

RESOLUTION NO. 2990

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, PIERCE COUNTY, WASHINGTON, AUTHORIZING THE AWARD OF CONTRACT WITH PARAMETRIX FOR THE INSTALL OF THE ON-SITE LOGIN/PASSCODE AND INTRUSION DISABLE SYSTEM ON THE HUMAN MACHINE INTERFACE (HMI) ALONG WITH A DAILY CALCULATED REPORT FOR SYSTEM DEMAND.

WHEREAS, the Human Machine Interfaces (HMI's) systems, intrusion switches, and calculated daily system demands reports are critical to the Bonney Lake water systems operations to protect the public health; and

WHEREAS, the HMI systems currently have no login/password credentials to safe guard them; Intrusion switches are placed in random locations and daily statistics cannot be produced accurately.

WHEREAS, sufficient funds are available in the Water Fund; and

NOW, THEREFORE, BE IT RESOLVED; that the City Council of the City of Bonney Lake, Washington, does hereby authorize the Mayor to sign the attached contract with Parametrix, in the amount of \$12,510.

PASSED by the City Council this 9th day of November, 2021.

DocuSigned by:
Neil Johnson, Jr.
20583FB9C281400...
Neil Johnson Jr., Mayor

AUTHENTICATED:

DocuSigned by:
Sadie A. Sehaneman
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Sadie A. Sehaneman, Interim City Clerk

City of Bonney Lake, Washington
City Council Agenda Bill (AB)

Department/Staff Contact: Public Works / Todd Tandecki	Meeting/Workshop Date: 9 November 2021	Agenda Bill Number: AB21-153
Agenda Item Type: Resolution	Ordinance/Resolution Number: 2990	Sponsor:

Agenda Subject: Authorizing the Award of Contract with Parametrix For The Install Of On-site Login/Passcode and Intrusion Disable System On The Human Machine Interface (HMI) Along With A Daily Calculated Report For System Demand.

Full Title/Motion: A Resolution Of The City Council Of The City Of Bonney Lake, Pierce County, Washington, Authorizing The Award Of Contract With Parametrix For For The Install Of On-Site Login And Intrusion Disable System On The Human Machine Interface (Hmi) Along With A Daily Calculated Report For System Demand.

Administrative Recommendation: Approve

Background Summary: As part of this contract Parametrix will address all off site Human Machine Interface (HMI) screens at all 13 locations and program a unique login and password for employees. Parametrix will also train a dedicated staff member on how to add, remove and/or change in the future. Once this has been created, they will eliminate the existing intrusion switches and program the new intrusion switches on the HMI screen to make things consistent. The password/login is a crucial part of the vulnerability assessment and needs to be done ASAP. The other part of this contract will address the reporting of the daily system stats. The goal is to be able to pull up trends from the water sources (Tacoma Point, Víctor Falls, Grainger Springs, Ball Park, South Prairie, and Peaking Storage) and be able to retrieve the data from each water source's flow meter to produce a daily demand report without going out in the field. This will all be done on the SCADA system at the Public Works Center. We currently have On-call service contract with Parametrix who will be providing the work. For more detailed information see Exhibit A - Scope of Work.

Attachments: Resolution 2990, Professional Services Agreement, Exhibit A - Scope of Work/Deliverables/Fee, Exhibit B -Rates

BUDGET INFORMATION

Budget Amount	Current Balance	Required Expenditure	Budget Balance	Fund Source
\$100,000	\$83,516.58	\$12,510.00	\$71,006.58	<input type="checkbox"/> General <input checked="" type="checkbox"/> Utilities <input type="checkbox"/> Other

Budget Explanation: Water: Eden -401.000.034.534.50.48.03-Replacement & Unscheduled Projects-\$12,510. Water Comprehensive Plan -A8 - Replacement & Unscheduled Projects- Will be properly coded to Engineering Services - 401.000.034.534.50.41.20.
 Revenue Source: Rates

COMMITTEE, BOARD & COMMISSION REVIEW

Council Committee Review:	Community Development <i>Approvals:</i>		Yes	No
	Date: 2 November 2021	Chair/Councilmember Dan Swatman	<input type="checkbox"/>	<input type="checkbox"/>
		Councilmember Tom Watson	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Councilmember J Kelly McClimans	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Forward to:	Consent Agenda:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Commission/Board Review:

Hearing Examiner Review:

COUNCIL ACTION

Workshop Date(s):

Public Hearing Date(s):

Meeting Date(s):

Tabled to Date:

APPROVALS

Director:

Ryan Johnstone

Mayor:

Neil Johnson, Jr.

