IRON COUNTY

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

Inv. No.	MHTD	Bridge Name	Description	
IRON01	F 646R	Big Creek Bridge	**2-100'**	**concrete open spandrel arch**
			1945	M.E. Gillioz, Monett, MO
*IRON02	F 990	Townsend Branch Bridge	1- 40'	**concrete filled spandrel arch**
			1922	St. Louis Bridge and Supply Co.
*IRON03	F 991	Gum Spring Branch Bridge	1- 40'	**concrete filled spandrel arch**
			1922	St. Louis Bridge and Supply Co.
*IRON04	F 992	East Fork Bridge	1- 40'	**concrete filled spandrel arch**
			1922	St. Louis Bridge and Supply Co.
IRON05	G 269R	Reeds Creek Bridge	1- 50'	**concrete filled spandrel arch**
			1923	J.P. Sparks
IRON06	G 879	Big Creek Bridge	1-100'	**riveted Pratt through truss**
			1924	J.W. Wilson
IRON07	H 393	Stouts Creek Bridge	1-123'	**concrete open spandrel arch**
			1928	Republic Concrete Constr. Co.
IRON08	101000.4	Stouts Creek Bridge	1- 60'	pinned Pratt half-hip pony truss
			c1895	

EXCLUDED:

Pratt pony truss
G 633

Warren pony truss
J 990 123000.1

Steel stringer / girder
F 647R K 136 T 222 020001.4 020003.6 053001.5 154001.3
158000.0

Concrete slab / girder
F 644R F 989 G 272 G 568 G 570 G 878A H 147
J 197 L 322 T 112 T 113 X 495 013500.1 079004.8
111001.3 173000.2

Concrete box culvert
G 273 G 632R H 26R H 871 J 351 J 352 J 492R
J 989 K 137 K 191 S 62 S 63 S 64 S 730
T 466 X 462 X 463 X 524 013500.2 020000.1 030000.8
053003.4 109001.0 112001.7 124003.5 134000.7 149000.1

Timber stringer
020000.3

IRON COUNTY

SUMMARY:

	Primary	Secondary	Urban	Other	Total
Included	7	1	0	0	8
Excluded	35	20	0	0	55
	42	21	0	0	63 structures

Big Creek Bridge

IRON01

GENERAL DATA

structure no.: F 646R
county: Iron
city/town: 3.7 miles north of Annapolis
feature inters.: Big Creek and Missouri Pacific Railroad
cadastral grid: S34/35, T32N, R3E
highway route: State Highway 49
highway distr.: 9
current owner: Missouri Highway and Transportation Department

STRUCTURAL DATA

superstructure: concrete two-rib, open-spandrel arch, with concrete girder approach spans
substructure: concrete abutments, wingwalls and piers

span number: 2
span length: 100.0'
total length: 496.0'
roadway width: 26.0'
condition: good
alterations: none
floor/decking : concrete deck
other features: concrete guardrails (MSHD standard design)

HISTORICAL DATA

erection date: 1945-46
erection cost: $113,718.00
designer: Missouri State Highway Department
fabricator : none
contractor: M.E. Gillioz, Monett MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number F 646R; Missouri Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO.

sign. rating: 45
evaluation: NRHP non-eligible (late example of open spandrel arch construction, with standard detailing and an average degree of physical integrity)

inventoried by: Clayton B. Fraser 21 April 1992

Townsend Branch Bridge

IRON02

GENERAL DATA

structure no.: F 990
county: Iron

city/town: 0.9 mile east of Belleview
feature inters.: Townsend Branch of Cedar Creek
cadastral grid: S5, T34N, R3E
highway route: State Highway 21
highway distr.: 9
current owner: Missouri Highway and Transportation Department

STRUCTURAL DATA

superstructure: concrete filled spandrel arch
substructure: concrete abutments and wingwalls

span number: 1
span length: 40.0'
total length: 43.0'
roadway width: 18.0'

condition: good
alterations: none
floor/decking : concrete deck over earth fill
other features: concrete guardrails (MSHD standard design)

HISTORICAL DATA

erection date: 1922
erection cost: $2568.60
designer: Missouri State Highway Department
fabricator : none
contractor: St. Louis Bridge and Supply Company, St. Louis MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number F 990; Missouri Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO; Missouri State Highway Commission, **Third Biennial Report**, 1921-22, pages 127-28, 131.

