CRESTLINE SANITATION DISTRICT

MEMORANDUM

DATE:

06/13/2024

TO:

BOARD OF DIRECTORSCrestline Sanitation District

FROM:

DAWN GRANTHAM General Manager

SUBJECT: PURCHASE OF 2 NEW RECIRCULATION PUMPS AND TWO VARIABLE FREQUENCY DRIVES (VFD) FOR SEELEY CREEK WWTP

A. RECOMMENDATION

I am recommending the purchase of the two Recirculation pumps and two Variable Frequency Drives from Brax Process and Pump Equipment.

B REASON FOR RECOMMENDATION

The recirculation pumps at Seeley Creek WWTP are original from the 1970's. The current pumps continuously lose prime, pump one is not currently priming. Motors and controls have been checked and appears to not be an electrical issue. This project was addressed in the Master Plan in 2018 and placed in the fiscal year budget CIP for 2023-24.

C. OTHER INFORMATION

Two quotes came in from Brax with labor costs and Xylem without labor costs. A third was requested from DXP, but they were unable to get us a quote.

D. FISCAL INFORMATION

\$111,100 was allocated for this project. The total cost for parts, labor, and the VFD's is \$62,415. I would like to request \$70,000 for this project to cover unexpected costs.

D. ATTACHMENTS

- 1) Quote from Brax Process and Pump Equipment, which was quoted on June 11, 2024.
- 2) Quote from Marshall Wolf Automation for the VFD's.
- 3) Page 122 of the 2018 Master Plan.



PROCESS AND PUMP EQUIPMENT

31248 Valley Center Rd | Valley Center CA 92082 | 760 749 2209

*Due to ongoing supply chain issues and unstable costs of raw materials pricing is subject to change without notice.

Bill To:

Project

CRESTLINE SANITATION DISTRICT ACCOUNTS PAYABLE PO BOX 3395 CRESTLINE, CA 92325

RECIRCULATION PUMPS 1 & 2

<u>Quote</u>

 Quote #
 55223

 Date
 6/11/2024

 Sales Person
 MG

 Written By
 AJ/KF

 Terms
 Net 30

Freight PREPAID & ADD

Ship To: CRESTLINE SANITATION DISTRICT 24516 LAKE DR. CRESTLINE, CA 92325

Part Number	Qty	Description	Unit	Total
		BRAX TO SUPPLY AND INSTALL TWO NEW SUBMERSIBLE PUMPS WITH GUIDE RAILS AND TWO NEW CHECK VALVES, REPLACING THE CURRENT FAIRBANKS MORSE SUBMERSIBLE PUMPS.		
		EST LEAD TIME 11-15 WEEKS		
BRAX CO.	2	REPLACEMENT OF FAIRBANKS MORSE 7.5 HP PUMPS SULZER/ABS 6-INCH XFP 150E CB1.7 PE56/4 SUBMERSIBLE WET-PIT PUMPS TO PRODUCE A DESIGN OF 600 GPM AT 20' TDH TO INCLUDE 7.5 HP, 460/3/60-VOLT MOTORS WITH 49' CABLE SUITABLE FOR SUBMERGED OR DRY OPERATION. PUMPS TO BE COATED WITH THE FACTORY'S 4.7MILS DFT TWO-PART	0.00	0.00Т
		EPOXY COATING.		
BRAX CO.	2	6" GUIDE RAIL ASSEMBLY	0.00	0.00T
BRAX CO.	2	WITHOUT DISCHARGE ELBOW	0.00	2 227
BRAX CO.	4	HARDWARE KIT, 316SS (PUMP TO GUIDE BRACKET)	0.00	0.00T
BRAX CO.	2	6" X 8" FLANGED	0.00	0.00T
		INCREASING ELBOW	0.00	0.001
BRAX CO.	2	HARDWARE KIT, 316SS	0.00	0.00T
		(INCREASER TO BASE ELBOW)		A 21 51
115-00808	2	SULZER / ABS 41686001-316 BRACKET UPPER, SINGLE, 2", 316SS,	0.00	0.00T
115-00610	2	SULZER/ABS 64856010 - 15' SS GRAB LINK ASSEMBLY, PE3	0.00	0.00T
115-00451	2	CA 462 - SEAL LEAK/OVER TEMP RELAY, 110-230VAC	0.00	0.00T
BRAX CO.	2	8" CLOW VALVE	0.00	0.00T
BRAX CO.	2	2" 304SS GUIDE RAILS	0.00	0.00T
BRAX CO.	2	8" DIAMETER X 1"L SPACER - CHECK VALVE TO 90 ELBOW	0.00	0.00T
BRAX CO.	2	8" DIAMETER X .8L" SPACER DISCHARGE ELBOW TO DISCHARGE PIPE	0.00	0.00T
BRAX CO.	16	3/4" X 4.125" 18-8SS BOLTS - FOR CHECK VALVE SPACER	0.00	0.00T
BRAX CO.	16	3/4" X 3.75" 18-8SS BOLTS - FOR DISCHARGE ELBOW SPACER	0.00	0.00T
BRAX CO.	32	3/4" 304SS NUTS	0.00	0.00T
BRAX CO.	12	8" FF GASKETS 1/8"	0.00	0.00T
BRAX CO.	11	3/8" 316SS CONCRETE ANCHORS	0.00	0.00T
BRAX CO.	1	MISC MATERIAL (BLEACH, RAGS, GLOVES, TYVEK SUITS, TRASH BAGS, SEALANTS, SHIMS)	0.00	0.00T
MATERIAL	1	TOTAL MATERIAL	45,263.80	45,263.80T

CLSB 487325 CAGE 6U1W7 DIR 1000441272



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Part Number	Qty	Description	Unit	Total
LABOR	1	LABOR TO COMPLETE - DAY 1: REMOVE ONE OLD PUMP, ONE GUIDE RAIL, AND ONE CHECK VALVE. PARTIALLY INSTALL ONE NEW GUIDE RAIL SYSTEM, ONE NEW PUMP, AND ONE NEW CHECK VALVE. ENSURE ONE OLD PUMP REMAINS OPERATIONAL. DAY 2: COMPLETE THE INSTALLATION OF THE FIRST NEW SUBMERSIBLE PUMP AND PERFORM STARTUP PROCEDURES. PARTIALLY INSTALL THE SECOND NEW GUIDE RAIL SYSTEM, PUMP, AND CHECK VALVE. ENSURE ONE OLD PUMP REMAINS OPERATIONAL. DAY 3: COMPLETE THE INSTALLATION OF THE SECOND NEW PUMP AND PERFORM STARTUP PROCEDURES BILLED PORTAL TO PORTAL	11,430.00	11,430.00
		ESTIMATED AND WILL BE BILLED TO ACTUAL AMOUNT OF TIME		
RENTAL		RENTAL - CONFINED SPACE EQUIPMENT	1,212.86	1,212.86
FREIGHT	1	FREIGHT – PREPAID AND ADD ESTIMATED AND WILL BE BILLED TO THE ACTUAL AMOUNT	1,000.00	1,000.00

CLSB 487325 CAGE 6U1W7 DIR 1000441272

Sales Tax (7.75%)

\$3,507.94

Total



Marshall Wolf Automation, Inc. 210 Dowdle Street, Ste 1 Algonquin, IL, 60102 United States

> QUOTE #: QN000369 CREATED DATE: Jun 5th 2024 EXPIRED DATE: Jul 5th 2024

Bill To

Ship To

Contact

Dawn Grantham

dgrantham@crestlinesanitation.com

		Price	Qty	Discount	Total
- Emm	SKU: ESV752N04TXB ESV752N04TXB Notes:	\$945.31	2	0.00%	\$1,890.62

Quote Totals

Thank you for your Business! If you have any questions, please contact us at

Total Price \$1,890.62
Total Discount \$0.00
Shipping(Customer choice at checkout)
Tax \$0.00

Grand Total \$1,890.62

Wastewater Master Plan

Project No.	SC-2			
Project Name	Seeley Creek WWTP Recirculation Pumping Upgrade			
	The existing recirculation pumps are original from the 1970s and run on 1980s electrical equipment. The check valves on each pump are also original and prone to failure. The age of the equipment has led to ongoing failures and maintenance challenges for this critical process. Additionally, the pumping efficiency is unknown and VFD control could help the District reduce energy consumption.			
Recommended Project: Full replacement of recirculation pumps, check valves, and electrical equipmed upgrading conduit. New design would include VFD control for the pumps that controlled by a BOD measuring device to adjust recirculation pumping based needs and reduce energy consumption. Replace grating with re-engineered light grating for easier access and operator safety.				
Priority Project Need Reliability Capacity City Policy & Goals	Immediate Works (0-2 Years) X			
Project Cost				
Capital Costs				
General		\$!	5,000	
Civil & Mechanical		\$ 12	2,000	
Structural		\$	6,000	
Electrical & Controls		\$ 12	2,000	
Equipment		\$ 58	8,000	
Capital Cost Subtotal:		\$ 93	,000	
Soft Costs				
Classification 'B'				
Engineering & Permitting	10 % of capital cost	\$	9,000	
CM & ESDC	18 % of capital cost	\$ 1	7,000	
Administration	3 % of capital cost	\$	3,000	
Soft Cost Subtotal		\$ 29	,000	
Contingency				
Contingency	35 % of capital cost	\$ 33	3,000	
Total Project Cost		\$ 155	5,000	

