THANK YOU
to Our Healthcare Heroes




BOH BROS. CONSTRUCTION CO., L.L.C. SINCE 1909

BOH PICTURE

VOL. 48, NUMBER 1 / Summer 2020
A Publication
of Boh Bros. Construction Co., LLC



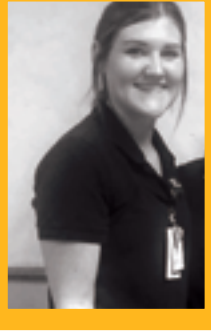




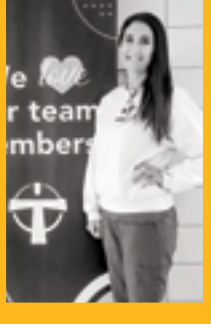










BOH PICTURE
Summer 2020

President
Robert S. Boh

On the cover:
Our healthcare heroes — employee family members serving on the frontlines of COVID-19.

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

Address all correspondence to:
BohPictureEditor@bohbros.com

www.bohbros.com

On the wall in my office is a framed invoice issued by A.P. Boh & Co. to a Mrs. Marquez for a list of home improvements and repairs. The most expensive item was $35 for "balustrade casement sash and extra window," and the total bill for all of the work was $115.80. The date was September 9, 1909.

The sudden and dramatic change in our business environment in the last three months, with the COVID-19 pandemic and resulting shutdown of much of the world economy, is the latest of many challenges our company and its people have endured in the 111 years since Arthur Boh did that small residential job. Having already survived disruptions such as two World Wars, the Great Depression of 1929-1933, several other wars, recessions and numerous hurricanes including Katrina; we now face the prospect of an unknown period of reduced capital expenditures by both our industrial and public clients. Projects that had previously been announced in the petrochemical sector are now at least delayed if not cancelled. Although we remain hopeful that a federal infrastructure plan may be initiated as a way to restart the construction industry and address long neglected needs, at this point there is nothing specific being considered in Congress.

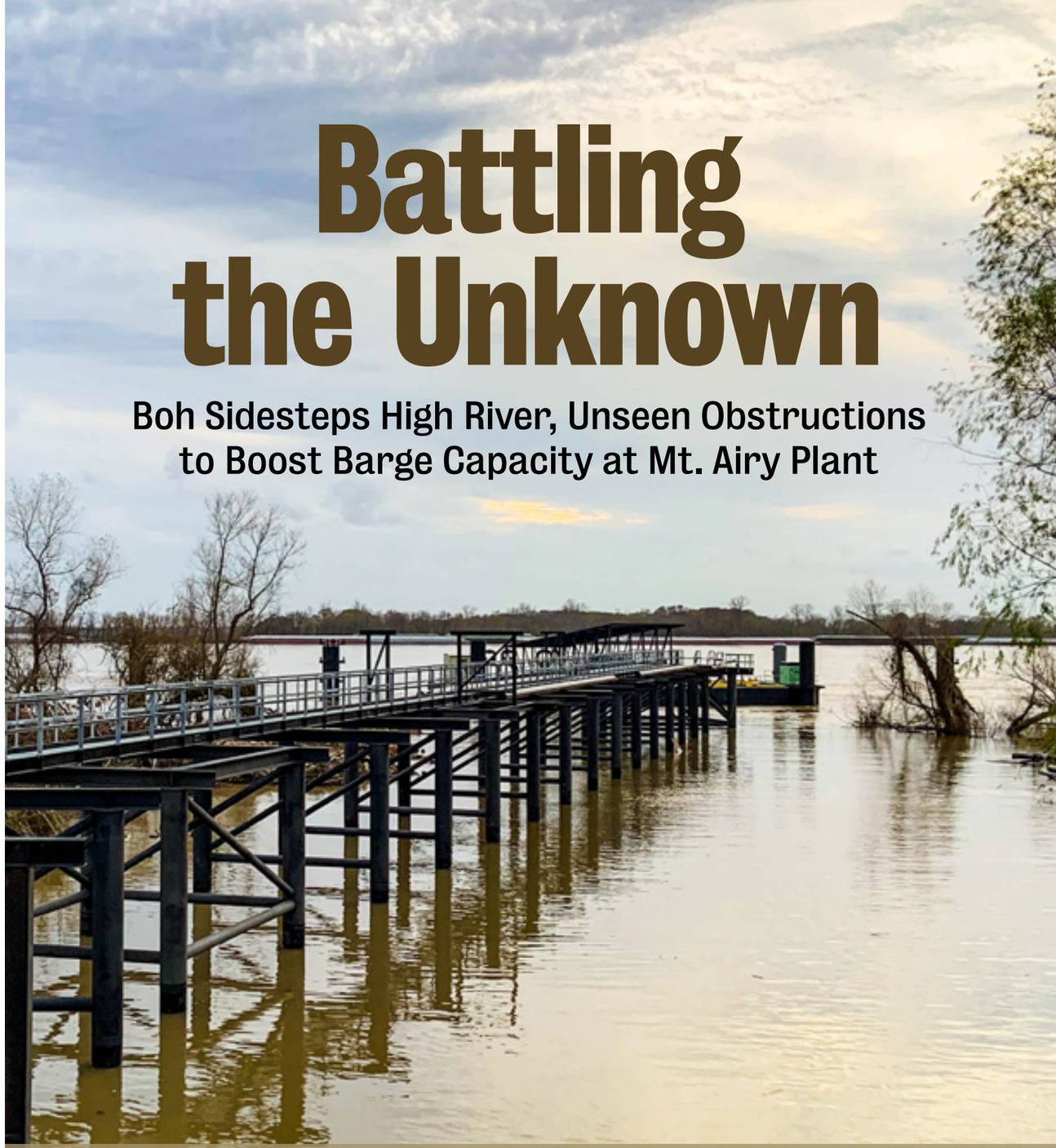
Against this rather somber short term outlook is an optimism that our company has been built to survive and thrive for the long term. We have always taken a conservative approach to finances and have retained funds in the business to weather the inevitable down times that occur periodically in a cyclical industry. Most importantly, we have a team of professional and experienced people who are dedicated to extending the legacy of an enduring company to the next generation. That dedication has been apparent in the last few months as we continued work on all of our projects while incorporating new safety and hygiene practices to meet CDC guidelines. As we have repeatedly done in the past, we will adapt to the changes in the world while staying true to our core purpose and core values. Arthur Boh would be proud to know we are still going strong!

