PERSONNEL QUALIFICATIONS

Douglas L. Smith | Principal

EDUCATION

- Texas A&M University
  - Bachelor of Science, Civil Engineering, 1983
  - Master of Science, Civil Engineering, 1985

PRACTICE AREAS

- Construction Materials
- Masonry
- Pavement Investigation
- Repair and Rehabilitation

REGISTRATIONS

- Professional Engineer in TX

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineering, Dallas Branch - past president
- International Concrete Repair Institute, North Texas Chapter - past president

CONTACT

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EXPERIENCE

Douglas Smith evaluates, investigates, and designs repairs for pavement systems, civil infrastructure, parking garages, building facades, and a wide variety of materials used in construction. He has particular expertise in solving materials problems related to performance, durability, and compatibility with other materials or systems. Mr. Smith works frequently with WJE's laboratories and has developed a number of test programs to assess construction materials.

Prior to joining WJE, Mr. Smith served as a vice president with 3D/International (3D/I), a program and construction management firm. He was also a materials engineer with Law Engineering and Environmental Services, Inc., and worked at Southwestern Laboratories, Inc., a geotechnical and construction materials testing firm.

REPRESENTATIVE PROJECTS

Construction Materials

- Riverfront Thirteen-Foot "Horseshoe" Concrete Tunnel - Dallas, TX: Assessment of the condition of 1,400-foot, thirteen-foot diameter, 1930s concrete tunnel for use in a redevelopment program
- Alvarado Junior High School - Alvarado, TX: Investigation of cracked cement-based and epoxy-based terrazzo floor systems
- Rowlett Sanitary Sewer Main - Rowlett, TX: Investigation of hydrogen sulfide corrosion of ductile iron pipe forced main and gravity system
- Vernon Newsom Stadium - Mansfield, TX: Investigation of gypsum-based handrail anchorage system
- Eagle 35 Warehouse - Fort Worth, TX: Investigation of slab hygroscopic salt accumulation resulting in slab moisture recurrence
- Alta Left Bank - Fort Worth, TX: Investigation of exterior cladding fiber cement panel cracking
- River Bend Villas - Fort Worth, TX: Investigation of premature deterioration of clay brick masonry screen walls and building cladding

Masonry

- Jones AT&T Stadium, Texas Tech University - Lubbock: Investigation of cast stone exterior cladding
- Laredo Federal Courthouse - Laredo, TX: Investigation of limestone cladding distress
- Apartment Complex - Grapevine, TX: Investigation of adhered manufactured stone veneer system, including in situ shear bond testing
- Cleburne High School - Cleburne, TX: Investigation of and repair design for the failed CMU veneer anchorage system
- First Baptist Church - Stephenville, TX: Investigation of 1920s cast stone distress

Pavement Investigation

- Cottonwood Valley - Irving, TX: Investigation of concrete pavement distress, design of repairs, and replacement for three-hundred-acre residential development
- Ford Motor Company Arizona Proving Ground - Yucca, AZ: Investigation of distress of asphalt pavement at twenty-six-acre vehicle dynamic testing area
- Tampa Harbour Yacht Club - Tampa, FL: Investigation of distressed concrete launch slab pavement at the high-load, multilevel dry storage boat barn
- Burns Motors - McAllen, TX: Investigation of rehabilitated asphalt pavement
- West Fourth Street - Taylor, TX: Litigation support regarding asphalt municipal pavement

Repair and Rehabilitation

- Old Dallas High School - Dallas, TX: Investigation of historic concrete, reinforcing steel, cast iron, and wood and repair design support for the adaptive reuse of the early 1900s school
- The Montane - Dallas, TX: Investigation and design of repairs to below-grade parking garage walls
- Exall Dam Pedestrian Bridge - Highland Park, TX: Repair design of a 1940s steel bridge supported on top of concrete dam
- Hackberry Creek - Irving, TX: Repair design of privately maintained residential concrete pavement network