

MSCN BUSINESS PLAN ANALYSIS AND SOLAR PV FEASIBILITY STUDY

City Council Meeting March 29, 2022 Douglas Williams, Facilities Maintenance and Operations Coordinator Transportation and Public Works



BACKGROUND

- On January 28, 2020, the City Council directed City staff to pursue an energy audit.
- In 2021 AECOM completed a detailed feasibility study for the City of Santa Rosa to help the city identify cost-effective opportunities for reducing Greenhouse Gas (GHG) emissions and improving the resiliency of the City's operations.

BACKGROUND

- On September 22, 2020, the Transportation and Public Works Department briefed the Climate Action Subcommittee on the status and details of the proposed study. The Subcommittee provided comments and supported the Transportation and Public Works Department in bringing this proposal to Council.
- On December 1, 2020, Council approved the contract with AECOM to perform an energy audit on general fund buildings.

BACKGROUND

 On October 13, 2021, the Transportation and Public Works Department and Santa Rosa Water briefed the Climate Action Subcommittee on the final report completed by AECOM. The Subcommittee provided comments and supported the Transportation and Public Works Department and Santa Rosa Water in bringing possible funding sources to City Council.



MSCN BUSINESS PLAN

- AECOM Will provide a complete plan to analyze:
- Energy Efficiency
 - a. MSCN Packaged Unit Replacement and HVAC Upgrades
 - b. MSCN Chiller Replacement
 - c. MSCN Boiler Replacement
- 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.

MSCN BUSINESS PLAN CONT.

- 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.
- Electric buses and charging infrastructure deployment for the MSCN facility

SOLAR PV FEASIBILITY STUDY

- Santa Rosa Water is interested in due diligence review and feasibility determination of the following 2019 Energy Optimization Plan identified solar PV and floating solar PV systems concepts:
- 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) Laguna Treatment Plan ponds (B, C and D)

RECOMMENDATION

It is recommended by the Transportation & Public Works Department and Santa Rosa Water that the Council, by resolution: 1) approve the First Amendment to the Professional Services Agreement Number F002238 with AECOM Technical Services, Inc. of Los Angeles, California, increasing compensation in the amount of \$93,225.00, for a total contract amount to \$347,315.00 for the purpose of providing professional technical services to evaluate Solar Photovoltaic Systems at identified City facilities; and 2) appropriate \$35,157.00 from the General Fund unassigned reserves.

QUESTIONS

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