2009 NFPA CODE SUMMARY

General Building Description:

Existing building is a 4 story multi-tenant office building w/ two exit stairs. One stair exits directly to the outside, One stair exits into the first floor unrated lobby that leads directly to the exterior. The lobby

stair has a rated exit access door at the second floor landing

Renovation Scenario: This project is a new tenant fit up for the first floor of the building.

> The space was previously business office use. The new tenant is a bank branch with administrative offices

9,000 S.F. First Floor Project Work Area: Square Footage:

Occupancy Classification: 'B'- Business Use

Sprinkler & Fire Alarm: Building will be equipped with an approved automatic, supervised sprinkler system per NFPA 13 and fire alarm system.

Construction Type: Type III (200)– Construction consists of non-combustible components at exterior walls and any material permitted by code at

the interior.

Height & Area Requirements: Per Table 38.1.6 – Minimum Construction Requirements: None. REQUIREMENT MET.

Occupancy Loads/ Load Factors used for each space, total calculated load, and Egress Capacity:

distribution of load to exit doors is shown on the Life Safety Plans. There are three separate functional areas of the plan: The bank branch, which has two exits - one leading directly to the exterior and the other exiting through the reception area of the office space, the administrative office area, which has two exits, one through the ground level of the exit stair at the rear of the building and one through the main common building lobby at the front of the building, and a stand alone ATM vestibule that has one exit directly to the

The Occupancy Load Plan illustrates that sufficient egress capacity is provided at all exit access doors or exit doors leading from the space. **REQUIREMENT MET.**

Exit Discharge:

At the existing first floor lobby, there is an existing rated, enclosed exit stair serving upper floors where the enclosure ends at the second floor landing and the stair is open from the landing down to the lobby. The existing elevator also opens into this lobby as does the exit access door from the first floor tenant space being renovated under this permit. The existing condition does not meet the requirements of current codes. While section 7.7.2 allows 50% of the building's exits and exit capacity to exit through a space at the level of exit discharge, the stair must be enclosed down to the LED and then a person can leave that enclosure and go through a space to reach the exterior provided the exit is readily visible, the building is sprinklered, and the floor of the space is separated from

To address this, the plans call for the addition of two new rated doors at the lobby and rated partitions at the lobby enclosing walls to essentially make the lobby a part of the stair enclosure. The doors also are located to isolate the existing elevator from this space. **REQUIREMENT MET.**

Required Fire Resistance Rating: Per 8.6.5, Required fire resistance ratings for enclosure of exits shall conform to 7.1.3.2.1. Under this section, 7.1.3.2.1(2) indicates that an exit must be separated from the rest of the building with a 2 hour rated separation when it connects 4 or more stories. &.1.3.2.1(2)(b) states that in existing buildings that are fully sprinkled, existing exits that otherwise require a 2 hour rated separation can be reduced to 1 hour. All proposed and existing enclosure components of the exit at the lobby will be made to be

1 hour rated. **REQUIREMENT MET.**

Common Path Limit: 100' (sprinklered-Table A.7.6) **Travel Distance Limits:**

> Dead-end Corridor: 50' (sprinklered--Table A.7.6)) Travel Distance: 300' (sprinklered--Table A.7.6))

REQUIREMENT MET.

Remoteness of Exits: Per 7.5.3.3 Remoteness of exits in portions of the building required

spaces below with a rated assembly.

to have two exits shall be a minimum of 1/3 the longest diagonal of the area or building apart (if sprinkled). Drawing indicates Max. diagonal and remoteness of exits at areas requiring two exits.

REQUIREMENT MET

2009 IBC/IEBC CODE SUMMARY

General Building Description: Existing building is a 4 story multi-tenant office building w/ two exit stairs. One stair exits directly to the outside, One stair exits into the first floor unrated lobby that leads directly to the exterior. The lobby stair has a rated

exit access door at the second floor landing

Renovation Scenario: This project is a new tenant fit up for the first floor of the building. The space

was previously business office use. The new tenant is a bank branch with

administrative offices.

9,000 S.F. First Floor Project Work Area: Square Footage:

Occupancy Classification: 'B'- Business Use

Sprinkler & Fire Alarm: Building is equipped with an approved automatic, supervised

sprinkler system per NFPA 13 and fire alarm system.

Construction Type: Type 3B - Construction consists of non-combustible components at exterior walls and any material permitted by code at the interior.

Height & Area Requirements: Per Table 503 – Construction Type Limitations:

Business Use, Type 3B can be up to four stories in height and 19,000 S.F.

per floor (Sprinkled) REQUIREMENT MET.

Occupancy Loads/ Load Factors used for each space, total calculated load, and distribution

load to exit doors is shown on the Life Safety Plans. There are three separate functional areas of the plan: The bank branch, which has two exits - one leading directly to the exterior and the other exiting through the reception area of the office space, the administrative office area, which has two exits,

one through the ground level of the exit stair at the rear of the building and one through the main common building lobby at the front of the building, and a stand alone ATM vestibule that has one exit directly to the exterior.

The Occupancy Load Plan illustrates that sufficient egress capacity is provided at all exit access doors or exit doors leading from the space. REQUIREMENT MET.

Egress Through Intervening Spaces:

The bank branch has one exit path through the reception area of the adjacent administrative office area. Per 1014.2, 1. States that egress from one room or space shall not pass through adjoining or intervening rooms or

areas, except where such adjoining rooms or areas and the area served are accessory to one or the other, are not a Group H occupancy and provide a

discernable path of egress travel to an exit. REQUIREMENT MET.

Exit Discharge:

Egress Capacity

At the existing first floor lobby, there is an existing rated, enclosed exit stair serving upper floors where the enclosure ends at the second floor landing and the stair is open from the landing down to the lobby. The existing elevator also opens into this lobby as does the exit access door from the first floor tenant space being renovated under this permit. The existing condition does not meet the requirements of current codes. While section 10.27.1 exception 1 allows 50% of the building's exits and exit capacity to exit through a space at the level of exit discharge, the stair must be enclosed down to the LED and then a person can leave that enclosure and go through a space to reach the exterior provided the exit is readily visible, the building is sprinklered, and the floor of the space is separated from spaces below with a rated assembly. Part of the scope of this project is to relocate the existing HC access ramp in the lobby to the opposite side of the space requiring the space's enclosing partitions to be reconfigured. As such, the lobby renovations are required to meet Level 2 Alteration requirements of the IEBC.

Per Section 703.2.1, existing vertical openings connecting two or more floors shall be enclosed with a 1hour rated enclosure. However, exception 3.2

allows such openings to remain unenclosed provided the following criteria are

3.2.1 – The communicating space has a low hazard occupancy or moderate hazard occupancy with sprinkler protection.

3.2.2 – The lowest or next to lowest level of the opening is a street level

floor. REQUIREMENT MET.

REQUIREMENT MET.

3.2.3 - The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected

spaces will be readily obvious to all of the occupants. REQUIREMENT MET.

3.2.4 – Exit capacity is sufficient to provide egress simultaneously for all of the occupants of all levels by considering all areas to be a single floor area in terms of determination of exit capacity.

REQUIREMENT MET.

3.2.5 –Each floor level, considered separately, has at least 50% of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another

communicating floor level or be exposed to smoke or fire

spreading from another communicating floor level. REQUIREMENT MET.

Alternatively, Exception 5 also allows the stair to remain unenclosed at the first floor level. It states that in Use Group B, a minimum of 30 minute enclosure shall be provided to protect all vertical openings not exceeding three stories but such enclosure shall not be required for buildings protected by an automatic sprinkler system. REQUIREMENT MET.

50' (Section 1018.4, exception 2)

Travel Distance Limits: Common Path Limit: 100' (Section 1014.3, exception 1)

REQUIREMENT MET.

Remoteness of Exits:

Travel Distance:

Dead-end Corridor:

300' (sprinklered--Table 1016.1) Per 1015.2.1, exception (2), Remoteness of exits in portions of the building

Also see Exit Discharge requirements above.

IEBC -Renovation

Requirements:

Per Section 404.1, work is considered to be a Level 2 Alteration. Level 2

Alterations must comply with sections 6 and 7.

Per Section 601.2, An existing building or portion thereof shall not be altered such that the building becomes less safe than its existing condition. REQUIREMENT MET.

required to have two exits shall be a minimum of 1/3 the longest diagonal of the area or building apart (if sprinkled). Drawing indicates Max. diagonal and remoteness of exits at areas requiring two exits. **REQUIREMENT MET.**

Per Section 701.3, all areas of new work in the renovation must meet the requirements of the IBC. REQUIREMENT MET.

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Portland Branch

27 Pearl Street 1st Floor Tenant Space Portland, Maine

FINAL CONSTRUCTION SET

MARCH 4, 2015

WRITTEN CODE SUMMARY

Scale: As Noted