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*Means* Written Notice when  
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### Greening the Roof: Strengthening Solutions for Installing Green Roofs on Existing Structures

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In the race to build "green," many building owners and contractors have turned to an unlikely place: the roof. A green roof is a green space created by adding a growing medium and plants on top of an existing or new roofing system. A distinction should be made between a green roof and traditional roof garden. A garden roof is typically done with containers and planters located on a roof terrace or deck while a green roof system is made of several layers that are installed directly on the roof. From the bottom up, these layers include: the roof structure, a waterproofing

see Greening - page 7

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### The BW Chapter has a lively panel discussion on CFRP



The September Baltimore Washington Chapter Meeting was held at Snyder's Willow Grove Restaurant and featured a lively panel discussion of the most requested topic from our membership questionnaire: fireproofing requirements for carbon fiber strengthening applications.

see Wrap-Up - page 12

**COLUMNS****Legal Column**

Written Notice of a Claim *Means* Written  
Notice when Dealing with a Virginia Public  
Entity

see page 13

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Emergency Action Plans (EAP)

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**CHAPTER INFORMATION****4th Quarter Membership Meeting**

PLEASE JOIN US FOR OUR SIXTH ANNUAL OUTSTANDING  
REPAIR PROJECTS AWARDS PROGRAM.

November 4, 2010  
Holiday Inn, College Park, MD

see page 3

**Business Card Service Directory**

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**2010 Fall Technical Seminars**

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### ICRI-Baltimore Washington Sponsors

see page 4



# ICRI MISSION STATEMENT

*The mission of the International Concrete Repair Institute is to be a leading resource for education and information to improve the quality of repair, restoration, and protection of concrete and other structures in accordance with consensus criteria.*

*ICRI is an organization composed of Engineers, Consultants, Contractors, Manufacturers and other Material Suppliers, Property Managers and Owners all working together for the betterment of the industry and of all involved. Providing an open forum to speak about our work, new technologies and methods, exchange ideas.*

*Creating and following standards to produce the best results for all involved.*

## PRESIDENT'S MESSAGE



ICRI's influence and presence across the United States is a testament to the strength of our organization.

I would like to share some of my recent experiences that demonstrate the benefits and strength of our organization. I have had the privilege of designing repairs and overseeing construction on several large projects in recent years in Denver, Boston, New York and other cities across the country. I was working for owners based in the Washington, DC area.

Aside from the obvious project challenges of conforming to the local building codes, construction requirements and interacting with code officials in these areas, one of the biggest challenges was to find local, qualified contractors and materials that were readily available for the projects. The owner relied on our firm to locate and qualify local contractors to perform the work. ICRI's contractor members in each project's geographic area were contacted, interviewed and prequalified to bid on the projects. ICRI manufacturers were consulted during the design process in addition to providing site visits during construction. The ICRI geographic membership directory was a great resource to us and knowing that the contractors were ICRI members meant that they were familiar with the repair techniques and methods required for quality repairs in our industry.

I urge others to use the ICRI geographic membership directory as a resource for out of town projects in the future. It helps us to reach the ultimate goal of providing the owner with a quality repair project.

The September dinner meeting was well attended and featured a panel of experts in the field of fireproofing CFRP. Thanks to Dave Rodler, Dave White, Casey West, Bob St. John and Rick Edelson for an enlightening discussion that highlighted the specifics of this highly debated and evolving topic. It was an informative evening for all that attended.

This year is quickly coming to a close, but there are still two more major events scheduled for the Baltimore Washington Chapter. On November 4<sup>th</sup>, the 6<sup>th</sup> Annual ICRI Baltimore Washington Chapter Outstanding Repair Project Awards Program will be held at the College Park Holiday Inn. This has always been an exciting and informative evening where the top three local repair projects are presented by our local members. Elections will also be held this evening for the 2011 Board of Directors. Ballots were sent out in early October, please make sure to exercise your member rights and vote!

Our last event for 2010, the Fall Seminar, will be held Thursday, December 2<sup>nd</sup> at Concrete Protection & Restoration's warehouse. The theme of this year's seminar is **Historic Restoration**. We have leading consultants, contractors and material representatives presenting on a wide variety of topics related to Historic Restoration. The presentations will be followed by hands-on demonstrations of various repair products. The seminar topics are wide ranging and we invite you to join us and bring along a non-member or even someone outside of the ICRI industry group. We are always looking for new members to join our organization.

