Outstanding Achievements!

This quarter, LVASCE organized and participated in several events including the annual student presentation and awards night, the 2016 Multi-Region Leadership Conference in Pittsburgh, the 16th Annual Legislative Fly-In in Washington D.C., and the talk delivered by Michael W. Rebert, PE., District 5-0 Executive Engineer of PennDOT. These events and others are described by different articles in this newsletter. In my article I would like to focus on recent recognitions of the two outstanding Civil and Environmental Engineering Departments in the Lehigh Valley at Lafayette College and Lehigh University.

During this quarter, the Department of Civil and Environmental Engineering at Lafayette College was awarded the ASCE Walter LeFevre Award. Congratulations to all faculty members, students, and alumnus of Lafayette College. This award is given to recognize the focused efforts that the department and its faculty have made in promoting licensure, ethics and professionalism. The nomination was put forward by a former student, Diana Hasegan ’10, and supported by the acting Department Head Prof. Anne Raich.

Also this year, the Civil and Environmental Engineering (CEE) Department at Lehigh University celebrated its 150th anniversary on April 1st and 2nd. The event looked back at decades of history at Lehigh and the pioneering minds that shaped both the department and the profession of civil engineering. It also established a foundation for the future as speakers from all areas of the profession offered a vision for the next generation of civil engineers to develop the necessary skills and systems to solve society’s most complex problems.

Muhammad T. Suleiman, Ph.D
President, ASCE Lehigh Valley Section
LVEC Engineer’s Week Banquet
By: Mike Derr, P.E., M.ASCE

The Lehigh Valley Engineering Council hosted the 2016 Engineer’s Week Banquet on February 26th at the Breiningsville Holiday Inn. Over 130 attendees were on hand for networking and to hear this year’s speaker, Andrei G. Jablokow PhD, and his topic of “Think Like an Engineer, Speak Like a Leader.” Dr. Jablokow led the discussion of how as engineers, we often concentrate on the technical aspects of our profession, but as we progress in our careers, we also have to inspire and motivate our project teams and clients.

Our chapter, as always, was a major contributor to the event. LVASCE was a Gold Sponsor and many of our members and member firms also attended and/or sponsored the event. LVASCE President, Muhannad Suleiman PhD, also presented the 2015 awards for Engineer of the Year (Matthew Kawczenski, PE, SE), Young Engineer of the Year (John Caperilla, EIT), and the Outstanding Civil Engineering Achievement Award (Camelback Lodge and Aquatopia Indoor Water Park) for the Lehigh Valley Section. LVPSPE also presented Matthew Kawczenski, PE, SE with an award for PSPE Young Engineer of the Year.

As a LVEC and ASCE board member, I was honored to provide the closing remarks at the end of the banquet. On behalf of LVEC and LVASCE, I would also like to thank all of the volunteers and members that helped sponsor this event.

WTC Seminar at Lehigh University
By: Joe McFadden, A.M.ASCE

On February 2nd, LVASCE in collaboration with Lehigh University’s SEI Graduate Student Chapter, organized hopefully the first of many seminars on campus. Over 30 people attended the inaugural event on “Coastal Flood Risk and Urban Resiliency in Lower Manhattan: A Case Study of the World Trade Center Water Intrusion Protection Plan” presented by Mark Osler, P.E., Bob Gallup, P.E., and Don Green, P.E. of Michael Baker International.

The study included a vulnerability assessment, followed by the transition from planning into conceptual design, final design and construction considerations. Design analyses included shelf-scale hurricane simulations, 2D near-field flood modeling, 1D modeling of flooding through the interior subsurface of the WTC complex, and performing a full scale physical model test of a floodwall design prototype.

