



# Cactus Comments

## Program

### BIM Bam Baby!\*

#### An Introduction to Building Information Modeling

Building Information Modeling (BIM) was first introduced in 2002 by Autodesk, developers of AutoCAD and Revit computer-aided design (CAD) software programs. In the past 5 years, BIM has expanded rapidly; however, many in the construction industry have little knowledge about what BIM is and what it can--and cannot-- do.

According to a Greenway Consulting report, *Revolution and Achievement: New Practice and Business Models Emerge in Study of Architecture, Design, and Real Estate*, "Building information modeling (BIM) is perceived as an important tool of change and competitive advantage for organizations transforming the A/E/C industry."

So, what is BIM? Defined by the *National BIM Standard*, it

is a digital representation of physical and functional characteristics of a facility. As such it serves as a shared knowledge resource for information about a facility forming a reliable basis for decisions during its life-cycle from inception onward.

Essentially, it is object-based CAD that provides a 3D model of the building. Linked to the objects are data that identifies the objects, such as size, manufacturer, model, color, etc.--any information that can be attached to the object. This model, developed by the design team, is transferred to the contractor for construction. Upon completion, and after updating of the model by the contractor, the model is transferred to the owner for purposes of facilities management.

Last year, The Associated General Contractors of America released the *Contractors' Guide to BIM*, which was designed to outline the best practices for contractors using BIM. The Guide is free to AGC members, but has a cost for nonmembers. It can be downloaded at the AGC website ([www.agc.org](http://www.agc.org)).

For our April program, we have Dan Russell, of Sundt Construction, presenting **Using Building Information Modeling (BIM) as a Construction Tool**. In his presentation, he'll cover the following topics:

- Who is asking for BIM
- Benefits of using BIM
- Project Collaboration and Collision Detection
- Quantity Analysis through Modeling
- Creating Better Construction Schedules
- Field Coordination
- BIM Requirements from Design Teams
- Software and Hardware Requirements
- BIM Example Projects

Our presenter, Dan Russell, is the SIMCON (Simulated Construction) Manager for Sundt Construction, Inc. located in Tempe, Arizona. He has 20 years of computer-aided design and modeling in the construction field, working on projects as varied as the Arizona Science Center, Finova Corporate Center, Airmore Hangar One, and US Airways Center. He is a LEED Accredited Professional, and is a member of AGC's BIM Forum. Dan is also a co-author of AGC's *Contractors' Guide to BIM*.

Links:

Autodesk Website on BIM: [www.autodesk.com/bim](http://www.autodesk.com/bim)

National Institute of Building Sciences (NIBS) National BIM Standard:  
<http://www.facilityinformationcouncil.org/bim/>

For those curious, this is the title of a song written by Sammy Mysels and recorded by Frank Sinatra in 1952.

## President's Page

From the President  
*George Wadding*  
Star Roofing

### **WE GOT DIRTY (as in "Let's Get Dirty")**

We also got worn out, achy, and satisfied. Thanks to Jenny Neuville and the Education Committee for taking the lead to encourage Phoenix Chapter to do something we've never done before. We've all heard of Habitat for Humanity; some have probably even volunteered before.

In a matter of a few weeks a family of 6 will have a new home in Glendale. Several members of the family who emigrated from the country of Togo, West Africa worked alongside the CSI Volunteers as we leveled and cleared the lot for landscaping, cut and installed base board molding, and started the masking and painting.

## INSTITUTE CONVENTION AND REGIONAL MEETING

It's time to start making your plans to attend the Baltimore and El Paso meetings.

I intend to put a couple days of personal vacation time and money into the Institute meeting and show, June 20-22. If you have never thought about it before, Baltimore was a hub of activity in the early years of the formation of our country. Situated on a deep, secure harbor, it played an important role in the commercial development of the USA.

Even if you can't stay long, do tour the Constellation, the last wooden warship in the United State Navy and Fort McHenry. You will be amazed by the determination of all of the people who spent weeks crossing from continent to continent in such confined quarters. It is anchored in the Inner Harbor just blocks away from the convention center.

Fort McHenry was the site of a severe naval bombardment by the British Navy during the War of 1812, which is the subject of the lyrics of our national anthem. Take a water taxi or drive and pause there a while just to ponder on the freedom we enjoy because the defenders perserved.

CSI on the Rio Grande, the Southwest Regional Conference is July 26-29 in El Paso. It's I-10 all the way. It'll be a great opportunity to catch up with friends from Golden and Snowbird.

