

## APPLICATIONS OF PILING TO INFRASTRUCTURE DEVELOPMENT

Harry G. Poulos

Coffey Services Australia, and University of Sydney



**ABSTRACT:** In this lecture, a number of infrastructure applications of piles and piling are discussed, including piles for pavement support, piles for embankment support, and piles for slope stabilization. In each case, some of the key design issues are set out, and some aspects of pile behaviour are described. Design methods are then recommended and design charts are presented. Some relevant case histories are also discussed.

### Biographical Details

Harry Poulos joined the Department of Civil Engineering at Sydney University in 1965, and was appointed a Professor in 1982, a position he held until his retirement in 2001. In 1989, he joined Coffey Partners International, and is currently a Senior Consultant with Coffey. He is also an Emeritus Professor at the University of Sydney and an Adjunct Professor at Hong Kong University of Science and Technology. He has been involved in a large number of high-rise and infrastructure projects in Australia and overseas. He was selected as the Australian Civil Engineer of the Year for 2003 by the Institution of Engineers Australia, and in 2010, was elected a Distinguished Member of the American Society of Civil Engineers (ASCE). In 2014, he was inducted into the US National Academy of Engineering. In 2017, he was awarded the Outstanding Leaders and Projects (OPAL) Award for lifetime achievement in design by ASCE.