Special thanks to Aly Mondoro for planning this event!
American Society of Civil Engineers
– Lehigh Valley Section

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ASHE East Penn/LVASCE Joint Meeting – State of the District 5-0 Address
By: John Caperilla, EIT, A.M.ASCE

Over 185 ASCE and ASHE members were in attendance to hear the state of PennDOT Engineering District 5-0 from District Executive Michael W. Rebert, PE. Engineering District 5-0 covers Berks, Carbon, Lehigh, Northampton, Monroe and Schuylkill Counties. The District includes 3,727 miles of highway, 2,134 bridges and an annual maintenance budget of $115 million dollars. Within District 5-0, three (3) Metropolitan Planning Organizations cover the area including the Lehigh Valley Transportation Study (LVTS) which covers Lehigh and Northampton Counties, Reading Area Transportation Study (RATS) which includes Berks County and The Northeastern Pennsylvania Alliance (NEPA) which covers Carbon, Monroe and Schuylkill Counties. The base TIP for the next four years average just shy of $200 million dollars per year.

As a result of the recent passage of Act 89 which was signed into law in late 2013 has benefited the District in reducing the amount of Structurally Deficient Bridges. The number which was as high in 499 in 2010, is now down to 365. Act 89 has also provided additional funding for annual construction lettings state wide, which will be around $2.4 billion dollars over the next four years. The District let 48 projects totaling $260 million dollars in 2015 and anticipates letting a total of 136 projects with an estimated total construction cost of $290 million dollars.

Rebert provided an update on the P3 bridges. The Public and Private Partnerships for Transportation Act which authorized P3 projects in Pennsylvania was signed into law in September 2012. The law which utilizes private companies to address the Commonwealth’s nearly 4,500 Structurally Deficient (SD) bridges. The Public Private Partnership (P3) project was recently awarded by the Pennsylvania Department of Transportation (PennDOT) to the Plenary Walsh Keystone Partners (PWKP) consortium.

With the P3 approach, the Department can replace hundreds of these bridges more quickly; save money; and minimize the impact on the traveling public. In District 5-0, forty (40) bridges are listed as P3 projects. To date, seven (7) bridges have been completed, three (3) bridges in Monroe County are currently in construction and six more bridges are expected to start construction within the next two months.

This past winter was not as rough as it has been in previous winters for the District’s Maintenance Unit. Total cost for winter maintenance for District 5-0. Rebert provide the following statics, 23,000 Tons of Salt, 13,000 Tons of Anti-Skid, 355,000 Gallons of Salt Brine was used in 2015-16. It was noted, the District spent $3.7 million dollars during winter storm Jonas which brought over two feet of snow to many areas in the District 5-0 region.

Currently there is 64 active projects worth $525 million dollars ongoing in District 5-0. Those projects include but are not limited to: Route 61 corridor in Schuylkill County; Route 209 & 715 Intersection, Jim Thorpe and McCall Bridges in the Pocono/Coal regions; Route 412, 8th Street Bridge and the Fahy Bridge in Bethlehem in the Lehigh Valley; and in the Reading area, the Buttonwood Street Bridge and the Route 662 betterment in the borough of Fleetwood.

Major projects that are currently in design include but are not limited to: I-80 reconstruction in Monroe County; PA Route 443 in Lehighton, Carbon County; US 22 widening from 15th Street to Airport Road and the PA 309/Tilghman Street Interchange in the Lehigh Valley; as well with I-78 and PA 61 Interchange near Hamburg and the US 422 reconstruction in Berks County.

LVASCE would like to thank ASHE East Penn for their partnership and everyone who was in attendance.

LV Phantoms Hockey Game
By: John Caperilla, EIT, A.M.ASCE

Members of the Lehigh Valley Section and the American Society of Highway Engineers (ASHE) East Penn Section gathered together at PPL Center on February 10th to watch the Lehigh Valley Phantoms hockey team take on the Binghamton Senators. Around 50 members of both societies and their guests were granted access to the Player High Five Tunnel at the Ice Level Party Suite. Prior to the game provided a time for networking amongst the two groups. The game was a successful one for the Phantoms winning the game 7-2 that included a hat trick by Taylor Leier, his first in his career.

