the Green Mountain Civil Report

http://sections.asce.org/vermont

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November 2011

1-800-548-ASCE

## PRESIDENT'S MESSAGE

Our year is off to a great start, with two very interesting dinner meetings. In October, we held a dinner meeting at Norwich University, which was coordinated by John Stevens of our newly formed geo-institute. Our speaker was David Scarpato, PE, Senior Rock Mechanics Engineer of Haley & Aldrich, Inc in Manchester, NH. David gave an excellent presentation on Rockfall Assessments. This is an interesting area of geo-technical engineering that we view everyday on the highways where rock cuts and steep slopes are present. As always, Norwich provided a great venue for our dinner. I was particularly pleased to see a great turn out of students from both Norwich and UVM.

In November we held our annual joint meeting with the New Hampshire Section. Mr. Ken Couture of Green Mountain Power gave a presentation on how a VT-based Power Company is keeping the Power Grid Stable and Sustainable. Green Mountain Power has been recognized as an environmental leader in Vermont and demonstrates its commitment to environmental strength in many ways, from its low-emission power portfolio to its innovative work on reducing carbon in its fleet to encouraging solar development with SolarGMP. GMP is currently building Kingdom Community Wind in Lowell, Vermont. The Company has also come to be recognized for its corporate culture emphasizing speed, efficiency and open communication. The meetings was held at the Hotel Coolidge in White River Junction and was coordinated by the New Hampshire Section.

Our December 8 meeting will be our second annual holiday social, sponsored by our young members committee. George McCain, our young member chair, is coordinating this event. We will be meeting in the basement room of the Farmhouse Tap and Grill on Bank Street in Burlington. Everyone that brings a gift for toys-for-tots will receive a ticket for a free drink. We hope to see you at this fun event and to support a great cause. We will be sending out an announcement in early December.

On February 3, 2012 we will host our annual student ski day at Sugarbush. In addition to great skiing and a pizza lunch for the students, we are adding a ski race this year. We'll have some great prizes for the top finishers. We are looking for corporate sponsors for this event, so if your firm is interested in providing a small donation we'd greatly appreciate it. In exchange for your donation, you can post a company banner and give a short introduction to your firm during lunch. I appreciate Amanda Hanaway-Corrente's efforts in coordinating this event.

Respectfully,

Bernie Gagnon

## 2011/2012 VT ASCE MEETING SCHEDULE

**December 8, 2011**
**Vermont ASCE Holiday Social**
**Topic: Holiday Good Cheer**
**And Toys-for-tots donation**
**Location: Farmhouse Tap and Grill**
**160 Bank St. Burlington**

**February 3, 2012**
**Annual Ski Day**
**Location: Sugarbush**

**February 20-24, 2012**
**E-Week**
**Location: Various**

**March 8, 2012**
**Joint Meeting with Structural Engineers Society of Vermont**
**Location and Topic: TBD**

**April 12, 2012**
**Location and Topic: TBD**

**May 10, 2012**
**Annual Meeting**
**Location and Topic:TBD**

## MESSAGE FROM THE EDITOR

The Green Mountain Civil Report is a monthly newsletter written in collaboration with the Vermont sector of the American Society of Civil Engineers.

Our goal is to keep you informed with the latest news and events in the field. If you have news you would like to share, please contact us with your announcements so we can add them to the upcoming edition.

The newsletter is generally distributed via email. If you would like to receive a hard copy, or you are not receiving the E-Newsletter and would like to, please contact Laura Ripley (Newsletter Editor) at vtascenewsletter@gmail.com or any of the other officers listed at the end of the newsletter.

## VT ASCE REPORT CARD

As part of an initiative started by our past president, Jason Booth, VT ASCE is working on the first of its kind Report Card on Vermont's Infrastructure. This Report Card will follow the format and content of the highly successful National ASCE Report Card on the Nation's infrastructure. The working committee has completed issue briefs for each of the categories being reviewed for the Vermont Report Card and National has commented on the Final drafts. The final drafts have been provided to State agencies for their comment. We expect to release the Final Reports in February at the State Capitol as part of E-week.

