

National Capital Section

September 2018 Volume 65, Number 1

Visit ASCE-NCS on the web: http://www.asce-ncs.org

September Section Meeting: Lead Levels in Drinking Water in Flint, Michigan Background, Report of Virginia Tech Investigation and Status

The ASCE-NCS Sustainability Committee is proud to announce that the September 2018 ASCE-NCS Section Dinner Meeting will highlight the topic of "Lead Levels in Drinking Water in Flint, Michigan - Background, Report of Virginia Tech Investigation and Status." Representing the renowned team of researchers led by Marc Edwards, M. ASCE, of Virginia Tech our distinguished guest speaker will be Rebekah Martin, a member of the Flint Water Study Team since their work began in the summer of 2015.

The Flint Water study team was created because LeAnne Walters, a mother living in Flint, MI, in 2014, suddenly found discolored and foul-tasting water spewing from her faucet and began observing alarming rashes on her son after bathing him. Ms. Walters contacted Dr. Marc Edwards, M. ASCE and Charles P. **Lunsford Professor of Environmental** and Water Resources Engineering due to his career experience with lead in water, water treatment and aquatic chemistry including the DC Lead crisis of the early 2000s. In order to answer this mother's questions as well as the concerns of the many other citizens of Flint, Dr. Edwards led his team which put together lead testing kits and sent



Photo from http://flintwaterstudy.org

them to a group of Flint residents who had organized a citizen sampling campaign. Their samples, once analyzed, gave citizens the scientific evidence needed to demonstrate that there was a city-wide water crisis occurring due to the lack of corrosion control in the distributed drinking water.

The aims of the study were fourfold: (a) to support citizen scientists concerned about public health, by empowering Flint residents and stakeholders with independent information about their tap water; (b) To study impacts of water age and current water quality on Flint's water distribution systems as well as issues of elevated lead and opportunistic pathogens in premise plumbing (OPPPs), (c) To summarize findings from (a) and (b) to inform decision making and policy considerations, if necessary, on the part of both citizens and government agencies in the city, (d) To develop a comprehensive online

Please join us on Thursday, September 20, at the Hilton Arlington, 950 North Stafford Street, Arlington, VA, on the second floor in the Gallery Ballrooms. Parking is available at the hotel (\$10), at the Ballston Mall garage (\$1 after 6 pm), and on the street (free after 6 pm). The Hilton is on the same block as the Ballston Station on Metro's Orange and Silver lines. Registration and networking will be from 6-6:45 pm, followed by dinner. The program will end by 8:30 pm. The cost is \$45 for those preregistering, \$25 for Life members, \$10 for students and \$55 for walk-ins, as space allows. One Professional Development Hour is available to attendees. For questions, please contact Emily Dean. Please click here to register by September 13.

Note that no-shows will be charged the full registration fee. We welcome walk-ins, including any registrations made after the guaranteed number of guests is provided to the hotel. However, the cost for walkins is higher because the Section is charged accordingly by the hotel for late registrations.

repository as data and information become available.

continued on page 3



2015: Flint River without Corrosion Control

2016: Detroit Water with Enhanced Corrosion Control



A view into Flint drinking water pipes, showing various types of iron corrosion and rust.

(Min Tang and Kelsey Pieper) from article: https://www.smithsonianmag.com/science-nature/chemical-study-ground-zero-house-flint-water-crisis-180962030/

Photo: ZHU "JOYCE" NI, MIN TANG, PAN JI, MARIAH GNEGY / VIRGINIA TECH from article http://www.michiganradio.org/post/ researchers-say-flint-water-much-improved-city-nearing-end-public-health-crisis

President's Corner

Welcome back! With the fall approaching, it is time to start a new Section year. We had our Annual Planning Meeting for 2018–19 in July, and we are excited for what we have planned for the upcoming year. Our Section meeting in September will include our induction of a new

slate of officers, and just like that, my turn as President will be over. As I bid a fond farewell to my 12 months as President of the National Capital Section, I would like to take the opportunity to reflect on all our Section has accomplished during the last year.

