



Memorandum

TO: TRANSPORTATION AND
ENVIRONMENT COMMITTEE

FROM: Kerrie Romanow
Barry Ng

SUBJECT: SEE BELOW

DATE: March 23, 2016

Approved

D. D. S. L.

Date

3/24/16

**SUBJECT: SAN JOSE-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 July through December 2015.

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 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 first 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 \$2,100,000,000 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 10 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 \$1,007,000,000, of which approximately \$709,000,000 is for construction projects. To provide visibility and

¹ The legal, official name of the facility remains San José/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.

accountability 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 23 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 July through December 2015 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 July through December 2015, significant progress were made in several program areas including:

A. Ten-Year CIP Funding Strategy

On June 2, 2015, Council approved the staff report and recommendations related to the RWF Ten-Year CIP Funding Strategy (which TPAC unanimously approved on May 14, 2015). An update on the Ten-Year Funding Strategy was recommended by TPAC on December 10, 2015 and approved by Council on January 12, 2016. The staff reports are available online at:

http://sanjose.granicus.com/MetaViewer.php?view_id=&event_id=732&meta_id=516433

http://sanjose.granicus.com/MetaViewer.php?view_id=&event_id=2118&meta_id=550326

While all tributary agencies indicated interest in short term financing in August and September 2015, at the time of the writing of this report, the agencies have not provided the interim commitments requested, through execution of the Amended and Restated Master Agreement by February 1, 2016. As a result, San José and Santa Clara are continuing the SRF loan application process for the Digester and Thickener Facilities Upgrade Project (loan application approval is expected in spring 2016), and will adjust the loan amount to only reflect participation from the co-owners, at the time of the final loan approval.

B. Odor and Corrosion Control Strategy

In October 2015, Council adopted the Odor Control Implementation Plan, which will enable staff to proceed with a phased implementation approach for completing odor control improvements at the RWF, corresponding to specific odor fence lines. Council directed staff to implement odor control improvements for three projects: East Primary Rehabilitation, Seismic Retrofit, and Odor Control; Headworks Improvements and New Headworks; and Digester and Thickener Facilities Upgrade. Council deferred odor control improvements for the Digested Sludge Dewatering Facility until non-sewer

ratepayer funding sources could be identified to pay for the improvements. Additionally, Council deferred consideration of optional odor control improvements until the decommissioning of the lagoons and drying beds has been completed, and the extent of public access at Pond 18 and the proposed shoreline levee has been determined.

C. Programmatic Studies

Between July and December 2015, staff completed five studies (Architectural Guidelines, Automation Master Plan and Process Control Approach, Odor and Corrosion Control, Yard Piping Condition Assessment Plan, and Traffic Circulation and Impacts) and continued work on the Flood Protection study, which is expected to be completed by spring 2016. The programmatic studies will provide foundational information and design criteria needed to design and construct projects at the RWF.

D. Procurements

Between July and December 2015, staff advertised four Requests for Qualifications (RFQs) for program-wide consultant services, including 1) Construction Management and Inspection Services, 2) Design and Construction Management Software, 3) General Engineering Services, and 4) Value Engineering and Peer Review Services. Project-specific procurements are discussed further below.

Other notable achievements during this reporting period include:

- Staff obtained a dedicated analyst to assist with the recruitment process for 23 new full-time positions that was approved by City 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 July and December, staff successfully filled five positions, including two senior engineers, two associate engineers, and one analyst.
- In August, the CIP received the 2015 organizational excellence award from the California Association of Sanitation Agencies (CASA) for its work on the startup and validation stage of the program.
- On November 4, 2015, staff held the third annual open house for prospective vendors to increase awareness of upcoming CIP procurements. Approximately 80 consultants, contractors, and material and equipment suppliers attended.

On the project delivery front, 27 active projects progressed through various phases of the project delivery model as further discussed below:

A. Construction Activity Highlights

During the first half of the fiscal year, seven projects totaling more than \$31,000,000 were in active construction (see Attachment A). Two of the seven projects are being delivered using the low-bid design-build project delivery method, with the remaining five projects being delivered using the conventional design-bid-build project delivery method.

Key construction activities highlighted for this period include:

- Digester Gas Compressor Upgrade (Low-Bid Design-Build) – delivery and installation of cooling towers; assembly of electrical boxes/pull boxes; installation of electrical switchgear boxes; grouting and sealing of interior and exterior walls. Through December, construction is 42 percent complete.
- Digester Gas Storage Replacement – substantial construction completion was reached in November. The new 50,000 cubic foot digester gas storage tank successfully passed its 45-day commissioning test in December 2015. The project is anticipated to be accepted in spring 2016.
- Emergency Diesel Generators (Low-Bid Design-Build) – access road was completed and passed inspection/testing; PG&E interconnection agreement was fully executed in October; civil work continued including trenching, placement of new electrical conduits and concrete pad for two fuel tanks, and footing for the new storage building; 100 percent design drawings nearing completion for PG&E and code review; factory acceptance testing of generators scheduled for spring 2016. Through December, construction is 12 percent complete.
- Three other projects reached substantial completion (Handrail Replacement – Phase V, Pond A18 Northern Gate Structure Replacement, and Training Trailer Replacement), and three projects were accepted (Fire Main Replacement – Phase III, Handrail Replacement – Phase V, and Training Trailer Replacement).

