LAGUNA MADRE WATER DISTRICT PORT ISABEL WASTEWATER TREATMENT FACILITY MODIFICATIONS BID NO.: WW-16-09-02

ADDENDUM NO. 1

BID OPENING TIME: November 30, 2016 @ 2:00 PM (CDT)

LOCATION: Laguna Madre Water District

105 Port Road

Port Isabel, TX 78578

The following additions, deletions, modifications, or clarifications, along with all attachments shall be made to the appropriate sections of the Specifications and Contract Documents and shall become a part of the Contract Documents. **Bidders shall acknowledge receipt of this addendum in the space provided on the Bid Form.**

CLARIFICATIONS

- A1-1. The sign-in sheet and minutes for the Pre-bid Conference are attached.
- A1-2. Question was asked concerning the paragraph listed in Document 00520, Paragraph 4.04 Special Damages. The damages would be related to fines, penalties, and other costs imposed by TCEQ or EPA associated with not meeting effluent quality requirements due to actions of the Contractor.
- A1-3. Question emailed concerning Specification Section 11322C-2.03.C.2.c that outlines a hinged enclosure for the local NEMA 7 emergency stop pushbutton asking that the need for the hinged door be confirmed. The hinged door is required due to the pushbutton being with a classified area.
- A1-4. Question emailed concerning Specification Section 11322C-2.03.D that states the screen operation will start/stop based upon the influent meter asking that this requirement be confirmed. Confirmed.
- A1-5. Question emailed concerning Specification 11333A-2.03.E requirement for a junction box to be mounted on the equipment. A factory prewired terminal box for connection of incoming power and control signals is to be provided by the manufacturer so electrical subcontractors are not wiring inside the equipment.
- A1-6. Question emailed concerning Specification Section 16422-2.07.F.1 that requires a conformal coating for all motor starter/overload electronic panels. Conformal coating is required for all motor starter/overload panels including those inside conditioned areas.



- A1-7. Question emailed concerning Specification Section 17050-1.08.4.a that requires control panels to be designed for 9 40.6 degrees Celsius including those in conditioned area be confirmed. Confirmed. Requirement applies to all control panels.
- A1-8. Question emailed concerning Specification Section 17710-2.04.C.4-5 that requirement for fusing for all PLC discrete inputs, outputs and analog signals be confirmed. Confirmed.
- A1-9. Question emailed concerning Specification Section 17720-2.01.A.1.b asking for the specific CPU part number for the 1768 CompacLogix series PLC. Carollo does not specify exact CPU part numbers. CPU part number should be based on internal vendor calculations for memory requirements.
- A1-10. Question emailed concerning Specification Section 17733-2.01.B, C asking if a licensed copy of the development software is to be provided with each Vendor supplied control system containing a PLC and LOI. Not required. Software is to be provided by the Instrumentation and Controls Subcontractor.
- A1-11. Question emailed concerning Specification Section 17733-2.04.A that outlines a N-TRON NT24K-AC1 managed Ethernet switch asking if it required in the vendor supplied control panels. The managed Ethernet switch is not required for vendor supplied control panels.
- A1-12. Question emailed concerning Drawings 04N02 and 04N03 requesting that the low flow switches for the solenoid valves be provided by the installing contractor. These shall be provided by the equipment vendor as shown since the vendor knows the flow range and recommended set points.
- A1-13. Question emailed concerning Specification Section 1705-1.09.C asking if each equipment supplier is required to attend a pre-submittal meeting on-site. Attendance is required at pre-submittal meeting.
- A1-14. Question emailed concerning requirement for each equipment supplier to attend a programming coordination meeting at the Systems Integrator's location. Attendance is required at programming coordination meeting.
- A1-15. Question emailed concerning requirement if owner/engineer will require each vendor to host a witnessed factory acceptance test for the vendor control panels. Witnessed FAT is required for VCPs.

VOLUME 1-3 – CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS

- A1-16. Replace all three (3) volumes of the specifications with the volumes on the attached thumb drive. The only change is replacement of the engineering seals.
- A1-17. DOCUMENT 00100 ADVERTISEMENT FOR BIDS
 - A. In the paragraph "Advertisement For Bids," change the date for the bid opening from "November 30th" to "December 6th."



B. Replace the first sentence in the first paragraph under "Bidding Documents" with the following:

"The Issuing Office for the Bidding Documents is: Laguna Madre Water District, 105 Port Road, Port Isabel, TX 78578; Charles Ortiz 956+943-2626, Ex 130."

A1-18. DOCUMENT 00200 - INSTRUCTIONS TO BIDDERS

A. Article 12 - Subcontractors, Suppliers, and Others, Paragraph 12.03, Revise the paragraph to read as follows:

"If the Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, or other individual entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a substitute, Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award."

A1-19. DOCUMENT 00410 - BID FORM

A. Article 5 - Basis of Bid

Replace the Basis of Bid Form in its entirety with the following:

ITEM				UNIT	
NO.	ITEM DESCRIPTION	QTY	UNIT	PRICE	TOTAL
	Mobilization, for not more than				
	the percent as specified in				
1	Section 0101	1	LS		\$
	Sheeting, shoring, and bracing,				
	or equivalent method for the				
	protection of life and limb in				
2	trenches and open excavations	1	LS		\$-
	Treatment facilities and				
	associated improvements not				
3	identified under other items	1	LS		\$
	Horizontal Recessed Impeller				
4	Centrifugal Pump	2	LS		\$ 49,670
5	Forced Vortex Grit Removal Unit	2	LS		\$135,000
	Commissioning and start-up as				
6	specified in Section 01756	1	LS		\$
7	Aeration Basin Grit Removal	1000	CY		\$
8	Liquid Sludge Hauling	2,428,000	Gallons		\$
9	Building Permit Allowance	1	LS		\$ 66,000
TOTAL BI	ID:				\$

TOTAL BID IN WORDS:

A1-20. DOCUMENT 00436 - LIST OF EQUIPMENT MANUFACTURERS

A. Under Article 2 - Submittal Requirements, Paragraph 2.04, In the second line of the table in the right column, Delete the word "Hidrostal."

A1-21, SECTION 01140 - WORK RESTRICTIONS

A. At the end of Paragraph 1.04 Shutdown and Construction Constraints, add the following at the end of Subparagraph 1.04.E:

"F. Plant Chemical Deliveries:

1. Contractor shall assist with the ton cylinder chemical deliveries by transporting the cylinders from the plant entry gate area to the Chemical Storage area whenever Contractor construction activities or equipment preclude entrance of the chemical delivery trucks onto the plant site.

G. Sludge Hauling:

- Contractor shall arrange for tanker hauling of liquid mixed liquor from the Aeration Basins during the emptying and cleaning operations. Liquid mixed liquor shall be hauled to other District treatment plants as directed by the plant staff.
- Contractor shall arrange for weekly tanker hauling of liquid mixed liquor during the period of rehabilitation of the Aeration Basins. Liquid mixed liquor shall be hauled to other District treatment plants as directed by the plant staff.
- Contractor shall provide and maintain the submersible pump, hose and other accessories to pump the mixed liquor from the basins into the tanker trucks.

H. Grit Handling:

 Contractor shall remove the grit from the aeration basins as part of the cleaning operations. Grit may be deposited in the plant drying beds for dewatering. Periodically, the Contractor shall transport the grit from the drying beds into the District's monofil adjacent to the Port Isabel WWTF.

A1-22. SECTION 01201 - PAYMENT PROCEDURES

A. Delete Paragraph 1.08 Payment For Demobilization in its entirety.

A1-23. SECTION 01460 - CONTRACTOR QUALITY CONTROL PLAN

A. Under Paragraph 1.07, Subparagraph B, delete sub-subparagraphs 1 and 2.



A1-24. SECTION 11312C - HORIZONTAL RECESSED IMPELLER CENTRIFUGAL PUMPS

- A. In Paragraph 1.01, add the following at the end of the paragraph:
 - "C. Cost of Pre-negotiated Items:
 - The CONTRACTOR is very strongly cautioned to carefully review the applicable pre-negotiated proposal because the pre-negotiated proposal does not include all the items included in the Specifications and Drawings. In addition to the cost indicated for the applicable bid item on the bidding form, the CONTRACTOR shall include in his bid the costs for the following:
 - a. All items not specifically mentioned in the scope of supply by the prenegotiated proposal but required per the Specifications and Drawings and required to complete the installation to provide an operational system.
 - b. All other items indicated in the pre-negotiated proposal to be provided by others, by customer, by OWNER, or any other similar designation.
 - c. All applicable freight and taxes, unless specifically included in the prenegotiated proposal.
 - d. All labor, materials, and all other associated costs not included in the pre-negotiated proposal but required per the Specifications and Drawings and required to complete the installation to provide an operational system."
- B. In Paragraph 2.01 Manufacturers, Change Subparagraph A to read as follows:
 - "A. Pump: The following and no exceptions:"
- C. In Paragraph 2.01 Manufacturers, Add the following:
 - "B. The Supplier Scope of Delivery is attached as an appendix to this section."
- D. Following Paragraph 3.03, add the following and attach "Appendix to Section 11312C."
 - "3.04 Appendix Supplier Scope of Delivery."

A1-25. SECTION 11323 - FORCED VORTEX GRIT REMOVAL UNIT

A. In Paragraph 1.01, add the following at the end of the paragraph:

"C. Cost of Pre-negotiated Items:

- 1. The CONTRACTOR is very strongly cautioned to carefully review the applicable pre-negotiated proposal because the pre-negotiated proposal does not include all the items included in the Specifications and Drawings. In addition to the cost indicated for the applicable bid item on the bidding form, the CONTRACTOR shall include in his bid the costs for the following:
 - a. All items not specifically mentioned in the scope of supply by the prenegotiated proposal but required per the Specifications and Drawings and required to complete the installation to provide an operational system.
 - b. All other items indicated in the pre-negotiated proposal to be provided by others, by customer, by OWNER, or any other similar designation.
 - c. All applicable freight and taxes, unless specifically included in the prenegotiated proposal.
 - d. All labor, materials, and all other associated costs not included in the pre-negotiated proposal but required per the Specifications and Drawings and required to complete the installation to provide an operational system."
- B. In Paragraph 2.01 Manufacturers, Change Subparagraph A.1 to read as follows:
 - "1. Manufacturers: The following and no exceptions:"
- C. In Paragraph 2.01 Manufacturers, Add the following:

"3.05 Appendix - Supplier Scope of Delivery."

- "B. The Supplier Scope of Delivery is attached as an appendix to this section."
- D. Following Paragraph 3.04, add the following and attach "Appendix to Section 11323."

A1-26. DOCUMENT 11324 - FREE VORTEX GRIT WASHER / DEWATERING UNIT

- A. In Paragraph 2.09.K., REPLACE "1 1/4-inch" with "1 1/2-inch".
- B. At the end of Paragraph 2.10.F., ADD the following sentence in its entirety:
 - "Organic removal and water content performance requirements will not be imposed for the unit if operated continuously."
- C. DELETE Paragraph 2.12.E. in its entirety.
- D. At the end of Paragraph 2.14.C.1., ADD the following in its entirety:
 - "if required by the manufacturer".



- E. DELETE Paragraph 3.06.E. in its entirety and replace with the following:
 - "E. The equipment, after its fabrication, shall undergo a passivation (pickling) process in accordance with ASTM A380 standard to ensure maximum resistance to corrosion. If equipment is cleaned with a pickling bath, the equipment must be washed with a high-pressure wash of cold water to remove any remaining surface debris and promote the formation of an oxidized passive layer that is critical to the long life of the stainless steel. Submergence insures complete coverage. Glass bead blasting are specifically not acceptable due to their inability to provide complete and uniform corrosion protection."
- F. In Sub-paragraph 3.07.C.1., in the first sentence, ADD "(Inlet distributor)" after the words "through the Grit Washing Unit tulip...".
- G. In Sub-paragraph 3.07.C.5., in the third sentence, ADD "or stainless steel" after the words "The ball valve shall have a PVC...".
- H. In Sub-paragraph 3.07.D.2., ADD "minimum" after the words "The grit washer shall be designed for a...".
- I. In Sub-paragraph 3.07.E.2., in the second sentence, ADD the word "minimum" after the words "The auger shall have a...".
- J. DELETE Sub-paragraph 3.07.E.4. in its entirety and replace with the following:
 - "4. The screw shall be shafted and shall be made of stainless steel or screw shall be shaftless and made of Brinell hardened alloy steel. The lower end of the shafted screw shall be supported by a chilled cast-iron stub bearing with a maintenance-free ceramic sleeve. The shaftless screw shall bear on a replaceable UHMW Polymer liner in the bottom of the conveyor trough. Wear strips are not acceptable."
- K. At the end of Sub-sub-paragraph 3.07.F.1.f., ADD the word "minimum".

A1-27. SECTION 11332C - ROTARY DRUM SCREEN

- A. In Paragraph 1.01, Summary, Subparagraph D, add reference to Section 01612 Seismic Design Criteria.
- B. In Paragraph 1.08, Maintenance, Subparagraph A.4.d, add the following:
 - "1) If spare LOI is not provided, vendor must supply a copy of the LOI graphic software program so it can be loaded onto a replacement LOI in the future."
- C. In Paragraph 1.08, Maintenance, Delete Sub-paragraph A.4.e in its entirety.
- D. In Paragraph 2.02, Materials, Subparagraph G.1, Change the chute material from "304 stainless steel" to "316 stainless steel."

A1-28. SECTION 11333A - SCREENING WASHER COMPACTOR

- A. In Paragraph 1.05, Design Requirements, Subparagraph A.1.d, Delete the phrase "to a belt conveyor."
- B. In Paragraph 1.10 Extra Materials, Subparagraph A.2.d add the following:
 - "1) If spare LOI is not provided, vendor must supply a copy of the LOI graphic software program so it can be loaded onto a replacement LOI in the future."
- C. In Paragraph 1.10 Extra Materials, Delete Sub-paragraph A.2.e in its entirety.
- D. In Paragraph 2.02 Materials, Subparagraph C.1, Change the material from "Schedule 40, Type 304 stainless steel pipe" to "14 gauge thickness, Type 316 stainless steel pipe."
- E. In Paragraph 2.02 Materials, Subparagraph E.3, Change the material thickness from "0.32 inches" to 0.25 inches."
- F. In Paragraph 2.03 Control System, Sub-paragraph B.4.b.2), Revise the sentence to read as follows:
 - "2) Variable frequency drive 6 pulse; or soft-start if a VFD is not needed."

A1-29. DOCUMENT 11371 – DIRECT DRIVE HIGH-SPEED TURBO BLOWER SYSTEM

- A. DELETE Sub-sub-paragraph 1.04.C.3.f. in its entirety.
- B. In Paragraph 1.05.G., second sentence, REPLACE "four software licenses" with "one software license".
- C. DELETE Sub-sub-paragraph 1.06.B.5.a. in its entirety and replace with the following:
 - "a. See specification 17720."
- D. DELETE Sub-sub-paragraph 1.06.B.5.b. in its entirety.
- E. DELETE Sub-sub-paragraph 1.06.B.5.c. in its entirety.
- F. DELETE Sub-sub-paragraph 1.06.B.5.d. in its entirety.
- G. DELETE Sub-sub-paragraph 1.06.B.5.e. in its entirety.
- H. DELETE Sub-sub-paragraph 1.06.B.5.f. in its entirety.
- I. In Paragraph 2.04.A. Table 2, REPLACE Line Item 1 Guaranteed Wire (KW) "126.1" with "137.7".
- J. In Paragraph 2.04.A. Table 2, REPLACE Line Item 2 Guaranteed Wire (KW) "108.9" with "119.0".



- K. In Paragraph 2.04.A. Table 2, REPLACE Line Item 3 Guaranteed Wire (KW) "73.8" with "80.2".
- L. In Paragraph 2.04.A. Table 2, REPLACE Line Item 4 Guaranteed Wire (KW) "90.5" with "98.2".
- M. In Paragraph 2.04.A. Table 2, REPLACE Line Item 5 Guaranteed Wire (KW) "62.7" with "68.0".

A1-30. DOCUMENT 11378A – MEMBRANE DISK FINE BUBBLE DIFFUSED AERATION SYSTEM

- A. DELETE Sub-sub-paragraph 1.04.B.1.b. in its entirety and replace with the following:
 - "b. The aeration system shall be compatible with 30 percent hydrochloric acid and 30 percent formic acid."
- B. In the table in Sub-paragraph 1.04.C.1., REPLACE Basin 1 SOTR, lbs/day "2,640" with "9,968".
- C. In the table in Sub-paragraph 1.04.C.1., REPLACE Basin 2 SOTR, lbs/day "1,705" with "6,440".
- D. In the table in Sub-paragraph 1.04.C.1., REPLACE Basin 3 SOTR, lbs/day "1,534" with "5,796".
- E. In the table in Sub-paragraph 1.04.C.1., REPLACE Basin 4 SOTR, lbs/day "1,534" with "5.796".

A1-31. SECTION 16050 - COMMON WORK RESULTS FOR ELECTRICAL

A. In Paragraph 1.08, Subparagraph C, Modify the "Exposed Conduit Type" for the third, fourth and fifth lines of the table, from "Fiberglass" to PVC Coated Rigid."

A1-32. SECTION 16130 - CONDUITS

- A. In Paragraph 3.01, Subparagraph F.2.a.1), change the conduit type from "Type RTRC" to "Type PVC Coated Rigid."
- B. In Paragraph 3.01, Subparagraph F.3.a, change the conduit type from "Type RTRC: Reinforced Thermosetting Resin Conduit (Fiberglass)" to "PVC Schedule 40."

A1-33. SECTION 16412 - LOW VOLTAGE MOLDED CASE CIRCUIT BREAKERS

A. Add the attached Section in its entirety.



A1-34. SECTION 17506 - ANALYZERS; DISSOLVED OXYGEN (D0)

- A. In Paragraph 1.04 Submittals, add the following:
 - "C. Provide a written statement confirming compliance with the specified requirements."
- B. In Paragraph 2.01, Subparagraph A, add the following:
 - "2. YSI LDO sensor and DIQ/S 182 XT transmitter (line power version)."

A1-35. SECTION 17710 - CONTROL SYSTEMS: PANELS, ENCLOSURES, AND PANEL COMPONENTS

- A. In Paragraph 2.06 Components, Sub-paragraph H.1, add the following at the end of the sub-paragraph:
 - "c. 480/3/60 supply surge protection see Section 16285."

A1-36. SECTION 17720 - CONTROL SYSTEMS: PROGRAMMABLE LOGIC CONTROLLERS

- A. In Paragraph 2.01 Manufacturers, Sub-paragraph B.1.a.2), Revise the sentence to read as follows:
 - "ICSC to provide one licensed copy of PLC programming software to the Owner."
- B. In Paragraph 2.01 Manufacturers, Sub-paragraph C.1.a.2), Revise the sentence to read as follows:
 - "ICSC to provide one licensed copy of PLC programming software to the Owner."
- C. In Paragraph 2.01 Manufacturers, Sub-paragraph D.1.a.2), Revise the sentence to read as follows:
 - "ICSC to provide one licensed copy of PLC programming software to the Owner."

A1-37. SECTION 17733 - CONTROL SYSTEMS; NETWORK MATERIALS AND EQUIPMENT

- A. In Paragraph 2.04 Manufactured Units, Sub-paragraph A.1.b.8), Add the following after the sub-paragraph:
 - "2. Unmanaged Ethernet Switches for VCPs:
 - a. Manufacturers: One of the following or equal:
 - 1) Moxa 308/305 Series.
 - 2) N-Tron.
 - 3) Hirschmann.
 - b. Properties:
 - 1) Hardware:
 - a) 10/100 BaseFX.
 - b) 100Base-FX.



- c) Power supply:
 - (1) Provide redundant power supplies.
 - (2) 24 VDC, 200 Watts/per power supply.
 - (3) Store and forward.
- d) No fans or moving parts.
- 2) Performance:
 - a) Full/half-Duplex.
 - b) MDI/MDI-X Auto-sensing.
- 3) Environment:
 - a) Operating temperature range: 32 to 140 Degrees Fahrenheit.
 - b) Humidity: 5 to 95 percent, non-condensing.
- 4) The Ethernet switch shall be capable of performing basic switching without special programming or configurations.
- 5) Ports:
 - As required to provide the number of connections required plus
 10 percent spare of each type used.
- 6) Connector type:
 - a) Copper: RJ-45.
- 7) Mounting:
 - a) Din Rail."

VOLUME 4 & 5 – DRAWINGS AND TYPICAL DETAILS

- A1-38. Replace both Volumes 4 and 5 of the drawings with the volumes on the attached thumb drive. The only change is replacement of the engineering seals.
- A1-39. DRAWING 00E15
 - A. Replace the drawing with the attached Drawing 00E15.
- A1-40. DRAWING 00E16
 - A. Replace the drawing with the attached Drawing 00E16.
- A1-41. DRAWING 03E06
 - A. Replace the drawing with the attached Drawing 03E06.
- A1-42. DRAWING 09E01
 - A. Replace the drawing with the attached Drawing 09E01.
- A1-43. DRAWING 10E01
 - A. Replace the drawing with the attached Drawing 10E01.



This Addendum No. 1, pages 1 through 12, shall become part of the Contract and all provisions of the Contract shall apply thereto.

The time provided for completion of the Contract is not changed.

Bidders shall acknowledge receipt of all Addenda by number in the space provided in the Proposal.

CAROLLO ENGINEERS, INC.



