



# PEIRCE ISLAND WWTF UPGRADE PROJECT

## Dedication Ceremony - July 13, 2021



### INTRODUCTION

Construction of the Peirce Island Wastewater Treatment Facility (WWTF) Upgrade Project is complete after four and half years of construction. The project included complete reconstruction of the facility with a new Headworks Building, Solids Building, Biological Aerated Filter Building, Electrical Building, Standby Generator, Gravity Thickener and Operations/Lab Building. Renovations were completed to the Grit Building and Grit Tanks.

The completed facility has significantly improved the quality of treated wastewater effluent discharged to the Piscataqua River.

### SITE PLAN



### PROJECT FACTS

- ✓ Largest Capital Improvement Project in the City's history
- ✓ Construction commenced in September 2016
- ✓ Total Project Cost: \$92 million  
NH State Revolving Fund Loan: \$81.9 million
- ✓ Number of public meetings:  
Prior to construction: > 40  
During construction: > 50  
Weekly construction meetings: > 200
- ✓ Construction Progress Tours: 7
- ✓ Area of WWTF site: 3.7 acres
- ✓ New buildings or tanks constructed: 5
- ✓ Total number of construction trucks:  
13,500 round trips
- ✓ Amount of rock removed: over 14,400 cubic yards
- ✓ Amount of concrete placed: over  
13,500 cubic yards
- ✓ Amount of reinforcing steel installed: over  
3,400,000 pounds
- ✓ Typical number of construction staff on-site daily:  
70 - 80
- ✓ Amount of utility pipe installed: over 3 miles

