NABIH YOUSSEF ASSOCIATES
STRUCTURAL ENGINEERS

February 28, 2014

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

Re: University of California Seismic Rating for 10960 Wilshire Boulevard, Los Angeles

Dear Bruce:

Nabih Youssef Associates (NYA) have performed an Independent Review of the 23-story office building located at 10960 Wilshire Boulevard in Los Angeles. The review consisted of a site visit to observe the existing condition of the exposed structural elements, a review of the structural drawings, identification of potential falling hazards that pose a significant life or safety risk to occupants, and a seismic risk assessment.

Description:

The building is rectangular-shaped in-plan with overall dimensions of 225' by 110' and includes a single basement level and mechanical penthouse. The building was constructed in the 1971 and was likely designed to the 1967 edition of the Uniform Building Code.

The roof and typical floors are constructed of 4½" light weight concrete slab spanning to steel wide flange beams that are supported by steel wide flange girders. The steel girders are supported by steel wide flange columns that are continuous to the foundation. The foundation system consists of tapered concrete piles and pile caps connected by concrete grade beams. Reinforced concrete retaining walls form the perimeter basement walls.

The later-force-resisting system consists of the roof and floor concrete slabs acting as structural diaphragms to transfer seismic inertial forces to perimeter welded steel moment frames. At the 3rd floor level, two 3-bay interior moment frames supplement the perimeter frames. All moment frames are continuous to the foundation. The typical moment frame connection consists of field-welded full-penetration joints of the frame beam flanges to the column flanges and shear tab fillet welded to the beam web.

Observation:

A site visit was performed by Maurizio Trevellin of NYA on February 27, 2014, to observe the condition and characteristics of the building. Observations were limited to visible areas of the structure. The building appeared to be in good condition and there were no obvious signs of distress.

The exterior of the building is clad with an aluminum frame and glass curtain wall system. Cantilevered canopies were observed over the building entrances and signage at the northeast corner. The canopies and signage appeared to be in good condition, adequately anchored and does not pose a significant potential falling hazard.

Evaluation:

The building is located on flat site and is not subject to the jurisdiction of the Alquist-Priolo Special Studies Zone Act. The building is founded on younger alluvium deposits that consist of loose to medium dense clay, silt, sand and gravel that have a low susceptibility to liquefaction. Thus, the potential for earthquake induced site failure is low.

The building has a complete load path to transfer seismic forces to the foundations. The lateral system is regular in-plan and vertically with no strength or stiffness discontinuities. The first and second floors are taller than the typical office floors of the building, however, deeper beams and heavier column sections are provided at these levels to mitigate soft and weak story concerns. Additional moment frames are also

provided at these levels in the north-south direction. The lateral system is also redundant with at least two lines of multi-bay moment frames in each direction.

The beam-to-column moment connection is the typical "pre-Northridge" type connection that is susceptible to undesirable brittle/cracking damage. This type of connection was standard practice at the time of construction. A sampling (78 of 1300) of the beam-to-column moment connections were ultrasonically inspected in July and August of 1995, in conformance with City of Los Angeles Ordinance 170406, which mandated the inspection of the building's welded moment connections. The inspection report indicates that the construction quality of the welds was considered standard for its time with weld cracks found in less than 4% of the connections tested. No cracks in base material were found and all identified damaged welds were repaired.

Seismic Risk Assessment:

A seismic risk assessment considering building stability, site stability, seismic ground motion hazard and building damageability was performed. The on-line seismic risk assessment tool *SeismiCat,* developed by ImageCat, Inc., for screening of buildings for seismic risk, was used. The assessment was performed to the Level 1 requirements of ASTM E-2026.

The Scenario Expected Loss (SEL) for ground shaking hazards having 10% probability of exceedance within a 50-year exposure period (BSE-1) was calculated. The SEL corresponds to the Implied Seismic Damageability, as defined by the 2011 UC Seismic Safety Policy. The SEL for the building is 16%. The report generated by SeismiCat is attached.

Conclusion:

Based on observations made during our site visit, review of the structural drawings and the results of the seismic risk assessment, the expected earthquake performance of the building corresponds to the University of California seismic rating of "IV" ("Fair").

References:

Seismic Hazard Zone Report for the Beverly Hills 7.5-Minute Quadrangle, Los Angeles County, CA, prepared by State of California, Department of Conservation Division of Mines and Geology, Report No. 023, 1998.

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

University of California Seismic Safety Policy, August 25, 2011.

Sincerely,

NABIH YOUSSEF & ASSOCIATES

Nabih Youssef, S.E.
Principal

Enclosure

cc: N. Youssef; O. Hata; File 14045.00

Photo 1 – Southwest Elevation

Photo 2 – South Elevation

Photo 3 – Typical Floor Framing

Photo 4 – Typical Beam-to-Column Moment Connection