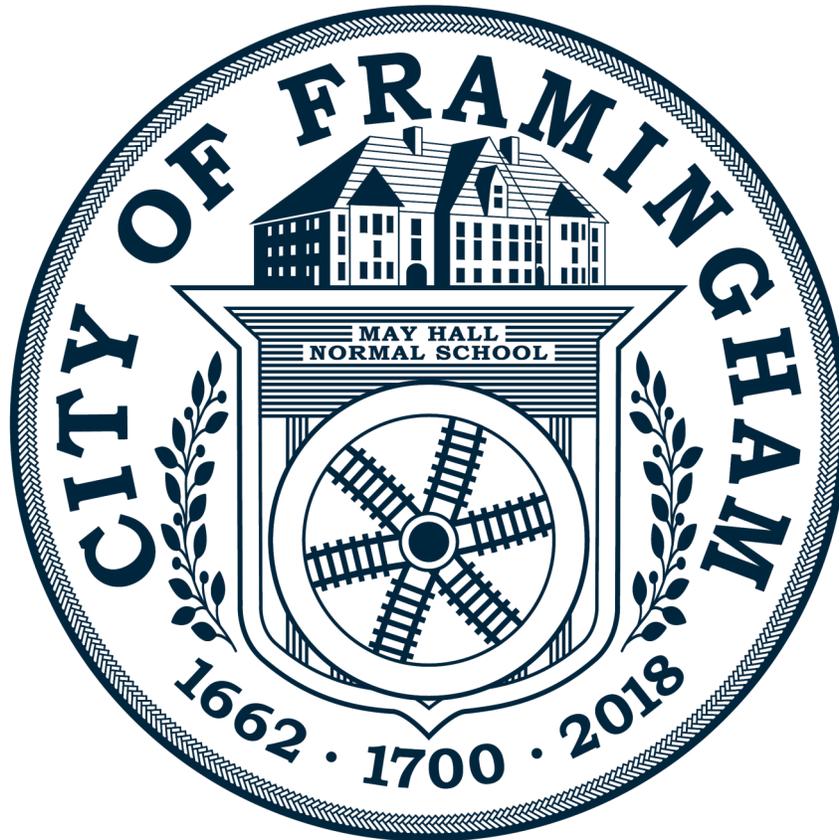


CITY OF FRAMINGHAM

**FISCAL YEAR 2021
CAPITAL IMPROVEMENT BUDGET PROPOSAL**



**GENERAL FUND ACCOUNT
WATER AND SEWER ENTERPRISE FUND ACCOUNTS**

**Dr. Yvonne M. Spicer
Mayor**

**Thatcher W. Kezer III
Chief Operating Officer**

**Mary Ellen Kelley
Chief Financial Officer**

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FY2021 General Fund Capital Improvement Project
Library Department—Systemwide Technology Upgrade Plan
Requested Authorization - \$245,040—Free Cash

Request Description:

Working in partnership with the City Technology Service Department, the Library will implement a three-year program beginning in FY2021, which will replace all of the old and cobbled-together bits and pieces of technology with uniform workstations managed from new servers using up-to-date software. This renovation of equipment will free up staff resources for public services like training and digital immersion, partnering more closely with the Framingham Public Schools, etc. The outcome of this funding request will be felt community-wide. The Library will create a technology environment that encourages access to information, fosters community engagement, shares resources and content with other City Departments and promotes educational achievement. It's been said that the true Public Library is one of the few remaining places where members of the community can gather as citizens rather than consumers. By upgrading and having an efficient plan to keep our technology current and relevant the Library will enhance its role as a trusted information resource in Framingham.

Request Justification:

The Framingham Public Library is working against the technological tide. The vast majority of our public internet PCs and all of our Staff PCs are old and out of warranty, dating back to 2008 in some cases. Staff PCs often require the installation of additional memory just so staff can use a web browser simultaneously with library software, two basic job necessities. Public PCs break, need to be re-imaged or rebuilt using parts harvested from other broken PCs. Rather than serving this community as the hub of innovation and knowledge, the Library's resources are being diverted into the practice of getting by and making do. In addition to old PCs, our infrastructure is out of date and not sustainable. Our two physical servers are reaching the end of their reliable service life as of November 2019. The virtual machines inside those servers are running on outdated server software.

FY2021 General Fund Capital Improvement Project
Technology Services Department—Data Storage and Virtual Environment Upgrade
Requested Authorization - \$151,965—Free Cash

Request Description:

The proposal is to upgrade the City of Framingham's current virtualized server and storage environment. The environment consists of two physically separate data centers, which both have production applications running. This equipment is utilized City-wide 7 days a week, 24 hours a day. The amount recommended is based on a five-year no-interest lease with a \$1 buyout at the end of the lease term. This amount will be included in the remaining years of the capital plan.

Request Justification:

The proposed upgrade would address the performance and capacity issues we are currently experiencing. The upgrade will also address equipment that will be going end of support in FY21. Currently, the City's server environment is 88% virtualized with 83 virtualized servers. These servers include (but are not limited to) our integrated financial system, Cisco phone system, e-mail, file and print, and network monitoring applications. Currently, we have 14 virtual hosts. We are looking to reduce our virtual hosts' footprint by installing hosts that have a greater density of memory and CPUs, likely resulting in a reduction in electrical and cooling costs at both of our data centers.

The upgrade is sized to accommodate growth projections to support the future technology needs for the City of Framingham. Allowing us to virtualize some of the remaining physical servers.

The proposed solution will also provide a more robust disaster recovery solution providing more support for an automatic failover in the case of a catastrophic failure in our main data center. This solution will also help better store and secure the City's critical data from the many new malicious threats municipalities now have to deal with, like ransomware.