## PROGRESS CONTINUES IN ALTERNATIVE PROJECT DELIVERY METHODS

Last month's program on CMR as seen by the owner brought a different perspective and illustrated why many owners are utilizing APDM for their construction projects. The Subcontractors Forum, which was a vehicle to start the process of selection of subcontractors based on qualifications, has now melded into the Design Assist movement to consolidate the gains made in the effort towards providing a better built environment by tapping into the knowledge of the people who actually provide the labor for the construction of our buildings.

Planning for an executive retreat to get the movers and shakers from all sides out of the office into a more inclusive networking environment where partnering can be discussed as a real resource rather than a buzz word. The intent is to reach out to involve all the major associations, both professional and industry (to use a CSI term) and move APDM to the next level.

## SOCIETY OF INDUSTRIAL AND OFFICE REALTORS

Masterformat 2004 bookmarks went home to two dozen cities across the country following the conclusion of the Designation Course (for beginning and already certified

specialty realtors seeking CEU to maintain their status). I was asked to help with questions for the roofing portion of the multi-day seminar. It was another opportunity to get CSI out before our ultimate customers.

### GET INVOLVED WITH CSI

Occasionally someone (not necessarily a new member) will express a desire to get more involved. There is, and always will, be opportunities to do just that. We have a significant opening coming up for the Cactus Comment. Pamela Bir has graciously come to our rescue again and again and largely through her efforts we now have an on-line chapter newsletter which is as good as any I've seen, and candidly, a lot better than most.

We need a couple people to step up and volunteer to give her significant relief. Perhaps two of you could divide up the tasks of keeping the various items of information up to date; contacting and encouraging articles for the pool of talented members of the chapter, exchanging and locating items from other chapter newsletters (especially in the Southwest Region) to reprint or link in Cactus Comments. Pamela will still be available to help on the actual website assembly, at least until someone feels they have enough skill to take it over. This is a vital position and we really need help for it.

We have thirteen standing committees and several are understaffed. Think about where your interests or talents might be especially helpful.

On a similar note, is there something you would like to see the Phoenix Chapter do that it is not doing now? Have you seen another organization do something that might benefit Phoenix? The Board kicked around a new idea at the last meeting and it is always open to new ideas.

### TABLE TOP DISPLAYS

I am not sure why the interest here seems to have dropped off, maybe we just need to push a little. Sometimes, you have to "ask for the sale". I'm asking! Table tops are a good way to do some net-working with someone who has approached you rather than the other way around. I challenge you to recruit\commit to a table top for the April meeting. I am taking it as a personal challenge to see that there is at least one; who else?

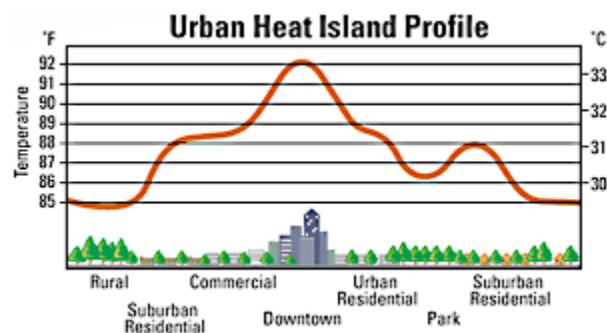
## **Technical Page**

Heat Island Effect, A Growing Concern  
Tim Garver, CSI, CDT – Technical Committee Chairman  
Dunn-Edwards Corporation

## ***What Is a Heat Island?***

The term "heat island" refers to urban air and surface temperatures that are higher than nearby rural areas. Many U.S. cities and suburbs have air temperatures up to 10°F (5.6°C) warmer than the surrounding natural land cover.

The heat island sketch pictured here shows a city's heat island profile. It demonstrates how urban temperatures are typically lower at the urban-rural border than in dense downtown areas. The graphic also shows how parks, open land, and bodies of water can create cooler areas.



Source: [www.epa.gov/heatisland/about/index.html](http://www.epa.gov/heatisland/about/index.html)

The CSI Phoenix Chapter Technical Committee is going to focus its next Green Sheet Technical Document on this subject. The Committee is looking for members to participate. If you are interested, please contact Tim Garver, Technical Committee Chairman, at 602.714.7280 or [tgarver@dunn-edwards.net](mailto:tgarver@dunn-edwards.net).

