#### NOTICE OF REGULAR MEETING OF THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY ENGINEERING COMMITTEE

#### May 8, 2025 8:30 a.m.

NOTICE IS HEREBY GIVEN that a Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Engineering Committee was called to be held on **May 8, 2025, at 8:30 a.m.** SOCWA staff will be present and conducting the meeting at the SOCWA Administrative Office located at 34156 Del Obispo Street, Dana Point, California.

THE SOCWA MEETING ROOM IS WHEELCHAIR ACCESSIBLE. 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 SUCH 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. MEMBERS OF THE PUBLIC HAVE THE OPTION TO PARTICIPATE IN AND MAY JOIN THE MEETING REMOTELY VIA VIDEO CONFERENCE FOR VISUAL INFORMATION ONLY (USE ZOOM LINK BELOW) AND BY TELECONFERENCE FOR AUDIO PARTICIPATION (USE PHONE NUMBERS BELOW). THIS IS A PHONE-CALL MEETING AND NOT A WEB-CAST MEETING, SO PLEASE REFER TO AGENDA MATERIALS AS POSTED ON THE WEBSITE AT WWW.SOCWA.COM. ON YOUR REQUEST, EVERY EFFORT WILL BE MADE TO ACCOMMODATE PARTICIPATION. FOR PARTIES PARTICIPATING REMOTELY, PUBLIC COMMENTS WILL BE TAKEN DURING THE MEETING FOR ORAL COMMUNICATION IN ADDITION TO PUBLIC COMMENTS RECEIVED BY PARTIES PARTICIPATING IN PERSON. COMMENTS MAY BE SUBMITTED PRIOR TO THE MEETING VIA EMAIL TO ASSISTANT SECRETARY DANITA HIRSH AT DHIRSH@SOCWA.COM WITH THE SUBJECT LINE "REQUEST TO PROVIDE PUBLIC COMMENT." IN THE EMAIL, PLEASE INCLUDE YOUR NAME, THE ITEM YOU WISH TO SPEAK ABOUT, AND THE TELEPHONE NUMBER YOU WILL BE CALLING FROM SO THAT THE COORDINATOR CAN UN-MUTE YOUR LINE WHEN YOU ARE CALLED UPON TO SPEAK. THOSE MAKING PUBLIC COMMENT REQUESTS REMOTELY VIA TELEPHONE IN REAL-TIME WILL BE ASKED TO PROVIDE YOUR NAME. THE ITEM YOU WISH TO SPEAK ABOUT. AND THE TELEPHONE NUMBER THAT YOU ARE CALLING FROM SO THE COORDINATOR CAN UN-MUTE YOUR LINE WHEN YOU ARE CALLED UPON TO SPEAK. ONCE THE MEETING HAS COMMENCED, THE CHAIR WILL INVITE YOU TO SPEAK AND ASK THE COORDINATOR TO UN-MUTE YOUR LINE AT THE APPROPRIATE TIME.

AGENDA ATTACHMENTS 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 FOR PUBLIC INSPECTION IN THE AUTHORITY ADMINISTRATIVE OFFICE LOCATED AT 34156 DEL OBISPO STREET, DANA POINT, CA ("AUTHORITY OFFICE") OR BY PHONE REQUEST MADE TO THE AUTHORITY OFFICE AT 949-234-5452. IF SUCH WRITINGS ARE DISTRIBUTED TO MEMBERS OF THE ENGINEERING COMMITTEE LESS THAN SEVENTY-TWO (72) HOURS PRIOR TO THE MEETING, THEY WILL BE AVAILABLE IN THE RECEPTION AREA OF THE AUTHORITY OFFICE AT THE SAME TIME AS THEY ARE DISTRIBUTED TO THE ENGINEERING COMMITTEE AND SENT TO ANY REMOTE PARTICIPANTS REQUESTING EMAIL DELIVERY OR POSTED ON SOCWA'S WEBSITE. IF SUCH WRITINGS ARE DISTRIBUTED IMMEDIATELY PRIOR TO, OR DURING, THE MEETING, THEY WILL BE AVAILABLE IN THE MEETING ARE DISTRIBUTED IMMEDIATELY PRIOR TO, OR DURING, THE MEETING, THEY WILL BE AVAILABLE IN THE MEETING ROOM OR IMMEDIATELY UPON VERBAL REQUEST TO BE DELIVERED VIA EMAIL TO REQUESTING PARTIES PARTICIPATING REMOTELY.

#### THE PUBLIC MAY PARTICIPATE REMOTELY BY VIRTUAL MEANS. FOR AUDIO OF MEETING USE THE CALL IN PHONE NUMBERS BELOW AND FOR VIDEO USE THE ZOOM LINK BELOW.

Join Zoom Meeting https://socwa.zoom.us/

Meeting ID: 862 2122 3048 Passcode: 972508

Dial by your location:

+1 669 900 6833 US (San Jose) +1 253 215 8782 US (Tacoma) +1 346 248 7799 US (Houston) +1 312 626 6799 US (Chicago) Find your local number: <u>https://socwa.zoom.us/u/kdv1vj2inL</u>

#### [AGENDA

#### 1. Call Meeting to Order

#### 2. Public Comments

THOSE WISHING TO ADDRESS THE ENGINEERING COMMITTEE ON ANY ITEM <u>LISTED</u> 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 Committee Member Request for Remote Participation (Standing Item)

**<u>Recommended Action:</u>** Committee Discussion/Direction and Action.

#### PAGE NO.

| 4. | Approval of Minutes1   |
|----|--|
|    | Engineering Committee Minutes of March 13, 2025  |
|    | <b>Recommended Action:</b> Staff requests that the Engineering Committee approve the subject Minutes as submitted.   |
| 5. | General Manager's Report4  |
|    | Recommended Action: Information Item.  |
| 6. | Operations Report (Verbal)   |
|    | Recommended Action: Information Item.  |
| 7. | Capital Improvement Construction Projects Progress and Change Order Report (May)<br>[Project Committees 2 and 15]7   |
|    | Recommended Action: Information Item.  |
| 8. | J. B. Latham Treatment Plant Effluent Pump Station and Energy Building Upgrades<br>Engineering Services During Construction Contract [Project Committee 2] |

**Recommended Action:** Staff recommends that the Engineering Committee recommend that the PC 2 Board approve Change Order 1 to Carollo Engineers in the amount of \$119,316. This will result in a revised total contract amount of \$294,832 for the JBL Effluent Pump Station and Energy Building improvements Engineering Services during Construction.

| 9. | J. B. Latham Treatment Plant 2 Headworks Upgrades Engineering Services During |    |
|----|---|----|
|    | Construction [Project Committee 2]  | 21 |

**Recommended Action:** Staff recommends that the Engineering Committee recommend to the PC 2 Board of Directors to approve Change Order 1 to Dudek for \$47,858. This will result in a revised total contract amount of \$255,958 for Engineering Services during Construction for the JBL Plant 2 Headworks Rehabilitation project.

10. <u>FY 2025-26 Budget Update</u>.....

Recommended Action: Information Item.

11. 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 <u>www.socwa.com</u>.

Dated this 1st day of May 2025.

to, de

Danita Hirsh, Assistant Board Secretary SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

#### MINUTES OF REGULAR MEETING OF THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

#### **Engineering Committee**



#### March 13, 2025

The Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Engineering Committee was held on March 13, 2025, at 8:30 a.m. in-person and via teleconferencing from the Administrative Offices located at 34156 Del Obispo Street, Dana Point, California. The following members of the Engineering Committee were present:

| MIKE DUNBAR<br>LINDSAY LEAHY<br>MARC SERNA<br>MARK McAVOY | Emerald Bay Service District<br>Santa Margarita Water District<br>South Coast Water District<br>City of Laguna Beach |
|---|--|
| Absent:   |  |
| DAVE REBENSDORF   | City of San Clemente   |
| HANNAH FORD   | El Toro Water District   |

Staff Present:

AMBER BOONE **RONI GRANT** JIM BURROR JAMES JONES ANNA SUTHERLAND JACK BECK MIKE MATSON MATT CLARKE DINA ASH

**General Manager** Capital Improvement Program (CIP) Manager **Deputy GM/Chief Engineer** Superintendent of O&M Accountant Staff Accountant Support Services Manager **Chief Technology Officer HR** Administrator

Also Present:

SANDER HUANG ROGER BUTOW DAVE LARSEN

South Coast Water District Clean Water Now (CWN) Moulton Niguel Water District

#### 1. Call Meeting to Order

Ms. Roni Grant, Capital Improvement Program (CIP) Manager, called the meeting to order at 8:35 a.m.

#### 2. Public Comments

None.

#### 3. Approval of Minutes

• Engineering Committee Minutes of February 13, 2025.

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A motion was made by Mr. Serna and seconded by Mr. McAvoy to approve the Engineering Committee Minutes for February 13, 2025.

| Motion carried: | Aye 4, Nay 0, Absta | ained 0, Absent 2 |
|-----------------|---------------------|-------------------|
|                 | Mr. McAvoy          | Aye               |
|                 | Ms. Ford            | Absent            |
|                 | Mr. Dunbar          | Aye               |
|                 | Ms. Leahy           | Aye               |
|                 | Mr. Serna           | Aye               |
|                 | Mr. Rebensdorf      | Absent            |

#### 4. General Manager's Report

Ms. Amber Boone, General Manager, reported on the permitted discharges for the San Juan Creek and Aliso Creek Ocean Outfalls approved by the San Diego Regional Water Quality Control Board. She also noted that Santa Margarita Water District was removed as the coowner of the 3A Plant and that Moulton Niguel Water District is now the sole owner. Ms. Boone concluded her report with a brief update on the upcoming budget and the timeline to present to the Board. An open discussion ensued.

This was an information item; no action was taken.

5. Operations Report

Mr. Jim Burror, Deputy GM/Chief Engineer, reported on the impacts of the overnight rainstorm at the Coastal Treatment Plant, stating that no issues have been reported so far. He also stated he handed out a copy of the 10-year capital plan that will be emailed to the members of the Engineering Committee to review with staff over the next month. An open discussion ensued.

This was an information item; no action was taken.

#### 6. <u>Capital Improvement Construction Projects Progress and Change Order Report (March)</u> [Project Committees 2 and 15]

Ms. Roni Grant updated the Engineering Committee on the status of the following CIP projects:

- JBL Scum Line Replacement Construction is currently in progress (no change).
- JBL Electrical Upgrades Pre-purchasing of MCC and Plant 1 Generator is underway (*no change*).
- JBL and CTP SCADA System There is one change order for \$14,626.50, revising the total contract amount to \$420,526.50. That covers the software licensing for Win-911 FactoryTalk A&E, including licensing and backup version upgrades. This system will allow backup in case the primary SCADA system is down.
- CTP Diffusers Replacement The contractor substantially completed the contract work and is working on the final punch list items (*no change*).
- CTP Aeration/Secondary Deck Grating Replacement Construction is currently in progress (*no change*).

- CTP West Primary and Secondary Scum Skimming System Pre-Purchasing of scum skimmers, launders, and weirs is currently in progress (*no change*).
- CTP Auxiliary Blower Building Roof Replacement Construction was completed with no change orders.
- CTP Personnel Building Sewer Rehabilitation Construction is currently in progress (*no change*).

This was an information item; no action was taken.

#### 7. J.B. Latham Treatment Plant (JBL) Flare System and Underground Piping Replacement Final Design [Project Committee 2]

#### ACTION TAKEN

A motion was made by Ms. Leahy and seconded by Mr. Serna that the PC 2 Board of Directors i) approve a contract with MKN for a total of \$441,129 and ii) approve a project contingency of \$44,133 to cover potential unknown issues during final design for a total project budget of \$485,242.

| Motion carried: | Aye 2, Nay 0, At | ostained 0, Absent 0 |
|-----------------|------------------|----------------------|
|                 | Ms. Leahy        | Aye                  |
|                 | Mr. Serna        | Aye                  |

#### 8. JBL and CTP Masterplan Scoping Services [Project Committees 2 & 15]

#### ACTION TAKEN

A motion was made by Mr. Dunbar and seconded by Mr. Serna to award a contract to Dopudja Wells in the amount of \$24,420 for the JBL and CTP Masterplan Scoping Services since it's within the General Manager's authority.

| ye 4, Nay 0, Abstaine | d 0, Absent 0                         |
|-----------------------|---------------------------------------|
| Ir. McAvoy            | Aye                                   |
| /Ir. Dunbar           | Aye                                   |
| /ls. Leahy            | Aye                                   |
| /Ir. Serna            | Aye                                   |
|                       | /r. McAvoy<br>/r. Dunbar<br>/s. Leahy |

#### 9. Adjournment

There being no further business, Ms. Grant adjourned the meeting at 9:12 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 March 13, 2025, and approved by the Engineering Committee and received and filed by the Board of Directors of the South Orange County Wastewater Authority.

Danita Hirsh, Assistant Board Secretary SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

# Agenda Item

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Budgeted: No

Legal Counsel Review: No

Meeting Date: May 8, 2025

TO: Engineering Committee

FROM: Amber Boone, General Manager

**SUBJECT:** General Manager's Report

#### Summary

The Coastal Treatment Plant (CTP) has a design capacity of 6.7 MGD. SOCWA aims to identify a nutrient removal process that is done through right sizing the plant and energy demands in a cost-effective manner. SOCWA staff is proposing to embark on a Water Research Foundation (WRF) Tailor Research Collaboration (TRC) to inform the Master Planning process. There is a pre-proposal deadline of June 2, 2025, to WRF.

#### **Discussion/Analysis**

CTP currently receives an average daily flow of 2.38 MGD and an average peak flow of approximately 4.42 MGD. The treatment process consists of screening, chemically enhanced primary treatment (CEPT), secondary treatment for carbon removal, tertiary filtration and disinfection. SOCWA currently recycles approximately 1 MGD treated water for non-potable uses and ocean discharges the remaining effluent. The primary and secondary solids are pumped to the Regional Treatment Plant for stabilization through anaerobic digestion.

SOCWA's future goals involve increasing water reuse, "right sizing" the plant operation to match the realized flow and loads, lower energy use, provide environmental stewardship, and plan for potential onsite solids management. Total dissolved salts (TDS) and nutrient (nitrogen) levels are two water quality parameters of concern for successful implementation for the future goals. SOCWA currently addresses TDS issues for the recycled water by blending the plant effluent with RO permeate of Latham plant effluent, and if needed, with potable water. SOCWA will continue to evaluate additional options for TDS removal.

To inform the Master Plan that is to be initiated soon, SOCWA intends to perform a pilot research study to evaluate suitable alternative technology/technologies through the Water Research Foundation (WRF) Tailored Collaboration Research (TCR) program. SOCWA is a long-time subscriber of WRF. The TCR program matches dollar for dollar cash funding, up to \$150,000, for proposals selected through a competitive solicitation. The deadline for submission of a two-page preproposal June 2nd for the 2025 TCR program.

The following preliminary process concepts are proposed for nutrient reduction in the Coastal Treatment Plant that can meet several future goals of SOCWA such as right sizing, energy reduction, and lower lifecycle cost. Upon receiving Engineering Committee consensus for match cash funding, SOCWA will further refine and identify a preferred process configuration that offers the highest potential value to SOCWA and submit a preproposal to WRF for the TCR program.

#### POTENTIAL NUTRIENT REMOVAL OPTIONS FOR COASTAL TREATMENT PLANT

#### I. Potential Options if Solids Treatment can be Continued at the Off-site Facility

Under this scenario, the treatment process train will primarily involve modifications to liquid stream secondary treatment.

