OREGON COUNTY

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

Inv. No.	MHTD	Bridge Name	Description
*OREG01	H 289A	Thayer Viaduct	3-150' **pinned Pratt through truss** 1930 M.S. Cartter & Co., St. Louis
*OREG02	K 272	Riverton Bridge	Martin Wunderlich 1-**200' riveted Parker through truss** 1934 M.E. Gillioz, Monett MO
*OREG03	223000.2	Crow Ford Bridge	1-100 **pinned Pratt through truss** **1914** East St. Louis Bridge Company

EXCLUDED:

Warren pony truss

F1045	F1046	K 344

Steel stringer

K 358	006500.1	181002.1

Concrete girder

F1057	G 801	H 458A	H 921R	J 604	T 432	W 247
W 488	150000.5	156002.5	178000.8			

Concrete slab

G 802	H 173	H 174	H 413R	Y 170	Y 171	111000.4
211000.9	222001.5	259001.0	422500.1			

Concrete box culvert

H 510	H 511	J 603	K 2	K 3	T 362	T 431
T 471	T 472	T 721	T 970R	T 971R	242000.4	422500.2

SUMMARY:

	Primary	Secondary	Urban	Other	Total
Included	2	1	0	0	3
Excluded	30	12	0	0	42
	32	13	0	0	45 structures

Thayer Viaduct

OREG01

GENERAL DATA

structure no.: H 289A
county: Oregon

city/town: Thayer
feature inters.: BNRR and Two Mile Creek
cadastral grid: S30, T22N, R6W
highway route: State Highway 19
highway distr.: 9
current owner: Missouri Highway and Transportation Department

STRUCTURAL DATA

superstructure: steel, 8-panel, pin-connected Pratt through truss; 2 steel, 6-panel, rigid-connected Warren pony truss approach spans at the north end
substructure: concrete abutments, wingwalls and piers

span number: 3
span length: 150.0'; 70.0'
total length: 305.0'
roadway width: 20.0'

condition: good
alterations: none
floor/decking : concrete deck over plate girders
other features: Pratt through truss - upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 punched rectangular eyebars (4 punched eyebars at center panels); vertical: 2 channels with lacing (2 punched square eyebars at the hip); diagonal: 2 punched rectangular eyebars; counter: square rod with unslotted turnbuckle; strut: I-beam; portal strut: 2 channels with angle bracing; floor beam: riveted plate girder; guardrail: steel pipe; timber sidewalk cantilevered outside truss on east side; bridge plate: Built by M.S. Cartter & Co. St. Louis; Warren pony approach spans - upper chord, inclined end post, and lower chord: 2 angles with continuous plate; vertical: two channels with lacing; diagonal: 2 angles; lateral bracing: none; floor beam: I-beam; guardrail: steel pipe

HISTORICAL DATA

erection date: 1930
erection cost: $14,410.67 (MSHD share)
designer: Missouri State Highway Department (substructure and approaches);Frisco Railroad (through truss)
fabricator : Passaic Rolling Mill Company, Paterson NJ (through truss)
contractor: M.S. Cartter and Company, St. Louis (through truss); Martin Wunderlich (substructure and approaches)

Thayer Viaduct

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. H 289A; Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO; **Seventh Biennial Report of the State Highway Commission of Missouri**: 1929-30, page 505; field inspection by Richard Collier, 29 March 1992.

sign. rating: 51

evaluation: NRHP possibly eligible (representative example of trussed viaduct, cooperatively built by railroad and highway department)

inventoried by: Clayton B. Fraser 4 May 1992

Riverton Bridge

OREG02

GENERAL DATA

structure no.: K 272
county: Oregon

city/town: Riverton
feature inters.: Eleven Point River
cadastral grid: S17, T23N, R2W
highway route: U.S. Highway 160
highway distr.: 9
current owner: Missouri Highway and Transportation Department

STRUCTURAL DATA

superstructure: steel, 10-panel, rigid-connected Parker through truss, with steel stringer approach spans
substructure: concrete abutments, wingwalls and piers

span number: 1
span length: 200.0'
total length: 402.0'
roadway width: 22.0'

condition: good
alterations: none
floor/decking : asphalt on concrete deck, over steel stringers
other features: upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 channels with lacing; vertical: 2 channels with lacing (4 angles with lacing at the hip); diagonal: 2 angles with batten plates; lateral bracing: 1 angle; strut: 4 angles with bracing; portal strut: wide flange; floor beam: I-beam; guardrail: 2 channels; bridge plate: Missouri Highway Dept. Bridge N¤ K272 1934

