

29E6

Structural
Engineering Firm

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Our common goal

SUPPLY STRUCTURAL ENGINEERING TO PROTECT THE PUBLIC

In doing so

WE PROVIDE THE MOST EFFICIENT DESIGN

How do we accomplish this?

WE LISTEN

By way of the proprietary **29E6-STEP PROCESS** we provide the most efficient and safe building design - maximizing time, revenue, profit, and enjoyment in working with all partners. In our structural design charette **WE LISTEN** to identify not only goals but all key factors effecting the scope of work. The unique collaborative discovery addresses potential concerns early on and outlines a clear direction to define expectations from 29E6 while also examining budgetary concerns.

Rebranded in 2017 as 29E6 the firm was originally founded in 2010 by Andy Richardson, Principal and Managing Professional Engineer. The company, employing ten full and part-time individuals, has enjoyed as much as 200% project increase rate over the last five years. The growth is attributed to excellent service and partner satisfaction. 29E6 serves the greater southeast region – and projections for continued success broaden into the Pennsylvania market – in the following market sectors: Commercial, Hospitality, Government, Medical, Residential, Municipal, Industrial, and Historic Preservation.

Like a larger organization, 29E6 brings the expertise, manpower and adaptability to every project. A pursuit for personal client attention and integral quality control provides excellence in all they do. 29E6 employees enjoy an atmosphere steeped in creativity and ingenuity, nurturing individual growth and opportunity.



Nearly 25 years in the structural engineering industry, Andy has wide exposure across various industries, which includes highly specialized technical expertise. His diverse resume provides experience in nearly any material, building type or structure. Living in the Lowcountry of South Carolina since 1998, he has acquired expertise in both hurricane design as well as seismic design of buildings. Over the past 10 years, Andy founded and operated his engineering firm and provided engineering education for the PE Exam. In 2017, Andy rebranded his company as 29E6. A combined passion for mentorship and excellence in design, Andy developed a process that unmistakably, but not only, provides the best design with every efficiency it is also intended to be utilized by a team of engineers. Since that time, the vision is to grow and expand 29E6 so architects, contractors, and fabricators everywhere can benefit from the 29E6-STEP PROCESS and its streamlined results.

Andy enjoys spending time with his lovely wife and six kids, who range in age from 20 to 6. He also enjoys spending time with his church family as well as running, playing frisbee, and learning ballroom dance.

Affiliations

American Society of Civil Engineers (ASCE), Structural Engineering Institute (SEI), Structural Engineering Association of SC (SEA of SC), NCEES Council Record

Licenses and Certifications

SCPE No. 22824, NCPE No. 036442, GAPE No. 031369, GASE No. 001063, ARPE No. 16069, TN No. 124016, NCEES Council Record Civil PE Exam (2003), Structural PE Exam (2005)

Licensed in: AR, GA, SC, NC & TN.

Engineering Education

Ultimate Civil PE Depth Review Courses - The Ultimate Civil PE Depth Review Courses are the #1 resource for passing the civil engineering exam. These courses are an on-demand review covering all five sub-disciplines of the PE Exam.

Professional Development Lunch and Learn Seminars - Developed and taught a number of continuing education and 'lunch and learn' seminars to architects and engineers alike to enrich their education in technical areas such as building code changes, mass timber, and wind load provisions.

Ace the PE Video Series - Creator of an on-demand video series helping prepare students for the PE Exam. The series covers the five sub-disciplines of civil engineering and provides supplemental content to live courses and the student's self-study activities. The course was hosted by PPI from 2015 to 2019 and then by Kaplan publications until 2020.

Live Online PE Exam Review Course - Online instructor for a Live PE Exam Review Course covering the five sub-disciplines of civil engineering. Provided the first online course of its kind (2012-2017) with excellent reviews from students; the course was hosted by the popular publisher of the Civil Engineering Reference Manual, PPI.

Ace the PE Exam - Website and podcast provided information and resources to prepare for and pass the PE Exam (2013-2015).

Publications

Theory and Practice of Steel Structures; Design to Eurocodes with Introduction to U.S. Standards, an update to structural Eurocodes. Provided a review and update to the book comparing the design of steel structures in the American Institute of Steel Construction (AISC) codes to Eurocodes. (2012)

Civil Engineering Solved Problems - Provided update to the structural chapters for publication to Civil Engineering Academy. (2009)

Civil Engineering Reference Manual - Provided update of masonry chapter to Civil Engineering Academy for conformity to the 2009 International Building Code. (2010)



Andy
Richardson

Professional Engineer
29E6 Principal

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Education

Clemson University, Clemson, SC

Bachelor of Science in Civil Engineering, Magna Cum Laude, 1998

Graduated with Honors

Featured Projects:

Hilton Head Beach House - Hilton Head Island, SC
Innovative, modern 10,000 sf coastal home with CLT wood decking system. At the time of construction this was the first residential project on the east coast utilizing new product material, CLT; considered to be one of the first CLT projects in the US.



Hilton Head Beach House

TRU by Hilton - Beaufort, SC

Four-story wood-framed hotel with walls and roof of traditional light-framed, wood construction.

Steel used to span large areas at ground level. Situated relatively close to possible seismic activity, the project had potential for a modest amount of liquefaction. Structural mitigation was utilized in order to alleviate this occurrence.

Bluffton Centre - Bluffton, SC

Multi-office medical facility serving growing demand in larger Bluffton region. Three buildings utilized steel construction framework with open web bar roofing joists. The lateral system, steel moment frames (SMF), allowed maximum flexibility of architecture for the current design as well as future modifications. Through keen understanding of codes we were able to utilize ordinary moment frames (OMF) in lieu of intermediate moment frames (IMF) - a small difference with big cost savings through efficient engineering.

Ohoppee Match Club - Cobbtown, GA

Completed in 2018, multi-building golf complex featured a two-story, exposed, heavy wood-framed clubhouse with steel aspects. Close collaboration with architect, Thomas & Denzinger, was a key part of the structural design; working to accomplish aesthetic goals of the visible connections as well as the structural function.

Ohoppee Match Club



Erie Veterans Health Administration - Erie, PA

Addition to veteran's hospital in Erie, PA, constructed of steel and concrete; steel joist with composite floor and metal roof deck(s). The proposed project will include a new addition to the first floor of existing (main) hospital, providing approximately 10,000 sf of additional area. The addition will be located on the front of the building extend east on one side and towards the west on the other, with the west side expansion extending to existing atrium. A portion of the existing building, which connects with the proposed expansion, will be remodeled as part of this project, and this new connection will serve as an extension of the existing Atrium.

Island Recreational Center - Bluffton, SC

Provided delegated design services for long-span steel trusses on a multi-use community recreational center. Ours was the role of fabricator's engineer to meet the requirements set forth by the Engineer of Record. The fabricator was Macuch Steel of Augusta, GA, and RISA was software used for analysis.

Island Recreational Center



...continued

Andy
Richardson

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29E6
is structural engineering



Eric Johnson

Structural Engineering
in Training

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Structural Engineer in Training and over two years design experience, Eric is on track for Professional Engineer Certification summer of 2021. An integral part of the engineering design team for projects in the high-end residential and low-rise commercial sectors. Focused on guiding architects and clients through a streamlined design process to ensure structural components blend seamlessly into the project. Experienced in site visits, design charettes, maintaining client relationships, drafting schedules and design load tracking.

Eric pursues a wide variety of activities; triathlon, board games, rock climbing, reading, paddle boarding, and yoga just to name a few. When not running around he can be found helping his friends out with their house projects or attempting the latest recipe he has dug out of his ever growing collection of cookbooks.

Affiliations

Structural Engineers Association of South Carolina - Treasurer, Sept 2018 - present

Licenses and Certifications

Engineer in Training, Feb 2017 - present

Education

Virginia Polytechnic Institute and State University, Blacksburg, VA
Bachelor of Science in Mechanical Engineering, 2015

Featured Projects:

Baptist Church of Beaufort Elevator Building - Beaufort, SC
Supplied a wood-framed design alternative to value engineer a masonry elevator building in historic religious facility.

Butler Marine - Beaufort, SC
Pre-engineered metal building for boat and trailer storage. The project required a heavy-duty slab design to support a boat load of storage!

Saint Helena Residence - Saint Helena Island, SC
Provided consult for custom residential project featuring non-traditional roof styles with an energy conservation design.

Herban Market - Beaufort, SC
Outfitted renovation of existing building front with add-on porch. Connections and overall design minimized to fit within existing building envelope.

Herban Market





David Naus

Professional Engineer
(retired)

David has over 42 years of experience in engineering design, the last 21 years of which have been in design and construction support, including: project management, project engineering, and civil/structural/architectural design on projects ranging from the UPF, HEUMF, F-Area tank farm services upgrades, TRU waste characterization and processing and mixed waste containment building, and site infrastructure upgrades for the accelerator production of tritium.

