

Manage our Resources



Explore Innovative Solutions



Protect our Environment



Preserve our Community

## CITY OF PORTSMOUTH WASTEWATER DIVISION

# PEIRCE ISLAND WASTEWATER TREATMENT FACILITIES UPGRADE

CITY COUNCIL MEETING

AUGUST 19, 2013

# Proposed Schedule Modification

Task Name per Consent Decree (CD)	CD Date	Proposed Date	Extension in months
<b>Complete design of secondary treatment facilities</b>	August 31, 2014	February 28, 2015	6
<b>Commence construction of secondary treatment facilities</b>	March 1, 2015	September 1, 2015	6
<b>Complete construction of secondary treatment facilities</b>	March 1, 2017	June 1, 2018	15
<b>Achieve compliance with secondary treatment facilities</b>	May 1, 2017	Nov 1, 2018	18



# Comparison of Scope by Project Element

Project Element	Secondary Treatment	Total Nitrogen (TN) Treatment	Additional Costs
Headworks	Y	Y	\$500,000
Existing Facility Upgrades	Y	Y	\$2,000,000
Secondary Pump Station	Y	Y	\$1,000,000
Filter Building Demolition	Y	Y	(\$500,000)
First Stage BAF	Y	Y	\$9,000,000
Second Stage BAF	N	Y	\$13,500,000
Sludge Storage / Sludge Thickening	Y	Y	\$1,000,000
Chemical Addition	N	Y	\$1,500,000
Main Electrical Service	N	Y	\$2,000,000
<b>Total Estimated Project Cost</b>	<b>\$33M</b>	<b>\$63M</b>	<b>\$30,000,000</b>

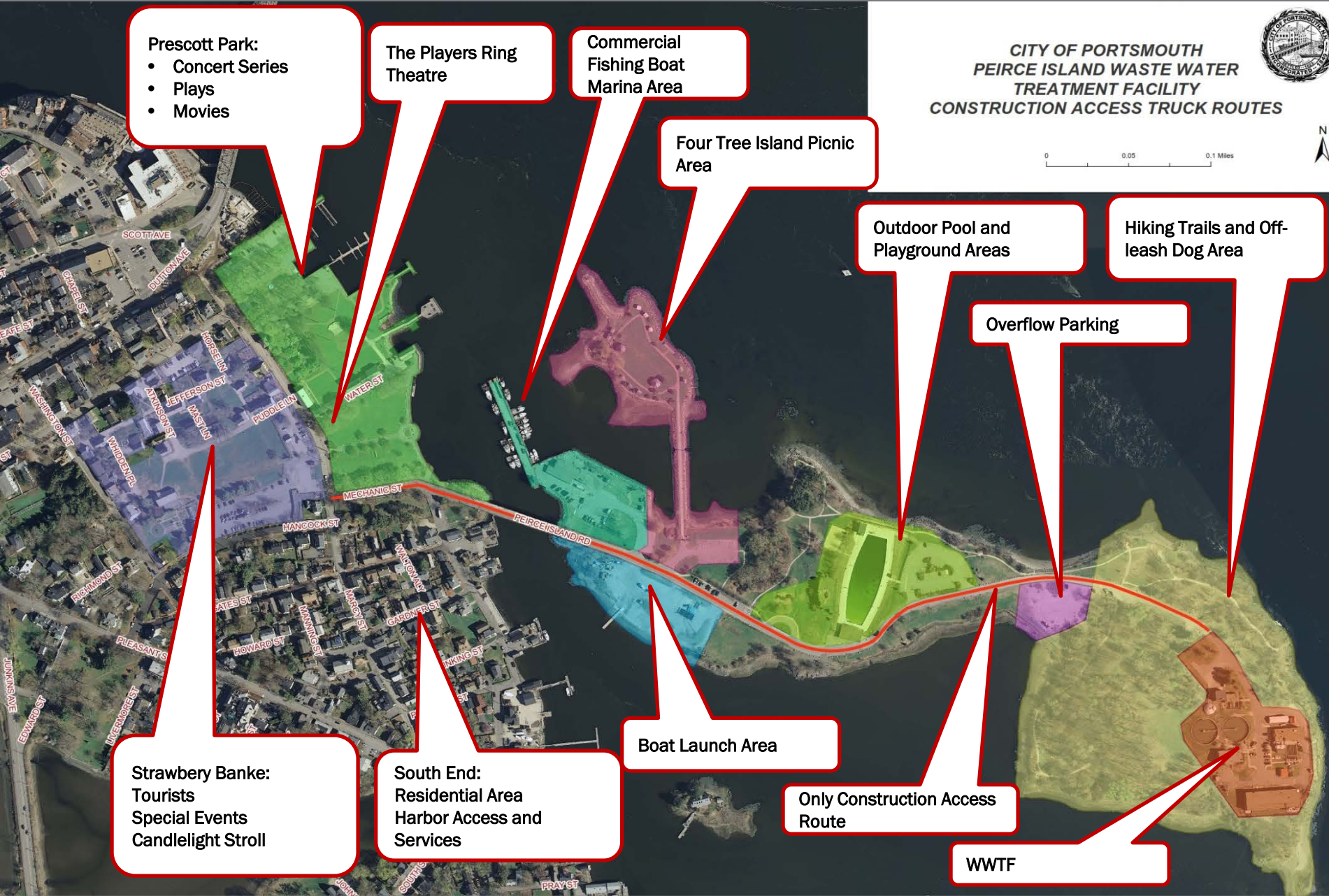




# Spatial Constraints



## CITY OF PORTSMOUTH PEIRCE ISLAND WASTE WATER TREATMENT FACILITY CONSTRUCTION ACCESS TRUCK ROUTES



**Prescott Park:**

- Concert Series
- Plays
- Movies

**The Players Ring Theatre**

**Commercial Fishing Boat Marina Area**

**Four Tree Island Picnic Area**

**Outdoor Pool and Playground Areas**

**Hiking Trails and Off-leash Dog Area**

**Overflow Parking**

**Boat Launch Area**

**Only Construction Access Route**

**WWTF**

**Strawbery Banke:**  
Tourists  
Special Events  
Candlelight Stroll

**South End:**  
Residential Area  
Harbor Access and Services



# Site Constraints

Existing East End Trails run Adjacent to the existing fenceline

Presence of Fort Washington requires section 106 review

Location of aids to navigation limits work near structures

Work within 100 ft of tidal wetland requires NHDES wetlands permit

Working within 250 ft of highest observable tide line requires NHDES Shoreline Permit

Existing WWTF Must Remain Operational During Construction

Presence of rock makes excavation for structure costly

**LEGEND**

- Existing Fort Washington Remains
- Approximate Fort Washington Original Location
- Existing WWTF fence line
- Existing aid to navigation
- Existing approximate wetland boundary

