

UNIVERSITY OF CALIFORNIA

BUILDING REPORT REQUIREMENTS ASCE 41-17 TIER 1 SEISMIC EVALUATIONS

BUILDING REPORT

- 1) UC Campus: Los Angeles
- 2) Building Name: Northwest Auditorium
- 3) Building CAAN ID:
- 4) Auxiliary Building ID: 4302F

- 5) Date of Evaluation: 6/4/2021
- 6) Evaluation by: Englekirk, TAS
- 7) Seismic Performance Rating and Basis of Rating: IV, ASCE 41-17 Tier 1



8) Plan Image or Aerial Photo

- 10) Site Location
 - (a) Latitude Decimal Coordinates: 34.0719125
 - (b) Longitude Decimal Coordinates: -118.4505357
- 11) ASCE 41-17 Model Building Type and Description
 - (a) Longitudinal Direction: RM1: Reinforced Masonry Bearing Walls with Flexible Diaphragms
 - (b) Transverse Direction: RM1: Reinforced Masonry Bearing Walls with Flexible Diaphragms
- 12) Number of Stories
 - (a) Above grade: 1
 - (b) Below grade: 0
- 13) Original Building Design Code & Year: UBC-1985
- 14) Retrofit Building Design Code & Year (if applicable):
- 15) Cost Range to Retrofit (if applicable): (Low, Medium, High or Very High): None

Comments: There is a steel frame structure supporting louvers over the HVAC unit at the north end of the building. The steel frame is not detailed per the requirements of any specific lateral system, e.g. moment



9) Exterior Elevation Photo



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frame, braced frame, etc. However, it is our opinion that this will not impact the overall behavior of the structure significantly considering the minimal weight being supported. There are tall cantilever CMU walls around the mechanical well that appear to have been designed to resist the out-of-plane forces.

BACKGROUND INFORMATION

Site Information

- 16) Site Class (A F) and Basis of Assessment
 - (a) Site Class: D
 - (b) Site Class Basis: Unknown (Default)
 - (c) Site Class Company: None
 - (d) Site Class Report Date: None
 - (e) Site Class Ref Page No.: None
- 17) Geologic Hazards
 - (a) Fault Rupture (Yes, No or Unknown) and Basis of Assessment: No, CGS Maps
 - (b) Liquefaction (Yes, No or Unknown) and Basis of Assessment: No, CGS Maps
 - (c) Landslide (Yes, No or Unknown) and Basis of Assessment: No, CGS Maps

18) Site-specific Ground Motion Study? (Yes or No) No

Seismic design acceleration parameters of interest:	
For BSE-1N	1.628 and 0.825
For BSE-1E	0.896 and 0.516

- 19) Estimated Fundamental Period (seconds)
 - (a) Longitudinal: 0.21
 - (b) Transverse: 0.21

20) Falling Hazards Assessment Summary: None noted.

21) Structural Non-Compliances/Findings Significantly Affecting Rating Determination Summary Significant Structural Deficiencies, Potentially Affecting *Seismic Performance Rating* Designation:

- (a) Lateral System Stress Check (wall shear, column shear or flexure, or brace axial as applicable): No deficiency noted
- (b) Load Path: No deficiency noted
- (c) Adjacent Buildings: Yes, deficiency noted. The gap provided is less than the requirement in Tier 1 checklist. However it is our opinion that the drift of both adjacent buildings will not exceed the seismic gap provided.
- (d) Weak Story: No deficiency noted
- (e) Soft Story: No deficiency noted
- (f) Geometry (vertical irregularities): No deficiency noted
- (g) Torsion: No deficiency noted
- (h) Mass Vertical Irregularity: No deficiency noted
- (i) Cripple Walls: Not Applicable



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- (j) Wood Sills (bolting): Not Applicable
- (k) Diaphragm Continuity: No deficiency noted
- (I) Openings at Shear Walls (concrete or masonry): No deficiency noted
- (m) Liquefaction: No
- (n) Slope Failure: No
- (o) Surface Fault Rupture: No
- (p) Masonry or Concrete Wall Anchorage at Flexible Diaphragm: No deficiency noted
- (q) URM wall height to thickness ratio: No deficiency noted
- (r) URM Parapets or Cornices: No deficiency noted
- (s) URM Chimney: Not Applicable
- (t) Heavy Partitions Braced by Ceilings: No deficiency noted
- (u) Appendages: No deficiency noted

22) Brief Description of Anticipated Failure Mechanism

CMU wall in-plane shear failure. CMU wall out-of-plane failure.

23) Seismic Retrofit Concept Sketches/Description (only required for buildings rated V or worse) None recommended.

Building Report Appendices

- A) ASCE 41-17 Tier 1 Checklists (Structural only)
- B) Quick Check Calculations