### MAY LUNCHEON

DATE: Thurs. May 16, 2013 - 11:30 AM Registration, 12:00 P.M. Lunch & Presentation

LOCATION: Villa Milano, 1630 Schrock Road, Columbus, OH

#### SPEAKER: Amanda Engle, PE

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Amanda Engle, PE manages design projects at the Columbus office of E. L. Robinson Engineers, primarily in the area of highway bridge design, and is a graduate of the Ohio State University. Amanda is the founder and past president of the Central Ohio Chapter of Engineers Without Borders, and project lead for the municipal services project in San Pedro Puxtla, El Salvador, a project that moved into the major construction phase in March of 2012. She also helped establish and mentor the OSU EWB Chapter and accompanied the OSU students on several implementation trips to carry out their portion of the El Salvador project over the past several years. All the while maintaining a full-time position at E. L Robinson Engineers in the Columbus office. She was selected for the Outstanding Civil Engineer Award by the Central Ohio Section of ASCE in 2012.

#### TOPIC: Engineers Without Borders - Las Pilitas Project in El Salvador

This presentation will be on the Central Ohio chapter of Engineers Without Borders USA and the Las Pilitas project in El Salvador. The project consists of a street and drainage system for an isolated residential area at the edge of the small town of San Pedro Puxtla. The street, which is now nearly complete, connects the Las Pilitas neighborhood to the rest of the town, eliminates unhealthful exposure to contaminated drainage, and allows safer access to the residences in the rainy season. Engineering challenges on the project included routing of floodwater, disposal of large boulders, limited space and difficult access. Completion was further complicated by local perceptions, language, politics, and funding. The project has received partial funding from both the Central Ohio Section and ASCE national.

This meeting will also include award of this year's Central Ohio Section Civil Engineer and Section Member of the Year.

MENU: Lasagna (with meat sauce) or Lasagna Cacciatora (Vegetarian). Specify at time of registration.

**CPD:** A certificate for one (1) Continuing Professional Development (CPD) hour will be issued.

COST: \$20 ASCE Members & Guests, \$15 ASCE Life Members, \$10 Students

REGISTER: Registration is due by 5:00 PM on Mon., May 13. Late registrations and walk-ins may not be accepted. Registration fees may apply for no-shows and registrants canceling after the deadline. To register contact Michael Navabi: 614-839-0250, or register@centralohioasce.com

**PAYMENT:** The preferred method of payment is online (click <u>HERE</u>) before the registration deadline. Payment on the day of the event is available by cash or check payable to Central Ohio ASCE.

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entral Ohio Section

ASCE Central Ohio Section - Newsletter

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#### LETTER FROM THE PRESIDENT

Central Ohio Section Members,

I wanted to update the section on the accomplishments of this year's central Ohio board. We have made some significant improvements to our section member benefits. I hope you have enjoyed them or plan to enjoy them in the future. Here are some of the items we've accomplished this year:

- \$1000 section sponsored scholarships were started or re-started at both Ohio University and The Ohio State University. These university's host our section's two student chapters. Each school will be awarding \$1000 scholarships to civil engineering students in their respective programs.
- The section began paying for ASCE webinars that section members host at their office. If your office can host a webinar for 15-30 sections members, the section will reimburse the cost.
- The section is purchasing several commonly used ASCE publications that will be hosted by the main Columbus library on

Broad St. These books will be available for use by any library member.

- The section donated \$1000 to the Engineers Without Boarders (EWB) central Ohio section this year to support their efforts on volunteer projects overseas.
- The section will be donating ASCE logo engineering graph paper to local middle and high school math classes. The board hopes this simple donation will make students aware of some of the tools used by engineers and of the field of civil engineering. If you know of a math class who would benefit by this donation, please let the board know.
- The section has arranged for the ASCE salary survey complete report to be available to section members upon request.

#### Regards,

Adam Rich, P.E., M.ASCE President – ASCE Central Ohio Section President@CentralOhioASCE.com

#### 17th ANNUAL GOLF OUTING

With spring in full swing that means Golf Season is upon us. Don't forget to mark your calendars and signup for the 17<sup>th</sup> annual ASCE Central Ohio Section Golf Outing to be held June 21<sup>st</sup>, 11:00a.m. at Darby Creek Golf Course. The format is the ever popular 2 person mixed format. For a low entry fee of \$70 you get greens fees, cart, driving range, drink tickets, lunch, steak and chicken dinner, beverages, tons of hole and place prizes and lots of "those" pies at the end.

