



Public Facilities Committee Report

City of Newton In City Council

Wednesday, September 21, 2022

Present: Councilors Leary (Chair), Kelley, Laredo, Gentile and Crossley

Absent: Councilors Kalis, Norton, and Danberg

City Staff: Lou Taverna City Engineer, Josh Morse Commissioner of Public Buildings, Lisa Dady Director of Historic Newton, Jason Sobel Director of Transportation, Waneta Trabert, Director of Sustainable Materials Management and Lara Kritzer CPA Program Manager

Referred to Public Facilities and Finance Committees

#407-22 Appropriate \$50,000 from Special Permit Fees, Austin Street and Lowell Ave

HER HONOR THE MAYOR requesting authorization to appropriate and expend the sum of fifty thousand dollars (\$50,000) from Acct #5568R401-432017 Special Permit fees, Austin and Lowell, to improve safety for all users by constructing traffic flow changes at two intersections on Lowell Ave, which is consistent with the intent of Special Permit #175-21, Condition 6.

Action: Public Facilities Held 5-0

Note: Jason Sobel, Director of Transportation joined the Committee to discuss the traffic calming projects on Lowell Ave. This is at the intersection of Austin Street and Lowell Ave and Hull St and Lowell Ave. The project at the Hull Street intersection will include the addition of bump outs which will narrow the travel lanes. The goal is that this will slow vehicle speeds. The project has been agreed upon with Complete Streets and the School Department.

For the Lowell Ave at the Austin Street, Mr. Sobel explained that they will be using bump outs on the Northeast and Southeast corners. There will also be medians on the North and South side for pedestrians. Mr. Sobel explained that they are requesting \$50,000 from Special Permit fees and the rest of the project will be paid out of the operating budget for traffic calming.

Councilors asked the following questions:

Q: Will there be a bike lane at the intersection of Lowell Ave and Hull Street?

A: Mr. Sobel explained that this is not a bike lane because parking is permitted in this area. There will be a five-foot shoulder on the road. This area is used for pick-up and drop off for Newton North along with student parking.

Q: What is the cost estimate for both intersections?

A: Mr. Sobel explained that this would be a \$500,000 project.

Q: Where is the additional \$450,000 coming from?

A: Mr. Sobel explained that they have an operating budget dedicated to traffic calming. The annual allocation has been \$350,000 and funds from last year have been rolled over.

Q: What was spent last year on traffic calming?

A: Mr. Sobel explained he could provide this information to the committee.

Q: Have funds been spent this year on traffic calming?

A: Mr. Sobel explained that they have spent funds this year. All of the funds have been committed in the operating budget.

Q: Has there been a study done on the ability of school buses to turn from Hull Street onto Lowell Ave with the bump out?

A: Mr. Sobel explained that they have done these studies and have adjusted the bump out accordingly.

Q: How was it determined that the City would make this investment on Hull Street, with all of the requests that come in for traffic calming?

A: Mr. Sobel explained that this was discussed and this area was determined as a priority based on the annual traffic calming evaluation.

Q: Is this a time sensitive project?

A: Mr. Sobel explained that their goal is to put this project out to bid this fall/winter so that construction can start next summer.

Councilors made the following comments:

There were concerns raised where the additional funds would be allocated from.

Before this item goes to the full City Council for a vote, it was requested that the committee knows how much was left at the end of last year for traffic calming that has not already been committed to another project. It was also questioned what has been committed to other projects from this year's allocation of \$350,000 and if there is a short fall, where would the additional funds come from?

Mr. Sobel noted that they are not anticipating a short fall and he would get this information for the Committee.

It was noted that both of these intersections have needed traffic calming measures for a number of years and these are important safety improvements.

A councilor raised concerns regarding using a whole year of appropriations on one traffic calming project.

Mr. Sobel noted that the Mayor has just allocated \$2 million worth of ARPA funds that can be used for other traffic calming projects. These funds will not be used for Lowell Ave. There are 4 or 5 separate projects that the \$2 million will be used for.

It was noted that the docket item needs to explicitly state the Hull Street intersection.

The Chair requested that these intersections be split into two separate items and Mr. Sobel explained that this is something that they can explore.

The Committee discussed holding the item until the outstanding questions are answered.

Councilor Crossley motioned to hold which passed unanimously.

