### **Alexandra Owens**

From: Zachariasen, Judith@DOC < Judith.Zachariasen@conservation.ca.g v> [

**Sent:** Thursday, December 21, 2023 8:47 AM **To:** SR110 Bridge Comments@DOT

**Cc:** OLRA@DOC; OPR State Clearinghouse

Subject: SR-110 Bridge Replacement & Railing Upgrade Project - SCH No. 2023126015 CAL

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Dear Kelly Ewing-Toledo,

The California Geological Survey (CGS) has received the Notice of Preparation of a Draft Environmental Impact Report (DEIR) for the SR-110 Bridge Replacement and Railing Upgrade Project. This email conveys the following recommendations from CGS concerning geologic issues related to the project area:

## 1. Liquefaction and Landslide Hazards

The project sites are located within earthquake zones of required investigation (ZORI) for liquefaction and landslide hazard mapped by CGS. The DEIR and supporting documents should address these hazards as they relate to the design of the proposed structures. Additional information is available at the links below: https://maps.conservation.ca.gov/cgs/EQZApp/app/

https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html? map=regulatorymaps

#### 2. Surface Fault Rupture Hazard

The Arroyo Seco Channel Bridge is located in an Earthquake Fault Zone for the Raymond Fault mapped by CGS. The DEIR and supporting documents should address this hazard as it relates to the design of the proposed structures. Additional information about surface faults can be obtained at the following sites:

https://maps.conservation.ca.gov/cgs/EQZApp/app/

https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf

### 3. Ground Shaking Hazards

Numerous active faults in addition to the Raymond Fault are located near the project area, and the project sites could be subject to significant ground shaking. The DEIR and supporting documents should address this hazard as it relates to the design of the proposed structures. Additional information about ground shaking hazard can be obtained at the following sites:

 $\frac{\text{https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=14d2f75c7c4f4619936dac0d14e1e468}}{\text{https://earthquake.usgs.gov/scenarios/catalog/bssc2014/}}$ 

If you have any additional comments or questions, please feel free to call or email.

Thank you, Judy Zachariasen



# Judith Zachariasen, PhD, PG, CEG

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