

MACON COUNTY

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

Inv. No.	MHTD	Bridge Name	Description
*MACO01	029002.2	Cherry Ford Bridge	(replaced)
*MACO02	031000.8	Bridge	1- 40' c1900 pinned Pratt bedstead
MACO03	033000.1	Buck Creek Bridge	(replaced)
MACO04	044003.2	Bridge	(replaced)
MACO05	048002.4	Richland Creek Bridge	1- 40' c1900 pinned Pratt bedstead
MACO06	049000.8	Richland Creek Bridge	(replaced)
MACO07	054000.6	Middle Fork Bridge	1- 32' 1897 pinned Pratt bedstead Scoven and Haynes
MACO08	063000.9	Richland Creek Bridge	(replaced)
MACO09	067001.6	East Fork Bridge	1- 40' 1896 pinned Pratt bedstead Farnsworth and Blodgett
MACO10	067003.0	Long Branch Bridge	(replaced)
*MACO11	089001.7	Bear Creek Bridge	(replaced)
MACO12	104000.8	Bear Creek Bridge	(replaced)
MACO13	111000.2	Bear Creek Bridge	1- 50' c1910 pinned Pratt pony truss
MACO14	118000.8	Bear Creek Bridge	(replaced)
MACO15	120001.1	Bear Creek Bridge	(replaced)
MACO16	139001.9	Ely Branch Bridge	1- 40' 1902 pinned Pratt bedstead A.M. Blodgett, Kansas City
MACO17	142002.2	Middle Fork Bridge	1- 40' 1897 pinned Pratt bedstead Farnsworth and Blodgett
*MACO18	152002.2	Bridge	(replaced)
MACO19	159001.2	Middle Fork Bridge	(replaced)
MACO20	190A00.4	Ten Mile Creek Bridge	(replaced)
MACO21	297000.7	Sweezer Creek Bridge	(replaced)
MACO22	300002.0	Evans Bridge	(replaced)
*MACO23	321001.2	Chariton River Bridge	1- 50' 1917 riveted Warren pony truss Illinois Steel Bridge Company
MACO24	323000.6	Bridge	(replaced)
*MACO25	349001.2	Mussel Fork Bridge	1- 60' c1910 pinned Pratt pony truss
*MACO26	358000.5	Santa Fe RR Overpass	1-150' c1920 pinned Pratt through truss
*MACO27	382000.6	Mussel Fork Bridge	1- 70' 1897 pinned Pratt pony truss Farnsworth and Blodgett
*MACO28	384000.4	Hair's Ford Bridge	1- 80' c1880 bowstring pony arch-truss re-erected 1892 by King Br. Co
*MACO29	388001.4	Little Brush Creek Bridge	1- 36' 1905 riveted Pratt bedstead Dildine Bridge Co. Cameron, MO
*MACO30	403001.6	Bridge	1- 40' c1905 pinned Pratt bedstead

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INCLUDED (cont.):

MACO31	405001.1	Bridge					(replaced)
MACO32	406000.9	Puzzle Creek Bridge	1- 30'	1904			pinned Pratt bedstead A.M. Blodgett (replaced)
*MACO33	409001.2	Hammock's Mill Bridge	1- 32'	1890			pinned Pratt bedstead Farnsworth & Blodgett (prob.)
*MACO34	454000.6	Bridge	1- 50'	c1910			pinned Pratt pony truss
*MACO35	462000.8	Middle Fork Bridge	1- 40'	c1900			pinned Pratt bedstead
*MACO36	464001.2	Bridge					(replaced)
*MACO37	480000.9	Bridge					(replaced)
MACO38	513001.6	Middle Fork Bridge	1- 70'	1907			pinned Pratt pony truss A.M. Blodgett (prob.)
*MACO39	517000.2	Middle Fork Bridge	1- 60'	c1895			pinned Pratt half-hip pony truss Farnsworth and Blodgett (prob.)
*MACO40	519000.4	Middle Fork Bridge	1- 60'	c1900			pinned Pratt bedstead
MACO41	526000.5	Middle Fork Bridge					(replaced)
MACO42	527001.2	Middle Fork Bridge					(replaced)
MACO43	533000.1	Bridge					(replaced)
MACO44	540001.3	Bridge					(replaced)
*MACO45	587000.7	East Fork Bridge					(replaced)
MACO46	606000.7	Middle Fork Bridge	1- 50'	1904			pinned Pratt bedstead A.M. Blodgett

EXCLUDED:

Pratt pony truss

009001.2 302001.2

Warren pony truss

012001.1 027000.8 040000.5 226000.5 226000.7 273000.4 273003.5
367001.5 387001.5 541000.5

Lattice bedstead

146003.1 305000.4 307000.8 383001.4

Steel stringer

G 750R	G 752R	G 754R	G 755R	S 84	S 338	
S 984	S 993	S 996	T 85	T 989A	W 401	X 104
X 122	003002.6	005000.2	009000.2	015001.6	054001.3	112000.4
143002.2	152001.4	163000.9	188001.2	194001.2	196000.7	198000.4
214000.8	225002.2	228002.7	232001.0	233000.9	234001.1	261002.2
277001.8	278000.8	280000.3	288R00.5	292001.7	296001.6	301000.7
323001.9	323004.7	326000.6	331001.4	336000.6	337000.5	344001.7
348000.3	352000.2	354000.5	361001.1	387001.9	403000.3	404000.8
408000.3	503002.3	503003.8	510000.9	531000.6	553000.3	559001.2
603000.6						

MACON COUNTY

EXCLUDED (cont.):

Steel girder

017001.6	020000.2	211000.6	216001.5	295001.2	373001.3	383000.7
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Concrete slab / girder

K 516	K 674	036000.1	423R00.0	621000.3	621000.7	621000.8
627000.4						

Concrete box culvert

G 753R	G 760R1	G 764R	S 312	S 313	S 390	T 380
T 764	T 988	X 721	X 786	X 935	X 936	X 940
X 942	X 949	629000.4				

Timber stringer

W 404	477000.6	567002.0
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SUMMARY:

	Primary	Secondary	Urban	Other	Total
Included	0	21	0	0	21
Excluded	34	82	0	0	116
	34	103	0	0	137 structures

Bridge

MACO02

GENERAL DATA

structure no.:	031000.8	city/town:	1.3 miles northeast of Elmer
county:	Macon	feature inters.:	unnamed stream
		cadastral grid:	S36, T60N, R16W
		highway route:	County Road 31
		highway distr.:	2
		current owner:	Macon County

STRUCTURAL DATA

superstructure: steel, 3-panel, pin-connected Pratt bedstead, with two-span steel stringer approach spans on the east end

substructure: steel pile bent piers and abutments; timber backwalls

span number:	1	condition:	fair
span length:	40.0'	alterations:	truss legs have been cut off and replaced with steel pile bents
total length:	76.0'	floor/decking :	timber deck over steel stringers
roadway width:	13.8'	other features:	upper chord and upright end post: 2 channels with cover plate and lacing; lower chord: 2 channels with batten plates (outer panels), and 2 punched rectangular eyebars (inner panel); 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, U-bolted to vertical; guardrail: two channels

HISTORICAL DATA

erection date: c1900
erection cost: unknown
designer: unknown
fabricator : unknown
contractor: unknown

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 031000.8; field inspection by Richard Collier, 11 June 1991.

sign. rating: 26
evaluation: NRHP non-eligible (typical example of relatively common structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Richland Creek Bridge

MAC005

GENERAL DATA

structure no.:	048002.4	city/town:	4.6 miles southwest of La Plata
county:	Macon	feature inters.:	Richland Creek
		cadastral grid:	S21/22, T60N, R15W
		highway route:	County Road 48
		highway distr.:	2
		current owner:	Macon County

STRUCTURAL DATA

superstructure: steel, 3-panel, pin-connected Pratt bedstead, with steel stringer approach span

substructure: steel pile bent pier and abutments with timber backwalls

span number:	1	condition:	fair
span length:	40.0'	alterations:	unknown
total length:	51.0'	floor/decking :	timber deck
roadway width:	14.5'	other features:	unknown

HISTORICAL DATA

erection date: c1900
erection cost: unknown
designer: unknown
fabricator : unknown
contractor : unknown

