Proceedings

Symposium on Hong Kong Soils and Rocks

27 March 2004, Hong Kong

Editors:

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FOREWORD

The Symposium on Hong Kong Soils and Rocks, held at the Hong Kong Convention and Exhibition Centre on 27 March 2004, was co-organised by three local groups: the Centre for Research and Professional Development (CRPD), the Hong Kong Branch of the Institute of Materials, Minerals and Mining (IMMMHK), and the Hong Kong Regional Group of the Geological Society of London (GSLHKRG).

Forty-two years earlier, in May 1962, a Hong Kong Joint Group of the Institutions of Civil, Mechanical and Electrical Engineers held what can now be regarded as the First Symposium on Hong Kong Soils. The convener and editor of the proceedings of that symposium was Peter Lumb, then a lecturer in the Civil Engineering Department of the University of Hong Kong. As many readers will know, Peter went on to become Professor of Civil Engineering in the department and spent the bulk of his career, over 32 years, teaching and carrying out geotechnical research at the University.

There was considerable geotechnical input to some of Hong Kong’s engineering projects in the 1950s and early 1960s, such as construction of the Plover Cove and Shek Pik dams, and extension of Kai Tak into an international airport. But in hindsight we can see that the 1962 symposium marked the beginning of a sustained interest in local ground conditions and the start of an academic tradition in geotechnical research and development in Hong Kong.

It’s interesting to look back at the proceedings of that first symposium, which have been reprinted by CRPD and are now on sale again at modest cost. We suggest it’s a good investment. The contents include papers on the general nature of Hong Kong soils, the marine soils, the use of decomposed granite and other materials as fill, offshore ground investigation, piling, and a general review of foundation problems in local rocks and soils. It also contains Peter Lumb’s classic early paper on the effect of rainstorms on slope stability. These were the days when engineers and geologists were usually directly involved in site investigations and in the laboratory, and plotted up the results of their work by hand. How different from today, when the design engineer sits mostly in air-conditioned comfort, surrounded by massive computing power at a fingertip’s touch, and often with a team of assistants or service agents to do much of the technical work.

So how much more do we know about local soils and rocks today, as compared to 40 years ago? We hope this question is at least partly addressed by these proceedings, which are based on the eight presentations given at the Symposium.

The Symposium programme was divided into two themes – ‘geological’ in the morning and ‘geotechnical’ in the afternoon, although the names were somewhat arbitrary. Our view is that the contents herein are all ‘geotechnical’ in a broad sense, and should be regarded as such by any reader engaged in construction in one way or another. Good site investigators should be more than just competent in investigating the ground, and good designers familiar with much more than deriving parameters from laboratory test data and plugging them into a codified design method. Investigators need to anticipate the problems designers are likely to encounter, and designers should understand the inherent variability of the ground and the limits of the investigation techniques used. In drawing up the programme, our aim was that collectively the presentations and papers should be of value in appreciating the limitations involved in mapping, boring, drilling, sampling and testing.
natural materials, and in making judgements about the representability of the data we deal with everyday in modelling the ground in Hong Kong.

We are very grateful to the speakers for giving up their time to make the presentations and to write up their papers. Acknowledgements and thanks are also due to May Ho of the CRPD, who took on the lion’s share of the work in organising the event, ably assisted by Wong Chi-kit and Pang Man-chun of the IMMMHK and Stuart Millis of the GSLHKRG.

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# TABLE OF CONTENTS

Classification and Distribution of Rocks and Superficial Deposits in Hong Kong  
S Diarmad G Campbell ........................................................................................................ 1

Importance of Comprehensive Rock and Soil Description in Ground Modelling  
C J N Fletcher .................................................................................................................. 17

Weathering and Erosion Processes in Rocks – Implications for Geotechnical Engineering  
Steve Hencher ............................................................................................................... 29

John W Tattersall .......................................................................................................... 80

Characterization of Hong Kong Soils: Laboratory Testing and Geotechnical Properties  
S R Lo .......................................................................................................................... 109

Factors Governing Failure Mechanisms in Rock Engineering Problems in Hong Kong  
A K L Kwong .................................................................................................................. 132

Advanced or Special Soil Testing Systems and the Properties and Behavior of Hong Kong Marine Soils  
Jian-hua Yin .................................................................................................................. 145

Analysis of Geotechnical Data  
Victor Li ....................................................................................................................... 159