Malcolm/Glendon

Staff Report Reply

Issue No. 1:
The permit was issued after the establishment of the AP Zone.

LADBS Response to Issue No. 1
"The LADBS reviews geotechnical reports and plans under the codes and regulations that are current at the time the reports or the permit applications are submitted. This applies to new PFRSA and AP zones as well. In addition, the fault investigation conducted for the proposed development was provided to the CGS to help to formulate the local AP zone map."

Fix The City Reply to Issue No. 1:

Arguments by the City concerning timing are fatally flawed.

- The Final Fault Map was released PRIOR to issuance of the building permit.
- The city must use best available information before issuing a building permit.
- The A-P act covers all new construction. Only existing buildings were grandfathered in.
- The "vesting" argument is belied by the fact that the Plan Check occurred AFTER the final fault map was in full force. (see timeline slide)
- The "vesting" argument is belied by the Safety Element of the City of Los Angeles (Seismic Hazards). It states:

  "As maps are released for Los Angeles they will be utilized by the Building and Safety Department in helping to identify areas where additional soils and geology studies are needed for evaluation of hazards and imposition of appropriate mitigation measures prior to issuance of building permits. "
  (https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf)

Issue No. 2:
The appellant suggests existing protocols established by the State of California (as explained by the CGS relative to the AP Act) and the LADBS's fault investigation policies (IB P/BC 2017-129 [currently IB P/BC 2020-129, Exhibit C]) were not followed by the geologic investigation.

LADBS Response to Issue No. 2:
LADBS reviewed the geologic investigation reports, and fulfilled its role as the Local Jurisdiction per CGS guidelines (see Exhibit K).

Fix The City Reply to Issue No. 2:
There is no substantial evidence to support this claim. Fix The City has supplied evidence, including
- Reliance on an incorrect fault database.
- Allowing improper mitigation
- Failure to implement even that mitigation
- Failure to provide any study on the Glendon structure at all

Primary Appellant Issues

- The City failed to adhere to the clear requirements of the Alquist-Priolo Act.
- The City relied on outdated information (and does to this day) as it uses the incorrect fault database on NavigateLA and Zimas.
    - Malcolm
        - The Final Fault Map was released PRIOR to issuance of the building permit or plan check.
        - The study failed to investigate on the property past a few feet and also did not provide evidence of absence of fault traces beginning under the property or entering from the south. This is admitted by the consultant.
        - As no study was done on property or on the other property boundaries, no structure can be built as there is a presumption of faulting.
        - As no study was done to the south, a 50’ setback is required.
        - The completed structure is built on a trace and/or in a “no-build” zone contrary to state law.
            - No cantilever is visible at finished grade as required.
            - At grade structures ARE connected to the alleged cantilevered section contrary to project conditions.
    - Glendon
    - The developer simply did not do a study for the Glendon structure.
- State law, City policy and related documents are clear. Allowing occupancy would be an abuse of discretion.
- LADBS failed to refute any of the evidence provided by Fix The City.
- The certificate of occupancy for each structure must be revoked.

Malcolm/Glendon

Project Description, Location & Timeline

The Project

- “the proposed project will consist of construction of <u>two separate multifamily residential buildings</u> on the subject sites. One building will face Malcolm Avenue and the other will face Glendon Avenue.”
  -- Developer Initial Fault Study

The project consists of two separate structures with two seprate foundations.

Permit Timeline

Event	Date
Submitted	6/1/2016
Assigned to Plan Check Engineer	7/14/2016
Corrections Issued	7/28/2016
Reviewed by Supervisor	8/5/2016
Building Plans Picked Up	8/12/2016
Applicant returned to address corrections	12/8/2016
Applicant returned to address corrections	12/20/2016
Applicant returned to address corrections	12/21/2016
Preliminary Fault Map Released	**7/13/2017**
Applicant returned to address corrections	7/19/2017
Applicant returned to address corrections	8/21/2017
Applicant returned to address corrections	8/22/2017
Final Fault Map Released	**1/5/2018**
Applicant returned to address corrections	2/27/2018
Plan Check Approved	5/16/2018
Issued	9/28/2018
Permit Closed-Status Void	9/18/2020
Re-Activate Permit	9/22/2020
CofO in Progress	6/30/2021
Permit Finaled	6/30/2021
CofO Issued	6/30/2021

Malcolm/Glendon

Alquist Priolo

The Alquist Priolo Act

- The purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to regulate development near active faults so as to mitigate the hazard of surface fault rupture. The stated intent of the Act is to *"…provide policies and criteria to assist cities, counties, and state agencies in the exercise of their responsibility to prohibit the location of developments and structures for human occupancy across the trace of active faults.*

