WARREN COUNTY

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

Inv. No.	FHWA	Bridge Name	Description	
*WARR01	K 969	Washington Bridge **over Missouri River**	**5-475'** 1934	**riveted cantilever through truss** Stupp Bros. Bridge & Iron Co. Missouri Valley Br. & Iron Co.
WARR02	Z 678	Lake Creek Bridge		(replaced)
*WARR03	004001.3	Camp Creek Bridge	1- 70' **1894**	pinned Pratt pony truss Farnsworth and Blodgett
WARR04	008000.4	Bailey Branch Bridge	1- 24' **1906**	steel stringer Stupp Bros. Bridge & Iron Co.
*WARR05	023000.5	Steinhagen Bridge	**2- 85' 1896**	**pinned Pratt through truss** J.S. McCleary and Sons
*WARR06	026000.6	Indian Camp Creek Bridge	1- 80' **1918**	**riveted Camelback pony truss** county work force
*WARR07	028000.2	Hollman Ford Bridge		(replaced)
*WARR08	085004.3	Charrette Creek Bridge	1- 85' **c1910**	pinned Pratt pony truss
WARR09	099001.7	Loutre Slough Bridge	1- 30' **1908**	riveted lattice bedstead Stupp Bros. Bridge & Iron Co.
WARR10	106001.4	Clay Branch Bridge	1- 40' **1902**	pinned Pratt half-hip pony truss Stupp Bros. Bridge & Iron Co.
WARR11	116000.3	Water Run Creek Bridge	1- 30' **1908**	riveted lattice bedstead Stupp Bros. Bridge & Iron Co.
*WARR12	133000.2	West Point Bridge	1-124' **1905**	**pinned Pratt through truss** Stupp Bros. Bridge & Iron Co.
WARR13	155000.2	Charrette Creek Bridge	1- 23' **1901**	pinned Pratt half-hip pony truss American Bridge Company

EXCLUDED:

Pratt pony truss
122000.8

Warren pony truss
K 93 T 38 057002.0 109000.1

Lattice bedstead
036001.1

Steel stringer
W 113 X 212 X 214 Y 981 009000.5 031001.5 044000.5
073002.8 113001.0 118001.1 118001.9

Concrete girder
G 704 H 578 K 94 K 391

WARREN COUNTY

EXCLUDED (cont.):

Concrete slab
073001.0 131001.9 139001.0 269000.1

Concrete box culvert

A3122	H 575	H 576	H 577	H 579	H 869	J 140
J 141	L 254R1	S 293	T 512	X 213	X 898	X 899

SUMMARY:

	Primary	Secondary	Urban	Other	Total
Included	1	10	0	0	11
Excluded	24	15	0	0	39
	25	25	0	0	50 structures

Washington Bridge

WARR01

GENERAL DATA

structure no.: K 969
county: Warren
city/town: Washington
feature inters.: Missouri River
cadastral grid: Survey 1647, T44N, R1W
highway route: State Highway 47
highway distr.: 3
current owner: Missouri Highway and Transportation Department

STRUCTURAL DATA

superstructure: steel, rigid-connected, cantilever Warren through truss
substructure: concrete abutments and piers with Moderne detailing

span number: 5
span length: 475.0'
total length: 2562.0'
roadway width: 22.0'
condition: good
alterations: none
floor/decking : concrete deck over steel stringers
other features: upper chord and inclined end post: 2 built-up channels with cover plate and lacing; lower chord: 2 built-up channels with batten plates; vertical: 2 angles with lacing; diagonal: 2 channels with lacing or batten plates; lateral bracing: 2 angles with lacing; floor beam: I-beam, field-bolted to vertical; guardrail: 2 steel channels

HISTORICAL DATA

erection date: 1934-36
erection cost: $802,000.00
designer: Sverdrup and Parcel, St. Louis MO
fabricator : Stupp Brothers Bridge and Iron Company, St. Louis MO
contractor: Stupp Brothers Bridge and Iron Company, St. Louis MO (superstructure)
Missouri Valley Bridge and Iron Co., Leavenworth KS (substructure)

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. K 969; Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO; "Building Bridge Major Event for City," **The (Washington) Missourian**, 24 May 1989, page 10; Ralph Gregory, **A History of Washington, Missouri**, pages 81-82, 88-89; Mari-Anne Messmann, "Desire, Determination Bridge the Missouri," **Washington Missourian**, 6 February 1975; "Washington Bridge Was 38 Years Old Monday," **Washington Missourian**, 30 May 1974; "Building of Bridge Major Event for City," **Washington Missourian**, 24 May 1989; "Work on Washington Bridge to Begin Soon," **Hermann Advertiser-Courier**, 15 March 1929; field inspection by Clayton Fraser, 29 June 1994.

Washington Bridge

sign. rating: 72

evaluation: NRHP determined eligible (superlative example of large-scale truss bridge construction on an important crossing of the Missouri River)

inventoried by: Clayton Fraser and Michelle Crow-Dolby 22 February 1993

Camp Creek Bridge

WARR03

GENERAL DATA

structure no.: 004001.3
county: Warren
city/town: 10.9 miles northwest of Warrenton
feature inters.: Camp Creek
cadastral grid: S3/10, T48N, R3W
highway route: Pin Oak Road
highway distr.: 3
current owner: Warren County

STRUCTURAL DATA

superstructure: steel, 5-panel, pin-connected Pratt pony truss, with steel stringer approach span
substructure: stone masonry abutments; concrete pier

span number: 1
span length: 70.0'
total length: 85.0'
roadway width: 11.4'
condition: fair
alterations: original steel cylinder pier replaced by concrete abutments in 1914
floor/decking : timber deck over steel stringers
other features: upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 looped rectangular eyebars; vertical: 4 angles with lacing; diagonal: 2 looped square eyebars; counter: square eyebar with turnbuckle; lateral bracing: round rod with threaded ends; floor beam: I-beam, field-bolted to vertical; guardrail: 2 angles

HISTORICAL DATA

erection date: 1894
erection cost: original: $1250.00; 1914 reconstruction: $1300.00
designer: Farnsworth and Blodgett, Kansas City MO
fabricator : unknown
contractor: original: Farnsworth and Blodgett, Kansas City MO; 1914 reconstruction: Miller and Borcherding, St. Louis MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 004001.3; Various papers relating to "Bridge No. 19", including report to the court from Benjamin Frick (21 October 1914) and original contract and construction drawings; Warren County Court Record G: page 57 (29 August 1893), page 86 (2 December 1893), page 137 (1 September 1894), page 161 (31 December 1894) - all located at Warren County Courthouse, Warrenton MO; field inspection by Clayton Fraser, 18 October 1990.

sign. rating: 53
evaluation: NRHP possibly eligible (well-preserved, relatively early example of mainstay structural type)

inventoried by: Clayton B. Fraser 22 February 1993

Bailey Branch Bridge

WARR04

GENERAL DATA

structure no.:	008000.4	**city/town:**	12.4 miles northwest of Warrenton
county:	Warren	**feature inters.:**	Bailey Branch
		cadastral grid:	S25, T49N, R3W
		highway route:	County Road 8
		highway distr.:	3
		current owner:	Warren County

STRUCTURAL DATA

superstructure: steel stringer
substructure: unknown

span number:	1	**condition:**	fair
span length:	24.0'	**alterations:**	unknown
total length:	25.0'	**floor/decking :**	unknown
roadway width:	13.9'	**other features:**	unknown

HISTORICAL DATA

erection date: 1906
erection cost: $999.00
designer: Stupp Brothers Bridge and Iron Company, St. Louis MO
fabricator : Stupp Brothers Bridge and Iron Company, St. Louis MO
contractor: Stupp Brothers Bridge and Iron Company, St. Louis MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 008000.4; Warren County Court Record I: page 387 (12 May 1906), page 390 (6 August 1906), page 396 (7 August 1906) - located at Warren County Courthouse, Warrenton MO.

sign. rating: 38
evaluation: NRHP non-eligible (a typically built example of rudimentary steel stringer bridge construction)

inventoried by: Clayton B. Fraser 28 October 1993

Steinhagen Bridge

WARR05

GENERAL DATA

structure no.: 023000.5
county: Warren
city/town: 5.5 miles north of Warrenton
feature inters.: Big Creek
cadastral grid: S34, T46N, R2W
highway route: County Road 23
highway distr.: 3
current owner: Warren County

STRUCTURAL DATA

superstructure: steel, 5-panel, pin-connected Pratt through truss
substructure: stone abutments; concrete-filled steel cylinder pier

span number: 2
span length: 85.0'
total length: 170.0'
roadway width: 12.6'
condition: fair
alterations: none
floor/decking : timber deck over steel stringers
other features: upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 looped rectangular eyebars; vertical: 2 channels with lacing (2 punched square eyebars at the hip); diagonal: 2 looped rectangular eyebars; counter: round eyerod with turnbuckle; lateral bracing: round rod with threaded ends; strut: 4 angles with lacing; floor beam: I-beam, U-bolted to vertical; guardrail: 2 angles

HISTORICAL DATA

erection date: 1896
erection cost: unknown
designer: Stupp Brothers Bridge and Iron Company, St. Louis MO
fabricator : Stupp Brothers Bridge and Iron Company, St. Louis MO
contractor: J.S. McCleary and Sons

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 023000.5; Warren County Court Record G: pages 335-36 (8 August 1896), page 341 (8 September 1896); County Court Record I: page 557 (8 November 1907), page 575 (6 February 1908 - located at Warren County Courthouse, Warrenton MO; field inspection by Clayton Fraser, 18 October 1989.

sign. rating: 48
evaluation: NRHP possibly eligible (well-preserved, two-span example of mainstay structural type)

inventoried by: Clayton B. Fraser 22 February 1993

Indian Camp Creek Bridge

WARR06

GENERAL DATA

structure no.: 026000.6
county: Warren
city/town: 3.2 miles northeast of Wright City
feature inters.: Indian Camp Creek
cadastral grid: S2, T47N, R1W
highway route: North Stringtown Road
highway distr.: 3
current owner: Warren County

STRUCTURAL DATA

superstructure: steel, 5-panel, rigid-connected Camelback pony truss, with concrete slab approach spans
substructure: concrete abutments and piers

span number: 1
span length: 80.0'
total length: 105.0'
roadway width: 13.6'
condition: fair
alterations: none
floor/decking : concrete deck over steel stringers
other features: upper chord and inclined end posts: 2 channels with cover plate and lacing; lower chord: 2 angles with batten plates; vertical: 4 angles with batten plates; diagonal: 2 angles with batten plates; lateral bracing: round rod with threaded ends; floor beam: I-beam, field-bolted to vertical; guardrail: 2 angles (steel pipe guardrails at approaches); bridge plate: **Class A bridge / 1918**

HISTORICAL DATA

erection date: 1918
erection cost: $5342.58
designer: Benjamin Frick, Warren County Engineer
fabricator : Illinois Steel Bridge Company, Jacksonville IL
contractor: county work force

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 026000.6; Warren County bridge records: original drawing by Benjamin Frick and various papers pertaining to bridge - located at Warren County Courthouse, Warrenton MO; field inspection by Clayton Fraser, 18 October 1989.

sign. rating: 50
evaluation: NRHP possibly eligible (well-preserved example of uncommon Pratt truss subtype)

inventoried by: Clayton B. Fraser 18 October 1989

Charrette Creek Bridge

WARR08

GENERAL DATA

structure no.: 085004.3
county: Warren
city/town: 6.5 miles southeast of Warrenton
feature inters.: Charrette Creek
cadastral grid: S18, T46N, R1W
highway route: Stark Church Road
highway distr.: 3
current owner: Warren County

STRUCTURAL DATA

superstructure: steel, 5-panel, pin-connected Pratt pony truss
substructure: concrete abutments and wingwalls

span number: 1
span length: 85.0'
total length: 86.0'
roadway width: 12.7'
condition: fair
alterations: none
floor/decking : concrete deck over steel stringers
other features: upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 looped rectangular eyebars; vertical: 4 angles with batten plates; diagonal: 2 looped rectangular eyebars; counter: square eyerod with turnbuckle; lateral bracing: round eyerod; floor beam: I-beam, field-bolted to vertical; guardrail: 2 angles

HISTORICAL DATA

erection date: c1910
erection cost: unknown
designer: unknown
fabricator : Cambria Steel Company, Pittsburgh PA
contractor: unknown

