



Addendum No. 2 to Contract Documents

Project	Phase 2 Cayuga Heights WWTP Upgrade	Project No.	11178479
Owner	Village of Cayuga Heights, NY	Federal Project No.	--
Contract No.	1 – General 2 – Electrical 3 – HVAC	Date	April 27, 2021

To All Contractors:

Contractors submitting proposals for the above-named project shall take note of the following changes, additions, deletions, clarifications, etc., in the Contract Documents, which shall become a part of and have precedence over anything contrarily shown or described in the Contract Documents, and all such shall be taken into consideration and be included in the Contractor's Bid Proposal.

(Please see attached pages.)



Howard B. LaFever, P.E.



Addendum No. 2 to Contract Documents

Phase 2 Cayuga Heights WWTP Upgrade

Village of Cayuga Heights, NY

GHD Project 11178479

April 27, 2021

SPECIFICATIONS

Item No. 1:

Section 01010 – Summary of Work

- Under Article 1.12, **ADD** the following new paragraph:

“D. Owner shall be responsible for removing Owner’s equipment and tools from areas of new work. Contractor shall notify Owner 2 weeks in advance of when area is needed for Contractor’s work.”
- In Paragraph B, under Article 1.13, **ADD** the following at the end of Subparagraph 8:

“Renovations shall be completed before startup and commissioning of the digesters and equipment within the building.”

Item No. 2:

Section 01640, Equipment – General

- In the Schedule of Equipment Testing and Manufacturer’s Services under the row for Digester Gasholder Cover
 - Under Column “Witness Preliminary Field Testing and Provide Installation Certificate”, **DELETE** “1” and **REPLACE** with “2”
 - Under Column “Witness Functional Testing and Provide Certification of Equipment Compliance”, **DELETE** “1” and **REPLACE** with “2”
 - Under Column “Support During Startup”, **DELETE** “1” and **REPLACE** with “2”

Item No. 3:

Section 01660, Testing and Startup

- In the first sentence of Paragraph F, Subparagraph 1 under Article 1.10, **DELETE** the words “a minimum of”

Item No. 4:

Section 02030, Demolition

- Under Article 1.01, **ADD** Paragraphs C and D:
 - “C. Demolition and removal of architectural construction for renovation of buildings.”
 - “D. Demolition and removal of process equipment and piping.”



Addendum No. 2 to Contract Documents

Phase 2 Cayuga Heights WWTP Upgrade
Village of Cayuga Heights, NY
GHD Project 11178479
April 27, 2021

- Under Article 1.02, **RENUMBER** Paragraph G as Paragraph J and **INSERT** the following new Paragraphs G, H, and I:
 - “G. Section 02831 – Asbestos Abatement”
 - “H. Section 02833 – Lead Hazard Control”
 - “I. Section 02843 – PCB Caulk Removal”

Item No. 5:

Section 02833, Lead Hazard Control

- Under Article 1.02, **DELETE** paragraphs A and C in their entirety. **RENUMBER** Paragraph B as Paragraph A.

Item No. 6:

Section 11375 – Digester Gas Collection and Safety Equipment

- In the equipment table under Article 2.01, under the column for Shand & Jurs, **DELETE** “Model 97571” and **REPLACE** with “Model 94309 with Model 94020”

Item No. 7:

Section 11402 – Digester Gasholder Covers

- In Paragraph A, under Article 2.03, **ADD** the following at the end of Subparagraph 1:

“Center ring shall include a 4” flange for mounting of safety selector valve and dual pressure/vacuum relief valves and flame arresters.”
- Paragraph A under Article 2.04, **DELETE** “galvanized, or zinc plated” and **REPLACE** with “Type 304 stainless steel.”

Item No. 8:

Section 17010 – Control Systems Integrator

- **ADD** the following new paragraph under Article 1.08:

“C. Submission of a qualifications package is not required for the following pre-qualified firms:

 1. Kaman Automation
Tom McDonough
Mobile: 585.703.3478
Email: tom.mcdonough@kdgcorp.com
 2. Aqualogics Systems, Inc.
Don Ballway
Mobile: 315.857.7696
Email: dballway@aqualogics.net”



Addendum No. 2 to Contract Documents

Phase 2 Cayuga Heights WWTP Upgrade
Village of Cayuga Heights, NY
GHD Project 11178479
April 27, 2021

Item No. 9:

Section 17100 – Programmable Logic Controllers (PLC)

- **INSERT** the following new paragraph at the end of Article 2.04:

“Q. Space shall be reserved in the enclosures for a fiber optic patch panel. Enclosure space shall be a minimum of 3.5” H x 19” W x 9” D.” The Contractor shall install a fiber optic patch panel within the allocated space upon receiving the fiber optic patch panel from the Electrical Contract.”
- **DELETE** Subparagraphs 1.a, 1.b, 1.c and 2 under Article 2.05 Paragraph C
- **REPLACE** Tables 17100-2 and 17100-3 located at the end of the section with the revised tables (Attachment 1).

Item No. 10:

Appendix 4 – Sludge Heater Proposal

- **REPLACE** the Evoqua Proposal with the revised proposal (Attachment 2).

CONTRACT DRAWINGS

Item No. 1:

Contract Drawing C003, Enlarged Site Plan

- **ADD** the following at the end of Note 3:

“PROVIDE AN APPROVED HDPE TO PVC TRANSITION COUPLING BEFORE ENTERING THE SLUDGE MANAGEMENT BUILDING. TRANSITION SHALL OCCUR UNDERGROUND.”

Item No. 2:

Contract Drawing D006, Primary and Secondary Digesters – Cover Plans

- Sheet Keynote #3, **ADD** the following after the last sentence “FOR BIDDING PURPOSES ASSUME THE ROOF TAR/SEALER OF THE SECONDARY DIGESTER WAS “HOT MOPPED” ONTO THE DIGESTER.”

Item No. 3:

Contract Drawing A005, Sludge Management Building – Plans

- **REPLACE** Contract Drawing A005 with the revised drawing (Attachment 3).



Addendum No. 2 to Contract Documents

Phase 2 Cayuga Heights WWTP Upgrade
Village of Cayuga Heights, NY
GHD Project 11178479
April 27, 2021

Item No. 4:

Contract Drawing A006, Sludge Management Building – Roof Plan and Details

- **REPLACE** Contract Drawing A006 with the revised drawing (Attachment 4).

Item No. 5:

Contract Drawing A007, Sludge Management Building – Exterior Elevations

- **REPLACE** Contract Drawing A007 with the revised drawing (Attachment 5).

Item No. 6:

Contract Drawing S002, Primary Settling Tanks – Upper Plan

- **REPLACE** Contract Drawing S002 with the revised drawing (Attachment 6).

Item No. 7:

Contract Drawing S003, Flocculation and Final Settling Tanks – Upper Plan

- **REPLACE** Contract Drawing S003 with the revised drawing (Attachment 7).

Item No. 8:

Contract Drawing S004, Tertiary Flocculation Tank and Chlorine Contact Tank Plan

- **REPLACE** Note 7 with the following:
“7. Coat the entire west concrete wall of the Recirculation Pumping Station with silane sealer.”

Item No. 9:

Contract Drawing M007, Primary and Secondary Digesters – Sections

- In Section B. **ADD** the following:
“MIN. W.L. EL. 427.04”
“MAX. W.L. EL. 436.00”

Item No. 10:

Contract Drawing M013, Waste Gas Burner, Plan, Sections and Details

- In the Condensate Trap Vault - Lower Plan:
 - **ADD** an HDPE to Stainless Steel Transition Coupling on the 4” HDPE pipe outside the right (southeast) wall of the Condensate Trap Vault. All digester gas pipe inside the Condensate Trap Vault shall be Stainless Steel.
 - **DELETE** “PVC Condensate Drain” and **REPLACE** with “HDPE Condensate Drain”



Addendum No. 2 to Contract Documents

Phase 2 Cayuga Heights WWTP Upgrade

Village of Cayuga Heights, NY

GHD Project 11178479

April 27, 2021

- **ADD** HDPE to PVC Transition Coupling on the 2" HDPE pipe outside the right (southeast) wall of the Condensate Trap Vault. **ADD** callout "PROVIDE APPROVED HDPE TO PVC TRANSITION COUPLING." All process drain pipe inside the Vault shall be PVC.
- **ADD** pipe label to the process drain pipe inside the Condensate Trap Vault. Pipe shall be 1" PVC. All process drain pipe inside the Vault shall be PVC.
- **ADD** pipe label to the sump pump discharge pipe inside the Condensate Trap Vault. Pipe shall be 2" PVC. All sump pump discharge pipe inside the Vault shall be PVC.
- **DELETE** label indicating "2" PVC" for sump pump discharge pipe outside the Condensate Drain Vault and **REPLACE** with "2" HDPE"
- **ADD** HDPE to PVC Transition Coupling on the 2" HDPE pipe outside the left (northwest) wall of the Condensate Trap Vault. **ADD** callout "PROVIDE APPROVED HDPE TO PVC TRANSITION COUPLING."
- In the Condensate Trap Vault – Section:
 - **ADD** an HDPE to Stainless Steel Transition Coupling on the 4" HDPE pipe outside the right (southeast) wall of the Condensate Trap Vault. All digester gas pipe inside the Condensate Trap Vault shall be Stainless Steel.
 - **DELETE** "PVC Condensate Drain" and **REPLACE** with "HDPE Condensate Drain"
 - **ADD** HDPE to PVC Transition Coupling on the 2" HDPE pipe outside the right (southeast) wall of the Condensate Trap Vault. **ADD** callout "PROVIDE APPROVED HDPE TO PVC TRANSITION COUPLING." All process drain pipe inside the Vault shall be PVC.
 - **ADD** pipe label to the process drain pipe inside the Condensate Trap Vault. Pipe shall be 1" PVC. All process drain pipe inside the Vault shall be PVC.
 - **ADD** pipe label to the sump pump discharge pipe inside the Condensate Trap Vault. Pipe shall be 2" PVC. All sump pump discharge pipe inside the Vault shall be PVC.
 - **DELETE** the label for "2" PVC" pipe on the sump pump discharge pipe outside the Condensate Drain Vault and **REPLACE** with "2" HDPE"
 - **ADD** HDPE to PVC Transition Coupling on the 2" HDPE pipe outside the left (northwest) wall of the Condensate Trap Vault. **ADD** callout "PROVIDE APPROVED HDPE TO PVC TRANSITION COUPLING."

