BOZEMAN MT

Memorandum

REPORT TO: City Commission

FROM: Natalie Meyer, Sustainability Program Manager
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Jon Henderson, Assistant City Manager

SUBJECT: Resolution Authorizing the Use of an Alternative Project Delivery Contract for a Design-Build Firm for Design and Construction Services for the Water Reclamation Facility Solar Photovoltaic, PV Project

MEETING DATE: May 6, 2025

AGENDA ITEM TYPE: Resolution

RECOMMENDATION: Adopt Resolution Authorizing the Use of an Alternative Project Delivery Contract for a Design-Build Firm for Design and Construction Services for the Bozeman Water Reclamation Facility Solar Photovoltaic, PV Project.

STRATEGIC PLAN: 6.3 Climate Action: Reduce community and municipal Greenhouse Gas (GHG) emissions, increase the supply of clean and renewable energy; foster related businesses.

BACKGROUND: The Bozeman Water Reclamation Facility (WRF) is an EPA award-winning facility with a treatment capacity of 8.5 million gallons per day (MGD). The facility uses biological nutrient removal for advanced treatment of the community's wastewater prior to discharge to the East Gallatin River. Wastewater treatment is an energy-intensive process. The WRF is the largest consumer of electricity for City-owned facilities, accounting for 40 percent of the City's annual electricity demand. The electric load at the WRF is consistently high, making it a good candidate for a behind-the-meter solar system, which enables the installation of a system that exceeds the State of Montana's net-energy metering cap of 50 kW AC.

On October 1, 2024, the City Commission approved a Task Order Agreement with HDR Engineering to complete a solar feasibility study at the WRF. The feasibility study provided a review of alternative layouts at a conceptual design level. The study finds that a PV system at the WRF is feasible and recommends installation of a 553.4 kW DC ground-mounted array. Design, permitting, and construction of the project are estimated at $1,239,600. The estimated simple return on investment (ROI) is 15 years, with a total estimated savings of $2.5 million over the 25-year life cycle of the project. The electricity generated by the project will reduce the WRF's current average annual energy consumption by at least 17 percent.

City staff recommends completing this solar installation in calendar year 2025 to help secure the federal Clean Electricity Investment Credit (Section 48E). The 2022 Inflation Reduction Act included provisions for elective pay (also known as direct pay). Elective pay allows tax-exempt and government entities to receive the full value of certain clean energy tax credits as a refund. The base amount of the Clean Electricity Tax Credit is 6 percent of the qualified investment. The credit is increased by up to 30 percent for facilities meeting prevailing wage and registered apprenticeship requirements. The WRF solar project is expected to be eligible for up to 30 percent of the qualified investment. This would result in a federal tax credit payment of approximately $371,880 and shorten the simple ROI to 10.5 years. The future of the Clean Electricity Investment Credit and the availability of elective pay for tax-exempt and government entities is unknown. The City's best opportunity to obtain the tax credit is to complete and interconnect the project in calendar year 2025.

Staff recommends using design-build as the alternative project delivery method for the WRF Solar PV Project to best position it for completion in 2025 to take advantage of the federal tax credit while it remains authorized under law. In a design-build contract, the contractor assumes the responsibility and the risk for the engineering design and construction delivery under a single contract with the owner. The owner defines the project's objectives and performance criteria within the design-build procurement documents, which are used to select the contractor that provides the highest possible overall value. The recommended solar array size and layout contained in the WRF solar feasibility study provides adequate definition for a project of this type.

The State of Montana's procurement statutes authorize the design-build alternative project delivery method. MCA 18-2-502 establishes specific requirements that must be met to use a design-build contract. To comply with state statute, the City will issue a request for qualifications to identify a short list of qualified design-build contractors. Qualified contractors, as determined by the City, will then be invited through a request for proposals to submit project pricing and a schedule for the project. The City's selection of a design-build contractor will be based on overall best value upon evaluation of the contractor's qualifications, pricing, and schedule.

UNRESOLVED ISSUES: None.

ALTERNATIVES: As directed by the City Commission.

FISCAL EFFECTS: The WRF Solar PV Project will be funded with Wastewater rates. The electric utility bill savings generated will reduce costs at the WRF and reduce future rates for ratepayers.

The Design-Build alternative project delivery aims to limit cost overruns by

ensuring the design engineer and construction contractor can efficiently respond to unanticipated circumstances. In addition, in the event of changes by the U.S. Congress to the tax code, alternative innovative financing options may be evaluated through the design-build alternative project delivery procurement process, according to MCA 18-2-501(10).

Attachments:
Commission Resolution Alternative Project Delivery WRF Solar Project.pdf

Report compiled on: April 25, 2025