ADDENDUM NO. 3

DATE: **June 27, 2018**
FROM: **City of Grand Junction Purchasing Division**
TO: **All Offerors**
RE: **Water Treatment Plant, Collection and Distribution Supervisory Control and Data Acquisition Automation System (SCADA) RFP-4525-18-DH**

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:

1. Q. If the City can provide physical VM Host servers at City Hall for SCADA VMs, please confirm approximately how many server resources (cores/memory) will be available for use.

   A. The city will provide the required core and memory requirement for based on the software recommend requirements in it's VM environment.

2. Q. Please confirm if disk storage for SCADA servers at City Hall will be SAN, NAS, or DAS type.

   A. Storage will be on one of the SAN devices.

3. Q. Please confirm if the City will also provide the required VM licenses.

   A. The city's VM environment is correctly licensed.

4. Q. Please confirm if the City will be responsible for procurement/installation of all network equipment at City Hall and the WTP.

   A. The City's I.T. Department will purchase and deploy the networking equipment to integrate into the city's infrastructure.

5. Q. If it is decided to install new SCADA servers (primary and/or backup servers) at the WTP, will the City or the SCADA provider be required to procure server/workstation hardware, software and necessary licenses?

   A. The City will procure the severs hardware and all OS licenses to comply with the city's license agreements with Microsoft or other vendors warranty agreements.

6. Q. Please confirm the City Hall to WTP comms link will provide a minimum of 1Gbps dedicated BW for SCADA network needs.

   A. See addendum 1

7. Q. Please provide network speed of the City Hall to WTP wireless remote link.

   A. See addendum 1

8. Q. Please confirm if the City will provide a mail server and/or SMS modem for sending process alarm notifications to WTP support personnel.

   A. The has a mail server that can be used to send emails from systems as needed. The city does not operate an SMS gateway at this time if this is required please provide recommendations for this service for evaluation.

9. Q. Will the City have its own Reporting SW /method for producing the required process/environmental reports, or will the SCADA provider need to provide a reporting solution?

   A. Reporting will need to be part of the SCADA system. The can develop reports from the SCADA system reporting system.

10. Q. What format does the City require history data to be transferred/saved on the City Hall DWH repository?

    A. History data need to be stored in a SQL type Database. The city is most familiar with Microsoft SQL as a database service.

11. Q. Are there any system performance KPI requirements (e.g. max allowed time from field device state change to SCADA GUI displaying the change)?

    A. We're not sure what KPI is, but if it deals with a communication protocol, standard industry specs are fine.

12. Q. Please provide the approximate SCADA monitoring & control i/o count, and if available please send through the WTP SCADA i/o listing.

    A. Please refer to Addendum 1

13. Q. If available, please provide a copy of existing WTP process control descriptions with SCADA functions identified.

    A. Please refer to Addendum 1

14. Q. If available, please provide screen-shots of Redlion HMI GUIs.

    A. See Attached.

15. Q. Please list all PLC comm protocols currently in use for communication between plant PLCs (and stand-alone smart devices) and the Redlion HMI, as well as any other monitoring/control HMIs.

   A. All PLCs are stand-alone; no interface with other systems.

16. Q. What is the earliest date that intrusive site testing can occur? Are there limited (off-peak) hours we must work within?
   A. If intrusive testing means that the plant must be shut down, we would prefer not until August as July is our high-demand month. The plant is staffed from 6AM to 5 PM.

The original solicitation for the project noted above is amended as noted.

All other conditions of subject remain the same.

Respectfully,

Duane Hoff Jr., Senior Buyer
City of Grand Junction, Colorado

Filter 1 Control	Filter 2 Control	Filter 3 Control	Filter 4 Control
Influent Valve	**Influent Valve**	**Influent Valve**	**Influent Valve**
Open	Open	Open	Open
Drain Valve	**Drain Valve**	**Drain Valve**	**Drain Valve**
Closed	Closed	Closed	Closed
Isolation Right Valve	**Isolation Right Valve**	**Isolation Right Valve**	**Isolation Right Valve**
Open	Open	Open	Open
Air Scour Right Valve	**Air Scour Right Valve**	**Air Scour Right Valve**	**Air Scour Right Valve**
Closed	Closed	Closed	Closed
Isolation Left Valve	**Isolation Left Valve**	**Isolation Left Valve**	**Isolation Left Valve**
Open	Open	Open	Open
Air Scour Left Valve	**Air Scour Left Valve**	**Air Scour Left Valve**	**Air Scour Left Valve**
Closed	Closed	Closed	Closed
Backwash Valve	**Backwash Valve**	**Backwash Valve**	**Backwash Valve**
Closed	Closed	Closed	Closed

Main | Backwash | BW Status | Valve Status | Run Times | Trends | Alarms | No Active Alarms

Filter #1 Valves

Valve	Status	Command	Mode	Call to Open
Influent Valve	Open	Open	Auto	● (green)
Drain Valve	Closed	Close	Auto	○
Isolation Right Valve	Open	Open	Auto	● (green)
Isolation Left Valve	Open	Open	Auto	● (green)
Backwash Valve	Closed	Close	Auto	○
Air Scour Right Valve	Closed	Close	Auto	○
Air Scour Left Valve	Closed	Close	Auto	○

Main | Backwash | BW Status | Valve Status | Run Times | Trends | Alarms | No Active Alarms

Backwash Control

Filter Valve Control

Backwash Status

Run Times

Trends

Alarms

Valve Status

Logon

No Active Alarms

BACKWASH CONTROL

Filter #1
| Initiate Left Side | Initiate Right Side |

Filter #3
| Initiate Left Side | Initiate Right Side |

Filter #2
| Initiate Left Side | Initiate Right Side |

Filter #4
| Initiate Left Side | Initiate Right Side |

Blowers
| Blower 1 Auto | Blower 2 Auto |
| Blower 1 Start | Blower 2 Start |
| Disable Blower Alternator |

Backwash Pumps
| Pump 1 Auto | Pump 2 Auto |
| Pump 1 Start | Pump 2 Start |
| Disable Pump Alternator |

Close Effluent Valve

BW Flow Rate 0000GPM

AS Flow Rate 0000SCFM

Backwash Timer
| AS Timer 00.0Mins |
| BW Timer 00.0Mins |
| Rinse Timer 00.0Mins |

BW Flow Totalizer
Today:	0.567MG
Yesterday:	0.421MG
This Month:	11.914MG
Previous Month:	12.316MG

Backwash Set Points

Filter #1
In Operational Mode

Filter #2
In Operational Mode

Filter #3
In Operational Mode

Filter #4
In Operational Mode

| Pump 1 | Pump 2 |
| OFF | OFF |

| Blower 1 | Blower 2 |
| OFF | OFF |

Start Backwash

| Main | BW Status | Valve Control | Valve Status | Run Times | Trends | Alarms | No Active Alarms |