# WJE

#### PERSONNEL QUALIFICATIONS

# **Brian Greve** | Principal



### **EDUCATION**

- University of Illinois at Urbana-Champaign
  - Bachelor of Science, Civil Engineering, 1998
  - Master of Science, Structural Engineering, 2000

#### **PRACTICE AREAS**

- Structural Evaluation
- Repair and Rehabilitation Design
- Failure Investigation
- Facade Assessment
- Load Testing
- Parking Structures
- Stadiums and Arenas

# **REGISTRATIONS**

- Professional Engineer in IL
- Structural Engineer in IL

# **PROFESSIONAL AFFILIATIONS**

- American Concrete Institute
- American Society of Civil Engineers
- Structural Engineers Association of Illinois

# **TECHNICAL COMMITTEES**

- ACI 437 Strength Evaluation of Existing Structures
- ACI 440 Fiber-Reinforced Polymer Reinforcement

# **CONTACT**

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#### **EXPERIENCE**

Brian Greve is experienced in the investigation, analysis, evaluation, and repair of existing structures. His projects have involved buildings, stadiums, parking garages, bridges, and facades and have included conventionally reinforced concrete, post-tensioned concrete, steel, masonry, and wood structural systems.

Since joining WJE in 2000, Mr. Greve has participated in a wide variety of projects involving the evaluation of structures to assess conditions related to design deficiencies, construction issues, and deterioration resulting from environmental exposure. He also has experience in instrumentation of structures and has performed full-scale load tests of many structures to verify the capacity of deteriorated and strengthened members.

#### REPRESENTATIVE PROJECTS

#### **Structural Evaluation**

- Cedar Street Bridge Over the Illinois River -Peoria, IL: Evaluation of steel trusses
- Tunnel Under Clark Street Chicago, IL: Evaluation of structural steel and concrete deterioration
- Great American Ballpark Cincinnati, OH: Review design and construction claims
- Building Plaza Deck Huntington, WV:
  Assessment of steel framing deterioration
- Chase Tower Chiller Replacement Chicago,
  IL: Evaluation of existing floor structure to support new loading
- Lurie Children's Hospital Chicago, IL: Pre and post-construction condition assessment surveys; vibration monitoring, and analysis

# Repair and Rehabilitation Design

- Ochsner Hospital New Orleans, LA:
  Structural rehabilitation of foundation
- Chicago Public Schools IL: Investigation and repair design for heavy timber roof trusses
- Chase Tower Chicago, IL: Assessment, analysis, and repair design for steel framing of monumental storefront structure
- Grandin House Cincinnati, OH: Repair of corrosion-damaged post-tensioned slab
- Guaranteed Rate Field Chicago, IL: Investigation and repair design for multiple capital repair projects

- Chicago Public Schools IL: Structural evaluation and design of fiber-reinforced polymer and steel reinforcement for twenty school structures
- Chase Tower Chicago, IL: Assessment and repair design for steel cooling towers and house stage support system
- McKinsey & Co. Chicago, IL: Steel floor analysis and structure modifications
- 222 S. Riverside Drive Chicago, IL: Plaza structure evaluation and repair design

#### Failure Investigation

- Louis Nettelhorst Elementary School -Chicago, IL: Investigation of heavy timber roof truss failure
- Navy Pier Chicago, IL: Inspection of precast double-tees following partial collapse of exhibition floor
- Chase Bank Chicago, IL: Evaluation of steel structure following vehicle impact
- Vaulted Sidewalk Chicago, IL: Failure investigation of steel framing for vaulted sidewalk

#### **Facade Assessment**

- Chase Tower Chicago, IL: Assessment and repair design of granite facade
- Marina Towers Chicago, IL: Assessment and repair of landmark facade
- 150 N. Wacker Drive Chicago, IL: Assessment and repair of concrete shear walls
- River North Point Chicago, IL: Facade assessment and repair design

# **Load Testing**

- Perry's Victory and International Peace Memorial - Put-in-Bay, OH: Load testing of plaza deck
- Midway Airport Parking Garage Chicago, IL: Load testing of parking structure
- Chicago Public Schools IL: Load testing of 1920s vintage reinforced concrete roof structures at twenty schools
- Arizona Charlie's Parking Garage Las Vegas, NV: Load testing of distressed double-tee beams

