

**Archetype, PA
48 Union Wharf
Portland, ME, 04101**

FIELD REPORT: Stairs A, E, and G

Project Name.: Motherhouse Senior Housing 605 Stevens Ave. Portland, ME

Date of Inspection August 23, 2018 Page 1 of 9 Report by: David Mele, Architect, Archetype Architects

Inspection by:

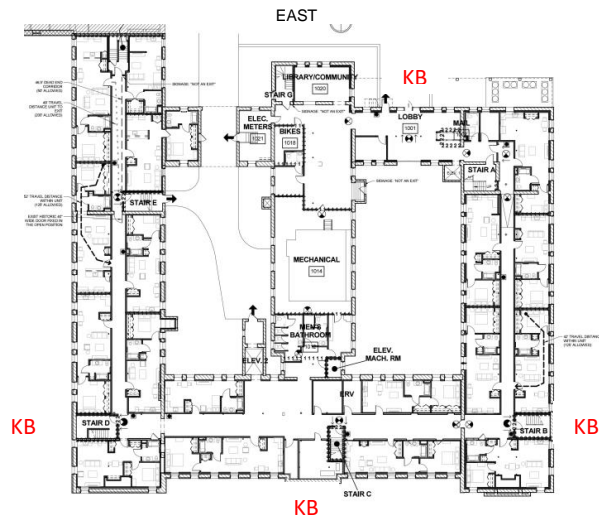
Rich McCarthy – Maine State Fire Marshal's Office
Robert Thompson – Division Chief, Portland Fire Department
John Brennan – Captain, Portland Fire Department
David Petruccelli – Captain, Portland Fire Department
Travis Ferrante – FF PFD Ladder Co. 34
Shawn Ramage – FF/P PFD Ladder Co. 34
Jeanie Bourke – Code Enforcement Officer, City of Portland
Greg Gilbert – Code Enforcement Officer/ Plan Reviewer
Steven Demmons – Superintendent, Portland Builders

On Thursday August 23, 2018 the participants listed above met with the project architect at the Motherhouse Senior Apartments located at 605 Stevens Ave. to review three historic stairwells and determine what measures could be taken to retain historic fabric and assure life safety for the building's residents. Stairs A, E, and G were reviewed.

In addition to reviewing the stairs, a deficiency with some of the exit signage was noted. On the fifth floor, Captain Petruccelli noted that the globes on the corridor pendant lights obscured the view of the exit signs. This was observed on other floors as well. The signs will be relocated to provide unobstructed visibility.

PFD also reviewed locations for Knox boxes and it was determined that Knox boxes will be located at all exterior access points with the exception of Stairs E and G. There will be four Knox boxes located as follows:

1. The Main Entrance at the east side of the building.
2. Stair B at the southwest corner.
3. Stair C at the west side facing Stevens Ave. This is also where the fire annunciator and fire alarm control panels are located.
4. Stair D at the northwest corner of the building.



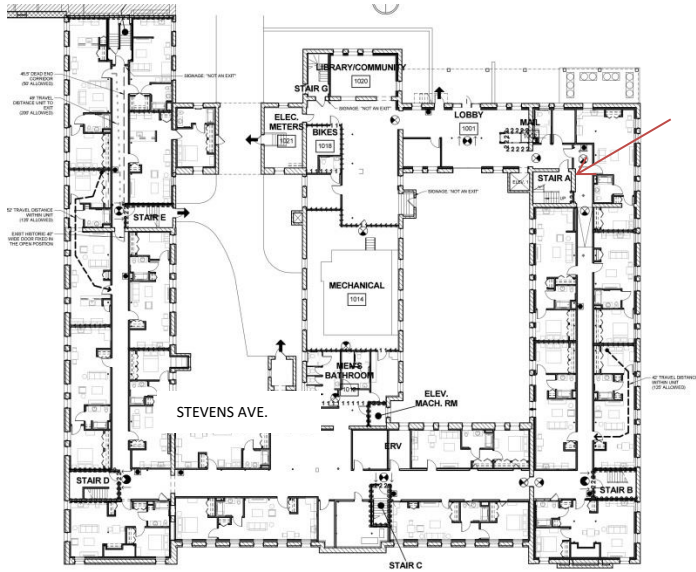
KNOX BOX LOCATIONS

STEVENS AVE.

KB = KNOX BOX

A summary with photos of what was determined to be required at the stairs is as follows:

STAIR A – Located near Main Lobby on the east side of the building.



2 | FIRST FLOOR LIFE SAFETY PLAN
1/16" = 1'-0"



Figure 1



Figure 2



Figure 3

Figure 1: Stair A 1st Floor Discharge Level to Main Lobby – Corridor Side to receive new 90-min. door & frame

Figure 2: Stair A 1st Floor Discharge Level – Stairwell side

Figure 3: Existing Door to be sealed shut and covered w/2 hr. wall



Figure 4



Figure 5

Figure 4: Stair A Level 2 – Corridor Side.

Figure 5: Stair A Level 2 – Stairwell Side.

Stair A Level 2 will receive a new 90-min rated wood door with new smoke seals in the existing frame and also receive a new door closer and sweep at the threshold. The existing wood frame is in a solid masonry opening. The wood frame will receive a clear coat of intumescent paint applied with the required number of coats to achieve a 90-minute rating.



Figure 6



Figure 7

Figure 6: Stair A Level 3 - Corridor Side.

Figure 7: Stair A Level 3 – Stairwell Side.

Stair A Level 3 will receive a new 90-min rated wood door with new smoke seals in the existing frame and also receive a new door closer and sweep at the threshold. The existing wood frame is in a solid masonry opening. The wood frame will receive a clear coat of intumescent paint applied with the required number of coats to achieve a 90-minute rating.



Figure 8



Figure 9

Figure 8: Stair A Level 4 – Corridor Side.

Figure 9: Stair A Level 4 – Stairwell Side.

Stair A Level 4 will receive a new 90-min rated wood door with new smoke seals in the existing frame and also receive a new door closer and sweep at the threshold. The existing wood frame is in a solid masonry opening. The wood frame will receive a clear coat of intumescent paint applied with the required number of coats to achieve a 90-minute rating.



Figure 10

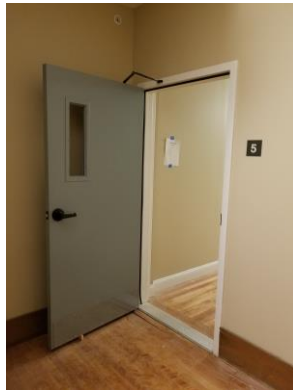


Figure 11



Figure 12

Figure 10: Stair A Level 5 – Corridor side of Vestibule enclosure.

Figure 11: Stair A Level 5 – Vestibule enclosure stairwell side with 90-minute doors in 2-hour rated walls per approved plans.

Figure 12: Stair A Level 5 – Existing Stairwell door inside rated vestibule to remain and permanently held open.

Stair E - Located in the middle of the north corridor.

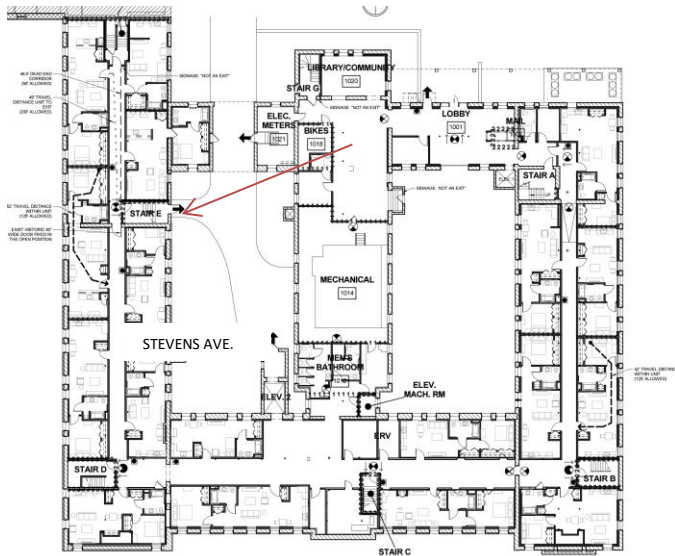




Figure 13



Figure 14



Figure 15

Figure 13: Stair E Level 1 view from north corridor. New 2-hour rated vestibule to receive 90-min. rated door.