Prior to that, David spent many years as an engineering manager in TN and SC offices handling projects for Title I - Title II of the Uranium Processing Facility. For over 13 years David served in the president role at Southern Engineering Services, Inc., and Zimmerman & Naus, Inc., and since has also worked with various clients as a structural engineering consultant.

Currently, David adds his immense knowledge base and career experience to the 29E6 team in a part-time role.

Licenses and Certifications

Florida Professional Engineering License (1983) - not active

Georgia Professional Engineering License (1991) - not active

South Carolina Professional Engineering License (1991) - not active

Education

University of Miami, Coral Gables, FL
Bachelor of Science in Architectural Engineering, 1979

Outstanding Graduating Senior Award

Featured Projects:

Corner Perk - Bluffton, SC
Designed a 4600 sf (primarily) wood-framed construction with roof wood trusses and second floor steel bar joists.

Pinewood Fire Station 1942 - Beaufort, SC
Addition and renovation to include redesign of steel stairs. Due to the potential for scour and the soil conditions, a deep foundation system is required with a helical pier system being recommended.

Atlanta VA - Atlanta, GA
Involvement included connection design and design calculations for this VA.



Scott's extensive work experience spans exposure to government, commercial and retail, renovations, residential, civil and structural forensics and civil site sectors. With nearly 25 years in the greater construction and building industry, Scott started working from the ground up in the construction field through to construction management. Civil and structural formal education and training widened his exposure to include: structural and field engineering, forensics and expert witness, quality assurance and construction quality control. Scott's breadth of knowledge and understanding of the industry is beyond compare.

Licenses and Certifications

SCPE No. 25127, OSHA Training in Construction and Industrial Safety (2010/2011)

Licensed in SC.

Education

Clemson University, Clemson, SC

Masters of Engineering, 2002

Bachelors of Science in Civil Engineering, 2001

Featured Projects:

Scott provides, in part, quality assurance design services, special inspections, and has a keen eye for construction supplying a critical capacity for our construction support component. While having touched all our market segments, highlights of some of his work would be found in the following projects.

The Breakers - Hilton Head Island, SC

Provide professional review and authorization on design wind speed and capacity for awning coverage at ocean side resort.

Statesville Courthouse - Statesville, NC

Provided special inspections for exterior stair replacement.

TRU by Hilton - Beaufort, SC

Provided structural design services, construction documents and services, and site visits for national hotel chain. The four-story wood-framed building used steel to span large areas at ground level.

Bluffton Centre - Bluffton, SC

Provided special inspections and construction support for a multi-office medical facility serving growing demand in larger Bluffton region.



TRU by Hilton



Bluffton Centre

Dwayne S.
Robinett

Professional Engineer

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Jennifer has administrative management background with over 15 years serving executives in the paper, telecommunications, healthcare, and marketing industries.

Focused on keeping Andy and the 29E6 team organized with administrative & project management needs, Jennifer is the conduit behind the scenes keeping all arms of the company in collaborative motion. She ensures the efficiency of inter-office needs and runs point on coordinating calendars, agendas and scheduling meetings. She manages human resources services across the remotely-located southeast offices including payroll, employee onboarding, policy and procedures. Jennifer also handles accounting responsibilities, including: preparing reports, billing, accounts receivable and accounts payable, while also lending support to both the marketing and IT facets of the company.

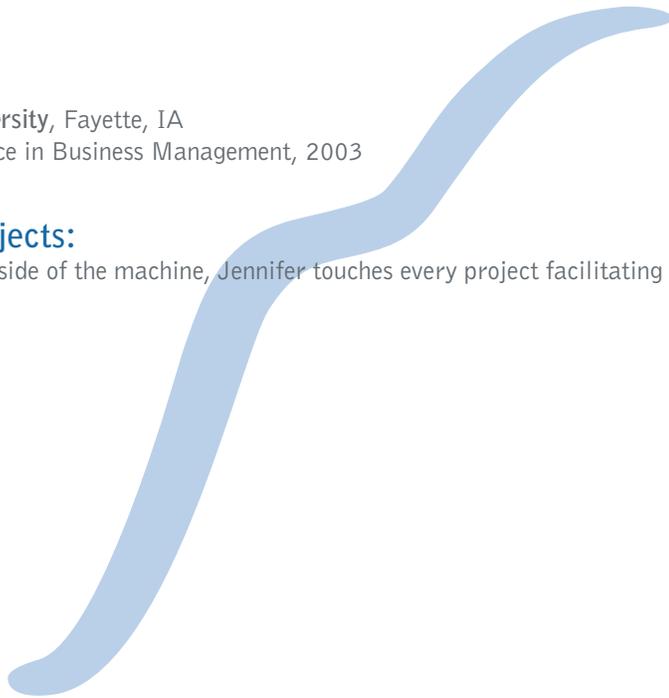
Jennifer resides in Nashville with her husband, 2 kids - Braden & Adalyn, and 3 dogs. Much of her spare time is spent running her children to practices or cheering one on at baseball, softball or soccer games. If there is free time left, she loves to do house projects, bowl and is a big fan of her hometown Wisconsin Badgers or anything red!