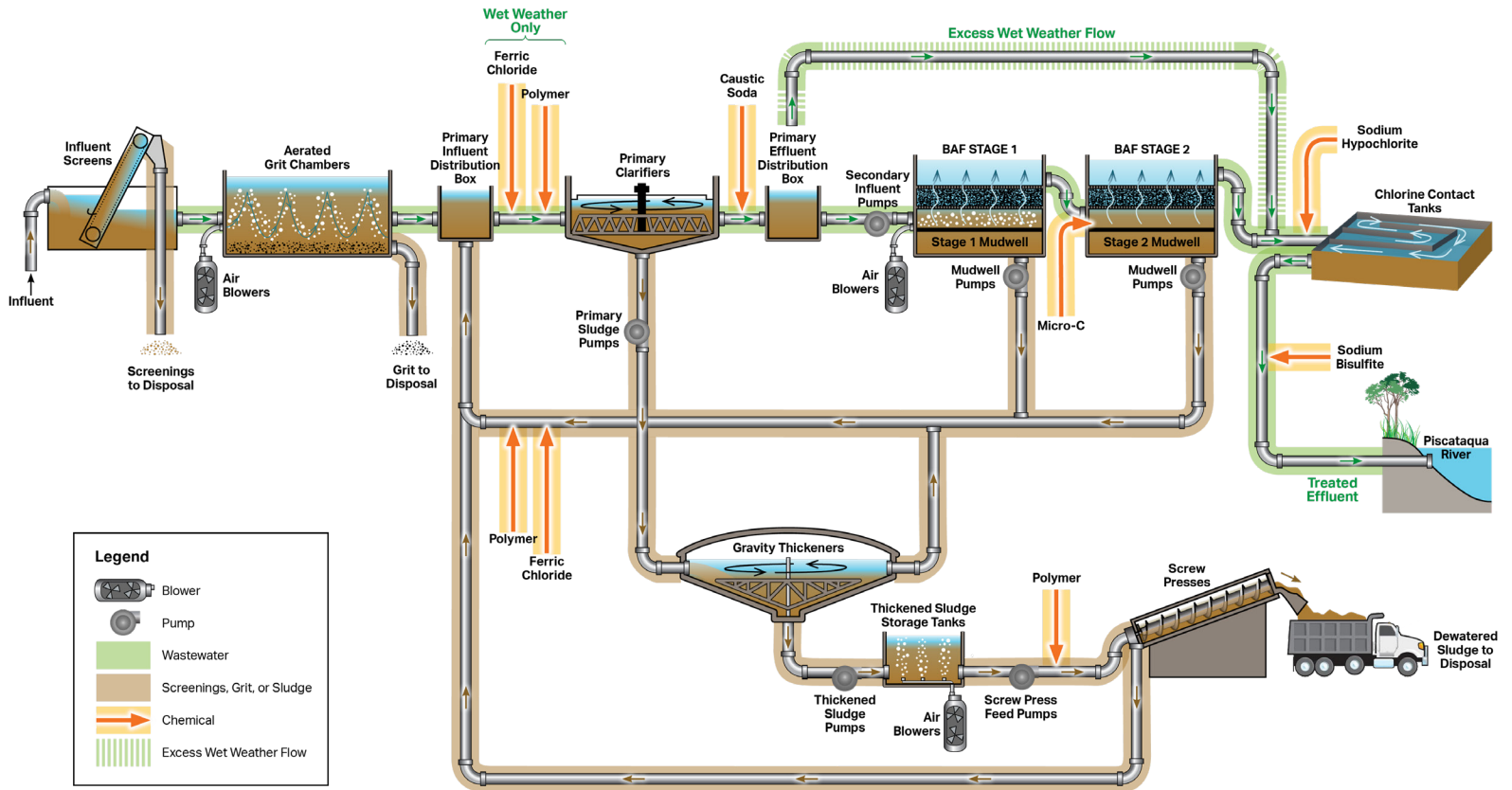
### VIRTUAL TOUR OF PEIRCE ISLAND WWTF

Scan the QR code with  
your mobile device to view  
video.



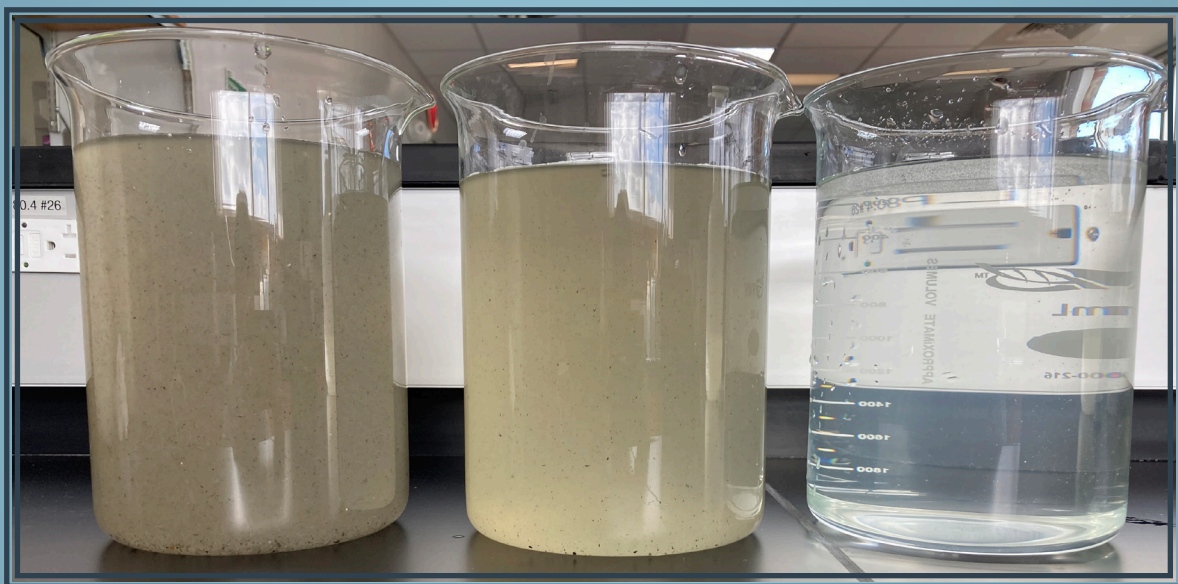


# PROCESS FLOW DIAGRAM



City of Portsmouth, NH  
Peirce Island Wastewater Treatment Facility  
Process Flow Diagram

## EFFLUENT WATER QUALITY



Raw  
Wastewater

Primary  
Effluent

Final  
Effluent