

MISSISSIPPI COUNTY

INCLUDED: [Significant feature(s) of bridge given in boldface]
 [Field inventoried bridge indicated by asterisk]

Inv. No.	MHTD	Bridge Name	Description
*MISS01	K 950R	Cairo Bridge	4-700' riveted cantilever through truss 1929 American Bridge Company; Missouri Valley B&I Company
*MISS02	094000.7	Bridge	1- 70' pinned Pratt pony truss c1915
*MISS03	110000.0	Maple Slough Bridge	1- 50' pinned Pratt pony truss 1913 Vincennes Bridge Company
*MISS04	173001.3	Glory Bayou Bridge	1- 50' pinned Pratt pony truss c1915 Vincennes Bridge Company

EXCLUDED:

Pratt pony truss
033000.2

Warren pony truss
 F 757R1 F 785R F 786R1 F 788R1 H 282 059000.4 116000.4
 123000.0 125000.0

Steel stringer / girder
 F 57R F 58R F 758R1 J 638 K 816 K 887 S 437
 S 664 T 418 T 419 T 542 T 543 T 544 T 545
 T 744 T 745 X 358 X 364 X 395 X 396 Y 619
 Z 757 009000.1 025001.6 052001.3 067001.1 069R01.7 117001.5148R00.5

Concrete slab / girder
 F 759R2 F 760R J 117

Concrete box culvert
 H 460R 063003.2

SUMMARY:

	Primary	Secondary	Urban	Other	Total
Included	1	3	0	0	4
Excluded	31	13	0	0	44
	32	16	0	0	48 structures

Cairo Bridge

MISS01

GENERAL DATA

structure no.:	K 950R	city/town:	Birds Point, Missouri / Cairo, Illinois
county:	Mississippi / Alexander	feature inters.:	Mississippi River
		cadastral grid:	S19, T27N, R18E
		highway route:	U.S. Highway 60 / U.S. Route 51
		highway distr.:	10
		current owner:	Missouri Highway and Transportation Department / Illinois Department of Public Works and Bridges

STRUCTURAL DATA

superstructure: steel, rigid-connected cantilevered through truss; 21 plate girder approach spans on Illinois side; 13 plate girder approach spans on Missouri side

substructure: concrete abutments, wingwalls and piers

span number:	4	condition:	good
span length:	700.0'	alterations:	deck replaced, 1981
total length:	5248.0'	floor/decking :	asphalt/concrete deck over steel stringers
roadway width:	20.0'	other features:	upper chord and inclined end post: 2 channels with cover plate and double lacing; lower chord: 2 channels with lacing, top and bottom; vertical: 4 angles with lacing (4 angles with continuous plate at some points); diagonal: 2 channels with double lacing; lateral bracing: 4 angles with lacing - top, 2 angles - bottom; strut: 2 angles with lacing and "X" bracing; portal strut: 2 angles with lacing; floor beam: plate girder; guardrail: 3 channels; Missouri approach bridge plate: American Bridge Co. USA 1928

HISTORICAL DATA

erection date: 1927-29

erection cost: \$3,109,311.86

designer: J.A.L. Waddell, Waddell and Hardesty

fabricator : American Bridge Company, New York NY; Illinois Steel Company, Chicago IL

contractor: American Bridge Company, New York NY (superstructure); Missouri Valley Bridge and Iron Company, Leavenworth KS (substructure)

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. K 950R; Primary System Bridge Record - located at Bridge Division, Missouri Highway and Transportation Department, Jefferson City MO; Mississippi County Court Record, Book 10: page 55 (27 August 1909); Book 11: page 25 (2 September 1912); Book 12: page 62 (1 October 1919) - located at Mississippi County

Cairo Bridge

Courthouse, Charleston MO; **Chicago Tribune**: "Roads Converge Where Rivers Meet" (February 1939); **The Cairo Evening Citizen**: "Two Views of the Beautiful Bridge Spanning the Mississippi", page 1 (1 October 1929), "Dedication", pp. 1 and 4 (18 October 1929), "One-Year Closing Planned For Mississippi Bridge", n.p. (15 November 1929); **Charleston Express-Courier**: "County Fighting Biggest Flood Crest" page 1 (21 April 1927), "Work On Bridge Ready To Start With Low River", page 1 (23 June 1927); **Charleston Enterprise-Courier**: "May Build Piers This Summer For Bridge At Cairo", page 1 (20 January 1927); "Cairo is Laying Plans for Bridge Campaign", page 1 (13 January 1927); "Builders Making Steady Progress on Cairo Bridge", page 1 (1 September 1927); "Bridge Builders Add Night Crew to Expedite Job", page 1 (13 October 1927) "Engineering Work on Cairo Bridge Making Progress", page 1 (21 July 1927); "Cairo Bridge is Ready to Start", page 1 (19 May, 1927); "Bridge Worker Drowns in Fall From Barge", page 1 (29 December 1927); "Steel Work For Cairo Bridge to Begin March 1", page 1 (28 February 1928); "Charleston Will Join in Opening New Cape Bridge", page 1 (28 June 1928); field inspection by Richard Collier, 1 April 1992.

