NABIH YOUSSEF
ASSOCIATES
STRUCTURAL ENGINEERS

September 23, 2013

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

Re: University of California Seismic Rating for 1035-1045 Gayley Avenue, Los Angeles

Dear Matt:

Nabih Youssef & Associates (NYA) have performed an Independent Review of the two-story retail and office building located at 1035-1045 Gayley Avenue in Los Angeles. The review consisted of a site visit to observe the existing condition of the exposed structural elements, review of tenant improvement plans, identification of potential falling hazards that pose a significant life or safety risk to occupants, and a seismic risk assessment.

Description:

The building has two-stories with a partial basement, was constructed circa1950 and likely designed to the 1946 edition of the Uniform Building Code. The building is generally rectangular-shaped plan with a small light well along the north elevation. The building measures 93 feet by 40 feet.

The roof is constructed of 1" diagonal sheathing supported by 2x6 sawn wood rafters spanning to interior wood stud bearing walls and perimeter reinforced brick masonry walls. The 2nd floor is constructed of ½" plywood sheathing over 1" diagonal sheathing supported by 3x14 sawn wood joists spanning to steel beams and perimeter reinforced brick masonry walls. The steel beams are supported by steel posts.

The elevated portion of the first floor is constructed of reinforced concrete slab spanning to steel beams that are supported by concrete walls. The remainder of the first and basement floor are constructed of concrete slab on grade. The foundation system is reported to consist of concrete grade beams and piles.

The lateral-force-resisting system consists of the diagonal and plywood sheathed roof and floor acting as structural diaphragms to transfer seismic inertial forces to perimeter reinforced brick masonry walls.

Observation:

A site visit was performed by Alejandro Pena of NYA on September 20, 2013, 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 building was in general conformance with the original structural drawings.

The exterior of the building consists of painted reinforced brick with windows. A concrete balcony extends over the Gayley Avenue entrance to the building. The balcony parapet has brick veneer with attached signage. Drawings for the anchorage of the brick veneer and signage were not available for review. The balcony, parapet, veneer and signage appeared to be in good condition and do not appear to pose a significant potential falling hazard.

The rooftop equipment was observed to be anchored and the parapets were typically less than 18" in height.

Evaluation:

The site is located on a gentle slope and is not subject to the jurisdiction of the Alquist-Priolo Special Studies Zone Act. The building is founded on younger alluvium that consists of loose to medium dense clay, silt, sand and gravel that has a low susceptibility to liquefaction. In addition, the building is reported to be supported on pile foundations which mitigate potential differential settlement concerns. Thus, the potential for earthquake induced site failure is low.

The building has a complete load path to transfer seismic forces to the foundations. There are no significant strength or stiffness discontinuities in the reinforced brick masonry walls. The walls provide adequate strength and redundancy to resist expected seismic force (see attached calculations). Out-of-plane anchors and straps tying the exterior brick walls to the wood roof and floor framing were observed (see photos).

Seismic Risk Assessment:

Based on visual observations and review of the available structural drawings, 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 29%. The report generated by SeismiCat is attached.

Conclusion:

Based on observations made during our site visit, a 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:

Tenant improvement drawings for UCLA Blood Donor Center (sheets A1.0 through A1.2), prepared by The Borsuk Company, November 17, 2003.

Seismic Screening of 1035-1045 Gayley Avenue, prepared by Nabih Youssef & Associates (02648-60), October 25, 2002.

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 13373.00

Photo 1 – Gayley Avenue Elevation

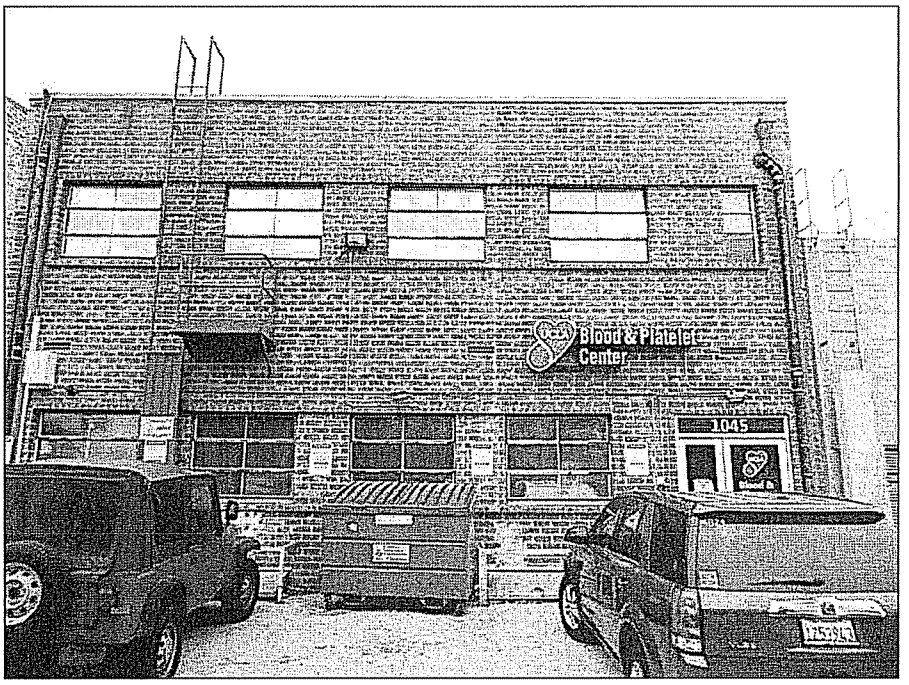

Photo 2 – West Elevation

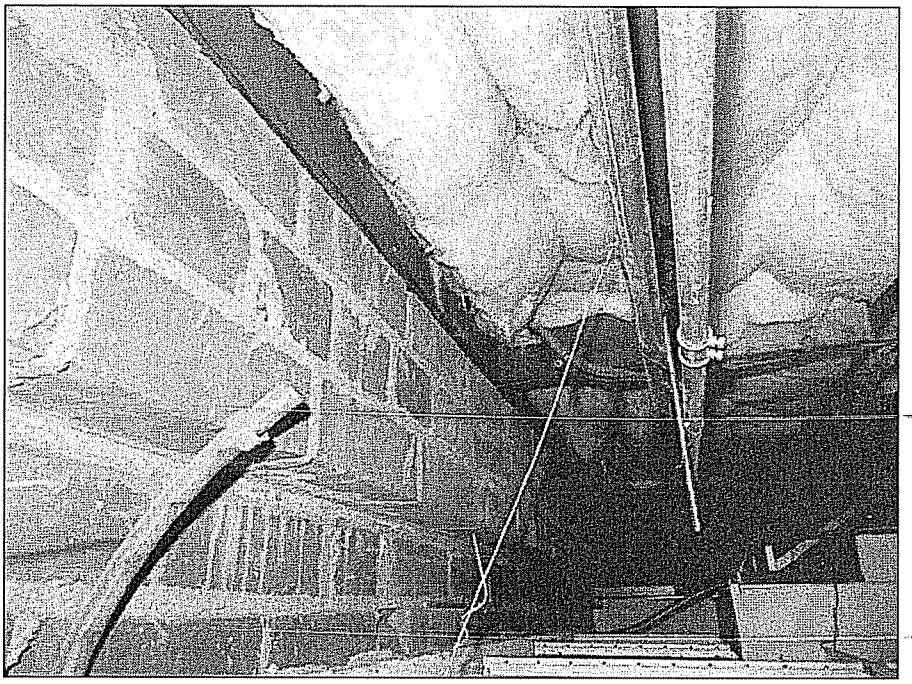

Photo 4 – Strap Connecting Wood Framing to Brick Wall

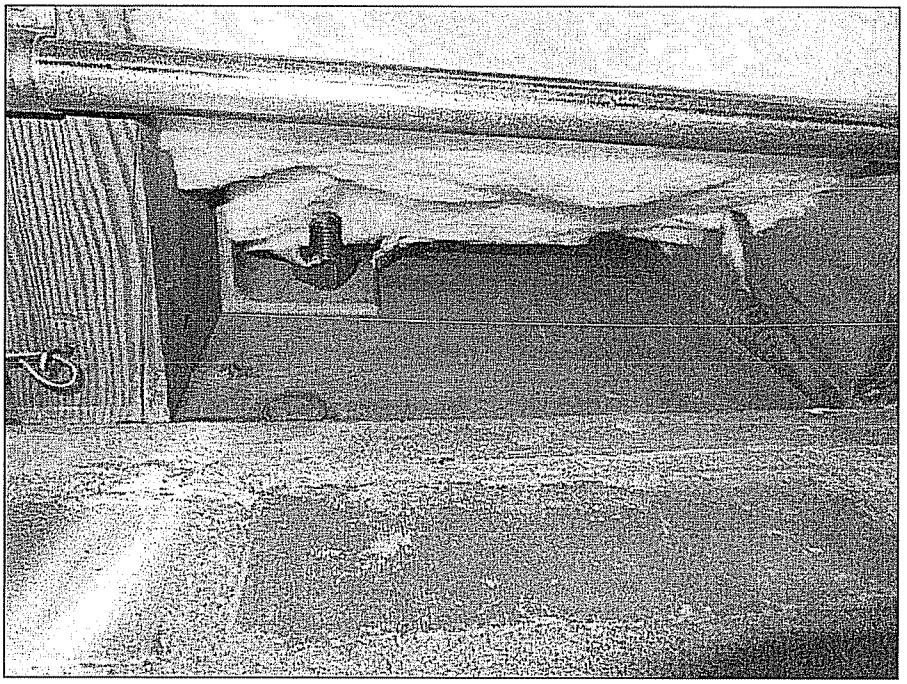

Photo 4 – Out-of-plane Wall Anchorage

1045 Gayley Ave.
Evaluation Criteria

The building located at 1045 Gayley Avenue, Los Angeles, California was built in 1950. The lateral system of the building is composed of a flexible wood flooring diaphragm which transfers the seismic inertial forces to perimeter reinforced masonry shear walls. These shear walls contain various window and door openings along all sides of the building. The effective shear wall length in both directions was used to calculate the overall shear stresses in the walls due to applied seismic loads.

The seismic hazard level used to evaluate the building was a 225 year event with a 20% chance of exceedence in 50 years. This seismic hazard is commonly referred to "BSE-R".

ASCE-31 will be used to determine the acceptance of the shear stresses in the masonry walls under the prescribed seismic loads.