

# Alaska Capital Engineers

A branch of the American Society of Civil Engineers

## January 2023 Newsletter

January Presentation:

### ***Haines Beach Road Landslide Geotechnical Investigation***



**Benjamin A. George, P.E., C.E.G., R.G.  
and  
Charles M. Hammond, C.E.G., R.G.**

**Location:**

**RESPEC Main Conference Room  
9109 Mendenhall Mall Rd, STE 4**

**Date: January 25th**

**Time: 12:00 PM**

**Cost: \$20 (includes lunch)**



#### **Speaker Bios:**

Ben has over 18 years of geotechnical and geological engineering experience in the Pacific Northwest including numerous projects in Alaska. He graduated from the Colorado School of Mines in 2002 with a B.Sc. in Geology and Geological Engineering, and in 2004 with a M.Sc. in Geological Engineering. He holds professional engineer licensure in six states, certified engineering geologist licensure in two states and registered/professional geologist licensure in three states. He has spent the majority of his professional career at Cornforth Consultants, Inc./Landslide Technology. He has expertise in slope stability evaluations for both rock and soil, geohazard risk reduction design, and rock cut slope design. As a trained rope access Level II technician from the Society of Professional Rope Access Technicians (SPRAT), he has extensive experience conducting and managing on-slope work efforts for both design and construction of rockfall and rock slope mitigation efforts. He has extensive experience with preparation of plans, specifications, and engineer's estimates along with providing construction observation services. Ben resides in Portland, Oregon with his wife and two boys.

Charlie has over 35 years of engineering geology experience investigating landslide and rockfall hazards and risks, seismic hazards, soil and rock material sources, groundwater and dewatering, soil and rock tunneling, and complex geologic conditions. He has consulted on projects in 16 of the United States and one country in Central West Africa. His landslide specialty work includes detailed interpretation, reconnaissance mapping, geologic and geomorphic assessment, subsurface investigation, modeling, causation analysis and risk assessment of future ground movement. He works on individual landslides and regions of widespread ancient landslide terrain. Mr. Hammond is a registered professional engineering geologist in Oregon and Washington and has a Bachelor of Arts degree in Geology from Whitman College in Walla Walla, Washington, and a Master of Science degree in Geology from New Mexico Institute of Mining and Technology in Socorro, New Mexico. Charlie resides in Portland, Oregon with his wife, dog, and cats, while the kid grew up and moved away.

#### **Presentation Summary:**

The Beach Road Landslide in Haines, Alaska occurred on December 2, 2020 when regional weather produced an 'atmospheric river' that delivered historic precipitation and caused significant snowmelt. Several local, state, and national agencies along with local volunteers responded to the event conducting emergency search and rescue operations, and evaluations of the landslide and adjacent terrain. In February 2021, Landslide Technology (LT) along with prime consultant R&M Consultants, Inc. (R&M) were contracted by the State of Alaska Department of Transportation and Public Facilities (DOT&PF) to conduct geotechnical investigations and analyses.

The LT and R&M team conducted a winter reconnaissance in late February 2021. Results of the reconnaissance along with desktop studies of available information were documented in a Preliminary Findings Report dated April 8, 2021. After the snowpack cleared in 2021, geotechnical investigation and instrumentation tasks were performed. In June over 20 test pits were conducted at road grade and higher elevations within and adjacent the slide extents. In July a reconnaissance was conducted and surface extensometers were installed along an eastern tension crack. An extensive subsurface exploration plan, including 12 borings with depths from 40 to 120 feet, was implemented from July to October 2021. Instrumentation was installed in all borings including vibrating wire piezometers and in-place-inclinometers (MEMS ShapeArray systems from Measurand). All instrumentation was connected to an Automatic Data Acquisition System (ADAS) for remote collection to facilitate periodic evaluation and analysis.

This presentation will delve into the details of the geotechnical investigations, interpretations of the site conditions, and stability analysis; and what it reveals about the potential for additional slope movements.

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# Announcements and More!

## ***EOTY and POTY Nominations***

ASCE is calling for all nominations for the 2022-2023 Engineer of the Year (EOTY) and Project of the Year (POTY).

The deadline is January 31, 2023.

The EOTY award recognizes a Juneau Engineer each year that has demonstrated excellence in engineering within the state of Alaska and the local community.

The POTY award recognizes the project in Alaska each year that best exemplifies outstanding engineering skill through the design, coordination and execution of the construction. Please take a moment to fill out the EOTY nomination form and/or the POTY nomination form for any engineer or project that deserves recognition for all of the hard work this last year! The forms can be found at <https://branches.asce.org/juneau/>

## ***Award and Scholarship Fundraiser Banquet***

This year the Juneau Branch is excited to be hosting our first Award and Scholarship Fundraiser Banquet since 2020 on February 25, 2023.

This year's banquet will recognize the Project of the Year and the Engineer of the Year. It will also serve as an opportunity to raise money for scholarships for local graduating high school seniors and current college students pursuing engineering vocations. We look forward to seeing you there! Please see the attached banquet invitation for more information.

