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Off The Drawing Board to UT Austin

TGCE Credentials and Participation



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If you or someone you know has suffered the loss of a friend or loved one, For the Love of Christi can help. (512) 467-2600 http://fortheloveofchristi.org/

VIEW THE CONSTRUCTION GALLERY

This article is a bit of a departure from our norm. It is not so much about projects as it is about the people for and with whom the projects are built. It is not so much about the relationships that develop during the course of a project as it is those relationships which sustain long after the project is completed. It is, necessarily, a personal account.

In 1998, I received a call from one William Massingill, AIA, of Polkinghorn Group Architects, (PGA). I've never asked, and I do not know to this day, why William called me. I knew William and some of his colleagues at "Polk's" office, and we had worked together on some cool projects over the years, but it was not like we and PGA were consistent teammates. Just the same, he called.

He asked if I might be interested in doing some pro-bono work for an organization named "For the Love of Christi" and if I knew about the group? I recall answering yes, I was interested, but tell me more about it.

I must have said okay, let's do it...because we did. Not a lot to say about the MEP engineering. Pretty basic stuff, but nonetheless important to the Christi Center so also important to us...as it would have been to any of you reading this account.

Throughout the (Phase I) project, I learned about the origin of the Christi Center, and came to know the cofounders Susan and Don Cox. You know how sometimes you sense you are in the midst of some form of providence or prevenient grace? That's the sense I came to feel with Susan and Don.

Over the course of the next few years, Susan and Don made it a point to stay connected. I began to get a glimpse of the broad network of people the Christi Center served, and why it is so aptly revered in the community. I have seen occasions where Susan and Don adjusted vacation plans to just go be with people who were grieving with a loss, people who they didn't even know except through an acquaintance. I have seen Susan and Don travel to Silver Taps to honor the lives and memories of victims of tragedy. I have seen Susan and Don helping to make construction decisions in the bitter cold and in the sweltering heat, always seeming like welcoming hosts in the process.

In 2010, William called again. Said there was another addition being planned...a Phase II as it were. Was I in? I, not unlike any of you would have done, said sure thing. And so our relationship with the Christi Center grew, as did our knowledge of what all they do. I have never heard Susan or Don say it in words, but I've seen it expressed in countless ways, that it is never about them, but always about those they and their equally giving colleagues serve. Their collective work is amidst the finest examples of unconditional and inspiring love I have witnessed in my years. I am honored to know them, and the entire organization.

I invite you to learn more about "For the Love of Christi" at http://fortheloveofchristi.org. Perhaps you or someone you know will have a need to become acquainted. Perhaps you will be moved to support them with volunteer time or financial resources. Perhaps you will be inspired by what they do so that your Gifts are developed and used in fulfilling ways. *Tom Green, P.E., LEED AP - Principal*

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OFF THE DRAWING BOARD TO UT AUSTIN



Image courtesy of McKinney York Architects

Jester Dormitory receives another AHU replacement

Round two of submarine-like design at the University of Texas at Austin's Jester Center Dormitory is under construction. (See also Round One: "Engineering Strategies for Close Quarters Design". *The Innovator Newsletter*, Spring 2010, Page 3.)

TGCE's design team includes TWC Architects and Datum Engineers. Mechanical and Process Systems (MPS) is the prime contractor. These and other team members have collaborated well in the compact but highly intensive 5,000 sq.ft. renovation., with 1,150 sq.ft. being strictly mechanical/electrical space. The project scope included a decoupled outdoor air system that served two air handlers, one new and the other existing. Using highly customized air handlers designed with computational fluid dynamics, we were able to design systems which fit, are highly maintainable, are efficient, that promote indoor air quality, that are affordable and constructable, and that meet UT's construction standards.

Expert use of 3D design and 3D shop drawings enabled this Team to allocate space appropriately in design, find any conflicts during the shop drawing process, and to construct rapidly and efficiently. Since Jester houses students and camp-goers year-round, phasing and construction time is very limited. 3D continues to be an important ingredient to the success of these projects.



College of Fine Arts - AHU 1E Replacement 3D Isometric by Tom Green & Company Engineers, Inc.

The Jackson School of Geosciences seeks LEED Gold Student Activity Center

A new renovation is underway for the Geology Building at the University of Texas seeking LEED Gold Certification. The 11,000 sq.ft. space on the second floor will be renovated into a student activity center by a Building Team including but not limited to: McKinney York Architects, Tom Green & Company Engineers, Inc., Jaster-Quintanilla, CO'Design, and Flintco Constructive Solutions. The space consists of student study areas, administration offices, and a courtyard featuring a dry creek bed that gives the illusion of entering the building. The large student study area has a glass façade to introduce natural light and features a 6 ft. diameter digital video globe, coffee bar, and study tables. The mechanical systems use existing air handlers with new high pressure dual-duct VAV boxes serving the renovated floor. The electrical systems include daylighting controls: photocell controlled dimming within 15 feet of windows with user dimming override. All spaces are also controlled by occupancy sensors. Portions of the interior lighting and all of the exterior lighting use LED's as the light source.



Jester Center (West) Dormitory - AHU 3W Replacement Rendering by Tom Green & Company Engineers, Inc.

College of Fine Arts utilizes 3D design and construction coordination in latest modifications

TGCE's design Team includes Noack-Little Architects, and Flynn Construction became the prime contractor for another compact but intensive mechanical room renovation, this one located on the second floor of the UT Austin Art Building.

The highly customized 30-ton air handler within the room is replacing a unit that was 51 years old. As one could imagine, a lot has changed in our industry since 1960. These differences challenged the design Team to develop constructable, maintainable, efficient, flexible, and affordable solutions...a tough combination made tougher with severe space restrictions.

