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May 8, 2025

SENT VIA: EMAIL

Michael Johansen
Assistant Engineer
City of Fullerton
303 W Commonwealth Ave
Fullerton, CA 92832

SUBJECT: Proposal for Engineering Services for the City of Fullerton to Perform Kimberly Well 2 PLC Programming and SCADA Configuration

Dear Michael:

The purpose of this letter proposal is to provide City of Fullerton (City) with a proposed scope of services, budget and schedule for Kimberly Well 2 Programmable Logic Controller (PLC) programming, Operator Interface Terminal (OIT) configuration, and Supervisory Control and Data Acquisition (SCADA) configuration.

SCOPE OF SERVICES

The following is a list of the key tasks necessary to perform this proposed scope of services, each further described below:

- Task 1. Project Management
- Task 2. Coordination with Contractor and Submittal Reviews
- Task 3. PLC Programming
- Task 4. SCADA and OIT Configuration
- Task 5. Network and Communications Configuration
- Task 6. Factory Acceptance Testing
- Task 7. Site Acceptance Testing and Commissioning
- Task 8. Training

Task 1. Project Management

The objective of this task is to track work progress and expenditures using proactive communications, quality assurance and quality control to keep the project on schedule and budget. Project Management activities include the following:

- **Kickoff Meeting** – West Yost will prepare for and coordinate a kickoff meeting to initiate the Project. The Kickoff meeting will review the project approach, scope, and project schedule.
- **Progress Meetings** – Conference calls will be held as-needed to review project status, including work completed during the latest reporting period, work anticipated to be completed during the next reporting period, identified problems/issues that could affect project budget/expenditures and/or schedule, outstanding issues to be resolved, and action items.

- **Invoices** – Monthly invoices will be prepared.
- **Quality Control** – In accordance with our internal quality assurance/quality control (QA/QC) policy, quality assurance and quality control will be performed for each of the project deliverables prior to final submission to the City.
- **Project Closeout Meeting** – In accordance with our internal policy, we will conduct final project closeout activities, including final document delivery and final invoice.

Task 1 Assumptions
- City Project Manager will attend all meetings associated with this task.
- All meetings associated with this task will be conducted virtually via Microsoft Teams, unless otherwise specified through coordination between the City and West Yost.

Task 1 Deliverables
- West Yost will provide agendas and minutes from meetings and conference calls.
- West Yost will provide monthly status reports, invoices, and project schedule updates.
- West Yost will provide kickoff meeting presentation material.

Task 2. Coordination with Contractor and Submittal Reviews

The objective of this task is to review submittals, respond to Requests for Information (RFI) from the Contractor, and to support any coordination required with the Contractor.

Task 2 Assumptions
- West Yost will provide responses for up to five (5) RFIs.
- West Yost will review the following submittals: Control Panel, Factory Acceptance Test Plan, Site Acceptance Test Plan.

Task 2 Deliverables
- West Yost will review the submittals identified in the Task 2 Assumptions.
- West Yost will provide RFI responses and coordination documentation.

Task 3. PLC Programming

The objective of this task is to develop Programmable Logic Controller (PLC) logic for the Kimberly Well 2 system that aligns to the final control strategy. PLC Programming activities include the following:

- **PLC Programming** –West Yost will develop PLC logic for the automation and control of the Kimberly Well 2 system.
- **PLC Program Testing** – Once PLC logic has been developed, West Yost will test the logic in a West Yost lab environment prior to deploying to the Kimberly Well 2 PLC.

Task 3 Assumptions
- All programming prior to Site Acceptance Testing and Commissioning activities will be done in a West Yost lab environment.
- West Yost will use the control strategy included in the contract documents. Any changes to the control strategy are not included in this scope of work.
- West Yost will use the PLC program from one of the City's previous PFAS treatment plants for development of PLC logic for this facility.

Task 3 Deliverables

- West Yost will provide the City with a final Kimberly Well 2 PLC backup file.

