NPS Form 10-900
(Oct. 1990)

OMB No. 10024-0018 1109

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM

1. NAME OF PROPERTY

HISTORIC NAME: State Highway 34 Bridge at the Trinity River
OTHER NAMES/SITE NUMBER: State Highway 34 Bridge at the Trinity River; KF0173-02-008

2. LOCATION

STREET & NUMBER: SH 34 at the Ellis and Kaufman county line **NOT FOR PUBLICATION:** N/A
CITY OR TOWN: Rosser **VICINITY:** X
STATE: Texas **CODE:** TX **COUNTY:** Kaufman **CODE:** 257 **ZIP CODE:** 75157

3. STATE/FEDERAL AGENCY CERTIFICATION

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this _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 _x_ meets __does not meet the National Register criteria. I recommend that this property be considered significant __nationally _x_ statewide __locally. (__See continuation sheet for additional comments.)

Signature of certifying official — Date: 9-6-96

State Historic Preservation Officer, Texas Historical Commission

State or Federal agency and bureau

In my opinion, the property _x_ 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: Signature of the Keeper — Date of Action

√ entered in the National Register — Edson A. Beall — 10.10.96
___ 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): _____

5. CLASSIFICATION

OWNERSHIP OF PROPERTY: public-State

CATEGORY OF PROPERTY: structure

NUMBER OF RESOURCES WITHIN PROPERTY:	CONTRIBUTING	NONCONTRIBUTING
	0	0 BUILDINGS
	0	0 SITES
	3	0 STRUCTURES
	0	0 OBJECTS
	3	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 7-4)

Description:

The State Highway 34 Bridge at the Trinity River consists of a single 150-foot Parker through truss span and 53 steel I-Beam approach spans (see Photographs 1 and 2). Small concrete structures at either end of the main bridge span borrow pits just outside the Trinity River levees (see Photographs 3 and 4). The three structures serve traffic on State Highway (SH) 34 at the Ellis and Kaufman county line. They link Ennis, in Ellis County, with Parvin, Scurry and Kaufman, in Kaufman County (see Figure 1). These counties are in the center of the Blackland Prairie agricultural region of North Central Texas.

For the truss span, Texas Highway Department (THD) engineers chose the THD T22-150 design for a riveted Parker through truss, one of many standard designs developed by the Bridge Division. Truss railing consists of 12-inch deep steel channel rails attached to intermediate and end posts. The truss span rests on reinforced concrete piers consisting of battered cylindrical columns in a dumbbell configuration. The bridge's 53 I-beam approach spans, supported on a series of concrete bents, total 1,556 feet and feature Type L open concrete railing (see Figure 2). The two borrow pit bridges consist of four steel I-beam spans with Type L open concrete railing. The main bridge's eastern entrance features a bronze plaque affixed to the railing end post. In addition to naming the bridge contractor, this plaque identifies the governmental agencies responsible for the project. It reads:

TRINITY RIVER BRIDGE
BUILT IN 1934 BY THE
TEXAS HIGHWAY DEPARTMENT
— * —
UNITED STATES
BUREAU OF PUBLIC ROADS
— * —
STATE HIGHWAY COMMISSION
JOHN WOOD CHAIRMAN
D.K. MARTIN MEMBER
W.R. ELY MEMBER
GIBB GILCHRIST
HIGHWAY ENGINEER
AUSTIN BRIDGE CO.
CONTRACTORS

A water level gaging station operated by the United States Geological Survey (USGS) is attached to the main bridge's east side.

In 1933 and 1934, the Austin Bridge Company built the Trinity River bridge and borrow pit bridges under contract to THD. The Petroleum Iron Works Company fabricated the truss span and the I-beam approach spans. In 1954, THD maintenance forces performed a repair to one bent on the Trinity River bridge. No other major repairs have been performed on these structures. As such, they retain integrity of design, materials and workmanship. The structures and their surroundings appear relatively unchanged

since 1934, maintaining integrity of location, setting, feeling and association. A replacement project, scheduled for late 1996, will result in the removal of the main structure and both borrow pit bridges.

