

SAN JOSÉ/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

CHUCK REED, CHAIR
JOSE ESTEVES, MEMBER
PAT KOLSTAD, MEMBER
JAMIE MATTHEWS, MEMBER
MADISON NGUYEN, MEMBER

CHUCK PAGE, MEMBER
JOHN GATTO, MEMBER
JENNIFER MAGUIRE, MEMBER
KANSEN CHU, MEMBER

AGENDA/TPAC

4:30 p.m.

February 13, 2014

Room 1734

1. **ROLL CALL**

2. **APPROVAL OF MINUTES**

A. December 12, 2013

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

4. **DIRECTOR'S REPORT** (verbal)

A. **Directors Verbal Report**

5. **AGREEMENTS/ACTION ITEMS**

A. **Master Agreement for O&M Engineering Service for Facility**

Staff Recommendation:

1. Approval of consultant Master Service Agreement with HydroScience Engineers, Incorporated for engineering support and services for the San José/Santa Clara Regional Wastewater Facility for various Operation and Maintenance (O&M) projects requiring engineering support and services on as needed basis for a period of one year from the date of execution for an amount not to exceed \$500,000, and up to three one-year options.
2. Adoption of a resolution authorizing the City Manager to exercise up to three one-year options to extend the term of the agreement for an amount not to exceed \$500,000 for each option term, and a total amount not to exceed \$2,000,000 for the initial term and all options, subject to the annual appropriation of funds.

The Master Agreement for O&M Engineering Service for Facility is scheduled for Council consideration on February 25, 2014.

B. Regional Wastewater Facility Program Start Up and Validation Efforts

Staff Recommendation: Accept this report on the progress of the Program Management start-up and validation efforts of the San José-Santa Clara Regional Wastewater Facility CIP Program.

The Regional Wastewater Facility Program Start Up and Validation Efforts is scheduled for Council consideration on February 25, 2014.

6. OTHER BUSINESS/CORRESPONDENCE

7. STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC

A. Second Amendment to Agreement with ESA and J&S Joint Venture

Approve the Second Amendment to the Agreement Between the City of San José and Environmental Science Associates, Inc. and Jones & Stokes Associates, Inc. doing business as ESA + J&S Joint Venture for California Environmental Quality Act support and other regulatory compliance services to amend the scope of services, and to increase the maximum compensation by \$179,672, for a not to exceed amount \$2,633,589 through the term of the contract ending June 30, 2014.

The Second Amendment to Agreement with ESA and J&S Joint Venture was approved by Council on December 17, 2013.

B. Regional Wastewater Facility Staffing

Accept this status report on the staffing situation at the San Jose-Santa Clara Regional Wastewater Facility.

The Regional Wastewater Facility Staffing was approved by Council on December 17, 2013.

C. South Bay Water Recycling Update on Strategic Planning Effort

Accept the progress report highlighting activities on the South Bay Water Recycling master planning activities.

The South Bay Water Recycling Update on Strategic Planning Effort was approved by Council on December 17, 2013.

D. First Amendment to Citywide Security Guard Services Agreements

Adopt a resolution to authorize the City Manager to execute the First Amendment to the Citywide Security Guard Services Agreements with First Alarm Security & Patrol Services (San Jose, CA) and National Security Industries * Services (San

Jose, CA), to require each vendor to pay employees paid on an hourly rate consistent with the paid time off requirement pursuant to the City's Living Wage Policy 3-3 as amended on June 4, 2013.

The First Amendment to Citywide Security Guard Services Agreements was approved by Council on December 17, 2013.

- E. Execute a Purchase Order with Jeffco Painting and Coating, Inc.
- (a) Execute a Purchase Order with Jeffco Painting and Coating, Inc. (Vallejo, CA) for sandblasting and painting services at the San Jose-Santa Clara Regional Wastewater Facility (Wastewater Facility) for the period December 17, 2013 through December 16, 2014, with total compensation not to exceed \$400,000; and
 - (b) Exercise four additional one-year options to renew the Purchase Order, subject to the appropriation of funds.

The First Amendment to Citywide Security Guard Services Agreements was approved by Council on December 17, 2013.

8. **REPORTS**

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

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

9. **MISCELLANEOUS**

- A. The next TPAC meeting is March 13, 2014, at 4:30 p.m. City Hall, City Manager's Office, 17th Floor, Room 1734.

10. **OPEN FORUM**

11. **ADJOURNMENT**

NOTE: If you have any changes or questions, please contact Jennifer Hade, Environmental Services, 408-975-2515.

To request an accommodation or alternative format for City-sponsored meetings, events or printed materials, please call Jennifer Hade at (408) 975-2515 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, 10th Floor, Environmental Services at the same time that the public records are distributed or made available to the legislative body. .

**MINUTES OF THE
SAN JOSE/SANTA CLARA
TREATMENT PLANT ADVISORY COMMITTEE**
City Hall, City Manager's Office, 17th Floor, Room 1734
Thursday, December 12, 2013 at 4:30 p.m.

1. ROLL CALL

Minutes of the Treatment Plant Advisory Committee convened this date at 4:37 p.m. Roll call was then taken, with the following members in attendance:

Committee members: Jose Esteves, John Gatto, Nanci Klein (for Ed Shikada), Pat Kolstad, Jamie Matthews, Chuck Page,

Absent: Committee Chair Chuck Reed, Committee member Madison Nguyen

Motion by Committee Member Kolstad, second by Committee Member Gatto to appoint Committee Member Matthews as Chair Pro-tem for the December 12, 2013 TPAC meeting. The motion was approved unanimously.

2. APPROVAL OF MINUTES

- A. **November 14, 2013**
Item 2.A was approved.