## ***Engineers Week: February 19-25, 2023***

This year's Engineers Week theme—Creating the Future— recognizes the vital role engineers and technicians play in innovating solutions to today's global challenges and asks you to engage K-12 students in engineering.

Engineers play a vital role in innovating solutions to global challenges that impact future generations. By working together to develop new technologies, products and opportunities, engineers create new possibilities that make the world a better place.

Go to <https://discovere.org/engage/engineers-week/> for more information on ways you can volunteer.

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## **APDC Fly-In**

The Alaska Professional Design Council (APDC) is a non-profit corporation that represents the common interests of Alaska's design professionals.

Members include engineers, land surveyors, landscape architects, and interior designers that live and work throughout the state of Alaska. APDC's core purpose since its inception in 1976 has been to bring together the diverse disciplines of the professional design community to represent shared interests.

The cumulative representation includes about 5,000 engineers, landscape architects, land surveyors, and interior designers throughout the state. This includes design professionals in both the private and public sectors.

Every year the APDC hosts a legislative fly-in in Juneau to discuss topics of interest with our legislators and the AELS Board. Those topics typically include professional licensure, funding for capital improvements and maintenance, qualifications-based selection, design code updates, and STEM education.

The member organizations represented within APDC include ASCE, ASID, ASLA, ASPE, ASPLS, ITE, and SEAAK. The 2023 APDC Fly-In will be held in Juneau February 28th – March 2nd.

If you are interested in participating, please contact ASCE's APDC Rep. David Gamez at [d.gamez@lounsburyinc.com](mailto:d.gamez@lounsburyinc.com)

## **Science Fair - Impact Opportunity**

Help Support the Next Generation of Scientists, Engineers, and Mathematicians with the Alaska Science and Engineering Fair  
The Alaska Science and Engineering Fair (ASEF) needs your help! We are looking for volunteers and sponsors to both make the science fair tick and fund our 501(c)3 nonprofit organization. Our state fair is run by an all-volunteer team and funded entirely by Alaskan businesses and individuals committed to inspiring the next generation of STEM students and professionals.

The 2023 fair in March would be ASEF's 68th year bringing together K-12 students – both in-person and virtual – from around Alaska to present their hard work: science projects. ASEF participants learn valuable research, communication, and critical thinking skills while competing for scholarships, special awards, and a chance to compete at the International Science and Engineering Fair held in May each year. ASEF has opened countless doors for thousands of students who have gone on to advance science in college and career - and it's all thanks to our dedicated volunteers and contributors.

Help us continue the science fair tradition for many years to come while supporting the next generation of Alaska's young scientists, engineers, and mathematicians! Sign up to volunteer or sponsor today!

Volunteer: <https://alaskasciencefair.org/teachers-mentors/information-for-volunteers/>

Donate/Sponsor: <https://alaskasciencefair.org/about-asef/sponsor-or-donate/>



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## MATHCOUNTS

After a couple of years of virtual competitions, the MathCounts Southeast AK Chapter Competition will be held in-person once again on February 11, 2023 at the Floyd Dryden Library starting at 9am.

Volunteers are needed to proctor exams, grade exams, and keep time as these middle school Mathletes compete in a Sprint, Target, Team and a Countdown round. The top Mathletes will advance from the Chapter level to the State level competition.

If you are interested in volunteering for the 1-day event, please reach out to one of our officers or email Doug Murray (doug.murray@respec.com).

## ASCE Membership Renewal

The ASCE Membership renewal deadline was the end of 2022. If you missed the deadline you can still visit [www.asce.org](http://www.asce.org) for details on how to join or renewing your membership.

## Current Job Postings

(Visit <https://branches.asce.org/juneau/> for more information)

PND Engineers, Inc - Structural Engineer - Juneau, AK

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RESPEC - Senior Structural Engineer - Juneau, AK

proHNS LLC - Civil Engineer - Juneau, AK

proHNS LLC - Resident Civil Engineer - Haines, AK

CBJ Dock & Harbors - Port Engineer Juneau, AK

## Local Branch Officers:

<b>2022-2023 ALASKA CAPITAL ENGINEERS OFFICERS</b>	
<b>ASCE</b>  President – Micki Minsch, EIT Vice President – Sean Kelly, EIT Treasurer – Chris Bydlon, PE Secretary – Eva Melancon, PE Past President – Janice Wells, PE Emeritus – Mark Sams, PE, SE  <b>Special Committees</b> School Outreach/STEM Coordinator - Please Volunteer Dream Big Coordinator - Please Volunteer	<b>ASPE - Alaska Society Contacts</b>  Past President – Craig Bledsoe, PE President – Jeanne Bowie, PE President Elect – Frank Wuttig, PE Secretary – Leora Houtary, PE Treasurer – Iain McPherson, PE NSPE House of Delegates – Craig Bledsoe, PE Anchorage Chapter Director – Brian Lamson, PE Fairbanks Chapter Director – Vacant Juneau Chapter Director - Darrell Wetherall, PE

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