HISTORICAL DATA

erection date: 1934
erection cost: $40,414.95
designer: Missouri State Highway Department
fabricator : Bethlehem Steel Company, Bethlehem PA
contractor: M.E. Gillioz, Monett MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. K 272; Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO; Oregon County Court Record, Book 16: page 336 (2 June 1914), page 343 (7 August 1914), page 349 (11 August 1914), page 354 (29 August 1914), page 358 (17 September 1914), page 363 (2 November 1914), page 369 (7 December 1914) - located at Oregon County Courthouse, Alton MO; field inspection by Richard Collier, 30 March 1992.

sign. rating: 51
evaluation: NRHP possibly eligible (well-preserved, well-documented, long-span example of MSHD highway truss design)

inventoried by: Clayton B. Fraser 4 May 1992

Crow Ford Bridge

OREG03

GENERAL DATA

structure no.: 223000.2
county: Oregon

city/town: 1.0 mile north of Thayer
feature inters.: Warm Fork Creek
cadastral grid: S20, T22N, R5W
highway route: Old Alton Road
highway distr.: 9
current owner: Oregon County

STRUCTURAL DATA

superstructure: steel, 6-panel, pin-connected Pratt through truss, with 2 steel stringer approach spans
substructure: concrete abutments, wingwalls and piers

span number: 1
span length: 100.0'
total length: 140.0'
roadway width: 16.0'

condition: fair
alterations: bridge closed
floor/decking : concrete over corrugated steel deck
other features: upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 punched rectangular eyebars; vertical: 2 channels with lacing; diagonal: 2 punched rectangular eyebars; counter: square eyebar with turnbuckle; lateral bracing: round rod with threaded ends; strut: 4 angles with lacing; portal strut: A-frame; floor beam: I-beam, field-bolted to vertical; guardrail: 2 channels

HISTORICAL DATA

erection date: 1914
erection cost: $2861.25
designer: unknown
fabricator : East St. Louis Bridge Company, East St. Louis IL; Illinois Steel Company, Chicago IL
contractor: East St. Louis Bridge Company, East St. Louis IL

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 223000.2; Oregon County Court Record, Book 16: page 335 (2 June 1914), page 336 (29 June 1914), page 338 (30 June 1914), page 343 (7 August 1914), page 369 (7 December 1914) - located at Oregon County Courthouse, Alton MO; "Oregon County Residents Want to Restore 'Old Iron Bridge'" **West Plains Daily Quill**, 3 June 1987; "Old Iron Bridge May Be Restored," **South Missourian News**, 4 June 1987; field inspection by Richard Collier, 30 March 1992.

sign. rating: 40
evaluation: NRHP non-eligible (typically configured example of mainstay structural type)

inventoried by: Clayton B. Fraser 4 May 1992

HAER INVENTORY
Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE
Thayer Viaduct
MHTD: H 289A

OREG01

DATE(S) OF CONSTRUCTION
1930

LOCATION
State Highway 19 over Two Mile Creek; S30, T22N, R6W
Thayer; Oregon County, Missouri

USE (ORIGINAL / CURRENT)
highway viaduct / highway viaduct

RATING NRHP potentially eligible (score: 51)

CONDITION
good

OWNER
Missouri Highway and Transportation Department

span number: 3
span length: 150.0'; 70.0'
total length: 305.0'
roadway wdt.: 20.0'

superstructure: steel, 8-panel, pin-connected Pratt through truss; 2 steel, 6-panel, rigid-connected Warren pony truss approach spans at the north end
substructure: concrete abutments, wingwalls and piers
floor/decking: concrete deck over plate girders
other features: Pratt through truss: upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 punched rectangular eyebars (4 punched eyebars at center panels); vertical: 2 channels with lacing (2 punched square eyebars at the hip); diagonal: 2 punched rectangular eyebars; counter: square rod with unslotted turnbuckle; strut: I-beam; portal strut: 2 channels with angle bracing; floor beam: riveted plate girder; guardrail: steel pipe; timber sidewalk cantilevered outside truss on east side; bridge plate: **Built by M.S. Cartter & Co. St. Louis**
Warren pony approach spans: upper chord, inclined end post, and lower chord: 2 angles with continuous plate; vertical: two channels with lacing; diagonal: 2 angles; lateral bracing: none; floor beam: I-beam; guardrail: steel pipe

The Thayer Viaduct carries Missouri State Highway 19 over Two Mile Creek and the tracks of the Burlington Northern Railroad, at the northern edge of Thayer. The structure is comprised of a pinned Pratt through truss over the railroad tracks and two rigid-connected Warren pony trusses over the creek immediately north. Concrete piers and abutments form the substructure. The superstructure was built in two separate stages, reflective of structure's dual role. The substructure and pony truss approach spans were designed by the Missouri State Highway Department and built under a contract with Martin Wunderlich. Fabricated by the Passaic Rolling Mill Company of New Jersey, the through truss was erected by M.S. Cartter and Company of St. Louis, in behalf of the Frisco Railroad. (The truss itself may have been built at another, earlier location, salvaged and re-built at this overpass). Since its completion in 1930, the Thayer Viaduct has carried vehicular and pedestrian traffic, without substantial alteration.

