Certificate of Design Application

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 06/08/16

From Designer: Ryan Senatore Architecture

Date: 02/02/16

Job Name: Bayside Bowl Addition

Address of Construction: 58 Alder Street

2009 International Building Code

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

Building Code & Year 2009 IBC/MUEBC Use Group Classification (s) M - Mercantile

Type of Construction Metal Building

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) _____

Structural Design Calculations

- 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
Public Entry	100 psf

Wind loads (1603.1.4, 1609)

- analytical — Design option utilized (1609.1.1, 1609.6)
- 100 mph — Basic wind speed (1809.3)
- cat II, 1.0 — Building category and wind importance Factor, I_w table 1604.5, 1609.5)
- B — Wind exposure category (1609.4)
- 0.18 — Internal pressure coefficient (ASCE 7)
- 40 — Component and cladding pressures (1609.1.1, 1609.6.2.2)
- 22 — Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

- - Design option utilized (1614.1)
- - Seismic use group ("Category")
- - Spectral response coefficients, S_{Ds} & S_{D1} (1615.1)
- - Site class (1615.1.5)

- none — Live load reduction
- 20 — Roof *live* loads (1603.1.2, 1607.11)
- 42 — Roof snow loads (1603.7.3, 1608)
- 60 — Ground snow load, P_g (1608.2)
- 42 — If P_g > 10 psf, flat-roof snow load P_f
- 1 — If P_g > 10 psf, snow exposure factor, C_e
- 1 — If P_g > 10 psf, snow load importance factor, I_s
- 1 — 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)

- - Flood Hazard area (1612.3)
- - Elevation of structure

Other loads

- - 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