GENERAL SPECS

TRUSS TYPE:	Parker through
THD STD. DESIGN:	T22-150
NO. TRUSS SPANS:	1
TRUSS SPAN LENGTH:	150'
ROADWAY WIDTH:	22'
DECK WIDTH:	25'
APPROACH SPANS:	49 - 28'6" & 4 - 40'0" I-beam spans
OVERALL LENGTH:	1708'

SPECIAL FEATURES

BRIDGE PLAQUE:	yes
APPROACH RAILING:	Type L steel/concrete railing
OTHER:	two borrow pit bridges

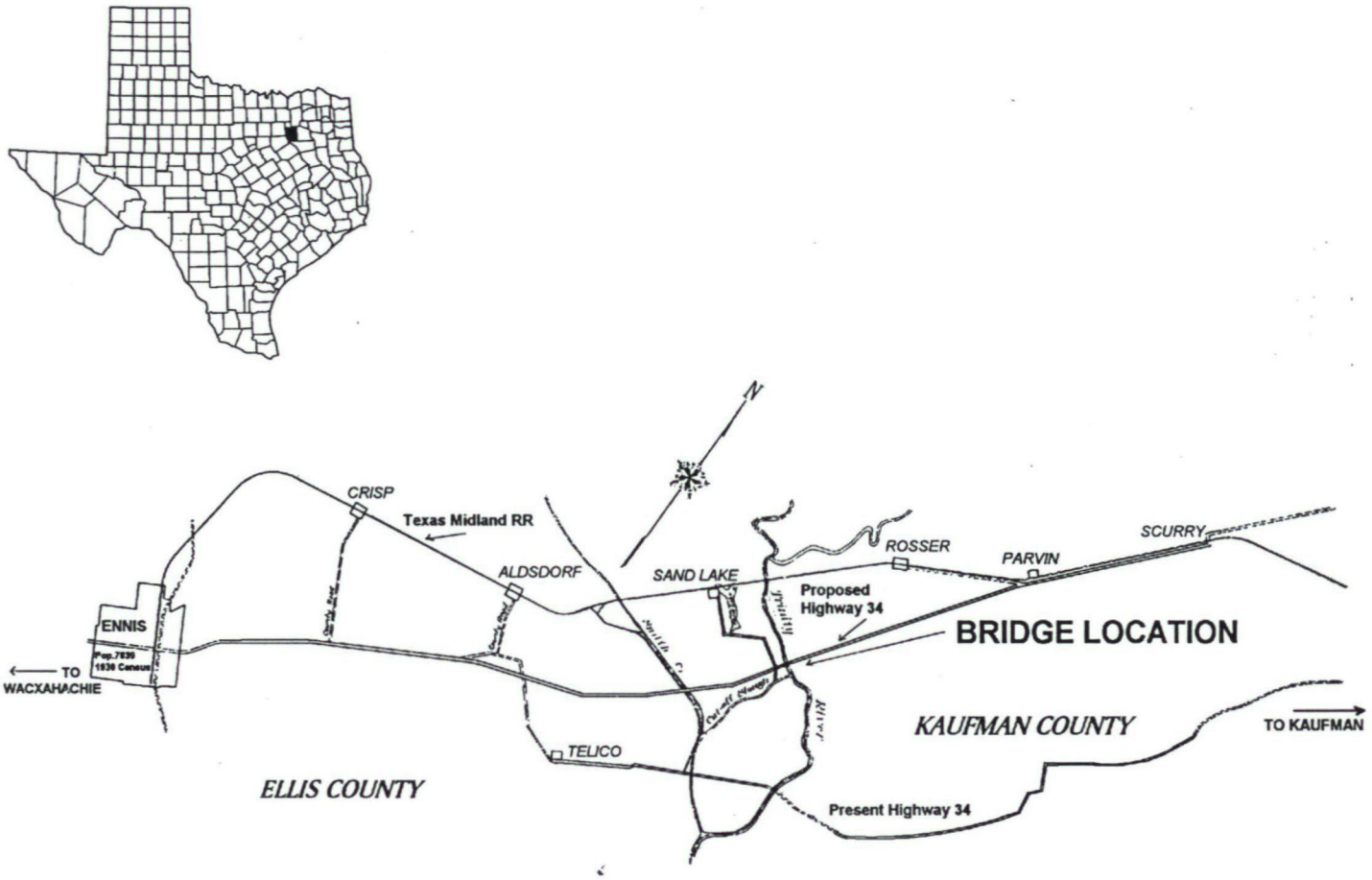
SUPERSTRUCTURE