Proper and effective 3D integration during design is critical in such applications, and was no doubt key in meeting the challenges of this project.

TGCE CREDENTIALS

TGCE PARTICIPATION

Tom Green and Company Engineers, Inc. encourages employee development through additional certifications beyond and/or complimentary to Professional Engineer licensure. Community involvement is also a big part of being a TGCE employees - here are some of the AEC community organizations we support. Our well rounded staff results in greater value to the Owner and design team.

LEED AP

75% of our employees are LEED accredited. This means that our staff has specialized knowledge and experience in the design and construction process of buildings that minimizes impact on the environment. These buildings also use energy efficiently and provide a healthy and more productive working/living environment for the building occupants. Our team has been involved with LEED projects at all levels of certification; from "Certified" to "Platinum".

L.C.

A credential recognized by the National Council on Qualifications for Lighting Professionals (NCQLP) as Lighting Certified (L.C.) distinguishes an individual in the specialized field of illumination. With specialized knowledge of the technical aspects of lighting, TGCE has had the privilege in fulfilling several clients needs ... and beyond.

MASTER ELECTRICIAN

Having a Master Electrician (recognized by the Texas Department of Licensing and Regulations) on board has proven to be very valuable to our team. Our senior designer with 20+ years of hands-on experience allows us to discuss/implement Owner's needs with a focus on constructability and to better communicate with Contractors in the field during construction.

HFDP

The Healthcare Facility Design Professional (HFDP) certification of ASHRAE recognizes an increased understanding and knowledge of medical terminology and facility operations as they affect HVAC design in healthcare facilities.

HBDP

The High-Performance Building Design Professional (HBDP) certification of ASHRAE recognizes an increased understanding and knowledge of how management of HVAC operations helps to achieve and maintain building performance goals.

CPMP



A certified Commissioning Process Management Professional (CPMP) of ASHRAE oversees and coordinates the commissioning process and communicates on behalf of the building owner with the commissioning provider and the commissioning team.

AUSTIN GREEN BUILDING PROFESSIONAL

Professionals listed in the AGB directory have rated a project in Austin Energy's service area. In doing so they demonstrated a commitment to incorporate green building practices into all aspects of their business.

GREEN BUILDING

ASHRAE

ASHRAE, founded in 1894, is an international organization of over 51,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.



YEA

The Young Engineers in ASHRAE (YEA) Committee enhances member benefits for young professional ASHRAE members, 35 years old and younger, by identifying activities and services focused on their needs. YEA's primary goal is to increase participation of younger professionals in ASHRAE for the betterment of the HVAC design/construction industries. Our members have access to the vast resources of ASHRAE, which increases the quality of design and construction practices amongst new professionals in our industry.

SMPS

The Society for Marketing Professional Services (SMPS) is a community of ethical marketing and business development professionals working to secure profitable business relationships for their A/E/C companies. Through networking, business intelligence, and research, SMPS members gain a competitive advantage in positioning their firms successfully in the marketplace. SMPS offers members professional development, leadership opportunities, and marketing resources to advance their careers.

AIA

AIA Austin provides the architecture community with resources and relationships to make a difference through design. AIA Austin opens doors, provides connections, keeps their members and the public informed, and demonstrates commitment to great design as the key ingredient for livable, sustainable places.

TGCE shows its support of the AIA community through its Allied membership. Additionally, we are involved through participating in the Austin Architecture for Healthcare (AAH) committee and Committee On The Environment (COTE).

AAH - The committee's aim is to develop knowledge and information to benefit architects, owners, contractors and consultants who are engaged or interested in the design and construction of healthcare facilities.

COTE - The Committee on the Environment works to advocate and promote sustainability and green design practices among the public and the architecture profession.





1 LB. Donut Challenge No. 1

The 1 pound donut challenge has been an office bet in which two of our employees have partaken. We're not quite sure how the whole thing originated, but we can definitely tell you how it ended.

Jay Young, E.I.T, LEED AP: Time: 10:05

It was a valiant effort by Jay. Unfortunately, he could not get it all down in time. "I couldn't do it," Jay said with a slothful mouth full at the end of the challenge.

Now, Cameron being appauled at Jay's inability to finish the donut in the allowable time, quickly one-ups Jay by saying he could complete the challenge in 4 minutes. The onlookers were quick to take that bet after seeing Jay struggle through his sugar coma.

1 LB. Donut Challenge No. 2

Cameron Labunski, P.E., LEED AP: Time: 7:16

Once again, the 1 pound donut proves victorious. "My jaw hurts," Cameron exclaimed.

Since then, no one has had the stomach, literally, to face the 1 pound donut challenge. Lesson learned: Don't Dare the Donut!

~Greg Maxwell, LEED AP - Designer/Technologist



Milebug - FREE or \$2.99



For all lovers of larger tax returns, MileBug is a beautiful app that makes it easy to track your tax-deductible mileage (with GPS tracking or manual input) on your iPhone or iPod Touch! Email HTML and Excel-friendly (.csv) reports to yourself.

SkyView - FREE or \$0.99



Find stars, constellations, and satellites. View planetary paths, change the date and time to travel into the future, track the final NASA space shuttle missions. What a fun way to teach yourself, your children, your students, or your closest friends about our wonderful universe.

TOM'S TRIVIA

Name that (TGCE) facial hair:



* All "close to correct" responses will be pooled, with a winner drawn and awarded a \$25 gift card to The Home Depot.

Reply to (CLICK LINK FOR AUTOREPLY) newsletter@tgce.com. Check our website at www.tgce.com/index_files/newsletter for results.

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