National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines* for *Completing National Register Forms* (National Register Bulletin 16). Complete each tem by marking 'X' in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter 'N/A'' for not applicable.'' For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

783

OMB No. 1024-0018

MAY 1 3 199

NATIONAL

REGISTER

1. Name of Property historic name Brazoria Bridge other names/site number Brazos River Bridge at Brazoria 2. Location n/a not for publication 332 street & number 0.9 miles east of State Highway 36 on State Hwy n/avicinity city, town Brazoria TX Brazoria code 039 state Texas code county zip code 77422 3. Classification **Ownership of Property** Category of Property Number of Resources within Property Contributing private building(s) Noncontributing public-local district 0 0 buildings X public-State site 0 0 sites 0 public-Federal X structure structures object 0 0 objects 1 0 Total Name of related multiple property listing: Number of contributing resources previously N/A listed in the National Register 0

4. State/Federal Agency Certification

In my opinion, the property I meets I	tional Historic Preservation Act of 1966, as amended, I hereby certify that this on of eligibility meets the documentation standards for registering properties in the neets the procedural and professional requirements set forth in 36 CFR Part 60. does not meet the National Register criteria. See continuation sheet. May 199 Date
In my opinion, the property meets	does not meet the National Register criteria. 🗌 See continuation sheet.
Signature of commenting or other official	Date
State or Federal agency and bureau	
5. National Park Service Certification	intered in the
I, hereby, certify that this property is: entered in the National Register.	Allourpyin 6/14/91
determined eligible for the National Register. See continuation sheet.	
determined not eligible for the National Register.	
removed from the National Register.	
	Signature of the Keeper Date of Action

Historic Functions (enter categories from instructions)		Current Functions (enter categories from instructions)	
Transportation/Road-related	Transp	Transportation/Road-related	
Here Contraction	ALCOLUCION	at the onestimate the	
NATIONAL PROVIDE	2.1. L. <u>21.11.2722</u>	and the second secon	
7. Description		AND	
Architectural Classification (enter categories from instructions)			
the second and the second as the production of the second	foundation .	Concrete piers	
Other: Parker Through Truss Bridge	walls	N/A	
CTITITIS	roof	N/A	
and the second se	other	Steel trusses and guardrails	
		concrete deck	

Describe present and historic physical appearance.

The Brazos River Bridge at Brazoria is a 1,124-foot-long concrete and steel structure with concrete piers, three steel truss spans, and concreteand-steel approaches at each end. The bridge roadway is 24 feet wide and crosses the Brazos River as State Highway 332, just east of Brazoria. The river runs from the northwest to the southeast, toward the Gulf of Mexico, and the bridge is perpendicular to the waterway.

The point where Brazoria and the river meet is but 15 miles away from the Gulf. The region is flat, with coastal soils. Both the Brazos and the San Bernard rivers provide drainage for the county.

The three bridge spans over the river bed consist of Parker through trusses, each approximately 222 feet in length. Broad tapered concrete piers between spans support the trusses. The riveted steel Parker trusses have gently arced top chords each divided by vertical struts into seven sections. At either end of each arc the top chord angles steeply down to the reinforced concrete bridge deck. Diagonal struts resist tension between vertical members that resist compression and brace each truss longitudinally; lattices of smaller struts spanning the roadway between the vertical members brace each truss laterally.

The approaches are concrete and steel girder-and-beam construction. Beginning at the north end of the bridge, there are eight steel I-beam spans, each approximately 31 feet long, followed by one 42 foot long I-beam span. Beginning at the south end of the bridge, there are four steel I-beam spans, also about 31 feet in length, followed by one 42 foot long I-beam span. A concrete pile cap on six pre-cast concrete pilings supports the approaches between each span. The approach decks are of reinforced concrete. The approaches' geometric balustrades are cast concrete vertical piers with two horizontal rails between vertical piers spaced every few feet. The balustrades continue along the main Parker truss spans as protection for the roadway.

