



Project No. T2647-22-16  
December 5, 2023

The City of Murrieta  
1 Town Square  
Murrieta, California 92562

Subject: GEOTECHNICAL THIRD-PARTY REVIEW  
FAULT RUPTURE HAZARD INVESTIGATION  
VISTA MURRIETA APARTMENTS PROJECT  
40475 VISTA MURRIETA ROAD, MURRIETA, CALIFORNIA  
TERRACON PROJECT CB235112

Reference: *Fault Rupture Hazard Investigation Report, Vista Murrieta Apartments Project, 40475 Vista Murrieta Road, Murrieta, California, Terracon Project No. CB235112, dated November 16, 2023.*

Dear Mr. Lyall,

At your request, Geocon West, Inc. (Geocon) has completed a third-party review with respect to fault hazards discussed in the referenced *Fault Rupture Hazard Investigation Report* prepared by Terracon. The purpose of this review is to present our opinion regarding the suitability of the information and conclusions provided within the referenced report with respect to the fault rupture hazard at the subject site. This correspondence presents a summary of our conclusions regarding the adequacy of the referenced report documents.

Our review is based on *County of Riverside Technical Guidelines for the Review of Geotechnical and Geologic Reports* 2000 Edition, and California Geological Survey Special Publication 42, *Earthquake Fault Zones, A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California* (2018) and Special Publication 117A, *Guidelines for Evaluating and Mitigating Seismic Hazards in California* (2008), as applicable.

## **SITE AND PROJECT DESCRIPTION**

The site is located northwest of Vista Murrieta at Carrigan Road in Murrieta, California. The property is not located in an Alquist-Priolo Fault Hazard Zone. The southern approximately 70 feet of the site is located within a Riverside County Fault Hazard Zone along the Murrieta Hot Springs fault. Kennedy and Morton (2003) and Kennedy (1977) mapped two closely spaced faults across the western portion

of the site in a north-northwest direction. These faults are depicted on Riverside County's Map My County website as a single fault. No fault hazard zone is noted along the mapped fault.

Geocon has performed fault trenching in association with a geotechnical investigation along the subject mapped fault on a parcel northwest of Skypark Road where sedimentary bedrock was encountered across the length of the trench. No indications of fault rupture were observed in the bedrock units.

Terracon's investigation included a review of stereoscopic aerial photographs from 1938 through 2023. Terracon reports that they did not observe indications of faulting within the subject site in the photographs. Terracon excavated one trench across the mapped fault. The trench was 12 feet deep and 235 feet long, extending at least 30 meters on either side of the mapped faults. The trench exposed Holocene alluvium. Terracon did not observe evidence of faults in their trench exposure. Geocon observed the fault trench exposure and we concur with Terracon's reported observations.

The Terracon trench did not extend into pre-Holocene earth materials which is typically required to evaluate the presence and age of faulting. However, based on the lack of evidence in the aerial photograph review, the lack of geomorphic evidence observed on site, and Geocon's experience exploring the mapped fault approximately 550 feet northwest of the site, we concur with the Terracon conclusion that a fault hazard is not likely present on the site and no building setbacks are warranted.

## **CONCLUSIONS**

Based on our review of the referenced report and our geologic knowledge in the vicinity of the site, it is our opinion that the document prepared by Terracon does meet the requirements in Special Publication 42 and is adequate for the proposed development at this time.

## **LIMITATIONS**

Our review of the subject report was limited to the review of the fault hazard evaluation of the documents provided by the City of Murrieta and the geotechnical consultant of record. Our evaluation of the subject report was intended to determine if the fault hazard aspects of the project were reasonably analyzed and addressed within the general standard of care in our industry. No additional analysis nor independent investigation were performed. As with all geotechnical projects of this type, it is critical that the project geotechnical consultant confirm their provisional findings and recommendations during construction. The fact that we have reviewed the subject report should not be considered an endorsement by Geocon West, Inc. of these documents or of the construction operations that result from them. Geocon West, Inc. is NOT responsible for errors and omissions in the subject document. Changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge.

Should you have any questions regarding this letter, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON WEST, INC.



Lisa A. Battiato  
CEG 2316



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