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 048002.4.

sign. rating: 26
evaluation: NRHP non-eligible (typical example of common structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Middle Fork Bridge

MAC007

GENERAL DATA

structure no.:	054000.6	city/town:	3.6 miles east of Elmer
county:	Macon	feature inters.:	Middle Fork of the Chariton River
		cadastral grid:	S4, T59N, R15W
		highway route:	County Road 54
		highway distr.:	2
		current owner:	Macon County

STRUCTURAL DATA

superstructure: steel, 2-panel, pin-connected Pratt bedstead
substructure: steel pile bent abutments with timber backwalls

span number:	1	condition:	fair
span length:	32.0'	alterations:	unknown
total length:	32.0'	floor/decking :	timber deck
roadway width:	13.8'	other features:	no guardrails

HISTORICAL DATA

erection date: 1897
erection cost: \$350.00
designer: unknown
fabricator : unknown
contractor: Scoven and Haynes

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 054000.6; Macon County Courthouse, Record N: page 133 (8 September 1897), page 215 (8 February 1898) - located at the Macon County Courthouse, Macon MO.

sign. rating: 39
evaluation: NRHP non-eligible (typical, small-scale example of relatively common structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

East Fork Bridge

MAC009

GENERAL DATA

structure no.:	067001.6	city/town:	5.2 miles southwest of La Plata
county:	Macon	feature inters.:	East Fork of the Chariton River
		cadastral grid:	S1, T59N, R15W
		highway route:	County Road 67
		highway distr.:	2
		current owner:	Macon County

STRUCTURAL DATA

superstructure: steel, 2-panel, pin-connected Pratt bedstead, with steel stringer approach spans

substructure: steel truss-leg piers and abutments with timber backwalls

span number:	1	condition:	fair
span length:	40.0'	alterations:	unknown
total length:	66.0'	floor/decking :	timber deck
roadway width:	13.8'	other features:	steel angle guardrails

HISTORICAL DATA

erection date: 1896

erection cost: \$415.00

designer: Farnsworth and Blodgett, Kansas City MO

fabricator : unknown

contractor: Farnsworth and Blodgett, Kansas City MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 067001.6; Macon County Courthouse, Record M: page 342 (6 April 1896) - located at Macon County Courthouse, Macon MO.

sign. rating: 48

evaluation: NRHP possibly eligible (typically configured, relatively early example of mainstay structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Bear Creek Bridge

MACO13

GENERAL DATA

structure no.: 111000.2	city/town: 5.4 miles southeast of La Plata
county: Macon	feature inters.: Bear Creek
	cadastral grid: S18/19, T60N, R13W
	highway route: County Road 111
	highway distr.: 2
	current owner: Macon County

STRUCTURAL DATA

superstructure: steel, 3-panel, pin-connected Pratt pony truss, with steel stringer approach spans	
substructure: unknown	
span number: 1	condition: fair
span length: 50.0'	alterations: unknown
total length: 80.0'	floor/decking : timber deck
roadway width: 11.0'	other features: steel angle guardrails

HISTORICAL DATA

erection date: c1910	
erection cost: unknown	
designer: unknown	
fabricator : unknown	
contractor: unknown	
references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 111000.2.	
sign. rating: 26	
evaluation: NRHP non-eligible (typical example of common structural type)	

inventoried by: Michelle Crow-Dolby 3 July 1993

Ely Branch Bridge

MACO16

GENERAL DATA

structure no.: 139001.9	city/town: 7.8 miles southeast of La Plata
county: Macon	feature inters.: Ely Branch
	cadastral grid: S6/7, T59N, R13W
	highway route: County Road 139
	highway distr.: 2
	current owner: Macon County

STRUCTURAL DATA

superstructure: steel, 3-panel, pin-connected Pratt bedstead	
substructure: steel pile bent abutments with timber backwalls	
span number: 1	condition: fair
span length: 40.0'	alterations: unknown
total length: 40.0'	floor/decking : timber deck
roadway width: 14.0'	other features: steel angle guardrails

HISTORICAL DATA

erection date: 1902	
erection cost: \$340.00	
designer: A.M. Blodgett, Kansas City MO	
fabricator : unknown	
contractor : A.M. Blodgett, Kansas City MO	
references:	Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 139001.9; Macon County Courthouse, Record P: pages 113-14 (13 June 1902), page 243 (11 November 1902) - located at the Macon County Courthouse, Macon MO.
sign. rating: 36	
evaluation:	NRHP non-eligible (typical, small-scale example of common structural type)

Inventoried by: Michelle Crow-Dolby 3 July 1993

Middle Fork Bridge

MACO17

GENERAL DATA

structure no.:	142002.2	city/town:	5.6 miles southeast of La Plata
county:	Macon	feature inters.:	Middle Fork of Salt River
		cadastral grid:	S2, T59N, R14W
		highway route:	County Road 142
		highway distr.:	2
		current owner:	Macon County

STRUCTURAL DATA

superstructure:	steel, 3-panel, pin-connected Pratt bedstead		
substructure:	steel truss-leg abutments with timber backwalls		
span number:	1	condition:	fair
span length:	40.0'	alterations:	none
total length:	40.0'	floor/decking :	timber deck
roadway width:	12.5'	other features:	steel angle guardrails

HISTORICAL DATA

erection date:	1897
erection cost:	\$450.00
designer:	Farnsworth and Blodgett, Kansas City MO
fabricator :	unknown
contractor:	Farnsworth and Blodgett, Kansas City MO
references:	Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 142002.2; Macon County Courthouse, Record N: page 133 (8 September 1897) - located at the Macon County Courthouse, Macon MO.
sign. rating:	48
evaluation:	NRHP possibly eligible (relatively early example of mainstay structural type)

Inventoried by: Michelle Crow-Dolby 3 July 1993

Chariton River Bridge

MACO23

GENERAL DATA

structure no.:	321001.2	city/town:	5.6 miles northeast of New Cambria
county:	Macon	feature inters.:	Chariton River
		cadastral grid:	S15, T58N, R16W
		highway route:	County Road 321
		highway distr.:	2
		current owner:	Macon County

STRUCTURAL DATA

superstructure:	steel, 3-panel, rigid-connected Warren pony truss, with flanking steel stringer approach spans		
substructure:	concrete-filled steel tubular piers with concrete backwalls		
span number:	1	condition:	fair
span length:	50.0'	alterations:	non-original steel tubes between main span and approaches
total length:	77.0'	floor/decking :	timber deck over steel stringers
roadway width:	14.0'	other features:	upper chord and inclined end post: 2 channels with cover and batten plates; 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; guard-rail: 2 channels

HISTORICAL DATA

erection date:	1917
erection cost:	unknown
designer:	Illinois Steel Bridge Company, Jacksonville IL
fabricator :	Illinois Steel Bridge Company, Jacksonville IL; Lackawanna Steel Company, Pittsburgh PA
contractor :	Illinois Steel Bridge Company, Jacksonville IL
references:	Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 321001.2; Macon County Courthouse, Record V: page 359 (10 May 1917), page 363 (6 June 1917) - located at the Macon County Courthouse, Macon MO; field inspection by Richard Collier, 11 June 1991.
sign. rating:	35
evaluation:	NRHP non-eligible (undistinguished example of common structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Mussel Fork Bridge

MACO25

GENERAL DATA

structure no.: 349001.2	city/town: 5.0 miles northwest of Ethel
county: Macon	feature inters.: Mussel Fork
	cadastral grid: S17/20, T59N, R17W
	highway route: County Road 349
	highway distr.: 2
	current owner: Macon County

STRUCTURAL DATA

superstructure: steel, 4-panel, pin-connected Pratt pony truss, with steel stringer approach spans	
substructure: steel pile bent abutment with timber backwall at west end, concrete-filled steel cylinder piers elsewhere	
span number: 1	condition: fair
span length: 60.0'	alterations: none
total length: 86.0'	floor/decking : timber deck over steel stringers
roadway width: 13.0'	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 rectangular eyebars; counter: round eyerod with turn-buckle; lateral bracing: round rod with threaded ends; floor beam: I-beam, field bolted to vertical; guardrail: 2 channels