END OF ADDENDUM NO. 1

ATTACHMENTS:

20 Thumb Drives including Volumes 1 - 5 of Specifications and Drawings Pre-Bid Conference Meeting Minutes and Sign-In Sheet 11312C Appendix

11323 Appendix

Specification 16412

Drawing 00E15

Drawing 00E16

Drawing 03E06

Drawing 09E01

Drawing 10E01





PROJECT MEMORANDUM

Project Name: Port Isabel WWTF Modifications and Upgrade Date: October 27, 2016

Project

Date Issued: November 16, 2016

Project Number 9586A.10

Prepared By: Leon Allen
Reviewed By: Hani Michel

Subject: Pre-Bid Conference Minutes

Attendees: See attached Sign-In Sheet

1.0 INTRODUCTIONS

1. LMWD Staff - Charles Ortiz, District Engineer

- 2. Carollo Leon Allen, Design Manager
- 3. Halff Gabriel Benavides, Electrical Engineer

2.0 PROJECT DESCRIPTION

- 1. Location Port Isabel WWTF, Woody Lane.
- 2. Summary of Work Page 0110-1
- 3. WWTP must be kept operational.

3.0 BIDDING INSTRUCTIONS

 Bids are to be submitted to the LMWD Engineering office on the second floor of the LMWD offices.

4.0 INSURANCE REQUIREMENTS

1. As per Section 0800 of the Specifications

5.0 TWDB REQUIREMENTS

1. Buy American Iron and Steel requirements apply to this project.

6.0 BID FORM

1. Page 00410-3

7.0 SUPPLEMENTS TO BID (9 ITEMS)

- 1. Bid Bond Document 00432
- 2. Proposed Subcontractors Form Document 00434
- 3. List of Manufacturers Document 00436
- 4. Contractor's Qualification Document 00451A
- 5. TWDB 0459 Vendor Compliance with Reciprocity on Non-resident Bidders
- 6. Bidder's Certification WRD -255

8.0 PROJECT SCHEDULE

- 1. Bid Opening Nov 30th at 2:00 PM
- 2. Proposed Award at LMWD Board Mtg Dec 14th
- 3. Substantial Completion 455 days from NTP
- 4. Project Completion 515 days from NTP

9.0 LIQUIDATED DAMAGES

- 1. To Substantial Completion \$1000/day
- 2. Final Completion of Project \$500/day

10.0 CONSTRUCTION SEQUENCING

- 1. WWTP must be kept operational at all times.
- 2. See Section 1140, Paragraphs 1.04 and 1.10
- 3. Demolition of existing aeration basins

11.0 QUESTIONS

- 1. Question was asked as to how to cost the grit removal. Requested that this be a unit price item with a stated quantity.
- 2. Question was asked concerning pricing of the WAS hauling. Need to have a quantity specified so all bidders are quoting on the same thing.
- 3. Requested that an allowance be used for the Port Isabel City building permit. City will not give a firm number prior to submitting the application.
- 4. Concern was stated about the 3 percent demobilization item. This makes retainage 8 percent.
- 5. Retainage is stated to be 10%. Request was to reduce to 5%.
- 6. Requested clarification on Document 00520, paragraph 4.04 as to the special damages.

CAROLLO ENGINEERS 2

- 7. Question was asked concerning plant access during construction. With the crane sitting in the plant roadway during construction of the Headworks there will be no vehicle access to the chemical storage area or for hauling sludge. How will operational site access be handled?
- 8. It was requested that the bid date be move back because of the Thanksgiving holiday weekend.
- 9. Section 01460 requires that the Contractor Quality Control Manager not be the superintendent and must be on-site daily. Felt that this requirement was very unusual for a project of this size.

12.0 NON-MANDATORY SITE TOUR

CAROLLO ENGINEERS 3

Laguna Madre Water District

PORT ISABEL WASTEWATER TREATMENT FACILITY MODIFICATIONS

(Bid # WW-16-10-01)

Pre-Bid Conference Date & Time: October 27, 2016 @ 2:00 p.m.

Sign In Sheet for Pre-Bid Conference

		ز	5	; ;	2)	(, 2	Con .		to	Ž	ζ		
Email	costized lundos	781-7100 Jerry, Ochas@Ding. Com	mited Water Services 956,226, 0874 missely 3 4W5-415.692	Square E Services 460 3492 IPCANTUR SquareellC. Com	chad a actarthers. on	> menchace squareallicom		739 3595 WARTER &		Coopsigns Letterman con	flee P BLTT.CC.	gary@ajieletric.co	Bidmaile Csacenstruction.com	łı
Phone	348-2626	09/2-181	956.226.8	456 3492	515-845-265	210) GI13	572-0345	729 3095	500-645.63	356 936	832 Suce	95550	7138686	1(
Company	Lagura Madre WD	Clesse Pups of System	United Water Services	Square E Services	MCP	SqUAVE E SEVUICES (210) G113	1 mm 7	Pepper Auson	Galloros Elect		Bl Techarlegy	Andrew Jordan Folkstor	CSA Construction	3
Name / Signature	Charles Ortiz	Imy Ocher	Medhat Saleh	17 Cantu	Chael Rila,	Jose Menchaea	Monk of Gener	Wheream Carring	Course to	Woods Jant	Soh Lea	GlENN GUY	1 Cole Hoelscher	RICHAISTA
	1	2	3	4	2	9	7	∞	6	10	11	12	13	14

Laguna Madre Water District

PORT ISABEL WASTEWATER TREATMENT FACILITY MODIFICATIONS

(Bid # WW-16-10-01) Pre-Bid Conference Date & Time: October 27, 2016 @ 2:00 p.m.

Sign In Sheet for Pre-Bid Conference

	30			000	1									
Email	LEW Construction 28/495 850 modarda/proconstruction	512 529728 1 allen a consta con	Sbenavides Chaliff. com	956- 5929 15antras Comoter Techina con	956-1157 384066 9 50, 10011/									
Phone	(5)3 564 182	\$26.85 218	450 -0286	956-3929	956-1157									
Сотрапу	LEM Construction	CAROLLO ENGRS	Halff Associates	WWATELTECHTAR										
Name / Signature	Thinks House &	Leon Merem	Gabriel Benavides	JAVIEZ Sia. dingo	Concre Braga	7					2			
	15	16	17	18	19	20	21	22	23	24	25	26	27	28

APPENDIX ADDED IN ITS ENTIRETYAD1

SECTION 11312C

APPENDIX - SUPPLIER SCOPE OF DELIVERY

AD1 Addendum No. 1

Weir Specialty Pumps

440 West 800 South Salt Lake City, UT 84101 P.O. Box 209 Salt Lake City, UT 84110 Tel: 801-359-8731 Fax: 801-355-9303 www.weirsp.com



PROPOSAL

October 27, 2016

SUBJECT: WEMCO PUMPING EQUIPMENT

JOB: PORT ISABEL WWTP – LAGUNA MADRE, TX

PROPOSAL NO. 439998

Thank you for your inquiry for WEMCO equipment. We are pleased to offer our quotation as described below:

Scope of Supply – 11312C – Horizontal Recessed Impeller Centrifugal Pump

Qty. (2) 3" X 3" MODEL C WEMCO Torque-Flow Pump, complete with Ni-Hard pump wet-end materials, graphite impregnated acrylic packing, 7.5HP 1800RPM premium efficient severe duty TEFC horizontal motor, side-mount pump/motor arrangement, with variable speed – stationary control belt drive, per the requirements of pump section 11312C.

Please refer to the enclosed Technical Offer 439998 Item 001 for further details.

Following items are included in the scope:

- Stainless steel pump hardware.
- 316 stainless steel anchor bolts.
- Spare parts, as specified in Sections 15050 & 11312C.
- Factory performance testing, per HI standard 2011, 14.6, Acceptance Grade 2B.
- Commissioning & start-up by HRM Environmental.

Following items are NOT included in the scope:

Documentation and Shipment Schedule:

- Controls or instrumentation of any kind, including variable speed drives, local control panels, monitoring and alarms, or starters.
- Gauges, piping, pipe supports, fittings, valves, special tools, stands, extra paint, flush systems.

Technical Comments:

Section 11312C

- 1.01.A.1: Pump shall be belt driven per drawings & as scheduled instead of flexible coupled.
- 2.04.F: Minimum impeller shroud thickness at wear area shall be 1 inch.
- 2.05.F, 2.07.E: Impeller is secured to the shaft via impeller bolt, locking collar and thrust washer.
- 2.07.F.2: Shaft sleeve is secured to the pump shaft with set screws rather than keyed.
- 2.12.D: Baseplate shall be of a fabricated rather than structural design.
- 3.03.Pump Schedule: Design point pump rpm shall be 845rpm.

Document submittal:	4-6 weeks after receipt of order	
Shipment:	14-16 weeks after executed PO and submittal approval	
Price:	\$49,670	



Terms and Conditions

Bid Price: Pricing is F.O.B. jobsite, Full Freight Allowed. Detailed receiving inspection is

required within 72 hours of delivery and notification of damage claims must occur within 5 working days of delivery. No taxes or duties of any kind are included.

Pricing is firm for the shipment(s) indicated, provided the included schedules are

maintained.

Payment Terms: Terms and Conditions will be per Weir Specialty Pumps Standard Terms and

Conditions GSD-30 (6/14), or as mutually agreed to.

Bid Validity: This proposal is valid for an order for 60 days from the bid date and based on all

conditions herein.

Warranty: The Warranty included will be per Weir Specialty Pumps Limited Warranty GSD-31

(6/14), or as otherwise noted.

Thank you for the opportunity of submitting our proposal on WEMCO pumping equipment, and if we may be of further service, please contact our representative in your area:

HAWKINS & AFFILIATES 1426 Stone Trail Dr. Sugar Land, TX 77479 Tel: (281) 343-1993, Fax: (281) 343-1995 (Miguel Vera)

Or you can contact this office directly.

Sincerely,

Katie Bailey
Applications Engineer
Weir Specialty Pumps
440 West 800 South
SLC Utah 84101
T: 801-530-7594
F: 801-530-7828
E: katie.bailey@mail.weir





Customer Technical Offer							
Customer	Carollo Engineers, Inc.	Size / Stages	3" Model C / 1				
Item number	001	Pump speed	845 rpm				
Customer reference		Quote number	439998				

Cust	omer reference	Quote number 439998
Pι	ımp	
Qty	Description	
2	3" Model C	
_	General Pump Optio	
	Pump Options	15
	Clockwise rotation (
	Stainless steel pump	
	Bearing lubrication	Haluwale
	Oil lubricated bearing	ne e
	Nitrile elastomers	90
	Case Assembly	
	3x3 Case	
	Vertical Top	
	Ni-Hard case (650+ E	HN hardness)
	No case vent & drain	1111 Hardinoso)
	Standard suction con	nection
	Rotating Assembly	iccuoii
	Rotating Assembly	
	Ni-Hard impeller (65)+ BHN hardness)
	Dynamic balance	The Hardiness
	*	complete rotating assembly
	Stainless steel shaft	Totaling assembly
	Stainless steel impe	er holt
	Pump Sealing	
	Pump sealing	
	Seal Type: Packing	
	Acrylic/graphite pack	ina
	Chesterton Style 140	
		SST shaft sleeve (450BHN)
	Cast iron gland housi	
	Bronze gland	-5/2-2-1-Plate
	Driver	
	Motors	
		: WSP Supplied Motor
		M Premium Efficiency TEFC Horizontal motor
	All motors are sized which adds 8% to th	and selected in accordance with Hydraulic Institute Grade 2 - 2B performance test acceptance grades and tolerances e rated horsepower requirement of the pump. This calculation has not changed the rated horsepower or efficiency show Data Sheet. View the link for more information from Hydraulic Institute.
	Motor manufacturer -	WSP Standard
	Motor options	
	Motor Space Hear	er, 120 V
	Motor Thermostat	s (3 per motor)
	Baseplate and Drive	
	Belt Drive Baseplate	Side Mount
	Galvanized Steel Bas	eplate
	WSP Standard Base	late Design
	Stainless Steel Base	olate Hardware
	Galvanized Steel Gua	ırds
	Left Hand Side Moun	Motor
	Belts and Sheaves	
	1 1/ 11/ 0 15/	and Observed Otalian and Ocales

Variable Speed Belts and Sheaves - Stationary Control



Pump

Qty Description

Protective Coatings

Paint manufacturer & type

Paint Preparation: Standard paint preparation (clean and blast)

WSP Standard Paint - Prime Only

Unless otherwise noted all motors will receive top coat only of specified paint

Packing & Shipping

Shipping

No Boxing

WSP Decision Carrier

Freight Rates

Freight Rates - Texas: Texas

Material Testing

Material Testing

No Hardness Testing

No Non-Destructive Testing

Testing

Testing Required

Performance testing

5 Point Performance Test, Multiple Speeds

Full Package Test: Full Package Test

Customer Approval

Spare Parts / Accessories

Spare Parts and Accessories Group

Spare Parts: (1) set pump bearings, (1) set belts

316SST Anchor Bolts (Cast in)

Two Year Extended Warranty

Documentation

Seismic Calculations certified by WSP PE

Bearing life calculations certified by WSP PE

Resonant frequency calculations certified by WSP PE

Estimated Weights

Bareshaft Pump 670.lbs

Baseplate 410.lbs

Driver 165.lbs

Total Per Unit Weight 1245.lbs



ustomer		: Carollo	o Engineers,	Inc.			Qι	ote num	per		: 43	39998			
ustomer re	eference	:	J ,				Siz				: 3'	Model C			
em numbe		: 001						iges			: 1				
ervice		: Grit Pı	umps					-	urve num	ber	: 30	C_P10C-	D41		
Quantity		: 2	•					te last sa					16 4:01 P	М	
-		Operat	ting Conditi	ons							Liqu	id			
ow, rated			.		0.0 USgp	m	Lic	uid type					r defined		
	head / pres	sure, rated	d (requested		.00 ft				quid desc	cription		:			
	head / pres				.88 ft				eter, max	•		: 0.00) in		
	ssure, rate		,	: 0.0	00.0 / 0	osi.q	So	ids cond	entration	, by volum	ne	: 0.00) %		
•	able, rated				.00 ft		Te	mperatui	e, max	, ,		: 79.0	00 deg F		
equency	•			: 60	Hz				y, rated /	max		: 1.00	00 / 1.000	SG	
		Pe	erformance					cosity, ra	-			: 1.00) cP		
oeed, rated	d			: 84	5 rpm		Va	por pres	sure, rate	d		: 0.34	psi.a		
oeed, max					00 rpm			-			Mater	ial			
eed, mini					0 rpm		Ma	terial sel	ected			: Star	ndard		
ficiency					.27 %						Pressure				
	ired / marg	in required		:-/	0.00 ft		Ma	ximum v	orking pr				0 psi.g		
	e flow) / S (: N/A	A Metric ι	units				working p	ressure		00 psi.g		
CSF		-		: 20.	.00 USgp	m				suction pr		: N/A			
ad maxin	num, rated	speed		: 29.	.11 ft				test pres			: N/A			
ead rise to	shutoff			: 21.	.34 %						ver & Po	wer Data	a		
ow, best e	eff. point			: 342	2.8 USgp	m	Dri	ver sizin	g specific				ed power		
ow ratio, ra	ated / BEP)		: 52.	.51 %				specifica			: 0.00) %		
peed ratio	(rated / ma	ax)		: 49.	.71 %			rvice fac	•			: 1.15	(used)		
ead ratio (ı					.89 %			wer, hyd	raulic			: 1.09) hp		
q/Ch/Ce/C	_	II 9.6.7 - 201	10]		00 / 1.00 /	1.00 / 1.	.00 Po	wer, rate	d			: 4.00) hp		
election sta	atus			: Ac	ceptable		Po	wer, max	dimum, ra	ted speed	ł	: 6.97	hp		
							Mi	nimum re	commen	ded moto	r rating	: 7.50	hp / 5.59	kW	
	8											wer]	
c	2 6 ├──										20				
=	_	_							_		Po	VVCI	+		
غ. '.	=										Po				
יל י	<u> </u>										Po	WCI			
Ower - h	D 4										Po				
Power - ho	Б 4 — — — — — — — — — — — — — — — — — —										Po				
Dower - h											Po			_	
Dower . h	2 0										Po				
Dower - h											Po		MOSE	100	
Dower - h	150										Po		MCSF	-	
Dower - h	150	J. rpm									Po		— MCSF	100	
Dower - h	150) rpm									Po		— MCSF	90	
Dower - h	150) rpm									Po		— MCSF	-	
Dower - h	150 135 120	0 rpm									Po		— MCSF	90	
Dower - h	150	0 rpm									Po		— MCSF	90	
	150 135 1700 120	0 rpm									Po		— MCSF	90 80 70	%
	150 135 120	0 rpm									Po	_	— MCSF	90	1
	150 135 1700 120 105	O rpm									Po	_	MCSF	90 - 80 - 70 - 60	1
	150 135 1700 120) rpm									Po		MCSF	90 80 70	1
Head - ft	150 135 1700 120 105 90) rpm									Po		MCSF	90 - 80 - 70 - 60	1
	150 135 1700 120 105 90 75) rpm									Po		MCSF	- 90 - 80 - 70 - 60	Efficiency - %
	150 135 1700 120 105 90 75) rpm											MCSF	- 90 - 80 - 70 - 60	1
	150 135 1700 120 105 90 75 60 45											L. Ciency	MCSF	- 90 - 80 - 70 - 60 - 50 - 40	1
	150 135 1700 120 105 90 75 60												MCSF	- 90 - 80 - 70 - 60 - 50 - 40	1
	150 135 1700 120 105 90 75 60 45 30												MCSF	- 90 - 80 - 70 - 60 - 50 - 40 - 30 - 20	1
	150 135 1700 120 105 90 75 60 45												MCSF	90 - 80 - 70 - 60 - 50 - 40 - 30	1
	150 135 1700 120 105 90 75 60 45 30												- MCSF	- 90 - 80 - 70 - 60 - 50 - 40 - 30 - 20	1



Total weight

: 1.245.0 lb

Weir Specialty Pumps 16.4.2.0 **Construction Datasheet** Customer : Carollo Engineers, Inc. Quote Number : 439998 Project Model / Size : 3" Model C Item number : 001 Stages : 1 Service : Grit Pumps Pump speed : 845 rpm Quantity of pumps : 2 Date last saved : 27 Oct 2016 4:01 PM Construction **Driver Information** Rating Manufacturer : WSP Choice Nozzle Size Face Pos'n (ANSI) Power : 7.50 hp Suction FF 3 in 125 lbs Fnd Service factor : 1.15 Discharge 125 lbs FF Right 3 in Speed : 1800 rpm Impeller Type : Recessed Orientation / Mounting : Horizontal/Foot Impeller Design : Cup Type Driver type : Horizontal **Pump Orientation** : Horizontal Frame-size : 213T Bearing Type (Rad/Thr) : Ball/Ball Enclosure : TEFC **Bearing Lubrication** : Oil Hazardous area class : Div 2, CL I, Groups A,B,C,D Rotation (view from : CW shaft-end) : WSP Standard Explosion rating Materials Volts / Phase / Hz : 460/3/60 : Ni-Hard Casing Insulation : F Impeller : Ni-Hard Temperature Rise : B Wearplate/Backplate : Ni-Hard : WSP Motor mounted by Elastomer : Nitrile Shaft : Stainless Steel : Ceramic Coated 416 SST Sleeve Seal, Gland and Piping Seal Arrangement : Packing Baseplate, Connection and Guard Seal Size : N/A Baseplate Type : Belt Drive - Side Mount Manufacturer : Chesterton : Galvanized Steel Baseplate Material Gland Material : Bronze Orientation : Left Hand Seal Face Mat'l : N/A : Belt drive Connection Type Throat Bushing : N/A Guard : Galvanized Steel Seal Flush Plan : N/A Weights (Approx.) Seal Flush Construction : N/A Bareshaft pump : 670.0 lb Baseplate : 410.0 lb Driver : 165.0 lb

: 439998



General Arrangement Drawing

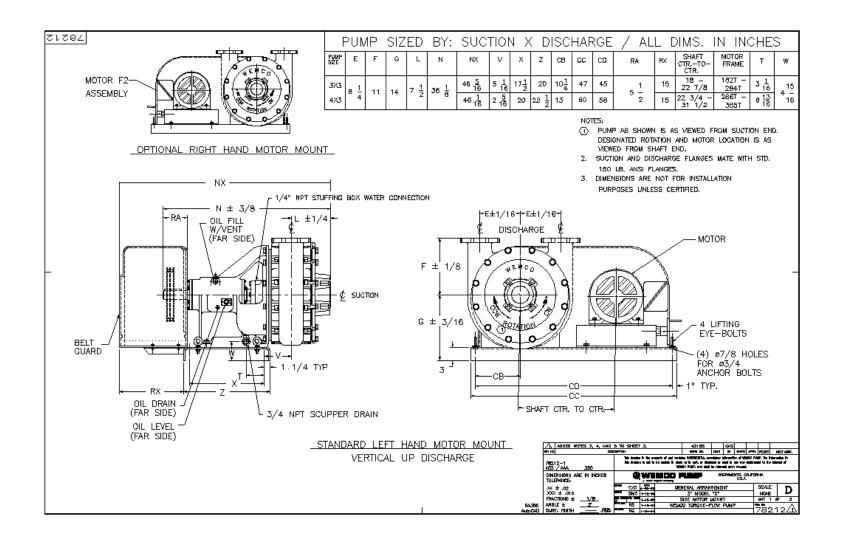
Customer : Carollo Engineers, Inc. Quote number

Customer reference : Size : 3" Model C

Item number : 001 Stages : 1

Service : Grit Pumps Pump speed : 845 rpm

Quantity of pumps : 2.0 Date last saved : 27 Oct 2016 4:01 PM





General Arrangement Drawing

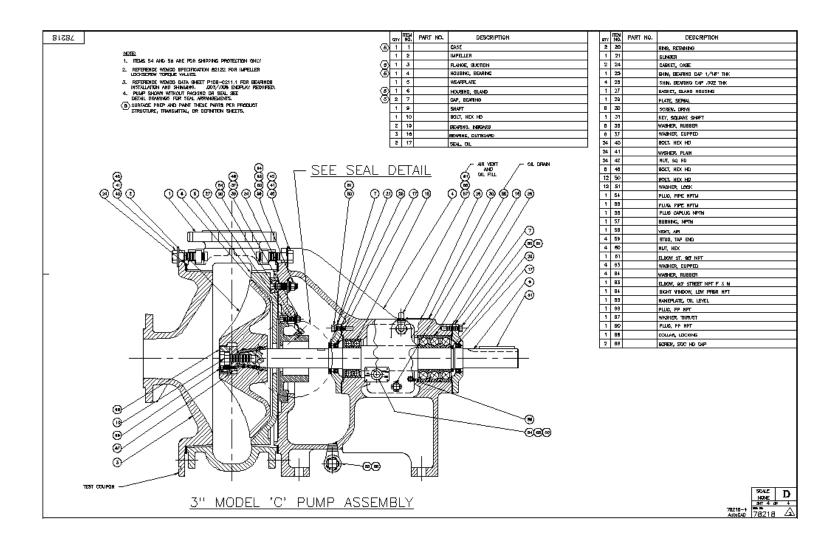
Customer : Carollo Engineers, Inc. Quote number : 439998

Customer reference : Size : 3" Model C

Item number : 001 Stages : 1

Service : Grit Pumps Pump speed : 845 rpm

Quantity of pumps : 2.0 Date last saved : 27 Oct 2016 4:01 PM





EnviroTech Pumpsystems, Inc d.b.a.

Weir Specialty Pumps (WSP) An Unincorporated Division of THE WEIR GROUP PLC

ADDENDUM to Warranty Period of Original LIMITED WARRANTY

Job Name & Location: Port Is	abel, TX	
WSP Quote / Order No: $\frac{439}{}$	998	
Purchase Order: TBD		_
to cover a period of	D: The original warranty perio 24 months from th 30 months from th	e date product was
	2C Grit pumps only. NITED WARRANTY REMAIN UN	CHANGED.
WSP Approval: Date: October 26, 2016	Owner / Purchas	
Signature: Katie Bailo	Signature:	<u> </u>
Name: Katie Bailey	Name:	
Title: Applications Enginee	Title:	



EnviroTech Pumpsystems, Inc d.b.a.

Weir Specialty Pumps (WSP)

An Unincorporated Division of THE WEIR GROUP PLC

LIMITED WARRANTY

COVERAGE: WSP (Seller) warrants its products to be free from defects in materials and workmanship when operated under the normal conditions for which the products were designed.

WARRANTY PERIOD: This warranty covers a period of twelve (12) months from the date product was placed into service, or eighteen (18) months from the date of shipment, whichever occurs first.

REMEDIES: If the product fails due to defective materials or workmanship within the warranty period, WSP's sole obligation after verification of the defect, shall be at its discretion the repair or replacement of the product. THIS PARAGRAPH PROVIDES THE EXCLUSIVE REMEDIES FOR ALL CLAIMS BASED ON FAILURE OF OR DEFECT IN A PRODUCT, WHETHER THE FAILURE OR DEFECT ARISES BEFORE, DURING, OR AFTER THE APPLICABLE WARRANTY PERIOD AND WHETHER A CLAIM, HOWEVER DESCRIBED, IS BASED ON CONTRACT, WARRANTY, INDEMNITY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, OR OTHERWISE, AND IS SUBJECT TO ALL LIMITATIONS OF LIABILITY FOUND HERE OR ELSEWHERE IN THE TERMS AND CONDITIONS.

OWNER'S OBLIGATIONS: Owner shall notify Seller of a defect within ten (10) days of its discovery. At Owner's expense, the defect may be verified at Owner's site, at Seller's authorized facility, or by returning the product to Seller's factory.

EXCLUSIONS: This warranty does not apply to consumable items that are normally replaced during maintenance; and defects resulting from improper installation, operation, maintenance, storage, neglect, or accident. This warranty does not cover any expense for repairs or alteration performed outside Seller's factory without Seller's prior authorization. Equipment and accessories not manufactured by Seller are warranted only by the original manufacturer's warranty. Seller shall not be liable for costs of removal, transportation, or reinstallation of products. Seller shall not be liable for any consequential, special, incidental, or indirect damages or delays resulting from or related to defective products.

SELLER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, AND ANY IMPLIED WARRANTY THAT COULD ARISE FROM COURSE OF DEALING OR USAGE OF TRADE. SELLER ALSO DISCLAIMS ALL STATUTORY WARRANTIES.

GSD-31 Rev. June 2014



EnviroTech Pumpsystems, Inc d.b.a.

Weir Specialty Pumps (Seller)

An Unincorporated Division of THE WEIR GROUP PLC

GENERAL TERMS and CONDITIONS of SALE

- 1. **SCOPE:** Unless otherwise agreed in writing, Seller's acceptance of Purchaser's purchase order is conditioned upon Purchaser accepting these terms and conditions. Seller sells its equipment in accordance with the following provisions.
- **2. PRICES:** Prices are EXW. Prices do not include any federal, state or local sales, use or other taxes and taxes may be added to the price.
- **3. TERMS:** Unless otherwise agreed, all invoices are due and payable in full, net-30 days from date of shipment or notification of readiness to ship, whichever is earlier. Credit terms are subject to Purchaser's credit worthiness, which shall be determined solely by Seller.

Late payments shall be charged interest at the rate of 1.5% per month or the highest rate allowable under law, whichever is less. Purchaser shall pay the full amount, regardless of any payment schedule between Purchaser and its customer.

If Purchaser is in default of any payment Seller may offset any monies of Purchaser available to Seller or in Seller's possession; declare all payments for completed work immediately due and payable; stop all further work until payments are brought current, and/or require advance payment for future shipments.

4. ITEMS INCLUDED: Each sale includes only the equipment described in the order.

Seller shall supply only those safety devices, if any, described in the order or in its proposal and drawings, and shall comply with those provisions of the federal Occupational Health and Safety Act of 1970 that Purchaser and Seller have identified as specifically applicable to the manufacture of the goods.

5. SECURITY INTEREST: To the extent allowable under applicable law, Seller retains a security interest in, and right of repossession, to the goods until Purchaser has paid in full. Purchaser will not encumber, nor permit others to encumber, the goods by any liens or security instruments. In the event legal action is necessary to enforce Purchaser's obligations under any order, Seller shall be entitled to recover its court costs and reasonable attorney's fees if it prevails. Purchaser shall provide

insurance for Seller's benefit to protect Seller's interest against loss or damage until is the goods are fully paid for.

6. SHIPMENTS AND DELIVERY: Purchaser must provide Seller all necessary information and instructions regarding its requested delivery schedule, including any required drawing approvals, and Seller shall use its reasonable efforts to meet the shipment dates in the order. However, any such dates are estimates only and are neither guaranteed nor a term of this agreement. Seller shall have no liability to Purchaser or its customer for any damages, whether direct or indirect, for any delay in shipment or delivery, regardless of the severity of the delay.

Unless otherwise agreed, all shipments are EXW Seller's factory, Incoterms 2010, and Purchaser shall make all claims for damage, delay, or shortage arising from any shipment directly against the carrier. When shipments are specified EXW, Purchaser shall inspect the goods, and notify Seller of any damage or shortage within seven days of receipt. Purchaser agrees that failure to so notify Seller shall be deemed as acceptance of the goods.

Unless agreed otherwise in the order, Seller may make partial shipments of completed items for partial payment under the terms of the order.

- **7. WARRANTY:** Seller warrants the goods in accordance with its current applicable Seller's Product warranty, which is incorporated by reference here.
- **8. PATENTS:** Purchaser agrees that it shall indemnify the Seller against all claims, demands, damages, penalties, costs and expenses to which the Seller may become liable by reason of any infringement or alleged infringement of a patent or patents arising out of performance of this order if the equipment is constructed in accordance with Purchaser's detailed drawings or designs submitted to Seller.
- **9. SUSPENSION OR DELAY:** If Purchaser requests a suspension, or delays Seller's work, Purchaser shall pay Seller all reasonable and necessary costs incurred due to the suspension or delay, plus Seller's overhead and reasonable profit. Additionally, all charges and risks for storage, disposition, and/or resumption of work shall be borne solely by Purchaser.



10. LIMITATION OF LIABILITY:

NOTWITHSTANDING ANYTHING ELSE IN THE AGREEMENT TO THE CONTRARY, SELLER SHALL NOT BE LIABLE, WHETHER IN CONTRACT, WARRANTY, FAILURE OF A REMEDY TO ACHIEVE ITS INTENDED OR ESSENTIAL PURPOSES, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, INDEMNITY, OR ANY OTHER LEGAL THEORY FOR LOSS OF USE, REVENUE, SAVINGS, OR PROFIT; COSTS OF CAPITAL; SUBSTITUTE USE OR PERFORMANCE; INDIRECT, LIQUIDATED, PUNITIVE, EXEMPLARY, COLLATERAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES; CLAIMS BY PURCHASER FOR DAMAGES OF PURCHASER'S CUSTOMERS; OR ANY OTHER LOSSES OR COSTS OF SIMILAR TYPE. "Consequential Damages" shall mean loss or deferral of production, loss of product, loss of use, exclusion and loss of revenue, profit or anticipated profit, cost of capital, overhead, cost of substitute products or services, downtime costs, increased cost of working, loss of contract or business interruption, facility, vessel, or rig downtime, costs relating to cleanup, removal, release or threatened release, remediation, or disposal of or any response to any hazardous material, inability to use property and equipment, losses resulting from failure to meet other contractual commitments, claims of a party's customers for any of the foregoing, and special, incidental, punitive, and speculative damages, as well as indirect losses or damages of any type no matter how characterized.

SELLER'S AGGREGATE LIABILITY TO PURCHASER FOR ALL CLAIMS ARISING OUT OF OR RELATED TO GOODS SOLD OR SERVICES PROVIDED OR OTHERWISE RELATED TO THIS AGREEMENT, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT PRODUCT LIABILITY OR OTHERWISE, SHALL NOT EXCEED FIFTY PERCENT (50%) OF THE TOTAL VALUE OF THE ORDER UNDER WHICH THE CLAIM AROSE. THE FOREGOING LIMITATION SHALL APPLY EVEN IF THE PURCHASER'S REMEDIES UNDER THIS AGREEMENT FAIL OF THEIR ESSENTIAL PURPOSE.

11. CHANGES AND BACKCHARGES: Seller shall not be obligated to make any changes in or additions to the scope of the work unless Seller and Purchaser first agree in writing to the details of the change and any resulting price, schedule or other contractual modifications. Any change to any law, rule, regulation, order, code, standard or requirement which requires any change hereunder shall entitle Seller to an equitable adjustment in the price and time of performance.

Purchaser agrees not to return goods or backcharge for labor, materials, or other costs incurred in modification, adjustment, service or repair of goods unless previously approved in writing by an authorized employee of Seller.

12. CHANGES IN DESIGN: Upon written notification to Purchaser, Seller may modify the design and construction of the goods in order to incorporate improvements or to

substitute material equal, or superior, to that originally specified. No charge shall be made to Purchaser for modifications made at Seller's option.

- **13. DUAL USE ITEMS:** In accordance with current U.S. government export rules, items made from Hastelloy C-22 alloy, Hastelloy C-276 alloy, and Inconel 718 alloy, forming part of any order fall into the category of "dual use," for which Seller is required to obtain an export license. If an order includes a dual use alloy, the order will not be considered accepted until the U.S. government has issued an export license. Furthermore, the delivery schedule for any good requiring regulatory approval shall only start once Seller has that approval. If the government denies an export license the order will be considered to have been terminated by Force Majeure.
- **14. PROPRIETARY INFORMATION:** All information furnished by Seller is solely for Purchaser's use in connection with the maintenance and operation of the goods and shall not be disclosed to any third party without Seller's prior, written consent.
- 15. FORCE MAJEURE: Seller shall not be liable nor responsible to Purchaser, nor be deemed to have defaulted under or breached this agreement, for Seller's failure or delay in fulfilling or performing any of its obligations under this agreement if such failure or delay is caused by, or results from, (a) acts of God; (b) flood, fire, earthquake or explosion; (c) war, invasion, hostilities (whether war is declared or not), terrorist threats or acts, riot or other civil unrest; (d) government order or law; (e) actions, embargoes or blockades in effect on or after the date of this agreement; (f) action by any governmental authority; (g) national or regional emergency; (h) strikes, labor stoppages or slowdowns or other industrial disturbances; (i) shortage of adequate power or transportation facilities; or (j) other events beyond the reasonable control of Seller ("Force Majeure"). Seller shall give Purchaser notice within a reasonable time of the Force Majeure event and shall use reasonable efforts to end the failure or delay and ensure the effects of Force Majeure are minimized. Should there ever be any time of performance it shall be extended for a time period equal to the period of Force Majeure and its consequences.
- **16. GOVERNING LAW:** This agreement shall be interpreted in accordance with the laws of the State of Utah, U.S.A., without regard to its conflicts of laws rules. The application of the United Nations Convention on Contracts for the International Sale of Goods is excluded. Purchaser shall comply with all applicable laws. Seller and Purchaser irrevocably and unconditionally consent to, and submit_themselves to, the exclusive jurisdiction of the state or federal courts of Salt Lake County, Utah, as the exclusive jurisdiction and venue for the resolution of conflicts arising from or pursuant to this agreement.



17. INDEMNITY: Seller shall indemnify, defend and hold Purchaser harmless from any claim, cause of action or liability incurred by Purchaser as a result of third party claims for personal injury, death or damage to tangible property, to the extent caused by Seller's negligence. Seller shall have the sole authority to direct the defense of and settle any indemnified claim. Seller's indemnification is conditioned on Purchaser (a) promptly, within the warranty period, notifying Seller of any claim, and (b) providing reasonable cooperation in the defense of any claim.

18. U.S. EXPORT COMPLIANCE: Furthermore, as Purchaser acknowledges that Seller is required to comply with applicable export laws and regulations relating to the sale, exportation, transfer, assignment, disposal, and usage of the goods provided under the order, including any export license requirements. Purchaser agrees that such goods shall not at any time directly or indirectly be used, exported, sold, transferred, assigned, or otherwise disposed of in a manner that will result in non-compliance with such applicable export laws and regulations. It shall be a condition of Seller's continuing performance of its obligations that compliance with such export laws and regulations be maintained at all times. Purchaser agrees to comply with all applicable export laws and regulations of the U.S. Commerce, Treasury, State and Defense Departments or other agency regulating exports from the United States. Purchaser agrees it will not export, reexport or permit the re-export of any Seller good to an ultimate destination of a restricted and/or embargoed country listed by the Department of State, Department of Commerce or the Department of Treasury and/or restricted and/or individuals on the Directorate of Defense Trade Controls' Debarred List and Nonproliferation Sanction List, Bureau of Industry and Security's Denied Person's List, Entity List and Unverified List and the Office of Foreign Assets Control's Specially Designated Nationals List or any other U.S. government list. Nor will Customer export, re-export or permit the re-export of any Seller good for any prohibited uses under the U.S. export laws.

To the extent that Purchaser subcontracts its services or utilizes agents or third-parties with respect to the provision of the Services to Seller, Purchaser shall incorporate the obligations of this provision with respect to export compliance into its respective subcontracts and agreements with such sub-contracted agents and third parties. All contracts entered into by Purchaser with agents, affiliates, or third-parties, must also include a specific requirement to comply with all laws and regulations (including U.S. export laws).

PURCHASER AGREES TO INDEMNIFY AND HOLD SELLER HARMLESS FROM ANY AND ALL COSTS, LIABILITIES, PENALTIES, SANCTIONS AND FINES RELATED TO NON-COMPLIANCE WITH APPLICABLE EXPORT LAWS AND REGULATIONS.

19. ENTIRE AGREEMENT: This proposal expresses the entire agreement between the parties hereto and supersedes any previous communications, representations, or agreements, whether oral or written, and is not subject to modification except in writing, signed by an authorized officer of each party.

APPENDIX ADDED IN ITS ENTIRETYAD1

SECTION 11323

APPENDIX - SUPPLIER SCOPE OF DELIVERY

AD1 Addendum No. 1



	Bid Pricing		
Project Name:	Port Isabel, TX Laguna Madre WWTP	Date Prepared:	October 27, 2016
Project Number:	15_11_3127	Validity:	February 28, 2017
Representative:	HRM Evironmental	Engineer:	Carollo
Primary Grit Rem	oval 4.4 mgd/unit		
9 ft. 4 Tray 106 mid	cron Eutek HeadCell® Grit Removal unit		2
Eutek HeadCell® in	2		
Grit slurry underflo	w collector, 316 Stainless Steel		2
Anchor Bolts			
	nchor bolt set, 316 SS		2
0((_		_
Stuctural Analysis	S		1
Freight			
Freight to jobsite in	Port Isabel, TX		1
Start-up			
Start-up One (1) factory rep	resentative for two (2) trips for a total of four (4) days		1
(, .e.c., .ep	(,, ,, , , , , , , , , , , , , , , , ,		
Total Bid Price:			\$135,000.00

Terms & Conditions: As defined by Hydro International standard Terms & Conditions.



10/27/16

To: Carollo

Re: Forced Vortex Grit Removal Unit – Section 11323

Port Isabel Wastewater Treatment Facility Modifications

Port Isabel, TX File #15_11_3127

Hydro International is pleased to present our quote for a HeadCell[®] Grit Removal Unit. The system will meet the requirements described in Section 11323 with comments noted below.

System Components

1. Two (2) 9' 4 tray Eutek HeadCell® Grit Concentrator units shall be supplied. Each Eutek HeadCell® shall consist of a stack of nested trays. The trays shall be fabricated from UV stabilized LDPE and shall be supported by a 316 SS frame integral to the unit. All flow passages shall be self-cleaning and free of sharp projections or fittings that may snag stringy or fibrous materials. The Eutek HeadCell® trays shall be constructed with a minimum ¼ inch material pans and sidewalls. The Tray Supports shall be fabricated to provide a means to independently support each tray and transfer the weight of each tray to the support structure frame. The Eutek HeadCell® will securely fit into a support structure frame containing the screened raw wastewater inlet connection, necessary hardware, and connections. The Eutek HeadCell® Concentrator shall be equipped with a fluidizing ring for intermittent fluidization. The settled solids are pumped to the grit washing units from each Eutek HeadCell® units.

Each unit shall remove 95% of all grit (S.G. 2.65) 106 micron and larger at a peak flow of 4.4 mgd. Each unit shall have 12 inches of headloss at the peak flow.

Utility Requirements

Clarified NPW or Reuse Water:

Each Eutek HeadCell® unit requires an intermittent 32 gpm @ 50 +/- 10 psig of clarified water for "fluidizing" to function properly.

Appurtenances Per Unit

Eutek HeadCell® Grit Concentrator

DESCRIPTION	QTY
Anchor Bolts –Frames Hilti 316SS 1/2" x 6 1/2" HAS Anchor Rods for use with HIT HY 200 Anchor System	4
Anchor Bolts –Underflow Collectors Hilti 316SS 3/8" x 5 1/8" HAS Anchor Rods for use with HIT HY 200 Anchor System	4
Anchor Bolts – For Fastening Inlet Duct to Channel Hilti 3/8" HDI 3/8 SS Drop in anchors	set

Spare Parts

No spare parts are included or recommend in this scope of supply.

Start-up

One (1) man, two (2) trips, for start-up and instruction services as required totaling four (4) days.

Seismic Analysis

Seismic anchorage and bracing calculations in accordance with specification section 01 88 15.

Exclusions

Any item(s) not specifically described above are excluded and are not to be supplied by Hydro International including but not limited to the following:

- Erection and installation
- Interconnecting piping and valving not expressly stated above
- Pipe connections and fittings not expressly stated above
- All pipe supports, hangers and braces
- Controls, switches, control panels and instrumentation of any kind not expressly stated above
- Wiring and conduit
- Field or touch-up paint, painting, blasting and touch-up of surface finish
- Spare parts not specifically stated above
- Unloading, hauling and storage charge
- Lubricating oil and greases

- Field performance testing, laboratory testing and sample collection and analysis
- All concrete and grouting work
- Insulation and heat tracing of any kind
- Performance and/or Supply Bond(s)
- Dumpsters of any kind
- Grit pump(s)/pump motor starters/VFD, associated piping, guiderails and valving, gauges
- Access platforms, walkways, ladders, covers
- Grit Study
- Metal or rubber extended discharge chutes
- Translation Services

Limitations

- General Liability is limited to \$5,000,000 per each occurrence
- Products Completed & Operations Liability is limited to \$5,000,000 per each occurrence
- Worker's Compensation is limited to \$5,000,000 per each accident

Warranty

Hydro International's Warranty shall cover a period of one (1) year from shipment.

Delivery

Please allow 4 to 6 weeks after receipt of purchase order for approval drawings. Shipment is typically a maximum of 16 weeks after receipt of "Approved" or "Approved As Noted, Resubmittal Not Required" submittal package. The grit removal system shall be delivered to site fully fabricated, subject to size, packaging and transportation constraints. The General Contractor must inspect equipment prior to unloading and notify Hydro International of any damage to equipment within 5 days to effect proper remedial action. Failure to notify Hydro International of damage to equipment prior to unloading will void all warranties pertaining to subject equipment.

Terms & Conditions

Hydro International payment terms are detailed in the attached terms and conditions. Price includes truck freight to jobsite and does not include any state or local taxes if required. The prices quoted are firm based on a receipt of a purchase order by February 28, 2017 and shipment of the equipment prior to August 15, 2017.

Purchase Order

Please make purchase orders to: Hydro International 2925 NW Aloclek Drive Suite #140 Hillsboro, OR 97124

Local Representative

Mr. Miguel Vera HRM Environmental 312 Water Oak Drive Cedar Park, TX 78613 Phone: (512) 337-7807

Fax: (512) 337-7824 Email: mvera@hrmenv.com

If you have any questions or concerns, do not hesitate to contact me.

Regards,

Hydro International

Dara Rolfe

Applications Engineer

Standard Terms & Conditions of Sale

- 1. **DEFINITIONS**. "Hydro" is Hydro International with an address of 2925 NW Aloclek Drive #140 in Hillsboro, Oregon. "Buyer" is the party purchasing the goods from Hydro.
- 2. ENTIRE AGREEMENT. Hydro's agreement is based on these terms and conditions of sale. This document, together with any additional writings signed by Hydro, represents a final, complete, and exclusive statement of the agreement between the parties and may not be modified, supplemented, explained, or waived by parol evidence, Buyer's purchase order, any course of dealing, Buyer's payment or acceptance, or in any other way except in writing signed by Hydro through its authorized representative. These terms and conditions are intended to cover all activity of Hydro and Buyer hereunder, including sales and use of products, parts, and work, and all related matters (references to products include parts and references to work include construction and installation). Hydro's obligations hereunder are expressly conditioned on Buyer's assent to these terms and conditions. Hydro objects to any terms that are different from, or additional to, these terms and conditions. Any applicable detail drawings and specifications are hereby incorporated and made a part of these Terms and Conditions of Sale insofar as they apply to the material supplied hereunder.
- 3. SPECIFICATIONS. Products are supplied in accordance with information received by Hydro, or its duly authorized agent, from Buyer. Hydro shall have no responsibility for products created or sold based upon inaccurate and/or incomplete information supplied to it. Buyer shall ensure that Hydro receives all relevant information in time to enable it to supply the appropriate products.
- 4. INSTALLATION AND APPLICATION OF PRODUCTS. Products supplied hereunder shall be installed and used only in the particular application for which they were specifically designed. Buyer should not presume that any products supplied by Hydro may be utilized for any applications other than those specified; nor shall Hydro's obligations, including, without limitation, any warranty obligations, survive Buyer's transfer of products supplied hereunder to third parties unless the products are transferred with Hydro's consent. In addition, Buyer shall not use any product supplied hereunder at any location other than at the location for which Hydro has previously received notice from Buyer. Any breach of any of the foregoing restrictions may amount to an infringement of the patent for the products in question and will in any event void all express or implied warranties relating to the products supplied hereunder.
- **5. PURCHASE PRICE AND PAYMENT TERMS.** All prices are in U.S. dollars and all payments shall be made in U.S. dollars. Payment terms are as follows:

	Incremental Payment	Cumulative Payment
Upon Approval of Shop Drawings	10%	10%
Upon Delivery of Equipment to Site	80%	90%
Upon Final Acceptance or 45 days following completion of	10%	100%
equipment start up		

If payments are not made in conformance with the terms stated herein, any unpaid balance shall be subject to interest at a rate 1½% per month, but not to exceed the maximum amount permitted by law. If shipment is delayed by Buyer, the previously agreed date of readiness for shipment shall be deemed to be the date of shipment for payment purposes. If manufacture is delayed by Buyer, a payment shall be made based on purchase price and percentage of completion, with the balance payable in accordance with the terms as stated. If at any time in Hydro's judgment Buyer may be or may become unable or unwilling to meet the terms specified, Hydro may require satisfactory assurance or full or partial payment as a condition to commencing, or continuing manufacture, or in advance of shipment.

Until payment in full has been received by Hydro, this Standard Terms and Conditions of Sale shall constitute a security agreement and Buyer hereby grants Hydro a purchase money security interest in and to the products produced by Hydro hereunder, and any products or proceeds thereof. In particular:

- (i) Hydro will retain an express purchase money security interest in and to the products and all proceeds thereof.
- (ii) Until full payment for the products is received by Hydro, Hydro reserves the right to retake possession of the products at any time and for this purpose Buyer authorizes Hydro or its duly authorized agent to enter upon land or premises where it believes the product may be.
- (iii) Proceeds of any disposal of the products shall be held in trust for Hydro pursuant to the terms of the Maine Uniform Commercial Code.
- (iv) Buyer grants Hydro a power of attorney for the purpose of filing a UCC-1 financing statement in the name of Buyer to evidence Hydro's security interest in the products.
- 6. BACKCHARGES. In the event that Buyer is required to make repairs, corrections or modifications to the goods supplied by Hydro, it shall only do so upon written approval from Hydro. Backcharges shall be limited to the costs directly associated in making the repairs, corrections or modifications to the goods supplied by Hydro. The costs of such backcharges shall be subject to approval by Hydro and shall be limited to: (1) directly related labor and material costs, (2) directly related equipment and tool rental at prevailing rates in the project location and (3) Buyer's overhead & supervision costs to make repairs, corrections or modifications to the goods supplied by Hydro. Buyer shall submit complete documentation to Hydro's satisfaction including but not limited to labor time sheets, material lists, and rental fees detailing the nature of the back charges. Backcharges shall be in the form of an adjustment to the

Page 4 of 6 10/25/2016

contract price or reduction in retained payments and not a direct payment. No incidental or consequential backcharges shall be allowed

- 7. **DELIVERY.** The goods are sold F.O.B. manufacturing site, freight prepaid to Buyer at job site. Except as outlined in Paragraph 8 below, the risk of loss passes to Buyer after Hydro delivers the goods to the carrier. Hydro reserves the right to select the method of shipment and carrier. Delivery dates are approximate only and are not a guarantee of delivery on a particular day. Hydro is not liable for failure or delays in deliveries of any cause whatsoever beyond the control of Hydro.
- 8. TITLE & INSURANCE: Title to the product(s) and risk of loss or damage shall pass to Buyer upon delivery to a carrier as outlined in Paragraph 7 above, or, in the event Buyer delays shipment, by the previously agreed date of readiness for shipment, except that a security interest in the product(s) or any replacement shall remain in Hydro's name, regardless of the mode of attachment to realty or other property, until the full price has been paid in cash. Buyer agrees to protect Hydro's interest by adequately insuring the product(s) against loss or damage from any external cause with Hydro named as insured or co-insured.
- 9. **ERECTION:** Unless otherwise stated in writing, the goods provided hereunder shall be assembled and erected by and at the expense of Buyer.
- 10. CANCELLATION & BREACH: Orders placed cannot be canceled, nor shipments of goods made up, or in process, be deferred beyond the original shipment dates specified, except with Hydro's written consent and upon terms which shall indemnify Hydro against all loss. In the event of cancellation or the substantial breach of Buyer's obligations, as by failing to make any of the payments when due, the parties agree that Hydro will suffer a serious and substantial damage that will be difficult, if not impossible, to measure, both as of the time of entering into this purchase agreement and as of the time of such cancellation or breach. Therefore, the parties agree that, upon such cancellation or breach, Buyer shall pay to Hydro the sums set forth herein below, which sums the parties do hereby agree shall constitute agreed and liquidated damages in such event:
 - If cancellation or breach shall occur after the acceptance of the purchase order but prior to mailing of submittal documents by Hydro to Buyer, liquidated damages shall be 10% of the selling price.
 - If cancellation or breach shall occur within thirty (30) days from the mailing of submittal documents by Hydro to Buyer, the liquidated damages shall be 20% of the selling price.
 - If the cancellation or breach occurs after thirty (30) days from the mailing of submittal documents by Hydro to Buyer, but prior to notification that the order is ready for shipment, the liquidated damages shall be the total of 30% of the selling price plus the expenses incurred, cost of material, and reasonable value of the work expended to fill the order involved herein by Hydro's engineers and other employees, agents and representatives after the mailing of general arrangement drawings by Hydro to Buyer, said sums to be determined at the sole reasonable discretion of Hydro; provided, however, that the total liquidated damages under this provision shall not exceed the total selling price.
 - If cancellation or breach shall occur after Hydro has notified Buyer that the order is ready for shipment, then the liquidated damages shall be the total selling price, less costs associated with startup or field testing.
- 11. MATERIALS OF CONSTRUCTION, PAINTS AND COATINGS: Buyer is responsible for determining the suitability of, and for giving final approval of, the materials of construction, paints, coatings, etc. to be used by Hydro.
- 12. WARRANTY: Any product that proves defective in material, workmanship or design within twelve (12) months after delivery (or entry into storage) will be, at the discretion of HYDRO, modified, repaired or replaced, or Buyer's payment for the products will be refunded. This shall be Buyer's sole remedy. HYDRO EXPRESSLY EXCLUDES AND DISCLAIMS ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTIES, EXPRESS OR IMPLIED.

This warranty does not cover any defects or costs caused by: (1) normal wear and tear of equipment from designed operation. (2) modification, alteration, repair or service of the goods by anyone other than Hydro; (3) physical abuse to, or misuse of, the goods, or operation thereof in a manner contrary to Hydro's instructions; (4) any use of the goods other than that for which they were intended; (5) chemicals or components which were not disclosed to Hydro; (6) storage contrary to Hydro's instructions; or (7) failure to maintain the goods in accordance with Hydro's instructions.

This warranty does not apply to component parts of the goods that were not both originally designed and manufactured by Hydro, including, but not limited to, valves and controls. These component parts do not carry any warranties by Hydro, and only carry the warranties, if any, of their manufacturers.

In order for Buyer to make a claim under this warranty, Buyer must promptly, and within the warranty period, notify Hydro in writing of any defect(s) in the goods covered by this warranty. If any defect(s) in the goods covered by this warranty are visible at the time of delivery, Buyer must notify Hydro of the defect(s) in writing within five working days. To make any claim under this warranty, Buyer must also fully comply with written authorization and return instructions from Hydro.

13. FIELD SERVICE: Startup/Field Service will only be scheduled upon written request. Buyer shall notify Hydro of schedule requirements at least ten (10) working days in advance, or additional charges may be added to cover late-scheduled travel costs. Additional costs will be limited to those arising out of late-scheduled costs. Should Buyer have outstanding balances due Hydro, no startup field service will be scheduled until such payments are received by Hydro. Hydro will send documents to Buyer defining the service or startup requirements. Buyer assumes all responsibility for the readiness of the system when it requests startup service. Should Hydro's Field Service Engineer arrive at the jobsite and determine that the system cannot be started up within a reasonable time, Hydro shall have the option to bring the Field Service Engineer home and bill Buyer for time, travel and living expenses. Additional field service is available from Hydro at the prevailing per-diem rate at the time of the request for service plus all travel and living expenses, portal-to-portal. A purchase order or change order will be required prior to scheduling this additional service.

- 14. LIMITATION OF HYDRO'S LIABILITY. Hydro assumes no liability or responsibility for the misuse of its products by Buyer, Buyer's employees, agents or assigns, or other use inconsistent with the use appropriate to the performance specification requirements submitted to Hydro, and Buyer agrees to indemnify and hold harmless Hydro for any loss, costs, expense or liability that it may incur or be put to as a result of misuse or inconsistent use of the products. In addition, Hydro shall have no liability to Buyer for any consequential or incidental damages incurred by Buyer in connection with the contract documents or the products purchased by Buyer. Hydro shall not be liable for any loss which results from delay in delivery caused by any reason beyond its control, including, but not limited to, acts of God, casualty, civil disturbance, labor disputes, strikes, transportation or inability to obtain materials or services, any interruption of its facilities, or act of any governmental authority. The time for delivery shall be extended during the continuance of such conditions. The total liability of Hydro to Buyer in the form of liquidated damages for any loss, indemnity, damage or delay of any kind will not under any circumstances exceed 25% of the Contract Sum.
- 15. INTELLECTUAL PROPERTY. Hydro shall retain sole ownership of all of its intellectual property used or produced in connection with the Project, including but not limited to all drawings, specifications, software, written materials, manuals, marks, business methods, and all other property that is capable of protection by a patent, copyright or trademark (whether or not such protection has actually been sought). Buyer shall not use such intellectual property except for the purpose of confirming the quality of design and/or manufacturing of the products and services set forth in the Proposal. Buyer shall not photocopy, duplicate or in any way copy such intellectual property except for the Buyer's internal purposes only (but not for rendering services or selling products to third persons). Buyer shall not sell, license, assign or transfer the intellectual property protected by this paragraph to anyone. Buyer shall ensure that Owner is in possession of valid licenses for all third-party software (not provided by Hydro) used for the Project, and shall indemnify and hold harmless Hydro against all claims by licensors of such software. Hydro makes no warranty regarding the effect of such third-party software on the performance of the software to be developed by Hydro for the Project and Hydro shall be released from any warranties given to Buyer to the extent that such software causes or contributes to problems. Following acceptance and final payment to Hydro, Hydro will grant to the Owner a non-transferable, non-exclusive license to use the software for the Owner's internal purposes only in the form of the license agreement attached as Exhibit A.
- **16. TAXES.** Prices stated herein do not include any tax, excise, duty or levy now or hereafter enacted or imposed, by any governmental authority on the manufacture, sale, delivery and/or use of any item delivered. An additional charge will be made therefore and paid by Buyer unless Hydro is furnished with a proper exemption certificate relieving Hydro of paying or collecting the tax, excise, duty or levy in question.
- 17. INTERPRETATION OF CONTRACT. This contract shall be construed according to the laws of the State of Maine.
- 18. CHOICE OF FORUM. Buyer and Hydro hereby consent and agree that the United States District Court for the District of Maine or the District Court or Superior Court located in the City of Portland, County of Cumberland, Maine will have exclusive jurisdiction over any legal action or proceeding arising out of or relating to the contract documents, and each party consents to the personal jurisdiction of such Courts for the purpose of any such action or proceeding. Buyer and Hydro further hereby consent and agree that the exclusive venue for any legal action or proceeding arising out of or relating to the contract documents will be in the County of Cumberland, Maine. Each party hereby waives all rights it has or which may hereafter arise to contest such exclusive jurisdiction and venue.
- 19. ATTORNEYS' FEES. If any judicial or non-judicial proceeding is initiated for the purpose of enforcing a provision of this contract, the prevailing party shall be awarded reasonable attorneys' fees in addition to all other costs associated with the proceeding, whether or not the proceeding advances to judgment.
- 20. SEVERABILITY. If any provisions of this contract are held invalid by a court of competent jurisdiction, the remainder of this contract shall not be rendered invalid, and such invalid provisions shall be modified, in keeping with the letter and spirit of this contract, to the extent permitted by applicable law so as to be rendered valid.
- 21. ANTI-BRIBERY. Hydro International will not engage in any form of bribery or corruption. The offering, giving or receiving of bribes is contrary to Hydro International's values and can play no part in the way in which it carries out its business. Hydro requires you to support our approach and implement provisions consistent with our policy through your own organization and your supply chain. Please find a copy of our Anti-Bribery and Corruption Policy on our website at http://plc.hydro-intl.com/content/view/296/247/

SECTION ADDED IN ITS ENTIRETYAD1

SECTION 16412

LOW VOLTAGE MOLDED CASE CIRCUIT BREAKERS

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes:
 - Low voltage molded case circuit breakers as indicated on the Drawings and as specified.

B. Related sections:

- 1. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.
- 2. It is the CONTRACTOR's responsibility for scheduling and coordinating the Work of subcontractors, suppliers, and other individuals or entities performing or furnishing any of CONTRACTOR's Work.
- 3. The following sections are related to the Work described in this Section. This list of related sections is provided for convenience only and is not intended to excuse or otherwise diminish the duty of the CONTRACTOR to see that the completed Work complies accurately with the Contract Documents.
 - a. Section 01330 Submittal Procedures.
 - Section 16050 Common Work Results for Electrical.
 - c. Section 16305 Electrical System Studies.

1.02 REFERENCES

- A. As specified in Section 16050.
- B. National Electrical Manufacturers Association (NEMA):
 - 1. AB 3. Molded Case Circuit Breakers and Their Application.
- C. Underwriter's Laboratories (UL):
 - 1. 489 Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures.
 - 2. 943 Ground Fault Circuit Interrupters.

1.03 DEFINITIONS

- A. As specified in Section 16050.
- B. In accordance with UL 489.

1.04 SYSTEM DESCRIPTION

A. Molded case thermal magnetic circuit breakers as indicated on the Drawings and connected to form a completed system.

1.05 SUBMITTALS

- A. Furnish submittals as specified in Sections 01330 and 16050.
- B. Product data:
 - Catalog cut sheets.
 - 2. MANUFACTURER's time-current curves for all molded case circuit breakers furnished.

1.06 QUALITY ASSURANCE

- A. As specified in Section 16050.
- B. Low voltage molded case circuit breakers shall be UL listed and labeled.

1.07 DELIVERY, STORAGE AND HANDLING

A. As specified in Section 16050.

1.08 PROJECT OR SITE CONDITIONS

- A. As specified in Section 16050.
- 1.09 SEQUENCING (NOT USED)
- 1.10 SCHEDULING (NOT USED)

1.11 WARRANTY

A. As specified in Section 16050.

1.12 SYSTEM START-UP

- A. As specified in Section 16050.
- 1.13 OWNER'S INSTRUCTIONS (NOT USED)
- 1.14 COMMISSIONING (NOT USED)
- 1.15 MAINTENANCE (NOT USED)

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. One of the following or equal:
 - 1. Schneider Electric/Square D Company.
 - 2. ABB.
 - 3. Siemens

2.02 EXISTING PRODUCTS (NOT USED)

2.03 MATERIALS (NOT USED)

2.04 MANUFACTURED UNITS

A. General:

- 1. Conforming to UL 489.
- 2. Operating mechanism:
 - a. Quick-make, quick-break, non-welding silver alloy contacts.
 - b. Common Trip, Open and Close for multi-pole breakers such that all poles open and close simultaneously.
 - c. Mechanically trip free from the handle.
 - d. Trip indicating handle automatically assumes a position midway between the manual ON and OFF positions to clearly indicate the circuit breaker has tripped.
 - e. Lockable in the "OFF" position.
- 3. Arc extinction:
 - a. In arc chutes.
- 4. Voltage and current ratings:
 - Minimum ratings as indicated on the Drawings.
 - b.
- 5. Interrupting ratings:
 - a. Minimum ratings as indicated on the Drawings.
 - Modify as required to meet requirements of the short circuit fault analysis

 as specified in Section 16305.
 - c. Not less than the rating of the assembly (panelboard, switchboard, motor control center, etc.)

2.05 EQUIPMENT (NOT USED)

2.06 COMPONENTS

A. Terminals:

 Line and load terminals suitable for the conductor type, size, and number of conductors in accordance with UL 489.

B. Case:

- Molded polyester glass reinforced.
- Ratings clearly marked.

C. Trip units:

- 1. Provide thermal magnetic or solid-state trip units.
- 2. Thermal magnetic:
 - a. Instantaneous short circuit protection.
 - b. Inverse time delay overload.
 - c. Ambient or enclosure compensated by means of a bimetallic element.
- 3. Solid state: (For all breaker rated 250amp or larger)
 - a. With the following settings as indicated on the Drawings.
 - 1) Adjustable long time current setting.
 - 2) Adjustable long time delay.
 - 3) Adjustable short time pickup.
 - 4) Adjustable short time delay.

- 5) Adjustable instantaneous pickup.
- 6) Adjustable ground fault for main circuit breaker in switchboards.
- D. Provide ground fault trip devices as indicated on the Drawings.
- E. Molded case circuit breakers for use in panelboards:
 - Bolt-on type.
 - a. Plug-in type breakers are not acceptable.

2.07 ACCESSORIES

- A. Shunt trip:
 - 1. Provide a trip coil to remotely open breaker as indicated on the Drawings.
- B. Auxiliary switches:
 - 1. Provide open/closed status switches for remote monitoring of breaker as indicated on the Drawings.
- C. Alarm switches:
 - 1. Provide normally open contact that is actuated when breaker trips as indicated on the Drawings.
- D. Lockable handle:
 - 1. Provide assembly to lock operating handle in 'OPEN' position.
 - Where a molded case circuit breaker is located in a dedicated enclosure, provide a lockable handle. Reference the Electrical Specifications for additional locking requirements associated with other mounting installations.
- 2.08 MIXES (NOT USED)
- 2.09 FABRICATION (NOT USED)
- 2.10 FINISHES (NOT USED)
- 2.11 SOURCE QUALITY CONTROL
 - A. Test breakers in accordance with:
 - 1. UL 489.
 - 2. MANUFACTURER's standard testing procedures.

PART 3 EXECUTION

- 3.01 EXAMINATION (NOT USED)
- 3.02 PREPARATION (NOT USED)
- 3.03 INSTALLATION
 - A. Install breakers to correspond to the accepted shop drawings.

- 3.04 **ERECTION, INSTALLATION, APPLICATION, CONSTRUCTION (NOT USED)**
- 3.05 REPAIR/RESTORATION (NOT USED)
- 3.06 **RE-INSTALLATION (NOT USED)**
- 3.07 FIELD QUALITY CONTROL
 - A. As specified in Section 16050.

ADJUSTING 3.08

- Adjust trip settings in accordance with Protective Device Coordination Study as accepted by the Engineer and in accordance with MANUFACTURER's recommendations.
- Adjust motor circuit protectors in accordance with NEC and the MANUFACTURER's recommendation based on the nameplate values of the installed motor.
- **CLEANING (NOT USED)** 3.09
- 3.10 **DEMONSTRATION AND TRAINING (NOT USED)**
- 3.11 **PROTECTION**

^{1AD1} Addendum No. 1

- A. As specified in Section 16050.
- 3.12 SCHEDULES (NOT USED)

END OF SECTION
=

