

Technical Talk on
“Geotechnical impact assessments due to underground tunneling”
(Co - Organised by Geotechnical Engineering Technical Division, IEM & Tunneling and Underground Space Engineering, IEM)

Ref Number: IEM19/HQ/111/T BEM Approved CPD/PDP Hours: 2

Date : 2nd May 2019 (Thursday)
Time : 5.30 pm – 7.30pm (*Refreshments will be served at 4.45 pm*)
Venue : Tan Sri Prof. Chin Fung Kee Auditorium,
3rd Floor, Wisma IEM, PJ
Speaker : Dr. BOON CHIA WENG

SYNOPSIS

In a densely built-up environment, the construction of infrastructure such as the mass rapid transit network would invariably need to explore underground solutions to avoid the numerous obstacles above ground. However, the adopting of underground solutions requires a good understanding of the interactions between tunnelling works and existing structures above ground. In the first half of the presentation, methods of impact assessments are discussed, for both structures with shallow and deep foundations. In the second half of the presentation, the impact to existing tunnels arising from various underground interfacing works is discussed. The type of risks to 3rd party structures varies with the geological formations. The discussions are largely based on the geotechnical experience in the Kenny Hill Formation and the Kuala Lumpur Limestone Formation in Kuala Lumpur. Some of the observations are explained using recent theoretical developments.

SPEAKER'S BIODATA

Dr. Boon is a geotechnical engineer at Gamuda Engineering Sdn Bhd, with key experience consisting of impact assessments of tunnels to foundations, twin tunnel interactions, impact of accommodating excavations above an existing tunnel, ground treatment works in soil and rock, deep excavation accommodating TBM bore through, and interfacing design issues of neighbouring future development with basement excavation. Boon was awarded the Rocha Medal by the International Society for Rock Mechanics and Rock Engineering (ISRM) in 2016. In 2017, he was inducted into the group of Future Leaders of the American Rock Mechanics Association (ARMA). He has won the Lee Kuan Yew Gold Medal Award and Professional Engineers Board Gold Medal (Singapore) in 2009. He is presently an active committee member in the Geotechnical Engineering Technical Division (GETD) and the Tunnelling and Underground Space Technical Division (TUSTD) in the Institution of Engineers Malaysia (IEM). He was a past recipient of the Yang di-Pertuan Agong's Scholarship. He graduated with a B.Eng. from Nanyang Technological University in 2009 and completed a D.Phil. at Oxford University in 2013.

Ir. LEE PEIR TIEN
Chairman,
Geotechnical Engineering Technical Division, IEM

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Chairman,
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(Effective: 1st October 2017)

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- (ii) Administrative Fee:
 - (a) Online RM15
 - (b) Walk-In RM20

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- (i) Registration Fee: RM50
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