#### PERSONNEL QUALIFICATIONS



# Catrina Longo | Associate III



#### **EDUCATION**

- University of Massachusetts Dartmouth
  - Bachelor of Science, Civil and Environmental Engineering, 2017
- Johns Hopkins University
  - Master of Engineering, Civil Engineering, 2021

# **PRACTICE AREAS**

- Structural Analysis/ Computer Applications
- Failure/Damage Investigation
- Structural Design
- Repair and Rehabilitation
- Wood Structures
- Facade Access

# **PROFESSIONAL AFFILIATIONS**

- American Society of Civil Engineers, Structural Engineering Institute (Boston Chapter)
- Structural Engineers Association of Massachusetts

#### **REGISTRATIONS**

Professional Engineer in CT, MA, and NH

# CONTACT

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#### **EXPERIENCE**

Catrina Longo has performed a wide range of projects involving structural design, failure investigation, analysis, repair, and rehabilitation as well as roof assessment and design projects. These structures primarily include high-rise and mid-rise buildings, warehouses, and parking garages comprising various substrates, such as reinforced concrete, wood, steel, and masonry.

Prior to joining WJE, Ms. Longo worked at a structural engineering firm involved in many mid- to high-rise new building structure projects. Ms. Longo has extensive experience designing steel, wood, and concrete structures using a variety of computer software and programs. She also has experience performing calculations and has managed design and contract document development, project team coordination, and construction administration.

#### REPRESENTATIVE PROJECTS

## **Structural Analysis/Computer Applications**

- Dormitory Authority of the State of New York: Analysis of lateral force resisting system of load-bearing CMU walls for an addition to the existing structure
- Oil Refinery Port Arthur, TX: Analysis of existing open-framed steel structure with wind loading requirements for current petrochemical code
- Manufacturing Plant NH: Analysis of existing roof structure capacity and supplemental strengthening design
- Sheraton Boston Boston, MA: Condition assessment and analysis of existing structure for renovations
- Landmark Center Boston, MA: Peer review of roof concrete paver pedestal system
- Airport Terminal Houston, TX: Analysis of existing concrete structure and supplemental strengthening design for existing concrete and steel interior framing \*

## Failure/Damage Investigation

- NOBO Apartments Saugus, MA: Investigation of failure of wood stair tower of four-story wood structure in construction
- 305 Webster Street Marshfield, MA:
  Damage investigation of a one-story family dwelling after a tree collapse

 167 Fairmont Avenue - Saugus, MA: Fire damage evaluation of a four-story wood building

#### **Structural Design**

- KIPP High School Bronx, NY: New structural design services for a 150,000-square-foot seven-story steel building with multiple transfer floors, a playing field on the roof, and shallow foundations over MTA tunnels \*
- New Bassick High School Bridgeport, CT: New structural design services for a 200,000square-foot four-story steel-framed school \*
- Choate Athletic Building Wallingford, CT: New structural design services for an 8,000-square-foot two-story wood structure with concrete foundations and interior steel framing \*
- Five Points Long Branch, NJ: New design of two six-story mixed-use structures with a four-story wood structure on concrete podiums and attached double height steel-framed building \*
- Airport Terminal Houston, TX: Design and drawing set development of strengthening design for existing concrete framing, new elevator cores, new hung elevator pits, new stair towers, and new steel mezzanine framing for renovations of departures terminal \*

# Repair and Rehabilitation

- Meriel Marina Bay Quincy, MA: Construction administration for the repair of the building enclosure facade assembly and the existing exterior wood framing of the main building structure
- Omni Parker House Boston, MA:
  Development of steel and concrete slab repairs and construction period services
- Choate Rosemary Hall Wallingford, CT: Renovation of interior steel structure and existing exterior masonry walls with a new steel-framed masonry addition \*
- Chipotle Bronx, NY: Interior renovation of existing brick building requiring additional framing for lateral resisting system \*
- \* Indicates with previous firm

