Certificate of Design Application

From Designer: Dana C. Sturtevant

Date: June 27, 2014

Job Name: Shucks Maine Lobster

Address of Construction: 40 Commercial Street / a.k.a. Maine State Pier

2009 International Building Code

Construction project was designed to the building code criteria listed below:

Building Code & Year MUBC 2009 Use Group Classification (s) F-1 Factory- Food Processing

Type of Construction Type II (000)

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2009 IBC Yes = Existing

Is the Structure mixed use? Yes If yes, separated or non separated or non separated (section 302.3) Separated

Supervisory alarm System? No Geotechnical/Soils report required? (See Section 1802.2) N/A - Pier

Structural Design Calculations

N. A. Submitted for all structural members (106.1 – 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

Floor Area Use	Loads Shown
Food processing	To be determined
	via Phase II Application
	Partition Loads only

Wind loads (1603.1.4, 1609)

N. A. Design option utilized (1609.1.1, 1609.6)

Interior fit up Basic wind speed (1809.3)

Building category and wind importance Factor, I_w table 1604.5, 1609.5)

Wind exposure category (1609.4)

Internal pressure coefficient (ASCE 7)

Component and cladding pressures (1609.1.1, 1609.6.2.2)

Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

N. A. Design option utilized (1614.1)

Existing bldg. Seismic use group ("Category")

Spectral response coefficients, S_{DS} & S_{D1} (1615.1)

Site class (1615.1.5)

N. A. Live load reduction

Existing bldg. Roof *live* loads (1603.1.2, 1607.11)

Fit up interior Roof snow loads (1603.7.3, 1608)

only Ground snow load, P_g (1608.2)

If P_g > 10 psf, flat-roof snow load P_f

If P_g > 10 psf, snow exposure factor, C_e

If P_g > 10 psf, snow load importance factor, I_s

Roof thermal factor, C_t (1608.4)

Sloped roof snowload, P_s (1608.4)

Seismic design category (1616.3)

Basic seismic force resisting system (1617.6.2)

Response modification coefficient, R_I and deflection amplification factor C_d (1617.6.2)

Analysis procedure (1616.6, 1617.5)

Design base shear (1617.4, 16175.5.1)

Flood loads (1803.1.6, 1612)

N. A. Flood Hazard area (1612.3)

Elevation of structure

Other loads

N. A. Concentrated loads (1607.4)

100 #/S.F. to 250#/s.f. Partition loads (1607.5)

Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)