ACI Committee 131
Building Information Modeling
Meeting at ACI 2010 Fall Convention – Pittsburgh, Pennsylvania
Tuesday, October 26, 2010 - 3:00 pm to 5:00 pm

Unapproved Minutes

1. Introductions

Members Attending:
Kevin Ake           Shelby Group
Phil Antis          AECOM
Dick Birley         Condor Rebar
Allan Bommer        Bentley Systems
Brady Buckey        Harris Rebar
Barry Butler        Design Data
Pete Carrato        Bechtel
Jim Davy            McHugh Construction
Ed Dean             Nishkian Dean
Sid Freedman        PCI
Dave Grundler       aSa
Julian Kang         Texas A & M
Bill Klorman        Klorman Construction
Shorky Rashwan      National Research Council of Canada
William Shebetka    Baker Concrete
John Turner         CRSI
Jim Volk            Gerdau Ameristeel
Alistair Wells      Tekla

Associate Members Attending:
Daniel Berend       Facchina Construction Co.
Aldo De La Haza     Dynasty Group
Benjamin Pimentel   Rosenwasser/Grossman

Guests Attending:
Chris Darnell       ACI Staff
Fahim Dunga         Tekla
Chris Latreille     Ryan-Biggs
Ted Mize            Harris Rebar
Mike Mota           CRSI
Bohwan Oh           Daewoo
Lance Osborne       Meadow Burke
Debi Ramos          Hunt Ortman
Brandon Rippeon     Gerdau Ameristeel
Bob Risser          CRSI
John Roberts        
Joe Sanders         Pankow
Doug Sordyl         ACI - SDC
2. Meeting Minutes
The 2010 Fall convention meeting minutes were approved as written.

3. ATC-81 Update
Ed Dean gave a presentation on the ATC-81 Strategic Plan “Development of IFCs for Structural Concrete”. Pete Carrato will post the report on the committee website. The plan discusses mission, goals and strategy. The key part of the strategy is which portions of the effort will be led by which organizations:

1. Geometry – ACI 131, Software subcommittee will lead
2. Reinforcement – CRSI (with assistance of PTI), Jim Volk is CRSI committee chair
3. Concrete Materials – NRMCA, Colin Lobo is initial contact
4. Project Management – American Society of Concrete Contractors (Phil Williams and Bill Klorman are co-chairs)
5. Formwork – ACI 131 / ACI 347, Bill Shebetka will be liaison between committees

The overall effort is envisioned to take 18 to 36 months, depending upon the availability of paid consultants.

The committee discussed and confirmed its belief that IFC is the best option available.

The Software subcommittee will be contacting the rest of the committee for feedback after getting after developing some initial ideas on the Geometry item.

4. BIM Application at LAX Tom Bradley International Terminal
Bill Klorman gave a presentation of his company’s impressive BIM-based work processes in the LAX project. Some highlights were: the use of confederated BIMs for coordination; the contractor’s recreation of the BIM from 2D drawings produced by the architect’s BIM(!); interop with survey/layout tools; conflict detection and RFI tracking.

5. Education Subcommittee
Julian Kang reported on the progress made by the Education subcommittee. The written subcommittee handout is attached. Highlights of the progress are:

1. 3 Short courses being developed (not sure yet if live or virtual)
2. Pool of concrete BIM instructors being developed – (feel free to volunteer yourself! Or someone else!)
3. Short youtube videos are being considered.
4. A cast-in-place BIM award is being considered.

Many of these items will need to be coordinated with ACI. Pete Carrato will contact TAC to discuss.

6. Adjournment
The meeting was concluded at 5:00 pm.
Sub-committee for Education

Concrete BIM 101 Courses

- Date: Spring 2011 in Tampa Florida

<table>
<thead>
<tr>
<th>No.</th>
<th>Course Title</th>
<th>Course Description</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Concrete BIM</td>
<td>What is BIM for concrete structures, with cast in place concrete or pre-fabricated concrete members?</td>
<td>TBD</td>
</tr>
<tr>
<td>2</td>
<td>Collaboration with Concrete BIM:</td>
<td>How do we want to handle information using BIM in the course of concrete structure design and construction? What kind of information needs to be generated and consumed in concrete construction? Who generates them and who uses them? How does BIM best help us to use them to speed up our design process and make informed decisions for pre-construction planning?</td>
<td>TBD</td>
</tr>
<tr>
<td>3</td>
<td>Opportunities with Concrete BIM</td>
<td>What are unique opportunities with Concrete BIM that we should take advantage of?</td>
<td>TBD</td>
</tr>
</tbody>
</table>

- Instructor’s pool
  - Joy Beers, Structural Engineer, LEO A DALY Company (She teaches a course “Modeling, Not Drafting, a Post-Tensioned Structure” at the Autodesk University)
  - Dan Russell, Director of Construction Technology, Sundt Construction (He teaches a course “BIM Utilization in Concrete Construction” at the Autodesk University)
  - Damien Legrand, BIM Business Development Specialist, BIM Solutions Centre (He teaches a course “3D Detailing of Reinforced Concrete and Steel Connections with AutoCAD and Revit Structure” at the Autodesk University)
  - More to be added

Best Practice Cases Collection

- Concrete BIM Awards
  - Objectives: The Concrete BIM Awards honor companies that have demonstrated the effective way of applying BIM technology to the challenges they face everyday with concrete structure design and construction. Winners will be recognized during an awards ceremony at the ACI annual convention.
  - Application: Those who are interested in submit a package presenting the followings:
    - Introduction of company (400 words)
    - Challenges you faced (200 words)
    - How to apply BIM technology to solve problems and improve productivity (400 words)
  - Evaluation: An evaluation committee will be formed with the BIM experts in the industry. The committee reviews the package and made a collective decision by vote.
  - Awards: The winner (1st, 2nd, and 3rd place will be announced at the ACI website. A new website can be produced if needed.)
  - Budget: (Less than $5,000 for certificate or plaque. If dinner is planned, sponsorship can be sought.)

- Best Practice YouTube Project
  - Synopsis: Produce 10 minute-video clips presenting the best use of BIM for cast-in-place concrete, and post them on the ACI Website though YouTube. Each video clips explains how BIM helped construction professors solve the problems they faced and improved the productivity. Interview with BIM managers and computer graphics are used to best present the case.
  - Budget: $2,000 per video-clip (most budgets are allocated for travel). Funding can be sought from sponsorships.