# WJE

# PERSONNEL QUALIFICATIONS

# Crisol Ortiz-Socas | Associate III



#### **EDUCATION**

- Florida State University
- Bachelor of Science, Civil Engineering, 2019

#### **PRACTICE AREAS**

- Structural Investigation
- Structural Analysis/
- Computer Modeling
- Facade Assessment
- Failure/Damage Investigations
- Leakage investigation
- Roofing and Waterproofing
- Construction Administration

# **PROFESSIONAL AFFILIATIONS**

 American Society of Civil Engineers

#### CONTACT

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#### EXPERIENCE

Crisol Ortiz-Socas joined WJE in 2020 and has participated in various structural and building enclosure investigations, assessments, repair designs, and construction administration projects. Ms. Ortiz has investigated construction systems and materials such as concrete, wood, and masonry structures. Her experience also encompasses field evaluation and testing to identify issues, including moisture infiltration problems, corrosion, and structural distress.

Prior to joining WJE, Ms. Ortiz gained experience in construction services at a major construction management firm. She was the group leader of a FEMA-sponsored senior design project focused on stormwater infrastructure improvements following the impact of Hurricane Michael in Florida. She also participated in a research project at the Wind and Impact on Structures laboratory focused on the study of vortex-induced vibrations.

#### **REPRESENTATIVE PROJECTS** Structural Investigation

- Champlain Towers South- Surfside, FL: Building collapse investigation
- Florida Department of Transportation: Statewide evaluation of corrosion prevention and control programs for reinforced concrete bridges in marine environments, including laboratory material testing
- Evander Square Apartments Celebration, FL: Investigation and design of connections for thirty-two timber-framed multifamily buildings
- Porto Bellagio Sunny Isles, FL: Assessment and repair design of a precast concrete parking garage
- Broward Financial Center Fort Lauderdale,
  FL: Assessment and repair design for concrete parapet walls, beams, columns, and pedestals
- Boca Mar Condominium Boca Raton, FL: Assessment of reinforced concrete slabs and concrete masonry units exterior walls

#### Structural Analysis/Computer Modeling

 U.S. Embassy - Undisclosed Location: Finite element modeling of static glazing assembly using SJ Mepla

#### **Facade Assessment**

- High-Rise Building Complex and Multipurpose Facility - Miami, FL: Direct-applied stucco cladding assessment
- Porto Bellagio Sunny Isles, FL: Assessment and repair design of distressed stucco cladding
- Multiple Hotels Islamorada, FL: Assessment of exterior facades and roofs as well as the fire/life safety components

#### Failure/Damage Investigations

- Burleigh House Condominiums Miami, FL: Structural assessment of windows and doors, full-scale laboratory testing, instrumentation, and analysis
- Homestead, FL, and Lake Worth, FL: Storm damage assessment of roofing, facade, windows, and doors
- Homestead, FL: Hurricane Irma damage assessment of roofing, facade, windows, doors, light poles, fencing, and guardrails

#### Leakage Investigation

- Ritz-Carlton Resort Naples, FL: Water leakage investigation of the stucco drainage system per ASTM E2128
- Terrace Building Sarasota, FL: Assessment of exterior walls of a building originally built in 1925; spray rack testing based on ASTM E1105 and nozzle testing based on AAMA 501.2

#### **Roofing and Waterproofing**

 Patrick Airforce Base Fire Crash Rescue Station - Cocoa Beach, FL: Evaluation and documentation of concrete tile roofing during various stages of demolition and construction

### **Construction Administration**

- Evander Square Apartments Celebration, FL: Assessment and rehabilitation of the stucco drainage system; structural evaluation and repairs of timber construction multifamily buildings
- Ocean Towers South Condominium -Palm Beach, FL: Assessment and rehabilitation of concrete balconies and guardrails

