Int'l conference on

Technology and Sustainable Landscape Design

Merging Technology with Nature !
International Conference on Technology and Sustainable Landscape Design held

One Day Conference   Technology and Sustainable **Landscape Design**   On 3rd March 2017

Singapore : Asia's one-day conference on Technology & Sustainable Landscape Design took place at the Furama Riverfront Hotel, Singapore on 2 March 2017.

Mr Tai Lee Siang, Chair, World Green Building Council was the Guest of Honour for the conference. Mr Tai touched on the history of technology and landscape design, citing examples such as the Hanging Garden of Babylon, Garden city and the new era of Vertical Greenery in his opening speech. He also focused on the importance of technology in sustainable landscape, and emphasized on the importance of integrating modern technologies in the design of sustainable and efficient landscape designs and urban planning.

Mr Mike Shilton, Chair of Landscape Institute, UK was the keynote speaker for the event. Currently, Mr Shilton also heads the BIM working group in LI, and is actively involved in the book BIM and Landscape Design. He focused more on BIM and Landscape Design in his keynote address. During his informative presentation, Mr Shilton touched on the following points:

- Why BIM and what is required for Level 2?
- Benefits of BIM for landscape design
- Software question
- How to engage in a BIM project
- Case Studies
- What the LI (UK) is doing to support for BIM
- The Future

Ms Srilalitha Gopalakrishnan, First VP and Associate Landscape Architect from Atkins spoke on the Sustainable Urban Greenery and Integration of Technology Opportunities ahead. She also talked about the art and science of landscape architecture design. According to her urban sustainability would largely depend on how a conscious balance is maintained between urban expansion and greenery integration to create a

liveable environment. She shared her views by citing some case studies on the Landscape master plan, KL, Olympic Park, UK and few others. Ms Srilalitha also covered topics such as how Landscape Information Modelling will help the landscape architects in the future.

Her presentation was followed by a Panel Discussion moderated by real estate expert Mr Bill Jones of Rio Tinto.

Ms Naree Phinyawatana, Director of Atelier Ten (Asia) Ltd touched on the rating systems and Landscape Design. She also cited various green rating systems and landscape as its important component. The most interesting part of her presentation was on SITES, the most powerful comprehensive system for developing Sustainable Landscape. She also brought up the WELL Building Standards and its holistic approach and the importance of Biophilic designs.

Mr Patrick Chan, Managing Director of GAC Ventures and Vision Edge Technologies made his presentation on the various eco products that can be used by landscape professionals.

Mr Philippe Girardot, Managing Director and Founder of Akrobat Pte Ltd shared his views on various Fall Protection systems and maintaining safely landscape at heights citing a lot of case studies.

Dr Abdul Rahim Hamid from the Department of Architecture at the School of Design and Environment in NUS gave an insightful presentation on Geographical Information Systems (GIS), Landscape Design, landform and view shed studies, visualization and community participation, Ecological landscape design,

landscape patterns,Urban design involving volumetric changes and current developments in GIS for design, citing few case studies.

The conference ended with a panel discussion moderated by Ken Hickson on the topic 'Step on the grass! How to sustain a green urban environment'.

The conference was organised by Green in Future, founded by Dr Parvathy Sathish (lovingly known as 'Paru'). Green in Future focuses on Urban Landscaping, Urban Farming, the Environment, and Health & Education. Together with partners SASA and ABC Carbon, the conference also received support from the Singapore Institute of Landscape Architects (SILA), Australian Institute of Landscape Architects, Hong Kong Institute of Landscape Architects as well as SIBL, Singapore. To promote the conference, SILA offered 2 CPD points for its members. With support from Atkins and Keysoft solution, the conference was indeed a great platform to learn more about sustainable landscape design and network with the green conscious community.

Personality

Mike is the Chair of the Landscape Institute BIM Working Group and has been an active member of the Group since its inception in 2012. Mike contributed to the "BIM for Landscape" book, which he helped project manage to publication, and has been involved with its subsequent promotion. Mike has been representing 'BIM for Landscape' to collaborate with other experts offering advice and guidance to the profession. He is a Chartered Member of the Landscape Architect and Product Director at Keysoft Solutions, where he provides the focus for future development of their BIM-enabled, traffic management and landscape design software. Green In Future had the opportunity to speak with Mike about his work and how BIM supports the development of a Sustainable Landscape - read on for our exclusive interview!

Interview with MIKE SHILTON CMLI   Chair of LI BIM Group, London and Product Director, Keysoft Solutions

Green In Future: Tell us a little about your background?

Mike: I have always been fascinated by the environment. My undergraduate degree in Ecology allowed me to gain a greater understanding of the delicate balance that exists between us and the other interactions that make up life.

After leaving University, unlike today, there were few jobs in Ecology so I worked as a project officer within a landscape design team at Birmingham City Council, where I trained as a Landscape Architect on a three-year, day release course. During this time, I moved to Wolverhampton Council where, over more than ten years, I got promoted as the Principal Landscape Architect. Whilst at Wolverhampton, I was involved in a wide range of landscape projects, from planning and policy, through design and implementation, to landscape management. From the start, I pushed for the introduction of CAD and technology into the landscape section. When the opportunity arose to influence the future of landscape design software, I jumped at the chance and I joined Keysoft Solutions in 1997, where I have progressed to Product Director, and now provide the focus for the future development of our BIM-enabled, traffic management and landscape design software.

Green In Future: How did you get involved with BIM?

Mike: From my early days at Keysoft Solutions, I was very keen to explore the interaction between CAD and GIS and explore how ecological information could, if provided within a design environment, inform better landscape design. In 2000, I was involved with a "Changing Places" project that attempted to apply these principles to the initial design stages. Whilst funding for the project stopped too early, I have continued to seek better ways of working, where information exchange is key to the decision making process. This is supported by the development of our

KeySCAPE LandCADD, landscape design software,which implements dynamic tools to ensure there is a single point of truth, reducing the risk of introducing errors through multiple edits, a key element of BIM.

I was involved in the very first meetings of the Landscape Institute BIM Working Group in 2012/13, where I have been able to offer advice on BIM, particularly in relation to the landscape profession. I am currently the Chair the Working Group.

Green In Future: How has BIM changed the work that landscape architects do now? What key BIM functions are now most used by architects?

Mike: Landscape has been slower to adopt BIM than other professions, simply because of its complexity – other structures rarely grow or change so dramatically through the seasons and over time! This has been a challenge for landscape, especially where the biggest misconception has been the belief that 3D is BIM. It has also been hindered by the current focus on the design and construction phases of BIM, when the biggest benefit for landscape is the use of design data throughout the lifetime of the landscape. Many landscape architects are starting to produce appropriate 3D models to answer key questions in the design stages and are increasingly looking at the data and how this will inform the ongoing maintenance of the facility in the future – another, often overlooked, key factor within the BIM process.

Green In Future: In your opinion how does BIM support the development of a sustainable urban landscape?

Mike :Simple, better informed, client-centric processes introduced earlier in the design will inevitably result in facilities that are better maintained and by skilled teams that will enable the design intent of the landscape architect to be realized. As BIM develops, im-

proved modelling techniques will allow for the consideration of "what if" scenarios and, through better prototyping, test the implications of decisions made at the design and maintenance stages.

Green In Future: Can you share some insights on your book "BIM for Landscape" ?

Mike: There is no book that can ever say, "this is how you do BIM", just like there is no book that tells you how to "do landscape". Just like the latter, BIM will be different for each client and for each project. What the "BIM for Landscape" book seeks to do is set out the key roles, responsibilities, processes, protocols and standards that may inform a BIM project and provide signposting to find out more. It does this in three, colour-coded, sections: those new to BIM; those trying to implement BIM for the first time; and, those that are implementing BIM and wish to extend their understanding further.

Green In Future: What would be your advice to landscape architects who are considering adopting BIM in their work?

Mike: Too many practices attempt to implement BIM in isolation. No landscape architect has got to where they are today overnight or will assume that they will not have to change again in the future, based on the client requirements and changing working practices. Why should BIM be any different?

How do you prepare? Ask lots of questions! Ask your clients and design partners (current and those you would like to work with in the future) what BIM means to them. This will allow you to understand what you need to do to align with them now and in the future. Once you know what you have to deliver, you can review your current systems, processes, skills and software. This will inform your business and investment plans which, in turn, will inform your BIM Implementation plan.

Green In Future: What are the biggest challenges you face in your current role?

Mike: Explaining that BIM is not just 3D and that it is continuing to do what you have always done but to just do it better! How? By clearly defining roles, responsibilities and implementing better standards, protocols and processes. Herein lies the biggest problem. There are currently no standards that universally define landscape objects. Consequently, many landscape architects are being forced to use software that is not appropriate for landscape design, for "ease of collaboration". In response to this, the Landscape Institute is developing software neutral-tools, based on Industry Foundation Classes (IFC), that will allow designers to use the software of their choice and exchange data in a common format.

Green In Future: Tell us a bit about your Landscape Institute working group and what it was set up to achieve?

Mike: Since its inception in 2013, it has sought to provide:
• Guidance on BIM implementation
• An overview of current BIM resources and standards
• A demonstration of how to apply BIM to landscape architecture projects
• Discussion on the systems and roles associated with a BIM process
• Awareness to identify the challenges faced by landscape architects
• Promotion of the opportunities and benefits that BIM can provide

What we do not seek to provide is:
• An off-the-shelf solution for every practice
• A detailed description of how to deliver BIM on your projects
• Recommendations on software