NOTICE OF SPECIAL MEETING OF THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY PROJECT COMMITTEE 2

May 12, 2025 10:30 am.

NOTICE IS HEREBY GIVEN that a Special Meeting of the South Orange County Wastewater Authority (SOCWA) Project Committee 2 was called to be held on **May 12**, **2025**, **at 10:30 am.** 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 TWENTY-FOUR (24) 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 TWENTY-FOUR (24) 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 PROJECT COMMITTEE 2 IN CONNECTION WITH A MATTER SUBJECT FOR DISCUSSION OR CONSIDERATION AT AN OPEN MEETING OF THE PROJECT COMMITTEE 2 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 PROJECT COMMITTEE 2 LESS THAN TWENTY-FOUR (24) 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 PROJECT COMMITTEE 2 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 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: 869 4914 1353 Passcode: 745691

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: https://socwa.zoom.us/u/kbXzETLON8

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)

Recommended Action: Committee Discussion/Direction and Action.

PAGE NO.

4. Closed Session

- A. Closed Session Conference with Legal Counsel Existing Litigation pursuant to (Government Code 54956.9(d)(1)): Case: SOCWA v. Olsson Construction, Inc. OCSC Case No. 30-2025-01465359-CU-BC-CJC
- B. Report out of Closed Session
- 5. Open Session

ACTION

The Engineering Committee recommends 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.

Adjournment

I hereby certify that the foregoing Notice was personally emailed or mailed to each member of the SOCWA Project Committee 2 at least 24 hours prior to the scheduled time of the Special Meeting referred to above.

I hereby certify that the foregoing Notice was posted at least 24 hours prior to the time of the above-referenced Project Committee meeting at the usual agenda posting location of the South Orange County Wastewater Authority and at www.socwa.com.

Dated this 7th day of May 2025.

Danita Hirsh, Assistant Secretary

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

Agenda Item

4

Project Committee 2 Meeting

Meeting Date: May 12, 2025

TO: Project Committee 2 Board of Directors

FROM: Amber Boone, General Manager

STAFF CONTACT: Roni Grant, Capital Improvement Program Manager

SUBJECT: J.B. Latham Treatment Plant (JBL) Flare System and Underground Piping

Replacement Final Design [Project Committee 2]

Overview

The existing digester gas and hot water loop piping serving the digesters is highly corroded and requires replacement. The buried portions of these pipelines run through an area that is congested with other process piping. Excavating in this area would be difficult, and leaks in buried piping can be difficult to locate and repair. Locating the new utilities above-ground could reduce construction costs, operational impacts, future maintenance costs and improve reliability.

The current flare system has been in operation since 1971 and has reached the end of its useful life. SOCWA engaged DHK Engineer in 2013 for a digester gas flare condition assessment and Carollo Engineers in 2018 for a flare study. In addition, SCAQMD has previously advised SOCWA that the existing flare does not meet the requirements of Rule 1118.1 because (in the view of SCAQMD) it exceeded the annual capacity thresholds set forth in the rule during two consecutive years.

Rule 1118.1 provides two pathways to continue operating the existing flare:

- Rule 1118.1(d)(5) allows for the continued operation of an existing flare that exceeds the
 annual capacity thresholds if SOCWA submits a Notice of Intent (NOI) to replace the flare
 and then applies for a permit to construct a replacement flare. SOCWA would have 18
 months from the date of permit to construct a replacement flare, plus an additional 12
 months if needed due to circumstances that prevented the installation within the 18-month
 period. SOCWA did submit a NOI to replace the flare and applied for the permit to
 construct it at the end of 2024.
- Under this provision, rather than submitting a NOI to replace an existing flare, SOCWA would submit a NOI to reduce Flare Input. Compliance with the rule would then entail monitoring digester gas input to the flare (using the existing meter) to ensure that the gas input to the flare does not exceed 5% of its maximum capacity on an annual basis. Rule 1118.1 also includes a provision that allows SOCWA to change its notification of intent from one to the other compliance path. In this case, it would involve submitting a Notification of Flare Input Reduction and rescinding the Notification of Flare Replacement.

The final design project elements include the following:

- Replace existing flare with new flare and piping and new location.
- Replace Hot Water Piping between digesters.
- Replace Digester Gas Piping between digesters and flare.
- Piping structures to accommodate proposed (this project) and future piping needs.

Proposals

SOCWA solicited proposals through PlanetBids on November 13, 2024. Eight firms were contacted during this process:

- Black and Veatch
- Carollo Engineers
- Dudek
- Hazen and Sawyer
- HDR
- Kleinfelder
- MKN
- TYLin

Three proposals were received from Carollo, Dudek, and MKN. Staff reached out to the firms who did not propose. The timeline either did not work, or the firms did not have enough pipe bridge experience.