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

SUBSTRUCTURE

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

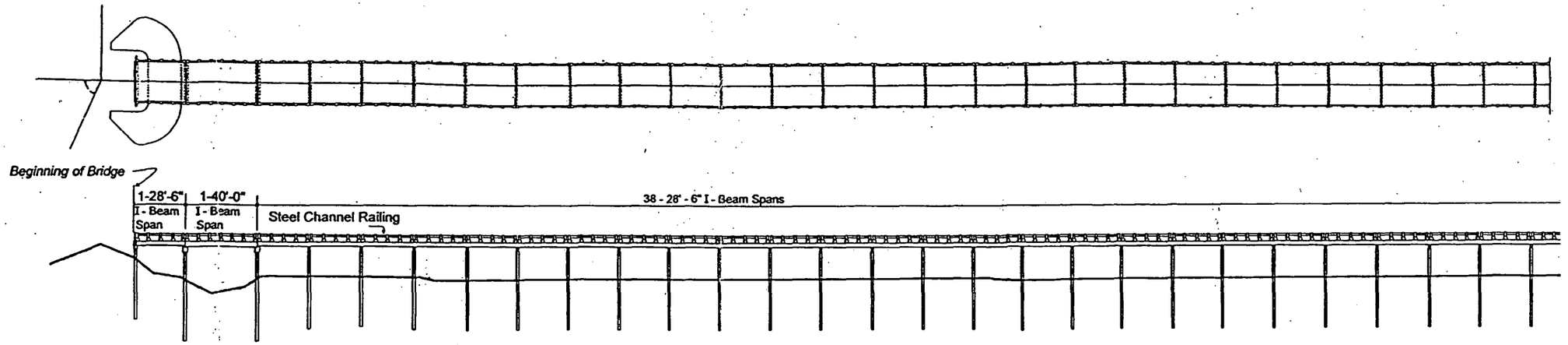
Figure 1. Map of SH 34 between Ennis and Kaufman with the location of the Trinity River bridge as shown in the 1932 plans.

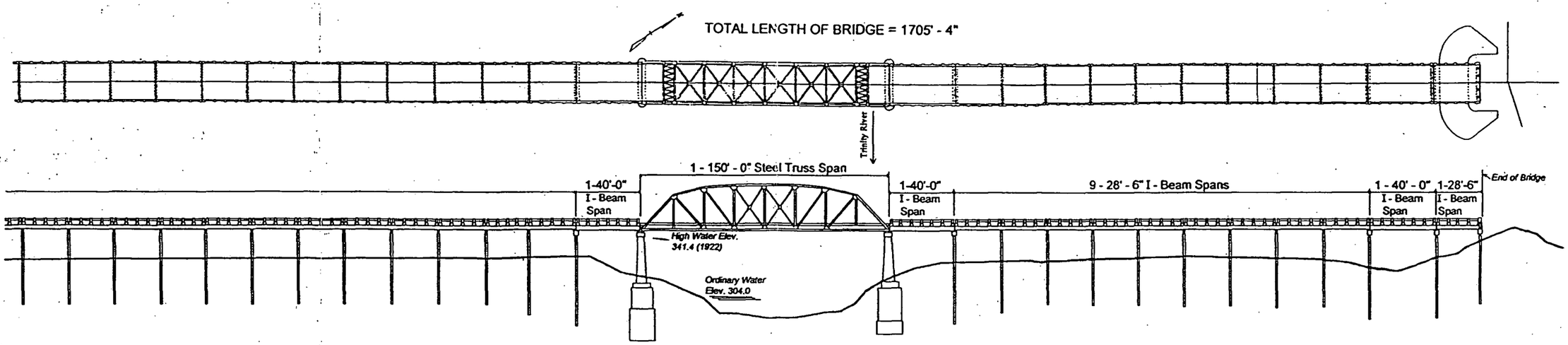


Source: Texas Highway Department, CSJ 0173-02-001, 1932.

