Project Submissions

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Capital Project Request

Project Title:	**Town Offices Replacement Furniture**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Equipment**	Status:	**New Request**
Department:	Town Manager			Supports:	General Government
Partners:				Useful Life:	More than five (5) years but less than eight (8) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required? **Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$50,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$50,000	$25,000		$25,000		$0		
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$50,000**	**$25,000**	**$0**	**$25,000**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Town Offices Replacement Furniture**	**Fiscal Year:**	**2020**

Project Description and Considerations

Town Hall was renovated with new furniture when it re-opened in September, 2011. The furniture which receives the heaviest use is begining to show wear and tear and needs to be replaced. The same situation is true for the Public Services Administration Building. It was opened as a new building with new furniture in February, 2010.

A furniture inventory, including current condition, has been done for the Town Hall and for the Public Services Administration Building and will be updated annually. In Fiscal Year 2019, the Town Hall's Board of Selectmen's conference table and chairs (to go around table) and some of the office and common area furniture in fair condition was replaced. Unfortunately the price for quality furniture (not the highest, but still sturdy) proved to absorb most of the appropriation, with the rest of the funds being used for some replacement furniture in Town Hall and at the Public Services Administration Building.

This request for $25,000 in Fiscal Year 2020 should allow for the purchase of replacement furniture not able to be purchased in FY2019, including replacement of tattered audience chairs in the much used Powers Hall at Town Hall and the wobbly conference tables in the Public Services Administration Building. The tables in the Charles River Conference room are inadequate to fit the oft changing physical layout of the room. Many of the meetings held in that room require different physical layouts and the current table inventory does not allow for flexibility in floorplan. Depending upon the condition of the furniture in out-lying years, this request may be repeated either annually or every other year.

FYI - replacement furniture prices at 2019 pricing: office task chairs $830 each. 3 drawer regular file cabinets $725 each. conference tables $1,500 each , conference chairs $650 each, sled chairs in Powers Hall $500 each.

Capital Project Request					
Project Title:	**Town Building Switching**			**Fiscal Year:**	**2024**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**New Request**
Department:	Finance			Supports:	General Government
Partners:				Useful Life:	More than five (5) years but less than eight (8) years

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Not Applicable
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Not Applicable
6. If funded, will additional permanent staff be required? **Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	Not Applicable
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$60,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$60,000					$60,000		
Other Expenses	$0							
TOTAL	**$60,000**	**$0**	**$0**	**$0**	**$0**	**$60,000**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Town Building Switching**	**Fiscal Year:**	**2024**

Project Description and Considerations

Switching is an important aspect of the communciations between the multiple building supported by the ITC. This request is for upgrading and replacing switching between the Town Hall, Public Services Adminstration Building, and the Center at The Heights. Because of the increased data transfer speeds between the buildings, currently at 10GB, it is important to maintain the current level of switching. Many of the current switches within the these buildings are two to three years old so the replacement of them wil be important in the years out. There is annual licensing and maintenance for this product which is currently maintained in the ITC budget. Those dollars would be used for annual licensing and maintenance of the updated hardware.

Capital Project Request

Project Title:	**Town Internet Control, Analysis, and Reporting**			**Fiscal Year:**	**2022**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**New Request**
Department:	Finance			Supports:	General Government
Partners:				Useful Life:	More than five (5) years but less than eight (8) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		Not Applicable
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		Not Applicable
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		Not Applicable
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		No
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$75,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$75,000			$75,000				
Other Expenses	$0							
TOTAL	**$75,000**	**$0**	**$0**	**$75,000**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Town Internet Control, Analysis, and Reporting**	**Fiscal Year:**	**2022**

Project Description and Considerations

Currently the Town is using a combination of hardware and software to manage and maintain the basic flow of access to the internet. The request would upgrade firewalls and software to help ITC better control, analyze, and report on the traffic that currently takes place. There is an increased interest and demand for cyber security across all levels of industry and how to better defend from unwanted attacks and this request would assist the ITC in maintaining and increasing the level of security from where the Town is currently.

Capital Project Request			
Project Title:	**Town Wide Video Projection and Smart TV Replacement**	**Fiscal Year:**	**2022**

Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**New Request**
Department:	Finance			Supports:	General Government
Partners:				Useful Life:	More than five (5) years but less than eight (8) years

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			Not Applicable
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Not Applicable
6. If funded, will additional permanent staff be required?	**Total New FTE's:**		No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			Not Applicable
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$145,000**	How was the Project Cost Determined:	In-House Estimate	
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000			

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$145,000			$50,000	$40,000	$55,000		
Other Expenses	$0							
TOTAL	**$145,000**	**$0**	**$0**	**$50,000**	**$40,000**	**$55,000**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	Town Wide Video Projection and Smart TV Replacement	Fiscal Year:	2022

Project Description and Considerations

FY22 $50,000 Town Wide Video Projection and Smart TV Replacement
Building Location and Device Type
1) Town Hall - Select Board Room
a. Projector
2) Town Hall - Great Plain Room
a. Projector
3) Town Hall - Highland Room
a. Projector

FY23 $40,000 Town Wide Video Projection and Smart TV Replacement
Building Location and Device Type
1) Center at The Heights - Multi-purpose Room 1st Floor
a. Projector
2) Center at The Heights - Computer Lab
a. Smart TV
3) Center at The Heights - Multi-purpose Room 2nd Floor (1 of 2)
a. Projector
4) Center at The Heights - Multi-purpose Room 2nd Floor (2 of 2)
a. Projector

FY24 $55,000 Town Wide Video Projection and Smart TV Replacement
Building Location and Device Type
1) Public Services Administration Building - Charles River Room
a. Projector
2) Rosemary Recreation Complex - Multi-pupose Room
a. Projector
3) Rosemary Recreation Complex - Health Department Conference Room
a. Smart TV
4) Rosemary Recreation Complex - Park and Recreation Conference Room
a. Smart TV

Across the Town there are video projectors and Smart TVs that have been included in the base construction of the building. This request is to replace those devices over a period of several years starting in FY22. Many of the devices are over 5 years old andhave issues with resolution compatibility with attached devices. Also a review of certain rooms, for example the Select Board Room, will be made at the time ti0determine if there is a better way to display videos and imageryrwithin the space. Based on cost comparison at the time of replacement some projectors may be replaced with Smart TVs based on the need of the departments that would make use of them.

Capital Project Request

Project Title:	**Wireless Hardware Infrastucture Upgrade**			**Fiscal Year:**	**2024**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**New Request**
Department:	Finance			Supports:	General Government
Partners:				Useful Life:	More than five (5) years but less than eight (8) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		Not Applicable
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		Not Applicable
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		Not Applicable
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		No
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$175,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$175,000					$175,000		
Other Expenses	$0							
TOTAL	**$175,000**	**$0**	**$0**	**$0**	**$0**	**$175,000**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title:	**Wireless Hardware Infrastucture Upgrade**	**Fiscal Year:**	**2024**

Project Description and Considerations

FY24 $175,000 Wireless Hardware Infrastucture Upgrade

This request is for the replacement and upgrade of the wireless access points (WAPs) installed across multiple buildings. Currently the Town has wireless access available in multiple buildings throughout Town. These buildings include Town Hall, Public Services Administration Building, The Center at The Heights, Publics Safety (NPD/Station 1), the Rosemary Recreation Complex, and soon to include the Memorial Field House. Part of the hardware included with this upgrade is a controller that is designed to manage the WAPs. The inclusion of the wireless infrastructure and hardware was part of the original construction and there was no previous capital request for any replacement or upgrade. Moving into the future the older WAP's will not be compatible with any updated controller software making it necessary to upgrade the WAPs. Annual licensing for the wirleess controller and WAPs are currently part of the ITC operating budget.. There are currently ITC operating budget dollars used for licensing for the both hardware and software maintenance and support. . Those dollars would be used for annual licensing and maintenance of the updated hardware.

Capital Project Request

Project Title:	**Town Building Security and Traffic Cameras Replacement**						**Fiscal Year:**	**2024**
Purpose:	**Acquisition**	Classification:	**Technology**		Status:	**New Request**		
Department:	Finance				Supports:	General Government		
Partners:					Useful Life:	More than five (5) years but less than eight (8) years		

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Not Applicable
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Not Applicable
6. If funded, will additional permanent staff be required? **Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	Not Applicable
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$300,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$300,000					$300,000		
Other Expenses	$0							
TOTAL	**$300,000**	**$0**	**$0**	**$0**	**$0**	**$300,000**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Town Building Security and Traffic Cameras Replacement**	**Fiscal Year:**	**2024**

Project Description and Considerations

FY24 $300,000 Town Traffic and Security Cameras Replacement

This request is for the replacement and upgrade of traffic and security cameras. Traffic cameras are currently located at two intersections downtown, Great Plain at Chapel and Chestnut, Great Plain at Highland and Dedham. Security cameras are located across the Town at multiple buildings and locations. Each building with security cameras also maintains a Digital Video Recorder which are currently backed up to a storage unit in the Town Hall server room. The cameras at all of the buildings are high resolution cameras used for maintaining the security of the buildings and properties. This hardware also has a five year life cycle and in the future better resolution. Currently used at the traffic intersection are low resolution traffic control cameras. It is anticipated that in the future traffic control cameras will also be high resolution which will better help control traffic.

Capital Project Request					
Project Title:	**Center At The Heights Computer Lab Hardware / Software Replacement**			Fiscal Year:	**2020**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**Same Request from the Prior CIP**
Department:	Finance			Funding Source:	General Fund
Partners:					

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	No
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	No
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No

Primary Reason for the Request: Scheduled replacement

How was the Estimated Project Cost Determined: In-House Estimate

Estimated Project Cost: $50,000

Useful Life: More than five (5) years but less than eight (8) years

Budget Impact: Negligible impact on the annual operating expenses less than $5,000

Total New FTE's: 0

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024
Planning/Feasibility	$0					
Design/Engineering	$0					
Land/ROW Acquisition	$0					
Site Preparation	$0					
Construction	$0					
Construction Management	$0					
Equipment	$0					
Furniture, Fixtures, and Equipment	$0					
Technology Hardware/Software	$50,000	$50,000				
Other Expenses	$0					
TOTAL	**$50,000**	**$50,000**	**$0**	**$0**	**$0**	**$0**

$0

Capital Project Request			
Project Title:	**Center At The Heights Computer Lab Hardware / Software Replacement**	Fiscal Year:	**2020**

Project Description and Considerations

FY 2020

The purpose of this request is to replace the hardware and upgrade software associated with the Center at The Heights (CATH) Computer Lab. This will include 20 desktops, 4 laptops, a server, switch, and firewall. Also being upgraded would be any software associated with the specific operation. Typically throughout other departments across the Town the Information Technology Center (ITC) looks at individual pieces of hardware and determines its need for replacement. However since this equipment and software was purchased and installed at the same time, as well as the nature of the use of the equipment, it will be better to keep the same make and models of hardware and software instead of mixing and matching. New models will be able to take advantage of upgraded operating systems and faster processers to better serve the users of the Computer Lab. If the funding does not occur there is currently not sufficient funding in the ITC budget to cover the cost of replacing the added pieces of hardware. Outside of this request for replacement the move of the Council on Aging to the CATH more than double the number of computers for that department. That in itself will draw more funds from the ITC over time making it harder to use currently budgeted dollars for the replacement of hardware and software in the CATH Computer Lab.

Capital Project Request

Project Title:	**GIS Technology Systems and Applications Updates**			Fiscal Year:	**2023**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**Revised Request from the Prior CIP**
Department:	Finance			Funding Source:	Revolving Fund
Partners:	DPW Engineering				

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	No
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	No
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No

Primary Reason for the Request:	Operational efficiency		
How was the Estimated Project Cost Determined:	In-House Estimate	Estimated Project Cost:	$100,000
Useful Life:	More than five (5) years but less than eight (8) years		
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		
Total New FTE's:			

Project Budget Elements	Project Budget	2023	2024	2025	2026	2027
Planning/Feasibility	$0					
Design/Engineering	$0					
Land/ROW Acquisition	$0					
Site Preparation	$0					
Construction	$0					
Construction Management	$0					
Equipment	$0					
Furniture, Fixtures, and Equipment	$0					
Technology Hardware/Software	$100,000	$100,000				
Other Expenses	$0					
TOTAL	**$100,000**	**$100,000**	**$0**	**$0**	**$0**	**$0**

$0

Capital Project Request

Project Title:	**GIS Technology Systems and Applications Updates**	Fiscal Year:	**2023**

Project Description and Considerations

1) Imagery and Planimetric Data Updates:
The Imagery and Planimetric Data Updates (previously titled Geographic Information Systems Upgrade) project is a request for a flight to update aerial imagery and then use that aerial imagery to update the Town's planimetric data. The aerial imagery and planimetric data is used across Town departments but it is most used by Public Works Engineering using computer aided design (CAD) software and the Information Technology Center Geographic Information System (GIS) Administrator using GIS software (ESRI, Inc) in support of multiple Town and School Departments. CAD and GIS are systems that use hardware and software for storage, retrieval, mapping, analysis, design, and planning. The planimetric data is the electronic representation of above ground physical structures and features. These physical structures and features are then associated with layers in CAD and geospatial information and databases in GIS which then allows for the different departments to use the planimetric data for needs specific to each department. The updated planimetric data will be incorporated into the Town's web GIS as well as secure web GIS sites accessed by DPW Divisions for viewing and querying as well as the Engineering Division using the data for planning and design projects. Because Water & Sewer, Planning, Conservation and other Town and School Departments use or request services specific to the planimetric data it is important to have up to date data so these departments can plan, analyze and display with as accurate a representation of the physical structures and features. Licensing costs to use the data through specific software are currently paid through the operating budget. The use of new planimetrics and imagery will not directly cause any increase to these costs.

There was revision to this CIP in that the starting fiscal year was changed from 2022 to 2023. This CIP request is a recurring request with the most recent fulfillment of the request happening in Fiscal Year 2015. The initial phase of the Imagery and Planimetric Data Updates is to fly the Town and collect imagery which is then used to collect planimetric data. However due to a heavy snow fall during the winter of 2014 - 2015 that left substantial snow on the ground in the spring of 2015 the flight did not take place. The flight was rescheduled for the spring of 2016 but due to technical problems with the flight that took place in the spring of 2016 the imagery deliverables did not take place. The flight did take place in the spring 2017 and imagery deliverables were available in the Fall of 2017 with finalizing of resolution and data delivery happening in the late Winter into 2018. Imiagery is currently available on the Town's public web GIS, https://www.mapsonline.net/needhamma/index.html. Currently there is in development an RFP for the development of the Planimetric data with plans of delivery in the Spring of 2019. Because of the initial delay in the flight and then the issues with the subsiquent flight it was decided to push the next flight for imagery and collection of planimetric data out one year which is reflected in the fiscal year request.

Capital Project Request					
Project Title:	**High Availability Firewalls**			**Fiscal Year:**	**2022**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**New Request**
Department:	Finance			Supports:	General Government
Partners:				Useful Life:	More than five (5) years but less than eight (8) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		Not Applicable
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		Not Applicable
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		Not Applicable
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		No
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$75,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$75,000			$75,000				
Other Expenses	$0							
TOTAL	**$75,000**	**$0**	**$0**	**$75,000**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**High Availability Firewalls**	**Fiscal Year:**	**2022**

Project Description and Considerations

FY22 $75,000 High Availibity Firewalls

Currently the Town uses multiple firewalls to controll traffic and access to different networks managed by the ITC. The meaning of high availability is that there are multiple firewalls per network in case of a failure of the single piece of hardware. These firewalls are used to separate out the current water SCADA network, the downtown traffic intersection network, and the municipal working network. These firewalls also allow the ITC to give external access to employees and consultants who are working away from Town halll and need to work within any of these specififc networks. The Town has migrated to a 10GB network which increases the cost of these pieces of hardware. All of the current hardware is close to five years old and should be part of the five year replacement cycle. This request will have them closer to eight years old when they are replaced There is annual licensing and maintenance for this product which is currently maintained in the ITC budget. Those dollars would be used for annual licensing and maintenance of the updated hardware.

Capital Project Request					
Project Title:	**Non-Public Safety Data Center Servers and Storage Units**			Fiscal Year:	**2023**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**Revised Request from the Prior CIP**
Department:	Finance			Funding Source:	General Fund
Partners:					

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	No
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	No
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No

Primary Reason for the Request:	Obsolete/non-functioning		
How was the Estimated Project Cost Determined:	In-House Estimate	Estimated Project Cost:	$325,000
Useful Life:	More than five (5) years but less than eight (8) years		
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		
Total New FTE's:			

Project Budget Elements	Project Budget	2023	2024	2025	2026	2027
Planning/Feasibility	$0					
Design/Engineering	$0					
Land/ROW Acquisition	$0					
Site Preparation	$0					
Construction	$0					
Construction Management	$0					
Equipment	$0					
Furniture, Fixtures, and Equipment	$325,000	$145,000	$180,000			
Technology Hardware/Software	$0					
Other Expenses	$0					
TOTAL	**$325,000**	**$145,000**	**$180,000**	**$0**	**$0**	**$0**

$0

Capital Project Request			
Project Title:	**Non-Public Safety Data Center Servers and Storage Units**	Fiscal Year:	**2023**

Project Description and Considerations

FY23 $145,000.00 Data Center 1 and Data Center 3 Hardware Replacements
FY24 $180,000.00 Data Center 1 and Data Center 2 Hardware Replacements

This project is for the replacement of hardware within the three Town of Needham data centers. Phase I of the project, which will take place in the fiscal year 20223), will be the replacement of servers, storage units, and switches. Phase II of the project will also be the re placement of servers, storage units, and switches. Data Center 1 is housed at the Town Hall, Data 2 is housed at the Public Services Administration Buildi ng, and Data Center 3 is housed at The Center at The Heights. Data Center 1 is the primary data center where the Town Departments access files and programs, the internet, and network and internet security takes place. The servers at Town Hall are physical servers however three of them maintain and support upwards of 80 virtual servers with corresponding data maintained on the storage units. The others are for specific software functions. The servers , storage unit, and switches at the Public Services Administration Building act as fail over in case of the Town Hall network and infrastructure going offlin e. The server and storage at The Center at The Heights is where backup data is housed and from there certain segments of the data are migrated off site using a Code42 business account.

Previously the Information Technology Center (ITC) has reviewed the data center design as described above to determine if shi fting to a hyper-converged environment would be financially viable moving forward based on the fiscal year dollar requests in previous years. After spe aking to several vendors it was determined that the cost of this architecture was too costly for use by the Town. The ITC is now looking into reducing t he number of data centers from the current 3 to 2 during the next refresh of hardware (FY23). If an update this year to a third CIP, Public Safety Dat a Center Servers and Storage Units, for FY21 is accepted then the data centers at the Public Services Administration Building and the Center at The Height s would not be used in their current configuration. The primary data centers would continue to be the Town Hall and then the Public Safety sever room wou ld act as the second data center. The ITC will be investigating an offsite option for cloud backup to support business continuity and disaster recover y. The goal is to find a solution that minimizes the amount of technology hardware needed as well as building space which in the long run will lessen the finan cial burden on ITC and any future buildings where ITC maintains and supports technology. ITC uses a five year replacement model for infrastructure hard ware.

The importance of this project is to maintain hardware at a level that will support the needs of the Town Departments as well as either continuing or changing the model developed for Business Continuity. As equipment gets older it becomes harder and harder to maintain the same level of quality and performance when initially installed directly effecting the day to day operation of the Town. There are currently ITC operati ng budget dollars used for licensing for the both hardware and software maintenance and support. . Those dollars would be used for annual licensing and maintenance of the updated hardware.

Capital Project Request					
Project Title:	**Public Safety Data Center Servers and Storage Units**			Fiscal Year:	**2021**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**Revised Request from the Prior CIP**
Department:	Finance			Funding Source:	General Fund
Partners:	Public Safety				

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	No
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	No
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No

Primary Reason for the Request:	Obsolete/non-functioning		
How was the Estimated Project Cost Determined:	In-House Estimate	Estimated Project Cost:	$200,000
Useful Life:	More than five (5) years but less than eight (8) years		
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		
Total New FTE's:			

Project Budget Elements	Project Budget	2021	2022	2023	2024	2025
Planning/Feasibility	$0					
Design/Engineering	$0					
Land/ROW Acquisition	$0					
Site Preparation	$0					
Construction	$0					
Construction Management	$0					
Equipment	$0					
Furniture, Fixtures, and Equipment	$0					
Technology Hardware/Software	$200,000	$200,000				
Other Expenses	$0					
TOTAL	**$200,000**	**$200,000**	**$0**	**$0**	**$0**	**$0**

$0

Capital Project Request			
Project Title:	**Public Safety Data Center Servers and Storage Units**	Fiscal Year:	**2021**

Project Description and Considerations

FY21 $200,000.00 Public Safety Computer Data Center Servers and Storage Units

The cost adjustment to the requests, from $60,000 to $200,000, is part of a plan by the ITC to maintain and upgrade current data centers. Servers, storage, and switches would be purchased to mimic the current infrastructure design so that the hardware for FY 2024 would not need to be purchased. This would create a second data center in the Public Safety Building which would replace the data center at the Public Services Administration Building and the Center at The Heights. The five year cycle of replacement used by the ITC would push the replacement date for this hardware out to FY 2026. A portion of this request would be a hardware refresh of Public Safety CAD hardware installed during the FY15 upgrade of the Public Safety CAD software. This is the $60,000 portion as described in last years request. The software piece of the Public Safety CAD project was funded by a capital request while the hardware piece of the Public Safety CAD project was funded using State 911 Grant Funds. Because of the uncertainly of the funding from the State it is important to include this hardware as part of the infrastructure upgrade and redesign. Annual licensing for the Public Safety CAD as well as hardware support and licensing are currently part of the ITC operating budget as is other software specific to operating systems, switching, and security.

Capital Project Request					
Project Title:	**Public Safety Desktops, Printers, and Peripherals**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**New Request**
Department:	Finance			Supports:	General Government
Partners:	Police Department Fire Departmnt PPBC			Useful Life:	More than five (5) years but less than eight (8) years

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Not Applicable
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Not Applicable
6. If funded, will additional permanent staff be required? **Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	Not Applicable
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$200,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$200,000	$200,000						
Other Expenses	$0							
TOTAL	**$200,000**	**$200,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Public Safety Desktops, Printers, and Peripherals**	**Fiscal Year:**	**2020**

Project Description and Considerations

This request is to fill those locations within the new public safety building where theer is currently any technology hardware. There is an estimated ninety (90) desktops and laptops that will need to be added to the ITC inventory. The majorty of this hardware is located on the Fire side of Public Safety where the re are few if any devices available for the offices. Often time s offices of both Police and Fire are sharing and waiting for others to finish their work. There are no availble desktops or laptops for officers to use for online training or meetings. Throughout each of the Public Safety buildings offices will be outfitted with this hardware. This request also includes purchasing of printers because with the larger buidlings it becomes more difficult to centralize printing. The different administrative offices will have the ability to print, copy, and scan however currently areas like dispatch there is shared printing with officers coming off the road. The new police dispatch area will be separate and more secure than present and the officers will be entering the building from a much further distance. Other peripherals could include addtional monitors, keyboards, mice, or other devices to help with conducting day to day office work.

Capital Project Request					
Project Title:	**Public Safety Mobile Devices**			Fiscal Year:	**2020**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**Revised Request from the Prior CIP**
Department:	Finance			Funding Source:	General Fund
Partners:	Public Safety				

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	No
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	No
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No

Primary Reason for the Request: Scheduled replacement

How was the Estimated Project Cost Determined: In-House Estimate

Estimated Project Cost: $135,000

Useful Life: More than five (5) years but less than eight (8) years

Budget Impact: Negligible impact on the annual operating expenses less than $5,000

Total New FTE's:

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024
Planning/Feasibility	$0					
Design/Engineering	$0					
Land/ROW Acquisition	$0					
Site Preparation	$0					
Construction	$0					
Construction Management	$0					
Equipment	$0					
Furniture, Fixtures, and Equipment	$0					
Technology Hardware/Software	$135,000	$35,000		$50,000	$50,000	
Other Expenses	$0					
TOTAL	**$135,000**	**$35,000**	**$0**	**$50,000**	**$50,000**	**$0**

$0

Capital Project Request

Project Title:	**Public Safety Mobile Devices**	Fiscal Year:	**2020**

Project Description and Considerations

FY20 $35,000 Public Safety Mobile Devices
FY22 $50,000 Public Safety Mobile Device
Fy23 $50,000 Public Safety Mobile Device

This project is for the replacement of laptops and tablets that are used in the Needham Police and Fire Department Vehicles. The hardware is used to access multiple applications during the daily operations of either an individual or vehicle. The hardware communicates with the Public Safety CAD software as well as State and Federal databases. The devices themselves are hardened military specification hardware manufactured for above normal use in more intensive environments than normal off the shelf hardware. The current hardware is a mix a Panasonic ToughBooks and ToughTablets. In the past the hardware was funded using State 911 Grant Funds. Because of the uncertainly of the funding from the State it is important to place this within the capital request. There are currently ITC operating budget dollars used for licensing for both hardware and software maintenance and support.

The FY20 request for $35,000 is a continuance from the previous fiscal year when $35,000 was also requested. The total for Public Safety Mobile Device replacement is $70,000 for both FY19 and FY20. The $50,000 seen in FY22 and FY23 represent the replacement of the mobile devices purchased starting in FY19. Typically a five year time frame for replacement is used by the ITC but it has been observed over the past several years that the mobile devices used in the field have a much shorter life span. Even though the hardware purchased is designed for more intense environments than normal the day to day usage by the officers in their vehicle is proving difficult to keep and maintain over a five year lifespan. The reason for the $15,000 dollar increase is primarily due to the need to have extra hardware on hand for replacement when a piece of hardware needs to be removed from a Public Safety vehicle. Each vehicle is a rolling office and the officers need to be able to access information through this hardware twenty-four hours a day, seven days a week. There are currently ITC operating budget dollars used for licensing of the both hardware and software maintenance and support. Those dollars would be used for annual licensing and maintenance of the updated hardware.

Capital Project Request					
Project Title:	**Public Works Mobile Devices**			Fiscal Year:	**2023**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**New Request**
Department:	Finance			Funding Source:	General Fund
Partners:	Public Safety				

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	No
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	No
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No

Primary Reason for the Request:	Scheduled replacement		
How was the Estimated Project Cost Determined:	In-House Estimate	Estimated Project Cost:	$50,000
Useful Life:	More than five (5) years but less than eight (8) years		
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		
Total New FTE's:			

Project Budget Elements	Project Budget	2023	2024	2025	2026	2027
Planning/Feasibility	$0					
Design/Engineering	$0					
Land/ROW Acquisition	$0					
Site Preparation	$0					
Construction	$0					
Construction Management	$0					
Equipment	$0					
Furniture, Fixtures, and Equipment	$0					
Technology Hardware/Software	$50,000	$50,000				
Other Expenses	$0					
TOTAL	**$50,000**	**$50,000**	**$0**	**$0**	**$0**	**$0**

$0

Capital Project Request			
Project Title:	**Public Works Mobile Devices**	Fiscal Year:	**2023**

Project Description and Considerations

FY23 $50,000 Public Works Mobile Device

This project is for the replacement of laptops and tablets that are used by the Department of Public Works. The hardware is used to access multiple applications during the daily operations of either an individual or vehicle. The hardware communicates with multiple applications depending on what division within Public Works is using the equipment. The devices themselves are a mixture of of the shelf devices and hardened military specification hardware manufactured for above normal use in more intensive environments . The current hardware is a mix of Android and Microsoft tablets as well as Panasonic ToughBooks purchased with previous CIP and operating capital dollars. This request would pull all those dollars into one request allowing for consistent purchase and replacement. There are currently ITC operating budget dollars used for licensing for both hardware and software maintenance and support.

Capital Project Request					
Project Title:	**Town Side Multi-Function Printer Devices**			Fiscal Year:	**2020**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**Same Request from the Prior CIP**
Department:	Finance			Funding Source:	Revolving Fund
Partners:					

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	No
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	No
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No

Primary Reason for the Request: Obsolete/non-functioning

How was the Estimated Project Cost Determined: In-House Estimate

Estimated Project Cost: $106,800

Useful Life: Between eight (8) and twelve (12) years

Budget Impact: Negligible impact on the annual operating expenses less than $5,000

Total New FTE's:

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024
Planning/Feasibility	$0					
Design/Engineering	$0					
Land/ROW Acquisition	$0					
Site Preparation	$0					
Construction	$0					
Construction Management	$0					
Equipment	$0					
Furniture, Fixtures, and Equipment	$0					
Technology Hardware/Software	$106,800	$35,600	$35,600	$35,600		
Other Expenses	$0					
TOTAL	**$106,800**	**$35,600**	**$35,600**	**$35,600**	**$0**	**$0**

$0

Capital Project Request			
Project Title:	**Town Side Multi-Function Printer Devices**	Fiscal Year:	**2020**

Project Description and Considerations

This project is for the replacement of multi-function printers throughout the four primary Town locations (Town Hall, Public Services Administration Building, Public Safety, Center at The Heights) due to either being obsolete or part of a planned schedule replacement. In all there are nine of these devices between the buildings with only three of the devices not purchased during a capital project. Though several of these devices are currently over six years old, with one over eight, only one has reached 50% of the anticipated life cycles for each model according to the manufacturer estimated cycles per year. Based on the current usage the expected life of these devices is between ten and twelve years however the manufacturer of these devices does not guarantee the availability of parts or consumables past seven years. The cycle for replacement of these multi-function printers would be seven years. During their replacement they would be replaced with devices similar in specifications. Due to the time out till replacement it is difficult to give an actual make and model that would be purchased. The current devices are listed below.

The revision to this request is that the fiscal year of start was moved forward two years from fiscal year 2021 to fiscal year 2019. The movement forward request was made, after conversation with the Town Manager, because of the increase of device downtime which required maintenance causing time lost waiting for printing projects as well as the issue, as noted above, with the lack of availability of parts and consumables from the manufacturer past seven years. More frequently, OEM consumables and parts have been replaced with refurbished and third party parts which in some case have not worked with the older multi-function printers. By fiscal year 2019 the age of the majority of these devices will range from five to eight years with the remaining three to four years old. The process of determining which devices will be replaced will be based on the age of the machine and the overall amount of use.

1) Public Services Administration Building, 2nd Floor, Ricoh Aficio MP 7500
2) Public Services Administration Building, 1st Floor, Ricoh Aficio MP 7501 / Replaced FY19
3) Public Services Administration Building , 2nd Floor , Ricoh Aficio MP 8001
4) Town Hall, Lower Level, Ricoh Aficio MP 7501 / Replaced FY19
5) Town Hall, 1st Floor, Ricoh Aficio MP 7501
6) Town Hall, Lower Level, Ricoh Pro 1357EX
7) Center at the Heights Copy Room RICOH MP C5503
8) Public Safety, Police, Konica Minolta Biz Hub 350
9) Public Safety, Fire, Konica Minolta Biz Hub 350

Capital Project Request					
Project Title:	**Revenue Application Software Package**			Fiscal Year:	**2021**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**Same Request from the Prior CIP**
Department:	Finance			Funding Source:	General Fund
Partners:	Treasurer's Office, Accounting Department, Finance Department, School Business Office, School Human Resources, Payrol, IT Services				

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	Yes
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	Yes
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	Yes
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes

Primary Reason for the Request: Operational efficiency

How was the Estimated Project Cost Determined: In-House Estimate

Estimated Project Cost: $1,100,000

Useful Life: Between eight (8) and twelve (12) years

Budget Impact: May increase annual operating expenses between $5,001 and $25,000

Total New FTE's:

Project Budget Elements	Project Budget	2021	2022	2023	2024	2025
Planning/Feasibility	$0					
Design/Engineering	$0					
Land/ROW Acquisition	$0					
Site Preparation	$0					
Construction	$0					
Construction Management	$0					
Equipment	$0					
Furniture, Fixtures, and Equipment	$0					
Technology Hardware/Software	$1,100,000	$1,100,000				
Other Expenses	$0					
TOTAL	**$1,100,000**	**$1,100,000**	**$0**	**$0**	**$0**	**$0**

$0

Capital Project Request			
Project Title:	**Revenue Application Software Package**	Fiscal Year:	**2021**

Project Description and Considerations

The Revenue and General Ledger/Accounting Software Package Replacement is a request to replace the current Revenue and General Ledger/Accounting Software Packages. The current Revenue Application was first purchased in 1996 and has gone through several versions since the original implementation. Its primary function is the collection of Real Estate and Personal Property Tax, Excise Tax, Utility Fees, and Miscellaneous Revenues collected among both Town and School Departments. There are other modules that are incorporated with the Revenue Package and these include Customer Information, Land /Parcel Management, and Cash Receipts. There has been a need for better reporting out of the Revenue package which is currently housed on an IBM piece of hardware. All of the specialized programming and processes in the Revenue Application are done using COBOL which in combination with the IBM hardware is becoming more and more difficult for the Information Technology Center (ITC) to support. Migrating both the application and hardware to a non-IBM piece of hardware would bring that specific application and hardware into the business model currently in place in the ITC. The General Ledger/Accounting Software Package has been in place since FY14. The movement to a different vendor providing the General Ledger/Accounting Software Package has been both beneficial and troublesome at the same time. Though some reporting, requisition, and rollover processes have seen improvements, the fact that the Revenue and General Ledger/Accounting packages are from two different vendors and hardware types has caused some problems. Most of those problems involve certain processes becoming more tedious and time consuming leading to delays in departments disseminating information. These processes range from revenue posting, cash reconciliation, bank account reconciliation, and personnel reporting. The complexity of the Town's payroll has also pushed the limits of the General Ledger/Accounting package leading to some confusion from certain employee groups about the line items on payroll checks and direct deposit notices. There may need to be additional cost increases for ongoing annual maintenance in comparison to the current Revenue and General Ledger/Accounting Software Packages. It is difficult to say the exact amount at this time but is anticipated these costs will be more due to the complex nature of the Town's business and the level of application needed. Also after implementation there may be situations that may require programming specialization which the vendor would supply. The planning and implementation for this project will involve multiple Town departments (Treasurer's Office, Accounting Office, Assessor's Office, Human Resources) as well as School departments (Business Office, Human Resources, Payroll, Information Technology Services).

Capital Project Request

Project Title: **Replacement of AED (Automated External Defibrillators)** **Fiscal Year:** **2023**

Purpose:	**Acquisition**	Classification:	**Equipment**	Status:	**Amended Request from the Prior CIP**
Department:	Police			Supports:	Public Safety
Partners:	N/A			Useful Life:	Between eight (8) and twelve (12) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		Yes
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		No
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$32,108**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$23,940				$23,940			
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$8,168	$0			$3,896			$4,272
TOTAL	**$32,108**	**$0**	**$0**	**$0**	**$27,836**	**$0**	**$0**	**$4,272**

$0 FY2020

Capital Project Request			
Project Title:	**Replacement of AED (Automated External Defibrillators)**	**Fiscal Year:**	**2023**

Project Description and Considerations

This purchase is to replace all of the current AED equipment. Some of the current equipment in use is sixteen years old and at the end of its useful life cycle. We intend to purchase the same model that is carried by the Needham Fire Department allowing the equipment to be interchangeable when fire personnel arrive. We will be purchasing 12 AED at a cost of $1,995.00 per unit. The additional $3896.00 is to purchase 12 hard shell, watertight carrying cases and one training unit.

The AED's come with a 3 year warranty. It is our intention that after year three we would purchase maintenance program for all 12 AED at a cost of $356.00 per unit or $4272. This maintenance package would include all software and program upgrades replacement of batteries and pads. This cost would be included in the operating budget on a year to year basis. This is the same program that the fire department currently utilizes.

Capital Project Request					
Project Title:	**Police Department Firearm Replacement**			**Fiscal Year:**	**2021**
Purpose:	**Acquisition**	Classification:	**Equipment**	Status:	**Amended Request from the Prior CIP**
Department:	Police			Supports:	Public Safety
Partners:				Useful Life:	Between eight (8) and twelve (12) years

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required? **Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$36,630**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$31,630		$31,630					
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$5,000		$5,000					
TOTAL	**$36,630**	**$0**	**$36,630**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Police Department Firearm Replacement**	**Fiscal Year:**	**2021**

Project Description and Considerations

The current service weapon of the Police Department is a Smith and Wesson M&P 40 caliber. The weapon is outfitted with night sights and has a 15 round capacity in each magazine. The current weapon was placed into service in 2009, replacing a weapon that was in service for eight years. Based on a study conducted by the FBI and research done by our firearms instructors we would replace the Smith and Wesson 40 caliber with a 9MM firearm (make and model to be determined). The cost includes the purchase of the new firearms and holsters . The other expense ($5000.) is for the purchase of new 9mm ammunition. The department intends to purchase 55 weapons.

Capital Project Request					
Project Title:	**Police and Fire Mobile and Portable Radios**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Equipment**	Status:	**Amended Request from the Prior CIP**
Department:	Police			Supports:	Public Safety
Partners:	Fire Department EOC			Useful Life:	Between eight (8) and twelve (12) years

Parameters		Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		No
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$617,550**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$617,550	$617,550						
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$617,550**	**$617,550**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Police and Fire Mobile and Portable Radios**	**Fiscal Year:**	**2020**

Project Description and Considerations

The current police cruiser radio system has been in service for over nine years. This is the primary communication tool between the officers in the field and the police dispatch center .The eighteen radios are Motorola Astro Spectra series now discontinued by the manufacturer. While we currently do not have service agreements for the cruiser radios due to age of the radios, replacement parts will be increasingly difficult to acquire in the future. With this in mind, the department is proposing to replace 20 cruiser radios with a compatible radio system in FY 2020. At that time, these units will have been in service for fourteen years, which would be the end of their useful life cycle.

The current police portable radios have been in service for nine years and is approaching the end of its useful life cycle . The portable radios are used for officer safety and the main means of communication between headquarters and the officer in the field that is outside his/her cruiser. The current model XTS 2500 is no longer manufactured by motorola and may be difficult to maintain as we integrate the new communication equipment. I am requesting seventy five portable radios to outfit sworn and non-sworn personnel which would include animal control, parking enforcement, dispatchers and special detail workers.

The Fire Department is looking to replace or add 16 new portables and two mobile radios for the apparatus. The sixteen portable radios would replace older radios that are at the end of their useful lifecycle and to outfit each seat on the equipment with a portable radio. The portable radio is the primary communication tool with dispatch and the command vehicle when firefighters are outside the equipment or inside structures. The two mobile radios are to replace the current mobile radios that are at the end of their useful lifecycle .

Currently the EOC has equipment that has been handed down from the police and fire equipment that has been outdated for several years. Emergency Management is looking to purchase six portable radios to assist in emergency management related incidents. The purchase of the new radios would ensure compatibility with the current proposed public safety communication system.

The cost of this request is a quote from Motorola that includes the cruiser/apparatus radios, portable radios and all equipment needed to operate. The quote was established as part of the ongoing public safety and communication construction project.

Capital Project Request							
Project Title:	**Public Safety Fitness Equipment**					**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Equipment**		Status:	**New Request**	
Department:	Fire				Supports:	Public Safety	
Partners:	Police				Useful Life:	Between eight (8) and twelve (12) years	

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Not Applicable
6. If funded, will additional permanent staff be required?	**Total New FTE's:**		No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$83,613**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$83,613	$83,613						
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$83,613**	**$83,613**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Public Safety Fitness Equipment** **Fiscal Year:** **2020**

Project Description and Considerations

This request is to provide fitness and exercise equipment to be installed in the new Public Safety Building and FIre Station 2. The equipment will be used by Fire and Police personnel to maintain fitness and health during their careers. Public safety personnel are considered to be industrial athletes, as the performance of their duties is physical at times to a level not dissimilar to that of professional athletes. It is mission critical that public safety personnel maintain a functional level of fitness and having well equipped fitness facilities at each station will help ensure this level of readiness. There is a real and ongoing cost benefit in maintaining the health and fitness of our personnel. Occupational injuries result in lost time, wages and in some cases lead to disability retirement costing significant sums of money. Strength and cardio conditioning can significantly reduce the number of occupation al injuries over time , as well as reduce their associated costs.

The request includes funding for Cardio, strentgh training and conditioning equipment and accessories. A complete list is as follows:

CARDIO EQUIPMENT:(4) Treadmills (Commercial Grade) Life Fitness; (2) Step Mills Stairmaster ; (2) Ellipticals Life Fitness ; (2) Concept 2 Rowers Concept 2 Model D; (2) Spin Style Bikes Kieser; (1) Airdyne Bike Assault Airbike; (2) Wahoo Snap Bicycle Trainors Wahoo Kickr Snap.
Public Safety Bldg. :$28,450
Fire Station 2: $18,256

STRENGTH EQUIPMENT : (2) Power Racks with Platforms Rogue Moster Lite ; (1) 1750 Cable Crossover w/ pulldown & row assemblies Nautilus ; Dumbbells 10 -120 Lbs Life Fitness; (3) Adjustable Benches X-Mark XM; (1) Bench Press Body-Solid ; Bumper plates and Iron plates Vulcan Alpha Bumper; EZ Curl Bar;(2) X-Mark Olympic EZ Curl Bar; Reverse Hyper Extension Rogue; Preacher Curls X-MArk XM; 1 Hex Bar X-Mark; Dumbell/Plates/Barbell Storage; Pull up Bar; Bands TRX TRX Pro4 .
Public Safety Bldg.: $14,263
Fire Station 2: $17,314

CONDITIONING EQUIPMENT Kettle Bells Set Rogue 4 pairs of different weight ; TRX with Wall mounts; TRX Builder Bundle ;Plyo Box Rogue Flat Pack 3; Rogue Gymnastic Wood Rings; Medicine Balls .
Public Safety Bldg.: $1,107
Fire Station 2: $1,107

ACCESSORIES: Rogue Echo Timer ; Rollers (2 Foam, 1 Foam PVC. 1 PVC); 2 Yoga Balls Everlast Burst Resistent; 2 BOSU Balls Bosu Elite Balance Trainer.
Public Safety Bldg.: $2,009
Fire Station 2: $1,107

Total Pub Safety Bldg: $45,829
Total Sta 2 $37,784

Capital Project Request					
Project Title:	**Ongoing Personal Protective Equipment, PPE ("bunker gear") Replacement Program**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Equipment**	Status:	**Amended Request from the Prior CIP**
Department:	Fire			Supports:	Public Safety
Partners:	Board of Selectmen; Finance Committee			Useful Life:	More than eight (8) years

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required? **Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$303,968**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	**Project Budget**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$303,968	$43,424	$43,424	$43,424	$43,424	$43,424	$43,424	$43,424
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$303,968**	**$43,424**	**$43,424**	**$43,424**	**$43,424**	**$43,424**	**$43,424**	**$43,424**
$0								

Capital Project Request			
Project Title:	**Ongoing Personal Protective Equipment, PPE ("bunker gear") Replacement Program**	**Fiscal Year:**	**2020**

Project Description and Considerations

This request is to replace Personal Protective Equipment, PPE ("bunker gear") for 20% of all firefighting personnel on an annual basis. This is to ensure the life span of the equipment does not exceed the 10 year guideline. Ensembles issued prior to the recent purchase of a second set of PPE are approaching this time frame for many of our members. Fortunately, with the number of recent and forthcoming new hires, about a third of the Department have been issued PPE within the past 5 years. All fire personnel are in the process of being issued a second set of PPE allowing them to properly maintain this equipment in a healthy manner.

In FY 2018 a request was approvedfor the purchase of a second set of Personal Protective Equipment, PPE ("bunker gear") for all fire line personnel. The PPE requested includes boots, firefighting pants and coat. Our firefighting personnel regularly work in highly toxic environments caused by spills, chemical releases and the products of combustion. Numerous studies have found the number of carcinogens and other toxins associated with the fire ground to be extremely high. Further, the toxicity of these carcinogens appears to be much greater and more concentrated today, due to the wide spread use of synthetic and petroleum based building materials and furnishings found in modern construction. These unhealthy contaminents, chemicals, toxins and carcinogens adhere to our firefighter's "bunker gear", thus creating a lingering exposure concern for not only the firefighters , but to members of the public they serve, as they respond to calls for service. Recent research by NIOSH, CDC, National Fallen Firefighters Foundation and others clearly points to the increased risks of cancer due to firefighters wearing contaminated PPE adds to this risk. The following links may be helpful in understanding this research:
http://firefightercancersupport.org/wp-content/uploads/2013/08/Taking-Action-against-Cancer-in-the-Fire-Service.pdf
http://www.cdc.gov/niosh/firefighters/ffCancerStudy.html
http://www.everyonegoeshome.com/wp-content/uploads/sites/2/2016/03/Cancer-Alliance-January-2015.pdf
http://www.cdc.gov/niosh/pgms/worknotify/pdfs/ff-cancer-factsheet-final.pdf

Ignoring such reasearch could be considered to negligent going forward.

Our Department has taken additional measures to help reduce the risk of cancer, including outfitting each piece of apparatus with after action wipes to quickly remove carcinogens from responsders skin while still in the field. However, current safety practices dictate that firefighters be issued two sets of PPE, so that once contaminated the equipment can be washed in extracters anddriedd in dryers designed specifically for that purpose. Maintaining a second set of PPE allows for contaminated equipment to be washed and dried properly, while allowing personnel to remain available to respond to calls. Research has found that wet PPE creates a breeding ground for unhealthy bacteria, as well, which is also harmful.

Fulfillment of this request will be greatly beneficial to the health and wellness of our personnel and the public we serve. In doing so, the exposure to occupational carcinogens will be reduced with the potential for a reduction in the number of our members contracting cancer from the work place. In turn, this could result in a corresponding reduction in cancer related disability pensions saving funds in the future.

Capital Project Request

Project Title:	**Building Management System Upgrade**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	ITC, School Department			Useful Life:	More than eight (8) years

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$392,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$392,000	$392,000						
Other Expenses	$0							
TOTAL	**$392,000**	**$392,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Building Management System Upgrade** **Fiscal Year:** **2020**

Project Description and Considerations

The Town maintains a Building Management System (BMS) on the School's server to manage the heating, ventilation, and air conditioning (HVAC) in all major facilities throughout Town. This system consists of internal sensors in the HVAC components and a backend software product that allow Building Maintenance staff to review and diagnose HVAC issues remotely and on site. This system is critical to the maintenance of healthy air temperature within the buildings.

Project Summary

- Currently, the Town has three separate BMS systems. All of the buildings constructed since 2003, with the exception of the Newman, are on Schneider products. Buildings constructed between 2003 and 2007 are on ControlSuite, which is a legacy system that will cease to be supported in the near future. ControlSuite requires manual schedule adjustments for all after school activities and vacations. Buildings constructed between 2007 and 2015 are on the LON system, which is a customized product only supported by one vendor, and is no longer an industry standard. The Newman is on a standalone proprietary system that has limited interface with the LON system. Since there are multiple systems in place, there are communications issues that require utilizing different vendors to diagnose and fix a problem. All construction after 2015 has been outfitted with Struxureware. By standardizing the BMS to Struxureware, staff would receive better data on the HVAC systems. The existing system is housed within a School building on the School's network, even though Town staff are required to maintain and access it.
- This request is to upgrade and standardize all of the existing BMS so that the Town is only using and maintaining one system.The system will work with all of the controls in all buildings, with the exception of the Newman, which will require a conversion of the controls in order for this new system to communicate. The new system will simplify the hardware and software in each building, and be more user friendly for staff. This will allow integration with the afterhours permitting system, freeing up staff time required for inputting irregular schedules to ensure appropriate temperatures for afterhours events. The BMS system would be able to be migrated to the Town's network. The current plan is to replace the front end of the BMS system to the SmartStruxure Building Management System. This is the system that the new addition at the NHS, the Mitchell Modulars, and the Rosemary Complex have recently installed and the new Williams School will have when it opens.

Changes from Prior Submission Year

- This request was not funded in FY`19 and is being resubmitted in FY20. The three year project has been consolidated into one year. There is a $70,000 increase based on the one year delay and an updated quote.

Clarification of Questions

Supports Other: Supports building infrastructure.

4. The request will require assistance from the IT Department.

5. This is a Building Maintenance request.

18. The School Department will be involved.

Capital Project Request									
Project Title:	**Permanent Message Boards**							**Fiscal Year:**	**2021**
Purpose:	**Acquisition**		Classification:	**Technology**		Status:	**Amended Request from the Prior CIP**		
Department:	Public Works - Engineering					Supports:	General Government		
Partners:	Town Manager's Office, ITC					Useful Life:	Between eight (8) and twelve (12) years		

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			Yes
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			Yes
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			Yes

Project Cost:	**$228,000**	How was the Project Cost Determined:	Current Contract
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$228,000		$54,000	$56,000	$58,000	$60,000		
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$228,000**	**$0**	**$54,000**	**$56,000**	**$58,000**	**$60,000**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Permanent Message Boards** **Fiscal Year:** **2021**

Project Description and Considerations

In support of the Board of Selectmen's goals, this request is for permanently installed message boards to communicate with residents.

Project Summaries

Currently the Public Works Department has mobile message boards that are used for large construction projects. These message boards are removed from construction projects and relocated to various sites in Town when requested for non-construction related notifications to residents and commuters. The existing message boards are difficult to maneuver, time consuming to program, and often not available for non-emergency notice.

This project will alleviate competition for the current message boards. The new message boards will have the capacity to be programmed remotely and simultaneously from a Town work station or laptop. There will be minimal operating costs, including a data plan to allow for remote updates and electricity for each location. This funding will fund one message board per year.

Central Avenue at Great Plain Avenue

- This is a gateway into the Town of Needham and a message board installed at this location would provide information to drivers and pedestrians leaving and entering the Town.
- One double sided message board will be permanently installed at this location.

Public Safety Building, School Street and Chestnut Street

- This building is positioned near a gateway into the Town of Needham and near the business center. There may be public safety information specific to these departments that could be viewed on a message board at this location.
- One message board will be permanently installed at this location.

Fire Station #2

- This building is positioned near a gateway into the Town of Needham and near the business center. There may be public safety information specific to these departments that could be viewed on a message board at this location.
- One message board will be permanently installed at this location.

Greendale Avenue at Great Plain Avenue

- This is a gateway into the Town of Needham and a message board installed at this location would provide information to drivers and pedestrians leaving and entering the Town.
- One double sided message board will be permanently installed at this location.

Capital Project Request

Project Title: **Permanent Message Boards** **Fiscal Year:** **2021**

Supplemental Information

Changes from Prior Year Submission

- This project was pushed out until FY21 as the Town is still piloting the use of the message board installed at the RTS in the spring of 2016.
- Funding for message boards may be part of the Police and Fire Station Project.

Clarification of Questions

3. Conservation Commission permitting may be required for some locations. Depending on the location, a building permit and Design Review Board Approval may be required.
4. ITC will add the new message boards to the existing programming software.
7. There will be minimal operating costs for these boards which include cellular service for remote programming and electricity.
16. These message boards will be permanently installed at the chosen locations.
17. This request is to improve public property by installing informational message boards.
18. The Town Manager's Office will assist in the programming of these message boards.
19. There may be additional software maintenance costs for ITC.

Capital Project Request

Project Title:	**DPW Specialty Equipment**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Equipment**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Garage			Supports:	Transportation Network
Partners:				Useful Life:	Between eight (8) and twelve (12) years

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required? **Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$298,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$298,000	$68,000	$192,000	$38,000				
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$298,000**	**$68,000**	**$192,000**	**$38,000**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **DPW Specialty Equipment** **Fiscal Year:** **2020**

Project Description and Considerations

This request is for all large equipment that fits the definition of capital but is not included in the rolling stock. These pieces of equipment are not plated.

Project Summaries

Unit 351 –Parks & Forestry Tractor - FY20

- This piece of equipment moves and places materials such as park soil, mulch, and loam. It is also used to pick up wood, stump grindings, and log debris. The tractor has a three-way attachment that is used in over-seeding, field tilling, and synthetic turf grooming. This unit is part of the Snow & Ice Program.

New Unit # TBD – Highway Loader Mounted Snow Blower - FY21

- This new piece of equipment (addition to the Fleet) will be used to clear gutter lines, parking lots, and loading trucks.

Unit 334 – Parks & Forestry Specialty Mower - FY22

- This small mower performs a second cut on highly maintained baseball fields. It has floating cutting decks that provide a higher quality cut and playing surface, it also lessens the amount of scalping and mower damage to the field compared to the large area mowers. Since this machine has a lighter footprint than the large area mowers, it is able to cut fields even after heavy rains.

Changes from Prior Year Submission

- The replacement request for Unit 351 decreased because the division removed the aerator attachment on the revised quote.
- The loader mounted snow blower request increased based on a revised quote for a larger auger.
- The replacement request for Unit 334 decreased based on the updated quote.

Capital Project Request

Project Title:	**Fleet Refurbishment**			**Fiscal Year:**	**2021**
Purpose:	**Construction**	Classification:	**Equipment**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Garage			Supports:	Transportation Network
Partners:				Useful Life:	More than five (5) years but less than eight (8) years

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$300,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$300,000		$150,000		$150,000			
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$300,000**	**$0**	**$150,000**	**$0**	**$150,000**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Fleet Refurbishment** **Fiscal Year:** **2021**

Project Description and Considerations

In FY18, the Fleet Division implemented a refurbishment program for all large equipment. The goal of this program is to extend the life-cycles of the vehicles, increase operational safety, and eventually reduce reactive maintenance. The funding requests are spread out to allow the Fleet Division time to plan multiple repairs at once, follow procurement practices, and have the work completed.

Project Summary

- To accomplish these extended life-cycles, the Fleet Division must invest additional resources into the planned maintenance of this equipment.
- Rehabilitation work includes corrosion abatement, treatment and refinishing, replacing corroded chassis, air brake tanks or brake valves, rebuilding primary components, replacing suspension and brakes, and updating lighting and reflective striping.

Changes from Prior Year Submission

- The Fleet Division decreased the amount and decided to delay until FY21 before requesting funding due to a lag in qualified vehicles for refurbishment. The vehicles that are 9-12 years old are not worth refurbishing. Vehicles should be 6-8 years old to be considered for refurbishment. There is also a lack of vendors who perform this type of work, so procuring these services has been an issue.

Capital Project Request					
Project Title:	**Library Furniture**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Equipment**	Status:	**Amended Request from the Prior CIP**
Department:	Library			Supports:	Culture and Leisure
Partners:				Useful Life:	Between twelve (12) and eighteen (18) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		Yes
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		Yes
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$278,882**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$278,882	$112,960	$82,740	$83,182				
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$278,882**	**$112,960**	**$82,740**	**$83,182**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title:	**Library Furniture**	**Fiscal Year:**	**2020**

Project Description and Considerations

This request is for the second year of a four-year plan to replace library furniture. The first year of the project was granted in FY2019.

The "new" library has been open to the public for more than twelve years, and, due to heavy use, the furniture is beginning to show wear and tear. Some of the mesh on the Community Room stackable mesh chairs is unravelling, the backs are separting from the frames, and food has beencaught in the mesh and proven unable to be removed. The forty-two cloth public arm chairs are showing the ravages of heavy use, particularly the arms of the chairs. The thirty-eight leather public arm chairs are also beginning to show wear.

The prices listed in this request were obtained from manufactuter's websites.

160 Community Room audience stackable chairs @ $706 each		$112,960
42 Public lounge chairs (cloth) @$1,970 each		82,740
38 Public lounge chairs (leather) @ $2,189 each		83,182
	Total	$278,882

1, The services of a design consultant may be needed

16. All furniture would be installed at the library

18. Public Facilities personnel may be needed to help move futniture

Capital Project Request

Project Title:	**Library RFID**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**Amended request from the prior CIP**
Department:	Library			Supports:	Culture and Leisure
Partners:				Useful Life:	Between twelve (12) and eighteen (18) years

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	Yes
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required? **Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	Yes
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$327,200**	How was the Project Cost Determined:	Industry References
Budget Impact:	May increase annual operating expenses between $25,001 and $50,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$313,766		$313,766					
Technology Hardware/Software	$8,684		$8,684					
Other Expenses	$4,750		$4,750					
TOTAL	**$327,200**	**$0**	**$327,200**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Library RFID**	**Fiscal Year:**	**2020**

Project Description and Considerations

RFID, Radio Frequency Identification, is the technology toward which libraries arae migrating, as a means to increase efficiency and to cut down on repetitive action tasks. The advantages of the system include:

1. Reduction in the time necessary to check in and out library materials (in FY18 the library checked in and out more than 1,000,000 items)
2. Information can be read faster from the RFID tags than from barcodes.
3. The items in a stack can be read at the same time, as opposed to barcodes that must be read one at a time. checking a stack of materials in and out reduces repetitive action tasks, saving time and helping to avoid repetitive stress syndrom in employees
4. Patron self-checkout is simplified--patrons do not have to carefully line up a barcode with a laser beam
5. Opens the possibility of electronic inventorying , item searching, and shelf order checking

There are forty-one Minuteman Library Network libraries. Currently, thirteen Minuteman libraries are using RFID; three libraries are placing RFID tags in materials (the first step in migrating to RFID); and four more have expressed interest. The current thinking and discussions at Minuteman committee meetings is that, eventually, all Minuteman libraries will move to RFID. The libraries that are now operating with RFID have formed a "service" group for interlibrary loan service. Requests from these libraries go automatically to the other RFID libraries (they are the larger libraries in the system), where items are found and requests filled faster than at the non-RFID libraries. In FY18, Needham requested 63,599 items from other libraries for the use of Needham residents. Needham sent 61,189 items to other librariaes. With an RFID system that includes a portable scanner, these items could have been retrieved faster from the library's shelves, increasing the efficiency ;of a library employee.

Further system investigation and obvservation at RFID libraries has shown that, for the RFID system to function at a peak level of efficiency, it must include an automated sorting system. In this system, materials are placed on conveyer-type equipment where the RFID tag is read and the item automatically drops into a predetermined bin of like materials. The divide can include one bin for items that are on reserve; one for items that belong to another library; one for a library's nonfiction books; one for a library's fiction books; one for a library's childrens books; plus many other useful divisions. The cost for a 15-bin system has been included below.

RFID System Cost:

RFID tags:	150,000 books @ $0.16 each	$24,000		
	35,000 media @ $0.63 each	$22,050	Total	$46,050
Conversion Stations:				
	2 @ $11,178 each		Total	$22,356
Staff Station Equipment:				
	4 Staff Stations (Circulation Desk(@ $4,895 each	$19,580		
	1 Portable Scanner @ $5,200	$5,200	Total	$24,780
Self-checkout Equipment:				
	3 Self-Checkout Stations @$6,860 each		Total	$20,580
Software:	4 Staff Stations @ $266 each	$1,064		
	3 Self-Checkout Stations @$2,450 each	$7,620	Total	$8,684
Sorting System	15 bin automated sorting system	$200,000	Total	$200,000
Installation and Training:				
	Pre-Installation site survey	$1,500		

Capital Project Request

Project Title:	**Library RFID**	**Fiscal Year:**	**2020**

Supplemental Information

Total Project Cost				$327,200	
1. The Circulation Desk area and adjacent lounge area would have to be reconfigured					
7. The Yearly Operating Budget would have to be increased for the cost of RFID tags:					
Books:	12,000 @ $0.16 each	$1,920			
Media	3,400 @ $.63 each	$3,142			
			Total	$4,062	
and software licensing:					
4 stff stations @ $266 each		$1,064			
3 self-checkout stations @ $2,540		$7,620	Total	$8,684	
and 15 bin sorty system maintenance		$17,000	Total	$17,000	
Total yearly operating budget increases:					$29,746
11. Annual licensing listed under #7					
16 All equipment will be installed at the library					

Capital Project Request					
Project Title:	**Library Technology Plan**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**New Request**
Department:	Library			Supports:	Culture and Leisure
Partners:				Useful Life:	More than five (5) years but less than eight (8) years

Parameters		Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		No
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$171,680**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$171,680	$30,000	$48,500	$26,280	$36,500	$30,400		
Other Expenses	$0							
TOTAL	**$171,680**	**$30,000**	**$48,500**	**$26,280**	**$36,500**	**$30,400**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Library Technology Plan** **Fiscal Year:** **2020**

Project Description and Considerations

This is a request that will fund five years of the library's FY2018-FY2029 Technology Plan.

FY20--Replace 20 staff computers (Circulation 7; Children's 5; Reference 3; Technical Services 3, Administration 2) @ $1,500 each = $30,000

FY21--Replace 29 public computers (Adult 20; Young Adult 4; Children's 4; Community Room 1) @ $1,500 each = $43,500
Replace 2 Self-Check computers @ $2,500 each = $5,000
$48,500

FY22--Replace Program Specialist's 2 computers @ $3,500 each = $7,000
Replace 16 barcode scanners (Circulation 6; Children's 5; Reference 5) @$312.50 each= $5,000
Replace 24 receipt printers (circulation 10; Children's 6; Reference 5; Technical Services 3))@ $345 each = $8,280
Replace four staff computers (Archives; Assistant Director; Reference Supervisor; Circulation Assistant) @ $1,500 each = $6,000
$26,280

FY23--Replace Server = $12,000
Replace 15 Public Catalog Computers @ $700 each = $10,500
Replace 5 UPS (Server; 2 Tel/Data Closets; Community Room; Wireless) @ $200 each = $1,000
Replace large format printer $1,000
Replace Microfilm Machine $12,000
$36,500

FY24--Replace 20 staff computers (Circulation 7; Children's 5; Reference 3; Technical Services 3; Administration 2) @ $1,500 each = $30,000
Replace Wireless Printer $400
$30,400

Capital Project Request

Project Title:	**Public Playgrounds**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Equipment**	Status:	**Amended Request from the Prior CIP**
Department:	Park and Recreation			Supports:	Culture and Leisure
Partners:	School Department			Useful Life:	Between eighteen (18) and twenty-five (25) years

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**		No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			Yes
13. Is this a request in response to a Court, Federal, or State order?			Yes
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			Yes
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$700,000**	How was the Project Cost Determined:	Industry References	
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000			

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$700,000	$350,000	$350,000					
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$700,000**	**$350,000**	**$350,000**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Public Playgrounds**	**Fiscal Year:**	**2020**

Project Description and Considerations

The Town of Needham has 18 public playground locations: Broadmeadow (2), Eliot (2), Hillside (2), Mitchell (1), Newman (3), Claxton, Cricket, DeFazio, Greene's, Mills, Perry, Riverside, and Walker-Gordon. With the addition of two locations at the Williams School, there will be 20. A list follows, under Supplemental Information.

Hillside has the oldest school playground equipment. It was updated in 2011, and will be able to remain in use for neighbors and visitors to the site, unless there are conflicts with future uses of the school site. It is recommended that the Hillside-Kindergarten playground be removed. The Mitchell School is currently replacing their playground, and adding features for Kindergarten age. If the future school plans require a new location for playgrounds, this equipment can be relocated. The Williams School will have new playground equipment installed as part of the construction project.

Broadmeadow's Grade 1-5 and Kindergarten playgrounds were installed in 2002 and will likely need upgrades in upcoming years. Eliot's two playgrounds were installed in 2004 and appear to be in excellent condition. Newman's Grade 1-5 and Kindergarten playgrounds were installed in 2012 and are in excellent condition. The Preschool playground received a poured-in-place surface in 2013. Its equipment was originally purchased in 1998 and moved to the Newman site in 2004. It is in good condition, but will need some refreshing. An improvement recommended for Broadmeadow and Eliot would be the installation of poured-in-place pathways.

Though wood fiber surfacing is currently considered ADA compliant, the MA Architectural Access Board may be creating a new ruling that will require other options for pathways, with the predominate recommendation that pathways be poured-in-place rubber. The addition of poured-in-place pathways reduces the wear and tear on the wood fiber surfacing, requiring less material to be installed a few times a year.

For the non-school playgrounds, all sites are in very good to excellent condition. Greene's Field's equipment was installed new in 2013, with a major donation from residents of over $180,000. An ADA adaption is needed for swings, which also includes the addition of some poured-in-place pathway surfacing. Some funds are available for this project, but this project would help supplement the cost. There is also a request to add an ADA swing at Cricket. The Exchange Club has "adopted" DeFazio and Claxton, adding improvements over several years, and the Women's Club has reached out to offer support for upgrades. Parent Talk has "adopted" Cricket, Perry and Mills, with new playgrounds installed between 2001-2007. The Parent Talk Board would like consideration for upgrades at Perry Park. Riverside received new equipment in 2007 as part of the nearby Charles River Landing project. Walker-Gordon was replaced in 2013 as part of the park reconstruction project. Cricket will have ADA improvements completed when the park building is renovated.

The school projects will require consultation with the School Department, insuring their educational goals are met with any new structures.
The estimate was made in-house, based on recent projects completed in Needham and informal discussions with playground and surfacing companies. Currently, the cost range for poured-in-place pathways, including installation and crushed stone base is $30-40 per square foot, depending on site and scope.

Capital Project Request

Project Title: **Public Playgrounds** **Fiscal Year:** **2020**

Supplemental Information

PLAYGROUND	MANUFACTURER	YEAR	SURFACING	CURRENT CONDITIONS/FUNDING
Broadmeadow	Miracle	2002	Fiber	fair/good; financed PPBC/PTC donations
Broadmeadow-Kindergarten	Miracle	2002	Fiber	fair/good; financed PPBC/PTC donations
Claxton	Landscape Structures	1994/2007	Fiber/tile	very good; Exchange Club donations
Cricket	Landscape Structures	2005	Fiber	very good; Parent Talk donations
DeFazio	Landscape Structures	1997/1999	Fiber	good; Exchange Club donations
Eliot	Landscape Structures	2004	Fiber	very good; financed PPBC/PTC donations
Eliot-Kindergarten	Landscape Structures	2004	Fiber	very good; financed PPBC/PTC donations
Greene's	Landscape Structures	2013	Fiber/PIP	excellent; CPA/donations
Hillside	Landscape Structures	1995/2011	Fiber	very good; PTC donations
Hillside-Kindergarten	Kompan	2001	Fiber	good; RCN payment/PTC donations
Mills	Landscape Structures	2007	Fiber/tile	very good; Parent Talk donations
Mitchell	Landscape Structures	2008	Fiber	excellent; School Department
Newman	Landscape Structures	2012	syn grass	excellent; PPBC/PTC/Town
Newman-Kindergarten	Landscape Structures	2012	syn grass	excellent; PPBC/PTC/Town
Newman-Preschool	Landscape Structures	1998/2004	PIP	very good; PTC donations/CPC
Rebecca Perry	Landscape Structures	2001	Fiber	very good; Parent Talk donations
Riverside	Landscape Structures	2004/2007	Fiber	very good; Hanover Company
Walker-Gordon	Landscape Structures	2013	Fiber	excellent; Town
Williams	Landscape Structures	2019	PIP	excellent; PPBC
Williams-Kindergarten	Landscape Structures	2019	PIP	excellent; PPBC

loose surfaces = wood fiber
unitary surfaces = poured in place rubber (PIP); synthetic grass; rubber tiles

Capital Project Request						
Project Title:	**School New and Replacement Furniture**				**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Equipment**	Status:	**Amended Request from the Prior CIP**	
Department:	Needham Public Schools			Supports:	Public Education	
Partners:	None			Useful Life:	More than twenty-five (25) years	

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**		No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$154,000**	How was the Project Cost Determined:		
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000			

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$145,000	$35,000	$35,000	$25,000	$25,000	$25,000		
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$145,000**	**$35,000**	**$35,000**	**$25,000**	**$25,000**	**$25,000**	**$0**	**$0**

$9,000 FY2020

Capital Project Request

Project Title: **School New and Replacement Furniture** **Fiscal Year:** **2020**

Project Description and Considerations

In FY05 Town Meeting approved funding of $20,500 to begin the replacement of furniture in poor and fair condition throughout the School Department. By FY15, all furniture in 'poor' condition was replaced in the schools. The FY20-FY24 funding request will continue with the replacement of furniture in fair condition at Pollard, provide funding for new new classroom furniture as needed, and will address targeted furniture needs at Eliot and Mitchell Schools. A breakdown of the funding request is found below:

FY20: $35,000
* $9,000 to replace student desks in Grades 1 and 2 with tables.
* $16,000 to reconfigure the Mitchell School music room into four offices (for literacy, math, ELL and psychology.) Starting with the FY 19/20 School Year, music will be held in one of the two new
modular classrooms under construction on that campus.
* $10,000 to continue the replacement of furniture at Pollard Middle School in 'fair' condition

FY21: $35,000
* $10,000 to conclude the replacement of furniture at Pollard Middle School in 'fair' condition
* $25,000 to purchase new classroom furniture as needed for new enrollment or replacement purposes.

FY22 - FY24: $25,000/year
* $25,000 to purchase new classroom furniture as needed for new enrollment or replacement purposes.

The anticipated furniture replacement schedule is depicted below:

Funding Plan	Request FY20	Request FY21	Request FY22	Request FY23	Request FY24	TOTAL
Eliot Furniture	$9,000					$9,000
Mitchell Music Room Reconfiguration	$16,000					$16,000
Pollard	$10,000	$10,000	$0	$0	$0	$20,000
New Classrooms		$25,000	$25,000	$25,000	$25,000	$100,000
Total	$35,000	$35,000	$25,000	$25,000	$25,000	$145,000

This request is revised from the prior year to add targeted funding for Eliot and Mitchell in FY20, spread the replacement of Pollard furniture in 'fair' condition over FY20 and FY21 (instead of just FY20), and defer new classroom furniture funding to FY21 and beyond.

Capital Project Request					
Project Title:	**School Copiers**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Equipment**	Status:	**Amended Request from the Prior CIP**
Department:	Needham Public Schools			Supports:	Public Education
Partners:	None			Useful Life:	More than five (5) years but less than eight (8) years

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required? **Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$345,960**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$345,960	$135,520	$37,600	$73,990	$41,200	$57,650		
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$345,960**	**$135,520**	**$37,600**	**$73,990**	**$41,200**	**$57,650**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **School Copiers** **Fiscal Year:** **2020**

Project Description and Considerations

In May of 2003, Town Meeting authorized $60,000 in first year funding to establish a replacement cycle for school photocopiers. School photocopiers are located in all the schools and the administration building, and are used both by administrative and teaching staff. Teachers use the machines to reproduce classroom materials, including homework sheets, exams, teaching packets etc. Currently the School Department owns 45 copy machines. The FY20-FY24 request replaces the following numbers of copy machines.

Fiscal Year	#of Copy Machines Replaced		
FY20 (Requested)	11	FY23 (Requested)	5
FY21 (Requested)	4	FY24 (Requested)	4
FY22 (Requested)	6		

Copier replacement is planned on a life-cycle basis, which projects when a copier should be replaced based on actual usage and the manufacturer's total estimated capacity. As a result, copiers which are heavily used, are replaced more frequently than copiers that are lightly used. An eight-year maximum is assumed for most machines (up from seven years in the prior CIP), even if they have not yet reached maximum copy allowances, given the additional operating expense associated with servicing and maintaining older equipment, as well as the difficulty in obtaining replacement parts. This analysis assumes that copiers can be re-deployed around the District as needed, to better match projected usage with equipment capacity.

This request is revised from the prior CIP to reflect updated life cycle calculations (based on copier usage and current condition), which have shifted replacement priorities in some cases. Notable trends from the previous capital plan include:

* Heavier usage of copiers, District-wide. The FY20 request includes four copiers, which were previously programmed for replacement in later years, but which have been accelerated to FY20 based on heavy usage: Production Center Color Copier (@ 139% useful life in FY20), NHS Math/Science (@ 134%), NHS English/Social Studies (@ 130%), and Broadmeadow Teachers' Lounge (@ 145%.) Last year, we estimated the following FY20 usage rates and replacement years for these machines: Production 67% in FY20 and replaced in FY21; Math/Science 64% in FY20 and replaced in FY23; English/Social Studies @ 57% in FY20 and replaced in FY22; and Broadmeadow Teacher's Lounge at 59% in FY20 and replaced in FY21.
* The need to replace older machines purchased in 2011 and 2012, which will be eight years old in FY20 and increasingly difficult to service. The FY20 request reflects the replacement of five smaller machines, previously programmed in out years, which have been moved to FY20: Broadmeadow ETC, NHS Health Office, NHS Bookkeeper Office, NHS Grade Level Office, and Science Center.

Building	Location	Make	Model	Purchase Year	FY20	FY21	FY22	FY23	FY24	FY20	FY21	FY22	FY23	FY24	Age at Repl'm't
Administration	2nd Floor	Konica	658E	2018	12%	23%	35%	47%	59%						
Administration	Production Center	Konica	KM1025	2015	126%	26%	52%	78%	104%	24,120				29,330	4
Administration	1st Floor	Konica	KM454E	2017	92%	104%	12%	25%	37%		5,840				3
Administration	Production Center	XEROX	D125	2012	10%	20%	31%	41%	51%						
Broadmeadow	Teachers' Lounge	Konica	KM 654 E	2014	145%	21%	43%	64%	85%	13,690					5
Broadmeadow	Teachers' Room	Konica	KM 654 E	2014	49%	57%	66%	8%	16%			7,420			7
NHS	Main Office	Konica	KM 364E	2015	106%	111%	6%	11%	17%		5,840				5
Broadmeadow	ETC	XEROX	3550	2012	34%	4%	8%	12%	17%	2,040					7
NHS	Athletics	Konica	KM 454E	2016	57%	70%	84%	97%	111%					6,760	7
NHS	Math/Sci Rm 205	Konica	KM654E	2017	22%	32%	43%	54%	65%						
NHS	World Lang 704	Konica	KM 654 e	2014	61%	81%	101%	20%	40%			12,130			7
NHS	Health Office 607	XEROX	WC3550 X	2012	9%	1%	2%	3%	3%	2,040					7
NHS	Bookkeeper Office	XEROX	WC3550 X	2012	55%	5%	11%	16%	21%	2,040					7

Capital Project Request

Project Title: School Copiers **Fiscal Year:** 2020

Supplemental Information

Building	Location	Make	Model	Purchase Year	FY20	FY21	FY22	FY23	FY24	FY20	FY21	FY22	FY23	FY24	Age at Repl'm't
NHS	Music	Konica	KM 654 E	2016	28%	35%	43%	50%	57%						
NHS	College 503	Konica	KM 364 e	2014	49%	56%	62%	69%	7%				6,440		8
NHS	Media Center	Konica	KM 454 e	2014	34%	36%	39%	41%	2%				6,440		8
NHS	Sped 801	Konica	458E	2018	11%	23%	34%	45%	57%						
NHS	SS/English 703	Konica	KM 754 e	2014	97%	107%	118%	11%	21%			12,130			7
NHS	Eng/SS	Konica	KM 754 e	2015	130%	25%	51%	25%	51%	Move from Hillside		15,090			6
NHS	Grade Level	XEROX	5775PT	2011	94%	2%	4%	6%	8%	5,560					8
NHS	Math/Sci	Konica	KM 754 e	2015	134%	25%	50%	75%	101%	13,690					4
Hillside	Main Office	XEROX	5755APT	2012	66%	13%	25%	38%	50%	Bldg Project					7
Hillside	Downstairs	XEROX	5765PT	2011	63%	6%	12%	18%	24%	Bldg Project					8
Hillside	Main Office	Konica	KM 754E	2014	108%	17%	35%	52%	69%	Bldg Project					5
Mitchell	Back Hallway	Konica	KM 654E	2017	18%	27%	35%	44%	53%						
Mitchell	Front Office	Konica	KM654E	2014	141%	163%	22%	45%	67%		14,370				6
Newman	Front Office	XEROX	5775PT	2012	103%	10%	20%	29%	39%	6,730					7
Newman	Hall Outside Office	Konica	KM 654 E	2016	65%	80%	96%	111%	16%				7,790		6
Newman	Hallway Near Café	Konica	KM 654 E	2017	20%	29%	39%	49%	59%						
Newman	Down Stairs Hall	Konica	558E	2018	11%	22%	34%	45%	56%						
Science Center	Science Center	XEROX	3550X	2012	22%	2%	5%	7%	9%	2,040					7
Pollard	8th Grade Hallway	konica	KM 654 e	2015	97%	120%	143%	23%	46%			15,090			6
Pollard	Modulars	Konica	KM 754 e	2014	32%	37%	42%	47%	5%				7,790		8
Pollard	Main Office	Konica	KM 754E	2014	146%	16%	32%	49%	65%	13,690					5
Pollard	7th Grade Work Area	Konica	KM654E	2014	105%	119%	14%	28%	43%		11,550				6
Pollard	Teachers Lounge	Konica	KM454 E	2017	20%	30%	40%	50%	60%					8,180	6
Pollard	Media Coin -OP	XEROX	3550	2012	13%	14%	15%	16%	18%						
High Rock	Room 207	Konica	KM 654E	2016	54%	67%	81%	94%	108%					13,380	7
High Rock	Main Office	Konica	KM 754E	2014	90%	103%	117%	13%	26%			12,130			7
Eliot	Main Office	Konica	KM754 E	2014	66%	76%	86%	96%	10%				12,740		8
Eliot	Room 151	Konica	658E	2018	8%	17%	25%	33%	42%						
Eliot	Room 210	Konica	458E	2018	12%	23%	35%	47%	59%						
Kase- Cong. Church	Main Office	XEROX	WC3550 X	2012	54%	57%	60%	63%	66%						
Administration	Production Center/ Color	Xerox	Color 560	2014	139%	21%	43%	64%	85%	49,880					5
Totals										**135,520**	**37,600**	**73,990**	**41,200**	**57,650**	

Capital Project Request					
Project Title:	**Newman Preschool Playground Custom Shade Shelter**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Equipment**	Status:	**Amended Request from the Prior CIP**
Department:	Needham Public Schools			Supports:	Public Education
Partners:	Parks & Recreation; DPW			Useful Life:	Between eight (8) and twelve (12) years

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**		No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			Yes
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$109,200**	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$18,600	$18,600						
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$50,600	$50,600						
TOTAL	**$69,200**	**$69,200**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$40,000 FY2020

Capital Project Request			
Project Title:	**Newman Preschool Playground Custom Shade Shelter**	**Fiscal Year:**	**2020**

Project Description and Considerations

The Newman Preschool playground is situated in a part of the school that has constant sunlight. As a result, access to the playground is limited to cloudy days or to mild weather, given that there is no available shade on the playground and temperatures climb rapidly on sunny days. About half of the children who attend the preschool are identified as having special needs, and many struggle with their social-emotional skills. A custom shade shelter would increase the students' comfort and access to the playground, which in turn would create more meaningful social opportunities for them during their day. It is also worth noting that this impacts the program year round, as the preschool runs a summer program for students who require year-round special education services.

This request is for a custom shade shelter to be built over the center section of the playground. The quoted structure consists of five steel columns and three triangular 'sail style' canopy tops, of the type depicted in the picture below, which would be permanently installed in the preschool playground. This structure would provide the shade necessary for students and staff to remain outside during recess periods. The quoted purchase and installation cost is $97,162, which is considerably higher than a previous estimate (of $43,000 in 2017), due to the need for a certified installer. Offsetting revenue of $40,000 can be contributed toward project costs from the current fund balance in the School Preschool Revolving Fund, for a net request of $57,162 (2018 $.) The estimated FY20 net cost of $69,200 includes an annual inflation adjustment of 10% (per PPBC.) Permitting would be required.

The assistance of Parks & Recreation/DPW would be needed to bid the project.

Offsetting revenue of $40,000 can be contributed toward project costs from the current fund balance in the School Preschool Revolving Fund.

PreK Custom Shade Shelter

	NA	**Equipment**	**Installation**	**Total**
	FY18 Project Cost (Vendor)	26,162	71,000	97,162
	Less Funding Offset (Fees)	(10,800)	(29,200)	(40,000)
	TOTAL	15,362	41,800	57,162
		27%	73%	100%
10.00%	FY19 Cost Multiplier	16,898	45,980	62,878
10.00%	FY20 Cost Multiplier	18,588	50,578	69,166
2 Years	TOTAL PROJECT COST	18,588	50,578	69,166
	TOTAL COST (ROUNDED)	18,600	50,600	69,200

Capital Project Request						
Project Title:	**NHS Athletic Locker Reconfiguration & Addition**				**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Equipment**	Status:	**Amended Request from the Prior CIP**	
Department:	Needham Public Schools			Supports:	Public Education	
Partners:	Public Facilities			Useful Life:	More than twenty-five (25) years	

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**		No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$50,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$50,000	$50,000						
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$50,000**	**$50,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **NHS Athletic Locker Reconfiguration & Addition** **Fiscal Year:** **2020**

Project Description and Considerations

This request proposes to reconfigure and increase the number of student physical education lockers at NHS, to accommodate the increased student population. Currently, there are 508 lockers at NHS (269 in the boys' locker room and 239 in the girls' locker room.) The project will add 111 lockers in the boys' locker room and 104 lockers in the girls' locker room, for a new grand total of 723.

Currently, each locker room has small, medium and large lockers. The reconfiguration would remove the doors and frames from the medium and large lockers, and would create three new, small lockers from every two medium lockers, and three new small lockers from every one large locker. (The existing small lockers would remain unchanged.) This reconfiguration would yield 81 new boy's lockers and 80 new girls' lockers. Additionally, a new bank of 30 lockers would be added in the boys' locker room, and 24 new lockers will be added in the girls' locker room.

This project was included in a prior CIP and aggregated for funding with the other components of the Needham High School renovation project. Unfortunately, due to project-related funding constraints, this portion of the project was dropped for future funding at a later date.

This request has been revised from the previous CIP to reflect the following cost escalator factors: 6%/year (FY16), 5.0%/year (FY17-18), and 10.0%/year (FY19-20,) based on PPBC advice. This request would allow for locker installation to occur during the summer of 2020, in preparation for a September 2020 (FY21) opening.

Parameters Addressed:
Building Improvements: The PFD Public Facilities Department supports this request.
Permanent Installation: The lockers will be permanently installed in the building.
Other Departmental Assistance: PFD Public Facilities Department

NHS Locker Replacement
2015 Costs (Based on Vendor Estimate)

		Feasibilty	Construction*	A/E	5% Conting	Constr Mgnt	Total
	FY14 Project Cost (D&W)	-	33,705	-	1,685	-	35,390
	TOTAL	-	33,705	-	1,685	-	35,390
		0%	95%	0%	5%	0%	100%
6.00%	FY16 Cost Multiplier	-	35,727	-	1,786	-	37,514
5.00%	FY17 Cost Multiplier	-	37,514	-	1,876	-	39,389
5.00%	FY18 Cost Multiplier	-	39,389	-	1,969	-	41,359
10.00%	FY19 Cost Multiplier	-	43,328	-	2,166	-	45,495
10.00%	FY20 Cost Multiplier	-	47,661	-	2,383	-	50,044
5 Years	TOTAL PROJECT COST	-	47,661	-	2,383	-	50,044
	TOTAL COST (ROUNDED)	-	47,700	-	2,400	-	50,000

Capital Project Request								
Project Title:	**School Document Management System**					**Fiscal Year:**		
Purpose:	**Acquisition**	Classification:	**Technology**		Status:	**Amended Request from the Prior CIP**		
Department:	Needham Public Schools				Supports:	Public Education		
Partners:					Useful Life:	More than five (5) years but less than eight (8) years		

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**		No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$187,700**	How was the Project Cost Determined:	
Budget Impact:			

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$187,700			$187,700				
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$187,700**	**$0**	**$0**	**$187,700**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request		
Project Title:	**School Document Management System**	**Fiscal Year:**

Project Description and Considerations

This is a request to purchase and implement a document management system for the efficient storage and retrieval of school documents, including student files, financial and administrative information. The acquisition cost also includes the cost to covert existing paper-based records to electronic format.

The document management system provides electronic storage and retrieval, automated document indexing and networked access for group workflow and email capability. The acquisition cost is based on a 2015 purchase estimate of $32,000 and $125,000 cost of document conversion, escalated at a cost of 3%/year. The document conversion cost is based on approximately 856 cubic feet of documents (Human Resources, Special Education) and is phased over two years.

Project timing based on planned renovation/reconstruction of Emery Grover School Administration Building, and the anticipated move of staff to temporary swing space in August 2022 (FY23). The project is timed precede the relocation of staff to swing space in FY22. The project is revised from the prior year to defer funding from FY20 to FY22, based on the revised Emery Grover construction schedule.

Parameters Addressed:
Technology: The School Instructional Technology Department is in support of this request.

Capital Project Request

Project Title: **School Document Management System** **Fiscal Year:**

Supplemental Information

Document Management Purchase & Document Conversion Expense

Emery Grover Active Files	# Cabinets Small (1)	# Cabinets Large (2)	Cubic Feet	Calculated # Boxes	Calculated Pages	Box Pickup Service (3)	Scanning Service	Total Cost
Human Resources	3	9	312	260	689,000	650	44,785	45,435
Financial Operations	0	0						
Payroll	0	0						
Food Service	0	0						
Special Education	24	11	544	453	1,201,333	1,133	78,087	79,220
Subtotal	27	20	856	713	1,890,333	1,783	122,872	124,655
Other Files								
Financial Operations	0	0	-					
Subtotal	0	0						
Grand Total	27	20	856	713	1,890,333	1,783	122,872	124,655
								125,000

Assume major storage is IV

(1) Small: 1'W x 4'H x 2'D 8 Cubic Feet
(2) Small: 4'W x 4'H x 2'D 32 Cubic Feet
(3) Pickup estimate is $2.50/box
(3) Estimated cost of prepping, scanning, indexing is $0.05 - $0.08/page. Estimate based on $0.065/page mid-rate.

Conversion
1 Small Bankers Box = 1.2 Cubic Feet
1 Small Bankers Box = 2650 Pages

Document Management Purchase & Installation			**Software Acquisition**	**Document Conversion**	**Total Cost**
2015 Acquisition Cost	FY16	DocStar	32,000	125,000	157,000
x Escalation	FY17	3%	33,000	128,800	161,800
x Escalation	FY18	3%	34,000	132,700	166,700
x Escalation	FY19	3%	35,000	136,700	171,700
x Escalation	FY20	3%	36,100	140,800	176,900
x Escalation	FY21	3%	37,200	145,000	182,200
x Escalation	FY22	3%	38,300	149,400	187,700
					187,700

Conversion Year - Prior to Aug 22 Move to Swing Space

Capital Project Request					
Project Title:	**School Department Technology Request**			**Fiscal Year:**	
Purpose:	**Acquisition**	Classification:	**Technology**	Status:	**Amended Request from the Prior CIP**
Department:	Needham Public Schools			Supports:	Public Education
Partners:				Useful Life:	More than five (5) years but less than eight (8) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required? **Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$2,496,825**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$2,496,825	$632,350	$556,575	$490,150	$422,000	$395,750		
Other Expenses	$0							
TOTAL	**$2,496,825**	**$632,350**	**$556,575**	**$490,150**	**$422,000**	**$395,750**	**$0**	**$0**

$0 FY2020

Capital Project Request		
Project Title:	**School Department Technology Request**	**Fiscal Year:**

Project Description and Considerations

The FY20-24 CIP request funds the purchase of School Department technology, including desktop computers, printers, interactive white boards (IWBs), specialized instructional labs, projectors, video displays, security cameras and electronic door access controllers. The request also incorporates funding for school technology infrastructure, which consists of servers, network hardware, wireless infrastructure, data cabling and access points. This request reflects the School Department's clasroom technology standard and the decision in FY17 to move devices with a lifespan of less than five years (Digital Learning Devices, or DLDs, and staff laptops) to the operating budget. A chart summarizing the five-year (FY20-24) request is included on the next page.

The FY20-24 Capital Improvement Plan (CIP) for school technology totals $2,496,825 and includes $1,931,825 for school hardware replacement and $565,000 for school technology infrastructure. Highlights of the FY20-24 CIP include:

* $90,000 for the purchase of IWB's for Kindergarten classrooms throughout the District, timed to coincide with the implementation of Full-Day Kindergarten in FY20. This component was included in the prior year's CIP plan.
* $56,000 to provide additional electronic key door access controllers at Broadmeadow Elementary School (4), Eliot Elementary School (2), Pollard Middle School (2), Needham High School (4) and Emery Grover (4.) This is a new component of the school technology capital plan and is needed to maintain secure access to our school buildings by eliminating the security risk that is introduced by the current practice of propping doors open.
* The reallocation of $60,000 in funds previously budgeted at the Hillside School (and now not needed due to the Sunita Williams construction project) toward other technology needs, including the installation of a large screen projector in the Eliot Performance Center ($28,000) and the replacement of the High School TV studio ($30,000.)

The FY20 request is for $632,350, an increase of $66,250 from the FY20 projection included in the FY19-23 CIP. The $632,350 total request includes $519,350 for hardware and $113,000 for infrastructure replacement. While the infrastructure component is unchanged from the prior CIP, the hardware replacement component increases $66,250 to meet the following needs:
* Reallocate $17,750 from HIllside desktop computer and printer replacement toward the purchase of the large screen projector in the Eliot Performance Center ($28,000), mentioned above.
* Reallocate $8,100 formerly budgeted for computer lab replacement at Pollard to the purchase of hard drives for Pollard lab computers.
* Install $56,000 in new electronic key door access controllers at Broadmeadow Elementary School (4), Eliot Elementary School (2), Pollard Middle School (2), Needham High School (4) and Emery Grover (4), described above.

The FY20-24 CIP increases $446,200 over the prior CIP, to add a new fifth year to the plan (@ $395,750) and provide $50,450 in net new funding during the first four years for electronic door access controllers ($56,000.) As noted above, $60,000 in funds previously allocated for Hillside hardware replacement were allocated toward the installation of a large screen projector in the Eliot Performance Center ($28,000) and the replacement of the High School TV studio ($30,000.) A summary of changes from the prior year is presented on the next page.

Capital Project Request

Project Title: **School Department Technology Request** **Fiscal Year:**

Supplemental Information

Summary All Hardware (Including New Requests)	**FY20 Prior**	**FY20 New**	**FY20 Change**	**FY21 Prior**	**FY21 New**	**FY21 Change**	**FY22 Prior**	**FY22 New**	**FY22 Change**	**FY23 Prior**	**FY23 New**	**FY23 Change**	**FY24 New**	**FY20-24 Total**
Lab Computers	54,100	46,000	(8,100)	202,500	202,500	-	162,000	162,000	-	202,500	162,000	(40,500)	40,500	613,000
Science Lab Computers	54,000	54,000	-	-	-	-	-	-	-	-	-	-	-	54,000
TV Studio Computers	30,000	-	(30,000)	30,000	-	(30,000)	30,000	-	(30,000)	-	36,000	36,000	-	36,000
Graphics Lab Computers	-	-	-	-	-	-	-	-	-	-	-	-	44,000	44,000
Destop Computers	123,000	108,000	(15,000)	108,000	106,500	(1,500)	22,500	21,000	(1,500)	22,500	21,000	(1,500)	21,000	277,500
Printers	22,000	19,250	(2,750)	22,825	20,075	(2,750)	42,700	37,650	(5,050)	-	-	-	-	76,975
IWB - Gr 1-12	80,000	80,000	-	80,000	80,000	-	110,000	110,000	-	90,000	90,000	-	80,000	440,000
IWB - Kindergarten	90,000	90,000	-	-	-	-	-	-	-	-	-	-	-	90,000
Door Access Controllers	-	56,000	56,000	-	-	-	-	-	-	-	-	-	-	56,000
Gym/ Performance Center Projection /Screen	-	28,000	28,000	-	-	-	-	-	-	-	-	-	18,000	46,000
Hard Drives for Pollard Lab Computers	-	8,100	8,100	-	-	-	-	-	-	-	-	-	-	8,100
NHS TV Studio	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000	-	-	-	30,000	120,000
Security Cameras	-	-	-	-	4,500	4,500	20,000	16,500	(3,500)	-	-	-	49,250	70,250
Subtotal	**453,100**	**519,350**	**66,250**	**443,325**	**443,575**	**250**	**387,200**	**377,150**	**(10,050)**	**315,000**	**309,000**	**(6,000)**	**282,750**	**1,931,825**

Summary Infrastructure	**FY20 Prior**	**FY20 New**	**FY20 Change**	**FY21 Prior**	**FY21 New**	**FY21 Change**	**FY22 Prior**	**FY22 New**	**FY22 Change**	**FY23 Prior**	**FY23 New**	**FY23 Change**	**FY24 New**	**FY20-24 Total**
Servers	30,000	30,000	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000	-	30,000	150,000
Network Hardware	20,000	20,000	-	20,000	20,000	-	20,000	20,000	-	20,000	20,000	-	20,000	100,000
Wireless Infra. Data Cabling	5,000	5,000	-	5,000	5,000	-	5,000	5,000	-	5,000	5,000	-	5,000	25,000
Wireless Infra. Access Points	58,000	58,000	-	58,000	58,000	-	58,000	58,000	-	58,000	58,000	-	58,000	290,000
Subtotal	**113,000**	**113,000**	**-**	**113,000**	**113,000**	**-**	**113,000**	**113,000**	**-**	**113,000**	**113,000**	**-**	**113,000**	**565,000**

Summary Grand Total	**FY20 Prior**	**FY20 New**	**FY20 Change**	**FY21 Prior**	**FY21 New**	**FY21 Change**	**FY22 Prior**	**FY22 New**	**FY22 Change**	**FY23 Prior**	**FY23 New**	**FY23 Change**	**FY24 New**	**FY20-24 Total**
Hardware	**453,100**	**519,350**	**66,250**	**443,325**	**443,575**	**250**	**387,200**	**377,150**	**(10,050)**	**315,000**	**309,000**	**(6,000)**	**282,750**	**1,931,825**
Infrastructure	**113,000**	**113,000**	**-**	**113,000**	**113,000**	**-**	**113,000**	**113,000**	**-**	**113,000**	**113,000**	**-**	**113,000**	**565,000**
Grand Total	**566,100**	**632,350**	**66,250**	**556,325**	**556,575**	**250**	**500,200**	**490,150**	**(10,050)**	**428,000**	**422,000**	**(6,000)**	**395,750**	**2,496,825**

Capital Project Request					
Project Title:	**Needs Assessment of Pollard, Newman and NHS Auditorium Theatrical Sound and Lighting Systems**			**Fiscal Year:**	**2020**
Purpose:	**Construction**	Classification:	**Equipment**	Status:	**New Request**
Department:	Needham Public Schools			Supports:	Public Education
Partners:				Useful Life:	Between eight (8) and twelve (12) years

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**		No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$60,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$60,000	$60,000						
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$60,000**	**$60,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0

FY2020

Capital Project Request			
Project Title:	**Needs Assessment of Pollard, Newman and NHS Auditorium Theatrical Sound and Lighting Systems**	**Fiscal Year:**	**2020**

Project Description and Considerations

This project is to conduct a needs assessment/ feasibility study of upgrading the theatrical sound and lighting systems in the Pollard, Newman and Needham High School (NHS)Auditoriums. These auditoriums are venues for student and community group productions. The theatrical equipment currently installed in these venues, however, is old and not adequate for contemporary musical or theatrical productions. Although some issues are unique to particular venues, some common deficiencies in the audio systems include:
* speakers, which are poorly placed, insufficient in number and/or non-functioning, thereby impairing the audience's ability to hear what is happening clearly on stage from all seats.
* sound boards, which are old (analog), partially non-functioning and/or not at a standard that is necessary for a modern musical or theatrical production.
* amplification equipment (such as wireless receivers and microphones), which are insufficient in number and/or broken.

The lighting systems also include light fixtures that are partially non-functioning, and uncoordinated with sound delivery.

Although the need and vision for these spaces has not yet been fully assessed, school parents and community groups already have engaged in fundraising for equipment upgrades. Pollard parents have written a Needham Education Foundation (NEF) grant and received community donations to obtain funding for lighting system upgrades in the Pollard Auditorium, the component parts of which are expected to cost approximately $15,000. This portion of the project will be undertaken in FY19 from grant and donated funds, leaving the audio system upgrades for a future funding year. Other groups have discussed fundraising for the NHS Auditorium as well.

This study would be important for informing future fundraising and directing capital planning efforts for these spaces.

Parameters:
Technology: The School Technology Department supports this request.
Departmental Assistance: PPBC

Capital Project Request

Project Title: **Needs Assessment of Pollard, Newman and NHS Auditorium Theatrical Sound and Lighting Systems** **Fiscal Year:** **2020**

Supplemental Information

Auditorium A/V Upgrade

	NA	**Equipment & Install**	**Less NEF Grant**	**Less Local Donations**	**NET CIP**	**Equipment & Install**	**Equipment & Install**
	2018 Pollard Auditorium A/V System Upgrade	194,000	9,032	4,505	180,463		
	2018 Newman Auditorium A/V System Upgrade				-	203,000	
	2018 NHS Auditorium A/V System Upgrade	-	-	-	-	-	162,000
	TOTAL	194,000	9,032	4,505	180,463	203,000	162,000
5.00%	FY20 Cost Multiplier	203,700	9,032	4,505	190,163	213,150	170,100
5.00%	FY21 Cost Multiplier	213,885	9,032	4,505	200,348	223,808	178,605
5.00%	FY22 Cost Multiplier					234,998	187,535
5.00%	FY23 Cost Multiplier	-	-	-	-	-	196,912
	TOTAL PROJECT COST	213,885	9,032	4,505	200,348	234,998	196,912
	TOTAL COST (ROUNDED)	213,900	9,000	4,500	200,300	235,000	196,900

Capital Project Request

Project Title:	**DPW Complex**	**Fiscal Year:**	**2020**

Purpose:	**Design/Engineering**	Classification:	**Building**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Highway			Supports:	Other (see below for information)
Partners:	PPBC			Useful Life:	More than twenty-five (25) years

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			Yes
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	1.5	Yes
7. If funded, will the operating budget need to be increased to cover operating expenses?			Yes
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$40,441,000**	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	May increase annual operating expenses between $5,001 and $25,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$3,062,000	$3,062,000						
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$37,379,000			$37,379,000				
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$40,441,000**	**$3,062,000**	**$0**	**$37,379,000**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **DPW Complex** **Fiscal Year:** **2020**

Project Description and Considerations

Project Summary

- The current DPW Operations Building at 470 Dedham Avenue is over 50 years old. To continue using this facility, the major building systems including electrical, plumbing, and HVAC require replacement as well as a structural upgrade for seismic events. Deficiencies exist throughout the building and the DPW site. The poor condition of the current building, unmet equipment and vehicle storage, and stormwater quality issues require a solution. Ultimately, the expansion and renovation of the DPW Operations Building and site will be required to address the need for stormwater quality mitigation as well as storage and maintenance considerations.
- In FY15, Town Meeting approved funding for a feasibility study for the appropriate location(s) for a facility to provide various DPW services. Weston & Sampson completed this study in October of 2016, which evaluated the current facility program needs and options for the location of various DPW operations. The Weston & Sampson study determined that the full garage needs could not be met on the existing site. It concluded the project should be implemented in three phases. The final result will address the needs of a modernized DPW facility and organization, including providing shelter for Town equipment which will increase the service life, and resolve any existing stormwater and wastewater management issues at the current location.
  Phase I – Temporary Fuel Island - Completed
  Phase II – Seasonal Storage Building – In Progress
  Phase III A – Public Works Facility (North)
  Phase III B – Public Works Facility (South)

Changes from Prior Year Submission

- Escalation rates increased to 8% because of current economic conditions and tariffs.

Clarification of Questions

This request supports culture and leisure, public safety, transportation network, and utilities.
2. There are costs for technology, maintenance, etc. that may not be included in this request.
3. Conservation Commission and Building permitting may be required.
4. Technology will be necessary for a DPW Facility.
5. This request is for a DPW Facility.
6. It may facilitate the addition of maintenance staff.
7. There may be additional expenses to maintain the building.
15. This will be to extend the useful life of the DPW Facility.
18. This will require input from all fuel users, technology, facilities construction, and Building Maintenance.

Capital Project Request

Project Title:	**Upgrade Boiler #1 at Hillside**			**Fiscal Year:**	**2020**
Purpose:	**Design/Engineering**	Classification:	**Building**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	School Department			Useful Life:	More than twenty-five (25) years

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$232,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$12,000	$12,000						
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$220,000		$220,000					
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$232,000**	**$12,000**	**$220,000**	**$0**	**$0**	**$0**	**$0**	**$0**

$0

FY2020

Capital Project Request

Project Title: **Upgrade Boiler #1 at Hillside** **Fiscal Year:** **2020**

Project Description and Considerations

Project Summary

- The Hillside School currently has two cast iron boilers to heat the building. Boiler #1 has a leak that needs to be repaired. The existing boilers were installed during the renovation in 1998 and are at their 20 year life cycle. A study conducted in 2011 indicated that they should only last for a few more years without major issues. Due to the age of the boilers, many of the parts necessary for continued maintenance are no longer manufactured, so repairing the boilers is becoming increasingly more difficult. Even though the student population of the Hillside will be moving to the new Williams School, the building will still be in regular use as a swing space. The boilers are still necessary to prevent the building from freezing and causing major damage.
- Boiler #1 will be removed and taken apart. The salvageable parts will be kept to provide spare parts for Boiler #2. Boiler #1 will be replaced with a high efficiency condenscing boiler.

Changes from Prior Year Submission

- FY 20 costs increased by $1,000 based on revised estimate for design.

Clarification of Questions

Supports Other: Supports building infrastructure.
3. This request will require a Building Permit.
5. This is a Building Maintenance request.
15. Upgrading the boiler will help to keep the building in use in the future.
16. The boiler will be permanently installed at the school.
18. Assistance from the School Department will be required.

Capital Project Request

Project Title:	**Pollard Locker Room Retrofit**			**Fiscal Year:**	**2021**
Purpose:	**Design/Engineering**	Classification:	**Building**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	Needham Public Schools			Useful Life:	More than twenty-five (25) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		Yes
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$690,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$60,000		$60,000					
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$630,000			$630,000				
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$690,000**	**$0**	**$60,000**	**$630,000**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Pollard Locker Room Retrofit**	**Fiscal Year:**	**2021**

Project Description and Considerations

Project Summary

- The current locker room layout at the Pollard Middle School is no longer conducive to the needs of the Athletic Department. The school is offering more varied sports programs, including sports with large equipment like field hockey sticks that need to be stored during the day. The existing lockers are all the same size and do not fit much of the sports equipment, leading to the either being carried around all day or left outside of lockers. The current layout also has blind spots in the locker rooms that pose a safety hazard. The flooring is starting to crack in places due to age. The bathrooms and showers are outdated as well.
- The division will work with a consultant for the design of retrofitting the locker room in order to make the space more functional for its current usage. Once a design has been decided on, lockers of varying sizes will be installed to accommodate the needs of the students, the flooring will be repaired, the showers, bathroom fixtures, and lighting will be updated and the room will be painted.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. Building, electrical, and plumbing permits will be required.
5. This is a Building Maintenance request.
15. This request is necessary to extend the life of the building.
16. All components will be permanently installed.
18. This request will require assistance from the School Department.

Capital Project Request					
Project Title:	**Pollard Blue and Green Gym Upgrades**			**Fiscal Year:**	**2020**
Purpose:	**Construction**	Classification:		Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	Needham Public Schools			Useful Life:	More than eighteen (18) years

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required? **Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	Yes
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$30,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$30,000	$30,000						
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$30,000**	**$30,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Pollard Blue and Green Gym Upgrades**	**Fiscal Year:**	**2020**

Project Description and Considerations

Project Summary

- In FY19, the Town received funding for the design and construction of upgrades for both the Blue and Green gyms at the Pollard Middle School. These upgrades plan to replace the rubber flooring that is not conducive to basketball, but is also not ADA/MAAB accessible. Additionally, the siding will be replaced, the gyms painted, backboards and winch mechanisms on the basketball hoops will be replaced or installed if not there, and padding will be added behind the backboards. In the Green gym, two sections of pull-out seating will be installed to accommodate classes. After those upgrades are made, the existing scoreboards will still remain. The existing scoreboards and shot clocks are beyond their useful life and the technology is outdated. They also contain incandescent bulbs, which are not energy efficient.
- The scoreboards in both gyms will be replaced with updated, electronic LED scoreboards. Shot clocks will be installed that have wireless controls and technology.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. Building and electrical permits will be required.

5. This is a Building Maintenance request.

8. Energy efficiency upgrades will reduce energy costs, but these are no longer included in Building Maintenance's budget.

15. This request will modernize building components, thereby maximizing the usefulness of this building.

16. Flooring and wall coverings will be permanently installed.

18. This request will require assistance from the School Department and the Athletics Department.

Capital Project Request

Project Title:	**Pollard AC Upgrades**			**Fiscal Year:**	**2021**
Purpose:	**Design/Engineering**	Classification:	**Building**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	School Department			Useful Life:	More than twelve (12) years

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			Yes

Project Cost:	**$1,225,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	May increase annual operating expenses between $5,001 and $25,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$100,000		$100,000					
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$1,125,000			$550,000	$575,000			
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$1,225,000**	**$0**	**$100,000**	**$550,000**	**$575,000**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Pollard AC Upgrades**	**Fiscal Year:**	**2021**

Project Description and Considerations

Project Summary

- The Pollard Middle School only has supplemental AC in one third of the building. The comfort and temperature of the educational learning space is an important aspect of school maintenance, especially with school starting in August. Some of the classrooms have very little refuge from direct sunlight, adding to the heat and humidity issues during the warmer months. A lack of temperature and humidity control throughout the building can cause lasting damage to the building. The Pollard is also underutilized during the summer for programming because of the lack of AC, adding strain to other schools.
- This request would look at the possibilities for adding AC to the rest of the building. It would evaluate roof top units and split systems with regards to their efficiency and the process of installing it. Once the best option for the Town is determined, the AC would be added to the Pollard.

Changes from Prior Year Submission

- This request has been pushed forward a year, with the design now in FY21 at the request of the School Department.

Clarification of Questions

Supports Other: Supports building infrastructure.
5. This is a Building Maintenance request.
18. Assistance will be required from the School Department.
19. The building is currently not air conditioned. Installing air conditioning throughout the building will increase energy costs, which are handled by the Needham ELG.

Capital Project Request

Project Title:	Newman Gym Floor Repairs			Fiscal Year:	2020
Purpose:	**Construction**	Classification:	**Building**	Status:	**New Request**
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	School Department			Useful Life:	More than twenty-five (25) years

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			Yes
15. Is this a request to improve or make repairs to extend the useful life of a building?			Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$275,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$275,000	$275,000						
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$275,000**	**$275,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Newman Gym Floor Repairs**	**Fiscal Year:**	**2020**

Project Description and Considerations

Project Summary

- The floors at the Newman gym are original to the building. Over the years, they have been subject to buckling. This buckling has accelerated in the past 2-3 years, making the conditions in the gym potentially unsafe. This problem will continue to get worse. Due to the presence of asbestos containing materials in the subfloor, temporary repairs are not possible.
- Design for this project will come from existing resources due to the emergent nature of the problem and the need for a replacement in the summer of 2019. The existing flooring will be removed, the asbestos containing materials will be safely abated, and new wood sports flooring will be installed.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. Building permits will be needed.

5. This is a Building Maintenance request.

14. The flooring presents a tripping hazard.

15. This will extend the useful life of the gym.

Capital Project Request					
Project Title:	**Mitchell Restroom Upgrades**			**Fiscal Year:**	**2020**
Purpose:	**Design/Engineering**	Classification:	**Building**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	School Department			Useful Life:	More than twenty-five (25) years

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$737,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$67,000	$67,000						
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$670,000		$670,000					
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$737,000**	**$67,000**	**$670,000**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	Mitchell Restroom Upgrades	Fiscal Year:	2020

Project Description and Considerations

Project Summary

- There are currently six restrooms at the Mitchell that are not ADA/MAAB accessible. Many of the existing plumbing fixtures are 40 to 60 years old. The current stalls are not the proper size and do not have grab bars. The urinals and dispensers are not set at the proper height. The sinks do not have insulated pipes. The restrooms do not have the minimum clearance necessary at the entrance nor do they have the appropriate turning radius.
- The existing restrooms would be upgraded to meet ADA/MAAB requirements. This request would also look at providing two additional Staff Only accessible restrooms. In the existing restrooms, the fixtures would be replaced with water saving fixtures. The existing restrooms would also be reconfigured increasing the entranceways and turning circle radius to be ADA accessible. The door hardware and stalls would be upgraded to be the proper size, set at the proper height, and include grab bars. The first phase would be the design, followed by the construction component. The Town will apply for an ADA compliance grant, if available, to offset the cost of this project.

Update from Prior Year Submission

- This request has been pushed up a year, with the design request in FY20 at the request of the School Department, due to the condition of the restrooms.
- The Town received an updated quote that was $77,000 higher than last year's submission, which is inline with the rising cost of construction.

Clarification of Questions

Supports Other: Supports building infrastructure.
3. Building and electrical permits will be required.
5. This is a Building Maintenance request.
15. This request will improve the bathrooms and extend their usage.
16. All fixtures will be permanently installed.
18. Assistance will be required from the School Department.

Capital Project Request

Project Title:	**Facility Assessment for Sustainable Building Management**			**Fiscal Year:**	**2020**
Purpose:	**Feasibility Study**	Classification:	**Building**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	Needham Public Schools			Useful Life:	More than eight (8) years

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required? **Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$150,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$150,000	$100,000				$50,000		
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$150,000**	**$100,000**	**$0**	**$0**	**$0**	**$50,000**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Facility Assessment for Sustainable Building Management**	**Fiscal Year:**	**2020**

Project Description and Considerations

Project Summary

As buildings age, a facility assessment helps to guide major repairs and upgrades that are required to ensure the buildings remain sustainable.

Broadmeadow and Eliot Schools- FY 20

- The Broadmeadow and Eliot Elementary Schools are approaching 20 years old and may require upgrades beyond general maintenance. Many of the systems within the buildings, including heating, ventilation, and air conditioning (HVAC), boilers, and plumbing, are reaching the end of their useful life.
- A facility assessment will be conducted on the Broadmeadow and Eliot Schools to determine the condition of the facility and to identify any major repairs and replacement needs. The assessment will consider HVAC systems, plumbing, roofing, and boilers, in order to create a plan to address future needs.

Library - FY 24

- The Library is approaching 20 years old and may require upgrades beyond general maintenance. Many of the systems within the building, including HVAC, boilers, and plumbing, are reaching the end of their useful life.
- A facility assessment will be conducted on the Library to determine the condition of the facility and to identify any major repairs and replacement needs. The assessment will consider HVAC systems, plumbing, roofing, and boilers, in order to create a plan to address future needs.

Changes from Prior Year Submission

- This article was not funded in FY19 and is being resubmitted in FY20.

Clarification of Questions

Supports Other: Supports building infrastructure.

5. This is a Building Maintenance request.

15. This study is anticipated to make recommendations that will extend the life of the building in a sustainable way.

18. Assistance will be required from the School Department and the Library.

Capital Project Request					
Project Title:	**Energy Efficient Upgrades**			**Fiscal Year:**	**2020**
Purpose:	**Construction**	Classification:	**Building**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	Building Occupants			Useful Life:	More than twelve (12) years

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required? **Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	Yes
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$457,000**	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$457,000	$57,000	$100,000	$100,000	$100,000	$100,000		
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$457,000**	**$57,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Energy Efficient Upgrades**	**Fiscal Year:**	**2020**

Project Description and Considerations

This article is to continuously make energy efficient upgrades throughout Town and School buildings

Project Summary

- In 2011, the Town conducted an engineering study for energy upgrades on the 10 oldest buildings. The results of this study showed that by making an initial investment in recommended energy upgrades, the cost of these upgrades will pay for themselves within 10 years. The division has continued to make upgrades each year.

Lighting Improvements at the Pollard

- The existing lighting at the Pollard is inefficient. This was a recommendation of the 2011 study.
- Bi-lighting will be installed throughout the building hallways to improve lighting.This consists of delamping the hallway lamp fixtures in the to two lamp fixtures along with reflectors and disconnecting alternate single lamp fixtures in the hallway andinstalling occupancy sensors in the hallways so as to implement Tandem lighting across the building. Tandem lighting would consists of series of ceiling-mounted occupancy controls that would turn off alternate light fixtures post detecting un-occupancy for a pre-programmed duration of time.

Retrocommissioning High Rock HVAC

- Heating and cooling at the High Rock has been inconsistent since the building was opened. Many spaces have been repurposed from the original design and the HVAC system was not altered to accommodate those changes. For example, there is a large classroom with a temporary subdividing wall. The HVAC was designed to function optimally with the wall open but the wall is now permanently closed.
- The retrocommissioning will evaluate the existing systems and make recommendations for rebalancing and reconfiguring if necessary.

Energy Efficiency Study

- The existing energy efficiency study recommendations have been exhausted. Technologies have improved and changed for energy efficiency. Buildings that were not originally evaluated due to their age are now eligible for possible upgrades. This study will produce recommendations for future improvements to be funded out of the operating budget or this article.

Retrocommissioning High School HVAC

- This is the largest and most complex building in the Town's inventory. It has had phased renovations of varying sizes, including large additions, repurposing of spaces, reconfigurations, etc.
- To make sure that the building HVAC system is well integrated, including the 2018 addition, this retrocommissioning will look at rebalancing the building and ensuring that the HVAC is performing efficiently.

Capital Project Request

Project Title: **Energy Efficient Upgrades** **Fiscal Year:** **2020**

Supplemental Information

Funding Schedule

Project	**FY 20**	**FY 21**	**FY 22**	**FY 23**	**FY 24**
Lighting Improvements at the Pollard	$7,000				
Retrocomissioning High Rock HVAC	$50,000				
Energy Efficiency Study		$100,000			
Retrocomissioning NHS HVAC			$100,000		
Future Projects				$100,000	$100,000

Changes from Prior Submission

- The retrocommissioning of the HVAC at the High Rock was added due to need, causing an increase in the FY20 request.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. Building, electrical, and plumbing permits will be required.

5. This is a Building Maintenance request.

8. Energy efficiency upgrades will reduce energy costs, but these are no longer included in Building Maintenance's budget.

15. This request will modernize building components.

16. Building components will be permanently installed.

18. This request will require cooperation from the occupants of the building(s) being addressed.

Capital Project Request

Project Title:	**Emery Grover Roof Replacement**			**Fiscal Year:**	**2021**
Purpose:	**Design/Engineering**	Classification:	**Building**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	School Department, Community Preservation Committee			Useful Life:	More than twenty-five (25) years

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			Yes
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			Yes
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$235,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$15,000		$15,000					
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$220,000			$220,000				
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$235,000**	**$0**	**$15,000**	**$220,000**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Emery Grover Roof Replacement** **Fiscal Year:** **2021**

Project Description and Considerations

Project Summary

- The existing roof at the Emery Grover School Administration building is slate and is over 100 years old. The life expectancy of a slate roof is 75 years, so this roof is well beyond that and poses continual maintenance problems. The roof has serious leakage problems, which have historically caused significant damage to the flooring and interruption to the building.
- This roof will be replaced with a new environmentally conscious material that mimics the aesthetics of slate, but is composed of recycled rubber from tires. This material would reduce the cost of installation and maintenance. This project is pending the results of the Emery Grover feasibility study.

Change from Prior Year Submission

- The price has increased slightly due to inflation.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. Building permits will be required.

5. This is a Building Maintenance request.

8. Energy efficiency upgrades will reduce energy costs, which are no longer handled by the Building Maintenance Division.

12. This project may be eligible for CPA funding.

15. This request is necessary to extend the life of the building.

16. The roof will be permanently installed.

18. This request will require assistance from the School Department.

Capital Project Request					
Project Title:	**Emery Grover Partial Window Replacement**			**Fiscal Year:**	**2021**
Purpose:	**Design/Engineering**	Classification:	**Building**	Status:	**Informational Only Details Incomplete**
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	Needham Public Schools, Community Preservation Committee			Useful Life:	More than twenty-five (25) years

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			Yes
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			Yes
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$398,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$30,000		$30,000					
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$368,000			$368,000				
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$398,000**	**$0**	**$30,000**	**$368,000**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Emery Grover Partial Window Replacement**	**Fiscal Year:**	**2021**

Project Description and Considerations

Project Summary

- The eight arched windows on the front of the Emery Grover School Administration building are beyond their expected life span. They are inefficient, resulting in occupant discomfort and needless energy usage in order to maintain the heating and cooling in the building. Replacing these windows will increase energy efficiency.
- The plan is to remove and replace the eight arched windows with custom, energy efficient arched windows.

Changes from Prior Year Submission

- This request has been pushed back to FY21 in order to allow additional time for the Town to determine the future of the building. If a major renovation is not planned for this facility, then this repair is being recommended. The price has increased slightly due to inflation.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. Building permits will be required.
5. This is a Building Maintenance request.
8. Energy efficiency upgrades will reduce energy costs, but those are no longer included in Building Maintenance's budget.
12. This project may be eligible for CPA funding.
15. This request is necessary to extend the life of the building.
16. The windows will be permanently installed.
18. This request will require assistance from the School Department.

Capital Project Request					
Project Title:	**DPW Boiler Replacement - 470 Dedham Ave**			**Fiscal Year:**	**2020**
Purpose:	**Design/Engineering**	Classification:	**Building**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:				Useful Life:	More than eighteen (18) years

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			Yes
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$510,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$50,000	$50,000						
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$460,000		$460,000					
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$510,000**	**$50,000**	**$460,000**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**DPW Boiler Replacement - 470 Dedham Ave**	**Fiscal Year:**	**2020**

Project Description and Considerations

Project Summary

- The boiler at the DPW garage was installed in 1961 and is past its useful life. It has required a number of significant repairs recently in order to keep it working. The Town has had to bring in a temporary boiler during the winter season to maintain heat in the facility while the boiler was down, as there is no redundancy in the heating system. Due to its age and style, it is not energy efficient. Based on previous projects of a similar nature, there is an estimated 15-20% energy cost savings.
- The existing boiler will be removed and replaced with two high efficiency condensing boilers that use natural gas to gain redundancy. This will ensure that should anything happen to one boiler, the building will still have sufficient heat to keep the pipes from freezing. This will also make the building more energy efficient. The design will also include addressing the heat piping throughout the building.

Changes from Prior Year Submission

- This request has been pushed back a year in order to give the Town additional time to determine the future of the DPW building.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. Plumbing and electrical permits will be required.
5. This is a Building Maintenance request.
8. Upgrading to an energy efficient boiler will reduce heating costs, but those are no longer included in Building Maintenance's budget.
15. This request will extend the life of the building.
16. The boiler will be permanently installed at this location.

Capital Project Request

Project Title:	**Daley Building Upgrades**			**Fiscal Year:**	**2024**
Purpose:	**Feasibility Study**	Classification:	**Building**	Status:	**New Request**
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:				Useful Life:	More than twenty-five (25) years

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required? **Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$50,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$50,000					$50,000		
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$50,000**	**$0**	**$0**	**$0**	**$0**	**$50,000**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Daley Building Upgrades**	**Fiscal Year:**	**2024**

Project Description and Considerations

Project Summary

- The Daley Building is utilized by Building Maintenance trades staff and supervisors as a shop. This building was originally constructed as a warehouse for the School Department, and additions have been constructed over the years. It has been retrofitted for trades work stations, but the design of the building is not conducive to utilize the space as such. The height and location of the loading dock prevents it from being used as such. Vehicles often get stuck in inclement weather because the loading dock is at an incline. The existing bathroom is insufficiently small and does not contain a shower facility. Staff based out of this building regularly handle materials that would require them to use a shower. The ceilings are too high for trades and office space use. Two supervisors are based out of this building and are often competing with the shop noises and dust. All eleven trades are required to track their work through a web based work order system, SchoolDude, and research parts on a computer and there is not an appropriate space to do so. The building is not currently tied into the Town sewage system and has a septic tank. All eight of the heavy overhead doors are manually operated. The existing electrical service is undersized for the building's use. The existing lighting system is outdated, not energy efficient, and insufficient, causing safety hazards because of the type of work being done in the building. None of the floor drains are operational, causing slippery floor conditions. The building does not have a sufficient number of exhaust fans to remove fumes when vehicles are in the building or when work is being done in the building. There is an existing break room for staff to take their lunch, but it does not include a sink or a window. The driveway and parking lot are in poor condition, causing even more problems for the number of vehicles in and out of there daily.
- The plan is to conduct a feasibility study to determine how to better utilize the existing space. Significant upgrades would be considered, with a focus on possible reconfigurations to provide a better working environment.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. The feasibility study could lead to construction that may trigger Planning Board, Building Department, and Conservation approval.
4. There will be some technology upgrades necessary.
5. This is a Building Maintenance request.
15. This request is primarily to extend the life of the building or identify alternatives.

Capital Project Request

Project Title:	**CATH Space Utilization Study**			**Fiscal Year:**	**2023**
Purpose:	**Feasibility Study**	Classification:	**Building**	Status:	**Informational Only Details Incomplete**
Department:	Public Works - Building Maintenance			Supports:	Community Services
Partners:	Health and Human Services, Council on Aging			Useful Life:	More than five (5) years

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required? **Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$75,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$75,000				$75,000			
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$75,000**	**$0**	**$0**	**$0**	**$75,000**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**CATH Space Utilization Study**	**Fiscal Year:**	**2023**

Project Description and Considerations

Project Summary

- The Center at the Heights (CATH) building has increased programming and usage as well as extended its hours of operation since opening. Some current concerns are that the outdoor deck on the second floor and the restaurant-grade kitchen are not utilized to their full potential, and that the parking is inadequate.
- Funding is requested for a space utilization study and assessment of the building needs at the CATH. The study would focus on program, office, and clinical spaces within the building to ensure optimal utilization and program flexibility for participants. The study would also look at the current configuration of the outdoor deck with regards to usage, enhancing and expanding the utilization of the restaurant-grade kitchen, and a thorough review of parking and building access challenges.

Changes from Prior Submission Year

- The price has increased based on an updated quote from a consultant.

Clarification of Questions

5. This is a Building Maintenance request.
15. This request is to improve the usage of the existing space and possibly improve it, depending on the results of the feasibility study.
18. Assistance will be required from the Council on Aging and the Department of Health and Human Services.

Capital Project Request						
Project Title:	**CATH Generator**				**Fiscal Year:**	**2023**
Purpose:	**Design/Engineering**	Classification:	**Building**	Status:	**New Request**	
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)	
Partners:				Useful Life:	Between eighteen (18) and twenty-five (25) years	

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			Yes
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$287,500**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	**Project Budget**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Planning/Feasibility	$0							
Design/Engineering	$37,500				$37,500			
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$250,000					$250,000		
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$287,500**	**$0**	**$0**	**$0**	**$37,500**	**$250,000**	**$0**	**$0**

$0

FY2020

Capital Project Request			
Project Title:	**CATH Generator**	**Fiscal Year:**	**2023**

Project Description and Considerations

Project Summary

- The Center at the Heights (CATH) was not built with an emergency generator. During the construction of the building, there was an ice storm that caused a power outage. The Town realized that there was no place for people to gather with an emergency backup generator that was not in use during the day, either because of school or office occupancy. The CATH was noted as an ideal place for this function, as it could provide a shelter and warming space in addition to the restaurant-grade kitchen. After it was constructed, a portable generator was added to the building. The existing portable generator requires a manual transfer switch to switch the electric load to run off of the generator. It does not support the entire building. It is also currently located in an inconvenient location, taking up a parking space in a parking lot that is already in high demand.
- The portable generator at the CATH will be removed and a permanent generator will be installed that has the capacity to carry the entire building. It will be installed in a more appropriate location. It will include an automatic transfer switch so that if the power goes out, the generator would automatically kick on instead of requiring staff to manually make the switch. The existing portable generator will be relocated to the Library and the connection will be reconfigured to be able to hook it up with a manual transfer switch.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. Would require Planning Board approval and Building Permits.

5. This is a Building Maintenance request.

7. Preventative maintenance, repairs on generator, and fuel will have to be included in operating expenses.

16. The generator will be permanently installed.

18. This project will need to be coordinated with the Department of Health and Human Services.

Capital Project Request								
Project Title:	**RTS Employee Trailer**						**Fiscal Year:**	**2024**
Purpose:	**Acquisition**		Classification:	**Building**		Status:	**Informational Only Details Incomplete**	
Department:	Public Works - RTS					Supports:	Utilities	
Partners:						Useful Life:	Between eighteen (18) and twenty-five (25) years	

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		
3. Does this project require any permitting by any Town or State agency?		Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		No
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:		How was the Project Cost Determined:	
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**RTS Employee Trailer**	**Fiscal Year:**	**2024**

Project Description and Considerations

This informational request is for a new employee trailer at the Recycling and Transfer Station (RTS) to replace the existing one, which is a donated, second-hand trailer.

Project Summary

- The current employee trailer is over 15 years old. It is in poor condition and does not meet the space needs of the staff. It has frequent issues with the heating and cooling systems, and the electrical system is substandard. It is not ADA compliant, nor does it have adequate storage space. There is only one small bath facility that does not have a shower.
- This project will include the install ation of a new employee trailer in a more centrally located area of the facility and it shall be ADA accessible. The trailer will provide appropriate working conditions for all RTS staff, including shower facilities and laundry. The plumbing for this new employee trailer poses a significant cost in terms of reconfiguring the sewer at the RTS.

Clarification of Questions

3. This project will have to go to the Planning Board for Site Plan Review and will be subject to Conservation Commission permitting requirements.
4. The technology in the current employee trailer includes cable television. The RTS will communicate with ITC in terms of technology needed in the new employee trailer.
5. The RTS will communicate with the Building Maintenance Division to discuss future cleaning service requirements.

Capital Project Request					
Project Title:	**Library Space Planning Consultant**			**Fiscal Year:**	
Purpose:	**Feasibility Study**	Classification:	**Building**	Status:	**New Request**
Department:	Library			Supports:	Culture and Leisure
Partners:	PPBC			Useful Life:	Between twelve (12) and eighteen (18) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		Yes
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$60,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$60,000	$60,000						
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$60,000**	**$60,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request		
Project Title:	**Library Space Planning Consultant**	**Fiscal Year:**

Project Description and Considerations

The library trustees desire to hire a professional library space planner to determine if the library's interior space could be better arranged to accommodate the many students and tutors that use the library's study rooms and study areas. In the afternoons, during the school year, the library is packed with students, tutors, and other people using the three study rooms, the row of carrels, and the many four-seat tables. The trustees are also interested in updating the furniture and exploring a set-up that would allow the library to use an automatic materials handler that would check in and sort returned materials.

15. A space-use rearrangement that replaces worn and chipped furniture with new and up-to-date items and creates a more efficient use of space will improve and increase the usefulness of the library's space and extend the library's life as a study and work place.

18. PPBC could possibly become involved.

Capital Project Request

Project Title:	**Cricket Field Building Renovation**			**Fiscal Year:**	**2020**
Purpose:	**Design/Engineering**	Classification:	**Building**	Status:	**Amended Request from the Prior CIP**
Department:	Park and Recreation			Supports:	Culture and Leisure
Partners:	PPBC; Public Facilities-Construction; DPW; Health Division; School Department			Useful Life:	Between eighteen (18) and twenty-five (25) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		Yes
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		Yes
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		Yes
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		Yes
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$982,589**	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	May increase annual operating expenses between $5,001 and $25,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$163,765	$163,765						
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$818,824		$818,824					
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$982,589**	**$163,765**	**$818,824**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	Cricket Field Building Renovation	Fiscal Year:	2020

Project Description and Considerations

Park and Recreation completed a feasibility study of the Cricket Field building with PPBC in March 2012. The study looked at (1) renovation of the building for current uses; (2) renovation of the building for year-round use; (3) construction of new building at same location; (4) construction of new building elsewhere on site. For the renovation options, code upgrades, including ADA, are included. Extensive work on the grounds is also required for accessibility. “Option 1 Modified” is used for the request, which is an update of the current layout for seasonal use only and a septic field. Option 1, without modifications, or a new modular building would be more than $100,000 of additional costs. The design costs would also include a survey that is required for a building permit.

Since the 2012 study, Park and Recreation now has an indoor programming space at the Rosemary Recreation Complex. The Cricket building is still needed for a summer program site as well as interior space for Needham High School sports, but some of the interior features can be simplified reducing the cost of construction.

The original estimate was created in 2012 by consultant Bargmann Hendrie + Archetype, Inc. , with a 10% contingency. It is recommended to escalate the estimate by 5% annually, or review if a significant period of time passes. The numbers in this request have therefore been increased from the original estimate. The design/engineering costs were based on 20% of total project estimate.

The building is currently used for (a) Park and Recreation summer program; (b) Needham High Girls Soccer and Girls Lacrosse; (c) storage for Park and Recreation programs; and (d) storage for DPW Parks and Forestry. It is hoped that the building could be utilized for these purposes, and that public restrooms for those using the playgrounds or athletic fields would be available. The chosen option would also create an accessible building, and site work would add appropriate accessible parking. Approval of a new septic system as opposed to a sewer system would help reduce the cost of construction. The 1964 wood structure building is approximately 1,250 square feet. Without renovations, it will become more difficult to use it for the summer program, which would also be a loss of revenue of approximately $30,000 as it isn’t likely another site in Town would be available to accommodate the program. Donations have been made for other projects at the park, totaling about $200,000. Those projects include the rebuilding of the athletic fields, addition of new playground equipment, and a bubbler and garden with park benches.

Any portion of the project related to outdoor recreation would be eligible for CPA funding, but indoor recreation is not eligible. Permits would be required from the Needham Health Department and the Planning Board. The costs do not include any unanticipated requirements of the permits. At some point, without renovation, the building will not be available for use by Park and Recreation for its summer program or by Needham High School Athletics. The loss of the summer program location would lead to a loss in revenue. Costs to use Cricket Field would increase for Needham High Athletics.

Currently, the building's restrooms are only used by Park and Recreation's summer program, as well as the Needham High teams. No other park user has access to the restrooms, so creating restrooms that are available to the park will increase the cost for cleaning by an outside firm as additional days would be needed for cleaning.

Capital Project Request						
Project Title:	**Pollard School Improvements**				**Fiscal Year:**	**2027**
Purpose:	**Construction**	Classification:	**Building**	Status:	**Same Request from the Prior CIP**	
Department:	Needham Public Schools			Supports:	Public Education	
Partners:	Massachusetts School Building Authority; PPBC			Useful Life:	More than twenty-five (25) years	

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		Yes
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		Yes
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		Yes
19. If funded, will this project increase the operating expense for any other department?		Yes

Project Cost:	**$101,239,500**	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	May increase annual operating expenses by more than $100,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$101,239,500 FY2020

Capital Project Request			
Project Title:	**Pollard School Improvements**	**Fiscal Year:**	**2027**

Project Description and Considerations

In 2011, a facilities assessment was conducted of the Mitchell, Hillside and Pollard Schools. This assessment identified repair projects that should be undertaken to extend the useful life of these school buildings. It also identified, in summary fashion, the need for programmatic improvements at the Pollard Middle School, for the purpose of adapting Pollard to the “21st Century Learning” environment. This environment reflects changes in education that have occurred over the past 50 years, including technology integration, project-based learning, team-teaching, multi-disciplinary collaboration and special education delivery methods. Dore & Whittier, the architects who conducted the facilities assessment, concluded that a detailed programmatic study be undertaken, in order to understand the full scope of the programmatic improvements needed and to ensure that any future renovation/improvement project be comprehensive enough to meet both the facility maintenance and programmatic needs of the school for the next several decades.

Many of the improvements identified in the facilities assessment have been, or will be, completed through the regular maintenance program. These include: bathroom renovation; interior door replacement; installation of LED exist signs; roof repair; installation of new gas main on Harris Ave.; replacement of the telephone, PA and clock systems; replacement of the paved walkway from the parking lot to the building; water fountain replacement; demolition of the condemned bridge; auditorium seating replacement; gym flooring replacement; removal of remaining VCT aand VAT flooring in the 1958 wing; water heater replacement; removal and abatement of the fuel oil tank; boiler replacement; classroom lighting replacement; asbestos abeatement.

Other identified improvements, however, will not be undertaken as part of the regular maintenance budget. These include: renovation and enlargement of the science and engineering classrooms, updates to the auditorium and reconfiguration of the administration area. The science classrooms are undersized from Massachusetts School Building Authority (MSBA) standards, do not have adequate prep rooms or storage spaces and include casework and plumbing fixtures that are in poor condition. The engineering classroom is a converted space that is not well-suited to delivery of the curriculum. The auditorium needs updating, including sound and lighting upgrades, in order to remain a suitable space for performing arts, guest lectures and assemblies. In addition, the administration space, which is located on the side of the building, is difficult for visitors to locate, doesn’t allow school personnel to view visitors as they approach the building and is undersized by MSBA standards. Finally, the modular classrooms, constructed in 2002, are not designed as permanent, long-term facilities. They are constructed of inexpensive materials, in fast-production style construction techniques and are not energy efficient. A long-term solution will be required within the next fifteen years. (The expected lifespan for modular classrooms is 20-25 years.)

This request is for funds to repair/renovate the Pollard Middle School to address identified deficiencies and meet programmatic needs. The projected cost was developed by Needham Public Schools, based on improvements identified in the Condition Assessment, which Public Facilities does NOT expect to undertake from its regular maintenance budget. These projects include the following: Replace Doors (#1.03 $113,880), Renovate Exit Corridors Near Band Room (#1.17 $131,400), Remove Borrowed Lights in 1958 Building (#2.02, $47,085), Sprinkler Remaining Building (#2.03, $1,620,600), New Science Classroom Addition Option 3 (#3.01.3, $6,745,200), Relocate Administration & Convert Existing Administration to Classroom (#3.02, $1,423,500), Renovate Multi-Stall Toilet Rooms Near Auditorium (#3.03, $952,650), Renovate Auditorium (HVAC, LIght, Flooring, Seating) (#3.08, $2,392.575), Replace Existing Signage (#4.05, $4,380), Upgrade Elevator Controls (#4.07, $43,800), Accessibility Improvements to Choral Room & Lecture Hall (#4.08, $19,710), Sell or Demolish Modular Classrooms (#5.1, $9,855), Replace Water Distribution Piping (#5.15, $416,100), Replace Classroom Sinks (#5.17, $76,650), Remove Pneumatic Control System & Replace with Electronic (#5.19, $697,515), Replace Classroom Unit Ventilators & Repairs to Roof (#5.21, $660,285), In Core & Assembly Areas & Replace with VAV Heat/Cool RTUs (#5.22, $1,018,350), Electrical Service Upgrade (#5.24, $996,450), Replace Fire Alarm Control Panels (#5.25, $48,180), Replace PA System Head End (#5.26, $52,000), New Site Drainage Structures & Pipe (#5.28, $181,770), and Provide New Server & Water LIne Connections (#5.29, $153,300.) The cost of item #3.01.3 is based on “Science Option 3,” which constructs a 14,500 s.f. science wing addition to the school. A Statement of Interest will be filed with the MSBA to initiate a dialog about this facility. It is possible that a modified project scope could be considered. Final decisions will be made upon project acceptance and a feasibility study, completed jointly with the MSBA.

Preliminary Project Schedule:
Feasibility Study: FY27
Schematic Design/Project Funding Year: FY28
Pollard Moves to Swing Space: FY29
Construction: FY29-30

Capital Project Request			
Project Title:	**Pollard School Improvements**	**Fiscal Year:**	**2027**

Supplemental Information

Preliminary Budget:
Project costs based on Dore & Whittier Facilities Assessment, 2014. The total project cost is updated to reflect the following cost escalator factors:6%/year (FY14-FY16), 5.0%/year (FY17-18), 10.0%/year (FY19-20), and 8%/year thereafter. The preliminary MSBA reimbusement rate for this project is 32.47%.

Parameters Addressed:
Project Costs Not Included: See Project Budget narrative above.
Permitting: As required by Town Boards.
Building Improvements: The PPBC and Public Facilities Department support this request.
Operating Budget Increase: Improvements to HVAC, electical system may increase building maintenance expense by more than $100,000/year. This placeholder estimate to be revised during design process.
Extend Useful Life: See above narrative.
Other Departmental Assistance: PPBC Project Management; Public Facilities Maintenance & Custodial.
Operating Budget Increase for Another Department: See above.

Pollard Improvements
Dore & Whittier, Comprehensive Facilities Assessment, 2014

	From Condition Assessment - Pollard Long-Term Improvements	**Construction**
1.03	Replace Corridor/Doors w Fire Rated Doors	113,880
1.17	Renovate Exit Corridors Near Band Room	131,400
2.02	Remove Borrowed Lites in 1958 Building	47,085
2.03	Sprinkler Remaining Building	1,620,600
3.01.3	New Science Classroom Addition (Option 3)	6,745,200
3.02	Relocate Admin, Convert Existing Admin to Classrooms	1,423,500
3.03	Multi-Stall Toilet Rooms Near Auditorium	952,650
3.08	Renovate Auditorium AHVAC, Lighting, Flooring, Seating	2,392,575
4.05	Replace Existing Signage	4,380
4.07	Upgrade Elevator Controls	43,800
4.08	Accessibility Improvements to Choral Room & Lecture Hall	19,710
5.1	Sell or Demolish Modular Classrooms; Regrade Area	9,855
5.15	Replace Water Distribution Piping	416,100
5.17	Replace Classrom Sinks	76,650
5.19	Remove Pneumatic Control System & Replace with Electronic	697,515
5.21	Replace Classroom Unit Ventilators, Repairs to Roof	660,285
5.22	In Core & Assembly Areas, Replace with VAV Heat/Cool RTUs	1,018,350
5.24	Electrical Service Upgrade	996,450
5.25	Replace Fire Alarm Control Panels	48,180
5.26	Replace PA System Head End	52,000
5.28	New Site Drainage Structures & Pipe	181,770
5.29	Provide New Server & Water Line Connections	153,300
	Subtotal Condition Assessment Cost	17,805,235

Assume
Feasiblity - 1 year
Design - 1 year
Construction - 2 Years

Assume
Feasiblity Funding Year - FY27
Project Funding Year - FY28
Midpt of Constr - FY29 (15 Years Escalation)

Capital Project Request

Project Title: **Pollard School Improvements** | **Fiscal Year:** **2027**

General Conditions Allowance	1,780,524	10% of construction	6.00%	FY15 & FY16
Escalation to Mid Point of Construction	39,099,618	15 Yrs to 2029	5.00%	FY17 & FY18
Subtotal A Construction	58,685,376		10.00%	FY19 & FY20
			8.00%	After FY20
Bonds	586,854	1% of Subtotal A		
Insurance	586,854	1% of Subtotal A		
Subtotal B Construction	59,859,084			
Fee	534,157	3% of Condition Assessment Cost		
Design & Pricing	8,978,863	15% of Subtotal B		
Total Construction Cost	**69,372,103**			
Project Contingency - Construction	10,405,816	15% of Total Construction		
Project Contingency - Owner	3,468,605	5% of Total Construction		
Subtotal Contingency	13,874,421			
Soft Cost (OPM, A/E, Survey, etc)	17,343,026	25% of Total Construction		
FF&E	-			
Total	**100,589,550**			

Summary

Construction Cost	**69,372,103**	
Project Contingency	**13,874,421**	
Soft Cost	**17,343,026**	
FF&E	**-**	
Total	**100,589,550**	(Excluding Feasibility)

	Total	**Rounded Total**
Feasibility	**650,000**	**650,000**
Schematic Design	**13,874,421**	**13,874,400**
Construction	**79,777,919**	**79,777,900**
Owners Project Contingency (Other)	**3,468,605**	**3,468,600**
Construction Management	**3,468,605**	**3,468,600**
Total	**101,239,550**	**101,239,500**

Capital Project Request

Project Title:	**Renovate Mitchell Elementary School**			**Fiscal Year:**	**2021**
Purpose:	**Construction**	Classification:	**Building**	Status:	**Amended Request from the Prior CIP**
Department:	Needham Public Schools			Supports:	Public Education
Partners:	Massachusetts School Building Authority; PPBC			Useful Life:	More than twenty-five (25) years

Parameters	**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	Yes
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required? **Total New FTE's:** 4	Yes
7. If funded, will the operating budget need to be increased to cover operating expenses?	Yes
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	Yes

Project Cost:	**$112,524,200**	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	May increase annual operating expenses by more than $100,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$650,000		$650,000					
Design/Engineering	$15,538,900				$15,538,900			
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$89,349,500				$89,349,500			
Construction Management	$3,884,700				$3,884,700			
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$3,101,100				$3,101,100			
Other Expenses	$0							
TOTAL	**$112,524,200**	**$0**	**$650,000**	**$0**	**$111,874,200**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Renovate Mitchell Elementary School** **Fiscal Year:** **2021**

Project Description and Considerations

Constructed in 1950, the Mitchell Elementary School has undergone several additions over the past 50 years, but is in need of total renovation/replacement to address building deficiencies and modernize the learning environment. This request would bring the Mitchell facility to a level of modernization comparable t o that of the Hillside School and is contingent upon the MSBA agreeing to partner with the Town in completing this project. It is possible that a modified project scope could be consider ed. Final decisions will be made upon project acceptance and a feasibility study, completed jointly with the MSBA. Project costs are based on a 2014 update of a 2012 Dore & Whittier Pre -feasibility estimate for an 82,227 s.f. 503-student school (Option 1A.3, New Construction), plus $650,000 for pre-feasibility design. During construction, the school would need to occupy swing space at HIllside School.

A possible schedule for the Mitchell Elementary School Renovation project is shown below, based on Needham's experience with the Hillside Renovation Project with MSBA. A parallel project to update the Hillside Elementary School as swing space is presented separately. The total cost of the project may vary from the existing estimates, based on the combined scope and MSBA's participation in the Mitchell project development.

Potential Schedule

- Submit SOI to MSBA (FY20) – Feb 20 – Apr 20)
- MSBA Board Meeting to Vote SOI (FY21) – Apr 20 – Aug 20
- Feasibility (FY21-22) – (Oct 20 STM)
  - Funding – Oct 20 STM
  - Bidding Feasibility – Oct 20 – Dec 20
  - Designer Selection w MSBA – Jan 21 – Mar 21
  - Feasibility Study – Mar 21 – Jun 22
  - PDP – Mar 21 – Aug 21
  - PSR – Sept 21 – Jan 22
  - MSBA Board Meeting to Accept Feasibility – Jan 22
- Schematic Design Mitchell (FY22-23)
  - Schematic Design – Jan 22 – Jun 22
  - DRT Review – Feb 22
  - MSBA/DESE Review – May 22 – Jun 22
  - Submit Schematic Design to MSBA – Jun 22
  - Needham Boards Approve Schematic Design Jun 22 – July 22
  - MSBA Board Meeting – July 22
- Project Funding (FY23)
  - Submit Ballot Question to Secretary of State – Aug 22
  - Special Town Meeting – Oct 22
  - Override Ballot Question – Nov 22
  - Project Funding Agreement – Nov 22 – Dec 22
- Design Development (FY23)
  - Design Development & Review – Dec 22 – June 23
  - MSBA Review & Approval – May 23 – Jun 23
- Construction Documents (FY24 – FY24)
  - 60% Construction Documents Developed – Jul 23 – Oct 23
  - 60% Submittal to MSBA – Oct 23
  - 90% Construction Documents Developed – Nov 23 – Jan 24
  - 90% Submittal to MSBA – Jan 24
  - Completion of Construction Docs – Mar 24
- Bidding Documents/ Procurement (FY24-FY25) - Apr 24 – July 25
- Construction (FY25-27) – Aug 24 – Aug 26
- New Building Opens (FY27) – Sept 26

This project has been updated to reflect the following cost escalator factors: 6%/year (FY14-FY16), 5.0%/year (FY17-18), 10.0%/year (FY19-20), and 8%/year thereafter.

Parameters Addressed:
Project Costs Not Included: Cost of Design and Construction of Combined Project.
Permitting: As required by Town Boards.
Technology: The School IT Department is in support of this request. The estimated project cost includes an FF&E budget for this new fac ility, including classroom technology.
Building Improvements: The PPBC and Public Facilities Department support this request.
FTE: Estimate 2.0 Additional Custodians; 2.0 Additional Crossing Guards, Similar to Hillside.
Operating Budget Increase: Improvements to HVAC, electical system may increase building maintenance by more than $100,000/ye ar. This placeholder estimate to be revised during design process.

Capital Project Request

Project Title: **Renovate Mitchell Elementary School** **Fiscal Year:** **2021**

Supplemental Information

Parameters Addressed:

Extend Useful Life: See above narrative.
Other Departmental Assistance: PPBC Project Management; Public Facilities Maintenance & Custodial.
Operating Budget Increase for Another Department: See above.

This project is revised from the previous request to reflect a 10% cost escalator for FY19 and FY20 (due to construction labor market trends and tariffs) and 8% thereafter, based on advice from the PPBC.

Mitchell School Renovation/ Replacement, Based on 2014 Dore & Whittier PreFeasibility Study
Option 1A.2a, New School Construction for 503 Students, Updated 2014
Scheduled opening: September 2026 (FY27)

	82,227 SF Building	**Feasibilty**	**Construction***	**A/E**	**FF&E**	**Constr Mgnt**	**Total**	**Cost/SF**
	FY14 Project Cost (D&W) - Mitchell	650,000	34,781,640	6,048,928	1,207,200	1,512,232	44,200,000	
	TOTAL	650,000	34,781,640	6,048,928	1,207,200	1,512,232	44,200,000	$538
		1%	79%	14%	3%	3%	100%	
6.00%	FY15 Cost Multiplier	650,000	36,868,538	6,411,864	1,279,632	1,602,966	46,813,000	$569
6.00%	FY16 Cost Multiplier	650,000	39,080,651	6,796,576	1,356,410	1,699,144	49,582,780	$603
5.00%	FY17 Cost Multiplier	650,000	41,034,683	7,136,404	1,424,230	1,784,101	52,029,419	$633
5.00%	FY18 Cost Multiplier	650,000	43,086,417	7,493,224	1,495,442	1,873,306	54,598,390	$664
10.00%	FY19 Cost Multiplier	650,000	47,395,059	8,242,547	1,644,986	2,060,637	59,993,229	$730
10.00%	FY20 Cost Multiplier	650,000	52,134,565	9,066,802	1,809,485	2,266,700	65,927,552	$802
8.00%	FY21 Cost Multiplier	650,000	56,305,330	9,792,146	1,954,244	2,448,036	71,149,756	$865
8.00%	FY22 Cost Multiplier	650,000	60,809,757	10,575,517	2,110,583	2,643,879	76,789,736	$934
8.00%	FY23 Cost Multiplier	650,000	65,674,537	11,421,559	2,279,430	2,855,390	82,880,915	$1,008
8.00%	FY24 Cost Multiplier	650,000	70,928,500	12,335,284	2,461,784	3,083,821	89,459,389	$1,088
8.00%	FY25 Cost Multiplier	650,000	76,602,780	13,322,106	2,658,727	3,330,527	96,564,140	$1,174
8.00%	FY26 Cost Multiplier	650,000	82,731,003	14,387,875	2,871,425	3,596,969	104,237,271	$1,268
8.00%	FY27 Cost Multiplier	650,000	89,349,483	15,538,905	3,101,139	3,884,726	112,524,253	$1,368
13 Years	TOTAL PROJECT COST	650,000	89,349,483	15,538,905	3,101,139	3,884,726	112,524,253	1,368
	TOTAL COST (ROUNDED)	650,000	89,349,500	15,538,900	3,101,100	3,884,700	112,524,300	$1,368

* Excludes modular temporary classrooms

Square Footage 82,227

	FY21	FY23	FY24	
Feasibility	650,000			650,000
Arch/Engineering		15,538,900		15,538,900
Construction	0	89,349,500		89,349,500
Construction Management		3,884,700		3,884,700
FF&E		3,101,100	0	3,101,100
Total	650,000	111,874,200	-	112,524,200

Capital Project Request								
Project Title:	**Renovate Hillside Elementary School as Swing Space for School Construction Projects**						**Fiscal Year:**	**2020**
Purpose:	**Construction**	Classification:	**Building**		Status:	**Amended Request from the Prior CIP**		
Department:	Needham Public Schools				Supports:	Public Education		
Partners:	PPBC				Useful Life:	Between twelve (12) and eighteen (18) years		

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			Yes
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	4	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			Yes
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			Yes

Project Cost:	**$28,599,900**	How was the Project Cost Determined:	Hired Consultant	
Budget Impact:	May increase annual operating expenses by more than $100,000			

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$225,000	$100,000						$125,000
Design/Engineering	$3,922,800		$3,922,800					
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$21,016,700			$21,016,700				
Construction Management	$980,700			$980,700				
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$2,454,700			$2,454,700				
Other Expenses	$0							
TOTAL	**$28,599,900**	**$100,000**	**$3,922,800**	**$24,452,100**	**$0**	**$0**	**$0**	**$125,000**

$0 FY2020

Capital Project Request			
Project Title:	**Renovate Hillside Elementary School as Swing Space for School Construction Projects**	**Fiscal Year:**	**2020**

Project Description and Considerations

This is a project to modernize the existing Hillside School for use as swing space for other school projects, after the new Sunita Williams Elementary School opens in September 2020 (FY21.) A potential schedule for use of this facility as swing space is: Use A Emery Grover Renovation (Aug '22 - July '24), Use B Mitchell Renovation (Aug '24 - June '26), and Use C Pollard Renovation (Aug '28 - Aug '29.) This schedule assumes that modernization will occur in multiple phases, with minor interior modifications occuring for the Emery Grover occupation, and more substantial modifications occurring to accommodate the Mitchell and Pollard School populations.

Given the long time-line and design variables associated with this project, the potential project schedule below reflects interim uses A (Emery Grover) and B (Mitchell School) only. The overall project cost also is a placeholder, based on the "Option A" 'Base Repair' project estimate developed by Dore & Whittier Architects in 2014, which updates all major building systems to comply with current codes and reulgations. The scope, timeline and budget of a final project would depend on the outcome of the feasibility studies below and could take various forms. (For example, an alternate project could tear down the facility and construct a modular classrooms campus.) The scope of the 'Option A' base repair budget does NOT include adding the modular classrooms that would be needed to accommodate the Mitchell School population or a full grade of Pollard students. The Feasibility Study scope should include a comparative analsis of the relative cost effectiveness of an alternate project to demolish the school and create modular swing space on this site, should reflect the smallest renovation scope possible, and should include the needed modular component.

This project is revised from prior years to reflect the timeline below and the following cost escalators: 6%/year (FY14-FY16), 5.0%/year (FY17-18), 10.0%/year (FY19-20), and 8%/year thereafter *Potential Schedule*

- Feasibility Funding for Interim Uses A & B (FY20) May '19 ATM
- Funding for Detailed Design (FY21) May '20 ATM
- Design Bidding May '20 - Aug '20
- Schematic Design for Interim Uses (Phases A, B, C) Sept '20 - Mar '21
- Funding for Construction Interim Use A (FY22) May '21 ATM
- Detailed Design & Bidding Phase A May '21 - Oct '22
- Interim Use - School Administration Construction/ Repairs Nov '21 - May '22
- Move School Administration to Hillside June '22 - July '22
- School Administration Occupies Hillside Aug '22 - July '24
- Funding for Construction Interim Use B (FY23) Oct '22 STM
- Design Development Exterior Modulars Jan '23 - June '23
- Construction Documents Exterior Modulars July '23 - Oct '23
- Bidding Nov '23 - Dec '23
- Exterior Construction Jan '24 - Aug '24
- Modular Relocation & Interior Renovation June '24 - Aug '24
- Feasibility Funding for Interim Use C (FY26) May '25 ATM
- Mitchell School Occupies Hillside Sept '24 - July '26
- Remaining Schedule and Budget to be Determined by Feasibility Study

Parameters Addressed:
Project Costs Not Included: See Project Budget narrative above.
Permitting: As required by Town Boards.
Technology: The School Instructional Technology Department is in support of this request. The estimated project cost includes an FF&E budget for this new facility, including classroom technology.
Building Improvements: The PPBC supports this request.
Operating Budget Increase: Improvements to HVAC, electical system may increase building maintenance expense by more than $100,000/year. This is a placeholder estimate.
Extend Useful Life: See above narrative.
Other Departmental Assistance: PPBC Project Management; Public Facilities Maintenance & Custodial.
Operating Budget Increase for Another Department: See above.
Operating Budget Increase: Improvements to HVAC, electical system may increase building maintenance by more than $100,000/year. This is a placeholder estimate.

Capital Project Request

Project Title: **Renovate Hillside Elementary School as Swing Space for School Construction Projects** **Fiscal Year:** **2020**

Supplemental Information

Hillside School Modernization, Based on 2014 Dore & Whittier PreFeasibility Study
Option A, Repair Hillside School for 430 Students
Scheduled opening: July 2024 (FY25)

	45,005 SF Building	**Feasibilty**	**Construction***	**A/E**	**FF&E**	**Constr Mgnt**	**Total**	**Cost/SF**
	FY14 Project Cost (D&W)	225,000	8,835,814	1,649,200	1,032,000	412,300	12,154,314	$270.07
	TOTAL	225,000	8,835,814	1,649,200	1,032,000	412,300	12,154,314	$270.07
		2%	73%	14%	8%	3%	100%	
6.00%	FY15 Cost Multiplier		9,365,963	1,748,152	1,093,920	437,038	12,645,073	$280.97
6.00%	FY16 Cost Multiplier		9,927,921	1,853,041	1,159,555	463,260	13,403,777	$297.83
5.00%	FY17 Cost Multiplier		10,424,317	1,945,693	1,217,533	486,423	14,073,966	$312.72
5.00%	FY18 Cost Multiplier		10,945,532	2,042,978	1,278,410	510,744	14,777,664	$328.36
10.00%	FY19 Cost Multiplier		12,040,086	2,247,276	1,406,251	561,819	16,255,431	$361.19
10.00%	FY20 Cost Multiplier	100,000	13,244,094	2,472,003	1,546,876	618,001	17,980,974	$399.53
8.00%	FY21 Cost Multiplier	100,000	14,303,622	2,669,763	1,670,626	667,441	19,411,452	$431.32
8.00%	FY22 Cost Multiplier	100,000	15,447,912	2,883,345	1,804,276	720,836	20,956,368	$465.65
8.00%	FY23 Cost Multiplier	100,000	16,683,745	3,114,012	1,948,618	778,503	22,624,877	$502.72
8.00%	FY24 Cost Multiplier	100,000	18,018,444	3,363,133	2,104,507	840,783	24,426,868	$542.76
8.00%	FY25 Cost Multiplier	100,000	19,459,920	3,632,184	2,272,868	908,046	26,373,017	$586.00
8.00%	FY26 Cost Multiplier	225,000	21,016,713	3,922,758	2,454,697	980,690	28,599,858	$635.48
9 Years	TOTAL PROJECT COST	225,000	21,016,713	3,922,758	2,454,697	980,690	28,599,858	$502.72
	TOTAL COST (ROUNDED)	225,000	21,016,700	3,922,800	2,454,700	980,700	28,599,900	$635.48

* Excludes modular temporary classrooms

Square Footage 45,005

	FY20	FY21	FY23	FY26	Total
Fesibility	100,000			125,000	225,000
Arch/Engineering		3,922,800			3,922,800
Construction			21,016,700		21,016,700
Construction Management			980,700		980,700
FF&E	0	-	2,454,700	0	2,454,700
Total	100,000	3,922,800	24,452,100	125,000	28,599,900

Capital Project Request

Project Title:	**Renovate/Reconstruct Emery Grover Building at Highland Avenue Location**			**Fiscal Year:**	**2021**
Purpose:	**Construction**	Classification:	**Building**	Status:	**Amended Request from the Prior CIP**
Department:	Needham Public Schools			Supports:	Public Education
Partners:	Community Preservation Fund; PPBC			Useful Life:	More than twenty-five (25) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	Yes
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required? **Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	Yes
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	Yes

Project Cost:	**$19,348,500**	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	May increase annual operating expenses by more than $100,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$1,967,300		$1,967,300					
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$14,690,000			$14,690,000				
Construction Management	$146,300		$146,300					
Equipment	$0							
Furniture, Fixtures, and Equipment	$805,600			$805,600				
Technology Hardware/Software	$0							
Other Expenses	$1,739,300			$1,739,300				
TOTAL	**$19,348,500**	**$0**	**$2,113,600**	**$17,234,900**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Renovate/Reconstruct Emery Grover Building at Highland Avenue Location**	**Fiscal Year:**	**2021**

Project Description and Considerations

The 2005 Facilities Master Plan indicated that the Emery Grover School Administration Building is in need of additional office and storage space, as well as extensive repair and modernization. The needed scope of renovation includes reorganizing office and meeting spaces, making the building fully ADA accessible, removing remaining asbestos and lead paint, and replacing deteriorating systems, including: windows, HVAC, electrical and plumbing. These renovations would allow for a more efficient use of space, as well as full utilization of all four floors and full handicapped accessibility. Emery Grover is on the National Register of Historic Buildings.

This request is for the renovation of the existing Emery Grover building at its present location. Pending Special Town Meeting funding approval in October, 2018, a feasibility study will be conducted to evaluate the various alternatives for completing this project, including: 1) full renovation and addition; 2) complete demolition and new construction; 3) preservation of one or more facades with new construction behind and 4) the sale and relocation of School District administration to leased/purchased space. The study will determine the structure's suitability for school needs, will provide recommendations for programmatic or zoning needs, will address temporary relocation requirements and cost, and will identify how each alternative is categorized with regard to CPA funding and any required local, state and national approvals.

A preliminary budget and schedule for a renovation project is presented below, based on a pre-feasibility study performed in 2013 by DesignLAB Architects. The budget assumes that the building will be reconstructed at its current location and that Community Preservation Act funding would cover approximately 67% of construction and related soft costs. It also includes funds to temporarily re-locate staff to swing space during construction. The construction schedule would be delayed by approximately one year if full demolition of the existing structure were required.

Preliminary Project Schedule:
Pre-Feasibility Study: FY14
Feasibility Study: FY19 (Oct '18 STM) - Jan '19 - April '20
Design Funding: FY21 (May '20 ATM)
Design: Jun '20 - Dec '21
Construction Funding: FY22 (Oct '21 STM)
Bidding: Jan '22 - May '22
Emery Grover Occupies Swing Space: Aug '22 (Move-In) - June '24
Construction: Aug '22 - June '24 (24 Months)
New Building Opens: (FY25) July '24

Project Budget:
The above referenced project budget excludes $30,000 approved at May 2013 Annual Town Meeting and $130,000 to be requested at October 2018 Special Town Meeting for feasibility design. The "Other Expenses" category includes $1,669,200 to occupy leased swing space for one year, while the building is being renovated, plus $70,100 in legal expense. If, alternatively, the modernized Hillside School is used as swing space, the project budget could be reduced by the lease expense. (The project to modernize Hillside for use as swing space is presented separately.) All costs include escalation to the mid-point of construction, using 6%/year (FY14-FY16), 5.0%/year (FY17-18), 10.0%/year (FY19-20), and 8%/year thereafter.

This project is revised from the previous request to reflect an August '22 move in date to Hillside swing space, based upon the current Police/Fire use of the existing Hillside building, and to reflect a 10% cost escalator for FY19 and FY20 (due to construction labor market trends and tariffs) and 8% thereafter, based on advice from the PPBC. It is likely that the final design budget will need to include 2% construction management expense (compared to 1%), but that adjustment is not reflected above, in order to preserve the integrity of the source information.

Parameters Addressed:
Project Costs Not Included: See Project Budget narrative above.
Permitting: As required by Town Boards.

Capital Project Request

Project Title: **Renovate/Reconstruct Emery Grover Building at Highland Avenue Location** **Fiscal Year:** **2021**

Supplemental Information

Building Improvements: The PPBC and Public Facilities Department support this request.
Operating Budget Increase: Improvements to HVAC, electical system may increase building maintenance expense by more than $100,000/year. This placeholder estimate to be revised during design.
CPC: Funding application to be submitted.
Extend Useful Life: See above narrative.
Other Departmental Assistance: PPBC Project Management
Operating Budget Increase: Improvements to HVAC, electical system may increase building maintenance expense by more than $100,000/year. This placeholder estimate to be revised during design process.

Emery Grover Renovation Cost Estimated, Based on 2013 DesignLab Study

	21,235 SF Building	**Feasibilty**	**Construction**	**A/E**	**Constr Mgnt**	**Temporary**	**FF&E**	**Other**	**Total**	**Cost/SF**	**Less CPA @ 67%**	**Net Cost**
	FY13 Project Cost (DesignLab)	-	7,339,550	982,906	73,120	834,000	402,500	35,000	9,667,076		8,350,000	1,317,076
	TOTAL	-	7,339,550	982,906	73,120	834,000	402,500	35,000	9,667,076	$455	8,350,000	1,317,076
		0%	76%	10%	1%	9%	4%	0%	100%			
6.00%	FY14 Cost Multiplier @ 6%	-	7,779,923	1,041,880	77,507	884,040	426,650	37,100	10,247,101	$483	8,350,000	1,897,101
6.00%	FY15 Cost Multiplier @ 6%	-	8,246,718	1,104,393	82,158	937,082	452,249	39,326	10,861,927	$512	8,350,000	2,511,927
6.00%	FY16 Cost Multiplier @ 6%	-	8,741,521	1,170,657	87,087	993,307	479,384	41,686	11,513,642	$542	8,350,000	3,163,642
5.00%	FY17 Cost Multiplier @ 5%	-	9,178,598	1,229,190	91,441	1,042,973	503,353	43,770	12,089,324	$569	8,350,000	3,739,324
5.00%	FY18 Cost Multiplier @ 5%	-	9,637,527	1,290,649	96,014	1,095,121	528,521	45,958	12,693,791	$598	8,350,000	4,343,791
10.00%	FY19 Cost Multiplier @ 10%	-	10,601,280	1,419,714	105,615	1,204,633	581,373	50,554	13,963,170	$658	8,350,000	5,613,170
10.00%	FY20 Cost Multiplier @ 10%	-	11,661,408	1,561,685	116,176	1,325,097	639,510	55,610	15,359,487	$723	8,350,000	7,009,487
8.00%	FY21 Cost Multiplier @ 8%	-	12,594,321	1,686,620	125,470	1,431,105	690,671	60,058	16,588,245	$781	8,350,000	8,238,245
8.00%	FY22 Cost Multiplier @ 8%	-	13,601,867	1,821,550	135,508	1,545,593	745,925	64,863	17,915,305	$844	8,350,000	9,565,305
8.00%	FY23 Cost Multiplier @ 8%	-	14,690,016	1,967,274	146,349	1,669,240	805,599	70,052	19,348,529	$911	8,350,000	10,998,529
8	TOTAL PROJECT COST	-	14,690,016	1,967,274	146,349	1,669,240	805,599	70,052	19,348,529	$911	8,350,000	10,998,529
	TOTAL COST (ROUNDED)	-	14,690,000	1,967,300	146,300	1,669,200	805,600	70,100	19,348,500	$911	8,350,000	10,998,500

Square Footage 21,235

Note - costs escalated at rates shown abaove, to midpoint of construction (FY23). FY14 & FY19 are feasibility funding years.

Project Funding Schedule	**FY14**	**FY19**	**FY21**	**FY22**	**FY14-22 Total**
Pre-Design	30,000	130,000			-
Engineering & Design			1,967,300		1,967,300
Construction	0	-		14,690,000	14,690,000
Construction Management			146,300		146,300
FF&E				805,600	805,600
Other	0	-	-	1,739,300	1,739,300
Total	30,000	130,000	2,113,600	17,234,900	19,348,500
				Plus Feasibility Design:	160,000
					19,508,500

Capital Project Request					
Project Title:	**Eliot School Technology Room Conversion**			**Fiscal Year:**	**2021**
Purpose:	**Construction**	Classification:	**Building**	Status:	**New Request**
Department:	Needham Public Schools			Supports:	Public Education
Partners:	Public Facilities			Useful Life:	More than twenty-five (25) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required? **Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$179,300**	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$28,500		$28,500					
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$108,100		$108,100					
Construction Management	$7,100		$7,100					
Equipment	$0							
Furniture, Fixtures, and Equipment	$35,600		$35,600					
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$179,300**	**$0**	**$179,300**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Eliot School Technology Room Conversion**	**Fiscal Year:**	**2021**

Project Description and Considerations

The School Committee is planning for the implementation of Full-Day Kindergarten (FDK) in September, 2019. Based on a feasibility study conducted by Dore & Whittier Arhitects (February 2018), several modifications to Needham buildings are needed to accommodate the projected number of classrooms needed. These modifications include the conversion of a technology labat the Eliot School to a classroom. According to the analysis, the additional classroom will be needed in September, 2019, however, this request would complete that conversion in September, 2021. The same analysis also called for the construction of up to six modular classrooms at that school, which are presented in a separate capital request.

This project is to provide funding to convert the existing technology lab at Eliot Elementary School to a classroom to meet that need. Project costs are based on a preliminary project budget prepared February 2018 by Dore & Whittier, updated to reflect the following cost escalators: 10%/year (FY19-20), and 8%/year thereafter.

Preliminary Project Schedule:
Funding for Detailed Design & Construction: FY21 (Oct '20 STM)
Detailed Design & Bidding: Nov '20 - May '21
Construction: June '21 - Aug '21
New Classroom Opens: (FY22) - Sept '21

Parameters Addressed:
Permitting: As required by Town Boards.
Technology: The School Instructional Technology Department is in support of this request. The estimated cost includes an FF&E budget for this project, including classroom technology.
Building Improvements: The Public Facilities Department supports this request.
Other Departmental Assistance: Public Facilities.

Capital Project Request

Project Title: **Eliot School Technology Room Conversion** **Fiscal Year:** **2021**

Supplemental Information

Eliot School Technology Room Conversion

	900 sf	**Feasibilty**	**Construction***	**A/E**	**FF&E**	**Constr Mgnt**	**Total**	**$/ sf**
	FY18 Project Cost (D&W)	-	91,000	24,000	30,000	6,000	151,000	167.78
	TOTAL	-	91,000	24,000	30,000	6,000	151,000	167.78
		0%	60%	16%	20%	4%	100%	
10.00%	FY19 Cost Multiplier @ 5%	-	91,000	24,000	30,000	6,000	151,000	167.78
10.00%	FY20 Cost Multiplier @ 5%	-	100,100	26,400	33,000	6,600	166,100	184.56
8.00%	FY21 Cost Multiplier @ 5%	-	108,108	28,512	35,640	7,128	179,388	199.32
3 Years	TOTAL PROJECT COST	-	108,108	28,512	35,640	7,128	179,388	199.32
	TOTAL COST (ROUNDED)	-	108,100	28,500	35,600	7,100	179,400	199.33

* Excludes modular temporary classrooms

	FY20	FY21	Total
Fesibility	-	-	-
Arch/Engineering		28,500	28,500
Construction		108,100	108,100
Construction Management		7,100	7,100
FF&E	0	35,600	35,600
Total	-	179,300	179,300

D&W Estimated Cost (including escalation)	164,500
Less Escalation	(13,500)
Subtotal	151,000

Capital Project Request									
Project Title:	**Eliot Modular Classrooms**							**Fiscal Year:**	**2021**
Purpose:	**Construction**		Classification:	**Building**		Status:	**New Request**		
Department:	Needham Public Schools					Supports:	Public Education		
Partners:	PPBC					Useful Life:	Between eighteen (18) and twenty-five (25) years		

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**		No
7. If funded, will the operating budget need to be increased to cover operating expenses?			Yes
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			Yes

Project Cost:	**$4,037,900**	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	May increase annual operating expenses between $25,001 and $50,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$556,700		$556,700					
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$3,266,300			$3,266,300				
Construction Management	$12,800			$12,800				
Equipment	$0							
Furniture, Fixtures, and Equipment	$202,100			$202,100				
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$4,037,900**	**$0**	**$556,700**	**$3,481,200**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title:	**Eliot Modular Classrooms**	**Fiscal Year:**	**2021**

Project Description and Considerations

The School Committee is planning for the implementation of Full-Day Kindergarten (FDK) in September, 2019, as well as the potential for significant enrollment growth in the Eliot neighborhood resulting from new development. Based on a feasibility study conducted by Dore & Whittier Arhitects (February 2018), several modifications would be needed to accommodate the projected number of classrooms needed under those assumptions. These modifications include the conversion of a technology lab to a classroom and the installation of six modular classrooms at the Eliot School.

This request would install six modular classrooms at the school. (The lab conversion project is presented as a separate capital request.) The modular classrooms (in combination with the lab conversion) would allow the school to meet the following projected need for classrooms: one additional classroom by 2020/21; two classrooms by FY2023/24; four classrooms by 2025/26; five classrooms by 2026/27, and a total of seven classrooms by 2029/30.

Project costs are based on a preliminary project budget prepared February 2018 by Dore & Whittier, updated to reflect the following cost escalators: 10%/year (FY19-20), and 8%/year thereafter.