3. UNFINISHED BUSINESS/REQUEST FOR DEFERRALS

4. DIRECTORS REPORT

- A. **Directors Verbal Report:**
Kerrie Romanow, Director, Environmental Services requested the TPAC meeting of January 9, 2014 be cancelled. Additionally, she requested that the May 8, 2014 meeting be rescheduled to May 15, 2014.

Motion by Committee Member Gatto, second by Committee Member Page to approve the cancellation and the date change. The cancellation and the date change were approved unanimously.

5. AGREEMENTS/ACTION ITEMS

- A. **Second Amendment to Agreement with ESA and J&S Joint Venture**

Staff Recommendation: Approve the Second Amendment to the Agreement Between the City of San José and Environmental Science Associates, Inc. and Jones & Stokes

Associates, Inc. doing business as ESA + J&S Joint Venture for California Environmental Quality Act support and other regulatory compliance services to amend the scope of services, and to increase the maximum compensation by \$179,672, for a not to exceed amount \$2,633,589 through the term of the contract ending June 30, 2014.

The Second Amendment to Agreement with ESA and J&S Joint Venture is scheduled for Council consideration on December 17, 2013.

David Wall, Public spoke on this item.

Motion by Committee Member Kolstad, second by Committee Member Klein to approve item 5.A. Item 5.A. was approved unanimously.

B. Regional Wastewater Facility Staffing

Staff Recommendation: Accept this status report on the staffing situation at the San Jose-Santa Clara Regional Wastewater Facility.

The Regional Wastewater Facility Staffing is scheduled for Council consideration on December 17, 2013.

Kerrie Romanow gave a brief presentation.

Motion by Committee Member Gatto, second by Committee Member Page to approve item 5.B. Item 5.B. was approved unanimously.

C. South Bay Water Recycling Update on Strategic Planning Effort

Staff Recommendation: Accept the progress report highlighting activities on the South Bay Water Recycling master planning activities.

The South Bay Water Recycling Update on Strategic Planning Effort is scheduled for Council consideration on December 17, 2013.

David Wall, Public spoke on this item.

Motion by Committee Member Page, second by Committee Member Klein to approve item 5.C. Item 5.C. was approved unanimously.

D. First Amendment to Citywide Security Guard Services Agreements

Staff Recommendation: Adopt a resolution to authorize the City Manager to execute the First Amendment to the Citywide Security Guard Services Agreements with First Alarm Security & Patrol Services (San Jose, CA) and National Security Industries * Services (San Jose, CA), to require each vendor to pay employees paid on an hourly

rate consistent with the paid time off requirement pursuant to the City's Living Wage Policy 3-3 as amended on June 4, 2013.

The First Amendment to Citywide Security Guard Services Agreements is scheduled for Council consideration on December 17, 2013.

David Wall, Public spoke on this item.

Motion by Committee Member Page, second by Committee Member Gatto to approve item 5.D. Item 5.D. was approved unanimously.

E. Execute a Purchase Order with Jeffco Painting and Coating, Inc.

Staff Recommendation:

- (a) Execute a Purchase Order with Jeffco Painting and Coating, Inc. (Vallejo, CA) for sandblasting and painting services at the San Jose-Santa Clara Regional Wastewater Facility (Wastewater Facility) for the period December 17, 2013 through December 16, 2014, with total compensation not to exceed \$400,000; and
- (b) Exercise four additional one-year options to renew the Purchase Order, subject to the appropriation of funds.

The First Amendment to Citywide Security Guard Services Agreements is scheduled for Council consideration on December 17, 2013.

Committee Member Page asked if Jeffco Painting could provide training services.

Joanna De Sa responded that staff would look into it.

Motion by Committee Member Klein, second by Committee Member Page to approve item 5.E. Item 5.E. was approved unanimously.

6. OTHER BUSINESS/CORRESPONDENCE

7. STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC

A. Plant Master Plan EIR

Recommend to the City Council adoption of the draft Plant Master Plan for the San José-Santa Clara Regional Wastewater Facility with modifications to the Land Use Component consistent with staff recommendations.

The Plant Master Plan EIR was approved by Council on November 19, 2013

B. Update on Financing and Alternative Project Delivery Options for Facility CIP Projects

Accept this report on Financing and Alternative Project Delivery Options for San José-Santa Clara Regional Wastewater Facility CIP Projects.

The Update on Financing and Alternative Project Delivery Options for Facility CIP Projects was approved by Council on November 19, 2013

C. Confined Space Rescue Services

Authorize the City Manager to:

1. Execute an Open Purchase Order with Capstone Fire Management Systems, Inc. (San Diego, CA) for confined space rescue and emergency services at the San Jose-Santa Clara Regional Wastewater Facility ("Plant") for the period of November 22, 2013 through November 21, 2014, in an amount not-to-exceed \$400,000.00; and
2. Exercise four additional one-year options to renew the Purchase Order, subject to the annual appropriation of funds.

The Confined Space Rescue Services report was approved by Council on November 19, 2013

Items 7 A-C were approved to note and file.

8. REPORTS

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

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

B. Tributary Agencies Available Plant Capacity - 2013

Item 8.A and 8.B were approved to note and file.

9. MISCELLANEOUS

The next TPAC meeting is February 13, 2014, at 4:30 p.m. City Hall, City Manager's Office, 17th Floor, Room 1734.

10. **PUBLIC COMMENT**

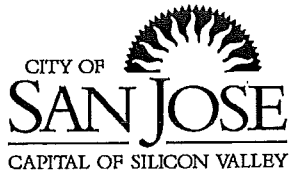
David Wall, Public spoke on public art for capital improvement programs.

