



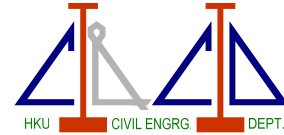
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Construction Industry Development**



THE UNIVERSITY OF HONG KONG

Water Mains Rehabilitation in Hong Kong

by

Ian Vickridge

Consultant, Black and Veatch Hong Kong Limited

Date: September 6, 2005 (Tuesday)
Time: 6:00 - 7:00 p.m.
Venue: Room JG04, James Hsioung Lee Science Building
The University of Hong Kong

ABSTRACT

The Hong Kong Water Supplies Department (WSD) provides freshwater and saltwater to its customers through a network of over 7,000 km of water mains. Almost 50% of the water mains in service is over 30 years old and WSD has been experiencing an increasing number of mains failures that cause inconvenience to customers, and the repair of which is costly and disruptive to traffic, commerce, and the general public. To address these problems, WSD has embarked on an ambitious programme of replacing or rehabilitating approximately 3000 km of water mains in stages in a compressed programme over the next 15 years. Work on the programme started in 2000 and major construction contracts for the first stage of the work commenced in 2003. Stage 2 investigation and design is now underway and construction of this Stage will start in early 2007. Stages 3 and 4 of the programme will follow, with completion of the whole programme targeted for 2015.

The presentation will provide an overview of the pipe condition assessment and trenchless techniques being used for water mains rehabilitation in Hong Kong, highlighting some of the particular problems and constraints encountered and the solutions that are being proposed and implemented. In addition, rehabilitation of large diameter trunk mains which are being carried out at the heavily trafficked Tolo Highway will be included for discussion.

ABOUT THE SPEAKER

Ian Vickridge is a Consultant with Black and Veatch Hong Kong and has been working on assignments related to trenchless technology in Hong Kong since 1999. He is currently involved in the design and construction supervision of pipeline rehabilitation assignments for the Water Supplies Department in Hong Kong, and has been overseeing technical aspects of an assignment for improving the fresh and sea water supply systems at Hong Kong International Airport.

From 1984 to 1999, he was a Senior Lecturer in Civil Engineering at the University of Manchester Institute of Science and Technology (UMIST), where he ran courses and conducted research in project management, water and environmental engineering, pipeline rehabilitation and associated topics.

In 1994 he became the Executive Secretary of the UK Society for Trenchless Technology (UKSTT) and set up the UKSTT offices within UMIST. He is a member of the British Standards Institute Subcommittee PRI/88/3 for Plastics Piping Systems for Rehabilitation and was the Review Co-ordinator / Workshop Director for "Mapping and Location" for the EPSRC funded UK Network in Trenchless Technology.

He has over 35 years of international experience in civil engineering and has worked for consultants, contractors and universities in various parts of the world, including Hong Kong, Singapore, Saudi Arabia, Canada, Ireland, and the UK. He is the author of over 80 technical papers and book chapters, has lectured extensively on trenchless technology, and has acted as an expert witness on a number of cases related to pipeline rehabilitation and the use of trenchless technology.

Dept. of Civil Engineering, The University of Hong Kong. Contact Tel. No.: 2859 2286