Certificate of Design Application

From Designer: LARRY A. WICHROSKI, P.E.

Date: AUGUST 2013

Job Name: THE PARK DANFORTH

Address of Construction: 777 STEVENS AVE, PORTLAND, ME

2009 International Building Code

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

Building Code & Year 2009 IBC Use Group Classification (s) I-1

Type of Construction IB

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2009 IRC YES

Is the Structure mixed use? NO If yes, separated or non separated or non separated (section 302.3) _____

Supervisory alarm System? YES Geotechnical/Soils report required? (See Section 1802.2) NO

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
RES. APTS	40.0 PSF
COMMON	100.0 PSF

Wind loads (1603.1.4, 1609)

N/A Design option utilized (1609.1.1, 1609.6)

" 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)

" Seismic use group ("Category")

" Spectral response coefficients, SDs & SD1 (1615.1)

" Site class (1615.1.5)

N/A Live load reduction

" Roof *live* loads (1603.1.2, 1607.11)

" Roof snow loads (1603.7.3, 1608)

" 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)

" Partition loads (1607.5)

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