Bridging the Cultural Divide in Rural Haiti

By Nathan Holmer, P.E.

I can’t help but smile as I reflect on all that took place while constructing a 55 meter span cable-stayed pedestrian bridge near the small village of Tierra Muskady. Recalling all the mishaps, misfortunes and unique situations that arose; some of which were, watching our materials delivery truck attempt to maneuver through impassible roads, the same truck break an axle attempting to ford the river, a flash flood wash away 75 percent of our concrete material stockpiles, taking showers in the rain, eating the same meals each day (spaghetti with ketchup for breakfast?), electrocuting myself in a house with faulty wiring, and tarantulas larger than the size of your outstretched hand mere feet from your bed. Throw in the sweltering climate, where a freshly-picked coconut might be the only thing standing between you and severe dehydration, and add in a hostile environment where the general populace does not trust and, for the most part respect you. There aren’t many places on Earth that I can imagine putting me further from what I am accustomed.

Last summer I took a position as a long term volunteer with Bridges to Prosperity, a non-profit organization which works to build pedestrian bridges in impoverished nations throughout the world. The first time I met my coworkers, Tyler Welsh and Connor Lind, was when I walked out of the Port-au-Prince International Airport amidst a dizzying atmosphere of family reunions, past anxious baggage handlers and relentless cabbies looking to win your fare. Tyler had just begun his second year as the In-Country Coordinator for Haiti with (continued on page 8)
I don’t know about you, but I have definitely been looking forward to the spring thaw. This has been a difficult winter for the area with the extreme cold and the significant amount of snow that has kept the ground covered for quite some time! The cyclical weather of snowfall followed by extreme cold snaps has not been good on our infrastructure either. Most communities have blown past their budgets for snowplowing, salt spreading and pothole patching.

The cyclical weather of snowfall followed by extreme cold snaps has not been good on our infrastructure either. Most communities have blown past their budgets for snowplowing, salt spreading and pothole patching. The City of Chicago even created an online Pothole Tracker showing the status of patching throughout the City limits. Just this morning while writing my notes, I heard about two watermain breaks shutting down roads and causing problems. There has also been a neighborhood that has been without water for more than two weeks! Over the last weekend, I was also driving along a 4-lane road that was making my teeth chatter due to all the bumps caused by the latest round of frost heaves. While writing this, the weather forecast is showing a steady and gradual climb to above freezing which is also going to bring about a threat of flooding. If all of these issues have not raised people’s concerns about the state of our infrastructure, then we need to be doing a better job getting the word out to the public and our legislators.

The Illinois Section ASCE is doing its part at helping elevate the discussion of our State’s infrastructure issues. We are continuing our strong relationship with the Transportation for Illinois Coalition (TFIC). TFIC is working with legislators to develop a more sustainable funding solution for our State’s revenues for transportation infrastructure maintenance and improvements. They are also supporting us with our upcoming events: the 2014 Report Card for Illinois Infrastructure and our 7th Annual Springfield Legislative Drive-Down.

Members of the Illinois Section have been working diligently on finalizing our 2014 Report Card for Illinois Infrastructure. This is the four year update to the previous version released in 2010. Each subcommittee has been going through published data and coordinating with critical leaders of the various infrastructure components. Grading is based on standards developed by ASCE and in 2010 the state of Illinois Infrastructure was given a grade of a D+. This grade is not an assignment of blame on any party, but rather an assessment of the conditions of each component versus the funding and investment needs required to maintain and improve our infrastructure to support its users. There have been some infrastructure investments over the last few years with some accomplishments. However, we need more. The Section also submitted to the State Journal-Register a response to Governor Quinn’s State of the State address asking that Illinois continue to invest in its infrastructure and our Report Card will provide a roadmap that could assist with raising our grades. Our updated Report Card will be released on April 2, 2014 in Springfield. The Illinois Section will be holding a press conference in Blue Room at 10:30 am. I would like to thank the Chair of the Report Card Committee, Darren Olson, for his critical leadership at pushing this task forward. In addition, the Section would also like
Geotechnical Design for Lime Unloading Facility at an Existing Powerplant


