

## SAN JOSÉ/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

SAM LICCARDO, CHAIR  
DEBI DAVIS, MEMBER  
LAN DIEP, MEMBER  
DAVID SYKES, MEMBER  
DEV DAVIS, MEMBER

CARMEN MONTANO, MEMBER  
KATHY WATANABE, MEMBER  
STEVEN LEONARDIS, MEMBER  
JOHN GATTO, MEMBER

### AGENDA/TPAC

**4:00 p.m.**

**February 14, 2019**

**Room 1734**

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1. **ROLL CALL**

2. **APPROVAL OF MINUTES**

A. December 13, 2018

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

4. **DIRECTOR'S REPORT**

- A. Director's Report (verbal)
- Monthly Progress Report for the months of November and December.

5. **AGREEMENTS/ACTION ITEMS**

A. First Amendment to the Master Consultant Agreements with Kennedy/Jenks Consultants Inc. and MNS Engineers, Inc. for Construction Management and Inspection Services for the San José- Santa Clara Regional Wastewater Facility Capital Improvement Program

Staff Recommendation:

Approve the First Amendment to the Master Consultant Agreement 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, to allow for overtime pay, as may be required by the City, with no extension to the term or increase to the maximum total compensation.

**This item is scheduled for consideration by the City Council on February 26, 2019.**

B, Actions Related to the Purchase Order for Digester Dome Coating Rehabilitation Services

Staff Recommendation:

Adopt a resolution authorizing the City Manager to:

1. Execute a Purchase Order with National Coating & Lining Company (Murrieta, CA) for digester dome coating rehabilitation services for the Environmental Services Department at the San Jose-Santa Clara Regional Wastewater Facility for an initial twelve-month period, starting on or about April 1, 2019 and ending on or about March 31, 2020, for an amount not to exceed \$240,000; and
2. Exercise up to four one-year options to extend the term of the Purchase Order with the last option year ending on or about March 31, 2024, subject to the annual appropriation of funds.

**Desired Outcome:** Increase the life expectancy of the Regional Wastewater Facility digesters.

**This item is scheduled for consideration by the City Council on February 26, 2019.**

6. **OTHER BUSINESS/CORRESPONDENCE**

- A. Tributary Agencies Estimated Available Plant Capacity Report dated January 18, 2018

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

- A. Master Service Agreement with Trussell Technologies for Engineering and Regulatory Support for the South Bay Water Recycling Program

Staff Recommendation:

Approve a Master Agreement with Trussell Technologies through January 31, 2021 and up to two one-year options to extend, for a maximum compensation of \$650,000 to provide conceptual engineering for sequential chlorination, and regulatory support for Title 22 compliance at the San Jose-Santa Clara Regional Wastewater Facility.

**This item was approved by the City Council on December 18, 2018.**

- B. Confined Space Protection and Rescue Team Services

Staff Recommendation:

Adopt a resolution authorizing the City Manager to:

1. Execute a Purchase Order with Capstone Fire Management, Inc. (Escondido, CA) for confined space rescue team services for the Environmental Service Department for an initial twelve-month period, starting on or about December 19, 2018 and ending on or about December 18, 2019, for an amount not to exceed \$300,000, subject to appropriation of funds; and
2. Exercise up to four one-year options to extend the term of the Purchase Order with the last option year ending on or about December 18, 2023, subject to the appropriation of funds.

**Desired Outcome:** To protect and rescue San Jose City staff working in confined spaces.

**This item was approved by the City Council on December 18, 2018.**

C. Cathodic Protection Systems Services

Staff Recommendation:

Adopt a resolution authorizing the City Manager to:

1. Execute a Purchase Order with Corrpro Companies, Inc. (Castro Valley, CA) for cathodic protection systems services for the Environmental Services Department for an initial twelve-month period, starting on or about December 19, 2018 and ending on or about December 18, 2019, for an amount not to exceed \$215,000; and
2. Exercise up to four one-year options to extend the term of the Purchase Order with the last option year ending on or about December 18, 2023, subject to the appropriation of funds.

**Desired Outcome:** Ensure cathodic protection systems are in place to protect valuable infrastructure from corrosion.

**This item was approved by the City Council on December 18, 2018.**

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 \$1.17 million and of services between \$100,000 and \$290,000.

9. **MISCELLANEOUS**

- A. The next monthly TPAC Meeting is on **March 14, 2019, at 4:00 p.m.**, City Hall, Room 1734.

**10. OPEN FORUM**

**11. ADJOURNMENT**

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

To request an accommodation or alternative format for City-sponsored meetings, events or printed materials, please contact Eva Roa (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 bod

**MINUTES OF THE  
SAN JOSÉ/SANTA CLARA  
TREATMENT PLANT ADVISORY COMMITTEE**

San José City Hall, T-1734  
Thursday, December 13, 2018 at 4:04 p.m.

**1. ROLL CALL**

Minutes of the Treatment Plant Advisory Committee convened this date at 4:04p.m. Roll call was taken with the following members in attendance:

**Committee Members:** Debi Davis, Dev Davis, Lan Diep, John Gatto, Marsha Grilli, David Sykes, Kathy Watanabe (Alternate), Sam Liccardo (4:07p.m.)

**Absent:** Steven Leonardis

**2. APPROVAL OF MINUTES**

A. November 8, 2018

**Item 2.A. was approved to note and file (done after 7.A)**

**Ayes – 8** (Debi Davis, Dev Davis, Diep, Gatto, Grilli, Liccardo, Sykes, Kathy Watanabe (alternate))

**Absent – 1** (Leonardis)

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

**4. DIRECTOR'S REPORT**

A. Director's Report  
No verbal report was given.

**5. AGREEMENTS/ACTION ITEMS**

A. Master Service Agreement with Trussell Technologies for Engineering and Regulatory Support for the South Bay Water Recycling Program

Staff Recommendation:

Approve a Master Agreement with Trussell Technologies through January 31, 2021 and up to two one-year options to extend, for a maximum compensation of

\$650,000 to provide conceptual engineering for sequential chlorination, and regulatory support for Title 22 compliance at the San Jose-Santa Clara Regional Wastewater Facility.

Deputy Director Jeff Provenzano and Public Works Interim Deputy Director were present for questions.

Committee Member Dev Davis asked why there was only one bid.

Deputy Director Jeff Provenzano answered that there was an online posting and it was an open recruitment with one respondent.

Committee Member Dev Davis followed up with a question regarding how we would know if this was a good deal since there was only one bid and Deputy Director Jeff Provenzano answered that it was a study and Trussell had done prior projects and it was evaluated that the City felt it was a streamlined and appropriate project to go forward with.

Jon Cannon gave an overview of BidSync, the standard procurement process for public contracts that is a third-party computer system.

Member John Gatto asked for an explanation of sequential chlorination as well as cost of it and whether the water that would be treated is non-potable. Deputy Director Jeff Provenzano answered that sequential chlorination is a two type of disinfection for filter effluent and that right now cost is unknown at the moment and the focus would be on recycled non-potable water.

Chair Sam Liccardo asked if this meant that there would be more recycled water out of the system. Deputy Director Jeff Provenzano answered that it wouldn't produce more however it would speed up how fast it could be made to meet summer peak demands.

**On a motion made by Committee Member Dev Davis and a second by Committee Member Sykes, TPAC recommended approval of staff's recommendation for Item 5.A.**

**Ayes – 8** (Debi Davis, Dev Davis, Diep, Gatto, Grilli, Liccardo, Sykes, Kathy Watanabe (alternate))

**Absent – 1** (Leonardis)

**B. Confined Space Protection and Rescue Team Services**

Staff Recommendation:

Adopt a resolution authorizing the City Manager to:

1. Execute a Purchase Order with Capstone Fire Management, Inc. (Escondido, CA) for confined space rescue team services for the

Environmental Service Department for an initial twelve-month period, starting on or about December 19, 2018 and ending on or about December 18, 2019, for an amount not to exceed \$300,000, subject to appropriation of funds; and

2. Exercise up to four one-year options to extend the term of the Purchase Order with the last option year ending on or about December 18, 2023, subject to the appropriation of funds.

**Desired Outcome:** To protect and rescue San Jose City staff working in confined spaces.

**On a motion made by Committee Member Gatto and a second by Committee Member Debi Davis, TPAC recommended approval of staff's recommendation for Item 5.B.**

**Ayes – 8** (Debi Davis, Dev Davis, Diep, Gatto, Grilli, Liccardo, Sykes, Kathy Watanabe (alternate))

**Absent – 1** (Leonardis)

C. Cathodic Protection Systems Services

Staff Recommendation:

Adopt a resolution authorizing the City Manager to:

1. Execute a Purchase Order with Corpro Companies, Inc. (Castro Valley, CA) for cathodic protection systems services for the Environmental Services Department for an initial twelve-month period, starting on or about December 19, 2018 and ending on or about December 18, 2019, for an amount not to exceed \$215,000; and
2. Exercise up to four one-year options to extend the term of the Purchase Order with the last option year ending on or about December 18, 2023, subject to the appropriation of funds.

**Desired Outcome:** Ensure cathodic protection systems are in place to protect valuable infrastructure from corrosion.

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

**Ayes – 8** (Debi Davis, Dev Davis, Diep, Gatto, Grilli, Liccardo, Sykes, Kathy Watanabe (alternate))

**Absent – 1** (Leonardis)

6. **OTHER BUSINESS/CORRESPONDENCE**

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

A. Project Labor Agreement

Staff Recommendation:

Provide input and accept the report on the City's execution of a Project Labor Agreement (PLA) that would apply to most Regional Wastewater Facility public works construction projects greater than \$3 million.

**At its October 16, 2018 meeting, the City Council authorized the City Manager to negotiate the PLA and to execute the PLA after consultation with this Committee.**

At this time, Chair Sam Liccardo referred to item 2.A. to approve the minutes that had been inadvertently not approved. After approved item 2.A., Chair Sam Liccardo continued on to item 8.A.

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 \$1.17 million and of services between \$100,000 and \$290,000 for the month of November.

9. **MISCELLANEOUS**

- A. The next TPAC Meeting is on **January 10, 2019, at 4:00 p.m.**, City Hall, Room 1734.

10. **OPEN FORUM**

Dean Stanton gave an update to the park proposal that he had brought to a previous meeting.

11. **ADJOURNMENT**



A. The Treatment Plant Advisory Committee adjourned at 4:19 p.m.

Sam Liccardo, Chair

TREATMENT PLANT ADVISORY COMMITTEE

DRAFT



San José-Santa Clara  
Regional Wastewater Facility

# Capital Improvement Program

## Monthly Status Report: November 2018

January 3, 2019

This report summarizes the progress and accomplishments of the Capital Improvement Program (CIP) for the San José-Santa Clara Regional Wastewater Facility (RWF) for November 2018.

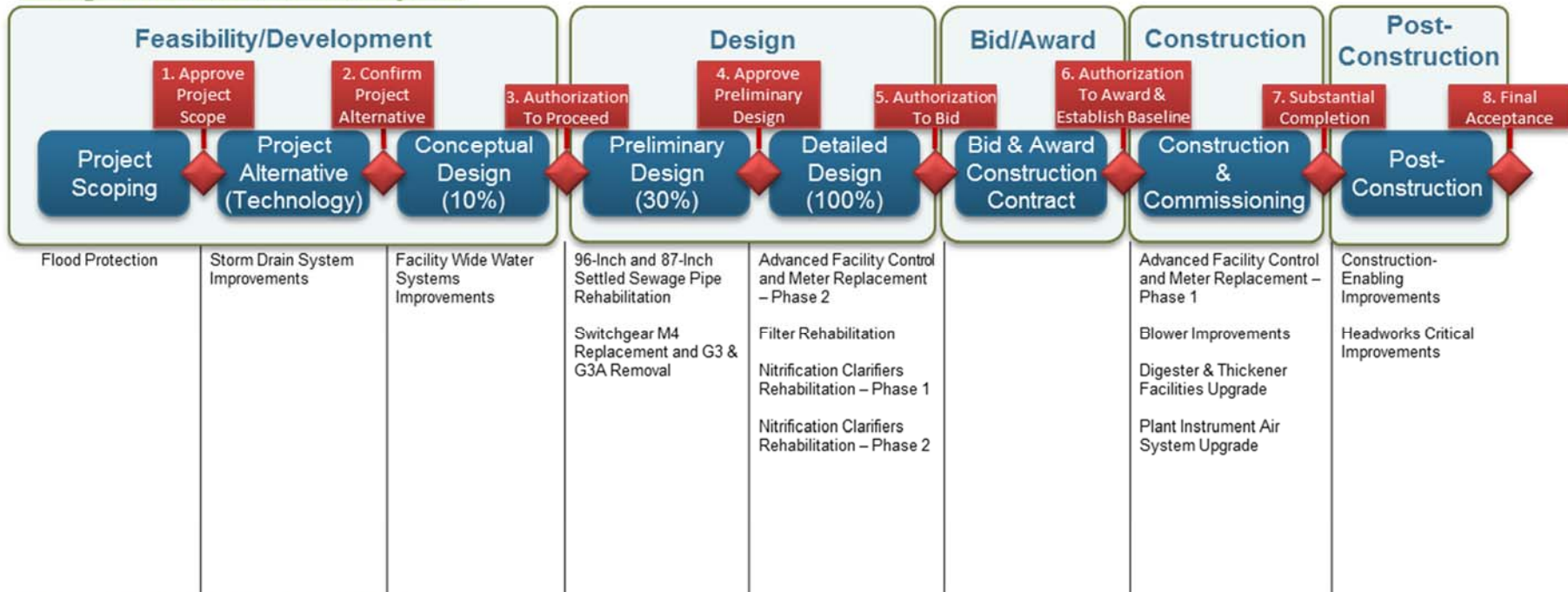
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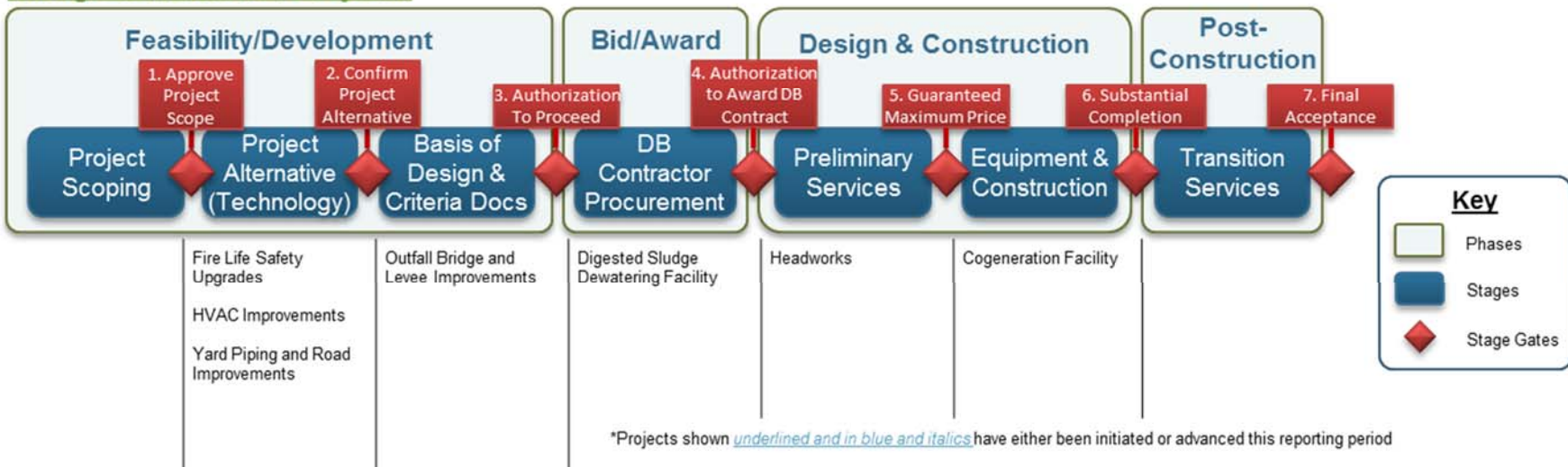


# Project Delivery Model

## Design-Bid-Build Active Projects



## Design-Build Active Projects





# Program Summary

## November 2018

In November, the City advanced one project through the Project Delivery Model (PDM) stage gate process. The Headworks Project completed Interim Stage Gate 4.2: Revisit Budget and Schedule. In October, the stage gate panel approved the site selection for the new headworks facility, but also directed the project team to perform additional engineering evaluations on both the proposed cost estimate and schedule. This month, the team presented this additional information and the panel approved the project to proceed.

On the Cogeneration Facility Project, the design-builder set four 3.1-megawatt engine generators on vibration isolators incorporated into a massive concrete slab completed last month. A 330-ton crane was required to set each of the engine generators on its base. The entire effort was completed in one day.

The Plant Instrument Air System Upgrade Project completed a 28-day commissioning test and achieved Beneficial Use. The new system provides compressed air with sufficient redundancy to all critical instruments in the Secondary Blower and Nitrification buildings.

The Digester and Thickener Facilities Upgrade Project continued with concrete work for the digester roofs, digester ring beam foundations, and sludge screening building walls. The contractor made progress on installing mechanical equipment for the dissolved air flotation thickeners, including the collector mechanism, ancillary tanks, and piping.

The project team for the Advanced Facility Control and Metering Replacement - Phase 2 Project held a 90 percent design workshop with key stakeholders. The Nitrification Clarifier Rehabilitation Project performed condition assessments, including concrete testing to identify potential structural integrity issues due to chloride corrosion. The project team for the 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation Project completed the conceptual design report and began the detailed design. The Facility Wide Water System Improvements Project continued to develop a subsurface investigation plan that will identify below-grade interferences for the replacement, rehabilitation, and extension of the RWF's extensive water systems. On the Storm Drain System Improvements Project, the consultant completed condition assessments for seven stormwater pump stations and began cleaning and inspecting pipes that are not planned to be upsized.

The City accepted the Headworks Critical Improvements Project and filed the Notice of Completion and Acceptance (NOCA) with the County on November 8, 2018.

