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*The Commonwealth of Massachusetts*  
*Executive Office of Public Safety*  
*Fire Safety Commission*  
*Automatic Sprinkler Appeals Board*  
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MAURICE M. PILETTE  
CHAIRMAN  
PAUL DONGA  
VICE CHAIR

**Docket # 2005-01**  
**523 Washington St.**  
**Boston, MA.**

**AUTOMATIC SPRINKLER APPEALS BOARD**  
**DECISION AND ORDER**

**A) Statutory and Regulatory Framework**

This is an administrative appeal held in accordance with Massachusetts General Laws Chapter 30A; Chapter 148, section 26A1/2; Chapter 6, section 201 and 530 CMR, relative to a decision of the Boston Fire Department, ordering the installation of automatic sprinklers in a building owned by the Boston Redevelopment Authority (hereinafter referred to as the Appellant). The building, which is the subject of the order, is located at 523 Washington Street, Boston, MA.

**B) Procedural History**

By order of Notice dated 11-24-04 the Boston Fire Department issued an order to the Appellant to install automatic sprinklers in its building located at 523 Washington Street, Boston, in accordance with the provisions of M.G.L. c. 148, s.26A1/2. The Board held a hearing relative to this appeal on March 9, 2005, at the Department of Fire Services, Stow, Massachusetts.

Paul R. Osborne, BRA Engineering and Edwin Kotak from R.W. Sullivan , Inc. represented the Appellant. Martin P. McCormack and Brian Tuohy appeared on behalf of the Boston Fire Department. Present for the Board were: Maurice M. Pilette, Chairperson, Edward G. McCann

and Brian Gore, Chief Thomas Coulombe and Steven Rourke. Peter A. Senopoulos, Esquire, was the Attorney for the Board.

**C) Issue(s) to be Decided**

Whether the Board should affirm, reverse or modify the enforcement action of the Boston Fire Department relative to the subject building in accordance with the provisions of M.G.L. c.148, s. 26A1/2.

**D) Evidence Received**

1. Application for Appeal,
2. Abatement order
3. Report of Sullivan Code Group
4. Notice of hearing to Appellant dated 2-25-05
5. Notice of hearing to Fire Department dated 2-24-05
6. Floor/Sprinkler plans (5 pages)

**E) Subsidiary Findings of Fact**

- 1) By Notice dated 11-24-04 the Boston Fire Department issued an order to the Appellant to install automatic sprinklers in its building located at 523 Washington Street, Boston, in accordance with the provisions of M.G.L. c. 148, s.26A1/2
- 2) The provisions of M.G.L. c. 148, s. 26A1/2, require every building of more than seventy feet in height and constructed prior to January 1, 1975, to be protected with an adequate system of automatic sprinklers in accordance with the provisions of the State Building Code. The Appellant does not challenge the applicability of M.G.L. c. 148, s. 26A1/2 to the subject building.
- 3) The subject building consists of 7 stories and is owned by the Boston Redevelopment Authority (BRA). The building, once used as a theatre (Modern Theatre), is currently vacant and is in a state of disrepair. The BRA is in the process of seeking a person to develop this building which has historical significance and cannot be demolished.
- 4) At one time it appears that the building did have a working sprinkler system. The building has long since been unoccupied and open to the elements causing a substantial amount of damage to the building and the system. The system is currently inoperable. It is questionable whether or not portions of the existing system can be used. There is no active lighting and/or electrical system in the building.

- 5) The appellant has taken steps to clear all combustible debris within the building and has secured and locked the building from intruders. The Appellant periodically conducts inspections of the building. The fire department indicated that the appellant has been cooperative in taken the necessary steps towards meeting the requirements of s. 26A1/2. The appellant has retained a code consultant that has prepared a report relative to the existing conditions of the building and a recommended plan to provide an adequate level of sprinkler protection in the building. The Fire Department does not object to the plan as submitted.

**F) Ultimate Findings of Fact and Conclusions of Law**

- 1) The provisions of M.G.L. c. 26A1/2 apply to the subject building which is owned by the Appellant. In accordance with said law, an automatic sprinkler system should have been installed in this building several years ago.
- 2) The Board concludes that the fire protection plan as proposed by the Appellant's fire protection consultant provides an adequate level of fire protection based upon the circumstances of this building at this time

**G. Decision and Order**

The Board hereby affirms the order of the Boston Fire Department to install sprinkler protection in the subject building in accordance with the provisions of M.G.L. c.148, s.26A1/2. Upon review of the unique circumstances and facts presented at the hearing relative to this building, the board hereby adopts the fire protection recommendations as stated in the report prepared by the Sullivan Code Group, dated January 14, 2005, including sections 3.1 Fire Sprinkler System; 3.2 Fire Alarm System; 3.3 Building Separation and 3.4 Interior Conditions. Said report is hereby incorporated by reference into this determination. Plans for the installation of the sprinkler and related fire protection system shall be submitted for approval to the Boston Fire Department no later than 120 days from the date of this hearing (March 9, 2005). The installation of said system shall be completed no later than December 31, 2005.

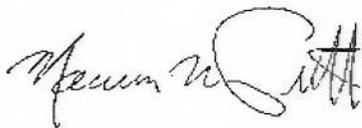
**H) Vote of the Board**

Maurice Pilette, (Chairperson)	In Favor
Edward G. McCann	In Favor
Thomas Coulombe	In Favor
Brian Gore	In Favor
Steven Rourke	In Favor

**I) Right of Appeal**

You are hereby advised you have the right, pursuant to section 14 of chapter 30A of the

General Laws, to appeal this decision, in whole or in part, within thirty (30) days from the date of receipt of this order.



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Maurice Pilette  
Chairperson

Dated: 4-28-05

Cc: Captain Martin McCormack, Boston Fire Department, Fire Prevention Division,  
115 Southampton Street, Boston, MA. 02118

**A COPY OF THIS DECISION AND ORDER WAS FORWARDED BY CERTIFIED  
MAIL, POSTAGE PRE-PAID, TO: Mr. Edwin A. Kotak, Jr., Sullivan Code Group, 343  
Commercial Street, Union Wharf, Unit 302, Boston, MA. 02109**

**MODERN THEATER  
WASHINGTON STREET  
BOSTON, MASSACHUSETTS  
RWS File 8412.00**

**Existing Conditions  
Analysis Report  
Fire Protection Recommendations**

**January 14, 2005**

**Prepared For:**

Boston Redevelopment Authority  
Capital Construction Department  
10 Drydock Avenue  
Boston, MA 02210

**Prepared By:**

Edwin A. Kotak, Jr., P.E.  
& Don E. Contois

**Reviewed By:**

Paul D. Sullivan, P.E.

**Sullivan Code Group**

**Robert W. Sullivan, Inc.**, Union Wharf Condominium, 343 Commercial Street, Unit 302  
Boston, MA 02109, Phone: (617)523-8227, Fax: (617) 523-8016

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## 1. Introduction

This existing conditions report includes a summary of our recommendations regarding the most feasible means to provide fire sprinkler protection throughout the existing Modern Theater building. This existing building is located at 523-525 Washington Street in Boston, Massachusetts. Massachusetts General Law Chapter 148 Section 26A½ requires that automatic fire sprinkler protection be installed throughout all existing high-rise buildings in the Commonwealth. This existing building has been found to meet the definition of a high rise structure and, therefore, must comply with MGL, Ch. 148, § 26A1/2. Given that this building is in such disrepair, the feasibility of installing a new automatic wet pipe fire sprinkler system that fully complies with MGL, Ch. 148, § 26A1/2 has been questioned by both the Boston Redevelopment Authority (BRA) and the Boston Fire Department (BFD). Therefore, this report has been generated with the intent to help develop a plan for protecting this building in a manner that is acceptable to the Boston Redevelopment Authority and the Boston Fire Department as part of the Fire Sprinkler Appeals Board application for relief from having to bring this building into total compliance with Massachusetts General Law Chapter 148 Section 26A½.

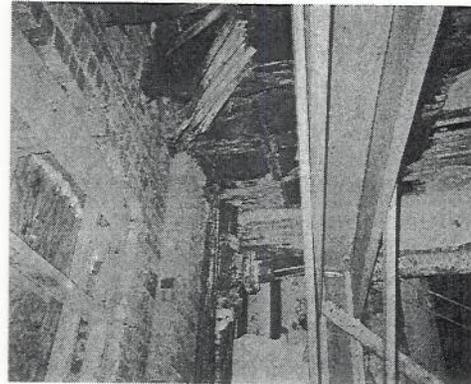
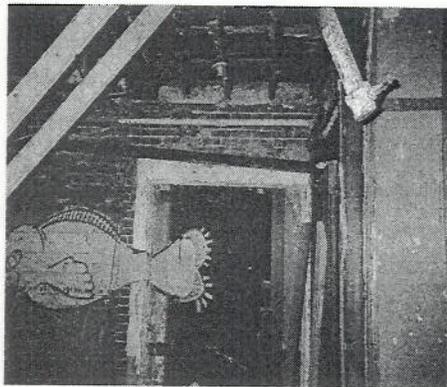
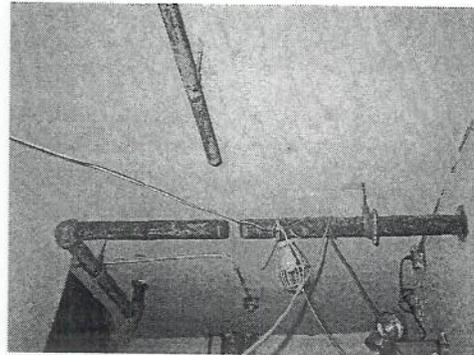
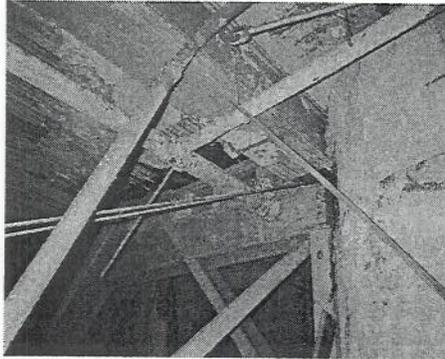
The recommendations outlined later in this report are based on information gathered during several site visits to this building and through conversations with the BRA and the BFD.

