

**FIRST AMENDMENT
TO PROFESSIONAL SERVICES AGREEMENT NUMBER F002238
WITH AECOM TECHNICAL SERVICES, INC.**

This First Amendment to Agreement number F002238, dated December 9, 2020 ("Agreement") is made as of this _____ day of _____, 2022, by and between the City of Santa Rosa, a municipal corporation ("City"), and AECOM Technical Services, Inc. a California Corporation ("Consultant").

RECITALS

- A. City and Consultant entered into the Agreement for Consultant to provide a City Facilities Microgrid Study and Energy Audit.
- B. City and Consultant now desire to amend the Agreement for the purpose of increasing compensation by \$93,225.00.

AMENDMENT

NOW, THEREFORE, the parties agree to amend the Agreement as follows:

1. Section 1. Scope of Services -

Exhibit A to the Agreement is supplemented by Exhibit A-1 to this Amendment, so that Section 1 is amended to read as follows:

Scope of Work to add a MSCN Business Plan Analysis and Solar PV Feasibility Study – Santa Rosa Water, as detailed in Exhibit A-1.

2. Section 2. Compensation

Exhibit B to the Agreement is supplemented by Exhibit B-1 to this Amendment. Section 2(c) is amended to increase the compensation payable to Consultant under the Agreement by \$ 93,225.00 to read as follows:

"Notwithstanding any other provision in this Agreement to the contrary, the total maximum compensation to be paid for the satisfactory accomplishment and completion of all tasks set forth above shall in no event exceed the sum of three hundred forty-seven thousand, three hundred fifteen dollars and no cents (\$347,315.00). The City's Chief Financial Officer is authorized to pay all proper claims from various charge numbers.

3. Section 12. Time of Performance

The last sentence of Section 12 is amended to read as follows:

"Consultant shall complete all the required services and tasks and complete and

tender all deliverables to the reasonable satisfaction of City, not later than June 30, 2022."

All other terms of the Agreement shall remain in full force and effect.

Executed as of the day and year first above stated.

CONSULTANT:

CITY OF SANTA ROSA
a Municipal Corporation

Name of Firm: AECOM Technical Services, Inc.

TYPE OF BUSINESS ENTITY (*check one*):

- Individual/Sole Proprietor
- Partnership
- Corporation
- Limited Liability Company
- Other (please specify: _____)

By: _____

Print Name: _____

Title: _____

Signatures of Authorized Persons:

APPROVED AS TO FORM:

By: _____ Date: _____

Office of the City Attorney

Print Name: _____

ATTEST:

Title: _____

City Clerk

By: _____ Date: _____

Print Name: _____

Title: _____

City of Santa Rosa Business Tax Cert. No.

06511770

Attachment: Exhibit A-1 - Scope of Services
Exhibit B-1 - Compensation

EXHIBIT A-1 – SCOPE OF SERVICES

TRANSPORTATION AND PUBLIC WORKS SCOPE OF WORK

The following solutions will be considered in the business plan analysis:

1. Energy Efficiency
 - a. MSCN Packaged Unit Replacement and HVAC Upgrades
 - b. MSCN Chiller Replacement
 - c. MSCN Boiler Replacement
2. Solar PV Systems: The MSCN consists of 8 facilities. The AECOM feasibility study identified the MSCN garage as the most feasible location for the implementation of solar PV Systems. AECOM identified two options for this site: either a canopy design for the car parking spaces or a [canopy/ground mount/roof mount?] system for the bus parking. Both options will be evaluated in the business plan analysis.
3. Battery Storage Systems: The City is interested in installing a battery storage system at the MSCN facility. AECOM conducted a feasibility study of the battery storage system as part of the complete microgrid system feasibility study. AECOM will consider the battery storage system in the business plan analysis. The microgrid system is excluded from this scope.
4. Electric buses and charging infrastructure deployment for the MSCN facility

AECOM will create a business plan to analyze the following pathways for achieving the above solutions:

1. Power Purchase Agreement (PPA)
2. Energy Savings Performance Contract (ESPC)
3. City Ownership of the systems and equipment.

The following aspects for each of the pathways listed above will be analyzed:

- Life cycle cost analysis: AECOM will estimate the cost associated with the listed solutions to purchase, implement, own, operate, maintain and decommission the systems. The cost will be reported in net present value.
- ROI analysis: AECOM will calculate the Return on Investment based on the overall cost and net return of each project pathway
- Project funding solutions: In addition to investigating different funding solutions, AECOM will identify the available incentives, rebates, tax incentives, and grants options for the project
- Risk analysis and mitigation strategies: AECOM will conduct a risk analysis for the different project pathways such as risk of ownership and identify risk mitigation strategies, as appropriate.
- Implementation plan: AECOM will create a high-level project implementation plan for the different project pathways
- O&M forecasting: AECOM will estimate the required cost, staffing, and resources required for operation and maintenance of the solutions.

Deliverables

AECOM will develop a comprehensive report documenting our methodology in completing the two parts of the scope. We will include our recommended plan of action for the business plan portion and for the solar PV study, we will incorporate preliminary site layouts, recommended installed capacities and high-level cost estimates for the installation.

