A R C H E T Y P

15 January 2014 (Rev. 16 January 2014)

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 01/22/14

Capt. Chris Pirone
Portland Fire Department
Fire Prevention Bureau

RE: Press Hotel – 119 Exchange St., Portland, Maine

Capt. Pirone,

Following are responses to comments contained within the review from FirePro dated December 9th, 2013:

Based on FIREPRO's review, the following must be provided:

1. *In an assembly occupancy, the common path limit is 20 feet when the occupancy load is greater than 50 people. When the occupancy load is fewer than 50 people, the common path of travel limit can be increased to 75 feet.*
   Comment: Additional egress requirements need to be reviewed in accordance with MUBC Chapter 10. It appears that common path of travel may be exceeded in the restaurant area on the First Floor. **Response: IBC 2009 1028.78** ***Common Path of Egress Travel. The common path of egress travel shall not exceed 30 feet from any seat to a point where an occupant has a choice of two paths of egress travel to two exits. MUBC Section 1028.8 Exception 1 allows for the maximum common path distance to be 75 ft. where the area is serving less than 50 occupants.***
   NFPA 101 Table A.7.6 note a. ***for common path serving >50 persons, 20 ft.; for common path serving ≤ 50 persons, 75 ft.***
   The area of the restaurant to the north-east of the entry vestibule is comprised of 650 SF with tables and chairs (moveable). This area has an occupancy of 44 people when based upon 15 SF per person net, but an actual seating count of 40. The common path distance for this area of the restaurant to the nearest point from which there is a choice of two paths is allowed to be 75 ft. The maximum distance as designed is <40 feet.
2. *Calculations for the existing plaster and concrete structural fire proofing.* **Response: See revised rating designations on each detail on Revised Sheet A4.03, included under separate cover. The ratings and UL assemblies for each condition have been provided.**
3. *Prior to inspection, shop drawings showing wall and floor coverings with fire-rating listings must be provided.* **Response: Understood. Will comply. My only question, given that this is the first of my projects to come under the FPE third-party review, is to whom am I submitting my shop drawings: the City of Portland FD, or to FirePro Engineers, or to both?**
4. *Prior to inspection, shop drawings showing all penetrations of fire-rated barriers and appropriate through penetration seal systems with details of the selected system for each penetration must be provided.* **Response: Understood. Will comply. See response to 3 above.**
5. *Provide a clear legend of all devices shown on the Life Safety drawings.* **Response: See revised LS1.1 and LS1.2 included under separate cover.**
6. *Provide details of the operation, fuel source, and fuel fill routing for the emergency power generator for the building.* **Response: See attached below sketch SK-M01 for the means and route of the gas piping serving the emergency generator. Also note revised drawing sheet M0.10 for integration of riser into set.**
7. *All drawings that are submitted for Permitting must be stamped by a Maine registered Professional Engineer or architect, including Life Safety Drawings.* **Response: There has been**

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delivered to the City of Portland a revised permit set with Architect's a stamps on each sheet.

8. *Emergency lighting must be shown. Preferably these should be shown on drawings. If generator supplied lighting is used, the emergency power riser d shown.* **Response:**
   a. **Emergency lighting is generator supplied through panel 'EM'.**
   b. **Sheets E2.02 through E2.07 indicate all general corridor lighting and all stairwell lighting circuited to panel EM**
   c. **Sheets E1.02A and E2.01A indicate emergency lighting circuits in common area spaces.**
   d. **Sheets E4.02 and E4.03 are the riser diagrams for the dimming control systems, which indicate the required UL924 shunt trip devices for emergency operation.**
   e. **Sheet E6.01 is the electrical riser diagram for both normal and emergency power.**
   f. **Sheet E6.04 contains the panelboard schedule for the "EM" panel.**
9. *Specifications for emergency lights and exit signs must be provided.* **Response: The emergency lighting, which is generator-powered, is simply the building lighting which is powered by a redundant emergency panel board and circuit. Therefore, the specification is the lighting fixture schedule as included in the documents. The exit signage is also included in the electrical specification as submitted.**
10. *Stair, floor, and suite/room designations must comply with Chapter 4 of the Portland Fire Department Rules and Regulations.* **Response: The stair, floor and suite/room designation has been reviewed and given verbal approval by Capt. Chris Pirone during preliminary document reviews and meets his expectations.**
11. *Several locations in the specification refer to 2003 IBC. This must be updated to the currently referenced editions in the MUBC.* **Response: The building has been designed and reviewed to be in compliance with MUBC and the 2009 Editions of both the IBC and NFPA codes. The specification references are simply in error. The content is unchanged other than the reference.**
12. *Fire rating specification for laminate floor, wood floors, and all carpeted areas must be provided.* **Response: These will be provided when submittals are available.**
13. *Details for exhaust duct connections at floor terminations must be provided.* **Response: See revised drawing sheet M3.00 included under separate cover.**
14. *The location of fire and smoke dampers are difficult to determine. A legend of damper symbols and the location and orientation of all fire and smoke dampers are to be shown.* **Response: An updated legend has been included on the revised sheet M0.10 included under separate cover.**
15. *Fire rating specification for the furniture in the restaurant and lobby must be provided.* **Response: This information will be provided when it is submitted to the Architect. It is not currently selected.**
16. *Location of stair pressurization fans and corridor exhaust fans to be shown.* **Response: M10.01, fans S-1 & S-2.**
17. *Method of backup power for the electric fire pump must be explained.* **Response: NEC Article 695.3 "Electric fire pump motors shall have a reliable source of power".**
    a. **Where reliable, and where capable of carrying indefinitely the sum of the locked-rotor current of the fire pump motor and the pressure maintenance pump motor and the full-load current of the associated fire pump accessory equipment when connected to this power supply, the power source for an electric motor driven fire pump shall be one or more of the following.**
       i. **Electric utility connection. A fire pump shall be permitted to be supplied by a separate service, or from a connection located ahead of and not within the same cabinet, enclosure, or vertical switchboard section as the service disconnecting means. The connection shall be located and arranged so as to**

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minimize the possibility of damage by fire from within the from exposing hazards. A tap ahead of the service discon shall comply with the labeling requirements in 230.2 an requirements in 230.72(B)."

At this location, CMP has a redundant network, and has not lost powe memory. This was deemed, in our professional opinion, to be a "reliable source of power", in accordance with the requirements above. Installation is specified as above, and requiring only one source of power, with no additional backup. An explanation of the system is included below, for clarification, as provided to us by CMP.

> **"In general, the downtown network (120/208v) functions as an integrated system. Attached (*see below*) is a generic network layout to give you an idea of the interconnectedness of the system. Each customer on the network ties into the secondary loop, and is NOT directly fed from any one transformer. Each transformer supplies power to this secondary grid. There are approximately sixty transformers (+-) on this secondary grid supplying all of our customers on the network. As currently designed, power to these transformers is from our substation which is fed from our transmission system. We would have to lose multiple transformers on the circuit or multiple substation circuits or transmission lines in order for the downtown network to fail. This redundancy allows us to remove equipment for maintenance while maintaining a customer's uptime".**

18. *Provide kitchen hood duct rating, termination, and detail.* **Response: See revised drawing sheet M1.01 and M8.00 included under separate cover for provision of notes and details which address the kitchen hood duct ratings and termination details.**

I trust these responses adequately address the comments from the third-party Fire Protection Engineers' review.
If you have any questions with regards to this letter, please contact our office.

Respectfully,

Kevin Gough, Architect
Archetype Architects
End of Memo

Attachments follow, and drawings provided under separate cover.

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PMENT SCHEDULE

	MBH	QTY	TOTAL MBH
	788	1	788
	60	1	60
	80	1	80
	744	1	744
	1000	1	1000
	1000	1	1000
	303	1	303
PLUMBING			
WATER HEATERS - DOMESTIC	1000	2	2000
WATER HEATER - KITCHEN	199	1	199
TOTALS			6,174

1. Provide dirt leg at gas meter
2. Provide a dirtleg, union and shut-off valve at each equipment connection
3. All exposed gas pipe shall be painted yellow
4. All gas piped shall be identified at 10 ft intervals with labels as manufactured by Seton
5. Provide a solenoid valve at 60" AFF in the gas line which serves each kitchen hood
6. Provide a full size gas header behind each kitchen battery
7. Provide a UL flex connector and shut-off valve at connection to each piece of kitchen equipment
8. Provide an equipment retaining cable equal Dormont at each piece of kitchen equipment
9. Refer to food service plans for additional information
10. Provide valved and capped gas line for connection by fireplace installer
11. Gas pressure shall be 2 PSI
12. Provide gas pressure regulator at point-of-use

Gas 2 PSI Isometric

N.T.S.

STATE OF MAINE
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Revisions:

1	13_10-14	Issue for Bid & Marriott Revw
2	13_10-21	Addendum #2
3	13_10-31	Addendum #3
4	13_12-18	Addendum #4 VE Items

SK-M01

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k System 3 Feeder Distributed