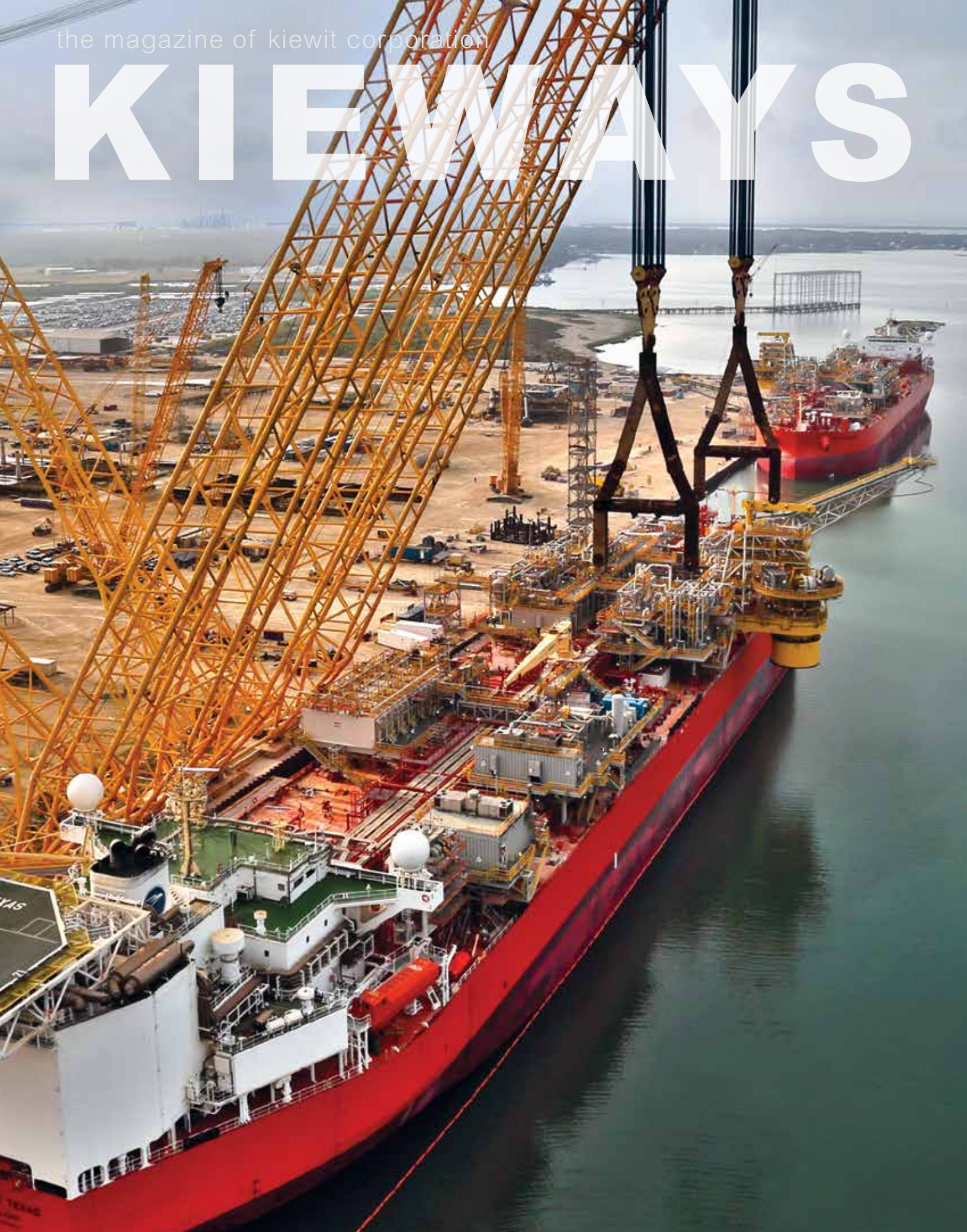


the magazine of kiewit corporation

# KIEWITWAYS







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 company operates through a network of offices and projects in the United States, Canada and Australia. Kiewit offers construction and engineering services in a variety of markets including transportation, water/wastewater, power, oil, gas and chemical, building and mining. Kiewit had 2013 revenues of \$11.8 billion and employs more than 33,000 staff and craft employees.

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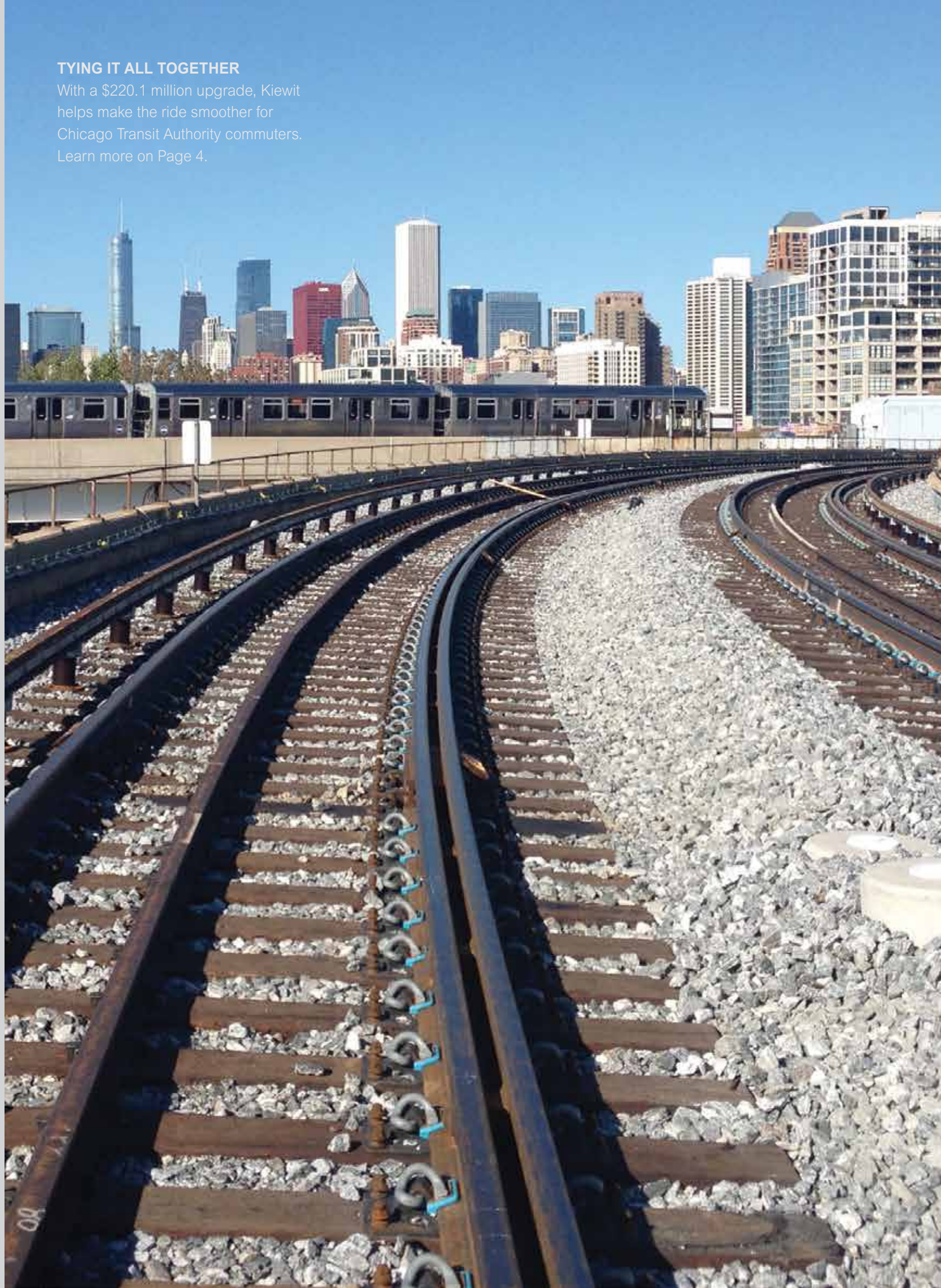
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**TYING IT ALL TOGETHER**

With a \$220.1 million upgrade, Kiewit helps make the ride smoother for Chicago Transit Authority commuters. Learn more on Page 4.



**POSITIONED TO MEET THE NEED**

We are all too familiar with the aging and crumbling infrastructure in the U.S. and Canada. Years of neglect and underinvestment have resulted in bridges, highways and rail systems that need to be upgraded or replaced. In fact, the American Society of Civil Engineers annually grades the U.S. infrastructure, and the 2013 rating was a dismal D+.

This year, the U.S. Congress is addressing the serious revenue shortfall of the Highway Trust Fund, the surface transportation program's federal funding mechanism. This topic will be highly debated, but I'm encouraged to know that at least Congress is discussing new revenue sources for infrastructure repairs.

This issue of Kieways features a recent example of how we are helping repair the aging infrastructure. Kiewit rebuilt the Chicago Transit Authority's Red Line Dan Ryan Track — the second-largest public transportation system in the U.S. Aging track conditions resulted in unreliable train service for the 640,000 daily commuters. Kiewit worked 24/7 on an accelerated schedule so commuters could travel safely and without much disruption (Page 4).

Also in this issue, read about our employees' volunteer work building a footbridge in rural Nicaragua (Page 20), and our capabilities to maintain and store modular capture vessels for the expanded well containment system in the Gulf of Mexico (Page 10).

**BRUCE GREWCOCK**  
Chairman and CEO





### PATH OVER TROUBLED WATER

It may appear small compared to Kiewit's impressive bridge repertoire, but this little footbridge is about to change lives in one rural Nicaraguan community. Read more on Page 20.



## ON THE COVER

### 10 BEGIN WITH THE END IN MIND

Kiewit Offshore Services partners with Marine Well Containment Company to better prepare the offshore drilling industry to handle a well control incident.

## ALSO INSIDE

### 04 RENEWING THE CTA RED LINE DAN RYAN BRANCH

After replacing more than 10 miles of track, Kiewit provided Chicago commuters a faster way to get from point A to point B.

### 20 BRIDGING THE GAP BETWEEN POVERTY AND PROGRESS

Kiewit volunteers joined a global initiative and traveled to Nicaragua to build a footbridge, connecting the community of Cina Verde to some of life's most basic necessities.





# RENEWING THE CTA RED LINE DAN RYAN BRANCH

# 10 MILES 154 DAYS

What's the easiest way to get from point A to point B?

For the more than 640,000 people who ride its rail system every day, the answer is straightforward: the Chicago Transit Authority (CTA).

The second-largest public transportation system in the United States, the CTA provides a combined 1.6 million bus and rail rides to urban and suburban commuters on any garden-variety weekday.

Over time, the trains take a toll on the more than 216,000 miles of track. That's been the case for a particular stretch of the Red Line that serves the south side of Chicago.

In recent years, slow zones had been implemented to contend with aging track conditions and a deteriorating soil base — a situation that translated to longer rides and sometimes-unreliable service for commuters.

"It was time to take action," said Chris Bushell, CTA senior vice president, infrastructure.

"This is a piece of mainline track that carries a significant portion of ridership. Rather than doing an extended project where riders would have to live through continuing slow zones and degraded service for several years, we decided

to do something bolder with immediate benefit."

In October 2012, Kiewit was awarded a \$220.1 million contract for the CTA Dan Ryan Track Renewal project, part of the Red Line South Reconstruction project.

The project would involve replacing 10.2 miles of double track, as well as the track bed and underlying soil, between the nine stops from the Cermak-Chinatown to 95th Street/ Dan Ryan stations.

### A COMMITMENT TO COMMUNITY

A long-time veteran of work on CTA's Blue and Red lines, Kiewit understands the nuances of the rail system and what it takes to maintain it. But for this contract, there were unprecedented factors to consider.

First, the job would need to be completed in no more than 154 days, to limit the impact on commuters. For Kiewit, that meant working 24 hours a day, seven days a week for the entire project.

For CTA, shutting down half of its busiest rail line for five continuous months meant taking a risk in terms of public and political perception.

"But in the long run, it also demonstrated CTA's dedication



## Dan Ryan Renewal by the numbers

10.2 Miles of double track replaced, including track bed, rail ties and ballast

98.7 thousand Feet of track removed and built at the rate of 700 feet a day, 30 feet an hour

165 thousand Cubic yards of material excavated

240 thousand Tons of new ballast

43.1 thousand Linear feet of new concrete-encased 12-duct ductbank

97.2 thousand Linear feet of new drainage

157 thousand Square feet of waterproofing

263 thousand Kiewit manhours

150 thousand Subcontractor manhours



to the city and community of Chicago,” said Wayne Thomas, Kiewit transportation area manager.

“Typically, a shutdown would mean a 54-hour outage over a weekend or by doing night work. To take out the line, do a complete replacement and bus around the line was a huge political commitment.”

That kind of commitment also meant building strong relationships with the neighborhoods. For the first time, and in accordance with the federal Workforce Investment Act (WIA), CTA included specific hiring goals for WIA-eligible employees.

“As part of its contract with CTA and in accordance with WIA requirements, Kiewit was required to fill part of its craft labor positions with qualified economically disadvantaged and/or dislocated worker applicants,” said John Locke, Kiewit community relations manager and diversity coordinator.

About 4,000 people applied to work on the Red Line project. Together with the Chicago Cook County Workforce Partnership and the Chicago Urban League, Kiewit set up a hiring office where they led an interview process for 800 applicants.

1. The Kiewit crew tamps the new track 2. Project Sponsor Mike Breyer talks with participants in the Building Tomorrow's Workforce program to discuss transit construction fundamentals and what Kiewit expects from its craft labor force.



## BUILDING THE LOCAL WORKFORCE

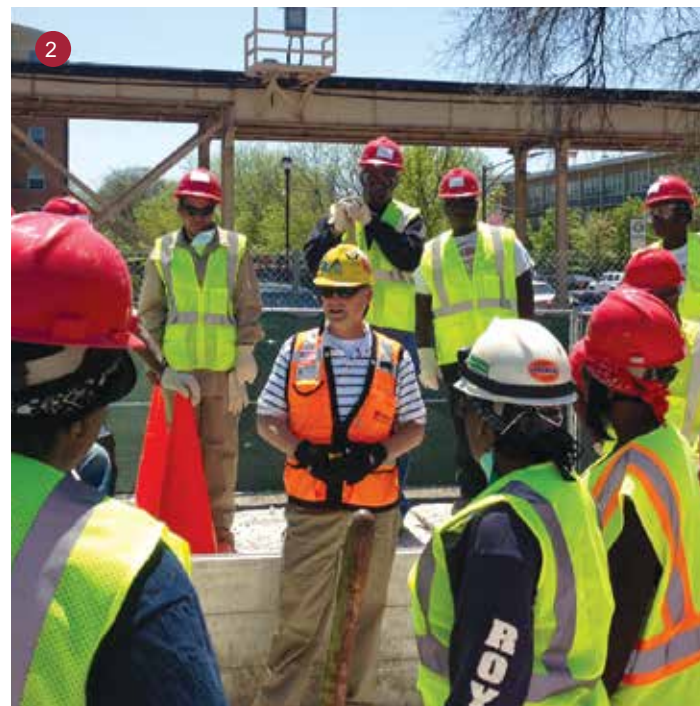
Then, Kiewit took its commitment to the community and went beyond federal and contractual requirements by creating its own training program for minority candidates.

In June 2013, Kiewit, along with the Chicago Urban League, introduced the Building Tomorrow's Workforce program. The initiative was made possible by veteran Kiewit Superintendent Jeff Crandall and Craft Foreman Jared Green.

The Dan Ryan Renewal jobsite was the perfect setting for participants to get a taste of on-the-job training for rail and transit construction. In total, 171 people participated in the two-day training, and finished with a certificate of completion and a stipend.

“The community understood the process, followed it and believed in it,” Locke said. “I still get a lot of thank-you text messages and phone calls. The people were excited and happy to work and learn.”

This program netted 99 hires to work on the project. While the contractual minority workforce participation goal was 19.6 percent, Kiewit reached nearly 50 percent.



## PRACTICE AND PREPARATION

When work on the Dan Ryan renewal began in May 2013, Kiewit had already been conducting on- and off-site planning for five months. At the top of the list was making sure all materials for the job site were ready to go on day one, said Sean Danaher, Kiewit project manager.

“When you're talking about 10 miles of full-depth track replacement, that's a lot of material to store. And once you get into the five months, you don't have time to keep replacing it. We had to prove to CTA we had everything ready to go the second they shut down.”

Part of the prep work also included calculating how to deliver and place 240,000 tons of stone ballast over a 42-inch-high permanent highway barrier during each phase of construction.

Kiewit tested methods in Dallas and Detroit using Kiewit conveyors. They fabricated custom boxes that dump trucks could drive into and drop 20 cubic yards of stone, which was then bailed over the barrier wall using excavators. They built timber ramps to drive up and over the barrier, with a fast-in-fast-out always top of mind.

## A SYMPHONY OF LOGISTICS

Gathering enough resources was only half the battle — delivering them was the other. To access the job site, Kiewit had to coordinate with the Illinois Department of Transportation to shut down lanes of the adjacent 10-lane Dan Ryan Expressway nightly.

Using one of the busiest roads in Illinois meant that closings were scheduled from 8 p.m. to 5 a.m. On days when the city's beloved White Sox, Cubs, Bears and Blackhawks were playing at home, the crew delayed lane closures to not disrupt traffic.

“The way Kiewit handled the logistics of the trucking was amazing to me,” said Ken Davidson, assistant vice president and project manager for Parsons Brinckerhoff, a construction manager for CTA.

“Every night, it was sort of like a symphony of different activities. If we had an issue that would take some time to resolve, Kiewit would resolve it so the schedule wouldn't be impacted.”

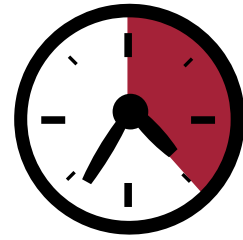
Every day, accompanied by an average of 100 staff and 300 craft, 75 to 100 trucks and 20 to 30 pieces of heavy equipment rumbled into place, all of which had to be

“The way Kiewit handled the logistics of the trucking was amazing to me. Every night, it was sort of like a symphony of different activities. If we had an issue that would take some time to resolve, Kiewit would resolve it so the schedule wouldn't be impacted.”

**KEN DAVIDSON,**  
PARSONS  
BRINCKERHOFF



# CTA Dan Ryan Renewal at a glance



The Dan Ryan Renewal will save each passenger up to **20 minutes** on a daily, round-trip commute from the Dan Ryan stop to downtown.