Task 4. SCADA and OIT Configuration

The objective of this task is to develop new SCADA Human Machine Interface (HMI) screens for the monitoring and control of the Kimberly Well 2 system. Also, the objective of this task is to provide alarming, trending, and historical data captures for required Kimberly Well 2 system SCADA tags. SCADA Configuration activities include the following:

- **Draft HMI Screens Development** – West Yost will develop draft HMI screens in SCADA for the monitoring and control of the Kimberly Well 2 system for the City to review.
- **City Review** – Once the draft HMI screens are developed, West Yost will send to the City in PDF format for review.
- **Review Workshop** – After City review, West Yost will conduct Review workshop No. 1 to obtain feedback from the City.
- **Final HMI Screens Development** – After Review Workshop No. 1, West Yost will develop final HMI screens for City review.
- **OIT Screens Development** – West Yost will develop OIT screens for the monitoring and control of the Kimberly Well 2 system based on the Final HMI screens that were developed.
- **Configuration of Alarms, Trends, and Historian Tags** – West Yost will perform final configuration of all alarms, trends, and historian tags.
- **HMI and OIT Screen Testing** – West Yost will perform testing of the final HMI and OIT screens in a West Yost lab environment.
- **HMI and OIT Screens Deployment** – After the HMI and OIT screens are tested, they will be deployed to the City SCADA production environment.

Task 4 Assumptions

- OIT HMI screens will be developed using the latest version of Rockwell Automation's FactoryTalk View Studio Machine Edition software that is compatible with the Panelview Plus OIT.
- Development of HMI and OIT screens will be based on the final control strategy.
- All HMI screen development prior to Site Acceptance Testing and Commissioning activities will be done in a West Yost lab environment.
- City staff will be available for the Review Workshop, which will be up to two (2) hours in duration and will be conducted in-person at a City facility.
- The City will provide West Yost with the latest SCADA backup file(s) prior to the start of SCADA Configuration activities.
- Any required SCADA reports will be developed by the City.
- Instrument calibration and configuration of MCCs to be provided by others.
- West Yost will use the SCADA and OIT screens from one of the City's previous PFAS treatment plants for development of SCADA screens for this facility.

Task 4 Deliverables

- West Yost will provide the City with a final SCADA backup file for the HMI and OIT.

Task 5. Network and Communications Configuration

West Yost will configure the network switch as needed and will integrate with the rest of the City's SCADA network. Additionally, West Yost will integrate all networked components with the PLC and SCADA system.

Task 5 Assumptions

- Configuration of radio equipment to be provided by others.
- West Yost will establish communications with up to eight (8) devices connected to the network switch.
- Configuration of equipment network devices (Generator, PQM, VFD, Soft Starter, MPR) to be provided by others.

Task 6. Factory Acceptance Testing

The objective of this task is to coordinate with the panel builder to participate in and witness a Factory Acceptance Test (FAT) on the new Kimberly Well 2 system control panel. FAT activities include the following:

- **Assess Control Panel –** West Yost will perform an assessment of the control panel to check for damages, holes, loose wires, and any other poor qualities that could negatively impact the SCADA system.
- **Test Network Functionality –** West Yost will connect to the network equipment inside the control panel to test basic network functionality and to observe traffic flow between SCADA components.
- **Test PLC and Input/Output (I/O) Functionality –** West Yost will go online with the PLC using a blank PLC program (consisting of SCADA tags but no logic) to perform basic tests on the processor and all I/O cards. This includes having the panel builder send test signals to inputs.
- **Test OIT Functionality –** West Yost will configure the new OIT. West Yost will also import the latest HMI screens to the OIT to test functionality and communication with the PLC.

Task 6 Assumptions

- West Yost will provide support for up to two days at the FAT.
- The FAT will be conducted and led by the panel builder; West Yost will provide testing support to the panel builder.
- The panel builder will provide a test plan / checklist to all participants and witnesses of the FAT prior to the start of FAT activities.
- The panel builder will flash the PLC with the required firmware prior to the start of FAT activities.
- The panel builder will power the panel and associated equipment.
- The panel builder will conduct any required tests involving wires and electrical components.
- West Yost will download to the PLC and conduct I/O checks with assistance from the panel builder.
- A City representative will be present to witness the FAT.

Task 6 Deliverables

- The panel builder will provide a sign-off sheet of tested and completed items associated with the FAT.

Task 7. Site Acceptance Testing and Commissioning

The objective of this task is to perform site acceptance testing and system commissioning for the Kimberly Well 2 system. Site Acceptance Testing and Commissioning Activities include the following:

- **Assess Control Panel** – West Yost will perform an assessment of the control panel to check for damages, holes, loose wires, and any other poor qualities that could negatively impact the SCADA system.
- **Test Network Functionality –** West Yost will connect to the network equipment inside the control panel to test basic network functionality and to observe traffic flow between SCADA components.
- **PLC Program Download** – West Yost will configure the PLC with the required Internet Protocol (IP) address and download the final developed program to the PLC.
- **OIT Screens Deployment** – West Yost will import the final HMI screens to the Kimberly Well 2 OIT. West Yost will also configure the OIT with the required IP address.
- **SCADA Screens Deployment** – West Yost will import the final HMI screens into the Kimberly Well 2 SCADA production environment.
- **Field I/O Checkout** – West Yost will work with the panel builder / electrician to perform I/O checks in the PLC program for all equipment and instrumentation wired to the PLC.
- **System Testing and Startup** – West Yost will conduct system tests in Remote Manual and Remote Auto to observe that system performance aligns to the final control strategy.
- **Equipment PID Tuning** – West Yost will perform Proportional-Integral-Derivative (PID) tuning for the required Kimberly Well 2 Variable Frequency Drive (VFD) to align equipment performance to the final control strategy.

Task 7 Assumptions

- Training will not be included as part of this scope.
- City representatives will be present and will assist West Yost with any requested troubleshooting of field equipment, instrumentation, network equipment, wiring, and the control panel.
- Jumpering of connections, electrical current readings and simulation, and wiring of panel components to support testing and I/O checkouts will be performed by the panel builder / electrician.
- Field commissioning is assumed to last up to two weeks in duration.

Task 7 Deliverables

- No deliverables will be provided as part of this task.

Task 8. Training

West Yost will develop a Standard Operating Procedure (SOP) and associated training documentation to support facilitation of training for City Operations staff. Following development of training documentation, West Yost will provide training for all SCADA elements of the project including PLC equipment, maintenance, and basic troubleshooting, SCADA HMI and OIT screens layout, navigation, and operation, and network devices, equipment, and connections.

Task 8 Assumptions

- West Yost will provide training limited to the components identified in this Task.
- West Yost will provide two staff on site for one day to facilitate training of City Operations staff.
- To the extent possible, West Yost will leverage the Operations, Maintenance and Monitoring Plan from the City's Main Plant PFAS project for development of the SOP for this project.

Task 8 Deliverables

- SOP and associated training documentation.

PROJECT BUDGET

West Yost's proposed level of effort and budget for each of the tasks described above is shown in Table 1. West Yost will perform the scope of services described above on a time-and-expenses basis, at the billing rates set forth in West Yost's attached 2025 Billing Rate Schedule (shown in Attachment A), with a not-to-exceed budget of $151,584. Since most work on this project will be performed in 2026 and potentially some work will be performed in 2027, escalation of billing rates is already included in this proposal. Any additional services not included in this scope of services will be performed only after receiving written authorization and a corresponding budget augmentation.

Table 1. Table of Estimated Project Hours and Budget

Task	Level of Effort, hours	Estimated Budget, dollars
Task 1. Project Management	37	10,709
Task 2. Coordination with Contractor and Submittal Reviews	44	10,940
Task 3. PLC Programming	116	26,578
Task 4. SCADA and OIT Configuration	129	33,328
Task 5. Network and Communications Configuration	10	2,850
Task 6. Factory Acceptance Testing	32	7,438
Task 7. Site Acceptance Testing and Commissioning	160	41,246
Task 8. Training	84	18,495
Total Project Hours and Budget	**612**	**$151,584**

SCHEDULE

The project schedule is shown in Attachment B.

Thank you for providing West Yost the opportunity to be of continued service to the City of Fullerton. We look forward to working with you on this important project. Please call if you have any questions or require additional information.

