EXHIBIT "A" – SCOPE OF WORK

WTP FILTER SOFTWARE INTEGRATION UPGRADE PROJECT

I. Project Services. Consultant agrees to perform services for a project known and described as the WTP Filter Software Integration Upgrade Project ("Project"). The Project includes Programmable Logic Controller (PLC) and Human Machine Interface (HMI) programming for three PLCs at the Water Treatment Plant.

Equipment controlled from ER1 is described below:

- 4 Variable Speed Decant Pumps
  - VS-P15
  - VS-P16
  - VS-P17
  - VS-P18
- 4 Variable Speed Solids Transfer Pumps
  - VS-P19
  - VS-P20
  - VS-P21
  - VS-P22
- 2 Variable Speed Thickened Sludge Transfer Pumps
  - VS-P25
  - VS-P26
- 1 Solids Thickening Clarifier Polymer Feed System
- 1 Solids Thickening Clarifier Agitator
- 1 Solids Thickening Clarifier Flocculator
- 1 Solids Thickening Clarifier Rake

Equipment controlled from ER4 is described below:

- 2 Ferrous Chloride Pumps
- 1 Filter Backwash Waste Polymer Feed System
- 1 Water Champ Chemical Induction System
- 1 Ferric Chloride Removal Feed System

Equipment controlled from FILT is described below:

- 2 Constant Speed Air Scour Blowers
  - B-1
  - B-2
- 2 Constant Speed Backwash Pumps
  - CS-P13
  - CS-P14
- 4 Biological Filters and associated valves
  - Surface Sweep Valve

- Influent Valve
- Air Scour Valve
- Backwash Inlet Valve
- Backwash Waste Valve
- Air Purge Solenoid
- Effluent Valve
- Waste Valve

The Services are described in the following subtasks:

1 Project Management

Consultant will manage, coordinate and perform administration of the Project execution and quality reviews. Consultant will provide the resources necessary for Project initiation and management throughout the Project as outlined in this Scope of Work. Activities include contract administration, Project accounting, Health & Safety Plan preparation, Project documentation, monitoring progress, change management, monthly invoicing, Project closeout and archiving.

Consultant will communicate and coordinate with the team members, provide general Project management, including Project coordination, Project status reports, invoicing, and periodic meetings with City staff.

1.1 Deliverables:

A. Monthly invoices and progress reports.

2 Software Planning

Consultant will develop preliminary Input/Output (IO) List, define the details of the loop descriptions, and populate the commissioning database in order to prepare for PLC and HMI programming.

2.1 Kick-off Meeting:

Consultant will lead a 1 Hour Kick-Off meeting over Microsoft Teams to discuss the Project's scope, schedule, and approach. Meeting will be attended by the Consultant Project Manager and the Consultant System Programmer. Consultant will document items discussed via meeting minutes to be forwarded to the team for documentation purposes.

2.2 Software Function Definition Workshop 1

Consultant will lead one, 2-hour Software Function Definition Workshop with a focus on Water Producing Filter Functions outlining Filter Availability, Valve Control Relevant to the Filters, Filter Modes, and Filter Control limitations. City will provide details on current filter operations and possible control limitations and Consultant will provide discussion points for filter operation improvement based on an understanding of system limitations. City will provide the ultimate decision to move forward with proposed changes to the equipment control scheme.

2.3 Software Function Definition Workshop 2

Consultant will lead one, 2-hour Software Function Definition Workshop with a focus on filter backwash equipment, backwash procedure, automatic backwash triggers/requirements, Backwash Holding Tank requirements, backwash pump control, chemical dosing, and detailed overall system function. City will provide details on current filter operations and possible control limitations and Consultant will provide discussion points for filter operation improvement based on an understanding of system limitations. City will provide the ultimate decision to move forward with proposed changes to the equipment control scheme.

2.4 Software Function Definition Workshop 3
Consultant will lead one, 2-hour Software Function Definition Workshop with a focus on the remaining controlled equipment, including solids processing, chemical dosing, and detailed overall system function.

During software function definition workshops City will provide details on current filter operations and possible control limitations and Consultant will provide discussion points for filter operation improvement based on an understanding of system limitations. City will provide the ultimate decision to move forward with proposed changes to the equipment control scheme.

2.5 Loop Description Development
Consultant's System Programmer will use notes from the Software Function Definition Workshops to create the Loop Descriptions document.

2.6 IO List Development
Consultant will develop IO list based on design documents and PLC reverse engineering.

2.7 Loop Description Review Meeting
Consultant will lead one, 3-hour, loop description review with the City. Preliminary Loop Descriptions will be reviewed with the City and adjustments will be made to loop descriptions based on the City's comments.