California
Department of Conservation

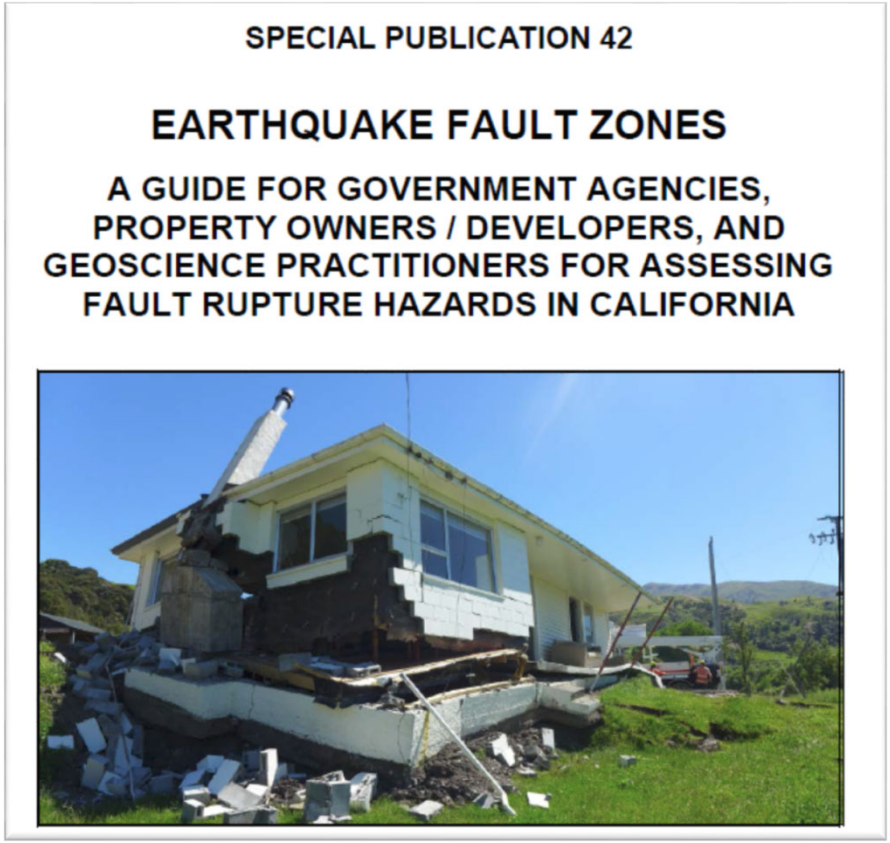
Alquist-Priolo Earthquake Fault Zones

Photo: Cottage destroyed by surface fault rupture on the Kekerengu Fault during the magnitude 7.8 2016 Kaikoura earthquake in New Zealand. Approximately 10 meters of right-lateral fault displacement occurred under this house, tearing it from its foundation. Photo credit: VML 190573, Julian Thomson, GNS Science / Earthquake Commission

Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults in California. (A trace is a line on the earth's surface defining a fault.) Wherever an active fault exists, if it has the potential for surface rupture, a structure for human occupancy cannot be placed over the fault and must be a minimum distance from the fault (generally fifty feet).

Special Publication 42

- …this revised document is specifically intended to provide state-of-the-practice guidelines for affected permitting agencies and their reviewers, as well as for geoscience consulting practitioners representing property owners and developers.



Special Publication 42 – Definitions

structure for human occupancy: “any structure used or intended for supporting or sheltering any use or occupancy, which is expected to have a human occupancy rate of more than 2,000 person-hours per year”

mitigation: The act of reducing the hazard of *surface fault rupture* either through avoidance or engineered design. Under the *Alquist–Priolo Earthquake Fault Zoning Act*, **the only mitigation allowed for *Holocene-active faults* is avoidance**.

setback: The mitigation technique for *surface fault rupture* that avoids placing structures across traces of *Holocene-active faults* and may include *age-undetermined faults*.

Special Publication 42 – Key Quotes

- The *A-P Act* addresses the hazard of *surface fault rupture* and, because the *A-P Act* explicitly prohibits the construction of *structures for human occupancy* across traces of *Holocene-active faults*, the only mitigation the *A-P Act* allows for is avoidance.

- This means that if a *Holocene-active fault* is found during a *fault investigation*, a *structure for human occupancy* **will not be allowed** to be built across that fault.

- …the working premise for the planning and execution of a site investigation within an *Earthquake Fault Zone* (EFZ) is that ***the suitability of the site must be demonstrated***. This premise will persist until either: (a) the *fault investigation* satisfactorily demonstrates the absence of *surface fault rupture* hazard, or (b) the site investigation satisfactorily defines the *surface fault rupture* hazard and provides a suitable *setback* recommendation for its *mitigation*.

- If the *project geologist* concludes that fault is absent, this conclusion should be based on the **evidence of absence** and not the **absence of evidence** for *surface fault rupture* hazard.

The AP Act Applies to Each "Structure for Human Occupancy"

- The developer's consultant clearly described the nature of the project's structures:

"It is our understanding that the proposed project will consist of construction of two separate multifamily residential buildings on the subject sites. One building will face Malcolm Avenue and the other will face Glendon Avenue."

Per Special Publication 42:

structure for human occupancy: *"any structure used or intended for supporting or sheltering any use or occupancy, which is expected to have a human occupancy rate of more than 2,000 person-hours per year"*

State Fault Evaluation Report (FER-259) Cited This Project

CALIFORNIA GEOLOGICAL SURVEY
FAULT EVALUATION REPORT FER 259

THE HOLLYWOOD, SANTA MONICA and NEWPORT-INGLEWOOD FAULTS
in the Beverly Hills and Topanga 7.5' Quadrangles
Los Angeles County, California

by
Brian P.E. Olson
Engineering Geologist
January 5, 2018 (revised)

Locality 10 - 1749-1751 Malcolm Avenue

A combined fault study and geotechnical investigation was performed for a proposed residential development at 1749-1751 Malcolm and 1772 Glendon Avenues by Applied Earth Sciences (2015a,b). The fault investigation consisted of a single transect along Malcolm Avenue constructed from 20 CPTs and three continuous core borings drilled to a maximum depth of about 80 feet. Spacing of CPTs/borings varied from 5 feet (between CPT/boring pairs) to over 25 feet in the public right-of-way, where numerous utilities were located. In their borings, the consultants identified both Holocene alluvium and "sag pond" deposits, along with Pleistocene alluvial and estuarine sediments. No well-developed paleosols were identified in the core samples, thus the consultants used various gravel and silt layers to correlate between CPTs/borings and look for stratigraphic anomalies that would suggest faulting. Their analysis indicated a thick sequence of Holocene silt and clay (interpreted as "sag pond deposits) was juxtaposed against the older Pleistocene sedimentary package between CPT-18 and CPT-19 (Figure 16). Additionally, they note groundwater was encountered in one boring north of CPT-18 and not in either of the borings down gradient to the south. Based on these findings, they interpret an active strand of the Santa Monica Fault trends through the immediate vicinity of CPT-18 and CPT-19. Consequently, the consultants established a "no build zone".

