



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Jeffrey Provenzano

SUBJECT: See Below

DATE: March 18, 2026

Approved	Date:
	3/30/26

COUNCIL DISTRICT: Citywide

SUBJECT: Master Consultant Agreement with Brown and Caldwell for the 10063 – Aeration Basin Modifications Phase 1 Project

RECOMMENDATION

Approve a Master Consultant Agreement with Brown and Caldwell to provide Owner’s Advisor services for the 10063 – Aeration Basin Modifications Phase 1 Project at the San José-Santa Clara Regional Wastewater Facility from the date of execution through June 30, 2034, in a total amount not to exceed \$18,900,000, subject to the appropriation of funds.

SUMMARY AND OUTCOME

Approval of this Master Consultant Agreement with Brown and Caldwell will provide the City with planning, procurement, design, and construction management oversight services needed for the delivery of the Aeration Basin Modifications Phase 1 Project (Project) at the San José-Santa Clara Regional Wastewater Facility (RWF). The modifications to the aeration basins and nitrification clarifiers will enable the RWF to meet the new nutrient permit and increase the reliability of the secondary treatment process. Approval of this Master Consultant Agreement will not result in any physical changes to the environment, as the City Council will need to take additional actions before Project construction starts.

BACKGROUND

The RWF is one of the largest advanced wastewater treatment facilities in the United States and treats an average of 110 million gallons per day of wastewater collected from eight South Bay cities and four special districts. The RWF is operated under a National Pollutant Discharge Elimination System permit and a Regional Nutrient

Watershed permit issued by the San Francisco Bay Regional Water Quality Control Board.

The secondary treatment process at the RWF is a step-feed biological nutrient removal process, which is a critical element to remove remaining organic material and nutrients from wastewater after primary treatment. The process consists of two parallel systems: secondary and nitrification systems. The secondary system was originally constructed in 1961 and expanded in 1970 with 16 aeration basins and 26 clarifiers split across two batteries. The nitrification system was originally constructed in 1975 and expanded in 1984 with eight aeration basins and 16 clarifiers split across two batteries.

Aeration Basins

In 2018, the Capital Improvement Program (CIP) at the RWF completed a comprehensive condition assessment, which identified and recommended significant rehabilitation to structural, mechanical, electrical, instrumentation, and controls systems for all of the secondary and nitrification aeration basins.

In 2021, the CIP completed a Process Optimization Study to identify and evaluate options to improve the RWF's process treatment efficiencies and facility conditions while accounting for future regulations and changes in flows and loads. The study recommended simultaneous nitrification denitrification with inDENSE technology as the preferred alternative to meet the anticipated total inorganic nitrogen discharge limits.

In 2023, the CIP completed an alternatives analysis to compare the costs and benefits of implementing the preferred simultaneous nitrification denitrification with inDENSE process at varying configurations and locations within the biological nutrient removal systems. A partial implementation in battery B of the secondary system was selected as the preferred location for the Project.

In 2024, the San Francisco Bay Regional Water Quality Control Board adopted Nutrient Watershed Permit No. 3, which established the total inorganic nitrogen effluent limits for the RWF, including an interim dry season average of 6,400 kg/d effective in 2025 and a final dry season average of 5,000 kg/d effective in 2035. Currently, the RWF is meeting the interim limits, however, forthcoming changes to the solids handling and treatment process will require process modifications to the biological nutrient removal systems to achieve compliance with this permit.

Clarifiers

The secondary and nitrification clarifiers have been in service for over 50 years and are essential to the secondary treatment process at the RWF. Condition assessments have shown that many components of the clarifiers are nearing the end of their useful life, are in poor condition, and require replacement or excessive maintenance. Multiple clarifiers

have been completely out of service due to corroded clarifier mechanisms, numerous cracks, and leaking valves. Rehabilitation of the clarifiers is crucial to enhance the process efficiency and minimize unscheduled maintenance activities.

The first phase of rehabilitation for the nitrification clarifiers was completed in 2024 and included replacement of seven clarifier mechanisms and return activated sludge pipelines; replacement of flow control valves, flowmeters, piping, and electrical systems; structural repairs to all 16 clarifiers; and installation of groundwater monitoring wells. The rehabilitation of the remaining nine nitrification clarifiers and other modifications will be implemented under this Project. Rehabilitation of the secondary clarifiers will happen as part of a separate, future project.

Project Description

Based on the work described above, the Project scope will focus on the following:

- Rehabilitation of nitrification battery B aeration basins to extend their useful life and to make process modifications to meet the newly adopted total inorganic nitrogen limits.
- Rehabilitation of the nine remaining nitrification clarifiers and associated systems to extend their useful life.
- Structural repairs to nitrification battery A aeration basins and secondary aeration basins.
- Construction of a new carbon storage and feed facility to assist with meeting interim and final total inorganic nitrogen limits.

Future phases of the Project will complete process modifications in the remaining batteries, nitrification battery A, secondary battery A, and secondary battery B, while also fully rehabilitating each of these batteries. See Attachment for the project site plan.