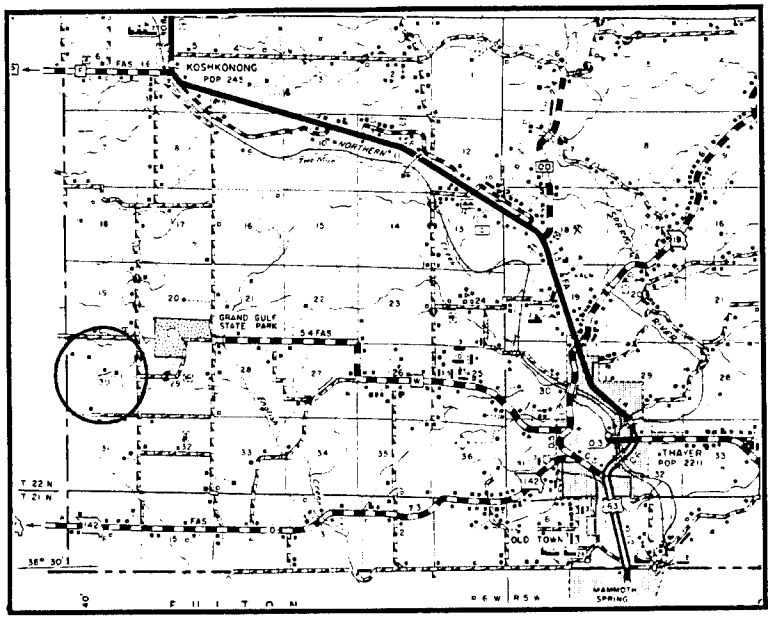
"The work of reducing the grade-crossing hazard has gone forward at an accelerated rate," the state highway commission reported in 1930. "During the biennial period just closing, the State Highway Commission, with the cooperation of the railroad companies, has constructed sixty-two grade separation structures at a cost of approximately $1,600,000.00... The cost of these structures including the approaches thereto has been borne equally by the State Highway Commission and the railroad companies." The Thayer Viaduct was one

of the cooperatively built grade separations constructed during this period. In this it typifies a statewide historical trend. The pony trusses employ standard MSHD design and detailing. Designed and built by the railroad to carry street traffic, the through truss reflects its mixed lineage, with structural features common for both highway and railroad trusses of the time. A locally important crossing, the Thayer Viaduct is a well-preserved transportation-related resource.

NAME(S) OF STRUCTURE

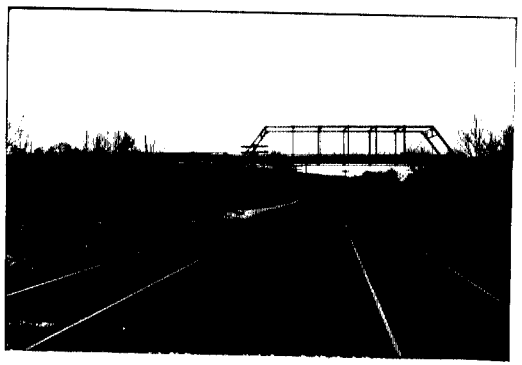
Thayer Viaduct

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. H 289A; Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO; **Seventh Biennial Report of the State Highway Commission of Missouri**: 1929-30, page 505; field inspection by Richard Collier, 29 March 1992.

INVENTORIED BY	**AFFILIATION**	**DATE**
Clayton B. Fraser	Fraserdesign, Loveland CO	4 May 1992

HAER INVENTORY
Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE
Riverton Bridge (Eleven Point River Bridge) OREG02
MHTD: K 272

DATE(S) OF CONSTRUCTION
1934

LOCATION
U.S. Highway 160 over Eleven Point River; S17, T23N, R2W
Riverton; Oregon County, Missouri

USE (ORIGINAL / CURRENT)
highway bridge / highway bridge

RATING NRHP possibly eligible (score: 51)