LADBS Surface Fault Rupture Hazard Investigations P/BC 2020-129

III. SETBACK REQUIREMENTS
Building setbacks from active fault traces are key recommendations provided in fault investigations. The default building setback from an active fault is 50 feet. **Reduced setbacks can be considered if the location, trend and nature of a particular fault trace is accurately established by several data points.**

CITY LADBS DEPARTMENT OF BUILDING AND SAFETY

INFORMATION BULLETIN / PUBLIC - BUILDING CODE
REFERENCE NO.: LABC 1803.5.11 Effective: 01-01-2020
DOCUMENT NO.: P/BC 2020-129 Revised:
Previously Issued As: P/BC 2017-129

SURFACE FAULT RUPTURE HAZARD INVESTIGATIONS

This information bulletin provides a general guideline for conducting surface fault rupture hazard investigations (fault investigation) within the City of Los Angeles. Fault investigation reports submitted to the Los Angeles Department of Building and Safety (LADBS) shall be based upon sufficient geologic data to determine the location or nonexistence of active fault trace(s) on the site. In addition to this Information Bulletin, geologists conducting fault investigations should use California Geological Survey (CGS) Special Publication 42 and Note 49, which provide detailed guidelines and suggested format for fault investigations.

Malcolm/Glendon

Report/Approval Flaws

The Project is in an Alquist-Priolo Earthquake Zone of Required Investigation

City of Los Angeles
Department of City Planning

7/18/2021
PARCEL PROFILE REPORT

PROPERTY ADDRESSES	Address/Legal Information	
1774 1-6 S GLENDON AVE	PIN Number	129B153 397
1772 1/2 S GLENDON AVE	Lot/Parcel Area (Calculated)	9,243.0 (sq ft)
1772 S GLENDON AVE	Thomas Brothers Grid	PAGE 632 - GRID C4

Seismic Hazards

Active Fault Near-Source Zone	
Nearest Fault (Distance in km)	0.16579596
Nearest Fault (Name)	Santa Monica Fault
Region	Transverse Ranges and Los Angeles Basin
Fault Type	B
Slip Rate (mm/year)	1.00000000
Slip Geometry	Left Lateral - Reverse - Oblique
Slip Type	Moderately / Poorly Constrained
Down Dip Width (km)	13.00000000
Rupture Top	0.00000000
Rupture Bottom	13.00000000
Dip Angle (degrees)	-75.00000000
Maximum Magnitude	6.60000000
Alquist-Priolo Fault Zone	Yes
Landslide	No
Liquefaction	Yes
Preliminary Fault Rupture Study Area	No
Tsunami Inundation Zone	No

City of Los Angeles
Department of City Planning

7/18/2021
PARCEL PROFILE REPORT

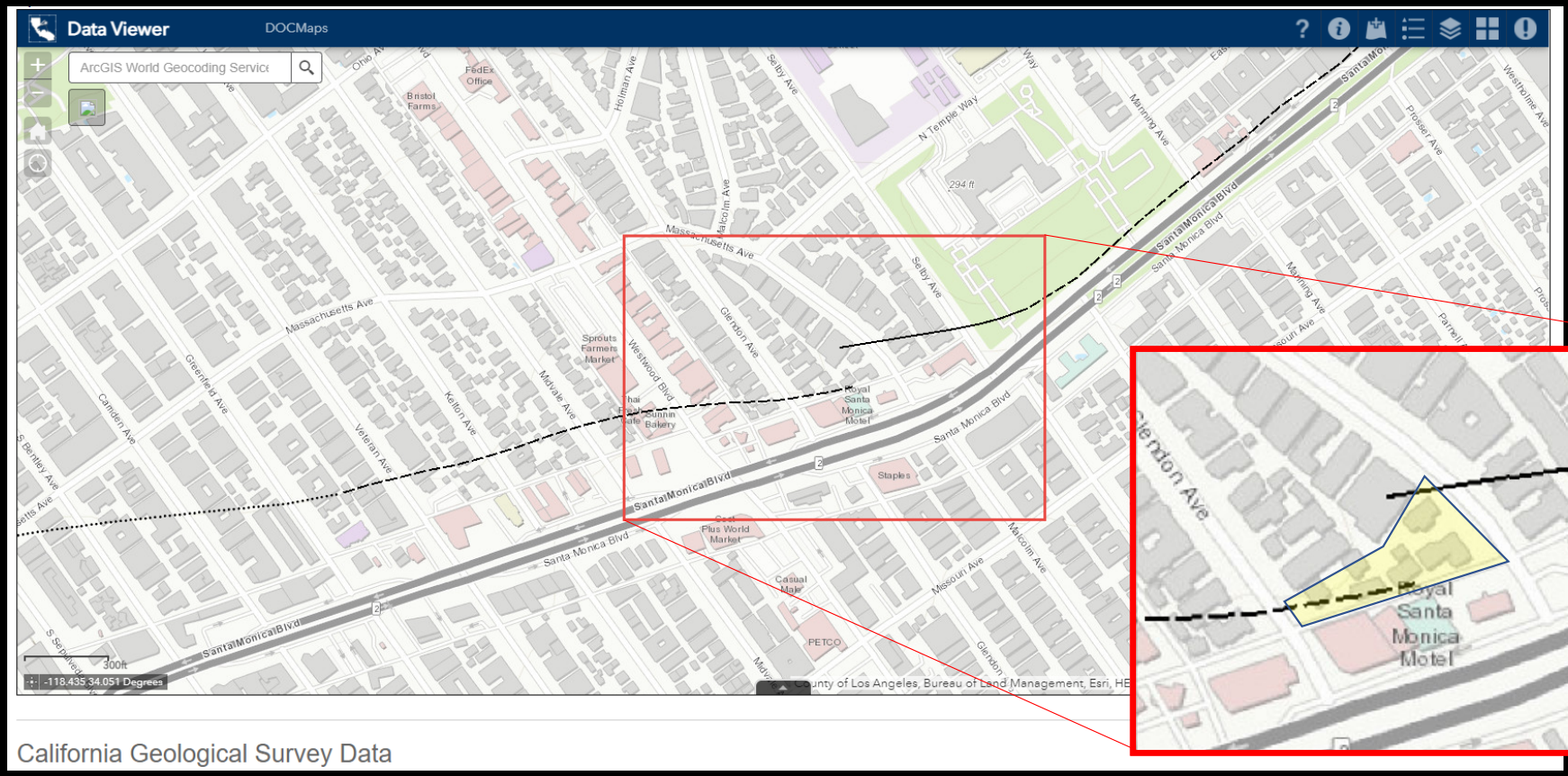
PROPERTY ADDRESSES	Address/Legal Information	
1749 S MALCOLM AVE	PIN Number	129B153 355
	Lot/Parcel Area (Calculated)	7,393.5 (sq ft)
	Thomas Brothers Grid	PAGE 632 - GRID C4

