

For the Period Ending September 30, 2024

DATE: December 04, 2024

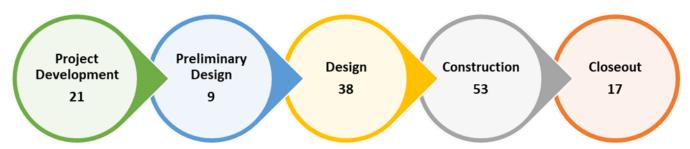
TO: Orange County Sanitation District Board of Directors

FROM: Rob Thompson, General Manager

Through: Mike Dorman, Director of Engineering

This report summarizes the status, activities, and performance of construction contracts and consultant agreements. This report also identifies the names and status of projects being performed under master budgets for planning studies, research, small construction projects, Operations & Maintenance capital projects and information technology projects.

As of September 30, 2024, Orange County Sanitation District (OC San) Engineering Department manages 138 active projects, with project budgeting totaling close to \$3.8 billion. These projects are in various project phases, ranging from Project Development to Closeout. The graphic below shows the number of projects in each of the project phases.



This report is organized into six parts, as follows. Detailed tables can be found in the appendix section of the report.

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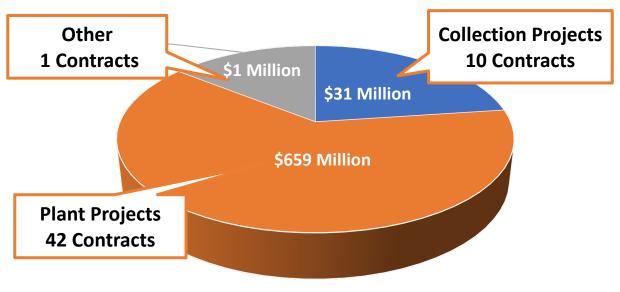


For the Period Ending September 30, 2024

PART 1 – CONSTRUCTION CONTRACTS

Construction Contracts

As shown in the graph below, there are currently 53 active construction contracts totaling \$848 million. The graph also categorizes the active construction contracts by project type (plant, collections, and other) with the "Other" category capturing research and small capital projects. Table 1 in the appendix lists the Board-awarded construction contracts while Tables 2 and 3 list the Operations Committee and General Manager awarded construction contracts, active as of September 30, 2024. The General Manager may award contracts up to \$150,000 and task orders up to \$500,000.



35 Unique Contractors

The table below summarizes the number of active and closed construction contracts and total contract amounts. See Tables 4, 5 and 6 in the appendix for a list of the closed contracts.

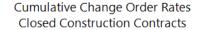
Туре	Contracts	Total Contract Amount
Active Board-Awarded Construction Contracts	47	\$846,101,203
Active Ops Committee Awarded Construction Contracts	2	\$318,815
Active GM Awarded Construction Contracts	4	\$3,648,850
Closed Board-Awarded Construction Contracts	1	\$1,953,454
Closed Committee-Awarded Construction Contracts	0	\$0
Closed GM Awarded Construction Contracts	0	\$0

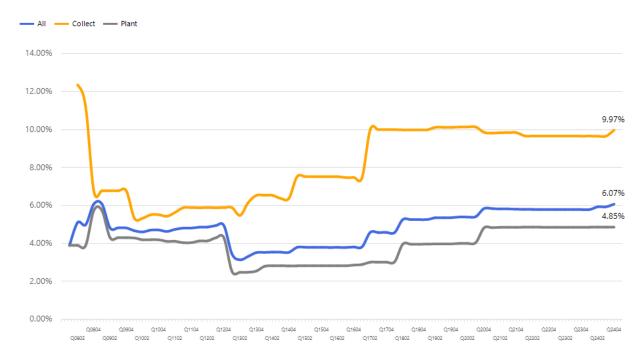


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Cumulative Change Order Rates

When the OC San Board of Directors awards a construction contract, they also approve a contingency which allows the General Manager to approve contract change orders up to the amount of the contingency. One purpose of this report is to document how much of the contingency is utilized. A contract's change order rate is only meaningful when the work is completed. As such, this report's change order performance charts are based only on contracts closed since the Board began approving contingencies in 2008. The following chart shows how cumulative change order rates have changed for plant, collections, and all contracts over the past 15 years.





Change Order Goals

Project Type	15-Year Sliding Window Change Order Goal
Plant – New	5%
Plant – Rehab	8%
Collections	10%



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PART 2 – ENGINEERING PROFESSIONAL SERVICES AGREEMENTS

Professional Design and Related Service Agreements

OC San engages engineering consultants through Professional Service Agreements (PSAs), Professional Design Services Agreements (PDSAs), and Professional Construction Services Agreements (PCSAs). PDSAs are used to obtain design engineering services, and PCSAs are a subsequent agreement with the design consultant to provide support services during construction. PSAs are used for planning studies and other consultant assignments. There are currently 50 Professional Design and Related Service Agreements (26 individual firms) with total agreement amount of \$233,456,511. Table 7 in the appendix provides a detailed list of Professional Design and Related Service Agreements.

Master Agreements

Master Agreements are issued to a pool of pre-qualified consultants for smaller projects. On those smaller projects, OC San solicits task order proposals from interested firms and awards a task order to the most qualified consultant. The Master Agreements are listed below.

- 2017 Master Agreements for Planning Studies (expired)
- 2018 Master Professional Design Services Agreements (expired)
- 2020 Master Agreements for On-Call Planning Studies (expired)
- 2021 Master Professional Design Services Agreements (expired)
- 2024 Master Agreements for On-Call Planning Studies
- 2024 Master Professional Design Service Agreements
- Agreement for Design Installation, Implementation and Maintenance of a Process Control System

New task orders cannot be issued under expired agreements, but previously issued task orders remain active until completed. Task Orders are limited by OC San Ordinance No. OC SAN-61 to \$500,000 per task order. Below is a summary of the various master agreements with active task orders. See Table 8 in the appendix for a detailed list of task orders.



For the Period Ending September 30, 2024

Task Order	Contracts	Total Contract Amount
2017 Master Agreements for Planning Studies	1	\$274,888
2018 Master Professional Design Service Agreements	18	\$3,492,073
2020 Master Agreements for On-Call Planning Studies	5	\$1,198,791
2021 Master Professional Design Service Agreements	16	\$3,998,275
2024 Master Agreements for On-Call Planning Studies	2	\$668,775
2024 Master Professional Design Service Agreements	0	\$0

Master Service Agreements

Through a competitive procurement process, a Master Services Agreement (MSA) was awarded to ABB Inc. for the design, installation, implementation, and maintenance of a control system for a term of 15 years with renewals up to 25 years under Project SP-196, Process Control Systems Upgrades Study. Specific equipment and services will be procured under task orders associated with each CIP project and operating budget.

Task Order	Contracts	Total Contract Amount
Design Installation, Implementation and Maintenance of a Process Control System Master Agreement	2	\$12,160,424



For the Period Ending September 30, 2024

PART 3 – MASTER BUDGET PROJECTS

The Board-adopted budget for Fiscal Years 2022-23 and 2023-24 includes master program budgets that allow staff to initiate, execute, and manage smaller projects that fit within the scope of a particular program more quickly. The projects chartered under these program budgets are referred to as sub-projects and are managed to the same standards as projects specifically listed in the adopted budget. A status table for each of these programs listing the sub-projects is attached in the appendix. These projects include Planning Studies (PS), Research (RE), Facility Engineering (FE), Maintenance (MP), and Small Capital (SC) and Information Technology (IT).

