

CITY OF CAMBRIDGE INTEROFFICE CORRESPONDENCE

TO: Louis DePasquale City Manager **DATE:** April 24, 2018

FROM: Ranjit Singanayagam

Commissioner/I.S.D

SUBJECT: 120 Brookline Street, Cambridge, MA. Former EMF Building

Based on a walkthrough with other City Officials, the following was noted.

This building was built in 1920, it consists of three different kinds of construction, heavy timber, concrete/masonry and wood frame.

It appears that, soil abatement needs to be done due to the contaminated soil in the surrounding areas, there may be a requirements for asbestos abatement due to the age of the building. It appears that since the original building was built there were additions to this building.

It was noted, the corridors are narrow and with un-even floor with open wiring may need to be insulated and open duck work without any insulation.

The existing sprinkler system may need to be updated or tested. Insufficient toilet facilities with no handicap facilities. There are no passenger elevators available and also appears to have no fire separation between tenant spaces. Roof needs to be inspected and replaced if necessary.

Further, some of the ceilings may have to be replaced and drop ceilings to be investigated for fire suppression. It also appears that there are no proper air exchangers and no heat provided at the 3rd floor level. All combustibles have to be removed.

No accessible entrance.

Provide diagrams to clear path of exits.

Depending on the cost of renovation, the whole building will need to comply with the Architectural Access Board requirements.



CITY OF CAMBRIDGE

FIRE DEPARTMENT

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April 27, 2018

Acting Chief Mahoney,

I had the opportunity last week to conduct a thorough walkthrough of the former EMF building located at 120 Brookline St. The building is equipped with a sprinkler system, a fire alarm system and a Knox Box which is located by the front entrance, containing a grand master key which should open most doors in the building. The building itself is two stories in some areas, three stories in others with a single story unit on the Pacific Street side. The building is made of concrete block for exterior walls and what appear to be block bearing walls on the interior. The remainder of the building is wood frame including heavy timber carrying beams, steel I beams and tongue and grooved wood flooring throughout the b. In many cases, the flooring is covered with plywood and where there are ceilings, they are acoustical tiles, however many are missing throughout the building. Above the drop ceiling is a significant sized interstitial space, unprotected by sprinklers or fire detection.

- Lighting in the common hallways varies with each hall. Some lighting consists of drop lights plugged into outlets controlled by wall switches, some lighting is hardwired and a few halls have no lighting at all.
- Many of the walls in common hallways are covered with either plywood or wood paneling over the wood framing.
- Fire doors not operating as designed.
- The combination of three buildings comprising one, create additional challenges for an emergency response as now faced with former exterior bearing walls, acting as interior walls, which will limit access in certain emergencies.
- A storage room adjacent to the elevator is packed from floor to ceiling and it appears that flammable liquids are being stored on the back shelves of this closet.

- The foundation shows signs of deterioration, and in some rooms, foam has been sprayed into the larger gaps.
- Some areas of the building appear to have no heat. Tenants of certain units are utilizing space heaters in these locations.
- Asbestos wrapped pipes are found in many areas. Any size fire will involve unknowingly disrupting what appears to be friable asbestos.
- The building has narrow hallways, many of which lead to dead ends. The floors are uneven and in some cases you are stepping up or down into rooms or adjacent hallways. Off the hallways, there are numerous rooms, most of which have 3 locks/deadbolts to enter. In certain cases (unit #23), you must unlock two deadbolts, open a door to find another door with three additional locks/deadbolts. There are fire doors located sporadically throughout, however few of them appear to function as designed. Some of the hallways have doors installed midway down the hall and triple locked. It is possible that tenants in some of the units can be locked behind these doors without adequate egress. Many of the rooms have sound proof rooms within them as small as 4' x 4', encapsulated in foam padding.
- The "New Alliance" room (unit # 28) has flammables stored in cabinets, the walls
 are covered in fabric and the floor is raised for acoustical reasons creating
 another large unprotected void which takes up a decent size portion of the
 second floor habitable area.
- Very little fire stopping between units and no visible fire stopping between floors.
 Large pipe chases throughout the building that communicate from room to room and floor to floor.
- Multiple ceilings in various rooms creating unprotected voids for fire travel.
- Numerous locked rooms within rooms that have access to them, and no egress.
 In some cases, access to them is via step ladders or makeshift stairs.
- Electrical junction boxes throughout the building with exposed wires.
- Exterior windows are mostly blocked with metal grates, plywood or built in air conditioners.
- I was unable to access and assess any hazards on the roof at this time.

Conclusion:

Despite the efforts to forewarn occupants of our inspection, many units had clothing, string lights and other miscellaneous items hanging from and obstructing the sprinkler system, AV devices and pull stations. I only had access to approximately 5 of the rooms, however the others were described by management representatives as "similar".

This building could be a tremendous hazard to its occupants and first responders. In the event of a fire, you could expect a rapid fire spread throughout because of the large, unprotected interstitial spaces. Occupants encountering a smoke or fire condition will likely retreat to the rooms they are able to access which are clad with highly flammable soundproofing materials as well as combustibles designed to deflect sound for acoustical reasons

In my experience as a nationally certified fire investigator, I believe that although the building is equipped with a sprinkler system, a fire would rapidly overtake that system due to the amount of combustibles and interstitial spaces as noted. A search for occupants in a smoke charged building of this type will be limited as a result of the items discussed, and you should expect a less than desirable outcome for occupants and rescuers.

Respectfully,

Tom/Cahill Chief of Operations

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