Figure 2. Elevation of the Trinity River bridge as shown in the 1932 plans.

Source: Texas Highway Department, CSJ 0173-02-001, 1932.


Beginning of Bridge
1-28'-6"
I - Beam
Span
1-40'-0"
I - Beam
Span
Steel Channel Railing
38 - 28' - 6" I - Beam Spans


TOTAL LENGTH OF BRIDGE = 1705' - 4"
Trinity River
1 - 150' - 0" Steel Truss Span
1-40'-0"
I - Beam
Span
1-40'-0"
I - Beam
Span
9 - 28' - 6" I - Beam Spans
1 - 40' - 0"
I - Beam
Span
1-28'-6"
I - Beam
Span
End of Bridge
High Water Elev.
341.4 (1922)
Ordinary Water
Elev. 304.0

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 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: Transportation (Depression-era Public Works); Engineering

PERIOD OF SIGNIFICANCE: 1933-1934

SIGNIFICANT DATES: 1933-1934

SIGNIFICANT PERSON: N/A

CULTURAL AFFILIATION: N/A

ARCHITECT/BUILDER: Bridge Designer: Texas Highway Department
Truss Fabricator: Petroleum Iron Works Company of Beaumont, Texas
Bridge Builder: Austin Bridge Company of Dallas, Texas

NARRATIVE STATEMENT OF SIGNIFICANCE (see continuation sheets 8-5 through 8-7)

9. MAJOR BIBLIOGRAPHIC REFERENCES

BIBLIOGRAPHY (see continuation sheet 9-8)
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:

Statement of Significance:

The State Highway 34 Bridge at the Trinity River was built from 1933 to 1934 with emergency relief funds. Because of its association with a federal work relief program implemented during the Depression, the bridge meets Criterion A in the area of Transportation (subcategory Depression-era Public Works) at a state level of significance. (Refer to Section F, Associated Property Types, for a discussion on subcategories within an area of significance.) The bridge is also significant for embodying the defining characteristics of a THD truss bridge and therefore meets National Register Criterion C in the area of Engineering at a state level of significance.

The Trinity River bridge was built on SH 34 which formed a loop running west, south and east of Dallas. The route linked Jacksboro, Fort Worth, Waxahachie, Ennis and Kaufman, and continued north through Greenville, Ladonia, Honey Grove, and Telephone into Oklahoma. The majority of the eastern portion of the original route, from Ennis to Honey Grove, is still designated SH 34.

As a National Recovery Secondary (NRS) project, the Trinity River bridge project was funded almost entirely with federal emergency funds authorized under Section 204, Title II, of the National Industrial Recovery Act of 1933 (NIRA). This legislation provided federal monies to supplement state highway funds that the Depression had severely curtailed. By providing additional federal aid, NIRA helped to maintain highway construction spending at pre-Depression levels. The act's primary goal was to boost employment and to establish standards for wages. Texas received nearly $25 million in emergency construction funds under this legislation; the Trinity River bridge was one of 543 Texas emergency projects funded under NIRA.

The bridge was built as part of a larger THD undertaking to reconstruct SH 34 between Ennis and the Kaufman County line on a new location. In addition to the construction of the truss bridge, the project included new roadway grading and concrete drainage structures, including the two borrow pit bridges. The borrow pits had been dug previously to provide earth for forming the Trinity River levees. Two pits were dug for each levee. Rather than haul dirt to the site to fill in the borrow pits, THD decided to construct bridges over them, probably because this was the more economical choice. The main bridge spans the Trinity River bottom as well as the two interior borrow pits. The two additional concrete structures span the exterior borrow pits (see Figure 3).

THD prepared the plans for the project and, because it received federal aid, the Bureau of Public Roads (BPR) reviewed and approved them. Even though plans to develop navigation on the Trinity River above Liberty (northeast of Houston, near the Gulf) were abandoned in 1922, the river fell under the jurisdiction of the War Department as a navigable waterway. As such, THD was required to submit the plans to that agency for its approval.