FY2021 General Fund Capital Improvement Project
School Department—Exterior Envelope
Requested Authorization - \$2,000,000

Request Description:

This funding request will be used in accordance with a developed scope of work prioritization plan spreadsheet for the replacement or repair of an existing wall, window, or sealant system components within a recommended timeline for multiple schools.

Request Justification:

Exterior walls, windows, sealant systems, and associated components are to be removed and replaced within a recommended timeline in phases.



Stress cracked foundation at Walsh Middle School.



Failed perimeter window sealant at Hemenway Elementary School. (Pictured Left)

FY2021 General Fund Capital Improvement Project
School Department—Paving Replacement/Stormwater Improvements
At Brophy Elementary School
Requested Authorization - \$955,000

Request Description:

This project appropriation will be used to upgrade the Brophy Elementary Schools existing driveway, parking lot and stormwater system.

Request Justification:

This is an on-going request for upgrades to existing school driveways, parking lots, and stormwater systems. This also ties to the National Pollution Discharge Elimination System (NPDES) requirement that all City buildings stormwater run-off including roofs, is pretreated before allowing stormwater to run into streams, brooks, ponds, etc. All of this work will be performed under the utilization of the DPW's Unit Pricing Contract.



Existing driveway and parking lot conditions at the Brophy Elementary School.



FY2021 General Fund Capital Improvement Project
School Department—Heating, Ventilation, and Air Conditioning (HVAC) - Replace Rooftop Air Handling Units (AHU's) and Ventilation—Barbieri Elementary School
Request Authorization—\$200,000

Request Description:

This funding request will be used for the demolition and installation of a new HVAC system to replace the existing system at the Barbieri Elementary School.

Request Justification:

The HVAC air handling unit on the rooftop at the south end of the Barbieri Elementary School has failed and needs to be replaced.

Barbieri Elementary School rooftop units.



FY2021 General Fund Capital Improvement Project
School Department—Security Enhancements throughout the District
Requested Authorization - \$235,200

Request Description:

This funding request will be used to further support and enhance security measures for our schools.

Request Justification:

The School Department has implemented increased security measures throughout the District and continues to be mindful of past and ongoing school related security events across our nation.

FY2021 General Fund Capital Improvement Project
Facilities Department— Energy/Sustainability Projects
Requested Authorization - \$1,268,361

[Please reference this link for project information.](#)

FY2021 General Fund Capital Improvement Project
Facilities Department— Pearl Street Garage Exterior Envelope and Stairwell Repairs
Requested Authorization - \$631,312

Request Description:

The repair of the existing structure and stairwells are imperative to keep the garage open. If masonry repairs are not completed soon, the concrete decking and structure will be unrepairable.

Request Justification:

A Feasibility Study was conducted in 2020 to evaluate the Pearl Street Garage. This study prioritized structural and stairwell repairs to keep the garage functional in its current use. The garage is home to all of the Memorial Building's municipal vehicles and equipment storage for the Weights and Measures Department. If repairs are not completed the garage will continue to deteriorate and be deemed unsafe for use. If this occurs, the garage will have to be demolished.

Exterior and interior of the Pearl Street Garage.



FY2021 General Fund Capital Improvement Project
Facilities Department—Memorial Building Exterior Envelope Repairs
Requested Authorization - \$1,821,461

Request Description:

The Memorial Building's exterior existing masonry must be addressed before becoming unrepairable. Preventing water infiltration on the exterior facade will preserve and prevent additional deterioration. The precast masonry pieces are at a critical point, and several sections are not repairable and will need to be replicated. If the infiltration continues, the masonry brick facade will start to lose the bond to the building. The brickwork is still in good condition despite its age; however, the mortar joints are starting to fail.

Request Justification:

A Feasibility Study was conducted in 2020 to evaluate the entire building along with mechanical systems. This study prioritized necessary repairs to keep water infiltration from continuing the damage on the exterior facade before the deterioration is total removal and rebuild. Addressing the exterior brick and masonry facade will continue to preserve the building's envelope.



Exterior of the Memorial Building.

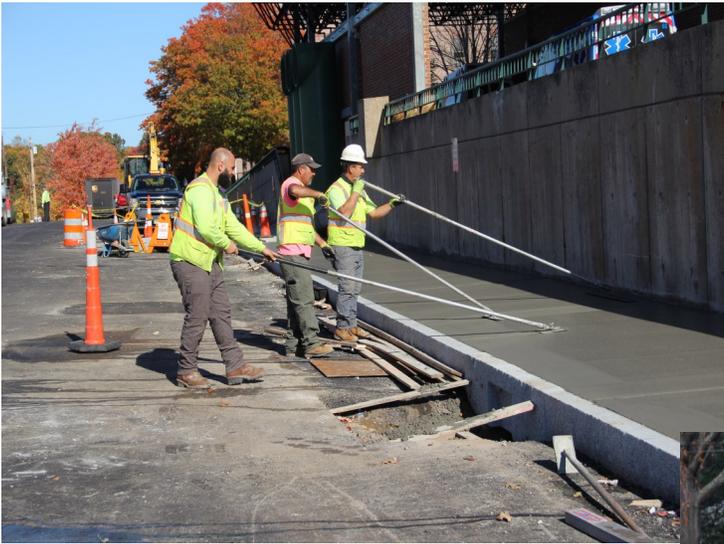
FY2021 General Fund Capital Improvement Project
Highway Department—Annual Roadway Improvements
Requested Authorization - \$3,100,000

Request Description:

This program provides funding for the roadway resurfacing and roadway surface treatment improvements on the City's arterial and secondary road segments, including pavement, curbing, sidewalks, drainage, signage, and pavement markings. Framingham Public Works is responsible for the maintenance of the City of Framingham's roadway network and management of the Roadway Capital Improvement Program

Request Justification:

The roadway network is a critical piece of the City's infrastructure, requiring considerable maintenance, as identified and prioritized according to the City's Road Surface Rating (RSR) reported in the Pavement Management Program. Roadways are identified for rehabilitation based on traffic volume, repair costs, repair life expectancy, and road condition, and are selected based on their benefit to the City.



