

Brian D. Richards, P.E.
Principal, Mechanical Engineer, Plumbing Engineer

PROFESSIONAL EXPERIENCE

Mr. Richards is experienced in the design of complex mechanical systems required to meet a multitude of challenges, and he excels at achieving even the most stringent energy efficiency guidelines. He has served in lead positions for major projects including the Cowgirl Museum and National Hall of Fame, the Tarrant County Law Center, and the Tarrant County College District Downtown Campus, and the expansion of the Kimbell Art Museum.

PROJECT EXPERIENCE

Educational Facilities:

- **Tarrant County College District Downtown Campus, Fort Worth, TX** - Principal In Charge of mechanical, electrical, plumbing, and fire protection engineering as well as lead mechanical engineer for a new 489,000 square foot addition to campus that will span the Trinity River and includes 13 buildings that will house classrooms, laboratories, a library, a bookstore, and an auditorium. This included the design of the largest building on campus, the new 80,000 square foot Allied Health Nursing facility. The project was designed to LEED Silver requirements.
- **FWISD Southwest High school Band Hall Renovation and Addition, Fort Worth, Texas** - Mechanical engineer for the new 12,005 square foot state-of-the-art band hall and renovation of 5,220 square foot existing band hall. The system was integrated with the acoustical requirements to provide quality sound.
- **University of North Texas, Environmental Science Building - Denton, Texas** - Project manager responsible for mechanical, electrical, plumbing, fire protection, structural and civil engineering design for the 80,000 square foot facility that housed laboratories, classrooms, an auditorium, and an atrium. An ice storage system was designed to reduce air conditioning energy costs.
- **University of North Texas Murchison Performing Arts Center - Denton, Texas:** Mechanical engineer and project manager for this new 72,500 square foot Performing Arts center. The facility included the 19,200 square foot 1,100 seat Winspear Performance Hall, the 6,300 square foot 400 seat Lyrics Theater, box office, offices, and support spaces.
- **University of North Texas Osteopathic Medical School Parking Garage - Fort Worth, Texas** - Project manager and mechanical engineer for the design of a multi-story parking structure.
- **University of North Texas, Music and Fine Arts Building - Denton, Texas** - Project manager responsible for mechanical, electrical, plumbing, fire protection, structural and civil engineering design for the 68,000 square foot facility. Design lead for the mechanical systems that included two chillers and six air handlers designed to serve performance and symphony halls. The systems were integrated with the acoustical requirements of each hall to provide recording quality sound levels.

YEARS EXPERIENCE 24

EDUCATION

BS, Mechanical Engineering,
The University of Utah

REGISTRATIONS

Professional Engineer (Mech.)

Alabama	New Mexico
Arizona	New York
California	Ohio
Florida	Oklahoma
Georgia	Pennsylvania
Illinois	South Carolina
Kansas	Tennessee
Maryland	Texas
Michigan	Utah
Mississippi	Virginia
Missouri	

ORGANIZATIONS

ASHRAE
ACEC

REFERENCES

Mr. David Phillips
Assistant Director - Facilities
Management
Tarrant County, Texas
(817) 884-3344

Mr. David Hoelke
Director of Physical Plant
Administration
Tarrant County College District
(817) 515-6480

Ms. Vicki Dickerson
President
The Projects Group
(817) 339-7219

- **Texas Woman's University, Redbud Theater - Denton, Texas** - Principal In Charge for the total renovation of existing space into a black box theater with lobby, rehearsal space, and scene shop. The facility included a 150-seat auditorium. Construction was completed in 2007 and cost was within budget.

Wellness Centers and Related Structures:

- **Shady Oaks Country Club - Clubhouse/Fitness Center - Fort Worth, TX** - Principal In Charge of the mechanical engineering for a new 38,000 square foot clubhouse that features a fitness center, men's and women's locker rooms, a golf pro-shop, a banquet hall, dining area, and kitchen.
- **Roanoke Recreation Center - Roanoke, TX** - Principal In Charge of mechanical engineering for a new 38,000 square foot recreation center that has a 3,600 square foot weight room, an aerobics room, two racquetball courts, two full-sized basketball courts, several classrooms, and a game room.
- **Shady Oaks Country Club Fitness Center - Fort Worth, TX** - Principal In Charge of mechanical engineering for a new 17,000, \$10,000,000 fitness center that included work-out rooms, exercise equipment rooms, offices and locker rooms.