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 085004.3; field inspection by Clayton Fraser, 18 October 1989.

sign. rating: 34
evaluation: NRHP non-eligible (longer than average, but a typically configured pinned Pratt pony truss, poorly documented)

inventoried by: Clayton B. Fraser 22 October 1993

Loutre Slough Bridge

WARR09

GENERAL DATA

structure no.:	099001.7	**city/town:**	0.5 mile southwest of Case
county:	Warren	**feature inters.:**	Loutre Slough
		cadastral grid:	S21, T46N, R4W
		highway route:	County Road 99
		highway distr.:	3
		current owner:	Warren County

STRUCTURAL DATA

superstructure: steel, 2-panel, rigid-connected lattice truss-leg bedstead
substructure: steel pile bent abutments

span number:	1	**condition:**	fair
span length:	30.0'	**alterations:**	unknown
total length:	30.0'	**floor/decking :**	timber deck over steel stringers
roadway width:	14.2'	**other features:**	no guardrails

HISTORICAL DATA

erection date: 1908
erection cost: $590.00
designer: Stupp Brothers Bridge and Iron Company, St. Louis MO
fabricator : Stupp Brothers Bridge and Iron Company, St. Louis MO
contractor: Stupp Brothers Bridge and Iron Company, St. Louis MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 099001.7; Warren County Court Record J: page 30 (15 September 1908) - located at Warren County Courthouse, Warrenton MO.

sign. rating: 43
evaluation: NRHP non-eligible (undistinguished, small-scale structure, lacking in technological significance)

inventoried by: Clayton B. Fraser 22 February 1993

Clay Branch Bridge

WARR10

GENERAL DATA

structure no.: 106001.4
county: Warren

city/town: 6.6 miles west of Hopewell
feature inters.: Clear Branch tributary
cadastral grid: S4/9, T45N, R3W
highway route: County Road 106
highway distr.: 3
current owner: Warren County

STRUCTURAL DATA

superstructure: steel, 3-panel, pin-connected Pratt half-hip pony truss
substructure: concrete abutments and wingwalls

span number: 1
span length: 40.0'
total length: 40.0'
roadway width: 13.5'

condition: fair
alterations: unknown
floor/decking : timber deck over steel stringers
other features: timber guardrails

HISTORICAL DATA

erection date: 1902
erection cost: $400.00 (superstructure only)
designer: Stupp Brothers Bridge and Iron Company, St. Louis MO
fabricator : Stupp Brothers Bridge and Iron Company, St. Louis MO
contractor: Stupp Brothers Bridge and Iron Company, St. Louis MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 106001.4; Warren County Court Record H: page 448 (10 May 1902), page 466 (31 May 1902), page 495 (20 September 1902) - located at Warren County Courthouse, Warrenton MO.

sign. rating: 41
evaluation: NRHP non-eligible (undistinguished, short-span example of a relatively common Pratt truss sub-type)

inventoried by: Clayton B. Fraser 22 February 1993

Water Run Creek Bridge

WARR11

GENERAL DATA

structure no.:	116000.3	**city/town:**	1.2 miles southeast of Holstein
county:	Warren	**feature inters.:**	Water Run Creek
		cadastral grid:	S20, T45N, R2W
		highway route:	Schomberg Road
		highway distr.:	3
		current owner:	Warren County

STRUCTURAL DATA

superstructure: steel, 2-panel, rigid-connected lattice truss-leg bedstead
substructure: concrete abutments and wingwalls

span number:	1	**condition:**	fair
span length:	30.0'	**alterations:**	unknown
total length:	31.0'	**floor/decking :**	timber deck over steel stringers
roadway width:	14.2'	**other features:**	no guardrails; builder's plate: **Stupp Brothers Bridge and Iron Company, St. Louis MO**

HISTORICAL DATA

erection date: 1909
erection cost: unknown
designer: Stupp Brothers Bridge and Iron Company, St. Louis MO
fabricator : Stupp Brothers Bridge and Iron Company, St. Louis MO
contractor: Stupp Brothers Bridge and Iron Company, St. Louis MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 116000.3.

sign. rating: 38
evaluation: NRHP non-eligible (undistinguished, short-span example of a relatively common Pratt truss sub-type)

inventoried by: Clayton B. Fraser 22 February 1993

West Point Bridge

WARR12

GENERAL DATA

structure no.:	133000.2	**city/town:**	1.0 mile north of Peers
county:	Warren	**feature inters.:**	Charrette Creek
		cadastral grid:	S22, T45N, R2W
		highway route:	County Road 133
		highway distr.:	3
		current owner:	Warren County

STRUCTURAL DATA

superstructure: steel, 7-panel, pin-connected Pratt through truss; steel, pin-connected Pratt pony approach span

substructure: concrete abutments; concrete-filled steel cylinder piers

span number:	1	**condition:**	good
span length:	124.0'	**alterations:**	none
total length:	186.0'	**floor/decking :**	timber deck over steel stringers
roadway width:	13.7'	**other features:**	upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 looped rectangular eyebars; vertical: 2 channels with lacing; diagonal: 2 looped rectangular eyebars; counter: square eyerod with turnbuckle; lateral bracing: round rod with threaded ends; strut: 4 angles with lacing; floor beam: I-beam, field-bolted to vertical; guardrail: steel lattice

HISTORICAL DATA

erection date: 1905

erection cost: $2625.00

designer: A.H. Wehmeyer, Warren County Surveyor

fabricator : Stupp Brothers Bridge and Iron Company, St. Louis MO; Lackawanna Steel Company, Pittsburgh PA

contractor: Stupp Brothers Bridge and Iron Company, St. Louis MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 133000.2; Warren County Court Record I: page 97 (1 August 1904), page 132 (16 November 1904), page 160 (8 February 1905), page 189 (6 April 1905), page 291 (9 November 1905), page 294 (10 November 1905) - located at Warren County Courthouse, Warrenton MO; field inspection by Clayton Fraser, 18 October 1990.

sign. rating: 50

evaluation: NRHP possibly eligible (well-preserved, well-documented example of mainstay structural type)

inventoried by: Clayton B. Fraser 22 February 1993

Charrette Creek Bridge

WARR13

GENERAL DATA

structure no.: 155000.2
county: Warren
city/town: 3.5 miles northwest of Marthasville
feature inters.: Charrette Creek
cadastral grid: S15/22, T45N, R2W
highway route: County Road 155
highway distr.: 3
current owner: Warren County

