# PERSONNEL QUALIFICATIONS



# Michael W. Lee | Senior Principal



### **EDUCATION**

- University of Texas at Austin
  - Bachelor of Science,
    Architectural Engineering, 1981
  - Master of Science, Structural Engineering, 1983

### **PRACTICE AREAS**

- Concrete Structures
- Construction Materials
- Failure/Damage Investigations
- Litigation Consulting
- Parking Structures
- Precast/Prestressed/ Post-Tensioned Concrete
- Repair and Rehabilitation
- Structural Evaluation

### **REGISTRATIONS**

Professional Engineer in AR, KS, MO, OK, and TX

### **PROFESSIONAL AFFILIATIONS**

- American Concrete Institute (ACI)
- American Society of Civil Engineers (ASCE)
- Precast/Prestressed Concrete Institute (PCI)
- Structural Engineers Association of Texas (SEAoT), past board member and past chapter president

## CONTACT

mlee@wje.com 972.550.7777 www.wje.com

#### **EXPERIENCE**

Michael Lee has investigated hundreds of distressed buildings, parking garages, and other structures. These distressed conditions have involved concrete deterioration, water leakage, collapse, construction deviations, and facade deterioration. Mr. Lee uses structural analyses, load tests, nondestructive testing, and laboratory studies to determine the cause and significance of the distress. He also develops drawings and specifications to repair the affected structures.

Prior to joining WJE, Mr. Lee worked at HDR (formerly W.E. Simpson) and Campbell & Associates, where he acquired fourteen years of structural design experience. At these firms, he was responsible for the analysis, design, or construction administration of over five million square feet of office, medical, parking, and educational facilities. His experience encompasses precast, post-tensioned, two-way, composite, and long-span structural systems. Mr. Lee has also investigated existing structures and designed modifications, as required, by changes in occupancy and loading.

### REPRESENTATIVE PROJECTS

### **Failure/Damage Investigations**

- Football Stadium TX: Column reinforcing bar failures during construction
- Warehouse Facility Dallas, TX: Steel-framed roof collapse during rainstorm
- Whole Foods Market Dallas, TX: Shopping center roof collapse during lifting

### **Parking Structures**

- Dallas County Parking Garage TX: Condition assessment of distress in precast, prestressed members
- JCPenney Home Office Parking Garage -Plano, TX: Evaluation of distress in precast beams, girders, and wall panels
- Metropolitan Uptown Garage Houston, TX: Investigation of distress in concrete deck in steel-framed structure

### **Repair and Rehabilitation**

- Cedar Hill High School Performing Arts Hall -Cedar Hill, TX: Concrete masonry unit wall repair design
- Richardson Public Safety Campus -Richardson, TX: Analysis of missing slab reinforcement and design of structural enhancement
- Texas Woman's University, Science Building -Denton: Analysis and design of structural modifications
- The Retreat Clubhouse Cleburne, TX: Investigation and remediation design of wood framing

#### Structural Evaluation

- Automated People Mover TX: Review of guide beam structural system
- Campbell Soup Company Paris, TX: Review of concrete beams and foundation
- High-Mast Light Poles Various Locations, TX: Evaluation of structural adequacy for wind loads
- State Highway 332 Bridge Brazoria County,
  TX: Stability analysis of steel girders

### **TECHNICAL COMMITTEES**

- ACI 117 Tolerances
- ACI 437 Strength Evaluation of Existing Concrete Structures
- ACI 440 Fiber Reinforced Polymer Reinforcement, Subsection F - External Strengthening, past chair
- ACI 562 Evaluation, Repair, and Rehabilitation of Concrete Structures, Subsection F - Fire
- ASCE 7 Minimum Design Loads and Associated Criteria for Buildings and Other Structures
- PCI Parking Structures
- PCI Standards
- SEAoT National Council of Structural Engineers Associations, delegate
- University of Texas at Arlington -Construction Research Advisory Committee

