

Portland ME 04101-2325

Guy T. Labrecque - Architect 207.774.4441 207.774.4016 E-mail: GLabrecque@CWSarch.com

February 18, 2010

#### CODE COMPLIANCE REPORT

#### Renovation for an Aaron's Rental @ 1041 Brighton Avenue Portland, Maine

### **IBC AND LIFE SAFETY CODES REVIEW**

#### 1.0 Codes Review

### Description of Building's Function and Program:

The project will consist of the partial renovations to 1041 Brighton Avenue. It is the intent of Aarons' to lease five adjacent tenant spaces, fitting up each space to suit their needs and allowing circulation to pass between all five spaces. All spaces are currently vacant and were used as mercantile use spaces. The perimeter/spatial limits (building shell) will not be modified or altered as part of this renovation. The work will be specific to interior renovations.

The building is being looked upon as a "non-separated, mixed use" building containing business and mercantile use spaces. Mercantile use will be more restrictive in many instances.

#### 1.0.A Occupant Classification(s):

Use and Occupancy Classification: Use Group M – Mercantile

Chapter 43, "Building Rehabilitation" – Building "Modification" per 43.2.2.1.3 Chapter 36, "New Class B - Mercantile Occupancies"

#### 1.0.B Specific Occupancy Areas / Incidental Use Areas relative to the Scope of this Project:

#### IBC 2006 - Table 508.2 - Incidental Use Areas:

The western side of the layout will be used for the typical storage of sellable goods. This space will be considered a storage room having a total area greater than 100 square feet. The building is not equipped with an automatic fire extinguishing system and therefore this space will require a 1-Hour Fire Barrier. No other "Incidental Use Areas" are anticipated for this project.

Code Compliance Report – Renovation To 1041 Brighton Avenue, Portland Maine 1 of 5

#### 1.0.C Building Height and Area Limitations:

The current/existing building height and area will not be impacted by this project.

### 1.0.D Type of Construction:

NFPA 220: Type II, 000 **IBC 2006: Type II (B)** 

### The building consists of the following assemblies;

The building is a steel framed building. The exterior walls are a combination of bearing and non-bearing masonry veneer wall assemblies.

### The roof framing consists of a steel beam and truss system

## **Exterior Walls:**

Masonry wall assemblies with steel stud framing and GWB finishes on the inside. Aluminum storefront window wall units.

### **Interior Walls:**

Steel stud framing Batt insulation Gypsum wallboard wall surfacing

#### 1.0.E Required Fire Resistance Ratings of applicable Structure Elements:

#### **IBC 2006 - Table 601**

**Element** 

Structural Frame – Incl. columns, girders, trusses 0 hr Bearing walls 0 hrs Exterior 0 hrs Interior

Nonbearing walls and Partitions Exterior (Ref. Table 602: > 35')

Nonbearing Walls and Partitions

Roof Construction – Incl. supporting beams and joists

Floor Construction – Incl. supporting beams and joists

Code Compliance Report – Renovation To 1041 Brighton Avenue, Portland Maine 2 of 5

0 hrs

### 1.0.F Means of Egress:

**NFPA 101 – Chapter 7: Table 7.3.1.2 IBC 2006 – Chapter 10: Table 1004.1.2** 

### Occupant Load NFPA: Class B, Mercantile Occupancy:

O.L. – sales floor @ street level: 4815.5 sf @1/30 sf/pps = 161 people644.7 sf @ 1/100 sf = 7 peopleO.L. - Office areas:1645.4 sf @ 1/300 sf = 6 peopleO.L. – Storage/Shipping Receiving:

Total Occupant Load of the space. = 174 people

### **Minimum Number of Exits:**

#### IBC 2006 – Chapter 1019.2, 1007.1

Two separate means of egress are required.

There are double doors at the south side of the sales area providing (2) 3'-0" door openings. There is a single 3'-0" door at the rear of the storage space. These doors would be considered remotely located.

### NFPA 101 – Chapter 39.2.4.1 & 39.2.4.2

The existing exit locations not be impacted by this project.

#### **Capacity of Egress Components:**

**Element** Minimum Allowable

Exit Access Corridors: Width

Width 174 people @ .2 inches per person = 35" opening

The existing door configurations exceed the minimum requirements of NFPA and IBC.

