

From: [O'Connor, Kevin](#)
To: [Downtown West Project](#)
Subject: FW: Microgrid service order template on San Jose downtown west project
Date: Monday, March 8, 2021 5:16:36 PM
Attachments: [2020-12-22 9749 Almaden Microgrid Study Consultant Agreement - AECOM \(002\).docx](#)

Kevin O'Connor
Energy Resilience Coordinator
City of San Jose Community Energy Department
Email: kevin.oconnor@sanjoseca.gov
Ph: (408) 535-8538

From: Mu, Huimin
Sent: Thursday, March 4, 2021 6:58 AM
To: Turley, Bob <bob.turley@aecom.com>
Cc: Chow, Keith <Keith.Chow@sanjoseca.gov>; O'Connor, Kevin <Kevin.Oconnor@sanjoseca.gov>
Subject: Microgrid service order template on San Jose downtown west project

Bob,

Morning. Please use the attached service order template to draft your service order for the san jose downtown west project.

Thanks

Huimin Mu

Exhibit A
Master City of San José Consultant Agreement
Approved Service Order Form
(Capital Projects)

Cover Page

1a. CPMS Contract No.: 9749 **1B.** AC Contract No.: #####

2. Approved Service Order No. **1**

3. Consultant's Name: AECOM Technical Services, Inc.

4. Project Name: **Almaden Library and Community Center Microgrid Feasibility Study Project**

5. Project Location: **6445 Camden Ave, San Jose, CA 95120**

6. The Consultant and the City will implement this Approved Service Order in accordance with the Master Agreement, this cover page and Attachments "A" (Tasks), "B" (Terms and Conditions), "C" (Compensation Table), and "D" (Schedule of Specific Services) which are incorporated herein by references.

7. Budget/Fiscal:

a. Current **unencumbered** amount in Master Agreement: \$ 1,500,000.00

b. **Maximum Service Order Compensation for this Approved Service Order:** \$ 23,764.00

c. New unencumbered balance in Master Agreement (7.a – 7.b): \$ 1,476,236.00

d. **Appropriation Certification:** I certify that an unexpended appropriation in the amount of the Maximum Service Order Compensation is available in the following fund(s) and that such fund(s) will be encumbered to pay for this Approved Service Order.

Fund: _____ Appn: 417R RC: _____ Amount: \$ _____

Fund: _____ Appn: _____ RC: _____ Amount: \$ _____

Fund: _____ Appn: _____ RC: _____ Amount: \$ _____

Authorized Signature: _____ **Date:** _____

8. Division Analyst Approval: _____ **Date:** _____

9. Consultant Approval: _____ **Date:** _____

10. Approval as to Form (City Attorney):

☐ Service Order Form Approved by the Office of the City Attorney
(Maximum Service Order Compensation is \$100,000 or less, and the provisions of the service order form are not altered.)

☐ Approved as to Form: _____ **Date:** _____
(Sr.) Deputy City Attorney

11. City Director Approval: _____ **Date:** _____

Attachment A: Tasks

The Consultant shall provide the services and deliverables set forth in this **Attachment A**. The Consultant shall provide all services and deliverables required by this **Attachment A** to the satisfaction of the City's contract manager.

General Description of Project for which Consultant will Provide Services: Almaden Library and Community Center is located at 6445 Camden Ave, San Jose, CA. It is used as a cooling center and housing facility during power outage and is used as a shelter-ready site for the Red Cross which requires 72 hours of backup power in an emergency. The Consultant must provide a high-level feasibility and technology report for a microgrid system at this site, provide a recommendation of an attainable solution, as well as a rough order magnitude of construction cost estimate.

Task No. 1: Kick-Off Meeting and Site Assessment

A. Services:

- 1) Consultant must perform a site assessment to review available data and summarize the key aspects of the project including:
 - a. Project goal and budget;
 - b. Project schedule;
 - c. Evaluation criteria;
 - d. Feasibility study procedure;
 - e. Site information, conditions and constraints;
 - f. Critical Loads Requirement.
- 2) Consultant must provide project financial/economic performance metrics It includes project discount rate, internal rate of return, project lifetime, inflation index for labor and material, projection of utility energy tariff, project financing structure, use of funds and grants among others. The financial metrics development process creates an opportunity to clearly define parameters to evaluate the different options of energy mix, track risk and allocate tangible cost benefits.
- 3) Consultant must provide site assessment to capture information and evaluate existing infrastructure and site constraints. Consultant must assess relevant site specifics to be analyzed and considered as input on the technical and economic feasibility analysis and further design, including:
 - a. Evaluation of electrical infrastructure including possibility of segregation of critical loads;
 - b. Evaluation of electrical connection for potential battery storage system and new equipment;
 - c. Evaluation of physical location for installation of equipment;
 - d. Evaluation and data collection of existing PV system;
 - e. Gathering of existing drawings.
- 4) This task must be performed according on the following assumptions.
 - a. The site has at least one utility meter for the entire site and the consultant must be granted permission to represent the City to download PG&E electric and gas usage data for one year of hourly data;
 - b. The City must provide facility drawings one week prior to site visit. Site as-built drawings may not be available and design drawing may be used instead;
 - c. The City must provide access to all facility electrical panels, etc.

Deliverable:

- 1) Provide written meeting minutes and field notes.

- B. Completion Time:** The Consultant must complete the services and deliverable for this task in accordance with whichever one of the following time is marked:

☐

On or before the following date:_____.



On or before 14 Business Days from the receipt of executed task order.

Task No. 2: Develop Microgrid Feasibility Study

A. Services:

- 1) Consultant must perform the economic dispatch study to evaluate the viability and the benefits from the implementation of a Microgrid system. The goal of the study is to determine the mix of energy resources necessary to meet the load demand, obtain the lowest possible cost, and consider operation, safety, green technology and contingency constraints.
- 2) Consultant must perform the following tasks during this stage:
 - a. Analysis of the site's current electric and thermal load profile and plan for future growth;
 - b. Investigation of local market opportunities and utility tariff structure;
 - c. Evaluation of dispatch capability of existing generation assets;
 - d. Cost benefit analysis of optimum Microgrid and alternate systems;
 - e. Project construction budget cost estimate (ROM);
 - f. Identification of key performance indicators such as NPV, IRR, LCOE, Renewable Penetration Index and Reduction of Greenhouse gas emission;
 - g. Briefly evaluate available utility demand response programs.
- 3) Consultant must produce a list of possible technologies and strategies to be evaluated during the feasibility analysis. Consultant must evaluate applicable system operating modes, normal operation mode, critical operational mode and consider islanding, re-synchronization and redundancy level in the analysis. The consultant must provide a recommendation from the analysis for the City to proceed to meet project goal and budget.
- 4) The following tasks are not included in this task.
 - a. Interconnection, design and permitting are not included in this project;
 - b. Geotechnical, structural, and environmental system studies are not included.

B. Deliverable:

Provide a draft report for the microgrid feasibility study and a ROM.

- C. **Completion Time:** The Consultant must complete the services and deliverable for this task in accordance with whichever one of the following time is marked:



On or before the following date:_____.



On or before 30 Business Days from completion of Task 1.

Task No. 3: Present Findings/ Final Report

A. Services:

- 1) Consultant must provide a cost benefit analysis for suitable system configurations to meet the project goal and budget. The City will have the information to take a final decision prior project implementation phase.
- 2) The final report will be developed and produced to the industrial standards for layout, graphic design, content, and accessibility. City comments will be captured, processed, and reflected in the final report. Only one round of City consolidated comments will be incorporated in this task.

B. Deliverable:

- 1) Provide a zoom power point presentation on the Findings;
- 2) Provide the final feasibility and technology report.

- C. Completion Time:** The Consultant must complete the services and deliverable for this task in accordance with whichever one of the following time is marked:

☐

On or before the following date:_____.

☒

On or before 14 Business Days from completion of Task 2_____.

Attachment B: Terms and Conditions

1. **City's Contract Manager:** The City's contract manager for this Approved Service Order is:

Name: Keith Chow	Phone No.: 408-535-8101
Department: Public Works	E-mail: keith.chow@sanjoseca.gov
Address: 200 East Santa Clara Street City Hall, 6th floor, San Jose, CA 95113	

2. **Consultant's Contract Manager and Other Staffing:** Identified below are the following: (a) the Consultant's contract manager for this Approved Service Order, and (b) the Consultant(s) and/or employee(s) of the Consultant who will be principally responsible for providing the services and deliverables. ***If an individual identified below does not have a current Form 700 on file with the City Clerk for a separate agreement with the City, and is required to file a Form 700, the Consultant must comply with the requirements of Subsection 17.2 of the Master Agreement, entitled "Filing Form 700."***

		<u>Required to File Form 700?</u>		
<u>Consultant's Contract Manager</u>		Yes Already Filed (Date Filed)	Yes Need to File	No
Name: Robert Turley	Phone No.:925-989-9797			
Address:300 Lakeside Drive, Oakland, CA 94612	E-mail: bob.turley@aecom.com			
<u>Other Staffing</u>				
<u>Name:</u>	<u>Assignment:</u>			
1. Nazar AlKhayat	Project Manager/ Technical Lead			
2.				
3.				

3. **Subconsultants**: Whichever of the following is marked applies to this Approved Service Order:

☒ X
☐

The Consultant can **not** use any subconsultants.

The Consultant can use the following subconsultants to assist in providing the required services and deliverables:

<u>Subconsultant's Name</u>	<u>Area of Work</u>
1.	
2.	
3.	

4. **Reimbursable Expenses**: If the Compensation Table set forth in **Attachment C** of this Approved Service Order states that the City will reimburse the Consultant for expenses, then only the expenses identified in Subsection 10.5.3 of the Master Agreement are Reimbursable Expenses unless the following box is marked and additional reimbursable expenses are set forth:

☐

In addition to the expenses identified in Subsection 10.5.3 of the Master Agreement, the following expenses are Reimbursable Expenses:

<u>Additional Reimbursable Expense(s)</u>	<u>Mark-up</u>
1. <u>travel expenses</u>	<u>0%</u>
2. _____	_____
3. _____	_____

Notwithstanding the foregoing, any additional reimbursable expense(s) set forth in the above table will be disregarded if the Compensation Table states that the City will *not* reimburse the Consultant for any expenses.

Attachment C: Compensation Table

The City will compensate the Consultant for providing the services and deliverables set forth in **Attachment A** in accordance this Compensation Table. This Compensation Table is subject to the terms and conditions set forth in the Master Agreement, including without limitation Section 10 of the Master Agreement.

Part 1 – Compensation for Services and Deliverables					
Column 1	Column 2		Column 3		Column 4
Task Nos. from Attachment A	Basis of Compensation		Invoice Period		Compensation
Task 1	<input type="checkbox"/> Time & Materials	<input checked="" type="checkbox"/> Fixed Fee	<input type="checkbox"/> Monthly	<input checked="" type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$4,795.00
Task 2	<input type="checkbox"/> Time & Materials	<input checked="" type="checkbox"/> Fixed Fee	<input type="checkbox"/> Monthly	<input checked="" type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$16,061.00
Task 3	<input type="checkbox"/> Time & Materials	<input checked="" type="checkbox"/> Fixed Fee	<input type="checkbox"/> Monthly	<input checked="" type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$2,708.00
	<input type="checkbox"/> Time & Materials	<input type="checkbox"/> Fixed Fee	<input type="checkbox"/> Monthly	<input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	
Part 2 – Reimbursable Expenses					
<input type="checkbox"/> No expenses are separately reimbursable. The amount(s) in Column 4 of Part 1 include(s) payment for all expenses.			<input checked="" type="checkbox"/> Expenses are separately reimbursable in the maximum amount of:		\$200.00
Part 3 – Subconsultant Costs					
<input checked="" type="checkbox"/> Subconsultant costs are not separately compensable. The amount(s) in Column 4 of Part 1 include(s) subconsultant costs.			<input type="checkbox"/> Subconsultant costs are separately compensable in the maximum amount of:		\$0.00
Maximum Service Order Compensation (sum of Parts 1 through 3):					\$23,764.00

