

MINUTES OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
BUILDING CODES COMMITTEE

August 15, 2007

Maricopa Association of Governments Office
Cholla Room
Phoenix, Arizona

COMMITTEE MEMBERS

Michael Clack, Scottsdale, Chairperson
Ken Sowers, Avondale
Phil Marcotte, Buckeye
*Mike Tibbett, Carefree
*Cave Creek
A-Alex Banachowski, Chandler
* El Mirage
*Peter Johnson, Fountain Hills
*John Smith, Gila Bend
*Jo Rene DeVeau, Gila River Indian
Community
A-Ben Cox, Gilbert
Bryan Woodcox for Deborah Mazoyer,
Glendale

Ed Kulik, Goodyear
*Chuck Ransom, Litchfield Park
Tom Ewers, Maricopa County
A- Steven Hether, Mesa
A- Bob Lee, Paradise Valley
*Dennis Marks, Peoria
Tom Wandrie, Phoenix
*Dennis Street, Queen Creek
Forrest Fielder, Surprise
*Michael Williams, Tempe
Mario Rochin, Tolleson
Bob Cooperider, Youngtown
Rus Brock, Home Builders Association

OTHERS IN ATTENDANCE

Heidi Pahl, MAG
Steve Gross, MAG
Brian Juedes, Felten Group
Cameron Stewart, American Solar Electric

Clint Mueller, ProTex
Robert Palmer, Southwest Gas
Michael Neary, Desert Sun Solar

*Those members neither present nor
represented by proxy.

A-Those members participating via
audioconference

V-Those members participating via
videoconference

1. Call to Order

The Chairperson, Michael Clack, called the August 15, 2007 meeting of the MAG Building Codes Committee (BCC) to order at 2:01 p.m.

2. Introductions

Voting members Alex Banachowski, Ben Cox, Steven Hether and Bob Lee attended via telephone conference call. All members introduced themselves.

3. June 20, 2007 Meeting Minutes

It was moved by Ken Sowers, seconded by Bryan Woodcox and unanimously recommended to approve the June 20, 2007 meeting minutes.

4. Call to the Audience

Clint Mueller, registered civil engineer with the State of Arizona, asked why some municipalities are asking for an original wet sealed certificate to verify the inspection of post tensioned slabs is done. He said the problem is that this document is used electronically so no hard copy exists.

Ed Kulik said the issue is that some job site coordinators take one photocopy and change the number, then photocopy it again. Mr. Kulik said Goodyear will accept an electronic copy, but if it has been changed, then the engineering firm must take responsibility for the change.

Steve Hether asked if any building official has caught someone providing a fraudulent document. Ben Cox said Gilbert had some engineering documents altered in the field, so they ask for a wet seal document.

Ed Kulik said Goodyear caught someone duplicating the Energy Star certificate in the field. Mr. Kulik said that since this is a violation of the code, the person was penalized. Clint Mueller said, for the most part, they do not create wet sealed originals anymore.

Michael Clack said with advancements in technology it is the responsibility of the professional engineer to take care of their seal and ensure it is not being misused. Mr. Clack said this sounds similar to identify theft, so understand the risks and be careful. Mr. Clack added that the State Board of Registrars can support the building official and take action against any misuse of a professional seal.

5. Comments From the Committee

Michael Clack said they had a good Arizona Building Officials (AZBO) meeting in Flagstaff with eye-opening discussion about State Registration.

Tom Wandrie said that the City of Phoenix Special Inspections Manual has been updated and will soon be available on the city Web site. Mr. Wandrie noted that Phoenix created a special inspection certificate for the purpose of having all parties working on a job identified by name, task and signature. Phoenix is asking the registered design professional in

responsible charge to sign the form to state that all inspection reports have been reviewed and are in compliance with the design drawings. He said the building official will have a designated single point of contact that they are referring to as the “registered design professional in responsible charge.” He said the goal is to have one document that shows that everyone working on the project is in compliance. Tom Wandrie noted that a private firm looked into getting this type of form electronically.

Ben Cox said Gilbert has used a similar form for a number of years and Gilbert requires the same format as Phoenix. Forrest Fielder said the City of Surprise procedure is essentially the same. Forrest Fielder noted that the code is not clearly worded when it talks about the “owner” or “owner’s agent” being responsible for doing the technical tasks. Tom Wandrie said he interpreted that section of the code to mean that the owner, owner’s agent or a design professional shall be responsible for hiring a special inspector, and it is the building official who is responsible for confirming the legitimacy of the design professional.

Forrest Fielder said that in this month’s International Code Council (ICC) newsletter they are making available a set of ICC standards for the 2006 edition. He said there is a four volume set of standards being distributed and it will be needed to implement the new codes.

Tom Wandrie commented that Larry Stump gave a good presentation on the International Plumbing Code (IPC) at the AZBO meeting. Mr. Wandrie commented that stainless steel pipe for potable water systems is not acceptable under the Uniform Plumbing Code (UPC) but it is acceptable under the IPC. He said Phoenix uses the UPC. He said NSF International said there are no standards for stainless steel pipe.

Michael Clack announced that ICC was in Scottsdale August 15, 2007 to film Anthony Floyd on the topic of green buildings. Mr. Clack informed the Committee that this two minute video will air in Reno at the ICC Annual Business Meeting. Rus Brock said he suspects ICC will incorporate more green building elements into the codes in the future. Rus Brock said the comment period for the ANSI standard on green buildings is August 10, 2007 to September 24, 2007. Mr. Brock said information can be obtained at www.nahbrc.org. Tom Wandrie asked what the ANSI standard includes for green buildings. Rus Brock said he did not read the document yet. Michael Clack said he encourages those that have green building products to advertise through ICC Evaluation Services to get an evaluation report.

6. Arizona Residential Post-tensioned Roundtable

Michael Clack said Brian Juedes and Clint Mueller discussed post-tensioned structures in residential construction.

Clint Mueller thanked the MAG Building Codes Committee (MAG BCC) for the opportunity to discuss the Arizona Residential Post-Tensioned Round Table (ARPTRT) recommendations for standards of construction and design. Mr. Mueller said the ARPTRT started meeting about six years ago with the purpose of creating some consistency in the design, construction and inspection of residential post-tensioned slab on ground. He said consistency would improve quality and confidence in the product. He noted the round table has a diverse membership and meets monthly. The round table is currently trying to interpret what they need to be doing at a minimum for special inspection and concrete testing for

quality. He distributed two handouts. He said they are using the International Building Code (IBC).

Brian Juedes introduced himself and said he is representing ARPTRT. Mr. Juedes said that ARPTRT set out to create uniformity for residential post-tensioned slabs on ground. He said his goal is for municipalities to adopt the handouts in order to ensure consistency across the region. Mr. Juedes discussed recommendation #1 on the first handout.

Forrest Fielder asked why number 10 references ACI 228, and the special reference table references ACI 318. Brian Juedes said that ACI 318 6.2 is only referencing shoring and stripping of shore forms and it is not helping to determine what method to use for in suit of strength testing. He said ACI 228 provided guidance for concrete strength.

Tom Wandrie said Phoenix has experienced conflict between the project engineer and the subcontractors responsible for post-tensioning. He explained that there are times when the construction drawings may not have the detail for post-tensioned slabs because the subcontractor responsible for it has not provided the detail on the drawings and the project engineer does not know the detail. Brian Juedes said in his opinion it is incumbent on the engineer of that component to get the loads for doing the job correctly and the back check is that the engineer should review the drawings. Brian Juedes said they reference chapter 17 for special inspections and the items that apply are checked on the municipal forms so that they know who is going to do the work. Mr. Juedes said that having a single point of contact is a new concept for them.

Brian Juedes discussed recommendation #2 on the second handout. Mr. Juedes said recommendation #2 deals strictly with evaluation and acceptance of concrete. He said chapter 19 of the IBC outlines this specifically. They have found that historically, cylinders are being taken from 1 of every 3 post-tensioned slabs on ground. He would like each house to be considered a property for the purpose of concrete testing. Brian Juedes said the goal is to obtain uniformity.

Forrest Fielder asked if the round table discussed creating a MAG specification for concrete. Clint Mueller replied yes it was discussed, but he did not know how to incorporate concrete into the MAG specs. Forrest Fielder encouraged them to continue to explore this option.

Michael Clack said MAG specifications are for large pours of concrete, not residential construction. Mr. Clack said that in a slower construction period he would test every slab, but in a faster construction period he would recommend testing every third slab because there is greater consistency between concrete pours.

Mr. Clack said even though they suggest testing every house, in reality, in a time of high growth, it is not economical to test every house. He said they should take advantage of the flexibility when the code permits it. Rus Brock asked Brian Juedes for copies of letters from ICC on these codes. Brian Juedes distributed three letters from ICC. He said he is not aware of any problems or challenges in the field that warrant a tighter inspection schedule.

Brian Juedes said he feels the design professional is responsible for identifying which parts of the design need special inspection and acknowledging who is doing it and disapprove as they see fit. Forrest Fielder asked if the round table was comfortable with the pattern of the

structural engineer that designed the slab typically having no ongoing role in the designation of the special inspector or in the review of the reports. Michael Clack said this topic may be revisited at a future meeting.

7. Energy Efficiency Tags

Michael Clack said this agenda item is a review of energy efficiency tags as required by Section 1101.8 of the 2006 International Residential Code (IRC). He said committee members will be requested to discuss how their jurisdictions will enforce this requirement and the possibility for uniformity of enforcement.

Forrest Fielder distributed a sample energy efficiency tag that Surprise created in order to comply with the new code requirements. Ken Sowers distributed a sample of Avondale's energy efficiency tag. Michael Clack asked how building officials intend to enforce this. Rus Brock said the Home Builders Association (HBA) has created an energy efficiency tag for homes in Phoenix, and he said it is the builder's responsibility to fill out the information on the tag and place it in the electrical box of a home. Mr. Brock discouraged cities from creating their own tags. Michael Clack said Scottsdale was planning to give their energy efficiency tags to the inspectors so they could complete it in the field. Rus Brock asked whether a building official would be capable of accurately filling out the tag in the field. Ed Kulik said all information and calculations are on the drawings, so field inspectors should be able to fill out the tag correctly. Ken Sowers said he envisioned giving the builder the tags to fill out and give to the superintendent in the field to put in the electrical box, then during final inspection the building official would check to make sure it is in the electrical box and completed correctly. Forrest Fielder said he discovered that some of the values, such as HSPF, are a bit arcane and it is possible that some superintendents may not know such a value. Rus Brock said it is worth the effort to have a standardized tag. Mr. Brock noted that the tag may have some value to subsequent home buyers that want to know if there are certain energy efficient things in a home. Michael Clack noted that he does not want a scenario where a certificate of occupancy is not issued because the energy efficiency tag was not completed correctly and placed in the electrical box. Mr. Clack said it does not appear that the MAG BCC wants one tag for the region, but that each jurisdiction should continue with what it is currently doing.

8. Solar Permitting

Micheal Neary gave a presentation on behalf of the Arizona Chapter of the Solar Energy Industries Association. Mr. Neary provided information on the current status of solar energy incentives in the MAG region. He also addressed the permitting standards for solar energy systems that were adopted by the MAG Building Codes Committee in 2002 and 2003 and potential changes to those standards. He referred members to Attachments One A and B. He noted that they are also seeking consistency.

Michael Neary said that it is problematic for them when some cities require a structural analysis for putting the simplest solar collector on the roof. He said their association suggests no structural analysis for a flat plate collector as agreed to by the MAG BCC in the past. Mr. Neary requested that permitting cost and processes for solar water heating be treated the same as for a water heater replacement.

Cameron Stewart explained that they are having problems with new builds as they are not getting the letter from the utility company for grid-tie photovoltaic systems. He said another problem is that the building official will not issue the final green tag on the solar system until all building inspection items are good.

Tom Ewers suggested that any changes to the standard that would suggest that an inspector ignore other illegal work while approving the solar component is not going to be allowed at Maricopa County. Mr. Ewers said that Maricopa County cannot issue a green tag with a provisional. Mr. Ewers stated that all work requires a permit. He added that Maricopa County's green tag on utility clearance is their final approval.

Forest Fielder asked for a progress report on net metering. Michael Neary said that net metering is regulated for APS by the Arizona Corporation Commission (ACC) and for SRP by the State Legislature. Mr. Neary said SRP adopted a good net metering program and APS did not. Mr. Neary noted that there is going to be a net metering workshop to work out details of net metering for APS. He said the Solar Rating Certification Corporation (SRCC) web site has schematics for each of these systems.

Michael Neary offered to revise the two attachments and present the changes at a future meeting. Michael Clack asked to see the original version, the changes and the new version so that he could understand why the changes were made. Tom Wandrie asked if there was a need for enhancement to the trusses after the design of the systems. Michael Neary said no,, simple drawings suffice.

9. Regional Plan Review/MAG Building Inspectors/Plans Examiners (RPR/BI/PE) Forum Update

Ben Cox announced that the next Regional Plan Review (RPR) meeting has been scheduled for September 13, 2007.

10. Updated MAG Building Codes Committee Membership

Heidi Pahl announced that Art Swanson is no longer working for the City of El Mirage and Mary Dickson will be the new MAG Building Codes Committee representative for El Mirage.

11. Updated Survey of Code Adoption

Michael Clack said the city of Scottsdale adopted the new set of I-codes, and the information is reflected in Attachment Three. Bryan Woodcox said Glendale adopted the 2006 family of I-codes.

12. Topics for Future Agendas

No future topics were mentioned.

13. Adjournment

The meeting adjourned at 4:15 p.m.