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November 24, 2014

Interior Fit-up for Global Studios
54 Danforth Street
Portland, Maine

IBC AND LIFE SAFETY CODES REVIEW

1.0 Codes Review

Description of Building's Function and Program:

The project consists of the interior fit-up to 5,738 square feet of existing vacant tenant spaces within the 54 Danforth Street building. The project is limited to interior fit-up for Assembly and Business Uses, audio/video production studio and office spaces with a limited amount of exterior work creating/correcting accessible means of egress points.

Based upon conversations with the City of Portland Code Enforcement staff, this project will require a "Change of Use." The intent of this submission is to request this process and to properly document the needs associated with the change.

1.0.A Occupant Classification(s):

IBC 2009:
Use and Occupancy Classification: Section 303, "Assembly Group A-3"

NFPA 101 - 2009:
Classification of Occupancy: Chapter 12, "New Assembly Occupancies"

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

IBC 2009 - Table 508.2.5:
There are on incidental use areas within the scope of the project.

1.0.C Building Height and Area Limitations:

Building Height:

IBC 2009 – Chapter 5, Section 506
The existing multi-tenant building is a split-level building of 11,735 total square feet. The project will consist of combining two tenant spaces into one, impacting and creating a space of approximately 5,738 square feet space. There are three adjacent tenant spaces in the building.

Proposed: The overall building height and area will not be impacted by this project.

1.0.D Type of Construction:

NFPA 220: Type II, 000
IBC 2009: Type II(B)

THE EXISTING BUILDING CONSISTS OF THE FOLLOWING ASSEMBLIES;

Structural System:
Internal steel columns, beams and joist assemblies.

Exterior Walls:
Brick veneer, metal stud framing, batt insulation and gypsum wall board assemblies.

Interior Walls:
Metal stud framing, batt insulation and gypsum wall board assemblies.

PROPOSED ASSEMBLIES;

It is the intent of this project to reclassify the existing buildings construction type from Type IIB to Type V. As indicated above the existing building has 2-stories and an overall area of 11,735 sf. It is further understood that due to site constraints and the limits of the existing structural components the buildings growth potential is limited.

Type VB - Allowable Height and Area Evaluation:

AREA: Table 503 and Section 506: Assembly A-3 Occupancy
- 6,000 sf plus 200% sprinkler increase = 12,000 sf allowable.

HEIGHT: Table 503 and Section 504.2: Assembly A-3 Occupancy
- 40 feet and 1 story. Sprinkler Adjustment 60 feet and 2 stories.

It is not the intent of this project to make any modifications to the existing structural system nor will the scope impact exterior wall assemblies. It is the intent that new interior partitions, stairs and ramp framing assemblies to be constructed with combustible building materials.

Structural System:
No change.

Exterior Walls:
No change.

Interior Walls:
All new interior wall framing will be wood stud and gypsum wall board assemblies. The stairs and ramps will be constructed of wood framing and wood decking.

1.0.E Required Fire Resistance Ratings of applicable Building Elements:

IBC 2009 - Table 601

Element	Rating
Structural Frame – Incl. columns, girders, trusses	0 hr
Bearing walls	
Exterior	0 hrs
Interior	0 hrs
Nonbearing walls and Partitions Exterior (Ref. Table 602: > 30')	0 hrs
Nonbearing Walls and Partitions Interior	0 hrs
Floor Construction – Incl. supporting beams and joists	0 hrs
Roof Construction – Incl. supporting beams and joists	0 hrs

1.0.F Means of Egress:

NFPA 101 – Chapter 7: Table 7.3.1.2
IBC 2009 – Chapter 10: Table 1004.1.1

Occupant Load Calculations:

Reference Drawing LS1.02 for all occupant load calculations.

1.0.G Minimum Number of Exits:

IBC 2009 – Section 1021

Due to the occupant load size and the travel distance requirements of 1021.1 – two means of egress shall be provided.

There are four (4) exits provided within the overall tenant space. Reference Drawing LS1.01for further information.

1.0.H Capacity of Egress Components:

Element	Minimum Allowable
Exit Access Corridors:	
Width	44 inches clear
Doors:	
Width	32 inches clear

Total Assembly A-3 Use O.L. = 190/2= 95 95x0.2 = 19" wide opening

Total Business Use O.L. = 24/2= 12 12x0.2 = 2.4" wide opening

The existing and proposed doors do and will conform.

