NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

# RECEIVED 2280 SEP - 6 2007 NAT. REGISTER OF HISTORIC PLACES NATIONAL PARK SERVICE

**CODE:** 493

**1. NAME OF PROPERTY** 

HISTORIC NAME: Mueller Bridge OTHER NAME/SITE NUMBER: AA03-65-001; Bridge at McAlister Crossing

2. LOCATION

STREET & NUMBER:CR 337 over Cibolo CreekCITY OR TOWN:La VerniaSTATE:TexasCODE:CODE:TXCOUNTY:Wilson

NOT FOR PUBLICATION: N/A VICINITY: X ZIP CODE: 78121

Date

Myust 31, 2007

#### 3. STATE/FEDERAL AGENCY CERTIFICATION

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this ( $\underline{x}$  nomination) (\_\_\_\_\_\_ request for determination of eligibility) meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ( $\underline{x}$  meets) (\_\_\_\_\_\_ does not meet) the National Register criteria. I recommend that this property be considered significant (\_\_\_\_\_\_ nationally) ( $\underline{x}$  statewide) ( $\underline{x}$  locally). (\_\_\_\_\_\_ See continuation sheet for additional comments.)

Signature of certifying official

State Historic Preservation Officer, Texas Historical Commission State or Federal agency and bureau

In my opinion, the property \_\_\_\_\_ meets \_\_\_\_ does not meet the National Register criteria. (\_\_\_ See continuation sheet for additional comments.)

Signature of commenting or other official

State or Federal agency and bureau

4. NATIONAL PARK SERVICE CERTIFICATION I hereby certify that this property is: Signature of the Keeper Date of Action entered in the National Register See continuation sheet. determined eligible for the National Register See continuation sheet determined not eligible for the National Register removed from the National Register other (explain):

### USDI/NPS NRHP Registration Form Mueller Bridge, La Vernia vicinity, Wilson County, Texas

#### **5. CLASSIFICATION**

**OWNERSHIP OF PROPERTY:** Public-local

**CATEGORY OF PROPERTY: Structure** 

NUMBER OF RESOURCES WITHIN PROPERTY:	CONTRIBUTING	NONCONTRIBUTING
	0	0 buildings
	0	0 SITES
	1	0 structures
	0	0 OBJECTS
	1	0 TOTAL
	0 0 1 0 1	0 sites 0 structure <u>0 objects</u>

### NUMBER OF CONTRIBUTING RESOURCES PREVIOUSLY LISTED IN THE NATIONAL REGISTER: 0

NAME OF RELATED MULTIPLE PROPERTY LISTING: Historic Bridges of Texas MPS

#### **6. FUNCTION OR USE**

HISTORIC FUNCTIONS: TRANSPORATION/road-related = bridge

CURRENT FUNCTIONS: TRANSPORATION/road-related = bridge; NOT IN USE

### 7. DESCRIPTION

ARCHITECTURAL CLASSIFICATION: OTHER: Warren polygonal chord truss

MATERIALS: FOUNDATION CONCRETE; METAL/steel WALLS ROOF OTHER METAL/steel (structure); WOOD (deck)

NARRATIVE DESCRIPTION (see continuation sheets 7-5 through 7-6).

# National Register of Historic Places Continuation Sheet

Section 2,7 Page 5

Mueller Bridge La Vernia vicinity, Wilson County, Texas

#### **SECTION 2: LOCATION**

The bridge is located in Wilson County, Texas on CR 337, lying east and southwest on Cibolo Creek situated between CR 342 and FM 539.

#### **SECTION 7: DESCRIPTION**

The three-span pony truss bridge is 252 feet long, with the middle span measuring 108 feet in length with seven panels, and the two end spans measuring 72 feet each in length with five panels each. The winged-back abutments on the east and southwest ends of the bridge are concrete. The metal truss members are connected with rivets and, in some locations, bolts. The approaches to the bridge are asphalt pavement, but the asphalt has deteriorated significantly in the years the road has been closed and not maintained. The spans rest on concrete pilings in metal casings. The wood deck is 18 feet wide. The bridge manufacturer's plaque has been missing for many years.

No major alterations have been made to the bridge; although the bridge was closed to vehicular traffic in 1988. Minor alterations include the replacement of the wood deck in 1988, shortly before the bridge was closed.<sup>1</sup> Also, according to a County employee, the pilings on the bridge had to be reset in the 1960s due to rising water in the creek, which "shifted some of the upright supports under the west end of the bridge causing the structure to bend and creating a dip in the bridge."<sup>2</sup> However, there is no visible evidence of alterations to the pilings as a result of this work.