The proposals were distributed to the evaluation committee (PC 2 Engineering Committee members and SOCWA staff) on January 30, 2025. At the February Engineering Committee meeting, it was proposed to conduct Q&A sessions with Dudek and MKN. These sessions were facilitated by staff on March 4, 2025, with the participation of PC 2 Engineering Committee members and SOCWA staff.

In light of the upcoming master planning effort, it is recommended to award the contract with a total not-to-exceed amount, structured in phases. The initial phase will focus on the design of the above-ground piping system, followed by the replacement of the flare. Staff has engaged with Dudek and MNK to request revised fee proposals that align with this phased approach. A summary of the proposals and SOCWA staff ratings is provided in Table 1.

Table 1 – Summary of Proposals

Firm	Dudek	MKN
Project Manager	Ken Deibert	Ryan Gallagher
Total Labor Hours	1,298*	1,497*
Phase 1 Fee	\$279,175	\$260,820
	\$130,815	\$180,309
Phase 2 Fee		
Total Fee	\$409,990	\$441,129
SOCWA Staff Rating	68	71
(80 max)		

^{*}Subconsultants hours were not included in the total labor hours.

A summary of the SOCWA staff's rating of the proposals is provided in Table 2.

Table 2: Evaluation Criteria

Evaluation Criteria	Dudek	MKN
Overall Qualifications	17	18
and Experience of Firm		
(20 points)		
Record of like projects:	7	9
(10 points)		
Realistic level of effort:	17	18
(20 points)		
Ability to Deliver Timely:	9	9
(10 points)		
Responsibility &	Yes	Yes
Responsiveness:		
Cost Competitive:	18	17
(20 Points)		
Total: (80 possible)	68	71

Staff recommends MKN due to the following:

- The firm has the most realistic project understanding and approach.
- The project team and manager have recently completed similar work.
- The firm has a strong constructability review team, which is important for this project.
- The firm uses innovative technology to identify potential utilities conflict.

Cost Allocation

The Phase 1 cost allocation for the final design is detailed in Table 3. Staff requests a 10% contingency, amounting to \$26,082, to cover potential unknown issues during the design phase. This brings the total Phase 1 budget to \$286,902.

Similarly, the Phase 2 cost allocation for the final design is outlined in Table 4. Staff requests a 10% contingency, amounting to \$18,031, for potential unknown issues during the design phase. This results in a total Phase 2 project budget of \$198,340.

In summary, the total contingency requested is \$44,113, and the overall project budget is \$485,242.

Table 3 – Phase 1 Cost allocation by member agency (including contingency)

Agency	Buried Digester and Flare Gasline Replacement (32232S)	Buried Digester and Flare Gasline (32232S)	Heat Exchanger No. 4 Pipe Replacement (32234S)	Total
South Coast Water District	\$32,240.33	\$20,299.46	\$66,868.82	\$119,408.61
Santa Margarita Water District	\$45,223.21	\$28,473.88	\$93,796.30	\$167,493.39
Total	\$77,463.54	\$48,773.34	\$160,665.12	\$286,902.00

Table 4 – Phase 2 Cost allocation by member agency (including contingency)

Agency	Gas Flare Replacement (32231S)
South Coast	
Water District	\$82,549.11
Santa Margarita	
Water District	\$115,790.89
Total	\$198,340.00

Prior Related Project Committee or Board Action (s)

This item was reviewed and discussed by the Engineering Committee on February 13 and March 13, 2025. The Engineering Committee agreed with staff's recommendation.

Budget

The Buried Digester and Flare Gasline Replacement (32232S) has a project budget of \$125,000. The Heat Exchanger No. 4 Pipe Replacement (32234S) has a project budget of \$75,000. The Buried Digester Piping Reconstruction (32263S) has a project budget of \$250,000, resulting in a total Phase 1 budget of \$450,000. The Gas Flare Replacement (32231S) has a proposed budget of \$537,790 for FY 25/26.

Recommended Action: The Engineering Committee recommends that the PC 2 Board of Directors: i) Approve a contract with MKN for a total of \$441,129, ii) approve a project contingency of \$44,133 to cover potential unknown issues during final design, for a total project budget of \$485,242.

TASK 8: 90% AND 100% BID SET

This task includes the completion of design phases 1 and 2. After SOCWA staff reviews the 50% submittal, Dudek will provide the 90% bid set of construction documents. The 90% bid set will represent the end of Phase 1 of the design. Phase 1 includes the piping layout and structural work that can be completed before the design flare capacity is determined by SOCWA. Once the 90% bid set is completed and reviewed, then it will be ready for Phase 2, which will be to incorporate the electrical design for the specified flare into the 100% bid set.

Task 8.1: 90% bid set without the flare

Dudek will provide the 90% bid set of construction documents without the flare details and only the location of the flare. The 90% bid set will include the design elements that can be completed before the final flare capacity and model is determined. This task will include plans, specifications, and opinion of construction cost (Class II Bid Estimate) that incorporate the review comments from the 50% submittal, standard details, and the list of specifications provided by SOCWA.

Deliverables

- 90% design plans and technical specifications (Division 2)
- 90% opinion of construction cost (Class II Bid estimate)
- SOCWA comments from the 50% submittal

Task 8.2: 100% bid set including the flare

This represents phase 2 of the design. Once the 90% bid set is completed and reviewed, Dudek will receive additional data from SOCWA to allow the determination of the flare model. The specific flare model will be incorporated into the electrical design for the 100% bid set.

Deliverables

- 100% design plans and technical specifications (Division 2)
- 100% opinion of construction cost (Class II Bid estimate)
- SOCWA comments from the 90% submittal

Assumptions

- SOCWA will determine the flare capacity with the Master Plan.
- Dudek will determine the appropriate model based on the capacity reqiurements.
- There may be minor revisions after review of the 100% bid set to provide a final bid set.

Electrical Assumptions

- SOCWA will provide record drawings of existing flare, digester area PLC panels, and electrical equipment.
- The existing flare is powered and controlled from panels and PLC near MCC-F in the NE corner of the plant.
- Power and controls to the PLC and electrical equipment for the new flare can run from Bldg 60 between Digesters 1 and 2 or from DAF MCC to the west of the new location.
- One electrical in-person site visit was budgeted at the beginning of the design.

- Dudek will not design E&I modifications to bring the existing digester area up to NFPA 820 code. Only work added for new flare will be made NFPA 820 compliant.
- Assumed that existing PLCs have available I/O and there is no need to add a PLC panel.
- Assumed hard-wired I/O from flare to PLC, not network communications.

South Orange County Wastewater Authority

JBL Plant Digester, Flare, Heat Exchanger & Piping Replacement DUDEK FEE ESTIMATE- PHASED FOR FLARE DESIGN 3/6/2025

