WHIPPLE-CALLENDER ARCHITECTS

March 4, 2014

City of Portland Inspections Office
c/o Laurie Leader
389 Congress Street
Portland, Maine 04101

RE: 200 Riverside Industrial Parkway, Portland Me.

Outlined below is the info for the General Code and Fire Department requirements:

Portland Zoning- 2009- Relevant sections;

14-250 Dimensional Req.:

Side and rear setbacks in the I-M zone are 1' of setback for 1' of bldg. height. We are compliant

Max. permitted imperv. Surface ratio- 75%. Based upon the survey, we are at 67,033 s.f of impervious with a 117,955 s.f. site or 56.82 % impervious. Impervious area will be remain as-is as a result of this work.

Max. permitted bldg. height is 75', we are at 15'-4" in height.

Parking- Incidental office space is 7,280/400 s.f. per =18.2 cars Manuf. space is 12,882 s.f./ 1,000 s.f. per =12.8 spaces or 31 required spaces.

There are currently 48 parking spaces and 75 employees working three shifts.

IBC- 2009- Relevant sections; Addition to existing structure. The existing building is comprised of metal framed and metal clad industrial buildings.

The existing building use is defined in F-1 Moderate Factory Hazard as it handles paper products. There is currently no sprinkler system for this existing structure from the 1970's.

The existing structure is not sprinkled, type 2B per table 601. The existing building is 16,662 S.F. with a 3,500 s.f. addition. The combined s.f. is 20,162 s.f., which is under the 15,500 s.f. x (.315) frontage factor allowable area limit of 20,338 s.f.

Area increase factor = (perimeter min. 20' deep/entire perimeter-.25) avg. depth/ 30

(511 l.f. frontage/878 l.f. entire bldg. -.25)= (.582-.25) =.332

.332 x 28.5' factored depth/30= .332 x .95= Frontage factor of .315

I reduced the average width to 28.5' from 30, which affected the figures. Of the frontages, 10% is 20' avg. depth, 20% is 28' avg. depth, and 70% is 30' avg. depth.

Table 508.4 indicated no separation between S-1/F-1 and B/F-1 uses in unsprinklered facilities.

Table 601- Type 2B has no requirements for rated construction.

Table 1004.1 Max. Flr. Area per Occupant list Warehouses as 500 gross s.f. per occupant.

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Fire Department checklist- please refer to plan for travel distance, F.E. locations, emergency lighting, exit signs.

1. Owner- **Form Systems, 200 Riverside Industrial Parkway, Portland, Me. 04104 (603-536-5500)**
2. Architect- **Whipple Callender Architects, PO Box 1276 Portland, Maine 04101 (775-2696)**
3. Proposed use- **New S-1 storage addition incidental to the existing F-1 use**
4. Square footage of structure- **16,662 existing single story building with proposed 3,500 s.f. addition**

5. Elevation of all structures**- match existing building, see drawings for addition**
6. Proposed fire protection of all structures- **un-sprinkled**
7. Hydrant Locations- **Riverside Industrial Parkway**
8. Water main sizes and locations- **6" main**
9. Access to any Fire Department Connections-**NA**
10. Access to all structures (2 sides Min.)- **Clear access to two sides**
11. A code summary shall be included referencing NFPA and all fire department technical standards-

NFPA 101-2009 – Chapter 42: Storage Occupancies

CHAPTER 18-

42.1.4.3 Storage occupancies or areas of storage occupancies that are used for the purpose of packaging, labeling, sorting, special handling or other operations requiring an occupant load greater than that which is normally contemplated for storage shall be classified as industrial occupancies. (See Chapter 40) The proposed structure will be rack space for finished, packaged goods prior to shipment and may involve more product preparation.

NFPA 101-2009 – Chapter 40: Industrial Occupancies

40.1.1.2 Industrial occupancies shall include factories making products of all kinds and properties used for operations such as processing, assembling, mixing, packaging, finishing or decorating , repairing and similar operations. The proposed structure will be rack space for finished, packaged goods prior to shipment and may involve more product preparation.

40.1.1.5 Classification of Hazard of Contents. Classification of Hazard of Contents shall be in accordance with Section 6.2.

6.2.2.3 Ordinary Hazard Contents. Ordinary Hazard contents shall be classified as those likely to burn with moderate rapidity or to give off a considerable volume of smoke. The product is tightly packaged paper products with no explosive properties.

40.1.7 Occupant load. Refer to table 7.3.1.2. Table has occupancy level as either NA or 46.5 s.f. The proposed structure will be rack space for a majority of its s.f. and therefore mostly un-occupiable. Zoning requires 1 parking space per 1,000 s.f. for warehouse space, I propose we use 3.5 people as the occupant load.

40.2 Means of egress requirements. We are providing two remotely located means of egress directly to grade according to Chapter 7.

40.2.4.1.1 Not less than 2 means of egress shall be provided from every story or section, and not less that one exit shall be reached without traversing another story. We are providing two remotely located means of egress directly to grade according to Chapter 7.

Table 40.2.5- Arrangement of Means of Egress. We are limited to and comply with the 50' common path of travel limit under General Industrial

Table 40.2.6- Max. Travel Distance to exits. We comply with the 200' maximum travel limit under General Industrial.

40.2.9.1 Emergency lighting shall be provided in accordance with Section 7.9. Refer to plans for emergency lighting.

40.3.4.1 Detection, Alarm and Communication System. General. A fire alarm system shall be required in accordance with Section 9.6 for industrial Occupancies, unless the total occupant load of the building is under 100 persons and unless, of these, no more than 25 persons are above or below the level of exit discharge. The maximum personnel on site is approximately 54 and all are located at egress grade. The owner will upgrade the system through their current alarm service and will coordinate with the Portland Fire Department.

40.3.4.3.1 Notification. The required fire alarm system shall meet one of the following criteria-

1. It shall provide occupant notification in accordance with 9.6.3
2. It shall sound an audible and visible signal in a constantly attended location for the purposes of initiating emergency action.
We will pursue with the alarm specialist

40.3.4.3.3 Existing presignal systems in accordance with 9.6.3.3 shall be permitted. We will maintain existing system pursue with the alarm specialist.

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