Master Program Title	Status Table	Number of Projects	Total Allocated Budget
Planning Studies Program	Table 9	18	\$11,643,943
Research Program	Table 10	2	\$8,101,029
Small Construction Projects, Operations & Maintenance Capital Programs	Table 11	42	\$115,469,700
Information Technology Capital Program	Table 12	8	\$2,247,322



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PART 4 – SUPPLEMENTAL ENGINEERING SERVICES CONTRACT

In April of 2022, the OC San Board of Directors approved two Professional Service Agreements - one with AECOM Technical Services, Inc. and one with Jacobs Project Management Co. - to provide Supplemental Engineering Services for a three-year period commencing May 1, 2022, through April 30, 2025, with two one-year renewal options. The Board approved the agreements for an amount not to exceed \$29,700,000 per individual agreement.

The benefits of using a supplemental engineering services contract, as opposed to hiring full-time staff or limited-term employees, include rapid mobilization of highly skilled/technical staff, flexibility to change the mix of staff positions on an immediate and as-needed basis, the ability to reduce staff as workloads decrease, access to technical experts to support special tasks, and access to staff with wastewater project experience.

Status tables for the supplemental engineering services contract and labor summary for the 2022 Supplemental Engineering Services Contract with AECOM and Jacobs Project Management Co. are included below.

2022 Supplemental Engineering Services Contract Status (AECOM)				
	Total Fees Time			
Contract	\$29,700,000		60 Months ⁽¹⁾	
Actuals to Date	\$2,585,199	9%	29 Months	48%
Remaining	\$27,114,801	91%	31 Months	52%

⁽¹⁾ Assuming two additional 1-year extensions

2022 Supplemental Engineering Services Labor Summary (AECOM)			
This Quarter Inception to Date			
Labor Hours	3,187	14,568	
Full Time Equivalents 7.08 3.35			
Labor Costs (no expenses) \$550,789 \$2,529,073			
Average Hourly Rate \$173 \$174			



Engineering Program Contract Performance ReportFor the Period Ending September 30, 2024

2022 Supplemental Engineering Services Contract Status (Jacobs)				
	Total Fees		Time)
Contract	\$29,700,000		60 Months ⁽¹⁾	
Actuals to Date	13,479,805	45%	29 Months	48%
Remaining	\$16,220,195	55%	31 Months	52%

⁽¹⁾ Assuming two additional 1-year extensions

2022 Supplemental Engineering Services Labor Summary (Jacobs)				
	This Quarter Inception to Date			
Labor Hours	12,570	79,885		
Full Time Equivalents	Time Equivalents 26 17			
Labor Costs (no expenses)	\$2,189,885	\$12,896,921		
Average Hourly Rate	\$176	\$174		



For the Period Ending September 30, 2024

PART 5 – PROGRAMMING PROFESSIONAL SERVICES CONTRACT

In April of 2022, the OC San Board of Directors approved two Professional Service Agreements - one with Enterprise Automation and one with Rockwell Automation, Inc. (formerly Maverick Technologies) - to provide Programming Professional Services for a three-year period commencing May 11, 2022, through May 10, 2025, with two one-year renewal options. The Board approved the agreements for an amount not to exceed \$4,900,000 per individual agreement.

The programming professional services will program, test, commission, maintain, upgrade, and configure programmable logic controllers, HMI graphics, databases, servers, and networks for select projects. The benefits of using a programming professional services contract, as opposed to hiring full-time staff or limited-term employees, include the ability to provide the needed short-term resources during the execution of Project No. J-120, Process Control Systems Upgrades, rapid mobilization of highly skilled technical resources, flexibility to change the mix of needed resources to match project requirements, and the ability to increase or reduce project resources as workloads change.

Status tables for the programming professional services contract and labor summary for the 2022 Programming Professional Services Contract with Enterprise Automation and Rockwell Automation are included below.

2022 Programming Professional Services Contract Status (Enterprise Automation)				
Total Fees Time			ne	
Contract	\$4,900,000		60 Months ⁽¹⁾	
Actuals to Date	1,852,439	38%	29 Months	48%
Remaining	\$3,047,561	62%	31 Months	52%

⁽¹⁾ Assuming two additional 1-year extensions

2022 Programming Professional Services Labor Summary (Enterprise Automation)				
This Quarter Inception to Date				
Labor Hours 383 9,829				
Full Time Equivalents 0.7 2.0				
Labor Costs (no expenses) \$74,676 \$1,852,355				
Average Hourly Rate \$195 \$188				



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2022 Programming Professional Services Contract Status (Rockwell Automation)											
Total Fees Time											
Contract	\$4,900,000		60 Months ⁽¹⁾								
Actuals to Date	1,446,494	30%	29 Months	48%							
Remaining	\$3,453,506	71%	31 Months	52%							

⁽¹⁾ Assuming two additional 1-year extensions

2022 Programmir	ng Professional Services Lab (Rockwell Automation)	or Summary
	This Quarter	Inception to Date
Labor Hours	1496	7647
Full Time Equivalents	2.9	1.5
Labor Costs (no expenses)	\$307,744	\$1,446,494
Average Hourly Rate	\$206	\$189



For the Period Ending September 30, 2024

PART 6 - ON-CALL SERVICES AGREEMENTS

OC San uses three sets of on-call services agreements for coating inspection and corrosion testing; materials testing, inspection, and other geotechnical testing; and surveying. Services are typically requested by inspection supervisors as needs arise, and the work is generally spread among the available firms.

The table below lists the contract limits and funds expended to date for each of the agreements which became effective on March 23, 2022, and will expire on April 30, 2025. For each of these services, OC San typically uses a single firm for a particular construction contract.

Consultant	Contract Limit	Total Costs Incurred	Remaining
Coating Inspection Services (PSA2022-	001)		
CSI Services, Inc.	\$300,000	\$38,064	\$261,937
Diversified Project Services Int'l (DPSI)	\$300,000	\$174,421	\$125,579
Geotechnical Testing Services (PSA2022	2-003)		
AESCO	\$400,000	\$303,262	\$96,738
Atlas Technical Consultants	\$400,000	\$282,184	\$117,816
Koury Engineering and testing, Inc.	\$400,000	\$193,622	\$206,378
MTGL, Inc	\$400,000	\$169,612	\$230,388
Surveying Services (PSA2022-002)			
D.Woolley & Associates	\$200,000	\$34,204	\$165,796
Michael Baker International, Inc.	\$200,000	\$27,263	\$172,737
Psomas	\$200,000	\$23,977	\$176,023
Stantec Consulting Services, Inc.	\$200,000	\$45,435	\$154,565

OC San uses an on-call corrosion engineering service agreement to perform condition assessments and an on-call corrosion engineering support agreement to support condition assessment and provide confined space entry support.



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The table below list the contract limits and funds expended to date for each of the agreements. The Corrosion Management Support Services is a one-year agreement with four one-year renewal options that became effective on February 1, 2020. The Condition Assessment On-Call Contractor Support Services is a one-year agreement with four one-year renewal options that became effective on November 1, 2021.

