

AN ORDINANCE approving PROFESSIONAL SERVICES AGREEMENT – WATER POLLUTION CONTROL PLANT SCADA MIGRATION – WORK PACKAGE NO. 7 – WORK ORDER #76472 - \$199,810.00 – between SHAMBAUGH & SON, L.P. and the City of Fort Wayne, Indiana, by and through its Board of Public Works.

NOW, THEREFORE, BE IT ORDAINED BY THE COMMON COUNCIL OF THE CITY OF FORT WAYNE, INDIANA:

SECTION 1. That the PROFESSIONAL SERVICES AGREEMENT – WATER POLLUTION CONTROL PLANT SCADA MIGRATION – WORK PACKAGE NO. 7 – WORK ORDER #76472 - \$199,810.00 – between SHAMBAUGH & SON, L.P. and the City of Fort Wayne, Indiana, by and through its Board of Public Works, is hereby ratified, and affirmed and approved in all respects, respectfully for:

All labor, insurance, material, equipment, tools, power, transportation, miscellaneous equipment, etc., necessary for: PROFESSIONAL ENGINEERING SERVICES TO INCLUDE SERVING AS CITY'S PROFESSIONAL REPRESENTATIVE FOR THE PROJECT, PROVIDING PROFESSIONAL ENGINEERING CONSULTATION AND ADVICE, AND OTHER CUSTOMARY SERVICES INCIDENTAL THERETO. SCADA MIGRATION - WORK PACKAGE NO.7 COMPLETES WORK AT THE WATER POLLUTION CONTROL PLANT FOR THE CONTINUING UPGRADE OF THE EXISTING CONTROL SYSTEM TO A NEW PLATFORM. THE WORK IN THIS AGREEMENT INCLUDES THE DEVELOPMENT OF HMI SCREENS, PROGRAMMING, AND MIGRATION OF THE REMOTE SEWER SITES (LIFT STATIONS, PUMP STATIONS, ETC.) TO THE NEW IGNITION PLATFORM AT THE WATER POLLUTION CONTROL PLANT;

involving a total cost of ONE HUNDRED NINETY-NINE THOUSAND EIGHT HUNDRED TEN AND 00/100 DOLLARS - (\$199,810.00). A copy of said Contract is on file with the Office of the City Clerk and made available for public inspection, according to law.

SECTION 2. That this Ordinance shall be in full force and effect from and after its passage and any and all necessary approval by the Mayor.

Council Member

APPROVED AS TO FORM AND LEGALITY

Malak Heiny, City Attorney

CU 4.9.2024

PROFESSIONAL SERVICES AGREEMENT

**Water Pollution Control Plant
SCADA Migration – Work Package No.7**

This Agreement is by and between

CITY OF FORT WAYNE ("CITY")

by and through its

**Board of Public Works
City of Fort Wayne
200 E. Berry Street, Suite 240
Fort Wayne, IN 46802**

and

**Shambaugh & Son, L.P. (ENGINEER)
7614 Opportunity Drive
Fort Wayne, IN 46825**

Who agree as follows:

City hereby engages Engineer to perform the services set forth in Part I - Services ("Services") and Engineer agrees to perform the Services for the compensation set forth in Part III - Compensation ("Compensation"). ENGINEER shall be authorized to commence the Services upon execution of this Agreement and written authorization to proceed from City. City and Engineer agree that these signature pages, together with Parts I-IV and attachments referred to therein, constitute the entire Agreement ("Agreement") between them relating to the Project.

APPROVALS

APPROVED FOR CITY
BOARD OF PUBLIC WORKS

BY:



Shan Gunawardena, Chair

BY:



Kumar Menon, Member

BY:



Chris Guerrero, Member

ATTEST:



Michelle Fulk-Vondran, Clerk

DATE:

4-9-2024

APPROVED FOR ENGINEER

BY:



Dan Ritzert, Senior Vice President

DATE:

March 12, 2024

PART I I

SCOPE OF BASIC ENGINEERING SERVICES

A. GENERAL

Engineer shall provide the City professional Engineering services in all phases of the project to which this scope of services applies. These services will include serving as City's professional representative for the Project, providing professional Engineering consultation and advice, furnishing civil Engineering services and other customary services incidental thereto.