THD bridge engineers chose the T22-150 design for the truss span of the Trinity River bridge. The T22-150, designed about 1930, is one of 25 THD standard designs the Bridge Division developed for Parker through truss spans; only 11 of these designs are represented by Texas bridges today. The Trinity

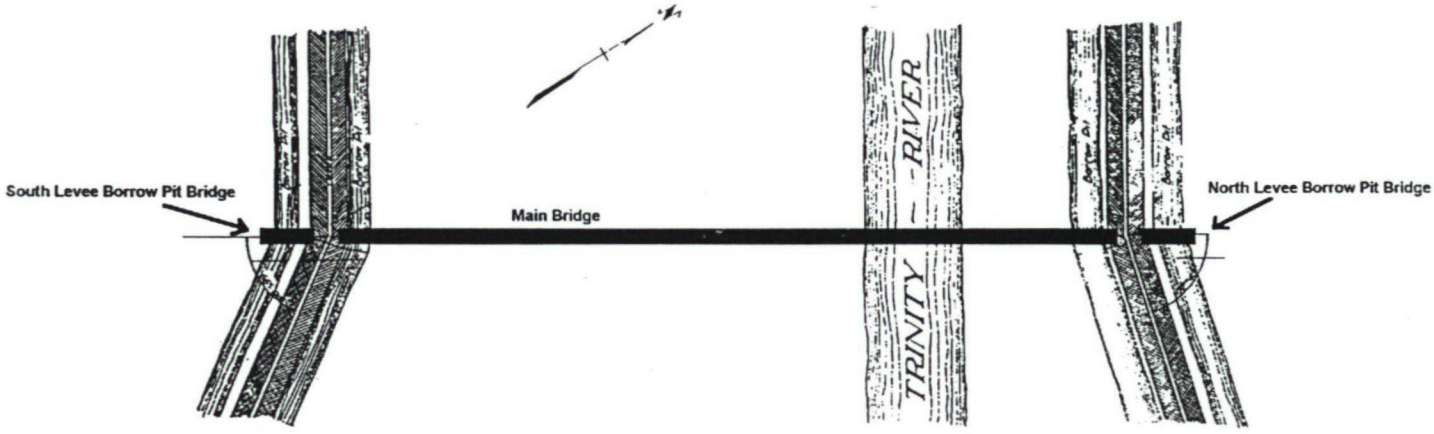
River bridge is one of four examples of the T22-150 standard design surviving in Texas. At just over 1700 feet, the Trinity River bridge is the third longest Parker through truss bridge remaining in Texas and is the earliest of the three. The bridge's 53 I-beam spans, totaling 1,556 feet, provide the second longest approach for a simple truss bridge on a Texas state highway.

The call for bids took the form of a contractor's notice published in local newspapers in early November 1933. In addition to describing the scope of the project, the notice informed bidders of special provisions under NIRA requiring "the use of domestic materials, the selection of labor, hours and conditions of employment, and hand labor methods." Under these provisions, which were implemented to increase employment levels, all carpentry work and painting had to be performed without the use of power tools, such as mechanical saws and electrical drills. THD had also disseminated these provisions in an "Important Notice to all Contractors, Materialmen, Bondsmen and Division Engineers" dated October 5, 1933.

The Texas Highway Commission opened bids for the construction of the Trinity River bridge and borrow pit bridges on November 11, 1933. After reviewing the two bids submitted, the commission awarded the contract to the Austin Bridge Company of Dallas, which submitted the low bid of about $110,000. The Petroleum Iron Works Company of Beaumont fabricated the steel portions of the truss and I-beam spans.

Work on the three bridges began on December 1, 1933, and was completed in November 1934. The THD resident engineer in Ennis supervised the construction, which engineers from both THD and BPR inspected. High water caused some difficulties during the construction of the pier foundations, but the total cost of the three structures was still below $118,000.

Figure 3. Plan view of Trinity River bridge and borrow pit bridges as shown in 1932 plans.



Source: Texas Highway Department, CSJ 0173-02-001, 1932.

10. GEOGRAPHICAL DATA

ACREAGE OF PROPERTY: less than one acre

UTM REFERENCES

	Zone	Easting	Northing		Zone	Easting	Northing
1	14	738510	3590270	3	_	_____	_____
2	_	_____	_____	4	_	_____	_____

(___see continuation sheet)

VERBAL BOUNDARY DESCRIPTION (see continuation sheet 10-8)

BOUNDARY JUSTIFICATION (see continuation sheet 10-8)

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

Bibliography:

Texas Highway Department. Plans of Proposed State Highway Improvement. Control-Section-Job No. 0173-02-001, located at TxDOT headquarters in Austin.

Texas Highway Department. Project Correspondence Files. Control-Section-Job No. 0173-02-001, located at TxDOT headquarters in Austin.

Texas Highway Department. Project Correspondence Files. Control-Section-Job No. 0173-02-002, located at TxDOT headquarters in Austin.

Verbal Boundary Description:

The discontiguous boundaries define three distinct areas. The first area (corresponding to the UTM coordinate listed in Section 10) encompasses the complete structure, State Highway 34 Bridge at the Trinity River, including the approach spans and concrete railing. The second area encompasses the borrow pit bridge 59 feet north of the main bridge's north end. The third area encompasses the borrow pit bridge 60 feet south of the main bridge's south end. The ground upon which these structures stand is included within the appropriate area. The roadway connecting these structures is excluded from the boundaries.

Boundary Justification:

The boundary includes all components historically associated with the property. The roadway between the structures has been excluded from the boundaries because it does not contribute to the significance of the property. Additionally, the roadway lacks integrity of design, materials, workmanship and feeling.

Location:

The State Highway 34 Bridge at the Trinity River is located in both Kaufman (257) and Ellis (139) counties.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: State Highway 34 Bridge at the Trinity River

MULTIPLE NAME: Historic Bridges of Texas MPS

STATE & COUNTY: TEXAS, Kaufman

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: 96001109

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. KF0173-02-008
SH 34 BRIDGE AT TRINITY RIVER
HISTORIC BRIDGES OF TEXAS
KAUFMAN CO., TEXAS
PHOTOGRAPH 1 OF 4


14 FT 9 IN

SITE NO. KF0173-02-008
SH 34 BRIDGE AT TRINITY RIVER
HISTORIC BRIDGES OF TEXAS
KAUFMAN CO., TEXAS
PHOTOGRAPH 2 OF 4

SITE NO. KF0173-02-008
SH 34 BRIDGE AT TRINITY RIVER
NORTH BORROW PIT BRIDGE
HISTORIC BRIDGES OF TEXAS
KAUFMAN CO., TEXAS
PHOTOGRAPH 3 OF 4

SITE NO. KF0173-02-008
SH 34 BRIDGE AT TRINITY RIVER
SOUTH BORROW PIT BRIDGE
HISTORIC BRIDGES OF TEXAS
KAUFMAN CO., TEXAS
PHOTOGRAPH 4 OF 4

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ROSSER QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

SITE NO: KF0173-02-008

HISTORIC BRIDGES OF TEXAS
SH 34 BRIDGE AT TRINITY RIVER
VICINITY OF ROSSER, KAUFMAN CO., TEXAS
UTM REFERENCE: 14/738510/3590270

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1961. Field checked 1963

Polyconic projection. 1927 North American datum
10,000-foot grid based on Texas coordinate system, north central zone
1000-meter Universal Transverse Mercator grid ticks, zone 14, shown in blue

Fine red dashed lines indicate selected fence lines

Areas covered by dashed light-blue pattern are subject to controlled inundation

UTM GRID AND 1963 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

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

ROAD CLASSIFICATION
Heavy-duty
Medium-duty
Light-duty
Unimproved dirt
State Route

TEXAS
QUADRANGLE LOCATION

3296-133

ROSSER, TEX.
N3222.5–W9622.5/7.5
1963
AMS 6748 IV NW–SERIES V882

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA