JURUTERA ONLINE



Talk + Technical Visit on Setiawangsa Pantai Expressway

by Azhar Azmi

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Urban engineering is challenging and rewarding as in the Setiawangsa Pantai Expressway (SPE), where there are lots engineering challenges and hopefully the rewards will be there when urban congestion is reduced.

The site talk and visit were held jointly on 8th June 2018 and was attended by 28 participants. We arrived at 8:15 am at EKOVEST (the concessionaire for the SPE), located at Jalan Gombak, Kuala Lumpur. On reaching Ekovest, we were welcomed by their staff, who briefed the participants on the site visit. Also present were the project consulting engineers, SSP, to brief the design aspects of the expressway.



Talk by Tan Sri Lim

Tan Sri Datuk Seri Lim Keng Cheng (Managing Director of Ekovest Berhad), welcomed the participants and delivered a talk about Ekovest and SPE. Tan Sri Lim possesses a wealth of experience of more than 33 years in diversified sectors encompassing building, civil, design and build turnkey construction projects, machinery trading and landmark property development initiatives. To date, various completed and current notable large-scale infrastructure projects, are: Felda Sahabat in Sabah, Labuan Financial Park, Iskandar Coastal Highway and the River of Life. Although with his vast experience, Tan Sri Lim humbly acknowledges the important role of the engineers involved in the projects.

Urban planning perspectives in traffic alleviation were discussed, in which the SPE together with Duta–Ulu Kelang Expressway, Phase 1 (DUKE 1) and Duta–Ulu Kelang Expressway, Phase 2 (DUKE 2) highways are inter-phased with SPRINT highway. The SPE was earlier identified as DUKE 3, arising from its interconnectivity with DUKEs 1 + 2. This urban traffic planning holistic integration enables the creation of a KL City Bypass for motorists to bypass congested city roads. The various SPE's urban project management

challenges are highlighted in the management and diversion of existing infrastructure services, as well as in the coordination with other in-progress and forthcoming new infrastructure services.





Alignment of SPE

Duke Highway Network

He highlighted several principles and strategies he adopted for his projects. One of their principles is giving value for the money. Instead of making the alignment longer to maximize toll collection, and making the road user endure a longer travel time, the company adopted to cut travel time, giving the road user the value for their money.

Another urban engineering challenge was the interfacing with other projects; Tan Sri Lim explained that for this they tried working closely with the contractor of the interfacing project. For example, for the construction of crossing another project, Ekovest subcontracted it out for the interface. An excellent urban engineering idea is the construction of the Park & Ride facilities nearby the LRT station, at the exit of the expressway. Tan Sri Lim also explained about the River of Life project as part of the urban development.

The second speaker was Mr. Encik Zakaria bin Shaffie, Project Director for Setiawangsa–Pantai Expressway and for DUKE 2. He explained in detail, the technical issues, progress, and contractual aspects of the projects. En. Zakaria is involved in all aspects of implementation and construction of both expressways. He was previously a Director with Konsortium Lebuhraya Utara-Timur (KL) Sdn Bhd where he oversaw all operational matters of DUKE 1 and is more than 20 years in the highway industry. Presently, the project is on track and ahead of schedule with an overall progress of 30%. There were no delays in the sections, with the exception of a few areas pending authority's decision, especially involving Bandar Malaysia development, and uncertainties on the direction of the government.

The first location of the site visit involved the interchange near Jalan Ampang. The construction in the area is a challenge, with residents having to endure expressway construction. The interchange cuts through the heavily trafficked Jalan Ampang, which collects traffic to the MRR2. Residents include embassies, and luxury apartments as well densely populated slums. Ekovest liaised with the Raintree Club and local residents to minimize disruptions. Due to limited space, the participants walked from the bus.



Figure 4a & 4b - Interchange at Jalan Ampang

The construction, involved the use of contiguous bored piles as permanent retaining walls, without sheet piling, for quick construction. As with other urban construction projects, fast construction is essential, as the travel delays caused by construction will cause the construction to lose its benefits. Similar contiguous bored pile techniques as retaining walls were also used at other locations near the Wangsa Maju interchange.



Figure 5a & 5b - Interchange Near Wangsa Maju

Our hosts, Ekovest then treated the participants to lunch, meanwhile being a Friday and during the month of Ramadhan, our Muslim participants went for prayers. Our coach left Ekovest office for IEM at 2:30 pm.