

BOH

Spring 2012

LA SCRAP BULKHEAD Boh Builds Innovative, OPEN CELL® Design

BOH WINS "SUPERIOR"
Corps Safety Award

TIGHT FIT
Boh Erects Main Span
of Design-Build Bridge

BRIDGING EDUCATION Students See Engineering Come to Life

LOAD OUT Boh Does it Right

Employee Spotlight

President Robert S. Boh

Design & Layout Design III

On the cover:

Boh erects steel girders for main span of KCS Railroad overpass bridge.

The BOH Picture is published for employees and friends of Boh Bros. Construction Co., LLC

Address all correspondence to: Editor, Boh Picture Boh Bros. Construction Co., LLC P.O. Drawer 53266 New Orleans, LA 70153



We're all familiar with team sports. Many of us played on teams from our early years as children, and we can attend or watch games virtually every day of the week. Players on the team come from all kinds of backgrounds, and each person brings unique talents, skills, values and belief systems to the playing field. In order for the team to be successful, those talents, skills and attitudes have to be blended together to make the team cohesive and greater than the sum of the parts. Some very talented teams don't accomplish the success that would be predicted by their talent level alone, while other teams seem to thrive with "overachievers" and "good locker room" guys. It takes good leadership and commitment on the part of each player to make the team a consistent winner.

Our Boh "teams" go into action each day on the playing fields of our jobsites, and the measure of their success starts with reaching the goal of everyone going home at the end of the shift without having been hurt. There are other measures of success, of course, such as building quality into our work, maintaining or beating the schedule, and being efficient enough to spend less than the budget. Each of these measures, however, is secondary to the first: nobody gets hurt. Getting each member of our team to buy in to this goal of working safe, and to take an active role in caring for their own safety and the safety of their teammates, is our challenge. We all come from different backgrounds with different life experiences and attitudes toward risk taking and personal safety in our lives away from work. When the game starts each day on our jobsites, however, we expect all of our players to be united in their resolve to work safe and make that day a safety success. Our biggest obstacle to being successful each day is complacency; many of our tasks are routinely executed day in and day out. Taking shortcuts, being inattentive, and overlooking details are just like turnovers in a football game: they lead to failure, and in the game of safety, those failures can be tragic. We can never be satisfied; each day brings new safety challenges that must be met.

The training in safety and recognizing hazards that we receive at Boh Bros. and the way we plan safety into our work are just as relevant at home as on the jobsite. Do you wear your seatbelt while driving and your life jacket while boating? Do you use safety glasses while doing work in your yard and plan for fall protection while working at heights around your house? Good safety practice at home gives our Boh team a much better chance to be successful each day at work. Our wives, husbands, children and families are counting on us. Nothing is more important.

West S Bob Robert S. Boh, President

> "It takes good leadership and commitment on the part of each player to make the team a consistent winner."

LA Scrap Bulkhead

Boh Builds Innovative, OPEN CELL® Design

sing an innovative, OPEN CELL® design, Boh Bros. constructed the bulkhead for a new, 12-acre, scrap metal yard for Louisiana Scrap Metal Recycling (LA Scrap) on the Intracoastal Waterway in Port Allen, La.