Seismic Hazards

Active Fault Near-Source Zone	
Nearest Fault (Distance in km)	0.176439576
Nearest Fault (Name)	Santa Monica Fault
Region	Transverse Ranges and Los Angeles Basin
Fault Type	B
Slip Rate (mm/year)	1.00000000
Slip Geometry	Left Lateral - Reverse - Oblique
Slip Type	Moderately / Poorly Constrained
Down Dip Width (km)	13.00000000
Rupture Top	0.00000000
Rupture Bottom	13.00000000
Dip Angle (degrees)	-75.00000000
Maximum Magnitude	6.60000000
Alquist-Priolo Fault Zone	Yes
Landslide	No
Liquefaction	Yes
Preliminary Fault Rupture Study Area	No
Tsunami Inundation Zone	No

Both Structures are in an Earthquake Zone

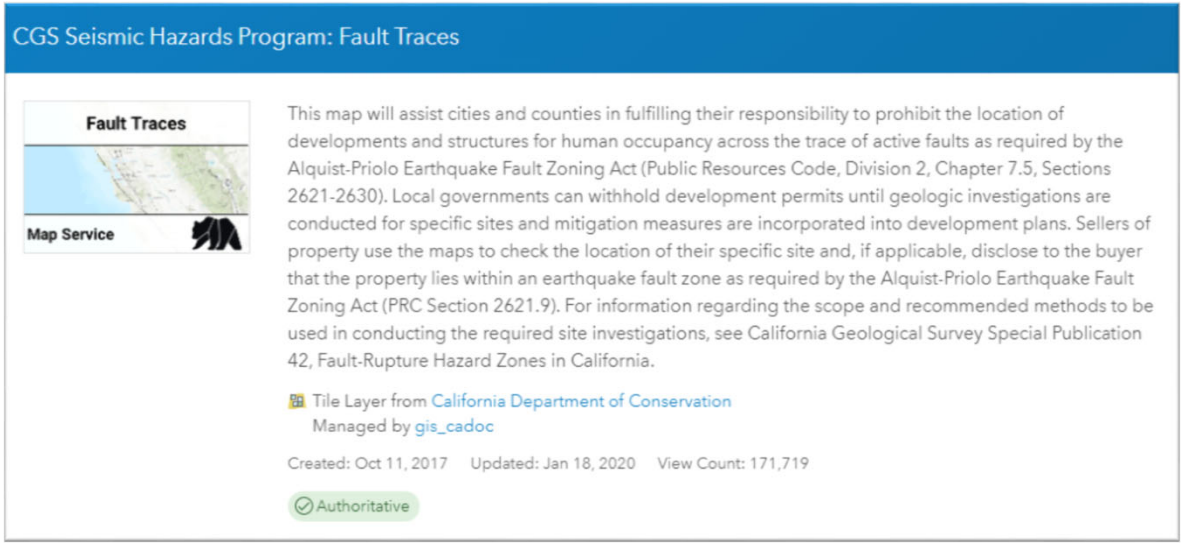
The Authoritative CGS Database Shows At Least Two Traces Under The Project



California Geological Survey Data

FTC Used the Correct Data Source

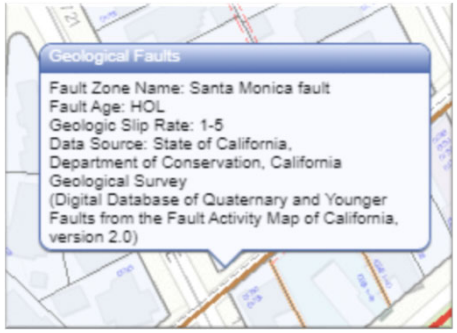
https://cadoc.maps.arcgis.com/home/item.html?id=0bf609400da84434999d37160433399d

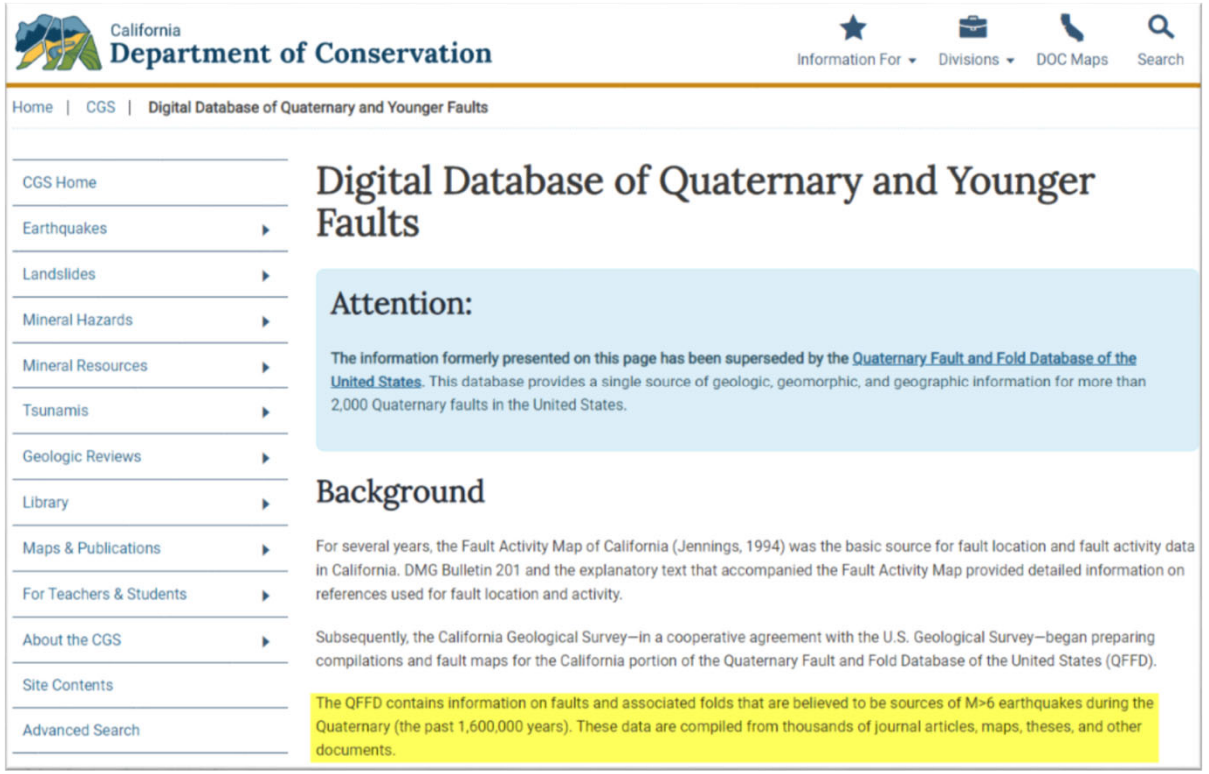


Incorrect Data Source Used by City/Developer

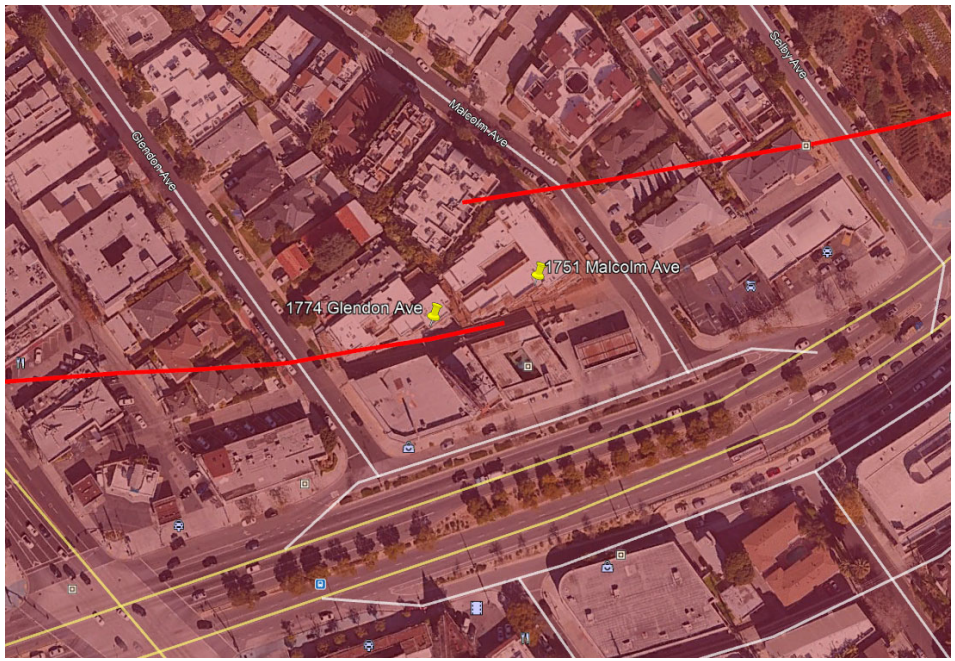
conservation.ca.gov/cgs/Pages/Publications/QuaternaryFaults_ver2.aspx

- Dataset reported by Navigate LA.





Difference Between Correct and Incorrect



More Error: Zimas/NavigateLA Contain Incorrect Distance to Fault Values

City of Los Angeles
Department of City Planning

7/18/2021
PARCEL PROFILE REPORT

PROPERTY ADDRESSES
1749 S MALCOLM AVE

Address/Legal Information	
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Rupture Top	0.00000000
Rupture Bottom	13.00000000
Dip Angle (degrees)	-75.00000000
Maximum Magnitude	6.60000000
Alquist-Priolo Fault Zone	Yes
Landslide	No
Liquefaction	Yes
Preliminary Fault Rupture Study Area	No
Tsunami Inundation Zone	No

The distance is ZERO, not .1657 km.

Developer's Report (Malcolm)

Based on wrong dataset.

Improperly allowed building over a fault trace and/or in a no-build zone.

Did not study west of the eastern property line.

Failed to study fault traces starting on the property or entering from the south.

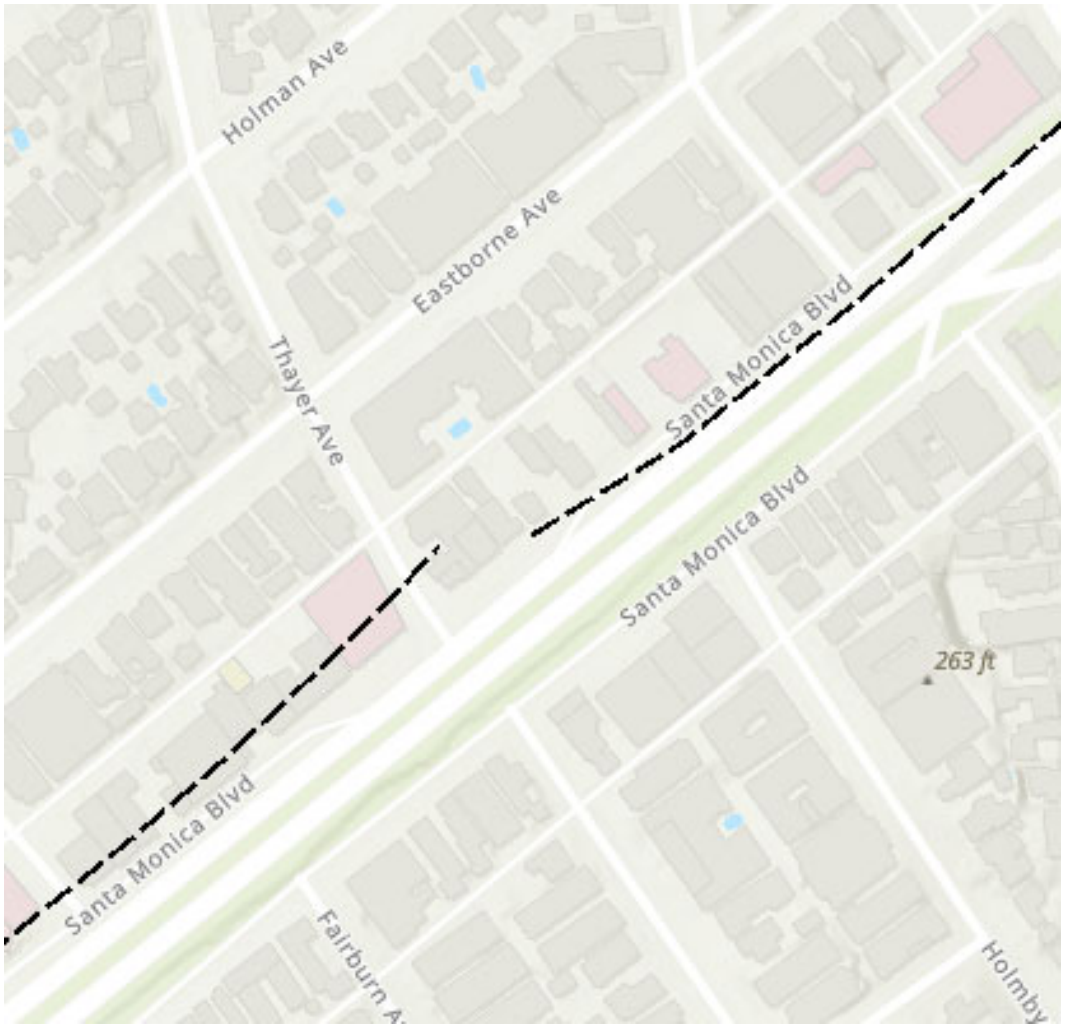
Failed to provide any "evidence of absence" of faulting on the property west of the eastern boundary.

Admitted no direct evidence to support findings:

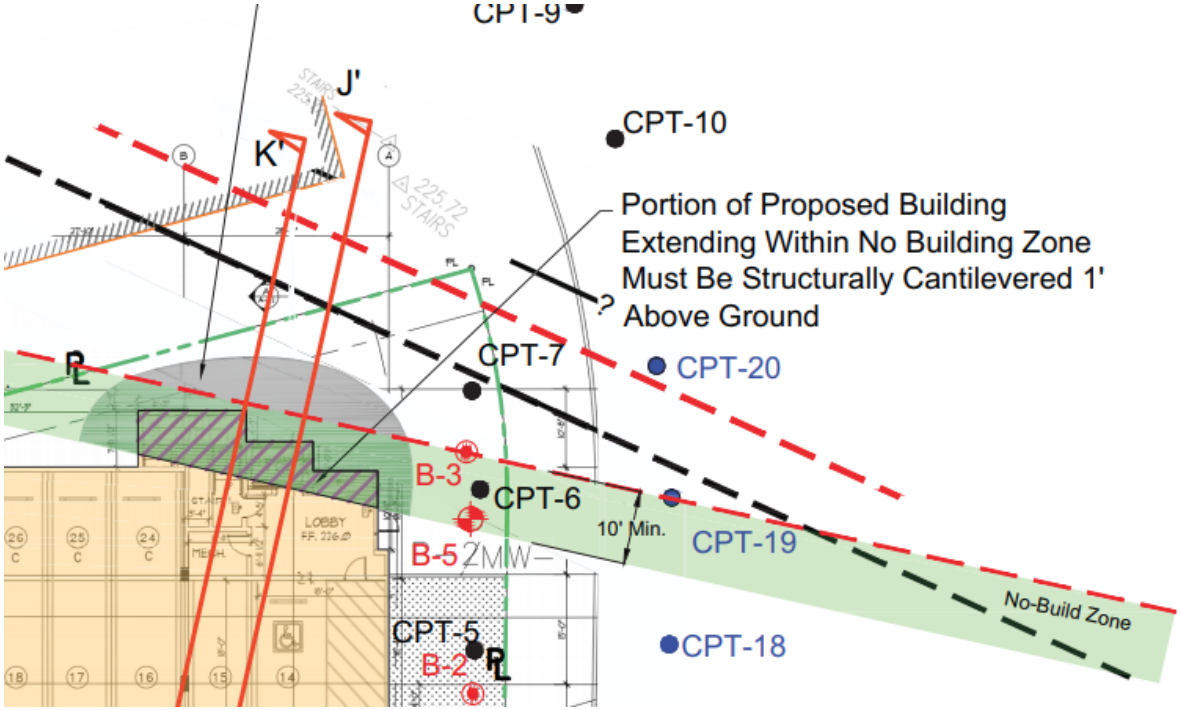
- *"We have hereby revised the fault orientation to reflect the most conservative orientation, based on that fact that direct evidence or observation of the actual orientation of the fault with the exploration methods used is not possible."* – Developer's Seismic Report.

Fault traces can start within a property or enter within a boundary.

Exploration on one side does not disprove the presence of fault traces.



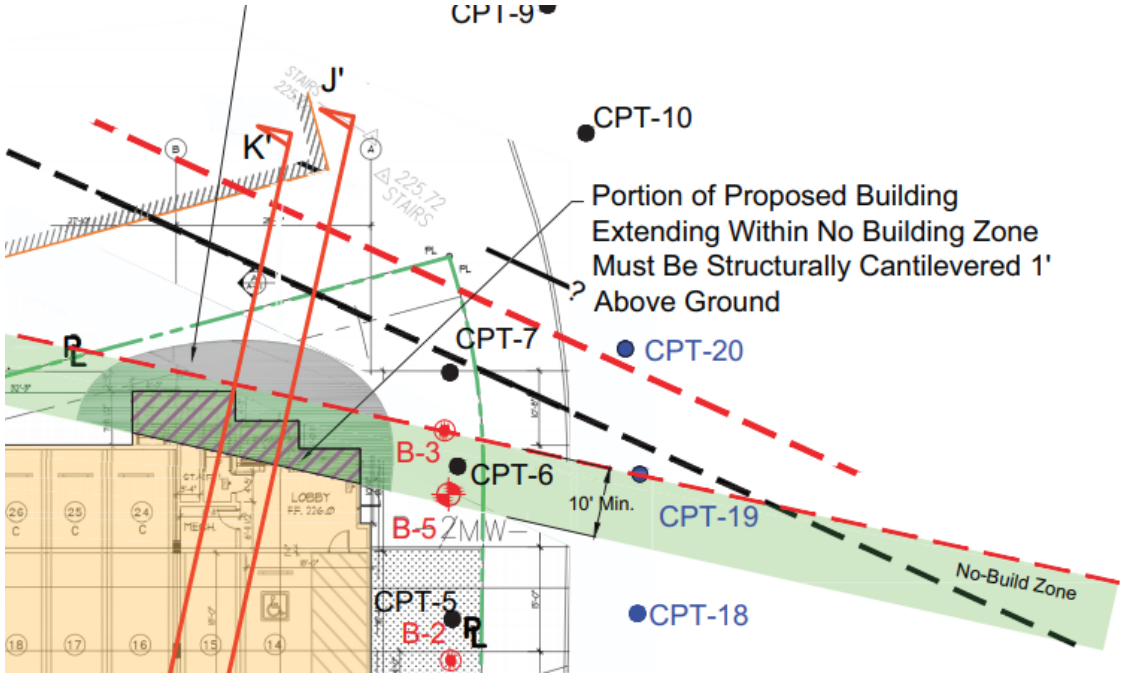
No study was done west of “CPT-7” just inside the eastern property line to determine “location, trend, nature” of the fault trace as required.



Developer's Report (Glendon)

- Required investigation not performed at all.

The Project is built in a no-build zone at the fault trace resulting in zero setback



Malcolm/Glendon

Project-Specific Mitigation Defects

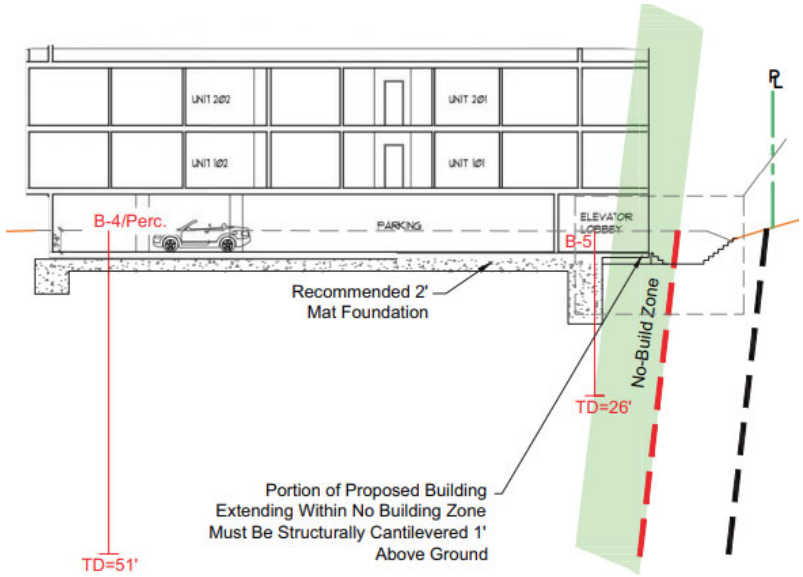
Building Over a Fault Trace or in a “No Build Zone” is Disallowed

