

## CITY OF NEWTON, MASSACHUSETTS

## PUBLIC BUILDINGS DEPARTMENT

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May 6, 2019

Ruthanne Fuller, Mayor Newton City Hall 1000 Commonwealth Avenue Newton Centre, MA 02459

RE: West Newton Armory 7/27/18 Inspection and Observations

Dear Mayor Fuller:

The Newton Armory was built in 1910 and is located at 1137 Washington Street. The lot is 33,150 square feet. The building is made up of three floors with a total gross building area of 30,363 square feet. The Cheesecake Brook is culverted behind the site, and the 200 foot riverfront protection act places restrictions on a small portion of the very rear of the property. There is a 20-30ft elevation change dropping from Washington Street to the rear of the property. The current property managers informed us that the site has the capacity for approximately 50 parking spots but based on the spatial observations I suspect this is only achievable by stacking vehicles, double, and triple parking. However, I do believe that site reconfiguration could yield 50 practical parking spaces. The main entrance is accessed via granite stairs bringing you up approximately 4.5 feet from the sidewalk grade. This will create some challenges from an accessibility standpoint, but the issue is not insurmountable.

The floors are broken down as follows:

**Basement**: 13,402 square feet. The front, left, and right sides of the basement floor all have windows and therefore the space does receive natural light. The rear end of this floor is at grade, so windows could be added. The space showed absolutely no signs of any water damage, and the users reported no history of flooding or groundwater issues. This floor was originally built with a very open floor plan but has been significantly modified over the years. None of these modifications would be difficult to undo. The core of this floor is made up of two very long spaces isolated from the perimeter. One was used as a firing range, and the other appears to be designed as a large staging area used for either horse travel or munitions transfers. The

interior wall systems are brick where original, and a combination of cmu block and wire lath and plaster where modifications have occurred. With the exception of the 819ft2 mechanical room, the rest of the space could be repurposed for programmatic and normal occupied uses. A small kitchen and mess hall are really a blank slate and could be used for most anything.

**1st Floor**: 13,558 square feet. Windows surround the perimeter of this floor with the exception of the rear facade, where the drill hall stage is. The drill hall is over 10,000ft2 when the 760ft2 stage is included. The rest of this floor is comprised of offices and sleeping quarters, which has been marginally modified spatially over the years. This floor has one bathroom with showers currently reserved for women. Clearly the drill hall has the potential to be repurposed for a wide variety of uses, but the rest of the spaces on this floor could not be easily modified without significant investment and a loss of interior character.

**2nd Floor**: 3,403 square feet. This space has two access points. One is a very narrow spiral staircase, and the other is the main staircase approximately 10ft wide. All of these spaces have windows. This floor has one men's room and shower facilities. The rest of this floor is comprised of offices and sleeping quarters. The spaces on this floor have been modified with simple gypsum walls, which could easily be removed to reopen the floor plan.

The facility lacks bathrooms, but there's plenty of capacity to add to the fixture count. Significant investment will be needed to make all three floors accessible and functional from a programmatic access standpoint, which will include a 3 stop elevator and significant modifications to the main entrance.

The following is a summary of the building systems and conditions as observed:

**Roof**: Asphalt shingles cover the drill hall, and were replaced approximately 10 years ago, and some repairs will be needed due to damage that occurred over the winter. The front section of the building has a white rubber membrane roof that appears to have been replaced within the last 10 years.

**Envelope**: The exterior masonry appears to be in very solid condition. The mortar was not easily removed with a scrape test, and only a couple of cosmetic cracks were observed. The wall sections are approximately 2 feet thick, but no insulation was observed where penetrations were open and visible.

Windows: There are 91 windows which are approximately 18 inches wide and 4 feet in height. Further investigation will be needed to determine if these windows are original to the building. In general, the windows are very small and limit daylight to portions of the building. This could prove to be a significant challenge if additional daylight is needed in the spaces, as the exterior wall sections were built to protect against forced entry via munitions and the historical significance of the facade will make modifications complicated.

**Doors**: In general, all the doors inside and out are custom, as they are quite large. This should however make interior accessibility easily to achieve. Most all the doors need to be replaced.

**Interior finishes:** The floors in most of the spaces are hardwood and good condition. Some of the living quarters have vinyl tile, and most of the basement floor is some form of finished concrete. The walls are painted brick, cmu, and wire lath and plaster. A report from the state is pending that may show if the interior paint and caulking contains lead and or asbestos.

**Mechanical**: The building has no air conditioning and is heated by steam radiators supplied by two 3 year old steam boilers and a vacuum return system. Although significant money has been spent on the heating system, it would likely need to be replaced as the overall system was not designed or laid out for any purpose other than the original military use.

**Plumbing**: The plumbing appears to be in good shape but is very limited and distribution is isolated to only the areas of the bathrooms, basement kitchen, and boiler room.

**Electrical**: The electrical panels were upgraded sometime in the 70's based on the panel models observed. Although these are in working and safe order, the entire electrical distribution and service will need to be replaced. The service to the building will need to be replaced and increased significantly. Lighting is generally adequate, but also needs to be replaced and supplemented to deliver code required light levels.

**Fire Alarm**: Although a fire alarm system exists, it will need to be replaced with a fully addressable system with adequate coverage based on the new use.

**Fire Suppression**: The building has no sprinkler system, and this will need to be added based on the level of renovation required.

**Data/Phones/Tech**: The building has very limited voice and data. This will all need to be replaced and expanded.

**Security**: Aside from the obvious near impenetrable envelope, the building has no security systems or access controls.

**Foundation**: The building is a combination of slab on grade, and an unknown below grade wall system. Further investigation will be needed to confirm the foundation type.

Hazardous Materials: The building has asbestos flooring, caulking, adhesives, and insulation. It likely has lead paint within the building, and potentially on the windows as well. The firing range in the basement was a source of lead for many years. The range stopped being used in the 1980's, and the range floors and walls were recently bead blasted and sealed with epoxy. Lead levels as recently as 6/7/18 were still above acceptable limits. I suspect this may be due to interior lead paint, but further testing and investigation will be needed. Depending on the results, this could be a significant cost factor in acquisition and ultimate renovation.

In closing, the Armory is a beautiful building with great historical features and flexible floor plans. The building will require a significant renovation for any change of use. The purpose of my inspection of this facility was to determine whether this facility and/or site could be used for either a Police Headquarters or a site for the NewCAL project. Both projects require a minimum of 2 acres of land area. Additionally, the building itself is too small to contain either program.

Sincerely,

Josh Morse

**Public Buildings Commissioner**