



Annual CIP Status Report (January – December 2022)

Transportation and Environment Committee

March 6, 2022

Presenter:

David Ohlson – Division Manager, ESD CIP



**San José-
Santa Clara
Regional
Wastewater
Facility**

Program History

- The San José and Santa Clara City Councils adopted the Plant Master Plan (PMP) in November 2013 and December 2013, respectively.
- The PMP identified more than 100 capital improvement projects totaling over \$2.1 billion to be implemented at the RWF over the next 30 years.
- A validation process was completed in early 2014 to update and prioritize the recommended PMP projects and additional gap projects into 33 projects to be initiated over 10 years.
- Beginning in fiscal year 2014-2015, the validation process was used to inform the five-year CIP and ten-year funding strategy, which are approved by the San José City Council.

Significant Program Activities

■ Dewatered Biosolids Management Strategy

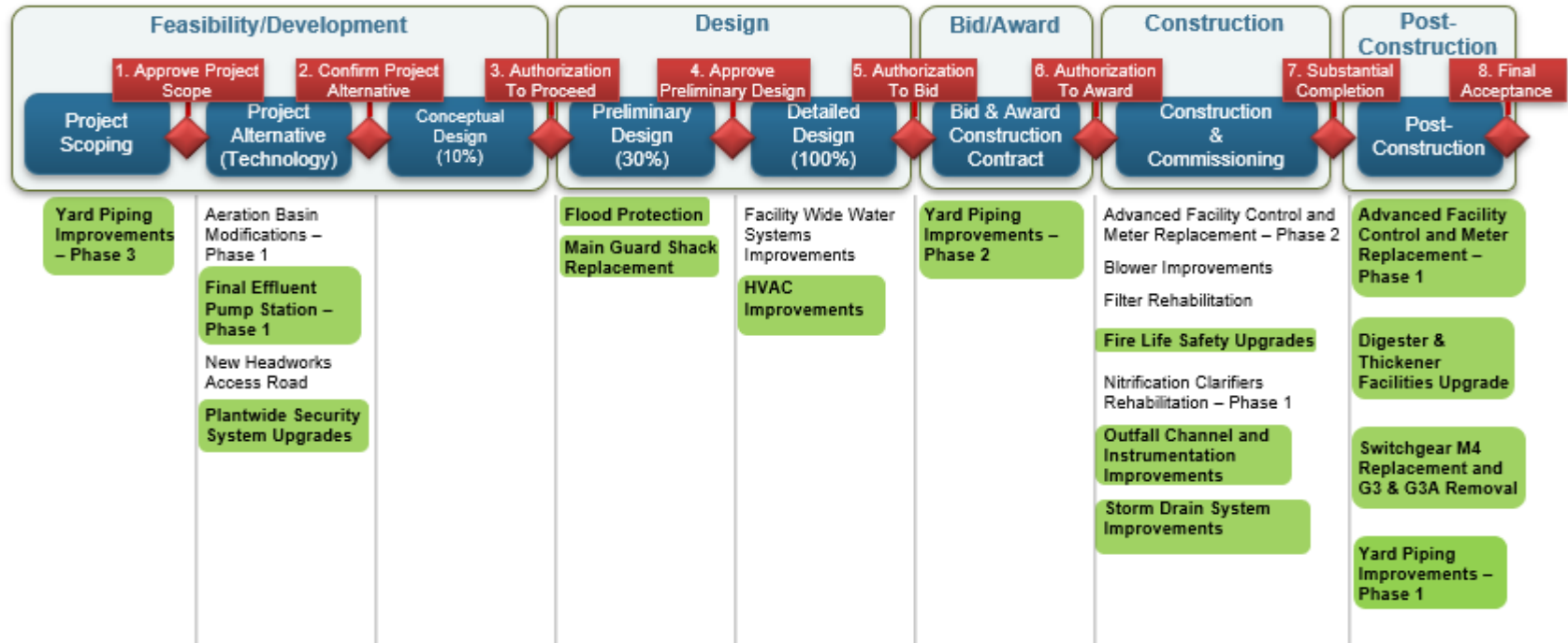
- Scope of services: schedule delivery of empty and clean containers, loading biosolids and covering containers, transporting biosolids, and prepare reports for billing and regulatory
- Five proposals were received, Council approved three agreements with Denali Water Solutions, LLC (35%), Synagro West, LLC (57%), and Lystek International Limited (8%) in December 2022 through June 2029
- New Dewatering Facility to begin operation in FY 2025-2026