Consultant	Contract Limit	Total Costs Incurred	Remaining						
Corrosion Management Support Serv									
Corrpro Companies Inc	\$600,000	\$297,968	\$302,032						
Condition Assessment On-Call Contractor Support Services									
Jamison Engineering Contractors, Inc	\$861,817	\$697,556	\$119,261						



For the Period Ending September 30, 2024

APPENDIX

Table 1 - Active Board-Awarded Construction Contracts

	Project/Contract	Contractor	Award Date		Contract An	nount			Conti	ngency	
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining
2-49	Taft Branch Improvements	Big Ben Inc.	08/26/2024	\$20,458,250	\$0	\$20,458,250	0.0%	10.0%	10.0%	0.0%	10.0%
3-64B	Los Alamitos Trunk Sewer Rehabilitation	Steve P. Rados, Inc.	05/26/2021	\$17,775,000	\$291,664	\$18,066,664	87.8%	10.0%	10.0%	1.6%	8.4%
3-67	Seal Beach Pump Station Replacement	Walsh Construction Company II, LLC	12/14/2023	\$97,032,743	\$0	\$97,032,743	3.8%	10.0%	10.0%	0.0%	10.0%
5-68	Newport Beach Pump Station Pressurization Improvements	Innovative Construction	04/25/2023	\$937,500	\$97,756	\$1,035,256	90.5%	10.0%	17.0%	10.4%	6.6%
7-65	Gisler-Red Hill Interceptor and Baker Force Main Rehabilitation	Steve P. Rados, Inc.	05/24/2023	\$44,706,000	(\$1,216,714)	\$43,489,286	33.5%	10.0%	10.0%	-2.7%	12.7%
7-68	MacArthur Force Main Improvements	SRK Engineering, Inc.	10/20/2023	\$3,897,000	\$0	\$3,897,000	48.7%	10.0%	10.0%	0.0%	10.0%
FE18-13	Redhill Relief Sewer Relocation at State Route 55	SRK Engineering, Inc.	06/22/2022	\$2,213,000	\$0	\$2,213,000	0.0%	15.0%	36.0%	0.0%	36.0%
FE18-14	Plant Water Pipeline Replacement in Kinnison, Lindstrom, and Scott Tunnels	MMC, Inc.	12/16/2020	\$1,134,000	\$19,428	\$1,153,428	74.9%	15.0%	15.0%	1.7%	13.3%
FE19-01	Pump Station Portable Generator Connectors	Pacific Industrial Electric	09/29/2021	\$1,207,479	\$56,691	\$1,264,170	89.6%	10.0%	16.0%	4.7%	11.3%
FE19-03	Trickling Filter Sludge and Scum Pumps Replacement at Plant No. 1	Garney Pacific, Inc.	02/23/2022	\$778,000	\$23,471	\$801,471	85.1%	10.0%	10.0%	3.0%	7.0%

Table 1 - Active Board-Awarded Construction Contracts

	Project/Contract	Contractor	Award Date			Contingency					
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining
FE19-04	Sunflower Pump Replacement at Plant No. 1	GSE Construction Company, Inc.	10/27/2021	\$2,123,200	\$0	\$2,123,200	83.3%	10.0%	25.0%	0.0%	25.0%
FE19-08	Secondary Treatment VFD Replacements at Plant No. 2	ACS Engineering	03/23/2022	\$1,433,000	\$0	\$1,433,000	6.7%	10.0%	10.0%	0.0%	10.0%
FE20-02	Digester C, D, F, and G Mechanical Rehabilitation at Plant No. 2	J.F. Shea Construction, Inc.	08/13/2024	\$3,694,000	\$0	\$3,694,000	0.0%	10.0%	10.0%	0.0%	10.0%
FE20-03	Return Activated Sludge Discharge Piping Replacement at Activated	GSE Construction Company, Inc.	12/15/2022	\$3,985,400	\$0	\$3,985,400	98.0%	10.0%	10.0%	0.0%	10.0%
FE20-04	Cengen Cooling Water Pipe Replacement at Plant No. 2	Innovative Construction	11/16/2022	\$3,487,600	\$0	\$3,487,600	39.2%	10.0%	10.0%	0.0%	10.0%
FE20-08	Olive Sub-Trunk Siphon Rehabilitation at Santa Ana River	MMC, Inc.	04/26/2023	\$1,944,000	\$0	\$1,944,000	24.3%	10.0%	10.0%	0.0%	10.0%
FE20-09	CenGen Smoke Detection Improvements at Plant No. 1 and No. 2	ADT Commercial, LLC	12/15/2022	\$313,000	(\$4,109)	\$308,891	98.5%	10.0%	10.0%	-1.3%	11.3%
FE21-07	Liquid Oxygen Tank A Replacement at Plant No. 2	J.R. Filanc Construction	01/18/2023	\$2,608,007	\$0	\$2,608,007	36.6%	10.0%	10.0%	0.0%	10.0%
FE22-02	Liquid Oxygen Tank B Replacement at Plant No. 2	J.R. Filanc Construction	07/01/2024	\$3,098,000	\$0	\$3,098,000	0.0%	10.0%	10.0%	0.0%	10.0%
FE23-01	Digester Gas Compressor Dryer Replacements at Plant Nos. 1 and 2	Innovative Construction	09/10/2024	\$5,942,500	\$0	\$5,942,500	0.0%	10.0%	10.0%	0.0%	10.0%

Table 1 - Active Board-Awarded Construction Contracts

	Project/Contract	Contractor	Award Date	Contract Amount					Contingency				
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining		
FE23-08	Power Buildings 7 and 8 HVAC Replacement at Plant No. 1	Trane U.S. Inc.	10/02/2024	\$687,708	\$0	\$687,708	0.0%	5.0%	5.0%	0.0%	5.0%		
FE23-09	Primary Clarifiers F and G Rotating Mechanism Rehabilitation at Plant No.	Vicon Enterprise	09/25/2024	\$3,150,000	\$0	\$3,150,000	0.0%	15.0%	15.0%	0.0%	0.0%		
FR1-0005	Cengen and 12Kv Service Center Switchgear Battery System Upgrades at	Mass Electric Construction Co.	11/27/2023	\$970,000	\$0	\$970,000	36.0%	10.0%	10.0%	0.0%	10.0%		
FR1-0007R		A2Z Construct Inc.	02/20/2024	\$348,000	\$0	\$348,000	26.1%	0.0%	10.0%	0.0%	10.0%		
FR1-0011	VFD Replacements at Plant No. 1	ACS Engineering	12/15/2022	\$1,214,888	\$0	\$1,214,888	14.8%	10.2%	10.2%	0.0%	10.2%		
FR1-0016	Waste Sidestream Pump Station VFD replacements at Plant No.1	Leed Electric	03/23/2022	\$344,889	\$23,764	\$368,653	100.0%	15.0%	15.0%	6.9%	8.1%		
FR1-0017	Trickling Filter Valve Replacement at Plant No. 1	Vicon Enterprise	02/13/2024	\$257,300	\$5,945	\$263,245	97.7%	10.0%	10.0%	2.3%	7.7%		
FR2-0018	Activated Sludge Clarifier Repairs at Plant No. 2	Garney Pacific, Inc.	07/27/2022	\$5,091,686	(\$4,741)	\$5,086,945	100.3%	10.0%	10.0%	-0.1%	10.1%		
FR2-0023	Activated Sludge Clarifier Entry Improvements at Plant No. 2	Tharsos, Inc.	03/21/2024	\$1,171,000	\$0	\$1,171,000	5.9%	10.0%	10.0%	0.0%	10.0%		
FR2-0026	Headworks Phase 3 Cable Replacement at Plant No. 2	ACS Engineering	02/22/2023	\$575,360	\$0	\$575,360	34.8%	20.0%	20.0%	0.0%	20.0%		