I want to take this opportunity to thank the 2010 Board of Directors and all that have volunteered their time to continuously improve our chapter and make it one of the leading chapters in the country. These volunteers plan, develop and implement all the chapter's events and communications. Serving on the Board takes time and dedication to our industry and our membership. I am grateful to all that are committed to the advancement of our chapter. It has been an honor to serve our members this year and I thank you for your support.

As always, chapter information, including all upcoming events, forms and chapter news can be found on our chapter website, [www.icribwchapter.org](http://www.icribwchapter.org). I hope to see everyone at the November 4<sup>th</sup> dinner meeting at the College Park Holiday Inn.

*Matt Nachman*  
Tadjer-Cohen-Edelson Associates, Inc.



# THE BALTIMORE WASHINGTON CHAPTER OF ICRI

**Thursday, November 4, 2010**

**Holiday Inn College Park**

**10000 Baltimore Blvd.**

**College Park, MD**

**301-345-6700**

Exit 25 (Baltimore Blvd. North US 1) off Beltway,  
Hotel on Left



## **NOVEMBER AWARDS DINNER AND BOARD MEETING**

Advance Reservations by 10/25/10:	\$50
After 10/25/10 & Non-Members	\$60

4:00	Board Meeting
5:30	Social Hour
6:30	Dinner & Presentation

Please join us on Thursday, November 4, 2010 for our Sixth Annual Outstanding Repair Projects Awards Program. Help us close the curtain and to celebrate a year of accomplishment when we honor our chosen contractors, engineers, consultants and materials suppliers for jobs well done. This year's program will feature unique projects completed within the last year. This event always has a large turnout from our membership as our local industry leaders showcase the award winning projects from this past year. There will be three awards and each recipient will have time to speak on their special project, challenges and what made the project a success. Projects under consideration as follows:



- ⇒ **Foxhall Square Garage Post-Tension Cable Repair and Replacement**  
*Concrete Protection & Restoration, Inc.*
- ⇒ **National Archives & Record Administration Installation of Self-Closing Flood Barriers and Loading Dock Turntable Removal and Structural Slab Repairs**  
*Concrete Protection & Restoration, Inc.*
- ⇒ **Bryant Denny Stadium Seating Bowl Repairs**  
*C.A. Lindman, Inc.*
- ⇒ **Comfort Inn – Arlington, VA Parking Garage**  
*Restoration East, LLC*

Projects are currently being judged by a fine field of judges selected from our national pool of ICRI member companies. Judging is based on a number of criteria including, but not limited to: overall presentation of the project, innovative or difficult approach to making repairs, specialized materials or equipment required, difficulties during construction related to site issues or owner issues, tight construction deadlines or compressed schedules and that the project's success can be attributed to utilization of ICRI techniques and guidelines in the repairs.

The winners will be allowed to speak about their project: 1<sup>st</sup> Place - 30 minutes; 2<sup>nd</sup> and 3<sup>rd</sup> Place - 15 minutes.

## **REGISTRATION DEADLINE IS October 25, 2010      NO-SHOWS WILL BE BILLED**

Please email ([pomalley@c-p-rinc.com](mailto:pomalley@c-p-rinc.com)) or print this page and fax to **Pat O'Malley**, Secretary, at 410-298-4086 no later than October 25, 2010. Checks to ICRI BWC may be turned in at the meeting or mailed with your form to:

Pat O'Malley, Secretary  
ICRI-BW Chapter  
c/o Concrete Protection & Restoration, Inc.  
6737 Dogwood Road  
Baltimore, MD 21207

**You may also register and  
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**[www.ICRIBWChapter.org](http://www.ICRIBWChapter.org)**

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### ICRI-BWC STILL NEEDS YOUR HELP!

In 2010, we raised \$15,300 with the help of our SPONSORS! Our thanks goes out to them!