HISTORICAL DATA

erection date: c1910
erection cost: unknown
designer: unknown
fabricator : unknown
contractor: unknown

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 349001.2; field inspection by Richard Collier, 11 June 1991.

sign. rating: 28
evaluation: NRHP non-eligible (typical example of common structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Santa Fe Railroad Overpass

MACO26

GENERAL DATA

structure no.: 358000.5	city/town: 1.6 miles southwest of Ethel
county: Macon	feature inters.: Atchison, Topeka and Santa Fe Railroad
	cadastral grid: S35, T59N, R17W
	highway route: County Road 358
	highway distr.: 2
	current owner: Macon County

STRUCTURAL DATA

superstructure: steel, 9-panel, pin-connected Pratt through truss, with multiple timber stringer approach spans

substructure: heavy timber pile abutments and piers

span number: 1	condition: fair
span length: 150.0'	alterations: truss moved
total length: 237.0'	floor/decking : timber deck over timber stringers
roadway width: 13.0'	other features: upper chord: 2 channels with cover plate and lacing; inclined end post: 2 channels with 2 cover plate and angle lacing; lower chord: 2 punched rectangular eyebars; vertical: 2 channels with cover plate and lacing (2 channels with batten plates at the hip); diagonal: 2 punched rectangular eyebars; counter: square eyebar with turnbuckle; lateral bracing: round eyerod with sleeve bolt; strut: 1 channel with angle knee braces; floor beam: built up I-beam; guardrail: timber

HISTORICAL DATA

erection date: c1890; moved c1920

erection cost: unknown

designer: unknown

fabricator : unknown

contractor: unknown

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 358000.5; field inspection by Richard Collier, 11 June 1991.

sign. rating: 21

evaluation: NRHP non-eligible (typically configured example of mainstay structural type, largely undocumented)

inventoried by: Michelle Crow-Dolby 3 July 1993

Mussel Fork Bridge

MACO27

GENERAL DATA

structure no.:	382000.6	city/town:	5.7 miles northwest of New Cambria
county:	Macon	feature inters.:	Mussel Fork
		cadastral grid:	S19/30, T58N, R17W
		highway route:	County Road 382
		highway distr.:	2
		current owner:	Macon County

STRUCTURAL DATA

superstructure: steel, 5-panel, pin-connected Pratt pony truss, with steel stringer approach span on the east end

substructure: steel pile bent abutments with timber backwalls; concrete-filled steel cylinder piers, and non-original steel tubes

span number:	1	condition:	fair
span length:	70.0'	alterations:	none
total length:	111.0'	floor/decking :	timber deck over steel stringers
roadway width:	14.0'	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, U-bolted to vertical; guardrail: 2 channels; builder's plate: Farnsworth and Blodgett / 1897 / Kansas City MO

HISTORICAL DATA

erection date: 1897

erection cost: \$1200.00 (contract amount)

designer: Farnsworth and Blodgett, Kansas City MO

fabricator : Jones and Laughlin Steel Company, Pittsburgh PA

contractor: Farnsworth and Blodgett, Kansas City MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 382000.6; Macon County Court Record N: page 133 (8 September 1897) - located at the Macon County Courthouse, Macon MO; field inspection by Richard Collier, 11 June 1991.

sign. rating: 50

evaluation: NRHP possibly eligible (typically configured example of mainstay structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Hair's Ford Bridge

MACO28

GENERAL DATA

structure no.: 384000.4	city/town: 5.3 miles northwest of New Cambria
county: Macon	feature inters.: Mussel Fork
	cadastral grid: S31, T58N, R17W
	highway route: County Road 384
	highway distr.: 2
	current owner: Macon County

STRUCTURAL DATA

superstructure: wrought iron, bowstring pony arch-truss, with one steel stringer approach span on the west end

substructure: concrete-filled iron cylinder piers with timber backwalls

span number: 1	condition: poor
span length: 80.0'	alterations: moved and re-erected, 1892; stringers and floor beams replaced
total length: 106.0'	floor/decking : timber deck (partially intact) over steel stringers
roadway width: 11.0'	other features: arch rib: 2 channels with 2 cover plates; lower chord: flat iron bar; vertical: star iron with star iron outriders; diagonal: round rod with threaded ends; lateral bracing: round rod with threaded ends; floor beam: steel I-beam; guardrail: none on main span, steel angle on west approach

HISTORICAL DATA

erection date: c1880; moved 1892

erection cost: \$700.00 (contract amount)

designer: King Iron Bridge and Manufacturing Company, Cleveland OH

fabricator : King Iron Bridge and Manufacturing Company, Cleveland OH

contractor: George E. King Bridge Company, Des Moines IA

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 384000.4; Macon County Courthouse, Record K: page 334 (6 August 1891), page 456 (4 February 1892), page 542 (5 July 1892) - located at the Macon County Courthouse, Macon MO; field inspection by Richard Collier, 11 June 1991.

sign. rating: 74

evaluation: NRHP eligible (one of the last remaining examples of mainstay structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Little Brush Creek Bridge

MACO29

GENERAL DATA

structure no.: 388001.4 city/town: 2.6 miles west of New Cambria
county: Macon feature inters.: Little Brush Creek
cadastral grid: S4/9, T57N, R17W
highway route: County Road 388
highway distr.: 2
current owner: Macon County

STRUCTURAL DATA

superstructure: steel, 2-panel, rigid-connected Pratt truss-leg bedstead, with flanking steel stringer approach spans
substructure: steel pile bent piers and abutments with timber backwalls

span number: 1 condition: fair
span length: 36.0' alterations: non-original round tubes added to substructure between truss legs
total length: 68.0'
roadway width: 12.0' floor/decking : timber deck over steel stringers
other features: upper chord: I-beam; upright end post: 2 channels; lower chord: 2 channels; vertical: 1 channel; diagonal: 2 angles; lateral bracing: 1 angle; floor beam: 1 channel; guard-rail: 1 channel; small plate on center vertical: Pat Apr 19 1904; bolted plates at intersections between verticals and top chord

HISTORICAL DATA

erection date: 1905
erection cost: \$490.00 (county estimate)
designer: Dildine Bridge Company, Cameron MO
fabricator : Dildine Bridge Company, Cameron MO
contractor : Dildine Bridge Company, Cameron MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 388001.4; Macon County Court Record Q: pages 423-24 (2 May 1905), located at the Macon County Courthouse, Macon MO; field inspection by Richard Collier, 11 June 1991.

sign. rating: 41
evaluation: NRHP non-eligible (undistinguished example of relatively common truss type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Bridge

MACO30

GENERAL DATA

structure no.: 403001.6 city/town: 3.6 miles southwest of New Cambria
county: Macon feature inters.: unnamed branch
cadastral grid: S26/27, T57N, R17W
highway route: County Road 403
highway distr.: 2
current owner: Macon County

STRUCTURAL DATA

superstructure: steel, 3-panel, pin-connected Pratt truss-leg bedstead
substructure: truss legs with timber backwalls

span number:	1	condition:	fair
span length:	40.0'	alterations:	none
total length:	40.0'	floor/decking :	timber deck over steel railroad rail stringers
roadway width:	14.0'	other features:	upper chord and upright end post: 2 channels with cover plate and lacing; lower chord: 2 angles with lacing (outer panels), 2 looped rectangular eyebars (inner panel); vertical: 4 angles with lacing; diagonal: 2 looped rectangular eyebars; counter: round eyerod with turnbuckle; lateral bracing: round bar with threaded ends; floor beam: I-beam, U-bolted to vertical; guardrail: none

HISTORICAL DATA

erection date: c1905
erection cost: unknown
designer: unknown
fabricator : unknown
contractor: unknown

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 403001.6; field inspection by Richard Collier, 11 June 1991.

sign. rating: 23
evaluation: NRHP non-eligible (typical, short-span example of relatively common structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Puzzle Creek Bridge

MACO32

GENERAL DATA

structure no.:	406000.9	city/town:	3.4 miles south of New Cambria
county:	Macon	feature inters.:	Puzzle Creek
		cadastral grid:	S25, T57N, R17W
		highway route:	County Road 406
		highway distr.:	2
		current owner:	Macon County

