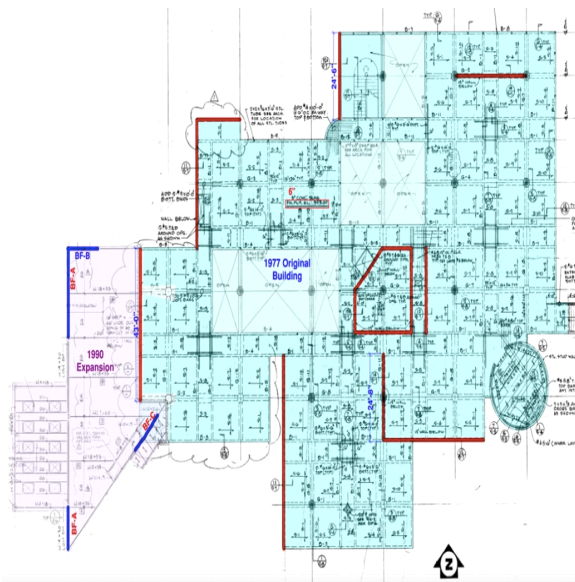




BUILDING REPORT REQUIREMENTS
ASCE 41-17 TIER 1 SEISMIC EVALUATIONS

BUILDING REPORT

- 1) UC Campus: Los Angeles
2) Building Name: James E. West Alumni Development Center, 1990 Expansion
3) Building CAAN ID: 4222
4) Auxiliary Building ID: 4222.1
5) Date of Evaluation: 12/11/2020
6) Evaluation by: Englekirk, TAS / NAT
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: 34.070233
(b) Longitude Decimal Coordinates: -118.445185
11) ASCE 41-17 Model Building Type and Description
(a) Longitudinal Direction: S2 and S2a: Steel concentrically braced frame
(b) Transverse Direction: S2 and S2a: Steel concentrically braced frame
12) Number of Stories
(a) Above grade: 2
(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): Medium



Comments: The James West Alumni Center was originally constructed in 1977 and underwent an expansion in 1990 (see plan view). The 1990 expansion is treated as a separate structure since it is not laterally tied to the original building (beam connections to the original building have slotted holes to allow



for independent lateral movement, and the floor slabs of the two structures are not doweled together). Separate reports have been created for the original building and for the 1990 expansion.

The lateral system of the 1990 expansion area consists of steel braced frames. Structural deficiencies per the Tier 1 evaluation include overstressed braced frame columns, beams, and connections. Tier 2 evaluation is recommended to confirm rating.

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	0.897 and 0.516

19) Estimated Fundamental Period (seconds)

- (a) Longitudinal: **0.36**
- (b) Transverse: **0.36**

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):
Yes, braced frame member stress deficiencies noted.
- (b) Load Path: **No deficiency noted**
- (c) Adjacent Buildings: **Yes, deficiency noted. There is no seismic gap provided between the West Center original construction and the 1990 expansion, thus not conforming to the required separation of 4.86" per the Tier 1 checklist.**
- (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): No deficiency noted
- (m) Liquefaction: No
- (n) Slope Failure: No
- (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: Not Applicable
- (t) Heavy Partitions Braced by Ceilings: No deficiency noted
- (u) Appendages: No deficiency noted

22) Brief Description of Anticipated Failure Mechanism

Braced frame column failure as well as other possible failure mechanisms for braced frames including buckling and fracture of braces, gusset plate connection failure, column base plate fracture, and/or beam failure.

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

Strengthening of braced frame columns, beams, and connections.

Building Report Appendices

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

B) Quick Check Calculations