**It is time to start our 2011 sponsorship Drive!**

### HELP US REACH OUR GOAL!

The money we raise will provide increased exposure for sponsoring companies to our local and national members and, in addition, provide an additional revenue source to expand and enhance the member service program of our chapter. So, PLEASE -

## BECOME A SPONSOR!

**VISIT OUR WEBSITE FOR MORE INFORMATION!**

**[WWW.ICRIBWCHAPTER.ORG](http://WWW.ICRIBWCHAPTER.ORG)**

## MEMBERSHIP MINUTE

### BENEFITS OF MEMBERSHIP

- Industry Recognition
- Peer Networking
- Concrete Repair Bulletin and the Aggregate
- Technical Support
- Discounted Pricing for Publications

These are just some of the reasons for becoming a member of ICRI and the Baltimore Washington Chapter!

## BECOME A MEMBER!

As summer and all of its good distractions comes to a close we turn our attention to the fall with a renewed energy focusing completely on business. We hope that part of your increased focus is with ICRI and your current membership status. If you have let your membership status lapse, please renew as soon as you can. If your membership status is about to expire, plan to renew before it does. ICRI National and our local chapter will be notifying you as your renewal date approaches. We look forward to seeing all of you at our November meeting in Baltimore.

*Mike Prizzi*

Membership Chairman

Metro Sealant & Waterproofing Supply

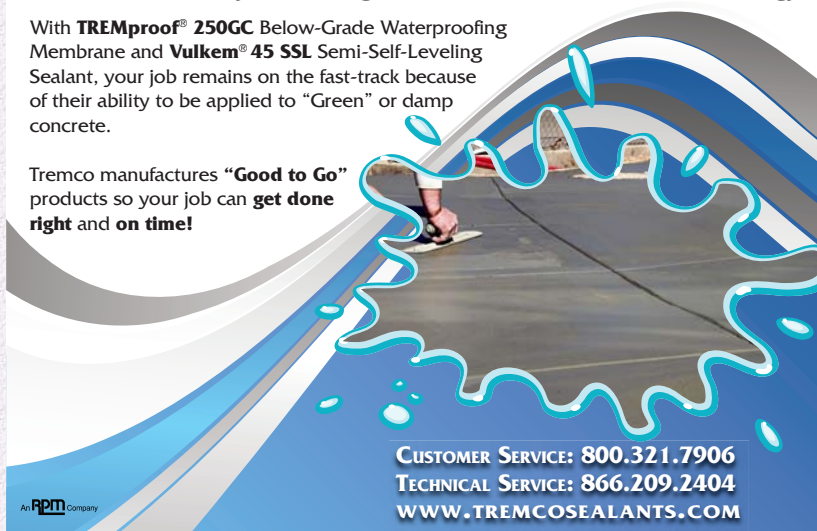
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# SAVE THE DATE

**2010 Fall Technical Seminars are set for December 2nd!**

This years theme is

## **HISTORIC RESTORATION & PRESERVATION**

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membrane, a drainage layer, a growing medium and plants. Green roofs have been shown to reduce heat loss and energy consumption in winter conditions and help keep temperatures down, particularly in urban areas.

Green roofs have many environmental benefits. Chief among the benefits is the ability to better regulate storm water runoff, help keep temperatures under control – both inside and outside the building, filter dust and smog particles, provide a habitat for wildlife, insulate noise, as well as increase the lifespan of the roof. For property owners seeking Leadership in Energy and Environmental Design (LEED) certification, a green roof can contribute to several credits towards green certification of new and existing buildings. Because of these factors, green roofs are currently experiencing a boom in popularity in urban environments. Many green roofs are designed like gardens, with pathways and manicured landscapes, and are popular amenities for office buildings, hotels, and condominiums looking to create green spaces for tenants and guests. What was a fad a few years ago is now developing into a quantifiable building improvement for natural aesthetics, lower utility costs, and reduced local watersheds.

There are two types of green roofs: intensive roofs, which are thicker and can support a wider variety of plants, and extensive roofs, which consist of a light layer of a growing medium and vegetation. Intensive green roofs are generally heavier, include a deeper layer of growing medium, and have greater needs for irrigation and maintenance. These roofs are designed as amenity space that can be used by building tenants or the general public. Soil depth for intensive green roofs varies from 6 to 24 inches (or more) and can weigh from 80 to 200 pounds per square foot. Extensive green roofs, on the other hand, are generally designed to be lightweight to maximize the performance and environmental benefits for the least increase in design loads. Extensive green roofs feature a layer of growing medium that is 6 inches deep or less and weigh 15 to 50 pounds per square foot. They have low maintenance requirements, but are generally not maintenance free. Extensive green roofs are not designed for public access and require less initial investment, making them ideal for owners who are simply looking for the energy benefits a green roof can provide.