CONDITION
good

OWNER
Missouri Highway and Transportation Department

span number: 1
span length: 200.0'
total length: 402.0'
roadway wdt.: 22.0'

superstructure: steel, 10-panel, rigid-connected Parker through truss, with steel stringer approach spans
substructure: concrete abutments, wingwalls and piers
floor/decking: asphalt on concrete deck, over steel stringers
other features: upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 channels with lacing; vertical: 2 channels with lacing (4 angles with lacing at the hip); diagonal: 2 angles with batten plates; lateral bracing: 1 angle; strut: 4 angles with bracing; portal strut: wide flange; floor beam: I-beam; guardrail: 2 channels; bridge plate: **Missouri Highway Dept. Bridge N° K272 1934**

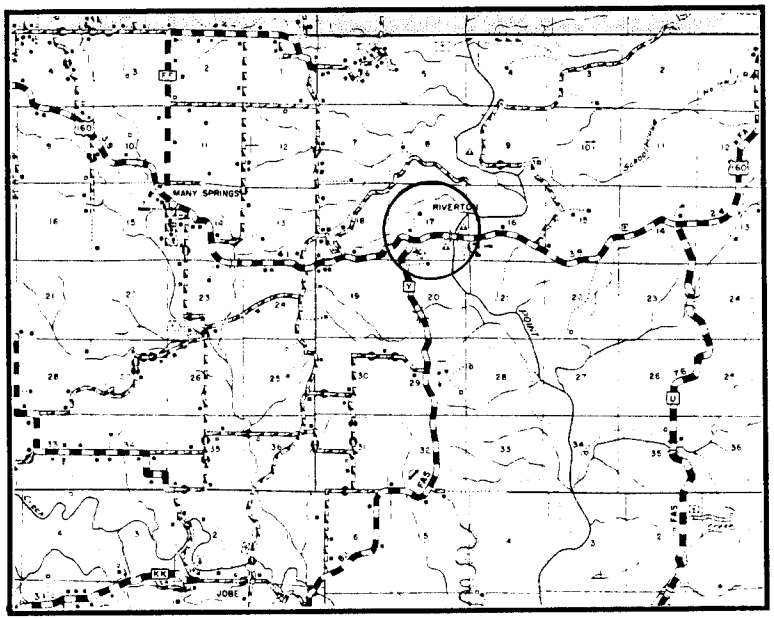
This long-span Parker through truss carries U.S. Highway 160 over the Eleven Point River at what has historically been known as the Johnson Ford, just west of Riverton. Named for Lum Johnson, who in earlier years had operated a ferry here, the first bridge at this site was built in 1914 by Oregon County. By 1933 the county road had been upgraded to State Route 42 (now U.S. 160), and the original pinned through truss was in need of replacement. The Bureau of Bridges of the Missouri State Highway Department designed a riveted Parker through truss in the fall of 1933. In December the agency let the contract for its construction to M.E. Gillioz of Monett, Missouri, that December. Monett completed the structure the following year for $40,414.95. Since that time the Riverton Bridge has functioned in place at this picturesque Ozarks crossing, without alteration.

The Riverton Bridge is a noteworthy long-span Parker through truss crossing. With its construction history well-documented, the crossing's physical integrity is, likewise, well intact.

NAME(S) OF STRUCTURE

Riverton Bridge (Eleven Point River Bridge)

PHOTOS AND SKETCH MAP OF LOCATION



LOCATION MAP

TAKEN FROM MISSOURI HIGHWAY AND TRANSPORTATION DEPARTMENT
GENERAL HIGHWAY MAP

SOURCES

Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. K 272; Primary System Bridge Record, located at the Missouri Highway and Transportation Department, Jefferson City MO; Oregon County Court Record, Book 16: page 336 (2 June 1914), page 343 (7 August 1914), page 349 (11 August 1914), page 354 (29 August 1914), page 358 (17 September 1914), page 363 (2 November 1914), page 369 (7 December 1914) - located at Oregon County Courthouse, Alton MO; field inspection by Richard Collier, 30 March 1992.

