Request for Proposals for Photovoltaic System Installation

Prepared and Presented by: Lewis & Clark Library

Locations: 120 S Last Chance Gulch, Helena, MT 59601

Funded by: Lewis & Clark Library Foundation

Contact: John Finn, Director Lewis & Clark Library and Secretary, Lewis & Clark Library

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Project Introduction and Scope

This project is to install a 44kW-46kW solar photovoltaic system at the Lewis & Clark Library in Helena, Montana. The system will be placed on the library roof. The library has already invested, as part of a current re-roof project, in the post supports and associated infrastructure to facilitate installation of the PV system.

The Lewis & Clark Library (L&C) assessed the feasibility of installing a solar PV system for the Library in 2015, in conjunction with the project to replace the existing roof. Technical assessment revealed that the available solar resource is significant and that the library roof can support a large solar PV system. In light of this information, the library's chosen architect designed the re-roof project to allow for easy installation of a solar PV system.

In keeping with the Library's 5-Year Capital Improvement Plan, the Library Board approved expenditure of Library Depreciation Funds in the Fiscal Year 2016 Budget to include a complete re-roof of the Helena Main Library. The flat roof is 25,600 square feet, consisting of an upper and lower roof and was last replaced in 1992. The project was completed in January 2016. As part of the Helena Main Library Re-Roof Project, a total of 117,700 square feet of insulation was installed. This brought the R value for the roof from an average R value of 15 to an average R value of 54. The installation of pipe support for solar as part of the recently completed re-roof project illustrates the Library and Library Foundation's commitment to the project.

The overarching goal for the L&C Solar Array Project is reducing the carbon footprint as well as experiencing additional energy savings for the Helena Main Library. A solar array, coupled with the recent re-roof of the Helena Main Library, will result in significant energy savings for the Library.

This Request for Proposals (RFP) is to solicit bids from photovoltaic (PV) system installers (Contractor) to design, supply and install a photovoltaic system at L&C. L&C seeks to gain pricing and equipment information from the Contractor in order to install stated system by late fall or early winter of 2016.

The information presented in this RFP document has been assembled to facilitate bidding on a common PV system design that meets L&C's requirements.

Project General Requirements

A. The contractor will be responsible for producing the complete PV system design, procuring all required materials and installing all materials in compliance with applicable national and local codes.

B. The contractor will be responsible for securing all planning, building, and electrical permits required to complete the scope of work outlined in this RFP.

C. The contractor will provide structural engineering design and secure the necessary building permits required to complete the contractor's scope of work outlined in this RFP.

Project Walkthrough

The MANDATORY site walk-through for contractors interested in bidding on this project will be held at L&C Library Tuesday September 6 at 10AM. The on-site contact for the walkthrough will be Dave Schulte. Contractors will meet in the L&C Lobby.

RFP Response Due Date

Submit electronic copies of proposals addressed to jfinn@lclibrary.org by 5:00pm, (September 14).

Proposals shall be accepted in email/soft copy only.

RFP Response Evaluation

L&C will evaluate bids based on equipment selection, completeness and contributed design details that illustrate the contractor's understanding of the requested scope-of-work or that enhance performance/aesthetics of the proposed photovoltaic system.

Proposed Installation Schedule

L&C is on a fast track for this installation. Priority will be given to those contractors able to accommodate a fall or early winter 2016 installation.

Lewis & Clark Library Solar Project RFP:

1. Contractor Requirements:
   A. Licensed contractor in Montana.
   B. Must be a certified NABCEP PV installer
   C. Ability to complete project by end of calendar year 2016.
   D. Prior experience: Contractor shall have been in business for a minimum of 3 years and shall have self-performed a minimum of 2 installations of photovoltaic systems of similar size (>10 kW).

2. **RFP Response shall include:**
   A. Title: Lewis & Clark Library Solar Project
   B. Background information on your company
      (1) Contractor license number
      (2) Proof of insurance
      (3) Number of years in business
      (4) Installation manager's contact information
      (5) Resumes or qualifications, education, and relevant experiences of key team members to be assigned to this project and their role in the project.
      (6) Descriptions and photographs of similar projects completed by Contractor. Specifically experience with PV system installations greater than 10 kW DC nameplate.
      (7) Professional references
   C. Lump-sum (fixed price) bid for all services (including but not limited to labor, materials, taxes, transport, permitting and engineering) associated with the design and installation of permitted and operational PV system.
   D. Company labor and material mark-up rates for potential change orders
   E. Specification sheets of major system components including racking components
      (1) Make and model of all photovoltaic system components
      (2) Make and model of all photovoltaic balance of system components
   F. Proposed construction plan with timeline (include completion dates for major project milestones)

Services Requested from Contractor

A. System Design — Contractor must submit (or confirm submittal if already submitted as part of RFP package and unchanged) the following design documents prior to system installation
    (1) Detailed Site Diagram showing:
    (2) Elevation of electrical equipment (inverter & disconnects) layout
    (3) Electrical Single-line diagram - Must include all information about major system components specifications and ratings, conductor size and type, conduit size, ratings of combiner boxes and series OCPD's, and type and ratings of facility electrical panel interconnection point.
    (4) Wire Sizing Calculations – Ampacities of conductors shall be determined using NEC tables. Voltage drops for PV source, output and inverter output circuits shall be determined by hand calculations and limited to manufacturer recommendations or tolerances.
    (5) PV Array Racking — The Contractor will be responsible for generating the PV array racking design and attachment methodology. Contractor shall provide this information to L&C in a timely manner for approval, prior to obtaining the building permit.
    (6) Field Verification — Contractor must field verify design feasibility and/or all record documents and prepare own as-builts prior to commencing work in order to ensure proper system installation and adherence to contract timeline.