- The city improperly allowed construction on/at an active fault trace.
- The city improperly allowed construction in a “no-build zone”
- The developer failed to build the called-for “cantilever”

> “…the cantilevered part of the proposed building will have a minimum of 12 inches clearance above the finished ground surface. Any appurtenant stair or bridge structures that provide access to the lower lobby level of the main building shall be structurally separate from the main building. “

Required Cantilever* Is Not Visible

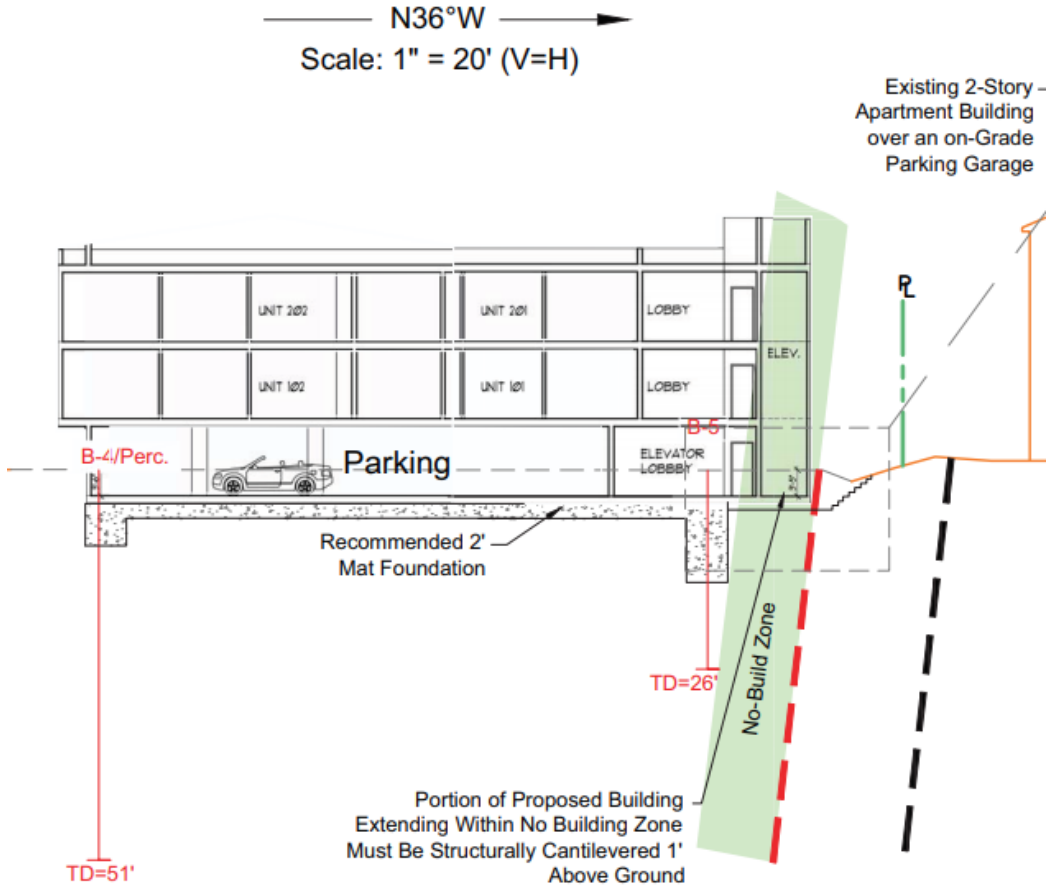
Note: Building over a fault trace is never allowed – even with a cantilever.



The at grade structure IS connected to the cantilevered section.

As the consultants recommend building a cantilevered structure within the "No-Build Zone", the consultants shall provide recommendations as to the maximum vertical and horizontal offset of the fault; and, a recommendation for vertical and horizontal space to be maintained below the cantilevered structure. Provide a plan that depicts the required space maintained below the cantilevered structure. Note: The current plan appears to show a lobby with doorways in the cantilevered area. No at grade structures can be connected to the cantilevered section of the proposed building.

The elevator and electrical vault are at the fault trace in the no-build zone.



Malcolm/Glendon

Reply to Staff Report, Conclusion

Conclusion

- Arguments by the City concerning timing are fatally flawed.
  - The Final Fault Map was released PRIOR to issuance of the building permit or plan check.
  - This disproves the sole reason the initial appeal was rejected.
- The developer's study is fatally flawed for the Malcolm structure.
  - No exploration west of CPT 7 to determine the location, trend and nature of the fault trace. A setback is not warranted.
  - No exploration for faults entering from the south.
- The developer simply did not do a study for the Glendon structure.
- The completed structure is built on a trace and/or in a "no-build" zone contrary to state law.
  - No cantilever is visible at finished grade as required.
  - At grade structures ARE connected to the alleged cantilevered section contrary to project conditions.
- State law, City policy and related documents are clear. Allowing occupancy would be an abuse of discretion The certificate of occupancy for each structure must be revoked.