



Kyle Smith

Apr 16th | At noon

EB 310

SUMMIT EXCAVATION SUPPORT: SEATTLE CONVENTION CENTER EXPANSION

Abstract

The Seattle Convention Center's new addition transformed a former transit center and automotive dealership into a nearly eight-acre urban high-rise convention space with co-developed residential and office towers. The project doubled the capacity of the Seattle Convention Center and will have a profound economic impact on the Seattle region. GeoEngineers, Inc., DBM Contractors (DBM), and KPFF Consulting Engineers (KPFF) collaborated on the design and construction of the temporary excavation support for the Seattle Convention Center Summit building.

The design and construction of the excavation support system required creative solutions due to extensive complex adjacencies created by the former bus transit station, adjacent cut-and-cover and bored transit tunnels, highway bridges, vacated city streets, project phasing, demolition of existing buildings/infrastructure, and heavy construction loading. The multidisciplinary team developed creative excavation-support designs that protected sensitive structures and allowed construction to proceed without significant impacts to adjacent roads and bridges. When Summit opens its doors to the public early in 2023, it will provide cultural, social, and economic value to Seattle for decades to come.

Biography

Kyle graduated from Brigham Young University in 2014 with a Master's degree in geotechnical engineering. He joined GeoEngineers right out of school and worked in the Seattle area for 10 years. He moved to Portland just over a year ago and leads the Portland Geotechnical Group. Kyle has worked on many projects with anchored excavation support systems, excavations that extend below the groundwater table, ground improvement, deep foundations, and earthwork. This is Kyle's favorite time of the year because of the NCAA March Madness basketball tournament, and he is not ashamed to admit that he predicted St Johns to win the tournament.