sign. rating: 47
evaluation: NRHP possibly eligible (relatively early, well-preserved example of MSHD concrete bridge design and construction, built during the agency's formative years.)

inventoried by: Clayton B. Fraser 21 April 1992

Gum Spring Branch Bridge

IRON03

GENERAL DATA

structure no.: F 991
county: Iron

city/town: 0.5 mile east of Belleview
feature inters.: Gum Spring Branch of Knob Creek
cadastral grid: S5, T34N, R3E
highway route: State Highway 21
highway distr.: 9
current owner: Missouri Highway and Transportation Department

STRUCTURAL DATA

superstructure: concrete filled spandrel arch
substructure: concrete abutments and wingwalls

span number: 1
span length: 40.0'
total length: 43.0'
roadway width: 18.0'

condition: good
alterations: none
floor/decking : concrete deck over earth fill
other features: concrete guardrails (MSHD standard design)

HISTORICAL DATA

erection date: 1922
erection cost: $3438.60
designer: Missouri State Highway Department
fabricator : none
contractor: St. Louis Bridge and Supply Company, St. Louis MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number F 991; Missouri Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO; Missouri State Highway Commission, **Second Biennial Report**, 1919-20, pages 129, 134; Missouri State Highway Commission, **Third Biennial Report**, 1921-22, pages 127-28, 131.

sign. rating: 47
evaluation: NRHP possibly eligible (relatively early, well-preserved example of MSHD concrete bridge design and construction, built during the agency's formative years.)

inventoried by: Clayton B. Fraser 21 April 1992

East Fork Bridge

IRON04

GENERAL DATA

structure no.: F 992
county: Iron

city/town: 1.9 miles north of Ironton
feature inters.: East Fork of Cedar Creek
cadastral grid: S30, T34N, R4E
highway route: State Highway 21
highway distr.: 9
current owner: Missouri Highway and Transportation Department

STRUCTURAL DATA

superstructure: concrete filled spandrel arch
substructure: concrete abutments and wingwalls

span number: 1
span length: 40.0'
total length: 43.0'
roadway width: 18.0'

condition: good
alterations: none
floor/decking : concrete deck over earth fill
other features: concrete guardrails (MSHD standard design)

HISTORICAL DATA

erection date: 1922
erection cost: $3205.10
designer: Missouri State Highway Department
fabricator : none
contractor: St. Louis Bridge and Supply Company, St. Louis MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number F 992; Missouri Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO.

sign. rating: 47
evaluation: NRHP possibly eligible (relatively early, well-preserved example of MSHD concrete bridge design and construction, built during the agency's formative years.)

inventoried by: Clayton B. Fraser 21 April 1992

Reeds Creek Bridge

IRON05

GENERAL DATA

structure no.: G 269R
county: Iron

city/town: 1.7 miles northwest of Belleview
feature inters.: Reeds Creek
cadastral grid: S30, T35N, R3E
highway route: State Highway 32
highway distr.: 9
current owner: Missouri Highway and Transportation Department

STRUCTURAL DATA

superstructure: concrete filled spandrel arch
substructure: concrete abutments and wingwalls

span number: 1
span length: 50.0'
total length: 53.0'
roadway width: 18.0'

condition: good
alterations: guardrails replaced, 1990
floor/decking : concrete deck over earth fill
other features: ARMCO guardrails

HISTORICAL DATA

erection date: 1923
erection cost: $4456.80 (engineer's estimate)
designer: Missouri State Highway Department
fabricator : none
contractor: J.P. Sparks

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number F 991; Missouri Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO; Missouri State Highway Commission, **Second Biennial Report**, 1919-20, pages 129, 140; Missouri State Highway Commission, **Third Biennial Report**, 1921-22, pages 154.

sign. rating: 37
evaluation: NRHP determined non-eligible (relatively early example of MSHD concrete bridge design and construction, recently substantially altered)

inventoried by: Clayton B. Fraser 21 April 1992

Big Creek Bridge

IRON06

GENERAL DATA

structure no.: G 879
county: Iron

city/town: 1.6 miles east of Annapolis
feature inters.: Big Creek
cadastral grid: S24/25, T31N, R3E
highway route: State Highway 143
highway distr.: 9
current owner: Missouri Highway and Transportation Department