## **Member Page**

### **Report on Volunteer Day for Habitat for Humanity**

Jennifer Neuville, CSI

Frazee Paint & Wall covering

Sweep, paint, shovel, rake, nail...we did it all. And had fun doing it! A big thank you to everyone who came out to participate in the CSI Habitat for Humanity day on March 10th. We had a great turnout, almost 30 people! We were able to accomplish an amazing amount of work in a very short amount of time. I know the Klomega family was very grateful for our help.

If anyone is interested in volunteering with Habitat for Humanity, either individually or with their office, please contact Kara Schlosser, Manager of Volunteer Services, at 602-268-9022 ext 107.

## More Habitat Information

Tammy Stevens  
McGraw Hill Construction/Dodge

### Attendees:

Angie France  
Bill Snyder & Family  
Cary Stoneman  
David Ortega  
George Wadding  
Jay Norton  
Louise Rehse  
Jill Rehse  
Joe Volinsky

Paul Simonsen  
Rick Armstrong  
Stefano Dellorso  
Janice Jennings  
Lenny Fotopoulos  
Lisa Honaman  
Clinton Wilkins  
Tammy Stevens  
Scott Thomas

CSI volunteers worked with soon-to-be owners, the Klomega Family at their new house, located at 5914 W Northview Lot 3039. Over 20 volunteers helped to construct a house for the deserving family. I do believe everyone had a great time volunteering. Habitat sells the homes to families for the cost of construction with zero percent interest. The Klomega home cost approx. \$80,000 to build, but is worth \$110,000, said a Habitat spokesperson.

The family has a 20-year mortgage with the non-profit organization and two sponsors. Habitat also has a warehouse of donated furniture, which families are allowed to shop from at no cost to furnish their new home.

A family is required to work 400 hours on other Habitat homes as well as their own. They also must pay \$2,000 in closing costs and have the electricity installed. How much does it cost to sponsor a home?

There are several sponsorship options, beginning with a complete home sponsorship of \$60,000. Homes are also financed from partial sponsorships. Gifts of all sizes are welcome. A list of donor recognition levels is below:

- Home Builders \$60,000+
- Miracle Makers \$40,000-\$59,999
- Project Coordinators \$25,000-\$39,999
  - Developers \$15,000-\$24,999
  - Architects \$5,000-14,999
  - Contractors \$3,000-\$4,999
- Master Carpenters \$1,000-\$2,999
  - Carpenters \$500-\$999
- Foundation Layers \$250-499
- Groundbreakers \$100-\$249

## Member Bio

Jill Rehse, CSI  
The Reference Library

Pamela Bir  
Your Computer Lady

How long have you been involved with CSI?

In the mid-80s, I flew out from Houston, Tx while George and I were dating to attend the Christmas parties and Awards Banquets. After I moved to Arizona and we married, I continued attending special events. Then we started our consulting firm in 1996. I joined in 1997 and got my CDT certification in 1998.

What is your company profile?

While YCL is very involved in the construction industry because of our beginnings with George's expertise, I have expanded the company to cover many different industries – manufacturing, interior designers, art shows, artists, non-profits, private individuals. We provide computer and administrative support on projects. A client can call us in to do a project of any size. Most of our work involves Microsoft Office programs though we also can do QuarkXpress, ACT! or other software programs. We can do non-computer projects such as client satisfaction surveys or organizing a trade show.

One very unique aspect of YCL is the network of professionals I have to call on. Many are stay-at-home moms with exceptional skills who want to keep their skill level high. I use them on projects that require a special expertise or that have a short deadline requiring a team approach.

My favorite part of the work is the training. I teach computer skills from a business perspective, not a big-picture software perspective. I try to give every student information they can use that very day to work smarter.

What is your responsibility at your company?

I am the salesperson, project manager, project completer, accounting department, personal trainer, shopper, bottle washer, janitor. I don't do Windows <sup>TM</sup>!!

What is your territory?

With the online meeting service I have been using for a little over a year now, my territory is anywhere there is high speed Internet and phone service. I'm currently working with clients in New Jersey, North Carolina, California and even Tucson. The online service lets me see your computer and even work your mouse and keyboard. Or you can see my computer while we edit a document or learn a new computer skill.

What project are you most proud of/largest/high profile that you have worked on?

There's a tie! Through CSI's involvement with the Pappas School in Tempe, I have been able to teach computer classes for the second graders. What a kick! These seven to eight year olds have little knowledge or hands-on experience with computers. Last

week I took them to a web site hosted in France and written partially in French. They got to write their names in hieroglyphics. They thought it was soooo cool!

Hollow Metal Xpress is a manufacturing firm for hollow metal doors and frames. The Phoenix plant was purchased in June 2006 by three individuals. YCL jumped in to create product literature, a web site and a brochure – all in time for a national trade show that I got to organize. It was great to see the pieces all come together in a cohesive form. ([www.HMXpress.com](http://www.HMXpress.com))

What do you hope to gain from CSI?

Since many of our projects are related to the construction industry in some fashion, CSI is a great source of education. I can assist a company in formatting their specifications or help write better marketing literature since I understand more of the architect's needs.

Hometown/grew up?

Lubbock, Texas I've been in Phoenix since 1986.

What is your alma mater?

The computer services business was a complete accident!! All of my training has been on the job.

What are your hobbies?

Reading. Bead work. Writing. In addition to the Computer Tips articles in Cactus Comments, I write for Sources + Design magazine. I edited and published a Western posthumously that my father had written.

Interesting fact about you?

I collect quotes and I'm in the process of publishing a book of my favorites.

What is your contact information?

480-929-0335

[Pamela@YourComputerLady.com](mailto:Pamela@YourComputerLady.com)

[www.YourComputerLady.com](http://www.YourComputerLady.com)

Comments.

CSI, like any organization, returns exactly what you put in. If you join a committee, work on a project, DO SOMETHING! you'll get your investment back. If you only show up for meetings once a month, you'll get very little return.

I chair the Publications Committee (Newsletter, Web Site, Special Announcements). We need some committee members!



## Redundant repetition

Communication may be our most important skill. It doesn't matter how fantastic or useful a design may be if we can't explain the idea to the people who have to build it. When we're dealing with construction documents, we know the value of the standards developed by CSI, and we acknowledge the value of the four Cs - clear, complete, concise, and correct. But when it comes to electronic communication, it's easy to forget that e-mail and discussion forums also benefit from clear, concise statements.

E-mail is one of the great communication innovations. Fast and easy to use, it allows us to send information to each other almost with hardly a thought. It is also one of the great communication curses of the modern world. Fast and easy to use, it allows us to inundate each other with endless chain letters, jokes, annoying messages, and forwarded mail.

In the good old days, when we wrote letters with pen and ink, or with a typewriter, we usually wrote to a single person. Writing to more than one person at a time was possible, but re-writing or reproducing a letter, addressing envelopes, affixing postage, and getting it all in the mail made it an uninviting chore.

With e-mail, we can respond immediately, and just a few clicks can send a message to several people. The "reply to all" feature makes it possible to respond to the sender *and* to everyone else who received a copy of the first message, and by adding a distribution list of your own, the message can be sent to people who weren't involved before.

Most of us have received jokes that have been forwarded countless times. Sometimes there are so many names of previous recipients that the original message is lost. I once received a joke that, printed out, would have run to more than a dozen pages, the payoff being a two-paragraph joke on the last page.

Jokes and chain letters are one thing, but business correspondence is entirely different. The purpose of serious mail is to convey important information. As long as we write to a single person, or a carefully selected group, all is well.

Unfortunately, pressing "reply to all" is so tempting that we often pass on information that is significant to only a few of the people that receive it. When this becomes common within a group, it is not unusual to receive copies of the same letter from several people, each of whom replied to all.

The recent e-mail discussion of the governance recommendation clearly illustrates the need for more thought when sending or responding to e-mail. The sad result of the enormous quantity of endlessly forwarded e-mail was that it discouraged many

members from reading their e-mail, thereby negating its purpose. Just like junk mail in your snail-mail inbox, much of it went right into the garbage without being read. When sending mass e-mail or responding to a message with several names in the "to" or "copy" fields:

- Take the time to select recipients who are interested.
- Check the previous distribution, and do not send to people who have already received the message.
- If the subject of the original mail is something like "What's a good time to meet?" reply only to the sender.
- If all you have to say is "I agree" think twice about how important that is to everyone else.
- And please - don't use those cute signature blocks that include your entire life history and that clever company logo. Same thing goes for that lovely background image.

Better yet, post your comments to a discussion forum, and when you get e-mail about a posted subject, tell the person who sent it to use the forum. Using a forum will make your comments available to all, avoid confusion about who said what, and eliminate a lot of clutter from our mailboxes.

Finally, when writing that terribly important message that you simply can't wait to send, go ahead - get it all out. Then save it, set it aside, and read it again the next day. You might be surprised how often comments made in the heat of the moment don't sound quite so reasonable in the light of another day.

*Sheldon Wolfe, RA, FCSI, CCS, CCCA  
Institute Director, North Central Region, CSI*