STRUCTURAL DATA

superstructure: steel, 2-panel, pin-connected Pratt truss leg bedstead
substructure: unknown

span number:	1	condition:	fair
span length:	30.0'	alterations:	none
total length:	61.0'	floor/decking :	timber deck
roadway width:	12.0'	other features:	steel angle guardrails

HISTORICAL DATA

erection date: 1904
erection cost: \$360.00
designer: A.M. Blodgett, Kansas City MO
fabricator : unknown
contractor: A.M. Blodgett, Kansas City MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 406000.9; Macon County Courthouse, Record Q: page 278 (5 October 1904); Record R: page 429 (7 August 1907) - located at the Macon County Courthouse, Macon MO.

sign. rating: 41
evaluation: NRHP non-eligible (typical example of relatively common structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Bridge

MACO34

GENERAL DATA

structure no.: 454000.6	city/town: 3.2 miles south of Bevier
county: Macon	feature inters.: unnamed branch
	cadastral grid: S33/34, T57N, R15W
	highway route: County Road 454
	highway distr.: 2
	current owner: Macon County

STRUCTURAL DATA

superstructure: steel, 2-panel, pin-connected truss-leg bedstead, with steel stringer approach span on the south end

substructure: steel pile bent abutments with timber backwalls; truss legs; steel tubes welded to truss legs on south end for added support

span number: 1	condition: fair
span length: 32.0'	alterations: none
total length: 55.0'	floor/decking : timber deck over steel stringers
roadway width: 12.0'	other features: upper chord: 2 channels with cover plate and lacing; end post: 2 channels with lacing; lower chord: 2 angles with lacing; vertical: 4 angles with lacing; diagonal: 2 looped rectangular eyebars; lateral bracing: round rod with threaded ends; floor beam: I-beam, U-bolted to vertical; guardrail: none; builder's plate:89.....

HISTORICAL DATA

erection date: 1890

erection cost: unknown

designer: Farnsworth and Blodgett, Kansas City MO (probable)

fabricator : Jones and Laughlin Iron Company, Pittsburgh PA

contractor: Farnsworth and Blodgett, Kansas City MO (probable)

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 454000.6; field inspection by Richard Collier, 11 June 1991.

sign. rating: 50

evaluation: NRHP possibly eligible (earliest dateable example in state of mainstay structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Middle Fork Bridge

MACO35

GENERAL DATA

structure no.: 462000.8	city/town: 5.7 miles southwest of Bevier
county: Macon	feature inters.: Middle Fork of the Chariton River
	cadastral grid: S8, T56N, R15W
	highway route: County Road 462
	highway distr.: 2
	current owner: Macon County

STRUCTURAL DATA

superstructure: steel, 3-panel, pin-connected Pratt pony truss, with steel stringer approach span on the west end	
substructure: steel pile bent piers and abutments with timber backwalls	
span number: 1	condition: fair
span length: 50.0'	alterations: none
total length: 66.0'	floor/decking : timber deck over steel stringers
roadway width: 13.0'	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; counter: round eyerod with turn-buckle; lateral bracing: round rod with threaded ends; floor beam: I-beam, field bolted; guardrail: none

HISTORICAL DATA

erection date: c1910
erection cost: unknown
designer: unknown
fabricator : unknown
contractor: unknown

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 462000.8; field inspection by Richard Collier, 11 June 1991.

sign. rating: 27
evaluation: NRHP non-eligible (typically configured, inadequately documented example of common structural type)

Inventoried by: Michelle Crow-Dolby 3 July 1993

Bridge

MACO36

GENERAL DATA

structure no.: 464001.2	city/town: 2.6 miles northwest of College Mound
county: Macon	feature inters.: unnamed stream
	cadastral grid: S17/20, T56N, R15W
	highway route: County Road 464
	highway distr.: 2
	current owner: Macon County

STRUCTURAL DATA

superstructure: steel, 3-panel, pin-connected Pratt truss-leg bedstead, with steel stringer approach span on the west end	
substructure: truss leg piers; a steel tube has been welded to one truss leg for added support	
span number: 1	condition: fair
span length: 40.0'	alterations: substructure braced
total length: 56.0'	floor/decking : timber deck over steel stringers
roadway width: 14.0'	other features: upper chord and upright end post: 2 channels with lacing; lower chord: 2 angles with batten plates (outer panels), 2 looped rectangular eyebars (inner panel); vertical: 4 angles with batten plates; diagonal: 2 looped rectangular eyebars; lateral bracing: round rod with threaded ends; floor beam: I-beam; guard-rail: 2 channels

HISTORICAL DATA

erection date: c1900	
erection cost: unknown	
designer: unknown	
fabricator : Carnegie Steel Company, Pittsburgh PA	
contractor: unknown	
references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 464001.2; field inspection by Richard Collier, 11 June 1991.	
sign. rating: 28	
evaluation: NRHP non-eligible (typically configured, inadequately documented example of common structural type)	

inventoried by: Michelle Crow-Dolby 3 July 1993

Middle Fork Bridge

MACO39

GENERAL DATA

structure no.: 517000.2	city/town: 10.2 miles southeast of Macon
county: Macon	feature inters.: Middle Fork of the Salt River
	cadastral grid: S27, T56N, R13W
	highway route: County Road 517
	highway distr.: 2
	current owner: Macon County

STRUCTURAL DATA

superstructure: steel, 5-panel, pin-connected Pratt pony truss, with 3 steel stringer approach spans on the north end and 2 steel stringer approach spans on the south end

substructure: steel pile bent abutments with timber backwalls; concrete-filled steel cylinder piers

span number: 1	condition: fair
span length: 70.0'	alterations: none
total length: 159.0'	floor/decking : timber deck over steel stringers
roadway width: 12.0'	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 square eyebars; lateral bracing: round rod with threaded ends; floor beam: I-beam, field bolted below lower chord; guardrail: 2 channels

HISTORICAL DATA

erection date: 1907

erection cost: \$1628.00

designer: A.M. Blodgett, Kansas City MO (probable)

fabricator : unknown

contractor: A.M. Blodgett, Kansas City MO (probable)

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 517000.2; Macon County Court Record R: page 242 (4 December 1906) - located at the Macon County Courthouse, Macon MO; field inspection by Richard Collier, 11 June 1991.

sign. rating: 46

evaluation: NRHP non-eligible (typical example of common structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Middle Fork Bridge

MACO40

GENERAL DATA

structure no.:	519000.4	city/town:	9.8 miles southeast of Macon
county:	Macon	feature inters.:	Middle Fork of the Salt River
		cadastral grid:	S22/27, T56N, R13W
		highway route:	County Road 519
		highway distr.:	2
		current owner:	Macon County

STRUCTURAL DATA

superstructure:	steel, 4-panel, pin-connected, Pratt half-hip pony truss, with 2 steel stringer approach spans on the east end and 1 steel stringer approach span on the west end		
substructure:	steel pile bent abutments with timber backwalls; concrete-filled steel cylinder piers		
span number:	1	condition:	fair
span length:	60.0'	alterations:	none
total length:	149.0'	floor/decking :	timber deck over steel stringers
roadway width:	14.0'	other features:	upper chord and inclined end post: 2 channels with cover and batten plates; lower chord: 2 punched rectangular eyebars; vertical: 4 angles with lacing; diagonal: 2 looped square eyebars; lateral bracing: round rod with threaded ends; floor beam: tapered "fishtail" plate girder; no guardrail

HISTORICAL DATA

erection date:	c1895
erection cost:	unknown
designer:	Farnsworth and Blodgett, Kansas City MO (probable)
fabricator :	unknown
contractor:	Farnsworth and Blodgett, Kansas City MO (probable)
references:	Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 519000.4; field inspection by Richard Collier, 11 June 1991.
sign. rating:	42
evaluation:	NRHP non-eligible (typically configured, inadequately documented example of common structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Middle Fork Bridge

MACO41

GENERAL DATA

structure no.:	526000.5	city/town:	8.0 miles southeast of Macon
county:	Macon	feature inters.:	Middle Fork of the Salt River
		cadastral grid:	S16, T56N, R13W
		highway route:	County Road 526
		highway distr.:	2
		current owner:	Macon County

STRUCTURAL DATA

superstructure: steel, 2-panel, pin-connected Pratt bedstead, with steel stringer approach spans

substructure: steel pile bent piers and abutments with timber backwalls

span number:	1	condition:	fair
span length:	60.0'	alterations:	unknown
total length:	102.0'	floor/decking :	timber deck
roadway width:	13.0'	other features:	steel angle guardrails

HISTORICAL DATA

erection date: c1900
erection cost: unknown
designer: unknown
fabricator : unknown
contractor : unknown

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 526000.5.

sign. rating: 29
evaluation: NRHP non-eligible (typical example of common structural type)

inventoried by: Michelle Crow-Dolby 3 July 1993

Middle Fork Bridge

MACO46

GENERAL DATA

structure no.: 606000.7	city/town: 4.3 miles northeast of Macon
county: Macon	feature inters.: Middle Fork of the Salt River
	cadastral grid: S6, T57N, R13W
	highway route: County Road 606
	highway distr.: 2
	current owner: Macon County

STRUCTURAL DATA

superstructure: steel, 3-panel, pin-connected Pratt pony truss, with steel stringer approach span	
substructure: unknown	
span number: 1	condition: fair
span length: 50.0'	alterations: unknown
total length: 81.0'	floor/decking : timber deck
roadway width: 10.0'	other features: steel angle guardrails

HISTORICAL DATA

erection date: 1904	
erection cost: unknown	
designer: A.M. Blodgett, Kansas City MO	
fabricator : unknown	
contractor: A.M. Blodgett, Kansas City MO	
references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 606000.7; Macon County Courthouse, Record Q: page 278 (5 October 1904) - located at the Macon County Courthouse, Macon MO.	
sign. rating: 41	
evaluation: NRHP non-eligible (typical example of common structural type)	

inventoried by: Michelle Crow-Dolby 3 July 1993

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

East Fork Bridge
MHTD: 067001.6

MACO09

DATE(S) OF CONSTRUCTION

1896

LOCATION

County Road 67 over East Fork of the Chariton River; S1, T59N, R15W
5.2 miles southwest of La Plata; Macon County, Missouri

USE (ORIGINAL / CURRENT)

roadway bridge / roadway bridge

RATING NRHP possibly eligible (score: 48)

CONDITION

fair

OWNER

Macon County

span number:	1	superstructure:	steel, 2-panel, pin-connected Pratt bedstead, with steel stringer approach spans
span length:	40.0'	substructure:	steel truss-leg piers and abutments with timber backwalls
total length:	66.0'	floor/decking:	timber deck
roadway wdt.:	13.8'	other features:	steel angle guardrails

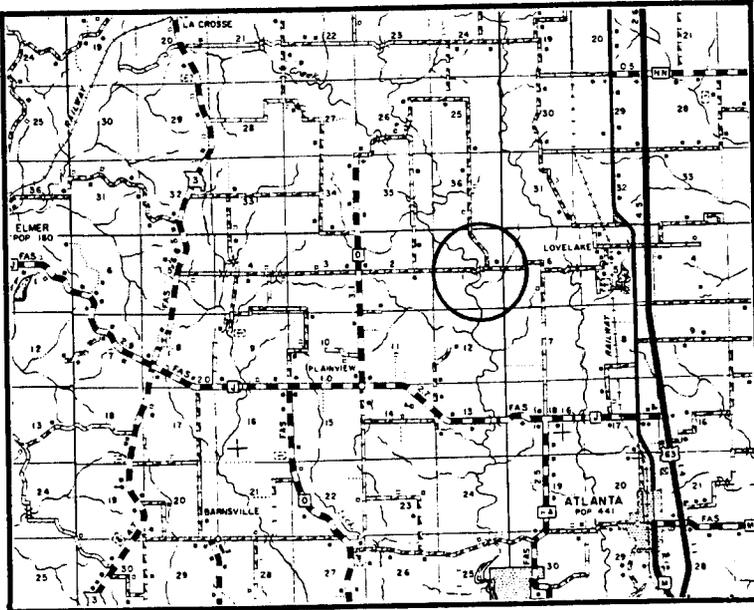
This short-span truss crosses the East Fork of the Chariton River some five miles southwest of La Plata. The structure consists of a single Pratt bedstead, supported by truss-leg piers and approached on one end by a stringer span. With pinned connections and a timber deck, the bridge is made up of steel components rolled in the Jones and Laughlin shops in Pittsburgh. It was erected here in 1896 by Farnsworth and Blodgett of Kansas City for \$415.00. Since that time the structure has carried vehicular traffic in relatively well-preserved condition.

In a bedstead truss, a single "leg" functioned as both end post and support at each corner of the structure. This combined super- and substructure reduced erection costs somewhat, but bedsteads were prey to flood and collision damage and suffered from inherent structural weaknesses relating to compression stress in the lower chords. Despite these weaknesses, numerous truss leg bedsteads were erected throughout Missouri in the late 1890s and early 1900s. Hundreds remain in place today; in fact, Missouri has probably more bedsteads than any other state. This bridge is distinguished as the earliest example remaining in Missouri of this mainstay structural type: a well-preserved, small-scale example of a prevailing statewide construction trend.

NAME(S) OF STRUCTURE

East Fork 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. 067001.6; Macon County Courthouse, Record M: page 342 (6 April 1896) - located at Macon County Courthouse, Macon MO.

INVENTORIED BY

Clayton B. Fraser

AFFILIATION

Fraserdesign, Loveland CO

DATE

3 July 1993

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

Middle Fork Bridge
MHTD: 142002.2

MACO17

DATE(S) OF CONSTRUCTION

1897

LOCATION

County Road 142 over Middle Fork of Salt River; S2, T59N, R14W
5.6 miles southeast of La Plata; Macon County, Missouri

USE (ORIGINAL / CURRENT)

roadway bridge / roadway bridge

RATING NRHP possibly eligible (score: 48)

CONDITION

fair

OWNER

Macon County

span number: 1
span length: 40.0'
total length: 40.0'
roadway wdt.: 12.5'

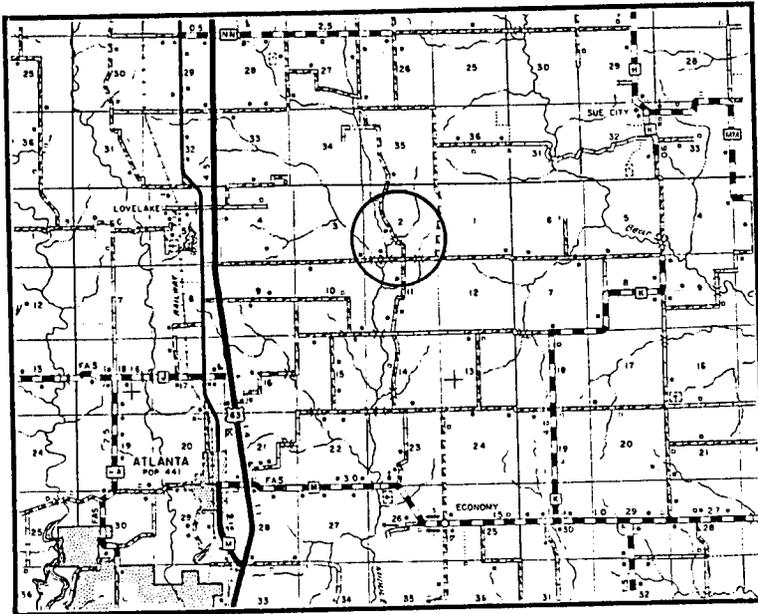
superstructure: steel, 3-panel, pin-connected Pratt bedstead
substructure: steel truss-leg abutments with timber backwalls
floor/decking: timber deck
other features: steel angle guardrails

This short-span truss crosses the Middle Fork of the Salt River some 5½ miles southeast of La Plata. The structure consists of a single Pratt bedstead, supported by truss-leg piers. With pinned connections and a timber deck, the bridge was erected here in 1897 by Farnsworth and Blodgett of Kansas City for \$450.00. Since that time the structure has carried vehicular traffic in relatively well-preserved condition.

