

Webinar on Diaphragm Wall and Secant Bored Pile Wall Construction Challenges for Underground Stations and Shafts in 1st Klang Valley MRT

BEM APPROVED CPD/PDP: 2 REF. NO.: IEM21/HQ/016/T(W)



**SPEAKER:
Mr. Vijayakumar
Viramuthu**

**THURSDAY, 4 FEBRUARY 2021
3.00PM - 5.00 PM**

**Registration Fees
(effective 1st August 2020)**

IEM Members : RM 15.00

IEM Non Members : RM 70.00

Register online | www.myiem.org.my

SYNOPSIS

Klang Valley SBK MRT Line or now known as MRT Kajang Line has been fully operational since July 2017. This is the first MRT line in Malaysia with total length of 51 km from Sungai Buloh to Kajang. The 9.5 km underground section consists of 7 underground stations and several shafts along the alignment. Secant bored pile wall and diaphragm wall had been used extensively as permanent earth retaining wall for the underground structures. This webinar presents the challenges of this geotechnical work during construction of 5 underground stations in addition to the South Portal cut and cover section and 3 shafts. These challenges include work construction, ground difficulties, logistical constraint, working through existing basement structure and low head room works. In addition, some new safety features which has been practiced in the construction industry will be discussed.

The underground stations, portal and shafts that will covered in this webinar are:

Merdeka Station - Diaphragm wall working with cutter in Kenny Hill formation with heavily reinforced steel cages

Pasar Seni Station - Diaphragm wall construction over two existing basement structures

Cochrane Station - Secant bored pile in limestone formation

Pasar Rakyat Station - Secant bored pile with the introduction of 1,500 mm diameter SBP with difficult karstic limestone formation

Taman Maluri Station - Secant bored pile works over existing Jalan Cheras road with difficult logistic and traffic conditions and working with low head room rigs

South Portal, Inai Shaft and Escape Shaft - Secant bored pile in limestone formation

Intervention Shaft 2 - Deeply cased secant bored pile wall in difficult ground condition and small work space



SPEAKER'S BIODATA

Mr. Vijayakumar is currently the Executive Director (Business Development & Operations) of Bauer Malaysia. He graduated with a Bachelor Degree in Civil Engineering from University Malaya in 1991. In his initial working years, he worked in the Engineering Service Department of a big public listed Plantation Group responsible for the design and supervision of Palm Oil Mill and Rubber Factory. In 1994, he joined Ho Hup Construction Berhad for LRT 1 based in Masjid Jamek Underground station. He subsequently jointed Bauer in 1996 serving in various positions, and recently appointed as a member of Bauer Malaysia Board of Director. In his 24 years of working experience with Bauer, he has undertaken various foundation projects involving bored piling, secant pile wall, diaphragm wall, ground improvement and ground anchors. He was involved in the LRT 1 works, Electrified Double Tracking works and during MRT Line 1 works, he took charge of the entire Bauer's works in the five Underground stations. He is also the Project Director for Bauer in the ongoing MRT Line 2