

CODE INFORMATION: Municipality: City of Bethlehem

Project Summary:
This project is for the interior fit-out of the existing Mansion and building addition. The existing A2 & R-1 use groups, previously established for the Wilbur Mansion, remain unchanged. Floors 2 and 3 of the Wilbur Mansion is a Level 1 Alteration (no change in egress) to a significant historic structure constructed prior to 1929. Refer to "R1 List of Existing Non-conforming Conditions" allowed to remain per 2015 IEBC.

Notes:
Refer to previously issued Mansion Alteration Permit Drawings:
Permit #19020323 - Existing Mansion interior alteration to vanilla box for future fit-out and demolition of the existing Masonic Temple, prepared by Artefact, Bethlehem, PA.
Refer to previously submitted Building Addition Shell Drawings:
Building Addition Shell Permit application drawings prepared by MKSD Architects, Allentown, PA dated 02-19-2021.

Use Groups:
A2: Basement and First Floor
R-1: Second Floor and Third Floor (10 guest rooms total)

Construction Type: 3B
This project has been designed to meet the provisions of the Pennsylvania Uniform Construction Code (UCC). The UCC Administration and Enforcement regulation has adopted the following codes for use throughout the Commonwealth of Pennsylvania, effective 10/01/2018.

- Pennsylvania Uniform Construction Code:**
International Existing Building Code 2015 (IEBC 2015) including all appendices & resource information
International Building Code 2015 (IBC 2015) excluding chapter 1, Chapter 27 (Electrical) requires that all electrical components, equipment and systems in buildings and structures covered by the IBC comply with the requirements of NFPA 70-2014, National Electrical Code
International Energy Conservation Code 2015 (IECC 2015)
International Fire Code 2015 (IFC 2015) only to the extent referenced in Chapter 35 of the IBC 2015
International Mechanical Code 2015 (IMC 2015)
International Plumbing Code 2015 (IPC 2015)
American National Standard Accessible and Usable Buildings and Facilities 2009 (ICC A117.1-2009)

- Notes:**
1. Existing Guest Rooms are to remain as shown on Permit #19020323 documents with proposed scope of work limited to Alteration Level 1, restoration of finishes.
2. Type B units are not required for buildings without elevator service. Refer to IBC Section 1107.7.

Existing Condition	Code Requirement	Statement of Compliance
1. Common single path of egress travel	2015 IEBC 704.1 Means of Egress	Alterations shall be done in a manner that maintains the level of protection provided for means of egress.
2. Open existing stairway connecting 4 levels	2015 IEBC 703.1 Fire Protection	Alterations shall be done in a manner that maintains the level of fire protection provided.
3. Dwelling/ Guest Room separation	2015 IEBC 703.1 Fire Protection	Alterations shall be done in a manner that maintains the level of fire protection provided.
4. Hallway/ Guest Room separation	2015 IEBC 703.1 Fire Protection	Alterations shall be done in a manner that maintains the level of fire protection provided.
5. Window Replacement (if operable)	2015 IEBC 702.4 Opening Control Device	Window opening control devices only required for Group R-2 or R03 building.
	2015 IEBC 702.5 EERO Exemption	Emergency Escape and Rescue Openings are only required in Group R-2 and R-3 occupancies and replacement windows are exempt from the requirements.
6. Accessibility	ICC A117.1 Compliance	A-2 occupancies comply. R-1 occupancies exempt at floor levels without elevator services per A1107.1.
7. Existing Door #305 to remain	ICC A117.1 Compliance	Building cost to remove barriers exceeds 20% of project cost.

Code Review:

Existing Group Classification (IBC 2015 Ch 3)
Assembly A-2: Basement and First Floors
Residential R-1: Second and Third Floors

Construction Type (T601, T602)
Type 3B
3 stories, 75 ft in height (Sprinklered)
1 stories, 20'-10" in height (Addition)
3 stories + Basement, 45'-0" in height (Mansion)
38,000 SF
24,277 SF

Allowable Building Height (T504.3, T504.4, Section 504)
Proposed Building Height

Allowable Building Area (T503, Section 506.2)
Proposed Building Area

Fire Protection Systems
Automatic Sprinkler System (Section 903)
Manual Fire Alarm (Section 907)
Fire Extinguishers

Exit Access Travel Distance (T1017.2)
With Sprinkler System= 250 FT

Number of Exits Required (1006.2)
2 min, provided

Corridor Fire-Resistance Rating (T1020.1)
With Sprinkler System= 0 hour (for an Occ Load >30), provided

Fire Resistance Rating Requirements (T601)
Structural Frame: 0 HR
Exterior Bearing Wall: 2 HR
Interior Bearing Wall: 0 HR
Interior Non-Bearing Wall: 0 HR
Floor Construction: 0 HR
Roof Construction: 0 HR

Interior Wall and Ceiling Finish Requirements (T803.11)
Exit Enclosures & Exit Passageways: Class B
Corridors: Class B
Rooms and Enclosed Spaces: Class C

Design Occupant Load (T1004.1.1)
Calculated By Use - See Life Safety Plan
Assembly Group A-2, Residential R-1

Egress Width per Occupant Served (Section 1005.1)
0.2" per occupant for other egress components
Basement = 94 occ. x 2" = 44.4" (1) 36" door, & (1) 42" existing stair
First Floor = 338 occ. x 2" = 73.2" (1) 36" door & (2) 72" door
Second Floor = 11 occ. x 2" = 2.2" (1) 42" existing stair
Third Floor = 10 occ. x 2" = 2" (1) 42" existing stair

A2 and R1 BUILDING EGRESS OCCUPANT LOAD CALC - IBC Table 1004.1.2

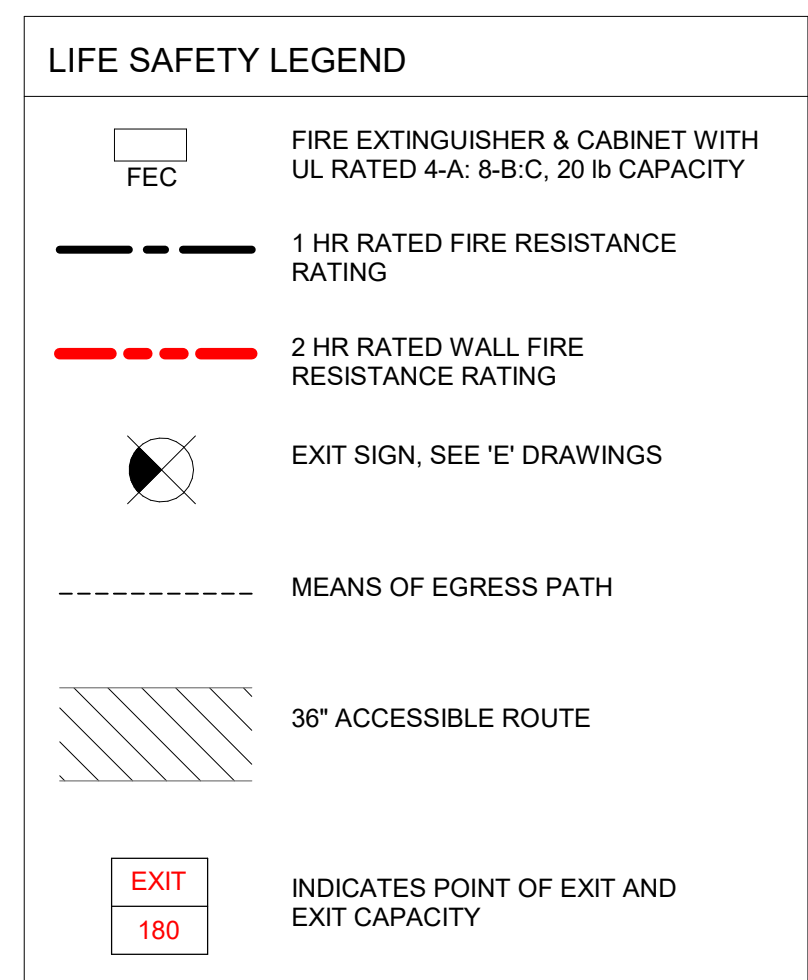
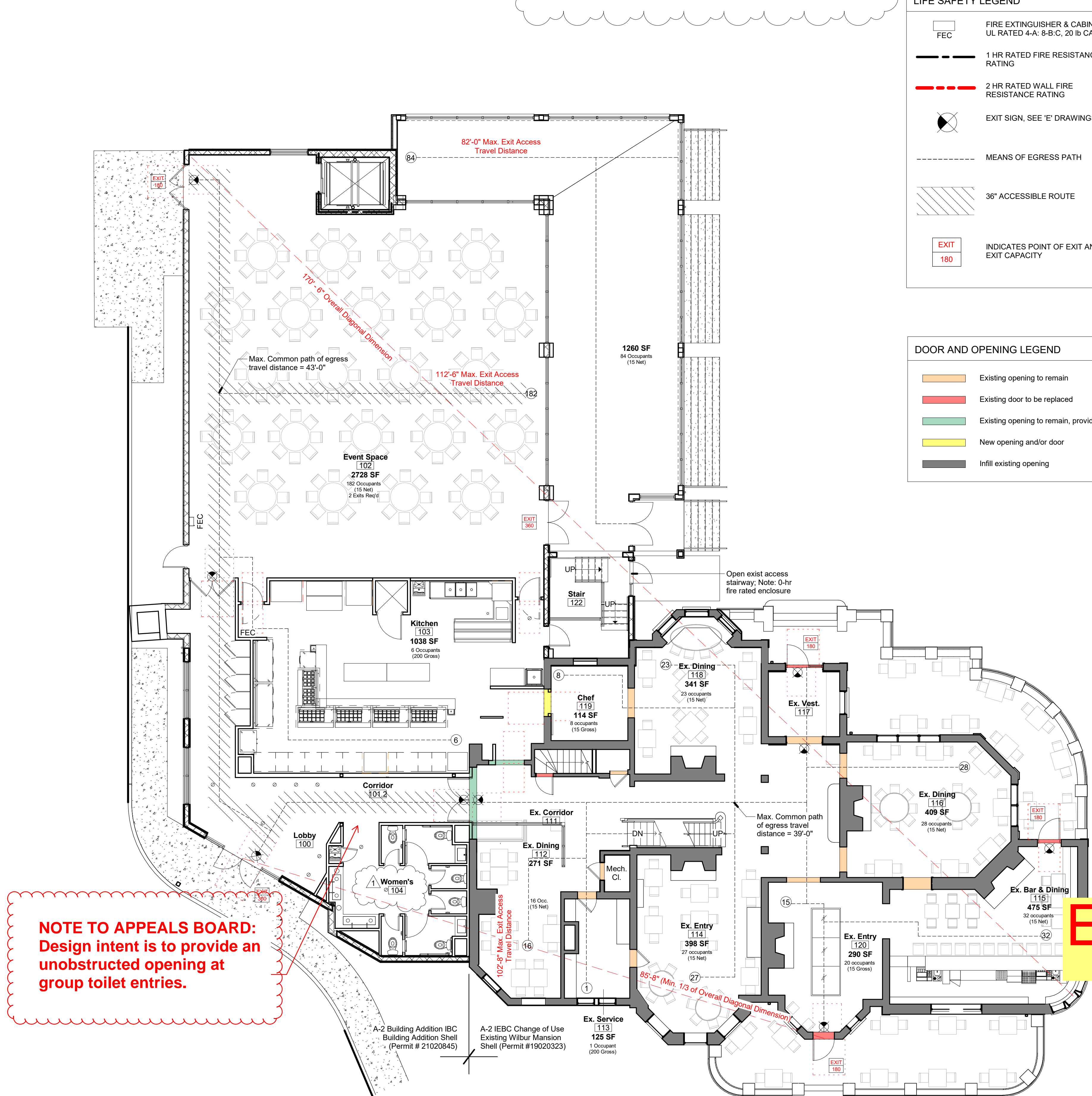
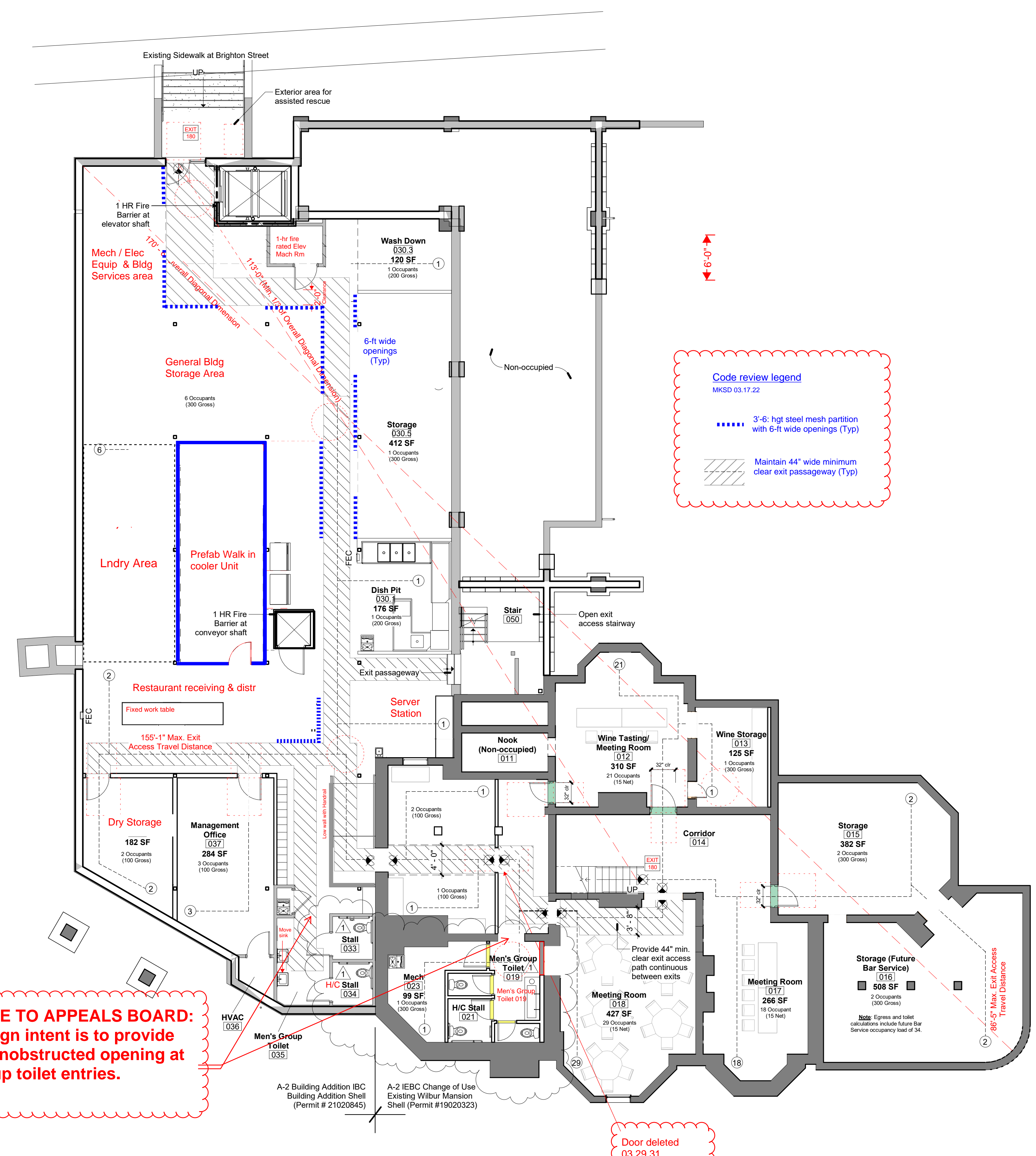
EXISTING MANSION:	Basement (A-2):	76 occ
First Floor (A-2):	150 occ	226 occ A-2
Second Floor (R-1):	11 occ	
Third Floor (R-1):	10 occ	21 occ R-1
NEW ADDITION:	Basement (A-2):	18 occ
Patio Areas (A-2):	84 occ	
1st Floor (A-2):	188 occ	280 occ A-2
TOTAL:		537 occs (516 A-2 and 21 R-1)

Signage Rqmt:
1. Maximum Occupancy Signage will be posted in all A2 assembly areas based on maximum egress capacity of the exits serving each space.

PLUMBING FIXTURE REQUIREMENTS - IBC Table 2902.1

A-2	Assembly Use, Occupancy Load: 516	Min # FIXTURES REQ'D:	# FIXTURES PROVIDED:
W.C.		4 M, 4 F	4 M, 7 F
LAV.		3 M, 3 W	3 M, 3 W
SERV. SINK		1	3
Drinking FNT.	0 (exception for A2 Use)		0
R-1	Residential Use, Occupancy Load: 21	Min # FIXTURES REQ'D:	TOTAL FIXTURES PROVIDED:
W.C.		1 fixture per sleeping unit	9*
LAV.		1 fixture per sleeping unit	9*
Tub / Shower		1 fixture per sleeping unit	9*
SERV. SINK		1	3

*Note: One existing bathroom on 3rd floor is shared by two existing bedrooms



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Wilbur Mansion
Interior Fitout

202 Wyandotte Street
Bethlehem, PA 18015

REVISIONS

No.	Date	Description
1	03.15.21	Rev Toilets

Sketch Plan
Rev 03.29.22
MKSD

Exhibit B

DRAWING TITLE
Code Information & Life Safety Plans

SCALE
As indicated

DATE
10.15.21

DRAWING NUMBER
G002.1

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1 Basement Life Safety Plan
1/8" = 1'-0"

2 First Floor Life Safety Plan
1/8" = 1'-0"