



Pickett, Kelm & Associates, Inc.
Consulting Structural Engineers

2745.doc



Ronald Reagan Elementary School

PROJECT LOCATION:

CEDAR PARK, TEXAS

PROJECT OWNER: LEANDER ISD

ARCHITECT: O'CONNELL ROBERTSON

GENERAL CONTRACTOR:

AMERICAN CONSTRUCTORS, INC.

COMPLETED: AUGUST 2009

CONSTRUCTION COST:

\$19,979,000



PROJECT DESCRIPTION:

Pickett, Kelm & Associates provided structural engineering services for this 111,250 square foot elementary school facility in Cedar Park, Texas. The building is modeled after LISD's Westside Elementary School. The building is configured in a "U" shape with classroom pods at each end. One pod is two-story in height and one is one-story in height. Mechanical platforms, with a total area of approximately 6,500 square feet, are provided above the floor levels for the support of HVAC and electrical equipment. Roofs consist of a combination of pitched metal and low sloping membranes. The school houses classrooms, offices, storage rooms, special program rooms, library, cafeteria and multi-purpose rooms for pre-kindergarten, kindergarten and first through fifth grade students.

The project utilizes a combination of exterior insulated and interior uninsulated load-bearing tilt-up concrete panels. The use of tilt-up panels eliminated the need for exterior columns and minimized interior column requirements, which maximized the project architect's flexibility to design and lay out interior spaces. The panels also allowed a high level of structural framing efficiency.

Roof framing consists of pitched and low-sloping roofs supported by structural metal deck, sloped parallel chord and gabled steel joists and a combination of tilt-up panels, girders and columns. Mechanical platforms over the classroom floors, and second floor framing consists of composite slabs supported by composite steel framing. Lateral resistance to wind loads at the classroom pods is provided by braced steel frames.

Canopies around the building consist of exposed, galvanized tubular steel framing.

Foundations consist of ground-supported floor slabs, and grade beams, acting as continuous strip footings, bearing on limestone.

The exterior tilt-up panels are finished with a combination of paint and concrete stains.

