



# Chlorination Building Upgrade

*Presented by:*

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# Presentation Overview



- ✓ Review of Bid Price & Budget
- ✓ Chlorination Building
- ✓ Funding Request
- ✓ Questions & Discussion

## Bid Award and Remaining Phase III/IV SRF Loan Balance

Base Bid	Award Combination
Main Plant: Main Pump Station – Clarifier Mechanism – Emergency Generators – Sludge Holding Tanks - Piping/Electrical/Computer Program Upgrades	\$13,868,487
Screenings Building	
Compost Facility	
Chlorination Building	
Wash Water Piping	
Souhegan Pump Station	\$1,638,880
Thornton's Ferry Pump Station	\$1,672,254
<b>Subtotal - Actual Cost based on Change Order #1</b>	<b>\$17,179,621.18</b>
<b>Engineering Design and Value Engineering - Actual Cost</b>	<b>\$1,552,825</b>
<b>Wright Pierce Construction Admin – Actual Cost</b>	<b>\$2,338,533</b>
<b>NH DES Misc. - (est. Based on Award) Admin Costs</b>	<b>\$390,020*</b>
<b>NHDES Req. Construction Contingency (5%) – Actual Cost</b>	<b>\$858,981</b>
<b>Total Loan Balance</b>	<b>\$22,319,980.18</b>

- Loan Amount -  
\$22,620,000
- Unaccounted for  
Loan Balance:  
\$300,020

## Chlorination Building Reason for Upgrade

- RAS Pumps and Motor Control Center have reached the end of their useful life creating frequent maintenance issues and costs and spare parts are becoming harder to come by.
- RAS piping has reached the end of its useful life and is recommended to be increased in size and capacity based on Town growth and stricter permit limits (e.g. nutrient removal).

## Major Activities Included in Upgrade

- Replace all four RAS pumps, valves and piping.
- Replace RAS yard piping.
- Replace existing Motor Control Center (MCC) and upgrade electrical service.
- Miscellaneous structural repairs.

- Construction upgrades are experiencing very high inflation rates and the cost for these upgrades will continue to increase as time passes.
- Adding the upgrades in the future will place significant burden on the WWTF staff to maintain and repair the aging equipment and pipe.
- Spare parts for these systems are not commercially available and therefore the cost to repair the current system is more than for a new system.

## Why Now (cont.)

Adding the upgrades to the current project now helps keep costs down and utilizes contractors who are very familiar with the work that needs to be done.

## Why Now (cont.)

ITEM	DESCRIPTION	QUAN	UM	UNIT COST	TOTAL
1	Methuen Site Work (Manholes, Ductbanks, Paving, Yard Piping, Earth Materials, Erosion Controls, Rebar, Concrete, Flowable Fill)	1.00	LS	392,874.46	<b>392,874.46</b>
2	Misc Metals Work (New Loading Dock Handrail)	1.00	LS	14,742.00	<b>14,742.00</b>
3	Mechanical Work (Pumps, Process Piping, Gauges, Small Bore Piping, hangers, bypass, HVAC work)	1.00	LS	700,258.83	<b>700,258.83</b>
4	Electrical Work	1.00	LS	596,691.90	<b>596,691.90</b>
5	Extended General Conditions (5 month X \$66,000)	1.00	LS	330,000.00	<b>330,000.00</b>
<b>Total</b>					<b>\$2,034,567.19</b>



## Chlorination Building Funding Request

- Requesting permission to use the following funds in order to add the Chlorination building to the Phase III/IV Upgrade:
  - \$1,273,229 from Town of Merrimack ARPA.
  - \$300,020 from existing Phase III/IV SRF Loan\*.
  - Withdrawal from Wastewater Infrastructure CRF in the amount of \$461,319.
  - Total ask is for \$2,034,568.

## Questions & Discussion

