 Priorities including: the advancement of a Stormwater Utility, an alternative funding strategy for a 5-year Roads

Program (Tier III Funding), administration of the Temporary Roads Repair petition in the White Pond neighborhood, support in the implementation of a newly established Solid Waste & Recycling Program, advancement of drinking water treatment for PFAS mitigation, advocacy for an update to the Town's Comprehensive Wastewater Management Plan, and tracking and advocacy of Public Works facility needs with consideration of a broader town Facilities Study

- > Conducted a Public Discount Rate hearing and approved FY25 Solid Waste & Recycling curbside collection "discount rate" proposal.
- > Reviewed and discussed the preliminary development of a Stormwater Utility budget.
- > Conducted a review of a paperless billing initiative advanced by the Municipal Light Board.
- > Reviewed and developed a policy for addressing billing and repayment plans associated with water & sewer zero usage attributed to failed meter reading equipment.
- > Reviewed and discussed various rate structures for the new Stormwater Enterprise.
- > Reviewed and discussion FY26 General Fund-Draft Capital Plan (draft) with special consideration of funding gaps in roads and stormwater infrastructure.
- > Reviewed and discussed FY26 Water & Sewer Enterprise Fund Capital Budget (draft) with special consideration of PFAS Treatment needs, long-term Water Management needs, and Wastewater Treatment Plant rehabilitation and potential partnership with MCI.
- > Discussed the FY25 Roads Program Update/Preview.
  - Discussion Town Road Program and Funding.
  - Discussion on addressing safety concerns in the community.
  - Discussion Pavement Management Program Overview.
  - Reviewed and discussed seasonal Winter Maintenance Program.
  - Reviewed and discussed Stormwater utility credit policy in anticipation of a pending rate schedule hearing to be held prior to Town Meeting.
- > Discussed FY26 Town Meeting-CPW Draft Articles

The Public Works Commission and Concord Public Works continue to focus on their joint goal of promoting greater community involvement in Concord Public Works projects and programs. This deliberate strategy has resulted in greater responsiveness to all stakeholders and positive project outcomes. Examples

of these efforts include neighborhood on-site meetings for large infrastructure improvement projects, and outreach meetings for the Roads Program. In addition, the Director continues to review the activities of Concord Public Works through the monthly Director's report and the Public Works Commission sets aside time for public comment during each meeting.

## Cemetery Committee

**Geoffrey Walton, Chair**

**Gerard Soucy, Vice Chair**

**Brian Davidson, Member**

**Priscilla White Sturges, Member**

**Bridget Rodrigue, Member**

### *Overview*

Concord cemeteries are an important asset to the Town of Concord. Visitors, historians, and residents use them as a window to the past, pleasant places for solitude and contemplation, as well as a final resting place. Concord cemeteries, include Old Hill Burying Ground (1635), South Burying Ground (1697), and Sleepy Hollow (1855), and total about fifty-five acres. Concord Public Works staff manages the Town's cemeteries, facilitating burials and cemetery upkeep, while also conducting plot purchases and sales. Concord is fortunate to have such diligent public servants in the positions they devotedly fill.

The Cemetery Committee consists of five members responsible for oversight of the operation and maintenance of all Town-owned cemeteries, and for establishing policies and procedures for the cemeteries. In 2024, Bridget Rodrigue joined the Committee as its newest member; the Committee is currently staffed at its designated number of five members.

### *Cemetery Grounds Maintenance*

Concord Public Works Staff and the Cemetery Supervisor manage the operations and maintenance of the cemetery grounds throughout the year. In 2024 contracted landscape services provided lawn care, tree care and seasonal cleanups in Sleepy Hollow Cemetery and throughout the year to remove trees or large branches damaged by storms.

### *Cemetery Projects*

#### **Master Plan Update**

- > In 2024, the Committee undertook the review and revision of the Master Plan. The revised Master Plan is expected to be approved by the Committee in early 2025. Major revisions included a focus on demand projections for various types of burial spaces and lot inventory to ensure we meet our goal to ensure 60 years of

grave availability.

## **Columbarium**

- > The Columbarium Subcommittee formed in 2022 is scheduled to reconvene in early 2025 to review progress and next steps after identifying an area in the Knoll Section of Sleepy Hollow Cemetery that was ideal for a columbarium. The Town conducted an engineering review and issued a Request for Proposals (“RFP”) for design and construction of a columbarium. In 2023, the Columbarium Subcommittee met with the design team (per the RFP). It concluded that, before proceeding to a final design for the Columbarium, the entire area surrounding the proposed Columbarium site needed to be surveyed and assigned burial lots, paths, etc. The Subcommittee is scheduled to meet in early 2025 to review progress on the Knoll expansion and to establish a plan for the next steps in the Columbarium design phase.

## **Stone Structures Restoration & Preservation**

- > In 2024, Concord Public Works (CPW) received a Community Preservation Act (CPA) grant to restore and preserve stone walls and other stone structures in Concord’s three cemeteries. CPA funds (\$340,000) were awarded in early July. CPW has requested matching funds as part of the FY 26 Capital Request.

## **Metal Structures Repair**

- > In 2024, CPW was awarded a Community Preservation Act grant (\$22,500) to evaluate every metal structure in Concord’s three cemeteries, and to provide cost estimates for their restoration and repair.

## **Headstone Restoration**

- > In 2022, CPW initially identified thirty-three headstones for restoration and preservation. Sixteen headstones were restored in 2022; In 2023 additional headstones were identified that required restoration and preservation; these have been added to the list and will be restored as time and budget permit. Eleven headstones were restored in 2023. Eight headstones were restored in 2024. We will continue to document headstones identified as needing restoration and apply for further funding

## **Mausoleums**

- > In 2020, the Cemetery Committee approved the designation of six lots in Sleepy Hollow Cemetery for use as mausoleum sites. After the purchase of the first mausoleum lot in the Knoll section of Sleepy Hollow Cemetery in 2023, the Concord Cemetery Committee approved the design and construction of the mausoleum in Sleepy

Hollow Cemetery. Concord Public Works staff then worked with a lot owner, their contractor, and the Engineering Division’s engineering consultant to facilitate the construction. This is the first mausoleum constructed in Sleepy Hollow Cemetery since 1930. The development of mausoleum lots has been a goal of the Cemetery Committee and was articulated in its report to Envision Concord in 2017 and added as a goal in the Cemetery Committee’s 2018 Master Plan. Ground was broken on the first mausoleum in 2024.

## **Memorial Day/Veteran’s Day Ceremonies**

- > In May 2024, American flags were installed by volunteers at veterans’ graves in all cemeteries in preparation for Memorial Day. In November 2024, the flags were removed by Cemetery staff. They were prepared for retirement prior to the Veterans Day ceremony but were not retired during the ceremony due to a fire restriction. The Fire Department will retire the flags at a later date when it is safe to do so.

## **Women’s Anti-Slavery Dedication**

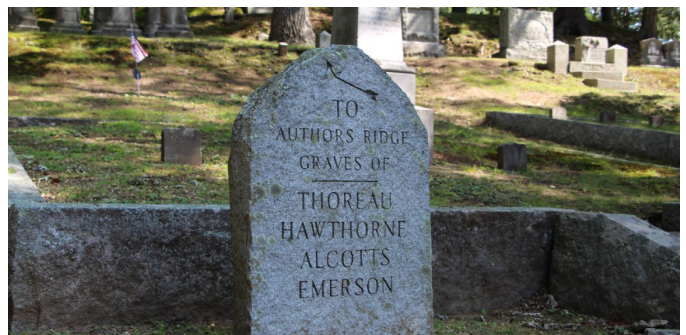
- > In October of 2024, Concord Public Works staff installed a gift of a flowering tree and raised brass plaque honoring Concord’s 19th Century Female Anti-Slavery Society donated by the Friends of Sleepy Hollow. The Society, unique in its composition of Black and White members, was founded on October 18th, 1837.

## *Statistics*

For 2024 there were 114 interments at Sleepy Hollow Cemetery 42 of these interments were Concord residents at the time of their death. 33 of the interments were full burials and 81 were cremations. Lot sales for the year totaled 87 with 33 of those being sold to eligible former residents.

## *Friends of Sleepy Hollow (FOSHC)*

The Committee is deeply grateful for the generous and thoughtful contributions the FOSHC have made and continues to make to Sleepy Hollow Cemetery. Andrea Solomon, who is a FOSHC member and former Cemetery Committee member, currently serves as the FOSHC liaison to the Committee.



## Administration

**Alan H. Cathcart**

### Director of Public Works

The Concord Public Works Team continues to focus on its principal mission to enhance the quality of life for those living, working or visiting the Town of Concord, and through sound management, communication, leadership, innovation, teamwork and vision provide dependable, high quality, responsive public works and utility services, consistent with community values and at reasonable costs to Concord's citizens, businesses, institutions and visitors for today and into the future.

### *Protecting the Town's Infrastructure/Providing Essential Services*

Concord Public Works is comprised of five Divisions. These include two staff Divisions, Administration and Engineering and three-line Divisions, Highway & Grounds (which include Recycling, Solid Waste Management and Cemetery Operations), the Water & Sewer Division and the Facilities Division. The Department is responsible for planning and managing a large segment of the Town's infrastructure.

These assets include Concord's municipal facilities, roads and roadsides; curbs and sidewalks; catch basins, storm drains, culverts and outfalls; traffic islands; guardrails; street signs and traffic signals; public shade trees and park trees; Town parks, common areas, playgrounds, ball fields, and recreation equipment; Town cemeteries; the Town's compost site and closed landfill, including the earth products and snow storage facility; the public water supply including its storage, pumping, and distribution systems; the Town's sewer collection, pumping, and treatment systems; and CPW buildings and equipment.

Delivering key services including water service; sewer service; recycling, curbside trash collection and disposal service; yard waste disposal; and winter snow and ice management along with other storm response and safety services is also a core responsibility of Concord Public Works.

### *CPW Team, Programs & Organization*

Concord Public Works is made up of 66 dedicated individuals with a wealth of experience. It is a team that is passionate about Concord, which takes great pride in their work, and fully understands their stewardship responsibilities. In 2024, the Department wished Jeff Koranda, Highway & Grounds Operations Manager, a happy retirement after having served the Department admirably for over 39 years. Taking advantage of internal staffing talent and strategic succession planning, we were equally pleased to be able to promote Tim Jones, former Park & Tree Crew Leader, into this important managerial role. We were also pleased to fill two critical staffing vacancies during

this year which includes the addition of Russell Karlstad as our new Facilities Manager, and Kimberly Sullivan as Environmental Health and Safety Manager.

### *Infrastructure Improvements and Initiatives*

Once again, the team at Concord Public Works is pleased to provide the Town of Concord with quality and responsive service. The Divisional Reports that follow summarize a series of initiatives and accomplishments in 2024.

## Environmental Health & Safety Division

### **Kimberly Sullivan, EHS Manager**

The Massachusetts Workplace Safety and Health Program (WSHP) was recognized as an OSHA State Plan in August 2022. WSHP enforces occupational safety and health regulations in public sector workplaces, including state, county, and municipal workplaces; public schools, colleges, universities, and quasi-government agencies, such as water districts and transportation. Federal OSHA continues to have jurisdiction over private sector. State Plans are OSHA-approved workplace safety and health programs operated by individual states or U.S. territories. There are currently 22 State plans covering both private sector and state and local government workers, and there are seven State plans covering only state and local governments. State plans are monitored by OSHA and must be at least as effective as OSHA in protecting workers and in preventing work-related injuries, illnesses, and deaths.

The Environmental Health and Safety Program has been developed within Concord Public Works (CPW) to support all divisions by increasing awareness and ensuring compliance with a variety of occupational health and safety and environmental compliance needs. Concord Public Works is one of the few Public Works Departments in the commonwealth to commit to hiring a full-time Environmental Health and Safety Manager, acknowledging the importance of this evolving demand on municipalities.

Notable Health & Safety programs managed within this area of responsibility include:

- > Tracking and administration of required training and licensing for public works employees
- > Personal Protective Equipment evaluations
- > Fire Prevention and Emergency Action Planning
- > Work Hazard Identification
- > Tool/equipment safety
- > Respiratory Protection

Environmental Protection programs managed within this area of responsibility include:

- > *DEP Stage 1 Vapor Recovery Program*: Stage I vapor recovery refers to the vapor control system

installed on gasoline storage tanks preventing gasoline vapors from being released to the environment during the transfer of gasoline from a gasoline delivery truck to gasoline storage tanks.