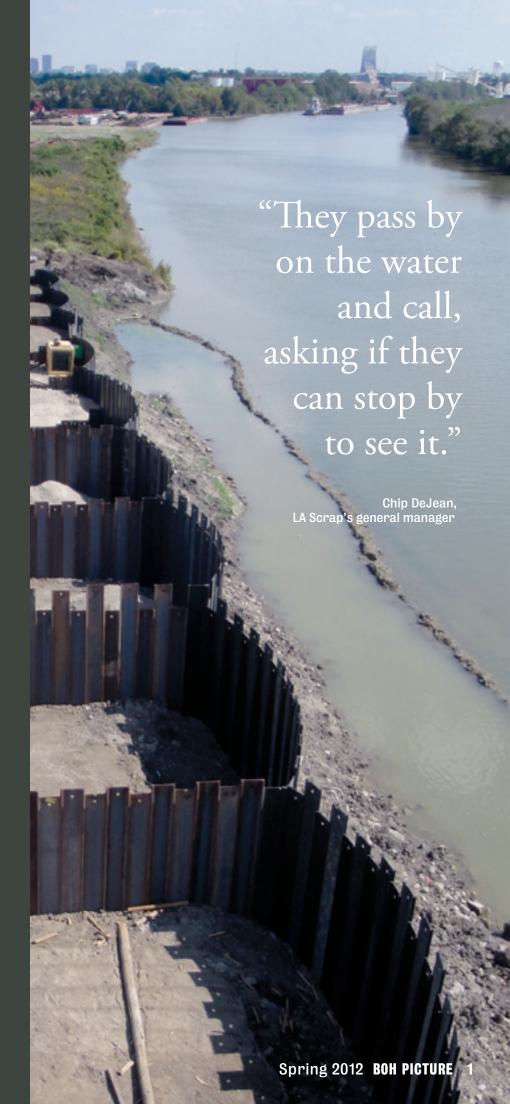
"I hope we can get 25 or 30 years out of it without having any kind of failure," said Chip DeJean, LA Scrap's general manager. "Out here, because of poor soil conditions, bulkheads tend to fail quickly. People often spend a couple million dollars on a bulkhead and, within a year, will have a few hundred thousand dollars of repairs."

LA Scrap's main facility is in Lafayette. The company wanted to add a waterside location that would allow for expansion of load outs to domestic steel mills and export markets, as well as the receiving of scrap iron via barge.

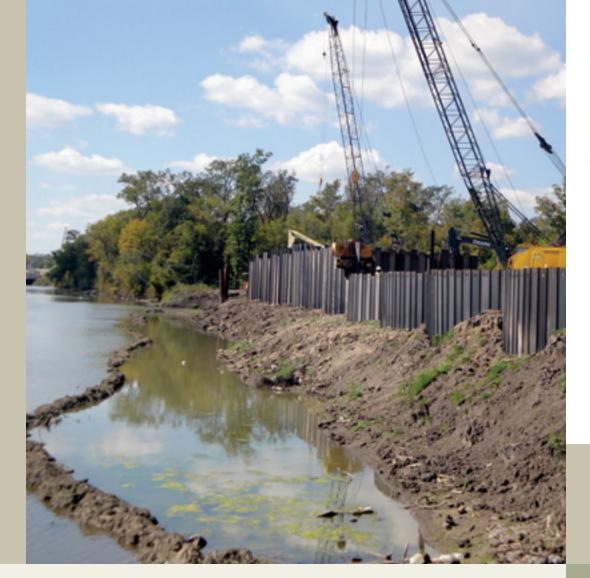
Boh was challenged with building in soft, Louisiana clays: a bulkhead that will be able to endure constant water fluctuations in the canal; stockpiling of scrap metal of up to 500 pounds per square ft.; and a 500-ton crane operating within 5 ft. of the bulkhead face, as per operational requirements for a scrap yard.

"Bulkheads are typically some of the most failed structures in the United States," said Tri Le, Boh's project manager. Usually, bulkheads are constructed by driving a line of sheet piles and bolstering them from behind with concrete piles and tie rods. They are often fronted with timber, to buffer blows from ships. "We worked with the engineering design team to come up with a more robust bulkhead that is more costeffective for the owner," Le said.

The OPEN CELL® system is a trademark of PND Engineers, Inc., Seattle, Wash.,



"We worked with a more robust bulkhead that is more cost-effective for the owner."



which also holds several patents on the system, explained Todd Nottingham, PND's lead engineer and vice president. The OPEN CELL® system bulkhead features flat sheet pile placed in an archcurved configuration on the face that is connected to vertical walls of sheet pile. The design allows load to be transferred back from the waterfront face through the supporting walls that are perpendicular to the face. "This design doesn't require any tie back systems," Le said. "Rubber tires hang off the face of the bulkhead, so if something hits it, all the load gets transferred back."

Using a Terex HC-110 crawler crane, Boh started driving sheet piles in July 2011. Each of the sheets was about 45 ft. long, and was driven to -38 ft. The canal depth of -10 ft. required a total bulkhead height of 26 ft., with a final elevation of approximately +16 ft.



A previous civil contractor had mistakenly excavated the soil in front of the bulkhead to use as fill elsewhere on the site. The excavation meant that, as Boh installed the new sheet pile, the soil pressure behind the bulkhead could force the sheeting out of alignment. To relieve the pressure, it was necessary to bench (or partially excavate) on the landside. Boh also devised a template to drive the sheet piles. Because of both the benching and the template, Boh was able to drive the total, 1,330 linear ft. of piles - plumb and within acceptable tolerances—a month ahead of schedule.

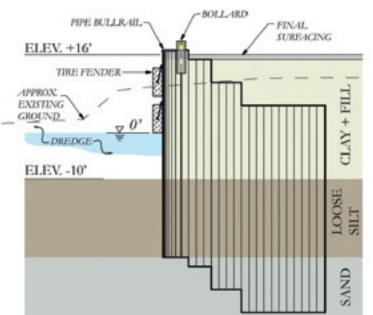
Boh finished the OPEN CELL® bulkhead construction, and also drove another 325, 50-ft.-long timber piles for building foundations, by December 2011. "We used a 50-ton crawler crane to drive the timber piles," Le said. "Then we moved it over to the bulkhead to unload the sheeting."

Nottingham said the project was the sixth installation of PND's system in Louisiana, but the first time he had ever

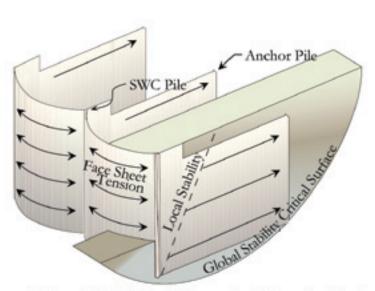
worked with Boh. "They did a great job of building it," he said. "Boh has some of the best construction practices I've seen."

He explained that, because the sheets all interlock, it is critical that they are installed within the proper tolerances. "Boh had a very experienced hand, Les Harvel, Sr., superintendent, who came out to get the crew started," Nottingham said. "You could tell there was a lot of experience in the company. By taking their time, and step driving in reasonable increments, they maintained plumbness and alignment, preventing the sheet pile from binding. I hope to work with Boh Bros. on many projects in the future."

LA Scrap opened its new yard February 27. Since then, a lot of people have stopped by to check out the new bulkhead design, DeJean said. "They pass by on the water and call, asking if they can stop by to see it." Although this was the first time that Boh has worked for LA Scrap, DeJean said, "If we ever do anything over here again, we would definitely give Tri and Boh a shot at it."



LA Scrap OPEN CELL structure cross section showing soil profile, dredge areas, and relative elevations.



3-D model of global stability on the LA Scrap bulkhead.

ON THE JOB Team Leaders

Tri Le Project Manager Les Harvel, Sr. Superintendent

Tim "T.J." Tregre Piling Foreman

Brent Pool Piling Foreman **Ronald Firmin** Pile Driving Foreman

The U.S. Army Corps of Engineers recently awarded Boh Bros. the **New Orleans District Large Contractor Superior Safety Performance Award for 2011**

for Boh's safe completion of work on the Corps' \$14.6 billion program to bring the greater New Orleans hurricane and storm damage risk reduction system to 100-year levels.

"This prestigious award is given yearly to the contractor that exhibits excellence in safety." said Scott J. Blanchard, a quality assurance/ safety representative in the NOD's construction division. "For the fiscal year 2011. Boh's safety record for the hurricane storm damage risk reduction construction projects was outstanding."

NOD Commander, Col. Edward Fleming, presented Robert S. Boh. company president. and Rusty Shelton, safety director, with the award March 2 during a ceremony at the New Orleans Hilton.

"Boh Bros, did not experience a single lost-time accident, despite working more than 515,000 man-hours on several of the Corps' major hurricane and storm damage risk reduction system projects," Fleming said. "From foreman to laborer, they have demonstrated that safety is a team effort."

Ed Scheuermann, Boh vice president, agrees that a team approach is required to work that many hours safely. "Everyone-



from the craft to upper management-must be part of the commitment. We are fortunate to have quality people who understand the company's belief that, if you cannot do it safely, there is no reason to do it."

