

March 25<sup>th</sup>, 2026



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**Subject: Proposal for City of Camas Wastewater Treatment Plant PLC-DBCP Replacement**

OCD Automation Inc. (OCD Automation) is pleased to provide this proposal to the City of Camas for professional services, automation hardware components, and commissioning services to support the automation hardware upgrade of the Solids Building Programmable Logic Controller (PLC) at the City of Camas Wastewater Treatment Plant.

The Digester Building Modicon Quantum PLC hardware has been discontinued and product support will soon be ending. Based on recent Solids Plant failures and system outages of other PLC systems that required replacement (PLC-C and PLC-D), it appears that the hardware is nearing the end of life, and its replacement is necessary to mitigate additional unexpected outages. Replacing this obsolete hardware and improving the control system architecture of PLC-DBCP is critical to eliminating outages and allowing future process improvements. In addition to the PLC upgrade, two additional improvements are required as part of this project, listed below:

1. Update the 120VAC and 24VDC Uninterruptable Power Systems (UPS) that power Input/Output signals and the PLC hardware in Solids Building Motor Control Centers 1 and 2. (MCC-C1/C1A/C2/C2A).
  - a. Currently, not all the PLC-C hardware is UPS powered!
2. Deploy a robust ethernet PLC Remote I/O and device network which relocates 13 ethernet drives and devices controlled by PLC-DBCP from the general SCADA network onto a segregated air-gapped network specific to PLC-DBCP.

OCD Automation is well positioned to support Camas effectively with our deep understanding of System Control and Data Acquisition (SCADA) systems, our depth of highly skilled technical staff near the wastewater treatment plant, and our familiarity and tribal knowledge of the plant itself. OCD Automation's employee Jake Ositis will be supporting this project primarily and Jake brings years of earned experience from his support of multiple municipalities and water providers throughout the Pacific Northwest. Furthermore, OCD Automation has been actively supporting the Camas Wastewater Treatment plant for over a decade and is familiar with the people, protocols, and expectations of the City of Camas for the successful execution of this work. Jake will be supported by a talented team as all OCD Automation employees are effective at programming the PLCs and Human-Machine-Interface software (HMI) utilized at the Camas Wastewater Treatment plant. Additionally, all OCD Automation staff can directly execute troubleshooting of controls system signals, networks, instrumentation, automation components as issues arise.

**Scope and Work and Deliverables Provided by OCD Automation:**

- Execution of detailed plan and design to be followed by the City's electrical contractor to upgrade of the four PLC groups that comprise the Digester Building Modicon Quantum PLC system (PLC-C). Design deliverables will include the following:
  - The selection and provision of new Modicon PLC hardware detailed on attachment-1 and summarized below is based on our knowledge of the Modicon platform.
    - Modicon M580 Processor using the Modicon X80 series PLC hardware platform.
    - Modicon Managed Ethernet Network hardware.
    - 24VDC UPS power each PLC panel for new PLC/Network hardware and analog I/O signals.
    - Industrial ethernet patch panel for interconnections between the two PLC control sections of the digester Motor Control Center (MCC).
  - Upgrade design will be conveyed as PDF redlines drafted upon PDF scans of the existing plant PLC network block diagram, the Digester MCC panel drawings, and each panel's respective control loop drawings where applicable. Up to 40 total drawing sheets are assumed to be redlined broken down below.
    - 1 Demolition drawing per PLC cabinet identifying hardware and circuits to be removed.
    - 1 Digester Control Panel and Digester MCC PLC and device Network Block Diagram identifying network components, and cabling to be installed between them.
    - PLC cabinet layout drawing redlines of the Digester PLC each of the control cabinets in the MCC identifying new hardware to be installed.
    - PLC cabinet power schematics of each of the control cabinets in the MCC identifying modified and new circuits.
    - 28 loop drawing updates reflecting new PLC hardware for the 14 digital I/O cards.
    - 5 loop drawing updates reflecting new PLC hardware for the 5 analog I/O cards.
  - Refinement of PDF redlines based on final implementation, startup, and commissioning efforts of the PLC panel upgrades.
- Configuration and Programming of OCD Automation Provided Hardware:
  - Migration of current Modicon Quantum PLC-DBCP code into the Modicon M580 plc platform. The PLC programming will replicate the existing programming with the following features requested:
    - Review, adjustments, and cleanup of function blocks and datatypes based on usage to eliminate unused logic and variables.
    - Update of motor and motorized valve function blocks and datatypes to make HMI manual operation, speed control available to the operators from the HMI for a future SCADA upgrade project
    - Development of an analog transmitter function block and datatype to allow transmitter scaling, diagnostics, and alarm setpoints to be available to the operators from the HMI for a future SCADA upgrade project.
- OCD Automation will provide two weeks of onsite startup support at the Camas Wastewater Treatment Plant during PLC panel upgrade during implementation phase to support the City of Camas and their installing electrician.
- OCD Automation employees Jake Ositis (E5) and Anthony Zacateco-Hernandez (E2) are expected to be the primary staff members working on project tasks, assisted as necessary by others.

**Materials:**

- See Attachment 1, itemized hardware list.

**Info Needs:**

- Existing Network Block Diagrams, Digester MCC Panel Drawings, and Digester MCC I/O Loop Drawings in PDF or native CAD format.

**Assumptions/Exclusions:**

- No trade craft labor is included or electrical materials other than those identified in Attachment-1 will be provided. Spare parts not included.
- It is assumed that any onsite electrical demolition or installation work and any materials not identified in Attachment-1 will be provided by the City's installing electrician. OCD Automation will be onsite during the implementation phase of the project to directly support the City's electrical contractor.
- PDF Redlines or modification of existing CAD drawings is assumed. Development of new CAD drawings is not anticipated or included.
- Services will be executed under the terms and conditions of our Agreement for Professional Services agreement.

**Schedule**

OCD Automation can be ready to start the design, procurement, and programming efforts upon receipt of purchase order referencing this proposal letter.

**Invoicing**

The anticipated hardware costs will be invoiced at project onset, with subsequent invoices based on project progress submitted monthly.

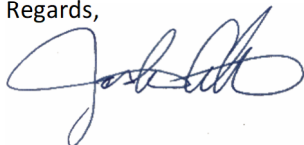
**Cost of Services**

The services to execute this work will be performed on a time and materials basis to a target budget of **\$174,969** broken down as follows:

- Hardware, Components, and Expenses: **\$70,151**
- Project Labor: **\$104,818**

We appreciate the opportunity to provide these services and your consideration of our project proposal for this work. This proposal is valid for 30 days. If there are any questions, please don't hesitate to contact Jake Ositis at (503) 910-5364 or [jake.ositis@odcautomation.com](mailto:jake.ositis@odcautomation.com).

Regards,



Justin D. Colton  
President, OCD Automation Inc.

**Attachments:**

- 1) PLC Hardware and Components List
- 2) Agreement for Professional Services



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### ATTACHMENT-1 PLC Hardware and Components List

Description	Manufacturer	Part Number	Quantity	Notes
QUINT4-PS/1AC/24DC/20 - Power supply unit	Phoenix Contact	2904602	3.00	
QUINT4-UPS/24DC/24DC/20 - Uninterruptible power supply	Phoenix Contact	2907071	3.00	
UPS-BAT/PB/24DC/12AH - Battery module	Phoenix Contact	1274119	3.00	
Modicon Extended Managed Switch, 8 ports for copper	Schneider	MCSESM083F23F1	5.00	
Proxy module, Modicon X80, Modbus Plus	Schneider	TCSEGDB23F24FA	1.00	
X-Slot Ethernet Backplane	Schneider	BMEXBPxx00	4.00	Rack Sizes TBD, as needed
High Power 24-48VDC Power Supply	Schneider	BMXCPS3020	4.00	
M580 CPU Level 40 - DIO and RIO	Schneider	BMEP584040	1.00	
M580 Ethernet IP, 3-Port	Schneider	BMENOC0301	1.00	
BUS MODULE, 2 RS485/232 Ports	Schneider	BMXNOM0200	1.00	
X-Bus Backplane Extender Kit (2 Modules, Cable, and Terminators)	Schneider	BMXXBE2005	1.00	
Digital Input, 16 Channel, 120VAC, Sinking	Schneider	BMXDAl1604	7.00	
Terminal block, Modicon X80, 20-pin removable caged	Schneider	BMXFTB2000	3.00	
Digital Output, 8 Channel, Form-C Relay	Schneider	BMXDRC0805	7.00	
Terminal block, Modicon X80, 40-pin removable caged	Schneider	BMXFTB4000	7.00	
Analog Input, 8 Channel, Current/Voltage	Schneider	BMXAMI0810	4.00	
Terminal block, Modicon X80, 28-pin removable caged	Schneider	BMXFTB2800	4.00	
Analog Output, 4 Channel, Current/Voltage	Schneider	BMXAMO0410	1.00	