Green roofs can also be classified as integrated or modular. Integrated green roof components are installed as a series of layers. Modular green roofs are partially assembled off-site and are installed in units. Some modular systems feature plastic or metal trays that are filled with growing medium and placed on the rooftop.

Before any installation can take place, it is very important to hire a licensed structural engineer to determine if the existing structure can support a green roof. The consultant will analyze the building and will need to know the following information to complete the structural analysis:

- Green roof type, layout, and loads.
- Type and condition of the existing roof membrane.
- Existing and required electrical and water supply.
- Roof accessibility for installation and maintenance.
- Structural system capacity.

Green roof loading is one of the main factors in determining both the viability and the cost of a green roof installation. For a green roof installed on an existing building, the design can be limited to the carrying capacity of the existing roof, or the existing roof system can be upgraded to support the new green roof loads. Typical green roofs weigh between 30 and 100 pounds per cubic foot. This is a heavier load, considering that most existing roofs are typically designed for a live load of 30 or 40 pounds per square foot. In general, the more complex the green roof system, the more extensive and intrusive the required structural upgrade. These strengthening solutions, however, have been successfully used to increase the load carrying capacity of structural systems and are typical considerations for green roof installation projects.

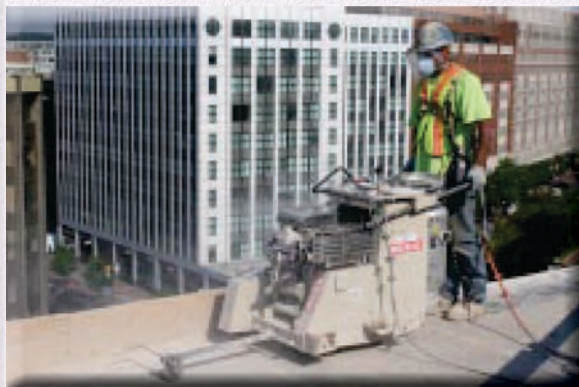
## **STRENGTHENING SOLUTIONS**

There are different methods available to strengthen existing buildings, including externally bonded fiber reinforced polymer (FRP) composites, span shortening, externally bonded steel, external or internal post-tensioning systems, and section enlargement. A thorough analysis of the existing capacity and the effects of the new loads on to the roof structure including slabs, beam and columns is a critical first step. The strengthening techniques

*continued on page 8*



used to upgrade the roof structure will depend on the specific requirements of the project in regard to the type of deficiency (flexure, shear, torsion, etc.), magnitude of strength increase, constructability issues, aesthetics, and economics. The following is a brief description of some of the most common structural strengthening methods.



### **Carbon Fiber Reinforced Polymer Composites:**

Carbon fiber reinforced polymer (CFRP) systems are carbon fiber fabric sheets or pre-cured laminates that are externally bonded to concrete members with adhesive resin and can increase the member's load-carrying capacity. CFRP reinforcement are typically very thin (30 to 60 mils-inch), yet they have a tensile strength up to 8 times that of steel, allowing it to add considerable capacity to the structure without impacting the appearance. As tensile reinforcement, CFRP systems must be bonded to a properly prepared concrete surface to achieve the desired composite

behavior. For applications where the top side of the roof slab requires upgrade, the thin CFRP system is very advantageous as it will not interfere with the green roof components and they are very durable. In some cases, CFRP rods are glued into slots cut in the concrete member, a technique known as near-surface mounting (NSM). Using externally bonded CFRP reinforcement, the bending capacity of beams and slabs, shear capacity of beams and joists, and axial capacity of columns can be increased; however, there are a few limitations and design and detailing should be in accordance with ACI 440.2R design guidelines.

**External Post-tensioning:** With external post-tensioning, active external uplift forces are applied to the structural member to offset new roof loads. Post-tensioning is the introduction of external forces to the structural member using high strength cables, strands or bars connected to the existing member at anchor points, typically located at the ends of the member, and profiled along the span to produce high and low points. End-anchors can be made of steel fixtures bolted to the structural member, or cast-in-place reinforced concrete blocks. When stressed, the tendons will produce upward forces (at low points) or downward forces (at high points) to create a reverse loading condition on the member. As with any strengthening system, there are several design, detailing, construction, and durability issues that must be considered when designing a post-tensioning strengthening system.