He added that the projects for which Boh is being recognized were particularly challenging, many requiring double shifts and round-the-clock work to meet the Corps' aggressive schedule. "We're meeting the Corps' expectations, but we never compromise safety

It's always great to receive recognition for a job well done. "It's particularly good to get recognition from the Corps," Shelton said. "It shows we've been successful with our safety process—from our new-hire safety orientation and on-going training, to our safety policies and procedures, and efforts to get Boh people to actively care and speak up about safety. This recognition validates our efforts and spotlights the success of our project teams."



I GHT FIT

Boh Erects Main Span of Design-Build Bridge

recting a 190-ft. long girder between existing lanes of interstate traffic —above an active rail line, and beneath a 230-kilovolt power line—was undoubtedly one of the most complicated parts of Boh's \$59.9 million design-build project to widen Interstate 10 in Baton Rouge between Siegen Lane and Highland Road.

"It was like threading a needle," said G.J. Schexnayder, Boh's heavy construction project manager on the job.

Boh accomplished the feat—safely, and with finesse—six times in March, when the company erected the steel girders for the main span of the new Kansas City Southern Railroad overpass bridge.

"Kenny Solis, construction manager, Neil Hickok, chief engineer, Josh Menier, project manager, Joe Martin, ironworker superintendent, Mike Nicholas, project superintendent, and many others put a whole lot of time and thought into the erection plans," Schexnayder said. "They are the reason why this operation was successful."

"This project has shown to be very complex, given such proximity to the active Entergy line, and straddling the KCS railroad at such an awkward skew."

> Jeffrey Burst, DOTD's project manager

The skewed angle of the KCS rail line to the interstate, and the tight workspace above the rail and below the Entergy transmission line meant it would be difficult to use a crane on the ground with a long boom to make the lifts. Boh's project team decided to use Mi-Jack gantry cranes because their wheels could ride on the inside shoulders of the existing bridges, behind concrete barriers, and make lifts with minimal interference to interstate or rail traffic below. Also, the height of the Mi-Jacks was designed to provide for sufficient clearance below the transmission line, as per OSHA standards.

But before devising the erection sequence, the Boh team had to determine if the existing bridge had enough structural capacity to support the weight of the cranes, the girders, and interstate traffic during lifts. "The maximum one-wheel weight on the Mi-Jack under one girder lift is 96,000 pounds," said Patrick Ledet, Boh's field project manager.

Boh brought in a structural engineer consultant to assess the bridge's integrity

and the erection plan before deciding to use the Mi-Jack. That impressed the owner, the Louisiana Department of Transportation and Development. "Their thorough approach, using an abundance of caution, has provided the department with a high degree of confidence in the overall erection system," said Jeffrey Burst, DOTD's

project manager. "Boh has also done a good job coordinating with KCS and Entergy." Girder erection was scheduled during KCS curfews, times when no trains would be traveling through.

The Mi-Jacks have been on the project since October, lifting rebar and setting girders and metal decking. The Mi-Jacks move parallel to the two bridges they travel on, lifting materials with huge hooks and trolleying them into place. "The heaviest lift the bridge will see is 96 kips, which is well within the Mi-Jack's lift capacity of 120 kips," Ledet said.

Threading A Needle

The six, 190-ft. long steel plate girders weren't the heaviest lifts for the bridge, but they were definitely the most challenging. To reach the requisite length, two pieces — 106-ft.- and 43-ft.long—were bolt spliced together on the ground.

After the 149 ft.-long girder was lifted and placed on a bridge cap and shoring tower, the final, 43-ft. piece was spliced on. "We had to splice it in the air because lifting the whole length (102,000 pounds) would cause instability in the girder," Ledet said.

Boh used AutoCAD Inventor software to build a 3-D model of the as-built structure and design plans for the new overpass structure. "With the model, Boh was able to develop clearances and offsets to demolish, lift, and set new girders in place," Burst said. "That was critical in the tight quarters and limited offset constraints they are working in. Field crews did field checks on the model to dimensional checks by layout crews to make sure that the 3 D models were accurate."

Boh is also using the 3-D modeling for the next challenge moving forward, demolition of the existing structure over the

"This project has shown to be very complex, given such proximity to the active Entergy line, and straddling the KCS railroad at such an awkward skew," Burst said. "The 3-D modeling has allowed Boh to look at multiple scenarios to construct the project and identify pros and cons of each possible construction sequence."

The new bridge was part of Boh's winning design-build proposal and provides "a major benefit to the I-10 corridor traveling public," Burst said. "Throughout implementation, design-build has allowed Boh Bros. to work directly with designers to develop design and construction methodologies that are effective and increase production."

Speedier project delivery makes the traveling public happy, and also translates into cost savings, Burst said. "Safety is always our primary concern, but the public makes the assumption that all work

will be conducted safely. We tend to be judged on how quickly we provide improvements, so meeting the schedule will go a long way toward building and maintaining public trust."

The DOTD estimates that average daily traffic through the site is 83,000 vehicles. Still, the department has seen relatively few traffic incidents and complaints on Boh's design-build project, Burst said. "With so much interstate construction going on in Baton Rouge, I think it's difficult for the public to differentiate contractors and projects. However, with the low number of complaints and issues we've had on the I-10 design-build project in particular, I think the public is satisfied with progress thus far, and views contractor performance in a positive light."

The project is scheduled for completion in March 2013. __



Bridging Education Students See Engineering Come To Life

Remember back in your school days, when taking field trips would breathe life into a classroom lesson?



A group of 19 civil engineering students from Louisiana State University recently visited a bridge construction site that is part of Boh's \$59.9 million design-build Rouge between Siegen Lane and Highland Road. The students got to see first-hand how bridge design comes to life with

"Every year I take my students on a field trip to a project," said Paul Fossier. an adjunct instructor at LSU's department of civil engineering. "It's really good when they go out in the field and can see the connection between what they are

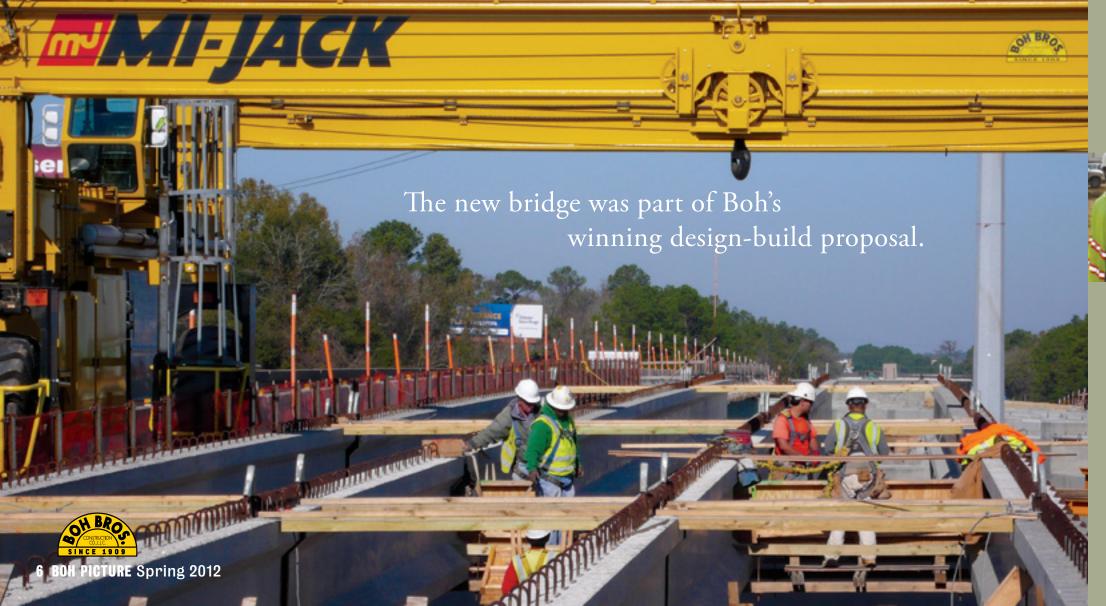
designing in the classroom. It's important to see both sides."

Patrick Ledet, Boh's field project manager and an LSU Civil Engineering alumnus, spoke to the students about the design-build project delivery method, and the project's phasing. He described for the students how Boh erected the 190-ft.-long steel girders for the bridge's

What was really exciting for Ledet was sharing with the students some of his manager. "I wasn't taught construction project management in my civil engineering course work at LSU, so I thought I could only sit in an office and design," he said. "Civil Engineering coursework gives you such a broad basis of knowledge that you have a platform from which you can expand to various fields of work."

Ledet loves being in a construction project management role. "It allows you to be a part of something tangible that you can look at, and touch, and see built from

The students enjoyed the field trip, Fossier said. "When you learn something in class, and then when you go out in the field and see it built, that is really good."







oh Bros. performed a 70-ton load out for Century Exploration, proving Boh's reputation for making heavy lifts quickly, efficiently, and safely. Using a Manitowoc 4100 barge-mounted ringer crane, Boh picked up the 70-ton production platform from the bank in Algiers and placed it on a barge bound for the Breton Sound oil fields.

"Often Boh will get requests for such lifts with only a few days advanced notice," said Ralph Diaz, marine lift manager. "We'll get a call from stevedoring companies, fabrication yards, and petrochemical facilities, because one of their cranes is either too small or not available, and they know we have the expertise to handle these kinds of lifts. We'll usually have a crane available with short-term notification, so we can react quickly to the customers' needs."

Currently, Boh has six derrick barges deployed throughout South Louisiana on various projects. "Ranging in size from 300 tons to 600 tons, these ringmounted cranes give far greater capacity at a longer radius than a conventional crane on a barge," Diaz said.

Prior to every lift, the Boh team conducts a job safety analysis (JSA) meeting as well as a pre-lift talk. "That's where we go through all the risks involved, and we analyze how to do the job safely," Diaz said. "Everybody who has anything to do with the lift is in the JSA and prelift meetings, including the derrick barge crew, tugboat crew, special riggers, management people, and welders. When we are finished we also do a lessons learned report card with all involved, including the customer, so we can learn how to better serve them."

ON THE JOB Team Leaders

Ralph Diaz Marine Lift Manager Wayne Poole Barge Superintendent

Grant Closson Office Project Manager/Engineer

BOH EMPLOYEE SPOTLIGHT



Mike Kennedy, pile driving barge foreman About 25 years ago, Mike Kennedy joined Boh as a certified welder. He moved on to pile driving, repairing pile-driving hammers, and eventually became pile driving barge foreman. The constant opportunities for different challenges, the variety of projects, and the people are what

Kennedy enjoys about working with Boh.

"I just came back from offshore, where we lifted a compressor unit for Texas Petroleum," Kennedy said. "We do

Kennedy has worked on construction of a few bridges and on several salvage projects. When he recalls a project, he always recalls the people who worked with him, too. "I worked with Cecil Singletary, hammer superintendent, on the piledriving hammers," he said. "I've worked together with the operator on my rig, Murray Latapie, for 25 years. I know I can

Kennedy's intermingled memories of the people who made the projects come to life are typical of Boh employees, who have deeply ingrained respect for their fellow workers, as well as a strong commitment to community and family.

Kennedy's father was a foreman who worked the night shift at the old, France Road yard. Harry L. Kennedy, Jr. worked for Boh Bros. for 14 years as a welder, pile driver, and then foreman. He retired in 1980.

Kennedy lives with his wife, Kim, on a two-acre farm in Pearl River. La. Together, they raise animals, including goats, horses, and dogs. "I have a blue heeler (an Australian cattle dog), and she is something else," Kennedy said. Kennedy likes being outside, whether at work for Boh, or at home. He and his wife enjoy gardening, hunting, and fishing. "We've been married 36 years, and spend a lot of time together," Kennedy said. "She does just about anything I do."



Nathan Crockett, pile driving fabrication foreman Nathan Crockett has been with Boh Bros. about 37 years. He started with the company as a welder, and worked his way up to fabrication foreman.

Crockett usually works in the Almonaster Yard. Often, he is fabricating items and doesn't even

know their final destination. However, he takes great pride in delivering quality materials for all of the company's projects. "I've built a lot of stuff over the years, and I like working on it all,"

Crockett lives on the north shore, near Folsom, with his wife, Mary Ann. Their daughter, Vickie, her husband, and their three sons live nearby. The family spends a lot of time together. When he's not at work, Crockett likes to hunt or simply relax.



Jimmie Ceaser, pile leads foreman

This May, will make "15 great years" that Jimmie Ceaser has been with Boh Bros. "I love working here," he said. "It's been one of the best companies I've worked for. They treat you like family. To me, that's important."

Boh and its employees do things that other companies he's worked for would never do. "When you are out sick, or something happens to your family, people support you and help you out," he said.

Additionally, Ceaser has tremendous confidence in the company. "The people here are very knowledgeable, not only here in the yard, but in the office as well," he said. "Guys like Henry Landry (general superintendent of pile driving), Fred Fuchs and Dale Biggers (vice presidents) really work with us. And they know what they are doing," Ceaser said. "When the engineers in the office give us information about the jobs, you know it's going to be right. We also do a lot of checks and balances."

Before joining Boh, Ceaser worked as a welder instructor and in-house inspector, so he brought to the company a lot of experience. He worked his way up from welder to foreman over the pile driving leads repair and fabrication. "I had a lot of knowledge of welding and metallurgy, but I'm also a hard worker," Ceaser said. "Come to work every day, and work hard. That's all it boils down to."

During his tenure with Boh, Ceaser has been a part of many challenging jobs, including construction of bridges, platforms and docks. However, the most memorable job, by far, was construction of the new, Interstate 10 Twin Spans Bridge, to replace the one destroyed by Hurricane Katrina's storm surge in 2005. "Although the storm was a bad thing, that job was amazing to me," Ceaser said.

When he's not at work, Ceaser's wife, Essie, and their nine grandchildren keep him busy. He also raises tropical fish, particularly, African Cichlids.

Boh Bros. is successful because of its people. The Boh Family is comprised of individuals who are committed to company values and take pride in being a part of the Boh Culture.



P.O. Drawer 53226 New Orleans, LA 70153

www.bohbros.com









Spring Anniversaries

YEARS
Fred T. Landry

40 YEARS

G. Arthur Seaver, III Leon A. Audibert, Jr.

35 YEARS

Denise C Saccaro James S. Knight Joe C. Martin

YEARS
Archie L. Watson

Bernard F. Audibert, Jr. Emmett E. Hyde Giles L. Cornwell John W. Fortner Norman D. Springer Terry M. Perry Willie H. Tolliver

25

YEARS

Arthur "Bud" Ricks, Jr. Daryl J. Matherne John T. Thibodeaux Larry T. Stuard

20

YEARS

Dennis P. Guidry Jonny R. Schmaltz Susan B. Talbot 15

YEARS

Austin J. Lemoine Bruce W. Jackson George J. Row James E. Leggins Jose A. Lagos Kenyatta D. Hughes Mitchell R. Palmer Roderick O. Brown

10

YEARS

Brad A. Daigle
Darren B. Grille
Grayellin J. Baudoin, Jr.
Jeffrey D. Lewis
Joseph W. Todd, III
Leo F. Battistella
Lizabeth L. Howard
Lorenzo Aparicio

Michael C. Johnson Nicholas J Fleming Rodney J. Roy Ulysses Payne William James

5

YEARS

Andrew Holmes
Cory M. Patterson
Damon V. Holmes
Frank E. Rick, IV
Gary C. Price
Gregory J. Walters, Jr.
James T. Bradley
James T. Polk
Lance G. Talamo
Louis H. Noel
Richard Austin
Shane E. Strouse
Ted J. Campiso
Willie E. Lillie

Equal Employment Opportunity/Affirmative Action Policy

Boh Bros. is an equal employment opportunity/affirmative action employer. The objective of this Company is to recruit, hire, train and promote into all job levels the most qualified applicants without regard to race, color, religion, sex, national origin, age, disability or protected veterans status. All such decisions are made by utilizing objective standards based on the individual's qualifications as they relate to the particular job vacancy and to the furtherance of equal employment opportunity. All other personnel decisions such as compensation, benefits, transfers, layoffs, return from layoff, company sponsored training, education, tuition assistance, social and recreational programs will be administered without regard to race, religion, color, sex, national origin, age, disability or protected veterans status. Boh Bros. employees should refer to www.hrconnection.com for further information on this and other employment-related policies including Anti-Harassment, Discrimination and Retaliation Policy and Reporting Procedure.