POOL DESIGN EXPERIENCE

LBYD ENGINEERS
A NORTH WIND COMPANY

Updated 12/21/2022

ABOUT US

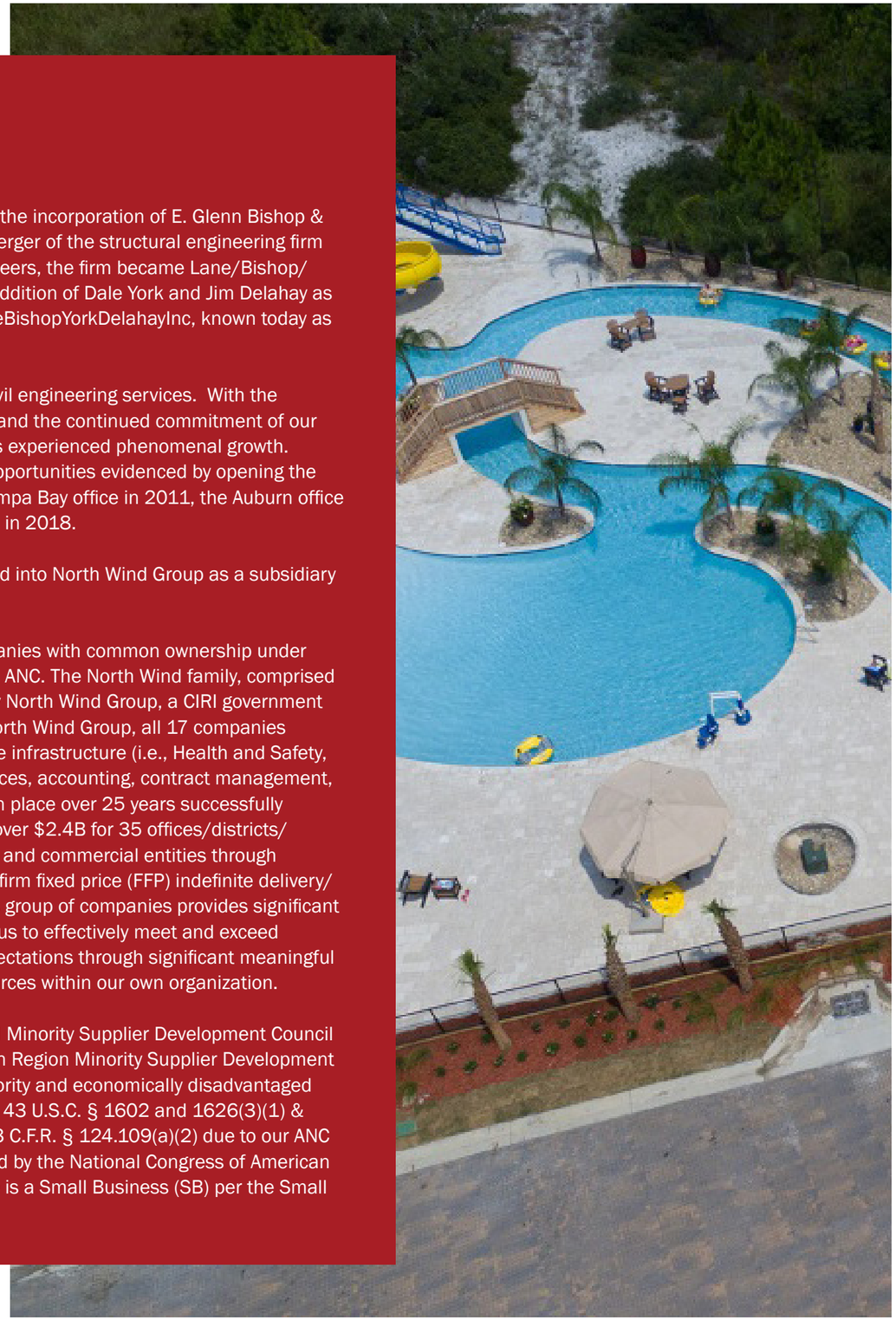
LBYD was founded in 1973 with the incorporation of E. Glenn Bishop & Associates. In 1978, with the merger of the structural engineering firm Lane & Hodnett Structural Engineers, the firm became Lane/Bishop/Hodnett, Inc. In 1987, with the addition of Dale York and Jim Delahay as Principals, the firm became LaneBishopYorkDelahayInc, known today as LBYD, Inc.

In 2001, LBYD began offering civil engineering services. With the addition of the civil department and the continued commitment of our structural department, LBYD has experienced phenomenal growth. We continue to pursue growth opportunities evidenced by opening the Huntsville office in 2009, the Tampa Bay office in 2011, the Auburn office in 2017, and the Nashville office in 2018.