Table 1 - Active Board-Awarded Construction Contracts

	Project/Contract	Contractor	Award Date		Contract An	nount		Contingency				
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining	
FR2-0027	Heavy Mechanics Group Office Space Upgrade at Plant No. 2	MBE Construction	02/08/2024	\$195,676	\$0	\$195,676	26.1%	10.0%	10.0%	0.0%	10.0%	
FRC-0010	Warner Avenue Vault Cover Improvements	Minako America Corporation	09/17/2024	\$977,000	\$0	\$977,000	0.0%	10.0%	10.0%	0.0%	0.0%	
J-117B	Outfall Low Flow Pump Station	Shimmick Construction	12/19/2018	\$90,200,000	\$5,456,554	\$95,656,554	92.1%	8.0%	8.0%	6.0%	2.0%	
J-135B	Engine and Generator Overhauls at Plant No. 1 and 2	Cooper Machinery Services	07/27/2022	\$29,361,029	\$3,041,959	\$32,402,988	69.9%	10.0%	15.6%	10.4%	5.2%	
MP-307	Bushard Diversion Structure Repair	Abhe - Svoboda, Inc.	06/22/2022	\$1,762,545	(\$25,000)	\$1,737,545	100.0%	10.0%	10.0%	-1.4%	11.4%	
P1-105	Headworks Rehabilitation at Plant 1	Kiewit Infrastructure West Co.	03/24/2021	\$222,330,000	\$3,693,834	\$226,023,834	58.9%	4.0%	4.0%	1.7%	2.3%	
P1-128A	Headquarters Complex at Plant No.	Swinerton Builders	05/26/2021	\$102,544,973	\$4,531,688	\$107,076,661	104.3%	5.0%	6.5%	4.4%	2.1%	
P1-128A.1		EIDIM Group, Inc.	09/20/2023	\$1,580,000	\$66,150	\$1,646,150	97.8%	10.0%	10.0%	4.2%	5.8%	
P1-132	Uninterruptable Power Supply Improvements at Plant 1	Leed Electric	12/15/2022	\$5,765,789	(\$3,381)	\$5,762,408	55.9%	10.0%	10.0%	-0.1%	10.1%	
P1-133	Primary Sedimentation Basins No. 6- 31 Reliability Improvements at Plant No. 1	Shimmick Construction	02/23/2022	\$6,275,000	\$85,749	\$6,360,749	96.2%	10.0%	10.0%	1.4%	8.6%	

Table 1 - Active Board-Awarded Construction Contracts

	Project/Contract	Contractor	Award Date			Contingency					
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining
P1-134	South Perimeter Security and Utility Improvements at Plant No.1	Tovey-Shultz Construction, Inc.	07/28/2021	\$4,396,779	\$405,201	\$4,801,980	97.7%	10.0%	10.0%	9.2%	0.8%
P2-127	Collections Yard Relocation and Warehouse Demolition at Plant No. 2	Archico Design Build, Inc.	09/19/2023	\$6,500,000	\$74,106	\$6,574,106	68.4%	10.0%	10.0%	1.1%	8.9%
P2-137A	Digester P and R Dome Tendon Repair	Structural Preservation	09/18/2024	\$2,597,864	\$0	\$2,597,864	0.0%	10.0%	10.0%	0.0%	10.0%
P2-98A	A-Side Primary Clarifiers Replacement at Plant 2	PCL CONSTRUCTION	05/26/2021	\$111,405,880	\$2,189,906	\$113,595,786	43.8%	6.0%	6.0%	2.0%	4.0%
RE21-01	Supercritical Water Oxidation Demonstration at Plant No. 1	Garney Pacific, Inc.	12/15/2022	\$1,172,000	\$77,719	\$1,249,719	100.0%	10.0%	10.0%	6.6%	3.4%
SC19-06	EPSA Standby Power Generator Control Upgrades at Plant No. 2	Shimmick Construction	10/17/2023	\$3,500,000	\$0	\$3,500,000	8.4%	10.0%	10.0%	0.0%	10.0%
SC22-01	EPSA Electrical Building and Distribution Center H HVAC System Replacement at Plant No. 2	Trane U.S. Inc.	06/28/2023	\$3,862,000	\$0	\$3,862,000	17.5%	10.0%	10.0%	0.0%	10.0%
			Total	\$826,317,337	\$18,887,640	\$845,204,977					

Table 2 - Active Operations Committee Awarded Construction Contracts

Project/Contract Contractor			Award Date		Contingency						
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining
FR2-0029	Influent Pump Station Plant Water	W.A. Rasic	06/07/2023	\$177,063	\$25,314	\$202,377	0.0%	20.0%	20.0%	14.3%	5.7%
	Piping Repair at Plant No. 2	Construction									
SC23-01	Electric Vehicle Charging Stations and Network Installation	Chargie, LLC	11/14/2023	\$143,225	(\$1,473)	\$141,752	84.7%	20.0%	20.0%	-1.0%	21.0%
			Total	\$320,288	\$23,841	\$344,129					

Table 3 - Active GM Awarded Construction Contracts

	Project/Contract	Contractor	Ontractor Date Contract Amount						Contingency				
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining		
FE19-02	Cengen Plant Water Pipe Replacement at Plant No. 1	Innovative Construction	05/14/2024	\$3,385,000	\$0	\$3,385,000	0.0%	10.0%	10.0%	0.0%	10.0%		
FE21-04	Thickening and Dewatering Facility Handrail Installation at Plant No. 1	J.R. Filanc Construction	07/30/2024	\$110,400	\$0	\$110,400	0.0%	10.0%	10.0%	0.0%	10.0%		
FE21-06	Chemical Dosing Stating Installation at Westside Pump Station	RP Controls, Inc.	05/09/2023	\$62,565	\$0	\$62,565	100.0%	20.0%	20.0%	0.0%	20.0%		
FR2-0025	Digester O-T and Q-R Bridge Repair at Plant No. 2	O'Connell Engineering & Construction, Inc.	03/14/2022	\$115,450	\$38,000	\$153,450	90.7%	10.0%	32.9%	32.9%	0.0%		
MP2-002	Ella Tunnel Walkway Replacement at Plant 2	O'Connell Engineering & Construction, Inc.	10/20/2022	\$49,450	\$0	\$49,450	100.0%	10.0%	10.0%	0.0%	10.0%		
			Total	\$3,610,850	\$38,000	\$3,648,850							

Table 4 - Closed Board-Awarded Construction Contracts

Project/Contract		Contractor	Award Date	Closed Date	Contract Amount			Contingency			
					Award	Change Orders	Final	Original	Final	Unused	
FE20-01	Wastehauler Station Safety and Security Improvements	Leed Electric	09/28/2022	08/13/2024	\$1,689,788	\$263,666	\$1,953,454	10.0%	16.0%	0.4%	
				Total	\$1,689,788	\$263,666	\$1,953,454				

Table 5 - Closed Committee -Awarded Construction Contracts

Project/C	ontract	Contractor	Award Date	Closed Date	C	Contract Am	ount	Contingency		у
					Original	Change	Final Contract	Original	Final	Unused
				Total						
No Committee-awarded construction	n contract closed this quarter									

Table 6 - Closed GM-Awarded Construction Contracts

	Project/Contract	Contractor	Award Date	Closed Date	Contract Amount		Contingency		у	
					Original	Change	Final Contract	Original	Final	Unused
				Total						
No GM-av	varded construction contract closed this quarter									