Referred to Public Facilities and Finance Committees

#413-22 Appropriate \$4,120,000 for the Pump Station Rehabilitation CIP Projects

HER HONOR THE MAYOR requesting authorization to appropriate and expend four million one hundred twenty thousand dollars (\$4,120,000) and authorize a general obligation borrowing of an equal amount for the construction and engineering services for the City of Newton Pump Station Rehabilitation CIP Project 1 and design for Project 2 and authorization to apply any premium received upon the sale of the bonds or notes, less the cost of preparing, issuing, and marketing them, and any accrued interest received upon the delivery of the bonds or notes to the costs of the project and to reduce the amount authorized to be borrowed for the project by like amount.

Action: **Public Facilities Approved as Amended to \$4,127,000 5-0**

Note: Lou Taverna, City Engineer presented the request to appropriate funds for the Pump Station Rehabilitation CIP Projects. Mr. Taverna explained that the pump station has not been rehabbed since 1990. This project includes the heating and ventilating, and the dehumidified the humidification systems, along with a number of other important improvements. He furthered explained that this is a 10-year CIP project which will need additional funding in the future. Mr. Taverna asked the Committee to amend the amount to \$4,127,000 due to the fact that there was a typo in the Mayor's Docket Request. He noted that the correct amount is shown in the back-up provided by Commissioner McGonagle.

It was questioned what a “wet well” is and why does the Eliot Street pump station isolation valve need to be repaired if that equipment hasn’t been used in years.

Mr. Taverna explained that a wet well is a holding tank of the pump station. He also explained that isolation valve allows you to transfer waste water from one pipe to another and by pass the Eliot Street Station which is why it is important that this is replaced.

A councilor asked if the bond would be paid out of the water and sewer funds?

Mr. Taverna explained that he believes it would come from the sewer funds and noted that he could confirm this at the Finance meeting.

Councilor Crossley motioned to amend the item to \$4,127,000 which passed unanimously.

Councilor Crossley motioned to approve as amended to \$4,127,000 which passed unanimously.

Referred to Public Facilities and Finance Committees

#454-22 Amendments to Chapters 11 and 17 to the City of Newton Ordinances

HER HONOR THE MAYOR requesting amendments to the City of Newton Ordinances regarding trash and recycling (Chapter 11 and Chapter 17) to allow the City to create a mattress recycling program needed to comply with a significant upcoming change in MassDEP regulations for mattresses.

Action: **Public Facilities Approved 5-0**

Note: Waneta Trabert, Director of Sustainable Materials Management presented the request to make amendments to Chapter 11 and 17 to the City of Newton ordinances. She explained that as of November 1, 2022 Mass DEP is banning mattresses from disposal. Therefore, the City needs to create a recycling program from mattresses and box springs. The state has a contract with five vendors and Ms. Trabert explained that she interviewed the companies close to Newton. The vendor has been chosen and the pricing is based off of their pricing and there will be protection of that pricing for 2 years. For residents, there will be a drop off option at Rumford Ave and that fee is \$35 per item and there is a curbside pickup option which would cost \$50 per item. The program will begin right before the ban.

Councilors made the following comment:

There should be a wider discrepancy between the prices for dropping off the mattress and curbside pick-up.

Ms. Tarbert explained that there are still additional costs when the resident drops off the mattress and most of the fee goes to the recycling itself. The costs are also set in the State contract.

Councilor Laredo motioned to approve which passed unanimously.

Referred to Public Facilities and Finance Committees

#442-22 **Transfer \$250,000 for the under \$75,000 projects**
HER HONOR THE MAYOR requesting authorization to transfer the sum of two hundred fifty thousand dollars (\$250,000) from Acct #0111502-582500 Building Improvements, (Under \$75K projects) to a new 01C115 account.

Action: **Public Facilities Approved 5-0**

Note: Josh Morse, Commissioner of Public Buildings presented the request to transfer \$250,000 for the under \$75,000 projects. Commissioner Morse explained that this is a new account that will allow the department to bill staff overtime. These projects can be done in-house and are sometimes are in occupied buildings therefore the work needs to happen at night or on the weekends.

Councilor Crossley motioned to approve which passed unanimously.

Referred to Public Facilities and Finance Committees

#440-22 **CPC Recommendation to appropriate \$75,000 in CPA funding**
COMMUNITY PRESERVATION COMMITTEE recommending appropriation of seventy five thousand dollars (\$75,000) in Community Preservation Act funding from the FY23 Historic Resource Reserve Fund to the control of the Planning & Development Department to complete the first phase of the Jackson Homestead Basement Restoration Project by hiring a preservation consultant to develop plans to remediate the existing water and humidity issues in order to preserve the historic structure and protect its important collections.

Public Facilities Held 8-0 on 09/08/22

Action: **Public Facilities Approved 5-0**

Note: Lara Kritzer CPA Program Manager, Lisa Dady Director of Historic Newton and Josh Morse Commissioner of Public Buildings presented the request to appropriate \$75,000 to complete the first phase of the Jackson Homestead Basement Restoration Project by hiring a preservation consultant to develop plans to remediate the existing water and humidity issues in order to preserve the historic structure and protect its important collections. Ms. Dady noted that the Committee has received a memo from Commissioner Morse and the scope of the work. These documents are attached. She also noted that they have talked to the vendor that was suggested at the last meeting but they were not interested in working with the City on this project. It was noted that a councilor was able to receive an estimate from this vendor and it was shared the Public Buildings Department. The vendor will be providing their specifications for the request for proposal (RFP).

Councilors asked the following questions:

Q: When this project does go off for an RFP, what would it cost if this space was made into a permanent exhibition space?

A: Commissioner Morse explained that this will be a part of the feasibility phase and schematic design of the project.

Q: Since this is a public building, why is the Planning Department in control of the funds?

A: Ms. Kritzer explained that this is due to the fact that she works out of the Planning Department and will be paying the bills.

Q: How will the construction costs be split?

A: Commissioner Morse explained that the Mayor has announced that \$200,000 from the ARPA funds will be going towards the exhibit improvements at the Jackson Homestead. He also noted that they need time to create a full proposal to know what the construction costs would be split between the historic resource and exhibits. Commissioner Morse explained that he believes this project will be close to \$1 million. The one variable that could change that is the installation of an elevator.

Councilor made the following comment:

A councilor noted that the funds should be in control of the experts on this project which would be in the Public Buildings Department.

Councilor Laredo motioned to approve which passed unanimously

The Committee adjourned at 8:41 p.m.

Respectfully Submitted,

Alison Leary, Chair

Newton - Lowell Avenue



Legend

- = Landscaped Areas
- = Detectable Warning Panel
- = Granite Curbing
- = HMA Pavement
- = ADA Wheelchair Ramp
- = Cement Concrete Sidewalk