Concrete sidewalk installation on Evergreen Street.

Compacting asphalt around new granite curbing on Summer Street.



Final paving operations on Beacon Street.

FY2021 General Fund Capital Improvement Project
Sanitation Department— Dudley Road Landfill Closure—Alternatives Analysis
Requested Authorization - \$400,000

Request Description:

The City of Framingham is in the process of closing the Former Dudley Road Landfill per the Massachusetts Department of Environmental Protection Bureau of Waste Prevention (MassDEP). The MassDEP's Solid Waste Management Approval of Landfill Assessment and Closure is a four-step process. The City has completed the first two steps of the process so far, the Initial Site Assessment and the Comprehensive Site Assessment.

The FY2021 appropriation will provide funding for the third step of the process, the Corrective Actions Alternative Analysis (CAAA), as well as continued water and air monitoring and quarterly reporting. The CAAA is conducted to determine the nature of the landfill cap and any additional remediation measures which will be needed to close the sanitary landfill properly. Based upon the feedback the City receives from the MassDEP regarding the Comprehensive Site Assessment Report, the City will present alternatives to close the landfill formally.

The CAAA is followed by a Corrective Action Design (CAD) and review before any closure construction activities can commence. Closure of the landfill is anticipated in 2023.

Request Justification:

The landfill closure process intends to protect public health, safety and the environment by monitoring the level of contamination emanating from a solid waste landfill and determining a baseline from which closure alternatives can be evaluated, selected, designed and implemented. Assessment of a landfill helps to ensure that the closure technology implemented in the landfill will result in the remediation of the site and prevent the spread of such contamination.



Solid Waste visible on the side slopes of the former Dudley Road Landfill.

FY2021 General Fund Capital Improvement Project
Engineering Department—Potter Road Bridge Rehabilitation Construction
Requested Authorization - \$500,000

Request Description:

This Urban Collector Roadway bridge over the Sudbury River will be repaired by eliminating the bridge joints over the piers, installing a new membrane waterproofing on the topside of the deck, cleaning and painting the steel bearings, repairing and sealing the deck and ends of the pre-stressed I-beams, replacing the severely deteriorated section of bridge railing (north side), repairing the concrete sidewalk, and repaving the roadway. The City of Framingham and the Town of Wayland have entered into an inter-municipal agreement to share in the design and construction costs of the remedial work.



The north side of the Potter Road Bridge is severely deteriorated.



A portion of the Potter Road Bridge is owned by the Town of Wayland.

Request Justification:

The existing 88-foot two-span bridge was constructed in 1957. At 62 years of age, the structure is showing deterioration and need for repairs, which is underscored by the December 2017 Inspection Report from MassDOT District 3. These repairs will extend the existing bridge life, and avoid the need for major rehabilitation or total reconstruction that would be much more costly and disruptive.

FY2021 General Fund Capital Improvement Project
Engineering Department—Union Avenue Right of Way and Final Design
(for TIP21)
Requested Authorization - \$1,240,000

Request Description:

This appropriation will provide funds for the construction of improvements along Union Avenue from Proctor Street to Main Street that will not be included by the state funded Transportation Improvement Program (TIP). Examples of these include property appraisals, easement acquisitions, and final design.

Request Justification:

Not having this funding will delay TIP funding and the completion of construction of this vital community corridor, including drainage improvements that reduce flooding along Union Ave, and stormwater pollution into Farm Pond. This work includes items required from the local entity for the TIP construction, and others not funded by the State. The sidewalk network along Union Ave. is not ADA compliant and needs to be addressed. The City undertook significant utility improvements along this corridor in advance of the proposed transportation work.



Pedestrian crossing signals at the intersection of Union Avenue and Mt. Wayte Avenue are non-existent.



Geometric improvements will be made at the intersection of Union Avenue and Lincoln Street.

FY2021 General Fund Capital Improvement Project
Engineering Department— Edgell Road/Central Street Intersection—Final Design
Requested Authorization - \$366,000

Request Description:

The appropriation will fund the final design to improve the intersection of Edgell Road and Central Street. Proposed reconstruction includes, geometric improvements, the installation of a traffic signal, and improved pedestrian mobility and safety features.

Request Justification:

The proposed work will improve safety and reduce traffic congestion at the intersection. A new traffic signal will include an exclusive pedestrian phase to improve mobility and safety for all users, in concert with ADA compliant sidewalks along both sides of all roadways, crosswalks across all approaches, and improved bicycle accommodation via consistent shoulders. This project is included in the FY2022 TIP.



25% Design rendering of Edgell Road at Central Street.

[For a larger view of the 25% Design, please click here.](#)

FY2021 General Fund Capital Improvement Project
Engineering Department—Arlington Street Area, Drains and Roads Design
Requested Authorization - \$520,000

Request Description:

This project will design drainage, road, and sidewalk improvements in the Arlington Street area. Design work includes drainage improvements to improve system functionality, reduce flooding and comply with the City's MS4 Permit. Road and sidewalk improvements will be designed to meet ADA standards.

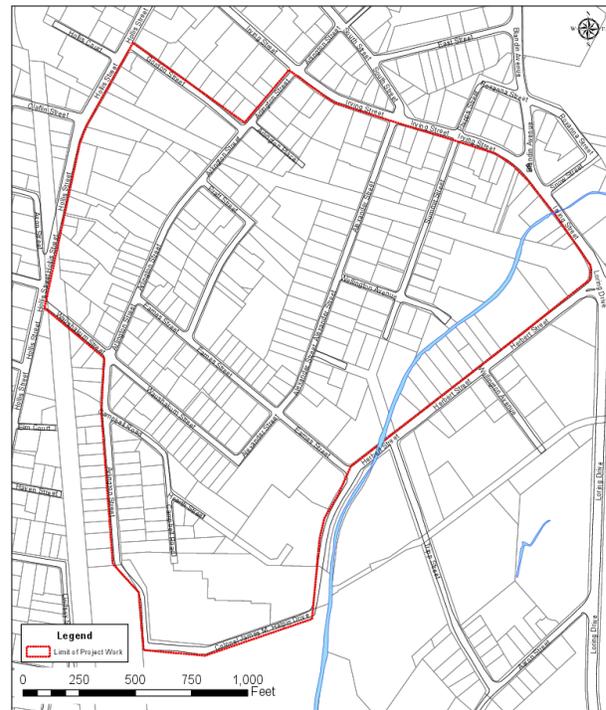
Request Justification:

Funding for this project was deferred for the past three years. Flooding frequently occurs at several locations throughout this neighborhood, due to inadequate or non-existent drainage. Some existing drainage pipes were installed under buildings and on private property, making access for maintenance difficult. The current drainage system is not in compliance with state regulations.

Existing sidewalks and roads are in poor condition and do not meet current ADA accessibility standards. Once underground utilities are upgraded, new roads and sidewalks will be installed. Water and sewer design work was previously funded and is underway. By completing drainage work in tandem with water and sewer improvements, it is more cost effective and less impactful to residents.



**Arlington Street
Utility and Roadway Improvements Project**



[For a larger view of the project limits, please click here.](#)

FY2021 General Fund Capital Improvement Project
Engineering Department—Unaccepted Streets Improvements—Harmony Lane, Bonvini Drive, and Sax Road
Requested Authorization - \$440,000

Request Description:

These funds would allow the City to improve certain roads that are currently private and do not meet minimum roadway standards. Funds would be used to improve Harmony Lane, Bonivini Drive, and Sax Road. Roads must be publically accepted before necessary improvements are made.

Request Justification:

This project was deferred in FY20. There are still 13 private roads in the City of Framingham that were created under subdivision control and were intended for eventual acceptance. These roads are not maintained by a homeowners association or other consolidated entity. Therefore some of these roads have deteriorated to an unacceptable level of disrepair. This request is to improve some of these roads to an acceptable condition after they are publically accepted.



Harmony Lane (left) and Bonvini Drive (right).

FY2021 General Fund Capital Improvement Project
Engineering Department— Annual Traffic Calming
Requested Authorization - \$200,000—Free Cash

Request Description:

This funding request will be used to study, design, and construct traffic calming measures and other related safety improvements to public roadways as identified by the City Council, Traffic Commission or Public Works Department. The intent is to improve the safety and livability of Framingham's streets and neighborhoods.

Request Justification:

Traffic congestion and safety are some of the most prevalent complaints from Framingham residents. These funds will allow for the continued study, design and installation of physical features that guide, warn, and manage the movement of vehicles, bicycles, and pedestrians.



Solar speed feedback sign recently installed on Wickford Road.

FY2021 General Fund Capital Improvement Project
Engineering Department—Annual MS4 Permit Implementation
Requested Authorization - \$366,000

Request Description:

This project will provide the necessary funds to achieve compliance with Year 3 of the City's National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Separate Storm Sewer System (MS4) permit requirements. Specifically, this project will support consulting services for water quality sampling to investigate potential sources of pollution into the City's drainage system and water bodies, developing pollution control plans, inspecting the City's stormwater system, and mapping drainage assets.



Water quality sampling at Lake Cochituate.

Request Justification:

In addition to restoring or increasing system capacity and improving water quality, this work helps extend the life of roadway pavement and curbs, which are deteriorated by undrained water.

FY2021 General Fund Capital Improvement Project
Highway Department—Annual Drainage System & Water Quality Projects
Requested Authorization - \$500,000

Request Description:

This funding request is for the capital repair of the City's stormwater conveyance system. Typically these improvements are prioritized to mitigate residential flooding or are made in conjunction with roadway improvements. Projects include the replacement and/or rehabilitation of deteriorating pipes, the replacement and/or rebuilding of catch basins, the restoration of open channels, and the inspection of drainage lines through closed-circuit television survey (CCTV).



The Highway Department making structural repairs to a storm drain located on Lockland Ave.

Request Justification:

Funding will restore and improve the system's capacity and reduce the risk of flooding to vulnerable areas. This will also, provide water quality improvements, and assist the City in complying with the EPA's Municipal Separate Storm Sewer System (MS4) permit requirements.

**FY2021 Water/Sewer Capital Fund: Sewer
Annual Wastewater Pump Station Capital Equipment Replacement
Requested Authorization - \$500,000**

Request Description:

This appropriation will provide for the replacement and upgrades of equipment at older wastewater pumping stations. The project includes the planned replacement of pumps, motors, controls and others, as well as emergency replacements.

Request Justification:

The lifespan and reliability of these stations can be extended a decade or more through the replacement of component parts as they become worn and inefficient, thereby reducing the near-term need for significant capital expenditures.

Antiquated pump station components (pictured right) causes maintenance to be more difficult and the pump station less reliable.



**FY2021 Water/Sewer Capital Fund: Sewer
Gates Street Sewer Pumping Station—Design & Construction
Requested Authorization - \$1,900,000**

Request Description:

Constructed in 1953, and last rehabilitated in 1984, the aged Gates Street Pump Station requires significant rehabilitation. Wastewater flow to the pump station will be bypassed while repairs are accomplished in the wet well, the pumps are replaced, and electrical improvements are undertaken. This work will improve operator safety, efficiency, and permit the pump station to operate for many years to come.