## Look Ahead

The following key activities are forecast for December 2018 and January 2019:

- The CIP will hold the fifth Annual Vendor Open House event on Wednesday, December 5. This outreach effort is designed to share information with the consultant and contractor community on upcoming projects and opportunities at the RWF.
- The condition assessment work for the Storm Drain System Improvements Project will be completed and the team will begin similar assessment work on the RWF sanitary pipe network.
- The Nitrification Clarifier Rehabilitation Project design consultant will submit the 60 percent design package for both phases.
- The City will receive proposals from potential design-builders for the Digested Sludge Dewatering Facility Project.
- On the Cogeneration Facility project, the heat exchangers and gas purification skid will be delivered, and installation will commence. The masonry wall construction will begin for the generator building.
- The Fire Life Safety Upgrades Project will proceed to Stage Gate 3: Authorization to Proceed.
- A Notice to Proceed (NTP) will be issued to Monterey Mechanical to begin construction of the Blower Improvements Project.
- The HVAC Improvements Project will complete the Alternatives Analysis Report and hold a design workshop with all stakeholders.



## Program Highlight – Preliminary Design

After completing the Conceptual Design stage (highlighted in the Monthly Status Report: July 2018), a project moves into the Preliminary Design stage of the PDM (see Figure 1 below). During this stage, the designer begins developing the details of the fundamental framework previously established and confirmed by CIP leadership as part of Stage Gate 3: Authorization to Proceed.

In this stage, the project team begins to define the size, quantity, and layout of those facilities and systems needed to achieve project goals. The team also begins to establish control strategies and redundancy measures to ensure satisfactory performance under a variety of operating conditions. The preliminary design stage develops major details that become fixed as the detailed design proceeds.

Key areas of project team focus during preliminary design include:

- Geotechnical – Initiate subsurface investigations of structures and foundation conditions.
- Piloting – Conclude pilot studies and incorporate results into the design.
- Performance – Establish performance standards for the project.
- Operations – Create an operations strategy with Operation and Maintenance (O&M) staff.
- Procurement – Initiate equipment pre-purchase, early work packages, and contractor pre-qualification.
- Interfaces – Identify interface mitigation measures and coordinate with other CIP projects.
- Hazard and operability (HAZOP) study – Conduct a HAZOP study to identify potential operational hazards.
- Costs – Update the project OPCC (Class 3) and operating cost estimates based on information developed in this stage.
- Risks – Refine existing threats and opportunities and develop response plans.
- Constructability – Develop a detailed sequence of construction and identify mandatory constraints.
- Commissioning and Startup - Initiate discussions about requirements with the designer and O&M.
- Permitting – Establish detailed permitting requirements and prepare permit applications.
- Schedule - Develop a medium-level construction schedule.
- Environmental – Complete CEQA documents for the project.
- Safety – Prepare an initial outline of the health and safety requirements for the general contractor.
- Report – Prepare a Preliminary Design Report (PDR) that establishes the basic design criteria, layout of facilities, location sizing, and number of items of major equipment. Minor changes to each of these components are expected during detailed design. For a design-bid-build delivery project, the report is prepared by the design consultant. In the case of a DB project, the report is prepared during the Preliminary Services stage by the DB entity.

To date, 11 projects have completed the Preliminary Design stage, with the 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation Project and the Switchgear M4 Replacement and G3 & G3A Removal Project currently progressing through it.

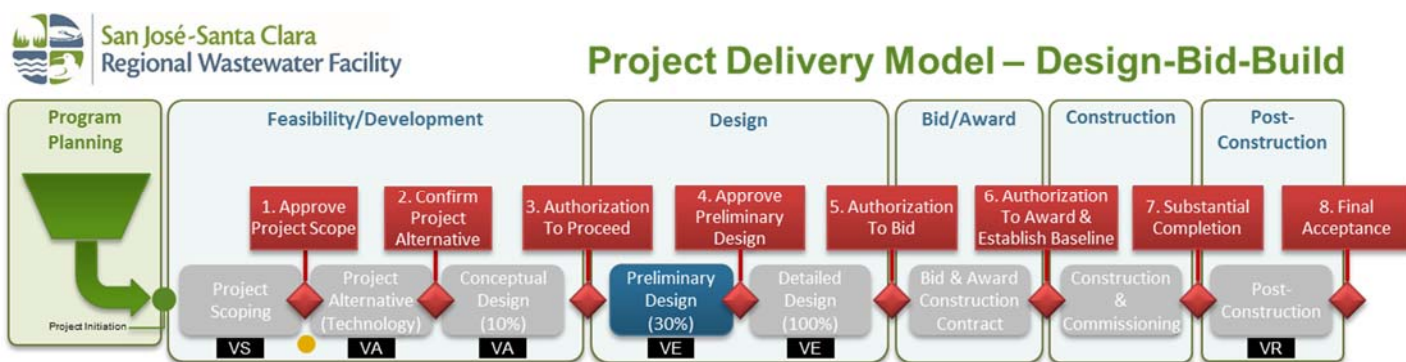


Figure 1: Design-Bid-Build Project Delivery Model

## Program Performance Summary

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

### Program Key Performance Indicators – Fiscal Year 2018-2019

KPI	Target	Fiscal Year to Date			Fiscal Year End		
		Actual	Status	Trend	Forecast	Status	Trend
<b>Stage Gates</b>	90%	90% 9/10			95% 18/19		
Measurement: Percentage of initiated projects and studies that successfully pass each stage gate on their first attempt. Target: Green: >= 90%; Amber: 75% to 90%; Red: < 75%							
<b>Schedule</b>	90%	33% 1/3 <sup>1</sup>			33% 1/3		
Measurement: Percentage of CIP projects delivered within 2 months of approved baseline Beneficial Use Milestone. <sup>2</sup> Target: Green: >= 90%; Amber: 75% to 89%; Red: < 75%							
<b>Budget</b>	90%	100% 2/2 <sup>3</sup>			75% 3/4		
Measurement: Percentage of CIP projects that are accepted by the City within the approved baseline budget. <sup>2</sup> Target: Green: >= 90%; Amber: 75% to 89%; Red: < 75%							
<b>Expenditure</b>	\$253M	\$231M			\$301M <sup>4</sup>		
Measurement: CIP FY18-19 committed costs. Target: Committed cost meets or exceeds 70% of planned Budget. 70% of \$362M = \$253M. Therefore Green: >=\$253M; Amber: \$199M to \$253M; Red: < \$199M							
<b>Safety</b>	0	0			0		
Measurement: Number of OSHA reportable incidents associated with CIP delivery for the fiscal year. Criteria: Green: zero incidents; Amber: 1 to 2; Red: > 2							
<b>Environmental</b>	0	0			0		
Measurement: Number of permit violations caused by CIP delivery for the fiscal year. Target: Green: zero incidents; Amber: 1 to 2; Red: > 2							
<b>Vacancy Rate<sup>5</sup></b>	10%	18% 15/84			6% 5/84		
Measurement: Ratio of the number of vacant approved positions to approved positions. Target: Green: <= 10%; Amber: 10% to 20%; Red: > 20%							

#### Notes

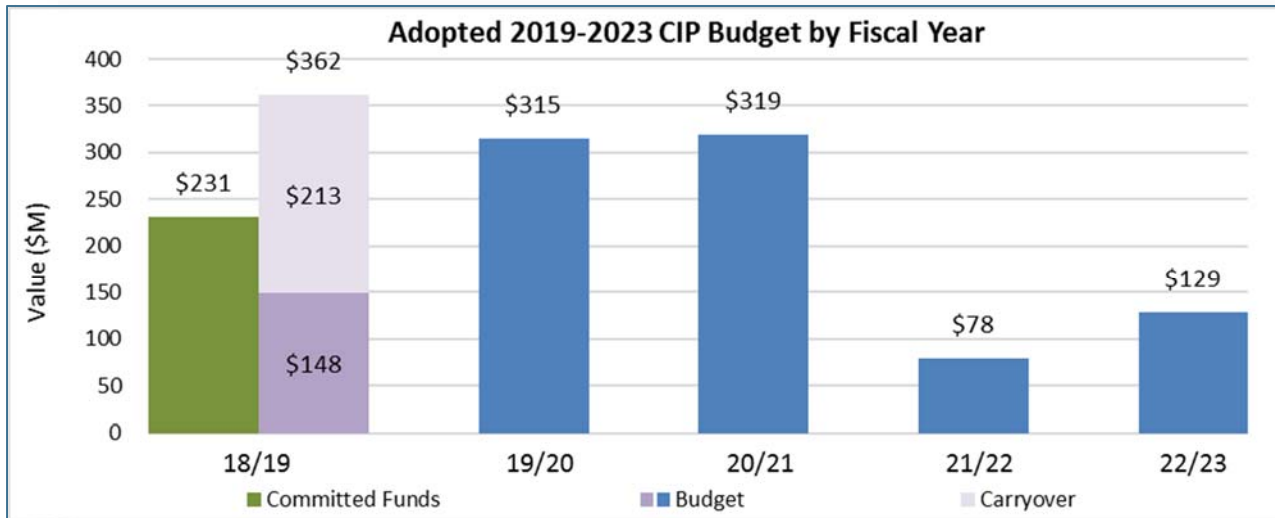
1. The Plant Instrument Air Systems Upgrade Project achieved Beneficial Use this month but was more than two months late.
2. The baseline Beneficial Use date and the baseline budget for each project are established at construction contract award and execution.
3. The City accepted the Headworks Critical Improvements Project with project expenses within the approved baseline budget.
4. The fiscal year-end forecast increased approximately \$5 million due to revised encumbrance forecasts.
5. The Vacancy Rate KPI measures City CIP-approved positions (ESD and Public Works) and program management consultant full-time staff.



## Program Budget Performance Summary

This section summarizes the cumulative monthly budget performance for fiscal year (FY)18-19 based on the Adopted 2019-2023 CIP.

### Adopted 2019-2023 CIP Expenditure and Encumbrances



#### Notes:

**Committed Funds:** Total of expenditures and encumbrances.

**Expenditure:** Actual cost expended, either by check to a vendor or through the City's financial system, for expenses such as payroll or for 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. An encumbrance reserves the funding within the appropriation and project.

The FY18-19 budget is \$185 million, which consists of \$131 million in new funds and \$54 million in rebudgets. For purposes of this monthly report, the adopted FY18-19 budget is adjusted from \$185 million to \$148 million due to the exclusion of certain appropriations that are not measured as part of the expenditure KPI. Excluded appropriations include City Hall Debt Service Fund; Clean Water Financing Authority Debt Service Payment Fund; Debt Service Repayment for Plant Capital Improvement Projects (San José only debt service); Equipment Replacement Reserve; Ending Fund Balance; Public Art; SBWR Extension; State Revolving Fund Loan Repayment; and Urgent and Unscheduled Treatment Plant Rehabilitation. Similar adjustments have been made to the budgets for FY19-20 through FY 22-23.

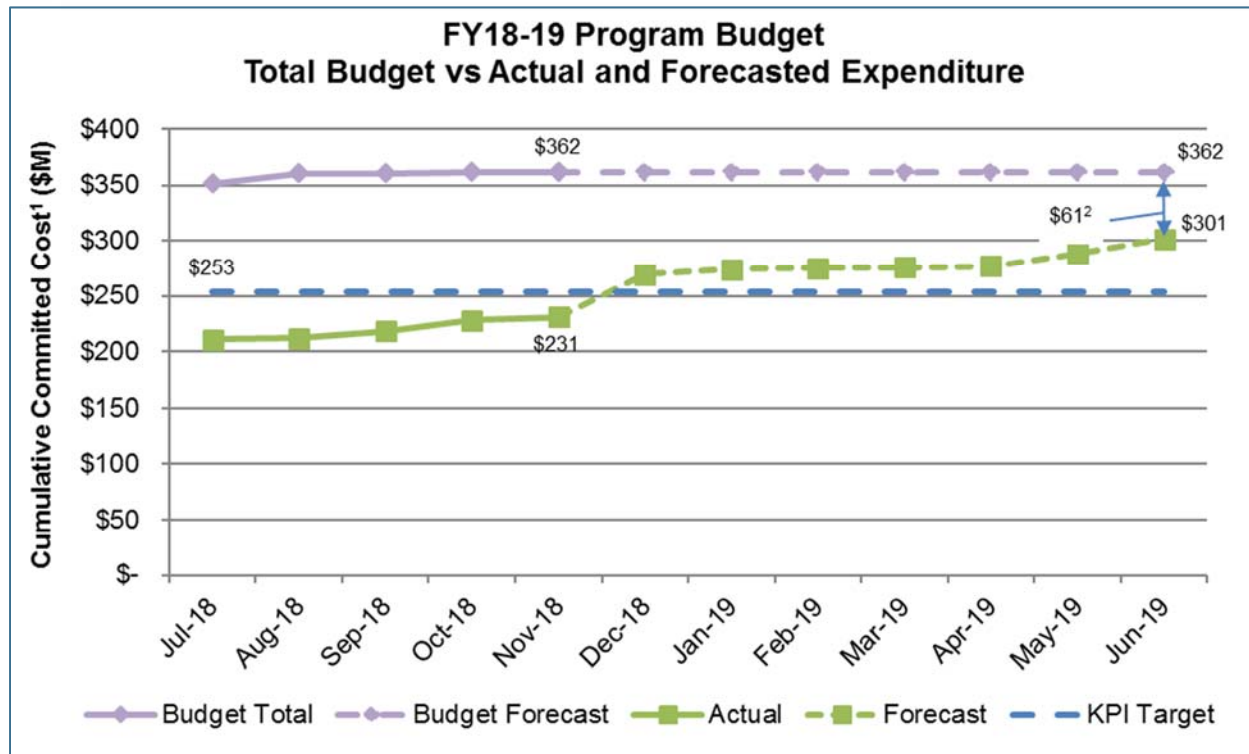
**Carryover:** Encumbrance balances at the end of the previous fiscal year are automatically carried forward to the current fiscal year as carryover funding to pay invoices for approved construction contracts and consultant agreements. FY18-19 carryover is \$213 million.

Budget of \$148.3 million and carryover of \$213.3 million totals \$361.6 million for FY18-19.



## Fiscal Year 2018-2019 Program Budget Performance

The FY18-19 CIP budget is comprised of approximately \$148 million in new funds, plus encumbrances carryover of \$213 million for a total of \$362 million. This excludes City Hall Debt Service Fund; Clean Water Financing Authority Debt Service Payment Fund; Debt Service Repayment for Plant Capital Improvement Projects (San José only debt service); Equipment Replacement Reserve; Ending Fund Balance; Public Art; SBWR Extension; State Revolving Fund Loan Repayment; and Urgent and Unscheduled Treatment Plant Rehabilitation items. Overall, the forecasted fiscal year-end committed funds exceed the fiscal year-end target by \$48 million.



### Notes:

1. Committed costs are expenditures and encumbrance balances, including carryover (encumbrance balances from the previous fiscal year).
2. The variance between forecasted budget and forecasted commitments can be primarily attributed to the following factors:
  - a. Several construction contracts are now anticipated to be awarded in FY19-20 instead of FY18-19 based on updated schedules:
    - i. Fire Life Safety Upgrades Project
    - ii. Switchgear M4 Replacement and G3 & G3A Removal
  - b. Several consultant service orders will not be awarded in FY18-19:
    - i. Aeration Tank Rehabilitation Project
    - ii. Support Facilities Project
    - iii. Tunnel Rehabilitation Project
  - c. The Blower Improvement Project construction bids came in under budget.
  - d. Several other minor encumbrances for consultant services are either lower than budgeted or are anticipated to be awarded in FY19-20.
  - e. Several authorized positions remain vacant, resulting in lower predicted personal services expenses than budgeted.
  - f. The FY16-17 payment budgeted for the annual Owners Controlled Insurance Program premium covered the period through FY17-18. Funds rebudgeted from FY17-18 will be programmed in FY19-20.





## Project Performance Summary

There are currently seven projects in the construction and post-construction phases and an additional 15 projects in feasibility/development, design, bid and award, or design and construction phases (see PDM, page 2). 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.

### 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. Construction-Enabling Improvements	Post-Construction	Aug 2018 <sup>3</sup>	◆	◆
2. Headworks Critical Improvements	Post-Construction	Aug 2018 <sup>3</sup>	●	●
3. Plant Instrument Air System Upgrade	Construction	Nov 2018 <sup>3</sup>	●	◆
4. Cogeneration Facility	Design & Construction	Mar 2020 <sup>4</sup>	●	●
5. Digester and Thickener Facilities Upgrade	Construction	Jan 2021	◆	◆
6. Advanced Facility Control & Meter Replacement - Phase 1	Construction	June 2021	●	●
7. Blower Improvements	Construction	Nov 2021 <sup>4</sup>	●	●

#### Key:

<b>Cost:</b>	● On Budget	◆ >1% Over Budget	<b>Schedule:</b>	● On Schedule	◆ >2 months delay
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#### 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 reviewed as part of project schedule reviews.
- An explanation of cost and schedule variances on specific projects identified in this table is provided on pages 11 and 12.
- Actual Beneficial Use date.
- The project construction Beneficial Use date will be baselined once the City accepts the contractor's construction schedule.



## Project Performance – Pre-Baselined Projects

Project Name	Phase	Estimated Beneficial Use Date <sup>1</sup>
1. Digested Sludge Dewatering Facility	Bid/Award	Nov 2022
2. 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation	Design	Oct 2020
3. Switchgear M4 Replacement and G3 & G3A Removal	Design	Feb 2022
4. Advanced Facility Control & Meter Replacement - Phase 2	Design	Dec 2022
5. Headworks Project	Design and Construction	Dec 2022
6. Filter Rehabilitation	Design	Mar 2023
7. Nitrification Clarifiers Rehabilitation – Phase 1	Design	Oct 2023
8. Nitrification Clarifiers Rehabilitation – Phase 2	Design	Nov 2024
9. Outfall Bridge and Levee Improvements	Feasibility/Development	Jan 2021
10. Fire Life Safety Upgrades	Feasibility/Development	Sep 2022
11. Storm Drain System Improvements	Feasibility/Development	Dec 2022
12. Flood Protection	Feasibility/Development	Mar 2023
13. HVAC Improvements	Feasibility/Development	Mar 2023
14. Facility Wide Water Systems Improvements	Feasibility/Development	May 2024
15. Yard Piping and Road Improvements	Feasibility/Development	June 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 reviewed as part of project schedule reviews.



## Significant Accomplishments

### Biosolids Package

#### Digester and Thickener Facilities Upgrade Project

- Contractor Walsh Construction completed one of the digester ring beam foundations and is continuing work on the remaining three. Additionally, the contractor completed installing the roof forms and placed the steel reinforcement on two of the four digesters.
- Walsh continued installing the dissolved air flotation tanks top skimmers and bottom collectors; the sludge screening building concrete walls, electrical conduits, and master control center concrete pad; and the odor control scrubber vessels, pipe rack, and appurtenances.

### Facilities Package

#### 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation Project

- The City authorized Black & Veatch to begin detailed design of the project. The project team anticipates submittal of the 50 percent design in December 2018.

#### Cogeneration Facility Project

- DB entity CH2M Hill hoisted into place and permanently installed all four engine-generators (60 tons each) to the engine room slab. Construction of the masonry block walls will begin in December 2018.

#### Construction-Enabling Improvements Project

- Construction management staff moved into the new trailer. Project closeout activities are being completed.

#### Outfall Bridge Improvements Project

- Design consultant AECOM completed the draft conceptual design report and conducted a conceptual design workshop. AECOM will submit the final conceptual design report in January 2019.

#### Storm Drain System Improvements Project

- Design consultant AECOM completed condition assessments for seven stormwater pump stations. They will conduct a condition assessment workshop in December and submit the condition assessment report in January 2019.

### Liquids Package

#### Advanced Facility Control and Meter Replacement Project – Phase 2

- Design consultant Black and Veatch conducted a 90 percent design review workshop and submitted the 90 percent OPCC. The project team anticipates completing the final design, specifications, and cost estimate in February 2019.

#### Headworks Project

- DB entity CH2M Hill Engineers led four additional workshops that addressed process equipment selection; HVAC and fire protection systems; odor control alternatives; and facility configuration.
- The project team returned to the interim stage gate and presented additional cost and schedule information. The panel approved the project to proceed. The project team anticipates the Final Basis of Design Report in January 2019.

#### Headworks Critical Improvements Project

- The City filed the NOCA on November 8, 2018 with the County and closed the project.

#### Nitrification Clarifiers Rehabilitation Project

- Design consultant HDR submitted the 60 percent design, OPCC estimate, and updated schedules for both phases. The project team anticipates receiving the final design, specifications, and OPCC for the first phase in early spring 2019.

### Power and Energy Package

#### Plant Instrument Air System Upgrade Project

- Contractor Anderson Pacific completed the 28-day commission test November 1, 2018. The City declared Beneficial Use for the project.
- The new plant air compressors are now providing plant instrument air to the RWF.



## Explanation of Project Performance Issues

### Construction-Enabling Improvements Project

This project was originally scheduled to be substantially complete by mid-February 2017. Due to the extremely wet 2016-17 winter season, contractor Teichert Construction was unable to perform site work on several occasions between October 2016 and April 2017. Teichert was granted extra work days for weather-related delays and for extra work associated with several contract change orders. A new contract completion date of June 8, 2017 was established. However, Teichert's subcontractor, ModSpace, was slow to respond and regularly submitted late and incomplete documentation, which resulted in the portable trailers arriving in January 2018, approximately 9 months late.

Teichert experienced additional delays completing installation of the portable trailers and submitting complete and acceptable documentation for access ramps and canopies. In early August 2018, the contractor completed installation of the electrical, communications, and wastewater utilities; the San José Building Division issued the Certificate of Occupancy permit for the trailers; and the construction management group issued the Notice of Substantial Completion indicating the project reached Beneficial Use. The project team provided Teichert with a list of remaining contract work to be completed. The project team is working with Teichert to complete the outstanding tasks and discuss negotiations for project closeout and liquidated damages. The project team anticipates accepting the project in January 2019.

### Plant Instrument Air System Upgrade Project

Project construction has been delayed by seven months due to four issues: 1) The project team discovered that the planned construction site access route crossed a large settled sludge pipeline, requiring an alternative access route to be developed and constructed; 2) the contractor was temporarily unable to install a section of the conduit from the sludge control building to the new compressor building due to other work being performed in the area by a different contractor; 3) development of the 28-day commissioning test procedure took longer than anticipated; and 4) the project team discovered oxidized (rusted) carbon steel shavings in an existing condensate tank unrelated to the project construction during the eight-hour functioning test. The material was removed, and the test was successfully completed. The project achieved Beneficial Use in November 2018.

### Digester and Thickener Facilities Upgrade Project

This project encountered numerous unforeseen conditions at the beginning of construction in 2016, described below. In 2017, design modifications were required to address seismic risks, and discovery of hazardous materials required extensive cleanup. Delays for these conditions are still being discussed and evaluated.

The City has negotiated contract change orders for the following unforeseen conditions discovered in 2016:

- Major corrosion of a below-ground, 78-inch settled sewage pipeline and junction structure delayed the construction of dissolved air flotation tank piping connections, two new pressurization flow boxes, and utility relocation work. The contractor postponed all repairs until a temporary pumping and pipeline system could be designed and safely installed to enable replacement of the pipeline in the 2018 dry season. In May of 2018, the contractor started full-time operation of this temporary pumping and pipeline system and began replacement of the 78-inch settled sewage pipeline, which was completed in late September 2018.
- A 36-inch biochemical oxygen demand pipe was found to be obstructing the new sludge screening building foundation. The contractor removed this pipe and relocated several gas drain vaults and associated piping before the foundation construction began.
- Multiple conflicts between contract work and existing utilities required numerous relocations including water, natural gas, digester gas, landfill gas, storm drains, and sanitary sewer pipelines. The contractor completed necessary relocations and rerouting, especially near the new digester gas pipe rack footings. Many of these modifications also required design changes.
- Bay Area Air Quality Management District venting restrictions also delayed digester work. The contractor completed the temporary digester gas connections and the system became operational in February 2018.

The following outstanding issues are currently being evaluated and are expected to result in additional costs and delays:

- Digester structural redesign: The design consultant revised the structural drawings to address seismic issues by enlarging the foundation ring beam at the base of each of the four digesters. The contractor provided a cost proposal associated with this revision and the City issued a change order for a portion of the proposal. Work associated with the new foundations is ongoing.
- Hazardous material mitigation: Testing of soils and concrete for polychlorinated biphenyls (PCBs) was completed and a final conditional approval was issued by the Environmental Protection Agency (EPA). All removal and disposal of contaminated materials has been completed to comply with the risk-based management plan approved by the EPA. All contaminated soils have been removed and disposed of and most of the impacted concrete has been encased. The



last portion of the work will be finalized once the base layer of foundations and roof work is complete. At that time, final reports on the work will be submitted to the EPA.

In November 2017, Council approved a contingency increase of \$15 million. The City issued change orders against the increased contingency for delays associated with the conditions discovered in 2016.

In June 2018, Council approved a second contingency increase of \$25 million for additional costs associated with the seismic redesign, hazardous material remediation, and extended construction duration.

An estimated delay of approximately 145 working days is currently reflected in the revised Beneficial Use date of January 2021. The City received an updated schedule from Contractor Walsh in November and are processing a change order to compensate for additional delays caused by the redesign and PCBs cleanup and removal.



## Project Profile – Nitrification Clarifiers Rehabilitation

The RWF's 16 nitrification clarifiers (Figure 2), together with the aeration basins, are at the core of the RWF treatment process. Constructed in the 1970s and 1980s, these clarifiers separate the biomass, or sludge, in the mixed liquor from the Biological Nutrient Removal (BNR) process effluent. Their performance directly impacts the performance of downstream filters, and ultimately the quality of the final effluent, or treated wastewater, that enters the south San Francisco Bay. This project will implement cost-effective improvements to enhance the clarifiers' efficiency and minimize unscheduled maintenance on them for the next 30 years.

In September 2015, HDR Engineering, Inc. (HDR) was selected as the project's design consultant. Since the project's inception, condition assessment work has revealed:

- The groundwater relief valves are corroded and no longer function as designed;
- The control and shutoff valves (Figure 3 below) for the clarifier inlet pipelines and Return Activated Sludge (RAS) pipelines have damaged seals;
- Spare parts for existing valves are difficult to procure, with limited availability;
- The RAS pipelines' interior conditions show signs of wear and require rehabilitation;
- All steel elements of the clarifiers' mechanisms (Figure 4 below) show loss of protective coatings, areas of corrosion, isolated pitting, loss of metal, and tubercles;
- The clarifiers' concrete walls have degraded sufficiently to result in a roughened surface with loss of cement paste and exposed aggregate; and
- The electrical and control systems, while well maintained, are more than 40 years old, do not meet current codes, and have suffered the effects of prolonged outdoor exposure.



HDR and the City utilized these condition assessment results and input from O&M staff to establish the project scope of work in June 2017. HDR then completed the conceptual and preliminary design. Value Management Strategies, Inc. (VMS) performed a value engineering analysis last summer, the results of which are being incorporated into HDR's detailed design.

To address higher than expected construction cost estimates for the project, the project team worked with O&M staff and the design consultant to prioritize the scope of work and divided the project into two phases. Phase 1 addresses the more critical project elements and will include:

- Replacement of clarifier mechanisms and appurtenances (including access bridge, walkway, inlet baffles, weir plates, weir cleaning system, scum baffles, and scum collection system) for eight clarifiers;
- Replacement of drain valves and RAS valves serving A-side and B-side clarifiers;
- Rehabilitation of clarifier basin groundwater pressure relief valves for the 16 clarifiers;
- Rehabilitation of up to eight RAS pipelines;
- Installation of six groundwater monitoring wells; and
- Replacement of electrical and instrumentation and control equipment for all 16 clarifiers.

Phase 2 of the project will include:

- Rehabilitation of the remaining eight clarifiers and
- Rehabilitation of up to eight of the remaining RAS pipelines.

The construction cost estimate for Phase 1 at the 60 percent design stage is \$40 million. The City will deliver the project using the conventional design-bid-build project delivery method and anticipates completing the detailed design of the first phase by May 2019. The project team anticipates awarding the construction contract for Phase 1 of the project in late fall 2019 and completing construction in fall 2023. The current Phase 2 proposed budget is \$36 million. The project team anticipates completing design in summer 2022, awarding the construction contract in fall 2022, and finishing construction as early as fall 2024.







Figure 3: RAS Pipeline Gallery in Tertiary Blower Building



Figure 4: Clarifier Interior and Mechanism

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# Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram

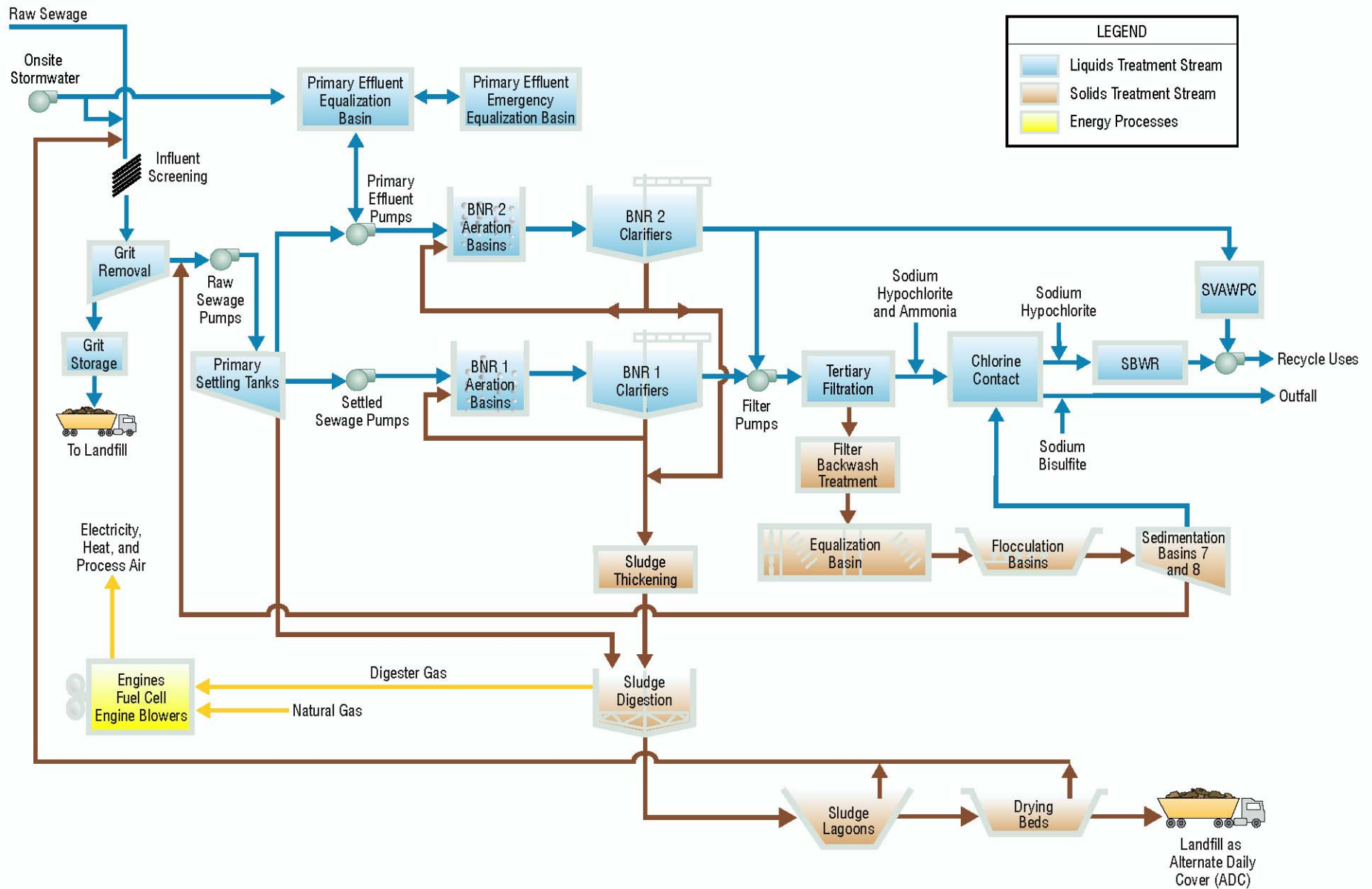


Figure 5 – Current Treatment Process Flow Diagram



# Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram

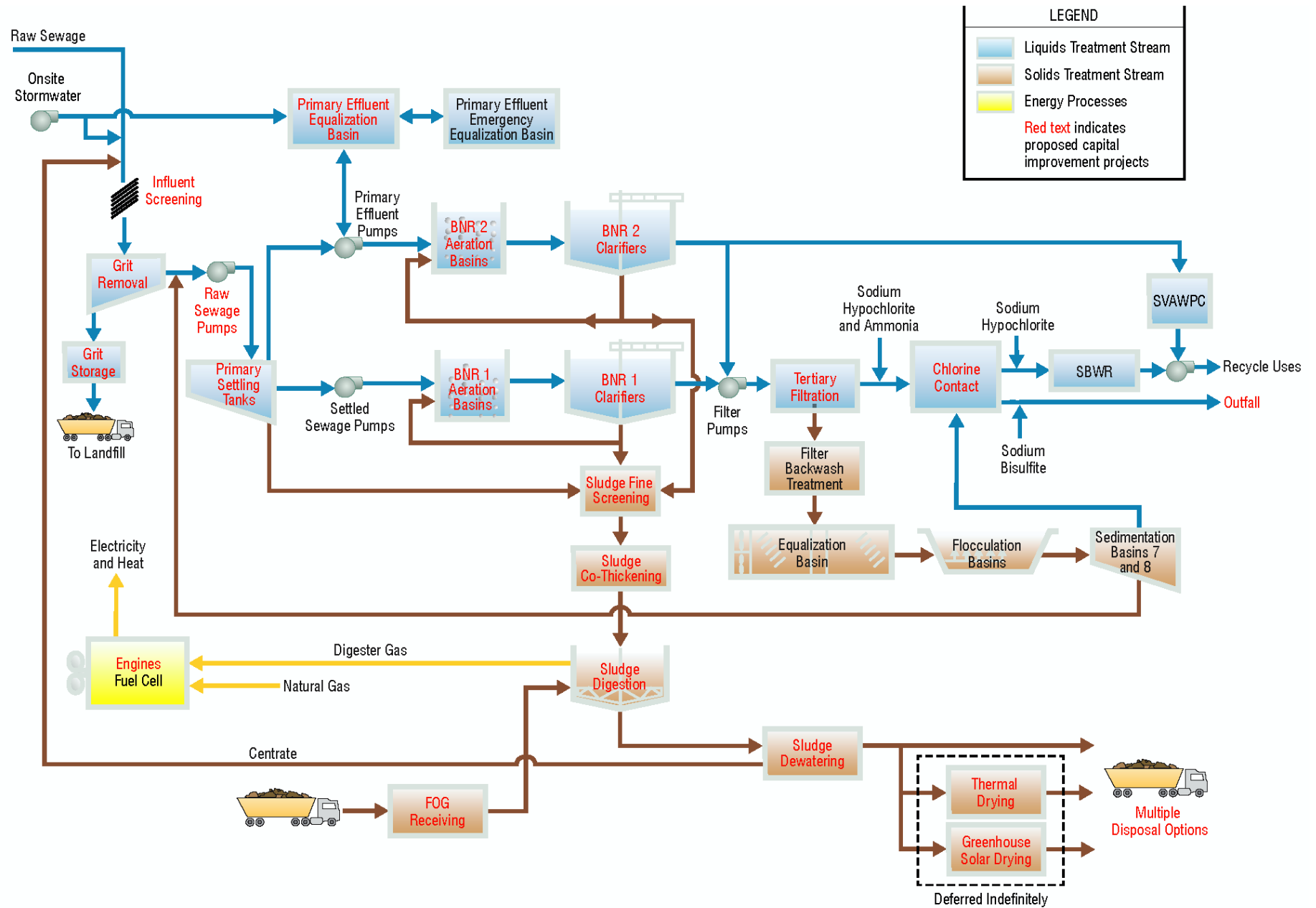
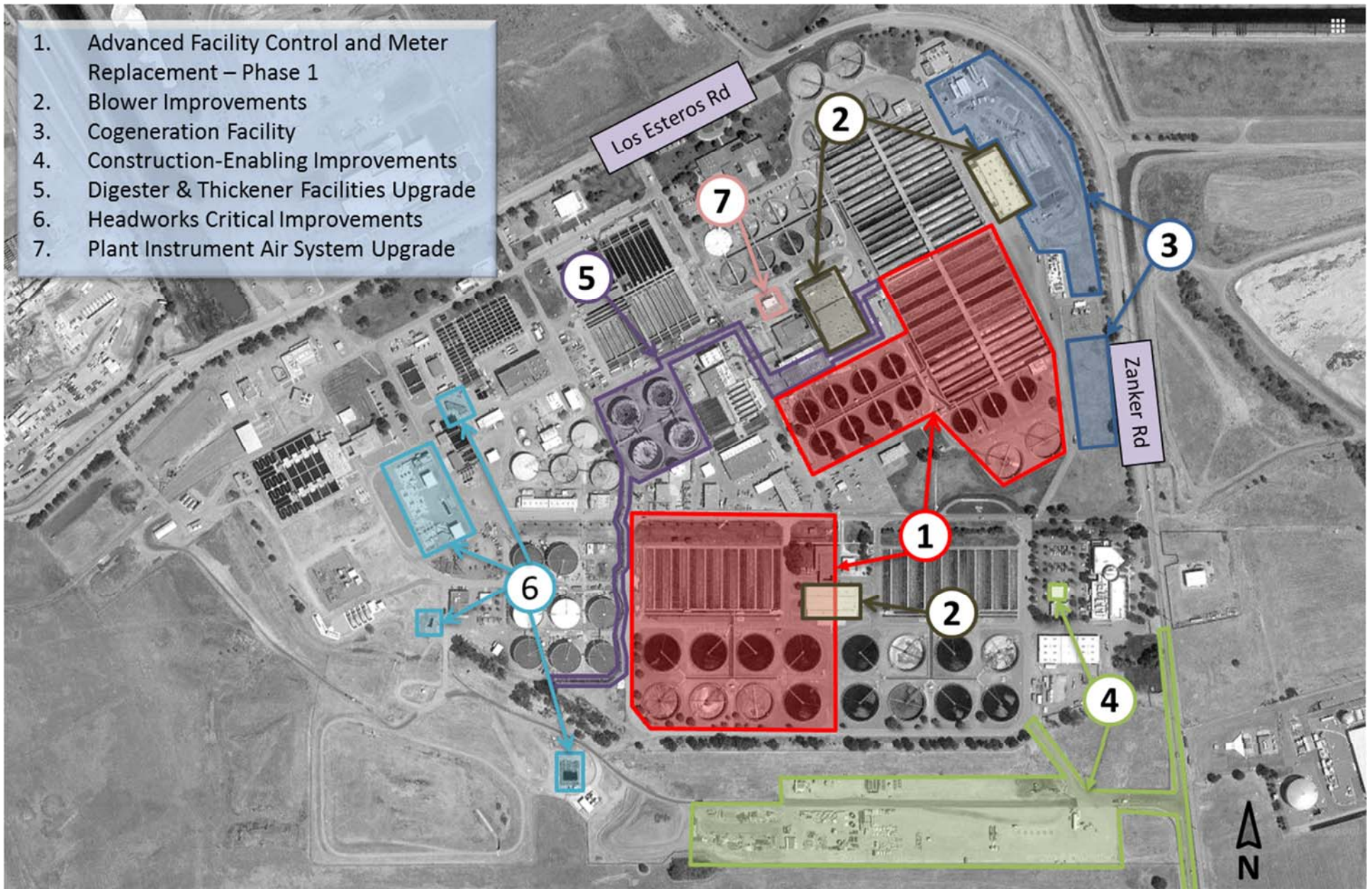


