



Proposal

To: Dean Bloch  
Town Administrator  
Town of Charlotte  
[dean@townofcharlotte.com](mailto:dean@townofcharlotte.com)  
cc [jennifer@cx-assoc.com](mailto:jennifer@cx-assoc.com)

From: Scott Gardner, Brent Mellen  
[sgardner@buildingenergyus.com](mailto:sgardner@buildingenergyus.com)  
[bmellen@buildingenergyus.com](mailto:bmellen@buildingenergyus.com)

Date: 2/28/14

Re: Library Envelope Audit

Dear Dean,

Thank you for the invitation to bid the Charlotte Town Library Envelope Audit. Based on the RFP dated February 17, 2014 we propose the following.

Assessment and recommendations for roof insulation, air sealing, and water sealing.

- Approach:
  - Determine the current status of the roof system with existing plan review, non-destructive visual inspection, infrared imaging and smoke testing (both ambient and depressurized conditions).
  - Recommend roof system upgrade to consider structural improvement, exterior water management, air barrier continuity, and effective insulation upgrade to code levels or above. Minimizing costs and disturbance to normal building operation will be important factors.
- Deliverables:
  - Written report including annotated photographs, work scope, materials used, estimated costs, and estimated fuel savings. For insulation, we will evaluate foam, dense pack cellulose, vented, and unvented options.
- Cost: \$900.

Full building energy audit

- Approach:
  - Determine current annual heating fuel and electrical consumption using records provided.
  - Blower door test to measure air leakage.
  - Infrared scan and smoke testing to identify areas of heat loss and air leakage.
  - R-value estimates of foundation, walls, and attic/roof system.
  - U-value estimates of windows and doors.
  - Safety and efficiency testing of combustion appliances.
  - Assessment of current and future ventilation needs.
  - Photographic documentation.

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White River Junction • phone 802-359-7550 • 2458 Christian Street, White River Junction, VT 05001  
[BuildingEnergyVT.com](http://BuildingEnergyVT.com) [info@buildingenergyus.com](mailto:info@buildingenergyus.com)

- Deliverables:
  - Written report including:
    - Executive summary of the main energy issues.
    - Comparison of the building's fuel and electrical consumption with buildings of similar size and function.
    - Annotated photographs of thermal deficiencies.
    - Individual pricing and heat savings projections for each energy saving measure, suitable for grant applications, work scope, and/or project bidding.
    - Information and estimates of applicable Efficiency Vermont incentives (up to \$5,000 available for completed insulation and air sealing measures).
    - Feasibility of incorporating solar options for future net zero planning.
- Cost: \$2,250.

#### Additional Options

- Roof assessment and energy audit completed at same time.
  - Deduct \$150.
- Distribution testing of the HVAC system including measuring flow rates at registers and testing the total duct leakage and duct leakage to outside.
  - Add \$525.
- Lighting audit including measuring light intensity and assessing controls.
  - Add \$375.

#### Project Schedule

- We can begin work by mid-April, with the possibility of starting in late March if given adequate notice. Work will be completed by dates set in the RFP.

#### Lead Staff

- Scott Gardner: Site assessment and costing.
- Brent Mellen: Site assessment, data analysis, report writing.
- Mike Spear: Roof assessment and costing.
- Hourly Rate: \$75 per hour.

#### Qualifications

- Sample Report: Norwich Public Library report attached separately.
- References: Attached separately. Please note Dorothy Alling Memorial Library.
- Personnel Qualifications:
  - Scott: 30+ years experience in energy-efficient residential and commercial new construction and remodeling.
  - Brent: 7 years experience conducting energy audits on commercial and residential buildings. BPI certifications in Building Analyst, Envelope, and Heating Professional.
  - Mike: Architect and project manager for commercial building projects. He has worked with Northeast Construction/Building Energy for 22 years.

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We are willing to work with your needs and budget to come up with a custom roof assessment and energy audit as needed.

Please feel free to contact us with any questions. We look forward to working with you.

Sincerely,

Scott Gardner  
Brent Mellen

Thank you for contacting Building Energy and we look forward to working with you.

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