



EDUCATION

- University of Notre Dame
 - Bachelor of Science, Civil Engineering, 2007
- University of Illinois at Urbana-Champaign
 - Master of Science, Structural Engineering, 2010

PRACTICE AREAS

- Structural Evaluation
- Testing and Instrumentation
- Structural Analysis/Computer Modeling
- Construction Observation Services

REGISTRATIONS

- Professional Engineer in IL
- Structural Engineer in IL

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineering (ASCE)

CONTACT

mgries@wje.com
847.272.7400
www.wje.com

EXPERIENCE

Matthew Gries has broad-based experience in condition assessments, structural evaluation, and construction period services for buildings, bridges, towers, and utility structures. He has performed nonlinear finite element analysis of concrete structures and has experience with nondestructive testing techniques.

Prior to joining WJE, Mr. Gries evaluated the feasibility of new techniques for improved real-time evaluation of reinforced concrete bridges while a graduate assistant at the University of Illinois at Urbana-Champaign.

REPRESENTATIVE PROJECTS

Structural Evaluation

- Electric Generating Station Hyperbolic Shell Natural Draft Cooling Towers - Mid-Atlantic region: Structural evaluation and repair program development
- Vehicle Assembly Building - Kennedy Space Center, FL: Corrosion evaluation of elevated concrete slabs, service life modeling, and repair development
- Illinois Department of Transportation: Load rating of various gusset plate connections of nonredundant steel truss bridges, including rolling lift and fixed trunnion bascule bridges
- Chicago Transit Authority: Load rating of circa 1919 reinforced concrete rail structures with advanced deterioration
- Indiana Toll Road: Condition survey, corrosion assessment, and repair development for multiple concrete bridge decks and substructure elements
- University Club Tower - Richmond Heights, MO: Assessment of wind-related damages to curtain wall and penthouse structures
- Prestressed Concrete Parking Garage - IL: Peer review of prestressed concrete parking garage experiencing distress during construction
- Wheaton Center Apartments - Wheaton, IL: Condition assessment of parking structures
- Industrial Facility - Northbrook, IL: Capacity evaluation of existing cold-formed metal and wood-framed mezzanine structures

Testing and Instrumentation

- Metropolitan Water Reclamation District - Hodgkins, IL: Ultrasonic thickness testing and evaluation of steel pipe walls
- Amelia Earhart Bridge Fabrication: Ultrasonic thickness testing of welded steel tab plate connections in steel tied-arch bridge
- La Grange Fire Department - La Grange, IL: Load testing of fire station apparatus floor
- ASTM A775/D3963 Material Testing: Epoxy-coated reinforcing materials compliance testing

Structural Analysis/Computer Modeling

- Locks and Dam - PA: Nonlinear finite element analysis of tremie placed concrete drilled shafts in as-built condition
- Mixed-Use Commercial/Residential Tower - NV: Three-dimensional nonlinear finite element analysis of reinforced concrete structural elements
- Slab-on-grade - NC: Finite element analysis and evaluation of crane loads applied to slab-on-grade

Construction Observation Services

- Parking Garage - Chicago: Condition assessment and repair construction observation of post-tensioned concrete parking garages
- Warehouse - Bolingbrook, IL: Repair design and construction observation of slab-on-grade replacement
- High-Rise Residential Building - Chicago, IL: Repair design and construction observation of exposed concrete frame
- Multifamily Residential Building - Wadsworth, IL: Repair design and construction observation of sanitary sewer replacement undermining building foundations