





ADDENDUM NO. 4

GRANGER-HUNTER IMPROVEMENT DISTRICT, UTAH ANDERSON WATER TREATMENT PLANT PROJECT

December 3, 2024

Addendum No. 4 to the Plans, Contract Documents, and Specifications prepared by J-U-B ENGINEERS, Inc. is hereby submitted for use in bid preparation and submittal. Contractor must acknowledge receipt of all Addenda on the Bid Form.

The following clarifications, additions, and/or deletions are hereby made part of the Granger-Hunter Improvement District Anderson Water Treatment Plant Project as fully and completely as if the same were entirely set forth in the Contract Documents and Specifications.

The corrections, clarifications, changes, and approvals described herein shall become an integral part of any contract entered into between the Owner and Contractor.

UTAH3P QUESTIONS AND RESPONSES

The questions and responses that have been posted on Utah3P thus far are attached.

VOLUME I FRONT ENDS

None.

VOLUME II TECHNICAL SPECIFICATIONS

- 1. 11400 Onsite Sodium Hypochlorite Generation System:
 - a. 1.6.D. Added the following text: "The General Contractor shall be responsible for installing the OSHGS equipment."
 - b. 1.1.C. Add "or manufacturer or vendor" to the following opening paragraph: A single OSHGS Supplier or manufacturer or vendor shall furnish each OSHGS consisting of the following major components and shall be responsible for making sure that all equipment is compatible with each other to ensure a simple installation.
 - c. 2.7.A. Delete the following sentence: "D.C. voltage output will be fixed with multiple primary taps for + 5-10% voltage correction."
 - d. 2.7.A. Modify the last sentence as follows: "D.C. ripple will be less than 4% with a power factor of 99-95% or better."
 - e. 2.7.C. Modify the last sentence as follows: "Rectifier efficiency will be 97 95% or greater."
 - f. 2.8.D.12. Modify as follows: Dedicated 24 VDC power supply for PLC and HMI and 12VDC powered items.







VOLUME III DRAWINGS

- 1. LP-101: Update to the "Landscape Requirement Calculations" table to show the correct number of trees provided (5) not (4).
- 2. LI-102: Revisions to the irrigation design in order to maintain active irrigation for the Red Oaks Village HOA during construction, and entails preserving an existing point of connection and back flow preventor, replacement of a section of irrigation mainline, and installation of a new valve to irrigation the small lawn areas adjacent to the new parking lot.
- 3. E-003: Add to the fixture schedule the following:

VOLUME IV FILTER PROCUREMENT

None.

Notice is hereby given that this Addendum must be signed and enclosed with a sealed bid for the Granger-Hunter Improvement District Anderson Water Treatment Plant Project as evidence that the Bidder has familiarized himself/herself with all changes incorporated herein.

NAME OF BIDDER:	
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BY: _____

Signature

Name (Print)

Submitted By: J-U-B Engineers, Inc.

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Christina Osborn, P.E. Project Manager

Attachments: SciQuest/Utah 3P Questions and Responses LP-101 LI-102 Title

Date







UTAH3P QUESTIONS AND RESPONSES

Questions are in black and the responses are in red.

1. Is the EC responsible for providing the PLC?

PLC is provided by APCO, installed on the wall by the Electrical Contractor. APCO will contract directly with GHID, but the General Contractor and Electrical Contractor are required to coordinate with APCO and to aid in the startup and commissioning. See SCADA APCO Proposal in bidding documents, Volume 1, for clarification of division of scope.

2. Please clarify that the EC is only responsible for providing raceways for all security measures, including cameras. The security installer will provide and install all cabling and equipment, including the head-end equipment.

All security is under the General Contractor. Whether the General subcontracts with a security installer or if a security installer subcontracts under the Electrical Contractor, or if the Electrical Contractor takes responsibility for the security is under the purview of the General Contractor.

- 3. Onsite sodium hypochlorite related questions:
 - a. PSI does not have a system for certifying installers per Section 11400, Paragraph 1.6.D. PSI is familiar with the qualified contractors and does not have a preference.
 Noted. Contractor shall be responsible to install the OSHGS equipment. See the change to 1.6.D noted above.
 - Section 11400, Paragraphs 1.10.A.25 requires a minimum 3-year warranty for the onsite generator and all ancillary equipment. PSI standard warranty is 3 years for the generator equipment and 1 year for ancillary equipment. Would PSI's standard warranty be acceptable? This standard warranty includes have a 3-year full replacement warranty and prorated straight-line replacement warranty for years 4-7 for the electrolytic cells, in accordance with Paragraph 1.10.A.26.

Entire system including ancillary equipment required in Section 11400 shall be warrantied for three (3) years as noted in the requirements.

- c. Do you need PSI to supply the Grundfos pumps and skids as part of their scope, or is acceptable if we provide them separately?
 Everything needs to be included in a single submittal package with <u>one manufacturer or supplier</u> <u>or vendor</u> taking ownership and warranty for the entire system. Tanks, pumps, *etc.* shall be included with the OSHGS submittal. See the change to 1.1.C noted above.
- d. Section 16000 has a number of items that run contrary to our system standards see below.
 - i. Section 16710 2.3.A.2.e.3, enclosure has a concealed hinge pins is this acceptable? Yes, No Exceptions Taken (NET).
 - Section 16710 2.3.A.2.g.3, no steel angels are affixed to the control panel as this would require additional work and is not necessary. Yes, NET.







- Section 16710 2.3.A.3.d, we do not utilize a flange mounted disconnect due to the design and nature of the control panel. This will add additional size and cost that unnecessary. Disconnect used is industry standard rotary type.
 Yes, NET.
- iv. Section 16710. 2.3.A.6.d, 8 inch clearance on wiring in OSHG panel is excessive and would result in a panel that may not fit on the skid system. Typical clearance is 2-3 inches which is PSI Standard. Yes, NET.
- v. Section 16710 2.3.A.k.5/6, this is not a standard requirement for our panels. If needed a 3 tier fuse / or breaker could be utilized. Is it acceptable to omit this requirement from the OSHG panel? Yes, NET.
- vi. Section 16710 2.3.A.k.9, Redundant DC power supplies are not standard on the panel. This will affect size and price. Is it acceptable to provide a spare in lieu of the redundancy?
 Yes, a spare may be provided. SCADA programming should monitor OSHGS system for connectivity.
- vii. Section 16710 2.3.A.10.d.6.b, typical to have DC and AC in same Panduit but separated. There may be some crossover but this is minimal. Addition of extra conduit would increase the size and cost of the panel and is not standard. Is this acceptable. Yes, NET.
- viii. Section 16710 2.4.D.2.f, PSI panels use Phoenix contact PLC style Single Pole Double Throw contactor are used on our standard PLC. DP DT are not required for our application and take up additional space. Is the Phoenix contact relay acceptable? Yes, NET.
- ix. Section 16710 2.4.E.11, All card I/O will have a designated terminal block, however, spare terminals with no i/o landings will not be supplied.
 Yes, NET.
- x. Section 16710 2.4.G, PSI typically provide a single 24VDC power supply. Due to size constraint of panel we would provide a shelf spare for emergency use. Is that acceptable?
 Yes, NET.
- Section 16710 2.4.I.1, PSI utilizes a ABB through door rotary style disconnect. Is this acceptable
 Yes, NET.







- xii. Section 16710 2.5.H.1, PSI standard panel does not have a duplex receptacle provided. This would impact the size of the cabinet. Is it acceptable to omit this device. Yes, NET.
- xiii. Section 11400 2.1.c, Salt dry basis is to be 99.7 % min else more frequent cleaning will be required for the system and diminished cell life.
 No change to specification requirements. These are the salt specifications of the salt the District uses for all their existing OSHGS systems including the system at the Rushton WTP.
- xiv. Section 11400 2.7.A, Transformer no longer has the +5-10% for voltage correction NET. See the change to 2.7.A noted above.
- xv. Section 11400 2.7.A, Power Factor to be 95% or better NET. See the change to 2.7.A noted above.

Section 11400 2.7.C, Rectifier efficiency to be 95% or greater NET. See the change to 2.7.C noted above.

- xvi. Section 11400 2.7.G, Primary Voltage to be 480VAC / 3 PH / 40A Noted. This will need to be coordinated after award of contract. Currently the project is designed for 50A 480V 3PH and so it should be coordinated with electrical submittals as soon as possible.
- Section 11400 2.8.D.5, 24 x 30 x8 is our standard control panel, is this acceptable?
 NET. Based on submittals from the Rushton WTP, the skid should be designed to handle a maximum compatible size of 30" x 30" x 12". As long as everything fits within the same MC-200 skid footprint, then it should not be an issue.



xviii. Section 114002 2.8.D.12, 24 DC Power supply is utilized for PLC/ HMI and 12VDC powered items. Is this acceptable?
 NET. See the change to 2.8.D.12 noted above.









 On Sheet E-003 fixture schedule it indicates that equal fixture substitutions are allowed upon prior approval of engineer. Which fixtures have received prior approval? The following manufacturers, vendors, etc., are noted in compliance with the Instructions to Bidders.

Furnish only equipment and materials from among those listed in the specifications or in this prior approval list. Any furnished item shall comply with the criteria and character of the basic specification, fully adapted to the actual project conditions. Costs of accommodating equipment which varies from that indicated shall be the responsibility of the Contractor.

Fixture F1 Metalux 8VT2 HE Williams 96-8 Columbia LXEM8

NOTE: Reduce the lumen output of the Metalux 8VT2 and HE Williams 96 and Columbia LXEM8 from 22,000 lumens to 16,000. Provide wet location fittings with the fixture as shown in the fixture schedule. Provide stainless steel latches.

Fixture F2 Metalux 4SNX HE Williams 75L-4 Columbia MPS2

NOTE: The fixture schedule contained an error with fixture F2. Fixture Type F2 will be corrected to Lithonia CLX L48 7000LM HEF WDL MVOLT GZ10 40K 80CRI. Prior approval fixtures shall match the performance of this updated F2 fixture.

- Fixture F3 Lumark AXCS1A HE Williams VWMV Beacon RWL1
- Fixture F4 Lumark PRV NLS Lighting NV-1 EXO ASL1

NOTE: Provide wall bracket with the fixture as shown in the fixture schedule.

Fixture F5 Metalux 4VT2 HE Williams 96-4 Columbia LXEM4

NOTE: Provide wet location fittings with the fixture as shown in the fixture schedule.







Provide stainless steel latches.

Fixture F6 Lumark PRV NLS Lighting NV-1 EXO ASL1

NOTE: Fixture Type F6 shall be provided with 12' square pole.

Fixture F7 Lumark AXCS1A HE Williams VWMV Beacon RWL1



HED	ULE				
CODE	<u>QTY</u>	BOTANICAL / COMMON NAME	<u>CONT</u>		HEERS, INC.
٩C	3	Abies concolor White Fir	1.5" CAL	J-U-B ENGINEERS, INC. 392. E. Winchester St., Suite 300 Salt Lake City, UT 84107 Phone: 801.547.0393 www.jub.com	
0	1	Celtis occidentalis Common Hackberry	1.5" CAL	Subconsultant:	
٢P	2	Koelreuteria paniculata Golden Rain Tree	1.5" CAL		
(PA	9	Koelreuteria paniculata 'Fastigiata' Columnar Golden Rain Tree	1.5" CAL	BID	
٥c	2	Pseudotsuga menziesii Douglas Fir	1.5" CAL		
3PA	12	Buddleia x `Pugster Amethyst` Pugster Amethyst Butterfly Bush	2 gal	SE	2024 T
CR	18	Chrysothamnus nauseosus Rubber Rabbitbrush	5 gal	YRIGHT AN E SAME CONSENT. TO J-U-B.	AJN11/27/
RGL	19	Rhus aromatica `Grow Low` Fragrant Sumac	2 gal	S JTORY, COF GS, AND TH R WRITTEN J-U-B WILL EXPOSURE	MEV /
ΥF	24	Yucca filamentosa Adam's Needle	2 gal	E OF DRAWING ON LAW, STATU ON LAW, STATU IT J-U-B'S PRIC CONSENT BY , LITY OR LEGAL	
ъС	75	Panicum virgatum 'Cheyenne Sky' Cheyenne Sky Prairie Winds® Switch Gra	2 gal ss	REUSI RYED RIGHTS OF RYED RIGHTS OF E REUSED WITHOU VITHOUT WRITTEN VID WITHOUT LIABII	um #4 DESCRIPT
٩A	51	Agastache rupestris 'Apache Sunset' Apache Sunset Threadleaf Hyssop	1 gal	J-U-B SHALL F OTHER RESE SHALL NOT B ANY REUSE V SOLE RISK AN	4 Addend VO.
ΞB	41	Euphorbia polychroma 'Bonfire' Bonfire Cushion Spurge	1 gal		
PR	40	Penstemon rostriflorus Bridge Penstemon	1 gal	ICT	
ΡE	40	Perovskia atriplicifolia Sage Advice Russian Sage	1 gal	ANT ISTR	
_S SC	CHED	DULE			7
LS SHOV	VN IN S	CHEDULE MAY NOT BE PRESENT ON EVERY S	SHEET	MEN	PLA TH
<u> QTY</u>		BOTANICAL / COMMON NAME	CONT	NE NE	Sou Sou Sou
<u>RS</u> 17,5	36 sf	1" Angular Crushed Rock Mulch Brown or Gray w/ Weed Barrier Fabric	3" Depth	ER TRE MPRO	SCAPE E PLANT ST 2320
2,17	′6 sf	4" Angular Crushed Rock Mulch Brown or Gray w/ Weed Barrier Fabric	6" Depth	VATE IER I	LANE SCAPE 9 WE
482	sf	Engineered Wood Fiber	12" Depth		AND: 162
309	sf	Poa pratensis Kentucky Bluegrass sod	SOD	RSC R-H	
36		2-5' Boulders		ANDE GRANGE	
				FILE : 93-23-004_L JUB PROJ. # :93-23 DRAWN BY: KAR DESIGN BY: KAR CHECKED BY: JMI I ONE I AT FULL SIZE INCH, SCALE LAST UPDATED: 1 DRAWING:	<u>P-001X</u> 3-004 M <u>NCH</u> , IF NOT ONE <u>ACCORDINGLY</u> 1/27/2024 101



