# WJE

# PERSONNEL QUALIFICATIONS

# Gary J. Klein | Vice President and Senior Principal



## **EDUCATION**

- University of Illinois at Urbana-Champaign
  - Bachelor of Science, Civil Engineering, 1973
  - Master of Science, Civil Engineering, 1975

## **PRACTICE AREAS**

- Bridge Engineering
- Collapse Investigation
- Historic Preservation
- Parking Structures
- Repair and Rehabilitation Design
- Structural Research
- Structural Investigation
- Testing and Instrumentation

# REGISTRATIONS

- Professional Engineer in FL, IL, and KY
- Structural Engineer in IL and MA

# **PROFESSIONAL AFFILIATIONS**

- American Concrete Institute (ACI)
- American Society of Civil Engineers (ASCE)
- National Academy of Engineering (NAE)
- Precast/Prestressed Concrete Institute (PCI)
- Structural Engineers Association of Illinois (SEAOI)

# CONTACT

gklein@wje.com 847.272.7400 www.wje.com

# **EXPERIENCE**

Gary Klein joined WJE in 1979 and has since investigated hundreds of concrete, steel, and wood structures. Most assignments have involved deterioration, distress, or failure of buildings and bridges. Mr. Klein's experience also includes the investigation of parking structures, tunnels, transit structures, stadiums, piers, environmental facilities, and wind turbines. Many of these studies have included repair design and construction observation services.

Mr. Klein has provided expert testimony in connection with many collapse and structural investigation projects.

From 1973 to 1979, Mr. Klein worked at the Chicago firms of McDonough Engineering, Inc., and HNTB. While with these firms, he was responsible for structural design and plan preparation for new bridge and tunnel construction, as well as investigation and rehabilitation of existing structures.

# **REPRESENTATIVE PROJECTS**

#### **Bridge Engineering**

- Loop Road Bridge VA: Structural investigation, repair design, and expert testimony
- Wacker Drive Viaduct Chicago, IL: Durability research, prototype testing, and health monitoring
- Hamakua Coast Steel Trestle Bridges Hilo, HI: Structural investigation and load testing
- Illinois River Bridge: Design of a twin segmental box-girder bridge (with HNTB)

#### **Collapse Investigation**

- I-80/94/294 Interchange at IL 394 Lansing, IL: Collapse of Ramp J framing during erection
- Koror-Babeldaob Bridge Republic of Palau: 790-foot concrete box-girder span over the Toegel Channel
- Los Angeles Metro Red Line CA: Subway tunnel collapse during remining
- Kansas City Hyatt Regency Hotel MO: Suspended walkway collapse

#### **Repair and Rehabilitation Design**

- Fenner Wind Farm Fenner, NY: Turbine foundation retrofit
- Chicago and Northwestern Trainshed IL: Structural rehabilitation
- Soldier Field Chicago, IL: Structural rehabilitation

#### Structural Research

- Predicting Volume Change Movements and Forces in Buildings, Precast/Prestressed Concrete Institute (PCI)
- Precast Spandrel Design, PCI
- Dapped Tees, PCI

#### Structural Investigation

- Central Artery/Tunnel Project (The Big Dig) -Boston, MA: Safety audit of tunnel and bridge structures
- Lakefront Millennium Project Chicago, IL: Post-construction structural review
- Major Restaurant Chain Various Locations, U.S.: Wood truss inspection and repair programs

#### **TECHNICAL COMMITTEES**

- ACI 318 Standard Building Code
- ACI 318J Joints and Connections
- ACI 318E Section and Member Strength
- ACI 378 Wind Turbines
- ACI 445 Shear and Torsion
- ACI 445A Strut-and-Tie Method
- National Construction Safety Team Advisory Committee