- > *The Emergency Planning and Community Right-to-Know Act (EPCRA) Tier II reporting program:* Requires the collection of information on hazardous chemicals stored at facilities. Facilities must keep Safety Data Sheets (SDSs) for these chemicals and submit either the SDSs or a list of hazardous chemicals to the State Emergency Response Commission (SERC), Local Emergency Planning Committee (LEPC), and local fire department each year. This information helps emergency responders and supports community emergency planning.
- > *Above Ground Storage inspections and Spill Prevention, Control and Countermeasure Regulations (SPCC):* The SPCC plan gives the regulators assurance the location with large quantity storage of fuel has a process in place to prevent spills from the above ground tank.

CPW continues to create a culture that prioritizes employee health and safety and empowers employees to make safe choices while performing work in town. The EHS Manager supports all divisions within CPW focusing on planning, communication and coordination with activities being performed throughout the town. Much of the focus of work performed in 2024 has been on training topics such as:

- > New employee environmental health and safety orientation
- > Monthly assigned EHS topics both classroom and online
- > First Aid CPR / AED/Stop the bleed
- > Chain Saw/Hand & power tools
- > Storm preparedness/seasonal safety topics

## Facilities Division

### Russell Karlstad, Facilities Manager

The Facilities Division provides safe, healthy, comfortable and productive environments for employees and residents of Concord. These include all Town buildings, public facing areas, offices, and more. As an integral element of Concord Public Works, we are able to leverage skills and resources from other divisions to support and assist in our goal to continue to provide the level of service required and expected in Concord.

Overall, the Facilities Division is responsible for maintaining, preserving, and improving 24 town owned buildings totaling over 600,000 square feet. This includes custodial services, routine building maintenance and

repairs, support in identifying and prioritizing capital projects while providing day-to-day project management for new construction and major renovations, space planning etc.

### Accomplishments

During this year we are pleased to report that we were able to provide a continual high level of service to all town departments. Facilities staff responded to and completed over 500 routine and preventative maintenance work orders, not counting the many non-work order calls that continue to be received. The Division has completed over 2,033 service calls since the work order system was implemented in 2019.

Newly instituted in 2024, an anonymous customer service portal has been developed to help gauge customer satisfaction for all work orders received and completed. We are proud to report that, to date we have received about a 10% participation in this survey with 100% positive feedback having been registered, a high mark grade for our staff indeed.

### Notable Renovations and Improvements for 2024

- > In house staff from both the facilities team as well as water/sewer personnel completed the demolition and replacement of approximately 70 feet of sewer line running from 133 rest rooms to the tie in point in the parking lot. Interior work was executed by facilities staff and consisted of removing concrete slabs at men's and women's rooms to facilitate new waste piping installation. Rough costs of approximately \$5,000 were expended to complete the work in-house vs estimated costs of \$50,000.00 if this work had been outsourced, illustrating the value of having a skilled trades group in-house.
- > Contracted with consultant to perform thermal imaging and visual inspection at 133 and 135 Keyes Road roof systems to determine condition and remediation needed to ensure a minimum of 5-10-year service life to coincide with possible new facilities being constructed in that time frame.
- > Evaluated exterior repairs and required updates to Bartlett Mills farmhouse located on Barrett's Mill Road. Anticipated work to include trim, window repair/replacement and painting.
- > A new high efficiency gas fired boiler, along with associated electric high efficiency pumps, were installed at in the Townhouse to replace the failed existing boiler and associated devices. Gas fuel was used due the technical challenges (power available and lack of space) to use electric boilers at this location per the town mandate. However, all equipment is of the highest efficiencies for the devices that are currently available.

- > Facilities staff assisted in the installation of a new deep water well at Barrett Mill Farm for irrigation purposes as prior attempts to install a shallow well proved to be unsuccessful. Town facilities staff provided all electrical and control needs to facilitate the installation of the well and well head that was provided under a grant obtained by others.
- > Staff created a functional private office space in second floor “former plotter room” at 133 Keyes by relocating the plotter to and recently cleared out and underused storage area. The new office was updated by relocating an existing door, blocking of a prior opening to an adjacent meeting room and repurposing available paint and furniture. The work was completed for minimal material costs.
- > Created a private staff space at 141 Keyes Road for needs as may occur for all employees such as medical, personal care needs etc. This was accomplished by relocating a shared printer and adding privacy shades and accessories to the old printer room. This was a low cost inhouse effort to meet a tight deadline.
- > Staff constructed solid roof structures at Knox Trail location to protect new ground mounted equipment from damage that may occur due to falling ice and snow from the high roof above.
- > Renovations to the existing storage building at Rideout Recreation Area include repurposing unused kitchen into proper storage for recreation team use, removing rotted roof structure, re-roofing the entire building, replacing failed siding and trim, fully repainting the exterior. Ongoing work will include repainting interior and new epoxy floors in the restrooms.
- > The replacement HVAC units for 133 Keyes Road were installed and made functional with minimal upset on operations thanks to proactive management of the third-party vendor and staff assistance. Air quality and temperature controls have improved greatly since the installation further supporting the mission.
- > Work has commenced to modify the conference room at the Public Service Building to help prepare for technology and information upgrades related to the upcoming Concord 250th as requested by the Emergency Operations Commander.
- > New lighting has been installed in the gift shop at the Visitor Center. Previous fixture were mini spots and provided no general lighting as well as being energy intensive. New fixtures are LED and provide uniform lighting levels improving staff and guest experience.
- > ESCO contract project was presented to the town and schools, and the decision was made to move forward and draft an RFP to be published by the end of the Calander year. Working with the Sustainability Director we are exploring the possibility of engaging with an “ESCO” (Energy Service Company) to provide overall turnkey energy and efficiency updates town wide.
- > Reviewing possible Green Community projects for the 2024 round grant cycle to further assist in reducing energy costs and GHG emissions town wide.

### *Maintenance*

Routine maintenance continues to be ongoing and consumes much of the staff’s hours and resources. Summer use of satellite restrooms require multiple daily visits to ensure the facilities are maintained at the expected levels, this often necessitates immediate response to issues as diverse as water leaks, lighting failures, vandalism/graffiti removal. Consistent vigilance to interior spaces require ongoing repair and repainting on a weekly if not daily basis. Custodial care of the facilities is also a constant effort with a focus on clean and sanitary facilities for all staff. New initiatives include more attention to building entrances and public spaces, a clean and tidy public space improves overall acceptance and perception of a well-run organization.

The diverse and multi-faceted maintenance crew continues to perform ongoing repair work in all town facilities including electrical, HVAC and plumbing systems, as well as carpentry, drywall repair, painting, roofing, window repair, office moves, space re-configuration and more. The department also coordinates all required building and safety inspection such as annual state elevator, boiler, and compressor inspections, fire alarm and sprinkler testing, and fire escapes.

Ongoing unseen maintenance includes cleaning of light fixtures, HVAC vents, switches, doors and frames, furniture and other various touch surfaces or “flats” as we describe them. Since the advent of COVID and the aftermath we spend a portion of every week disinfecting while cleaning to help maintain as healthy a space as possible.

Other maintenance services provided by facilities include winter weather responses at town buildings to assure safe conditions for staff and residents, assist the Town Clerk in the set up and tear down of multiple voting locations on all state and federal election events, as well as set up for various Town Boards, Committees, and other meetings.

## Highway & Grounds Division

**Aaron Miklosko**

### Highway & Grounds Superintendent

The Highway & Grounds Division of Concord Public Works maintains approximately 107 miles of public streets, along with the associated drainage systems consisting of approximately 62 miles of drain lines, 3,630 catch basins, and 216 culverts. In addition, the Division also maintains 82 acres of public parks and grounds which include 50 acres of active recreation space. The Highway & Grounds Division also maintains over 23,000 public shade trees and park trees, under the direction of the Town's Tree Warden.

### *Highway And Stormwater Maintenance*

CPW's Highway & Grounds Division completed routine maintenance and improvements to Concord's roads and sidewalks throughout the year.

Concord Public Works crews began preparations for the annual Patriots' Day Parade in early March by sweeping the streets and sidewalks, leveling stone dust sidewalks, and raking out the open space areas along this high-visibility route.

Street sign maintenance was prioritized by CPW via the Town's Traffic Management Group (TMG). This group includes representatives from Highway & Grounds, Engineering, and the Concord Police Department. CPW prioritized improvements affecting sightlines for signage and pedestrian safety.

During the spring season, CPW staff began roadside mowing, and prioritized trimming in areas where growing vegetation adversely impacts traffic sightlines and pedestrian safety.

The spring town-wide street sweeping program was completed by June 30th this past year. CPW continued to perform additional sweeping of arterial roads again in the fall to remove leaves and other debris from catch basin grates to prevent clogging in the stormwater

drainage system, prevent street flooding during heavy rain events and minimize nutrient contributions to local water ways. Staff also continued weekly sweeping in the denser business districts, which include Concord Center, Thoreau Depot, and West Concord.

Full-depth roadway patching, sidewalk reconstruction and drainage infrastructure repairs continued to be a priority for the Highway & Grounds Division during the construction season. In 2024, Concord Public Works procured an asphalt milling attachment for the skid steer. This equipment allows CPW crews to mill and pave large asphalt patches and provided a notable improvement to the roadway maintenance program.

Routine inspections were conducted as part of the catch basin cleaning program. CPW cleaned 321 catch basins in 2024, removing 283 cubic yards of material from the storm drain system. Ongoing monitoring and maintenance of other environmental infrastructure including bio-retention areas, detention basins, drain swales, culvert headwalls and outfalls were also completed in 2024.

### *Parks And Grounds Maintenance Program*

CPW's Highway & Grounds Division provided a high level of maintenance service at the Town's parks, athletic fields, traffic islands and outdoor facilities in 2024.

Maintenance activities were completed in an environmentally sensitive and sustainable manner. Regular maintenance including frequent mowing, ball field preparation and field painting was performed with a goal of providing high quality and consistent playing conditions for Concord's youth sports programs and other users within the community. The Bruce Freeman Rail Trail was monitored with season maintenance completed as necessary. The Highway & Grounds Division also continued to support public-private partnerships with local volunteer organizations, to maintain the hanging flower baskets and holiday greenery that lined the streets in West Concord, as well as the community gardens throughout Town.



### *Winter Maintenance Program*

Concord's winter maintenance program requires continuous monitoring of winter weather forecasts and formulating strategic plans for the deployment of staff and resources. CPW utilizes advanced weather and roadway technologies that allow for more accurate predictions of incoming weather, with real-time assessments of road conditions throughout Concord. This information results in a more informed, strategic, and economically prudent deployment of staff and resources. The winter maintenance program includes weather forecasting consulting by professional meteorologists and real-time imagery and temperature sensing equipment at targeted sites across Concord, both of which help provide data necessary to prepare and respond to winter events.

Winter maintenance activities include de-icing, snow plowing, sidewalk clearing, and snow removal from municipal lots and business districts. Concord's winter maintenance program has many components, including an anti-ice pretreatment approach in which CPW crews apply road salt or a brine solution to roadways in Concord. This environmentally sustainable practice prevents snow and ice buildup on the roadway when snow initially begins to fall and decreases the ability for the snow to bond to the roadway. This allows for a reduction in salt use before and after a weather event which saves time and money and reduces environmental impacts.

The 2023/2024 season's first snow response occurred on January 6th, 2024, and brought 10.6 inches of snow accumulation to the Town of Concord, requiring a full response of CPW staff and third-party plow contractors. During the months of January 2024 through April 2024, CPW crews responded to 9 snow and ice events, with total snow accumulations of just over 21 inches.

### *Cemetery Operations*

CPW's Cemetery Division provided interments year-round and maintains the Town's three cemeteries. A great deal of pride is taken in the professional and compassionate service that is provided to residents. In



2024 there were 114 interments at Sleepy Hollow Cemetery. 42 of these interments were Concord residents at the time of their death. 33 of the interments were full burials and 81 were cremations. Lot sales for the year totaled 87 with 33 of those

being sold to eligible former residents.

Cemetery staff carry out the duties of caring for the Town's three cemeteries and serving the residents. With assistance from the Highway & Grounds Division, they provided mowing and spring/fall cleanups for the Old Hill Burying Ground and South Burying Place. CPW crews performed all other maintenance for the cemetery including pothole patching, tree and stump removal and water system maintenance.