				Senior	Dudek	Labor Hours	and Rates							Subcor	nsultant Fees					
	Project Team Role:	PIC	QA/QC	Project Manager	Project Manager	Senior Engineer	Project Engineer	CAD Designer	Electrical Engineer	Admin			Structural	Technical Advisor	Surveying	Potholing				
	Team Member:	Mike Metts	Brian Robertson	Ken Deibert	Sam Hawkinson	Servando Diaz	Hilary Goldschmidt	Nikki Hunter	Joe Schneider	Michelle Kinney	TOTAL DUDEK	DUDEK LABOR	Kelsey	DHK	Kelsoe	Bess	_	OTHER DIRECT		
	Billable Rate :	\$330	\$275	\$290	\$275	\$260	\$200	\$200	\$290	\$100	HOURS	costs	Fee	Fee	Fee	Fee	_	COSTS	T	OTAL FEE
Task 1	Project Management																			
1.1	Schedule, Status Reports, Admin			12	4	8				8	32	\$ 7,460	\$4,180	\$390					\$	12,030
1.2	Engineering Phase Meetings (6)		2	10	4	6	4		6		32	\$ 8,650	\$1,760	\$780			\$	800	\$	11,990
	Subtotal Task 1		2	22	8	14	4		6	8	64	\$ 16,110	\$ 5,940	\$ 1,170) \$ -	\$ -	\$	800	\$	24,020
Task 2	Data Collection & Document Review																			
2.1	Record Drawing Review			3	3	6	6		2		20	\$ 5,035	\$1,600	\$390					\$	7,025
2.2	Utility Research			3	3	6	6		2		20	\$ 5,035		\$390					\$	6,985
	Subtotal Task 2			6	6	12	12		4		40	\$ 10,070	\$ 3,160	\$ 780) \$ -	\$ -	\$	-	\$	14,010
Task 3	Survey																			
3.1	Site Reconnaissance			2	2	6	4				14	\$ 3,490		\$390			\$	1,200		5,080
3.2	Piping and Field Measurements			2	2	6	4				14	\$ 3,490			\$9,000		\$	1,200	-	13,690
Took 4	Subtotal Task 3			4	4	12	8				28	\$ 6,980) \$ -	\$ 390	\$ 9,000) \$ -	\$	2,400	\$	18,770
Task 4	Potholing Potholing plan		4	2	2	4	8	0			05	ф <u>го</u> дг		#200	#2.450	\$15,540			•	04.705
4.1	Subtotal Task 4		1 1	2	2 2	4	8	8 8			25 25	\$ 5,645 \$ 5,645		\$390 \$ 39 0	\$3,150 \$ 3,15 0) ¢		\$ \$	24,725 24,725
Task 5	Conceptual Design		<u> </u>		2	4	8	•			25	φ 5,040	, 4 -	φ 350) \$ 3,13C	σ 19,940	JΨ	-	Ψ	24,125
5.1	Conceptual Design TM	1	2	Q	8	24	24	16	1		87	\$ 20,800	\$10,280	\$780					\$	31,860
5.1	Subtotal Task 5	1	2	8	8	24	24	16	4		87	\$ 20,800) \$ -	\$ -	\$		\$	31,860
Task 6	Conceptual Design Workshop	_	_		J		_,				<u> </u>	20,000	10,200	4 100	•	1	Ť		Ť	02,000
6.1	Conceptual Design Workshop		2	3	2	2	2		2		13	\$ 3,470	\$1,240	\$390			\$	1,800	\$	6,900
0.1	Subtotal Task 6		2	3	2	2	2		2		13	\$ 3,470	- ' ') \$ -	\$ -	\$	1,800	-	6,900
Task 7	50% Submittal																			
7.1	50% Submittal	2	2	14	14	40	40	154	8	4	278	\$ 61,040	\$14,640	\$1,560					\$	77,240
	Subtotal Task 7	2	2	14	14	40	40	154	8	4	278	\$ 61,040	\$ 14,640	\$ 1,560	\$ -	\$ -	\$	-	\$	77,240
Task 8	90% and 100% Bid Set																			
8.1	90% Bid Set (without flare)	1	2	14	14	40	40	154	8	4	277	\$ 60,710	\$19,380	\$1,560					\$	81,650
8.2	100% Bid Set (including flare)	1	2	4	4	16	16	104	92		239	\$ 57,980							\$	57,980
	Subtotal Task 8	1	4	18	18	56	56	258	100	4	516	\$ 118,690	\$ 19,380	\$ 1,560) \$ -	\$ -	\$	-	\$	139,630
Task 9	Constructability Review																			
9.1	Constructability Review	1	1	2	2	4	6		3		19	\$ 4,845							\$	4,845
	Subtotal Task 9	1	1	2	2	4	6		3		19	\$ 4,845	5 \$ -	\$ -	\$ -	\$ -	\$	-	\$	4,845
Task 10	Technical Specifications & Standard																			
	Details								_					4000						
10.1	Technical Specification Review	1	1	2	2	4	8		3	2	23	\$ 5,445		\$390					\$	5,835
	Subtotal Task 10	1	1	2	2	4	8		3	2	23	\$ 5,445	5 -	\$ 390) \$ -	\$ -	\$	-	\$	5,835
Task 11	Construction Sequencing & Shutdown Plan																			
11.1	Sequencing & Shutdown Plan	1	1	2	2	4	6		2		18	\$ 4,555		\$390					\$	4,945
	Subtotal Task 11	1	1	2	2	4	6		2		18	\$ 4,555	5 \$ -	\$ 390) \$ -	\$ -	\$	-	\$	4,945
Task 12	Bidding & Engineering Services During Construction																			
12.1	Bid Phase Services		1	1	2	4	4		2		14	\$ 3,535							\$	4,375
12.2	Conformed Drawings & Specifications		1	1	2	2	4	12	2		24	\$ 5,415							\$	5,415
12.3	Construction meetings Review Submittals		2	6	4	6	6		2		26	\$ 6,730		\$780					\$	7,510
12.4	Respond to RFIs		2	3	2	16	16	2	12		51	\$ 12,810		\$390					\$	18,120
12.5 12.6	Change Orders		2	1	4	8	2	2	2		30 9	\$ 7,470 \$ 2,340		\$780					\$	9,810 2,340
12.6	Record Drawings		1	1	1	4	4	20	2		33	\$ 2,340							\$	2,340 9,640
14.1	Subtotal Task 12		10	15	16	42	44	3 4	26		187	\$ 45,560		\$ 1,950) \$ -	\$ -	\$		\$	57,210
	Total Hours and Fee	8	26	98	84	218	218	470 -	158	18	1298		\$ 64,340		\$ 12,150	\$ 15.540) \$	5.000		409,990
	Percent of Hours:	1%	2%	8%		17%	17%	36%	12%	1%	100%	T-W - 000,210	T W 07,070	T \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Ψ 12,130	T 4 10,040	- Ψ	-5,500	TΨ	100,000

