



Brian Moon

PE, MS

Project Manager

Department

Engineering Services

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Locations

Nashville, TN

Biography

Mr. Brian Moon is a Senior Associate where he provides condition assessment, and forensic evaluation of structures damaged by natural disasters, collapses, fires, tree and vehicle impacts, and building envelope failures as part of YA Engineering Services. Mr. Moon is a licensed Professional Engineer in 7 states (Tennessee, Alabama, Mississippi, Kentucky, Louisiana, Florida, Arkansas). He has practiced internationally in Canada, Mexico, and Europe. He has experience in complex structural analysis and design, as well as failure analysis of post-loss structures affected by fires, floods, and catastrophes, both natural and manufactured.

Credentials

- PE | Professional Engineer
- MS | Masters of Science - Engineering Management
- FAA Part 107 Certification

Representative Consulting Assignments

- University Academy | Panama City, FL | Hurricane | Investigated an existing school building following Hurricane Michael. The existing structure, consisting of hot-rolled wide flange beams and columns with bolted end-plate connections, was evaluated for structural damage. Findings were presented in a report to the owner outlining the extent of structural damage resulting from the hurricane. Performed a site visit to assess the structural damage after Hurricane Michael. The existing structural drawings were not found by the owner. So, the existing structure was described in report format as steel-framed, using hot-rolled wide flange beams and columns. Lateral stability and lateral load resistance were provided by semi rigid frames with bolted end-plate connections, etc. To summarize, a structural assessment report was written advising the owner the extent of structural damage for an existing school building.
- College University | Kentucky | Construction Incident | Investigated to determine the cause of the collapse of the cold-formed steel trusses during the construction phase of the building.
- Dentist Office | Murfreesboro, TN | Ceiling Failure | Investigated the cause of the collapsed drywall ceiling in the waiting area of the office building.
- Shopping Plaza | Memphis, TN | Fire Damage Assessment | Conducted a comprehensive evaluation of the shopping plaza to determine the extent of structural damage resulting from the building fire.
- Industrial Building | Franklin, KY | Fire Damage Assessment | Conducted a comprehensive evaluation of the commercial building to assess the magnitude of structural damage caused by the building fire and provided conceptual repair recommendations for the associated damage.
- Tobacco Factory | Mayfield, KY | Tornado Damage Assessment | Conducted a thorough assessment of the structural damage sustained by multiple buildings on the premises following the tornado and evaluated the potential for reparability of the observed structural damage.
- Hotel | Tunica Resorts, MS | Tornado Damage Assessment | Conducted a

comprehensive evaluation to assess the extent of structural damage to the roof covering caused by the tornado and determine the source of interior water intrusion.

- Nursing Home Facility | Lebanon, TN | Storm Damage Assessment | Conducted a thorough evaluation to assess the extent of damage to the roof covering and related components resulting from wind and/or hail.
- Church | Paducah, KY | Storm Damage Assessment | Conducted a thorough evaluation to assess the extent of damage to the roof covering and related components resulting from wind and/or hail.
- Retail Building | Little Rock, AR | Vehicle Assessment | Conducted a comprehensive evaluation of the commercial building to assess the magnitude of structural damage caused by the vehicle impact and provided conceptual repair recommendations for the associated damage.
- Toyota Manufacturing | San Antonio, TX | Commercial & Public Buildings | Oversaw construction activities which included steel erection sequencing installation for the Forma building expansion, oversaw slab on grade pours for the weld, stamping and forma expansions (performed pre-pour inspections). Responded to contractor RFIs, identified and fixed field issues, gave PowerPoint presentation to Toyota and the onsite contractors providing guidance on slab on grade pour expectations/ previous lessons learned.
- Residential Home | Knoxville, TN | Tree Impact Assessment | Conducted a comprehensive evaluation of the residence to assess the magnitude of structural damage caused by the tree impact and provided conceptual repair recommendations for the associated damage.
- Tesla | Austin, TX | Commercial & Public Buildings | Worked on delegated portions of the overall design for the new general assembly facility from the structural lead engineer for the Tesla bldg. expansion in TX. Worked on designing large mezzanine structures which included vibration analysis. Also, designed the building moment connections for the general assembly building and the exterior stair shaft tower structural framing.
- General Motors | Ramos, Mexico | Commercial & Public Buildings | Structural Design Lead for General Assembly Building and GA Seat and Delivery Building: Designed the general assembly building and GA seat and delivery building expansion. The building was comprised of brace frames in one direction and moment frames in the other direction. The roof framing consisted of truss framing for both buildings. The intermediate floors were non-composite framing. Design responsibilities included coordination with other disciplines.

Professional Experience

- 2023 - Current | Senior Associate | YA Engineering Services
- 2021 - 2023 | Project Engineer | Envista Forensics
- 2020 - 2021 | PE Exam Question Book Reviewer and Editor | School of PE
- 2020 - 2021 | Regional Engineering Manager | Oldcastle Infrastructure
- 2020 - 2020 | Structural Engineer, E4 | SSOE Group
- 2018 - 2020 | Structural Engineer | Barge Design Solutions
- 2013 - 2018 | Structural Engineer, E3 | SSOE Group
- 2013 - 2013 | Engineering Internship | Honeycutt Engineering

Area of Practice

- Building Code Upgrade Review
 - Building Envelope
 - Condition Assessment
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- Construction Administration
- Damage Assessment
- Earthquake Engineering
- Failure Analysis
- Infrared Thermography
- Litigation Support
- Repair and Rehabilitation Design
- Roofing
- Seismic Evaluations and Retrofit Design
- Structural Analysis

Education

- Tennessee Technological University - Bachelor of Science - Civil Engineering (Structural) - Cookeville - Tennessee
- Lipscomb University - Master of Science - Engineering Management - Nashville - Tennessee

Affiliations

- American Institute of Steel Construction (AISC)
- American Society of Civil Engineers (ASCE)
- Tennessee Structural Engineers Association (TN-SEA)

Licenses

- 38642 - Alabama - Professional Engineer (Structural)
 - 21516 - Arkansas - Professional Engineer (Structural)
 - 36290 - Kentucky - Professional Engineer (Structural)
 - 47408 - Louisiana - Professional Engineer (Structural)
 - 119782 - Tennessee - Professional Engineer (Structural)
 - 96071 - Florida - Professional Engineer (Structural)
 - 34048 - Mississippi - Professional Engineer (Structural)
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