National Register of Historic Places Continuation Sheet

Section number 7 Page 1

A builder's plate was placed on the bridge's north approach reading:

FEDERAL EMERGENCY ADMINISTRATION OF PUBLIC WORKS FRANKLIN D. ROOSEVELT President of the United States HAROLD L. ICKES Administrator of Public Works BRAZORIA BRIDGE 1939

In addition, a name tablet was placed below the builder's plate reading:

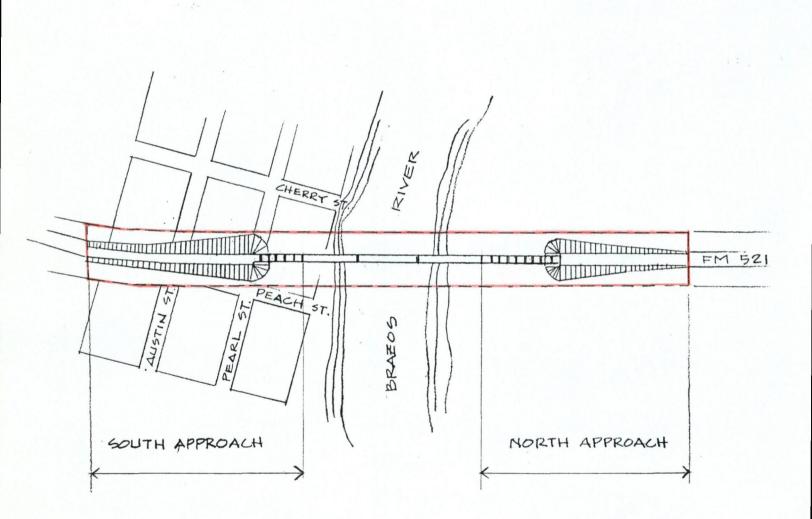
ERECTED BY BRAZORIA COUNTY, TEXAS County Judge Floyd Enlow-1938 O.K. Phillips-1939 County Commissioners W.H. Brigance Mrs. S.H. McLeod E.H. Mays C.W. Massey-1938 A.O. Evans-1939 County Auditor F.A. Taylor J.G. McKenzie-Cons. Eng'r. Haile & McClendon-Assoc. Cons. Engrs. Keliher Constr. Co.-Contractor

These plates were removed in 1990 and given to the Brazoria County Historical Commission. They are now housed in the Brazoria County Historical Museum in Angleton, Texas.

To date the Brazos Bridge is in good condition and remains in use.

National Register of Historic Places Continuation Sheet

Section number 7 Page 2



·BRAZORIA BRIDGE ·BRAZORIA, BRAZORIA CO., TEXAS

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National Register of Historic Places Continuation Sheet

Section number 7 Page 3

Photograph Log

Brazos River Bridge at Brazoria 0.9 mile east of State Highway 36 on State Highway 332 Brazoria, Brazoria County, Texas Photographed by Kathy Jones May 1990 Negative with K. Jones, Box 456, Angleton, TX 77516 Camera facing southeast Photograph 1 of 8

Brazos River Bridge at Brazoria 0.9 mile east of State Highway 36 on State Highway 332 Brazoria, Brazoria County, Texas Photographed by Kathy Jones May 1990 Negative with K. Jones, Box 456, Angleton, TX 77516 Camera facing west Photograph 2 of 8

Brazos River Bridge at Brazoria 0.9 mile east of State Highway 36 on State Highway 332 Brazoria, Brazoria County, Texas Photographed by Kathy Jones May 1990 Negative with K. Jones, Box 456, Angleton, TX 77516 Camera facing northwest Photograph 3 of 8

Brazos River Bridge at Brazoria 0.9 mile east of State Highway 36 on State Highway 332 Brazoria, Brazoria County, Texas Photographed by Kathy Jones May 1990 Negative with K. Jones, Box 456, Angleton, TX 77516 Camera facing southwest Photograph 4 of 8

Brazos River Bridge at Brazoria 0.9 mile east of State Highway 36 on State Highway 332 Brazoria, Brazoria County, Texas Photographed by Kathy Jones May 1990 Negative with K. Jones, Box 456, Angleton, TX 77516 Camera facing north Photograph 5 of 8

National Register of Historic Places Continuation Sheet

Section number ____7 Page ___4

Brazos River Bridge at Brazoria 0.9 mile east of State Highway 36 on State Highway 332 Brazoria, Brazoria County, Texas Photographed by Kathy Jones May 1990 Negative with K. Jones, Box 456, Angleton, TX 77516 Camera facing north Photograph 6 of 8

Brazos River Bridge at Brazoria 0.9 mile east of State Highway 36 on State Highway 332 Brazoria, Brazoria County, Texas Photographed by Kathy Jones May 1990 Negative with K. Jones, Box 456, Angleton, TX 77516 Plaque Photograph 7 of 8

