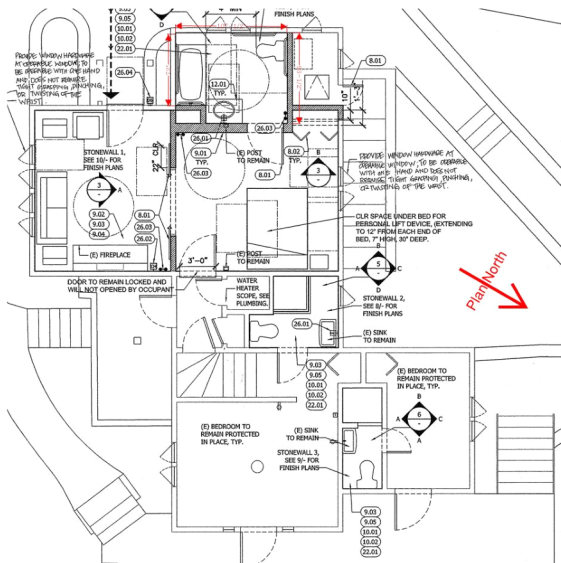




BUILDING REPORT REQUIREMENTS
ASCE 41-17 TIER 1 SEISMIC EVALUATIONS

BUILDING REPORT

- 1) UC Campus: Los Angeles
2) Building Name: Lake Arrowhead Stonewall
3) Building CAAN ID: 4201F
4) Auxiliary Building ID:
5) Date of Evaluation: 6/30/2020
6) Evaluation by: Englekirk, TAS
7) Seismic Performance Rating and Basis of Rating: V, ASCE 41-17 Tier 1



8) Plan Image or Aerial Photo



9) Exterior Elevation Photo

- 10) Site Location
(a) Latitude Decimal Coordinates: 34.264635
(b) Longitude Decimal Coordinates: -117.187163
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: 0
13) Original Building Design Code & Year:
14) Retrofit Building Design Code & Year (if applicable):
15) Cost Range to Retrofit (if applicable): (Low, Medium, High or Very High): Medium



Comments: No drawings. Unstiffened cripple walls, no bolting to stone stem wall. Assumed URM (stone) chimney.



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: **Unknown, None**
- (b) Liquefaction (Yes, No or Unknown) and Basis of Assessment: **Unknown, None**
- (c) Landslide (Yes, No or Unknown) and Basis of Assessment: **Unknown, None**

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

Seismic design acceleration parameters of interest:	
For BSE-1N	1.249 and 0.805
For BSE-1E	0.919 and 0.545

19) Estimated Fundamental Period (seconds)

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

20) Falling Hazards Assessment Summary: **Tall stone chimney, stone fireplace 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: **Yes, 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: **Not Applicable**
- (h) Mass – Vertical Irregularity: **No deficiency noted**
- (i) Cripple Walls: **Yes, deficiency noted**
- (j) Wood Sills (bolting): **Yes, deficiency noted**
- (k) Diaphragm Continuity: **No deficiency noted**
- (l) Openings at Shear Walls (concrete or masonry): **Not Applicable**
- (m) Liquefaction: **Unknown**
- (n) Slope Failure: **Unknown**



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

22) Brief Description of Anticipated Failure Mechanism

Unbraced cripple walls and crawl space posts not anchored to foundation piers. Unreinforced stone foundation walls. Failure of let-in or diagonal bracing or exterior stucco and interior plaster walls. Failure of URM (stone) chimney.

23) Seismic Retrofit Concept Sketches/Description (only required for buildings rated V or worse)

Place cribbing under building and raise building off of foundation. Replace perimeter stone walls with concrete stem walls and replace stone veneer. Add new concrete interior foundations and anchorage hardware. Lower building and secure to new foundations. Connect crawl space framing with structural hardware and strapping. Add new shear walls. Anchor roof framing to exterior walls. Resheath roof with plywood. Connect roof framing with structural hardware. Remove and replace masonry chimney and stone fireplace veneer.

Building Report Appendices

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