Egress Arrangement:

Use Group A-3: IBC 2009 Chapter 10

Common path of egress travel (Section 1014.3)	75'
Dead-end corridor (Section 1018.4)	20'
Exit Access Travel Distance (Table 1016.1)	250' with a sprinkler system

New Assembly Occupancy: NFPA 101

Common Path of Travel (Section 12.2.5.1.2)	20' from any point, 75' <50 occupants
Dead-end corridor (Section 12.2.5.1.3)	20'
Travel Distance to an Exit (Section 12.2.6.2(1))	250' with sprinkler system

1.0.H Illumination of the Means of Egress:

NFPA 101 – Section 12.2.8

Required.

1.0.I Emergency Lighting:

NFPA 101 – Section 12.2.9.1

Required.

1.0.K Interior Finish System:

IBC 2009 - Table 803.9 and Section 804
NFPA 101 – Section 12.3.3.3 and Section 10.2

Wall and Ceiling Finishes:	NFPA	IBC
Exit Enclosures and Passageways	Class A,B	Class B
Corridors	Class A,B	Class C
Rooms and Enclosed Spaces	Class A,B,C	Class C
Interior Floor Finishes:		
Vertical Exits / Exit Corridors	Class II	Class I or II

1.0.L Detection, Alarm, and Communications:

IBC 2009 – Chapter 9
NFPA 101 – Section 12.3.4.1.1 and Section 9.6.1

An approved fire alarm system is required due to the O.L. subject to 300 or more occupants. It is the intent of this project to extend and modify the existing fire alarm system into the area of fit-up as required.

1.0.M Extinguishing Requirements:

IBC 2009 - Section 906

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

IFC – Section 906.1

Fire extinguishers are required within 30' of commercial cooking equipment.

1.0.N Flame-Retardant Requirements:

NFPA 101 – Section 12.4.5.11.1

Combustible scenery of cloth, film dry vegetation, and similar materials shall meet the requirements of NFPA 701. Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.

2.0 GENERAL BUILDING COMPONENTS

2.0.A Stair Assemblies

IBC 2009 – Chapter 10

Maximum Riser Height (1009.3)	7"
Minimum Rise Height (1009.3)	4"
Minimum Tread Depth (1009.3)	11"
Minimum Head Room (1009.2)	80" (6'-8")
Maximum Vertical Rise to Landing (1009.6)	12'-0"
Hand Rail Height (1012.2)	not less than 34" / not greater than 38"
Guardrail Height (1013.2)	at least 42"
Opening Limitations	Business Use openings shall resist the passage of a 4" sphere through any opening up to 34". Spacing shall resist the passage of an 8" sphere from 34" to 42".

NFPA 101 – Chapter 7

Maximum Riser Height (7.2.2.2.1.1(a))	7"
Minimum Rise Height (7.2.2.2.1.1(a))	4"
Minimum Tread Depth (7.2.2.2.1.1(a))	11"
Minimum Head Room (7.2.2.2.1.1(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"
Opening Limitations	Business Use openings shall resist the passage of a 4" sphere through any opening up to 34". Spacing shall resist the passage of an 8" sphere from 34" to 42".

End of Code Compliance Report

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 03/09/15

CWS Architects

LICENSED ARCHITECT
GUY T. LABRECQUE, JR.
No. 2568
STATE OF MAINE

OWNER / DEVELOPER
GLOBAL CONTENT PARTNERS
30 DANFORTH STREET
PORTLAND, MAINE 04101

PROJECT TITLE
INTERIOR FIT-UP FOR GLOBAL STUDIOS
54 DANFORTH STREET
PORTLAND, MAINE 04101

DRAWING TITLE
CODE SUMMARY
CWS PROJ. NO.: 13424

DATE
REVISION DESCRIPTION

DRAWING NUMBER
LS1.00

SCALE: 1/8" = 1'-0"
DATE: 02/13/2015

ISSUED FOR CONSTRUCTION

A5 CODE SUMMARY
REFERENCED FROM: SCALE: N/A