This outing has raised almost \$28,000 over the years to support the Younger Member Group (our annual chefs at the outing), Civil Engineering Career Day and numerous other programs. This is made possible with the



generous sponsorships from many Central Ohio firms and businesses. Please consider being a hole sponsor for \$100 or a lunch/dinner/beverage cart sponsor for \$250 which includes hole recognition as well.

For any questions in regards to sponsorship and/or registering to play, please contact Jim Pajk at 614-525-3021 or email at jpajk@franklincountyengineer.org . Go to the ASCE Central Ohio website, www.centralohioasce.org , to download a flyer.

#### MOTORCYCLE RALLY & DINNER

ASCE is offering a motorcycle tour for nongolfers in coordination with the ASCE Golf Outing on June 21. The cost will \$35 for dinner at the Darby Creek Golf



Course, located between Plain City and Marysville. We typically start the ride from the McDonalds at SR 161 and Avery-Muirfield Drive in Dublin around noon, and finish at the golf course between 4:00 and 5:00 PM. The tour will navigate the back roads northwest of Columbus with stops at some notable (or not so notable) sites in the area of Union, Logan, Madison, and/or Champaign Counties. It is a scenic ride, the food at the golf course is great (prepared by the Younger Member Group), and it is a time to renew acquaintances in the business at dinner. To sign up or for more information contact Dave Pritchard at 614-519-4819 or davepritchard@sbcglobal.net.

www.centralohioasce.com



## UPDATE TO OHIO INFRASTRUCTURE REPORT CARD

In 2009, the ASCE Ohio Council of Local Sections published the first Ohio Infrastructure Report Card (<u>http://ohioasce.org/reportcard</u>), assigning letter grades to various areas of infrastructure, akin to the ASCE National Report Card. On the heels of ASCE's recent release of the 2013 National Infrastructure Report Card, the Ohio Council is forming a committee of volunteers to update the Ohio Report Card. If you interested in providing research for any specific categories or would be interested in writing, editing, or checking the updated report sections, the Ohio Council would welcome all volunteers. Please contact any board member or <u>newsletter@centralohioasce.org</u> to learn how you can get involved in this valuable effort to bring attention to infrastructure needs on our local level.



Ohio Council Of Local Sections Akron-Canton, Central Ohio, Cincinnati, Cleveland, Dayton, Toledo