## Option I.a. Primary Treatment followed by Low DO Operation for Nutrient Removal during Secondary Treatment

Under this option the proposed process train will include existing primary treatment process followed by secondary treatment consisting of an anoxic zone (for denitrification) followed by an aerobic zone operated under low dissolved oxygen (~0.25 to 0.50 mg/L) levels. The process optimization strategy uses significantly less energy than existing conventional activated sludge process, achieves targeted levels of nitrogen removal and can be readily fitted within the existing footprint at the Coastal plant. Optimization using advanced process control strategies, such as ammonia-based aeration control, can further reduce energy consumption, while meeting nutrient reduction goals, and support chloramine formation for disinfection.

#### **Option I.b. Primary Treatment followed by Partial Denitrification/Anammox (PdNA)**

In this option, the proposed process train will include the existing primary treatment followed by secondary treatment consisting of anoxic and aerobic zones where nutrient removal is achieved by an emerging PdNA process. PdNA achieves nutrient removal by oxidizing only a portion of the influent ammonium to either nitrite or nitrate, as the remainder of the influent ammonium is directly metabolized with nitrite by anammox bacteria (AnAOB) to produce nitrogen gas. Compared to conventional nitrification and denitrification (NDN) processes, PdNA uses a smaller footprint, less energy and lower external carbon for denitrification.

#### II. Potential Options if Solids Reduction is Required due to In-house Solids Treatment

Under this scenario, in addition to effective nutrient removal, solids production during liquid train treatment will need to be minimized. The proposed concepts involve retiring primary treatment (that produces large amount solids that putrefy rapidly) and optimizing the secondary treatment for nutrient removal.

## Option II.a. Conversion of Primary Treatment to Anaerobic Treatment, followed by Polishing Treatment for Ammonia by PdNA

In this option primary treatment tanks are converted to anaerobic liquid stream treatment. Anaerobic treatment converts carbonaceous matter to biogas that can be used to produce energy. Further, an anaerobic process produces less solids than conventional, aerobic, treatment processes. The effluent from the anaerobic treatment tends to have higher ammonia, dissolved sulfide and methane. The ammonia can be removed by PdNA process using lower energy and lower footprint requirements. Sulfide may be oxidized in the aeration zone of PdNA or through a polishing aeration step.

## Option II.b. Conversion of Primary Treatment to Anoxic Zone, followed by Nutrient Removal by Low DO, high SRT process

In this option, the primary treatment process will be retired, and the tanks will be converted to anoxic zones for denitrification. The existing secondary tanks will be used for low DO, high SRT process for nitrification. Suspension of primary treatment will lower solids production. Similar to Option I.a above, low DO operation will help minimize energy demand for carbon removal and nitrification. High SRT operation will lower the solids production and simplify on-site solids management since there would be only secondary solids to address

#### NEXT STEPS

Upon Board approval for TCR funding, one of the core technical considerations that underpin one of the above options will be selected for further evaluation under the TCR program. A preproposal for TCR program will be developed to address key factors (e.g. energy demand, footprint requirements, SRTs, solids

production and handling,  $N_2O$  production) impacting successful implementation of the process through the research study.

#### **Fiscal Impact**

The TRC is up to \$150,000 in matched funding by the subscriber (SOCWA) and the Water Research Foundation, but no matched funds are being requested at this time.

Recommended Action: Committee Discussion and Direction.

## Agenda Item

### Engineering Committee Meeting Meeting Date: May 8, 2025

TO: Engineering Committee

FROM: Roni Grant, Capital Improvement Program Manager

**SUBJECT:** Capital Improvement Construction Projects Progress and Change Order Report (May) [Project Committees 2 and 15]

#### Overview

This agenda item provides an update on projects in construction, including any change orders. Attached are the updated CIP reports.

#### Project Updates

#### JBL Scum Line Replacement

Construction is currently in progress and near completion. There are two change orders: Change Order 3, in the amount of \$18,231.04, was to coat the two existing deteriorating manholes. Change Order 4, in the amount of \$7,584.79, was to remove and replace two deteriorated concrete walls, bringing the revised total contract amount to \$264,999.15.

#### JBL Electrical Upgrades

Pre-purchasing of MCC and Plant 1 Generator is underway.

#### JBL and CTP SCADA System

Upgrades started earlier this year and have been completed.

#### CTP Diffusers Replacement

The construction has been completed.

<u>CTP Aeration Deck Grating Replacement</u> Construction is currently in progress.

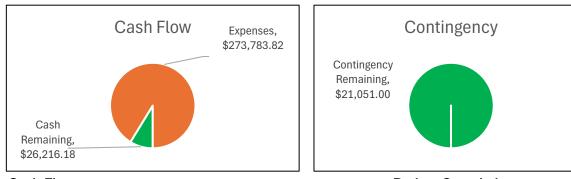
<u>CTP West Primary and Secondary Scum Skimming System</u> Pre-Purchasing of scum skimmers, launders, and weirs is currently in progress.

<u>CTP Auxiliary Blower Building Roof Replacement</u> Construction has been completed.

<u>CTP Personnel Building Sewer Rehabilitation</u> Phase 1 construction has been completed.

Recommended Action: Information Item only.

# Project Financial Status Project Committee 2 Project Name Scum Line Replacement - 32233S Project Description Replacement of scum line at Plant 1 Aeration Basin 1



#### **Cash Flow**

| Collected | \$<br>300,000.00 |
|-----------|------------------|
| Expenses  | \$<br>273,783.82 |

| Project Completion |     |  |  |  |  |
|--------------------|-----|--|--|--|--|
| Schedule           | 98% |  |  |  |  |
| Budget             | 92% |  |  |  |  |

#### **Construction Contracts**

| Company          | PO No. |    | Original   |    | Original Chang |     | ange Orders      | Amendments       | Total | Costs to Date |
|------------------|--------|----|------------|----|----------------|-----|------------------|------------------|-------|---------------|
| SS Mechanical    | 20557  | \$ | 278,949.00 | \$ | (13,949.85)    |     | \$<br>264,999.15 | \$<br>251,482.97 |       |               |
| Project Partners | 20164  | \$ | 30,000.00  |    |                |     | \$<br>30,000.00  | \$<br>11,520.00  |       |               |
| Steve Andrews    | 20332  | \$ | 5,232.00   |    |                |     | \$<br>2,818.00   | \$<br>724.50     |       |               |
| SOCWA Staff Time | 32233S |    |            |    |                |     |                  | \$<br>10,056.35  |       |               |
|                  |        | \$ | 314,181.00 | \$ | (13,949.85)    | \$- | \$<br>297,817.15 | \$<br>273,783.82 |       |               |

\*Values include change orders to be reviewed by the Engineering Committee

#### **Construction Contingency**

| Area   | Project Code | Amount          |    | ange Orders | Total Remaining |         | Percent Used |  |
|--------|--------------|-----------------|----|-------------|-----------------|---------|--------------|--|
| Solids | 32233S       | \$<br>21,051.00 | \$ | (13,949.85) | \$ 21           | ,051.00 | 0.0%         |  |
|        |              | \$<br>21,051.00 | \$ | (13,949.85) | <b>\$</b> 21    | ,051.00 | 0.0%         |  |

#### Data Last Updated May 1, 2025

| Change Order No. | Vendor Name   | Project ID | Description                                    | Status Date | Days | Amount            |
|------------------|---------------|------------|--|-------------|------|-------------------|
| 1                | SS Mechanical | 32233S     | Change pipe<br>diameter from 12"<br>to 10"     | 1/8/2025    |      | \$<br>(39,765.68) |
| 2                | SS Mechanical | 322335     | Non-Compenable<br>Time Extension               | 3/31/2025   | 94   | \$<br>-           |
| 3                | SS Mechanical | 322335     | Coating of two<br>manholes                     | 4/25/2025   |      | \$<br>18,231.04   |
| 4                | SS Mechanical | 322335     | Remove and<br>replace of two<br>concrete walls | 4/25/2025   |      | \$<br>7,584.79    |
|                  |               |            |  |             | 94   | \$<br>(13,949.85) |

| Project Financial Status   |  |  |  |  |  |  |  |
|----------------------------|--|--|--|--|--|--|--|
| Project Committee 2 and 15 |  |  |  |  |  |  |  |
| Project Name               | SCADA System Upgrades - 32243C and 35249L            |  |  |  |  |  |  |
| Project Description        | SCADA server replacement and upgrades at JBL and CTP |  |  |  |  |  |  |



#### **Cash Flow**

| Collected | \$<br>440,000.00 |
|-----------|------------------|
| Expenses  | \$<br>421,114.21 |

| Project Completion |      |  |  |  |  |
|--------------------|------|--|--|--|--|
| Schedule           | 100% |  |  |  |  |
| Budget             | 96%  |  |  |  |  |

#### **Construction Contracts**

| Company          | PO No. | Original         | Cha | inge Orders | Am | endments | Total            | С  | osts to Date |
|------------------|--------|------------------|-----|-------------|----|----------|------------------|----|--------------|
| W. M. Lyles      | 20660  | \$<br>405,900.00 | \$  | 14,626.50   |    |          | \$<br>420,526.50 | \$ | 420,526.50   |
| SOCWA Staff Time |        |                  |     |             |    |          |                  | \$ | 587.71       |
|                  |        | \$<br>405,900.00 | \$  | 14,626.50   | \$ | -        | \$<br>420,526.50 | \$ | 421,114.21   |

#### **Construction Contingency**

| Area   | Project Code | Amount |           | Change Orders |           | Total Remaining |          | Percent Used |
|--------|--------------|--------|-----------|---------------|-----------|-----------------|----------|--------------|
| Common | 32243C       | \$     | 20,296.00 | \$            | 14,626.50 | \$              | 5,669.50 | 72.1%        |
|        |              | \$     | 20,296.00 | \$            | 14,626.50 | \$              | 5,669.50 | 72.1%        |

| Change Order No. | Vendor Name | Project ID | Description                 | Status Date | <u>Days</u> | Amount       |
|------------------|-------------|------------|-----------------------------|-------------|-------------|--------------|
| 1                | W. M. Lyles | 32243C     | Win911 SCADA<br>Programming | 1/21/2025   |             | \$ 14,626.50 |

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Data Last Updated

May 1, 2025

#### Project Financial Status

| Treject i maneiar etc |   |
|-----------------------|---|
| Project Committee     | 15  |
| Project Name          | Grating Replacement on Aeration/Secondary Deck - 35245L |
| Project Description   | Replacement of grating on west aeration/secondary deck  |



|            | Project C |
|------------|-----------|
| 160,000.00 | Schedule  |
| 36,628.77  | Budget    |

#### **Construction Contracts**

\$

\$

Collected

Expenses

| Company          | PO No. | Original         | Ch | ange Orders | Amendments | Total            | C  | Costs to Date |
|------------------|--------|------------------|----|-------------|------------|------------------|----|---------------|
| SS Mechanical    | 20588  | \$<br>147,126.00 | \$ | 10,874.78   |            | \$<br>158,000.78 | \$ | 23,055.00     |
| Project Partners | 20877  | \$<br>25,000.00  |    |             |            | \$<br>25,000.00  | \$ | 4,240.00      |
| Steve Andrews    | 20332  | \$<br>2,818.00   |    |             |            | \$<br>2,818.00   | \$ | 483.00        |
| SOCWA Staff Time | 35245L |                  |    |             |            |                  | \$ | 8,850.77      |
|                  |        | \$<br>174,944.00 | \$ | 10,874.78   | \$-        | \$<br>185,818.78 | \$ | 36,628.77     |

25%

23%

#### **Construction Contingency**

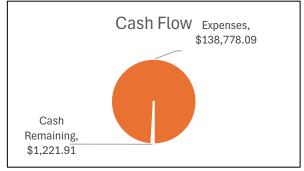
| Area    | Project Code | Amount          | Ch | ange Orders | Tot | al Remaining | Percent Used |
|---------|--------------|-----------------|----|-------------|-----|--------------|--------------|
| Liquids | 35245L       | \$<br>12,874.00 | \$ | 10,874.78   | \$  | 1,999.22     | 84.5%        |
|         |              | \$<br>12,874.00 | \$ | 10,874.78   | \$  | 1,999.22     | 84.5%        |

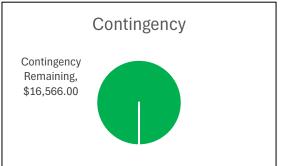
| Change Order No. | Vendor Name   | Project ID | Description   | Status Date | <u>Days</u> | <u>Amount</u> |
|------------------|---------------|------------|---|-------------|-------------|---------------|
| 1                | SS Mechanical | 35245L     | 316L SST angle<br>in lieu of 304L<br>SST angle at the<br>Step-Feed<br>Channel | 1/8/2025    | 94          | \$ 2,235.25   |
| 2                | SS Mechanical | 35245L     | Change<br>Secondary<br>effluent grating<br>from 1-inch to<br>1.5"             | 1/31/2025   | 89          | \$ 8,639.53   |

#### Data Last Updated

May 1, 2025

| Project Financial Sta | atus  |
|-----------------------|---|
| Project Committee     | 15  |
| Project Name          | Auxiliary Blower Building Roof Replacement - 35221L |
| Project Description   | Replacement of Auxiliary Blower Building roof       |
|                       |   |
|                       |   |





#### Cash Flow

| Collected | \$<br>140,000.00 |
|-----------|------------------|
| Expenses  | \$<br>138,778.09 |

| Project Completion |      |  |  |  |  |  |
|--------------------|------|--|--|--|--|--|
| Schedule           | 100% |  |  |  |  |  |
| Budget             | 99%  |  |  |  |  |  |

#### **Construction Contracts**

| Company          | PO No. | Original         | Change Orders | Amendments | Total            | C  | Costs to Date |
|------------------|--------|------------------|---------------|------------|------------------|----|---------------|
| Best Contracting | 20911  | \$<br>123,434.00 |               |            | \$<br>123,434.00 | \$ | 123,434.00    |
| Project Partners | 20877  | \$<br>10,000.00  |               |            | \$<br>10,000.00  | \$ | 3,680.00      |
| SOCWA Staff Time | 35221L |                  |               |            |                  | \$ | 11,664.09     |
|                  |        | \$<br>133,434.00 | \$-           | \$-        | \$<br>133,434.00 | \$ | 138,778.09    |

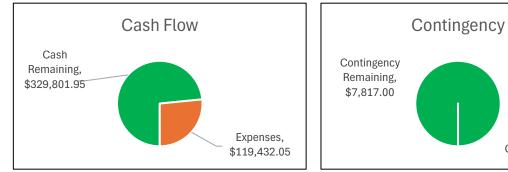
#### **Construction Contingency**

| Area    | Project Code | Amount |           | Change Orders | То | tal Remaining | Percent Used |
|---------|--------------|--------|-----------|---------------|----|---------------|--------------|
| Liquids | 35221L       | \$     | 16,566.00 |               | \$ | 16,566.00     | 0.0%         |
|         |              | \$     | 16,566.00 | \$-           | \$ | 16,566.00     | 0.0%         |

| Change Order No. | Vendor Name | Project ID | <b>Description</b> | Status Date | <u>Days</u> | Amount |
|------------------|-------------|------------|--------------------|-------------|-------------|--------|
|                  |             |            |                    |             |             |        |
|                  |             |            |                    |             |             | \$-    |

#### Data Last Updated May 1, 2025

# Project Financial Status Project Committee 15 Project Name Personnel Building Sewer Rehabilitation - 3525 Project Description Replacement of grating on west aeration/secondary deck



| Cash Flow |                  |
|-----------|------------------|
| Collected | \$<br>449,234.00 |
| Expenses  | \$<br>119,432.05 |

| Project Completion |   |      |  |  |  |  |  |
|--------------------|---|------|--|--|--|--|--|
| Schedule           | - | 100% |  |  |  |  |  |
| Budget             |   | 27%  |  |  |  |  |  |

Change

Orders, \$-

#### **Construction Contracts**

| Company          | PO No. | Original         | Change Orders | Amendments | Total            | С  | osts to Date |
|------------------|--------|------------------|---------------|------------|------------------|----|--------------|
| T.E. Roberts     | 20930  | \$<br>78,165.00  |               |            | \$<br>78,165.00  | \$ | 78,165.00    |
| Project Partners | 20877  | \$<br>35,000.00  |               |            | \$<br>35,000.00  | \$ | 18,160.00    |
| SOCWA Staff Time | 3525   |                  |               |            |                  | \$ | 23,107.05    |
|                  |        | \$<br>113,165.00 | \$-           | \$-        | \$<br>113,165.00 | \$ | 119,432.05   |

#### **Construction Contingency**

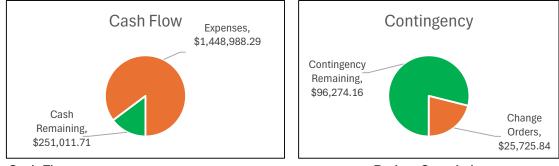
| Area    | Project Code | Amount |          | Change Orders | To | tal Remaining | Percent Used |
|---------|--------------|--------|----------|---------------|----|---------------|--------------|
| Liquids | 3525         | \$     | 7,817.00 |               | \$ | 7,817.00      | 0.0%         |
|         |              | \$     | 7,817.00 | \$-           | \$ | 7,817.00      | 0.0%         |

| Change Order No. | Vendor Name | Project ID | <b>Description</b> | Status Date | <u>Days</u> | Amount |
|------------------|-------------|------------|--------------------|-------------|-------------|--------|
|                  |             |            |                    |             |             |        |
|                  |             |            |                    |             |             | \$-    |

#### Data Last Updated May 1, 2025

#### **Project Financial Status**

| Project Committee   | 15  |
|---------------------|---|
| Project Name        | Aeration Diffusers Replacement - 35228L         |
| Project Description | Replacement of diffusers in the aeraiton tanks. |
|                     |   |



#### Cash Flow

| Collected | \$<br>1,700,000.00 |
|-----------|--------------------|
| Expenses  | \$<br>1,448,988.29 |

| Project Completion |   |      |  |  |  |  |  |
|--------------------|---|------|--|--|--|--|--|
| Schedule           | - | 100% |  |  |  |  |  |
| Budget             |   | 96%  |  |  |  |  |  |

#### **Construction Contracts**

| Company          | PO No.      | Original           |    | ange Orders | Amendments | Total              | (  | Costs to Date |
|------------------|-------------|--------------------|----|-------------|------------|--------------------|----|---------------|
| Filanc           | 19640       | \$<br>1,022,250.00 | \$ | 25,725.84   |            | \$<br>1,047,975.84 | \$ | 1,047,975.84  |
| EDI              | 16620       | \$<br>250,490.00   |    |             |            | \$<br>250,490.00   | \$ | 250,490.00    |
| EDI              | 20885       | \$<br>82,800.00    |    |             |            | \$<br>82,800.00    |    |               |
| Hazen            | 17256/19641 | \$<br>93,578.00    |    |             |            | \$<br>93,578.00    | \$ | 62,279.04     |
| SS Mechanical    | 20443       | \$<br>37,535.00    |    |             |            | \$<br>37,535.00    | \$ | 37,535.00     |
| SOCWA Staff Time | 35228L      |                    |    |             |            |                    | \$ | 50,708.41     |
|                  |             | \$<br>1,486,653.00 | \$ | 25,725.84   | \$-        | \$<br>1,512,378.84 | \$ | 1,448,988.29  |

#### **Construction Contingency**

| Area    | Project Code | Amount           | Ch | ange Orders | Total Remainin      | g Percent Used |
|---------|--------------|------------------|----|-------------|---------------------|----------------|
| Liquids | 35228L       | \$<br>122,000.00 | \$ | 25,725.84   | \$ 96,274.1         | 16 21.1%       |
|         |              | \$<br>122,000.00 | \$ | 25,725.84   | <b>\$ 96,274</b> .1 | 16 21.1%       |

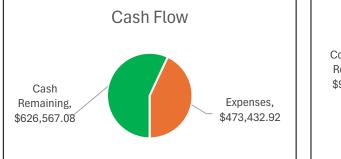
| Change Order No. | Vendor Name | Project ID | <b>Description</b> | Status Date | <u>Days</u> | Am  | ount      |
|------------------|-------------|------------|--------------------|-------------|-------------|-----|-----------|
|                  |             |            |                    |             |             |     |           |
| 1                | Filono      | 35228L     | Contract           | 4/4/2024    | 273         | ¢   |           |
| 1                | 1 Filanc    | 33220L     | Extension          | 4/4/2024    | 275         | Φ   | -         |
| 2                | Filene      | 252201     | Solids removal in  | 1/05/0005   | 60          | ¢ , |           |
| Z                | Filanc 352  | 35228L     | basins             | 1/25/2025   | 60          | Þ 4 | 25,725.84 |

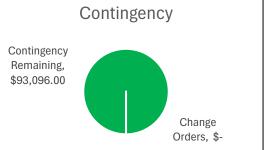
#### Data Last Updated

May 1, 2025

#### **Project Financial Status**

| Project Committee   | 15  |
|---------------------|---|
| Project Name        | West Primary and Secondary Sludge Skimming System - 35246L/35239L |
| Project Description | Replacement of west primary and secondary sludge skimming system  |
|                     |   |
|                     |   |





#### Cash Flow

| Collected | \$<br>1,100,000.00 |
|-----------|--------------------|
| Expenses  | \$<br>473,432.92   |

| Project Completion |     |  |  |  |
|--------------------|-----|--|--|--|
| Schedule           | 50% |  |  |  |
| Budget             | 43% |  |  |  |

#### **Construction Contracts**

| Company          | PO No.        | Original         | Change Orders | Amendments | Total            |    | Costs to Date |
|------------------|---------------|------------------|---------------|------------|------------------|----|---------------|
| Brentwood        | 20496         | \$<br>930,960.00 |               |            | \$<br>930,960.00 | \$ | 465,480.00    |
| Z&K/Ardurra      | 12240         | \$<br>12,240.00  |               |            | \$<br>12,240.00  | \$ | -             |
| SOCWA Staff Time | 35246L/35239L |                  |               |            |                  | \$ | 7,952.92      |
|                  |               | \$<br>943,200.00 | \$-           | \$-        | \$<br>943,200.00 | \$ | 473,432.92    |

#### **Construction Contingency**

| Area    | Project Code  | Amount |           | Change Orders |   | Total Remaining |           | Percent Used |  |
|---------|---------------|--------|-----------|---------------|---|-----------------|-----------|--------------|--|
| Liquids | 35246L/35239L | \$     | 93,096.00 | \$            | - | \$              | 93,096.00 | 0.0%         |  |
|         |               | \$     | 93,096.00 | \$            | - | \$              | 93,096.00 | 0.0%         |  |

| Change Order No. | Vendor Name | Project ID | <b>Description</b> | Status Date | <u>Days</u> | Amount |
|------------------|-------------|------------|--------------------|-------------|-------------|--------|
|                  |             |            |                    |             |             |        |
|                  |             |            |                    |             |             |        |

### Data Last Updated

May 1, 2025

# Agenda Item

Engineering Committee Meeting

Meeting Date: May 8, 2025

**TO:** Engineering Committee

FROM: Roni Grant, Capital Improvement Program Manager

**SUBJECT:** J. B. Latham Treatment Plant Effluent Pump Station and Energy Building Upgrades Engineering Services during Construction Contract [Project Committee 2]

#### Overview

SOCWA retained Carollo to perform the Effluent Pump Station and Energy Building Upgrades final design in August 2024. The final design fee is \$175,516, and the design has been completed. SOCWA requested the bidding and engineering services during construction (ESDC) proposal from Carollo.

The proposed Scope of Services includes the following:

- Project Management
- Project Meetings
- Shop Drawing Review
- Request for Information
- Site Visits
- Change Order Assistance
- Record Drawings
- Project Close-out

Carollo proposed a total fee of \$119,316. Staff broke down the costs of \$39,375 for the Effluent Pump Station improvements, \$32,215 for the hoist system, and \$47,726 for the Energy Building improvements. The Engineer's cost estimate is \$2.5M.

#### **Cost Allocation**

The Effluent Pump Station Improvements will be funded by 32226L and have a budget of \$950,000 for the 24/25 fiscal year. Table 1 shows the allocation of costs by member agency.

| Agency                         | Cost        |
|--------------------------------|-------------|
| South Coast Water District     | \$20,443.50 |
| Santa Margarita Water District | \$18,931.50 |
| Total                          | \$39,375.00 |

Table 1 – Cost Allocation by Member Agency (32226L)

The Energy Building Roof improvements will be funded by 32225S (solids) and have a budget of \$1,163,000. Table 2 shows the allocation of costs by member agency.

| Agency                         | Cost        |
|--------------------------------|-------------|
| South Coast Water District     | \$19,863.56 |
| Santa Margarita Water District | \$27,862.44 |
| Total                          | \$47,726.00 |

The hoist system will be funded by 3216 (common) and has a budget of \$792,000. Table 3 shows the allocation of costs by member agency.

 Table 3 – Cost Allocation by Member Agency (3216)

| Agency                         | Cost        |
|--------------------------------|-------------|
| South Coast Water District     | \$15,066.96 |
| Santa Margarita Water District | \$17,148.04 |
| Total                          | \$32,215.00 |

**Recommended Action:** Staff recommends that the Engineering Committee recommend that the PC 2 Board approve Change Order 1 to Carollo Engineers in the amount of \$119,316. This will result in a revised total contract amount of \$294,832 for the JBL Effluent Pump Station and Energy Building improvements Engineering Services during Construction.

5355 Mira Sorrento Place, Suite 270 San Diego, California 92121 P 858-505-1020



carollo.com

April 14, 2025

Roni Young South Orange County Wastewater Authority 34156 Del Obispo Street Dana Point, CA 92629

## Subject: Proposal for J.B. Latham Effluent Pump Station and Energy Building Upgrades Project – Engineering Services During Constructions (ESDC) Fee

Dear Ms. Young:

Pursuant to your request, Carollo Engineers, Inc. (Carollo) has prepared this letter proposal for the South Orange County Wastewater Authority's (SOCWA) J.B. Latham Wastewater Treatment Plant (JBLTP) Effluent Pump Station and Energy Building Upgrades Project. Carollo will provide ESDC as defined in the scope of services, outlined below.

#### Scope of Services

- Project Management:
  - Project management includes the effort required for general project management and administration over the duration of construction and project close-out. A total duration of six (6) months of construction is included. This task includes 1 hour per month for the project manager (PM) and 3 hours per month for the project assistant (PA) for monthly reviews and invoicing.
- Project Meetings:
  - Carollo will attend construction progress meetings monthly or as needed during the performance of the work. It is assumed there will be a total of six (6) progress meetings for the duration of the work.
- Shop Drawing Review:
  - Review shop drawings and other submittals as required in the Contract Documents. Review procedures will be as specified in the Contract Documents and as directed by SOCWA. Carollo will review shop drawings for conformance with the design documents. The review does not relieve the Contractor from specification or contractual requirements. Contractor is expected to provide complete submittals. Carollo will provide two submittal reviews. Additional reviews of the same submittal will be considered an extra scope item. Carollo will track the budget expended for submittal review beyond two submittals for reimbursement by SOCWA and the Contractor. Unless additional time is requested, all submittals will be reviewed and returned within 15 work days after Carollo has received the submittal. Some especially large or complex submittals may require additional time. It is assumed that there will be a maximum of 64 submittals.
- Requests for Information:

JBLTP Effluent PS and Energy Building Upgrades\_ESDC Proposal.docx

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Roni Young South Orange County Wastewater Authority April 14, 2025

Page 2

- Respond to Design Clarifications and Requests for Information (RFIs). Contractor will submit all requests in writing to SOCWA. All responses will be submitted in writing to SOCWA. It is assumed that there will be a maximum of 25 RFIs.
- Site Visits:
  - Carollo will attend and conduct three (3) site visits throughout the construction period to review construction progress, resolve technical issues, and/or review overall project schedule, coordination, and progress with SOCWA and the Contractor. These site visits will be separate from project meetings noted above. Each site visit is assumed for one person and four hours per visit, with additional persons as needed.
- Change Order Assistance:
  - Review and analyze Change Order Requests to determine their merit relative to the Contract Documents and design intent. The review of change orders will only be upon the request of SOCWA. It is assumed that there will be a maximum of four (4) change orders total. Carollo's review and analysis of Change Order Requests will include review of scope and pricing information submitted by the Contractor and/or SOCWA.
- Record Drawings:
  - Carollo will prepare record drawings from markups made by the Contractor and reviewed by SOCWA's construction manager. Total number of drawings is 34 and record drawings will be submitted electronically, as pdf files in half and full-size formats for Draft and Final.
- Project Close-out:
  - This task includes review of construction during a site visit at substantial completion and preparation of a punch list of corrective actions. It is assumed that this task will require a maximum of 20 hours.

We look forward to working with you, please let us know if you have any questions.

Sincerely, CAROLLO ENGINEERS, INC.

Weistour

Jeff Weishaar, P.E.

Author Initials: JW

Enclosures: None JBLTP Effluent PS and Energy Building Upgrades\_ESDC Proposal.docx

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#### J.B. Latham Wastewater Treatment Plant Effluent Pump Station and Energy Recovery Building Upgrades Project Engineering Services During Construction

April 2025

| Task | Task Description                    |               | Project<br>Manager | Senior Project<br>Professional | Lead Project<br>Professional | Project<br>Professional | Assistant<br>Professional | Senior<br>Technician | Technician | Document<br>Processing | Task Hours | Task S | ubtotal | Project<br>Equipment and<br>Communication<br>Expense | Other Direct<br>Costs | Та       | isk Total |
|------|-------------------------------------|---------------|--------------------|--------------------------------|------------------------------|-------------------------|---------------------------|----------------------|------------|------------------------|------------|--------|---------|--|-----------------------|----------|-----------|
| 1    | Project Management                  |               |                    |                                |                              |                         |                           |                      |            |                        |            |        |         |  |                       |          |           |
| 1.01 | Project Management                  |               | 6                  |                                | 18                           | 0                       | 0                         | 0                    | 0          | 0                      | 24         | \$     | 6,792   | \$ 384   | \$-                   | \$       | 7,176     |
|      |                                     |               |                    |                                |                              |                         |                           |                      |            |                        |            |        |         |  |                       |          |           |
|      |                                     | Task Subtotal | 6                  | 0                              | 18                           | 0                       | 0                         | 0                    | 0          | 0                      | 24         | \$     | 6,792   | \$ 384   | \$-                   | \$       | 7,176     |
| 2    | Construction Phase Services         |               |                    |                                |                              |                         |                           |                      |            |                        |            |        |         |  |                       |          |           |
| 2.01 | Project Meetings (6 Total)          |               | 6                  | 0                              | 6                            | 3                       | 3                         | 0                    | 0          | 0                      | 18         | \$     | 4,770   | \$ 288   | \$-                   | \$       | 5,058     |
| 2.02 | Shop Drawing Review (64 Total)      |               | 8                  | 8                              | 30                           | 80                      | 40                        | 0                    | 0          | 0                      | 166        | \$     | 39,740  | \$ 2,656   | \$-                   | \$       | 42,396    |
| 2.03 | Requests for Information (25 Total) |               | 6                  | 8                              | 24                           | 48                      | 14                        | 0                    | 0          | 0                      | 100        | \$     | 25,052  | \$ 1,600   | \$-                   | \$       | 26,652    |
| 2.04 | Site Visits (3 Total)               |               | 4                  | 0                              | 12                           | 4                       | 4                         | 0                    | 0          | 0                      | 24         | \$     | 6,216   | \$ 384   | \$ 1,750              | \$       | 8,350     |
| 2.05 | Change Order Assistance (4)         |               | 4                  | 0                              | 4                            | 4                       | 4                         | 0                    | 0          | 0                      | 16         | \$     | 4,024   | \$ 256   | \$-                   | \$       | 4,280     |
| 2.06 | Record Drawings                     |               | 2                  | 0                              | 6                            | 16                      | 24                        | 8                    | 36         | 0                      | 92         | \$     | 18,288  | \$ 1,472   | \$ 204                | \$       | 19,964    |
| 2.07 | Project Close-Out                   |               | 4                  | 0                              | 8                            | 4                       | 4                         | 0                    | 0          | 0                      | 20         | \$     | 5,120   | \$ 320   | \$-                   | \$       | 5,440     |
|      |                                     | Task Subtotal | 34                 | 16                             | 90                           | 159                     | 93                        | 8                    | 36         | 0                      | 436        | \$     | 103,210 | \$ 6,976   | \$ 1,954              | \$       | 112,140   |
|      |                                     |               | 40                 | 10                             | 100                          | 450                     |                           | 0                    | 26         |                        | 460        |        |         |  |                       | 1        |           |
|      | Hours Total                         |               | 40                 | 16                             | 108                          | 159                     | 93                        | 8                    | 36         |                        | 460        |        |         | 4  |                       |          |           |
|      | Rate                                |               | \$ 310             |                                | \$ 274                       |                         |                           | -                    |            |                        |            | ļ .    |         | \$ 16  |                       | <u> </u> |           |
|      | Project Subtotal                    |               | \$ 12,400          | \$ 4,960                       | \$ 29,592                    | \$ 38,478               | \$ 16,740                 | \$ 1,640             | \$ 6,192   | \$ -                   |            | \$110  | ),002   | \$7,360  | \$1,954               | \$1      | 119,316   |