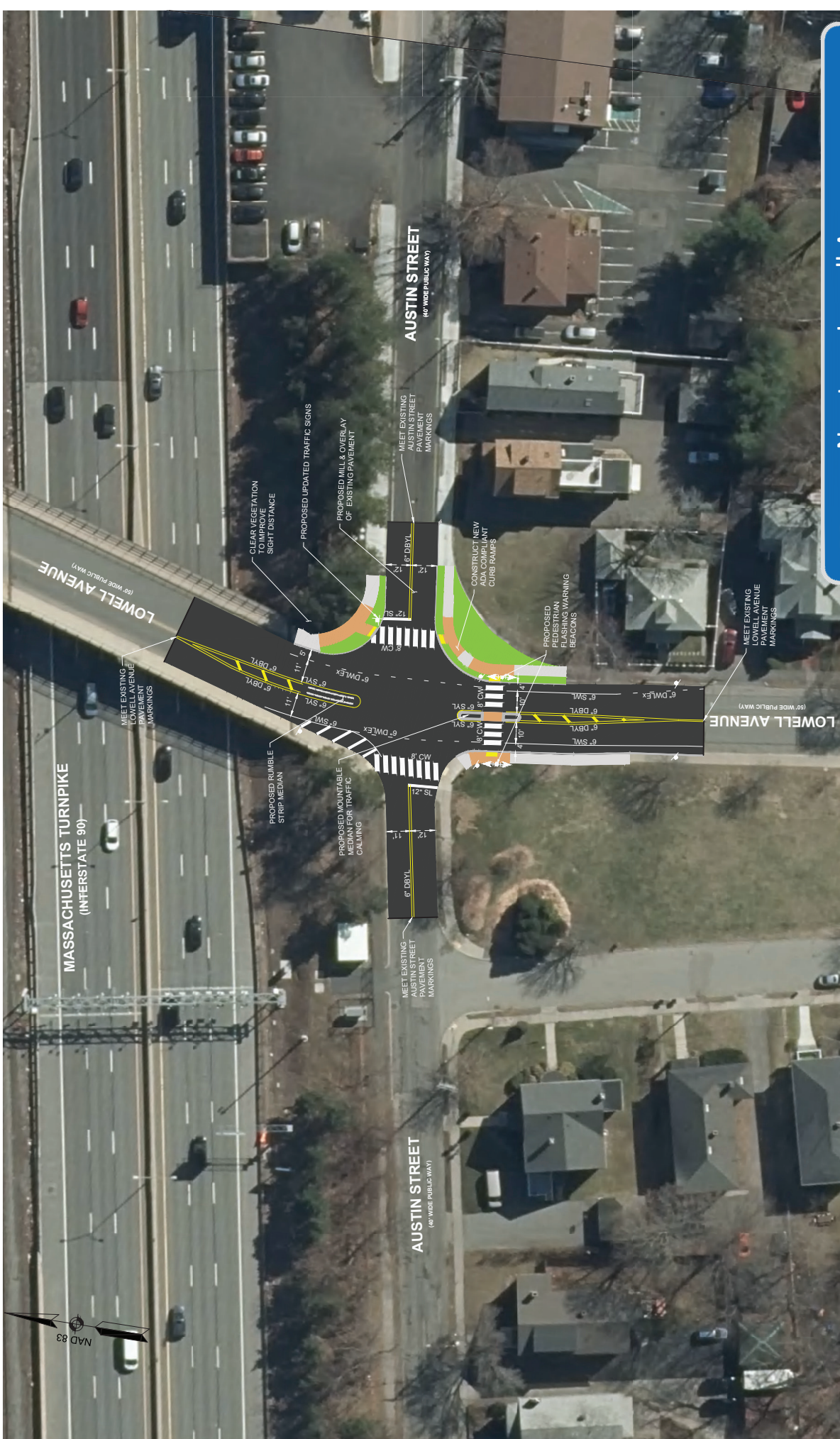
June 16, 2022



282 Merrimack St. | 311 Main Street
 Worcester, MA 01608 | Worcester, MA 01608
 978-294-1792 | 508-868-5104

169 Ocean Blvd, Unit 3
 Harpoon, NH 03842
 603-601-8154

Newton - Lowell Avenue



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Ruthanne Fuller
Mayor

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52 ELLIOT STREET
NEWTON HIGHLANDS, MA 02461-1605

I understand there were some questions from the City Council with respect to the Jackson Homestead Basement Waterproofing and Improvement Project. This letter is intended to clarify the general project scope and provide some context for the rough project budget estimate.

The \$75,000 design funding request will help confirm the approach to the waterproofing, but it will also further define, and refine, the project scope for general improvements to the basement level of the Jackson Homestead.

In general, the basement waterproofing is a means to an end. Once the basement is waterproofed and water and moisture infiltration is stopped, the goal is to have a museum-level climate control system installed. The current forced air handling unit is gas-fired and serves the basement and the rest of the house. I am assuming that we will want to electrify and replace this unit with a heat pump that can both heat, cool, and dehumidify the basement and the rest of the house. This will likely require rebuilding the current very small mechanical room. Once the basement is waterproofed and humidity controlled, the desire as I understood it was to make upgrades to the finishes and systems within the basement. This includes the floors, walls, and ceiling finishes. Electrical and lighting improvements will be required. The current basement restroom is inaccessible, and I assumed this would need to be corrected, so new water, sewer, fixtures, finishes, framing, walls, ceilings, and exhaust would be needed. Displays, display cases, and layout would likely all be modified. I assumed that to make these changes, we would likely need to adjust and rework systems such as fire protection, security, fire alarm, and data. I also assumed that to complete this work we would need to professionally move and store the museum materials in the basement while the space is under construction.

The \$1M budget works out to \$666/sf. Renovation projects are almost always more expensive per square foot than new construction. At \$666/sf, I'm not assuming a full gut renovation of the basement, but rather about half that scope. Based on the current and projected market, a full gut reno of the basement would be closer to \$2,000/sf escalated out to ~2025. For reference, The Durant Kenrick project cost was \$4,915,911, the house is 4,164sf, which yielded a \$1,180/sf cost in 2012, which would be \$1,809/sf in 2022 when adjusted for escalation.

The design money in this case will help refine the project scope for the waterproofing, climate control, and interior renovations.

