

## SAN JOSÉ/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

SAM LICCARDO, CHAIR  
PAT KOLSTAD, VICE CHAIR  
PIERLUIGI OLIVERIO, MEMBER  
DAVID SYKES, MEMBER  
MANH NGUYEN, MEMBER

JOSE ESTEVES, MEMBER  
JERRY MARSALLI, MEMBER  
STEVEN LEONARDIS, MEMBER  
JOHN GATTO, MEMBER

### AGENDA/TPAC

4:00 p.m.

August 11, 2016

Room 1734

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1. **ROLL CALL**

2. **APPROVAL OF MINUTES**

A. June 9, 2016

3. **UNFINISHED BUSINESS/REQUEST FOR DEFERRALS**

4. **DIRECTOR'S REPORT**

- A. Directors Report (verbal)
- Monthly Progress Report
  - Owner Controlled Insurance Program Update

5. **AGREEMENTS/ACTION ITEMS**

- A. Report on Bids and Award of Construction Contract for 7617 – Plant Instrument Air Upgrade Project at the San José- Santa Clara Regional Wastewater Facility

Staff Recommendations:

- (a) Adopt a resolution approving the San José- Santa Clara Regional Wastewater Facility Plant Instrument Air System Upgrade Initial Study/Mitigated Negative Declaration and related Mitigation Monitoring and Reporting Program (File No. PP15-114).
- (b) Report on bids and award of construction contract for 7617- Plant Instrument Air System Upgrade to the low and only bidder, Anderson Pacific Engineering Construction, Inc., in the amount of \$2,848,000, and approve a 15 percent construction contingency in the amount of \$427,200.
- (c) Adopt a resolution authorizing the Director of Public Works to execute one or more change orders in excess of \$100,000 for the remaining duration of the Plant Instrument Air Upgrade Project, not to exceed the total contingency amount approved for the Project.

**This item is scheduled for consideration by the City Council on August 23, 2016.**

6. **OTHER BUSINESS/CORRESPONDENCE**

7. **STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC**

A. **Actions related to the March 24, 2016 Hearing on the Tributary Agencies' Claims of Breach of Agreement and Inequities**

Staff Recommendations:

- (d) Adopt a Resolution setting forth the San Jose/Santa Clara Treatment Plant Advisory Committee's (TPAC) report, findings, and recommendations following the March 24, 2016 hearing before TPAC on the Claims of Breach of Agreement and Inequities filed on January 22, 2016 by West Valley Sanitation District, Burbank Sanitary District No. 2-3, and the City of Milpitas (Tributary Agencies); and
- (e) Direct the Secretary of TPAC to distribute to the legislative bodies of the Tributary Agencies, the City of San Jose, and the City of Santa Clara a copy of TPAC's Resolution.

**TPAC adopted the proposed Resolution on June 9, 2016. Senior Deputy City Attorney sent the revised claim report to TPAC Liaison Melrose Cacal for distribution.**

B. **Report on Bids and Award of Contract for 7987 – Construction Enabling Project**

Staff Recommendations:

- (a) Adopt a resolution approving the Construction- Enabling Improvements Project Addendum to the San José/Santa Clara Water Pollution Control Plant Master Plan Environmental Impact Report (SCH# 2011052074) and Related Mitigation Monitoring and Reporting Program (File No. PP15-120).
- (b) Report on bids and award of contract for the 7987- Construction Enabling Improvements Project to the low bidder, Teichert Construction, Inc. for the base bid of \$3,124,885 and Add Alternate No. 2 in the amount of \$11,025 for a total contingency in the amount of \$314,000.
- (c) Adopt a resolution authorizing the Director of Public Works to execute one or more change orders in excess of \$100,000 for the duration of the Construction Enabling Improvements project, not to exceed the total contingency amount approved for the project.
- (d) Adopt the following 2015-2016 Appropriations Ordinance amendments in the San Jose- Santa Clara Treatment Plant Capital Fund:
  - (1) Decrease the Urgent and Unscheduled Treatment Plant Rehabilitation appropriation to the Environmental Services Department by \$455,000; and
  - (2) Increase the Construction- Enabling Improvements appropriation to the Environmental Services Department by \$455,000.

**The proposed resolutions were adopted by the City Council on June 21, 2016.**

- C. Master Consultant Agreements with Brown & Caldwell for Engineering Services for the 8001 – Aeration Tanks Rehabilitation Project and 8073 – Blower Improvements Project at the San Jose- Santa Clara Regional Wastewater Facility

Staff Recommendation: Approve a Master Consultant Agreement with Brown and Caldwell to provide engineering services for the 8073 – Blower Improvements Project 8001 – Aeration Tanks Rehabilitation Project at the San José- Santa Clara Regional Wastewater Facility from the date of execution through December 21, 2024, in an initial amount not to exceed \$7,900,000, subject to the appropriation of funds.

**The proposed recommendation was approved by the City Council on June 21, 2016.**

- D. Amendment to Master Consultant Agreements with CDM Smith and Kennedy/Jenks for Engineering Services for Projects in the San Jose- Santa Clara Regional Wastewater Facility Capital Improvement Program

Staff Recommendations:

- (a) Approve an amended and restated master consultant agreement with CDM Smith, Inc. for engineering and construction management services for the 7701- Headworks Project, with no extension to the term or increase to the maximum total compensation.
- (b) Approve an amended and restated master consultant agreement with Kennedy/Jenks Consultants, Inc. for engineering services for the 7448 – Filter Rehabilitation Project, with no extension to the term or increase to the total maximum total compensation.

**The proposed recommendations were approved by the City Council on June 14, 2016.**

- E. Master Agreements with Kennedy/Jenks Consultants, Inc. and MNS Engineers, Inc. for Construction Management and Inspection Services for the San Jose- Santa Clara Regional Wastewater Facility Capital Improvement Program

Staff Recommendation: Approve master consultant agreements with Kennedy/Jenks Consultants, Inc. and MNS Engineers, Inc. for construction management and inspection services for various capital improvement projects at the San José- Santa Clara Regional Wastewater Facility, from the date of execution through June 30, 2024, in a total amount not to exceed \$8,000,000 for each agreement Subject to the appropriation of funds.

**The proposed recommendation was approved by the City Council on June 21, 2016.**

- F. Master Consultant Agreements with Hazen and Sawyer and Value Management Strategies, Inc. for 8095 – Value Engineering and Peer Review Services for the San Jose- Santa Clara Regional Wastewater Facility Capital Improvement Program

Staff Recommendation: Approve the master consultant agreements with Hazen and Sawyer, and Value Management Strategies, Inc. to provide value engineering and peer review services for the Capital Improvement Program at the San José-Santa Clara Regional Wastewater Facility from the date of execution through June 30, 2021, in a total amount not to exceed \$5,000,000 for each agreement, subject to the appropriation of funds.

**The proposed recommendation was approved by the City Council on June 21, 2016.**

G. Execute an Open Purchase Order with Tucker Construction, Inc.

Staff Recommendation: Authorize the City Manager to:

- (1) Execute a Purchase Order with Tucker Construction, Inc. (San Jose, CA) to provide all labor, material, and equipment to perform expansion joint and concrete maintenance and repair services at the Regional Wastewater Facility for the term June 22, 2016 through June 21, 2017, in an amount not-to-exceed \$300,000.
- (2) Approve a contingency of \$50,000 in the event that additional repairs are required.
- (3) Exercise up to four, one-year options to extend the term through June 30, 2021, with any price increases subject to approval by the City and subject to the annual appropriation of funds.

**The proposed resolution was adopted by the City Council on June 21, 2016.**

**8. REPORTS**

A. Open Purchase Orders Greater Than \$100,000 (including Service Orders)

The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between \$100,000 and \$1.08 million and of services between \$100,000 and \$270,000.

**9. MISCELLANEOUS**

- A. The next monthly TPAC Meeting is September 8, 2016, at 4:00 p.m., City Hall, Room 1734. **Please note new start time for meeting.**

**10. OPEN FORUM**

**11. ADJOURNMENT**

NOTE: If you have any changes or questions, please contact Melrose Cacal, Environmental Services (408) 975-2547.

To request an accommodation or alternative format for City-sponsored meetings, events or printed materials, please contact Melrose Cacal (408) 975-2547 or (408) 294-9337 (TTY) as soon as possible, but at least three business days before the meeting/event.

**Availability of Public Records.** All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at San Jose City Hall, 200 East Santa Clara Street, 10<sup>th</sup> Floor, Environmental Services at the same time that the public records are distributed or made available to the legislative body.

**MINUTES OF THE  
SAN JOSÉ/SANTA CLARA  
TREATMENT PLANT ADVISORY COMMITTEE**  
City Hall, Council Chambers  
Thursday, June 9, 2016 at 4:00 p.m.

**1. ROLL CALL**

Minutes of the Treatment Plant Advisory Committee convened this date at 4:01 p.m. Roll call was taken with the following members in attendance:

**Committee Members:** Jose Esteves, Pat Kolstad, Patrick Kwok, Sam Liccardo, Steven Leonardis, Manh Nguyen, Pierluigi Oliverio, Dave Sykes, Teresa O'Neill (alternate)

Absent: Committee Member Jerry Marsalli

**2. APPROVAL OF MINUTES**

A. May 19, 2016

**Item 2.A. was approved to note and file.**

**Ayes – 8** (Esteves, Kolstad, Kwok, Leonardis, Liccardo, Nguyen, Oliverio, Sykes)

**Nays – 0**

**Absent – 1** (O'Neill)

**3. UNFINISHED BUSINESS/REQUEST FOR DEFERRALS**

**4. DIRECTORS REPORT**

A. Directors Report (verbal)

- Monthly Progress Report

There were no items to report.

**5. AGREEMENTS/ACTION ITEMS**

A. Actions related to the March 24, 2016 Hearing on the Tributary Agencies' Claims of Breach of Agreements and Inequities

Staff Recommendations:

- (a) Adopt a Resolution setting forth the San José/Santa Clara Treatment Plant Advisory Committee's (TPAC) report, findings, and recommendations following the March 24, 2016, hearing before TPAC on the Claims of Breach of Agreement and Inequities filed on January 22, 2016 by West Valley Sanitation District, Burbank Sanitary District No. 2-3, and the City of Milpitas (Tributary Agencies); and
- (b) Direct the Secretary of TPAC to distribute to the legislative bodies of the Tributary Agencies, the City of San José, and the City of Santa Clara a copy of TPAC's resolution.

Senior Deputy Jennifer Pousho clarified for the record that TPAC was incorrectly referred to as the “Tributary Agency Advisory Committee” instead of the “Treatment Plant Advisory Committee” in Section 3 of the posted Resolution, which was then corrected and sent to TPAC Liaison Melrose Cacal for distribution.

**On a motion made by Committee Member Oliverio and a second by Committee Member Kolstad, TPAC recommended approval of staff’s recommendations for Item 5.A.**

**Ayes – 7** (Carrasco, Esteves, Kolstad, Kwok, Liccardo, Oliverio, Sykes)

**Nays – 2** (Esteves, Kwok)

**Absent –1** (O’Neill)

**B. Report on Bids and Award of Contract for 7987- Construction Enabling Project**

Staff Recommendations:

- (a) Adopt a resolution approving the Construction-Enabling Improvements Project Addendum to the San José / Santa Clara Water Pollution Control Plant Master Plan Environmental Impact Report (SCH# 2011052074) and related Mitigation Monitoring and Reporting Program (File No. PP15-120).
- (b) Report on bids and award of contract for the 7987 – Construction-Enabling Improvements Project to the low bidder, Teichert Construction, Inc., for the base bid of \$3,124,885 and Add Alternate No. 2 in the amount of \$11,025 for a total amount of \$3,135,910 and approval of a 10 percent construction contingency in the amount of \$314,000.
- (c) Adopt a resolution authorizing the Director of Public Works to execute one or more change orders in excess of \$100,000 for the duration of the Construction Enabling Improvements project, not to exceed the total contingency amount approved for the project.
- (d) Adopt the following 2015-2016 Appropriations Ordinance amendments in the San José-Santa Clara Treatment Plant Capital Fund:
  - (1) Decrease the Urgent and Unscheduled Treatment Plant Rehabilitation appropriation to the Environmental Services Department by \$455,000; and
  - (2) Increase the Construction-Enabling Improvements appropriation to the Environmental Services Department by \$455,000.

Program Manager Colin Page presented on this item.

Committee Member Kwok inquired if the first and second lowest bidders were located within the Santa Clara County, and what the difference in bids were. Assistant Director Ashwini Kantak clarified that the low bidder, Teichert Construction, is located in Pleasanton and Granite Construction is a local company. The difference in the bids was approximately \$100,000.

**This item is scheduled for consideration by the City Council on June 14, 2016.**

**On a motion made by Committee Member Oliverio and a second by Committee Member Sykes, TPAC recommended approval of staff's recommendations for Item 5.B.**

**Ayes – 8** (Kolstad, Kwok, Leonardis, Liccardo, Nguyen, Oliverio, O'Neill, Sykes)

**Nays – 1** (Esteves)

**Absent – 0**

C. Master Consultant Agreements with Brown & Caldwell for Engineering Services for 8001- Aeration Tanks Rehabilitation Project in the San Jose- Santa Clara Regional Wastewater Facility Capital Improvement Program

Staff Recommendation: Approve a Master Consultant Agreement with Brown and Caldwell to provide engineering services for the 8073 – Blower Improvements Project and 8001 – Aeration Tanks Rehabilitation Project at the San José- Santa Clara Regional Wastewater Facility from the date of execution through December 21, 2024, in an initial amount not to exceed \$7,900,000, subject to the appropriation of funds.

**This item is scheduled for consideration by the City Council on June 14, 2016.**

**On a motion made by Committee Member Kolstad and a second by Committee Member Leonardis, TPAC recommended approval of staff's recommendation for Item 5.C.**

**Ayes – 6** (Kolstad, Leonardis, Liccardo, Nguyen, O'Neill, Sykes)

**Nays – 2** (Esteves, Kwok)

**Absent – 1** (Oliverio)

D. Amendments to the Master Consultant Agreements with CDM Smith and Kennedy/Jenks for Engineering Services for Projects in the San Jose- Santa Clara Regional Wastewater Facility Capital Improvement Program

Staff Recommendations:

(a) Approve an amended and restated master consultant agreement with CDM Smith, Inc. for engineering and construction management services for the 7701- Headworks Project, with no extension to the term or increase to the maximum total compensation.

(b) Approve an amended and restated master consultant agreement with Kennedy/Jenks Consultants, Inc. for engineering services for the 7448 – Filter Rehabilitation Project, with no extension to the term or increase to the maximum total compensation.

**On a motion made by Committee Member Esteves and a second by Committee Member Leonardis, TPAC recommended approval of staff's recommendations for Item 5.D.**



**Ayes – 8** (Esteves, Kolstad, Kwok, Leonardis, Liccardo, Oliverio, O’Neill, Sykes)

**Nays – 0**

**Absent – 1** (Oliverio)

- E. Master Agreements with Kennedy/Jenks Consultants, Inc. and MNS Engineers, Inc. for Construction Management and Inspection Services for the San Jose- Santa Clara Regional Wastewater Facility Capital Improvement Program

Staff Recommendation: Approve a master consultant agreements with Kennedy/Jenks Consultants, Inc. and MNS Engineers, Inc., for construction management services for various capital improvement projects at the San José-Santa Clara Regional Wastewater Facility, from the date of execution through June 30, 2024, in a total amount not to exceed \$8,000,000 for each agreement, subject to the appropriation of funds.

**This item is scheduled for consideration by the City Council on June 14, 2016.**

**On a motion made by Committee Member O’Neill and a second by Committee Member Leonardis, TPAC recommended approval of staff’s recommendation For Item 5.E.**

**Ayes – 7** (Kolstad, Kwok, Leonardis, Liccardo, Nguyen, O’Neill, Sykes)

**Nays – 1** (Esteves)

**Absent – 1** (Oliverio)

- F. Master Consultant Agreements with Hazen and Sawyer and Value Management Strategies, Inc. for 8095- Value Engineering and Peer Review Services for the San Jose- Santa Clara Regional Wastewater Facility Capital Improvement Program

Staff Recommendation: Approve the master consultant agreements with Hazen and Sawyer, and Value Management Strategies, Inc. to provide engineering and peer services for the Capital Improvement Program at the San José- Santa Clara Regional Wastewater Facility from the date of execution through June 30, 2021, in a total amount not to exceed \$5,000,000 for each agreement, subject to the appropriation of funds.

**This item is scheduled for consideration by the City Council on June 14, 2016.**

**On a motion made by Committee Member Kolstad and a second by Committee Member Leonardis, TPAC recommended approval of staff’s recommendation for Item 5.F.**

**Ayes – 7** (Kolstad, Kwok, Leonardis, Liccardo, Nguyen, O’Neill, Sykes)

**Nays – 1** (Esteves)

**Absent – 1** (Oliverio)

G. Execute an Open Purchase Order with Tucker Construction, Inc.

Staff Recommendation: Authorize the City Manager to:

- (1) Execute a Purchase Order with Tucker Construction, Inc. (San Jose, CA) to provide all labor, material, and equipment to perform expansion joint and concrete maintenance and repair services at the Regional Wastewater Facility for the term June 22, 2016 through June 21, 2017, in an amount not-to-exceed \$300,000.
- (2) Approve a contingency of \$50,000 in the event that additional repairs are required.
- (3) Exercise up to four, one-year options to extend the term through June 30, 2021, with any price increases subject to approval by the City and subject to the annual appropriation of funds.

**This item is scheduled for consideration by the City Council on June 21, 2016.**

**On a motion made by Committee Member Leonardis and a second by Committee Member Kolstad, TPAC recommended approval of staff's recommendations for Item 5.G.**

**Ayes – 7** (Esteves, Kolstad, Leonardis, Liccardo, Nguyen, O'Neill, Sykes)

**Nays – 0**

**Absent – 1** (Oliverio)

6. **OTHER BUSINESS/CORRESPONDENCE**

7. **STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC**

A. Approval of an Ordinance Designating Additional Public Right-of-Way for Zanker Road

Staff Recommendations:

- (1) Consider the Addendum to the Plant Master Plan EIR; and
- (2) Approve an ordinance designating approximately 27,000 square feet along the west side of Zanker Road, located over a portion of the San José/Santa Clara Regional Wastewater Facility, as public right-of-way and accept the newly-Dedicated right-of-way into the City's street system as part of Zanker Road to allow for construction-related traffic improvements on Zanker Road.

**The proposed recommendations were approved by the Santa Clara City Council on May 24, 2016 and is scheduled for considered by the San José City Council on June 7, 2016.**

B. 7995 – Master Consultant Agreements with Brown and Caldwell, AECOM Technical Services, Inc., and Black & Veatch Corporation, for General Engineering Services for the San Jose- Santa Clara Regional Wastewater Facility Capital Improvement Program

Staff Recommendation: Approve Master Consultant Agreements with Brown and Caldwell, AECOM Technical Services, Inc., and Black and Veatch Corporation to Provide general engineering services at the San Jose- Santa Clara Regional Wastewater Facility from the date of execution to June 30, 2021, in a total amount Not to exceed \$5,000,000 each, subject to the appropriation of funds.

**The proposed recommendation was approved by the City Council on May 24, 2016.**

C. Report on Bids and Award of Construction Contract for 7382- Digester and Thickeners Facilities Upgrade Project at the San Jose- Santa Clara Regional Wastewater Facility

Staff Recommendations:

(a) Adopt a Resolution

(1) Approving the Digester and Thickener Facilities Upgrade Project Initial Study/Mitigated Negative Declaration and related Mitigation Monitoring and Reporting Program (File No. PP15-055).

(2) Reporting on bids and award of construction contract for the 7382- Digester and Thickener Facilities Upgrade project to the low bidder, Walsh Construction Company II, LLC, to include the base bid less Revocable Item No. 5, in the amount of \$107,925,000, and approve a 12.5 percent construction contingency in the amount of \$13,490,625.

(3) Authorizing the Director of Public Works to execute one or more change orders in excess of \$100,000 for the duration of the Digester and Thickener Facilities Upgrade project, not to exceed the total contingency amount approved for the project.

(b) Adopt the following 2015-2016 Appropriation Ordinance Amendments in the San Jose- Santa Clara Treatment Plant Capital Fund

(1) Decrease the Energy Generation Improvements appropriation to the Environmental Services Department by \$6,000,000;

(2) Decrease the SBWR System Reliability and Infrastructure Replacement appropriation to the Environmental Services Department by \$4,692,000;

(3) Decrease the Tunnel Rehabilitation appropriation to the Environmental Services Department by \$600,000;

(4) Decrease the Ending Fund Balance – Unrestricted appropriation by \$17,253,000; and

(5) Increase the Digester and Thickener Facilities Upgrade appropriation to the Environmental Services Department by \$28,545,000.

**The proposed resolutions were adopted by the City Council on May 24, 2016.**

D. Report on Bids and Award of Contract for 6970 – Fiber Optic Connection Project at the San Jose- Santa Clara Regional Wastewater Facility

Staff Recommendation: Report on bids and award a construction contract for the 6970 – Fiber Optic Connection Project to the second low bidder, Aegis ITS, Inc., in the amount of \$271,692 and approval of a 15 percent contingency in the amount of \$40,754.

**This item is scheduled for consideration by the City Council on May 24, 2016.**

E. Agreement with Santa Clara Valley Habitat Agency to Manage Burrowing Owl Habitat

Staff Recommendation: Adoption of a resolution authorizing the City Manager to negotiate and execute an Agreement between the City of San Jose and the Santa Clara Valley Habitat Agency to manage the 201- acre burrowing owl habitat at the Regional Wastewater Facility for a term of five years.

**This item is scheduled for consideration by the City Council on May 24, 2016.**

F. Execute a Purchase Order with Pipe and Plant Solutions, Inc.

Staff Recommendations: Adopt a resolution authorizing the City Manager to:

- (1) Execute a Purchase Order with Pipe and Plant Solutions, Inc. (Berkeley, CA) to provide all labor and material to clean three anaerobic digesters at the Regional Wastewater Facility for the term June 7, 2016 through June 6, 2017, in an amount not to exceed \$339,067;
- (2) Approve a contingency of \$50,000 in the event that unanticipated issues are identified during the performance of the work; and
- (3) Exercise up to three additional one-year options to extend the term of the cleaning services for nine additional digesters that are scheduled for cleaning on a rotational basis through June 6, 2020, subject to the appropriation of funds.

**The item is scheduled for consideration by the City Council on June 7, 2016.**

G. Amendment to Master Service Agreement with Hydrosience Engineers, Inc.

Staff Recommendation: Approve the First Amendment to the Master Agreement with Hydrosience Engineers, Inc. for engineering services to allow for future adjustments to rates and charges, and to increase the rates for Hydrosience Engineers, Inc. and subconsultants.

**The proposed recommendation was approved by the City Council on May 24, 2016.**

H. San Jose/Santa Clara Water Pollution Control Plant 2017-2021 Proposed Capital Improvement Program

Staff Recommendation: TPAC approval of the San Jose/Santa Clara Water Pollution Control Plant 2017-2021 Proposed Capital Improvement Program.

**The Five-Year Capital Improvement Program is scheduled for Council consideration on June 14, 2016, and for adoption on June 21, 2016.**

I. San Jose/Santa Clara Water Pollution Control Plant 2016-2017 Proposed Operating and Maintenance Budget

Staff Recommendation: TPAC approval of the San Jose/Santa Clara Water Pollution Control Plant 2016-2017 Proposed Operating and Maintenance Budget.

**The Operating and Maintenance Budget is scheduled for Council consideration on June 14, 2016, and for adoption on June 21, 2016.**

**All items under Section 7 were approved to note and file.**

**Ayes – 8** (Esteves, Kolstad, Kwok, Leonardis, Liccardo, Nguyen, O'Neill, Sykes)

**Nays – 0**

**Absent – 1** (Oliverio)

8. **REPORTS**

A. Open Purchase Orders Greater Than \$100,000 (including Service Orders)

The attached monthly Procurement and Contract Activity Report summarizes the Purchase and contracting of goods with an estimated value between \$100,000 and \$1.08 million of services between \$100,000 and \$270,000.

**Item 8.A. was approved to note and file.**

**Ayes – 8** (Esteves, Kolstad, Kwok, Leonardis, Liccardo, Nguyen, O'Neill, Sykes)

**Nays – 0**

**Absent – 1** (Oliverio)

9. **MISCELLANEOUS**

- A. The monthly TPAC Meeting is August 11, 2016, at 4:00 p.m., City Hall, Room 1734. **Please note new start time.**

10. **OPEN FORUM**

11. **ADJOURNMENT**

A. The Treatment Plant Advisory Committee adjourned at 4:22 p.m.

Sam Liccardo, Chair  
TREATMENT PLANT ADVISORY COMMITTEE



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

# Capital Improvement Program Monthly Status Report: June 2016

August 4, 2016

This report summarizes the progress and accomplishments of the Capital Improvement Program (CIP) for the San José-Santa Clara Regional Wastewater Facility (RWF) for June 2016.

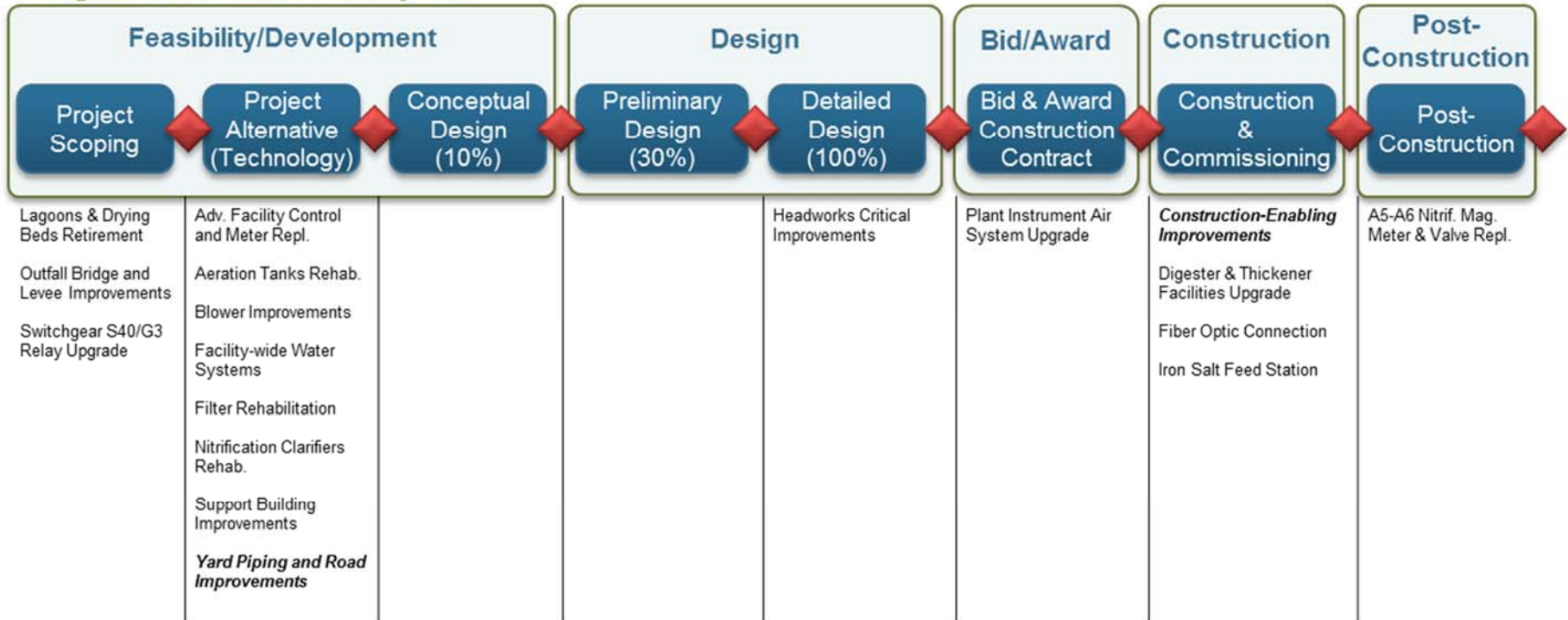
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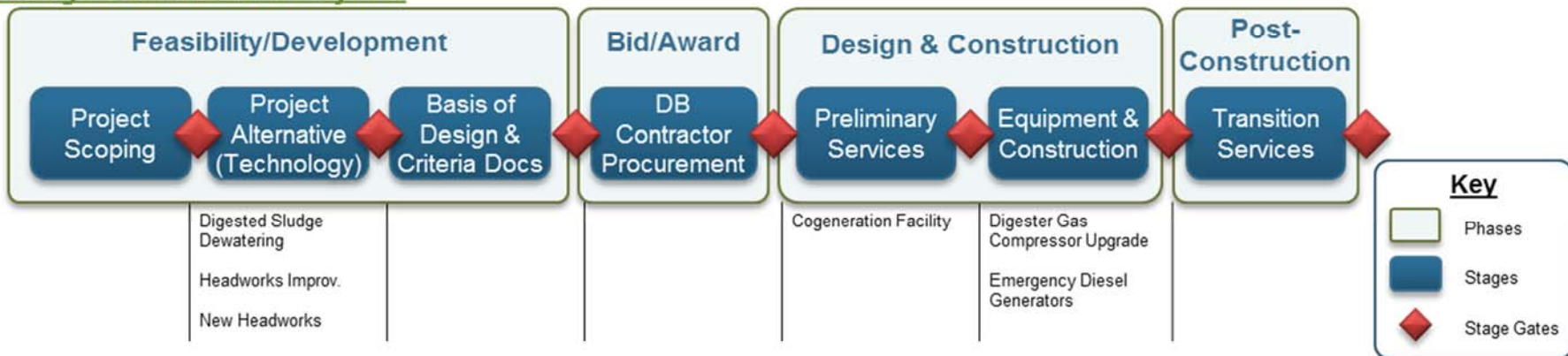


# Project Delivery Model

## Design-Bid-Build Active Projects



## Design-Build Active Projects



\*Projects shown in **bold and italics** have advanced this reporting period





# Program Summary

## June 2016

In June, the CIP progressed on multiple fronts, including advancing two projects through the Project Delivery Model (PDM) stage gate process: the Plant Instrument Air System Upgrade Project (Authorization to Award and Establish Baseline), and the Yard Piping and Road Improvements Project (Approve Project Scope). In additional developments, CIP staff:

- Received Statement of Qualifications (SOQ) for the Support Building Improvements Project;
- Received SOQ for the RWF System Integrator services pre-qualification;
- Received bids for the Plant Instrument Air System Upgrade Project;
- Completed SOQ evaluations and issued final rankings for Owner's Advisor services for the Digested Sludge Dewatering Project; and
- Presented the following recommendations to the Treatment Plant Advisory Committee (TPAC) and San José City Council (Council), all of which were accepted or approved:
  - Approve a master consultant agreement for the Aeration Tanks Rehabilitation and Blower Improvement Projects to Brown and Caldwell;
  - Award a construction contract for the Construction-Enabling Improvements Project to the low bidder, Teichert Construction, for \$3,135,910;
  - Approve two master consultant agreements to provide construction management and inspection services to Kennedy/Jenks and MNS Engineers;
  - Approve two master consultant agreements for value engineering services to Hazen and Sawyer, and Value Management Services; and
  - Consider and adopt the five-year (2017-2021) Capital Improvement Program.

Design continued on the Headworks Critical Improvements Project, which met the preliminary design 60 percent milestone this month, and on the Cogeneration Facility design-build project. Alternatives analysis also continued on the Blower Improvement and Filter Rehabilitation projects, with technical workshops held for each project this month.

Major construction work continued on the Emergency Diesel Generators, Digester Gas Compressor Upgrade, and Iron Salt Feed Station projects this month. Two new construction projects became active at the RWF this month, with the pre-construction meeting held on the Fiber Optic Connection Project, and the Notice-to-Proceed (NTP) issued for the Digester and Thickener Facilities Upgrade Project.

## Look Ahead

In July, CIP project teams and the selected design consultants will move forward with alternatives analysis and designs for the Headworks projects and for the Cogeneration Facility, Filter Rehabilitation, Blower Improvements, and Nitrification Clarifiers Rehabilitation projects.

Staff will continue with efforts related to consultant procurements and service orders, including the Nitrification Clarifiers Rehabilitation; Facility Wide Water Systems Improvement; Advanced Facility Control and Meter Replacement; Switchgear S40/G3 Relay Upgrade; Digested Sludge Dewatering Facility; and Support Buildings Improvement projects.

Procurements for a number of programmatic services will continue to advance, including Third-Party Audit, Owner Controlled Insurance Program, System Integrator, and Industrial Hygienist services.

Construction activities will continue on the Emergency Diesel Generators, Digester Gas Compressor Upgrade, Iron Salt Feed Station, and Fiber Optic Connection projects. Construction will commence on the Digester and Thickener Facilities Upgrade and the Construction-Enabling Improvements Project. Staff will hold pre-construction meetings for all of these projects.

Staff will issue a Notice of Intent-to-Award the construction contract for the Plant Instrument Air System Upgrade Project received in June. A recommendation will be made to TPAC and Council in August to proceed with the award of the contract to the lowest bidder.

In addition, all CIP project managers and project engineers will continue formal staff training, with the next training session focused on effective decision making.



## Program Highlight – Design and Construction Management Software

The Construction Management (CM) team, led by Public Works, oversees the construction of RWF projects. A key component of successful CM is the ability to manage effective communications between CIP staff, the contractor, and other stakeholders, such as Operations and Maintenance (O&M), the designer, and other City departments. Historically, the CIP team managed communications using standard productivity tools such as Microsoft Office. However, with the imminent five-fold increase in construction activity at the RWF, it was determined that a more specialized tool would be required.

To reach a solution, in 2015 staff worked with the City Finance Department to purchase a vendor-hosted Design & Construction Management Software (DCMS) system to manage and track CIP projects. The procurement effort followed the normal procedure of providing a Request for Proposal (RFP) from qualified vendors. Twelve vendors submitted proposals that were evaluated and rated by a Technical Evaluation Panel (TEP). Four vendors were shortlisted and were subsequently interviewed by the TEP. As part of the process, vendors were asked to demonstrate their systems. Bentley Systems' EADOC program received the highest overall score for functionality, ease of use, and cost; Bentley Systems was subsequently awarded the contract.

CIP staff are now working with Bentley Systems' implementation team to configure the DCMS system for RWF construction management forms and processes. The first major CIP project to use EADOC is the recently-awarded Digester and Thickener Facilities Upgrade Project. Project participants from the CIP, O&M, the contractor, and the design consultant are being trained to submit Requests for Information (RFI), submittals, and letters through EADOC. Training on invoicing, contract change orders, and other CM processes will soon follow.

The benefits of using the EADOC system, which are already becoming apparent, include:

- Real-time collaboration between project team members;
- Automatic time- and date-stamping for every document action;
- Customized document alerts that notify users when documents need a response;
- A web-based platform that provides access to all users around the clock; and
- Linked relationships between a project's documents, communications, and costs, which become an effective archive when the project is completed.

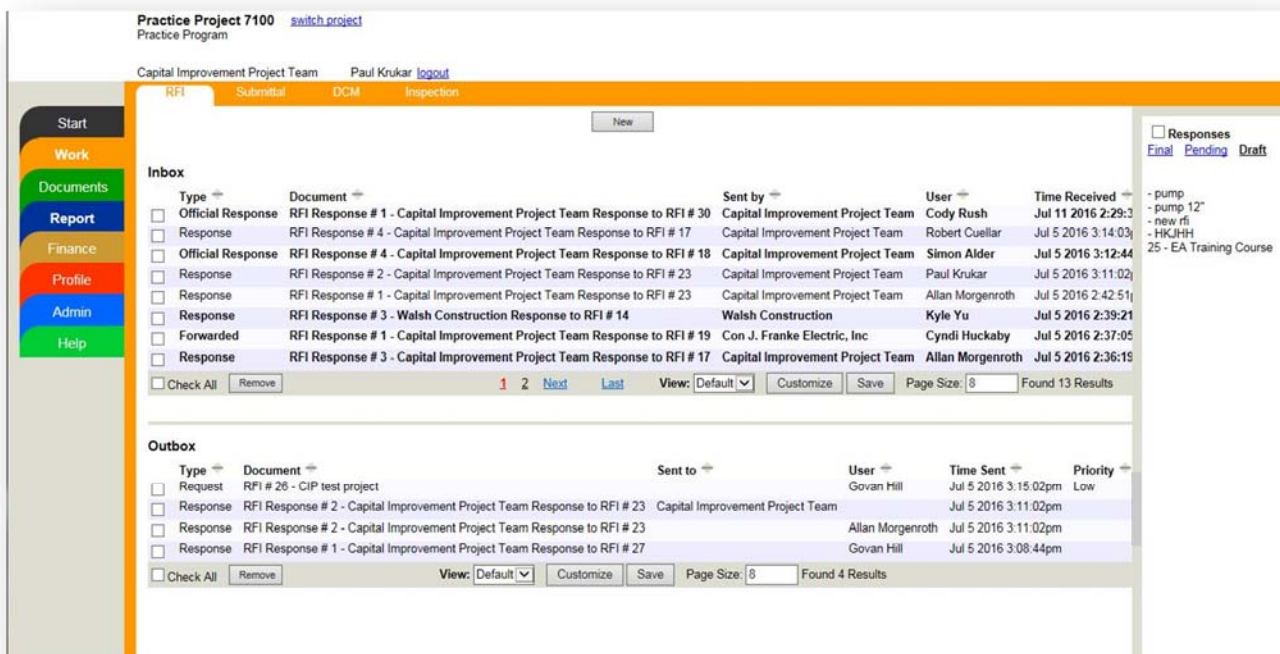


































Figure 1 – Typical EADOC interface for a Request for Information document



## Program Performance Summary

Eight key performance indicators (KPIs) have been established to measure the overall success of the CIP. Each KPI represents a metric that will be monitored on a regular frequency. Through the life of the CIP, KPIs will be selected and measured that best reflect the current maturity of the program.

### Program Key Performance Indicators – Fiscal Year 2015-2016

KPI	Target	Fiscal Year to Date			Fiscal Year End		
		Actual	Status	Trend	Forecast	Status	Trend
<b>Stage Gates</b>	80%	100% (22/22) <sup>1</sup>			100% (22/22)		
Measurement: Percentage of initiated projects and studies that successfully pass each stage gate. Criteria: Red: < 70%; Amber: 70% to 80%; Green: >=80%							
<b>Schedule</b>	85%	25% (1/4)			25% (1/4)		
Measurement: Percentage of CIP projects delivered within 2 months of approved baseline Beneficial Use Milestone. Criteria: Red: < 75%; Amber: 75% to 85%; Green: >=85%							
<b>Budget</b>	90%	83% (5/6) <sup>2</sup>			83% (5/6)		
Measurement: Percentage of CIP projects that are completed within the approved baseline budget. Criteria: Red: < 80%; Amber: 80% to 89%; Green: >=90%							
<b>Expenditure</b>	\$146M <sup>3</sup>	\$206M			\$206M		
Measurement: CIP Fiscal Year 15/16 committed costs. Committed cost meets or exceeds 70% of planned Budget (70% of \$209.2M = \$146.4M)							
<b>Procurement</b>	80%	100% (17/17)			100% (17/17)		
Measurement: Number of consultant and contractor procurements for initiated projects and program-wide services advertised compared to planned for the fiscal year. Criteria: Red: < 70%; Amber: 70% to 79%; Green: >=80%							
<b>Safety</b>	0	0			0		
Measurement: Number of OSHA reportable incidents associated with CIP construction for the fiscal year. Criteria: Red: > 2; Amber: 1 to 2; Green: zero incidents							
<b>Environmental</b>	0	0			0		
Measurement: Number of permit violations caused by CIP construction for the fiscal year. Criteria: Red: > 2; Amber: 1 to 2; Green: zero incidents							
<b>Staffing<sup>4</sup></b>	80%	52% (15/29) <sup>5</sup>			52% (15/29)		
Measurement: Number of planned positions filled for the fiscal year. Criteria: Red: < 70%; Amber: 70% to 79%; Green: >=80%							

#### Notes

- The number of completed stage gates increased from 20 to 22 for the Stage Gate KPI Fiscal Year to Date (YTD) as the Plant Instrument Air System Upgrade Project successfully completed the Authorization to Award stage gate and the Yard Piping and Road Improvements Project successfully completed the Approve Project Scope stage gate.
- The Digester Gas Storage Replacement Project was completed and was within budget. The A5-A6 Nitrification Magnetic Meter & Valve Replacement Project was also completed, but not within the approved baseline budget.
- Carryover encumbrance of \$157K was liquidated, reducing budget and causing the target to reduce from \$146.6K (\$147 rounded) to \$146.4M (146M rounded).
- The City Staffing level KPI for planned recruitments for positions that are vacant at the start of the fiscal year is measured quarterly; all other KPIs are measured monthly. KPI measurement does not account for staff turnover throughout the fiscal year.
- Six employees were hired in the fourth quarter of fiscal year 2015-2016. This includes a senior engineer, an associate engineer, two engineers, a senior engineering technician, and a senior construction inspector.

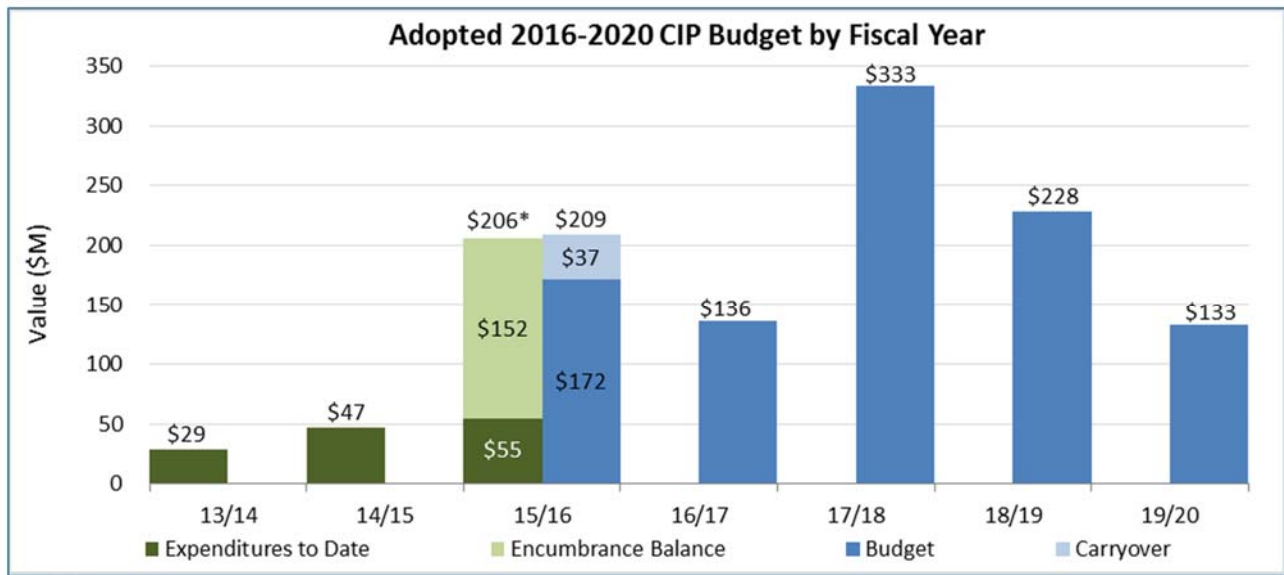


## Program Cost Performance Summary

This section summarizes CIP cost performance for all construction projects and non-construction activities for FY15-16 and for the 2016-2020 CIP.

### Adopted 2016-2020 CIP Expenditure and Encumbrances

To accommodate the proposed increase in expenditures and encumbrances over the next five years, the City is implementing a long-term financial strategy to fund needed, major capital improvements while minimizing the impact to ratepayers. FY13-14, FY14-15, and FY15-16 expenditures have been adjusted to reflect the CIP portion of the Treatment Plant Capital Fund, Fund 512, excluding South Bay Water and Urgent and Unscheduled Cost (\$2.6M and \$1.5M, respectively).



\*The 2015-2016 CIP expenditures are \$54.6M (\$55M rounded) and the encumbrance balance is \$151.6M (\$152M rounded), making the total committed to date for the CIP \$206.2M (\$206M rounded). The above graph total the rounded amounts.

#### Notes:

**Expenditure:** Actual cost expended, either by check to a vendor or through the City's financial system, for expenses such as payroll or non-personal expenses that do not require a contract.

**Encumbrance:** Financial commitments, such as purchase orders or contracts, that are committed to a vendor, consultant, or contractor. The encumbrance reserves the funding within the appropriation and project.

**Encumbrance Balance:** The amount of the remaining encumbrance committed after payments.

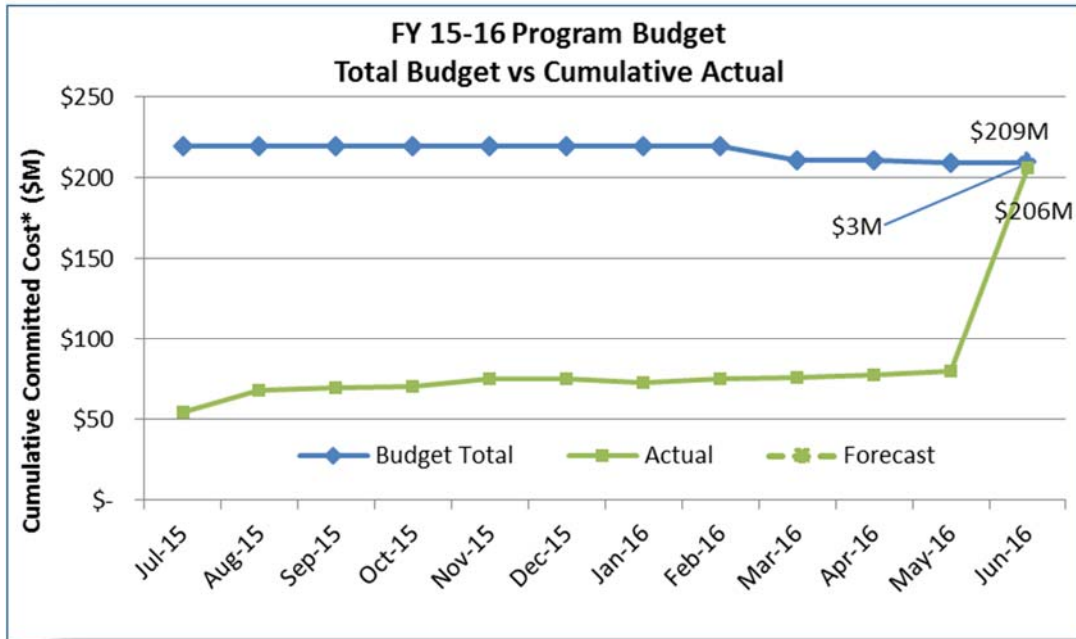
**Budget:** Adopted FY 2016-2020 Budget, which is new funding plus rebudgeted funds.

**Carryover:** Encumbrance balances at the end of a fiscal year become carryover funding. Carryover is different from rebudgeted funds, in that it automatically utilizes funding that was previously committed, but not yet paid.



## Fiscal Year 2015-2016 Program Budget Performance

This budget comprises the 2015-2016 budget of \$172.0 million plus carryover of \$37.4 million. The budget excludes Reserves, Ending Fund Balance, South Bay Water Recycling, Public Art, and Urgent and Unscheduled Rehabilitation items.

















\*Committed costs are expenditures and encumbrance balances, including carryover (encumbrance balances from the previous fiscal year).







## Project Performance Summary

There are currently seven active projects in the construction or post-construction phases, with a further 17 projects in feasibility/development, design, bid and award, or design and construction (design-build projects) phases (see PDM, page 2). All active projects are listed in the tables below. Projects in the construction phase have established cost and schedule baselines and are monitored using the City's Capital Project Management System (CPMS). Green/red icons are included in the table below to indicate whether these projects are on budget and schedule, using CPMS data as a source.

### Project Performance – Baselined Projects

Project Name	Phase	Estimated Beneficial Use Date <sup>1</sup>	Cost Performance <sup>2</sup>	Schedule Performance <sup>2</sup>
1. A5-A6 Nitrification Mag. Meter & Valve Replacement	Post Construction	May 2016 <sup>3</sup>		
2. Digester Gas Compressor Upgrade	Construction	Oct 2016		
3. Emergency Diesel Generators	Construction	Dec 2016		
4. Fiber Optic Connection	Construction	Feb 2017 <sup>4</sup>		
5. Construction Enabling Improvements	Construction	Feb 2017 <sup>4</sup>		
6. Iron Salt Feed Station	Construction	Sept 2017		
7. Digester and Thickener Facilities Upgrade	Construction	Sept 2019 <sup>4</sup>		

#### KEY:

Cost:		On Budget		>1% Over Budget
Schedule:		On Schedule		>2 months delay

#### Notes

- Beneficial Use is defined as work that is sufficiently complete, in accordance with contract documents, that it can be used or occupied by the City. Beneficial Use dates are being reviewed as part of project schedule reviews.
- An explanation of cost and schedule variances on specific projects identified in this table is provided on page 11.
- Actual Beneficial Use date.
- Project construction Beneficial Use date will be baselined once the contractor submits their construction schedule.



## Project Performance – Pre-Baselined Projects

Project Name	Phase	Estimated Beneficial Use Date <sup>1</sup>
1. Cogeneration Facility	Design & Construction	May 2019
2. Plant Instrument Air System Upgrade	Bid & Award	Jan 2018
3. Headworks Critical Improvements	Design	Sept 2017
4. Blower Improvements	Feasibility/Development	Feb 2019
5. Adv. Facility Control & Meter Replacement	Feasibility/Development	Aug 2020
6. Switchgear S40 Upgrade, M4 Replacement, G3 & G3A Removal	Feasibility/Development	Jan 2021
7. Headworks Improvements	Feasibility/Development	April 2021
8. Outfall Bridge and Levee Improvements	Feasibility/Development	Dec 2021
9. Digested Sludge Dewatering Facility	Feasibility/Development	Dec 2021
10. Facility Wide Water Systems Improvements	Feasibility/Development	May 2022
11. Filter Rehabilitation	Feasibility/Development	May 2022
12. New Headworks	Feasibility/Development	Aug 2022
13. Yard Piping and Road Improvements	Feasibility/Development	Oct 2022
14. Nitrification Clarifiers Rehabilitation	Feasibility/Development	Nov 2022
15. Aeration Tanks Rehabilitation	Feasibility/Development	Nov 2023
16. Support Building Improvements	Feasibility/Development	Jan 2027
17. Lagoons & Drying Beds Retirement	Feasibility/Development	Mar 2027

### Notes

- Beneficial Use is defined as work that is sufficiently complete, in accordance with contract documents, that it can be used or occupied by the City. Beneficial Use dates are being reviewed as part of project schedule reviews.



## Significant Accomplishments

### Biosolids Package

#### Digester and Thickener Facilities Upgrade

- The NTP for construction was issued to Walsh Construction Company II, LLC on June 22. The first chargeable day of work will be July 5. This project will be the first phase of rehabilitation for the RWF biosolids facilities.

#### Digested Sludge Dewatering Facility

- The City issued the final rankings for the Owner's Advisor Services procurement.

### Facilities Package

#### A5-A6 Nitrification Magnetic Meter & Valve Replacement

- The City accepted the project on June 21.

#### Cogeneration Facility

- Development of the Basis of Design Report began with several workshops to discuss key project elements.

#### Construction-Enabling Improvements

- Council awarded the project to Teichert Construction, Inc. on June 21 with a pre-construction meeting scheduled for mid-July.

#### Fiber Optic Connection

- The project team held the pre-construction meeting. Staff expect to complete the project by the end of February 2017.

#### Yard Piping and Road Improvements Project

- The project team completed the Project Scoping stage gate, and is proceeding with Feasibility/Development.

### Liquids Package

#### Advanced Facility Control and Meter Replacement

- Staff is negotiating with Black & Veatch for design services.

#### Aeration Tanks Rehabilitation and Blower Improvements

- Staff began negotiations with the consultant and held the Preliminary Alternative Analysis workshop for the Blower Improvements Project.

#### Filter Rehabilitation

- The project team held the project kick-off meeting and completed interviews with O&M staff.

#### Headworks Critical Improvements, Headworks Improvements, and New Headworks

- Staff received 60 percent submittal for the Headworks Critical Improvements project and held an Alternative Analysis Workshop for the Headworks Improvements and New Headworks projects.

#### Nitrification Clarifiers Rehabilitation

- Staff finalized the scope of work for SO #1 for the Nitrification Clarifier Rehabilitation Project.

### Power and Energy

#### Plant Instrument Air System Upgrade

- The City received and evaluated bids. Staff will move forward with recommending award of a construction contract in August.





## Explanation of Project Performance Issues

### A5-A6 Nitrification Magnetic Meter and Valve Replacement

In September 2014 during startup, the project team discovered that the actuators that had been specified and installed were incompatible with the available power supply. Engineering staff determined it would cost more to modify the electrical system than to order and install compatible actuators. O&M staff requested that the actuators match the custom actuators used in the other 14 clarifiers. The City pursued various options to resolve the issue and received a proposal from the contractor to install new actuators based on a revised specification. A counterproposal was provided to the contractor in December 2015. Discussions between senior management from both sides have been productive. A negotiated agreement to resolve all outstanding contract issues was concluded in January 2016 and a change order was issued for the contractor to purchase replacement custom actuators, with lead time of between 12 to 14 weeks. Council approved the additional required funding in March. The Contractor remobilized and completed the work, with a Beneficial Use date of May 27. The City issued Final Acceptance on June 21.

### Emergency Diesel Generator

The project completion schedule is delayed approximately three months due to the following three factors:

1. Caterpillar, the supplier of the Emergency Diesel Generator system, encountered delays in developing the controls that interface with the existing RWF controls. They have now delivered and installed the controls and switchgear enclosures. Caterpillar and Peterson Control are in the process of completing all outstanding items.
2. Additional time is required for Pacific Gas & Electric (PG&E) to schedule the witness test of the emergency diesel generator equipment installation and commissioning to connect to the RWF grid. After PG&E approves the Emergency Diesel Generator plans and the third-party test report, PG&E will require 60 days to schedule their technical team to witness the commissioning of the emergency diesel generator equipment.
3. A no-cost, time extension change order is being processed to split the commissioning sequence into two periods to ensure RWF backup power during engine modification.



## Project Profile – Digester and Thickener Facilities Upgrade Project

The RWF currently has 16 anaerobic digesters that were constructed between 1956 and 1983. These aging digesters are in various states of disrepair and urgently need rehabilitation to maintain viable biosolids processing capacity. Of these 16 digesters, six are currently out of service due to structural damage or other mechanical failures. Typically a minimum of eight and up to 10 digesters are operating at any given time. Currently, the digesters receive primary sludge from the primary sedimentation tanks and thickened waste activated sludge from the dissolved air flotation thickeners (DAFTs). To reduce the number of digesters that will ultimately require rehabilitation, a reconfiguration of the DAFT process area is needed.

This project consists of improvements to the digestion and thickening process, including rehabilitation of four digesters (digesters 5-8) to a thermophilic process known as Temperature-Phased Anaerobic Digestion (TPAD). The TPAD upgrade will improve digested biosolids stabilization and increase gas production. It will also provide flexibility to upgrade the process to produce Class A biosolid products in the future. Additionally, six DAFT units (units 1-6) will be rehabilitated to operate as co-thickening units. All elements associated with the digesters will be upgraded, including covers, mixers, heating systems, electrical, and instrumentation components. Modifications to the existing DAFT system include upgrades to existing piping, tanks, mechanical equipment, and electrical and instrumentation components. The upgraded units will also receive covers and an odor control system. A new primary screen sludge screening facility will remove debris prior to introducing sludge to the DAFT and digestion process.

All existing digester gas piping and associated appurtenances will be upgraded to meet future gas production needs. An external elevated pipe network will collect biogas from the entire digester campus. This component includes removal of digester, natural, and blended gas piping systems from underground tunnels. The completion of this project will be the first step toward declassifying the tunnels and eliminating hazardous environment conditions. Additional work will include miscellaneous site improvements, paving, relocation of utilities, and construction of two electrical rooms, concrete flow distribution boxes, and a sampling station.

Brown and Caldwell began the project design in October 2013 and completed it in December 2015. The lowest responsive bidder on the project was Walsh Construction Company II, LLC for a total bid of \$107.9 million. This project was recommended for approval by the TPAC and approved by Council on May 19 and May 24, respectively. The Construction Notice to Proceed was issued on June 22. Construction completion is anticipated in September 2019. The total project budget is approximately \$147.9 million.

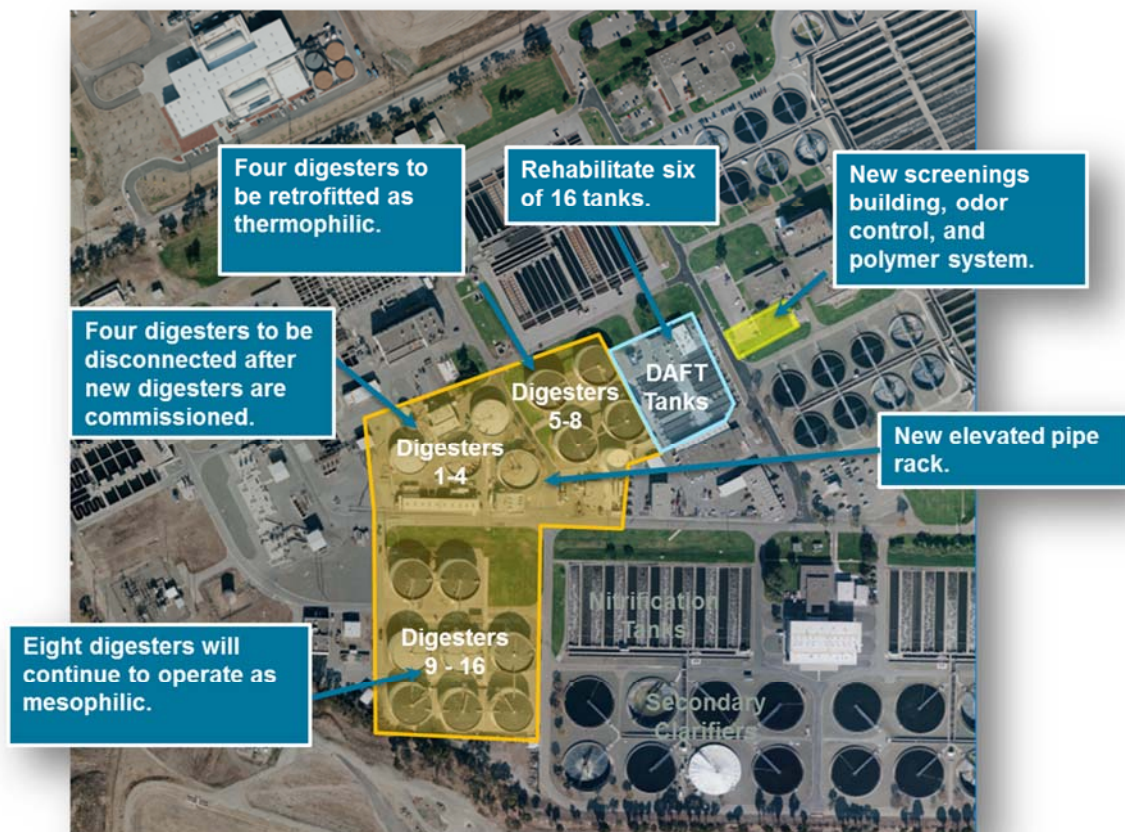


Figure 2: Project layout

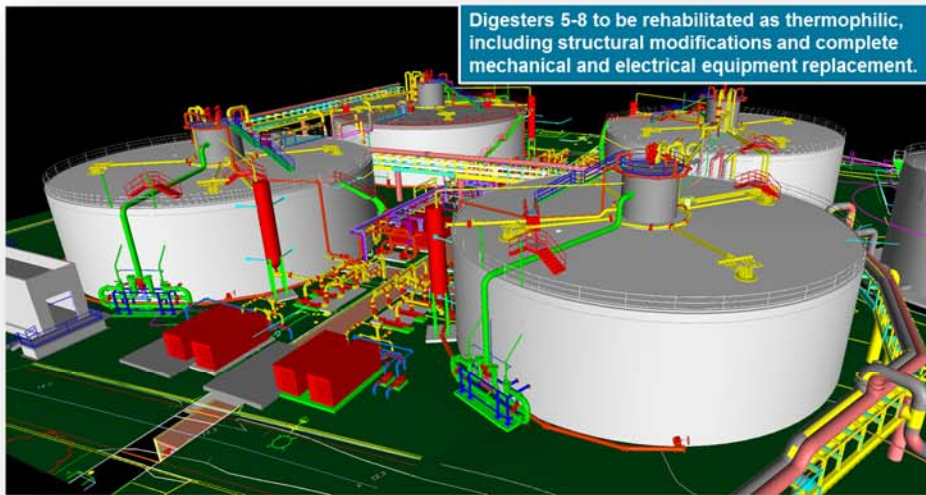


Figure 3: Anaerobic Digester Improvements

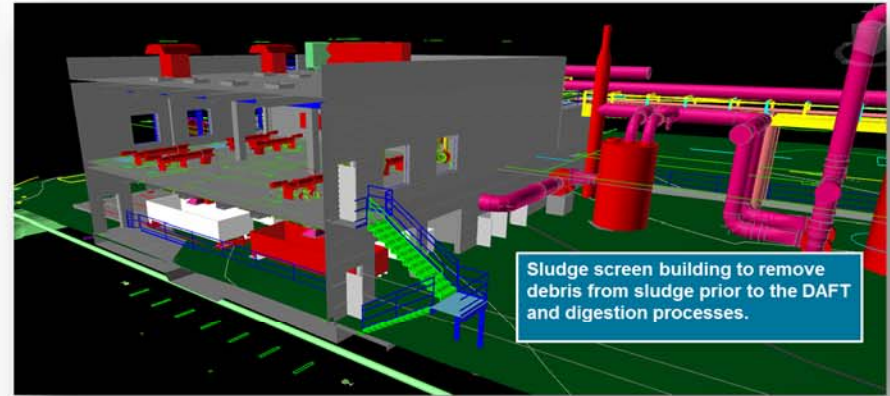


Figure 4: New Sludge Screening Facility

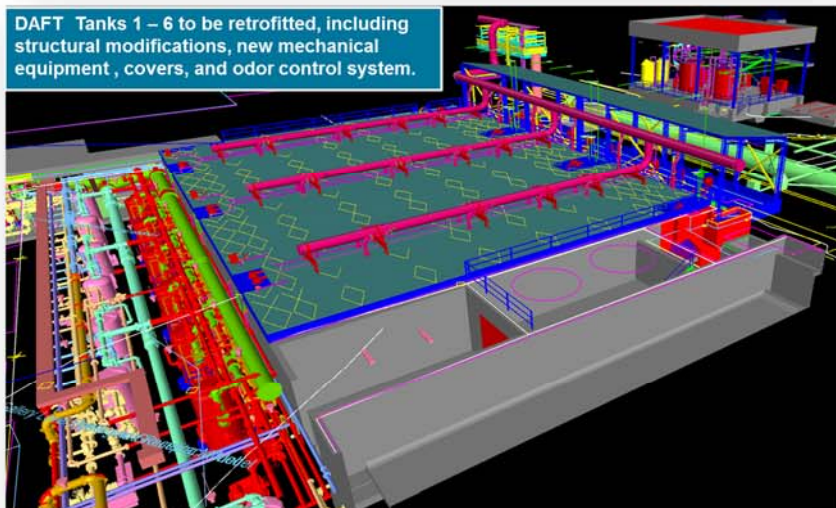


Figure 5: Anaerobic Digester Improvements

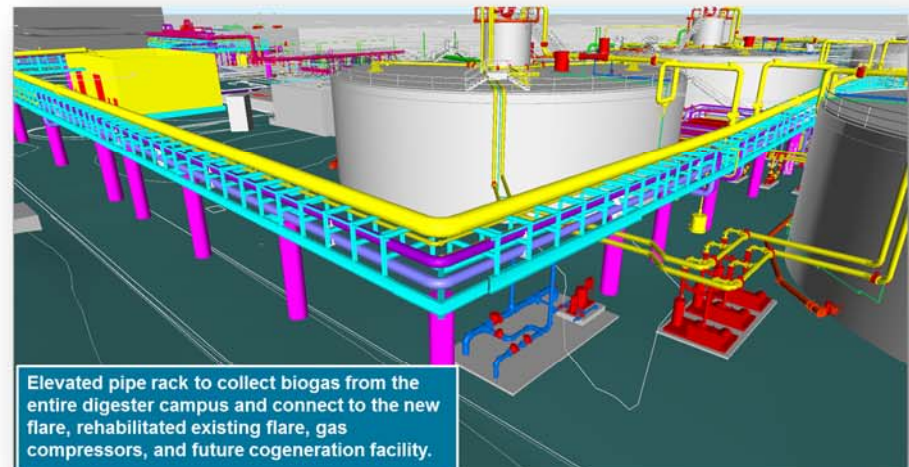


Figure 6: New Elevated Pipe Rack

# Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram

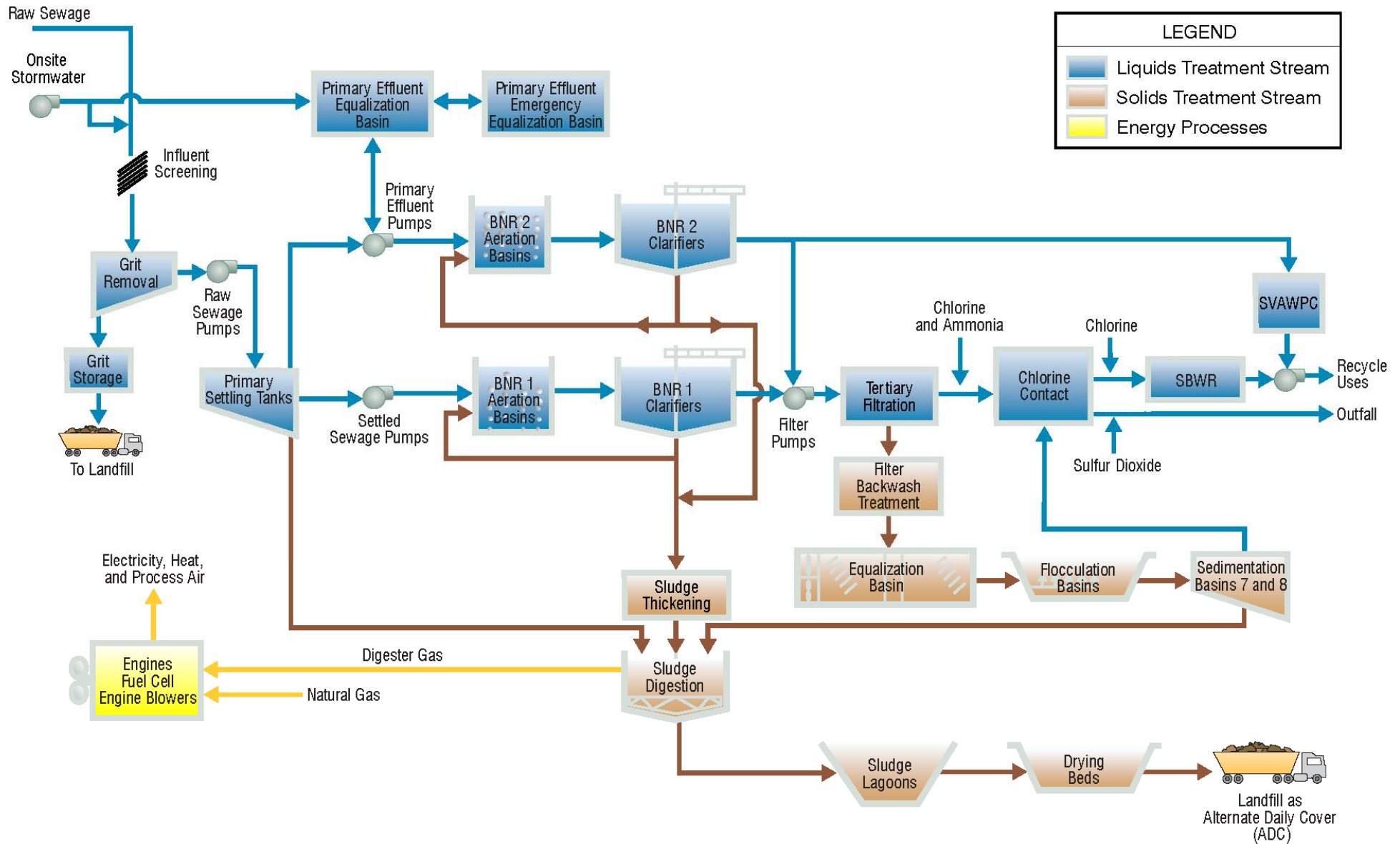


Figure 7 – Current Treatment Process Flow Diagram



# Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram

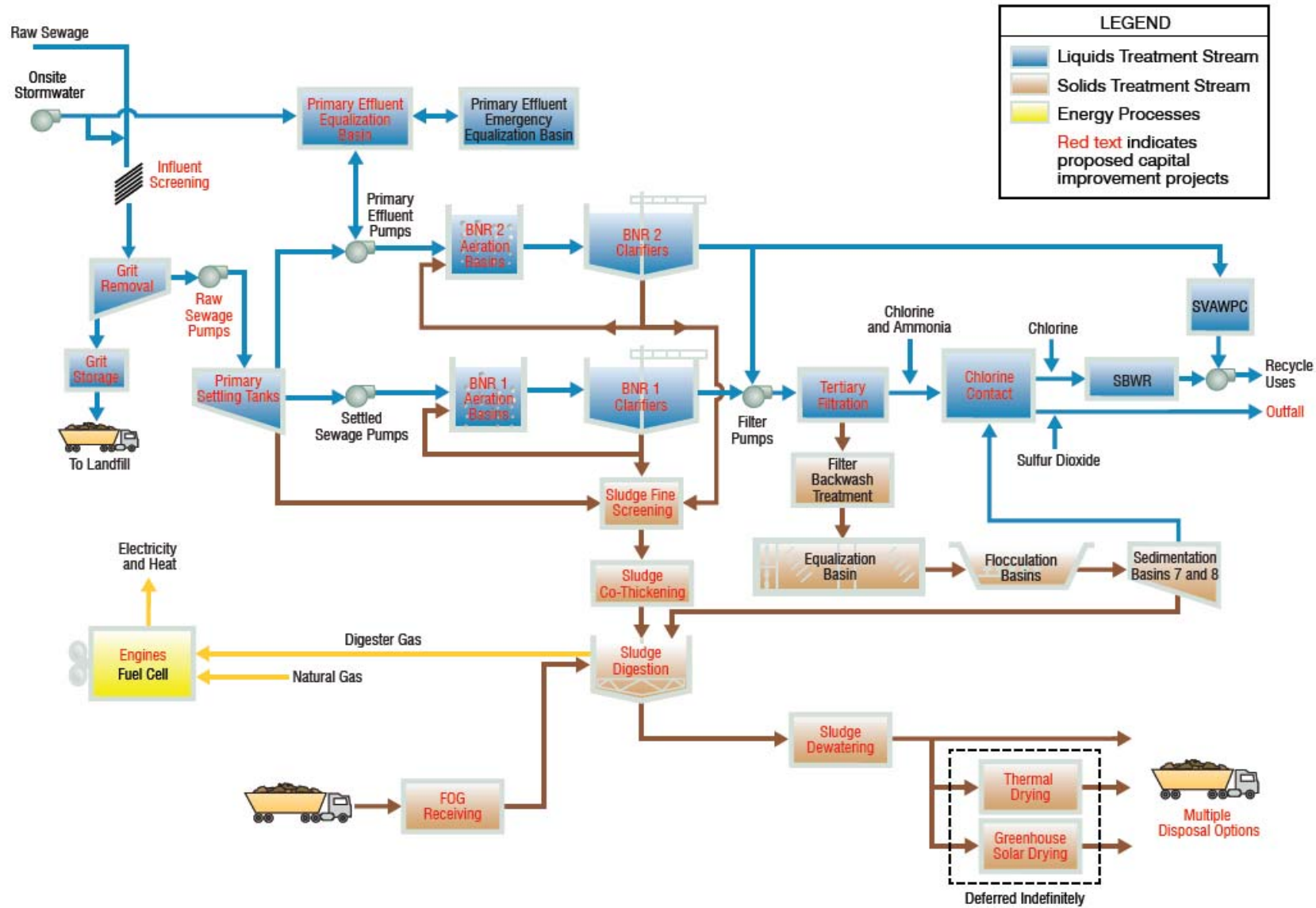


Figure 8 – Proposed Treatment Process Flow Diagram



## Active Construction Projects – Aerial Plan

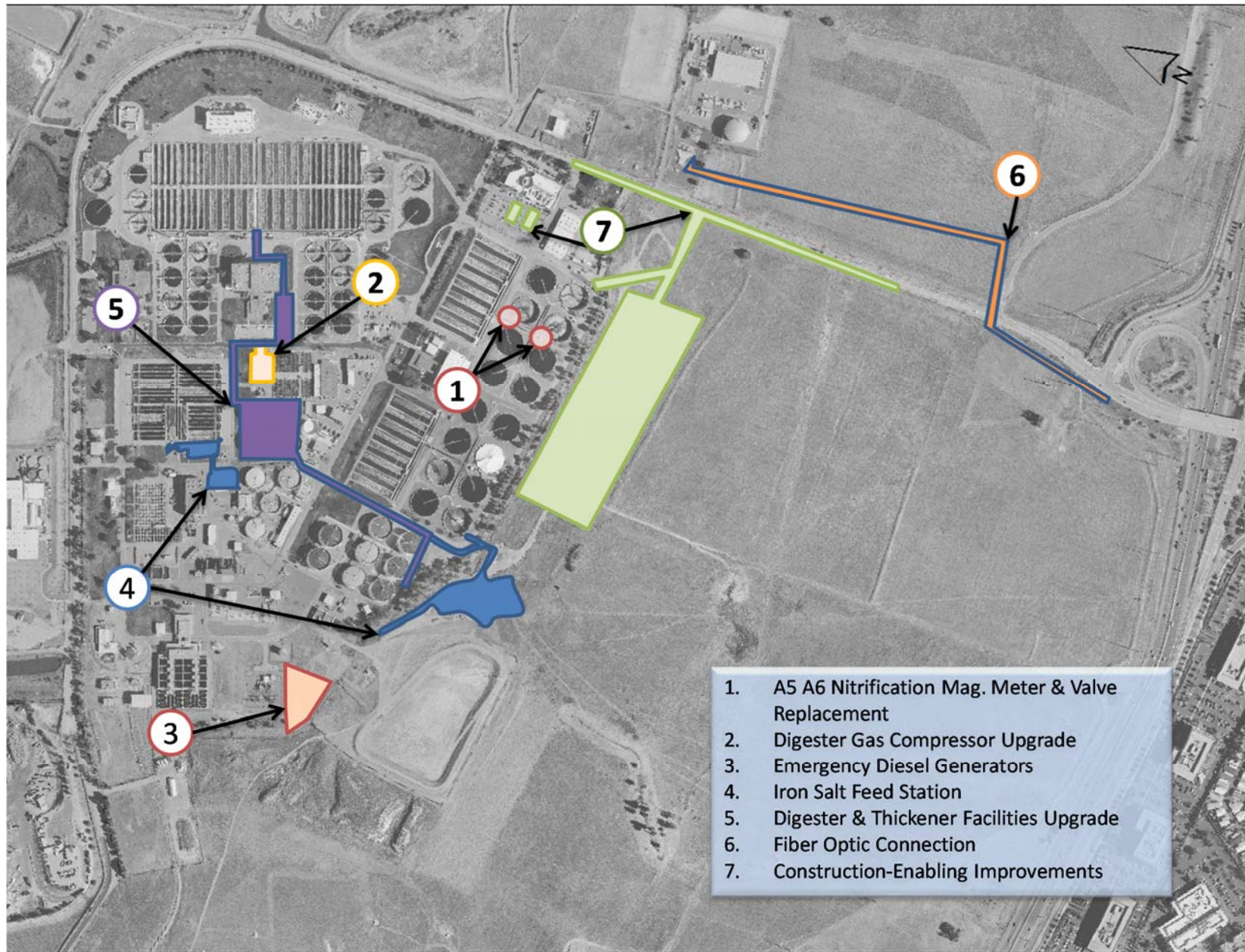


Figure 9 – Active Construction Projects





# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** Kerrie Romanow  
Barry Ng

**SUBJECT:** SEE BELOW

**DATE:** August 2, 2016

Approved

Date

8/4/16

**SUBJECT: REPORT ON BIDS AND AWARD OF CONSTRUCTION CONTRACT FOR 7617 – PLANT INSTRUMENT AIR SYSTEM UPGRADE PROJECT AT THE SAN JOSÉ-SANTA CLARA REGIONAL WASTEWATER FACILITY**

## RECOMMENDATION

- (a) Adopt a resolution approving the San José – Santa Clara Regional Wastewater Facility Plant Instrument Air System Upgrade Project Initial Study/Mitigated Negative Declaration and related Mitigation Monitoring and Reporting Program (File No. PP15-114).
- (b) Report on bids and award of construction contract for 7617- Plant Instrument Air System Upgrade Project to the low and only bidder, Anderson Pacific Engineering Construction, Inc., in the amount of \$2,848,000, and approve a 15 percent construction contingency in the amount of \$427,200.
- (c) Adopt a resolution authorizing the Director of Public Works to execute one or more change orders in excess of \$100,000 for the remaining duration of the Plant Instrument Air System Upgrade Project, not to exceed the total contingency amount approved for the Project.

## OUTCOME

Award of the construction contract to Anderson Pacific Engineering Construction, Inc. will allow for the construction and completion of the Plant Instrument Air System Upgrade Project (Project) at the San José-Santa Clara Regional Wastewater Facility<sup>1</sup> (RWF). Approval of a 15 percent contingency will provide funding for any unanticipated work that is necessary for the proper completion of the Project. Adoption of a resolution approving the Initial Study/Mitigated Negative Declaration and implementing the Mitigation Monitoring and Reporting Program for the project will ensure all environmental mitigation and monitoring measures will be carried out.

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

Adoption of a resolution authorizing the Director of Public Works to execute change orders up to the contingency amount will allow for timely implementation of any changes required in the project for completion as scheduled in spring 2018.

## **BACKGROUND**

The RWF has a high pressure air supply system which is used for controlling pneumatically operated valves, processing air for the dissolved air floatation thickening process and powering various equipment. The existing instrument air compressor system is located in the basement of the Secondary Blower Building (SBB) and consists of four air compressors, an air filter, a wet air receiver tank, a chilled water air dryer (primary), a refrigerator air dryer (backup), and two dry air receiver tanks. (See Attachment A for project location map.)

The system needs to be upgraded for several reasons: (1) The below-grade location of the existing instrument air compressor system makes it vulnerable to submergence during a flooding event, (2) the compressors are connected to the SBB as a source of electrical power supply without any redundancy which, in the event of a SBB failure, could severely impact the ability to operate critical treatment processes, (3) as currently configured, the compressors depend on the RWF absorption chillers and SBB engines for cooling. The SBB engines are scheduled to be decommissioned in two to three years as part of the Cogeneration Facility project, thus, an alternative cooling solution is needed.

The Project will construct three new air compressors, which will be housed in a new compressor building located above the 100 year flood elevation level. The Project also includes two new air dryers, wet receiving tank, variable frequency drives, electrical distribution center, and instrumentation and control equipment. To improve operational reliability and redundancy, power to the new instrument air compressor system will be supplied from two independent sources. In addition, the Project includes sufficient reservoir redundancy and air supply to support critical operations in the event of an extended power loss. The new compressors will be air cooled, eliminating the need for an external cooling source (i.e. removes dependency on the existing absorption chillers and SBB engines). The system is also configured so that each compressor, reservoir and pipe segment can be isolated for maintenance or repair without pressure loss or interruption of operations.

The Project allows for 355 working days. Construction is scheduled to begin in September 2016 with substantial completion in January 2018.



**ANALYSIS**

Bids were opened on June 2, 2016 with the following results:

Contractor	Bid Amount	Variance Over/(Under) Amount	Variance Over/(Under) Percent
Anderson Pacific Engineering Construction, Inc. (Santa Clara)	\$2,848,000	\$258,000	10%
<b>Engineer's Estimate</b>	<b>\$2,590,000</b>		

Only one bid was received from Anderson Pacific Engineering Construction which is 10 percent higher than the Engineer's Estimate. Staff considers this is reasonable for the work involved since this is within the accuracy range of a Class 1 estimate of +15 percent on the high end as defined by the Association for the Advancement of Cost Engineering International (AACEI).

The lower-than-expected number of bidders can be attributed to the high volume of construction work currently available in the Bay Area. Staff considers the bid submitted for this Project acceptable for the work involved and recommends award of contract to the Anderson Pacific Engineering Construction.

Construction contingencies for capital projects are established by Council Resolution No. 71319:

- a. 5 % of the total contract amount for street, sidewalk or park projects;
- b. 10 % of the total contract amount for utilities and building projects;
- c. 15 % of the total contract amount for building renovation projects;
- d. Such other amount as may be approved by the City Council for a particular project.

Staff recommends a 15 percent contingency for this Project to account for the challenge of maintaining continuous operations at the RWF during construction, in addition to complex project interfaces with existing electrical and process control facilities, potential utility conflicts, and other concurrent capital improvement projects underway by others.

Staff also recommends delegating authority to the Public Works Director to execute one or more change orders in excess of \$100,000 for the remaining duration of the Project. This is not to exceed the total contingency amount approved for the Project, and is subject to other applicable limitations on the authority of the Director in the San José Municipal Code. Approval of these recommendations will provide funding for any unanticipated work necessary for the proper completion of the Project, and provide staff with the flexibility to efficiently and effectively respond to unforeseen or changed conditions for the remaining duration of the Project.

## **EVALUATION AND FOLLOW-UP**

No follow-up action with City Council is expected at this time. A progress report on this and other RWF capital projects will be made to the Transportation and Environment Committee and the Council on a semiannual basis. Monthly progress reports of the RWF Capital Improvement Program (CIP) will also be submitted to the Treatment Plant Advisory Committee (TPAC) and posted on the City's website.

## **POLICY ALTERNATIVES**

### ***Alternative 1: Direct City staff to reject all bids and re-bid the Project***

**Pros:** Re-bidding the Project may result in more bid proposals being submitted.

**Cons:** Re-bidding will delay the construction schedule and increase project delivery costs.

**Reason for not recommending:** Re-bidding a project does not always result in more bid proposals or lower bids. If this alternative is adopted, the construction schedule would be delayed for at least three to six months and project delivery costs would be increased due to staff and consultant efforts in the re-bidding process.

## **PUBLIC OUTREACH**

This Project was advertised on BidSync.com on April 20, 2016 and advertised in the *San José Post Record*. This memorandum will be posted on the City's Council Agenda website for the August 23, 2016 City Council meeting.

## **COORDINATION**

This Project and memorandum have been coordinated with the Departments of Planning, Building and Code Enforcement, Fire, and Finance, the City Manager's Budget Office, and the City Attorney's Office. This memorandum is scheduled to be heard at the August 11, 2016 TPAC meeting.

## **FISCAL/POLICY ALIGNMENT**

This Project is consistent with the City Council-approved budget strategy to focus on rehabilitating aging RWF infrastructure, improve efficiency and reduce operating costs. This Project is also consistent with the budget strategy principle of focusing on protecting our vital core services.

**COST SUMMARY/IMPLICATIONS**

1. AMOUNT OF RECOMMENDATION/COST OF PROJECT:	\$2,848,000
Project Delivery	\$1,309,507
Construction	\$2,848,000
<u>Contingency (15%)</u>	<u>\$427,200</u>
<b>Total Project Costs</b>	<b>\$4,584,707</b>
<u>Prior Year Expense</u>	<u>\$1,315,419</u>
<b>Remaining Project Costs</b>	<b>\$3,269,288</b>

\* *Project delivery includes \$616,439 for consultant design and construction support services, \$38,518 for project management during feasibility and development, \$115,000 for project management during design, \$22,000 for bid and award, \$456,877 for construction management, \$27,673 for environmental consultant services, and \$33,000 for post construction and project closeout. The estimated project delivery cost is 46% of the construction cost, which is in line with project delivery costs for capital projects at other wastewater facilities.*

2. COST ELEMENTS OF AGREEMENT/CONTRACT:

This is a lump sum contract. \$2,848,000

3. SOURCE OF FUNDING: 512 – San José-Santa Clara Treatment Plant Capital Fund

4. OPERATING COSTS: The Plant Instrument Air System will have no additional impact on the San José-Santa Clara Treatment Plant Operating Fund (Fund 513) or the General Fund.

5. PROJECT COST ALLOCATION: In accordance with the recommendations set forth in the Capital Project Cost Allocations Technical Memo (Carollo Engineers, March 2016), this Project is allocated between the four billable parameters relative to the rolling weighted average distribution of all RWF assets.

August 2, 2016

**Subject: 7617 – Plant Instrument Air System Upgrade Project**

Page 6

**BUDGET REFERENCE**

The table below identifies the fund and appropriations proposed to fund the contract recommended as part of this memorandum and remaining project costs, including project delivery, construction, and contingency costs.

Fund #	Appn #	Appn Name	Current Total Appn	Amt for Contract	2016-2017 Proposed Capital Budget Page*	Last Budget Action (Date, Ord. No.)
<b>Remaining Project Costs</b>			<b>\$3,269,288</b>			
<b>Remaining Funding Available</b>						
512	7680	Plant Instrument Air System Upgrade	\$3,697,000	\$2,848,000	V – 172	06/21/2016, Ord. No. 29762
<b>Total Current Funding Available</b>			<b>\$3,697,000</b>	<b>\$2,848,000</b>		

\*The 2016-2017 Capital Budget was adopted on June 21, 2016.

**CEQA**

San José – Santa Clara Regional Wastewater Facility Plant Instrument Air System Upgrade Project Mitigated Negative Declaration (MND), File No. PP15-114

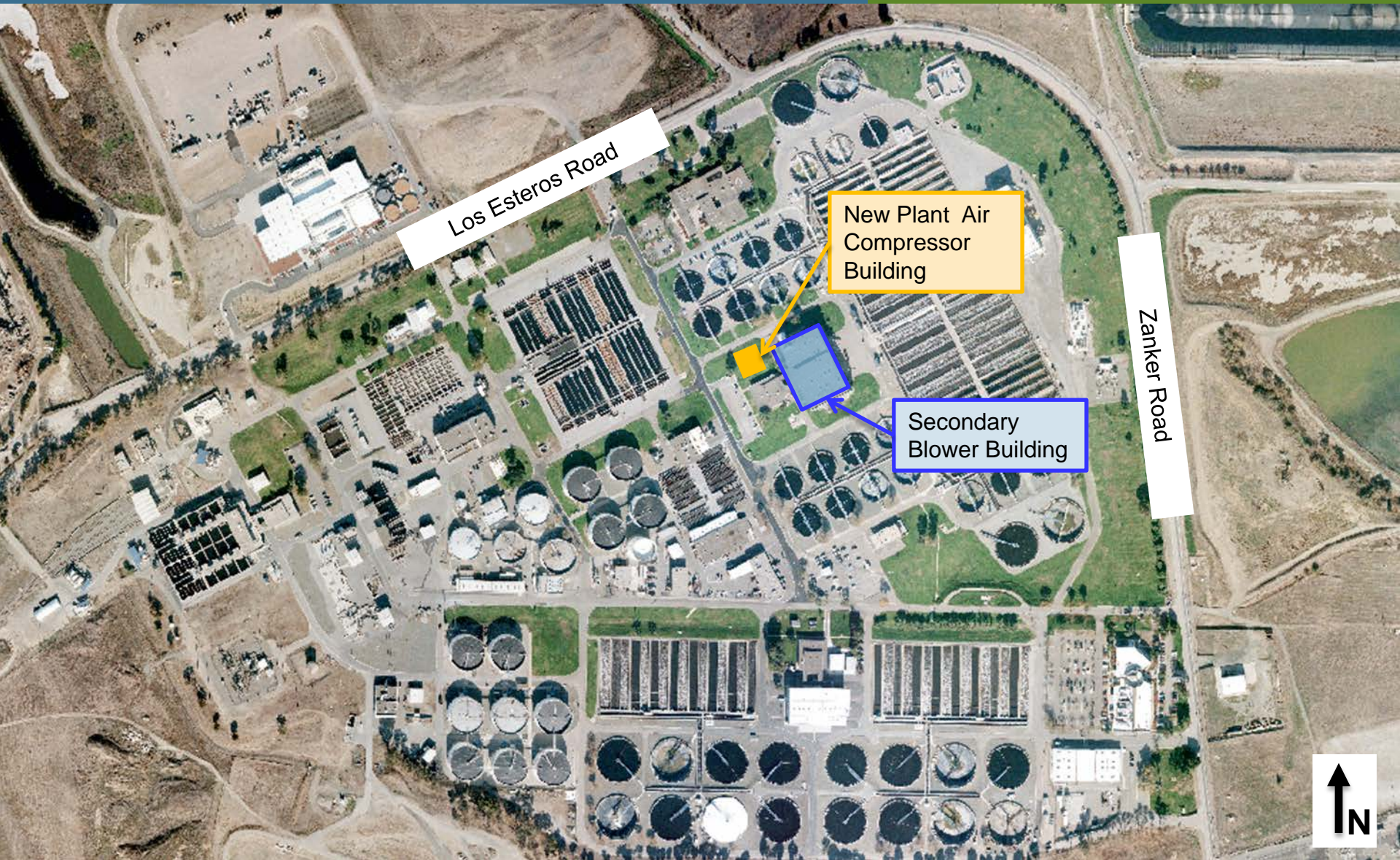
/s/ Ashwini Kantak for  
KERRIE ROMANOW  
Director, Environmental Services Department

/s/ Jon Cicirelli for  
BARRY NG  
Director of Public Works

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

Attachment A – Plant Instrument Air System Upgrade Project Map

# Attachment A Plant Instrument Air System Upgrade Project Location



Los Esteros Road

New Plant Air Compressor Building

Secondary Blower Building

Zanker Road



**City Manager's Contract Approval Summary**  
**For Procurement and Contract Activity between \$100,000 and \$1.08 Million for Goods and \$100,000 and \$270,000 for Services**

JUNE 1, 2016 - JULY 31, 2016

Description of Contract Activity <sup>1</sup>	Fiscal Year	Req#/RFP#	PO#	Vendor/Consultant	Original \$ Amount	Start Date	End Date	Additional \$ Amount	Total \$ Amount	Comments
FERRIC CHLORIDE & DOSING STATION	15-16	20658	51837	KEMIRA WATER SOLUTIONS, INC	\$700,000	8/17/2015	8/16/2016	\$90,000	\$790,000	INCREASED USAGE OF FERRIC CHLORIDE DUE TO ABSENCE OF FERROUS CHLORIDE IN INFLUENT (CANOAS PUMP STATION DOWN DUE TO PROLONGED MAINTENANCE)
LIQUID SODIUM HYPOCHLORITE 12.5%	16-17	22460	52958	UNIVAR USA INC	\$995,000	7/1/2016	6/30/2017			
SODIUM BISULFITE	16-17	22462	52959	UNIVAR USA INC	\$560,000	7/1/2016	6/30/2017			
BUILDING MAINTENANCE MATERIALS & SUPPLIES	16-17	22463	52553	GRAINGER, W W INC	\$400,000	7/1/2016	6/30/2017			
FERRIC CHLORIDE & DOSING STATION	16-17	22465	53303	KEMIRA WATER SOLUTIONS, INC	\$700,000	8/17/2016	6/30/2017			
BADGER METERS & REPLACEMENT PARTS	16-17	22553	52965	BADGER METER, INC	\$345,000	7/1/2016	6/30/2017			\$145K FOR FUND 500; \$200K FOR FUND 513
PIPES, FITTINGS AND RELATED PARTS	16-17	22722	52885	FERGUSON WATERWORKS	\$120,000	7/1/2016	6/30/2017			
LABOR, MATERIALS & EQUIP FOR LEVEE REPAIRS	16-17	22737	52696	RJ GORDON CONSTRUCTION INC	\$100,000	7/1/2016	6/30/2017			
FRICITION & NON-FRICITION PARTS INCLUDING BEARINGS, SEALS, DRIVE COMPONENTS & RELATED ITEMS AS NEEDED	16-17	22843	53157	MOTION INDUSTRIES, INC.	\$100,000	7/1/2016	6/30/2017			
AQUEOUS AMMONIA	16-17	22984	52812	HILL BROS CHEMICAL CO	\$162,000	7/1/2016	6/30/2017			
TEMPORARY PERSONNEL: ENVIRONMENTAL INSPECTORS (3)	16-17	23235	53140	TRENDTEC INC	\$343,700	7/1/2016	6/30/2017			\$147K FOR FUND 446; \$196K FOR FUND 513
TEMPORARY PERSONNEL: LABORATORY TECHNICIANS (3)	16-17	23241	53187	KELLY SERVICES INC	\$122,320	7/1/2016	6/30/2017			
NEW 2016 F550 CHASSIS WITH 45' ALTEC AERIAL BUCKET TRUCK (2)	15-16	23282	79468	ALTEC INDUSTRIES INC	\$420,515	7/1/2016	6/30/2017			\$210K FOR FUND 465; \$210K FOR FUND 513
CONOCO PHILLIPS UNION 76 MOTOR OILS	16-17	23369	53322	PACIFIC COAST PETROLEUM INC.	\$240,000	7/1/2016	6/30/2017			

<sup>1</sup> This report captures completed contract activity (Purchase Order Number, Contract Term, and Contract Amount)