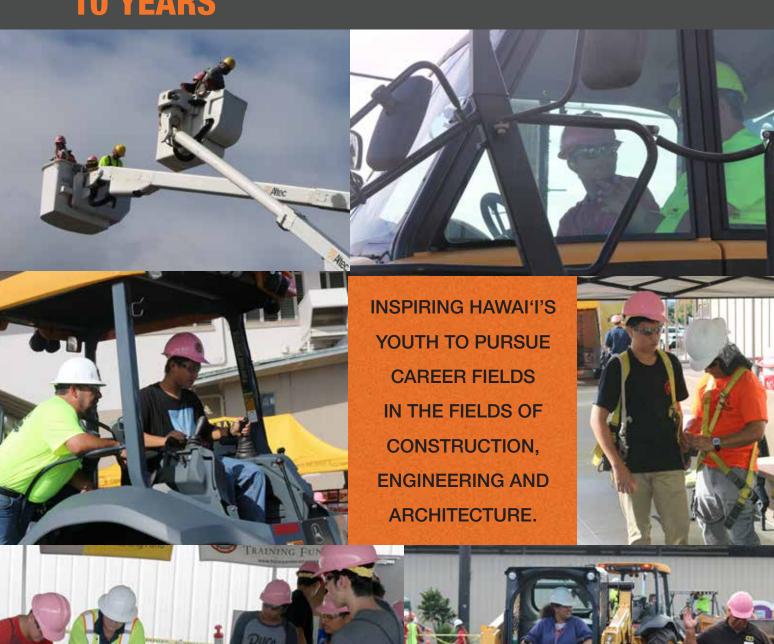


O HAWAI'I CONSTRUCTION CAREER DAYS

10 YEARS











2016 HAWAII CONSTRUCTION CAREER DAYS October 27 and 28, 2016 — 8:30 a.m.- 1:00 p.m.

Aloha Stadium

99-500 Salt Lake Boulevard Honolulu, HI 96818

AGENDA

8:30a.m. to 9:15a.m.

Registration

9:15a.m. to 10:30 a.m.

Session One

Group A: Heavy Equipment Group B: Construction Trades Educational Exhibitors

10:30 a.m. to 10:40 a.m.

Passing Time

10:40 a.m. to 11:55 a.m.

Session Two

Group B: Heavy Equipment Group A: Construction Trades Educational Exhibitors

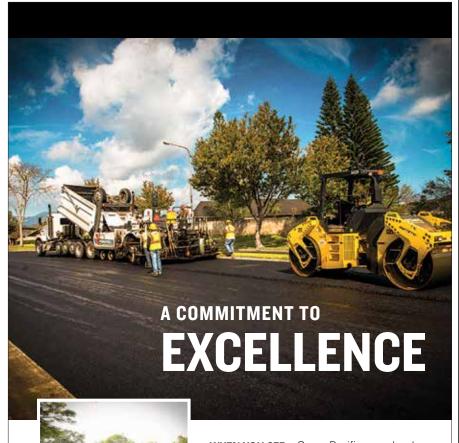
11:55 a.m. to 12:00 p.m. Passing Time

12:00 p.m. to 1:00 p.m. Box Lunch

1:00 p.m. Return to School







WHEN YOU SEE a Grace Pacific crew hard at work, you know that stretch of roadway is improving. The ride will be smoother, the neighborhood more attractive, and the work will be of the highest quality.

In everything we do, we are constantly looking for new and innovative ways to improve our products and processes. Why?

Because at Grace Pacific, we are committed to excellence.











Messages from our Hawai'i Officials



Special Message from Governor David Y. Ige

2016 Construction Career Days Welcome Message

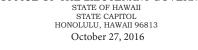


It is my pleasure to welcome you to the 10th annual Construction Career Days event.

I hope you'll operate heavy equipment, use specialized tools, and participate in a variety of other activities to find out what it's like to be on a construction site. I encourage you to ask questions of the professionals who are here to help you explore the wide variety of career opportunities in the construction industry. You might find a fit that's just right for you.

For the past decade the State of Hawai'i has been proud to co-sponsor this event. Mahalo nui loa to the dedicated committee members, sponsors, participants, local businesses, the Hawai'i Department of Transportation and all those who have contributed to the success of this exceptional experience. Best wishes for a successful event.

OFFICE OF THE LIEUTENANT GOVERNOR STATE OF HAWAII STATE CAPITOL HONOLULU, HAWAII 96813







On behalf of the people of the State of Hawaii, I extend a warm aloha and welcome to all the attendees and supporters of the 10th Annual Hawaii Construction Career Days held at the Aloha Stadium.

The construction industry has been part of Hawaii's history for more than a hundred years. Everywhere you look, whether it's Hawaii's roads and highways, the schools you've attended, or the home you live in, the construction industry has had a hand in the planning and development of our great State.

Hawaii Construction Career Days is an outstanding two-day event that provides more than a thousand students opportunities to interact with industry professionals, get hands-on experience with heavy equipment and learn about the myriad of career options available in the construction industry. I encourage all the students to participate in the different activities.

I'd like to extend a special mahalo to honorary event chair Clay Asato, General Contractors Association of Hawaii President and Koga Engineering President, and to the committee members, sponsors, participants, local businesses and all of those who have contributed to the success of Hawaii Construction Career Days. It is my pleasure to wish you much aloha on this very important educational event.

SHAN S. TSUTSUI

Lieutenant Governor, State of Hawaii

MESSAGE FROM MAYOR KIRK CALDWELL

City and County of Honolulu





It gives me great pleasure to send my warmest aloha to everyone gathered at Aloha Stadium for the 10th annual Hawai'i Construction Career Days event. Construction activities affect nearly every aspect of our economy, and it is incumbent on our community to inspire Hawai'i's youth to pursue careers in the fields of construction, engineering and architecture. These future leaders will help to keep Hawai'i's construction industry thriving and strong.

To the high school and college students attending this two-day event, congratulations on taking advantage of this opportunity to explore career and educational opportunities. By taking part in the hands-on activities and visiting with industry representatives, you can discover what a career in construction might look like, and then decide if it's right for your future.

Mahalo to the event organizers and participants, including many industry representatives, University of Hawai'i College of Engineering and School of Architecture, Honolulu Community College, and State of Hawai'i Department of Transportation. This event provides an opportunity for talented young people to gain insight into the multi-faceted construction industry.

On behalf of the people of the City and County of Honolulu, I extend best wishes for an interesting and productive event, and continued success of this important program.





Chairman's Message



Aloha Students,

Welcome to the 10th Annual **Construction Career Days** event at Aloha Stadium!



The construction industry is full of exciting and fulfilling professions. Each project is unique in its own way and those involved are able to see physical evidence of progress as construction begins. Imagine driving over a bridge or roadway

years after completion or entering a building or high rise knowing that you were a part of the construction team. It will be fulfilling to know that you helped improve the lives of the community and made our roadways safer.

A career in construction provides a wide range of opportunities. Architecture, engineering, project management, and the various construction trades are some of the professions involved. In addition, there are also business specialists, computer experts, and professionals in safety and quality control.

Today, the interactive exhibits will help you to experience some of the skills required in this industry and realize how technology is becoming increasingly important. In addition, there are professionals and educators in architecture, engineering, project management, and government agencies who will be available to help you to understand the design, planning, and coordination aspects of construction.

I hope you take full advantage of the event and explore the many employment opportunities that construction has to offer. I would also like to acknowledge and thank all volunteers and sponsors that help to make this event a success.

On behalf of the General Contractors Association of Hawaii, we wish you much success as you pursue your future goals and hope that a career in this challenging and rewarding profession is in your future.



President, General Contractors Association of Hawaii Honorary Chair, 2016 Hawaii Construction Career Days



President's Message



Aloha and Welcome to Construction Career Day!

This year's event is very special because it is our 10th anniversary! We are so excited that you are here. Today will be filled with many activities for you to do. You'll get to operate heavy equipment, try out a crane simulator, and learn about many different jobs from the exhibitors and

construction trade representatives. We are expecting more than 1,500 students, teachers and counselors to participate and learn about careers in the construction industry.

Construction Career Day is more than just a field trip and a "free day" away from school. And it's definitely more than a "free lunch." Today you will get to learn and observe that careers in the construction industry have many different paths. Some jobs are waiting for

you after high school, while others require a college degree. If you are taking STEM classes, you will find that what you learn in school will lay the foundation for professional careers in the construction industry such as engineering, architecture, accounting and construction management.

While walking through the heavy equipment and exhibitor/trades areas today, you will meet many industry professionals that are passionate about what they do and find their jobs rewarding. They make good money, have great benefits and can utilize their skills anywhere life takes them. One day this will be you. It all starts here at Construction Career Day.

Enjoy your visit and good luck in your future endeavors!

Melanie M. Martin

Melanie M. Martin, President Hawaii Construction Career Days

Board Members

Melanie Martin, President

Hawaii Department of Transportation

Darlean Kiyokane, Vice President

BF Tile, Inc.

Michael Barros, Secretary

Hawaii Department of Education

Lawrence Ono, Treasurer

Ono & Chen CPAs LLC

Dale Sakamoto Yoneda, Board Member

S & M Sakamoto, Inc.

Guy Shibayama, Board Member

Honolulu Community College

Cheryl Walthall, Board Member

Pacific Resource Partnership

Leslie Isemoto, Board Member

Isemoto Contracting Co., Ltd.

Planning Committee Members

BF Tile, Inc.

Clarity Printing

General Contractors Association of Hawaii

Hawaii Carpenters Apprenticeship & Training Fund

Hawaii Department of Education

Hawaii Department of Labor & Industrial Relations

Hawaii Department of Transportation

Hawaii Sheet Metal Workers

Honolulu Community College - Apprenticeship Program

Honolulu Community College - Construction Academy

International Brotherhood of Electrical Workers Local 1186

National Association of Women in Construction

Ono & Chen CPAs LLC

Pacific Resource Partnership

Paul's Electric

Roofers Union

S & M Sakamoto, Inc.

Sunbelt Rentals

University of Hawaii College of Engineering

Editorial Staff

Jason Soeda

Graphic Design

Production Coordinator Studio 78 Design **Clarity Printing LLC**





GILILAMS @ KEALIKAHA FIFMENTARY SCHOOL



LSL WALL PANELS @ HOSPICE, KAMUELA



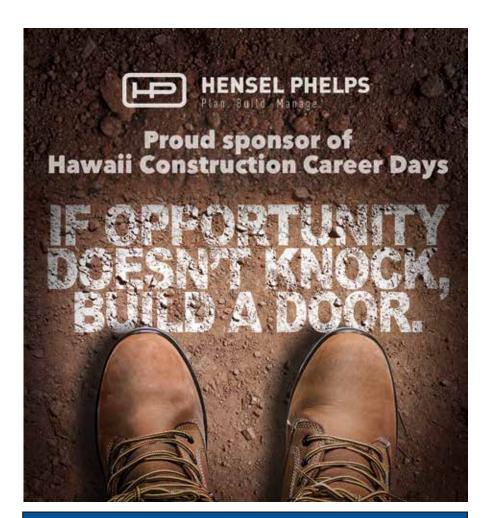
FROM YOUR FOUNDATION

TO YOUR ROOF & EVERYTHING IN BETWEEN, WE'LL HELP YOU BUILD BETTER



FOR STATEWIDE SERVICE

CALL US TOLL FREE 1-877-841-7633 OR VISIT US ONLINE AT HPMHAWAII.COM





Supporting Hawaii's Construction Industry

Matson

Q & A — Developers with Jason Soeda

Tracy Tonaki Senior Vice President of Development D.R. Horton Hawaii





Q: How long have you worked with D.R. Horton? How did your construction career begin?

A: I began designing D.R. Horton homes in Hawaii as an architect with KY International Inc., a Hawaii-based architecture firm specializing in residential and resort development design. In 2003, I joined D.R. Horton Hawaii as the director of design and today, I am the senior vice president of development responsible for overall development operations. As an architect for 10 years prior to joining D.R. Horton Hawaii, I worked and coordinated closely with contractors on the build out of design projects. That experience was a natural segue into working for a development and home building company.

Q: When did you realize that construction was the right choice for you?

A: I credit my dad, Gerard Sakamoto of S & M Sakamoto, for encouraging me to explore an education and career in architecture. As an engineer and second-generation contractor, my dad understood the value of working in the construction industry. He exposed me to various fields of related studies where I ultimately focused on a degree in architecture. I have been extremely lucky to work with contractors as an architect and now in my capacity at a development company.

Q: What are your various duties at D.R. Horton?

A: As senior vice president of development, I oversee all aspects of our development operations in Hawaii, including planning, design, purchasing, contracts and land development. Every day I work closely with a talented team of architects, project managers and engineers, as well as our construction, sales, customer

service, finance and legal teams to create quality homeownership opportunities for Hawaii's families.

Q: What are some of the benefits or positive aspects of working in this field?

A: Being a part of the process to develop and build much-needed affordable homes for Hawaii's homebuyers, many of whom are first-time buyers, is extremely rewarding. Many people are involved in a myriad of steps to coordinate and collaborate, all contributing to fulfilling homeownership dreams of Hawaii's working families. It is truly humbling to be a part of this amazing process.

Q: What are the various occupations available in construction?

A: As a developer and home builder, D.R. Horton offers a wide variety of career opportunities in acquisitions, planning/design, purchasing/contract management, construction, sales/marketing, finance, and customer and mortgage services. We have a diverse range of expertise on our team that collaboratively works together to develop homes and communities for the people of Hawaii.

Q: What advice would you give to young people who are trying to land their first job?

A: I feel it is important to contribute in anything you do. As I share with my son and daughter, whether it is at school, at home, at the office or in the community, we should all make a concerted effort to contribute positively with our time, energy, expertise or resources. Our efforts, small or large, add up to amazing things when we all contribute collectively.



Q&A — Developers continued

Q: What are some exciting projects that D.R. Horton is working on (or recently completed) that you are especially proud of?

A: There are two developments that D.R. Horton Hawaii is very excited about. The first is our master-planned community

of Mehana in Kapolei where we are completing the final development project. We began planning and designing the first neighborhood at Mehana in 2005 with construction beginning in 2007. At full build out, Mehana will be home to over 1,100 families who will enjoy community amenities such as a

pool, recreation center, dog park, tot lot, trike park, county park, restaurants, physicians' offices and convenience stores. In addition, Mehana is home to the newest DOE elementary school, Ho'okele Elementary, where residents can walk and ride their bikes to school on wide multi-modal pathways.

Another exciting project we are planning is Hoʻopili, a mixed-use, master-planned community that is slated to add approximately 11,750 affordable and workforce homes in West Oʻahu. We are also planning for commercial activity including various businesses, industrial facilities, retail shops and restaurants, as well as parks and gathering places and 200-plus acres of commercial farms and community gardens. Hoʻopili is planned to be home to five new DOE schools and is planned to offer various transportation options such as walking, biking and public transit, including three rail transit stations.

Q: How long has D.R. Horton been involved in Hawaii Construction Career Day? And why is it important for our industry to support this unique event?

A: D.R. Horton Hawaii has been a proud supporter of Hawaii Construction Career Day for the past three years. We believe that developing and growing a qualified and sustainable construction community is a process that begins with Hawaii's youth. Hawaii Construction Career Day is a wonderful opportunity for high school students and organizations from the construction industry to come together and interact in a productive and meaningful way.



