

the magazine of kiewit corporation

# KIEWITS







Kiewit is one of North America's largest and most respected construction and engineering organizations. With its roots dating back to 1884, the employee-owned organization operates through a network of subsidiaries in the United States, Canada and Australia. Kiewit offers construction and engineering services in a variety of markets including transportation; oil, gas and chemical; power; building; water/wastewater; and mining. Kiewit had 2015 revenues of \$9 billion and employs 22,000 staff and craft employees.

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**KIEWAYS**

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**SAFETY WEEK 2016**

Kiewit joined more than 40 industry peers to reinforce and celebrate the company's commitment to safety during Safety Week 2016. See some of the demonstrations and events that took place on Kiewit projects on Page 5.



**A TIMELESS TRUTH**

"Our strength as a company has always been people. That's not a cliché, that's just the truth." — *Bill Grewcock*

It's been 31 years since my dad, a long-time Kiewit leader, said those words to a roomful of peers. That speech challenged our employees to recognize what it takes to thrive versus survive in this industry. And to his point, all of our success up until then — and still today — can be traced back to our people.

You really get a sense of that right out of the gate when reading this issue of Kieways. In market news on Page 4, you'll see the fruits of our teams' labor from the 2016 Desalination Plant of the Year to the world's longest floating bridge opening to traffic.

On Page 6, we go behind the scenes of the Pio Pico Energy Center in San Diego, Calif., where a strong, repeat partnership helped pave the way for better solutions in meeting local water regulations. But relationship building goes well beyond how we work with clients. You'll also see how that focus on people helped us introduce fresh talent to the field and bond with seasoned craft workers who live in the area. That history with local craft was also a key to our success at the Kodiak Airport project featured on Page 12. We relied on workers familiar with local weather conditions and tricky logistics to make timely improvements for safer, remote Alaskan runways.

Speaking of safety, who better to manage our project safety than the men and women who actually do the work? On Page 18, you'll learn about the customizable program that's putting ownership into our people's hands, making our sites safer, and giving back to the communities where we work.

A lot has changed since 1985, but people are still the secret to Kiewit's success.

**BRUCE GREWCOCK**

Chairman and CEO





#### SAFE TRAVELS

On Page 12, learn how Kiewit helped Alaska's Kodiak Airport meet an FAA deadline for runway improvements.

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Kiewit's Craft Voice in Safety (CVIS) program puts craft on the front lines of project safety.



# OUR MARKETS

🏗️ BUILDING
⚙️ MINING
🛢️ OIL, GAS & CHEMICAL
⚡ POWER
🚚 TRANSPORTATION
🚰 WATER/WASTEWATER

What began in 1884 with two hard-working brothers has grown into a Fortune 500 construction and engineering industry leader. As a multi-billion dollar organization, Kiewit can tackle projects of all sizes, in any market. Here are a few interesting facts about Kiewit.



## DID YOU KNOW?

Kiewit's mining operations have moved over

**4.5 BILLION**  
cubic yards of material.



### BUILDING FOR THE FUTURE

Hawaii's Department of Education awarded Kiewit and NAC Architecture the **Kahului Elementary School Building G** project. This design-build project will provide five new classrooms and support space to meet the Maui school's current and future needs.



### 2016 DESALINATION PLANT OF THE YEAR

The **Carlsbad Desalination Plant** in Carlsbad, Calif., is Global Water Intelligence's 2016 Desalination Plant of the Year. Carlsbad is the largest desalination plant in the western hemisphere and was constructed by Kiewit-Shea Desalination for owner Poseidon Water. The plant can produce up to 50 million gallons of water per day.



### BREAKING NEW GROUND

Groundbreaking ceremonies were held in April at the **St. Joseph Energy Center** near New Carlisle, Ind. When complete, the new 700-megawatt facility will be capable of supplying power for more than 450,000 homes.



### IN THE NEWS

Statoil awarded the contract for its **Peregrino-II** project to Kiewit Offshore Services earlier this year. The 11,000-ton topsides structure is destined for Brazil upon completion. Kiewit's scope includes design, procurement and construction.



### THE WORLD'S LONGEST FLOATING BRIDGE

On April 25, Seattle's new **SR 520 floating bridge** opened to traffic in both directions for the first time. Now that they've completed construction of the new bridge, Kiewit/General/Manson is in the process of decommissioning the old one, a process that is scheduled to take less than a year.



# OUR VALUES

PEOPLE | **INTEGRITY** | EXCELLENCE | STEWARDSHIP

For more than 130 years, Kiewit's culture has thrived on strong principles. From generation to generation, the torch has been passed down and carried by the company's leaders and workforce. Today, its core values — People, Integrity, Excellence and Stewardship — remain the company's cornerstone and are the way Kiewit runs its business.

### HONORING OUR COMMITMENT TO SAFETY

To uphold its core value of integrity, Kiewit strives to honor all commitments it makes, including its focus on safety. In May, the company joined more than 40 industry peers to celebrate Safety Week. Across the Kiewit organization, projects and offices hosted various demonstrations and events to reinforce and celebrate their commitments to safety. Here are a few examples.



The Cove Point LNG project in Lusby, Md., organized several events to reinforce the team's commitment to safety, including a safety-oriented version of Jeopardy.



As work nears completion, the Homer City AQCS project team continues to reinforce and reflect on its commitment to safety.



The Dulles Phase II project kicked off Safety Week with a mass safety meeting and a catered breakfast.

### KIEWIT RECEIVES A BETTER BUSINESS BUREAU (BBB) INTEGRITY AWARD

In late 2015, the Better Business Bureau (BBB) of Omaha, Neb., presented Kiewit with a BBB Integrity Award. The award recognizes companies that go "above and beyond" in serving their customers, employees and communities. Judges selected the winners based on submissions outlining organizational structure, ethical management practices, community relations and charitable contributions.







# PIO PICO'S NAMESAKE

A new peaker plant provides  
supplemental power  
in Southern California

Long before Ronald Reagan and Arnold Schwarzenegger, there was Pio Pico.

In the mid-19th century, Pico served as the last governor of what was known as Alta California, a territory of Mexico that encompassed the area of the current state and land to the east.

Like current California Governor Jerry Brown, he also held two terms years apart — one briefly in 1832 and again from 1845 to 1846.

After the Mexican-American War began in the spring of 1846, American troops moved to occupy southern California.

As the Americans advanced, a surrender seemed inevitable. Pico fled to Mexico in a failed attempt to mount a resistance force.

Pico later returned to the area as a citizen and became a noted landowner. He left his imprint, and his name, throughout southern California.

Today, you'll find his name memorialized on Pico Boulevard — a route that stretches from downtown L.A. to the Pacific Ocean — as well as in the city of Pico Rivera.

Pico's name also lives on through a Kiewit-led project: the Pio Pico Energy Center.

*Friends of Pio Pico, Inc. Pio Pico State Historic Park. 2015. Web. June 2016.  
State of California. Pio Pico State Historic Park. 2016. Web. June 2016.*



# Pio Pico Snapshot

Kiewit is the general contractor at the Pio Pico Energy Center. The facility is anticipated to go online in fall 2016.

Major equipment and facilities for the 318-megawatt (MW) facility, which will serve customers in the San Diego area, include:

- Three natural gas-fired combustion turbine generators
- Inlet air evaporative coolers
- Two separate mechanical-draft cooling towers (one wet and one dry)
- 230-kilovolt switchyard with overhead high-voltage transmission lines
- Air emissions control equipment
- Aqueous ammonia storage tank
- Above-ground water storage tanks
- Underground utility connections, including a natural gas pipeline, potable water pipeline, reclaimed water pipeline, sewer pipeline and electrical transmission lines



## EXTRA POWER WHEN CONDITIONS DEMAND

Located a few miles from San Diego in an area close to the Mexican border called Otay Mesa, the 318-megawatt (MW) gas-powered plant is designed to provide power to San Diego Gas & Electric customers during periods of high demand.

Known as a peaker and load-following facility, the Pico plant will ramp up quickly to deliver supplemental energy as needed, said Brian Stenstrom, Kiewit's project manager.

"The equipment can go from zero to 318 megawatts, or maximum capacity, in 10 minutes, allowing the client to be able to 'follow' loads. As the winds come and go and as the sun shines and doesn't shine, it can follow those dips in power rapidly."

"That gives the utility a lot of flexibility to maximize green energy through alternate sources and be able to supplement that with base load as they need it," he added.

## A REPEAT PARTNERSHIP

Kiewit's client on the \$153 million project is Ares EIF. It's not the first time the two companies have collaborated. They also partnered on the Panoche Energy Project in Firebaugh, Calif., which began operating in 2009, as well as the St. Joseph Energy Center which is a 700-MW combined-cycle gas turbine project currently under construction in Indiana.

When it came to choosing a contractor to handle engineering, procurement and design, Ares EIF already knew what Kiewit could bring to the project.

"I've worked with Kiewit for 10 years," said Mike King, managing partner at Apex Power, which provided development services to Ares EIF for both Pio Pico and Panoche. "I appreciate their thorough commitment to safety and planning. They've always been honest, straightforward and diligent. I'm very pleased to have Kiewit as a partner on this."

## 'IT'S GOING TO HAPPEN'

That relationship helped pave the way for solutions when the team encountered some challenges during the development phase — namely two delays when work was stopped because of regulatory issues.

