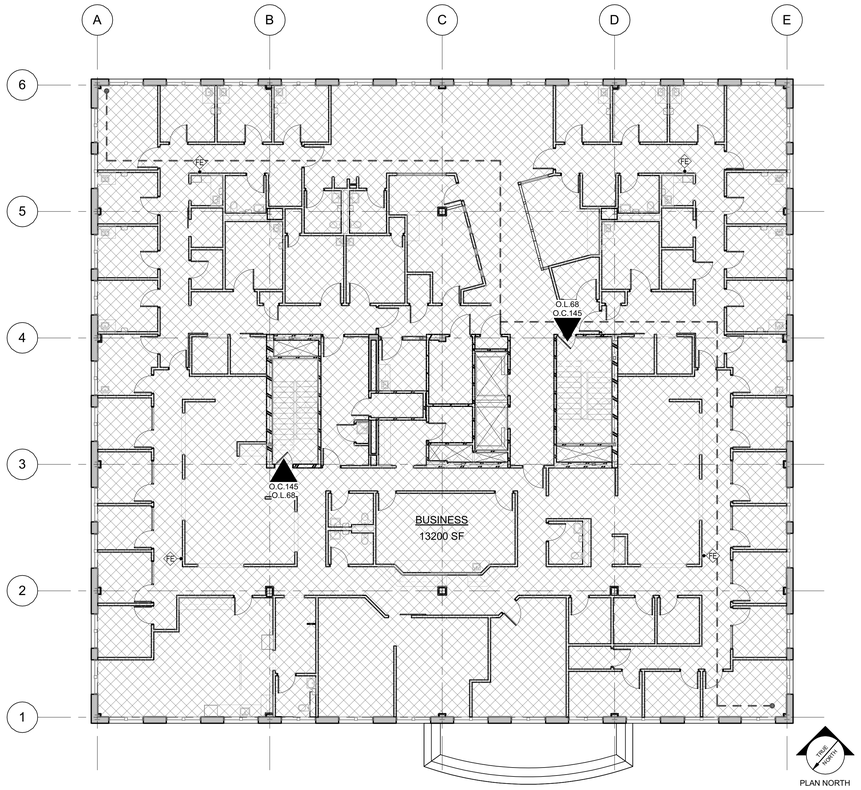
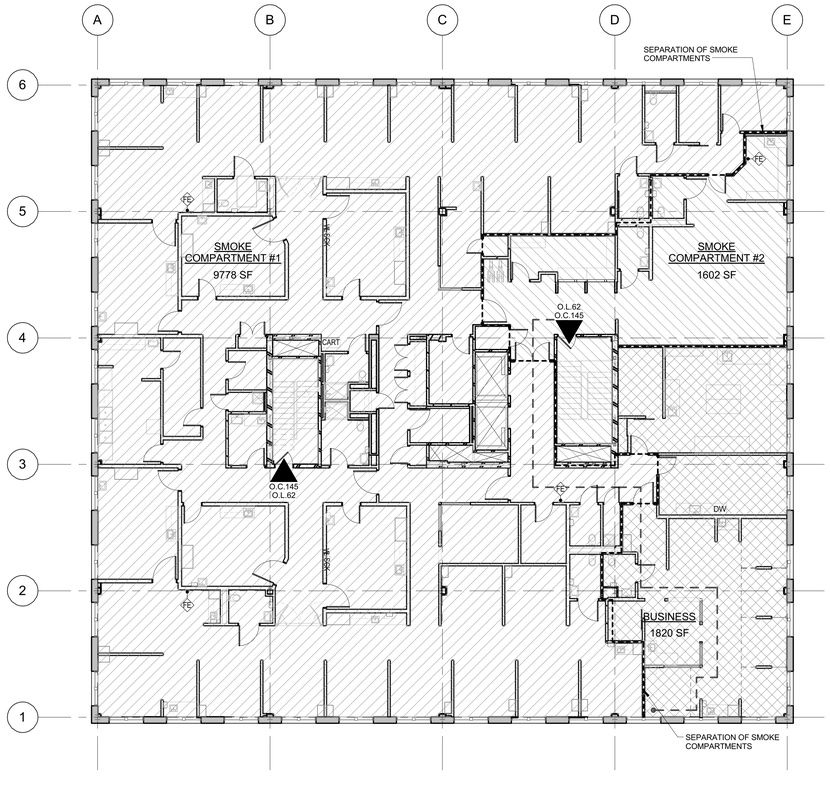


LEVEL 3 LIFE SAFETY PLAN



LEVEL 4 LIFE SAFETY PLAN

OCCUPANT LOADS							
AREA OCCUPANCY	AREA	OCCUPANT LOAD	OCCUPANTS	EGRESS WIDTH REQUIRED FROM LEVEL	EGRESS PROVIDED FROM LEVEL	STAIR WIDTH REQUIRED FROM LEVEL	STAIR WIDTH PROVIDED FROM LEVEL
LEVEL 3							
BUSINESS	13200 SF	100 SF	132	26.5	69	39.7	90
LEVEL 3: 1	13200 SF		132	26.5		39.7	
LEVEL 4							
AMBULATORY CARE AREA 1	9778 SF	100 SF	98	19.7	69	29.5	90
AMBULATORY CARE AREA 2	1602 SF	100 SF	17	3.3	69	5.0	90
BUSINESS	1820 SF	100 SF	19	3.7	0	5.6	0
LEVEL 4: 3	13200 SF		133	26.7		40.0	

Egress-Travel Path Schedule	
Travel Path ID	Travel Distance
1	120' - 5 15/16"
2	123' - 4 1/32"
3	119' - 7 3/32"

1 HR FIRE-RESISTANCE SMOKE PARTITION

1 HR FIRE-RESISTANCE WALL

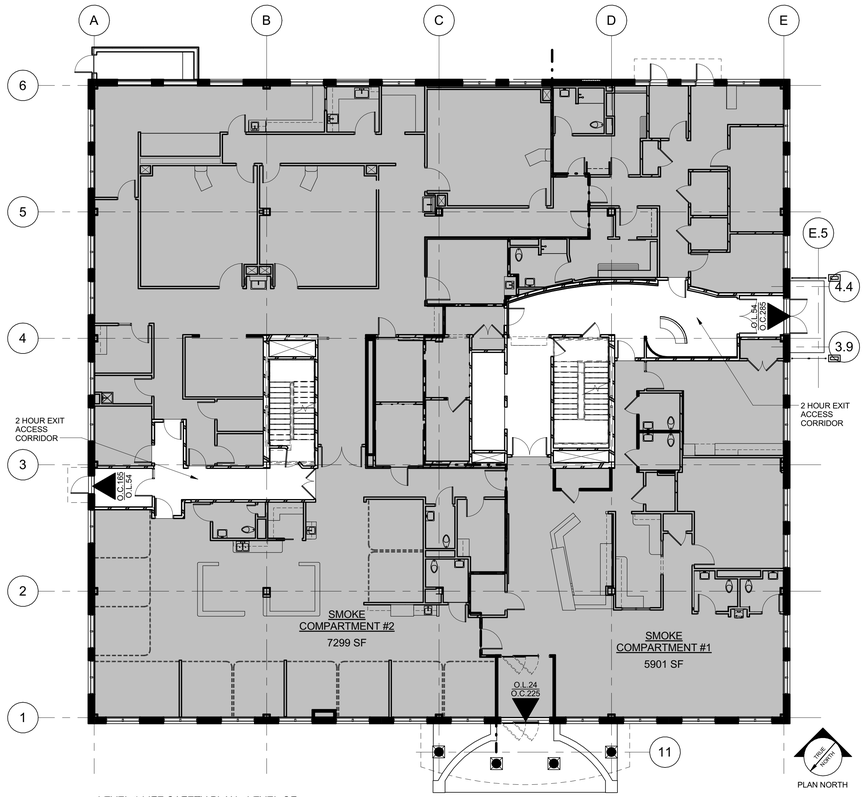
2 HR FIRE-RESISTANCE WALL

O.L. 140 / O.C.145 — OCCUPANT LOAD / OCCUPANT CAPACITY

EXIT

EGRESS TRAVEL LINE

FE — FIRE EXTINGUISHER



LEVEL 1 LIFE SAFETY PLAN - LEVEL OF EXIT DISCHARGE

CODES
Maine Uniform Building Code - MUBC
Maine Uniform Energy Code - MUEC
International Building Code - IBC - 2009
National Fire Protection Associateion - NFPA 1 and NFPA 101- 2009
Uniform Plumbing Code - UPC 2009
Portland City Code, Chapter 10, Fire Prevention and Protection

NARRATIVE:
The existing building consists of four stories served by 2 stairs, and existing elevators.
The building is defined as a reconstruction per NFPA. Any new work is to be built to current code.
We will be required to add illumination and emergency lighting to the current means of egress if not provided.
43.6.2.1. General - The means of egress shall comply with the requirements applicable to the existing occupancy as modified by 43.6.2.
43.6.2.2.1 Means of egress in rehabilitation work areas shall be provided with illumination and emergency lighting in accordance with the requirements of other sections of this Code applicable to new construction for the occupancy.
43.6.2.2.2 Where the reconstruction rehabilitation work area on any floor exceeds 50 percent of that floor area, means of egress throughout the floor shall be provided with illumination and emergency lighting in accordance with the requirements of other sections of this Codeapplicable to new construction for the occupancy, unless otherwise specified in 43.6.2.2.4.
43.6.4.1 In a building with rehabilitation work areas involving over 50 percent of the aggregate building area, automaticsprinkler systems shall be provided on the highest floor containing a rehabilitation work area and on all floors below inaccordance with the requirements of other sections of thisCode applicable to new construction for the occupancy.

OCCUPANCY CLASSIFICATIONS/OCCUPANCY GROUPS:
Level 3 - Business (IBC 304)
Level 4 - Business and Ambulatory Care (IBC 304, NFPA 20 and 38)

CONSTRUCTION TYPE:
Existing Construction - NFPA Type II (1,1,1), IBC Type IIA The building is permitted as type 2A in accordance with BOCA 1996. This would exceed current type 2A construction.

FIRE PROTECTION SYSTEMS:
Existing NFPA-13

ALLOWABLE AREA PER FLOOR - BUILDING 3:
IBC 503

TYPE	OCCUPANCY	ALLOWABLE AREA	SPRINKLER INCREASE(+200%)
IIA	BUSINESS	37,500	112,500

ACTUAL OCCUPANCY AREAS - BUILDING 3:
EACH LEVEL - BUSINESS;13,500 SF

AREA RATIOS:
BASED ON BUSINESS OCCUPANCY - 13,500/112,500 = 0.12

ALLOWABLE HEIGHT:
IBC 503

TYPE	OCCUPANCY	FEET	STORIES
IIA	BUSINESS	65+20 = 85	5+1 = 6

NFPA-101

TYPE	OCCUPANCY	FEET	STORIES
II (111)	AMBULATORY	N/A	≥2 PERMITED
II (111)	BUSINESS	N/A	NO MINIMUM REQUIREMENTS

SEPARATION OF OCCUPANCIES:
IBC 508.4, Table 508.4
No separation required for Business Occupancy
IBC 422
Smoke barriers. Smoke Barriers shall be provided to subdivided every ambulatory care facility greater than 10,000 sf. Into a minimum of 2 smoke compartments per story. The travel distance from any point in a smoke compartment to a smoke barrier door shall not exceed 200 feet. the smoke Barriershall be installed in accordance with 710

NFPA-101
6.1.14.4 Separated Occupancies
Table 6.1.14.4.1.(a) - 1-hr fire-rated separation required between Business and Ambulatory occupancies.

20.3.7.2 Every story of an ambulatory health care facility shallbe divided into not less than two smoke compartments, unlessotherwise permitted by the following:
(1) This requirement shall not apply to facilities of less than5000 ft2 (465 m2) that are protected by an approved automatic smoke detection system.
(2) This requirement shall not apply to facilities of less than10,000 ft2 (929 m2) that are protected throughout by an approved, supervised automatic sprinkler system installedin accordance with Section 9.7.

SMOKE AND FIRE PROTECTION:
Corridor walls: No Requirements for Business or Ambulatory care
Exterior walls: None
Vertical openings: **Fire-Resistance Rating.** Shaft Enclosures shall have a fire-resistance rating of not less than 2 hours where connecting four stories or more, and not less than 1 hour where connecting less than four stories
Exit stair enclosures: 2-hour w/ 90 minute opening protectives
Smoke Compartments: Minimum two in Ambulatory care over 10,000 sf.
Fire Barriers: Fire barriers must be continuous from floor deck to the floor or roof assembly above. Structure supporting fire barriers that provide enclosure of exits or protection of vertical openings must be provided with a fire-rating corresponding to the fire-rating of the supported fire barrier.

MEANS OF EGRESS:
Egress width: Stairs .3"/person (not less than 44")
Corridors/doors/ramps .2"/person (min 44" in Business/Ambulatory occupancies)
Door Width: Min clear 32", Max leaf 48"
Common path of travel: Business — IBC 1014.3 - Shall not exceed 100'; NFPA 38.2.5.3.1 - Shall not exceed 100'
Ambulatory — IBC N/A; NFPA Reference 38.2.5
Number of exits: Two exits or exit access from any Space space w/ o.l.< 49 or where Common Path of Travel distance is exceeded. Min two exits from each floor level.
Distance to an exit: Business 300 ft (IBC/NFPA); Ambulatory 200 ft (NFPA)
Dead End: Business 50 ft (IBC/NFPA); Ambulatory 50 ft (NFPA)

0' 2' 5' 10' 20'

Reviewed for Code Compliance
Inspectional Services Division
Approved with Conditions
Date: 05/03/16

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PORTLAND GASTROENTEROLOGY CENTER

161 Marginal Way Portland, Maine

No.	Date	Description
Revision Schedule		

REGISTERED ARCHITECT ANN M. FONTAINE-FISHER NO.1439 STATE OF MAINE

JOB NO. 14054

DRWN. CHK
Checker

SCALE: 1/8" = 1'-0"

ISSUE
PERMIT SET
03/18/16

TITLE
LIFE SAFETY PLANS

SHEET
A002

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