



WHIPPLE-CALLENDER ARCHITECTS

Updated March 6, 2017
February 28, 2017

Renovations to 117 Auburn Street -Medical Offices for New England Foot & Ankle Specialist

CODE REVIEW SUMMARY

Portland Zoning- 2009- Relevant sections:

14-250 Dimensional Req.:

Zone: R-P Residence-Professional Zone permitted use: Medical offices are permitted use. Also Stream Protection Overlay Zone

No minimum lot size: 6,000 sf

Setback requirements

Street frontage:	60' min.
Front setback:	20'
Side setback:	12'
Rear yard:	20'

Max. permitted impervious surface – According to abutting Residential Zone R3 or .70 Surface Ratio

Max. Floor area Ratio (F.A.R.) – According to nearest residential Zone R3 or.55

Max. permitted bldg. height is 45'

First floor is 4,897 sf. Second floor is 5,024 sf (tenant will occupy only 522 sf)

Parking- is 1 space for every 400 SF of office. When fully rented 9,921sf /400=25 spaces.

IBC- 2009- Relevant sections:

The existing building use is defined as Business Group B

Table 503 indicates that the Type II B structure can have 23,000 s.f. per floor and can be 3 stories while remaining unsprinklered. **THE BUILDING IS SPRINKLED AND DOES NOT EXCEED THIS SF (4,897 sf floor. With future build-out 9,921 sf)**

Table 601 indicates 0 hour rated components for bearing walls, partitions, floor & roof construction for Type II B construction.



WHIPPLE-CALLENDER ARCHITECTS

Table 1004.1 shows maximum floor area per occupant for Business use to be 100 gross sf per occupant. 4,897sf / 100 is 49 people

IEBC- 2009- Relevant sections;

404.1 Scope Level 2 alterations include the reconfiguration of space, the addition or elimination of any door or window, the reconfiguration of any systems, or installation of any additional equipment.

404.2 Application Level 2 alterations shall comply with the provisions of Chapter 6 for Level 1 alterations as well as the provisions of Chapter 7.

705.3 Number of exits: The building has 3 means of egress on the ground floor and 2 on the second floor.

705.6 Dead-end Corridors: Exception 2: In other than Group A or H, the maximum length of a dead-end corridor shall be 50' in buildings equipped with an automatic fire alarm system. **THE BUILDING MEETS THIS REQUIREMENT.**

711.1 Energy Conservation minimum requirements: Level 2 alterations to existing buildings are permitted without requiring the entire building to comply with the energy requirements of the IECC. The alterations shall conform to the energy requirements of the IECC as they relate to new construction only.

KNOX BOX SHALL BE PROVIDED

1. Owner- Greg Pomeroy
2. Architect- Whipple Callender Architects, PO Box 1276 Portland, Maine 04101 (775-2696)
3. Proposed use- Medical offices
4. Square footage of structure- 9,921 total s.f. gross ; Work to include 4,897 s.f. work on 1st floor and 522 sf on 2nd floor.
5. Elevation of all structures- existing 11' floor to floor
6. Proposed fire protection of all structures- fully sprinkled
7. Hydrant Locations- Auburn Street
8. Water main sizes and locations- not known
9. Access to any Fire Department Connections-Connection to existing sprinkler system provided
10. Access to all structures (2 sides Min.)- Clear access to 3 sides
11. A code summary shall be included referencing NFPA and all fire department technical standards-

NFPA 101-2009 – Chapter 39: Existing Business Occupancies



WHIPPLE-CALLENDER ARCHITECTS

39.2 Means of Egress

39.2.1.1 All means of egress must be in accordance with Chapter 7 and this chapter

39.2.2.2 Doors Doors complying with 7.2.1 shall be permitted.

39.2.2.3 Stairs Stairs complying with 7.2.2 shall be permitted. Permitted minimum width clear is 36", maximum height of risers is 8 inches, minimum tread depth is 9 inches, minimum headroom is 6'-8" and maximum height between landings is 12'. **In this building clear stair width is 43", risers are 7" treads are 11", minimum head room between landings exceeds 8'. And height between landings is 11'.**

7.2.2.4.1. Handrails Stairs shall have handrails on both sides unless otherwise permitted. **In this building handrails exist on both sides of the stairs and are continuous for the full flight of stairs.**

7.2.2.4.4. Handrail details: Existing handrails shall not be less than 30" and not more than 38" above the surface of the tread, measured vertically to the top of the railing from the leading edge of the tread. **In this building the handrails are 33" above the surface of the tread**

7.2.2.4.4.5 New Handrails shall be installed to provide a clearance if not less than 2 1/4" between handrail and the wall to which is it fastened. **The clearance is 2" and this is not a new handrail**

7.2.2.4.4.7 New handrails shall be continuously graspable along their entire length. **This is not a new handrail and it is graspable along the entire length.**

7.2.2.4.5 Guard Details Existing guards on exiting stairs shall be permitted to be not less than 30" high. **Existing guard at stairs #2 is 43".**

39.2.3.2 The clear width of any corridor or passageway serving an occupant load of 50 or ore people shall not be less than 44 in. **This is the minimum width of Hall 1.**

39.2.4 Number of Exits:

39.2.4.1 The number of exits shall be in accordance with 7.4.1.1.and 7.4.1.3 through 7.4.1.6. Not less that two separate exits shall be provided on every story, Not less than two separate exits shall be accessible from every part of every story. Not less than two separate exists shall be accessible from every part of every story. **The plan complies with this requirement.**

39.2.5 Arrangement of Means of Egress

39.2.5.1 Access to all required means of egress shall be in accordance with Section 7.5

39.2.5.2 Dead-end corridors shall not exceed 50'. **The plan complies with this requirement.**



WHIPPLE-CALLENDER ARCHITECTS

39.2.5.3.1 Common path of travel shall not exceed 100' on a story throughout by an approved sprinkler system in accordance with 9.7.1.1(1). **The plan complies with this requirement.**

39.2.6 Maximum Travel Distance to Exits: Travel distance may not exceed 200' from any point in the building unless otherwise permitted. **In this building the maximum travel distance is 38'. The plan complies with this requirement.**

7.3 Capacity of Means of Egress

7.3.4.2.1 In existing buildings, the width of exit access shall be permitted to be not less than 28" **Exit access will typically be in excess of 28".**

7.5 Arrangement of Means of Egress

7.5.1.3.2 Where 2 exits, exit accesses, or exit discharges are required, they shall be located at a distance from one another not less than ½ the length of the maximum overall diagonal dimension of the area to be served, measured in a straight line between the nearest edge of the exits, exit accesses or exit discharges unless otherwise provided in 7.5.1.2.2 through 7.5.1.3.5 **The plan complies with this requirement.**

7.8. Illumination of Means of Egress

7.8.1.1. Emergency lights shall be provided in accordance with Section 7.8 for every building or structure where required in Chapter 11 - 43. For the purpose of this requirement, exit access shall include only designated stairs, aisles, corridors, ramps and passageways leading to an exit. **Emergency Lights are provided in this project.**

7.10 Marking of Means of Egress

7.10.1.2 Exits, other than the main exterior doors the obviously and clearly are identified as exits, shall be marked by an approved sign that is readily visible from any direction of exit access. **The plan will comply with this requirement.**

7.10.1.3 Exit Door Tactile Signage

7.10.1.4 Existing Exemption. The requirement of 7.10.1.3 does not apply to existing buildings, provided that the occupancy classification does not change.

7.10.8.5 Evacuation Diagram. Where a posted floor evacuation diagram is required in Chapters 11 -43, floor evacuation diagrams reflecting the actual floor arrangement and exit locations shall be posted and oriented in a location and manner acceptable to the authority having jurisdiction. **We will comply with this requirement**



39.3.4 Detection, Alarm and Communication Systems

39.3.4.1. A fire alarm system in accordance with Section 9.6 shall be provide in all business occupancies where any on of the following conditions exists:

1. The building is three or more stories in height,
2. The occupancy is subject to 100 or more occupants above the level of exit discharge.
3. The occupancy is subject to 1000 or more total occupants. **A fire alarm system exists and will be upgraded.**

31.3.4.2 Initiation of required fire alarm system shall be one of the following means:

1. Manual means in accordance with 9.6.2.1.1
2. Means if an approved automatic fire detection system that complies with 9.6.2.1.2 and provides protection throughout the building,
3. Means of an approved automatic sprinkler system that complies with 9.6.2.1.3 and provides protection throughout the building. **The fire alarm shall be initiated by automatic detectors and manual pull stations located as each egress stair exit door.**

39.3.4.3 Occupant Notification

39.3.4.3 During all times that the building is occupied, the required fire alarm system, once initiated shall perform on of the following functions:

1. It shall activate a general alarm in accordance with 9.6.3 throughout the building and the following also shall apply:
 - a. Positive alarm sequence in accordance with 9.6.3.3
 - b. A pre-signal system in accordance with 9.6.3.3. shall be permitted.
2. Occupant notification shall be permitted to be made via a voice communication or public address system in accordance with 9.6.3.9.2.

Horns sand strobes shall be installed in corridors and open office areas. Strobes shall be installed in all exam rooms and bathrooms. An existing annunciator exist in the lobby & will be upgraded.

39.3.5 Extinguisher Requirements. Portable fire extinguishers shall be provided in every business occupancy in accordance with 9.7.4.1 **We will comply with this requirement**