Table 7 - Active Engineering Services Agreements

	Project/Contract	Consultant	Туре	Award Date		Contract Am	ount			Conti	ngency	igency	
					Award	Amendments	Current	% Spent	Original	Current	Used	Remaining	
11-33	Edinger Pump Station Replacement	Arcadis U.S., Inc.	PDSA	09/27/2023	\$3,125,590	\$35,180	\$3,160,770	39%	10.0%	10.0%	1.1%	8.9%	
1-23	Santa Ana Trunk Sewer Rehabilitation	Stantec Consulting Services Inc.	PDSA	04/27/2022	\$3,880,000	\$0	\$3,880,000	72%	10.0%	10.0%	0.0%	10.0%	
1-24	Greenville Trunk Improvements	Brown and Caldwell	PDSA	10/26/2022	\$4,730,000	\$0	\$4,730,000	35%	10.0%	10.0%	0.0%	10.0%	
2-49	Taft Branch Improvements	Woodard & Curran, Inc.	PDSA	02/24/2021	\$2,200,000	\$147,062	\$2,347,062	99%	10.0%	10.0%	6.7%	3.3%	
2-49	Taft Branch Improvements	Woodard & Curran, Inc.	PCSA	07/23/2024	\$1,108,033	\$0	\$1,108,033	0%	10.0%	10.0%	0.0%	10.0%	
3-60	Knott - Miller Holder Artesia Branch Rehabilitation	Dudek	PDSA	10/24/2023	\$1,200,000	\$0	\$1,200,000	27%	10.0%	10.0%	0.0%	10.0%	
3-62	Westminster Blvd Force Main Replacement	Stantec Consulting Services Inc.	PCSA	12/18/2019	\$1,183,000	(\$400,000)	\$783,000	75%	10.0%	10.0%	-33.8%	43.8%	
3-64	Rehabilitation of Western Regional Sewers	AECOM Technical Services, Inc.	PDSA	01/27/2016	\$17,639,250	\$195,850	\$17,835,100	63%	10.0%	10.0%	1.1%	8.9%	
3-64B	Los Alamitos Trunk Sewer Rehabilitation	AECOM Technical Services, Inc.	PCSA	05/26/2021	\$610,000	\$0	\$610,000	76%	10.0%	10.0%	0.0%	10.0%	
3-67	Seal Beach Pump Station Replacement	Lee & Ro, Inc.	PCSA	12/14/2023	\$6,148,000	\$0	\$6,148,000	7%	10.0%	10.0%	0.0%	10.0%	

Table 7 - Active Engineering Services Agreements

	Project/Contract	Consultant	Туре	Award Date		Contract Am	nount			Conti	ngency	
					Award	Amendments	Current	% Spent	Original	Current	Used	Remaining
5-67	Bay Bridge Pump Station Replacement	Arcadis U.S., Inc.	PDSA	10/25/2017	\$7,137,000	\$2,116,140	\$9,253,140	88%	10.0%	35.0%	29.7%	5.3%
5-68	Newport Beach Pump Station Pressurization Improvements	Dudek	PCSA	02/01/2023	\$124,979	\$0	\$124,979	28%	10.0%	10.0%	0.0%	10.0%
6-20	Fairview Sewer Rehabilitation	Dudek	PDSA	07/27/2022	\$1,200,000	\$0	\$1,200,000	57%	10.0%	10.0%	0.0%	10.0%
7-65	Gisler-Red Hill Interceptor and Baker Force Main Rehabilitation	CDM Smith Inc.	PCSA	05/24/2023	\$988,460	\$0	\$988,460	49%	10.0%	10.0%	0.0%	10.0%
7-66	Sunflower and Red Hill Interceptor Repairs	GHD, Inc.	PCSA	07/28/2021	\$166,000	\$0	\$166,000	51%	10.0%	10.0%	0.0%	10.0%
7-68	MacArthur Force Main Improvements	Michael Baker International, Inc.	PDSA	05/26/2021	\$500,000	\$0	\$500,000	100%	10.0%	10.0%	0.0%	10.0%
7-68	MacArthur Force Main Improvements	Michael Baker International, Inc.	PCSA	09/11/2023	\$272,002	\$0	\$272,002	42%	10.0%	10.0%	0.0%	10.0%
J-117B	Outfall Low Flow Pump Station	Brown and Caldwell	PCSA	12/19/2018	\$8,563,913	\$1,584,324	\$10,148,237	81%	10.0%	18.5%	18.5%	0.0%
J-117B	Outfall Low Flow Pump Station	SEL Engineering Services Inc.	PSA	03/27/2019	\$1,096,074	\$0	\$1,096,074	61%	10.0%	10.0%	0.0%	10.0%
J-124	Digester Gas Facilities Rehabilitation	Brown and Caldwell	PDSA	11/15/2017	\$11,770,000	\$9,760,000	\$21,530,000	62%	10.0%	89.9%	82.9%	6.9%

Table 7 - Active Engineering Services Agreements

	Project/Contract	Consultant	Туре	Award Date		Contract An	nount			Conti	ngency	
					Award	Amendments	Current	% Spent	Original	Current	Used	Remaining
J-128	Project Management Information System	PMWeb, Inc.	PSA	06/27/2017	\$1,022,500	\$200,817	\$1,223,317	83%	20.0%	20.0%	19.6%	0.4%
J-98	Electrical Power Distribution System Improvements	Schweitzer Engineering Laboratories, Inc	PSA	03/25/2020	\$1,296,878	\$0	\$1,296,878	36%	10.0%	10.0%	0.0%	10.0%
J-98	Electrical Power Distribution System Improvements	Brown and Caldwell	PDSA	02/26/2020	\$2,240,000	\$147,592	\$2,387,592	97%	10.0%	10.0%	6.6%	3.4%
P1-105	Headworks Rehabilitation at Plant 1	Carollo Engineers, Inc	PCSA	03/24/2021	\$16,500,000	\$0	\$16,500,000	50%	10.0%	10.0%	0.0%	10.0%
P1-105	Headworks Rehabilitation at Plant 1	SEL Engineering Services Inc.	PSA	01/30/2024	\$137,275	\$0	\$137,275	20%	9.3%	9.3%	0.0%	9.3%
P1-126	Primary Sedimentation Basins No. 3-5 Replacement at Plant No. 1	Black & Veatch Corporation	PDSA	04/27/2022	\$14,163,000	\$177,504	\$14,340,504	35%	10.0%	10.0%	1.3%	8.7%
P1-128A	Headquarters Complex at Plant No. 1	HDR Engineering, Inc.	PCSA	05/26/2021	\$4,900,000	\$726,720	\$5,626,720	94%	10.0%	15.0%	14.8%	0.2%
P1-128A	Headquarters Complex at Plant No. 1	AECOM Technical Services, Inc.	PSA	04/28/2021	\$6,750,000	\$0	\$6,750,000	94%	10.0%	10.0%	0.0%	10.0%
P1-132	Uninterruptable Power Supply Improvements at Plant 1	Tetra Tech, Inc.	PCSA	11/09/2023	\$217,830	\$0	\$217,830	42%	10.0%	10.0%	0.0%	10.0%
P1-132	Uninterruptable Power Supply Improvements at Plant 1	Tetra Tech, Inc.	PDSA	11/20/2019	\$784,630	\$62,755	\$847,385	97%	10.0%	10.0%	8.0%	2.0%

