# **PERSONNEL QUALIFICATIONS**



# Daniel T. Pearson | Senior Associate



## **EDUCATION**

- Texas A&M University
  - Bachelor of Science,
     Civil Engineering, 2013
  - Master of Engineering, Civil Engineering, 2014

## **PRACTICE AREAS**

- Repair and Rehabilitation
- Steel Structures
- Failure/Damage Investigations
- Structural Analysis/Computer Applications
- Bridges and Civil Infrastructure

# **REGISTRATIONS**

- ARSC Basic Orientation Plus
- NHI Course 130055 Safety Inspection of In-Service Bridges
- NHI Course 130078 Fracture Critical Inspection Techniques for Steel Bridges
- Professional Engineer in CA, OR, and TX
- Structural Engineer in LA and OK
- TSA Transportation Worker Identification Credential

## **PROFESSIONAL AFFILIATIONS**

- American Society of Civil Engineers
- Structural Engineers Association of Texas

# **CONTACT**

dpearson@wje.com 832.467.2177 www.wje.com

#### **EXPERIENCE**

Daniel Pearson is involved in the assessment, evaluation, and repair/rehabilitation of numerous structures. His project work includes steel, concrete, masonry, and wood structures. He has experience working in buildings, parking garages, bridges, marine facilities, and process-plant structures.

Before joining WJE, Mr. Pearson was a structural engineering consultant in the oil-and-gas industry, where he gained expertise in onshore and offshore oil-and-gas facilities. His graduate research at the Texas A&M Transportation Institute focused on evaluating roadside barriers and related hardware through the application of nonlinear, dynamic, finite element analyses of vehicle impacts with roadside barriers.

## REPRESENTATIVE PROJECTS

## **Repair and Rehabilitation**

- Barbours Cut Terminal Wharf Houston, TX:
   Design for structural retrofit of wharf to support new gantry cranes
- Chemical Plant Process Building -Houston, TX: Assessment and repair design for structural steel process building
- Refinery Process Tower Foundation -Houston, TX: Condition assessment and repair design for reinforced concrete tabletop structure
- Chemical Plant Support Structure OK: Assessment and repair design for steel process support structure

# Steel Structures

- Pipeline Suspension Bridge Houston, TX: Assessment of structural steel towers of suspension bride and development of prioritized repair recommendations
- Steel-Framed Garages Houston, TX:
   Assessment of steel-framed garages and development of prioritized repair recommendations
- Refinery Pipe Rack Houston, TX: Condition assessment and conceptual repair recommendations for steel pipe rack
- PSA Airlines Aircraft Hangar San Antonio,
   TX: Main truss and secondary member analysis and strengthening design

## **Failure/Damage Investigations**

- Tilt-Up Warehouse Houston, TX: Investigation of tilt-up warehouse roof collapse
- Aircraft Hangar Houston, TX: Investigation of steel aircraft hangar collapse during construction
- Elementary School Fort Lauderdale, FL: Investigation of school-roof collapse
- Pedestrian Bridge Houston, TX: Investigation of pedestrian bridge soffit collapse
- Tilt-Up Office Building Houston, TX: Investigation and repair design related to tilt-up office building roof collapse
- Hurricane Damage Assessments Various Locations, U.S.: Post-hurricane structural assessment of numerous buildings

## Structural Analysis/Computer Applications

- Historic Office Building Port Arthur, TX: Nonlinear structural analysis of seven-story historic office building
- Highway Interchange Connectors -Houston, TX: Nonlinear finite element analysis of horizontally curved steel girders for erection
- Reinforced Concrete Bridges OR:
   Refined load rating of multiple bridges using CSiBridge
- Pre-Engineered Metal Building Facility -McAllen, TX: Structural assessment and detailed structural analysis of existing building to current building code

## **Bridges and Civil Infrastructure**

- Suspension Bridge Waco, TX: Structural analysis of suspension bridge during suspension cable replacement
- Steel Pedestrian Bridge Houston, TX:
   Erection engineering for multispan,
   horizontally covered steel pedestrian bridge
- In-Service Bridges Houston, TX: Routine inspections of numerous bridges and retaining walls
- Interstate Highway Houston, TX: Assessment of concrete deck cracking
- Reinforced Concrete Bridges and Culverts -OR: Refined load ratings of multiple reinforced concrete bridges and culverts

