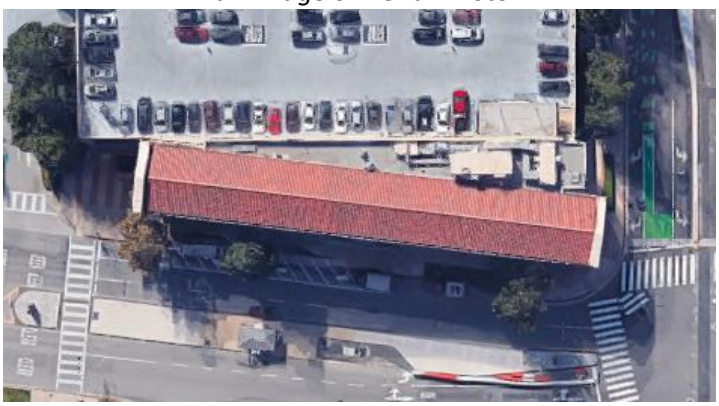
NABIH YOUSSEF ASSOCIATES
STRUCTURAL ENGINEERS

UC Seismic Evaluation – Strathmore

Date:	10/30/20
UC Campus:	UCLA – on campus
Building Name:	Strathmore
Building Address:	501-555 Westwood Plaza, Los Angeles, CA 90024
CAAN ID:	4279
Auxiliary Building ID[1]:	N/A

Summary of information provided by Evaluator:
Nabih Youssef Associates Structural Engineers
UCOP Seismic Performance Level[2] (or "Rating") based on ASCE 41-17 Tier 1 evaluation findings: IV*
*Tier 2 Evaluation is recommended to confirm acceptance of all noncompliant tier 1 checklist items

Plan Image or Aerial Photo



Exterior Elevation Photo

Site location coordinates (decimal):
Latitude: 34.068307
Longitude: -118.445217

Is this a "Partial" Building (i.e., a single structure in a complex building? (Y or N): N

ASCE 41-17 Model Building Type[3]:
Longitudinal Direction: C1 – Concrete Moment Frames
Transverse Direction: C1 – Concrete Moment Frames

Number of stories:
Above grade: 4
Below grade: 1

[1] Applicable only for individual buildings that are structurally separate units within a building complex. Each auxiliary building shall be designated with the main building CAAN ID with a decimal number suffix (i.e. main building CAAN ID 5534; auxiliary building CAAN ID 5534.1). Auxiliary building ID is null for a single building or the main building in a building complex.
[2] The designated Seismic Performance Level shall be a Roman numeral associated with the most applicable performance description from Table A.1 in Appendix A of the UC Seismic Safety Policy.
[3] If a building has multiple building types in one story, the model building type should be designated based on engineering judgement as the lateral system that would have the most predominantly negative effect on the seismic behavior of the building in that respective direction.

Original Building Design Code and Year: 1996 Edition of the Los Angeles Building Code, 1994 Edition of the Uniform Building Code and the 1995 Edition of the California Building Code.

Retrofit Building Design Code and Year: N/A

Cost Range to Retrofit (if applicable)[4]: N/A
"Low" cost-range corresponds to a complete retrofit cost less than $50 per square foot (sf), "Medium" cost-range corresponds to a complete retrofit cost greater than $50 per sf and less than $200 per sf, "High" cost-range corresponds to a complete retrofit cost greater than $200 per sf and less than $400 per sf, and "Very High" cost-range corresponds to a complete retrofit cost greater than $400 per sf.

Building information used in this evaluation:
Structural drawings by Brandow & Johnston Associates, "Westwood Plaza Office Building", dated 06/21/2001

Scope for completing this form:
Reviewed structural drawings for original construction and performed ASCE 41-17 Tier 1.

Brief description of structure:

The 4-story office building has an area of approximately 88,957 square feet and was built in 2001. The building is irregular-shaped in-plan with re-entrant corners.

Foundation System: The foundation system consists of 24-in-diameter concrete piles typically 40-ft in length with concrete pile caps tied together by concrete grade beams supporting concrete columns and perimeter basement walls. A 6-in-thick concrete slab-on-grade forms the basement level.

Structural System for Vertical (gravity) loads: The typical office floors and low roof are constructed of two-way reinforced concrete slabs spanning to reinforced concrete beams that are supported by concrete columns that are continuous to the foundation. The upper gable roof is constructed of metal roof deck spanning to steel post and beam framing supported by the lower roof concrete slab and beam framing.

Structural System for Lateral (seismic/wind) loads: The concrete slabs act as diaphragms to distribute seismic forces to concrete moment frames that are continuous from the low roof to the foundation. The upper gable roof metal roof deck acts as a diaphragm to distribute seismic forces to the steel post and beam framing supported by the lower roof concrete slab and beam framing.

[4] Assume a complete retrofit conforming to the current UC Seismic Safety Policy. Note this range includes all construction costs, including code upgrades (e.g., ADA, fire and life safety, mechanical, electrical, plumbing) triggered by the seismic retrofit. No specific estimate is required to be supplied at this time (i.e., provide an approximate cost to retrofit using Low, Medium, High or Very High cost-range categories). It is acknowledged that such a cost range is assumed to be based only on the engineer's rough estimate and is not intended to require input from a professional cost estimator. For estimation purposes, CSEs may judgmentally determine an approximate cost range for seismic retrofits based on recent relevant experience, and then apply a multiplier to approximate total construction costs.

BACKGROUND INFORMATION

Site Information:
Site Class (A-F): D; Default

Geologic Hazards (Y or N):

- Fault Rupture: N; EZRIM Beverly Hills
- Liquefaction: N; USGS
- Landslide: N; EZRIM Beverly Hills

Site-specific Ground Motion Study? N

Site-modified Spectral Response:

Hazard Level BSE-2E, (0.2s), S_{XS}: 1.855

Hazard Level BSE-2E, (1.0s), S_{X1}: 0.946

Hazard Level BSE-1E, (0.2s), S_{XS}: 0.896

Hazard Level BSE-1E, (1.0s), S_{X1}: 0.516

Estimated Fundamental Period (seconds): 0.67s

Falling Hazards Assessment Summary: Steel overhang canopy at level 3 overhanging the adjacent parking structure roof level is noted as a possible falling hazard.

Summary of Tier 1 Seismic Evaluation Structural Non-compliances/Findings Significantly Affecting Rating Determination:

Significant Structural Deficiencies, Potentially Affecting *Seismic Performance Level* Designation:

- ☐ Lateral System Stress Check (wall shear, column shear or flexure, or brace axial as applicable)
- ☐ Load Path
- ☐ Adjacent Buildings
- ☐ Weak Story
- ☐ Soft Story
- ☐ Geometry (vertical irregularities)
- ☐ Torsion
- ☐ Mass – Vertical Irregularity
- ☐ Cripple Walls
- ☐ Wood Sills (bolting)
- ☐ Diaphragm Continuity
- ☐ Openings at Shear Walls (concrete or masonry)
- ☐ Liquefaction
- ☐ Slope Failure
- ☐ Surface Fault Rupture
- ☐ Masonry or Concrete Wall Anchorage at Flexible Diaphragm
- ☐ URM wall height to thickness ratio
- ☐ URM Parapets or Cornices

☐ URM Chimney

☐ Heavy Partitions Braced by Ceilings

☒ Appendages : Steel overhang canopy at level 3 overhanging the adjacent parking structure roof level is noted as a possible falling hazard.

Brief Description of Anticipated Failure Mechanism: The building is generally anticipated to perform well in a moderate seismic event with possible degradation of concrete frame beam longitudinal splices along with possible secondary and nonstructural damage.

Comments and Additional Deficiencies:

The building is directly adjacent to a large parking structure, Parking Structure 8. While gaps between the Strathmore building and the parking structure have been provided, excessive drift or failure of the parking structure would likely significantly impact the Strathmore building.

Seismic Retrofit Concept Sketches/Description (only if above-listed rating is V or greater): N/A

Appendices:

A. ASCE 41-17 Tier 1 Checklist - C1