Table 7 - Active Engineering Services Agreements

	Project/Contract	Consultant	Туре	Award Date		Contract Am	nount			Conti	ngency	
					Award	Amendments	Current	% Spent	Original	Current	Used	Remaining
P1-133	Primary Sedimentation Basins No. 6-31 Reliability Improvements at Plant No.	Carollo Engineers, Inc	PCSA	03/23/2022	\$530,000	\$0	\$530,000	56%	10.0%	10.0%	0.0%	10.0%
P1-134	South Perimeter Security and Utility Improvements at Plant No.1	HDR Engineering, Inc.	PCSA	07/28/2021	\$235,000	\$0	\$235,000	57%	10.0%	10.0%	0.0%	10.0%
P1-137	Support Buildings Seismic Improvements at Plant No. 1	Simpson, Gumpertz, and Heger	PDSA	07/27/2022	\$1,900,000	\$151,537	\$2,051,537	72%	10.0%	10.0%	8.0%	2.0%
P1-140	Activated Sludge-1 Rehabilitation at Plant No. 1	HDR Engineering, Inc.	PDSA	12/15/2022	\$18,462,443	\$0	\$18,462,443	27%	10.0%	10.0%	0.0%	10.0%
P2-122	Headworks Modifications at Plant No. 2 for GWRS Final Expansion	CDM Smith Inc.	PCSA	01/22/2020	\$2,200,000	\$0	\$2,200,000	91%	10.0%	10.0%	0.0%	10.0%
P2-123	Return Activated Sludge Piping Replacement at Plant 2	Spec Services, Inc.	PCSA	09/25/2019	\$252,329	\$25,233	\$277,562	100%	10.0%	10.0%	10.0%	0.0%
P2-124	Interim Food Waste Receiving Facility	Kennedy/Jenks Consultants, Inc.	PDSA	09/26/2018	\$695,000	\$31,168	\$726,168	100%	10.0%	10.0%	4.5%	5.5%
P2-128	Digester Replacement at Plant No. 2	Brown and Caldwell	PDSA	07/22/2020	\$39,300,000	\$3,845,405	\$43,145,405	68%	10.0%	10.0%	9.8%	0.2%
P2-135	Chemical Systems Rehabilitation at Plant No. 2	Lee & Ro, Inc.	PDSA	03/22/2023	\$862,328	\$74,963	\$937,291	69%	10.0%	10.0%	8.7%	1.3%
P2-137	Digesters Rehabilitation at Plant No. 2	CDM Smith Inc.	PDSA	03/23/2022	\$2,700,000	\$270,000	\$2,970,000	95%	10.0%	10.0%	10.0%	0.0%
P2-137A	Digester P and R Dome Tendon Repair	CDM Smith Inc.	PCSA	08/27/2024	\$209,000	\$0	\$209,000	0%	10.0%	10.0%	0.0%	10.0%
P2-138	Operations and Maintenance Complex at Plant No. 2.	Stantec Architecture Inc.	PDSA	01/25/2023	\$7,914,529	\$431,414	\$8,345,943	20%	10.0%	10.0%	5.5%	4.5%

Table 7 - Active Engineering Services Agreements

	Project/Contract	Consultant	Туре	Award Date		Contract Am	nount			Conti	ingency	
					Award	Amendments	Current	% Spent	Original	Current	Used	Remaining
P2-98A	A-Side Primary Clarifiers Replacement at Plant 2	Black & Veatch Corporation	PCSA	05/26/2021	\$8,400,000	\$0	\$8,400,000	51%	10.0%	10.0%	0.0%	10.0%
P2-98A	A-Side Primary Clarifiers Replacement at Plant 2	SEL Engineering Services Inc.	PSA	05/23/2023	\$97,399	\$0	\$97,399	0%			0.0%	0.0%
PS20-02	Collection System Flow Level Monitoring Study	Woodard & Curran, Inc.	PSA	07/28/2021	\$616,562	\$0	\$616,562	60%	0.0%	10.0%	0.0%	10.0%
PS21-01	Exterior Lighting Study at Plant Nos. 1 and 2	IDS Group, Inc.	PSA	09/07/2022	\$151,660	\$0	\$151,660	99%	10.0%	10.0%	0.0%	10.0%
PS21-04	Energy and Digester Gas Master Plan	Brown and Caldwell	PSA	06/22/2022	\$1,438,036	\$0	\$1,438,036	87%	10.0%	10.0%	0.0%	10.0%
PS21-06	Urban Runoff Optimization Study	Michael Baker International, Inc.	PSA	03/22/2023	\$711,230	\$70,700	\$781,930	66%	10.0%	10.0%	9.9%	0.1%
PS21-07	Process Simulation Model Development for Cen Gen Facilities	Intelliflux Controls	PSA	02/05/2024	\$150,308	\$0	\$150,308	0%	10.0%	10.0%	0.0%	10.0%
RE21-01	Supercritical Water Oxidation Demonstration at Plant No. 1	374Water Systems, Inc.	PSA	12/15/2021	\$5,139,000	\$101,558	\$5,240,558	41%	10.0%	10.0%	2.0%	8.0%
				Total	\$213,667,238	\$19,789,273	\$233,456,511					

Table 8 - Active Task Orders by Master Agreement

	Agreement/Project	Consultant	Award Date	Original Task Order Value	Amendments	Current Task Order Value	% Spent
17 Master A	Agreements for On-Call Planning Studies						
PS19-03	Laboratory Rehabilitation Feasibility Study	HDR Engineering, Inc.	10/20/2020	\$274,888	\$0	\$274,888	819
			Subtotal	\$274,888	\$0	\$274,888	
18 Master F	Professional Design Service Agreements	,	'			,	
FE18-06	CenGen Instrument Air Compressors Replacement at Plant No. 1	IDS Group, Inc.	04/27/2020	\$89,876	\$0	\$89,876	699
FE18-13	Redhill Relief Sewer Relocation at State Route 55	GHD, Inc.	03/27/2020	\$168,612	\$105,331	\$273,943	869
FE18-14	Plant Water Pipeline Replacement in Kinnison, Lindstrom, and Scott Tunnels at Plant No. 2	Dudek	11/06/2019	\$108,308	\$21,544	\$129,852	899
FE19-02	Cengen Plant Water Pipe Replacement at Plant No. 1	AECOM Technical Services, Inc.	07/08/2020	\$156,498	\$143,378	\$299,876	809
FE19-03	Trickling Filter Sludge and Scum Pumps Replacement at Plant No. 1	Black & Veatch Corporation	09/02/2020	\$244,728	\$55,272	\$300,000	989
FE19-06	EPSA Motor Cooling Improvements at Plant No. 2	IDS Group, Inc.	05/05/2020	\$88,206	\$10,541	\$98,747	100
FE19-10	Digesters C, D, F, G and I Gas Balance Lines Replacement at Plant No. 2	GHD, Inc.	02/03/2021	\$25,000	\$65,749	\$90,749	80
FE19-11	Primary Clarifiers Nos. 6-31 Lighting and Alarm Improvements at Plant No. 1	AECOM Technical Services, Inc.	09/21/2020	\$226,685	\$6,137	\$232,822	759
FE19-13	VFD Replacements at Seal Beach Pump Station	AECOM Technical Services, Inc.	03/24/2021	\$78,033	\$0	\$78,033	60
FE20-01	Wastehauler Station Safety and Security Improvements	AECOM Technical Services, Inc.	03/16/2021	\$161,012	\$16,247	\$177,259	91'
FE20-02	Digester C, D, F, and G Mechanical Rehabilitation at Plant No. 2	HDR Engineering, Inc.	03/02/2021	\$188,212	\$34,352	\$222,564	86
FE20-03	Return Activated Sludge Discharge Piping Replacement at Activated Sludge Plant No. 1	GHD, Inc.	06/14/2021	\$249,000	\$0	\$249,000	92'
FE20-04	Cengen Cooling Water Pipe Replacement at Plant No. 2	Dudek	05/18/2021	\$240,000	\$60,000	\$300,000	99
FE20-05	Plant Water Piping Replacement at Secondary Clarifiers 1- 26 at Plant No. 1	IDS Group, Inc.	06/22/2021	\$186,626	\$0	\$186,626	77'
FE20-08	Olive Sub-Trunk Siphon Rehabilitation at Santa Ana River	Dudek	06/10/2021	\$240,000	\$0	\$240,000	949
FE20-09	CenGen Smoke Detection Improvements at Plant No. 1 and No. 2	IDS Group, Inc.	06/15/2021	\$63,275	\$0	\$63,275	839
FR1-0011	VFD Replacements at Plant No. 1	Black & Veatch Corporation	04/08/2021	\$283,000	\$17,000	\$300,000	839
FRC-0009	Bitter Point Trunk Sewer Repair at Bitter Point Pump Station	GHD, Inc.	06/17/2021	\$159,451	\$0	\$159,451	839
			Subtotal	\$2,956,522	\$535,551	\$3,492,073	

