

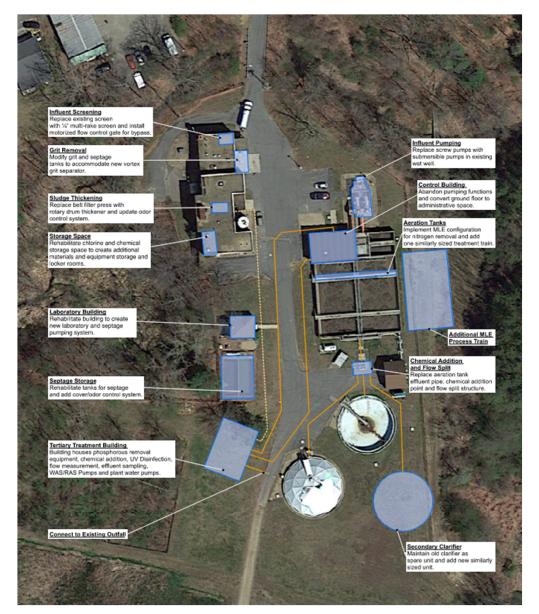
#### SELECT BOARD WASTEWATER PROJECT UPDATE

Project Lead: Ian Catlow, PE Ryan Siegel, PE

Tighe&Bond

## **PROJECT STATUS**

- Design Complete
- Contractors Prequalified
- Bidding Under Way
  - Sub Bids Opened 5/17/22
  - General Bids Opening 6/7/22
- Construction Start July 2022





NPDES Permit No. MA0100919 Page 1 of 18

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# **PROJECT DRIVERS**

- Aging & Obsolete Equipment, Systems, Structures
- NPDES Discharge Permit
  - Phosphorous Removal by 12/31/24
  - Nitrogen Limit Issued In Draft Permit
    - Final Permit Expected Summer 2022

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§ 26-53),

Town of Spencer Sewer Commission

is authorized to discharge from the facility located at

Spencer Wastewater Treatment Plant Route 9 Spencer, MA 01562

2. Total Phosphorus

In order to comply with the permit limits, the Permittee shall take the following actions with regard to total phosphorus:

- a. The interim monthly average total phosphorus interim limits are 0.2 mg/L from May 1 through October 31 and 0.3 mg/L from November 1 through April 30. The interim loading limits are 0.79 lb/day from May 1 through October 31 and 1.19 lb/day from November 1 through March 1, calculated using the flow rate through Outfall 001. The permittee shall meet these limits until it attains compliance with the final phosphorus effluent limits in Part I.A.1.
- b. No later than <u>December 31, 2019</u>, complete a conceptual design to meet the total phosphorus limit.
- Complete design plans and specifications for necessary upgrades no later than <u>July 31</u>, <u>2021</u>.
- d. Start construction of necessary upgrades no later than June 30, 2022.
- e. Attain compliance with the final effluent limits for total phosphorus no later than **December 31, 2024**.

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Effluent Characteristic	Discharge Limitation			Monitoring Requirement <sup>1,2</sup>		
Parameter	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type <sup>3</sup>	
Escherichia coli <sup>8</sup> (April 1 – October 31)	126 colonies/ 100 mL		409 colonies/100 mL	1/Week	Grab	
Total Copper	10.3 µg/L		15.3 μg/L	2/Month	Composite	
Total Phosphorus <sup>6,10</sup> (April 1 – October 31)	0.1 mg/L 0.79 lb/day			2/Month	Composite	
Total Phosphorus <sup>6,10</sup> (November 1 – March 31)	0.2 mg/L 1.19 lb/day			2/Month	Composite	
Ammonia Nitrogen <sup>6</sup> (May 1 – October 31)	0.56 mg/L 5.0 lb/day	0.84 mg/L 7.5 lb/day		2/Month	Composite	
Ammonia Nitrogen <sup>6</sup> (November 1 – April 30)	6.3 mg/L 56.7 lb/day			2/Month	Composite	
Total Kjeldahl Nitrogen <sup>11</sup> (April 1 – October 31) (November 1 – March 31)	Report mg/L Report mg/L		Report mg/L Report mg/L	1/Week 1/Month	Composite Composite	
Nitrate + Nitrite <sup>11</sup> (April 1 – October 31) (November 1 – March 31)	Report mg/L Report mg/L		Report mg/L Report mg/L	1/Week 1/Month	Composite Composite	
Total Nitrogen <sup>6,11</sup>	Report mg/L Report lb/day		Report mg/L	1/Month	Calculation	
Rolling Average Total Nitrogen <sup>6,11</sup>	90 lb/day			1/Month	Calculation	

# **BIDDING STATUS**

### Sub-Bids Opened

- Opinion of Cost \$8.454M
- Sub-Bid Total \$11.067M
- 31% Cost Increase

### Reasons for Increase

- Tight Labor Market
- Abundant Construction Work
- Supply Chain Issues
  - Material Costs
  - Prolonged Delivery
    Schedules

Sub-Bid Summary				
Masonry		\$372,731		
Misc. Metals		\$810,000		
Waterproofing		\$197,000		
Roofing & Flashing	\$727,000			
Metal Windows	\$293,500			
Glass & Glazing		\$38,325		
Acoustic Tile		\$36,500		
Painting		\$160,000		
Fire Protection		\$260,000		
Electrical		\$5,014,700		
Plumbing		\$420,000		
HVAC		\$2,734,000		
Tile		\$11,875		
Тс	otal:	\$11,067,631		



# **MARKET TRENDS**

## Material Cost Changes

- Fuel +200%
- Bitumen +39%
- PVC/Plastic -4%
- Steel -4.7%
- Aluminum +23%
- Concrete +11%

#### Recent Bids

- Medway WTP \$17M OPCC
  - Bid Cost \$22M (+29%)
- Dudley WTP \$5.8M OPCC
  - Bid Cost \$6.3M (+9%)
- Wareham WWTF \$7.1M OPCC
  - Bid Cost \$8.8M (+24%)

#### 

#### Cape Bridge Replacement Costs May Soar to \$4 Billion

LOCAL WEATHER INVESTIGATIONS VIDEOS SPORTS TRAFFIC NEWSLETTERS

That's at least double the originally anticipated price, although the federal government is ultimately expected to foot the bill

By Chris Lisinski • Published May 18, 2022 • Updated on May 18, 2022 at 1:56 pm





Automobiles and trucks cross the Sagamore Bridge in Bourne, Massachusetts.

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### **NEXT STEPS**

- Plan For Special Town Meeting on 6/23/22
  - Select Board
  - Finance Committee
- Open General Bids
  on 6/7/22
  - Adjust Warrant Article to Reflect Bid Value & Revised Contract Duration
- Request Award Deadline Extension from MassDEP

- Capture 0% Loan
  From SRF Program
- Capture 17.4%
  Principal
  Forgiveness From
  MassDEP
  - Ex. \$48M Project Cost
  - 17.4% Grant (\$8.35M)
  - Net Cost to Town \$39.7M

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