STRUCTURAL DATA

superstructure: steel, 2-panel, pin-connected Pratt half-hip pony truss with 1 steel stringer approach span
substructure: concrete abutments and wingwalls

span number: 1
span length: 25.0'
total length: 30.0'
roadway width: 15.7'
condition: fair
alterations: truss moved
floor/decking : corrugated steel deck
other features: steel angle guardrails

HISTORICAL DATA

erection date: 1901
erection cost: $223.00 (superstructure only)
designer: American Bridge Company, New York NY
fabricator : unknown
contractor: superstructure: American Bridge Company, New York NY; substructure: local stonemasons

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 155000.2; Warren County Court Record H: page 313 (11 May 1900), page 338 (7 August 1901), pages 347-48 (10 August 1901), page 356 (2 September 1901), page 386 (4 February 1902) - located at Warren County Courthouse, Warrenton MO.

sign. rating: 36
evaluation: NRHP non-eligible (shorter than average, typically configured example of a common structural type)

inventoried by: Clayton B. Fraser 22 February 1993

HAER INVENTORY
Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE
Washington Bridge
MHTD: K 969

WARR01

DATE(S) OF CONSTRUCTION
1934-36

LOCATION
State Highway 47 over Missouri River; Survey 1647, T44N, R1W
Washington; Warren County, Missouri

USE (ORIGINAL / CURRENT)
highway bridge / highway bridge

RATING NRHP determined eligible (score: 72)

CONDITION
good

OWNER
Missouri Highway and Transportation Department

span number:	5	superstructure:	steel, rigid-connected, cantilever Warren through truss
span length:	475.0'	substructure:	concrete abutments and piers with Moderne detailing
total length:	2562.0'	floor/decking:	concrete deck over steel stringers
roadway wdt.:	22.0'	other features:	upper chord and inclined end post: 2 built-up channels with cover plate and lacing; lower chord: 2 built-up channels with batten plates; vertical: 2 angles with lacing; diagonal: 2 channels with lacing or batten plates; lateral bracing: 2 angles with lacing; floor beam: I-beam, field-bolted to vertical; guardrail: 2 steel channels

Local citizens and elected officials had been lobbying off-and-on for years for a highway bridge over the Missouri River at Washington. In 1930 the Washington Bridge Committee was formed, and three years later Congress authorized the bridge's construction. Sverdrup and Parcel of St. Louis were hired to engineer the structure, which was to be funded through a combination of federal aid grants, state highway department monies and locally raised loan proceeds. Construction bids let in the spring of 1934 elicited proposals from eleven firms; that summer contracts were awarded to the Missouri Valley Bridge and Iron Company for the substructure and Stupp Brothers Bridge and Iron Company for the superstructure. Work got underway in October 1934, and by late November a hundred workers were employed setting the structure's foundations. Construction of the impressive bridge was carried out over the course of the next eighteen months. The bridge was opened to traffic on April 8, 1936; on May 28th a formal dedication ceremony was held. Attended by a host of regionally important dignitaries, the event featured bridge designer L.J. Sverdrup as the guest of honor. The bridge operated as a toll crossing until the fall of 1951, when its indebtedness was finally retired. During the 1930s and 1940s, the standard toll charge was 45 cents for one-way, or 75 cents for a round-trip crossing. The Washington Bridge today appears largely as originally built, having only been subjected to minor, maintenance related repairs.

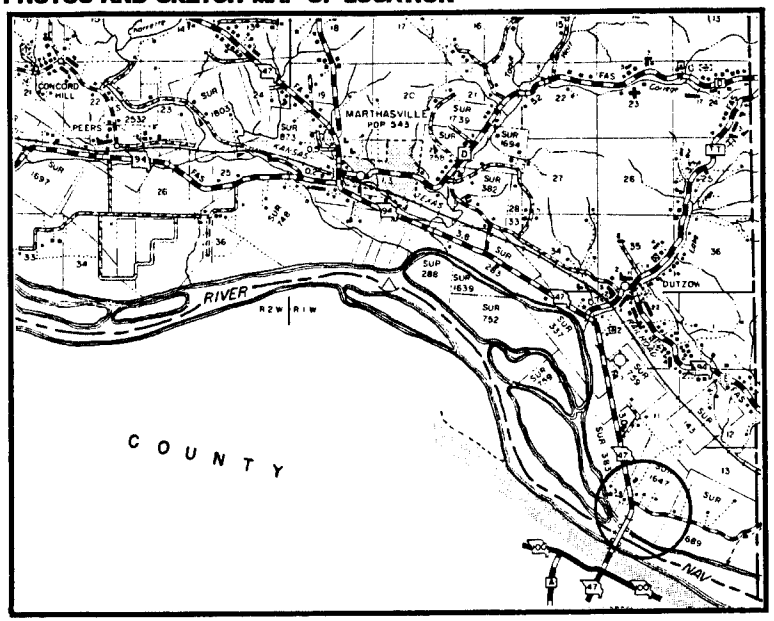
Fourteen vehicular steel truss bridges over the Missouri River are included in Missouri's statewide historic bridge inventory. As a group, these bridges comprise some of the state's longest examples of truss bridge construction. Undertaken during the depth of the Great Depression, the Washington Bridge was one of a series of great river bridges built in Missouri during the 1920s and 1930s. It has formed a regionally important crossing of the Missouri River: the only span between Hermann and St. Charles. Featuring a cantilevered design, the Washington Bridge ranks among Missouri's most monumental examples of steel truss construction. With a span length of 475 feet and an overall length of 2562 feet, the multiple-span structure clearly ranks as a superlative example of its type. Its distinctive curved

profile distinguished it among several great river bridges undertaken in the state by prominent St. Louis civil engineers Sverdrup and Parcel. Similarly configured structures undertaken by Sverdrup and Parcel include the Mark Twain Bridge in Hannibal, the Hermann Bridge and the Miami Bridge. As an important river crossing and a well-preserved example of large-scale bridge construction, the Washington Bridge is one of Missouri's more noteworthy highway trusses.