Education

Upper Iowa University, Fayette, IA
Bachelor of Science in Business Management, 2003

Featured Projects:

Through the back side of the machine, Jennifer touches every project facilitating its seamless progress.



Jennifer
Fox

Executive Assistant

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815 823 2553



**James
Ellis**

Structural Designer

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With both military and construction in his background and work experiences, James's varied skill set encompasses: management, training, organizational foundation for remedying troubleshooting and a keen aptitude for preventative maintenance and inspections methodology. A former Marine, James worked in general construction and quality assurance, then as a structural mechanic at both Gulfstream and Lockheed Martin. These positions developed James's work experience and propelled him to structural designer at 29E6. James's fluidity and expertise in Revit is an essential role in drafting projects for client approval across all market segments at 29E6.

James has been married to his beautiful wife, Emily, for almost two years. They have two daughters, Charity and Nora. James enjoys spending time with his family, playing frisbee and basketball. He also spends time doing projects around the house and is very involved with his home church and his church family.

Education

Liberty University, Lynchburg, VA
Continuing studies.

Featured Projects:

Typically, James provides the 3D Revit modeling and design and facilitates communication across duties. James is astute in reviewing and processing charette notes and interpreting data from architectural plans for all projects.

Port Royal Residence - Port Royal, SC
Special feature having superior walls.

Fripp Island Residence - Fripp Island, SC
Two-story home on CMU piers.

Fripp Island Recreation Center - Fripp Island, SC
Renovation and addition, including multiple level slabs.





Jonathan Cox

Professional Engineer

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Jon has ten years of structural design experience across a variety of industries, including: residential, commercial, higher educational, and healthcare buildings as well as heavy industrial consulting. Jon has served in responsible charge of project teams on projects up to \$115M in construction cost and is familiar with a wide variety of building materials and project delivery methods.

In his free time, Jon enjoys watching Clemson football, cycling, smoking barbeque, and spending time with his wife, Megan, daughter, Olivia and two beagles – Sawyer and Petunia.

Affiliations

Model Law Engineer (NCEES)

Licenses and Certifications

SCPE No. 31513, TXPE No. 127987, VAPE No. 056123.

Licensed in SC, TX & VA.

Education

Clemson University, Clemson, SC

Master of Science in Civil Engineering - Structures Emphasis, 2010

Bachelor of Science in Civil Engineering - Structures Emphasis, 2009

Featured Projects:

Erie Veterans Health Administration - Eric, PA

Addition to veteran's hospital constructed of steel and concrete; steel joist with composite floor and metal roof deck(s). The proposed project will include a new addition to the first floor of existing (main) hospital, providing approximately 10,000 sf of additional area. A portion of the existing building, which connects with the proposed expansion, will be remodeled as part of this project, and this new connection will serve as an extension of the existing atrium.

Times Square Development Center - Acworth, GA

Structural design of a 4,000 sf new steel framed retail building. The project consists of open web steel bar joists atop perimeter steel beam framing with light gauge metal stud perimeter walls.

Port Wentworth Car Wash - Port Wentworth, GA

Structural design of a 5,000 sf load-bearing CMU car wash. The project consists of open web steel bar joists atop load-bearing perimeter CMU walls with mixed light gauge wall studs and roof joists at mechanical rooms.



At 29E6, Stafford provides engineering design and management services for the residential studio helping the team design new homes, additions, and remodeling projects.

Since graduating from Clemson University in 2011, Stafford has lived and worked as a structural engineer in the Lowcountry where he grew up. Starting as a residential design and project manager and later broadening his design and management skills in the commercial, industrial, and non-profit sectors, Stafford has a wide range of projects designed and completed in the lowcountry, across the country, and around the world.