The current construction estimate of \$240 million included in the Project proposed budget is a high-level planning estimate. The estimate will be further refined by the Owner's Advisor as the Project definition is advanced. Due to its size and complexity, the Project will be delivered as a design-build project. Construction is estimated to begin in summer 2030 with substantial completion by late 2033.

Staff is seeking a consultant to provide Owner's Advisor services for the Project. These specialized engineering services include:

- Project management;
- Project Definition Report, CEQA, and permitting support;
- Design-Builder procurement support;
- Design review and guaranteed maximum price negotiation support;
- Engineering services during construction;

- Construction management, inspection, and startup oversight services; and
- 12-month performance evaluation period support.

ANALYSIS

On October 13, 2025, the City issued a Request for Qualifications (RFQ) seeking professional services for an Owner's Advisor for the Project. A non-mandatory pre-bid site walk was held on October 21, 2025, which was attended by eight engineering firms. The City received Statements of Qualifications (SOQs) from three firms by the November 17, 2025, submittal deadline. These firms were Brown and Caldwell, CDM Smith, Inc., and HDR Engineering, Inc.

A technical evaluation panel consisting of representatives from the Environmental Services Department evaluated and ranked all three SOQs in accordance with the procurement process set forth in the RFQ. Each panel member evaluated the SOQs using a consistent scoring matrix based on the firm's expertise, experience, approach, cost, and Local Business Enterprise and Small Business Enterprise status. The Project team worked closely with the City's Public Works procurement support team, which administered the evaluation process.

Following evaluation of the SOQs, the technical evaluation panel decided interviews were not required because the point difference between the two top firms was such that the second ranked firm would not be able to overcome the point deficit, given the weighting allocated to the interview in the point scale advertised in the RFQ.

The proposals were first reviewed for responsiveness and then evaluated in accordance with the point scale advertised in the RFQ. Each firm received a total score comprised of its SOQs score and LBE/SBE status, as shown below.

Description	Weight
Statement of Qualifications	
Submittal Responsiveness	Pass/Fail
Minimum Qualifications	Pass/Fail
Expertise	35
Experience	25
Project Approach	20
Cost	10
Local Business Enterprise	5
Small Business Enterprise	5
TOTAL	100

The final ranking and scores for the three proposing firms are as follows:

Rank	Firm	Expertise	Experience	Approach	Cost	LBE/SBE	Total
1	Brown and Caldwell	31.90	23.10	17.65	9.23	5.00	86.88
2	CDM Smith, Inc.	30.10	21.50	17.30	10.00	0	78.90
3	HDR Engineering, Inc.	28.30	19.90	15.40	9.44	5.00	78.04

In accordance with the City Policy 4.12, 10% of the total evaluation points were reserved for local and small business enterprise status. Two of the firms qualified for the Local Business Enterprise status. None of the firms qualified for the Small Business Enterprise status.

Staff recommends awarding a Master Consultant Agreement in an amount not-to-exceed \$18,900,000 to the top-ranked firm, Brown and Caldwell. Brown and Caldwell is a nationally recognized environmental engineering and consulting firm, specializing in the design and construction of all components associated with wastewater treatment, including aeration basin and clarifier rehabilitation and process modifications. It proposed a team of well-qualified personnel with extensive experience in providing similar services for projects at the RWF as well as for other major wastewater clients, including:

- Sacramento Area Sewer District (Elk Grove, CA)
- DC Water (Washington, DC)
- City of Palo Alto (Palo Alto, CA)
- Charlotte Water (Pineville, NC)

The Brown and Caldwell team demonstrated extensive knowledge of the biological nutrient removal process design, carbon feed and storage facilities, and rehabilitation of aeration basins and clarifiers, as well as an excellent understanding of potential issues associated with the operations and maintenance of wastewater facilities, and substantial experience in the role of Owner’s Advisor for similar types of design-build projects. The proposed team has strong prior experience in negotiations with design builders, including negotiations for the CIP’s Digested Sludge Dewatering project.

The agreement not-to-exceed amount of \$18,900,000 represents approximately 7.9% of the estimated construction cost of \$240,000,000. Staff consider this amount appropriate for the work involved, and it is consistent with other CIP projects as well as the industry standard for Owner’s Advisor services that is typically in the range of 5% to 12.5% of the estimated construction cost. A breakdown of the \$18,900,000 is provided in the Cost Summary section below. A 5% contingency is built into the not-to-exceed value for optional services that may be authorized by the City on an as-needed basis.

Furthermore, during the course of the Project, the City will evaluate whether any of the services currently included under the Consultant's scope of work can instead be performed in-house by City staff, depending on availability and expertise.

Depending on the type of services rendered, Brown and Caldwell will be compensated based on actual hourly wages times a multiplier of 2.96 or 3.11. The 2.96 multiplier will be applied for on-site construction management oversight services, and the 3.11 multiplier will be applied for all other off-site services performed by Brown and Caldwell. The multiplier covers overhead (e.g., fringe benefits, payroll taxes, group insurance, building/rental expenses, etc.), associated Project costs (e.g., routine printing and copying, computer equipment use, network and telecommunications expenses, etc.), and profit.

