



Presentation to

Wastewater Advisory Committee

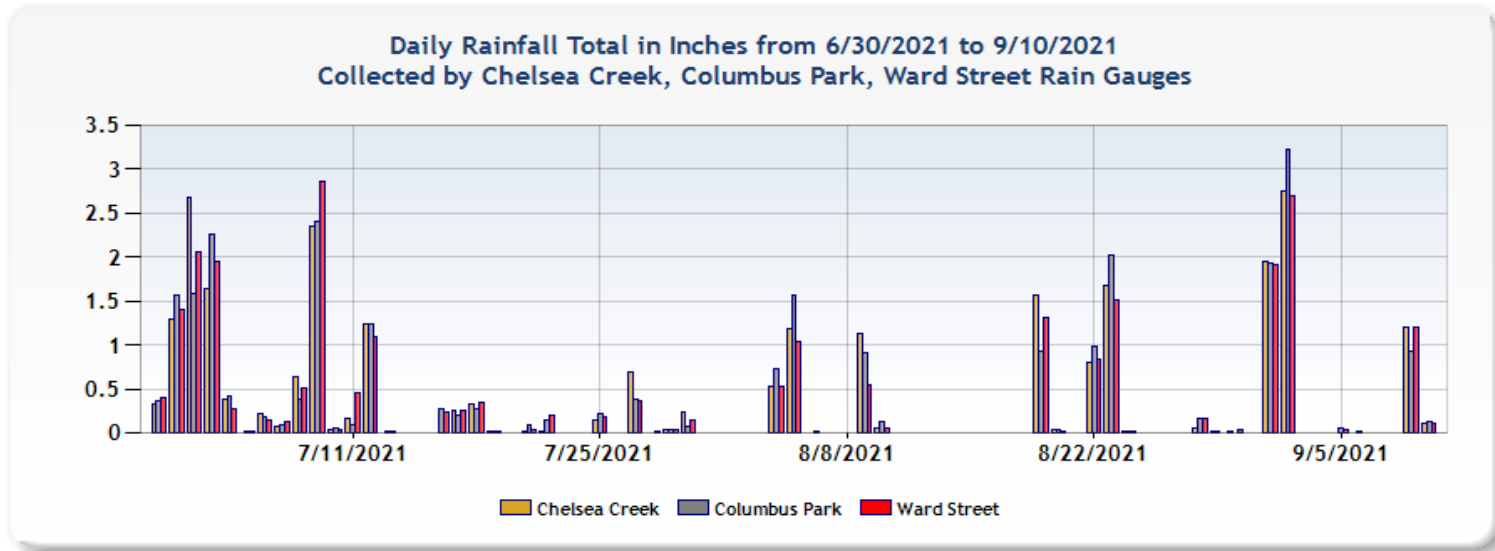
Big Storms, Big Projects

November 5, 2021



73-Day Rainfall

MWRA's service area experienced over 25 inches of rainfall from June 30th through September 10th.



Chelsea Creek: 25.77" Columbus Park: 26.10" Ward Street: 25.15"