NAME(S) OF STRUCTURE

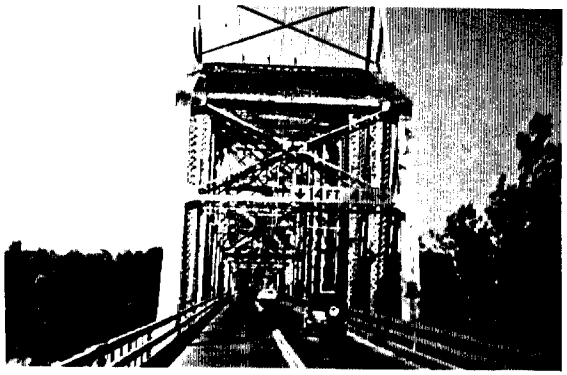
Washington Bridge

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 969; Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO; "Building Bridge Major Event for City," **The (Washington) Missourian**, 24 May 1989, page 10; Ralph Gregory, **A History of Washington, Missouri**, pages 81-82, 88-89; Mari-Anne Messmann, "Desire, Determination Bridge the Missouri," **Washington Missourian**, 6 February 1975; "Washington Bridge Was 38 Years Old Monday," **Washington Missourian**, 30 May 1974; "Building of Bridge Major Event for City," **Washington Missourian**, 24 May 1989; "Work on Washington Bridge to Begin Soon," **Hermann Advertiser-Courier**, 15 March 1929; field inspection by Clayton Fraser, 29 June 1994.

INVENTORIED BY	AFFILIATION	DATE
Clayton B. Fraser	Fraserdesign, Loveland CO	3 February 1992

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE
Camp Creek Bridge
MHTD: 004001.3

WARR03

DATE(S) OF CONSTRUCTION
1894

LOCATION
Pin Oak Road over Camp Creek; S3/10, T48N, R3W
10.9 miles northwest of Warrenton; Warren County, Missouri

USE (ORIGINAL / CURRENT)
roadway bridge / roadway bridge

RATING NRHP possibly eligible (score: 53)

CONDITION
fair

OWNER
Warren County

span number:	1	superstructure:	steel, 5-panel, pin-connected Pratt pony truss, with steel stringer approach span
span length:	70.0'	substructure:	stone masonry abutments; concrete pier
total length:	85.0'	floor/decking:	timber deck over steel stringers
roadway wdt.:	11.4'	other features:	upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 looped rectangular eyebars; vertical: 4 angles with lacing; diagonal: 2 looped square eyebars; counter: square eyebar with turnbuckle; lateral bracing: round rod with threaded ends; floor beam: I-beam, field-bolted to vertical; guardrail: 2 angles

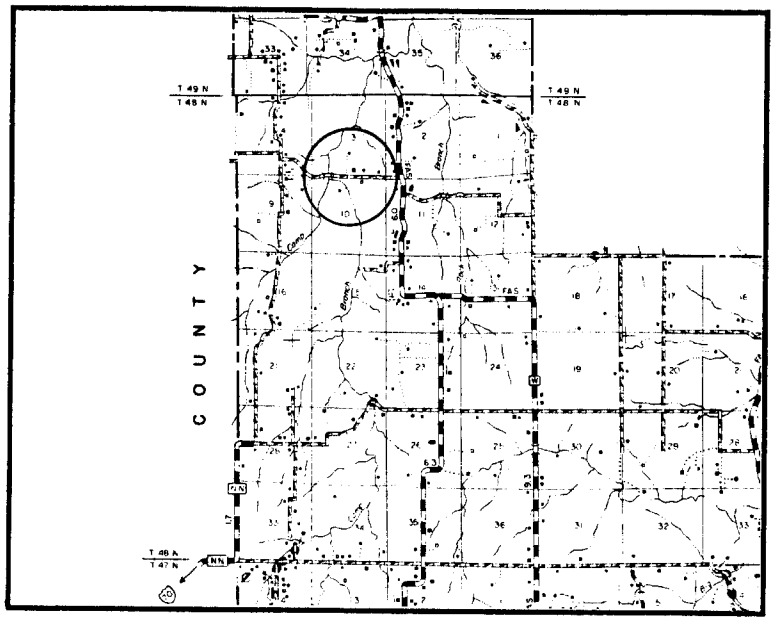
Meeting in the county seat of Warrenton, the Warren County Court in December 1893 received a citizens' petition for a permanent bridge in Camp Creek Township. Located in the northern part of the county, the structure would carry a county road across Camp Creek. The judges granted the petition in February and later that spring awarded a contract to Farnsworth and Blodgett of Kansas City to fabricate and erect a medium-span truss on stone masonry abutments and a steel cylinder pier. The contractors completed the bridge in August 1894 for $1250.00. The truss carried traffic for twenty years before the west abutment collapsed, dropping the span into the creek. Declaring an emergency, the county hired St. Louis contractors Miller and Borcherding to construct a new concrete pier and re-erect the truss with new steel stringers for $1300.00. Once repaired, the Camp Creek Bridge has functioned in place since, with no other alterations of note.

Although altered somewhat in 1914, this crossing of Camp Creek has now functioned in its current condition for more than 75 years. The bridge is a well-documented, typical example of a pin-connected Pratt pony truss - a mainstay design for short-span crossings in the years around the turn of the century.

NAME(S) OF STRUCTURE

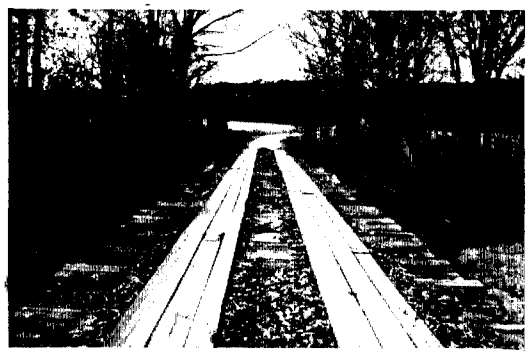
Camp Creek Bridge

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. 004001.3; Various papers relating to "Bridge No. 19", including report to the court from Benjamin Frick (21 October 1914) and original contract and construction drawings; Warren County Court Record G: page 57 (29 August 1893), page 86 (2 December 1893), page 137 (1 September 1894), page 161 (31 December 1894) - all located at Warren County Courthouse, Warrenton MO; field inspection by Clayton Fraser, 18 October 1990.

INVENTORIED BY	AFFILIATION	DATE
Clayton B. Fraser	Fraserdesign, Loveland CO	3 February 1992

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE
Steinhagen Bridge
MHTD: 023000.5

WARR05

DATE(S) OF CONSTRUCTION
1896

LOCATION
County Road 23 over Big Creek; S34, T46N, R2W
5.5 miles north of Warrenton; Warren County, Missouri

USE (ORIGINAL / CURRENT)
roadway bridge / roadway bridge

RATING NRHP possibly eligible (score: 48)

CONDITION
fair

OWNER
Warren County

span number:	2	superstructure:	steel, 5-panel, pin-connected Pratt through truss
span length:	85.0'	substructure:	stone abutments; concrete-filled steel cylinder pier
total length:	170.0'	floor/decking:	timber deck over steel stringers
roadway wdt.:	12.6'	other features:	upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 looped rectangular eyebars; vertical: 2 channels with lacing (2 punched square eyebars at the hip); diagonal: 2 looped rectangular eyebars; counter: round eyerod with turnbuckle; lateral bracing: round rod with threaded ends; strut: 4 angles with lacing; floor beam: I-beam, U-bolted to vertical; guardrail: 2 angles

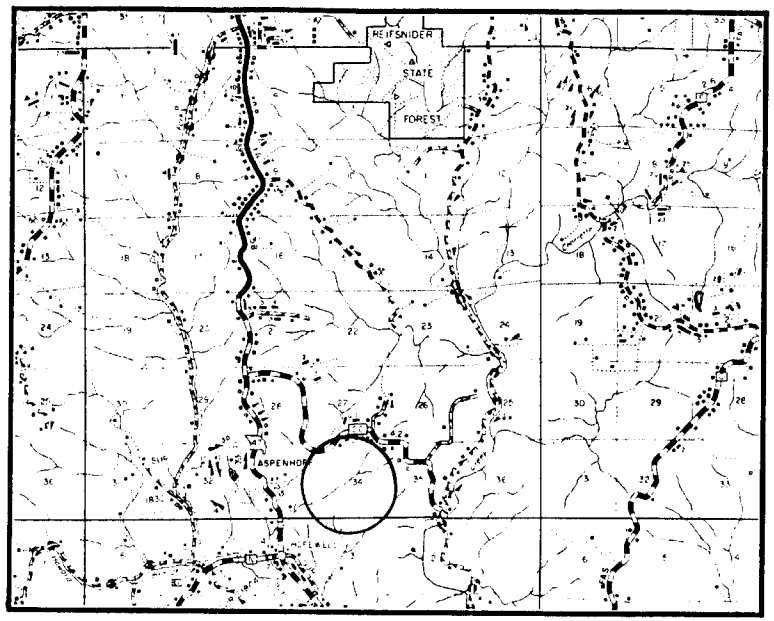
Early in 1896 the Warren County Court contracted with local contractor J.S. McCleary and Sons to erect a substantial bridge over Big Creek north of the small settlement of Steinhagen. Located on the Warrenton - Hawk Point Road (the major route north from the county seat), the structure consisted of two short-span Pratt through trusses, supported by stone masonry abutments and a center concrete-filled steel cylinder pier. McCleary subcontracted with the Stupp Brothers Bridge and Iron Company of St. Louis to fabricate the pin-connected trusses, which McCleary assembled in August 1896. The Steinhagen Bridge has survived in unaltered condition, although since the subsequent construction of State Highway 47, it has carried only intermittent traffic.

Thousands of Pratt trusses were erected throughout Missouri in the late 19th and early 20th centuries. Marketed by virtually all of the in-state and regional bridge companies, this versatile structural type was used overwhelmingly by the counties for short- and medium-span applications. With typical dimensions and detailing, the Steinhagen Bridge typifies this statewide bridge building trend.

NAME(S) OF STRUCTURE

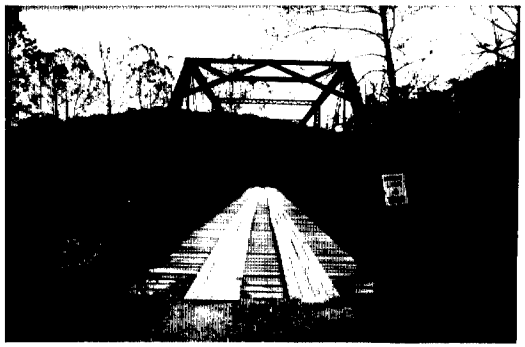
Steinhagen Bridge

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. 023000.5; Warren County Court Record G: pages 335-36 (8 August 1896), page 341 (8 September 1896); County Court Record I: page 557 (8 November 1907), page 575 (6 February 1908 - located at Warren County Courthouse, Warrenton MO; field inspection by Clayton Fraser, 18 October 1989.

INVENTORIED BY	AFFILIATION	DATE
Clayton B. Fraser	Fraserdesign, Loveland CO	3 February 1992

HAER INVENTORY
Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE
Indian Camp Creek Bridge
MHTD: 026000.6

WARR06

DATE(S) OF CONSTRUCTION
1918

LOCATION
North Stringtown Road over Indian Camp Creek; S2, T47N, R1W
3.2 miles northeast of Wright City; Warren County, Missouri

USE (ORIGINAL / CURRENT)
roadway bridge / roadway bridge

RATING NRHP possibly eligible (score: 50)

CONDITION
fair

OWNER
Warren County

span number:	1	superstructure:	steel, 5-panel, rigid-connected Camelback pony truss, with concrete slab approach spans
span length:	80.0'	substructure:	concrete abutments and piers
total length:	105.0'	floor/decking:	concrete deck over steel stringers
roadway wdt.:	13.6'	other features:	upper chord and inclined end posts: 2 channels with cover plate and lacing; lower chord: 2 angles with batten plates; vertical: 4 angles with batten plates; diagonal: 2 angles with batten plates; lateral bracing: round rod with threaded ends; floor beam: I-beam, field-bolted to vertical; guardrail: 2 angles (steel pipe guardrails at approaches); bridge plate: **Class A bridge / 1918**