# 2010 UPDATE – 2009 OHIO INFRASTRUCTURE REPORT CARD

| Subject                 | Grade | Comments  |
|-------------------------|-------|---|
| Aviation                | C-    | Ohio ranks third in the nation with 124 paved and lighted general aviation airports.<br>Only 58% of runways, 57% of taxiways and 62% of aprons meet the satisfactory<br>condition index. These percentages are below ODOT Office of Aviation established<br>goals. Ohio's commercial service airports are meeting capacity requirements.                    |
| Bridges                 | B-    | Bridges in Ohio are crucial components of one of the largest transportation systems in the country. Ohio has the second largest inventory of bridges in the United States. It is estimated that it would cost \$3.6 billion to replace all the structurally deficient bridges and two-thirds of the functionally obsolete bridges in Ohio.                  |
| Dams                    | С     | There are more than 2,600 dams in the State of Ohio. Nearly 70% of Ohio dams are<br>privately owned. There were 1,597 state-regulated dams in Ohio in 2007. Of the<br>state-regulated dams, 33% are deficient. It is estimated that the repair cost for Ohio's<br>deficient dams is approximately \$300 million.  |
| Drinking<br>Water       | D+    | Approximately 90% of O hioans receive water for daily needs from one of the more<br>than 6,000 public water systems. An estimated 99% of the burden for funding public<br>water supply systems is borne by local government. It is estimated that Ohio has<br>\$9.68 billion in drinking water infrastructure needs.  |
| Electricity             | C+    | Electric generation, transmission and distribution systems in Ohio are satisfactory,<br>reliability problems are relatively few, and those that exist are being addressed by<br>system improvements. However, man dates related to alternative energy and<br>environmental protection may pose problems for Ohio's electric utilities in the future.        |
| Parks and<br>Recreation | C-    | Park systems in Ohio provide a crucial economic element in terms of jobs and<br>financial impact. An additional \$26.5 million is needed each year to properly operate<br>the state parks and other divisions, and an additional \$29.9 million annually is needed<br>to eliminate the maintenance backlog over the next 10 to 20 years.                    |
| Railroads               | С     | Railroads provide critical services to industries important to Ohio's economy, hauling<br>rawmaterials, parts, and finished products. Railroads are an important industry,<br>employing more than 8,000 workers and paying approximately \$500 million in wages.<br>ODOT estimated that the cost to improve thirty railroad choke points is \$1.19 billion. |
| Roads                   | D     | With over 125,000 miles of roads, Ohio has one of the largest and most utilized<br>roadway networks in the United States. 43% of Ohio's roads are in critical, poor, or<br>fair condition. It is estimated that by the year 2014, Ohio will have a highway budget<br>shortfall of more than \$10 billion at the state government level alone.               |
| Schools                 | С     | The quality of schools in O hio is crucial to the state's long-term viability and ability to<br>compete in the global marketplace. The American Federation of Teachers estimated<br>in 2008 that O hio schools require \$9.32 billion in infrastructure investment. This ranks<br>Ohio 6 <sup>th</sup> in the country for total funds needed.               |
| Transit                 | D     | An average of 500,000 riders use public transit daily, making Ohio 12 <sup>29</sup> highest in ridership rate in the nation. Ohio ranks 40 <sup>th</sup> in the nation in percentage of state transportation funds expended on public transit. Less than 1% of Ohio's state transportation funds go towards public transit.                                 |
| Wastewater              | C-    | Aging systems discharge billions of gallons of untreated wastewater into U.S. surface<br>waters each year. An estimated 95% of the burden for funding municipal wastewater<br>treatment systems is borne by local government. It is estimated that Ohio has \$11.16<br>billion in wastewater infrastructure needs.  |

# OHIO LEGISLATIVE DAY



Please join the Ohio Society of Professional Engineers, with ASCE Ohio Council of Local Sections as co-sponsor, for the 2013 Ohio Legislative Day. Sessions will be held on pertinent legislative topics affecting the engineering

profession, and visits with your local legislators will occur in the afternoon. Registration is due by March 8. Click <u>HERE</u> for additional information and to register.

#### SCHEDULE

8:00 am Registration & Light Refreshments

9:00am <u>Welcome -</u> Dave Kuhn, PE, President, OSPE Jeff Kennedy, PE, VP of OSPE Legislative & Government Affairs

9:15 am <u>A PE in Politics - What Do You Hope To</u> <u>Accomplish</u> - *Rep. Louis W. Blessing, III, District* 29

9:45 am <u>Turnpike Bond Issue - Panel Discussion</u> Richard Hodges, Executive Director, Ohio Turnpike

#### Commission

Greg Murphy, PE, Chief of Staff, Ohio Department of Transportation

10:45 am 10 Minute Break

10:55 am <u>PE In Responsible Charge</u> Diane Roller, PE Ed Meixner, PE, PS, County Engineer, Ashland County Joe Litvin, PE, PS, F.NSPE, Retired, Montgomery County Engineer

D. Bruce Larcomb, PE, PS, F.SFPE, Consultant

11:55 am <u>Bill Summary Update</u> Jeff Kennedy, PE, VP of OSPE Legislative & Government Affairs

Holly Ross, Legislative Agent, Ohio Society Professional Engineers

12:30 Lunch & Speaker

State Trends on Infrastructure Funding

Aaron Castelo, Director, State & Local Government Relations, ASCE

1:45 pm Legislative Visits

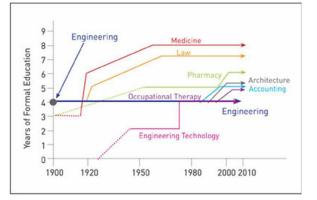
#### **REGION 3 RAISE THE BAR RESOLUTION**

ASCE Region 3, comprised of Ohio, North Dakota, Minnesota, Wisconsin, Michigan, and Illinois, is seeking member input as they draft a resolution in response to ASCE National's "Raise the Bar" initiative. While the resolution is yet to be worded, it will recommend that National either: 1) continue to push Raise the Bar initiatives under the current strategy, 2) continue to push Raise the Bar initiatives under a modified strategy, or, 3) cease pushing the Raise the Bar initiative. Your input will be requested in an upcoming member survey.

