EMERALD COAST UTILITIES AUTHORITY

BAYOU MARCUS WATER RECLAMATION FACILITY HEADWORKS EQUIPMENT

December 20, 2012

ADDENDUM NO.1

Dear Sir:

This addendum is to notify you of the following information to the above referenced bid number. The changes are shown in **bold**, *italic*, and **strikethrough** print. The remaining information is to stay the same.

See Pages 32, 33, 34, 35, 40, 44, and 45, drawings M-250, M-251, E-011, E-050, and E-051.

Page 32, Paragraph 2.2.A.7: The peak flow rate for each Unit is 12 MGD.

7. Peak Flow/Unit: **14.0 12.0** MGD with 6" headloss

Page 32, Paragraph 2.2.A.11: The overflow channel shall include a 36" drop pipe.

11. Effluent Connection: 60" wide channel, with 36" flanged drop pipe connection.

Page 33, Paragraph 2.2.D.1.a: A Beck actuator shall be required for the plug valve.

- a. One (1) 4" cast iron plug valve with electric actuator as manufactured by Beck, 120 V, 60 Hz, 1PH, NEMA 4X, to control the underflow. *The actuator shall be Beck Group 11 quarter-turn rotary actuator with hand-wheel for manual operation without power.*
- Page 33, Paragraph 2.3.A.1: One main control panel (indoor) and one local control panel (remote located at equipment) shall be furnished, completely pre-wired and tested. There is no third panel, all three Grit Kings (2 now, 1 future) shall be controlled from a single main control panel and the local control panel. Drawing: E-011 shows CP-3 with a control feed to CP-3A. Refer to drawings: E-050 & E-051 for additional information and requirements.
- 1. One (1) control panel (1) control panel (indoor) and one (1) local control panel (remote located at equipment) shall be furnished, completely pre-wired and tested. There is no third panel, all three Grit Kings (2 now, 1 future) shall be controlled from a single main control panel and the local control panel. Drawing: E-011 shows CP-3 with a control feed to CP-3A. Refer to drawings: E-050 & E-051 for additional information and requirements.

Page 33, Paragraph 2.3.A.2.f: Ignore load requirement.

2.f Load: 15 Amp

- Page 33, Paragraph 2.3.A.3: The main control panel shall contain all timers, switches, indicator lights, PLC, HMI screen, and other components, while the local control panel shall contain all switches, indicator lights, and other components necessary to operate the following equipment:
- 3. The *Control main control* panel shall contain all timers, switches, indicator lights, *PLC*, *HMI screen*, and other components, *while the local control panel shall contain all switches*, *indicator lights, and other components* necessary to operate the following equipment:
- Page 34, Paragraph 2.3.A.6: Confirm, 480V, 3-Phase power and 120V, 1-Phase will be provided to the panel. No 480V to 120V step-down transformer is required.
- 6. The panel door layout shall include the following items below; 480V, 3-Phase power and 120V, 1-Phase power will be provided for the panel. No 480V to 120V step-down transformer is required.
- Page 35, Paragraph 2.5.B.1: As long as panels, solenoids, devices, etc. are not located in a classified area, it will not be required to be explosion proof.
- 1. The system shall require one (1) 480 VAC, three phase electrical service connection and one (1) 120 VAC, single phase control power connection to operate, explosion proof as required. As long as panels, solenoids, devices, etc., are not located in a classified area, it will not be required to be explosion proof.
- Page 40, Paragraph 2.3.F: The solenoid valve shall be provided by the Grit Removal System Manufacturer. Any controls for this valve shall be provided by the System supplier.
- F. A valve cock with NPT nipple shall be furnished for the spiral washwater. Also, an 115V-single phase solenoid valve, which is compatible with the motor enclosure, shall be included for the washwater line and connected by the electrical contractor to open when the Hydrogritter motor is activated. Solenoid valve shall be brass body, ASCO Series 8221. *The solenoid valve shall be provided by the Grit Removal System Manufacturer. Any controls for this valve shall be provided by the System supplier.*

Page 44/45, Paragraph 2.3.B-C-D: Clarification

2.3 ACCESSORIES

The Grit Removal System supplier shall be responsible for incorporating the Grit Pump controls into his panel design. The panel shall be able to monitor/control signals from the grit pump as listed in the specifications and drawings. Input/output signals shall be verified by the specified pump manufacturer.

B. TEMPERATURE PROTECTION - Furnish temperature monitoring devices in motor windings for use in conjunction with and supplemental to external motor overload protection. Arrange controls to shut down the pump should any of the sensors detect high temperature and automatically reset once motor temperature returns to normal. Set temperature monitors at levels recommended by pump manufacturer.

C. SEAL LEAK DETECTION - Provide a humidity sensitive sensor in the motor's stator cavity which allows a control panel mounted relay to indicate leakage into the motor. Electronic probes which depend on sensing resistance value changes in seal oil will not be acceptable as seal leak indicators.

D. "PumpSafe" MOTOR SENSOR MONITORING RELAY - The pump supplier shall furnish all relays required for monitoring all motor sensors. The relays shall be installed by others in the motor control panel and properly wired in accordance with pump manufacturer's instructions. Relays shall mount in standard 12-pin socket bases (provided) and shall operate on available control voltage of 24-240 VAC. If relays require an input voltage that is not available in the motor control panel an adequate transformer (with fused input) shall be provided by the pump supplier. Relays shall have a power consumption of no more than 2.8 watt, and shall be UL approved. Relays shall be modular in design, with each relay monitoring no more than two motor sensor functions.

The following clarifications are hereby issued for drawing M-250:

The grit removal system shall have a cover that consists of 3/8" thick diamond plate aluminum with 4" thick neoprene gaskets. All hardware shall be 316SS. The cover shall be provided in no less than four (4) sections such that it is removable by plant operators. The cover shall be rated for a 30 PSF live load and a 300 pound concentrated load. The access hatch for the grit removal system shall be Halliday model S1S2430 or engineer approved equal. The hatch shall include an auto lock hold open arm, slam lock, and a recessed handle. Removable handles shall not be accepted. Bolt down access hatches shall not be accepted. The hatch shall have a 300 PSF load rating.

The following clarifications are hereby issued for drawing M-251:

The handrail shown on top of the grit removal system shall be provided by the Grit Removal System supplier. The handrail shall consist of a double rail aluminum system with kick plate. All hardware shall be 316SS. The handrail system shall be a face-mount system, not a floor mounted system. The handrails and supports shall not have to be removed in order to remove the covers on the Grit King units.

The following clarifications are hereby issued for drawing E-011:

Main control panels shall be NEMA 12. The local control panels shall be NEMA 4X Stainless Steel (316L). CP-3, the main control panel, is indoor with the HMI, PLC, etc.; CP-3A is the local control panel to be located outside at the equipment.

The following clarifications are hereby issued for drawing E-050:

The Grit Removal Manufacturer is responsible for providing the control panel. Refer to Sheet Note 1.2 for clarity. Control panels shall be PLC based logic for interface with the plant network system and HMI screen. Additional relay logic shall be provided as required for operation of equipment and/or interface between the main and local control panels.

The following clarifications are hereby issued for drawing E-051:

The control panels contain the power distribution for the equipment (as indicated on E-011), the control for the equipment (as indicated on E-050 & E-051), and the network connection to interface with the plant (as indicated in E-050). Panel shall be provided by the equipment manufacturer (built by their designated process systems integrator).

Underflow Valve system does not need to be controlled from local control panel CP-3A, but it shall have an auto/manual selector within the HMI of CP-3.

After review, no changes will be made to the insurance requirements for this bid.

If you have any questions, please call my office at 850-969-6531 or email me at amy.williamson@ecua.fl.gov.

Sincerely,

Amy Williamson Senior Purchasing Agent