11. **ADJOURNMENT**

A. The Treatment Plant Advisory Committee adjourned at 5:17 p.m.

Chuck Reed, Chair
Treatment Plant Advisory Committee

DRAFT



COUNCIL AGENDA: 2/25/14

ITEM: 5A

Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Kerrie Romanow

SUBJECT: SEE BELOW

DATE: January 7, 2014

Approved

Date

2/1/14

SUBJECT: MASTER SERVICE AGREEMENT WITH HYDROSCIENCE ENGINEERS, INCORPORATED FOR ENGINEERING CONSULTING SERVICES FOR THE SAN JOSÉ/SANTA CLARA REGIONAL WASTEWATER FACILITY

RECOMMENDATION

1. Approval of consultant Master Service Agreement with HydroScience Engineers, Incorporated for engineering support and services for the San José/Santa Clara Regional Wastewater Facility for various Operation and Maintenance (O&M) projects requiring engineering support and services on as needed basis for a period of one year from the date of execution for an amount not to exceed \$500,000, and up to three one-year options.
2. Adoption of a resolution authorizing the City Manager to exercise up to three one-year options to extend the term of the agreement for an amount not to exceed \$500,000 for each option term, and a total amount not to exceed \$2,000,000 for the initial term and all options, subject to the annual appropriation of funds.

OUTCOME

Approval of a Master Service Agreement (MSA) with HydroScience Engineers, Inc. to provide engineering services for implementation of various O&M projects at the San José/Santa Clara Regional Wastewater Facility, on an as-needed basis.

January 7, 2014

Subject: Master Service Agreement With Hydroscience Engineers, Inc.

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BACKGROUND

The San José/Santa Clara Regional Wastewater Facility (Wastewater Facility)¹, is an advanced wastewater treatment facility with an average dry weather flow design capacity of 167 million gallons per day (mgd) and a peak wet weather flow design capacity of 271 mgd. The current average annual flow at the Facility is 125 mgd and the average dry weather flow is 114 mgd. Approximately 10% of the treated effluent is re-used for irrigation, agricultural use, and industrial sector consumption, through the South Bay Water Recycling Program (SBWR).

The City of San José's Environmental Services Department (ESD) is in the process of implementing the Wastewater Facility's Master Plan (MP) for intermediate and long term improvements. The Capital Improvement Program (CIP) Division of ESD will implement many complex projects required for the Facility due to aging infrastructure and future regulations. The MP also serves as a tool to identify and prioritize future projects for upgrades and replacements.

While the CIP projects are underway, there are numerous structures, utilities, equipment, systems, and unit operations associated with the operation of the Facility that need to be maintained for functional use.

The O&M projects are predominantly process related and routine. The majority of O&M engineering support will be focused on the replacement and maintenance of existing aging equipment such as pumps, motors, valves, pipes etc., as well as equipment repair due to unexpected failure. In the past, the budget for engaging external resources for engineering support and implementation of O&M projects was combined with the CIP. Over the last year, ESD has reorganized RWF engineering support to better facilitate the design and delivery of the large scale CIP. This restructuring included separating CIP projects from O&M projects to ensure both the short and long term infrastructure needs of the facility are positioned to be completed. In order to add engineering support to the O&M group, the 2013-2014 Adopted Budget included the addition of one (1) associate engineer position to manage O&M projects. This position is currently filled and supervised by a senior engineer. In addition, an annual budget of \$500,000 for professional services was moved from the CIP to the O&M to fund external support such as this contract. The MSA with HydroScience Engineers, Inc. will allow O&M engineering staff to obtain the engineering support needed to complete the O&M related projects while other MP and CIP projects move in parallel.

ANALYSIS

A consultant selection process was initiated in July 2013 with a Request for Qualifications (RFQ) for Engineering Services. Proposals from seven firms were received, of which the top three firms were selected for interviews. The selection criteria were based on the following:

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

- Qualifications of the firm and expertise of the lead personnel (30%)
- Service Approach (30%)
- Examples of Applicable and Exemplary Projects (30%)
- Classification as local/small firm per Council policy (10%)

The top three firms below were interviewed on November 4, 2013, by staff from various sections within the Facility. A combination of the written submittal and the interview scores were used to rank the firms. The evaluation panel rated HydroScience Engineers, Inc. as the most qualified to provide engineering services, based on the qualifications presented in their Statement of Qualifications and final interview score.

1. HydroScience Engineers, Inc.
2. HDR Engineering, Inc.
3. AECOM Technical Services, Inc.

The RFQ process encourages local consultant participation by awarding additional points to local firms, as identified by Council policy. The selected firm qualified as having a local office in San José. A notice of intention to award the contract was issued on November 6, 2013, and no protests were filed by any of the other firms.

Scope of Work

The scope of services under the MSA will involve a variety of activities that include engineering studies, conceptual design, preparation of construction bid documents, construction management support and O&M manual preparation for newly constructed or rehabilitated facilities. Specific service orders will be issued to implement projects related to equipment replacement, infrastructure rehabilitation, and electrical and electronic communication improvements. The current and future projects include but are not limited to the following:

- Prepare contract and/or bid documents for replacement of various antiquated equipment such as pumps, motors, valves, gearboxes, actuators, pipes, etc. facility wide.
- Prepare record drawings for various O&M projects
- Primary sludge pump improvements
- Outfall sensors communication upgrade
- Evaluation of the floor draining system at the tunnels near sludge processing areas
- Facility wide replacement of piping supports and joints for various types of pipes
- Facility wide hydraulics assessment and modeling using software applications
- Repairs to digester sludge piping systems
- Primary wash down water piping replacement
- Paint shop expansion for additional storage and workspace
- Various electrical and instrumentation improvements and repair projects
- Outfall bridge condition assessment
- Facility wide condition assessment of various overhead cranes inside building

- Secondary mixed liquor channel - design crane pad areas for crane outriggers
- Vibration report evaluation for various pumps facility wide

Prior to scope development for the projects and issuing any service orders to the consultant, project manager(s) assigned to each individual project and the CIP program management team participates in coordination meetings. The purpose of the meetings is to ensure availability of the needed resources and to avoid duplication of efforts and projects.

