



Memorandum

TO: TRANSPORTATION AND
ENVIRONMENT COMMITTEE

FROM: Kerrie Romanow
Barry Ng

SUBJECT: SEE BELOW

DATE: September 19, 2016

Approved

D. D. Sy L

Date

9/23/16

**SUBJECT: SAN JOSÉ-SANTA CLARA REGIONAL WASTEWATER FACILITY
CAPITAL IMPROVEMENT PROGRAM SEMIANNUAL STATUS
REPORT**

RECOMMENDATION

Accept the semiannual status progress report on the San José-Santa Clara Regional Wastewater Facility Capital Improvement Program for the period January through June 2016.

OUTCOME

The purpose of this semiannual status report is to provide the Transportation and Environment Committee (T&E), the Treatment Plant Advisory Committee (TPAC), and San José City Council (Council) with a progress update on Capital Improvement Program (CIP) implementation at the San José-Santa Clara Regional Wastewater Facility, and more specifically, to highlight key accomplishments achieved during the second half of fiscal year 2015-2016.

BACKGROUND

The San José and Santa Clara City Councils adopted the Plant Master Plan (PMP) in November and December 2013, respectively. The PMP identified more than 100 capital improvement projects totaling over \$2.1 billion to be implemented at the San José-Santa Clara Regional Wastewater Facility¹ (RWF) over the next 30 years. A validation process was completed in early 2014 to update and prioritize the recommended PMP projects, as well as additional gap projects into 33 construction packages to be initiated in the next ten years. Beginning in fiscal year 2014-2015, the validation process was used to inform the five-year CIP and ten-year funding strategy. The 2016-2020 adopted CIP includes funding in the amount of \$1.07 billion, of which approximately \$709 million is for construction projects. To provide visibility and accountability

¹ The legal, official name of the facility remains San Jose/Santa Clara Water Pollution Control Plan, but beginning in early 2013, the facility was approved to use a new common name, the San José-Santa Clara Regional Wastewater Facility.

for this significant CIP effort, staff began providing formal semiannual status reports to the T&E, TPAC, and Council in spring 2013.

The first Semiannual Status Report was published in April 2013 and focused on progress and activities from July through December 2012. Three subsequent semiannual reports were published in October 2013, April 2014, and October 2014, respectively. With the establishment of the MWH/Carollo consultant program management team, a new monthly CIP status report was created to provide more frequent and time-relevant updates. The first CIP monthly status report was issued to TPAC in April 2014 and a total of 29 monthly reports have been issued to date. This semiannual status report is provided to T&E, TPAC, and Council to highlight key program and project accomplishments achieved for the period January through June 2016 and serves to complement the monthly reports. Copies of the monthly reports are available online at <http://www.sanjoseca.gov/Archive.aspx?AMID=190>.

ANALYSIS

For the period January through June 2016, significant progress was made in several program areas including:

A. Design and Construction Management System

On April 26, 2016, Council approved a contract with Bentley Systems for a design and construction management system (DCMS), which will allow staff to manage all significant contract communications; facilitate coordination during the review and approval of documents submitted by project consultants and contractors; and exchange and track the latest project information, such as schedules and costs securely and electronically. Staff is implementing the DCMS and the first major project to use the system is the recently awarded Digester and Thickener Facilities Upgrade.

B. Procurements

Between January and June 2016, Council awarded seven master consultant agreements for construction management and inspection services, general engineering services, and value engineering and peer review services. The construction management and inspection agreements will supplement City resources to meet the increased construction activity in the coming years. The scope of the general engineering services agreements includes engineering studies and engineering services for small, urgent or unscheduled projects. The peer review and value engineering services agreements will enable independent reviews of the large design projects.

In addition, staff awarded four construction contracts, one design-build contract, and three project-specific master consultant agreements, discussed further below.

C. Recruitments

Staff continued to focus on recruiting for the positions approved by Council in June 2015. The approved positions include all levels of engineers and engineering technicians, as well as an analyst and staff specialist, that will support three functional groups within the RWF

CIP division: 1) program management, 2) design/project delivery, and 3) process engineering. Between January and June, staff successfully filled six positions, including one senior engineer, two engineers, two senior engineering technicians, and one staff specialist.

Other notable achievements during this reporting period include:

- In April 2016, the PMP received the prestigious National Planning Achievement Award for Environmental Planning from the American Planning Association (APA). The Northern California Chapter of the APA recognized the PMP, in June 2016, with an Award of Merit for Innovation in Green Community Planning.
- In May 2016, staff completed the Flood Protection study to identify improvements necessary to protect the RWF from regional flooding and develop guidelines for protecting existing and new RWF facilities from major flood events.

On the project delivery front, 25 active projects progressed through various phases of the project delivery model as further discussed below:

A. Construction Activity Highlights

During the second half of the fiscal year, eight projects totaling more than \$143 million were either in active construction (see Attachment A) or post-construction. Two of the eight projects are being delivered using the design-build low bid project delivery method, with the remaining six projects being delivered using the conventional design-bid-build project delivery method.

Key construction activities highlighted for this period include:

- Construction-Enabling Improvements: The project team completed 100 percent design in February. The project bid set was approved and advertised in March and bids were opened in April. Three bids were received. On June 21, 2016, Council awarded the construction contract to Teichert Construction. Staff anticipates issuing the Notice to Proceed (NTP) in July.
- Digester and Thickener Facilities Upgrade: The project bid set was approved and advertised in January and bids were opened in March. Five bids were received. On May 24, 2016, Council awarded the construction contract to Walsh Construction. Staff issued the NTP to the contractor on June 22, 2016. The State Water Resource Board continued its review of the project's Clean Water State Revolving Fund (SRF) loan application. Staff anticipates returning to Council in fall 2016 to execute the SRF Financing Agreement, if the loan application is approved. The final loan amount will be adjusted to reflect participation by San José and Santa Clara.
- Digester Gas Compressor Upgrade (Design-Build Low Bid): The contractor installed the gas compressor motors and gas compressor skids, including their respective control panels. Through June, construction is 82 percent complete. The project is anticipated to reach beneficial use in fall 2016.

- Emergency Diesel Generators (Design-Build Low Bid): The contractor installed the two fuel tanks, the engine-generator units with housings, and connections. Through June, construction is 88 percent complete. The project is expected to reach beneficial use in spring 2017.
- Fiber Optic Connection: Council awarded the construction contract to Aegis ITS, Inc. on May 24, 2016. Staff issued the NTP in June 2016. The project is anticipated to reach beneficial use in spring 2017.
- Iron Salt Feed Station: Council awarded the construction contract to Anderson Pacific Engineering Construction on January 26, 2016. Staff issued NTP to the contractor in March. The project is anticipated to reach beneficial use in fall 2017.
- The Influent Magnetic Meter and Valve Replacement for Nitrification Clarifiers A5 & A6 achieved substantial completion and project acceptance and the Digester Gas Storage Replacement also achieved project acceptance.

There were no OSHA reportable safety incidents during this construction reporting period.

B. Design Activity Highlights

Three projects were under active design. Key design activities highlighted for this period include:

- Cogeneration Facility (design-build): On April 24, 2016, Council awarded the design-build contract to CH2M HILL Engineers, Inc. In May, staff issued an NTP to the design-builder for preliminary services to produce the Basis of Design report. Also in May, the project team held a formal partnering session and kickoff meeting. In June, the project team held several workshops to discuss key project elements. The final Basis of Design report is expected in October 2016.
- Headworks Critical Improvements: The consultant completed the 30 percent design in April and submitted their 60 percent design for review in June. Final plans are expected in October.
- Plant Instrument Air System: The consultant completed the final plans and specifications in March. The project team advertised the project for bids in April. Contract award is anticipated for August.

As significant design work gets underway, the program continues to work on developing comprehensive strategies, approaches, and tools for guiding the design development of current and future projects with the aim of establishing baselines, achieving consistency across different designers/design-builders, ensuring project interfaces are considered, incorporating operational flexibility, and considering current and future demands.

C. Planning/Feasibility Development Highlights

Fourteen projects were in active planning and feasibility development. Key activities highlighted for this period include:

- Scoping work began on the Lagoons and Drying Beds Retirement Project, continued on the Outfall Bridge and Levee Improvements and Switchgear S40/G3 Relay Upgrade projects, and completed on the Yard Piping and Road Improvements Project.
- Consultant procurement activities continued for five projects, including: 1) Advanced Facility Control and Meter Replacement, 2) Digested Sludge Dewatering Facility, 3) Facility-wide Water Systems Improvements, 4) Support Building Improvements, and 5) Yard Piping and Road Improvements.
- Between January and June 2016, Council awarded consultant agreements for design services for the Filter Rehabilitation, Nitrification Clarifiers Rehabilitation, Aeration Tanks Rehabilitation and Blower Improvements projects.
- Staff held alternative analysis workshops for the Blower Improvements, Headworks Improvements, and New Headworks projects.

Significant activity is expected to continue in the upcoming six-month period including:

- Obtain Council approval of SRF loan agreement for the Digester and Thickener Facilities Upgrade Project
- Obtain Council approval of three resolutions required to be submitted with the financial security package as part of the SRF loan application for the Cogeneration Facility Project
- Obtain Council approval to award a consultant agreement for owner's advisor and construction management services for the Digested Sludge Dewatering Facility Project
- Obtain Council approval to award consultant agreements for design services for Facility-wide Water System Improvements and Support Building Improvements projects
- Obtain Council approval to award a construction contract for the Plant Instrument Air System Upgrades Project
- Continue design and/or design-build work on four projects: Headworks Critical Improvements, Cogeneration Facility, Digester Gas Compressor Upgrade, and Emergency Diesel Generators
- Obtain broker, administrative, and claims services to further evaluate implementation of an Owner Controlled Insurance Program (OCIP)
- Obtain as-needed third-party audit services for CIP projects
- Continue to develop the five-year CIP staffing and transition plan
- Continue recruitment activities to fill capital program vacancies

EVALUATION AND FOLLOW-UP

No follow up action is required at this time. Staff will continue to provide regular updates to T&E, TPAC and Council to inform of significant changes or issues (particularly as related to rate impacts) as the program implementation progresses. In addition to semiannual presentations, monthly progress reports will continue to be sent to TPAC.

PUBLIC OUTREACH/INTEREST

This memorandum will be posted on the City's website for the October 3, 2016 Transportation and Environment Committee agenda.

COORDINATION

This report has been coordinated with the City Manager's Budget Office.

COMMISSION RECOMMENDATION/INPUT

This item is scheduled to be heard at the October 13, 2016 TPAC meeting. A supplemental memo with the committee's recommendation will be included in the amended October 25, 2016 City Council meeting agenda.

CEQA

Not a Project, File No. PP10-069(a), Staff Reports / Assessments / Annual Reports / Informational Memos that involve no approvals of any City Actions.

/s/Ashwini Kantak for

/s/

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For questions please contact Ashwini Kantak, Assistant Director of Environmental Services, at (408) 975-2553.

Attachment A – Projects in Active Construction