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

Policy Alternatives

Alternative #1: Direct City staff to provide the required services with in-house resources.

Pros: Increased work options for City staff.

Cons: City staff does not currently possess the capacity and technical expertise needed for the anticipated scope of services. As the Project's design-build phases proceed, if additional staff members are not hired, the lack of flexibility to scale resources may cause delays in the implementation of the Project.

Reason for not recommending: The challenges of implementing a project of this size and complexity, in addition to the use of a design-build project delivery method, will require the assistance of specialized expertise and experience that does not currently exist within RWF CIP staff. The City would need to hire new staff with knowledge and expertise in a variety of professional disciplines, which would delay the Project.

EVALUATION AND FOLLOW-UP

All service orders issued under this master consultant agreement will be reported to the Treatment Plant Advisory Committee on the monthly summary of procurement and contract activity and the quarterly CIP agreement and service order summary. A progress report on this and other RWF capital projects will be made to the Treatment Plant Advisory Committee and the City Council on an annual basis. Quarterly progress reports of the RWF CIP will also be submitted to the Treatment Plant Advisory Committee and posted on the City's website.

The current action is for the award of a Master Consultant Agreement for Owner's Advisor services only. After the procurement process for the selection of the design builder, staff will return to the City Council, anticipated in early 2028, for approval of the design builder's contract for preliminary services. In summer 2030, staff will return again for approval of the design-builder's contract amendments that include the guaranteed maximum price for the Project and the initiation of the construction phase.

Staff will return to the City Council after completion of the California Environmental CEQA review process, anticipated in summer 2028, to recommend the adoption of a resolution approving the CEQA findings for this Project. This process will be completed prior to any disturbance to the physical environmental conditions, and no construction activity will be initiated before approval.

The preliminary project schedule milestones are as follows:

- Completion of the Project Definition Report: early 2027.
- City Council approval of the design builder's contract for preliminary services: early 2028.
- Completion of 60% design and initiation of guaranteed maximum price negotiations: late 2029.
- City Council approval of the design-builder's contract amendments that include the guaranteed maximum price: summer 2030.
- Construction Substantial Completion: late 2033.

FISCAL IMPACTS

The source of funding for this project is through the 512 – San José-Santa Clara Treatment Plant Capital Fund. The Project will have no additional impact on the San José-Santa Clara Treatment Plant Operating Fund or the General Fund.

1. TOTAL COST OF MASTER AGREEMENT	
Master Agreement Amount	\$18,900,000
TOTAL MASTER AGREEMENT AMOUNT	\$18,900,000
2. COST ELEMENTS OF MASTER AGREEMENT AS RECOMMENDED AS PART OF THE MEMORANDUM:	
Project Management	\$2,000,000
Project Definition Report, CEQA, and Permitting Support	\$1,450,000
Design Builder Procurement Support	\$1,450,000
Design Review and Guaranteed Maximum Price Negotiation Support	\$2,800,000
Engineering Services During Construction	\$2,700,000
Construction Management, Inspection, and Startup Oversight	\$7,000,000
12-Month Performance Evaluation Period Support	\$1,500,000
TOTAL AGREEMENT AMOUNT	\$18,900,000

BUDGET REFERENCE

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

Fund #	Appn. #	Appropriation Name	Total Appropriation	2025-2027 Adopted Biennial Capital Budget Page	Last Budget Action (Date, Ord. No.)
512	7677	Aeration Tanks and Blower Rehabilitation	12,947,000	272	10/21/2025 31252

Services performed by Brown and Caldwell under this agreement will be authorized by service orders. An appropriation is not required for execution of the Master Consultant Agreement, but is required for each service order authorized under this agreement. The appropriation listed above is included in the 2025-2027 Adopted Biennial Capital Budget and represents the amount available in FY 2025-2026. Future funding is subject to appropriation and, if needed, will be included in the development of future year budgets during the annual budget process.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office, City Manager's Budget Office, and the Finance Department.

PUBLIC OUTREACH

This memorandum will be posted on the City Council Agenda website for the April 14, 2026 City Council meeting.

BOARD, COMMISSION, COMMITTEE RECOMMENDATION AND INPUT

This item is scheduled to be heard at the April 9, 2026 Treatment Plant Advisory Committee meeting. A supplemental memorandum with the Committee's recommendation will be included in the amended City Council meeting agenda.

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CEQA

Not a Project, File No. PP17-003, Agreements/Contracts (New or Amended) resulting in no physical changes to the environment.

PUBLIC SUBSIDY REPORTING

This item does not include a public subsidy as defined in section 53083 or 53083.1 of the California Government Code or the City's Open Government Resolution.

/s/

JEFFREY PROVENZANO, PE
Environmental Services Director

For questions, please contact Mariana Chavez-Vazquez, RWF General Manager, Environmental Services Department, at Mariana.Chavez-Vazquez@sanjoseca.gov or (408) 535-8550.

ATTACHMENT: Project Site Plan

Attachment – Project Site Plan