The Section would like to thank ASHE East Penn for their partnership and everyone who was in attendance.
ASCE Society President-Elect visits Lehigh Valley Section

By: Greg Kuklinski, P.E., M.ASCE

On Thursday April 31, 2016, Society President-Elect Norma Jean Mattei, PhD., P.E., M.ASCE, arrived in the Lehigh Valley to visit our Section Students Chapters: Lehigh University and Lafayette College.

Her first tour was a visit to the recently built Hoover-Mason Trestle at the Bethlehem Steel Blast Furnaces. We had a guided tour which gave a history of the site and the trestle. The tour was organized by section Vice President Joe McFadden.

In the afternoon, she visited Lafayette College hosted by Professor Steve Kurtz, PhD. and Section Associate Member Director Chris Skrabak, EIT. She met with faculty members and the school’s ASCE steel bridge team, toured the structural lab (with a sneak peak of the 2016 bridge) and saw the school’s new GIS equipment and 3D printer. After the tour, we walked over to Marquis Hall for the Section Student Dinner meeting where she got to meet and greet with Section Members and students from both Lehigh University and Lafayette College to hear their technical presentations.

On Friday morning, I took her on a tour of the Lehigh University Campus including the environmental labs in the STEPS Building and Baldwin testing machine in Fritz Lab. She was excited to see the ASCE National Landmark sign in Fritz Lab. She attended lunch with the ASCE Student Chapter and got to say a few words about the importance of staying with ASCE after college. In the evening, she attended the Lehigh U. CEE 150th celebration and addressed the audience at dinner in Fritz Lab about ASCE’s strategic initiatives.

On Saturday morning, Norma-Jean went on a tour of Lehigh’s ATLSS Facility where she received a tour from the graduate students as well as detailed presentations on their research. She attended the CEE 150th panel discussion before heading back to New Orleans. She wanted me to thank all of you for our Section’s hospitality and said that it was great meeting many of you. This was a great honor for our Section to get a Presidential Officer visit and we got the opportunity to show her the great things that our Section does.

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LVASCE Student Presentations
By: Kyle John, A.M.ASCE

April’s dinner meeting was once again the annual student presentation and awards night. The event took place in Lafayette College’s newly renovated Clay Ketcham room.

LVASCE student award winners were Chris Nelsen of Lafayette College and Kawsar Hooda. Chris was chosen for his involvement in research at Lafayette along with his dedication to the ASCE steel bridge team. Kawsar, the current Lehigh student chapter president, won the award based on his dedication to ASCE during his time at Lehigh. The ASCE Student Award is presented by LVASCE to a senior civil engineering student at both Lafayette College and Lehigh University that has exhibited enthusiasm and leadership in one or more engineering-related activities and strives for academic excellence. The award winner is chosen by the faculty of each school. Section awards were also presented to John Caperilla (Young Engineer of the Year) and Matt Kawczenksi (Engineer of the Year).

Presentations were given by Lehigh students Brenden Michaelis (Propagation of Human Activities on Surface Water Systems) and Kevin Augustyn (Extra Terrestrial Greenhouse). Lafayette presenters were Chris Nelsen and Mike Yust. Unfortunately the two presenters from Lafayette College were not able to make it to the event in person due to prior obligations to give their presentations at a conference in California, however they were able to record their presentations in advance to be played the night of the event. Professor Kurtz got creative and made the audience feel as they were in the presence of Chris and Mike by creating life-sized cut-outs of the two students to stand at the podium during the playing of their presentations.

The event was highlighted by the presence and short presentation of ASCE’s President Elect, Norma Jean Mattei. During Norma Jean’s speech, she enlightened us with the global outreach of ASCE as well as shared some of ASCE’s goals for the future.
Washington D.C. Legislative Fly-In
By: John Caperilla, EIT, A.M.ASCE

The 16th annual Legislative Fly-In is took place in Washington D.C. on March 15th and 16th. The two day conference brought nearly 200 ASCE members from 49 states and the District of Columbia together to learn about issues currently affecting our profession. Seven ASCE leaders from across the four Pennsylvania sections were in attendance.