INVENTORIED BY	AFFILIATION	DATE
Clayton B. Fraser	Fraserdesign, Loveland CO	4 May 1992

HAER INVENTORY
Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE
Crow Ford Bridge (Warm Fork Spring River Bridge) OREG03
MHTD: 223000.2

DATE(S) OF CONSTRUCTION
1914

LOCATION
Old Alton Road over Warm Fork Creek; S20, T22N, R5W
1.0 mile north of Thayer; Oregon County, Missouri

USE (ORIGINAL / CURRENT)
roadway bridge / abandoned

RATING NRHP non-eligible (score: 40)

CONDITION
fair

OWNER
Oregon County

span number:	1	superstructure:	steel, 6-panel, pin-connected Pratt through truss, with 2 steel stringer approach spans
span length:	100.0'	substructure:	concrete abutments, wingwalls and piers
total length:	140.0'	floor/decking:	concrete over corrugated steel deck
roadway wdt.:	16.0'	other features:	upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 punched rectangular eyebars; vertical: 2 channels with lacing; diagonal: 2 punched rectangular eyebars; counter: square eyebar with turnbuckle; lateral bracing: round rod with threaded ends; strut: 4 angles with lacing; portal strut: A-frame; floor beam: I-beam, field-bolted to vertical; guardrail: 2 channels

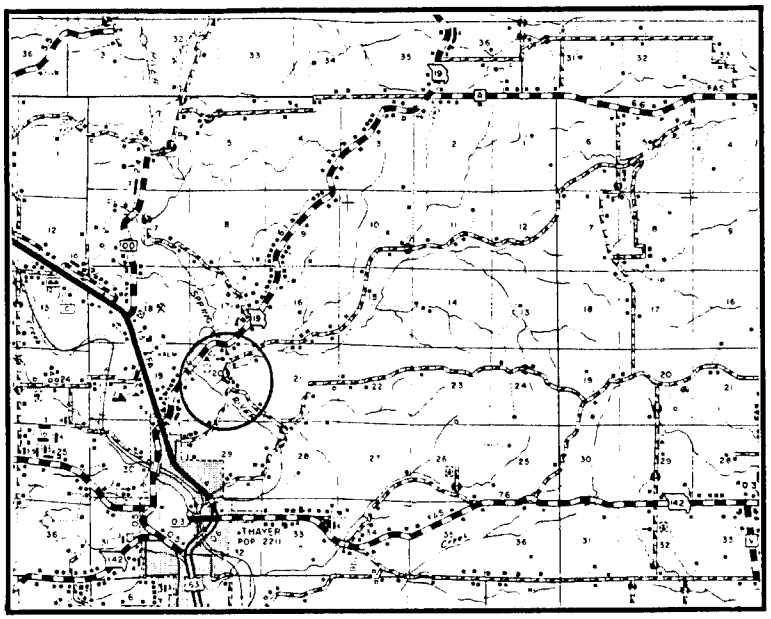
On June 2, 1914, the Oregon County Court declared that "a great public necessity existed for the erection of a bridge across Warm Fork Creek at the crossing of the Thayer and Alton Public Road known as the Crow Ford." County Engineer Wade Heiskell was directed to prepare measurements and estimate the structure's cost. Later that month bid notices were run in the **South-Missourian Democrat** and the **Ozark News**. Proposals received from several bridge builders were opened on June 29th. With a bid of $2805.00, the East St. Louis Bridge Company won the contract. A separate deal was struck with local contractor Hayden Pierce, to build dirt approaches for 24¢ per cubic yard. Construction of the bridge was undertaken in the summer and fall of 1914. On December 7th Heiskell reported that the structure had been "completed according to contract in every detail." The Court accepted the bridge and issued payment of $2861.25 to the East St. Louis Bridge Company. Included in this final cost was an additional $56.25 for extra concrete work. The structure carried traffic on the old Thayer to Alton Road until the summer of 1982. Found to be in a deteriorated condition, the bridge was closed to traffic at that time. In recent years local sentiment has been directed toward restoring and reopening the bridge. No direct action to do so has been undertaken however.

Despite its abandonment, the Crow Ford Bridge has retained a high degree of historical integrity. A representative example of pinned Pratt truss construction, the structure's history is thoroughly documented.

NAME(S) OF STRUCTURE

Crow Ford Bridge (Warm Fork Spring River Bridge)

PHOTOS AND SKETCH MAP OF LOCATION



LOCATION MAP

TAKEN FROM MISSOURI HIGHWAY AND TRANSPORTATION DEPARTMENT
GENERAL HIGHWAY MAP

SOURCES

Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure No. 223000.2; Oregon County Court Record, Book 16: page 335 (2 June 1914), page 336 (29 June 1914), page 338 (30 June 1914), page 343 (7 August 1914), page 369 (7 December 1914) - located at Oregon County Courthouse, Alton MO; "Oregon County Residents Want to Restore 'Old Iron Bridge'" **West Plains Daily Quill**, 3 June 1987; "Old Iron Bridge May Be Restored," **South Missourian News**, 4 June 1987; field inspection by Richard Collier, 30 March 1992.

INVENTORIED BY	**AFFILIATION**	**DATE**
Clayton B. Fraser	Fraserdesign, Loveland CO	4 May 1992