

## CAPITAL IMPROVEMENT PROGRAM

Page #

89	<i>WATER FUND</i>	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
90	Town Water System Improvements	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
91	Town/UNH Shared Water System Improvements	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000
92	Madbury Road Complete Streets Project - Water Line Replacement	1,980,000	222,000								
94	Commercial Meter Replacement	30,000									
95	Rubber Tired Excavator Replacement (Cost Share with General Fund 75%/25%)							77,500			
96	Utility Truck Replacement (One Ton)										90,000
	<b>WATER FUND TOTALS</b>	<b>2,155,000</b>	<b>367,000</b>	<b>145,000</b>	<b>145,000</b>	<b>145,000</b>	<b>145,000</b>	<b>222,500</b>	<b>145,000</b>	<b>145,000</b>	<b>235,000</b>

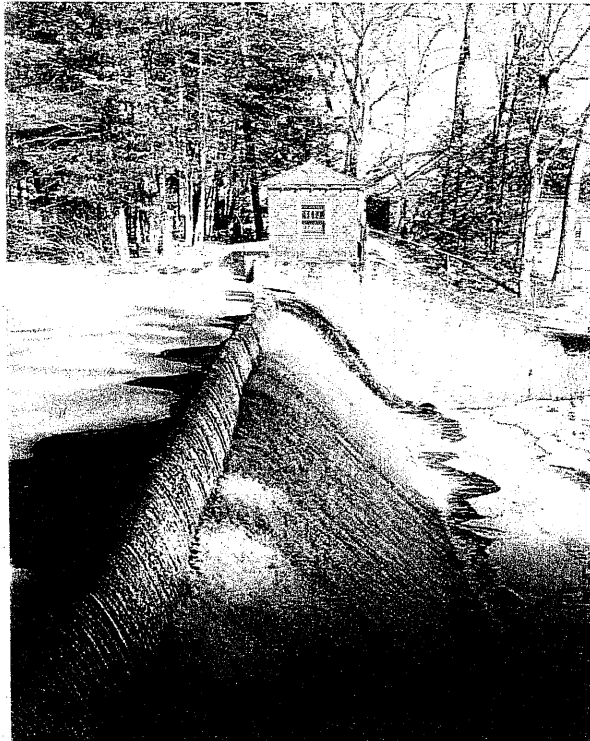
# CAPITAL IMPROVEMENT PROGRAM

PROJECT YEAR		2024-2033	PROJECT COST		\$75,000
DESCRIPTION		Town Water System Improvements	DEPARTMENT Public Works - Water		
IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)					
Department Initiative					
DESCRIPTION (TO INCLUDE JUSTIFICATION)					
The Town's water distribution infrastructure includes 29 miles of water main along with valves, hydrants and appurtenances. Recognizing that a new ductile iron water main has an approximate useful life of 80 years, a water main replacement program targeting this timeframe is a prudent investment to ensure proper system operation. Given the lineal footage and age of the Durham's system, a replacement of approximately 1,900 lineal feet of water main each year at a cost of \$380,000 would be warranted. It is important to plan for these water main replacement programs proactively before failures occur. The goal of the Department's water system improvement program is to budget a minimum of \$75,000 annually and accumulate several years of funding, while identifying sections of the oldest water mains and replace them in conjunction with the Town's Road and Drainage Program,. This is also done in coordination with other underground utilities. Projects requiring larger funding amounts which exceed this annual appropriation and previous accumulations will be included in the capital plan separately as needed. The reconstruction of Burnham Avenue is scheduled for FY28 and will include replacement of its transite watermain.					
ESTIMATED COSTS:					
		PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$	-	
		FINAL DESIGN AND ENGINEERING	\$	-	
		CONSTRUCTION ENGINEERING OVERSIGHT	\$	-	
		CONSTRUCTION COSTS	\$	75,000	
		CONTINGENCY	\$	-	
		TOTAL PROJECT COST	\$	75,000	
FINANCING					
		OPERATING BUDGET	\$	75,000	
		UNH - CASH	\$	-	
		BOND - TOWN PORTION	\$	-	
		FEDERAL/STATE GRANT	\$	-	
		CAPITAL RESERVE ACCOUNT	\$	-	
		TOTAL FINANCING COSTS	\$	75,000	
IF BONDED:					
		NUMBER OF YEARS		N/A	
		TOTAL PRINCIPAL	\$	-	
		TOTAL INTEREST	\$	-	
		TOTAL ESTIMATED COST	\$	-	



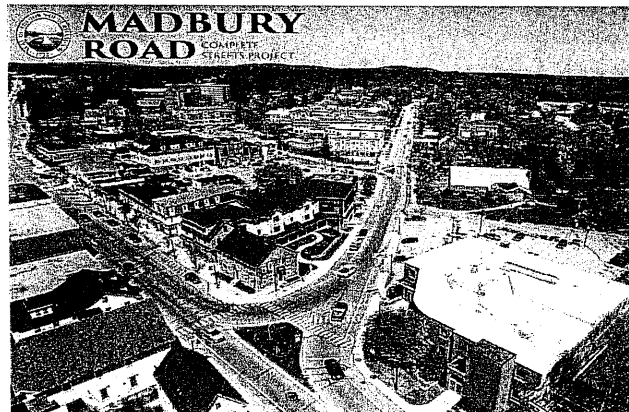
# CAPITAL IMPROVEMENT PROGRAM

<b>PROJECT YEAR</b>	2024- 2033	<b>PROJECT COST</b>	\$70,000
<b>DESCRIPTION</b>	Town/UNH Shared Water System Improvements	<b>DEPARTMENT</b>	Public Works - Water
<b>IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)</b>			
Department Initiative			
<b>DESCRIPTION (TO INCLUDE JUSTIFICATION)</b>			
This capital project is for design and construction of jointly shared Town/UNH water distribution, storage and treatment assets. This proposed capital request represents the Town's contribution toward these improvements which is equal to 1/3 of the total project cost estimated at \$210,000 per year.			
*Estimated costs are Town's Share of 1/3 of the total cost estimated at \$210,000 per year			
<b>ESTIMATED COSTS:</b>	PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$	-
	FINAL DESIGN AND ENGINEERING	\$	-
	CONSTRUCTION ENGINEERING OVERSIGHT	\$	-
	CONSTRUCTION COSTS	\$	70,000
	CONTINGENCY	\$	-
	<b>TOTAL PROJECT COST</b>	\$	-
<b>FINANCING</b>	OPERATING BUDGET	\$	70,000
	UNH - CASH	\$	-
	BOND - TOWN PORTION	\$	-
	FEDERAL/STATE GRANT	\$	-
	CAPITAL RESERVE ACCOUNT	\$	-
	<b>TOTAL FINANCING COSTS</b>	\$	70,000
<b>IF BONDED:</b>	NUMBER OF YEARS	N/A	
	TOTAL PRINCIPAL	\$	-
	TOTAL INTEREST	\$	-
	<b>TOTAL ESTIMATED COST</b>	\$	-



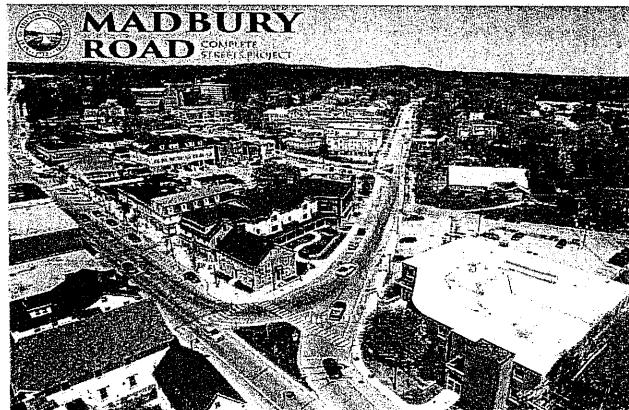
# CAPITAL IMPROVEMENTS PROGRAM

PROJECT YEAR		2024	PROJECT COST		\$1,980,000
DESCRIPTION			DEPARTMENT		
Madbury Road Water Distribution Complete Streets Project - Construction			Public Works - Water		
IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)					
Department Initiative					
DESCRIPTION (TO INCLUDE JUSTIFICATION)					
<p>Madbury Road is approximately 6,500 feet in length and serves as a major arterial roadway in Durham with Average Daily Traffic exceeding 4,500 vehicles. The roadway was transferred to Town ownership from the State of New Hampshire when Route 4 was upgraded many years ago. The roadway was last paved in 2009 at which time it received an overlay treatment. Currently the roadway is in poor condition with significant pavement raveling, delamination, longitudinal and alligator cracking, rutting, settlement, and base failure. The sidewalks and curb ramps are ADA non-compliant and curb reveal is minimal or non-existent in some areas. The drainage system is undersized with drainage structures and drainage pipeline in a deteriorated condition. On September 13<sup>th</sup>, 2021, the Town Council approved a contract award in the amount of \$1,142,898.00 to VHB Engineering to provide design engineering services for the reconstruction of Madbury Road. The Madbury Road design project team has taken a "Complete Streets" approach, which includes evaluating and constructing multi-modal transportation improvements where possible, including traffic calming and pedestrian and bicycle accommodations. The design will also include a sustainable environmental approach to construction of public infrastructure, incorporating low impact development stormwater features, and environmentally conscious construction techniques and materials. A robust public involvement component has been developed to ensure all stakeholder's perspectives are considered within the design and incorporated where possible. The project team has developed a GIS "Story Map" using interactive maps to solicit feedback and has hosted a public information meeting on June 15<sup>th</sup>, 2022 and is planning a project open house in a September/October timeframe to share design concepts with project stakeholders. The project construction timeline includes four separate phases beginning in 2023 and continuing through 2026. Project components include Culvert rehabilitation and replacement, stormwater and drainage system reconstruction, water distribution system and sewer collection system rehabilitation and replacement and roadway, sidewalk, streetscape reconstruction. The project has been divided into 3 separate segments. The Public Work Department continues to aggressively pursue grant and principal forgiveness opportunities and has been successful in receiving \$800,000 in American Rescue Plan Act (ARPA) Funding and principal forgiveness thus far through the State Revolving Loan Fund Program. The proposed funding requests over Fiscal Year 2023 through Fiscal Year 2026 provides the necessary funding to design and construct the Madbury Road Complete Streets Improvements.</p>					
ESTIMATED COSTS:					
PRELIMINARY STUDY, DESIGN AND ENGINEERING		\$	-		
FINAL DESIGN AND ENGINEERING		\$	-		
CONSTRUCTION ENGINEERING OVERSIGHT		\$	-		
CONSTRUCTION COSTS		\$	1,980,000		
CONTINGENCY		\$	-		
TOTAL PROJECT COST		\$	1,980,000		
FINANCING					
OPERATING BUDGET		\$	-		
UNH - CASH		\$	-		
BOND - TOWN PORTION		\$	1,980,000		
UNH PORTION		\$	-		
FEDERAL/STATE GRANT		\$	-		
CAPITAL RESERVE ACCOUNT		\$	-		
TOTAL FINANCING COSTS		\$	1,980,000		
IF BONDED:					
NUMBER OF YEARS		20			
TOTAL PRINCIPAL		\$	1,980,000		
TOTAL INTEREST		\$	874,000		
TOTAL ESTIMATED COST		\$	2,854,000		



