



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: MARCH 12, 2018

ITEM NO: 7

SUBJECT: PROFESSIONAL SERVICES AGREEMENT FROM RFP NO. 1697 WITH WESTIN TECHNOLOGY SOLUTIONS, LLC, MILWAUKEE, WISCONSIN, FOR ELECTRIC WORK AND ASSET MANAGEMENT OPTIMIZATION PROJECT PHASE 1, FOR A TERM OF 2 YEARS IN THE AMOUNT OF \$1,266,100 - WORK ORDER NO. 1820191 IN THE AMOUNT OF \$1,600,000

ISSUES:

Approve a Professional Consulting Services Agreement, Request for Proposal No. 1697, with Westin Technology Solutions, LLC of Milwaukee, Wisconsin, for a term of two years, in the amount \$1,266,100 to provide a range of support services to support the Electric Work and Asset Management Optimization Project Phase 1, and approve Work Order No. 1820191 in the amount of \$1,600,000.

RECOMMENDATIONS:

That the Board of Public Utilities:

1. Approve a Professional Services Agreement, Request for Proposal No. 1697, with Westin Technology Solutions, LLC, in the amount of \$1,266,100 for a term of two years;
2. Authorize the City Manager, or his designee, to execute the Professional Services Agreement with Westin Technology Solutions, LLC, including making minor, non-substantive changes, and to sign all documents and instruments necessary to complete the transactions; and
3. Approve Work Order No. 1820191 in the amount of \$1,600,000.

BACKGROUND:

The goal of the Electric Work and Asset Management Optimization Project (Project) is to create a cohesive and systematic approach to understanding equipment and infrastructure in the Electric Division of Riverside Public Utilities (RPU). The system will enable data-driven decisions for capital and maintenance planning, to move RPU's Electric Division (Electric) toward a more preventative and predictive approach for managing assets. The total value of RPU's water and electric assets is approximately \$3.4 billion. The cost of equipment failure can be 4-10 times greater than the cost to replace the same equipment before it reaches the point of failure, so it is important that assets are systematically tracked and repaired/replaced at the appropriate time. RPU places very high value on continuously increasing automation, streamlining processes, improving operational efficiencies to lower overall costs for our customers, and enhancing customer service. This Project will help achieve those objectives.

In 2016, the City of Riverside engaged a third party consultant firm, Baker Tilly, to conduct a performance audit of the performance of certain departments, programs, activities and functions within RPU. One area

of focus was RPU's asset management practices. The findings of the performance audit, published on May 16, 2016, outlined several opportunities for RPU to improve its asset management practices. In summary, the findings were as follows:

1. Document and communicate comprehensive asset management policies,
2. Develop a method of ensuring that each of the divisions leverages the asset management system in a way that enables RPU to achieve its overarching strategic objectives,
3. Re-implement work and asset management system, improve system functionality and re-engineer business processes to standardize and improve system use,
4. Implement a process to monitor compliance with the asset management policies,
5. Conduct an organizational assessment of asset management function, including staffing, workload, and organizational structure, and
6. Assess the lifecycle of asset accounting.

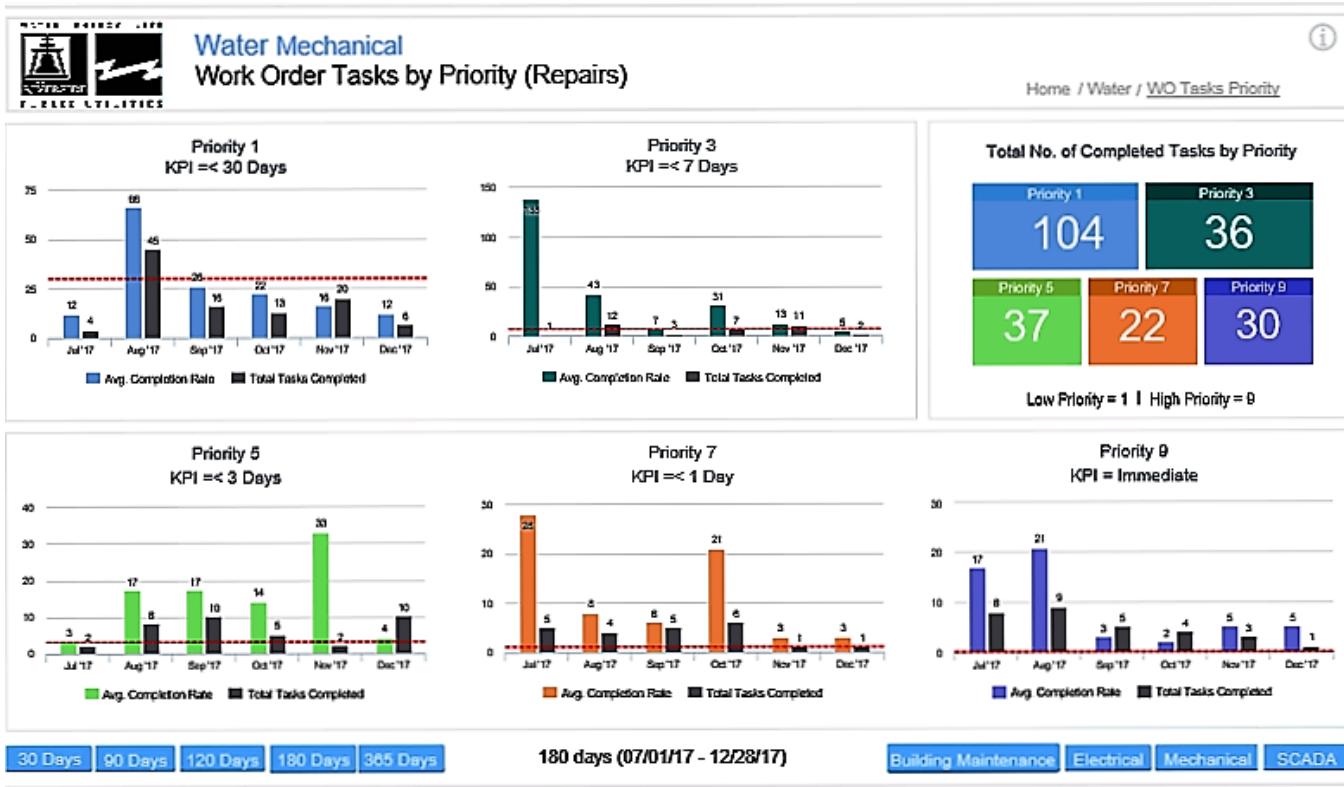
The Project will address the findings of the performance audit and will improve management of work, assets and inventory utilizing the existing system, Oracle's Utility Work and Asset Management (UWAM). RPU currently uses UWAM for all timesheet entries and to process purchasing requisitions, work orders, purchase orders, invoices, and inventory. However, the functionality of UWAM is not being fully utilized for work and asset management in Electric. Through this Project, RPU will enhance the use of UWAM as a first step toward developing a robust work and asset management program in Electric.

In 2016, RPU's Water Division (Water) completed a Phase 1 implementation of Work and Asset Management Optimization, which included loading approximately 100,000 water assets, including vertical assets (wells, reservoirs, booster stations, treatment plants, and pressure-reducing valves) and horizontal assets (transmission and distribution water mains, hydrants, valves and meters larger than 2-inches), into UWAM. Labor and maintenance costs are now captured in the system at the asset level and can be rolled-up to parent assets, under a clearly defined asset hierarchy structure, for analytics and reporting purposes. Preventative maintenance activities that were previously tracked on spreadsheets, paper, and maintenance cards are now generated as work orders automatically from UWAM; and all related work is captured on electronic forms and stored in the system. A summary of benefits realized through the now completed Water Project are as follows:

1. Greater visibility into work order performance and completion results,
2. Improved accounting and tracking of cost,
3. Reduced potential liability with the ability to produce comprehensive preventative maintenance documentation,
4. Implementing consistent preventative maintenance schedules aligned with manufacturer recommendations,
5. Providing more efficient scheduling of work and reduces redundant work,
6. Providing crews access to electronic documentation (such as prior maintenance records) necessary to safely and effectively execute their work, and
7. Significantly reducing costs from paper waste.

Supervisors and managers in Water now have access to data to track work orders and preventative maintenance activities, reassign and prioritize work, appropriately allocate resources, track costs, and make better decisions about the management and oversight of water assets. The water data from UWAM has been integrated with the Operational Data Management System (ODMS) Pi, along with data from the Supervisory Control and Data Acquisition (SCADA) system, Geographic Information System (GIS) and the financial system, IFAS, to provide comprehensive dashboards and detailed reports, as shown in the example below.

Figure 1: Water Works and Asset Management Pi Dashboard Example+



DISCUSSION

RPU is now focused on improving work and asset management in Electric, to address the findings presented in the performance audit and to meet the level at which Water is now operating. Utilizing consultant services from Westin Technology Solutions, LLC (formerly Westin Engineering), RPU recently completed an assessment of work and asset management in Electric to better understand the current state, identify gaps, and recommend improvements. The assessment included reviewing the use of the Oracle UWAM system, business processes, asset hierarchies, asset attributes, preventive maintenance, staff roles and responsibilities, scheduling work and crews, and the General Order (GO) 165 inspection program. The assessment findings showed that existing Electric work processes are inconsistent and manual, missing data, incorrect or inconsistent with integrated systems, and Electric does not fully utilize the capabilities of UWAM for work and asset management. As a result of this effort, RPU has already implemented a new GO 165 inspection program, and this Project will address the other items identified in the assessment.

