

ENGINEERING GEOLOGICAL PRACTICE IN HONG KONG

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Abstract: The aim of the talk is to introduce the Engineering Geological Practice in Hong Kong and to highlight some key areas where Geotechnical Engineers and Engineering Geologists work together in Hong Kong practice. The speaker has spent over 10 years working as a Geotechnical Engineer in Hong Kong. The talk is based on the GEO Publication No. 1/2007 titled Engineering Geological Practice in Hong Kong and the speaker's own experience working together with Engineering Geologists on numerous engineering projects. The speaker first introduced the geology of Hong Kong. He then explained the main input that Engineering Geologists provide such as desk study, geological mapping, sub-surface exploration, geotechnical characterization and development of geological models. The importance of getting input from Engineering Geologists at an early stage to help in the understanding of the geological processes and landforms together with the inherent geotechnical risks. The roles of Engineering Geologists in defining the geological models and communicating the potential and actual variations in the ground conditions are also presented.

A few examples of projects to illustrate how the Engineering Geological Practice is carried out in Hong Kong are presented. This include the natural terrain hazard studies for a proposed gas terminal project, assessment of water damming effects of a deep excavation for a large MTR railway station and also the foundation solution for a cable car project located within a geological shear zone.