Brazos River Bridge at Brazoria 0.9 mile east of State Highway 36 on State Highway 332 Brazoria, Brazoria County, Texas Photographer unknown Date unknown Negative with Angleton Public Library, Angleton, TX 77516 Camera facing northeast Photograph 8 of 8

8. Statement of Significance	antina series and	Sumpord & tointe le
Certifying official has considered the significance of this proper	ty in relation to other properties: statewide I locally	
Applicable National Register Criteria X A B X C	D	
Criteria Considerations (Exceptions)	D E F G N/A	
Areas of Significance (enter categories from instructions) Transportation Engineering	Period of Significance 1939-1941	Significant Dates 1939
	Cultural Affiliation	
Significant Person	Architect/Builder McKenzie, J.D. Wickline, G.G.	o di manaca fi di alema Imposto cominuenti Infontati cominuenti
	Keliher Construction Co	in head shakevenal

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

The Brazos River Bridge at Brazoria, completed in 1939, is the second road bridge crossing at this location and perpetuates a historic route through Texas, critical to Brazoria County's development since 1912. The structure is also an important surviving example of the work of the Public Works Administration [PWA] during the Great Depression. The bridge meets National Register Criterion A in the area of Transportation, as a link in the historic route of commerce and communication along which Brazoria was settled and, in this century, as a link between Houston and several coastal communities. It meets Criterion C in the area of Engineering, as a major Parker through truss bridge embodying the design and construction technology of 1930s highway construction in Texas.

Brazoria grew from a colony that Stephen F. Austin established in 1828 as a port and trading center at this important crossing of the Brazos River. The river served as a chief artery of commerce and communication from the Gulf of Mexico for Austin's colony. Brazoria burned in April 1836 toward the end of the Texas Revolution. Rebuilt, the town functioned as the seat of Brazoria County from 1836 until 1897 when the seat of county government was moved to Angleton.

In 1906 the St. Louis, Brownsville, and Mexico Railroad (now Missouri Pacific) traversed the county and the Brazos River at Brazoria. While what became known as Old Brazoria remained at the south bank of the river, a new townsite for Brazoria was laid out in 1912 about one mile south along the railroad line. Running parallel to the railroad bridge, the first highway bridge at this crossing was also constructed in 1912. Local residents remember this bridge as a steel truss bridge with a wood deck. Construction of this first bridge provided access from eastern to western Brazoria County as well as to many coastal towns.

After World War I automobiles became an increasingly dominant form of transportation in Texas, as throughout the United States. In 1917 more than

X See continuation sheet

9. Major Bibliographical References	 Statement of Significance.
any in relation to other proceedies:	Condyna and an aneidered the significance of this propa
See Continuation Sheet 9-1.	
Providuo documentation on file (NDC), N/A	X See continuation sheet
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 Other State agency Federal agency Local government University Other Specify repository: Texas Historical Commission, Austin, T
10 Geographical Data	
10. Geographical Data Acreage of property less than one acre	
Acreage of property	
UTM References A 1_15 2 5 1 0 4 0 3 2 1 6 5 0 0 Zone Easting Northing C	B
Verbal Boundary Description The width of the right of way on State Highwa and its approaches.	ay 332, including the bridge structure
	See continuation sheet
Boundary Justification	
The loweder dealed the ortice structure	1. 11.
The boundaries include the entire structure a	as built.
	See continuation sheet
11. Form Prepared By	
name/title Amy E. Dase (research by Margurite Ma	
organization <u>Texas Historical Commission</u> street & number P.O. Box 12276	date <u>Sept., 1990; March, 1991</u> telephone <u>512/463-6094</u>
city or town Austin	state zip code zip code 78711

city or town _____

state __Texas _____ zip code ___78711

National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>1</u>

200,000 automobiles were in use in Texas and motor transport provided a means for the delivery of mail and the movement of agricultural goods within rural areas. Reflecting this trend, the construction of railroads in the state eventually peaked and began to decline after the 1920s.

The river crossing at Brazoria sustained the direct route between Houston (40 miles north) and several important coastal towns including Matagorda (46 miles south) and Palacios (55 miles south). The growing need for access to these communities and western Brazoria County justified a modern bridge structure to replace the earlier bridge, which was condemned (according to local sources) in the early 1930s and eventually fell into the river.