South Orange County Wastewater Authority Phase 1 - Hot Water Piping



Hourly Rates	289 289	Project Manager - RG	289 Civil - JR	688 Mechanical - JH	503 Project Engineer I	Constructability - PB	Senior Designer - KN	ក្នុ Administrative Assistant	Total Hours (MKN)		Labor (MKN)	GPRS - Laser Scanning		Structural		Electrical/Instrumentation		Potholing		Non-Labor Costs		Total Fee
Task 1 - Project Management (6 mos.) and Meetings (6)	1	36	6	6					49	Ś	14.161	Ś	-	\$ -	Ś	-	Ś	-	Ś	-	Ś	14,161
Task 2 - Data Collection and Document Review		8	8	10	10				36	Ś	9,544	Ś	-	\$ -	Ś	-	\$	-	\$	-	Ś	9,544
Task 3 - Surveying					8		24		32	\$	6,064	\$ 3,4	110	\$ -	\$	-	\$	-	\$	3,410	\$	9,474
Task 4 - Potholing (4 per RFP)				4	4		4		12	\$	2,708	\$	-	\$ -	\$	-	\$	6,600	\$	6,600	\$	9,308
Task 5 - Conceptual Design	4	8	16	36	40	0	44	0	148	\$	34,756	\$ 7,9	920	\$ 2,200	\$	-	\$	-	\$	10,120	\$	44,876
Basemap with Alternatives	4	4	12	12	16		24		72	\$	16,936	\$ 7,9	920	\$ 2,200	\$	-	\$	-	\$	10,120	\$	27,056
Potholing Plan/ Proposed Foundations				4	4		4		12	\$	2,708	\$	-	\$ -	\$	-	\$	-	\$	-	\$	2,708
Consideration of Future Pipes		2		8	16		16		42	\$	9,098	\$	-	\$ -	\$	-	\$	-	\$	-	\$	9,098
Construction Cost and Duration			4	4	4				12	\$	3,124	\$	-	\$ -	\$	-	\$	-	\$	-	\$	3,124
Construction Phasing Plan		2		8					10	\$	2,890	\$	-	\$ -	\$	-	\$	-	\$	-	\$	2,890
Task 6 - Conceptual Design Workshop		2	2	2	2		2		10	\$	2,510	\$	-	\$ 550	\$	550	\$	-	\$	1,100	\$	3,610
Task 7 - 50% Deliverable (Plans, Estimate)	6	2	30	46	80	0	78	0	242	\$	54,946	\$	-	\$ 3,850	\$	2,750	\$	-	\$	6,600	\$	61,546
Construction Plans (11 MKN, 7 others)	4	2	28	38	64		78		214	\$	48,230	\$	-	\$ 3,850	\$	2,750	\$	-	\$	6,600	\$	54,830
Estimate	2		2	8	16				28	\$	6,716	\$	-				\$	-	\$	-	\$	6,716
Task 8 - Bid Set (Plan, Estimate)	4	2	12	23	36	0	40	0	117	\$	26,557	\$	- [\$ 5,830	\$	2,750	\$	-	\$	8,580	\$	35,137
Construction Plans (11 MKN, 7 others)	4	2	12	19	32		40		109	\$	24,589	\$		\$ 5,830	\$	2,750	\$	-	\$	8,580	\$	33,169
Estimate				4	4				8	\$	1,968	\$		\$ -	\$	-	\$	-	\$	-	\$	1,968
Task 9 - Constructability Review		2		8	8	8	4		30	\$	7,430	\$	-	\$ -	\$	-	\$	-	\$	-	\$	7,430
Task 10 - Technical Specifications and Standard Details	4		4	8	24			8	48	\$	10,400	\$	-	\$ -	\$	1,518	\$	-	\$	1,518	\$	11,918
Task 11 - Construction Sequencing and Shutdown Plan	2	2		8	8				20	\$	5,092	\$	-]	\$ -	\$	-	\$	-	\$	-	\$	5,092
Task 12 - Bid and ESDC	2	28	17	32	61	0	32	0	172	\$	41,134	\$	-	\$ 3,795	\$	3,795	\$	-	\$	7,590	\$	48,724
Bid Phase Support		4	4	4	8		4		24	\$	5,832	\$	-	\$ -	\$	-	\$	-	\$	-	\$	5,832
Project Management and Construction Meetings (5)		6		5					11	\$	3,179	\$	-	\$ 275	\$	275	\$	-	\$	550	\$	3,729
Submittal Review (up to 20)		10	10	15	35				70	\$	17,220	\$	-	\$ 1,100	\$	1,100	\$	-	\$	2,200	\$	19,420
RFI Review (up to 5)		4		5	6		4		19	\$	4,559	\$	-	\$ 1,100	\$	1,100	\$	-	\$	2,200	\$	6,759
Change Order Support		2	3	3	4		8		20	\$	4,604	\$	-	\$ 550	\$	550	\$	-	\$	1,100	\$	5,704
Record Drawings (18 sheets)	2	2			8		16		28	\$	5,740	\$	-	\$ 770	\$	770	\$	-	\$	1,540	\$	7,280
TOTAL BUDGET	23	90	95	183	281	8	228	8	916	\$	215,302	\$ 11,3	30	\$ 16,225	\$	11,363	\$	6,600	\$	45,518	\$ 2	260,820

South Orange County Wastewater Authority Phase 2 - Flare



Task 2 - Data Collection and Document Review	Hourly Rates	04/QC - KN	R Project Manager - RG	289 Civil - JR	88 Mechanical - JH	က္က Project Engineer I	Senior Designer - KN	ក្នុ Administrative Assistant	Total Hours (MKN)	Labor (MKN)	Structural	Electrical/Instrumentation	Potholing		Non-Labor Costs	Total Fee
Task 2 - Data Collection and Document Review																
Task 3 - Surveying		1	28	4	4						-			_		11,518
Task 4 - Potholing (6 New Flare)	Task 2 - Data Collection and Document Review			4	5	5				3,616	\$ -	\$ 1,100	\$ -		1,100	\$ 4,716
Task 5 - Flare Preliminary Design TM	Task 3 - Surveying					8	16		24	\$ 4,584	\$ -	\$ -	\$ -	\$	-	\$ 4,584
Task 6 - Conceptual Design Workshop 2 2 2 2 2 2 1,734 \$ - \$ 506 \$ - \$ 506 \$ 2,240 Task 7 - 50% Deliverable (Plans, Estimate) 6 2 18 28 48 45 0 147 \$ 33,675 \$ 3,850 \$ 3,300 \$ - \$ 7,150 \$ 40,825 Construction Plans (8 MKN, 5 others) 4 2 16 24 36 45 127 \$ 28,927 \$ 3,850 \$ 3,300 \$ - \$ 7,150 \$ 40,825 Estimate 2 2 4 12 20 \$ 4,748 \$ - \$ 7,150 \$ 36,077 Estimate 4 2 8 16 22 23 0 75 \$ 17,299 \$ 2,750 \$ 4,400 \$ - \$ 7,150 \$ 24,449 Construction Plans (8 MKN, 5 others) 4 2 8 12 18 23 67 \$ 17,299 \$ 2,750 \$ 4,400 \$ - \$ 7,150 \$ 24,449 Constructi	Task 4 - Potholing (6 New Flare)					2	2		4	\$ 776	\$ -	\$ -	\$ 6,600	\$	6,600	\$ 7,376
Task 7 - 50% Deliverable (Plans, Estimate) 6 2 18 28 48 45 0 147 \$ 33,675 \$ 3,850 \$ 3,300 \$ - \$ 7,150 \$ 40,825 Construction Plans (8 MKN, 5 others) 4 2 16 24 36 45 127 \$ 28,927 \$ 3,850 \$ 3,300 \$ - \$ 7,150 \$ 36,077 Estimate 2 2 4 12 20 \$ 4,748 \$ \$ - \$ 7,150 \$ 36,077 Estimate 4 2 8 12 18 23 67 \$ 15,331 \$ 7,150 \$ 24,481 Estimate 4 4 4 8 \$ 1,968 \$ - \$ - \$ 7,150 \$ 22,481 Estimate 4 4 4 4	Task 5 - Flare Preliminary Design TM	4	4	16	35	16	24		99	\$ 24,739	\$ -	\$ 2,750	\$ -	\$	2,750	\$ 27,489
Construction Plans (8 MKN, 5 others) 4 2 16 24 36 45 127 \$ 28,927 \$ 3,850 \$ 3,300 \$ - \$ 7,150 \$ 36,077 Estimate 2 2 4 12 20 \$ 4,748 \$ - \$ - \$ - \$ 4,748	Task 6 - Conceptual Design Workshop		2	2	2				6	\$ 1,734	\$ -	\$ 506	\$ -	\$	506	\$ 2,240
Estimate 2 2 4 12 2 0 \$ 4,748	Task 7 - 50% Deliverable (Plans, Estimate)	6	2	18	28	48	45	0	147	\$ 33,675	\$ 3,850	\$ 3,300	\$ -	\$	7,150	\$ 40,825
Task 8 - Bid Set (Plan, Estimate) 4 2 8 16 22 23 0 75 \$ 17,299 \$ 2,750 \$ 4,400 \$ - \$ 7,150 \$ 24,449 Construction Plans (8 MKN, 5 others) 4 2 8 12 18 23 67 \$ 15,331 \$ 2,750 \$ 4,400 \$ - \$ 7,150 \$ 22,481 Estimate 4 4 4 8 \$ 1,968 \$ - \$ - \$ - \$ 1,968 Task 19 - Constructability Review 9 9 9 9 2 5 - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	Construction Plans (8 MKN, 5 others)	4	2	16	24	36	45		127	\$ 28,927	\$ 3,850	\$ 3,300	\$ -	\$	7,150	\$ 36,077