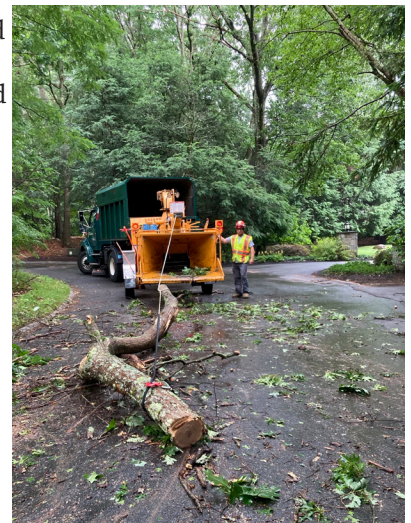
In June and July, CPW staff worked with a lot owner, their contractor, and the Engineering Division's engineering consultant to facilitate construction of a new mausoleum in the Knoll section of Sleepy Hollow Cemetery. This is the first mausoleum constructed in Sleepy Hollow Cemetery since 1930. The Concord Cemetery Committee previously approved the design and construction of the mausoleum in Sleepy Hollow Cemetery. The development of mausoleum lots has been a goal of the Cemetery Committee and was articulated its report to Envision Concord in 2017 and added as a goal in their 2018 Master Plan.

The use of contracted landscaping services continued for the mowing and seasonal cleanup needs of Sleepy Hollow Cemetery.

### *Public Shade Tree Program*

CPW's Highway & Grounds Division and the Town's Tree Warden continued the implementation of the urban forestry management plan, which was developed by Davey Resource Group. In 2024 the Town planted 91 new trees of multiple varieties including Kousa Dogwood, Tupelo, and Elm trees. The plantings included public shade trees, set-back plantings, and Cemetery trees.

CPW tree crews performed tree maintenance throughout the roadway network and on Town property in 2024. Tree maintenance included pruning and general forestry maintenance, hazard tree removal and storm and emergency responses.



### *Fleet Maintenance Program*

CPW mechanics maintain the Concord Public Works fleet to the highest level possible, completing preventative maintenance and repairs as required. In 2024, CPW took delivery of three Ford F350 pickup trucks, a Ford Explorer Hybrid, and a Caterpillar Skid

Steer which were funded with allocations from the April 2024 Annual Town Meeting, and a Ford Lightning EV pickup truck which was funded by an appropriation at the April 2023 Annual Town Meeting. These vehicles will support operations and maintenance within Concord Public Works.

### Compost Site Management

The Town’s compost site at 755 Walden Street was open seasonally Wednesdays and Saturdays for residents to access the site for the disposal of brush, leaves, and invasive species, along with recycling of mattresses. This facility was visited over 19,700 times by residents during the months of April – December. After completion of an initial pilot program, based on interest expressed by our residents, the container to collect bagged Styrofoam for recycling was left in place throughout the entire collection season. The paint shed on site made it possible for 394 residents to drop off paint and 94 residents to pick up paint for reuse. In 2024, Concord Public Works contracted with a third-party contractor to recycle latex or acrylic paint that is not selected for reuse by residents. CPW continued to utilize the compost site for equipment storage and as a staging area for surplus wood debris generated from tree maintenance activities. The compost site was staffed in early January to provide opportunities for residents to recycle Styrofoam, holiday lights and trees after the holidays. During the winter season, the site is used for snow storage. Snow is hauled to this location from parking lots and business district areas following snow plowing events.

## Recycling & Solid Waste Management Program

### Curbside Collection, Disposal, and Processing

An updated program for Curbside Collection of solid waste and recycling began in October of 2024. This program included automated collection, town-issued solid waste & recycling carts, and single stream recycling. These changes will result in fewer trucks operating in Town each week, and a more efficient program. The municipal curbside collection program provided trash and recycling services to 3,738 households. Subscribers to the municipal curbside collection program disposed of over 1,300 tons of recyclables and 2,085 tons of solid waste in 2024.

Concord Public Works staff coordinated the installation of Big Belly Solar Compactors for both solid waste and recycling to replace barrels in West Concord and at Rideout Field and Emerson Park, as a more sustainable and sanitary solution for the collection of solid waste and recycling. Additional receptacles will be deployed in 2025 throughout Concord.

Year	Subscribers (as of December 31)			
	Number of Subscribers*	Recyclables collected (tons)	Trash collected (tons)	Recycling Rate
2020	3,587	1,693	2,623	38%
2021	3,657	1,592	2,505	38%
2022	3,622	1,462	2,162	40%
2023	3,508	1,439	2,129	40%
2024	3,738	1,324	2,085	39%

### Curbside Recycling Rate

Residents using Concord’s municipal curbside collection program recycled 39% of the materials they set at the curb. It does not include the materials collected for recycling at the semi-annual DropOff-SwapOff events, nor the more than 1,000 households that contract with private haulers for the collection of their trash and recyclable materials.

### Reuse and Recycling DropOff & SwapOff Events

In 2024, Concord Public Works held DropOff/SwapOff events on Saturday May 18th, with over 600 participants and Saturday October 5th, with 540 participants. Pre-registration was required, which assisted with crowd control and traffic flow. Working together with REUSIT and a number of community volunteers, items such as bulky plastic, paper shredding, construction & demolition items, and household items were collected for re-use or recycling. These popular events continue to support CPW’s goal of increasing the opportunity for waste diversion.

Year	DropOff SwapOff Participants	
	May	October
2020	-	425
2021	630	790
2022	685	546
2023	750	562
2024	617	540



## Hazardous Products Collection

Subscribers to the curbside collection program receive

Year	Visits to the Composting Site			
	Leaves & Grass	Brush	Paint Drop-off	Paint Pickup
2020	14,257	7,040	Closed	Closed
2021	12,883	6,243	448	143
2022	12,272	5,671	295	253
2023	13,221	6,327	453	105
2024	13,782	5,945	394	94

one visit per year to the Minuteman Household Hazardous Products Facility in Lexington (for up to 25 lbs. or 25 gallons of hazardous waste). The facility is generally open one weekend day a month from April – November.

### Compost Site-755 Walden Street

From April through December 2024, residents made more than 19,700 visits to the 755 Walden Street Compost Site, dropping off leaves, grass clippings and brush. 394 residents dropped off paint and 94 residents picked up paint for reuse at the paint shed on site. In 2024, Concord Public Works contracted with a third-party vendor to provide recycling services for latex and acrylic paint that is not selected by residents for re-use. Styrofoam block and mattresses were accepted for recycling throughout the season. Styrofoam block, string lights and Christmas Trees were accepted for recycling at the facility after the December holidays.

### Keeping Mercury Out of the Environment

During 2024, Concord Public Works collected 4,534 linear feet of fluorescent light bulbs, 1,414 pounds of nickel cadmium, lithium, and lead acid batteries, and 1,288 compact fluorescent bulbs from residents and municipal facilities, for recycling.

### Grants

In 2024, Concord Public Works obtained a Recycling Dividends Program (RDP) grant from MassDEP in the amount of \$7,200. The grant can be utilized to purchase recycling-related equipment and/or services including backyard compost bins and waste reduction initiatives.



## Water & Sewer Division

### Jeffrey A. Murawski, P.E., Superintendent

In 1974 and 1976, Annual Town Meeting established separate Water and Sewer Enterprise Funds, to ensure that the operation, maintenance and capital investments in Concord’s water and sewer systems would be responsibly managed and financially viable. Expenses incurred for each system are covered by revenues from customers of each respective enterprise. Monthly billing is performed, and dozens of requests for new, replacement and rehabilitated water and sewer services are reviewed for conformance with system standards and policies. The Water & Sewer Division of Concord Public Works (CPW) is responsible for managing the day-to-day operations of drinking water and sanitary sewer infrastructure.

### Water System

Concord was provided with legislative authority to establish a public water system in 1872. In 1874, water from Sandy Pond, in Lincoln, MA, began flowing through the original network of water mains to Concord Center. Today, the water system has evolved to include six groundwater wells and one surface water source (Nagog Pond), seven water pumping stations, two water treatment facilities, and a high-pressure water main network consisting of over 136 miles of pipe. Two covered storage reservoirs, one located on Annursnac Hill in Concord and the other located on Pine Hill in Lincoln, provide a total reserve capacity of 7.5 million gallons. There are presently 5,710 customer accounts receiving potable water service and fire protection from this supply. This represents approximately 95% of Concord residents and businesses, along with a small number of properties along the Route 2A water main from Nagog Pond that are in the Town of Acton.

### Drinking Water Regulations and Policy Updates

Per- and Poly-fluoroalkyl (PFAS) Substances: EPA announced the final National Primary Drinking Water Regulation (NPDWR) update on April 10, 2024, with new PFAS standards to become effective in April 2029. The updated regulation includes both a non-enforceable Maximum Contaminant Level Goal (MCLG) for PFAS as well as an enforceable standard, or Maximum Contaminant Level (MCL) or Treatment Technique (TT).

EPA National Primary Drinking Water Standards		
PFAS	Max Contaminant Level Goal	Maximum Contaminant Level
PFOA	0	4.0 ppt
PFOS	0	4.0 ppt
PFNA	10 ppt	10 ppt
PFHxS	10 ppt	10 ppt
GenX	10 ppt	10 ppt
Mixture of 2 or more	PFNA	1 (unitless) Hazard Index
	PFHxS	
	GenX	
	PFBS	

It has become well documented that these compounds are persistent in the environment and have been used for decades in a number of everyday products. Concord will continue to perform testing and closely monitor developments in the science around this issue. For more information on PFAS in Concord Water, please visit: <https://concordma.gov/PFAS>.

#### ***Aqueous Film-Forming Foam (AFFF) Class Action***

**Suits:** With guidance from SL Environmental Law Group, special counsel representing Concord as well as many other water departments across the country, the Division has collected and submitted analytical results along with historic pumping data from each individual water supply for inclusion into 2 separate Class Action Lawsuits. One with Dupont & 3M and one with BASF & Tyco.

**Lead Service Line Inventory:** As part of the 2021 Federal Lead and Copper Rule Revisions (LCRR) and subsequent 2024 Lead and Copper Rule Improvements (LCRI), Concord completed a water service line inventory and lead service line replacement plan prior to a regulatory deadline of October 16, 2024. Shortly afterwards, notices were issued to customers with a water service line containing lead, galvanized metal, or those with “unknown” materials (for homes built in, or before 1986). This letter outlined potential health implications of lead exposure along with steps that can be taken to protect themselves from additional exposures, along with information relating to Concord’s previously established Lead Water Service Line Replacement Program. For more information on lead water services in Concord, please visit: <https://concordma.gov/lead>.

#### **Water Use and Demand Management**

In 2023, Concord received its Water Management Act (WMA) Registration statement, renewed once every ten years, affirming our “authorized” water withdrawal cap of 2.10 million gallons per day (MGD) based on an annual daily average. Back In 2001, Concord also received a WMA Permit authorizing an additional average daily withdrawal capped at 0.42 MGD resulting in a total authorized average daily withdrawal volume of 2.52 MGD. In 2022, the MassDEP informed the Town that Concord’s Permit allowance, originally anticipated to be finalized in 2023, but still not issued, would be amended to reduce the Town’s permitted “additional” water withdrawal allowance to 0.10 MGD for a total allowance of 2.2 MGD. This reduction, once imposed, will include enforceable conservation standards of 65 gallons per day per capita (RGPCD) for residents and a 10% allowance for system losses (primarily attributed to leaks).

In 2024, the total water production required to meet our system demands was 1.81 million gallons per day or 649 million gallons for the year. A peak day demand of 3.05 million gallons was recorded on June 19, 2024. During

this same time period, the RGPCD was calculated to be 57.2 gpcd and the total system losses (or “unaccounted” for water use) was calculated to be 8.8% (on January 24, 2025).

#### ***Integrated Water Resource Planning Initiative:***

Partnering with CPW’s Engineering Division, the Town’s Sustainability Director and representatives from the Health Division, Natural Resources Division and Planning Division, the Water Division continued to advance the Town’s integrated water resources planning initiative. We are looking forward to completing the final review of the Vulnerability Assessment, Long-Term Water Supply Study and Roadmap to an Integrated Water Resource Plan in early 2025.

**Water Main Leak Detection:** Beginning November 20, 2024, New England Water Distribution Services LLC (NEWDS), of Windham, NH, performed a water main leak detection survey on approximately 50% of the water distribution system. The acoustic survey targeted water mains, hydrants, select gate valves, and service lines located in the southern half of the water distribution system. No reportable leaks were identified.

The Division continues to maintain its commitment to its comprehensive water conservation program that encourages efficient water use via seasonal increasing block rates, the provision of complimentary residential water saving devices including showerheads, aerators, garden nozzles, rain gages, and toilet fill cycle diverters, as well as customized outreach and assistance to customers who are interested in learning more about indoor and outdoor water savings opportunities. As funds allowed, the Division continued to offer rebates on water-saving toilets and high-efficiency clothes washing machines.

#### **Water Quality and Drinking Water Compliance**

In compliance with Federal and State drinking water requirements, staff perform extensive drinking water quality monitoring activities for regulatory compliance and treatment optimization at all production stations and throughout the distribution system. This includes over 500 sampling events which are performed each year to assess approximately 145 potential contaminants, like bacteria, perchlorate, pesticides, metals, etc.