Request Justification:

This wastewater pump station and associated force mains has reached the end of their reliable service lives, and have outdated equipment. Failure of these stations could result in Sanitary Sewer Overflows (SSOs), and enforcement actions by the Massachusetts Department of Environmental Protection (DEP).



***Dry well at the Gates Street
Sewer Pumping Station***



Gates Street Sewer Pumping Station building.



***Wet well at the Gates Street
Sewer Pumping Station***

**FY2021 Water/Sewer Capital Fund: Sewer
Annual Various Sewer Improvements
Requested Authorization - \$375,000**

Request Justification:

Repairs and improvements are needed to assure continuing sewer service to ratepayers and compliance with regulations, to reduce costly emergency repairs and system maintenance, and delay needs for major capital investments.

Request Description:

This appropriation provides funding for the Sewer Division to perform systematic improvements and repairs to sewer mains and manholes and to respond to unanticipated sewer system failures.

The Sewer Division recently fixed a section of broken sewer main on Park Avenue (pictured right). This sewer break was caused by tree roots growing into the pipe.



**FY2021 Water/Sewer Capital Fund: Sewer
Sewer Defects Repairs Phase III—Construction
Requested Authorization - \$1,000,000**

Request Description:

This funding request will allow the City to continue addressing high priority sewer main and manhole defects. Two common construction methods will be used, replacement “dig” repairs (replacing sewer pipe) and rehabilitation “no dig” repairs (sewer lining). In a recent Sanitary Sewer Evaluation Survey (SSES), sewer infrastructure located between Waverly Street and Worcester Road as well as areas east of Concord Street.

Request Justification:

This project was deferred from FY2020. Framingham has evaluated the condition of approximately 50% of its sewer system within the last decade, with a focus on identifying high priority sewer repairs. These high priority repairs include rectifying defects that contribute to infiltration, as well as spot repairs and rehabilitation that will extend the reliable service life of sewer system assets. Infiltration is clean water, such as groundwater, that enters the sanitary sewer system and, in turn, reduces the capacity for wastewater flow. This capacity reduction can result in system backups and overflows, as well as fee increases from the MWRA, which is based on total wastewater flow from Framingham.



A specialized contractor lining sewer pipes through a manhole opening.

FY2021 Water/Sewer Capital Fund: Sewer
Worcester Road Sewer Construction, East of Concord Street, Westbound, Phase II
Construction and Phase III Design
Requested Authorization - \$4,400,000

FY2021 Water/Sewer Capital Fund: Water
Worcester Road Water Construction, East of Concord Street, Westbound, Phase II
Construction
Requested Authorization - \$4,925,000

Request Description:

This funding request is for the second construction phase of the Worcester Road Water and Sewer Improvements Project. The project would rehabilitate approximately 2,000 feet of aged sewer mains and 4,000 feet of water main and appurtenances on Worcester Road/Route 9 westbound between Concord Street and the Natick town line. Also, this appropriation would fund the design for the third phase of the project, which consists of 5,200 linear feet of gravity sewer that ties into Cochituate Road.

Request Justification:

Serving a major portion of Framingham's retail corridor, under a State road in need of rehabilitation, existing City infrastructure is aged and in poor condition, with some undersized sections. There is a high risk of failure, which would require costly emergency repairs as well as disruption of service and traffic. The existing sewer in phase III is located within wetlands, which make maintenance access and emergency repairs extremely difficult, costly and damaging to the natural resources.

[For a larger view of the project limits, please click here.](#)



FY2021 Water/Sewer Capital Fund: Water
Annual Various Water Improvements
Requested Authorization - \$350,000

Request Description:

This appropriation will provide funds for the design and reconstruction of the replacement of existing water mains and appurtenances in various locations. The work includes the replacement of water mains, services, and related equipment at locations identified by department staff throughout the year.

Request Justification:

Throughout the year, small sections of water mains require replacement or need to be increased in size. This project would allow the Department to survey, design and construct the work utilizing in-house staff whenever possible or to contract out where immediate attention is required. Particular attention will be placed on locations requiring increased fire protection, proper water circulation and those experiencing low volume and/or pressure.



The Water Division recently installed new water main on Prindiville Avenue.

**FY2021 Water/Sewer Capital Fund: Water
Annual Various Hydrant & Valve Improvements
Requested Authorization - \$250,000**

Request Description:

This appropriation will provide funds for the replacement of hydrants and gate valves, to be installed by in-house staff and contracted services as needed. The appropriation includes the purchase of hydrants, gate valves and related appurtenances and equipment. Additionally, the Department will be continuing its gate valve exercising program.

Request Justification:

One of the most critical services that the Water Division provides is ensuring adequate water volume and pressure for fire suppression and maintaining hydrants in good working order. In accordance with the City's Water Master Plan recommendations, the Water Division replaces up to 50 hydrants and associated gate valves per year. In addition to replacing these hydrants and valves, it is critical to exercise the more than 5,000 gate valves that control the flow of water throughout the distribution system and replace those that are no longer functioning. Routine exercising of the valves by opening and closing them ensures that they will be able to be operated in emergencies.



***The Water Division replacing a fire hydrant on
Old Worcester Road.***

**FY2021 Water/Sewer Capital Fund: Water
Merriam Hill Water Tank Repair and Replacement—Assessment
Requested Authorization - \$75,000**

Request Description:

An assessment will determine the cost-effectiveness of rehabilitation to extend the service life of the tank in comparison to the cost of replacing the tank. Replacing the tank will be difficult and costly due to its location. This study will result in the opinion of probable cost for the recommended alternative.