Museum Projects:

- **Kimbell Art Museum Expansion, Fort Worth, TX** - Lead mechanical engineer for the design of the new 96,000 square foot Kimbell Art Museum expansion. The project is expected to cost \$75,000,000.
- **National Cowgirl Museum and Hall of Fame, Fort Worth, TX** - Principal In Charge for the design of mechanical, electrical, plumbing and fire protection systems for a 34,000 square foot museum that included a grand rotunda, interactive exhibits, a multi-purpose theater, a research library, a gift shop, and an exhibit restoration area. Air conditioning system design was critical to meeting the criteria for temperature, humidity, and sound levels throughout the facility. The construction cost of the project was \$7,500,000.
- **Sid Richardson Museum of Western Art, Fort Worth, TX** - Responsible for the design of mechanical, electrical, plumbing and fire protection systems to provide museum quality environments for the basement, gallery, gift shop and second floor Sid Richardson Foundation offices.
- **Casa Manana Theatre, Fort Worth, TX** - Provided mechanical engineering for the design of a new lobby addition and renovation of the existing performance auditorium. The project included the large toilet rooms that comply with the Texas potty parity requirements.

Municipal and Government Buildings:

- **City of Fort Worth Convention Center Master Plan - Fort Worth, TX** - Principal In Charge for preliminary engineering studies to establish design criteria and assisted in the preparation of preliminary cost estimates for the renovation and major expansion of the Tarrant County Convention Center.
- **Tarrant Law Center - Fort Worth, Texas** - Master planning services project manager for the mechanical, electrical, and plumbing engineering services for

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this \$47,000,000 project in conjunction with David M. Schwarz / Architectural Services, Inc. Also served as lead mechanical engineer for the design portion of the new four-story family courts facility with a budget of \$48,000,000. The project included 19 courtrooms, judges' offices, and offices for the district clerk and domestic relations departments.

- **Collin County Justice Center - McKinney, TX** - Mechanical engineering design for new two story addition to and existing justice facility and renovation of approximately 125,000 square feet of space in the existing facility.
- **Building 1720, NAS Ft. Worth - Joint Reserve Base, TX** - Served as the lead mechanical engineer for a major renovation and expansion to a 15,000 square foot SCIF facility that included a two-compartment SCIF.
- **Carswell Air Force Base, Fort Worth, TX** - Designed building HVAC systems, including renovations to B-52 nose docks to convert them to maintenance and storage hangars for smaller aircraft. The designs included enhancement and modifications to HVAC systems in nine buildings and the design of new systems for five other buildings. System designs included single zone, multi-zone, VAV, vehicle and welding exhaust systems, general ventilation, and clean rooms.

Other Relevant Projects:

- **Reata Restaurant, Fort Worth, TX** - Project Manager and mechanical engineer for the renovation and expansion of the existing Caravan of Dreams into a new Reata Restaurant that includes a Prep Kitchen, a Main Kitchen, and a Serving Kitchen. The restaurant is on three floors and provides seating for 300 people.
- **Ashton Hotel, Fort Worth, Texas** - Mechanical engineering for the design of a new 39-room luxury hotel with meeting rooms, bar, and dining facilities.
- **Whites Chapel United Methodist Church, Southlake, TX** - Mechanical engineering for a new 51,000 square foot sanctuary with choir room and offices. The sanctuary was designed to performance hall criteria using extremely low air velocity and sound attenuators on the supply and return air ductwork. Construction of the \$7,500,000 facility was completed in 2002.
- **MCI Switch Facilities** - Sites include: Longview, TX; Salt Lake City, UT; Tampa and Miami, FL; Greensboro, NC. Responsible for mechanical design for the facilities including the design of redundant air conditioning systems, plumbing systems and fire sprinkler systems.
- **Miller Brewing Company, Fort Worth, TX** - Served as project manager and lead mechanical engineer for the design of a central door heating system serving ten truck docks per unit. The design included the relocation and revisions to existing fire protection system piping. The system was controlled and monitored via the use of PLC's and an existing management system.

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