Sincerely,
WEST YOST

Michael Gruenbaum
Project Manager

Daniel Groves
Business Sector Leader

Attachment(s): A. West Yost 2025 Billing Rate Schedule
B. Project Schedule

Attachment A

West Yost 2025 Billing Rate Schedule

2025 Billing Rate Schedule

(Effective January 1, 2025, through December 31, 2025)*

POSITIONS	LABOR CHARGES (DOLLARS PER HOUR)
ENGINEERING	
Principal/Vice President	$373
Engineer/Scientist/Geologist Manager I / II	$352 / $369
Principal Engineer/Scientist/Geologist I / II	$317 / $338
Senior Engineer/Scientist/Geologist I / II	$286 / $300
Associate Engineer/Scientist/Geologist I / II	$237 / $255
Engineer/Scientist/Geologist I / II / III	$185 / $215 / $224
Engineering Aide	$111
Field Monitoring Services	$138
Administrative I / II / III / IV	$102 / $127 / $152 / $168
ENGINEERING TECHNOLOGY	
Engineering Tech Manager I / II	$366 / $369
Principal Tech Specialist I / II	$336 / $348
Senior Tech Specialist I / II	$308 / $321
Senior GIS Analyst	$278
GIS Analyst	$264
Technical Specialist I / II / III / IV	$196 / $224 / $251 / $280
Technical Analyst I / II	$141 / $168
Technical Analyst Intern	$113
Cross-Connection Control Specialist I / II / III / IV	$147 / $159 / $179 / $198
CAD Manager	$222
CAD Designer I / II	$172 / $194
CONSTRUCTION MANAGEMENT	
Senior Construction Manager	$355
Construction Manager I / II / III / IV	$211 / $226 / $239 / $303
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	$190 / $211 / $235 / $244
Apprentice Inspector	$172
CM Administrative I / II	$91 / $124
Field Services	$244

- Hourly rates include charges for technology and communication, such as general and CAD computer software, telephone calls, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses.
- Outside services, such as vendor reproductions, prints, and shipping; major West Yost reproduction efforts; as well as engineering supplies, etc., will be billed at the actual cost plus 15%.
- The Federal Mileage Rate will be used for mileage charges and will be based on the Federal Mileage Rate applicable to when the mileage costs were incurred. Travel other than mileage will be billed at cost.
- Subconsultants will be billed at actual cost plus 10%.
- Expert witness services, research, technical review, analysis, preparation, and meetings will be billed at 150% of standard hourly rates. Expert witness testimony and depositions will be billed at 200% of standard hourly rates.
- A finance charge of 1.5% per month (an annual rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

* This schedule is updated annually

2025 Billing Rate Schedule

(Effective January 1, 2025, through December 31, 2025)*

Equipment Charges

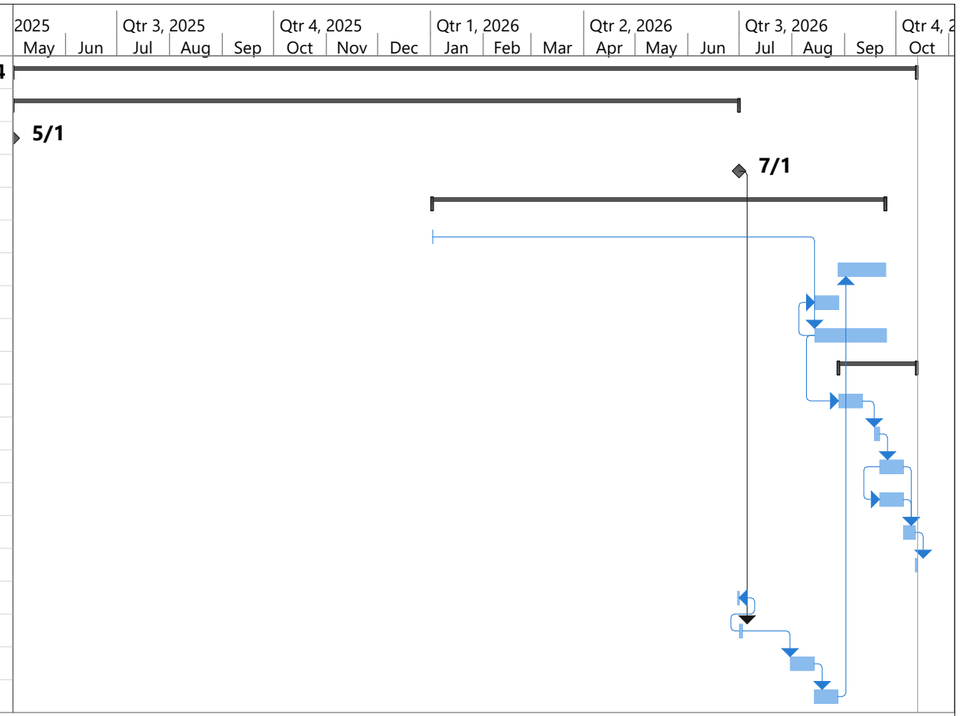
EQUIPMENT	BILLING RATES
2" Purge Pump & Control Box	$300 / day
Aquacalc / Pygmy or AA Flow Meter	$28 / day
Emergency SCADA System	$35 / day
Field Vehicles (Groundwater)	$1.02 / mile
Gas Detector	$80 / day
Generator	$60 / day
Hydrant Pressure Gauge	$10 / day
Hydrant Pressure Recorder, Impulse (Transient)	$55 / day
Hydrant Pressure Recorder, Standard	$40 / day
Low Flow Pump Back Pack	$135 / day
Low Flow Pump Controller	$200 / day
Powers Water Level Meter	$32 / day
Precision Water Level Meter 300ft	$30 / day
Precision Water Level Meter 500ft	$40 / day
Precision Water Level Meter 700ft	$45 / day
QED Sample Pro Bladder Pump	$65 / day
Skydio 2+ Drone (2 hour minimum)	$100 / hour
Storage Tank	$20 / day
Sump Pump	$24 / day
Transducer Communications Cable	$10 / day
Transducer Components (per installation)	$23 / day
Trimble GPS – Geo 7x	$220 / day
Tube Length Counter	$22 / day
Turbidity Meter	$30 / day
Turbidity Meter (2100Q Portable)	$35 / day
Vehicle (Construction Management)	$10 / hour
Water Flow Probe Meter	$20 / day
Water Quality Meter	$50 / day
Water Quality Multimeter	$185 / day
Well Sounder	$30 / day

* This schedule is updated annually

Attachment B

Project Schedule

ID	Task Name	Start	Finish	Duration	Predecessors	Work	Cost
1	**City of Fullerton - Kimberly Well 2 Rehab**	**Thu 5/1/25**	**Tue 10/13/26**	**372.13 days**		**612 hrs**	**$151,584.04**
2	**Key Milestones**	**Thu 5/1/25**	**Wed 7/1/26**	**298 days**		**0 hrs**	**$0.00**
3	Notice to Proceed	Thu 5/1/25	Thu 5/1/25	0 days		0 hrs	$0.00
4	Factory Acceptance Test	Wed 7/1/26	Wed 7/1/26	0 days		0 hrs	$0.00
5	**Task 1 - Project Management**	**Fri 1/2/26**	**Thu 9/24/26**	**190 days**		**37 hrs**	**$10,709.34**
6	Kickoff Meeting	Fri 1/2/26	Fri 1/2/26	1 hr		5 hrs	$1,468.15
7	Project Closeout	Fri 8/28/26	Thu 9/24/26	1 mon	20	4 hrs	$1,155.15
8	**Task 2 - Coordination with Contractor and Submittal Review**	**Fri 8/14/26**	**Fri 8/28/26**	**2 wks**	**9SS**	**44 hrs**	**$10,939.47**
9	**Task 3 - PLC Programming**	**Fri 8/14/26**	**Fri 9/25/26**	**6 wks**	**6FS+32 wks**	**116 hrs**	**$26,578.24**
10	**Task 4 - SCADA and OIT Configuration**	**Fri 8/28/26**	**Tue 10/13/26**	**32 days**		**129 hrs**	**$33,327.55**
11	Draft SCADA Screen Development	Fri 8/28/26	Fri 9/11/26	2 wks	9SS+2 wks	30 hrs	$7,748.00
12	Review Workshop 1	Fri 9/18/26	Mon 9/21/26	1 day	11FS+1 wk	14 hrs	$3,682.35
13	Final SCADA Screen Development	Mon 9/21/26	Mon 10/5/26	2 wks	12	22 hrs	$5,659.68
14	OIT Screen Development	Mon 9/21/26	Mon 10/5/26	2 wks	13SS	30 hrs	$7,748.00
15	Configuration of Alarms, Trends, and Historian Tags	Mon 10/5/26	Mon 10/12/26	5 days	14,13	22 hrs	$5,659.68
16	HMI and OIT Screens Testing	Mon 10/12/26	Tue 10/13/26	1 day	15	11 hrs	$2,829.84
17	**Task 5 - Network and Communications Configuration**	**Tue 6/30/26**	**Wed 7/1/26**	**1 day**	**18SF**	**10 hrs**	**$2,849.60**
18	**Task 6 - Factory Acceptance Testing**	**Wed 7/1/26**	**Thu 7/2/26**	**2 days**	**4**	**32 hrs**	**$7,438.08**
19	**Task 7 - Site Acceptance Testing and Commissioning**	**Fri 7/31/26**	**Thu 8/13/26**	**2 wks**	**18FS+4 wks**	**160 hrs**	**$41,246.40**
20	**Task 8 - Training and SOP Development**	**Fri 8/14/26**	**Thu 8/27/26**	**2 wks**	**19**	**84 hrs**	**$18,495.36**



Project: City of Fullerton - Kimb
Date: Wed 4/16/25

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	