## UVM ASCE STUDENT CHAPTER

The UVM ASCE student chapter consists of roughly 30 active student members. Their involvement includes competing in the Concrete Canoe Competition, Steel Bridge Competition, volunteering for Irene relief, and various other fundraisers/volunteer work.

A current project that several students are organizing is an afterschool program for middle schoolers. This is funded through the 4-H Youth Development Organization, and the students hold sessions twice a week. These meetings consist of a short lecture followed by a science experiment, to get the young community members interested in the science and mathematics field.

To find out more about their club and the members, go to http://www.cems.uvm.edu/~asce/.

## Norwich ASCE STUDENT CHAPTER

ASCE Norwich is moving forward with preparation for the Regional Steel Bridge competition as well as Portland Cement Association's Big Beam competition, both this spring. We are planning to hold our 14th annual high school Popsicle Stick Bridge competition at Norwich in late January. We are looking to send several students to the Workshop for Student Leaders, held by ASCE National in Nashville, TN, January 20-21, 2012. Several field trips that have occurred this fall have filled out our activity for the Fall semester.

Norwich ASCE members and senior civil engineering and engineering management students visited the White River Railroad Bridge in late September, after the devastating effects of Hurricane Irene. We met with the engineers on the job and they explained the damage as well as the plan to get this bridge back to serviceable. One of the piers on the three span bridge was undermined and proceeded to drop 6 feet vertical and shift upstream. The sections of the bridge on the pier were only supported on the bearing plate by inches only. Had this span fallen into and blocked the river a larger catastrophe would have certainly ensued. A large capacity crane was placed on a temporary causeway in the river, and was holding the span while temporary shoring could be placed. J. B. McCarthy with VAOT and David Briggs, Norwich graduate and owner of the Hotel Coolidge were instrumental in scheduling this site visit.

The entire civil engineering school at Norwich University travelled to three sites in late October 2011. The first stop was the West Lebanon Interchange, where major work ($20 million) was proceeding on both NH Route 12 and Interstate 89. Here we were met by the head of safety with Audley Construction as he guided us throughout the site explaining several construction details. The second stop was the Carroll Concrete batch plant. Here we toured the facility, and were able to watch several trucks being loaded with concrete in their new high-tech batch plant. Lunch was served at Ramuntos Pizza, and the group proceeded to the White River Junction Railroad Bridge. The bridge was in much better shape then the previous visit, standing on temporary H-Piles. The bridge was open for rail traffic, and the construction crew was clearing the way for the new pier. The new pier will be founded on 6 foot diameter caissons drilled into bed rock. This field trip was in conjunction with the Portland Cement Association and greatly facilitated by Mrs. Femm Singer of Lafarge and Kyle Daniels with VAOT.

## VTASCE FUND RAISERS AND COMMUNITY SERVICE EVENTS – PLEASE HELP SUPPORT YOUR LOCAL SECTION AND YOUR COMMUNITY!

I. **COMPANY DIRECTORY in VTASCE newsletter**
See attached flyer
II. **JOB POSTING in VTASCE newsletter.**
See attached flyer
**III. CELL PHONE DONATION**
Consider donating your old cell phone to the ASCE VT SECTION. We will take your phone and turn it into cash and use it for our ASCE VT Section. Please bring your cell phone to our next meeting.

## UPDATE YOUR CONTACT INFORMATION

The Vermont Section of ASCE depends on its membership to update their member information with ASCE National. Please make sure ASCE has your latest contact information by calling 1-800-548-ASCE (2723)

## ATTENTION VT ASCE MEMBERS

The Vermont Section is looking to fill the Vermont Technical College Practitioner Advisor Position. This position is important to the student chapter and the engineering community. This position provides a link for the students to a world outside of academia. If you are interested in discussing this position please contact Jason Booth at jbooth@aeengineers.com

**ASCE Member Benefits!**

- FedEx discounts
- ASCE Memoirs
- Discounted Life Insurance (Visit the ASCE Website)

## CONTINUING EDUCATION WEBINARS FOR September 2011

*For more information on ASCE's webinars, go to*
*http://www.asce.org/conted/distancelearning/online_webseminars.cfm*

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|---|---|
| Fri Nov 04 | Tractive Force Analysis and Design–Key to Better Self-Cleansing in Gravity Sanitary Sewers |
| Mon Nov 07 | Load and Resistance Factor Design (LRFD) for Geotechnical Engineering Features: Design and Construction of Driven Pile Foundations |
| Tue Nov 08 | Changes to the Nonbuilding Structures Provisions in ASCE 7-10 |
| Tue Nov 08 | Introduction to HEC-GeoRAS Capabilities |
| Wed Nov 09 | Speaking: How to Prepare and Deliver a Convincing Presentation |
| Thu Nov 10 | An Introduction to Highway Safety Data Systems |
| Thu Nov 10 | Design of Buildings for Coastal Flooding |
| Mon Nov 14 | Ethics: The Road All Engineers Must Follow |
| Tue Nov 15 | Building Structures and Sustainability |
| Tue Nov 15 | How Transportation Liability Impacts Civil Engineers |
| Wed Nov 16 | Project Planning: How to Think Through Before You DO |
| Thu Nov 17 | Geometry Pre-Processing in HEC-RAS |
| Fri Nov 18 | Time Management: A Roles and Goals Approach to Life Balance |
| Mon Nov 21 | Strengthening Structural Steel Beams |
| Tue Nov 22 | Renovation of Masonry Facade |
| Tue Nov 22 | Curve Number and Vegetative Techniques to Manage Stormwater Runoff Sustainability |
| Mon Nov 28 | Verification of Computer Calculations by Approximate Methods |
| Tue Nov 29 | Design of Wood Beams and Joists |
| Tue Nov 29 | Access Management: Best Practices |
| Wed Nov 30 | Scope Creep: Focus on Prevention and Improve Project Performance |

## SMARTBRIEF BY ASCE

ASCE SmartBrief is a FREE e-mail news service that summarizes the day's most important news as it relates to civil engineers. Each day, ASCE SmartBrief delivers:

• Links to stories that matter, selected from hundreds of top news sources.
• Summaries of articles relevant to you, handpicked by SmartBrief's editorial staff.
• Wireless functionality for mobile readers.
• The latest information from ASCE.

ASCE SmartBrief is available at no cost to you. Please visit www.smartbrief.com/asce for information on how to sign up.

***A note to professionals/employers:***
***We would like to inform others about your current projects and plans. If you are interested in writing a short segment on your recent work, please contact Laura Ripley at vtascenewsletter@gmail.com for more information.***

# JOB OFFERINGS

**BRIDGE ENGINEER**

A minimum of 5-10 years experience in the evaluation, planning, design, and construction administration of Federal, D.O.T., and municipal bridge projects and programs. Experience with AASHTO, NHDOT, and VTrans standards a plus. P.E. required or ability to obtain. Position available in Nashua, N. H., Randolph or Williston, VT.

Competitive salary; excellent fringe benefit program; ESOP Company.

Visit our website at http.//www.dubois-king.com for more information about advertised positions and DuBois & King, Inc.

Send resume to: DuBois & King, Inc., P.O. Box 339 Randolph, Vermont 05060 Fax: 802.728.4930 Email: rgoodall@dubois-king.com

**-EEO**

## 3) SENIOR MECHANICAL ENGINEER

Responsible for supervision and direction of daily activities of Mechanical Engineering Department of firm's Building Services Division located in Williston, Vermont. Includes project planning, design and AutoCAD drawing, management and inspection phase duties in wide range of mechanical engineering related functions for commercial, industrial, institutional, healthcare, recreational and municipal projects. Project management responsibilities include client relations, project scheduling, budget and contract administration; key participation in developing project workload for Mechanical Engineering Department. PE required. LEED AP preferred. Commissioning a plus.