Formation of the Reston Branch -

The most significant change for our Section over the past year was the formation of the first Branch within the National Capital Section in our 100+ year history. The Reston Committee was originally started in July 2016 as an an experiment to prove the value that an added Branch within our Section would create. The Reston Committee elected a Board, published Bylaws, and was formally chartered as a Branch in September 2017. The Reston Branch holds monthly lunchtime professional development meetings in Reston, which provide additional opportunities to engineers who may not be able to regularly attend the evening Section meetings in Arlington. The Branch's meetings and events are a valuable supplement to all of the Section's offerings to serve the local civil engineering community. Branch membership is free, so I encourage our Northern Virginia NCS members to contact ASCE to request to join.



Dream Big Initiative – By now, hopefully most of you are familiar with ASCE's *Dream Big* movie, which was produced to get our K-12 students interested in STEM careers. *Dream Big* has wrapped up a successful run in our local IMAX theaters, but the mission continues. The next step is

to encourage Dream Big to be incorporated into the curriculum of our local schools by providing educational toolkits, which include a copy of the movie and related lesson plans catered to each grade. Thanks to generous donations from our members, a contribution from Section funds, and grants at a Society level, we succeeded in placing a Dream Big educational toolkit in every elementary, middle, and high school in our geographic area! We hope this will help to inspire the next generation of engineers. Dream Big is also available right now on Netflix, so you can watch it with your kids at home.

Education Committee – This past year also brought a renewed energy and sense of purpose to our college outreach. Our Section supports five local universities with ASCE student chapters: George Washington University, George Mason University, Howard University, the University of the District of Columbia, and Catholic University. We increased our communication and cooperation with each university, inviting student leaders from each school to our Board and Section meetings to present their activities. We provided financial and volunteer assistance to Catholic University as they successfully hosted

the Virginias Student Conference, an annual meeting of colleges from Virginia, DC, and West Virginia, which includes activities such as The Steel Bridge and Concrete Canoe Competitions. We had our first Coffee and Connections event, a mixer connecting local students with civil engineering professionals. And as we do every year, we recognized our top students at our Annual Awards Banquet and awarded over \$10,000 in scholarships. Our Section Board recently approved a motion to reimburse Section dues for new graduates that actively participate in Section events during the year. Our goal is to impress upon our students that they are important part of our Section's present and our future.

Bylaws Committee - We have been hard at work updating our Section's Bylaws and Constitution. The Committee is finishing our final draft, and we hope to obtain Board approval and roll the updated documents out to our membership within the next few months. The current versions of these documents have not been updated since 1982! We had discussed tackling this initiative for a number of years and finally determined that it was necessary for an update to coincide with the formation of the Reston Branch. We also felt it was important to modernize these documents to reflect the way our Section should run and to more closely resemble the current sample Section Constitution and Bylaws provided by ASCE.

It has been the honor of my professional life to serve as the National Capital Section President during this continued on page 3

Newsletter

Jim Palmer, Editor

Sumon Chatterjee, Editor-in-Training

October 2018 Issue Deadline: September 21, 2018

To Submit Articles: newsletter@asce-ncs.org

NCS eNewsletter Archives: go to www.asce-ncs.org and view along

the sidebar.

Address Changes: Call 1-800-548-ASCE, e-mail member@asce.org, visit www.asce.org, or write: ASCE – Membership, 1801 Alexander Bell Drive, Reston, VA 20191. Include your membership number.

National Capital Section

Officers (2017–2018)

Brian Barna, President
Emily Dean, Vice President
Piers Causton, Treasurer
Kelly Cronin, Secretary
Jim Palmer, Newsletter Editor
Mike Venezia, YMF President
Vic Crawford, Director
Rachel Schneider, Director
Stuart Crooks, Director

Jeff Tan, Director

Jordan Pitt, Past President
Christian Manalo, Previous Past

Lisa Anderson, Reston Branch President

Committee Chairs

Please refer to the NCS website for a current list of NCS committees and chairs.

September Section Meeting: Lead Levels in Drinking Water in Flint, Michigan

continued from page 1

Ms. Martin's presentation will present background on the DC water crisis, the team's Flint results, and the basics of the science behind the Flint citizen sampling plan and their related research.



About the Speaker
Rebekah Martin is
a PhD student at
Virginia Tech in Civil
Engineering. She
is from Richmond,

Virginia and attended Bucknell University for her undergraduate studies in Civil and Environmental Engineering. She has been a member of the Flint Water Study team since their formal work began in the summer of 2015.

Additional Information

Scientists Now Know Exactly How Lead Got Into Flint's Water (Smithsonian. com): https://www.smithsonianmag.com/science-nature/chemical-study-ground-zero-house-flint-water-crisis-180962030/ ■

The D.C. Report Card 2020 Team is Assembling!

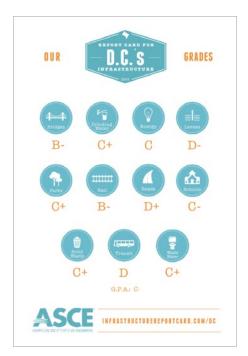
The first D.C. Infrastructure Report Card (DC-IRC) was released on January 14, 2016. The National Capital Section is now assembling the team that will update DC-IRC for release in the first quarter of the year 2020.

As we look to kick off this effort, you have the unique opportunity to be associated with an effort that has high visibility, conducts public outreach, and helps infrastructure owners secure funding.

If you're interested in learning more, visit ASCE's Infrastructure Report Card on the Web and also NCS' D.C. Infrastructure Report Card.

To learn more about how to volunteer for this effort, and for details about how the Report Card updating process works, reach out to Ranjit Sahai via email.

The National Capital Section looks forward to helping you become associated with this vital effort that continues to garner attention nationwide in raising awareness about the state of civil infrastructure and about what it will take to improve its grade. ■



President's Corner, continued

past year. I could not have done any of this without the tireless work of the Board of Directors and all of our other volunteers. My goal was to complete my term as president by leaving the Section in a slightly better state than when I started, and I hope that I succeeded in that endeavor. I have total confidence that our incoming President Emily Dean will push our Section to even greater heights.

She has been a dedicated Section volunteer for almost a decade who has not only held just about every other position on our Board, she has been responsible for organizing our Section meetings and Engineers Week Family Day for several years. I look forward to continuing to serve on the Board as Past President and to strive to make the National Capital Section one of the best sections in the country.

Thanks,

Brian Barna, P.E. ASCE-NCS President

ASCE-NCS Newsletter Patrons



Ethan Grossman Engineering

Interstate Series: Tribute to Eisenhower

By Ranjit S. Sahai, PE, F.ASCE

As one whose professional career is focused on various aspects of highway engineering, I was captivated by the series of watercolor paintings, showcased below, by the artist Elaine Nunnelly. The palette of colors used, the technical mastery of the watercolor medium, the backdrop that evokes emotions one associates with the depicted time of day, and the subject matter showcasing the road and its users, never fails to evoke a smile on my face along with a sense of pride in playing a part in building the civil infrastructure that enables travelers reach their destinations.

The narrative that follows is based on the information I read on Elaine's Website:

Elaine has been working, for the past eleven years on a series of watercolor painting she calls the Interstate

Series. The theme came to her when she was thinking about creating a new series, while traveling on the interstate – and there it was! She often refers to this series of paintings as her tribute to Dwight D. Eisenhower, as it was he who started the interstate system back in

the 1950s. She goes on to say that she hopes that when people see her work they will think, "Wow, I never thought about highways like that!"

About the Author

Ranjit, a Past President (2013–14) of ASCE-NCS, is a principal and founder of RAM Corporation, a firm serving State DOTs with a focus on traffic engineering design, stormwater facility inspections, and IT solu-

inspections, and IT solutions for engineering workflows. He is also an author and speaker.



Artist Elaine Nunnely



Titles of paintings (clockwise from top left): Sharing the Open Road; The Wall that Separates Us; Long Road Home; Gray Sky Overpass; End of the Working Day; S Curve in Purple.

