

**United States Department of the Interior
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM**



1. NAME OF PROPERTY

HISTORIC NAME: State Highway 23 Bridge at the Clear Fork of the Brazos River
OTHER NAMES/SITE NUMBER: US 283 Bridge at the Clear Fork of the Brazos River; SF0125-04-019

2. LOCATION

STREET & NUMBER: US 283, 2.3 mi. south of Throckmorton Co. line **NOT FOR PUBLICATION:** N/A
CITY OR TOWN: Albany **VICINITY:** X
STATE: Texas **CODE:** TX **COUNTY:** Shackelford **CODE:** 417 **ZIP CODE:** 76430

3. STATE/FEDERAL AGENCY CERTIFICATION

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this 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 meets does not meet the National Register criteria. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments.)

Laurie J. Jurnell
Signature of certifying official

9-6-96
Date

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

Date

State or Federal agency and bureau

4. NATIONAL PARK SERVICE CERTIFICATION

I hereby certify that this property is:

- 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): _____

Edson H. Beall
Signature of the Keeper

Date of Action
10-10-90

5. CLASSIFICATION

OWNERSHIP OF PROPERTY: public-State

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

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

NAME OF RELATED MULTIPLE PROPERTY LISTING: Historic Bridges of Texas, 1866-1945

6. FUNCTION OR USE

HISTORIC FUNCTIONS: TRANSPORTATION/road-related (vehicular)

CURRENT FUNCTIONS: TRANSPORTATION/road-related (vehicular)

7. DESCRIPTION

ARCHITECTURAL CLASSIFICATION: Other: Parker through truss bridge

MATERIALS: FOUNDATION substructure: concrete piers and bents

WALLS N/A

ROOF N/A

OTHER superstructure: steel truss

NARRATIVE DESCRIPTION (see continuation sheets 7-1 through 7-3)

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National Register of Historic Places
Continuation Sheet

Historic Bridges of Texas
State Highway 23 Bridge at the Clear Fork of the Brazos River
Shackelford County, Texas

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Description:

The State Highway 23 Bridge at the Clear Fork of the Brazos River consists of a single 150-foot Parker through truss span and 10 concrete girder approach spans (see Photographs 1 and 2). The bridge serves traffic on US 283, former State Highway (SH) 23, in northern Shackelford County. Shackelford County is in North Central Texas, where the Rolling Prairie Region and the Western Cross Timbers Region meet. The bridge is about two miles south of the Throckmorton County line, just north of Fort Griffin State Park. It links the park and the surrounding ranches with Albany and Throckmorton, the county seats for Shackelford and Throckmorton counties (see Figure 1).

For the truss span, the Texas Highway Department (THD) chose the THD T20-150 design for a riveted Parker through truss, one of many standard designs the Bridge Division developed. The truss span rests on piers specially designed by the Bridge Division. These reinforced concrete piers consist of straight cylindrical columns in a dumbbell configuration. The bridge's 10 approach spans are supported on a series of concrete bents. These spans feature Type D open concrete railing which has been shortened. Truss railing consists of two rows of 6-inch deep steel channels 18 inches apart (see Figure 2).

In 1929, Maney & Alley constructed the Clear Fork bridge under contract to THD. In the late 1940s, THD maintenance forces shortened the concrete approach railing to about half its original height. Sometime later, they replaced the portal bracing with a steel beam. No other major repairs have been performed on the Clear Fork bridge. As such, it retains integrity of design, materials and workmanship. The bridge and its surroundings appear relatively unchanged since 1929, maintaining integrity of location, setting, feeling and association. Although no projects are currently planned for this bridge, its BRINSAP sufficiency rating as of August 1995 is 35.8, making it eligible for replacement under the federal Highway Bridge Replacement and Rehabilitation Program (HBRRP).

GENERAL SPECS

TRUSS TYPE: Parker through
THD STD. DESIGN: T20-150
NO. TRUSS SPANS: 1
TRUSS SPAN LENGTH: 150'
ROADWAY WIDTH: 20'
DECK WIDTH: 23'
APPROACH SPANS: 10 - 30'6" DG-6 girder spans
OVERALL LENGTH: 457'

SUPERSTRUCTURE

TRUSS DEPTH: 28' 0"
TRUSS PANELS: 8 - 18'9" panels
TOP CHORD & END POSTS: 2 channels w/ cover plate and lacing
BOTTOM CHORD: 2 angles w/ batten plates
VERTICAL POSTS: 2 channels w/ lacing
DIAGONAL MEMBERS: 2 angles w/ batten plates
DECK TYPE: concrete

SPECIAL FEATURES

BRIDGE PLAQUE: none
APPROACH RAILING: Type D concrete railing (shortened)
OTHER: none

SUBSTRUCTURE

PIERS/INTERIOR BENTS: concrete piers and bents
THD STD. DESIGN: n/a
ABUTMENTS/END BENTS: concrete end bents
THD STD. DESIGN: n/a

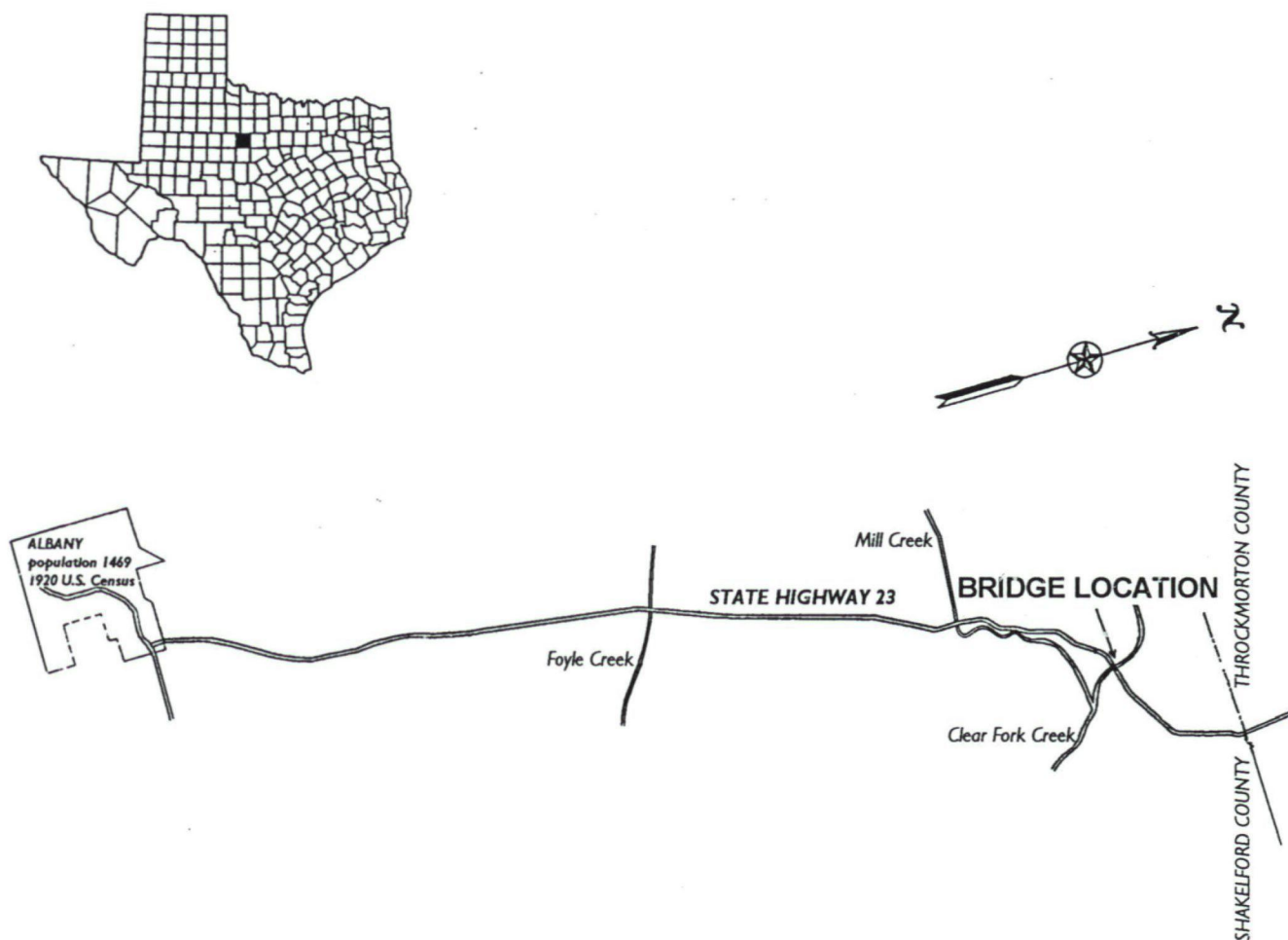
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Historic Bridges of Texas
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Shackelford County, Texas

Figure 1. Map of SH 23 between Albany and the Throckmorton County line, with the location of the Clear Fork bridge as shown in the 1928 plans.



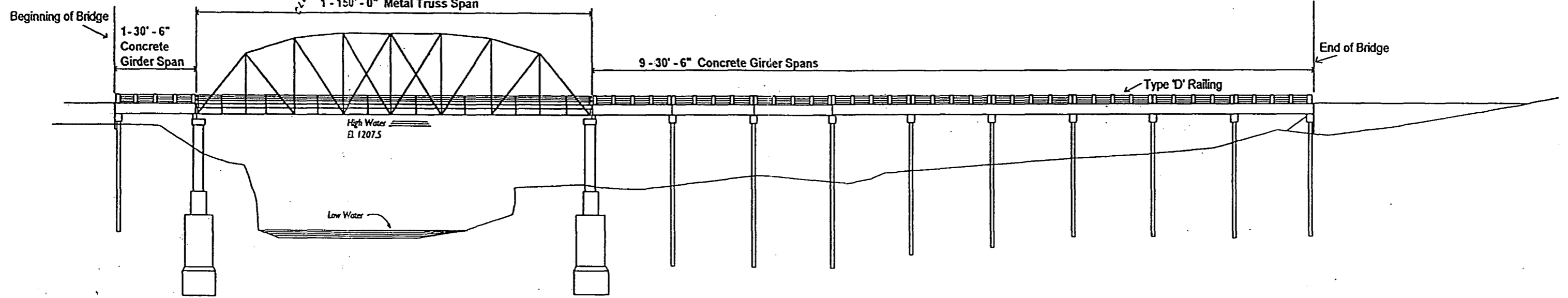
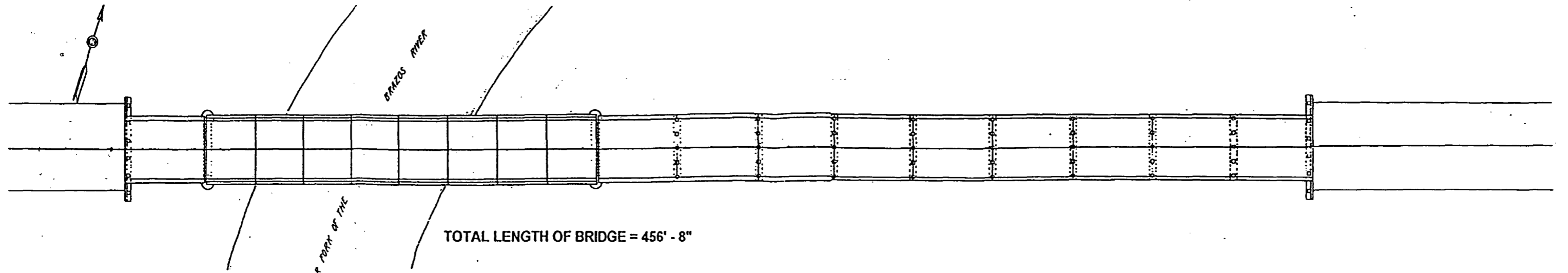
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Figure 2. Elevation of State Highway 23 Bridge at the Clear Fork of the Brazos River as shown in the 1928 plans.



8. STATEMENT OF SIGNIFICANCE

APPLICABLE NATIONAL REGISTER CRITERIA

- 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.
- 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 VALUE, 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

PERIOD OF SIGNIFICANCE: 1929

SIGNIFICANT DATES: 1929

SIGNIFICANT PERSON: N/A

CULTURAL AFFILIATION: N/A

ARCHITECT/BUILDER: Bridge Designer: Texas Highway Department
Truss Fabricator: Virginia Bridge & Iron Company of Roanoke, Virginia
Bridge Builder: Maney & Alley of Oklahoma City, Oklahoma

NARRATIVE STATEMENT OF SIGNIFICANCE (see continuation sheets 8-4 through 8-5)

9. MAJOR BIBLIOGRAPHIC REFERENCES

BIBLIOGRAPHY (see continuation sheet 9-6)

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:

- State historic preservation office (*Texas Historical Commission*)
- Other state agency (*Texas Department of Transportation*)
- Federal agency
- Local government
- University
- Other -- Specify Repository:

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Statement of Significance:

Built in 1929, the State Highway 23 Bridge at the Clear Fork of the Brazos River is the earliest extant representative of a standard design Parker through truss bridge in Texas. As such, it represents the early use of THD standard designs for Parker through truss bridges and is significant for embodying the defining characteristics of a THD truss bridge. The bridge meets National Register Criterion C in the area of Engineering at a state level of significance.

The Clear Fork bridge was built on SH 23 (now US 283), which originated in the Texas Hill Country and extended north into Wilbarger County and Oklahoma, passing through the Shackelford and Throckmorton County seats. The bridge is adjacent to Fort Griffin, which was established in 1867. A town of the same name sprang up around the military outpost and enjoyed prosperity until 1881, when the fort was abandoned. The community's population subsequently declined, becoming no more than the settlement of scattered ranches it is today. At the time the bridge was built, the route was designated SH 23. By about 1930, the route was designated SH 23/US 283, and by 1942 the original SH 23 designation had been dropped. The abandoned fort became a state park in 1936 and was entered into the National Register of Historic Places in 1971.

The Clear Fork bridge, along with a concrete relief structure (widened in 1961), was constructed as part of a larger THD project to provide roadway grading and drainage structures for SH 23 in Shackelford County between Albany and the Throckmorton County line. THD prepared the plans and, because it was a federal aid project, the Bureau of Public Roads (BPR) reviewed and approved them. The THD resident engineer in Albany supervised the construction, which engineers from both THD and BPR inspected.

THD bridge engineers chose the T20-150 design for the truss span of the Clear Fork bridge. Designed about 1927, the T20-150 is one of 25 different THD standard designs the Bridge Division developed for Parker through truss spans; only 11 of these designs are represented by Texas bridges today. The Clear Fork bridge is the only surviving example of the T20-150 design, and is the earliest Parker through truss bridge in Texas built to a standard design. In addition, the Clear Fork bridge features dumbbell piers with straight cylindrical columns; typically columns are battered.

The Texas Highway Commission opened bids for the construction of the Clear Fork bridge and the relief structure on December 17, 1928. After reviewing the five bids submitted, the commission awarded the contract to Maney & Alley of Oklahoma City, who submitted the low bid of about \$52,000. The commission had held an earlier bidding session for the rest of the work on SH 23, i.e., roadway grading and concrete drainage structures. The commission awarded that contract to E.F. Bucy & Son and C.T. Childs of Rising Star, Texas. The Virginia Bridge & Iron Company of Roanoke, Virginia, fabricated the truss span for the Clear Fork bridge, along with four other T20-150 truss spans for bridges elsewhere in Texas, at their Birmingham, Alabama, plant.

Construction of the bridge began on February 23, 1929, and was completed on November 23 of that year. Work on the grading and concrete structures took place between July and September 1929. During

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construction of the bridge, the contractor encountered several difficulties that caused delays and extra expenditures. The height of the interior bents on the eastern approach concerned THD engineers, who requested that struts or web walls be incorporated into each of these piers for increased rigidity. During the same period, a rise in the river resulted in the washout of the false work supporting the truss span. As the riveting had not been completed on the lower chord, much of the camber designed to keep the bridge from sagging was lost. Excavation of the blue shale bedrock also caused great difficulties for the contractor because it could not be removed by the methods specified in the contract and had to be removed by more expensive means. Finally, the THD division (now district) engineer did not accept the bridge upon completion because one of the girder spans had insufficient bearing area on the bent cap. THD eventually reversed this decision, believing it preferable to accept the bridge in that condition than try to repair the problem.

As a result of these complications, the contractor, Maney & Alley, took a loss on the project. All five of the vendors who had supplied materials or services (including the Virginia Bridge & Iron Company) had to file liens against the contractor in order to guarantee payment. This allowed THD to withhold payment from the contractor and distribute it directly to the vendors. The total cost of the bridge came to about \$73,000, of which \$13,000 was paid by the state, \$25,000 by the county, and the rest from federal aid. The project had a time overrun of 15½ days.

Upon completion of the project, THD undertook two more projects on the same section of SH 23 in Shackelford County. These projects, implemented from 1929 to 1931, entailed placing a caliche gravel base course on the roadway and surfacing it with asphalt. Structures were not affected by these projects.

THD has implemented two major alterations to the Clear Fork bridge. Sometime after 1944, THD maintenance forces shortened the bridge's concrete approach railing. This was done as part of a THD campaign promoting bridge safety initiated by DeWitt C. Greer, then State Highway Engineer. In 1944, he released Administrative Circular 3-44 encouraging districts to shorten Type C and Type D concrete bridge railing. Evidently, the standard railing height of just over 3 feet made bridges appear narrow, causing drivers to veer toward the center of the roadway and sometimes collide. By shortening the railing, the illusion of the narrow bridge relative to the approach roadway was lessened. In addition, the decreased railing height allowed truck overhangs to clear the railings. The modification was performed by sawing off the top of each concrete post, removing the upper row of railing and casting a new top on each post. An additional modification to the Clear Fork bridge involved the portal bracing, which was replaced with a single steel beam placed horizontally across each portal.

The modifications to the railing and portal bracing do not substantially compromise the bridge's integrity. In particular, the railing modification is sympathetic to the original design and the majority of the original material remains. In addition, this alteration represents the first step taken in the evolution toward safer railing design. Modification of the portal bracing is a common occurrence on historic truss bridges, as their low clearance height often results in damage to the portals.

10. GEOGRAPHICAL DATA

ACREAGE OF PROPERTY: less than one acre

UTM REFERENCES	Zone	Easting	Northing	Zone	Easting	Northing
1	14	479910	3643650	3	—	—
2	—	—	—	4	—	—

(— see continuation sheet)

VERBAL BOUNDARY DESCRIPTION (see continuation sheet 10-6)

BOUNDARY JUSTIFICATION (see continuation sheet 10-6)

11. FORM PREPARED BY

NAME/TITLE:	text by Regina A. Lauderdale graphics by Pat St. George	
ORGANIZATION:	Texas Historical Commission/ Texas Department of Transportation	DATE: September 1996
STREET & NUMBER:	Texas Historical Commission P.O. Box 12276	TELEPHONE: 512/463-6094
CITY OR TOWN:	Austin STATE: TX	ZIP CODE: 78711

ADDITIONAL DOCUMENTATION

CONTINUATION SHEETS

MAPS

PHOTOGRAPHS

ADDITIONAL ITEMS

PROPERTY OWNER

NAME Texas Department of Transportation	
STREET & NUMBER 125 East 11th Street	TELEPHONE 512/416-2606
CITY OR TOWN Austin STATE TX	ZIP CODE 78701

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Bibliography:

Shackelford County Survey Committee. *Shackelford County: 1874-1974*. n.p., by the author, 1974.

Texas Highway Department. Administrative Circular No. 3-44, February 29, 1944, located at TxDOT headquarters in Austin.

Texas Highway Department. Plans of Proposed State Highway Improvement. Control-Section-Job No. 0125-04-002, located at TxDOT headquarters in Austin.

Texas Highway Department. Project Correspondence Files. Control-Section-Job No. 0125-04-001, located at TxDOT headquarters in Austin.

Texas Highway Department. Project Correspondence Files. Control-Section-Job No. 0125-04-002, located at TxDOT headquarters in Austin.

Verbal Boundary Description:

The nomination boundaries encompass the complete structure, State Highway 23 Bridge at the Clear Fork of the Brazos River, including the approach spans and concrete approach railing, as well as the ground upon which the structure stands.

Boundary Justification:

The boundary includes all components historically associated with the property.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: State Highway 23 Bridge at the Clear Fork of the Brazos River

MULTIPLE NAME: Historic Bridges of Texas MPS

STATE & COUNTY: TEXAS, Shackelford

DATE RECEIVED: 9/09/96 DATE OF PENDING LIST: 9/24/96
DATE OF 16TH DAY: 10/10/96 DATE OF 45TH DAY: 10/24/96
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 96001106

NOMINATOR: STATE

REASONS FOR REVIEW:

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

COMMENT WAIVER: N

ACCEPT RETURN REJECT 10-10-96 DATE

ABSTRACT/SUMMARY COMMENTS:

RECOM./CRITERIA _____

REVIEWER _____ DISCIPLINE _____

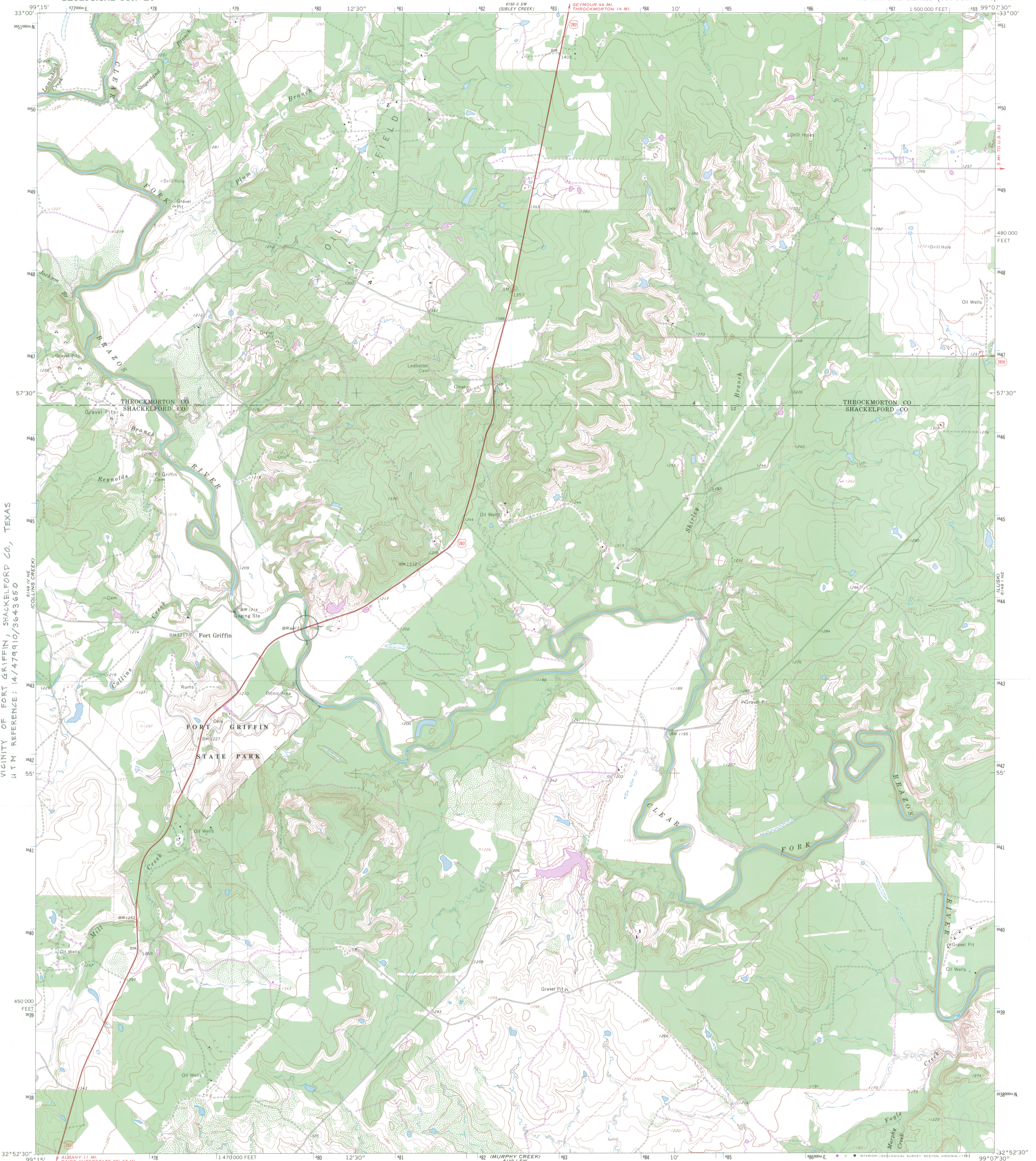
TELEPHONE _____ DATE _____

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

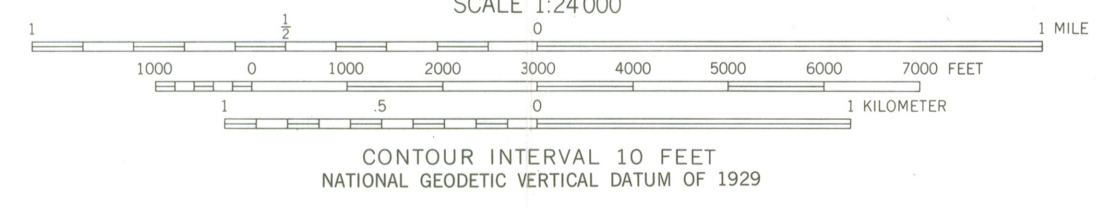
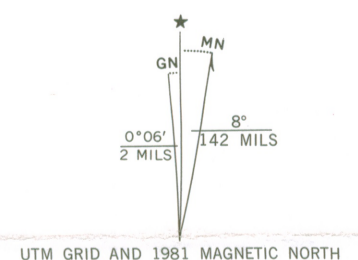




SITE NO: SF0125-04-019
HISTORIC BRIDGES OF TEXAS
SH 23 BRIDGE AT CLEAR FORK OF BRAZOS RIVER
VICINITY OF FORT GRIFFIN, SHACKELFORD CO., TEXAS
UTM REFERENCE: 14/47910/3643650



Mapped, edited, and published by the Geological Survey
Control by USGS and NOS/NOAA
Topography by photogrammetric methods from aerial
photographs taken 1964. Field checked 1965
Polyconic projection. 10,000-foot grid ticks based on Texas
coordinate system, north central zone. 1000-meter
Universal Transverse Mercator grid ticks, zone 14,
shown in blue. 1927 North American Datum. To place
on the predicted North American Datum 1983 move
the projection lines 9 meters south and 33 meters
east as shown by dashed corner ticks
Fine red dashed lines indicate selected fence lines
There may be private inholdings within the boundaries of
the National or State reservations shown on this map
Revisions shown in purple and woodland compiled from
aerial photographs taken 1979 and other sources. This
information not field checked. Map edited 1981



ROAD CLASSIFICATION

Heavy-duty	Light-duty
Medium-duty	Unimproved dirt
U.S. Route	State Route



FORT GRIFFIN, TEX.
N3252.5—W9907.5/7.5
1965
PHOTOREVISED 1981
DMA 6149 1 NW—SERIES V882

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

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