■ Aeration Tanks Approach

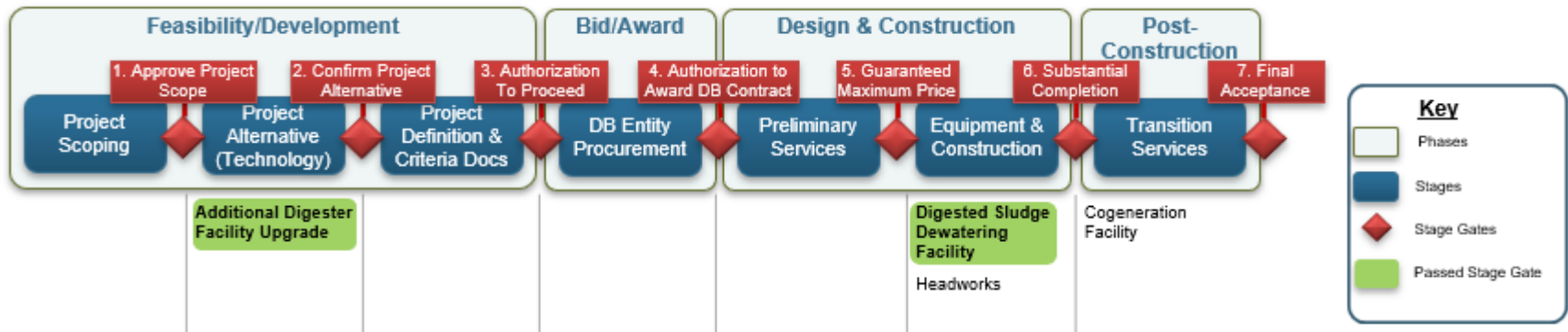
- 2024 Nutrient Watershed Permit to impose Total Inorganic Nitrogen limits by 2029
- Phase 1 to optimize SND/inDENSE™ operation
- Incremental approach to upgrade

Program Snapshot: All Projects

Design-Bid-Build Active Projects



Progressive Design-Build Active Projects



Six Projects in Feasibility/Development

Scoping

- Yard Piping Improvements – Phase 3

Project Alternatives

- Additional Digester Facility Upgrade
- Aeration Basin Modifications – Phase 1
- Final Effluent Pump Station – Phase 1
- New Headworks Access Road
- Plantwide Security System Upgrades



- Contractor deploying remote operated vehicle to perform condition assessment in the 108-inch Filter Influent pipe in the Yard Piping Improvements – Phase 3 project

Five Projects in Design and Bid/Award

Preliminary Design

- Flood Protection
- Main Guard Shack Replacement

Detailed Design

- Facility-wide Water Systems Improvements
- HVAC Improvements

Bid & Award

- Yard Piping Improvements – Phase 2



- Corrosion and cracking of the 96" raw sewage pipe that will be rehabilitated by the Yard Piping Improvements – Phase 2 project



- Preferred alternative for the new RWF entrance for the Main Guard Shack Replacement project

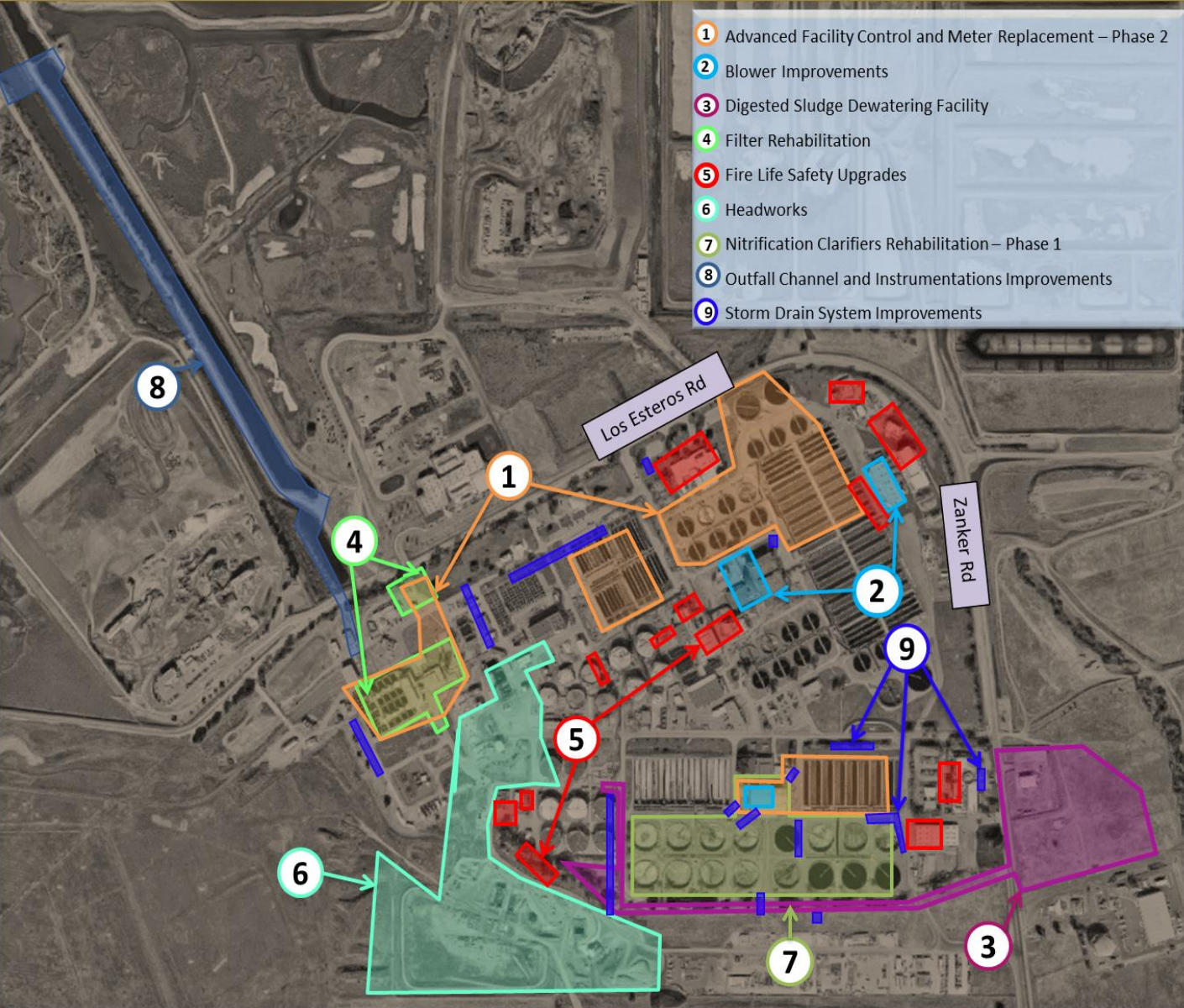
Nine Projects in Construction

- Advanced Facility Control and Meter Replacement – Phase 2 (**\$7.0m**)
- Blower Improvements (**\$29.5m**)
- Digested Sludge Dewatering Facility (**\$131.2m**)
- Filter Rehabilitation (**\$33.3m**)
- Fire Life Safety Upgrades (**\$2.8m**)
- Headworks (**\$126.9m**)
- Nitrification Clarifiers Rehabilitation – Phase 1 (**\$26.2m**)
- Outfall Channel and Instrumentation Improvements (**\$4.3m**)
- Storm Drain System Improvements (**\$6.3m**)



- 1 Advanced Facility Control and Meter Replacement – Phase 2
- 2 Blower Improvements
- 3 Digested Sludge Dewatering Facility
- 4 Filter Rehabilitation
- 5 Fire Life Safety Upgrades
- 6 Headworks
- 7 Nitrification Clarifiers Rehabilitation – Phase 1
- 8 Outfall Channel and Instrumentations Improvements
- 9 Storm Drain System Improvements

Nine Projects In Construction



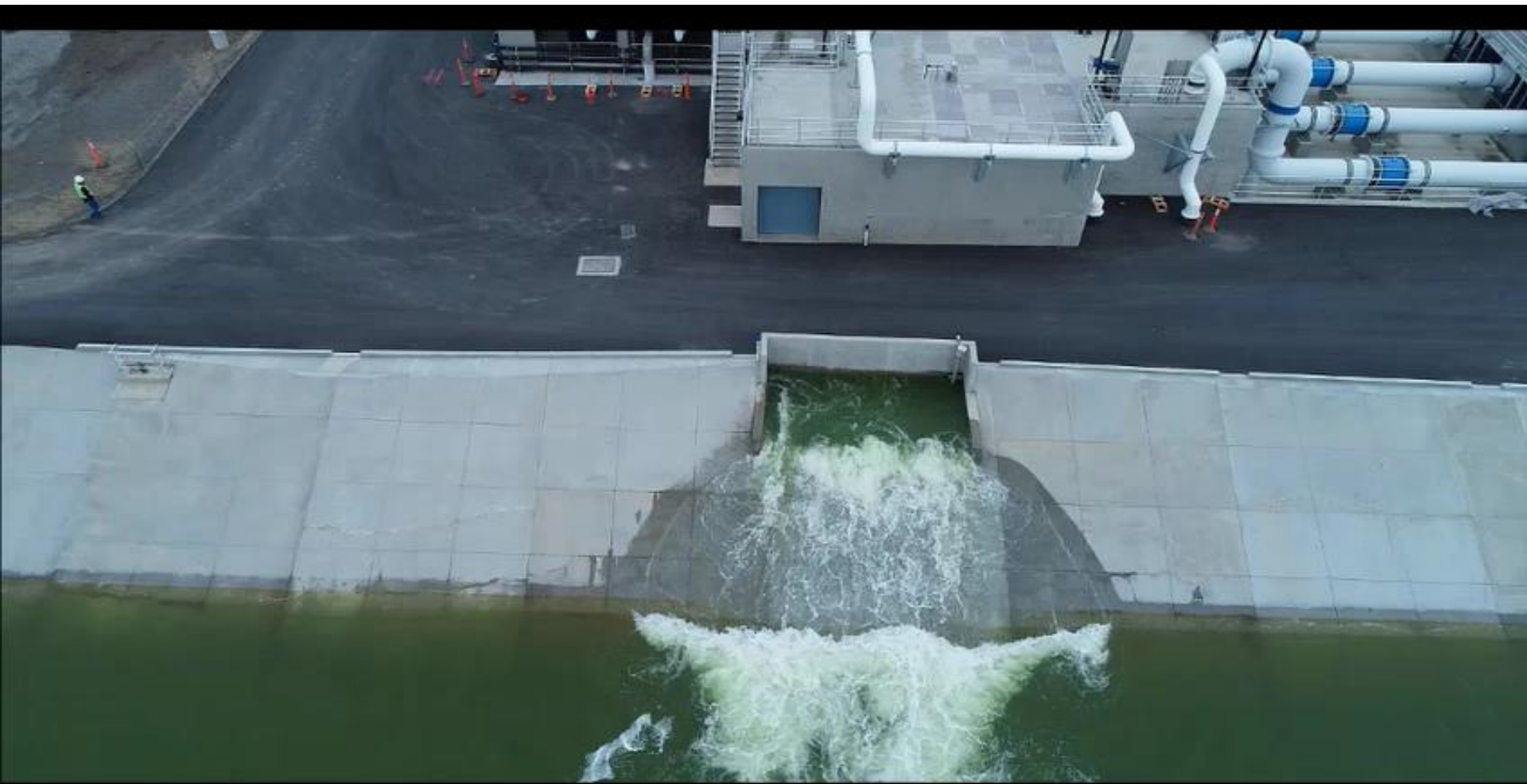
Total Base Construction Value: \$368M



Headworks Project

Construction Value: \$126.9M | Estimated Beneficial Use: Summer 2023

Headworks

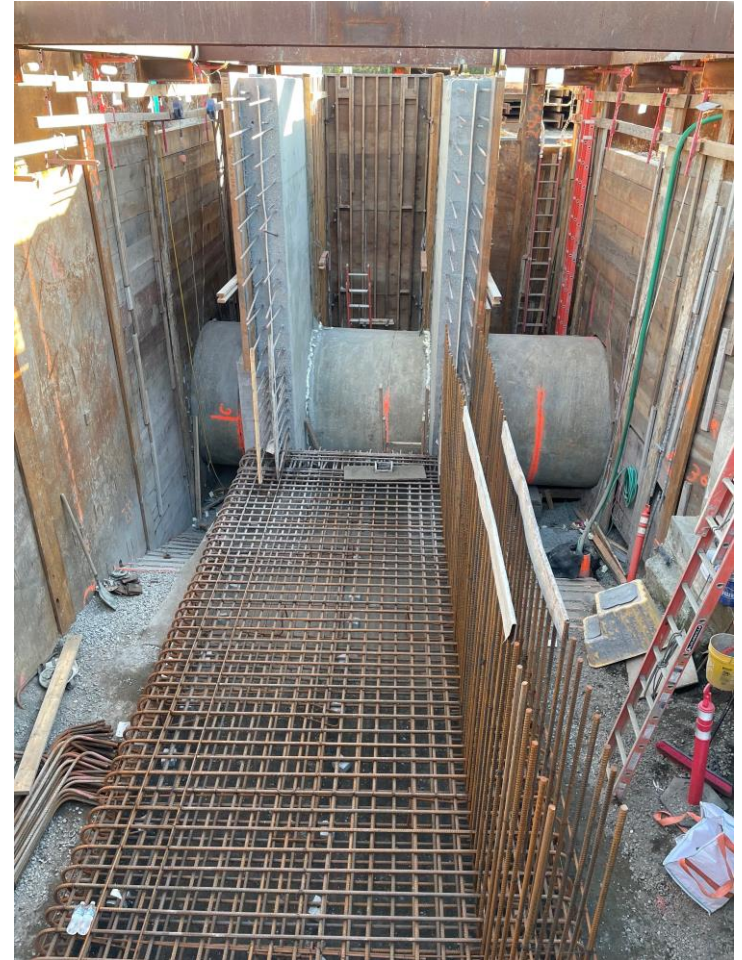


- Flow circulates in a loop through new Headworks, Emergency Overflow Basin and EBOS