sign. rating: 71

evaluation: NRHP eligible (superlative example of large-scale highway truss design)

inventoried by: Clayton B. Fraser 4 May 1992

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

Cairo Bridge (Birds Point Bridge, Mississippi River Bridge)
MHTD: K 950R

MISS01

DATE(S) OF CONSTRUCTION

1927-29

LOCATION

U.S. Highway 60 / U.S. Route 51 over Mississippi River; S19, T27N, R18E
Birds Point, Missouri / Cairo, Illinois; Mississippi / Alexander County, Missouri

USE (ORIGINAL / CURRENT)

highway toll bridge / highway toll bridge

RATING NRHP eligible (score: 71)

CONDITION

good

OWNER

Missouri Highway and Transportation Department / Illinois Department of Public Works and Bridges

span number: 4
span length: 700.0'
total length: 5248.0'
roadway wdt.: 20.0'

superstructure: steel, rigid-connected cantilevered through truss; 21 plate girder approach spans on Illinois side; 13 plate girder approach spans on Missouri side
substructure: concrete abutments, wingwalls and piers
floor/decking: asphalt/concrete deck over steel stringers
other features: upper chord and inclined end post: 2 channels with cover plate and double lacing; lower chord: 2 channels with lacing, top and bottom; vertical: 4 angles with lacing (4 angles with continuous plate at some points); diagonal: 2 channels with double lacing; lateral bracing: 4 angles with lacing - top, 2 angles - bottom; strut: 2 angles with lacing and "X" bracing; portal strut: 2 angles with lacing; floor beam: plate girder; guardrail: 3 channels; Missouri approach bridge plate: **American Bridge Co. USA 1928**

Cairo, Illinois, located at the confluence of the Mississippi and Ohio rivers, was faced with the problem of bridging not one, but two, major rivers to link with outlying areas. A railroad bridge over the Ohio was completed in October 1889 by the Illinois Central Railroad. Consisting of a series of pinned Whipple through trusses, supported by stone piers, it was the longest metallic bridge in the world when completed, and its 518-foot channel spans represented the ultimate extension of the Whipple truss. A vehicular bridge was a long time coming, however. While ferryboats carried wagons and cars across the two rivers, the citizens of Cairo hopefully promoted a single structure with a Y-shaped configuration, with one leg over the Mississippi and one over the Ohio. The structure would be paid for by the government, and its construction and maintenance costs would be defrayed by tolls.

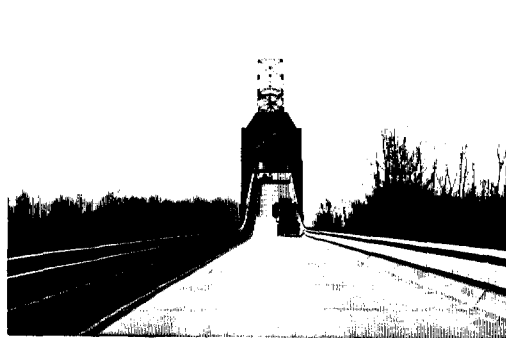
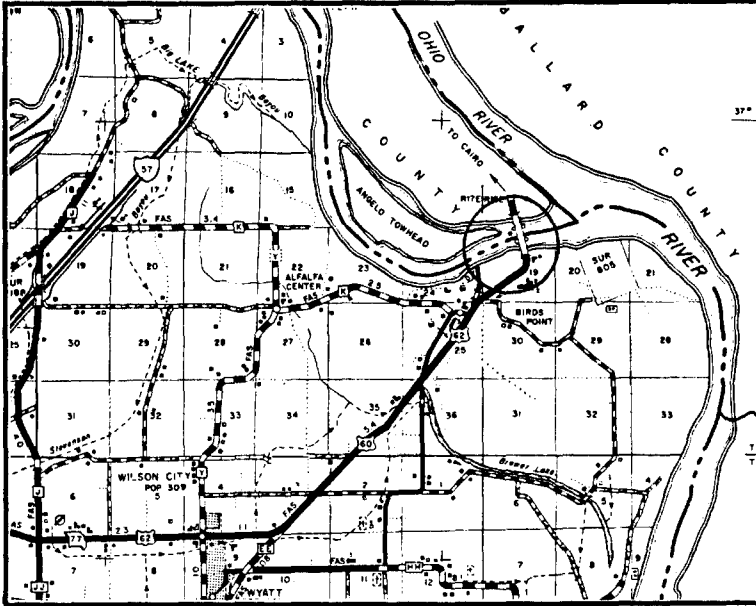
When the government was not forthcoming with the funds in the 1920s, the community instead turned to Harry E. Bovay, an Arkansas capitalist. Bovay had built one successful toll bridge in his home state, and he was looking for a larger bridge project, when he contacted the Cairo Chamber of Commerce. Under Bovay's direction, an organization was established to promote the bridge, a Congressional charter was secured, bonds were sold, and the venerable J.A.L. Waddell, of Waddell and Hardesty, was commissioned to design it. The contract for the substructure was awarded to the Missouri Valley Bridge and Iron Company of Leavenworth, Kansas, a veteran of several Mississippi and Missouri River bridge projects. The silicon steel superstructure was to be fabricated and erected by the American Bridge Company of New York.