In November 2020, LBYD merged into North Wind Group as a subsidiary company.

LBYD is part of a family of companies with common ownership under Cook Inlet Region, Inc. (CIRI)—an ANC. The North Wind family, comprised of 15 companies, is managed by North Wind Group, a CIRI government contract holding entity. Under North Wind Group, all 17 companies share the same proven corporate infrastructure (i.e., Health and Safety, Quality Programs, human resources, accounting, contract management, project controls) that has been in place over 25 years successfully completing a combined total of over $2.4B for 35 offices/districts/sites within 11 Federal agencies and commercial entities through various contract types including firm fixed price (FFP) indefinite delivery/indefinite quantities (IDIQs). This group of companies provides significant flexibility and diversity, enabling us to effectively meet and exceed customer requirements and expectations through significant meaningful involvement reach-back to resources within our own organization.

LBYD is certified by the National Minority Supplier Development Council (NMSDC) as well as the Southern Region Minority Supplier Development Council (SRMSP). LBYD is a minority and economically disadvantaged business (SDB) by statute under 43 U.S.C. § 1602 and 1626(3)(1) & (2) and further codified under 13 C.F.R. § 124.109(a)(2) due to our ANC ownership by CIRI, as determined by the National Congress of American Indians (NACI). In addition, LBYD is a Small Business (SB) per the Small Business Association.

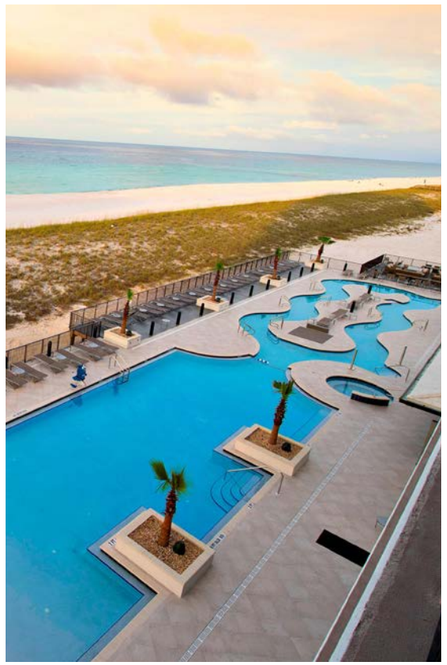


*LARGE FIRM **EXPERTISE**, SMALL FIRM **RESPONSIVENESS***

Large Firm Expertise, Small Firm Responsiveness has become a staple across our company and is present in the work we do on a daily basis. Starting out as a small one-person firm, and growing to over one hundred engineers, we have provided engineering services for various clients including architects, engineers, contractors, commercial developers, public and private institutions, as well as local, state and federal governments.

OUR PROJECTS

LBYD provides civil and structural engineering services on a wide variety of project types for architects, engineers, contractors, commercial developers, public and private institutions and local, state and federal governments. Our project experience includes libraries, educational facilities, sports fields and complexes, public parks, office complexes, parking garages, hospitals, mixed-use facilities, convention centers, bridges, stadiums, arenas, correctional facilities, manufacturing and industrial facilities, residential buildings, residential subdivisions, municipal consulting and government facilities.



OUR SERVICES

STRUCTURAL ENGINEERING

Our structural engineers are knowledgeable in the development of different framing schemes and foundation designs using a wide variety of construction materials for determining the most economical and constructible structural systems.

CIVIL ENGINEERING

Our work includes site grading, storm water management, best management practices, erosion and sediment control, utility design which includes gravity sanitary sewer designs, wetland mitigation, flood plan modifications, stream impacts, on-site sewage disposal, and earthwork calculations.

CONSTRUCTION ENGINEERING

We understand that connection design must be safe and must be economical for the fabricator and erector to produce. We work closely with fabricators to provide designs that work well with the fabricator's shop practices and can be erected in the field as easily as possible.

TEMPORARY STRUCTURES

We design and verify the structural capacity of temporary structures such as tents, temporary grandstand seating, stage platforms, etc.

HYDROLOGY AND WATER RESOURCES

We offer comprehensive hydraulic and hydrology engineering services to ensure quality corrective and preventative measures for stormwater drainage.

PEER REVIEWS

Peer reviews can include interviews, review of documents obtained during the review process and technical reviews.

STORM SHELTERS

We design storm shelters within schools and other structures to withstand loading from tornadoes and heavy winds in accordance to ICC 500, and safe rooms according to FEMA P-361.

FORENSICS

We offer innovative and economical investigative and corrective design services in areas such as site placement, foundation failures, roofing and envelope investigations, storm damage, earthquake and vibration damage, truss failures, concrete failures, expert testimony and litigation support, and more.

INDUSTRIAL APPLICATIONS

We work with industrial clients to identify the problem they are facing, understand the processes that are in place in the facility, and create a custom solution around it to make sure the faciilty meets their exact needs.

PARKING

LBYD is a leader in the design of parking facilities in the Southeast. We have designed parking facilities for federal facilities, government facilities, institutional facilities, office buildings, churches, hospitals, mixed-use facilities, commercial buildings, and residential buildings.

CITY ENGINEERING

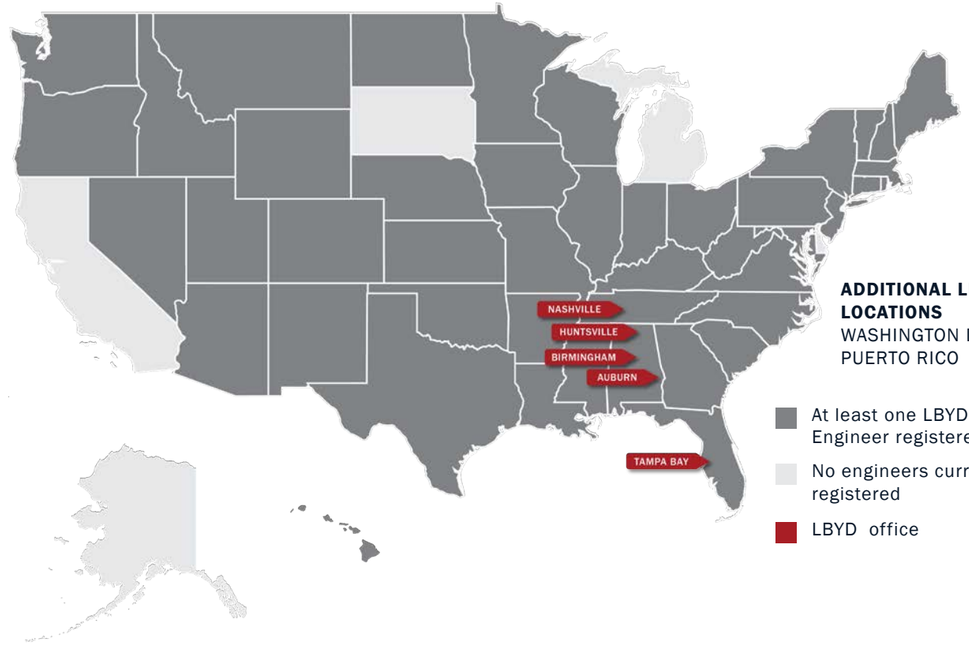
Our engineers can assist municipalities in all areas of city engineering including development plan reviews, roadway inventories and resurfacing schedules, stormwater management and permitting, public works manuals, parks and recreation design, capital improvement plans, funding assistance, and more.

SUSTAINABLE DESIGN

LBYD is a Founding Member of the Alabama Chapter of U.S. Green Building Council. We have designed many facilities that have earned LEED certifications.

LICENSED LOCATIONS

LBYD has engineers currently registered in multiple states across the country, but we are continually expanding our licensure as needed.



ADDITIONAL LICENSE LOCATIONS
WASHINGTON D.C.
PUERTO RICO

At least one LBYD Engineer registered

No engineers currently registered

LBYD office

LEADERSHIP

MICHAEL HERMECZ, PE

PRINCIPAL ENGINEER/
POOL DIVISION MANAGER

PROFESSIONAL ENGINEER (PE)

Alabama
Florida
Louisiana
Tennessee

Michael has over 13 years of experience in all aspects of site development including site layout, roadway design, grading, drainage, storm water management, best management practices for erosion control and sanitary sewer systems. Experience includes projects for institutional and healthcare facilities, commercial developments, federal installations, multi-family housing and office buildings.

Michael has designed over 120 pools over the past five years including competition pools, recreation pools, special use pools, fountains and spas. He has extensive knowledge in all aspects of acquatic design.

POPULAR POOL FEATURES

ZERO ENTRY
A zero entry pool replaces traditional stairs and ladders with a sloping entrance, thus creating a seamless transition between land and water.

WATERFALLS
Artificial waterfalls use powered pumps to cycle water to the top of the waterfall, where it then spills into the pool.

GEYSER
Geysers are jets that shoot water directly into the air, which then lands in a pool or fountain.

ADA RAMPS
A pool ramp is an accessible way for wheelchair-bound individuals or people with varying physical abilities to safely and conveniently enter or exit a pool.

DECK JETS
Deck jets are installed on the pool deck or patio and spray arcs of water into the pool.

BENCHES
This feature consists of a bench built into the side of the pool that allows swimmers the ability to sit and relax while remaining in the water.

PROPULSION
A pool propulsion system provides a current that allows recreational and competition swimmers to swim while remaining in the same place.

LAZY RIVER
Lazy rivers are often found at hotels, resorts, and water parks. They consist of a long, shallow, and often winding pool that generates a slow current, similar to a river.

ADA LIFT
An ADA lift provides a way for anyone with disabilities or difficulty climbing in or out of a pool to enter or exit the water safely.

OVERFLOW
In an overflow pool, water in the pool overflows into gutters, and is sent through a filtration system and pumped back into the pool.

POTS AND SPOUTS
This water feature consists of decorative planters or bowls that fill with water and overflow into the pool.

INFINITY POOL
An infinity pool is designed so that water flows over one or more edges to give the illusion that the water has no boundary.

HEATERS
Heaters allow swimmers to enjoy using pools all year long and in a variety of climates.

SPLASH PAD
Splash pads are aquatic venues that are designed so that the play area has little to no standing water in order to reduce the risk of drowning. Typically there are various nozzles and above-ground spray jets.

SLIDES
Slides are commercially manufactured and securely attached to the pool deck and provide a fun water entry method for swimmers.

SUNSHELF
A sunshelf is a flat, shallow section of a pool that acts as an area for swimmers to play and lounge in the pool.

RACING LANES
Racing lanes allow for competitive swimming competitions to take place.

UMBRELLAS
Umbrellas offer a way for swimmers to escape the direct heat of the sun.

BUBBLERS
Bubblers are fountain-like devices that create bubbles in the pool. They are often used for visual effect, but also help circulate water to keep debris from settling.

SCUPPER
A scupper is a spout that allows water to spill into a pool from another source.

ARLINGTON TOWNHOMES

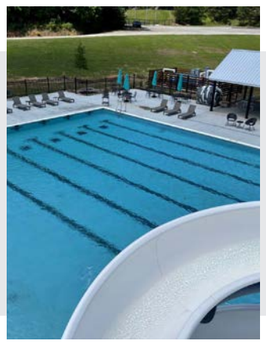
BATON ROUGE, LOUISIANA

This 7,344 SF pool was built for a townhouse community in Baton Rouge. It has many unique features including two large Sunshelves, two islands, bench seat alcoves, and 16 deck jets.

ONEONTA AQUATICS CENTER

ONEONTA, ALABAMA

This 4,845 SF pool was constructed for the community of Oneonta, AL. It is a gravity system that uses surface overflow to achieve its skimming action. It has a large water slide that pours into the meeting point of the zero entry and competition swimming lanes.



BUENA VISTA

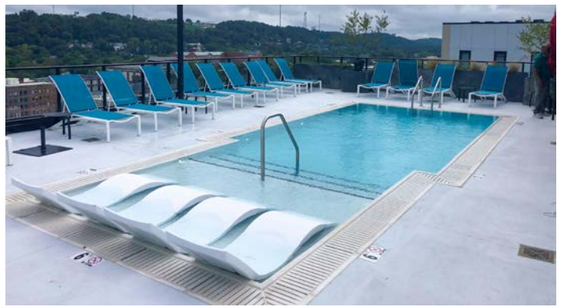
ORANGE BEACH, ALABAMA

This 6,058 SF pool was constructed for the Buena Vista RV Park in Orange Beach, AL. This pool has a water slide with plunge pool, a zero entry, a sunshelf, a lazy river, and waterfall features. Filtration is achieved using a gravity-fed vacuum cartridge tank.

SUGAR SANDS RV RESORT
ORANGE BEACH, ALABAMA
Area: 1,134 SF
Depth: 0’ — 3’5”

PANDION RIDGE
ORANGE BEACH, ALABAMA
Area: 2,410 SF
Depth: 0 — 4’2”

RESERVE AT COTTON BAYOU
ORANGE BEACH, ALABAMA
Area: 819 SF
Depth: 3’ – 5’
Features:
Bench Seat
Salt Water



SCHOLAR
BIRMINGHAM, ALABAMA
Area: 367 SF
Features:
Overflow
Sunshelf

SPRINGHILL SUITES
ORANGE BEACH, ALABAMA
Area: 2,343 SF
Depth: 0’ – 5’
Features: ADA Lift

CYPRESS VILLAGE
BIRMINGHAM, ALABAMA
Area: 6,176 SF
Depth: 6” – 5’
Features:
Deck Jets

CONTACT US

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