#### **Egress Arrangement:**

Use Group M – IBC 2006

Dead-end corridor (1016.3) Exit Access Travel Distance (Table 1016.1) 200 ft 75 ft Common Path of Travel (1014.3)

Code Compliance Report – Renovation To 1041 Brighton Avenue, Portland Maine 3 of 5

### **New Mercantile Occupancy: NFPA 101**

Dead-end corridor (36.2.5.2.1) 50 ft Common Path of Travel (36.2.5.3) 75 ft 150 ft Travel Distance to an Exit (36.2.6)

NFPA-101, 36.2.5.11

Without a sprinkler system – an egress door to the rear of the show room will need maintained due to lack of a sprinkler system.

### 1.0.G Emergency Lighting: NFPA 36.2.9.1

Emergency Lighting is required.

### **1.0.H Interior Finish System:**

IBC 2006 - Chapter 8, Table 803.5, 804.4 NFPA 101 – 36.3.3, and Chapter 10.2

Wall and Ceiling Finishes: Class A, B Vertical Exits Class A, B Exit Access Corridors Class A, B Class A, B, C All other spaces Class A, B or C Class A, B

Floor Finishes:

Vertical Exits / Exit Corridors No Requirements Class I or II

# 1.0.1 Detection, Alarm, and Communications:

**IBC 2006 – Chapter 9 (907.2.7)** NFPA 101 – Chapters 36 (36.3.4.2)

A detection/fire alarm system is not required by NFPA 101: 36.3.4.1 for Class B mercantile occupancies. A detection/fire alarm system is not required by IBC (907.2.7).

# **1.0.J Extinguishing Requirements:**

## IBC / International Fire Code - Chapter 960

Portable Fire Extinguishers shall be provided at locations required by the *International Fire Code*.

### NFPA 101 – Chapter 36.3.5.3, 9.7.4.1

Portable fire extinguishers are required by NFPA 101:36.3.5, 9.7.4.1 and in accordance with NFPA 10.

## NFPA 10, Table 5.2.1:

Fire extinguishers shall be provided such that the maximum travel distance to an extinguisher is 75'.

Code Compliance Report – Renovation To 1041 Brighton Avenue, Portland Maine 4 of 5

# 2.0 GENERAL BUILDING COMPONENTS

# 2.0.A Stair Assemblies

**IBC 2006 – Chapter 10** 

Maximum Riser Height (1009.3) Minimum Rise Height (1009.3) Minimum Tread Depth (1009.3) 11" Minimum Head Room (1009.2) 80" (6'-8") Maximum Vertical Rise to Landing (1009.6) 12'-0" not less than 34" / not greater than 38" Hand Rail Height (1009.12.2) Guardrail Height (1013.2, 1013.3) at least 42" Baluster Spacing shall resist the passage of a 4" sphere cannot pass through any opening up to 34".

### NFPA 101 – Chapter 7, Table 7.2.2.2.1.1(a) New Stairs

Spacing shall resist the passage of an 8" sphere from 34" to 42".

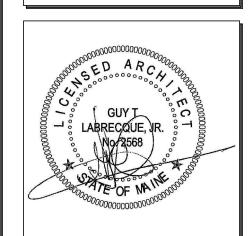
Maximum Riser Height (7.2.2.2.1(a)) Minimum Rise Height (7.2.2.2.1(a)) 4" 11" Minimum Tread Depth (7.2.2.2.1(a)) Minimum Head Room (7.2.2.2.1(a)) 80" (6'-8") Maximum Vertical Rise to Landing (7.2.2.2.1(a)) 12'-0" Hand Rail Height (7.2.2.4.4.1) not less than 34" / not greater than 38" Guardrail Height (7.2.2.4.5.2) not less than 42" Baluster Spacing shall resist the passage of a 4" sphere per 7.2.2.4.5.3

# ...End of Code Compliance Report

Code Compliance Report – Renovation To 1041 Brighton Avenue, Portland Maine 5 of 5

Architects

☐ 434 Cumberland Avenue Portland, ME 04101 Phone: (207)774-4441 Fax: (207)774-4016 www.CWSarch.com



ARON'S

I/AARON'S, RPORATED SEI

2 0 ဟ

CODE CORENT

Drawing Number: