



Pickett, Kelm & Associates, Inc.  
Consulting Structural Engineers

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# Swenson Farms Bridge

**PROJECT LOCATION:**  
PFLUGERVILLE, TEXAS

**PROJECT OWNER:**  
TRAMMEL CROW RESIDENTIAL

**CIVIL ENGINEER:**  
HUFFCUT & ASSOCIATES

**GENERAL CONTRACTOR:**  
CAPITAL EXCAVATION

**PROJECT COMPLETION:**  
2003

**CONSTRUCTION COST:**  
\$610,000

## PROJECT DESCRIPTION:

Pickett, Kelm & Associates, Inc. provided structural design of a four-lane bridge in Pflugerville, Texas.

The bridge consists of three spans of 55 feet, for a total bridge length of 165 feet. The bridge includes a 6.5 foot minimum width sidewalk on one side of the roadway and a 10.5 foot minimum width hike and bike path on the other side, for a total deck width of 70 feet.



In order to clear the 100-year flood elevation using the proposed roadway profile, prestressed concrete box beams with a 6" slab were selected, minimizing the required depth of the superstructure. The roadway was designed with a horizontal curve, but box beam construction dictates a straight bridge, so variable-width sidewalks were provided. The substructure consists of cast-in-place concrete bents and abutments, skewed to the creek but placed normal to the bridge, supported by drilled shafts founded in limestone.

Vertical abutment walls were considered, but they would have been 11 to 13 feet high, so concrete riprap slope protection was provided at each abutment instead. A C203 railing was selected for use.