Seismic Provisions per ASCE 7-16

Martin B. Hudson **Turner Construction**

> **Lisheng Shao** Keller

> > and

Andrew Dinsick GeoPentech

Friday, July 10, 2020 The Grand Long Beach 4101 E Willow St. Long Beach, California 90815

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ASCE Geo-Institute Los Angeles and Orange Sections



Martin B. Hudson, Ph.D., P.E., G.E.



Martin B. Hudson is the Director of Geotechnical Engineering for the Turner Engineering Group of Turner Construction Company. He has over 27 years of industry experience covering a variety of building types, sizes and market sectors. Dr. Hudson is a Licensed Civil and Geotechnical Engineer. He obtained his B.S. and M.S. degrees from the University of California,

Los Angeles and Ph.D. in civil engineering from the University of California, Davis.

Dr. Hudson has worked as geotechnical engineer of record on some of the largest projects in California history, including the Wilshire Grand tower, Ronald Reagan UCLA Medical Center, and New Century twin tower development. He has worked as one of the plan check reviewer on behalf of the City of Inglewood for the geotechnical aspects of the Rams Stadium. He has extensive experience with deep excavations, shoring, soil nailing, MSE walls, ground improvement, shallow and deep foundations including driven piles, drilled shafts, caissons, and micropiles. He also has extensive experience with ground motion studies on many high-rise buildings, reservoirs, subway stations and tunnels, and hospital buildings, including base-isolated and damped structures. He serves on the seismology committee of the Structural Engineers Association of Southern California and has served on the Board of the American Society of Civil Engineers Los Angeles Branch Geo-Institute and on the Board of the Structural Engineers Association of Southern California. He also teaches courses on foundation engineering at the UCLA Henry Samueli School of Engineering and Applied Science. He has dozens of publications on seismic and geotechnical engineering topics.

Lisheng Shao, Ph.D., P.E., G.E.



Dr. Shao serves as the Chief Engineer of Special Projects, Hayward Baker/Keller North America, in charge of ground improvement design, analysis, quality control, and technology development. His work focused on liquefaction mitigation, soft soil

improvement under heavy building structures, excavation support, and dam rehabilitation, by vibro stone columns, soil mixing, jet grouting, micropiles, compaction grouting, fracture grouting and permeation grouting, etc. He joint Hayward Baker, Inc in 1997.

He is a Professional Engineer and Geotechnical Engineer registered in California, North Carolina, Hawaii, and Alberta. He received his PhD degree in 1995 from North Carolina State University. He has published over 50 technical papers in geotechnical engineering.

Andrew Dinsick, P.E.



Mr. Dinsick has over 15 years of experience in the field geotechnical and earthquake engineering with an undergraduate degree from Duke University and a graduate degree from UCLA. He has analyzed subsurface information on

a wide range of infrastructure projects, with specific emphasis on seismic hazard evaluation and mitigation. Past project experience has included critical infrastructure facilities such as bridges, dams, reservoirs, buildings, pipelines, roadways, tunnels, and power plants including nuclear facilities. His expertise includes characterization of subsurface material static and dynamic properties, liquefaction evaluation, seismic hazard analysis and ground motion characterization. Mr. Dinsick has been the lead hazard analyst for the ground motion development on over 50 projects in the last several years. Many of these projects were performance-based design ground motion evaluations for high-rise buildings in Downtown Los Angeles. These ground motion evaluations included the selection and spectral matching of horizontal pairs of appropriate earthquake time histories, performed in accordance with the 2013 and 2016 California Building Code, ASCE 7-10, ASCE 7-16, ASCE 41-13, and the Los Angeles Tall Buildings Structural Design Council (LATBSDC) requirements. Mr. Dinsick is a registered Civil Engineer.

COURSE SCHEDULE

8:30 - 9:00 Registration

9:00 - 9:45 "Performance of Shallow Foundations on Liquefiable Soils and Mitigation Strategies" by Dr. Lisheng Shao

9:45 – 10:15 Break/Networking

10:15 - 11:00 "Time History Selection and Scaling/Matching" by Dr. Martin Hudson

11:00 - 11:30 Break/Networking

11:30 - 12:30 "Near Fault Considerations"

by Andrew Dinsick, P.E.

12:30 - 1:30 Lunch/Networking

REGISTRATION

Course fee is \$100.00 early bird registration until 7/3/2020; \$120 late registration Register on-line:

http://lageoinstitute.com/register/

Or Checks payable to the "Los Angeles Geo-Institute Chapter" and mailed to: Macan Doroudian

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