An electricity generating facility in western Pennsylvania is upgrading their pollution control system, and requires a rail-unloading facility to dump and convey pebble lime to storage silos for use in the plant’s new coal scrubber. Patrick Engineering was contracted to provide design-build services for the lime conveyance equipment and structures (bottom dumper, transfer towers, silo distribution), support infrastructure, dumper lead track, and an adjacent railroad yard for car storage. The geotechnical components of this project included geotechnical investigations and geotechnical design for: shallow foundations for structures and equipment; deep foundations to support the conveyor system; analysis and design of retaining walls to support cut slopes; analysis and design of reinforced slopes; pavements for multiple load configurations; and a land bridge structure supported on a combination of bedrock and deep foundations.

Project Challenges. This project had many challenges including a very congested site, maintaining full operation throughout construction, very hilly topography, inconsistent depth to bedrock, extensive existing fill areas, mine refuse, unique loading conditions, soil quality and soil availability. The geotechnical team worked closely with the rest of the design team, the construction team, the owner, and others to successfully execute the design and complete the construction of these vital components.

Geotechnical Investigation. Since it was an existing power plant, many investigations had been performed over the years. Available data was evaluated and field exploration activities were focused on areas of the plant where additional subsurface data was required, or to obtain samples for specific testing. Borings were drilled to obtain data for design of the new structures, including rock coring in some areas, and open-standpipe-type piezometers were installed in select borings to measure depth to groundwater.

Gabion Wall. The proposed rail extension had to pass between the coal unloading building, which could not be moved and a slope that supported a coal waste landfill, as well as, the power plant’s coal pile. The toe of the slope had to be pushed back to make room for the rail spur, and the slope had to be steepened in some areas, including utilizing exposed bedrock where possible. However, the slope stability analyses demonstrated a portion of the slope could not be steepened safely. Several retaining wall types were evaluated to support this section, and it was determined that a gabion wall was the most cost- and schedule-effective way to support the slope. The resulting gabion wall was 12 feet high and 130 feet long.

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Interestingly, prior to construction of the gabion wall and following a significant precipitation event, a portion of the existing slope failed producing a classic circular slope failure. This was a clear indication that additional support was required to support the ground slope in this area and it highlighted the need for good control of surface water runoff.

**Land Bridge.** Near the gabion wall, the rail extension was designed to pass over a tunnel containing the coal conveyor system. The tunnel for the conveyor was more than 20 feet below the surface, in a bedrock excavation that had been backfilled with blast rock. The tunnel had not been designed to support the new Cooper E-80 rail loading condition. A land bridge had to be designed to carry the live load over the tunnel. Pile foundations were designed to straddle the tunnel and transfer these live loads to the underlying bedrock. The land bridge slab is four feet thick and 125 feet long, and is supported on the bedrock shelf at the abutments and two groups of HP12 piles.

**Pile Foundations for Conveyor.** Pile foundations were used to support the conveyor system that carries lime from under a series of hoppers 25 feet below the ground surface to the tops of four storage silos 130 feet in the air. A total of 45 vertical and 12 battered piles were required to support the conveyor at five bent locations. All piles were designed to be end-bearing on shale bedrock. Steel H-piles were selected to support this structure, due to the presence of thick fill soils with inconsistent bearing capacity. Also, displacement piles were required, because much of the fill soil was mine waste that could not be moved, in order to stay in compliance with the mine permit.

During the design process, it was determined that the mine waste could produce a corrosive condition that would affect the structural integrity of the H-Piles. Concrete displacement piles were considered as an alternate to the steel H-piles, but the pH of the soil was too low (1-2.5 pH) for concrete piles. To protect the H-piles, the team selected a two-layered coating system. The inner layer would protect the piles from corrosion and the outer layer would protect the inner layer from abrasion during the driving process. The geotechnical team oversaw installation of the piles and confirmed proper installation.

**Excavation Design and Deep Fills.** The lime unloader consisted of a series of hoppers below track level. These hoppers collect lime from the bottom-dumped rail cars and funnel it onto the conveyor system. The hoppers and unloader were constructed to feed the start of the conveyor 25 feet below the design bottom of the ground surface. The geotechnical team assisted in design of the excavation and provided lateral loading parameters to the structural engineer for design of the foundation sidewalls.