Figure 6 – Proposed Treatment Process Flow Diagram



## Active Construction Projects – Aerial Plan







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

# Capital Improvement Program

## Monthly Status Report: December 2018

February 7, 2019

This report summarizes the progress and accomplishments of the Capital Improvement Program (CIP) for the San José-Santa Clara Regional Wastewater Facility (RWF) for December 2018.

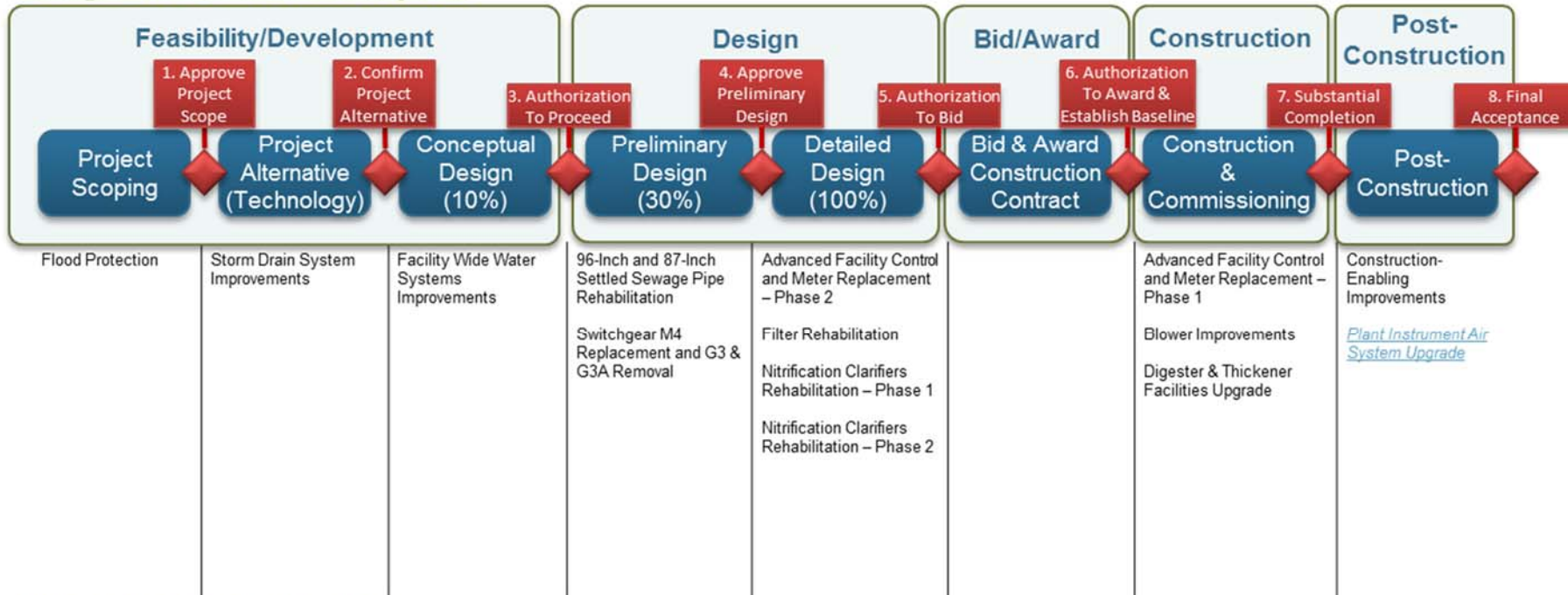
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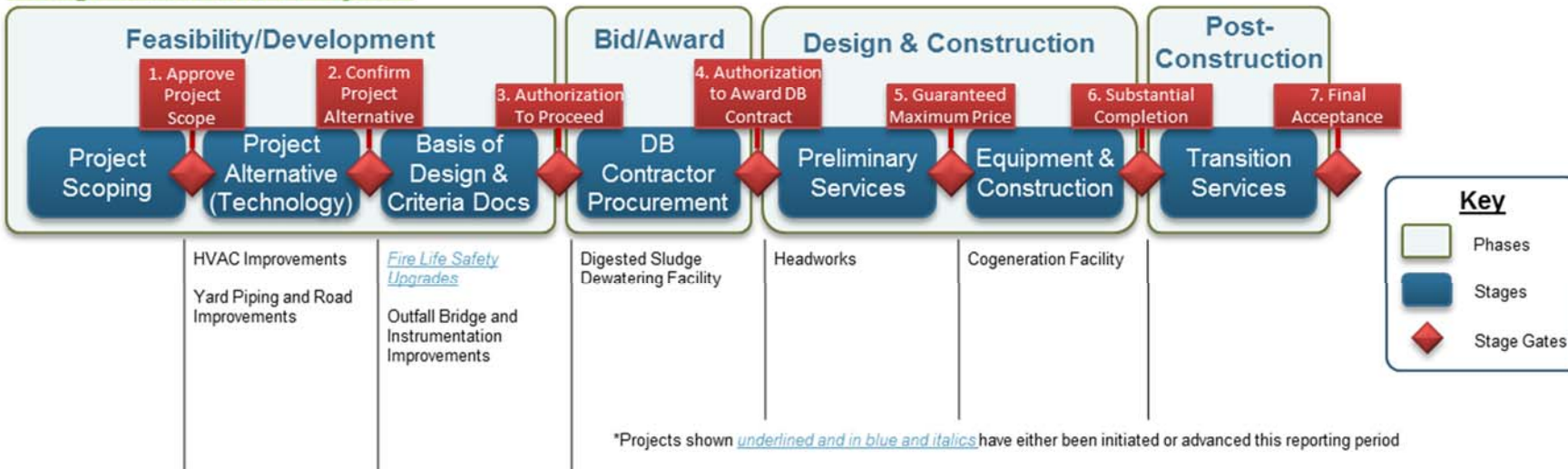


# Project Delivery Model

## Design-Bid-Build Active Projects



## Design-Build Active Projects





# Program Summary

## December 2018

In December, the Digester and Thickener Facilities Upgrade Project continued concrete placement for the digester roofs and ring beam foundations. The contractor also began installing digester exterior insulation and gas domes, and they completed the sludge screening building walls.

The Cogeneration Facility Project design-build (DB) entity continued work to install hot water supply and return piping and biogas piping for the gas purification system. Work started on the electrical duct banks for the cooling towers and gas purification system, and continued on the installation of masonry walls for the generator building.

On the Advanced Facility Control & Meter Replacement – Phase 1 Project, the City completed review of major equipment submittals and the contractor ordered flow meters. The Blower Improvements Project team continued preparation for construction to begin in January 2019. The contractor on the Plant Instrument Air System Upgrade Project decommissioned two of the existing instrument air compressors.

The Headworks Project held a two-day design workshop to finalize the draft Basis of Design Report prior to submission. In addition, the DB entity performed geotechnical investigations to identify soil characteristics and developed the scope of work and cost estimate for exploratory trenching to be conducted in early 2019. For the Digested Sludge Dewatering Project, the City received proposals from three potential DB entities and will conduct evaluations and interviews in January.

The design consultant for the Storm Drain System Improvements Project completed condition assessments of the storm and sanitary sewers. The City received the conceptual design for the Fire Life Safety Upgrades Project. The City also received the 50 percent design submittal for the 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation Project and the 60 percent design submittal for both phases of the Nitrification Clarifiers Rehabilitation Project. The owner's advisor for the Yard Piping and Road Improvements Project completed the field work and prepared a draft condition assessment report for the interior plant roadways.

For the Filter Rehabilitation Project, the process engineering team completed the filter column pilot testing to identify the filter media configuration for further testing under a full-scale pilot in one of the existing filter basins. This testing is key to further defining the filter loading rates, runtimes, and ultimate performance requirements needed.

Also this month, the CIP held its fifth annual vendor open house at the RWF. Sixty people representing 48 different companies attended, with one-third of the attendees representing small businesses and approximately half representing local businesses. Consultants, construction contractors, and material and equipment suppliers received information about bidding opportunities on the seven construction projects anticipated to be advertised this year. The estimated construction value of the work is \$95 million.

## Look Ahead

The following key activities are forecast for January and February 2019:

- The project team for the 96-inch and 87-inch Settled Sewage Pipe Rehabilitation Project will hold a workshop with all stakeholders to review the 50 percent design submittal.
- The Filter Rehabilitation Project will perform subsurface investigations including geotechnical drilling and ground-penetrating radar utility location, as well as a structural reconnaissance survey.
- Two projects will seek approval to advance through the Authorization to Proceed stage gate: Fire Life Safety Upgrades and Outfall Bridge & Instrumentation Improvements.
- On the Switchgear M4 Replacement and G3 & G3A Removal Project, the design consultant will complete the 60 percent design package and the team will seek approval to advance through the Preliminary Design stage gate.
- The City will issue a Notice to Proceed (NTP) to Monterey Mechanical for construction of the Blower Improvements Project. The City will hold a pre-construction conference.
- The Digested Sludge Dewatering Facility Project team will complete the interviews to select the DB Entity.



## Program Highlight – CIP Portal

Launched in early 2014, the CIP Portal is a document management and collaboration tool that allows CIP team members to share project documents and other information in an online Microsoft SharePoint environment. Currently, more than 190 users including CIP staff, O&M staff, design consultants, owner's advisors, and staff from other City departments access program- and project-level content that includes more than 30,000 documents, videos, and photographs.

The CIP Portal home page (Figure 1) provides links to key program information as well as a rotating series of program announcements. Program-level information includes organizational charts, the master schedule, monthly reporting cycle calendar, risk register, the Program Execution Plan, Project Delivery Model (PDM), drone videos, and photos. Users find information through drop-down menus or by clicking “big easy buttons.”

A key portal section is the Report Library, which stores program- and project-level reports. The CIP currently generates reports on a regular basis, usually monthly or quarterly. In all, over 4,000 reports have been produced since 2014.

Much of the portal content is organized in team sites. The portal features three types of team sites: Project, Functional, and Consultant.

Project team sites consist of project documents, lists, links to the risk register and decision logs, and a photo library. One of the key aspects of the Project team sites is a standardized folder structure based on the specific delivery method selected for each project. Functional team sites store content related to specific program functional teams such as program controls, risk and interface management, and budget. Consultant team sites provide a controlled access point for external team members such as design consultants to gain access to specific project documentation, without access to other portal areas. Consultants also have access to program standards and documentation that they are required to follow to ensure consistency in project delivery.

The CIP Portal Manager oversees portal administration and is the first point of contact for users who have questions or issues that require resolution. The CIP Portal Manager also trains new users, who can supplement training with informational videos and quick reference guides from the portal home page.

Users can look forward to improved usability, as well as a new look and feel, when the CIP Portal is upgraded to the next version of SharePoint in the next few months. The upgrade will include an enhanced document management feature, improved search functionality, and a modernized team collaboration user interface. With the improvements, the CIP Portal will become even more useful to CIP personnel as a key tool to manage, store, and distribute program and project information.

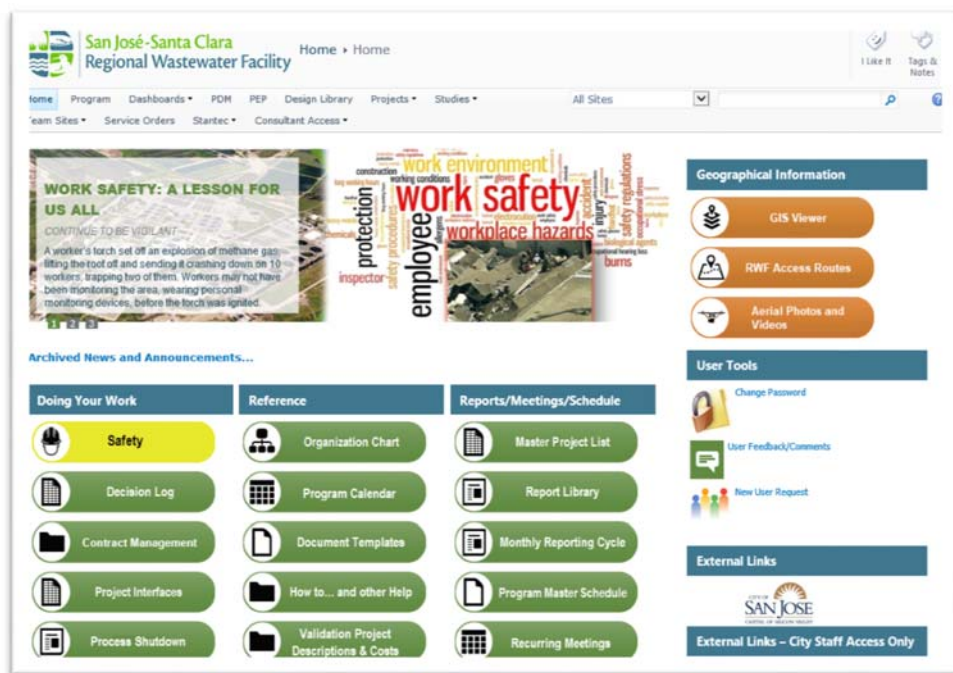


Figure 1 - CIP Portal home page



## Program Performance Summary

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

### Program Key Performance Indicators – Fiscal Year 2018-2019

KPI	Target	Fiscal Year to Date			Fiscal Year End		
		Actual	Status	Trend	Forecast	Status	Trend
<b>Stage Gates</b>	90%	90% 9/10			95% 18/19		
Measurement: Percentage of initiated projects and studies that successfully pass each stage gate on their first attempt. Target: Green: >= 90%; Amber: 75% to 90%; Red: < 75%							
<b>Schedule</b>	90%	33% 1/3			33% 1/3		
Measurement: Percentage of CIP projects delivered within 2 months of approved baseline Beneficial Use Milestone. <sup>1</sup> Target: Green: >= 90%; Amber: 75% to 89%; Red: < 75%							
<b>Budget</b>	90%	100% 2/2			75% 3/4		
Measurement: Percentage of CIP projects that are accepted by the City within the approved baseline budget. <sup>1</sup> Target: Green: >= 90%; Amber: 75% to 89%; Red: < 75%							
<b>Expenditure</b>	\$253M	\$233M			\$301M		
Measurement: CIP FY18-19 committed costs. Target: Committed cost meets or exceeds 70% of planned Budget. 70% of \$362M = \$253M. Therefore Green: >=\$253M; Amber: \$199M to \$253M; Red: < \$199M							
<b>Safety</b>	0	0			0		
Measurement: Number of OSHA reportable incidents associated with CIP delivery for the fiscal year. Criteria: Green: zero incidents; Amber: 1 to 2; Red: > 2							
<b>Environmental</b>	0	0			0		
Measurement: Number of permit violations caused by CIP delivery for the fiscal year. Target: Green: zero incidents; Amber: 1 to 2; Red: > 2							
<b>Vacancy Rate<sup>2</sup></b>	10%	18% 15/84			6% 5/84		
Measurement: Ratio of the number of vacant approved positions to approved positions. Target: Green: <= 10%; Amber: 10% to 20%; Red: > 20%							

#### Notes

1. The baseline Beneficial Use date and the baseline budget for each project are established at construction contract award and execution.
2. The Vacancy Rate KPI measures City CIP-approved positions (ESD and Public Works) and program management consultant full-time staff.

