PERSONNEL QUALIFICATIONS

Jeremiah Fasl | Associate Principal and Senior Project Operations Associate

EDUCATION

- The University of Texas at Austin
  - Bachelor of Science, Civil Engineering, 2006
  - Master of Science, Engineering, 2008
  - Doctor of Philosophy, Engineering, 2013

PRACTICE AREAS

- Bridge Engineering
- Testing and Instrumentation
- Nuclear Facilities
- Research and Testing
- Structural Evaluation

REGISTRATIONS

- AWS Certified Welding Inspector
- Fracture Critical Insp. Techniques for Steel Bridges (NHI 130078)
- NHI 130056 - Safety Insp./In-Service Bridges for Prof. Engineers
- Professional Engineer in KY, NJ, OH, SC, and TX
- Structural Engineer in AZ

PROFESSIONAL AFFILIATIONS

- American Concrete Institute (ACI)
- American Institute of Steel Construction (AISC)
- American Welding Society (AWS)
- Structural Engineers Association of Texas (SEAoT)
- Structural Stability Research Council (SSRC)

CONTACT

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EXPERIENCE

Since joining WJE in 2013, Jeremiah Fasl has investigated and evaluated a variety of existing structures. His project work experience includes concrete, steel, and wood structures.

Prior to joining WJE, Dr. Fasl worked on a variety of bridge instrumentation and material testing projects at the University of Texas. His research focused on estimating the remaining fatigue life in steel connections using field measurements. He developed instrumentation and analyzed data for bridges and high mast illumination poles. Dr. Fasl was also involved in fracture tests of notched specimens and determination of slip coefficients of coated, galvanized surfaces during his graduate studies.

REPRESENTATIVE PROJECTS

Bridge Engineering

- IH-345 - Dallas, TX: Fracture critical inspection and strain instrumentation of fatigue-critical details
- Sunshine Bridge - Donaldsonville, LA: Instrumentation for assessment of damaged bottom chord of truss bridge
- Rayse Creek Bridge - Woodlawn, IL: Failure investigation and analysis to determine the cause of bridge collapse
- Cow Bayou Swing Bridge - Bridge City, TX: Condition assessment and rehabilitation design of historic swing span
- South Florida Bascule Bridge - Fort Lauderdale, FL: Stability calculations for the erection of the bascule leaf

Testing and Instrumentation

- U.S. 181 Harbor Bridge - Corpus Christi, TX: Load testing of proposed concrete beams with Grade 75, No. 20 bars
- Double-Tee Beams - TX: Load testing of prestressed beams to determine cause of cover stem spalling
- U.S. Coast Guard Facility - PR: Structural evaluation and load test of an existing wharf
- Block 42 - Houston, TX: Implementation of sensors to detect movement of a historic building adjacent to high-rise construction
- Leo Frigo Bridge - Green Bay, WI: Development of alarm monitoring systems during emergency repairs

Nuclear Facilities

- Seabrook Station - Seabrook, NH: Condition assessment of concrete distress, including spalling and cracking, in the residual heat removal equipment vaults
- Water Resources, Palo Verde Generating Station - Tonopah, AZ: Assessment of concrete-related distress at a large water reclamation plant
- Wolf Creek Generating Station - Burlington, KS: Development of repair approach for drilled shafts subject to alkali-carbonate reaction
- Davis-Besse Nuclear Power Station - Oak Harbor, OH: Engineering support for concrete repair activities

Research and Testing

- Behavior of Corroded Bars in Concrete Slabs: Experimental testing to determine ductility and behavior of slabs
- Development of rapid, reliable, and economic methods for inspection and monitoring of highway bridges, sponsored by NIST
- Acoustic Emission Monitoring of ASR in Concrete Structures: Development of a nondestructive technique to quantify ASR

Structural Evaluation

- Barbours Cut Terminal Wharf 3 - La Porte, TX: Strengthening of a container wharf to support new, larger ship-to-shore cranes in a hurricane region
- Woodhouse Terminal - Houston, TX: Assessment of an existing grain elevator and development of repair recommendations and priorities
- Central Control Building - Port Arthur, TX: Structural evaluation of an existing building to determine wind load capacity for shelter-in-place

TECHNICAL COMMITTEES

- ACI 348, Structural Reliability and Safety
- ACI 357, Offshore and Marine
- ACI 437, Strength Evaluation of Existing Concrete Structures
- ACI 562, Evaluation, Repair, and Rehabilitation of Concrete Buildings