B. Project Documentation
    (1) Contractor will be responsible for maintaining accuracy of design documentation listed in 5.A during project construction and will submit as-built documentation to L&C upon project completion.
    (2) Contractor will be responsible for generating a complete and detailed project construction schedule once all permits are secured. The project schedule should help L&C understand the timing and duration of work and in which areas of the two sites the work will occur.

C. Procure materials
    (1) Contractor shall be responsible for procuring all system materials, as outlined in the system description, unless otherwise indicated above that it will be supplied by L&C or others.

D. PV System installation
    (1) Contractor shall be responsible for installing a grid-tied photovoltaic installation at the host facility. The installation must be compliant with the current NEC and/or local authority having jurisdiction (AHJ). It is the installer's responsibility to ensure code compliance with the local authorities. The installation shall be executed according to the system design documentation. L&C must approve any design changes made in the field.

E. Interconnection
    (1) Contractor shall coordinate with the utility to confirm acceptable location for AC disconnect at site. It will be the responsibility of

the Contractor to ensure that any and all other documentation necessary to meet permit and utility requirements is submitted to L&C and the AHJ.

(2) It shall be the Responsibility of the Contractor to ensure that the system has passed all required AHJ and utility inspections.

F. Electrical Permit
   (1) It will be the responsibility of the Contractor to obtain all electrical permits, schedule inspections and pay associated fees
G. Building Permit
   (1) It will be the responsibility of the Contractor to perform all structural engineering, submit all required applications with the AHJ and utility, and obtain the land use and building permit.
H. System Documentation
   (1) Contractor must deliver all documentation to L&C as outlined in the Project Documentation Checklist ***(On Next Page)***.
I. System Commissioning
   (1) Contractor shall develop a PV system commissioning protocol to assure the system is operating as designed. Contractor will be responsible for developing the requisite commissioning documentation to be approved by L&C prior to commissioning. The final PV system commissioning report shall be included in the project documentation.
J. The contractor will install and set up on behalf of L&C a data monitoring system that could be used as a public education kiosk.
K. Final Walk through
   (1) Contractor shall schedule a tour of the completed and operating PV system with L&C
L. System warranty
   (1) Contractor shall provide a 5 year workmanship warranty.
M. Exhibit A: Site Plans
N. Project Documentation Checklist:

EXHIBIT A – Project Completion Checklist

The CONTRACTOR will provide the following documentation to FACILITY as outlined below, before final payment will be issued. Please return this checklist with the final documentation. Please check the boxes to indicate which documents have been included. If a document is not required for the project or does not apply in the installation location, please initial in the space provided.

Documentation to FACILITY:
Item Initials:
Photovoltaic System Commissioning Checklist _____
Lien Release Affidavit _____
Signed Warranty Letter from GC and all subs _____
Photos of completed system _____
Site Diagrams _____
Electrical Single Line Diagram _____
Electrical Calculations _____
Solar Module Warranty and Operators Manual _____
Solar Module(s) Serial Numbers _____
Inverter Manual _____
Inverter Warranty and Registration Card _____
Inverter Serial Number(s) _____
Monitoring Gateway Documentation _____
Electrical Work Permit _____
Approved and signed electrical inspection _____
Building Permit (if necessary) _____
Sealed approval from licensed PE of all mounting
or structural designs (if necessary) _____
Any and all other documentation necessary to meet
state/local or utility requirements _____
Including: _____

Proposals will be evaluated based on the following criteria:

Offerors' proposals will be considered in a two-step selection process. In order to qualify for consideration, Offerors' must meet the basic project requirements. Proposals that do not meet the basic project requirements will be deemed nonresponsive and such offers will be rejected on that basis without further consideration.

Following is the criteria the selection committee will use to evaluate proposals:

1. Meets basic equipment specifications required (Yes/No);
2. Meets L&C timeline and completion date expectation, 25 points
3. Experience and credentials, 25 points
4. Demonstration of understanding of project, 15 points
5. Can meet project requirements, 15 points
6. Can provide data monitoring/kiosk capabilities, 10 points
7. Lump Sum bid amount, 10 points

There is a maximum of 100 total points available. Each category of evaluation criteria will be assigned points based on the proposal response when compared to all the qualified proposals.

Good Response: 85 - 100%

Fair Response: 50 - 84%.

Poor Response: 5 - 49%.

All factors considered, the award of the contract will be made to the Offeror whose proposal is deemed most advantageous to Lewis and Clark County. Prior to the award of the contract, proposals may be held by Lewis & Clark Library for a period not to exceed 30 days from the date due for the purpose of reviewing the proposals and investigating the qualifications of the Offeror.

No verbal proposals shall be accepted. The Offeror agrees that the proposal shall be good and may not be withdrawn during the 30-day period.