

Architecture



Aviation Engineering



Bridge/Structural Design



Construction Management/CE&I



Design-Build Engineering



Environmental Services



Foundation Testing



Geotechnical Engineering



Grant Writing



Hydrology/Hydraulic Design



Intelligent Transportation Systems (ITS)



Pavement Engineering



Port Engineering/Civil Site Design



Public Relations



Railroad Services



Roadway Design



Traffic Engineering



Utility Coordination



Surveying



**SC 277 Flyover Ramp/Bridge Replacement  
over I-77**



**HAWK Pedestrian Signal Crossing**



**I-285 Ramps at CR 209/Riverside Drive**



**Wando Welch Terminal Traffic Flow Improvements**



**Bridge Replacement Package E  
Brooklyn Road over Rocky Creek**



**T-Hangar Replacement  
Sarasota Bradenton International Airport**



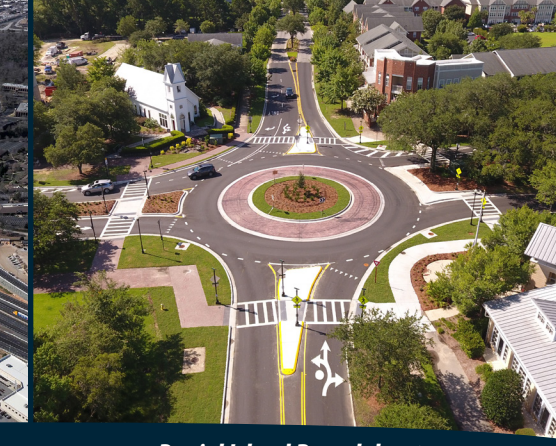
**Flowery Branch Bridge over I-85 &  
I-85 Widening**



**Geotechnical Services for  
I-26 Widening (MM 85-101)**



**85/385 Gateway Project**



**Daniel Island Roundabout**

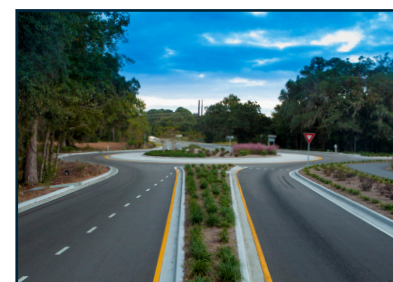
## IE INFRASTRUCTURE CONSULTING & ENGINEERING

**Infrastructure Consulting & Engineering, PLLC (ICE)** offers transportation consulting and engineering services throughout the Southeast including highway, structure/bridge, and hydrology/hydraulic design; geotechnical engineering and foundation testing; utility coordination; surveying; traffic engineering; and construction management and inspection services.

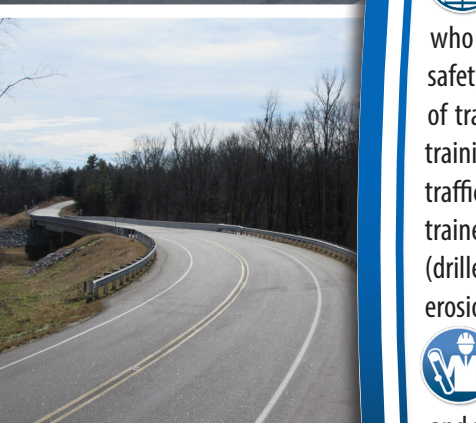
The firm prides itself on timely project progress, quality work, and dedicated client services. The work of ICE has been recognized by the American Council of Engineering Companies (ACEC) for Engineering Excellence on numerous projects in recent years and has been recognized in the *Engineering News-Record (ENR)* as one of the Top 500 Design Firms nationwide, Top 100 Design Firms regionally, and Top 100 Construction Management-for-Fee Firms nationwide.

The key to the success of the firm is derived from attention to detail, personal and committed service to clients, and perseverance for excellence. An unparalleled diligence to client satisfaction is achieved by providing technical accuracy, experienced and competent support, constant communication, accessibility, and responsiveness.

**OUR MISSION**  
“Providing innovative and efficient transportation engineering solutions with personal client service that exceeds expectations for accessibility and responsiveness in a work environment that encourages safety, health, and a balanced life.”







**Architecture** | Our Team provides architectural services throughout all phases of a project, from preliminary studies and conceptual plan development to construction plan preparation and construction administration.



**Aviation Engineering** | ICE provides a broad range of services for airside and landside projects at general aviation and commercial service airports located throughout the Southeast. ICE has expert aviation engineers and designers who will provide sound and innovative solutions for all of your aviation design, planning, and construction challenges.



**Bridge/Structural Design** | ICE provides a wide variety of Structural Design services including bridge, culvert, and retaining wall designs. Our engineers have designed major and minor bridges over highways, waterways and railroads in multiple states, as well as international locations. Numerous projects have involved in-depth seismic analysis and design. We also provide Construction Support to Contractors for field issues such as temporary walls and trestle spans. Additionally, we specialize in Value Engineering (VE) analysis and design. We take pride in designing structures that are safe, economical, and rapidly constructable while striving to minimize impacts to the environment and existing infrastructure.



**Construction Management/CE&I** | ICE has in-house, full-time, state-certified, site-based Construction Engineering and Inspection Technicians who perform materials testing and sampling, workzone traffic control services, safety management, and construction inspection to ensure the successful completion of transportation construction. Our field personnel have the experience and cross-training to inspect and test bridge and structure work, roadway items, drainage, traffic control, and erosion control. ICE is committed to keeping our technicians trained and certified in concrete paving, asphalt roadway, asphalt plant, foundations (drilled shafts, drilled pile, steel and concrete piling), earthwork, sediment and erosion control, and traffic control.



**Design-Build Engineering** | Overlapping the design and construction phases of a project can greatly reduce the delivery schedule and project costs and minimizes the risks for the project owner. ICE has teamed with several industry-leading contractors on recent Design-Build projects throughout the Southeast for state departments of transportation and county agencies. Since the firm's founding, ICE has been the lead design firm on more than 26 Design-Build projects with design/construction values totaling nearly \$2 Billion. These projects include bridge replacement packages consisting of more than 150 bridges combined, numerous interstate widenings and rehabilitations, new alignment highways that include new structures over streams, and mega bridge replacements over large tidal rivers.



**Environmental Services** | ICE provides a variety of environmental services including NEPA documentation, wetland delineation, Section 404/401 permitting, natural resources, public involvement, and environmental compliance. These services further enhance ICE's ability to provide full-service transportation consulting and design, and the in-house collaborative planning and design will ultimately expedite project delivery.



**Grant Writing** | ICE has experience with writing grant applications and has been involved in developing numerous federal, state, and local grants for additional transportation funding. These grants included State Infrastructure Bank (SIB) Grants, Transportation Investment Generating Economic Recovery (TIGER) Grants now known as Better Utilizing Investments to Leverage Development (BUILD) Grants, TAP Grants, and Enhancement Grants.

## LEADERSHIP

**Elham Farzam, PE**

*President & Chief Executive Officer*

**Billy Coleman, PE**

*Executive Vice President & Chief Operating Officer*

**Peter Graf, PE**

*Executive Vice President & Technical Director*

## LOCATIONS

### Corporate Headquarters

1021 Briargate Circle

Columbia, South Carolina 29210

803.822.0333 ♦ 803.822.0034 (fax)

### SOUTH CAROLINA

Beaufort

Charleston

Columbia (HQ)

Greenville

Ladson

West Columbia

### FLORIDA

Fort Walton Beach

Lake City

Orlando

Tallahassee

Tampa

### GEORGIA

Atlanta

Norcross

### LOUISIANA

Baton Rouge

Pineville

### NORTH CAROLINA

Charlotte

New Bern

Raleigh

### TEXAS

Austin

Houston

[www.ice-eng.com](http://www.ice-eng.com)



**Geotechnical Engineering** | ICE provides design and construction support of complex geotechnical features on both traditional and Design-Build transportation projects. Our design functions include roadway foundation recommendations, bridge foundation recommendations for large coastal bridges, pile supported embankments, ground improvement through the use of surcharges, lightweight fill materials, and compaction grouting, railway bridges and embankments, railroad temporary shoring systems, and slope failure mitigation.



**Hydrology/Hydraulic Design** | Our Hydrological and Hydraulic Services include: roadway drainage plans, bridge hydraulic analysis, storm sewer design, ditch design, culvert analysis, pond design, energy dissipation design, FEMA analysis, flood control modeling, scour analysis, riverine analysis for multidimensional flow, erosion and sediment control, NPDES permitting, stormwater management, cost estimation, value engineering, and quality assurance/quality checking. The ICE Team is constantly training to stay up to date with the latest software and methods used in hydraulic designs.



**Pavement Engineering** | ICE offers pavement engineering solutions ranging from pavement evaluation (using FWD and GPR) to designing new or rehabilitated pavement and developing pavement management systems. ICE's Pavement Engineers have expertise in pavement evaluation and design for both the flexible (HMA) and rigid (PCC and RCC) pavements. They are well-versed in the latest aviation, port and heavy industrial and highway pavement design.



**Port Engineering/Civil Site Design** | ICE offers port engineering and civil design solutions for projects from the initial stages of planning, feasibility analysis and conceptual design through the later phases of development, procurement and construction management. Specialized expertise includes landside facilities including inbound and outbound roadway network and gate system, chassis yards, barge facilities, cargo terminals, and piers and wharves planning and design.



**Traffic Engineering** | ICE traffic professionals have diverse experience in all facets of traffic engineering and transportation planning including analysis and mitigation of traffic congestion to best facilitate the movement of traffic. Their expertise includes the design of traffic signal systems and timing, evaluation of existing traffic deficiencies and conditions, and providing innovative solutions for improvements and means of accommodating for future infrastructure development.



**Roadway Design** | Our Roadway Engineers focus on providing designs for cost-effective, reliable, safe and maintainable roadway systems. They have successfully designed complex roadway widening/extensions, major interchanges, minor intersections, multi-use bike and pedestrian paths, unpaved to paved roads, bridge approaches, and roundabouts.



**Utility Coordination** | Our Utility Managers consistently focus on effective communication with utility owners, agencies, design firms and local municipalities in order to successfully coordinate water, sanitary, electric, communication, and gas utilities on ICE projects. Services provided by ICE include developing and overseeing utility schedules, negotiating, reviewing and executing utility agreements, preparing relocation sketches and no cost letters, and supporting the efforts in acquiring utility permits and easements.



**Surveying** | ICE maintains a highly experienced field survey department based in our Ladson office to serve our public and private sector clients on stand-alone survey projects as well as turn-key engineering assignments. ICE currently operates five dedicated field survey crews.