B. PROJECT DESCRIPTION

This project continues the City's Water Pollution Control Plant (WPCP) SCADA Integration Project with Work Package No. 7 including the tasks summarized in Table 1.

Table. 1 WPCP Work Package No. 7 Summary

Tasks	Unit Process	HMI Screen Concepts	WPCP PLCs	Notes
No. 1	Project Management			
No. 2	Collection System Stations: City of Fort Wayne Lift Stations, Allen County Lift Stations, Toe Drains, and Fort Wayne Special Stations	Level 1 –Lift Station Overview	All systems associated with 1100-PLC-00	▪ Integrate improvements into Ignition ▪ The PLC interfaces with 118 remote sites
		Level 2 – Station Monitoring		
		Level 3 - Individual Lift Station Screens		
		Level 4 - Individual System Controls, Popups and Slide outs		

C. SCOPE OF SERVICES

The Proposer shall develop and provide the following services in accordance with the SCADA Standards (as updated), SCADA Migration Development Plan, and Remote Site Technical Memorandum.

Task 1 Project Management and Schedule

- 1.1 Prepare and manage project and project schedule.
- 1.2 Attend monthly progress review meetings and workshops. Keep minutes of meetings and workshops and distribute the meetings within 7-days.
- 1.3 Attend two(2) planning workshops to finalize AOI, UDT, and Ignition tag structure.
- 1.4 Attend three (3) planning workshops related view concepts, site templates, and database UI.
- 1.5 Coordinate validation, rollout and cutover with integration team, inspection team and City.

Task 2 Integrate WPCP Collection System unit process in accordance with Process Control Standards (Attachment 2) and SCADA Migration Development Plan (Attachment 3). Integration includes the following:

- 2.1 Develop and submit HMI screen submissions, PLC updates, and PLC and HMI tagging modifications in accordance with Process Control System Standards, SCADA Migration Development Plan, and Remote Site Monitoring Technical Memo. Integrator shall submit draft HMI screen submissions and tag updates 30 days from Notice to Proceed. Integrator shall plan for 2-weeks for City to review and comment on submissions.
- 2.2 Develop/Implement/Document standards for remote site tagging, tag structure, and database structure.
- 2.3 Develop methods and rules for Remote site writes and update SCADA Standards accordingly. Remote site writes shall allow for full remote control upon completion of the project.
- 2.4 Prepare and submit Validation Plan requirements in accordance with Section 5.0 of SCADA Migration Development Plan including but not limited to:
 - a. Prepare Factory Acceptance Test (FAT) Plan for Rollout and Cutover
 - b. Prepare Site Acceptance Test (SAT) Plan for Rollout and Cutover
 - c. Prepare Training Plan
 - d. Prepare Submittal Plan.

Validation Plan shall plan transitions by unit process or sub-unit process for all systems associated with the Master Polling PLC (1100-PLC-00) generally including:

- a. City of Fort Wayne Lift Stations
 - b. Allen County Lift Stations
 - c. Toe Drains
 - d. City of Fort Wayne Special Stations
 - e. Ancillary systems associated with each unit process or sub-unit process and building services are coordinated with each transition.
- 2.5 Confirm/Update PLC firmware, minimum version 30 based on work package requirements.
 - 2.6 Execute rollout requirements by unit process or sub-unit process in accordance with Section 6.0 of SCADA Migration Development Plan including but not limited to:
 - a. Complete FAT testing associated with the PLC program modifications and modifications to iFIX HMI
 - b. Integrate PLC updates and iFIX by unit process
 - c. Ensure Historian data is maintained through the transition process
 - d. Complete SAT testing to ensure functionality of system.
 - 2.7 Execute cutover requirements by unit process or sub-unit process in accordance with Section 7.0 of SCADA Migration Development Plan including but not limited to:

- a. Complete FAT testing associated with the PLC program modifications and modifications to Ignition Perspective HMI
 - b. Complete cutover to Ignition Perspective HMI
 - c. Complete SAT testing.
- 2.8 Execute training and operability requirements (Section 8.0 and Section 9.0 of SCADA Migration Development Plan).
- 2.9 Visit a minimum of 20 remote sites (ten of which being considered special stations as outlined in the Remote Sites Technical memo) to confirm performance and proper data transfer to Master Polling PLC.
- 2.10 Support/train plant staff to add 75% of the Duplex Lift Station into Ignition

Reference Documents

- City of Fort Wayne Process Control System Standards Document
- City of Fort Wayne SCADA Migration Project Development Plan (October 2021)
- Process and Instrument Diagrams
- PLC Programs (Submitted in native file format)
- Remote Station Technical Memo

D. SCHEDULE

The project shall be completed based on the schedule below. This schedule is based on receiving prompt review and approvals from City agencies (2-weeks per review are included in the schedule).

Complete all work 16 weeks from NTP.

SCHEDULE

DATE

Completion of WPCP Lift Station Unit Process January – February 2025

For additional information, please see scope of work submitted.

CONTINGENCY TASKS (but not specifically limited to):

Contingency items are authorized by the Program Manager and shall have prior approval of fees prior to commencement.

- Attend additional meetings as needed to review and discuss the project.
- Perform site visits to assist Program Manager in resolution of design or construction problems.
- Additional tasks as directed by Owner

PART II

CITY'S RESPONSIBILITIES

City shall, at its expense, do the following in a timely manner so as not to delay the services:

A. INFORMATION REPORTS/CITY UTILITY MAPS/AERIAL MAPS/CONTOUR MAPS

Make available to Engineer reports, studies, regulatory decisions and similar information relating to the Services that Engineer may rely upon without independent verification unless specifically identified as requiring such verification.

Provide System Integrator with existing SCADA standards and migration plans.

Provide System Integrator with any existing programs available in the City's AssetCentre

B. REPRESENTATIVE

Designate a representative for the project who shall have the authority to transmit instructions, receive information, interpret and define City's requirements and make decisions with respect to the Services. The City representative for this Agreement will be Zachary A. Katter, P.E.

C. DECISIONS

Provide all criteria and full information as to City's requirements for the Services and make timely decisions on matters relating to the Services.

PART III

COMPENSATION

A. COMPENSATION

Compensation for services performed in accordance with Part I -- Scope of Basic Engineering Services of this Agreement will be based on hours actually spent and expenses actually incurred with a not-to-exceed Engineering fee of \$ 199,810.00 as summarized in attached Attachment 1.

Engineer's costs will be based on the hours incurred to complete the project times the hourly rates of the various personnel, per Attachment 2 -- Hourly Rate Schedule.

The Engineer shall provide the Services at the hourly rates attached hereto as Attachment 2 -- Hourly Rate Schedule. The Engineer may propose adjustments to its hourly rates from time to time. To propose an adjustment in rates, Engineer shall submit a "Rate Adjustment Request" on a form made available by the City. All proposed adjustments are subject to City approval. If the proposed adjustments are approved, the adjustments shall become effective on the date identified in the Rate Adjustment Request form provided by Engineer, which shall thereafter be attached to the Agreement as an additional Exhibit. If the City rejects the proposed adjustments, the City shall provide written notice to the Engineer and the parties shall work in good faith to identify mutually acceptable hourly rates. If an agreement cannot be reached within (10) days following the date that the City provides written notice to the Engineer of its rejection of the proposed rates, the Engineer shall continue to provide the Services at the original agreed upon rates for the duration of this Agreement. Any adjustment of hourly results under this paragraph that is anticipated to increase the total Contract Price for the Services shall be approved by the Board of Public Works. Otherwise, Board approval shall not be required.