Typical annual rainfall for Boston area = 43 inches

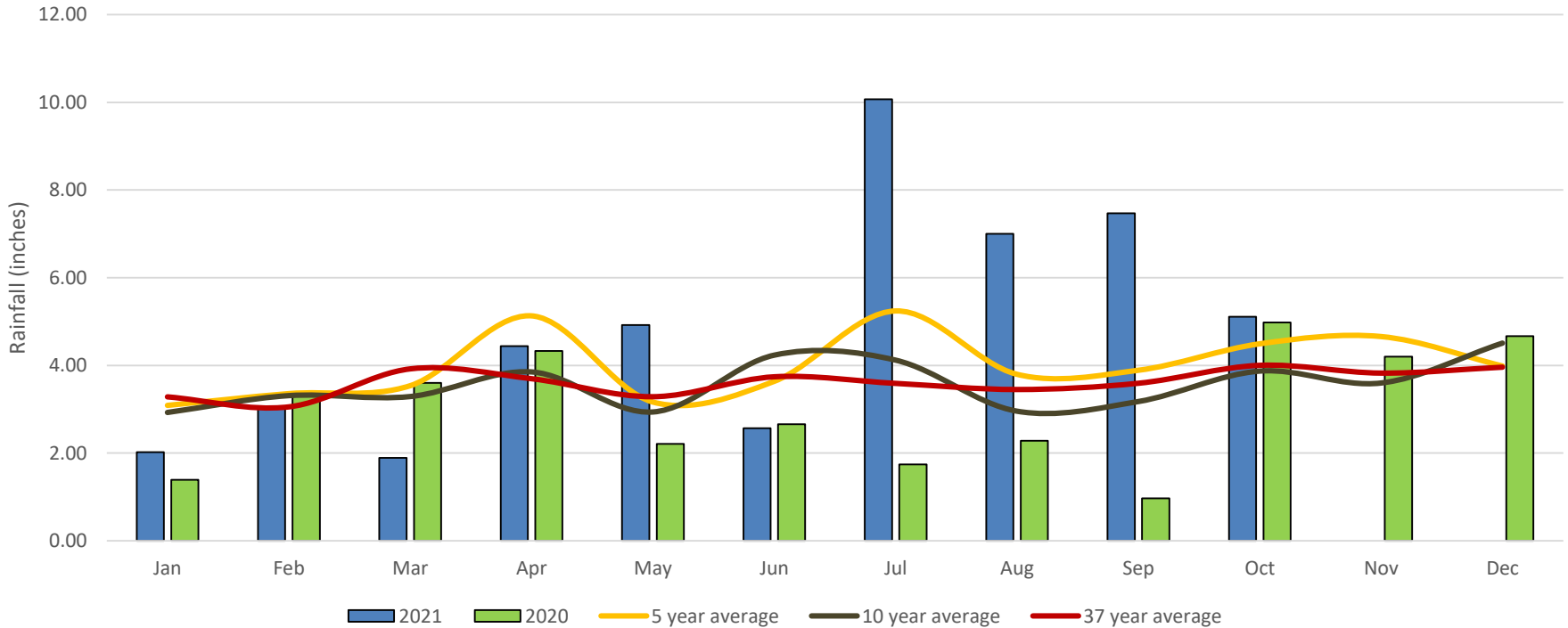
2021 rainfall through September 43.43 inches

2021 rainfall through October = 48.54 inches



2021 Rainfall vs Long Term Average Rainfall

Rainfall@ NOAA Logan Airport Rain Gauge



2021 rainfall through October = 48.54 inches



CSO/SSO Current Reporting Requirements

For CSOs:

- Post on MWRA website and email subscribers (via Everbridge) within 4 hours of discharge
- Provide volumes and total precipitation within 5 business days

For SSOs:

- Preliminary notification on website within 4 hours
- Notify DEP, EPA, BOA and DMF within 24 hours
- Submit DEP SSO form within 5 days
- Update website with final info within 5 days



