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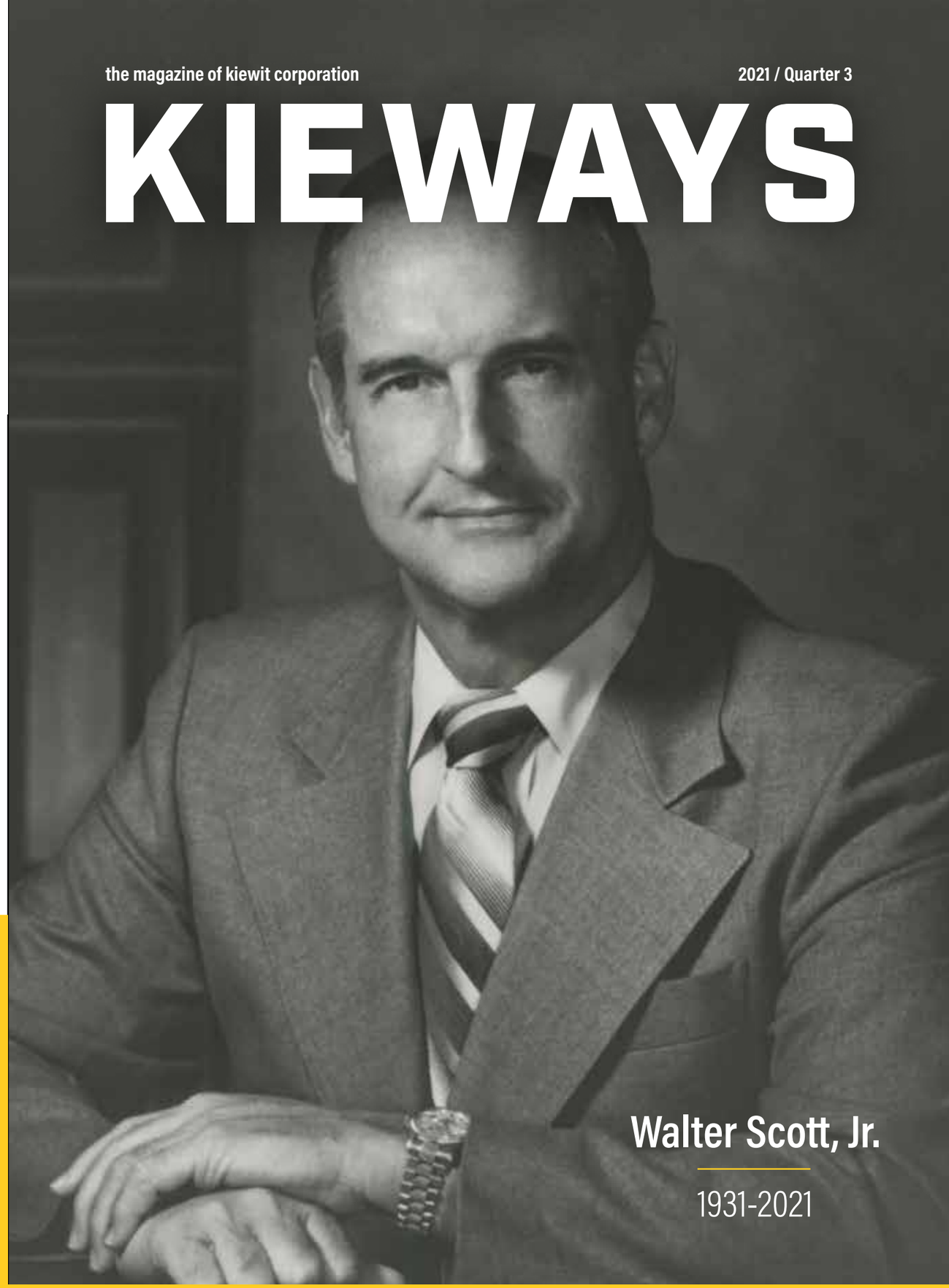
2021 / Quarter 3

KIEWAYS



Walter Scott, Jr.

1931-2021

DEVELOPING THE NEXT GENERATION
Walter Scott, Jr. focused his charitable investments on the education and development of young people through the Scott Scholars program. He is shown in this photo interacting with students at the University of Nebraska Omaha. Read more about Walter on Pages 4-7.

WALTER SCOTT, JR. LEAVES A LEGACY

In late September, Kiewit joined countless others in communities near and far to mourn the loss of Walter Scott, Jr., a significant presence at our company and in our industry.

With more than 65 years of total service at Kiewit, Walter served as the company's chairman and chief executive officer for 19 years before stepping down in 1998 and continued to serve on our Board of Directors up until last year. It was under Walter's leadership that many of Peter Kiewit's traditions continued on and were instilled in the company culture for future generations.

And while his contributions to Kiewit were many, Walter will forever be best known for his commitment to stewardship and the philanthropic work he did to improve communities and the lives of young people.

Through the Walter Scott Foundation, he had a powerful impact on institutions like Omaha's Henry Doorly Zoo, the Peter Kiewit Institute at University of Nebraska Omaha, and his alma mater, Colorado State University, where students attend the Walter Scott, Jr. College of Engineering. It would be difficult to list the many communities, people and organizations that Walter supported through his lifelong philanthropic giving, leadership and guidance. But those who were positively impacted by Walter know they were all the better for it.

Please read about some of Walter's many accomplishments and his legacy beginning on Page 4. I can't think of a better role model for living up to our Stewardship core value. He set a great example for all of us on the importance of giving back.

Our thoughts and prayers are with the Scott family and all who knew and loved Walter.

RICK LANOHA
President and Chief Executive Officer

Kiewit

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 Mexico. Kiewit offers construction and engineering services in a variety of markets including transportation; oil, gas and chemical; power; building; water; industrial and mining. Kiewit had 2020 revenues of $12.5 billion and employs 27,000 staff and craft employees.

MANAGING EDITOR: Sharon Armstrong

CREATIVE EDITOR: Ashley Wedeking

CONTRIBUTING WRITERS: Sharon Armstrong, Jordan Burgmeier, Michael Faust, Angela Nemeth, Teresa Shada

CONTRIBUTING DESIGNERS: Krista Aiello, Jordan Burgmeier, Emma Farrell, Kate Harris, Ashley Wedeking

CONTRIBUTORS: Rusty Brown, Jessica Jensen, Tricia Todd

EDITORIAL TEAM: Sharon Armstrong, Jessica Jensen, Tammy Korgie, Bob Kula, Laura Lenaghan, Dan Lumma, Amy Nussmeier, Craig Olson, Gary Pietrok, Neil Quinlan, Selma Santin, Teresa Shada, Shawn Vaughan, Ashley Wedeking

