



EDUCATION

- The University of Texas at Austin
 - Bachelor of Science, Civil Engineering, 2011
 - Master of Science, Structural Engineering, 2013

PRACTICE AREAS

- Repair and Rehabilitation Design
- Damage Assessment and Documentation
- Concrete Materials and Durability Evaluation
- Materials Evaluation and Research
- Structural Evaluation and Analysis
- Facade Assessment
- Failure Investigation
- Nondestructive Evaluation

REGISTRATIONS

- Professional Engineer in TX

PROFESSIONAL AFFILIATIONS

- American Concrete Institute (ACI) - Northeast Texas chapter
- International Concrete Repair Institute (ICRI) - North Texas chapter

TECHNICAL COMMITTEES

- ACI 201 - Concrete Durability

CONTACT

rmarkus@wje.com
972.550.7777
www.wje.com

EXPERIENCE

Reid Markus actively participates in a wide variety of projects within the structural engineering and construction industries. His primary focus areas are damage assessment, structural repair and rehabilitation, and evaluation of concrete durability issues, and he has greatly enhanced his expertise in structural evaluation and analysis through his involvement in an increasing number of projects during his time at WJE. Mr. Markus has particular interests in the field of concrete durability and is steadily developing experience in the diagnosis, remediation, and mitigation of durability-related distress in concrete structures.

While studying at the University of Texas at Austin, Mr. Markus actively participated in research focused on the mitigation of expansion due to alkali-silica reaction in existing concrete structures. He also assisted with a number of projects focusing on the prevention of a wide range of durability related distress mechanisms.

REPRESENTATIVE PROJECTS

Repair and Rehabilitation Design

- Texas Scottish Rite Hospital for Children - Dallas, TX: Repair design for post-tensioned parking garage experiencing corrosion related distress
- Catholic School - TX: Rehabilitation of corrosion-induced deterioration of structural concrete framing
- UT Southwestern Medical Center Parking Garage Assessment - Dallas, TX: Assessment of seven parking garages experiencing varying degrees of distress

Damage Assessment and Documentation

- Gerdau Special Steel - Ft. Smith, AK: Assessment and documentation of heat-damaged concrete in electric arc furnace foundations
- IH-35 Managed Lanes - Dallas, TX: Emergency assessment of structural damage to bridge after vehicular impact
- Condominium Parking Garage - Dallas, TX: Assessment of cast-in-place post-tensioned parking garage experiencing various types of distress

Materials Evaluation and Research

- North Hayden Commerce Center - Scottsdale, AZ: Investigation of slab-on-ground experiencing popouts and sodium-silicate surface hardener extrusions
- Three-Story Parking Garage - Dallas, TX: Contract administration for mitigation of expansion due to alkali-silica reaction in precast parking garage
- Finley Terrace Apartments - Irving, TX: Investigation of fire-related damaged to concrete foundations

Structural Evaluation and Analysis

- IH-345 Bridge - Dallas, TX: Evaluation of steel superstructure framing and concrete substructure
- North Texas Tollway Authority - Dallas, TX: Evaluation of more than seventy mechanically stabilized earth-retaining walls along SH-121

Facade Assessment

- Residential Community - Dallas-Fort Worth Area, TX: Investigation of falling stones from adhered manufactured stone facade
- Mid-Rise Building - Waco, TX: Investigation and repair design for failure of connections at precast facade panel

Nondestructive Evaluation

- Regional Distribution Warehouse - Dallas-Fort Worth Area, TX: Evaluation of distressed construction joints using ground penetrating radar (GPR)
- High School Football Stadium - TX: Evaluation of location and spacing of reinforcement in structural framing members
- Tri Quint Semiconductor Facility - Richardson, TX: Assisted with the measurement, documentation, and evaluation of floor vibrations of various structural systems