In a bedstead truss, a single "leg" functioned as both end post and support at each corner of the structure. This combined super- and substructure reduced erection costs somewhat, but bedsteads were prey to flood and collision damage and suffered from inherent structural weaknesses relating to compression stress in the lower chords. Despite these weaknesses, numerous truss leg bedsteads were erected throughout Missouri in the late 1890s and early 1900s. Hundreds remain in place today; in fact, Missouri has probably more bedsteads than any other state. This bridge is distinguished as one of the earliest example remaining in Missouri of this mainstay structural type: a well-preserved, small-scale example of a prevailing statewide construction trend.

NAME(S) OF STRUCTURE
Middle Fork 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. 142002.2; Macon County Courthouse, Record N: page 133 (8 September 1897) - located at the Macon County Courthouse, Macon MO.

INVENTORIED BY
Clayton B. Fraser

AFFILIATION
Fraserdesign, Loveland CO

DATE
3 July 1993

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

Mussel Fork Bridge
MHTD: 382000.6

MACO27

DATE(S) OF CONSTRUCTION

1897

LOCATION

County Road 382 over Mussel Fork; S19/30, T58N, R17W
5.7 miles northwest of New Cambria; Macon County, Missouri

USE (ORIGINAL / CURRENT)

roadway bridge / roadway bridge

RATING NRHP possibly eligible (score: 50)

CONDITION

fair

OWNER

Macon County

span number: 1
span length: 70.0'
total length: 111.0'
roadway wdt.: 14.0'

superstructure: steel, 5-panel, pin-connected Pratt pony truss, with steel stringer approach span on the east end
substructure: steel pile bent abutments with timber backwalls; concrete-filled steel cylinder piers, and non-original steel tubes
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, U-bolted to vertical; guardrail: 2 channels; builder's plate: Farnsworth and Blodgett / 1897 / Kansas City MO

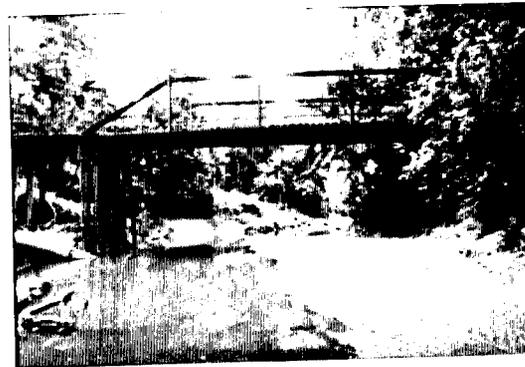
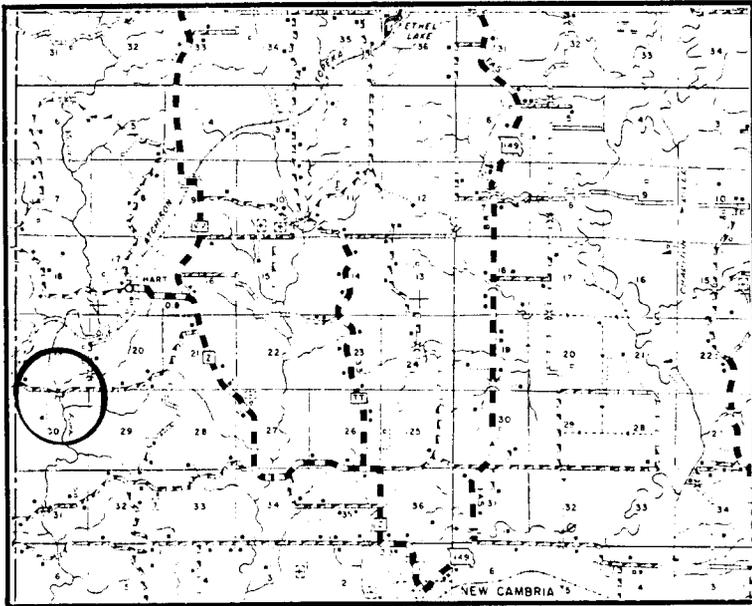
Linking the towns of Hart and Bucklin, between Linn and Macon Counties, the Mussel Fork Bridge was constructed in 1897. On September 8th of that year, the Macon County Court awarded Kansas City based builders Farnsworth and Blodgett a \$1200.00 contract to build this pin-connected Pratt pony truss. One of numerous such crossings built over Mussel Fork around the turn of the century, the bridge continues to carry local traffic in this rural setting.

With industry giants such as the King Bridge Company and the Wrought Iron Bridge Company marketing it extensively, the Pratt truss was the bridge of choice among Missouri's counties for medium-span crossings in the late 19th century. Thousands of pin-connected Pratts were erected throughout the state during this period of intense bridge construction, and hundreds remain in place today. The Mussel Fork Bridge is distinguished among these for its relatively early erection date and its well-preserved condition.

NAME(S) OF STRUCTURE

Mussel Fork 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. 382000.6; Macon County Court Record N: page 133 (8 September 1897) - located at the Macon County Courthouse, Macon MO; field inspection by Richard Collier, 11 June 1991.

INVENTORIED BY

Michelle Crow-Dolby

AFFILIATION

Fraserdesign, Loveland CO

DATE

3 July 1993

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

Hair's Ford Bridge
MHTD: 384000.4

MACO28

DATE(S) OF CONSTRUCTION

c1880; moved 1892

LOCATION

County Road 384 over Mussel Fork; S31, T58N, R17W
5.3 miles northwest of New Cambria; Macon County, Missouri

USE (ORIGINAL / CURRENT)

roadway bridge / closed

RATING NRHP eligible (score: 74)

CONDITION

poor

OWNER

Macon County

span number: 1
span length: 80.0'
total length: 106.0'
roadway wdt.: 11.0'

superstructure: wrought iron, bowstring pony arch-truss, with one steel stringer approach span on the west end
substructure: concrete-filled iron cylinder piers with timber backwalls
floor/decking: timber deck (partially intact) over steel stringers
other features: arch rib: 2 channels with 2 cover plates; lower chord: flat iron bar; vertical: star iron with star iron outriders; diagonal: round rod with threaded ends; lateral bracing: round rod with threaded ends; floor beam: steel I-beam; guardrail: none on main span, steel angle on west approach

Known locally as the Hair's Ford Bridge, this long-span bowstring crosses the Mussel Fork northwest of New Cambria. The structure is comprised of a single wrought iron pony arch-truss, supported by iron tubular piers and approached on one side by a stringer span. The initial erection date for this span is not known, but physical characteristics of the truss indicate that it was fabricated around 1880 using the patented tubular arch design of the King Iron Bridge and Manufacturing Company. The Cleveland giant was active throughout Missouri during the period and was, in fact, responsible for the bowstring's re-erection in 1892. On August 6, 1891, the Macon County Missour ordered that the bridge over Mussel Fork on the Old State Road in Russell Township, be moved 3/8 mile and put up on iron piers. John E. Wright, county road and bridge commissioner, reported that "I have made a strict examination of bridge across Muscle[sic] Fork on public road leading east from Bucklin...." The bridge should be "moved downstream and rebuilt according to contract", Wright concluded. On February 5, 1892, the contract for the structure's re-erection was let to the George E. King Bridge Company of Des Moines. George King was Zenas King's nephew, and the Iowa firm was actually a subsidiary of the Cleveland firm. King completed the work early that summer and in July was paid the remaining \$100.00 due on a \$700.00 contract. Now located on a vacated county road, the Hair's Ford Bridge is now permanently closed to vehicular traffic. Having been allowed to molder, much of the bridge's deck is missing, and the web on the north side is leaning inward.