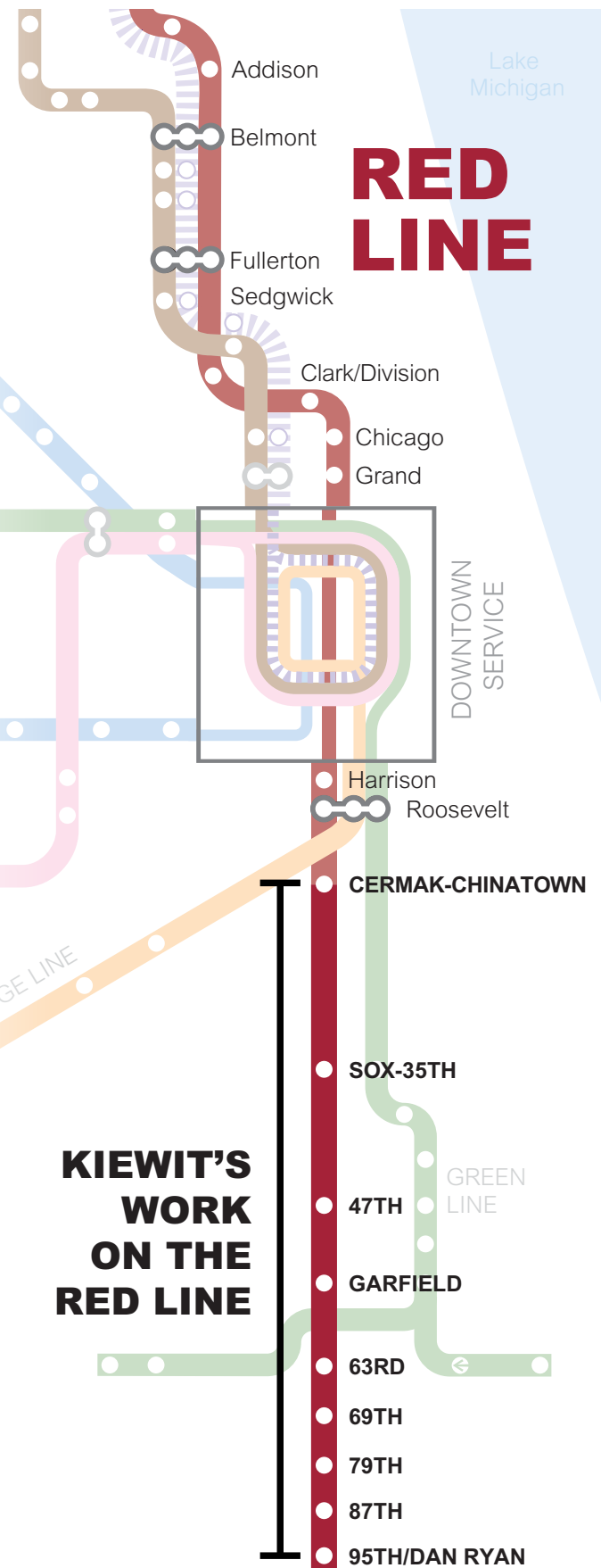
**99 employees** were hired from Kiewit's hiring program with the Chicago Urban League.



**861 people** were hired for the project, of which **437** were minority workers.



**171 Chicagoans** were trained through Kiewit's Building Tomorrow's Workforce program.



removed each morning for rush-hour traffic.

As the work progressed down the line, foot by foot, yard by yard, how many resources were needed and where they were needed changed every night — sometimes twice.

Danaher compares it to working on a 5,000-piece jigsaw puzzle and having to start over every 12 hours.

The job also provided a few surprises. When Kiewit dug down and saw the condition of the soil firsthand, they knew there was considerably more work to be done.

“It was oversaturated and had become mushy,” Thomas said. “We had to do additional excavation and backfill to replace something that wasn’t structurally sound. We couldn’t afford to wait another week [to come up with a plan]. That meant working with CTA and the designers around the clock.”

## A SMOOTH RIDE, AGAIN

As summer waned and autumn leaves started to turn, the crew completed the last stretch between Sox-35th and Cermak-Chinatown — literally, the end of the line. Kiewit turned over the completed project to CTA for final testing a full five days ahead of the already-aggressive deadline.

On Oct. 20, greeted by Chicago Mayor Rahm Emanuel and Illinois Governor Pat Quinn, commuters took their seats for a ride on the much faster, smoother Red Line South.

In fewer than 154 days, at 30 feet an hour and 700 feet a day, Kiewit did what some said was the impossible. That was bringing together a team that could overcome any obstacle thrown in front of it.


“To me, this job was all about the people and the sacrifices they made to get it done,” Danaher said. “This job is exactly what Kiewit is all about.”

“It was the summer Kiewit’s staff and crew won’t soon forget. And that’s a fact not lost on CTA,” said Bushell.

“We knew this was going to be a difficult project from the very first day to the very last day. But when you’re working with a company like Kiewit that brings quality to every aspect, you’re going to be successful. I want to thank all the folks who really gave a slice of their lives to the project,” said Bushnell.

Two days after the track re-opened, Project Sponsor Mike

Breyer rode the train from the Cermak-Chinatown station to 95th Street/Dan Ryan to experience it for himself.

“For me, it was gratifying to hear people’s enthusiasm. When the train operator saw the Kiewit logo on my jacket, he came back to shake my hand and told me how great this ride was.” 



1. Trucks are loaded with old ballast from the job site to be sent to a recycling facility. 2. Clockwise from the top, Chicago Transit Authority President Forrest Claypool, Chicago Mayor Rahm Emanuel and Chicago Transit Board Chairman Terry Peterson meet Kiewit craft as they perform final ballast dressing at the 47th Street station.





**BEGIN**  
— with the —  
**END IN**  
**MIND**

A PARTNERSHIP UNITING  
THE OFFSHORE DRILLING  
INDUSTRY TO PROTECT  
THE ENVIRONMENT



On April 20, 2010, an explosion erupted and engulfed the Deepwater Horizon oil rig working the Macondo exploration well for BP in the Gulf of Mexico. This tragic accident claimed the lives of 11 people and spilled millions of barrels of oil.

As the world was watching the Macondo incident unfold, and before the well had finally been capped, four oil companies understood they had the knowledge and ability to lay new groundwork for the future. The corporations — ExxonMobil, Chevron, ConocoPhillips and Shell — came together to create the Marine Well Containment Company (MWCC). The industry standards — the industry itself — were in the process of changing, and the group knew there was a better way.