The conference began with a Young Members forum where younger members were presented on how they can make an impact at the conference as well as when they return back home. The program continued with dinner that Marion McFadden, Deputy Assistant Secretary for Grants Programs in the United States Department of Housing and Urban Development’s (HUD) Office of Community Planning and Development highlighted Rebuild by Design and HUD’s $1 billion nationwide design competition for infrastructure projects and community programs open to areas affected by natural disasters from 2011-2014.

The next morning, members were briefed on key issues including the advocating for a new Water Resources Development Act (WRDA), water infrastructure funding, and the Federal Aviation Administration Reauthorization (FAA). To bring the point home, special guest Rep. Garrett Graves from Louisiana, came to address the members in attendance. A member of the House Transportation and Infrastructure Committee provided some tips on who to make the most of your Congressional Meetings as well as the staff from ASCE.

Those members then took to the steps of Capitol Hill. The Pennsylvania delegation had the opportunity to meet with the staff of both Senators Bob Casey and Pat Toomey to discuss the importance of funding our infrastructure. Following our meetings with the Senators, each of us had the opportunity to meet with our local Congressional Representatives. For me, I meet with the staff of Rep. Mike Fitzpatrick who serves the 8th Congressional District which covers Bucks and portions of upper Montgomery Counties. Congressman Fitzpatrick has informed his constituents through his e-mail updates that infrastructure is a top priority.

If you have any interest in getting move involved or simply have a question, please feel free to contact me directly by e-mail at jcaperilla@orton-lawson.com
History and Heritage Field Trip #3 – The Ole Bethlehem Waterworks
By: Tom Christopher, P.E., M.ASCE

The first Landmark named within the Section was the Old Bethlehem Waterworks. Completed in 1754, it is the first known pumping system providing drinking and wash water in the North American colonies.

In 1741, Moravian missionaries from Germany established their new community up a steep slope from an abundant spring that they named Monocacy Creek. Initially water was obtained for the community by assigning carriers to bring water up the hill.

In 1751 a millwright named Hans Christopher Christiansen arrived at the community from Holstein in what is now Germany. He devised a method to move water to the community using mechanical pumps and commenced construction in 1754. Water was forced up the hill in wooden pipes to a distribution tank located in the space now occupied by the Central Moravian Church.

In 1761 Christiansen started construction of more powerful permanent machinery. A two-story stone building was erected to house three single-acting iron pumps cast at Durham Furnace. The pumps worked by means of a triple crank geared to the shaft of an undershot waterwheel 18 feet in diameter.

The rising mains, made of gum wood, delivered the water to a reservoir on a wooden tower located in the area of the previous tank. The water was then distributed to cisterns and tanks near principal dwellings. The system became operational on July 6, 1762 with a capacity of 800 gpm.

The pumps were used until the 1830s and the piping system supplied Bethlehem with water until 1912 when the water was found to be contaminated. The spring was sealed and replaced with wells at other locations.

The two-story building is architecturally distinctive. It is made of hand hewn limestone, has Moravian brick arched windows and doors, and has a red tile sloped roof. The building was restored in 1973 and the machinery was restored in 1976.

The Old Bethlehem Waterworks was designated an ASCE National Civil Engineering Landmark in 1971.

To visit the Waterworks, located at 459 Old York Road in Bethlehem on the east bank of the Monocacy Creek, you can park in the Colonial Industrial Quarter in Bethlehem and follow maps or signs. Alternately, you can walk south on Main Street from the Hotel Bethlehem and take the walkway down to the Colonial Industrial Quarter. Take a look while you are at Musikfest!
This year at the 2016 Multi-Region Leadership Conference for Regions 1, 2, 4, and 5, more than 600 leaders from Sections and Branches, the Younger Members and Student Chapters took part in the weekend sessions. The conference was held on February 12-13, 2016 and held at the William Penn Hotel in downtown Pittsburgh, PA. In attendance from the Lehigh Valley Section was: Kyle John, EIT, A.M.ASCE from Whiting-Turner at the Eastern Regional Younger Member Council, Joe McFadden, A.M.ASCE from Michael Baker International, Greg Kuklinski, P.E, M.ASCE from Alfred Benesch & Co. and John Caperilla EIT, A.M.ASCE from Borton-Lawson at the Workshop for Section and Branch Leaders (WSBL). Two students from Lehigh University attended the Workshop for Student Chapter Leaders (WSCL) portion of the program. Greg Kuklinski, P.E., M.ASCE was the planner and organizer for the WSBL as part of his duties on the national Leader Training Committee.