Construction Plans (8 MKN, 5 others)	Estimate	2		2	4	12			20	\$ 4,748			\$ -	\$	-	\$ 4,748
Estimate	Task 8 - Bid Set (Plan, Estimate)	4	2	8	16	22	23	0	75	\$ 17,299	\$ 2,750	\$ 4,400	\$ -	\$	7,150	\$ 24,449
Task 9 - Constructability Review 0 5 5 5 5 5 5 5 5 5 5 9,264 Task 10 - Technical Specifications and Standard Details 2 4 8 16 4 34 \$ 7,746 \$ - \$ 1,518 \$ - \$ 1,518 \$ - \$ 1,518 \$ 9,264 \$ 1,518 \$ - \$ 1,518 \$ 9,264 \$ 1,518 \$ - \$ 1,518 \$ 9,264 \$ 1,518 \$ - \$ 1,518 \$ 9,264 \$ 1,518 \$ - \$ 1,518 \$ 9,264 \$ 1,518 \$ 9,264 \$ 1,518 \$ 9,264 \$ 1,518 \$ - \$ - \$ 2,546 \$ - \$ - \$ - \$ 2,546 \$ - \$ -	Construction Plans (8 MKN, 5 others)	4	2	8	12	18	23		67	\$ 15,331	\$ 2,750	\$ 4,400	\$ -	\$	7,150	\$ 22,481
Task 9 - Constructability Review 0 5 5 5 5 5 5 5 5 5 5 5 9,264 Task 10 - Technical Specifications and Standard Details 2 4 8 16 4 34 \$ 7,746 \$ - \$ 1,518 \$ - \$ 1,518 \$ 9,264 Task 11 - Construction Sequencing and Shutdown Plan 2 4 4 4 10 \$ 2,546 \$ - \$ - \$ 2,546 Task 12 - Bid and ESDC 2 21 11 25 50 22 0 131 \$ 31,271 \$ 1,650 \$ 3,795 \$ - \$ 5,445 \$ 36,716 Bid Phase Support 4 2 4 8 18 4,514 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	Estimate				4	4			8	\$ 1,968	\$ -	\$ -	\$ -	\$	-	\$ 1,968
Task 11 - Construction Sequencing and Shutdown Plan 2 4 4 10 \$ 2,546 \$ - \$ - \$ - \$ - \$ 2,546 Task 12 - Bid and ESDC 2 21 11 25 50 22 0 131 \$ 31,271 \$ 1,650 \$ 3,795 \$ - \$ 5,445 \$ 36,716 Bid Phase Support 4 2 4 8 18 \$ 4,514 \$ - \$ - \$ - \$ - \$ 4,514 PM (4 mo.) & Construction Meetings (3) 4 3 7 \$ 2,023 \$ - \$ 275 \$ - \$ 2,298 Submittal Review (up to 10) 5 5 10 24 44 \$ 10,652 \$ 550 \$ 1,100 \$ - \$ 1,650 \$ 1,2302 RFI Review (up to 5) 4 4 6 4 18 4,270 \$ 550 \$ 1,100 \$ - \$ 1,650 \$ 5,920 Change Order Support 2 4 4 4 8 22 \$ 5,182 \$ - \$ 550 \$	Task 9 - Constructability Review								0	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -
Task 11 - Construction Sequencing and Shutdown Plan 2 4 4 10 \$ 2,546 \$ - \$ - \$ - \$ - \$ 2,546 Task 12 - Bid and ESDC 2 21 11 25 50 22 0 131 \$ 31,271 \$ 1,650 \$ 3,795 \$ - \$ 5,445 \$ 36,716 Bid Phase Support 4 2 4 8 18 \$ 4,514 \$ - \$ - \$ - \$ - \$ 4,514 PM (4 mo.) & Construction Meetings (3) 4 3 7 \$ 2,023 \$ - \$ 275 \$ - \$ 2,298 Submittal Review (up to 10) 5 5 10 24 44 \$ 10,652 \$ 550 \$ 1,100 \$ - \$ 1,650 \$ 1,2302 RFI Review (up to 5) 4 4 6 4 18 4,270 \$ 550 \$ 1,100 \$ - \$ 1,650 \$ 5,920 Change Order Support 2 4 4 4 8 22 \$ 5,182 \$ - \$ 550 \$	Task 10 - Technical Specifications and Standard Details	2		4	8	16		4	34	\$ 7,746	\$ -	\$ 1,518	\$ -	\$	1,518	\$ 9,264
Task 12 - Bid and ESDC 2 21 11 25 50 22 0 131 \$ 31,271 \$ 1,650 \$ 3,795 \$ - \$ 5,445 \$ 36,716 Bid Phase Support 4 2 4 8 18 \$ 4,514 \$ - \$ - \$ - \$ - \$ 4,514 PM (4 mo.) & Construction Meetings (3) 4 3 7 \$ 2,023 \$ - \$ 275 \$ - \$ 275 \$ 2,298 Submittal Review (up to 10) 5 5 10 24 44 \$ 10,652 \$ 550 \$ 1,100 \$ - \$ 1,650 \$ 1,2302 RFI Review (up to 5) 4 4 6 4 18 \$ 4,270 \$ 550 \$ 1,100 \$ - \$ 1,650 \$ 5,920 Change Order Support 2 4 4 4 8 22 \$ 5,182 \$ - \$ 550 \$ - \$ 1,650 \$ 5,732 Record Drawings (14 sheets) 2 2 8 10 22 \$ 4,630 \$	Task 11 - Construction Sequencing and Shutdown Plan	2			4	4			10	\$ 2,546	\$ -	\$ -	\$ -	\$	-	\$ 2,546
Bid Phase Support 4 2 4 8 18 \$ 4,514 \$ - \$ - \$ - \$ - \$ 4,514 PM (4 mo.) & Construction Meetings (3) 4 3 7 \$ 2,023 \$ - \$ 275 \$ - \$ 2,298 Submittal Review (up to 10) 5 5 10 24 44 \$ 10,652 \$ 550 \$ 1,100 \$ - \$ 1,650 \$ 12,302 RFI Review (up to 5) 4 4 6 4 18 \$ 4,270 \$ 550 \$ 1,100 \$ - \$ 1,650 \$ 5,920 Change Order Support 2 4 4 4 8 22 \$ 5,182 \$ - \$ 550 \$ - \$ 550 \$ 5,732 Record Drawings (14 sheets) 2 2 8 10 22 \$ 4,630 \$ 550 \$ 770 \$ - \$ 1,320 \$ 5,950		2	21	11	25	50	22	0	131	\$ 31,271	\$ 1,650	\$ 3,795	\$ -	\$	5,445	\$ 36,716
Submittal Review (up to 10) 5 5 10 24 44 \$ 10,652 \$ 550 \$ 1,100 \$ - \$ 1,650 \$ 12,302 RFI Review (up to 5) 4 4 6 4 18 \$ 4,270 \$ 550 \$ 1,100 \$ - \$ 1,650 \$ 5,920 Change Order Support 2 4 4 4 8 22 \$ 5,182 \$ - \$ 550 \$ - \$ 5,920 Record Drawings (14 sheets) 2 2 8 10 22 \$ 4,630 \$ 550 \$ 770 \$ - \$ 1,320 \$ 5,950	Bid Phase Support		4	2	4	8			18	\$ 4,514	\$ -	\$ -	\$ -	\$	-	\$ 4,514
RFI Review (up to 5) 4 4 6 4 18 \$ 4,270 \$ 550 \$ 1,100 \$ - \$ 1,650 \$ 5,920 Change Order Support 2 4 4 4 8 22 \$ 5,182 \$ - \$ 550 \$ - \$ 550 \$ 5,732 Record Drawings (14 sheets) 2 2 8 10 22 \$ 4,630 \$ 550 \$ 770 \$ - \$ 1,320 \$ 5,950	PM (4 mo.) & Construction Meetings (3)		4		3				7	\$ 2,023	\$ -	\$ 275	\$ -	\$	275	\$ 2,298
Change Order Support 2 4 4 4 8 22 \$ 5,182 \$ - \$ 550 \$ - \$ 550 \$ 5,732 Record Drawings (14 sheets) 2 2 8 10 22 \$ 4,630 \$ 550 \$ 770 \$ - \$ 1,320 \$ 5,950	Submittal Review (up to 10)		5	5	10	24			44	\$ 10,652	\$ 550	\$ 1,100	\$ -	\$	1,650	\$ 12,302
Change Order Support 2 4 4 4 8 22 \$ 5,182 \$ - \$ 550 \$ - \$ 550 \$ 5,732 Record Drawings (14 sheets) 2 2 8 10 22 \$ 4,630 \$ 550 \$ 770 \$ - \$ 1,320 \$ 5,950	RFI Review (up to 5)		4		4	6	4		18	\$ 4,270	\$ 550	\$ 1,100	\$ -	\$	1,650	\$ 5,920
Record Drawings (14 sheets) 2 2 8 10 22 \$ 4,630 \$ 550 \$ 770 \$ - \$ 1,320 \$ 5,950			2	4	4	4	8		22	\$ 5,182	\$ -	\$ 550	\$ -	\$	550	\$ 5,732
TOTAL BUDGET 21 59 67 127 171 132 4 581 \$ 138.679 \$ 8.250 \$ 18.194 \$ 6.600 \$ 33.044 \$ 171.723		2	2			8	10		22	\$ 4,630	\$ 550	\$ 770	\$ -	\$	1,320	\$ 5,950
10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TOTAL BUDGET	21	59	67	127	171	132	4	581	\$ 138,679	\$ 8,250	\$ 18,194	\$ 6,600) \$	33,044	\$ 171,723

5% Escalation (2025 start date) \$ 180,309