

**NOTICE OF REGULAR MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

ENGINEERING COMMITTEE
TELECONFERENCE MEETING**

**August 12, 2021
8:30 a.m.**

Join Zoom Meeting by clicking on the link below:

<https://socwa.zoom.us/>

Meeting ID: 894 0207 2370

Passcode: 388311

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NOTICE IS HEREBY GIVEN that a Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Engineering Committee was called to be held by Teleconference on **August 12, 2021 at 8:30 a.m.** SOCWA staff will be present and conducting the call at the SOCWA Administrative Office located at 34156 Del Obispo Street, Dana Point, California. This meeting is being conducted via Teleconference pursuant to the California Governor Executive Order N-29-20.

MEMBERS OF THE PUBLIC ARE INVITED TO PARTICIPATE IN THIS TELECONFERENCE MEETING AND MAY JOIN THE MEETING VIA THE TELECONFERENCE PHONE NUMBER AND ENTER THE ID CODE. THIS IS A PHONE CALL MEETING AND NOT A WEB-CAST MEETING SO PLEASE REFER TO AGENDA MATERIALS AS POSTED WITH THE AGENDA THE WEB-SITE WWW.SOCWA.COM. ON YOUR REQUEST, EVERY EFFORT WILL BE MADE TO ACCOMMODATE PARTICIPATION. IF YOU REQUIRE ANY SPECIAL DISABILITY RELATED ACCOMMODATIONS, PLEASE CONTACT THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY SECRETARY'S OFFICE AT (949) 234-5452 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO THE SCHEDULED MEETING TO REQUEST DISABILITY RELATED ACCOMMODATIONS. THIS AGENDA CAN BE OBTAINED IN ALTERNATE FORMAT UPON REQUEST TO THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY'S SECRETARY AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO THE SCHEDULED MEETING.

AGENDA EXHIBITS AND OTHER WRITINGS THAT ARE DISCLOSABLE PUBLIC RECORDS DISTRIBUTED TO ALL, OR A MAJORITY OF, THE MEMBERS OF THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY ENGINEERING COMMITTEE IN CONNECTION WITH A MATTER SUBJECT FOR DISCUSSION OR CONSIDERATION AT AN OPEN MEETING OF THE ENGINEERING COMMITTEE ARE AVAILABLE BY PHONE REQUEST MADE TO THE AUTHORITY ADMINISTRATIVE OFFICE AT 949-234-5452. THE AUTHORITY ADMINISTRATIVE OFFICES ARE LOCATED AT 34156 DEL OBISPO STREET, DANA POINT, CA ("AUTHORITY OFFICE"). IF SUCH WRITINGS ARE DISTRIBUTED TO MEMBERS OF THE ENGINEERING COMMITTEE LESS THAN SEVENTY-TWO (72) HOURS PRIOR TO THE MEETING, THEY WILL BE SENT TO

PARTICIPANTS REQUESTING VIA EMAIL DELIVERY. IF SUCH WRITINGS ARE DISTRIBUTED IMMEDIATELY PRIOR TO, OR DURING, THE MEETING, THEY WILL BE AVAILABLE IMMEDIATELY ON VERBAL REQUEST TO BE DELIVERED VIA EMAIL TO REQUESTING PARTIES.

AGENDA

1. Call Meeting to Order

2. Public Comments

THOSE WISHING TO ADDRESS THE ENGINEERING COMMITTEE ON ANY ITEM LISTED ON THE AGENDA WILL BE REQUESTED TO IDENTIFY AT THE OPENING OF THE MEETING AND PRIOR TO THE CLOSE OF THE MEETING. THE AUTHORITY REQUESTS THAT YOU STATE YOUR NAME WHEN MAKING THE REQUEST IN ORDER THAT YOUR NAME MAY BE CALLED TO SPEAK ON THE ITEM OF INTEREST. THE CHAIR OF THE MEETING WILL RECOGNIZE SPEAKERS FOR COMMENT AND GENERAL MEETING DECORUM SHOULD BE OBSERVED IN ORDER THAT SPEAKERS ARE NOT TALKING OVER EACH OTHER DURING THE CALL.

3. Approval of Minutes

- Engineering Committee Meeting of May 13, 2021
- Engineering Committee Meeting of June 10, 2021

Recommended Action: Staff recommends the Engineering Committee to approve Minutes as submitted.

4. Operations Report

Recommended Action: Information Item

5. Use Audit Flow and Solids Methodology – Annual Update FY 2020-21

Recommended Action: The Engineering Committee to review and accept flows and solids results to be included in the Use Audit.

6. Capital Improvement Construction Projects Report

Recommended Action: Staff recommends that the Engineering Committee:

- recommend to the PC-2 Board of Directors to approve Olsson Construction Change Orders 22 and 23 for \$510,256; and
- recommend to the PC-15 Board of Directors to approve JR Filanc Change Orders 2 through 4 for \$24,649 for the CTP Facility Improvements project.

7. Coastal Treatment Plant Sludge Force Main Replacement Project Geotechnical Services During Construction Change Order [Project Committee 15]

Recommended Action: Staff recommends that the Engineering Committee recommend to the PC-15 Board of Directors to approve the Ninyo & Moore change order in the amount of \$43,166 for a total revised contract amount of \$108,956 for the geotechnical services during construction for the Coastal Treatment Plant Sludge Force Main Project.

8. **San Juan Creek Ocean Outfall Junction Structure Rehabilitation Project Closeout [Project Committee 5]**

Recommended Action: Information Item

9. **Regional Treatment Plant Miscellaneous 2018 Project Closeout [Project Committee 17]**

Recommended Action: Information Item

Adjournment

I hereby certify that the foregoing Notice was personally emailed or mailed to each member of the SOCWA Engineering Committee at least 72 hours prior to the scheduled time of the Regular Meeting referred to above.

I hereby certify that the foregoing Notice was posted at least 72 hours prior to the time of the above-referenced Engineering Committee meeting at the usual agenda posting location of the South Orange County Wastewater Authority and at www.socwa.com.

Dated this 6th day of August 2021.



Betty Burnett, General Manager/Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

**MINUTES OF REGULAR MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
Engineering Committee**

DRAFT

May 13, 2021

The Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Engineering Committee Meeting was held on May 13, 2021, at 8:30 a.m. via teleconferencing from the Administrative Offices located at 34156 Del Obispo Street, Dana Point, California. The following members of the Engineering Committee were present via Teams Meeting:

DAVID SHISSLER	City of Laguna Beach
MIKE MARQUIS	City of San Juan Capistrano
ROD WOODS	Moulton Niguel Water District
DON BUNTS	Santa Margarita Water District
MARC SERNA	South Coast Water District
LORRIE LAUSTEN	Trabuco Canyon Water District

Absent:

DAVE REBENS DORF	City of San Clemente
DENNIS CAFFERTY	El Toro Water District
KEVIN BURTON	Irvine Ranch Water District
MIKE DUNBAR	Emerald Bay Services District

Staff Present:

BETTY BURNETT	General Manager
JASON MANNING	Director of Engineering
DAVID BARANOWSKI	Senior Engineer
RONI YOUNG	Associate Engineer
JIM BURROR	Director of Operations
JEANETTE COTINOLA	Procurement/Contracts Administrator
MATT CLARKE	IT Administrator
GAGE GESIRIECH	Maintenance Supervisor
DANITA HIRSH	Executive Assistant

Also Present:

TARYN KJOLSING	South Coast Water District
JESUS GARIBAY	Moulton Niguel Water District
DEBBIE MARTIN	TRC

1. Call Meeting to Order

Mr. Manning, Director of Engineering called the meeting to order at 8:32 a.m.

2. Public Comments

None

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3. Approval of Minutes

• **Engineering Committee Meeting of April 8, 2021**

Staff pulled the Minutes for revisions and to be brought back to the next Engineering Committee Meeting for consideration of approval.

4. Operations Status Report

Mr. Burror reported on the recent spill that occurred at the Sludge Force Main between the Coastal and Regional Treatment Plants. He noted the spill was a little over 400 gallons and had not infiltrated any of the water ways including the ocean. He thanked the Moulton Niguel Water District staff for their assistance in the matter. Mr. Burror also stated the repairs were made and the line was back in service. He also stated reports to the Health Department and the Regional Board are forthcoming. An open discussion ensued.

This was an information item; no action was taken.

5. Capital Improvement Construction Projects Report

There was consensus from the PC 2 Engineering Committee members to recommend to the PC 2 Board to approve Change Orders 19 through 21 for a total of \$134,453 for the J.B. Latham Package B Project.

There was consensus from the PC 15 Engineering Committee members with one (1) absent and (1) abstention to recommend to the PC 15 Board to approve Change Order 1 for \$5,690 for the CTP Sludge Force Main, and Change Orders 22 through 24 for \$14,394 for the CTP Facility Improvements Project. Moulton Niguel Water District abstained, and Emerald Bay Service District was absent.

