Memorandum

DATE May 5, 2023

CITY OF DALLAS

TO Honorable Members of the Environment & Sustainability Committee

SUBJECT **Upcoming Building Services Department Agenda Item for installing Solar PV and Battery Energy Storage System (BESS) at Bachman Recreation Center**

On the May 24, 2023 Agenda, City Council will consider the following agenda item related to a resiliency project managed by the Building Services Department (BSD).

> **File ID 23-928:** Authorize a construction services contract for installation of solar photovoltaic and battery energy storage system at Bachman Recreation Center, located at 2750 Bachman Drive - Ameresco, Inc., most advantageous proposer of three, in an amount not to exceed $975,000.00 - Financing: Capital Construction Fund.

BACKGROUND

This contract will authorize the installation of a fully operational solar photovoltaic and battery energy storage system, with turn-key services at the Bachman Recreation Center located at 2750 Bachman Drive, Dallas, TX 75220.

This project will be the first pilot project for the City to implement combination solar PV and battery energy storage systems at a City facility to provide solar energy and limited backup power to the facility during power outages.

BSD utilized the criteria listed below for selecting Bachman Recreation Center for this project:

- Availability of adequate roof space with minimal shading from foliage
- Consideration of Equity Priority Areas
- Energy benchmarking data from Energy Star Portfolio Manager
- Facility used as an emergency shelter
- No emergency generator at facility
- Public facing building

This project is being implemented in support of the Comprehensive Environmental & Climate Action Plan (CECAP) that was adopted by the City Council in May 2020 to reduce City of Dallas greenhouse gas emissions, and provide resilient facilities that can provide critical services during power outages.

The 2022 annual energy usage for the Bachman Recreation Center was 918,000 kilowatt hours (kWh), costing $49,409.60. High energy usage for Bachman Recreation Center is due to an aquatic center with a heated indoor pool located at the recreation center.

The proposed 120.4 kW-DC solar PV system is expected to reduce the facility's annual energy usage by approximately 20%, compared to 2022 energy usage, and reduce the annual energy cost by approximately $10,000.

The proposed 100 kW rated battery energy storage system (BESS) would have a storage capacity of 186 kWh. This option maximizes both the peak output power of the BESS, and the number of critical loads that can be served in the event of a grid outage. This option will allow approximately 58% of the building demand to be connected to the Critical Loads Panel, and provide an expected backup duration of 3.5 hours for the following:

- Emergency lights
- 100% of gym lights
- 100% of gym bathrooms
- 50% of building HVAC
- Water heater
- 15 receptacles

PROCUREMENT

The City of Dallas Building Services Department (BSD) sought proposals via a Request for Proposals (RFP) for Solar Photovoltaic and Battery Energy Storage System at Bachman Recreation Center, advertised in accordance with the City of Dallas purchasing guidelines. As shown below in the table, the RFP was advertised in the Dallas Morning News and published on the City of Dallas Bonfire solicitation portal on January 18 and 25, 2023; a Pre-Proposal Meeting was held on January 31, 2023, and proposal submissions were due on February 24, 2023.

Date	Action
January 18 and 25, 2023	Public Advertisement (City of Dallas Bonfire Solicitation Portal and Dallas Morning News)
January 31, 2023	Pre-Proposal Meeting
February 2, 2023	Mandatory Site Visit
February 14, 2023	Final Vendor Questions Due
February 15, 2023	Final Addenda (#6) issued
February 24, 2023	Proposals Due
March 10, 2023	Committee Evaluations Complete
May 24, 2023	City Council authorization of contract

Three proposals were received by the deadline and moved forward to the evaluation committee. Using the published evaluation criteria, the most advantageous proposer was selected. Once the contract has been executed and a notice to proceed issued, equipment delivery, construction, and installation is expected to take 12 months, weather permitting.

Should you have any questions, please contact John Johnson, Director of Building Services at john.johnson2@dallas.gov.

Robert M. Perez, Ph.D.
Assistant City Manager

c: Honorable Mayor and Members of the City Council
T. C. Broadnax, City Manager
Tammy Palomino, Interim City Attorney
Mark Swann, City Auditor
Bilierae Johnson, City Secretary
Preston Robinson, Administrative Judge
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Jon Fortune, Deputy City Manager
Majed A. Al-Ghafry, Assistant City Manager
M. Elizabeth (Liz) Cedillo-Pereira, Assistant City Manager
Carl Simpson, Assistant City Manager
Jack Ireland, Chief Financial Officer
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