

TECHNICAL VISIT TO PIPE-ROOF SUPPORTED TUNNEL THROUGH AN EXISTING RE WALL HIGHWAY RAMP EMBANKMENT

Organised by: Tunnelling & Underground Space Technical Division, IEM
BEM Approved CPD/PDP Hours: 3 Ref No: IEM19/HQ/467/V

Date : 28th September 2019 (Saturday)
Time : 8.00am – 1.30pm
Venue : Jalan Haji Sirat Kampung Baru, 50300 Kuala Lumpur
Transport : Coach will be provided. (Coach will depart at 8.30am sharp)

SYNOPSIS

As part of *Rancangan Tebatan Banjir Sg. Bunus*, Wilayah Persekutuan Kuala Lumpur, the Department of Irrigation and Drainage (DID), Wilayah Persekutuan has implemented a project to mitigate flooding issues in the Sg. Bunus catchment area. The main objectives of the project are to protect lives; safeguard the health and safety of residents in the community; reduce damages to structures due to flooding; and to ensure a sustainable future for the community. Both soft-engineered features and structural measures have been considered and implemented in the project, which include storage ponds, in-stream storages, planting of vegetations, tunneling, underground storage tanks and pumping stations.

A twin RC box culvert would act as a vital connection between Sg. Bunus and Sg. Klang acting as a control-gate structure that hoist force main drainage pumping system that lifts low water level from Sg. Bunus to high water level of Sg Klang.

In order to construct the cast-in-situ twin RC box culvert (serving later as a pump gate drainage culvert) within an existing Reinforced Earth (RE) wall highway ramp embankment, a temporary pipe-roofing system (Microtunnelling) has been designed for tunnel excavation.

The first of its kind in the world pipe-roof support tunneling through the existing RE wall highway ramp embankment has been constructed for the above purpose. The system encompasses the jacking of a series of horizontal and vertical 600mm dia. contiguous steel pipes beneath and through the existing RE wall highway ramp embankment by hydraulic jacking.

It is to note that the technical visit to this project site is a follow-up to a previous one conducted on 26th January 2019 during the early stages of its construction. It is expected that this site visit would unveil new challenges and solutions that would be shared with the participants.

SAFETY REMINDER: Participants shall be well-equipped with their own PPE equipment, i.e. safety helmet, safety vest and safety boots in order to be allowed access into the site.



TENTATIVE ITINERARY – (subject to change without prior notice)

Time	Itinerary
8.00am	Gather and registration at IEM Building
8.30am	Group departing from IEM Building to site
9.15am	Arrival of participants at site
9.30am-10.15am	Project briefing
10.30am-12.30pm	Site visit
12.30pm-1.30pm	Back to IEM Building

Commitment Fees (Non refundable & non transferrable)	
IEM Member	: RM 50.00
Non Member	: RM 80.00

- The visit is strictly limited to **30 participants** registered on a first-come, first-served basis.
- Interested participants are to register and pay online at www.myiem.org.my or register by returning the appended registration form before or by **25th September 2019** together with payment.
- Cheques are to be made payable to The Institution of Engineers, Malaysia.
- Please note that the commitment fee must be settled prior to the visit.
- After the closing date, IEM reserves the right to allocate seats to other registrants on a first-come first-pay basis.
- Intended participants are also reminded that IEM may cancel the reservation if payment is not received before the closing date.

REPLY SLIP

Chairman
 Tunnelling & Underground Space Technical Division
 The Institution of Engineers, Malaysia
 PO Box 223 (Jalan Sultan),
 46720 Petaling Jaya, Selangor

**TECHNICAL VISIT TO PIPE-ROOF SUPPORTED TUNNEL THROUGH AN EXISTING RE WALL
 HIGHWAY RAMP EMBANKMENT**

I wish to participate in the above visit. I enclosed herewith a cheque no. for the amount of RM..... as my commitment fee for the visit.

Name of Member	:	M'ship No.:
Address	:	Grade :
	:	Tel (Office):
	:	Tel (Mobile):
Company's Name	:	Email :

PERSONAL DATA PROTECTION ACT:

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal data as set out in the said notice.

I will be participating in the visit at my own risk and hereby indemnify fully The IEM from all claims arising from any injury, damage or loss that may be sustained by me.

.....
 (Date)

.....
 (Signature)

- Please bring along this flyer for confirmation of attendance - -Photocopies are acceptable -