

UC Seismic Evaluation – 11500 W Olympic

Date:	06/24/2019
UC Campus:	UCLA – off campus
Building Name:	Olympic Plaza
Building Address:	11500 W Olympic Blvd, Los Angeles, CA 90064
CAAN ID:	N/A
Auxiliary Building ID:	N/A



Summary of information provided by Evaluator: Nabih Youssef Associates Structural Engineers

UCOP Seismic Performance Level (or "Rating") based on ASCE 41-17 Tier 1/Tier 2 evaluation findings: IV Tier 2 deficiency-based analysis addressed all potential deficiencies identified in the Tier 1 evaluation.

Plan Image or Aerial Photo



Exterior Elevation Photo



Site location coordinates (decimal):

Latitude: 34.035770 Longitude: -118.444130

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

ASCE 41-17 Model Building Type:

Longitudinal Direction:	S1-S1A – Steel Moment Frames w/ stiff or flexible diaphragm(s
Transverse Direction:	S1-S1A – Steel Moment Frames w/ stiff or flexible diaphragm(s

Number of stories:

Above grade: 6 Below grade: 3

Original Building Design Code and Year: 1979 UBC **Retrofit Building Design Code and Year**: N/A

Cost Range to Retrofit (if applicable): N/A



Building information used in this evaluation:

Structural drawings by Paul Y. Koshi & Associates, "Olympic Plaza", dated 03/23/81

Scope for completing this form:

Reviewed structural drawings for original construction and performed ASCE 41-17 Tier 1 and Tier 2 evaluation.

Brief description of structure:

The 6-story office building has an area of approximately 244,500 square feet and was built in 1982. The building is irregular-shaped in-plan with re-entrant corners and a large opening in the floor diaphragms for an interior courtyard.

<u>Foundation System</u>: The foundation system consists of shallow spread footings supporting columns and walls. A 4" thick concrete slab-on-grade forms the 3rd Sub-Parking level.

<u>Structural System for Vertical (gravity) loads</u>: The roof and typical office floors consist of metal deck with light weight concrete fill spanning to rolled steel beams and girders. The steel floor framing are supported by steel wide flange columns that are continuous to the intermediate or grade level where they are supported by reinforced concrete columns that are continuous to the foundation. The intermediate, ground and sub-parking levels are constructed of two-way reinforced concrete slabs that are supported by concrete walls and columns.

<u>Structural System for Lateral (seismic/wind) loads</u>: The metal deck and concrete fill roof and floors act as diaphragms to transfer seismic forces to distributed welded steel moment frames. At the intermediate and ground floors, seismic forces are transferred from the steel moment frames to reinforced concrete shear walls.

BACKGROUND INFORMATION

Site Information:

Site Class (A-F): D

Geologic Hazards (Y or N):

- Fault Rupture: N
- Liquefaction: N
- Landslide: N

Site-specific Ground Motion Study? N Site-modified Spectral Response (0.2s), Hazard Level BSE-1E, S_{XS} : 0.888 Site-modified Spectral Response (1.0s), Hazard Level BSE-1E, S_{X1} : 0.508 Estimated Fundamental Period (seconds):

- Longitudinal Direction: 1.25s
- Transverse Direction: 1.25s



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

Moment frames utilize pre-Northridge welded connections.

Brief Description of Anticipated Failure Mechanism: N/A

Comments and Additional Deficiencies:

LDP analysis and Tier 2 evaluation was performed. The results indicate that the moment frame columns, beams and connections typically meet life safety and collapse prevention performance when averaged on a floor-by-floor basis.

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

Appendices:

- A. ASCE 41-17 Tier 1 Checklists
- B. Quick Check Calculations
- C. ASCE 41-17 Tier 2 Calculations