KIEWAYS
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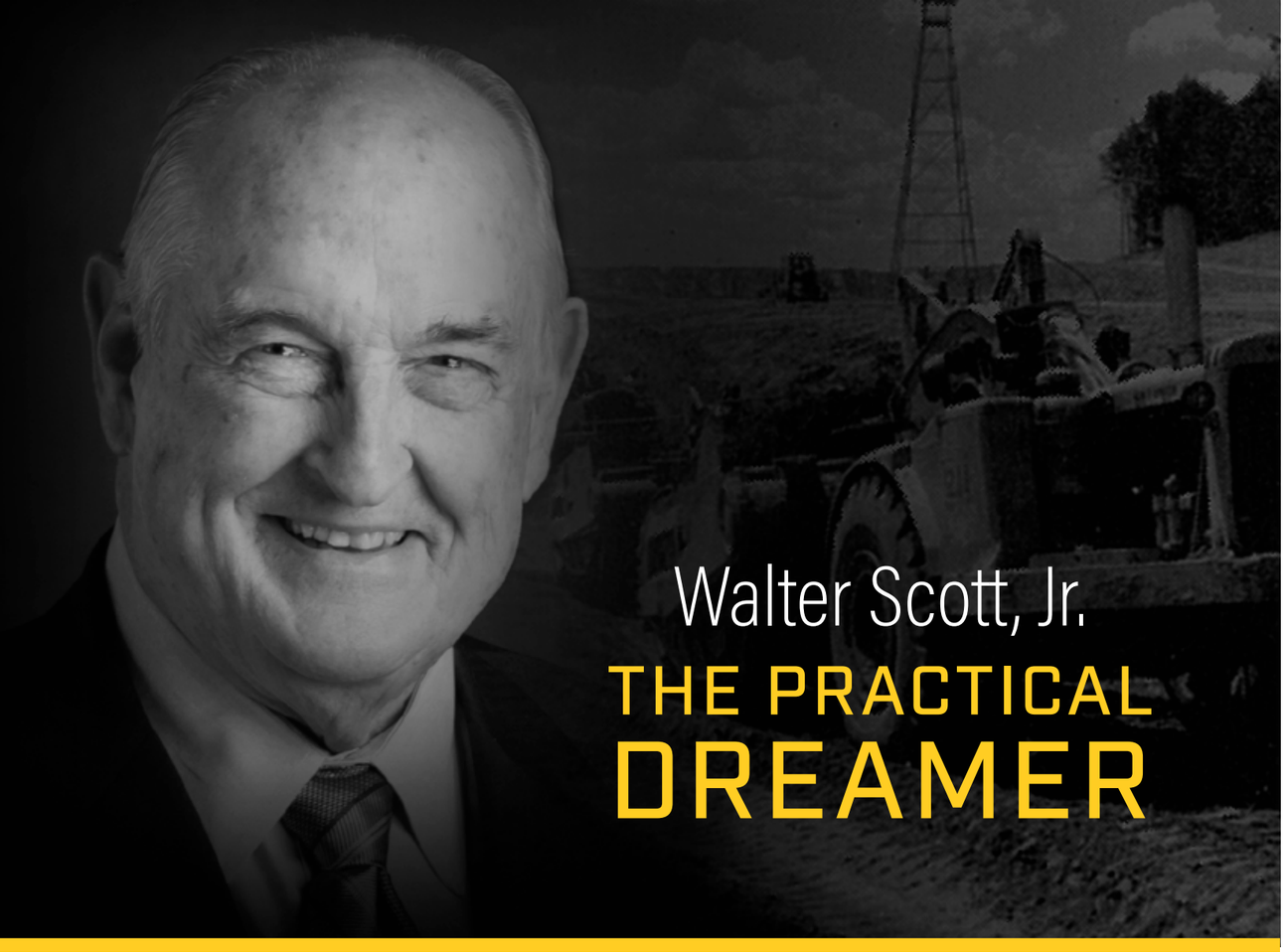
EXCAVATORS ON THE ROCKS

Groins, rock structures built to limit beach erosion, are one of many types of work being done by Kiewit in Hawaii, as shown in this photo of the Waikiki Royal Hawaiian Groin project in Honolulu. Read about Kiewit's work in Hawaii on Page 12.

ON THE COVER

ALSO INSIDE



Walter Scott, Jr.
THE PRACTICAL DREAMER

In the early sixties, Vice President and Division Manager Lee Rowe traveled to Cleveland to determine who might be the best candidate to succeed a District Manager who was making plans to retire.

He returned to Omaha to advise Peter Kiewit that the best option was not any of the district's more experienced employees. It was a relatively young man who, in addition to having a solid understanding of the fundamentals of contracting, understood the business side of construction.

That young man was 30-year-old Walter Scott, Jr. Peter was skeptical, but told Lee to proceed if he was confident in his decision. Under Walter's leadership the district's profitability improved dramatically.

Several years later, Walter was asked to return to his hometown of Omaha to serve as a Vice President and Division Manager. With a focus on work east of the Mississippi, he also sought to establish a Kiewit presence in the eastern provinces of Canada. Together with John Bahen he pursued work in Ontario and Quebec, planting the seeds for a dramatic expansion of the company's work throughout Canada.

Peter soon saw what Lee had meant by Walter's understanding of the business side of contracting. In 1965, he chose Walter to be Executive Vice President, with added responsibilities for oversight of the company's finance and administrative functions.

In November 1979, Peter Kiewit called from his room at Clarkson Hospital. He said he felt his time was short and wished Walter the best of luck. He never made it out of the ICU following surgery and Walter would lead the company with distinction for the next 19 years.

It was a career that almost didn't happen. During high school summers, Walter worked at a ranch near John Day, Oregon owned by a friend of his father. Upon graduation, he chose to attend Colorado A&M (now Colorado State University) because he planned to major in Range Management.

Early in his studies, fellow Nebraskan and friend Gene Miller asked Walter what he planned to study. Gene dissuaded him from his original plans, making the case that civil engineering might be a more challenging curriculum but one that would lead to a more diverse set of career opportunities.

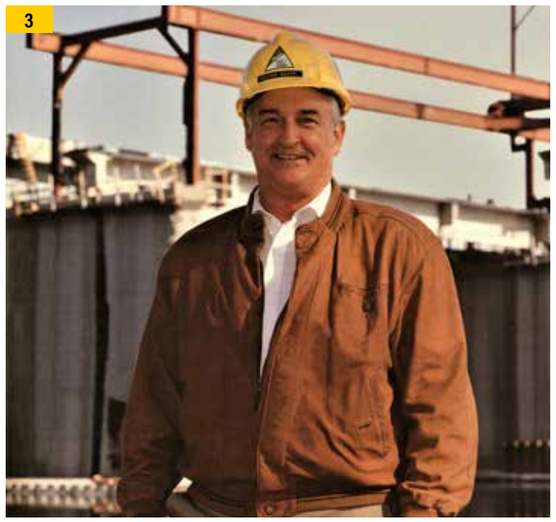
Gene was older than Walter but lived to see the 2017 dedication of the Walter Scott, Jr. College of Engineering at their alma mater. His career advice had been sound, but Walter did go on to purchase a ranch near Elk Mountain in south central Wyoming. Some dreams never fade.

Walter's predecessor as president, Bob Wilson, passed about seven months after Peter's death. Walter was Chairman and CEO of one of North America's largest contractors at age 49, and two of his mentors were gone. An added burden was a cancer diagnosis for Carolyn, who he had married before his senior year at CSU. She passed away in 1983. Their family was comprised of three daughters and one son, all born in different cities due to their many moves early in Walter's career.

Walter found a new partner in Suzanne Marshall Singer, who had been the first Executive Director of the Omaha Zoo Foundation. They married in 1987. Sue's two sons are both physicians, leading to a greater appreciation by Walter for philanthropy in medical research. Sue passed away in 2013.