Preliminary Project Schedule:
Funding for Detailed Design: FY21 (May '20 ATM)
Detailed Design & Bidding: June '20 - Apr '21
Funding for Construction: FY22 (May '21 ATM)
Site Work/ Construction: June '21 - Aug '23 (24 Months, Due to Tight Site)
New Classrooms Open: (FY24) - Sept '23

Parameters Addressed:
Permitting: As required by Town Boards.
Technology: The School Instructional Technology Department is in support of this request. The estimated project cost includes an FF&E budget for this new facility, including classroom technology.
Operating Budget Increase: Utilities. This placeholder estimate to be revised during design.
Other Departmental Assistance: PPBC Project Management
Operating Budget Increase: Utilities. This placeholder estimate to be revised during design process.

Capital Project Request

Project Title: **Eliot Modular Classrooms** **Fiscal Year:** **2021**

Supplemental Information

Eliot School Modular Classrooms (6 @ 1,200 sf/each) & Renovation of Existing Technology Lab

	10,000 sf	**Construction (1)**	**A/E (2)**	**FF&E**	**Constr Mgnt (3)**	**Total**	**Cost/SF**
	FY18 Project Cost (D&W) - Combined	2,515,500	437,250	180,000	15,500	3,148,250	314.83
	Less Tech Room Conversion - Separate	91,000	24,000	30,000	6,000	151,000	167.78
	TOTAL	2,424,500	413,250	150,000	9,500	2,997,250	147.05
10.00%	FY19 Cost Multiplier @ 5%	2,545,725	433,913	157,500	9,975	3,147,113	314.71
10.00%	FY20 Cost Multiplier @ 5%	2,800,298	477,304	173,250	10,973	3,461,824	346.18
8.00%	FY21 Cost Multiplier @ 5%	3,024,321	515,488	187,110	11,850	3,738,770	373.88
8.00%	FY22 Cost Multiplier @ 5%	3,266,267	556,727	202,079	12,798	4,037,871	403.79
4 Years	TOTAL PROJECT COST	3,266,267	556,727	202,079	12,798	4,037,871	403.79
	TOTAL COST (ROUNDED)	3,266,300	556,700	202,100	12,800	4,037,900	403.79

(1) Construction includes site, modulars, renovation construction cost and contingencies
(2) A/E includes soft costs and 80% of owners' direct costs (less FF&E.)
(3) Construction management includes 20% of owners' direct costs (less FF&E.)

	FY21	FY22	Total
Fesibility			-
Arch/Engineering	556,700		556,700
Construction		3,266,300	3,266,300
Construction Management		12,800	12,800
FF&E	-	202,100	202,100
	556,700	3,481,200	4,037,900

	Modulars	Tech Room
D&W Estimated Cost (including escalati	3,728,750	164,500
Less Escalation	(580,500)	(13,500)
Subtotal	3,148,250	151,000

Capital Project Request					
Project Title:	**Broadmeadow School Technology Room Conversion**			**Fiscal Year:**	**2022**
Purpose:	**Construction**	Classification:	**Technology**	Status:	**New Request**
Department:	Needham Public Schools			Supports:	Public Education
Partners:	Public Facilities			Useful Life:	More than twenty-five (25) years

Parameters		Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		Yes
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$213,100**	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$33,900			$33,900				
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$128,400			$128,400				
Construction Management	$8,500			$8,500				
Equipment	$0							
Furniture, Fixtures, and Equipment	$42,300			$42,300				
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$213,100**	**$0**	**$0**	**$213,100**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Broadmeadow School Technology Room Conversion**	**Fiscal Year:**	**2022**

Project Description and Considerations

The School Committee is planning for the implementation of Full-Day Kindergarten (FDK) in September, 2019. Based on a feasibility study conducted by Dore & Whittier Arhitects (February 2018), several modifications to Needham buildings are needed to accommodate the projected number of classrooms needed. These modifications include the conversion of a technology lab at the Broadmeadow School to a classroom, effective for the 2022/23 School Year.

This project is to provide funding to convert the existing technology lab at Broadmeadow Elementary School to a classroom to meet that need. Project costs are based on a preliminary project budget prepared February 2018 by Dore & Whittier, updated to reflect the following cost escalators: 10%/year (FY19-20), and 8%/year thereafter.

Preliminary Project Schedule:
Funding for Detailed Design & Construction: FY22 (Oct '21 STM)
Detailed Design & Bidding: Nov '21 - May '22
Construction: June '22 - Aug '22
New Classroom Opens: (FY23) - Sept '22

Parameters Addressed:
Permitting: As required by Town Boards.
Technology: The School Instructional Technology Department is in support of this request. The estimated cost includes an FF&E budget for this project, including classroom technology.
Building Improvements: The Public Facilities Department supports this request.
Other Departmental Assistance: Public Facilities.

Capital Project Request

Project Title: **Broadmeadow School Technology Room Conversion** **Fiscal Year:** **2022**

Supplemental Information

Broadmeadow School Technology Room Conversion

	900 sf	**Feasibilty**	**Construction***	**A/E**	**FF&E**	**Constr Mgnt**	**Total**	**Cost/SF**
	FY18 Project Cost (D&W)	-	91,000	24,000	30,000	6,000	151,000	167.78
	TOTAL	-	91,000	24,000	30,000	6,000	151,000	167.78
		0%	60%	16%	20%	4%	100%	
10.00%	FY19 Cost Multiplier	-	100,100	26,400	33,000	6,600	166,100	184.56
10.00%	FY20 Cost Multiplier	-	110,110	29,040	36,300	7,260	182,710	203.01
8.00%	FY21 Cost Multiplier	-	118,919	31,363	39,204	7,841	197,327	219.25
8.00%	FY22 Cost Multiplier	-	128,432	33,872	42,340	8,468	213,113	236.79
4 Years	TOTAL PROJECT COST	-	128,432	33,872	42,340	8,468	213,113	236.79
	TOTAL COST (ROUNDED)	-	128,400	33,900	42,300	8,500	213,100	236.78

	FY20	FY21	FY22	Total
Fesibility	-			-
Arch/Engineering			33,900	33,900
Construction			128,400	128,400
Construction Management			8,500	8,500
FF&E	0	-	42,300	42,300
	-	-	213,100	213,100

D&W Estimated Cost (including escalation)	164,500
Less Escalation	(13,500)
Subtotal	151,000

Capital Project Request									
Project Title:	**School Master Plan Supplement**							**Fiscal Year:**	**2020**
Purpose:	**Design/Engineering**	Classification:	**Building**		Status:	**New Request**			
Department:	Needham Public Schools				Supports:	Public Education			
Partners:	PPBC				Useful Life:	More than five (5) years but less than eight (8) years			

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**		No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$125,000**	How was the Project Cost Determined:	
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$125,000	$125,000						
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$125,000**	**$125,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**School Master Plan Supplement**	**Fiscal Year:**	**2020**

Project Description and Considerations

Capital planning for the School Department has grown increasingly complex, given the pressing needs of accommodating Full-Day Kindergarten, providing capacity for a growing enrollment and repairing and renovating aging facilities. These needs have made it extremely difficult to prioritize from among the capital needs on the planning horizon: including a Mitchell Elementary School renovation to address building age/deficiencies; a recommended project to install up to six modular classrooms at the Eliot Elementary School to accommodate projected enrollment growth in that District; a small-scale retrofit to the Broadmeadow and Eliot Elementary Schools to provide needed capacity for Full Day Kindergarten, and a Pollard Renovation project to replace the modular classrooms (now at the end of their useful life), modernize spaces and provide enrollment capacity. In addition, the need to provide swing space for these projects and the potential use of the existing Hillside Elementary School on Glen Gary Road to meet this need, present intermediate scheduling and planning challenges. (These challenges are made more acute by the need to schedule around the planned use of this space as temporary headquarters for police/fire during renovation of their facility, and the fact that different retrofits will likely be needed to accommodate each use.) Meeting these various needs within available resources and reasonable timeframes will require the School Department to carefully consider all of the possibilities and options for prioritizing and scheduling building projects going forward.

This request is for a master planning study of school facilities in FY20. The proposed study would develop recommendations for long-range school capital plans under different enrollment scenarios/ trajectories and the practical considerations of aging buildings. Potential recommendations could involve other buildings and/or non-building solutions like redistricting.

The proposed study would complement the Needham 2025 effort, for which funding will requested at the October 2018 Special Town Meeting, and would provide an informational resource for the next Town-wide Master Planning Cycle. The purpose of the Needham 2025 study is to gain a better understanding of the impact of commercial and residential growth on the Town's infrastructure, including but not limited to: traffic, transportation, water, sewer, drains, roads and bridges, and school facilities, and to identify options for managing that impact. The Needham 2025 study, which is expected to be completed in FY19, will provide a general framework for more detailed master planning activities to be conducted in each area, which this study would be an example of. The in-depth analysis of school facility needs that could be provided for in this study also would be a valuable information resource for future Town-wide master planning efforts.

Finally, the proposed study could complement, or even incorporate, the objectives of the Pollard Phased Improvements Feasibility Study, for which $65,000 in funding was obtained in FY19. The purpose of that study, which has not yet been undertaken, was to determine whether or not it would be possible to phase the Pollard renovation project over multiple years with the goal of accelerating completion of the project and reducing the overall project cost. A particular emphasis was the Pollard modular classrooms, which are nearing the end of their useful life, but which are needed to meet the current program of studies for the projected enrollment. The study also was to look at the cost benefit of completing the science classrooms first to create swing space when the modular classrooms are demolished, examine strategies to maximize potential MSBA reimbursement for this project and, finally, estimate future need, based on long-term enrollment trends. In addition, some ongoing maintenance repair work may have reduced the scope of the overall project, such as the relocation of the administrative offices at Pollard, renovations to bathrooms and auditorium seating improvements.

Parameters Addressed:
Other Departmental Assistance: PPBC Project Management

Capital Project Request					
Project Title:	**Harris Ave Parking Lot**			**Fiscal Year:**	**2023**
Purpose:	**Design/Engineering**	Classification:	**Infrastructure**	Status:	**Informational Only Details Incomplete**
Department:	Public Works - Building Maintenance			Supports:	Transportation Network
Partners:	School Department			Useful Life:	More than twelve (12) years

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$525,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$25,000				$25,000			
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$500,000					$500,000		
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$525,000**	**$0**	**$0**	**$0**	**$25,000**	**$500,000**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Harris Ave Parking Lot**	**Fiscal Year:**	**2023**

Project Description and Considerations

Project Summary

- The Pollard Middle School parking lot, located on Harris Avenue, is currently made up of two areas. The large, main parking lot is to the left and the area to the right is a temporary, paved bike parking lot that was converted to a temporary paved parking lot. It was not constructed with the intention of supporting automotive vehicles. Both parking lots suffer from structural deficiencies and lack of drainage. Additionally, there is need for more staff and visitor parking as a result of increased student population, as well as increased educational requirements. Currently, visitors park in the bus loop after hours or along the road.
- The first phase of this project is to design parking lot upgrades with the intention of capturing additional space where possible and repairing structural deficiencies to make the parking lot more sustainable. Construction is the second phase. This project will include the addition of drainage structures in compliance with the Town's National Pollution Discharge Elimination System (NPDES) permit.

Clarification of Questions

3. This request may be subject to Planning Review, Conservation Commission, Street Opening Permits, and Building Permits.
5. This is a Building Maintenance request.
16. The parking lot will be permanently installed.
18. This request will require support form Highway and the School Department.

Capital Project Request

Project Title:	**Public Works Infrastructure Program**			**Fiscal Year:**	**2020**
Purpose:	**Construction**	Classification:	**Infrastructure**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Highway			Supports:	Transportation Network
Partners:				Useful Life:	Between twelve (12) and eighteen (18) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		No
6. If funded, will additional permanent staff be required?	**Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		Yes
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		No
19. If funded, will this project increase the operating expense for any other department?		Yes

Project Cost:	**$13,492,050**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$802,500	$100,000	$83,000	$150,000	$269,500	$200,000		
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$12,689,550	$2,069,550	$2,332,000	$2,128,000	$3,255,000	$2,905,000		
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$13,492,050**	**$2,169,550**	**$2,415,000**	**$2,278,000**	**$3,524,500**	**$3,105,000**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Public Works Infrastructure Program**	**Fiscal Year:**	**2020**

Project Description and Considerations

The Public Works Infrastructure Program allows the Department of Public Works to make improvements and repairs to Town infrastructure, including but not limited to roads, bridges, sidewalks, intersections, drains, brooks, and culverts. This program consists of multiple categories, each with their own sub-projects.

Project Summaries

Street Resurfacing

- The Town has 279 lane miles of accepted road that require maintenance. The average lifecycle of a road is 15 to 20 years. Specialized surface treatments can be applied within this period of time to sustain or extend the lifecycle of the roadway based on usage. The Town targets 17 lane miles of road per year in order to resurface roads before they reach the end of their lifecycle. These roads are prioritized based on a pavement condition index (PCI). The Town targets roads with a PCI of under 70 for resurfacing and specialized treatment, under 60 for repair and renovation.
- The primary strategy of this program is asphalt paving and incidental work. Incidental work may include asphalt berm curb, new grass shoulders, corner reconstruction including handicapped ramps, minor drainage improvements, street sign replacement, traffic markings, and signs. Installing a monolithic asphalt berm curb and/or granite curbing better defines the edge of the road, improves drainage, and protects the shoulder from erosion. The cost per lane mile for resurfacing in FY19 is $84,500 or more per lane mile. A basic asphalt overlay at 1.5 inches with asphalt berm curb and casting adjustments is $65,000 per lane mile. The cost of micro surfacing treatments and rubber chip seal surfacing treatments are approximately $5 per square yard.

Roadway Reconstruction

- The Town has 279 lane miles of accepted road that require maintenance. Road resurfacing may be the appropriate treatment to extend the useful life of a road, but conditions may require that a total reconstruction of the road is necessary to address structural issues within the road including drainage, grade, and subsurface material construction. This differs from the road rehabilitation program, as it requires more complete design and construction. Rehabilitation is similar to a house renovation whereas reconstruction is similar to a knock-down and rebuild. Roads do not just consist of the top layer of asphalt; they are complete systems that have their own foundation.
- The Town evaluates the sight distance, drainage, handicap ramps, sidewalks, subsurface utilities, public utility poles, and overhead utilities. The physical condition of the road to be evaluated for improvement includes shape, foundation, and traffic volume. The roads being addressed are deficient in one or more of the areas listed. This relates to the nature of how the Town has evolved historically, with roads being constructed as opposed to being designed. This is a multi-year process which requires surveying, designing, utility evaluation, and construction.

Capital Project Request			
Project Title:	Public Works Infrastructure Program	Fiscal Year:	2020

Supplemental Information

Marked Tree

- The road condition is very poor due to age and utility work. The electric and gas work has been completed in recent years. The Town is finishing up a capital improvement project in this roadway for the water system. This road has asphalt curbing that is past is useful life and falling apart. The private properties that are connected to the road have some topographical challenges where there is a pitch to the driveways that is not ideal. There are sight distance concerns due to the curvature of the road. The road is only 20 feet wide and is used as a cut-through road.
- The work will widen the road, improve sidewalk width, install granite curbing, and make grading adjustments to lower road height for better access to private properties and provide better drainage. Reconstruction work will follow complete streets principals.

Sidewalk Program

- This program requires funding for the Town to address the failing network of sidewalks throughout the community. There are over 130 miles of accepted sidewalks in Needham. Over half of the Town's sidewalks do not comply with current standards and require significant improvements including the installation of handicapped ramps. Sidewalk improvements must comply with Federal and State laws and construction standards.
- The Town conducted a study to create a sidewalk condition index. The conclusions of that study identified 80 miles of sidewalk in a condition that would warrant reconstruction. The cost for sidewalk rehabilitation and reconstruction can vary significantly. Current estimates have identified over $20,000,000 in backlogged sidewalks in need of repair. FY19 contract pricing to reconstruct one mile of asphalt sidewalk with incidental costs is estimated to be $232,320 per mile ($44.00/lf). Contract pricing to install a mile of granite curb with minor drainage improvements and incidental costs is estimated to be $274,560 per mile ($52.00/lf). These costs do not include engineering, design, tree removal and replacement, major drainage improvements, or major public or private property adjustments.

Intersection Improvements

- Traffic signals, intersections, and signage require upgrades and reevaluation as infrastructure ages, technology improves, and methods of transportation change. The Engineering Division reviews intersections based on requests identified need from the Highway Division, and traffic patterns and infrastructure changes that put pressure on various intersections throughout Town.

Highland Avenue at West Street

- At this intersection there is aging traffic control infrastructure, with reliability issues. Traffic control signals have been damaged by several car accidents. The traffic controls signals only have one timer, which allows for only one traffic pattern regardless of the time of day. This does not allow for the efficient flow of traffic for the intersection. This area is also less aesthetically pleasing.
- This work will include installing a new traffic signal system with modern technology that will better control the flow of traffic through the intersection, reducing back-ups of traffic. It will also follow the same aesthetic design principals as the downtown improvements. This intersection redesign will comply with complete streets principals.

Capital Project Request			
Project Title:	**Public Works Infrastructure Program**	**Fiscal Year:**	**2020**

Central Avenue at Great Plain Avenue

- There have been struggles with bringing appropriate traffic flow through the intersection since it was constructed in the 1990s due to property size limitations. There is a historic property on one corner that limits the design. The existing intersection design does not provide the ideal traffic patterns for multiple modes of transportation.
- This project will include geometric improvements and replacement/improvement of the traffic signal system. Installing a new traffic signal system that will include modern technology will better control the flow of traffic through the intersection, reducing back-ups of traffic. The layout of the intersection will be improved to increase traffic flow. This intersection redesign will comply with complete streets principals.

Bridge Repairs

- Surrounded on three sides by the Charles River, the Town jointly maintains a number of bridges with neighboring communities. The Massachusetts Bridge Inspection Program has identified a number of bridges that have some level of deficiency and has recommended repairs.

Newell's Bridge

- Massachusetts Department of Transportation (MassDOT) issued a report on Newell's Bridge on Central Avenue to Dover, which indicated that the bridge is deficient and in need of repair. The Town will work with Dover to determine how to address these deficiencies. This bridge is on the MassDOT's Accelerated Bridge Program which is a state funding source for bridge repairs. Prior to receiving funding it is possible that the bridge's capacity may be down-graded at the next bridge inspection.
- If the bridge is downgraded, the Town will need to perform an evaluation of the bridge with its own engineering consultant. This is a stone arch bridge that is structurally supported by the contact of the stones that support the bridge. The evaluation of the bridge will include installing monitoring devices on the bridge to determine if the support structure is moving and by how much. If there is no capacity change of the bridge, then this funding will be redirected to street resurfacing.

Storm Drain Capacity Improvements

- The March 2002 Stormwater Master Plan identified a number of areas throughout Needham where improvements are required to resolve existing problems with flooding and illicit discharge. Locations for improvements have been prioritized within the plan. Since the issuance of the 2002 Stormwater Master Plan, numerous multi-unit developments have been built or planned in the Town. These developments include new roads with drainage structures and roof or sump connections that are then connected to existing Town systems. These new connections have increased the load on the Town's drainage system and caused flooding in some areas.

Ardmore Road and Hunnewell Street or Other Prioritized Projects

- Replace existing 12" drain pipe with a larger drain pipe to improve capacity for stormwater.

Concord Street and Burnside Road or Other Prioritized Projects

- Construct a new drain that will be connected to the recently extended Greendale Avenue drain project to provide capacity for stormwater.

Capital Project Request

Project Title:	**Public Works Infrastructure Program**	**Fiscal Year:**	**2020**

Storm Drain System Repairs

- This program provides funding to repair failing storm drainage infrastructure within Town easements that have been discovered through investigation work. These projects will include the replacement of existing culverts that have deteriorated over time and are restricting flow. This work will eliminate flooding and capacity issues in the immediate vicinity. This project will provide funding for the Drains Division to address small projects related to the Labor Day 2013 storm drainage remediation.

470 South Street

- The existing concrete pipe is plugged with roots.
- Remove and replace with plastic pipe that is more resistant to root intrusion.

Brooks and Culverts

- There are aging draining infrastructures that require repair including poorly draining brooks, streams, waterways, and culverts throughout the Town that have been severely damaged by heavy rains/storms in the past. Flooding in March 2010 caused the failure of retaining walls, resulting in extensive erosion and silt deposits in brooks and streams. The silt has provided a medium for vegetation and affected the flow of water, and the situation has resulted in the loss of usable abutting property and flooded basements. The current conditions are beyond the means of DPW equipment and personnel. It will require a detailed investigation, a plan of recommended improvements, a design drawing and specifications, environmental permitting, and bidding of construction to be overseen by the Town's Engineering Division. This will return the waterways to a condition that the DPW will be able to maintain. The Environmental Protection Agency (EPA) has finalized stronger requirements for stormwater and permitting under the National Pollution Discharge Elimination System (NPDES) permit. The Town will need to continue to demonstrate its efforts regarding cleaning and improving the water quality of brook and culverts to avoid fines from the EPA.

Rosemary Brook

- The section of the brook being addressed has sediment, vegetation, and eroded banks that cause flow capacity and water quality issues**.**
- Remove sediment and vegetation and repair and/or replace failing walls.

Alder Brook

- This is a category 5 impaired water body under NDPES. Category 5 is worst rating a water body can receive from the EPA. It required cleaning that will remove the phosphorus contaminated sediment and improve water quality.
- Remove sediment and vegetation, and repair/replace failing walls/culverts.

Guardrail

- Many of the Town's guardrails are noncompliant and DPW is preparing a plan internally to systematically upgrade existing guardrails to make them both compliant and aesthetically pleasing.

Capital Project Request

Project Title: **Public Works Infrastructure Program** **Fiscal Year:** **2020**

447 Dedham Avenue to Town Line

- The decorative guardrail that was installed over 40 years ago is not code compliant. The current guardrail does not meet state guidelines.
- This will replace the existing guardrail with a replacement option that will be selected which will be aesthetically pleasing, compliant, and safe. If Newell Bridge is not replaced prior to this project, this funding will be redirected to the Needham Dover line, as that guardrail is in worse condition.

Funding Schedule

Category	Project	FY 20		FY 21		FY 22		FY 23		FY 24	
		D & E	Const.	D & E	Const.	D & E	Const.	D & E	Const.	D & E	Const.
Street Resurfacing			$924,550		$957,000		$990,000		$1,025,000		$1,060,000
Roadway Reconstruction						$150,000			$1,500,000		
Sidewalk Program			$512,500		$525,000		$540,000		$555,000		$570,000
Intersection Improvements	Highland Ave at West St				$575,000						
Intersection Improvements	Central Ave at Great Plain Ave							$166,000			$1,200,000
Bridge Repair	Newell's Bridge	$100,000									
Storm Drain Capacity Improvements	Ardmore Rd & Hunnewell St		$362,500								
Storm Drain Capacity Improvements	Concord St and Burnside Rd			$83,000			$523,000				
Storm Drain Capacity Improvements	TBD							$103,500			
Storm Drain System Repairs	470 South St		$270,000								
Storm Drain System Repairs	TBD				$75,000		$75,000		$75,000		$75,000
Brooks & Culverts	Rosemary Brook				$200,000						
Brooks & Culverts	Alder Brook									$200,000	
Guardrail									$100,000		

Capital Project Request			
Project Title:	**Public Works Infrastructure Program**	**Fiscal Year:**	**2020**

Future Projects

Intersection Improvements

Great Plain Avenue at Greendale Avenue, Kendrick Street at Third Avenue, and Kendrick Street at Fourth Avenue.

Storm Drain Capacity Improvements

Carey Road (Area 2), Lower Hunnewell Street Drainage Improvements, Oak Street (Area 8), Mackintosh Avenue (Areas 3 & 7), Oxbow Road (Area 9), and West Street (Area 11), and Fairfield Street and Elmwood Road (Area 5).

Brooks & Culverts

Winding River Road, Locust Lane, Fuller Brook Avenue, Oxbow Road, Webster and Howland Streets, Brookside Road and Forest Street, Chestnut Street and Carriage Lane, Emerson Place, Pennsylvania Avenue, and Elder Road.

Roadway Reconstruction

Nehoiden Street, Kingsbury Street (received an interim full width overlay patch in CY16), Sections of Central Avenue, Webster Street from Dedham Avenue to South Street (received an interim full width overlay patch in CY16).

Guardrail

Central Avenue, Hillside Avenue at Rosemary Street, various locations along Rosemary Street, various locations along Dedham Avenue, High Rock Street at Warren Street, South Street at Dedham Avenue, South Street near Farley Pond Road, Brookline Street at Mitchell School, Greendale Avenue at railroad bridge, Perry Drive, Coulton Park, Harris Avenue, Charles River Street, Central Avenue at Dover town line, multiple locations along Great Plain Avenue, Pilgrim Road, Cartwright Road, Ivy Road, Marshall Street, West Street, Abbott Street, Carter Street, Pershing Road, Chapel Street lot, Oak Knoll Terrace, Blake Street, Highland Avenue near Fire Station #2, Fisher Street near railroad tracks, Parkland Road, and Brookside Road.

Clarification of Questions

3. Conservation Commission permitting may be required for drainage repairs, brooks and culvert repair, and roadway reconstruction.
14. The School Safety Committee documented safety issues on Nehoiden Street and Marked Tree Road.
19. A potential increase in electrical costs from traffic signals may require additional budget funds from the Needham Electric Light and Gas Program.

Capital Project Request					
Project Title:	**Asa Small Field Renovation**			**Fiscal Year:**	**2024**
Purpose:	**Design/Engineering**	Classification:	**Infrastructure**	Status:	**Informational Only Details Incomplete**
Department:	Public Works - Parks and Forestry			Supports:	Culture and Leisure
Partners:	Park and Recreation, Needham Youth Sports Groups			Useful Life:	More than twenty-five (25) years

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			Yes
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:		How was the Project Cost Determined:	
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	Asa Small Field Renovation	Fiscal Year:	2024

Project Description and Considerations

Project Summary

- This project will address the field deficiencies on the Asa Small ball diamond at the DeFazio complex that were not included in the scope of work for the Field of Dreams project. This has been on the Little League priority list for several years. The Town recently completed a minor infield renovation.
- The Town will hire a contractor to strip the existing turf, regrade the field, amend soils, replace the baseball skin surface, and install a new irrigation system. This project may include additional amenities such as field lights, a score board, bleachers, and a larger batting cage that will be funded by user groups. The Parks & Forestry Division will work with the user groups to identify any value added items.

Changes from Prior Year Submission

- The Parks & Forestry Division changed the status of this request to informational and pushed it to FY24 because Little League is undergoing a restructuring in leadership and the priority of projects may change as a result.

Clarification of Questions

3. This project may require permitting from the Conservation Commission, Planning Board, Zoning Board of Appeals, and Building Department.
12. This project may be eligible for Community Preservation funds under Recreation.

Capital Project Request					
Project Title:	**Athletic Facility and Public Recreation Improvements**			**Fiscal Year:**	**2020**
Purpose:	**Construction**	Classification:	**Infrastructure**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Parks and Forestry			Supports:	Culture and Leisure
Partners:	Park and Recreation			Useful Life:	Between twelve (12) and eighteen (18) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required? **Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$5,631,500**	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$239,500	$70,000	$62,500	$107,000				
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$5,392,000	$2,880,000	$550,000	$570,000	$1,102,000	$290,000		
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$5,631,500**	**$2,950,000**	**$612,500**	**$677,000**	**$1,102,000**	**$290,000**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Athletic Facility and Public Recreation Improvements**	**Fiscal Year:**	**2020**

Project Description and Considerations

The Department of Public Works and Park and Recreation have developed a maintenance plan for all fields, which includes new construction, total reconstruction, partial renovation, irrigation, drainage improvements, and equipment replacement or repair (bleachers, fences/backstops, player benches, and miscellaneous equipment) for multi-use fields and ball diamonds.

Project Summaries

Turf Field Replacement at DeFazio Field and Memorial Park

- Artificial turf ages and over time compacts, creating a harder surface for playing. Each year, an impact (g-max) test is performed on all artificial turf fields in Town. The most recent test shows that these fields are approaching the end of their useful life.
- The Town will hire a contractor to remove the existing turf carpet, regrade, and install new artificial field turf. This needs to be done during the summer (off-season) so it can be made available for fall sports.

Cricket Field

- There is not a fully functioning irrigation system at this field, the current system was gifted to the Town over 15 years ago and is showing signs of age. When the existing irrigation system is in full operation, the sprinkler heads do not fully engage until several minutes of operation which is not an efficient use of water. The grading on this site is inconsistent and leads to localized drainage problems.
- All existing turf will be stripped and the top soil will be removed and stored on site. The whole site will then be sub-graded. And the top soil will be placed back on site and amended in place with sand, then blended for improved drainage. The site will then be laser graded to ensure that water slopes off the surface, and then sod will be laid. As part of the removal of turf and soil, the existing irrigation system will be abandoned in place and new water efficient irrigation system will be installed.

Claxton Field

These two projects do not need to be coordinated as they affect different areas of the field.

Field Lighting

- The field currently has metal halide field lights that require increasing maintenance as they age. Metal halide is one of the least efficient lighting types currently available, the bulbs have a short life span that require frequent replacements, and they light an area as opposed to a focused directional light.
- This project will address upgrading the field lighting system to more energy efficient lights. The project will evaluate the lighting needs of the field and make recommendations for improvement. The construction of these lights will be done in the fall season to prepare for the following spring softball season.

Capital Project Request			
Project Title:	Athletic Facility and Public Recreation Improvements	Fiscal Year:	2020

Supplemental Information

Softball Skin Renovation Fields 1 & 2
- Softball fields have the entire infield as clay skin, unlike baseball diamonds which is a combination of skin and turf; this makes the grading of the skins very important as any imperfections will cause puddling. The current fields were constructed on a closed landfill that was not properly graded due to site conditions, settling of materials, and age. After heavy rains, there is puddling on the skin which can lead to frequent field closures.
- This project will remove the existing skin clay material, evaluate the conditions below the skin, and make amendments and regrade as necessary. Proper drainage materials will be brought in, laser graded, and clay skins will be replaced.

McLeod Field
- Since the field was renovated in 2009, there has been several drainage issues related to the 4' drain pipe that runs through the field. This has caused sink holes that require emergency repair for the field to be safely used. These sink holes appear after large rain events that wash out the materials from underneath the field.
- Currently there are several methodologies that vary in terms of invasiveness and cost to address this issue that will be vetted out in design. This will address both the 4' drain and the subsurface of the field that has been eroded by storm water events. The budget proposed is for one of the more invasive approaches to ensure there is sufficient funding to return the field to operation.

Broadmeadow and Eliot Fields
- Both the Broadmeadow and Eliot School fields are showing signs of age due to inappropriate subsurface materials which impact the health of the turf and have made it difficult to provide a suitable playing surface at these fields. Additionally, this problem at the Broadmeadow is exacerbated by the physical location that has surface drainage from neighboring areas draining into the field.
- All existing turf will be stripped and the top soil will be removed and stored on site. The whole site will be sub-graded and the top soil will be placed back on site and amended in place with sand, then blended for improved drainage. The site will then be laser graded to ensure that water slopes off the surface, and then sod will be laid. At the Broadmeadow, there may be additional storm water capturing systems to be designed to alleviate the excessive flooding problem. These will be vetted out during the design process.

Town-Wide Fencing Improvements
DeFazio Tot Lot
- The perimeter chain link fencing is showing age, including rust and damage. Improvements have been delayed on this fence due to the uncertain nature of the site. With the new Facilities Master Plan being completed, this facility is envisioned to be used well into the future and the fence should be replaced.
- The existing posts will be evaluated and those that are suitable will be reused. The chain link fabric will be disposed of and replaced in kind.

DeFazio Complex
- Various fencing structures including perimeter fencing, backstops, and players benches are showing age and use. These fields are in very high use and receive the most wear and tear, which may cause the life cycle of the fencing and related structures to be shortened.

Capital Project Request

Project Title: **Athletic Facility and Public Recreation Improvements** **Fiscal Year:** **2020**

- The existing posts will be evaluated and those that are suitable will be reused. The chain link fabric will be disposed of and replaced in kind.

Funding Schedule

Project	FY 20		FY 21		FY 22		FY 23	FY 24
	D & E	Const.	D & E	Const.	D & E	Const.	D & E	Const.
Turf Carpet Replacment		$2,500,000						
Crickets Field - Renovation		$380,000						
Claxton Field - Lights	$70,000			$550,000				
Claxton Field - Fields			$17,500			$120,000		
McCloud Field -Renovation			$45,000			$450,000		
Broadmeadow & Eliot Fields - Renovation					$107,000		$1,102,000	
Various Fencing Improvements								$290,000

Changes from Prior Year Submission

- Claxton lighting was not funded in FY19 and has since been broken down into two components (Design and Construction) and resubmitted for FY20 and FY21.
- McLeod Field Design increased by $10,000 based on the complexity of design.

Future Projects

- Needham Heights Common Renovation - design of sidewalks, irrigation, landscape improvements, hardscape, electrical and lighting, park benches
- DeFazio Complex - install walking path with protective netting to DeFazio #1
- Charles River Water Treatment Plant - mitigation of red pines tree stand in the well fields
- Hillside and Mitchell - renovation of fields
- Nike, Ridge Hill, and Hillside - construction of new athletic fields
- DeFazio Complex - track resurfacing
- High Rock Field - fencing

Clarification of Questions

3. Conservation Commission permitting and Planning Board filing may be required.
12. All items except for Turf Fields are eligible for Community Preservation Funds.
18. The Department of Public Works will be partnering with Park and Recreation.