# Agenda Item

Engineering Committee Meeting

Meeting Date: May 8, 2025

**TO:** Engineering Committee

- **FROM:** Roni Grant, Capital Improvement Program Manager
- **SUBJECT:** J.B. Latham Treatment Plant 2 Headworks Rehabilitation Engineering Services During Construction [Project Committee 2]

#### Overview

Dudek has been working on the J.B. Latham (JBL) Plant 2 Headworks Rehabilitation final design since July 2024. The final design fee is \$208,100, and the final design has been completed. SOCWA requested Dudek to submit a proposal to provide engineering support during bidding and engineering services during construction (ESDC). The scope of services includes the following:

- Engineering Support During Bidding
  - Pre-Bid Meeting and Site Walk: Dudek will attend and respond to design-related questions.
  - Addenda Preparation and Response to Questions: Dudek will assist SOCWA with RFIs and addenda documentation.
- Engineering Support During Construction
  - Meetings: Dudek will attend pre-construction and regular progress meetings.
  - RFIs & Design Clarifications: Dudek will respond to RFIs and evaluate design deviations or substitutions.
  - Shop Drawings & Submittal Reviews: Dudek will review shop drawings and submittals.
  - Structural Observation: Kelsey Structural will perform structural observations and provide reports.
  - Record Drawing Preparation: Dudek will prepare record drawings based on construction plan markups.
- Project Management
  - Monthly Invoicing and Billing Reports: Dudek will manage project administration, including progress reports and budget status updates.

#### Cost Analysis

The proposed cost for these services is \$47,858. The cost allocation by member agency is shown in Table 1. Project 32243L has a proposed budget of \$1.5M. The Engineer's cost estimate for this project is \$1.3M.

Table 1 – Cost Allocation

| Member Agency                  | Plant 2<br>Headworks<br>Rehabilitation<br>(32243L) |
|--------------------------------|--|
| South Coast Water District     | \$24,847.87  |
| Santa Margarita Water District | \$23,010.13  |
| Total                          | \$47,858.00  |

**Recommended Action:** Staff recommends that the Engineering Committee recommend to the PC 2 Board of Directors to approve Change Order 1 to Dudek for \$47,858. This will result in a revised total contract amount of \$255,958 for Engineering Services during Construction for the JBL Plant 2 Headworks Rehabilitation project.



March 12, 2025

Roni Young Grant, PMP Associate Engineer South Orange County Wastewater Authority 34156 Del Obispo Street Dana Point, California 92629

#### Subject: Letter Proposal for J.B. Latham (JBL) Plant 2 Headworks Rehabilitation Engineering Support During Bidding and Construction

Dear Roni Young Grant,

Dudek is pleased to provide this proposal for engineering support services for bidding and construction of JBL headworks rehabilitation. Included in this proposal are the following discussions:

- 1. General Information General Firm Information and Primary Point of Contact
- 2. Project Team Presents our Team members' roles and responsibilities.
- 3. Project Understanding and Approach Describes project background and objectives; Includes scope of work with specific work elements.
- 4. Fee Proposal Quantifies our anticipated level of effort.

Our proposal demonstrates our thorough understanding of your project goals and offers a comprehensive approach for successful construction.

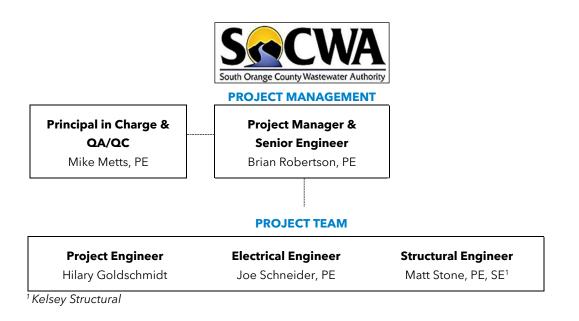
## **General Information**

The Dudek team presented in this proposal has the resources to perform the work required for the Project as included in the provided Project Scope of Work. Those tasks to be completed by subcontractors are also defined within the Scope of Work.

The primary point of contact for this proposal and project correspondence is Brian Robertson, available at 760.479.4845 or brobertson@dudek.com.

## Project Team

The Dudek team will maintain the same project management and engineering team that prepared the JBL Plant 2 Headworks final design:



## Project Understanding and Approach

## Background

It is our understanding that South Orange County Wastewater Authority (SOCWA) is requesting engineering support during bidding (ESDB) and construction (ESDC) proposals for the J.B. Latham Treatment Plant (JBL) Plant 2 Headworks Rehabilitation project located in Dana Point, CA. The project is currently at the 100% Design phase and is anticipated to go out to bid in early 2025. The Dudek team has performed the structural, architectural, mechanical, and electrical design for the project and will provide services including request for information (RFI) review, submittal review, structural observations and preparation of record drawings.

## Scope of Work

Dudek will implement the detailed scope of work as outlined below. Dudek assumes that SOCWA will select a construction management (CM) team to provide construction management and inspection of the work. The services of the team will facilitate good communication between the Contractor, SOCWA and Engineer, and support successful completion of construction. Dudek proposes to provide the following services:

#### TASK 1 ENGINEERING SUPPORT DURING BIDDING

#### Task 1.1 Pre-Bid Meeting and Site Walk

Dudek will attend the pre-bid site walk and be prepared to respond to questions regarding design intent.

#### Task 1.1 Assumptions

Dudek Project Manager will attend site walk.

#### Task 1.1 Deliverables

None.

#### Task 1.2 Addenda Preparation and Response to Questions

Dudek will assist SOCWA in providing responses to Requests for Information (RFIs) and clarifications and preparing written addenda.

#### Task 1.2 Assumptions

- Dudek and Kelsey Structural support is needed for a maximum of one (1) addendum. SOCWA will
  prepare addenda documentation.
- Conformed plans and specifications are not required.
- Dudek team will provide responses for a maximum of twelve (12) RFIs, eight (8) for Dudek staff and four (4) for Kelsey Structural staff.
- SOCWA will prepare the addenda documentation.

#### Task 1.2 Deliverables

• Written responses in email format.

#### TASK 2ENGINEERING SUPPORT DURING CONSTRUCTION

#### Task 2.1 Meetings

Dudek will attend the Pre-Construction Meeting and regular construction progress meetings.

#### Task 2.1 Assumptions

- The Pre-Construction meeting will be conducted by SOCWA, including meeting agenda and minutes. Dudek Project Manger will attend in-person. The electrical and structural engineers will attend virtually.
- Dudek Project Manager will attend a maximum of ten (10) biweekly progress meetings, each lasting 30 minutes. Meetings will be virtual except Dudek Project Manager will attend one (1) inperson to observe construction progress and/or support structural observation.

#### Task 2.1 Deliverables

None.

#### Task 2.2 **RFIs & Design Clarifications**

Dudek will assist SOCWA in responding to RFIs and providing clarifications of the design intent.

Dudek will assist SOCWA with evaluation of Contractor-proposed design deviations or substitutions that may be requested. Dudek will evaluate the proposed design changes relative to consistency with the original design intention.

#### Task 2.2 Assumptions

- Dudek team will provide a maximum of twenty (20) RFI responses, twelve (12) for Dudek staff and eight (8) for Kelsey Structural staff.
- RFIs from the Contractor will be formally submitted to the Construction Manager, and then transmitted to Dudek. Questions requiring responses from the design team will be forwarded to the Dudek Project Manager for distribution and response.
- Dudek will support a maximum of one (1) design deviation and one (1) substitution review with a total maximum of eight (8) staff hours.

#### Task 2.2 Deliverables

• Written responses in e-mail format and drawing markups of design modifications or clarifications.

#### Task 2.3 Shop Drawings & Submittal Reviews

Dudek and Kelsey structural will review and process shop drawings and submittals and resubmittals. Submittal responses will be returned within ten (10) working days. Dudek will maintain a submittal log to document submittals and track status.

#### Task 2.3 Assumptions

- Submittals and shop drawings from the Contractor will be formally submitted to the Construction Manager, who will forward to the Dudek Project Manager for distribution and response.
- Dudek will review and respond to a maximum of twelve (12) shop drawings/submittals and 6 resubmittals.
- Kelsey Structural will review and respond to a maximum of fifteen (15) shop drawings/submittals and 8 resubmittals for structural project elements.

#### Task 2.3 Deliverables

• Written respones in email format and accompanying submittal makrups.

#### Task 2.4 Structural Observation

Kelsey Structural will perform a maximum of three (3) structural observations during construction to verify general conformance with the contract documents. A written structural observation report will be provided with comments and action items to be addressed by the Contractor.

#### **Task 2.3 Assumptions**

• Structural observations will be per California Building Code.



 Suggested observations would occur prior to concrete repair mortar placement, structural steel erection and prior to coating application.

#### Task 2.3 Deliverables

• Written structural observation reports.

#### Task 2.7 Record Drawing Preparation

Dudek will prepare record drawings, in cooperation with SOCWA and its Construction Manager, based on the construction plan markups provided by the Contractor at the completion of construction.

#### Task 2.7 Assumptions

• Following construction, Dudek will prepare the record drawings.

#### Task 2.7 Deliverables

- The drawings will be prepared based on field changes and redlines documented by the Construction Manager and the Contractor, and changes resulting from RFIs, clarifications and design deviations.
- Dudek will provide electronic files of the revisions. Hard copies are not included.

#### TASK 3 PROJECT MANAGEMENT

#### Task 3.1 Monthly Invoicing, and Billing Reports

Dudek will conduct project administration and management including the preparation and distribution of monthly progress reports including progress to date, potential completion issues, and anticipated next steps in progress. Progress reports will also include budget status and project schedule updates.

#### Task 3.1 Assumptions

Dudek assumes a seven (7) month project duration with project closeout in October 2025.

#### Task 3.1 Deliverables

Monthly progress reports and invoices.

## Fee Proposal

Dudek proposes a project budget of \$47,858 for completion of the above tasks. A breakdown of estimated labor hours by category for each task is included below.

|        |  |                | [                  | Dudek Labor Ho      | urs and Rates          | ŝ               |              |                |       |          |                                  |          |            |    |    |          |
|--------|--|----------------|--------------------|---------------------|------------------------|-----------------|--------------|----------------|-------|----------|----------------------------------|----------|------------|----|----|----------|
|        | Project Team Role:                               | PIC -<br>QA/QC | Project<br>Manager | Project<br>Engineer | Electrical<br>Engineer | CAD<br>Designer | Admin        |                |       |          | Kelsey<br>Structural<br>M. Stone |          | Structural |    |    |          |
|        | Team Member:                                     | M.<br>Metts    | B. Robertson       | H.<br>Goldschmidt   | J.<br>Schneider        | N. Hunter       | M.<br>Kinney | TOTAL<br>DUDEK | DUD   | EK LABOR |                                  |          |            |    |    |          |
|        | Billable Rate :                                  | \$345          | \$265              | \$190               | \$290                  | \$200           | \$160        | HOURS          | COSTS |          |                                  | Fee      | COSTS      |    | T  | DTAL FEE |
| Task 1 | Engineering Support<br>During Bidding            |                |                    |                     |                        |                 |              |                |       |          |                                  |          |            |    |    |          |
| 1.1    | Pre-Bid Meeting and Site<br>Walk                 |                | 2                  |                     |                        |                 |              | 2              | \$    | 530      |                                  |          | \$         | 40 | \$ | 570      |
| 1.2    | Addenda Preparation and<br>Response to Questions |                | 6                  | 2                   | 2                      |                 |              | 10             | \$    | 2,550    |                                  | \$2,112  |            |    | \$ | 4,662    |
|        | Subtotal Task 1                                  |                | 8                  | 2                   | 2                      |                 |              | 12             | \$    | 3,080    | \$                               | 2,112    | \$         | 40 | \$ | 5,232    |
| Task 2 | Engineering Support During<br>Construction       |                |                    |                     |                        |                 |              |                |       |          |                                  |          |            |    |    |          |
| 2.1    | Pre-Construction and<br>Progress Meetings        |                | 8                  |                     | 3                      |                 |              | 11             | \$    | 2,990    |                                  | \$484    | \$         | 40 | \$ | 3,514    |
| 2.2    | RFI and Design Clarifications                    | 1              | 8                  | 12                  | 6                      |                 |              | 27             | \$    | 6,485    |                                  | \$2,112  |            |    | \$ | 8,597    |
| 2.3    | Shop Drawing and Submittal<br>Reviews            | 1              | 8                  | 16                  | 12                     |                 |              | 37             | \$    | 8,985    |                                  | \$10,780 |            |    | \$ | 19,765   |
| 2.4    | Structural Observation                           |                |                    |                     |                        |                 |              |                | \$    | -        |                                  | \$3,520  |            |    | \$ | 3,520    |
| 2.5    | Record Drawing Preparation                       |                | 1                  | 2                   | 1                      | 8               |              | 12             | \$    | 2,535    |                                  | \$2,200  |            |    | \$ | 4,735    |
|        | Subtotal Task 2                                  | 2              | 25                 | 30                  | 22                     |                 |              | 87             | \$    | 20,995   | \$                               | 19,096   | \$         | 40 | \$ | 40,131   |
| Task 3 | Project Management                               |                |                    |                     |                        |                 |              |                |       |          |                                  |          |            |    |    |          |
| 3.1    | Monthly Invoicing and<br>Progress Reports        |                | 7                  |                     |                        |                 | 4            | 11             | \$    | 2,495    |                                  |          |            |    | \$ | 2,495    |
|        | Subtotal Task 3                                  |                | 7                  |                     |                        |                 | 4            | 11             | \$    |          | \$                               | -        | \$         | -  | \$ | 2,495    |
| T      | otal Hours and Fee                               | 2              | 40                 | 32                  | 24                     | 8               | 4            | 110            | \$    | 26,570   | \$                               | 21,208   | \$         | 80 | \$ | 47,858   |

## Closing

We look forward to continuing our work on this project with you and SOCWA and to providing the services described herein. Please do not hesitate to call or email me with any questions you might have about our proposal.

Respectfully Submitted,

Mike Metts, P.E. Principal Engineer

Mike Metts is authorized to sign on behalf of Dudek.

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Brian Robertson Project Manager



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