Robert S. Boh, President

> "Against this rather somber short term outlook is an optimism that our company has been built to survive and thrive for the long term. "

Battling the Unknown

Boh Sidesteps High River, Unseen Obstructions to Boost Barge Capacity at Mt. Airy Plant



Boh Bros. Construction Co. found itself battling high river levels and unseen obstructions during construction of a floating barge dock and associated pipe rack in Mt. Airy, LA last year.

In the end, the terminal Owner and the Operator significantly boosted their dock capacity to accommodate four 54- by 300-foot barges at one time. The terminal, situated just south of the Gramercy Bridge, ships oil, liquid asphalt and light oil to destinations along the Gulf of Mexico and Eastern Seaboard. *(continued next page)*

John Hambrick, manager of construction and engineering for the Owner, says the facility was at a critical juncture, as insufficient barge capacity at the site was causing the plant to miss out on potential revenue. “We were paying barges to sit and wait because we didn’t have the capacity that we needed,” he says.

Hambrick, who manages large construction projects for eight terminals from Texas to Virginia to Chicago, was immensely pleased with the outcome, as the multi-faceted Boh Team was able to quickly respond to a host of unexpected challenges. “They did an excellent job — despite a few rough patches that no one could have anticipated.”

As many as five Boh crews worked side-by-side in tight quarters to tackle work that included civil, structural, marine, and foundation phases. By the project’s conclusion, the contractor had fabricated and installed a new floating barge dock with a 100-foot-long articulating truss; two 54-inch-diameter captive barge monopiles; eight 54-inch-diameter barge breasting monopiles with laminated wraps; a truss tower; and 800 feet of structural steel pipe racks and supports for a highway and levee crossing.

As many as five Boh crews worked side-by-side in tight quarters to tackle work that included civil, structural, marine, and foundation phases.

A Skillful Approach

It wasn’t an easy task, as Boh had to circumvent a variety of hurdles. Topping the list — the Mississippi River was at flood stage for an extended period of time at the project’s outset, significantly narrowing the project team’s work window. ”We had originally planned to begin in February 2019,” says Kyle Alexander, Boh project manager. “That was delayed until September due to the abnormally long high-river season we had last year.”