ASCE's Raise the Bar initiative seeks to ensure that those who practice engineering as licensed professionals (PEs) in the future have attained the body of knowledge necessary to protect the public health, safety, and welfare.

Since entry into professional practice is regulated by state engineering licensure laws, the Raise the Bar initiative aims to amend state law so that additional education beyond the bachelor's degree – a master's degree or an equivalent 30 credits of graduate or upperlevel undergraduate courses – is required of those who become licensed engineers in the future. A specific record of three or four years of progressive experience would also still be required.

At the beginning of the 1900's, a four-year baccalaureate degree was required to enter the engineering profession- more than for most other learned professions. Learned professions such as medicine, law, pharmacy, architecture, and accounting recognized the exploding body of knowledge in our society and responded to these changes by expanding their formal education requirements beyond a bachelor's de-The engineering profession's gree. requirements have remained unchanged, despite the ever-expanding technical and professional knowledge and skills and the fact that engineering services and engineered products affect the public health, safety, and welfare in all its aspects.





# FREE WEBINAR - MODERN ROUNDABOUTS

- What: Free Continuing Education Webinar - 1.5 PDH
- When: Friday, May 17, 2013 12:00 Noon - 1:30 PM Bring your own lunch
- Where: Franklin County Engineer's Office 970 Dublin Road Columbus, OH 43215
- Topic: Modern Roundabouts The Geometric Aspects
- RSVP: To jpajk@franklincountyengineer.org by Tuesday, May 14, 2013.
- \*Open only to Central Ohio Section Members.
- \*Seating is limited to the first 25 people.

About 65% of all crashes in urban areas and 40% of all crashes in rural areas occur at or near intersections or driveways. Safety improvements at these locations have always been a priority and pose a challenge for most transportation agencies. Because crashes are typically complex events, a variety of mitigation measures have been tried with varying degrees of success, including the modern roundabout. This webinar will focus on the best practices for designing the geometric aspects of roundabouts to maximize the safety of all road users using guidance from the latest publications from FHWA and TRB. Case studies will be used to highlight problems that can result from roundabouts that are not designed in accordance with best practices.



Webinar Outline

- Right of way impacts
- Design parameters affecting capacity
- Relative importance of entry and exit radii
- Geometric design to reduce path overlap
- Addressing potential crash patterns
- Splitter islands
- Truck aprons
- Spacing to adjacent traffic signals
- Sight distance
- Lesson

#### Learning Outcomes/Benefits

- Learn how to design various types of modern roundabouts to maximize capacity
- Understand the key horizontal and vertical geometric design parameters
- Recognize the relationship of geometry to safety and geometry to capacity from a design perspective
- Become more familiar with the latest edition of FHWA's Roundabout Guide (NCHRP 672)
  - Learn best practices for handling pedestrians and bicyclists at modern roundabouts

#### OHIO SCIENCE DAY

ASCE Ohio Council is once again presenting awards for Civil Engineering related projects at the State Science Day here in Columbus. Will you be able to serve as a judge this year? It is a great incentive to the students, rewards their interest in engineering, and encourages them in engineering careers. The Central Ohio Section sponsors one award for which we need to pick first, second, and third place student projects from everyone that applies.

The date is Saturday, May 11, typically from 7:30 am until 12:30 pm.

If you can volunteer to be a judge, please contact <u>newsletter@centralohioasce.org</u> to reserve your spot and obtain more information.

Also, if you know of anyone that would make a good judge, please let them know about this opportunity. We are especially seeking younger engineers or engineering students, and women engineers.

