

City of Beaumont Wastewater Treatment Plant Salt Mitigation Upgrade Project Change Order No. 19

March 18, 2020

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Calendar

			Amount	Days	Date
Contractor:	W.M. Lyles Co.	Original Contract:	\$ 53,312,000.00	820	1/26/2021
Project Name:	Wastewater Treatment Plant Salt Mitigation Upgrade Project	Previous Approved Changes:	\$4,171,594.50	186	5/30/2021
Contract No.:	C18-80	This Change: Amount NTE	\$95,556.60	0	
CO Number:	19	Revised Contract:	\$57,579,151.10	1006	7/31/2021
		Previous Phase 1 Completion Date			5/20/2020
		Revised Phase 1 Completion Date			9/18/2020

This change order covers changes to the subject contract as described herein. The Contractor shall supply all labor, equipment, and materials to complete the Change Order items for the lump sum price agreed upon herein. All Change Order items must be submitted to the City for approval prior to fabrication.

ltem No.	PCO No.	Description of Changes	Amount	Phase 1 Time Extension (CD*)	Phase 2 / Project Completion Time Extension (CD*)
1	43	Aeration Basin 1 thru 4 MOV Extension Risers	\$11,028.75	0	0
2	44	Aeration Basin Network Switch for HACH Instruments	\$14,093.21	0	0
3	45	Fine Screens – Addition of a High-Level Alarm Switch	\$11,639.14	0	0
4	46	MBR – Addition of MOV Actuator on the Influent Gates	\$58,795.50	0	0
		NET CHANGE IN CONTRACT AMOUNT – INCREASE (or decrease) NTE	\$95,556.60	0	0

*Calendar Days

The amount of the Contract will be increased/decreased by Ninety-Five Thousand, Five Hundred Fifty-six dollars and sixty cents (\$95,556.60). The Contract Time will be increased by zero (0) calendar days.

The Contractor agrees to furnish all labor, equipment, and materials and to perform all other necessary work, inclusive of the directly or indirectly related work, within the approved time extension required to complete the above Change Order items. The undersigned Contractor approves the foregoing Change Order as to the changes, if any, in the Contract Price specified for each item including any and all supervision costs and other miscellaneous costs relating to the change in Work, and as to the extension of time allowed, if any, for the completion of the entire Work on account of said Change Order. The City and the Contractor hereby agree that this Change Order constitutes full mutual accord and satisfaction for all time, all costs, and all impacts related directly or indirectly to this Change Order. The Contractor hereby agrees that this Change Order represents the full equitable adjustment owed under the Contract, and further agrees on behalf of himself and all subcontractors to waive all right to file any further claims or request for equitable adjustment arising out of or as a result of this Change Order or the contract and all provisions will apply hereto. It is understood that the Change Order shall be effective when approved by the City.

Recommended:	MWH Opperructors, Senior Resident Engineer	Date: <u>3-18-2021</u>
Accepted:	WM. Lyles Co., Contractor	Date: 3.23.21
Approved:	Brian P. Knoll Produktive Schora house of the Schora schor	Date:
Approved:	City of Beaumont, City Manager	Date:



City of Beaumont Wastewater Treatment Plant Salt Mitigation Upgrade Project

Technical Justification:

PCO-43	
Design Adjustment: WML COP-048	Aeration Basin 1 thru 4 MOV Extension Riser Addition

Reason for Design Changes:

Safe Access required change. Each of the four aeration basins has a motor operated valve that control air flow to the aerobic zones in the basins. The valve controller is located directly on the valve and air piping manifold within the basins above approximately 18-feet of concentrated mixed liquor wastewater, MLSS, creating a potential safety and difficult maintenance or repair hazard. Staff or a repair technician would be required to lie in a prone position or crawl outside of safety railing on to piping to adjust or repair valve equipment.

Design and Scope Changes:

- Add a 48-inch valve extension stem and elevate valve controller to a height suitable for human interaction.
- Contractor shall also include all necessary labor for conduit, wiring and termination adjustments to disconnect and reconnect the valve controller at its new location.
- Cost proposal shall include all necessary costs for labor and miscellaneous materials to perform this change. Contractor shall not perform any work until change has been approved by the City.

Cost Impact:

MWHC has reviewed the attached WML cost proposal and find it acceptable. Accordingly, MWHC recommends a contract cost increase of \$11,028.75 to be executed in a change order for the modifications requested.

CITY OF BEAUMONT WWTP SALT MITIGATION UPGRADE PROJECT

CHANGE ORDER PROPOSAL (COP) # 048 (By Contractor)

To (Engineer/CM) [.]	From (Contractor)								
MWH Constructors	W.M. Lyles Co.								
Attention: Charles Reynolds	Attention: Oscar Mendoza								
Phone: 702-497-8024	Phone: 619-565-6064								
Fmail: Charles w revnolds@stantec.com	Email: omendoza@wmlylesco.com								
Email: Charles. W. Pyhotas (#Stanlee.com									
PCO/DCM No.: N/A									
Subject: A-Basin Air Line MOV Actuator Relocation									
Reference Documents: Attached									
DESCRIPTION									
This COP is for the installation of 4ea MOV Actuation s access to actuator's main electrical components per the 2020.	stem extensions on the air lines in order to provide better attached MWH Field Observation dated February 26 th ,								
COST ES	STIMATE								
Total Cost : \$ 11,028.75 – see attached breakdown									
SCHEDUI	Е ІМРАСТ								
Received by MWH Constructors (Date) :									

RESPONSE	
D D	D (
Kesponse By:	Date:

Final Distribution: Oscar Mendoza, W.M. Lyles Co. Brian Knoll, Webb Associates MWH Inspector

W. M. Lyles Co. 42142 Roick Drive Temecula, CA 92590

Reference #: N/A

Attention:

Charles W. Reynolds

City of Beaumont WWTP Salt Mitigation Upgrade Project

DESCRIPTION:

A-Basin Air Line MOV Actuator Relocation

Item:		Unit	Total MH	Tota	al MH Cost	Eq.	. Cost	Mat	erial	Sub	cont.	Total Cost	
1	A-Basin Air Line MOV Actuator Relocation	1 LS	24	\$	1,994.61	\$	1,548.88	\$	5,495.25	\$	500.00	\$	9,538.74
2		1 LS	0	\$	-	\$	-	\$	-	\$	-	\$	-
3		1 LS	0	\$	-	\$	-	\$	-	\$	-	\$	-
		1 LS	0	\$	-	\$	-	\$	-	\$	-	\$	-
Total (Costs		24	\$	1,994.61	\$	1,548.88	\$	5,495.25	\$	500.00	\$	9,538.74

Total This Change Order		\$ 11,028.75
Bond	1.0%	\$ 109.20
Mark-up - Subcontractor	5%	\$ 25.00
Mark-up - Materials	15%	\$ 824.29
Mark-up - Equipment	15%	\$ 232.33
Mark-up - Labor	15%	\$ 299.19
Subtotal		\$ 9,538.74

Comments:

City of Beaumont WWTP Salt Mitigation Upgrade Project

A-Basin Air Line MOV Actuator Relocation

A. Labor

	Descri	ption			La	b Pipe	FM	L	.ab Pip	ре	C	Dpera	tor	C	arp F	М		Carp			Lab		Ce	ment I	Mason
					ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT
Install 48" MOV ex	tension and recor	nnect			8			8			8														
-							-	_		_													<u> </u>		
					8	0	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Rate					Hour	rs	_								•								
Name	ST	PT		DT		ST	PT	DT		E	ktens	ion													
Lab Pipe FM	\$77.80		\$103.90	\$129.98		8	3 C) ()		\$62	22.43													
Lab Pipe	\$75.19		\$99.97	\$124.75		8	3 C) ()		\$60)1.51													
Operator	\$96.33		\$128.99	\$161.66		8	3 C) ()		\$77	70.67													
Carp FM	\$85.03		\$115.33	\$145.63		(0 0) ()		9	\$0.00													
Carp	\$81.11		\$109.45	\$137.79		(0 0) ()		9	60.00													
Lab	\$71.72		\$94.78	\$117.82		(0 0) ()		9	\$0.00													
Cement Mason	\$78.05		\$102.25	\$126.45		() () ()		9	\$0.00													
						24	4 C) ()				-												
						То	tal La	abor =	-		\$1,99	94.61													

B. Equipment

	Description	17.1	2 32.03	7 31.028	30.048	20.041	35.064	Rent
Install 48" MO	V extension and reconnect	8		8				
		8	0	8	0	0	0	0
Number	Description	Rate	Hours	Extension	•		•	
17.12	Foreman Truck	\$29.6	0 8	\$236.80				
32.037	ReachliftXtremeXR1055	\$58.6	1 0	\$0.00				
31.028	Hydro Crane - 80 TonLink BeltRTC-8080 II 80 Tor	n \$164.0	1 8	\$1,312.08				
30.048	Loader Backhoe 410John Deere410L	\$64.3	0 0	\$0.00				
20.041	ExcavatorJohn Deere350GLC	\$151.1	2 0	\$0.00				
35.064	LoaderJohn Deere644J	\$123.0	0 0	\$0.00				
17	Foreman Truck	\$29.6	0 0	\$0.00				
20.041	ExcavatorJohn Deere350GLC	\$151.1	2 0	\$0.00				
35.064	LoaderJohn Deere644J	\$123.0	0 0	\$0.00				
Rent	Owner Op dump trucks	\$100.0	0 0	\$0.00				
			16					
		Total Equ	uipment =	\$1,548.88				
C. Material	S							
	Quantity	Unit Pric	e	Extension				
SS Flanged V	alve Stem Extension - 48" 4	ea \$	1,275.00	\$5,100.00				
				\$0.00				
				\$0.00				
Tax	7.750%	, D		\$395.25				
			Subtotal	\$5,495.25				
		IOt	ai Materiai =	\$5,495.25				
D. Subcon	tractor							
	Quantity	Unit	Price	Extension				
Southern	1	LS	\$500.00	\$500.00				
				\$0.00				
		Total Sul	ocontract =	\$500.00	_			



Bray Sales Southern California

Quote QQ-1274615-01

Date 11/17/2020

Company	W M Lyles - Temecula	Sales Rep	Gary Figueroa
Name	Oscar Mendoza	Email	gary.figueroa@bray.com
Email	omendoza@wmlylesco.com	Phone	+1-951-640-6384
Phone	+1 951 973-7393		
		Prepared By	Gary Figueroa
Quote Ref	A-Basin MOV actuator location Issue	Email	gary.figueroa@bray.com
		Phone	+1 909 937 1624,2402

Line No	Product Details	Qty	Unit Price	Line Total	Delivery
1	Part Number 120480-22101534 Stainless steel flanged valve stem extension to raise the existing Auma SQR12.2 actuators mounted on 12" Bray Series #40 HPBFV. Extension to be constructed from a S/S flanged outer housing with a stainless steel inner shaft that will be mounted between the valve bracket and botton of the Auma actuator. Overall extension length to be advised, the proposed price is for extensions up to 48".	4	\$1,275.00	\$5,100.00	3-4 Week(s)
	Total Datas (1992)			47 400 00	

Total Price: (USD)

\$5,100.00

Terms Notes

All deliveries subject to prior sales

Seller's acceptance of this Order is expressly limited to, and expressly conditional on, Buyer's Acceptance of Seller's standard terms and conditions attached and available at https://www.bray.com/sales-terms-and-conditions. Seller objects to any different or additional terms. 1. APPLICABILITY. These terms and conditions of sale (these "Terms") are the only terms which govern the sale of the products ("Products") by Bray International, Inc. and its subsidiaries, branches and divisions (as applicable, "Bray" or "Seller") to a purchaser of Products ("Buyer") from Bray. Notwithstanding anything herein to the contrary, if a written contract signed by Bray and a Buyer covers the sale of Products covered hereby, the terms and conditions of such contract shall prevail to the extent they are inconsistent with these Terms.

References to (i) "Bray factory" are to the applicable Bray national or regional headquarters of Seller in the country where the order is received and (ii) "dollars" or "\$" are to United States dollars unless specified otherwise.

2. ENTIRE AGREEMENT. These Terms and the quotation (the "Quotation") which they accompany (collectively, the "Agreement") comprise the entire agreement between Bray and Buyer relating to the Products that are the subject of such Quotation, and supersede all prior or contemporaneous understandings, agreements, negotiations, representations and warranties and communications, both written and oral. These Terms prevail over any of Buyer's general terms and conditions of purchase regardless of whether or when Buyer submitted its purchase order or such terms. Buyer's acceptance of the Quotation is expressly limited to these Terms, and Bray objects to, and is not bound by, any terms or conditions that differ from, add to, or modify these Terms. Fulfillment of Buyer's order does not constitute acceptance of any of Buyer's terms and conditions and does not serve to modify or amend these Terms. Notwithstanding anything to the contrary in these Terms or any Agreement, Bray shall not be obligated to make, or otherwise fulfill the terms of, any sale of Products to Buyer in an order amount less than Two Hundred and Fifty Dollars (\$250).

 QUOTATIONS. Unless stated otherwise in writing by Seller, all Quotations made by Seller are for immediate acceptance. Seller reserves the right to withdraw and/or revise any Quotation at any time prior to final acceptance by Buyer.

4. PRICE. Buyer shall purchase the Products from Seller at the prices (the "Prices") set forth in Seller's published price list in force as of the date Buyer's order is received by Bray. All Prices (and any applicable discounts) for Products are subject to change without notice. Any order that is delayed for delivery at Buyer's request or is otherwise scheduled to be made in excess of one hundred twenty (120) days from the order date will be invoiced at published list prices and discounts effective at the time of shipment unless otherwise specifically agreed at the time of Seller's order acceptance. Any extra expenses incurred by Seller, such as engineering, tagging, taxes, service calls, export crating or other expenses, will be added to the invoice after notification to Buyer of the extra costs. excise taxes, and any other similar taxes, duties, fees and charges of any kind imposed by any governmental authority (including those arising from changes in laws or regulations affecting foreign exchange) on any amounts payable by Buyer. Buyer shall be responsible for all such charges, costs and taxes, and if payable or paid by Seller, then added to the Price.

6. PAYMENT TERMS.

A. All invoices for domestic (U.S.) Buyers will be due net thirty (30) days from date of invoice unless otherwise stated by Seller. All invoices for international (non-U.S.) Buyers will require confirmed, irrevocable letters of c redit due upon delivery to freight forwarder at its United States port for shipment, unless otherwise agreed by Seller. Seller reserves the right (including if it determines subsequently that Buyer's financial condition becomes unsatisfactory to Seller) to (i) require payment on "cash in advance" basis, (ii) require a confirmed, irrevocable letter of credit or other acceptable security (including preservation of any lien rights) before shipment, or (iii) cancel shipment at any time prior to delivery of the Products (without further obligation or liability on Seller's part). In such cases, an order will be considered valid only upon receipt of any such advance payment or provision of security. Credit terms are provided solely at the discretion of Seller and may be denied for any reason by Seller.

B. Buyer shall pay interest on all late payments at the lesser of: (i) the rate of two percent (2%) per month and (ii) the highest rate permissible under applicable law. Buyer shall reimburse Seller for all costs incurred in collecting any late payments, including, without limitation, attorney fees and court costs. In addition to all other remedies available under these Terms or at law (which are not waived by Seller's exercise of any rights hereunder), Seller shall be entitled to suspend the delivery of any Products if Buyer fails to pay any amounts when due hereunder.

C. Buyer shall not withhold or delay payment of any amounts due and payable by reason of any set-off of any claim, counterclaim, abatement, delay of customer payment or dispute with Seller, whether relating to Seller's breach, bankruptcy or otherwise.

7. CREDIT. Shipments and deliveries of Products to Buyer shall remain at all times subject to the approval of Seller's credit department. Seller, in addition to any other rights and remedies, may, at its option, decline to make shipments or deliveries hereunder except upon receipt of payment or satisfactory security or otherwise upon terms and conditions satisfactory to Seller. Should Seller elect to extend credit to Buyer, Seller may limit or deny further extensions of credit in Seller's sole discretion. Any extension of open payment terms by Seller is dependent on Buyer's ongoing ability to support its working capital requirements for its business.

5. TAXES. Prices are exclusive of all sales, use and

8. DELIVERY.

A. The Products will be delivered within a reasonable time after the receipt of Buyer's order. Delivery dates are approximate and are dependent upon prompt receipt of all necessary Buyer-furnished information and materials (if applicable). Penalty fees/liquidated damages that may be associated with any late delivery will not apply unless mutually agreed in writing at the time of order acknowledgement.

B. Unless otherwise agreed in writing by the parties, Seller shall make the Products available at the Bray factory (the "Delivery Point"). The title to and risk of loss for Products passes to Buyer upon signing of the bill of lading by the transportation company (which signifies the delivery of the Products to the transportation company for shipment to Buyer). Buyer shall be responsible for all loading costs and provide equipment and labor reasonably suited for receipt of the Products at the Delivery Point.

C. All Prices are quoted ExWorks (EXW) Bray factory or such other place that Seller shall designate on the Quotation. Seller does not insure shipments beyond the Delivery Point and, therefore, all claims of lost or damaged Products in transit must be filed directly with the transportation company by Buyer. Seller shall select the method of shipment and the carrier for the Products. Seller may ship via the Buyer's choice if routing is satisfactory and rates equal to or less than Seller's normal choice. In the case of higher than normal special shipping requirements, Seller will ship the Products at Buyer's expense (including a handling fee or collect basis) and Buyer will not receive any credit for freight charges that under normal circumstances would be incurred by Seller. There may be only one destination per order.

D. Bray's standard document package will be provided—please see associated Quotation for details on what is included in document package for associated Product(s); document package will be delivered via electronic delivery (additional charges may apply if hard copy is required).

E. If for any reason Buyer fails to accept delivery of Products on the date fixed pursuant to Seller's notice to Buyer that the Products are being made available for delivery at the Delivery Point: (i) risk of loss to the Products shall pass to Buyer, (ii) the Products shall be deemed to have been delivered and accepted by Buyer and (iii) Seller, at its option, may store the Products until Buyer picks them up, whereupon Buyer shall be liable for all related costs and expenses (including, without limitation, storage and insurance). Any failure of Buyer to provide appropriate instructions, documents, licenses or authorizations in connection with delivery of Products shall be deemed to be a failure of Buyer to accept delivery of Products at such time as such Products are otherwise available for delivery. Any orders held by Seller more than thirty (30) days may be treated as a cancelled and the Products deemed returned.

9. INSPECTION AND REJECTION OF NONCONFORMING PRODUCTS.

A. Buyer shall inspect the Products within ten (10) days of receipt ("Inspection Period"). Buyer will be deemed to have accepted the Products unless it notifies Seller in writing of any Nonconforming Products during the Inspection Period and furnishes such written evidence or other documentation as reasonably required by Seller. "Nonconforming Products" means that the Products shipped are different than those identified in Buyer's purchase order.

B. If Buyer timely notifies Seller of any Nonconforming Products during the Inspection Period, Seller shall, in its sole discretion, (i) replace such Nonconforming Products with conforming Products, or (ii) credit or refund the Price for such Nonconforming Products, together with any reasonable shipping and handling expenses incurred by Buyer in connection therewith. Buyer shall ship, at its expense and risk of loss, the Nonconforming Products to the Bray factory or such other place that Seller shall designate on the Quotation. Upon Seller's confirmation of the nonconforming nature of the Nonconforming Products, Seller shall credit the Buyer's expense for such shipment against the Buyer's payment obligations to Seller. If Seller exercises its option to replace such Nonconforming Products, Seller shall, after receiving shipment of returned Nonconforming Buyer's Products, ship to Buyer the replaced Products and the terms of Section 8(B) shall apply for such replaced Products, except that Seller shall be responsible for the costs and expenses for such shipment.

C. Buyer acknowledges and agrees that the remedies set forth in <u>Section 9(B)</u> (exercised in accordance with these Terms) are Buyer's exclusive remedies for the delivery of Nonconforming Products.

10. CHANGE ORDER / CANCELLATIONS. Orders received and accepted by Seller may not be changed or cancelled except on terms satisfactory to Seller and which prevent Seller from incurring any loss. Seller will not accept changes or cancellations of Products, whether standard, non-standard or special, without full reimbursement of all related expenses incurred to date. Buyer must request all cancellations and change orders in writing, and must be signed by an authorized representative of Seller to be effective. Any changes or cancellations of Projects will be subject to appropriate changes in discounts, freight costs and other charges to Buyer.

11. LIMITED WARRANTY.

A. Seller warrants to Buyer that, for a period of thirtysix (36) months from the date of Bray's shipment (the "Warranty Period") from its manufacturing facility, Products manufactured by Seller will be free from defects in materials and workmanship when used for the purposes for which they were designed and manufactured. Seller does not warrant the Products against chemical or stress corrosion or against any other failure (including normal wear and tear due to operation or the environment) other than from defects in materials or workmanship.

B. THE EXPRESS WARRANTY SET FORTH IN <u>SECTION 1.11(A)</u> IS EXCLUSIVE AND IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS INTENDED OR GIVEN.

C. Products manufactured by a third party ("Third Party Product") may constitute, contain, be contained in, incorporated into, attached to or packaged together with, the Products. Third Party Products are not covered by the warranty in <u>Section 11(A)</u>. For the avoidance of doubt, SELLER MAKES NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO ANY THIRD PARTY PRODUCT.

D. The Seller shall not be liable for a breach of the warranty set forth in <u>Section 11(A)</u> unless: (i) Buyer gives written notice to Seller of the defect during the Warranty Period and, in any event, within fourteen (14) days of the time when Buyer discovers or ought to have discovered the defect; (ii) Seller is given a reasonable opportunity after receiving the notice to examine such Products and Buyer (if requested to do so by Seller) returns such Products to Bray's factory or such other place that Seller shall designate on the Quotation for the examination to take place there; (iii) Products are stored, maintained and shipped in accordance with Seller's applicable guidelines therefor (available to Buyer in product information available at https://www.bray.com/resources/documents/manuals-

guides?page=1, please contact productspec@bray.com with any questions concerning the guidelines) and (iv) Seller reasonably verifies Buyer's claim that the Products are defective. Buyer shall return (freight prepaid) the defective Product to Bray at Bray's factory or such other place that Seller shall designate on the Quotation no later than ninety (90) days of Buyer's initial written notice to Seller of the defect. Upon Seller's confirmation of Products in breach of the warranty provided under Section 11(A), Seller shall credit the Buyer's expense for shipment against the Buyer's payment obligations to Seller and, if Seller exercises its option to replace such defective Products, Seller shall ship to Buyer the replaced Products and the terms of Section 8(B) shall apply for such replaced Products, except that Seller shall be responsible for the costs and expenses for such

shipment. Seller shall not be obligated for any on-site costs, including removal and reinstallation of any warranted Products. Upon request, Buyer shall provide Seller reasonable and clear access to the warranted Products.

E. The Seller shall not be liable for a breach of the warranty set forth in <u>Section 11(A)</u> if: (i) Buyer makes any further use of such Products after giving such notice; (ii) the defect arises because Buyer failed to follow Seller's oral or written instructions as to the storage, installation, commissioning, use or maintenance of the Products; or (iii) Buyer alters or repairs such Products without the prior written consent of Seller.

F. Subject to Section 11(D) and Section 11(E) above, with respect to any such Products during the Warranty Period, Seller shall, in its sole discretion, either: (i) repair or replace such Products (or the defective part) or (ii) credit or refund the price of such Products at the pro rata contract rate provided that, if Seller so requests, Buyer shall, at Seller's expense, return such Products to Seller. THE REMEDIES SET FORTH IN THIS SECTION 11(F) BE THE BUYER'S SOLE SHALL AND EXCLUSIVE REMEDY AND SELLER'S SOLE AND ENTIRE LIABILITY FOR ANY BREACH OF THE LIMITED WARRANTY SET FORTH IN SECTION 11(A).

12. LIMITATION OF LIABILITY.

A. IN NO EVENT SHALL SELLER BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES, LOST PROFITS OR REVENUES OR DIMINUTION IN VALUE, ARISING OUT OF OR RELATING TO ANY BREACH OF THESE TERMS, WHETHER OR NOT THE POSSIBILITY OF SUCH DAMAGES HAS BEEN DISCLOSED IN ADVANCE BY BUYER OR COULD HAVE BEEN REASONABLY FORESEEN BY BUYER, REGARDLESS OF THE LEGAL OR EQUITABLE THEORY (CONTRACT, TORT OR OTHERWISE) UPON WHICH THE CLAIM IS BASED, AND NOTWITHSTANDING THE FAILURE OF ANY AGREED OR OTHER REMEDY OF ITS ESSENTIAL PURPOSE. No action, regardless of form, may be brought by Buyer more than one (1) year after the cause of action has accrued.

NO B. IN EVENT SHALL SELLER'S AGGREGATE LIABILITY ARISING OUT OF OR RELATED TO ANY PRODUCT, WHETHER ARISING OUT OF OR RELATED TO BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, EXCEED THE TOTAL OF THE AMOUNTS PAID TO SELLER FOR SUCH PRODUCT.

13. AUTHORIZED RETURNS. All sales of Products to Buyer are made on a one- way basis and no Products may be returned without prior written approval from Seller. Generally, in addition to the requirement for prior written approval, Bray will accept returns from a Buyer only if the return request is timely made following shipment of the applicable Product(s) to Buyer and the Product(s) are in good, reusable condition and remain standard Bray products (*i.e.*, not custom-made, obsolete or buyout products). In regard to any returns, Seller generally issues credit (from which Seller may deduct shipping, restocking and reconditioning expenses).

14. INTELLECTUAL PROPERTY RIGHTS. All copyrights, patents, trademarks, trade secrets, know-how and other intellectual property or proprietary rights pursuant to the laws of any jurisdiction worldwide ("IP Rights") associated with or relating to the Products shall belong solely and exclusively to Seller. Seller will retain all IP Rights used to create, embodied in, used in and otherwise relating to the Products and any of their component parts, and Buyer shall not acquire any ownership interest in any of Seller's IP Rights. Buyer shall use Seller's IP Rights only in accordance with these Terms and any instructions of Seller. No license, either express or implied, is granted in any IP Rights of Seller. If Buyer acquires any IP Rights in or relating to any Product by operation of law or otherwise, such rights are deemed and are hereby irrevocably assigned to Seller without further action. Buyer shall, at Seller's expense, execute such documents and do such things as are necessary to enable Seller to protect its IP Rights.

 DESIGN CHANGES. Seller reserves the right to change, discontinue or alter the design and construction of Products without prior notice and without further obligation.

16. COMPLIANCE WITH LAW. Buyer shall comply with all applicable laws, regulations and ordinances, and shall maintain in effect all the licenses, permissions, authorizations, consents and permits that it needs to carry out its obligations under the Agreement. Upon Seller request, Buyer agrees to provide Seller with information about the end use (including location of) of any products purchased. In furtherance of the foregoing (and without limitation thereto), please note the following in regards to compliance:

A. Trade Compliance. Buyer must comply with all laws governing export/import control and regulation, including, without limitation, laws governing re exporting. If Buyer is obtaining Product(s) for resale, such compliance requires that Buyer know of the end- use, enduser, ultimate destination or other facts relating to such sale of Product(s), and be alerted to "red flags" in the circumstances related to such sale. Buyer is obligated to comply with Bray's trade compliance program in regards to any sale and purchase of Product(s). Buyer should contact Bray to confirm compliance with the requirements of this program.

B. Anti-Corruption Laws. Buyer must comply with all anti-corruption and bribery laws and regulations, including, without limitation the United Kingdom's Bribery Act of 2010 and the United States' Foreign Corrupt Practices Act. Buyer must not pay, offer or promise to pay, directly or indirectly, anything of value for purposes of influencing an official decision or seeking influence in regards to any such decision from a person or organization affiliated with any government body, organization or business entity owned in part or in whole by a government body. Buyer must contact Bray in regards to any transaction in respect of Product(s) provided under this Agreement that could implicate such laws. Bray may immediately terminate, without any liability, any sale, agreement or association with any person violating such laws.

17. TERMINATION. In addition to any remedies that may be provided under the Agreement, Seller may terminate the Agreement with immediate effect upon written notice to Buyer, if Buyer: (i) fails to pay any amount when due; (ii) has not otherwise performed or complied with any of the terms of the Agreement, in whole or in part; or (iii) becomes insolvent, files a petition for bankruptey or commences or has commenced against it proceedings relating to bankruptey, receivership, reorganization or assignment for the benefit of creditors.

18. WAIVER. No waiver by Seller of any of the provisions of these Terms or the Agreement is effective unless explicitly set forth in writing and signed by Seller. No failure to exercise, or delay in exercising, any rights, remedy, power or privilege arising from the Agreement operates or may be construed as a waiver thereof. No single or partial exercise of any right, remedy, power or privilege hereunder precludes any other or further exercise thereof or the exercise of any other right, remedy, power or privilege.

CONFIDENTIAL INFORMATION. 19. All Confidential Information (as defined below) of Seller disclosed by Seller to Buyer, whether disclosed orally or disclosed or accessed in written, electronic or other form or media, and whether or not marked, designated or otherwise identified as "confidential," in connection with these Terms or the Agreement is confidential, solely for the use of performing this Agreement and may not be disclosed or copied unless authorized in advance by Seller in writing. Upon Seller's request, Buyer shall promptly return all Confidential Information received from Seller. Seller shall be entitled to injunctive relief for any violation of this Section. For purposes of this Agreement, "Confidential Information" means all non-public, confidential or proprietary information of Seller including, but not limited to, business affairs, business plans, trade secrets, intellectual property, specifications, samples, patterns, designs, client information, customer information, supplier information, technical data, developments, properties, systems, procedures, services, processes, methods, drawings, know- how, equipment, development plans, documents, manuals, strategies, training materials, costs, pricing, discounts or rebates, inventions, discoveries or any other confidential matters acquired in respect of the Seller or

the Products.

20. FORCE MAJEURE. Neither Seller nor Buyer shall be in breach of contract nor liable to the other party for any delay or damages if prevented from performance of these Terms and the Agreement (other than the payment of money) by any condition of force majeure which is beyond the control and not caused by the negligence of the party so affected ("Force Majeure"). Force Majeure includes, but shall not be limited to, carthquakes, floods, hurricanes, named tropical storms, lightning strikes, ice storms, blizzards, icebergs, pack ice, air and sea disasters, explosions and fire, epidemics, acts of God, acts of public enemy, war, terrorism, national emergency, invasion, insurrection, riot, strike, lockout, blockade or other industrial disputes, any laws, rules, regulations, orders, directives or requirements of or interference by any government or government agency (including any thereof or any affecting foreign exchange or otherwise making the terms of sale materially impractical on the basis of the economics relating to the agreed sale price or of illegality), inability or delay in obtaining supplies of adequate or suitable materials, power outage or other circumstances not within the control of the party and which, by the exercise of reasonable diligence, the party is unable to prevent or remedy, whether similar or dissimilar, foreseen or unforeseen. Seller shall have such additional time as may be reasonably necessary to perform its obligations upon the occurrence of any Force Majeure event.

21. ASSIGNMENT. Buyer shall not assign any of its rights or delegate any of its obligations under this Agreement without the prior written consent of Seller. Any purported assignment or delegation in violation of this Section is null and void. No assignment or delegation relieves Buyer of any of its obligations under this Agreement.

22. AMENDMENT AND MODIFICATION. These Terms may only be amended or modified in a writing which specifically states that it amends these Terms and is signed by an authorized representative of each of Seller and Buyer.

23. RELATIONSHIP OF THE PARTIES. The relationship between the parties is that of independent contractors. Nothing contained in these Terms or the Agreement shall be construed as creating any agency, partnership, joint venture or other form of joint enterprise, employment or fiduciary relationship between Seller and Buyer, and neither party shall have authority to contract for or bind the other party in any manner whatsoever.

24. NO THIRD-PARTY BENEFICIARIES. These Terms and the Agreement are for the sole benefit of the Seller and Buyer and their respective successors and permitted assigns, and nothing herein, express or implied, is intended to or shall confer upon any other person or entity any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of these Terms.

25. GOVERNING LAW / JURISDICTION / JURY WAIVER. THESE TERMS, THE AGREEMENT AND THE RELATIONS BETWEEN THE PARTIES SHALL BE THE PROCEDURAL AND GOVERNED BY SUBSTANTIVE LAWS OF THE STATE OF TEXAS, EXCLUSIVE OF CONFLICT OF LAWS PRINCIPLES WHICH WOULD DIRECT THE APPLICATION OF THE SUBSTANTIVE OR PROCEDURAL LAW OF ANOTHER JURISDICTION. IN THE EVENT TEXAS LAW IS RULED OR ORDERED TO NOT APPLY TO ANY DISPUTE BETWEEN THE PARTIES, THEN FOR PURPOSES OF THAT DISPUTE THESE TERMS, THE AGREEMENT AND THE RELATIONS BETWEEN THE PARTIES SHALL BE GOVERNED BY THE LAWS OF THE JURISDICTION IN WHICH BRAY'S FACTORY APPLICABLE TO THE SALE IS LOCATED. EXCLUSIVE OF CONFLICT OF LAWS PRINCIPLES WHICH WOULD DIRECT THE APPLICATION OF THE SUBSTANTIVE OR PROCEDUAL LAW OF ANOTHER JURISDICTION.

IF BRAY'S FACTORY APPLICABLE TO THE SALE IS LOCATED IN ANY STATE, TERRITORY, OR DISTRICT OF THE UNITED STATES OF AMERICA, EACH (A) IRREVOCABLY SUBMITS TO THE PARTY: AND VENUE OF THE COURTS JURISDICTION LOCATED IN HARRIS COUNTY, TEXAS FOR THE RESOLUTION OF ANY AND ALL DISPUTES ARISING FROM OR RELATING TO THESE TERMS, THE AGREEMENT AND THE RELATIONS BETWEEN THE (B) KNOWINGLY AND PARTIES: AND VOLUNTARILY WAIVES ALL RIGHTS TO A JURY TRIAL IN ANY LEGAL PROCEEDING RELATING TO THESE TERMS, THE AGREEMENT AND THE RELATIONS BETWEEN THE PARTIES.

IF BRAY'S FACTORY APPLICABLE TO THE SALE IS NOT LOCATED IN ANY STATE, TERRITORY, OR DISTRICT OF THE UNITED STATES OF AMERICA, EACH PARTY AGREES ALL DISPUTES ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR THE ORDER(S) SHALL BE FINALLY SETTLED, THE DEFENSES ALLOWED SUBJECT TO BY APPLICABLE RULES LAW, UNDER THE OF ARBITRATION OF THE INTERNATIONAL CHAMBER COMMERCE BY A SINGLE ARBITRATOR OF APPOINTED IN ACCORDANCE WITH THE SAID RULES. THE ARBITRATION SHALL BE CONDUCTED IN ENGLISH WITHIN THE LIMITS OF THE CITY OF HOUSTON, TEXAS. THE ARBITRATOR MUST MEET EACH OF THE FOLLOWING QUALIFICATIONS IN ORDER TO BE APPOINTED: (1) BE A GRADUATE OF A LAW SCHOOL LOCATED IN THE UNITED STATES; (2) HAVE MORE THAN TWENTY YEARS OF EXPERIENCE IN LITIGATING AND/OR ARBITRATING DISPUTES; BE COMPLEX COMMERCIAL (3)LICENSED TO PRACTICE LAW IN THE STATE OF TEXAS; AND (4) BE IMPARTIAL. THE ARBITRATOR WILL HAVE THE AUTHORITY TO APPORTION LIABILITY BETWEEN THE PARTIES, BUT WILL NOT HAVE THE AUTHORITY TO AWARD ANY

DAMAGES OR REMEDIES NOT AVAILABLE UNDER, such termination or expiration. OR IN EXCESS OF, THE EXPRESS TERMS OF THESE TERMS OR THE AGREEMENT, THE ARBITRATION AWARD WILL BE PRESENTED TO THE PARTIES IN WRITING, AND UPON THE REQUEST OF EITHER PARTY, WILL INCLUDE FINDINGS OF FACT AND CONCLUSIONS OF LAW. THE AWARD MAY BE CONFIRMED AND ENFORCED IN ANY COURT OF COMPETENT JURISDICTION. BUYER AND SUPPLIER CONSENT TO THE HEREBY AND SUBMIT AFOREMENTIONED AND THE ARBITRATION JURISDICTION OF ANY LOCAL, STATE OR FEDERAL COURT LOCATED WITHIN HOUSTON, TEXAS, AS JURISDICTION FOR REVIEW OR CHALLENGE OF THE ARBITRATION RESULTS AND WAIVE ANY RIGHT SUCH PARTY MAY HAVE TO TRANSFER THE VENUE TO ANY OTHER JURISDICTION. THE PARTIES EXPRESSLY RESERVE ALL RIGHTS TO PURSUE INJUNCTIVE RELIEF IN ANY COURT THE PARTIES LOCATED IN HOUSTON, TEXAS. ACKNOWLEDGE AND AGREE THAT THIS AGREEMENT INCLUDES IN ACTIVITIES INTERSTATE COMMERCE (AND, ACCORDINGLY, THE FEDERAL ARBITRATION ACT OF THE UNITED STATES SHALL CONTROL AND APPLY TO ALL ARBITRATIONS CONDUCTED HEREUNDER, NOTWITHSTANDING ANY STATE LAW PROVISIONS TO THE CONTRARY).

26. NOTICES. All notices, request, consents, claims, demands, waivers and other communications hereunder (each, a "Notice") shall be in writing and addressed to the parties at the addresses set forth on the face of the Quotation or to such other address that may be designated by the receiving party in writing. All Notices shall be delivered by personal delivery, nationally recognized overnight courier (with all fees pre-paid), facsimile (with confirmation of transmission), email or certified or registered mail (in each case, return receipt requested, postage prepaid). Except as otherwise provided in the Agreement, a Notice is effective only (i) upon receipt of the receiving party (and confirmation of such receipt in respect of facsimile or email transmissions), and (ii) if the party giving the Notice has complied with the requirements of this Section.

27. SEVERABILITY. If any of these Terms or other terms or provision of the Agreement are determined to be invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other term or provision or invalidate or render unenforceable such term or provision in any other jurisdiction.

28. CLERICAL ERRORS. Seller reserves the right to correct all stenographic or clerical errors or omissions in any documents (whether Quotations, invoices or other documents).

29. SURVIVAL. Any provision of the Agreement that by its nature should apply after any termination or expiration of the Agreement, including (but not limited to) the following with provisions: Laws, Confidentiality, Compliance Governing Law / Jurisdiction and Survival, shall survive any

30. PUBLISHED DATA. All published dimensions, weights, temperatures, pressure ratings and other Product data are approximate.

CANCELLATION, CHANGE ORDERS AND RETURNED GOODS POLICY ADDENDUM

As guidance and further clarification on the applicable terms and conditions relating to change orders or cancellations, Bray will accept changes and cancellations generally subject to Buyer agreement to pay all costs and expenses incurred by Bray for the order, including, without limitation, costs and expenses relating to engineering, financing costs (including those for any performance or warranty obligations), restocking, order administration, supplies, freight, duties and inspection. For standard product, Bray will generally apply a twentyfive percent (25%) cancellation fee unless such amount is not sufficient to recapture Bray's fees and expenses (e.g., financing costs, freight, duties, etc.) relating to the order. For non standard products (i.e., product with unique feature(s) or specifically designed for the applicable purchase), the cancellation charge will usually be the purchase price of the product(s). For any such agreed cancellation or change, Bray will calculate the specific amount of such costs and expenses incurred to the date of such cancellation or change and advise Buyer of the applicable amount owed. For any standard product returns, exceptional costs such as freight, duties and financing costs will be added to any standard cancellation fcc. For any non standard product returns, the cancellation charge will additionally include amounts incurred in connection with the return.

Specific terms and conditions relating to the foregoing and the events and circumstances relating to the novel coronavirus COVID-19: Bray will agree to delay the delivery of orders beyond a previously agreed delivery date as long as the Buyer pays an additional storage fee of five percent (5%) relating to such applicable order(s); provided, however, that the applicable order(s) must nevertheless be shipped and invoiced by no later than ninety (90) days after the previously agreed delivery date or the applicable order(s) will be deemed canceled and the cancellation charge (as outlined above) therefor shall be charged.



City of Beaumont Wastewater Treatment Plant Salt Mitigation Upgrade Project

Technical Justification:

PCO-44	
Design Adjustment:	
WML COP-050	Aeration Basin - Network Switches for HACH Instruments
CLAR-38	

Reason for Design Changes:

Network Reliability Improvement for critical process analyzers. Liquid process analyzer transmitters were upgraded in a previous approved and executed design change. The initial intent was for the HACH sc4200 transmitters to access the network via wireless connectively. With the spotty Wi-Fi access and occasional signal loss due to long distances it now necessary to hardwire the devices to the network via CAT6 cabling. The cost to install field data switches and cabling for aeration basins 1 & 2 has been covered by the equipment vendor, HACH. The cost for basins 3 & 4 now in construction, includes additional conduit and cabling has been requested in Design Clarification-38.

Design and Scope Changes:

- Provide conduit and wire to connect the following AIT's 2151, 2152, 2251, 2252, 2351, 2352, 2451, 2452, 2111, 2211, 2311, 2411 to the 18-port data comm switches located in Pull Box JB-2111 and JB-2311.
- NOTE: the installation shall vary from the design issued in CLAR-038 sense data switches provided by transmitter supplier HACH were sized to accommodate transmitters that are to be installed in basins 3 & 4.
- Cost proposal shall include all necessary costs for labor and miscellaneous materials to perform this change. Contractor shall not perform any work until change has been approved by the City.

Cost Impact:

MWH and Network design engineer, SKM, has reviewed the attached WML cost proposal and find it acceptable. Accordingly, MWHC recommends a contract cost increase of \$14,093.21 to be executed in a change order for the modifications requested.

CITY OF BEAUMONT WWTP SALT MITIGATION UPGRADE PROJECT

CHANGE ORDER PROPOSAL (COP) # 050 (By Contractor)

WM Lyles Co									
Attention: Oscar Mendoza									
Dhone: 610 565 6064									
Email: omendeze@wmlylesco.com									
Subject: Network Switches for HACH Instruments									
TION									
AR 38.									
ІМРАСТ									
IMI AU I									

RESPONSE	
D D	D (
Kesponse By:	Date:

Final Distribution: Oscar Mendoza, W.M. Lyles Co. Brian Knoll, Webb Associates MWH Inspector

W. M. Lyles Co. 42142 Roick Drive Temecula, CA 92590

1/27/2021

CLAR-38, DCM-32

Reference #:

Attention:

Charles W. Reynolds

City of Beaumont WWTP Salt Mitigation Upgrade Project

DESCRIPTION:

Network Switches for HACH Instruments

Item:		Unit	Total MH	Tot	tal MH Cost	Eq. Co	ost	Material		Su	bcont.	Total Cost	
1	Network Switches for HACH Instruments	1 LS	0	\$	-	\$	-	\$	-	\$	13,289.21	\$	13,289.21
2		1 LS	0	\$	-	\$	-	\$	-	\$	-	\$	-
3		1 LS	0	\$	-	\$	-	\$	-	\$	-	\$	-
		1 LS	0	\$	-	\$	-	\$	-	\$	-	\$	-
Total (Costs		0)\$	-	\$	-	\$	-	\$	13,289.21	\$	13,289.21

Tatal This Ohamma Onder		÷	44.000.04
Bond	1.0%	\$	139.54
Mark-up - Subcontractor	5%	\$	664.46
Mark-up - Materials	15%	\$	-
Mark-up - Equipment	15%	\$	-
Mark-up - Labor	15%	\$	-
Subtotal		\$	13,289.21

Comments:

City of Beaumont WWTP Salt Mitigation Upgrade Project

Network Switches for HACH Instruments

###

\$0.00

A. Labor

	Description				Lab Pipe FM		Lab Pipe		Operator		Carp FM Carp				Lab			Cement Mason							
					ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT
-																									
-									1			1													
					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Rate					Hours	s	_																
Name	ST	PT		DT		ST	PT	DT		E>	tens	ion													
Lab Pipe FM	\$80.34		\$107.19	\$134.03		C	0	0			5	60.00													
Lab Pipe	\$77.73		\$103.27	\$128.79		C	0	0			5	60.00													
Operator	\$98.67		\$131.84	\$165.00		C	0	0			5	60.00													
Carp FM	\$87.32		\$117.91	\$148.48		C	0	0			5	60.00													
Carp	\$83.44		\$112.07	\$140.71		C	0	0			5	60.00													
Lab	\$74.26		\$98.07	\$121.86		C	0	0			5	60.00													
Cement Mason	\$80.42		\$105.60	\$130.78		C	0	0			5	\$0.00	_												
						C	0	0					-												

Total Labor =

B. Equipment

Description		17.12	32.037	31.028	30.048	20.041	35.064	Rent
		0	0	0	0	0	0	0
Number	Description	Rate	Hours	Extension				
17.12	Foreman Truck	\$29.60	0	\$0.00				
32.037	ReachliftXtremeXR1055	\$58.61	0	\$0.00				
31.028	Hydro Crane - 80 TonLink BeltRTC-8080 II 80 Ton	\$164.01	0	\$0.00				
30.048	Loader Backhoe 410John Deere410L	\$64.30	0	\$0.00				
20.041	ExcavatorJohn Deere350GLC	\$151.12	0	\$0.00				
35.064	LoaderJohn Deere644J	\$123.00	0	\$0.00				
17	Foreman Truck	\$29.60	0	\$0.00				
20.041	ExcavatorJohn Deere350GLC	\$151.12	0	\$0.00				
35.064	LoaderJohn Deere644J	\$123.00	0	\$0.00				
Rent	Owner Op dump trucks	\$100.00	0	\$0.00				
			0					
		Total Equipme	ent =	\$0.00				

C. Materials

Quantity Unit Price

Extension

Тах	7.750%		\$0.00
		Subtotal	\$0.00
		Freight	
	Total Mate	rial =	\$0.00

D. Subcontractor

		Total	Subcontract =	\$13,289.21
Southern Contracting	1	LS	\$13,289.21	\$13,289.21
	Quantity	Unit	Price	Extension



То

Return To

Southern Contracting Company P.O. Box 445 San Marcos, CA 92079-0445 Tel 760-744-0760 Fax 760-744-6475 website: www.southerncontracting.com email: info@southerncontracting.com

Change Order Request

COR Subject: COR#028 CLAR-038 Hach

Changes phase 2

103801 — Wastewater Treatment Plant Salt Mitigation Upgrade

Juan C. Ahumada

42142 Roick Drive

Temecula, CA 92590

Southern Contracting Company

DAlcantar@southerncontracting.com

W.M. Lyles

951-973-7393

Dan Alcantar

Contract No:55.1173COR Number:103801-COR#028COR Revision Number:0COR Date:1/7/2021Work Type:Price / Do Not
ProceedOther Reference No:CLAR-038
Days Valid:5

Scope Of Work / Time Extension Request

760-744-0760x621 619-778-0681

The work associated with CLAR-038 phase 2 Hach Changes is a change to Southern Contracting Company's scope of work in which a change in Contract Price and Time is to be considered.

Accordingly, Southern Contracting Company requests a Contract Change Order in the amount of \$13,289.21

Scope of Work is as follows:

- provide conduit and wire to connect the following AIT's 2151, 2152, 2251, 2252, 2351, 2352, 2451, 2452, 2111, 2211, 2311, 2411 to the 18 port data comm switches located in Pull Box JB-2111 and JB-2311. NOTE: this installation varies from the design issued in CLAR-038 and we have included a rough sketch on NI-04A showing the differences. Actual red line as builts will be provided as part of the project record drawing.

Exclusions: Set up of network, Programming, Installation of inline instrumentation, Overtime.

Change in time: 5 days

Southern Contracting reserves all rights to additional costs and time for changes not identified in the documents furnished, and is not responsible for additional costs or time for work which is not part of our contract scope of work, unless stipulated above. Should additional information or clarification be required, please contact me at your convenience.

Summary

Total: \$13,289.21

Reservation of Rights

This COR does not include any amount for impacts such as interference, disruptions, rescheduling, changes in the sequence of work, delays and/or associated acceleration. We expressly reserve the right to submit our request for any of these items.

Signed By:

Daniel Alcantar PM Dated: 1/7/2021

Bid Summary Report

103801 Beaumont Chang Orders Estimator: Dan Alcantar

Job #2336

Job Name: 103801 Beaumont Chang Orders

Contractor:

Estimator: Dan Alcantar

Notes:

Bid Date:

		Material		Labor					
Summary Description	Extended	%	Adjusted	Extended	%	Adjusted			
COR#028 CLAR-038 Hach Comm phase 2	\$3,196.30	100.00%	\$3,196.30	81.19	100.00%	81.19			

Top Sheet				
Raw Cost		\$11,340.44	Sales per Month	\$0.00
Тах		\$247.71	Return per Month	\$0.00
Raw Cost with Tax		\$11,588.15	Price per Square Foot	\$0.00
Overhead		\$1,701.07	Hours per Square Foot	0.00
Profit		\$0.00	Square Feet	0.00
Total Return Amount		\$1,701.07	Job Months	0.00
Total Return %		12.80%	Hours per Week	0.00
Price		\$13,289.21	Workers per Day	0.00
Bond		\$0.00	Total Hours	81.19
Sell Price		\$13,289.21	Markup Sales Tax (Overhead)	No
Adjusted Sell ()		\$0.00	Markup Sales Tax (Profit)	No
Adjusted Sell Return	0.00 %	\$0.00	Use Bond Table	No

Labor	Percent	Hours	Hourly	Burd	en	
Class Description	of Total	Distributed	Rate	Rate	Percent	Labor Cost
General Foreman	12.00%	9.74	\$99.49	\$0.00	0.00%	\$969.34
Journeyman	88.00%	71.45	\$85.51	\$0.00	0.00%	\$6,109.60
Totals	100.00%	81.19	\$87.19	\$0.00	0.00%	\$7,078.94

Mark Ups		OVER	HEAD	PROFIT	
	Total	%	Amount	%	Amount

Materials	\$3,196.30	+	15.00%	\$3,675.74	+	0.00%	\$3,675.74
Labor	\$7,078.94	+	15.00%	\$8,140.78	+	0.00%	\$8,140.78
Supplier Quotes	\$0.00	+	15.00%	\$0.00	+	0.00%	\$0.00
SubContractors	\$0.00	+	5.00%	\$0.00	+	0.00%	\$0.00

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Bid Summary Report

103801 Beaumont Chang Orders	Estimator: D	an Alcantar				Job #2336
Direct Job Expense	\$1,065.20 +	15.00%	\$1,224.98	+	0.00%	\$1,224.98
Equipment Rental	\$0.00 +	15.00%	\$0.00	+	0.00%	\$0.00
Totals	\$11,340.44	15.00%	\$13,041.50		0.00%	\$13,041.50

Tax Report		Taxed Amount	Tax Rate %	Tax Amount
Materials		\$3,196.30	7.75%	\$247.71
Labor		\$7,078.94	0.00%	\$0.00
Supplier Quotes		\$0.00	0.00%	\$0.00
SubContractors		\$0.00	0.00%	\$0.00
Direct Job Expense		\$0.00	0.00%	\$0.00
Equipment Rental		\$0.00	0.00%	\$0.00
			Total Tax:	\$247.71
Direct Job Expense				
Name	Supplier	Tax (0.0 %)	Unit Cost Multiplier	Amount
FM Truck		No	\$26.63 40.00	\$1,065.20
			Total:	\$1,065.20

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Job Name: 103801 Beaumont Chang Orders Job Number: 2336

COR#028 CLAR-038 Hach Comm phase 2

[Items and ByProducts]

81.19		\$3,196.30			oducts] Total:
0.18	1.00 C	\$45.00	\$250.00 C	18.00	gs Tube Style
5.65	0.31 E	\$118.80	\$6.60 E	18.00	ERMINATION
37.68	3.14 C	\$1,140.00	\$950.00 M	1,200.00	CABLE
43.51		\$1,303.80			Wire/Cable
5.28	26.38 C	\$193.05	\$9.65 E	20.00	C/PVC CLAMP
1.51	7.54 C	\$303.03	\$1,515.15 C	20.00	C/PVC CLAMP BAK
2.51	62.80 C	\$205.74	\$51.43 E	4.00	C/PVC HUB
3.27	81.64 C	\$80.69	\$2,017.25 C	4.00	C/PVC ELBOW
18.84	12.56 C	\$921.49	\$614.33 C	150.00	C/PVC COATED
2.26	18.84 C	\$142.50	\$1,187.50 C	12.00	FRUT-STAINLESS
4.02	20.10 C	\$46.00	\$230.00 C	20.00	WEDGE ANCHOR
37.68		\$1,892.50			Conduit/Raceway
81.19		\$3,196.30	σ	nbined, Combine	ed, Combined, Combined, Con
Ext Labor	Unit Labor U	Ext Price	Unit Price U	Quantity	Item Name

Material Filter: <None> Report: COR - 2

1/7/2021 12:46 PM

Courtesy of McCormick Systems Inc.

Name: 0		Combin	e: 010 - 0	1/4" SS	1 5/8 ST	1 GR(e: 020 - \	CAT6E (CAT6 TE	Wire Ta	nd ByPro				
Extension	Item #	Label Set:	Cost Cod	2,615	2,675	2,702	2,731	2,808	3,015	3,043	Cost Cod	749	750	60,050	[ltems ar



File No. CLAR-38

CITY OF BEAUMONT WASTE WATER TREATMENT PLANT SALT MITIGATION UPGRADE PROJECT

CLARIFICATION 38

To (Construction Manager):	Stantec					
	Attention: Charles Reynold	S				
	Phone: 702-497-8024					
Email: Charles.w.reynolds@stantec.com						
From (Engineer):	SKM Engineering					
	Attention: Lindsey Stevens					
	Phone: 801-677-0011					
	Email: lindsey.stevens@ski	neng.com				
Subject: Network Switches for HACH Instrumentation Location: Process Basins						
Reference Documents: Drawing Nos. NI-04A, LE-07, CE-07, CE-09, CE-11						
CLARIFICATION						
Note the following:						
The HACH transmitters located 2251, AIT-2252, AIT-2311, communication. To accommode and Aeration Basins, JB-2111, J	at the Anoxic and Aeration Ba AIT-2351, AIT-2352, AIT ate this network switches will JB-2131, JB-2311 and JB-233	asins (AIT-2111, AIT-2 -2411, AIT-2451 and be added to the four ma 1, as shown on NI-04A	151, AIT-2152, AIT-2211, AIT- 1 AIT-2452) require ethernet ain junction boxes at the Anoxic and LE-07.			
To provide ethernet communication to the HACH transmitters and wireless access points, existing conduits and combined conduits will need to be modified as follows. Communication conduits have been added, which will not be physically installed, but have been listed for clarity (F2111, F2151, F2311, and F2351). Conduit F2111 with CAT6 shielded cable will be combined into conduit F0203+ to provide communications from CTC-MB to RIO-MB. F2111 will then be combined with S2111+ to provide communications from RIO-MB to JB-2111 (CE-10 and CE-11). Conduits F2151, F2311 and F2351 will similarly be used to route CAT6 shielded cable from CTC-MB to RIO-MB and on to junction boxes JB-2131, JB-2311 and JB-2331.						
From the new network switches and analyzer transmitters throug Conduit S2111 will ha and the wireless access AIT-2211.	s in the junction boxes, CAT6 gh existing signal conduits. we two (2) CAT6 shielded ca s point. Conduit S2211 will b	shielded conduit is rou bles from the network be used to route CAT6	ted to the wireless access points switch in JB-2111 to AIT-2111 shielded cable from JB-2111 to			
 Conduit S2151 will ha and the wireless access AIT-2152. Conduit S2 S2252 will be used to r Conduit S2311 will ad CAT6 cable from JB-2 	 AIT-2211. Conduit S2151 will have two (2) CAT6 shielded cables from the network switch in JB-2131 to AIT-2151 and the wireless access point. Conduit S2152 will be used to route CAT6 shielded cable from JB-2131 to AIT-2152. Conduit S2251 will be used to route CAT6 shielded cable from JB-2131 to AIT-2251. Conduit S2252 will be used to route CAT6 shielded cable from JB-2131 to AIT-2252. Conduit S2311 will add a CAT6 shielded cable from JB-2311 to AIT-2311, while conduit S2411 will route 					
• CAT6 shielded cables switch in JB-2331 to A See drawing CE-07.	will be added to conduits S23 JIT-2351, AIT-2352, AIT-245	51, S2352, S2451 and S 1 and AIT-2452, respec	S2452 to feed from the network ctively.			
Prepared By (Name): Lindse	ey Stevens, SKM		Date : Dec. 10, 2020			

Distributed By:

Page 1 of 1

Date:





12/11/2020 C:/USERS/DANIEL.LEAVITT/AQUA ENGINEERING/BEAUMONT - DOCUMENT3/WEBB170227 SALT MITIGATION WWTP UPGRADE/050 DRAFTING/997 ELECTRICAL/13 LE-07 ANOXIC & RERATION BASINS FLAN.DWG

13/02/30 Wb1 DCF Wb1 10/32/30 Wb1 BB Wb1 13/05/16 Wb1 DCF Wb1	TRICAL - CONDUITS AND DUCTBANKS	ELEC	
Image: Construction Image: Construction 000/02/18 Mb1 DCT Mb1 ' DVLE DESIGN CHECKED			
о керкорисе, изе, оиитець, итан Орді Сімаг	СІТА ОЕ ВЕДІІМОИТ 1 сойгрейсе иегинек кесерт иок роззезски сойтека ок ткилагека илу кіюнта 1 лерозе мітнопт тне мкіттей рекмізаюн ог аки енсімеекию. © сорукіюнтер 2018 Г	THIS DRAWING IS PROPERTY OF SKM ENGINEERING AND IS TRANSMITTED IN OR DISCLOSE, IN WHOLE OR IN PART, DATA CONTAINED HEREIN FOR ANY PI	
			Baurtiful, Utah 84010 Standard Standard Stand Standard Standard S
		NOTES: NOTES:	AND CONDUCTORS FOR LIGHTS, RECETACLES AND DATA JACKS. IT ALSO DESN'T SHOW CONDUT AND SONDCRE DAY JACKS. IT ALSO HAZC AND APPLLANCES FOR THE OFFICE, BREAK ROOM, CONTRACTOR IS HAZC AND APPLLANCS. FOR THE OFFICE, BREAK ROOM, CONTRACTOR IS RESPONSIBLE. TO INCLUDE THESE CONDUIT ROUTING PLAN. WORK AND IN THEIR SUBMITED CONDUIT ROUTING PLAN.
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12/11/2020 C:/USERS/DANEL.LEAVITT/AQUA ENGINEERING/BEAUMONT - DOCUMENTS/WEBB170227 SALT MITIGATION WHTP UPGRADE/050 DRAFTING/997 ELECTRICAL/15 CE-07 CONDUIT SCHEDULE 7.DWG

2 15\02\50 Mb1 DCF M 4 10\50\50 Mb1 DCF M 2 10\11\18 Mb1 DCF M 5 08\14\18 Mb1 DCF M 6 08\14\18 Mb1 DCF M 6 08\02\18 Mb1 DCF M	SALT MITIGATION WWTP UPGRADE ELECTRICAL - CONDUITS AND DUCTBANKS CONDUIT SCHEDULE 9	ENGINE (801) SOB-1327 FX (801) S99-0153	11 12 12 12 12 12 12 12 12 12 12 12 12 12 12 14 14 14 15 14 16 14 17 14 18 14 19 14
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		NOTES: NOTES: 1 CONDUTS THAT ARE COMBINED BETWEEN PULL POINTS ARE DENOTED WITH A + (PLUS) SYMBOL. SEE THE COMBINED CONDUTS SCHEDULE ON SHEET CE-11, CONDUTS THAT HAVE BEEN COMBINED SHALL BE LABELED WITH MULTIPLE CONDUTT TAGS, ONE FOR EACH CONDUTT THAT HAS BEEN COMBINED.	THE CONDUIT DEVELOPMENT AND SCHEDULE DOES NOT SHOW CONDUIT ADD CONDUCTORS FOR LUBHTS, RECETAACLES AND DATA JACKS. IT ALSO DOESN'T SHOW CONDUIT AND CONDUCTORS FOR THE MBR BUILDING'S LAW AND APPLIANCES FOR THE OFFICE, REEX ROOM, CONTRACTOR IS LAB, MECANNICAL ROOM AND RESTROOMS. THE CONTRACTOR IS RESPONSIBLE TO INCLUDE THESE CONDUIT ROUTING PLAN. WORK AND IN THEIR SUBMITTED CONDUIT ROUTING PLAN.
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020 C:/USERS/DANIEL.LEAVITT/AQUA ENGINEERING/BEAUMONT - DOCUMENTS/WEBB170225 SALT MITICATION WWTP UPGRADE/050 DRAFTING/997 ELECTRICAL/15 CE-09 CONDUIT SCHEDULE 9.DWC

3 112/07/20 MPJ DCL MF 5 10/11/19 MPJ DCL MF 6 10/20/20 MPJ DCL MF 7 02/05/18 MPJ DCL MF 7 02/05/18 MPJ DCL MF	ANGINITED IN CONFIDENCE NETHER RECEIPT NOR POSESSION CONFERSION OF SKIN ENGINEERING. © COPYRICHTED 201 IN FOR ANY PURPOSE WITHOUT THE WRITTEN PERMISSION OF SKIN ENGINEERING. © COPYRICHTED 201 SALT MITIGATION WWTP UPGRADE SALT MITIGATION WWTP UPGRADE CONDUIT SCHEDULE 11 CONDUIT SCHEDULE 11	THIS DRAWING IS PROPERTY OF SKM ENGINEERING AND IS THE OR DISCLOSE, IN WHOLE OR IN PART, DATA CONTAINED HERE EAS W 2600 S, SUITE 275, BOUNTIFUL, UT 84010 CONTAINED HERE PHONE (801) 299-0153	CINERATING CONSULTANTS RIGEINERRING CONSULTANTS A S S O C I A I E S STRE MCGRAFERE STRE MCGAY STREET STRE MCGAY STREET STRE MCGAY STREET STRE MCGAY STREET STRE MCGAY STREET STRE MCGAY STREET STRE MCGAY STREET STREET STRE MCGAY STREET
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12/7/2020 C:/USERS/DANIEL.LEANITYAQUA ENGINEERING/BEAUMONT - DOCUMENTS/WEBR170227 SALT MITICATION WMTP UPGRADE/050 DRAFTING/997 ELECTRICAL/15 CE-11 CONDUIT SCHEDULE 11.DWC



City of Beaumont Wastewater Treatment Plant Salt Mitigation Upgrade Project

Technical Justification:

PCO-45	
Design Adjustment:	
WML COP-050	Fine Screens – Addition of a High-Level Alarm Float Switch
CLAR-35	

Reason for Design Changes:

To provide operations with advanced notice of potential overflow of the Fine Screen. A high-level float switch is to be added to the Fine Screen Splitter Box to provide an alarm in case of high liquid level upstream of fine screens.

Design and Scope Changes:

- Please provide and install a high-level float switch as indicated on revised drawing FSM-1, PI-05 and LE-05. The high-level float switch shall be installed so that an alarm is triggered once the liquid elevation reaches a level of 3'-4" above the finished floor of the influent box (Note that this level may need to be adjusted following flow testing of screens).
- Route the float switch cable to a small NEMA 4X Junction Box adjacent to the float switch location (a minimum 18" above top of wall) and provide an intrinsically safe barrier (120VAC powered) inside the junction box. Three #12 with #12 Ground wires will need to be routed to the junction box from RIO-HW. To accomplish this, utilize conduit C1711 from RIO-HW to HH-105 and then from HH-105 route the wires through one of the underground conduits that is being used for lighting. See drawings CE-05 and CE-18
- Cost proposal shall include all necessary costs for labor and miscellaneous materials to perform this change. Contractor shall not perform any work until change has been approved by the City.

Cost Impact:

MWH and Network design engineer, SKM, has reviewed the attached WML cost proposal and find it acceptable. Accordingly, MWHC recommends a contract cost increase of \$11,639.14 to be executed in a change order for the modifications requested.

CITY OF BEAUMONT WWTP SALT MITIGATION UPGRADE PROJECT

CHANGE ORDER PROPOSAL (COP) # 047 (By Contractor)

To (Engineer/CM):						
10 (Engineer/CNI):	From (Contractor):					
MWH Constructors	w.M. Lyles Co.					
Attention: Charles Reynolds	Attention: Oscar Mendoza					
Phone: 702-497-8024	Phone: 619-565-6064					
Email: Charles.w.reynolds@stantec.com	Email: omendoza@wmlylesco.com					
PCO/DCM No.: 29						
Subject: High Level Float Switch at Fine Screens						
Reference Documents: Attached						
DESCRIPTION						
This COP is for the installation of a High Level Float Sy DCM 29 (Attached).	witch at the Fine Screens Splitter Box as outlined under					
COST ES	STIMATE					
Tatal Cost : \$ 11,620,14						
Total Cost : \$ 11,039.14 – see attached breakdown						
SCHEDUL	Е ІМРАСТ					
Received by MWH Constructors (Date):						

RESPONSE	
Response By:	Date:

Final Distribution: Oscar Mendoza, W.M. Lyles Co. Brian Knoll, Webb Associates MWH Inspector

W. M. Lyles Co. 42142 Roick Drive Temecula, CA 92590

Reference #: CLAR. 35

Attention:

Charles W. Reynolds

City of Beaumont WWTP Salt Mitigation Upgrade Project

DESCRIPTION:

High Level Float Switch at Fine Screen

Item:		Unit	Total MH	To	otal MH Cost	Eq.	Cost	Material		Sul	bcont.	Total Cost	
1	High Level Float Switch at Fine Screen	1 LS	0	\$	-	\$	-	\$	-	\$	10,975.14	\$	10,975.14
2		1 LS	0	\$	-	\$	-	\$	-	\$	-	\$	-
3		1 LS	0	\$	-	\$	-	\$	-	\$	-	\$	-
		1 LS	0	\$	-	\$	-	\$	-	\$	-	\$	-
Total	Costs		0) \$	-	\$	-	\$	-	\$	10,975.14	\$	10,975.14

Subtotal		\$ 10,975.14
Mark-up - Labor	15%	\$ -
Mark-up - Equipment	15%	\$ -
Mark-up - Materials	15%	\$ -
Mark-up - Subcontractor	5%	\$ 548.76
Bond	1.0%	\$ 115.24
Total This Change Order		\$ 11,639.14

Comments:

City of Beaumont WWTP Salt Mitigation Upgrade Project

High Level Float Switch at Fine Screen

A. Labor

Description				La	b Pipe	FM	L	Lab Pipe Operator Carp FM Carp					Lab		Cement Mason										
					ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT
					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Rate					Hour	s																	
Name	ST	PT		DT		ST	PT	DT	-	E	ktens	ion													
Lab Pipe FM	\$77.80		\$103.90	\$129.98		C	0) ()		9	60.00													
Lab Pipe	\$75.19		\$99.97	\$124.75		C	0) ()		9	60.00													
Operator	\$96.33		\$128.99	\$161.66		C	0) ()		9	60.00													
Carp FM	\$85.03		\$115.33	\$145.63		C	0) ()		9	60.00													
Carp	\$81.11		\$109.45	\$137.79		C	0) ()		9	60.00													
Lab	\$71.72		\$94.78	\$117.82		C	0) ()		9	60.00													
Cement Mason	\$78.05		\$102.25	\$126.45		C	0) ()		9	60.00	_												
						C) ()) ()				-												
						Tot	tal La	abor =			\$	0.00													

B. Equipment

	Description	17.12	32.037	31.028	30.048	20.041	35.064	Rent
		0	0	0	0	0	0	0
Number	Description	Rate	Hours	Extension				
17.12	Foreman Truck	\$29.60	0	\$0.00				
32.037	ReachliftXtremeXR1055	\$58.61	0	\$0.00				
31.028	Hydro Crane - 80 TonLink BeltRTC-8080 II 80 Ton	\$164.01	0	\$0.00				
30.048	Loader Backhoe 410John Deere410L	\$64.30	0	\$0.00				
20.041	ExcavatorJohn Deere350GLC	\$151.12	0	\$0.00				
35.064	LoaderJohn Deere644J	\$123.00	0	\$0.00				
17	Foreman Truck	\$29.60	0	\$0.00				
20.041	ExcavatorJohn Deere350GLC	\$151.12	0	\$0.00				
35.064	LoaderJohn Deere644J	\$123.00	0	\$0.00				
Rent	Owner Op dump trucks	\$100.00	0	\$0.00				
			0					
		Total Equipm	ent =	\$0.00				
C. Material	s							
	Quantity	Unit Price		Extension				
				\$0.00				
				\$0.00				
				\$0.00				
Tax	7.750%			\$0.00				
			Subtotal	\$0.00				
		Total Ma	iterial =	\$0.00				
D. Subcon	tractor							
	Quantity	Unit Prio	ce	Extension				

Southern	Contracting
	<u>.</u>

	Total	Subcontract =	\$10,975.14
			\$0.00
1	LS	\$10,975.14	\$10,975.14
anuty	Unit	FILCE	EXTENSION



Southern Contracting Company P.O. Box 445 San Marcos, CA 92079-0445 Tel 760-744-0760 Fax 760-744-6475 website: www.southerncontracting.com email: info@southerncontracting.com

Change Order Request

103801 — Wastewater Treatment Plant Salt Mitigation Upgrade

COR Subject: High Level Float Switch at Fine Screen

То	Juan C. Ahumada W.M. Lyles	Contract No: COR Number:	55.1173 103801-COR#024		
	42142 Roick Drive	COR Revision Number:	0		
	Temecula, CA 92590	COR Date:	11/9/2020		
	951-973-7393	Work Type:	Price / Do Not Proceed		
Return To	Dan Alcantar Southern Contracting Company 760-744-0760x621 619-778-0681 DAlcantar@southerncontracting.com	Other Reference No: Days Valid:	CLAR-035 5		

Scope Of Work / Time Extension Request

The work associated with CLAR-035 High Level Float Switch at Fine Screen

Splitter Box is a change to Southern Contracting Company's scope of work in which a change in Contract Price and Time is to be considered. Accordingly, Southern Contracting Company requests a Contract Change Order in the amount of \$10,975.14

Scope of Work is as follows:

- Per the request made by W.M. Lyles we will provide A high-level float switch will be added to the Fine Screen Splitter Box to provide an alarm in case of high liquid level upstream of fine screens. An approximate location is indicated on FSM-1, PI-05 and LE-05. The high-level float switch shall be installed so that an alarm is triggered once the liquid elevation reaches a level of 3'-4" above the finished floor of the influent box (Note that this level may need to be adjusted following flow testing of screens). Route the float switch cable to a small NEMA 4X Junction Box adjacent to the float switch location (a minimum 18" above top of wall) and provide an intrinsically safe barrier (120VAC powered) inside the junction box. Three #12 with #12 Ground wires will need to be routed to the junction box from RIO-HW. To accomplish this, utilize conduit C1711 from RIO-HW to HH-105 and then from HH-105 route the wires through one of the underground conduits that is being used for lighting. See drawings CE-05 and CE-18.

Exclusions: Set up of network, programming, Overtime.

Change in time: 5 days

Southern Contracting reserves all rights to additional costs and time for changes not identified in the documents furnished, and is not responsible for additional costs or time for work which is not part of our contract scope of work,
unless stipulated above. Should additional information or clarification be required, please contact me at your convenience.

Summary

Total: \$10,975.14

Reservation of Rights

This COR does not include any amount for impacts such as interference, disruptions, rescheduling, changes in the sequence of work, delays and/or associated acceleration. We expressly reserve the right to submit our request for any of these items.

Signed By: _____

Dated: 11/9/2020

103801 Beaumont Chang Orders Estimator: Dan Alcantar

Job Name: 103801 Beaumont Chang Orders

Contractor:

- Estimator: Dan Alcantar
 - Notes:

Bid Date:

		Material		Labor			
Summary Description	Extended	%	Adjusted	Extended	%	Adjusted	
COR#024 CLAR-035 High Level Float Fine Screen	\$1,144.12	100.00%	\$1,144.12	31.11	100.00%	31.11	

Top Sheet				
Raw Cost		\$9,360.44	Sales per Month	\$0.00
Тах		\$88.67	Return per Month	\$0.00
Raw Cost with Tax		\$9,449.11	Price per Square Foot	\$0.00
Overhead		\$1,417.37	Hours per Square Foot	0.00
Profit		\$0.00	Square Feet	0.00
Total Return Amount		\$1,417.37	Job Months	0.00
Total Return %		12.91%	Hours per Week	0.00
Price		\$10,866.47	Workers per Day	0.00
Bond		\$108.66	Total Hours	31.11
Sell Price		\$10,975.14	Markup Sales Tax (Overhead)	Yes
Adjusted Sell ()		\$0.00	Markup Sales Tax (Profit)	Yes
Adjusted Sell Return	0.00 %	\$0.00	Use Bond Table	Yes

Labor	Percent	Hours	Hourly	Burd	en		
Class Description	of Total	Distributed	Rate	Rate	Percent	Labor Cost	
General Foreman	20.00%	6.22	\$99.49	\$0.00	0.00%	\$619.08	
Journeyman	80.00%	24.89	\$85.51	\$0.00	0.00%	\$2,128.34	
Totals	100.00%	31.11	\$88.31	\$0.00	0.00%	\$2,747.42	

Mark Ups		OVE	RHEAD		PROFIT		
	Total	%	Amount	%	Amount		
Materials	\$1,144.12 +	15.00%	\$1,315.74 +	0.00%	\$1,315.74		
Labor	\$2,747.42 +	15.00%	\$3,159.53 +	0.00%	\$3,159.53		
Supplier Quotes	\$4,670.00 +	15.00%	\$5,370.50 +	0.00%	\$5,370.50		

11/9/2020 3:31:06 PM McCormick Systems, Inc. Page 1 of 2

Bid Summary Report

103801 Beaumont Chang Orders	Estimator: Dan Alcantar						Job #2336		
SubContractors	\$0.00	+	5.00%	\$0.00	+	0.00%	\$0.00		
Direct Job Expense	\$798.90	+	15.00%	\$918.74	+	0.00%	\$918.74		
Equipment Rental	\$0.00	+	15.00%	\$0.00	+	0.00%	\$0.00		
Totals	\$9,360.44		15.00%	\$10,764.50		0.00%	\$10,764.50		

Tax Report	Taxed Amount	Tax Rate %	Tax Amount
Materials	\$1,144.12	7.75%	\$88.67
Labor	\$2,747.42	0.00%	\$0.00
Supplier Quotes	\$0.00	0.00%	\$0.00
SubContractors	\$0.00	0.00%	\$0.00
Direct Job Expense	\$0.00	0.00%	\$0.00
Equipment Rental	\$0.00	0.00%	\$0.00
		Total Tax:	\$88.67

Supplier Quot	es					
Name	Supplier	Tax (0.0 %)	Unit Cost M	ultiplier	Amount	
Intrumentation and controls	d	No	\$4,670.00	1.00	\$4,670.00	
			То	tal:	\$4,670.00	
Direct Job Ex	pense					
Namo	Supplier	Tax (0.0 %)	Unit Cost M	ultiplier	Amount	

Name	Supplier	Tax (0.0 %)	Unit Cost M	lultiplier	Amount
FM Truck		No	\$26.63	30.00	\$798.90
			Т	otal:	\$798.90

Job Name: 103801 Beaumont Chang Orders Job Number: 2336

Extension Name: COR#024 CLAR-035 High Level Float Fine Screen

[Items and ByProducts]

Material Filter: <None> Report: COR - 2

ltem #	Item Name	Quantity	Unit Price	U	Ext Price	Unit Labor	U	Ext Labor
Label Set:	Combined, Combined, Combined, Com	ed		<u>\$1,144.12</u>			<u>31.11</u>	
Cost Code	: 010 - Conduit/Raceway				<u>\$797.37</u>			<u>6.88</u>
2,701	3/4 GRC/PVC COATED	20.00	\$474.52	С	\$94.90	10.05	С	2.01
2,715	3/4 GRC/PVC COUP	4.00	\$493.74	С	\$19.75	11.30	С	0.45
2,730	3/4 GRC/PVC ELBOW	2.00	\$1,758.82	С	\$35.18	69.08	С	1.38
2,807	3/4 GRC/PVC HUB	2.00	\$41.16	Е	\$82.32	50.24	С	1.00
2,987	3/4 GRC/PVC CHNL STP	4.00	\$680.49	С	\$27.22	3.77	С	0.15
15,779	12x10x6 N4X SS PULLBOX	1.00	\$538.00	Е	\$538.00	1.88	Е	1.88
Cost Code	: 020 - Wire/Cable				<u>\$346.75</u>			<u>19.83</u>
44	12 THHN CU STRANDED	2,000.00	\$130.18	М	\$260.35	7.54	Μ	15.07
4,150	12 GA TERMINATION	24.00	\$110.00	С	\$26.40	0.19	E	4.52
60,050	Wire Tags Tube Style	24.00	\$250.00	С	\$60.00	1.00	С	0.24
Cost Code	: 140-Instrumentation				<u>\$0.00</u>			<u>4.40</u>
15,890	LSL/LSH -LEVEL SW, FBO	2.00	\$0.00	Х	\$0.00	2.20	E	4.40
[Items an	d ByProducts] Total:				<u>\$1,144.12</u>			<u>31.11</u>

November 9, 2020 Quote Number: CO#11 To: Southern Contracting Dan Alcantar Attn: Project: Beaumont WWTP Salt Mitigation **Beaumont Wastewater Treatment Plant** Reference: **CLAR-35 Fine Screens Level Switch** Bid Date: N/A Bid Time: N/A

Technical Systems, Inc. (TSI) is pleased to provide a quote for the above referenced project. Material for this project will be shipped FOB Lynnwood WA, complete, ready for field termination by others. TSI's price includes CA sales tax and does not include the cost to bond TSI's portion of the project.

TSI's price for the scope of work detailed on the following pages:

Change Order Proposal Pricing:

INSTRUMENTATION

Change Scope as Follows:

- Add New Float Switch LSH-14XX
 - o Conery B8, 10A@120vac, Gold Contacts for I.S. Application, Cord Weight, 100' Cable (trimmable)
 - Add New Junction Box with I.S. Relay _
 - CAD Drawings/Submittal and Wiring Diagrams
 - o 304SS NEMA 4X, 12"x10"x6", Wall Mount, Screw Clamp Closure, Backpan
 - Hoffman A12106CHNFSS
 - o Turck I.S. Relay, Universal Voltage, UL Listed, Relay Output
 - Terminals and Nameplate
 - Update RIO-HW drawings with new IO

Terms: Net 30 FOB: Lynnwood WA Freight: Prepaid

This quote is valid for 90 days.

Please call with any questions you may have concerning pricing or any technical questions.

Sincerely,

Colin Dightman-Kovak



E

E M E T R

> Technical Systems Incorporated

2303 196th Street SW Lynnwood, WA 98036 Tel: (425) 775-5696 Fax: (425) 775-9074 info@tsicontrols.com



C O N T

R 0 L S

\$4,670.00

Colin Dightman-Kovak Technical Systems, Inc. 1-425-678-4116

Scope of Work

Misc Equipment:

Including:

- 1. Hardware Procurement
- 2. Required Testing
- 3. O&M, drawings updates

GENERAL

- 1. TSI supplies a bill of materials, CAD-based drawings, and Operations and Maintenance Manuals for all equipment furnished by TSI.
- 2. TSI supplies the required field startup services for this project.
- 3. Panels fabricated by TSI are UL 508 labeled.

STANDARD INCLUSIONS

We provide the following unless specifically excluded on our bill of material:

- 1) Equipment shipped FOB factory with freight allowed, tailgate, destination.
- 2) Field wiring diagrams showing interconnection of field instruments and instrumentation panels.
- 3) Instruction manuals as required.
- 4) All necessary field start-up and calibration of the equipment we supply.

STANDARD EXCLUSIONS

We do <u>NOT</u> include the following unless specifically included in our bill of material:

- 1) Pipe, tubing, valves or fittings between the instrument and the process.
- 2) Conduit, wire or cable not an integral part of the instrument.
- 3) Mounting brackets, stanchions, supports or mounting pads not an integral part of the instrument.
- 4) Labor to install the equipment.
- 5) The Cost, (if due to local union regulations), to have local craftsman make adjustments or wiring modifications to our equipment during start-up and calibration.
- 6) Any material or services not in our quoted sections.
- This proposal is based on award of a supply purchase order and does not include any of the costs associated with bonding or subcontract administration. If bonding or a subcontract is required they can be provided for additional cost.

SPECIFIC EXCLUSIONS

1) Installation of Panels, programming/SCADA modifications.

CITY OF BEAUMONT WASTE WATER TREATMENT PLANT SALT MITIGATION UPGRADE PROJECT

CLARIFICATION 35

Attention: Charles Reynolds Phone:: Y02-497-8024 Email: Charles.w.reynolds@stantec.com From (Engineer): SKM Engineering Attention: Lindsey Stevens Phone: 801-677-0011 Email: Indsey.stevens@skmeng.com Subject: High Level Float Switch at Fine Screen Splitter Box Reference Documents: Drawing Nos. FSM-1, Pt-05, 11-4, LE-05, CE-05 and CE-18 CLARIFICATION Note the following: A high-level float switch will be added to the Fine Screen Splitter Box to provide an alarm in case of high liquid level upstream of fine screens. An approximate location is indicated on FSM-1, Pt-05. The high-level float switch shalt be installed so that an alarm is triggered once the liquid elevation reaches a level of 3-4" above the finished floor of the influent box (Note that this level may need to be adjusted following flow testing of screens). Route the float switch cable to a small NEMA 4X Junction Box adjacent to the float switch cables to be routed to the junction box from RIO-HW. To accomplish this, utilize conduit C1711 from RIO-HW to HH-105 and then from HH-105 route the wires through one of the underground conduits that is being used for lighting. See drawings CE-03 and CE-18. Prepared By (Name): Lindsey Stevens, SKM Date: Oct. 12, 2020 Distributed By: Date: Oct. 12, 2020	To (Construction Manager):	Stantec							
Prone: 102-97-8024 Email: Charles.w.reynolds@stantec.com From (Engineer): SKM Engineering Attention: Lindsey Stevens Phone: 801-677-0011 Email: lindsey.stevens@skmeng.com Subject: High Level Float Switch at Fine Screen Splitter Box Location: Fine Screens Building Reference Documents: Drawing Nos. FSM-1, PI-05, 1-14, LE-05, CE-05 and CE-18 CLARIFICATION Note the following: A high-level float switch will be added to the Fine Screen Splitter Box to provide an alarm in case of high liquid level upstream of fine screens. An approximate location is indicated on FSM-1, PI-05, The high-level float switch shall be installed so that an alarm is triggered once the liquid elevation reaches a level of 3'-4" above the finished floor of the influent box (Note that this level may need to be adjusted following flow testing of screens). Route the float switch cable to a small NEMA 4X Junction Box adjacent to the float switch location (a minimum 18" above top of wall) and provide an intrinsically safe barrier (120XAC powered) inside the junction box. Three #12 with #12 Ground wires will need to be routed to the junction box from RIO-HW. To accomplish this, utilize conduit C1711 from RIO-HW to HH-105 and then from HH-105 route the wires through one of the underground conduits that is being used for lighting. See drawings CE-05 and CE-18. Prepared By (Name): Lindsey Stevens, SKM Date: Oct. 12, 2020 Distributed By: Date: Date:		Attention: Charles Rey	nolds						
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Distributed By: Date:	Prepared By (Name): Lindse	ey Stevens, SKM		Date: Oct. 12, 2020					
	Distributed By:	· · ·		Date:					





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AI NO	SLOT:POINT TAGRAME DESCRIPTION 1:00 AI-2161 PLANT INFUGENT DO	PERDSHEET STATUS PI-01 EXISTING	DI	2.05 INSTALLED SPARE	PAID SHAT STATUS	DO	15:03 ZCC-1322 INFLUENT PUWES SWING VALVE 2 CLOSE CMD	Pli-04 NEW	NA NA NA
At No	1:01 AI-2162 PLANTING LENT PH	PI-01 EXISTING	DI	106 INSTALLED SPARE		00	15:04 ZCO-1343 INFLUENT PUMPS FO VALVE OPEN CMD 15:05 ZCC-1343 INFLUENT PUMPS FO VALVE CLOSE CMD	PI-04 NEW PI-04 NEW	3
Al No	1:02 AP-1103 PLANT INFLUENT FLOW	PI-01 EXISTING	DI	9 DR INSTALLED SPARE		00	15:06 YC-1611 ODOR CONTROL 1 EXHAUST FAN RUN COMMAND	PI-27 NEW	
At Ves	1:04 11-1303A INFLIENT WTT WILLEVILA	PI-04 NEW	DI	INSTALLED SPARE		DO	15:07 YC-1711 ODOR CONTROL 2 DRHALST FAN RUN COMMAND 15:08 YC-7410 SODRUM BISULFITE PUMP 1 START COMMAND	PI-27 NEW PI-19A NEW	N N N
Ai No	1:05 U-130IB INTEGER WE WELCTFELD	PI-04 NEW	01	9.11 INSTALLED SPARE		00	15:09 YC-7420 SODIUM BISILITITE PUMP 2 START COMMAND	PI-19A NEW	
Ai No	1:97 U-1501 EQUAUZADON BASEN 2 LEVEL	DI-DA ALW		INSTALLED SPARE		00	15:10 YC-7511 SODRUM HYDROXIDE PLMP 1 START COMMAND 15:11 YC-7521 SODRUM HYDROXIDE PLMP 2 START COMMAND	PI-19A NEW PI-19A NEW	
Al Yes	1:09 11-1801 KTORA DRAW 35 11/11	PI-17 NEW	22 Di	P 14 INSTALLED SPARE		00	15:12 ZCO-8433 BLOWER 2 OWERSION VALVE 3 OPEN COMMAND	PI-Z1 NEW	1.1.1 N. 1.1.1
AI No	1:10 FI-1822 STORM DRAIN PLWPS FLOW	P1-17 NEW	01	INSTALLED SPARE	-	00	15:13 ZCC-8413 BLOWER 2 OVERSION VALVE 1 CLOSE COMMAND 15:14 ZCO-8422 BLOWER 2 OVERSION VALVE 2 OPEN COMMAND	PI-21 NEW	
Al No	1:12 FI-6420 KIPW PUMP STATION FLOW	P1-19 NEW	01	2.17 INSTALLED SPARE		00	15:15 ZCC-8432 BLOWER 2 DIVERSION VALVE 2 CLOSE COMMAND	PI-23. NEW	
Al Yes	1:13 11-7301 RECYCLED WATER LEVEL 1-34 EL-2322 RECYCLED WATER LET FUMPS FLOW	91-19 NEW 71-19 NEW	DI	19.38 INSTALLED SPARE	-		15:17		
AI Yes	115 II-7131 RECYCLED WATER STORAGE TANK 1 LEVEL	PI-19 NEW	Di	9 20 INSTALLED SPARE	_		15:18		že
Al Yes Al No	2:0 11-7343 RECYCLED WATER STDRAGE TANK 2LEVEL 2:1 FE-7151 PLANT EFFLIENT FLOW	PI-19 NEW	Di Di	222 INSTALLED SPARE			15:20		25 (A
Al Yes	2:2 11-7401 SODUM & SULFITE TANK LEVEL	PI-19A NEW	Di	2.23 INSTALLED SPARE			15:21		<u>第一一日 6</u>
Al No Al No	2:3 SI-7410 SODUM BISIGHT FUMP I SPEED 2:4 SI-7420 SODUM BISIGHT FUMP 2 SPEED	PI-19A NEW	Di	925 INSTALLED SPARE			15:23		
Al No	2:5 AI-7472 PLANT EFFLUENT PH	P1-19 NEW	D3	9.36 INSTALLED SPARE		_	15:24		
AI NO AI Yes	2:5 AI-14/3 PLANTEFFLUENT CHLONINE RESIDUAL 2:7 UI-7501 SODUM HYDROXODE TANK IFVR	P1-19A NEW	Di	2.28 RIC-HUY SPD FAL			15:26		SSL 0 A.
A) Na	2:8 SE-7531 SOOLUM HIT ROOM F SPEED	PI-19A NEW	Di	P.29 RIO-HW ZAVDC PSA ALARM			15:27		1 2 5 6 S
AI NO AI Yes	2:9 SF-IS21 SCOOM INFORMATING FOR POWER SHEET	P1-20 NEW	08	931 SW-HW-IO ALARM			15:29		
Al Yes	2:11 11-8282 SOLIDS HOLDING TANK 1 LEVEL	P1-20 NEW	-		PI-64 NEW		15:30		월 옥 노구 :
Al Tes Al No	2:13 F1-8433 BLOWERS DISCHARCH LINE FLOW 1	PI-21 NEW	Di	11:01 ZIO-1321 INFLUENT PUMPS SWING VALVE 1 OPENED	PI-04 NEW			Di Ot	
Al No	2:14 FI-8443 BLOWERS DISCHARCHLINE FLOW 2 2:15 TI-1921 READWORKS DISCHARCHLINE FLOW 2	P3-21 NEW	01 01	21C-1321 INFLUENT PLMPS SWING VALVE 1 CLOSED 11 03 ZI-1322 INFLUENT PLMPS SWING VALVE 1 CLOSED	PI-04 NEW	Etherne	The Constant of the Course Screens FEED GATE ADMOTE 210-1201 EAST COURSE SCREENS FEED GATE OPENED	PI-01 EXISTING	
Al No	3:0 FI-L332 INFLUENT PUMPS TO FINE SCREENS FLOW	PI-04 NEW	D DI	11 04 ZIO-1322 INFLUENT PLRAPS SWING VALVE 2 OPENED	PI-04 NEW	Etherne	The Life Table Course scales for File Gate Closed	PI-DI EXISTING	
AI No	3:1 FI-1342 INFLUENT PUMPS TO EQ BASIN FLOW 3:2 A1-1643 ODDR CONTROL 1 INFLUENT METHANE LEVEL	PI-04 NEW PI-25 NEW	3 01	11.05 ZIC-1322 INFLUENT PUMPS SWING VALVE 2 CLOSED 11.06 ZI-1343 INFLUENT PUMPS EQ VALVE REMOTE	PLOA NEW PLOA NEW	Etherne	net 200-1491 CASE COURSE SCREWS FEED GATE COMPONED	PI-02 EXISTING	
AI	3-3 AI-1743 ODOR CONTROL 2 INFLUENT METHANE LEVEL	PI-25 NEW	2 01	11.07 ZIO-1343 INFLIENT PUMPS EQ VALVE OPENED	PI-DI NEW	Etherne	net 21-1102 WEST COURSE SCREENS FLED GATE REMOTE 21-1102 WEST COURSE SCREENS FLED GATE REMOTE	PI-01 EXISTING	SSI>I≤È!
AI	34 INSTALLED SPARE		Di	LAN-1503 EQUALIZATION BASIN LEVEL NICH ALARM	FLOA NEW	Etherne	net ZIC-1102 WEST COURSE SCREENS FEED CATE CLOSED	PI-02 EXISTING	
Al	3.6 INSTALLED SPARE		CH	11 10 LAN-1504 SQUALIZATION BASIN 2 LEVEL HIGH ALARM	PL-G4 NEW	2 Etherne	het ZCO-1182 WEST COURSE SCREENS FEED GATE OPEN EMB 2011-1102 WEST COURSE SCREENS FEED GATE CLOSE (MS)	PI-01 EXISTING	BIO E E
Al	3:7 NSTAILED SPARE 3:8 NSTAILED SPARE		Di Di	FQI-1332 INFLOENT PUMPS TO FINE SCREENS FLOW TOTAL	PI-04 NEW	Etherne	net ZI-7111 COURSE SCHEEN 1 INLET GATE REMOTE	Pi-01 EXISTING	
Al	3:9 INSTALLED SPARE		OI .	11:13 ZI-1611 ODOR CONTROL 1 EXHAUST FAN REMOTE	PI-27 NEW	Etherne	net 210-3111 COURSE SCREEN 1 INTEL GATE CREME D	PI-01 EXISTING	
Al	3:10 INSTALLED SPARE 3:11 INSTALLED SPARE		DI	1115 YI-1611 ODOR CONTROL 1 EXHAUST FAN HAN.	PI-27 NEW	Etherne	net 200-1111 COURSE SCREEN 1 INLET GATE OPEN CMD	PI-01 EXISTING	SE X S
Al	3:12 INSTALLED SPARE		DI	11:16 LAL-1631 NUTRIENT TANK 1 LEVEL ALARM LOW	PI-27 NEW	Etherne	net ZCC-1111 COURSE SCREEN 1 INLET GATE CLOSE CMD ZI-1113 COURSE SCREEN 1 OUTLET GATE REMOTE	PE-01 EXISTENG	£§ ″ ≚
Al Al	3:13 INSTALLED SPARE		DI	11:18 YA-1711 OLOR CONTROL 2 EXHAUST FAN REMUTE	PI-27 NEW	Etherne	2IO-3333 COURSE SCREEN 1 OUTLET GATE OFFNED	PI-01 EXISTING	LING L
Ai	3:35 INSTALLED SPARE		DI	VI-1711 ODOR CONTROL 2 EXHAUST FAN RUNNING	PI-27 NEW	Etherne	net 2/C-1213 COURSE SCREW LOUTLIT GATE CLOSED	PI-01 EXISTING	
AD	5:00 DC-1164 FLOW SIGNAL TO PLANT INFLIENT SAMPLER	PI-01 EXISTING	DI	11-21 ZI-R411 BLOWER 2 DIVERSION VALVE 1 REMOTE	91-21 NEW	Etherne	net ZCC-1113 COURSE SCREW 1 OUTLET GATE CLOSE CMD	PI-01 EXISTING	E 0 6
AO	5.01 (2C-1533 A SILVENT PLANE STATICK RETURN VALVE ADDITICK COMMAND	ALOI NEW		11-22 ZIO-8411 SLOWER 2 DIVERSION VALVE 1 OPEN	PI-21 NEW	Etherne	net ZI-1151 EAST COURSE SCREENS OUTLET GATE REMOTE net ZIO-1151 EAST COURSE SCREENS OUTLET GATE REMOTE	Pi-01 EXISTING	
AD AD	5:03 SC-7410 SODIUM DISULTITE PUMP 1 SPEED COMMAND	PI-19A NEW	DI	11-24 ZI-8412 SLOWER 2 DIVERSION VALVE 2 REMOTE	PI-21 NEW	Etherne	Det ZIC-1151 EAST COURSE SCRIENS OUTLET GATE CLOSED	PI-03 EXISTING	
AO AO	5:04 SC-7420 SODIUM BISULFITE PUMP 2 SPEED COMMAND 5:05 SC-7511 SODIUM BISULFITE PUMP 2 SPEED COMMAND	PI-19A NEW PI-19A NEW	Di	11 25 ZIO-8412 BLOWER 2 DIVERSION VALVE 2 OPEN 210.8412 BLOWER 2 DIVERSION VALVE 2 OF OSED	PI-21 NEW	Etherne	net ZCC-1251 EAST COURSE SCREWS DUTIET GATE OFFIC AND ZCC-1151 EAST COURSE SCREWS DUTIET GATE CLOSE CMD	PI-02 EXISTING	
AO	5:06 5C-7521 SODIUM HYDROX OF PLIMP 2 SPEED COMIMAND	PI-19A NEW	DI	11:27 LAH - INSTALLED SPARE Fine Scoren Splitter Box	21-09	Etherne	tet ZI-1152 GRF BYPASS GATE REMOTE	PI-01 EXISTING	
AO	5:07 INSTALLED SPARE		DI	11:28 INSTALLED SPARE	ing	Ethome	net ZIC-1352 GRETBYPASS GATE CLOSED	PI-01 EXISTING	
DI	8:00 LAH-1302 INFLUENT WET WELL HIGH LEVEL	PI-OA NEW	DI	11 30 INSTALLED SPARE		Etherne	net 200-1152 GRIT BYPASS GATE OPEN CMD	PI-OI EXISTING	
DI	8:02 FQI-1332 INFLIENT PUMPS TO FINE SCREENS FLOW PULSE	PI-DA NEW	DI	12:00 INSTALLED SPARE		Etherne	net ZI-1202 GRET TRAP 1 NEMOTE	P1-03 NEW	
£ 01	8:03 EQ-1362 INFUGNI PLAYS TO LOT UCA PUSE	PI-04 NEW	01	12.01 INSTALLED SPARE		Etherne	net VI-1202 GRT TRAP I FUINING	Pt-08 NEW 24-03 NEW 24-03	
	8:05 CUM-304 EQ KETURN VALVE FALAT FLOOD ALARM	st be which	2 Di	12.02 INSTALLED SPARE 12.03 INSTALLED SPARE		Etherne	VC-1202 GRIT TRAF 1 START CMD	PI-03 NEW	
Di	8:06 LSH-1802 STORM DRAIN PS LEVEL ALARMINISH	PI-17 NEW	Di	12.04 INSTALLED SPARE		Etherne	net ZI-1232 GRITTRAF2 REMOTE net YI-1232 GRITTRAF3 RUNNENG	PI-03 NEW	Skie Skie
Di	8:06 FQE-1822 STORM DRAIN PUMPS FLOW TOTAL PULSE	PI-17 NEW	01	12:06 INSTALLED SPARE		Etherne	VA-3212 GRITTRAF 2 FAIL	P1-03 NEW	
Di	8:09 FGI-6420 NFW PUMP STATION FLOW TOTAL FULSE 8:10 Lat-7001 RECYCLED WINTER FUEL ALARMICON	PI-19 NEW	Di	12.07 INSTALLED SPARE		Etherne	REC PL-1212 GREET FRAP 2 START CMD	PT-US NEW	
	8:11 LAH-7102 RECYCLED WATER LEVEL ALARM HIGH	PI-19 NEW	DI	12.09 INSTALLED SPARE		1	I/O LIST RIO-HW CONTINUED		
	8:32 FQI-7122 RECYCLED WATER LIFT PUMPS FLOW TOTAL PULSE 8:13 FAN-7406 EFEWASH SHOWER FLOW ALARM HIGH	PI-19 NEW PI-19A NEW	Di Di	12.20 INSTALLED SPARE				NoE	2566 2568 2568 2568 2568 2568 2568 2568
Dł	B:14 ZI-7410 SODIUM INSULFITE PUMP 1 REMOTE	PI-19A NEW	DI	12.12 INSTALLED SPARE		-		i i i i i i i i i i i i i i i i i i i	
	8:15 Yi-7410 SODUM NSUFITE PUMP 1 FUNNING 8:36 YA-7420 SODUM DISUBITE PUMP 1 FAIL	PI-19A NEW PI-19A NEW	DI DI	12.33 INSTALLED SPARE 12.34 INSTALLED SPARE				10 1 6 K	2208×
Di	8:17 21-7420 SOCIUM DISULFITE PUMP 2 REMOTE	P1-19A NEW	Di	12.15 INSTALLED SPARE		1		eng est	
Di Di	R:18 YE-7420 SOCIUM BISLUTTE PLMMP 2 FUNKING R:19 YA-7420 SOCIUM BISLUTTE PLMMP 2 FulL	P7-19A NEW P1-19A NEW	DI DI	12.25 INSTALLED SPARE					AN A
D4	8:20 LA-7431 SODUM RISULTITE DISCHARGE LEAK ALARM	NEW	01	12 18 INSTALLED SPARE]		N the second	4000
C#	8:21 YI-7471 EFFLUENT SAMPLE PUMP RUNKING 8:22 ZI-7511 SOCIUMINOROVICE PUMP 1 REMOTE	P3-19 NEW P3-19A NEW	DI DI	12:33 INSTALLED SPARE 12:20 INSTALLED SPARE				Pho Bou	
01	8:23 YI-7511 SOCIUM HYDRONIDE PUMP 3 RUNNING	PI-19A NEW	DI	12.31 INSTALLED SPARE		-			
Dł	8:25 ZI-7521 SCOLUM HYDROXIDE PUMP 1 FAIL 8:25 ZI-7521 SCOLUM HYDROXIDE PUMP 2 REMOTE	PI-19A NEW	DI DI	12.22 INSTALLED SPARE 12.33 INSTALLED SPARE					
DI	8:26 YI-7521 SOCIUM HYDROXIDE PUMP 2 RUNAING	PI-19A NEW	DI	12.34 INSTALLED SPARE				<u> </u>	
04 04	8:28 LA-7531 SCOUM HERCOULD DISCHARGE LEAK ALARM	NEW NEW	01 Di	12:26 INSTALLED SPARE		1			
Dł	8:29 LAH-8203 SOLIDS HOLDING TANK 1 HIGHLEVEL ALARM	Pi-20 NEW	01	12-37 INSTALLED SPARE		-			
N N	8:31 LAH-8303 SOLIDS HOLDING TANK 2 HIGH LEVEL ALAMM	PI-20 NEW	01	12.29 INSTALLED SPARE					
~		21.70 5104	DI	12:30 INSTALLED SPARE					
Di	9:03 FQE-2332 INFLUENT FLMPS TO FINE SCRIPTIS FLOW TOTAL PLESE	PI-04 NEW	DI	12.51 INSTALLED SPAKE		1		0 1/2 1	SHEET 50 OF 1
01	9:02 F03-1342 INFLUENT FUMPS TO ED BASIN FLOW TOTAL PULSE	PI-04 NEW	D0	1500 ZCO-1321 INFLIENT PLIMPS SWING VALVE 1 OPEN CMD 2701-1321 INFLIENT DEMAPS SWING VALVE 1 OPEN CMD	P1-04 NEW P1-04 NEW				1 1 4 4
01	9:04 INSTALLED SPARE		00	15:02 ZCO-1322 INFLIENT PUMPS SWING VALVE Z OPEN CMD	PI-04 NEW	1		DRAWING IS TO SCI	ALE -14
	I/O LIST RIO-HW			I/O LIST RIO-HW CONTINUED				1" = FULL SCAL	E
1								1/2" = HALF SCA	LE



						CONTROL CONDUCT				
	CONDUIT	SIZE	CONDUCTORS	SERVICE 120VAC	FROM	10 8.8.1312	COMBINED P13124 C1311D4	DUCTBANKS	NOTES	
	C1313	N/A	4814	120VAC	LOP-1311	.#P-1313	P1313+, C1311D+	-		
	C1314	N/A N/A	4814	120VAC 120VAC	LCP-1311 ECP-1311	.8.9.1314	P1314+, C13110+			
	C1321	1"	10#14	120VAC	LCP-1311	FV-101	C1321+			
	C1322	1"	10/14	120VAC	£.CP-1315 2.CD-1915	FV-1322	C1321+			
	C1413	1"	10814	120VAC	MCC-HWH	CP-ME-1413	27 TOM 1			
	C1413A	3.5"	S0#12 VEW12 GND	120VAC 120VAC	CP-ME-1413 MCCL-MAI	LCP-ME-1413		101, 105		
	C1423A	3.5"	SORT2 WINT2 GND	120VAC	CP-ME-1423	LCP-ME-1423		101, 105		
	C1433	1.4*	WIRE FUTURE	120VAC 120VAC	MOC-HW1 FUITIRE OP-ME-1433	FUTURE CP-ME-1433 FUTURE 1 CP-ME-1433		101. 105	STUB UP CONDUIT AND CAP STUB UP CONDUIT AND CAP	
	C1441	1"	12#12 WINF12 GND	120VAC	MCC-FW1	ECP-ME-1441		101, 105		
	C1441A C1451	1*	12812 WW12 GND	120VAC 120VAC	LCP-ME-1441 MCC-HW2	SSL-7641, 25-1441 LCP-ME-1451		151, 105		
	C1451A	1*	ten2 il/#12 GND	120VAC	LCP-ME-1451	SEL-1451, 25-1451		-64 485		
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	C1461 C1503		WIRE FUTURE 2012 WIR12 GND	120VAC INTRINSICALLY SAFE	RtO-SH	16 LCP-482-1401	C1503+	303.1, 303.2	STUB UP CONCERTAND CAP	
UPDATED	C1594	1"	Sen2 wat 2 GND	INTRINSICALLY SAFE	RIO-SH	£3H-1504	C1503+	303.1, 303.2		
1	C1511A	1	3414	INTRINSICALLY SAFE	LCP-1511	ZS-1511		493.1, 365.5		
~~~ \	C1512	1*	964	INTRINSICALLY SAFE	LCP-1511	ZS-1512				
-	C1513	2"	36412	120VAC	RIO-SM	LCP-1514		303.1, 303.3		
	C1514A	1"	3#14	INTRINSICALLY SAFE	LCP-1514	23-1514				
	C1515	1"	3#14	INTRINSICALLY SAFE	LOP-1514	Z8-1518	-			
	C1521	1" 1"	6814 WW14 GND	129VAC	LCP-1511	#V-1521 EV.1522				
ADDED	C1523	1"	Deta Warth GND	120VAC	LCP-1511	FV-1523				
131	C1524 C1525	1"	BE14 VER14 GND	120VAG 120VAC	LCP-1514 LCP-1514	FV-1521 FV-1522				
DELETED	C1526	1"	B#14 VLW14 GND	120VAC	LCP-1514	FV-1523				
	C1531 C1534	1"	10#12 WW12 GND	\$20VAC 24VAC	RO-GH RIO-MAN	LCP-1531 LSH-1624	S1523+	303.1, 303.2		
Lass,	C1611	1*	12812	120VAC	RIO-HW	LCP-ME-1611		101, 104, 104,3		
TATA DEL	C1631 C1711	1"	2914 VL914 GND	120VAC	RID-HW	100-ME-1711 LSH		101, 195		
	C1731	1"	2914 VLW14 GND	120VAC	LOP-ME-1711	LSL-1731	babbi .	101 101 0		
Line 1	C1802 C1811	1"	6812 VENT2 GND	120VAC	MCC-HW1	LCP-P-1911	810V1+	101, 101.2		
	01812	1*	6412	120VAC	MCC-HW2	LCP-P-3812		101, 101.2		
	C1902	94	2814	24VAC	H-1902	H-1904				
	C1903	17	TSTATCABLE	24VAC	H-1903 H-1904	TSTAT	-	-		
	C2171	17	19#12 W#12 GND	120VAC	MCC-MB1	LCP-P-0171	C2171+	202, 204		
	C2371 C2371	1-	19/12 Will 2 GND	120VAG	MCC MB2 MCC-MB1	LCP-P-2271	C217t+ C237t+	202, 204		
	C2471	1	10/12 W/#12 GND	120VAC	MCC-ME2	LCP P-2471	C2371+	202, 204		
	C2752 C2752A	1.5"	19/12 WW12 GND MFR CABLES	120VAC 120VAC	RIC-M8 LCP-2761	LCP-2781 LSL-2752, LSH-2752, LSH-2752		202, 204, 204.1		
	(2761	5°	13/12	120VAC	MCC-M91	LCP-2761		202, 204, 204.1		
	C3001	3"	5814	120VAC	FRO-MB	CP-3001		404, XU4, 404, I		
	C3007	\$"	4814	SIMDC	RIG-MB	PSL-3807				
	C3112	1.25*	28#14 W/4#14 GND	120VAC	RIO-MB	FV-31518, FV-3171				
	C3161A	\$* \$*	10414 Wate GND MI4 Wate GND	129VAC 24VDC	MOC-MB1 LOP-3161	LCP-3181 PSH-3181A				
	G31818	84	3814 WIN14 GND	24VDC	LCP-3181	PSH3181B		-		
	C3191 C3192	5"	10#12	120VAC 120VAC	RIO-MB	SV-3192, 3292, 3392, 3492, 3592				
	00040	4.055		627110.2	troub	LSH-3212, LSL-3212, FV-3251A,				
	C3281	1.25	TORIA WIRIA GND	120VAC	MCC-MB1	LCP-3281				
	C3281A	\$ ¹⁴ 4*	3814 Wilet4 GND	24V/DC	LCP-3261 LCP-3261	PSH-3281A				
	C3291	\$**	8#14	120VAC	RID-MB	FV-3291				
	C3312	1.25*	28#14 WHER 14 GND	120VAC	PIC-MB	LSH-3312, LSL-3312, FV-3351A, FV-33518, FV-3371				
	C3351	1"	10814 Wilt14 GND	120VAC	MCC-MB1	LCP-3381	-			
	C33618	£. ‡.	SHI4 WINIA GND	24VDC	LCP-3381	PSH338:8				
	C3391	*	8814	120VAC	RIO-MB	FV-3391				
	C3412	1.25*	25#14 WHAT14 GMD	120VAC	RIO-MB	FV-34510, FV-3471	1.			
	C3481	1º 5*	10#14 W#14 GND 3#14 W#14 GND	129VAC 24VOC	MCC-MB1 LOP-3481	LCP-3481 PSH-3431A				
	C34818	T'	Set4 Wilet4 GND	24VDC	LCP-3481	PSH-34818				
	C3491	7.	5814	120VAC	NO-MB	LSH-3512, LSL-3512, FV-3551A,				
	C3512	1.25*	WRE FUTURE	120VAC	RIO-MB	FV-35510, FV-3571			STUB UP AND CAP	
	C3581A	3.	WRE FUTURE	24VOC	LOP-3581	PSH-3581A			STUB UP AND CAP	
	C3651B	5" 4"	WHE FUTURE	24V06	LCP-3581 PKD.MR	PSH-35818			STUB UP AND CAP	
	C3802	***	NFR CABLES	24VDC	LCP-3811	LSH-3802, LSL-3802				
	C3811 C3812	1.25	SE14 WIETA OND 27614	24VDC 120VAC	RKO-MB MCC-MB1	LCP-3811				
	ACTION		And a second second			SV-3812, 3822, 3832, 3842, 3852				
	C3812A C3822	1"	20814 WISB14 GND 10814	128VAC	LCP-3811 MCC-MB2	FGL-3815, 3825, 3835, 3845, 3865 LCP-3811				
	C3882	3/4*	WFR CABLE	120VAC	LCP-3891	LS1-3682				
	C3891 C3805	5"	2912	120VAC	FICI-MB	H-3938			A THO LEDYNU CADLE ITAT	
	C3907	3/4"	2012 TC	120VAC	RIO-MB	\$1-3507 H-3500				
	C3912	1"	2912	120VAC	RIG-MB	H-3912				
	C3914	1"	TATAT CABLE	24VAC	H-3960	8-3014 H_3015				
	C3966	1"	2014	24VAC	H-3950	H-3966				
	C3967 C4802	1* 1*	2914 6814 W#14 GND	24VAC 120VAC	H-3961 PLC-RO	14-3967 LCP-4081				

NOTES:

to Reproduce, Use, Bountifula, Utae,	ORIGINAL O. DATE DESKIN DRAWN CHECKEN C 09,05,18 MPJ DCL MPJ MPJ 1 11/26/18 MPJ BS MPJ BS MPJ 2 01/18/19 MPJ DCL MPJ BS MPJ
g and is transmitted in contadence. Neither regent nor possession contears or transfers any regains Wed herein for any uppose without the neither regent soon of star engineering. O copyregated 2018	CITY OF BEAUMONT SALT MITIGATION WWTP UPGRADE SALT MITIGATION WWTP UPGRADE ELECTRICAL - CONDUITS AND DUCTBANKS CONDUIT SCHEDULE 5
THIS DRAWING IS PROPERTY OF SKM ENGINEERIN OR DISCLODE, IN WROLE OR IN PART, DATA CONT	E N G I N E R I 533 W 2600 S, SUITE 276, BOUNTIFUL, U PHONE (801) 288-1327 FAX (801) 288-1
533 W 2600 S, Suite 25 Bountiful, Utah 84010 Phone: (801) 677-0011 WWWJSKMENg.com	ALBERTA. CVULENCENEE STORMARCAN STREET ANTROUE AN STREET ANTROUE CA 2500 A 5 5 0 C 1 A T E 5 FM. (951) 780-120 A 5 5 0 C 1 A T E 5 FM. (951) 780-120
0 1/2 1 DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = MALF SCALE	SHEET 147 OF 172

CONDUCTS THAT ARE COMBINED BETWEEN PULL POINTS ARE DENOTED WITH A + (PLUS) SYMBOL. SEE THE COMBINED CONDUCTS SCHEDULE ON SHEET CE-11. CONDUCTS THAT HAVE BEEN COMBINED SHALL BE LABELED WITH MULTIPLE CONDUCT TAGS, ONE FOR EACH CONDUCT THAT HAS BEEN COMBINED.

(2) THE CONDUIT DEVELOPMENT AND SCHEDULE DOES NOT SHOW CONDUIT AND CONDUCTORS FOR LIGHTS, RECEPTACLES AND DATA JACKS, IT ALSO DOESN'T SHOW CONDUIT AND CONDUCTORS FOR THE MBR BUILDING'S HVAC AND APPLIANCES FOR THE OFFICE, BREAK ROOM, CONTROL ROOM, LAB, NECHANICAL ROOM AND RESTROOMS. THE CONTRACTOR IS RESPONSIBLE TO INCLUDE THESE CONDUITS AND CONDUCTORS IN THEIR WORK AND IN THEIR SUBMITTED CONDUCTING PLAN.



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5H)	AWING 15 PROPERTY OF SKA ENGINEERING AND 15 T 2.05E. IN WHOLE GR IN PART, DATA CONTAINED HER		ACUA (ENGINE ERING	2600 8, SUITE 275, BOUNTIFUL, UT 84010 ONE (801) 299-1327 FAX (801) 298-0153
	anismitted in confidence neither receipt nor possession ookfers or transfers any rights in for tay postored 2019 in For any puspose without the writter densission of transfered 2019 in For	CITY OF BEAUMONT	SALT MITIGATION WWTP LIPGRADE	ELECTRICAL - CONDUITS AND DUCTBANKS	CONDUIT DEVELOPMENT 7
	TO REPRODUCE, USE, SOUNTIFUL, UTAN	ORIGINAL DATE DESKAN DRAWN CHECKED	COP/05/18 MPJ DCL MPJ	11/25/18 4PJ 50 4PJ	A UNI MAR A UNI AU (11 JAU A



City of Beaumont Wastewater Treatment Plant Salt Mitigation Upgrade Project

Technical Justification:

PCO-46	
Design Adjustment: WML COP-051 MBR – CLAR-37	Addition of Influent Gate MOV Actuators

Reason for Design Changes:

System Required Change to Optimized Operation and Maintenance: The operation of the MBR system is a SCADA programed controlled process with all the equipment associated with system networked together. Isolation slide gates proceed each of the four MBR Trains and are used to stop flow to the train for weekly routine cleanings and when long duration maintenance events are required. The current gates are manually operated requiring City staff to man the gates whenever the electronic system requests the gates to be opened and closed, be it for normal scheduled cleanings or an emergency shutdown occurrence. The day to day on duty City Staff team is required to work offsite as well as onsite during their shifts and may not be available to operate the manual gates in timely manner.

Design and Scope Changes:

- Please provide and replace the manual slide gate actuators with MOV actuators as described below.
- All of the MBR influent gates (G-3101, G-3201, G-3301, G-3401 and future G-3501*) have been updated to operate via motorized actuators (see PI-09 and LE-09). The actuators will be powered with 120VAC from LP-MB3, as shown on E-15 and E-23. Signal will be 24V and feed back to RIO-MB (see I-16 and I-17). Existing conduits will be used to provide both power and signal wiring. Two #12 wires and a #12 ground will be added to each of the power conduits: P3191, P3291, P3391 and P3491. Future conduit P3591 will be used to power future gate G-3501. See drawings CE-02 and CE-22. Eight #14 wires will be added to each signal conduit: S3192, S3292, S3392 and S3492. Future conduit S3592 will be used to provide signal to future gate G-3501. See drawings CE-07 and CE-22.
- In addition, modifications to the actual slide gates are required. The required modifications are generally limited to stem replacement and providing supports for actuator mounting. Attached to this clarification are pertinent drawings from Hydro Gate and proposals received to date. All dimensions shall be verified and coordinated with vendor prior to construction. Final actuator data and gate drawings shall be provided to the Engineer for review and approval.
- Cost proposal shall include all necessary costs for labor and miscellaneous materials to perform this change. Contractor shall not perform any work until change has been approved by the City.

Cost Impact:

MWH and design engineer, Aqua, has reviewed the attached WML cost proposal and find it acceptable. Accordingly, MWHC recommends a contract cost increase of \$58,795.50 to be executed in a change order for the modifications requested.

CITY OF BEAUMONT WWTP SALT MITIGATION UPGRADE PROJECT

CHANGE ORDER PROPOSAL (COP) # 051 (By Contractor)

To (Engineer/CM).	From (Contractor):										
To (Engineer/Civi).	WM Lyles Co										
M w H Constructors	W.IVI. Lyles Co. Attention: Oscar Mendoza										
Altention: Charles Reynolds	Phone: 619-565-6064										
Finone: /02-49/-8024	Email: omendoza@wmlylesco.com										
Email: Charles.w.reyholds@stantec.com	Email: offendoza@winiyeseo.com										
PCO/DCM No.: CLAR-37, DCM-31											
Subject: MBR Influent Gate Actuators											
Reference Documents: Attached											
DESCRIPTION											
This COP is to install new electric actuators and stem 037.	s on gates G-3101, G-3201, G-3301 and G-3401 per CLAR										
COST ESTIMATE											
SCHEDU	JLE IMPACT										
Received by MWH Constructors (Date):											

RESPONSE	
D D	D (
Kesponse By:	Date:

Final Distribution: Oscar Mendoza, W.M. Lyles Co. Brian Knoll, Webb Associates MWH Inspector

W. M. Lyles Co. 42142 Roick Drive Temecula, CA 92590

2/4/2021

CLAR-37, DCM-31

Reference #:

Attention:

Charles W. Reynolds

City of Beaumont WWTP Salt Mitigation Upgrade Project

DESCRIPTION:

MBR Influent Gate Actuators

Total MH Total MH Cost Eq. Cost Total Cost Item: Unit Material Subcont. MBR Influent Gate Actuators 1 LS 96 \$ 7,545.59 \$ 1,005.81 25,670.36 \$ 18,024.52 \$ 52,246.28 \$ 1 1 LS 0 \$ 2 \$ \$ \$ ---\$ --3 1 LS 0 \$ \$ \$ \$ \$ -----1 LS 0 \$ \$ \$ \$ \$ -----Total Costs 96 \$ 7,545.59 \$ 1,005.81 \$ 25,670.36 \$ 18,024.52 \$ 52,246.28

Total This Change Order		\$ 58,863.58
Bond	1.0%	\$ 582.81
Mark-up - Subcontractor	5%	\$ 901.23
Mark-up - Materials	15%	\$ 3,850.55
Mark-up - Equipment	15%	\$ 150.87
Mark-up - Labor	15%	\$ 1,131.84
Subtotal		\$ 52,246.28

Comments:

City of Beaumont WWTP Salt Mitigation Upgrade Project

MBR Influent Gate Actuators

###

Description		Lab Pipe FM			Lab Pipe		Operator		Carp FM Carp				Lab			Cement Mason									
					ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT	ST	PT	DT
Installation of Influe	ent Gate Actuator	rs			32			64																	
																								<u> </u>	<u> </u>
																							<u> </u>	┝───┘	<u> </u>
					32	0	0	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Rate					Hour	s	_		-			-						-					-
Name	ST	PT		DT		ST	PT	DT		E	ktens	ion													
Lab Pipe FM	\$80.34		\$107.19	\$134.03		32	0	0		:	\$2,57	71.00													
Lab Pipe	\$77.73		\$103.27	\$128.79		64	0	0		:	\$4,97	74.59													
Operator	\$98.67		\$131.84	\$165.00		0	0	0			9	60.00													
Carp FM	\$87.32		\$117.91	\$148.48		0	0	0			9	60.00													
Carp	\$83.44		\$112.07	\$140.71		0	0	0			9	60.00													
Lab	\$74.26		\$98.07	\$121.86		0	0	0			9	60.00													
Cement Mason	\$80.42		\$105.60	\$130.78		0	0	0			9	\$0.00													
						96	0	0					-												
						Tot	al La	bor =			\$7,54	5.59													

B. Equipment

	Description	17.12	32.037	31.028	30.048	20.041	35.064	Rent
Installation of Influent Gate Actuators		32	1					
				_				
		32	1	0	0	0	0	0
Number	Description	Rate	Hours I	Extension				
17.12	Foreman Truck	\$29.60	32	\$947.20				
32.037	ReachliftXtremeXR1055	\$58.61	1	\$58.61				
31.028	Hydro Crane - 80 TonLink BeltRTC-8080 II 80 Ton	\$164.01	0	\$0.00				
30.048	Loader Backhoe 410John Deere410L	\$64.30	0	\$0.00				
20.041	ExcavatorJohn Deere350GLC	\$151.12	0	\$0.00				
35.064	LoaderJohn Deere644J	\$123.00	0	\$0.00				
17	Foreman Truck	\$29.60	0	\$0.00				
20.041	ExcavatorJohn Deere350GLC	\$151.12	0	\$0.00				
35.064	LoaderJohn Deere644J	\$123.00	0	\$0.00				
Rent	Owner Op dump trucks	\$100.00	0	\$0.00				
			33					
		Total Equipme	ent =	\$1,005.81				
C. Materia	ls							
	Quantity	Unit Price	<u> </u>	Extension				
Electric Actua	tor with Stem Replacement (HvdroGate) 4	ea \$ 5.9	956.00	\$23.824.00				

			Total	Material =	\$25,670.36
				Freight	
				Subtotal	\$25,670.36
Тах	7.750%				\$1,846.36
Electric Actuator with Stem Replacement (HydroGate)	4	ea	\$	5,956.00	\$23,824.00

D. Subcontractor

	Quantity	Unit	Price	Extension
Southern Contracting	1	LS	\$18,024.52	\$18,024.52
		- Total	Subcontract =	\$18,024,52



Southern Contracting Company P.O. Box 445 San Marcos, CA 92079-0445 Tel 760-744-0760 Fax 760-744-6475 website: www.southerncontracting.com email: info@southerncontracting.com

Change Order Request

Gate Actuators

COR Subject: COR#026 CLAR-037 MBR Influent

103801 — Wastewater Treatment Plant Salt Mitigation Upgrade

To Juan C. Ahumada W.M. Lyles 42142 Roick Drive COR Temecula, CA 92590 951-973-7393 Return To Dan Alcantar Southern Contracting Company 760-744-0760x621 619-778-0681 DAlcantar@southerncontracting.com

Contract No:55.1173COR Number:103801-COR#026COR Revision Number:0COR Date:12/17/2020Work Type:Price / Do Not
ProceedOther Reference No:CLAR-037
Days Valid:Days Valid:5

Scope Of Work / Time Extension Request

The work associated with CLAR-037 MBR Influent Gate Actuators is a change to Southern Contracting Company's scope of work in which a change in Contract Price and Time is to be considered. Accordingly, Southern Contracting Company requests a Contract Change Order in the amount of \$18,024.52

Scope of Work is as follows:

-Provide materials and labor to support electrical installation to MBR influent gates (G-3101, G-3201, G-3301, G-3401 and future G-3501*) actuators. Per the CLAR-037 MBR gates have been updated to operate via motorized actuators. Include conduit, wire, terminations and assist power up of actuators with the actuator rep. Includes Loop Drawing Modifications.

Exclusions: Set up of network, programming, actuator installation, welding, fabrication, paint, surface restoration. Overtime.

Change in time: 5 days

Southern Contracting reserves all rights to additional costs and time for changes not identified in the documents furnished, and is not responsible for additional costs or time for work which is not part of our contract scope of work, unless stipulated above. Should additional information or clarification be required, please contact me at your convenience.

Summary

Reservation of Rights

This COR does not include any amount for impacts such as interference, disruptions, rescheduling, changes in the sequence of work, delays and/or associated acceleration. We expressly reserve the right to submit our request for any of these items.

Signed By:

Dated: 12/17/2020

Daniel Alcantar PM

103801 Beaumont Chang Orders Estimator: Dan Alcantar

Job Name: 103801 Beaumont Chang Orders

Contractor:

- Estimator: Dan Alcantar
 - Notes:

Bid Date:

		Material		Labor						
Summary Description	Extended	%	Adjusted	Extended	%	Adjusted				
COR#026 CLAR-037 MBR Influent Gate Actuators	\$2,455.58	100.00%	\$2,455.58	97.87	100.00%	97.87				

Top Sheet				
Raw Cost		\$15,328.01	Sales per Month	\$0.00
Тах		\$190.31	Return per Month	\$0.00
Raw Cost with Tax		\$15,518.31	Price per Square Foot	\$0.00
Overhead		\$2,327.75	Hours per Square Foot	0.00
Profit		\$0.00	Square Feet	0.00
Total Return Amount		\$2,327.75	Job Months	0.00
Total Return %		12.91%	Hours per Week	0.00
Price		\$17,846.06	Workers per Day	0.00
Bond		\$178.46	Total Hours	97.87
Sell Price		\$18,024.52	Markup Sales Tax (Overhead)	Yes
Adjusted Sell ()		\$0.00	Markup Sales Tax (Profit)	Yes
Adjusted Sell Return	0.00 %	\$0.00	Use Bond Table	Yes

Labor	Percent	Hours	Hourly	Burd	en	
Class Description	of Total	Distributed	Rate	Rate	Percent	Labor Cost
Journeyman	100.00%	97.87	\$85.51	\$0.00	0.00%	\$8,368.72
PM	8.17%	8.00	\$99.77	\$0.00	0.00%	\$798.16
Startup Testing JW	6.13%	6.00	\$78.74	\$0.00	0.00%	\$472.44
Totals	114.30%	111.87	\$86.17	\$0.00	0.00%	\$9,639.32

Mark Ups		C	VERHEAD			PROFIT
	Total	%	Amount		%	Amount
Materials	\$2,455.58	+ 15.00%	\$2,823.91	+	0.00%	\$2,823.91
Labor	\$9,639.32	+ 15.00%	\$11,085.22	+	0.00%	\$11,085.22

12/17/2020 8:27:51 PM McCormick Systems, Inc. Page 1 of 2

Bid Summary Report

103801 Beaumont Chang Orders	Estimator: I	Dar	n Alcantar				Job #2336
Supplier Quotes	\$650.00 -	+	15.00%	\$747.50	+	0.00%	\$747.50
SubContractors	\$0.00 -	+	5.00%	\$0.00	+	0.00%	\$0.00
Direct Job Expense	\$2,583.11 -	+	15.00%	\$2,970.58	+	0.00%	\$2,970.58
Equipment Rental	\$0.00 -	+	15.00%	\$0.00	+	0.00%	\$0.00
Totals	\$15,328.01		15.00%	\$17,627.21		0.00%	\$17,627.21

Tax Report	Taxed Amount	Tax Rate %	Tax Amount
Materials	\$2,455.58	7.75%	\$190.31
Labor	\$9,639.32	0.00%	\$0.00
Supplier Quotes	\$0.00	0.00%	\$0.00
SubContractors	\$0.00	0.00%	\$0.00
Direct Job Expense	\$0.00	0.00%	\$0.00
Equipment Rental	\$0.00	0.00%	\$0.00
		Total Tax:	\$190.31

Supplier	Tax (0.0 %)	Unit Cost M	ultiplier	Amount
	No	\$650.00	1.00	\$650.00
		Тс	otal:	\$650.00
	Supplier	Supplier Tax (0.0 %) No	Supplier Tax (0.0 %) Unit Cost Me No \$650.00 To	Supplier Tax (0.0 %) Unit Cost Multiplier No \$650.00 1.00 Total: 100

Direct Job Ex	pense				
Name	Supplier	Tax (0.0 %)	Unit Cost N	lultiplier	Amount
Site Truck		No	\$26.63	97.00	\$2,583.11
			Т	otal:	\$2,583.11

Job Name: 103801 Beaumont Chang Orders Job Number: 2336

Extension Name: COR#026 CLAR-037 MBR Influent Gate Actuators

[Items and ByProducts]

Material Filter: <None> Report: COR - 2

Item #	Item Name	Quantity	Unit Price	U	Ext Price	Unit Labor	U	Ext Labor
Label Set:	Combined, Combined, Combined, Com	bined, Combine	ed		<u>\$2,455.58</u>			<u>97.87</u>
Cost Code	e: 010 - Conduit/Raceway				<u>\$1,390.54</u>			<u>38.31</u>
1,975	1-1/2 REDUCING BUSHING	8.00	\$406.00	С	\$32.48	25.12	С	2.01
2,615	1/4" SS WEDGE ANCHOR	16.00	\$230.00	С	\$36.80	20.10	С	3.22
2,616	3/8" SS WEDGE ANCHOR	22.00	\$577.50	С	\$127.05	22.61	С	4.97
2,675	1 5/8 STRUT-STAINLESS	20.00	\$1,187.50	С	\$237.50	18.84	С	3.77
2,701	3/4 GRC/PVC COATED	120.00	\$474.52	С	\$569.43	10.05	С	12.06
2,715	3/4 GRC/PVC COUP	16.00	\$493.74	С	\$79.00	11.30	С	1.81
2,730	3/4 GRC/PVC ELBOW	6.00	\$1,758.82	С	\$105.53	69.08	С	4.14
3,098	3/4 GRC/PVC C105 STRP	24.00	\$253.52	С	\$60.84	3.77	С	0.90
3,873	1/2 FLEX WP	40.00	\$118.80	С	\$47.52	7.54	С	3.01
3,903	1/2 FLEX WP CONN,IT	8.00	\$495.63	С	\$39.65	15.07	С	1.21
3,963	1/2 FLEX WP 90 CON,IT	8.00	\$684.21	С	\$54.74	15.07	С	1.21
Cost Code	e: 020 - Wire/Cable				<u>\$1,065.04</u>			<u>59.56</u>
43	14 THHN CU STRANDED	5,000.00	\$84.86	М	\$424.32	6.28	М	31.40
44	12 THHN CU STRANDED	1,200.00	\$130.18	М	\$156.21	7.54	М	9.04
4,149	14 GA TERMINATION	72.00	\$300.00	С	\$216.00	0.15	E	10.85
4,150	12 GA TERMINATION	16.00	\$110.00	С	\$17.60	0.19	Е	3.01
4,220	GROUND SCREW/WIRE	16.00	\$18.00	С	\$2.88	12.56	С	2.01
4,224	SCOTCH TAPE - 33+	1.00	\$6.16	Е	\$6.16	1.26	E	1.26
4,234	YELLOW WIRE NUT	88.00	\$24.85	С	\$21.87	1.26	С	1.11
60,050	Wire Tags Tube Style	88.00	\$250.00	С	\$220.00	1.00	С	0.88
[Items an	d ByProducts] Total:				\$2,455.58			97.87

CITY OF BEAUMONT WASTEWATER TREATMENT PLANT SALT MITIGATION UPGRADE PROJECT

CLARIFICATION 37

To (Construction Manager):	Stantec Attention: Charles Rey Phone: 702-497-8024 Email: Charles.w.reync	nolds lds@stantec.com		
From (Engineer):	AQUA Engineering Attention: Boris Petkov	ic		
	Phone: 801-683-3746			
	Email: boris.petkovic@	aquaeng.com		
Subject: MBR Influent Gate A	ctuators	Location: MBR Buildin	g	
Reference Documents: Drawin	ng Nos. MBM- 5, PI-09, I	-16, I-17, LE-09, E-15, E-2	23, CE-02	, CE-07, CE-22
	CLARIF	ICATION		
Note the following:				
All of the MBR influent gates (via motorized actuators (see PI- on E-15 and E-23. Signal will b to provide both power and signal P3191, P3291, P3391 and P349 02 and CE-22. Eight #14 wires v S3592 will be used to provide si In addition, modifications to the stem replacement and providing drawings from Hydro Gate and vendor prior to construction. Fr review and approval. *At this time, the scope of sup	G-3101, G-3201, G-3301, 09 and LE-09). The actuation of 24V and feed back to F l wiring. Two #12 wires a 1. Future conduit P3591 v will be added to each signation ignal to future gate G-350 e actual slide gates are req g supports for actuator mo proposals received to data inal actuator data and g	G-3401 and future G-3501 fors will be powered with 12 fIO-MB (see I-16 and I-17) and a #12 ground will be add vill be used to power future al conduit: S3192, S3292, S 1. See drawings CE-07 and uired. The required modific unting. Attached to this cla be attached to this cla be All dimensions shall be yo ate drawings shall be pro actuator, gate, or labor for actuator, gate, or labor for	(*) have b 20VAC fro). Existing ed to each gate G-35 3392 and d CE-22. cations are arification verified ar ovided to	een updated to operate om LP-MB3, as shown g conduits will be used of the power conduits: 501. See drawings CE- S3492. Future conduit e generally limited to are pertinent id coordinated with the Engineer for gate G-3501.
Prepared By (Name): Mark J	eppsen, SKM Engineering	5	Date	12/03/2020
Boris I	Petkovic, AQUA Engineer	ring	Date.	12:03:2020
Distributed By:			Date:	





	DO DO DO	00 DO	00 DC	DO DO	DO DO	DC 00	00	00	DO	00 DC	00	00	00	00	00 DO	DO	00	00	DO	00 DC	DO	DO DO	00	00 DO	DC DC	00	00	00	DO	00	00	DO DO	00	DO DO	DC	DO DO	DC	00	DO	DC	<u>00</u>	00	DO	DO DC	00	00 DO	DC	00 DC	DC		00 DC	0.0	D1 D1	Di		D:	Di Di	D!	D: D:	DI	TYPE
I/O LI	1:10:13 2:10.14 1:10:15	1:10:11 1:10:12	1:10:09 E:10:10	10:07 1:10:08	2:10:05	1:10:03 1:10:04	1:10:01	1:10:00	1:9:31	1:9:29	1:9:27	2:9:26	1:9:24	£:9:23	1:9:21	1:9:20	1:9:18	1:9:17	1:9:16	2:9:14	1:9:13	1:9:11	1:9:10	1:9:08	1:9:07	2:9:05	1:9:04	1:9:02	1:9:01	1:9:00	1:8:31	1:8:29 1:8:30	1:8:28	1:8:26	1:8:25	1:8:23	1:8:72	1:8:20	1:8:19	1:8:17	1:8:16	1:8:14	1:8:13	1:8:11	2:8:10	1:8:08	1:8:07	1:8:05	1:8:54	1:8:02	1:8:01	x.m.(r)	2:4:30	1:4:29	1:4:27	2:4:25	1:4:23	2:4:22	1:4:20	\$:4:19	LOOP POWERED RACKSLOT:PO
ST RIO-MB CONTINUED	: IINSTALLED SPARE :NSTALLED SPARE INSTALLED SPARE	YC-5062 SODIUM HYPO CIRCULATION PUMP 2 START COMMAND INSTALLED SPARE	ZCC-5145 CITRIC ACID VALVE 5 CLOSE COMMAND SYC-5061 SODIUM HYPO CIRCULATION PUMP 1 START COMMAND	ZCC-5144 CITRIC ACID VALVE 4 CLOSE COMMAND ZCO-5145 CITRIC ACID VALVE 5 OPEN COMMAND	ZCC-5143 CITRIC ACID VALVE 3 CLOSE COMMAND ZCO-5144 CITRIC ACID VALVE 4 OPEN COMMAND	ZCC-5142 CLTRIC ACID VALVE 2 CLOSE COMMAND ZCO-5143 CLTRIC ACID VALVE 3 OPEN COMMAND	ZCO-STATETINIC ACID VALVE TELOSE COMMAND ZCO-STATETINIC ACID VALVE Z OPEN COMMAND	ZCO-S143 CITRIC ACID VAEVE 1 OPEN COMMAND	YC-S131 CITRIC ACID PUMP 2 START COMMAND	ZCC-5055 SODIUM HYPO VALVE 5 CLOSE COMMAND YC-5121 CITRIC ACID PUMP 1 START COMMAND	ZCO-SISS SODUM HYPO VALVE & CONMIAND	ZCO-S054 SODIUM HYPO VALVE 4 OFEN COMMAND	2CC-5053 DOULIN HYPO VALVE 3 OPEN COMMAND 2CC-5053 SODIUM HYPO VALVE 3 CLOSE COMMAND	ZCC-5052 SODIUM HYPO VALVE 2 CLOSE COMMAND	2CC-S051 SODIUM HYPO VALVE 1 CLOSE COMMAND 2CC-S052 SODIUM HYPO VALVE 2 OPEN COMMAND	ZCO-SQ51 SODIUM HYPO VALVE 1 OPEN COMMAND	TC-5031 (SUDIOW HYPO PUMP ESTART COMMAND YC-5041 SODIUM HYPO PUMP 2 START COMMAND	YC-3913 MBR PROCESS ROOM NW HEATERS START COMMAND	YC.3910 MBR PROCESS ROOM SOUTH HEATERS START COMMAND	YC-3906 MBR PROCESS ROOM NORTH START COMMAND YC-3907 MBR PROCESS ROOM SW HEATERS START COMMAND	ZCO-3592 PERMEATE PUMP 5 TURBIDITY VALVE OPEN COMMAND	CLCC-3501 IMEMBRANE BASIN 5 INLET GATE OPEN COMMAND		2CC-3551B_IMEMBRANE BASIN 5 UW VALVE & CLOSE COMMAND 2CC-3571MEMBRANE BASIN 5 PERMEATE SV CLOSE COMMAND	2CO-35538 MEMBRANE BASIN 5 UW VALVE B OPEN COMMAND	ZCC-35514 MEMBRANE BASIN 5 UW VALVE A OPEN LOMMAND	2CO-3493 PERMEATE PUMP 4 TURBIDITY VALVE OPEN COMMAND	CACO-MUL IMEMBRANE BASIN 4 INLET GATE OPEN COMMAND		ZCO-3471 MEMBRANE BASIN 4 PERMEATE SV OPEN COMMAND	INSTALLO SPARE	ZCO-34538 MEMBRANE BASIN 4 UW VALVE B OPEN COMMAND ZCC-3451B MEMBRANE BASIN 4 UW VALVE B CLOSE COMMAND	ZCC-3451A MÉMBRANE BASIN 4 UW VALVE A CLOSE COMMAND	2CO-3393 [PLRMEATE PUMP 3 TURBIDIFY VALVE OPEN COMMAND 2CO-3451A [MEMBRANE BASIN 4 UW VALVE A OPEN COMMAND	(ZCC-330) MEMBRANE BASIN 3 INLET GATE CLOSE COMMAND	ZCO-3301 MEMBRANE BASIN 3 INLET GATE OPEN COMMAND	ZCO-3373 MEMBRANE BASIN 3 PERMEATE SV OPEN COMMAND	ZCO-33518 MEMBRANE BASIN 3 UW VALVE B OPEN COMMAND ZCC-33518 MEMBRANE BASIN 3 UW VALVE B CLOSE COMMAND	ZCC-3351A MEMBRANE BASIN 3 UW VALVE A CLOSE COMMAND	2CO-3253 PERMEATE PUMP 2 TURRIDITY VALVE OPEN COMMAND 2CO-33514 MEMBRANE BASIN 3 JUN VALVE A OPEN COMMAND	ZCC-3201 MEMBRANE BASIN 2 INLET GATE CLOSE COMMAND	ZCO-3201 MEMBRANE BASIN 2 INLET GATE OPEN COMMAND	ZCO-3271 MEMBRANE BASIN 2 PERMEATE SV OPEN COMMAND	2CO-32518 MEMBRANE BASIN 2 UW VALVE B OPEN COMMAND 2CC-32518 MEMBRANE BASIN 7 JPW VALVE B CLOSE COMMAND	ZCC-3251A MEMBRANE BASIN 2 UW VALVE A CLOSE COMMAND	32CO-3193 PERMEATE PUMP 1 TURBIDITY VALVE OPEN COMMAND /2CO-3251A MEMBRANE BASIN 2 LW VALVE A OPEN COMMAND	ZCC-3101 MEMBRANE BASIN 1 INLET GATE CLOSE COMMAND	ZCO-310) MEMBRANE BASIN LINLET GATE OPEN COMMAND	ZCO-3171 MEMBRANE BASIN 1 PERMEATE SV OPEN COMMAND	ZCO-33538 MEMBRANE BASIN 1 LIW VALVE B OPEN COMMAND ZCC-31518 MEMBRANE BASIN 1 UW VALVE B CLOSE COMMAND	ZCC-3151A MEMBRANE BASIN 1 UW VALVE A CLOSE COMMAND		INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSFAILED SPARE	INSTALLED SPARE	INSTALLED SPARE	DINT TAGNAME DESCRIPTION
		PI-32 NEW	PI-12 FUTURE PI-12 NEW	PI-12 NEW PI-32 FUTURE	PI-12 NEW PI-12 NEW	PI-32 NEW PI-32 NEW	PI-32 NEW 91-32 NEW	71-32 NEW	PI-32 NEW	PI-12 FUTURE PI-12 NEW	PI-12 NEW PI-12 FUTURS	PI-32 NEW	21-32 NEW 21-32 NEW	21-32 NEW	PI-12 NEW PI-12 NEW	91-12 NEW	PI-32 NEW	NFW SL 33 NEW	NÉW	NEW NEW	21-30 NEW	PI-09 NEW		PI-30 FUTURE	PI-09 FUTURF	PI-05 FUTURE	PI-30 NEW	PI-09 NEW 3		71-20 NEW		PI-09 NEW PI-09 NEW	21-09 NEW	P1-20 NEW P1-09 NEW	PI-09 NEW 3	21-09 NEW .	PI-30 NEW	PI-09 NEW PI-09 NEW	PI-09 NEW	21-30 NEW 21-09 NEW	PLOG NEW 3	PI-09 NEW	PI-30 NEW	PI-09 NEW 21-09 NEW	21-05 NEW	PI-20 NEW PI-09 NEW	21-041 NEW 3		PI-30 NEW	21-09 NEW 21-09 NEW	21-03 NEW										PRID SHEET STATUS
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<u>I/O LI</u>	Yes 225:08 No 225:09 No 25:10	Yes 2:5:06 Yes 2:5:07	Yes 12:5:04 Yes 12:5:05	No 2:5:07 No 2:5:03	No 2:5:00 No 2:5:01	No 2.4:15	Yes 2:4:13 No 2:4:14	No 24:12	Yes 2:4:10	No 2:4:08	NO 2:4:06 Yes 2:4:07	No 2:4:05	2:4:03 Yes 2:4:04	No 2:4:D2	No 2.4:00 Yes 2.4:01		Yes 2:3:14 No 2:3:15	No 2:3:13	No 2:3:12	No 2:3:10 Yes 2:2:17	No 2:3:09	No 2:3:07 Yes 2:3:08	No 2:3:06	No 2.3:04 Yes 2:3:05	No 2:3:03	Yes 2:3:02	No 2:3:00	Yas 2:2:15	No 2:2:14	Yes 2:2:12 No 2:2:13	No 2:2:11	Yes 2 2:09 No 2:2:10	Yes 2:2:08	No 2:2:06 No 2:2:07	No 2:2:05	No 2.2:03	No 2:2:02	No 2:2:00 No 2:2:01	10 (8.01)	No 2:8:14	No 2:5:13	No 2.1:11 No 2:8:12	No 2:3:10	No 2 1:08 No 2:1:09	No 2.E:07	No (2 1:05 No (2 1:06	No 2:2:04	No 2:2:02 No 2:1:03	No 2:3:01	No 2 2:00	1:30:31	1:10:29	1.10.27	1:10:26	1 10:24	1:10:22	1:20:20	1:\$0:\$9	1:20:17	1:10.16	LOOP POWERED RACKISLOT:POINT
ST R	TI-3971 AE-3972 FI-5072	TI-3918 TI-3919	TI-3936	FI-4605	AE-4602 AE-4503	FI-3893	EI-3801 FI-3861	ZI-3751	PI-3741	FIC-3592 AI-3593	F1-3522 P1-3547	ZI-3521B	AI-3493 (1-351)	FIC-3492	FI-3422 PI-3447		EI-3411 ZI-3421B	AF-3393	FIC-3397	FI-3322	ZI-3321B	El-3311	FIC-3292	FI-3272 PI-3242	ZI-32218	El 3211	FIC-3E92	91-3142	FI-3122	EI-3111 ZI-3121B	FI-2031	TI-2642 ZI-2651	PI-2641	AI-2452	AI-2451	ZI-2431B FI-2432	Al- 2411	AF-2352		AI-2332	ZI-2331B	AI-2262	AF-2252	FI-2232 At-2251	21-2231B	AF-2162 AF-2211	AF 2152	FI-2132	ZI-Z131B	AF-2111									+		TITAGNAME
IO-MB CONTINUED	IMBR ELECTRICAL ROOM YEMPERATURE AMMONIA ROOM GAS DEFECTOR SODRUM HYPD CIRCULATION PLIMPS FLOW:	MBR PROCESS ROOM NW TEMPERATURE MBR PROCESS ROOM NORTH TEMPERATURE	MRR PROCESS ROOM SE TEMPERATURE MBR PROCESS ROOM SOUTH TEMPERATURE	BRINE LINE FLOW	BRINE LINE PHELEVEL BRINE LINE CONDUCTIVITY	WAS/SCUM FLOW	MAR FEED FUMP WET WELLEVEL MAR FEED FLOW	MEMBRANES AIR BLOW OFF VALVE POSITION	INEMBRANES AIR PRESSURE	FERMEATE PUMP S FLOW	IMEMBRANE BASIN 2 SLOWER AIR FLOW	MEMBRANE BASIN S BLOWER AIR VALVE POSITION	PERMEATE PUMP 4 TURBID:TV	PERMEATE PUMP 4 FLOW	MEMBRANE BASIN 4 BLOWER AIR FLOW IMEMBRANE BASIN 4 PERMEATE PRESSURE		MEMBRANE BASIN 4 LEVEL	FERMEATE PUMP 3 TURBIDITY	INEWORNINE BASIN 3 PERMEATE PRESSURE PERMEATE PLIMP 3 FLOW	MEMBRANE BASIN 3 BLOWER AIR FLOW	MEMBRANE BASIN 3 BLOWER AIR VALVE POSITION	PERMEATE PUMP 2 TURBED TY	PERMEATE PUMP 2 FLOW	MEMBRANE BASIN 2 BLOWER AIR FLOW	MEMBRANE BASIN 2 BLOWER AIR VALVE POSITION	PERMEATE PUMP E TURBIDITY MEMBRANE DASIN 2 LEVEL	PERMEATE PUMP LFLOW	MEMBRANE BASIN I PERMEATE PRESSURE	MEMBRANE DASIN 1 BLOWER AIR FLOW	MEMBRANE BASIN I LEVEL	DRAIN PUMP STATION FLOW	AERATION BASINS AIR TEMPERATURE	AERATION BASINS AIR PRESSURE	ABRATION BASIN 4 00 2	AERATION BASIN 4 DO 1	AERATION BASIN 4 VALVE POSITION	ANOXIC BASIN 4 ORP	ARATION BASIN 3 DO 7		AFRATION BASIN 3 AIR FLOW	AERATION BASIN 3 VALVE POSITION	ANAEROBIC BASIN 2 ORP	AERATION BASIN 2 DO 2	AERATION BASIN 2 AIR FLOW AERATION BASIN 2 DO L	AERATION BASIN 2 VALVE POSITION	ANAEROBIC BASIN 1 ORP	AERATION BASIN 1 DO 2	AERATION BASIN 1 AIR FLOW	AERATION BASIN EVALVE POSITION	ANOXIC BASIN 1 ORP	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTRUCT SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	DESCRIPTION
1.1.45	P -12			PI-17 PI-12	21-17 21-37	PI-05	PI-08 PI-08	PI-11	PI-21	P1-10 P1-10	21-09 21-09	P1-09	PI-10 PI-09	PI-10	PI-09 PI-09		21-09 21-09	PI-30	PI-30	P1-09	PI-09	PI-30 PI-09	PI-10	PI-09 PI-09	P1-09	PI-30 PI-09	PI-10	PI-05	PI-09	91-09 80-19	PI-07	PI-31	PI-21	PI-07 PI-07	PI-07	PI-07 PI-07	P1-07	PI-07 PI-07		21-07 21-07	PI-07	PI-06 PI-07	PI-06	PI-06 PI-06	PI-06	PI-06 PI-06	21.06	PI-06	PI-06	PI-06											P&ID SHEET
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														ST RIO-MB CONTINUED	H-5427 (EYEWASH SHOWER FLOW ALARM HIGH	H-5412 EYEWASH SHOWER FLOW ALARM HIGH	II-4605 (BRINE UNE FLOW TOTAL PULSE II-5402 EYEWASH SHOWER FLOW ALARM HIGH	H-3893 WAS/SCUM FLOW TOTAL	U-3861 MBR FEED FLOW TOTAL PULSE	3592 PERMEATE PUMP 5 FLOW DIRECTION	II-3592 PERMEATE PUMP 5 FLOW TOTAL PULSE	3492 PERMEATE PUMP 4 FLOW DIRECTION 3521A MEMBRANE BASIN 5 BLOWER AIR VALVE REMOTE	1-3492 PERMFATE PUMP 4 FLOW TOTAL PULSE	3392 PERMEATE PUMP 3 FLOW DIRECTION 3421A MEMBRANE BASIN 4 BLOWER AIR VALVE REMOTE	H-3392 PERMEATE PUMP 3 FLOW TOTAL PULSE	3232 PERMEATE PONP 2 FLOW DIRECTION 3321A MEMBRANE BASIN 3 BLOWER AIR VALVE REMOTE	I-3292 PERMEATE PUMP 2 FLOW TOTAL PULSE	3197 PERMEATE PUMP 1 FLOW DIRECTION 3221A MEMORANE BASIN 2 BLOWER AIR VALVE REMOTE	-3192 PERMEATE PUMP 1 FLOW TOTAL PULSE	II-2764 ORAIN PUMP STATION FLOW TOTAL PULSE 31214 MEMBRANE BASIN 1 BLOWER AIR VALVE REMOTE	2651 AERATION BASINS AIR BLOW OFF VALVE REMOTE	2331A AERATION BASIN 3 VALVE REMOTE	2231A AERATION BASIN 2 VALVE REMOTE	ZI3LA AERATION BASIN 1 VALVE REMOTE	INSTALLED SPARE	INSTALLED SPARE INSTALLED SPARE	INSTALLED SPARE	-3751 MEMURANES AIR BLOW OFF VALVE POSITION COMMAND	-3523 MEMBRANE BASIN 5 BLOWER AIR VALVE POSITION COMMAND	-422: MEMBRONE ROSIN & BLOWER AIR VALVE POSITION COMMAND	-3321 MEMBRANE BASIN 2 BLOWER AIR VALVE POSITION COMMAND	-3123 MEMBRANE BASIN 1 BLOWER AIR VALVÉ POSITION COMMAND -3223 MEMBRANE BASIN 2 BLOWER AIR VALVE POSITION COMMAND	2553 AERATION BASINS AIR BLOW OFF VALVE POSITION COMMAND	-2333 AFRATION BASIN 3 VALVE POSITION COMMAND 2433 AFRATION BASIN 4 VALVE POSITION COMMAND	2233 AERATION BASIN 2 VALVE POSITION COMMAND	-2131 AERATION BASIN 1 VALVE POSITION COMMAND	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE		INSTALLED SPARE	INSTALLED SPARE	INSTALLED SPARE	GNAME DESCRIPTION
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		2:14:28	PAL-3007	INSTRUMENT AIR PRESSURE AS ARM LOW	PI-10A	NEW	Etherner Ethernet		(A-328) PERMEATE PL/MP 2 FAI} C-3281A PERMEATE PL/MP 2 FORWARD (COMMAND)	PI-10 NEW	Etherne	et MMA-3892 WA5/SCUM PUMP 2 MOISTURE ALARM	91-09 NEW	U X X X
Diamana	Dé	2:14:30		INSTALLED SPARE			Ethernet		C-3281B PERMEATE PLIMP 2 REVERSE COMMAND	PI-10 NEW	Etherne	et YI-3301 EXPACT FAN I TENDSE et YI-3301 EXHAUST FAN I RUNNING	NEW	⊼
	Dí	2:14:31		INSTALLED SPARE			Etherne:		I-3281 PERMEATE PUMP 2 SPEED	PI-10 NEW	Etherne	et YA-390L EXHAUST FAN LFAII	NEW	D D N D N
	DI	2:15:00	ZI-3101	MEMBRANE BASIN 1 KNLET GATE REMOTE	PI-(%	NEW	Ethernet		AH-3281 PERMEATE FOMP 2 SPEED CONTINUE	PI-10 NEW	Etherne	et YC-3901 EXHAUST FAN 1 START COMMAND et 21,3902 EXHAUST FAN 2 REMOTE	NEW NEW	
	<u>()</u>	2:15:01	210-3191	MEMBRANE BASIN 1 INLET GATE OPENED	PI-09	NEW	Ethernet		AH-3281A PERMEATE PUMP 2 FORWARD FLOW PRES ALARM HIGH	PI-10 NEW	Etherne	et YI-3902 EXHAUST FAN 2 RUNNING	NEW B	MPJ MPJ
	D:	2:15:02	ZIC-3101	MEMBRANE BASIN 1 INLET GATE CLOSED	PI-09	NEW 5	Ethernet		AH-32838 [PERMEATE PLIMP 2 REVERSE FLOW PRES ALARM HIGH	PI-10 NEW	Etherne	et YA-3902 EXHAUST FAN 2 FAIL	NEW UE	
	Di	2:15:04	210-3201	MEMBRANE BASIN 2 PILET GATE OPENED	PI-09	NEW 2	Ethernes		1-3381A PERMEATE PUMP 3 FORWARD RUN	PI-10 NEW	Etherne	et YU-3902 EXHAUST FAN 2START COMMAND et ZI-3903 EXHAUST FAN 3 REMOTE		
	DI	2:15:05	7IC-3201	MEM8RANE 8ASIN 7 WLET GATE CLOSED	PI-(29	NEW	Etherne:		1-33818 PERMEATE PUMP 3 REVERSE RUN	PI-10 NEW	Etherne	et YI-3903 EXHAUST FAN 3 RUNNING	NEW CLE	
	נם Dé	2:15:06	ZI-3301 ZIO-3301	MEMBRANE BASIN 3 INLET GATE REMOTE	PI-09	NEW SEW	Ethernet		C-3381A PERMEATE PUMP 3 FORWARD COMMAND	PI-10 NEW	Etherne	et YA-3903 EXHAUST FAN 3 FAIL		
	Dí	2:15:08	ZIC-3301	MEMBRANE BASIN 3 INLET GATE CLOSED	P1-09	NEW	Ethernet		C-3381B PERMEATE PUMP 3 REVERSE COMMAND	PI-10 NEW	Etherne	et ZI-3904 EXHAUST FAN 4 REMOTE	NEW CL @	AB AB
	Dt	2:15:09	ZI-3401	MEMBRANE BASIN 4 INLET GAFE REMOTE	PI-09		Ethernet		1-3381 PERMEATE PUMP 3 SPEED	PI-10 NEW	Etherne	et YI-3904 EXHAUST FAN 4 RUNNING	NEW BC	
	<u>ני</u>	2:15:11	ZIC-3401	MEMBRANE BASIN 4 SILET GATE CLOSED	PI-09	NEW	Ethernes		AH-3381 PERMEATE PUMP 3 MOTOR TEMP ALARM HIGH	PI-10 NEW	Etherne	et YA-3904 EXHAUST FAN 4 FAIL ei YC-3900 EXHAUST FAN 4 START COMMAND		
	Di	2:15:12	ZI-3501	MEMBRANE BASIN 5 JALET GATE REMOTE	P1-09	NEW }	Ethernet		AH-3381A PERMEATE PUMP 3 FORWARD FLOW PRES ALARM HIGH	PI-10 NEW			SS A DR	ഗ
	Dí Di	2:15:13	ZIO-3501 ZIC-3501	MEMBRANE BASIN S BILET GATE OPENED	PI-09	NEW }	Ethernet		AH-33818 PERMEATE PUMP 3 REVERSE FLOW PRES ADARM HIGH 1-3481 PERMEATE PUMP 4 REMOTE	PI-10 NEW		I/O LIST RIO-MB CONTINUED	. Harden Harden	
	DI	7:15:15	-	INSTALLED SPARE			2 Ethernet		1-3481A PERMEATE PUMP 4 FORWARD RUN	PI-10 NEW			RAN 0 0	
	<u>D1</u>	2:13:16		INSTALLED SPARE			Ethernet		1-34818 PERMEATE PUMP 4 REVERSE RUN	PI-10 NEW			L NO	<u>ן א</u> א
	Dí	2:15:18		INSTALLED SPARE			Ethernez		C-348 LA PERMEATE PUMP 4 FORWARD COMMAND	PI-10 NEW			RS	<u>ו ט א א ו</u>
	D:	2:15:19		INSTALLED SPARE			Ethernet		C-34818 PERMEATE PUMP 4 REVERSE COMMAND	PI-10 NEW			ENCE	킯토I 뚝 뚠 근 I
		2:15:20	<u>+</u>	INSTALLED SPARE	i		Ethernet		H-5461 [PERMEATE FORM? 4 SPEED CONTROL C-3481 [PERMEATE FUMP 4 SPEED CONTROL	PI-10 NEW				
	Di	2:15:22	ļ	INSTALLED SPARE			Ethernet		AH-3481 PERMEATE PUMP 4 MOTOR TEMP ALARM MIGH	PI-10 NEW			O S C S C S C S C S C S C S C S C S C S	
	Dí	2:15:23		INSTALLED SPARE			Ethernez		AH-3481A (PERMEATE PUMP 4 FORWARD FUDW PRES ALARM HIGH	PI-10 NEW			SSE	
	D:	2:15:24	•	INSTALLED SPARE			Ethernet		1-3581 PERMEATE PUMP 5 REMOTE	PI-10 FUTURE			Ser Post	Ĩ\∐ ≥ <u>'</u> ⊇
	<u>D1</u>	2:15:26		INSTALLED SPARE			Ethernet		1-3581A PERMEATE PLMP 5 FORWARD RUN	PI-10 FLITURE	_		X NO NO NO NO NO NO NO NO NO NO	
	Di	2:15:27	+	INSTALLED SPARE			Ethernes		1-35818 [PERMEATE PUMP 5 REVERSE RUN A-3581 [PERMEATE PUMP 5 FAI)	PI-10 FUTURE	TYPE	LOOP POWERED SLOT:POINT TAGNAME DESCRIPTION	P&ID SHEET STATUS	휘피 친구기
Image: Image: Orage: Orage:<	D:	2:15:29		Rio-MB 24VDC PSA ALARM			Ethernet		C-3581A PERMEATE PUMP 5 FORWARD COMMAND	14-10 ริเรียระ	Etherne	er i (27-641) INPW BOOSTER PUMP LREMOTE et i information information information information information information information information information]이 [- [-] 이
Image Image <t< td=""><td>DI</td><td>2:15:30</td><td></td><td>RIO-MB 24VDC PS8 ALARM</td><td></td><td></td><td>Ethernet</td><td></td><td>C-3581B PERMEATE PUMP 5 REVERSE COMMAND</td><td>PI-10 FUTURE</td><td>Etherne</td><td>et YA-6411 NPW BOOSTER PUMP 1 FAIL</td><td></td><td></td></t<>	DI	2:15:30		RIO-MB 24VDC PS8 ALARM			Ethernet		C-3581B PERMEATE PUMP 5 REVERSE COMMAND	PI-10 FUTURE	Etherne	et YA-6411 NPW BOOSTER PUMP 1 FAIL		
NUM NUM <td> rai</td> <td>2:15:31</td> <td>- </td> <td>ISW-MB-IO ALARM</td> <td></td> <td></td> <td>Ethernet</td> <td></td> <td>C-3581 PERMEATE PUMP 5 SPEED CONTROL</td> <td>PI-10 FUTURE</td> <td>Etherne</td> <td>et VC-6411 NPW BOOSTER PUMP L START COMMAND</td> <td>PI-OS NEW</td> <td>[IÈ ≌ Z ⊇ I</td>	rai	2:15:31	- 	ISW-MB-IO ALARM			Ethernet		C-3581 PERMEATE PUMP 5 SPEED CONTROL	PI-10 FUTURE	Etherne	et VC-6411 NPW BOOSTER PUMP L START COMMAND	PI-OS NEW	[IÈ ≌ Z ⊇ I
No. No. <td>Ethernet</td> <td></td> <td>ZI-2171</td> <td>RECYCLE PLIMP & REMOTE</td> <td>PI-56</td> <td>NEW</td> <td>Ethernet</td> <td></td> <td>AH-3581 PERMEATE PUMP 5 MOTOR TEMP ALARM HIGH</td> <td>PI-JO FLITURF</td> <td>Etherne</td> <td>etSS-6411RPW BOOSTER PUMP LSPEED COMMAND</td> <td>PI-05 NEW US</td> <td>리이 느 뜯 뛰</td>	Ethernet		ZI-2171	RECYCLE PLIMP & REMOTE	PI-56	NEW	Ethernet		AH-3581 PERMEATE PUMP 5 MOTOR TEMP ALARM HIGH	PI-JO FLITURF	Etherne	etSS-6411RPW BOOSTER PUMP LSPEED COMMAND	PI-05 NEW US	리이 느 뜯 뛰
NO. N	Ethernet		YI-2171	RECYCLE PUMP 1 RUN	PI-06	NEW	Ethernet Ethernez		AH-3581A PERMEATE PUMP 5 FORWARD FLOW PRES ALARM HIGH	PI-10 FUTURE	Étherne	et 27-6412 NPW BOOSTER PUMP 2 REMOTE	14-05 NEW 225	2 5 5 5 1
	Ethernet		YC-2171	RECYCLE PUMP 1 START COMMAND	PI-06	NEW	Ethernet		1-3811 MBR F2ED PUMP 1 REMOTE	P1-08 NEW	Etherne	et YE-6412 NPW BOOSTER PUMP 2 RUN		1 F K
	Etherner		51-2371	RECYCLE PUMP 1 SPEED	PI-06	NEW	Ethernet		1-38LI MBS FEED PUMP 1 RUN	PI-08 NEW	Etherne	et CVC-6012 NPW BOOSTER PUMP 2 START COMMAND	PI-05 NEW OOD	
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	Ethernet		MMA-2371	RECYCLE PUMP \$ MOISTURE ALARM	PI-(16	NEW	Ethernet		II-3811 MBR FEED PLIMP 1 SPEED	PI-08 NEW	Etherne	er ;SC-6412 _:NPW BOOSTEB PUMP 2 SPEED COMMAND	NEW	
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NUM Construction Construc	Ethernet		YA-7271	RECYCLE PUMP 2 RUN RECYCLE PUMP 2 FAIL		NEW	Ethernet		AH-SKEL MOR FEED POMP I MOTOR TEXPERATORS ALARM HIGH AL-3816 MBR FEED POMP 1 SEAS WATER FLOW ALARM HOW	PI-08 NEW				
No. N	Ethernet		YC-2271	RECYCLE PUMP 2 START COMMAND	PI-06	NEW	Ethernet		U-3821 MBR FEED PUMP 2 REMOTE	PI-08 NEW	1		L S L	9 U
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Normal	Ethernet		ZI-2371 VI-2371	RECYCLE PUMP 3 REMOTE RECYCLE PUMP 3 REMOTE	PI-07	NEW NEW	Ethernet		AH-3821 MBS FEED PUMP 2 SPEED COMMAND AH-3821 MBS FEED PUMP 2 MOTOR TEMPESATURE ALARM HIGH	PI-08 NEW			IGIN TA J	
Inter [1/2] <th< td=""><td>Ethernet</td><td></td><td>YA-2371</td><td>RECYCLE PUMP 3 FAIL</td><td>PI-07</td><td>NEW</td><td>Ethernet</td><td></td><td>AL 3825 MBR FEED PUMP 2 SEAL WATER FLOW ALARM LOW</td><td>PI-08 NEW</td><td></td><td></td><td></td><td></td></th<>	Ethernet		YA-2371	RECYCLE PUMP 3 FAIL	PI-07	NEW	Ethernet		AL 3825 MBR FEED PUMP 2 SEAL WATER FLOW ALARM LOW	PI-08 NEW				
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District District <th< td=""><td>Ethernet</td><td></td><td>YA-2471</td><td>RECYCLE PUMP 4 FAIL</td><td>PI-07</td><td>NEW</td><td>Etherner</td><td></td><td>AL-3836 MBR FEED PUMP 3 SEAL WATER FLOW ALARM LOW</td><td>PI-08 NEW</td><td></td><td></td><td></td><td></td></th<>	Ethernet		YA-2471	RECYCLE PUMP 4 FAIL	PI-07	NEW	Etherner		AL-3836 MBR FEED PUMP 3 SEAL WATER FLOW ALARM LOW	PI-08 NEW				
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tetterest 0.4/10 VASB.	Ethernet		MMA-2761	DRAIN PLIMP 1 MOISTLIRE ALARM	PI-07	NEW	Ethernez		A-3851 MB8 FEED PUMP 5 FAIL	PI-08 NEW			nd S 1) 6 2 1) 6	(9510 K
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International premierate product produc	Ethernet		TAH-3181	PERMEATE PUMP 1 MOTOR TEMP ALARM HIGH	PI-10	NEW	Etherner Etherne		1-3892 [WAS/SCIIM PUMP 2 8UNNING (4-3892] WAS/SCIIM PUMP 2 840	PI-09 NEW				
Ethermet Zi-3281 PERMEATE PUMP 2 REMOTE P1-10 NEW Y1-3281A PERMEATE PUMP 2 FORWARD RUN P1-10 NEW Y1-3281B PERMEATE PUMP 2 REVERSE RUN P1-10 NEW V1-3281B PERMEATE PUMP 2 REVERSE RUN P1-10 NEW I/O LIST RIO-MB CONTINUED I/O LIST RIO-MB CONTINUED I/O LIST RIO-MB CONTINUED	Ethernet		PAH-3181A	EXPERIMENT & POWERT FORWARD FLOW PRES ALARM FRGH PERMEATE PUMP 1 REVERSE FLOW PRES ALARM HIGH I PERMEATE PUMP 1 REVERSE FLOW PRES ALARM HIGH	PI-10 PI-10	NEW	Ethernet		C-3892 WAS/SCUM PUMP 2 START COMMAND	PI-09 NEW			0 1/2 1	SHEET 53 OF 172
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PANEL CB TYPE	LP-MB2 BOLT-ON	VOLTAGE: MOUNTING	120/208 SURFACE	MAIN CB BUS A I C	125 AMP 22KA	BUS AMPS BKR AIC	125 AMP 22KA	
CRCUIT DESCRIPTION	6KR	CIRCUIT	PHASE A	PHASE B	PHASE C	CIRCUIT	BKR	CIRCUIT DESCRIPTION
	30-1		630			2	20/1	AB 384 SOUTH LIGHTS 7 RECEPTACLES
AB 182 SOUTH LIGHTS / RECEPTACLES	20/1	3		600 600		4	20/1	AB 384 SOUTH LIGHTS / RECEPTACLES
AB 182 NORTH LIGHTS / RECEPTACLES	20/1	5			600 \$00	6	15/1	AIT-2362 ANOXC / AEROBIC 3 ORP
AIT-2162 ANOXIC / AEROBIC 1 ORP	15/1	7	300 720			8	15/1	FV-2331 AERATION TANK 3 PLOW VALVE
FV-2131 AERATION TANK 1 FLOW VALVE	15/1	§		720 300		10	15/1	FIT-2332 AERATION TANK 3 AIR FLOW METER
FIT-2132 AERATION TANK 1 AIR FLOW METER	15/1	18			100 100	12	15/1	AIT-2351 AERATION BASIN 3 DO PROBE 1
AIT-2151 AERATION BASIN 1 DO PROBE 1	15/1	13	100 100			14	15/1	AIT 2352 AERATION BASIN 3 DO PROBE 2
AIT-2152 AERATION BASIN 1 DO PROBE 2	15/1	15		100 100		16	15/1	AIT-2362 ANOXC / AEROBIC 4 ORP
AIT-2282 ANOXIC / AEROBIC 2 ORP	15/1				100 720	18	\$5/1	FV-2331 AERATION TANK 4 FLOW VALVE
EV-2231 AERATION TANK 2 FLOW VALVE	15/1	19	720 100			20	15/1	FIT-2332 AERATION TANK 4 AIR FLOW METER
FIT-2232 AERATION TANK 2 AIR FLOW METER	15/1	21		00* 00*		22	15/1	AIT-2351 AERATION BASIN 4 DO PROBE 1
AD-2251 AERATION BASIN 2 DO PROBE 1	15/1	23			100	24	£5/1	AIT-2352 AERATION BASIN 4 DO PROBE 2
AIT-2252 AERATION BASIN 2 DO PROBE 2	15/1	25	\$30 249			26	20/1	DRAIN PUMP STATION LIGHTS / RECEPTACLES
FIT-3693 WAS/SCUM FLOW METER	15/1	27		\$00 \$00		28	20/1	FIT-5072 SODIUM HYPO CIRC PUNP FLOW METER
PLC-RO	20/1	29			500 450		20/1	P-85900A/B RO SYSTEM HYPO PUMPS
RIO-RO1	20/1	31	500 \$00			32	20/1	WIT-5391 ANTISCALANT TOTE SCALE
RIO-R02	20/1	33		500 450		34	20/1	P-85300A/B RO ANTISCALANT PUMPS
RIO-R03	20/1	35			500 100	36	20/1	AIT-4004 PERMEATE SPLITTER BOX (H ANALYZER
RIO-804	29/1	37	500			38	20/1	SPARE
RIO-ROS	20/1	39		500			2011	
RIO-RO6 (FUTURE)	20/1	41			500	4()		
AIT-4802 BRIME LINE pH	15/1	43	100		2500	42	50/2	PORTABLE OFFICE BUILDING
AIT-4603 BRINE LINE CONDUCTIVITY	15/1	45	2500	100		64		
ME-4604 BRINE LINE SAMPLER	15/1	47		300	500	46	20/1	DA-5231 CHEMICAL LEAK DE IECTOR
FIT-4605 BRINE LINE FLOW METER	15/1	49	300		450	48	20/1	P-85100A, P-85100B AMMUNIUM SULFATE PUMPS
BRINE VAULT LIGHTS/RECEPTACLE	20/1	51	200	540		50	20/1	ATF-30094, ATT-30095 RC INFLUENT pH & NH4 ANALZRS
FIT-2764 DRAIN PUMP FLOW	20/1	53		450	100	52	20/1	P-85600A, P-85500B SULFURIC ACID PUMPS
	20/1	55			636	54	20/1	ICHEMICAL TANK AREA 1 LIGHTS (4) & OUTLETS (2)
	20/1	57					20/1	
	20/1	59			5252555245893	58	20/1	
	20/1	51				60	20/1	
	20/1	63		4889494949494949		62	20/1	
	20/1	65				64	20/1	
		67	2790			56	20/1	
2-MB3	70/3	59		2500		68	20/1	
		71			2300	70	20/1	
CONNECTED VA PER PHASE			10589 0	8760 C	10256.0	72 NOTES	20/1	I
CONNECTED AMPS PER PHASE	~		89.1	73.0	65.5			
25% OF CONTINUOUS & LIGHTING LOAD (VA)			2672 3	2193 0	2584.0			
CODE VA PER PHASE			13361.3	10950.0	12820.0			
CODE AMPS PER PHASE			t113	91.2	३ ८७ १			

PANEL: CR TVPF	LP-MB3 BOLT-ON	VOLTAGE: MOUNTENG	120/208 SURFACE	MAIN CB	70 AMF	BUS AMPS	125 AMP 22KA			NN C	
CIRCUIT DESCRIPTION	BKR	CIRCUIT	PHASE A	PHASE B	PHASE C	CIRCUIT	BKR	CIRCUIT DESCRIPTION		DRA	
TL3122 MBR 1 AIR ELOW METER	15/1		200	100		2	\$5/1	EV-3221 MBR 2 AIR VALVE	ui	GINA	2 2 2 2 2
	15/1	5		100	200	4	15/1	FIT-3222 MBR 2 A/R FLOW METER	чн АН	ORIG	
V-3171 MBR 1 PERMEATE INLET VALVE	15/1	7	200		200	<u> </u>	¢5/1	FV-3251A-B MER 2 AIR PURGE VALVES		ш	1/20 1/19
	15/1	5	200	201	.	8	¢5/1	FV-3271 MBR 2 PERMEATE INLET VALVE	TIFU TIFU	DAT	4/2 ¹ 6/2 ¹
11-3192 MBR 1 PERMEATE FLOW METER	15/1			200	100	10	15/1	FV-3291 MBR 2 PERMEATE OUTLET VALV	E OL	ġ	0 0 0 0 7 7 8
AIT-3393 MBR 1/2 TURBIDITY ANALYZER	15/1	13	100		100	12	\$5/1	FIT-3292 MBR 2 PERMEATE FLOW METER	GHTS 2018	2	
V-3021 MBR 3 AIR VALVE	15/1	15	200	200		} ≥	15/1	FV-3421 MBR 4 AIR VALVE	HTED		
TT-3322 MBR 3 AIR FLOW METER	15/1	17		100	100	18	‡5/1	FIT-3422 MBR 4 A/R FLOW METER	PERS A		, z
V-3351A/S MER 3 AIR PURGE VALVES	15/1	19	200		200	18	15/1	FV-3451A/B MBR 4 AIR PURGE VALVES	NSFE		
V-3371 MBR 3 PERMEATE INLET VALVE	15/1	21	202	200		20	<u>‡5/1</u>	FV-3471 MBR 4 PERMEATE INLET VALVE			<u>₹</u> 5
V-3391 MBR 3 PERMEATE OUTLET VALVE	15/1	23		200	200	22	15/1	FV-3491 MBR 4 PERMEATE OUTLET VALV	EE 081		U D E
TT 3392 MBR 3 PERMEATE FLOW METER	15/1	25	100		103	24	‡5/1	FIT-3492 MBR 4 PERMEATE FLOW METER		片	
V-3521 MBR 5 AIR VALVE	15/1	27	100	200		26	1 5/1	AIT-3393 MBR 3/4 TURB/DITY ANALYZER	NON NO	ð	
17-3522 MBR 5 AIR FLOW METER	15/1	29		200	100	28	15/1	FV-3621 MBR 6 AIR VALVE	N OF	I₹	
V-3551A/8 MBR 5 AIR PURGE VALVES	15/1	31	200		100	30	15/1	FIT-3622 MBR 6 AIR FLOW METER	POSS SSIO	F	
V-3571 MBR 5 PERMEATE INLET VALVE	15/1	33	200	200		32	15/1	FV-3651A/8 MBR 6 AIR PORGE VALVES	NOR NOR	Ш	
V-3591 MBR 5 PERMEATE OUTLET VALVE	15/1	35		200	200	34	15/1	FV-3871 MBR 6 PERMEATE INLET VALVE	EIPT I		ĮĮ
TT-3592 MBR 5 PERMEATE FLOW METER	15/1	37	100		200	36	\$5/1	FV-3691 MBR 6 PERMEATE OUTLET VALV	RECI VRITT	Ō	
AIT.3593 MBR 5/2 TURRIDITY ANALYZER	15/1	39	100	100		38	15/1	FIT-2892 MBR 6 PERMEATE FLOW METER	HH H	≥	بر ق
ATT-JODO MER TES ANALYZER	15/1	41		100	100	40	\$5/1	FIT-3861 MBR FEED FLOW METER		ы С	Ēΰ
	15/1	43	500		500	42	15/1	G-3201 MBR 3 INLET GATE	ATHCE VIEW		∣ੁਙੁੁਲ
C-3301 MBR 3 INLET GATE	15/1	45	500	500		β <u>44</u>	15/1	G-34-D1 MBR 4 INLET GATE	3 gin		15
3-350: MBR 5:NLET GATE (FUTURE) {	15/1	47				46	15/1		URP C		μĔ
	15/1	49				48	15/1		ANY F		l S 団
	15/1	51				50	15/1		FOR		
	15/1	53			1	52	15/1		TRAN		
CONNECTRO VA PER PHASE	[[33/10/1	2800/0	24/10 /1	54 NOTES	£5/£				Ű
CONNECTED AMPS PER PHASE		(27.5	23.3	29.0	3			IG AN		<u>Z</u>
5% OF CONTINUOUS & LIGHTING LOAD (VA)	,		825.0	700.0	500.0	-)			SONT		~ ~
CODE VA PER PHASE		<u> </u>	4125.0	3500.0	3000.0	4			AGINE ATA (ш
		(1120.0	30.5	25.0	1			E E		
							10		IS DRAWING IS PROPERTY IS DRAWING IS PROPERTY		
									533 W 2600 S, Suite 25 Bountiful, Utah 84010 Phone: (801) 677–0011 www.skmeng.com	ALBERT A.	WEBB CIVIL ENGINEERS A S S O C I A T E S FXX (951) 588-1070 A S S O C I A T E S FXX (951) 788-1256
								DR	0 1/2 1 AWING IS TO SCALE	SHE	ET 131 OF

LP-MB2 LOAD CALCULATIONS





	POWER CONDUIT									
	1	CONDUIT	SIZE	CONDUCTORS	SERVICE	FROM	TO	COMBINED IN	DUCTBANKS	NOTES
		P 1501	1"	12#10 W/#10 GND	120VAC	LP-SH	: L3T-3501	P1501+	303,1,303,2	İ
		P1502	11	2#10 W/#10 GND	120VAC	LP-SH	LIT-1502	P1501 F	303.1, 303.2	
	-	P1514	1"	2#10 W/#10 GND	120VAC	LP-SH	: LCP-1511	<u> </u>	303.1 303.3	<u> </u>
		P1531	1,5"	3#4 W/#8 GND	480VAC	MCC-EQ MCC-EQ	: P-1531		303,1,303,2	
		P1552	1.5	3#4 W/#8 GND	480VAC	MCC-EQ MCC-EQ	P-1532 P-1533		303.1, 303.2	
	F	91541 01414	1"	2#32 W/#12 GND	120VAC	LP-5H	53T-1541	P 1501 +	303.1.303.2	
	-	P1611A	1-	3#32 W/#12 GND	450VAC	LCP-ME-1611	ME-1611	4	101, 104, 304.3	
	- [-	P1621	1"	2#32 W/#12 GND	320VAC	LCP-ME-1011	SV-1621	<u>;</u> ;		
		21711		3#8 W/#10 GND	460VAC	DP-HW2	LCP-ME-1711	·jj	101, ±05	
	-	P1711A	1"	3#32 W/#12 GND	460VAC	ECP-ME-1711	ME-1711	: ·		
	Ŀ	P1732	1'	2#32 W/#12 GND	120VAC	LCP-ME-1711	P-1732			İ
	F	P1811	11	3#8 W/#10 GND	480VAC	MCC-HW1	DS-P-1811		101. 101 2	
	E	P1821	1'	3#8 W/#10 GND	4BOVAC	MCC-HW2	DS-P-1825		101, 101 2	
		P1821A	2	MFR CASLE	480VAC	OS-P-1821	P-1821	<u> </u>	101 101 2	
	-	P\$901	1	3#10 W/#12 GND	490VAC	DP-HW1	H-1901		101. 1012	
		P1902 P1903		[3#30 W/#12 GND [3#12 W/#12 GND	4BOVAC 4BOVAC	DP-HW2	E H- 1902 H- 1903	÷i		
		P1904	17	3#\$2 W/#12 GND	460VAC	CF-HW2	M-\$304			
		P2111	1" 3/4"	2#\$2 W/#12 GND 2#\$2 W/#12 GND	320VAC	LP-MB2	EV-2131	P0251+, P2111+	202 204	<u>i</u> 1
	Ľ	£2132	3/4"	2#12 W/#12 GND	120VAC	LP-M82	FIT-2132	P2131+, P2151+, P2352+	203, 205	
		P2151 P2152	3/4"	2#32 W/#12 GND	20VAC 220VAC	LP-MB2	: A/T-2151 : A/T-2152	P2151+, P2152+	203 205	
		P2171	1.25	VFD CABLE 3#8 W/#10 GND	460VAC	MCC-MB1	LCP-P-2171		202, 204	
	-	P2231	3/4"	2#32 W/#12 GND	320VAC	LP-MB2	FV-2231	P0251+, P2111+ P2231+, P2251+, P2252+	202. 204	
		P2232	3/4"	2#32 W/#12 GND	120VAC	I.P-MB2	FIT-2232	P2231+ P2251+ P2252+	203, 205	
		P2252	3/4"	2#32 W/#12 GND 2#32 W/#12 GND	\$20VAC \$20VAC	LP-MB2 LP-MB2	A11-2251	P2251+, P2252+	203. 205	
	F	₽2271	1.25'	VFD CABLE 3#8 W/#10 GND	450VAC	MCC-M82	1CP-P-2271	20053, D0144,	202. 204	
	~~	PZ331	3/4"	2#12 W#12 GND 2#52 W/#12 GND	120VAC 120VAC	LP-MB2	FV-2331	P2331+, P2351+, P2352+	202 204 203. 205	
	-	P2332	3/4"	2#32 W/#12 GND	120VAC	LP-MB2	FiT-2332	: P2331+ P2351+, P2352+;	203 205	
	-	P2352	3/4"	2#12 W/#12 GND	120VAC	LP-MB2	Ait-2351	P2352+	203. 205	
		P23/1	1.25	VPD CABLE 3#8 W/#10 GND	450VAC	MCC-MB1	ECP-P-2371		202. 204	
	-	P2431	3/4"	2#32 W/#12 GND	120VAC 120VAC	i,P-M82	: A-1-291 : : FV-2431	P2431+, P2451+, P2452+	202 204 205	
	[P2432	3/4"	2#12 W/#12 GND	\$20VAC	LP-MB2	F3T-2432	P2431+, P2451+, P2452+	203.205	
		P2452	3/4"	2#32 W/#12 GND	320VAC	LP-M82	A:1-2401 A:T-2452	P2452+	203.205	
		92471	1.25	VFD CABLE 3#8 W/#10 GND	480VAC	MCC-MB2	LCP P-2471	ļ	202, 204	
	-	P2611	2-4"	2 SETS OF 3-350MCM W/#1 GND	450VAC	SWGR-ME	LCP-ME-2001			
		92621 02614	2.4"	2 SETS OF 3-350MCM W/#1 GND	480VAC	SWGR-MB SIMOR MB	LCP-ME-2627			STYR LIP AND CAP
		P2651	17	2#12 W/412 GND	400VAC 320VAC	LP-MB2	PV-2651			
	-	P2761	1.25	3#8 W/#10 GND	450VAC 480VAC	MCC-MB1	: LCP-2761		202. 204. 204. 1	
	Ľ	P2762	1.25"	3#8 W/#10 GND	480VAC	MCC-M82	LCP-2761	11	202. 204. 204. 1	
	⊢	P2762A	2"	MFR CABLE 2#32 W/#12 GND	480VAC COMAC	LCP-2761 LP-MB2	P-2762		202 204 204 1	
		P3000	1'	2#12 W#12 GND	120VAC	LP-MB2	AiT-3000			
	-	P3001 P3001A	<u>1</u>	13#\$2 W/#12 GND 13#\$2 W/#12 GND	460VAC 450VAC	DP-1/18 DS-CP-3001	CP-3001			1
		P3604	1'	2#32 W/#12 GND	120VAC	LP-MB1	CP-3034, SV-3084			ROUTE POWER THROUGH & 20A, 120VAC DISCONNECT SWITCH
~~~~~		P3121	1"	\$0#12 W/\$#12 GND	\$20VAC	LP-MB0	FV-3121, FIJ-3122, FV-3151A, FV-33538, FV-3171			
	-	F3181	1.25"	3#4 W/#5 GND 2#14	450VAC	MCC-MS1	P-3181	:		
		P3191 P3192	1	10#12 W/5#12 GND	120VAC	LP-MB3	SV-3192, 3292, 3392, 3492, 3592			•
4	-	P3193	1"	6#12 W/3#12 GND	\$20VAC	LP-MB3	AIT-3193, 3393, 3593	······		
		P3221	17	10#12 W/5#12 GND	120VAC	LP-MB3	FV-3261, F13-3266, FV-3271A, FV-3251B, FV-3271			
	, E	P3281	1.25	3#4 W/#8 GND: 2#14	460VAC	MCC-M82	P-3281			Į
	-	10401	·		720040		FV-3321, FIT-3322, FV-3351A,			<u>.</u>
(CONDUIT )		P3321	1 74-	10#12 W/5#12 GND	120VAC	LP-MB3 McCLMR4	FV-3351B, FV-3371	- <u> </u>		
		P3391	1	6#12 W/3#12 GNO	\$20VAC	LP-MB3	FV-3911. FIT-3392, G-3301			
4		P3421	17	+0#12 W/5#12 GND	\$20VAC	LP-MB0	FV-3421, FIT-3422, FV-3451A, FV-34518, FV-3471			
(CONDUIT }		P3481	1.25"	3#4 W/#8 GND: 2#14	450VAC	MCC-M82	P-3481	<u>.</u>		
UPDATED		913491	1	[0#12 WU3#12 (SNC)	SAAC	LP-MB3	: FV-3911, FII-3492, G-3401 FV-3521, FIT-3522, FV-3551A.	<u>.</u>		
$\wedge$		P3521	17	WIRE FUTURE	\$20VAC	LP-MB0	PV-05518. PV-3571			STUS UP AND CAP
4		P3581 P3591	1.25	WIRE FOTURE	120VAC	i,P-MB3	FV-3083 FV-3911, FIT-3592, G-3501			STUB UP AND CAP
		P3701	24"	2 SETS OF 3-4/0 W/#2 GND	460VAC	SWGR-MB	LCP-ME-3701	1		
	F	P3711 P3721	2-4"	2 SETS OF 34/0 W/#2 GND	480VAC 480VAC	SWGR-MB	LCP-ME-3713			
		P3731	24"	WIRE FUTURE	480VAC	SWGR-MB	LCP-ME-3731	ļ		STUS UP AND CAP
	-	P3751 P3891	2"	3#3 W/#8 GND 2#\$4	450VAC	MCC-MB1	- P-3011	·		
		P3821	2' ~	3#3 W/#6 GND, 2#24	480VAC	MCC-M82	P-3821	: 		
		£3631 ₽3841	2	3#3 W/#6 GND: 2#14	450VAC	MCC-M82	P-3641	<u>+</u>		
		P3851	2'	WIRE FUTURE	490VAC	MCC-MB1	: P-3851 (FUTURE)	:		STUB OUT AND CAP CONDUIT NEAR FUTURE PUMP LOCATION
	-	P3891	<u>t</u>	VFD CABLE 3#10 W/#10 GND	480VAC	MCC-M81	LCP-3891	<u> </u>		THRU 480VAC CABLE TRAY
		P3891A £39803	1.5"	MER CABLE	450VAC	LCP-3891 MCC-M82	: P-3591 : I CP-3901	:		
	-	P3892A	1.5"	MFR CASLE	480VAC	LCP-3891	P-3692	İİ		
	ļ.	P3893	3/4"	2#12 W/#12 GND TC	120VAC 480VAC	LP-M82 MCC-MR1	: <u>\$?)\-3893</u> : H-2001			1948U 120VAC CABLE TRAY
	-	P 3902	3/4"	3#12 W/#12 GND TC	480VAC	MCC-M82	H-3902	<u>.</u>		THERE 480VAC CABLE TRAY
		P3903	3/4"	3#12 W/#12 GND TC	480VAC	MCC-MB1 MCC-MB2	H-3903			THRU 480VAC CABLE TRAY
	E	P3905	3/4"	2#\$2 W/#12 GND TC	\$20VAC	LP-MB1	H-3905			
	~	93906 93907	3/4"	2#12 W/#12 GND	120VAC 120VAC	LP-MB1	H-3906 H-3907			TYPE 120VAC CABLE TRAY
	E	P3908	3/4"	2#32 W/#12 GND TC	20VAC	H-3907	H-3908	C3907+		THRU 120VAC CABLE TRAY
		P3909	3/4"	2#32 W/#12 GND TC	320VAC	H-3907	H-3909	C3907+		THRU 120VAC CABLE TRAY

NOTES:

- CONDUITS THAT ARE COMBINED BETWEEN PULL POINTS ARE DENOTED WITH A + (PLUS) SYMBOL. SEE THE COMBINED CONDUITS SCHEDULE ON SHEET CE-11. CONDUITS THAT HAVE BEEN COMBINED SHALL BE LABELED WITH MULTIPLE CONDUIT TAGS, ONE FOR EACH CONDUIT THAT HAS BEEN COMBINED.

ITS TO REPRODUCE, USE, 18 BOUNTIEU, UTAH	ORIGINAL           NO.         DATE         DECKED           AB         04/24/20         MPJ         CHECKED           AB         04/24/20         MPJ         DCL         MPJ           I         01/18/19         MPJ         C         06/24/19         MPJ         C         06/24/19         MPJ         I         0CL         MPJ         C         06/24/19         MPJ         O         O         MPJ         C         0         O         O         D         MPJ         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O <th colspa="2" o<="" th="" th<=""></th>	
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533 W 2600 S, Suite 25 Bountiful, Utah 84010 Phone: (801) 677–0011 www.skmeng.com	A L B E R T A. CIVIL ENGINEERS CIVIL ENGINEERS STREET RESENCE A S S O C I A T E S EN (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 FX (951) 788-1070 F	
0 1/2 1 DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE	SHEET 144 OF 172	

THE CONDUIT DEVELOPMENT AND SCHEDULE DOES NOT SHOW CONDUIT AND CONDUCTORS FOR LIGHTS, RECEPTACLES AND DATA JACKS. IT ALSO DOESN'T SHOW CONDUIT AND CONDUCTORS FOR THE MBR BUILDING'S HVAC AND APPLIANCES FOR THE OFFICE, BREAK ROOM, CONTROL ROOM, LAB, MECHANICAL ROOM AND RESTROMS. THE CONTRACTOR IS RESPONSIBLE TO INCLUDE THESE CONDUITS AND CONDUCTORS IN THEIR WORK AND IN THEIR SUBMITTED CONDUIT ROUTING PLAN.

	CONDUIT	SIZE	CONDUCTORS	SERVICE	FROM	SIGNAL CONDUIT	COMBINED	DUCTBANKS	NOTES
	S0400	1.5"		SIGNAL	CTC-MB	EXISTING GATE CONTROLLER		205.3	
	5:124	<u>'</u>	2 TSP	SIGNAL	CP-ME-1122	EDIT-1124		303, 104, 104.5	
	\$1124A \$11248	3/4"	MFR CABLE	SIGNAL SIGNAL	LDFT-1124 LDFT-1124	LE-1124A LE-1124B			
	S1161	1.5"	6 TSP	SIGNA(.	EXISTING LCP-1161	RIQ-HW		F91, 104, 104 4	
	\$1301	1'	2 TSP	INTRINSICALLY SAFE	LCP-1311	JB-1301			
	S\$351 S\$332	<u>1"</u> 	2 PAIR TWISH	SIGNAL SIGNAL	RIO-HW	LCP-1311 FIT-1332	S1332-	101.2	l
	\$1332A	1"	MFR CABLE	SIGNAL	FIT-1332	FE-1332	91313-	101 2	
	S1342A	1"	MFR CABLE	SIGNAL	FIT-1342	FE-1342	G1332	101. 2	<u> </u>
	S1412 S1412A	<u>1"</u>	2 PAIR TW/SH #18	SIGNAL	CP-ME-1413 LIT-1412	LIT-1412 LE-1412A	S1741-	101, 105	
	\$14128	1'	1 TSP #18 2 PAIS TIMSH #15	SIGNAL	LI7-1412 CR-ME-1423	LE-14128	S1741-	101 105	
	S1422A	1"	3 TSP #18	SIGNAL	LIT-1422	LE-1422A			
	S14228 S1432	<u>1"</u>	1 TSP #18 2 PAIR TWISH #18	SIGNAL SIGNAL	LIT-1422 CP-ME-1433	LE-1422B L:T-1432	S174‡-	101, 105	STUS UP CONDUIT AND CAF
	S\$501	1"	1 TSP	SIGNA:	RKO-SK	LIT-1501	S150f+	303.1 303.2	
	\$1502	··· i'	1 TSP	SIGNAL	RIÓ-SH	L:1-1502	\$150}-	303.1. 303.2	
	S1502A S3541	<u>1"</u> 	MFR CA8LE 2 PAIR TW/SH	SIGNAL SIGNAL	LIT-1502 RIO-SR	LE-1502 FiT-1541	S150‡-	303.1, 303.2	
	\$1541A	1"	MFR CABLE	SIGNAL	FIT-1541	FE-1541			
	S\$741	1"	3 TSP	SIGNAL	RIO-HW	ATT-1741	S174‡-	101. 105	
	S\$801 S\$822	<u>1"</u> 1"	1 TSP 2 PAIR TWISH	SIGNAL SIGNAL	RIO-HW RIO-HW	LiT-1801 FIT-1822	S1801- S1801-	101, 101 2	
	S1822A	ie	MFR CABLE	SIGNAL	FIT-1822	FE-1822			
	\$1921 \$2171	1"	2 TSP, CATE SH	SIGNAL SIGNAL	RIO-HW RIO-MB	AIT-2111	S2111-	202, 204	
	S21:1A	1"	MFR CABLE	SIGNAL	AIT-2111 RIO-MR	AE-2111 EV-2111	821311 82151. 60150.	203 205	
	\$2132	3/4"	1 TSP	SIGNAL	RO-MB	F!T-2132	S2131+. S2151+. S2152+	203. 205	
	\$2151 \$2152	3/4"	1 ISP, CATE SH 1 TSP	SIGNAL SIGNAL	R:O-MB R:O-MB	AIT-2153 AIT-2152	\$2151+, \$2152- \$2152+	203, 205 203, 205	L
	\$2162	1"	MFR CABLE	SIGNAL	AIT-2111	AE-2162	27415-		
	\$2211A	1"	MFR CABLE	SIGNAL SIGNA)	AIT-2211	AG-2211	62/11-	202. 204	
	<u>\$2231</u> 52232	3/4"	2 TSP, 2#14	SIGNAL	RIO-MB BIO-MB	FV-2231 Fit-2232	82231+ 82251+ 82252+ 82231+ 82251+ 82252+	203, 205	
	S2251	3/4"	1 TSP	SIGNAL	RIO-MB	AIT-225?	S2251+. S2262-	203 205	
	\$2252 \$2262		MFR CABLE	SIGNAL	AIT-2211	AFT-2252 AE-2262	52252-	203, 205	
	S2311	1"	2 139 NED CAR E	SIGNAL	RIG-MB	Al'(-2311	82311-	202.204	
	\$2331	3/4"	2 TSP, 2#14	SIGNA?	RIO-MB	EV-2331	S2331+, S2351+ S2352+	203, 205	
	\$2332 \$2351	3/4"	1 TSP 1 TSP	SIGNAL SIGNAL	R10-MB 1910-MB	F!T-2332 AIT-2351	\$2331+, \$2351+, \$2352+ \$2351+, \$2352-	203, 205	
	S2352	3/4"	\$ TSP	SIGNAL	RIO-NIB	AIT-2352	S2352-	203. 205	
	52362	1"	2 TSP	SIGNAL	RIO-MB	AE-2362 AET-2411	\$231 !+	202, 204	
	S2491A S2431	1" 3/4"	MFR CA816 2 TSP: 2#14	SIGNAL	AIF-2411 RIO-MB	AE-2411 FV-2431	S2431+, S2453+, S2452+	203 205	
	S2432	3/4"	1 TSP	SIGNAS	RIO-MB	FiT-2432	S2431+, S2451+, S2452+	203, 205	
	52451 \$2452	3/4"	1 TSP 1 TSP	SIGNAL	RIO-MB RIO-M8	AIT-2451 AIT-2452	\$2451+, \$2452+ \$2452-	203, 205 203, 205	
	S2462 S2641	1"	MFR CA8E	SIGNAL SIGNA	AIT-2411 POMB	AE-2462 RIT-2641 DT-2642			
	\$2651	1	2 TS₽	SIGNAL	RIO-MB	PV-2651			
	S2764 S2764A	1"	2 PAIR TWISH MFR CABLE	SIGNAL SIGNAL	RIO-MB FIT-2764	FIT-2764 FE-2764		202, 204. 204 1	
	\$3000 \$30000	1"	1 TSP TC, CATE SH TC	SIGNAL	RIO-MB	AFT-3000			
۰ ·····	S3191	1"	5 TSP	SIGNAL	R:0-MB	LT-3111 EV-3121. FIT-3122. PIT-3142			
	S3192 S3193	<u>1"</u> 1"	2 PAIR TWISH, 8#14 5 TSP, 2 CA76 SH	SIGNA(. SIGNAL	RiQ-MB RiQ-M8	FIT-3192, G-3101 ArT-3193, ArT-3393, ArT-3593			
	D2744		5 TPD	CICNIA/	BIONE	LT-3211, FV-3221.			
6 CONDUIT UPDATED	- S3292	1"	2 PAIR 7W/SH 8#14	SIGNAL	RIO-MB	FIT-3292, G-3201			
	\$3351	1"	5 792	SIGNAL	RtC-MB	LT-3311, FV-3321, F07-3322, P07-3342			
6 CONDUIT UPDATED	S3392	1"	2 PAIR TWISH 8#14	SIGNAL	RIO-MB	FIT-3392. G-3301			
	\$3411	<u>. 1</u> "	5 TSP	SIGNAL	RIO-\/16	51-3411, FV-9421. FIT-3422, PIT-3442			
6 (CONDUIT UPDATED)	\$3492	1'	2 PAIR 11W/SH. 8#14	SIGNAL	RIO-MB	FIT-3492. G-3401 LT-3511. FV-3521.			
	S35\$1	1"		SIGNAL	RIO-MB	FIT-3522 PIT-3542			
6 CONDON OF DATED	\$3392 \$3741	1	2 TSP	SIGNAL	RIO-MB	PIT-3741, TPT-3742			
	\$3751 \$3801	1"	2 TSP 9 TSP	SIGNAL SIGNA	RIO-MB RIO-MB	EV-3751 LCP-3811			
	\$3801A	1"	MFR CABLE	SIGNAL	LCP-3811	LT-360 :			
	S3861A	1"	Z PAIR SWIGH MFR CABLE	SIGNAL	FE-3861	FiT-3861			
	\$3893	3/4"	2 PAIR TW/SH TC 1 TSP TC	SIGNAL SIGNAI	R:D-MB RIO-M8	FIT-3893 Tf-3916			THRU SIGNAL CABLE TRAY
	S3917	3/4"	5 TSP TC	SIGNAL	RO-MB	TT-3917			THRU SIGNAL CABLE TRAY
	53978 53919	1"	3 TSP	SIGNAL	RIO-MB RIO-MB	11-3918 TT-3919			
	\$3971 83972	3/4"	1 TSP 5 TSP TC	SIGNAL	RIO-M8 RIO-ME	TF-3971			THRU SIGNAL CARLE TRAY
	S3972A	1"	MFR CABLE	SIGNAL	AIT-3972	AE-3972			
	54001 S4001A	3/4"	MFR CABLE	SIGNAL	LCP-4001	LGP-4001 LT-4001			
	S4003	1"	1 TSP 1 TSP TC CAT SH TC	SIGNAL	RIO-M5 210-80	TT-4003 ATT-4004			
	S4004A	3/4"	MFR CABLE	SIGNA1	AIT-4004	AE-4004			
	\$4602 \$4602A	1" 3/4"	3 ISP, CATE SH MPR CABLE	SIGNAL SIGNAL	RIO-M8 AIT-4602	AIT-4602. AFT-4603. FIT-4603 AE-4502		203, 205	
	S4602	3/4"	MFR CABLE	SIGNAL	AIT-4693	AE-4603		202 205	
	\$4605	<u>1"</u>	MFR CABLE	SIGNAL	FIT-4604	IVE-4604 ₽E-4504		203.205	
	\$5002 \$5002A	1"	1 TSP 1 TSP	SIGNAL SIGNAL	PLC-RO LI-5002	LI-5002 RIO-MB	S5002+, S5002A+ S5002A+		
	950028	3/4"	1 TSP	SIGNAL	LIT-5002	LI-5002			
	\$5072 \$5301	3/4"	2 HAIK WWSH 70 1 TSP TC	SIGNAL	RID-MB PLC-RO	FIT-5072 WIT-5301			THRU SIGNAL CABLE TRAY
	S5301A	1"	MFR CABLE	SIGNA),	WIT-5301	WE-5301	[		]

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NOTES:

3HTS TO REPRODUCE, USE, 2018 BOUNTIFUL, UTAH	ORIGINAL           NO.         DATE         DESIGN         CHECKED           AB         04/24/20         MPJ         DCL         MPJ           3         06/24/19         MPJ         DCL         MPJ           4         10/11/19         MPJ         DCL         MPJ           5         12/02/19         MPJ         DCL         MPJ           6         10/26/20         MPJ         DCL         MPJ
TRANSMITTED IN CONFIDENCE NEITHER RECEIPT NOR POSSESSION CONFERS OR TRANSFERS ANY RI REIN FOR ANY PURPOSE WITHOUT THE WRITTEN PERMISSION OF SKM ENGINEERING. © COPYRIGHTED	CITY OF BEAUMONT SALT MITIGATION WWTP UPGRADE ELECTRICAL - CONDUITS AND DUCTBANKS CONDUIT SCHEDULE 7
THIS DRAWING IS PROPERTY OF SKM ENGINEERING AND IS OR DISCLOSE, IN WHOLE OR IN PART, DATA CONTAINED HE	E N G I N E E R I N G BHONE (801) 239-0153
533 W 2600 S, Suite 25 Bountiful, Utah 84010 Phone: (801) 677–0011 www.skmeng.com	A L B E R T A. CIVIL ENGINEERS CIVIL ENGINEERS CIVIL ENGINEERS A S S O C I A T E S ENGINEERING CONSULTANTS ENGINEERING CONSULTANTS
0 1/2 1 DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE	SHEET 149 OF 172

CONDUITS THAT ARE COMBINED BETWEEN PULL POINTS ARE DENOTED WITH A + (PLUS) SYMBOL. SEE THE COMBINED CONDUITS SCHEDULE ON SHEET CE-11. CONDUITS THAT HAVE BEEN COMBINED SHALL BE LABELED WITH MULTIPLE CONDUIT TAGS, ONE FOR EACH CONDUIT THAT HAS BEEN COMBINED.

THE CONDUIT DEVELOPMENT AND SCHEDULE DOES NOT SHOW CONDUIT AND CONDUCTORS FOR LIGHTS, RECEPTACLES AND DATA JACKS. IT ALSO DOESN'T SHOW CONDUIT AND CONDUCTORS FOR THE MBR BUILDING'S HVAC AND APPLIANCES FOR THE OFFICE, BREAK ROOM, CONTROL ROOM, LAB, MECHANICAL ROOM AND RESTROOMS. THE CONTRACTOR IS RESPONSIBLE TO INCLUDE THESE CONDUITS AND CONDUCTORS IN THEIR WORK AND IN THEIR SUBMITTED CONDUIT ROUTING PLAN.





1. CASTING TOLERANCES APPLY ON ALL UNMACHINED SURFACES.

7/8ø x 2 1/4

1/4 SLIDE

L 3/8 x 2 UHMW

3/8ø x 1 1/4 HEX HEAD BOLTS W/FLAT

POLY BAR

WASHERS

ANCHOR BOLT

FRAME EXTRUSION

(WHEN REQUIRED)

J–SEAL

2. SEE MANUAL G-1900 FOR INSTALLATION AND ADJUSTMENT

3. ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED.

4. MATERIAL SPECIFICATIONS AND COATINGS PER DRAWING:

5	GATE HEAD DESIGN	SEATING:	2.875'
	MEASURED FROM GATE Q	UNSEATING:	2.875'
	OPERATING DESIGN HEAD	SEATING:	2.875'
	MEASURED FROM GATE 🤤	UNSEATING:	2.875'

10,>	PLEASE	CONFI	RM THE	GATE	TRAVEL,	THE	TOP	0F	CON	CRETE	AND	INVERT
	ELEVATIO	DNS, AS	S WELL	AS T	he inver	T CL	EARAN	ICE	and	CONF	IGURA	TION.

R		48" X WALL MOUNTED QUANTITY: 4	66" FABRICATED , NON-RISING S MATERIAL: AL-6	) ALUMINUM \ Tem, Self-Co 061	WEIR GATE DNTAINED, TOPSEAL SCALE: 1'=3/5"
E		THIS IS A PROPRI DATA AND INFOR DISSEMINATED C EXPRESS WRITTE	ETARY DESIGN OF RMATION RELATIN PR REPRODUCED IN IN CONSENT OF HY	HYDRO GATE G THERETO IS V WHOLE OR IN DRO GATE CO	CORP. THE DESIGN, NOT TO BE USED, I PART WITHOUT THE RP.
		DRAWN BY	CUSTOMER NO.	006	SALES
			33.11/3-4000		2434433
		CHECKED BY	DATE DRAWING N		457 10
			01/5/10	2434	455-10


Hydro Gate Sales 12000 E. 47th Ave., Suite 200 Denver, CO 80239

phone: 303-288-7873 fax: 303-287-8531 hydrogate.com

# QUOTE #2009072

Date: November 18, 2020

## **Project Name: MBR Train Influent Gate – New Electric Actuators**

#### Representative: Kelly Brians – Southwest Valve & Equipment – 714-832-1090

We are pleased to offer for your consideration the following equipment for this project.

Quantities and descriptions listed in this quotation were based on the following: Emailed information. Quoted based on existing Hydro Gate Order # 2434453

Please note these prices are based on receiving the entire order. Adjustments to item quantities or specifications may alter the pricing.

- Prices quoted are firm for acceptance within 30 days of the bid date and apply to this quotation only, subject to attached Terms & Conditions. Prices do not include sales or use tax. If this proposal is not accepted within 30 days after bid, Hydro Gate reserves the right to re-quote and price escalation may be necessary.

The equipment we have quoted meets or exceeds the specifications with the following clarifications:

#### NOTE: We have received no addendums for this project.

- 1. If awarded to Hydro Gate, we will need to be supplied with a full set of plans and specifications.
- 2. Prices do not include third party inspection services of gates and equipment unless specifically required by specifications that supplier (Hydro Gate) be responsible for cost of these inspections.
- 3. Hydro Gate will provide digital copies of all relevant Operation and Maintenance manuals. Contact Hydro Gate should custom manuals be required.
- 4. Please note these prices are based on receiving the entire order. Adjustments to item quantities or specifications may alter the pricing.
- 5. Prices do not include taxes.
- 6. Non-machined, submerged ferrous surfaces to be blast cleaned and painted with 2 shop coats of manufacturer's standard epoxy paint.
- 7. This quotation reflects our policy of sourcing raw materials in the most cost effective manner. Any requirement for specific U.S content shall require a revised quotation.
- 8. Prices do not include installation of gates and equipment or lubricants for stems, gear units and bearings.



- 9. Mastic, grout, gaskets and epoxy capsules for anchors not by Hydro Gate.
- 10. Upon placing an order with Hydro Gate, buyer must ensure that the approval of equipment be provided to Hydro Gate within 30 days of receiving submittals. Failure to do so may result in an increase of price in relation to market fluctuation of raw material costs.
- 11. Please address all purchase orders to Henry Pratt Company, LLC 12000 East 47th Ave., Suite 200, Denver, CO 80239.
- 12. Hydro Gate Standard Terms and Conditions of Sale apply to this quotation and can be found at <u>www.hydrogate.com/support</u>.
- Field service not included. If field service is needed, a charge of \$1,500.00 will be made for each trip, plus \$1,250.00 for each day including any holidays, weekends or other layovers made at the convenience of the contractor or engineer.
- 14. The equipment quoted for this project includes electric motor actuators. Actuator controls cannot be adjusted or preset at the factory. Complete instructions for proper setting of components are included with the unit when shipped. This quotation does not include any field service to adjust electric actuators and lubricate equipment unless specifically required by project specification. If a factory technician is preferred, field service rates that are in effect at time service is required shall apply. Contact Hydro Gate with a purchase order if this service is required.
- 15. Electric Actuator has been quoted to be 120v, 1-phase, 60 hertz power. 120v was requested via preliminary note from the customer. If different power requirements are needed, please contact Hydro Gate for pricing and lead time adjustment.
- 16. Gates were originally installed by Hydro Gate via Order # 2434453. Parts and Electric Actuators are based off the information in the original Hydro Gate submittal drawings and the customer provided drawings.
- 17. New replacement stems are included in this quote. New replacement stems will be required to provide additional stem length so that the stem can feed into the new electric actuator for each gate.

<b>HYDRO</b>	GATE
· MULLER bard	

#### Quotation Number: 2009072

Item Number	:	01
Designation	:	Electric Actuator to replace existing Manual Lift for Gates
-		G-3101, G-3201, G3301, & G-3401
Qty	:	1 Lot to Include
-		4 – Replacement Electric Actuator for Gates
		4 – Replacement adaptor plate to match existing flange
Shipment	:	10-12 weeks after drawing and credit approval.
Lot Price	:	<u>\$</u> 4,486.00 Each Gate

Item Number	:	02
Designation	:	Stem Replacement
Qty	:	1 Lot to Include
		4 – 90" long 2.0" diameter type 304 stainless steel non-rising stems
		4 – Replacement Stem Block for each stem
Shipment	:	10-12 weeks after drawing and credit approval.
Lot Price	:	<u>\$</u> 1,470.00 Each Gate

# Total price for items listed above: \$ 5,956.00 each gate, \$23,824.00 total for 4 gates

The delivery lead times are based on stock inventory at the time of quotation. Stock quantities and quoted delivery times must be re-evaluated and verified at time of order and/or time of release to manufacturing.

Please see notes 1 through 17 in this quotation.



## Quotation No.: 2009072

## FREIGHT:

F.O.B. shipping point, full freight allowed. Seller will pay freight charges for standard shipments. Additional freight cost incurred to comply with buyer's special requirements will be added to the invoice.

#### FIELD SERVICE:

Hydro Gate will make every effort to provide a representative to meet your schedule, but due to conflicting requirements a request should be made no later than fourteen (14) days before a representative is required. Where previous commitments have been made, some flexibility in your schedule should be anticipated. All field service trips will require a written confirmation prior to arriving at the site.

#### **DRAWINGS**:

Submittal drawing lead time is 3 to 5 weeks after receipt of your written purchase order.

Thank you for your interest in our product. If any questions arise regarding this quotation, please contact Hydro Gate.



# Erik Mustain Hydro Gate® Application Engineer

12000 E. 47th Avenue - Suite 200 Denver, Colorado 80239 office: 303.374.2169 | muellerwp.com