The Eastern Regional Younger Members Council (ERYMC) started off with round table discussions where younger members were given several topics to discuss (such as increasing membership, dinner meeting topics, etc.) and were able to share what works and what doesn’t work for the various sections. This was a great opportunity to bring some ideas back to the Lehigh Valley section that other sections are benefiting from. Friday evening was highlighted by a social and networking event at Jerome Bettis Grille in downtown Pittsburgh. Saturday morning was started off with a technical presentation on the demolition of Pittsburgh’s Civic Arena followed by the ERYMC business meeting where Buffalo was selected as the location of the 2018 ERYMC meeting.

The Friday morning session started with a Welcome by Region 2 Director, Chris Menna, P.E., F.ASCE and local dignitaries from the Pittsburgh Section. We then heard a very entertaining and interactive session called “Your Glimpse into ASCE” run by Nancy Berson, Aff.M.ASCE, Director of Geographic Services and the Governors/Directors from Regions 1, 2, 4 and 5. The interactive game of ASCE trivia was played on a cell phone or tablet from the captain at each table with results showing real time on the screen. The morning continued for the Section and Branch Leaders with a presentation by ASCE’s Leader Development team called “Engineers Have Feelings Too: Lead Through Emotional Intelligence.” In the afternoon, all three groups met in their respective Regions (Region 2 for us) and had an interactive exercise and learned more about our Region activities. We then heard from our Society Leaders: President Mark Woodson, P.E. F.ASCE, President-Elect Norma Jean Mattei, Ph.D., P.E., M.ASCE and Tom Smith, F.ASCE, Executive Director. The day ended with a discussion about Professional Ethics from ASCE’s General Counsel, Tara Hoke, Esq, Aff.M.ASCE and an Order of the Engineer Ceremony.

On Saturday morning, we all started bright and early at 7am with coffee and ASCE’s President-Elect candidates, Robin Kemper and Kristina Swallow which was a town-hall style meeting where they discussed their ideas and took questions. After breakfast, we all heard a discussion about Professional Manners in a Digital World and continued with a session from the Geographic Services Department with ASCE Resources for Sections and Branches. The WSBL then broke up in to various Breakout Sessions including Raise the Bar, Engaging Younger Member and Student Members, Running a Section Survey, Creating a Successful Website for your Local Group (facilitated by Joe McFadden, A.M.ASCE discussing our Section website), and Following Up on your State Report Card. After lunch, all three groups met to hear Terry Neimeyer, P.E. F.ASCE from the Industry Leaders Council talk about his achievements in ASCE and in his company, KCI Technologies as well as ASCE’s Grand Challenge. The evening concluded with the ERYMC awards dinner held at the LeMont Restaurant on Mt. Washington.
Lehigh University 150th Anniversary
By: John Gilpatrick, CEE Department at Lehigh University

Craig Benson, a Lehigh graduate, a member of the National Academy of Engineering, and the current Dean of the University of Virginia School of Engineering and Applied Science, delivered the keynote address for this sesquicentennial celebration on April 1. “From wastewater treatment facilities and air pollution control to highway design and structures like the Golden Gate Bridge, Sears Tower, and Hoover Dam, “civil engineering is truly the backbone of our modern society.” “I can solve your problem, and no one else can,” said Benson to the crowd of more than 100 alumni, faculty, staff, students, and local civil engineers. That’s a civil engineer’s value proposition to industry, he explained. The challenge is keeping up with the increasing complexity of the problems that need solving”.