Although the bridge is in no danger of intentional demolition, it has suffered damage from vandalism, flooding, and neglect. Intentionally-set fires have damaged the wood deck in two locations and the frequent flooding of Cibolo Creek has caused damage to the concrete abutments. Two major floods, one in 1973 and one in 1998, caused especially severe erosion along the banks.<sup>3</sup> Part of the northeast abutment and the bank adjacent to it has been washed out as a result. The damage is so severe that the bridge is in danger of immediate collapse and requires measures to shore the bridge until the bank and abutments can be stabilized.<sup>4</sup> A lack of maintenance since the bridge's closure has allowed for rust to cause corrosion of the steel structural members.

<sup>&</sup>lt;sup>1</sup> Shirley Grammer, "Bridge at McAlister Crossing, AKA Mueller Bridge, CR 337, Wilson County, Texas, Constructed 1915." Texas Historical Commission, Recorded Texas Historic Landmark files, n.d., p. 13.

<sup>&</sup>lt;sup>2</sup> Ibid., p. 12.

<sup>&</sup>lt;sup>3</sup> Ibid., p. 11.

<sup>&</sup>lt;sup>4</sup> Stephen Graham, Principal Engineer, San Antonio River Authority, to Lisa Hart, Texas Department of Transportation, 19 April 2005.

# National Register of Historic Places Continuation Sheet

Section 7 Page 6

Mueller Bridge La Vernia vicinity, Wilson County, Texas

## **General Specifications (bridge)**

- Truss type: Warren polygonal truss
- No. Truss spans: 3
- Truss span length: 108 (1), 72 (2)
- Roadway Width: 24'
- Deck width: 17.8'
- Overall length: 252'
- Deck type: wood
- Piers/Interior bents: concrete piers in metal casings
- Abutments/End Bents: concrete abutments

### 8. STATEMENT OF SIGNIFICANCE

### APPLICABLE NATIONAL REGISTER CRITERIA

- X A PROPERTY IS ASSOCIATED WITH EVENTS THAT HAVE MADE A SIGNIFICANT CONTRIBUTION TO THE BROAD PATTERNS OF OUR HISTORY.
  - **B** PROPERTY IS ASSOCIATED WITH THE LIVES OF PERSONS SIGNIFICANT IN OUR PAST.
- X C PROPERTY EMBODIES THE DISTINCTIVE CHARACTERISTICS OF A TYPE, PERIOD, OR METHOD OF CONSTRUCTION OR REPRESENTS THE WORK OF A MASTER, OR POSSESSES HIGH ARTISTIC VALUES, OR REPRESENTS A SIGNIFICANT AND DISTINGUISHABLE ENTITY WHOSE COMPONENTS LACK INDIVIDUAL DISTINCTION.
  - **D** PROPERTY HAS YIELDED, OR IS LIKELY TO YIELD INFORMATION IMPORTANT IN PREHISTORY OR HISTORY.

**CRITERIA CONSIDERATIONS: N/A** 

AREAS OF SIGNIFICANCE: Engineering; Transportation

**Period of Significance:** 1915

SIGNIFICANT DATES: 1915

SIGNIFICANT PERSON: N/A

CULTURAL AFFILIATION: N/A

ARCHITECT/BUILDER: Alamo Construction Company of San Antonio

NARRATIVE STATEMENT OF SIGNIFICANCE (see continuation sheets 8-7 through 8-10).

9. MAJOR BIBLIOGRAPHIC REFERENCES

### **BIBLIOGRAPHY** (see continuation sheet 9-11).

PREVIOUS DOCUMENTATION ON FILE (NPS): N/A

- \_ preliminary determination of individual listing (36 CFR 67) has been requested.
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey #
- recorded by Historic American Engineering Record #

## PRIMARY LOCATION OF ADDITIONAL DATA:

- x State historic preservation office (Texas Historical Commission)
- x Other state agency (Texas Department of Transportation)
- \_Federal agency
- Local government
- \_University
- \_ Other -- Specify Repository:

# National Register of Historic Places Continuation Sheet

Section 8 Page 7

Mueller Bridge La Vernia vicinity, Wilson County, Texas

### STATEMENT OF SIGNIFICANCE

The Mueller Bridge at Cibolo Creek on County Road 337 between CR 342 and FM 539 in Wilson County, was built in 1915, and is significant for embodying the defining characteristics of a Warren pony polygonal truss bridge and being an important transportation structure. The bridge was part of a road improvement effort by the Commissioners of Wilson County in that year and created a much needed crossing over the Cibolo Creek at the location of an existing low-water crossing that was an important transportation route for local settlers. The bridge meets Criterion C in the area of Engineering, at the state level of significance, and Criterion A in the area of Transportation, at the local level of significance.

