Request for Proposals

Project Name	**Community Building Energy Improvements**
Owner	**Town of Groton**
Location	**Groton, VT**

Request for Proposals – Construction Services for Town of Groton Community Building

KEY DATES

Pre-Bid Site Visit Day: September 18, 2025 (2pm EDT)

Proposals Due: September 29, 2025 (4pm EDT)

Work Completed By: No later than May 15, 2026

Through funding from the VT Municipal Energy Resilience Program (MERP), the Town of Groton requests written proposals to secure construction services for the Community Building Energy Improvements Project.

Please note, this is one of three similar RFPs involving energy improvements at Groton municipal buildings. The other two are for the Fire Station and Town Garage buildings. We encourage you to consider and bid on all three.

Project Description

Square Footage: 6,128 square feet
Building Type: Community Building
Location: 1476 Scott Highway, Groton, VT 05046

Schedule

RFP Post Dated: 08/28/25
Pre-Bid Site Visit: 09/18/2025 (2pm EDT) – *RSVP in advance by sending your name, organization, and contact info to grotontogether@gmail.com.*
Deadline for Proposals: 09/29/2025 (4pm EDT)
Expected Selectboard Meeting to Review and Select Proposal: 10/01/2025 (5pm EDT)
Construction Window: October 2025 – 05/15/2026

Project Team

Owner: Town of Groton
Groton MERP Grant Project Team: Mike Gaiss (617-398-0896, mgaiss@gmail.com), Dennis Casey (802-751-9016) drcasey58@gmail.com)
Engineering Consulting Partner: Alan Therrian, Senior Engineer, Cx Associates (alan.therrien@cx-assoc.com)
Groton Town Clerk: Carrie Peters, townclerk@grotonvt.com

Questions

General questions should be directed to a Groton MERP Grant Project Team member. Technical questions in advance of the Pre-Bid Site Visit should be directed to the Engineering Consulting Partner.

Submission Deadline

Please submit your proposal no later than 4:00 p.m. EDT on 09/29/2025 to:
Carrie Peters
Groton Town Clerk
1476 Scott Highway
Groton, VT 05046
townclerk@grotonvt.com

1. Scope of Work

Building Enclosure Improvements

As described in the MERP Level I Energy Assessment Report for the Groton Community Building, several improvements have been identified for the building enclosure to improve efficiency and reduce energy usage. The building is 3 stories with an approximate floor area of 6,128 square feet.

Foundation Insulation

A large portion of the CMU block foundation is exposed above grade on the east side of the building, leaving a large surface area vulnerable to excessive heat loss due to low R-value. The intent is to introduce exterior rigid insulation to these areas with appropriate water management and protection finishes to ensure longevity of the system. Note that on this east elevation, exterior insulation will create the need for flashing/finishing at the window returns and integration with the existing vinyl siding above. This will be important to review by bidding contractors in the pre-bid meeting.

1. Materials
    a. Graphite Polystyrene Insulation
        i. Shall have a minimum R-value of 5.0 at 1 inch when tested in accordance with ASTM C518
        ii. Basis of design material is BASF Neopor F5000. Equal substitutions will be considered.
    b. Metal Flashing
        i. Shall be aluminum, preformed or field-formed, with an upper vertical leg (portion that underlaps siding and weather barrier) of at least 1.5" (for vinyl siding integration) or ½" (for window sill integration), a horizontal leg (portion that extends over top edge of insulation) of at least 3-1/4" with a positive slope, and drip edge/kicker projecting away from the insulation.
        ii. Equal substitutions will be considered as long as water management over top of insulation is maintained.
    c. Finishes
        i. May be one of the following finishes, owners choice.
            1. Stucco finish with base coat and reinforcing mesh
            2. Alternative options may be considered
    d. Accessories
        i. Foam Board Adhesive (ex. Loctite PL 300) or mechanical fasteners with washers
        ii. 100% silicone sealant and closed cell backer rod
        iii. Fasteners/Adhesives (as recommended by flashing and finish manufacturer)
        iv. 3M 8067 All-Weather Tape (for counterflashing metal flashing)
2. Installation
    a. Existing foundation surface and surrounding finishes shall be properly prepared and/or removed as necessary to accept insulation, flashing, and finishes. Finish materials removed shall be salvaged to the extent possible in instances where salvaging materials is more cost-effective than replacement.
    b. From the exterior excavate into the soil/gravel around the foundation and expose 12 to 18" of the below-grade foundation wall. Wash off the soil and allow the walls to dry completely.
    c. Remove vinyl siding and window trim to the extent necessary to install aluminum flashing.