Following Benson’s address, dinner was served in the shadow of the five-million-pound testing machine in Lehigh’s Fritz Laboratory, a historic ASCE landmark, during which Ted Galambos ’59 Ph.D., a member of the National Academy of Engineering and Professor Emeritus at the University of Minnesota, was conferred the Lynn S. Beedle Distinguished Civil and Environmental Engineering Award. Named after the distinguished professor of civil engineering at Lehigh and founder of the Council on Tall Buildings and Urban Habitat, this marked the first time the Beedle Award had been given out in nearly a decade.

Galambos was introduced by the 2007 recipient of the award, John Fisher, Professor Emeritus of Structural Engineering at Lehigh, who recalled his years studying at Lehigh alongside Galambos and other important figures in the Lehigh civil engineering community including Ben Yen and the late Le-Wu Lu. Other guests included Thomas Wenk ’78G, who traveled all the way from Zurich, Switzerland, to reunite with his classmates and former professors, and national ASCE President-elect Norma Jean Mattei, who, like Benson, delivered an impassioned plea for dedication to advancing the profession.

Two panel discussions led by groups of alumni in practice and in academia highlighted the second day of the event. Bethany Malusa ’09, Project Engineer at Alfred Benesch & Company and Young Member Forum President for the LVASCE, participated in the practice panel alongside industry leaders and fellow graduates Mark Sarkisian, Michael Semeraro, and Daniel Zarrilli.

The event concluded following the education panel, which included presentations from Stephen Ressler, Tara Troy, Jeffrey Evans, and Larry Fahenstock – all Lehigh CEE graduates and professors affiliated with leading civil engineering institutions.
Lafayette College Steel Bridge
By: Lafayette College Steel Bridge Team

The Lafayette Steel Bridge Team competes in the National Students Steel Bridge Competition (NSSBC), the largest engineering competition in the United States, with about 250 engineering schools competing, each year. The goal of the competition is to produce a steel bridge of nominal 20’ span that has the minimum “total cost.” The “total cost” is determined by an equation which considers the self-weight of the bridge, the deflections of the bridge under a 2500-lb load, and the speed in which the bridge is assembled from size-limited parts, which must each fit into a 4”x6”x36” prismatic box.

Steel bridge competitions are held regionally and nationally. For 2016, the Mid-Atlantic (Pennsylvania, Maryland, and Delaware) regional will be held at Drexel University on April 24th. The top two schools from this regional competition will qualify for the national competition, which will be held in Provo, Utah in May 27th and 28th.

The actual competition days consist of two main phases: construction and load-testing. During the construction phase, each team begins with all of its pre-fabricated parts (typically between 30 and 80 parts) arranged in the “staging yard.” When given the command to begin, each team races to assemble and bolt together its bridge parts as quickly as possible. For teams that compete at the national level, it generally takes about 8 to 10 minutes for 3 to 4 builders to assemble the bridge. The score for “construction economy” is minimized by using the least possible number of person-minutes to assemble the bridge. Following timed construction, the bridge is weighed and subsequently subjected to a randomly located 2500-lb load, while vertical deflections are measured in three locations, whose sum is termed the aggregate deflection. The score for “structural efficiency” is based on the aggregate deflection and the self-weight, such that the best score is achieved by a very light, yet stiff, bridge.

The rules for the NSSBC change every year for the purpose of keeping the design process fresh and original, as the changes in rules lead to vastly different design solutions, each year. However, there are always a variety of strict dimensional limitations which specify, for example, the maximum allowable height of the bridge, etc. Consequently, the Lafayette team began its effort in August by analyzing the rule changes. From this analysis, the team concluded that weight minimization is somewhat less of a factor in 2016, but the stiffness demands were substantially increased, giving an early indication that the optimal structure was likely to approach a truss of maximum allowable depth. Subsequently, the team conducted hundreds of parametric studies, using SAP2000 to determine deflections and self-weight, while estimating construction speed based on an assumed per-member construction speed, based on experience and judgment.

