



# Town of Carlisle

MASSACHUSETTS 01741

## MUNICIPAL FACILITIES COMMITTEE

### Minutes

### Zoom Meeting

**Thursday, May 4, 2023 9:00 a.m.**

#### **Members Present**

Jerry Lerman, *Chair*, Bill Risso, *Vice Chair*, Travis Snell, *Select Board Member*

#### **Members Absent**

Steve Hinton, Carrie Patel, *School Committee Member*

#### **Staff Present**

Ryan McLane, *Town Administrator*, Stephen Conneaney, *Facilities Director*, Jennine Blum, *Administrative Assistant*

#### **Others Present**

Chris Garcia, *GGD Consulting Engineers*, Chris Musorofiti, *Gale Associates*, John Lavery, *395 School St.*

**9:00 a.m.** Jerry Lerman called the meeting to order.

#### **DPW Trailer: Automatic Sprinkler System Project Proposal** **Chris Garcia, GGD Consulting Engineers**

**Overview.** A proposal from GGD Consulting Engineering was received in mid-April for an automatic sprinkler system including water storage tank(s) and fire pump for the DPW trailer, which has a kitchen, breakroom, possible office space and sleeping quarters for use during storms. The system will conform to NFPA 13D standards for life safety and property. The state Fire Marshall has required a sprinkler system be installed before the DPW staff can sleep there. The goal of the MFC is to look at possible designs and choose one that will work the best and be cost effective.

#### **Possible tank/pump locations which have been discussed to date.**

**Option 1: Inside the trailer.** Water tank(s) and pump to supply water to the sprinkler system would be housed inside the trailer possibly, to the left inside the door. The existing water line in the trailer can be tapped to maintain the water level in the tanks if it's ½- or ¾-inch in diameter. Multiple small tanks might be needed due to the physical limitations of the door size. Additional support would be needed to support the weight of the filled tanks. The DPW staff has concerns about losing available space that might serve as an office.

**Option 2: Inside the garage repair bay.** If space can be spared in the repair bay, one large tank can be brought in through the overhead garage door. The well service is in a closet in the back of the bay. Excavation from the well to the trailer will be needed for the water supply.

**Option 3: Housed inside a separate prefab structure.** Chris G. recommended purchasing a prefab structure to house the tank and pump, which would require a foundation/pad and electric heater to prevent the water from freezing. Chris G. stated that this seems like the most expensive option.

**Option 4: New trailer with sprinkler system.** In efforts to find a less expensive option, Travis Snell investigated the possibility of purchasing an additional trailer or RV bunk house that has a sprinkler system to locate on the DPW site and would be used exclusively for sleeping quarters. This would eliminate the cost of installing a sprinkler system in the existing trailer, free up the existing trailer for office space and not impinge on the repair bay space. He discovered that this option would be a more expensive endeavor. In addition, together with Town Planner Julie Mercier and DPW Director Jim Hall, a workable location for another trailer couldn't be identified.

**Option 5: Housed in an addition to the trailer.** Travis and John Lavery both stated that Jim Hall's preference is for an addition. The location Jim identified is to the left at the top of the ramp as you're facing the trailer door. He stated that ambient heat from the trailer can heat the addition to prevent the water from freezing. John Lavery suggested that if built outside the 32-inch trailer window, that opening would provide ambient heat or it could be enlarged and louvered doors could be installed.

Ryan has discussed this with Jim and relayed to Jim that a proper design would need to be done and then they could discuss which tasks were reasonable for the DPW staff to do and which should be contracted out to a third party.

Chris G. stated that if the decision is made to build a third structure, a structural engineer consultant would be engaged to design it which is why prefab was recommended. Chris G. ended by stating that once the process is started, these options can be more thoroughly discussed.

**Proposal clarification.** Regarding item 2, the words "cleaning agent" should be removed. It should read as follows: *Electrical design will include power connection to system equipment and integration of control panel to the existing building fire alarm system.*

**Requirements and Waiver Possibility.** Chris G. stated that conferring with the authorities that have jurisdiction for this project and reaching out to the state to see if a waiver can be obtained for the sprinkler system will be included as part of the proposal which was requested by the MFC.

**Request/assurance.** The MFC requested that GGD make sure that the electrical panel was adequate, and the system is designed to meet code requirements. The preference is to have the pumps for the fire sprinkler be on the circuit powered by the emergency generator, although there was a question whether or not that is required. Chris G. assured the MFC that the electrical, plumbing and fire protection design would meet code requirements.

#### **Motion to approve**

**Travis Snell moved the motion** to allow Ryan to engage GGD to do the design work for the DPW trailer sprinkler system.

**Bill Risso seconded the motion.**

**Roll call vote.** Jerry Lerman – Aye, Bill Risso – Aye, Travis Snell – Aye

**All in favor (3 to 0).**

#### **DPW Site Possibilities and Priorities**

- Site possibilities for a new trailer equipped with sprinkler system were discussed earlier (see option 4).
- DPW project priorities will be discussed with Jim Hall at the next MFC meeting.