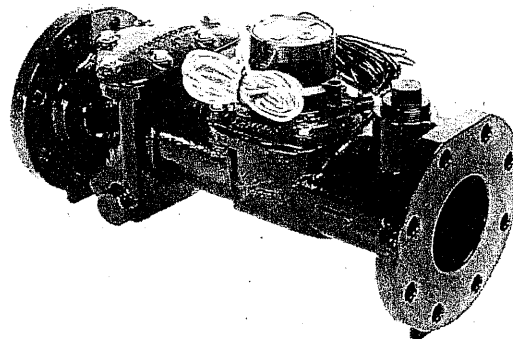
# CAPITAL IMPROVEMENTS PROGRAM

PROJECT YEAR		2025	PROJECT COST		\$222,000
DESCRIPTION			DEPARTMENT		
Madbury Road Water Distribution Complete Streets Project - Construction			Public Works - Water		
IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)					
Department Initiative					
DESCRIPTION (TO INCLUDE JUSTIFICATION)					
<p>Madbury Road is approximately 6,500 feet in length and serves as a major arterial roadway in Durham with Average Daily Traffic exceeding 4,500 vehicles. The roadway was transferred to Town ownership from the State of New Hampshire when Route 4 was upgraded many years ago. The roadway was last paved in 2009 at which time it received an overlay treatment. Currently the roadway is in poor condition with significant pavement raveling, delamination, longitudinal and alligator cracking, rutting, settlement, and base failure. The sidewalks and curb ramps are ADA non-compliant and curb reveal is minimal or non-existent in some areas. The drainage system is undersized with drainage structures and drainage pipeline in a deteriorated condition. On September 13<sup>th</sup>, 2021, the Town Council approved a contract award in the amount of \$1,142,898.00 to VHB Engineering to provide design engineering services for the reconstruction of Madbury Road. The Madbury Road design project team has taken a "Complete Streets" approach, which includes evaluating and constructing multi-modal transportation improvements where possible, including traffic calming and pedestrian and bicycle accommodations. The design will also include a sustainable environmental approach to construction of public infrastructure, incorporating low impact development stormwater features, and environmentally conscious construction techniques and materials. A robust public involvement component has been developed to ensure all stakeholder's perspectives are considered within the design and incorporated where possible. The project team has developed a GIS "Story Map" using interactive maps to solicit feedback and has hosted a public information meeting on June 15<sup>th</sup>, 2022 and is planning a project open house in a September/October timeframe to share design concepts with project stakeholders. The project construction timeline includes four separate phases beginning in 2023 and continuing through 2026. Project components include Culvert rehabilitation and replacement, stormwater and drainage system reconstruction, water distribution system and sewer collection system rehabilitation and replacement and roadway, sidewalk, streetscape reconstruction. The project has been divided into 3 separate segments. The Public Work Department continues to aggressively pursue grant and principal forgiveness opportunities and has been successful in receiving \$800,000 in American Rescue Plan Act (ARPA) Funding and principal forgiveness thus far through the State Revolving Loan Fund Program. The proposed funding requests over Fiscal Year 2023 through Fiscal Year 2026 provides the necessary funding to design and construct the Madbury Road Complete Streets Improvements.</p>					
ESTIMATED COSTS:		PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$	-	
		FINAL DESIGN AND ENGINEERING	\$	-	
		CONSTRUCTION ENGINEERING OVERSIGHT	\$	-	
		CONSTRUCTION COSTS	\$	222,000	
		CONTINGENCY	\$	-	
		TOTAL PROJECT COST	\$	222,000	
FINANCING		OPERATING BUDGET	\$	-	
		UNH - CASH	\$	-	
		BOND - TOWN PORTION	\$	222,000	
		UNH PORTION	\$	-	
		FEDERAL/STATE GRANT	\$	-	
		CAPITAL RESERVE ACCOUNT	\$	-	
		TOTAL FINANCING COSTS	\$	222,000	
IF BONDED:		NUMBER OF YEARS		5	
		TOTAL PRINCIPAL	\$	222,000	
		TOTAL INTEREST	\$	23,300	
		TOTAL ESTIMATED COST	\$	245,300	