The team produced its first bridge, fully compliant with the rules, by November 15th. The team practiced the construction assembly with that bridge and load-tested it successfully. Analysis of this fall semester bridge, coupled with further computer-based parametric studies led to a complete new design that was completed on December 5th. This new design features an outward-canted truss top chord and an inward-canted open-web bottom cord. The purpose of this is to bring the working points of the top chord compressive force as close as possible to the bottom chord tension force to minimize the inefficiency associated with bending in the diaphragms.
Lehigh University Student Chapter Update
By: Kawsar Hooda, S.M. ASCE

The spring of 2016 was another eventful semester for the Lehigh ASCE student chapter as we collaborated with multiple groups both on and off campus. We started off our semester by collaborating with the Lehigh’s FERS Society and the LVASCE Section to host a presentation about the new World Trade Center. We have increased the membership for the club significantly after providing our members with after-hours access to the STEPS building, a popular study spot for many. We worked alongside the department and got the word out regarding the new CEE mentoring program which is part of a University Pilot program being organized by our Practitioner Advisor, Greg Kuklinski. In February, we had members of our executive board attend the ASCE Workshop for Student Chapter Leaders at the Multi-Regional Conference in Pittsburgh, PA. Members from our executive board have reached out and presented to high school students about engineering, and specifically what civil engineers do, as the students make important decisions as the apply to colleges. Lehigh ASCE also had returning Co-Op students present their experiences to underclassmen, and the lessons they’ve learnt from working. We also collaborated and helped design the wall for a campus wide initiative, Without Walls, which aimed to improve the campus climate, by writing positive comments on a temporary wall on the STEPS lawn. We also carried out social activities such as inter-club soccer, where we played against other civil engineering organizations, to encourage the collaboration between the clubs. Finally, we have continued to hold our semester bridge tours with the help of Greg Kuklinski, and have continued having our Fritz Friday doughnut socials for the first Fridays of each month.
Structures Congress has always been a unique opportunity for engineers with different backgrounds and expertise to be exposed to the latest developments in professional practice and research studies, and meet new people in the field to network and exchange ideas. To this respect, as a PhD student and researcher, I have always considered participation in the Structures Congress to be very beneficial for my current studies and future career.

The 2016 Structures Congress was particularly exclusive, as it was organized jointly by ASCE Geo-Institute (G-I) and Structural Engineering Institute (SEI). This transformed the Congress to a unique venue for the researchers and practitioners of both fields and facilitated the conversation among them. Personally, I participated in several interesting technical presentations delivered by geotechnical and structural engineers on different current hot topics including resilience, sustainability, and hazards analysis.

Through the Congress, I got the chance to present my research titled “A Project Management Approach to Restoration for Probabilistic Resilience Prediction of Bridges” and received useful feedback which I would use to further improve my research and expand my studies.

Additionally, I participated in different committee meetings held in parallel with the technical sessions. These included the Task Group – 1, and Task Group -2 of the Technical Council on Life-Cycle Performance, Safety, and Reliability, as well as the technical committee on Disaster Resilience of Structures, Infrastructures, and Communities. Typically, highly active research professors, practitioners, and students participate in such meetings, and discuss the current status and the future directions of research. Through these meetings, I had the chance to interact with different researchers, exchange ideas, and discuss about possible future collaborations.

Among several conferences held by different organizations (e.g. ASCE, EERI, etc.) in Civil Engineering, Structures Congress has a unique feature, as it always attracts not only participant from academia, but also various professional engineers working in different industries. This makes such events perfect venues for career development and networking. I managed to approach and talk in person with some of the employees of the companies I would like to apply to and received valuable information about the job opportunities and requirements.

Last but not least, I enjoyed the perfect weather of Phoenix at February. Taking a break from 20o at Bethlehem and walking in 85o Phoenix streets was nice in particular. Moreover, I personally love cactuses, which I could find almost everywhere in Phoenix.

