

## **Pre-AGM Talk on Sewer Maintenance and Construction in Malaysia – Sharing IWK’s Challenges and Experiences**

Organized by : Tunneling & Underground Space Technical Division, IEM  
BEM Approved CPD/PDP Hours: 2 Ref No: IEM18/HQ/177/T

Date : 12<sup>th</sup> May 2018 (Saturday)  
Time : 9.00am – 11.00am (Refreshments will be served at 8.00am)  
Venue : Auditorium Tan Sri Prof. Chin Fung Kee, 3rd Floor, Wisma IEM, Petaling Jaya  
Speaker : Ir. Mohd Zuki Muda

**Keywords: Sewerage Management; Type of Services, Open Cut versus Trenchless Method, Trenching Technologies, Trenchless in Future**

### **SYNOPSIS**

Over the past two (2) decades, Malaysia has seen tremendous improvements in sanitation provisions to secure public health and protect the environmental resources. To date basic sanitation coverage for Malaysia is more than 95%. This progress was achieved primarily as a result of the Government’s decision in 1993 to federalize and private sewerage services. Since then, Malaysia’s sewerage system and industry had evolved and transformed to provide efficient and effective delivery of sewerage services to the public. Sewerage services in Malaysia is largely provided by Indah Water Konsortium Sdn Bhd (IWK) which is entrusted to develop and maintain a modern and efficient sewerage system in Malaysia. IWK provides services to more than 23.5 million population in 87 Local Authority areas in Peninsular Malaysia, including WP Labuan. IWK’s sewerage services covers the operation and maintenance of over 6609 public sewage treatment plants and more than 18,743 km of sewerage network.

This paper intends to share experiences of IWK, in managing sewer system nationwide and also challenges faced by IWK, in its effort to improve health, water resources and environment, including escalating costs, aging infrastructure, and increasingly stringent regulatory requirements. The extensive coverage of sewer network comes with its own challenges and not limited to the wide range in pipe size, type, and age and the large length of sewer to be operated and maintained. This paper will also discuss open cut method versus trenchless method with various technology and experiences by IWK. The extent in use of trenchless technologies for the last few years in Malaysia will also be highlighted. With new innovation and automation, repairing and rehabilitation method of sewer network has been changed to suit rapid developments especially in urban area. These changes is required to enhance the operation and maintenance of sewer systems that meet the nation’s needs for sustainable sewerage development

### **BIODATA OF SPEAKER**

Ir. Mohd Zuki graduated with a bachelor of science in Civil Engineering from New Mexico State University, USA in May 1990. His first working experience was with Dowell Schlumberger from 1990 to 1995 as a field engineer responsible for installation, testing, commissioning, operations and maintenance of high pressure pumping & testing equipment and sub-sea / drilling tools. He has served numerous clients such as Petronas, Esso / Mobil, Unical, Shell Malaysia, Brunei Shell, Idemitsu, MBODC in various countries in Southeast Asia. He started his career in sewerage industry with Indah Water in 1995 and was responsible for planning and design of sewerage systems in various part of Malaysia. He started as a process engineer before being promoted to assistant manager and later promoted to manager for various sections such as sludge, products and process engineering under Planning Department. He left IWK in 2000 and worked for almost ten (10) years with two contractors in sewerage industry, first as technical manager with WWE Holdings Bhd (from 2000 to 2002) and second as general manager & director for Nishihara (M) Sdn Bhd (from 2002 to 2008). He managed various sewerage projects with the two companies including Phase 2, Package 3, JBIC fund projects in Damansara, Melaka, Seremban and Sunggala (Negeri Sembilan) under the Sewerage Services Department (SSD / JPP), KeTTHA. He rejoined IWK at the end of 2008 as the first state manager for Terengganu, which responsible for management of operations & maintenance of public sewerage systems, certification of new sewerage system and planning of sewerage services in the state. He was promoted to his current post in 2013 as the Head of Capital Works Department which responsible for management of IWK projects implementation and PMC services of sewerage projects undertaken by the company.

**Ir. Syed Rajah Hussain Shaib Bin A.H. Mohd Haniff**  
**Chairman**  
**Tunnelling & Underground Space Technical Division, IEM**

### **ANNOUNCEMENT TO NOTE**

**EFFECTIVE 1<sup>st</sup> OCTOBER 2017**

#### **FEES FOR TALKS**

##### **Members:**

**Registration Fee: No Charge**

**Administrative Fee:**

**Online RM15**

**Walk-In RM20**

##### **Non-Members:**

**Registration Fee M50**  
**Administrative Fee RM20**

Limited seats are available on a "first come first served" basis (maximum 100 participants).

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