



## **MARSHALL ENGINEERING CORPORATION**

**RAYFORD R. MARSHALL, P.E.**

**PRESIDENT**

**PROJECT ROLE – PRINCIPAL IN-CHARGE**

### **EDUCATIONAL BACKGROUND**

- Master of Mechanical Engineering, University of Houston, 1982
- Bachelor of Science, Mechanical Engineering, Texas A&M University, 1974

### **PROFESSIONAL REGISTRATION**

- Professional Engineer: TX

### **PROFESSIONAL AND BUSINESS AFFILIATIONS**

- National Society Professional Engineers
- Texas Society Professional Engineers (TSPE)
- Association for Architects and Engineers (AAE)
- American Society of Mechanical Engineers (ASME)

### **PROFESSIONAL BACKGROUND**

Mr. Marshall has over 30 years of experience, serving as a Project Professional, Design Engineer, Project Manager, and Controls Specialist. Has participated in and led various project teams in engineering, procurement and construction of various private, commercial, and industrial sectors. Mr. Marshall has extensive experience in managing projects ranging up to \$200 million dollars in construction cost. Key technical strengths include Mechanical Engineering, HVAC, Piping, Cost / Schedule Control, and System Design. Organizational strengths include planning, organizing, directing and evaluating.

### **RELEVANT PROJECT EXPERIENCE**

#### **North Harris Montgomery Community College District- Montgomery College, The Woodlands, Texas**

Prime MEP Contractor for Lone Star College System. Engineered and Desined replacement of Variable Speed Drives (VSD) at Montgomery Community College Campus. Total Cost \$ 200,000.

#### **Lone Star College Sytem- North Harris College, Houston, Texas**

Engineering and Design services associated with air handler replacement, chill water replacement and Variable Speed Drives replacement. Total Cost \$ 300,000

**Texas Southern University- New School of Public Affairs Building, Houston, Texas**

Mechanical, Electrical, and Plumbing engineering for an 82,000-sq. ft. classroom, laboratory, and office complex. Total cost \$15,000,000.

**City of Houston – Southwest Environmental service center, Houston, Texas**

Mechanical, Electrical and Plumbing engineering for a 20,000-sq. ft. City of Houston Household Waste reprocessing center. The facility has been given an “H” (Hazardous) classification and is designed to contain flammables, combustibles, poisons and oxidisers. The facility employs enhanced ventilation, monitoring, and qualifies for LEED certification. Total cost \$2,700,000.

**Texas Southern University- Lanier East & West Dormitory, Houston, Texas**

Mechanical, Electrical, and Plumbing design including new information technology network. Redesign of chilled/hot water Hydraulic Systems. Complete HVAC, Piping, and Hydraulic design was required to upgrade their existing utility systems. Total Cost \$750,000.

**Prairie View A&M University- Bandfield Relocation, Prairie View, Texas**

Construction of regulation size football field complete with earthwork, landscaping, director's stand, and other amenities. This project is part of an Open-Ended contract with Prairie View A&M University. Total cost \$250,000.

**Texas Southern University- Steam/Condensate System Upgrade, Houston, Texas**

Mechanical design for 55lb Steam generator and distribution system. Scope included revamp of campus-wide condensate collection system. Total cost \$1,700,000.

**Angelo State university- Student Dining Hall, San Angelo, Texas**

Complete Mechanical, electrical and Plumbing demolition and design of student dining hall including branded food concepts. Total cost \$1,300,000.

**Wallip Development – Wallip Senior Residences – Houston, Texas**

Mechanical, Electrical, and Plumbing Engineering for a 60,000-sq. ft. four story apartment complex. The facility included eighty 900-sq. ft. dwelling residences, utility support, laundry facilities, office facilities, and retail lease spaces. The living space that was designed is consistent with DOD standards. Total Cost \$5,000,000.

**Texas A&M University – TAMU PA 36 – College Station, Texas**

Lighting analysis and design for TAMU 36 Reconstruction Project. Scope included field analysis of existing lighting, photometric analysis of existing conditions and design of new lighting to meet IES standards for parking lots. Total Cost \$ 200,000.

**METRO Transit Authority – North Corridor – Houston, Texas**

Engineering and Design services associated with installation of lighting, power and plumbing for Construction Stage 1 (Hogan to Boundary/Fulton, IH-610 to Dorchester) for the Metro Transit Authority North Corridor. The scope includes Mechanical, Electrical and Plumbing design for the transit. Total Cost \$ 500,000,000.

**City of Houston- Gregory School African American Library- Houston, Texas**

Complete Mechanical, Electrical and Plumbing engineering The African American Library (AAL) at the Gregory School project. This project consists of the historical restoration of an existing 26,000 for SF two-level building constructed in 1926 and a new 10,000 sq. ft. Black Box Theater. Total Cost \$10,000,000.

### **Texas A&M University – Stores Renovation – College Station, Texas**

Complete Mechanical, Electrical and Plumbing renovations of a 25,000 sq. ft. storage space into Library Storage, complete Mail services and Administrative Offices. Total Cost \$1,000,000.

### **Houston Independent School District – Tijerina Elementary School, Houston, Texas**

Mechanical, Electrical, Plumbing design and engineering for a new two story library / classroom building. The total sq. ft. of the classroom building is 24,000 and the library is 3,500. The building addition consisted of classrooms, restrooms, library, offices, mechanical rooms and related facilities. Total cost \$8,000,000.

### **Texas Southern University- New School of Public Affairs Building, Houston, Texas**

Mechanical, Electrical, and Plumbing engineering for an 82,000-sq. ft. classroom, laboratory, and office complex. Total cost \$15,000,000.

### **City of Houston Parks Department – Houston, Texas**

Mechanical, Electrical and Plumbing renovation to 5 City of Houston Parks. These include facilities at Gutierrez Park, Clinton Park, Joplin Park. Revisions included additions to site lighting; installation of covered pavilions, and modifications to support facilities. Total Cost \$250,000.

### **Port Arthur Independent School District – Port Arthur, Texas**

Engineering and Project Management for the major renovation of two Elementary Schools and one Jr. High School. Project involved complete MEP renovation of facilities. Total Cost \$20,000,000.

### **Blinn College – Brenham, Texas**

Engineering and consulting for the replacement of a 500 ton centrifugal chiller. Project involved the installation of a temporary chiller for the interim service. Total Cost \$400,000

### **Port of Houston – Houston, Texas**

Engineering and Construction Management for the installation of 2-125 ton chillers on the roof of the Port Administration Building. Project involved increase in efficiency and operating flexibility for chillers located on the roof of the 3 story building. Total Cost \$ 1,000,000

### **Harris County Annex 44 – Houston, Texas**

Mechanical, Electrical, and Plumbing engineering and design for the renovation of a 15,000 sq. ft. office facility on the 16<sup>th</sup> floor of the Annex Building. Total Cost \$540,000

### **Eastside Church of God in Christ – Tucson, Arizona**

Mechanical, Electrical, and Plumbing engineering and design for a 70,000 sq. ft. worship facility. The facility includes a 2,000 seat sanctuary, classrooms, offices, fellowship hall, and support facilities. Total cost \$15,000,000.

### **Summit Christian Center – San Antonio, Texas**

Mechanical, Electrical, and Plumbing engineering and design for a 120,000 sq. ft. worship facility. The facility includes an 8,000 seat sanctuary, classrooms, commercial kitchens, offices, fellowship hall, and support facilities. Total Cost \$20,000