There are over 200,000 electric assets in RPU's system. These include overhead assets, such as poles and distribution transformers, underground assets such as vaults and transformers, and substation assets, such as relays, bus structures, breakers and transformers. Much of this equipment has expected lifespans of up to 30-40 years and lose both value and integrity as they age. Over time, equipment may fail if not properly maintained, which impacts the ability of the utility to deliver safe and reliable service. A well-defined work and asset management program will help RPU avoid asset failure as it provides a proactive

means to facilitate preventative maintenance work, as well as tracks maintenance, inspections, repairs, and replacements. This will help ensure assets receive appropriate maintenance in a proactive manner to minimize failures and to realize the full life-cycle expectancy of the assets. It also provides data to make more informed decisions about capital planning and expenditures.

The purpose of this Phase 1 Project is to build a strong foundation to continue to build upon. The scope includes elements of work and asset management, as well as some components of inventory management as outlined below:

1. Work Management

- a. Establish roles and responsibilities
- b. Criteria and process for planned maintenance triggering work orders
- c. Establish preventative maintenance schedules based on manufacturers recommendations and best practices
- d. Train workforce to utilize system to record time and costs to specific assets

2. Asset Management:

- a. Develop asset management policy, strategic plan, procedures, and job aids
- b. Establish naming convention and asset hierarchy structures
- c. Develop asset criticality criteria and weighted ranking
- d. Conduct criticality assessment on major assets
- e. Establish asset lifecycle process from creation to retirement
- f. Establish data governance plan and oversight committee
- g. Establish UWAM as the system of record for assets
- h. Reconcile data discrepancies from previous system
- i. Migrate data from other systems to the system of record
- j. Upload attachments to specific assets from previous work completed
- k. Develop operations and management reports

3. Inventory Management

- a. Assess and improve transformer receiving process
- b. Resolve transformer receiving form back-log
- c. Review and make recommendations for compatible unit cost estimating
- d. Review meter inventory process and make recommendations for improvements

Achieving the goal of creating a cohesive and systematic approach to understanding equipment and infrastructure, enable data-driven decisions for capital and maintenance planning, moving Electric toward a more preventative and predictive approach for managing assets requires a proactive and clearly-defined plan for utilizing the UWAM system, along with the underlying business processes that support it. Aligning with an experienced business partner to support RPU during planning and implementation of the Project will ensure industry standards and best practices are implemented enabling an effective, manageable, and sustainable system.

On June 27, 2017, staff issued Request for Proposal No. 1697, for consultant services to support the Project. Three (3) vendors submitted proposals prior to the close of Request for Proposal No. 1697, July 27, 2017, as shown in the table below:

Vendor	Evaluation Result Ranking
Westin Technology Solutions, LLC, Milwaukee, WI	1
UDC, Inc., Englewood, CO	2
Stellar Services, Inc., New York, NY	3

The proposals were evaluated by a panel of RPU staff using the following pre-established criteria:

1. Clear, appropriate and comprehensive work plan and approach (50%)

2. Demonstrated experience, competence and qualifications for the types of services to be performed (30%)
3. Estimated fees for the proposed scope of work is fair and reasonable (20%)

The evaluation panel selected Westin Technology Solutions, LLC (Westin) as the preferred vendor to support the project based on best overall value.

Westin has extensive experience supporting electric and water utilities with end-to-end Work and Asset Management deployments. In addition, Westin has in-depth knowledge of RPU's systems, policies, and practices related to Work and Asset Management as they supported the successful implementation of RPU's Water Project and conducted the Electric Assessment.

The Purchasing Manager concurs that the recommended actions comply with the City of Riverside's Purchasing Resolution No. 23256.

The Chief Innovation Technology Officer and Chief Financial Officer agree with the recommendation to approve the Professional Services Agreement with Westin Technologies.

The total professional services expenditure for Work Order No. 1820191 is not-to-exceed \$1,266,100. Additional project costs for RPU and Innovation and Technology (IT) Department labor are estimated at \$333,900. Below is the project cost breakdown:

ITEM	COST
Professional Services Tasks 1-8	\$1,151,000
Travel and Expenses	\$115,100
Not-to-Exceed Contract Total	\$1,266,100
RPU and IT Labor Expenses	\$333,900
Total Project Work Order Amount	\$1,600,000

FISCAL IMPACT:

The total project cost is \$1,600,000. Sufficient funds are available in Public Utilities' Electric Professional Services Account No. 6105000-421000 for the contract amount of \$1,266,100.

Internal RPU and IT Department labor cost of \$333,900 is budgeted in personnel and city-wide cost allocation plan as part of the normal budget process.

Prepared by: George Hanson, Utilities Assistant General Manager/Energy Delivery
Approved by: Todd L. Jorgenson, Utilities Interim General Manager
Approved by: John A. Russo, City Manager
Approved as to form: Gary G. Geuss, City Attorney

Certifies availability of funds: Laura M. Nomura, Utilities Assistant General Manager/Finance & Administration

Attachments:

1. Professional Consultant Services Agreement
2. RFP Award Recommendation
3. Presentation