Table 8 - Active Task Orders by Master Agreement

	Agreement/Project	Consultant	Award Date	Original Task Order Value	Amendments	Current Task Order Value	% Spent
20 Master	Agreements for On-Call Planning Studies						
PS19-03	Laboratory Rehabilitation Feasibility Study	Hazen and Sawyer	01/17/2023	\$23,825	\$0	\$23,825	1009
PS20-09	Thickening & Dewatering Plant Water Study at Plant No. 1	HDR Engineering, Inc.	04/21/2022	\$219,670	\$0	\$219,670	804
PS21-08	Pure Oxygen Activated Sludge Operations Study at Plant No. 2	Hazen and Sawyer	09/22/2022	\$241,791	\$55,413	\$297,204	1009
PS21-10	Integrated Nitrogen Management	Hazen and Sawyer	10/19/2023	\$247,000	\$0	\$247,000	199
PS22-02	Onsite Oxygen Generation Feasibility Study at Plant No. 2	Black & Veatch Corporation	02/13/2023	\$393,374	\$17,718	\$411,092	529
			Subtotal	\$1,125,660	\$73,131	\$1,198,791	
21 Master	Professional Design Service Agreements						
FE21-08	Newhope-Placentia Sewer Manhole Replacements	GHD, Inc.	02/28/2023	\$235,820	\$0	\$235,820	904
FE22-01	Platform Modifications for Process Areas at Plant No. 1 and No. 2	ProjectLine Technical Services. Inc.	03/14/2023	\$159,296	\$0	\$159,296	809
FR1-0017	Trickling Filter Valve Replacement at Plant No. 1	Dudek	08/16/2022	\$101,108	\$0	\$101,108	85
FR1-0018	Dewatering Centrifuge Diverter Gate Improvements at Plant No. 1	Dudek	08/16/2022	\$140,000	\$93,191	\$233,191	97
FR1-0023	Secondary Treatment Area Cable Replacement at Plant No. 1	Brown and Caldwell	06/28/2024	\$338,943	\$0	\$338,943	1'
FR2-0023	Activated Sludge Clarifier Entry Improvements at Plant No. 2	AECOM Technical Services, Inc.	01/13/2022	\$120,030	\$79,828	\$199,858	65
FR2-0027	Heavy Mechanics Group Office Space Upgrade at Plant No. 2	ProjectLine Technical Services. Inc.	09/13/2022	\$126,153	\$0	\$126,153	969
FR2-0031	Activated Sludge System Scum Rerouting at Plant No. 2	GHD, Inc.	06/14/2024	\$369,479	\$0	\$369,479	3
FRC-0010	Warner Avenue Vault Cover Improvements	Kleinfelder, Inc.	11/16/2021	\$205,000	\$43,128	\$248,128	86
FRC-0014	Magnolia Sewer Manhole Abandonment at Interstate-5	Brown and Caldwell	03/15/2023	\$195,055	\$0	\$195,055	57
FRC-0017	Valve Replacements and Wet Well Access Improvements at Slater Pump Station	Dudek	06/14/2024	\$281,000	\$0	\$281,000	0'
FRJ-0003	Interplant Gas Line Blow Off Vault Repairs	Dudek	09/08/2022	\$165,000	\$55,091	\$220,091	89
J-120A	Control Room Reconfiguration at Plant No.1	ProjectLine Technical Services. Inc.	12/04/2023	\$255,036	\$27,672	\$282,708	84
P1-142	Trickling Filter Media Replacement at Plant No. 1	Brown and Caldwell	05/21/2024	\$397,030	\$0	\$397,030	15
P2-127	Collections Yard Relocation and Warehouse Demolition at Plant No. 2	ProjectLine Technical Services. Inc.	08/02/2022	\$188,898	\$121,517	\$310,415	919

Table 8 - Active Task Orders by Master Agreement

	Agreement/Project	Consultant	Award Date	Original Task Order Value	Amendments	Current Task Order Value	% Spent
SC19-06	EPSA Standby Power Generator Control Upgrades at Plant No. 2	Spec Services, Inc.	11/03/2021	\$241,153	\$58,847	\$300,000	73%
			Subtotal	\$3,519,001	\$479,274	\$3,998,275	

Table 8 - Active Task Orders by Master Agreement

		Agreement/Project	Consultant	Award Date	Original Task Order Value	Amendments	Current Task Order Value	% Spent
20	4 On-Call I	Planning Studies						
	PS23-01	Fleet Facilities Improvements Study	Stantec Consulting Services Inc.	09/10/2024	\$243,543	\$0	\$243,543	0%
	PS23-03	2025 Outfall Initial Dilution Model	Hazen and Sawyer	07/16/2024	\$425,232	\$0	\$425,232	0%
				Subtotal	\$668,775	\$0	\$668,775	
Ag	eement fo	r Design Installation, Implementation and Maintenance o	f a Process Control System				<u> </u>	
	J-120	Process Control Systems Upgrades	ABB, Inc.	07/28/2021	\$11,818,480	(\$14,679)	\$11,803,801	57%
	J-120A	Control Room Reconfiguration at Plant No.1	ABB, Inc.	09/25/2024	\$356,622	\$0	\$356,622	0%
				Subtotal	\$12,175,102	(\$14,679)	\$12,160,423	
				Total	\$20,719,948	\$1,073,277	\$21,793,225	

Table 9 - Planning Studies Status Report

Project Number	Project Name	Status	Allocated Budget
PS19-03	Laboratory Rehabilitation Feasibility Study	Active	\$450,000
PS20-02 PS20-08 PS20-09	Collection System Flow Level Monitoring Study Euclid Trunk Sewer Hydraulic Modeling and Odor Control Analyses Thickening & Dewatering Plant Water Study at Plant No. 1	Active Active Active	\$743,218 \$500,000 \$400,000
PS21-01	Exterior Lighting Study at Plant Nos. 1 and 2	Active	\$345,533
PS21-02	Public Announcement and Fire System at Plant Nos. 1 and 2	Active	\$500,000
PS21-04	Energy and Digester Gas Master Plan	Active	\$1,785,000
PS21-05	CAD Design Manual Update for 3D Design	Active	\$758,000
PS21-06 PS21-07 PS21-10	Urban Runoff Optimization Study Process Simulation Model Development for Cen Gen Facilities Integrated Nitrogen Management	Active Active Active	\$1,100,000 \$211,192 \$372,000
PS22-02	Onsite Oxygen Generation Feasibility Study at Plant No. 2	Active	\$295,000
PS23-01	Fleet Facilities Improvements Study	Active	\$350,000
PS23-03	2025 Outfall Initial Dilution Model	Active	\$708,000
PS23-04	Digital Asset Management Study	Active	\$630,000
PS23-05	Utility Water Planning Study at Plant Nos. 1 and 2	Active	\$1,100,000
PS23-06	Seismic Resilience Study at Plant No. 2	Active	\$946,000
PS24-01	Deep Well Injection Feasibility Study	Active	\$450,000
Grand Total			\$11,643,943
Board Approv	hartered Projects ved Program Budget nallocated Budget		18 \$25,000,000 \$13,356,057

