

Memorandum

DATE: September 23, 2020
TO: Peter Bagnall (Wm. Bagnall Architects, Inc.)
FROM: David C. Seymour, PG, CEG
RE: Potential Impact of Construction Related Vibrations on Adjoining Properties
2035 N. Pacific Avenue Project
Santa Cruz, California
Ninyo & Moore Project No. 403215002

According to our recent correspondence, it is our understanding that there are some concerns that vibrations generated during construction may impact the adjoining properties and hillside. The proposed project currently includes excavation of an underground parking garage near the bottom of the ascending slope. The depth of the excavation is anticipated to be on the order of 12 feet below the existing grade. Based on the underlying soil conditions and excavation depth, we anticipate that the shoring system for the excavation will consist of soldier piles (steel beams) and wood lagging. The drilling equipment used to install soldier piles does not generate significant vibrations. In addition, we recommend that design of the shoring system be coordinated with the architect, structural engineer, and contractor in order to minimize construction-related vibrations, and that vibration monitoring be performed during construction.