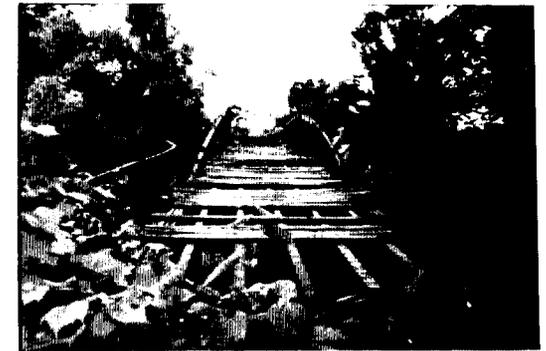
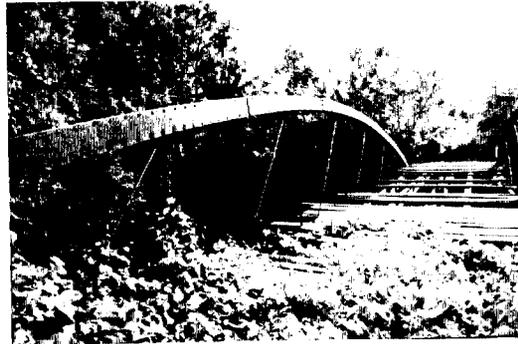
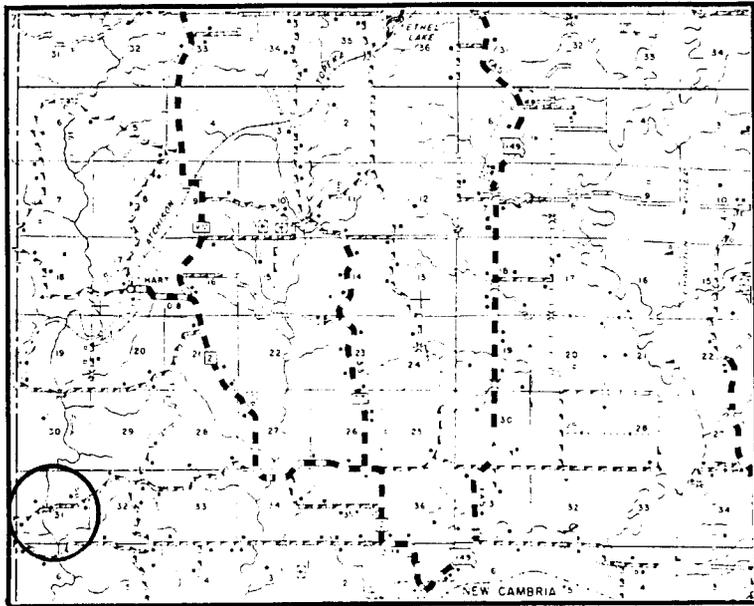
The bowstring arch-truss was the iron span of choice for Missouri counties in the late 1860 and 1870s. Marketed extensively throughout the Midwest by such industry giants as the King Iron Bridge Manufacturing Company and the Wrought Iron Bridge Company, these often-patented bridges featured a wide range of span lengths and tube or box arch configurations. The proliferation of the bowstring corresponded with the initial development of Missouri's road system; as a result, perhaps thousands of these prototypical iron spans were

erected throughout the state. The bowstring had some rather severe structural flaws, however, relating primarily to lateral stability of the arches, and it was largely superseded by the pin-connected truss in the early 1880s. Through subsequent attrition, almost all of Missouri's bowstrings have since been demolished and replaced. Although it no longer carries traffic, the Hair's Ford Bridge is historically and technologically significant as one of the last remaining examples in the state of what was once a mainstay structural type.

NAME(S) OF STRUCTURE

Hair's 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. 384000.4; Macon County Courthouse, Record K: page 334 (6 August 1891), page 456 (4 February 1892), page 542 (5 July 1892) - located at the Macon County Courthouse, Macon MO; field inspection by Richard Collier, 11 June 1991.

INVENTORIED BY

Michelle Crow-Dolby

AFFILIATION

Fraserdesign, Loveland CO

DATE

3 July 1993

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

Little Brush Creek Bridge
MHTD: 388001.4

MACO29

DATE(S) OF CONSTRUCTION

1905

LOCATION

County Road 388 over Little Brush Creek; S4/9, T57N, R17W
2.6 miles west of New Cambria; Macon County, Missouri

USE (ORIGINAL / CURRENT)

roadway bridge / roadway bridge

RATING NRHP non-eligible (score: 41)

CONDITION

fair

OWNER

Macon County

span number: 1
span length: 36.0'
total length: 68.0'
roadway wdt.: 12.0'

superstructure: steel, 2-panel, rigid-connected Pratt truss-leg bedstead, with flanking steel stringer approach spans
substructure: steel pile bent piers and abutments with timber backwalls
floor/decking: timber deck over steel stringers
other features: upper chord: I-beam; upright end post: 2 channels; lower chord: 2 channels; vertical: 1 channel; diagonal: 2 angles; lateral bracing: 1 angle; floor beam: 1 channel; guardrail: 1 channel; small plate on center vertical: Pat Apr 19 1904; bolted plates at intersections between verticals and top chord

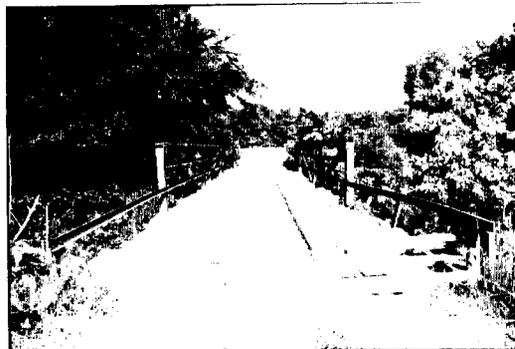
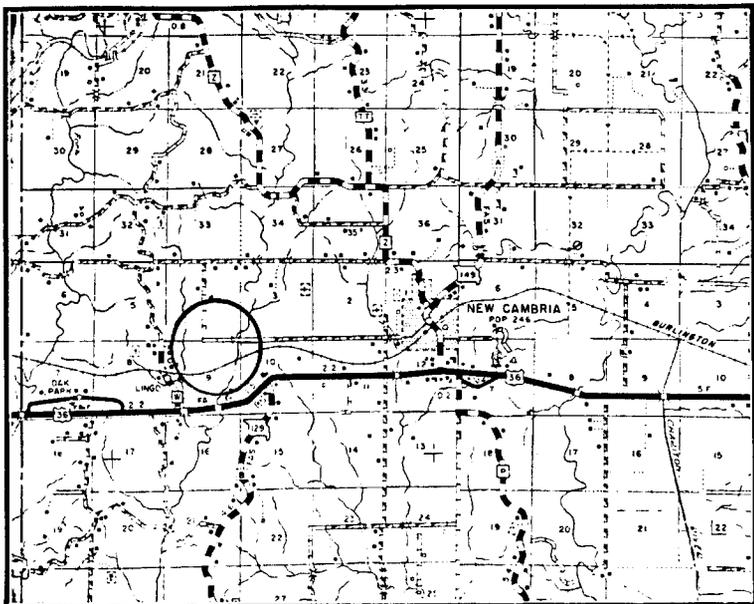
Carrying a gravel-surfaced county road over the Little Brush Creek, this short-span pony truss is located about 2½ miles west of New Cambria in southwestern Macon County. Minutes of the Macon County Court reveal that the contract for the single-span bridge was awarded on May 2, 1905, to the Dildine Bridge Company of Cameron, Missouri, for \$490.00. A rigid-connected truss leg bedstead, the bridge has since carried intermittent local traffic in its rural setting. Concrete-filled steel cylinder piers have been added to shore up the truss legs at the west end, but the bridge's integrity remains otherwise intact.

In a bedstead truss, a single "leg" functioned as both end post and support at each corner of the structure. This combined super- and substructure reduced erection costs somewhat, but bedsteads were prey to flood and collision damage and suffered from inherent structural weaknesses relating to compression stress in the lower chords. Despite these weaknesses, numerous truss leg bedsteads were erected throughout Missouri in the late 1890s and early 1900s. Hundreds remain in place today -in fact, Missouri has probably more bedsteads than any other state. The Little Brush Creek Bridge is a fairly well-preserved, though not particularly distinguished, example of this statewide bridge construction trend.

NAME(S) OF STRUCTURE

Little Brush 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. 388001.4; Macon County Court Record Q: pages 423-24 (2 May 1905), located at the Macon County Courthouse, Macon MO; field inspection by Richard Collier, 11 June 1991.