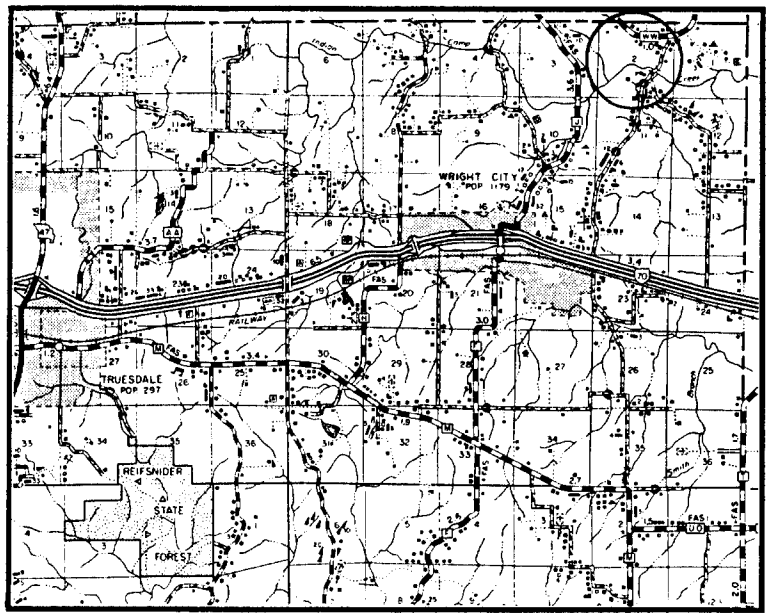
This bridge carries North Stringtown Road over Indian Camp Creek three miles northeast of Wright City, near the Lincoln County line. A bridge plate reveals that the five-panel, rigid-connected Camelback pony truss was erected in 1918. Drawings for the structure, prepared by County Highway Engineer Benjamin Frick, were based on "Class A" Missouri Steel Specifications, developed in 1911. Frick also prepared plans for the substructure - comprised of concrete abutments on spread footers. Steel for the truss was delivered to Wright City by the Illinois Steel Bridge Company of Jacksonville, Illinois. Illinois Bridge was paid $1750.00 for the steel, while the East Saint Louis Bridge Company and the Missouri Bridge and Iron Company were both paid smaller amounts for bridge materials. Once all the material had been received, the structure was erected by a county bridge crew. The total cost came to $5342.58. Somewhat unusual, the truss has been painted yellow. Today, the bridge continues to carry vehicular traffic in its rural northeast Warren County location.

Rigid-connected pony trusses - primarily of the Warren configuration - were built by the thousands throughout Missouri in the 1910s and 20s. Rigid-connected Camelback ponies were built far less often, however, and relatively few remain in place today. Less than 20 of these unusual bridges remain in use on Missouri's roadways. As a well-preserved example of an uncommon truss type, built at the height of riveted truss construction, the Indian Camp Creek Bridge is a noteworthy structural anomaly.

NAME(S) OF STRUCTURE

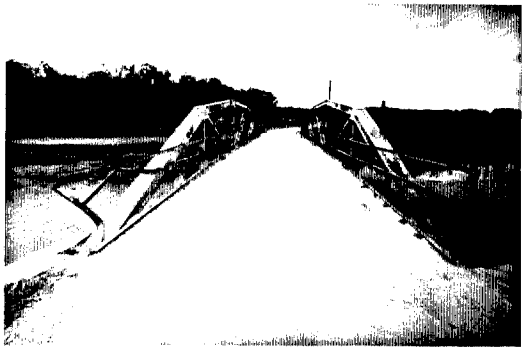
Indian Camp Creek Bridge

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. 026000.6; Warren County bridge records: original drawing by Benjamin Frick and various papers pertaining to bridge - located at Warren County Courthouse, Warrenton MO; field inspection by Clayton Fraser, 18 October 1989.

INVENTORIED BY	AFFILIATION	DATE
Clayton B. Fraser	Fraserdesign, Loveland CO	3 February 1992

HAER INVENTORY
Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE
Hollman Ford Bridge
MHTD: 028000.2

WARR07

DATE(S) OF CONSTRUCTION
1906

LOCATION
Bell Road over Indian Camp Creek; S5, T47N, R1W
3.0 miles northwest of Warrenton; Warren County, Missouri

USE (ORIGINAL / CURRENT)
roadway bridge / roadway bridge

RATING NRHP non-eligible (score: 46)

CONDITION
fair

OWNER
Warren County

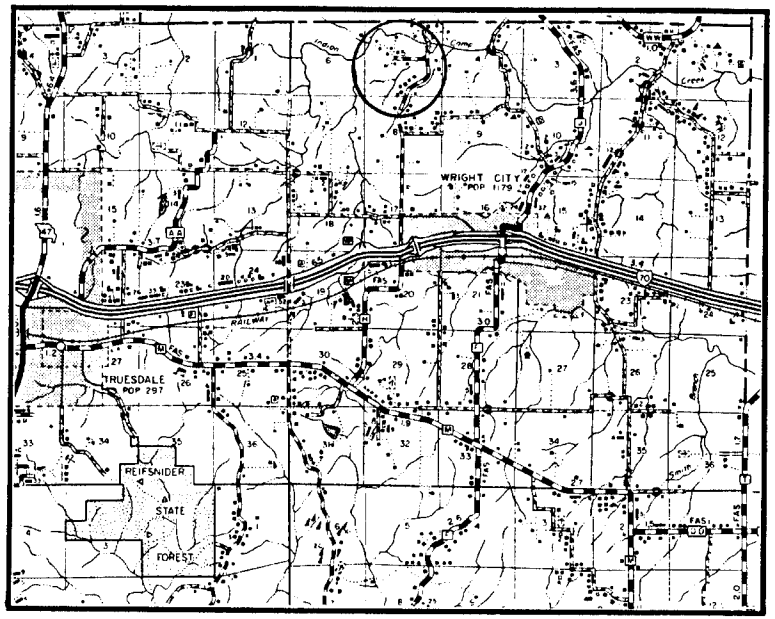
span number:	1	superstructure:	steel, 4-panel, pin-connected Pratt pony truss, with 1 steel stringer approach span
span length:	65.0'	substructure:	concrete abutment at north end; steel pile bent abutment at south end; concrete-filled steel cylinder piers
total length:	81.0'		
roadway wdt.:	13.0'	floor/decking:	timber deck over steel stringers
		other features:	upper chord and inclined end post: 2 channels with cover and batten plates; lower chord: 2 looped rectangular eyebars; vertical: 4 angles with lacing; diagonal: 2 looped rectangular eyebars; counter: round eyerod with turnbuckle; lateral bracing: round rod with threaded ends; floor beam: I-beam, field-bolted to vertical; guardrail: steel lattice