## **Town Hall: Roof, Wall, Rooftop Mechanical Equipment Evaluation Proposal**

### **Chris Musorofiti, Gale Associates**

The MFC's initial general comments were that the proposal is 1) very thorough and would give them a very good understanding of the building's condition and needs and 2) it's quite expensive.

#### **Overview by Chris M.**

- The intent is to provide an evaluation.
- Addressing the comments made about the high expense:
  - Most of the services associated with a lot of the costs are reimbursable including:
    - GGD to look at the RTU.
    - Industrial hygienist to do sampling during the evaluation.
    - Contractor to do exploratory work.
    - If the town has an in-house contractor, roofer, industrial hygienist and/or a facilities employee who could do the work, it might be less expensive.
  - Thermal imaging will be done after hours, overtime rates apply. A differential in heat is needed.
  - The evaluation of the building will be extensive. The better it is, the better the design document will be, resulting in fewer change orders during construction.
  - A quicker visual evaluation would significantly reduce the cost, but it won't provide the information needed.
  - Chris offered to go through the specifics of the scope to try to reduce the cost, but it might mean Gale will have to do additional evaluation during the design phase.

#### **Green Communities – Ryan McLane**

- It's too late to get a grant this round, but it might be possible to get a grant for some of the weatherization and insulation work on the next round.
- Ryan asked if the proposal would include helping to prepare the grant application if this work is one of Gale's recommendations. Chris M. replied that if Carlisle required Gale's services for this then, yes, they can help out.

#### **Questions**

**Bill: What is the intent? Is the goal to weatherize the building, fix deficiencies or an overall envelope redo?**

Chris M.: All of the above. We're going to look at just about everything. For instance, at this point, we really don't know what's behind the siding. Did they just use Tyvek? Did they tape over the plywood seams? Is it insulated? Probably, but we just don't know what's there.

Bill: The siding is wood clapboard which still needs to be evaluated. There is insect damage on some of it.

**Bill: Are you going to provide us with suggestions or just do an evaluation?**

Chris M.: The intention is to provide our opinion as to what we think needs to get done along with pros and cons so you can understand our suggestions. We won't tell you that you have to do this, but rather this is what's in your best interest and then we can work within your budget to move forward. We can do budget numbers as well.

**Jerry: What would the industrial hygienist do?**

Chris M.: Although the building is relatively new, the AQ06 form still requires that an industrial hygienist sign off on it. They would typically be looking for lead-based paint and/or asbestos. I don't think you'll have either, but the sign-off needs to be done in order to get a permit.

**Bill: The DPW has staff that have done carpentry. Do you think doing some of this work would overload them?**

Jerry: The DPW can handle opening up the walls. We would want the sampling of the roof structure to be done by a roofing expert though. Can Capeway handle that?

Chris M.: That's entirely possible.

Before Chris M. left the meeting, he mentioned that the MFC should contact him if they'd like to modify the proposal.

### **Further Discussion: Concerns and Additions to Proposal**

#### **Request heat pump option / rooftop enclosure size**

- A heat pump option wasn't included in the proposal, but all agreed it would be wise to include it. Energy codes in the near future may prohibit the use of natural gas.
- Would a heat pump be physically larger and heavier?
- Will the size of the existing roof top enclosure be restrictive?
- An additional reimbursable should be included in the schedule for a heat pump.

#### **Adequate space is a must to perform maintenance / rooftop enclosure.**

- Stephen C. strongly urged the MFC to require Gale's recommendations and plans to take into consideration the ability to perform maintenance.
- The current system in the rooftop enclosure doesn't allow for proper maintenance. There isn't enough room to get access to the air intake filters and they haven't been cleaned.
- All equipment should be installed to comply with code which requires three feet of clearance around it.
- Proper maintenance will prolong the life of the system.
- It was suggested that a pad mounted system might be a better option if more space is needed. The downside is that this would require ductwork up the side of the building.

#### **Create adequate ventilation / rooftop enclosure**

- Stephen stated that the current RTU is installed in a very inefficient space due to the black surfaces and 12-foot walls with no ventilation – it's like an oven.
- Stephen suggested aesthetically pleasing louvered vents be put in the 12-foot walls for cross ventilation.

#### **Concerns about proposal**

- The MFC should be very specific about what it's asking of Gale.
- The MFC needs to get a comprehensive scope of the current state of the building and what potentially will need to be repaired/replaced so informed decisions can be made about the work that needs to be done.

#### **Request info for capital planning**

- For purposes of capital planning, it was agreed that Gale should be asked to provide the MFC with a schedule for what needs to be done over time along with the expected lifespan of each piece of equipment for purposes of this capital planning this summer.
- Ryan stated that with Gale's Town Hall evaluation, costs and timeline, and info from the library and DPW (coming soon) there should be a good understanding of the large building projects, which can be tackled in the next five to ten years.

### **Motion to proceed**

**Travis Snell made a motion** to proceed with Gale's proposal subject to the additions discussed and inclusion of the evaluation of a capital plan, if amenable to all members, so we can know baseline what we have with the existing structure and will have a plan going forward.

**Bill seconded.**

Ryan said he would negotiate with Gale to include these things.

**MFC voted to proceed with Gale.**

**All in favor (3 to 0).**

### **Project Management Roles of Town staff and Volunteers**

Ryan proposed that a team be established for each project to shepherd it from start to finish so nothing slips through the cracks. Each team will consist of a staff member (mostly Stephen C.), an MFC member/liason and the department head. The staff member will schedule and coordinate work, storage of materials and equipment, and provide access to the buildings. The MFC member will monitor the project closely from the town's perspective, making sure the project is running smoothly. The department heads for the municipal buildings are Jim Hall, DPW, Martha Feeney-Patten, GPL and Ryan, Town Hall.

Ryan nominated Bill to be the MFC liaison for the town hall project. It was suggested that Steve Hinton continue on with the Police Station ramp project and that Bill continue to look after the GPL RTU project. The MFC agreed to talk about assigning an MFC member to the GPL roof and ridge vent project when Steve Hinton returned.

It was recommended that the level of involvement of MFC members be clearly defined.

### **Gleason Public Library Progress**

#### **RTU Project**

**Smoke detector.** The installation of the smoke detectors has been completed. See Facilities Managers Report for information about how the fire alarm communicates with the Police and Fire Departments.

**BMS.** BMS programmer has been there for the past two days and the system is up and running. Remaining deliverables/work include commissioning report, operation manual, onsite training, and as-built drawings. Stephen Conneaney, Steve Bastek, Bill Risso, Martha Feeney-Patten and Jennifer Pike, Assistant Director and Head of Technology, will attend the training, which hopefully will be held within the next month.

Remaining payments to Guardian Energy Management Solutions were discussed and it was mentioned that the contract isn't specific enough to determine which work/deliverables are included. There is also the question of waiting to make the last payment when the last of the work/deliverables are completed. Jerry will discuss this with Ryan.

#### **Roof Shingle Replacement and Ridge Vents Project**

Not discussed.

#### **Mechanical Room Expansion**

Not discussed.

## Facilities Manager Report

**School solar array canopy.** Stephen asked in the report what the impact of the solar array operation was on the town. He stated that the array isn't currently working. Bill mentioned that the panels, owned by Ameresco, have been blowing a fuse at the 3-phase transformer up the street and it's unclear why.

This is only a concern for the town if the cost of the power produced by the array is less than the cost of power that currently is being purchased from Eversource. Bill or Stephen will check the contracts.

It's assumed that the charging stations are powered by the solar array when it's functioning and Eversource when it's not. Bill mentioned that the town pays Eversource a particular rate for the use of the charging stations and it's an unfavorable situation for the town, which he and others are looking to correct. Stephen will check the charging station contract.

Stephen also inquired about the Corey building solar panels and how the generated power is used. The Corey solar panels are owned by the town and power produced is used for the school and town for about nine years.

## Other Business

**Fire alarm system issues.** The question was asked how the fire alarm systems at the school and GPL communicate with the Police and Fire Departments. Bill Risso explained that the system was originally designed to dispatch the specific room/area at issue in the school buildings and GPL. The computer that handled this feature was located at the Police Station and doesn't exist anymore. The system was originally designed by Simplex and was working when the Spaulding building was finished in 2012. Simplex couldn't fix the fire alarm system when it failed for various reasons, including wire and cabling issues.

Currently, anytime a fire alarm is triggered, the master box for that alarm alerts the Police and Fire Departments which building(s) is at issue. The specific room information is no longer available to them unless they read the main alarm panel on the school campus. There are four master boxes for all of the school buildings. The Robbins and Wilkins buildings each have their own and the remaining buildings share the other two master boxes. The MFC expressed that this diminished capacity to identify a specific room should be addressed.

**Security alarm system issues.** Stephen stated that when a security alarm goes off, the system dials out the wrong building to Lexington Alarm. Stephen received a quote of \$3500 from Norel Service Co. to provide a solution, which entails using radio signals rather than the existing faulty wiring to transmit the information. FIBERONE fiber optics, which has been installed to all town and school buildings, can also be used as an alternative if desired.

Jerry mentioned that the new alarm at the Bog House is a radio alarm that goes to dispatch. Bill added that each manufacturer of radio alarm boxes has its own frequency and their own coordination. Is the proposed product by Norel the same brand that the Fire Department requested for use at Benfield and the Bog House? They should all be compatible.

**Simplex vs. other vendors.** Stephen stated that Simplex only needs to be involved when programming, renaming or troubleshooting the main panel is needed. Other vendors can be used for other aspects of the work to cut costs. He has been using Norel to do all the fire alarm testing, and has cut expenses by one third.

Simplex is regarded as being very expensive and it was recommended that the town use another vendor. Records pulled from 2019-2023 reveal that \$26,000 has been spent on alarm troubleshooting alone. This doesn't reflect costs for fixing the problems. In some cases the problems are related to

underground copper wiring. Stephen received a quote of \$42,000 for putting in a new system for the entire school campus.

Bill mentioned that he is involved with a Simplex issue at Village Court which was very costly to troubleshoot and involved three to four visits. Stephen will forward Norel's contact information to Bill.

**Minutes will be approved at the next meeting.**

Bill Risso noted a correction to the April 6, 2023 minutes.

**Next Meeting**

**May 18, 2023**, 9:00 a.m., Zoom

Topics: Jim Hall, DPW Director, to discuss priorities of the DPW projects

**Adjournment at 10:18 a.m.**

**Documents Submitted Update**

- Facilities Managers Report, dated April 1, 2023
- DPW Trailer: New Automatic Sprinkler System Proposal: GGD Consulting Engineers, dated April 18, 2023
- Town Hall Roof, Wall and Rooftop Mechanical Equipment Evaluation Proposal, Gale Associates, dated April 24, 2023



## Municipal Facilities Report

May 1st, 2023

### Director Notes

On behalf of the school system, I want to express our thanks to the Town for allocating ARPA funds to support the Grant Elevator modernization project, the WWTF MUA replacement and the school refrigeration upgrades. I will be working with Ryan and Andy to manage these projects over the next few months.

Last week, I met with Ryan and Jim to discuss the ongoing “pilot” and to identify possible next steps. The outcomes of this meeting were the following.

- At the next staff meeting after the Town Meeting, I will roll out the Facility One work order management system with the town employees.
  - I will also provide a follow-up tutorial video to support the roll out.
  - Once Facility One is implemented, reports of corrective and preventative maintenance will be shared as part of the MFC report.
- I will begin taking a more leadership role with regards to town projects which are already underway.
  - Projects include Library Roof, Library RTU, Police Ramp and DPW
  - Ryan will be connecting me with the project managers on each project.
- There will be a concerted effort made by both the school and the Town to ensure I am looped in and informed of all meetings with vendors that pertain to town buildings and facilities.

Question for the MFC:

There was a question as to whether the operation of the parking lot solar array has any impact on the town. Are they currently operating?

I am also curious to know if anyone has any insight into the solar panels on the Corey roof. Where does the power generated by these go?



## **Corrective Maintenance and Preventative Maintenance**

- 47 CM work orders completed in the past 30 days. School
- 52 PM work orders completed in the past 30 days. School

## **Project Updates**

### *Library RTU Progress Report*

- Simplex programmed the panel last week and the system was assessed by the Fire Department. The smoke detector is complete and working.
- We are waiting for all the BMS detection points to be installed. They are installing Tuesday May 2<sup>nd</sup> and should be completed by Thursday, May 4<sup>th</sup>. The training for the BMS has not happened yet and is awaiting BMS installation.
- State inspector coming 5/2 to verify heat pump installation and removed gas RTU.

### *Library Roof Progress Report*

- No updates on the roof project that are unknown to the MFC.

### *Gleason Public Library Mechanical Room Progress Report*

- Room expansion
  - o No updates on this project that are unknown to the MFC

### *Town Hall Updates*

- Glass Walls – Sulmac order parts and is scheduled to install the new rooms in early May.
- VOIP telephone installation scheduled for the week of May 22. All lines have been ported and assessed.

### *Police Department ADA Ramp*

- The historical commission relayed concerns about the finish on the railings. The concern is that they are too glossy and not meeting contract specs for a “matte” finish. They also have an issue with the continuous rail. See Town Administrator notes for more details on the contractor response to this.

### *DPW Fire Suppression System*

- Pending design to be discussed at 5/4 meeting

### *School Project Updates*

- Wilkins roof had 16 new cracks found at the peak of the roof. All have been repaired under warranty.
- Robbins roof leak has been repaired under warranty
- Guardian has performed an energy audit at the school (envelope). Awaiting results.
- Security systems issues found but not resolved. Underground wiring is corroded and causing false alarms. Some of the metal conduit has been under ground 37 years.
  - o Currently seeking a new system campus wide. Have a quote at \$47k

## **Town Administrator Notes**

- We secured engineers for your discussions about Town Hall improvements and the DPW Fire Suppression system for your meeting on 5/4. I am looking forward to that conversation and the work to follow.

- I spoke with Kneeland (Greg). They believe the paint on the railings is a matte finish, not glossy and that the continuous railing is being confused with the guard rail. The guard rail is a purchased segmented product. The handrail, inside the cage, will be continuous. We need more clarity from the MFC on contract enforcement here.
- For the structure conversation on Thursday, I would like to propose assigning liaisons per MFC project. This would be a staff member and a volunteer (MFC) to “oversee” and report back on projects for the Board. This would simplify conversations and make sure each project is being completed to standard. In most cases, the staff member will be Stephen, Steve, or myself, but identifying the person will allow us more direct control over project oversight.



## GGD Consulting Engineers, Inc.

375 Faunce Corner Road, Suite D  
Dartmouth, MA 02747

L#84309  
Proposal

April 18, 2023

Town of Carlisle  
68 Westford Street  
Carlisle, MA 01741

Attn: Mr. Ryan M. McLane  
Carlisle Town Administrator

Re: Department of Public Works (DPW) Trailer  
New Automatic Sprinkler System  
59 Morse Road  
Carlisle, MA 01741

Dear Mr. McLane:

We are pleased to submit our proposal to provide Professional Engineering design and construction phase services for the Department of Public Works (DPW) Trailer project, as set forth below.

### **THE PROJECT**

The project, as we understand it, is to provide an automatic sprinkler system, including water storage tank and fire pump, for the Department of Public Works (DPW) Trailer. The system shall be designed in accordance with NFPA 13D. The Trailer is approximately 720 square feet.

### **BASIC SERVICES**

Under the lump sum fee proposal our basic services include construction documents, services for bidding, and construction administration for the Fire Protection, Plumbing and Fire Alarm Systems. Our proposal **excludes** services for HVAC, Technology, Security, and Civil Systems.

1. The fire protection design will include sprinkler head layouts for the building. The systems will be coordinated with the other trades and will be reviewed by us with the Fire Department. Service, alarm facilities, pumps, major runs of piping, and equipment will be shown on our drawings. Our fee includes the preparation of calculations necessary to comply with the requirements of the code. The sizing of the installed sprinkler piping network will be specified to be by the Sprinkler Contractor with review and approval by this office. During the analysis and code review phase, we will review the project, advise you of the relevant code requirements, and assist in discussions with the fire and building officials to determine the scope of required fire protection.
2. Electrical design will include power connection to clean agent system equipment and integration of clean agent system control panel to the existing building fire alarm system.
3. Plumbing design will include make-up water connection to the fire water storage tank.
4. Our project manager will attend coordination meetings with your staff and other consultants as necessary to meet the projected design schedule.

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Proposal  
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5. Produce AutoCAD generated drawings suitable for Bidding and Construction Documents. The specifications will be book type on 8 ½" x 11" paper and/or will be provided electronically in .PDF format.
6. Services during construction include review of shop drawings; document interpretation and clarification as may be required; and periodic observations of the construction work not to exceed one observation per month during construction and reports thereon. Site observations are to determine general conformance of the work to the intent of the documents. **This paragraph is not to be interpreted as requiring our attendance at weekly project meetings.**
7. Included in the basic services is the furnishing of .PDF files for purposes of coordination and printing. Out of pocket expenses such as travel, sustenance, and other incidental expenses for routine trips to the project, and for coordination meetings with the design team, is included in the basic fee.

**COMPENSATION AND PAYMENT**

To provide the above, we propose a lump sum fee of Fourteen Thousand Seven Hundred Dollars (**\$14,700.00**), detailed as follows:

<b>TASK</b>	<b>FEE</b>
Construction Documents	\$11,400.00
Bid/Construction Administration	\$ 3,300.00
<b>TOTAL</b>	<b><u>\$14,700.00</u></b>

Payment for the fee shall be made within 30 days of billing. Billings shall be rendered monthly in proportion to the services performed in the preceding 30-day period; however, the total billings shall be in proportion to the overall completion schedule.

**EXTRA SERVICES**

Extra services shall be confirmed and authorized in writing prior to rendering of same and may be compensated either by hourly reimbursement or on a mutually agreed upon fixed fee. Hourly compensation shall be in accordance with the following:

Principal	\$200.00/hr
Senior Engineer	\$175.00/hr
Engineer	\$140.00/hr
Designer	\$110.00/hr
Clerical	\$ 75.00/hr
Site Visit	\$1,000.00/per visit

**REIMBURSABLE EXPENSES**

Reimbursable expenses such as mailing, shipping, and printing are included in the Basic Services. Any local/town fees and advertisement fees associated with completing the project will be billed as a reimbursable expense.

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**INSURANCE COVERAGE**

We provide complete insurance coverage which includes \$4,000,000 aggregate Professional Liability Insurance coverage. Upon acceptance of this proposal, we will provide you with proper certification.

This proposal is valid for 90 days from the issue date and is based on commencement of the initial design phase within 60 days of proposal acceptance.

If this proposal meets with your approval, please return a signed copy to our office. This will act as our agreement and notice to proceed.

Very truly yours,

**GGD Consulting Engineers, Inc.**

**Town of Carlisle**



\_\_\_\_\_  
Christopher M. Garcia, PE, Principal

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Mr. Ryan M. McLane  
Carlisle Town Administrator

\_\_\_\_\_  
Date

CMG:ja



April 24, 2023

Town of Carlisle  
66 Westford Street  
Carlisle, MA 01741

Attn: Mr. Ryan M. McLane  
Town Administrator  
P: (978) 371-6688  
Email: [rmclane@carlislema.gov](mailto:rmclane@carlislema.gov)

Re: Roof, Wall and Roof Top Mechanical Equipment Evaluation  
Carlisle Town Hall  
66 Westford Street  
Carlisle, MA 01741  
Gale P10259

Dear Mr. McLane:

Gale Associates, Inc. (Gale) is pleased to present this proposal to provide Engineering Consulting Services to the Town of Carlisle (Carlisle) regarding the above-referenced facility.

**PROJECT DESCRIPTION**

The Carlisle Town Hall is a two story wood framed office building constructed with plywood sheathing for the roof and wall substrates which is covered with asphalt shingles and vinyl siding, respectively; refer to Image 1. A large monitor well extends above the center of the building which houses the building's Roof Top Mechanical Unit (RTU); refer to Image 2. The monitor well walls and roof system are covered with elastomeric (EPDM) roof membrane.



Image 1: Town Hall

Representatives from Carlisle have stated that the RTU appears to be nearing its service life expectancy, and that a more efficient unit is under consideration. However, it is Carlisle's understanding that the walls and roofs may not be air sealed and could result in inefficiencies of a replacement mechanical system. Carlisle has requested Gale to complete an evaluation of the roof, wall and RTU systems to better understand the conditions and future renovations. Design, bid and construction phase services are not included in this proposal.



## SCOPE OF SERVICES

Based upon our understanding of the project from our discussions and site visit, we propose the following Scope of Services:

### *Evaluation Services*

- Initiate the project via teleconference to establish the schedule for field services, deliverables, and to coordinate access and site logistics with Carlisle. Minutes of the meeting will be developed and distributed by Gale.
- Review original plans, specifications, reports, and similar data made available to Gale. It is our understanding that the available documents may consist of the original building design documents.
- Interview personnel familiar with the facility and the leak/repair history.
- View the interior of the facility to locate damage due to reported leakage. Carlisle will provide an escort.
- Perform a visual evaluation of the roofing and flashing systems and related accessory construction. General location of observed defects will be noted on a copy of the roof area plan provided by Carlisle or on satellite imagery. Access will be provided by Carlisle.
- Perform a visual evaluation of the exterior wall and window systems and related accessory construction. General location of observed defects will be noted on copies of drawings provided by Carlisle or on photographic documentation. Walls and windows will be observed from readily accessible roofs and the ground using binoculars.
  - A representative number of windows will be observed from the interior to determine operability and to review the condition of weather stripping/hardware.
- Observe three-to-five (3 to 5) roof test cuts to document representative existing details and as-built conditions, as well as subsurface conditions at the test openings. Test openings are estimated to require one (1) day.
  - Test cuts will be performed and repaired by a qualified roofing contractor. The cost for the roofing contractor has been estimated and is included in this proposal as a reimbursable expense. Alternatively, Carlisle can hire and pay for the contractor services directly.
  - In accordance with 310 CMR 7.15 (4), it is recommended that Carlisle consider retaining the services of an Industrial Hygienist/Environmental Engineer to perform sampling of potential hazardous material to satisfy the Massachusetts Department of Environmental Protection (DEP) Bureau of Waste Prevention – Air Quality (BWP-AC) submission requirements as part of the Notification Prior to Construction or Demolition procedures.



Image 2 – Monitor Well EPDM roof and walls.



The fee for the Industrial Hygienist/Environmental Engineer has been estimated and included in this proposal as a reimbursable expense. Alternatively, Carlisle can hire and pay for the IH/EE services directly if they have an approved vendor.

- Observe the removal and reinstallation of isolated sections of existing vinyl siding to verify the as-built methods and materials of construction, the substrate system, and condition of these materials at the test opening locations. We anticipate two-to-three (2 to 3) locations of destructive testing. Test openings are estimated to require one (1) day.
  - The actual removal and reinstallation of the vinyl siding components and the staging/hoisting apparatus required to perform these tests will be provided by an independent contractor. The cost for contractor services has been estimated and included in our proposal as a reimbursable expense. Alternatively, Carlisle can hire and pay for the contractor services directly.
- Coordinate with a Mechanical/Electrical/Plumbing (MEP) consultant to provide a visual evaluation of the existing RTU and comment on the conditions and potential options for replacement. This review will be preliminary in nature to provide a general understanding of the existing conditions and potential modification(s) that may be required. It does not include sizing of the equipment, a review of the occupancy and ventilation loads, or a structural evaluation to define loading requirements for replacement equipment. This preliminary information will be provided with subsequent evaluations/schematic design after the preliminary observations are complete and a meeting with Carlisle is conducted to review options. Gale has discussed the service and fee with the MEP consultant which will be invoiced as a reimbursable expense. A formal proposal is not available at the time of this proposal.
- OPTIONAL: Perform infrared thermography on the exterior of the building to assist in locating potential air and thermal loss, and areas of moisture intrusion, if present.
  - As Carlisle has indicated the potential for air movement through the wall system, a thermal scan may better help to define locations which can be focused on during the visual evaluation and test cut observations. If the optional thermal imaging is authorized, it will be performed prior to destructive test cuts which will focus on potential anomaly locations. Should the thermal scan be considered after the evaluation and test cuts, additional contractor services may be required to confirm anomaly conditions encountered.
  - Drawings provided by Carlisle, photographic documentation, or satellite imagery will be annotated to identify observed anomalies.
  - Gale's two (2) person team will require access after-hours to perform this service. Carlisle will be required to provide an escort and access to the building.
  - This proposal is predicated on one (1) night to perform the infrared scans of the exterior of the building with our handheld infrared camera.





- Prepare a brief letter report, in electronic format, outlining our findings and opinions. The letter will be augmented with photographs, reduced drawings, and construction budget estimates.
- Meet with Carlisle via teleconference to present and review the letter report. Meeting minutes will be developed and distributed by Gale.

**COMPENSATION**

- Our compensation to provide the Scope of Services described above will be as follows:

Evaluation Services	Gale Fee	Reimbursables
Gale’s Fee (fixed fee)	\$14,900	N/A
MEP Consultant Fee (estimated)	N/A	\$4,600
IH/EE Consultant Fee (estimated)	N/A	\$4,400
Roofing Contractor (estimated)	N/A	\$3,200
Carpenter/Wall Contractor (estimated)	N/A	\$3,200
Sub-Total	\$14,900	\$15,400
Optional Thermal Imaging	\$4,600	N/A
Engineering Budget Total:	\$34,900	

- Gale services will be performed in accordance with our executed contract agreement dated March 15, 2023 and our current Schedule of Fees, attached.

**PROJECT PARAMETERS AND LIMITATIONS**

- Gale will be provided complete access to required areas at the facility to facilitate our services.
- Gale’s services will be performed during normal business hours, Monday through Friday, with the exception of the optional thermal imaging services, which will require after hour access.
- Exterior envelope observations will be weather dependent.
- Using the services of an Industrial Hygienist/Environmental Engineer (IH/EE) during the evaluation phase is to confirm the presence, or lack thereof, of hazardous materials. Mass DEP BWP-AQ06 form is required to be submitted prior to construction and requires that the certified inspector be listed for the on-line submission. Not using the IH/EE during the evaluation phase could result in increased cost estimates during the design phase, or change orders during the construction phase should hazardous materials be present in the building materials impacted by the renovations. Gale has included the fee for the IH/EE as a reimbursable expense, but it is Gale’s opinion that an IH/EE be retained and paid for directly by Carlisle.



- Gale will be provided with available documents related to the building envelope systems. Gale assumes no liability for the accuracy of any documents of any type, to include drawings, provided to Gale by Carlisle. Gale will rely on the accuracy of said documents as provided.
- Our fee does not include:
  - Design Services (i.e., preparation of technical specifications, details, and/or plans).
  - Bid Phase Services.
  - Construction Phase Services.
  - Mechanical, electrical, plumbing, or fire protection engineering beyond the RTU evaluation.
  - Structural engineering.
  - Research of the building's assessed value and confirmation of the construction costs spent on the building over the last three years. Carlisle will provide this information to Gale as needed.
  - Hazardous materials evaluation (lead, PCBs, etc.). Evaluation and design for remediation, and mold identification or remediation. Representative testing for asbestos containing materials in the roof and flashing systems has been included.
  - Provision of staging, scaffolding, or hoisting equipment.
  - Field testing (leak testing, etc.).
  - Specialized material testing of construction components and assemblies.
  - Accessibility evaluations or upgrades.
  - Professional cost estimating.
  - Obtaining permits.
- If during the optional thermal imaging services the results indicate areas that may provide air exfiltration or contain moisture within the roof and/or wall system, destructive testing may be recommended. Gale's proposal does not include the costs associated with coordinating, observing, or taking/patching roof test cuts to identify the presence of moisture within the roof systems associated with the infrared imaging.
- Should the thermal imaging survey be performed, Gale will not mark the building of the suspected anomalies. The building is considered finished and marking of the building could result in an undesirable appearance should future repairs/modifications to the anomaly conditions not be performed.
- Infrared surveys are dependent on weather conditions. Upon receipt of written authorization to proceed, Gale will schedule this infrared scan as soon as possible provided the weather conditions are favorable and there is no standing precipitation on the roof system. After business hours access will be required to perform the survey.
- Infrared surveys identify anomalies as a result of temperature variations between the roof/wall cover and the uppermost insulation/coverboard substrates. They are not intended to identify the limits of potential defects, as water infiltration that occurs below these substrates could travel laterally and vertically beyond the surface of the system.

Mr. Ryan M. McLane  
Roof, Wall and Roof Top Mechanical Equipment Evaluation  
Carlisle Town Hall  
66 Westford Street; Carlisle, MA 01741  
April 24, 2023  
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- It is understood that any cost estimates developed related to this project will be rough order of magnitude engineering estimates, not to be used for sensitive budgeting.
- Gale services are strictly limited to those defined within the Scope of Services noted above. If additional services are requested, they will be performed and invoiced on a time and expenses basis in accordance with our Schedule of Fees, following receipt of written authorization to proceed from Carlisle.

**REQUIRED DOCUMENTS**

- Space has been provided below for your signature in order that this proposal may serve as a notice to proceed and/or contract/task order for this project.
- Space has been provided under the signature line in order for the Optional Services to be authorized. Please circle the appropriate response and initial the line in order for Gale to proceed with the services.
- Receipt of written notice to proceed is required prior to Gale initiating services on the project.

Thank you for this opportunity to submit this proposal to the Town of Carlisle for consideration. Please call if you have any questions regarding this proposal.

Best regards,  
GALE ASSOCIATES, INC.

Christopher Musorofiti, RRC  
Senior Associate  
Building Enclosure Consulting & Commissioning  
Group

CM:pmw

Enclosures:

- Schedule of Fees

W:\Proposals\Town-Municipal Bldgs-Schools\MA\Carlisle\Town Hall\2023 0424 Carlisle Town Hall roof wall rtu eval.docx

Accepted for:  
Town of Carlisle  
The Undersigned represents that he/she is an officer/principal of Carlisle and is duly authorized to execute this contract on behalf of Carlisle.

\_\_\_\_\_

Signature

\_\_\_\_\_

Type Name and Title

\_\_\_\_\_

Date

OPTIONAL Service for thermal imaging  
(Circle One)

YES NO \_\_\_\_\_ (Initial)



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**GALE ASSOCIATES, INC.**

**SCHEDULE OF FEES**

**JANUARY 2023**

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**300 Ledgewood Place, Suite 300  
Rockland, Massachusetts 02370  
781-335-6465**

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Fees for services are based on the time worked on the project by staff personnel in accordance with the following schedule:

Principal	\$275/hr
Senior Associate	\$250/hr
Associate	\$235/hr
Sr. Project Manager/Sr. Structural Engineer	\$225/hr
Project Manager	\$210/hr
Sr. Engineer/Architect/Planner	\$190/hr
Drone Pilot	\$160/hr
Project Engineer/Designer/Planner/Architect	\$170/hr
Landscape Architect	\$155/hr
Sr. Staff Engineer/Designer	\$150/hr
Staff Engineer/Staff Designer	\$140/hr
Sr. Technician/CAD Designer	\$130/hr
Technician/CAD Drafter	\$125/hr
Administrative Professional	\$125/hr
Clerk/Word Processor/Admin Assistant	\$105/hr

Fees for expert testimony at pre-trial conference, deposition, hearing, trial, or any other legal proceeding, including preparation time for any such testimony, will be billed at 1.5 times the hourly rate.

Fees for expedited services authorized will be billed at 1.5 times the hourly rate.

Overtime will be charged for services for more than 8 hours per day, including travel, and all services on holidays, Saturdays, and Sundays. Overtime is charged at a rate of 1.5 times the regular hourly rate.

In the event onsite construction observation services are provided, the minimum charge for an onsite visit will be 4 hours.

This Schedule of Fees will be utilized for a period of six months from the date of submission unless otherwise provided in the Agreement and is subject to revisions at six-month intervals unless otherwise stipulated in the Agreement.

**Reimbursable Expenses**

Automobile expenses for personal or company vehicles will be charged at \$0.60 per mile, plus toll charges for travel from Gale's office to the project and return and for travel required in the conduct of work.

The following items of direct non-salary expenses shall be billed at Gale's cost plus 15%.

1. Transportation and living expenses incurred for out-of-town projects.
2. Laboratory and field equipment directly identifiable to the project and specifically noted in Gale's proposal.
3. Purchase of specialized equipment and rental of equipment from outside vendors.
4. Reproduction of specifications, drawings, reports and photographs beyond what is specifically included in Gale's proposal.
5. Computer services provided by outside vendors.
6. Rental vehicles.
7. Contractor and sub-consultant services.
8. Federal Express and Priority Mail costs when requested by the client.