THE CONSTRUCTION ACADEMY AT YOUR SCHOOL PREPARES YOU FOR A FUTURE IN THE CONSTRUCTION INDUSTRY

- Hands-on classes teach you real skills that lasts a lifetime
- · Industry professionals give you real-life training
- You'll be ready to start an apprenticeship program or career in construction



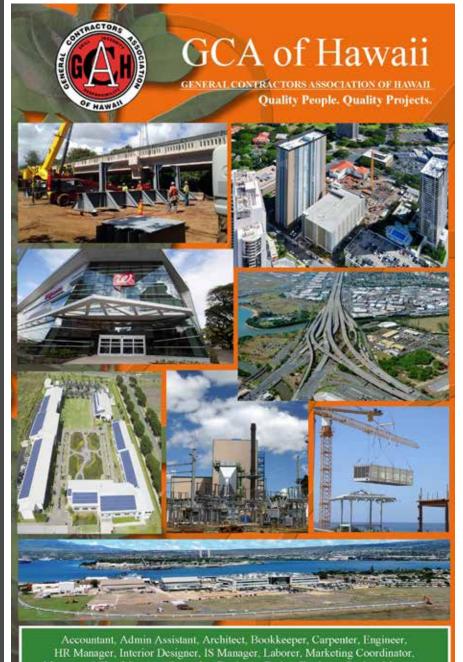












Masonry, Office Manager, Operating Engineer, Project Engineer, Project Manager, Purchasing Agent, Quality Control Manager, Risk Manager, Safety Director, Sales Representative, Site Safety & Health Officer







Q & A — Engineers with Jason Soeda

Janell Kent
Estimator
Jayar Construction, Inc.





Q: How did you get your start in the construction industry? How long have you been working for Jayar Construction?

A: I have been around construction my entire life. My dad started Jayar Construction a year before I was born so it truly has always been a part of my life. As soon as I could, I started working at Jayar during summers in high school. I started filing invoices and eventually learned how to do estimating takeoffs. After graduating from college in 2011, I began working full-time as an estimator.

Q: When did you realize that construction was the right field for you?

A: Construction runs in the family. My grandpa, Clifford Nohara, worked for the City and County of Honolulu from the 1950s and retired as chief of traffic engineering in 1978. Growing up, I remember always admiring a poster in my grandparents' house with grandpa drawn as a caricature with a Mickey Mouse logo on his hardhat. This poster, along with a resolution congratulating him on a fine career, was presented to him for his many years of service. He must have inspired my dad, Rodney Nohara, and Uncle Glenn Nohara who also turned to construction after college. My brother and I followed in their footsteps and pursued our engineering degrees as well. On my first day of college, I noticed only a handful of other females in my classes, but I did not let that deter or discourage me from participating in class. If anything, being a female engineer is empowering! You belong there. Join groups on campus that will help you flourish like the Society of Women Engineers (SWE) or national societies in whatever field you are pursuing. Likewise, there aren't too many females in construction, and you may face a few challenges, but overcoming those challenges will just make you stronger.

Q: What exactly do engineers do? How do individuals from various engineering fields contribute to a project team?

A: There are multiple branches of engineering and even more career paths. If you want, you can choose to be a design engineer. Design engineers work with the architect to build a set of construction documents. Most project plans are the culmination of the efforts of various design engineers (civil, mechanical, structural and electrical to name a few). The plans are put out to bid and estimators in the various disciplines will figure out how much it would cost their company to complete their work on the project. Once a company is awarded the project, the company's project engineer takes over. A few of their responsibilities include making sure everything gets done according to the design engineer's plan, within the estimator's budget, and per the project schedule. Project engineers need to coordinate and communicate with their company's tradesmen, other trades, the general contractor, OSHA (Occupational Safety and Health Administration), the City and County of Honolulu, etc. As you can see, many people are involved in the success of any project. It is truly a team effort.

Q: In your opinion, what are the benefits of working in this industry, particularly the engineering field?

A: Seeing a project grow into fruition from planning and development to reality is truly remarkable. So many innovative and exciting projects are worked on every day. At the same time, rehabilitation and maintenance are necessary to have a functional society. The product of construction is everywhere; roads, sidewalks, public parks, homes and offices all contribute to our everyday lives. It is exciting to be a part of that.



Q&A — Engineers continued

- Q: How should young people prepare for a career in engineering? What classes are crucial for these students?
- A: If you have a passion for math and science, you should consider a career in engineering. Engineering opens up a wide array of opportunities for graduates. Construction is just one of them! If you like knowing how things are made or how things work, engineering would be a great degree choice for you. Most engineers, no matter what discipline, will take calculus, physics, statistics, dynamics and maybe some sort of computer programming course in college.
- Q: In your personal observations, do you feel that local schools are doing enough to encourage girls and young women to become interested in math, science, and engineering?
- A: I am not too familiar with what local schools are doing, but I have heard about STEM-related events from my coworkers who have children. I think getting involved in these activities at a young age is very important. Join your schools robotics team or work on projects on your own at home! In college, I took a semester class with Iridescent. a science education non-profit. We would teach engineering concepts in a fun kid friendly way
- to elementary and middle school students and their parents in the neighborhood. It was important to emphasize that they could continue their learning and experimentation at home. What a great way to encourage STEM and also have some quality family time. Also, one of my coworker's kids attended an event put on by the Society of Women Engineers at UH Manoa. Their event, 'Wow! That's Engineering' is geared toward middle school girls and introduces engineering concepts through hands-on activities. This is an annual event so look out for it on their Web site.
- Q: In your experience, how important was formal education versus real world, get-yourhands-dirty experience?
- A: I think formal education was important to develop a solid foundation of engineering concepts. It is important to understand the theory behind design and construction. However, hands-on, real-life experience is simply irreplaceable. So much is learned in the field and office that cannot be taught in a classroom. In my opinion, both are imperative. Young engineers must be sure to learn from their coworkers who have field experience. Do not think you know better because you have a college degree. If someone in the field is willing to share their experiences with me, I am always ready to soak up their knowledge like a sponge.

FHB.COM

Building a better future.

As a major partner in the local construction industry, we're proud to support Hawaii Construction Career Days and the opportunities it provides our youth.







Q: Is there a project handled by Jayar Construction that you are especially proud of?

A: One of the projects that I am proud of being a part of is the Sullivan Center at 'Iolani School. 'Iolani is my alma mater and I am so excited that the current students have such an amazing facility at their disposal. The Sullivan Center encourages handson learning and gives students real-life exposure through various venues. Particularly exciting to me is the robotics and laser cutting laboratory. I wish I was still a student there!

Q: Why is it important for our industry to support Hawaii Construction Career Days?

A: Hawaii Construction Career Day is a wonderful event that exposes young people to construction. It's important to show what construction is all about so students can decide on their future career path. Jayar has supported Hawaii Construction Career Days from the beginning and we appreciate all they do to help young students today.



HAWAII OPERATING ENGINEERS INDUSTRY STABILIZATION FUND



It is our intention, by assuring compliance with the law, to create an atmosphere of fair, competitive and safe contracting for the benefit of the entire construction industry.

Uniting our strengths and working together for a better tomorrow

Best wishes to all of the participants from the Trustees and Staff at HOEISF

www.hoeisf.com



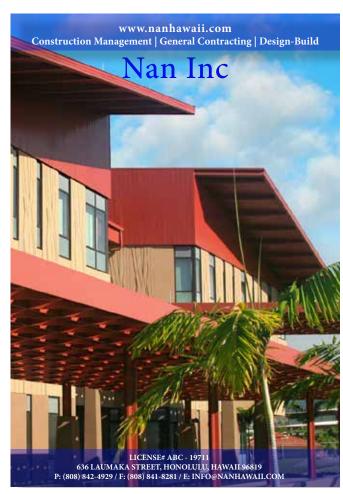


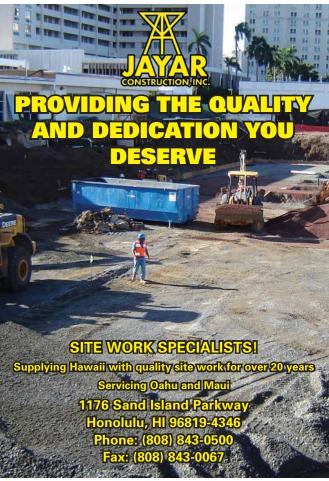


"Providing journeyman and apprentice-level training that is second to none"









PAMCA?? 1/4 V

Q & A — Contractors with Jason Soeda

Dale Sakamoto Yoneda President S & M Sakamoto, Inc.





- **Q:** How long have you worked with S & M Sakamoto, Inc.? Please tell us about your career path.
- A: I have been with S & M Sakamoto, Inc. (SMSI) for 23 years. I started as an assistant project engineer then moved on to estimating and project management. I continue to estimate and manage projects, but have now added strategic and financial planning and oversight to my responsibilities.
- **Q:** What are your duties and responsibilities at S & M Sakamoto? What are the most rewarding aspects of your job?
- A: Besides strategic and financial planning, I focus on estimating for new projects, managing our existing projects and since we are a small business, I work daily with our field supervisors and crew. The most rewarding aspect of my job is building projects that will benefit the community, whether it is a new restaurant or new school classroom. The smiles on our clients' faces are truly priceless. Another rewarding aspect of my job is working closely with the talented men and women in our company. Everyone takes pride in their responsibilities and works together for the good of the company.
- **Q:** What was your educational path like? When did you realize that construction was the right career for you?
- A: After graduating from Kaiser High School, I attended the University of Hawaii at Manoa and obtained my bachelors of business administration degree in marketing. SMSI is my family's company, so it was always on my radar to work in the construction industry.

Q: What is the greatest benefit of being in this career?

- A: One of the greatest benefits of working in the construction industry is that you are always a part of a team. Job satisfaction is high when you know you helped build something that will last for many years. Some projects have a short timeframe for completion and this can present some challenges for the team. However, working together will always get you through any challenges you may experience.
- **Q:** In your experience, how important is formal education versus hands-on experience?
- A: Both are very important. With formal education, you receive the book knowledge to do your job; the handson experience brings that knowledge into real world activities they work hand in hand.
- **Q:** For students who are not exactly strong in mathematics, would low math scores preclude them from a career as a contractor? If there's still time to improve, in which classes should they strive to succeed?
- A: Math is an important aspect of construction, however, other skills are as well, including written and verbal communication, listening, problem solving, mechanical skills, creativity, etc. There is always time to learn new skills or improve. I still learn something new every single day.



Q & A — Contractors continued

- Q: In your personal observations, do you feel that local schools are doing enough to encourage girls and young women to become interested in math, science, and engineering?
- A: With STEM (science, technology, engineering and math) programs starting up around the state, more and more girls will become interested in this area of study. Our construction industry is very
- diverse and has many different career opportunities — structural engineering, safety compliance, project management, architecture, accounting, bonding, insurance, marketing, etc. There is a career in construction for everyone!



Q: S & M Sakamoto, Inc. is one of the most respected general contractors in the state. Can you tell us about some exciting projects of which you are proud?

A: We are wrapping up a three-year project at the newly dedicated Daniel K. Inouye Elementary School on Schofield Barracks, which involved seven new buildings and the renovation of 10 of their existing classroom buildings. We also just completed a new 8-classroom building at Ewa Elementary School. Teamwork between the Department of Education, construction managers, architects, engineers, our company and our subcontractors and suppliers was the key to the success of both of these projects. Open, honest communication and effective planning will always result in success. We are particularly proud of the work we do for the Department of Education because we know that a good learning environment will help children to learn better.

- Q: Why is it important for our industry to support Hawaii Construction Career Day (Hawaii CCD)? How long has S & M Sakamoto, Inc. been involved in this annual event?
- A: Hawaii Construction Career Day exposes our high school students to the many careers available

For Some Cat[®] Dealer Techs, Work is Paradise.

As a Cat[®] dealer tech, you play an integral role in the way people experience life in the middle of the Pacific Ocean. Everyone's definition of paradise is different. For people like you, it's having a job that challenges you every day and makes you feel like a part of something bigger—a rewarding career, with good pay and benefits, that allows you to live anywhere in the world.

Visit **www.hawthornehiring.com** for more information about the application process and to view current positions available.

www.hawthornehiring.com 808.677.9111





in the Hawaii construction industry. It provides students with an opportunity to operate heavy equipment, talk to industry professionals and gain real life experience —even if it is just for a day. We hope to leave a positive, lasting impression on the students' minds. SMSI has been involved with Hawaii CCD since its inception 10 years ago. I was lucky enough to represent the General Contractors Association of Hawaii at the initial planning meeting for the event and have since been a member of the Hawaii CCD Planning Committee and Board of Directors for many years now.





Hawaff LECT is a proud Gold Sponsor of the 2016 Hawaii Construction Career Days



Hawaii Laborers-Employers Cooperation and Education Trust (LECET) is a labor-management partnership between the Hawaii Laborers' Union, Local 368, and its unionized

Our primary objective is to generate business opportunities for our union contractors and job opportunities for the Hawaii Laborers' 5000+ union members, through a concerted effort in government relations, working with industry partners, and expanding the construction industry.

Labor - Management Partnership for a Better Hawaff

Mahalo for participating in Hawaii Construction Career Days. Please visit the Hawaii Laborers' Training Program's (HLTP) booth to learn more about being a Laborer in Hawaii's construction industry.

· Aerial Work Platforms

· Air Compressors & Tools

Earth Moving Equipment

· Compaction Equipment

Generators

Clyde T. Hayashi - Director Hawaii LECET 650 Iwilei Road, Suite 285 Honolulu, HI 96817 Ph: (808) 845-3238 JRL: hilecet.ora



We Have Equipment For That.

Sunbelt Rentals is a full-service rental company providing a broad range of equipment to industrial, commercial and specialty contractors, as well as do-it-yourselfers. Sunbelt delivers what you need, when and where you need it. And, we guarantee it.

KAUAI 808.246.3900

OAHU 808.693.8771

MAUI 808.873.2100

LANAI 808.208.0425

- · Lawn & Landscape
- · Light Towers
- · Material Handling
- · Pressure Washers & Surface Preparation

I&L Rentals is now Sunbelt Rentals

Rental & Water Trucks



Satisfaction . Delivery . Service . Availability . After-Hours Response

Wahine of STEM: Tables Are Turning

By Jason Soeda

There is much talk about the lack of females in STEM-related fields (science, technology, engineering and mathematics). Prospective students will encounter endless national studies on the Web expounding the shortage of women at the educational and professional levels. Facts and figures are all well and good, but maybe it's time to explore this issue from a Hawaii point of view. Let's hear from two female professionals heavily ensconced in the sciences and whose success stories defy statistics on STEM.

Kai Nani Kraut has accomplished much despite the so-called "social barriers" that prevent women from thriving in the sciences. She is the construction management lead at HDR Engineering, Inc., an architecture-engineering-consulting firm in Honolulu. She also is currently contracted as the west construction management lead at the Honolulu Authority for Rapid Transportation (HART). In this position she is responsible for oversight of the construction on the west side of the massive project.

"I have been in project management and delivery my entire career for over 22 years," says Kraut. "I have been specifically on the construction side of project delivery for the past eight years."

Through her work, Kraut challenges the misconceptions that women cannot excel or become leaders in this industry.

"I have always been better at math," she says. "My brain just works more naturally with numbers and problem solving. But as I have grown in my career, I have learned that being able to concisely and accurately communicate those numbers and solutions is equally important."

Kraut notes one advantage that she has over her contemporaries. The STEM gene, as well as engineering, runs in her family.

"My grandfather was an electrical engineer who worked on the Illinois Tollway," says Kraut. "He encouraged me to be a civil engineer because he always said, 'The world will always need engineers to build and maintain our infrastructure."

Kraut recalls her days at Wheeler Elementary where she participated in the school's gifted and talented program for math.

"I was always put in advanced math classes, which indirectly fueled my confidence and passion for STEM subjects," she says.

Throughout high school, Kraut excelled in math and science, but she did not limit herself to those subjects, which turned out to be a good thing for her future career.

"I participated in sports and was active socially," says Kraut. "I feel like I was more well-rounded than laser focused on STEM. I think that well-roundedness

has served me well as an engineer because I have a technical background as well as the ability to relate to others and communicate."

Kraut says the entire construction industry would do well to be more gender balanced.

"Woman bring different skills to the table," she says. "Through a collaborative process, I feel we get better solutions to the problems we face."

Kraut often finds herself the only female in meetings, especially at the executive levels.

"There are few females in the field," she says. "I am currently the president of the Women's Transportation Seminar. The organization's goal is to change the face of transportation through the advancement of women. I am passionate about encouraging women and assisting with the advancement of women because I feel I have been blessed with opportunities that have served my career.



Kai Nani Kraut of HDR, Inc.



I want to encourage and help others in the same way."

Kraut is highly optimistic about the future of women in STEM. She also feels that changing the world starts at home with our own families. She continually encourages her 13-year-old daughter to strive towards excellence in everything she does.

"I personally try to encourage her and her friends through Girl Scouts

to realize that with hard work and effort, they can do anything they set their minds to," she says.

Melissa Montoya, a STEM educator at Waipahu High School, is on the front lines of the effort to motivate female youth to pursue careers in math and science. Montoya has a master of education in curriculum and instruction and has been teaching at Waipahu for five years. She always enjoyed

science, but her path wasn't exactly a straight line.

"I did not always know I wanted to become a teacher," Montoya says. "I started my undergraduate degree in nuclear engineering. After volunteering at a robotics competition, I decided I wanted to create little engineers instead of pursuing engineering."

Montoya says there is a special key to motivating her "little engineers."

She explains: "Every student has different interests, so it is a matter of making science relevant to them. To get them engaged and make the material relatable to the real world, I assign homework where they read an article of their own choosing that encompasses any type of science. It is very exciting for me to see them just as excited to speak about the science that they take interest in! When students have a 'buy-in,' they are that much more invested in the science."

She continues: "Appealing to the interest of your students is important. Design projects and experiments that cater to their interests. And show that you're passionate about science. It gets your students excited, too. Encourage failure — not in a way that they're failing the class; encourage failure in experimenting. They will experience that coveted 'a-ha!' moment when they understand why it is okay to fail."

Montoya says people have often been surprised by her own passion for the sciences.

She explains: "In high school I was involved in a lot of different content areas. I was involved in advanced placement courses from calculus to U.S. history to art. My teachers and classmates thought I would be pursuing an art. I had many teachers and classmates that were surprised when I told them I would be pursuing an engineering degree. In college, I had similar surprised reactions such as, 'Um... but you're not like other engineers.' It only drives me to encourage my students now to pursue their own

DO YOU WANT A CAREER AS A **JOURNEYMAN ELECTRICIAN?**

If so, you will need to meet the following minimum requirements:

- Be of 18 Years of Age
- One Year of Satisfactory Completion of Algebra I or NJATC Math Course
- Graduate from High School or Pass the GED Test
- Must be a United States Citizen
- Applicant Must Pass the NJATC Aptitude Tests Before Acceptance into the Program

Call or visit the Hawaii Electricians Training Office for more information.





"Lighting Your Path to the Future" www.hetf1186.org (808) 847.0629 1935 Hau Street, Room 301 Honolulu, Hawaii 96819





Melissa Montoya, an educator at Waipahu High School, encourages her students to strive for excellence.

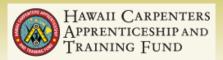
dreams and reach their full potential."

Montoya credits her family for always supporting her educational aspirations.

"My family has always been supportive of me and to this day still want me to finish that engineering degree," she says. "I have an incredibly strong-willed female role-model in my mom. She taught me the importance of hard-work, patience, that everyone deserves a helping hand, and that 'knowledge can never be taken away from you.' That last quote is something I tell my students all the time because I think it drives a person to never stop learning."

Montoya agrees with Kraut about the importance of having a wellrounded education.

"I knew that my favorite subject was math, with science as a close second," says Montoya. "I also knew that when I went to school for engineering that I would have



Apply in person at:

Hawaii Carpenters Apprenticeship and Training Office

1311 Houghtailing Street, Suite 201

Honolulu, Hawaii 96817

P: (808) 848-0794 ext. 198

E: hcatfhelpdesk@hicarpenterstraining.com

For application information, call:

Paul Chang

P: (808) 848-0794 ext. 183

E: pchang@hicarpenterstraining.com

& DRYWALL APPRENTICES

NEIGHBOR ISLANDS

Call these training coordinators for application information:

MAUI, LANAI, MOLOKAI, KONA

SEEKING CARPENTER

Christian Tackett

P: (808)242-6891 ext. 608

KAUAI

Steven Bonifacio

P: (808) 848-0794 ext. 182

E:ctackett@hicarpenterstraining.com E: sbonifacio@hicarpenterstraining.com

HILO

Glenn Alcalde

P: (808) 848-0794 ext. 181

E: galcalde@hicarpenterstraining.com www.hicarpenterstraining.com

For more information ind details go to:

"Learn a Skill to Build Your Future"







to be focused on only math, science and engineering."

Despite this, Montoya says she maintained a strong interest in social sciences, communications and arts. She continues: "I did not focus on only one subject in school. I joined many clubs throughout high school to gain a breadth of knowledge that made me a well-rounded applicant to get into my colleges of choice. All of it went toward getting into those schools with the major I wanted. Neither of my parents went to college, so I was motivated to get into a top school to make them proud!"

Montoya says it is important to empower young girls to strive for excellence.

"The more role models young girls have, the more likely they are to identify with engineers and technologists," says Montoya. "It can be intimidating to be the only female, or one of a few surrounded by only males. Support specifically designed for female students has been studied and has shown effectiveness in

decreasing the high attrition rates of females in STEM education."

Montoya offers a final word of advice to all students, male and female: "Take advantage of as many opportunities as possible! No class can ever replace experience. There are many opportunities towards scholarships and grants to pursue post-secondary degrees. After you're in, go to recruitment fairs. This is where you find your internships. I remember being very intimidated at 18 when I showed up to a recruitment fair, but the opportunity helped me to experience real employment settings, the questions that typically are asked and the answers that jobseekers give. It was eye-opening to understand the impact of a direct introduction and the interpersonal communication skills needed to get the top internships and jobs. My favorite event in undergrad was a business etiquette seminar. Engineers and technologists are not known to have the best communication skills, so it was very helpful."





Pacific Resource Partnership wants to test your eye 4 detail. Find thirteen objects that are different from the two pictures.

See answers at www.hawaiiccd.com



PAU HANA PAY

Craftspeople in the construction industry work hard, but they also get paid well—more than the average Hawaii employee. Here's a look at the wage estimates for just some of the jobs out there.

Career	Basic Hourly	Mean Annual	Career	Basic Hourly	Mean Annual
Architects, except landscape & naval	\$39.46	\$77,342	Industrial Engineers	\$39.84	\$78,086
Architectural & Civil Drafters	\$23.90	\$46,844	Insulator	\$39.65	\$77,714
Architectural & Engineering Managers	\$51.91	\$101,744	Ironworker	\$37.75	\$73,990
Architecture & Engineering Occupations	\$37.46	\$73,422	Mechanical Engineers	\$38.68	\$75,813
Brickmasons & Blockmasons	\$39.11	\$76,656	Operating Engineers & Other Construction Equipment Operators	\$39.69	\$77,792
Carpenters	\$45.68	\$89,533			,
Cement Masons & Concrete Finishers	\$39.36	\$77,146	Painters, Construction & Maintenance	\$34.85	\$68,306
Civil Engineers	\$37.96	\$74,402	Paving, Surfacing, & Tamping Equipment Operations	\$41.19	\$80,732
Construction Laborers	\$36.35	\$71,246	Plumbers, Pipefitters, & Steamfitters	\$40.85	\$80,066
Construction Managers	\$46.54	\$91,218	Roofers	\$39.85	\$78,106
Drywall & Ceiling Tile Installers	\$45.90	\$89,964	Sheet Metal Workers	\$40.59	\$79,556
Electrical & Electronics Drafters	\$30.59	\$59,956	Surveyors	\$27.92	\$54,723
Electrical Engineers	\$40.88	\$80,125	Surveying & Mapping Technicians	\$22.32	\$43,747
Electricians	\$50.49	98,960	Tapers	\$41.50	\$81,340
Engineering Technicians, Except Drafters, All Other	\$36.03	\$70,619	Tile & Marble Setters	\$40.20	\$78,792
Engineers, All Others	\$43.59	\$85,436	Source: September 19, 2016 State of Hawaii, Department of Labor Industrial Relations, Wage Schedule Bulletin No. 488 and May 2015 State Occupational Employment and Wage Estimates for Hawaii from the U.S. Department of Labor's Bureau of Labor Statistics.		
Glazier	\$35.78	\$70,129			



MAHALO TO OUR SPONSORS



Diamond:

D.R. Horton – Schuler Division

Gold:

General Contractors Association of Hawaii Goodfellow Bros., Inc. Grace Pacific / A & B

Hawaii Carpenters Apprenticeship & Training Fund
Hawaii Laborers Employers Cooperation and Education Trust
HC&D

International Brotherhood of Electrical Workers, Local 1186
Isemoto Contracting Co., Ltd.
Pacific Resource Partnership

Silver:

First Hawaiian Bank Hensel Phelps HPM Building Supply Jayar Construction, Inc. Kiewit

Koga Engineering & Construction, Inc.
Matson

Operating Engineers Union, Local 3
PAMCAH
S & M Sakamoto, Inc.

Equipment Companies:

AE Equipment Rentals Inc.
Akana Trucking
Allied Machinery
Bacon Universal
Don's Makiki Service
Hawthorne
HD Supply & Industrial
Pineridge Farms
Safety Systems & Signs Hawaii, Inc.
Sun Belt Rentals
Western Pacific Crane & Equipment, LLC

Bronze:

Building Industry Association of Hawaii Hawaii Sheet Metal Workers Training Fund King & Neel, Inc. Milwaukee Tool Nan, Inc.

Other Supporters:

Arthur Y. Mori & Associates, Inc.
Bowers & Kubota Consulting
National Association of Women in Construction
Rons Construction

Special Mahalo To:

American Society of Safety Engineers
Clarity Printing
Federal HighwayAdministration
Hawaii Department of Education
Hawaii Department of Transportation
Hawaii Self Storage
University of Hawai'i, College of Engineering
University of Hawai'i, Honolulu Community College
University of Hawai'i, School of Architecture