Item No. 11:

Contract Drawing I001, SCADA Network Architecture

- **REPLACE** Note 3, which was added in Addendum No. 1, with the following:
 - "3. CATEGORY 6 ETHERNET CABLING, FIBEROPTIC CABLING AND FIBEROPTIC PATCH PANELS SHALL BE FURNISHED AND INSTALLED BY CONTRACT 2, ELECTRICAL."



Addendum No. 2 to Contract Documents

Phase 2 Cayuga Heights WWTP Upgrade

Village of Cayuga Heights, NY

GHD Project 11178479

April 27, 2021

Item No. 12:

Contract Drawing I002, Instrumentation Details

- **INSERT** General Sheet Note 1 to read as follows:
"1. ALL ILLUSTRATED CONDUITS AND CONDUCTORS FOR SIGNAL WIRING SHALL BE FURNISHED AND INSTALLED BY CONTRACT 3, ELECTRICAL."
- **DELETE** Detail 300 for Ultrasonic Level Monitoring Equipment Wiring Detail in its entirety.
- In Detail 450, **REVISE** the title to read "GAS FLOW TRANSMITTER WIRING DETAIL" and **DELETE** the callout referencing 3/4" Cw w/ 1#16 TSP (Flow) 3#14s (24 VDC Power).
- In Detail 475 for Differential and Gage Pressure Transmitter Wiring Detail **DELETE** the callout referencing 3/4" Cw w/ 1#16 TSP.

Item No. 13:

Contract Drawing E010, Sludge Management Building Lighting Floor Plans

- **REVISE** the Upper Level Plan as shown in the revised drawing (Attachment 8).

Item No. 14:

Contract Drawing E018, Riser Diagrams I

- In Sheet Key Note 15, **REPLACE** the words "12-STRAND MULTI-MODE" with "8-STRAND MULTI-MODE"

Item No. 15:

Contract Drawing H006, Sludge Management Building Floor Plans

- **REPLACE** Contract Drawing H006 with the revised drawing (Attachment 9).

Item No.	Equipment Item	Equipment Designation	Description	Function Designation	Input or Output	I/O Type	Electrical Characteristic	In/Out Building?	Remarks
2000	Secondary Wastewater Treatment System								
2001	Trickling Filter Feed/Recirc Pump 1	P-2001	Speed Indication In Remote Run Indication Failure Indication	SI, SR HSI YI, KQ, YQ YA	Input Input Input Input	Analog Discrete Discrete Discrete	4-20 mA 24 VDC 24 VDC 24 VDC	In In In In	Existing
2002	Trickling Filter Feed/Recirc Pump 2	P-2002	Speed Indication In Remote Run Indication Failure Indication	SI, SR HSI YI, KQ, YQ YA	Input Input Input Input	Analog Discrete Discrete Discrete	4-20 mA 24 VDC 24 VDC 24 VDC	In In In In	Existing
2003	Trickling Filter Feed/Recirc Pump 3	P-2003	Speed Indication In Remote Run Indication Failure Indication	SI, SR HSI YI, KQ, YQ YA	Input Input Input Input	Analog Discrete Discrete Discrete	4-20 mA 24 VDC 24 VDC 24 VDC	In In In In	Existing
2101	Flash Mixer 1	MX-2101	Run Indication Failure Indication	YI, KQ, YQ YA	Input Input	Discrete Discrete	24 VDC 24 VDC	In In	
2102	Flash Mixer 2	MX-2102	Run Indication Failure Indication	YI, KQ, YQ YA	Input Input	Discrete Discrete	24 VDC 24 VDC	In In	
2201	Blower 1	B-2201	Run Indication Failure Indication	YI, KQ, YQ YA	Input Input	Discrete Discrete	24 VDC 24 VDC	In In	
2202	Blower 2	B-2202	Run Indication Failure Indication	YI, KQ, YQ YA	Input Input	Discrete Discrete	24 VDC 24 VDC	In In	
2301	Final Settling Tank Drive 1	FST-2301	Run Indication Failure Indication	YI, KQ, YQ YA	Input Input	Discrete Discrete	24 VDC 24 VDC	Out Out	Existing
2302	Final Settling Tank Drive 2	FST-2302	Run Indication Failure Indication	YI, KQ, YQ YA	Input Input	Discrete Discrete	24 VDC 24 VDC	Out Out	Existing
2401	Secondary Sudge Pump 1	SSP-2401	In Remote Run Indication Failure Indication	HSI YI, KQ, YQ YA	Input Input Input	Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC	In In In	Existing
2402	Secondary Sudge Pump 2	SSP-2402	In Remote Run Indication Failure Indication	HSI YI, KQ, YQ YA	Input Input Input	Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC	In In In	Existing
2501	Sump Pump Control Panel	CP-2501	Pump 1 Run Indication Pump 1 Fault Indication Pump 2 Run Indication Pump 2 Fault Indication Sump High Level Alarm	YI, KQ, YQ YI, KQ, YQ YI, KQ, YQ YI, KQ, YQ YA	Input Input Input Input Input	Discrete Discrete Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC 24 VDC 24 VDC	In In In In In	Existing

Item No.	Equipment Item	Equipment Designation	Description	Function Designation	Input or Output	I/O Type	Electrical Characteristic	In/Out Building?	Remarks
3000	Tertiary Treatment and Disinfection System								
3001	Tertiary Feed Pump Control Panel	CP-3001	Various	Various	Various	Various	Ethernet	In	
3101	Tertiary Filter 1 Control Panel	CP-3101	Various	Various	Various	Various	Ethernet	Out	
3102	Tertiary Filter 2 Control Panel	CP-3102	Various	Various	Various	Various	Ethernet	Out	
3201	Tertiary Bldg Alarm Panel	CP-3201	Tertiary Flocc Tank Drive Fault	YA	Input	Discrete	24 VDC	Out	
			Tertiary Polymer Feed System Fault	YA	Input	Discrete	24 VDC	Out	
			Tertiary Building Sump Pump System Fault	YA	Input	Discrete	24 VDC	Out	
			Tertiary Building Flood Alarm	YA	Input	Discrete	24 VDC	Out	
3301	Tertiary Feed Flow Meter	FIT-3301	Wastewater Flow Indication	FI	Input	Analog	4-20 mA	In	Existing (magnetic flow meter)
7000	WWTP Support Systems								
7001	Effluent Water Pump 1	EWP-7001	Run Indication	YI, KQ, YQ	Input	Discrete	24 VDC	In	Existing
			Failure Indication	YA	Input	Discrete	24 VDC	In	
7002	Effluent Water Pump 2	EWP-7002	Run Indication	YI, KQ, YQ	Input	Discrete	24 VDC	In	Existing
			Failure Indication	YA	Input	Discrete	24 VDC	In	
7010	Bldg Sump High Level Float Switch	LS-7010	Flood Alarm Indication	YA	Input	Discrete	24 VDC	In	Existing
8000	Building Systems								
8005	Ventilation Flow Detection - RPS Building	FI-8005	Ventilation Alarm	YA	Input	Discrete	24 VDC	In	Signal from HVAC-201 CP
PLC Status									
			PLC Memory Battery		Internal Value	Internal Value			
PLC-RPS			AC Power Loss	IA	Input	Discrete	24 VDC	In	N.O. contacts energized closed while power is On.
PLC-RPS	Primary DC Power Supply Failure		Failure Indication	EAL	Input	Discrete	24 VDC	In	
PLC-RPS	Secondary DC Power Supply Failure		Failure Indication	EAL	Input	Discrete	24 VDC	In	
PLC-RPS	Ethernet Switch Failure		Failure Indication	YA	Input	Discrete	24 VDC	In	
PLC-RPS	UPS Battery		UPS Battery Low	EAL	Input	Discrete	24 VDC	In	
PLC-RPS	PLC Cabinet Internal Temperature		Temperature Indication	TI, TAH, TAL, TR	Input	Analog	4-20 mA	In	

Item No.	Equipment Item	Equipment Designation	Description	Function Designation	Input or Output	I/O Type	Electrical Characteristic	In/Out Building?	Remarks
0000	WWTP Headworks System								
0100	Mechanical Screen Control Panel	CP-0100	Screen Running Screen Fault Compactor Running Compactor Fault High-High Differential Level High Upstream Level Loss of Echo High-High Level Float	YI, KQ, YQ YA YI, KQ, YQ YA YA YA YA YA	Input Input Input Input Input Input Input Input	Discrete Discrete Discrete Discrete Discrete Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC 24 VDC 24 VDC 24 VDC 24 VDC 24 VDC	In In In In In In In In	Existing
0200	Grit System Control Panel	CP-0200	Grit Trap Running Grit Trap Fault Grit Pump Running Grit Pump Fault Grit Classifier Running Grit Classifier Fault	YI, KQ, YQ YA YI, KQ, YQ YA YI, KQ, YQ YA	Input Input Input Input Input Input	Discrete Discrete Discrete Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC 24 VDC 24 VDC 24 VDC	In In In In In In	Existing
0300	Parshall Flume Influent Flow	FIT-0300	Flow Indication Loss of Echo	FI, FAL, FALL YA	Input Input	Analog Discrete	4-20 mA 24 VDC	In In	Existing
1000	Primary Wastewater Treatment System								
1101	PST 1/2 Sludge Collector Drive	SCD-1101	Run Indication Failure Indication	YI, KQ, YQ YA	Input Input	Discrete Discrete	24 VDC 24 VDC	In In	Existing
1102	PST 3 Sludge Collector Drive	SCD-1102	Run Indication Failure Indication	YI, KQ, YQ YA	Input Input	Discrete Discrete	24 VDC 24 VDC	In In	Existing
1201	PST 1 Sludge Withdrawal Valve Actuator 1A	VAC-1201	Fault Indication Open Valve Close Valve Valve Closed Valve Open In Remote Torque Fault Torque Fault	YA ZCC ZCO ZIC ZIO HSI_R YA YA	Input Output Output Input Input Input Input Input	Discrete Discrete Discrete Discrete Discrete Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC 24 VDC 24 VDC 24 VDC 24 VDC 24 VDC	Out Out Out Out Out Out Out Out	
1202	PST 1 Sludge Withdrawal Valve Actuator 1B	VAC-1202	Fault Indication Open Valve Close Valve Valve Closed Valve Open In Remote Torque Fault Torque Fault	YA ZCC ZCO ZIC ZIO HSI_R YA YA	Input Output Output Input Input Input Input Input	Discrete Discrete Discrete Discrete Discrete Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC 24 VDC 24 VDC 24 VDC 24 VDC 24 VDC	In Out Out In In In In In	

Item No.	Equipment Item	Equipment Designation	Description	Function Designation	Input or Output	I/O Type	Electrical Characteristic	In/Out Building?	Remarks
1203	PST 1 Sludge Withdrawal Valve Actuator 2A	VAC-1203	Fault Indication	YA	Input	Discrete	24 VDC	In	
			Open Valve	ZCC	Output	Discrete	24 VDC	Out	
			Close Valve	ZCO	Output	Discrete	24 VDC	Out	
			Valve Closed	ZIC	Input	Discrete	24 VDC	In	
			Valve Open	ZIO	Input	Discrete	24 VDC	In	
			In Remote	HSI_R	Input	Discrete	24 VDC	In	
			Torque Fault	YA	Input	Discrete	24 VDC	In	
			Torque Fault	YA	Input	Discrete	24 VDC	In	
1204	PST 1 Sludge Withdrawal Valve Actuator 2B	VAC-1204	Fault Indication	YA	Input	Discrete	24 VDC	In	
			Open Valve	ZCC	Output	Discrete	24 VDC	Out	
			Close Valve	ZCO	Output	Discrete	24 VDC	Out	
			Valve Closed	ZIC	Input	Discrete	24 VDC	In	
			Valve Open	ZIO	Input	Discrete	24 VDC	In	
			In Remote	HSI_R	Input	Discrete	24 VDC	In	
			Torque Fault	YA	Input	Discrete	24 VDC	In	
			Torque Fault	YA	Input	Discrete	24 VDC	In	
1205	PST 1 Sludge Withdrawal Valve Actuator 3A	VAC-1205	Fault Indication	YA	Input	Discrete	24 VDC	In	
			Open Valve	ZCC	Output	Discrete	24 VDC	Out	
			Close Valve	ZCO	Output	Discrete	24 VDC	Out	
			Valve Closed	ZIC	Input	Discrete	24 VDC	In	
			Valve Open	ZIO	Input	Discrete	24 VDC	In	
			In Remote	HSI_R	Input	Discrete	24 VDC	In	
			Torque Fault	YA	Input	Discrete	24 VDC	In	
			Torque Fault	YA	Input	Discrete	24 VDC	In	
1206	PST 1 Sludge Withdrawal Valve Actuator 3B	VAC-1206	Fault Indication	YA	Input	Discrete	24 VDC	In	
			Open Valve	ZCC	Output	Discrete	24 VDC	Out	
			Close Valve	ZCO	Output	Discrete	24 VDC	Out	
			Valve Closed	ZIC	Input	Discrete	24 VDC	In	
			Valve Open	ZIO	Input	Discrete	24 VDC	In	
			In Remote	HSI_R	Input	Discrete	24 VDC	In	
			Torque Fault	YA	Input	Discrete	24 VDC	In	
			Torque Fault	YA	Input	Discrete	24 VDC	In	
1301	Primary Sludge/Scum Pump Control Panel	P-1301	Pump 1 Run Indication	YI, KQ, YQ	Input	Discrete	24 VDC	Out	Existing
			Pump 1 Failure Indication	YA	Input	Discrete	24 VDC	Out	
			Pump 2 Run Indication	YI, KQ, YQ	Input	Discrete	24 VDC	Out	Existing
			Pump 2 Failure Indication	YA	Input	Discrete	24 VDC	Out	
			Wet Well High Level Alarm	YA	Input	Discrete	24 VDC	Out	
			Wet Well Low Level Alarm	YA	Input	Discrete	24 VDC	Out	

Item No.	Equipment Item	Equipment Designation	Description	Function Designation	Input or Output	I/O Type	Electrical Characteristic	In/Out Building?	Remarks
5000	Anaerobic Sludge Digestion System								
5101	Digester Mixing Pump 1	DMP-5101	In Remote Run Indication Failure Indication	HSI YI, KQ, YQ YA	Input Input Input	Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC	In In In	
5201	Digested Sludge Recirc. Pump 1	DRP-5201	In Remote Run Indication Failure Indication	HSI YI, KQ, YQ YA	Input Input Input	Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC	In In In	
5301	Sludge Heater 1 Control Panel	SHX-5301	Sludge Heater Running Induced Draft Fan Running Fault Indication	YI, KQ, YQ YI, KQ, YQ YA	Input Input Input	Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC	In In In	
5302	Sludge Heater 2 Control Panel	SHX-5302	Sludge Heater Running Induced Draft Fan Running Fault Indication	YI, KQ, YQ YI, KQ, YQ YA	Input Input Input	Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC	In In In	
5401	Digester Sump Pump Control Panel	CP-5401	Pump 1 Run Indication Pump 1 Failure Indication Pump 2 Run Indication Pump 2 Failure Indication Sump High Level Alarm Sump Low Level Alarm	YI, KQ, YQ YA YI, KQ, YQ YA YA YA	Input Input Input Input Input Input	Discrete Discrete Discrete Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC 24 VDC 24 VDC 24 VDC	In In In In In In	
5402	Digester Sump Pump Control Panel	CP-5402	Pump 3 Run Indication Pump 3 Failure Indication Sump High Level Alarm	YI, KQ, YQ YA YA	Input Input Input	Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC	In In In	
5501	Digested Sludge Recirculation Flow Meter	FIT-5501	Sludge Flow Indication	FI	Input	Analog	4-20 mA	In	Magnetic flow meter
5511	Digester Gas Flow Meter (Waste Gas)	FIT-5511	Gas flow indication	FI	Input	Analog	4-20 mA	In	Thermal mass flow meter
5512	Digester Gas Flow Meter (Gas to Heaters)	FIT-5512	Gas flow indication	FI	Input	Analog	4-20 mA	In	Thermal mass flow meter
5521	Primary Digester Cover Level Sensor	LIT-5521	Level Indication	LI, LAHH, LAH, LAL, LALL	Input	Analog	4-20 mA	In	
5522	Secondary Digester Cover Level Sensor	LIT-5522	Level Indication	LI, LAHH, LAH, LAL, LALL	Input	Analog	4-20 mA	In	
5531	Primary Digester Sludge Level	PIT-5531	Level Indication	LI, LAHH, LAH, LAL, LALL	Input	Analog	4-20 mA	In	Differential pressure transmitter
5532	Secondary Digester Sludge Level	PIT-5532	Level Indication	LI, LAHH, LAH, LAL, LALL	Input	Analog	4-20 mA	In	Differential pressure transmitter
5601	Waste Gas Burner Control Panel	CP-5601	Run Indication Failure Indication	YI, KQ, YQ YA	Input Input	Discrete Discrete	24 VDC 24 VDC	In In	
5610	Automatic Drip Trap Control Panel	CP-5610	Run Indication Failure Indication	YI, KQ, YQ YA	Input Input	Discrete Discrete	24 VDC 24 VDC	In In	

Item No.	Equipment Item	Equipment Designation	Description	Function Designation	Input or Output	I/O Type	Electrical Characteristic	In/Out Building?	Remarks
6000	Sludge Dewatering System								
6001	Belt Press Sludge Feed Grinder 1	SFG-6001	AUTO Mode Indication Run Indication Failure Indication High Temp	HSI YI, KQ, YQ YA YA	Input Input Input Input	Discrete Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC 24 VDC	In In In In	
6002	Belt Press Sludge Feed Grinder 2	SFG-6002	AUTO Mode Indication Run Indication Failure Indication High Temp	HSI YI, KQ, YQ YA	Input Input Input	Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC	In In In	
6101	Belt Filter Press Sludge Feed Pump 1	SFP-6101	In Remote Run Indication Failure Indication	HSI YI, KQ, YQ YA	Input Input Input	Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC	In In In	
6102	Belt Filter Press Sludge Feed Pump 2	SFP-6102	In Remote Run Indication Failure Indication	HSI YI, KQ, YQ YA	Input Input Input	Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC	In In In	
6201	Belt Press Sludge Feed Flow Meter	FIT-6201	Sludge Flow Indication	FI	Input	Analog	4-20 mA	In	Magnetic flow meter
7000	WWTP Support Systems								
7001	Sewage Ejector Pump 1	SEP-7001	In Remote Run Indication Failure Indication	HSI YI, KQ, YQ YA	Input Input Input	Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC	In In In	
7002	Sewage Ejector Pump 2	SEP-7002	In Remote Run Indication Failure Indication	HSI YI, KQ, YQ YA	Input Input Input	Discrete Discrete Discrete	24 VDC 24 VDC 24 VDC	In In In	
7100	SMB Pump Room Combustible Gas Detection	LEL-7101	Combustible Gas Alarm	YA	Input	Discrete	24 VDC	In	
7101	SMB Pump Room Combustible Gas Detection	LEL-7102	Combustible Gas Alarm	YA	Input	Discrete	24 VDC	In	
7110	HWB Influent Room Combustible Gas Detection	LEL-7110	Combustible Gas Alarm	YA	Input	Discrete	24 VDC	In	Existing

Item No.	Equipment Item	Equipment Designation	Description	Function Designation	Input or Output	I/O Type	Electrical Characteristic	In/Out Building?	Remarks
8000	Building Systems								
8001	Ventilation Flow Detection - HWB Influent Room	FI-8001	Ventilation Alarm	YA	Input	Discrete	24 VDC	Out	Signal from HVAC-101 CP
8002	Ventilation Flow Detection - SMB Pump Room	FI-8002	Ventilation Alarm	YA	Input	Discrete	24 VDC	In	Signal from HVAC-101 CP
8003	Ventilation Flow Detection - SMB Digester Room	FI-8003	Ventilation Alarm	YA	Input	Discrete	24 VDC	In	Signal from HVAC-101 CP
8101	Airlock Door 1 Position Sensor	ZI-8101	Airlock Door Open Alarm	YA	Input	Discrete	24 VDC	In	
8102	Airlock Door 2 Position Sensor	ZI-8102	Airlock Door Open Alarm	YA	Input	Discrete	24 VDC	In	
8103	Airlock Door 3 Position Sensor	ZI-8103	Airlock Door Open Alarm	YA	Input	Discrete	24 VDC	In	
8104	Airlock Door 4 Position Sensor	ZI-8104	Airlock Door Open Alarm	YA	Input	Discrete	24 VDC	In	
8204	Service Bldg Fire Detection System	XI-8204	Fire Alarm	YA	Input	Discrete	24 VDC	Out	Signal from HVAC-102 CP
PLC Status									
			PLC Memory Battery			Internal Value	Internal Value	In	
PLC-SMB			AC Power Loss	IA	Input	Discrete	24 VDC	In	N.O. contacts energized closed while power is On.
PLC-SMB	Primary DC Power Supply Failure		Failure Indication	EAL	Input	Discrete	24 VDC	In	
PLC-SMB	Secondary DC Power Supply Failure		Failure Indication	EAL	Input	Discrete	24 VDC	In	
PLC-SMB	Ethernet Switch Failure		Failure Indication	YA	Input	Discrete	24 VDC	In	
PLC-SMB	Uninterruptible Power Supply (UPS) Battery		UPS Battery Low	EAL	Input	Discrete	24 VDC	In	
PLC-SMB	PLC Cabinet Internal Temperature		Temperature Indication	TI, TAH, TAL, TR	Input	Analog	4-20 mA	In	

FIRM PROPOSAL

CAYUGA HEIGHTS HEATER HEAT EXCHANGER REPLACEMENT CAYUGA HEIGHTS, NY

SECTION 11385 – SLUDGE HEATER/HEAT EXCHANGER

Quotation No: 408636R2 – 3/16/2021

Questions related to this Proposal should be directed to Evoqua's area sales representative:

SALES REPRESENTATIVE

Dave Boshart

GP Jager, Inc.

105 Bristol Road

Fayetteville, NY 13066

315-256-3071

dboshart@jagerinc.com



To: Contractors bidding
Owner: Cayuga Heights, NY
Engineer: GHD
Bid Date: 3/16/2021

1. SUMMARY

Evoqua Water Technologies LLC (Evoqua) proposes to furnish the equipment specified in this Quotation in accordance to the scope of supply described in this quotation and subject to the Clarifications/Exceptions and Standard Terms of Sale stated herein.

Addenda received: 0.

The information in this quotation is confidential and/or proprietary and has been prepared solely for the recipient's use in considering the purchase of the equipment and/or services described herein. Transmission of all or any part of this information to others, or use by the recipient, for other purposes is expressly prohibited without Evoqua's prior written consent.

ITEM & DESCRIPTION

PRICE

Section 11385 – Sludge Heater/Heat Exchanger

████████ USD

Evoqua's price includes only the specific items detailed in this quotation. Items not specifically identified herein are to be furnished by others. Please refer to the excluded items in Section 4 of this quotation for a list of items to be furnished by others.

A. OPTIONS: An order for items quoted as an extra cost option, if any, will be accepted only when included with the basic equipment order. None

B. FREIGHT: Pricing is FCA shipping point with standard freight allowed to the job site. Our price does not include any costs for unloading, transporting on the site, phased shipments or storage.

C. QUOTATION VALIDITY: This quotation is valid until March 31, 2021 unless extended in writing by Evoqua. Due to current raw material price fluctuation, Evoqua reserves the right to re-quote the equipment proposed herein after that time.

D. FIELD SERVICES: Evoqua's pricing includes the services of a factory field service technician for checking the installed equipment and instruction of Owner's personnel; all of which shall be performed over a total of two (2) trips with four (4) days on site.

E. SERVICE MANUALS: Our pricing includes an electronic version of the operation and maintenance (O&M) manual as an Adobe PDF file format only. If requested, Evoqua will supply hard copies of the service manual at the customer's expense. Drawings will be supplied in an unchangeable TIF, bitmap,

or PDF file format only. The rights to the content of Evoqua O&M manuals and drawings belong solely to Evoqua and Evoqua reserves the right to make changes to content at any time.

F. PAYMENT AND PRICE TERMS: The terms of payment are net 30 in accordance with the following milestones:

- 10% on drawing submittal delivery;
- 85% on shipment of equipment, or offer to ship;
- 5% on startup of equipment or 120 days from final delivery, whichever occurs first.

G. CANCELLATION POLICY: If Evoqua is issued an order and the Buyer cancels or suspends its order for any reason other than Evoqua's breach, the Buyer shall promptly pay Evoqua for work performed prior to cancellation or suspension and any other costs incurred by Evoqua as a result of such cancellation or suspension. At a minimum, cancellation after executed contract will result in a cancellation fee of 10% of the total order value.

Evoqua's prices are exclusive of any taxes. If this project is not subject to sales or use tax, please issue a Tax-Exempt Certificate with any ensuing purchase order (P.O.). If applicable, please provide a copy of payment bond information with the P.O. With no exemption or if this project is subject to sales or use tax, the Purchaser will be invoiced for taxes at the then-current rate of sales, use or other tax for the jobsite location.

2. DRAWING AND SHIPPING INFORMATION

Evoqua will furnish shop drawing submittals and equipment per the following project schedule:

- Submittal Drawings: Within ten (10) weeks from the date of final agreement by both parties.
- Submittal Drawing Reviews/Approvals: Within four (4) weeks from Evoqua's delivery of Submittal Drawings.
- Shipment of Equipment: Within twenty (20) weeks after approval of Submittal Drawings.

Evoqua has provided typical standard times and shipment dates. Actual times will be provided upon receipt of a Purchase Order based upon current backlog. Evoqua will work closely with the General Contractor to provide delivery dates to meet the overall project schedule as possible.

If Submittal Drawing Reviews/Approvals are not received by Evoqua in accordance with the project schedule noted above, Evoqua shall be entitled to a reasonable extension of the *Shipment of Equipment* times and/or a reasonable increase in the contract price to cover costs incurred because of Submittal Drawing Review/Approval delays unless the delay is the fault of Evoqua.

3. EQUIPMENT SCOPE

SECTION 11385 – SLUDGE HEATER/HEAT EXCHANGER

Evoqua proposes to furnish and deliver, ready for installation, one (1) Model 254R digester sludge heater and heat exchanger. The unit will have a sludge heating capacity of 250,000 BTU per hour plus a building heating capacity of 130,000 BTU per hour, and will be arranged to automatically burn digester gas, natural gas, or a mixture of the two gases, by means of a special burner with draft induced, positive exhaust system. The unit will be a left hand front configuration.

The digester heater and heat exchanger will be an integral unit constructed by a single manufacturer in accordance with Section IV (Heater Boiler) of the ASME Boiler Code. Both the boiler and heat exchanger will be inspected, stamped, and registered with ASME by an inspector holding a valid National Board Commission.

The fuel handling equipment and controls on the proposed heater and heat exchanger will comply with those national, state and local codes specifically referenced in section 11385 of the bid documents and dated prior to bid, except as noted herein. Should adherence to additional or updated codes be required, we reserve the right to adjust our price accordingly.

DESIGN CRITERIA

The heater and heat exchanger will be selected upon design calculations incorporating the following criteria:

- A. Minimum boiler output: 380,000 BTU/hr.
- B. Minimum sludge heating capacity: 250,000 BTU/hr.
- C. Sludge recirculation flow: 150 GPM.
- D. Digester operating temperature: 95 °F.
- E. In accordance with Section IV (Heating Boiler) of the ASME Boiler Code.
- F. Maximum working pressure: 30 psi.
- G. Site elevation: Operation at 433 feet above sea level.

BOILER

All surfaces exposed to fire, including the return back, will be water cooled and readily accessible for inspection and maintenance.

The fire tubes will be .095" wall SA-178 GR "A" steel boiler tubes. In order to facilitate tube replacement, the boiler tubes will be rolled and flared in place. The exhaust breeching and water-cooled return back will be readily removable for access for fire tube cleaning. The furnace tube will be a minimum of 16" O.D., SA-53 GR "B" steel.

The combined heating surface of the combustion chamber, water-cooled back, and fire tubes will not be less than 87.9 square feet to allow an extended period between tube cleaning. An exhaust stack temperature gauge will be supplied to monitor the exhaust gas temperature. Front and sides of exhaust breach will be covered with an expanded metal protective guard.

All steel plate used in construction of the boiler in contact with fire will be SA-516 GR "70" and of a minimum thickness of 5/16". The tube sheets will have a minimum thickness of 5/8".

SLUDGE TUBES

The sludge tubes will be standard weight steel pipe held in position by multiple gasket joints so arranged that leakage will be exposed to atmospheric pressure and detected by telltale holes in the gasket following ring, positively preventing contamination of the heating water by any material circulated through the sludge tubes. The sludge return bends, gasket following rings and flanged connections will be of cast iron construction. Sludge tubes will be completely removable for inspection, cleaning, or replacement. Return bends and 4" standard flanged sludge inlet and outlet connections will be removable for inspection or cleaning of the interior surface of the sludge tubes without draining the water bath.

All passageways through the sludge tubes and return bends will be large enough to pass a 3-1/2" diameter sphere. The exterior heated surface of the sludge tubes will be at least 28.3 square feet. To allow convenient access for inspection, cleaning, or replacement, the sludge tubes will be located next to the boiler.

A water circulation pump, equipped with an open drip proof motor will be provided, with discharge arranged to produce turbulent transverse circulation across the sludge tubes. A flow control valve, to prevent gravity flow through the pump, will be provided.

INDUCED DRAFT FAN

The induced draft fan will be provided to maintain a negative pressure of at least 1" w.c. vacuum in the furnace throughout boiler operation to prevent the leakage of combustion products to the surrounding room and to permit dependable operation at the digester gas pressures listed herein. The induced draft fan will be of a capacity in excess of the maximum air requirements for combustion.

The induced draft fan will draw air at the burner inlet and at the top of the exhaust breech. The burner suction point will permit the adjustment of combustion air volume and the exhaust breech inlet will be adjustable to provide negative furnace pressure.

The induced draft fan will be belt driven to permit field adjustment of the air capacity. The drive belts and open drip proof motor will be enclosed in a removable housing. An air-proving switch will be provided to shut down the boiler in the event of fan failure.

CONTROL PANEL

The electrical control panel containing burner controller, branch circuit breaker and magnetic starter for the induced draft fan motor, controls for water bath circulation pump, and digester temperature controls will be mounted and wired with rigid conduit and flexible watertight connectors in accordance with NEC. The electrical control panel will be mounted on the side of the unit so as not to interfere with access to the burner, return breech, sludge tubes, or gas piping. The control panel will be a NEMA 12 enclosure with dual swing-out doors. The doors will be lockable with disconnect switch and handle to insure the doors are closed during operation.

Starters and circuit breakers for digester recirculation pump will be provided in the motor control center.

Emergency stop E-Stop will be supplied.

The following switches and indicating lamps will be provided on control panel doors:

- A. Sludge heat (manual/off/auto) switch.
- B. Constant water bath (on/off) switch.
- C. Burner Off/Auto switch.
- D. Exhaust fan (continuous/intermittent) switch.
- E. Sludge recirculation pump (continuous/intermittent) switch.
- F. Low boiler water indicator lamp.
- G. Flame failure alarm horn, alarm horn silencer, and flame failure indicator lamp.

Tagged outlets will be provided to:

- A. The main power, 3 phase, 60 Hertz, 460 volt AC.
- B. The control circuit supply, single phase, 60 Hertz, 115 volt AC.
- C. The starter of the digester recirculation pump.

- D. The normally open contact on the magnetic starter for the raw pump, to insure operation of the digester recirculation pump when the raw sludge pump is operating.
- E. The building heat pump.
- F. The building heat thermostat.
- G. Remote E-Stop switches.

BURNER CONTROLLER

The flame safeguard and programming controller, with transistorized amplifier, will be listed by Underwriters Laboratories and approved by Factory Mutual. The controller will provide a minimum of 30-second pre-purge and 15-second post-purge of the combustion chamber. An infrared scanning device will sense pilot and main flame presence. The burner controller will, upon flame failure, automatically close the main fuel and pilot valves within 4 seconds and sound an audible alarm in addition to lighting a visual indicator. The burner controller will, after an interruption of power, automatically recycle upon resumption of power.

DIGESTER TEMPERATURE CONTROL

Manual control of the digester temperature will be permitted by the manual/off/auto switch mounted on the control panel.

Automatic control of the digester temperature, within plus or minus ½ °F, will be by means of a sensor located at the inlet to the sludge tubes of the unit. The water circulation pump for sludge heating and burner equipment will be automatically controlled by the temperature of the sludge passing the sensor. A 24-hour repeating cycle time switch will be provided for periodic starting of the digester recirculation pump, with controls arranged such that the recirculation pump will continue to operate until the digester heating requirements are satisfied or shall stop after a short cycle in case heat is not required by the digester.

Sludge temperature digital indicators with a range from -58 °F to 392 °F will be mounted on the face of the control panel. The indicators will be connected to sensors placed in the sludge inlet and outlet of the heat exchanger. Each sensor will be provided with a mounting socket to enable the removal of the sensor without draining the sludge tubes.

SAFETY CONTROLS

The following safety controls will be provided:

- A. Operating temperature sensor and controller, with high/low set points, including a digital indicator mounted on the face of the control panel.
- B. High temperature sensor and controller, with manual reset, for high temperature limit safety shut down.
- C. ASME pressure relief valve for both the boiler and heat exchanger, set at 30 psi.
- D. Low water cutoff switch.
- E. Boiler pressure gauge with a range from 0 to 60 psi.

BURNER AND FUEL PIPING

The fuel burning equipment will include the necessary accessories for burning either digester gas having a heat content of approximately 650 BTU/cu. ft. and a specific gravity of 0.8, natural gas having a heat content of 1,000 BTU/cu. ft. or a mixture of the two gases. The burner will operate on digester gas until the inlet pressure at the unit drops to 2" w.c., at which point natural gas will automatically be blended to make up the deficiency, insuring the maximum utilization of available digester gas.

The burner will be equipped with infrared flame detection. Digester and natural gas will be ignited by a proven pilot. A 6,000-volt ignition transformer will be provided at the burner.

The digester gas feed line will consist of a shutoff valve, low pressure check valve, pressure regulator, two (2) motorized valves and adjustable orifice valve. The natural gas feed line will consist of a natural gas regulator, adjustable orifice valve, pilot line shutoff valve, pilot line regulator, and pilot line solenoid valve.

BUILDING HEAT

Connections will be provided on the heater and heat exchanger for building heating water supply and return. The building heating water circulation pump shall be provided by the heating contractor for separate installation and connection to tagged terminals on the digester heater control panel.

COMPRESSION TANK

A compression tank of sufficient capacity for the heater and heat exchanger (and engine jacket heating water system) will be supplied with the unit. The tank will have a water level gauge and drain. Connections will be provided on the heater for makeup water, and drainage.

SHOP TEST

The completed heater and heat exchanger will be shop fired and tested prior to shipment to ensure proper operation and to adjust air and fuel flows. A report of the results of this test will be submitted to the Engineer. This report will include the following information:

- A. Manometer readings at the main gas regulator, pilot gas regulator, burner inlet, burner, and furnace.
- B. Amps drawn by all motors.
- C. Voltage of pilot and main flame controller signal.
- D. Flue gas readings including percent oxygen, percent carbon dioxide, temperature, and efficiency.

PAINTING AND INSULATING

The shell and internal framework will be painted with Tnemec #140 Primer before insulation is installed. The shell will be insulated with a minimum of 2" of fiberglass having a density of 0.60# and an "R" factor of 3.33/inch. The insulated sides will be protected by removable 14-gauge sheet steel covering.

The top of the unit will be protected by a removable 10-gauge plate. The entire exterior surface of the unit will be shop cleaned and factory finish painted with Tnemec #135-1243 Gray Aluminum Chembuild (minimum of 7 to 9 mils dry film thickness).

ERECTION INFORMATION

The equipment will be shipped as follows:

The heater and heat exchanger will be shipped completely assembled except for compression tank. Electrical controls are protected by a plastic sheet covering.

Shipping weight of the unit is approximately 5,200 lbs.

A completely wired and attached electrical control cabinet is provided with tagged outlets for the following field connections:

- A. 3 - Wire to main power supply, 460-volt, 60 hertz, 3 phase.
- B. 2 - Wire to control supply, 115-volt, 60 hertz, single phase.
- C. 2 - Wire to digester recirculation starter.
- D. 2 - Wire to raw sludge pump interlock.
- E. 2 - Wire to building thermostat.
- F. 2 - Wire to building heat pump.
- G. 2 Remote E-Stop switches.

Installer shall place the unit in required location, mount compression tank, connect two (2) sludge lines, fuel supply lines, water lines, connect exhaust to flue and make external electrical connections.

Evoqua's price is based on the surface protection outlined in Section 3 above:

Prices are based on paints and surface preparations as outlined in this quotation. In the event an alternate paint system is selected, purchaser's order must advise of its selection. Evoqua will, at its sole discretion, either adjust its price as necessary to comply or ship the material unpainted if compliance is not possible due to price considerations, application problems or environmental controls.

Evoqua does not guarantee primer's compatibility with purchaser's coating system unless approved by the coating system manufacturer. Primers will only protect for a minimal amount of time, usually thirty (30) days. Specific information should be obtained from coating system manufacturer.

4. EXCLUDED ITEMS

The price from Evoqua includes only those items listed in this Quotation. The items listed below are excluded:

- Electrical, hydraulic, or pneumatic controls.
- Building heat pump.
- Building thermostat.
- Building heating convection units.
- Flue connections.
- Supports for compression tank.
- Anchors.
- Wiring of motors or controls, control panels, or panel supports.
- Piping, valves, wall sleeves, gates, drains, weirs, baffles.
- Floor grating, stairways, ladders, platforms, handrailing.
- Concrete, grout, mastic, sealing compounds, shims.
- Lubricants, grease piping, grease gun.
- Machinery or bearing supports, shims.
- Detail shop fabrication drawings.
- Tools or spare parts.
- Equipment offloading and installation of any kind.
- Modifications to existing equipment or structures.
- Supervisory services; laboratory, shop, or field testing.
- Underwriters Laboratory inspection of electrical controls.
- Special written process performance or extended mechanical warranties.

5. CLARIFICATIONS/EXCEPTIONS

The equipment specified herein shall conform to the specification sections referenced in Section 1 of Evoqua's Quotation to the extent they are technically applicable to Evoqua's scope of supply as described in this Quotation and subject to the following clarifications:

Article, Section	Clarifications/Proposed Modifications

Evoqua's standard terms and conditions, including without limitation Evoqua's warranty obligations in Article 7 govern the purchase and sale of equipment, products, and related services, referred to in Evoqua's proposal. Evoqua's offer or acceptance is expressly conditioned on Buyer's assent to these terms. Evoqua rejects all additional or different terms in any of Buyer's forms or documents. In addition, Evoqua takes exception to all performance commitments, guarantees or obligations, unless provided for in Evoqua's proposal.

6. ADDITIONAL FIELD SERVICES

Should the Purchaser feel that additional services will be required, they can be purchased from Evoqua. Additional services may be purchased at the per diem rate stated below.

Evoqua's price does not include service of a factory field service technician during the time of installation of the equipment items.

In the event Purchaser wishes to videotape the Evoqua field service personnel during start-up and/or field service, Purchaser must execute Evoqua's standard "Videotape Agreement" in which the Purchaser shall expressly waive any claim against Evoqua, for injury or damage caused by inaccuracies or errors in such videotape(s), and acknowledge that such videotaping is done by Purchaser at its sole risk.

TERMS GOVERNING FIELD SERVICES: Services of a factory field service technician to inspect installation and/or first operation of the products specified in the quotation can be furnished by Evoqua at the following rates:

- A. Supervision or consultation of a process service technician within the continental limits of the United States: \$1,400 per eight (8) hour day, Monday through Friday inclusive.
- B. Supervision or inspection of a field service technician within the continental limits of the United States: \$1,200 per eight (8) hour day, Monday through Friday inclusive. Overtime Monday through Friday and Saturday work is charged at time and one-half. Time worked on Sunday will be charged double time; time worked on U.S. Holidays will be charged triple time.
- C. Traveling, living and incidental expenses at cost, including shipping charges on tools and other equipment which the factory field service technician has shipped to the construction site.
- D. Travel time will be charged to and from Purchaser's construction site, and weekend or holiday travel request or required by Purchaser will be charged at the overtime rates.

- E. Rescheduling or cancellation of a field service trip once booked will incur the greater of either a \$1,500 cancellation or re-scheduling charge, or actual costs.

Rates shown above apply only to additional services performed within twelve (12) months from the date of Quotation. Additional services performed after twelve (12) months from the date of Quotation shall be subject to Evoqua's current rates at the time such service is provided. Except for the direct acts or omissions of the factory field service technician, the responsibility for the installation and/or first operation shall be Purchaser's. Evoqua will assume responsibility for workmen's compensation coverage of Evoqua employees only and will provide umbrella liability coverage during installation. All other insurance coverage and necessary materials to accomplish installation shall be provided by Purchaser.

QUOTATION SUBMITTED BY EVOQUA WATER TECHNOLOGIES LLC

Signature below indicates acceptance of this quotation including the Standard Terms of Sale attached hereto and will act as the purchase order document between Evoqua Water Technologies LLC, the Seller, and the Buyer. The Standard terms of Sale shall form the complete and only set of terms for this order.

Accepted by Buyer:

Company

Printed Name

Title

Signature

Date

Billing Address

Shipping Address**Acknowledged by Seller:**

Evoqua Water Technologies LLC

Company

Printed Name

Title

Signature

Date

Evoqua Water Technologies LLC
N19 W23993 Ridgeview Pkwy, Suite 200
Waukesha, WI 53188

Address

Please submit the signed proposal to TWEL@evoqua.com along with the Billing Address, Shipping Address, Tax-Exempt Certificate, and a Copy of Payment Bond. It is clarified that the purchase order price does not include sales tax and that sales tax is to be added to the sale price unless the Seller receives a Tax-Exempt Certificate or Resale Certificate.

EVOQUA WATER TECHNOLOGIES LLC

STANDARD TERMS OF SALE

1. **Applicable Terms.** These terms govern the purchase and sale of equipment, products, related services, leased products, and media goods if any (collectively herein "Work"), referred to in Seller's proposal ("Seller's Documentation"). Whether these terms are included in an offer or an acceptance by Seller, such offer or acceptance is expressly conditioned on Buyer's assent to these terms. Seller rejects all additional or different terms in any of Buyer's forms or documents.

2. **Payment.** Buyer shall pay Seller the full purchase price as set forth in Seller's Documentation. Unless Seller's Documentation specifically provides otherwise, freight, storage, insurance and all taxes, levies, duties, tariffs, permits or license fees or other governmental charges relating to the Work or any incremental increases thereto shall be paid by Buyer. If Seller is required to pay any such charges, Buyer shall immediately reimburse Seller. If Buyer claims a tax or other exemption or direct payment permit, it shall provide Seller with a valid exemption certificate or permit and indemnify, defend and hold Seller harmless from any taxes, costs and penalties arising out of same. All payments are due within 30 days after receipt of invoice. Buyer shall be charged the lower of 1 ½% interest per month or the maximum legal rate on all amounts not received by the due date and shall pay all of Seller's reasonable costs (including attorneys' fees) of collecting amounts due but unpaid. All orders are subject to credit approval by Seller. Back charges without Seller's prior written approval shall not be accepted.

3. **Delivery.** Delivery of the Work shall be in material compliance with the schedule in Seller's Documentation. Unless Seller's Documentation provides otherwise, delivery terms are Ex Works Seller's factory (Incoterms 2010). Title to all Work shall pass upon receipt of payment for the Work under the respective invoice. Unless otherwise agreed to in writing by Seller, shipping dates are approximate only and Seller shall not be liable for any loss or expense (consequential or otherwise) incurred by Buyer or Buyer's customer if Seller fails to meet the specified delivery schedule.

4. **Ownership of Materials and Licenses.** All devices, designs (including drawings, plans and specifications), estimates, prices, notes, electronic data, software and other documents or information prepared or disclosed by Seller, and all related intellectual property rights, shall remain Seller's property. Seller grants Buyer a non-exclusive, non-transferable license to use any such material solely for Buyer's use of the Work. Buyer shall not disclose any such material to third parties without Seller's prior written consent. Buyer grants Seller a non-exclusive, non-transferable license to use Buyer's name and logo for marketing purposes, including but not limited to, press releases, marketing and promotional materials, and web site content.

5. **Changes.** Neither party shall implement any changes in the scope of Work described in Seller's Documentation without a mutually agreed upon change order. Any change to the scope of the Work, delivery schedule for the Work, any Force Majeure Event, 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.

6. **Force Majeure Event.** Neither Buyer nor Seller shall have any liability for any breach or delay (except for breach of payment obligations) caused by a Force Majeure Event. If a Force Majeure Event exceeds six (6) months in duration, the Seller shall have the right to terminate the Agreement without liability, upon fifteen (15) days written notice to Buyer, and shall be entitled to payment for work performed prior to the date of termination. "**Force Majeure Event**" shall mean events or circumstances that are beyond the affected party's control and could not reasonably have been easily avoided or overcome by the affected party and are not substantially attributable to the other party. Force Majeure Event may include, but is not limited to, the following circumstances or events: war, act of foreign enemies, terrorism, riot, strike, or lockout by persons other than by Seller or its sub-suppliers, natural catastrophes or (with respect to on-site work), unusual weather conditions.

7. **Warranty.** Subject to the following sentence, Seller warrants to Buyer that the (i) Work shall materially conform to the description in Seller's Documentation and shall be free from defects in material and workmanship and (ii) the Services shall be performed in a timely and workmanlike manner. Determination of suitability of treated water for any use by Buyer shall be the sole and exclusive responsibility

of Buyer. The foregoing warranty shall not apply to any Work that is specified or otherwise demanded by Buyer and is not manufactured or selected by Seller, as to which (i) Seller hereby assigns to Buyer, to the extent assignable, any warranties made to Seller and (ii) Seller shall have no other liability to Buyer under warranty, tort or any other legal theory. The Seller warrants the Work, or any components thereof, through the earlier of (i) eighteen (18) months from delivery of the Work or (ii) twelve (12) months from initial operation of the Work or ninety (90) days from the performance of services (the "Warranty Period"). If Buyer gives Seller prompt written notice of breach of this warranty within the Warranty Period, Seller shall, at its sole option and as Buyer's sole and exclusive remedy, repair or replace the subject parts, re-perform the Service or refund the purchase price. Unless otherwise agreed to in writing by Seller, (i) Buyer shall be responsible for any labor required to gain access to the Work so that Seller can assess the available remedies and (ii) Buyer shall be responsible for all costs of installation of repaired or replaced Work. If Seller determines that any claimed breach is not, in fact, covered by this warranty, Buyer shall pay Seller its then customary charges for any repair or replacement made by Seller. Seller's warranty is conditioned on Buyer's (a) operating and maintaining the Work in accordance with Seller's instructions, (b) not making any unauthorized repairs or alterations, and (c) not being in default of any payment obligation to Seller. Seller's warranty does not cover (i) damage caused by chemical action or abrasive material, misuse or improper installation (unless installed by Seller) and (ii) media goods (such as, but not limited to, resin, membranes, or activated carbon media) once media goods are installed. THE WARRANTIES SET FORTH IN THIS SECTION 7 ARE THE SELLER'S SOLE AND EXCLUSIVE WARRANTIES AND ARE SUBJECT TO THE LIMITATION OF LIABILITY PROVISION BELOW. SELLER MAKES NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE.

8. **Indemnity.** Seller shall indemnify, defend and hold Buyer harmless from any claim, cause of action or liability incurred by Buyer 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 Buyer (a) promptly, within the Warranty Period, notifying Seller of any claim, and (b) providing reasonable cooperation in the defense of any claim.

9. **Assignment.** Neither party may assign this Agreement, in whole or in part, nor any rights or obligations hereunder without the prior written consent of the other party; provided, however, the Seller may assign its rights and obligations under these terms to its affiliates or in connection with the sale or transfer of the Seller's business and Seller may grant a security interest in the Agreement and/or assign proceeds of the agreement without Buyer's consent.

10. **Termination.** Either party may terminate this agreement, upon issuance of a written notice of breach and a thirty (30) day cure period, for a material breach (including but not limited to, filing of bankruptcy, or failure to fulfill the material obligations of this agreement). If Buyer suspends an order without a change order for ninety (90) or more days, Seller may thereafter terminate this Agreement without liability, upon fifteen (15) days written notice to Buyer, and shall be entitled to payment for work performed, whether delivered or undelivered, prior to the date of termination.

11. **Dispute Resolution.** Seller and Buyer shall negotiate in good faith to resolve any dispute relating hereto. If, despite good faith efforts, the parties are unable to resolve a dispute or claim arising out of or relating to this Agreement or its breach, termination, enforcement, interpretation or validity, the parties will first seek to agree on a forum for mediation to be held in a mutually agreeable site. If the parties are unable to resolve the dispute through mediation, then **any dispute, claim or controversy arising out of or relating to this Agreement or the breach, termination, enforcement, interpretation or validity thereof, including the determination of the scope or applicability of this agreement to arbitrate, shall be determined by arbitration in Pittsburgh, Pennsylvania before three arbitrators** who are lawyers experienced in the discipline that is the subject of the dispute and shall be jointly selected by Seller and Buyer. **The arbitration shall be administered by JAMS pursuant to its Comprehensive Arbitration Rules and Procedures. The Arbitrators shall issue a reasoned decision** of a majority of the arbitrators, which shall be the decision of the panel. Judgment may be entered upon the arbitrators' decision in any court of competent jurisdiction. The substantially prevailing party as determined by the arbitrators shall be reimbursed by the other party for all costs, expenses and charges, including without limitation reasonable attorneys' fees, incurred by the prevailing party in connection with the arbitration. For any order shipped outside of the United States, any dispute shall be referred to and finally determined by the International Center for Dispute Resolution in accordance with the provisions of its International Arbitration Rules, enforceable under the New York Convention (Convention on the Recognition and Enforcement of Foreign Arbitral Awards) and the governing language shall be English.

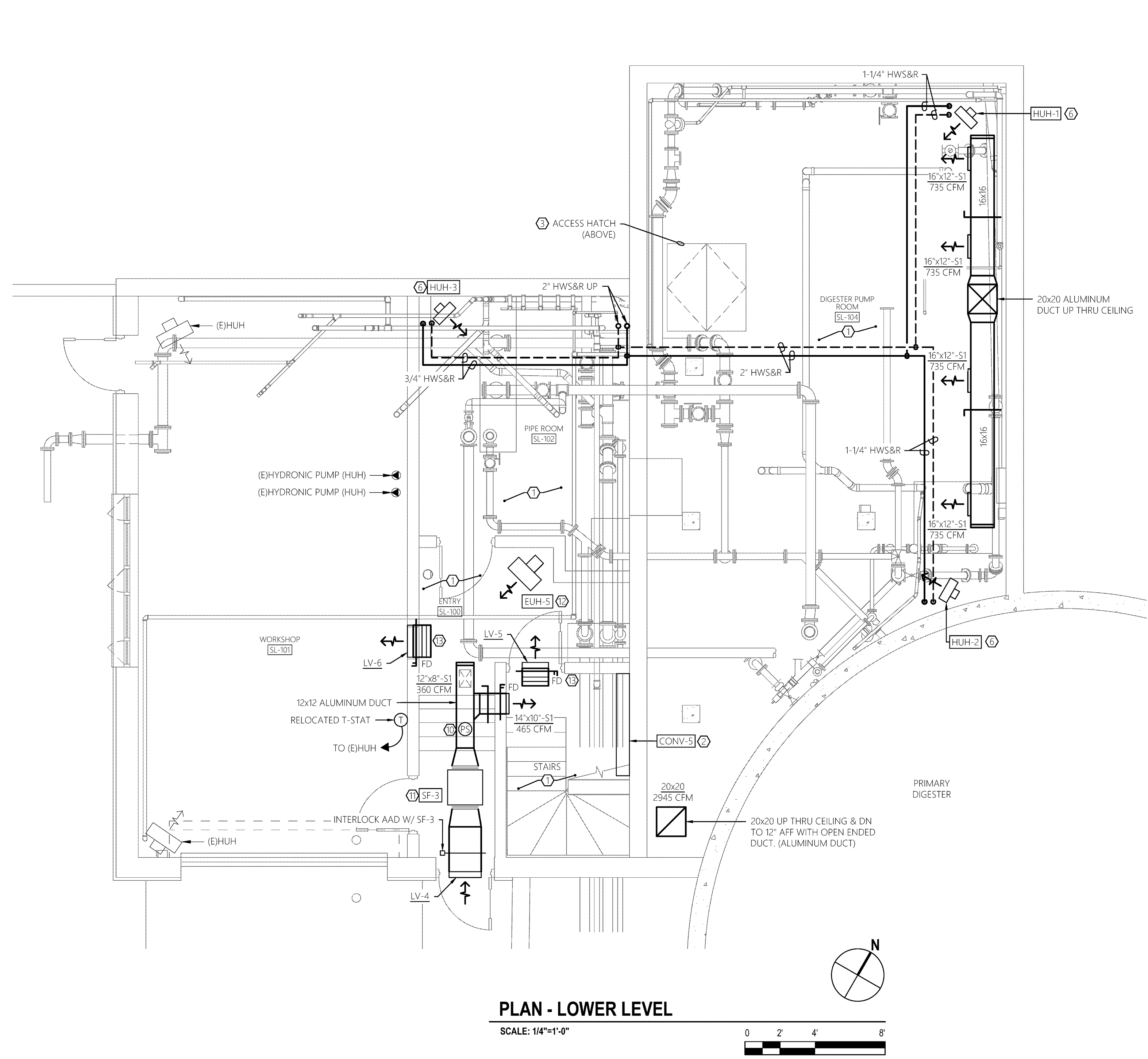
12. **Export Compliance.** Buyer acknowledges that Seller is required to comply with applicable export laws and regulations relating to the sale, exportation, transfer, assignment, disposal and usage of the Work provided under this Agreement, including any export license requirements. Buyer agrees that such Work shall not at any time directly or indirectly be used, exported, sold, transferred, assigned or otherwise disposed of in a manner which will result in non-compliance with such applicable export laws and regulations. It shall be a condition of the continuing performance by Seller of its obligations hereunder that compliance with such export laws and regulations be maintained at all times. BUYER 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.

13. **LIMITATION OF LIABILITY.** NOTWITHSTANDING ANYTHING ELSE TO THE CONTRARY, SELLER SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, PUNITIVE OR OTHER INDIRECT DAMAGES, AND SELLER'S TOTAL LIABILITY ARISING AT ANY TIME FROM THE SALE OR USE OF THE WORK, INCLUDING WITHOUT LIMITATION ANY LIABILITY FOR ALL WARRANTY CLAIMS OR FOR ANY BREACH OR FAILURE TO PERFORM ANY OBLIGATION UNDER THE CONTRACT, SHALL NOT EXCEED THE PURCHASE PRICE PAID FOR THE WORK. THESE LIMITATIONS APPLY WHETHER THE LIABILITY IS BASED ON CONTRACT, TORT, STRICT LIABILITY OR ANY OTHER THEORY.

14. **Rental Equipment / Services.** Any leased or rented equipment ("Leased Equipment") provided by Seller shall at all times be the property of Seller with the exception of certain miscellaneous installation materials purchased by the Buyer, and no right or property interest is transferred to the Buyer, except the right to use any such Leased Equipment as provided herein. Buyer agrees that it shall not pledge, lend, or create a security interest in, part with possession of, or relocate the Leased Equipment. Buyer shall be responsible to maintain the Leased Equipment in good and efficient working order. At the end of the initial term specified in the order, the terms shall automatically renew for the identical period unless canceled in writing by Buyer or Seller not sooner than three (3) months nor later than one (1) month from termination of the initial order or any renewal terms. Upon any renewal, Seller shall have the right to issue notice of increased pricing which shall be effective for any renewed terms unless Buyer objects in writing within fifteen (15) days of issuance of said notice. If Buyer timely cancels service in writing prior to the end of the initial or any renewal term this shall not relieve Buyer of its obligations under the order for the monthly rental service charge which shall continue to be due and owing. Upon the expiration or termination of this Agreement, Buyer shall promptly make any Leased Equipment available to Seller for removal. Buyer hereby agrees that it shall grant Seller access to the Leased Equipment location and shall permit Seller to take possession of and remove the Leased Equipment without resort to legal process and hereby releases Seller from any claim or right of action for trespass or damages caused by reason of such entry and removal.

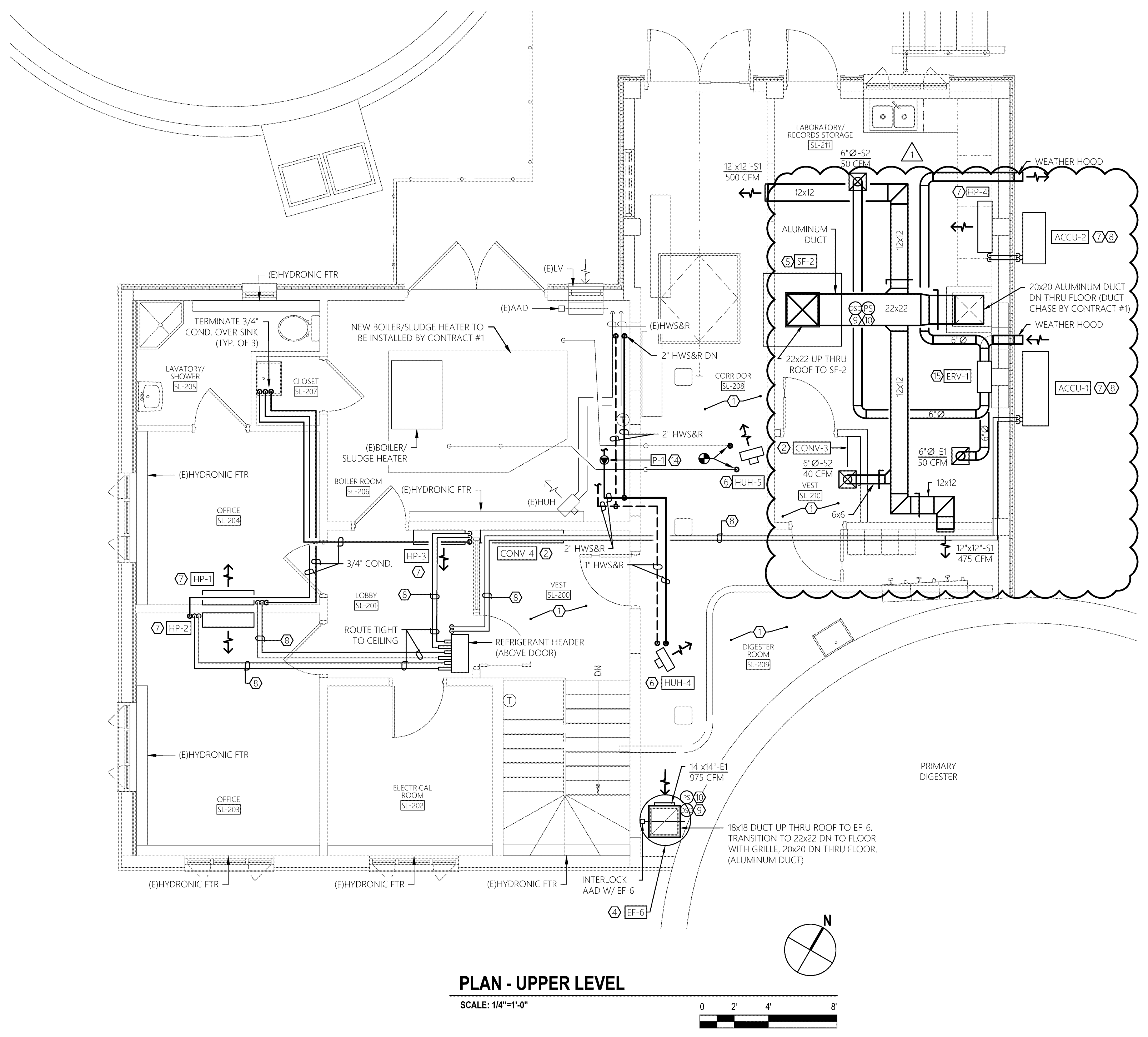
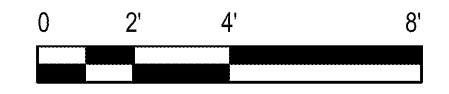
15. **Miscellaneous.** These terms, together with any Contract Documents issued or signed by the Seller, comprise the complete and exclusive statement of the agreement between the parties (the "Agreement") and supersede any terms contained in Buyer's documents, unless separately signed by Seller. No part of the Agreement may be changed or cancelled except by a written document signed by Seller and Buyer. No course of dealing or performance, usage of trade or failure to enforce any term shall be used to modify the Agreement. To the extent the Agreement is considered a subcontract under Buyer's prime contract with an agency of the United States government, in case of Federal Acquisition Regulations (FARs) flow down terms, Seller will be in compliance with Section 44.403 of the FAR relating to commercial items and those additional clauses as specifically listed in 52.244-6, Subcontracts for Commercial Items (OCT 2014). If any of these terms is unenforceable, such term shall be limited only to the extent necessary to make it enforceable, and all other terms shall remain in full force and effect. The Agreement shall be governed by the laws of the Commonwealth of Pennsylvania without regard to its conflict of laws provisions. Both Buyer and Seller reject the applicability of the United Nations Convention on Contracts for the international sales of goods to the relationship between the parties and to all transactions arising from said relationship.

May 2015



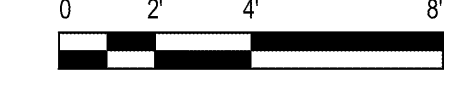
PLAN - LOWER LEVEL

SCALE: 1/4"=1'-0"



PLAN - UPPER LEVEL

SCALE: 1/4"=1'-0"



GENERAL SHEET NOTES:

- REFER TO H001 FOR HVAC LEGENDS, ABBREVIATIONS AND GENERAL PROJECT NOTES.
- UNLESS OTHERWISE NOTED, HVAC ITEMS SHOWN HEAVY SOLID (—) SHALL BE NEW AND HVAC ITEMS SHOWN LIGHT SOLID (---) SHALL BE EXISTING TO REMAIN.

SHEET KEY NOTES:

- AREA IS A CLASS I, DIVISION II, GROUP D SPACE. ALL HVAC EQUIPMENT, ACCESSORIES, AND CONTROLS INTERIOR TO THIS AREA ARE TO BE EXPLOSION PROOF RATED FOR USE IN A CLASS I, DIVISION II, GROUP D ENVIRONMENT.
- NEW ELECTRIC CONVECTOR TO BE INSTALLED AT LOCATION SHOWN PER MANUFACTURER RECOMMENDATIONS. COORDINATE CONNECTION OF ELECTRICAL SERVICE WITH CONTRACT #2. COORDINATE FINAL LOCATION WITH OWNER AND ALL OTHER TRADES.
- ACCESS HATCH (ABOVE). CONTRACTOR TO KEEP AREA CLEAR FOR FUTURE PROVISIONS OF REMOVING EQUIPMENT.
- NEW ROOF MOUNTED EXHAUST FAN TO BE INSTALLED AT LOCATION SHOWN PER DETAIL ON SHEET H-009 AND PER MANUFACTURER RECOMMENDATIONS. COORDINATE CONNECTION OF ELECTRICAL SERVICE WITH CONTRACT #2. COORDINATE FINAL LOCATION WITH OWNER AND ALL OTHER TRADES. PROVIDE NEW ROOF CURB/ROOF CURB ADAPTER AS NECESSARY FOR INSTALLATION, COORDINATE WITH CONTRACT #1.
- NEW ROOF MOUNTED SUPPLY FAN TO BE INSTALLED AT LOCATION SHOWN PER MANUFACTURER RECOMMENDATIONS. COORDINATE CONNECTION OF ELECTRICAL SERVICE WITH CONTRACT #2. COORDINATE CUTTING OF NEW ROOF PENETRATION/INSTALLATION OF NEW ROOF CURB WITH CONTRACT #1. COORDINATE FINAL LOCATION WITH OWNER AND ALL OTHER TRADES.

SHEET KEY NOTES:

- NEW HYDRONIC UNIT HEATER TO BE INSTALLED AT LOCATION SHOWN PER DETAIL ON SHEET H009 AND PER MANUFACTURER RECOMMENDATIONS. COORDINATE CONNECTION OF ELECTRICAL SERVICE WITH CONTRACT #2. COORDINATE FINAL LOCATION WITH OWNER AND ALL OTHER TRADES.
- NEW AIR COOLED CONDENSING UNIT/WALL MOUNTED HEAT PUMP TO BE INSTALLED AT LOCATION SHOWN PER MANUFACTURER RECOMMENDATIONS. MOUNT AIR COOLED CONDENSING UNIT TO EXTERIOR WALL. COORDINATE CONNECTION OF ELECTRICAL SERVICE WITH CONTRACT #2. COORDINATE FINAL LOCATION WITH OWNER AND ALL OTHER TRADES.
- CONTRACTOR SHALL SIZE AND INSTALL REFRIGERANT PIPING PER MANUFACTURER RECOMMENDATIONS.
- NEW DUCT SMOKE DETECTOR TO BE PROVIDED AND WIRED BY CONTRACT #2 AND INSTALLED WITHIN DUCTWORK BY CONTRACT #3. INSTALL PER MANUFACTURER RECOMMENDATIONS. COORDINATE WITH CONTRACT #2.
- NEW AIRFLOW PROVING SWITCH/PRESSURE SENSOR TO BE PROVIDED AND INSTALLED IN DUCTWORK FOR AIRFLOW MONITORING PER MANUFACTURER RECOMMENDATIONS. UNIT SHALL BE MCDONNELL AND MILLER SERIES AFE-1 OR EQUAL. PROVIDE ALL COMPONENTS AND ACCESSORIES FOR A COMPLETE AND OPERABLE AIRFLOW MONITORING SYSTEM. COORDINATE CIRCUITRY WITH CONTRACT #2.

SHEET KEY NOTES:

- NEW IN-LINE SUPPLY FAN TO BE INSTALLED AT LOCATION SHOWN PER DETAIL ON SHEET H009 AND PER MANUFACTURER RECOMMENDATIONS. COORDINATE CONNECTION OF ELECTRICAL SERVICE WITH CONTRACT #2. COORDINATE FINAL LOCATION WITH OWNER AND ALL OTHER TRADES.
- NEW ELECTRIC UNIT HEATER TO BE INSTALLED AT LOCATION SHOWN PER MANUFACTURER RECOMMENDATIONS. COORDINATE CONNECTION OF ELECTRICAL SERVICE WITH CONTRACT #2. COORDINATE FINAL LOCATION WITH OWNER AND ALL OTHER TRADES.
- NEW COUNTERBALANCE PRESSURE RELIEF DAMPER AND CURTAIN-TYPE FIRE DAMPER SAME SIZE AS LOUVER TO BE INSTALLED AT LOCATION SHOWN PER MANUFACTURER RECOMMENDATIONS. COUNTERBALANCE RELIEF DAMPER (GREENHECK MODEL BR OR EQUAL) SHALL BE CALIBRATED TO MAINTAIN POSITIVE PRESSURE DIFFERENTIAL OF 0.1"WC IN ENTRY/STAIR, RELATIVE TO ADJACENT ROOM WITH ALL DOORS CLOSED. MOUNT BOTH DAMPERS IN WALL SLEEVE WITH LEMMED OR FLANGED EDGE.
- NEW HYDRONIC BUILDING HEAT PIPING LOOP AND HYDRONIC CIRCULATING PUMP TO BE INSTALLED PER MANUFACTURER RECOMMENDATIONS. PROVIDE HYDRONIC PIPING CONNECTIONS TO THE NEW AND EXISTING BOILER SLUDGE HEATERS, INCLUDING ISOLATION VALVES AT EACH, AND EXISTING SYSTEM MAIN BUILDING HEAT PIPING AS NECESSARY. COORDINATE FINAL CONNECTIONS WITH CONTRACT #1.

SHEET KEY NOTES:

- NEW ENERGY RECOVERY VENTILATOR TO BE INSTALLED AT LOCATION SHOWN ABOVE CEILING PER MANUFACTURER RECOMMENDATIONS. ROUTE ASSOCIATED DUCTWORK PER MANUFACTURER RECOMMENDATIONS. COORDINATE CONNECTION OF ELECTRICAL SERVICE WITH CONTRACT #2. COORDINATE DIFFUSER/GRILLE LOCATIONS WITHIN CEILING GRID AND EXTERIOR WEATHER HOOD LOCATIONS WITH CONTRACT #1. COORDINATE FINAL LOCATION OF UNIT AND ACCESSORIES WITH OWNER AND ALL OTHER TRADES.

SEQUENCE OF OPERATIONS:

FANS:
 SF-2 / EF-6 SHALL OPERATE CONTINUOUSLY TO PROVIDE 12 AIR CHANGES PER HOUR (ACH) VENTILATION TO DIGESTER ROOM AND DIGESTER PUMP ROOM.
 SF-3 SHALL OPERATE CONTINUOUSLY TO PROVIDE VENTILATION TO ENTRY/STAIRS/VESTIBULE.
HYDRONIC UNIT HEATERS:
 UNIT HEATERS SHALL BE CONTROLLED THRU UNIT MOUNTED THERMOSTATS. UNIT HEATER SUPPLY FAN SHALL CYCLE ON/OFF TO MAINTAIN SPACE TEMPERATURE SETPOINT.

Notes Underground facilities, structures, and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only. There may be others, the existence of which is presently not known.				Bar is one inch on original size sheet 0 2 4 8'			<p>GHD Consulting Services Inc. 5788 Widewaters Pkwy Syracuse NY 13214 USA T 1 315 802 0260 F 1 315 802 0450 W www.ghd.com</p>	<p>JADE STONE ENGINEERING mechanical, electrical, plumbing 444 VALDEZ ST. WATERLOO NY 13161 P: 315.536.4862 F: 888.999.9672 jstoneeng.com</p>	Drawn MAE	Designer RJK	Client VILLAGE OF CAYUGA HEIGHTS, NEW YORK
2 ADDENDUM No. 2	MAE	RJK	4/2021	Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD	Drafting Check MGR				Design Check MCW	Project Title WWTP UPGRADE - PHASE 2	
1 FOR CONSTRUCTION	MAE	RJK	3/2021		Project Director H. B. LaFever	Date FEBRUARY 2021	Project No. 111-78479				
No.	Issue	Drawn	Approved	Date	This document shall not be used for construction unless signed and sealed for construction.		Original Size	Scale AS SHOWN	Sheet No. H006	Contract No. 3	