In November 1904 W.H. Bollinger petitioned the Warren County Court for a new bridge at Hollman Ford near Wright City, saying, "Owing to the location of the ford of the creek and the hilly and broken condition of the surrounding or adjoining lands, it is very hard to secure a site suitable for the erection and maintenance of a bridge at this point." The court in February 1905 instructed county surveyor A.W. Wehmeyer to locate and design the structure. Wehmeyer delineated a medium-span, pinned Pratt pony truss, supported high above Indian Camp Creek by concrete and steel abutments with steel cylinder piers between the truss and a single steel stringer approach span. After advertising for competitive bids, Wehmeyer awarded a construction contract to Stupp Brothers Bridge and Iron Company in September, but the judges nullified the contract and ordered him to try again. Two months later Wehmeyer contracted with O.W. Childs, but again the court intervened, rejecting the contract. Finally, in December the surveyor re-hired Stupp Brothers to build the bridge. The St. Louis contractor completed the structure by the May 1st contract deadline. Total cost: $999.00 (some $550.00 less than the company's original bid). The Hollman Ford Bridge received steel replacement stringers two years later, but has otherwise remained intact. It is a typical example of a common truss configuration, with standard detailing, unremarkable dimensions and an average degree of physical integrity.

NAME(S) OF STRUCTURE

Hollman Ford 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. 028000.2; Warren County Court Record I: page 140 (18 November 1904), page 167 (10 February 1905), page 256 (9 August 1905), page 273 (5 September 1905), page 294 (10 November 1905), page 304 (7 December 1905), page 66 (31 December 1908) - located at Warren County Courthouse, Warrenton MO; field inspection by Clayton Fraser, 18 October 1989.

INVENTORIED BY	AFFILIATION	DATE
Clayton B. Fraser	Fraserdesign, Loveland CO	3 February 1992

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE
West Point Bridge
MHTD: 133000.2

WARR12

DATE(S) OF CONSTRUCTION
1905

LOCATION
County Road 133 over Charrette Creek; S22, T45N, R2W
1.0 mile north of Peers; Warren County, Missouri

USE (ORIGINAL / CURRENT)
roadway bridge / roadway bridge

RATING NRHP possibly eligible (score: 50)

CONDITION
good

OWNER
Warren County

span number:	1	superstructure:	steel, 7-panel, pin-connected Pratt through truss; pin-connected Pratt pony approach span
span length:	124.0'	substructure:	concrete abutments; concrete-filled steel cylinder piers
total length:	186.0'	floor/decking:	timber deck over steel stringers
roadway wdt.:	13.7'	other features:	upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 looped rectangular eyebars; vertical: 2 channels with lacing; diagonal: 2 looped rectangular eyebars; counter: square eyerod with turnbuckle; lateral bracing: round rod with threaded ends; strut: 4 angles with lacing; floor beam: I-beam, field-bolted to vertical; guardrail: steel lattice

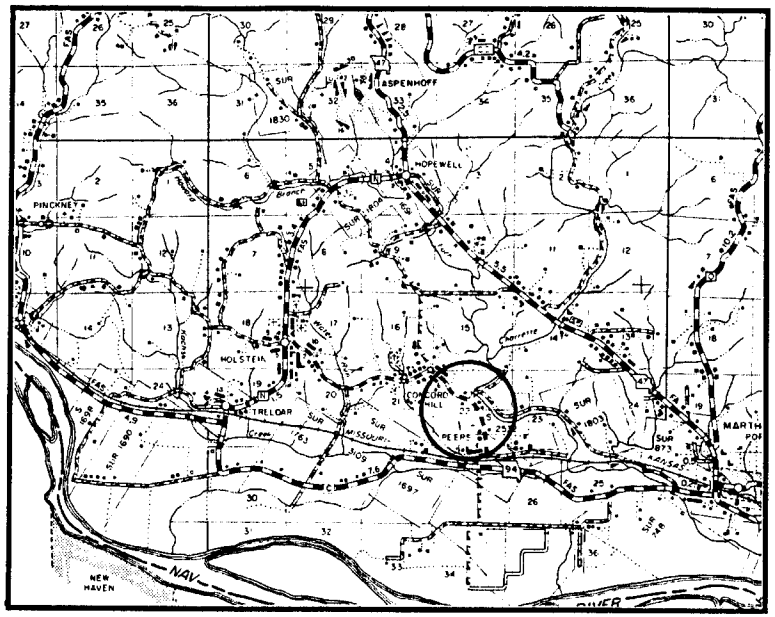
After receiving several petitions from H.A. Schoppenhorst and others for a permanent bridge over Charrette Creek, the Warren County Court in November 1904 ordered county surveyor A.W. Wehmeyer to survey the site and prepare plans and specifications for the structure. Located on the Marthasville - Holstein Road, three miles north of the Missouri River, the bridge that Wehmeyer engineered consisted of a medium-span Pratt through truss with a single pony truss approach span on the east. Wehmeyer advertised for competitive bids in February 1905 and two months later awarded the construction contract for $2625.00 to the Stupp Brothers Bridge and Iron Company. A Stupp crew began excavation for the concrete abutments soon thereafter. Using steel components milled by Lackawanna Steel Company of Pittsburgh, the St. Louis contractor completed the pin-connected trusses by early November. Called the West Point Bridge because of its position on a tight westward curve of the stream, the structure has carried traffic since 1905 in essentially unaltered condition.

The West Point Bridge is a well-preserved and well-documented example of a mainstay structural type–the Pratt through truss. The structure accrues additional significance due to its intact pinned Pratt pony truss approach span.

NAME(S) OF STRUCTURE

West Point 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. 133000.2; Warren County Court Record I: page 97 (1 August 1904), page 132 (16 November 1904), page 160 (8 February 1905), page 189 (6 April 1905), page 291 (9 November 1905), page 294 (10 November 1905) - located at Warren County Courthouse, Warrenton MO; field inspection by Clayton Fraser, 18 October 1990.

INVENTORIED BY	AFFILIATION	DATE
Clayton B. Fraser	Fraserdesign, Loveland CO	3 February 1992