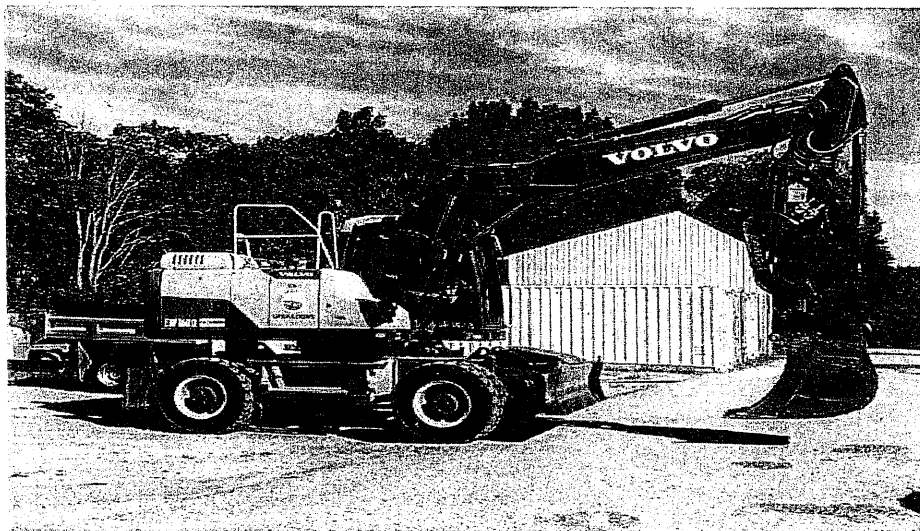
# CAPITAL IMPROVEMENT PROGRAM

PROJECT YEAR2024		PROJECT COST\$30,000	
DESCRIPTIONCommercial Meter Replacement		DEPARTMENTPublic Works - Water	
DESCRIPTION (TO INCLUDE JUSTIFICATION):			
Water meters at homes and businesses are vital because they ensure that the water consumed is accurately billed. In 2013, Durham Public Works replaced the approximately 30 1.75" - 4" commercial water meters its distribution system. The non-replaceable batteries in these meters had an expected life of 10 years at the time of installation and are now beginning to fail. Durham Public Works replaced several of these meters in FY23 which had failed utilizing operating funds and is proposing capital funding in fiscal year 2024 to complete the replacement project. Each meter is valued at approximately \$1,500.00			
ESTIMATED COST	PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$	-
	FINAL DESIGN AND ENGINEERING	\$	-
	CONSTRUCTION ENGINEERING OVERSIGHT	\$	-
	CONSTRUCTION COSTS	\$	30,000
	CONTINGENCY	\$	-
	TOTAL PROJECT COST	\$	30,000
FINANCING	OPERATING BUDGET	\$	30,000
	UNH - CASH	\$	-
	BOND - TOWN PORTION	\$	-
	UNH PORTION	\$	-
	FEDERAL/STATE GRANT	\$	-
	CAPITAL RESERVE ACCOUNT	\$	-
	TOTAL FINANCING COSTS	\$	30,000
IF BONDED	NUMBER OF YEARS	N/A	
	TOTAL PRINCIPAL	\$	-
	TOTAL INTEREST	\$	-
	TOTAL ESTIMATED COST	\$	-



# CAPITAL IMPROVEMENT PROGRAM

PROJECT YEAR	2030	EQUIPMENT COST	\$77,500
DESCRIPTION	Replacement of Rubber Tired Excavator.	DEPARTMENT	Public Works Operations/ Water
DESCRIPTION (TO INCLUDE JUSTIFICATION):			
<p>The 2013 Volvo EW160D Rubber-Tired Excavator is scheduled for replacement in 2030. This is one of the most critical pieces of front-line equipment for Public Works projects and emergencies, delivering a multitude of indispensable benefits across various critical tasks and Divisions. The excavator's versatility allows it to be utilized across nearly all of our Public Works projects. It is irreplaceable when faced with water main breaks, performing roadside mowing, completing large and small drainage projects, excavating culverts, and roadside ditching. The machine's rubber tires add a valuable dimension to its capabilities, enabling it to be driven from site to site. This mobility feature eliminates the need for additional transportation equipment, streamlining logistics and reducing operational costs. Durham Public Works is proactively exploring alternative fuel options for this upcoming acquisition, including electric and compressed natural gas (CNG) solutions.</p> <p>The total cost for this piece of equipment is \$310,000. The cost is being shared 75% Operations and 25% Water Fund.</p> <p>Vehicle to be Replaced: 2013 Volvo EW160D Rubber-Tired Excavator</p>			
ESTIMATED COST	PURCHASE PRICE	\$	77,500
	ACCESSORIES*	\$	-
	LESS TRADE-IN**	\$	-
	NET PURCHASE PRICE	\$	77,500
	*Accessories include lighting, radios, striping, misc. equipment.		
FINANCING	OPERATING BUDGET	\$	-
	UNH - CASH	\$	-
	BOND - TOWN PORTION	\$	77,500
	FEDERAL/STATE GRANT	\$	-
	CAPITAL RESERVE ACCOUNT	\$	-
	TOTAL FINANCING COSTS	\$	77,500
IF BONDED	NUMBER OF YEARS		5
	TOTAL PRINCIPAL	\$	77,500
	TOTAL INTEREST (EST'D)	\$	8,150
	TOTAL PROJECT COST	\$	85,650



# CAPITAL IMPROVEMENT PROGRAM

PROJECT YEAR		2033		VEHICLE COST		\$90,000					
DESCRIPTION				1-Ton Utility Truck Replacement				DEPARTMENT		Public Works - Water	
DESCRIPTION (TO INCLUDE JUSTIFICATION):											
Durham Public Works will be replacing with Water Division Cheif Operator's 2022 Ford F-350 Utility Truck in 2033. This vehicle serves as an essential means of transportation for the Water Division Cheif Operator, who is responsible for the daily upkeep and management of Durham's potale drinking water distribution system and production facilities. Considering the wide range of responsibilities assigned, it is imperative that the replacement truck be outfitted with the necessary features to accommodate various pieces of specialized equipment and responses. The truck must be capable of transporting tools such as generators, piping locating equipment, pavement saws, mechanical equipment, repair tools, hand tools, marking paints, and other necessary gear. Additionally, this vehicle must carry a 2-ton crane for use in the repair of hydrants and distribution piping appurtenances. Furthermore, the inclusion of a plow package will enhance the vehicle's useability during snow plowing operations, further optimizing its functionality throughout the year. Durham Public Works is proactively exploring alternative fuel options for this upcoming acquisition, including electric and compressed natural gas (CNG) solutions. This vehicle is on a 10-12 year replacement plan.											
Vehicle to be Replaced: 2022 Ford Utility Truck with utility body and crane.											
ESTIMATED COST		PURCHASE PRICE		\$		72,000					
		ACCESSORIES*		\$		20,500					
		LESS TRADE-IN**		\$		(2,500)					
		NET PURCHASE PRICE		\$		90,000					
*Accessories include lighting, radios, striping, misc. equipment.											
FINANCING		OPERATING BUDGET		\$		-					
		UNH - CASH		\$		-					
		BOND - TOWN PORTION		\$		90,000					
		FEDERAL/STATE GRANT		\$		-					
		CAPITAL RESERVE ACCOUNT		\$		-					
		TOTAL FINANCING COSTS		\$		90,000					
IF BONDED:		NUMBER OF YEARS				5					
		TOTAL PRINCIPAL		\$		90,000					
		TOTAL INTEREST (EST'D)		\$		9,150					
		TOTAL PROJECT COST		\$		99,150					

