



City of Arts & Innovation

City Council Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL DATE: FEBRUARY 27, 2024

FROM: PUBLIC WORKS DEPARTMENT WARDS: ALL

SUBJECT: MASTER SOFTWARE SERVICES AGREEMENT WITH RUBICON GLOBAL LLC, A DELAWARE LIMITED LIABILITY COMPANY AUTHORIZED TO DO BUSINESS IN CALIFORNIA, FOR RUBICONSMARTCITY™ SOLID WASTE TECHNOLOGY UNDER SOURCEWELL CONTRACT #020221-RUB, FOR A FIVE-YEAR TERM FROM MARCH 1, 2024 THROUGH FEBRUARY 28, 2029, FOR A TOTAL AMOUNT OF \$418,800 WITH TWO OPTIONAL ONE-YEAR EXTENSIONS IN ANNUAL AMOUNTS OF \$69,465.60; SUPPLEMENTAL APPROPRIATION IN THE AMOUNT OF \$130,536 FOR YEAR 1 IMPLEMENTATION OF RUBICONSMARTCITY™ SOLID WASTE TECHNOLOGY AND REQUIRED IN-CAB TECHNOLOGY – SUPPLEMENTAL APPROPRIATION

ISSUES:

Approval of a Master Software Services Agreement with Rubicon Global LLC, a Delaware Limited Liability Company authorized to do business in California, for RubiconSmartCity™ Solid Waste Technology under Sourcewell Contract #020221-RUB, for a five-year term from March 1, 2024 through February 28, 2029, for a total amount of \$418,800 with two optional one-year extensions in annual amounts of \$69,465.60; authorization of a supplemental appropriation in the amount of \$130,536 for Year 1 implementation of RubiconSmartCity™ Solid Waste Technology and purchase of required in-cab technology.

RECOMMENDATIONS:

That the City Council:

1. Approve the Master Software Services Agreement with Rubicon Global LLC, a Delaware Limited Liability Company authorized to do business in California, for RubiconSmartCity™ Solid Waste Technology for a five-year term from March 1, 2024, through February 28, 2029, for a total amount of \$418,800 plus 10% contingency, with two optional one-year extensions;
2. Authorize the City Manager, or designee, to execute the Master Software Services Agreement, including the optional extensions in annual amounts of \$69,465.60 per year plus 10% contingency, and making minor and non-substantive changes; and

3. With at least five affirmative votes, authorize the Chief Financial Officer, or designee, to record a supplemental appropriation in the amount of \$130,536 from the Refuse Fund available working capital to the Refuse Fund, Professional Services and Telephone – Cellular accounts for RubiconSmartCity™ Solid Waste Technology and required in-cab technology.

BACKGROUND:

The City of Riverside Public Works Department is responsible for providing comprehensive solid waste (trash and recycling) management services to our residents and businesses to meet State regulatory requirements and with the goal of preserving the health, welfare, and sustainability of our community. Solid waste collection and street sweeping services for the City's 63,484 residential accounts and 7,408 commercial accounts are currently provided through a combination of City staff and contracted haulers. City staff provide residential waste collection services for approximately two-thirds of the City's residential customers (42,323 customers) and street sweeping on more than 800 miles of streets twice a month to ensure compliance with State regulations. Like many other cities throughout California and the nation, the City of Riverside solid waste system is facing a variety of challenges. To address these challenges, on September 19, 2023, the City Council approved a five-year residential solid waste rate plan effective November 1, 2023, for one-time and on-going operational costs for solid waste services.

State Regulation

In 2016, the State of California passed Senate Bill (SB) 1383, California's Short-Lived Climate Pollutant Reduction Strategy, which aims to reduce methane and other greenhouse gas (GHG) emissions statewide. To meet this goal, the bill establishes two targets by 2025:

- Reduce organic waste disposal 75% by 2025
- Rescue at least 20% of edible food, currently being disposed, for human consumption by 2025. 2025

SB 1383 is overseen by CalRecycle, however, the implementation is managed by individual jurisdictions. Jurisdictions not in compliance with SB 1383 may be subject to daily fines ranging from \$500 to \$1,000.