Ultimately, the issues were resolved favorably and construction commenced in early 2015. At its peak, 250 craft and subcontractors and about 50 staff worked on site.

"Keeping up the morale of the constructability team was a challenge — saying, 'it's going to happen, it's going to happen,'" said Construction Manager Roger Real. "The other challenge was keeping the consistency with the craft that we had at the beginning."

# Conserving a precious resource

It's been more than two years since Gov. Jerry Brown first proclaimed a state of emergency in California due to the state's severe drought conditions.

The scarcity of water — and how to work within the limitations — is on the mind of everyone living and working in the state.

That includes the Kiewit team, said Engineering and Design Project Manager Neil Stewart.

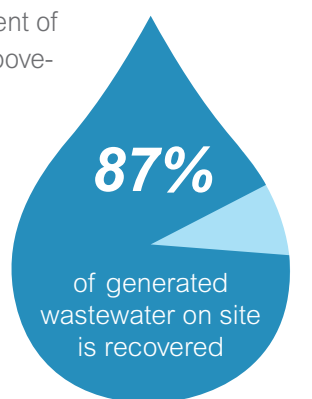
"We brought the client in early in the design. They expressed concerns about the operability of the water treatment system due to the peaking nature of the plant, so between our project team and the client we spent quite a bit of time reviewing and fine-tuning our plan."

Regulations limit the annual water consumption to **312 acre-feet** of water — or about **100 million gallons**.

Not exceeding that usage, Stewart said, drove the majority of the wastewater considerations.

"We have a requirement to recover **87 percent** of wastewater we generate. It's part of the California Energy Commission requirements. So we're recycling a huge amount of the water we use in this plant."

That number also drove development of another part of the facility — an above-ground storage tank dedicated to wastewater collection. After the plan was overhauled, so was the size of the tank: It was upgraded to a **500,000-gallon** capacity.





Kiewit's reputation and the relationship the team already had with area craft proved valuable in providing work on other jobs when Pio Pico was on hold, and in bringing back so many of the same workers when it was time to restart the project.

"We have a pretty good following of people who have been with us for a long time," said Real. "They're not only workers, but they're friends to us and almost family in a way. They know the Kiewit ways."

### POWERING AHEAD IN 2016

Substantial completion for the facility is set for fall 2016.

Looking at the challenges the team has addressed and overcome, Stenstrom says he's impressed by the way everyone has kept their focus, despite the stops and starts.

"The attitudes from everyone involved here have been as good as I've seen on any project. The teamwork has been amazing, and everyone here continuously works together to do what is best for the project."

For Neil Stewart, Kiewit's engineering and design project manager, the opportunity to build his skills and see his colleagues do the same has been valuable.

"We have a lot of people in roles for the first time on this job, both on the engineering and construction side — myself included. Seeing how everyone adapts to their new roles and helps each other with acclimation and getting used to new responsibilities, that's something I take a lot of pride in."

As another leader who was tasked with learning on the job, that's surely something Pio Pico himself would have related to. **K**

## A firsthand look at life on site

A group of engineering and construction students and faculty from California Baptist College got an up-close look at the work in progress at the Pio Pico Energy Center.

The group boarded a bus to travel more than 100 miles to spend part of their day learning about the project and walking the jobsite. Kiewit staff shared an overview of the project as well as a glimpse of what life is like for an on-site field engineer.

The visit was eye-opening for students. Some noted that the experience helped them recognize new opportunities in the field. Others commented on the value of seeing a working



Kiewit employees on the Pio Pico project volunteer at a local food bank.

