

ALASKA CAPITAL ENGINEERS

JANUARY 2020



Upcoming Events

January Luncheon

(01/08/2020)

Speaker: Aaron Marsh,

Hecla Greens Creek

Mining Company

Inside This Issue

- 1 Upcoming Events
- 2 Officer Message
- 3 Luncheon Summary
- 4 EOTY & POTY nominations
- 5 Dale Nelson Memorial Fund
- 6 ASCE 2020 Scholarship
- 7-9 Job Postings
- 10 MATHCOUNTS & Dream Big
- 11 ASCE News Brief
- 12 Information Shorts
- 13-14 ACE Sponsors
- 15 Officer Information

December Menu

Catered by Breeze In

\$20 per person

\$10 under 35 years old

Location: AEL&P

Conference Room

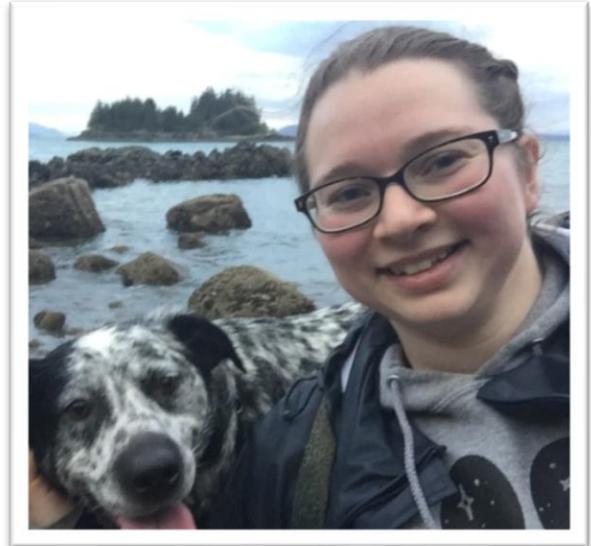
Contact Ethan Roemeling to submit ideas for luncheon speakers:

EthanRoemeling@pdceng.com

ASCE Juneau Treasurer Message

Alaska Capital Engineers,

I hope you had a wonderful holiday season! My name is Janice (Simmons) Wells, ASCE's current Branch Treasurer. I am originally from Valdez, went to college for Civil Engineering at Montana State University, and worked in the Seattle area for three years before returning to Alaska in January 2018. I now work for PDC Engineers in their Structural department. Although I am fairly new to Juneau, I am enjoying everything it has to offer. It has many similarities to Valdez, but a larger population and larger variety of activities and opportunities.



I got married about a month ago to Brett Wells, who works as a Designer for AK DOT&PF Southcoast Region. Between his connections and my involvement, I hope to get to know more of Juneau's engineering community in this New Year!

Also, with the New Year, it is time to start making nominations for Project of the Year (POY) and Engineer of the Year (EOY) for 2019. Please send POY and EOY nominations to events@alaskacapitalengineers.org. The nomination forms can be found on the branch website. The deadline for nominations is January 31, 2020.

Thank you,

Janice Wells

ASCE Juneau Branch Treasurer

January Luncheon

Cognitive Biases in Engineering

BY Aaron Marsh

Wednesday January 8th,

Noon to One

AEL&P Conference Room



Location of Greens Creek Mine. Photo: Hecla-Mining.com

Presentation Summary

Aaron will be presenting on the cognitive biases that influenced the effectiveness of various communication methods employed during construction of the recent Stage 3 Phase 1 (S3P1) expansion of Greens Creek's Tailings facility. The presentation will describe how various project participants were blended into the S3P1 Expansion Team and the communication protocols that were set up to facilitate the design and construction process.