## 2. Existing Building Conditions and Concerns

### 2.1. Existing Fire Protection Systems

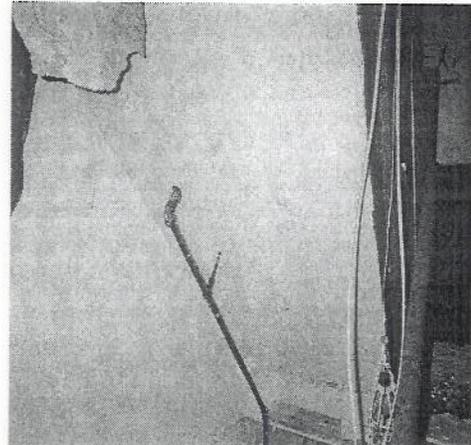
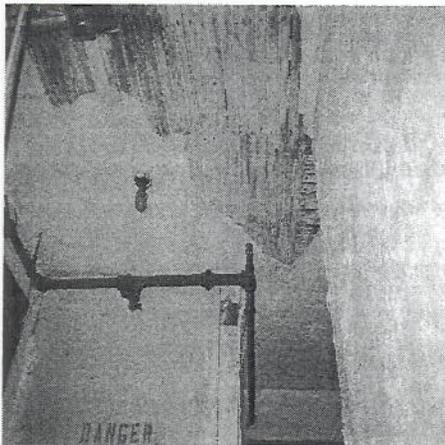
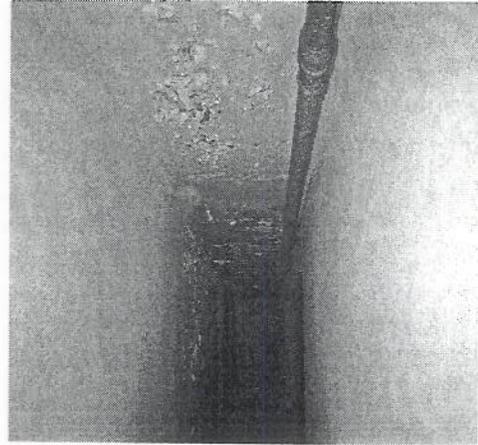
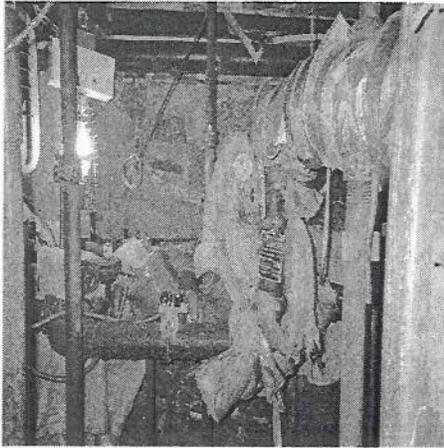
It appears that at one time this building was equipped with a sprinkler system throughout almost all areas within the structure. This building has not been in use for many years and most of the structure and contents have been subjected to the weather through roof, floor and wall openings. Openings to the exterior have since been sealed. However, cold weather has caused the existing fire sprinkler systems on the upper three levels of the building to freeze and many of the cast iron pipe fittings have split and fallen to the floor. In addition, the need to perform emergency repairs to structurally stabilize the building and close openings exposed to the weather caused a need to have many sections of existing fire sprinkler system piping on the upper floors of the building to be cut and abandoned in place to facilitate the repairs.

The photographs below show examples of the conditions that now exist on the upper levels of this building:



The existing piping, fittings and sprinkler heads from the ceiling of the theater (the underside of the 5<sup>th</sup> Floor level) and below appear to be substantially intact. However, the possible re-use of this piping could be problematic. Therefore, the BRA has decided that the best approach to providing reliable protection would be to replace this existing with new piping.

The photographs below show examples of the conditions that now exist below the 5<sup>th</sup> Floor level of this building:



The fire protection water supply arrangement that once existed for the Modern Theater and the adjacent building at 515 Washington Street has been changed. Previously, both buildings were supplied from a common source. However, the Boston Redevelopment Authority has had work completed to separate this common source.