i. Vertical leg of aluminum flashing should underlap existing vinyl siding as well as any weather barrier/building wrap, if present. If no weather barrier/building wrap is present and access allows, counterflash the leading edge of the metal flashing with a weather-barrier self-adhesive tape.
ii. The horizontal leg of the siding should sit just below the bottom edge of siding, with 1/8-1/4" gap. Bend the horizontal leg downward slightly, if necessary to create a positive slope. Reinstall siding fasteners.
iii. Overlap butt ends of flashing 3" minimum and bed in sealant.
iv. Install metal window sill flashing that provides water management below the finish sill to protect water from draining behind the new insulation. Sill flashing should be fastened back to the CMU, counterflashed with all-weather tape.
v. Extend metal flashing 2" past the jambs to catch water that may drain between jamb extensions and insulation.

d. Adhere 3" thickness of rigid graphite polystyrene (GPS) foam board to the foundation with foam board adhesive per manufacturer's instructions. Mechanical fastening with washers is also an acceptable method. Set the insulation from the bottom of the trench up to the top of the foundation. If insulation is to be installed in 2 layers, stagger layers 6" in both directions. Insulation should terminate close to the underside of the flashing but maintain a slight gap (approx. ¼") so that it does not press against the flashing and create a negative slope.
e. Build out head, jamb, and sill extension around each window unit with PVC trim to ensure concealment of insulation edges and a flush fit with new finish plane.
f. Cover the above grade GPS insulation with stucco and reinforced base coat or fiberglass reinforced plastic finish, following AWCI best practices (for stucco and reinforcing mesh) and manufacturer's installation instructions.
g. Provide a backer rod and caulk seal between jamb and head window extensions and the rigid insulation and top of foundation flashing, respectively. Follow sealant manufacturers instructions to create a proper width-depth ratio and tooled joint. Leave joint between sill extension and sill flashing open to promote drainage.
h. Backfill the trenches in the soil and replace gravel drip bed.

Exterior Door Replacement

The Community Center has one (1) exterior person door in need of full replacement. It is located at the basement stairs/east entrance.

1. Materials
    a. Insulated Fiberglass Pre-Hung Exterior doors
        i. Basis of design is a Jeld-Wen Smooth-Pro, half-lite, no panel, pre-hung fiberglass door. Equal substitutions will be considered.
        ii. Glazing shall be 1/2", low-E coated.
        iii. Fiberglass doors shall have a total maximum U-Factor 0.24, equivalent to R-4.2.
        iv. Hardware type and finish, interior finish, and exterior finish to be approved by Owner prior to ordering.
    b. Door Accessories
        i. All door installation accessory materials including but not limited to flashing tape, flashing membrane, sealants, and fasteners shall be in compliance with manufacturer's written instructions.
2. Installation
    a. Existing exterior person doors and frames shall be removed and disposed of by the Contractor.
    b. Door and frame sizes shall be measured by contractor to fit in existing rough openings.

c. Rough opening framing shall be inspected and confirmed acceptable prior to door installation. Any framing at the door opening in poor condition shall be replaced prior to installation.
d. Doors and frames shall be installed level, plumb, square, and in accordance with manufacturer's written instructions. Air sealing and water management practices shall also be installed per manufacturer's instructions.
e. After complete door installation, interior wooden trim shall also be installed. Finish to be approved by Owner.

Improved Weatherstripping & Air Sealing at Doors

The Community Center has (1) exterior person door that is in need of air sealing improvements to reduce air leakage to the exterior. This door is located at the west gym entrance and measures approximately 42" wide.

1. Materials
    a. Weather Stripping
        i. Perimeter weatherstripping and door bottoms, sweeps, or shoes are to be compressible neoprene or rubber.
        ii. Basis of design products are DraftSeal Door Weatherseals. Equal substitutions will be considered.
2. Installation
    a. Any existing weatherstripping on the doors listed above shall be removed and dispose of by the contractor.
    b. Weatherstripping shall be installed continuously around the perimeter of the doors/openings described above to create tight seals without any voids or gaps when doors are in the closed position.
    c. Modification may be needed to the door, such as adjustment to achieve a uniform, continuous seal.

Basement Space Improved Air Sealing & Insulation

The Energy Assessment of the Community Center identified a narrow basement area (approximately 2.5" x 15 'x 10') adjacent to the basement office that is largely uninsulated yet technically within the condition enclosure. Some air sealing exists at the rim joist of this space though it isn't clear how effective it may be. Some portions of the rim joist do not have any air sealing. As a means of better defining this space as one that is within the conditioned enclosure, air sealing and insulating of this space has been recommended.

1. Materials
    a. Two-component closed-cell kit foam
        i. Minium nominal density of 1.75 lb/ft^3 when tested according to ASTM D1622
        ii. Minimum thermal resistance of R-6.7 when tested according to ASTM C518
        iii. Low GWP and no ozone depleting chemicals or HFCs
        iv. Basis of Design is DuPont Froth-Pak
    b. Intumescent Paint or other 15-minute Thermal Barrier (if deemed necessary by local Authority Having Jurisdiction)
2. Installation
    a. Prepare all surfaces to receive insulation as required by manufacturer. Ensure all dust and debris has been removed and substrates are clean.
    b. Prior to installation ensure product has been stored per manufacturer's instructions.
    c. Coordinate with building occupants to ensure isolation from space and hazardous chemicals during installation and for a minimum of 24 hours thereafter, or as required by product manufacturer.
    d. Beginning at the underside of the subfloor, spray the rim joist to a minimum 3"

thickness. Lap spray foam onto the subfloor by at least 2" and extend spray foam over the horizontal shelf of the foundation wall.
e. Extend insulation down the exterior foundation wall a minimum of 3 feet, maintaining 3" uniform thickness. Installer may extend insulation to the floor if desired, but the first 3 feet will have the most impact on thermal performance.
f. Ensure spray foam laps onto interior walls at either end by 6" minimum.
g. Consult with the local Authority Having Jurisdiction (AHJ) to determine the necessity of a 15-minute thermal barrier (ex. Intumescent paint) over the spray foam. If deemed necessary, select products required by the AHJ and apply thermal barrier as required by the AHJ and per product manufacturer instructions.
h. Ensure product installation is per manufacturer instructions.

Mechanical, Electrical, and Plumbing System Improvements

Heat Pumps

The existing heating system consists of hot water baseboard radiators and unit heaters supplied by two 214 MBH fuel oil-fired boilers. This measure will install ductless multi-split heat pumps throughout the office and community areas (excluding gym) to provide heating and cooling, and leave the boilers in place to provide backup and supplemental heat.

1. Materials
    a. Ductless multi-split heat pump system
        i. Heat pumps shall meet "Cold Climate Air Source Heat Pump" specification
        ii. Units shall be rated in accordance with ARI Standards 210/240
        iii. HSPF2 ≥ 8.5
        iv. SEER2 ≥ 15
        v. COP at 5°F ≥ 1.75 at maximum capacity operation
        vi. 120/240V, 1-phase
    b. Outdoor units
        i. Variable speed inverter driven compressors
        ii. Multiple zone capacity
        iii. Operating range down to -5°F outdoor air temperature
        iv. Basis of design is Mitsubishi MXZ-SM. Equal substitutions will be considered
    c. Indoor units
        i. Compatible with selected outdoor unit
        ii. Wall-mounted, ceiling cassette, floor-mounted, or ducted units
        iii. Individual fan speed control and temperature control
        iv. Wired or wireless controllers with programmable temperature settings and auxiliary heat contact
2. Installation
    a. Contractor to verify system sizing based on calculated heated and cooling loads (ACCA Manual N, ASHRAE, or equivalent). Since there is an existing backup/supplemental heating system in place, to avoid oversizing, heat pump system can be sized based on nominal capacity. For pricing purposes, estimated heating load is 150 MBH.
    b. Contractor to select quantity and capacity of indoor units and identify indoor unit types and installation locations in consultation with town. Estimated quantity of indoor units is 9.
    c. Install outdoor and indoor units in accordance with manufacturer instructions and any applicable codes
    d. Set outdoor units on approved mounting pads or wall brackets
    e. Ensure proper clearances for accessibility for service

f. Provide dedicated circuit for outdoor units with disconnect
g. Provide condensate management for indoor units
h. Connect line sets between outdoor and indoor units, properly routed and insulated, encapsulated in UV-resistant material, including ample expansion compensation
i. Install and configure wall-mounted controllers
j. Wire auxiliary heat contact to existing thermostat controlling boiler to provide auxiliary heat if heat pump cannot meet load.
k. Charge refrigerant system according to manufacturer specifications
l. Seal all wall penetrations
m. Verify proper operation of all units and controls.
n. Provide system documentation, manuals, permits, warranty information, and train town personnel on system maintenance.

Hot Water Supply Temperature Reset

Existing boilers are two cast-iron boilers providing a fixed hot water supply temperature. Contractor to furnish and install a boiler controller that is capable of resetting hot water supply temperature based on outdoor air temperature.

1. Materials
    a. Boiler controller
        i. Control up to 2 on/off boilers
        ii. 120V
        iii. Provide outdoor air reset control that adjusts hot water supply temperature in response to outdoor air temperature
        iv. Adjustable reset curve with user-adjustable minimum and maximum hot water supply temperatures
        v. Adjustable warm-weather shutdown temperature
        vi. Sensors: hot water supply temperature, outdoor air temperature
        vii. Basis of design is Tekmar 261. Equal substitutions will be considered.
2. Installation
    a. Install controller and sensors in accordance with manufacturer's instructions and local code requirements
    b. Verify proper placement and orientation of outdoor air temperature sensor (north-facing in a shaded location)
    c. Provide system documentation, manuals, permits, warranty information, and train town personnel on system operation and maintenance.
3. Controls
    a. The control parameters shall be set as follows (adjustable):
        i. Outdoor Design (OUTDR DSGN): -11°F
        ii. Terminal Unit Type: Fin-tube convector (4)
        iii. Boiler Indoor (BOIL INDR): 70°F
        iv. Boiler Design (BOIL DSGN): 180°F
        v. Boiler Maximum (BOIL MAX): 200°F
        vi. Boiler Minimum (BOIL MIN): 155°F
            1. Note that that the minimum should be set conservatively as it is important that the hot water return temperature remains above the temperature where condensing of flue gases may occur (~140°F)
        vii. Warm Weather Shutdown (WWSD): 65°F

Efficient Hot Water Circulation Pumps

The existing hot water circulation pumps are fairly old and inefficient. This measure will replace the existing pumps with new brushless permanent magnet (BLPM) pumps, also referred to as electronically commutated (ECM) pumps. Existing pump models are shown below:

Make	Model	Pump Motor HP
Taco	0012-F4-1	1/8
Taco	007-F5	1/25
Taco	007-F5-71FC	1/25
Taco	007-F5-71FC	1/25
Taco	007-F5-71FC	1/25
Taco	007-F5	1/25

1. Materials
    a. Hot water circulation pumps
        i. Five (5) 1/25 hp pumps
        ii. One (1) 1/8 hp pump
        iii. 120V
        iv. ECM motor
        v. Basis of design is Taco 007e. Equal substitutions will be considered
2. Installation
    a. Remove and properly dispose of existing pumps
    b. Install new ECM pumps in same orientation and location as removed pumps
    c. Install new pumps in accordance with manufacturer's instructions
    d. Verify proper operation of pumps
    e. Provide system documentation, manuals, permits, warranty information, and train town personnel on system operation and maintenance.

Heat Pump Domestic Hot Water Heater

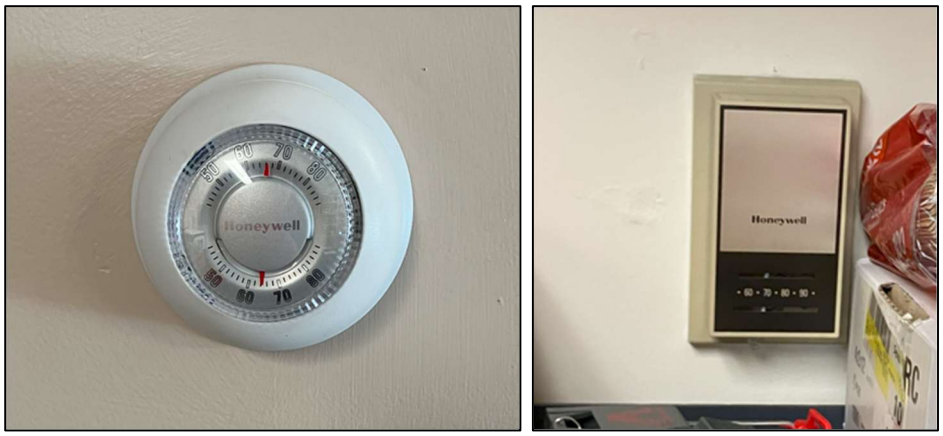
Domestic hot water is currently provided by a 40-gallon, Bradford White electric water heater. This existing unit is to be removed and replaced with a hybrid heat pump hot water heater.

1. Materials:
    a. 40-gallon hybrid heat pump water heater:
        i. 240V
        ii. Unit shall be ENERGY STAR Rated
        iii. Final unit selection to be approved by the owner
    b. Additional components
        i. Provide all necessary electrical components, circuit breakers, disconnects and other balance of system components rated for indoor use and sized for the voltages, currents and power of the system as appropriate.
        ii. Provide necessary plumbing components including pressure relieve valves, pipe insulation, isolation valves, and balance of system components as appropriate.
        iii. Ensure all components comply with local, state, and federal codes and standards
2. Installation:
    a. Remove and properly dispose of existing domestic hot water heater.

b. Install new water heater in accordance with manufacturers' instructions and applicable state, local, and federal regulations. Ensure manufacturers' recommended clearances are provided.
c. The water heater should be installed on a dedicated electrical circuit. Contractor shall verify capacity of existing electrical service prior to installation and coordinate upgraded electrical service if necessary. Contractor shall also provide appropriate circuit breakers and labeling.
d. Connect new water heater to existing domestic hot water piping.
e. System shall be commissioned to confirm functionality of heat pump and back-up electric resistance functionality as well as appropriate connections to domestic hot water piping.
f. Provide system documentation, manuals, permits, warranty information, and train town personnel on system maintenance.

Programmable Thermostats

There are six existing manually-controlled analog thermostats throughout the building (see below for examples). Contractor is to replace these with modern web-connected programmable thermostats.



Existing thermostats in office and food pantry

1. Materials
    a. Programmable thermostat
        i. Thermostat shall be listed on ENERGY STAR Certified Smart Thermostats qualified product list
        ii. 24-V
        iii. Minimum of 7-day programmable schedule
        iv. Wi-Fi connectivity
        v. Digital touchscreen
        vi. Local manual override capability
        vii. Basis of design is Ecobee Smart Thermostat Enhanced. Equal substitutions will be considered.
2. Installation
    a. Contractor to verify existing quantity of thermostats
    b. Remove and properly dispose of existing thermostats
    c. Install new programmable thermostats per manufacturer's instructions.
    d. Verify proper operation of all thermostat modes.
    e. Program initial schedule in consultation with facility staff and provide instructions on how to adjust programming.
    f. Connect to Wi-Fi and assist with app setup.

Wood Pellet Boilers

The two existing fuel oil boilers are to be replaced by two high-efficiency wood pellet boilers OR one high-efficiency pellet boiler and one small low mass propane boiler. Each pellet boiler shall be sized to carry 2/3 of building load. Ductwork improvements can be tied to the newly implemented system, if needed.

We'd like to understand the above two options first before deciding which one to implement.

- Design
    a. Contractor to verify proper boiler sizing based on calculated heated and cooling loads (ACCA Manual N, ASHRAE, or equivalent). For pricing purposes, see estimated capacities below, based on existing boilers (likely oversized).
    b. Contractor to design balance of system components including pellet storage, thermal buffer storage tank, and controls
- Materials [OPTION 1]
    a. Two (2) Wood Pellet Boilers
        i. Capacity (each): 80 kW (273 MBH)
        ii. Fuel: Wood pellets
        iii. Modulation: minimum 3:1 turndown ratio
        iv. Thermal efficiency: > 85%
        v. 240V
        vi. Automatic ignition
        vii. Automatic pellet delivery
        viii. Automatic ash removal
        ix. Basis of design is Froling P4 Model 80 Pellet Boiler. Equal substitutions will be considered
    b. Wood pellet storage and conveyance
        i. Outdoor weatherproof silo
        ii. Sized appropriately for annual heating requirement
        iii. Delivery from storage to boilers shall be via manufacturer-approved auger, vacuum, or pneumatic system
    c. Thermal storage buffer tank(s)
        i. Sized appropriately for selected boilers to minimize boiler cycling
        ii. ASME-rated, carbon steel with factory-applied insulation and jacket
- Materials [OPTION 2]
    a. Wood Pellet Boiler (1)
        i. Capacity (each): 80 kW (273 MBH)
        ii. Fuel: Wood pellets
        iii. Modulation: minimum 3:1 turndown ratio
        iv. Thermal efficiency: > 85%
        v. 240V
        vi. Automatic ignition
        vii. Automatic pellet delivery
        viii. Automatic ash removal
        ix. Basis of design is Froling P4 Model 80 Pellet Boiler. Equal substitutions will be considered
    b. Low Mass Propane Boiler (1)
        i. Capacity: 273 MBH
        ii. Propane fuel
        iii. Modulation: minimum 5:1 turndown ratio
        iv. AFUE ≥ 95
        v. 120/240V
        vi. Heat Exchanger: Stainless steel

vii. Direct vent (sealed combustion)
viii. Outdoor reset control

c. Wood pellet storage and conveyance
   i. Outdoor weatherproof silo
   ii. Sized appropriately for annual heating requirement
   iii. Delivery from storage to boilers shall be via manufacturer-approved auger, vacuum, or pneumatic system

d. Thermal storage buffer tank(s)
   i. Sized appropriately for selected boilers to minimize boiler cycling
   ii. ASME-rated, carbon steel with factory-applied insulation and jacket

- Installation
  a. Remove and properly dispose of existing boilers
  b. Install new boilers in accordance with manufacturer's instructions
  c. Install appropriate venting per local code and manufacturer requirements
  d. Connect boilers to existing hydronic distribution system
  e. Install buffer tank with any required valves, pumps, and connections
  f. Install pellet storage silo and conveyance system per manufacturer's instructions
  g. Run electrical circuits, disconnects, and wiring as needed
  h. Provide boiler plant controller to control sequencing, lead/lag operation, and thermal storage management
  i. Test all system modes and verify proper operation of boilers, pellet storage and delivery system, and thermal buffer tank
  j. Provide system documentation, manuals, permits, warranty information, and train town personnel on system operation and maintenance.

If circumstances dictate that during the process of implementing the scope of work it becomes not feasible or cost prohibitive in terms of additional building modifications and/or enhancements, we may or may not choose to do everything in this RFP.

2. Pre-Bid Site Visit

A Pre-Bid Site Visit will be hosted at the Groton Community Building on September 18, 2025 (2pm).

- RSVP in advance by sending your name, organization, and contact info to grotontogether@gmail.com.
- We encourage bidders to submit any technical questions ahead of the site visit date via email to Alan Therrian, Senior Engineer, Cx Associates: alan.therrien@cx-assoc.com.

3. Qualifications

It is the owner's desire for the contractor to satisfy as many of the following requirements as possible:

- An established track record of successfully implementing similar types of projects (while not required, please highlight any previous experience working with municipalities).
- Provide at least two references for previously completed projects of a similar scope, including pictures of said work.
- Agree to complete all contract documents, including verification of insurance(s) prior to the start of construction.

4. Proposal Requirements

Proposals shall:

1. Provide a clear description of the proposed scope. Clearly note any exceptions to the scope outlined in the RFP. Provide lump sum pricing for each scope item outlined in the RFP. It is a requirement of the grant funding that pricing is itemized for each scope item.
2. Include a list of relevant past projects with similar size and scope of work.
3. Include at least two references from recent projects.
4. Include a proposed timeline for the project work (including an expected start and completion date). Note: All project work must be completed by May 15, 2026.

5. Proposal Deadline: September 29, 2025 (4pm EDT)

Please submit your proposal no later than 4:00 p.m. EDT on 09/29/2025 to:

Carrie Peters
Groton Town Clerk
1476 Scott Highway
Groton, VT 05046
townclerk@grotonvt.com