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## STATE CLEARINGHOUSE

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Mr. Taylor,

The California Geological Survey (CGS) has received the Notice of Preparation of a Draft Environmental Impact Report (DEIR) for the City of Riverside Housing and Public Safety Element Updates and Environmental Justice Policies Project. This letter conveys suggestions and recommendations from CGS concerning geologic and soils issues related to the planning area.

The California Geological Survey recommends the DEIR address the following items and issues within the planning area:

1) Geologic Hazards

Numerous potential geologic hazards exist within the project area. Each of the hazards listed below should be addressed with respect to the opportunity sites considered in the DEIR.

a. *Liquefaction and Landslide Hazards*

Riverside County has mapped liquefaction zones that intersect the project area. The GIS data for these zones can be downloaded here: <https://gisopendata-countyofriverside.opendata.arcgis.com/datasets/liquefaction?geometry=-118.663%2C33.349%2C-113.437%2C34.149>

In addition, CGS has mapped landslide susceptibility throughout the state. This was originally published in 2011 as Map Sheet 58, available for download here:

[https://www.conservation.ca.gov/cgs/Documents/Publications/Map-Sheets/MS\\_058.pdf](https://www.conservation.ca.gov/cgs/Documents/Publications/Map-Sheets/MS_058.pdf)

An interactive web map is also available here:

[https://www.arcgis.com/home/webmap/viewer.html?url=https%3A%2F%2Fgis.conse rvation.ca.gov%2Fserver%2Frest%2Fservices%2FCGS%2FM58\\_LandslideSusceptibility\\_Classes%2FMapServer&source=sd](https://www.arcgis.com/home/webmap/viewer.html?url=https%3A%2F%2Fgis.conse rvation.ca.gov%2Fserver%2Frest%2Fservices%2FCGS%2FM58_LandslideSusceptibility_Classes%2FMapServer&source=sd)

b. *Ground Shaking Hazards* – The project area is located near many active faults capable of producing severe ground shaking during an earthquake. The DEIR should include a discussion of nearby active faults and the relative likelihood of the planning area to experience strong ground shaking. The earthquake shaking potential for various regions in California can be viewed at the following website:

<https://www.conservation.ca.gov/cgs/psha>.

2) Regional and Site-Specific Geology

The DEIR should include a brief discussion of the geologic history of the area and a description of the rock types in the planning area. Geologic maps of varying scale can be found here: <https://ngmdb.usgs.gov/mapview/>

3) Soils

The DEIR should consider including a summary on the types of soils present in the planning area and a discussion of the soil characteristics pertinent to development, such as source material, geographic setting, drainage characteristic, permeability, and the risk of erosion and soil expansion. The Natural Resources Conservation Service has an interactive soil map available at the following website:

<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

Please let me know if you have any questions or concerns with the comments in this letter.

Sincerely,

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