		1	
			JB)
<u>SYMB</u> OL	MANUFACTURER/MODEL/DESCRIPTION	J-U-B ENGI	NEERS, INC.
	Hunter ICZ-101-25 Drip Control Zone Kit. 1" ICV Globe Valve with 1" HY100 filter system. Pressure Regulation: 25psi. Flow Range: 2 GPM to 20 GPM. 150 mesh stainless steel screen.	J-U-B ENGINEERS, INC. 392. E. Winchester St., Suite 300 Salt Lake City, UT 84107 Phone: 801.547.0393 www.jub.com	
	Area to Receive Drip Emitters Hunter HE-B Point Source Drip Emitter with Self Piercing Barb. Pressure compensating from 15 PSI-50 PSI. Emitter Notes: 05HE-B emitters (2 assigned to each 1 gal plant) 05HE-B emitters (2 assigned to each 2 gal plant) 20HE-B emitters (2 assigned to each 5 gal plant) 60HE-B emitters (3 assigned to each 1.5" CAL plant)	BID	
<u>SYMBOL</u>	MANUFACTURER/MODEL/DESCRIPTION		
	Hunter ICV-G-FS with AS-ADJ 1in., 1-1/2in., 2in., and 3in. Plastic Electric Remote Control Valves, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use. With Filter Sentry, and Adjustable Pressure Regulator.	COPYRIGHT AND D THE SAME TEN CONSENT. LL BE AT CLIENT'S JRE TO J-U-B.	EVAJN11/27/2024
۲	Hunter HQ-44LRC Quick coupler valve, yellow rubber locking cover, red brass and stainless steel, with 1" NPT inlet, 2-piece body.	DF DRAWINGS N LAW, STATUTORY, IESE DRAWINGS, ANE J-U-B'S PRIOR WRIT CONSENT BY J-U-B WI LY OR LEGAL EXPOSI	N VISION
X	Isolation Valve (2") 2" Leemco LMV gate valve with 2" square operating nut. Bush up before valve, and back down to mainline size after valve.	REUSE C RETAIN ALL COMMON AVED RIGHTS OF TH E REUSED WITHOUT VITHOUT WRITTEN C LD WITHOUT LIABILIT	RE ks Village Irrigation DESCRIPTIO
M	Netafim Photo Diode Register 1-1/2 1-1/2" 1-1/2in. Master Valve/Flow Sensor with Water Meter and Hydraulic Valve in a Single Unit. Cast Iron with Baked Powder-Coated Finish, Minimum Working Pressure 14 psi. Male Pipe Thread Connection, Photo Diode Register, High Frequency.	CT CTERSE	4 Red Oa
$\langle D \rangle$	Manual Drain Valve Assembly Apollo Bronze ball valve with weld top 3/4" (Place as needed in low points on main line)	LANT DISTRI	
BF	Zurn 375 1" Reduced Pressure Principle Assembly. Sizes 1/2in.,3/4in., 1in., 1-1/4in., 1-1/2in., 2in	1ENT P	PLAN TH
С	Hunter IC-0600-M Modular Controller, 6 stations, Metal Cabinet. No Module Required. Commercial Use. Coordinate location and power source on exterior of building with Owner.	RTREATA APROVEN	SCAPE (L) RRIGATION 2320 SOUT
POC1	Point of Connection 1" SEE CIVIL PLANS	NATEF TER IN	LANDS CAPE II
EX	Point of Connection 2" Existing irrigation point of connection and back flow preventer for Red Oaks Village to remain.	ERSON /	LANDS 162
	 Irrigation Lateral Line: PVC Schedule 40 	ANDI	
	 Irrigation Mainline: PVC Schedule 40 	SR/	
• — • • —	Irrigation Mainline: Existing Red Oaks Village Mainline	FILE : 93-23-004	LI-001X
=====	Pipe Sleeve: PVC Class 200 SDR 21	JUB PROJ. # :93-2 DRAWN BY: KAR DESIGN BY: KAR	23-004 R
Valve Callout Valve Number			
#• #"•	Valve Flow	INCH, SCALE	ACCORDINGLY
 <i>π</i> •		DRAWING:	102
	SUALE IN FEET		