



For Immediate Release:
Jan. 25, 2013

Jo Anita Miley, 256-895-1585
JoAnita.Miley@usace.army.mil

Huntsville Center project delivery team win USACE design award

By Jo Anita Miley
Public Affairs Office

Building information modeling is a process involving the generation and management of digital representations of physical and functional characteristics of a facility. The resulting building information models become shared knowledge resources to support decision-making about a facility from earliest conceptual stages, through design and construction, through its operational life and eventual demolition.

The Corps of Engineers Huntsville Center Engineering Directorate's Medical Facilities Center of Expertise & Standardization Medical Design Plate team recently emerged as winners on Jan. 11, 2013, in the U.S. Army Corps of Engineers 2012 Building Information Modeling Awards Visualization Category.

There were four categories in the competition: BIM in Preliminary Design Charrette, BIM Supporting Energy Analysis, and Innovative use of Civil 3-D, and Visualization category.

The Center's Medical Facilities Center of Expertise & Standardization Medical Design Plate Project was initiated in 2010. Center architect Jelani Ingram, intern architect Ross Allen, and interior designer Stephanie Woods, all of the Center's Engineering Directorate, make up the team that collaborated on the Medical Design Template project. Ingram who is the team lead was responsible for the write-up and overall direction of the final submission and Allen and Woods handled production of the submitted templates. The design work was handled in 'real time' BIM charrettes with the customer and the Huntsville team.

Ingram said he is excited about how the technology can be used. Their team showed USACE judges how BIM technology is used in the preliminary design charrette process to support the Military Health System's Medical Space Template project. They were also able to explain how they utilize BIM to translate existing 2D drawings into 3D data-rich visualization models which are used to propose improvements to future medical facilities.

Ingram said BIM is the latest technology to offer significant improvement in the speed, cost and quality of facility planning, design and construction, and the operations and maintenance. In a typical BIM-enabled process the data model serves as the principal means for communication and coordination between construction activities and the design and construction professionals.

Allen said each piece of equipment we model has specific data embedded in it. When we place these pieces of equipment in a room template, the schedules automatically populate with this data. "It really eliminates errors that occurred when you have to manually create the schedules," he said. "This helps the customer know exactly how many and which specific pieces of equipment are in the room."

According to Ingram, the program template is the brainchild of Boyce Ross, Director of Engineering at Huntsville Center back in 2010, as part of a plan to grow the Directorate. Ross is pleased about the team's recent win, and is very supportive of their efforts.

“Boyce has been instrumental in making sure we have all the necessary tools and support to complete this mission for our customer,” Ingram said. We are currently working to stand up a management entity where we oversee the development of these templates on an annual basis for the customer,” he said. We are also working on a study of the templates to determine how the templates are being utilized by the architect/engineer’s and service providers.”

Allen also said this win is very gratifying because it shows that all of the work that we’ve put into this program for the past two years has paid off. “Winning this award shows that Huntsville Center is doing innovative work that is helping customers become more efficient and deliver a better product, one that compares favorably with the work coming out of the private industry,” he said. BIM technology has a direct impact upon customers because it helps them better understand the product and continually test and refine space planning ideas.

Woods said she enjoyed working on the team. Winning a USACE award is a great representation of Huntsville Center’s modeling capabilities.

Ingram said overall, the Corps must be pioneers in order to stay current and relevant.

“The technology is constantly evolving, reshaping and improving our lives, from how we communicate with one another, to how we do business at Huntsville Center.” Ingram said. “This is at the heart of why we applied to compete in the BIM competition this year. We recognized this as an excellent opportunity for our team to showcase how we use 3-D BIM to support our customer, while at the same time dynamically changing how the Corps communicates and does business with those customers,” he said. “We are bringing to the table a new way by which our customer can visualize and understand its objectives for its facilities and bring to bare healthcare solutions that have positive impacts on our servicemen and women and their families.