NABIH YOUSSEF ASSOCIATES
STRUCTURAL ENGINEERS

January 3, 2017

Mr. Gregory Park
Senior Leasing Specialist
UCLA Real Estate
10920 Wilshire Boulevard, Suite 810
Los Angeles, CA 90024

Re: University of California Seismic Rating for The Bloc – 750 West 7th Street, Los Angeles

Dear: Gregory

Nabih Youssef Associates (NYA) have performed an Independent Review of The Bloc hotel tower located at 750 West 7th Street in Los Angeles. The review consisted of a site visit to observe the existing condition of the exposed structural elements, identification of potential falling hazards that pose a significant life or safety risk to occupants, a review of available structural drawings and an ASCE 41-13 Tier 1 and deficiency only Tier 2 evaluation.

Description:

The BLOC consists of an office tower, a hotel tower and a mid-rise parking/retail structure. The complex was constructed in 1973 and was designed to the 1969 edition of the City of Los Angeles Building Code.

The hotel tower is a rectangular-shaped, steel-framed structure with 23 floor levels above grade with a rooftop restaurant. The office and hotel towers are supported on a common 3-level base structure consisting of steel frames and concrete walls. The base of the hotel tower has overall dimension of approximately 260'-0" by 112'-3". The building is set back above the 3rd floor with overall dimension of approximately 201'-4" by 61'-9".

The roof and typical floors are constructed of 5" thick one-way reinforced light weight concrete slabs spanning to wide flange steel beams. The beams are supported by wide flange steel girders and steel columns that are continuous to the foundation. The foundation system consists of concrete spread footings supporting columns and continuous footings under walls.

The lateral-force-resisting system consists of the concrete slab roof and floors acting as structural diaphragms to transfer seismic inertial forces to welded steel moment frames. The typical moment frame connection consists of field-welded full-penetration joints of the frame beam flanges to the columns flanges. This connection detail is the typical "pre-Northridge" type connection that was standard practice at the time of construction.

The building was subjected to moderate ground motion during the 1994 Northridge Earthquake. Recorded ground motion near the site indicates peak ground acceleration less than 0.2g.

Observation:

A site visit was performed by Alejandro Pena of NYA on December 13, 2016, to observe the condition and characteristics of the building. Observations were limited to visible areas of the structure. The building structures appeared to be in general conformance with the available structural drawings, no significant structural alterations were observed. The buildings generally appeared to be in good condition and there were no obvious signs of structural distress.

No falling hazards were observed at egress points along exterior of the building.

Evaluation:

The building is located on a gently sloping site and is not susceptible to landslide. The site is not located within an Alquist-Priolo Earthquake fault zone – a geologic zone where surface rupture may occur. The site is not located in an area recognized by the State of California where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacement.

An ASCE 41-13 Tier 1 and deficiency only Tier 2 assessment was performed on the building assuming a site soil classification D, and design spectral acceleration at short period and one second period for BSE-1E, 0.973g and 0.537g, respectively.

The building has the following noncompliant characteristics:

- Adjacent Building – Clear distance between the low roof of the hotel tower and the adjacent retail/parking structure is 6", which is less than 4% of the height of the retail/parking structure. Columns of the low-rise portion of the hotel tower and the retail/parking structure are located several feet away from the separation joint. Thus, impact between buildings would likely result in localized damage and not compromise the structural integrity of the buildings.
- Moment Resisting Connections – The connections are not able to develop the strength of the adjoining members or panel zones. This is common for pre-Northridge connections.
- Panel Zones – Panel zones have inadequate shear capacity to develop the flexural strength of the girders framing into the column. This is common for buildings of this vintage, as panel zone shear strength was not a design requirement.
- Strong Column/Weak Beam – Calculations indicate that the moment frames do not meet the strong column/weak beam condition. This is common for buildings of this vintage, as strong column/weak beam was not a design requirement.
- Compact Members – Not all members meet compact section requirements. This is common for buildings of this vintage, as compactness was not a design requirement.

The building has a complete load path to transfer seismic forces to the foundations. Nonlinear response history analysis was performed using ground motions equivalent to BSE-2E seismic hazard. Building response was evaluated to collapse prevention performance per ASCE 41 criteria. A limited number of beams at the upper floors did not satisfy the collapse prevention criteria. However, the results indicate that the building globally provides collapse prevention performance.

Conclusion:

Based on observations made during our site visit and the results of the ASCE 41-13 Tier 1 and deficiency only Tier 2 assessment, the expected earthquake performance of the hotel building corresponds to the University of California seismic rating of "IV" ("Fair").

Sincerely,

NABIH YOUSSEF & ASSOCIATES

Nabih Youssef, S.E.
Principal

References:

Structural drawings for Broadway Plaza Office Tower Phase 3, Brandow & Johnston Associates (2007.03), February 11, 1972.

Geotechnical Engineering Investigation Proposed Renovations The Bloc, Geotechnologies, Inc. (20742), April 25, 2014.

Seismic Hazard Zone Report for the Hollywood 7.5-Minute Quadrangle, Los Angeles County, CA, prepared by State of California, Department of Conservation Division of Mines and Geology, Report No. 26, 1998.

State of California Seismic Hazard Zone, Hollywood Quadrangle, March 25, 1999.

University of California Seismic Safety Policy, September 15, 2014.

Photo 1 – Northeast Elevation

Photo 2 – East Elevation (Low-Rise)

Photo 3 – Braced Piping

Photo 4 – Typical Steel Framing