STRUCTURAL DATA

superstructure: steel, 6-panel, rigid-connected Pratt through truss; 6 concrete deck girder approach spans
substructure: concrete abutments and wingwalls; concrete hammerhead spill-through piers

span number: 1
span length: 100.0'
total length: 357.0'
roadway width: 20.0'

condition: good
alterations: none
floor/decking : concrete deck over steel stringers
other features: steel pipe guardrails

HISTORICAL DATA

erection date: 1924
erection cost: $33,485.36
designer: Missouri State Highway Department
fabricator : unknown
contractor: J.W. Wilson

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number G 879; Missouri Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO.

sign. rating: 38
evaluation: NRHP non-eligible (typically configured example of MSHD truss design)

inventoried by: Clayton B. Fraser 21 April 1992

Stouts Creek Bridge

IRON07

GENERAL DATA

structure no.: H 393
county: Iron

city/town: 2.6 miles east of Ironton
feature inters.: Stouts Creek
cadastral grid: S3, T33N, R4E
highway route: Missouri State Highway 72
highway distr.: 9
current owner: Missouri Highway and Transportation Department

STRUCTURAL DATA

superstructure: concrete open spandrel arch
substructure: concrete abutments and wingwalls

span number: 1
span length: 122.5'
total length: 125.0'
roadway width: 20.0'

condition: good
alterations: none
floor/decking : concrete deck
other features: concrete guardrails (MSHD standard design)

HISTORICAL DATA

erection date: 1928
erection cost: $16,691.36
designer: Missouri State Highway Department
fabricator : none
contractor: Republic Concrete Construction Company, Republic MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number H 393; Missouri Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO.

sign. rating: 45
evaluation: NRHP non-eligible (longer than average example of open spandrel arch construction, with otherwise standard detailing and an average degree of physical integrity)

inventoried by: Clayton B. Fraser 21 April 1992

Stouts Creek Bridge

IRON08

GENERAL DATA

structure no.: 101000.4
county: Iron

city/town: 1.7 miles southwest of Ironton
feature inters.: Stouts Creek
cadastral grid: S6, T33N, R4E
highway route: County Road 101
highway distr.: 9
current owner: Iron County

STRUCTURAL DATA

superstructure: steel, 4-panel, pin-connected Pratt half-hip pony truss
substructure: concrete abutments and wingwalls

span number: 1
span length: 60.0'
total length: 61.0'
roadway width: 16.0'

condition: fair
alterations: steel pile bent pier added at mid-span
floor/decking : concrete on corrugated steel deck, over steel stringers
other features: fishtail plate girder floor beams

HISTORICAL DATA

erection date: c1895
erection cost: unknown
designer: unknown
fabricator : unknown
contractor: unknown

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 101000.4.

sign. rating: 30
evaluation: NRHP non-eligible (early, but typically configured and inadequately documented example of a common structural type)

inventoried by: Clayton B. Fraser 21 April 1992

HAER INVENTORY
Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE
Townsend Branch Bridge
MHTD: F 990

IRON02

DATE(S) OF CONSTRUCTION
1922

LOCATION
State Highway 21 over Townsend Branch of Cedar Creek; S5, T34N, R3E
0.9 mile east of Belleview; Iron County, Missouri

USE (ORIGINAL / CURRENT)
highway bridge / highway bridge

RATING NRHP possibly eligible (score: 47)

CONDITION
good

OWNER
Missouri Highway and Transportation Department

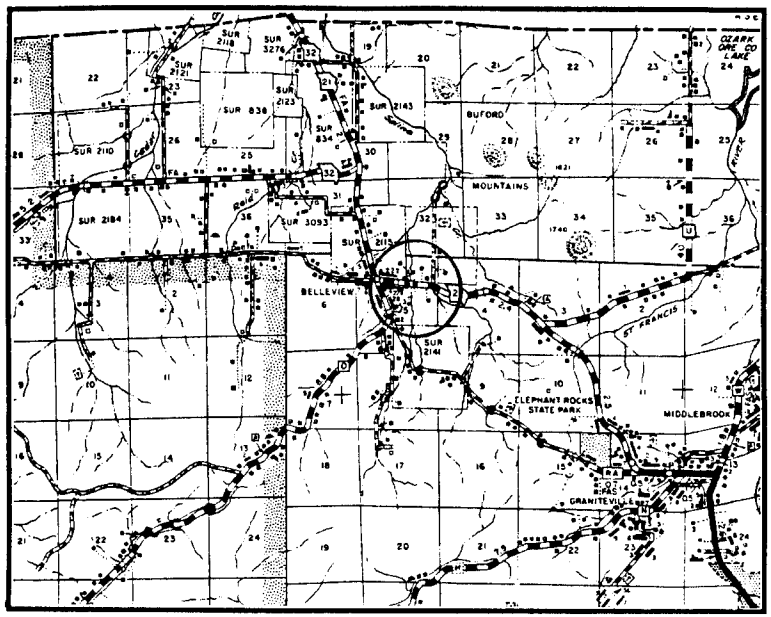
span number:	1	superstructure:	concrete filled spandrel arch
span length:	40.0'	substructure:	concrete abutments and wingwalls
total length:	43.0'	floor/decking:	concrete deck over earth fill
roadway wdt.:	18.0'	other features:	concrete guardrails (MSHD standard design)

One of the provisions of the Hawes Road Law establishing the Missouri State Highway Department was that the newly formed agency develop plans and specifications for bridges and culverts. "The Highway Department has maintained a drafting room which has been called upon for many kinds of service," the department reported in 1918, "but the especial function of which has been the preparation of bridge and culvert designs." By 1920, the department had developed several standards for short- and medium-span bridges, including 13 designs for steel superstructures with spans ranging up to 100 feet. In addition, the department delineated some 185 special bridge designs during the 1919-20 biennium. In 1922 the department designed some 293 spans with a total length of over 20,000 feet. One of these was a structure over the Townsend Branch Bridge of Cedar Creek in Iron County, a concrete filled spandrel arch with a 40-foot span. One of seven small-scale concrete structures designed by MSHD under Federal Aid Project No. 107, its cost was estimated at $3,146.50. When competitive proposals were received in May 1922, the low bidder at was the St. Louis Bridge and Supply Company at $2,568.60. The contractor completed all seven bridges; the Townsend Branch structure has continued to function in place, without alteration. It is historically significant as one of the few structures left intact from MSHD's formative years–a small-scale concrete arch that represents early highway bridge building in Missouri.

NAME(S) OF STRUCTURE

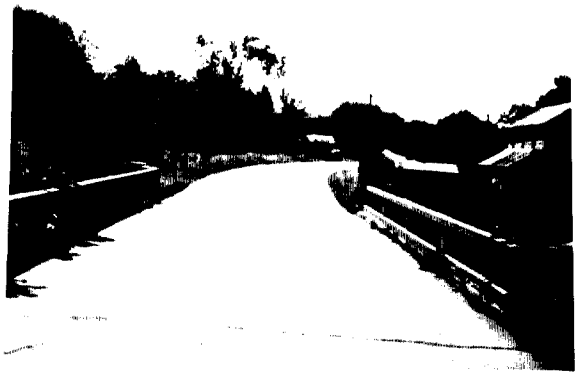
Townsend Branch Bridge

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 Number F 990; Missouri Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO; Missouri State Highway Commission, **Third Biennial Report**, 1921-22, pages 127-28, 131.

INVENTORIED BY	AFFILIATION	DATE
Clayton B. Fraser	Fraserdesign, Loveland CO	21 April 1992

HAER INVENTORY
Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE
Gum Spring Branch Bridge
MHTD: F 991

IRON03

DATE(S) OF CONSTRUCTION
1922

LOCATION
State Highway 21 over Gum Spring Branch of Knob Creek; S5, T34N, R3E
0.5 mile east of Belleview; Iron County, Missouri

USE (ORIGINAL / CURRENT)
highway bridge / highway bridge

RATING NRHP possibly eligible (score: 47)