Among his many community leadership roles, Walter's greatest love was reserved for Omaha's Henry Doorly Zoo & Aquarium. He became chairman of the Omaha Zoological Society in 1982. Over the next several decades he helped turn an average zoo into what is universally recognized as one of the finest in the world. At the time of his passing, he was still serving as chairman of the Omaha Zoo Foundation.

He was also passionate about helping young people get a start in the world. Each year, more than 100 students at his alma mater and several other universities receive Scott Scholarships.



1. Walter Scott, Jr., (back row, far right) was an engineer on the Continental Can Co. Plant project in Omaha, Nebraska, in 1953. 2. Walter stands behind Peter Kiewit in this photo taken at Annual Meeting in 1979. 3. This photo of Walter out on a project appeared on the cover of ENR in March 1993. 4. Kiewit Chairman Bruce Grewcock looks on as Walter delivers a speech after receiving his 60-year Service Award at the 2014 Annual Meeting.

Walter's Career at Kiewit

1953 Joined Kiewit after graduating from Colorado State University

Engineer on Continental Can Manufacturing Plant in Omaha, Nebraska

1956 Engineer on Monticello Dam in Napa County, California

1957 Project Engineer on Ogden Island Channel Excavation, Massena, New York

1958 Engineer Estimator in Cleveland, Ohio

1959 District Engineer in Cleveland, Ohio

1961 Assistant District Manager in Cleveland, Ohio

1962 District Manager in Cleveland, Ohio

1964 Vice President and Division Manager in Omaha, Nebraska; first elected to Board of Directors

1965 Executive Vice President and Division Manager

1979 President and later President and Chairman of the Board

2020 Retired from Board of Directors

When his children were young, Walter would often tell them that the most important thing they could have was their good health. The most important thing they could acquire was a good education. And the most important thing they could be was a giver. Because the world already has plenty of takers.

Walter followed his own advice. It has been estimated that he contributed $500 million to charitable causes during his lifetime. Following the example of his mentor Peter Kiewit, most of his estate will go into his charitable foundation.

Longtime friend Warren Buffett once observed that Walter didn't see things as they are, but as they could be five years or ten years into the future. But it was his professional background as an engineer and builder that made him a practical dreamer.

It was a life well-lived. Walter Scott, Jr. leaves behind a special legacy to the Kiewit people of today, the charitable causes that benefited from his generosity, and the children, grandchildren and great-grandchildren who were fortunate to have had such a wonderful role model. **K**

The Sustainable Giver

"Be a giver, not a taker. There are plenty of takers in the world." Walter Scott, Jr.

Long before the Suzanne & Walter Scott Foundation was founded in 1990, Walter Scott, Jr. was already blazing philanthropic trails. He traced that spirit of stewardship back to Peter Kiewit's influence in a naming ceremony speech for the Walter Scott, Jr. College of Engineering at Colorado State University (CSU), his alma mater, in 2017.

"Peter often remarked that it was more difficult to give away money intelligently than it was to make money in the first place. He didn't think in terms of making gifts or giving back; instead, he tried his best to make charitable investments in a community and in young people," Walter explained to a crowd of students.

He recalled hearing Peter say that charitable investments should produce societal returns, making sustainable impacts on people's lives or communities.

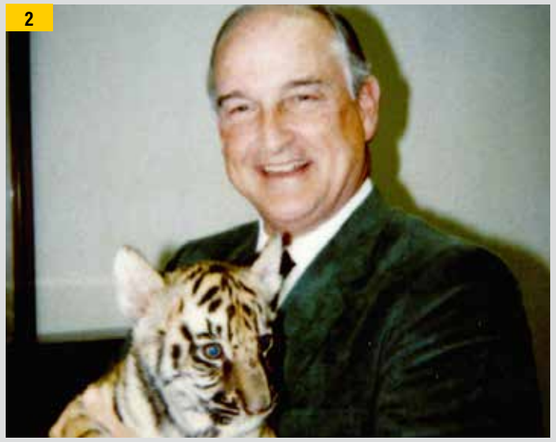
"I hope my investment helps develop the next generation of leaders — those who will do great things for our country," Walter told the audience of CSU students. "My job is done. Now it's up to you to make sure my investment lets you do great things."

Over the years, Walter focused his charitable investments on the education and development of young people through the Scott Scholars program. He helped fund multiple educational facilities for the University of Nebraska at Omaha, Hastings College, the University of Nebraska-Lincoln, Creighton University and Colorado State University. He also invested in medical facilities, museums and, of course, Omaha's Henry Doorly Zoo & Aquarium.

"Once Walter said yes to an idea, he didn't give up easy," said Dr. Lee Simmons, former director of Omaha's Henry Doorly Zoo & Aquarium and Walter's longtime friend. "Walter was an outdoorsman. He liked the zoo, he liked animals and he loved a little bit of adventure."

Over the years, Walter and Simmons traveled frequently to research animal habitats around the world, or with their teams to examine habitats at other zoos. Simmons says that construction-driven research is an uncommon but impactful practice in his profession.

"Whether it was for the jungle, the aquarium, the Desert Dome or the Gorilla Valley, we always traveled to the best of the same kind of facilities around the country. It was helpful to have the architects and Kiewit engineers there because they could ask the right questions. We were able to escape making mistakes others had made," said Simmons.



Among his many philanthropic endeavors, Walter's greatest love was Omaha's Henry Doorly Zoo & Aquarium. He loved the animals and interacting with them, as shown in the photos above where he is holding a young gorilla and tiger.

He credits Walter's good business sense and guidance for the way the zoo operates today and says, while the donations were welcome, they weren't the most important thing. In the early years as chairman of the Omaha Zoological Society, it was his expertise that made all the difference.

"Walter was an engineer and he used to look at the project, the problem, the parameters and alternatives and then make a decision — 'Bang!' like that. There was no hand wringing or maybes. The decision-making process was fast, and Walter let us take risks. That was undoubtedly a management style he picked up at Kiewit."

KIEWIT NEWS

What began in 1884 with two hard-working brothers has grown into a construction and engineering industry leader. As a multi-billion dollar organization, Kiewit can tackle projects of all sizes, in any market. Here's a brief collection of recent news and information from around the company.

OUR MARKETS:

- BUILDING
- INDUSTRIAL
- MINING
- OIL, GAS & CHEMICAL
- POWER
- TRANSPORTATION
- WATER

OUR VALUES:

- PEOPLE
- INTEGRITY
- EXCELLENCE
- STEWARDSHIP

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NEW BOARD MEMBER BRINGS OUTSTANDING EXPERIENCE TO KIEWIT

Lynn Elsenhans joined Kiewit's board of directors on Aug. 1.

Elsenhans has extensive global executive leadership and board experience, including serving as chairman, president and chief executive officer at Sunoco from 2009-2012. Before Sunoco, which she joined in 2008, Elsenhans held a wide variety of executive management roles during her 28-year career at Royal Dutch Shell, including executive vice president of Global Manufacturing from 2005-2008.

Elsenhans serves on the boards of Baker Hughes and GlaxoSmithKline (GSK), and the state-run board of Saudi Aramco, one of the world's largest energy and chemical companies. She has also served on the boards of International Paper, Texas Medical Center and Flowserve, one of the largest suppliers of industrial and environmental machinery to the power and OGC markets. She is an advisory board member of the Whiting School of Engineering at Johns Hopkins.