Date Reviewed

by City Attorney:
(if applicable)

PROFESSIONAL SERVICES AGREEMENT

THIS PROFESSIONAL SERVICES AGREEMENT (“Agreement”) is made and entered into this 9th day of November, 2021, by and between the City of Bonney Lake (“City”) and Parametrix, Inc. (“Consultant”).

The parties hereby agree as follows:

- Scope of Work.** The Consultant shall perform all work and provide all materials described in the Scope of Work set out in Exhibit A attached hereto and incorporated herein by this reference. Such work shall be performed using facilities, equipment and staff provided by Consultant, and shall be performed in accordance with all applicable federal, state and local laws, ordinances and regulations. The Consultant shall exercise reasonable care and judgment in the performance of work pursuant to this Agreement. The Consultant shall make minor changes, amendments or revisions in the detail of the work as may be required by the City, such work not to constitute Extra Work under this Agreement.
- Ownership of Work Product.** Documents, presentations and any other work product produced by the Consultant in performance of work under this Agreement shall be tendered to the City upon completion of the work, and all such product shall become and remain the property of the City and may be used by the City without restriction; *provided*, that any such use by the City not directly related to the particular purposes for which the work product was produced shall be without any liability whatsoever to the Consultant.
- Payment.** The Consultant shall be paid by the City for completed work and services rendered under this Agreement pursuant to the rates and charges set out in Exhibit B, attached hereto and incorporated herein by this reference. Such payment shall be full compensation for work performed or services rendered and for all labor, materials, supplies, equipment, and incidentals necessary to complete the work. All billings for compensation for work performed under this Agreement shall list actual time and dates during which the work was performed and the compensation shall be figured using the rates set out in Exhibit B; *provided*, that payment for work within the Scope of Work (Exhibit A) shall not exceed the fee/hour estimate set out in Exhibit B without written amendment to this Agreement, agreed to and signed by both parties.

Acceptance of final payment by the Consultant shall constitute a release of all claims, related to payment under this Agreement, which the Consultant may have against the City unless such claims are specifically reserved in writing and transmitted to the City by the Consultant prior to acceptance of final payment. Final payment shall not, however, be a bar to any claims that the City may have against the Consultant or to any remedies the City may pursue with respect to such claims.

The Consultant and its sub consultants shall keep available for inspection, by the City, for a period of three years after final payment, the cost records and accounts pertaining to this Agreement and all items related to, or bearing upon, such records. If any litigation, claim or audit is started before

the expiration of the three-year retention period, the records shall be retained until all litigation, claims or audit findings involving the records have been resolved. The three-year retention period shall commence when the Consultant receives final payment.

4. **Changes in Work.** The Consultant shall make all revisions and changes in the work completed under this Agreement as are necessary to correct errors, when required to do so by the City, without additional compensation.

5. **Extra Work.** The City may desire to have the Consultant perform work or render services in addition to or other than work provided for by the expressed intent of the Scope of Work. Such work will be considered Extra Work and will be specified in a written supplement which will set forth the nature and scope thereof. Work under a supplement shall not proceed until authorized in writing by the City. Any dispute as to whether work is Extra Work or work already covered by this Agreement shall be resolved before the work is undertaken. Performance of the work by the Consultant prior to resolution of any such dispute shall waive any claim by the Consultant for compensation as Extra Work.

6. **Employment.** Any and all employees of Consultant, while engaged in the performance of any work or services required by the Consultant under this Agreement, shall be considered employees of the Consultant only and not of the City, and any and all claims that may or might arise under the Workman's Compensation Act on behalf of said employees, while so engaged; any and all taxes arising out of Consultant's or Consultant's employees' work under this Agreement; and any and all claims made by a third party as a consequence of any acts, errors, or omissions on the part of the Consultant's employees, while so engaged, shall be the sole obligation and responsibility of the Consultant, except as provided in Section 12 of this agreement. The Consultant's relation to the City shall at all times be as an independent contractor.

