

**Speech by YB Datuk Hj Fadillah bin Hj Yusof
Minister of Works, Malaysia
At The 4TH Edition of Nehemiah Design Competition 2013
10 October 2013, Dewan Kuliah
Faculty of Engineering, University of Malaya**

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The Vice Chancellor, University of Malaya

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Managing Director of Nehemiah Reinforced Soil Sdn Bhd

Eminent Competition Judges

Ladies and Gentlemen

Assalamualaikum Waramatullahi Wabarakatuh and Good afternoon.

1. It gives me great pleasure to be here with all of you this afternoon for the Fourth edition of the Nehemiah Design Competition 2013, an event held annually since 2010. At the outset, allow me to congratulate the students who have made it to the final round of the competition. I know that the competition is tough, and all of you have put in your best efforts to reach this stage and one of you will go on and clinch the Championship title for this year's competition.

2. The Nehemiah Design Competition is held to help civil engineering and architectural students to look for solutions to a real life problem. The idea is to encourage students to think out of the box and to see how they can find a solution that is economically viable. These efforts are in line with the government's initiative to inculcate creativity and innovation among students in higher learning institutes as creativity and innovation are major driving forces behind a productive and competitive nation.

Ladies & Gentlemen,

3. At the national level, the Tenth Malaysia Plan, which runs from 2011 to 2015, focuses on shifting the economy to a high value-added and high income economy by increasing productivity. During these period, privatization and Public-Private Partnership initiatives were intensified with projects worth about RM62 billion to be rolled out. The impact of this intensification on the construction sector is very evident, with the Malaysian construction industry recorded a double digit growth of 18.5% in 2012. This

trend has continued in 2013, with Bank Negara Malaysia recording construction growth of 14.2% and 9.9% respectively in the 1st and 2nd quarters.

4. The massive roll out of projects will require skilled workers, both local and foreign, to ensure successful completion, considering the complexity and fast track nature of the projects. There is thus an urgent need to provide quality industry-based training to meet the construction industry's needs especially for the up-skilling of the local construction workforce. As the nation is facing the challenge of getting adequate workers, the Government has put in place measures to encourage industries to move-up the value chain and, where possible, to automate and mechanise their operations and in this regard, a skilled workforce is needed, one that is creative, innovative and can solve problems.

5. Many industries are facing a lot of pressure due to globalization of the marketplace. Client sophistication has become a major driver for productivity improvements in construction. Clients demand higher quality end products and services at lower price. This has created a buyers market whereby firms compete for projects at lower margins and hence demand better project management practices to enforce tighter control on projects activities. Besides that, tariff barriers are virtually falling and labour has become more mobile. Further, due to productivity improvements and advantages in economies of scale, foreign firms are capable of competing

with local firms on price, quality and delivery. Therefore, to venture to oversea markets, Malaysian firms must be able to compete with others and become a total solution provider to their clients. They must also be capable to offer a competitive price. All this requires knowledge, skills and expertise in the management of projects. Due to this, I urge you, future engineers and architects, to gain all the knowledge and experience that is available to enable you to compete in a future that is going to be demanding and challenging.

Ladies & Gentlemen,

6. This event, jointly organized by the Nehemiah Reinforced Soil Sdn Bhd and University Malaya, helps to bridge the gap between industry and the academic world. This is a noble effort that should be emulated by other companies as part of their corporate social responsibility (CSR). Although the prizes are attractive, as students, you should realise that your participation in this competition goes beyond just winning the medals and the cash prizes.

7. What is more important is that what you learn in this competition, about the real challenges that you will face in the real world upon graduation. The challenges are even tougher to overcome and we need people who are both qualified and innovative enough to look for effective solutions.

8. Through the simulation exercise in this competition, I am sure in your capacity as an “engineer” or an “architect” with the Public Works Department (JKR) highway division, you will have to overcome challenges when you are asked to “construct a highway connecting the west coast and the east coast of Peninsular Malaysia, where a 200m long section of this highway passes through a valley of 20m depth on the fringe of a million years old rainforest.” Due to the logistics involved, you have had to rule out the possibility of constructing a bridge across the valley due to accessibility and cost constraints.

9. Hence, you will have to be creative and innovative in order to propose a holistic solution that is both structurally sound and aesthetically pleasing by incorporating ‘green technology’ features. It is not easy, but as I looked at your models this afternoon, I see very impressive attempts at a solution. Well done!

10. In real life, this is what good engineering is all about. When you enter into the work force, you are expected to face new challenges and that’s where you will have to put on your thinking cap to look for practical solutions to even more difficult situations. Many of these solutions do not appear in textbooks, but if you work hard enough, you will find new ways to overcome these challenges. There will of course be various constraints that you will have to face, but this is what differentiates a good engineer from the average, because a good engineer is able to generate new ideas that work at an affordable cost.

11. Finally, for those who win in this competition, I congratulate you, and for those who did not make it this year, I hope you do not give up but in the coming years you will strive harder in future competitions.

Thank you and Assalamualaikum.