



# TOWN COUNCIL – AGENDA REQUEST FORM

THIS FORM WILL BECOME PART OF THE BACKGROUND INFORMATION USED BY THE COUNCIL AND PUBLIC

Please submit Agenda Request Form, **including back up information**, 8 days prior to the requested meeting date. **Public Hearing requests must be submitted 20 days prior to requested meeting date to meet publication deadlines** (exceptions may be authorized by the Town Manager, Chairman/Vice Chair).

## MEETING INFORMATION

Date Submitted: January 7, 2022  
Submitted by: Asst. Director of Public Works /  
Wastewater Sarita Croce  
Department: WWTF  
Speakers: Sarita Croce

Date of Meeting: January 13, 2022  
Time Required: 20 minutes  
Background Info. Supplied: Yes:  No:

## CATEGORY OF BUSINESS (PLEASE PLACE AN "X" IN THE APPROPRIATE BOX)

Appointment:	<input type="checkbox"/>	Recognition/Resignation/Retirement:	<input type="checkbox"/>
<b>Public Hearing:</b>	<input type="checkbox"/>	Old Business:	<input type="checkbox"/>
New Business:	<input checked="" type="checkbox"/>	Consent Agenda:	<input type="checkbox"/>
Nonpublic:	<input type="checkbox"/>	Other:	<input type="checkbox"/>

## TITLE OF ITEM

Wastewater Treatment Facility Upgrade Phase V

## DESCRIPTION OF ITEM

The Town Council to be presented with the Wastewater Treatment Facility Phase V upgrade. This upgrade consists of items that were removed from the initial phase III and IV upgrades approved by the voters due to cost considerations.

## REFERENCE (IF KNOWN)

RSA:	Warrant Article:	_____
Charter Article:	Town Meeting:	_____
Other:	N/A	

## EQUIPMENT REQUIRED (PLEASE PLACE AN "X" IN THE APPROPRIATE BOX)

Projector:	<input type="checkbox"/>	Grant Requirements:	<input type="checkbox"/>
Easel:	<input type="checkbox"/>	Joint Meeting:	<input type="checkbox"/>
Special Seating:	<input type="checkbox"/>	Other:	<input type="checkbox"/>
Laptop:	<input type="checkbox"/>	None:	<input type="checkbox"/>

## CONTACT INFORMATION

Name:	<u>Sarita Croce</u>	Address:	<u>36 Mast Road</u>
Phone Number:	<u>603-883-8196</u>	Email Address:	<u>scroce@merrimacknh.gov</u>

## APPROVAL



# Proposed Phase V Project

*Presented by:*

Sarita Croce – Assistant Director, Public Works Department/Wastewater

# Presentation Overview

- ✓ Overview of WWTF Treatment
- ✓ Review of Bid Price & Budget
- ✓ Phase V Project
- Recommendation
- ✓ Questions & Discussion



# WWTF Overview: Treatment

- Preliminary
  - Removes debris such as “flushable” wipes, sticks and other floatables and grit which cause problems with equipment downstream
- Primary
  - Removes >50% of particulate materials
- Secondary
  - Removes >90% of organic materials
  - Removes nutrients
- Disinfection
  - Kills bacteria
- Biosolids handling



## Original Project Town Bond Approvals

- ✓ Phase III - April 2019 Town vote \$13.1 million.
- ✓ Phase IV - June 2020 Town vote \$9.52 million.
- ✓ Total Funding Approved by Town - **\$22.62 million.**

# Bid Award

Base Bid	Bid Value	Award Combination
<b>Main Plant:</b> Main Pump Station – Clarifier Mechanism – Emergency Generators – Sludge Holding Tanks -Piping/Electrical/Computer Program Upgrades	\$13,868,487	x \$13,868,487
Screenings Building	\$2,326,764	
Compost Facility	\$1,882,553	
Chlorination Building	\$875,106	
Wash Water Piping	\$425,189	
Souhegan Pump Station	\$1,638,880	x \$1,638,880
Thornton's Ferry Pump Station	\$1,672,254	x \$1,672,254
<b>Subtotal:</b>	<b>\$22,689,233</b>	<b>\$17,179,621</b>
Bid Alternate Subtotal (Headworks Building, algae removal brush system)	\$1,915,520	
<b>Engineering Design and Value Engineering - Actual Cost</b>	<b>\$1,552,825</b>	<b>\$1,552,825</b>
<b>Wright Pierce Construction Admin – Actual Cost</b>	<b>\$2,338,533</b>	<b>\$2,338,533</b>
<b>NH DES Misc. Admin Costs</b>	<b>\$545,700</b>	<b>\$370,000(est. Based on Award)</b>
<b>NHDES Req. Construction Contingency (5%)</b>	<b>\$1,230,200</b>	<b>\$870,000(est. Based on Award)</b>
	<b>\$30,272,011</b>	<b>\$22,310,979</b>

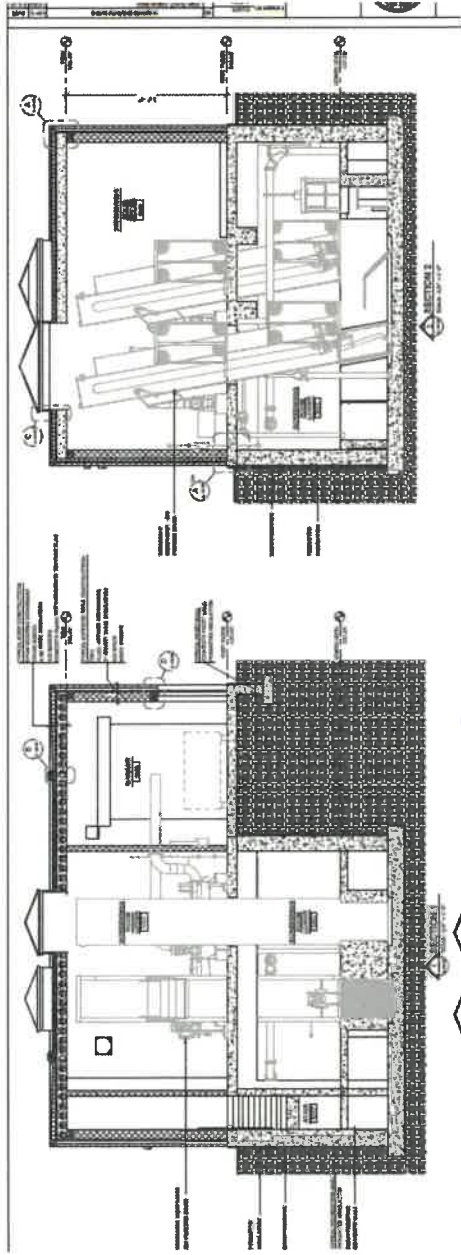
## Project Components Removed

### Bid Components

- Upgrading Main Pump Station,
- Upgrading Souhegan and Thornton's Ferry Pump Stations,
- Building New Influent Screenings Building,**
- Replacement of clarifier mechanisms,
- New emergency generators,
- Upgrade Compost Facility Ventilation System,**
- Upgrade Sludge Holding Tank,
- Washwater System,**
- Renovation to Headworks Building Administrative Spaces, Bathrooms, and Laboratory,**
- Miscellaneous piping, electrical, and computer programing upgrades,

# Phase V Project Recommendation

## New Screenings Building



Compost



Wastewater System



Renovation to Headworks Building Administrative Spaces, Bathrooms, and Laboratory.





## Phase V Project Cost

<b>Project Components</b>	<b>Cost</b>
Screenings Building	\$3,200,000
Wash water Piping	\$585,000
Compost Facility	\$2,600,000
Headworks Building	\$2,400,000
Construction Cost Total	\$8,785,000
Contingency 5%	\$439,250
Engineering 10%	\$878,500
Total Project Cost	\$10,102,750

## Clean Water ARPA Grant Offers

- NHDES announced the availability of the [American Rescue Plan Act \(ARPA\) Grant Application](#) for all Clean Water ARPA Grant Offers.
- Town submitted an SRF pre-application to qualify for the ARPA grant.
- The Town of Merrimack has been preapproved for 20% ARPA grant up to \$2,000,000.

## Phase V Project Cost

Project Components	Cost
Screenings Building	\$3,200,000
Wash water Piping	\$585,000
Compost Facility	\$2,600,000
Headworks Building	\$2,400,000
Construction Cost Total	\$8,785,000
Contingency 5%	\$439,250
Engineering 10%	\$878,500
Total Project Cost	\$10,102,750
ARPA Grant	(\$2,000,000)
<b>Total Loan Amount</b>	<b>\$8,102,750</b>

Funding for debt repayment on  
the bond will come from sewer  
user fees **not** property taxes

# Debt Schedule Repayment

- 20 Year Loan at 2.5% Interest

Year	Principal	Interest	Total Annual Payment	Principal Balance
1	\$405,137.50	\$202,568.75	\$607,706.25	\$7,697,612.50
2	\$405,137.50	\$192,440.31	\$597,577.81	\$7,292,475.00
3	\$405,137.50	\$182,311.88	\$587,449.38	\$6,887,337.50
4	\$405,137.50	\$172,183.44	\$577,320.94	\$6,482,200.00
5	\$405,137.50	\$162,055.00	\$567,192.50	\$6,077,062.50
6	\$405,137.50	\$151,926.56	\$557,064.06	\$5,671,925.00
7	\$405,137.50	\$141,798.13	\$546,935.63	\$5,266,787.50
8	\$405,137.50	\$131,669.69	\$536,807.19	\$4,861,650.00
9	\$405,137.50	\$121,541.25	\$526,678.75	\$4,456,512.50
10	\$405,137.50	\$111,412.81	\$516,550.31	\$4,051,375.00
11	\$405,137.50	\$101,284.38	\$506,421.88	\$3,646,237.50
12	\$405,137.50	\$91,155.94	\$496,293.44	\$3,241,100.00
13	\$405,137.50	\$81,027.50	\$486,165.00	\$2,835,962.50
14	\$405,137.50	\$70,899.06	\$476,036.56	\$2,430,825.00
15	\$405,137.50	\$60,770.63	\$465,908.13	\$2,025,687.50
16	\$405,137.50	\$50,642.19	\$455,779.69	\$1,620,550.00
17	\$405,137.50	\$40,513.75	\$445,651.25	\$1,215,412.50
18	\$405,137.50	\$30,385.31	\$435,522.81	\$810,275.00
19	\$405,137.50	\$20,256.88	\$425,394.38	\$405,137.50
20	\$405,137.50	\$10,128.44	\$415,265.94	\$0.00
<b>Totals</b>	<b>\$8,102,750.00</b>	<b>\$2,126,971.88</b>	<b>\$10,229,721.88</b>	<b>\$0.00</b>

# Questions & Discussion