“When these four companies joined forces, they had an end objective in mind, which was to be better prepared for an offshore well control incident,” said MWCC CEO Marty Massey. “It has evolved into a dedicated set of equipment to respond to an event [such as Macondo] in the future and be ready to deploy when it’s necessary.”

#### MARINE WELL CONTAINMENT SYSTEM

And so the process began. By February 2011, MWCC had an initial system in place called the interim containment

system. While it met the needs of members’ current wells, the company needed a solution to meet the needs of future wells.

With this in mind, a project team was formed to engineer and construct equipment that would expand the system’s capabilities. They decided to create the expanded containment system, which is expected to be available later this year, to further advance containment capabilities. The equipment will be flexible, adaptable and ready for deployment.

The system has two parts: subsea components and surface components. The subsea components include the capping stacks and subsea umbilicals, risers and flowlines, known as SURF equipment. These components have the ability to either cap a well, or cap and flow a well. When a well is capped, the capping stack is deployed and installed to stop the flow of fluids.

If it’s necessary to also flow a well (a “cap and flow” scenario), the SURF equipment is used to connect to the capping stack and flow the fluids to the surface and into capture vessels. These surface components are modular capture vessels that will be deployed in the case of an emergency well control event. They will be outfitted with equipment to process, store and offload liquids to shuttle tankers.

MWCC has contracted two dedicated modular capture vessels as part of the expanded containment system — the first-of-their-kind Eagle Texas and Eagle Louisiana tankers. When the vessels aren’t on standby for an emergency deployment, the owning company uses them as lightering vessels to move crude from port to port throughout the Gulf of Mexico.



1. The riser turret module, weighing more than 700 tons, is lifted by three cranes and installed onto the modular capture vessel. 2. The project team designed and built steel module transport frames that allowed the 15 modules to be moved throughout the construction phase. 3. A processing module is prepared for the lift onto the modular capture vessel.

## MWCC: Marine Well Containment Company

MWCC is an independent company that provides well containment equipment and technology in the U.S. Gulf of Mexico. Formed in 2010 by ExxonMobil, Chevron, ConocoPhillips and Shell, its mission is to respond to incidents such as the Macondo oil spill in the future.

MWCC membership expanded to include six other companies — Anadarko, Apache, BHP Billiton, BP, Hess and Statoil. These 10 companies are the “who’s who” of deep-water drilling; they account for 70 percent of the drill wells in the Gulf of Mexico and hold approximately 70 percent of the leases.

“We are in a very competitive industry. The fact these companies, 10 of the most competitive companies in the world, came together to develop a solution they could all buy into and support is unprecedented,” said MWCC CEO Marty Massey.

“The collaboration that occurred and the willingness to come together ensures the industry is better prepared. It’s refreshing and rewarding to be a part

of MWCC and to work in this environment.”

At an investment of more than \$1 billion, the containment system was created with the hope it is never deployed, but it will always be ready.



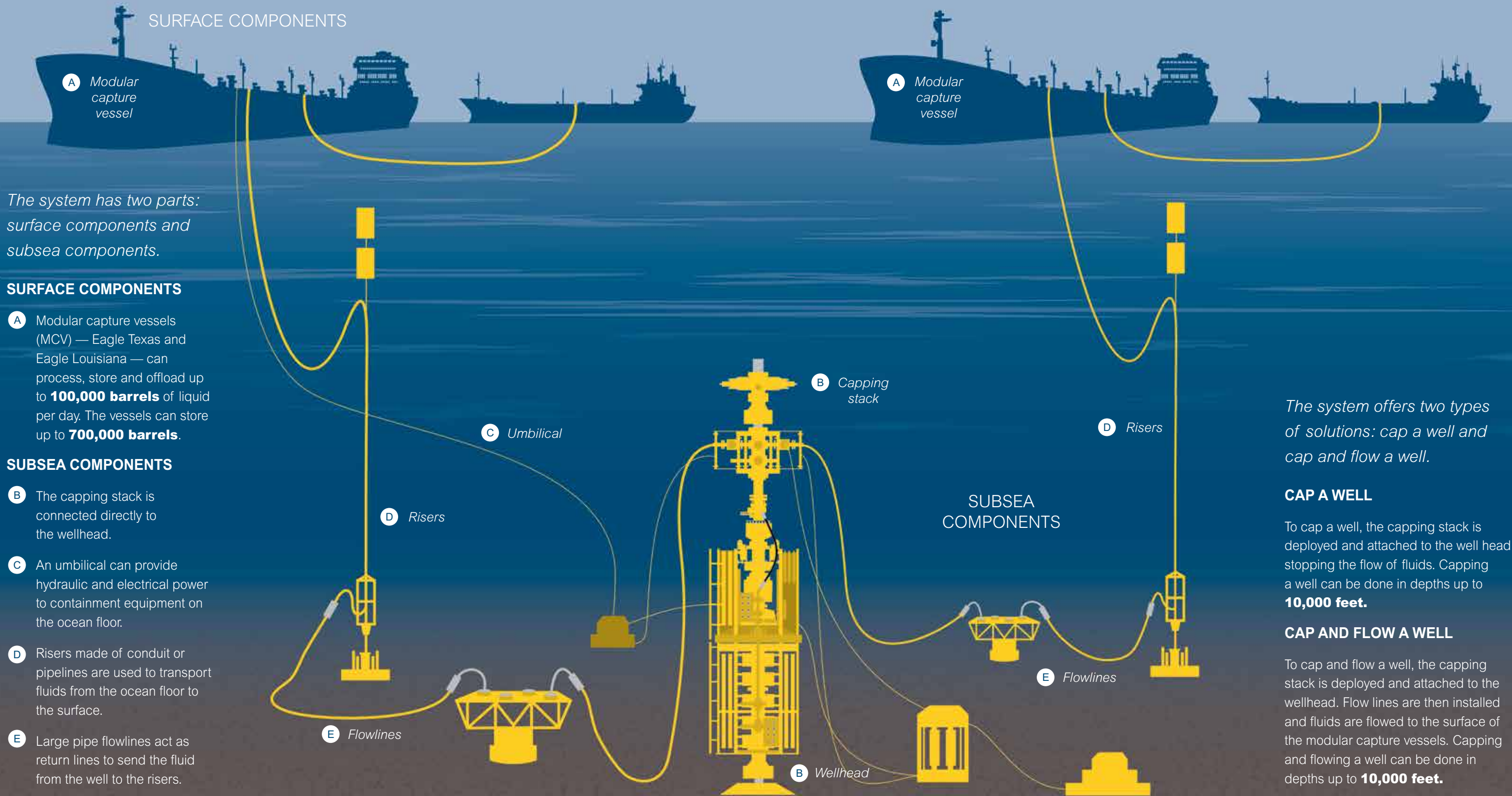
#### MEMBERS:

|              |                |
|--------------|----------------|
| Anadarko     | ConocoPhillips |
| Apache       | ExxonMobil     |
| BHP Billiton | Hess           |
| BP           | Shell          |
| Chevron      | Statoil        |



# The expanded containment system process

The expanded containment system designed and engineered for MWCC will provide a solution to stop the flow of fluid from a well control incident.



The system has two parts: surface components and subsea components.

## SURFACE COMPONENTS

**A** Modular capture vessels (MCV) — Eagle Texas and Eagle Louisiana — can process, store and offload up to **100,000 barrels** of liquid per day. The vessels can store up to **700,000 barrels**.

## SUBSEA COMPONENTS

- B** The capping stack is connected directly to the wellhead.
- C** An umbilical can provide hydraulic and electrical power to containment equipment on the ocean floor.
- D** Risers made of conduit or pipelines are used to transport fluids from the ocean floor to the surface.
- E** Large pipe flowlines act as return lines to send the fluid from the well to the risers.

The system offers two types of solutions: cap a well and cap and flow a well.

## CAP A WELL

To cap a well, the capping stack is deployed and attached to the well head, stopping the flow of fluids. Capping a well can be done in depths up to **10,000 feet**.

## CAP AND FLOW A WELL

To cap and flow a well, the capping stack is deployed and attached to the wellhead. Flow lines are then installed and fluids are flowed to the surface of the modular capture vessels. Capping and flowing a well can be done in depths up to **10,000 feet**.





## KIEWIT OFFSHORE SERVICES AND THE MWCC PROJECT

The surface components and capping stacks, which are the centerpiece of the containment system, are stored in Ingleside, Texas, at Kiewit Offshore Services (KOS).

Kiewit's offshore operations began in 1984. Today, in a yard covering nearly 600 acres, KOS constructs large, complex offshore projects for major oil and gas companies operating all over the world.

From the time MWCC began searching for a modular capture vessel shore base location, KOS was on the short list since its resources matched the prerequisites of MWCC. Those requirements were specific: a location along the U.S. Gulf of Mexico, available land, a bulkhead big enough to dock both capture vessels at the same time, and a large supply of crawler cranes and self-propelled modular transporters.

Last, but far from least, MWCC needed a sizable, skilled group of staff and craft employees, and a dependable company.

"We went through an exhaustive process of trying to identify the best location to meet our requirements," Massey said. "Of course, we also wanted a commercial deal that made sense for us long-term. Kiewit was able to deliver all of that for us in a very excellent manner."

The original scope of the project was to provide a shore base to store, maintain, test and deploy modules for the containment vessels for up to 20 years. The shore base would be comprised of a dedicated 12-acre section of land and a 40,000-square-foot warehouse.

In December 2012, the project scope expanded. MWCC asked KOS to finish construction on the remaining modules for installation on the capture vessels in case of a deployment. Roughly 15 350-ton modules were created from 130 smaller pieces.

"Kiewit had the ability to solve MWCC's problems and become the go-to contractor throughout its organization," Kiewit Project Manager Gregory Benedict said. "The job started out at 140,000 manhours. With the added scope, it will finish at more than one million."

"We are in a state of readiness all the time," added Project Sponsor George Osgood, a 22-year Kiewit



veteran. The team provides a monthly report to MWCC to keep members informed and comfortable with the status of the project and the ability to deploy. A step-by-step guide is being created that will provide a seamless action plan for actual system deployment.

If MWCC would be notified of a well control event, the first step for the project team would be to place the capping stack on a vessel. If needed, the modular capture vessels would be alerted to head for KOS to begin the module integration phase. Once outfitted with the necessary equipment, the vessels would sail to the well site.

While MWCC and the project can't prevent an oil spill from occurring, the plan will help ensure there's a

reliable, dynamic response to minimize the overall environmental impact.

### WE KNOW WHAT SAFETY LOOKS LIKE

As with every project where Kiewit is involved, safety comes first. The project team created safety display boards with eight different rated categories, including permits, tools, personal protective equipment and safety equipment, and worker well-being. The goal is to earn a green rating in each category.

The MWCC project also holds a monthly safety stand-up meeting for all employees. Instead of focusing on the negative, the project leadership team focuses on what the teams are doing well and recognizes safety champions at

each meeting.

"We have a group called the ALT, Area Leadership Team, which is people from KOS, MWCC and some subcontractors working in our yard. Once a week we do a safety walk," explained Kiewit Project Engineer Zachary Davis.


"One purpose is to find hazards and to help make it a safer environment. The bigger part is to recognize and reward employees who are doing such a great job, because so many of them are. One of the most important goals is to let them know we care and that we want them to go home the way they came in."

### FORWARD THINKING

"From day one on this project, we had the mindset of 'Begin with the end in mind,'" said Davis. "Even throughout the construction phase, we asked ourselves, 'What can we do to make life easier for people five, 10, even 15 years down the road, should the system ever have to deploy? How do we make it safer? How can we make it more efficient?'"

KOS and MWCC believes transparency is key to their success, so everyone works as one unit, not individual groups. One of the few ways to recognize the differences among the project team: the color of each person's hard hat.

This open communication and teamwork have created a strong relationship, not only between KOS and MWCC, but throughout all organizations involved. The partnership is a great example of how people in the industry are working together to protect the environment for years to come.

"We are proud of the relationship between MWCC and Kiewit. It makes complete sense," said Massey. "Kiewit Offshore's business revolves around drilling and production projects. By becoming an integral part of the containment process, Kiewit is instrumental in ensuring the success of MWCC and the continuation of the offshore drilling industry. This effort is off to a great start." 

“From day one on this project, we had the mindset of ‘Begin with the end in mind’. ... we asked ourselves, ‘What can we do to make life easier for people five, 10, even 15 years down the road, should the system ever have to deploy? How do we make it safer? How can we make it more efficient?’”

**ZACHARY DAVIS,**  
PROJECT ENGINEER



1. The MWCC project features safety display boards with eight rated categories, such as permits and tools. The team works to earn a green rating in each category, signifying the project team is working safely. 2. From across the KOS yard, a full view of the modular capture vessel Eagle Texas can be seen as it is outfitted with the processing modules. 3. The MWCC project team gathers together at a monthly safety stand-up meeting where the team discusses safety standards and recognizes safety champions.



# BRIDGING THE GAP

*BETWEEN POVERTY  
AND PROGRESS*



Have you ever crossed a bridge and wondered what your world would be like without it?

Imagine having no transportation, while a raging river stands between your family and their most basic needs, such as food and health care. Imagine if your children had to risk their lives daily to get to school on the other side.

For many of us, this hypothetical scenario doesn't pose a threat, but for the people of Cinta Verde, Nicaragua, it's been a harrowing reality — until now.

"The power to build a footbridge is really the power to put someone's future into their own hands," said Maria Gibbs, operations and research coordinator for Bridges to Prosperity.

The nonprofit organization's goal is to empower communities affected by rural isolation. "You're giving

people the tools they need to break the cycle of poverty that they were born into," said Gibbs.

They're succeeding with help from expert volunteers within the infrastructure industry. Their mission caught the attention of Kiewit Area Manager Ralph Salamie.

"I heard about it through a friend in the business and said, 'I want to do that.' The opportunity presented itself while I was at a bridge conference where the Bridges to Prosperity director was speaking."

Salamie was sitting next to International Bridge Technologies (IBT) President Dan Tassin during that speech.

"I turned to him and said, 'I'm going to ask my boss if we can build one of these bridges.'" Tassin immediately volunteered IBT's assistance. "Without blinking Dan said,



During the rainy winter season, the walk to school can be treacherous for the children who live on the opposite side of the river. Some of the children said they have tied ropes around their waists and held on to each other while wading through the rising water.

## Project Profile

**Project lead:** Bridges to Prosperity

**Location:** Cinta Verde, Nicaragua

**Bridge design:** Suspension footbridge

**Span:** 35m (114.8 feet)

**Population:** 300 people

**Expected traffic:** 200 people per day

**Partners:** Government of Esquipulas

**Sponsors:** Kiewit, International Bridge Technologies (IBT)

### PROVIDING MORE THAN MATERIALS: KIEWIT VOLUNTEERS DONATE TIME AND MONEY

Along with Kiewit's donation for bridge materials and one week of time off, the employee volunteers used another week of their own vacation time and paid for their travel, food and lodging expenses. In addition, Kiewit employees donated \$2,200 to purchase school supplies and sports equipment for the community.

**\$25,000 + \$25,000**  
from Kiewit from IBT  
**FOR BRIDGE MATERIALS**



The team bonded with the locals over a friendly game of baseball one Saturday afternoon.

### FINALIZATION OF BRIDGE DESIGN

- Provided by IBT

### PERSONAL PROTECTION EQUIPMENT

- Provided by Kiewit
- Left in Nicaragua for the community

### SMALL TOOLS AND SUPPLIES

- Provided by Kiewit



‘I’d like to build it with you. We’ll put up half the money and supply some people.’ It was a great partnership from the beginning.”

“It is really inspiring to get the industry’s best on our team, helping us solve global challenges,” said Bridges to Prosperity CEO Avery Bang.

The organization has staff in five countries, recruiting teams like Kiewit to help build 100,000 bridges worldwide. Kiewit Senior Vice President Tom Skoro didn’t hesitate when Salamie asked if Kiewit could participate. He felt the project aligned well with Kiewit’s culture and commitment to stewardship.

“Appropriately, all of our previous efforts have been spent in the communities where we live and work,” said Skoro. “It has been seldom, if ever, that we’ve been able to combine our philanthropic efforts with our technical bridge-building expertise. This was the perfect opportunity to do that.”

### A TALE OF TWO RIVERS

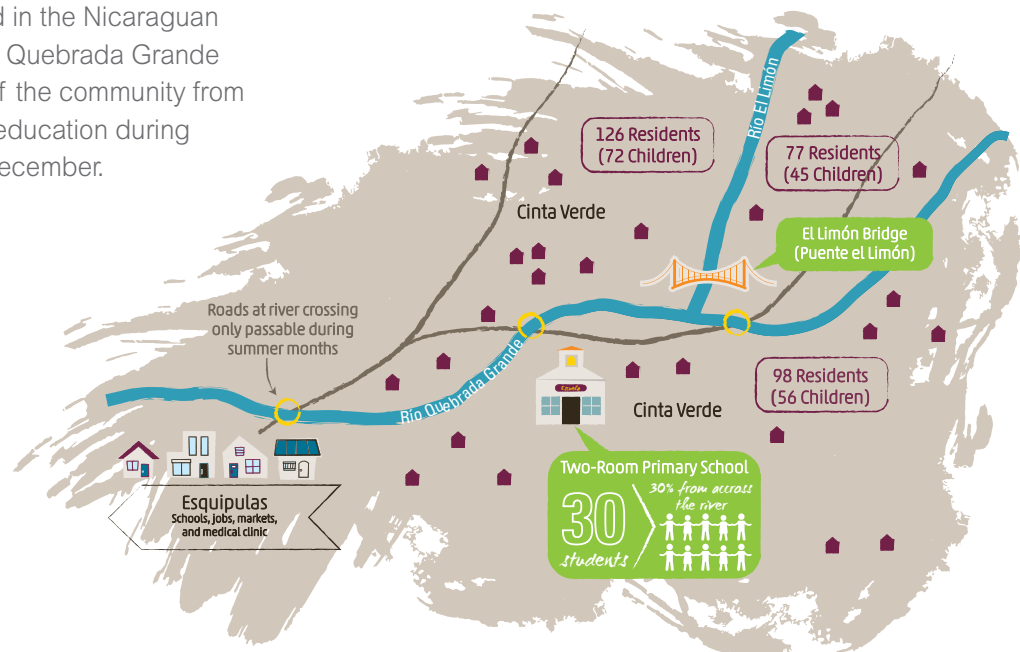
After reaching out to Bridges to Prosperity, Salamie and Skoro assembled a team of 11 Kiewit volunteers, which includes two alternates, from across the United States, Canada and Mexico to join the three bridge experts from IBT.

Their assignment was to build a footbridge within two weeks in Cinta Verde, a community nestled in the Nicaraguan countryside along the El Limón and Quebrada Grande Rivers. The isolated location cuts off the community from job opportunities, medical aid and education during the rainy months of June through December.

“The rivers split the community into three areas,” said Kiewit Engineer Julia Anderson. “Kiewit and IBT were assigned to build the first footbridge across the Rio El Limón and another volunteer team will build a second bridge across the Rio Quebrada Grande this summer to finish the link.”

The work began long before the volunteers arrived in Cinta Verde.

“On Christmas Day, I was Skyping with my Nicaragua contact to work on communication tests,” said Anderson.



Cinta Verde is about a half-hour east of the town of Esquipulas. Two rivers isolate the community from Esquipulas’ hub of markets, schools and medical care.

“The entire team understood that the basic necessities of life were not being met, all because of a lack of access. In our line of work, we pride ourselves on connecting communities through improvements to our nation’s infrastructure.”

To make this a sustainable improvement, the team would have to do more than build the bridge: They would need to teach the people of Cinta Verde how to replicate the process.

“We’re really all about transferring knowledge about bridge-building to local communities and municipalities,” said Maria Gibbs on behalf of Bridges to Prosperity. “The knowledge that Kiewit brings, for example — just seeing that transfer from your construction folks to our masons is pretty cool. The footbridge is the tool, but it’s really that

knowledge transfer that’s our goal.”

### A FEW BUMPS IN THE ROAD

“It’s different from what I expected,” reflected Kiewit Project Manager Kyle Coleman. “My first impression on the way to Cinta Verde was that the road’s a little rough. We had to drive through three rivers to get to the site, [and over] a couple of steep hills, rocks and more potholes than I could count. You definitely need four-wheel drive to get there.”

Once the team arrived, they had a few more challenges to tackle, one of which was communication. Expecting that language barriers would be an issue, the team was staffed with a few Spanish-speaking members from Kiewit and IBT. But a translator wasn’t always on hand.

“I had to use a lot of hand gestures,” recalled Kiewit crew



1. Pictured above left: Belinda Ruzindana, Jeronimo Cruz, Justin Guevara, Jaclyn Phillips, Dustin Donahoo, Julia Anderson, Maria Gibbs (B2P), Ralph Salamie, Juan Gea (Mayor), Edward Torres (Director of Projects), Carlos Zolorsano (Esquipulas), Chris Villalobos (IBT), John Gage, Daniel Tassin (IBT), Brandon Johnson (B2P), Kyle Colman. Not pictured: Joseph Smith (IBT) 2. The team slept in tents set up near the remote project site. 3. Kiewit employees, like Dustin Donahoo, led by example, training local volunteers to follow Kiewit’s best practices in safety.



**550**  
**MANHOURS**  
to complete construction activities

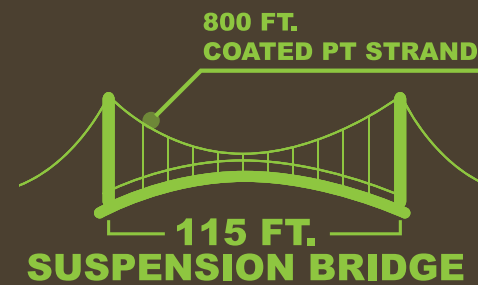
**14** Days in Nicaragua

**7** Construction Days



**22** CONSTRUCTION CREW MEMBERS  
**10** LOGISTICS & SUPPORT STAFF

**48** 5/8" bolts  
**1,050** lag bolts  
**1,800 LBS.** of steel  
**650 FT.** of 2" X 8" lumber  
**380 FT.** of smooth #3 rebar



member Jaclyn Phillips. "They work well and it may take a few extra minutes, but it usually creates lots of laughs."

It's a familiar process for the Bridges to Prosperity team, which has invited organizations like IBT and Kiewit to help build more than 130 bridges in 15 underdeveloped countries to date. It's also one of Maria Gibbs' favorite things to witness.

"I loved watching the communication between the Kiewit

non-Spanish speakers and the community non-English speakers. It's amazing how much you can communicate through hand gestures and smiles."

One of the more challenging things to communicate was Kiewit's strict safety processes.

"Getting the locals to participate in Kiewit's safety rules was a big challenge at first," said Kiewit Safety Manager Belinda Ruzindana. "But the mentality started to change over the

course of the project. I became more comfortable telling people that they needed gloves or hard hats in broken Spanish and sign language."

Another big challenge was not having quick access to the necessary tools.

"Things like finding out that we were missing a simple blade for a skill saw was the most difficult part," said Jeronimo

Cruz, a Kiewit crew member. "We had to come up with a different method of building the work without the tools we expected to have."

#### LESSONS LEARNED

For Cruz, the most rewarding moment was seeing the locals take over. "It's been a little bit of a mentoring thing for me. Seeing the residents succeed, have fun and take ownership has been good."



“ During the opening ceremony, you could see how grateful people were through the many hugs, handshakes and tears in their eyes. It was very emotional and inspiring to see and hear just how important and personal this was to so many in the community. ”

**DUSTIN DONAHOO,**  
KIEWIT CONSTRUCTION  
MANAGER




As darkness fell over the worksite each evening, the volunteers spent their downtime laughing, telling stories and sharing meals with the community. It's that connection that drew Anderson to this opportunity.

“When you look around at the wealth that surrounds us, both monetary and knowledge, it is impossible to not find the encouragement to give,” said Anderson. “My motivation came not only from what we could give, but the knowledge that I would gain from the experience. I find that when you step outside your comfort zone, that is where the greatest learning happens.”

That was the lesson shared by others during the opening ceremony. Justin Guevara, a Kiewit engineer and volunteer on the El Limón Bridge project, tried to capture some of the memories on video, but a steady stream of hugs kept him distracted.

“It was at that moment that I realized how lucky I was to be able to participate in the project,” he said.

“Everyone was so happy to walk across the bridge for the first time,” said Anderson. “They were proud of what they had accomplished. The team was happy to have been there to assist them. This was their bridge, and that showed through their kind words and smiles on the last day.” 







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