ASCE-NCS Newsletter Patrons

Christopher H. Lester, PE

Associate Vice President
Office Sales Manager

HNTB Corporation

2900 South Quincy Street Suite 600 Arlington, VA 22206 (703) 824-5100 Direct (703) 253-5951 Cell (703) 597-3985 Fax (703) 671-6210 E-mail clester@hntb.com www.hntb.com



The HNTB Companies



Are You an Engineer? The Order of the Engineer

By Phillip Melville, Ph.D, P.E., F. ASCE, Chair of Life Members Forum

Well, if you are reading this little story in a friendly way you might start a discussion as to how to define the word "Engineer" and it is not so easy! Webster, Wikipedia, and many references may bring you to a desire for some order. This was brought up at the very constructive meeting of our Planning group earlier this summer. Your choice: graduating from an approved engineering program or having a State issued proof of registration as an Engineer (does that include a Canadian Provincial one?) or joining an engineering society? The rather funny thing is that we can forget that the name Engineer comes for the Latin INGENIUM (starting with an I and not an E and meaning cleverness, and the Romans had some very clever engineers!).

Some order came in North America under European influence with work for Military Engineers one of the many splits in our profession: if you were not military you were civil as is used today with prestige by the Civil Works of our US Army Corps of Engineers. Further splits came from James Watt for ME and Faraday for EE etc., Aerospace or Computer Engineers may be the last ones? Probably not. Further, we should not forget our friends the railroad engineers or the ups and downs of the elevator engineers? Is this disorder helpful? Two events started to change the picture: 1 - the State registrations in the US which are still limited by the "exemptions" and 2 - the creation by our Canadian colleagues in Toronto of the Order of the Engineer. Following

the concept of the Canadian Order a US Order of the Engineer was created. You are in for life with a one-time nominal fee, with the taking of a ceremonial Oath not very different from our own ASCE ethical requirements at an annual NCS meeting providing that you have met the minimal education requirements (or P.E.) in any recognized branch of engineering. Then the Engineer's Ring is yours to wear on the little finger of the working hand. The ring? It shows that you are an Engineer and proud of it.

This is now under consideration by your Board of Directors, supported by the Forum of Life Members and strongly endorsed by ASCE. We engineers will be in good Order. ■

Section's Scholarship Trust – Your Section Voluntary Contribution

As you may know, our Section's Scholarship Trust annually awards scholarships to high academic civil engineering students at the 5 universities in our Section boundary: Howard University, Catholic University, George Washington University, University of District of Columbia, and George Mason University. We need your help with this effort, and it's easy.

You will be receiving your annual ASCE membership dues request soon. On the form, the block for Section Voluntary Contribution allows you to contribute directly to our NCS

Scholarship Trust. Life Members are encouraged to consider giving at a higher level with their annual renewal since they no longer pay the full dues. Your contribution will have a direct impact on the future of the Civil Engineering profession.

Please be generous in your contribution – no contribution is considered too small.

Other sources of funding for our Trust include: the Past Presidents Annual Contributions, Memorial Contributions, and Corporate Contributions. ■

ASCE-NCS Newsletter Patrons



Robert A. Pronier

www.cardno.com

Senior Vice President / Regional Manager Robert.Pronier@cardno.com 1881 Campus Commons Drive, Suite 103 Reston, VA; **Phone: 703-391-0024**

www.cardnohayneswhaley.com/

Practicing the Art of Structural Engineering

We provide structural engineering services nationwide and internationally for a broad range of projects, including:

- > Commercial
- > Institutional
- > Public

Booz | Allen | Hamilton

Update on Dr. Z's PRO-BONO FE/PE Review Classes for Students and Engineers from the Washington Metro Area

As readers of the NCS eNewsletter know, we are very fortunate to be associated with Dr. Ahmet Zeytinci (known to his UDC students and colleagues as "Dr. Z") of the University of the District of Columbia. For two decades, Dr. Z has been holding free study sessions for the Fundamentals of Engineering (FE) and Professional Engineer (PE) exams, open to all students and young professionals in the NCS area. Dr. Z has also authored a monthly feature in the newsletter, Dr. Z's Corner, since September 2014. (See http://www. asce-ncs.org/index.php/specialfeatures/dr-z-s-corner.) Because of his deep commitment to engineering education and tireless contributions via the newsletter, Dr. Z's program has gained both national and international attention for helping young engineers develop the knowledge and confidence to pass the exams. Additionally, his track record of students passing the exams is impressive.