6. Contract Amendment for the J.B. Latham Treatment Plant Package B Engineering Services during Construction [Project Committee 2]

There was consensus from the PC 2 Engineering Committee members to recommend to the PC 2 Board to approve the contract amendment to Carollo in the Amount of \$227,617 for a total revised contract amount of \$1,074,145 for the engineering services for the J.B. Latham Package B Project.

7. Contract Amendment for the J.B. Latham Treatment Plant Package B Construction Management Services [Project Committee 2]

There was consensus from the PC 2 Engineering Committee to recommend to the PC 2 Board to approve the contract amendment to Butier in the amount of \$290,156 for a total revised contract amount of \$1,185,883 for the construction management services for the J.B. Latham Package B Project.

8. J.B. Latham Treatment Plant Electrical System Evaluation Additional Design Services [Project Committee 2]

Ms. Young gave a presentation on the construction status, project schedule and budget update. An open discussion ensued.

This was an information item; no action was taken.

9. Coastal Treatment Plant Aeration Diffuser Purchase [Project Committee 15]

Mr. Manning stated at the PC-15 Board meeting staff requested consent to purchasing and installing new Aeration Diffusers at the Coastal Treatment Plant. He noted the plant currently has Parkson Panels that are no longer supported by the manufacturer and replacement diffusers are needed to maintain operation of the biological process and maintain quality effluent for recycled water. An open discussion ensued.

There was consensus from the PC 15 Engineering Committee members with one (1) absent and (1) abstention supporting the recommendation to the PC 15 Board to authorize purchasing the Aeration Diffusers. Moulton Niguel Water District abstained, and Emerald Bay Service District was absent.

Adjournment

There being no further business, Mr. Manning adjourned the meeting at 10:07 a.m.

I HEREBY CERTIFY that the foregoing Minutes are a true and accurate copy of the Minutes of the Regular Meeting of the South Orange County Wastewater Authority Engineering Committee of May 13, 2021 and approved by the Engineering Committee and received and filed by the Board of Directors of the South Orange County Wastewater Authority.

Betty Burnett, General Manager/Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

**MINUTES OF REGULAR MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
Engineering Committee**

DRAFT

June 10, 2021

The Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Engineering Committee Meeting was held on June 10, 2021, at 8:30 a.m. via teleconferencing from the Administrative Offices located at 34156 Del Obispo Street, Dana Point, California. The following members of the Engineering Committee were present via Teams Meeting:

DAVID SHISSLER	City of Laguna Beach
MIKE MARQUIS	City of San Juan Capistrano
MIKE DUNBAR	Emerald Bay Service District
ROD WOODS	Moulton Niguel Water District
DON BUNTS	Santa Margarita Water District
TARYN KJOLSING	South Coast Water District

Absent:

DAVE REBENS DORF	City of San Clemente
DENNIS CAFFERTY	El Toro Water District
KEVIN BURTON	Irvine Ranch Water District
LORRIE LAUSTEN	Trabuco Canyon Water District

Staff Present:

BETTY BURNETT	General Manager
JASON MANNING	Director of Engineering
JIM BURROR	Director of Operations
DAVID BARANOWSKI	Senior Engineer
JEANETTE COTINOLA	Procurement/Contracts Administrator
MATT CLARKE	IT Administrator

Also Present:

JESUS GARIBAY	Moulton Niguel Water District
CHRIS NEWTON	South Coast Water District
SHERRY WANNINGER	Moulton Niguel Water District

1. Call Meeting to Order

Mr. Manning, Director of Engineering called the meeting to order at 8:34 a.m.

2. Public Comments

Mr. Dunbar noted his concerns for the increased amount of change orders on construction projects. He requested this topic to be agendaized at the next Engineering Committee meeting to discuss working on how to reduce changes in the design phase of the projects scope to minimize costs impacts during construction. An open discussion ensued.

3. Approval of Minutes

- Engineering Committee Meeting of April 8, 2021

ACTION TAKEN

Motion was made by Mr. Woods seconded by Mr. Dunbar to approve the Engineering Committee Minutes of April 8, 2021 as submitted.

Motion Carried:	Aye 6, Nay 0, Abstained 0, Absent 4
	David Shissler (CLB) Aye
	Dave Rebensdorf (CSC) Absent
	Mike Marquis (CSJC) Aye
	Mike Dunbar (EBSD) Aye
	Dennis Cafferty (ETWD) Absent
	Kevin Burton (IRWD) Absent
	Rod Woods (MNWD) Aye
	Taryn Kjolsing (SCWD) Aye
	Don Bunts (SMWD) Aye
	Lorrie Lausten (TCWD) Absent

4. Operations Status Report

Mr. Burror reported on several projects occurring within Operations. He stated there is significant increases in pricing relating to contract renewals. He stated member agencies who are impacted will be notified once the information is finalized. Mr. Burror shared a photo of tile replacement work occurring in the Administration building lobby due to a slab leak. He also reported there is a tour scheduled for the JBL Plant on June 21st with members from South Coast Water District and El Toro Water District. He also reported on projects at the Regional Treatment and Coastal Treatment Plants. An open discussion ensued.

5. Capital Improvement Construction Projects Report

Mr. Manning reported on the Package B Project at JBL noting the project contingency was depleted on the solids side of the project and will be discussed in further detail under agenda Item 6. He also noted on page 9 of the agenda packet the change orders for Butier were on hold to get more accurate costs before presenting to the Board.

Mr. Baranowski reported on the progress of the Export Forcemain Replacement project stating the project is 50% completed through the construction of the pipeline at Station 82 of 164. He stated the contractor will continue the work on the remainder of the pipeline through the end of the year. Mr. Baranowski noted no findings or any issues to report to date on the project. Mr. Baranowski also gave a report on the Coastal Treatment Plant Facilities Improvement Project stating the project was near completion. He noted minor change orders due to some electrical work needed. An open discussion ensued.

Mr. Manning noted a correction on the total amount of the change orders from \$4,210 to \$7,210.

ACTION TAKEN

There was consensus amongst the PC-15 Engineering Committee to recommend to the PC-15 Board of Directors to approve Change Orders 25 and 26 for \$7,210 for the CTP Facility Improvements project.

Motion Carried:	Aye 3, Nay 0, Abstained 1, Absent 0
	David Shissler (CLB) Aye
	Mike Dunbar (EBSD) Aye
	Rod Woods (MNWD) Abstain
	Taryn Kjolsing (SCWD) Aye

6. J.B. Latham Treatment Plant Package B Solids Contingency [Project Committee 2]

Mr. Manning reported on the Package B Solids Contingency stating the funds for the contingency on the solids side of the project ran out. Mr. Manning stated as presented in the report in Table 1 on Page 2 that the project is essentially out of contingency for the solids portion of the project. He stated we would like to request a conservative contingency so that the remaining portions of the project are kept on track and moving forward. An open discussion ensued.

ACTION TAKEN

There was consensus amongst the PC-2 Engineering Committee to recommend to the PC-2 Board of Directors to approve the addition of \$985,000 of contingency to the J.B. Latham Package B Solids Project (3287-000) for a total Solids contingency of \$1,657,400.

Motion Carried:	Aye 4, Nay 0, Abstained 0, Absent 0
	Mike Marquis (CSJC) Aye
	Rod Woods (MNWD) Aye
	Taryn Kjolsing (SCWD) Aye
	Don Bunts (SMWD) Aye

Adjournment

There being no further business, Mr. Manning adjourned the meeting at 9.30 a.m.

I HEREBY CERTIFY that the foregoing Minutes are a true and accurate copy of the Minutes of the Regular Meeting of the South Orange County Wastewater Authority Engineering Committee of June 10, 2021 and approved by the Engineering Committee and received and filed by the Board of Directors of the South Orange County Wastewater Authority.

Betty Burnett, General Manager/Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

Agenda Item

5

Engineering Committee Meeting

Meeting Date: August 12, 2021

TO: Engineering Committee Members

STAFF CONTACT: Amber Baylor, Director of Environmental Compliance

SUBJECT: Use Audit Flow and Solids Methodology – Annual Update FY 2020-21

Summary

The Use Audit flow allocation methodology has relied on historical practice for allocation of costs. The intent of this agenda item is to review the historical methodology per project committee (PC) which is presented to the Engineering Committee on an annual basis for review and comment. The only change in methodology from FY 19-20 versus FY 20-21 is a request by ETWD to include additional percent solids used in the pounds contributed from ETWD. SOCWA staff analyzes samples three times a week, while ETWD analyzes samples five times a week thus providing a more accurate sample percent solid. Please note that this change will result in a slight difference in the monthly operations report compared to the Use Audit inclusion of data. In addition, SOCWA worked to program this report into the Water Information Management System to provide an automated report which will increase efficiency of delivery of the raw and calculated data to member agencies in FY 21-22.