"The strength and diversity of Lynn's board experience speaks for itself, but more importantly she has always been an active board member, consistently reaching out to provide insights and guidance to those who work at the companies where she serves as a director," said Kiewit Chairman Bruce Grewcock. "I've asked her to do the same at Kiewit. Lynn is a great fit for our culture, and her perspective will bring fresh eyes to our strategy and business operations. I'm confident she will only add to the impact our external board members regularly provide."

CRITICAL TRANSPORTATION INFRASTRUCTURE REOPENS BETWEEN ARKANSAS AND TENNESSEE

All lanes of the Hernando de Soto Bridge on Interstate 40 between Memphis, Tennessee, and West Memphis, Arkansas, reopened on August 2 after repairs were completed to a fractured steel beam. Kiewit mobilized to the site less than 72 hours after being awarded the emergency repair project. Crews worked alongside the Tennessee and Arkansas Departments of Transportation to deliver the project and safely restore mobility in under 11 weeks.

NEW DIGS IN DENVER

The first building on Kiewit's Denver regional headquarters campus welcomed its first employees in June 2021. This innovative, contemporary office in Lone Tree, Colorado, is adjacent to a light rail station, providing employees with easy access to alternative transportation across the Denver Metro.

A second building is scheduled to open summer of 2022. Upon completion, the entire campus will have space for 1,800 employees.

A LASTING LEGACY FOR JIBBY

In 2020, Djibril "Jibby" Diol, an engineer on the Central 70 project in Colorado, died in an arson fire along with his wife, daughter, sister and niece. The Kiewit Companies Foundation joined the CSU Walter Scott, Jr. College of Engineering, Jibby's alma mater, to establish a civil engineering scholarship in his memory.

"On C-70 we started the phrase, 'Be more like Jibby,' and we use it to this day," Kiewit Central 70 Project Manager Jason Proskovec said. "His positive attitude always brought up morale, directly impacting the performance of his team."

SEVERAL KIEWIT EMPLOYEES RECOGNIZED BY INDUSTRY AND BUSINESS ORGANIZATIONS

Several Kiewit employees were recently recognized for their achievements by construction and business organizations.

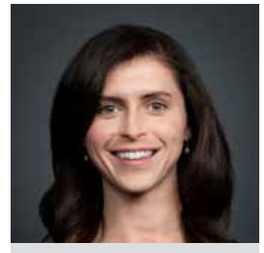
- The Moles named Paul Madsen a member of its Class of 2020. The 2020 class was recognized alongside the 2021 class this year. The Moles is an organization, "composed of individuals now or formerly engaged in the construction of tunnel, subway, sewer, foundation, marine, sub-aqueous or other heavy construction projects."
- The Women Builders Council named Karly Almond, Sarah Cooperman and Liz Starbuck 2021 Next Generation of Women Builders honorees. The Women Builders Council (WBC) was established in 2004 and is the leading voice for women in the construction industry in New York.

Paul Madsen

The Moles, Class of 2020

Karly Almond

Sarah Cooperman



Liz Starbuck

Women Builders Council, 2021 Next Generation of Women Builders

THESE INTERNS AREN'T MAKING COPIES

While Kiewit internships allow students to gain insight into their future careers, they also give Kiewit employees the opportunity to mentor the next generation of construction and engineering industry employees.

Many Kiewit employees, ranging from field engineers to top executives, began their careers as Kiewit interns.

Over 1,500 Kiewit employees previously interned at the company, making them ideal mentors for those looking to follow similar career paths.

Out of last year's 1,012 interns, 631 returned to Kiewit for another internship or to accept a full-time position. Even with the restrictions of a virtual internship, these interns were wanting more.

Aaron Wharry at Propane Dehydrogenation project (PDH)

A total of 733 interns from across North America joined Kiewit this year. These interns came from 232 universities and across 91 different majors or fields of study.

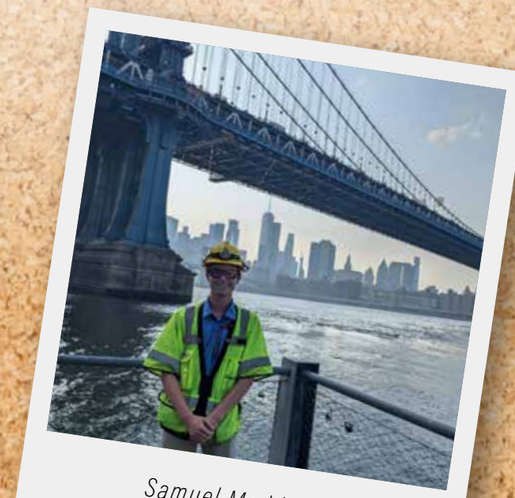
While these students may be called interns, they worked alongside Kiewit staff and craft as full members of their teams.

Here's more about how their Kiewit internship has made an impact on them:

Kara Bjornson at Big Bar project

Lauren Holt at Long-Baseline Neutrino Facility

Dana Bonner at Ottawa Light Rail Transit project



Samuel Madder in New York, New York

AARON WHARRY

Northern Alberta Institute of Technology

At the PDH site, every day I learn something new about the world of industrial construction: from rigging, to piping, to structural steel, to insulation and of course the amazing people that make it happen. I believe the greatest impact Kiewit has had on my career is learning the importance of effective communication — when it comes to helping others, it's all about your approach. I have been so fortunate to be surrounded by people who have taken time to invest in my future, and I'm proud to say that every day I'm taking safety to new heights.

KARA BJORNSON

University of Western Ontario

Being an intern on this project is a once-in-a-lifetime opportunity. I've been able to see firsthand how my actions and roles as an intern, no matter how big or small, have a large impact on the project and others. I enjoy the fact that my work has a purpose. Kiewit has given me the opportunity to act as a field engineer, with no discrepancies between myself and other FEs on site, and learn an extraordinary amount in my small amount of time on the project. I am proud and grateful to be a part of this project and will remember it for the rest of my life.

LAUREN HOLT

Colorado School of Mines

Not many can say they have been 4,850 feet underground, but I am one of a handful who can. From the 6 a.m. cage ride down, to observing the process of drill, blast, muck and bolt, to getting prepped behind the blast doors for my first rock blast, there is not a moment where it wasn't exhilarating to learn. This truly is a one-of-a-kind, hands-on learning experience you would not find anywhere else but with Kiewit.

SAMUEL MADDER

Drexel University

This summer I have been able to see just how much planning it takes to run a project in a very busy location. I've seen how Kiewit works to protect its employees while working from heights, in confined spaces, and close to traffic. It's been amazing watching the levels of precaution Kiewit puts in place to protect everyone on its jobsites at all times. Thank you for letting me see how you take care of your employees and showing me what it means to be part of the Kiewit family.

DANA BONNER

Ryerson University

I have always been fascinated by the construction industry and the joy of watching a project progress from start to finish. Working with Kiewit has been such a rewarding experience, and this project is one that I am proud to put my name on. Having grown up in Ottawa, I really feel that I have a first-hand understanding of the social impacts of this project. This project takes the east-most portion of Ottawa and connects it to the west-most portion, bringing the community together so that 77% of us live within 5 kilometers of the train. And not only that, but it will also bring us over 1,000 jobs in these difficult times and reduce our greenhouse gas emissions by 110,000 tons by 2048. I am so proud to work for Kiewit on this project and to serve the community where I was raised. **K**

Winning in HAWAII

A strong strategy and winning formula have led to success for Kiewit Infrastructure West Co. in Hawaii. It's a combination of bidding enough work, maintaining good relationships, keeping equipment utilized and having a loyal, diversified and dedicated craft workforce.