Competitive salary; excellent fringe benefit program; ESOP Company.

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Send resume to: DuBois & King, Inc.
P.O. Box 339
Randolph, Vermont 05060
Fax: 802.728.4930
Email: rgoodall@dubois-king.com

## 4) SENIOR DAM ENGINEER/PROJECT MANAGER

DuBois & King, Inc., a full service consulting engineering firm is seeking a Senior Dam Engineer / Manager with approximately 5 to 15-years (or more) of experience. This is a full time / full benefits senior engineering position in our busy and growing Dam Engineering Group, which is located in our Randolph, Vermont office.

Duties include (but not limited to) the safety inspection, evaluation, planning, design, plan development, technical specification preparation of contract documents, and construction inspection of dam projects. Technical experience in geotechnical / foundations, structural concrete, earth embankments is required. Related experience in hydrology & hydraulics, permitting, hydroelectric facilities is a plus.

Experience with applicable dam safety design criteria and state / federal regulations, client interaction, meetings, construction cost estimating, AutoCad is desirable. VT / NH P.E. required or able to obtain within 6 to 12-months is required.

Send resume and salary requirements to:

DuBOIS & KING, INC.
28 North Main Street
P.O. Box 339
Randolph, VT 05060
802-728-4930 -Fax
Human.Resources@dubois-king.com
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E.O.E.

## 5) SENIOR PROJECT MANAGER/DEPARTMENT MANAGER

DuBois & King, Inc. is seeking to fill a key a leadership position of a dynamic and growing environmental & water resources team consisting of planners, engineers and scientists in our Randolph office. The position involves the supervision and direction of daily activities of the firm's Environmental Documentation and Natural Resources Department and also for strategic future department planning and positioning.

Key activities within the department include (but not limited to): NEPA, Act 250 and Act 248, local permitting, stormwater analysis, design and management, river restoration, fluvial geomorphology, wetland identification and mitigation, hydrology & hydraulics and much more!

Key position responsibilities include: Project management, client relationships, scheduling, budget and contract administration, staff supervision / mentoring and training, meetings, public presentation and much more!

Professional registrations preferred include one of the following (or a combination); P.E., LEED AP, CFM and AICP. Company leadership opportunities exist for the right person. Competitive salary, excellent fringe benefit program; ESOP Company. EEO

***If your company has any job openings, please submit them to Laura Ripley, VT Section Newsletter Editor at lripley@uvm.edu for a posting.***

# Company Directory

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**JOHN E. LENS, P.E.**
*Principal*

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# VTASCE Newsletter/Website Ad Rate Form

Under the appropriate category, please select the duration that you would like your company's advertisement to be published. For employment ads, please indicate the number of individual employment advertisements you would like to have published.

For employment ads, please submit a Microsoft Word document containing the ad and company logo. For company ads, please submit a business card in PNG or JPEG image format with dimensions of 280 x 160 pixels to ensure the best clarity. Submit ads to Laura Ripley, VT Section Webmaster at vtascenewsletter@gmail.com.

Please make checks payable to **VT-ASCE** and mail along with this sheet to:

Erik Alling
c/o Stantec

**55 Green Mountain Drive**
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|---|---|---|---|---|---|
| ☐ | 1 month | $25.00 | ☐ | 1 month | $35.00 |
| ☐ | 4 months | $80.00 | ☐ | 4 months | $125.00 |
| ☐ | 8 months | $100.00 | ☐ | 8 months | $200.00 |
| ☐ | 1 year | $125.00 | ☐ | 1 year | $350.00 |

Number of Employment Ads Requested = ☐

Totally invoice amount= ☐

Company Ad Rate OR Employment Ad Rate x Number of Employment Ads

Company Name_____
Address_____
Contact Person_____
*E-mail*_____
**Date**_____

**Requested Newsletter Dates: Jan, Feb, Mar, Apr, May, Summer (June-Aug), Sept, Oct. Nov, Dec**
(Please circle.)