Regards,

Josh Morse

DRAFT consulting scope for Jackson Homestead Basement Rehabilitation Project

Phase 1: Feasibility Study

Qualifications

The prime consultant is to be experienced in the preservation of historic structures including wood-frame structures similar to the Jackson Homestead. The consultant team must be experienced in design and construction of museum spaces in buildings similar to the Jackson Homestead and able to propose high-performance mechanical solutions with estimates of associated temperature and humidity ranges that can be achieved in light of the proposed renovations.

Project Organization

The City of Newton will administer this contract through the Public Buildings Department (PBD), as managed by their project manager. The operating agency is the Historic Newton Department which operates the Museum and is directed by the Director. The Director will create a Review Committee of museum staff and members of the Joint Board of Historic Newton, along with PBD's Project Manager, which will provide information and review materials submitted by the Consultant. In addition, the Director, on behalf of the Owner's Review Committee, will commission a museum designer to develop a program and performance specifications for the exhibit on Newton History that will be housed in the proposed gallery.

Consultant Scope of Work

Task 1: Review of existing material, both historical information on the structure and information gathered as part of renovations and repair. Material to include:

1. HABS drawings of site, building plans, elevations and details, 1935
2. Photographs and drawings of the building and grounds
3. Plans and specifications of renovation of the building exterior performed by the city including:
 - a. Exterior and foundation prepared by TBA Architects, Inc., 1997
 - b. Renovation of the Jackson Room prepared by TBA Architects, Inc., **date**
 - c. Renovation of archive and access and safety system improvements to exterior prepared by Durkee, Brown, Viveiros & Werenfels Architects (D,B,V&W), 2011
 - d. HVAC repair and equipment most-recent replacement prepared by PBD's Contractor
 - e. Exterior envelope repair and repainting prepared by PBD, **date**
 - f. Record of relevant work orders performed recently

4. Prior master plans for JH reconfiguration and expansion
 - a. Space Needs Program Study for the Newton History Museum, prepared by Solomon+Bauer Architects, Inc., 2005
 - b. Long Range Plans for Maintenance and Operations of the Durant-Kenrick House and Jackson Homestead, 2017
 - c. Schematic studies by D,B,V&W, , date
5. Update/confirmation of existing conditions documents to assure that recommendations are based on the installed and dimensionally accurate conditions.

Task 2: Review of proposed program: work is to be coordinated with the consultant and Owner's Review Committee.

1. Building Stabilization
 - a. The building shows evidence of water infiltration from the fieldstone foundation walls and rising damp from below the existing concrete slab on grade, resulting in deterioration of the foundation wall, and of wood windows, frames and sills of the structure above. Brick walls and piers are deteriorating with spalling and crumbling due to rising damp. This has required exhibit materials be relocated to the main level, severely restricting the museum use of the lower level. Additionally, high humidity levels are migrating to the building above, damaging wood structural elements and compromising the museum's ability to properly store and preserve its collections.
 - b. Consultant is to recommend building system solutions to control water infiltration to the structure and building interior.
2. Exhibit Space
 - a. House a new exhibit on Newton history. Work will be coordinated with HN staff and an independent exhibit design consultant commissioned by the Newton Historical Society.
 - b. A goal of this aspect of the study is to maximize exhibit area and configure it to maintain flexibility. Reconfiguring existing utilities and service spaces can be considered.
 - c. Temperature and humidity control are critical components of the study. We recognize that the area under consideration is largely below grade with a fieldstone foundation and wood structure above. Alternative scopes of construction are to be considered in light of estimated temperature and humidity ranges that can be achieved.
3. Accessibility
 - a. Currently, the lower level is accessed from the back through a separate entrance, requiring either separate (street) parking or long walkway access. Main level access is provided by a ramp to the main entrance and reception. The building's upper level is currently not accessible.

- b. Explore options for providing access between two or three building levels. Options to consider include an interior lift, or a new lift constructed outside the historic building envelope. Reconfiguration of the existing lower-level stair access may be considered.
- 4. Storage
 - a. Identify areas for storage. Storage is to be configured for efficiency and flexibility. Consultant will identify the estimated range of temperature and humidity control for each proposed alternative.
- 5. Restroom
 - a. An existing, noncompliant restroom exists in the lower level (with a compliant restroom on the main floor). Consultant to consider building-wide compliance to determine whether this is required in the lower level.
- 6. Mechanical and Service
 - a. Currently, an existing mechanical closet houses a gas-fired boiler (installed **date**). Other utilities in the basement include an electrical panel, sprinkler valves and controls, and _____. Consultant to review existing systems and identify opportunities for higher performance to meet or advance the museum's goals for temperature and humidity control.

Task 3: Concept Plans and Outline Specifications: Consultant team is to provide draft conceptual plans and specifications and details sufficient to establish the parameters of a solution for final design and engineering.

1. Draft recommendations to include estimated costs for final design services and construction, with recommended spending priorities.
2. Meetings to discuss recommendations.
3. Revisions as required.
4. Final Report.

Schedule

Work on the feasibility study will commence immediately on award with progress milestones as follows:

Month	Scope	Deliverable
1	Contract Award	
2	Task 1	Confirmation Memo
3	Task 2	Draft Program Submitted
5	Task 3	Draft Plans and Cost Estimates
6		Final Report

Preapplication text on the project

The intent of this project is to stabilize and rehabilitate the basement of the Jackson Homestead, a Newton historical treasure. The end-goal is to achieve a space that is safe for artifacts, enjoyable for visitors, and structurally sound in support of the building for generations to come.

Existing Conditions

The existing space is used for whole building heating, air conditioning and ventilation (HVAC), electrical service, water service, main sprinkler system supply piping and valves, and a small non-accessible bathroom. Most of its area is used for museum gallery space, created in the 1980's. The below-grade space is relatively high-ceilinged and has fieldstone walls, brick structural piers and an unsealed concrete slab on grade. There is a compliant accessible entrance (but arguably sub-standard entrance from a Universal Design perspective) along the north wall. The basement space suffers from water infiltration through the foundation walls and floor. The brick structural piers show damage from creeping damp due to the infiltration. Water infiltration is also damaging the stone mortar, as well as the wood windows and frames. The space is inadequately conditioned resulting in wide swings in relative humidity during winter and summer seasons. The Museum has closed the basement to the public as it works to remove the City's collections from the space to avoid continuing damage. The basement needs to be renovated to eliminate or control water infiltration in order to stabilize and protect the structure. The gallery is obsolete and requires redesign and renewal to meet contemporary standards of collection preservation, museum display, and public engagement.

Project Organization

We propose to complete the project through two design and engineering contracts. The first contract, commissioned by the City and supported largely by the City's CPC funds, will provide detailed analysis of the existing conditions and result in structural repairs and stabilization, new interior structure and wall, floor and ceiling finishes, lighting, power and HVAC. The second contract, commissioned by the non-profit Newton Historical Society (NHS), will include gallery interior and exhibit design and installation. The redesign will also result in a small storage space to replace to replace three awkward, damp, and underutilized closets as well as allow for collection storage in exhibit furniture and elsewhere. The two design contracts will overlap in schedule and be coordinated by Public Buildings and Jackson Homestead staff, Historic Newton's Buildings and Grounds Committee, and supported by members of the Historic Newton community.

Scope of Construction

Although the final design approach has yet to be determined, our current expectation is that most of the construction work will be largely on the building interior. The fieldstone walls

and floor will be sealed on the interior by a continuous membrane. New wall and floor framing, and interior wall surfaces and flooring will create a sealed interior gallery space as well as enclosures for the various utilities. Access stairs from the main floor of the Museum will be modified as required to adjust for the new floor level. We will also install new sealed windows and properly flashed frames. The space between the new membrane and the interior face of the fieldstone walls and concrete floor will be configured to actively drain away any water that infiltrates the structure. Related site work will include modification of window wells to assure proper drainage and examination of the condition of previous infiltration efforts. Existing catch basins will be inspected, cleaned, and repaired if necessary. The building's overall HVAC system will be assessed, upgraded or an additional unit installed to achieve museum-quality climate control. Additional capacity will be designed with regard to the City's "green" goals, including increased efficiency and reduction of fossil fuel consumption. New ceilings and gallery lighting will be coordinated with the gallery design.

Jackson Homestead is truly an Historic Landmark, but with a deteriorating foundation it is at great risk. The main Newton history exhibit is sorely outdated (both in content and design). However, when this project is finalized, the entire building will be preserved through its foundational structures and new climate control, and the public will be served by an exhibit with more modern, diverse, and engaging presentations, for years to come.