**Project Description:**

The project is a renovation of a commercial interior tenant space leased by Maine Medical Center at 901 Washington Street in Portland Maine. The project includes modification of the floor plan, creation of a conference room, and replacement of some of the finishes. The area of work is 8,881 square feet within a tenant space of 27,307 square feet. Diagram 1 shows the entire tenant space with the area of work shaded and (3) exit discharge locations for the tenant space. The following is a list of IBC codes that are relevant to this project

**IBC 2009**

**Chapter 3: Use and Occupancy Classification**

Maine Occupancy: SECTION 304 BUSINESS GROUP B
Accessory Occupancy: SECTION 303 ASSEMBLY GROUP A-3 (Occupant load greater than 50, floor area greater than 750 sf)

**Chapter 5: General Building Heights and Areas**

The building is an existing business occupancy. No additions or changes in occupancy are proposed that would alter the existing occupancy designation. The existing building height and area are unchanged.

Separation of Occupancies: not required under 508.2.1.
The proposed assembly occupancy is less than 10% of the building area of the story in which it is located. (Note conference rooms smaller less than 750 sf or less than 50 occupants are considered B occupancy. See table 303.1) See Diagram 2 for area tabulations

**Chapter 6: Types of Construction**

The building construction type is unchanged and not pertinent to this project. Refer to building construction permit for building type as needed.

**Chapter 7: Fire and Smoke Protection Features**

No changes are required or proposed to any of the walls, barriers, enclosures, partitions, etc. called for in Chapter 7

## Chapter 9: Fire Protection Systems

Separate permits for the design and installation of a revised sprinkler and alarm system shall be provided by contractors licensed in the state of Maine, with engineered stamped drawings submitted to the authorities having jurisdiction as required by the State of Maine
Fire extinguishers provided according to requirements of NFPA 10, Table 6.2.1.1. See diagram 9. (Fire extinguishers required by NFPA 101 39.3.5)

## Chapter 10: Means of Egress

**1004 - Occupant Load** from table 1004.1. 171 Occupants
Load calculated by use or area, whichever is greater (See diagram 3)
**1005 – Required Egress Width**
Calculated: 171 x .02 = 34.5”
(Other requirements more restrictive)
**1006 –Means of egress illumination**: The existing lighting layout will remain to the largest extent possible and the new lighting will conform to MMC standards for illumination levels. The code required minimum of 1 fc at the floor will be exceeded
**1007 - Accessible means of egress**: In this plan the primary consideration of accessible means of egress is to provide the required maneuvering clearances at doors labeled exit 2, exit 3, and exit 4 on diagram 2. Exit 1 is existing. The doors at the exit discharge are also existing
**1008 - Doors, gates and turnstiles**: All new doors shall be 36” wide leafs with ADA compliant lever operation. Doors at exits 1, 2, 3, and 4 shall swing in the direction of egress per 1008.1.2 (see diagram 4)
**1011 – Exit sign:** (See Life Safety Device Plan
**1014 – Exit Access**: Access to Exit Discharge B is through an intervening space as allowed by 1014.2. (See diagram 5)
Common Path of Travel (Per NFPA table A.7.6) Due to the open office area, the direction to both exits is clearly visible through most of the space, resulting in generally short common paths
Business Occupancy: 250’, Assembly Occupancy (greater than 50) 20’ (See diagram 6)
**1015 - Exit and exit access doorways**: (2) exits required, (2) provided. 1/3 diagonal required for sprinklered building and provided at exits 1 and 2 and exits 3 and 4. See diagram 7
**1016 – Exit Access Travel Distance**: (Per NFPA table A.7.6)
Assembly: 250’ Business: 300’ (Sprinklered building) See Diagram 8
**1017 - Aisles:** Aisles formed by furniture: 36” minimum width required

## NFPA 101, Chapter 39 Existing Business Occupancy

The requirements of chapter 39 with regard to egress component requirements such as doors, passageways, occupant load calculations, capacity of the means of egress, number of exits, travel distance, remoteness of exits, emergency lighting, exit signs, etc., are largely in agreement IBC 2009

Note that the IBC threshold for panic hardware on egress doors is 50 occupants, whereas NFPA 101 sets the threshold at 100 occupants. The more restrictive requirement applies. Note that the travel distance shown in NFPA table A7.6 are more restrictive than IBC travel distance requirements and are therefore adhered to in this project

## NFPA 1, Fire Code

The requirement of NFPA 1 are largely in agreement with NFPA 101 and IBC, especially in regards to egress component requirements such as doors, passageways, occupant load calculations, capacity of the means of egress, number of exits, travel distance, remoteness of exits, emergency lighting, exit signs, etc.