2018 has been a year of exciting transition for Volkert. We have implemented a number of initiatives to make us an even stronger firm and to provide even better service to our valued clients and communities. Our new executive team was completed in April (p. 3) and I look forward to seeing their positive impact on Volkert’s future. Our communication tools have also been upgraded, allowing us to better communicate internally and externally. One thing that hasn’t changed is our commitment to excellence.

It was announced in April that we earned the No. 87 spot in ENR’s top 500 design firms ranking—the highest in company history. We also ranked well in the pure design firms list and in the Southeast Region rankings (p. 3).

We continue to expand both our geographic reach and our service offerings. As we broaden our areas of expertise through talent acquisition (p. 3) and professional development, we are strengthening our ability to serve clients in transportation, energy, water, and environment.

One part of our mission statement is “to serve our clients with quality, innovation, and honest value.” To each of our clients, thank you for giving us the opportunity to serve you and the communities you represent. Whether we are building roadways to connect college campuses (p. 4), helping solve traffic issues (p. 7), building sustainability and resiliency into infrastructure (p. 9), or using technology to deliver innovative design plans (p. 10), we are committed to providing outcomes for all of our projects that exceed your expectations.

I look forward to working with you as we close out 2018 and begin a new year.

Jerry Stump, PE
President and CEO
Committing to Talent Acquisition

When Jerry Stump assumed the President and CEO role in January, he stated that talent recruitment would be a top priority. The addition of Volkert’s first chief administrative officer, Dan Houston, was the first step in equipping the firm to successfully handle its rapid growth.

In August, Stump and Houston announced that Carrie Bingham (right) was hired as Volkert’s first talent acquisition manager. “In this role, Carrie will help develop our talent acquisition strategy, work closely with executive and senior leaders and with hiring managers to evaluate talent acquisition priorities, and create an effective onboarding process for new hires,” Houston says. “She will personally assist in recruiting individuals to Volkert and work with selected recruiting agencies when appropriate.”

Bingham brings to Volkert more than 14 years of experience in human resources and talent acquisition, having worked with several large companies including J.B. Hunt Transport, Inc.
Volkert was tasked to design a much-needed roadway connection from the existing main Guilford Technical Community College Jamestown, North Carolina, campus to the expansion campus. This involved designing a tunnel crossing under the existing four-lane Guilford College Road. Work has included roadway design, traffic control plans, and wetland and stormwater permitting. The tunnel is made of a steel plate pipe with mechanically stabilized earth (MSE) retaining walls.

In addition to the design and permit work, Volkert developed all contracting documents and conducted the bid opening. Construction is still ongoing and Volkert is providing CEI services, acting as the owner’s representative, and is responsible for ensuring that the project is constructed according to the plans and specifications.

Volkert encountered challenges due to the traffic volume on Guilford College Road. The volume of traffic forced Volkert to design the project in such a way as to assemble the tunnel in two sections.

Work began in February 2018 by placing traffic in a two-lane, two-way pattern on one side of the existing road, while the other side was excavated and the tunnel and walls assembled. In late August the contractor began the excavation for the other half of the tunnel installation. Work is slated to be completed by Spring 2019 with a total project cost of $3.4 million.

Volkert Carolinas Team Members:
Warren Walker, Executive Oversight
Darrell Ferguson, Project Manager
Deni Kulovic, Inspector
Michael Barnhill, Inspector
Stephen Wray, Inspector
The Tennessee Department of Transportation (TDOT) named Volkert the main consultant for a statewide tunnel inspection assignment as part of Volkert’s existing TDOT bridge repair on-call contract. The assignment included inspections for seven tunnels owned or operated by TDOT.

This tunnel inspection assignment was the first in the state of Tennessee, and among the first in the nation, to use the newly implemented National Tunnel Inspection Standards (NTIS). These standards, which went into effect in August 2015, require tunnel owners to establish a program for inspecting tunnels, record tunnel inventory, report inspection findings, and correct critical issues.

Because Volkert was the first firm to perform tunnel inspections in Tennessee per these new NTIS requirements, TDOT tasked Volkert staff with establishing compliant procedures by August 2017. These complex inspections also gave Volkert the opportunity to be the first firm to use and apply procedures outlined in the NTIS Specifications for National Tunnel Inspection and Tunnel Operations, Maintenance, Inspection, and Evaluation guidelines for a TDOT project.

The tunnels included in this assignment all featured different challenges. From the oldest, and shortest, rock tunnel in Tennessee to the sophisticated Nashville Airport Tunnel, Volkert was able to efficiently and successfully inspect all seven TDOT tunnels. “It was critical that these tunnels be inspected, and repaired if necessary, because a total of over 138,000 vehicles traveled these tunnels daily in 2016,” explains project manager Justin Eckel.

Volkert’s work on this project has set the stage for future tunnel inspections in the state. TDOT has stated that they will use Volkert’s established report format, inspection procedures, and inventory format for future tunnel inspection cycles.

This significant project recently won a 2018 Engineering Excellence Award from ACEC Tennessee in the small project division’s Studies, Research, and Consulting category.

Volkert Central Team Members:
Justin Eckel, Project Manager
Tony Montiel, Senior Inspector
Andy Allsbrook, Inspector
Joe Dillard, Inspector
Madi Lee, Inspector
The Florida Department of Transportation (FDOT) recently awarded Volkert a Project Development and Environment (PD&E) study to evaluate potential bridge alternatives for the NASA Causeway Bridge in Brevard County, Florida.

The existing bascule bridge, which was built in 1964, includes two 2,993-foot separate eastbound and westbound structures. The bridge currently provides a 90-foot horizontal navigational clearance. The existing vertical clearance is 28 feet when the bascule is in the closed position. Each structure provides two 12-foot-wide travel lanes in each direction.

The bridge is the primary corridor for transporting freight and payload into the Kennedy Space Center / Cape Canaveral Air Force Station (KSC/CCAFS), and is currently used to transport payloads from processing facilities in Titusville to the KSC/CCAFS launch pad facilities. A payload, in this case, is the actual freight being launched, defined as airborne or space equipment or material that is not an integral part of the carrier vehicle. The main concerns with payloads are carrying capacity and clearances, both horizontal and vertical.

This PD&E study will produce the required documentation for FDOT to identify a recommended alternative and advance the project into the final design phase. Design alternatives being considered in the study include several replacement options: no-build; rehabilitation; in-kind replacement; and low-, mid-, and high-level replacement.

The existing structure is eligible for listing on the National Register of Historic Places. In addition to the PD&E study, Volkert will be managing the final design and permitting phase of the project, which is expected to be construction-ready in early 2021.

**Volkert Florida Team Members:**
Bo Sanchez, Principal in Charge  
Ralph Bove, Project Manager  
Brian Kirwan, Deputy Project Manager/Design Lead  
Tyler Wallum, Roadway Design  
Mark Lauckner, Structures Lead  
Drew Appler, Structures Support  
Roger Menendez, Environmental Reviews
Mitigating Traffic

Volkert, under contract with the Florida Department of Transportation, District 3, recently completed a Planning, Design, and Environment (PD&E) study for the intersection of US 98 at 17th Avenue in Pensacola, Florida.

US 98 has a current annual average daily traffic of 50,000 vehicles, with a projected annual average daily traffic in the year 2040 of 68,000 vehicles.

As a result of the PD&E study, the existing intersection, which is at-grade and signalized, will be converted to a grade-separated interchange utilizing an at-grade roundabout.

The PD&E Preferred Alternative effectively removes a majority of the US 98 through-traffic from the intersection by using grade separation. It also utilizes a roundabout to efficiently handle the remainder of the traffic desiring to access either 17th Avenue or Bayfront Parkway.

Construction costs are estimated to be $22 million. Volkert provided roadway design, drainage design, structures design, NEPA documentation, environmental science services, right-of-way work, and public involvement services.

Volkert Gulf Design Team Members:
Shawn Justice, Project Manager
Scott Golden, Roadway/Drainage Engineer
Alan Jayroe, Structures Engineer
Billy Woodbery, Roadway Engineer
Clark Bailey, Traffic Engineer
Jason Goffinet, NEPA Environmental
Arthur Hooks, NEPA Engineering
Jimbo Huddleston, CADD
Ray Wilkins, CADD
Reconstructing History

Volkert recently provided Construction Management and Inspection (CMI) services for the District Department of Transportation’s (DDOT) Rehabilitation of Pennsylvania Avenue Bridge over Rock Creek and Rock Creek Parkway project in Washington, D.C.

DDOT rehabilitated the existing bridge—a historic simple span reinforced concrete deck arch structure that carries five lanes of two-way traffic—to repair structural features and increase the service life of the bridge. The work included structural steel repairs, center span deck replacement, joint settlement assessments, repaving, sidewalk repairs, LED lighting installation, and painting the twin 48-inch watermains that have been in service since the 1850s.

Volkert led a partnering session with DDOT, the contractor, and key stakeholders to proactively plan the construction process. This established positive working relationships and provided effective communications protocols among key players. The Volkert team visited local businesses, residents, and institutions to discuss the project, and continued proactive public engagement during the life of the project.

As DDOT’s representative, Volkert reviewed the contractor’s submittals, plans of operations, and schedule to identify potential issues and recommend solutions.

A significant challenge was coordinating a 200-day detour of westbound Pennsylvania Avenue—a major commuter route from downtown D.C. The detour was lifted eight days ahead of schedule, with zero incidents or complaints.

The Pennsylvania Avenue Bridge is shown above in the mid-1800s.

Volkert Mid-Atlantic Team Members:
Ben Lineberry, Executive Oversight
Matthew Weaver, Construction Manager
Sedeek Mohammad, Senior Construction Inspector and Office Engineer
Adu Bandoh, Senior Construction Inspector
Dawn Dekker, Public Outreach Manager
Manuel Richardson, Traffic Engineering Support
Earl Wilkins, Design Support
Brendan August, CADD Support
The First of Its Kind

Volkert’s program management group recently finished work on the Gulf State Park Interpretive Center and new pedestrian bridge for the Alabama Department of Conservation and Natural Resources. Volkert provided not only construction management services for this project, but also environmental compliance and permitting services for all projects in the Gulf State Park Enhancement Program.

These two facilities will now serve as the gateway to Gulf State Park. The East Pedestrian Bridge connects the 28-mile Gulf State Park trail system with the beaches. This bridge and the already-constructed Western Pedestrian Bridge were included in the Gulf State Park Master Plan in response to public feedback regarding the lack of easy and safe pedestrian and bicycle travel across East Beach Boulevard.

The Interpretive Center features an open-air porch containing interactive exhibits from all nine distinct ecologies from the Gulf to the inland forest. The Center also has a multi-use event space and a play area, which includes shade, sky viewing benches, and a water play exhibit. Public restrooms, bike parking, and amphitheater seating round out the building’s amenities.

The Interpretive Center was just awarded the FORTIFIED Commercial – Bronze Level certification by the Institute for Business and Home Safety (IBHS). This voluntary certification program was implemented by the IBHS to make new commercial buildings stronger against high winds, hail, and hurricanes. The Interpretive Center served as a pilot project for this certification and is the first project in the world to achieve a successful certification through the FORTIFIED program.

The Interpretive Center is currently pursuing LEED Platinum certification and Living Building Challenge (LBC) certification, developed and administered by the International Living Futures Institute (ILFI). LBC certification is the world’s most rigorous and complex environmental certification. In order to be LBC-certified, the building must produce 105% of its required energy, treat 105% of its needed water supply, and use only renewable and sustainable materials during construction. The Interpretive Center uses solar energy to generate more power than it consumes, and generates more potable water than it consumes using a unique roof and gutter design to capture, treat, and store up to 11,000 gallons of rainwater on site. These measures make the building “net positive” to the environment instead of just “net neutral.”

There are only 16 fully-certified LBC buildings in the world, and if the Interpretive Center is successful in its certification, it will be the first in the Southeast.

Volkert Program Management Team Members:
Leon Barkan, Principal In Charge
Stan Winter, Lead Construction Manager
Buddy Squires, General Superintendent
Paul Ensign, Construction Manager
Volkert has spent two years using Bentley’s OpenRoads Technology to deliver 3D models of all Texas transportation design projects. 3D design technology is nothing new, but the workflow and tools have finally evolved to the point that it makes sense to use them in day-to-day engineering.

Volkert was recently charged with providing the Texas Department of Transportation (TxDOT) Tyler District with its first 3D OpenRoads design project on SH 135. The project featured widening an existing roadway of approximately 6 miles to add passing lanes and upgrade facilities.

The design schedule was tight and, as part of the contract, Volkert and TxDOT agreed to hold the 30 percent submittal as a 3D walk-through, instead of traditional 2D paper plans.

“This was our first completely 3D model submittal,” explains Trevor Reed. “We focused our efforts on generating a high-quality 3D model and met with our client to walk them through each step of the project using the model, analyzing 3D utilities, drainage features, driveways, and pavement widening features. Our communication efforts accelerated decision making and the design process to keep the project on a compressed schedule”

**Volkert Texas Team Members:**
- Randy Redmond, Principal in Charge
- Trevor Reed, Project Manager
- Justin Montez, Senior Designer
- Geoff Gastelum, Senior Designer
- Slone Harrison, Engineer-in-Training
A Working Relationship

Prairie Power, Inc. (PPI) recently selected Volkert to complete real estate services in Central Illinois. PPI is a member-owned, not-for-profit electric generation and transmission cooperative producing and supplying wholesale electricity to ten electric distribution cooperatives across the state. PPI’s distribution cooperatives provide retail electric service to approximately 78,000 members within their local service territories. PPI is experiencing unprecedented growth and is expanding and upgrading its system across its coverage area.

Volkert began cultivating its working relationship with PPI two years ago. According to vice president Jason Watters, “a relationship was built over time with PPI and several members of our staff. When a recent opportunity presented itself, Volkert was well positioned to be offered the work. Our responsiveness and client-driven approach on that first job led to the next job and the next. That’s the model of how we’ve grown our business in this region with several clients.”

Initially, Volkert was asked to provide real estate services along PPI’s Athens to Turris 138 kV electrical transmission line. This 6-mile line extends across Sangamon and Logan Counties in Illinois from an existing PPI substation to a proposed tap. Volkert’s scope of work included land acquisition, a market data study, survey services, non-environmental permitting, construction support services, and road monitoring.

Initial success on the Athens to Turris line led to PPI offering Volkert similar work on its Taylorville to Blue Mound 34.5 kV electrical transmission line and its Monmouth to McDonough Power Coop Tap Routing Project.

Most recently, Volkert was asked to assist PPI with its Substation Express Feeder project.

“PPI has a phenomenal staff, and we love working with them,” says Christina Kibel, Volkert’s real estate project manager with PPI. “Our hope is to continue working with PPI on real estate projects, but also to show them our additional services such as site and electrical design. Our goal is to have PPI as a satisfied client for a long time.”

Volkert West Central Team Members:
Jason Watters, Principal in Charge
Christina Kibel, Project Manager Real Estate
Joe Hemphill, Project Engineer
Nathan Dozier, Survey
Stephanie Muentnich, Management Oversight
Volkert is proud to welcome Mike Kole as a real estate operations manager for the company’s new office in Fishers, Indiana. Prior to joining Volkert, Mike owned and managed a right of way agency serving utility clients in the Midwest and eastern United States. Mike looks to bring his knowledge and expertise to this new market for Volkert.

Steven Froncillo, PE, recently joined Volkert as a senior traffic engineer in the firm’s Virginia Beach office. For more than 12 years, Steve served as the City of Chesapeake, Virginia’s, traffic engineer. He brings a first-hand knowledge of the challenges of multimodal mobility in urban settings and the innovative traffic engineering solutions required to solve them.

Hossein Ghara, PE, recently joined Volkert’s Baton Rouge office as a senior structural engineer with over 40 years of transportation experience, specifically with bridges. Prior to joining Volkert and a working for another subconsultant for 5 years, he served as the Louisiana DOTD state bridge engineer for 12 years, where he managed engineering technicians as well as civil, structural, electrical, and mechanical engineers.

Volkert welcomes Adil Rizvi, PE, as the D.C. engineering operations manager. Adil’s diverse 25-year career has encompassed the technical, managerial, and administrative aspects of civil engineering in the public and private sectors. As a former DDOT project manager, Adil brings experience with the City’s infrastructure, enhancing our ability to serve this important client. His expertise includes roadway and site design, surveying and mapping, and stormwater management systems.

Travis Rogers, PE, has rejoined Volkert’s Illinois office as a real estate operations manager. Travis spent nearly 10 years working with the Kentucky Transportation Cabinet (KYTC) as both an employee and as a consultant, performing highway design and managing construction and maintenance activities. He has spent the last 4 years in utilities, managing right-of-way activities for natural gas and electrical transmission projects.

Volkert welcomes Matthew Lifick, PE, to the Virginia Beach office as an assistant vice president in the Construction Management & Inspection division. For more than 11 years, Matt has provided construction management services for large, complex infrastructure projects throughout the region. His construction-at-risk management experience totals over $100 M and construction management on infrastructure exceeds $250 M.

Matt Salmon, PE, a coastal engineer with over 10 years of experience, is now part of Volkert’s Baton Rouge team. He has worked on a variety of projects including coastal/environmental engineering design and restoration, shoreline stabilization and improvements, hurricane protection, hydraulic analysis, and environmental remediation. He will focus on planning, design, and construction projects along the Louisiana coast.

Volkert welcomes Rob Stone, PE, to our Raleigh, North Carolina, office as engineering manager overseeing the design group. With 28 years of transportation project management experience with NC DOT and the City of Fayetteville (NC), Rob brings a comprehensive understanding of project issues, challenges, and opportunities, including expertise in municipal operations.

Jennifer McRoy, PE, joins the Raleigh office as a senior structural engineer in Raleigh’s design group. Jennifer has over 16 years of civil engineering experience in both public and private industries, with major experience in bridge design and design review for structures.