By and large, I would like to express my sincere appreciation to the Lehigh Valley Chapter and the Lehigh University Chapter of SEI that provided me such a wonderful opportunity to participate in 2016 Geotechnical and Structural Congress, through the travel grant. I hope SEI continues this program in the future and helps more students to attend such events.
The quality, durability and reliability of the 510HD translate into significant advantages. In situations that would damage other infiltration equipment the rugged 510HD keeps performing. As a result, users eliminate repair costs or replacements and/or avoid wasting time by trying to install flimsy equipment in challenging soil conditions. The bottom line results are compelling: lower total cost of ownership and greater return on investment over the 510HD’s useful life.
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Sponsor a Student
$20 per dinner meeting or event

Sponsor an LVASCE Meeting
Gold $250: Includes one (1) admission; recognition in the meeting announcement sent to entire section; a PowerPoint slide, and option to hang company banner and table for advertising at the dinner.

Platinum $500: Includes Gold above plus two (2) admissions and opportunity to introduce your firm or project.
ASCE LEHIGH VALLEY
ELECTION OF OFFICERS AND DIRECTORS FOR SECTION YEAR 2016-2017

In accordance with the Constitution, By-Laws, and Operating Manual of the Lehigh Valley Section of the American Society of Civil Engineers, the LVASCE Nominations and Awards Committee, chaired by the Past President of the Board of Directors, is charged with nominating eligible ASCE members as candidates for open officer and director positions. The Committee has completed the nomination process for 2016-2017. The Committee is comprised of Dion Campbell, John Caperilla and Scott Stenroos.

The election ballot can be found in the LVASCE Spring 2016 newsletter or downloaded from the LVASCE website, http://lvasce.org. The ballot should be submitted to Secretary-Elect, Kyle John, by JUNE 9, 2016 to the address or email indicated on the ballot. Alternatively, the ballot may be submitted at the LVASCE June Dinner Meeting.

2016-2017 Official Ballot

President Elect (assumes President position in 2017-18 & remains on Board as Past President in 2018-19)

_________ Michael Derr, P.E.
_________ Write-in Candidate: ________________________________

Vice-President (1 year term)

_________ Dion R. Campbell, P.E.
_________ Write-in Candidate: ________________________________

Secretary-Elect (1 year term, assumes Secretary position in 2017-18)

_________ Janelle Hall, P.E., LEED Green Assoc.
_________ Write-in Candidate: ________________________________

Treasurer (2 year term)

_________ Chas Snyder, P.E.
_________ Write-in Candidate: ________________________________

At-Large Member Director (1 year term) (Vote for up to 2)

_________ Dave Wieller, P.E.
_________ Col. Steven Ressler, Ph. D., P.E.
_________ Write-in Candidate: ________________________________

Associate Member Director/Student Chapter Liaison Chair (1 year term)

_________ Chris Skrabak, EIT
_________ Write-in Candidate: ________________________________

Associate Member Director/YMF President (2 year term)

_________ Joe McFadden
_________ Write-in Candidate: ________________________________

(By to be detached prior to tallying the votes)

BALLOT VALIDATION

Name: ______________________________ ASCE Member #: ______________

Address: __________________________________________ Date: _____________

Please return ballots to Kyle John, Secretary-Elect, by June 9, 2016

Kyle.John@whiting-turner.com

THE WHITING-TURNER CONTRACTING COMPANY
Attn: Kyle John
5050 West Tilghman St.
Allentown, Pennsylvania 18104
In Search Of: Younger Members Forum Executive Committee

We are now seeking young engineering professionals to serve on the Executive Committee to help organize events and operate our social media pages. Duties will include interaction with the student chapter and hosting networking opportunities as well as social gatherings. If you or someone you know is interested in joining the YMF, please contact Bethany Malusa at bmalusa@benesch.com.

YMF Upcoming Events:

- Happy Hour
  Allentown Brew Works
  June 1, 2016
- Mini-Golf Outing
  August 2016
- Covered Bridge Tour Bike Ride
  Fall 2016

YMF Upcoming Events: