# WJE

# PERSONNEL QUALIFICATIONS

Oana T. Whalen | Senior Associate



#### **EDUCATION**

- University of Illinois at Urbana-Champaign
  - Bachelor of Science, Civil Engineering, 2011
  - Master of Science, Civil Engineering, 2013

# **PRACTICE AREAS**

- Asset Management
- Structural Analysis
- Repair and Rehabilitation
- Failure/Damage Investigations
- Facade Access and Fall Protection
- Facade Assessment
- Peer Review

# REGISTRATIONS

- NHI Course 130078 Fracture Critical Inspection Techniques for Steel Bridges
- Professional Engineer in AZ and IL
- Structural Engineer in IL

# **TECHNICAL COMMITTEES**

ANSI/ASSP Z359 Fall Protection

# CONTACT

owhalen@wje.com 847.272.7400 www.wje.com

# **EXPERIENCE**

Since joining WJE in 2013, Oana Whalen has been involved in the condition assessment, field investigation, structural evaluation, and rehabilitation of various structures. She has primarily worked with reinforced concrete, steel, aluminum, wood, and masonry elements of buildings, bridges, parking structures, foundations, and power generating stations. She has also led large-scale data collection and processing efforts for several multibuilding and asset management projects.

Ms. Whalen has experience with evaluating existing facade access and fall protection systems for OSHA compliance and designing new systems. She actively participates in the ANSI/ASSP Z359 Fall Protection Committee, which develops industry consensus standards for fall protection systems.

# **REPRESENTATIVE PROJECTS**

#### Asset Management

- The Salvation Army, Various Buildings U.S. Midwest: Eighty building enclosure and structural condition assessments with online repair and cost prioritization database
- Vacant Detroit Public Schools MI: Sixty-three school enclosure and structural assessments with rehabilitation database for adaptive reuse master plan
- Accor Hotels Australia, Europe, and United Kingdom: Fire safety assessment of hotel exterior cladding systems for more than eight hundred properties
- Portfolio of Purpose-Built Student Accommodations - England, Ireland, and Scotland: Fire assessments of exterior walls and cladding systems for sixty properties
- Major Retail Chain Nationwide U.S.: Inspection and structural analysis of steel joist roof structures at over 2,200 facilities

# **Structural Analysis**

- High-Rise Condominium Building Chicago, IL: Analysis and structural strengthening of concrete framing for increased load requirements on new rooftop sun deck
- Multistory Parking Structure and Transportation Center: Concrete distress and corrosion evaluation, temporary safety measures for critical conditions, and structural analysis of post-tensioned concrete and steel structure

#### **Repair and Rehabilitation**

- The Salvation Army, Kroc Corps Community Center - Quincy, IL: Evaluation and strengthening of roof framing for mechanical loading
- Retail Store Chicago, IL: Repair design for failed timber bowstring roof trusses
- Holy Family Catholic Church Lincoln, IL: Repair design for timber roof trusses
- Pima County Public Works Tucson, AZ: Design of structural attachments for twobuilding curtain wall replacement

# Failure/Damage Investigations

- Warehouse Indianapolis, IN: Structural analysis of roof framing after partial collapse
- Illinois Tollway Elmhurst, IL: Investigation of temporary soil retention wall failure
- Retail Store Bridgeview, IL: Investigation of masonry parapet collapse
- Residential Facility Rockford, IL: Investigation of steel joist-bearing failure in masonry wall system

#### **Facade Access and Fall Protection**

- Northwestern Memorial Hospital Chicago, IL: Campus-wide evaluation and load testing of existing davit and anchorage systems
- Northwestern University Chicago, IL: Design and load testing of davit bases and anchorages at multiple buildings
- 541 N. Fairbanks Court Chicago, IL: Conversion of rooftop track system to frame supporting dedicated anchorages
- One Magnificent Mile Chicago, IL: Load testing of davit bases and design of new fall protection systems

# Facade Assessment

- InterContinental Hotel Chicago, IL: Limestone facade assessment and repair
- Sheridan Edgewater Apartments Chicago, IL: Masonry facade restoration of 1920s residential building
- Various Buildings Chicago, IL: Annual facade ordinance inspections