INVENTORIED BY

Michelle Crow-Dolby

AFFILIATION

Fraserdesign, Loveland CO

DATE

3 July 1993

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

Bridge
MHTD: 454000.6

MACO34

DATE(S) OF CONSTRUCTION

1890

LOCATION

County Road 454 over unnamed branch; S33/34, T57N, R15W
3.2 miles south of Bevier; Macon County, Missouri

USE (ORIGINAL / CURRENT)

roadway bridge / roadway bridge

RATING NRHP possibly eligible (score: 50)

CONDITION

fair

OWNER

Macon County

span number: 1
span length: 32.0'
total length: 55.0'
roadway wdt.: 12.0'

superstructure: steel, 2-panel, pin-connected truss-leg bedstead, with steel stringer approach span on the south end
substructure: steel pile bent abutments with timber backwalls; truss legs; steel tubes welded to truss legs on south end for added support
floor/decking: timber deck over steel stringers
other features: upper chord: 2 channels with cover plate and lacing; end post: 2 channels with lacing; lower chord: 2 angles with lacing; vertical: 4 angles with lacing; diagonal: 2 looped rectangular eyebars; lateral bracing: round rod with threaded ends; floor beam: I-beam, U-bolted to vertical; guardrail: none; builder's plate:89.....

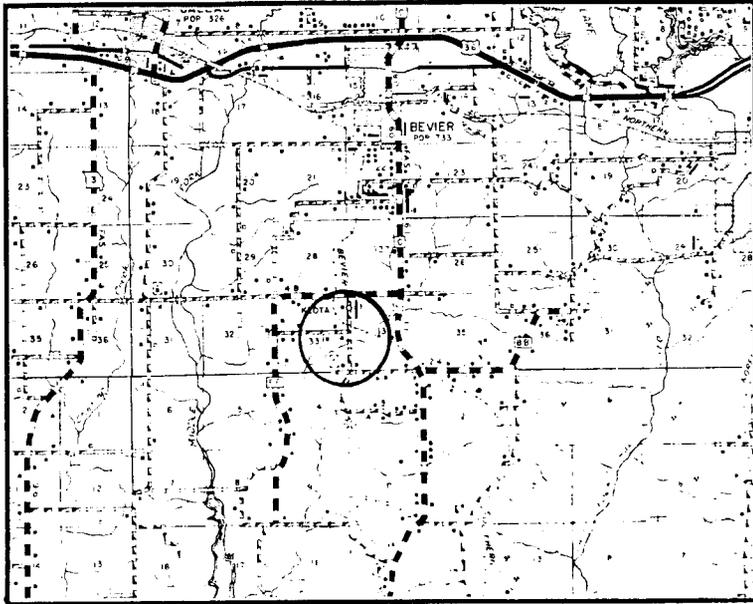
This short-span truss crosses a small stream south of Bevier in south-central Macon County. The structure consists of a single Pratt bedstead, supported by truss-leg piers and approached on one end by a stringer span. With pinned connections and a timber deck, the bridge is made up of wrought iron components rolled in the Jones and Laughlin shops in Pittsburgh. Macon County SI&A records indicate that the bridge was erected here in 1890, probably by Kansas City contractors Farnsworth and Blodgett. Today, more than 100 years later, the bridge remains in use, with only maintenance-related repairs.

In a bedstead truss, a single "leg" functioned as both end post and support at each corner of the structure. This combined super- and substructure reduced erection costs somewhat, but bedsteads were prey to flood and collision damage and suffered from inherent structural weaknesses relating to compression stress in the lower chords. Despite these weaknesses, numerous truss leg bedsteads were erected throughout Missouri in the late 1890s and early 1900s. Hundreds remain in place today; in fact, Missouri has probably more bedsteads than any other state. This bridge is distinguished as the earliest example remaining in Missouri of this mainstay structural type: a well-preserved, small-scale example of a prevailing statewide construction trend.

NAME(S) OF STRUCTURE

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. 454000.6; field inspection by Richard Collier, 11 June 1991.

INVENTORIED BY
Michelle Crow-Dolby

AFFILIATION
Fraserdesign, Loveland CO

DATE
3 July 1993

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

Bridge
MHTD: 480000.9

MACO37

DATE(S) OF CONSTRUCTION
1897

LOCATION

County Road 480 over unnamed branch; S25/30, T57N, R15/14W
3.0 miles southwest of Macon; Macon County, Missouri

USE (ORIGINAL / CURRENT)
roadway bridge / roadway bridge

RATING NRHP non-eligible (score: 45)

CONDITION

fair

OWNER

Macon County

span number: 1	superstructure: steel, 3-panel, pin-connected Pratt truss-leg bedstead
span length: 40.0'	substructure: steel truss legs with timber backwalls
total length: 40.0'	floor/decking: timber deck over steel stringers
roadway wdt.: 13.0'	other features: upper chord and upright end post: 2 channels with lacing; lower chord: 2 angles with lacing (outer panels), 2 looped rectangular eyebars (inner panel); vertical: 4 angles with lacing; diagonal: 2 looped rectangular eyebars; lateral bracing: round rod with threaded ends; floor beam: I-beam, U-bolted to vertical; guardrail: none; builder's plate: ..189...

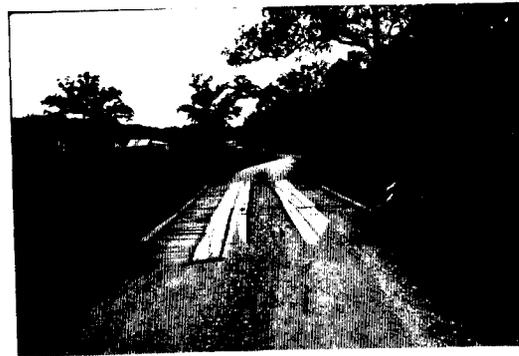
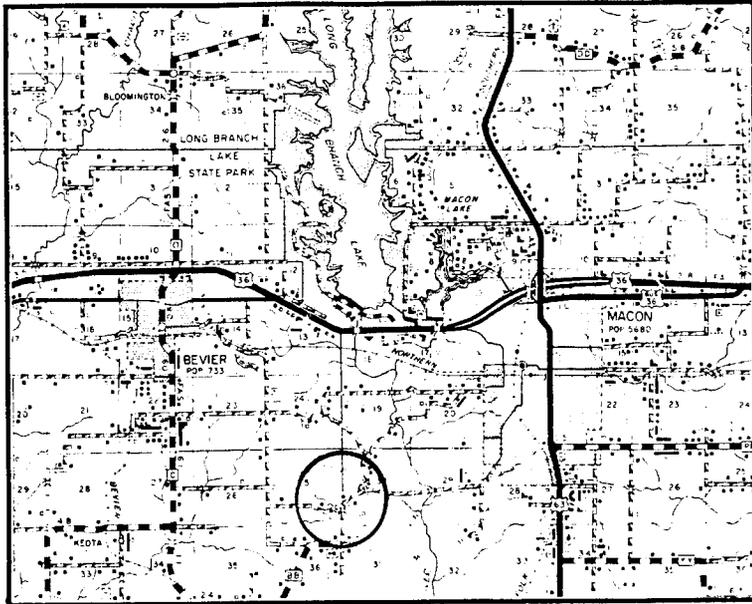
This steel Pratt truss-leg bedstead spans a small stream southwest of Macon in south-central Macon County. Supported by a timber substructure and featuring pinned connections throughout, this structure dates to 1897. A fragment of the original builder's plate indicates ...189... as the construction date which helps to corroborate the county engineer's construction date of 1897. Additionally, the county engineer's office records Farnsworth and Blodgett of Kansas City, Missouri, as the bridge's contractor. The small-scale Macon County bridge continues to carry local traffic in its rural setting, while retaining a high degree of structural integrity.

In a bedstead truss, a single "leg" functioned as both end post and support at each corner of the structure. This combined super- and substructure reduced erection costs somewhat, but bedsteads were prey to flood and collision damage and suffered from inherent structural weaknesses relating to compression stress in the lower chords. Despite these weaknesses, numerous truss leg bedsteads were erected throughout Missouri in the late 1890s and early 1900s. Hundreds remain in place today -in fact, Missouri has probably more bedsteads than any other state. This bridge is a early, well-preserved example of this statewide bridge construction trend.

NAME(S) OF STRUCTURE

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. 480000.9; field inspection by Richard Collier, 11 June 1991.

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