# PERSONNEL QUALIFICATIONS

# Anna Quinn | Associate III



## **EDUCATION**

- Auburn University
  - Bachelor of Civil Engineering,
  - Master of Science, Civil Engineering, 2019

# **PRACTICE AREAS**

- Structural Evaluation
- Repair and Rehabilitation Design
- Failure/Damage Investigation
- Construction Materials Assessment
- Construction Troubleshooting
- Bridges and Civil Infrastructure
- Nondestructive Evaluation

# **REGISTRATIONS**

- ARSC Basic Orientation Plus
- OSHA 10-Hour Construction
- Professional Engineer in TX

# **PROFESSIONAL AFFILIATIONS**

- American Concrete Institute
- Structural Engineers Association of Texas

# **CONTACT**

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#### **EXPERIENCE**

Anna Quinn has been involved in the condition assessment, structural evaluation, and repair design of concrete and steel structures. She has experience in assessing and evaluating finishing-related defects and problems associated with new concrete construction, as well as performing various concrete and steel structural failure investigations. Ms. Quinn prepares construction documents involving repair designs and has experience utilizing destructive and nondestructive testing techniques.

Prior to joining WJE, Ms. Quinn worked as a graduate research assistant at Auburn University, where she studied the effects of vehicular braking in highway bridge substructures for typical Alabama Department of Transportation (ALDOT) short-span bridges. She created an analytical model to determine the shear force in the substructure and calibrated the model to static pull tests and dynamic braking tests conducted on a shortspan bridge typical of ALDOT construction.

#### REPRESENTATIVE PROJECTS

#### **Structural Evaluation**

- Refinery Port Arthur, TX: Assessment of existing structures for wind load capacity
- Governmental Facility Houston, TX: Visual assessment of structural steel framing for potential overload
- Multistory Building Houston, TX: Structural steel bracing design
- Hyatt Regency Houston, TX: Assessment of structural steel pool framing

# Repair and Rehabilitation Design

- Various Parking Garages Houston, TX: Concrete repairs of impacted double-tee
- Chemical Plant Pasadena, TX: Concrete repair design of reformer foundation
- Marathon Oil Tower Houston, TX: Shear strengthening repair design for adaptive reuse of a post-tensioned and conventionally reinforced parking garage

# **Failure/Damage Investigation**

■ Governmental Facility - Houston, TX: Investigation and structural analysis related to a roof collapse

- Tilt-Wall Building Houston, TX: Investigation, analysis, and repair design related to partial roof collapse
- Reinforced Concrete Bridge Foundation -Houston, TX: Damage assessment and repair design related to construction damage
- Airport Terminal Houston, TX: Structural assessment and repair design related to a partial structural collapse

#### **Construction Materials Assessment**

- El Rio Buildings B and D Houston, TX: Evaluation and recommendations for damages caused by concrete slab moisture
- Houston Methodist Clear Lake Hospital -Nassau Bay, TX: Evaluation and recommendations for distress in terrazzo flooring caused by concrete slab moisture
- Lonestar Corrosion Services Houston, TX: Evaluation of concrete site paving
- Custom Car Cool Houston, TX: Evaluation of concrete site paving

#### **Construction Troubleshooting**

- Cy-Fair Volunteer Fire Department Houston, TX: Evaluation of concrete slab delaminations
- United Technical Operations Center -Houston, TX: Evaluation of concrete slab delaminations
- Educational and Hospital Buildings Various Locations, TX: Preconstruction concrete flatwork consulting

# **Bridges and Civil Infrastructure**

- Various Vehicular Bridges AL and TX: Initial, routine, and in-depth condition assessments
- Various Bridge and Roadway Construction -Harris County, TX: Assessments of concrete pavement cracking, structural assessments of bridge components, and development of repair documents
- In-Service Bridges Dallas, TX and Houston, TX: Routine inspections of numerous bridges and retaining walls

# **Nondestructive Evaluation**

- Existing Segmental Bridge Houston, TX: Structural monitoring and instrumentation
- Facility Paving and Flatwork Surveys Various Locations, TX
- New Bridge Construction Harris County, TX: Bent cap survey for identifying reinforcing configuration/cover