[The federal government was responsible for funding most bridges of this size during the New Deal era. Recognizing the importance of a network of farm-to-market roads as early as the 1890s with the establishment of the Bureau of Public Roads (part of the United States Department of Agriculture), federal aid to local governments for road construction began on a small scale at that time. The 1916 Federal Aid Road Act formalized this procedure focusing on the creation of major thoroughfares within the states. The Texas Highway Department was created in 1917 as required by the Act to manage the disbursement of federal funds and oversee the construction of roads by county governments. By 1921 most often county commissioners employed a county engineer to handle construction and maintenance of the road system under the management of the state highway commission. A county could apply to the state for up to 25 percent financial assistance on a project and up to 50 percent from the federal government. The Depression of the 1930s brought increased federal aid to the state highway system, and to local governments through such work relief programs as the Public Works Administration.]

The construction of the Brazoria Bridge appears to have been an unusual project in that the funding sources deviated from the typical approach. The bridge is a product of an early partnership between the federal government and the county government, without the assistance of the state. The PWA agreed to pay 45 percent of the bridge's cost. Brazoria County raised its share of the construction cost of the Brazoria Bridge, originally estimated to be about \$175,000, through the issuance of road bonds in 1938. Bids on the project were solicited and the Keliher Construction Company was selected as contractor.

The project included not only construction of the bridge, but upgrading the eight mile segment of road designated as Farm-to-Market 521 sometime between 1936 and 1938, before the state had formally established the farm-tomarket system in 1941. The road connected State Highway 35, just west of Angleton, and State Highway 36, at Brazoria.

National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>2</u>

Although funding for the project was not channeled through the state highway department, State Bridge Engineer (1918-1940) George G. Wickline's design of choice heavily influenced the consulting engineer's design for the project. Largely through Wickline's influence, the Parker through bridge truss was popular across the state from the 1920s into the 1940s. J.D. McKenzie, associated with the firm of Haile & McClendon of Harris County, served as consulting engineer on the project and designed this Parker through truss bridge.

The Parker is offspring to an earlier truss design, the Pratt truss, which has vertical compression members and diagonal tension members with top and bottom chords that run parallel to each other. In truss design structural members resist forces in two primary ways--compression and tension. The Parker applies a polygonal top chord (the center of the truss is taller than the ends) to the structure. The polygonal design increased the distance between the top and bottom chords and made the truss depth greatest at the center of the span where stress was highest.

Ranging from 40 to 250 feet long, 40 Parker through truss bridges remain in Texas. The majority of these were constructed in the 1930s. Only five of these are known to be longer than the Brazoria Bridge. This bridge design was preferred because of its life expectancy and ease of construction. In addition, its efficiency allowed for a longer span with greater strength while using less steel, reducing both weight and cost.

Construction of the bridge took about a year, with problems encountered in driving the pilings for the pier foundations to a firm strata beneath the river bed. The bridge was opened in 1939.

According to the present State Department of Highways and Public Transportation, the bridge was placed on their state highway department maintenance list in 1939 and the state agency became owner of the resource. The bridge now serves State Highway 332 providing access to downtown Brazoria.

National Register of Historic Places Continuation Sheet

Section number ____9 Page __1

Bibliography

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UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Brazoria Bridge NAME :

MULTIPLE NAME :

STATE & COUNTY: TEXAS, Brazoria

DATE OF WEEKLY LIST:

DATE RÉCEIVED:5/13/91DATE OF PENDING LIST:5/29/91DATE OF 16TH DAY:6/14/91DATE OF 45TH DAY:6/27/91

REFERENCE NUMBER: 91000783

NOMINATOR: STATE

REASONS FOR REVIEW:

REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: N

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N

COMMENT WAIVER: N

ACCEPT ____RETURN ____REJECT 6/14/91 DATE National Register

ABSTRACT/SUMMARY COMMENTS:

RECOM./CRITERIA REVIEWER DISCIPLINE DATE

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

CLASSIFICATION

____count ____resource type

STATE/FEDERAL AGENCY CERTIFICATION

FUNCTION

____historic ____current

DESCRIPTION

___architectural classification
___materials
___descriptive text

SIGNIFICANCE

Period Areas of Significance--Check and justify below

Specific dates Builder/Architect Statement of Significance (in one paragraph)

____summary paragraph ____completeness ____clarity ___applicable criteria ___justification of areas checked ___relating significance to the resource ___context ___relationship of integrity to significance ___justification of exception ___other