2.8 Preliminary PLC and HMI programming
Consultant will populate the commissioning database with PLC IO tags, loop descriptions, and AOI assignments. This work is to be done based on feedback from the software definition workshop and IO list development.

2.9 Deliverables
A. Draft and final kick-off meeting agenda delivered electronically.
B. Software Function Definition Workshop 1 meeting minutes delivered electronically.
C. Software Function Definition Workshop 2 meeting minutes delivered electronically.
D. Software Function Definition Workshop 3 meeting minutes delivered electronically.
E. Loop Description Review meeting minutes delivered electronically.
F. IO List Assignments
G. Loop Descriptions Draft to be delivered electronically before Loop Description Review meeting.

H. Loop Descriptions Review meeting notes

3 Software Development

Consultant will perform the PLC and HMI programming work based on the information developed in Task 2.

3.1 PLC and HMI Programming

Consultant will provide PLC and HMI Programming based on results from Software Definition Workshop and IO list development.

A. Up to 10 process graphics.
B. Up to 14 custom control pop-up graphics.
C. Modify Navigation graphic in System Platform.
D. Modify WTP overview graphic in System Platform.
E. Modify existing System Communications Overview.

3.2 Draft HMI Graphics Review

Consultant will provide HMI screenshots of up to 6 major process graphics and 6 custom control popups digitally for review of concepts by City before labor is invested in development of remaining graphics required for the Project.

Consultant will lead one, 2-hour workshop with within one week of providing the screenshots for review to demonstrate the concepts and collect City feedback. City will provide marked-up copies of the graphics identifying the desired changes within 1 week from completion of the graphics review workshop.

3.3 Unwitnessed Software Demonstration

Consultant will perform an unwitnessed software demonstration test to confirm that the PLC and HMI programs are ready for the witnessed software demonstration test and that they meet the functional requirements of the Project.

3.4 Witnessed Software Demonstration

Consultant will perform a witnessed software demonstration test, which is a repeat of the unwitnessed software demonstration test but witnessed by the City to verify that the functionality of the PLC and HMI programs meets the Project requirements as defined in Task 2.

Consultant does not expect modifications to the loop descriptions during the witnessed software demonstration. Changes to the loop descriptions will require additional effort not captured in this Scope of Work.

3.5 PLC to PLC Communications Workshop

Consultant will lead one, 1 hour PLC to PLC communications workshop to discuss communications that are required for the Project and outline communications strategies during startup.

3.6 Startup Planning Workshop 1

Consultant will lead one, 1 hour, Startup Planning Workshop to include integrator and City staff and discuss possible startup plans and gather information related to the startup schedule and City's operational limitations for startup. City to clearly state any potential water quality and process-related concerns or limitations for the affected systems. Consultant does not assume responsibility for final water quality leaving the plant but will work with operations to maintain operability to the best of Consultant's ability during startup and present a plan for addressing those concerns in Startup Planning Workshop 2.

Consultant to formulate a plan for software implementation and coordinate with City in Startup Planning Workshop 2.

3.7 Startup Planning Workshop 2

Consultant to lead one, 1 hour Startup Planning Workshop 2 to coordinate with City staff and system integrator to establish a final plan for software integration including details on software download order, firmware upgrades, Component test phase for each PLC, operational test phases, and operational contingency during the upgrades.

3.8 Preparation for Startup

Consultant to prepare PLC and HMI programs for startup, including importing of HMI objects into City's production System Platform Server, download of PLC program into City's test bench PLC, system platform installation on one City-designated HMI computer and deployment of HMI objects. Consultant to verify and test HMI application installation and communication with Galaxy Repository. Consultant to test and verify the functionality of deployed HMI objects. It is expected that this work will be performed prior to the week of startup. Consultant to be supplied with a list of relevant IP addresses for controlled equipment and PLC equipment.

3.9 Deliverables

A. Draft HMI Screenshots
B. Draft HMI Graphics Review Workshop Meeting Minutes
C. Witnessed Software Demonstration Meeting Minutes
D. PLC to PLC Communication Workshop Meeting Minutes.
E. Startup Planning Workshop 1 Meeting Minutes.
F. Startup Planning Workshop 2 Meeting Minutes.
G. Startup Plan Submitted Electronically.

4 Software Implementation

Consultant agrees to install the control system software, provide required field testing, provide City training, and to complete the system start up and tuning.

Consultant will provide a 10-day site visit (2 person) for startup and coordination with City to validate system functionality as described in the loop descriptions. It is expected that Consultant will work for one full week, and stay in Lake Havasu City over the weekend to work for the following week. 10 total working days and 12 days of expenses are included in this Project.