Results

Captured herein are the methodologies employed and the results by member agency based on the raw and calculated data. Please note that PC5 and PC24 are attributed to fixed costs.

PC2

Member agency average flows for the FY were used in the flow allocation and applied proportionally from the total combined flow from each tributary trunk line. The PC2 use audit uses FY flows and three-year FY average solid loadings to reconcile the budgeted amounts. Solids loadings are calculated from adding the average FY BOD and TSS and dividing by 2 and then multiplying the result by the flow and the 8.34 pounds conversion factor. In March 2018, PC2 members Moulton Niguel Water District (MNWD) and Santa Margarita Water District (SMWD) came to an agreement on how to allocate solids for budgeting and use audit purposes. The new method captures the influent loading at Plant 3A as it was recognized that this allocation would isolate MNWD's solids contributions to JBL to a single variable. SMWD solids to JBL would then be the balance of solids contributed by the Oso Creek Water Reclamation Plant, 3A and any other discharges to the Oso Trabuco line to JBL. Summary results for PC2 are included in Table 1.

PC2 - JB Latham Plant					
Liquids Summary (mgd)					
Member	2020-2021 Budgeted	2020-2021 Budgeted	2020-2021 Total	2020-2021 Total	Total Percent
Agency	Flow (mgd)	Percent	Avg. Flow (mgd)	Billing Flow (mgd)	To Date
CSJC	2.17	36.61%	2.207	2.207	31.15%
MNWD	1.40	23.62%	Constant	1.400	19.76%
SCWD	1.64	27.65%	1.684	1.684	23.76%
SMWD	0.72	12.11%	3.195	1.795	25.33%
	5.93	2.17%	7.086	7.086	100.00%

Please refer to the MNWD & SMWD Agreement from 2018 for flow/solids splitting in the Oso-Trabuco line.

Solids Summary Loading (mgd)					
Member	2020-2021 Budgeted	2020-2021 Budgeted	Total Avg. Loadings	Total Avg. Loadings	Total Percent
Agency	Flow	Percent	FY 2020-2021	Billing Loading	To Date
CSJC	5815.44	23.90%	6317	6317	24.07%
MNWD	5123.93	21.06%	Constant	4006	15.27%
SCWD	4399.25	18.08%	6035	6035	23.00%
SMWD	8991.56	36.96%	13889	9882	37.66%
	24330.19	100.00%	26240	26240	100.00%

Table 1: PC2 Liquids and Solids Summary Table

PC12

The PC12 method of production is detailed by member agency in the following narrative. San Juan Capistrano is the acre-foot sum of the Rosebaum well, the Mission Street Well, and the total reclaimed water from the SMWD/CSJC intertie. MNWD is the amount of reclaimed water produced from the Regional Treatment Plant (RTP) and the 3A Treatment Plant (split with SMWD). South Coast Water District (SCWD) is the total reclaimed water produced from the Coastal Treatment Plant (CTP). The Santa Margarita Water District (SMWD) is the combined sum of reclaimed water produced from the 3A Treatment Plant (split with MNWD), the Oso Creek Water Reclamation Plant (OCWRP), the Chiquita Water Reclamation Plant (CWRP), and the Nichols Water Reclamation Plant (NWRP). The Trabuco Canyon Water District (TCWD) is reclaimed water produced from the Robinson Ranch Water Reclamation Plant (RRWRP). Summary results for PC2 are included in Table 2.

PC 12 Recycled Water		
Master Recycled Water Permit		
2020-2021		
Member Agency	Region 9 Recycled Production FY 2020-2021	% RW Produced FY 2020-2021
	acft	%
CSJC	414	2.64
MNWD	6557	41.76
SCWD	1090	6.94
SMWD	7064	44.98
TCWD	578	3.68
Total	15704	100.00

Table 2: PC12 Liquids and Solids Summary Table

PC15

Due to the lack of solids handling capacity at the Coastal Treatment Plant (CTP), allocation methodology is based on flows to the treatment plant. In addition, there are no current flow meters installed to account for any flow sent to CTP from MNWD so no flow is being accounted for in this PC flow allocation methodology. The City of Laguna Beach (CLB) is the average annual flow into CTP (metered). The Emerald Bay Services District (EBS) is the average annual flow into CTP (calculated from monthly meter read from the lift station divided by the days in the month). The South Coast Water District (SCWD) is the average annual flow into CTP (metered). The meter calibration is performed annually in June. Summary results for PC2 are included in Table 3.

PC 15 Actual Flows		
FY 2020-2021		
Coastal Treatment Plant		
Member Agency	Plant Flows MGD	Plant Flow Percent
CLB	1.566	58.11
EBS	0.078	2.89
SCWD	1.051	38.99
MNWD	0.00	0.00
Total	2.69	100.00

Table 3: PC15 Liquids and Solids Summary Table

PC17

PC17 has liquid and solids contribution. The liquid flow allocation is based on influent flow to the plant. The influent flow is solely contributed by the MNWD. Due to liquid flow from CTP, the centrate flow is divided by 5 and distributed to each agency then summed to create a total liquid flow to the RTP. The flows are then distributed on a proportional basis. The solids contribution is based on the total daily average pounds contributed by each agency distributed proportionally. The meter calibration is performed annually in June. Summary results for PC17 are included in Table 4.

PC 17 Liquids				
Regional Treatment Plant				
FY 2020-2021				
Member Agency	Plant Flow (MGD)	Centrate Flow (MGD)	Total Flow (MGD)	Liquid Flow (%)
CLB	0.00	0.0131	0.0076	0.10
EBS	0.00	0.0007	0.0000	0.00
SCWD	0.00	0.0087	0.0034	0.04
ETWD	0.00	0.0153	0.0153	0.20
MNWD	7.66	0.0662	7.7222	99.66
Total	7.66	0.1039	7.7485	100.00

PC 17 Solids		
Regional Treatment Plant		
FY 2020-2021		
Member Agency	#/Day	%
CLB	4514.39	14.52
ETWD	175.31	0.56
EBS	223.74	0.72
MNWD	23154.71	74.49
SCWD	3016.21	9.70
Total	31084.37	100.00

Table 4: PC15 Liquids and Solids Summary Table

Recommended Action: The Engineering Committee to review and accept flows and solids results to be included in the Use Audit.

PC2 - JB Latham Plant					
Liquids Summary (mgd)					
	2020-2021	2020-2021	2020-2021	2020-2021	Total
Member	Budgeted	Budgeted	Total	Total	Percent
Agency	Flow (mgd)	Percent	Avg. Flow (mgd)	Billing Flow (mgd)	To Date
CSJC	2.17	36.61%	2.207	2.207	31.15%
MNWD	1.40	23.62%	Constant	1.400	19.76%
SCWD	1.64	27.65%	1.684	1.684	23.76%
SMWD	0.72	12.11%	3.195	1.795	25.33%
	5.93	2.17%	7.086	7.086	100.00%

Please refer to the MNWD & SMWD Agreement from 2018 for flow/solids splitting in the Oso-Trabuco line.

Solids Summary Loading (mgd)					
	2020-2021	2020-2021	Total	Total	Total
Member	Budgeted	Budgeted	Avg. Loadings	Avg. Loadings	Percent
				2020-2021	
Agency	Flow	Percent	FY 2020-2021	Billing Loading	To Date
CSJC	5815.44	23.90%	6317	6317	24.07%
MNWD	5123.93	21.06%	Constant	4006	15.27%
SCWD	4399.25	18.08%	6035	6035	23.00%
SMWD	8991.56	36.96%	13889	9882	37.66%
	24330.19	100.00%	26240	26240	100.00%

PC 12 Recycled Water		
Master Recycled Water Permit		
2020-2021		
Member Agency	Region 9 Recycled Production FY 2020-2021	% RW Produced FY 2020-2021
	acft	%
CSJC	414	2.64
MNWD	6557	41.76
SCWD	1090	6.94
SMWD	7064	44.98
TCWD	578	3.68
Total	15704	100.00

PC 15 Actual Flows		
FY 2020-2021		
Coastal Treatment Plant		
Member Agency	Plant Flows MGD	Plant Flow Percent
CLB	1.566	58.11
EBSD	0.078	2.89
SCWD	1.051	38.99
MNWD	0.00	0.00
Total	2.69	100.00

**PC 17 Liquids
Regional Treatment Plant
FY 2020-2021**

Member Agency	Plant Flow (MGD)	Centrate Flow (MGD)	Total Flow (MGD)	Liquid Flow (%)
CLB	0.00	0.0131	0.0076	0.10
EBS	0.00	0.0007	0.0000	0.00
SCWD	0.00	0.0087	0.0034	0.04
ETWD	0.00	0.0153	0.0153	0.20
MNWD	7.66	0.0662	7.7222	99.66
Total	7.66	0.1039	7.7485	100.00

**PC 17 Solids
Regional Treatment Plant
FY 2020-2021**

Member Agency	#/Day	%
CLB	4514.39	14.52
ETWD	175.31	0.56
EBS	223.74	0.72
MNWD	23154.71	74.49
SCWD	3016.21	9.70
Total	31084.37	100.00

Agenda Item

6

Engineering Committee Meeting

Meeting Date: August 12, 2021

TO: Engineering Committee
FROM: Jason Manning, Director of Engineering
SUBJECT: Capital Improvement Construction Projects Report

Overview

Active Construction Project Updates:

Attached are the updated CIP reports. Please note that there are two new change orders for PC 2 JB Latham Package B project totaling \$510,256 and three new change orders for PC 15 Coastal Treatment Plant Export Sludge Replacement project totaling \$24,649. A separate Staff Report is presented for the CTP Export Sludge Replacement Geotechnical Services change order.

JBL Package B

Olsson Change Order 23 - Background Information for MCC F1

MCC F1 replaces MCC F which is currently located outside in a Class I Division I area. MCC F1 will provide power to Digesters 1 and 2 for pumping, heating, and instrumentation. The MCC was originally planned to be located in the access road behind Digesters 1 and 2 but during potholing and trenching, utility conflicts arose that prevented any further consideration of a fully buried duct bank. The design for the MCC was then moved so that the cabinet would be located in an area where overhead conduit bridges would be used. The cost estimate for the construction of this redesign was significantly higher than anticipated. Carollo Engineers then provided three potential alternatives to the first overhead redesign.

Option 1: Keep the overhead design but utilize a duct bank in the adjacent planter eliminating exposed conduit and use a cable tray for the bridges.

Option 2: Utilize surface duct banks across the access road.

Option 3: Utilize precast "Trenwa" style trenches across the access road.

Options 2 and 3 pose more potential conflicts with some shallow utilities and would raise the height of the access road. A pipe bridge that transports hot water and digester gas to/from the digesters is already located across the road. The access road is used for large equipment to service not just the digesters but the digester gas conditioning system further down the access road. The road height increase may prevent some larger vehicles from accessing areas past the bridge. Storm flows, spills, and issues with below grade conductor and conduit is another concern with a precast trench.

SOCWA directed Carollo Engineers to update the design using Option 1. Olsson provided pricing and schedule impacts based on Option 1. After review by the construction management, design, and engineering teams was completed, it was determined that the cable tray provided no overall cost savings and could have a significant impact on the project schedule. It was therefore decided to revert to the conduit bridge design. The conduit bridge design has the least likelihood for further related change orders, is the preferred method for conductor protection, and will have minimal impacts to the construction schedule.

Recommended Action: Staff recommends that the Engineering Committee:

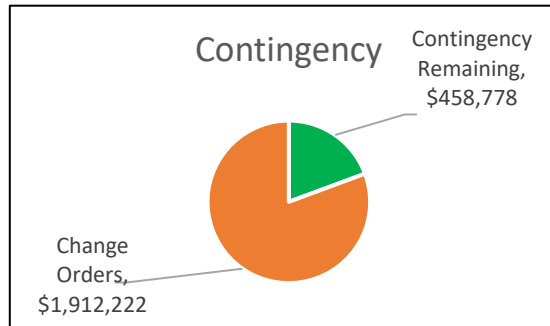
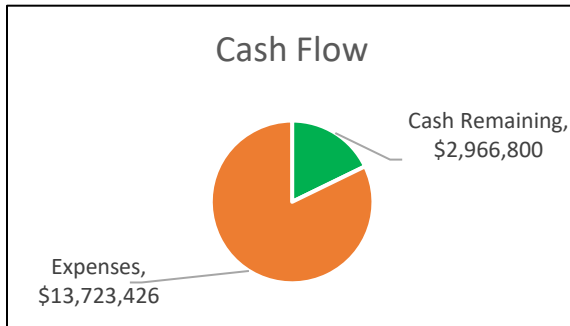
- recommend to the PC-2 Board of Directors to approve Olsson Construction Change Orders 22 and 23 for \$510,256; and
- recommend to the PC-15 Board of Directors to approve JR Filanc Change Orders 2 through 4 for \$24,649 for the CTP Facility Improvements project.

Project Financial Status

Project Committee	2
Project Name	Package B
Project Description	Plant 1 basin repairs, DAF rehabilitation, Energy Building seismic retrofit and minor rehabilitation, Digester 4 rehabilitation

Data Last Updated

August 4, 2021



Cash Flow

Collected	\$16,690,226
Expenses	\$13,723,426

Project Completion

Schedule	80%
Budget	60%

Contracts

Company	PO No.	Original	Change Orders	Total	Paid
Olsson	13497	\$ 17,325,000	\$ 1,071,890	\$ 18,396,890	\$ 10,668,328
Butler	13647	\$ 895,727	\$ 612,715	\$ 1,508,442	\$ 895,727
Carollo	13616	\$ 846,528	\$ 227,617	\$ 1,074,145	\$ 947,580
TetraTech	13605	\$ 94,000	\$ -	\$ 94,000	\$ 81,837
		\$ 19,161,255	\$ 1,912,222	\$ 21,073,477	\$12,593,472

Contingency

Area	Project Code	Amount	Change Orders	Total Remaining	Percent Used
Liquids	3220-000	\$ 616,800	\$ 567,630	\$ 49,170	92.0%
Common	3231-000	\$ 96,800	\$ 67,205	\$ 29,595	69.4%
Solids	3287-000	\$ 1,657,400	\$ 1,277,387	\$ 380,013	77.1%
		\$ 2,371,000	\$ 1,912,222	\$ 458,778	80.7%

Summary of New Change Orders

Change Order No	CSJC	MNWD	SCWD	SMWD	Amount
22	\$8,912	\$6,684	\$8,355	\$5,013	\$28,965
23	\$144,387	\$104,063	\$96,258	\$136,582	\$481,290
Grand Total	\$153,300	\$110,747	\$104,613	\$141,596	\$510,256

Change Orders

Change Order No.	Vendor Name	Project ID	Description	Status	Status Date	Potential Change Amount	Final Amount
1	Olsson	3287-000	Addition of Loop Piping to the Existing Hot Water Lines Adjacent to Digester 3	Approved by Board of Directors	12/12/2019		\$ 4,725
2	Olsson	3287-000	Asbestos Gaskets in Boiler hazardous disposal	Approved by Board of Directors	6/4/2020		\$ 6,343
3	Olsson	3287-000	Add Analog Infrastructure and Cabling	Approved by Board of Directors	6/4/2020		\$ 37,970
4	Olsson	3287-000	Digester 4 Coating Additional Sealant	Approved by Board of Directors	6/4/2020		\$ 24,002
5	Olsson	3220-000	Valve Handwheel Ergonomic extension	Approved by Board of Directors	8/6/2020		\$ 16,370
6	Olsson	3287-000	Change to DeZurik Plug Valves to match existing	Approved by Board of Directors	8/6/2020		\$ 41,994

Change Order No.	Vendor Name	Project ID	Description	Status	Status Date	Potential Change Amount	Final Amount
7	Olsson	3287-000	Digester 4 Additional Concrete Repair	Approved by Board of Directors	8/6/2020		\$ 7,413
8	Olsson	3287-000	Repair Existing Damaged Electrical Box	Approved by Board of Directors	8/6/2020		\$ (1,829)
9	Olsson	3220-000	Change the Telescoping Valve Boxes and Piping from Carbon Steel to Stainless Steel	Approved by Board of Directors	8/6/2020		\$ 18,678
10	Olsson	3287-000	Duct bank J Interferences	Approved by Board of Directors	12/17/2020		\$ 73,639
11	Olsson	3220-000	Blasting of Existing Influent Pipe Spools	Approved by Board of Directors	12/17/2020		\$ 20,869
12	Olsson	3220-000	Duct bank K Interferences	Approved by Board of Directors	12/17/2020		\$ 15,567
13	Olsson	3287-000	Digester 3/4 PLC Relocation	Approved by Board of Directors	12/17/2020		\$ 41,368
14	Olsson	3287-000	Digester 4 Additional Tank Repair	Approved by Board of Directors	12/17/2020		\$ 33,643
15	Olsson	3220-000	Duct bank O Interferences	Approved by Board of Directors	12/17/2020		\$ 1,687
16	Olsson	3287-000	Digester 3/4 Control Building Roof Replacement	Approved by Board of Directors	2/4/2021		\$ 42,780

Change Order No.	Vendor Name	Project ID	Description	Status	Status Date	Potential Change Amount	Final Amount
17	Olsson	3287-000	MCC-D1 Modifications due to Change in Motor Size	Approved by Board of Directors	5/6/2021		\$ 34,392
18	Olsson	3287-000	Integrator Additional Site Visits	Approved by Board of Directors	5/6/2021		\$ 7,572
19	Olsson	3287-000	Multi-zone air conditioning unit in the Cogen MCC Room and Office	Approved by Board of Directors	6/3/2021		\$ 29,417
20	Olsson	3220-000	Overhead Walkway Removal at Plant 1 Secondary Basins 5 through 9	Approved by Board of Directors	6/3/2021		\$ 62,114
21	Olsson	3287-000	Cogeneration PLC Modifications and Integration	Approved by Board of Directors	6/3/2021		\$ 42,923
22	Olsson	3220-000	Plant 1 Secondary Basins UV Rated Wear Strips	Within Contingency, to be reviewed by Engineering Committee	8/12/2021		\$ 28,965
23 See discussion in staff report.	Olsson	3287-000	MCC-F1 Design Change	Within Contingency, to be reviewed by Engineering Committee	8/12/2021		\$ 481,290

Change Order No.	Vendor Name	Project ID	Description	Status	Status Date	Potential Change Amount	Final Amount
1CM Common	Butier	3231-000	CM Change Order No. 1	Approved by Board of Directors	7/13/2021		\$ 48,995
1CM Liquids	Butier	3220-000	CM Change Order No. 1	Approved by Board of Directors	7/13/2021		\$ 294,125
1CM Solids	Butier	3287-000	CM Change Order No. 1	Approved by Board of Directors	7/13/2021		\$ 269,595
1ESDC Common	Carollo	3231-000	ESDC Change Order No. 1	Approved by Board of Directors	6/3/2021		\$ 18,210
1ESDC Liquids	Carollo	3220-000	ESDC Change Order No. 1	Approved by Board of Directors	6/3/2021		\$ 109,256
1ESDC Solids	Carollo	3287-000	ESDC Change Order No. 1	Approved by Board of Directors	6/3/2021		\$ 100,151
PCO 002	Olsson	3287-000	Digester 4 Rail Coating. The coating is not needed and resulting in a credit but some rehabilitation work will be needed.	Potential Change	(blank)	-\$1,000	
PCO 004	Olsson	3287-000	Digester 4 Control Narrative needed	Potential Change	(blank)	\$5,000	
PCO 005	Olsson	3287-000	TWAS Slab Modifications	Potential Change	(blank)	\$50,000	

Change Order No.	Vendor Name	Project ID	Description	Status	Status Date	Potential Change Amount	Final Amount
PCO 008	Olsson	3287-000	Conduit Routing Conflict from MCC-F1 and Relocation of MCC-F1	Potential Change	(blank)	\$350,000	
PCO 009	Olsson	3287-000	PLC East Headworks Integration	Potential Change	(blank)	\$10,000	
PCO 012	Olsson	3287-000	PCL-CG Integration	Potential Change	(blank)	\$5,000	
PCO 014	Olsson	3287-000	Digester 4 Compressor Supply Line	Potential Change	(blank)	\$18,146	
PCO 018	Olsson	3287-000	Duct bank L Interferences	Potential Change	(blank)	\$10,000	
PCO 026	Olsson	3287-000	Gas Hatch Lids Mating Connection	Potential Change	(blank)	\$7,771	
PCO 028	Olsson	3287-000	4" Gas Line Routing Modifications	Potential Change	(blank)	\$18,147	
PCO 032	Olsson	3287-000	Gas Mixer Conduit Conflict	Potential Change	(blank)	\$12,384	
PCO 037	Olsson	3231-000	Energy Building Monorail and Other Conflicts	Potential Change	12/10/2020	\$10,000	
PCO 039	Olsson	3220-000	Diversion Structure Gate Actuator Power Feed Replacement	Potential Change	8/13/2020	\$5,000	
PCO 050	Olsson	3220-000	Telescoping Valves Rework	Potential Change	12/23/2020	\$27,884	
PCO 43	Olsson	3220-000	Telescoping Valve Pipe Support	Potential Change	(blank)	\$3,754	

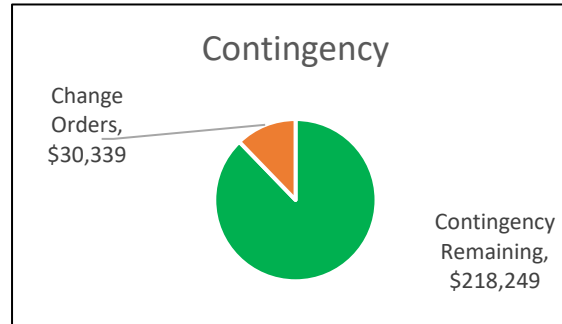
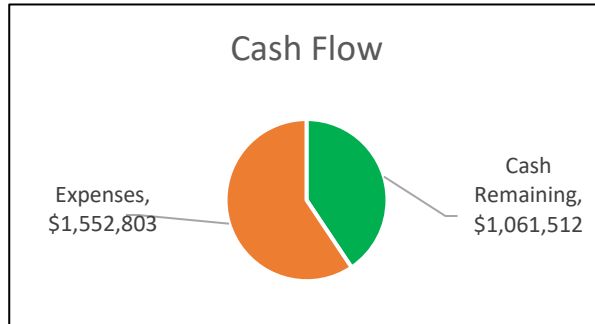
Change Order No.	Vendor Name	Project ID	Description	Status	Status Date	Potential Change Amount	Final Amount
PCO 46	Olsson	3220-000	UV Protected Wear Strips	Potential Change	(blank)	\$29,545	
PCO 66	Olsson	3287-000	DAFT 1 and 2 Repairs	Potential Change	(blank)	\$300,000	
PCO 98	Olsson	3220-000	Effluent Pump Station Descope (A1-A6)	Potential Change	(blank)	-\$800,000	
PCO 99	Olsson	3223-000	Energy Building Modifications Descope (F1-F4, G1-G2, & H1-H2)	Potential Change	(blank)	-\$600,000	
Grand Total						-\$538,369	\$ 1,912,222

Project Financial Status

Data Last Updated

Project Committee	15
Project Name	Export Sludge Force Main Replacement
Project Description	New 6-inch HDPE force main replacing ageing 4-inch (x2) lines from the Coastal Treatment Plant to the Regional Treatment Plant through Aliso Canyon

August 4, 2021



Cash Flow

Collected	\$2,614,315
Expenses	\$1,552,803

Project Completion

Schedule	60%
Budget	36%

Contracts

Company	PO No.	Original	Change Orders	Total	Paid
Filanc	15949	\$ 3,107,346	\$ 30,339	\$ 3,137,685	\$ 1,135,552
Butier	16164	\$ 226,100	\$ -	\$ 226,100	\$ 61,570
PSOMAS	15961	\$ 277,368	\$ -	\$ 277,368	\$ 40,275
Dudek	15947	\$ 387,750	\$ -	\$ 387,750	\$ 190,459
Ninyo & Moore	16268	\$ 65,790	\$ 43,166	\$ 108,956	\$ 48,889
		\$ 4,064,354	\$ 73,505	\$ 4,137,859	\$1,476,744

Filanc Contingency

Area	Project Code	Amount	Change Orders	Total Remaining	Percent Used
Liquids	3541-000	\$ 248,588	\$ 30,339	\$ 218,249	12.2%
		\$ 248,588	\$ 30,339	\$ 218,249	12.2%

Summary of New Change Orders

Change Order No.	CLB	EBS	MNWD	SCWD	Amount
2	\$5,920	\$466	\$4,568	\$4,661	\$15,615
3	\$2,527	\$199	\$1,950	\$1,990	\$6,666
4	\$898	\$71	\$693	\$707	\$2,368
GT 01	\$16,364	\$1,289	\$12,628	\$12,885	\$43,166
Grand Total	\$25,709	\$2,024	\$19,838	\$20,243	\$67,815

Change Orders

Change Order No.	Vendor Name	Project ID	Description	Status	Status Date	Potential Change Amount	Final Amount
1	Filanc	3541-000	Alternative Fiber Optic Conduit Installation at Jack and Bore	Approved by Board of Directors	6/3/2021		\$ 5,690
2	Filanc	3541-000	HDPE Pipe Price Adjustment	Within Contingency, to be reviewed by Engineering Committee	8/12/2021		\$ 15,615
3	Filanc	3541-000	Existing 6-Inch Sludge Line Fix for Pressure Test	Within Contingency, to be reviewed by Engineering Committee	8/12/2021		\$ 6,666
4	Filanc	3541-000	18-Inch VCP Sewer Line Conflicts	Within Contingency, to be reviewed by Engineering Committee	8/12/2021		\$ 2,368

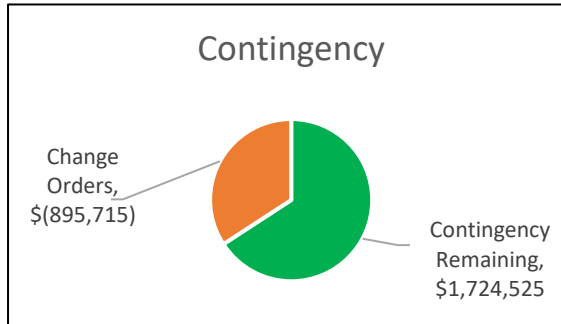
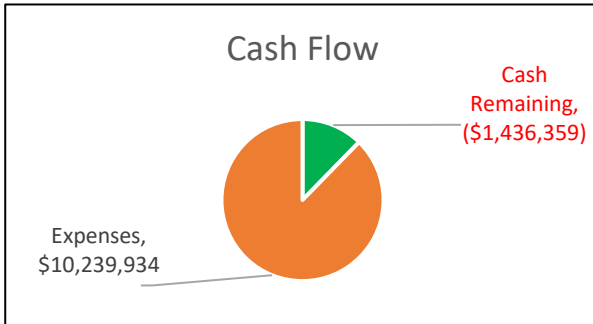
Change Order No.	Vendor Name	Project ID	Description	Status	Status Date	Potential Change Amount	Final Amount
PCO 007	Filanc	3541-000	Lost Production with Equipment Movement	Potential Change	(blank)		
PCO 008	Filanc	3541-000	Abandoned 4" PVC Water Line Interference	Potential Change	(blank)		
PCO 009	Filanc	3541-000	Wider Trench in Low Cover	Potential Change	(blank)	\$36,000	
PCO 012	Filanc	3541-000	Jack and Bore Conflict	Potential Change	(blank)	\$110,000	
PCO 013	Filanc	3541-000	Nesting Bird Restrictions	Potential Change	(blank)		
PCO 014	Filanc	3541-000	Abandoned 12" PVC Interference	Potential Change	(blank)	\$6,000	
PCO 015	Filanc	3541-000	18-Inch VCP Sewer Line Conflict at Sta. 96+55	Potential Change	(blank)	\$6,000	
PCO 016	Filanc	3541-000	ACWHEP Unknown Buried Concrete	Potential Change	(blank)	\$30,000	
PCO 017	Filanc	3541-000	Encasement at Sta. 88+90 to 89+90	Potential Change	(blank)	\$4,000	
Grand Total						\$192,000	\$ 30,339

Project Financial Status

Project Committee	15
Project Name	Facility Improvements
Project Description	New ferric chloride system, new collection equipment in East Sedimentation basins, concrete repair, structural improvements, new switchgear and numerous electrical upgrades

Data Last Updated

August 4, 2021



Cash Flow

Collected	\$8,803,575
Expenses	\$10,239,934

Project Completion

Schedule	91%
Budget	97%

Contracts

Company	PO No.	Original	Change Orders	Total	Paid
PCL	13751	\$ 9,209,000	\$ (895,715)	\$ 8,313,285	\$ 8,861,557
Butier	13647	\$ 812,288	\$ 612,715	\$ 1,425,003	\$ 808,498
Hazen & Sawyer	13648	\$ 490,484	\$ -	\$ 490,484	\$ 279,793
		\$ 10,511,772	\$ (283,000)	\$ 10,228,772	\$9,949,848

Contingency

Area	Project Code	Amount	Change Orders	Total Remaining	Percent Used
Liquids	3539-000	\$ 828,810	\$ (895,715)	\$ 1,724,525	-108.1%
		\$ 828,810	\$ (895,715)	\$ 1,724,525	-108.1%

Summary of New Change Orders

Change Order No	CLB	EBSD	MNWD	SCWD	Amount
Grand Total					

Change Orders

Change Order No.	Vendor Name	Project ID	Description	Status	Status Date	Potential Change Amount	Final Amount
1	PCL	3539-000	Additional Potholing	Approved by Board of Directors	8/6/2020		\$ 22,936
2	PCL	3539-000	Gas Line Replacement	Approved by Board of Directors	8/6/2020		\$ 41,006
3	PCL	3539-000	Main Switchgear Building Underground Conflicts	Approved by Board of Directors	8/6/2020		\$ 8,683
4	PCL	3539-000	Mud Valve Bolt Removal	Approved by Board of Directors	8/6/2020		\$ 6,577
5	PCL	3539-000	Additional Anchor Bolt Removal	Approved by Board of Directors	8/6/2020		\$ 15,271
6	PCL	3539-000	Slide Gate Concrete Repair	Approved by Board of Directors	8/6/2020		\$ 3,396
7	PCL	3539-000	Sludge Collector Wear Strips	Approved by Board of Directors	8/6/2020		\$ 5,304
8	PCL	3539-000	SCE Transformer Slab Box	Approved by Board of Directors	9/3/2020		\$ 4,378
9	PCL	3539-000	Duct Bank 5 Buried Utility Conflicts	Approved by Board of Directors	10/1/2020		\$ 32,224
10	PCL	3539-000	Telescoping Valve Modifications	Approved by Board of Directors	10/1/2020		\$ 36,067
11	PCL	3539-000	Secondary Effluent Channel Improvements	Approved by Board of Directors	12/17/2020		\$ 5,153

Change Order No.	Vendor Name	Project ID	Description	Status	Status Date	Potential Change Amount	Final Amount
12	PCL	3539-000	Portable Generator Tap Enclosures in Buildings 2 & 15	Approved by Board of Directors	12/10/2020		\$ 18,356
13	PCL	3539-000	Conduit, wiring, and mounting of LL1 fixtures	Approved by Board of Directors	12/10/2020		\$ 5,001
14	PCL	3539-000	MCC Feeder Credit	Approved by Board of Directors	2/4/2021		\$ (8,803)
15	PCL	3539-000	Switchgear Building Concrete Repair	Approved by Board of Directors	3/11/2021		\$ 40,144
16	PCL	3539-000	Sludge Collector Mounting Plate Replacement	Approved by Board of Directors	3/11/2021		\$ 10,623
17	PCL	3539-000	Basin Leaking Crack Repair in East Secondaries	Approved by Board of Directors	3/11/2021		\$ 1,863
18	PCL	3539-000	Additional Spall Repair - Grit Channels	Approved by Board of Directors	3/11/2021		\$ 26,405
19	PCL	3539-000	Mixed Liquor Channel Remobilization	Approved by Board of Directors	3/11/2021		\$ 5,323
20	PCL	3539-000	Building 10 Roof Repairs	Approved by Board of Directors	3/11/2021		\$ 2,245
21	PCL	3539-000	Building 8 Gas Line Rerouting	Approved by Board of Directors	3/11/2021		\$ 717

Change Order No.	Vendor Name	Project ID	Description	Status	Status Date	Potential Change Amount	Final Amount
22	PCL	3539-000	Additional Spall Repair - East Secondary Basins	Approved by Board of Directors	6/3/2021		\$ 9,722
23	PCL	3539-000	Grit Chamber Conflicts	Approved by Board of Directors	6/3/2021		\$ 3,888
24	PCL	3539-000	1/2" Ferric Line Conflicts	Approved by Board of Directors	6/3/2021		\$ 784
25	PCL	3539-000	Helical Skimmer Wiring	Approved by Board of Directors	8/5/2021		\$ 1,072
26	PCL	3539-000	MCC 15 Unmarked Wire Chasing	Approved by Board of Directors	8/5/2021		\$ 6,138
27	PCL	3539-000	Unilateral Descope of Drainage Pump Station, East Basin RAS Channel, and West Secondary Sludge Collection Equipment	Approved	6/11/2021		\$(1,200,188)
28	PCL	3539-000	Unilateral for 21 calendar days for weather and COVID-19 delays	Approved	6/16/2021		\$ -
PCO 006	PCL	3539-000	Additional Pothole Paving	Potential Change	(blank)	\$5,000	
PCO 013	PCL	3539-000	Ferric Containment Foundation	Potential Change	(blank)	\$15,000	

Change Order No.	Vendor Name	Project ID	Description	Status	Status Date	Potential Change Amount	Final Amount
PCO 015	PCL	3539-000	RAS Channel Modification Desclope	Potential Change	(blank)	-\$2,000	
PCO 016	PCL	3539-000	Spray Water Piping Replacement	Potential Change	(blank)	\$1,500	
PCO 026	PCL	3539-000	Additional Spall Repair - East Secondary Basins	Potential Change	(blank)	\$10,000	
PCO 028	PCL	3539-000	Ops Building Gas Line Relocation	Potential Change	(blank)	\$5,000	
PCO 029	PCL	3539-000	Building 15 Concrete Restoration	Potential Change	(blank)	\$20,000	
PCO 031	PCL	3539-000	Roll Up Door Fascia	Potential Change	(blank)	\$3,000	
PCO 032	PCL	3539-000	DAF Stair Railing	Potential Change	(blank)	-\$500	
PCO 035	PCL	3539-000	Grit Chamber Conflicts	Potential Change	(blank)	\$20,000	
PCO 038	PCL	3539-000	Aeration Channel Conflicts	Potential Change	(blank)	\$8,000	
PCO 044	PCL	3539-000	Building 10 Wall Repair	Potential Change	(blank)	\$2,000	
PCO 046	PCL	3539-000	1/2" Ferric Line Conflicts	Potential Change	(blank)	\$5,000	
PCO 047	PCL	3539-000	West Telescoping Valve Improvements	Potential Change	(blank)	\$25,000	

Change Order No.	Vendor Name	Project ID	Description	Status	Status Date	Potential Change Amount	Final Amount
PCO 048	PCL	3539-000	West Secondary Effluent Channel Concrete Repair	Potential Change	(blank)	\$20,000	
PCO 050	PCL	3539-000	RAS Box Leaks	Potential Change	(blank)	\$0	
PCO 051	PCL	3539-000	Grit Grating Modifications	Potential Change	(blank)	\$0	
PCO 053	PCL	3539-000	West Grit Channel Unforeseen Conflicts	Potential Change	3/26/2021	\$15,000	
PCO 059	PCL	3539-000	Telescoping Valve Stand Modifications	Potential Change	(blank)	\$5,000	
PCO 060	PCL	3539-000	Headworks Roofing Additions	Potential Change	(blank)	\$3,500	
PCO 061	PCL	3539-000	Headworks bypass	Potential Change	(blank)	\$20,000	
PCO 062	PCL	3539-000	Additional Ferric Area Work	Potential Change	(blank)		
PCO 065	PCL	3539-000	SCE XFMR Slab Box	Potential Change	(blank)	\$20,000	
PCO 066	PCL	3539-000	Ferric Tank LIT	Potential Change	(blank)	\$2,500	
Grand Total						\$203,000	\$ (895,715)

Agenda Item

7

Engineering Committee Meeting

Meeting Date: August 12, 2021

TO: Engineering Committee
FROM: David Baranowski, Senior Engineer
SUBJECT: Coastal Treatment Plant Sludge Force Main Replacement Project Geotechnical Services During Construction Change Order [Project Committee 15]

Overview

To support the construction of the Export Sludge Force Main Project, a geotechnical firm is needed for soils and materials testing. They work in conjunction with the construction management firm to test soil samples, test backfill compaction, and concrete strength testing.

Ninyo & Moore has been providing these services since construction began in March 2021. The initial contract value of \$65,790 was based on a set of assumptions we provided bidders, which included the number of days to be on site. However, construction has not progressed as quickly as we assumed, therefore, the initial budget will not cover the work through the completion of the project.

Using the rate of construction so far and the remaining work to be completed, Ninyo & Moore estimates an additional budget of \$43,166 will be needed. Since this is a time and materials contract, we will only pay for services provided.

Cost Allocation

Table 1 – Cost allocation by member agency for the Ninyo & Moore change order.

Agency	Geotechnical Services
	3534-000
CLB	\$ 16,364.42
EBSD	\$ 1,288.54
MNWD	\$ 12,627.67
SCWD	\$ 12,885.37
Total	\$ 43,166.00

Project 3534-000 is already funded and within budget.

Table 2 – Contact Allocation

	Original Contract	Change Order No. 1	Total
Geotechnical Services	\$ 65,790	\$43,166	\$ 108,956

Recommended Action: Staff recommends that the Engineering Committee recommend to the PC-15 Board of Directors to approve the Ninyo & Moore change order in the amount of \$43,166 for a total revised contract amount of \$108,956 for the geotechnical services during construction for the Coastal Treatment Plant Sludge Force Main Project.



July 15, 2021
Project No. 202426007

Mr. David Baranowski
South Orange County Water Authority
34156 Del Obispo Street
Dana Point, California 92629-2916

Subject: Budget Status for Geotechnical and Materials Testing Services
Coastal Treatment Plant Export Sludge Force Main Project
Dana Point, California.

Reference: Ninyo & Moore, 2021, Proposal for Geotechnical and Materials Testing Services
Coastal Treatment Plant Export Sludge Force Main Project
Dana Point, California, dated February 24.

Dear Mr. Baranowski:

Per your authorization and request, we have provided geotechnical and materials testing services pertaining to construction of the Coastal Treatment Plant Export Sludge Force Main project. We have provided our services on an as-requested basis as scheduled by representatives of Butier Engineering, Inc. Due to slower than expected construction progress, our expenses have been higher than originally anticipated. In order to continue to provide geotechnical and materials testing services through the end of the project, we will require additional budget. Therefore based on project's current progress and the length of pipeline that still needs to be installed, we request that our total budget be increased by \$43,166. Please sign and return one copy of this letter to our office at your earliest convenience.

Ninyo & Moore appreciates the opportunity to provide services on this project and we look forward to working with you.

Sincerely,
NINYO & MOORE

A handwritten signature in blue ink, appearing to read "RMB".

Robert M. Bigger
Senior Project Manager
RMB/mlc

Attachment: Table 1 - Breakdown of Estimated Fees Beyond 7/14/2021.

Authorized by:
South Orange County Water Authority

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Signature

Print Name and Title

Date

Table 1 - Breakdown of Estimated Fees Beyond 7/14/2021

Field Services

Senior Field Technician - Trench Backfill	300 hours @ \$ 97.00 /hour	\$ 29,100.00
Vehicle and Equipment Expense	300 hours @ \$ 15.00 /hour	\$ 4,500.00
	Subtotal	\$ 33,600.00

Laboratory Testing

Proctor Density	2 tests @ \$ 220.00 /test	\$ 440.00
		\$ 440.00

Project Coordination and Management

Senior Project Engineer/Geologist	12 hours @ \$ 163.00 /hour	\$ 1,956.00
	Subtotal	\$ 1,956.00

Report Preparation

Principal Engineer/Geologist	4 hours @ \$ 178.00 /hour	\$ 712.00
Senior Project Engineer/Geologist	12 hours @ \$ 163.00 /hour	\$ 1,956.00
Data Processing	4 hours @ \$ 73.00 /hour	\$ 292.00
	Subtotal	\$ 2,960.00

TOTAL ESTIMATED FEE		\$ 38,956.00
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San Juan Creek Ocean Outfall Junction Structure Rehab Closeout

August 12, 2021

Agenda Item 8

Project Scope

- Phase I - Design
 - Contractor brought on during design phase to assist in constructability
 - ROV investigation
- Phase II - Junction Structure & Metering Station Improvements
 - Insert stainless sleeve inside junction structure
 - Remove existing cap on junction structure
 - Replace failing strap and associated piping on outfall in metering station

Project Financials

	Original	COs	Total Billed
Contractor	\$ 1,041,572	\$ 0	\$ 1,041,572
Construction Management	\$ 24,000	\$ 0	\$ 7,280
Engineering Services During Construction	\$ 169,366	\$ 0	\$ 145,364
Biological Monitoring	\$ 89,668	\$ 0	\$ 85,636
SOCWA Salary & Fringe			\$ 22,473
Total	\$ 1,324,606	\$ 0	\$ 1,295,045

Project Schedule

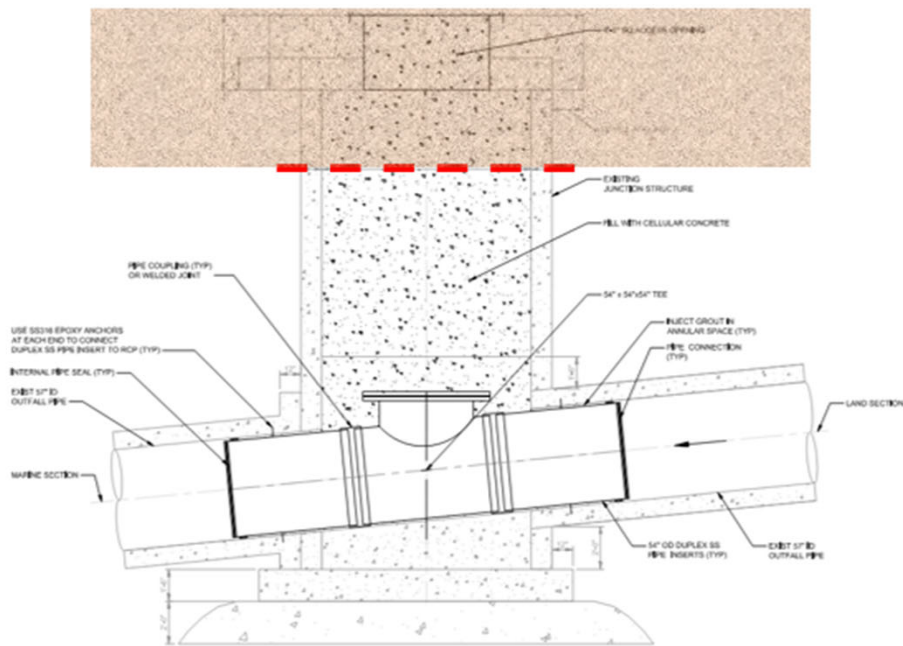
- Contract Start Date: September 16, 2020
- Original Substantial Completion Date: April 1, 2021
- Substantial Completion: March 31, 2021
- Direct COVID-19 delays: 0 days
- Seven nighttime shutdowns:
 - September 2, 2020 – ROV Inspection
 - February 3, 2021 – First Dive, Verify Dimensions
 - February 10, 2021 – Downstream Spool Insertion
 - February 17, 2021 – Upstream Spool
 - February 24, 2021 – Tee Insertion
 - March 3, 2021 – Link-seal Installation
 - March 9, 2021 – Final Dive, Sika Seal and Grouting



Santa Margarita
Water District



SJCOO Junction Structure



SJCOO Junction Structure

Before



After



Metering Vault Improvements

Before



After





RTP Miscellaneous Improvements 2018 Closeout

August 12, 2021

Agenda Item 9

Project Scope

- Secondary Sedimentation Basins
 - Replace failing secondary scum, sludge, and return activated sludge electrical runs from MCC
- Energy Building
 - Install roof over equipment bay and exhaust fans
 - Install bridge for safe access to equipment bay
- Primary Gallery
 - Demolish old equipment and fixtures no longer used
 - Replace ventilation/air handling system
 - Update lighting
 - Replace electrical conduit and conductor to scum pumps, grit pumps, sump pumps, and scum collectors and skimmer
- DAF Mannich Polymer System
 - Update components between bulk polymer tank and DAF tanks and automate with new PLC
- Install 4" drain line for future operations trailer

Project Financials

	Original	COs	Total Billed
Contractor	\$ 4,181,205	\$ 313,752	\$ 4,494,957
Construction Management	\$ 137,625	\$ 60,660	\$ 188,170
Engineering Services During Construction	\$ 123,310	\$ -	\$ 123,213
SOCWA Salary & Fringe			\$ 44,859
Total	\$ 4,442,140	\$ 374,412	\$ 4,851,198

Average construction change order cost: \$10,819

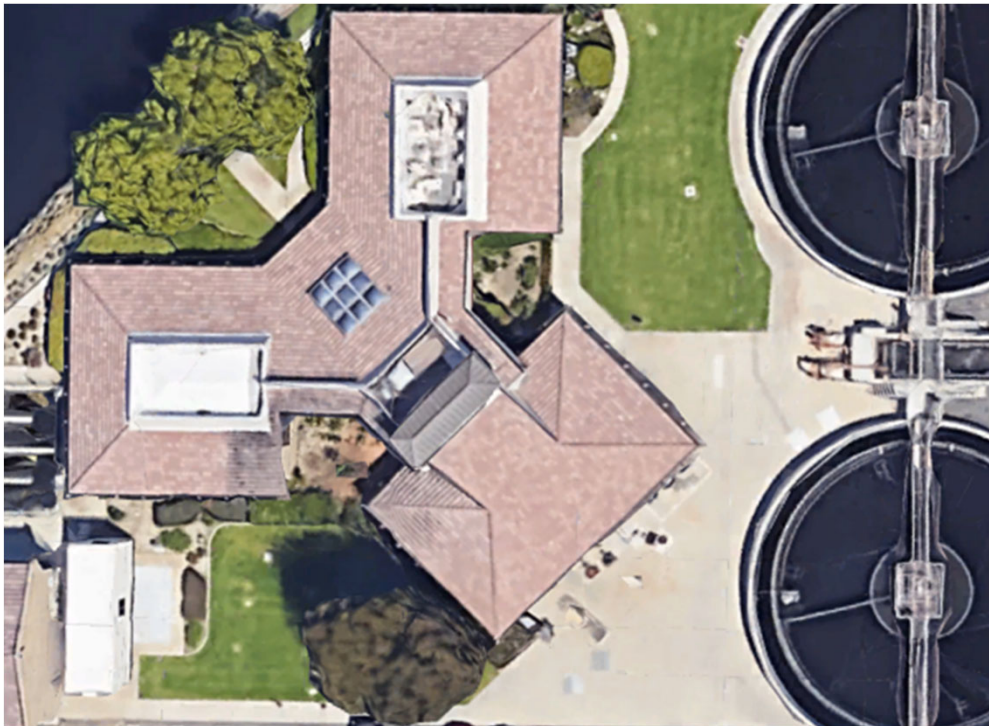
Four change orders were for safety improvements not originally included in project

	Total	Used	Remaining
Contingency	\$502,652	\$374,412	\$128,240

Project Schedule

- Contract Start Date: July 15, 2019
- Original Substantial Completion Date: November 1, 2020
- Substantial Completion: June 16, 2021
- Largest delays: Installation of new electrical vault outside of the Administration Building and start up of new polymer system
- Direct COVID-19 delays: 0 days

Secondary Electrical

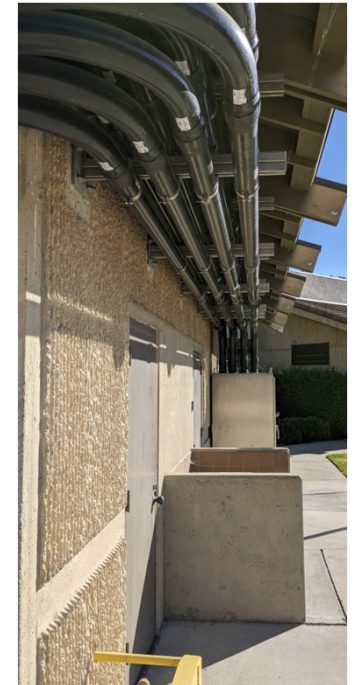


Secondary Electrical

Before

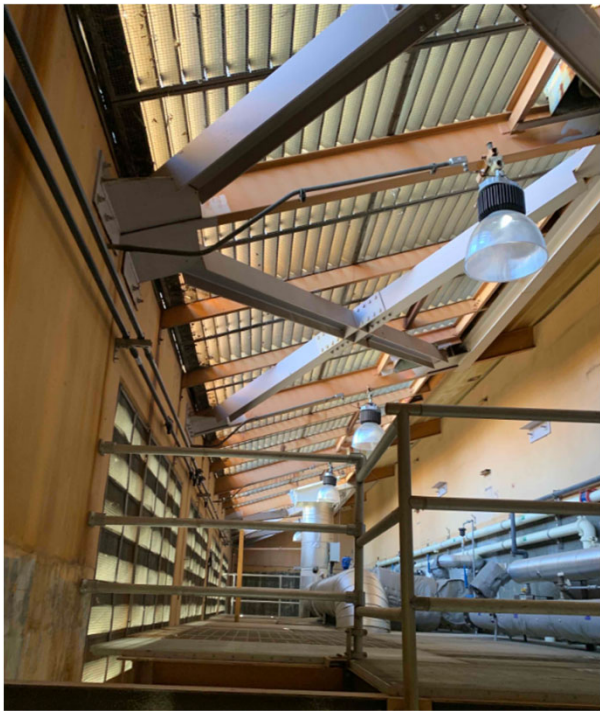


After

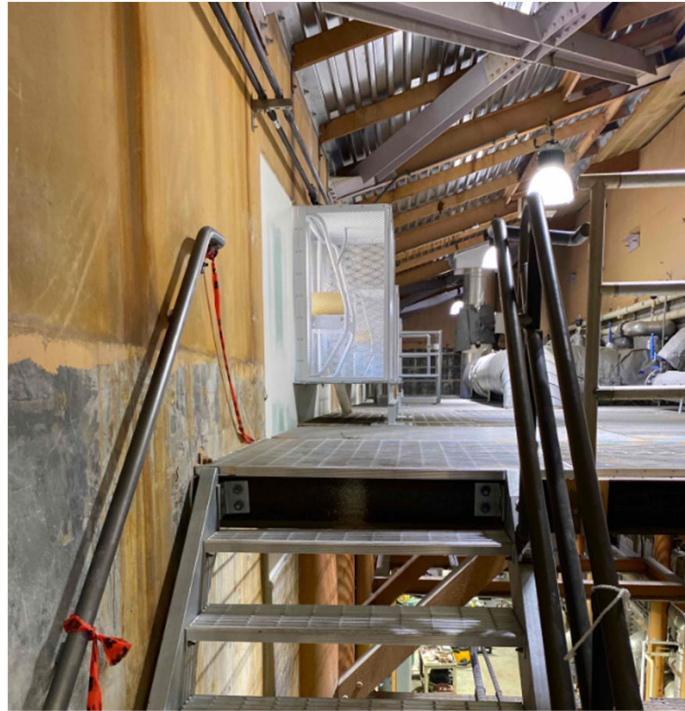


Energy Building Upgrades

Before



After



Primary Gallery

Before



After



Polymer Room – Dissolution Pumps/Tanks

Before



After



Polymer Room – Mix Tanks

Before



After