BIBLIOGRAPHY

GEOGRAPHICAL DATA

___acreage ___verbal boundary description ___UTMs ___boundary justification

ACCOMPANYING DOCUMENTATION/PRESENTATION

____sketch maps ___USGS maps ___photographs ___presentation

OTHER COMMENTS

Questions concerning this nomination may be directed to

_____ Phone _____

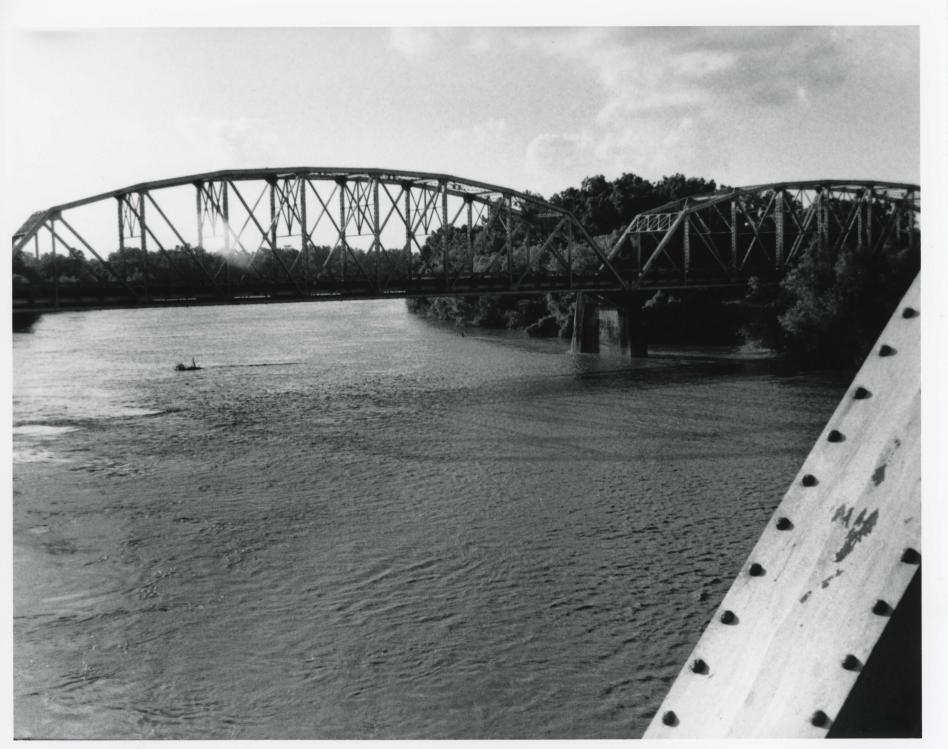
Signed _____

Date _____



0.9 MILE EAST of STATE HIGHWAY 36 ON STATE HIGHWAY 332 BRAZORIA, BRAZORIA COUNTY, TEXAS

PHOTOGRAPH 1 of 8



0.9 MILE EAST of STATE HIGHWAY 36 ON STATE HIGHWAY 332 BRAZORIA, BRAZORIA COUNTY, TEXAS

ALOTOGRAPH 2 of 8



0.9 MILE EAST of STATE HIGHWAY 360 al STATE HIGHWAY 332 BRAZORIA, BRAZORIA COUNTY, TEXAS