EXHIBIT A-1 – SCOPE OF SERVICES

SANTA ROSA WATER SCOPE OF WORK

Santa Rosa Water is interested in due diligence review and expansion of a feasibility study for the following additional solar PV and floating solar PV systems.

- A 320kW system mounted on a new truck-port structure - Utility Field Operation
- A 1,257kW system mounted on four new truck-port structures
- A 134kW system on existing rooftop structure – Waste Transfer Station
- Floating PV at three (3) ponds (B, C and D)

AECOM has extensive experience in providing services in the development and implementation of large multi-site PV programs and BESS for public agencies and developers. We analyse hourly electrical usage versus solar PV energy production for the behind-the-meter option as well as optimization of land use for open space PV. Once the site has been vetted and preliminarily developed through our desktop analysis, we will conduct site visits to finalize the site analysis process. AECOM will also look at ownership options should the City decide to own and operate or procure through a PPA provider. AECOM will conduct the following process to initiate and complete the feasibility study:

- Initiate kick-off meeting to discuss the sites, any constraints, and data needs
- Review the analysis completed by Kennedy-Jenks
- Collect data, perform due diligence, and analyse the sites
- Conduct site visits
- Structure analysis for the roof of the West Transfer Station
- Develop and finalize preliminary layouts of the PV
- Evaluate options for the site (BTM, PPA, lease, or combination)
- Life cycle cost analysis: AECOM will estimate the cost associated with the listed solutions to purchase, implement, own, operate, maintain and decommission the systems. The cost will be reported in net present value.
- ROI analysis: AECOM will calculate the Return on Investment based on the overall cost and net return of each project pathway
- Project funding solutions: In addition to investigating different funding solutions, AECOM will identify the available incentives, rebates, tax incentives, and grants options for the project
- Develop the final report and presentation

For the analysis related to Floating solar PV on Delta pond and pond B, as this technology is still not mature and there are no established design guidelines, our recommendations would be based on our site visit and the available data. This would result in a high-level preliminary layout with the following items not part of our initial analysis.

- Structural buoyancy
- Biofouling
- Marine growth on system within pond arrays

For our analysis we will assume that proposed ponds will adhere to local and state requirements for floating photovoltaic design.

If the City agrees to move forward and approve a more detailed analysis for this system then an environmental assessment of the ponds shall be performed to determine any extenuating circumstances which could affect array installation, location or size. Testing and analysis will be required to determine potential water characteristics which could impact wavelength, and factor into racking design. In addition,

EXHIBIT A-1 – SCOPE OF SERVICES

fatigue analysis and fetch strength shall be calculated and analyzed by an approved structural or environmental engineer

Deliverables

AECOM will develop a comprehensive report documenting our methodology in completing the two parts of the scope. We will incorporate preliminary site layouts, recommended installed capacities, detailed financial analysis, comparison of different contractual options and high-level cost estimates for the installation.

ADDITIONAL SERVICES – PROJECT IMPLEMENTATION & ON-CALL CONSULTING

With respect to the scope of work for Transportation and Public Works and for Santa Rosa Water, staff has provided that the City may incorporate optional, additional Project Implementation and On-Call Consulting services into the scope of services as the project proceeds through all phases.

- Project Implementation Upon City Request – City may request that Consultant assist with implementation of various plans in order to effect the strategic recommendations contained in the Plan. These services could relate to, without limitation, support, oversight, and reporting and/or programmatic implementation to augment City resources on an as needed basis.
- On-Call Consulting Upon City Request – City may also request that Consultant work with the City on an ongoing basis to provide additional consulting services, including, without limitation, advice related to financial and operating procedures, processes and policies.

With regards to Plan Implementation and/or On-Call Consulting, the City is under no obligation to proceed with Plan Implementation or On-Call Consulting. Such additional services, if any, would be at the sole discretion of the City.

EXHIBIT B-1 – COMPENSATION

1. AECOM will provide the services described in the Transportation and Public Works Scope of Work for a total not-to-exceed amount of \$35,157. The detailed breakdown of costs is presented in Table 1 (Business Plan for Execution – MSCN).
2. AECOM will provide the services described in the Santa Rosa Water Scope of Work for a total not-to-exceed amount of \$58,068, which includes:
 - Solar PV feasibility analysis for Unified Field Operations and Waster Transfer Station - \$32,770
 - Solar PV feasibility analysis (floating solar) for three (3) ponds - \$25,298

A detailed breakdown of costs is presented in Table 1 (Solar PV Feasibility Study – Unified Field Operations and Waste Transfer Station).

Table 1 – Business Plan for Execution – MSCN

Task. No	Task Description	Level of Effort						Travel/ODCs	Labor	Subtotal
		Project Director	Project Manager	PM Support	Technical Lead	Technical Support	Technical Support			
		Doug Sattler	Mushtaq Ahmad	Homa Naeimi	McKenna Bertsch	Mitch Anderson	Steve Hall			
		\$261	\$199	\$178	\$162	\$199	\$230	(\$)	(\$)	(\$)
1	Lifecycle Cost Analysis		2	8	8	4	2	\$ 250	\$ 4,368	\$ 4,618
2	ROI analysis		2	8	8	4	2		\$ 4,368	\$ 4,368
3	Review of funding solutions	2	4	8	8	4	6		\$ 6,207	\$ 6,207
4	Risk analysis and mitigation	2	4	8	8				\$ 4,034	\$ 4,034
5	Implementation Plan	2	4	8	8				\$ 4,034	\$ 4,034
6	O&M forecasting				8	4		\$ 150	\$ 2,090	\$ 2,240
9	Draft progress report	2	8	8	8				\$ 4,828	\$ 4,828
10	Final report	2	8	8	8				\$ 4,828	\$ 4,828
	Total hours	10	32	56	64	16	10			
	Task Subtotal	\$2,612.50	\$6,353.60	\$9,948.40	\$10,366.40	\$3,176.80	\$2,299.00	\$ 400	\$ 34,757	\$ 35,157
									Total (\$)	\$ 35,157

Table 1 – Solar PV Feasibility Study – Unified Field Operations and Waste Transfer Station

Task No	Task Description	Level of Effort								Travel/ODCs	Labor	Subtotal
		Project Director	Project Manager	PM Support	Technical Lead	Technical Support	Engineer(s)	Engineer(s)				
		Doug Sattler	Mushtaq Ahmad	Homa Naeimi	McKenna Bertsch	Mitch Anderson	Sam Monger	Matt Acker				
		\$261	\$199	\$178	\$162	\$199	\$162	\$141				
	Multiplier with actual rate	2.27	2.42	2.96	2.95	2.48	2.95	3.71				
1	Site Walk through				8	8				\$ 500	\$ 2,717	\$ 3,217
2	Data Processing / Desktop Due Diligence					8		8	4	\$ -	\$ 3,156	\$ 3,156
3	Utility Bill Analysis					8		8	8	\$ -	\$ 3,720	\$ 3,720
4	Energy and Cost Savings Calculations								16	\$ -	\$ 2,257	\$ 2,257
5	Preliminary sizing and layouts								16	\$ -	\$ 2,257	\$ 2,257
6	Structural Analysis							24	16	\$ -	\$ 6,145	\$ 6,145
7	Cost and Financial Analysis								12	\$ -	\$ 1,693	\$ 1,693
8	Lifecycle Cost Analysis		2	4	4	4			4	\$ -	\$ 2,320	\$ 2,320
9	ROI analysis		2	4	4	4			4	\$ -	\$ 2,320	\$ 2,320
10	Report								4	\$ -	\$ 564	\$ 564
11	Review								4	\$ -	\$ 564	\$ 564
12	QA/QC		2						4	\$ -	\$ 1,609	\$ 1,609
13	Final Report		1	2	2	2	2	4	4	\$ -	\$ 2,947	\$ 2,947
	Total Hours		1	8	18	34	2	48				
	Task Subtotal (\$)	\$ 261	\$ 1,588	\$ 2,198	\$ 5,507	\$ 397	\$ 7,775	\$ 13,543	\$ 500	\$ 32,270	\$ 32,770	
										Total (\$)	\$ 32,770	

Task No	Task Description	Level of Effort								Travel/ODCs	Labor	Subtotal
		Project Director	Project Manager	PM Support	Technical Lead	Technical Support	Engineer(s)	Engineer(s)				
		Doug Sattler	Mushtaq Ahmad	Homa Naeimi	McKenna Bertsch	Mitch Anderson	Sam Monger	Matt Acker				
		\$261	\$199	\$178	\$162	\$199	\$162	\$141				
	Multiplier with actual rate	2.27	2.42	2.96	2.95	2.48	2.95	3.71				
1	Site Walk through				6	6				\$ 500	\$ 2,038	\$ 2,538
2	Data Processing / Desktop Due Diligence					8		4	8	\$ -	\$ 3,072	\$ 3,072
3	Utility Bill Analysis					8		8	8	\$ -	\$ 3,720	\$ 3,720
4	Energy and Cost Savings Calculations								14	\$ -	\$ 1,975	\$ 1,975
5	Preliminary sizing and layouts								14	\$ -	\$ 1,975	\$ 1,975
6	Cost and Financial Analysis								12	\$ -	\$ 1,693	\$ 1,693
7	Lifecycle Cost Analysis		2	4	4	4			4	\$ -	\$ 2,320	\$ 2,320
8	ROI analysis		2	4	4	4			4	\$ -	\$ 2,320	\$ 2,320
9	Report								4	\$ -	\$ 564	\$ 564
10	Review								4	\$ -	\$ 564	\$ 564
11	QA/QC		2						4	\$ -	\$ 1,609	\$ 1,609
12	Final Report		1	2	2	2	2	4	4	\$ -	\$ 2,947	\$ 2,947
	Total Hours		1	8	16	32	2	20	80			
	Task Subtotal (\$)	\$ 261	\$ 1,588	\$ 2,842	\$ 5,183	\$ 397	\$ 3,240	\$ 11,286	\$ 500	\$ 24,798	\$ 25,298	
										Total (\$)	\$ 25,298	