Speaker Biography

Aaron Marsh is a registered Professional Civil Engineer. He obtained BSc. and MSc. degrees in Civil Engineering from Brigham Young University with emphasis on geotechnical engineering. Mr. Marsh joined Hecla's Greens Creek Mining Company in 2017 and currently manages operations for their filtered tailings disposal facility as well as managing other projects focused on maintain and supporting operations. Prior to joining Hecla, Aaron worked for DOWL in their geotechnical and civil practice areas. Before beginning his engineering studies, Aaron was a successful commercial fisherman based out of Petersburg, Alaska.

2019-2020 Call For Nominations

DUE JANUARY 31ST, 2020

It's time to think about our hard-working friends and coworkers and their projects! These awards recognize a Juneau Engineer that has demonstrated excellence in engineering within the state of Alaska and the local community, as well as a project in Alaska that has demonstrated excellence in engineering skill through the design, coordination, and execution of the construction. Please consider nominating an engineer and/or project for this year's awards. Nomination forms are posted on the ASCE Juneau Branch website.

ASCE Alaska Section, Juneau Branch Outstanding Engineer of the Year

Requirements:

- The nominee shall be a Juneau resident, having practiced as a licensed engineer within the state of Alaska for the majority of 2019
- The nominee shall have practiced within the state of Alaska for 3 years

ASCE Alaska Section, Juneau Branch Outstanding Project of the Year

Requirements:

- The project must have been constructed in Alaska, with the majority of the design work having been performed by Juneau engineers
- The project must have been completed and put into service during 2019-2020. Individual phases/segments of multiple-phase projects maybe submitted upon completion of the phase being nominated. Only the phase being nominated must meet these guidelines
- No project or project phase/segment may be re-nominated after receiving an award

Support the Endowment of the Dale Nelson Memorial Civil Engineering Scholarship Fund



Dale Albin Nelson, PE, F.ASCE 14 December 1944 – 01 January 2019

Growing up in Washington, Dale worked at his parents' logging and sawmill business as well as at his grandparents' cattle ranch. Completing his degree in Civil Engineering, Dale realigned his dream and moved to Alaska, where he worked for the U.S. Army Corps of Engineers at Fort Richardson. Soon after, Dale married Elaine, and they were blessed with two children: Garth Nelson, a registered civil engineer, and Lesa Zimnawoda, an environmental scientist.

Committed to strong family values, Dale was a strong role model for Anchorage youth, teaching positive work ethic, compassion, and community involvement, and a stalwart proponent of young engineering professionals, providing powerful mentorship and advocacy. He distinguished himself as an active and influential member of ASCE, assuming leadership responsibility within ASCE beginning in 1971, serving all positions within the Board of Directors of the Anchorage Branch and the Alaska Section, and as a Regional Governor and Director. In October 1999, Dale was elevated to the ASCE Fellow status and he became a life member in 2009. Throughout his career, Dale was admired and well respected by the engineering community he so passionately served.

Dale Nelson Memorial Civil Engineering Scholarship Fund

In his honor and memory, Dale's family established the Dale Nelson Civil Engineering Memorial Scholarship, which is currently gathering funds through the University of Alaska Foundation in a holding account. Current funding has reached \$22,000, and it is hoped that the \$25,000 level needed for an endowed scholarship will be reached soon.

Your Financial Support

If you are able to contribute, you may do so online (<https://engage.alaska.edu/>, select "Other" as designation, and write "Dale Nelson Memorial Scholarship Fund" in the comment section), by check (checks payable to "University of Alaska Foundation" and write "Dale Nelson Memorial Scholarship Fund" in the memo section), or by wire transfer (contact the University of Alaska Foundation at 907-450-8030 or foundation@alaska.edu for details).

Checks may be mailed to:

University of Alaska Foundation
2025 Yukon Drive
PO Box 755080
Fairbanks, AK 99775

University of Alaska Foundation
1815 Bragaw St., Ste.203
Anchorage, AK 99508



Tax ID # 23-7394620

ASCE Juneau Branch 2020 Scholarship Due April 30th, 2020

The American Society of Civil Engineers scholarship is a \$500 - \$1,000 scholarship awarded to students from Juneau Douglas and Thunder Mountain High Schools intending to pursue a degree in an engineering discipline at an accredited college.

Application Information:

Selection will be based on several factors including past educational performance, engineering goals and demonstrated community service participation. \$500 - \$1,000 scholarships may be awarded to one or two students from JDHS and TMHS pursuing engineering degrees

Applications are on the Juneau Branch website and should be submitted **no later than April 30, 2020**

Deputy Port Engineer

Full-Time Position

Position open until filled



This is the first level registered professional engineer (PE) or architect. Work is performed under general direction. Independently performs most assignments with instruction as to the desired outcome. Receives instructions on specific assignment objectives, complex features and possible solutions. Provides professional management of engineering, architectural and construction projects. May lead the work of lower level engineering/architectural staff.

Typical responsibilities include the following:

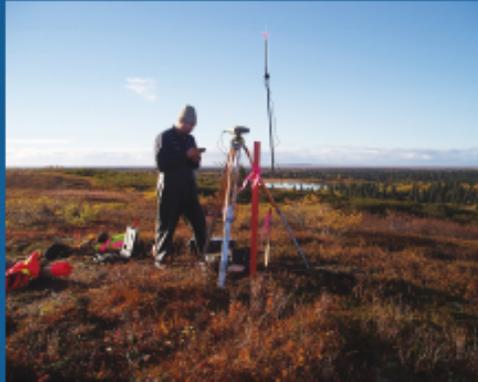
Assists in the preparation of and/or prepares drawings, specifications, cost estimates, reports, contracts and requests for proposals (RFPs); utilizes professional seal where appropriate.

- Provides technical architectural, engineering, and landscape architecture services and/or support for projects that construct new, or renovate or modify existing, CBJ owned or operated facilities.
- Assists with and/or conducts negotiations related to professional service contracts.
- Reviews and/or creates permit applications, including plans and drawings and specifications for compliance with regulatory codes and standards.
- Serves as a CBJ representative for management of multiple planning, design and construction projects.
- Manages and conducts project activities to ensure CBJ's interests are protected.
- Continuously monitors and inspects construction work quality, workmanship, and material selection to ensure compliance with contract documents; identifies deficiencies; recommends corrective actions; coordinates the resolution of issues between parties.
- Issues Stop Work orders, Notices of Defective Work and imposes other contractual mechanisms to contractors not complying with the contract documents.
- Monitors contractor's construction safety program and maintains safe practices for CBJ personnel at the construction site.
- Proposes and implements a dispute resolution program.
- Develops project budgets; provides fiscal control of projects; reviews and approves expenses charged to projects; administers professional design and construction contracts for timely completion; establishes and maintains the financial project records; and assists in financial audits.
- Determines appropriate insurance and bonding limits and amounts for a variety of project types.
- Designs, conducts and manages specialized studies; identifies alternatives and makes recommendations.
- Assesses project needs and hires, or recommends the hire, of qualified staff to provide high quality public service.
- Prepares reports regarding the status of projects.
- Trains other CBJ staff on project management, documentation and CBJ policies and procedures.
- Supervise and direct staff
- Makes oral and written presentations to the Assembly, Docks & Harbor Board, Commissions, Client Department groups and the public.
- Develops and implements departmental policies and procedures.
- Other related duties as assigned.

For more information and directions on how to apply, visit the City and Borough of Juneau Website.



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Submit Resume & Cover Letter to:
Human Resources at jobs@pdceng.com

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All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, or protected veteran status and will not be discriminated against on the basis of disability.

Ongoing Recruitment

We always have room for more talent. If this position isn't the right one for you but you still feel like you'd be a great addition to our team, visit www.PDCENG.com/open-positions and let us know what position you're interested in. We'll make sure your information gets into the right hands.



WWW.PDCENG.COM

Professional Land Surveyor Position Opening

Location: Juneau, Alaska

PDC Engineers is seeking an experienced Professional Land Surveyor to join our full-service engineering team and lead and grow our Southeast Survey Department in Juneau, AK. We design innovative world-class projects utilizing state-of-the-art technologies from five offices throughout Alaska. We offer competitive pay and excellent benefits that includes paid time off (PTO), eight (8) paid holidays/year, healthcare, group life/disability, retirement, education reimbursement and advancement opportunities. PDC is a 100-percent employee-owned company.

The successful candidate will be licensed as a Professional Land Surveyor (PLS) in the state of Alaska. Duties include establishing legal boundaries of properties, subdivision plats, Dept. Of Natural Resources plats (ASLS, ATS, Accretions). This position facilitates work for small to large projects and entails the ability to work on many type of survey works, collaborating with multi-discipline engineering staff, clients, and other invested individuals to review and coordinate findings; interprets survey data and calculates geodetic measurements to determine shapes, positions, and elevations of geomorphic and topographic features. Schedules, assigns, supervises work of survey parties, engages in collection, processing and mapping of survey data. Provides advanced professional, technical, day-to-day support, guidance, and input to staff and other team members. Prepares project submittals to ensure that project budgets are met and reviews each project upon completion for quality assurance.

Qualifications/Skills:

- Registered land surveyor in Alaska
- 5+ years of relevant work experience
- Proficient in Trimble Business Center and AutoCAD with Civil 3D desired
- Experience with GPS equipment, total station instruments, data collectors
- Boundary, control, Bathymetric, and topographic survey experience
- Thorough understanding of the principles, practices, and procedures of land surveying
- In depth knowledge of federal and state laws related to land surveying
- Excellent mathematical skills to conduct land survey analysis
- Strong verbal & written communication skills
- Ability to work on multiple projects concurrently and meet deadlines

Submit your resume to **PDC Engineers, Attn: Human Resources, 6205 Glacier Highway, Juneau, AK 99801** or at jobs@pdceng.com. Open until filled.

Anchorage | Fairbanks | Juneau | Palmer | Soldotna



proHNS is Hiring (Civil Engineer)

Haines, Alaska

This position, based in Haines, AK, will manage a variety of interesting projects and hone your skills in site development, production of construction drawings and specifications, design of utilities, and construction of government-owned facilities. Most of our projects include all aspects of civil engineering design through on-site construction inspection and contract administration. This job requires professionalism, out-of-the-box thinking, open communication, and a willingness to push the limits of one's expertise. For the right candidate, this is a position that allows for putting down lasting roots in Haines while also continuing to grow with proHNS.

Successful candidates will have at least five years of relevant professional experience, a bachelor's degree in civil engineering or related field, and an Alaska Professional Civil Engineer license (or ability to obtain within one year). Preferred skills include proficiency in AutoCAD Civil 3D and other engineering software applications, solid time management skills, and ability to produce accurate, high-quality work under deadline.

We offer competitive pay, paid personal leave, a SIMPLE IRA retirement program, eligibility for annual performance bonuses, a relocation stipend, and more. To learn more about the position, visit www.proHNS.com/careers. Submit your cover letter, resume, and references to solutions@proHNS.com.

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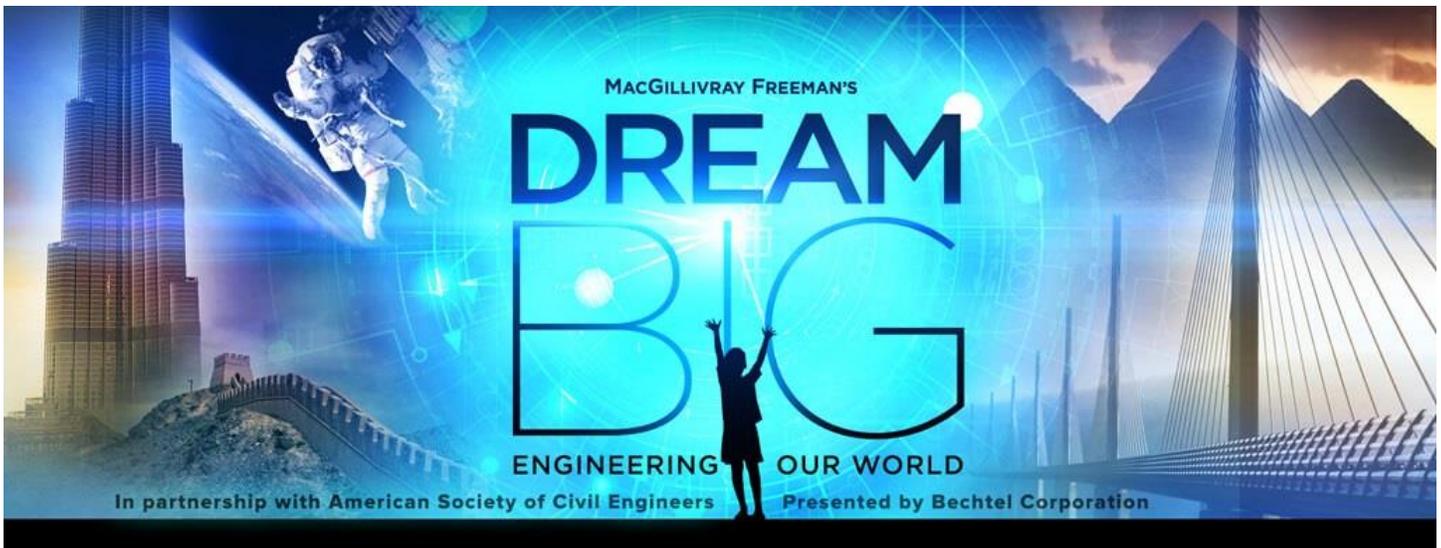


The MATHCOUNTS Foundation is a 501(c)3 non-profit organization that reaches students in grades 6-8 in all US states and territories with extracurricular math programs. More than a quarter million students participate each year.

<https://www.mathcounts.org/>

For information on MATHCOUNTS in Juneau, or to volunteer, contact Doug Murray (dougmurray@pdceng.com)

Members of last year's Southeast regional MATHCOUNTS winning team from Dzantik'i Heeni Middle School. From left: coach Mary Borthwick, Marina Lloyd, Krishna Bathija, Addy Mallott and Edward Hu. (Kevin Gullufsen | Juneau Empire)



All around the world, engineers are pushing the limits of ingenuity and innovation in unexpected, imaginative, and amazing ways. Dream Big: Engineering Our World, a giant-screen film about engineering, takes viewers on a journey of discovery from the world's tallest building to a bridge higher than the clouds. Along the way, the audiences witness how today's engineers are shaping the world of tomorrow.

[Available on Netflix](#)

ASCE News Brief



Celebrating the Civil Engineering Project That Transformed the Country

BY Ben Walpole
April 25, 2019

The Transcontinental Railroad Turned 150 years old in 2019

The Transcontinental Railroad, one of the great infrastructure triumphs in U.S. history, turns 150 years old May 10.

The ASCE History and Heritage Committee is celebrating with the [Golden Spike 150th Anniversary history symposia](#), May 5-6, in Sacramento, CA.

Among the speakers is renowned civil engineering historian and ASCE Distinguished Member Raymond Paul Giroux, whose previous lectures highlighted such landmark projects as the Golden Gate Bridge, Panama Canal, Brooklyn Bridge, Hoover Dam, Grand Coulee Dam, and the Eads Bridge. His talk, "The Bridges, Tunnels, and Track of the Transcontinental Railroad," will outline why he thinks the railroad is even more remarkable, even more forward-thinking than most civil engineers already realize.

Giroux talked with *ASCE News* about the civil engineering project that united the country.

ASCE News: What's something you've learned that maybe surprised you in doing research for your Transcontinental Railroad lecture?

Paul Giroux: When many people learn about the Transcontinental Railroad, there is usually some casual understanding of the complexity of effort required to plan the route. I do not feel that most published historical accounts of the route planning really do it justice.

The variables that dictated a good railroad track system and alignment were complex, with infinite possible options to evaluate. Indeed, civil engineers led the way, exploring and surveying the potential routes.

[Read More >>>](#)

Professional Development Hours

The ASCE Juneau Branch will provide electronic continuing education development hour certificates for those who are interested in tracking development hours received by attending the Alaska Capital Engineers Luncheons to hear speakers present on engineering topics. Certificates can be found on the branch webpage: <http://branches.asce.org/juneau/>

ASCE Juneau Branch Website

Bookmark this website for easy access to the events calendar, PDH certificates, new and archived newsletters, contact information and much more:

<http://branches.asce.org/Juneau/>

For questions or concerns regarding the Juneau Branch ASCE website, please contact Ethan Roemeling.

AccessEngineering

Developed in partnership with McGraw-Hill Education, ASCE members now have FREE and unlimited usage of this award-winning engineering reference tool:

www.asce.org/AccessEngineering



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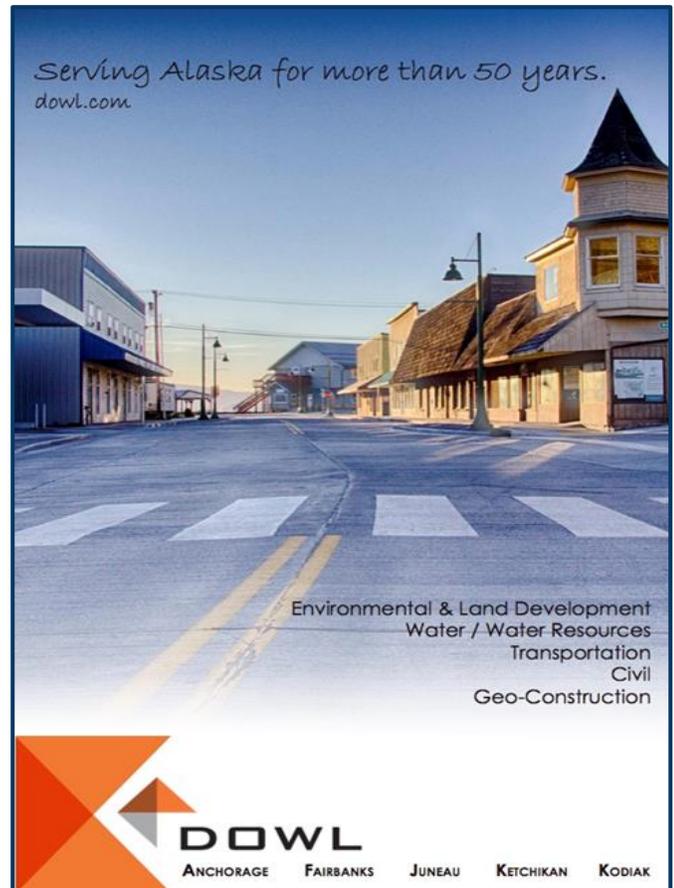
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Membership and Renewal

Thank you for your continued membership and support for ASCE and NSPE. Our professional organizations provide a great opportunity to network with other members of the engineering profession. Select the links below for society membership information.

[ASCE Membership Information](#)

[NSPE Membership Information](#)

2019-2020 Alaska Capital Engineers Officers

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President – Ethan Roemeling, EIT

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Emeritus – Naomi Hobbs, PE

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School Outreach/STEM Coordinator - Please Volunteer

Dream Big Coordinator - Please Volunteer

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