PHOTOGRAPH 3 of 8



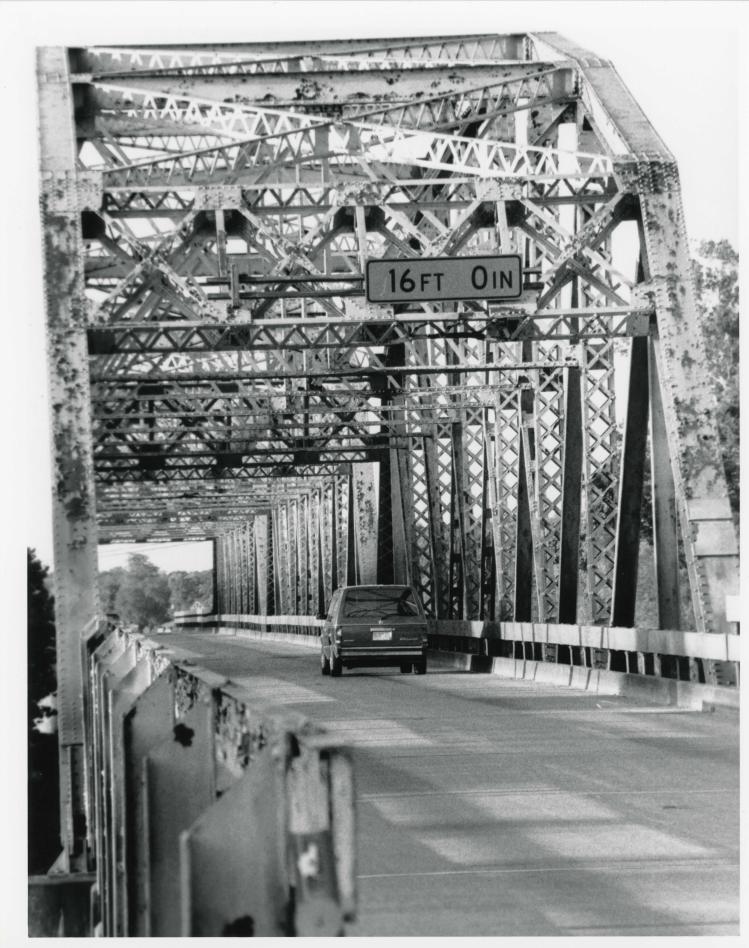
0.9 MILE EAST of STATE HIGHWAY 36 ON STATE HIGHWAY 332 BRAZORIA, BRAZORIA COUNTY, TEXAS

PHOTOGRAPH 4 of 8



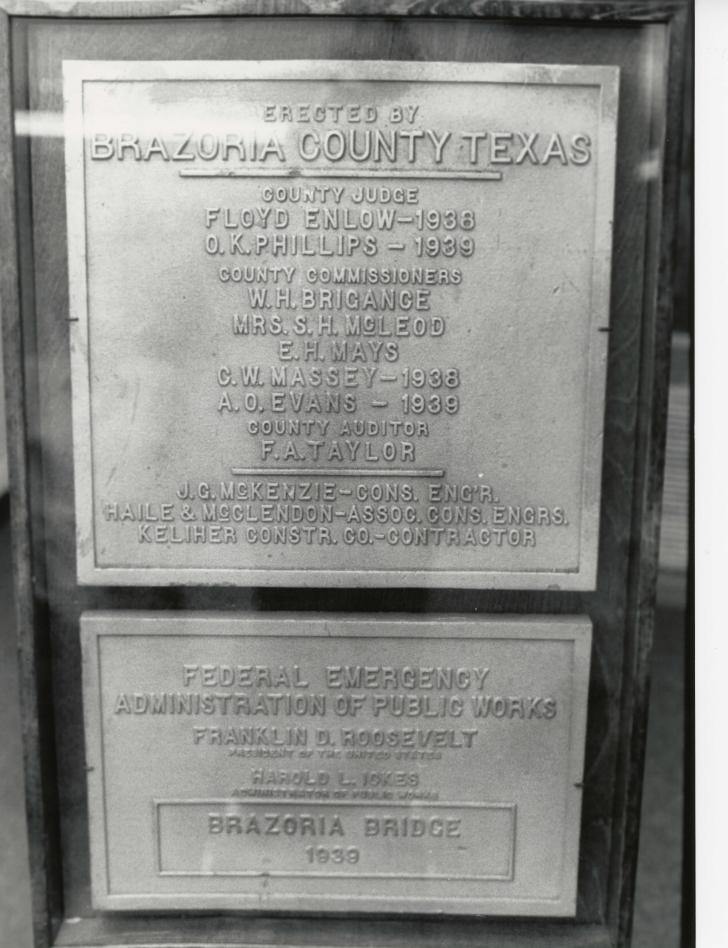
0.9 MILE EAST of STATE HIGHWAY 36 and STATE HIGHWAY 332. BRAZORIA, BRAZORIA COUNTY, TEXAS

PHOTOGRAPH 5 of 3



0.9 MILE EAST OF STATE HIGHWAY 36 ON STATE HIGHWAY 332 BRAZORIA, BRAZORIA COUNTY, TEXAS

PHOTOGRAPH 6 of 8



BRAZORIA BRIDGE 0.9 MILE EAST of STATE HIGHWAY 36 ON STATE HIGHWAY 332 BRAZORIA, BRAZORIA COUNTY, TEXAS

PHOTOGRAPH 7 of 8



0.9 MILE EAST of STATE HIGHWAY 36 ON STATE HIGHWAY 332 BRAZORIA, BRAZORIA COUNTY, TEXAS

PHOTOGRAPH & of 8