CONDITION
good

OWNER
Missouri Highway and Transportation Department

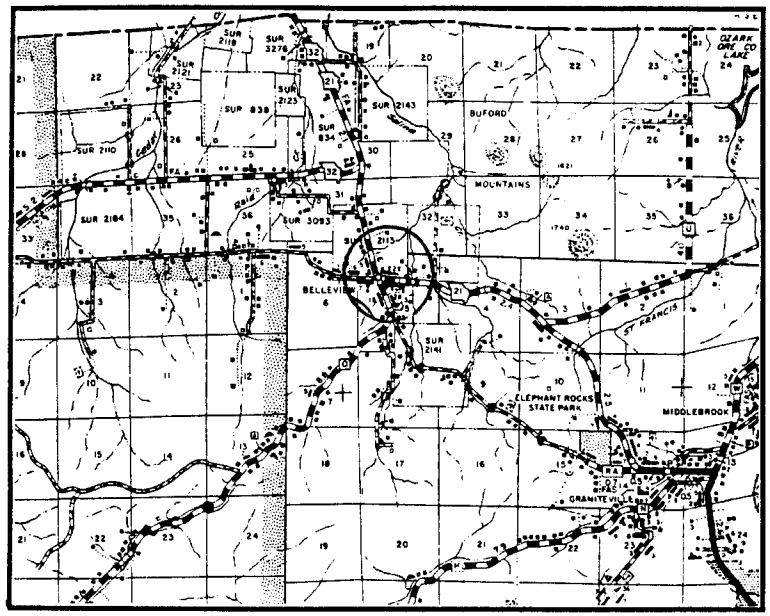
span number:	1	superstructure:	concrete filled spandrel arch
span length:	40.0'	substructure:	concrete abutments and wingwalls
total length:	43.0'	floor/decking:	concrete deck over earth fill
roadway wdt.:	18.0'	other features:	concrete guardrails (MSHD standard design)

One of the provisions of the Hawes Road Law establishing the Missouri State Highway Department was that the newly formed agency develop plans and specifications for bridges and culverts. "The Highway Department has maintained a drafting room which has been called upon for many kinds of service," the department reported in 1918, "but the especial function of which has been the preparation of bridge and culvert designs." By 1920, the department had developed several standards for short- and medium-span bridges, including 13 designs for steel superstructures with spans ranging up to 100 feet. In addition, the department delineated some 185 special bridge designs during the 1919-20 biennium. In 1922 the department designed some 293 spans with a total length of over 20,000 feet. One of these was a structure over the Gum Spring Branch of Knob Creek in Iron County, a concrete filled spandrel arch with a 40-foot span. One of seven small-scale concrete structures designed by MSHD under Federal Aid Project No. 107, its cost was estimated at $4,067.30. When competitive proposals were received in May 1922, the low bidder at was the St. Louis Bridge and Supply Company at $3,438.60. The contractor completed all seven bridges; the Gum Spring Branch structure has continued to function in place, without alteration. It is historically significant as one of the few structures left intact from MSHD's formative years–a small-scale concrete arch that represents early highway bridge building in Missouri.

NAME(S) OF STRUCTURE

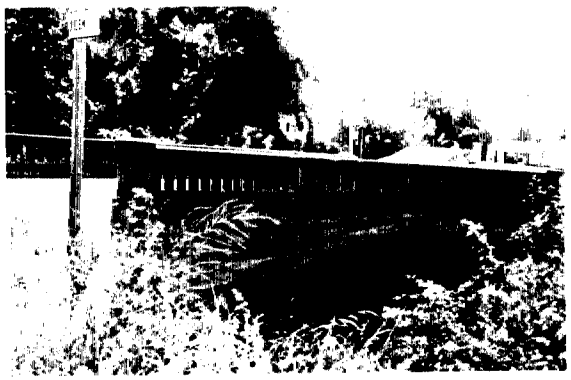
Gum Spring Branch Bridge

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 Number F 991; Missouri Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO; Missouri State Highway Commission, **Second Biennial Report**, 1919-20, pages 129, 134; Missouri State Highway Commission, **Third Biennial Report**, 1921-22, pages 127-28, 131.

