

Jeffrey L. Garrett, PhD, SE **Managing Principal**

Dr. Garrett specializes in the failure analysis of structures and structural components, including building structures, building structural components, communication towers, temporary scaffolding structures and moveable and stationary crane structures. His expertise extends to structural condition assessments, remedial structural design, wind-induced vibration issues, structural dynamic problems, and foundation and retaining structure design issues.

Dr. Garrett consults and provides legal and litigation support on cases involving structural failures, performance and behavior issues, and design professional standard of care issues, as well as building code and standards issues related to structural design and construction.

Prior to founding jlgconsultingllc, Dr. Garrett held structural design, investigation and management positions at several firms, including Jack D. Gillum & Associates, St. Louis; Henningson Durham & Richardson, Omaha; Hansen Lind Meyer, Chicago; Exponent Failure Analysis Associates, Chicago; and CTLGroup, Skokie, Illinois.

Credentials

- Ph.D. in Civil (Structural) Engineering
Iowa State University, 2003
- M.S. in Structural Engineering
Iowa State University, 1977
- B.A. in Architecture
Iowa State University, 1973

Professional Registration

- NCEES
- Structural Engineer, Illinois
- Professional Engineer,
Iowa and 18 other states

Professional Expert Services

- Forensic investigation
- Structural condition assessment
- Structural Engineering
- Failure analysis

Affiliations

- American Society of Civil Engineers
- Structural Engineers Association of Illinois
- American Bar Association Construction Forum
- American Institute of Steel Construction
- American Concrete Institute

Experience

- **Forensic investigation, failure analysis**

Conducted investigation of the collapse of a 1,500 foot-tall TV transmission tower

Investigated the collapse of scaffolding suspended beneath the Queensboro Bridge, New York

Conducted investigations into the partial collapse during construction of a cable-stayed, 600-foot span steel roof system of the Salt Lake City Olympic ice skating venue

Investigated the collapse of several monopole structures along the interstate highway system, Illinois

Investigated the collapse of a 60-foot diameter fiberglass dome used to protect a satellite communication antenna in Greenland

Investigated the collapse of a 540-foot tall crawler crane at the Milwaukee County Baseball Stadium

Investigated the collapse of a 360-foot tall crawler crane at the Iatan Power Plant, Missouri.

- **Forensic structural engineering**

Investigated allegations of deficient structural design, excessive vibrations and deflections of a structural steel mixed-use office/residential/commercial development

Investigated the cause of structural distress and developed preliminary repair designs, including cost estimates, for a grain storage facility.

Investigated the partial collapse of a warehouse roof due to ponding water during a rainstorm.

- **Forensic structural failure analysis**

Investigated a collapse during construction of a 120 foot span of a precast concrete girder bridge on the interstate highway system in Oahu, Hawaii

- **Structural engineering design**

Completed the structural engineering design on construction valued at over \$1.6 billion construction.