Contract Management and Oversight

Staff will negotiate costs with the consultant on individual project proposals, on a flat fee, or not to exceed time and materials basis. Staff will also determine the award of individual service orders based on their overall expertise, total cost, and availability of the required expert personnel on the consultant's team. The Consultant will provide monthly status reports that will be discussed with ESD management. Performance of the Consultant on each service order will be evaluated after each project is completed and prior to the issuance of the next service order.

EVALUATION AND FOLLOW-UP

No additional follow up action with Council is expected at this time

POLICY ALTERNATIVES

Alternative #1: An alternative approach to accomplish this effort would be for all work to be performed by City staff in lieu of the proposed partnership effort with outside professional engineering consulting firms.

Pros: The work would be done by City staff.

Cons: In-house staff does not possess the capacity or all of the required technical capability and specialized equipment across the broad range of expertise anticipated for the wide array of O&M-related projects. A significant amount of the anticipated work will require engineering oversight in various technical specialties.

Reason for not recommending: The City would need to hire additional staff with the knowledge, expertise, and/or certification in a variety of engineering areas. Specialized equipment would need to be obtained or leased to perform these duties and staff would need to be trained and certified to use of the equipment. Furthermore, with an extensive CIP program underway at the Wastewater Facility, there will already be an increased need engineering design and construction services and existing staff will not be able to meet the demand.

Alternative #2: An alternative approach to accomplish this effort would be to perform a separate RFP process for each of the projects described in the background and scope of work sections of this memo.

Pros: The RFP selection process would focus on the specific needs of each project instead of the broader scope of work specified in the recent RFQ.

Cons: The RFP selection process typically takes six months or more to complete and involves a large amount of staff work to develop a specific project scope, solicit responses, interview consultants, negotiate contracts, and obtain Council approval if needed. The majority of the O&M projects require a more timely response due to the critical nature of various unit operations and processes at the Facility. By having consultants assigned to a specific project, there will be significant delays in completing the aforementioned O&M projects.

Reason for not recommending: This approach will limit the City's flexibility and response time for handling the O&M projects, possibly leading to equipment and process failures critical to safe and sound operation of the Facility.

PUBLIC OUTREACH/INTEREST

- Criteria 1: Requires Council action on the use of public funds equal to \$1,000,000 or greater.
(Required: Website Posting)
- Criteria 2: Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criteria 3: Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

This memorandum will be posted on the City's website for the February 25, 2014 Council agenda. Also, a Request for Qualifications was advertised on the City's Internet Bid Line.

COORDINATION

The memorandum has been coordinated with the Environmental Services Department, the City Manager's Budget Office, and the City Attorney's Office. This item is scheduled to be heard at the February 13, 2014 Treatment Plant Advisory Committee (TPAC) meeting.

FISCAL/POLICY ALIGNMENT

This project is consistent with the following General Budget Principles "We must focus on protecting our vital core city services for both the short and long-term".

HONORABLE MAYOR AND CITY COUNCIL

January 7, 2014

Subject: Master Service Agreement With Hydrosience Engineers, Inc.

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COST SUMMARY/IMPLICATIONS

Funding for service orders issued under the MSA will be made available from the San José/Santa Clara Treatment Plant Operations & Maintenance Funds (Fund 513). Funds will be encumbered as needed from various project appropriations when service orders are developed, but will not exceed \$500,000 per contract, per fiscal year for a four year total not to exceed \$2,000,000. All encumbrances will be subject to the appropriation of funds.

BUDGET REFERENCE

Fund #	Appn #	Appn. Name	RC #	Total Appn.	Amt. for Contract	2013-2014 Adopted Operating Budget Page	Last Budget Action (Date, Ord. No.)
513	0762	NP/Equip	921	\$28,567,518	\$500,000	XI-85	6/18/2013, 29271

CEQA

Not a Project, File No. PP10-066(a), Agreements and Contracts for purchase of professional services.

/s/

KERRIE ROMANOW

Director, Environmental Services

For questions please contact Amit Mutsuddy, Wastewater Facility Maintenance Division Manager, at(408) 635-2007.

January 17, 2014

Subject: RWF Program Management Start-Up and Validation Efforts

Page 2

The 2014-2018 Adopted Capital Improvement Program (CIP) includes more than \$725 million in funding for capital improvements at the Wastewater Facility. Management of the Wastewater Facility CIP is led by the Environmental Services Department (ESD), in partnership with the Department of Public Works (DPW). On September 24, 2013, the City Council approved a consultant agreement with MWH Americas, to assist and support ESD and DPW staff in developing and implementing a project delivery program (CIP Program). On October 15, 2013 MWH program team members mobilized and are now co-located with City staff in the Program Management Office (PMO), in the Environmental Services Building of the Wastewater Facility.

The purpose of this memorandum is to summarize the initial efforts of the joint Program team to establish the tools, processes and structure necessary to deliver a CIP of unprecedented size at the Facility.

ANALYSIS

Progress to Date

Significant progress has been made on moving the CIP program forward. As discussed above, the PMP EIR has been certified, and the PMP itself has been adopted by the Cities of San José and Santa Clara. The members of the PMO have made substantial progress setting up the program, with efforts falling into three major areas:

- **Preparation of the Program Execution Plan (PEP):** The PEP outlines the major elements of Program implementation. The content of the PEP describes the steps, processes, procedures, systems and tools for management of the Program. Once completed, the PEP will serve as a “user’s manual” for current and new Program team members.
- **Set-up of Program Systems, Tools and Processes:** The Program team must be supported by a robust set of systems, tools, and processes in order to meet the challenge ahead. The second major area of start-up activities is to put in place the program systems, tools, and processes described in the PEP. During the start-up phase, the Program team is supported by experienced MWH program controls staff to develop these tools. These tools will be used for Program controls, reporting, document management, communication and collaboration. Development of these tools is currently being defined and implemented, and will be in place by March 2014.
- **Validation of CIP Projects:** The third major component of start-up is project validation. The purpose of the project validation effort is to critically evaluate the CIP project list and develop a revised 5-Year CIP and 10-Year CIP for Program implementation. The Program team has conducted approximately 20 workshops at the time of this writing, and will conduct a total of approximately 35 workshops with City staff where these projects will be individually reviewed and evaluated to confirm their relevance. A gap analysis

was also performed to identify important projects not included in the Wastewater Facility CIP project list. Projects selected for inclusion in the 5-Year CIP and 10-Year CIP were bundled into construction packages for the purpose of gaining efficiencies and/or cost savings and prioritized by City staff. Cost estimates were then developed for each package within the 10-year planning horizon. Currently, these construction packages are being sequenced to develop an overall cost-loaded schedule. City staff will also make recommendations with respect to a preferred delivery approach (e.g., design-bid-build, design-build).

A detailed description of these start-up efforts is contained in Attachment A.

Major Areas of Focus

As the CIP program plays out, several areas are receiving particular attention:

- **Biosolids Transition:** The biosolids transition efforts continue to focus on eliminating discharge of biosolids to the lagoons by 2018. The CIP program is developing details of the facilities needed for this transition, assessing the specific ability of the Newby Island Landfill to accept biosolids produced by the new facilities, and beginning to research the market for biosolids reuse/disposal in the region.
- **Biosolids Facility Siting:** The PMP identified a site for the new biosolids treatment facilities on the north edge of the main plant facilities. However, the EIR identified sensitive wildlife habitat in that location. Getting environmental clearance to build facilities in that location could cause significant delay, and the Program team is now looking at alternative locations for the biosolids facilities.
- **Delivery Methods:** To date, the CIP program has focused on using design-bid-build methods for projects which lie within the main treatment process part of the Wastewater Facility ("within the fence") and are generally repair and rehabilitation projects. These projects have been collectively referred to as "Package 1" projects. The program also intends to utilize alternative delivery methods (e.g., design-build) for "Package 2" projects which lie "outside the fence" (e.g., biosolids transition, cogeneration). As details of the CIP projects become clearer through the validation process, the Program team is also considering whether alternative delivery methods might have some applicability within the fence. In addition, the Program team is further investigating the authority of the City to use additional project delivery methods that could prove advantageous throughout the life of the Program.
- **Financing:** The general concept to date on financing the CIP program has been to finance the Package 2 projects, and pay for Package 1 projects with existing funds. Of late, several TAC and TPAC members have raised the question of whether any project that will provide benefit for 30 years or greater could be considered for external

financing. In December 2013 ESD and Program team leaders met with finance managers from the Cities of San José and Santa Clara and the tributary agencies to discuss financing needs, and discussions are ongoing on this topic. Recommendations for external financing, if needed, will be brought forward as part of the FY 14-15 budget.

Next Steps

The initial results of the validation effort will be brought forward in February 2014 to feed into the City's CIP budgeting process. That information will also feed into program financing discussions, which will continue into the spring.

The majority of the program start-up efforts will conclude in the March/April timeframe, and the Program team will shift into an increasing level of project delivery. The Program team will be preparing a detailed analysis of the resources needed to implement the CIP, based on the final approved CIP schedule coming out of validation. The resources analyzed will include project management, construction management, and administrative staff (including cost and schedule control staff). Additional staff may need to be added to the existing Program team (potentially City and/or consultant staff), based on this analysis.

During the start-up efforts, it has become apparent that, while the PMP provides a good overall planning document, the CIP program would benefit from additional guidance documents focusing on specific technical areas to inform the efforts coming up. Therefore, the Program team will be implementing additional planning efforts in focused areas, such as automation, odor control, and long-term biosolids management.

EVALUATION AND FOLLOW-UP

Staff will continue to provide regular updates to T&E, TPAC and Council to inform them of significant progress, changes or issues, particularly as related to rate impacts, as the program implementation progresses. The next semi-annual Wastewater Facility CIP report will be presented to the T&E Committee in April.

PUBLIC OUTREACH/INTEREST

- Criterion 1:** Requires Council action on the use of public funds equal to \$1,000,000 or greater. **(Required: Website Posting)**

- Criterion 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**

TRANSPORTATION AND ENVIRONMENT COMMITTEE

January 17, 2014

Subject: RWF Program Management Start-Up and Validation Efforts

Page 5

- Criterion 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

This report does not meet the criteria listed above. This memorandum will be posted on the City's website for the February 3, 2014 Transportation and Environment Committee agenda.

COORDINATION

This report will be presented to the Treatment Plant Advisory Committee (TPAC) at its February 13, 2014 meeting.

CEQA

Not a Project, File No. PP10-069 (a) Staff Reports.

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

/s/
DAVID D. SYKES
Director, Public Works

Attachment

For questions please contact Ashwini Kantak, Assistant Director (ESD), at (408) 975-2553

ATTACHMENT A

Detailed Description of CIP Program Start-up Activities

The initial focus of the Program team is to:

1. Establish a program execution plan that will serve to guide the implementation of the Capital Improvement Program.
2. Develop supporting systems, tools, and processes, organization and governance structure, master schedules and budgets, performance reports, and a document management system.
3. Conduct a detailed project validation process to inform the 2015-2019 Proposed Five-Year Capital Improvement Program and the Ten-Year CIP planning effort. This validation effort involves the review of PMP projects and additional projects that have come forward since the completion of the technical work of the PMP. The validation effort includes a schedule, resource, and delivery approach analysis for each project.

Each of these three areas is discussed in further detail below.

1. Program Execution Plan

The PEP outlines the major elements of Program implementation. The content of the PEP includes, but is not limited to, the steps, processes, procedures, systems and tools for management of the Program's execution. Once completed, the PEP will serve as a "user's manual" for current and new Program team members. At the time of this writing, the Program team is creating the content of the PEP, using the following steps:

- **Develop a Program Organization Chart:** Starting with the organization chart developed by the City during the program management RFQ process, the Program team developed a program organization chart. The program organization chart focuses strictly on the delivery of projects; existing City reporting lines and staff organization are not impacted by the program organizational structure.
- **Conduct Resource "Gap" Analysis:** The Program team then defined roles and responsibilities for each key position shown in the Program org chart, and compared those roles to available City and MWH staff. It was determined that sufficient resources existed to complete the start-up efforts. As part of the validation effort (described below), this gap analysis will be updated to address the number of project management and construction management resources needed to implement the CIP projects.
- **Assess City Processes and Procedures:** Implementation of each CIP project will be subject to City processes and procedures, which must be as efficient as possible to support a CIP of this magnitude. The Program team has been charged with assessing those processes and procedures, to determine areas where modifications are needed.
- **Outline Decision-Making Processes:** The Program team is working with City staff to define the decision-making processes to be used in implementing the CIP projects. The

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Program decision-making process will be based upon the org structure described above, and will clearly document the hierarchy for decision authority within the defined Program team structure. The team will also develop and document an approach to issues tracking and resolution.

- **Create Communication Plan:** The Program team is developing a communication plan for providing timely and pertinent information to various stakeholders.
- **Develop Plan for O&M Staff Engagement:** The Program team is working intensively with the Wastewater Facility O&M staff to outline the approach to O&M participation throughout the life cycle of each project. Areas of O&M involvement and input on the Program include:
 - Decision on specific elements of a project's implementation
 - Validation of technologies under consideration
 - Plans for tie-ins and shutdowns
 - Means for acceptance testing, startup and commissioning
 - Requirements for staffing, training and transfer of responsibility for new facilities
- **Develop Guidelines for Design and Construction Management:** The Program team is developing two key guideline documents, one outlining how the Program will provide oversight to design consultants (Program Design Management Guideline), and one outlining how the Program will provide oversight to Construction Contractors or 3rd Party Construction Managers (Program Construction Management Guideline).
- **Develop a Value Management Plan:** The Program team is developing a Program Value Management Plan, which will provide information on the application of the value engineering (VE) process, factoring in such variables as project magnitude, implementation variability opportunities, technical complexity, and new versus in-kind retrofits.
- **Develop Procedures for Procurement and Contract Administration Strategy:** The Program team is conducting a review of current City procurement and contract administration procedures, and will provide suggestions to streamline or gain efficiency. The City will review these suggestions and determine which suggestions to implement.
- **Develop Procedures for Program Quality Management:** The Program team will develop a Program Quality Management Plan (QMP) by reviewing existing City Quality Management standards and providing recommendations for improvements.
- **Develop Program Health & Safety Plan:** The Program team will develop a Program Health & Safety Plan (HASP). The completed Program HASP will clearly outline the roles and responsibilities of MWH and City staff, and any other third-party consultant or contractor staff that may be hired by the City to perform work at the Wastewater Facility. The intent of the HASP is to develop safe work practices and procedures that all parties hired to perform work at the Wastewater Facility will follow at all times, with the

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exception of the construction contractors who will be responsible for the safety of their efforts.

- **Develop Program Budget and Finance Approach:** The Program will develop a baseline budget and cash flow projection to assist the City with financing, bond sales and cash flow management. In this task, the Program team will work with City staff to review existing budgets, and make recommendations on the overall Master Program Baseline Budget and Finance approach, including:
 - Monthly Master Program baseline budget
 - Monthly Program expenditures and cash flow updates
 - Annual Master Program Budget Update
 - Monthly tracking project-level budgets

2. Program Systems, Tools, and Processes

The second major area of start-up activities is program systems, tools, and processes. The Program team must be supported by a robust set of systems, tools, and processes in order to meet the challenge ahead. During the start-up phase, the Program team is being supported by experienced MWH program controls staff to develop these tools.

Prior to creation of the tools, the Program team is developing several foundational items:

- **Develop Project Delivery Model:** The Program team has established an over-arching Project Delivery Model (PDM). The PDM will serve to drive consistency for all Program projects and will also incorporate a decision-making and approval framework. The PDM consists of periods of project work, termed “stages,” interspersed with approval meetings, termed “stage gates.”
- **Define Stage Gate Governance Framework:** For each of the stage gates identified in the Program PDM above, the Program team will define and document the criteria by which a project will be assessed by the project management team and Steering committee for approval to proceed to the next PDM stage.
- **Assess Existing City Standard Operating Procedures:** The Program team is assessing the City’s existing documented project delivery business processes, resources, and systems (i.e., Standard Operating Procedures) associated with CIP delivery for adequacy and appropriateness of application for the Program efforts. Based on that assessment, the Program team will develop a prioritized list of SOPs that warrant modification and/or creation.
- **Develop Lifecycle Delivery Activities:** Within each stage of the PDM, there is a set of sequential and/or parallel activities that define the progression of the project through that stage. Under this task, the activities per stage and sequence in which they occur will be defined, documented and populated into the Program PDM.