On January 1, 2022, SB 1383 requirements went into effect, and jurisdictions became responsible to provide organic waste collection services to all residents and businesses, along with the requirement to recycle organic materials using recycling facilities such as anaerobic digestion facilities that create biofuel and electricity, and composting facilities that make soil amendments. As California collects and recycles organic materials, local governments will be required to use the recycled material and convert them into different products, such as renewable energy, compost, or mulch. The bill has generated a need for a substantial infrastructure investment to process organics into certain specifications and to reduce contamination. There is an additional need to establish markets for compost and renewable fuels. Currently, there is no funding source associated with the regulation.

DISCUSSION:

Rubicon Technology Improvements

Technology improvements to operations are imperative to achieve compliance with SB 1383 mandates. Implementing new technology applications such as Rubicon Global LLC RubiconSmartCity™ Solid Waste Technology (Rubicon) will improve operational efficiency, document contamination and other residential violations, and improve route optimization.

Rubicon has developed a technology-enabled suite of systems and methods for monitoring waste management services provided by waste hauler vehicles in real-time, enabling users to effectively measure and manage the impact and efficiency of waste removal services. Staff began discussions with Rubicon in 2022, and the Public Works Department conducted a 6-month field test demonstration of the RubiconSmartCity™ software application in ten refuse trucks.

The City's Solid Waste Division operates a fleet of 40 refuse vehicles that service over 42,000 locations within the city limits each week. Solid Waste drivers currently navigate the city using a paper route map system detailing the travel path of the vehicle along the route. New employees who are unfamiliar with the routes often miss areas due to the need to continuously reference a paper map. Drivers carry additional paper documents to identify special services, such as disabled services locations that necessitate that the driver exit the vehicle to move the bins to/from the front or backyard to the curb for collection. These antiquated and inefficient paper systems greatly increase the probability of missed service collection and result in increased costs associated with return trips to the residential address. Refuse collection that is delayed to the following day may also impact street sweeping, which is scheduled to follow trash collection days.

We are trailing the industry in utilizing technology in refuse collection vehicles to keep pace with changes in California legislation, maximize operational efficiencies, improve customer service, and enhance communication between solid waste operations and the City Call Center. To improve driver, route, and overall operational efficiencies, we are seeking to implement Rubicon technology to make improvement in the following areas:

- **Customer Service** – We need real-time access to route information (service provided, service not provided due to containers not placed out, contaminated load, etc.). We seek to improve response time to customer service requests by using technology to quickly identify the driver closest to the problem location and dispatching that driver.
- **Driver Assistance** – Throughout the day, when their trucks are at capacity, drivers will leave their route and travel to the MRF Transfer Station, then automatically be routed to the same location they left, to ensure that all residential addresses are serviced. In cases where a replacement driver returns to complete the route, the driver will be automatically routed to resume service from the same location that the original driver left.
- **Route Assessment** – Analyze route data to develop new routes, and/or optimize existing routes for efficiency. The Rubicon software can generate routes that are equal in number of residences served, track the number of homes served, track route miles, vehicle breakdowns/equipment issues, and build service history for each address.
- **Documentation** – Document activity along the entire route, including trips to the MRF Transfer Station. Residential stops and misses are documented identifying drivers' daily activity along each route. Drivers also have the ability to document containers not placed out for collection,

cans overpacked or too heavy, and cans that have contaminated commodities. Drivers will be able to identify problem addresses by activity and with images, such as residents not having the containers out for pick up, contaminated containers (mixed commodities), overloaded containers, etc. Rubicon will also track route start/stop times for operators.

- **Analytics** – Provide reporting information based on route, driver, commodity, tonnage, problems, etc.
- **Operational Communication** - Improve communication between the driver, supervisor, Call Center and customer. Service calls can be added by Call Center staff to the driver queue using the Rubicon software. This will reduce the number of back and forth phone calls between the Call Center, and Solid Waste staff. The Rubicon software provides a two-way feature for quick communications between the driver and the supervisor.
- **Operational Efficiency** – Automated work assignments will enable our operations to analyze route data, identify recurring driver issues, identify recurring residential complaints, and reduce issues such as repetitive service for missed cans, excessive can weight, contaminated commodities, etc.).

Each driver will be equipped with a City-issued smartphone that will be installed in-cab to operate the Rubicon software. Route maps and information for specific locations will be provided in a digital format for the driver. The driver will use the smartphone's camera to document locations where solid waste containers were not pulled to the curb for service. The Rubicon database will include residential addresses only and no personal identification information. Should Solid Waste staff need to contact a resident directly about an issue, a call will be made to the Call Center for contact information.

The initial costs associated with equipping 40 solid waste vehicles with smartphones is \$12,000, which includes the purchase of cellular phones, holding brackets, and the monthly recurring cellular service.

The Rubicon software will be purchased under Sourcewell Contract #020221-RUB, which commenced on March 26, 2021, and expires March 26, 2025, however, Rubicon has agreed to continue offering cooperative pricing past the Cooperative Agreement expiration date through the end of the Master Software Services Agreement, including the optional extensions. As Rubicon is offering the same or better pricing as a previous competitive procurement, the City can maintain competitive pricing beyond the end of the Cooperative Agreement, for price discounts available to the City over the five-year contract period and the two optional one-year extensions.

The Purchasing Manager concurs that the recommendation to approve the Master Software Services Agreement is in compliance with Purchasing Resolution No, 23914, Section 702 (f) that authorizes the acquisition of services "When Cooperative Purchasing is available and undertaken, or when Services can be obtained through Federal, State and/or other public entity pricing contracts or price agreements."

The Innovation and Technology Director concurs with the recommendation to approve the Master Software Services Agreement.

STRATEGIC PLAN ALIGNMENT:

This item contributes to **Strategic Priority 4 – Environmental Stewardship**, and **Goal 4.4 – Implement measures and educate the community to responsibly manage goods, products, and services throughout their life cycle to achieve waste reduction outcomes.**

This item aligns with each of the five Cross-Cutting Threads as follows:

1. **Community Trust** – Implementing the Rubicon software will allow for real-time monitoring of waste management services that will optimize the impact and efficiency of waste removal services, increasing community trust through accountable waste management practices.
2. **Equity** – Efficiency of waste management practices will improve the solid waste collection experience for all residents serviced by the City of Riverside.
3. **Fiscal Responsibility** – Rubicon aids the City of Riverside by increasing efficiency, optimizing operational costs, and promoting cost-effective strategies in the waste management process.
4. **Innovation** – The digitization of solid waste field operations and the introduction of a technology-enabled suite contributes to enhanced innovation in the field by promoting data-driven decision-making and continuous improvement in waste management processes.
5. **Sustainability & Resiliency** – Rubicon enhances sustainability by enhancing resource utilization and strengthening community resiliency through improved waste management practices and reduced environmental impact.

FISCAL IMPACT:

The estimated fiscal impact of the Master Technology Services Agreement for the initial five-year term is \$460,680, including up to a 10% contingency in the amount of \$41,880. If the two optional extensions are exercised, the fiscal impact over the over the life of the Agreement will be \$557,731.20 plus up to a 10% contingency in the amount of \$55,774, for a total amount of \$613,505.20.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Contract Amount	\$107,760	\$77,760	\$77,760	\$77,760	\$77,760	\$418,800
Contingency	\$10,776	\$7,776	\$7,776	\$7,776	\$7,776	\$41,880
Total:	\$118,536	\$85,536	\$85,536	\$85,536	\$85,536	\$460,680

	Optional Year 6	Optional Year 7	Total
Contract Amount	\$69,465.60	\$69,465.60	\$138,931.20
Contingency	\$6,947.00	\$6,947.00	\$13,894.00
Total:	\$76,412.60	\$76,412.60	\$152,825.20

Upon Council approval of this action, a supplemental appropriation will be recorded in the amount of \$130,536 from available working capital in the Refuse Fund to the following account numbers:

Fund	Account Name	Account Number	Amount
Refuse	Master Technology Services Agreement – Year 1 Professional Services	4130100 – 421000	\$118,536
	In-Cab technology to operate Rubicon software - Telephone - Cellular	4130100 – 422120	\$12,000
		Total:	\$130,536

Funding for subsequent years of this Master Technology Services Agreement and costs associated with in-cab equipment/technology needs will be included in the Public Works Department's budget submission presented to Council for approval.

Prepared by: Christina Navaratnam, Senior Administrative Analyst
 Approved by: Gilbert Hernandez, Public Works Director
 Certified as to
 availability of funds: Kristie Thomas, Finance Director/Assistant Chief Financial Officer
 Approved by: Kris Martinez, Assistant City Manager
 Approved as to form: Phaedra A. Norton, City Attorney

Attachments:

1. Master Technology Services Agreement
2. Sourcewell RFP