Figure 14: Stair E Level 1 View of new 2-hour vestibule from stairwell side.

Figure 15: Stair E Mid-Level – between Level 1 & 2 - Discharge to paved north courtyard. Opening to receive new HM door with weatherstripping and exit hardware.



Figure 16



Figure 17

Figure 16: Stair E Level 2 Vestibule Corridor Side. New opening in new 2-hour rated vestibule to receive new HM 90-min rated door & frame with smoke seals, threshold & sweep, new closer and hardware.

Figure 17: Stair E Level 2 Vestibule Stairwell Side.



Figure 18



Figure 19

Figure 18: Stair E Level 3 – Corridor Side.

Figure 19: Stair E Level 3 – Stairwell Side.

This opening will remain as is with the following conditions:

1. A new 90-min rated wood door with new smoke seals will replace the existing door and receive new hardware, a new door closer and sweep at the threshold.

2. The existing door frame will receive a clear coat of intumescent paint applied with the required number of coats to achieve a 90-minute rating.
3. The transom glazing will be moved to the corridor side. Behind the glazing a sandwich of 5/8" gyp, mineral wool, and another layer of 5/8" gyp will fill the transom opening.



Figure 20



Figure 21

Figure 20: Stair E Level 4 – Corridor Side.

Figure 21: Stair E Level 4 – Stairwell Side.

This opening will remain as is with the following conditions:

1. A new 90-min rated wood door with new smoke seals will replace the existing door and receive new hardware, a new door closer and sweep at the threshold.
2. The existing door frame will receive a clear coat of intumescent paint applied with the required number of coats to achieve a 90-minute rating.
3. The existing transom panels will be removed and a gyp and mineral wool sandwich will be installed. The original luan plywood panels will then be reinstalled.



Figure 22

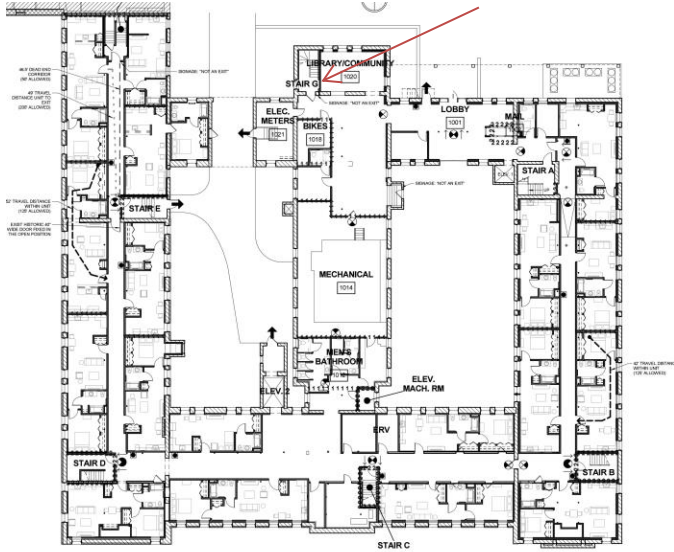


Figure 23

Figure 22: Stair E Level 5 – Corridor Side. At Level 5 a new 2-hour rated enclosure with new 90-minute door has been installed.

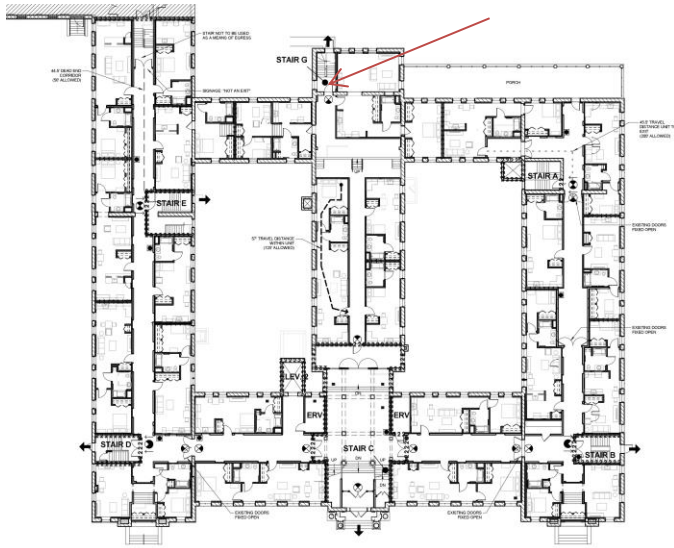
Figure 23: Stair E Level 5 – Stairwell Side.

Stair G – Located at the east side of the building, Stair G goes from the 1st Floor to the 3rd Floor at the Chapel. This stairwell is in a masonry enclosure. It also serves as a second means of egress for the apartment units below the Chapel on the 2nd Floor.

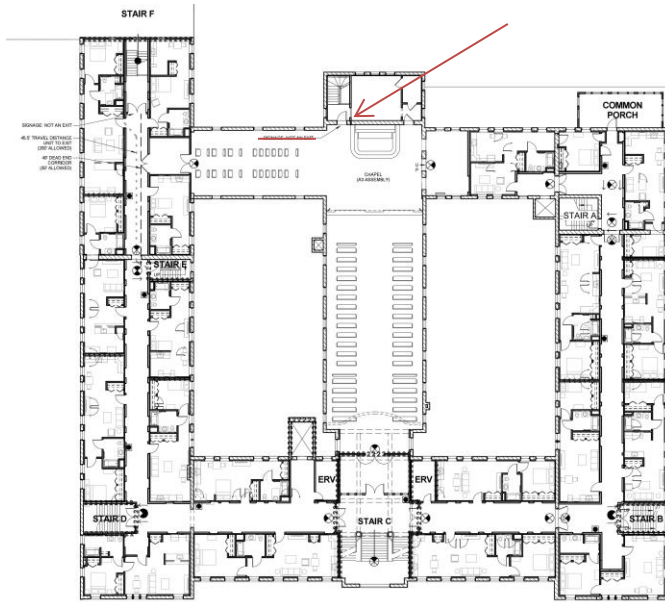


STEVENS AVE.

2 | FIRST FLOOR LIFE SAFETY PLAN
1/16" = 1'-0"



1 | SECOND FLOOR LIFE SAFETY PLAN
1/16" = 1'-0"



1 | THIRD FLOOR LIFE SAFETY PLAN
1/16" = 1'-0"



Figure 24



Figure 25

Figure 24: Stair G 1st Floor - Corridor Side. This existing 90-min rated door and frame will be cleaned and remain. It will receive a new closer, new hardware, new smoke seals and door sweep.

Figure 25: Stair G 1st Floor – Stairwell Side. The door on the left will be visible inside the stairwell, be sealed shut, have a “No Exit” sign and be protected by a 2-hour wall on the other side of the existing wall.



Figure 26



Figure 27



Figure 28



Figure 29

Figure 26: Stair G – Discharge Level to Exterior between Levels 1 & 2 Stairwell Side. This opening will receive a new door to replicate the original door shown here, new closer, hardware, weatherstripping, threshold and door sweep. The new door will swing towards the exterior in the direction of egress.

Figure 27: Stair G – Discharge to Exterior, Existing Door. See above. In addition to that, the grade will be raised and join a walkway with a handrail.

Figure 28: Stair G Level 2 – Corridor Side. A new 45-min. rated wood door will replace the existing door and receive new hardware, new closer, smoke seals, and a new threshold and door sweep.

Figure 29: Stair G Level 2 – Stairwell Side. The door on the left will be visible inside the stairwell, be sealed shut, have a “No Exit” sign and be protected by a wall with 2 layers of 5/8” gyp on the other side of the existing wall where there’s an apartment unit.



Figure 31



Figure 32

Figures 31 & 32: Stair G Level 3 - Chapel Side

This door will remain in place with the following additional components: new protective metal rails aligned with the stained glass pattern, new hardware, including an exit device, smoke seals, door sweep and threshold. A new lighted exit sign will be installed above the archway.



Figure 33



Figure 34

Figure 33: Stair G Level 3 - Stairwell Side. On the stairwell side a sheet of 3/4” hardwood plywood will be fastened to cover the entire area of stained glass.

Figure 34: Stair G Level 3 – Stairwell Side with adjacent door to Sacristy. This door will be fixed in place and have a “No Exit” sign. A new 1-hour rated wall will be built on the other side of the existing wall.

End of Report