If you would like to see more information about state science day, their website is here: <u>http://www.ohiosci.org/ssd.htm</u>



| 2012-2013 CENTRAL OHIO ASCE MEETINGS    |   |                    |                                   |   |  |  |  |
|---|---|--------------------|-----------------------------------|---|--|--|--|
| Meeting Date                            | Торіс   | Group(s)           | Location                          | Coordinator   |  |  |  |
| Tuesday<br>April 16, 2013<br>Dinner     | OSU/OU Student Chapter &<br>President Elect   | OSU / OU<br>/ ASCE | Ohio<br>University                | Bob Redfield / Dr.<br>Carolyn Merry                         |  |  |  |
| Wednesday<br>April 17, 2013<br>Lunch    | ASCE National President<br>Elect - Randy Over | OSU / OU<br>/ ASCE | The Ohio<br>State<br>University   | Bob Redfield / Dr.<br>Carolyn Merry                         |  |  |  |
| Thursday<br>May 16, 2013<br>Lunch       | Engineers Without Borders<br>(EWB) / Awards   | ASCE               | TBD                               | Coordinator: Dave<br>Pritchard - Awards:<br>Kevin Carpenter |  |  |  |
| T.B.D.<br>June, 2013<br>Dinner          | 2013-2014 Planning Meeting                    | ASCE               | Tommy's<br>Pizza, Dublin,<br>Ohio | Mark Siedelmann<br>(ASCE)                                   |  |  |  |
| Friday<br>June 21, 2013<br>Lunch/Dinner | Annual Golf Outing                            | ASCE               | Darby Creek<br>Golf Club          | Jim Pajk (ASCE)   |  |  |  |

#### ASCE CONTINUING EDUCATION SEMINARS

ASCE Geographic Services is pleased to provide Continuing Education seminars and workshops. These indepth, practice-oriented programs are produced by ASCE's Continuing Education Department.

| Seminar/Workshop  | Date                    | City / State    |
|---|-------------------------|-----------------|
| Structural-Condition Assessment of Existing Structures                              | April 18 - 19, 2013     | Chicago, IL     |
| HEC-HMS Computer Workshop   | May 9 - 10, 2013        | Milwaukee, WI   |
| Pumping Systems Design for Civil Engineers  | May 30 - 31, 2013       | Cincinnati, OH  |
| Load Rating of Highway Bridges  | June 6 - 7, 2013        | Minneapolis, MN |
| Structural-Vibration Analysis: Design and<br>Troubleshooting                        | June 12 - 14, 2013      | Chicago, IL     |
| Introduction to Tunnel Design and Construction                                      | June 19 - 21, 2013      | Chicago, IL     |
| Bridge Rehabilitation   | July 18 - 19, 2013      | Chicago, IL     |
| Project Management  | September 12 - 13, 2013 | Chicago, IL     |
| Seismic Loads for Buildings and Other Structures                                    | September 19 - 20, 2013 | St. Louis, MO   |
| Progressive Collapse Mitigation: Practical Analysis<br>Methods and Proven Solutions | September 26 - 27, 2013 | Chicago, IL     |

#### KEEP UP TO DATE

# BOARD MEETING

Join Our E-Mail List! Stay up to date with current news go to <u>http://centralohioasce.com/e-mail</u>.

Web: <u>www.centralohioasce.com</u> E-Mail: <u>asce@centralohioasce.com</u> Our Next Board Meeting Will Be T.B.D.

Location: T.B.D.