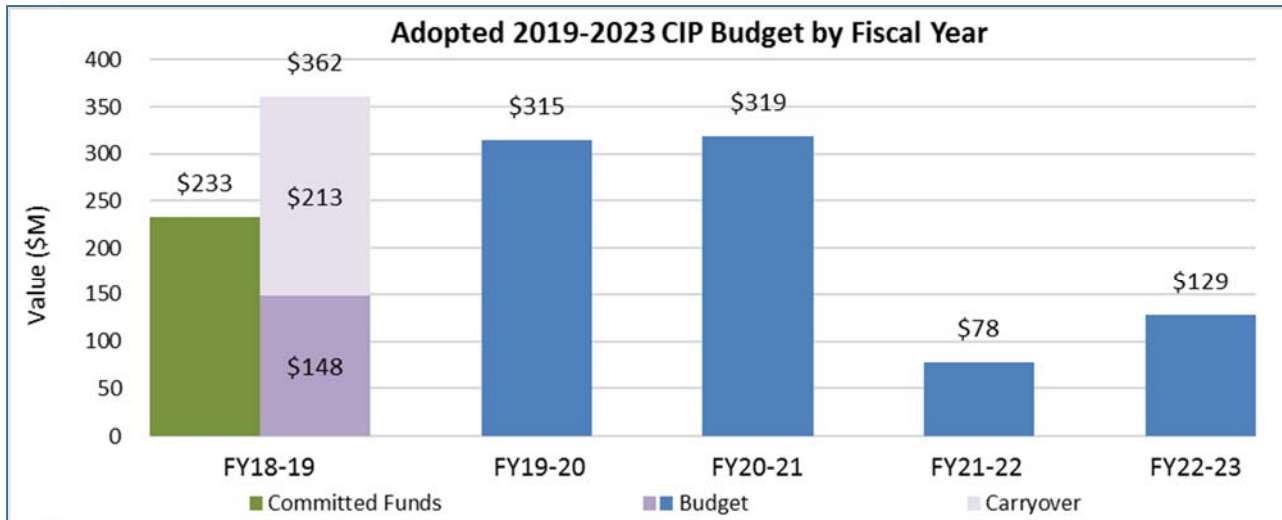




## Program Budget Performance Summary

This section summarizes the cumulative monthly budget performance for fiscal year (FY)18-19 based on the Adopted 2019-2023 CIP.

### Adopted 2019-2023 CIP Expenditure and Encumbrances



#### Notes:

**Committed Funds:** Total of expenditures and encumbrances.

**Expenditure:** Actual cost expended, either by check to a vendor or through the City's financial system, for expenses such as payroll or for 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. An encumbrance reserves the funding within the appropriation and project.

The FY18-19 budget is \$185 million, which consists of \$131 million in new funds and \$54 million in rebudgets. For purposes of this monthly report, the adopted FY18-19 budget is adjusted from \$185 million to \$148 million due to the exclusion of certain appropriations that are not measured as part of the expenditure KPI. Excluded appropriations include City Hall Debt Service Fund; Clean Water Financing Authority Debt Service Payment Fund; Debt Service Repayment for Plant Capital Improvement Projects (San José only debt service); Equipment Replacement Reserve; Ending Fund Balance; Public Art; SBWR Extension; State Revolving Fund Loan Repayment; and Urgent and Unscheduled Treatment Plant Rehabilitation. Similar adjustments have been made to the budgets for FY19-20 through FY 22-23.

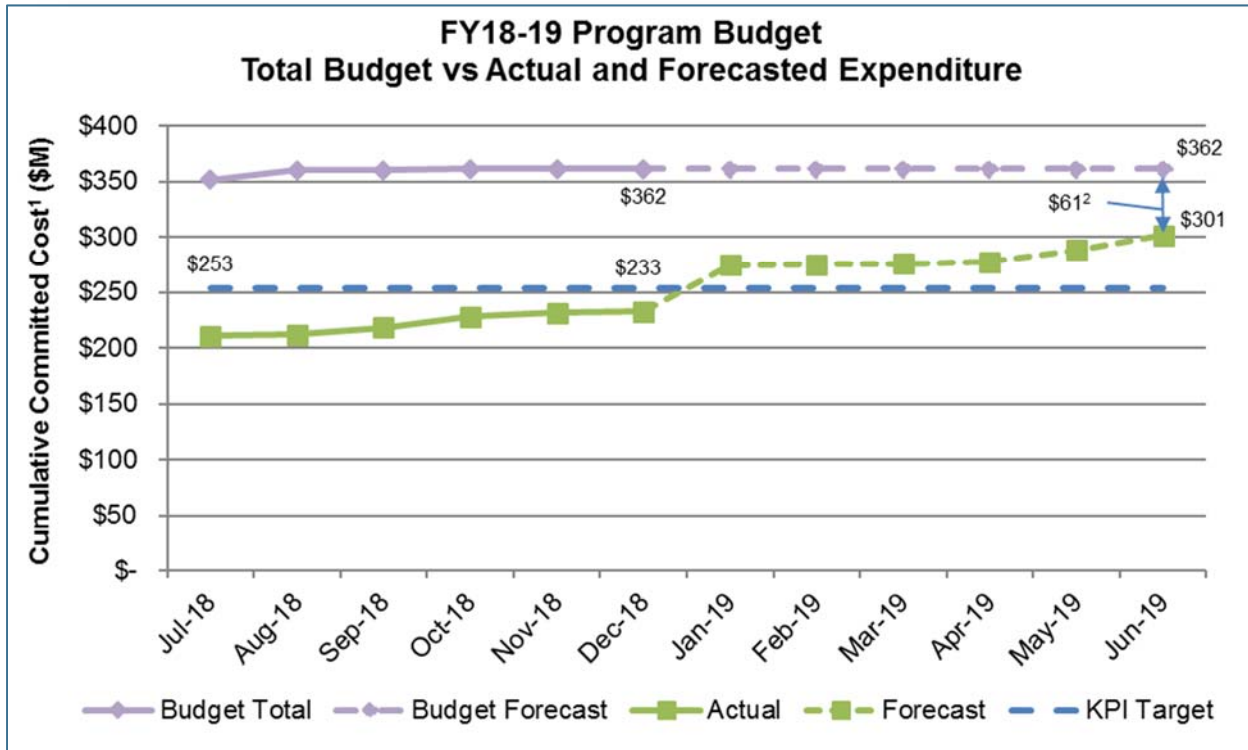
**Carryover:** Encumbrance balances at the end of the previous fiscal year are automatically carried forward to the current fiscal year as carryover funding to pay invoices for approved construction contracts and consultant agreements. FY18-19 carryover is \$213 million.

Budget of \$148.3 million and carryover of \$213.3 million totals \$361.6 million for FY18-19.



## Fiscal Year 2018-2019 Program Budget Performance

The FY18-19 CIP budget is comprised of approximately \$148 million in new funds, plus encumbrances carryover of \$213 million for a rounded total of \$362 million. This excludes City Hall Debt Service Fund; Clean Water Financing Authority Debt Service Payment Fund; Debt Service Repayment for Plant Capital Improvement Projects (San José only debt service); Equipment Replacement Reserve; Ending Fund Balance; Public Art; SBWR Extension; State Revolving Fund Loan Repayment; and Urgent and Unscheduled Treatment Plant Rehabilitation items. Overall, the forecasted fiscal year-end committed funds exceed the fiscal year-end target by \$48 million.



### Notes:

1. Committed costs are expenditures and encumbrance balances, including carryover (encumbrance balances from the previous fiscal year).
2. The variance between forecasted budget and forecasted commitments can be primarily attributed to the following factors:
  - a. Several construction contracts are now anticipated to be awarded in FY19-20 instead of FY18-19 based on updated schedules:
    - i. Fire Life Safety Upgrades Project
    - ii. Switchgear M4 Replacement and G3 & G3A Removal
  - b. Several consultant service orders will not be awarded in FY18-19:
    - i. Aeration Tank Rehabilitation Project
    - ii. Support Facilities Project
    - iii. Tunnel Rehabilitation Project
  - c. The Blower Improvement Project construction bids came in under budget.
  - d. Several other minor encumbrances for consultant services are either lower than budgeted or are anticipated to be awarded in FY19-20.
  - e. Several authorized positions remain vacant, resulting in lower predicted personal services expenses than budgeted.
  - f. The FY16-17 payment budgeted for the annual Owners Controlled Insurance Program premium covered the period through FY17-18. Funds rebudgeted from FY17-18 will be programmed in FY19-20.



## Project Performance Summary

There are currently six projects in the construction and post-construction phases and an additional 15 projects in feasibility/development, design, bid and award, or design and construction phases (see PDM, page 2). 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.

### 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. Construction-Enabling Improvements	Post-Construction	Aug 2018 <sup>3</sup>	◆	◆
2. Plant Instrument Air System Upgrade	Post-Construction	Nov 2018 <sup>3</sup>	●	◆
3. Cogeneration Facility	Design & Construction	Mar 2020 <sup>4</sup>	●	●
4. Digester and Thickener Facilities Upgrade	Construction	Nov 2020	◆	◆
5. Advanced Facility Control & Meter Replacement - Phase 1	Construction	June 2021	●	●
6. Blower Improvements	Construction	Nov 2021 <sup>4</sup>	●	●

#### Key:

<b>Cost:</b>	● On Budget	◆ >1% Over Budget	<b>Schedule:</b>	● On Schedule	◆ >2 months delay
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#### Notes

1. 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 reviewed as part of project schedule reviews.
2. An explanation of cost and schedule variances on specific projects identified in this table is provided on pages 11 and 12.
3. Actual Beneficial Use date.
4. The project construction Beneficial Use date will be baselined once the City accepts the contractor's construction schedule.



## Project Performance – Pre-Baselined Projects

Project Name	Phase	Estimated Beneficial Use Date <sup>1</sup>
1. Digested Sludge Dewatering Facility	Bid/Award	Nov 2022
2. 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation	Design	Oct 2020
3. Switchgear M4 Replacement and G3 & G3A Removal	Design	Feb 2022
4. Advanced Facility Control & Meter Replacement - Phase 2	Design	Dec 2022
5. Headworks	Design and Construction	Dec 2022
6. Filter Rehabilitation	Design	Mar 2023
7. Nitrification Clarifiers Rehabilitation – Phase 1	Design	Oct 2023
8. Nitrification Clarifiers Rehabilitation – Phase 2	Design	Nov 2024
9. Outfall Bridge and Instrumentation Improvements	Feasibility/Development	Jan 2021
10. Fire Life Safety Upgrades	Feasibility/Development	Sep 2022
11. Storm Drain System Improvements	Feasibility/Development	Dec 2022
12. Flood Protection	Feasibility/Development	Mar 2023
13. HVAC Improvements	Feasibility/Development	Mar 2023
14. Facility Wide Water Systems Improvements	Feasibility/Development	Jun 2024
15. Yard Piping and Road Improvements	Feasibility/Development	June 2027

### Notes

1. 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 reviewed as part of project schedule reviews.



## Significant Accomplishments

### Biosolids Package

#### Digester and Thickener Facilities Upgrade Project

- Contractor Walsh Construction continued installing the final digester's ring beam foundation required to prevent seismic uplift. Walsh also continued work on three of the four digester roof replacement concrete pours.
- Walsh continued installation of mechanical, electrical, and communications equipment in the dissolved air flotation tanks (DAFTs), the DAFT underground gallery, and in the existing and new sludge control buildings.
- Construction of the concrete foundation, slabs, walls, and roof decks continued at the new sludge control building, east and west electrical buildings, the new flare site, the polymer storage location and the new wye structure flow-sampling station.

### Facilities Package

#### 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation Project

- Owner's Advisor Black & Veatch completed and submitted the 50 percent design to the City for review. Next, Black & Veatch will hold the 50 percent design review workshop in January.

#### Cogeneration Facility Project

- DB entity CH2M Hill continued to install the underground hot water distribution, gas piping, and electric duct bank systems. Additionally, CH2M Hill began masonry block wall work and received the last part of the gas treatment equipment and the heat dissipation/heat exchanger skids for all four engines.

#### HVAC Improvements Project

- Design consultant Kennedy/Jenks conducted an alternative analysis workshop to present alternatives to correct system deficiencies identified during condition assessment and replace the aging HVAC equipment. Kennedy/Jenks will complete the Alternative Analysis Report in January.

#### Storm Drain System Improvements Project

- Design consultant AECOM completed the sanitary sewer system field condition assessment. Next month the draft Condition Assessment Report and the storm pump stations Alternative Analysis Report will be completed.

### Liquids Package

#### Advanced Facility Control and Meter Replacement – Phase 2 Project

- The project team completed reviewing the 90 percent design submittal and returned comments to the design consultant, Black and Veatch. Black and Veatch will address the project team's comments in January.

#### Blower Improvements Project

- The project team executed the construction contract with Monterey Mechanical, with the contractor scheduled to begin construction in January. The City will hold a kickoff meeting in January.

#### Filter Rehabilitation Project

- The project team attended a construction-sequencing meeting to provide input to the design consultant, Kennedy/Jenks.
- Kennedy/Jenks confirmed utility locations in preparation for geotechnical drilling. In January, they will complete geotechnical drilling field work and begin planning for utility potholing to complete the electrical base map drawings.

#### Headworks Project

- The project team coordinated geotechnical investigations and held several final design development workshops to discuss project risks, interfaces with other CIP projects, and startup, acceptance, and performance guarantees.
- The DB entity held a two-day design workshop to finalize the Basis of Design Report prior to submission in early 2019 and develop the scope of subsurface exploratory borings to be performed to confirm base mapping information.

#### Nitrification Clarifiers Rehabilitation Project

- The City completed review of the 60 percent design submittal for both phases of the project and returned comments to design consultant HDR. In January, HDR will review the project team's design comments and progress the design of Phase 1 so that construction can begin in 2019. Design of Phase 2 will resume in spring 2021.



# Explanation of Project Performance Issues

## Construction-Enabling Improvements Project

This project was originally scheduled to be substantially complete by mid-February 2017. Due to the extremely wet 2016-17 winter season, contractor Teichert Construction was unable to perform site work on several occasions between October 2016 and April 2017. Teichert was granted extra work days for weather-related delays and for extra work associated with several contract change orders. A new contract completion date of June 8, 2017 was established. However, Teichert's subcontractor, ModSpace, was slow to respond and regularly submitted late and incomplete documentation, which resulted in the portable trailers arriving in January 2018, approximately 9 months later than the contract completion date.

Teichert experienced additional delays completing installation of the portable trailers and submitting complete and acceptable documentation for access ramps and canopies. In early August 2018, the contractor completed installation of the electrical, communications, and wastewater utilities. Also in August, the City of San José Building Division issued the Certificate of Occupancy permit for the trailers and the construction management group issued the Notice of Substantial Completion, indicating the project had reached Beneficial Use. The project team provided Teichert with a list of remaining contract work to be completed. The project team has reached agreement with Teichert for liquidated damages and to complete outstanding tasks for project closeout. The project team anticipates accepting the project in February 2019.

## Plant Instrument Air System Upgrade Project

Project construction has been delayed by seven months due to four issues: 1) The project team discovered that the planned construction site access route crossed a large settled sludge pipeline, requiring an alternative access route to be developed and constructed; 2) the contractor was temporarily unable to install a section of the conduit from the sludge control building to the new compressor building due to other work being performed in the area by a different contractor; 3) development of the 28-day commissioning test procedure took longer than anticipated; and 4) during the eight-hour functioning test the project team discovered oxidized (rusted) carbon steel shavings in an existing condensate tank unrelated to the project construction. The material was removed, and the test was successfully completed. The project achieved Beneficial Use in November 2018. Project Acceptance is anticipated in April 2019.

## Digester and Thickener Facilities Upgrade Project

This project encountered numerous unforeseen conditions at the beginning of construction in 2016, described below. In 2017, design modifications were required to address seismic risks, and discovery of hazardous materials required extensive cleanup. Delays for these conditions continue to be discussed and evaluated.

The City has negotiated contract change orders for the following unforeseen conditions discovered in 2016:

- Major corrosion of a below-ground, 78-inch settled sewage pipeline and junction structure delayed the construction of dissolved air flotation tank piping connections, two new pressurization flow boxes, and utility relocation work. The contractor postponed all repairs until a temporary pumping and pipeline system could be designed and safely installed to enable replacement of the pipeline in the 2018 dry season. In May of 2018, the contractor started full-time operation of this temporary pumping and pipeline system and began replacement of the 78-inch settled sewage pipeline, which was completed in late September 2018.
- A 36-inch biochemical oxygen demand pipe was found to be obstructing the new sludge screening building foundation. The contractor removed this pipe and relocated several gas drain vaults and associated piping before the foundation construction began.
- Multiple conflicts between contract work and existing utilities required numerous relocations including water, natural gas, digester gas, landfill gas, storm drains, and sanitary sewer pipelines. The contractor completed necessary relocations and rerouting, especially near the new digester gas pipe rack footings. Many of these modifications also required design changes.
- Bay Area Air Quality Management District venting restrictions also delayed digester work. The contractor completed the temporary digester gas connections and the system became operational in February 2018.

The following outstanding issues are currently being evaluated and are expected to result in additional costs and delays:

- Digester structural redesign: The design consultant revised the structural drawings to address seismic issues by enlarging the foundation ring beam at the base of each of the four digesters. The contractor provided a cost proposal associated with this revision and the City issued a change order for a portion of the proposal. Work associated with the new foundations is ongoing.
- Hazardous material mitigation: Testing of soils and concrete for polychlorinated biphenyls (PCBs) was completed and the federal Environmental Protection Agency (EPA) issued a final conditional approval. All removal and disposal of contaminated materials has been completed to comply with the risk-based management plan approved by the EPA. All contaminated soils have been removed and disposed of and most of the impacted concrete has been encased. The



last portion of the work will be finalized once the foundation base layer and roof work is complete. At that time, final work reports will be submitted to the EPA.

In November 2017, Council approved a construction contingency increase of \$15 million. The City issued change orders against the increased contingency for delays associated with the conditions discovered in 2016.

In June 2018, Council approved a second construction contingency increase of \$25 million for additional costs associated with the seismic redesign, hazardous material remediation, and extended construction duration.

The Beneficial Use date was revised this month to November 2020 after the contractor identified and initiated several tasks concurrently that were planned in series originally. The City received an updated schedule from Contractor Walsh in November 2018 and is processing a change order to compensate for additional delays caused by the redesign and PCBs cleanup and removal.





## Project Profile – 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation

The RWF has more than 300,000 linear feet (LF) of piping, 67,000 LF of which are wastewater process pipes. Seventy percent of the piping is more than 25 years old. In June 2015, the City completed a desktop study of the RWF's process pipes, which developed a risk-based framework that prioritized the condition assessment of the pipe segments based on the likelihood and consequence of failure. Sixteen pipe segments, totaling 21,000 LF, were identified as high priority based on these criteria.

Two of the pipe segments identified as high priority include the 96-inch settled sewage (SES) pipeline and the 87-inch by 136-inch SES pipeline (see Figure 2). Primary effluent from the east primary clarifiers is conveyed to the SES Pump Station through the 96-inch SES pipeline, which combines with the south 78-inch SES pipeline at a wye junction structure. From the structure, the combined flow enters the 87-inch by 136 inch SES pipeline to the pump station, where it is then distributed to the secondary treatment process for further treatment. The two pipelines are critical to RWF operations, as they carry more than 100 million gallons per day of wastewater during dry weather.

While the 78-inch SES pipeline was under repair in the summer of 2018 as part of the Digester and Thickener Facilities Upgrade Project, the City had Black and Veatch (B&V) conduct a condition assessment of these pipes. Inspection of the two pipelines confirmed severe crown corrosion in both. Figures 3 to 6 below show some of the damaged sections of pipe.

Although the repair or replacement of these pipelines was originally scoped as part of the larger Yard Piping and Road Improvements Project, the City decided to expedite their rehabilitation due to criticality and to take advantage of the extensive bypass system that was designed and installed to facilitate the replacement of the 78-inch SES pipeline.

In September 2018, B&V completed an alternatives analysis that considered estimated costs, constructability, hydraulic impact, and service life. As a result, B&V recommended rehabilitation methods that are cost effective, provide long service life, and maintain the necessary pipeline hydraulic capacities. Following alternatives analysis and conceptual design, the City authorized B&V to proceed to detailed design. The City is currently reviewing the detailed design and validating the recommended rehabilitation methods.

The project will use the design-bid-build delivery approach. The project team expects to complete 100 percent design in April 2019 and award a construction contract by November 2019. Construction is scheduled to begin in the 2020 dry season and reach substantial completion by October 2020. The total project estimate is estimated at \$9.5 million.

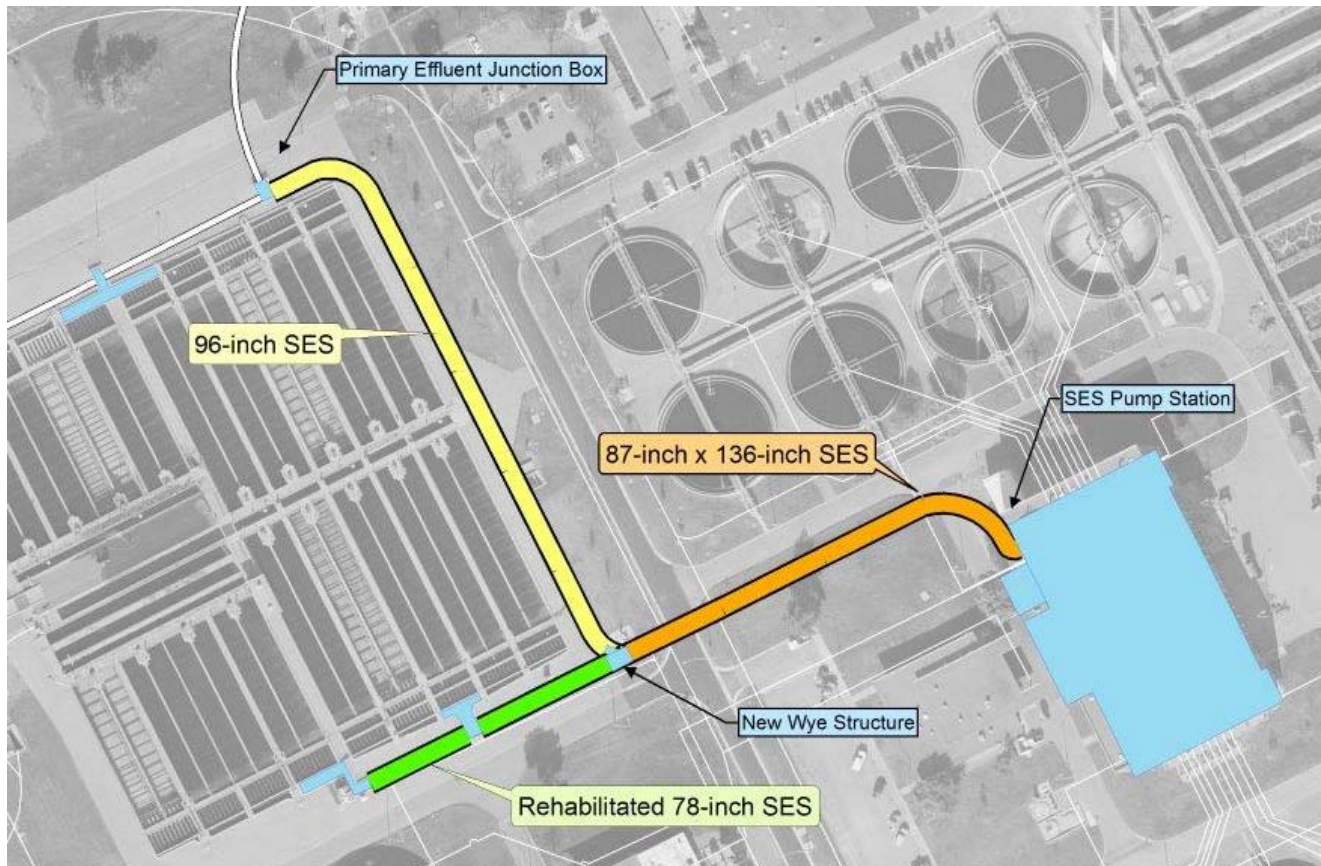


Figure 2: Site Map







Figure 3: Rebar degradation on 96-inch SES Pipeline



Figure 4: Crown corrosion pocket on 96-inch SES Pipeline



Figure 5: Crown corrosion of 87-inch SES Pipeline



Figure 6: Crown corrosion pocket of 87-inch SES Pipeline

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# Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram

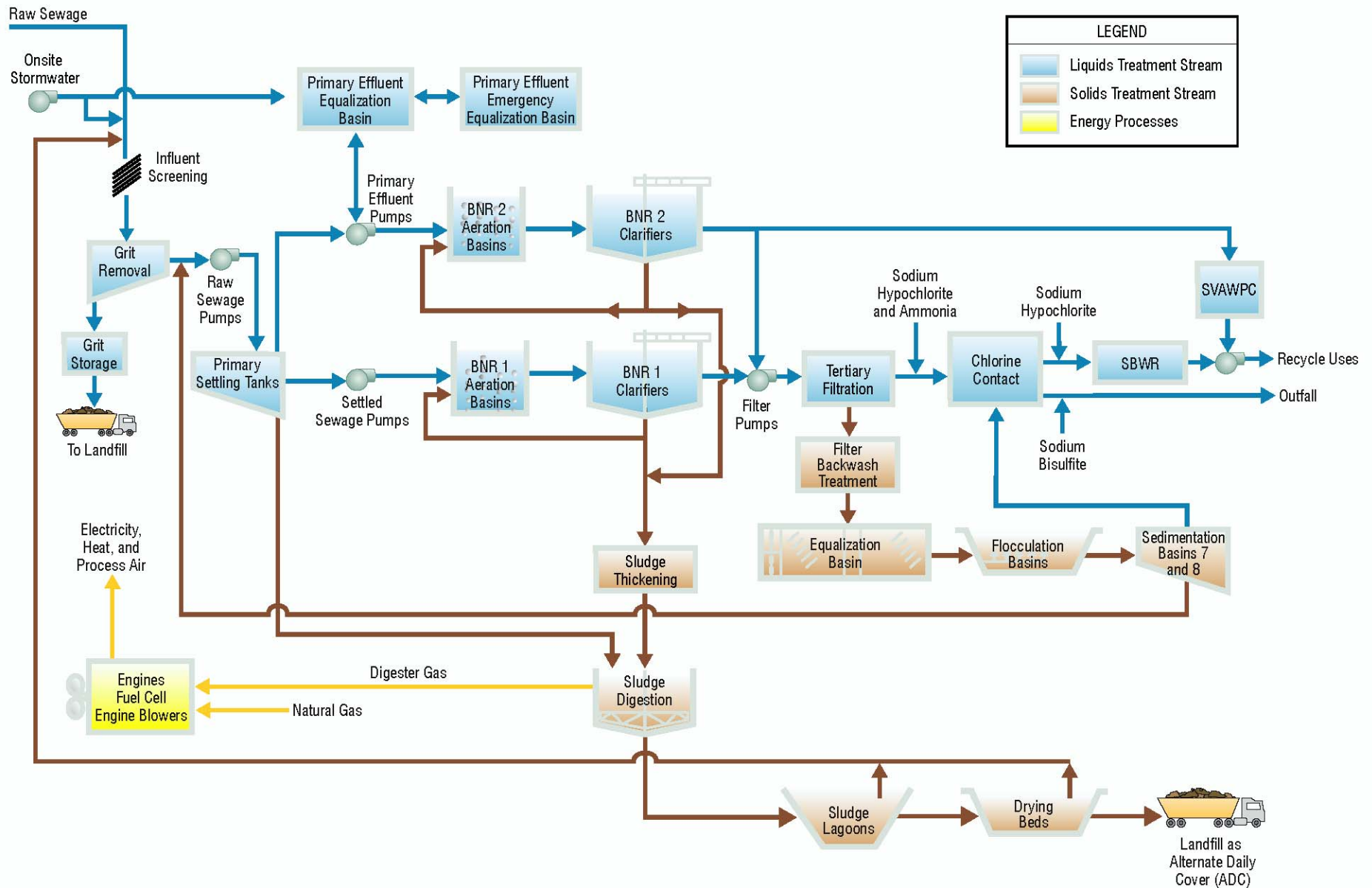


Figure 7 – Current Treatment Process Flow Diagram



# Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram

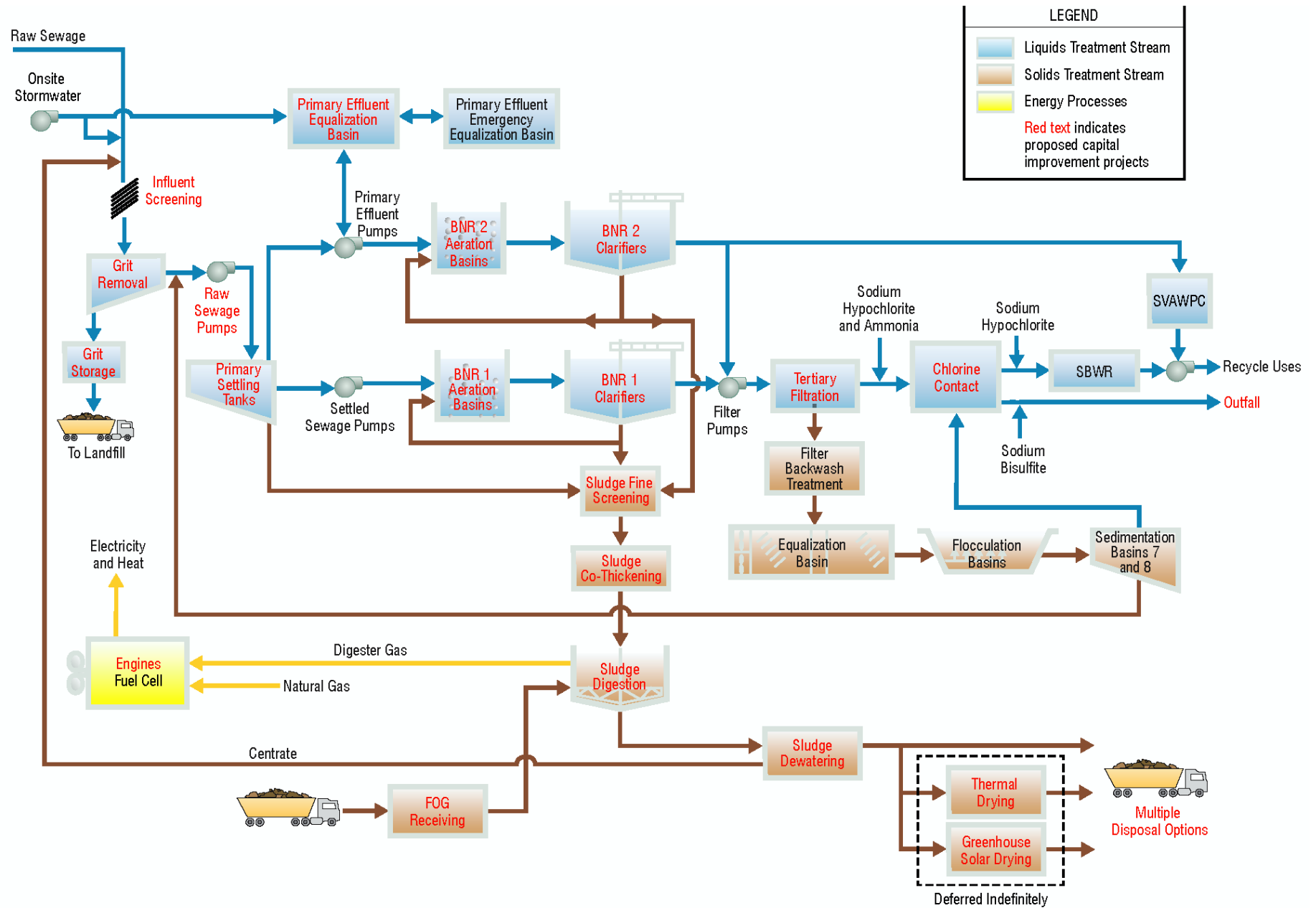


Figure 8 – Proposed Treatment Process Flow Diagram





## Active Construction Projects – Aerial Plan

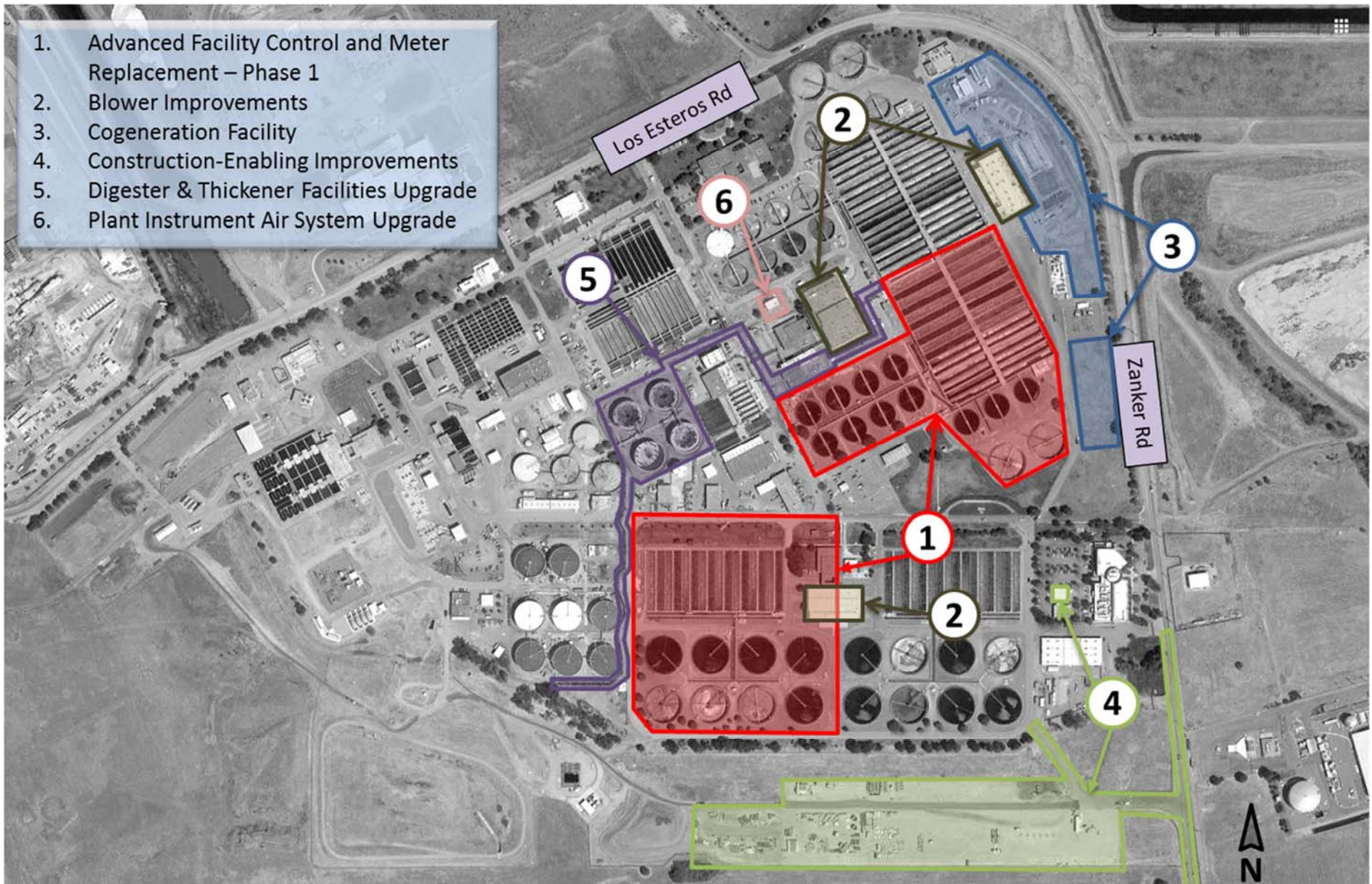


Figure 9: Active Construction Projects

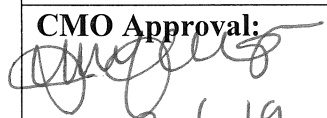




FILE:

ITEM:

**CITY COUNCIL ACTION REQUEST**

<b>Department(s):</b> Environmental Services Public Works	<b>CEQA:</b> Not a Project, File No. PP17-003, Agreements/ Contracts (New or Amended) resulting in no physical changes to the environment.	<b>Coordination:</b> City Attorney's Office; City Manager's Budget Office  The Treatment Plant Advisory Committee will consider this item on February 14, 2019	<b>Dept. Approval:</b> /s/ Kerrie Romanow  /s/ Matt Cano  <b>CMO Approval:</b>  2-6-19
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**SUBJECT: FIRST AMENDMENT TO THE MASTER CONSULTANT 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**

**RECOMMENDATION:**

Approve the First Amendment to the Master Consultant Agreement 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, to allow for overtime pay, as may be required by the City, with no extension to the term or increase to the maximum total compensation.

**BASIS FOR RECOMMENDATION:**

On June 14, 2016, the City Council approved master consultant agreements with Kennedy/Jenks Consultants Inc. (K/J) and MNS Engineers, Inc. (MNS) for construction management and inspection services to support the Capital Improvement Program (CIP) at the San José-Santa Clara Regional Wastewater Facility (RWF) (Agenda Item 7.4).

Both agreements were based on the standard RWF CIP master consultant agreement, approved as to form by the City Attorney's Office in April 2016, which does not include a provision for overtime pay for work conducted after hours, or in excess of 40 hours per week. Overtime pay is excluded from the RWF CIP master consultant agreement since these services are typically design-related or are performed by salaried consultant staff. However, construction at the RWF often requires contractors to work beyond the regular 40-hour week in order to complete critical work prior to start of the wet-weather season, coordinate with RWF operations, perform critical unanticipated work due to unforeseen site conditions, and meet the interface schedules between the numerous projects at the RWF. In these cases, the City's project inspectors and the consultant inspectors are required to monitor these construction activities. Consequently, the City needs the ability to properly compensate consultant inspectors who are required to perform work beyond and/or outside of the regular eight-hour weekday shifts, including night, weekend and holiday work.

The first amendment to these master consultant agreements will allow overtime pay for hourly consultant employees, as may be required by the City. Overtime pay will not be subject to the agreement's multiplier, and the consultant's salaried or exempt employees will not be eligible for overtime pay. All requests require written authorization by the City prior to working any additional hours.

**COST AND FUNDING SOURCE:**

Services performed by the consultants under these agreements will be authorized by service orders. An appropriation is not required for execution of these Master Consultant Agreements, but is required for each service order authorized under these agreements. This amendment does not change the total compensation nor the term of the Master Consultant Agreements.

**FOR QUESTIONS CONTACT:** John Cannon, Interim Deputy Director, Department of Public Works at (408) 535-8340

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS  
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1

FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

**CRAFT: #BUILDING/CONSTRUCTION INSPECTOR AND FIELD SOILS AND MATERIAL TESTER**

**DETERMINATION:** NC-63-3-9-2018-2

**ISSUE DATE:** August 22, 2018

**EXPIRATION DATE OF DETERMINATION:** September 30, 2019\*\* The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director – Research Unit for specific rates at (415) 703-4774.

**LOCALITY:** All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo and Yuba counties.

CLASSIFICATION (JOURNEYPERSON)	Basic Hourly Rate	Health and Welfare <sup>a</sup>	Employer Payments				Straight-Time		Overtime Hourly Rate		
			Pension	Vacation and Holiday	Training	Other Payment	Hours	Total Hourly Rate	Daily <sup>b</sup> 1 1/2X	Saturday <sup>b</sup> 1 1/2X	Sunday/ Holiday 2X
Group 1	\$47.03	13.88	9.57	6.24	1.13	0.24	8	78.09	101.605	101.605	125.12
Group 2	45.03	13.88	9.57	6.24	1.13	0.24	8	76.09	98.605	98.605	121.12
Group 3	38.89	13.88	9.57	6.24	1.13	0.24	8	69.95	89.395	89.395	108.84
Group 4	33.66	13.88	9.57	6.24	1.13	0.24	8	64.72	81.550	81.550	98.38

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Internet @ <http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp>. To obtain any apprentice wage rates as of July 1, 2008 and prior to September 27, 2012, please contact the Division of Apprenticeship Standards or refer to the Division of Apprenticeship Standards' website at <http://www.dir.ca.gov/das/das.html>.

<sup>a</sup> Amount shall be paid for all hours worked up to 173 hours per month.

<sup>b</sup> Rate applies to the first 4 daily overtime hours, Monday through Friday, and the first 8 hours on Saturday. All other overtime is paid at the Sunday/Holiday overtime rate.

**CLASSIFICATIONS:**

<u>Group 1</u>	<u>Group 2</u>	<u>Group 3</u>	<u>Group 4</u>
ASNT Level II-III	AWS-CWI	Geotechnical Driller	ACI
DSA Masonry	ICC Certified Structural Inspector	Soils/Asphalt	Drillers Helper
DSA Shotcrete	NICET Level III	Earthwork Grading	ICC Fireproofing
Lead Inspector	Shear Wall/Floor System Inspector	Excavation and Backfill	NICET Level I
NICET Level IV	Building/Construction Inspector	NICET Level II	Proofload Testing
NDT Level Two			Torque Testing
			NACE
			NDT Level One

**RECOGNIZED HOLIDAYS:** Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Internet at

<http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

**TRAVEL AND/OR SUBSISTENCE PAYMENT:** In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Internet at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS  
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1

FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

**CRAFT: #BUILDING/CONSTRUCTION INSPECTOR AND FIELD SOILS AND MATERIAL TESTER (SECOND SHIFT)**

**DETERMINATION:** NC-63-3-9-2018-2

**ISSUE DATE:** August 22, 2018

**EXPIRATION DATE OF DETERMINATION:** September 30, 2019\*\* The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director – Research Unit for specific rates at (415) 703-4774.

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Group 1	\$52.91	13.88	9.57	6.24	1.13	0.24	8	83.97	110.425	110.425	136.88
Group 2	50.66	13.88	9.57	6.24	1.13	0.24	8	81.72	107.050	107.050	132.38
Group 3	43.75	13.88	9.57	6.24	1.13	0.24	8	74.81	96.685	96.685	118.56
Group 4	37.87	13.88	9.57	6.24	1.13	0.24	8	68.93	87.865	87.865	106.80

# Indicates an apprenticeable craft. The current apprentice wage rates are available on the Internet @ <http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp>. To obtain any apprentice wage rates as of July 1, 2008 and prior to September 27, 2012, please contact the Division of Apprenticeship Standards or refer to the Division of Apprenticeship Standards' website at <http://www.dir.ca.gov/das/das.html>.

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DSA Masonry	ICC Certified Structural Inspector	Soils/Asphalt	Drillers Helper
DSA Shotcrete	NICET Level III	Earthwork Grading	ICC Fireproofing
Lead Inspector	Shear Wall/Floor System Inspector	Excavation and Backfill	NICET Level I
NICET Level IV	Building/Construction Inspector	NICET Level II	Proofload Testing
NDT Level Two			Torque Testing
			NACE
			NDT Level One

**RECOGNIZED HOLIDAYS:** Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Internet at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

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**First**

**Amendment to Master Consultant Agreement – RWF Capital Projects**

**Second**

**Third**

Consultants Name: Kennedy/Jenks Consultants, Inc

**(CPMS Contract No. 8125-1)  
(Master Agreement AC No. 27745)**

This Amendment to the Master Agreement is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2018. The City and the Consultant amend the above-referenced agreement as set forth herein.

1. Capitalized words in this Amendment have the same meaning as in the Master Agreement.
2. The provisions of this Master Agreement (including any previous amendments) not modified by this Amendment remain in full force and effect.
3. The provisions of this Amendment are effective upon execution of the Amendment by both parties.

4.  **Agreement Term:** Section 2 is amended to extend the expiration date from \_\_\_\_\_ to \_\_\_\_\_.

5.  **Maximum Total Compensation:** Subsection 10.1 is amended to  Increase  Decrease the Maximum Total Compensation from \$\_\_\_\_\_ to \$\_\_\_\_\_.

6.  **Agreement Section(s):** Section(s) \_\_\_\_\_ is/are amended to read as set forth in Attachment A of the Amendment.

7.  **Basis of Compensation – Exhibit B:** The  original  First Revised  Second Revised Exhibit B is amended to read as set forth in the attached  First  Second  Third Revised Exhibit B, which is incorporated by reference into this Amendment.

**This Amendment is executed by the authorized representatives of the City and Consultant as follows:**

**City of San José**

**Consultant**

By \_\_\_\_\_

By \_\_\_\_\_

Name: Toni Taber  
Title: City Clerk

Date

Name: Dennis Sanchez  
Title: Vice President

Date

**Approval as to Form (City Attorney):**

**Form Approved by the Office of the City Attorney.**

(The Maximum Total Compensation, as amended, is \$100,000 or less, and the provisions of the form are not altered.)

**Approved as to Form:**

By \_\_\_\_\_

Name:  
Title:

Date

\_\_\_\_\_  
Sr. Deputy City Attorney

Date



**First**

## **Revised Exhibit B: Basis of Compensation**

**Second**

(Capital Project)

**Third**

This revised Exhibit B is an attachment to the  First  Second  Third amendment to Master Agreement.

This First Revised Exhibit B, replaces the original Exhibit B, and any previous amendment to the original Exhibit B, in their entirety.

### **Exhibit B: Basis of Compensation**

The Consultant's compensation for services provided pursuant to an Approved Service Order shall be in accordance with Section 10 of the Agreement and this **Exhibit B**. Consultant shall be compensated for Work performed pursuant to an Approved Service Order based on the following categories only: (1) multiplier compensation; (2) reimbursable expenses; (3) Contract Personnel costs; and (4) subconsultant costs.

**1. Multiplier Compensation.** As compensation for all of Consultant's employee labor costs and expenses, overhead and profit for performing Work required by an Approved Service Order, the City will pay Consultant an amount equal to the Consultant's Direct Labor Rate (as defined below) multiplied by 2.82 ("Multiplier"), plus any applicable Overtime Pay (as defined below) (collectively, "Multiplier Compensation"). Except for other costs and expenses expressly set forth in this Master Agreement as being compensable, the Multiplier Compensation shall be the Consultant's only compensation for all Work performed pursuant to an Approved Service Order.

**1.1 Direct Labor Rate.** For purposes of calculating the Multiplier Compensation, the direct labor rate shall be the sum of the number of hours worked by each of Consultant's employees pursuant to an Approved Service Order multiplied by the respective hourly rates paid by Consultant to such employees ("Direct Labor Rate"). The Direct Labor Rate shall be based on a normal 8-hour day, 40-hour week (e.g., no overtime, holidays or weekend rates) and shall exclude any other form of compensation (e.g., no bonuses, stock options, profit-sharing or equity arrangements). The Direct Labor Rate shall not include any labor other than Consultant's employees, including, without limitation, Consultant's Contract Personnel.

**1.2 Overtime Pay.** Overtime Pay is an amount in addition to the Direct Labor Rate added to Consultant's labor charges for a nonexempt employee for Work performed under an Approved Service Order outside of the employee's regularly scheduled, forty-hour work week or on recognized holidays. Overtime Pay shall be in accordance with the general prevailing wage determination made by the Director of Industrial Relations for Northern California for Building/Construction Inspector and Field Soils and Material Tester, journey person classifications, as attached hereto as Exhibit B-1.

The Multiplier shall not be applied to Overtime Pay. For those employees who work hours subject to Overtime Pay, Overtime Pay shall be calculated in accordance with Exhibit B-1.

The Consultant may invoice the City for Overtime Pay only if the Consultant has obtained the Director's prior written consent to perform specific work in a manner that would require Overtime Pay. In addition to other required information, invoices shall set forth the date(s), start and end times and number and type of overtime hours worked for each employee for whom the Consultant is seeking Overtime Pay.

**1.3 Overhead Costs.** Consultant acknowledges and agrees that the Multiplier Compensation includes all of Consultant's overhead costs and expenses incurred in performing Work pursuant to this Master Agreement. The Multiplier is in lieu of itemized payments for fringe benefits, overhead expenses and associated project costs, including, without limitation:

- Fringe benefits, such as payroll taxes, holidays, vacation and sick time, health, life and accidental insurance, retirement plans, etc.
- Overhead or Indirect Costs, such as outside accounting and legal services, occupancy costs, depreciation costs, professional and general liability insurance, general management and administration, business taxes, etc.
- Associated project costs, such as costs to cover customary office costs, network infrastructure and information systems, CAD and computer usage, in-house reproducing services, including graphics and photocopying, printing, postage, overnight delivery, courier services, cell phone and data plan charges, etc.

**1.4 Profit.** Consultant acknowledges and agrees that the Multiplier Compensation includes all of Consultant's profit for performing Work pursuant to an Approved Service Order. City shall pay Consultant a profit equal to ten percent ( 10%) of direct labor and overhead cost approved by the City. In no event shall City be responsible for paying any amount pursuant to an Approved Service Order for which Consultant's profit would exceed the foregoing percentage.

**1.5 Rate and Cost Information.** The Direct Labor Rate shall be based on the most current audit of the Consultant's payroll and financial records. The Consultant's overhead costs shall be based on the Consultant's latest audited Federal Acquisition Regulation (FAR) Overhead Statement. If a current audit is not available for the Direct Labor Rate or FAR Overhead Statement, the Direct Labor Rate and/or overhead costs shall be based on information acceptable to the City. The City retains the right to conduct an audit of the Consultant's payroll at any time during the term of this Master Agreement. Unless otherwise required under applicable law, including, but not limited to, the California Public Records Act, the City shall not disclose Consultant's payroll information to third parties without Consultant's prior written consent.

**2. Reimbursable Expenses.** The City will pay for the following reimbursable expenses under this Master Agreement:

	<b>Reimbursable Expense</b>	<b>Markup</b>
1.	Specialty printing specifically requested by the City and printing associated with major deliverables that cannot be completed by Consultant in-house.	5%
2.	With the written pre-authorization of the City's project manager, mileage and other travel-related expenses to the same extent that the City reimburses its employees pursuant to the Employee Travel Policy (City Policy Manual, Sections 1.8.2 and 1.8.3). The Consultant acknowledges that it has received a copy of Sections 1.8.2 and 1.8.3 and is familiar with these sections of the Employee Travel Policy.	No Markup

The following expenses are not reimbursable and shall not be incorporated into any invoice amounts submitted to the City:

- Alcoholic Beverages;
  - Meals and incidentals for Consultant and subconsultant staff working from their home office location, not the San José-Santa Clara Regional Wastewater Facility; and
  - Entertainment.
3. **Contract Personnel.** Consultant shall be compensated for Contract Personnel costs in accordance with Subsection 10.4.4 of the Agreement.
  4. **Subconsultant Costs.** Consultant shall be compensated for subconsultant costs in accordance with Subsection 10.4.6 of the Agreement.
  5. **Accuracy of Information.** Consultant certifies that cost and pricing information used to calculate its compensation pursuant to this **Exhibit B** will be complete, current and accurate at the time of submission to the City.

**First**

**Amendment to Master Consultant Agreement – RWF Capital Projects**

**Second**

**Third**

Consultants Name: MNS Engineers, Inc.

**(CPMS Contract No. 8125-2)  
(Master Agreement AC No. 27747)**

This Amendment to the Master Agreement is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2018. The City and the Consultant amend the above-referenced agreement as set forth herein.

1. Capitalized words in this Amendment have the same meaning as in the Master Agreement.
2. The provisions of this Master Agreement (including any previous amendments) not modified by this Amendment remain in full force and effect.
3. The provisions of this Amendment are effective upon execution of the Amendment by both parties.

4.  **Agreement Term:** Section 2 is amended to extend the expiration date from \_\_\_\_\_ to \_\_\_\_\_.

5.  **Maximum Total Compensation:** Subsection 10.1 is amended to  Increase  Decrease the Maximum Total Compensation from \$\_\_\_\_\_ to \$\_\_\_\_\_.

6.  **Agreement Section(s):** Section(s) \_\_\_\_\_ is/are amended to read as set forth in Attachment A of the Amendment.

7.  **Basis of Compensation – Exhibit B:** The  original  First Revised  Second Revised Exhibit B is amended to read as set forth in the attached  First  Second  Third Revised Exhibit B, which is incorporated by reference into this Amendment.

**This Amendment is executed by the authorized representatives of the City and Consultant as follows:**

**City of San José**

**Consultant**

By \_\_\_\_\_

By \_\_\_\_\_

Name: Toni Taber  
Title: City Clerk

Date

Name: James A. Salvito  
Title: President and CEO

Date

**Approval as to Form (City Attorney):**

**Form Approved by the Office of the City Attorney.**

(The Maximum Total Compensation, as amended, is \$100,000 or less, and the provisions of the form are not altered.)

**Approved as to Form:**

By \_\_\_\_\_

Name:  
Title:

Date

\_\_\_\_\_  
Sr. Deputy City Attorney

Date

**First**

## **Revised Exhibit B: Basis of Compensation**

**Second**

(Capital Project)

**Third**

This revised Exhibit B is an attachment to the  First  Second  Third amendment to Master Agreement.

This First Revised Exhibit B, replaces the original Exhibit B, and any previous amendment to the original Exhibit B, in their entirety.

### **Exhibit B: Basis of Compensation**

The Consultant's compensation for services provided pursuant to an Approved Service Order shall be in accordance with Section 10 of the Agreement and this **Exhibit B**. Consultant shall be compensated for Work performed pursuant to an Approved Service Order based on the following categories only: (1) multiplier compensation; (2) reimbursable expenses; (3) Contract Personnel costs; and (4) subconsultant costs.

**1. Multiplier Compensation.** As compensation for all of Consultant's employee labor costs and expenses, overhead and profit for performing Work required by an Approved Service Order, the City will pay Consultant an amount equal to the Consultant's Direct Labor Rate (as defined below) multiplied by 2.74 ("Multiplier"), plus any applicable Overtime Pay (as defined below) (collectively, "Multiplier Compensation"). Except for other costs and expenses expressly set forth in this Master Agreement as being compensable, the Multiplier Compensation shall be the Consultant's only compensation for all Work performed pursuant to an Approved Service Order.

