

Semiannual CIP Status Report (July – December 2021)

Transportation and Environment Committee

March 7, 2022

Presenter:
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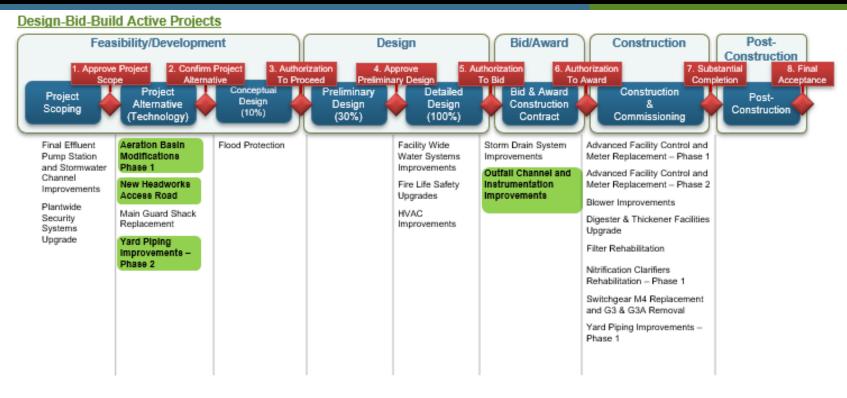
Background

- 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

- Biosolids Disposition Procurement Strategy
 - RFP for transportation and beneficial use services advertised Nov. 2021
 - Proposals due in February 2022
 - Disposition agreement awards anticipated in coming months
 - Services to begin in FY 2024-25
- Testing, Startup and Commissioning (TSC)
 - Two full-time consultant TSC experts brought on early 2021 for support
 - Testing of new equipment and systems ramped up in summer 2021
 - Four concurrent projects in the nitrification area were in TSC
 - Critical TSC support will be needed this summer in key process areas

Program Snapshot: All Projects



Progressive Design-Build Active Projects





Seven Projects in Feasibility/Development

Scoping

- Final Effluent Pump Station and Stormwater Channel Improvements
- Plantwide Security Systems Upgrade

Project Alternatives

- Aeration Basin Modifications Phase 1
- Main Guard Shack Replacement
- New Headworks Access Road
- Yard Piping Improvements Phase 2

Conceptual Design

Flood Protection



 CCTV station of inspection crawler for condition assessment of 96" pipe for Yard Piping Improvements – Phase 2



 Severely corroded steel reinforcing bars at pipe crown



Six Projects in Design and Bid/Award

Detailed Design

- Facility Wide Water Systems Improvement
- Fire Life Safety Upgrades
- HVAC Improvements

Bid & Award

- Outfall Channel and Instrumentation Improvements
- Storm Drain System Improvements

Preliminary Services

Digested Sludge Dewatering Facility



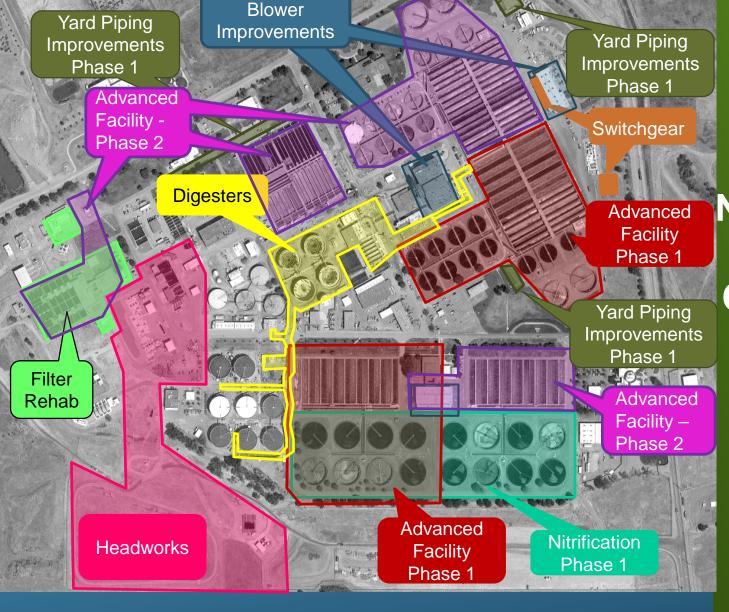
 Site Preparation work for the Digested Sludge Dewatering Facility project

Nine Projects in Construction

- Advanced Facility Control and Meter Replacement Phase 1 (\$5.8m)
- Advanced Facility Control and Meter Replacement Phase 2 (\$7.0m)
- Blower Improvements (\$29.5m)
- Digester and Thickener Facilities Upgrade (\$107.9m)
- Filter Rehabilitation (\$33.3m)
- Headworks (\$126.9m)
- Nitrification Clarifiers Rehabilitation Phase 1 (\$26.2m)
- Switchgear M4 Replacement and G3 & G3A Removal (\$5.5m)
- Yard Piping Improvements Phase 1 (\$3.1m)







Nine Projects In Construction

Total Base Construction Value: \$345M



Headworks Project

Construction Value: \$126.8M | Estimated Beneficial Use: Summer 2023

Headworks



Progress on construction of New Headworks facilities including grit removal, pump station, influent screenings removal, electrical building, emergency overflow basin, and odor control system as of November 2021.

Headworks



Construction work in the emergency overflow basin

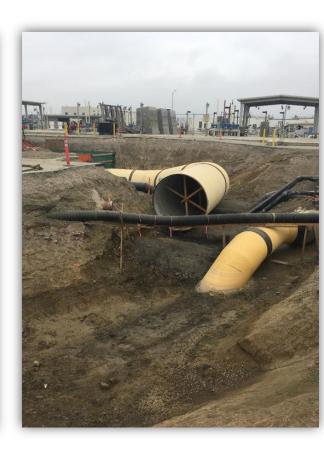


Installation of a new bar screen

Headworks







Installation of 96" pipe

Realignment of existing Santa Clara pipeline

Installation of 96" pipe over Santa Clara pipeline



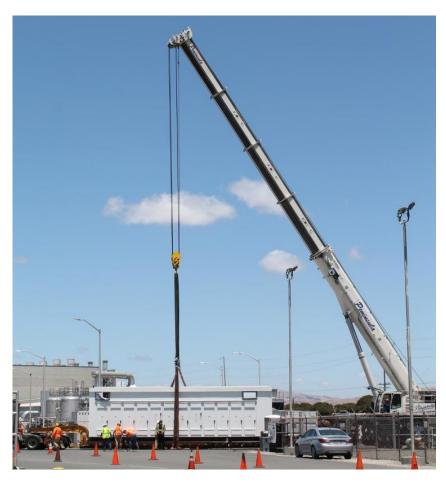
Switchgear M4 Replacement and G3 & G4 Removal

Construction Value: \$5.5M | Estimated Beneficial Use: Winter 2022

Switchgear M4 Replacement and G3 & G4 Removal







Delivery and installation of outdoor M4 switchgear enclosure

Switchgear M4 Replacement and G3 & G4 Removal



Interior of Switchgear enclosure

Duct installation and supports

Expected Activities through June 2022

- Reach Substantial Completion on three projects
- Obtain Council approval to execute the Definitive Contract Amendment for Digested Sludge Dewatering Facility project
- Obtain Council approval to award the construction contract for Storm Drain System Improvements project
- Advertise construction contracts for Fire Life Safety Upgrades and HVAC Improvement projects
- Obtain Council approval of a fourth contingency increase for settlement of inefficiency claims for the Digester and Thickener Facilities Upgrade project
- Advertise request for prequalification for Facility Wide Water Systems Improvement