In the fall, Dr. Z plans to continue his pro-bono review sessions at a new venue: George Mason University (GMU) has agreed to provide facilities for Dr. Z to hold sessions for students from other institutions and practicing engineers in the NCS' region who wish to conquer the FE and PE exams. The sessions will be held on Fridays from 5 to 7:30 p.m. in room 3507 of the Engineering Building, beginning August 31 and continuing through December 14, 2018 (every Friday except the day after Thanksgiving, November 23).



Fall Semester (2018)	CEIE 404.003 CEIE 404.002	Fridays 10:30 am – 1:10 pm Fridays 01:30 am – 4:10 pm
Spring Semester (2019)	CEIE 404.002 CEIE 404.001	Fridays 10:30 am – 1:10 pm Fridays 01:30 am – 4:10 pm

Dr. Z is passionate about engineering education and his dedication to help his students succeed is relentless. He makes sure every student understands the concepts, along with practical and efficient ways to solve typical exam problems. Former students report that he presents complex concepts in such a crystal clear and straight forward manner that they can't believe it's that easy. Further information can be obtained at: azeytinci@udc.edu.

In addition to the pro-bono review sessions, GMU has arranged for Dr. Z to teach two sections of a newly created class during the fall 2018 and spring 2019 semesters. The class, Senior Engineering Competency Exam, will be held as shown below. These sections will be limited to GMU engineering students and alumni.

Further information can be found at: http://civil.gmu.edu/people/ ahmet-zeytinci.

ASCE-NCS Committee and Branch News and Updates



Younger Members ForumBy Haley Carpenter, EIT, YMF Secretary/ Newsletter

Happy Hours. The ASCE-NCS Younger Members Forum (YMF) holds monthly happy hours in Arlington, VA or Washington, D.C. Happy hours are typically held the first Wednesday of each month unless a holiday falls during that week.

The ASCE-NCS YMF held our July Happy Hour at Cantina Bambina at the Wharf, Washington, DC. Approximately 15 members attended the event.





The ASCE-NCS YMF held our August Happy Hour at A-Town Bar and Grill in Arlington, VA. Approximately 15 members attended the event.

Join us for the next upcoming monthly happy hour, taking place on Wednesday, September 12th at Whitlows on Wilson in Arlington, VA. Network with local engineers from the area while enjoying free appetizers and happy hour drink specials, meet new friends and make new connections. We look forward to seeing you!

Stay Connected! Check out photos and stay up-to-date with YMF events by visiting the new YMF Facebook page: http://www.facebook.com/
ASCENationalCapitalYMF. Also, follow us on Twitter (@asce_ncsYMF) at https://twitter.com/asce_ncsYMF.

Get Involved! Are you interested in getting involved with more Younger Members activities? Do you have ideas for social events or volunteering activities? Would you like to be a board member? The ASCE NCS Younger Members Group is always looking for new members! Let us know if you are not already on our mailing list!

If you would like to become more active with the YMF or would like more information on our events, please contact the YMF President (ncsymfpresident@gmail.com).

Education Committee - Collegiate

By Jameelah M. Ingram, PE

College students from across the ASCE National Capital Section (NCS) have arrived back to school for the start of the fall semester. Our section includes students from the Catholic University of America (CUA ASCE), George Mason University (GMU ASCE), George Washington University (GW ASCE), Howard University (HU ASCE), and the University of the District of Columbia (UDC ASCE). Here are two upcoming opportunities for professional members of ASCE NCS to engage with our future leaders this school year. Please find out more below:

Review a Resume. GMU ASCE and the ASCE-NCS Education Committee are hosting a College to Career Workshop, at the Fairfax Campus of George Mason University, located at 4400 University Drive, Fairfax, VA 22030. The workshop will be held on Thursday, October 25, 2018 from 6:00 pm to 8:30 pm. All students and professionals from across ASCE-NCS are invited to sign up to attend. The workshop will feature the following:

- Useful tips to lead students from the networking stages to the first day at a new job
- Appointment-based resume reviews with ASCE NCS Professional Members
- Networking over light refreshments with ASCE NCS students and professionals

Professional Members: To volunteer to review a resume with a student at the workshop, please contact Jameelah Ingram at jameelah.muhammadingram@wsp.com.

Student Members: Please save the date! A link to sign up for a resume review appointment will be provided in future ASCE NCS correspondence.

Attend the Assembly. Region 2 represents ASCE members from Washington, DC, and parts of Northern Virginia, Maryland, Delaware and Pennsylvania. This year, ASCE Members will convene for the annual assembly at George Mason University in Fairfax, Virginia on Saturday, November 17, 2018. The focus of this year's assembly is Leadership and Professional Development. There will be plenty of presentations and activities that foster interaction between ASCE Student Chapters, professors, practitioners, and employers.

Please contact Andres Izquierdo at aizquier@gmu.edu and copy Khaled Alamdeen at kalamdeen@alaengr.com for more information on how to register.

College students within ASCE NCS have also spent their summers quite productively, including the construction of a pedestrian bridge! Please find news from GMU EfID and GMU ASCE members, Omar Azizi and Andrew Simpson below:

Through Engineers for International Development (EfID), a student run organization at George Mason University, GMU students and GMU ASCE members participated in a local bridge building project. EfID focuses on international projects that impact communities around the world, as well as domestic projects to better the local continued on page 8

community. This year, GMU EfID worked with the Potomac Appalachian Trail Club (PATC) to design and build a pedestrian bridge for the 2018 Appalachian Trail Bridge Project. The bridge is located along the Tuscarora Trail (which branches off of the Appalachian Trail) in Toms Brook, VA.

The bridge is a fully timber pedestrian bridge with a concrete foundation. The bridge was constructed with pressure treated southern yellow pine. It consists of four beams, each 32 ft long (30 ft span). The beams were bolted together, glued on site, and hoisted into place using a grip hoist. Students built two wooden formworks, mixed concrete, and poured the concrete foundation on site as well. The bridge was designed in accordance to the 2015 AWC-NDS manual and had 40 psf live load capacity. The PATC approved the student's design and allowed EfID to begin construction. The design process went from January - June 2018, and construction was performed over the course of 4 weekends in June and July. The bridge was completed on July 21st, 2018.

Students were responsible for the entire bridge design and construction, and included: Michael Ambrosio, Omar Azizi, Michael Belay, Paul Cipparone, Anna Close, Mubeen Farukh, Henry Gonzales, John Humpton, Min Lu Kelly-Durham, Sylvia McClain, Farbod Moghaddam, Moudi Moukalled, Sharif Qandour, Cindy Reyes, Jack Scherer, Andrew Simpson, Ieva Sopaite, Stephanie Thomson, Priscilla Tran, and Alex Villamizar.

The team of students was guided by Faculty Adviser Matt Doyle. Practicing engineers and some professionals from ASCE NCS contributed their time to mentor or coordinate with the students as well, including: Lauren Clark, Matt



Doyle, Amy Floren, Jameelah Ingram, Sean Jones, David Lattanzi, Girum Urgessa, and Khatereh Vaghefi.

Reston Branch

By Lisa Anderson, PE, LEED AP, M. ASCE, Reston Branch President

I would like to welcome the new Reston Branch Board of Directors that will finish the 2017–2019 term. Manuel Rosario, previously an At-Large Director, will now serve as the Branch's Treasurer. Mr. Rosario will take over for Ting Shi, who is unable to continue. On behalf of the Reston Branch Board of Directors, I would like to thank Ting for her service to the Branch and to the Reston Committee prior to the Branch formation.

