

SHEPHERD ENGINEERING, INC.

1308 GRAFTON STREET • WORCESTER, MA 01604 • (508) 757 7793 • FAX: (508) 753 2309

B GOOD Restaurant
15 Exchange Street
Portland, ME

August 9, 2013

Fire Protection Construction Documents

1. a. Basis (methodology) of design

Section 1 - Building Description

Use Group A-2 Assembly (Restaurant)

Section 2 - Applicable Laws, Regulations and Standards

- International Building Code 2009
- NFPA 72– 2010 edition standards.
- Approved local by-laws or ordinances
- Portland Fire Department Final Occupancy Documentation Requirements

Section 3 - Design Responsibility for Fire Protection Systems

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Section 4 - Fire Protection Systems Being Installed

Installation of new addressable monitored fire alarm devices to protect the proposed restaurant in its entirety. The devices shall connect to the existing Fire Alarm Control Panel currently located within in the building.

Section 5 - Features Used in the Design Methodology

Building occupants will be notified of an alarm condition through the use of new horn strobe audio/visual units, individually, by space. Upon completion of the fire alarm system, the manufacturer or a factory trained technician shall test the system devices as outlined in NFPA 72 - 2010, edition and the International Building Coode - 2009 as required. In addition, all alarms and trouble conditions will sound at the fire alarm control panel until acknowledged and reset. The building owner shall have a trained authorized person responsible for resetting the control panel in the event of an alarm or trouble condition.

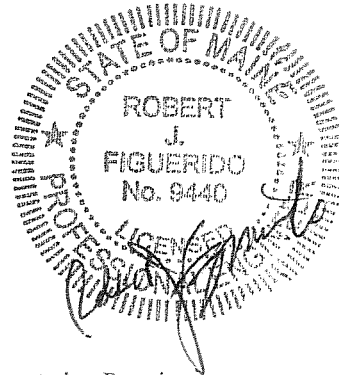
Section 6 - Special Consideration and Description

1. b. Sequence of Operation

Section 1:

Upon the activation of a manual pull station, smoke detector, heat detector, the following shall occur:

- a. All fire alarm visuals within the building of alarm shall be activated.
- b. All fire alarm horns within the building of alarm shall be activated.
- c. CPU shall record the alarm description of event shall be displayed on the continually illuminated Information Management System computer.



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- d. Fire department shall be notified via the existing monitoring system approved by the City of Portland.

Upon the activation of the hood ansul system, the following shall occur:

- a. All fire alarm visuals within the building of alarm shall be activated.
- b. HVAC units related to the hood system shall be shutdown as required.
- c. All electrical equipment installed below the hood system will automatically shutdown.
- d. Fire department shall be notified via the existing monitoring system approved by the City of Portland.
- e. Smoke detectors shall have alarm verification.

2. Type/description and design layout of the fire protective signaling system

Project includes installation of new double action manual pull stations to be installed at the egress doors throughout the restaurant. ADA compliant audio/visual and visual appliances. The audible/visual notification appliances shall meet the requirements of ADA. The audible appliances shall have a sound level at least 15 dBA above the average ambient sound level or 5 dBA above the maximum sound level having a duration of at least 60 seconds, whichever is greater, measured 5 feet above the floor. Visible notification appliances are located in toilet rooms. All audible/visual and visual notification appliances shall be mounted 80 inches above the finished floor to the bottom of the devices.

Fire fighters key box mounted outside at the main entrance. Each key located within the key box are to be clearly labeled. Keys are to be included on one key ring. Remote red beacon light located on the exterior of the facility for the tenant.

3. Fire protective signaling system control equipment

The main fire alarm signaling control panel equipment is existing, Firelite Company series, located in the main electric room of the building. "Call fire department prior to any work at (207) XXX-XXXX" shall be labeled inside of the fire alarm control panel.

4. Fire protection systems alarm/supervisory signal transmission method and location

The existing control panel is capable of multiple 24VDC-power outputs. All auxiliary manual controls are supervised so that all switches must be returned to the normal automatic position to clear system trouble. Each independently supervised circuit shall include discrete panel readout to indicate disarrangement conditions per circuit. The incoming power to the system shall be supervised so that any power failure must be audibly and visually indicated at the control panel. A green "power on" LED shall be displayed continuously while incoming power is present. The System Expansion Modules shall be electrically supervised for module placement. Should a module become disconnected from the controls, the system trouble indicator must illuminate and audible trouble signal must sound.

The system shall contain multiple supervised signaling line circuits. The alarm activation of any initiation circuit shall not prevent the subsequent alarm operation of any other initiation circuit. There shall be independently supervised and independently fused indicating appliance circuits for alarm horns and flashing alarm lamps. Disarrangement conditions of any circuit shall not affect the operation of other circuits. The system shall have provisions for disabling and enabling all circuits individually for maintenance or testing purposes.

10. Testing Criteria to be used for final system acceptance

All fire protection systems shall be tested as a system with all equipment ready for operation. Tests shall be performed on the following equipment and devices:

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Alarm notification devices and circuits
Alarm indicating appliances and circuits
Supervisory-signal initiating devices and circuits
Signaling line circuits
Primary and secondary power supplies

The tests shall meet all the requirements of NFPA 72-2010, the International Building Code and the Portland Fire Department Fire Alarm Standards.

END OF NARRATIVE