Site grading operations required deep fills, over 20 feet thick in some areas, to create space for the ladder storage tracks and level access to the lime unloading building. The designers worked with the owner to identify and certify use of onsite soil and shot rock from several potential sources. Careful consideration and approval of some of (continued on page 5)
to thank ASCE staff in Washington D.C. and Reston for their assistance with this process.

Mr. Matt Breitenbach has over 17 years of experience in managing geotechnical investigations and performing geotechnical analyses and design for commercial and industrial projects at various types and sizes. Recently he has been directing investigations and performing engineering design for deep and shallow foundations for projects with challenging subsurface conditions. In addition to foundation design, Mr. Breitenbach manages several junior engineers and performs slope stability analyses, dam inspections, and manages projects and accounts for clients throughout the U.S. He holds a Bachelor of Science degree in Geological Engineering from the Missouri University of Science and Technology and is a registered Professional Engineer in Illinois.

Gary Goodheart has over 40 years of professional experience executing and managing geotechnical investigations for heavy industrial facilities, dams, and reservoirs, commercial facilities, institutional facilities, and solid waste management and disposal facilities. Mr. Goodheart holds a Bachelor of Science degree in Civil Engineering from the University of Houston, he has been a registered professional engineer since 1977, and is currently registered in Illinois and 10 other states. He has been an active member of ASCE for over 40 years, during which time he has served on the National ASCE Publications Committee for the Geotechnical Journal, served as Chair of the ASCE Illinois Section Geotechnical Committee, and helped organize and moderate several ASCE Chicago Geotechnical Lecture Series. He has worked and been active professionally in the Chicago area since 1996.

Geotechnical Design for Lime Unloading Facility at an Existing Powerplant

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these materials resulted in a significant cost savings, since typical fill soil was not readily available at the site and hauling it in from off site was cost prohibitive. ASCE

President’s Notes

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to their water, flushes their toilet, drives down a road, crosses a river, goes into a building, or uses electricity, engineers have helped make that happen. We as engineers need to emphasize that funding the maintenance and improvement of our infrastructure is not a request for spending, but rather an investment in our future.

I hope that all of you are as excited as we are for the upcoming release of our Report Card and Legislative Drive-Down and I hope that you are able to take the time to help out the Section. You can help by going to Springfield with us or promoting the Report Card to your colleagues, clients, and legislators. I have reached out to my local and federal legislators to establish a working relationship to promote the need for infrastructure investment. Have you?

If you are interested in helping out the Section, please let us know. I can be reached at president@isasce.org. We always have room for one more volunteer. ASCE
A Summary of the MWRD’s Watershed Management Ordinance

By John P. Murray, P.E., CFM

The Metropolitan Water Reclamation District of Greater Chicago’s (MWRD’s) Board of Commissioners adopted the Watershed Management Ordinance (WMO) on October 3, 2013, and it will take effect on May 1, 2014. MWRD is an agency that collects, treats and disposes of wastewater from approximately 95% of Cook County. MWRD’s notable achievements include reversal of the Chicago River and construction of the Tunnel and Reservoir Plan (TARP), which is known colloquially as the Deep Tunnel.

MWRD’s notable achievements include reversal of the Chicago River and construction of the Tunnel and Reservoir Plan (TARP), which is known colloquially as the Deep Tunnel.

MWRD has a legacy of stormwater management in Northeastern Illinois. In 1972, the MWRD first promulgated stormwater management regulations under the Sewer Permit Ordinance (SPO) and the companion Manual of Procedures for the Administration of the Sewer Permit Ordinance (MOP). The MWRD continues to regulate stormwater management under the effective SPO. With the passage of Public Act 093-1049 (Act) in 2004, the Illinois General Assembly placed stormwater management in Cook County under the general supervision of the MWRD. The Act allows the MWRD to prescribe, by ordinance, reasonable rules and regulations for floodplain and stormwater management. On October 3, 2013, the MWRD’s Board of Commissioners adopted the WMO, which includes regulatory components of drainage and detention, floodplain management, isolated wetland protection, riparian environment protection, and soil erosion and sediment control.

The WMO will supersede the currently effective SPO and MOP. In order to provide an orderly transition, the MWRD will allow proposed developments, which have received preliminary approval from the relevant municipality, to be placed on an existing development plans list, which will be valid until May 1, 2015. These developments will be subject to the existing established requirements of the SPO and MOP. The MWRD will petition Cook County municipalities and the various towns/ships (for unincorporated areas) to submit projects for inclusion on the existing development plans list.

The WMO is more comprehensive in scope than the currently effective SPO. In addition to stormwater detention requirements, the WMO includes volume control requirements. As mentioned previously, the WMO will additionally regulate isolated wetlands, riparian environments and erosion control.

The WMO will impact the design of stormwater management facilities. Under the WMO, Bulletin-70 rainfall data is required for all hydrologic analyses. The WMO includes a flat release rate of 0.30 cfs per acre of development until 2018. During this time, MWRD will study Cook County Watersheds to determine watershed specific release rates, which will be effective thereafter. Furthermore, developments in combined sewer areas will need to provide stormwater detention, which was not required under the SPO.

The WMO will also be unique in that in addition to regulating stormwater in Cook County it will also regulate sewer construction that is tributary to the MWRD. The stormwater aspects will apply to all of Cook County. The sewer regulation aspects will only apply to those municipalities, villages, sanitary Districts and utility companies tributary to the MWRD’s intercepting sewer system, which is approximately 95% of Cook County. The MWRD made a decision to have one comprehensive

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“Let’s Make a Difference”
At press time, volunteers from the Illinois Section ASCE were gearing up to help celebrate “National Engineers Week”. This weeklong celebration ran from February 16-22, 2014 with the purpose of recognizing the engineering profession and highlighting engineers and the contributions they have made to society. It was also a perfect time for engineers to share their enthusiasm for engineering with children through various volunteer activities throughout Greater Chicago. This year’s theme was “Let’s Make a Difference”.

As civil engineers and as members of ASCE, we have the opportunity and the responsibility to give back to the field that has rewarded us and challenged us in many ways. The Illinois Section’s Student Outreach Committee, Co-Chaired by Stephanie Nurre and Thera Baldauf, is working with the Institutes/Technical Groups to coordinate volunteer opportunities for members to share their engineering experiences and talents with children from kindergarten through high school.

Student Outreach & E-Week Activities
Locally, many activities fall under the umbrella of National Engineers Week; however, the Illinois Section’s Student Outreach Committee and Institutes/Technical Groups will be recruiting volunteers for numerous events in 2014, from providing speakers in high school class rooms to hosting booths at library science expos. Most of these are designed to reach out to students of all ages, but everyone is welcome to participate. Some of the highlights of the year have been the Future City Competition, IIT Bridge Design Competition, Mathcounts, Chicago Architecture Foundation Engineers Week Celebration, and Family DuPage Area Engineers Week.

While we know that everyone has busy schedules, we encourage you to take a look at the opportunities sent out via email or listed on the Section’s cool new website http://www.isasce.org/index.php/committees/student-outreach-committee. You can also find the Committee’s contact information should you have volunteer ideas for them to consider.

We are looking forward to a great year and, with your help, we hope to make that happen! ASCE

Stephanie Nurre is a Senior Mitigation Planner with Stantec as is Co-Chair of the Student Outreach Committee. Thera, who serves as the IL Section Secretary, has joined Stephanie as Co-Chair of the Student Outreach Committee. She is a Project Manager with MWH.
Bridging the Cultural Divide in Rural Haiti

(continued from page 1)

Bridges to Prosperity, and Connor was the other volunteer with whom I would be spending the next two months overseeing the construction of a bridge. This bridge would provide access for a community of 2,500 people to safely cross the river, when it swelled during the rainy season. It quickly became apparent, as we ascended into the Central Plateau during the three hour bus ride that this project would require more than the standard repertoire of tape measures, levels, calculators and equations. This would be a project where success is derived through the patience it took to adjust on all sides to a new idea, a new custom, an unforeseen problem, and ultimately a new culture.

After spending three days getting us settled into our new home and setting the stage for the bridge, Tyler left Connor and me to travel to another bridge site across the country. The realization quickly set in that this was going to be trial by fire, as the two of us only knew about 20 words of the native language, Creole.

The first order of business was to find a reliable driver who would be responsible for getting us to the work site, the bank and the materials depot. Asking Denni, the 18-year-old kid in front of our house, if he had any suggestions turned out to be the best decision that we made. Denni, not only fulfilled our need as transporter, but he also became an integral part to helping us finish the bridge and in the end a great friend. Working with us on a daily basis, he was able to serve as a decoder for our broken Creole and help us convey to the workers to, “Do as we meant, not as we say”. He also proved vital in obtaining materials. Not only did he know where we had to go to buy the necessary items, he often times would purchase them on his own, thus helping us avoid the “blan tax”. The Haitians refer to anyone with lighter toned skin as blan, white. The problem with being a blan in Haiti is everyone immediately adopts the preconceived notion that you are infinitely wealthy and that money is of no concern to you.

While working in Haiti to construct a 55 meter span cable-stayed pedestrian bridge, there aren’t many places on Earth that I can imagine putting me further from what I am accustomed.

Eager to prove to the Haitians, and ourselves, that we were in control of the situation, we couldn’t have started off any worse. Prior to his departure, Tyler had set up the first excavation contracts. The next day Connor and I showed up on the site ready to inspect the excavation and pay out the contract. As expected, the work was finished and we handed over the remaining 1250 Gourdes (HG) on the contract. Upon counting the money the contractor looked at us insulted and started shouting. The contractor, Wilbe, was simply the farmer who owned the land on (continued on page 9)
which the bridge would be built. The fact that it was his land made him the contractor by default. Thinking they were trying to pull a fast one on us ‘blans’, I was adamant that the amount we handed him was what we had agreed. We failed to realize that the contract was for 1250 Haitian Dollars (HD), not 1250 HG. The Gourde is the basic monetary unit in Haiti. One HD = Five HG. We had just handed him 20 percent of what he was owed and told him that was all he was getting. Needless to say, this was the last time this mistake was made. Fortunately for us, this was a mistake which gave the Haitians a good laugh...of course only after the rest of the money was paid.

Contracts in Haiti, contrary to here in America, are hashed out on the site in mere minutes. The catch however, was that we were using a foreign language to describe an often foreign concept. This reality left a lot of room for uncertainty, and hand drawn sketches quickly became a tool we leaned on greatly to make sure they understood what was asked. Once the context of the contract was established, we then had to deal with how much it would cost. It’s difficult to negotiate a situation where the unemployment rate is 80 percent, market value for labor is unknown and often times based on the situation, and the client is assumed to have infinite wealth. The Haitians are looking to gain as much of an advantage as possible, and honestly, it’s hard to blame them.
Often, the caveat to settle the contracts came in the form of a ‘bonus’, offered if a certain deadline was met.

Power tools were used for three things, cutting the 1-inch diameter steel cables, cutting the wood for the decking, and installing the decking. There was no backhoe to excavate the three meter deep hole for the anchors, no end loader to unload the 2,500 pound spool of cable, and no mixers would be on hand to create the nearly 40 cubic meters of concrete needed for the project. This meant we would be relying on our ingenuity and large groups of Haitians to tackle these labor intensive tasks.

Working with Haitians in large groups proved to be extremely difficult. When it came time to cut and place the cables, we offered free lunch to those who would volunteer to help us move the 850 pound 96-meter lengths. As the cable was un-spoiled, the Haitians would have 15 people bunched up for a length of 30 meters, leaving six other people to account for the other 66 meters. After cutting one cable, they repeated the same technique and did not spread out along the length of the cable, which was frustrating to manage.

My frustrations peaked one morning as we worked on tightening clamps and excavations for the approach walls. While we were working, the crew which had been delivering out materials, began harvesting stones from the river and loading them in their truck. The stones they were taking, whose purpose was to serve as a portion of our back-fill, went from sitting free on site to being transported away and returned to the tune of 1500 HD ($175 US). With a dwindling bank account, a tight deadline and six weeks of working in Haiti, I watched astonished (infuriated may be a better word). At times individuals’ desires took priority over the rest of the community, which would benefit from the completion of this bridge. It is still something I struggle to comprehend. My saving grace came in the form of a gentleman, whom I’d never seen before, start pulling rocks from the river. It did not take a contract, nor the promise of a hot meal, he just wanted to help.