Request Justification:

This project was deferred from FY2020. This 3.5 million gallon water storage tank provides nearly half of the City's daily water supply. Built in 1962, this tank is the largest and oldest of the City's seven tanks. The Massachusetts Department of Environmental Protection requires annual exterior inspections and an interior inspection (via diver or Remote Operated Vehicle) every five years. These inspections indicate the tank is in good structural condition, but that interior and exterior coatings and tank appurtenances show extensive degradation resulting in corrosion and should be recoated in the near future.



Merriam Hill Water Tank.

FY2021 Water/Sewer Capital Fund: Water
Flagg Drive (Fuller Middle School) Water Main Design & Construction
Requested Authorization - \$1,933,600

Request Description:

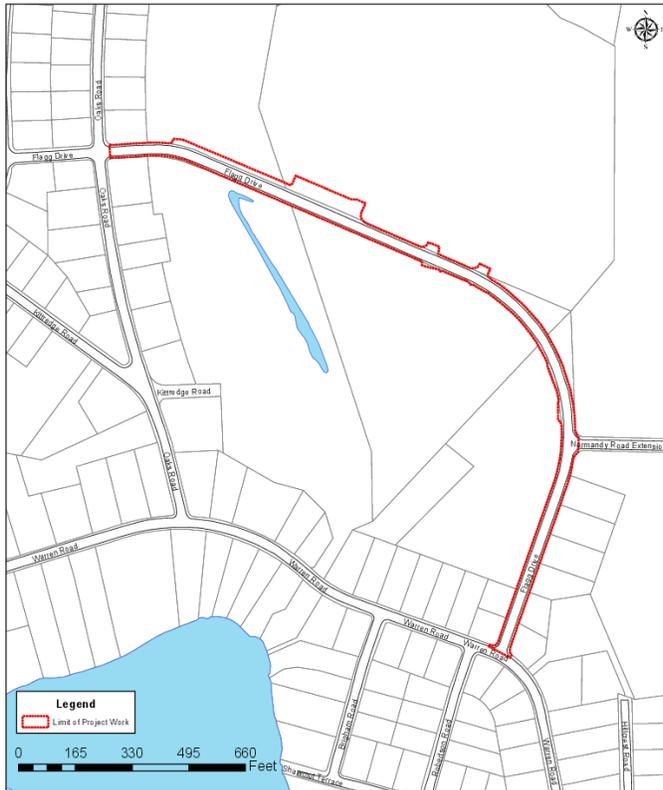
This project is for the replacement of 2,500 linear feet of 1955 8-inch cast iron water main along Flagg Drive between Oaks Road and Warren Road, including curb to curb mill and overlay paving.

Request Justification:

These replacements are timely with breaks in this section of main, and the Fuller Middle School construction project. In addition to the heavy vehicle traffic that will quickly deteriorate the pavement that is already showing signs of disrepair, there will be numerous pavement patches for the water, sewer and likely other service connections to the new school, as well as a sewer sag repair that will further deteriorate the roadway. Also, there is growing recognition that the 1950s cast iron pipe materials and installation are known to have a higher than average number of breaks. Construction will be less costly when bundled together, and less disruptive to the surrounding residential neighborhoods if completed before the opening of the new school in the fall.



Flagg Drive Water Main Replacement Project



[For a larger view of the project limits, please click here.](#)

FY2021 Capital Vehicles and Equipment Requests

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FY2021 General Fund Capital Improvement Project
Fire Department—Engine 7 Fire Truck Asset Replacement
Requested Authorization - \$789,763

Request Description:

Engine 7 is a 2009 fire truck built by KME and is assigned to Nobscot Station 7. Engine 7 is the station's only frontline fire truck that is responsible for the Nobscot and Northwest quadrant of the City.

Request Justification:

This Capital Request was originally scheduled for FY20 and was deferred. The replacement of this truck addresses two Department needs. First, the Department is planning to standardize the fleet so that all fire trucks are the same manufacturer and specifications. Having the same make and model of fire trucks will reduce the costs of maintaining the fleet because there would be common maintenance supplies, tools and mechanic familiarity. Second, this



project would address the need to place primary response fire trucks on a standardized replacement schedule. Maintenance records indicate that repair costs accelerate when the apparatus has reached 10-12 years of service. Also, fire trucks are manufactured to meet nationally recognized fire service standards, which typically change on a 10-year revision cycle to address the latest advancements in firefighter safety.

FY2021 General Fund Capital Improvement Project
Parks & Recreation Department

- ◆ Replace 1998 Kubota B21 Loader/Backhoe Tractor
 - ◆ Replace 2007 F450 4WD Cab and Chassis with a Dump Body and Plow
 - ◆ Replace 2006 F250 4WD Pickup Truck with a Crew Cab
- Requested Authorization - \$198,105**

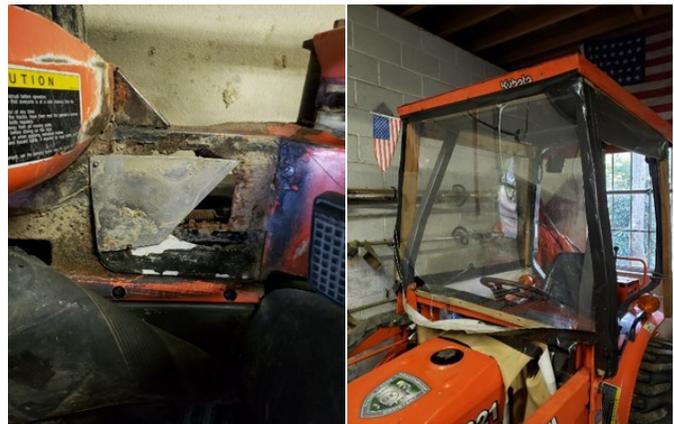
FY2021 Parks & Recreation Department, General Fund Capital Improvement Project
Replace 1998 Kubota B21 Loader/Backhoe Tractor

Request Description:

This funding request is for the replacement of a 1998 Kubota B21 Tractor with 33,443 hours of usage. The Kubota is used daily in support of the Edgell Grove Cemetery operations, such as grave digging, landscaping improvements, roadway repairs, brush removal, and general maintenance through the facility. It's the only tractor of its size to support these operations. During the winter, this machine is used for snow removal operations and road re-grading.

Request Justification:

This tractor has long surpassed its life expectancy of 5,000 hours and is in desperate need of replacement. Floorboard corrosion is now causing fumes to enter the tractor cab.



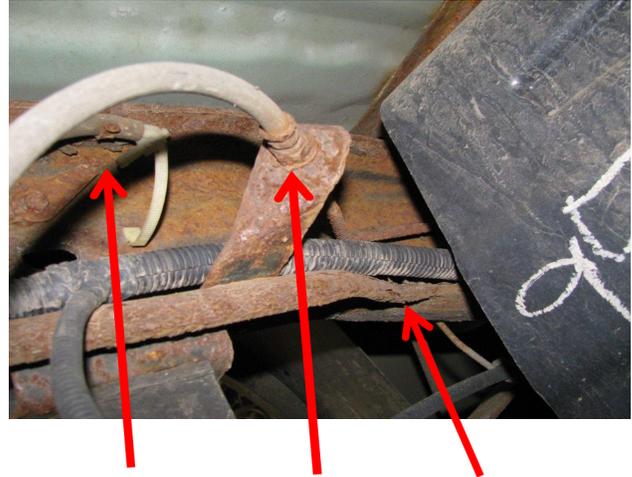
**FY2021 Parks & Recreation Department, General Fund Capital Improvement Project
Replace 2007 F450 4WD Cab and Chassis with Dump Body and Plow**

Request Description:

This funding request is for the replacement of a 2007 F450 Dump Truck which has exceeded its life expectancy. This vehicle is used daily in support of Parks Maintenance Department Operations including snow and ice operations, landscape support, brush removal, hauling equipment, moving crews, cemetery, and burial operations.

Request Justification:

Recently, the usage of this truck has greatly decreased due to its current condition. Over the past three years, the Department has spent \$20,264 in repairs, with an additional need for \$3,163 more in repairs.



Rotting break lines requiring full replacement.

**FY2021 Parks & Recreation Department, General Fund Capital Improvement Project
Replace 2006 F250 4WD Pickup Truck with a Crew Cab**

Request Description:

This funding request is for the replacement of a 2006 F250 Pickup Truck. This vehicle is used daily to support Parks Maintenance Operations including daily lining at over 60 fields throughout the city.

This truck is responsible for transporting lining equipment, paint, lime, and stencils by hauling a trailer throughout the city.

Request Justification:

This truck has exceeded its useful life expectancy. Corrosion is allowing engine fumes to enter the cab of the vehicle.



Exterior cab corrosion.

FY2021 General Fund Capital Improvement Project
Public Works Department—FY21 Fleet Replacements
Requested Authorization - \$1,141,832

Request Description:

For FY21 the Department is taking a new approach to request General Fund Vehicle and Equipment Replacements. Historically, we would present each unit up for replacement and request an individual vote. By requesting a budgetary allotment, the Department will have the ability to reassess vehicles on the replacement schedule once funds become available.

The combined number of vehicles/equipment up for replacement in FY21 is sixteen units, totaling over 2.5 million dollars.

Due to budgetary constraints, the Department has reduced its request to \$1,141,832 for the replacement of approximately eight units.

Request Justification:

The Department utilizes a five-year replacement schedule based upon vehicle/equipment age and mileage or hours. Additional factors taken into consideration when preparing the replacement schedule are reliable service life, cost of maintenance, overall structural condition, availability of replacement parts, and downtime. The final determination of which vehicles will be replaced will be in concert with this schedule and made by the Public Works Senior Management Team.

Nearly all vehicles and equipment are utilized by the staff daily to perform routine maintenance, emergency repairs, and respond to unforeseen weather events. Also, almost all of the Department's vehicles and equipment are utilized for the Snow and Ice Program, which is particularly destructive to both structural and mechanical components.

FY2021 General Fund Capital Improvement Project
Highway Department—New Fleet Vehicles, Stormwater
Requested Authorization - \$351,000

Request Description:

This funding request is for four new vehicles that will provide operational, maintenance and construction support for the new Stormwater Division. The addition of a Stormwater Division will increase the amount of maintenance and construction activities that will be performed and, in turn, create a need for additional dump trucks and pickup trucks.

The following vehicles are requested to support the Stormwater Division:

- One (1) 40,000 GVW Cab and Chassis with a Dump Body and Plow
- One (1) 15,000 GVW Cab and Chassis with a Dump Body and Plow
- Two (2) 7,700 GVW 4WD Cab and Chassis with a Standard Truck Bed

Request Justification:

Maintaining and upgrading the City's stormwater infrastructure will improve water quality and reduce pollution in lakes, rivers, brooks, and streams. The acquisition of these vehicles is essential to achieve compliance with Year 3 of the City's National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Separate Storm Sewer System (MS4) permit requirements.

Two dump trucks will support rehabilitation and construction activities that require the hauling of excavated material, clean gravel, and asphalt to and from the site. One pickup truck will be to support the operation, maintenance and construction crew to haul the necessary tools and equipment to perform the work. The second pickup truck will be to support the stormwater utility inspector, performing inspections to ensure that private construction and land disturbances meet the requirements set forth in their permit and continue post-construction operation and maintenance activities. The two larger trucks will come equipped with plows to support the Snow and Ice Program during the winter months.

FY2021 Water/Sewer Capital Fund: Sewer
Replace Sewer Service Trucks - Unit 703, 704, and 728
Requested Authorization - \$205,751

FY2021 Sewer Capital Fund Improvement Project
Replace 2009 15,000 GVW 4WD Cab and Chassis with a Service Body, Crane, and Plow, Unit 728

Request Description:

This vehicle is assigned to the Wastewater Pump Stations. It is a dual wheel truck that has a truck-mounted crane as well as a lift gate. This utility truck holds all necessary tools used to perform daily maintenance on the City's water and wastewater pump stations and water tanks. The crane component is used to remove pumps from stations when work is needed to be performed on the outside of the station. During the winter months, this vehicle is assigned to the City's Snow and Ice Program.

Request Justification:

This vehicle has over 130,000 miles, is unreliable, and has exceeded its 10-year life expectancy. Due to extensive undercarriage corrosion, the truck's engine oil pan had to be replaced for \$2800. Additional usage will increase the potential for a major engine/transmission failure. The crane is inoperable and unrepairable. It would cost between \$8000 and \$10,000 to replace this essential component, not including potential body modifications that may be required. Further repairs far exceed the value of this vehicle.



FY2021 Sewer Capital Fund Improvement Project
Replace 2008 9,800 GVW 4WD Cab and Chassis with a Modified Service Body and Plow, Unit 704

Request Description:

The City of Framingham is under an administrative agreement with the Attorney General's Office for the proper handling of asbestos-containing material.

The majority of asbestos-containing pipe in the City of Framingham is located in sewer infrastructure. Therefore the Wastewater Division has specifically retrofitted this vehicle with all of the necessary tools and materials to abate asbestos properly.

This truck is outfitted with a sealed cap over the truck bed, a mobile water tank, and a state-approved saw for use on an asbestos pipe.

Federal and State regulations require that all asbestos-containing material be transported in a sealed enclosed compartment, separate from the cab.

Request Justification:

This unit has exceeded its 10-year life expectancy and has 110, 938 miles. Due to this unit's age and high mileage, the City has seen an increase in engine sensor codes and engine performance. Additional usage will increase the potential for a major engine failure causing a strain on the division to properly abate asbestos-containing material. A new engine and transmission would cost close to \$20,000.



Unit #704 underbody and undercarriage corrosion.

FY2021 Sewer Capital Fund Improvement Project
Replace 2011 8,800 GVW 4WD Cab and Chassis with a standard truck bed, Unit 703

Request Description:

The Materials Coordinator uses this truck to travel to local vendors to order and pick up parts and materials for the Water and Wastewater Division. This truck is also used to deliver parts and materials from the DPW to job sites as well as move parts throughout the DPW facilities.

Request Justification:

This vehicle will have reached its 10-year life expectancy by the time it is replaced and has 100,384 miles.

FY2021 Water/Sewer Capital Fund: Water
Replace Water Service Trucks—Unit 60, 616, 618
Replace Water Backhoe/Loader with a Plow, Hammer, and Compactor—Unit 651
Requested Authorization - \$250,000

FY2021 Water Capital Fund Improvement Project
Replace 2011 8,800 GVW 4WD Cab and Chassis with a standard truck bed, Unit 60

Request Description:

This vehicle is assigned to the Operations Manager of the Water Division. The Operations Manager will use this truck to travel throughout the City to oversee work that would impact the water distribution system performed by in-house staff and contractors. This truck is utilized to respond to emergencies at all hours of the day and allows the manager to carry tools and parts to perform tasks on their own or with staff.

Request Justification :

This vehicle will have reached its 10-year life expectancy by the time it is replaced and has 81,635 miles.

FY2021 Water Capital Fund Improvement Project
Replace 2008 9,900 GVW 4WD Cab and Chassis with a Service Body and Plow, Unit 616

Request Description:

This vehicle is assigned to the Capital Program technician to provide operational support to the City's major water and wastewater capital projects. This truck is utilized for traffic control in construction work zones and to respond to unforeseen emergencies and customers. During the winter months, this vehicle is assigned to the City's Snow and Ice Program.

Request Justification:

This vehicle is currently out of service and is no longer operable. The vehicle has 110,438 miles, significant corrosion issues, and a slipping transmission. The cost for a new transmission is approximately \$6500. The front frame, firewall, and spring buckets are rotted and cannot be repaired. Further repairs far exceed the value of this vehicle.



FY2021 Water Capital Fund Improvement Project
Replace 2012 13,000 GVW 4WD Cab and Chassis with Service Body and Plow, Unit 618

Request Description:

This vehicle is assigned to the 11:00 a.m. to 7 p.m. shift of the Water Division. This truck is daily for dig safe mark outs, water main flushing, valve and fire hydrant maintenance, and customer service calls. This vehicle responds to emergencies investigating water main breaks and water meter issues. During the winter months, this vehicle is assigned to the City's Snow and Ice Program.

Request Justification:

This vehicle is nearing its 10-year life expectancy and has 114,925 miles.

FY2021 Water Capital Fund Improvement Project
Replace 2006 Backhoe/Loader with a Plow, Hammer, and Compactor, Unit 651

Request Description:

This critical piece of equipment is used daily by the Water Division for excavation of hydrants, water main pipe installation, and emergency response to system failures. This machine is equipped with a plow and is a crucial piece of heavy equipment to the City's Snow and Ice Program to clear parking lots and roads.

Request Justification :

This piece of equipment has well exceeded its 12-year life expectancy. The unit has significant cab and floorboard corrosion as seen in the adjacent photos. Most recently, the backhoe needed repairs to the arm boom, it's rotted oil pan and aged steering components replaced. This unit has 14,451 operating hours. Due to the current age and hours on this machine with more use, there is a potential for more costly failures in the near future. To replace the cab on this piece of equipment, it would cost approximately \$10,000. Further repairs will exceed the value of this machine.



The Water Division's backhoe/loader is a vital piece of equipment and is utilized daily.