That left mere months for much of the work to be completed. Once the river dropped below Elevation +11 feet, multiple crews began working simultaneously to make up lost ground by constructing levee foundations, hydro-excavating pile locations within the plant, site clearing the river batture, pile driving, and erecting structural steel for the pipe rack and walkway.

Water proved to be an ongoing problem. Whenever it rained, operating construction equipment on the levee and batture was nearly impossible, so a temporary road was constructed using existing material on site — riprap, sand etc. — to enable cranes and other equipment to safely grab piles, erect steel, or place material.

Through it all, time was of the essence. “We knew that once the river came back up, we weren’t going to get back out there until the next season, which could last through October 2020,” Alexander says.

A Boh team led by Larry Lamonte and John Paul Talkington discovered numerous below-ground obstructions during the hydro excavation process, forcing the layout team to re-work and re-map the pipe rack foundation almost daily. Unfortunately, there were no subsurface schematics available for the decades-old site. “It was a recurring process where we would find obstructions, map them, and re-work the layout,” says Boh layout manager Mike Langlois. “We would shift the orientation of the piles, when possible, so that they would fit between all the obstructions.”

Only through a rigorous, collaborative process between Boh and the project’s engineer, Lanier & Associates, was the project team able to minimize impacts to schedule.

Darren Torres, Boh’s civil project manager, says working with the design team to integrate the new foundations on the existing levee was also a challenge. “Before we arrived on site, we worked closely with Lanier & Associates to eliminate potential conflicts. That advance work helped the entire project team be successful once on the ground,” Torres says. The civil team constructed seven poured-in-place spread footings, along with a concrete base, walls and a top concrete slab, as support for the pipe rack.

Due to these challenges, Boh’s Mike Langlois and Craig Sanchez took the initiative to plot control points and create new “as-builts” of the entire site. “All of the data was entered into our program, and we were able to more accurately generate new layouts of the work,” Langlois says.

“I know it sounds like a cliché, but it was a team effort.”

Couser Hano,
Field Project Manager

“Lanier then blended their design with our information so that they knew exactly where everything was located in conjunction with the new control points.”

Design precision was critically important given the tight spaces in which the team had to work. During pile driving, for example, a forklift and rough terrain crane were used to maneuver and drive 18-inch-diameter, 60-foot-long piles for the pipe rack around tanks, power lines, and other obstructions. The steel pipe piles were driven in two pieces so they could be easily maneuvered through the existing plant site.

By Land and by Water

Boh’s Kari Hubbard and Josh Menier, along with William St. John and Ricky Tamor, were responsible for designing and detailing the steel needed for the articulating truss, pipe racks, levee and road crossing, all of which was fabricated within Boh’s 12,000-square-foot, AISC-certified High Bay fabrication facility at the Almonaster yard.

“A lot of quality control checks were involved, particularly in regards to the steel connections,” Alexander says. “We needed to ensure that everything was constructable upon arriving at the site. They did an awesome job from shop drawings to fabrication to shipping.”

The steel work culminated with the setting of a structural steel pipe bridge across Hwy 44 (River Road) during an around-the-clock, weekend-long closure. The steel for the 20-foot-wide bridge was shipped to the site and preassembled on the levee batture.

Steve Menard, steel foreman, says the bridge was lifted and placed in one section by a hydraulic crane. The bridge also supports a prefabricated steel catwalk for plant workers to access the dock from the plant, and vice versa. “Pre-assembling the bridge saved a significant amount of time and manpower,” Menard says. Others supervising the steel work were Max Bourgeouis Jr., Steve Ngyuen, and Matthew Vessier.

Meanwhile, Boh’s marine team, led by David Perry, drove mooring and berthing piles, and set a 100-foot-long articulating truss with a Manitowoc 4100 ringer crane in preparation for the project’s centerpiece—a floating barge dock. The process followed stringent quality control measures, as the team double and triple checked pile locations to ensure their accuracy and alignment.

Driving piles in a moving river is no piece of cake, and the work at Mt. Airy was no different. “The river was high and we were in a bend, so it was a challenge to make sure that the large mooring piles were in the right location,” says Couser Hano, field project manager. To ensure accuracy, a Boh survey crew frequently “shot locations and checked everything three times before we actually put a pile in the ground.”

The marine crew monitored for any pile movement throughout the process. “We had to stay on top of that,” Hano says, “because we had riprap underneath the mudline that we were driving through…you could literally hear the rocks crunching underneath the piles as they were going into the mud.”

Langlois says driving in the river is always difficult from a design layout standpoint. “You’re driving off of a floating structure, the river is moving, and once you put your piles down the barge wants to move on you a little. I was very conscious of that from the start.

“Also, the bottom of the river is not perfectly flat, so your pile wants to slide on you,” Langlois adds. “Fortunately, there are things you can do to adjust.” The Boh team worked with the engineer to adjust berthing pile locations when problems arose. “Fortunately, we only had to make a few small adjustments in this case.”

Pride in the Team

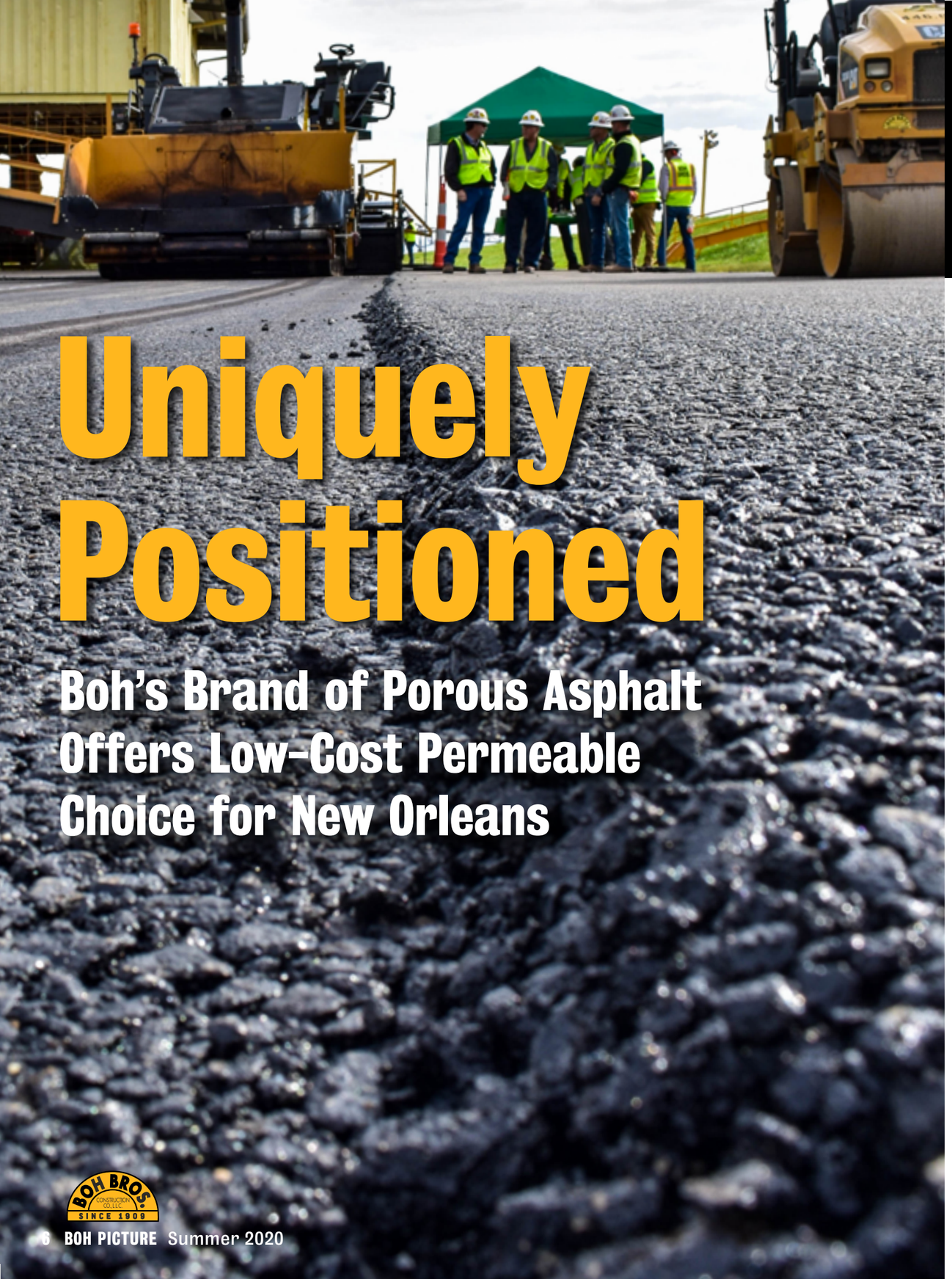
In his 40 years of working in construction, Hano has never been more impressed by the work ethic displayed at the Mt. Airy site. “We had multiple crews out there at the same time on a tight site, with a lot of underground obstructions…it could have become a nightmare,” Hano says. “We would get three quarters of the way done, then find an unknown obstruction and have to start back over, backfill that area and try something else.

“Despite all that, no one got frustrated…all we could do was just keep moving forward.”

He was particularly impressed by first-time foreman Garrett Robertson and his ability to roll with the changes. “I know it sounds like a cliché, but it was a team effort,” Hano adds. “This was great to be part of a job that, even though it was broken into separate parts, we functioned as one team…and we did it safely.

“Literally, nothing slowed us down. Everything rolled as one.”

It wasn’t an easy task, as Boh had to circumvent a variety of hurdles. Topping the list—the Mississippi River was at flood stage for an extended period of time at the project’s outset, significantly narrowing the project team’s work window.



Uniquely Positioned

Boh's Brand of Porous Asphalt Offers Low-Cost Permeable Choice for New Orleans

By its nature, porous asphalt pavements allow water to drain through the pavement surface into a stone recharge bed and infiltrate into the soils below the pavement or into a drainage system.

Boh Bros. Construction's proficiency for designing, testing, and implementing groundbreaking asphalt designs has pared nicely with a recent mandate handed down by the New Orleans City Council.

The city recently joined a nationwide movement to mitigate flooding and soil subsidence by requiring that all new commercial parking surfaces be paved with a porous surface. While that alone won't solve the problem of street flooding, these surfaces could lighten the burden placed on the city's drainage system during heavy rainfalls.

The mandate comes some six years after the implementation of the city's broader sustainability strategy, dubbed the Greater New Orleans Urban Water Plan. Since the plan's release, New Orleans has launched more than $120 million in "green" infrastructure projects that could add millions of gallons of stormwater storage capacity.

Of course, the city's battle with stormwater has been waged for years, as its 100-year-old drainage system was built at a time when there were far more grassy spaces that could easily absorb and dissipate the water.

While a porous surface can be achieved in a variety of ways — permeable concrete pavers are the main competition — porous asphalt offers a cheaper alternative, provided it is done correctly. By its nature, porous asphalt pavements allow water to drain through the pavement surface into a stone recharge bed and infiltrate into the soils below the pavement or into a drainage system.

With the proper design and installation, porous asphalt can provide cost-effective, attractive pavements with a life span of more than 20 years, and at the same time provide stormwater management systems that promote infiltration, improve water quality and eliminate the need for a detention basin.

It Begins in the Lab

James Adams, asphalt quality control manager at Boh, began studying and researching porous mix designs early last year. Other than some large-scale highway projects implemented by the Louisiana Department of Transportation and Development (DOTD), he found that there were very few local applications of the product.

It became clear that DOTD designs weren't wholly transferrable to parking lots, as they were more expensive and had unsuitable requirements for asphalt cement content (AC) and fine aggregates. "Your normal asphalt mix has about 5 percent AC and they specified 6 to 6.5 percent," Adams says. "That drives the cost up. Additionally, with so much AC and fewer rocks, you have to include mineral fibers to hold the asphalt cement in place while the mix cools. Otherwise, all of the asphalt cement would release from the rock and drain out of the mix.

We quickly realized that utilizing a DOTD-class interstate pavement didn't make sense for our purposes."

Boh's asphalt group began experimenting with designs that were more conducive to a smaller application — and less costly — and found the answer in polymer modified asphalt (PMA). By using PMA, they were able to significantly lower the AC in the mix. They also lowered the temperature of the asphalt within a specially-equipped plant at Boh's France Road facility in order to stiffen the mix and minimize AC "drain down."

During the process, the plant uses a water foaming system to lower production temperatures. "When the asphalt meets the rock aggregate, it sprays a mist of water," Adams says. "That expands the mix, enabling the asphalt to more efficiently coat the rock because it has a lower viscosity. You get a much better coating that way."

The Boh team was able to reduce asphalt cement content to 4 to 5 percent and avoid the need for fibers. That subsequently lowered production costs.

Arriving at the right design was a painstaking process. Adams, along with QC technicians Billy Taylor and Mike Patrick, bounced ideas off each other and tested various rock sizes and fine aggregates in the France Road laboratory.

James Adams, asphalt quality control manager at Boh, began studying and researching porous mix designs early last year.

"When we had an idea, we'd go to the mix design section of our lab and mix it up a small batch," Adams says. "We'd mix up a batch and put it in the oven, heat up some liquid AC and pour that into it, then mix it up with a stand mixer." That was followed by a Marshall Test to simulate the compaction from a roller in the field. They would then examine the mix, aiming for a goal of 16 percent air voids.

Next, the team initiated a mixture performance test to simulate wear and tear at different traffic loads, with the goal of achieving the Asphalt Institute-recommended Marshall Stability of 1,200 lbs. Ultimately, the mix design far surpassed the standard at 1,700 lbs.

Valuable Lessons at Almonaster

To validate the design, Boh Bros.' asphalt team chose a much-needed employee and equipment parking lot overlay at its Almonaster Avenue facility for its first full-scale test of the product. "That allowed us to put our eyes on it and determine optimal temperature, number of passes needed with the roller etc., to achieve the desired infiltration rate," Adams says.

In February, the team applied two, 2-inch lifts across the expansive 150- by 350-foot parking lot. A 10-man crew under the supervision of superintendent Anthony Harrison performed the work, as city representatives and area engineering firms observed. "Through it all, we had our QC guy checking behind us to make sure we were achieving the right density," Harrison says.

James Breland, asphalt operations manager, says there were some valuable lessons learned during the Almonaster test. Most importantly, while applying the 1,000 tons of asphalt for the job they determined the optimal speed and temperature for rolling the mix. "We learned that there is a finite, sensitive temperature range for compacting the asphalt," Breland says. "Getting on it too soon can cause rutting, but if you wait too long the mix starts to harden. There's an optimal 10- to 15-minute window. You've got to be cognizant of the temperature."

Typically, asphalt is manufactured at about 330 degrees and cools slightly to 275 to 300 degrees upon arriving at the site. A traditional mix would then be immediately vibrated and rolled down. That's not the case with porous asphalt. "We found it was best to wait until the asphalt got to about 180 degrees before compaction," Breland says.

Throughout the process, a QC technician equipped with a thermal gun measures the asphalt's temperature to determine when the rolldown can begin. "That requires good communications between our QC team and operators so they know it's in the proper range."

That also impacts the sequencing of asphalt deliveries, as the trucks can't wait in line for the asphalt to cool. Therefore, a heightened level of planning is needed to make it all happen. "You need to know how much you're trying to pave, how fast you're trying to pave it and how fast you have to be off of it," Breland says. "There's a lot more waiting. However, if done correctly you can put down just as many tons as you would with traditional asphalt on a given day."

At Almonaster, the Boh team also discovered that the roll-down rates are different in a porous mix, as the larger stone minimizes compaction. "Regular asphalt has a lot of fines, and a lot of smaller particles. You vibrate it, you roll it and all those particles interlock and they get rid of all the voids. However, you want to keep those voids with porous asphalt."

Core samples from Almonaster were taken to France Road to be analyzed, where they tested at 16 to 20 percent air voids—far exceeding preliminary results in the lab. Furthermore, "city specifications require a seepage rate of 200 inches per hour, and we achieved 700 inches," Adams says.

Harrison says the test surpassed his expectations. "I was very impressed by the way that the water penetrated through the mix," he adds.

There's little doubt Boh can handle the capacity requirements of the specialized porous mix. The contractor can produce as much as 400 tons an hour at the France Road facility. The Almonaster site, in fact, was paved in just two days. "We've expanded our France Road facilities from three to six silos," Adams says. "That gives us the option of running six different mixes on the same day."

While excited about the prospects of porous asphalt, Adams stresses that not every contractor can design, produce and place the product. A contractor needs to be at the top of their game. "We feel our porous asphalt design can go a long way toward resolving a long-standing problem in New Orleans, but in a less expensive way."

"We feel our porous asphalt design can go a long way toward resolving a long-standing problem in New Orleans, but in a less expensive way."

James Adams,
Asphalt Quality Control Manager

Healthcare HEROES

Mr. Robert H. Boh, in the inaugural issue of the Boh Picture (March 1968), shared the following thought in his memo: "I think it is appropriate that this initial issue of the Boh Picture should be dedicated to all those who have worked for the Company during these 59 years, and **that this and future issues be utilized to bring to all of our employees and their families the continuing story of the Company and its employees."**

The Boh Picture has been true to Mr. Boh's wishes for the last 52 years by featuring Boh employees that are dedicated to our Core Purpose of Honorably Serving our Communities. We will depart from tradition in this issue to celebrate and honor family members of Boh employees that have bravely chosen to Honorably Serve our Communities by providing healthcare services during the ongoing COVID-19 pandemic. Please join us in thanking our Healthcare Heroes.

Shemika Moore
Registered nurse
(Medical Administrator–
Boh Almonaster Training Facility)

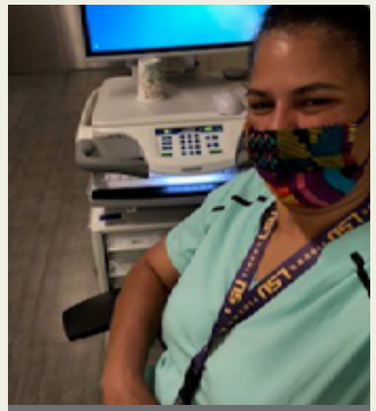
Olivia Fleming
Registered nurse
Nick Fleming, *spouse*

Elizabeth St John
Pediatric physical therapist
Emmett White, *niece*

Ricky Burns
Registered nurse
Melanie Burns, *sister*

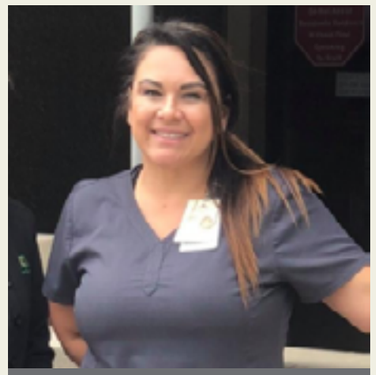
Holly Sanchez Blanchard
Registered nurse
Craig Sanchez, *daughter*

Elaina Schexnayder
Nurse practitioner
GJ Schexnayder, *spouse*



Maricia Bloodwirt Sansone
Registered nurse
Jimmy Sansone, *spouse*

Kristie Barras
Registered nurse
Keith Barras, *daughter*



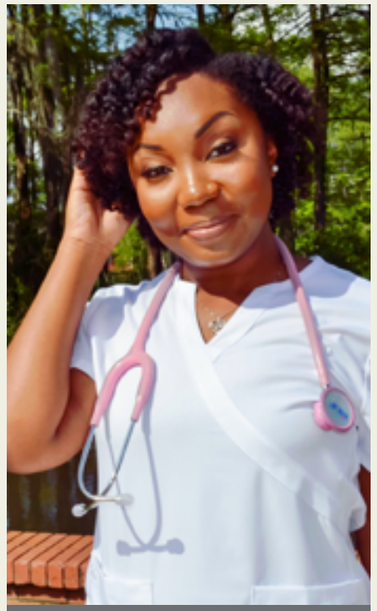
Amanda Polanco
Registered nurse
Tim Carpenter, *niece*

Dawn O'Mara
Registered nurse
Margaret Baggert, *step daughter*

Dr. Antoinette Hubble
Pediatrician
Margaret Baggert, *cousin*

Amelia Hendrickson Breland
Nurse practitioner
James Breland, *spouse*
Andy Hendrickson, *daughter*

HealthcareHEROES



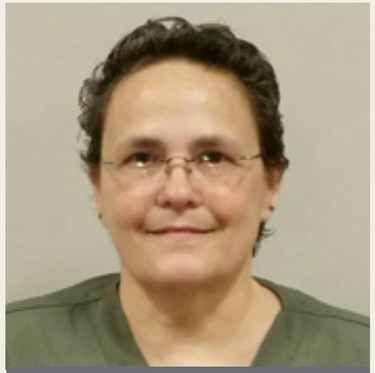
Marissa Prudohmme
Licensed practical nurse
Curtis Prudohmme, *daughter*

Erica Dantin Daroca
Certified hyperbaric technician/ hyperbaric safety officer
Ricky Dantin, *daughter*

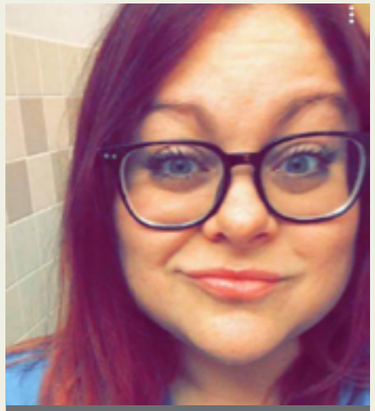
Trinell Prudohmme Edwards
Laboratory technician
Curtis Prudohmme, *daughter*

Judy Irion
Respiratory therapist
Margaret Baggert, *sister-in-law*

Lauren White
Registered nurse
Paul White, *spouse*



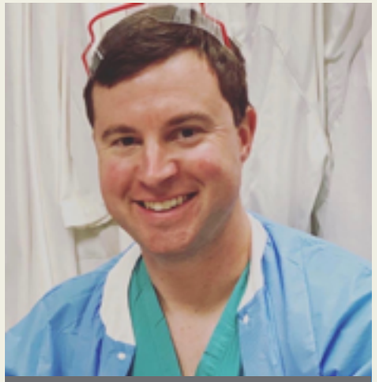
Sherre Gunter
X-ray tech
Pat Gunter, *sister*



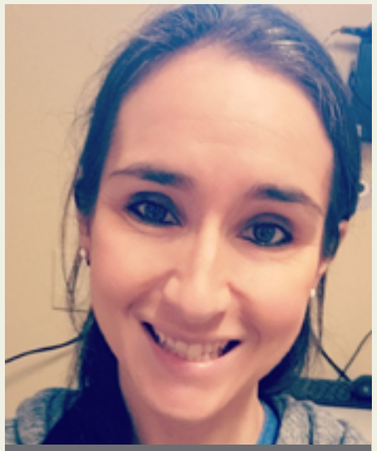
Maria Labruzza
Respiratory therapist
Johnny Clement, *step daughter*

Breann Bremermann Messina
Army medic
Wayne Bremmerman, *daughter*

Kayla Fleming
Registered nurse
Tim Carpenter, *niece*



Robert St. John, Jr.
Nurse anesthetist
Emmett White, *nephew*



Leslie Carin Thornton
CT/X-ray technician
Scott Thornton, *spouse*

Kelly Altemus Quebedeaux
Doctor of physical therapy
Jeff Quebedeaux, *daughter-in-law*

Jessica Hano
Pharmacist
Earl Hano, Jr., *daughter*

Sharon Gondrella
Dosimetrist
Michael Gondrella, *spouse*

BOH BROS. CONSTRUCTION CO., L.L.C. SINCE 1909
P.O. Drawer 53226
New Orleans, LA 70153

Prsrt Std
U.S. Postage
PAID
New Orleans, LA
Permit No. 1273

www.bohbros.com




Summer Anniversaries

45 YEARS
Douglas B. Dovie
Larry R. Lamonte
Richard J. Tamor

40 YEARS
Michael D. Hotard
Chester J. Mathe, Jr.
Kevin F. Schoonmaker

35 YEARS
Willard P. Gunter
Neal A. Keller
Paul A. Marino

30 YEARS
James A. Jambon, Jr.
Frances M. Lacour
Olga L. Pustanio
Kenneth R. Solis

25 YEARS
Robert W. Brehm, Jr.
Herbert J. Firmin III
Dwight Mikell
Walter C. Tabony

20 YEARS
Chad C. Brooks
Barbara A. Costley
Karen C. Encardes
John P. Henderson
Brad C. Landry
Clyde A. Olivier, Jr.
Jeffrey D. Plauche
Randall P. Ryan
Steven J. Scott, Sr.
Timothy J. Theisen, Jr.

15 YEARS
Anthony C. Barient
Leon J. Battaglia
Bobby R. Bergeron, Jr.
Wesley G. Drumwright
Sean P. Foster
Nicholas Friedman III
James B. Kerr
Dustin A. Parks
Jarett T. Roche
Jason A. Ruble
Richard J. Tipton

10 YEARS
Michael C. Abadie
Gordon C. Abboud
Benjamin A. Brenneke
Vincent P. Burton
Brayden K. Caillouet
Jimmie R. Cooke
Eric S. Crowe
Henry L. Durr
Emmanuel N. Lewis
Jose L. Lopez Rangel
Kermit A. Miller
Quang V. Nguyen
Larry J. Page, Jr.
Jerome M. Parquet
Troy J. Sperandeo

5 YEARS
Francisco J. Argueta Espinoza
Manuel A. Armstrong, Jr.
Donterrieaux M. Bell
Kevin T. Bourgeois
Cary J. Degelos
Sara C. Eagan
Thomas M. Hammortree
Darnell Harris
Kari E. Hubbard
Donald C. Johnson
William G. Taylor

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.