While sufficient post-tensioning should be provided to achieve the desired strength increase, care should be taken not to overstress the member at service condition and to ensure an effective transfer of post-tensioning force between the structure and the post-tensioning system. Forces generated at the anchor points can be quite large and should be accounted for in the design of the system. As such, it is generally recommended that the design and detailing of post-tensioning strengthening systems be designed by experienced engineers with a focus on structural strengthening and use of post-tensioning for structures.

**Section Enlargement:** This method of strengthening involves placing additional "bonded" reinforced concrete to an existing structural member in the form of an overlay or a jacket.

Achieving composite action between the existing member and the new enlargement section is critical to utilize the full section properties of the enlarged member. The bond at the interface between the new and existing concrete can be achieved by proper preparation of existing concrete surfaces (typically  $\frac{1}{4}$  in. surfaces amplitude) and the use of shear dowels that are epoxy or mechanically anchored to the existing member. The American Concrete Institute (ACI) 318 building code provides criteria for design of horizontal shear reinforcement and profiling requirements. To ensure full composite behavior, the additional concrete must be placed in the formwork under pressure, to ensure consolidation around the new reinforcement and full surface bond. This method of concrete placement is known as the form-and-pump technique.

Section enlargement can be used on columns, beams, slabs and walls to increase their load-carrying capacity. A section enlargement can be as thin as 2 inches for slabs and 4 inches for beams and columns. In some cases, the enlargement may utilize post-tensioning tendons as reinforcement within the new concrete.

*continued on page 9*



**Span Shortening-Supplemental Supports:** This technique involves adding supports underneath existing members – increasing strength by reducing the length between spans or directly supporting the element. Typically, structural steel members are utilized. Although it employs basic materials, challenges with this technique include material handling, structural connections, and reduced headroom inside the building.

## SELECTING THE PROPER STRENGTHENING SYSTEM

In many cases, the green roof design load will be governed by the strengthening system that can provide the required strength increase without interfering with the use and operation of the structure. The structural engineer typically decides which type of strengthening system is best-suited for the project based on the structural analysis of the building, as well as constructability, cost and aesthetic considerations. In some instances, thorough analysis of the roof structure can reveal that there are certain roof areas where loading can be increased more than others, which allows for specific areas that can accommodate deeper growing medium and larger plants (combination of extensive and intensive roof systems). The structural engineer should make the owner and building manager aware of the roof's loading restrictions to avoid future improper relocation or additional plantings in areas that cannot accommodate the weight.



## WHAT ABOUT COST?

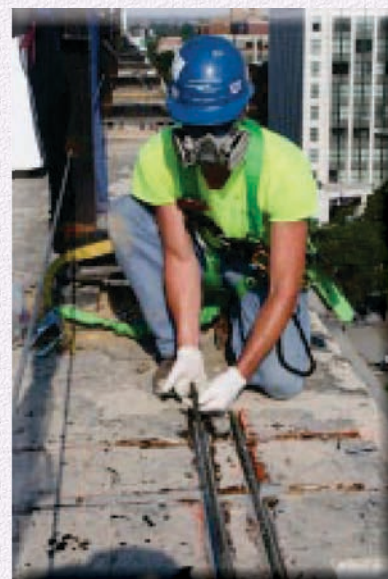
A properly designed and installed \$20 per square foot for extensive square foot for intensive green green roof design specifics, climate and plant selection. However, there are additional costs associated with strengthening the existing roof structural system to support the new green roof loads. The cost of the strengthening the structural system will vary from \$20 to \$50 per square foot, depending on the complexity of the structural system, size and level of strength increase required, as well as the type of strengthening system.

green roof system can cost \$8 to green roofs and \$15 to \$25 per roofs. The cost depends on the

Although renovating an existing roof system to install a green roof requires an initial investment, the long-term benefits and the energy savings outweigh the original investment through factors such as increased longevity of the roof and savings on energy expenditures.