www.centralohioasce.com



# EMPLOYMENT OPPORTUNITIES

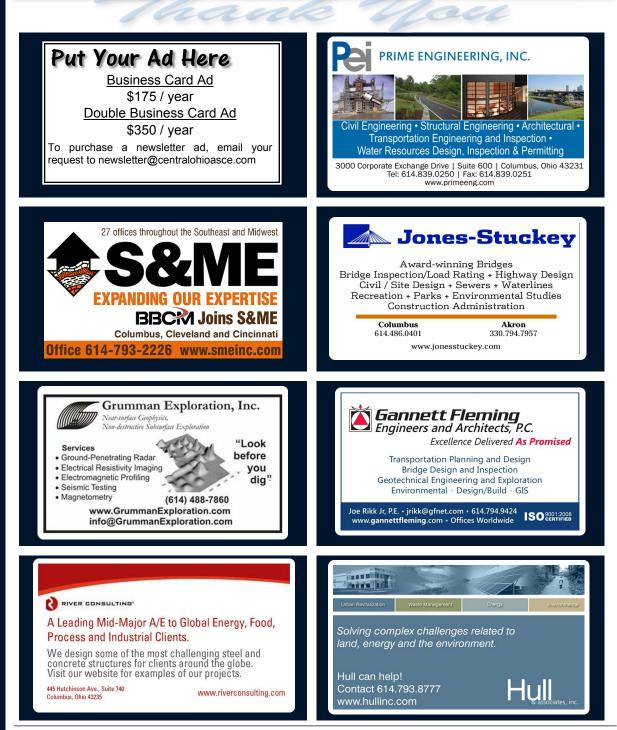
As a service to our members and colleagues who may be seeking employment opportunities, we have provided links directly to *Human Resources* or *Careers* pages on the company website below. Please click any of the company logos to visit the site. We thank the companies below for their support of the Central Ohio Section of ASCE.

The ASCE National website also provides employment assistance with hundreds of job

postings and additional resources. Please click the image to the right to visit the webpage.

| ASCE of civil engineers         |   |  |  |  |  |
|---------------------------------|---|--|--|--|--|
| KNOWLEDGE & LEARN               | NG 📕 LEADERSHIP & MANAGEMENT 📕 ISSUES & ADVOCACY 📕 MEMBERSHIP & COM   | NUNITY   |  |  |  |
| Find a Local Group * Find a     | Technical Group #   |  |  |  |  |
| Kome / Leadeship and Manapement | Canner Resources  |  |  |  |  |
| CE CAREERS                      | JOIN THE ENERGY REVOLUTION  | Get 2 for \$20   |  |  |  |
| Job Seekers                     | NUSCALE   | Bridges 2012 Calendar  |  |  |  |
| Employers                       | SIGN ON WITH NOSCALE  |  |  |  |  |
| Career Resources                | HOME MY ACCOUNT JOBS RESOURCES  | 2012   |  |  |  |
| Coreer Development              | SHIED JOES + HELP. NOT LODGED IN \$200.00   | 100  |  |  |  |
| Salary Survey                   | 0   | From Design Engineer to  |  |  |  |
| Mertorino                       | Search Search   | Hanager in 2012 - You<br>Can Do M  |  |  |  |
| IDVERTISING                     |   |  |  |  |  |
| Print Ad Rates                  | Enter Kaywords Zip Code Search CLEAR  | I have received many<br>questions recently through                                     |  |  |  |
| Web Ad Rates                    | Search job titles only 🔄 Exact match Posted within all active jobs 💌  | the different social media<br>outlets to the effect of. "How                           |  |  |  |
| Job Roard Rates                 | SAVE THIS SEARCH OPEN SAVED SEARCHES ADVANCED SEARCH  | do I go from design enginea<br>to menarotr in my                                       |  |  |  |
| PUBLICATIONS                    | 1 - 12 of 478 Total Result(s) Next Page   | engineering career?" h's a   |  |  |  |
| Engineering Grades              | 1 - 12 ct 4 ru stationellung) held Page Nature by: statekreince discialine level taxe county education  | great question and one that<br>many engineers ask. In my<br>career travels as a design |  |  |  |
| Career Development              | Verv: Multi-line - Single-line Set by: minute- oldest first - newest first  | engineer, and the last few years as an engineering L                                   |  |  |  |
| Education                       |   | Read More1   |  |  |  |
| Civil Engineering Magazine      | Serior Geotechnical Engineer<br>GeoEngineers, Inc - US - D - Boise  |  |  |  |  |
| ASCE News                       | As an ideal candidate, you will possess a degree in Geotechnical Engineering (BS required,<br>MS strongly preferred) and 10+ years related professional geotechnical experience, four years | Jain your peers for more<br>career related informatio                                  |  |  |  |
| Continuing Education            | of which have b<br>Jan-06-2012 - pare job - pmail - more  | and discussions via:   |  |  |  |
|                                 |   |  |  |  |  |

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