

The Commonwealth of Massachusetts

Department of Public Safety

Board of Building Regulations and Standards

One Ashburton Place, Room 1301

Boston, Massachusetts 02108-1618

Phone (617) 727-7532 Fax (617) 227-1754

TTY (617) 727-0019

www.mass.gov/dps

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Date: March 27, 2008

Name of Appellant: Norton S. Remmer

Service Address: 18 John St. Place
Worcester, MA 01609

In reference to: Emerson College
Paramount Center Building
543-561 Washington Street
Boston, MA

Docket Number: 05-444

Property Address: 543-561 Washington Street
Boston, MA

Date of Hearing: 7-24-07

We are pleased to enclose a copy of the decision on the request for certain variances from the Building Code.

Sincerely:

BUILDING CODE APPEALS BOARD

Patricia Barry
Patricia Barry, Clerk

cc: Building Code Appeals Board
Building Official

COMMONWEALTH OF MASSACHUSETTS

SUFFOLK, ss.

**Building Code Appeals Board
Docket No. 05-444**

Emerson College,)
Appellant)
)
v.)
)
City of Boston,)
Appellee)

BOARD’S RULING ON APPEAL

Procedural History

This matter came before the State Building Code Appeals Board (“Board”) on Appellant’s appeal filed pursuant to 780 CMR §122.1. In accordance with 780 CMR §122.3, Appellant asks the Board to grant variances from 780 CMR §§780 CMR §§917.9.1; 705.3; 705.5; 403.5; and 403.2 of the Massachusetts State Building Code (“Code”). Appellant had filed an application with the City of Boston’s Inspectional Services Department (“ISD”), requesting modifications from the above-cited sections of the Code (“Application”). The Application involves a project to construct a nine-story building adjacent to the existing Paramount Theatre (“Theatre”). The new building will provide student dormitory living facilities on floors six through nine; classroom, studio, and performance spaces will be provided on floors one through five. The basement of the new building will provide additional facilities serving both the Theatre and the new building (collectively, the “Project”).

By letter dated June 14, 2007, the Inspectional Services Department for the City of Boston (“Appellee”), denied the Application because the Project would violate 780 CMR §§917.9.1; 705.3; 705.5; 403.5; and 403.2.

In accordance with G. L. c. 30A, §§10 and 11; G. L. c. 143, §100; 801 CMR §1.02 et. seq.; and 780 CMR §122.3.4, the Board convened a public hearing on July 24, 2007 where all interested parties were provided with an opportunity to testify and present evidence to the Board.

Norton S. Remmer, Ross Cameron, John Walden, and Lenny Belliveau appeared on behalf of Appellant. Appellee did not appear.

Reasons for Variances

Fire Alarms

The first issue is whether Appellant should be allowed a variance from the Code's fire alarm requirements. Under 780 CMR §917.9.1:

The sequence of operation of the voice alarm signaling system shall be as follows:

1. Sound an alert (pre-signal) tone (the alert tone shall be a 900 hertz tone pulsed to produce one round of code 4 at approximately one second intervals.
2. Activate the recorded message regarding the evacuation procedure. The alarm and communications system shall provide a pre-recorded message to all required areas. The message shall contain the following information. "attention please. The signal tone you have just heard indicated a report of an emergency in this building. If your floor evacuation signal sounds after this message, walk to the nearest stairway and leave the floor. While the report is being verified, occupants on other floors should await further instructions."

This message shall be transmitted three times.

A female voice shall be used for this message.

3. Activate the evacuation signal on the floor of incident and the next floor above and below (the evacuation signal shall be in accordance with 780 CMR 917.8.2.1

Rather than have the same alarm sequence on all nine floors of the Project, Appellant proposes having alarm functions on the sixth through ninth floors that are different from alarm functions for the first through fifth floors. The reason for the difference is that the alarm history in Appellant's dormitories indicates that dormitory events (such as burned popcorn, smoke from microwave cooking) would frequently trigger "nuisance" alarms in the lower five floors, which are to be used for theatre, sound stage, and film screening functions. In addition, if the Paramount Theatre space were not separated, for purposes of alarm and evacuation, from the nine-floor new building, nuisance alarms in any part of the dormitory areas would lead to evacuation of the Theatre.

With this background in mind, Appellant proposed an alarm sequence as follows: If the floor of origin were the ninth, eighth, or seventh, evacuation would occur on the floor of origin, the immediately above, and the floor immediately below. If the floor of origin were the sixth floor, the sixth and seventh floor would be evacuated, but not the floor below---the fifth. If the floor of origin were the fifth floor, the sixth floor would be evacuated, along with the fifth, fourth, third and second. Because the fifth floor contains double height spaces, the fourth and fifth floors are considered interconnected for alarm purposes. Similarly, the third and second floors are interconnected and considered one level for alarm purposes.

If the floor of origin were the fourth floor, the alarm would evacuate the sixth, fifth, and fourth floor. If the third floor were the origin, the fifth, fourth, third, second and first floors would be evacuated. If the second floor were the origin, the third, fourth, first and second would be evacuated. If the first floor were the origin, the second floor and basement would be evacuated. For basement origin, the basement and first floor would be evacuated.

Openings

The next issue is whether window openings for the Project should be allowed within three feet from the adjacent Opera House. Under §705.3, a maximum area of unprotected or protected is specified for exterior walls. Under §705.5, approved protectives must be provided for every opening that is less than 15 feet vertically above the roof of an adjoining building or adjacent structure which is within a horizontal fire separation distance of 15 feet of the wall in which the opening is located, unless such roof construction affords a fire resistance rating of not less than one hour.

The Project calls for windows in the dormitory portion that will be located within three feet of the adjacent Opera House, approximately 19 feet above the Opera House roof. The exterior wall of the Project has a one-hour fire rating. Two intake vent louvers in the North Wall of the Project are protected by one-hour fire rated dampers. Appellant also represented that the roof of the Opera House located in the vicinity of the openings is constructed of reinforced concrete T-sections with concrete protected steel beams supporting the T-sections. Thus, the "rating appears to be at least one hour and the concrete cover on the wide flange steel beams appears to be at least 2 inches." In sum, Appellant represented that the entire roof assembly appears to have a fire rating of at least one hour. Further, the Opera House owners do not oppose the proposed wall design.

Voice Alarm Signaling Systems

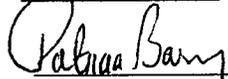
Appellant proposes that the voice alarm signaling systems, under 780 CMR §403.5, would be programmed based on the proposed modifications described above for *Fire Alarms*, and would operate in accordance with §917.7.1 with programming modifications to the addressable systems.

Sprinkler System

Appellant proposes a modification to the transformer vault to conform with the "N-Star" requirements, which have been specified as an alternative to the requirement of an automatic sprinkler system under 780 CMR §403.2 and G. L. c. 148, §26A. The N-Star requirements that the Board has approved are as follows:

1. The cable within the vault is flame retardant or limited combustible.
2. The dielectric fluid is a limited combustible fluid.
3. The vault is enclosed in three hour fire resistance rated construction.
4. The vault is at grade or no more than one level below grade. Access to the vault is directly from the exterior or via a dedicated two hour passageway.
5. The vault is protected with automatic smoke detection connected to the building fire alarm system which notifies the fire department upon activation.
6. The room is limited to the sole use of the transformer equipment and is limited in size to accommodate said equipment only. Storage is prohibited in the vault enclosure.
7. The vault is provided with spill containment.
8. An emergency fire plan has been developed with and approved by the fire department.

A true copy attest, dated: March 27, 2008



Patricia Barry, Clerk

All hearings are audio recorded. The digital recording (which is on file at the office of the Board of Building Regulations and Standards) serves as the official record of the hearing. Copies of the recording are available from the Board for a fee of \$10.00 per copy. Please make requests for copies in writing and attach a check made payable to the Commonwealth of Massachusetts for the appropriate fee. Requests may be addressed to:

Patricia Barry, Coordinator
State Building Code Appeals Board
BBRS/Department of Public Safety
One Ashburton Place – Room 1301
Boston, MA 02108