**Lead Service Line Replacement Program:** Water & Sewer Division operations crews continued to move forward on the systematical elimination of lead service lines in Concord, which account for less than 2% of the active services in Concord. To assist and incentivize property owners to replace their private lead service lines, the Public Works Commission pre-emptively approved a Lead Service Line Replacement Program (LSLRP) in 2017. This program enables Division personnel to perform work within private property, subject to certain requirements and restrictions, at a cost not to exceed

\$1,500<sup>1</sup>. Participating customers are also offered a 12-month, interest-free payment plan to further mitigate economic challenges. Five lead service lines were replaced in 2024, bringing the total to 58 lead service lines replaced since the program's inception.

### **Water Sources and PFAS Treatment**

While routine sampling noted previously continue to demonstrate that Concord's water supply meets all current standards, including PFAS, three of the Town's seven existing sources of supply will require advanced treatment prior to April 2029. These three sources include Nagog Pond, Hugh Cargill and Second Division well sites. A Request or Proposals (RFP) is being generated to retain the services of a qualified engineering firm to lead water treatment piloting, permitting and design services in anticipation of meeting this deadline.

### **Nagog Pond Update**

In March of 2023, the Second Phase of the Nagog Pond Intake Project started with equipment mobilization by the General Contractor, D&C Construction. The project involved lining approximately 1,400 LF of 16-inch diameter of old cast iron pipe. The work suffered significant delays during the cleaning of the existing pipe, based on the nature and extent of sediment (buildup) in the host pipe and means of cleaning selected by the third-party contractor. After many weeks of intense cleaning, the actual installation of the liner began before the summer of 2023. The liner, installed by Insituform (a certified installer), served as a subcontractor who was responsible for installing the specified Primus Line<sup>®</sup> Lining System. The liner failed to perform as specified and has restricted flow since it was originally installed. To date, the Town's design engineering firm, Environmental Partners Group and the General Contractor, D&C, are still conducting investigations into this problem in an attempt to determine the cause for a failed liner system as well as potential mitigation needs required to allow this intake to function as designed. As the Town has yet to determine the cause of this failure - design or installation, both the designer and installer have been put on notice that the Town is prepared to take necessary action to resolve this matter in a fair and responsible manner.

### **Water Pumping Station Rehabilitation and Upgrades**

Division crews continued to perform routine operation and maintenance of the seven water production facilities and related treatment systems which make up our total water supply. In addition to these routine inspection and service activities, capital upgrades are also planned and performed on the millions of dollars of assets including associated mechanical, electrical, plumbing and instrumentation and control systems

housed within these facilities. Notable improvements performed within the past year include:

- > D.L. Maher (Division of Weston & Sampson CMR) performed the inspection, cleaning and rehabilitation of the White Pond Well pump and motor.
- > Crews performed non-routine services work at the Hugh Cargill Well Building, including the rebuilding of the vacuum pumps.
- > Mayer Tree Service was contracted for extensive hazard trees removal of at-risk trees along the access drives to the Pine Hill Reservoir (in Lincoln, MA) and to the Robinson Well (off Sudbury Road, in Concord). Both locations are critical physical assets where the Division requires access to the facilities.

### **Water Mains**

The water distribution system consists of approximately 136 miles of water main ranging in size from 6-inch to 16-inch. Seasonal flushing of the distribution system was performed in the spring of 2024 (March 18th – April 2nd) in the western portion of the system and was performed in the fall of 2024 (October 15th – October 25th) in the southern portion of the system.

A replacement/rehabilitation program has been developed to maintain and improve system service reliability. Improvement/replacement projects are prioritized based on age, condition, and material of pipe. Plans and schedules are further refined with consideration to other public works initiatives such as drainage improvements, annual CPW Roads Program or CMLP underground initiatives. Each year, new mains may also be added to the system to allow for service to new or existing properties where frontage to the municipal water distribution system had not otherwise existed. During 2024, Consultant Engineer Wright-Pierce prepared the construction bid documents for the Silver Hill Road Neighborhood Infrastructure Improvements Phase 1 Project. Due to the overall size of the neighborhood, the project was divided to "Phase 1" and "Phase 2". The Phase 1 project included the replacement of approximately 3,450 LF of 8-inch transite pipe with new 8-inch ductile iron pipe, and the replacement of 7 hydrants along Silver Hill Road, Cress Brook Road, and Turning Mill Road. The Phase 2 project will be bid and constructed in 2025, and will complete the replacement of approximately 2,400 LF of 8-inch transite pipe with new 8-inch ductile iron pipe, along with the replacement of 5 hydrants along Silver Hill Road (from the Turning Mill at Silver Hill intersection to the end of Silver Hill Road).

**Emergency Water Main Repairs:** Based on the age and condition of water main located throughout the water distribution system, it is not uncommon for sections to

<sup>1</sup> The typical cost for a private contractor to replace a lead service line is \$5,000 or more, per the American Water Works Association (AWWA).

fail<sup>2</sup>. When they do, they can cause sudden pressure drops or water discoloration that can affect a few customers or larger neighborhoods. Depending on the nature and location of each break, individual water service interruptions can also occur and last for several hours. This past year, the Division performed emergency repairs at the following locations:

- > Bedford Street water main leak, on February 6th, 2024
- > Ministerial Drive water main break, on February 28th, 2024
- > Ministerial Drive water main break, on February 29th, 2024
- > Liberty Street water main break, on July 17th, 2024

Water Statistics	2024	2023	2022	2021	2020
Miles of Main	136.1	136.1	136.1	135.9	135.7
Hydrants	1,349	1,349	1,339	1,336	1,330
Main Pipe - New (linear feet)	0	0	1,025	1,002	1,000
Main Pipe - Replaced or Rehabilitated (lf)	3,553	4,060	0	0	7,932
Main Breaks	5	7	3	4	4
Number of Service Accounts	5,710	5,696	5,690	5,651	5,641
Total Water Demand (million gallons)	649	650	696	647	722
Daily Average Demand (million gallons)	1.81	1.78	1.91	1.8	1.97
Peak Day Demand (million gallons)	3.05	3.13	3.29	3.04	3.85
Unaccounted for Water (percent)	8.6	12.6	8.5	12.2	9.9
Residential per Capita per day (gallons)	57.2	55	63.6	62.2	75
Annual Precipitation (inches)	46.03	66.78	39.73	54.91	42.26
Mean Annual Precipitation (inches)	42.45	42.43	42.19	42.23	42.16
<b>Residential Rate per Unit (unit = 7.48 gallons)</b>					
Base Rate - Step 1	\$0.09	\$0.08	\$0.07	\$0.07	\$0.06
Conservation Rate - Step 2 (May 1 - Oct. 31)	\$0.18	\$0.16	\$0.14	\$0.14	\$0.12
Conservation Rate - Step 3 (May 1 - Oct. 31)	\$0.23	\$0.20	\$0.18	\$0.17	\$0.06
<b>General Service Rate per Unit (unit = 7.48 gallons)</b>					
Step 1 - (<=50 Units)	\$0.09	\$0.08	\$0.07	\$0.07	\$0.06
Step 2 - (>50 Units)	\$0.11	\$0.20	\$0.09	\$0.08	\$0.08

### Sewer System

Concord was provided with legislative authority to create a municipal sewer system in 1894. By early 1900 a small, centralized collection system carried wastewater from Concord center via a network of gravity mains to a collection chamber located at 141 Keyes Road where it was then pumped to a cluster of filter beds located approximately one mile away on fields located adjacent to Great Meadows. The present system consists of approximately 34 miles of collector mains (gravity and low pressure), two pumping stations, six neighborhood lift stations and a 1.2 MGD treatment plant. The present sewer system serves 1,927 customers, or approximately 35% of the community.

### Wastewater Regulations and Policy Updates

**Sewage Release Notification Regulation:** Massachusetts regulation 314 CMR 16.00 – “**Notification Requirements to Promote Public Awareness of Sewage Pollution**” became effective on January 21, 2022. This new regulation requires public notification for “partial treatment” events at wastewater treatment facilities and Sanitary Sewer Overflows (SSO’s) into the surface waters of the Commonwealth. In 2024, there were no reportable SSO discharge release events within Concord.

**NPDES Permit:** In February of 2023, USEPA and MassDEP issued Concord a new Medium WWTF General Permit Authorization #MAG590030, which became effective April 1, 2023. This permit authorizes the Town to continue to operate its publicly owned treatment works (POTW) and to continue to discharge treated effluent to the Concord River under the terms and conditions of this new permit. In 2024, due to higher-than-average rainfall in winter and

<sup>2</sup> The Water Research Foundation reports that the average number of main breaks in North America is 25 breaks per 100 miles of main per year.

early spring, the 12-month rolling average flow limit of 1.20 MGD was exceeded for the months of February through July (see table below). Reduced rainfall in late summer and fall saw the 12-month rolling average flow limit drop back down under 1.20 MGD.

modifications to current Sewer Improvement Fee ("SIF") rate and structure.

This past summer, a team of process engineers from WSE performed an evaluation of all assets associated with MCI Concord WWTF and provided a draft memo

on the existing operations and facility capital improvement needs for Town review. The primary take-away from this assessment is that the facility which is designed to treat approximately 310,000 gallons per day of wastewater and has been in operation for decades without any major upgrades and will require an investment of approximately \$25M over the next five to ten years in order to continue to operate and meet its present design capacity.

### Sewer Pumping Stations

Sewer pumping stations carry wastewater from local networks of gravity flowing pipes (collection system) and then pump this wastewater to the Town's central wastewater treatment plant located off Bedford Road. The size and complexity of each pumping station depends upon local land elevations, topography, and the volume of wastewater handled. The Lowell Road and Assabet Sewer Stations are the two

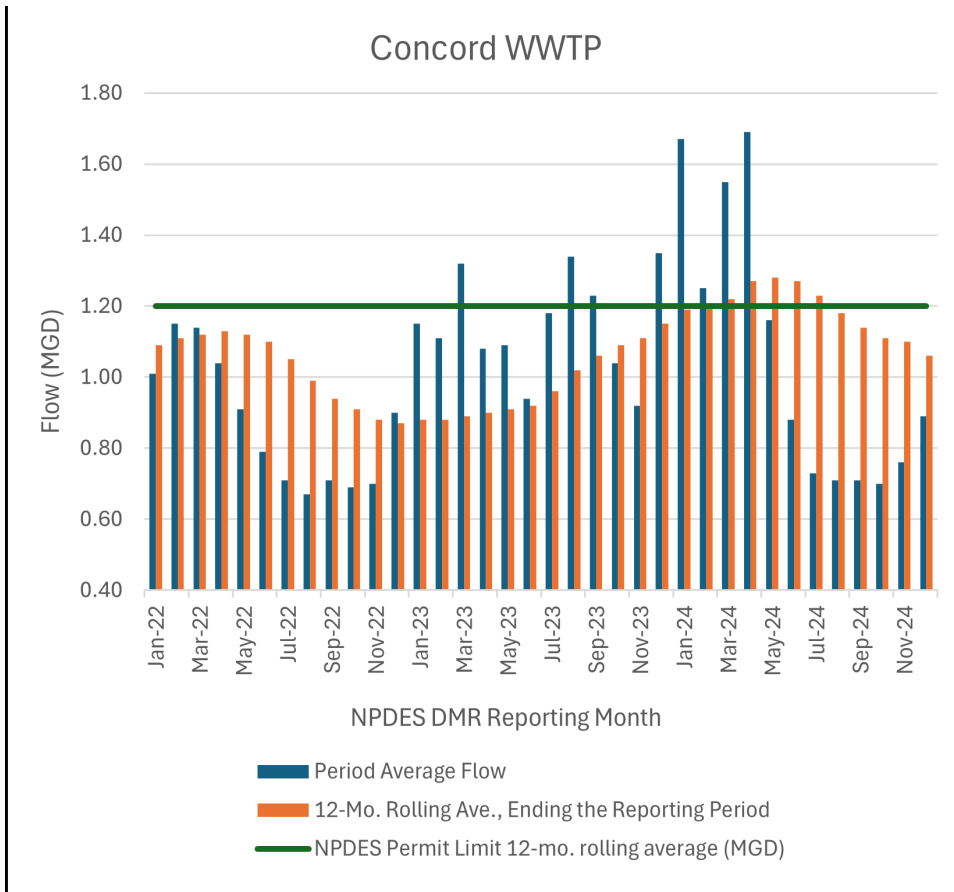
largest facilities in Concord, designed to handle flows from the most densely populated and commercialized neighborhoods of West Concord and Concord Center. Six smaller neighborhood lift stations serve less populated areas of Town, with much more modest physical footprints.

