



Public Works Water, Sewer & Roads Update

March 4, 2025





Department of Public Works Overview

Bridgewater Department of Public Works manages the Town's public infrastructure, including water supply, treatment, and distribution; wastewater collection, treatment, and discharge; roadways and transportation. With the foregoing, the DPW holds paramount the safety, health, and welfare of the Town's residents. In this presentation, we will attempt to provide an overview of how the DPW achieves its mandate in the protection of the Town's water system, wastewater, and roadways. In the following slides, we will provide an update on the status of critical projects in these areas.



Water Update

Department of Public Works



High Street Water Treatment Plant



Water System Priorities

Maximize
withdrawals from
wells to meet
water demand

Meet all
regulatory
requirements

Maintain well
storage capacity
for emergencies

Plan for
additional water
sources

Ensure financial
stability of the
water enterprise
fund



Capital Projects FY25

FY 2025		Opinion of Probable Cost
1	Well No. 9R Replacement, Investigation, Design and Construction	\$1,671,000
2	Well No. 5R Replacement, Investigation, Design and Construction	\$1,671,000
3	Flagg St. Water Main Replacement (installation of new 8-inch water main) Drainage and Pavement Costs under DPW Roadway Project Capital Cost	\$1,233,690*
4	Cross St. Water Main Replacement (installation of new 8-inch water main) Drainage and Pavement Costs under DPW Roadway Project Capital Cost	\$4,282,000*
5	Pump Upgrades and New Raw Water Transmission Main from Plymouth St. Wells (10A & 10R) to the High St. WTP	\$3,915,000
6	Abandon 6" CI Water Main along Main Street from Center St to Central Square (see Roadways section for other details)	\$251,000
FY25 Capital Improvements Total		\$13,023,690

* Estimate Prepared by Town Financial Director 2017. EP recent project bid results



Capital Projects FY26-30

Phase II Improvements – FY 2026-2030		Opinion of Probable Cost
1	Tank Analysis and Water Supply Strategy Alternatives	\$75,000
2	Vernon St. New Well and Treatment Facility – OPM, Pilot, Design, Bidding and Construction	\$38,427,000
3	Carver Pond WTP Building Addition for PFAS Removal – OPM, Pilot, Design, Bidding and Construction	\$7,351,000
4	High St. WTP Building Addition for PFAS Removal – OPM, Pilot, Design, Bidding and Construction	\$7,351,000
5	Sprague Hill Tank Rehabilitation Replacement with Elevated Tank	\$4,558,000
6	Connection to Aquaria Regional Desalinization Plant or Taunton-Phase 1 Engineering and Evaluation	\$1,250,000
FY 2023-2030 Improvements Total		\$63,027,000
7	Lead Service Line Replacement	TBD



Replacement Wells 9R & 5R

Project Priority

- **High**
- Needed to increase well production to meet demand for water

Estimated Cost

- \$2.0 million

Revenue Source

- Bond Issue

Status

- Obtain DEP approval for project, contract with vendor, complete by April 1st



Plymouth St Wells (10A & 10B) – Transmission Line Pump Upgrades to High Street Treatment Plant

Project Priority

- High
- Removes iron and manganese from the raw water (brown water complaints)
- Wells are not fully utilized to meet demand due to this issue

Estimated Cost

- \$3.9 million

Revenue Source

• Town funds – survey & engineering	\$478,000
• DWSRF Low Interest Loan	\$6.0 million

Status

- Complete survey and design
- Obtain DEP approval for the project
- Put the project out to bid ASAP

Carver's Pond & High Street Plants – PFAS Removal



Project Priority

- **Medium**
- Federal regulations require compliance by 2029

Estimated Cost

- \$14.7 million

Revenue Source

- Grants, Loans, PFAS class action \$14.7 million

Status

- Replacement Wells 9R & 5R & Plymouth Street connections are higher priority to meet water demand



Status of other projects

 **Lead Service Line Inventory**

- Completed

 **Great Hill Water Tank Upgrade**

- Completed

 **Carver's Pond Valve Replacements**

- Under Construction

 **High Street Plant Dehumidification**

- In Design

 **Flagg Street & Cross Street Water Mains**

- Delay until road funding identified

 **Vernon Street Wells & Treatment Plant**

- Delayed

 **Sprague Hill Tank Rehabilitation**

- Delayed

 **Connection to another Water Source**

- Exploring options



Funding Options

Water System
User Fees

Water
Retained
Earnings

Low Interest
Loans

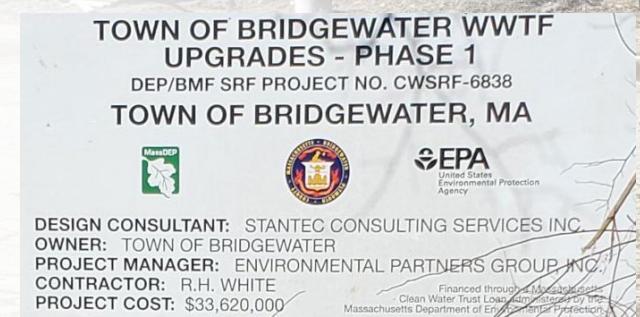
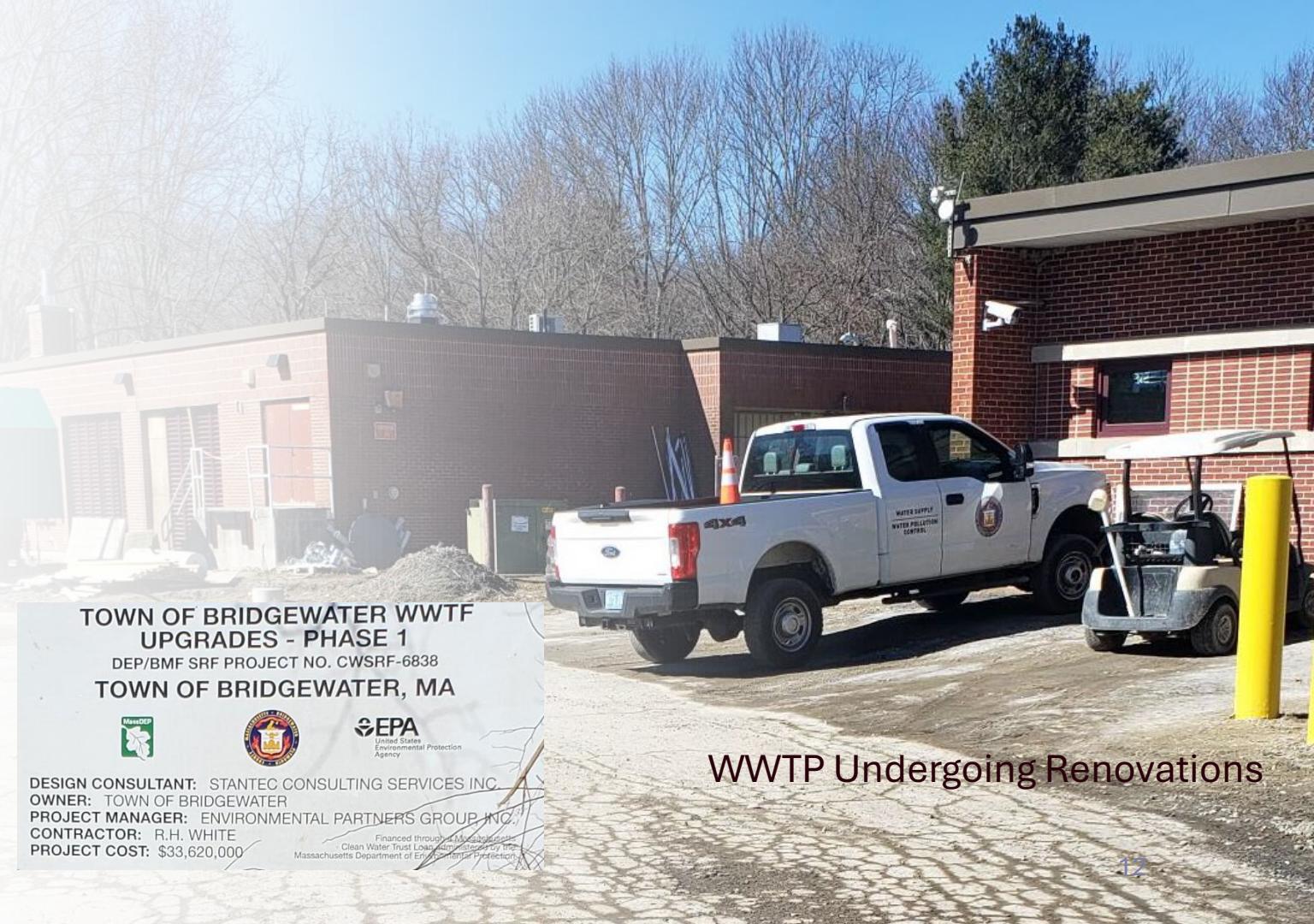
State and
Federal
Grants

Class Action
Lawsuits



Wastewater Update

Department of Public Works



WWTP Undergoing Renovations



Wastewater System Priorities

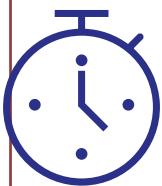
Comply with
EPA Consent
Order

Manage Costs

Miscellaneous
Infrastructure
Upgrades



Wastewater System Projects



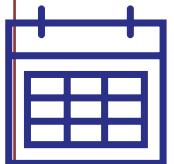
EPA Consent Order

- Requires that nitrogen and phosphorus removal projects be completed by 2031



WWTP Upgrade Phase 1

- Under construction



WWTP Upgrade Phase 2

- Planning



Wastewater Treatment Plant Upgrade Phase 1

Project Priority

- **High** – a requirement of the EPA Consent Order
- Upgrades plant and removes nitrogen from effluent

Estimated Cost

- \$43 million

Revenue Source

- ARPA Loan and Principal Forgiveness, User charges
- \$10 million overall savings to sewer users

Status

- Under construction, completion by 5/1/25



Wastewater Treatment Plant Upgrade Phase 2

Project Priority

- **High** – requirement of the EPA Consent Order
- Removes phosphorous from effluent

Estimated Cost

- \$56.8 million

Revenue Source

- User charges, grants, loans

Status

- In planning stage, completion by 6/1/31



Funding Options

User fees

Low Interest
Loans

Grants



Roadways Update

Department of Public Works



Roadways Division



Roadways Priorities

Rehabilitation of
existing roads

Address
underlying
drainage &
utilities

Manage cost
impact to
taxpayers



Roadways Facts

Length of roads in Bridgewater:
114.1 miles

- Arterial ~ 25 miles
- Collector ~ 20 miles
- Sub collector ~ 30 miles
- Local roads ~ 30 miles
- Subdivision roads ~ 9.1 miles

We prioritize our roadwork based on the following:

- Function of the road
- Condition of the road
- Anticipated cost of repair/rehabilitation

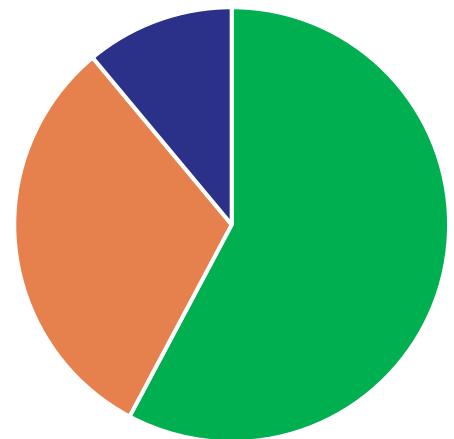
Rehabilitation cost data per mile of road:

• Mill and pave	\$348,322
• Full depth reconstruction	\$570,926
• Granite curb furnish and install	\$686,400
• 8-mile PVC watermain	\$1,600,000
• 12-inch drainpipe	\$1,300,000

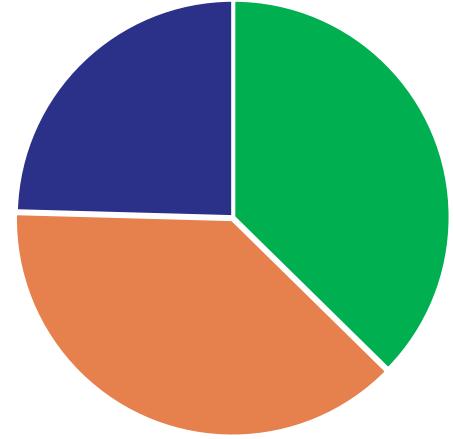


Roadways Projects Cost Components

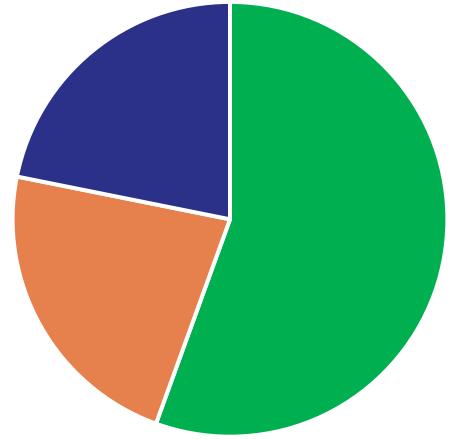
Vernon St



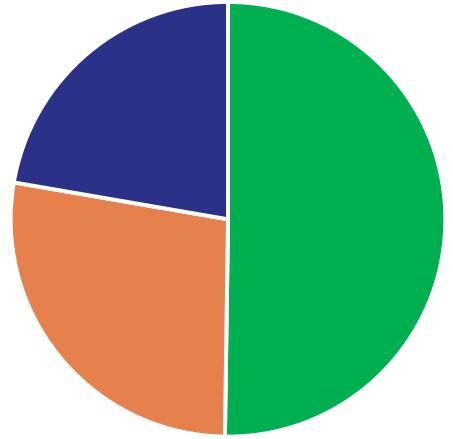
Deerfield St



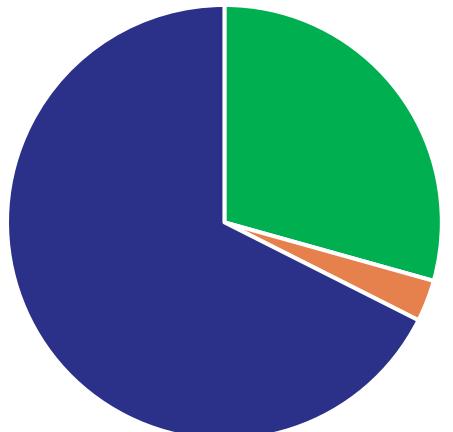
Main St



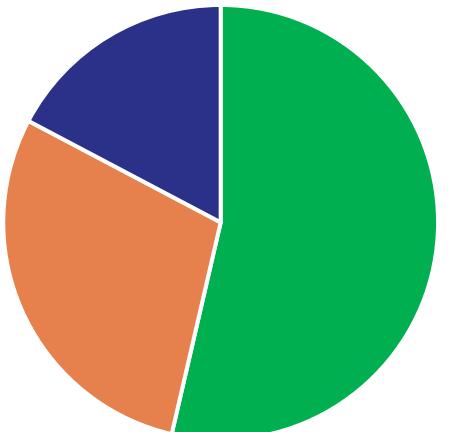
Cross St



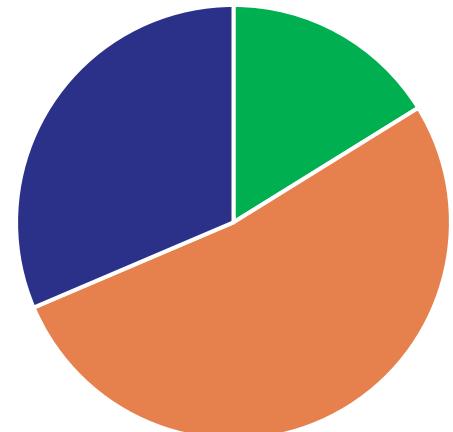
Green St



South St



Flagg St



- Roadways
- Drainage
- Water



Capital Projects FY 2025-2030

FY 2025-2030		Roadways Cost (Roadways and Drainage)	Water Cost	Total Cost
1	Vernon St Opt 2 – Pleasant to Green – Roadways, Drainage, Water	\$17,273,166	\$2,145,564	\$19,418,730
2	*Deerfield St – Roadways/Curbings, Sidewalks, Drainage, Water lines	\$6,650,135	\$2,165,638	\$8,815,773
3	Main St – Center St to Central Sq – Roadways, Drainage, Water Lines	\$7,366,565	\$2,059,463	\$9,426,028
4	Downtown Gateway Project – Roadways	\$5,134,490		\$5,134,490
5	Chpt. 90 – Roadways Resurfacing, Repair	\$1,437,941		\$1,437,941
6	Cross St Opt 2 – Vernon Sat to South St – Roadways, Box Widening, Bike Lanes, Drainage, Water Lines	\$8,359,179	\$2,397,312	\$10,756,491
7	Green St Opt 2 – Water Main – Mill, Overlay – Roadways, Drainage, Water Lines	\$390,653	\$813,700	\$1,204,353
8	South Street Opt 1 – Crescent St to Central Sq – Roadways, Box Widening, Paving, 5' Bike Lane, Drainage, Water Lines	\$5,148,528	\$1,075,109	\$6,223,637
9	Flagg St – Drainage, Roadways, Water Lines	\$4,831,603	\$2,213,226	\$7,044,829
FY 2025-2030 Total		\$56,592,260	\$12,870,012	\$69,462,272

These are estimates of probable cost.



Current Roadways Under Consideration for Spring/Summer 2025

High Street

Excluding the already completed bridge replacement and dam removal

South Street

Central Sq to Pleasant St

Winter Street

Bedford St to Connect St

Flagg Street

Bedford St to Summer St (drainage and resurfacing)



Road Projects Status



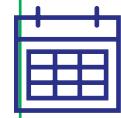
Flagg Street

- Under construction



Winter Street

- Planned for Summer 2025



South Street

- Planned for Summer 2025



Cross Street

- Scope determined, plans and funding needed



Vernon Street

- Scope determined, plans and funding needed



Green Street

- Scope determined, plans and funding needed



Deerfield Street

- Scope determined, plans and funding needed



Funding Options

Chapter 90
Funds

Debt
Exclusion
Borrowing

Grants