**1.1 Direct Labor Rate.** For purposes of calculating the Multiplier Compensation, the direct labor rate shall be the sum of the number of hours worked by each of Consultant's employees pursuant to an Approved Service Order multiplied by the respective hourly rates paid by Consultant to such employees ("Direct Labor Rate"). The Direct Labor Rate shall be based on a normal 8-hour day, 40-hour week (e.g., no overtime, holidays or weekend rates) and shall exclude any other form of compensation (e.g., no bonuses, stock options, profit-sharing or equity arrangements). The Direct Labor Rate shall not include any labor other than Consultant's employees, including, without limitation, Consultant's Contract Personnel.

**1.2 Overtime Pay.** Overtime Pay is an amount in addition to the Direct Labor Rate added to Consultant's labor charges for a nonexempt employee for Work performed under an Approved Service Order outside of the employee's regularly scheduled, forty-hour work week or on recognized holidays. Overtime Pay shall be in accordance with the general prevailing wage determination made by the Director of Industrial Relations for Northern California for Building/Construction Inspector and Field Soils and Material Tester, journey person classifications, as attached hereto as Exhibit B-1.



The Multiplier shall not be applied to Overtime Pay. For those employees who work hours subject to Overtime Pay, Overtime Pay shall be calculated in accordance with Exhibit B-1.

The Consultant may invoice the City for Overtime Pay only if the Consultant has obtained the Director's prior written consent to perform specific work in a manner that would require Overtime Pay. In addition to other required information, invoices shall set forth the date(s), start and end times and number and type of overtime hours worked for each employee for whom the Consultant is seeking Overtime Pay.


- 1.3 Overhead Costs.** Consultant acknowledges and agrees that the Multiplier Compensation includes all of Consultant's overhead costs and expenses incurred in performing Work pursuant to this Master Agreement. The Multiplier is in lieu of itemized payments for fringe benefits, overhead expenses and associated project costs, including, without limitation:
- Fringe benefits, such as payroll taxes, holidays, vacation and sick time, health, life and accidental insurance, retirement plans, etc.
  - Overhead or Indirect Costs, such as outside accounting and legal services, occupancy costs, depreciation costs, professional and general liability insurance, general management and administration, business taxes, etc.
  - Associated project costs, such as costs to cover customary office costs, network infrastructure and information systems, CAD and computer usage, in-house reproducing services, including graphics and photocopying, printing, postage, overnight delivery, courier services, cell phone and data plan charges, etc.
- 1.4 Profit.** Consultant acknowledges and agrees that the Multiplier Compensation includes all of Consultant's profit for performing Work pursuant to an Approved Service Order. City shall pay Consultant a profit equal to ten percent ( 10%) of direct labor and overhead cost approved by the City. In no event shall City be responsible for paying any amount pursuant to an Approved Service Order for which Consultant's profit would exceed the foregoing percentage.
- 1.5 Rate and Cost Information.** The Direct Labor Rate shall be based on the most current audit of the Consultant's payroll and financial records. The Consultant's overhead costs shall be based on the Consultant's latest audited Federal Acquisition Regulation (FAR) Overhead Statement. If a current audit is not available for the Direct Labor Rate or FAR Overhead Statement, the Direct Labor Rate and/or overhead costs shall be based on information acceptable to the City. The City retains the right to conduct an audit of the Consultant's payroll at any time during the term of this Master Agreement. Unless otherwise required under applicable law, including, but not limited to, the California Public Records Act, the City shall not disclose Consultant's payroll information to third parties without Consultant's prior written consent.
- 2. Reimbursable Expenses.** The City will pay for the following reimbursable expenses under this Master Agreement:

Reimbursable Expense		Markup
1.	Specialty printing specifically requested by the City and printing associated with major deliverables that cannot be completed by Consultant in-house.	5%
2.	With the written pre-authorization of the City's project manager, mileage and other travel-related expenses to the same extent that the City reimburses its employees pursuant to the Employee Travel Policy (City Policy Manual, Sections 1.8.2 and 1.8.3). The Consultant acknowledges that it has received a copy of Sections 1.8.2 and 1.8.3 and is familiar with these sections of the Employee Travel Policy.	No Markup

The following expenses are not reimbursable and shall not be incorporated into any invoice amounts submitted to the City:

- Alcoholic Beverages;
  - Meals and incidentals for Consultant and subconsultant staff working from their home office location, not the San José-Santa Clara Regional Wastewater Facility; and
  - Entertainment.
3. **Contract Personnel.** Consultant shall be compensated for Contract Personnel costs in accordance with Subsection 10.4.4 of the Agreement.
  4. **Subconsultant Costs.** Consultant shall be compensated for subconsultant costs in accordance with Subsection 10.4.6 of the Agreement.
  5. **Accuracy of Information.** Consultant certifies that cost and pricing information used to calculate its compensation pursuant to this **Exhibit B** will be complete, current and accurate at the time of submission to the City.

**CITY COUNCIL ACTION REQUEST**

<b>Department(s):</b> Finance	<b>CEQA:</b> Not a Project, File No. PP17-049, Agreements/Contracts (New or Amended) resulting in no physical changes to the environment.	<b>Coordination:</b> Environmental Services Department, City Attorney's Office, City Manager's Budget Office	<b>Dept. Approval:</b> /s/ Julia H. Cooper
<b>Council District(s):</b> Citywide			<b>CMO Approval:</b>  2-6-19

**SUBJECT: ACTIONS RELATED TO THE PURCHASE ORDER FOR DIGESTER DOME COATING REHABILITATION SERVICES**

**RECOMMENDATION:**

Adopt a resolution authorizing the City Manager to:

1. Execute a Purchase Order with National Coating & Lining Company (Murrieta, CA) for digester dome coating rehabilitation services for the Environmental Services Department at the San Jose-Santa Clara Regional Wastewater Facility for an initial twelve-month period, starting on or about April 1, 2019 and ending on or about March 31, 2020, for an amount not to exceed \$240,000; and
2. Exercise up to four one-year options to extend the term of the Purchase Order with the last option year ending on or about March 31, 2024, subject to the annual appropriation of funds.

**Desired Outcome:** Increase the life expectancy of the Regional Wastewater Facility digesters.

**BASIS FOR RECOMMENDATION:**

The City currently utilizes eight anaerobic mesophilic digesters in the solids processing area of the Regional Wastewater Facility (RWF). These tanks are used for anaerobic digestion to treat biodegradable waste and sewage sludge. The tanks are circular with floating covers producing methane gas. Sludge inside the digester is constantly recirculated, assisted by pumps and move through external heat exchangers to maintain a constant temperature of 98 degrees. This process produces hydrogen sulfide gas, which is extremely corrosive to metal. To protect the metal roof from corrosion and extend the useful life of the digesters, it is imperative the City contract for digester coating rehabilitation services, which includes abrasively blasting, recoating the interior metal parts and patching any small corrosion holes with epoxy metal patch.

A competitive Request for bid was facilitated by the Finance Department to procure these services. Five bids were submitted and no protests were received. Staff recommends award to National Coating & Lining Company, as the lowest responsive and responsible bidder pursuant to the formal bidding procedures of the San Jose Municipal Code, Section 4.12.310B.

Input from a Board or Commission: The Treatment Plant Advisory Committee is scheduled to consider this item on February 14, 2019.

This Council item is consistent with the City's 2018-2019 Adopted Budget City Areas Delivery Framework: "To provide environmental leadership through policy development, program design, and reliable utility services."

**COST AND FUNDING SOURCE:**

Fund #	Appn #	Appn. Name	Total Appn.	Amt. for Recommendation	2018-2019 Adopted Operating Budget Page	Last Budget Action (Date, Ord. No)
513	0762	NP/EQUIP-ENVIRONMENTAL SVCS	\$28,520,251	\$240,000	X-79	10/16/2018 30172

**FOR QUESTIONS CONTACT:** Jennifer Cheng, Deputy Director of Finance at 408-535-7059

January 18, 2019

TO: Treatment Plant Advisory Committee

SJ: Tributary Agencies Estimated Available Plant Capacity - 2018

The Master Agreements require that the Treatment Plant Advisory Committee file annually with the legislative bodies of San Jose, Santa Clara and member agencies a report on plant capacity. The attached report, Tributary Agencies Estimated Available Plant Capacity - 2018, has been prepared to satisfy this requirement and to identify each agency's 2018 plant capacity as well as estimated available (unused) capacity.

It is recommended that the Treatment Plant Advisory Committee approve the attached report.

Sincerely,



Kerrie Romanow  
Director  
Environmental Services Department

Attachment



**CITY OF SAN JOSE  
ENVIRONMENTAL SERVICES DEPARTMENT**

**SAN JOSE - SANTA CLARA REGIONAL WASTEWATER FACILITY  
TRIBUTARY AGENCIES' ESTIMATED AVAILABLE PLANT CAPACITY - 2018**

**January 2019**

**CITY OF SAN JOSE  
ENVIRONMENTAL SERVICES DEPARTMENT  
SAN JOSE - SANTA CLARA REGIONAL WASTEWATER FACILITY**

**TRIBUTARY AGENCIES' ESTIMATED AVAILABLE PLANT CAPACITY - 2018**

This analysis was prepared to comply with the terms of the Master Agreements which require that the operational capacity and productive use of the treatment plant be determined annually. Tables I through IV contain the Plant Capacity, the 2018 Peak Week (5-day average) Flow, and the Remaining Available Capacity for the entire plant and for each individual member for 2018.

**2018 PLANT CAPACITY**

The nominal capacity of the treatment plant during the 2018 peak week is 167 MGD. The agencies' capacity rights in the 167 MGD plant are shown on Tables I through IV and were determined in accordance with the provisions of the Master Agreements.

**2018 PEAK WEEK FLOW (1)**

The 2018 peak dry weather flow of 110.30 MGD occurred during the week of June 4 - 8. Tables I through IV contain the agencies' flow and loadings for the 2018 peak week which were obtained from the following sources:

- WEST VALLEY SANITATION DISTRICT - Wastewater Flow Report dated 7/31/18, submitted by the District.
- CUPERTINO SANITARY DISTRICT - Metered Flow Reports dated 11/13/18, submitted by the District.
- CITY OF MILPITAS - Metered Flow Reports dated 11/19/18, submitted by the City
- COUNTY SANITATION DISTRICT 2-3 - 2018-2019 Revenue Program.
- BURBANK SANITARY DISTRICT - 2018-2019 Revenue Program.
- CITY of SAN JOSE and CITY of SANTA CLARA - The 2018 Peak Week flow and loadings remaining after subtracting the other agencies' reported flows and loadings are attributed to San Jose and Santa Clara as joint owners of the facilities. These were allocated, in accordance with the 1959 Agreement, to the two cities based on current assessed valuation ratios of 80.675% for San Jose and 19.325% for Santa Clara.

**2018 ESTIMATED AVAILABLE CAPACITY**

The Agencies' peak week flows and loadings were subtracted from their capacities in the 167 MGD plant to obtain their 2018 available capacities.

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*(1) Past reporting has been based on different sources of information between the agencies. A new policy will be put in place that will standardize the source of information and methodology for future reporting purposes to comply with the Master Agreement requirement to report actual discharge.*

TABLE I

**CITY OF SAN JOSE  
ENVIRONMENTAL SERVICES DEPARTMENT  
SAN JOSE - SANTA CLARA REGIONAL WASTEWATER FACILITY  
TRIBUTARY AGENCIES' ESTIMATED AVAILABLE PLANT CAPACITY - 2018**

**FLOW**

Agency		2018 Plant Capacity MGD	2018 Peak Week Flow MGD	Estimated Available Capacity MGD (*)
San Jose	80.675%	106.344	70.759	35.585
Santa Clara	19.325%	25.474	16.950	8.524
Subtotal	100.000%	131.818	87.709	44.109
West Valley Sanitation District	(1) (3)	11.697	9.622	2.075
Cupertino Sanitary District	(4)	7.850	4.396	3.454
City of Milpitas	(3) (4)	14.250	7.350	6.900
County Sanitation District 2-3	(2)	0.985	0.985	0.000
Burbank Sanitary District		0.400	0.238	0.162
Subtotal		35.182	22.591	12.591
<b>Total</b>		<b>167.000</b>	<b>110.300</b>	<b>56.700</b>

(1) Reflects transfer of capacity from West Valley Sanitation District to San Jose/Santa Clara resulting from annexations as of June 2018.

(2) In January 1985, County Sanitation District 2-3 entered into an agreement with the Cities of San Jose and Santa Clara, as joint owners of the plant, electing not to participate in a fixed capacity. Capacity is determined annually in accordance with the methods and restrictions prescribed in the agreement.

(3) Reflects transfer of capacity from West Valley Sanitation District to Milpitas in July 2006.

(4) Reflects transfer of capacity from Cupertino to Milpitas in January 2009.

(\*) Past reporting has been based on different sources of information between the agencies. A new policy will be put in place that will standardize the source of information and methodology for future reporting purposes to comply with the Master Agreement requirement to report actual discharge.

TABLE II

**CITY OF SAN JOSE  
ENVIRONMENTAL SERVICES DEPARTMENT  
SAN JOSE - SANTA CLARA REGIONAL WASTEWATER FACILITY  
TRIBUTARY AGENCIES' ESTIMATED AVAILABLE PLANT CAPACITY - 2018**

**BOD**

Agency	2018 Plant Capacity KLBS/D	2018 Peak Week Flow KLBS/D	Estimated Available Capacity KLBS/D (*)	
San Jose	80.675%	375.848	245.026	130.822
Santa Clara	19.325%	90.031	58.694	31.337
Subtotal	100.000%	465.879	303.720	162.159
West Valley Sanitation District (1) (3)		28.611	20.868	7.743
Cupertino Sanitary District (4)		16.419	12.625	3.794
City of Milpitas (3) (4)		27.249	18.504	8.745
County Sanitation District 2-3 (2)		2.027	2.027	.000
Burbank Sanitary District		.815	.486	.329
Subtotal		75.121	54.510	20.611
<b>Total</b>		<b>541.000</b>	<b>358.230</b>	<b>182.770</b>

- (1) Reflects transfer of capacity from West Valley Sanitation District to San Jose/Santa Clara resulting from annexations as of June 2018.
- (2) In January 1985, County Sanitation District 2-3 entered into an agreement with the Cities of San Jose and Santa Clara, as joint owners of the plant, electing not to participate in a fixed capacity. Capacity is determined annually in accordance with the methods and restrictions prescribed in the agreement.
- (3) Reflects transfer of capacity from West Valley Sanitation District to Milpitas in July 2006.
- (4) Reflects transfer of capacity from Cupertino to Milpitas in January 2009.

(\*) Past reporting has been based on different sources of information between the agencies. A new policy will be put in place that will standardize the source of information and methodology for future reporting purposes to comply with the Master Agreement requirement to report actual discharge.



**TABLE III**  
**CITY OF SAN JOSE**  
**ENVIRONMENTAL SERVICES DEPARTMENT**  
**SAN JOSE - SANTA CLARA REGIONAL WASTEWATER FACILITY**  
**TRIBUTARY AGENCIES' ESTIMATED AVAILABLE PLANT CAPACITY - 2018**  
**SUSPENDED SOLIDS**

Agency		2018 Plant Capacity KLBS/D	2018 Peak Week Flow KLBS/D	Estimated Available Capacity KLBS/D (*)
San Jose	80.675%	333.735	213.151	120.584
Santa Clara	19.325%	79.943	51.058	28.885
Subtotal	100.000%	413.678	264.209	149.469
West Valley Sanitation District	(1) (3)	27.173	18.563	8.610
Cupertino Sanitary District	(4)	16.299	9.607	6.692
City of Milpitas	(3) (4)	25.990	13.646	12.344
County Sanitation District 2-3	(2)	2.007	2.007	.000
Burbank Sanitary District		.853	.478	.375
Subtotal		72.322	44.301	28.021
<b>Total</b>		<b>486.000</b>	<b>308.510</b>	<b>177.490</b>

- (1) Reflects transfer of capacity from West Valley Sanitation District to San Jose/Santa Clara resulting from annexations as of June 2018.
- (2) In January 1985, County Sanitation District 2-3 entered into an agreement with the Cities of San Jose and Santa Clara, as joint owners of the plant, electing not to participate in a fixed capacity. Capacity is determined annually in accordance with the methods and restrictions prescribed in the agreement.
- (3) Reflects transfer of capacity from West Valley Sanitation District to Milpitas in July 2006.
- (4) Reflects transfer of capacity from Cupertino to Milpitas in January 2009.

(\*) Past reporting has been based on different sources of information between the agencies. A new policy will be put in place that will standardize the source of information and methodology for future reporting purposes to comply with the Master Agreement requirement to report actual discharge.



TABLE IV

**CITY OF SAN JOSE  
ENVIRONMENTAL SERVICES DEPARTMENT  
SAN JOSE - SANTA CLARA REGIONAL WASTEWATER FACILITY  
TRIBUTARY AGENCIES' ESTIMATED AVAILABLE PLANT CAPACITY - 2018**

**AMMONIA**

Agency		2018 Plant Capacity KLBS/D	2018 Peak Week Flow KLBS/D	Estimated Available Capacity KLBS/D (*)
San Jose	80.675%	33.139	27.413	5.726
Santa Clara	19.325%	7.938	6.566	1.372
Subtotal	100.000%	41.077	33.979	7.098
West Valley Sanitation District	(1) (3)	2.825	2.407	.418
Cupertino Sanitary District	(4)	2.287	1.061	1.226
City of Milpitas	(3) (4)	2.847	1.620	1.227
County Sanitation District 2-3	(2)	.267	.267	.000
Burbank Sanitary District		.297	.066	.231
Subtotal		8.523	5.421	3.102
<b>Total</b>		<b>49.600</b>	<b>39.400</b>	<b>10.200</b>

(1) Reflects transfer of capacity from West Valley Sanitation District to San Jose/Santa Clara resulting from annexations as of June 2018.

(2) In January 1985, County Sanitation District 2-3 entered into an agreement with the Cities of San Jose and Santa Clara, as joint owners of the plant, electing not to participate in a fixed capacity. Capacity is determined annually in accordance with the methods and restrictions prescribed in the agreement.

(3) Reflects transfer of capacity from West Valley Sanitation District to Milpitas in July 2006.

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(\*) Past reporting has been based on different sources of information between the agencies. A new policy will be put in place that will standardize the source of information and methodology for future reporting purposes to comply with the Master Agreement requirement to report actual discharge.

