

MINUTES OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
BUILDING CODES COMMITTEE

July 20, 2011

Avondale Civic Center
11465 W. Civic Center Drive
Sonoran Room
Avondale, Arizona

COMMITTEE MEMBERS

Ken Sowers, Avondale, Chair

Phil Marcotte, Buckeye

*Mike Tibbett, Carefree

*Mike Baxley, Cave Creek

*Martin Perez, Chandler

Mary Dickson, El Mirage

*Peter Johnson, Fountain Hills

*John Smith, Gila Bend

*Jo Rene DeVeau, Gila River Indian
Community

A-Ben Cox for Ray Patten, Gilbert

*Tom Paradise, Glendale

*Ed Kulik, Goodyear

*Chuck Ransom, Litchfield Park

Tom Ewers, Maricopa County

Steven Hether, Mesa

A-Bob Lee, Paradise Valley

*Dennis Marks, Peoria

Julie Belyeu, Phoenix

*Dean Wise, Queen Creek

Dustin Schroff for Michael Clack,
Scottsdale

A-Michael Williams, Tempe

Dale Crandell for Mario Rochin, Tolleson

Rick DeStefano, Wickenburg

*Jim Fox, Youngtown

Jackson Moll, Home Builders Association

OTHERS IN ATTENDANCE

Jami Garrison, MAG

Scott Wilken, MAG

Chuck Gunn, Mesa

Laura Hyneman, Mesa

Ryan Spillers, Mesa

Michael Dalmulik, Mesa

Randall Westacott, Avondale

Anthony Floyd, Scottsdale

Roger Rotundo, Phoenix

Bruce Dimmig

*Those members neither present nor
represented by proxy.

A-Those members participating via
audioconference

1. Call to Order

Ken Sowers, Chairman, called to order the July 20, 2011 meeting of the MAG Building Codes Committee (BCC) at 2:05 p.m.

2. Introductions

Voting members Michael Williams, Ben Cox, and Bob Lee attended via telephone conference call. All members introduced themselves.

3. January 19, 2011 Meeting Minutes

It was moved by Tom Ewers, seconded by Steven Hether and unanimously recommended to approve the May 18, 2011 meeting minutes.

4. Call to the Audience

There were no comments from the audience. Jami Garrison introduced Scott Wilken, who recently joined the MAG staff as a Regional Planner, and will be taking over staffing the Building Codes Committee in the future.

5. Comments From the Committee

Bob Lee commented that the Arizona Building Officials, AZBO, annual business meeting will be held at the Prescott Resort August 2-4.

Ken Sowers said that the information for the AZBO Fall Educational Institute is now available online. There will be 19 new or updated classes. He said that the fee will be \$100 per day, and it will be at the Prescott Resort October 3-7.

6. Green Building Codes

Roger Rotundo and Anthony Floyd presented an overview of the International Green Construction Code, IGCC, and the National Green Building Standard. Roger Rotundo said that the IGCC is a commercial code developed by the International Code Council, ICC. He said that the IGCC is a highly customizable code that can be adopted by a municipality as desired. He said that in each chapter there are mandatory components and elective components. Municipalities can raise the bar from what is written in the IGCC as needed. He said it is written as an overlay code, in that it goes on top of a municipality's existing code. He said that the heart of the IGCC is sustainable buildings and sustainability. He said that the goal is to increase the lifecycle of buildings to last 200 years rather than 10 years by designing elements that can be replaced as needed without having to replace the whole building.

Anthony Floyd said that the IGCC is a model code that can be adapted and amended by municipalities as needed. He said that the IGCC was created to be a mandatory code, but that Phoenix and Scottsdale adopted the code as a voluntary code. He said that it would be very difficult to adopt the code as mandatory without being able to try it and work with it first. He said that ICC created the IGCC in order to allow its members to have a code that does not conflict with other building codes. He said that the Leadership In Energy and Environmental

Design, LEED, requirements, in some instances, can conflict with existing building codes, and that this code attempts to solve that issue. He said that the American Society of Heating, Refrigerating and Air-Conditioning Engineers, ASHRAE, also recognized a need for a green building standard and developed a code compatible with their existing codes. He also said that ICC and ASHRAE came to an agreement to reference each other's codes in order to not compete and to not confuse the marketplace. He also said that the ICC and the National Association of Home Builders, NAHB, got together to create the National Green Building Standard for residential building. He said that both Phoenix and Scottsdale have adopted versions of the National Green Building Standard. He also introduced the 2008 California Green Building Standards Code, which is a mandatory code created by California.

Roger Rotundo added that he has observed that all of these separate green building codes are coming together and are on their way to becoming a single standard. Anthony Floyd said that he has seen in this process the best aspects of each of the codes becoming homogenized into one code.

Roger Rotundo discussed the new industries and opportunities that will be created as a result of further standardization and adoption of green building codes across the country.

Anthony Floyd discussed the committee process that took place to create the initial drafts of the IGCC. He said that the ICC went through a rigorous public process to draft the code. He said that one of the big compromises made was with regard to building materials. As an example he said that one of the baseline requirements is that at least 55% of all building materials used have to meet one or more of five properties: 1) has to be a reused material 2) has to contain recycled content 3) has to be recyclable; 4) has to be a bio-based material, like wood, from a sustainably-maintained forest or 5) has to be a local material, from within 500 miles. He said that this was a compromise between all the different building material manufacturing industries.

Bob Lee asked about an objection he had to a section in version 1 of the IGCC. He said that section 503.2.5 required that indigenous materials be both recovered and manufactured. He asked if this had been resolved. Anthony Floyd said that there was discussion about this question at the recent committee hearings, and that this language originally came from LEED. He said that when Scottsdale adopted the code, that portion was loosened up from what was written in version 1. He said that he couldn't remember exactly what the language was in version 2, but he believes that it has been resolved. Bob Lee pointed out that the same language is in version 2. Anthony Floyd responded that he could not remember what the results were of the recent hearings, but that he thought it would be changed for the next version. Bob Lee asked if the Scottsdale amendments to the IGCC are available online. Anthony Floyd responded that they are available online.

Randall Westacott commented that, since the IGCC was adopted by Phoenix and Scottsdale as a voluntary code, what incentives do builders have for complying with the code? Anthony Floyd answered that Scottsdale issues a Green Certificate of Occupancy to any builder who complies with the IGCC. Roger Rotundo commented that Phoenix is doing the same thing, and that they will be maintaining a database of buildings that they have certified as green.

Ken Sowers asked what the added cost will be for a builder to comply with the green building code, and how it compares to constructing a building with LEED certification. Anthony Floyd responded that with LEED there are registration and certification fees, which could be anywhere from a few hundred dollars to \$25,000 to \$30,000 depending on the size of the

project. With the IGCC, he said, a builder doesn't have those fees, and that it is part of the design, review and building process. He said that the energy savings and payback time period will be different for each building depending on the type and use of the building, and that complying with the IGCC could initially cost more or about the same, but the cost savings will be found over time.

Anthony Floyd described the plan verification process that is now used in Scottsdale for the IGCC. The first step, he said, is to meet with the developer to get a common understanding of what is expected, what needs to be provided by the applicant, and what the applicant will need to comply with. The plans are then submitted for review, and the IGCC items are reviewed concurrently with the standard building code items. After that review process, a green building permit is issued. During construction, IGCC items are inspected along with standard building items, but a different checklist is used to keep the two lists separate. Finally, he said, at the end of the project a green certificate of occupancy is issued for the building.

Roger Rotundo passed out a handout that he created for the Phoenix building inspectors that shows the different dial-in codes for IGCC inspection items. This list, he said, helps inspectors verify major required items throughout the building process.

Anthony Floyd said that, in the building community, there are a lot of people asking if the IGCC is competing with or will ultimately replace LEED. He said that this is not the case at all. He said that LEED is a rating system with different achievable levels, while the IGCC, on the other hand, is a minimum baseline code. He said that if a developer wants to get recognized for building green, he would go with LEED certification. Most likely, he said, achieving LEED certification would mean that a builder complied with the IGCC, as well. He described the requirements of IGCC as the floor, while LEED is the ceiling. He said that the U.S. Green Building Council, who maintains LEED, supports the IGCC because they see IGCC as raising the floor of building requirements, which allows them to raise the ceiling with LEED. Roger Rotundo added that, with many of the green building items, there will be a point of diminishing returns. After that point is reached, he said, we will start to see new technology being developed and used in green building.

Anthony Floyd said that the IGCC will be updated every three years as part of the code update process. He discussed the next steps for the IGCC, saying that the ICC will be holding its national conference in Phoenix in this November, and that the final action hearings for the IGCC will take place at that time. He said that the IGCC will be published next year as part of the 2012 I-family of codes.

Chuck Gunn said that Fulton Homes has decided to exceed the IGCC as a selling point for their houses. He said that that the extra cost for the first five houses paid for the extra cost of the next 150 or so houses, and that they have seen materials suppliers lowering their costs, so the extra costs associated with complying with the IGCC is going down. He also said that other homebuilders are starting to follow this trend, as well. He asked if the certification that gets submitted to show IGCC compliance gets submitted with the building plans or at a separate time. Anthony Floyd said that Scottsdale has only adopted the IGCC for commercial construction, not residential, but as a part of that, they are treating the verification process similarly to special inspections. He said that they have created an IGCC Commissioning Certificate that is similar to the special inspections certificate. He said that this form contains various sign-offs that refer to sections of the code that do not get inspected by the City. He said that, at the end of the job, the applicant is required to sign off saying that each item was done.

Roger Rotundo said that Phoenix asks the applicant to come in with a plan on how the IGCC requirements will be met.

Ken Sowers said that Roger Rotundo and Anthony Floyd will be in Prescott presenting at the AZBO conference.

Anthony Floyd said that is available online at the ICC website free of charge.

7. Updated MAG Building Codes Committee Membership

There were no updates.

8. Update on Survey of Code Adoption Document

Steven Hether announced that Mesa has adopted the 2009 edition of the Energy Code with an effective date of January 3, 2012.

Julie Belyeu said that Phoenix is discussing adopting the 2012 ICC codes. She said that they haven't formalized anything, but their proposal would give them an adoption date of January 2013.

Ken Sowers said that he thinks AZBO will be looking at the 2012 codes as well.

Jackson Moll suggested altering the Code Adoption Document in the last column to say 2009 or 2012 ICC Code.

Bruce Dimmig said that the Department of Energy, DOE, is considering making a 2012/2010 combo book available, and that they are gauging how any municipalities are moving to the 2012 codes. He said that if there is enough interest, they will probably publish those and provide them for free to municipalities. He asked for members to let him know their interest so he could get that information back to DOE.

9. Topics for Future Agendas

Ken Sowers asked if any members have ideas for future meeting topics.

Julie Belyeu asked if anyone had a contact for someone who could give a presentation on Building Information Modeling, BIM. Bruce Dimmig indicated that he could find a contact for a presentation like that.

10. Adjournment

Steven Hether made a motion to adjourn and Phil Marcotte seconded the motion. The meeting was adjourned at 3:30 PM.