Capital Project Request								
Project Title:	**Passive Recreation Improvements - Dwight Field/Charles River Center**						**Fiscal Year:**	**2020**
Purpose:	**Design/Engineering**	Classification:	**Infrastructure**		Status:	**New Request**		
Department:	Public Works - Parks and Forestry				Supports:	Culture and Leisure		
Partners:	Charles River Center				Useful Life:	Between eighteen (18) and twenty-five (25) years		

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			Yes
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$385,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$35,000	$35,000						
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$350,000		$350,000					
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$385,000**	**$35,000**	**$350,000**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	Passive Recreation Improvements - Dwight Field/Charles River Center	Fiscal Year:	2020

Project Description and Considerations

The Parks and Forestry Division and Charles River Center are presenting a plan to make substantial improvements to the Town-owned quarter acre passive recreation area behind the Charles River Center on Dwight Road, adjacent to the baseball diamond at Dwight Field. This area is frequently used by participants in Charles River Center programming and residents of Charles River properties. During baseball season, the park is used by families who have children participating in the baseball programs.

Project Summary

- This parcel is presently in disrepair and suffers from drainage issues. There are trees on site that are no longer viable, creating safety concerns, and the ground cover has been eroded by stormwater. This park does not have good accessibility due to the elevation and the park is presently accessed from the Charles River Center by several stairs.
- This project will include removing the existing ground covering, regrading the site, making drainage improvements, installing new turf, removing and pruning problematic trees, planting new trees, creating an accessible entrance into the park areas, and other site amenities. Additionally, site furniture will be installed for passive recreation including picnic tables and benches, a small covered pavilion similar to what was installed at Greene's Field, and other small recreational equipment that can be used by children whose siblings are playing baseball. There will be a focus on low maintenance installations to reduce reoccurring costs. This will require some additional grass mowing, but it should take minimal time due to the connection to the field.

Clarification of Questions

12. This should meet the eligibility requirements CPA funding under the recreational category.

Capital Project Request

Project Title:	**Town Common Historic Redesign and Beautification**			**Fiscal Year:**	**2020**
Purpose:	**Design/Engineering**	Classification:	**Infrastructure**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Parks and Forestry			Supports:	Culture and Leisure
Partners:	Town Manager, ITC			Useful Life:	Between eighteen (18) and twenty-five (25) years

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			Yes
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$1,023,000**	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$117,000	$117,000						
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$906,000		$906,000					
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$1,023,000**	**$117,000**	**$906,000**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Town Common Historic Redesign and Beautification** **Fiscal Year:** **2020**

Project Description and Considerations

The Town completed an internal design process for the Town Common and drafted a scope of service which includes improved hardscape, landscaping, amenities, tree plantings, and utility upgrades that are consistent with the historic nature of the Common and the new Downtown Streetscape Improvement Project.

Project Summary

- The Town Common shall be redesigned to maximize the current usage of space, complement Town Hall, enhance the "blue tree", and integrate with the new Downtown Streetscape Improvement Project.
- This project will install new sod, trees, plantings, low maintenance hardscape materials, and increase handicap accessibility. The pathways and landscaping will be adjusted to become more aesthetically pleasing and functionally enhanced. There will be increased electrical and sound capacity to accommodate Town-wide events.

Changes from Prior Year Submission

- The FY20 request for design funding increased based on a revised scope of service and quote from an engineering firm.

Clarification of Questions

3. This project may be subject to Planning Board review.
4. ITC will need to be involved for Wi-Fi and electrical connectivity.
12. This project is being evaluated for eligibility of Community Preservation Funds under the category of Historic Preservation.
18. The Town Manager's Office will be involved.

Capital Project Request					
Project Title:	**RTS Property Improvements**			**Fiscal Year:**	**2020**
Purpose:	**Construction**	Classification:	**Infrastructure**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - RTS			Supports:	Utilities
Partners:	Public Facilities Construction, Building Maintenance			Useful Life:	Between eighteen (18) and twenty-five (25) years

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$945,500**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$18,975		$18,975					
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$926,525	$295,000	$382,525	$124,500	$124,500			
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$945,500**	**$295,000**	**$401,500**	**$124,500**	**$124,500**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	RTS Property Improvements	Fiscal Year:	2020

Project Description and Considerations

Project Summaries

This article will be used to fund improvements to the Recycling & Transfer Station (RTS) facility to increase efficiency, comply with regulatory requirements, and improve the facility function.

Fencing Improvements

- Presently the RTS is accessible to the public after hours. This fencing will minimize public access and increase security.
- This is for the purchase and installation of two new chain link gates and a chain link fence with privacy slats in the same location as the current security fencing at the RTS.

Fabric Structures for Open Top Containers

- The RTS uses 100-yard open top containers to haul trash and recyclables. During the winter, the loaded trailers are left outside and the loads of trash or recyclables inside the containers often freeze, making the trailers impossible to empty until the loads thaw. Containers cannot be tarped in the event of snow due to safety concerns about having the snow shoveled by staff or the driver from the tarps if they were covering the load of trash or recyclables.
- The plan is to purchase and install a fabric covered storage facility for four containers to prevent precipitation from accumulating. To minimize freezing of loads and to allow containers to be covered at all times when full, a 65' x 70' fabric covered steel skeletal structure would be built over the existing 2 concrete pads on which four 100-yard open top containers are parked.

Jersey Barriers

- In 2014 the Town received a Negative Determination of Applicability from the Conservation Commission that required the separation of the composting operations from the wetlands.
- This request is to purchase and install 300 jersey barriers that will be used to create a barrier between the composting operation and the wetlands.

Expansion of Scale

- The extended scale will accurately determine the weights of materials being shipped out of or dropped off at the RTS. Presently, the Town uses approximate values for these materials.
- This is for the purchase and installation of two 18' x 10' panels to extend the existing scale which is 40 feet and insufficient to take the accurate weight of the Town's 100 yard open top containers and contractor's larger vehicles.

Capital Project Request			
Project Title:	RTS Property Improvements	Fiscal Year:	2020

Supplemental Information

Stormwater Improvements

- The RTS composting operation is presently under a July 2014 Conservation Commission Negative Determination of Applicability (NDA). Th is NDA was put in place as a result of adverse impacts to the wetlands from the compost operations. The NDA calls for the mitigation of potential stormwater issues at the site. At the present time, untreated stormwater runoff is entering a perennial stream that feeds the wetlands a butting the composting operations. This project will assist the Town in complying with the 2016 NPDES MS4 Permit.

Area 1

- The construction of a sediment removal structure at the compost area.

Area 3

- A new detention basin at the base of the landfill that will control stormwater runoff from the materials processing area and the road behind the salt shed.

Area 2

- The stormwater management collection system for the proposed paving of the road behind the salt shed.

Funding Schedule

Project	FY 20	FY 21		FY 22	FY 23
	Const.	D & E	Const.	Const.	Const.
Fencing Improvements	$45,000				
Covered Storage for Open Top Containers		$18,975	$107,525		
Jersey Barriers				$124,500	
Extension of Scale					$124,500
Stormwater Improvements Area 1 & 3	$250,000				
Stormwater Improvements Area 2			$275,000		

Changes from Prior Year Submission

- The cost of the fencing for FY20 has increased over the prior year due to increased materials costs and an increase in the length of the fence.
- Addition of fabric structure in FY21 as a result of freezing MSW loads being rejected from Wheelabrator.
- Jersey barriers pushed out from FY 21 to FY22 to allow for the funding of the fabric structure.
- Extension of scale was pushed out from FY22 to FY23 to allow for the funding of the fabric structure.
- Merged the RTS Stormwater Plan into this request. This work must be coordinated and staged with other work occurring at the f acility and the timing of the funding between these programs is key for the success of both programs.

Capital Project Request

Project Title: **RTS Property Improvements** **Fiscal Year:** **2020**

Future Projects

Area 4

The re-grading of the materials processing area; this re-grading will require all stormwater runoff to be shifted away from the wetlands.
Replace 3,000 gallon diesel fuel tank.

RTS Building Improvements

The Recycling and Transfer Station has grown organically over the years and currently includes seven separate buildings:
1. Transfer station building with customer reception area has been abandoned and is currently being used as storage due to lack of ADA compliance, insufficient barrier to the transfer station, deteriorated bathroom facility, and areas with mold.
2. A new office trailer that is temporary in nature has been installed in front of the transfer station building. This is a temporary solution.
3. 3-Bay garage used for surplus paint and equipment storage and Re-use-it area
4. Employee break trailer with storage and restroom are not ADA compliant
5. REX building garage with Superintendent Office and restroom are not ADA compliant. The garage is not properly insulated or heated.
6. Surplus paint reuse shed and hazardous waste locker
7. 12 foot storage container

Some of the limitations of the current facility include:
- Superintendent's office is isolated from the day-to-day operations and staff activity, making supervision and oversight challenging
- No shower facilities on site for staff working in extremely dirty environment
- Limited secure storage
- Employee lunch/break room is in a donated second-hand trailer located in isolated area of facility

Looking to the future, in order to improve efficiency and oversight of operations, provide adequate working conditions, and provide secure storage, new quarters at the RTS are desperately needed. The new area would combine the functions of five separate storage buildings into one facility attached to the existing transfer station building. The new facility would include: customer service area, staff office, superintendent office, employee lunch/break room, meeting room, restroom, shower facilities, and secure storage area all in a single facility. The new facility would most likely be a three-story addition to the existing transfer station building consisting of secure storage and shower/locker room on the ground level, customer reception and office area on the first floor, and meeting room and employee break room on the second floor. A May 2014 Annual Town Meeting Warrant approved funding for a temporary office trailer to provide adequate customer service, office, and restroom facilities and to bring the superintendent's office into the main operations area. This trailer is intended to be temporary and is situated so as not to interfere with potential transfer station expansion.

Capital Project Request			
Project Title:	**RTS Property Improvements**	**Fiscal Year:**	**2020**

Clarification of Questions

3. This project may have to go to the Planning Board for Site Plan Review and may be subject to Conservation Commission permi tting requirements.
5. This project involves building improvements to the Transfer Station Building and Roof. The RTS has communicated with Build ing Maintenance and this division supports the request.
15. This is a request to improve or make repairs to extend the useful life of the Transfer Station Building and Roof.
16. The scale is a below ground device and will be permanently installed at the RTS.
18. The Conservation Department will be required to provide assistance in order to complete the project.

Capital Project Request					
Project Title:	**Athletic Fields Master Plan**			**Fiscal Year:**	**2024**
Purpose:	**Feasibility Study**	Classification:	**Land**	Status:	**Same Request from the Prior CIP**
Department:	Park and Recreation			Supports:	Culture and Leisure
Partners:	DPW Parks and Forestry Division; School Department			Useful Life:	Between twelve (12) and eighteen (18) years

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**		No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			Yes
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$75,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$75,000					$75,000		
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$75,000**	**$0**	**$0**	**$0**	**$0**	**$75,000**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Athletic Fields Master Plan**	**Fiscal Year:**	**2024**

Project Description and Considerations

The Park and Recreation Commission has been working with user groups to determine how athletic fields are being used and how best to schedule the athletic fields to provide optimal use without jeopardizing the maintenance plan. The organizations and the Commission need to do some additional work together before the scope of a master plan can be created.

Renovations have occurred at several parks, and some school sites will be improved in upcoming years. The study would help the Commission determine whether new athletic fields are needed to accommodate the need and provide feasibility studies on possible locations for new athletic fields. The new Williams School will add a small multi-purpose field into the inventory. It will be a synthetic surface, but will not be large enough for multiple group use.

The ability for the Town to maintain current athletic facilities, along with any possible new facilities, would be included within the study.

This project may be appropriate to submit for a warrant article as opposed to a capital request.

The project has been moved out to a later year, while it waits for additional field improvements to be completed. DPW Parks and Forestry will need to be involved as they are responsible for maintenance of athletic fields.

Capital Project Request

Project Title:	**Boat Launch on Charles River**			**Fiscal Year:**	**2021**
Purpose:	**Construction**	Classification:	**Land**	Status:	**Same Request from the Prior CIP**
Department:	Park and Recreation			Supports:	Culture and Leisure
Partners:	Conservation Department; Town Manager			Useful Life:	Between twelve (12) and eighteen (18) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		Yes
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		Yes
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		Yes
18. Will any other department be required to provide assistance in order to complete the project?		Yes
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:		How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title:	**Boat Launch on Charles River**	**Fiscal Year:**	**2021**

Project Description and Considerations

The Town of Needham is adjacent to a major state resource - the Charles River. It creates about 2/3rds of the Town's border, with the City of Newton, the City of Boston, the Town of Dedham, and the Town of Dover, our neighbors on the other side of the river.

CPC funds of $30,000 have been awarded to design an improved boat launch into the Charles River on Town-owned property on South Street, near the intersection of Dedham Avenue, but we have not started the formal design process as this is written, so there isn't a construction estimate. One of the on-call engineer firms will be chosen to work with Park and Recreation/Conservation departments on this project. As this is an outdoor recreation project, it is eligible for CPA funds.

There is an existing unimproved launch for canoes and kayaks, with a circular driveway and parking for 10-12 vehicles. There is pedestrian access, only, to the river. The intention is to keep the launch in its natural setting, but create a more consistent access on a pervious path, and possibly creating the ability for vehicles to back up to the launch area with their boats. Depending on the final design, it is hoped that maintenance will be minimal.

At a minimum, permits would be required from the Needham Conservation Commission.

A project estimate can be provided once the designer is able to provide options and the Town chooses a scope of work. Until a design is in place, it is not known whether there would be any maintenance or staffing costs related to operation.

Though design is funded, the project has not moved forward as Conservation and Park & Recreation staff have needed to concentrate on other projects. The Conservation Department is partnering on this project.

Capital Project Request					
Project Title:	**Rosemary Lake, Camp Property, Trail**			**Fiscal Year:**	**2020**
Purpose:	**Construction**	Classification:	**Land**	Status:	**Amended Request from the Prior CIP**
Department:	Park and Recreation			Supports:	Culture and Leisure
Partners:	DPW, Conservation Department			Useful Life:	Between eighteen (18) and twenty-five (25) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required? **Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	Yes
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$200,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$200,000	$200,000						
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$200,000**	**$200,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title:	**Rosemary Lake, Camp Property, Trail**	**Fiscal Year:**	**2020**

Project Description and Considerations

The Park and Recreation Commission's vision for Rosemary Lake and the Recreation Complex is that it be a place for year-round outdoor recreation. All Town-owned parcels around the lake are now consolidated and a special permit was placed on the property for the building of the pools and complex, so permits are likely needed from the Planning Board, as well as from Conservation Commission for any parts of the project within their jurisdiction. The projects would also be coordinated with DPW's sediment removal project.

Funding has been provided to remove the buildings at the camp property. The goal is to replace the large building with a picnic shelter for programs and other visitors. Some benches would also be added along the trails. Floating docks will be added to both sides of the lake, with a larger dock on the pool side to accommodate paddle boats to be donated by the Exchange Club. Some minor improvements will be made to the trails. In 2018, the Student Conservation Association rebuilt the bridge over the stream. An Eagle Scout has built two outdoor boat racks to hold the department's canoes and kayaks during the summer season. Additional kayaks will be donated or purchased, and a revolving fund program for use of the boats will be created. As was done at the Needham Accessible Reservoir Trail, small features will be added throughout the trails to encourage children's exploration.

Current estimate is based on informal discussions with vendors, must more formal estimates are in the process of being developed.

The current floating dock on the pool side is approximately 30 years old. Access is down a set of stairs. The Conservation Commission will be asked to consider permitting an adjacent location that is easier to access for people of all abilities.

As this is an outdoor recreation project, it is eligible for CPA funding. Volunteers will be sought to help maintain the trail system, including through the Trail Steward program.

Capital Project Request

Project Title:	**Purchase of Open Space**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Land**	Status:	**Same Request from the Prior CIP**
Department:	Park and Recreation			Supports:	Culture and Leisure
Partners:	Board of Selectmen, Conservation Commission			Useful Life:	More than twenty-five (25) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		Not Applicable
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		Not Applicable
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		Yes
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		Yes
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$1,000,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$1,000,000	$1,000,000						
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$1,000,000**	**$1,000,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Purchase of Open Space**	**Fiscal Year:**	**2020**

Project Description and Considerations

At the time of this submission, a specific parcel is not known to be available for purchase.

Without much notice, opportunities to purchase private land to add to the open space inventory surface each year. In particular, some opportunities arise during discussions of the development of private land. This project request is to keep all aware of the possibility, in the near future, of a purchase moving forward. This request is a "place holder" in the event a parcel that benefits the community becomes available. It is possible that some purchases would relate to easements, as opposed to full ownership of the land.

Unexpectedly, in FY 2010, the purchase of two parcels of land on Carol Road and Brewster Drive, as well as a parcel on Charles River Street, adjacent to Walker-Gordon Field were all funded through CPA funds. A conservation restriction would need to be placed on the property, under CPA requirements.

The Open Space and Recreation Plan reflects the goal of making additional purchases, especially in areas of Town without current open space to retain open areas, or to create access to other parcels, including connections to the Charles River. The purchase of parcels adjacent to current open space is also a high priority. Some parcels may require improvements which would be submitted as separate capital improvement projects. Under the current CPA legislation, parcels purchased with CPA funds are eligible for improvement funds from CPA. The CPA indicates how the value of the property is determined.

It is hoped that the cost of appraisal and purchase of conservation restriction can be included in the overall budget for purchase.

The Town Manager and Town Counsel would need to be involved in discussions, deliberations and negotiations.

Capital Project Request

Project Title:	**Outdoor Basketball Courts**			**Fiscal Year:**	**2022**
Purpose:	**Construction**	Classification:	**Infrastructure**	Status:	**Amended Request from the Prior CIP**
Department:	Park and Recreation			Supports:	Culture and Leisure
Partners:	DPW			Useful Life:	Between eighteen (18) and twenty-five (25) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		Yes
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		Yes
18. Will any other department be required to provide assistance in order to complete the project?		Yes
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$135,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	**Project Budget**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Planning/Feasibility	$0							
Design/Engineering	$30,000			$30,000				
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$105,000			$105,000				
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$135,000**	**$0**	**$0**	**$135,000**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Outdoor Basketball Courts**	**Fiscal Year:**	**2022**

Project Description and Considerations

The Town has outdoor basketball courts located at parks, including Mills Field, Greene's Field, RIverside Park, Perry Park; and half basketball courts at Cricket FIeld and Walker-Gordon Field.

Full or half courts are also located at Broadmeadow, Eliot, Hillside, Mitchell , Newman and High Rock, with a new court anticipated at the Williams School.

The Mills Field courts are ready for renovation, new backboards, and striping. The Perry Park courts can be painted, but cannot be rebuilt at the same location due to the former school's foundation. Riverside and Cricket would have minor repairs.

The Park and Recreation Commission is viewing the locations of basketball courts, to determine if a new set is needed in a new location. The design costs are to assist with the scope of work needed for repairs, or creation of a new court at a location where one doesn't currently exist.

DPW will provide guidance on the project scope, likely Parks & Forestry, Highway and Engineering.

As this is an outdoor recreation project, it is eligible for CPA funding.

The Park and Recreation Commission requested moving this project up a year from FY'23 to FY'22. It has been increased by 5%.

Capital Project Request

Project Title:	Sewer Main Replacement		Fiscal Year:	2021
Purpose:	**Design/Engineering**	Classification: **Infrastructure**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Sewer		Supports:	Utilities
Partners:			Useful Life:	More than twenty-five (25) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required? **Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$10,950,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$1,950,000		$1,950,000					
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$9,000,000				$9,000,000			
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$10,950,000**	**$0**	**$1,950,000**	**$0**	**$9,000,000**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Sewer Main Replacement** **Fiscal Year:** **2021**

Project Description and Considerations

This article is to address the Greendale Avenue/Route 128 sewer interceptor from Cheney Street to Great Plain Avenue.

Project Summary

- The existing sewer line is deteriorating and in need of rehabilitation/replacement in order to remain functional.
- The plan is to replace or reline the 12,000 feet (2.25 miles) of 18 inch reinforced concrete gravity sewer main running through Town property along Greendale Avenue near Cheney Street towards Route 128, along the Route 128 right of way, to Great Plain Avenue. This work will be on an interceptor sewer. An interceptor sewer is a trunk sewer that collects and conveys waste water from numerous sewer lines. In FY23, the Town plans to replace the sewer under Route 128 at Great Plain Avenue using horizontal directional drilling in order to avoid major disruptions to the roadway traffic.

Changes from Prior Year Submission

- The Town received funding for a feasbility study in FY19 but has not yet engaged an engineering firm. Funding for design will not be requested until the feasibility study is underway.

Clarification of Questions

3. Massachusetts Department of Transportation (MassDOT) permitting may be required for repair work.

Capital Project Request					
Project Title:	**Sewer Pump Station Improvements/Replacement**			**Fiscal Year:**	**2020**
Purpose:	**Construction**	Classification:	**Infrastructure**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Sewer			Supports:	Utilities
Partners:				Useful Life:	More than twenty-five (25) years

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$4,345,500**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$440,000	$95,000		$345,000				
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$3,905,500	$535,000			$3,370,500			
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$4,345,500**	**$630,000**	**$0**	**$345,000**	**$3,370,500**	**$0**	**$0**	**$0**

$0

FY2020

Capital Project Request

Project Title: **Sewer Pump Station Improvements/Replacement** **Fiscal Year:** **2020**

Project Description and Considerations

Project Summary

- The Town maintains 9 sewer pump stations at elevations below the gravity system. Without these stations, sewage would not enter the Town's sewerage system at these locations. As part of the Wastewater System Master Plan, several wastewater pumping stations were evaluated to assess physical condition, capacity, and the current as well as future flow projections.

Lake Drive

- The pump station at this location is beyond its useful life and requires constant maintenance. The pumps are failing more frequently due to electrical or mechanical issues and require more personnel time and emergency funds to keep the station running.
- The plan is to replace the existing canister pump station with a new canister pump station.

Cooks Bridge

- The pump station at this location is beyond its useful life and requires constant maintenance. The pumps are failing more frequently due to electrical or mechanical issues and require more personnel time and emergency funds to keep the station running. The capacity of the pump must be upgraded to handle the volume of sewage at this location. The controls on the existing pump station are located outside of the building.
- The plan is to replace the existing canister pump station with a new canister pump station. The controls on the replacement pump station will be relocated to inside the building.

Funding Schedule

Project	FY20		FY22	FY23
	D&E	Const.	D&E	Const.
Lake Drive	$95,000	$535,000		
Cooks Bridge			$345,000	$3,370,500

Future Projects

- Warren Street

Clarification of Questions

3. Conservation Commission permitting may be required for site work.

Capital Project Request

Project Title:	**Sewer System Inflow & Infiltration Removal**			**Fiscal Year:**	**2020**
Purpose:	**Construction**	Classification:	**Infrastructure**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Sewer			Supports:	Utilities
Partners:				Useful Life:	More than twenty-five (25) years

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$1,600,000**	How was the Project Cost Determined:	Industry References	
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000			

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$1,600,000	$1,600,000						
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$1,600,000**	**$1,600,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Sewer System Inflow & Infiltration Removal** **Fiscal Year:** **2020**

Project Description and Considerations

In 2016, the Town completed a study that Inflow and Infiltration (I/I) removal in areas around Town over the next ten years. The Town has been undertaking I/I projects using funding from private developments. In future years, funding from private developments will be appropriated at Town Meeting.

Project Summary
- The Town of Needham is under Administrative Orders from the Department of Environmental Protection (DEP) to identify and remove Infiltration and Inflow (I/I) in existing sewer systems. Failure to address I/I will increase the percentage of costs to the Town. If the Town decreases I/I in comparison to participating communities, its percentage of costs will remain level or decrease.
- The Town has implemented an inflow/infiltration removal program and will address inflow separately from infiltration.

Infiltration
- Infiltration is defined as groundwater or storm water runoff that enters the system through deteriorated pipe or manhole structures that need to be repaired. The pipes are aging, causing infiltration. The Town pays to treat and dispose of sewage.
- The Town will develop a design to remove the remaining identified infiltration. Once a design is determined, the Town will remove infiltration as identified in the 2016 BETA report. Various methods used to remove identified infiltration include: replacing sewer manholes, lining sewer mains, replacing sewer mains and services, and testing and sealing joints.

Future Projects
Inflow
- Inflow is defined as clean, non-septic water that is introduced into the system. This water is ground water or rain water, typically being removed by residential sump pumps draining basements directly into the Town's sewerage system.

Capital Project Request

Project Title:	**Drain System Improvements - Water Quality (EPA)**			**Fiscal Year:**	**2020**
Purpose:	**Design/Engineering**	Classification:	**Infrastructure**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Drains			Supports:	Utilities
Partners:				Useful Life:	More than twenty-five (25) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?	No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required? **Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?	No
10. If the project is **NOT** funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	**$2,278,000**	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$278,000	$25,000	$253,000					
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$2,000,000			$2,000,000				
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$2,278,000**	**$25,000**	**$253,000**	**$2,000,000**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Drain System Improvements - Water Quality (EPA)** **Fiscal Year:** **2020**

Project Description and Considerations

The Town entered into a Memorandum of Understanding (MOU) with the Environmental Protection Agency (EPA) to commence a Town-wide investigation of stormwater discharge to address the pollutants through stormwater into the Charles River Basin and other water bodies. Incorporated into this plan are improvements to the Stormwater Drainage System to upgrade the quality of the water discharged into the Charles River in Town. This request is to support action items identified in the MOU. In 2003, the EPA National Pollutant Discharge Elimination System (NPDES) Stormwater Drainage Permit took effect. It incorporated several requirements identified in the existing Town's MOU. In April 2016, the second permit issued by the EPA was submitted and went into effect July 1, 2018. This article addresses some of the requirements for NPDES.

Project Summary

60 Wildwood Drive Pond Analysis

- The pond at 60 Wildwood Drive is suffering from eutrophication. Eutrophication is when the pond has heavy plant decay and sediment accumulation, along with other issues, that are damaging to the pond. This can result in loss of aquatic life, decreased water transparency, and water treatment problems. Eutrophication is considered a pollution problem and this analysis will help to identify the various issues associated with it.
- The Town will conduct a feasibility study to determine the best way to address the problem.

The Town Reservoir Sediment Removal

- The sediment at the bottom of the reservoir is contaminated and must be removed. This is a category 5 impaired water body under NDPES. Category 5 is worst rating a water body can receive from the EPA.
- The Town will engage a designer to determine the best way to remove the sediment.

Funding Schedule

	FY20	**FY21**	**FY22**
Project	**D&E**	**D&E**	**Const.**
60 Wildwood Drive Pond Analysis	$25,000		
Town Reservoir Sediment Removal		$253,000	$2,000,000

Changes from Prior Year Submission

- The request for 60 Wildwood Drive Pond Analysis was not funded in FY19 and is being resubmitted in FY20.
- The increase in FY21 and FY22 is due to an updated quote.

Capital Project Request			
Project Title:	**Drain System Improvements - Water Quality (EPA)**	**Fiscal Year:**	**2020**

Supplemental Information

Future Projects
Action Items from Watershed Management Plan funded in FY15

Clarification of Questions
3. Conservation Commission, State, and Federal permitting may be required for dredging.
12. Yes, this a project for which an Initial Eligibility Project Application may be filed with the Community Preservation Committee.

Capital Project Request					
Project Title:	**Charles River Water Treatment Plant HVAC Upgrades**			**Fiscal Year:**	**2022**
Purpose:	**Design/Engineering**	Classification:	**Building**	Status:	**Informational Only Details Incomplete**
Department:	Public Works - Water			Supports:	Other (see below for information)
Partners:	Public Works - Building Maintenance			Useful Life:	Between eighteen (18) and twenty-five (25) years

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:		How was the Project Cost Determined:		
Budget Impact:				

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Charles River Water Treatment Plant HVAC Upgrades**	**Fiscal Year:**	**2022**

Project Description and Considerations

Project Summary

- The Charles River Water Treatment Plant is almost 20 years old. The heating, ventilation, and air conditioning (HVAC) controls are at the end of their useful life. Some of the controls are no longer supported by the manufacturer, making repairs and maintenance difficult. In addition to the HVAC controls, the boilers are also approaching the end of their useful lives. Many of the parts needed to maintain the boilers are no longer manufactured. The existing boilers are inefficient. The setup of the boiler room makes it incredibly difficult to reach some of the equipment that is in need of repair. The domestic hot water heater is also reaching the end of its useful life and is rusting due to cycling.
- The boiler room and entire HVAC system will be reviewed by an outside engineer to determine the best plan to upgrade the outdated equipment and better utilize the existing space. The equipment at the Charles River Water Treatment Plant will be analyzed to determine what the best equipment given space constraints. Any major construction changes will be determined with this plan.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. This request may require building permits.
4. This request may require support from ITC.
5. This request will require support from Building Maintenance.
15. This request will improve the HVAC in the building.
16. The updates will be permanently installed.

Capital Project Request					
Project Title:	**Fire Flow Improvements**			**Fiscal Year:**	**2021**
Purpose:	**Design/Engineering**	Classification:	**Infrastructure**	Status:	**Informational Only Details Incomplete**
Department:	Public Works - Water			Supports:	Utilities
Partners:				Useful Life:	More than twenty-five (25) years

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			Yes
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$2,940,000**	How was the Project Cost Determined:	In-House Estimate	
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000			

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$540,000		$540,000					
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$2,400,000			$2,400,000				
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$2,940,000**	**$0**	**$540,000**	**$2,400,000**	**$0**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Fire Flow Improvements**	**Fiscal Year:**	**2021**

Project Description and Considerations

In 2016, the Town received funding for a feasibility study which explored the issue of water pressure in the Tower Hill and Birds Hill areas. The preliminary draft of the feasibility study was completed in 2017. A final meeting is needed to select the appropriate approach. This article addresses these issues.

Project Summary

- An outside consultant recommended that the Town improve water pressure in the Tower Hill and Birds Hill areas.
- The goal is to create a high pressure zone in both areas, potentially supplied by water booster stations. The Town is currently working on solidifying a plan to move forward.

Changes from Prior Year Submission

- The design/engineering request has been pushed to FY21 and the construction request has been pushed to FY22 to allow for a detailed analysis of the final report from the feasibility study. The estimates provided are based upon a water system report and may be altered, depending upon which option the Town decides to pursue.

Clarification of Questions

14. The water pressure in these areas has the potential to be a public health or safety concern, specifically for the Fire Department.

Capital Project Request					
Project Title:	**Water Distribution Study**			**Fiscal Year:**	**2024**
Purpose:	**Design/Engineering**	Classification:	**Infrastructure**	Status:	**Informational Only Details Incomplete**
Department:	Public Works - Water			Supports:	Utilities
Partners:				Useful Life:	More than eighteen (18) years

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$230,000**	How was the Project Cost Determined:	In-House Estimate	
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000			

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$230,000					$230,000		
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$230,000**	**$0**	**$0**	**$0**	**$0**	**$230,000**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Water Distribution Study** **Fiscal Year:** **2024**

Project Description and Considerations

This article is for a study to provide an analysis of the Town's existing water infrastructure.

Project Summary

- The current master plan was conducted in 1998 and the Town is coming to its completion of the recommendations. Since the last time the Town studied its water infrastructure, Needham Crossing, formerly the 128 Business Park, has significantly changed with more dense development and different industries and uses. This new water distribution study is to evaluate the existing water distribution system to identify any deficiencies that exist and determine what repairs should be made to ensure that the system can provide the required flow and pressure.
- The new 20 year master plan will include the following:
  - Conduct a thorough asset inventory of the system and conduct a hydraulic analysis
  - Prioritize the rehabilitation and replacement of the asset information related to condition, performance, replacement values, failure modes, probability of failure, and criticality
  - Develop a new 20 year forecast for projected growth
  - Develop an annual estimate of needed reserves and an annual budget
  - Implement the asset management plan
  - Review and revise the current asset management plan

Changes from Prior Year Submission

- This request is being pushed out a year to FY24 and remaining informational to allow the Town to evaluate future conditions. The increase in cost is due to inflation.

Capital Project Request					
Project Title:	**Water Distribution System Improvements**			**Fiscal Year:**	**2020**
Purpose:	**Construction**	Classification:	**Infrastructure**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Water			Supports:	Utilities
Partners:				Useful Life:	More than twenty-five (25) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		No
6. If funded, will additional permanent staff be required?	**Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		No
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		No
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		No
19. If funded, will this project increase the operating expense for any other department?		No

Project Cost:	**$6,148,500**	How was the Project Cost Determined:	In-House Estimate	
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000			

Project Budget Elements	**Project Budget**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Planning/Feasibility	$0							
Design/Engineering	$196,500	$49,500	$42,000		$105,000			
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$5,952,000	$4,742,000	$330,000	$405,000		$475,000		
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$6,148,500**	**$4,791,500**	**$372,000**	**$405,000**	**$105,000**	**$475,000**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Water Distribution System Improvements** **Fiscal Year:** **2020**

Project Description and Considerations

Project Summaries

- Portions of the Town's water infrastructure are over 75 years old and are approaching the end of their useful life. In order to ensure a continual supply of water to the public, the Department of Public Works must partake in a rehabilitation program including maintenance, repair, and replacement of aging pipes. Replacement of water pipes is prioritized, taking into consideration the condition of the pipe, water break history, and adequacy of water flow to fire hydrants.

Bennington Street/High Street to Concord Street

- The 8" water main constructed in 1926 is at the end of its useful life.
- Dig and replace 650 linear feet of 8" water main and services. The process includes: installing temporary bypass piping, diging and removing existing pipe, installing replacement pipe, installing temporary trench patch, and overlaying asphalt gutter to gutter, including sewerage and drainage castings and roadway markings.

Country Way

- The water main constructed between 1961 and 1965 has a history of breakage that has accelerated it in the replacement program.
- Dig and replace 1,200 linear feet of 8" water main . The process includes: installing temporary bypass piping, diging and removing existing pipe, installing replacement pipe, installing temporary trench patch, and overlaying asphalt gutter to gutter, including sewerage and drainage castings and roadway markings.

Alder Brook Lane

- The water services are lead lined. There is a 2" water main that is aging and connecting new water services to the aging pipe may compromise the pipe.
- Remove and replace all lead services and replace 340 linear feet of 2" pipe with 6" pipe. This will include the installation of a fire hydrant at the end of Alder Brook Lane, installation of a temporary trench patch, and overlay of asphalt gutter to gutter.