### Warren Truss Bridges

The Warren truss was patented by English engineer James C. Warren in 1848.<sup>5</sup> Warren truss forms are composed of diagonal members connecting the two chords; creating a series of equilateral triangles where the members act in compression and tension. In the earlier truss forms, each member received different levels of stress, therefore member sizes differed. In Warren trusses, each member equally bears stress, so the member sizes are the same. The Warren truss form dominated twentieth century bridge design, especially among state highway departments.<sup>6</sup> In the early twentieth century Warren was the preferred truss type for pony trusses, and Warren pony trusses were especially good candidates for experimentation, including the introduction of a polygonal top chord, which allowed for the construction of longer spans.<sup>7</sup>



Figure 1: Typical elevation, polygonal top chord Warren truss<sup>8</sup>

 <sup>&</sup>lt;sup>5</sup> Barbara Stocklin, "Historic Bridges of Texas, 1866–1945." National Register Multiple Property Documentation Form, 1995, p. E-13.
 <sup>6</sup> National Research Council, "A Context for Common Historic Bridge Types," prepared for the National Cooperative Highway Research Program, Transportation Research Council, by Parsons Brinckerhoff and Engineering and Industrial Heritage. NCHRP Project 25-25, Task 15, October 2005.

<sup>&</sup>lt;sup>7</sup> James L. Cooper, *Iron Monuments to Distant Posterity: Indiana's Metal Bridges, 1870–1930* (Indianapolis: Indiana Historical Bureau, 1987), p. 91; also Stocklin, "Historic Bridges of Texas, 1866–1945," p. E-13.

<sup>&</sup>lt;sup>8</sup> National Research Council, "A Context for Common Historic Bridge Types."

## National Register of Historic Places Continuation Sheet

Section 8 Page 8

Mueller Bridge La Vernia vicinity, Wilson County, Texas

#### **Mueller Bridge**

The 1915 Mueller Bridge is a good example of late county highway development before the formation of the Texas State Highway Department in 1917. The commissioners of Wilson County, Texas, authorized the construction of the bridge on 14 May 1915, along with four other bridges in the county: a bridge over Ecleto Creek on Caddo and Pandora Road (Caddo Bridge), a bridge over Electo Creek on Pandora and Stockdale Road (Pandora Bridge), a bridge over Alum Creek two miles south of Sutherland Springs (Alum Creek Bridge), and a bridge over the draw on Zook Road near Floresville (Zook Bridge). The county commissioners accepted the bid from the Alamo Construction Company of San Antonio, Texas, to construct all five of these bridges at a cost of \$14,630.00.<sup>9</sup> In order to raise the funds to construct the bridges, the commissioners levied a tax of fifteen cents per one hundred dollars on all taxable property in the county.<sup>10</sup> The bridge at McAlister Crossing was completed by November, 1915 at a cost of \$8,650.00.<sup>11</sup> Clearly, this bridge required significantly more material and labor than the other four, since each of the other bridges cost less than \$2,000 each to construct.

While not considered a major Texas bridge builder, the Alamo Construction Company submitted bids for the construction of several metal truss bridge projects in Texas between 1914 and 1918. A number of engineers were associated with the company during this period, including a G.H. Bradford and an H.L. Miles; according to a 1916 San Antonio city directory, a C.G. Sheely was the firm's president. These city directories provide an address for the Alamo Construction Company's downtown office location, but the listings do not mention a foundry, fabrication plant, or warehouse.<sup>12</sup> Sheely later became the president of another San Antonio company, Monarch Engineering, in the late 1920s, as indicated by city directories. Sanborn maps of the period show office buildings for Monarch's address at 1146 W. Laurel Street, but no foundry, fabrication plant, or warehouse structures are indicated.<sup>13</sup>

The bridge has two historic names: the older "Bridge at McAlister Crossing" and the later "Mueller Bridge." The older name is derived from the McAlister family who, in the 1850s, settled the land on the west side of Cibolo Creek where the bridge is situated today.<sup>14</sup> The later name refers to the Mueller family, who purchased land on the east and west sides of Cibolo Creek near the bridge in 1906 and 1915; these properties are still in the Mueller family today.<sup>15</sup>

<sup>&</sup>lt;sup>9</sup> Commissioners' Court, Wilson County, Texas, Minutes of the Commissioners' Court Meeting, 15 May 1915, p. G-529.
<sup>10</sup> Ibid., p. G-532.

<sup>&</sup>lt;sup>11</sup> Grammer, "Bridge at McAlister Crossing," pp. 3-4.

<sup>&</sup>lt;sup>12</sup> Stocklin, "Historic Bridges of Texas, 1866–1945," p. E-23.

<sup>&</sup>lt;sup>13</sup> Ibid. Stocklin cites *Jules A. Appler's City Directory of Greater San Antonio* (San Antonio: J.A. Appler) for information on the Alamo Construction Company during the years 1914 to 1918. For information on Monarch Engineering, Stocklin cites *John F. Worley Directory Company's San Antonio City Directory* (Dallas: John F. Worley Directory Company) for the years 1927–1928 and 1929–1930, and *Sanborn's Fire Insurance Map, San Antonio, Texas, 1911* (revised) (New York: Sanborn Map Company, 1911 with revisions to 1951), volume 1, sheet 55.

<sup>&</sup>lt;sup>14</sup> Grammer, "Bridge at McAlister Crossing," p. 6.

<sup>&</sup>lt;sup>15</sup> Ibid., p. 9.

## National Register of Historic Places Continuation Sheet

Section 8 Page 9

Mueller Bridge La Vernia vicinity, Wilson County, Texas

Due to the need for access to La Vernia and the railroad by settlers on the east side of the Cibolo and the need for a more convenient route to the Sutherland Springs–Seguin road by settlers on the west side of the Cibolo, there was a low-water crossing at this approximate location until the construction of this bridge. The construction of the bridge, which was located on old Road #62 (CR 337), finally created a safe, all-weather crossing between the old Sutherland Springs–Seguin Road (FM 539) and the old Chihuahua Road (CR 342).<sup>16</sup> Old Road #62 dates to 1892 or earlier, as it is referred to in commissioners' court minutes in that year. In 1892, the road ran through the property of D.P. Hale, whose land bordered the McAlister property, but by 1896 that portion of the Hale property was sold to the McAlister family. In 1908 the commissioners permitted the owner of the La Vernia telephone exchange to construct a line of telephone poles along Road #62 and crossing the Cibolo at McAlister Crossing.<sup>17</sup> After the construction of the Mueller Bridge, the 1893 old Seguin Road (Road #31, now FM 775) bridge over the Cibolo was removed and the Mueller Bridge became the best route from La Vernia to Seguin until a new bridge could be constructed for the old Seguin Road.<sup>18</sup>

According to the Texas Department of Transportation's Historic Bridge Inventory, the bridge survives as one of two multi-span Warren polygonal top chord bridges in Texas, and it is considered significant as a rare example of its type in the state. This bridge was determined eligible for listing in the National Register of Historic Places at the state level of significance for Engineering as part of the State Historic Bridge Inventory, a statewide study of 1200 metal truss bridges. The bridge also received a Recorded Texas Historic Landmark Designation in 2005 and a marker was dedicated on 3 December 2005. No major alterations have been made to the bridge, although it was closed to vehicular traffic in 1988 with plans to bypass it with a new bridge yet to be constructed.

<sup>16</sup> Ibid., pp. 6-7. <sup>17</sup> Ibid., pp. 7-8.

<sup>18</sup> Ibid., p. 11.

## National Register of Historic Places Continuation Sheet

Section 9 Page 10

Mueller Bridge La Vernia vicinity, Wilson County, Texas

#### BIBLIOGRAPHY

Cooper, James L. Iron Monuments to Distant Posterity: Indiana's Metal Bridges, 1870–1930. Indianapolis: Indiana Historical Bureau, 1987.

Commissioners' Court, Wilson County, Texas. Minutes of Commissioners' Court Meeting, 15 May 1915.

Graham, Stephen. Letter to Lisa Hart, 19 April 2005.

- Grammer, Shirley. "Bridge at McAlister Crossing, AKA Mueller Bridge, CR 337, Wilson County, Texas, Constructed 1915." Prepared for the Texas Historical Commission, Recorded Texas Historic Landmark files, n.d.
- National Research Council, "A Context for Common Historic Bridge Types." Prepared for the National Cooperative Highway Research Program, Transportation Research Council, by Parsons Brinckerhoff and Engineering and Industrial Heritage. NCHRP Project 25-25, Task 15, October 2005.
- Stocklin, Barbara. "Historic Bridges of Texas, 1866–1945." National Register Multiple Property Documentation Form, 1995.

10. GEOGRAPHICAL DATA

	s than one acre	
UTM REFERENCES 1.		<u>rthing</u> 47273N
VERBAL BOUNDARY DESCRI		acompasses the entire structure from the extreme limit ing walls, to the extreme limit of the south wing walls.
BOUNDARY JUSTIFICATION:	The boundary includes all	of the elements of the 1915 bridge.
11. FORM PREPARED BY (with	n assistance from Rachel I	eibowitz, THC historian)
NAME/TITLE: Shirley Gram		
ORGANIZATION:	<b>DATE:</b> August 1, 2006	
STREET & NUMBER: P.O. B	ox 234	<b>Теlephone:</b> (830) 947-3176
CITY OR TOWN: La Vernia	STATE: Texas	ZIP CODE: 78121
ADDITIONAL DOCUMENTATIO	DN	
CONTINUATION SHEETS		
CONTINUATION SHEETS MAPS		
	tion sheet Photo-11 throug	gh Photo-12)
MAPS	tion sheet Photo-11 throug	gh Photo-12)
MAPS PHOTOGRAPHS (see continua	tion sheet Photo-11 throug	gh Photo-12)
MAPS PHOTOGRAPHS (see continua ADDITIONAL ITEMS		
MAPS PHOTOGRAPHS (see continua ADDITIONAL ITEMS PROPERTY OWNER	s (Marvin Quinney, Count	

Page 4

OMB Approval No. 1024-0018

NPS Form 10-900-a (8-86)

## United States Department of the Interior National Park Service

# National Register of Historic Places Continuation Sheet

Section Photo Page 11

Mueller Bridge La Vernia vicinity, Wilson County, Texas



Photo 1: Camera facing southwest

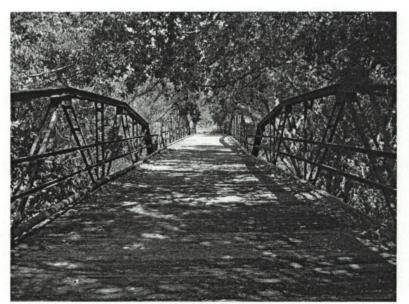


Photo 2: Camera facing northeast.

OMB Approval No. 1024-0018

## United States Department of the Interior National Park Service

# National Register of Historic Places Continuation Sheet

Section Photo Page 12

Mueller Bridge La Vernia vicinity, Wilson County, Texas



### Photo 3: Bridge pier.



Photo 4: Northeast abutment.

## National Register of Historic Places Continuation Sheet

Section Photo Log Page 13

Mueller Bridge La Vernia vicinity, Wilson County, Texas

Mueller Bridge AA03-65-001; Bridge at McAlister Crossing CR 337 over Cibolo Creek LaVernia, Wilson County, Texas Photograph by Gregory Smith 2002 Negative on file at the Texas Historical Commission Roadway and railing of bridge, camera facing east Photo 1 of 4

Mueller Bridge AA03-65-001; Bridge at McAlister Crossing CR 337 over Cibolo Creek LaVernia, Wilson County, Texas Photograph by Gregory Smith 2002 Negative on file at the Texas Historical Commission Western abutment and deck structure of bridge, camera facing west Photo 2 of 4

Mueller Bridge AA03-65-001; Bridge at McAlister Crossing CR 337 over Cibolo Creek LaVernia, Wilson County, Texas Photograph by Gregory Smith 2002 Negative on file at the Texas Historical Commission Elevation of bridge, camera facing north Photo 3 of 4

Mueller Bridge AA03-65-001; Bridge at McAlister Crossing CR 337 over Cibolo Creek LaVernia, Wilson County, Texas Photograph by Gregory Smith 2002 Negative on file at the Texas Historical Commission Substructure and railing of bridge, camera facing north Photo 4 of 4

#### UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Mueller Bridge NAME :

MULTIPLE Historic Bridges of Texas MPS NAME :

STATE & COUNTY: TEXAS, Wilson

 
 DATE RECEIVED:
 9/06/07
 DATE OF PENDING LIST:
 9/24/07

 DATE OF 16TH DAY:
 10/09/07
 DATE OF 45TH DAY:
 10/20/07
 10/20/07 DATE OF WEEKLY LIST:

REFERENCE NUMBER: 07001094

REASONS FOR REVIEW:

APPEAL:	N	DATA PROBLEM:	N	LANDSCAPE:	N	LESS THAN 50 YEARS:	N
OTHER:	N	PDIL:	N	PERIOD:	N	PROGRAM UNAPPROVED:	N
<b>REQUEST:</b>	N	SAMPLE:	N	SLR DRAFT:	N	NATIONAL:	N

COMMENT WAIVER: N

RETURN REJECT 10.16.07 DATE ACCEPT

ABSTRACT/SUMMARY COMMENTS:

dntered in the Jational Register

RECOM./CR	ITERIA
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REVIEWER\_\_\_\_\_ DISCIPLINE\_\_\_\_\_

TELEPHONE

DATE

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.



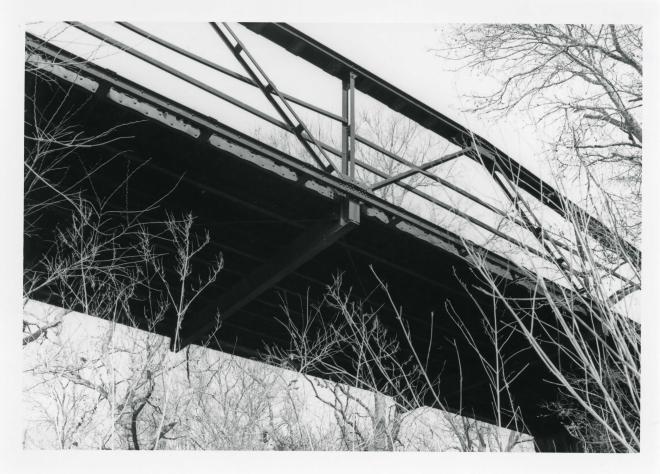
Mueller Bridge AA03-65-001; Bridge at McAlister Crossing CR 337 over Cibolo Creek La Vernia, Wilson County, Texas Photograph by Gregory Smith 2002 Negative on file at the Toxas Historical Commission Roadway and railing of bridge, camera facing east Photo 1 of 4



ALO3-65-001; Bridge at McAlister Crossing CR 337 over Cibolo Creek LaVernia vicinity, Wilson County, Texas Photograph by Gregory Smith 2002 Negative on file at the Toxas Historical Commission Western abutment and deck structure of bridge, camera facing west Photo 2 of 4



Mudlor Bridge AA03-65-001; Bridge at McAlistor Crossing CR 337 over Cibolo Creek Lavernia, Wilson County, Texas Photograph by Gregory Smith 2002 Nogative on file at the Texas Historical Commission Elevation of bridge, camera facing north Photo 3 of 4



Mueller Bridge AA 03-65-001; Bridge at McAlister Crossing CR 337 over Cibelo Creek La Vernia, Wilson County, Texas Photograph by Ovegory Smith 2002 Nogative on file at the Texas Historical Commission Substructure and railing of bridge, camera facing north Photo 4 of 4





TEXAS HISTORICAL COMMISSION Rick Perry · Governor

John L. Nau, III · Chairman

F. Lawerence Oaks . Executive Director

The State Agency for Historic Preservation

TO:	Linda McClelland National Register of Historic Places	
FROM:	Rachel Leibowitz, Historian Texas Historical Commission	

RE: Mueller Bridge, LaVernia, Wilson County, Texas

DATE: September 5, 2007

• The following materials are submitted regarding Mueller Bridge:

X	Original National Register of Historic Places form
	Resubmitted nomination
	Multiple Property nomination form
X	Photographs
X	USGS map
	Correspondence
	Other:

COMMENTS:

- \_\_\_\_ SHPO requests substantive review
- \_\_\_\_ The enclosed owner objections (do\_\_) (do not\_\_) constitute a majority of property owners Other: