



2/02/2022

ATTN: Jennifer Sweeney  
Management Analyst  
City of Lodi

RE: Lodi City Hall Retro-Commissioning  
Professional Services Proposal - Smith Rosenfeld, LLC

**1. Scope and Disclaimer**

The professional consulting services, including the tasks and deliverables described herein, if any, are intended to represent the full scope of this proposal. The nature of this project may require program modifications not anticipated at this time that may alter the scope of work, such as further evaluation or investigation.

**2. Introduction and Work Summary**

Smith Rosenfeld, LLC is to perform retro-commissioning (RCx) study services for the Lodi City Hall building located at 130 S. Main St., Lodi, WI 53555.

Smith Rosenfeld performed a facility walk-thru on Thursday, Jan. 28 of the Lodi City Hall to see if the building would be a good candidate for a retro-commissioning (RCx) project. Lodi City Hall was constructed in 2003 and is approximately 10,500 sqft. Most mechanical equipment is original to the building's construction. The ventilation and cooling for the building is provided by a Carrier roof top unit that provides air to (qty of 15) variable air volume boxes with hot water reheat coils. Most exterior rooms & offices have auxiliary radiant heating units consisting of hot water wall fin, radiant panels, and/or cabinet unit heaters. The source of heat for the building is provided by (qty of 2) instantaneous gas fired boilers that were installed in 2013 that are piped to a constant volume hydronic system. The building is served by an i-Vu building automation system that was installed at time of construction and components may be obsolete.

Anna Stieve with WPPI has calculated the Site EUI at 79.1 kBtu/sf with an Energy Star Score of 32. The current Focus on Energy incentive structure for the 2022 RCx program to complete the audit and reduce EUI will receive a minimum base incentive of \$0.10 per square foot. Additional incentives up to \$0.10 per square foot are available for achieving higher than a 5% reduction in Energy Use Intensity. There will also be a review of potential grants associated with the WPPI Municipal Building Program incentives of \$0.04/kWh saved (on top of FOE & WPPI Study Funding) that may be available.

Based on the initial site visit at Lodi City Hall, this facility would be a good candidate to perform a retro-commissioning project. During the initial system review the following were typical measures that were found with the current operation of the mechanical systems.

1. Occupant comfort issues regarding zone control with perimeter heating units.
2. Constant volume hydronic hot water system does not appear to be operating efficiently utilizing hot water temperature setpoint resets and pressure differential control.
3. BAS control causing simultaneous heating and cooling between VAV reheat coils and perimeter heating units.
4. RTU, BAS, and hydronic system components are nearing their end of useful life expectancy.

The list above is a sampling of the items we identified in our preliminary reviews. This list will continue to be developed and built upon as we perform a more in-depth analysis.

## **Scope of Work**

The scope of activities as indicated in the description below are included in this proposal.

The activities for the energy efficiency improvement measures will be for the Lodi City Hall building. Our coordination, and retro-commissioning activities will be performed in a logical, sequential, and efficient manner using our customized protocols and forms with centralized documentation and with clear and on-going communication with Lodi City Hall staff.

The following is a list of the services that will be provided for the Lodi City Hall RCx Project.

1. Fill out application for the Focus on Energy Retro-Commissioning program.
2. Perform (qty of 2) site visits for surveying existing mechanical system conditions. On site reviews will consist of reviewing the operation of the existing BAS (i-Vu) that is installed. Perform functional testing to confirm existing operation of the VAV terminal boxes and associated perimeter heating units. Functional testing of the RTU will also be included in this process and will include the launching of temperature data loggers as needed to confirm operation.
3. Generate energy improvement measure list that will include a description and examination of existing equipment and system layout, with a baseline energy consumption and operating cost profile.
4. Generate a summary of recommendations for improving occupant comfort and improved equipment or facility energy performance. Summary list will also include capital improvements items that may not be included in the Focus on Energy RCx program.
5. Populate Focus on Energy RCx workbook that is required for application to the Focus on Energy RCx Program
6. Provide estimated implementation costs, with a breakdown of components such as equipment, labor, operation, and maintenance.
7. For each recommendation, provide estimates of electric demand reduction (kW), annual energy savings (kWh), and project economics (e.g., energy cost savings, simple payback, IRR, other quantifiable benefits) with supporting calculations.
8. Take part in a meeting with city staff to review the summary and recommendation of the energy efficiency measures (EEM) list to determine which measures to implement.
9. Assist with Focus on Energy prescriptive and custom grant applications for measures the City of Lodi decides to implement that may not fall under the Retro-Commissioning program.
10. Generate drawings and/or narratives that will be required for bidding purposes to have subcontractors implement the approved measures.
11. Perform one onsite visit to verify implemented measures.
12. Fill out final Focus on Energy documentation for submittal of completed RCx workbook.

**Assumptions & Clarifications**

The following are not included:

- All fire protection systems including smoke detectors
- All fire alarm systems.
- All electrical systems including lighting and emergency power.
- All plumbing systems
- Code reviews.
- Cosmetic punch lists.

**3. Proposed Cost**

Proposed cost of the services and activities listed above include meetings, site visits and expenses, travel, and professional liability insurance coverage. We expect up to 50% of the proposed cost to be covered by the WPPI Energy Audit Grant.

For the proposed Scope of Work as indicated above, the cost shall not exceed **\$8,650.00 (Eight Thousand Six Hundred Fifty Dollars)**.

Please do not hesitate to reach out with any questions for further clarification. We look forward to working with you!

Thank you,



Trenton Smith  
President  
Smith Rosenfeld, LLC