## **CODE SUMMARY**

# **GENERAL INFORMATION:**

Project Number:

MARCH 2017 Date Prepared: Interior renovations and improvements to existing medical office space. Project Description:

International Building Code (IBC) 2009 Edition

NFPA 101 Life Safety Code 2009 Edition

2009 ADA Standards for Accessible Design Guidelines for Design and Construction of Healthcare Facilities, The Facility Guidelines Institute, 2010 Edition

ASHRAE Standard 62.1-2007 - Ventilation for Acceptable Indoor Air Quality Mechanical:

NFPA 90A - Standard for the installation of air conditioning and ventilation systems, 2009 Edition.

MUBEC - Maine Uniform Building and Energy Code

Maine State Internal Plubming Code, Latest Edition (2015 Edition)

NFPA 13 - Installation of Sprinkler Systems - 2016 Edition. Sprinklered: Throughout with an approved sprinkler system (Existing sprinkler head layout to be modified to accomodate new floor

EXAM 424

EXAM 421

EXAM 406

EXAM 429

404

400

OFFICE 488

EXAM 422

MA 418

EXAM 408

EXAM 407

NFPA 70 - National Electrical Code, 2014 Edition Electrical: NFPA 72 - National Fire Alarm Code, 2007 Edition

**USE AND OCCUPANCY CLASSIFICATIONS:** Existing Medical Office Building, Business

Occupancy Classification: NFPA 101: Business (Chapter 38) Section 6.1.11.1. A business occupancy includes Doctor's offices. Section A4.1.11.1.

IBC: Business group B

### FIRE/SMOKE RESISTANCE RATINGS:

Incidental Use AREAS: IBC: Boiler Rooms over 15psi and 10 HP, Laundry Rooms >100sf, Storage Rooms >100sf, Waste and Linen Collection Rooms >100sf: In a sprinklered building, separated by construction capable of resisting the passage of smoke; seal at top, bottom, and all penetrations; doors shall be self closing (on closers) or automatic-closing on detection of smoke and be in accordance with NFPA 80. Section and Table 302.1.1.

OFFICE 415

OFFICE 414

OFFICE 411

OFFICE 410

OFFICE 409

Where multiple code editions are noted, contractor to provide work in accordance with the more stringent.

Existing exits to remain. No impact to existing exits and exit enclosures as part of the scope of work.

### **MEANS OF EGRESS**

MEANS OF EGRESS, EXIT ACCESS: INTERVENING SPACES:

IBC: Egress can pass through intervening spaces that are accessory to the area being served. Egress cannot pass through kitchens, storage rooms, closets, or spaces used for similar purposes. Egress cannot pass through rooms that can be locked to prevent egress. Section 1013.2. NFPA: If the corridors don't have to be rated, they can discharge into open plan areas. Section 7.5.1.2.2.

# OCCUPANT LOAD:

BUSINESS: IBC: 100 sf/occupant gross, Table 1004.1.2.

NFPA: 100 sf/occupant gross, Table 7.3.1.2.

MECHANICAL EQUIPMENT ROOMS: IBC: 300 sf/occupant gross, Table 1004.1.2.

LOW HAZARD STORAGE: IBC: 300 sf/occupant gross, Table 1004.1.2.

CAPACITY FACTORS: IBC: Stairways = 0.2" per occupant.

Other egress components = 0.15" per person, Table 1005.1. NFPA: Stairways = 0.3" per person, Level Components and Ramps = 0.2" per person, Table 7.3.3.1.

Occupant Load: (14,112 GSF) TOTAL OCCUPANT LOAD LEVEL 4 = 142

MEANS OF EGRESS, GENERAL:

## HEADROOM:

IBC: The means of egress shall have a height of not less than 7'-0". Section 1003.2. NFPA: Headroom shall be 90" (7'6") min. above finish floor. Section 7.1.5.1. This ceiling height shall be maintained for at least two-thirds of the room with the remaining ceiling height being at least 80" (6'-8") above finish floor. Section 7.1.5.2. ADAAG: 80" Section 4.3.5

# PROTRUDING OBJECTS:

IBC: Protruding objects can reduce headroom to 80" (6'-8") for not more than 50% of the walkway. Door closers and stops can reduce headroom to 78" (6'-6"). A barrier is required where the headroom is reduced below 80" with the leading edge 27" high maximum. Section 1003.3.1. NFPA: Projections from the ceiling shall be at least 80" (6'-8") min. above finish floor. Section 7.1.5.1.

