



THE INSTITUTION OF ENGINEERS, MALAYSIA

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Technical Visit to Hydraulic and Instrumentation Laboratory, NAHRIM

(Organised by Water Resources Technical Division)
BEM approved CPD/PDP hours: 2 Ref No: IEM13/HQ/014/V

Date : 21 February 2013 (Thursday)
Time : 9.30 am. to 1.00 pm.
Venue : Hydraulic And Instrumentation Laboratory, NAHRIM
Transport : Participants are to assemble at NAHRIM Reception Hall, Seri Kembangan, Selangor at 9.30am.
(location map is attached)

SYNOPSIS

PHYSICAL MODELLING OF TIDAL CONTROL GATE AND BARRAGE & LOCK – FLOOD MITIGATION PROJECT FOR BANDARAYA KUCHING

The major flood mitigation component comprises the following:-

- An 8km long 250m wide unlined earth flood bypass channel and bund to direct flood flows from the Sg Sarawak, upstream of Kuching to the sea via Batang Salak.
- A tidal gate across the flood bypass channel to prevent tidal intrusion. This will comprise 15 bays, 14 bays each with a 12m tidal control gate and one bay with a 12m emergency navigation gate giving a total opening 180m.
- A gated barrage and lock structure across an approximately 1km long 80m wide channel.

The barrage structure will comprise two radial gates of 25m width each and a 25m wide ship lock to give a total opening of 75m.

The main objective of this consultancy service shall comprise development of physical and numerical modelling to assess the efficiency and effectiveness of the proposed flood mitigation options focusing on the following issues:-

- Verify discharge capacity of water release structures for tidal control gate and barrage and lock.
- Verify energy dissipation and scour protection of the proposed structures.
- Test different operation modes of the gates.
- Observe flow regime for potential water quality and sedimentation/erosion pattern in flood bypass channel and ox-bow lake within the water courses of Sg. Sarawak.

Hydraulic And Instrumentation Laboratory, NAHRIM with the total built-up area at 12,000m² and recorded as the biggest Hydraulic laboratory in Malaysia.

The ultimate aim of this laboratory are :

- To carry out R&D activities in all aspects of physical modeling related to water and its environment;
- To increase research collaboration with local and foreign research organisations and higher institutions in the same field;
- To produced high quality R&D products and innovations that can be used in solving water related problems; and
- To become a fully accredited hydraulic laboratory in Malaysia and the region

Time	Tentative Itinerary	Commitment Fee
9:30 am	Arrival at NAHRIM Reception Hall	IEM member: RM 40.00 Non IEM member: RM 60.00
10.00 am	Briefing/Presentation by Mr. Mohd Fauzi b. Mohamad (Director - Hydraulic Lab & Instrumentation Division, National Hydraulic Research Institute of Malaysia (NAHRIM))	
11.00 am	Visit to Hydraulic and Instrumentation Laboratory	
1.00 pm	Lunch will be provided (courtesy of NAHRIM)	
2.30 pm	End of visit / Depart from NAHRIM	

✓ The visit is strictly limited to only **80 participants** registered on a **first come, first pay** basis.

✓ Interested members could :-

- Register and pay online at IEM website (<http://www.myiem.org.my>); OR
- Register by returning the appended registration form by **18 February 2013 (Monday)**.
- ✓ Cheques are to be made payable to "The Institution of Engineers, Malaysia".
- ✓ **The commitment fee must be settled prior to the visit.**

Ir. Elias b. Saidin
Chairman
Water Resources Technical Division

TECHNICAL VISIT TO HYDRAULIC AND INSTRUMENTATION LABORATORY, NAHRIM on 21 FEBRUARY 2013 REGISTRATION FORM (Fax: 03-7957 7678 Email: nortian@iem.org.my)	
I wish to participate in the above visit on 21 February 2013 (Thursday) . I enclose herewith cash/cheque for the amount of RM..... as my commitment fee for the visit.	
Name	
IEM Membership No.	
NRIC No.	
Company Name	
Email Address (please write clearly as the confirmation letter will be sent via email)	
Mobile No.	
Fax No.	

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.

.....
Signature

.....
Date

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