NABIH YOUSSEF ASSOCIATES
STRUCTURAL ENGINEERS

~~May 11, 2011~~
Revised: April 26, 2012

Richard Azar
Director of Real Estate, Master Planning
and Design Construction
UCLA Health System
10920 Wilshire Blvd.
Los Angeles, CA 90024

RE: 10924 Le Conte, Westwood
Structural Assessment
NYA Project #11138.00

Dear Mr. Azar,

Nabih Youssef & Associates (NYA) has performed a structural assessment of the single-story office building located at 10924 Le Conte Avenue in Westwood. The assessment consisted of a site visit to observe the visibly exposed condition of the structure and based on our previous experience and expertise; evaluate the building based on the new UC Seismic Rating Policy implemented on August 2011.

A site visit was performed by Jacob Rodriguez, S.E., of NYA on May 10, 2011 to observe the visibly exposed condition of the structure. The following information was gathered based on the site visit.

The structure is a single story structure, approximately 24'-0" in height with a basement level and mezzanine level on the south end of the structure. The building is rectangular in plan and measures approximately 80'-0" N/S x 60'-0" E/W. The building was constructed in the late 1930's with construction materials typical of that era.

The perimeter of the building is constructed of unreinforced masonry (URM) walls and cast-in-place concrete walls with a cast-in-place concrete bond beam near the top of the wall. A portion of the east wall was observed to be cast-in-place concrete. The walls were originally designed to support the wood roof trusses, which span in the east/west direction and support a wood framed ceiling to the front of the structure and the roof framing throughout. The rear, south portion, of the structure also includes a wood framed mezzanine level.

There are some areas of the structure that could benefit from further investigation such as the north facing side of the structure. The north facing wall consists of a large storefront window glazing system. Two 3'-0" wide concrete or masonry piers were measured which will provide some lateral resistance to this side of the structure. The roof diaphragm will provide some measure of lateral bracing for the out-of-plane loads of the tall masonry walls.

It is apparent that the building has undergone a voluntary seismic upgrade. Structural steel columns have been added at each end of the wood trusses to support gravity loads. Steel channels were also installed, most likely to provide additional out-of-plane bracing to the URM walls. Seismic straps were observed at the tops of the walls providing a positive connection between the URM walls and the wood roof diaphragm. Steel braces were observed at the roof level to brace the URM parapet walls.

We performed an ASCE 31 Tier 1 evaluation to determine the performance rating for the building. The building appears to be compliant with the requirements of this guideline except for two items. Item 1 is the adjacent building separation requirement. Item 2 is the adequacy of the existing horizontal diaphragm width.

ASCE 31 requires adjacent buildings to be separated by 4% of the building height to eliminate pounding of the two buildings in a seismic event. Pounding of adjacent buildings can affect the gravity resisting elements. However, if the floor elevations occur at the same elevations only localized damage at the interface is to be expected. Although this building does not have adequate gap between the adjacent buildings, the roof elevations of the two buildings are similar therefore only localized damage due to building pounding would be expected.

The second item is the adequacy of the existing straight sheathing roof diaphragm. The maximum length of an acceptable straight sheathed diaphragm is 40 feet. Since we do not have structural drawings of the retrofit performed for this building and we have not performed any soft demolition we do not know for certain that a new diaphragm has been added to the roof. Since retrofit of this types of buildings typically requires a plywood diaphragm overlay, we believe that a new diaphragm sheathing has been overlayed on the horizontal sheathing. In addition, the span to depth ratio of the roof sheathing is less than 2 as is allowed for straight sheathed diaphragms.

Based on our experience and evaluation of the structure, the building will meet the **"IV"** Seismic Performance Rating as defined by the University of California Seismic Safety Policy.

If you have any questions or require further assistance please do not hesitate to contact us.

Sincerely,

NABIH YOUSSEF & ASSOCIATES

Nabih Youssef, S.E.
President

cc: N. Youssef; J. Rodriguez, File 11138.00

Photo 1: Exterior View of Building – North Facing Wall

Photo 2: Interior View: Supplemental Gravity Supporting Steel Elements

Photo 3: URM Wall to Roof Framing Connections

Photo 4: Parapet Wall Bracing