FORCON
INTERNATIONAL

GLEN E. SMITH, MS, P.E.

SUMMARY

Mr. Smith is a well-established Engineer with over 18 years of engineering experience, which has entailed laboratory research, structural design, and forensics. He has investigated a wide range of commercial and residential structures for foundation failures, failed structural components, fire damage, storm (tornado, hurricane, high wind, and surge) damage, roof damage, structural collapse, water intrusion, construction defects, and code compliance, as well as supervised and reviewed thousands of other forensic inspections of other engineers. Prior to his forensic experience, he managed, designed, analyzed, and administered construction of numerous religious facilities, educational buildings, office buildings, sports facilities, retail buildings, and high-end residences, utilizing steel, concrete, wood, and masonry. Additionally, he inspected existing structures and designed major structural renovations for reuse and remodeling.

EDUCATION

Master of Science in Civil Engineering - North Carolina State University, 2005

Bachelor of Science in Civil Engineering - North Carolina State University, 2003 (Park Scholar, Magna Cum Laude)

REGISTRATIONS & CERTIFICATIONS

Registered Professional Engineer:
- Florida #86061
- Georgia #PE043832
- Louisiana #PE.0042984
- Texas #PE.102403

NCEES Model Law Engineer (MLE)

PROFESSIONAL ASSOCIATIONS

National Society of Professional Engineers
National Academy of Forensic Engineers
American Society of Civil Engineers
Chi Epsilon Civil Engineering Honor Society
Tau Beta Pi Engineering Honor Society

CAREER HISTORY

FORCON International – Civil/Structural Engineer
Conducting forensic investigations and analysis in his fields of expertise.

Caliber Forensics, Houston, TX – President & Principal Engineer

Envista Forensics, Houston, TX – Technical Field Supervisor, Senior Forensic Consultant

Matrix Structural Engineers, Houston, TX – Director of Forensics, Senior Assoc. Engineer, Assoc. Engineer

Rice University, Houston, TX – DMA (Engineering Software Trainer)

North Carolina State University, Raleigh, NC – Research and Teaching Assistant

HIGHLIGHTED LITIGATION SUPPORT SUMMARIES

The Grace Presbyterian Church of Houston – Expert for Plaintiff
- Cause of flooding throughout education wing of church building
- **Provided expert testimony at deposition – 11/11/2015**

El Rey Productions – Expert for Defendant
- Extent of storm damage and cause of interior water damage to historical commercial theatre building

SLTA Real Estate Investments, LLC. – Expert for Defendant
- Extent of storm damage and cause of interior water damage to commercial/educational building
- **Provided expert testimony at deposition – 7/2/2021**

Palmview Metro – Expert for Defendant
- Extent of damage from Hurricane Hanna and cause of interior water damage to commercial strip-mall building

Ochoa Ltd. – Expert for Defendant
- Extent of damage from Hurricane Hanna and cause of interior water damage to commercial health care building

EC & SM Guerra, LLC – Expert for Defendant
- Extent of storm damage and cause of interior water damage over multiple dates to commercial childcare property
- **Provided expert testimony at deposition – 10/29/2021**

Matador Stadium – Expert for Defendant
- Cause of reported damage to concrete flatwork, and extent of potential construction defects, at newly constructed football stadium

The Grand Inn – Expert for Defendant
- Extent of damage from freeze event to commercial motel property

La Porte Hospitality Inc – Expert for Defendant
- Extent of water damage from freeze event to commercial motel property

ANI Ventures – Expert for Defendant
- Extent of storm damage and cause of interior water damage to commercial motel property

Blitz Contractors – Expert for Defendant
- Cause of groundwater intrusion, and extent of potential construction defects, in building envelope of newly constructed commercial building

HIGHLIGHTED CLAIMS ASSISTANCE SUMMARIES

Structural Failure Evaluation
Assessment of a variety of super-structure failures at residential and commercial properties.

- Evaluation of collapses including those that occurred during storm events, and during structural renovations to existing buildings

Catastrophe Response / Storm Damage Evaluation
Assessment of structural damage to numerous residential and commercial properties following various catastrophic tornado, hurricane, flood, and winter freeze events, and management of large-scale international engineering catastrophe response.

- Response to hurricane events including Sandy (2012), Harvey (2017), Hanna (2020), Laura (2020), Delta (2020), Ian (2022), and Nicole (2022)
- Response to various tornado events in Texas, Louisiana, and Oklahoma

Roofing & Exterior Cladding Evaluation
Assessment of wind and hail damage to roofing and cladding, and determination of building envelope deficiencies for numerous residential and commercial properties, entailing an extensive range of roofing and cladding materials. Determination of cause of water intrusion through building envelopes.

Construction Defect Evaluation
Assessment of potential construction defects related to claimed damage.

- Defects related to roofing installation; spalling of concrete elements; excessive cracking in concrete surfaces; waterproofing and cladding elements; structural framing collapse

Foundation Damage Evaluation
Assessment of foundations of numerous residential and commercial properties associated with movement-related distress.

Fire Damage Evaluation
Assessment of structural fire damage to numerous residential and commercial properties, including steel-framed, concrete-framed, and wood-framed structures, with damage ranging from minor to substantial structural damage.

Explosion Damage Evaluation
Assessment of residential and commercial properties for damage potentially related to nearby explosion events.

- Response to surrounding communities following explosions at TPC chemical plant in Port Neches, Texas (2019), and at Watson Grinding and Manufacturing building in Houston, Texas (2020)

Vehicular Impact Damage Evaluation
Assessment of damage to various concrete-framed, steel-framed, and wood-framed structures from impact from vehicular collision.

HIGHLIGHTED STRUCTURAL DESIGN SUMMARIES

Religious Facilities Design
Managed projects from schematic design through completion of construction and led structural design teams.
- Ex. *Our Lady of Lourdes Catholic Church – Houston, Texas* (18,000 square feet steel-framed church building with a worship space and three large towers)

Education Building Design
Managed projects from schematic design through completion of construction and led structural design teams.
- Ex. *Sugar Grove Middle School – Houston, Texas* (101,000 square feet two-story steel-framed middle school with classrooms, offices, dining areas, and gymnasium)

Office Building Design
Managed projects from schematic design through completion of construction and led structural design teams.
- Ex. *Noble Energy Campus at Malabo Dos – City of Malabo, Equatorial Guinea* (65,000 square feet six-story concrete-framed office building, 2,600 square feet garage/maintenance building, 6,100 square feet generator building, and two 220 square feet guard houses)

Residential Building Design
Managed projects from schematic design through completion of construction and led structural design teams.
- Ex. *Private Residence – Kenny, Texas* (19,000 square feet wood and steel framed private residence with a two- story main house, two-story pool house, and several small auxiliary buildings, as well as numerous site improvements including multiple retaining walls, a large concrete dam, and a steel-framed bridge)

Sports Facilities Design
Managed projects from schematic design through completion of construction, led structural design teams, and performed forensic inspections of existing structural components.
- Ex. *Lamar University Cardinal Stadium Renovation – Beaumont, Texas* (Renovations to existing stadium, including new 46,000 square feet two-story steel-framed field house, new box seating off of existing basketball stadium structure, improvements to existing grandstand seating, new 70' tall scoreboard, and analysis of existing grandstand for addition of new light post system)

Retail Building Design
Managed projects from schematic design through completion of construction documents and led structural design teams.
- Ex. *Plaza at Spring Green – Katy, Texas* (80,000 square feet retail center consisting of two buildings with a combination of tilt-wall and steel-framed construction)

Existing Reuse / Remodel Building Design
Managed projects from inspection and schematic design through design development and led structural design teams.
- Ex. *First Methodist Church Houston – Houston, Texas* (Study of approximately 100-year-old existing church structure, which consists of load-bearing masonry walls, wood framing, and iron columns, beams, and trusses, for major structural renovations, including removal of significant portions of existing masonry and columns)

PUBLICATIONS

Bond Characteristics and Qualifications of Adhesives for Marine Applications and Steel Pipe Repair.