**Report of**

**Industrial Training**

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**Date of Submission: 23 September 2011**

**1.0 Introduction**

I have undergone a-year industrial training as requisite by Board of Engineers Malaysia (BEM) Professional Assessment Examination (PAE), Institute of Engineers Malaysia (IEM) Professional Examination (PE) and Universiti Teknologi Malaysia Pekeliling Pentadbiran Bil. 15/2010 UTM.J.02.03/10.12/(6). As required under Teacher’s Scheme of BEM APE and IEM PE, I have undergone a six-month practical training as a site engineer and a residual six-month as a design engineer at two different civil and structural (C & S) engineering companies, based at construction site and design consultant office, respectively. Thus, this report is presented in briefly describing my industrial training scope of job, responsibility and experience at both companies based on the timeline as discussed in the following section.

**2.0 15 September 2010 – 14 March 2011**

I was stationed at Grand Hyatt Kuala Lumpur (GHKL) construction site located at Jalan Pinang, Kuala Lumpur from 15 September 2010 to 14 March 2011 as the C&S Site Engineer. As temporarily attached to IJM Construction Sdn. Bhd., the main contractor for this project, I was designated to the Department of Civil and Structural, reported to Mr. Beh Lai Seng, the GHKL Project Manager, with the responsibilities of coordinating and managing the site work activities, partaking in all issues related to works, reporting issues affecting the work progress to the Project Manager, controlling the documentation of subcontractors’ correspondences and issue of drawings, issuing the site instruction to the subcontractors, as well as liaising with the consultants/architects/clerk of works on any discrepancy pertaining work executing at site.

Despite the work routine as a site engineer, I also attended various in-house training provided by IJM Construction Sdn. Bhd. namely pre-stressed concrete, façade technology, critical path methods for managing project, ALUMA and Peri IBS formwork, etc. I also involved in numerous site visits to factory, mock-up hotel rooms, workshop etc within Kuala Lumpur and Selangor in checking and validating the proposed design or materials are as per client expectation. As a part of industrial training procedures established by IJM Construction Sdn. Bhd., I also chaired various meetings involving sub-contractors, which were conducted on the weekly basis.

Although being loaded with the job routine, I managed to publish/present the following papers/book:

1. Syuhaida Ismail dan Aminah Md. Yusof (2011). Private Finance Initiative (PFI) Guidelines in Malaysia. The 5th South East Asian Technical Universities Consortium (SEATUC 2011). February 23-24, 2011. Hanoi, Vietnam: Hanoi University of Science and Technology.
2. Syuhaida Ismail (2011). Key Performance Indicators for Private Finance Initiative in Malaysia: Monitoring the Performance of Public Infrastructure Project Provision. ISBN 978-3843392471. Germany: LAP Lambert Academic Publishing.

**3.0 15 March 2011- 14 September 2011**

After accomplishing my six-month industrial training at GHKL, I was attached to KTA Tenaga Sdn. Bhd., an engineering consultant office based in Dataran Prima, Kelana Jaya from 15 March 2011 to 14 September 2011 as the C&S Engineer. Reporting to the Associate (Project Manager), Ir. Suhaimi Shamsuddin under the Head of Department, Ir. Lee Chau Kuang of the Department of Civil and Structural, my scope of work is to coordinate and design some reinforced concrete (RC) structures for a real life project as well as some civil infrastructures design.

As for RC design, my responsibility was to design the structural elements of a one-storey Bangunan Pentadbiran Universiti Malaysia Sabah, Labuan using both manual and computerized design calculation of ATSStructE, Esteem and ORION R15. On the other hand, as for civil infrastructures design, my scope of work varied from designing the water supply system using computer programme of InfoWorks; earthworks calculation for the eight-storey Kolej Kediaman Lelaki, the eleven-storey Kolej Kediaman Perempuan, the 1.5-storey Medan Makan and parking area of Universiti Teknologi MARA (UiTM) Seremban; box culvert for Langat 2 water treatment plant and water reticulation system; sewerage system for 10 unit of detached houses at Phase 9, Lot 53663, Bukit Jelutong, Seksyen U8, Shah Alam; as well as road and drainage for Universiti Teknologi MARA (UiTM) Seremban of which include the road marking design.

Although being loaded with the job routine, I managed to publish/present the following papers/book:

1. Wai, S. H., Aminah My. Yusof and Syuhaida Ismail (2011). The Provision of Economic Infrastructure via Public Private Partnership and Private Finance Initiative in Malaysia. 10th Annual Conference and Meeting of Management in Construction Researchers Association Malaysia (MiCRA) 2011. July 26-27, 2011. International Islamic University Malaysia, Gombak: MiCRA.
2. Wai, S. H., Aminah My. Yusof and Syuhaida Ismail (2011). Determinants and Criteria of Social Infrastructure Projects Success. International Postgraduate Conference on Infrastructure and Environment 2011. July 11-12, 2011. Hong Kong, China: The Hong Kong Polytechnic University (PolyU).
3. Syuhaida Ismail dan Aminah Md. Yusof (2011). Key Performance Indicators for Public Infrastructure Project in Malaysia. The 12th International Conference on Quality in Research (QiR 2011). July 4-7, 2011. Denpasar, Indonesia: Universitas Indonesia and Universitas Udayana.
4. Wai, S. H., Aminah My. Yusof and Syuhaida Ismail (2011). Relationship Framework for Social Infrastructure Projects Success Determinants and Criteria. The 12th International Conference on Quality in Research (QiR 2011). July 4-7, 2011. Denpasar, Indonesia: Universitas Indonesia and Universitas Udayana.
5. Syuhaida Ismail (2011). Green: A Better Colour for A Better Building. Public Engagement Talk at June School Holiday Programs of Petrosains. Invited speaker. June 10-11, 2011. Suria KLCC, Kuala Lumpur: Petrosains Sdn. Bhd.

**4.0 Conclusion**

The industrial training is benefitted to the academic staff in establishing the state-of-the-art practical knowledge and exposing the new young ones to the real world of construction industry as particular for Civil Engineering academic staff. Despite being able to broaden the soft and hard skill, the network created between the industry and university makes it able for the academic staff to look for post-graduate student supervision or research and development (R&D) collaboration with the industry. Thus, I fully supported the establishment of Universiti Teknologi Malaysia Pekeliling Pentadbiran Bil. 15/2010 UTM.J.02.03/10.12/(6), which provides value-added to the academic staff career development as well as creates an indivisible and continuous collaboration between the university and the industry.