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In parallel with, and building on, the efforts described above, the Program team will implement and configure the systems and tools (including software programs) needed for Program controls, reporting, document management and collaboration. Activities for this effort include:

- **Establish Program Controls Environment:** Under this task, the Program team will establish Program Controls tools and processes to monitor and report Program performance against cost, schedule, and scope objectives. Through standardized controls processes, project changes and variances will be identified, analyzed and reported in a timely manner. All Program Controls information will reside in the Project Management Information System (PMIS) a computerized database that will contain all project budget, resource and schedule data. This task consists of three activities:
 - **Develop Standard Project Work Breakdown Structure:** The Program team will create and document a standard Work Breakdown Structure (WBS) for projects. A standard WBS is a deliverable-oriented decomposition of the project into smaller components at which budget, resources and schedule activities may be assigned, monitored and controlled.
 - **Create Standard Project Schedule Template:** The Program team will develop a schedule template(s) for current and future projects. This template will use the common WBS and identify the activities required to effectively manage and communicate project sequencing and status. The template will include the PDM stage gates discussed above. The team will use the Critical Path Method (CPM) to develop the template(s) and all project schedules. Use of a standard schedule template and common WBS will permit the City's capital projects to be consolidated into a Master Program Schedule.
 - **Create Project Controls Standard Process Documentation:** The Program team will develop a Project Controls Plan which will define the standard project control processes for the Program. This will provide the City adequate documentation to support implemented practices and processes.
- **Set Up the Project Controls System:** By setting up the project management processes required for a good controls environment and populating the PMIS, our project managers will be able to deliver meaningful performance reports to senior City and Program team staff. Through effective baseline control, project managers will be able to report on positive and negative variances to all baselines and highlight to management deviations from approved plans. This task consists of two activities:
 - **Develop Program Risk Management Plan:** The Program Team must monitor and mitigate potential risks to the Program's success. These risks will be gathered in a series of risk registers. In this task, the Program team will develop a Risk Management Plan (RMP) which will contain the processes and guidelines for managing risk at the Program and project level, and will include the following:
 - Template risk registers--one for individual projects (Project-level) and one for the Program as a whole (Program-level)

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- Qualitative and quantitative methods for identification and analysis of project risks in terms of cost and schedule
 - Typical project risk responses and mitigation strategies
 - Process for preparation and regular review of project contingency estimates
- **Populate Project Controls System:** The Program team will use Primavera P6 software to incorporate the City's Program cost, schedule, resource and risk information into a database environment. Access to this environment will be provided to all Program team members through a hosted environment.
- **Establish Document Management & Monthly Reporting Systems:** The Program team will evaluate the City's existing systems and reporting practices to identify gaps or improvements to support the overall objectives of the Program, and to establish a framework environment for accessing key project controls information, documents, and performance reporting dashboards. This task consists of two activities:
- **Systems and Tools Assessment:** The Program team will evaluate and assess existing City systems and tools for supporting project delivery, including:
- Capital Investment Planning
 - Capital Project Management
 - Contract Management
 - Time Accounting
 - Project Scheduling
 - Work Management System
 - Financial / Enterprise Resource Planning (ERP)
 - Procurement / Supply Chain Management
 - Document Management / Collaboration
 - Drawing Management
 - Enterprise Reporting
 - Email & Calendaring
 - Intranet
 - Database Repositories/Data Warehouses
 - Productivity Tools (e.g., MS Office)
 - Work Flow System
 - Project Delivery Support System
- **Create Program Collaboration Portal:** The Program Collaboration Portal is an online, web-based interface which will serve as a centralized repository and framework for accessing key project controls information, documentation, and performance reporting dashboards. The Program team will develop and deploy the Program Collaboration Portal.
- **Implement Performance Reporting System:** A key component of the Collaboration Portal will be the performance reporting system and executive dashboards. This system will provide the City with ready access to project and operational performance data, and will provide City

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senior staff with access to project, portfolio, and operation-wide business driver Key Performance Indicators (KPIs), budget charts, and other performance data that has been loaded into the system. This task consists of two activities:

- **Develop Performance Dashboard and Reports:** The Program team will design dashboard pages at a project level to support progress and performance for individual projects, as well as at a Program level to support overall Program progress and KPI performance measurement. A specific set of report templates will also be designed and developed to support printing or emailing of reports.
- **Deploy Performance Reporting System:** The Program Performance Reporting System will include the Program Dashboard and reports definition and layout. The Program team will configure the reporting system to integrate with various City data sources, including accessing project schedule and cost information from the City's CPMS.

3. Project Validation

The third and final major component of start-up is project validation. The purpose of the project validation effort is to critically evaluate the CIP project list and develop a revised 5-Year CIP and 10-Year CIP for Program implementation. The Program team has conducted approximately 20 workshops at the time of this writing, and will conduct a total of approximately 35 workshops with City staff where these projects will be individually reviewed and evaluated to confirm their relevance. A gap analysis was also performed to identify important projects not included in the Wastewater Facility CIP project list. Projects selected for inclusion in the 5-Year CIP and 10-Year CIP were bundled into construction packages (for the purpose of gaining efficiencies and/or cost savings) and prioritized by City staff. City staff will also make decisions with respect to a preferred delivery approach (e.g., design-bid-build, design-build). Cost estimates will be developed for each package within the 10-year planning horizon based on the technical document project cost estimates, additional information made available by City staff, and additional project scope information developed by the Program team. The design/construction packages will be included in a cost-loaded Primavera schedule for use by the City in financial planning, procurement and implementation.

Specific efforts of the validation effort were:

- **Establish Goals and Objectives:** The Program team established goals and objectives for the development of CIP projects in connection with the validation process. These CIP project goals and objectives will be used in subsequent tasks to rationally assess planned projects for current relevance and need. Evaluation of projects against these goals and objectives will provide the criteria for later project prioritization.
- **Identify Projects:** The Program team reviewed existing projects described in the Wastewater Facility CIP Project List for relevance and applicability against the goals and objectives developed for the CIP. During this project evaluation, Program team members sought input regarding additional projects that, while not in existing lists, were deemed

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critical to continued reliable performance of the Facility. These added projects were subjected to a confirmation and definition process, and were added to the projects identified in the CIP for the remaining validation steps.

- **Package Projects:** The Program team then assembled individual projects into approximately 30 larger “packages” to create large enough projects to take advantage of economies of scale and to optimize use of project management resources. The following criteria were considered in creating the packages:
 - Physical proximity on plant site
 - Priority ranking
 - Process inter-relationships
 - Regulatory needs
 - Funding availability/constraints
 - Construction sequencing
 - Operational constraints
 - Delivery approach
 - Small “stranded” projects that would be difficult to efficiently implement on their own

From a nomenclature standpoint, the (approximately) 30 packages were considered the CIP “projects” going forward.

- **Develop Project Delivery Strategy:** The City is considering a variety of contracting methods to deliver projects, whether by conventional delivery (Design/Bid/Build) or an alternate delivery method such as Low-Bid Design Build, Best Value Design Build, Progressive Design/Build (PDB), Construction Management at Risk (CMAR), Design/Build/Operate (DBO), Design/Build/Operate/Finance (DBOF), among others. The Program team developed a written strategy, identifying (in general) which alternative delivery options are appropriate for which types of CIP projects. A final decision on delivery strategy will be made when an individual project is brought forward for implementation.
- **Package Sequencing and Delivery:** At the time of this writing, the Program team is organizing and sequencing the CIP projects into an overall Program schedule. Sequencing will be based on a number of criteria developed during a workshop process, including regulatory need, operational interference, constructability, and risk.
- **Capital Improvement Plans:** The culmination of the validation work will be a new 5-Year CIP and 10-Year CIP describing the specific projects to be designed and constructed during this initial phase of the Program. The final CIP will include budget-level cost estimates for each contract and a Master Schedule, since the decisions regarding delivery method may impact both budget and schedule for the various packages.

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

DECEMBER 1, 2013 - JANUARY 31, 2014

Description of Contract Activity ¹	Fiscal Year	Req#/ RFP#	PO#	Vendor/Consultant	Original \$ Amount	Start Date	End Date	Additional \$ Amount	Total \$ Amount	Comments
NEW:										
LEEVE REPAIR	FY13-14	17689	48883	RJ GORDON CONSTRUCTION	\$130,000	8/1/13	7/31/14	\$25,000	\$155,000	
TEMPORARY PERSONNEL - (5) LABORATORY TECHNICIANS	FY13-14	18470	49400	ON ASSIGNMENT LAB SUPPORT	\$101,080	12/1/13	4/12/14			(1) 12/1/13-3/31/14 (4) 1/6/14-4/12/14
PRIME ENGINE MOVER PARTS AND SERVICE	FY13-14	18478	49396	NRG ENERGY SERVICES LLC	\$180,000	1/2/14	1/2/15			
BALTIMORE AIR COIL CLOSED CIRCUIT TOWER AND INSTALLATION SERVICES	FY13-14	18506	49467	AIR TREATMENT CORPORATION	\$233,528					
TEMPORARY PERSONNEL - (5) GENERAL LABORERS FOR OPERATIONS	FY13-14	18528	49434	TRENDTEC INC	\$243,984	1/1/14	6/30/14			OPS (3) \$146,390 RSM (2) \$97,594
TEMPORARY PERSONNEL - (3) GENERAL LABORERS FOR MAINTENANCE	FY13-14	18536	49443	TRENDTEC INC	\$146,390	1/1/14	6/30/14			
WEED ABATEMENT SERVICES	FY13-14	18551	49456	LONG'S CUSTOM DISCING, INC.	\$110,000	2/1/14	1/31/15			
OVERHAUL OF TPS & FLOWWAY PUMPS AS NEEDED	FY13-14	18631	49515	MARTECH, INC (MECHANICAL ANALYSIS REPAIR INC)	\$200,000	2/1/14	1/31/15			
SLUDGE DIGESTION PROCESS EVALUATION	FY13-14		AC 21248	BROWN & CALDWELL	\$181,743	1/8/14	5/8/14			SERVICE ORDER #4 (MASTER AGREEMENT TERM 6/25/08 - 6/30/15)
PROFESSIONAL SERVICES - TECHNICAL COORDINATOR	FY13-14		AC 25110	ROBERT REID	\$175,000	1/24/13	12/31/14	\$95,000	\$270,000	FIRST AMENDMENT, EXT TO 12/31/14; CM APPROVED 12/20/13
ONGOING:										
SANDBLASTING & PAINTING	FY13-14	18108	49466	JEFFCO PAINTING & COATING, INC	\$400,000	12/17/13	12/16/14			
COMPRESSED GASES AND WELDING EQUIPMENT SERVICES & SUNDRIES	FY13-14	18297			\$100,000					LABORATORY (40K) & MAINTENANCE (60K)

¹ This report captures in process contract activity (Requisition Number or RFP Number) and completed contract activity (Purchase Order Number, Contract Term, and Contract Amount)

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