There were no reported or recorded safety incidents or claims filed during this construction reporting period.

B. Design Activity Highlights

Seven projects were under active design, including the two low-bid design-build projects mentioned above. Key design activities highlighted for this period include:

- Digester and Thickener Facilities Upgrade – In August, the pre-qualification for contractors was advertised. In September, the design consultant submitted the 90 percent design documents for review. Staff returned comments in October and the design consultant completed the 100 percent design documents in December. In October, staff pre-qualified nine contractors to bid on the project.

In November, staff submitted the SRF loan application package for the Digester & Thickener Facilities Upgrade Project. Council also adopted three resolutions required as part of the loan application process. Staff anticipates receiving confirmation of the loan approval from the State Water Resource Board in spring 2016 and will return to Council to execute the SRF Financing Agreement if the loan application is approved. As stated earlier, the final loan amount will be adjusted to reflect participation by San José and Santa Clara; as well as to reflect construction costs based on the lowest responsive bid. In accordance with the Master Agreements, staff will also be bringing forward a budget action in

March 2016 to adjust allocations by parameter for this project, based on 100 percent design as well as a March 2016 report from Carollo Engineers.

- Iron Salt Feed Station – In July, staff provided comments on the 90 percent design to the design consultant. The 100 percent design was completed in August. The project bid set was approved and advertised in September and opened bids in October. Six bids were received. A recommendation to award the project went to TPAC and Council in January 2016. Since the Carollo Engineers report on allocation methodology had not been completed at the time of award of this project, adjustments to parameter allocations for this project will be done at the completion of the project.
- Plant Instrument Air System Upgrade – In September, the 50 percent design was completed. The final design submittal is anticipated in spring 2016.
- Construction-Enabling Improvements – Staff completed conceptual design in August, 30 percent design in October, and 60 percent design in December. Final design and bidding is expected in spring 2016.
- Fiber Optic Connection – The project was advertised in July and the City received two bids. A recommendation to award the project went to TPAC and Council in February 2016.

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

Fifteen projects were in active planning and feasibility development. Scoping work began on four of the projects.

Key planning/feasibility development activities highlighted for this period include:

- Consultant procurement activities continued for seven projects, including 1) Advanced Facility Control and Meter Replacement, 2) Blower Improvements and Aeration Tanks Rehabilitation, 3) Digested Sludge Dewatering Facility, 4) Facility-wide Water Systems Improvements, 5) Filter Rehabilitation, 6) Headworks, and 7) Nitrification Clarifiers Rehabilitation.
- Cogeneration Facility – In July, staff issued a Request for Proposals for design-builders. In August, Council approved an agreement for technical support services and staff began the SRF application process. In October, staff identified the top-ranked design-build firm. In December, Council approved the final proposer ranking and authorized the City Manager to negotiate the design-build contract. Following Council approval, staff began negotiations. Staff also initiated the SRF loan application process for this project.

- In December, Council awarded a consultant agreement for owner's representative and construction management services for Headworks and a consultant agreement for design services for Filter Rehabilitation.

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

- Complete negotiations with the top-ranked design-build firm and obtain Council approval of a design-build contract for the Cogeneration Facility
- 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 Project
- Obtain Council approval to award consultant agreements for design services for Advanced Facility Control and Meter Replacement, Facility-wide Water System Improvements, and Nitrification Clarifiers Improvements projects
- Advertise and obtain Council approval to award construction contracts for the Construction-Enabling Improvements, Digester and Thickener Facilities Upgrade, and Fiber Optic Connection projects
- Continue design and/or design-build work on four projects: Plant Instrument Air, Headworks Critical Improvements, Digester Gas Compressor Upgrade, and Emergency Diesel Generators
- Obtain brokerage services for an Owner Controlled Insurance Program
- Continue to develop the five-year CIP staffing and transition plan
- Continue recruitment activities to fill capital program vacancies
- Continue to work with the City of Santa Clara and tributary agencies to implement the Ten-Year Funding Strategy as previously directed by TPAC and Council

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 April 4, 2016 Transportation and Environment Committee agenda.

COORDINATION

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

TRANSPORTATION AND ENVIRONMENT COMMITTEE

March 23, 2016

Subject: Wastewater Facility CIP Semiannual Status Report, July - December 2015

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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
KERRIE ROMANOW
Director, Environmental Services

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BARRY NG
Director, Public Works

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

Attachments:

Attachment A – Projects in Active Construction - July – December 2015