In his free time, Stafford enjoys spending time with his fiance Reagan, heading to the beach, quail hunting with his dog Boogie, watching the Clemson Tigers dominate the college football world, traveling, and serving in his local church.

Affiliations

American Society of Civil Engineers (ASCE)

Structural Engineering Association of South Carolina (SEA of SC)

Engineering Ministries International (EMI)

Licenses and Certifications

SCPE No. 34677

Licensed in SC.

Education

Clemson University, Clemson, SC

Master of Science in Civil Engineering, 2011

Featured Projects:

Stafford has a heart for residential challenges and unique design opportunities, he is our dedicated high-end residential structural engineer. Stafford has experience in both steel and wood framing, but our distinct location requires additional expertise for added seismic and wind challenge considerations. Unique projects have highly unique expectations, especially so when it comes to residential building and Stafford rises to that need.

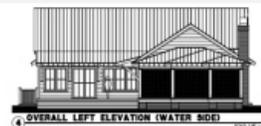
Shelley Residence - Port Royal, SC

New build in quiet lowcountry community used exposed, 20' grout-filled brick pier system with garage and cart barn being slab on grade. The second floor areas and mechanical ducts run through attic truss space. Request for garage and 9' door openings brought challenges to keep heavy steel out of the design.

Red Bluff - Okatie, SC

Two-story, residence near Broad River based on nearby multi-million dollar hollywood actors estate utilized slab on grade foundation with wood roof trusses and engineered 'I-joists' or floor trusses for the floor framing. The first floor is dimensional lumber, columns at porches are hollow with tiedowns and rear windows require steel or hardy frame system. Due to the potential for scour and the soil conditions, a deep foundation system was required. In this case, a helical pier system was used.

Shelley Residence



Red Bluff Residence



W. Stafford
Carter III

Professional Engineer

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Nicklaus Jeffreys

Structural EIT

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Nick is a Structural Engineer in Training with over 3 years of design experience. He is on track for Professional Engineer Certification January 2022. Experience in Industrial, Petrochemical, Commercial, and Residential Design. Nick has held structural design engineering roles with Flour and Marathon Petroleum's STAR Revamp and Expansion, been involved in various specialized design projects, including: PDH unit, CCR foundation and vertical vessel/splitter foundations using the Alberta Building Code. His international exposure on TCO in Area 51D, Kazakhstan, designing pipeline and electrical supports as well as siting future locations, brings a unique aptitude to the 29E6 team.

Nick has assisted in acquisitions and surveying of right-of-way; identifying routes, preparing exhibits and working with surveying teams. He manages closeouts, analyzes and modifies various existing structural equipment and foundations and exhibits a wide range of awareness with a variety of engineering software bringing additional competence in support of the 29E6 team.

Outside of work Nick spends his spare time staying active: running, golfing, hunting, and lifting. Nick also enjoys spending his time reading or listening to thought provoking books or podcasts.

Affiliations

American Society of Civil Engineers (ASCE)

Licenses and Certifications

Engineer in Training, July 2017 - present

Education

The Citadel, Charleston, SC

Bachelor of Science in Civil and Environmental Engineering, Magna Cum Laude, 2017
Graduated with Honors

Featured Projects:

Chechessee Golf Center - Okatie, SC

Single story wood frame building with roof trusses to include vast 28' x 12' openings to accommodate sheltered lessons. The building is in a Class C Wind Zone.

The Sunshine Project - St James Parish, LA

An estimated \$9.4 billion industrial complex that would produce polyethylene, polypropylene, polymer and ethylene glycol. *(while with previous employer)*

GBR STAR Program - Galveston, TX

Definition Phase (FEED) Engineering Services for the revamp of the Pipestill 3B (PS3B) unit, the Residual Hydrotreater Unit (RHU), their associated OSBL scopes and separate ISBL logistics projects to integrate capabilities at the GBR and TRD refineries. *(while with previous employer)*

Tengizchevroil (TCO) Future Growth Project & Wellhead Pressure - Republic of Kazakhstan

The project entailed the design and construction of a major expansion of Tengizchevroil (TCO) existing facilities. The new facilities provide an additional capacity of 12MMTY of stabilized crude and 960 MMSCFD of dehydrated gas for re-injection through the sour gas injection facilities. *(while with previous employer)*