Work on the piers began in July 1927. The channel piers were sunk with agonizing tedium by means of pneumatic caissons. Work on the cantilever spans began in 1928. "The steel work progressed much faster than the foundation work," reported the **Cairo Evening Citizen**. "You could almost see the bridge creep across the river. The span was cantilevered out over the water half way to the next pier, and a support was put in, resting upon a cluster of piles and the rest of the distance was jumped....There was no long stretch of piling filling the entire span, as in the construction of the Illinois Central bridge. The method of construction showed the progress made in bridge building between 1887 and 1927, forty years." After several weather-related delays, the trusses were completed and the bridge opened ceremoniously in October 1929. The original Cairo Bridge and Terminal Company operated it as a toll structure until the Cairo Bridge Commission acquired it in 1942. This quasi-public agency held the bridge until the bonds were retired in May 1954 and it was turned over to the states of Missouri and Illinois. The original deck was replaced in 1981, but the Birds Point Bridge remains otherwise intact as a pivotal interstate crossing.

Almost a mile long, the Cairo was a stunning achievement for the citizens in southern Illinois and the bootheel of Missouri - the fulfillment of some forty years of boasting. It played a critical role in transportation and commerce in a three-state region, as it linked Cairo with Missouri and Kentucky. The bridge is noteworthy as a superlative example of long-span truss construction. With its 700-foot, silicon steel spans, it is the longest of Missouri's cantilevered through trusses - a historically and technologically significant highway-related resource.

NAME(S) OF STRUCTURE

Cairo Bridge (Birds Point Bridge; Mississippi River Bridge)

PHOTOS AND SKETCH MAP OF LOCATION**LOCATION MAP**

TAKEN FROM MISSOURI HIGHWAY AND TRANSPORTATION DEPARTMENT
GENERAL HIGHWAY MAP

SOURCES

Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. K 950R; Primary System Bridge Record - located at Bridge Division, Missouri Highway and Transportation Department, Jefferson City MO; Mississippi County Court Record, Book 10: page 55 (27 August 1909); Book 11: page 25 (2 September 1912); Book 12: page 62 (1 October 1919) - located at Mississippi County Courthouse, Charleston MO; "One-Year Closing Planned For Mississippi Bridge", n.p. (15 November 1979); **Charleston Express-Courier**: "County Fighting Biggest Flood Crest" page 1 (21 April 1927), "Work On Bridge Ready To Start With Low River", page 1 (23 June 1927); **Charleston Enterprise-Courier**: "May Build Piers This Summer For Bridge At Cairo", page 1 (20 January 1927); "Cairo is Laying Plans for Bridge Campaign", page 1 (13 January 1927); "Builders Making Steady Progress on Cairo Bridge", page 1 (1 September 1927); "Cairo Bridge is Ready to Start", page 1 (19 May, 1927); "Steel Work For Cairo Bridge to Begin March 1", page 1 (28 February 1928); "Charleston Will Join in Opening New Cape Bridge", page 1 (28 June 1928).

INVENTORIED BY

Clayton B. Fraser

AFFILIATION

Fraserdesign, Loveland CO

DATE

4 May 1992
