

UNIVERSITY OF CALIFORNIA

BUILDING REPORT REQUIREMENTS ASCE 41-17 TIER 1 SEISMIC EVALUATIONS

BUILDING REPORT

- 1) UC Campus: Los Angeles
- 2) Building Name: Chancellor's Residence
- 3) Building CAAN ID: 4240
- 4) Auxiliary Building ID:

- 5) Date of Evaluation: 10/30/2020
- 6) Evaluation by: Englekirk, CC
- 7) Seismic Performance Rating and Basis of Rating: V, ASCE 41-17 Tier 1



8) Plan Image or Aerial Photo

- 10) Site Location
 - (a) Latitude Decimal Coordinates: 34.076382
 - (b) Longitude Decimal Coordinates: -118.442127
- 11) ASCE 41-17 Model Building Type and Description
 - (a) Longitudinal Direction: W1 and W2: Wood frame, wood shear panels(b) Transverse Direction: W1 and W2: Wood frame, wood shear panels
- 12) Number of Stories
 - (a) Above grade: 2
 - (b) Below grade: 1
- 13) Original Building Design Code & Year:
- 14) Retrofit Building Design Code & Year (if applicable): CBC-1995
- 15) Cost Range to Retrofit (if applicable): (Low, Medium, High or Very High): Low

Comments: Wood framed building from 1929. A retrofit from 1997 addressed bracing for the loggia adding braced frames to support it, retrofit also included the strengthening of wood post bases and wood post to girder connections, and the addition of plywood at the existing wood shear walls at the garage. The chimney was also strengthened as part of the retrofit. Tier 1 Quick Checks procedures show a potential deficiency for the existing wood shear walls capacity; a Tier 2 would be useful to confirm the rating.







UNIVERSITY OF CALIFORNIA

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, GCS 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) None

Seismic design acceleration parameters of interest:	
For BSE-1N	1.633and 0.827
For BSE-1E	0.897 and 0.518

19) Estimated Fundamental Period (seconds)

- (a) Longitudinal: 0.19
- (b) Transverse: 0.19

20) Falling Hazards Assessment Summary: There is a potential for spalling of the brick veneer.

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): Yes, wall shear stress deficiency noted
- (b) Load Path: No deficiency noted
- (c) Adjacent Buildings: No deficiency noted
- (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
- (j) Wood Sills (bolting): No deficiency noted
- (k) Diaphragm Continuity: No deficiency noted
- (I) Openings at Shear Walls (concrete or masonry): Not Applicable
- (m) Liquefaction: No
- (n) Slope Failure: No



UNIVERSITY OF CALIFORNIA

- (o) Surface Fault Rupture: No
- (p) Masonry or Concrete Wall Anchorage at Flexible Diaphragm: Not Applicable
- (q) URM wall height to thickness ratio: Not Applicable
- (r) URM Parapets or Cornices: Not Applicable
- (s) URM Chimney: No deficiency noted
- (t) Heavy Partitions Braced by Ceilings: Not Applicable
- (u) Appendages: No deficiency noted

22) Brief Description of Anticipated Failure Mechanism

Shear failure of existing wood shear walls at the first story, leading to excessive drift causing the lost of vertical load carrying capacity of the structure.

23) Seismic Retrofit Concept Sketches/Description (only required for buildings rated V or worse) Addition of plywood panels and hardware (including holdowns) to the interior of existing wood shear walls.

Building Report Appendices

A) ASCE 41-17 Tier 1 Checklists (Structural only)

B) Quick Check Calculations