Thorpe Road/Webster Street to Manning Street

- The water main constructed between 1923 and 1953 is coming to the end of its useful life.
- Design and replace 330 linear feet of 8" pipe.

Mills Road/Sachem Road to Davenport Avenue

- The water main constructed in 1896 is coming to the end of its useful life.
- Design and replace 500 linear feet of 8" pipe.

Mayo Avenue/Harris Avenue to Great Plain Avenue

- The water main constructed in 1913 is coming to the end of its useful life.
- Design and replace 1,060 linear feet of 8" pipe.

Capital Project Request

Project Title: **Water Distribution System Improvements** **Fiscal Year:** **2020**

Kingsbury Street/Oakland Avenue to Webster Street
- The water main constructed in 1892 and 1965 is coming to the end of its useful life.
- Design and replace 1,500 linear feet of 8” pipe.

Oakland Avenue/May Street to Highland Avenue
- The water main constructed in 1893 is coming to the end of its useful life.
- Design and replace 1,100 linear feet of 8” pipe.

Emerson Place (dead end)
- The water main constructed in between 1946 and 1954 is coming to the end of its useful life and has a history of breakage.
- Replace 130 linear feet of 2” pipe with 6” pipe.

Rosemary
- There is a water main that is currently located under the lake, making leaks difficult to detect and repairs difficult to conduct. The water main needs to be relocated.
- The 8” water main under the lake will be removed and relocated to Rosemary Street.

Clark Circle
- There are currently two dead end water mains at this location. Redesigning and rehabilitating the water main will improve water quality at this location.
- The plan is to design and install 300 linear feet of 8” pipe in order to connect two dead end water mains in a loop.

Failing Lined Transmission Water Mains (locations below)
- The existing water line dates from 1936-1939 and is cast iron with bitumastic or coal tar liner. The lining of these pipes breaks down over time, causing discoloration in the water and concern for the water quality in the areas serviced by this line. The Town began addressing this issue in 2008, when there was approximately 19,000 linear feet of piping in need of replacement. During this first phase, piping was replaced extending from Charles River Street to Pine Street and a section between Oak Street and Chestnut Street to School Street. Additionally, the 14” water main was relined from the Charles River Water Treatment Facility to Grove Street.The second phase of this project began in 2010 with the replacement of the 14” water main line extending from Grove Street to Central Avenue with a new 16” water main. In FY16, the Town replaced the water main in Oak Street from Maple Street to Chestnut Street and in Chestnut Street from Oak Street to School Street. This project is to replace the remainder of existing pipe.
- The Town will replace a total of 5,500 linear feet of 14” water main with a new 16” water main from the intersection of Pine Street to Marked Tree Road to High Rock Street. This project will include replacing the pipe and reconstruction of the road.

Capital Project Request

Project Title: **Water Distribution System Improvements** **Fiscal Year:** **2020**

Funding Schedule

Project	FY20		FY21		FY22	FY23	FY24
	D&E	Const.	D&E	Const.	Const.	D&E	Const.
Bennington Street/High Street to Concord Street		$430,000					
Country Way		$430,000					
Alder Brook Lane		$82,000					
Thorpe Road/Webster Street to Manning Street; Mills Road/Sachem Road to Davenport Avenue; Mayo Avenue/Harris Avenue to Great Plain Avenue			$42,000		$405,000		
Kingsbury Street/Oakland Avenue to Webster Street; Oakland Avenue/May Street to Highland Avenue						$105,000	$475,000
Rosemary	$49,500			$330,000			
Water Main Replacement		$3,800,000					

Changes from Prior Year Submission

- All of the water system rehabilitation projects have been pushed out a year and costs have been inflated.
- The project at Alder Brook Lane was added into FY20 for $82,000 because there are lead line services off of an old pipe.
- The project at Rosemary was added in FY20 for $49,500 because the Town is draining the lake for the last time during the summer of 2019, making it difficult to detect leaks moving forward.

Future Projects

- Fenton Road/West Street to Pershing Road
- Greenough Street/Pine Grove Street to Avery Street
- Pine Grove Street, Hillside Avenue to exiting 8"
- Tower Avenue/Greendale Avenue to Lexington Avenue 800lf of 12"
- Rosemary Pond Water Main Replacement
- Gage Street 8" (320')
- Holland Terrace 6" (260')
- Fairlawn 6" (270')
- Marked Tree from High Rock to Central Ave
- Central Ave from High Rock to Pine Street (5500')
- South Street from Charles River to Chestnut Street (7000')

Clarification of Questions

3. Conservation Commission permitting may be required for site work.

Capital Project Request					
Project Title:	**Water Service Connections**			**Fiscal Year:**	**2022**
Purpose:	**Construction**	Classification:	**Infrastructure**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Water			Supports:	Utilities
Partners:				Useful Life:	More than eighteen (18) years

Parameters			**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			Yes
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$600,000**	How was the Project Cost Determined:	Current Contract	
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000			

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$600,000			$200,000	$200,000	$200,000		
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$600,000**	**$0**	**$0**	**$200,000**	**$200,000**	**$200,000**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Water Service Connections** **Fiscal Year:** **2022**

Project Description and Considerations

Project Summary

- There are old iron pipe water services that may contain lead and need to be removed. System wide, there are approximately 1,000 services that still need to be replaced in the system. Each calendar year has seen the replacement of additional services, as indicated below:

  CY07 – 126
  CY08 – 170
  CY09 – 174
  CY10 – 17
  CY11 – 145
  CY12 – 102
  CY13 – 200
  CY14 – 152
  CY15 – 110
  CY16 – 12*
  CY17 – 140
  CY18 – 99 (as of September 2018)
  **Decrease in services replaced due to the contracted vendor being released from their contract and the Town rebidding the work.*
- Total and partial lead services are replaced at least one year prior to a road reconstruction/paving project. Each year, additional services are removed and replaced.

Changes from Prior Year Submission

- The funding request is being pushed up to FY22 because the replacements have been occurring at a faster rate than anticipated.

Clarification of Questions

14. Old iron pipe water services in the water distribution system that may contain lead is a documented public health or safety condition.

Capital Project Request								
Project Title:	**Water Supply Development**						**Fiscal Year:**	**2021**
Purpose:	**Design/Engineering**		Classification:	**Infrastructure**		Status:	**Amended Request from the Prior CIP**	
Department:	Public Works - Water					Supports:	Utilities	
Partners:						Useful Life:	More than twenty-five (25) years	

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			Yes
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No

Project Cost:	**$1,693,000**	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than $5,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$433,000		$433,000					
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$1,260,000				$1,260,000			
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$1,693,000**	**$0**	**$433,000**	**$0**	**$1,260,000**	**$0**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Water Supply Development** **Fiscal Year:** **2021**

Project Description and Considerations

Project Summary

- The Charles River Well Field has three wells, allowing it to operate at full capacity. Whenever one of the wells is taken offline for routine maintenance and repairs, the Town has to rely on MWRA water to meet its daily demands. With an additional fourth well, the Town would be able to take a well offline and continue to operate at its full capacity, allowing for more independence during maintenance periods.
- This funding request is for both the design/engineering and the construction phases. The design/engineering phase includes DEP and Conservation permitting, exploration and test wells program, and the design of a pitless well with appurtenance. The construction phase is for the installation of a well approximately 100’ deep with control, pump, and electrical included. There would be no changes to the Town’s MWRA withdrawal permit.

Changes from Prior Year Submission

- This request is being pushed back to FY21 to give the Town time to determine the implications of the permit withdrawal. Mass DEP had a withdrawal permit for the Town's wells, which gave them jurisdiction to mandate a water restriction, even though the Town gets supplemental water from MWRA. The Town chose to give up its withdrawal permit and remove it from the jurisdiction of Mass DEP. The Town needs to confirm that creating a redundant well will not force the Town to again enter into a withdrawal permit and be subject to the Mass DEP jurisdiction. The increase in cost is due to inflation.

Clarification of Questions

3. This project requires permitting from DEP and Conservation.
7. The operating budget will need to be increased in order to cover increased monitoring and maintenance expenses associated with having an additional well.
16. The well equipment is intended to be permanently installed at the location of its use.

Capital Project Request

Project Title:	**Fleet Replacement Program**			**Fiscal Year:**	**2020**
Purpose:	**Acquisition**	Classification:	**Equipment**	Status:	**Amended Request from the Prior CIP**
Department:	Finance			Supports:	Other (see below for information)
Partners:	Building, Fire, Health and Human Services, Police, Public Works, and the School Department			Useful Life:	Varies between 6 and 20 years

Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?			No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			Not Applicable
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Not Applicable
6. If funded, will additional permanent staff be required?	**Total New FTE's:**	0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			Yes
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?			No
10. If the project is **NOT** funded, will current Town revenue be reduced?			Not Applicable
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			Not Applicable
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			Yes

Project Cost:	**$10,225,761**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	May increase annual operating expenses between $5,001 and $25,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$0							
Construction Management	$0							
Equipment	$10,225,761	$2,106,572	$2,071,403	$2,594,627	$1,127,048	$2,326,111		
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$10,225,761**	**$2,106,572**	**$2,071,403**	**$2,594,627**	**$1,127,048**	**$2,326,111**	**$0**	**$0**

$0 FY2020

Capital Project Request			
Project Title:	**Fleet Replacement Program**	**Fiscal Year:**	**2020**

Project Description and Considerations

The Town's fleet replacement program is funded through both the capital plan and the operating budget. A major equipment expense for the Town is rolling stock. The Town relies upon many types and sizes of vehicles in order to provide services, respond to emergencies, maintain public facilities, and improve the infrastructure in the community. The fleet replacement program consolidates all vehicles and special equipment attachments under one submission, but allocation of resources is looked at on a department by department basis rather than as one global replacement schedule. Needs and purposes for equipment differ significantly, and no department can do its work without the equipment. We classify the fleet program in three categories: core fleet (general purpose vehicles), special purpose/high value vehicles, and snow and ice equipment. The program is intended to centrally present and review the Town's rolling stock operations in order to ensure timely, cost effective, and high quality replacement of vehicles, maintenance, fueling, and short-term transportation. However, the Police Department vehicles are not included in this request. Generally, the Police Department vehicles are funded through the operating budget as many vehicles in the department do not meet the threshold to be considered part of the capital program. The Needham Public Schools fleet replacement program is funded through the capital process, but the School Department does from time to time acquire additional vehicles outside of the capital process and Town Meeting votes. A majority of the Town's fleet maintenance and management is performed by the Fleet Division of the Public Works Department. Other maintenance work is provided off-site by vendors due to factors such as specialized work, volume, or warranty.

Managing and maintaining a fleet of more than 230 vehicles – from passenger vehicles to large heavy duty diesel trucks and tractors – involves some of the Town's most environmentally consequential choices. Considering the number of vehicles purchased and the thousands of gallons of fuel used, the fleet represents one of the Town's opportunities to meet its goal of environmentally responsible and sustainable operations.
The most obvious and substantial environmental impacts of the fleet for the Town are, of course, tailpipe emissions and fuel use. However, an environmentally superior fleet encompasses a number of other factors, only some of which are under the control of fleet operations. For example, the Town's ability to influence vehicle manufacturing is limited, even though the process involves huge amounts of material extraction, use of natural resources and is responsible for significant air and water pollution. The elements that the Town's fleet operations can control or influence to achieve a cleaner and greener fleet include the following:

- Fleet size
- Fuel use, type, and amount
- Fueling procedures - preventing pollution from incidental fuel spills
- How vehicles are maintained, e.g. avoiding oil leaks, ensuring proper tire inflation, etc.
- Use of maintenance materials, e.g., alternatives to hydraulic fuels, or recycled anti-freeze
- Use of recycled oil, and, as appropriate, tires
- Use, storage and disposal of hazardous materials used in vehicle maintenance
- Vehicle type, e.g., fuel efficiency, size, and availability of alternatives

The Town's fleet replacement program was established in FY2015. This represents a budget and schedule for the Town's rolling stock fleet of approximately 239 vehicles, trailers, and large specialized attachments and the School Department fleet of vans and buses. General purpose vehicles include pickup trucks, a variety of police vehicles, school buses, sedans, SUV's, and vans (98). They comprise approximately 41 percent of the entire fleet. General purpose vehicles are utilized in every department and are relatively inter-changeable. The replacement of these vehicles can proceed on a regular schedule and should be considered part of the Town's base recurring costs.

Specialized, high value vehicles, and snow and ice equipment comprise of the other 34 percent of the fleet. These vehicles and equipment are just as integral to Town operations as the general purpose vehicles, but serve the unique purposes of specific departments or divisions. Included in this group are the high value vehicles such as ambulances, large dump trucks, fire engines, street sweepers, and others for which appropriations need to be planned.

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Capital Project Request

Project Title: **Fleet Replacement Program** **Fiscal Year:** **2020**

Supplemental Information

The estimated cost of the identified replacements (including the school department) for core fleet, specialize equipment, and snow and ice equipment is $10,225,761 which is up from the prior CIP five-year submission of $8,284,433 . The change is due to the addition of fiscal year 2024 and increased cost estimates for some specialized equipment, most notably fire apparatus, and several vehicles which should be replaced in FY2020 or FY2021 which is earlier than planned (for example unit 2) or were not funded in the previous year (units 38, 181, and 457). We have offset some of the cost by delaying the replacement of several vehicles which were scheduled for replacement in FY2020 (units 10, 17, 19, 30, 39, 164, and 756). The estimated core fleet replacement cost over the five year period is $2,022,387 which is down from the prior CIP amount of $2,385,803; specialized equipment is $7,143,890 which is up significantly from the prior CIP amount of $5,548,947 ; and snow and ice equipment is $1,059,484 which also up from the prior amount of $328,346. The FY2020 request is for vehicles that have been identified to be replaced based on, condition, functionality, usability, or cost of maintenance. The vehicles identified for replacement in FY2021 and beyond are based on industry recommended replacement schedules. However, the schedule is adjusted annually based on the actual condition of the vehicles, the serviceability of the vehicles, demands on the equipment, and financial resources.

Specific Questions:

Question 3: Does this project require any permitting by any Town or State agency? All vehicles which travel the public roadways must be registered through the Massachusetts Department of Motor Vehicles.

Question 7: If funded, will the operating budget need to be increased to cover operating expenses? Yes, as part of the fleet replacement program, there are recommendations to change some of the vehicles types or increase the number of vehicles available for use. In those years where such a change is approved, there may be an increase in insurance, and perhaps specialized tools in order to better maintain the new equipment.

Question 11: Is specialized training or annual licensing required that the Town will need to pay in order to use the asset? Yes, some vehicles require a commercial driver's license to operate. Other vehicles have specialized equipment which requires period training and demonstrations on the proper use of the equipment.

Question 18: Will any other department be required to provide assistance in order to complete the project? Yes, the various requesting departments must assist in the final assessment of the vehicle to be replaced, procurement of the new vehicle, and the discontinuation or transfer of the current vehicle. The vehicle may be retained as a pool vehicle for the department, transferred to another department, auctioned or traded, or otherwise disposed.

Question 19: If funded, will this project increase the operating expense for any other department? Increase costs may be incurred for any department that increases the number of vehicles used in the fleet. The Town's commercial and vehicle insurance expense could increase.

The total request consists of both General and Enterprise Fund assets of which the portion that relates to an enterprise fund would be paid by the applicable enterprise fund. The table below summarizes the amount that would be paid from enterprise funds if approved.

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Capital Project Request

Project Title: **Fleet Replacement Program** **Fiscal Year:** **2020**

Supplemental Information

Fund	Approved FY2019	Request FY2020	Request FY2021	Request FY2022	Request FY2023	Request FY2024	5 Year Request
General Fund	$1,821,605	$1,583,817	$1,284,426	$1,915,298	$1,031,794	$2,141,595	$7,956,930
RTS Enterprise	$377,471	Discontinued					$0
Sewer Enterprise	$132,111	$522,755	$735,005	$377,262	$41,618	$149,723	$1,826,363
Water Enterprise	$355,048	$0	$51,972	$302,067	$53,636	$34,793	$442,468
Total	$2,686,235	$2,106,572	$2,071,403	$2,594,627	$1,127,048	$2,326,111	$10,225,761

	Approved FY2019	Request FY2020	Request FY2021	Request FY2022	Request FY2023	Request FY2024	5 Year Request
General Fund							
Core Fleet - Town	7	8	6	7	2	4	27
Core Fleet - Schools	2	3	2	2	2		9
Specialized	3	2	2	7	2	4	17
Trailers	1	1	1	1		2	5
Snow and Ice	1	2	1		2		5
RTS Enterprise							
Core Fleet	2						0
Specialized	1						0
Sewer Enterprise							
Core Fleet	2		1		1		2
Specialized		2	2	2		1	7
Trailers				1			1
Water Enterprise							
Core Fleet			1	1			2
Specialized	2			2			2
Trailers			1		2	2	5
Total	21	18	17	23	11	13	82

Unit #	Department	Year	Make/Model	Vehicle Type	Primary Purpose	FY20 Funding Amount	FY21 Funding Amount	FY22 Funding Amount	FY23 Funding Amount	FY24 Funding Amount
2	DPW Fleet	2010	Ford F150 XL	Pick Up	Fleet Supervisory Vehicle	37,060				
3	DPW Fleet	2012	Ford F450	Utility Truck	Fleet Field Service Truck; Snow & Ice Vehicle (Mechanic)			78,567		
5	DPW RTS	2011	INTERNATIONAL 7400 Serie	Dump Truck	RTS All-Purpose Utility Vehicle; Snow & Ice Vehicle (Primary)				247,365	
9	DPW Highway	2012	INTERNATIONAL 7400 Serie	Dump Truck	Highway Material & Equipment Transport; Snow & Ice Vehicle (Primary)					287,978
10	DPW Highway	2010	INTERNATIONAL 7400 Serie	Dump Truck	Highway Material & Equipment Transport; Snow & Ice Vehicle (Primary)			269,978		
11	DPW Sewer	2013	FORD EXPLORER	SUV	Sewer Backflow Inspection Vehicle; Snow & Ice Vehicle (Supervisory)				41,618	
17	DPW Sewer	2012	Ford F550	Dump Truck	Sewer Material Transport (Excavation); Snow & Ice Vehicle (Primary)			73,233		
19	DPW Sewer	2010	INTERNATIONAL 7400 Serie	Dump Truck	Sewer Heavy Material Transport (Excavation); Snow & Ice Vehicle (Primary)			268,830		
23	DPW Sewer	2011	Ford F350	Utility Truck	Sewer Personnel & Supply Transport (Pump Station Maintenance); Snow & Ice Vehicle (Primary)		56,054			
25	DPW Water	2012	Ford F450	Utility Truck	Water Personnel & Supply Transport (Excavation); Snow & Ice Vehicle (Primary)			96,907		
29	DPW Sewer	2008	INTERNATIONAL 7400 Serie	Jet Vac	Sewer Maintenance Vehicle (Jet Truck)	321,268				
30	DPW Water	2012	Ford F550	Dump Truck	Water Material Transport (Excavation); Snow & Ice Vehicle (Primary)			136,811		
31	DPW Water	2011	Ford F150	Pick Up	Water Supervisory Vehicle (General); Snow & Ice Vehicle (Supervisory)		44,118			
32	DPW Highway	2012	Ford F350	Pick Up	Highway Supervisory Vehicle; Snow & Ice Vehicle (Supervisory)			68,349		
34	DPW RTS	2001	MACK TRACTOR	Tractor	RTS Equipment Transport (Trailer/Screens)					182,172

Unit #	Department	Year	Make/Model	Vehicle Type	Primary Purpose	FY20 Funding Amount	FY21 Funding Amount	FY22 Funding Amount	FY23 Funding Amount	FY24 Funding Amount
35	DPW Sewer	1999	INTERNATIONAL 4900 Serie	6 Wheel Dum	Sewer Maintenance Vehicle (Catch Basin Cleaner); Snow & Ice Vehicle (Secondary)	201,487				
36	DPW RTS	2014	WARREN UTILITY Trailer	Trailer	RTS Equipment Trailer (Open-Top Containers)					79,281
37	DPW Sewer	2010	INTERNATIONAL 7500 Serie	Vactor	Sewer Maintenance Vehicle (Vactor)		398,030			
38	DPW Parks	2007	INTERNATIONAL IH 4300 Se	Truck	P&F Forestry Maintenance Vehicle (Aerial Lift Truck)	274,434				
39	DPW Highway	2012	Ford F550	Dump Truck	Highway Personnel and Supply Transport; Snow & Ice Vehicle (Primary)			73,233		
40	DPW Water	2012	Ford F350	Pick Up	Water Supervisory Vehicle (Excavation); Snow & Ice Vehicle (Primary)			68,349		
43	DPW Highway	2012	Ford F350	Pick Up	Highway Supervisory Vehicle; Snow & Ice Vehicle (Supervisory)			66,407		
45	DPW Engineering	2012	FORD E150 VAN	Passenger Va	Engineering Surveying Vehicle			45,656		
56	DPW RTS	2010	Ford F150	Pick Up	RTS Supervisory Vehicle	50,332				
57	DPW Highway	2012	Ford F350	Pick Up	Highway Supervisory Vehicle; Snow & Ice Vehicle (Supervisory)	63,804				
58	DPW RTS	2011	STECO REFUSE TRAILER	Trailer	RTS Equipment Trailer (Open-Top Containers)		Operating Budget			
60	DPW RTS	2012	STECO REFUSE TRAILER	Trailer	RTS Equipment Trailer (Open-Top Containers)			Operating Budget		
64	DPW RTS	2013	STECO REFUSE TRAILER	Trailer	RTS Equipment Trailer (Open-Top Containers)				Operating Budget	
91	DPW RTS	2000	CONSTRUCTION SCALP TRUCK		RTS Material Processing Vehicle (Scalper Screen)			143,142		
92	DPW Engineering	2012	FORD EXPLORER	SUV	Engineering Surveying Vehicle; Snow & Ice Vehicle (Supervisory)	41,550				

Unit #	Department	Year	Make/Model	Vehicle Type	Primary Purpose	FY20 Funding Amount	FY21 Funding Amount	FY22 Funding Amount	FY23 Funding Amount	FY24 Funding Amount
101	DPW Sewer	2010	CASE LOADER	Yellow Iron	Sewer Construction Vehicle (Loader); Snow & Ice Vehicle (Primary)		280,921			
102	DPW Highway	2008	JOHN DEERE LOADER 544J	Equipment	Highway Construction Vehicle (Loader); Snow & Ice Vehicle (Primary)	252,140				
103	DPW Sewer	2012	JOHN DEERE BACKHOE	Yellow Iron	Sewer Construction Vehicle (Backhoe Loader); Snow & Ice Vehicle (Primary)					149,723
107	DPW Highway	2008	CAMOPLAST SW4S	Yellow Iron	Snow & Ice Vehicle (Sidewalk)	178,571				
108	DPW Highway	2011	TRACKLESS TRACTOR	Yellow Iron	Highway Maintenance Vehicle (Mower); Snow & Ice Vehicle (Primary)				197,985	
112	DPW Highway	2011	Prinoth	Yellow Iron	Snow & Ice Vehicle (Sidewalk)				245,967	
113	DPW Highway	2008	CAMOPLAST SW4S	Yellow Iron	Snow & Ice Vehicle (Sidewalk)		184,821			
121	DPW Highway	2007	Vermac UTILITY TRAILER	Trailer	Highway Equipment Trailer (Electronic Message Board)			17,213		
122	DPW Highway	2007	Vermac UTILITY TRAILER	Trailer	Highway Equipment Trailer (Electronic Message Board)			17,213		
123	Police	2009	CARMATE UTILITY TRAILER	Trailer	Highway Equipment Trailer					
145	DPW RTS	2011	Work sport PACE UTILITY TI	Trailer	RTS Equipment Transport (Water Cannon)				-	
151	DPW Water	2008	INGERSOLL RAND AIR COMI	Trailer Compr	Water Equipment Trailer (Air Compressor)				16,580	
164	DPW Water	2008	Trailer ATLAS Copco	Trailer MDT G	Water Equipment Trailer (Generator)				37,056	
168	DPW Sewer	2010	GORMAN UTILITY TRAILER	Trailer	Water Equipment Trailer (Pump)			35,199		
181	DPW Highway	2012	Elgin PELICAN Sweeper	Equipment	Highway Maintenance Vehicle (Sweeper)	313,169				

Unit #	Department	Year	Make/Model	Vehicle Type	Primary Purpose	FY20 Funding Amount	FY21 Funding Amount	FY22 Funding Amount	FY23 Funding Amount	FY24 Funding Amount
186	DPW Parks	2010	GIANT LEAF VAC TRAILER	Trailer	P&F Equipment Trailer (Leaf Vac)			26,623		
254	DPW Parks	2013	BANDIT BRUSH CHIPPER	Equipment	P&F Equipment Trailer (Chipper)				73,183	
256	DPW Parks	2008	TRAILER UTILITY	Trailer	P&F Equipment Trailer (Chipper)	64,936				
259	DPW Highway	2010	HUDSON TRAILER	Trailer	Highway Equipment Trailer (Pavement Roller)		3,354			
260	DPW Water	2009	FELLING UTILITY TRAILER	Trailer	Water Equipment Trailer (Roller)					29,672
261	DPW Water	2009	HUDSON TRAILER HD10	Trailer	Water Equipment Trailer (Excavator)					5,121
324	DPW Water	2006	CONST UTILITY TRAILER	Trailer	Water Equipment Trailer (Excavation Equipment)		7,854			
350	DPW Parks	2010	JOHN DEERE TRACTOR LOA	Yellow Iron	P&F All-Purpose Maintenance Vehicle (Utility Tractor)			67,245		
400	Building Inspector	2005	Ford Taurus	Sedan	Field work			35,441		
404	Health and Human Services	2012	Ford E350 VAN	Passenger Vai	Passenger Transport			93,575		
452	Finance Assessing	2013	Ford Taurus	Sedan	Field Work site visits for appraisal work				38,305	
453	Building Inspector	2016	Ford Focus	Sedan	Field work					37,966
454	Building Inspector	2014	Ford Fusion	Sedan	Field work					37,966
455	Building Inspector	2016	Ford Focus	Sedan	Field work					37,966
456	Building Inspector	2014	Ford Fusion	Sedan	Field work					37,966

Unit #	Department	Year	Make/Model	Vehicle Type	Primary Purpose	FY20 Funding Amount	FY21 Funding Amount	FY22 Funding Amount	FY23 Funding Amount	FY24 Funding Amount
457	Building Inspector	2006	Ford Taurus	Sedan	Field work	33,085				
573	Police	2018	Ford Explorer	SUV	Front Line Cruiser		Operating Bdgt			
577	Police	2016	Ford Explorer	SUV	Command Unit for all emergency units within Town	Operating Bdgt				
589	Police	2019	Fleet Increase Request		Front Line Cruiser	Operating Bdgt				
700	DPW Building Maintenance	2012	Ford Econ Van E250	Van	Facilities Supply & Equipment Transport (Electrical)				48,461	
705	DPW Building Maintenance	2006	Ford Econ Van E250	Van	Facilities Supervisory Vehicle	37,060				
707	DPW Building Maintenance	2008	Ford Econ Van E250	Van	Facilities Supply & Equipment Transport (HVAC)		45,239			
710	DPW Parks	2008	LEAF UTILITY TRAILER	Trailer	Facilities Equipment Trailer (Leaf Vac)					8,077
712	DPW Building Maintenance	2011	Ford Econ Van E250	Van	Facilities Supply & Equipment Transport (Plumbing)			46,822		
713	DPW Building Maintenance	2012	Ford F450	Dump Truck	Facilities Heavy Field Service Vehicle					84,163
715	DPW Building Maintenance		Fleet Increase Request		Plumbing Operations	43,709				
720	DPW Building Maintenance	2009	Ford Escape Hybrid	SUV	Shift Supervisor Vehicle		34,243			
756	DPW Building Maintenance	2010	Ford F150	Pick Up	Facilities Supervisory Vehicle			39,700		
Bus 1	School	2017	BLUE BIRD 303 SCHOOL BU	School Bus	Pupil Transport				90,264	
Bus 14	School	2012	IC SCHOOL BUS	Mini Bus	Pupil Transport	81,942				

Unit #	Department	Year	Make/Model	Vehicle Type	Primary Purpose	FY20 Funding Amount	FY21 Funding Amount	FY22 Funding Amount	FY23 Funding Amount	FY24 Funding Amount
Bus 2	School	2017	BLUE BIRD 303 SCHOOL BU	School Bus	Pupil Transport				90,264	
C-01	Fire	2017	FORD EXPLORER	SUV	Manager		47,733			
C-02	Fire	2016	Chevrolet TAHOE	SUV	Command Vehicle		54,357			
C-03	Fire	2013	FORD EXPLORER	SUV	Manager		47,733			
C-06	Fire	2015	Ford F350	Pick Up	Emergency Response		68,750			
C-42	Fire	2013	Ford Explorer	Sedan	Field Work, Inspections and Incident Response	35,249				
HAZ	Fire	1996	HAZMAT TRAILER	Trailer	Emergency Response				-	
L-01	Fire	2004	SUTPHEN QUINT LADDER TI	Fire Truck	Emergency Response					1,348,060
R-01	Fire	2016	FORD E450 AMBULANCE	Ambulance	Emergency Response		350,322			
R-02	Fire	2017	FORD E450 AMBULANCE	Ambulance	Emergency Response			362,584		
R-03	Fire	2008	FORD E450 AMBULANCE	Ambulance	Emergency Response		350,322			
R-04	Fire	2006	FORD E450 AMBULANCE	Ambulance	Emergency Response			362,584		
Van 1	School	2011	FORD E150 VAN	Passenger Vai	Pupil Transport	38,388				
Van 10	School	2015	TOYOTA SIENNA	Van	Pupil Transport			50,483		
Van 2	School	2011	FORD E150 VAN	Passenger Vai	Pupil Transport	38,388				

Unit #	Department	Year	Make/Model	Vehicle Type	Primary Purpose	FY20 Funding Amount	FY21 Funding Amount	FY22 Funding Amount	FY23 Funding Amount	FY24 Funding Amount
Van 7	School	2012	FORD E250 VAN	Passenger Va	Pupil Transport		48,776			
Van 8	School	2013	FORD E250 VAN	Passenger Va	Pupil Transport		48,776			
Van 9	School	2014	TOYOTA SIENNA	Van	Pupil Transport			50,483		

Color Code

Green = Core Fleet Vehicles
Tan = Specialized or Heavy Vehicles
Blue = Snow and Ice Operation Vehicles
Purple = School Vehicles

Capital Project Request

Project Title:	**Traffic Improvements**			**Fiscal Year:**	**2020**
Purpose:	**Construction**	Classification:	**Infrastructure**	Status:	**Amended Request from the Prior CIP**
Department:	Public Works - Engineering			Supports:	Transportation Network
Partners:				Useful Life:	Between eighteen (18) and twenty-five (25) years

Parameters		**Response**
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are **NOT** included is this request?		No
2. Are there recommendations or costs identified by other departments which are **NOT** factored into the request?		No
3. Does this project require any permitting by any Town or State agency?		Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?		No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?		No
6. If funded, will additional permanent staff be required?	**Total New FTE's:** 0	No
7. If funded, will the operating budget need to be increased to cover operating expenses?		Yes
8. If funded, will this project lower the requesting Department's operating costs?		No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is **NOT** already budgeted?		No
10. If the project is **NOT** funded, will current Town revenue be reduced?		No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		No
13. Is this a request in response to a Court, Federal, or State order?		No
14. Is this a request in response to a documented public health or safety condition?		Yes
15. Is this a request to improve or make repairs to extend the useful life of a building?		No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		Yes
17. Is this a request to repair or otherwise improve public property which is **NOT** a building or infrastructure?		No
18. Will any other department be required to provide assistance in order to complete the project?		No
19. If funded, will this project increase the operating expense for any other department?		Yes

Project Cost:	**$250,000**	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	May increase annual operating expenses between $5,001 and $25,000		

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024	2025	2026
Planning/Feasibility	$0							
Design/Engineering	$0							
Land/ROW Acquisition	$0							
Site Preparation	$0							
Construction	$250,000	$50,000	$50,000	$50,000	$50,000	$50,000		
Construction Management	$0							
Equipment	$0							
Furniture, Fixtures, and Equipment	$0							
Technology Hardware/Software	$0							
Other Expenses	$0							
TOTAL	**$250,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$0**	**$0**

$0 FY2020

Capital Project Request

Project Title: **Traffic Improvements** **Fiscal Year:** **2020**

Project Description and Considerations

This request will allow for the funding of projects that are recommended by the Traffic Management Advisory Committee (TMAC). The $50,000 annual request will support one or two TMAC construction related projects per year such as 500 feet of roadway granite curb installation, two school zone installations, two average traffic calming installations, several radar sign installations, or sign and/or pavement markings.

Project Summary
- The goal of the TMAC is to provide for the safety of pedestrians, motorists, and bicyclists. TMAC construction related projects are not presently funded in the Department of Public Works operating budget.
- Projects include installing flashing LED pedestrian signs and school zone signs, constructing handicap ramps and cross-walks throughout town, and putting up children playing signs at various locations.

Future Projects
- Advisory curve signs with speed tabs on Forest Street
- Traffic signal timing adjustments at Great Plain Avenue and Central Avenue

Clarification of Questions
3. Depending on recommendations from TMAC there may be permitting requirements with the Conservation Commission, Planning Board, Zoning Board of Appeals, and Building Department.
7. The maintenance budget for the Highway Division will need to be increased so that improvements can be maintained. The cost of maintenance will vary based on the type of improvement made.
14. This request is in response to the recommendations by the TMAC and Safe Routes to School report.
16. Improvements under this article could include signage, signaling, curbing, or other traffic calming measures that will be permanently installed at the determined locations.
19. If electricity is required for any of these improvements, then the Needham Light, Electric, and Gas Program budget may be increased to fund the electricity costs.