Nut Island Headworks Odor Control & HVAC Systems Improvements



Contract No. 7548 Nut Island Headworks Odor Control & HVAC Systems Improvements

**Walsh Construction Co. II
Hazen & Sawyer
\$58,541,462**

November 2021



Odor Control Roof







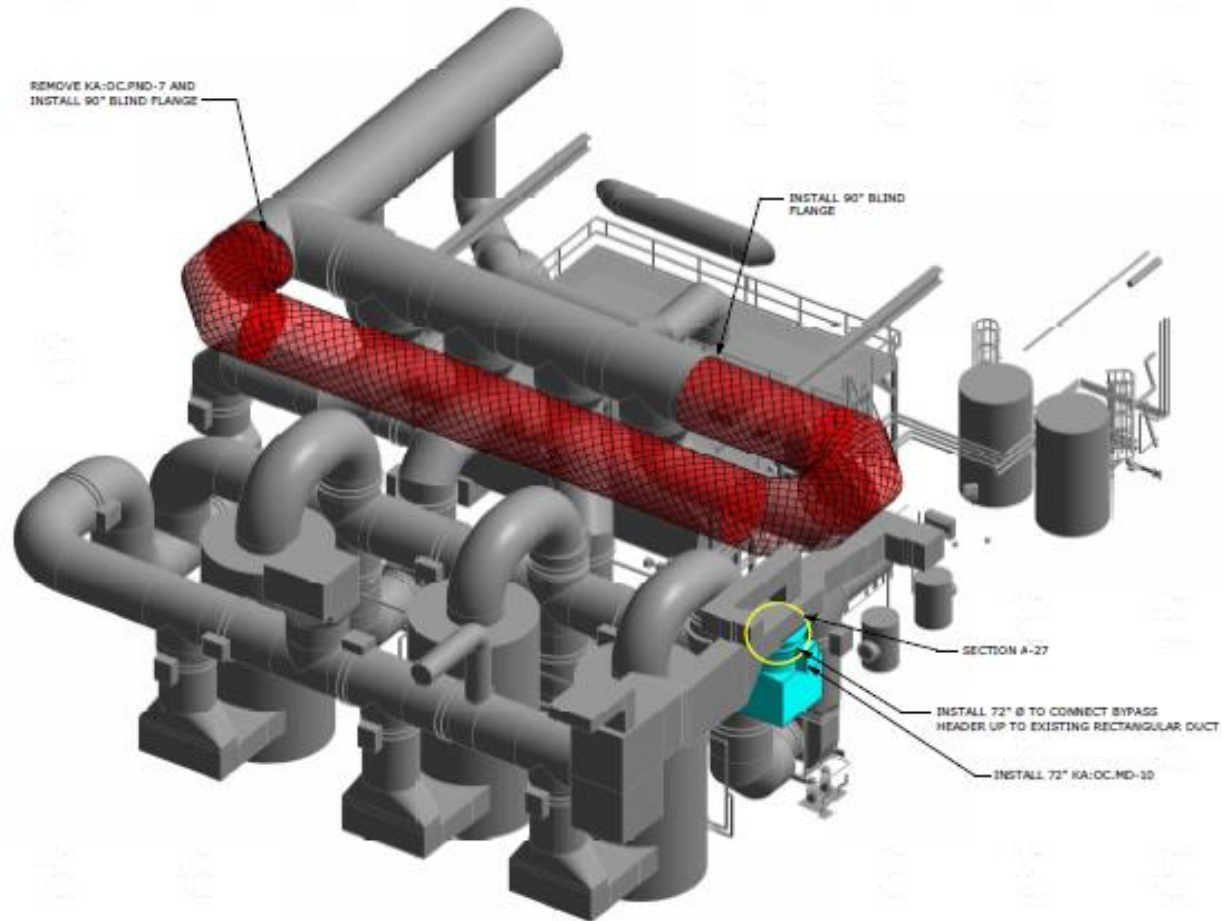




Odor Control Room



Nut Island Headworks Odor Control & HVAC Systems Improvements

















MID-EXTEND

MID-EXTEND

CAUTION







HVAC Improvements







Emergency Spillway Sluice Gates











**Underground Fuel Oil
Storage Tanks
20,000 Gallons**

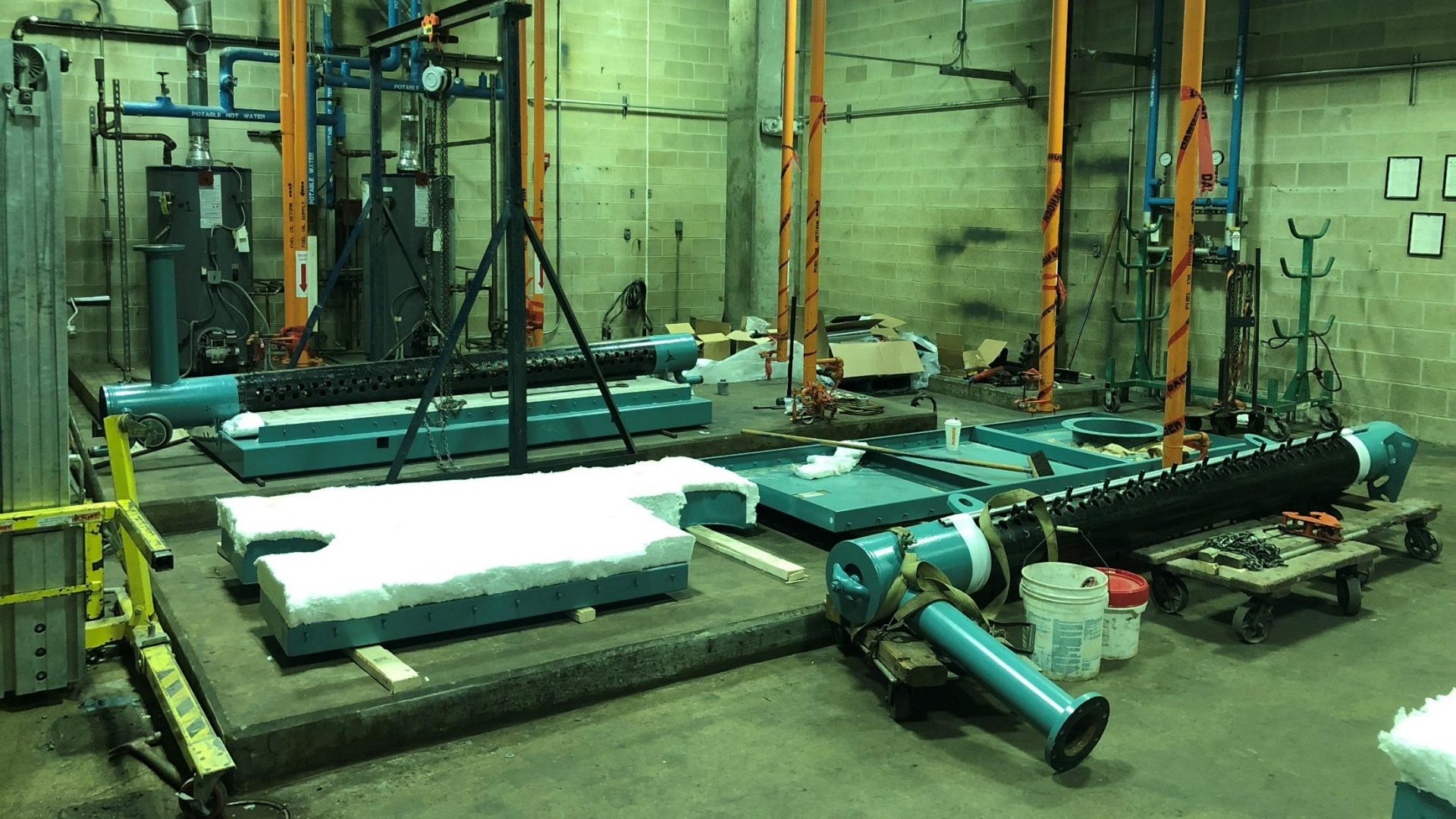








Boiler Replacement







FlexGen
FLEXIBLE WATER TUBE BOILER

FUEL OIL SUPPLY
EMERGENCY

100-20173580

100-20173580

100-20173580

100-20173580

100-20173580



Prison Point CSO Facility Improvements Construction Contract 7462

November 2021



Prison Point CSO Facility



Main Building



Chemical Building



Prison Point CSO Facility Improvements



Catenary Bar Screens to be Replaced



Replacement of Conveyor System



Prison Point CSO Facility Improvements



Influent Wet Weather Gate to be Replaced



Prison Point CSO Facility Improvements



Storm Pump Engine to be Replaced



Relocation of Electrical Room



Prison Point CSO Facility Improvements



**Dry Weather and Dewatering
Pumps to be Replaced**



Generator to be Replaced



Prison Point CSO Facility Improvements



**Replacement of Leaking
Chemical Tanks**



**Replacement of Chemical Building Roof
and Installation of Chemical Tank Access
Hatches**



Prison Point CSO Facility Improvements

- Construction contract awarded to Barletta Heavy Division at Sept. BOD (\$39,479,000)
- Arcadis, U.S. to perform RE/RI services and Construction Administration and Management
- NTP Construction Contract 7462 – October 29, 2021
- 2 year construction duration



Major/critical facility equipment to be replaced/rehabilitated while facility remains operational

- Wet weather pump engines, dry weather pumps, force main lining, screens, gates, chemical systems, PLCs, etc.
- Discharge/treatment capacity will be reduced by 1/3 for a year. 2nd construction shift will be utilized during this time to hold construction to 2 years.
- Complex sequencing and constraints.
- One train (channel, detention basins, pump engine, concrete repair, gate, etc) will be taken offline at a time during reduced capacity.