Consultant will coordinate with the City during startup to define the needs of the City and consider possible tasks for remote support after start-up activities defined below have been completed.

Consultant's System Programmer will provide the following for the WTP ER1 PLC.

A. Reprogramming of ER1 PLC/control logic.
B. HMI software installation and configuration.

Consultant's System Programmer will provide the following for the WTP ER4 PLC.

A. Reprogramming of ER4 PLC/control logic.
B. HMI software installation and configuration.

Consultant's System Programmer will provide the following for the WTP Filter PLC.

A. PLC software installation and configuration.
B. HMI software installation and configuration.

4.1 Testing

Upon completing each test phase, Consultant's System Programmer will submit test results for City approval and signature.

A. Component Test Phase
    a. Evaluate each instrument loop as an integrated system from the field instrument to the HMI. IO counts based on preliminary IO quantity developed during scope development for the Project.
    b. Consultant to coordinate time and staff required to complete component testing based on discussion and recommendations made in the startup planning workshops.
B. Performance Test Phase
    a. Evaluate each control loop to verify functionality as defined in the Loop Descriptions
    b. Consultant to coordinate time and staff required to complete component testing based on discussion and recommendations made in the startup planning workshops.

4.2 Remote Support

Up to 80 additional hours for remote support after startup occurs for operational changes and software modification.

4.3 Deliverables

A. Component Test Results
B. Performance Test Results
C. Final Electronic Copy of IO Lists
D. Final Updated Loop Description
E. Final PLC Programs
F. Updated System Platform Application

II. Schedule

The Services will commence upon receipt of an executed Agreement and will be completed based on the timeline below:

Receipt of executed Agreement	August 2025
Kickoff Meeting	August 2025
Software Planning	September 2025
Software Development	October – December 2025
Software Implementation	January 2026
Project Closeout	February 2026

III. Assumptions

A. New Filter PLC programming will be for a CompactLogix-5069-L330ER with firmware version 33. New ER1 and ER4 programming will be for a CompactLogix 1769-L33ER.
B. Any software licenses required for this Project are supplied by others and are not included in this Scope of Work.
C. PLC, HMI, and AVEVA System Platform programming for this Project will be done remotely from the site, primarily in the Consultant's Boise office.
D. PLC IO to be programmed and tested is based on the preliminary IO quantity developed during scope development for the Project. City changes to the IO list shall be issued as a request for change (RFC). Consultant's System Programmer shall have no less than 30 working days prior to loop testing to implement each change or as agreed to in the RFC response.
E. Consultant's System Programmer to use the City's programming standards for Allen Bradley PLCs and AVEVA System Platform HMI.
F. Upgrading PLC firmware is not included in this scope. At least one PLC firmware will need to be upgraded by City before system integrator can download and implement upgraded control logic.
G. PLC programming effort is based on using the City's existing add-on instructions (AOIs) similar to those used for previous City work that Consultant has executed.
H. AVEVA System Platform programming effort is based on using the City's existing Archestra object templates similar to those used for previous City work that Consultant has executed.
I. PLC and HMI tagging format will be based on tags developed during the IO List Development portion of the Project.
J. No Factory Acceptance Test is required.
K. City staff will be available for coordination and assistance with field equipment during software implementation.
L. Consultant's System Programmer will use software test documentation forms for signature by an authorized City representative (similar to those used for previous City work that Consultant has executed).
M. Third-Party Materials. The Services and/or Deliverables may include software, content, data or other materials, including related documentation, that are owned by persons or

entities other than Consultant and that are provided to the City pursuant to third-party license terms ("Third-Party Licenses"). City shall procure and be bound by and shall comply with all Third-Party Licenses. City has a direct relationship with the third-party providers who own or make the Third-Party Materials available to the City and Consultant is not responsible and shall not be held accountable for any defects or issues deriving from such Third-Party Materials.

N. Procurement of equipment is not included in this Project.
O. Troubleshooting of existing IO is not included in this Project. If existing IO is determined as non-functioning, they will be put on a list for the city to adjudicate.
P. Filter backwashes do not need to happen for at least one week to provide sufficient time to update PLC and HMI programs.
Q. City staff will be available for workshops to meet the schedule of the Project.

Table 1: IO Quantities

	Hardwired IO				
IO Type	DI	DO	AI	AO	Total
WTP Filter	68	30	16	8	**122**
ER1	84	48	26	11	**169**
ER4	31	7	24	3	**65**
Total	**183**	**85**	**66**	**22**	**356**