# FREE-STANDING OBJECTS:

IBC: A free-standing object, mounted on a post or pylon, shall not overhang the edge of the post or pylon more than 12" if the object is greater than 27" and less than 80" above the floor. Section 1003.3.2.

IBC: Objects are allowed to project 4" max. out from walls between 27" and 80", but are not allowed to reduce the minimum clear width required. Sections

**ELEVATION CHANGE:** IBC: Any change of elevation less than 12" in a means of egress must use sloped surfaces. If less than 6", the sloped surface must contrast to adjacent surfaces or the ramp must use handrails. Section 1003.5.

NFPA: 1/4" max. if vertical; 1/2" allowed if beveled at 1 to 2. Section 7.1.6.2. A 1:20 slope is allowed without meeting ramp requirements. Section 7.1.6.3. Changes of elevation of less than 21" with stairs shall have 13" treads. Section 7.1.7.2.2.

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ADAAG: ¼" max. if vertical; ¼" to ½" if beveled at 1 to 2; greater than ½" and 5% is a curb ramp or ramp.

### **CODE SUMMARY CONT**

### ACCESSIBLE MEANS OF EGRESS:

IBC: All accessible spaces must have one accessible means of egress. In new buildings, where more than one exit is required from accessible spaces, at least two means of egress must be accessible. Section 1007.1. The 48" width requirement for enclosed stairs and the area of refuge are not required in sprinklered buildings, Section 1007.3 Exception 3. Stairs not required to be accessible must provide signage indicating the location of accessible means of egress, Section 1007.7.

NFPA: Unless only one exit is required, two accessible means of egress are required. Section 7.5.4.

# AREA OF REFUGE:

IBC: An area of refuge is not required if the building is sprinklered. Section 1007.3 Exception 3.

NFPA: An area of refuge is not required if the building is sprinklered. Section 38.2.2.12.2.

ADAAG: Areas of rescue assistance are not required in buildings equipped with "supervised automatic sprinkler systems".

#### MEANS OF EGRESS, DOORS:

IBC: Doors shall provide a clear width of 32" wide min., nominal 48" wide max., and 80" high min., Section 1008.1.1. Doors shall swing in the direction of travel when serving an occupant load of 50 or more persons. Section 1008.1.2.

NFPA: Doors shall provide a clear width of 32" min. Section 7.2.1.2.4. Doors shall swing in the direction of travel when serving an occupant load of 50 or more, in exit enclosures, and in high hazard contents areas. Section 7.2.1.4.2. & 3. During its swing, a door shall leave not less than one half of the required width of an aisle, a corridor, a passageway, or a landing unobstructed and shall not project more than 7" into this width when fully open, Section 7.2.1.4.4. See Sections 7.2.1.5., 6, 7, & 8 for detailed door hardware requirements. See Section 7.2.1.9 for detailed requirements for powered doors.

#### DOORS IN SERIES:

IBC: The space between the doors shall be 48" plus the dimension of the door swing. Section 1008.1.7.

## DOOR OPERATIONS:

IBC: Doors shall readily opened from the egress side. Section 1008.1.8.

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TOILET 468

IBC: Threshold shall be 0.5" high max. If more than 0.25" high, edges shall be beveled at a ratio of 1 vertical to 2 horizontal. Section 1008.1.6. NFPA: Floor level shall not vary by more than 1/2" on either side of a door; a door threshold shall not exceed 1/2"; level changes greater than 1/4" shall be beveled no steeper than 1 to 2; Section 7.2.1.3.

### NUMBER OF EXITS:

IBC: Two exits or two exit access doorways from any space shall be provided where the occupant load exceeds 50. Section 1014.1. If any space or area has an occupant load greater than 500 and less than 1000, three exits are required. If more than 1000, four exits are required. Section 1018.1. NFPA: Two exits or two exit access doorways from any space shall be provided except that a single exit is allowed to be common for the common path of travel allowed. Section 38.2.4.2 (1).

DOOR ARRANGEMENT: IBC: In a sprinklered building, if two doors are required from an area, they must be a distance apart at least as great as 1/3 the greatest diagonal

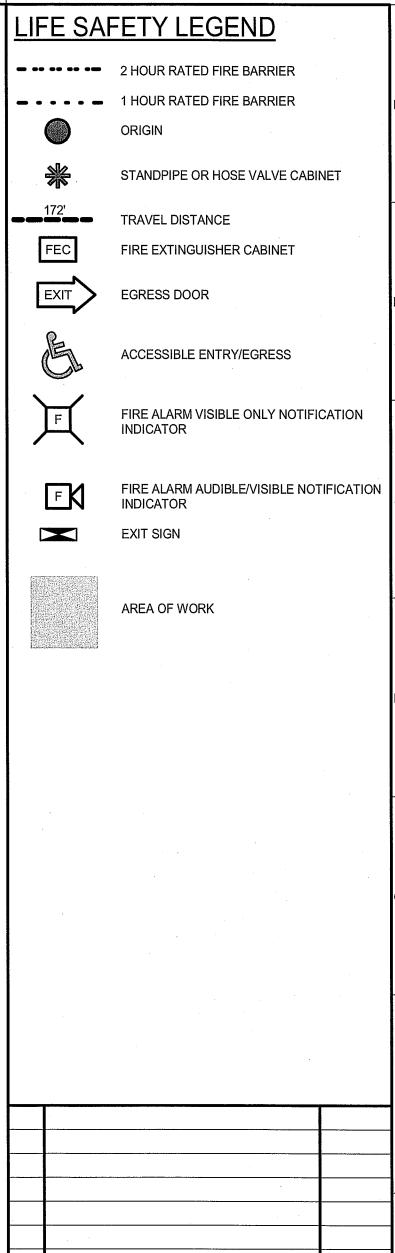
dimension. Section 1014.2.1 E 2. NFPA: Two exits shall be located at a dist, apart from each other at least 1/3 the length of the max, overall dimension; if more than two exits are required. at least two shall meet the separation requirement and the rest located such that if one is blocked by fire, the rest are available. Sections 7.5.1.3.2, 7.5.1.3.3 and 7.5.1.3.6.

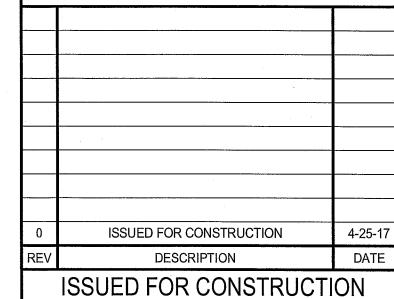
BREAK 447

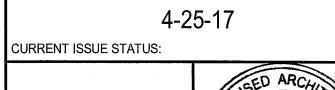
### EXIT ACCESS DIMS

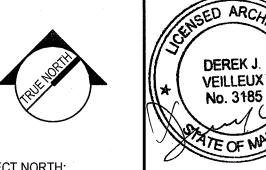
NFPA	IBC
100', 38.2.5.3.1	100', 1013.3 E 1
300', 38.2.6.1	300', Table 1015.1
44", 38.2.3.2	44", 1016.2
50', 38.2.5.2.1	50', 1016.3 E 2
	100', 38.2.5.3.1 300', 38.2.6.1 44", 38.2.3.2











PROJECT NORTH: SMRT Architects and Engineers 144 Fore Street/P.O. Box 618 Portland, Maine 04104

RCHITECTURE ENGINEERING PLANNING INTERIORS ENERGY MAINE MEDICAL PARTNERS

SURGICAL CARE RENOVATIONS

PORTLAND, MAINE

CODE COMPLIANCE PLAN

SHEET TITLE:

SMRT FILE:

SCALE: AS NOTED

DJV PROJECT NO: ROJECT MANAGER: VE OF RECORD: IOB CAPTAIN: CAH/JCH DRAWN BY:

GI002-17027 SHEET No.

LEVEL 4 - LIFE SAFETY PLAN

1/8" = 1'-0"

A1