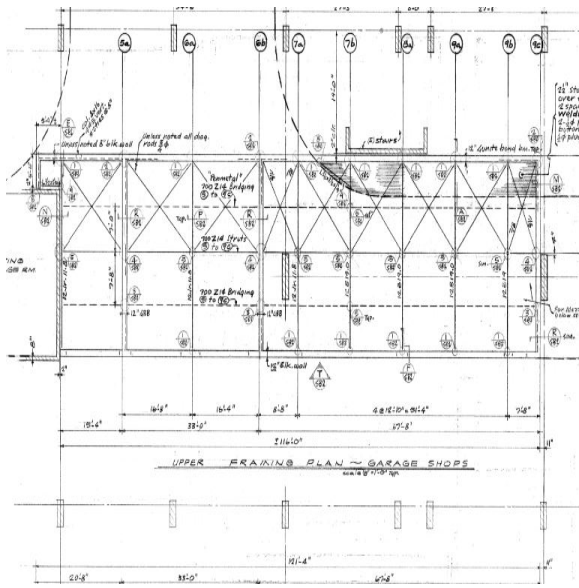




BUILDING REPORT REQUIREMENTS
ASCE 41-17 TIER 1 SEISMIC EVALUATIONS

BUILDING REPORT

- 1) UC Campus: Los Angeles
2) Building Name: Fleet Services Garage
3) Building CAAN ID: 4233A
4) Auxiliary Building ID:
5) Date of Evaluation: 10/20/2020
6) Evaluation by: Englekirk, AB
7) Seismic Performance Rating and Basis of Rating: IV, ASCE 41-17 Tier 1



8) Plan Image or Aerial Photo



9) Exterior Elevation Photo

- 10) Site Location
(a) Latitude Decimal Coordinates: 34.06766837
(b) Longitude Decimal Coordinates: -118.4477341
11) ASCE 41-17 Model Building Type and Description
(a) Longitudinal Direction: RM1: Reinforced masonry
(b) Transverse Direction: RM1: Reinforced masonry
12) Number of Stories
(a) Above grade: 1
(b) Below grade: 0
13) Original Building Design Code & Year: UBC-1973
14) Retrofit Building Design Code & Year (if applicable):
15) Cost Range to Retrofit (if applicable): (Low, Medium, High or Very High): None



Comments: Fleet Services Garage is located below Parking Structure 8 ramp. There is a 2" vertical gap filled with styrofoam which provides a joint between ramp and the structure beneath. This evaluation does not take into account the mass or seismic behavior of the ramp above. 2" Horizontal separation joint provided between existing building and Fleet Services Garage. Although Tier 1 Checklist requires building



horizontal separation of 2.75" and therefore item is non-compliant, actual building displacement with masonry wall lateral system is not anticipated to exceed 2".

**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) **None**

Seismic design acceleration parameters of interest:	
For BSE-1N	<b>1.624 and 0.824</b>
For BSE-1E	<b>0.896 and 0.516</b>

19) Estimated Fundamental Period (seconds)

- (a) Longitudinal: **0.154**
- (b) Transverse: **0.154**

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: **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): **Not Applicable**
- (k) Diaphragm Continuity: **No deficiency noted**
- (l) Openings at Shear Walls (concrete or masonry): **Not Applicable**



- (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: **Not Applicable**
- (r) URM Parapets or Cornices: **Not Applicable**
- (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

Shear failure of CMU masonry wall, inability of walls to behave in a ductile manner due to minimal steel reinforcing.

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