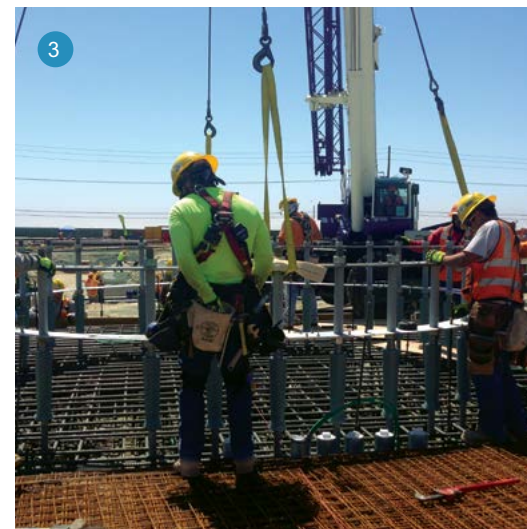
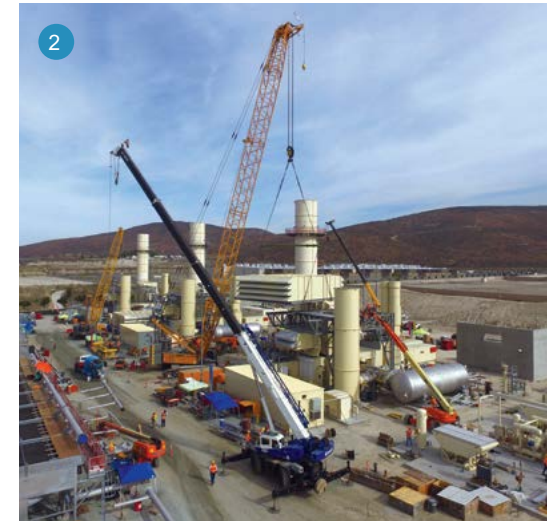
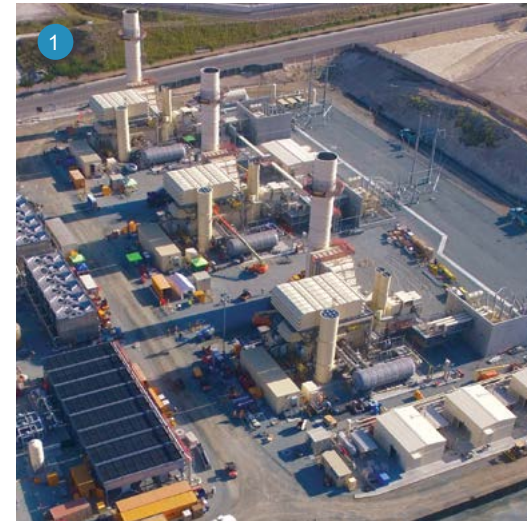
construction site and hearing what it takes to bring a project together.

One California Baptist student said, "The trip showed me not only the amazing projects Kiewit is capable of building, but also the world-class team members that happily work for Kiewit . . . I am actively pursuing a career with Kiewit, and I can 100 percent attribute that to the Pio Pico road trip."

Another said, "As a former Marine that deployed to Iraq and Afghanistan, I love challenging myself to grow as a person. I am attracted to the idea of being a field engineer with Kiewit. Working with responsible go-getters and rewarding projects sounds exciting to me."

Hosting the group is just one way the Kiewit Pio Pico team has been reaching out to the local community. Some other activities they've coordinated:

- Raised money for children's cancer research through a golf outing and Friday-morning breakfast
- Raised money for 22Kill, a veterans' organization
- Participated in a toy drive for local child centers
- Supported the United Way campaign



1. Combustion turbine units 1, 2 and 3 are seen from overhead at the Pio Pico Energy Center project. 2. Construction is a coordinated effort between many moving parts, as seen in setting the unit 3 inlet air filter at Pio Pico. 3. Crews place exhaust stack anchor bolts. 4. A network of electrical ductbank is seen in the main trench on the site. 5. Team Pio Pico poses proudly for a team picture in January 2016.





# A SAFETY NET FOR KODIAK AIRPORT

*Located 30 miles south of the Alaskan Peninsula, Kodiak Island's landscape includes mountains, rivers, lakes and oceanfront. Home to the world's largest species of brown bear — appropriately named the Kodiak bear — it's a popular destination for wildlife viewing, hiking, fishing and other outdoor activities.*

On the southern side of the island, Kodiak Airport treats locals and visitors alike to spectacular views as they arrive or depart. But the airport's footprint on the island — and more specifically the alignment of its runways — made runway safety a cause for concern as Federal Aviation Administration (FAA) standards changed. Like other airports with limited land resources, the FAA required that the Alaska Department of Transportation & Public Facilities (ADOT&PF) use a unique design solution to ensure runway safety areas (RSA) could safely support airport operations.

#### **ARRIVING AT A SOLUTION**

According to the FAA, a runway safety area is “a defined surface surrounding a runway prepared or suitable for reducing the risk of damage to airplanes in the event of an

undershoot, overshoot or other excursion from the runway.”

<sup>1</sup> In the '90s, updated regulations required all RSAs extend 1,000 feet beyond the end of the runway. Many airports built prior to the ruling — including Kodiak, in operation since 1940 — were restricted by limited land resources and unable to meet the standard without encountering significant environmental concerns or extreme costs. <sup>2</sup>

Following a study, the FAA selected Zodiac Arresting Systems's engineered materials arresting system (EMAS) as a solution for impacted airports.<sup>3</sup> An EMAS bed placed at the end of a shorter RSA can stop a plane traveling from 40 to 70 knots safely and with limited damage to the aircraft.

To meet these requirements at Kodiak Airport, ADOT&PF contracted Kiewit to complete improvements.

Kiewit's contract included extending two RSAs by 600 feet into the Gulf of Alaska and installation of two EMAS beds; building new taxiways and service roads to access the longer runways; upgrading lighting systems; and rehabilitating the Devil's Creek culvert located beneath the runways.

In order to collect all the resources needed to complete the runway extensions, Kiewit managed drill-and-shoot operations at Green Mountain Quarry on Kodiak Island and mining at the Wrangell Harbor Quarry in southeast Alaska.





“More than 1.2 million tons of borrow came from the island and 63,000 tons of armor stone were barged in 800 nautical miles from Wrangell,” said Project Manager Dustin Lehman. “The remaining 21,500 tons of armor and 54,000 tons of underlayer were purchased from the north side of Kodiak Island and barged to the project. Other materials, including the concrete armor units and EMAS blocks, were manufactured and barged to the site.”

Coordinating deliveries to the remote location required detailed planning.

“We knew the distance and weather conditions on the Gulf of Alaska could complicate our delivery schedule,” said Lehman. “To avoid any setbacks, we ordered supplies well in advance of the required date and worked with barging companies to ensure everything left from a southern port with enough time to reach the project.”

### A DEADLINE IN MIND

Following a four-week winter shutdown, work ramped up in February 2015 with an important milestone to achieve.

“The schedule hinged on placing the EMAS beds before winter weather set in,” said Lehman. “That meant we needed to complete the borrow, subbase, aggregate base, armor stone and concrete armor unit placement operations at all runway locations, as well as runway electrical installation and paving, by early summer.”

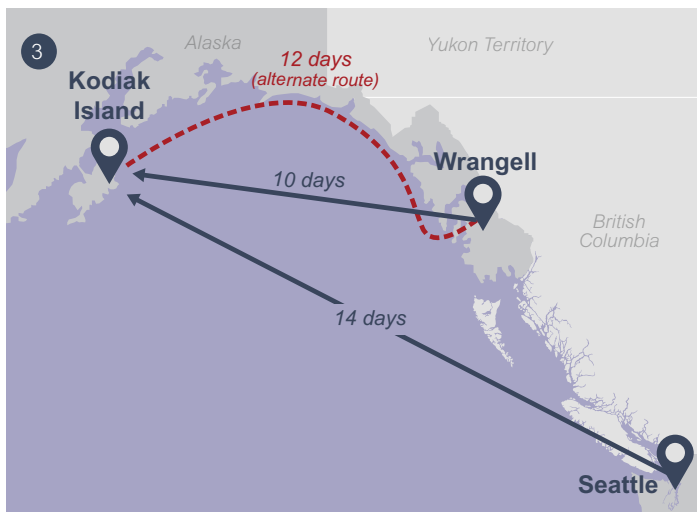
Working diligently alongside the Kiewit staff were many craft workers who’d become familiar with the company on other projects in the region.

“We had a great, loyal craft team,” said Superintendent Nik Schriener. “There were about 60 field workers on the job and many had worked with us on recent projects like the Northern Rail Extension and Prince of Wales projects. We were fortunate to have crews familiar with the seasonal conditions and logistics of projects in this region.”

### CAREFUL COORDINATION

Kiewit worked closely with the airport’s stakeholders to manage construction successfully amid flight operations. Alaskan Airlines and smaller local and regional carriers collectively operate 20 to 35 flights from the airport daily. The U.S. Coast Guard, which leases the airport property to ADOT&PF, uses Kodiak as a base for Search and Rescue (SAR) missions and training exercises.

“It was paramount that our construction didn’t interrupt



1. Crews endured Alaska’s winter conditions during drill-and-shoot operations at Kodiak Island’s Green Mountain Quarry. 2. Subbase materials are placed at the end of Kodiak Airport’s runway 25. 3. On a remote project, logistics get complicated. In poor weather, barges hug the coast, meaning shipments of armor stone from Wrangell would take approximately 12 days to arrive compared to the 10 it takes on a direct route across the Gulf of Alaska to Kodiak. Equipment and material shipments from Seattle and southern ports took approximately 14 days and required precise advanced planning.



Crews install EMAS blocks at Kodiak Airport. These were the first EMAS bed installations by a Kiewit company.

flight operations,” said Schriener. “To help coordinate, we hired a liaison to communicate with the airport tower.”

The liaison let the team know when runways were clear for equipment to cross and when they needed to hold short to provide ample space for aircraft. Having just one person on the radio with the tower also limited chatter during arrivals and departures. Airport officials noticed the team’s effort.

“Kiewit always looked out for the stakeholders who operate from the Kodiak Airport,” said Robert Greene, Kodiak Aleutian district superintendent with ADOT&PF.

### FINISHING STRONG — AND EARLY

By June, the borrow, subbase, aggregate base, armor stone and concrete armor units were in place and installment of runway and taxiway lighting was underway. Paving operations followed and set the stage for setting the EMAS beds — a total of 4,788 individual blocks — beginning in July.

The final EMAS block was placed on Aug. 26, 2015 — before winter’s arrival and in advance of the FAA and Congress’s December 2015 deadline for RSA

improvements. Should a pilot flying into or out of Kodiak Airport ever experience complications on the runway, EMAS will essentially serve as a safety net.

“The tires of an aircraft running off the runway crush the light-weight concrete inside the blocks of the EMAS bed,” said Zodiac Arresting Systems’s Hugh DeLong, the company’s lead engineer for Kodiak Airport’s EMAS beds. “That crushing takes the energy and momentum away from the aircraft and slows it down. Passengers and crews only experience a sudden stop.”

Rehabilitation of the 800-foot long Devil’s Creek box culvert was finished in October. It marked successful completion of a project that, like Kiewit projects past and present of similar size and scope, provided an opportunity for a relatively young team to apply their experiences from previous jobs managing their own work.

“Kiewit has always realized the importance of providing the right opportunities for our people to take on new challenges and grow as individuals,” said Sponsor Justin O’Brien. “Dustin and his team were well prepared to manage the Kodiak project.”

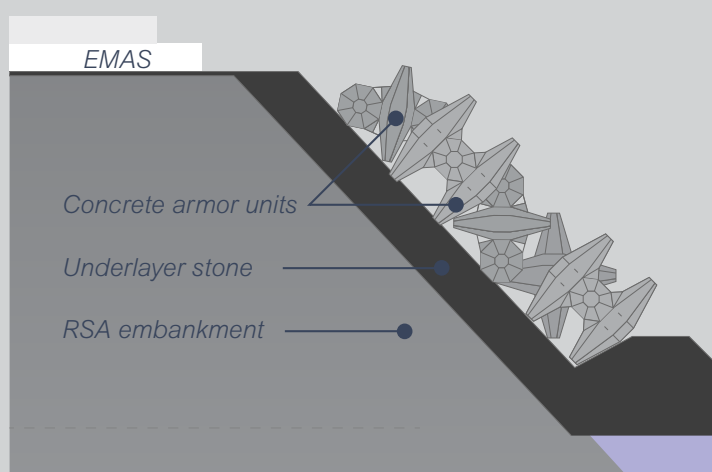


# Kodiak RSA Improvements



The Kodiak Airport RSA project had many components, including extending runways, installing EMAS beds, repairing a taxiway and making improvements to an 800-foot-long box culvert.

- 1 Extend RSA for runway 25 by 600 feet
- 2 Construct EMAS at ends of runways 18 and 25
- 3 Extend runway 36 embankment 600 feet
- 4 Construct 360-foot RSA at the end of runway 36 embankment extension
- 5 Relocate thresholds for runways 18 and 36
- 6 Construct new service roads and connecting taxiways
- 7 Repair Taxiway C asphalt
- 8 Construct new segmented circle and lighted wind cone
- 9 Remove and salvage existing segmented circle and lighted wind cone




Cross section of concrete armor units and underlayer stone at runway 25.



Preparation came not only in the form of learning from past responsibilities, but in coaching and mentoring from senior managers like O'Brien. Early on, O'Brien spent two to three days on site each week, working with Lehman and providing feedback.

"I wasn't on the island to manage the job, that was Dustin's responsibility," said O'Brien. "I was there to ensure he had support and to develop a young man into a leader."

Even now that the project is complete, O'Brien says he still enjoys telling others about the project, especially the team's successes managing complicated logistics in a remote location.

"It's very gratifying to reflect on what they were able to accomplish and the impact it will have on the continuous development of our business and their personal careers," he said. 

1. If a plane overruns or undershoots a runway, the lightweight concrete in the EMAS bed will crush beneath the plane's weight and bring it to a stop. The plane is then towed out and only the affected blocks must be replaced. 2. Workers install the last EMAS block at Kodiak Airport. 3. Runway improvements included extending two runways by 600 feet. Armor stone and concrete armor units provide stability along the shoreline.

<sup>1</sup> Runway and Taxi Safety Areas FAQ; Federal Aviation Administration Southern Region Airports Division; <sup>2</sup> National Runway Safety Plan 2015-2017; Federal Aviation Administration; <sup>3</sup> Fact Sheet - Engineering Material Arresting System (EMAS); Federal Aviation Administration



# PUTTING SAFETY INTO CRAFT HANDS

*At any moment, Kiewit projects are underway in drastically different environments, from urban areas in New York City and Los Angeles, to some of the northernmost regions of Alberta and Ontario, and even in the desert of Western Australia. The work ranges in size from several thousand dollars to more than \$3 billion in contract value, and from a few weeks to a few years in duration depending on the scope.*

*Despite these variables, every Kiewit job shares one thing in common as its most important focus: the safety of all those involved on the project. Since its beginnings in 2012, the company's Craft Voice in Safety (CVIS) program has put more of that responsibility and ownership into the hands of the craft workers themselves.*

**"NOBODY GETS HURT"**

DO YOU HAVE A QUESTION?  
BRING IT TO CVIS.  
YOUR VOICE IS IMPORTANT!  
LOOK FOR THE GREEN VEST!



## WHAT IS CVIS?

CVIS is a craft-only safety committee that interacts on a daily and weekly basis with management and their own peers to address safety on the project. Its ultimate purpose is to provide a platform to ensure all craft have an equal voice in safety, while developing relationships and empowering everyone to support safety through prevention, education and awareness.

For Kiewit Safety Director Eric Grundke, implementing CVIS was a no-brainer.

“Who better to address our safety concerns than our craft?” Grundke said. “These men and women know the hazards of the job best. Their knowledge and experience is an incredible resource when identifying and mitigating safety issues in the field.”

## BUILDING A CVIS TEAM

Every Kiewit job is required to have a CVIS team. At start-up, the preference is to begin building the committee with an experienced CVIS member. If that’s not an option, project management selects craft workers to start the program.



Instrumentation fitters at the Pio Pico Energy Center discuss access plans and how they’re going to prevent dropped objects from occurring during their operation.

Craft elect additional committee members from a list of volunteers. Teams vary in size based on the needs of the project, but ideally include a member from each trade and shift, as well as from all major subcontractors on the project. Reviews of committee members are conducted throughout the year to evaluate and ensure their effectiveness.

“People have to want to be part of the committee and be recognized by others as good representatives of the group,” said Infrastructure Safety Director Rand Magee. “Involving all disciplines and shifts gives us better insight into all of the work on the project, while building a sense of unity around our safety efforts.”

## INVOLVEMENT FROM ALL LEVELS

CVIS committees meet at least once a week. In addition to the committee members, a senior management representative on the job is required to attend all meetings. Attendees discuss observations in the field, determine how to address concerns and implement best practices, as well as follow up on the status of resulting action items.

Projects typically have CVIS committees join all job site tours with Kiewit management, from on-site managers up to the CEO. This ensures members can interact with every level of management, and keeps safety top-of-mind for not only the project but the entire organization.

“Engagement with management is crucial to the success of CVIS,” said Magee. “Continuous interaction between craft and staff is about having no secrets regarding safety on our projects — good or bad. In order to reach our goal of Nobody Gets Hurt, everyone needs ownership.”

Magee’s thought is one that’s echoed by CVIS members.

“One of our CVIS team’s favorite activities has been building the relationship between craft and management,” said Dion Jones, CVIS member on the Cove Point LNG project in Maryland.



## Same program, different name

Because Kiewit’s work spans different geographies and markets, CVIS sometimes takes on a different name to better represent the project and its people.

### MVIS

Miners’ Voice in Safety – Mining operations

### TVIS

Trade Voice in Safety – Australia

### VTSS

La Voix des travailleurs en santé et sécurité  
– French

1. CVIS Liaison Dave Mefford reviews fall protection with new hires in the CVIS Education Center at the Replacement Medical Center Facility in Colorado 2. CVIS members Willie Stringfield and Mike Davis on the Carroll Avenue Bridge Rehabilitation project in Takoma Park, Md. 3. A CVIS team on the Tampa Bay Water Reservoir project provides emergency response training to prepare coworkers for a potential medical emergency on the job. 4. On the Hawaii Guideway project, CVIS members are involved in the selection of a safety crew of the month, which the project then supports with \$1,000 to donate to a local charitable organization of the crew’s choosing.





1. CVIS, Craft Safety Advisors (CSA) and safety team members pass out bandanas to employees before they pass through turnstiles onto the Cove Point LNG project in Maryland. The bandanas reinforced safety messages including: extreme housekeeping, work-front hazard identification, intervention, mentoring and CVIS/CSA. 2. A CVIS member reviews a job hazard analysis (JHA) with fellow pipefitters. 3. A “You Asked, We Did” board on the PCCP project. 4. The Lower Mattagami project enjoys a CVIS-led appreciation barbecue. 5. A CVIS-led mass safety meeting is seen from above on the I-225 Light Rail Corridor project in Colorado. 6. The CVIS team on the Replacement Medical Center Facility, Eastern Colorado Health Care System in Colorado, reminds workers to think things through before they act with their hands. 7. Prominent signage on job sites helps craft identify members of the CVIS committee.

Ultimately, one of the best ways to gauge how a CVIS committee’s efforts are being received is through regular discussions with non-CVIS craft.

“When other craft understand the mission of the CVIS team and have a sense of what they’re accomplishing on the job, then I know there’s a strong safety commitment and support for the CVIS team,” said Grundke.

### BEST PRACTICES

As CVIS has evolved, several best practices have become popular across the company. One is a “You Asked, We Did” board, which is placed in a highly visible location to update peers on what CVIS and management have been asked to address and how they’ve followed up.

“The ‘You Asked, We Did’ boards help build trust because it shows action; it shows we will find a way to address concerns and make this a safer work environment,” said Travis Priddy, safety director for Kiewit’s infrastructure projects on the West Coast. “The key to keeping CVIS effective is constant communication back to our builders on what CVIS is working on and what they are accomplishing for their fellow builders.”

Safety rodeos are another common sight on projects. These training events are tailored to each job’s schedule. For example, if there’s an increased risk of dropped objects from upcoming work, a safety rodeo will demonstrate potential hazards through a live demonstration or “skit” using props.

## Project Spotlight – Hebron



The CVIS team utilizes many different tools and techniques to ensure safety is top-of-mind for more than 2,000 craft workers on site:



Organizes safety rodeos to increase the safety awareness of all craft and supervision on site



Publishes a CVIS newsletter to highlight CVIS projects and other safety articles and messages



Updates “You Asked, We Did” boards, which have detailed several of the more than 450 items that have been addressed since the team was created



Coordinates safety award programs



Participates in quarterly round-table discussion with the project’s client and other craft safety programs in the area to develop best practices for the client’s future craft safety groups



Organized a site-wide barbecue for all 2,000 people on site to demonstrate appreciation for the craft’s hard work — management served the meal to craft

In Newfoundland & Labrador, Canada, Kiewit-Kvaerner Contractors are building the Hebron Gravity-Based Structure (GBS), the base of an oil platform destined for the North Atlantic. As of April 2016, there were 44 CVIS members on site across the three main work shifts.

CVIS Chairperson Kerry Philpott said the reason he joined the CVIS team boils down to encouraging everyone to speak up and get involved in safety matters.

“The reason I joined the CVIS program is because I’m passionate about the men and women in the field being able to freely express safety concerns. Our goal is to have everyone in the field participating as safety ambassadors and having their voices heard so at the end of the day no one gets hurt,” he said.



“All of our safety programs are about making safety personal. Our CVIS teams allow us to build better relationships and ultimately get everyone involved so Nobody Gets Hurt.”

**ERIC GRUNDKE,**  
KIEWIT SAFETY  
DIRECTOR

“The safety rodeos demonstrate hazards and hazard controls that are experienced on the project daily. I’ve overheard people say it opens their eyes to the seriousness of dropped objects — that even small nails falling can really hurt someone,” said Chris Rutkowski, site safety lead for Kiewit-Kvaerner Contractors on the Hebron Gravity-Based Structure (GBS) project in Canada.

“What’s most important is that these rodeos are run by the craft. A safety message from peers carries more credibility than if it just comes from management,” he added.

Proactive training is one of the most common themes of CVIS, and extends beyond safety rodeos. Like on the Replacement Medical Center Facility, Eastern Colorado Health Care System project where a CVIS Education Center provides hands-on onboarding for new hires, reviewing tools and equipment used on the job and the potential consequences if used improperly.

“Having the opportunity to educate fellow craft in our CVIS Education Center on the hazards around us and watching craft take ownership and embrace the CVIS culture has been a positive experience,” said CVIS Lead Dave Mefford.

Additional best practices like suggestion boxes allow individuals to get involved in the process, while milestone events and barbecues recognize noteworthy accomplishments of the entire team.


#### **MAKING SAFETY PERSONAL**

The effects of the best practices coupled with CVIS tools and techniques unique to each project, are seen most clearly when changes directly improve the safety of those on site.

Like on the Cove Point LNG project, where CVIS has helped improve driving and access conditions.

“Some of the greatest things CVIS has been able to bring to the Cove Point job site are a lower speed limit and improved walkways to allow the best driving and access conditions possible in such a tight space,” said Jones.

Collectively, the process and the results are all about that one goal: ensuring the safety of everyone on Kiewit’s projects.

“All of our safety programs are about making safety personal,” said Grundke. “Our CVIS teams allow us to build better relationships and ultimately get everyone involved so Nobody Gets Hurt.” 







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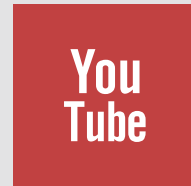
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