Despite all of the communication breakdowns, late deliveries, fund transfer delays, tropical storms, lost materials, broken trucks, broken generators and sleepless nights, the bridge now sits finished, allowing for safe passage across the river for those going to school, markets and church. Haiti is a place where the pace of work is not dictated by a deadline and a foreman, but rather the height of the sun, the duration of the storms and how long it takes the 6-year-old boy to transfer the sacs of cement half a mile away to the site on the back of a donkey. As with all projects, the picture of the finished product rarely tells the whole story.

Nathan Holmer, PE works as a structural engineer at Hutchison Engineering, Inc. He obtained his BS in Civil Engineering and MS in Structural Engineering from Marquette University and currently serves as the Treasurer for the SEI Illinois Chapter. This article is provided by the SEI Illinois Chapter.

This would be a project where success is derived through the patience it took to adjust on all sides to a new idea, a new custom, an unforeseen problem, and ultimately a new culture.
n an effort to inform Illinois Section members of the discussions at the monthly Board meetings, the Section Secretary contributes this monthly article to the newsletter. Any questions or comments on the Board activities are welcome by contacting Thera Baldauf, at ther.a.baldauf@mwhglobal.com

■ Treasurer’s Report

▲A treasurer’s report was presented at the December, January and February Meetings. Year-end accounting was due by December 1. All reports were approved with no changes.

■ Group Reports

▲Groups presented a written report outlining previous and current month’s activities.

■ New Business

▲Website – The new website is up and running. Please check it out!

▲Report Card – Sub-Committee reports are scheduled to be completed and approved by ASCE National by the end of February 2014. The official Report Card release date has been set for April 2, 2014. ASCE National and the Transportation for Illinois Coalition (TFIC) have agreed to help the Illinois Section with coordination efforts.

▲Springfield Legislative Dinner – Past President Arrigoni had a call with ASCE National Representative Aaron Castello in regards to assistance with the legislative dinner. There is no SPAG money available for the dinner; however, National will provide some support with organizing and providing literature. The dinner is intended to be small with a matchup of one ASCE member per every legislative member in attendance. A venue has yet to be selected.

▲Annual DC Fly-In - The Annual DC Fly-In will be held March 18-20, 2014. President Lach and Treasurer Mackinnon and Secretary Baldauf will attend.

▲Spring Dinner – The date for the Spring Dinner has been set for April 17, 2014 at Maggiano’s Little Italy. National President-Elect attendance has been confirmed.

▲Web Advertising Rates – The Communications Committee investigated web advertising rates of other organizations and verified that the Section was the cheapest. Average monthly rates are about $50 with a tiered discount offering. No special discounts to public agencies were found. The Communications Committee will prepare a proposal for a vendor form with tiered discounts for review at the March Board Meeting.

▲Golf Outing – The Section is now under a 2 year contract with Seven Bridges Golf Course. This year’s golf outing will be held one week earlier on Thursday, May 22, 2014. Prices have been raised this year to recoup losses from previous years. Sponsorship calls will be forthcoming.

■ Old Business

▲ACEC Professional Design Alliance – ACEC-II and ISPE has made ASCE aware of the following issues being sought after by organized labor, the Capital Development Board, and Illinois Department of Labor that may impact the Professional Design Industry which includes establishing Prevailing Wages for Material Testers; Inspectors and Survey Workers and new responsible bidder requirements to design professions; requirements for apprenticeship training that are not relevant to design work; and requirements that design firms become signatory to Project Labor Agreements. Illinois Section Executive Board contacted ASCE National regarding the Section involvement. ASCE National indicated that the Section could provide monetary support depending on feedback from our Section membership and that National may be able to provide nominal financial support. An email blast was sent out to Section membership mid-December. Ten responses were received from both public and private sector members all in support for helping ACEC-II and ISPE. A motion was presented and approved with no exception for providing $10,000 for legal fee support at the January meeting. A follow-up email blast will be sent to the membership in late February.