Headworks



- Setting raw sewage pump #3



- New Milpitas Structure addition

Filter Rehabilitation



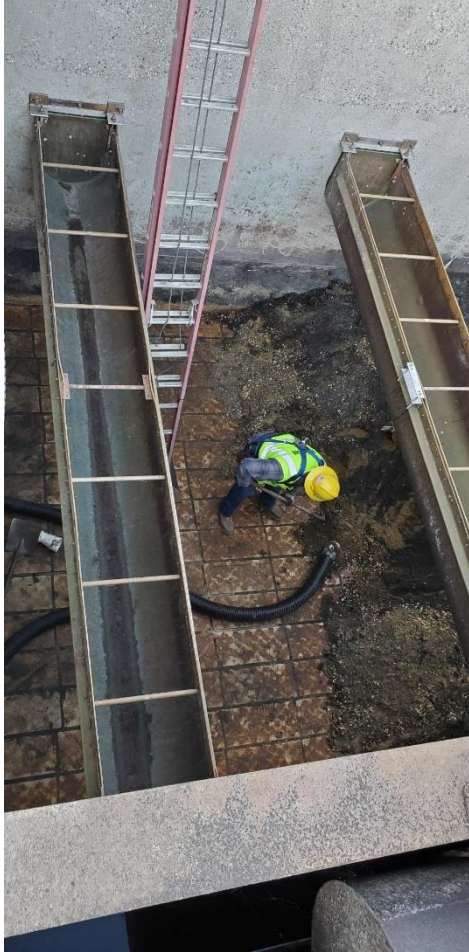
Construction Value: \$33.3M | Estimated Beneficial Use: Summer 2024

Filter Rehabilitation



- New gravel in the white sacks being added to the Filter Building as new media

Filter Rehabilitation



- Old filter media removal



- Demolition of Surface Wash line containing lead paint in Gallery A

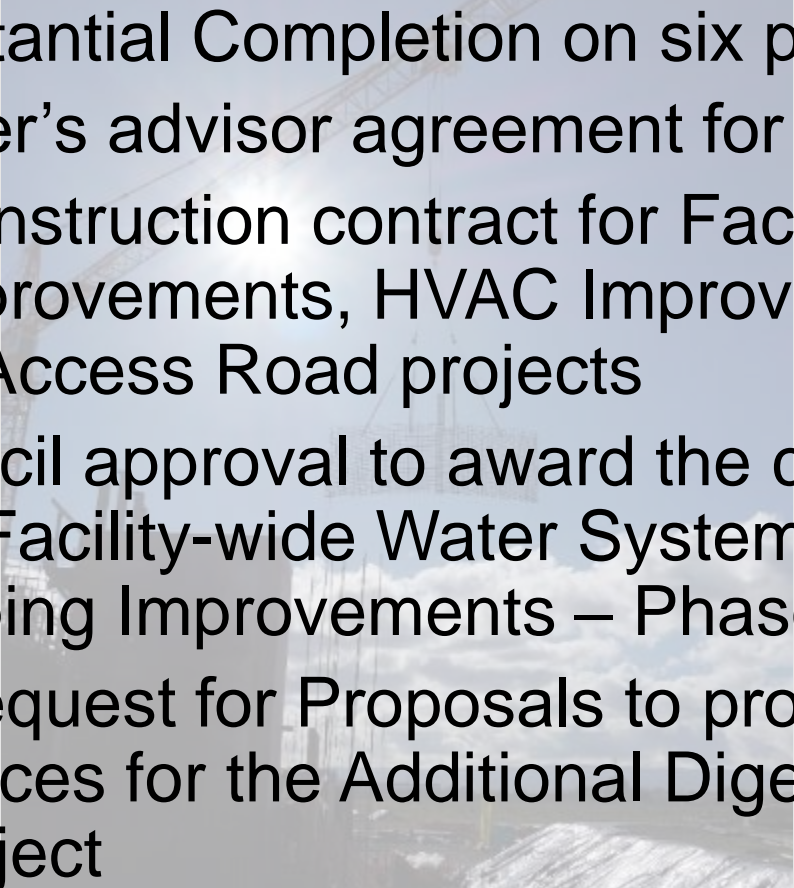


- Switchgear being laid onto pad



- New air scour blowers in service

Expected Activities through December 2023

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- Reach Substantial Completion on six projects
 - Amend owner's advisor agreement for Dewatering
 - Advertise construction contract for Facility-wide Water Systems Improvements, HVAC Improvements, and New Headworks Access Road projects
 - Obtain Council approval to award the construction contract for Facility-wide Water Systems Improvements and Yard Piping Improvements – Phase 2
 - Advertise Request for Proposals to procure owner's advisor services for the Additional Digester Facility Upgrade project