Kiewit bids 55 to 60 jobs a year in Hawaii, and those projects can range from a few hundred thousand dollars to hundreds of millions. The bulk of the work is traditional bid-build and includes concrete paving, heavy civil, highways, underground utilities, site development, rock revetment, groins and beach nourishment.

"We bid every single job that we have the capacity to perform," said Kyle Preedy, executive area manager. "Between start-up and close-out, we consistently have 20 jobs active at any given time."

That's where the winning formula comes into play.

Hawaii has a dedicated estimating team, which gives them the capacity to bid the high number of jobs. It has its own equipment fleet that is sourced out to the various jobs as needed. They have a craft workforce experienced in a variety of disciplines — a team willing to go where they are needed. Finally, they focus on building strong relationships with clients, subcontractors, employees and others.

EXPERIENCED CRAFT

"We have a strong craft pool, a lot of talented craft loyal to us and willing to travel with us," said Kiewit Sponsor Kyle Johnson. "Our crews can build anything. They might be working on a bridge job one day and a utility job the next."

Project Manager Kyle Nakamura has been with Kiewit for more than 20 years and attributes a lot of the company's success in the islands to this experienced crew.

"We have a very strong base of experienced people who already understand the Kiewit culture, our core values and how we do work," he said. "It's almost like you come into a job and you already have momentum."

Most stay with Kiewit because of the culture. Nakamura said there is a sense of family and the people out in the field are close and always looking out for each other.

"Craft stay with Kiewit because they come to work for us and they realize that when we say we take safety seriously, we mean it," Nakamura said. "They understand that the reason we need them to follow the rules is because we want them to go home safe at the end of every day. They see we mean it, and we genuinely care about them."

Making sure the people and the equipment stay busy is a bit of a juggling act. It takes a lot of coordination, planning and scheduling the work to optimize resources.

Johnson compared Kiewit's Hawaii operations to running a small contracting business.

"Our targets are different, we do diverse types of work and a lot of the work is short duration — a year to 18 months," he said. "We're always going through start-up, construction and closeout."

STRONG RELATIONSHIPS

"One thing about Hawaii, whether it's the clients we work for or the subcontractors we work with, it's a small place. You know a lot of the people you're working with," said Johnson. "They might be with one company one day and another company the next but sure enough, they are going to turn up somewhere in the industry. Those relationships do matter; that sense of community matters out here."

1. Kiewit replaced three single lane bridges on the narrow Camp 10 Access Road in Waimea Canyon. 2. Crews recently built a helicopter dock pad, landing platform and a concrete emergency landing pad at the Marine Corps base in Kaneohe, Hawaii. 3. The Hawaii team repaired 460 linear feet of seawall with cast-in-place form-line concrete on Waikiki Beach.

The Dowsett Highlands Sewers Project required installation of 17,500 linear feet of new gravity sewer lines, using guided bore and open excavation methods.

Most of the Hawaii work is the traditional rip-and-read contract, but relationships are still key. Working with the same people helps the company understand what it takes to work for them, he added.

"We might work for 15 or more clients in a given year, but they are clients we've worked with in the past. We have a history with them," said Preedy.

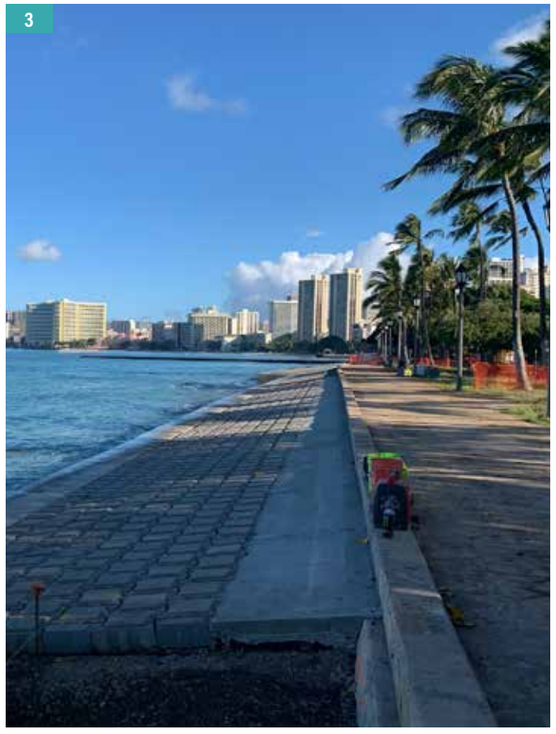
Repeat clients include the Hawaii Department of Transportation, city and county of Honolulu, Hawaii Department of Land and Natural Resources, U.S. Army Corps of Engineers and the U.S. Naval Facilities Engineering Systems Command.

TRAINING THE NEXT GENERATION

Beautiful scenery, beaches and comfortable temperatures aren't the only benefits of working for Kiewit in Hawaii.

Because of the number of jobs underway at any given time and the varying sizes of those jobs, employees in Hawaii get exposed to a lot of different types of work and get opportunities to rapidly develop their careers.

"I'm certainly proud of the success we have here financially and operationally, but I think one of the unique things that



Scope of the Kapalama Container Terminal project (left and above) included site preparation for construction of a new 60-acre container terminal at Honolulu Harbor.

we get to do over here is to develop the next generation of contractors for our company," said Preedy.

"These projects provide folks with good opportunities to take on bigger roles, wear a lot of hats and get exposure to all different aspects of the contracting business," said Johnson. "It accelerates their development and allows us to continue to put them in bigger roles with more responsibility, so we can keep chasing more work."

Hawaii has logistical challenges, which also provide valuable training in resource planning. Located 2,700 miles from the mainland, they can't run down to the local hardware store or equipment dealership to pick up something they need. Preedy said that can be very expensive or require a lengthy lead time to get, so detailed, accurate planning is critical.

While they have a strong pool of talent that stays in Hawaii, most move on to other roles in the company.

"When you look at the history of the folks who have spent time here, the list is pretty long of people who went to the mainland and had a huge positive impact on other parts of the company," Preedy said. "It's a reflection of the business model here. It's a disciplined approach to training and developing the next generation of project engineers, superintendents, project managers and sponsors." **K**

"These projects provide folks with good opportunities to take on bigger roles, wear a lot of hats and get exposure to all different aspects of the contracting business."

KYLE JOHNSON
Sponsor

THE PATH TO DECARBONIZATION

The role of engineering and construction in the energy transition

The energy transition, a global strategy to reduce carbon emissions, is here to stay. A growing number of government entities, private companies, investors and consumers are backing the effort and have publicly declared targets and goals.

In the U.S., President Biden has set the goal of reaching 100 percent carbon pollution-free electricity by 2035. Some states, such as California, have even more aggressive plans, aiming to reduce carbon emissions to 40 percent below 1990 levels by 2030. In Canada, the federal government is committed to reducing emissions to 30 percent below 2005 levels in less than a decade, by 2030.

In the private sector, large global companies — including Microsoft, BP, American Airlines and Nestle — have all publicly committed to net-zero targets. Private equity firms are taking unprecedented steps to decarbonize their portfolios. And global sales of electric vehicles are at an all-time high, increasing by more than 40 percent in 2020.

The goals have clearly been set — now what?

"The path forward will require all of us to stretch our thinking, facilitate new collaborations and embrace innovation," said Dan Lumma, who leads engineering services at Kiewit. "It will also require extensive engineering and construction ingenuity, which we are prepared and well-equipped to provide."

While decarbonization is complex and multi-dimensional, there are three general areas in which Kiewit can help:

1. Retrofitting facilities and systems to reduce or eliminate carbon emissions
2. Increasing the use of renewable energy resources
3. Helping industrial operations meet the new demand for products, such as hydrogen and ammonia

REDUCING, CAPTURING AND CONVERTING CARBON

Nearly everything we do, either directly or indirectly, emits carbon — from the clothes we buy to the food we eat and the homes we heat. However, there are three major sources that comprise roughly 75% of carbon emissions in the U.S.: transportation, electricity and industry.

"We've been working with clients in these markets for decades and understand the opportunities and challenges of their business and facilities," said Matt Thomas, a leader in Kiewit's power engineering business. "This foundational understanding gives us a head start in helping them transition to lower carbon intensive operations."

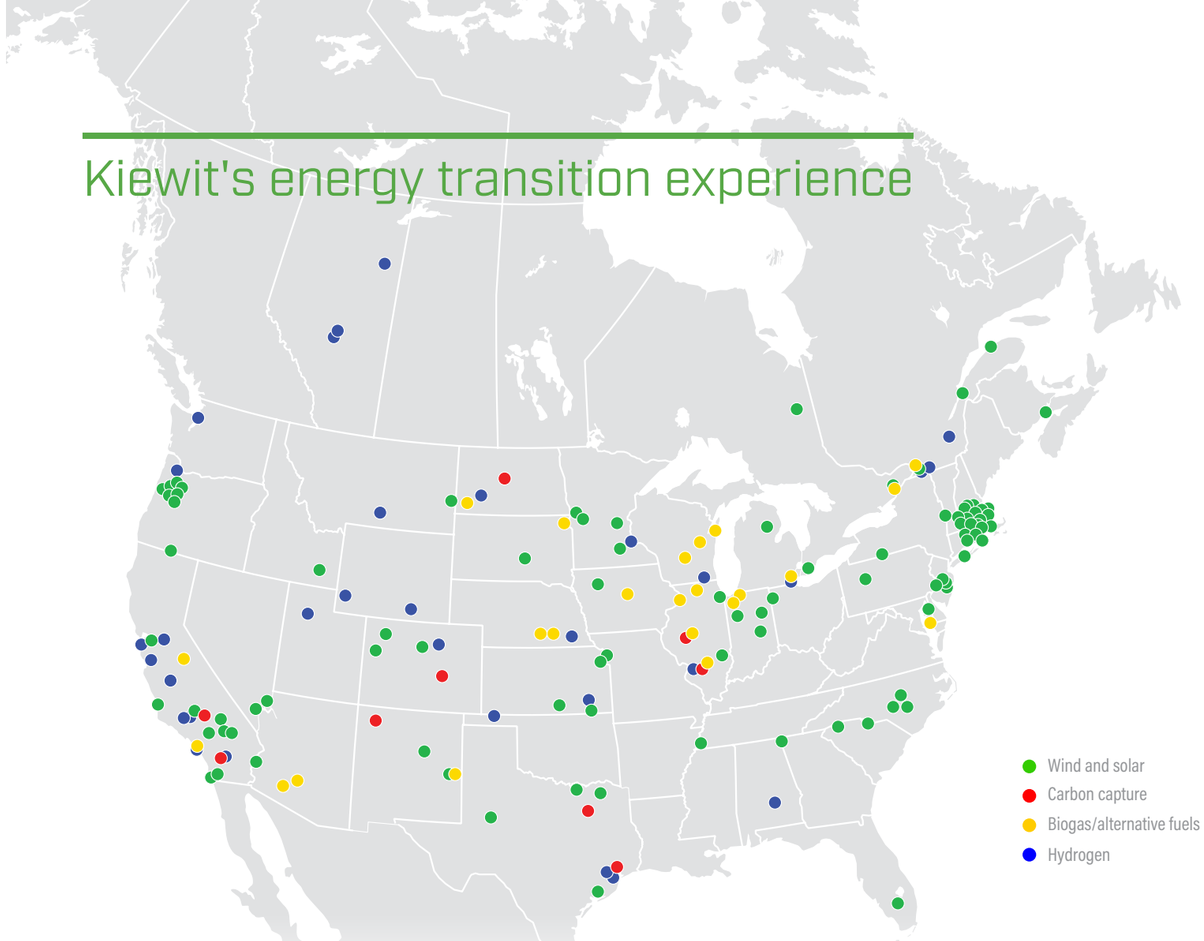
In the power generation market, carbon capture, utilization and storage (CCUS) technologies are now a proven solution in mitigating emissions. In 2017, the first commercial-sized post-combustion carbon capture system in the U.S. began operating at Petra Nova in Thompsons, Texas. Kiewit and its subsidiary, TIC – The Industrial Company (TIC), served as the engineering, procurement and construction (EPC) contractor for the facility.

More recently, Kiewit has devoted countless time and resources to various CCUS research and pilot projects, including an engineering study backed by the U.S. Department of Energy to retrofit an existing power generation station in Illinois with a system designed to capture 95 percent of carbon emissions. Kiewit has also conducted a detailed analysis of direct air capture (DAC) technology — a process where CO2 is removed from the atmosphere through chemical processes. The analysis includes information and guidance on cost, supply chains, materials and labor requirements that can help streamline decision-making by facility owners. The potential impact of this type of research is tremendous as it can help fuel more widespread adoption of CCUS at coal, natural gas and industrial facilities across North America.

In the transportation market, the availability and accessibility of public transit plays an important role in reducing carbon emissions. Building or expanding these systems can be time and cost intensive; however, the use of alternative project delivery methods is helping to streamline budgets and schedules.

Beyond public transit, new electrification technologies continue to gain momentum in the transportation market. Specific infrastructure is needed to support the increased use of electric vehicles among individuals and large company fleets. Advancements continue to be made in vehicle-charging stations as well as the emergence of new technologies, such as dynamic electrical vehicle charging, which allows vehicles to charge as they are driving down the road.

Kiewit's energy transition experience



To fully integrate electric vehicles into transportation networks, local utilities also need to ensure that the electrical grid can support electrification. For example, FedEx has set its sights on electrifying its entire fleet by 2040 — an estimated 77,000 vehicles in the U.S. — which will affect when, where and how much electricity the grid will need to deliver.

NEW INVESTMENT IN RENEWABLES

Wind, solar, geothermal and hydroelectric have been a mainstay in the production of renewable energy for many years. Kiewit has been working in these markets for more than four decades, but the speed of innovation in renewable energy has increased significantly in recent years. For example, wind farms are expanding from on-land to offshore, and bifacial photovoltaic modules are more efficiently harnessing the power of the sun.

"We've assembled a team and strategy to stay ahead of emerging technologies so that we can thoroughly evaluate how they might fit with our clients' needs," adds Thomas. "Through Kiewit's highly specialized subject matter experts, we can help make the best decisions to get the best results."

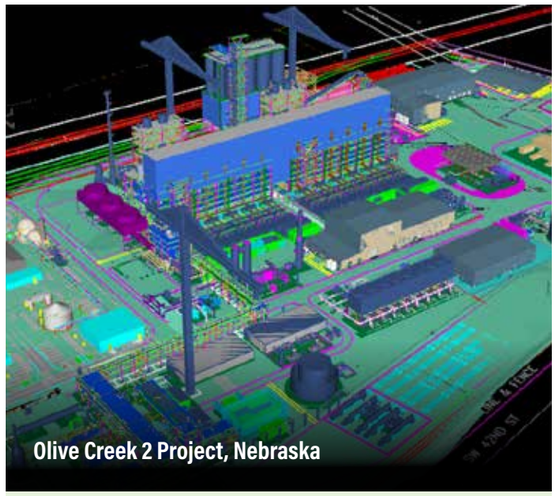
There is also renewed interest and investment in other renewable energy sources. The use of renewable diesel is on the rise, most notably in California, where the Low Carbon Fuel Standard has triggered demand for alternative fuels. The conversion of several existing petroleum-based refineries is currently underway, which transform vegetable and animal fats into renewable diesel. Combined heat and power systems (CHP) are also being retrofitted to use biogas and wood waste as fuel, reducing dependency on natural gas. In Maryland and Wisconsin, Kiewit is providing engineering and construction services to farming operations where poultry litter and dairy farm manure are converted into fuel.

NEW MARKETS AND REVENUE STREAMS

The National Renewable Energy Laboratory (NREL) projected a four-fold increase in the demand for hydrogen by 2050. The growing popularity of hydrogen is partially driven by its versatility since it can be used as a fuel source

Petra Nova Carbon Capture Project, Texas

The first commercial-size post-combustion carbon capture system in the U.S.



Olive Creek 2 Project, Nebraska

The first large scale, carbon-free ammonia plant in the U.S.

Ottawa LRT Stage 2, Ontario

The use of public transportation plays a critical role in reducing carbon emissions. In Ottawa, 77 percent of residents will be within 5 kilometers of rail once the Stage 2 project is complete.

Samson Solar, Texas

The largest solar energy farm in the U.S.

as well as feedstock in many industrial operations. For example, hydrogen can be used to power combustion turbines instead of natural gas. Many CCUS technologies also support clean hydrogen, ammonia and ethanol production.

As a result, there are new commercial opportunities and revenue streams to meet this demand.

"We recently had a call with a client to discuss how they might turn the carbon emissions at their facility into a revenue stream," said Travis Shearer, vice president of Kiewit's energy group. "Due to the breadth and depth of Kiewit's experience and capabilities, we were able to pull together the right subject matter experts that can transform an idea into the real deal."

Beyond hydrogen, there is also an uptick in the demand for ammonia. Kiewit is currently the EPC contractor for the first large scale, carbon-free ammonia plant in the U.S. The facility will utilize proprietary technology to produce anhydrous ammonia and carbon black, which are key ingredients used to manufacture fertilizer, tires, cables, batteries and other products.

"Our ability to successfully execute industry-first projects is a testament to our talent and agility; however, it is also driven by our unique distributed execution model," said Rob Zinsmeister, the engineering manager for Kiewit's oil, gas and chemical business. "Kiewit has centralized expertise and local execution capabilities, resulting in a more streamlined approach since we can mobilize faster and understand the local labor market."

Looking ahead, there are several noteworthy innovations on the horizon:

- A process in which carbon can be absorbed by algae and used to make products, such as soil supplements and food for fish or livestock
- New solutions that can convert carbon into chemical products that are used to manufacture plastics, pharmaceuticals, carbon fiber and synthetic fuel
- The ability to purify, store and inject carbon into concrete.

"There is an unprecedented level of innovation and cross-pollination with process, power and industrial engineering," said Alastair Cullen, who is on the front lines of Kiewit's business development efforts. "It is an exciting time to work in engineering and construction, where we can make a meaningful contribution to the energy transition." **K**

"The path forward will require all of us to stretch our thinking, facilitate new collaborations and embrace innovation. It will also require extensive engineering and construction ingenuity, which we are prepared and well-equipped to provide."

DAN LUMMA
Kiewit Engineering Group, Inc.

OLEFINS RECOVERY

A WORLD-CLASS PLASTICS FACILITY BUILT ON NERVES OF STEEL

Under normal circumstances, transforming a Texas cotton field into a multibillion-dollar plastic manufacturing facility would be quite a feat. But building a world-class plastics plant during a global pandemic — that takes nerves of steel.

To build a client's vision in the heart of Texas' Coastal Bend community took four large engineer-procure-construct (EPC) teams who came together to simultaneously build their own scopes of work — work that will become the world's largest single unit ethylene plant.

Between the four EPCs, 6,000 construction jobs employed people from all walks of life and backgrounds, bringing them to Gregory, Texas. And, despite a global pandemic that brought much of the world to its knees, the project was able to keep progressing and moving forward.

For the CKJV team, the largest of the four EPCs, the story that it will be telling for years to come is one of safety and finishing strong.

1

2

1. Crews transform a cotton field to a level-stabilized surface in preparation of setting the "plug and play" modules being fabricated overseas.
2. A module shipment prepares to leave China for Gregory, Texas.

CKJV, a 50/50 joint venture of Chiyoda International and Kiewit Energy Group Inc., was tasked with designing and building the olefins portion of the plant, the heart of the entire ethylene project. This portion, also called the ethane cracker, feeds three derivative units: one monoethylene glycol unit and two polyethylene units, each of which are being built simultaneously by different EPC teams.

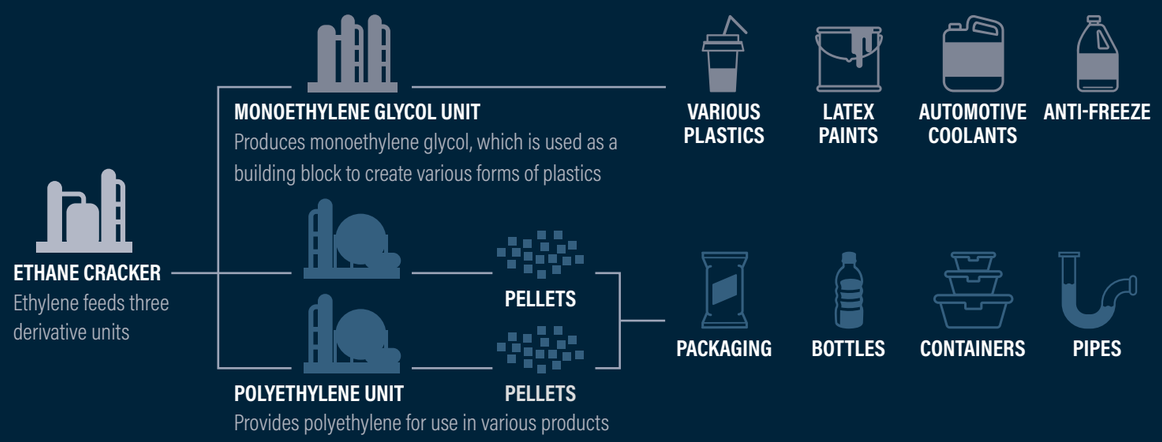
The project's client set clear expectations with its EPC teams — its core values of health, safety and environmental protection must be reflected throughout the construction phases of the project. Before even breaking ground, CKJV put an emphasis on executing those values, building out its JV team with the right partners and contracting out the construction to TIC — The Industrial Company (TIC).

TIC, a wholly owned subsidiary of Kiewit Corporation, was a perfect fit for the JV team — not only because of its extensive experience in the petroleum market, but also because it shares and lives up to Kiewit's Nobody Gets Hurt safety philosophy — a philosophy fully embraced by CKJV.

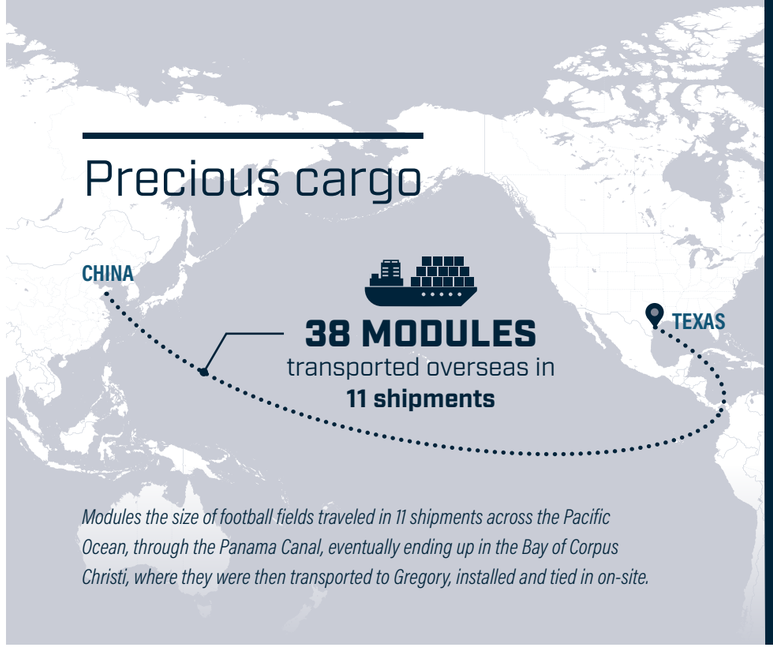
GETTING READY TO PLUG AND PLAY

While what would become "plug and play" modules were being fabricated half a world away, construction on the site in Gregory broke ground in spring 2019. For more than a year, the team on-site was focused on civil and concrete to support the entire plant, with the utilities area having an early turnover deadline for the end of 2020. This phase of the project also included anchor-bolts-down work, a term used to describe everything on a construction site that

Making plastics 101



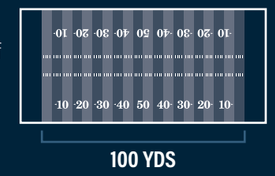
Precious cargo



Modules the size of football fields traveled in 11 shipments across the Pacific Ocean, through the Panama Canal, eventually ending up in the Bay of Corpus Christi, where they were then transported to Gregory, installed and tied in on-site.

The tallest module CKJV placed was nearly 170 feet tall, almost as tall as the leaning tower of Pisa.

Modules the size of football fields



happens underground and with a project's foundation.

"On the Olefins Recovery Project, anchor-bolts-down was a geotechnical challenge," explains Executive Project Sponsor Paul Geldmeier. "Because the site was greenfield (a term used to describe rural, undeveloped land), it required extensive soil mixing and we turned the ground from a cotton field to a level-stabilized surface to put the plant on."

For CKJV, this meant calling upon Kiewit's infrastructure and heavy civil expertise to ensure the land was capable of handling the massive modules being fabricated offsite. Skilled civil and foundations crews came from all over the south to ensure the land was properly developed.

Modularizing the project and executing module fabrication overseas greatly reduced the project schedule. However, modularized projects require a different level of effort with an intense focus on early and accurate design information to support the modularization process.

The massive modules — roughly the size of football fields — brought with them extreme weight and heavy haul consideration in order to transport and set them onto their foundation. Project success depended on the early design and fabrication of the modules overseas, along with executing the logistics required to work seamlessly across all four EPC contractors to deliver their respective modules on time and as complete as possible.

The result of this collaboration was 38 modules designed and completed on-time, as close to fully commissioned as possible overseas, eliminating significant commissioning time on-site.

BREATHING NEW LIFE INTO SAFETY

When it came to the project's aggressive schedule, CKJV flourished. Deadlines were met, some even exceeded. But by the time the team was completing its utilities area turnover in winter of 2020, there was a definite opportunity to reaffirm everyone's focus and commitment to safety.

At this point, CKJV was starting its process olefins-oriented phase on the south side of the project. This second phase was the more technical and process-critical portion of the job. The project team barely had time to catch their breath as they ran right into this phase of the project.

When a project changes from one phase to another, it can be an opportune time to bring in new leadership because the type of work changes and the expertise needed often differs. CKJV decided to change out its leadership, with the goal of these leaders being focused on safety, collaboration and open communication.

It was then that David Dukat, a senior vice president with TIC responsible for the company's southern operations, was brought in to serve as the full-time project director, and Geldmeier, president of Kiewit Offshore Services, Ltd. (KOS), an affiliate of Kiewit Energy Group Inc., was brought in to serve as executive project sponsor.

"A lot happened to the world around us during anchor-bolts-down and the utility work," said Dukat. "Much of the country was working remotely and avoiding contact, but in construction that isn't an option. The pandemic changed the way we worked. We adapted to wearing face coverings, trying to stay 6 feet apart at all times, eliminating small

and large gatherings, worrying about our co-workers and families, and never knowing what tomorrow would bring. It was an anxious and exhausting time for a lot of people. We had to find a safe way to bring back the feeling of teamwork and camaraderie to the project."

With Dukat at the helm and Geldmeier there to support, CKJV also brought in more leaders from KOS, including Todd Brennan as construction director, and Matt Grant as a full-time safety manager. Dukat also brought in two area managers to serve as full-time operational safety leaders.

"These were not only safety managers, but some of the company's best leaders, builders and strategic thinkers, stepping onto the project with a fresh perspective to breathe new life into CKJV's project culture," said Geldmeier.

Their purpose was to ensure the project was focused on learning from mistakes and making sure the Nobody Gets Hurt safety culture drove every action and decision, explains Dukat.

BREAKING DOWN BARRIERS

CKJV got to work, kicking off the Operational Safety Leadership (OSL) program and Life Saving Actions task forces to focus on enhancing craft engagement. The task forces also identified where project learning could improve.

They introduced a Learning Teams program where facilitators brought crews in and conducted confidential assessments, asking open-ended questions to determine root causes to the lack of craft engagement. Results from the Learning Teams led CKJV to reexamine the way it was executing and using data from its observation program. Data from the Learning Team assessments also helped Dukat and his leadership team better understand the steps they could take to maximize the Craft Voice in Safety (CVIS) and Craft Safety Advisor (CSA) programs.

"Our Nobody Gets Hurt safety culture has always been about reporting everything, no matter how seemingly minor," Geldmeier said. "The goal is to listen to our craft and learn how to continuously improve and put in safeguards, so everyone stays safe."

TALE OF TWO TURNOVERS

Fast forward to the end of the south process Olefins turnover, and morale is the highest it has ever been.

We were always going to finish the work ahead of schedule, but building high quality work ahead of schedule isn't enough if we cannot build our work safely," Dukat said. "We are a company powered by people, and our safety and morale had to be as strong as our finish." **K**

1. Once complete, the Olefins Recovery project CKJV built will be part of the world's largest single unit ethylene plant. 2. CKJV broke ground before the pandemic. However, once the pandemic hit, the team was quick to adapt and evolve its protocols to keep the project safely moving forward.