In 2024, the Division procured the furnishing and installation of a new diesel fueled standby power generator to serve the Pilgrim Road Lift Station (30kW). The bid has been awarded to Kraft Power Corporation, of Woburn, MA.

Division crews continued to perform routine operation and maintenance of the eight operating sewer facilities with considerable time and effort having been required at the Laurel Street lift station resulting from ongoing negligence of proper disposal practices from some customers. Despite ongoing outreach and education efforts made to a relatively small customer base that this station serves, the Division has yet to have determined the source of the problem to allow us to effectively mitigate and/or enforce service violations.

### Collection System

The sewer collection system is composed of over 34



### Comprehensive Wastewater Management Plan ('CWMP') and Capacity.

- > The Town executed a services agreement with Weston & Sampson Engineers (WSE) in May 2024 for wastewater capacity management and planning support services. The services to be provided include:
- > Reviewing existing and prior assumptions of future Town-wide wastewater capacity conditions and needs, with specific coordinating with the Department of Planning and Land Management staff to better understand economic growth and planning interest, including housing initiatives,
- > Re-assessment of potential options to add wastewater capacity to the community (including the review and evaluation of MCI Concord's WWTF) providing strategic level review of options and associated planning-level costs, and
- > Provide preliminary recommendations to move forward with capacity initiatives.
- > In addition, WSE has also been tasked with providing recommendations for updates or

miles of gravity and force sewer mains (ranging in size from 2-inch to 27-inch in diameter) with manholes that allow for access and maintenance of this system. Approximately 50% of Concord’s sewer collection system is made up of clay pipes – much of it dating back to the original sewer system installed over 100 years ago. Concord continues to investigate the condition of this infrastructure and repair or replace it as needed to reduce preventable inflow and infiltration (I/I). “I/I” refers to stormwater and groundwater that flows into the sanitary wastewater collection system through illicit connections or leaking pipes.

### Infiltration and Inflow Program

**Inflow & Infiltration Plan:** In accordance with a MassDEP Infiltration/Inflow (I/I) Control Plan approved in 2018, Division crews continued to conduct sewer inspection and cleaning using a specialized jetter/vacuum truck, as part of capacity, management, operations, and maintenance (CMOM) best management practices for sewer system operations. In 2024, the total amount of linear feet for sewer main pipe that was cleaned (jetted) by the Division was approximately 124,500 linear feet.

The 12-month (rolling average) of wastewater flow processed through Concord’s wastewater treatment plant (through the December 2024 reporting period) was 1.06 MGD, just below the 1.2 MGD permitted capacity assigned to this facility. The combined total of the infiltration rate (of groundwater) and the inflow rate (stormwater) into the collection system was estimated at approximately 15.32% of the total sewer flow for the year. This rate falls within acceptable industry limits and well below the USEPA “excessive” rates benchmark value. In 2024, there were no Sanitary Sewer Overflow releases or partial treatment events identified within Concord’s service area.

### Wastewater Treatment Plant Operations

Woodard & Curran, Inc. (Portland, ME) continues to oversee daily operations of the Concord Wastewater Treatment Plant (WWTP), located at 509 Bedford Street. They are nearing the end of the 3rd year of a 4-year service contract. The CPW – Water & Sewer Division oversees the plant and the services provided by Woodard & Curran to ensure day-to-day operation and maintenance is performed in a quality manner and according to federal and state regulations. In 2024, the facility and associated equipment operated reliably as in previous years. Due to excessive rainfall and associated flooding activities experienced regionally, the facility operated out of compliance for several months starting in February 2024. This subsequently resulted in an exceedance of the Towns NPDES Permit - maximum 12-Month Rolling Average of 1.2 MGD. This yearly average flow is the permitted flow mandated by the USEPA and MassDEP for the facility.

For the last few years, the facility has been operating near this permitted limit of 1.2 MGD. The flow exceedance experienced in 2024, was the result of higher-than-average rainfall during the winter months and early spring. Currently, CPW’s Staff with the assistance of Consultant Engineers Weston & Sampson, are assessing and exploring options on how to increase the existing permitted capacity which was set over 50 years ago.

Following the closing of MCI Concord, the Town is seeking to acquire the existing wastewater facility serving this correctional center. Currently, this facility holds its own NPDES permitted flow of 0.31 MGD which will provide the Town of Concord with much needed flow limit increase to support the Town’s economic growth and development interests called out in a number of long-range planning documents.

Sewer Statistics	2024	2023	2022	2021	2020
<b>Assabet Pumping Station</b>					
Total Pumped (million gallons)	105.27	138.45	89.5	No Annual Data Available	62.38*
Monthly Average (million gallons)	8.77	11.54	7.46		6.24*
Daily Average (million gallons)	0.29	0.38	0.25		0.20*
<b>Lowell Road Pumping Station</b>					
Total Pumped (million gallons)	379.68	426.23	312.76	No Annual Data Available	297.27
Monthly Average (million gallons)	31.64	35.52	26.06		24.77
Daily Average (million gallons)	1.04	1.17	0.86		0.81
<b>Bedford Street</b>					
Total Pumped (million gallons)	8.79	8.57	7.84	7.9	7.41
Monthly Average (million gallons)	0.73	0.71	0.65	0.66	0.62
Daily Average (million gallons)	0.02	0.02	0.02	0.02	0.02
<b>Collection System</b>					
Number of Service Accounts	1,927	1,927	1,913	1,905	1,891
Miles of Sewer Main	34.03	34.03	34.03	34.03	34.03
Main Pipe Inspected (lf)	0	0	0	2,342	48,941
Main Pipe Replaced/Rehabilitated (lf)	0	0	0	2,342	12
Rate per Unit (unit = 7.48 gallons)	0.14	\$0.13	\$0.12	\$0.12	\$0.12

## Engineering Division

### Stephen Dookran, P.E. Town Engineer

Concord Public Works (CPW) Engineering Division is responsible for the planning, design, engineering and construction administration of the Town's roadways, sidewalks, bridges, and stormwater/drainage infrastructure assets. Engineering provides a wide range of professional engineering, construction management, and permitting administration for CPW as well as for other Town departments and divisions. These responsibilities are carried out by a team led by the Town Engineer which includes the Assistant Town Engineer, the Senior Public Works Engineer, the Environmental Engineer-Stormwater, the Public Works Engineer, and an Administrative Specialist. During 2024, changes in staffing included a resignation of the former Environmental Engineer-Stormwater which was backfilled in July 2024.

### Roadway Pavement Management Program

#### General

Pavement improvement projects are implemented primarily based on CPW's Pavement Management Program. This program utilizes pavement management software, called Streetlogix (developed by StreetScan) to obtain the town's network pavement condition index (PCI) to prioritize roads for the proper construction method and to provide the best overall improvement to the roadway network. This is a comprehensive program that implements various preservation treatments and traditional road reconstruction methods to maintain and improve the town's 108-mile road network. In the spring of 2024, Streetscan performed a new pavement condition survey, updating the program with new data that showed a PCI improvement from the mid 60's to low 70's. Engineering's consultant, Stantec reviewed the new PCI data and continued to analyze the data for making recommendations in early 2025 on a short-term capital plan to bring the average network condition to more acceptable level. In 2024, the overall pavement management program developed and implemented several projects described below, coordinated with utility improvements, and incorporated other infrastructure improvements including sidewalks, ADA ramps, drainage, signs, and pavement markings.

## Crack Sealing

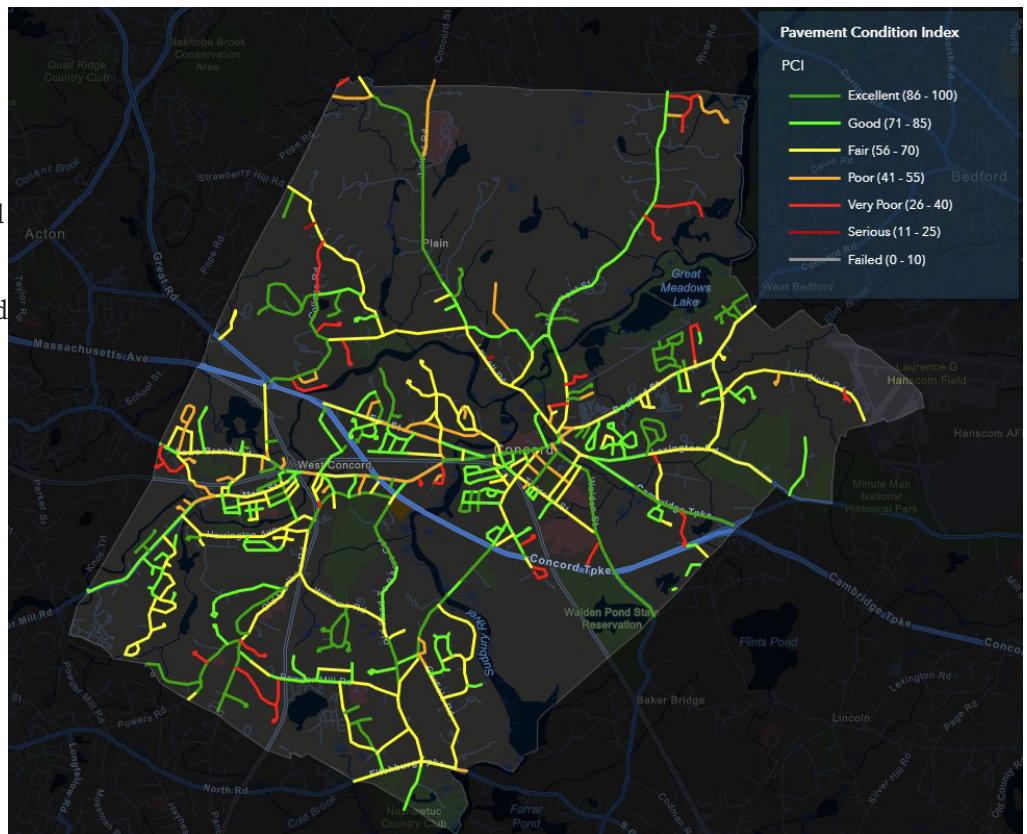
The annual crack sealing program was implemented by Engineering as part of the pavement management program. In 2024, Engineering designed, prepared, and executed a contract to crack seal 10.9 road miles. All work was completed in the 2024 season.

## Pavement Preservation Projects

Fog seal treatment was applied to a total of approximately 4.2 miles of roadways that were in good condition to help preserve new asphalt qualities. The following streets were fog sealed, Baker Ave, Baker Ave Ext., Old Marlboro Rd (Harrington Ave to ORNAC), Dee Rd, Sudbury Rd (2,000 ft south of Rt 2 to 200 ft south of Seven Star Ln), Laurel St (Thoreau St to Stow St), Shady Side Ave, Alcott Rd, and Independence Rd. In addition, Engineering prepared documents and obtained bids for additional preservation work to be completed in the spring of 2025 consisting of micro-surfacing portions of Old Bedford Rd (Town line to Bedford St) and Harrington Ave (Main St to Ministerial Dr) as well as the fog sealing of Southfield Rd, Southfield Cir, Pilgram Rd, Riverdale Rd, Riverdale Cir, Dana Rd, Garden Rd. The total length to be micro surfaced and fog sealed in the spring of 2025 is 1.1 miles, and 1.4 miles respectively under a contract to be awarded in early 2025. Additional streets were planned for preservation treatments, but the bid prices were higher than expected and resulted in a reduction of the overall preservation work.

## Pavement Structural Improvement Projects

Mill and overlays, consisting of both thin and deep



treatments, were conducted on approximately 4.24 miles of roadways in 2024. The streets that received this treatment were Main St (Monument Sq to Coolidge Rd), Westford Rd (900 ft north of Lowell Rd to Spencer Brook Rd), Sudbury Rd (Rt 2 to 2,000 ft south), Monument Sq, Pine St (Main St to bridge), Central St (Pine St to West St), Walden St (Heywood St to Rt 2, Davis Ct, and ORNAC (Rt 2 to Wolf Pine Way and Rollingwood Ln to Sudbury Rd). Outstanding streets under contract to be milled and overlaid in the spring of 2025 are Main St (Baker Ave to Damon Mill Bridge), and Laws Brook Rd, consisting of approximately 1.74 miles of roadways.



### **Pavement Base Reconstruction Projects**

Road rehabilitation projects, consisting of road base reclamation and paving, were implemented on approximately 3.43 miles of roads that were beyond disrepair. Roads reconstructed in 2024 were Mattison Dr, Alford Cir, Ayrshire Ln, Macmillan Dr, Westford Rd (Spencer Brook Rd to 900 ft north of Lowell Rd), Temple Rd, Isaac Davis Rd, Carr Rd, Channing Rd, Red Coat Ln, Highland St, Hayes Rd, Bartlett Hill Rd, North Branch Rd, Martin Rd, and Deer Grass Ln. In addition, the final paving of Butternut Cir, Minott Rd, Fox Ln, Mallard Dr, and Black Duck Rd was completed in 2024 following the reclamation and binder paving that took place in the fall of 2023. The reclamation of Ripley Hill Rd, contracted for 2024, was deferred to the spring of 2025.



### **Sidewalks/ADA Compliance**

**Curb Ramp Improvements** – Reconstruction of sidewalk curb ramps to meet ADA requirements was incorporated into paving projects and the Main and Walden Street Intersection Improvement project. The reconstructed curb ramps include 6 ramps on Mattison Dr, 1 on Pine St, 2 on Highland St, 2 on Old Marlboro Rd, 3 on Butternut Cir, and 4 on main/Walden Intersection, totaling 18 new curb ramps.



**Sidewalks** – In addition to the sidewalks reconstructed at the intersection of Main and Walden Street, 900-foot of sidewalk was reconstructed in the Butternut Circle neighborhood.

### **Pavement Markings**

Engineering, in conjunction with the Community Safety Officer of the Police Department implemented the annual town-wide pavement markings project using two contracts in 2024. The project included the remarking of centerlines, shoulder lines, parking, crosswalks and stop bars. High volume traffic locations were striped twice to maintain an acceptable level of visibility all year.

### **Main St/Baker Ave/Cottage St Intersection Redesign**

The pre-preliminary design of the improvements at the Main St, Baker Ave, and Cottage St intersection as well as the Main St, Crest St and Old Bridge Rd intersection by the consultant, Jacobs showed the need for additional right-of-way to provide the necessary safety improvements. During 2024, Engineering staff met with project abutters and negotiated the necessary sidewalk, signal equipment, and aerial easements with the four abutting properties, and have received verbal agreement on said easements. Jacobs has been given direction to proceed with the preparation of the final design

documents for bidding in the spring of 2025.

### Main Street/Walden Street Intersection Improvements

This project, designed to reduce speeds at the Main St/Walden St intersection was funded primarily by a 2023 Shared Streets and Spaces Grant for \$197,663.75 from MassDOT. The improvements include construction of 3 sidewalk bump outs, 4 ADA curb ramps, sidewalk reconstruction, installation of lighted bollards, drainage improvements, raised cobble features, and pavement markings. The construction contract was advertised for bids with the 2024 pavement management project and was successfully awarded in spring 2024. The work began in July 2024 and the majority

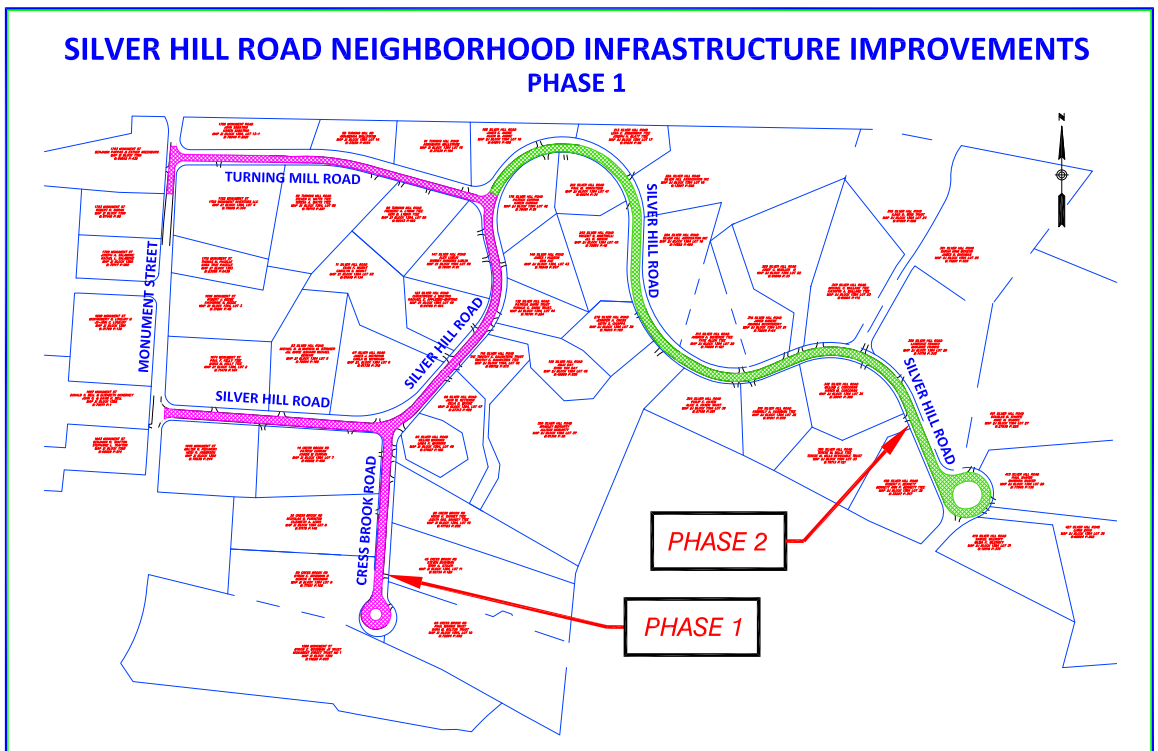


of the work has been completed with the exception of installing the crosswalk surface treatment and the lighted bollards. This is scheduled to be completed before April 14th, 2025.

### Silver Hill Comprehensive Infrastructure Improvements Project

CPW Engineering and Water & Sewer Divisions collaborated with the design consultant, Wirght Pierce to design Phase I and II of the Silver Hill Infrastructure Improvement Project. Phase I design has been completed and included 3600ft+/- of water main replacement, water service upgrades, hydrant replacement, drainage improvements, and full road reconstruction, of Silver Hill Road between Monument Street and Turning Mill Road, Cress Brook Road,

and turning Mill Road. The water infrastructure and drainage improvements construction were completed as of December 2024, except for 80ft +/- water main and 1 water service scheduled to be completed in January 2025. Phase I road reconstruction work is scheduled to commence in Spring 2025 with completion by the end of May 2025. Phase II was about 75% designed in 2024, encompassing



a similar scope to phase I, including water main and services replacement, drainage improvements, and road reconstruction. CPW planned for the construction of Phase II to commence in the 2025 construction season.

### **Municipal Parking Lots**

The Town has 19 municipal parking that the Engineering Division is responsible for keeping them in an acceptable condition. The condition of some lots is at a deteriorated level and in need of pavement treatment or reconstruction. When possible, staff try to make improvements in the parking count, circulation, drainage system, shade, and/or provide electric vehicle charging stations. The following lots were addressed in 2024:

- > **Fairyland Pond Parking Lot Improvement** – Plans were developed by Engineering staff to address the puddling at the northerly edge of the lot, asphalt deterioration, and runoff water quality of the existing parking lot. The bid documents were included in the 2023 Pavement Management Program – Phase III project and, the work was completed in summer 2024.



- > **MBTA Parking Lot** - The MBTA parking lot in West Concord has been identified as a high priority for major pavement rehabilitation, with capital funds allocated in FY24. While the Engineering Division initiated design work, progress was paused after Engineering learned from the Planning Division that the planned Assabet River Pedestrian Trail and Bridge project will significantly impact the parking, and the estimated schedule for construction is in 4-5 years. Because of the impact, an interim repair was decided on to extend the lot's pavement life past the construction of the trail and bridge project. It was decided that milling, filling deteriorated areas, and crack sealing, was the best solution for extending the pavement life. However, securing a contract to perform this work in the fall of 2024 was not successful. The Engineering Division aims to prepare bid documents over the winter

for a pavement overlay in 2025 to maintain the parking lot until the pedestrian trail and bridge project is implemented.

- > **55 Church Street Parking Lot** - The Engineering Division hired a consulting firm, McClure to redesign the 55 Church Street parking lot to improve accessibility and convenience for the community. The firm will also incorporate improvements to the site grading, drainage enhancements, and parking lot layout. The design is expected to be completed by spring 2025, with bidding to follow, and construction anticipated to begin in summer 2025.

### **Guardrail Projects**

The Engineering worked on preparing bid documents for a guardrail project in the fall of 2024. The completion of the documents for bidding was delayed due to some guardrail vehicle strikes in town that require more in-depth structural design for the repair of roadside barriers such as the ones attached to the culvert of Spencer Brook on Spencer Brook Road. Staff worked with a consultant to prepare the design and bid documents and planned on soliciting bids in early 2025 with anticipated construction occurring in spring of 2025.

### **Stormwater Management/Drainage Improvements**

Currently, the stormwater management program faces a funding shortage, which limits the scope of possible drainage improvements town wide. Drainage improvements are limited to work undertaken by the Town's Road Program. Drainage improvements completed this year by the 2023 and 2024 Pavement Management Programs includes:

- > Installation of 1 sediment forebay
- > Rebuilding of 12 existing manholes and catch basins
- > Replacement of 2 manholes
- > Installation of 1 new manhole
- > Replacement of 8 catch basin
- > Installation of 8 new catch basin
- > Installation of 6 new gutter inlets
- > Installation of 170± feet of new pipe
- > Cleaning of 1700 feet of drainpipe

### **Fox Lane and Minot Road Intersection Pavement Reduction**

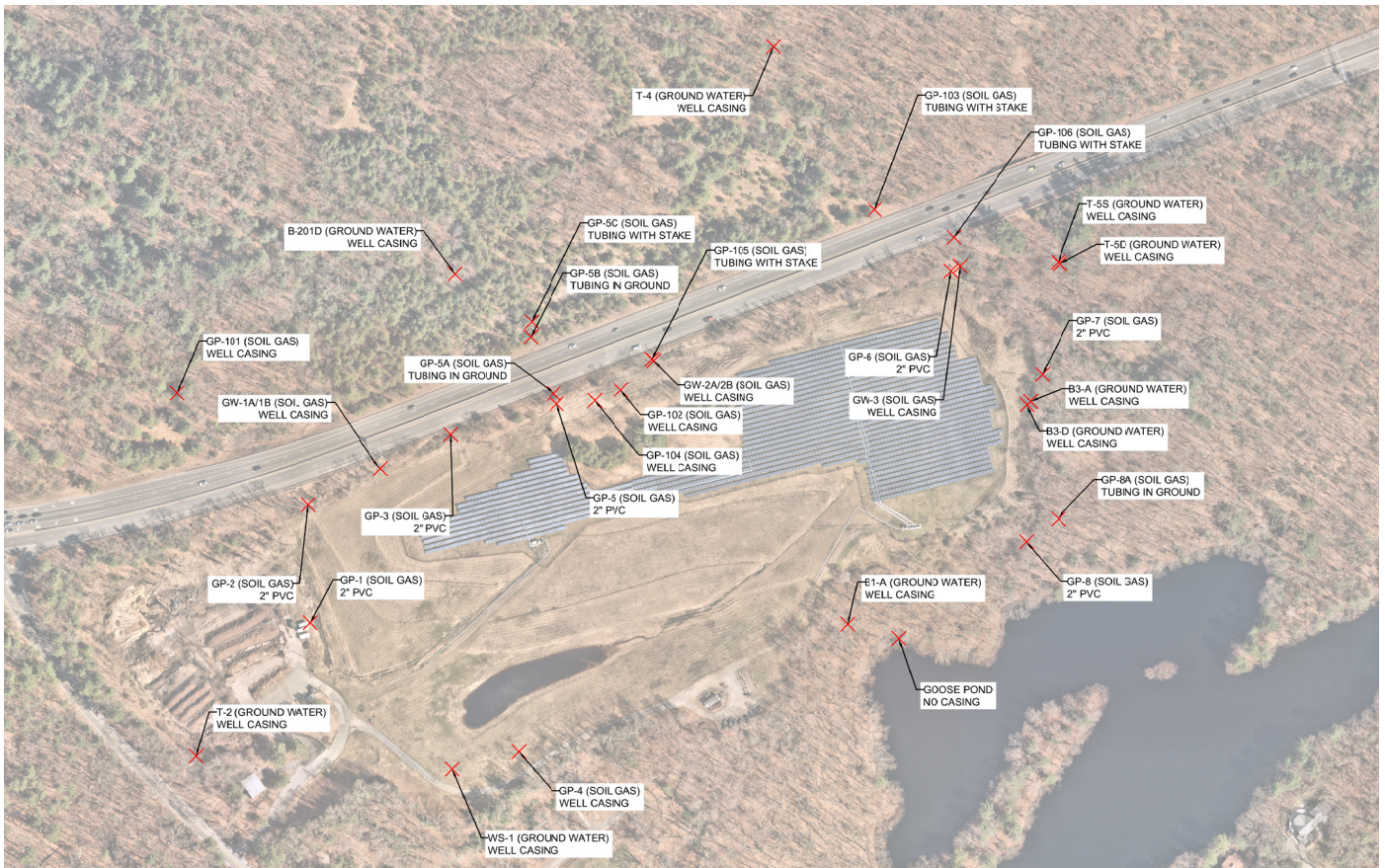
The Engineering Division, as part of the reconstruction of the Butternut Circle neighborhood and under the 2023 Pavement Management contract, developed a plan to alter the Fox Lane and Minot Road intersection. The primary goal of this modification was to decrease the extent of pavement and consequently minimize the impervious surface within the intersection. This initiative is in line with the MS4 permit mandates,

which necessitate a reduction in impervious surfaces on Town-owned properties and rights-of-way. Final paving and restoration of the intersection was completed in 2024.

## Closed Landfill Environmental Monitoring

### Landfill Gas and Water Monitoring

Landfill Gas and Water Monitoring activities at the 755 Walden Street closed landfill site were conducted in compliance with state regulations outlined in 310 CMR 19.132. The site includes nine groundwater wells and twenty-three soil gas probes. Semi-annual groundwater monitoring was conducted for the nine wells, along with semi-annual surface water monitoring, while quarterly monitoring was performed for the twenty-three gas probes. Through a request for quotations, a new contract with One Atlas was executed so that the work will continue to meet the permit schedule.



### Landfill Gas Vent Turbines Replacement

Weston & Sampson was tasked with replacing the landfill gas vent turbines at Concord Landfill, located at 755 Walden Street. They have successfully replaced five gas vent turbines, as the existing units had deteriorated due to corrosion and were no longer operational.

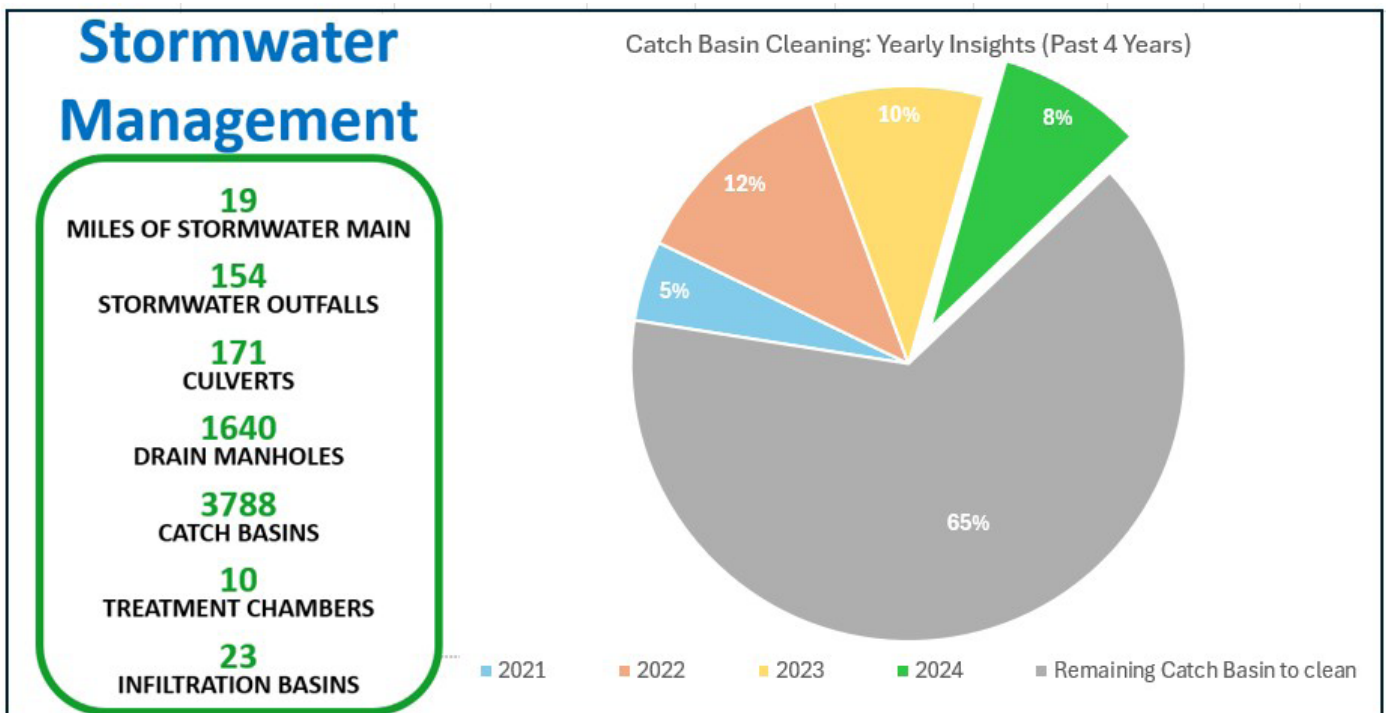


### Third Party Inspection

In compliance with the DEP-approved environmental monitoring plan from 2005 and the 2013 Post Closure Annual Inspection, the closed Concord Landfill is under active monitoring and maintenance. MassDEP mandates an annual inspection of closed landfills by a third-party MassDEP-approved inspector. Weston & Sampson, Inc. conducted the latest inspection on November 12, 2024, and submitted their findings to MassDEP on December 17, 2024. The inspection confirmed that there were no deviations from applicable performance standards for water or air quality.

### Stormwater Utility

Due to the lack of a reliable and dedicated source of funding for stormwater management, the Town, through the Engineering Division and the consultant, Weston & Sampson Engineers, Inc. continued to develop and establish a Stormwater Utility. At the 2024 Annual Town Meeting, the Stormwater Enterprise Fund Article was presented and adopted, creating the Stormwater Enterprise Fund to set, assess, and collect fees supporting stormwater infrastructure and management across the town. Work continued in the development of the Stormwater Utility to secure a reliable revenue source for stormwater management. This initiative included assessing the budgetary requirements of the Stormwater Management Program, meeting MS4 permit obligations, maintaining drainage systems, addressing capital needs, and mitigating flooding. Key milestones included finalizing the annual budget for approval at the 2025 Annual Town Meeting, establishing a fee structure and credit system, and contracting with NISC to develop the billing process, which is scheduled to begin in early 2025, with fee collection targeted for July 2025. Public outreach and the creation of the Stormwater Enterprise Fund documents, including all necessary forms and resources started in 2024 and will be completed in 2025.



### Warner's Pond and Dam

The Engineering Division engaged a consulting firm, Pare Corporation, to develop an Inspection and Maintenance Plan for yearly inspection and maintenance of the Warner's Pond Dam. This plan would outline procedures for annual inspections and maintenance activities and will be shared with the Natural Resources Commission and the Public Works Highway and Grounds Division to facilitate routine monitoring and upkeep. The final plan is expected in January 2025. These routine inspections are in addition to the state-mandated inspection that the dam underwent in 2023. Those inspections are required every five years, with the next inspection scheduled for 2028.

Engineering Division updated the Emergency Action Plan (EAP) for Warners Pond Dam. The revised EAP was distributed to all designated responders to ensure preparedness in the event of an emergency.

Engineering staff participated in the Warner's Pond Task Force monthly meetings and have been actively involved in reviewing and providing comments on the plans and studies completed.

## Gerow Recreation Area

Cole contracting resumed work after the winter shutdown and completed remaining work for the pavilion which included resetting the settled floor pavers, adding lighting, drainage and regrading the perimeter. Other work completed included the kiosk, park sign, bike racks, bike repair station, parking lot striping, traffic signs, replacement of dead plantings, and other miscellaneous items. Occupancy certificates were issued for the restroom building and the pavilion. Closeout procedures started in late 2024 and will be completed in early 2025.



## Ministerial Drive Drainage and Sinkhole Repair

This location experienced sinkholes in the roadway and sidewalk at the intersection of Ministerial Drive and Loring Road which necessitated the closing of Ministerial Drive between Loring Road and Lapham Road for a significant period. The reason for the sink holes was the failure of a drain manhole bottom that was allowing the fine soil in the area to be pulled by stormwater and groundwater through the drainage system. The extensive repair project involved the replacing of the failed manhole, repair of two water main breaks resulting from the construction, soil modification and compaction in the areas of the sinkholes and the installation of an underdrain to provide some protection from this situation reoccurring. The project was completed in spring of 2024.



## Baker Avenue Sinkhole and Culvert Repair

In May 2024, a sink hole developed in Baker Avenue under the sidewalk adjacent to Concord Greene Condominiums. CPW Engineering evaluated the area, consulted with Wright-Pierce and made recommendations for stabilizing the sinkhole that was performed by CPW forces. A CCTV inspection of the culvert determined that the collapse was due to a failed joint within the three 30" parallel culvert system that flows from a pond on the Concord Greene Condominium property and discharges on the west side of Baker Ave.

Monitoring of the area occurred on a regular basis while funding was being secured to develop and implement the repair of this major culvert system. An appropriation of \$1 million of ARPA funds was received and Engineering staff executed a contract with Wright-Pierce to perform the design services and bid document preparation for the final repair of the culvert. Due to the impending winter, a temporary restoration of the road surface was designed by Wright-Pierce to make the area safe for winter operations, and the construction was completed by Lazaro Paving in December 2024. The final repair project, permitting, and coordination with utilities and affected abutters will take place over winter 2025 to have the construction work begin in spring 2025. A National Grid project to relocate a gas main that is within the sinkhole area will need to occur in advance of the culvert project.



## Rt 126 (Walden Street) Paving under MassDOT Municipal Paving Program

The Massachusetts Department of Transportation selected Walden Street between Route 2 and the Lincoln Town line to be paved in 2024. Under this program, MassDOT aids municipalities in paving qualified local streets. Engineering met with State officials to determine the work needed in the roadway, and an agreement was executed with the State and Walden Street was paved in the summer of 2024.

## Parking Meter Removal Project

On November 20, 2023, the Select Board voted to remove the parking meters in town. As a result, all meters and the 103 parking meter posts were required to be removed. CPW Engineering was requested to prepare documents and solicit bids for the construction work required for the removal of the meters on several different streets throughout the town and restoring the surface (asphalt or concrete sidewalks or grass). A contract was executed, and construction is anticipated to start at the beginning of 2025.

## Dover Street & Darton Street – Petition for

## National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit

The Year-6 Annual Report (July 1, 2023-June 30, 2024) for the MS4 permit was completed and forwarded to both the EPA and MassDEP in September 2024. Below, Engineering has summarized the actions taken by the Town during this reporting year to fulfill these requirements:

- 1. Public Participation:** The Town actively engaged the public in the review and implementation of the Stormwater Management Program (SWMP). Additionally, an educational event was organized in local elementary schools to raise awareness about the importance of preventing pollutants from entering our surface waters.
- 2. Community Outreach:** The Town proactively communicated with town residents, businesses, and industries, encouraging the adoption of stormwater pollution mitigation methods.
- 3. Personnel Training:** Annual training sessions were conducted for personnel involved in the Stormwater Management Program, specifically focusing on Illicit Discharge Detection and Elimination.
- 4. Site Plan Reviews:** A total of 10 site plan reviews were carried out for development or redevelopment projects that disturbed one or more acres of land.
- 5. Stormwater Site Inspections:** The Town conducted at least 20 stormwater site inspections to monitor compliance.
- 6. Green Stormwater Infrastructure Assessment:** The existing Town-owned green stormwater infrastructure was assessed to determine the amount of phosphorus removed by these structures before releasing stormwater flows into the Assabet River watershed.
- 7. Catch Basin Inspections:** A total of 475 catch basins were

## Temporary Repairs to Private Ways

Dover St and Darton St are private ways located in the White Pond watershed. The residents submitted a petition to the Public Works Commission, requesting the Town consider making repairs to reduce street flooding at the intersection that caused the street to deteriorate. This petition follows the process authorized by the bylaw approved under Article 18 of the 1996 Annual Town Meeting and will need approval by the Public Works Commission (PWC). CPW continued to examine more feasible and sustainable options as the solution for the persistent flooding problems. Questions on the petition process, ownership of the proposed drainage system, easements, and other items were reviewed with Town Counsel. Using ARPA funds appropriated for the project, a consulting firm, IMEG was retained to design the plans to address the drainage challenges faced by the community. CPW also continued to work with legal counsel to review the easement needed from the owner of 20 Darton St and 4A Shore Dr to enable portions of the proposed stormwater system to run through their properties. The design plans are expected to be completed for construction by the summer of 2025.



inspected, 375 were cleaned and 316 cubic yards of sediment were removed, contributing to enhanced stormwater quality.

8. **Street Sweeping:** A substantial effort was made with the sweeping of 330 miles of pavement, ensuring that streets remained clean and free from debris that could potentially affect stormwater runoff.

CPW Engineering solicited multiple consulting firms to obtain quotes for wet weather sampling of outfalls identified based on system vulnerability factors. A contract will be finalized with one of the firms in January 2025, and wet weather sampling for the designated outfalls is set to commence in spring of 2025.

### **Right of Way/Driveway Permitting**

In 2024 Engineering staff issued a total of 177 permits - 103 Right-of-Way permits, and 74 Driveway permits by utilizing the Full Circle platform to accept, review and issue permits. R-O-W permits were typically issued for the installation or repair of utility mains, structures or service lines or for impacts caused by private development work to infrastructure in the public right-of-way. Driveway permits were typically issued for the reconstruction of or the installation of a new driveway that accessed the public right-of-way. Engineering staff also performed pre-, during- and post-inspections of the work sites for each permit.

### **Private Development Plan Reviews**

Engineering staff reviewed a total of eleven private development projects in 2024 and several comment letters prepared by third party reviewers for larger projects. Projects that required review effort included 406 Old Marlborough Road, 80X & 1053 Main Street, Minute Man National Park, 1200-1224 Main Street, Alpine Property Management Corp., and 61B Walden Street. Projects that required evaluation of peer review comments included 166 Commonwealth Avenue, 292-294 Baker Ave - Novo Riverside Commons, 275 Forest Ridge Road, 1400 Lowell Road, Middlesex School Field House, and 300-310 Baker Avenue. Staff also performed field observations of soil testing for stormwater management.

### **Town-Requested Engineering Services**

- > Managed the inspectional services by an engineering consultant in the construction of the foundation of the Napoli Mausoleum at the Sleepy Hollow Cemetery.
- > Managed the design by an engineering consultant of the stone wall repairs for the Sleepy Hollow Cemetery, Old Hill Cemetery and Old South Cemetery.
- > Assisted in the contracting and the provision of plot layout by an engineering consultant for the Sleepy Hollow Cemetery.
- > Staff collaborated with the GIS Division and

Highway & Grounds teams to create a GIS-based inspection report and user map for catch basin cleaning. This aims to streamline catch basin maintenance efforts in compliance with MS4 requirements.

- > Engineering worked with the Town Clerk's office in responding to numerous requests for public records.
- > For Warner's Pond Dam, Natural Resources Division established a Task Force to address and formulate recommendations for mitigating environmental issues arising from the dam. These concerns encompass sedimentation, pollutant loads, and the proliferation of invasive plant species. A member of the Engineering Division participated in the Task Force as a non-voting member, offering guidance on technical engineering aspects to assist in decision-making.
- > Engineering continued its review and provided comments on the MBTA Communities Zoning Site Plan Rules and Regulations.
- > Engineering reviewed the structural design of the Poetry Phone Booth prior to its installation at the Bruce Freeman Rail Trail.
- > Engineering Staff aided DPLM in the review of the request for the removal of a fence on Power Mill Road over the Bruce Freeman Rail Trail.
- > Engineering aided in the technical review of a sidewalk decal in West Concord that was applied to the new sidewalks on Commonwealth Ave.
- > Engineering performed a technical review of the design of the proposed Concord Prison Cemetery Seating Area adjacent to the Bruce Freeman Rail Trail.
- > Engineering Staff attended Safe Routes to School walk audits at the Alcott Elementary School and Thoreau Elementary School.
- > Engineering staff assessed the location of signage with the Economic Vitality Manager, and updated the Town's Traffic, Parking and Pedestrian Rules & Regulations based on approvals from the Select Board.

### **Grants of Location (GOL) for Utilities in Public Ways**

Engineering staff performed reviews of plans and documents submitted to the Select Board by utility companies petitioning for approval to locate new utility lines, services and appurtenances overhead or underground in the public right-of-way. Engineering coordinated with other Town departments and prepared comments and conditions of approval for the Select Board's public hearings. During 2024, National Grid delayed several of its petitions because of their unacceptance of conditions placed by the Engineering

Division. Both parties worked to re-establish conditions that would be amenable to both CPW and National Grid and the reviews on the petitions resumed. The utility projects are listed below with the status of the GOL.

- > National Grid's 4 - 195 Thoreau St GOL petition – CPW requested National Grid's revisions to their design
- > National Grid's 475-806 Monument Street GOL petition – CPW's final review started
- > National Grid's Main St from Edgewood Rd to Winslow St. GOL petition - CPW requested National Grid's revisions to their design
- > National Grid's 1-28 Sudbury Road petition - requested National Grid's revisions to their design
- > National Grid's 21-92 Old Bridge Road, Main Street, Cottage Street GOL petition - CPW's initial review started
- > National Grid's 398 Simon Willard Rd GOL - Approved by the Select Board (1/24/2024) and work was completed
- > National Grid's Davis Ct GOL - Approved by the Select Board (3/4/2024) and work was completed
- > National Grid's 150 Lexington Rd GOL - Approved by the Select Board (7/8/2024) and work including significant pavement restoration was completed
- > National Grid's GOL for Crescent Rd, Hosmer Rd, Garland Rd, Wilson Rd, Nashoba Rd Petition - Approved by the Select Board (9/9/2024) but work has not started
- > Crown Castle's 133 Old Road to Nine Acre Corner GOL - Approved by the Select Board (8/5/2024) and work was completed
- > Comcast's 86 Baker Ave GOL petition - Staff have prepared a comment letter to the Select Board for a hearing scheduled for 1/6/2025

### Surveys

- > Engineering staff conducted the existing conditions survey of Highland Street when drainage issues were observed. The survey was used to re-grade the roadway and design repairs and updates to the drainage system.
- > An existing condition survey of various parking lots was performed by Engineering staff in preparation for the design and reconstruction of the parking lots.

### Traffic Management Group

Engineering staff is an integral part of the Traffic Management Group (TMG), made up of representatives from the Concord Police Department, Planning Department, CPW Highway and Grounds Division, and CPW Engineering Division that manages resident traffic-

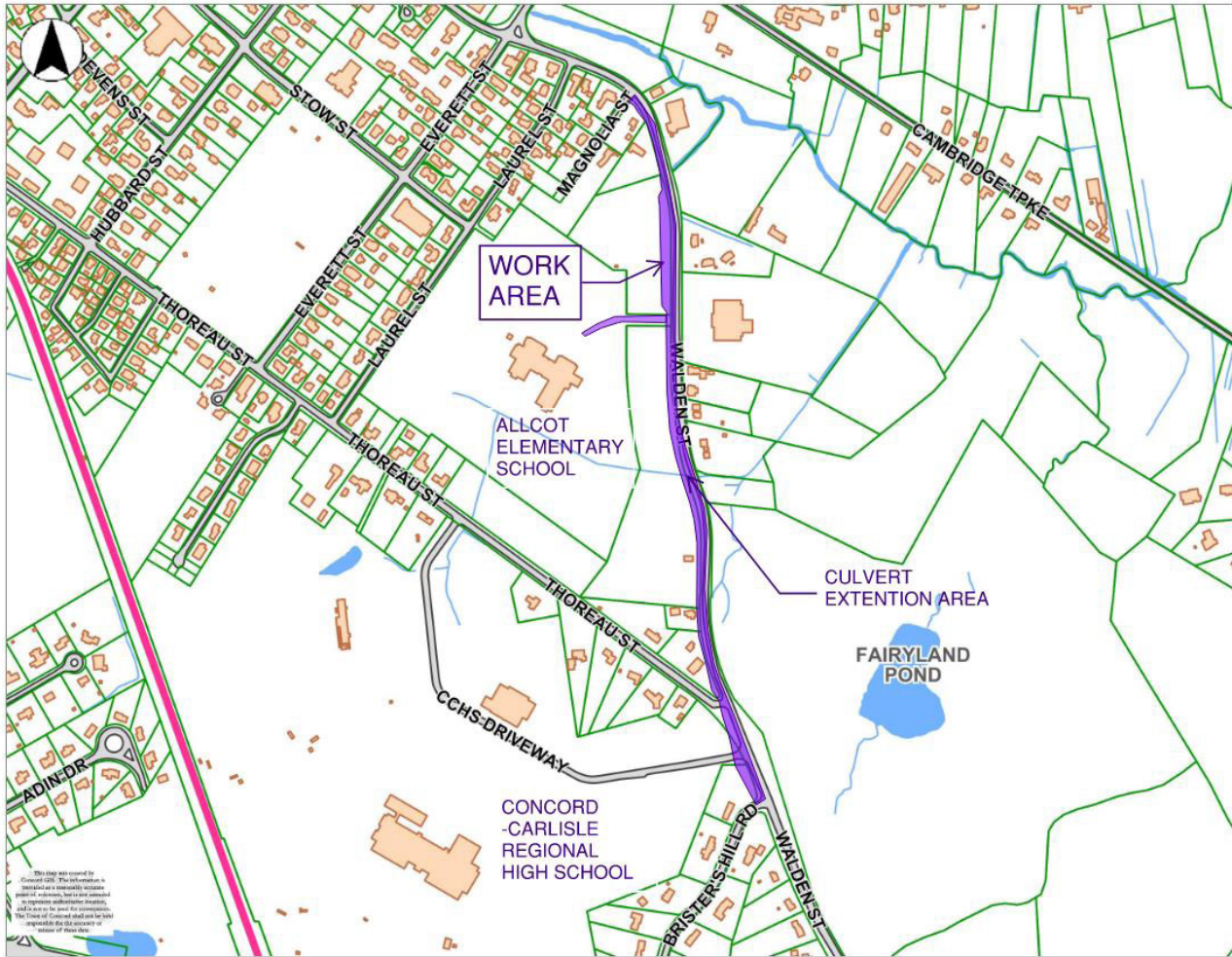
related concerns and requests within the Town's public rights-of-way. Engineering's role in the TMG is to provide technical recommendations related to engineering standards and practices. Some of the more significant items acted on by the TMG this year were review of speed data provided by Concord Police related to resident complaints. TMG recommended installation of speed limit signage, warning signage, wayfinding signage, and pavement markings for improvements to facilitate safer roadways.

### Comprehensive Transportation Study

Results of a town-wide survey and general public meeting held in late 2023 for residents and stakeholder input on transportation and mobility were compiled and summarized and presented to the Transportation Advisory Committee (TAC) in early 2024. TAC responded that the study needed to be modified to address the Town's transportation goals in a more practical and actionable way. TAC developed a Transportation and Mobility Vision document in July 2024 and listed goals along with several action items, some of which were to be incorporated in the study being performed by the consultant, Stantec. The consultant, under a separate contract and in conjunction with the existing planning study performed asset management of the street pavement and sidewalk condition. The results will be finalized and presented to support a Tier III 5-year roads program "borrowing" request for consideration at the 2025 Annual Town Meeting. An additional task in Stantec's scope of work is a review of MassDOT's design of Route 2 within the town limits and examine traffic impacts due to the re-development of the closed MCI facility.

### Grant Applications

- > A Complete Streets Grant for the Walden Street sidewalk from Magnolia Ln to Brister's Hill Rd was applied for. This project was chosen by the Engineering staff with the aid of members of the Traffic Management Group and the Planning Division as the next project from the approved Complete Streets Prioritization Plan to pursue for funding. The grant in the amount of \$500,000 was awarded. A consultant will be selected to perform the design of the sidewalk with construction anticipated to start in the fall of 2025.
- > Engineering aided DPLM in the request for a Safe Routes to School Signs and Lines Grant for the Thoreau Elementary School. The grant request was successful, and a contract was executed with MassDOT. Construction is anticipated to begin in summer 2025.
- > The Engineering Division received notice that they were not successful in their application for other State grants that included a Safe Routes to School on Lexington Rd and Heywood St and a culvert replacement on Spencer Brook.




- Town Boundary - State Su
- Address Numbers
- Buildings (ft)
- Parcels
- MA Highways
- Interstate
- US Highway
- Numbered Routes
- MBTA Commuter Rail Stati
- Railroad
- Streams
- Streets Area
- Rivers & Ponds

This map was created by Concord GIS. The information is intended as a general location guide only. It is not intended to be used for legal purposes. The Town of Concord shall not be held responsible for the accuracy or reliability of these data.

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Printed on 04/29/2024

**TOWN OF CONCORD WALDEN STREET COMPLETE STREETS SIDEWALK PROJECT**