7. **Nondiscrimination and Legal Compliance.** Consultant agrees not to discriminate against any client, employee or applicant for employment or for services because of race, creed, color, national origin, marital status, gender, age or handicap except for a bona fide occupational qualification with regard to, but not limited to, the following: employment upgrading; demotion or transfer; recruitment or any recruitment advertising; layoff or termination; rates of pay or other forms of compensation; selection for training; and rendition of services. The consultant represents and warrants that it is in compliance with and agrees that it will remain in compliance with the provisions of the Immigration Reform and Control Act of 1986, including but not limited to the provisions of the Act prohibiting the hiring and continued employment of unauthorized aliens and requiring verification and record keeping with respect to the status of each of its employees' eligibility for employment. The consultant shall include a provision substantially the same as this section in any and all contracts with sub consultants performing work required of the contractor under this contract. The consultant agrees to indemnify and hold the City harmless from any and all liability, including liability for interest and penalties, the City may incur as a result of the consultant failing to comply with any provisions of the Immigration Reform and Control Act of 1986. Consultant understands and agrees that if it violates this section, this Agreement may be terminated by the City, and that Consultant shall be barred from performing any services for the

City in the future unless and until a showing is made satisfactory to the City that discriminatory practices have terminated and that recurrence of such action is unlikely.

8. **Term.** This Agreement shall become effective upon the day of its execution by both parties, and shall terminate upon completion of the work and delivery of all materials described in Exhibit A.

9. **Termination by City.** The City may terminate this Agreement at any time upon not less than ten (10) days written notice to Consultant, subject to the City's obligation to pay Consultant in accordance with subsections A and B below.

A. In the event this Agreement is terminated by the City other than for fault on the part of the Consultant, a final payment shall be made to the Consultant for actual cost of work complete at the time of termination of the Agreement. In addition, the Consultant shall be paid on the same basis as above for any authorized Extra Work completed. No payment shall be made for any work completed after ten (10) days following receipt by the Consultant of the termination notice. If the accumulated payment(s) made to the Consultant prior to the termination notice exceeds the total amount that would be due as set forth in this subsection, then no final payment shall be due and the Consultant shall immediately reimburse the City for any excess paid.

B. In the event the services of the Consultant are terminated by the City for fault on the part of the Consultant, subsection A of this section shall not apply. In such event the amount to be paid shall be determined by the City with consideration given to the actual costs incurred by the Consultant in performing the work to the date of termination, the amount of work originally required which was satisfactorily completed to date of termination, whether that work is in a form or of a type which is usable by the City at the time of termination, the cost to the City of employing another person or firm to complete the work required and the time which may be required to do so, and other factors which affect the value to the City of the work performed at the time of termination. Under no circumstances shall payment made under this subsection exceed the amount which would have been made if subsection A of this section applied.

C. In the event this Agreement is terminated prior to completion of the work, the original copies of all work products prepared by the Consultant prior to termination shall become the property of the City for its use without restriction; *provided*, that any such use by the City not directly related to the particular purposes for which the work product was produced shall be without any liability whatsoever to the Consultant.

10. **Termination by Consultant.** Consultant may terminate this Agreement only in response to material breach of this Agreement by the City, or upon completion of the work set out in the Scope of Work and any Extra Work agreed upon by the parties.

11. **Applicable Law; Venue.** The law of the State of Washington shall apply in interpreting this Agreement. Venue for any lawsuit arising out of this Agreement shall be in the Superior Court of the State of Washington, in and for Pierce County.

12. Indemnification / Hold Harmless

Consultant shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees arising out of or resulting from the negligent acts, errors or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City. In the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability, including the duty and cost to defend, hereunder shall be only to the extent of the Consultant's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

Insurance

The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees.

A. Minimum Scope of Insurance

Consultant shall obtain insurance of the types described below:

1. Automobile Liability insurance covering all owned non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
2. Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, independent contractors and personal injury and advertising injury. The City shall be named as an insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City.
3. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.
4. Professional Liability insurance appropriate to the Consultant's profession.

B. Minimum Amounts of Insurance

Consultant shall maintain the following insurance limits:

1. Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.
2. Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate.
3. Professional Liability insurance shall be written with limits no less than \$1,000,000 per claim and \$1,000,000 policy aggregate limit.

C. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions for Automobile Liability, Professional Liability and Commercial General Liability insurance:

1. The Consultant's insurance coverage shall be primary insurance as respect the City. Any insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.
2. The Consultant's insurance shall be endorsed to state that coverage shall not be cancelled by either party, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City.

D. Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.

E. Verification of Coverage

Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Consultant before commencement of the work.

13. **Subletting or Assigning.** The Consultant shall not sublet or assign any of the work covered by this Agreement without the express written consent of the City.

14. **Entire Agreement.** This Agreement represents the entire Agreement between the parties. No change, termination or attempted waiver of any of the provisions of the Agreement shall be binding on any party unless executed in writing by authorized representatives of each party. The agreement shall not be modified, supplemented or otherwise affected by the course of dealing between the parties.

15. **Waiver.** Failure by any party to this Agreement to enforce any provision of this Agreement or to declare a breach shall not constitute a waiver thereof, nor shall it impair any party's right to demand strict performance of that or any other provision of this Agreement any time thereafter.


16. **Severability.** If any provision of this Agreement or its application is held invalid, the remainder of the Agreement or the application of the remainder of the Agreement shall not be affected.

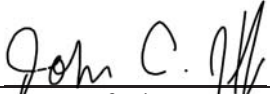
17. **Execution and Acceptance.** This Agreement may be executed in several counterparts, each of which shall be deemed to be an original having identical legal effect. The Consultant hereby ratifies and adopts all statements, representations, warranties, covenants, and agreements contained in the supporting materials submitted by the Consultant, and does hereby accept the Agreement and agrees to all of the terms and conditions thereof.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

CITY OF BONNEY LAKE

CONSULTANT

By:  _____
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NEIL JOHNSON JR., MAYOR

By:  _____
JC Hungerford PE, Water Division Manager

Attachments:

Exhibit A: Scope of Work/Deliverables/Fee

Exhibit B: Rates

EXHIBIT A: SCOPE OF WORK

The Consultant shall perform the following services as directed by the City:

SCOPE OF WORK

City of Bonney Lake Water Source Flow Meter Totalizer(s) Demand versus Production Data Visualization

INTRODUCTION

The City of Bonney Lake (“City”) would like to show and report the daily potable water system demand versus the water system production.

The goal is to be able to pull up a trend from Tacoma Point Wells, Victor Falls, Grainger Springs, Ball Park, South Prairie, Peaking Storage, and Tacoma Water Intertie and be able to retrieve the data from each water source’s flow meter(s). The totalized flow shall be displayed in supervisory control and data acquisition system (SCADA) along with totalized system demand information.

In order to facilitate the expected totalized flow information from the above-mentioned sites, Parametrix shall visit each of the sites to verify that proper flow indication and totalized information is being properly represented, and where discrepancies are found, corrective action information shall be reported.

Parametrix shall work with City staff to facilitate the building of the expected trending and/or visualization of the source and demand information in the City’s SCADA system.

The City would also like to install the site intrusion disable system in the Human Machine Interface (HMI) screens and eliminate the existing switches at the sites.

TASK 01 – QA/QC

Subtask 01 – Project Management and QA/QC Goal

Parametrix administrative staff provides oversight and guidance for the project to ensure that the project remains on schedule and within budget and that it coincides with the original scope of work. Parametrix “Quality Assurance (QA)” practices provide “Quality Control (QC)” reviews performed by Parametrix personnel not associated with the project. Parametrix has found this QA/QC process to objectively identify any discrepancies in the way the project is being administered.

Approach

The specific activities included under this task shall include the following:

- Project administration and management of budget, contract, billing memoranda, and schedule, as well as coordinating individual tasks and maintaining project records.
- Parametrix QA/QC standard practices.
- Billings Effort: This activity is for project accounting and project coordination services that are not included as part of the Parametrix audited overhead rate applied to this project.

Assumptions

Assumptions are as follows:

- On-site testing and start-up activities shall be conducted in blocks of contiguous days on site.
- Parametrix shall not debug or configure instrumentation. Discrepancies found during testing shall be provided in documented form describing what issue(s) the programmable logic controller (PLC) tags and/or programming is experiencing. Parametrix will not perform any field adjustments to instrumentation and electrical equipment.
- Issues found with the SCADA system or PLC manufacturer's software that causes issues beyond Parametrix's control shall be documented and relayed to the manufacturer's technical support. All support ticket numbers and details of the issues shall be documented and provided to the Parametrix project manager. The project manager shall determine the severity of the issues and provide updates as to the status of the issues during the project coordination meetings. If stoppage of work is required, the Parametrix project manager shall inform the City of the issues causing the stoppage.

Deliverables

Deliverables shall consist of the following:

- Project schedule.
- Monthly effort tracking, project progress reports, and generation of invoices.
- Monthly issues report identifying project impacts and resolutions.
- Notifications regarding software issues and potential work stoppages.

TASK 02 – WATER SOURCE TOTALIZER INFORMATION

Subtask 01 – Water Source Site Visit

Goals

The goals of this task include:

- Visitation of water source sites to determine if water flow information shall meet the expectation of the project.
- Installation of intrusion disable programming at each site to be accessed on the existing HMI screens.

Approach

Parametrix shall visit the following sites:

Tacoma Point Wells, Victor Falls, Grainger Springs, Ball Park, South Prairie, and Peaking Storage.

At each of these sites, Parametrix shall verify the source flow meter(s) are operating and displaying the proper flow rate and totalizer readings. Parametrix shall verify readings all the way through to the SCADA Wonderware display. Parametrix shall record the method of how the flow is being totalized, whether it is by calculation (flow

over time) or by flow meter totalized pulse. Parametrix shall also record if the existing flow meter has totalized pulse capabilities.

At each of these sites, the intrusion disable system is a manual switch, toggle, or key switch. Timing for the disable is hard coded in the PLC. Install intrusion disable controls in the HMI touch screen at each site to make them consistent in operation and control. Timing set points will be available to allow for customizing the amount of alarm delay time allowed for ingress and egress. Test each site for proper intrusion control and alarming.

Assumptions

- This task shall take up to three 8-hour days.
- Parametrix will not be responsible for removing any existing intrusion switches or wiring.
- The City will allow Parametrix staff access to all seven sites.

Deliverables

Deliverables shall consist of the following:

- Copy of site totalizer report.

Subtask 02 – Totalizer Data Visualization

Goals

Building of the trending and/or visualization of water source flow meter totalization and demand readings.

Approach

Work with City personnel to build up to seven trends and up to two visualization screens in Wonderware to properly display the expected daily water system demand versus the water system production. There is a possibility that some programming in the Master PLC may be required to manipulate the data in a fashion that allows for the proper visualization of the data.

Assumptions

City shall provide the guidance and personnel to allow Parametrix to meet the expectation.

This task shall take up to four 8-hour days.

Deliverables

Deliverables shall consist of the following:

- Electronic copy of the Master PLC program changes.
- Electronic copy of the Wonderware Galaxy backup.

SCHEDULE

This work is to be completed in 30 calendar days from the Notice to Proceed (NTP). This is also contingent on COVID-19 restrictions.

CYBERSECURITY DISCLAIMER

Parametrix shall provide SCADA and PLC programming services consistent with this Scope of Work. Parametrix has not and shall not provide information technology security services to protect Bonney Lake's networks and equipment from breaches or hacks from outside sources. As such, Bonney Lake should consider the following:

- Bonney Lake is encouraged to proactively monitor their environment for security threats. Parametrix does not provide this service.
- Bonney Lake is encouraged to engage a qualified, independent third party to perform an operational security assessment of the industrial control system environment.
- Where a firewall or other perimeter security device is provided in conjunction with the Scope of Work, Parametrix recommends that:
 - The configuration of these devices be evaluated by qualified personnel.
 - The devices be properly maintained with available threat and anti-virus subscription services.
 - The firmware on the devices be kept reasonably up to date per manufacturer's recommendations.
- Parametrix is not responsible for Windows or other operating system maintenance (patching, anti-virus, etc.) associated with the implementation/design of the system.
- Parametrix is not responsible for the maintenance/configuration of any remote access (i.e., virtual private network) capabilities. These should be configured in accordance with Bonney Lake's organization practices.
- Parametrix encourages the use of multifactor authentication for any and all remote access to the control environment.

EXHIBIT B: RATES

Exhibit B

Task	SubTask	Description	Labor Dollars	Labor Hours	Rates:
01		Data Collection QA/QC	\$930.00	6	\$205.00
	01	Project Management & QA/QC	\$930.00	6	\$145.00
02		Water Source Totalizer Information	\$11,480.00	56	\$135.00
	01	Water Source Site Visit	\$4,920.00	24	\$120.00
	02	Totalizer Data Visualization	\$6,560.00	32	\$145.00
Labor Totals:			\$12,410.00	62	\$190.00
Totals:			\$12,410.00	62	\$11,685.00

Other Direct Expenses	
Mileage	\$100.00
Other Direct Expenses Total:	\$100.00
Project Total	\$12,510.00

Sr Electrical Designer	Guy Cosway	\$205.00	1	\$190.00
Publications Supervisor	Amanda B. Lucas	\$145.00	1	\$120.00
Project Controls Specialist	Sandra L. Cosgrove	\$135.00	2	\$120.00
Project Accountant	Jessica M. Lavaris	\$120.00	1	\$190.00
Electrical Engineer IV	Marvin C. Casanova	\$190.00	1	