INVENTORIED BY	AFFILIATION	DATE
Clayton B. Fraser	Fraserdesign, Loveland CO	21 April 1992

HAER INVENTORY
Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE
East Fork Bridge
MHTD: F 992

IRON04

DATE(S) OF CONSTRUCTION
1922

LOCATION
State Highway 21 over East Fork of Cedar Creek; S30, T34N, R4E
1.9 miles north of Ironton; Iron County, Missouri

USE (ORIGINAL / CURRENT)
highway bridge / highway bridge

RATING NRHP possibly eligible (score: 47)

CONDITION
good

OWNER
Missouri Highway and Transportation Department

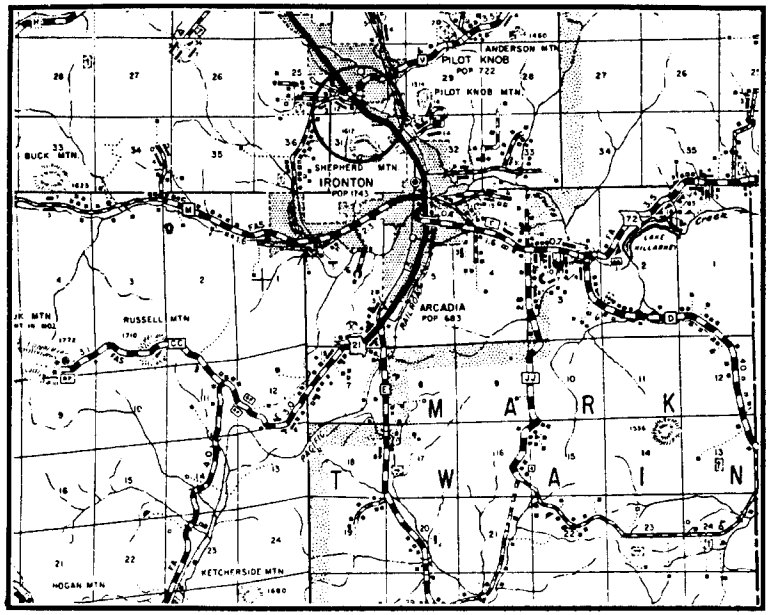
span number:	1	superstructure:	concrete filled spandrel arch
span length:	40.0'	substructure:	concrete abutments and wingwalls
total length:	43.0'	floor/decking:	concrete deck over earth fill
roadway wdt.:	18.0'	other features:	concrete guardrails (MSHD standard design)

One of the provisions of the Hawes Road Law establishing the Missouri State Highway Department was that the newly formed agency develop plans and specifications for bridges and culverts. "The Highway Department has maintained a drafting room which has been called upon for many kinds of service," the department reported in 1918, "but the especial function of which has been the preparation of bridge and culvert designs." By 1920, the department had developed several standards for short- and medium-span bridges, including 13 designs for steel superstructures with spans ranging up to 100 feet. In addition, the department delineated some 185 special bridge designs during the 1919-20 biennium. In 1922 the department designed some 293 spans with a total length of over 20,000 feet. One of these was a structure over the East Fork of Cedar Creek in Iron County, a concrete filled spandrel arch with a 40-foot span. One of seven small-scale concrete structures designed by MSHD under Federal Aid Project No. 107, its cost was estimated at $3,820.70. When competitive proposals were received in May 1922, the low bidder at was the St. Louis Bridge and Supply Company at $3,438.60. The contractor completed all seven bridges; the East Fork Bridge structure has continued to function in place, without alteration. It is historically significant as one of the few structures left intact from MSHD's formative years–a small-scale concrete arch that represents early highway bridge building in Missouri.

NAME(S) OF STRUCTURE

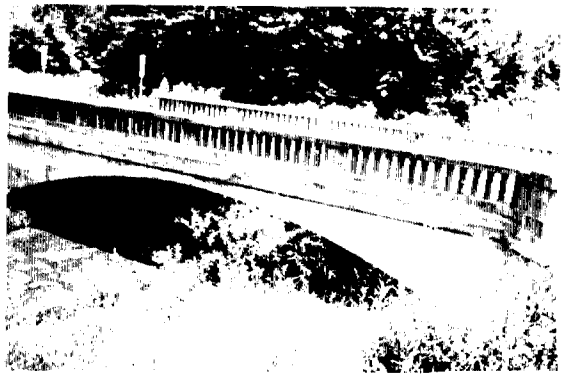
East Fork Bridge

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 Number F 992; Missouri Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO.

INVENTORIED BY	AFFILIATION	DATE
Clayton B. Fraser	Fraserdesign, Loveland CO	21 April 1992