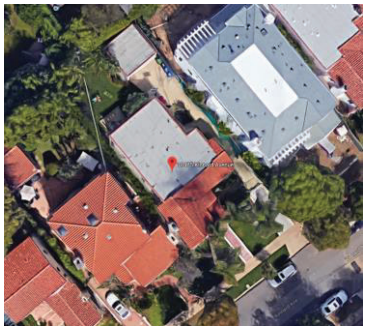
BUILDING REPORT

1) UC Campus: **UCLA**
2) Building Name:
   10475 Kinnard Ave, Los Angeles
3) Building CAAN ID: **N/A**
4) Auxiliary Building ID[1]: **N/A**
5) Date of Evaluation: **11/23/2018**
6) Evaluation by: **Englekirk Institutional, TS**
7) Seismic Performance Level (SPL)[2] Rating and Basis of Rating: **V; ASCE41-17 Tier 1 Check. The house was built in 1928 and there is no evidence of anchorage of the walls to the foundations. Diagonal blocking may be used on the shear walls. Per ASCE 41-17 Tier 1 checklist, the shear stress on the walls exceeds the limit. But the building is expected to only see moderate structural and non-structural damage and collapse is not anticipated due to plenty of partition walls inside. A rating of V is given based on the anticipated overall performance of the building during a seismic event.**

8) 

9) 

10) Site Location
    a. Latitude Decimal Coordinates: **34.05879832008516**
    b. Longitude Decimal Coordinates: **-118.42758672215932**
11) ASCE 41-17 Model Building Type and Description[3]
    a. Longitudinal Direction: **Wood shear wall building W1 consisting of partial tile and partial built-up roof. The sheathing of the shear wall and diaphragm couldn't be observed during the visit but are assumed to be diagonal blocking and straight sheathing respectively. The building was built on a hillside site. Perimeter continuous footing was observed. Anchorage of the wall into foundation was not observed since the internal structure of the wall was not exposed during the visit. But it is assumed to be unanchored**
    b. Transverse Direction: **Same as the longitudinal direction.**
12) Number of Stories
    a. Above 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 123; auxiliary building CAAN ID 123.1)
[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.

b. Below grade: **0**

13) Original Building Design Code & Year: **1928 (based on city record on ZIMAS)**
14) Retrofit Building Design Code & Year (if applicable): **None listed on city record.**
15) Cost Range to Retrofit (if applicable)[4] (Low, Medium or High): **Low**

Please assume a "Low" cost-range corresponds to a complete retrofit cost less than $50 per square foot (sf), a "Medium" cost-range corresponds to a complete retrofit cost greater than $50 per sf and less than $200 per sf, a "High" cost-range corresponds to a complete retrofit cost greater than $200 per sf and less than $400 per sf, and a "Very High" cost-range corresponds to a complete retrofit cost greater than $400 per sf.

[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 or 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

16) Site Class (A – F) and Basis of Assessment: **D; Default value assumed.**

17) Geologic Hazards

a. Fault Rupture (Yes, No or Unknown) and Basis of Assessment
No, based on CGS Zones of Required Investigation.

b. Liquefaction (Low, Moderate or High) and Basis of Assessment
No, based on city data on ZIMAS.
Landslide (Low, Moderate or High) and Basis of Assessment
No, based on city data on ZIMAS.

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

The seismic design acceleration parameters of interest are S_{DS} and S_{D1} for BSE-1N and S_{XS} and S_{X1} for BSE-1E.

19) Estimated Fundamental Period (seconds)

a. Longitudinal: **0.13s**

b. Transverse: **0.13s**

20) Falling Hazards Assessment Summary

To comply with Seismic Safety Policy Section III.B.3, all building evaluations must include a survey of potential falling hazards that pose a significant life or safety hazard to occupants. Scope of falling hazard evaluations shall include representative building walk-through observations (including public access areas such as walkways, building perimeters, assembly areas, as well as ingress and egress pathways of travel) and reporting of features presenting a high potential life or safety hazard to occupants or hazardous materials that pose a safety hazard. Risk assessment should be based on engineering judgment, guided by observed past seismic performance of similar features and does not require completion of an ASCE 41 "Nonstructural Checklist". Such hazards may include, but shall not be limited to:

a. Heavy ceilings, features or ornamentation above large lecture halls, auditoriums, lobbies or other areas where large numbers of people congregate;
b. Heavy masonry or stone veneer above exit ways and public access areas;
c. Unbraced masonry parapets, cornices or other ornamentation above exit ways and public access areas;
d. Unrestrained hazardous materials storage;
e. Masonry chimneys; and
f. Unrestrained natural gas-fueled equipment such as water heaters, boilers, emergency generators, etc.

No significant falling hazard was observed during the site visit. Roof tile may not be anchored.

21) Structural Non-Compliances/Findings Significantly Affecting Rating Determination Summary

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

a. Lateral System Stress Check (wall shear, column shear or flexure, or brace axial as applicable):
No plywood on the shear wall was observed during the site visit. Assumption is made based

on the year built that diagonal blocking is used as structural panels. The wall finish is cement plaster. Based on the quick check calculation, the shear stress exceeds the limit as given in the checklist.

b. Load Path: **No record drawing was provided and no structural connections including anchorage into foundation were exposed for observation during the site visit. Based on the year built, assumption could be made that there is no anchorage between the sill plate and foundation. The load path may not be complete.**
c. Adjacent Buildings: **No**
d. Weak Story : **No**
e. Soft Story : **No**
f. Geometry (vertical irregularities) : **No**
g. Torsion: **No**
h. Mass – Vertical Irregularity: **No**
i. Cripple Walls: **The type of sheathing on the cripple wall can't be observed during the site visit. Based on the year built, it is assumed that there is no structural panels to brace the cripple wall.**
j. Wood Sills (bolting): **There was no bolting observed during the site visit since the sill plates were not exposed. Based on the year built, the assumption is made that sill bolts don't exist.**
k. Diaphragm Continuity: **No**
l. Openings at Shear Walls (concrete or masonry) : **No**
m. Liquefaction: **No**
n. Slope Failure: **No**
o. Surface Fault Rupture: **No, based on CGS Zones of Required Investigation.**
p. Masonry or Concrete Wall Anchorage at Flexible Diaphragm: **N/A**
q. URM wall height to thickness ratio: **N/A**
r. URM Parapets or Cornices: **N/A**
s. URM Chimney: **N/A**
t. Heavy Partitions Braced by Ceilings: **N/A**
u. Appendages: **N/A**

22) Brief Description of Anticipated Failure Mechanism**:**

The walls may experience in-plane shear failure and over deflect during a seismic event. The whole building may slide off the foundation.

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

This sketch or description is intended to communicate the basic concept of a proposed retrofit. Sketches are not mandatory if a description suffices; however, if a sketch is used, it may be a simple manual sketch, electronic image, or other form of graphic representation with simple notations. The choice of either a sketch or a written description may be based on whichever method most efficiently communicates the retrofit concept.

Add structural panels, sill bolts and holdowns to the walls. The may be other load-path related connections that require upgrade, such as nailing between the roof joists and the wall top plates, etc.

Attachment 3 Appendices