The Modern Theater now has a separate fire protection water service entering into the basement of the building. The water service is active from Washington Street to the control valve at the basement wall. A new, separate, fire protection water service line is been installed from Washington Street to the existing adjacent building at 515 Washington Street. As a result of the work performed, each building now has a separate fire protection systems water supply from Washington Street.

The room in the Basement of The Modern Theater that contains the existing water supply piping and valves is heated and will remain heated.

There does not appear to be a functioning fire alarm system within The Modern Theater building. However, the existing supervisory and water flow switches within the room in the Basement of The Modern Theater that contains the existing water supply piping will remain as installed should they be required to be used at some future date.

## 2.2. Building Separation

The existing building exterior wall and common wall between the Modern Theater and the adjacent building at 515 Washington Street have openings in them that could allow the spread of fire and smoke into adjacent buildings. The primary openings observed during site visits were: one per floor on the 5<sup>th</sup>, 6<sup>th</sup> & 7<sup>th</sup> Floors that are now partially closed using rolling fire doors, one at the Mezzanine level secured by a metal door and one at grade level that is also secured by a metal door. These openings, as well as others along the building perimeter at grade, will be sealed and/or protected as required for their location.

## 2.3. Interior Conditions

Many of the building stairs and other paths of travel are currently covered with debris that has fallen from above. This makes travel within the building difficult under normal conditions.

In all areas but the room that contains the existing water supply piping and valves there is no active heating system of any kind.

At the present time there are also no active lighting and/or electrical systems in most of the building. However, the Boston Redevelopment Authority has made arrangements with the Local Utility Provider (Nstar) to provide new electrical service to The Modern Theater. Once this new service is installed, the Boston Redevelopment Authority intends to improve lighting throughout the building.

# 3. **Summary of Recommended Actions**

## 3.1. Fire Sprinkler System

With the exception of the floor directly above the original main seating area, protect all levels of the building using a dry pipe sprinkler system. New components will include: a new dry pipe valve supplied from the existing connection to the Public water main in Washington Street, new

pipng throughout the entire buildings, a new air compressor, water flow pressure switch, low air pressure switch and Fire Department Connection.

The new dry pipe fire sprinkler system will be supplied through one dry pipe valve. In discussions with the BFD, it was agreed that, given this building has been posted as abandoned, no standpipe system will be installed and there is no need to zone individual floors.

The room in the Basement of The Modern Theater that contains the existing water supply piping and valves is heated and will be provided with proper lighting. This room will continue to serve as the Fire Sprinkler Valve Room and will contain: a backflow prevention device, the dry pipe valve, air compressor and fire alarm system control panel. In addition to a low air alarm for the dry pipe system, low temperature and power failure alarms will also be installed that will report these supervisory conditions to a listed UL Central Station for the BRA.

### 3.2. Fire Alarm System

A new fire alarm system control panel will be installed. This new panel will monitor the status of the dry pipe system, temperature within the Fire Sprinkler Valve Room and electrical power. All alarm, supervisory and trouble signals will report to a UL Listed Central Station for the BRA. All alarm signals will be passed from the UL Listed Central Station to the Boston Fire Department. A remote annunciator will be located in the lobby entrance from Washington Street at grade level.

Manual pull stations would be installed at all exists to grade and a rotating beacon would be installed on the exterior of the building at a location acceptable to the Boston Fire Department.

A Knox Box will also be provided at a location on the exterior of the Modern Theater building chosen by the Boston Fire Department.

### 3.3. Building Separation

Existing building separations will be closed as required to prevent the spread fire and smoke to the adjacent building. Any penetrations that will affect neighboring buildings will be filled as required to maintain proper fire separation. Any openings accessible from grade will be secured in accordance with the Massachusetts State Building Code (780 CMR) Section 121.7.

### 3.4. Interior Conditions

The interior of the building and especially the stairs and other paths of travel, will have all the debris removed such that travel within the building is made as safe as possible for emergency responders. This will also help to reduce the fuel load within the building.

## 4. **Proposed Project Schedule**

1. Prepare Fire Protection Construction Documents  
Proposed duration 45 days
2. Submit to City of Boston ISD for permits  
Proposed duration to secure permits 30 days
3. Issue Bid Package  
Proposed duration of bid period 15 days
4. Award installation contract
5. Contractor field survey and mobilization  
Proposed mobilization duration 30 days
6. Install fire sprinkler / fire alarm systems  
Proposed duration of installation 105 days
7. Commence Testing and Certification  
Proposed Duration 10 days
8. Boston Fire Department Inspection
9. Final project turn over to BRA

**PROJECTED TOTAL PROJECT DURATION : 240 days (8 months)**