

March 10, 2016

Mr. Matt Ceragioli  
Associate Director  
UCLA Real Estate  
10920 Wilshire Boulevard, Suite 810  
Los Angeles, CA 90024

**Re: *University of California Seismic Rating for 1919 Santa Monica Boulevard, Santa Monica***

Dear Matt:

Nabih Youssef Associates (NYA) have performed an Independent Review of the 4-story medical office building located at 1919 Santa Monica Boulevard in Santa Monica. 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 structural drawings and an ASCE 41-13 Tier 1 evaluation.

**Description:**

The building is generally rectangular shaped in-plan with setbacks and re-entrant corners. The building has 4-stories above grade and two levels of subterranean parking. The building was constructed in 1991 and designed to the 1988 edition of the Uniform Building Code.

The roof is constructed of metal deck with insulating concrete fill. The typical floors are constructed of 3" metal deck with 2½" hardrock concrete fill spanning to wide flange steel beams and girders. The steel beams and girders are supported by wide flange steel columns that are spliced at every other floor and are continuous to the first floor where they are supported on reinforced concrete columns. The first floor is constructed of 10" thick reinforced concrete two-way flat slab with 8" thick concrete drop panels. The parking level 1 is constructed of 8" thick reinforced concrete two-way flat slab with 4" thick concrete drop panels. The ground floor and parking level 1 slabs are supported by reinforced concrete columns at the interior and reinforced concrete wall along the perimeter. The concrete columns and walls are continuous to the foundation. The foundation system consists of shallow concrete spread footings supporting the columns and strip footings supporting the walls. A 5" thick reinforced concrete slab on grade forms parking level 2.

The lateral-force-resisting system consists of the metal deck and concrete fill roof and floors acting as structural diaphragms to transfer seismic inertial forces to the distributed 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 strong ground motion during the 1994 Northridge Earthquake. Recorded ground motion near the site indicates peak ground acceleration greater than 0.2g. City of Santa Monica permit records indicate that the welded moment connections were inspected and repaired after the earthquake. Inspection reports and repair drawings were not available for review.

**Observation:**

A site visit was performed by Maurizio Trevelin of NYA on March 4, 2016, to observe the condition and characteristics of the building. Observations were limited to visible areas of the structure. The building

structure appeared to be in general conformance with the original structural drawings, no significant structural alteration was observed. The building generally appeared to be in good condition and there were no obvious signs of structural distress.

Mechanical and electrical equipment were observed to be generally anchored and piping systems generally braced. The cladding consists of pre-cast concrete panels (spandrel and column covers) and ribbon windows. There is a glass masonry wall (full height of building) at the entrance. The walls span floor to floor and are secured at top and bottom with steel angles and closure plates. Steel T vertical supports are also embedded in the wall and connected to the top and bottom floor slabs. No falling hazards were observed on the exterior of the building.

**Evaluation:**

The building is located on a flat site and is not susceptible to landslide or liquefaction. The site is not located within an Alquist-Priolo Earthquake fault zone – a geologic zone where surface rupture may occur.

An ASCE 41-13 Tier 1 assessment was performed assuming a site soil classification D, and design spectral acceleration at short period and one second period for BSE-1E, 0.923g and 0.514g, respectively.

The building has the following noncompliant characteristics:

- Moment Resisting Connections – Moment connections do not develop the strength of adjoining members. This is common for pre-Northridge connections. The moment connections appear to have been inspected and repaired after the 1994 Northridge Earthquake.
- Compact Members – Not all frame members satisfy desirable 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. In addition, the seismic system is redundant and the moment frames have the desirable strong-column/weak-beam property.

**Conclusion:**

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

Sincerely,

**NABIH YOUSSEF & ASSOCIATES**



Nabih Youssef, S.E.  
Principal

Enclosure

**References:**

Structural drawings for 1919 Santa Monica, Wong Hobach Lau (88105), dated March 21, 1990.

Architectural drawings for 1919 Santa Monica, Rossetti Associates (87118.04), dated March 22, 1990.

City of Santa Monica EQ Damage Repair Permit Application, March 16, 1994.

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. 23, 1998.

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

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



Photo 1 – Southwest Elevation



Photo 2 – Southeast Elevation



Photo 3 – West Elevation



Photo 4 – North Elevation



Photo 5 – Typical Concrete Framing Subterranean Parking



Photo 6 – Concrete Retaining Wall



Photo 7 – Driveway (1<sup>st</sup> Floor)



Photo 8 – Typical Steel Framing



Photo 9 – Main Roof and Parapet



Photo 10 – Typical Piping and Ductwork