Table 10 - Research Program Status Report

Project Number	Project Name	Status	Allocated Budget
RE20-06	Co-Thickened Sludge Pump Trial at Plant No. 1	Active	\$160,000
RE21-01	Supercritical Water Oxidation Demonstration at Plant No. 1	Active	\$7,941,029
Grand Total			\$8,101,029
Number of C	hartered Projects		2
Board Approved Program Budget			\$10,000,000
Remaining Unallocated Budget			\$1,898,971

Table 11 - Small Construction Projects Program Status Report

	Project Name	Status	Allocated
Number		A .:	Budget
FE18-06 FE18-13	CenGen Instrument Air Compressors Replacement at Plant No. 1 Redhill Relief Sewer Relocation at State Route 55	Active	\$1,150,000
FE18-13 FE18-14	Plant Water Pipeline Replacement in Kinnison, Lindstrom, and Scott Tunnels at Plant	Active Active	\$4,100,000 \$2,300,000
FE10-14	No 2	Active	\$2,300,000
FE19-01	Pump Station Portable Generator Connectors	Active	\$2,570,000
FE19-02	Cengen Plant Water Pipe Replacement at Plant No. 1	Active	\$5,725,000
FE19-03	Trickling Filter Sludge and Scum Pumps Replacement at Plant No. 1	Active	\$3,200,000
FE19-04	Sunflower Pump Replacement at Plant No. 1	Active	\$4,300,000
FE19-06	EPSA Motor Cooling Improvements at Plant No. 2	Active	\$1,825,000
FE19-08	Secondary Treatment VFD Replacements at Plant No. 2	Active	\$2,900,000
FE19-10	Digesters C, D, F, G and I Gas Balance Lines Replacement at Plant No. 2	Active	\$176,000
FE19-11	Primary Clarifiers Nos. 6-31 Lighting and Alarm Improvements at Plant No. 1	Active	\$1,250,000
FE20-01	Wastehauler Station Safety and Security Improvements	Active	\$2,923,000
FE20-02	Digester C, D, F, and G Mechanical Rehabilitation at Plant No. 2	Active	\$6,622,000
FE20-03	Return Activated Sludge Discharge Piping Replacement at Activated Sludge Plant No.	Active	\$6,840,000
FE20-04	1 Cengen Cooling Water Pipe Replacement at Plant No. 2	Active	\$5,180,000
FE20-05	Plant Water Piping Replacement at Secondary Clarifiers 1-26 at Plant No. 1	Active	\$2,485,000
FE20-08	Olive Sub-Trunk Siphon Rehabilitation at Santa Ana River	Active	\$3,500,000
FE20-09	CenGen Smoke Detection Improvements at Plant No. 1 and No. 2	Active	\$950,000
FE21-01	Plasma Cutting Fume Extractor installation at Plant No. 1 Rebuild Shop	Active	\$400,700
FE21-04	Thickening and Dewatering Facility Handrail Installation at Plant No. 1	Active	\$510,000
FE21-06	Chemical Dosing Station Installation at Westside Pump Station	Active	\$560,000
FE21-07	Liquid Oxygen Tank A Replacement at Plant No. 2	Active	\$3,800,000
FE21-08	Newhope-Placentia Sewer Manhole Replacements	Active	\$1,225,000
FE22-01	Platform Modifications for Process Areas at Plant No. 1 and No. 2	Active	\$1,300,000
FE22-02	Liquid Oxygen Tank B Replacement at Plant No. 2	Active	\$4,200,000
FE23-01	Digester Gas Compressor Dryer Replacements at Plant Nos. 1 and 2	Active	\$8,000,000
FE23-03	Wetwell Level Monitoring Upgrade at Collections Pump Stations	Active	\$4,005,000
FE23-04	Truck Loading Scale Replacement at Plant No. 2	Active	\$916,000
FE23-05	Primary Clarifier Nos. 6-31 Scum Pump Replacement at Plant No. 1	Active	\$3,789,000
FE23-06	HVAC Replacements at Plant Nos. 1 and 2	Active	\$2,840,000
FE23-07	Pipeline Utility Easement Clean Up in Huntington Beach	Active	\$4,500,000
FE23-08	Power Buildings 7 and 8 HVAC Replacement at Plant No. 1	Active	\$850,000
FE23-09	Primary Clarifiers F and G Rotating Mechanism Rehabilitation at Plant No. 2	Active	\$4,360,000
FE24-02	Gas Compressor Building Heat Exchanger Replacement at Plant No. 1	Active	\$640,000
SC19-03	Return Activated Sludge Pump Station Elevator Rehabilitation at Plant No. 2	Active	\$890,000
SC19-06	EPSA Standby Power Generator Control Upgrades at Plant No. 2	Active	\$4,800,000
SC20-02	Ocean Outfall Booster Station Elevator Rehabilitation	Active	\$410,000
SC22-01	EPSA Electrical Building and Distribution Center H HVAC System Replacement at Plant	Active	\$5,100,000
SC22-02	No 2 HVAC Replacement for Plant 2 Centrifuge Buillding, Operations Building, and Bitter	Active	\$3,712,000
SC23-01	Point PS Electric Vehicle Charging Stations and Network Installation	Active	\$391,000
SC23-02	Effluent Junction Box Security Fence Replacement at Plant No. 1	Active	\$130,000
SC23-03	Collection System Critical Assets	Active	\$145,000
Grand Total	Concedion System Childen 1650 Co	/ CUVC	\$115,469,700

Number of Chartered Projects Board Approved Program Budget Remaining Unallocated Budget

42 \$125,000,000 \$9,530,300

Table 12 - Information Technology Capital Program Status Report

Project Number	Project Name	Status	Allocated Budget
IT19-05	IT P1 & P2 Data Refresh (IT19-05)	Active	\$1,200,000
IT20-05	Client Management Modernization (ICE-69_IT20-05) 6520005	Active	\$99,000
IT20-08	Field Computer for Nerissa and Interface with LIMS(ICE-68_IT20-07) 6520008	Active	\$121,000
IT20-10	Digitize Quality Assurance Tracking Processes/TNI/ELAP Standards (ICE-76_IT20-10)	Active	\$145,700
IT21-04	Databridge Scale Management Software (ICE - 84_IT21-04)	Active	\$42,752
IT23-03	Workforce Timecard Migration (ICE-98_IT23-03)	Active	\$314,403
IT23-04	Evacuation Mustering & Visitor Management System (ICE -99_IT23-04)	Active	\$176,000
IT24-01	ServiceNow Employee Center Intranet Portal Migrations (ICE - 101_IT24-01)	Active	\$148,467
Grand Total			\$2,247,322
Number of Chartered Projects Board Approved Program Budget Remaining Unallocated Budget		8 \$10,000,000 \$7,752,678	