

Organised by: Highway and Transportation Engineering Technical Division (HTETD)

# WEBINAR TALK ON SPECIAL CUSTOMISED PRECAST CONCRETE PRODUCTS FOR THE MALAYSIAN INFRASTRUCTURE AND TRANSPORTATION INDUSTRY

### 18 MAY 2022 | 3.30 PM-5.30 PM

BEM Approved CDP: 2 Hours Ref. No.: IEM22/HQ/121/T(w)

## <u>Synopsis</u>

The speakers will speak on several special, customised and non- standard precast concrete products for Malaysian infrastructural and transportation industry. The topic would be discussed and shared:

- Bebo Arch and Hume Arch Culvert (HAC) as a viable alternative to conventional cast in situ vehicular box culvert (VBC). Its application as aesthetic vehicular, waterway and utility bridges. Bebo Arch is a patented proprietary product from Bebo International. We will touch on its different arch profiles for single and multiple span applications. Plus developmental milestones, features, design considerations, production, handling, installation procedures, advantages and site supervision.
- Prestressed Railway Sleepers and its design aspects, production processes using casting and cutting machines, design, QA/QC checklist items. The speakers will show its applications in past and ongoing projects eg. MRT 2 and Klang Valley Double Tracking (KVDT) Project.
- Concrete Sheetpile as a viable and robust alternative to steel sheetpile in terms of durability aspects. The speakers will touch on applications, properties and its corrugated shape profile types and its advantages.
- **T-Wall System** is a viable alternative to conventional Reinforced Concrete, Reinforced Soil and Crib Wall technology for walls up to 7m height. Its an aesthetic finished product. We will touch on its applications, design considerations, features, advantages, handling and construction methodology

### **Speaker's Biodata**

**Mr. Mehdi Maghfouri** holds a Master of Engineering Science degree in Structural and Materials, with 13 years' hands-on experience in design and construction of precast concrete products and civil infrastructure projects such as railway and highway bridges (Penang Second Bridge and MRTI), as well as design and application of various types of special concrete mixtures with a strong focus on innovative concrete technologies. He is currently working as Head of Technical Department in Hume Concrete Sdn Bhd.

Additionally, Mr. Mehdi has extensive experience in the testing and analysis of multiple types of special concrete such as Lightweight Concrete, Self-Compacting concrete, Ultra High-Performance Concrete and their subsequent applications in real-world projects such as highway bridges, tunnels, large dams and precast concrete industry.

Mr. Mehdi has 3 practical patents in building and construction materials, and has obtained a Silver Medal and Diploma from Geneva-Switzerland International Inventions Exhibition and Competition. Mr. Mehdi has several publications in international civil engineering journals, and has achieved numerous awards including Best School award and Best Researcher award, as well as international Concrete Technology Competitions hosted by American Concrete Institute.

**Mr. Lee Hui Seng, PJK** has been working in the local precast concrete industry for 29 years since returning from UK in 1993. He worked for 3.5 years from 1989 to 1993 with Mott MacDonald Consultants in Croydon, Surrey and London Docklands for a composite concrete-steel bridge job. He was first involved in the early developmental stages and marketing of new special precast concrete products eg. Bebo Arch and Hume Arch Culvert (HAC) from 1993 to 2000. In the early days, he helped promote them to consultants, contractors, developers and Govt Authorities to gain early acceptance.

He graduated with a B.Eng (Hons) in Civil Engineering from Queens University Belfast, Northern Ireland and M.Sc. in Structural Engineering from Newcastle Upon Tyne University, England. His Masters thesis is on Concrete Technology on subject of High performance concrete using Microsilica additives.

He also has 21 years specialist experience in Reinforced Soil retaining wall technology and marketing. Currently, he is employed with Hume Concrete Sdn Bhd.

#### Registration fee

Student Member: Free IEM Member: RM15.00 Non-Member: RM70.00









#### See more details at www.myiem.org.my