Expenses

Engineer will be reimbursed for travel related expenses, overnight stays, and other expenses per the table below. Per Diem reimbursement is only applicable for individuals traveling 50 miles or more to or from Fort Wayne. Overnight stay is not expected for an individual who is within a 100 mile range, unless expected for multiple days. Travel days are only applicable to individuals traveling 100 miles or more to or from Fort Wayne.

	<u>Per Diem Rate</u>
Travel Day 1 (City or State)	\$112.00
Workshop	\$200
Non-Travel Day	\$68.00
Overnight Accommodations	\$108.00

Payment for outside consulting and/or professional services such as Geotechnical, Utility Locates, Registered Land Surveyor for easement preparation, or Legal Services performed by a Subconsultant at actual cost to ENGINEER plus 10 percent for administrative costs. The Engineer will obtain written City approval before authorizing these services.

B. BILLING AND PAYMENT

1. Timing/Format

- Engineer shall invoice City monthly for Services completed at the time of billing. Such invoices shall be prepared in a form and supported by documentation as City may reasonably require and shall include the employee name and title of all staff billing to project.
- City shall pay Engineer within 30 days of receipt of approved invoice.
- Engineer shall invoice City in whole dollar amounts on the grand total of each invoice. Rounding shall be implemented only on grand total amounts and not subtotals of individual tasks or fees. Contract amounts due to rounding may not exceed the not-to-exceed amount.
- To be considered for payment, invoicing for January through September must be received no later than 90 days from the end of the month that the services were provided. For services provided in the months of October, November, and December, invoices must be received by January 15th of the

following year. Any invoices submitted after the deadlines noted in this paragraph will be considered late and may not be paid.

- e. By January 15th of each calendar year, the Engineer shall invoice the City for all outstanding services through December 31st of the prior year (Year End Invoice). If Engineer is unable to provide the Year End Invoice by January 15th, the Engineer shall notify the City Representative by January 15th, in writing, and shall coordinate with the City Representative to determine the earliest feasible date to deliver the Year End Invoice. Any Year End Invoices or notices submitted after the deadlines noted in this paragraph will be considered late and may not be paid.
- f. By January 10th of each calendar year, the Engineer shall provide City Representative, in writing, a list of any outstanding payments due (Aged Receivables) for services rendered through December 31st of the prior year. The City Representative shall review the list of Aged Receivables and confirm that they are being processed for payment.

2. Billing Records

Engineer shall maintain accounting records of its costs in accordance with generally accepted accounting practices. Access to such records will be provided during normal business hours with reasonable notice during the term of this Agreement and for 3 years after completion.

PART IV Non-Consent Decree STANDARD TERMS AND CONDITIONS

1. **STANDARD OF CARE.** Services shall be performed in accordance with the standard of professional practice ordinarily exercised by the applicable profession at the time and within the locality where the services are performed. No warranty or guarantee, express or implied, are provided, including warranties or guarantees contained in any uniform commercial code.

2. **CHANGE OF SCOPE.** The scope of Services set forth in this Agreement is based on facts known at the time of execution of this Agreement, including, if applicable, information supplied by ENGINEER and CITY. ENGINEER will promptly notify CITY of any perceived changes of scope in writing and the parties shall negotiate modifications to this Agreement.

3. **SAFETY.** ENGINEER shall establish and maintain programs and procedures for the safety of its employees. ENGINEER specifically disclaims any authority or responsibility for general job site safety and safety of persons other than ENGINEER employees.

4. **DELAYS.** If events beyond the control of ENGINEER, including, but not limited to, fire, flood, explosion, riot, strike, war, process shutdown, act of God or the public enemy, and act or regulation of any government agency, result in delay to any schedule established in this Agreement, such schedule shall be extended for a period equal to the delay. In the event such delay exceeds 90 days, ENGINEER will be entitled to an equitable adjustment in compensation.

5. **TERMINATION/SUSPENSION.** Either party may terminate this Agreement upon 30 days written notice to the other party in the event of substantial failure by the other party to perform in accordance with its obligations under this Agreement through no fault of the terminating party. CITY shall pay ENGINEER for all Services, including profit relating thereto, rendered prior to termination, plus any expenses of termination.

ENGINEER or CITY, for purposes of convenience, may at any time by written notice terminate the services under this Agreement. In the event of such termination, ENGINEER shall be paid for all authorized services rendered prior to termination including reasonable profit and expenses relating thereto.

6. **REUSE OF PROJECT DELIVERABLES.** Reuse of any documents or other deliverables, including electronic media, pertaining to the Project by CITY for any purpose other than that for which such documents or deliverables were originally prepared, or alteration of such documents or deliverables without written verification or adaptation by ENGINEER for the specific purpose intended, shall be at CITY's sole risk.

7. **OPINIONS OF CONSTRUCTION COST.** Any opinion of construction costs prepared by ENGINEER is supplied for the general guidance of the CITY only. Since ENGINEER has no control over competitive bidding or market conditions, ENGINEER cannot guarantee the accuracy of such opinions as compared to contract bids or actual costs to CITY.

8. **RELATIONSHIP WITH CONTRACTORS.** ENGINEER shall serve as CITY's professional representative for the Services, and may make recommendations to CITY concerning actions relating to CITY's contractors, but ENGINEER specifically disclaims any authority to direct or supervise the means, methods, techniques, sequences or procedures of construction selected by CITY's contractors.

9. **MODIFICATION.** This Agreement, upon execution by both parties hereto, can be modified only by a written instrument signed by both parties.

10. **PROPRIETARY INFORMATION.** Information relating to the Project, unless in the public domain, shall be kept confidential by ENGINEER and shall not be made available to third parties without written consent of CITY.

11. **INSURANCE.** ENGINEER shall maintain in full force and effect during the performance of the Services the following insurance coverage; provided, however, that if a High Risk Insurance Attachment is attached hereto, the requirements of the High Risk Insurance Attachment shall be substituted in lieu of the following requirements:

- a) Worker's Compensation per statutory requirements
- b) General Liability \$1,000,000 minimum per occurrence/ \$1,000,000 aggregate (if the value of the projects exceeds

\$10,000,000 then this shall be \$5,000,000 aggregate).

- c) Automobile Liability \$1,000,000 per occurrence
- d) Products Liability \$1,000,000 per occurrence
- e) Completed Operations Liability \$1,000,000 minimum per occurrence

The Certificate of Insurance must show the City of Fort Wayne, its Divisions and Subsidiaries as an Additional Insured and a Certificate Holder, with 30 days notification of cancellation or non-renewal. All Certificates of Insurance should be sent to the following address:

City of Fort Wayne Purchasing Department
200 East Berry St., Suite #480
Fort Wayne, IN 46802

12. **INDEMNITIES.** To the fullest extent permitted by law, ENGINEER shall indemnify and save harmless the City from and against loss, liability, and damages sustained by CITY, its agents, employees, and representatives by reason of injury or death to persons or damage to tangible property to the extent caused directly by the negligent errors or omissions of ENGINEER, its agents or employees.

To the fullest extent permitted by law, City shall indemnify and save harmless, Engineer from and against loss, liability, and damages sustained by Engineer, its agents, employees, and representatives by any reason of injury or death to persons or damage to tangible property to the proportionate extent caused by the negligence of City, its agents or employees.

13. **LIMITATIONS OF LIABILITY.** Each party's liability to the other for any loss, cost, claim, liability, damage, or expense (including attorneys' fees) relating to or arising out of any negligent act or omission in its performance of obligations arising out of this Agreement, shall be limited to the amount of direct damage actually incurred. Absent gross negligence or knowing and willful misconduct which causes a loss, neither party shall be liable to the other for any indirect, special or consequential damage of any kind whatsoever.

14. **ASSIGNMENT.** The rights and obligations of this Agreement cannot be assigned by either party without written permission of the other party. This Agreement shall be binding upon and insure to the benefit of any permitted assigns.

15. **ACCESS.** CITY shall provide ENGINEER safe access to any premises necessary for ENGINEER to provide the Services.

16. **PREVAILING PARTY LITIGATION COSTS.** In the event any actions are brought to enforce this Agreement, the prevailing party shall be entitled to collect its litigation costs from the other party.

17. **NOWAIVER.** No waiver by either party of any default by the other party in the performance of any particular section of this Agreement shall invalidate another section of this Agreement or operate as a waiver of any future default, whether like or different in character.

18. **SEVERABILITY.** The various term, provisions and covenants herein contained shall be deemed to be separate and severable, and the invalidity or unenforceability of any of them shall not affect or impair the validity or enforceability of the remainder.

19. **AUTHORITY.** The persons signing this Agreement warrant that they have the authority to sign as, or on behalf of, the part for whom they are signing.

20. **STATUTE OF LIMITATION.** To the fullest extent permitted by law, parties agree that, except for claims for indemnification, the time period for bringing claims regarding Engineer's performance under this Agreement shall expire one year after Project Completion.

ATTACHMENT #1

SUMMARY SHEET

SCOPE OF BASIC ENGINEERING SERVICES FEE PROPOSAL

Project Management – (Task 1)

For Services outlined in Tasks 1 not to exceed fee of: \$ 56,220.00

Collection System Unit Process - (Task 2)

For Services outlined in Task 2 a not to exceed fee of: \$ 133,590.00

Contingency Allowance - As authorized by PM

For Additional Services and tasks required during the performance of the work, but not specifically described herein, a sum not to exceed of : \$10,000.00

TOTAL NOT TO EXCEED FEE: \$199,810.00

ATTACHMENT #2

EMPLOYEE HOURLY RATE SCHEDULE

<u>EMPLOYEE/SERVICE DESCRIPTION</u>	<u>RATE</u>
Jared Trimble, Automation Engineer	\$140/hour
Barbara White, Automation Engineer	\$140/hour
Colin Taylor, Automation Engineer	\$135/hour

Interoffice Memo

Date: 4/8/2024
To: Common Council Members
From: Michael Kiester, Manager, City Utilities Engineering
RE: SCADA Migration – Work Package No. 7
W.O. # 76472

Michael Kiester
4.8.2024

Council District # N/A – At Plants

Engineer shall provide the City professional Engineering services in all phases of the Project to which the scope of services applies. These services will include serving as City's representative for the Project, providing professional Engineering consultation and advice, and other customary services incidental thereto. SCADA Migration – Work Package No.7 completes work at the Water Pollution Control Plant for the continuing upgrade of the existing control system to a new platform. The work in this agreement includes the development of HMI screens, programming, and migration of the Remote Sewer Sites (lift stations, pump stations, etc.) to the new Ignition platform at the Water Pollution Control Plant

Implications of not being approved: SCADA is the control system for both the plants and is used to assist operators in monitoring/ managing processes. Due to changes in technology, our SCADA system has outlived its useful life. The SCADA Migration project involves replacing this system with a new platform that will be more widely supported and easier to modify in the future. This migration also implements high performance graphics to assist in the operation of the Water Pollution Control Plants Remote Sewer Sites.

If Prior Approval is being Requested, Justify: N/A

Selection and Approval Process:

The consultant was selected through the Request for Proposal process. A request for proposals was developed and sent to five shortlisted firms. Two shortlisted firms submitted Competitive Sealed Proposals for this portion of the project. A scoring matrix was used to score all firms based on responses to the RFP's. RFP scoring was based on expertise, qualifications, proposed scope of work and fee. Using this process, City Utilities Engineering selected Shambaugh & Sons for this project and finds their scope and fee to be the best value for this project. The Board of Public Works approved the contract on April 9, 2024.

The cost of said project funded by: State Revolving Fund Sewer Bond

Council Introduction Date: 4/16/2024

CC: BOW
Matthew Wirtz
Jill Helfrich