Two willing and very qualified Reston Branch members responded to the open call for nominations to fill the 2 At-Large Director vacancies and were unanimously approved by the Board of Directors. Welcome to Chris Friend and David Vanaman! Shainur Ahsan (Vice President), Matthew Bechtel (Secretary), and myself (President) will continue in our current officer roles.

The next meeting of the Reston Branch will be held on September 11th at ASCE Headquarters in Reston, VA, starting at 11:45 am. Please see the Reston Branch webpage for more information. One PDH will be awarded to attendees.

Geotechnical Executive Committee

September Meeting: Managing Risks to Infrastructure with Real-Time Monitoring of Performance

Construction of new infrastructure and operation of existing infrastructure facilities can create major risks to society and the environment. These risks can include loss of life, major property loss, significant environmental damage, and

disruption of societal interactions and commerce. One effective way to help reduce these risks is to monitor performance with sensors, so that emerging risks can be detected early enough to activate mitigation measures that stop risks from fully developing or mitigate to reduce the impacts.

This presentation will discuss the nature of risk to typical infrastructure facilities and how those risks can be mitigated by using sensors, computers, and the Internet to provide real-time data on the performance of these facilities. Concepts of risk identification and risk management will be described. Approaches to monitor risks with modern technological tools will be presented. Key points will be illustrated with case studies from recent and ongoing projects including some in the Washington, DC area. Some of the challenges presented, by using performance monitoring to help manage risks, will be discussed.

About the Speaker



W. Allen Marr, PhD, PE, DGE, NAE, Geocomp Corporation, Boston, New York, Atlanta, Chicago, Los Angeles.

Dr. Marr founded and

leads Geocomp, one of the foremost providers in USA of real-time, webbased performance monitoring of civil engineering structures, including dams, levees, deep excavations, retaining walls, tunnels, buildings, bridges and utilities. Allen also has extensive experience in testing to measure the mechanical properties of earthen materials, designing earth structures, determining the causes of poor performance of geotechnical structures, developing cost effective remedial measures for troubled projects, and risk management. He is a member of the US National Academy of Engineers and the Moles. He currently serves as the President of the ASCE Academy of GeoProfessionals.

Register Now!

History & Heritage CommitteeField Trip to Government Island

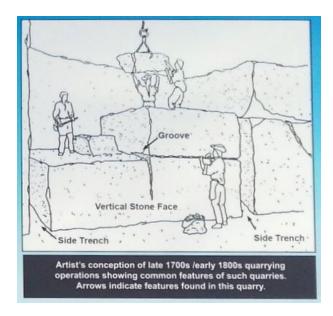
On June 9th the History & Heritage Committee sponsored a field trip tour of Government Island in Stafford VA. Government Island, is a historic 18th and 19th century quarry site that is listed on the National Register of Historic Places. It was purchased in 1791 Pierre Charles L'Enfant and provided Aquia sandstone for the construction of the U.S. Capitol, the White House, and the DC Boundary Stones (photo 1). A group of 14 (photo 2) assembled at the site for a tour led by Dr. Robert (Bob) Kapsch, the former Chief of the National Park Service's Historic American Buildings Survey/Historic American Engineering Record (HABS/

continued on page 9

HAER). Bob gave an introduction and overview of the Island - its history, its quarries, ownership, and what we will see during the walk. Then we were off on the 1.5 mile trail. Along the way we stopped at several locations to hear

about quarrying techniques (photo 3 and 4) and transportation of the stones north to Washington. We also viewed remnants of an old ice house (photo 5) and foundation of other structures that housed workers.

If you are interested in joining our HHC and getting information on future field trips and activities, please contact Bernie Dennis at berniedennis@ mindspring.com.





EMPLOYERS - Do you need Civil Engineers or Technicians? EMPLOYEES - Are you looking for a Civil Engineering or **Technician Position?** Use the NCS "Employment Clearinghouse"

For a number of years, the NCS has sponsored an "Employment Clearinghouse" feature in the monthly NCS newsletter. The intent is to assist public and private organizations in the Washington metropolitan area in obtaining civil engineering employees and engineering technicians, and to apprise the 3,200+ NCS members of employment opportunities.

Firms and public agencies (bona fide employers; employment agencies are not permitted to use the service) who have civil engineering positions available may submit requests using the instructions below. There is no charge for this service. If you have no current need for this service, please keep the information on file for future use, or forward it to your personnel director.

Free Announcements -**Highly Focused Readership**

American Society of Civil Engineers -**National Capital Section Employment Clearinghouse**

Civil engineering or technician "Position Available" announcements, as presented by you via e-mail to newsletter@asce-ncs.org, will be published in the monthly NCS newsletter on a space-available basis and will be posted on the NCS website. The newsletter is published near the first of each month, September through May (excluding December). Deadline for the Clearinghouse information is 4 weeks prior to publication. Each request will be published on a one-time basis; separate

requests must be submitted for each additional insertion. Website postings will be kept on the site for 60 days.

Please note that ASCE policy prohibits discrimination in employment. The Clearinghouse column will include the statement "All employers listed herein are equal opportunity employers."

For a "Position Available" announcement, please present the essentials only; the who, what, where, and when. Ads should be brief (limit to 50 words) and avoid self-laudatory statements. The NCS reserves the right to edit all ads. E-mail submissions are preferred and should include the senders name, title, firm, telephone number, and e-mail address. Send ads to newsletter@ asce-ncs.org. ■

Upcoming Events (Also available on the NCS website under the Events tab.)

September 11

Reston Branch Meeting, 11:45 am, ASCE Headquarters, Reston, VA. See this month's committee update for more information.

September 11

Geotechnical Executive Committee Meeting, 11:45 am, ASCE Headquarters, Reston, VA. Dr. Allen Marr will present on real-time monitoring of infrastructure. See this month's committee update for more information.

September 12

YMF Happy Hour, 6:00-8:00 pm, Whitlow's on Wilson, Arlington, VA. Join younger members from the area for free appetizers and drink specials. Look for an email announcement with more details.

September 20

NCS Section Meeting, 6:30-8:30 pm, Hilton Arlington. Rebekah

Martin will be presenting on the Flint and DC water crises. See this month's featured article for more information.

October 16

NCS Section Meeting, 6:30-8:30 pm, Hilton Arlington. The topic of discussion will be the Purple Line. Look for additional information in next month's newsletter.

October 25

Education Committee Resume Workshop, 6:00–8:30 pm, 4400 University Drive, Fairfax, Virginia. Professional Members: To volunteer to review a resume with a student at the workshop, please contact Jameelah Ingram at jameelah.muhammadingram@wsp.com.

Student Members: Please save the date! A link to sign up for a resume review appointment will be provided in future ASCE NCS correspondence.

See this month's Committee update for more information.

November 13

NCS Section Meeting, 6:30-8:30 pm, Hilton Arlington. A representative of the U.S. Army Corps of Engineers, Headquarters, Engineering & Construction Division will present. Look for additional information in a future month's newsletter.

November 17

Region 2 Assembly, George Mason University, Fairfax, VA. The focus of this year's assembly is Leadership and Professional Development. There will be plenty of presentations and activities that foster interaction between ASCE Student Chapters, professors, practitioners, and employers. Please contact Andres Izquierdo at aizquier@ gmu.edu and copy Khaled Alamdeen at kalamdeen@alaengr.com for more information on how to register.

Employment Clearinghouse

Civil Staff Engineer, **Utility Division**

The Thrasher Group

Fredericksburg, VA, and Other Mid-Atlantic Offices

Salary: Dependent upon qualifications

Job Type: Full time with benefits

Closing date: When Filled

For a complete job listing, click here.

Civil Project Engineer The Thrasher Group

Fredericksburg, VA, and Other Mid-Atlantic Offices

Salary: Dependent upon qualifications

Job Type: Full time with benefits

Closing date: When Filled

For a complete job listing, click here.

The NCS provides the Employment Clearinghouse as a free service to its membership. The Clearinghouse allows members to post short notices for available positions or candidates seeking employment. All employers listed herein are equal opportunity employers. If you have questions, are seeking employment or would like to post a position please contact the newsletter editor and visit our jobs page.