## GREEN ROOFS IN ACTION

Today's savvy owners are looking to add green roofs to their properties to enhance value. One example is an eight-story office building on Connecticut Avenue in downtown Washington, D.C. In September 2008, the building was undergoing a complete renovation. The owner originally registered the project as LEED EB (Gold) certification, but decided to add a green roof to complement the new penthouse and to earn enough credits for a Platinum rating – the highest allowed under the LEED system. A strengthening program was needed to address the increase in required capacity from 30 pounds per square foot (psf) to 75 psf – part of which came from the 4 to 6 inches of saturated growing medium. It was determined that a CFRP system could supply up to 100 psf (10 psf superimposed dead load and 90 psf live load).



*continued on page 10*



In certain places on the roof structure, the team investigated using rebar equivalents, but the roof needed underside reinforcement because of the penthouse wall. This wall required the use of CFRP as approved by the engineer-of-record, RTKL Associates, Inc.

The strengthening contractor worked to develop a space saving solution involving:

- CFRP sheets on the underside of the slab.
- NSM carbon fiber rods on the top side of the slab.
- Concrete drop panel enlargements designed for optimum structural enhancement and minimal space disruption.
- Column enlargement modified for load requirements, minimization of labor, and usable tenant space

Projects involving strengthening of an existing structure offer different challenges than new construction. A significant one with this project was access to the roof. A crane was not utilized during the project; therefore, all equipment and repair material (including thousands of bags of concrete) were taken up to the roof via a small service elevator. Some of the equipment had to be dismantled to fit in the elevator and then be re-assembled on the roof. Three mobilizations were required to accommodate the overall project schedule.

These challenges were addressed and the solutions implemented with great success. The building now has a green roof that not only enhances the value of the property, but also helped the owner attain Platinum LEED certification.

"The green roof addition to the project presented logistical, scheduling, and engineering challenges to the project," said Chris Voros, Project Manager at James G. Davis Construction Corp. "Without the capability of the CFRP, we would have been limited in our options to include this part of the project, and we would have not been able to achieve a LEED Platinum rating for our client."

#### KEY TO A SUCCESSFUL GREEN ROOF

Depending on the type of green roof system selected, installation can be a major undertaking. Upgrading a roof for additional capacity requires careful consideration to ensure the structure is prepared to handle the additional load. Because every element of the existing structure carries a share of the load, the effects of strengthening or removing part or all of a structural element must be analyzed carefully to determine its influence on the global behavior of the structure. Failure to do so may overstress the structural element and cause serious problems. In addition, performing work on an existing structure requires attention to critical issues such as access to the work area, noise and dust control, and compatibility of construction materials.

Because of these many considerations, it is important for owners, engineers and architects to engage a company with experience in structural upgrades. Specialty firms familiar with the critical aspects of strengthening structures will ensure the most cost-effective and long-lasting results – making the green roof an enhancement and valuable addition to the property.

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## Upcoming Chapter Events

- Nov. 4, 2010** **ICRI-BWC 2010 Awards Banquet**  
*Holiday Inn,  
College Park, MD*
- Dec. 2, 2010** **ICRI-BWC Fall Technical Seminars**  
*"Historic Restoration & Preservation"  
CP&R Warehouse  
Woodlawn, MD*

## Upcoming National Events

- Oct. 20-22, 2010** **ICRI 2010 Fall Convention**  
*Theme: "Transportation Structures"  
Omni William Penn Hotel  
Pittsburgh, PA*
- Mar. 15-18, 2011** **ICRI 2011 Spring Convention**  
*Expanded 3-Day Event!  
Theme: TBD  
The Westin Galleria, Houston  
Houston, TX*
- Oct. 12-14, 2011** **ICRI 2011 FALL CONVENTION**  
*Theme: TBD  
The Westin Cincinnati  
Cincinnati, OH*
- April 18-20, 2012** **ICRI 2012 SPRING CONVENTION**  
*Theme: TBD  
Hilton, Quebec  
Quebec, QC, Canada*

## 2010 ICRI-BWC SCHOLARSHIP RECIPIENTS

### 2010 Scholarship Winners

- **Christopher Carlson**
  - Recipient of a \$1,000 award.
  - Junior at the University of Maryland where Christopher has made the Dean's List the last two semesters.
  - Double Major in Government and Politics and Criminology and Criminal Justice.
  - Plans to apply to Law School after graduation with a goal to become a licensed attorney.
  - Christopher has been interning with a local law firm.
- **Elise Prizzi**
  - Recipient of a \$1,000 award.
  - Freshman at Catholic University this year.
  - Active in her community with volunteer work.
  - Recipient of the Minds in Motion Scholar Athlete Award (awarded to high school athletes that earn at least a 3.25 GPA while playing a high school sport).
- **Thomas Harrison**
  - Recipient of a \$500 award.
  - Junior at Virginia Commonwealth University.
  - Majoring in Interior Design
- **Caitlin O'Malley**
  - Recipient of a \$500 award.
  - Senior at James Madison University.
  - Majoring in Business/Marketing.
- **Maureen O'Malley**
  - Recipient of a \$500 award.
  - Freshman at the University of Maryland.
  - Recipient of the Minds in Motion Scholar Athlete Award.

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## 3RD QUARTER MEETING WRAP-UP

*continued from page 1* Contractors, Engineers, and Material Manufacturer's were all represented by an esteemed panel including Bob St. John of SPS, Casey West with Stanchem, Dave Rodler with SK&A Engineers, and Dave White of Sika. Rick Edelson (TCE Engineers) moderated the discussion, solicited questions from the audience, and offered insights on future ACI 562 Code Requirements. The topics of liability, testing, UL Ratings, material durability, as well as current and future Building Code requirements were discussed.

Pat O'Malley recapped the Chapter's industry outreach and charitable efforts for the year, thus far, related to Habitat for Humanity in Garrett County, Carver Vocational-Technical High School in Baltimore City, and with the upcoming façade repair project for Gospel Rescue Ministries in Washington, DC. The Chapter is pleased to have been involved with more community outreach projects this year than ever before.

Another achievement that the BW chapter is proud of is our ongoing support of college students through scholarships. This year five scholarships were awarded to deserving college students. Ms. Elise Prizzi, who will be attending Catholic University, and Mr. Christopher Carlson, Jr. a proud University of Maryland Terrapin, were on hand to accept \$1000 Scholarships.

An appeal was made for applicants for the available Chapter industry training scholarships, which are intended to help those who are actively working in the repair marketplace.



Larry Genovere and Rick Edelson



From left to right: Rick Edelson, Tom Ouska, Bob St. John, Dave Rodler, Dave White, Casey West and Matt Nachman



Peter Romero



Attendees enjoying the Social Hour



## Written Notice of a Claim Means Written Notice when Dealing with a Virginia Public Entity

By Jennifer A. Mahar, Esquire

Contracting in Virginia with a public entity requires you to take stock of the written notice provisions that apply to your contract as the failure to provide written notice of claims can bar your right to seek payment. This past month the Virginia Supreme Court issued its much anticipated decision in Amec Civil, LLC v. Commonwealth, 2010 Va. Lexis 230 (September 16, 2010) and reminded the contracting community that Virginia law requires strict compliance with written notice provisions when the other party to the contract is a public entity.

The AMEC case arose from a contract dispute with the Virginia Department of Transportation ("VDOT"). The contractor sought payment of \$24 million in cost overruns related to differing site conditions, acceleration damages and extra work. Among the issues before the Court was whether the contractor complied with the written notice provisions set forth in the contract and the Virginia Code.

VA Code § 33.1-386(A) provides that a condition precedent for a contractor making a claim against VDOT is written notice to VDOT of its intention to file such claim at the time of the occurrence or beginning of the work upon which the claim and subsequent action is based. The Virginia Supreme Court consistent with prior opinions ruled that VA Code § 33.1-386(A) must be strictly construed to require contractors to strictly comply with written notice requirements. The Court held that where the contractor fails to provide written notice "actual notice" by VDOT of the claim is not a substitute for the written notice requirements.

The Court rejected the contractor's argument that written meeting minutes satisfy the written notice requirements "because they are merely a recorded summary of what was said at a meeting." The Court stated: "At a minimum, to satisfy the written notice requirement, the written document at issue must clearly give notice of the contractor's intent to file its claim and must be given to [VDOT] by letter or equivalent communication to VDOT at the appropriate time."

Unfortunately, the contractor in AMEC failed to provide written notice for some of its claims and its recovery on those claims were barred by the lack of written notice. While the AMEC decision deals directly with the VDOT statute, the written notice provisions in the Virginia Public Procurement Act are similar and Virginia courts will likely continue to interpret them to require strict compliance when it comes to providing written notice to Virginia public entities.

For further questions, Jennifer can be reached at [jmahar@smithpachter.com](mailto:jmahar@smithpachter.com) or 703-847-6300.



## EMERGENCY ACTION PLANS (EAP)

By: David Caple, COHC, CEAS

In the event of an Emergency how many of your employees know what to do? Where to meet? Who to call?

No two Restoration Projects are completely the same. Therefore, even if you think you have a grasp of the basics of what to do in the event of an emergency, it is important that you know the specifics of the site where you are working and how to respond at that particular location. Without a plan in place, an emergency can quickly become a catastrophe.

Emergency Action Plans should be in writing, posted at the jobsite, and reviewed with the employees on site by their supervisor. When preparing an EAP ask yourself:

1. What is the emergency escape route from this site? and,
2. Where is the rally point or the location all the employees should meet once out of the worksite?
3. Will any employees be responsible for critical operations before they can evacuate (such as shutting down equipment or assisting others)?
  - a. If so, have them perform a small drill or mock evacuation so the scenario doesn't seem so foreign in the event of an emergency.
4. Who is First Aid Trained on the Worksite?
5. Who are the emergency contacts and what services do they provide?
6. How will employees not present be notified of the situation?

If you can answer these few questions you are already on your way to completing your EAP.

An alarm or horn may be considered for alerting the employees to specific emergencies. This will also alert employees with certain responsibilities during an emergency they need to respond.

Be sure to review the plan when the job begins. Review the plan with all new employees to the worksite and anytime there is either a change in the plan itself or a change in the work environment, be sure to alert all workers how the changes impact what their response should be. During a toolbox talk or a safety walk is a good time to review this information.

These are just the first steps in developing a basic plan. For more complex worksites with multiple work stations and/or spread out activities a more detailed plan may be required. Contact your safety department or a safety consultant for assistance in developing plans which require more detail.

For more information or to recommend a topic for a future publication contact me at [d.p.caple@gmail.com](mailto:d.p.caple@gmail.com)

David Caple, COHC, CEAS, a Construction Safety and Health Specialist, is the Principal Member of Pinnacle Safety Network, LLC. He has over 15 years experience in a combination of structural restoration and safety.





# 2010 GOLF TOURNAMENT

It was a wonderfully warm and sunny day Thursday Oct 7<sup>th</sup> when 90 golfers took the course at Glenn Dale Golf Club to support the ICRI-BW Chapter Annual Scholarship Fund through participation and sponsorship.

Everyone had a great time and enjoyed the company of others. The course was in perfect condition, but the winners were able to master it with a tie score of 57 that had to be broken by a playoff hole [only on paper]; 1<sup>st</sup> place went to the team of Eric Henry, Ashton Cherubin, Josh Kaehler and Justin Wingenfield from CA Lindman and Grunley Construction; 2<sup>nd</sup> place went to the team of Alan Rutherford, Joel Eiler, Ken Kosteva and Dan Lemieux from CA Lindman and WJE & Assoc; 3<sup>rd</sup> place went to the team of David Viar, Garth Viar, Greg Viar and Mike Prizzi from Metro Sealants & Waterproofing Supply; Longest Drive competitions were won by Elena Danko / Aquafin and Zach Hohns / Manganaro; Closest to the Pin competitions were won by Cindy Nunn - 8 FT / Nunn & Assoc and Ashton Cherubin - 4 FT / CA Lindman; Straightest Drive was won by Jim Seldomridge - 8 INCHES / CA Lindman.



**1<sup>st</sup> PLACE**



**2<sup>nd</sup> PLACE**



**3<sup>rd</sup> PLACE**



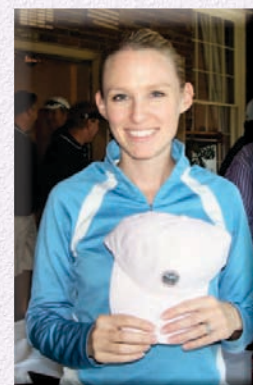
**CLOSEST TO PIN  
WOMENS**



**CLOSEST TO PIN  
MENS**



**LONGEST DRIVE  
MENS**



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# 2010 GOLF TOURNAMENT

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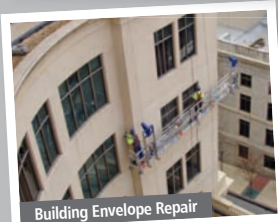
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