▲Region 3 Update – Director Frauenhoffer provided a report at the January meeting on region initiatives which include promoting infrastructure and sustainability. The infrastructure initiative takes the Report Card to the next step on the local, state and federal levels. A paper will be produced and draft available for Section review this Spring, with hopes of it being finalized at the next Region Assembly. The Illinois Section is the only section producing a Report Card in Region 3.

▲ASCE Sustainability – Another region initiative is the continued support of sustainability. Currently, the Institute for Sustainable infrastructure (ISI) is having problems gaining traction in the (continued on page 12)
marketplace. ASCE National has spent over $3 Million on the sustainability initiative, supporting ISI and developing the EnvISIon rating tool. Director Frauenhoffer wishes to propose that ASCE National continue to provide funding to help ISI, but develop a timeframe with milestones. If these milestones are not met, then the EnvISIon rating tool should be brought back into ASCE. Director Frauenhoffer is looking for feedback from the Section on his resolution. The Sustainability Committee will prepare a report with recommendations to be approved at the March meeting.

**Resume Book** – Director Green reported that the Section solicited for student resumes for this year’s resume booklet. It is open to all IIT, UIC and Northwestern students looking for summer internships or full-time employment. Resumes were due February 14, 2014. Copies will be available for all companies interested. Contact Director Green for more information.

**WSBL and CRYMC 2016** – YMG Chair Kukielka reported that National is looking for a Section to host the 2016 WSBL/CRYMC Conference. Since 2016 is the 100 year anniversary for the Section, the Illinois Section has volunteered to host the conference. YMG and the Section will be responsible for the Friday night social event, fundraising and volunteers. YMG will be creating a planning committee to start budget development. A motion to host the 2016 WSBL/CRYMC conference was approved with no exceptions at the January meeting.

**ASCE Region 3, 6 & 7 Workshop** (January 10-11, 2014) – Director Chou attended on the behalf of the Section. Breakout Sessions were very informational and included the following topics: how best to transition and engage students to younger members; taking Science, Technology, Engineering, and Math (STEM) education to schools; and the Dallas Branch online Survey.

**ASCE Region 3, 6 & 7 Workshop**

The Illinois Section Board Meetings are held every first Monday of every month with the exception to holidays. The next board meeting is scheduled for Monday, March 3, 2014 at 5:30 pm at MWH Americas, Inc., 175 West Jackson Blvd, 19th Floor. Meetings in the second quarter of 2014 will be held on April 7, May 5 and June 2.

By Theria A. Baldauf
theria.baldauf@mwhglobal.com

**SPAG Grants** – The Section was pursuing three National SPAG grants for funding 1) publishing and graphic design of the Report Card 2) Dinner with State legislators and 3) the Report release coinciding with the standard Springfield drive down. The Section received $1,500 for the Report Card and $500 for the report release/drive down.

The Illinois Section Board Meetings are held every first Monday of every month with the exception to holidays. The next board meeting is scheduled for Monday, March 3, 2014 at 5:30 pm at MWH Americas, Inc., 175 West Jackson Blvd, 19th Floor. Meetings in the second quarter of 2014 will be held on April 7, May 5 and June 2.

By Theria A. Baldauf
theria.baldauf@mwhglobal.com

**A Summary of the MWRD’s Watershed Management Ordinance**

(continued from page 6)

The WMO is designed to encourage and promote the use of green infrastructure to reduce overall runoff. The WMO provides full credit for green infrastructure when applied toward the requirement for stormwater detention volume. The use of stone void storage, infiltration basins, vegetated bio-swales, and permeable surfaces are all examples of green infrastructure which may be used for compliance with WMO requirements.

The MWRD is currently developing a Technical Guidance Manual (TGM), which will serve as a companion reference to the WMO. The TGM will provide “real world” example developments that will illustrate the concepts behind the requirements of the WMO. In addition, MWRD will conduct training seminars for consulting engineers and Cook County municipalities. More information on the upcoming schedule of training will be available in early 2014. Updates on WMO information and an electronic version of the WMO can be found online at WMO.MWRD.org.

Mr. John P. Murray, P.E., CFM, is the Supervising Civil Engineer of the Stormwater Management Section of the MWRD’s Engineering Department. Mr. Murray has been with the MWRD since 2002. Prior to that, he was an engineer for a local consulting engineering firm. Mr. Murray is a licensed Professional Engineer in the State of Illinois, a Certified Floodplain Manager, and a graduate of Purdue University.
### EWRI

**Monthly Committee Meeting**

**Date:** Tuesday, March 11  
**Time:** 5:30pm  
**Host:** Michael Baker Jr., Inc.  
**Place:** 311 W. Monroe Street, Suite 1350  
Chicago, IL 60606  
**RSVP:** Gary Paradoski at gary.paradoski@mbakercorp.com

### SEI-IL March Dinner Meeting

**I-43 Leo Frigo Bridge Pier Settlement and Emergency Repairs**

**Speakers:** Kent Zinn, P.E., S.E. – Vice President, Michael Baker Jr, Inc.

**Date:** Wednesday, March 19  
**Time:** 5:30 pm-Cocktails; 6:00 pm-Dinner Presentation following dinner  
**Place:** Elephant and Castle  
111 West Adams St.  
Chicago, Illinois 60603  
**Cost:** $45 - With Reservation  
$30 - Government  
$20 - Full Time Students  
$5 - Fee for Late/No RSVP  
Cash, checks and credit cards will be accepted at the door. Make Checks payable to the “ASCE Structural Group”

**PDH:** 1.0 PDH  
**RSVP:** Marcin Krok, P.E.,S.E., asce.il.struct@gmail.com  
by Friday March 14, 2014

### ASCE IL T&D/ISPE/ITE

**Cook County DOT Luncheon Seminar**

**Speakers:** Maria Choca Urban and Tara Fifer of the Cook County Department of Transportation and Highways  
**Date:** Thursday, March 20  
**Time:** 11:30 am-1:30 pm  
**Place:** Harry Caray’s  
33 W. Kinzie Street  
Chicago, IL 60654  
**PDHs:** One (1) Hour  
**Cost:** $50 ASCE/ISPE/ITE members  
$60 Non-members  
$35 Government  
$35 Students  
**Lunch will be provided.**  
**Register:** [https://www.eventbrite.com/e/cook-county-dept-of-transportation-highways-long-range-transportation-plan-tickets-10518776945](https://www.eventbrite.com/e/cook-county-dept-of-transportation-highways-long-range-transportation-plan-tickets-10518776945)  
**Questions:** Adam Hardy at 312-884-8085 or ahardy@milhouseinc.com.

### ASCE IL T&D

**DuPage County DOT Luncheon Seminar**

**Speaker:** Christopher C. Snyder, Director of Transportation/County Engineer at the DuPage County Division of Transportation  
**Date:** Wednesday, April 23  
**Time:** 11:30 am-1:30 pm  
**Place:** Maggiano’s (Oak Brook)  
240 Oakbrook Ctr.  
Oak Brook, IL 60523  
**PDHs:** One Hour  
**Cost:** $45 ASCE members, $50 Non-members, $35 Government, $15 Students  
**Lunch will be provided.**  
**Registration:** [https://s08.123signup.com/servlet/SignUpMember?PG=1532202182300&P=1532202191427613500](https://s08.123signup.com/servlet/SignUpMember?PG=1532202182300&P=1532202191427613500)  
**Questions:** Andy Walton at 312-242-6430 or awalton@primeraeng.com.

### ASCE Crane Safety Seminar

**Date:** Tuesday, April 29  
**Time:** 1:00-5:00pm  
**Place:** Hyatt Regency O’Hare  
9300 Bryn Mawr Avenue,  
Rosemont, IL 60018  
847-696-1234  
[www.hyatt.com](http://www.hyatt.com)  
**Questions:** John Frauenhoffer at 217-356-2797 or mustang2797@att.net

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For all Section, Group and Committee events, check out the Section website at: [www.isasce.org/web/section/calendar.html](http://www.isasce.org/web/section/calendar.html)